# FINAL CLEANUP REPORT

L&E AUTO SALES PROPERTY
2101 BURWELL PLACE
BREMERTON, WASHINGTON
ECOLOGY FS ID: 14170/ CS ID: 11943

Prepared for:
MR. RIC BEARBOWER
FRICK N FRACK HOLDINGS, INC.
P. O. BOX 1010
SILVERDALE, WA. 98383

Prepared by:
ENVIROSOUND CONSULTING, INC.
3388 BYRON STREET NW, SUITE 200
SILVERDALE, WA 98383

Project No. ESC13-E002 July 21, 2013



# EnviroSound Consulting Geotechnical and Environmental Consulting

July 21, 2013 Project No. ESC13-E002

Mr. Ric Bearbower Frick N Frack Holdings Inc. P. O. Box 1010 Silverdale, WA 98383

RE: Final Cleanup Report

L & E Auto Sales Property 2101 Burwell Place

Bremerton, Washington

Ecology FS ID: 14170/ CS ID: 11943

### Dear Mr. Bearbower:

EnviroSound Consulting, Inc., (EnviroSound) has completed a Report for the L & E Auto Sales Property site, summarized in a report dated July 21, 2013.

EnviroSound has completed confirmation sampling in areas of former UST's on the site.

Due to the non-detect levels, EnviroSound recommends that a No Further Action (NFA) designation be requested from the Washington Department of Ecology.

If you have any questions, or if we can be of further assistance, please do not hesitate to contact our office.

Respectfully Submitted, EnviroSound Consulting, Inc.

Shawn E. Williams, L.G.

Senior Environmental Geologist

An Ellelli

# Project No. ESC13-E002

# **Table of Contents**

EXECUTIVE SU	JMMARY	.1
SECTION 1.0	INTRODUCTION	
SECTION 2.0	SITE DESCRIPTION	
SECTION 3.0	PROJECT BACKGROUND	.2
SECTION 4.0	SCOPE OF SERVICES	.3
SECTION 5.0	FIELD AND LABORATORY PROCEDURES	3
5.1 SOIL SAMP	LING	3
5.2 Laborato	RY ANALYTICAL METHODS	3
SECTION 6.0	SITE HYDROGEOLOGICAL CHARACTERISTICS	3
SECTION 7.0	ENVIRONMENTAL MONITORING RESULTS	4
7.1 SOIL		4
SECTION 8.0	DISCUSSION/CONCLUSIONS	5
SECTION 9.0	RECOMMENDATIONS	5
SECTION 10.0.		6
REFERENCES.		
	[S	

# <u>Figures</u> (following photos)

Figure 1: Vicinity Map Figure 2: Site Plan

# **Appendices**

- A Phase II ESA Report by DLH Environmental Consulting
- B Underground Storage Tank Decommissioning and Final Cleanup Report by DLH Environmental Consulting
- C EnviroSound Laboratory Data-2013.



EnviroSound Consulting Geotechnical and Environmental Consulting

July 21, 2013

Project No. ESC13-E002

### FINAL CLEANUP REPORT

# L & E SALES PROPERTY 2101 BURWELL PLACE BREMERTON, WASHINGTON

# **Executive Summary**

This Final Cleanup Report has been prepared by EnviroSound Consulting, Inc. (EnviroSound) for the L & E Sales property at 2101 Burwell Place in Bremerton, Washington. This report describes the results of confirmation soil sampling by EnviroSound following previous site cleanup efforts following the removal of three Underground Storage Tanks (USTs) and petroleum contaminated soil (PCS) in 2010 and to obtain a No Further Action (NFA) designation from the Washington Department of Ecology.

Historical research by DLH Environmental Consulting (2010) indicated that the subject property had been a taxi cab stand with the potential presence of a three- pump island on the subject property. Although the pump islands had been removed there was no evidence that the UST's had been removed. A waste oil UST was also located in a small garage on the subject site.

In June 2010 DLH performed a Phase II Environmental Site Assessment on the subject property with the drilling of six (6) geoprobes at select locations on the site to a maximum depth of 20 feet. Soil samples were submitted for Total Petroleum Hydrocarbon Identification by method NWTPH-HCID, with the sample next to the small garage having the only elevated level of Diesel at 2,500 ppm. Soil samples were also submitted for analysis of volatile organic compounds (VOC's), polychlorinated biphenyls (PCB's) and the RCRA 8 metals. Laboratory analysis confirmed that only diesel was detected.

A waste oil tank and an old hydraulic lift were removed on August 19, 2010 from inside a small garage building on the southwest corner of the property. Soil samples collected from the sidewalls and bottom of the excavation by DLH indicated elevated levels of heavy oil remain in place beneath the garage building. On August 20, 2010 two UST's were removed from the northeast corner of the property. On August 23, 2010 a third UST was removed from the northeast corner of the property. A total of 75.95 tons of petroleum impacted soil was excavated from the site and transported to the Waste Management Olympic View Transfer Station. Confirmation samples collected from the sidewalls and bottom of the UST excavation indicated elevated levels of gasoline impacted soil along the south and west ends of the excavation.

