# PETROLEUM CONTAMINATED SOIL REMOVAL ACTION REPORT POINT ROBERTS MARINA RESORT 713 SIMUNDSON DR. POINT ROBERTS, WASHINGTON

prepared for:

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

July 18, 2016



soil | water | air compliance consulting

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prepared for:

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

prepared by:

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

July 18, 2016

Harold Cashman Project Manager, 341 HAROLD J. CASHMAN

Jake Reijm QA/QC Reviewer

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# **1.0 INTRODUCTION**

Whatcom Environmental Services Inc. has completed a Petroleum Contaminated Soil (PCS) removal action conducted at 713 Simundson Dr. in Point Roberts, Washington (Point Roberts Marina Resort). The site location is shown on Figure 1.

An underground storage tank (UST) system consisting of 2 tanks (one 15,000gallon gasoline tank, and one 15,000-gallon diesel tank) was removed at the subject property as part of a system upgrade for a property transaction. 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). The UST site assessment report titled Underground Storage Tank Site Assessment at Closure: Point Roberts Marina, 713 Simundson Dr., Point Roberts, Washington, 98281 was submitted to Ecology on May 27, 2016.

During the tank decommissioning, field screening indicated that a petroleum release had occurred to shallow soil below and to the south of the removed tanks. A soil sample was collected, and laboratory analytical results confirmed that a release of petroleum products had occurred to soil in the southern portion of the tank pit. The release was reported to Ecology (ERTS #664451).

A petroleum contaminated soil (PCS) removal action was conducted following removal of the tanks in an effort to remediate the site. Approximately 1,300 tons of soil were removed from the site and bioremediated at an adjacent property owned by the Point Roberts Marina Resort. A separate report will be submitted to Ecology when the remediation of all PCS removed from the tank pit has been completed.

Clean confirmation soil samples were collected from the floor and sidewalls of the tank pit excavation to document the success of the PCS removal action. Soil sample analytical results indicated that all PCS has been removed from the site and that the soil remaining at the site meets the Model Toxics Control Act (MTCA) Method A criteria.

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# 2.0 SITE SETTING

The PCS Removal Action was conducted at the Point Roberts Marina Resort located at 713 Simundson Dr., Point Roberts, Washington (tax parcel #0306417). The property is zoned by Whatcom County as Rural Community. Surrounding land use is mixed commercial and residential. 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.

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. Water was pumped from the tank pit into a Baker tank stored onsite. Approximately 21,000 gallons of water were removed from the excavation to allow for the removal of PCS and installation of the new UST system. Water was treated onsite with a water stripper and discharged into the storm water catch basins per a Whatcom County permit obtained by the contractor.

# 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 target 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 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 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 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.

A separate report summarizing the UST system removal titled: Underground Storage Tank Site Assessment at Closure: Point Roberts Marina, 713 Simundson Dr., Point Roberts, Washington was submitted to Ecology on May 27, 2016.

# 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 14, 2016 and completed on April 29, 2016. Ultra-Tank Services conducted the PCS removal action. 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 Mini Rae 3000 PID equipped with a 10.6 eV lamp.

The PCS removal work began at the northern edge of the tank pit and progressed downwards to find the depth of the contamination. The contamination extended to approximately 12 feet bgs, where further migration was impeded by a 2-foot-thick concrete slab. The concrete slab was removed from the floor of the excavation on April 29, 2016 and floor samples were collected from below the removed slab to document that no PCS extended below the slab. PCS removal continued to the south as the PCS extended primarily to the south of the tank pit. Field screening was used to guide the excavation of PCS from areas where organic vapor and sheen indications indicated the presence of petroleum contamination. The final excavation was approximately 50 feet long by 40 feet wide by an average of 14 feet deep. The excavation location is shown on Figure 2.

All excavated PCS was hauled to the Marina property located to the northeast across Simundson Rd to be bioremediated via land treatment under a Fill and Grade Permit issued by Whatcom County. A separate report will be submitted to Ecology when the remediation of all PCS removed from the tank pit has been completed.

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

When a particular sidewall or section of the excavation floor appeared to be no longer impacted by petroleum compounds, clean confirmation soil samples were collected for laboratory analyses. Thirteen clean confirmational soil samples were collected from the floor and sidewalls of the excavation to document the effectiveness of

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the remedial action. The clean confirmational samples were identified as *SS-1* through *SS-13*. Each soil sample was described in general accordance with ASTM D2487 and recorded in a field notebook. The excavation extent and approximate soil sample locations are shown on Figure 2.

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

Clean confirmational soil samples collected from the site were analyzed for volatile (gasoline) range total petroleum hydrocarbons (TPH) using Method NWTPH-Gx; diesel and oil range TPH using Method NWTPH-Dx; benzene, toluene, ethylbenzene, and total xylenes (BTEX); and methyl tert-butyl ether (MTBE) using EPA Method 8021. Select samples were also analyzed for lead using EPA Method 6020.

#### 5.2 FINAL EXCAVATION SOIL SAMPLE RESULTS

Thirteen clean confirmational soil samples were collected from the final excavation. The soil samples were identified as *SS-1* through *SS-13*. Soil sample locations are shown on Figure 2. Soil sample descriptions, sample dates, sample depths, and field screening results are included in Table 1. Laboratory analytical results are summarized in Table 2. The original soil sample laboratory analytical data reports are included in Appendix A.

All clean confirmational soil samples met the MTCA Method A target cleanup levels for volatile range TPH, diesel and oil range TPH, BTEX constituents, MTBE and lead (Table 2).

# 6.0 CONCLUSIONS

A PCS Removal Action has been completed at the Point Roberts Marina Resort located at 713 Simundson Dr. in Point Roberts, Washington. The PCS removal action occurred between April 14 and April 29, 2016. Approximately 1,300 tons of PCS were excavated and removed from the subject property for offsite bioremediation via land treatment. Clean confirmation soil samples collected from the site were analyzed for volatile, diesel, and oil range TPH, BTEX constituents, MTBE, and lead.

