

UST DECOMMISSIONING REPORT July 26, 2007

4221 228th Avenue Southeast Issaquah, Washington

INTRODUCTION

This Underground Storage Tank (UST) Decommissioning Report presents a summary of UST decommissioning, removal of petroleum-contaminated soil (PCS), and the results of soil sampling conducted on June 21-27, 2007, at the above-referenced property (the property) (Figure 1). Sound Environmental Strategies Corporation (SES) prepared this report on behalf of Trinity Lutheran College (Trinity). Significant property features are illustrated on Figure 2.

Remediation Objectives

The purpose of this UST Decommissioning Report is to summarize the removal of PCS associated with a UST that supplied heating oil to the campus emergency generator. The scope of the UST Decommissioning Report included the following tasks:

- Provide background information, including a description of the property, and the UST decommissioning activities;
- Describe the remediation activities;
- Summarize the results of the soil sampling; and
- Provide conclusions and a list of the supporting tables, figures, and appendices attached to this report.

SUMMARY RESULTS OF THE SOIL REMEDIATION

The following is a summary of the subsurface conditions and the nature and extent of chemicals of concern (COCs) at the property. Additional details are provided in later sections of this report.

Stratigraphy: Topographically, the property is situated at the top of a hill with elevation change gradually sloping in all directions. Soil observed during excavation of the UST consisted of moist, brown topsoil with some concrete fragments and glass (fill material) above and immediately surrounding the UST. Soil became moist, grayish-brown silty sand and gravel from approximately 8 to 12 feet below ground surface (bgs), grading to sandy gravel to a depth of 13.5 feet bgs, the maximum depth explored.

The geology of the area (Jones 1998) indicates that the property is underlain by Vashon Till, which is predominantly fine-grained deposits consisting of unsorted and unstratified glacial sediments from clay to boulder in size that vary in compaction and composition throughout the Puget Sound lowlands.

Hydrogeology: No groundwater was encountered to the depths explored (13.5 feet bgs).

Chemicals of Concern: Concentrations of COCs in soil samples collected during this investigation are summarized below.

Summary of Analytical Results

Analyte(s)	Analytical	al coce		tions in Soil g/kg)
	Method			Maximum
Diesel-Range Petroleum Hydrocarbons	NWTPH-Dx	DRPH	ND	3,500
Oil-Range Petroleum Hydrocarbons	NWTPH-Dx	ORPH	ND.	760

Concentrations exceeding MTCA Method A Cleanup Levels are shown in red.

mg/kg = milligrams per kilogram

ND = not detected at concentrations above laboratory reporting limit

Medium of Concern: Soil

Extent of Contamination: As indicated above and in the attached Table 1, the results of laboratory testing revealed concentrations of diesel-range petroleum hydrocarbons (DRPH) in excess of the Model Toxics Control Act (MTCA) Method A Cleanup Level for unrestricted land use in the soil sample collected from beneath the former UST (Sample ID – EX01F02-10.0) (Photograph 8, Site Photographs). The soil samples collected from the southern sidewall in the vicinity of the product line (UST01S01-06.0), below the south end of the UST (EX01F01-10.0), and stockpiled soil (SP-02 and SP-03) contained detectable concentrations of DRPH. However, these concentrations did not exceed the cleanup level. Laboratory analysis revealed one sample (SP-02) contained detectable concentrations of oil-range petroleum hydrocarbons (ORPH). The concentration did not exceed the cleanup level. No other COCs were identified in the soil samples collected.

After sample collection, PCS beneath the former UST was excavated to a maximum depth of 13.5 feet bgs. Soil samples P-1, P-2, and EX01F02-10.0 were overexcavated. Final confirmation soil samples collected from the north sidewall, east sidewall, and west sidewall of the finished excavation did not have concentrations of COCs above the method reporting limits. Sample PL-01-03.0, collected in the vicinity of the product line between the generator building and UST, revealed non-detectible concentrations of DRPH and ORPH. Final confirmation data are presented in Table 1.

Nature of Release: The source of the DRPH in the soil is attributed to a release of heating oil from the former UST located adjacent to the access road on the east side of the campus.

PROPERTY LOCATION AND DESCRIPTION

The approximately 44-acre property consists of the Trinity campus property located at 4221 228th Avenue Southeast in Issaquah, Washington (Figure 1). The property was developed into a multi-building campus comprising various structures interconnected through hallways and subterranean tunnels. The property was developed in the mid-1950s by the Sisters of Providence as a teaching campus and residential facility.

The primary property grouping consists of three irregularly shaped parcels bounded by Southeast 43rd Way and 228th Avenue to the west, a residential development named Providence Pointe to the south, and single multi-family home developments to the west. The main campus

land parcel is reported to contain 28.86 acres of land. Providence Point Drive is internal to the property, separating the main campus land from a wooded and undeveloped parcel (5.8 acres) to the north. A street named 224th Lane Southeast is also internal to the property, separating the main campus land from a wooded and undeveloped parcel (6.0 acres) to the southwest.

The UST was located adjacent to the access road approximately 70 feet southeast of the pool and gym building. The UST was situated at the edge of a bluff, with a local topographic slope to the east.

PROJECT BACKGROUND

SES understands that a subsurface investigation was initiated on May 14, 2004 by Golder Associates Inc. (Golder 2004). Three bore holes were created adjacent to the UST, to depths up to 14 feet bgs. Golder observed petroleum-stained soil, discoloration, and petroleum hydrocarbon odor in two of the three borings. At least one soil sample collected from each boring contained detectible concentrations of DRPH. Sample results ranged from non-detect to 1,800 milligrams per kilogram (mg/kg), which are below cleanup level. Soil analytical results for the Golder samples are included in Table 1.