On February 22, 2013 a representative of EnviroSound collected two soil samples from an excavation inside the small garage. The garage was in the process of being demolished at the time of the sampling. The samples were collected from a depth below the elevated soil samples previously collected by DLH. No stained soil was observed during the excavation process. Soil sample results were non detect for diesel and heavy oil.

On March 28, 2013 a representative of EnviroSound collected two soil samples from an excavation in the

area of the former USTs. The samples were collected from a depth below previous soil samples collected by DLH. No stained soils or hydrocarbon odors were observed during the excavation process. Soil sample results were non-detect for Total Petroleum Hydrocarbons (TPH) in the gasoline range and the hydrocarbon constituents benzene, toluene, ethylbenzene, and total xylenes (BTEX). A third sample was collected in the area of geoprobe B-1 at a depth below the elevated diesel soil sample collected by DLH. No stained or odoriferous soils were noted during the excavation. The soil sample result was non-detect for diesel and heavy oil.

### Section 1.0 Introduction

This report presents the results of confirmation soil sampling conducted by EnviroSound on the referenced property. EnviroSound was contracted by Frick N Frack Holdings, LLC. to begin work on the subject property in February 2013. The results of the field activities are described in this report.

# Section 2.0 Site Description

The subject property is bounded by Naval Avenue on the east side, single-family residences to the west side, Burwell Place to the north and Burwell Street to the south in Bremerton, Washington (Figure 1). The property consists of 0.25 acres, with County Assessor's parcel number of 3778-005-001-0002 and is located in Range 1E, Township 24N Section 14. The parcel is developed with a one-story wood frame building which is currently vacant with gravel parking. The building was constructed during 1953. A small garage located on the southwestern portion of the site was demolished in March 2013. The topography of the site in general gently slopes toward the west.

# Section 3.0 Project Background

EnviroSound developed the scope of work contained herein based on the review of previous work performed on the site by DLH Environmental Consulting. (DLH). During June 2010 DLH conducted a Phase II Site Assessment at the subject property utilizing a geoprobe to collect soil samples from six locations on the site. Ten soil samples were collected and submitted for analysis of Total Petroleum Hydrocarbon Identification by method NWTPH-HCID and Total Petroleum Hydrocarbons (TPH) in the diesel and oil ranges by method NWTPH-Dx. Based on laboratory analytical results, one sample contained heavy oil above the Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) cleanup level of 2,000 ppm. It was recommended that a waste oil UST be removed from a small garage building on the site. On August 19, 2010 the 250 gallon waste oil UST was removed as was an old hydraulic lift. Exploratory work with an excavator led to the discovery of three USTs on the northeastern corner of the lot. Two of the USTs had a capacity of 1,000 gallons and the third had a capacity of 2,000 gallons. The three larger USTs were empty and had numerous holes. During UST removal and excavation operations, 75.95 tons of petroleum-contaminated soil (PCS) were removed and disposed of at the Olympic View Transfer Station, for transport to Waste Management's disposal facility. Laboratory analysis of soil around the waste oil UST was conducted for diesel and heavy oil-range hydrocarbons, volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and RCRA 8 metals (which were non-detect). Laboratory analysis for the soils around the three USTs was for the presence of gasoline and benzene, toluene, ethylbenzene, and xylenes (BTEX), using method NWTPH-GX and EPA Method 8021B, respectively, and lead using EPA-Method 200.8. Laboratory results are included in Appendix A.

Soil sample results collected by DLH after soil excavation indicated that petroleum impacted soils were

still in place along the south and west ends of the excavation associated with the three USTs. A geoprobe sample outside the garage and samples underneath the garage building indicated that heavy oil impacted soils remain in place on the property. Previously excavated areas are shown on Figure 2. Laboratory results from DLH sampling will be inputted into Ecology's Environmental Information Management (EIM) system after the system has been updated (August 2013).

### Section 4.0 Scope of Services

The scope of services for EnviroSound's investigation consisted of: 1) excavating test pits in the area of the impacted soils with a trackhoe excavator and the collection of soil samples, 2) chemical analysis of soil for Total Petroleum Hydrocarbons (TPH) in the diesel-extended range (method NWTPH-Dx) and the gasoline-range (method NWTPH-Gx) with the BTEX constituents (EPA method 8021B), and 3) preparation of a report documenting the field investigation and findings.

# Section 5.0 Field and Laboratory Procedures

Field activities for collection of soil samples in the area of the former waste oil UST occurred on February 22, 2013, with one test pit placed within the former garage building and another outside the former building footprint. Field activities for collecting soil samples for the three USTs were performed on March 28, 2013. Test pit locations are shown on Figure 2.

# 5.1 Soil Sampling

Soil from the test pits were collected from the excavator bucket. Each soil sample was viewed for staining from petroleum and the presence of any petroleum odors.