The cleanup goals for the site were set such that at the completion of the project the petroleum constituent concentrations remaining in soil met the MTCA Method A target cleanup levels for unrestricted land use.

Please use this report and the attached site location figures, and soil analytical data to document the successful removal of PCS from the subject property.

# 7.0 LIMITATIONS

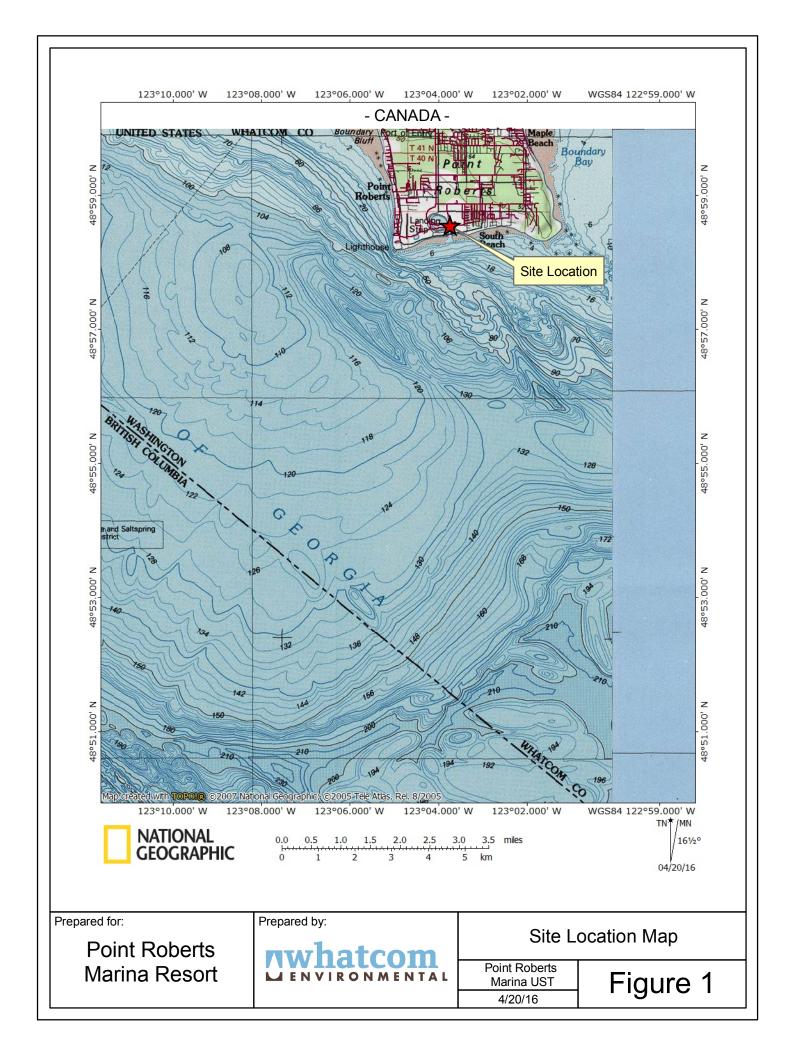
No site assessment can wholly eliminate uncertainty regarding the potential for contamination in connection with a property. The interpretation of soil and groundwater conditions is based on field observations and chemical analytical data collected from relatively widely spaced sampling locations at 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 the Point Roberts Marina Resort, their 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 Whatcom County Area, Washington. Soil Conservation Service.
- 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. 2016. Guidance for Remediation of Petroleum Contaminated Sites. Publication No. 10-09-057.
- Whatcom Environmental Services. May 27, 2016. RE: Underground Storage Tank Site Assessment at Closure: Point Roberts Marina, 713 Simundson Dr., Point Roberts, Washington.





Sample ID	Date	Location and Description	PID	Sheen
			(ppm)	Test*
SS-1	4/14/16	Collected from the northern excavation sidewall, at 9 feet bgs. Sand with gravel, gray, loose, moist.	1.2	NS
SS-2	4/14/16	Collected from the eastern excavation sidewall, at 7.5 feet bgs. Sand with minor gravel, gray, loose, moist.	2.5	NS
SS-3	4/19/16	Collected from the eastern excavation sidewall, at 8 feet bgs. Course sand, gray, loose, moist to moist.	1.5	NS
SS-4	4/19/16	Collected from the northern excavation sidewall, at 8 feet bgs. Course sandy gravel, gray, loose, moist.	4	VSS
SS-5	4/21/16	Collected from the western excavation sidewall, at 8 feet bgs. Sand with minor gravel, brown, loose, moist.	0.5	NS
SS-6	4/21/16	Collected from the southwestern excavation sidewall, at 9 feet bgs. Sand with minor gravel, brown, loose, moist.	0.5	NS
SS-7	4/21/16	Collected from the southeastern excavation sidewall, at 10 feet bgs. Course sand with minor gravel, gray, loose, moist.	5	NS
SS-8	4/21/16	Collected from the western excavation sidewall, at 7.5 feet bgs. Sand, brown, loose, moist.	0	NS
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.	1	NS
		Sand with minor gravel, brown, loose, moist.		
SS-10	4/29/16	Collected form the floor of the excavation from below the removed slab, at 14 feet bgs.	3	NS
		Course sand with trace gravel, gray, loose, wet.		
<b>SS</b> -11	4/29/16	Collected form the floor of the excavation from below the removed slab, at 14 feet bgs.	0.3	NS
		Medium to course sand with minor silt, gray, loose, wet.		
SS-12	4/29/16	Collected form the floor of the excavation from below the removed slab, at 14 feet bgs.	0.1	NS
		Course sand and gravel, gray, loose, wet.		
SS-13	4/29/16	Collected form the floor of the excavation from below the removed slab, at 14 feet bgs.	1.3	NS
		Course sand with gravel, gray, loose, wet.		