Two borings were created on either side of a buried geophysics line on the western side of the generator building. It was not evident if this was the fuel line or a water line. One sample was collected at 2 feet bgs. No observable petroleum-stained soil, discoloration, or petroleum hydrocarbon odor was present. Laboratory analysis revealed non-detectable concentrations of DRPH and ORPH.

SOIL REMEDIATION

A Washington State-certified UST Site Assessor from SES (Appendix E) arrived on property to field-screen soil and direct the removal of PCS on June 21, 25, and 27, 2007. Apparent PCS was excavated and stockpiled for off-site disposal. Soil with questionable petroleum contamination levels was stockpiled for testing. Soil samples were collected from the excavation sidewalls and floor upon completion of excavation activities (Photograph 10, Site Photographs). Additional soil samples were collected from the stockpiled soil which was later used to backfill the excavation. One soil sample was collected near the geophysics line between the generator building and UST location. Samples were placed in appropriate glass containers, which were immediately placed in an iced cooler maintained at 4°C or less, until delivered to Friedman & Bruya, Inc., a Washington State-accredited laboratory. Chain-of-custody protocol was observed throughout the project.

SES made the following observations during remediation activities:

- The emergency generator UST was orientated in a north-south direction parallel to the access road on the east side of the campus (Photograph 1, Site Photographs). The fuel oil tank had a capacity of approximately 500 gallons.
- The UST was triple-rinsed and inerted with carbon dioxide gas prior to tank removal (Appendix C).
- The UST was removed from its cavity on June 21, 2007 (Photograph 2, Site Photographs).

- UST had three observable pinholes, ranging from 1/8-inch to 1/4-inch in size (Photograph 5, Site Photographs). Petroleum leaks to the soil were evident around the pinholes and where the product line attached to the UST.
- Soils with a strong petroleum odor and with visual petroleum stains were observed directly below and to the sides of the UST (Photographs 3 and 6, Site Photographs).
- Soil was excavated to a maximum depth of 13.5 feet bgs (Photograph 9, Site Photographs).
- The apparent PCS was loaded directly into trucks for off-site disposal (Photograph 7, Site Photographs). Clean backfill was brought onsite to replace the PCS for backfilling.
- A private utility survey located a buried water line and power line running from the generator building toward the college campus building. The utility locate was unable to identify the location of the product line during the survey. The product line was observed extending to the south of the excavation where it is presumed to join the water line cavity that runs to the east into the generator building. Because of the close proximity to the buried utilities, the product line was not removed outside the UST excavation area.
- A test pit was created on the wooded slope between the generator building and UST
 excavation in order see if the product line showed evidence of leaking heating oil. The
 test pit was created approximately 3 feet to the north of the buried water line locate
 marker. A soil sample was collected at the south sidewall approximately 3 feet bgs. No
 petroleum odors or staining was observed.
- Soil suspected to be clean was removed from the excavation and stockpiled. Once characterization sampling was complete the soil was backfilled into the excavation (Photograph 12, Site Photographs).
- Oxygen Release Compound (ORC) was applied to the sidewalls and floor of the excavation upon conclusion of PCS removal and before backfilling (Photograph 11, Site Photographs).

SOIL CONFIRMATION SAMPLING RESULTS

Soil sampling and analytical reporting for this project adhered to the current *MTCA UST Site Assessment and Soil Sampling Guidelines* (Washington Administrative Code 173-340). Confirmation and performance soil samples were analyzed for DRPH by Northwest Method NWTPH-Dx (Table 1).

SES conducted soil sampling activities beneath the former tank location, around the perimeter of the excavation area, stockpiled soil, and adjacent to the product line. Sample locations are shown on Figure 2. SES collected two soil performance samples, P-1 and P-2, directly below the UST upon removing the tank. On June 25, soil samples UST01F01-10.0 and UST01F02-10.0 were collected from below each end of the former UST location. Soil samples UST01N01-06.0, UST01S01-06.0, UST01E01-05.0, and UST01W01-06 were collected from the sidewalls of the UST excavation area at approximately 5 to 6 feet bgs. Soil samples SP-01, SP-02, and SP-03 were collected from stockpiled soil located southeast of the excavation area. One sample, PL-01-03.0, was collected at 3 feet bgs adjacent to the product line between the UST

excavation and generator building. On June 27, SES collected sample EX01F03-13.5 at approximately 13.5 feet bgs (directly below sample EX01F02-10.0 location).

Performance soil samples P-1 and P-2 had concentrations of 1,900 mg/kg DRPH and 400 mg/kg DRPH, respectively. Performance sample EX01F02-10.0 had a DRPH concentration of 3,500 mg/kg, greater than the cleanup level of 2,000 mg/kg. The soil areas represented by these samples were overexcavated. Confirmation soil samples EX01S01-06.0, EX01F01-10.0, SP-02, and SP-03 had concentrations of 140 mg/kg; 1,400 mg/kg; 120 mg/kg; and 91 mg/kg respectively, all below cleanup levels. Sample SP-02 had an ORPH concentration of 760 mg/kg.

Laboratory analytical results showed concentrations below detection limits for DRPH (<50 mg/kg) and ORPH (<250 mg/kg) in soil samples EX01N01-06.0, EX01E01-05.0, EX01W01-06.0, SP-01, and PL-01-03.0. Laboratory reports are presented in Appendix A and analytical results are summarized in Table 1.