# Table 1. Soil Sample Descriptions - Point Roberts Marina PCS Removal Action

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

All samples collected using EPA Method 5035A

Sample ID	Date	<b>NWTPH-Gx</b> Volatile Range mg/kg	<b>NWTPH-Dx</b> Diesel Range mg/kg	<b>NWTPH-Dx</b> <b>Oil Range</b> mg/kg	EPA-8021 Benzene mg/kg	<b>EPA-8021</b> <b>Toluene</b> mg/kg	EPA-8021 Ethylbenzene mg/kg	<b>EPA-8021</b> <b>Xylenes</b> mg/kg	<b>EPA-8021</b> MTBE mg/kg	EPA-6020 Lead mg/kg
MTCA Method Cleanup Levels		30/100*	2,000	2,000	0.03	7	6	9	0.1	250
SS-1	4/14/2016	ND(<3)	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	NA
SS-2	4/14/2016	ND(<3)	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	NA
SS-3	4/19/2016	4.2	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	1.9
SS-4	4/19/2016	ND(<3)	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	NA
<b>SS-5</b>	4/21/2016	ND(<3)	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	NA
SS-6	4/21/2016	ND(<3)	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	NA
SS-7	4/21/2016	4.9	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	0.22	0.22	ND(<0.1)	1.6
SS-8	4/21/2016	ND(<3)	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	NA
SS-9	5/19/2016	ND(<3)	120	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	2
SS-10	4/29/2016	ND(<3)	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	NA
<b>SS-11</b>	4/29/2016	ND(<3)	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	1.6
SS-12	4/29/2016	ND(<3)	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	NA
SS-13	4/29/2016	ND(<3)	ND(<25)	ND(<50)	ND(<0.03)	ND(<0.05)	ND(<0.05)	ND(<0.2)	ND(<0.1)	NA

 Table 2. Soil Sample Analytical Results - Point Roberts Marina PCS Removal Action

\* Cleanup level dependent on BTEX concentration

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

# APPENDIX A

Original Soil Laboratory Analytical Data



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, 2 samples were received by our laboratory and assigned our laboratory project number EV16040094. 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

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ALS Group USA, Corp dba ALS Environmental

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# CERTIFICATE OF ANALYSIS

CLIENT: CLIENT CONTACT: CLIENT PROJECT: CLIENT SAMPLE ID	Whatcom Environr 228 E. Champion S Bellingham, WA 98 Harold Cashman Point Roberts Mari SS-1	St., Suite 101 3225 na UST	COL WDOE AG	DATE: ALS JOB#: ALS SAMPLE#: ATE RECEIVED: LECTION DATE: CCREDITATION:	04/15/20	0094 0094-01	M
		SAMPLE D	ATA RESULTS				
ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS A DATE	NALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/15/2016	PAB
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/15/2016	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/15/2016	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/15/2016	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/15/2016	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/15/2016	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	04/15/2016	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	04/15/2016	EBS
						ANALYSIS A DATE	NALYSIS BY
SURROGATE	METHOD	%REC					
TFT	NWTPH-GX	40.4 GS1				04/15/2016	PAB
TFT	EPA-8021	39.6 GS1				04/15/2016	PAB
C25	NWTPH-DX	104				04/15/2016	EBS

U - Analyte analyzed for but not detected at level above reporting limit. GS1 - Surrogate outside of control limits due to matrix effect.

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		CERTIFICAT	E OF ANALYSIS						
CLIENT:	Whatcom Environ 228 E. Champion S	St., Suite 101		DATE: ALS JOB#:			4/15/2016 EV16040094		
	Bellingham, WA 98225			ALS SAMPLE#:	EV1604	0094-02			
CLIENT CONTACT:	Harold Cashman		D	ATE RECEIVED:	04/15/20	016			
CLIENT PROJECT:	Point Roberts Marina UST		COL	LECTION DATE:	4/14/20	16 4:00:00 P	М		
CLIENT SAMPLE ID	SS-2		WDOE AC	CCREDITATION:	C601				
		SAMPLE D	ATA RESULTS						
ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS A DATE	ANALYSIS BY		
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/15/2016	PAB		
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/15/2016	PAB		
Benzene	EPA-8021	U	0.030	1	MG/KG	04/15/2016	PAB		
Toluene	EPA-8021	U	0.050	1	MG/KG	04/15/2016	PAB		
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/15/2016	PAB		
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/15/2016	PAB		
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	04/15/2016	EBS		
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	04/15/2016	EBS		
SURROGATE	METHOD	%REC				ANALYSIS A DATE	ANALYSIS BY		
TFT	NWTPH-GX	41.6 GS1				04/15/2016	PAB		
TFT	EPA-8021	40.0 GS1				04/15/2016	PAB		
C25	NWTPH-DX	98.0				04/15/2016	EBS		

U - Analyte analyzed for but not detected at level above reporting limit. GS1 - Surrogate outside of control limits due to matrix effect.

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#### LABORATORY BLANK RESULTS

CERTIFICATE OF ANALYSIS

# 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	t not detected at level above rep	porting limit.					
MB-041116S - Batch 1	03179 - 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	04/11/2016	PAB	
Benzene	EPA-8021	U	MG/KG	0.030	04/11/2016	PAB	
Toluene	EPA-8021	U	MG/KG	0.050	04/11/2016	PAB	
Ethylbenzene	EPA-8021	U	MG/KG	0.050	04/11/2016	PAB	
Xylenes	EPA-8021	U	MG/KG	0.20	04/11/2016	PAB	

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

# MB-041416S - Batch 103303 - Soil by NWTPH-DX

				REPORTING	ANALYSIS	ANALYSIS
ANALYTE	METHOD	RESULTS	UNITS	LIMITS	DATE	BY
TPH-Diesel Range	NWTPH-DX	U	MG/KG	25	04/14/2016	EBS
TPH-Oil Range	NWTPH-DX	U	MG/KG	50	04/14/2016	EBS

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

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ALS Group USA, Corp dba ALS Environmental

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#### CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc.	DATE:	4/15/2016
	228 E. Champion St., Suite 101	ALS SDG#:	EV16040094
	Bellingham, WA 98225	WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	Point Roberts Marina UST		

#### LABORATORY CONTROL SAMPLE RESULTS

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

				LIM	ITS	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

					LIN	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

				LIMI	rs	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

APPROVED BY

A Dager

Laboratory Director

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41S Environmental	Chain Of Custodv/	ALS Job# (Laboratory Use Only)
La	Analysis Request	EV16040094
ALS) Fax (422) 350-2626 http://www.alsglobal.com	Date $\frac{1}{1000}$	Cherage Cot
PROJECTION RING RANGE (1287	ANALYSIS REQUESTED	OTHER (Specify)
Cur Environ E. Chauren e. Chauren e. Anuel E.MAIL: Jue E.MAIL: Jue E.MAIL: Jue E.MAIL: Jue E.MAIL: Jue DATE	VWTPH-HCID VWTPH-HCID VWTPH-GX JTEX by EPA-8021 → Alogenated Volatiles by EPA 8260 → Alotatile Organic Compounds by EPA 8260 ⇒ DB / EDC by EPA 8260 SIM (water) ⇒ Diycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM □ ⇒ Diycyclic Aromatic Hydrocarbons (PAH) by EPA-8200 SIM □ ⇒ Diycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM □ ⇒ Diycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM □ ⇒ Diycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM □ ⇒ Diycyclic Aromatic Hydrocarbons (PAH) by EPA-8200 SIM □ ⇒ Diycyclic Aromatic Hy	AUMBER OF CONTAINERS
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9. 10.		
SPECIAL INSTRUCTIONS UNAS LILLO UTA 5035		
SIGNATURES (Name, Conpagnente, Time): 1. Relinquished By: Anthrow Contraction Contraction ALS 415/16 Received By: Charpy Contraction ALS 4/15	TURNAROUND REQUI Inorganic Analysis 2 1 2000 arton Analysis	ESTED in Business Days* OTHER: Specify:
	*Tumarour	*Turnaround request less than standard may incur Rush Charges



April 20, 2016

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

Dear Mr. Cashman,

On April 20th, 2 samples were received by our laboratory and assigned our laboratory project number EV16040116. 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

 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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# CERTIFICATE OF ANALYSIS

CLIENT: CLIENT CONTACT: CLIENT PROJECT: CLIENT SAMPLE ID	Whatcom Environr 228 E. Champion S Bellingham, WA 98 Harold Cashman Point Roberts Mari SS-3	St., Suite 101 3225	COL	DATE: ALS JOB#: ALS SAMPLE#: ATE RECEIVED: LECTION DATE: CCREDITATION:	4/20/2016 EV16040116 EV16040116-01 04/20/2016 4/19/2016 12:45:00 PM C601		
		SAMPLE D	ATA RESULTS				
ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS A DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	4.2	3.0	1	MG/KG	04/20/2016	PAB
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/20/2016	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/20/2016	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/20/2016	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/20/2016	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/20/2016	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	04/20/2016	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	04/20/2016	EBS
Lead	EPA-6020	1.9	0.50	5	MG/KG	04/20/2016	RAL
						ANALYSIS A DATE	ANALYSIS BY
SURROGATE	METHOD	%REC				DATE	ы
TFT	NWTPH-GX	96.7				04/20/2016	PAB
TFT	EPA-8021	96.2				04/20/2016	PAB
C25	NWTPH-DX	97.0				04/20/2016	EBS

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

Page 2 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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		CERTIFICAT	E OF ANALYSIS					
CLIENT:	Whatcom Environr 228 E. Champion S			DATE: ALS JOB#:		4/20/2016 EV16040116		
	Bellingham, WA 98			ALS SAMPLE#:		0116-02		
CLIENT CONTACT:	Harold Cashman		Л	ATE RECEIVED:	04/20/20			
CLIENT PROJECT:	Point Roberts Mari	na LIST		LECTION DATE:		16 2:00:00 P	М	
CLIENT SAMPLE ID	SS-4			CCREDITATION:	C601	10 2.00.00 1	IVI	
	00-4	SAMPLED	ATA RESULTS	DONE DITATION.	0001			
		SAIVIFLE D	ATA NEGULIG					
ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS A DATE	ANALYSIS BY	
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/20/2016	PAB	
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/20/2016	PAB	
Benzene	EPA-8021	U	0.030	1	MG/KG	04/20/2016	PAB	
Toluene	EPA-8021	U	0.050	1	MG/KG	04/20/2016	PAB	
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/20/2016	PAB	
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/20/2016	PAB	
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	04/20/2016	EBS	
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	04/20/2016	EBS	
SURROGATE	METHOD	%REC				ANALYSIS A DATE	ANALYSIS BY	
TFT	NWTPH-GX	96.5				04/20/2016	PAB	
TFT	EPA-8021	94.3				04/20/2016	PAB	
C25	NWTPH-DX	95.1				04/20/2016	EBS	

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

Page 3
ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
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CLIENT: CLIENT CONTACT: CLIENT PROJECT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225 Harold Cashman Point Roberts Marina UST	DATE: ALS SDG#: WDOE ACCREDITATION:	4/20/2016 EV16040116 C601	
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#### LABORATORY BLANK RESULTS