PCS TRANSPORT AND DISPOSAL

On June 25 and 27, 2007, 80.62 tons of PCS was removed from the property and transported to the Waste Management, Inc. disposal facility in Seattle, Washington (Appendix B).

CONCLUSIONS

Based on information provided by Golder, observations of subsurface conditions, and current analytical results, SES has made the following observations:

- A 500-gallon heating oil UST was decommissioned and removed from the property (Appendix D).
- PCS to the west, south, east, north, and beneath the former UST with DRPH concentrations greater than their respective cleanup levels have been removed from the property.
- Confirmation soil samples show the remaining soils are below MTCA Method A Cleanup Levels.
- Groundwater was not observed during excavation activities.
- ORC placed in the excavation cavity should cause any residual PCS to break down at a faster rate and augment the bio-degradation of the residual.

The data collected by SES suggests that PCS associated with the former 500-gallon heating oil tank release has been excavated and removed from the property. SES recommends submitting this report to the Washington State Department of Ecology under the Voluntary Cleanup Program with a request for a No Further Action designation.

REFERENCES

- Golder Associates Inc. 2004. Subsurface Investigation Report for UST, 4221 225th Avenue Southeast, Issaquah, Washington. May 25.
- Jones, M.A. 1998. U.S. Geologic Survey, Surficial Hydrogeologic Units for the Tacoma Quadrangle, Plat 14.
- Washington State Department of Ecology. 1998. Underground Storage Tank Statute and Regulations, Chapter 173-360 WAC. July 14.

	. 2001. Model Toxics Control Act -	- Cleanup,	Chapter	173-340	WAC
February 12.	9				

CLOSING

SES trusts that the information presented in this *UST Decommissioning Report* meets Trinity's objectives. If you have questions or require additional information, please do not hesitate to contact the undersigned at 206.306.1900.

Prepared by:

Corey League Project Scientist

WA State Site Assessor

#5267709-U7

Reviewed by:

John R. Funderburk III, MSPH

John R Funderburk

Principal

Attachments: Figure 1, Vicinity Map

Figure 2, Exploration Location Plan

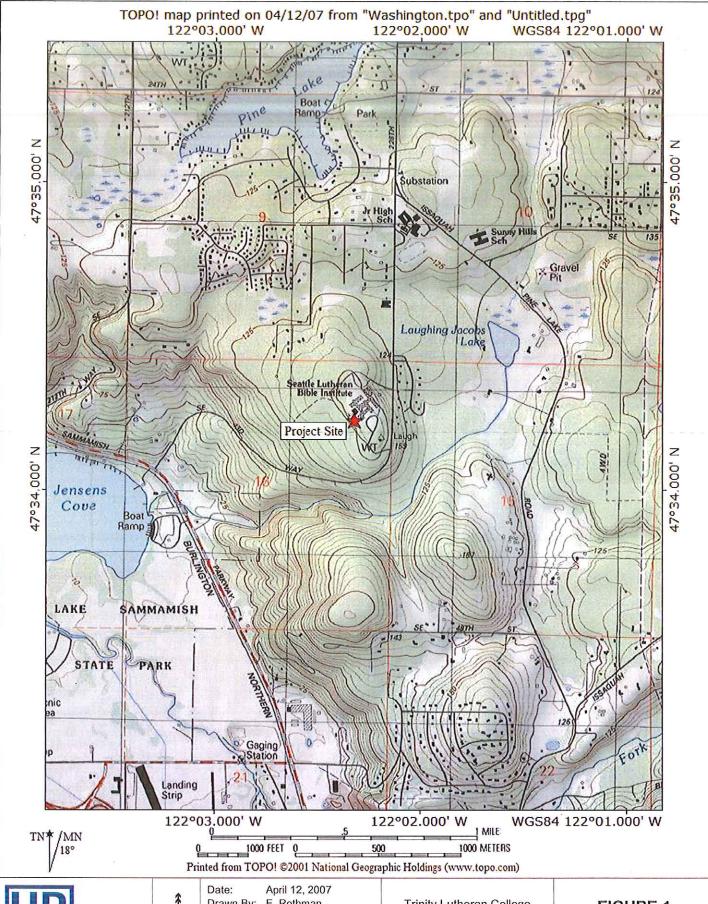
Table 1, Summary of Soil Analytical Results

Site Photographs

Appendix A, Laboratory Analytical Report Appendix B, Waste Disposal Tickets Appendix C, Triple Rinse Certificate Appendix D, Tank Disposal Ticket