CERTIFICATE OF ANALYSIS

# MBG-041516S2 - Batch 103375 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS By	
TPH-Volatile Range	NWTPH-GX	U	MG/KG	3.0	04/15/2016	PAB	
U - Analyte analyzed for but	not detected at level above rep	oorting limit.					
MB-041516S2 - Batch	103375 - Soil by EPA	-8021					
ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS By	
Methyl T-Butyl Ether	EPA-8021	U	MG/KG	0.10	04/15/2016	PAB	
Benzene	EPA-8021	U	MG/KG	0.030	04/15/2016	PAB	
Toluene	EPA-8021	U	MG/KG	0.050	04/15/2016	PAB	
Ethylbenzene	EPA-8021	U	MG/KG	0.050	04/15/2016	PAB	
Xylenes	EPA-8021	U	MG/KG	0.20	04/15/2016	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 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



#### CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc.	DATE:	4/20/2016
	228 E. Champion St., Suite 101	ALS SDG#:	EV16040116
	Bellingham, WA 98225	WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	Point Roberts Marina UST		

#### LABORATORY CONTROL SAMPLE RESULTS

# ALS Test Batch ID: 103375 - Soil by NWTPH-GX

				LI	MITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC RPD	QUAL	MIN	MAX	DATE	
TPH-Volatile Range - BS	NWTPH-GX	95.4		66.5	122.7	04/15/2016	PAB
TPH-Volatile Range - BSD	NWTPH-GX	94.2 1		66.5	122.7	04/15/2016	PAB

# ALS Test Batch ID: 103375 - Soil by EPA-8021

					LIN	IITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	MIN	MAX	DATE	
Methyl T-Butyl Ether - BS	EPA-8021	87.7			66	116	04/15/2016	PAB
Methyl T-Butyl Ether - BSD	EPA-8021	87.2	1		66	116	04/15/2016	PAB
Benzene - BS	EPA-8021	88.3			67.7	124	04/15/2016	PAB
Benzene - BSD	EPA-8021	88.2	0		67.7	124	04/15/2016	PAB
Toluene - BS	EPA-8021	94.6			71	123	04/15/2016	PAB
Toluene - BSD	EPA-8021	94.3	0		71	123	04/15/2016	PAB
Ethylbenzene - BS	EPA-8021	94.6			69.8	117	04/15/2016	PAB
Ethylbenzene - BSD	EPA-8021	94.7	0		69.8	117	04/15/2016	PAB
Xylenes - BS	EPA-8021	92.9			70	119	04/15/2016	PAB
Xylenes - BSD	EPA-8021	92.8	0		70	119	04/15/2016	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

APPROVED BY

Laboratory Director

Page 5

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ALS Environmental	Chain Of Custody/	ALS Job# (Laboratory Use Only)
	Laboratory Analysis Request	1 EV16040116
ALS) Fax (425) 356-2626 http://www.alsglobal.com	Date 🞸	14/16 Page / Of /
PROJECTION Drink Rinna UST	ANALYSIS REQUESTED	OTHER (Specify)
Eavino Chaw Chaw FALE E-MALL: E-MALL: AS	NWTPH-HCID NWTPH-HCID MWTPH-GX BTEX by EPA-8021 Halogenated Volatiles by EPA 8260 Volatile Organic Compounds by EPA 8260 EDB / EDC by EPA 8260 SIM (water) Semivolatile Organic Compounds by EPA 8260 PCB Pesticides Dy EPA 8260 PCB Pesticides Dy EPA 8260 Metals-MTCA-5 RCRA-8 PM PM Py PPA-8270 SIM (Water) PCB Pesticides Dy EPA 8260 (soli) PCB Pesticides Dy EPA 8260 (soli) POIVCVCIIC AND PA PA 8260 (soli) POINT PA	
1. SS-3 4/14/10/45 501 1	<b> </b>	3
SC UN W. L. NW		
2. 30.7 /1/1/ 0.m JUIL ~		70
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10.		
SPECIAL INSTRUCTIONS UDAS FULLU ULA SO35A	A	
SIGNATURES (Name Company) Date, Time):	TURNAROUND TURNAROUND Organic, Metake Whorganic Analysis	TURNAROUND REQUESTED in Business Days* Janic Analysis OTHER:
Received By: Champy Received By	$\frac{10}{16} \frac{5}{10} \frac{10}{5} \frac{5}{10} \frac{3}{10} \frac{2}{10} \frac{1}{5}$ Fuels & Hydrocarbon Apelly is	Specify:
2. Heiinquisned By: Received By:	5 3 1 (Same Standard	1
		*Turnaround request less than standard may incur Rush Charges



April 25, 2016

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

Dear Mr. Cashman,

On April 22nd, 4 samples were received by our laboratory and assigned our laboratory project number EV16040140. 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
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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# CERTIFICATE OF ANALYSIS

CLIENT: CLIENT CONTACT: CLIENT PROJECT: CLIENT SAMPLE ID	Whatcom Environr 228 E. Champion S Bellingham, WA 98 Harold Cashman Point Roberts Mari SS-5	St., Suite 101 3225 na UST	COL WDOE A	DATE: ALS JOB#: ALS SAMPLE#: DATE RECEIVED: COLLECTION DATE: WDOE ACCREDITATION:			4/25/2016 EV16040140 EV16040140-01 04/22/2016 4/21/2016 9:30:00 AM 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	04/22/2016	PAB				
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/22/2016	PAB				
Benzene	EPA-8021	U	0.030	1	MG/KG	04/22/2016	PAB				
Toluene	EPA-8021	U	0.050	1	MG/KG	04/22/2016	PAB				
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/22/2016	PAB				
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/22/2016	PAB				
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	04/22/2016	EBS				
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	04/22/2016	EBS				
	METHOD	0/ <b>7</b> 50				ANALYSIS / DATE	ANALYSIS BY				
SURROGATE	METHOD	%REC									
TFT	NWTPH-GX	99.9				04/22/2016	PAB				
TFT	EPA-8021	110				04/22/2016	PAB				
C25	NWTPH-DX	82.0				04/22/2016	EBS				