Appendix E, Certification

FIGURES





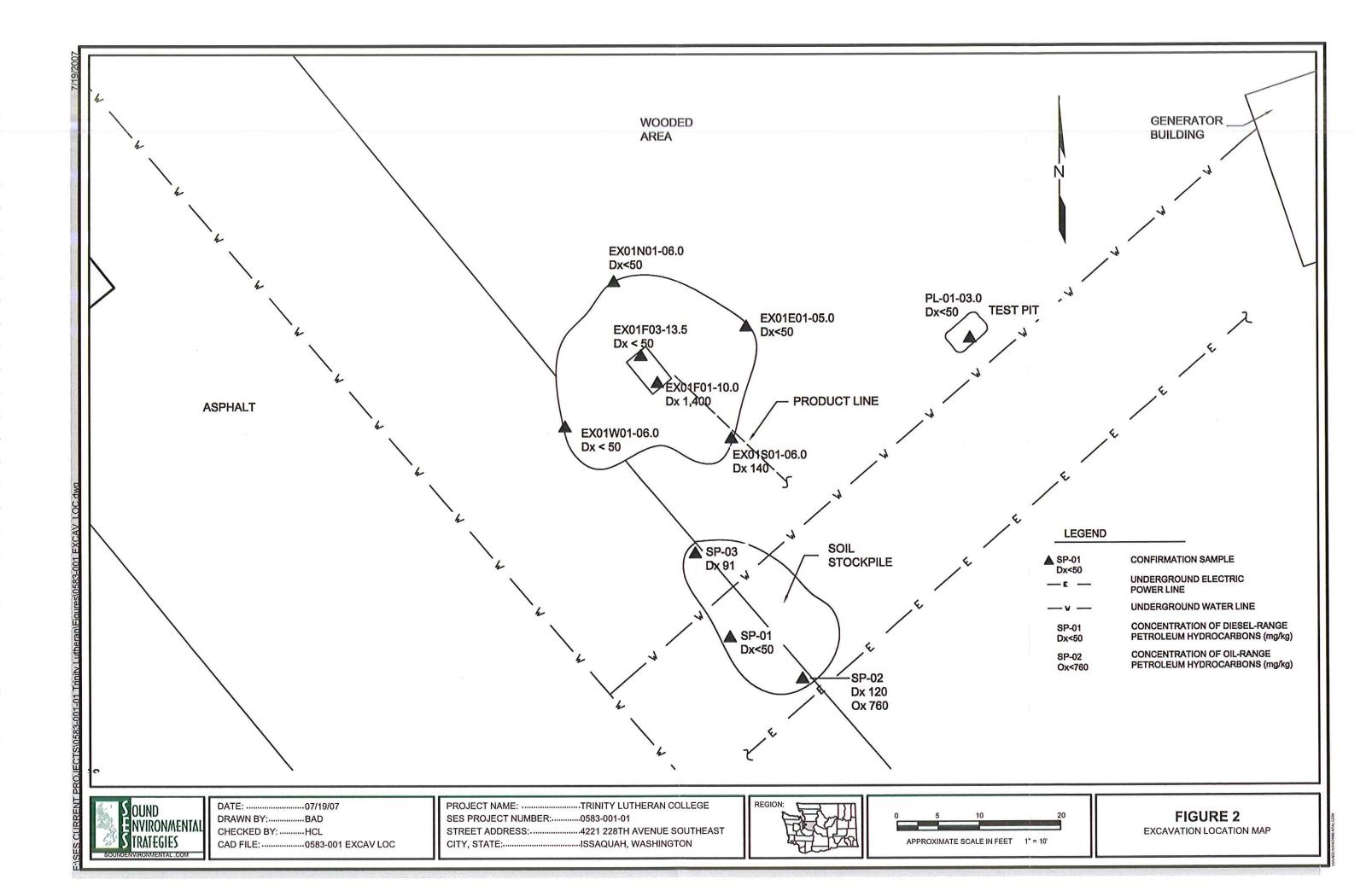


Date: April 12, 2007
Drawn By: E. Rothman
Chk By: J. Funderburk
SES Project No.: 0583-001-01

File ID: 583-001 Figure 1 Vicinity Map.doc

Trinity Lutheran College 4221 228th Street Southeast Issaquah, Washington FIGURE 1

Vicinity Map



SITE PHOTOGRAPHS



Photograph 1. Overview of excavation area, looking east (June 21, 2007).



Photograph 3. Gray petroleum staining evident in soil directly below and surrounding UST (June 21, 2007).



Photograph 5. Holes visible on bottom and west end of UST (June 21, 2007).



Photograph 2. Removal of UST, facing north (June 21, 2007).



Photograph 4. North side of UST (June 21, 2007).



Photograph 6. Removing gray petroleum stained soil from excavation floor (June 25, 2007).

Page 1 of 2



SES Project No.: 0583-001-01
Date: July 18, 2007
Drawn By: HCL

Chk By: File ID:

JRF

0583 Site Photographs

SITE PHOTOGRAPHS

Trinity Lutheran College 4221 228th Avenue SE Issaquah, Washington



Photograph 7. Petroleum contaminated soil directly loaded onto truck for offsite disposal (June 25, 2007).



Photograph 9. View of soil conditions at maximum excavation depth of 13.5 feet (June 27, 2007).



Photograph 11. White Oxygen Release Compound applied to excavation before backfilling (June 27, 2007).



Photograph 8. Over-excavation soil sample EX01F02-10.0 location (June 27, 2007).



Photograph 10. Looking west at excavation area upon completion of soil removal (June 27th, 2007).



Photograph 12. Looking east at stockpiled soil (June 27, 2007).

Page 2 of 2



SES Project No.: 0583-001-01 Date:

July 18, 2007

Drawn By: Chk By:

HCL **JRF**

File ID: 0583 Site Photographs

SITE PHOTOGRAPHS

Trinity Lutheran College 4221 228th Avenue SE Issaquah, Washington

TABLE



Summary of Soil Analytical Results **Trinity Lutheran College** 4221 228th Avenue SE Issaquah, Washington Table 1