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

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		CERTIFICAT	E OF ANALYSIS						
CLIENT:	Whatcom Environr 228 E. Champion S Bellingham, WA 98	St., Suite 101		DATE: ALS JOB#: ALS SAMPLE#:			4/25/2016 EV16040140 EV16040140-02		
CLIENT CONTACT:	Harold Cashman		D	ATE RECEIVED:	04/22/20	016			
CLIENT PROJECT:	Point Roberts Mari	na UST	COL	LECTION DATE:	4/21/20	16 9:45:00 A	Μ		
CLIENT SAMPLE ID	SS-6		WDOE AG	CCREDITATION:	C601				
		SAMPLE D	ATA RESULTS						
ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS A DATE	ANALYSIS BY		
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/22/2016	PAB		
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/22/2016	PAB		
Benzene	EPA-8021	U	0.030	1	MG/KG	04/22/2016	PAB		
Toluene	EPA-8021	U	0.050	1	MG/KG	04/22/2016	PAB		
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/22/2016	PAB		
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/22/2016	PAB		
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	04/22/2016	EBS		
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	04/22/2016	EBS		
SURROGATE	METHOD	%REC				ANALYSIS A DATE	ANALYSIS BY		
TFT	NWTPH-GX	93.0				04/22/2016	PAB		
TFT	EPA-8021	105				04/22/2016	PAB		
C25	NWTPH-DX	88.5				04/22/2016	EBS		

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

Page 3
ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
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		CERTIFICAT	E OF ANALYSIS						
CLIENT:	Whatcom Environr 228 E. Champion S Bellingham, WA 98	St., Suite 101		DATE: ALS JOB#: ALS SAMPLE#:			4/25/2016 EV16040140 EV16040140-03		
CLIENT CONTACT:	Harold Cashman		D	ATE RECEIVED:	04/22/20	016			
CLIENT PROJECT:	Point Roberts Mari	na UST	COL	LECTION DATE:	4/21/201	16 9:55:00 A	Μ		
CLIENT SAMPLE ID	SS-7		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	4.9	3.0	1	MG/KG	04/22/2016	PAB		
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/22/2016	PAB		
Benzene	EPA-8021	U	0.030	1	MG/KG	04/22/2016	PAB		
Toluene	EPA-8021	U	0.050	1	MG/KG	04/22/2016	PAB		
Ethylbenzene	EPA-8021	0.22	0.050	1	MG/KG	04/22/2016	PAB		
Xylenes	EPA-8021	0.22	0.20	1	MG/KG	04/22/2016	PAB		
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	04/22/2016	EBS		
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	04/22/2016	EBS		
Lead	EPA-6020	1.6	0.50	5	MG/KG	04/22/2016	RAL		
	NETUOD	0/ DE0				ANALYSIS A			
SURROGATE	METHOD	%REC							
TFT	NWTPH-GX	91.9				04/22/2016	PAB		
TFT	EPA-8021	104				04/22/2016	PAB		
C25	NWTPH-DX	96.8				04/22/2016	EBS		

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

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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		CERTIFICAT	E OF ANALYSIS						
CLIENT:	Whatcom Environr 228 E. Champion S Bellingham, WA 98	St., Suite 101		ALS JOB#:			4/25/2016 EV16040140 EV16040140-04		
CLIENT CONTACT:	Harold Cashman		D	ATE RECEIVED:	04/22/2	016			
CLIENT PROJECT:	Point Roberts Mari	na UST	COL	LECTION DATE:	4/21/20	16 10:30:00	AM		
CLIENT SAMPLE ID	SS-8		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	U	3.0	1	MG/KG	04/22/2016	PAB		
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/22/2016	PAB		
Benzene	EPA-8021	U	0.030	1	MG/KG	04/22/2016	PAB		
Toluene	EPA-8021	U	0.050	1	MG/KG	04/22/2016	PAB		
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/22/2016	PAB		
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/22/2016	PAB		
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	04/22/2016	EBS		
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	04/22/2016	EBS		
SURROGATE	METHOD	%REC				ANALYSIS A DATE	ANALYSIS BY		
TFT	NWTPH-GX	89.6				04/22/2016	PAB		
TFT	EPA-8021	100				04/22/2016	PAB		
C25	NWTPH-DX	70.4				04/22/2016	EBS		

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

Page 5
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CLIENT:	Whatcom Environmental Svcs., Inc.	DATE:	4/25/2016
	228 E. Champion St., Suite 101	ALS SDG#:	EV16040140
	Bellingham, WA 98225	WDOE ACCREDITATION:	C601
CLIENT CONTACT: CLIENT PROJECT:	Harold Cashman Point Roberts Marina UST		

#### LABORATORY BLANK RESULTS

CERTIFICATE OF ANALYSIS

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

				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 1	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
	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-042216S - Batch 103563 - Soil by EPA-6020

				REPORTING	ANALYSIS	ANALYSIS
ANALYTE	METHOD	RESULTS	UNITS	LIMITS	DATE	BY
Lead	EPA-6020	U	MG/KG	0.10	04/22/2016	RAL

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

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CLIENT:	Whatcom Environmental Svcs., Inc.	DATE:	4/25/2016
	228 E. Champion St., Suite 101	ALS SDG#:	EV16040140
	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

				LIMI	TS	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

					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: 103563 - Soil by EPA-6020

					LI	NITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	MIN	MAX	DATE	
Lead - BS	EPA-6020	105			80	120	04/22/2016	RAL
Lead - BSD	EPA-6020	106	1		80	120	04/22/2016	RAL