	The state of the s	The second secon		The state of the s	
		Depth		DRPH1	ORPH ¹
Sample ID	Date	(feet)	Sample Location	(mg/kg)	(mg/kg)
		Golder Associates	Golder Associates Soil Boring Samples		
B1-7	5/14/04	7	4 Feet NW of Fillport	550	QN
B1-10	5/14/04	10	4 Feet NW of Fillport	Q.	ND
B1-13	5/14/04	13	4 Feet NW of Fillport	500	ΩN
B2-7	5/14/04	7	5 Feet SW of UST	1,800°e	630
B2-13	5/14/04	13.0	5 Feet SW of UST	85	QN
B3-7	5/14/04	7.0	5 Feet SE of UST	77	Q
B3-13	5/14/04	13	5 Feet SE of UST	Q.	ON
B4-2	5/14/04	2	Adjacent Generator Building, West Side	ND	ND
	Sound	Environmental Stra	Sound Environmental Strategies Performance Samples		
P-1	6/21/07	00	Below UST	1,900°e	<250
P-2	6/21/07	13.5	Below UST	440°e	<250
EX01F02-10.0	6/25/07	10	Below North End of UST	3,5000	<250
	Sound	Environmental Str	Sound Environmental Strategies Compliance Samples		
EX01N01-06.0	6/25/07	9	North Sidewall	<50	<250
EX01S01-06.0	6/25/07	ဖ	South Sidewall	140	<250
EX01E01-05.0	6/25/07	2	East Sidewall	<50	<250
EX01W01-06.0	6/25/07	9	West Sidewall	<50	<250
EX01F01-10.0	6/25/07	10	Below South End of UST	1,400	<250
EX01F03-13.5	6/27/07	13.5	Below North End of UST	<50	<250
SP-01	6/25/07	NA A	Stockpiled Soil	<50	<250
SP-02	6/25/07	AN	Stockpiled Soil	120	092
SP-03	6/25/07	AN	Stockpiled Soil	91	<250
PL-01-03.0	6/25/07	က	Product Line, SE of UST	<50	<250
MTCA Method A Cleanup Levels for Unrestricted	vels for Unrestricted Land Uses	2.5		2,000	2,000
NOTES:			:		
Red indicates concentration exceeds MTCA Method A Cleanup Level.	MTCA Method A Cleanup Level.		DRPH = diesel-range petroleum hydrocarbons	suox	

¹Analyzed by Northwest Method NWTPH-Dx.

ORPH= oil-range petroleum hydrocarbons MTCA = Model Toxics Control Act mg/kg = milligrams per kilogram SP = Stockpile Sample

ND = not detected at or above the practical quantitation limit UST = underground storage tank

²MTCA Cleanup Regulation, Chapter 173-340-900, Table 740-1 Method A Soil Cleanup Levels for Unrestricted Land Uses.

oo = soil sample location subsequently overexcavated

APPENDIX A

Laboratory Analytical Report

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

June 28, 2007

Corey League, Project Manager Sound Environmental Strategies Corporation 2400 Airport Way S., Suite 200 Seattle, WA 98134-2020

Dear Mr. League:

Included are the results from the testing of material submitted on June 21, 2007 from the SOU_0583-001-01_20070621, F&BI 706262 project. There are 3 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures SOU0628R.DOC

ENVIRONMENTAL CHEMISTS

Date of Report: 06/28/07 Date Received: 06/21/07

Project: SOU_0583-001-01_20070621, F&BI 706262

Date Extracted: 06/21/07 Date Analyzed: 06/21/07

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C ₁₀ -C ₂₅)	Motor Oil Range (C ₂₅ -C ₃₆)	Surrogate (% Recovery) (Limit 53-144)
P-1 706262-01	1,900	<250	114
P-2 706262-02	440	<250	112
Method Blank	<50	<250	120

ENVIRONMENTAL CHEMISTS

Date of Report: 06/28/07 Date Received: 06/21/07

Project: SOU_0583-001-01_20070621, F&BI 706262

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory	Codo	706249-09 (Matrix Spike)	
Laboratory	Coae:	(UDZ49-U9 GWALTIX ODIKE)	

				Percent	$\operatorname{Percent}$		
	Reporting	Spike	Sample	Recovery	Recovery MSD	Acceptance	RPD
Analyte	Units	Level	Result	MS		Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	104	101	71-137	3

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diesel Extended	mg/kg (ppm)	5,000	89	70-129

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 More than one compound of similar molecule structure was identified with equal probablility.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte indicated may be due to carryover from previous sample injections.
- d The sample was diluted. Detection limits may be raised due to dilution.
- ds The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dv The sample was diluted due to insufficient sample volume. Detection limits are raised due to dilution
- fb The analyte indicated was found in the method blank. The result should be considered an estimate.
- fc The compound is a common laboratory and field contaminant.
- fp Compounds in the sample matrix interfered with quantitation of the analyte. The reported concentration may be a false positive.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht The sample was extracted outside of holding time. Results should be considered estimates.
- ip Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The result is below normal reporting limits. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- Ic The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- **pc** The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve · The value reported exceeded the calibration range established for the analyte. The reported concentration should be considered an estimate.
- vo The value reported fell outside the control limits established for this analyte.
- x The pattern of peaks present is not indicative of diesel.
- y The pattern of peaks present is not indicative of motor oil.

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FOBLES Company SES ON Cy (PEGUE Send Report To ON Cy (PEGUE Address 266 Mir fort Way (" Suit 160 City, State, ZIP Scaffle with 180 Phone # Worsob-190 Rax # 206-190	Sample ID Sample S	Friedman & Bruya, Inc. 3012 16th Avenue West Seattle, WA 98119-2029 Received by: Ph. (206) 285-8282 Relinquishe Fax (206) 283-5044 Received by:

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

June 28, 2007

Corey League, Project Manager Sound Environmental Strategies Corporation 2400 Airport Way S., Suite 200 Seattle, WA 98134-2020

Dear Mr. League:

Included are the results from the testing of material submitted on June 25, 2007 from the SOU_0583-001-01_20070625, F&BI 706300 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures SOU0628R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 25, 2007 by Friedman & Bruya, Inc. from the Sound Environmental Strategies SOU_0583-001-01_20070625, F&BI 706300 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Sound Environmental Strategies
706300-01	EX01N01-06.0
706300-02	EX01S01-06.0
706300-03	EX01E01-05.0
706300-04	EX01W01-06.0
706300-05	EX01F01-10.0
706300-06	EX01F02-10.0
706300-07	SP-01
706300-08	SP-02
706300-09	SP-03
706300-10	PL-01-03.0

All quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/28/07 Date Received: 06/25/07

Project: SOU_0583-001-01_20070625, F&BI 706300

Date Extracted: 06/25/07 Date Analyzed: 06/25/07

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLE FOR TOTAL PETROLEUM HYDROCARBONS AS IR SCAN USING METHOD 418 MODIFIED

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	<u>IR Result</u>
EX01N01-06.0	<500
EX01S01-06.0	<500
EX01E01-05.0 706300-03	<500
EX01W01-06.0 706300-04	<500
EX01F01-10.0 706300-05	900
EX01F02-10.0 706300-06	1,600
SP-01 706300-07	<500
SP-02 706300-08	<500
SP-03 706300-09	<500
PL-01-03.0 706300-10	<500
Method Blank	<500

ENVIRONMENTAL CHEMISTS

Date of Report: 06/28/07 Date Received: 06/25/07

Project: SOU_0583-001-01_20070625, F&BI 706300

Date Extracted: 06/25/07 Date Analyzed: 06/26/07

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

	Sample ID Laboratory ID	Diesel Range (C ₁₀ -C ₂₅)	Motor Oil Range (C ₂₅ -C ₃₆)	Surrogate (% Recovery) (Limit 53-144)	
	EX01N01-06.0 706300-01	<50	<250	106	-
	EX01S01-06.0 706300-02	140	<250	108	
	EX01E01-05.0 706300-03	<50	<250	107	
<u> </u>	EX01W01 06.0 706300-04	√50	<250	104	
	EX01F01-10.0 706300-05	1,400	<250	108	
	EX01F02-10.0 706300-06	3,500	<250	111	
	SP-01 706300-07	<50	<250	107	
	SP-02 706300-08	120	760	106	
	SP-03 706300-09	91	<250	107	

ENVIRONMENTAL CHEMISTS

Date of Report: 06/28/07 Date Received: 06/25/07

Project: SOU_0583-001-01_20070625, F&BI 706300

Date Extracted: 06/25/07 Date Analyzed: 06/26/07

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	$rac{ ext{Diesel Range}}{ ext{(C}_{10} ext{-C}_{25} ext{)}}$	Motor Oil Range (C ₂₅ -C ₃₆)	Surrogate (% Recovery) (Limit 53-144)
PL-01-03.0 706300-10	<50	<250	101
Method Blank	<50	<250	102

ENVIRONMENTAL CHEMISTS

Date of Report: 06/28/07 Date Received: 06/25/07

Project: SOU_0583-001-01_20070625, F&BI 706300

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory	Code	706300-10	Matrix	Snike

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery MSD	Acceptance	RPD
Analyte	Units	Level	Result	MS		Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	98	102	71-137	4

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diesel Extended	mg/kg (ppm)	5,000	98	70-129

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 More than one compound of similar molecule structure was identified with equal probablility.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte indicated may be due to carryover from previous sample injections.
- d The sample was diluted. Detection limits may be raised due to dilution.
- ds The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dv The sample was diluted due to insufficient sample volume. Detection limits are raised due to dilution
- fb The analyte indicated was found in the method blank. The result should be considered an estimate.
- fc The compound is a common laboratory and field contaminant.
- fp Compounds in the sample matrix interfered with quantitation of the analyte. The reported concentration may be a false positive.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht The sample was extracted outside of holding time. Results should be considered estimates.
- ip Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The result is below normal reporting limits. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- **pc** The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve The value reported exceeded the calibration range established for the analyte. The reported concentration should be considered an estimate.
- vo The value reported fell outside the control limits established for this analyte.
- x The pattern of peaks present is not indicative of diesel.
- y · The pattern of peaks present is not indicative of motor oil.

- *** ** * * * * *								-			 	·	T							—— <u> </u>	
AS 10 † of Color TURNAROUND TIME 10 Standard (2 Weeks) 11 RUSH 6/2 c/c A M 12 Rush charges authorized by: 12 SAMPLE DISPOSAL 13 Dispose after 30 days 10 Return samples 11 Will call with instructions	0	S) 43 43 43 43 44 45 47 77 44	Run IR	g carrier	anoma			· · · · · · · · · · · · · · · · · · ·	a a a a a a a a a a a a a a a a a a a			~ ~	on all well	gyringu d	£42072.000000	DATE TIME	6/25/2 1430	0871 1930	L 18:20	5 15:20 Folze 3	, , , , , , , , , , , , , , , , , , ,
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1 2 - 2693	¥	Marix of NWTPH.Dx NWTPH.Dx Street NWTPH.Dx Street NWTPH.Dx	30i(1 X	<u>У</u>	X	X	X	X	X	X	X	· · · · · · · · · · · · · · · · · · ·				PRINT NAME	Carlina	Andrea Lilleaga	<i>ر</i> ن ع	When Phon	
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706300 Send Report To Corcy Rague Company SES Address 2400 Air Part Way S. Surt City, State, ZIP Sec 44 k with 18134 Phone # 206-304-1900 Rax # 2010-306-		Sample ID Sample Sar	[WalNG1+106.0	1X01861-106.0	\Z\ \Z\	ויאו	EXOIFOL-10.0	EXØ1F 02-15.0	54-0	SP-02.	50-03	13.3				Friedman & Bruya, Inc.		Seattle, WA 98119-2029 Rec	Ph. (206) 285-8282 Rel	Fax (206) 283-5044 Rec	FORMS\COC\SESGEMSR1.DOC (Revision 1)
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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