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Laboratory Director

Page 7

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ALS Environmental	Chain Of Custodv/	ALS Job# (Laboratory Use Only)
_	-aboratory Analysis Request	EVIGONOLYO
(ALS) Fax (425) 356-2626 http://www.alsglobal.com	Date 4/01/	L Page Of /
PROJECTION PROJECTS MARING UST	ANALYSIS REQUESTED	OTHER (Specify)
Where an Endin Hardd Cashun 278 E. Cha. Bellinghawi 20-752-9571 F. E.Maile / SAMPLEID. DA	NWTPH-HCID NWTPH-HCID MWTPH-GX BTEX by EPA 8021-₩ BTEX by EPA 8021-₩ MTBE by EPA 8021-₩ Halogensted Volatiles by EPA 8260 EDB / EDC by EPA 8260 SIM (water) EDB / EDC by EPA 8260 SIM (water) FOB / EDC by EPA 8050 SIM (water) FOB / EDC by EPA 80	RECEIVED IN GOOD CONDITION?
1. SS-S /21/16 9.30 5012 1		5
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SPECIAL INSTRUCTIONS VOAS FUNED VIG SO35A		
SIGNATURES (Name, Confrance, Time): 1. Relinquished By: <u>Mark / Kon</u> , WES, <u>422/16</u> 10: 30ar Received By: <u>Magle Mark</u> , <u>422/16</u> 10: 30ar	CPM Organic Metals & Inorg	TURNAROUND REQUESTED in Business Days* ganic Analysis OTHER: 1 Sweetity:
2. Relinquished By: J Received By:	5 3 1	

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\*Turnaround request less than standard may incur Rush Charges



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
ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 9820 | PHONE 425-356-2600 | FAX 425-356-2626
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CLIENT:	Whatcom Environr 228 E. Champion S	,		5/23/2016 EV16050119			
		Bellingham, WA 98225		ALS JOB#: ALS SAMPLE#:			
CLIENT CONTACT:	Harold Cashman		D	ATE RECEIVED:	EV1605 05/20/20		
CLIENT PROJECT:	Point Roberts Mari Assessment	na UST Site	COL	LECTION DATE:	5/19/201	16 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	WEEL AGONEDHATION.	0001

#### 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	АХ	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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Laboratory Director

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600 626 algobal.com Marine UST Sule Assessme Environ newood Br. #01 Changin Br. #01 Changin Br. #01 Fax: 360 - 752 - 9573 I Fax: 360 - 752 - 9573 DATE TIME TYPE LABE DATE TIME TYPE LABE	Laboratory Analysis Request       CV10-0014         Laboratory Analysis Request       CV10-0014         Data       CV10-0014	<b>ALS Environmontal</b> 8620 Holly Drive, Suite 100		Chain	Of Custody/	)ust	ody	1					ALS Job#	pb#	(Labor	(Laboratory Use Only)	Only)	Γ
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June 23, 2016

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

Dear Mr. Cashman,

On April 29th, 4 samples were received by our laboratory and assigned our laboratory project number EV16040194. 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: CLIENT SAMPLE ID	Whatcom Environr 228 E. Champion S Bellingham, WA 98 Harold Cashman Point Roberts Mari SS-13	St., Suite 101 3225 na UST	COL WDOE AG	DATE: ALS JOB#: ALS SAMPLE#: ATE RECEIVED: LECTION DATE: CCREDITATION:	6/23/201 EV16040 EV16040 04/29/201 4/29/201 C601	0194 0194-01	M
		SAMPLE D	ATA RESULTS				
ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS / DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/29/2016	PAB
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/29/2016	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/29/2016	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/29/2016	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/29/2016	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/29/2016	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	04/30/2016	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	04/30/2016	EBS
		*****				ANALYSIS /	
SURROGATE	METHOD	%REC					
TFT	NWTPH-GX	102				04/29/2016	PAB
TFT	EPA-8021	104				04/29/2016	PAB
C25	NWTPH-DX	109				04/30/2016	EBS

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

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		CERTIFICAT	E OF ANALYSIS				
CLIENT:	Whatcom Environ 228 E. Champion Bellingham, WA 98	St., Suite 101		DATE: ALS JOB#: ALS SAMPLE#:	6/23/201 EV1604 EV1604	0194	
CLIENT CONTACT:	Harold Cashman		D	ATE RECEIVED:	04/29/20	)16	
CLIENT PROJECT:	Point Roberts Mari	ina UST	COL	LECTION DATE:	4/29/201	16 8:45:00 A	M
CLIENT SAMPLE ID	SS-10		WDOE AG	CCREDITATION:	C601		
		SAMPLE D	ATA RESULTS				
ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/29/2016	PAB
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/29/2016	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/29/2016	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/29/2016	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/29/2016	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/29/2016	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	04/30/2016	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	04/30/2016	EBS
SURROGATE	METHOD	%REC				ANALYSIS / DATE	ANALYSIS BY
TFT	NWTPH-GX	102				04/29/2016	PAB
TFT	EPA-8021	101				04/29/2016	PAB
C25	NWTPH-DX	99.0				04/30/2016	EBS

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

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		CERTIFICAT	E OF ANALYSIS				
CLIENT:	Whatcom Environ 228 E. Champion Bellingham, WA 98	St., Suite 101		DATE: ALS JOB#: ALS SAMPLE#:	6/23/201 EV16040 EV16040	0194	
CLIENT CONTACT:	Harold Cashman		D	ATE RECEIVED:	04/29/20	)16	
CLIENT PROJECT:	Point Roberts Mari	ina UST	COL	LECTION DATE:	4/29/201	6 9:00:00 A	M
CLIENT SAMPLE ID	SS-11		WDOE AG	CCREDITATION:	C601		
		SAMPLE D	ATA RESULTS				
ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS / DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/29/2016	PAB
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/29/2016	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/29/2016	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/29/2016	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/29/2016	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/29/2016	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	04/30/2016	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	04/30/2016	EBS
Lead	EPA-6020	1.6	0.50	5	MG/KG	04/29/2016	RAL
	METHOD	<b>*/</b> DEC				ANALYSIS /	ANALYSIS BY
SURROGATE	METHOD	%REC					
TFT	NWTPH-GX	93.6				04/29/2016	PAB
TFT	EPA-8021	98.7				04/29/2016	PAB
C25	NWTPH-DX	106				04/30/2016	EBS