July 6, 2007

Corey League, Project Manager Sound Environmental Strategies Corporation 2400 Airport Way S., Suite 200 Seattle, WA 98134-2020

Dear Mr. League:

Included are the results from the testing of material submitted on June 27, 2007 from the SOU_0583-001-01_20070627, F&BI 706339 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures SOU0706R.DOC

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 27, 2007 by Friedman & Bruya, Inc. from the Sound Environmental Strategies SOU_0583-001-01_20070627, F&BI 706339 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID 706339-01

Sound Environmental Strategies

EX01F03-13.5

All quality control requirements were acceptable.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/06/07 Date Received: 06/27/07

Project: SOU_0583-001-01_20070627, F&BI 706339

Date Extracted: 06/27/07 Date Analyzed: 06/27/07

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLE FOR TOTAL PETROLEUM HYDROCARBONS AS IR SCAN USING METHOD 418 MODIFIED

Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	<u>IR Result</u>
EX01F03-13.5 706339-01	<500
Method Blank	<500

ENVIRONMENTAL CHEMISTS

Date of Report: 07/06/07 Date Received: 06/27/07

Project: SOU_0583-001-01_20070627, F&BI 706339

Date Extracted: 06/27/07 Date Analyzed: 06/28/07

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C ₁₀ -C ₂₅)	$rac{ ext{Motor Oil Range}}{ ext{(C}_{25} ext{-C}_{36} ext{)}}$	Surrogate (% Recovery) (Limit 50-150)
EX01F03-13.5 706339-01	<50	<250	117
Method Blank	<50	<250	97

ENVIRONMENTAL CHEMISTS

Date of Report: 07/06/07 Date Received: 06/27/07

Project: SOU_0583-001-01_20070627, F&BI 706339

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 706328-07 (Matrix Spike)

				Percent	Percent		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	< 50	129	128	50-150	1

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diesel Extended	mg/kg (ppm)	5.000	111	70-130

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

- a · The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- A1 More than one compound of similar molecule structure was identified with equal probability.
- **b** The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte indicated may be due to carryover from previous sample injections.
- d The sample was diluted. Detection limits may be raised due to dilution.
- ds The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.
- dv The sample was diluted due to insufficient sample volume. Detection limits are raised due to dilution
- fb The analyte indicated was found in the method blank. The result should be considered an estimate.
- fc The compound is a common laboratory and field contaminant.
- fp Compounds in the sample matrix interfered with quantitation of the analyte. The reported concentration may be a false positive.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.
- ht The sample was extracted outside of holding time. Results should be considered estimates.
- ip Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- \mathbf{j} The result is below normal reporting limits. The value reported is an estimate.
- I The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- **jl** The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.
- jr The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- Ic The presence of the compound indicated is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- pr The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve The value reported exceeded the calibration range established for the analyte. The reported concentration should be considered an estimate.
- vo The value reported fell outside the control limits established for this analyte.
- x The pattern of peaks present is not indicative of diesel.
- y The pattern of peaks present is not indicative of motor oil.

·			
Page # (of / of / TURNARROUND TIME TURNARROUND TIME Standard (2 Weeks) WRUSH 6/22/6 > A-M Rush charges authorized by: LICL SAMPLE DISPOSAL SAMPLE DISPOSAL G Dispose after 30 days C Return samples Will call with instructions	STED Notes TR - 6/27/67	anicination monomina anicination monomina anicination	6/2767 1155 6/2767 1500 6/27/07 1500
ME 06/37/07 Po# OSta Kush Rush GEMS Y/N) SPDis	ANALYSE ANALYSE OVO's by 8260 SYOC's by 8270 SYOC's by 8270 SYOC's by 8270	Samples received	SES
AIN OF CUSTODY S (signature) NAME/NO.	Matrix # of NWTPH-Dx		PRINT NAME ALLY Lighth Whan Dhun
54.7e 2ce	b Date Time Sampled Sampled 6/22/67 //55-		SIGNATURE by: M m m
39 Tt To Corry Cague SES 400 Aryant Way S , IIP Soft 1900 Fax#	Sample ID Sample Sample Lab Location Depth ID Sample ID		Friedman & Bruya, Inc. 3012 16th Avenue West Seattle, WA 98119-2029 Ph. (206) 285-8282 Fax (206) 283-5044 Fox (206) 283-5044
7063 Send Repo Company Address Z City, State	Sami		Fried. 3012 J Seattl Ph. (2 Fax (2

APPENDIX B Waste Disposal Tickets

BILL OF LADING/SCALE TICKET



Generators Name & Address: TRINITY LUTHERAN COLLEGE

Billing: SOUND ENVIRONMENTAL STRATEGIES

Contact Person: COREY LEAGUE Contact Number: 206-306-1900 Fax Number: 206-306-1907

Remarks:

TICKET 42829
WMI ARRF
70 S. ALASKA ST.
SEATTLE WA.
TRUCK ID E104
- TIME 10:34 AM 25 JUN 2007

GROSS
K TARE
HET
HET
TIME 10:34 AM 2

96660 LB 41800 LB 54860 LB 27.43 TON 25 JUN 2007

Acknowledgement of Loading Name (Please Print) Company Signature Date Deliver To: Disposal Facility: ALASKA RELOAD & RECYCLING FACILITY COLUMBIA RIDGE LANDFILL AND 70 SOUTH ALASKA STREET RECYCLING FACILITY SEATTLE, WASHINGTON 98134 18177 CEDAR SPRINGS LANE TELEPHONE #. (206) 763-5025. ARLINGTON, OREGON 97812 MONDAY-FRIDAY 7 COAM-4:00PM TELEPHONE (541) 454-2030 Transporter Name: Waste Profile # 100310WA Waste Type: ADC Expiration Date: 06/22/08 Driver's Name (Please Print) DATE