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

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		CERTIFICAT	E OF ANALYSIS				
CLIENT:	Whatcom Environ 228 E. Champion Bellingham, WA 98	St., Suite 101		DATE: ALS JOB#: ALS SAMPLE#:	6/23/201 EV1604 EV1604	0194	
CLIENT CONTACT:	Harold Cashman		D	ATE RECEIVED:	04/29/20	)16	
CLIENT PROJECT:	Point Roberts Mari	ina UST	COL	LECTION DATE:	4/29/201	16 9:10:00 A	M
CLIENT SAMPLE ID	SS-12		WDOE AC	CCREDITATION:	C601		
		SAMPLE D	ATA RESULTS				
ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	04/29/2016	PAB
Methyl T-Butyl Ether	EPA-8021	U	0.10	1	MG/KG	04/29/2016	PAB
Benzene	EPA-8021	U	0.030	1	MG/KG	04/29/2016	PAB
Toluene	EPA-8021	U	0.050	1	MG/KG	04/29/2016	PAB
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	04/29/2016	PAB
Xylenes	EPA-8021	U	0.20	1	MG/KG	04/29/2016	PAB
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	04/30/2016	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	04/30/2016	EBS
SURROGATE	METHOD	%REC				ANALYSIS / DATE	ANALYSIS BY
TFT	NWTPH-GX	92.3				04/29/2016	PAB
TFT	EPA-8021	101				04/29/2016	PAB
C25	NWTPH-DX	106				04/30/2016	EBS

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

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CLIENT:	Whatcom Environmental Svcs., Inc.	DATE:	6/23/2016
	228 E. Champion St., Suite 101	ALS SDG#:	EV16040194
	Bellingham, WA 98225	WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	Point Roberts Marina UST		

#### LABORATORY BLANK RESULTS

# MBG-042716S - Batch 103753 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	MG/KG	3.0	04/27/2016	PAB
, ,	not detected at level above rep	8				
MB-042716S - Batch 10 ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
	-		<b>UNITS</b> MG/KG			
ANALYTE	METHOD	RESULTS		LIMITS	DATE	BY
ANALYTE Methyl T-Butyl Ether	<b>METHOD</b> EPA-8021	RESULTS U	MG/KG	LIMITS 0.10	<b>DATE</b> 04/27/2016	BY PAB

MG/KG

04/27/2016

PAB

0.20

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

EPA-8021

### MB-042616S - Batch 103707 - Soil by NWTPH-DX

**Xylenes** 

ANALYTE	METHOD	RESULTS	UNITS	REPORTING LIMITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	MG/KG	25	04/26/2016	EBS
TPH-Oil Range	NWTPH-DX	U	MG/KG	50	04/26/2016	EBS

U

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

#### MB-042916S - Batch 103814 - Soil by EPA-6020

				REPORTING	ANALYSIS	ANALYSIS
ANALYTE	METHOD	RESULTS	UNITS	LIMITS	DATE	BY
Lead	EPA-6020	U	MG/KG	0.10	04/29/2016	RAL

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

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

www.alsglobal.com



CLIENT:	Whatcom Environmental Svcs., Inc.	DATE:	6/23/2016
	228 E. Champion St., Suite 101	ALS SDG#:	EV16040194
	Bellingham, WA 98225	WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	Point Roberts Marina UST		

#### LABORATORY CONTROL SAMPLE RESULTS

# ALS Test Batch ID: 103753 - Soil by NWTPH-GX

				LIN	IITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN	MAX	DATE	
TPH-Volatile Range - BS	NWTPH-GX	90.1		66.5	122.7	04/27/2016	PAB
TPH-Volatile Range - BSD	NWTPH-GX	88.8	1	66.5	122.7	04/27/2016	PAB

# ALS Test Batch ID: 103753 - Soil by EPA-8021

				LIN	IITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN	MAX	DATE	
Methyl T-Butyl Ether - BS	EPA-8021	83.3		66	116	04/27/2016	PAB
Methyl T-Butyl Ether - BSD	EPA-8021	85.5	3	66	116	04/27/2016	PAB
Benzene - BS	EPA-8021	83.0		67.7	124	04/27/2016	PAB
Benzene - BSD	EPA-8021	83.0	0	67.7	124	04/27/2016	PAB
Toluene - BS	EPA-8021	88.9		71	123	04/27/2016	PAB
Toluene - BSD	EPA-8021	89.2	0	71	123	04/27/2016	PAB
Ethylbenzene - BS	EPA-8021	89.2		69.8	117	04/27/2016	PAB
Ethylbenzene - BSD	EPA-8021	89.4	0	69.8	117	04/27/2016	PAB
Xylenes - BS	EPA-8021	87.1		70	119	04/27/2016	PAB
Xylenes - BSD	EPA-8021	87.9	1	70	119	04/27/2016	PAB

# ALS Test Batch ID: 103707 - Soil by NWTPH-DX

				LIMITS	ANALYSIS ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD QUAL	MIN MAX	DATE
TPH-Diesel Range - BS	NWTPH-DX	97.6		75.5 122.1	04/26/2016 EBS
TPH-Diesel Range - BSD	NWTPH-DX	104	6	75.5 122.1	04/26/2016 EBS

#### ALS Test Batch ID: 103814 - Soil by EPA-6020

	-				LIN	NITS	ANALYSIS	ANALYSIS BY
SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	MIN	MAX	DATE	
Lead - BS	EPA-6020	101			80	120	04/29/2016	RAL
Lead - BSD	EPA-6020	103	3		80	120	04/29/2016	RAL

APPROVED BY

Laboratory Director

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

www.alsglobal.com

ALS Environmental 8620 Holiv Drive Suite 100	Chain Of Custody/	ALS Job# (Laboratory Use Only)
Everett, WA 98208 Phone (425) 356-2600 E2V (1055) 356-2600	-aboratory Analysis Request	Evibogoia 4
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