BILL OF LADING/SCALE TICKET



Generators Name & Address: TRINITY LUTHERAN COLLEGE

Billing SOUND ENVIRONMENTAL STRATEGIES

Contact Person: COREY LEAGUE Contact Number: 206-306-1900 Fax Number: 206-306-1907 TICKET 42840 WMI ARRF 70 S. ALASKA ST. SEATTLE WA. TRUCK ID E104 TIME 01:29 PM 25 JUN 2007

GROSS 99680 LB K TARE 41800 LB NET 57880 LB NET 28.94 TON TIME 01:23 PM 25 JUN 2007

Acknowledgement of Loading	
Name (Please Print)	Company
Signature	Date
Deliver To:	Disposal Facility:
ALASKA RELOAD & RECYCLING FACILITY 70 SOUTH ALASKA STREET SEATTLE. WASHINGTON 98134 TELEPHONE #. (208) 763-5025 MONDAY-FRIDAY 7:00AM-4:00PM	COLUMBIA RIDGE LANDFILL AND RECYCLING FACILITY 18177 CEDAR SPRINGS LANE ARLINGTON, OREGON 97812 TELEPHONE: (541) 454-2030
Transporter Name:	Waste Profile # 100310WA
£ 2011	Waste Type: ADC
Truck #: <u>E 104</u>	Expiration Date: 06/22/08
Driver's Name (Please Print)	
Water Druce	DATE
Remarks:	

BILL OF LADING/SCALE TICKET



Generators Name & Address: TRINITY LUTHERAN COLLEGE

Billing SOUND ENVIRONMENTAL STRATEGIES

Contact Person: COREY LEAGUE Contact Number: 206-306-1900 Fax Number: 206-306-1907 TICKET 42934
WMI ARRE
70 S. ALASKA ST.
SEATTLE WA.
TRUCK ID E3
TIME 12:47 PM 27 JUN 2007

GROSS 90300 LB K TARE 41800 LB HET 48500 LB HET 24.25 TOH TIME 12:47 PM 27 JUN 2007

Acknowledgement of Loading	
Name (Please Print)	Company
Signature	Date
Deliver To:	Disposal Facility:
ALASKA RELOAD & RECYCLING FACILITY TO SOUTH ALASKA STREET SEATTLE, WASHINGTON 98134 TELEPHONE #: (206) 763-5025 MONDAY-FRIDAY 7:00AM-4.00PM	COLUMBIA RIDGE LANDFILL AND RECYCLING FACILITY 18177 CEDAR SPRINGS LANE ARLINGTON, OREGON 97812 TELEPHONE: (541) 454-2030
Transporter Name:	Waste Profile # 100310WA
Truck #: E3	Waste Type: ADC
Truck #:	Expiration Date: 06/22/08
Driver's Name (Flesse Print)	
Westly Louve	DATE
SIGNATURE Remarks:	

APPENDIX C Triple Rinse Certificate

MARINE VACUUM SERVICE, INC.

UNDERGROUND STORAGE TANK TRIPLE RINSE CERTIFICATE

Tank Size: 3 00 (a)
Tank Location: Trusty Community College. 4221 228D ST &
Marine Vacuum Service, Inc. certifies that the above mentioned tank(s) have been triple rinsed in accordance with the industry standard and that all rinsate has been disposed of in accordance with Federal, State and Local regulations.
Tank Owner Trinity Luthing College
Sub-Contractor: Spronter Contracting LLC
M.V.S. Representative:
Date: 4219
Notes: Pamp of Wash ust

APPENDIX D

Tank Disposal Ticket

MARINE VACUUM SERVICE PO Box 24263 98124 Seattle, WA

INVOICE

Invoice Number 35961

> Invoice Date: Jun 30, 2007

> > Page:

Voice: 206,762.0240

Fax: 206.763.8084

Bill To: SPOONER CONTRACTING, LLC

17807 SE 346TH ST. AUBURN, WA 98092

SPOONER CONTRACTING, LLC DISPOSAL @ MVS 628004/06.21.07 AUBURN, WA 98092

Customer ID	Customer PO	Paymen	Payment Terms Net 30 Days	
SPOONER-	9 7	Net 3		
· · · · · · · · · · · · · · · · · · ·	Description	Quaraity	Unit Price	Extensio
****** 06/21/07	DISPOSAL W MVS			In endouble
TANK DISPOSAL	•	1.00 EA	SERVICE	

Subtotal

Sales Tax

Total Invoice Amount

Overdue invoices are subject to finance charges.

Invoice Due: Jul 30, 2007

APPENDIX E

Certification

INTERNATIONAL CODE COUNCIL

COREY LEAGUE

The International Code Council attests that the individual named on this certificate has satisfactorily demonstrated knowledge as required by the International Code Council by successfully completing the prescribed written examination based on codes and standards then in effect, and is hereby issued this certification as:

WASHINGTON STATE SITE ASSESSMENT

given this day of August 23, 2005

5267709-U7 Certificate Number

Frank P. Hadge Je.

Frank P. Hodge Jr.

President, ICC Board of Directors

Jawa K. Will

James L. Witt ICC Chief Executive Officer