Soil samples were selected for analysis based on depths from the previous sampling performed by DLH. Soil samples were collected at depths ranging from 5.0 to 9.0 feet in the former garage and 7.0 feet in the area of DLH Environmental consulting B-1. Soil samples in the area of the former UST's were collected at a depth of 15.0 to 16.0 feet. Soil samples for TPH diesel-range analysis were collected using individual stainless steel spoons and four-ounce glass jars which were laboratory-certified. Samples were placed into the jars, leaving no headspace, labeled, placed into a ziplock bag, and then placed into a cooler with ice-substitute. Soil samples for gasoline range hydrocarbons were collected utilizing a plunger and placed in glass vials. The cooler was delivered by courier to ALS Laboratories for analysis using proper chain-of-custody protocols.

### 5.2 Laboratory Analytical Methods

The submitted soil samples were analyzed by ALS Laboratories for the following:

- Diesel and Oil-Range Hydrocarbon by Method NWTPH-Dx,
- Gasoline-Range Hydrocarbon and BTEX by Method NWTPH-Gx and EPA Method 8021B, respectively.

# Section 6.0 Site Geological Characteristics

The subject site is located at an elevation of about 100 feet above mean sea level in the City of Bremerton Washington. The soil conditions encountered in the EnviroSound test pits were approximately 2.5 feet of fill, underlain by a stiff to hard gray, slightly sandy Silt with trace clay to a depth of approximately 16.0 feet.

No groundwater was encountered in the geoprobe sample locations or in the test pit excavations to depths of 20 and 16 feet respectively.

# Section 7.0 Environmental Sample Results

Analysis and interpretation of the data generated during the laboratory testing is presented in the following sections. Where appropriate, the results are compared with regulatory limits for the chemicals identified in the soil and groundwater. Model Toxics Control Act (MTCA) Method A Cleanup Levels for Unrestricted Land Uses are shown for comparison with the analytical results. Those results shown as "less than" (<) are below detection limits, with the detection limit value following the "<". Copies of the Certified Analytical Results and Chain-of-Custody Records are included in Appendix B.

### 7.1 Soil

Soil samples were collected from depths below previous sampling performed by DLH Consulting. The laboratory analytical results are listed in Table 1 for the Diesel and Oil-range Hydrocarbon and in Table 2 for the Gasoline-range Hydrocarbon and BTEX compounds. No concentrations of any of the parameters were detected above the detection limits or above the applicable cleanup levels.

Table 1. Summary of Soil Diesel and Oil Results 2101 Burwell Place, Bremerton, Washington

Location	Sampling Depth	Diesel (mg/kg)	Lube Oil (mg/kg)
Former Hydraulic Lift	@ 9.0 feet	< 25	< 50
Former Waste Oil UST	@ 5.0 feet	< 25	< 50
B-1	@7.0 feet	< 25	< 50
MTCA Method A	Cleanup Levels	2,000.	2,000.

### Notes:

Concentrations listed in milligrams per kilogram (mg/kg), or parts per million (ppm). Standards are MTCA Method A Soil Cleanup Levels from Chapter 173-200 WAC.

Table 2. Summary of Soil Gas and BTEX Results 2101 Burwell Place, Bremerton, Washington

210: Dai Wolf Flact, Diomorton, Washington						
Sampling Depth	Benzene	Ethyl- benzene	Toluene	Xylenes	Gas	
@ 15.0 feet	< 0.02	<0.03	< 0.05	< 0.05	< 3	
@ 15.0 feet	< 0.02	< 0.03	< 0.05	< 0.05	< 3	
d A Cleanup	0.03	7	6	9	*30/100	
	Sampling Depth @ 15.0 feet @ 15.0	Sampling   Benzene	Sampling   Benzene   Ethylbenzene	Sampling Depth         Benzene         Ethylbenzene         Toluene           @ 15.0 feet         < 0.02	Sampling Depth         Benzene         Ethylbenzene         Toluene         Xylenes           @ 15.0 feet         < 0.02	

### Notes:

Concentrations listed in milligrams per kilograms (mg/kg), or parts per million (ppm).

<sup>\*</sup>Gasoline cleanup levels in soil is 30 mg/kg if benzene is present, and 100 mg/kg if benzene is not present. Standards are MTCA Method A Soil Cleanup Levels from Chapter 173-200 WAC.

### Section 8.0 Discussion/Conclusions

Based on the results of this study, the following conclusions have been developed:

### Former Fuel USTs.

DLH supervised the excavation and removal of three fuel UST's and 75.95 tons of PCS on the northeast corner of the subject property. A confirmation sample in the south portion of the UST excavation and the west portion of the excavation were above Ecology cleanup level guidelines. Both samples were approximately 14.0 feet in depth. EnviroSound supervised the excavation of a trench in the elevated sample areas. No visible evidence of PCS was observed and no petroleum odors were noted during excavation. Soil samples were collected at 15.0 feet to 16.0 feet below existing grade with soil sample results for Gas and BTEX below detection limits.

# Former Garage

DLH supervised the removal of a waste oil tank and a hydraulic lift in the small garage building. EnviroSound collected two samples from beneath the (former) garage building as well as one soil sample just outside (north) of the garage in the area of geoprobe B-1. Soil sample results were all below the detectable limits for heavy hydrocarbons. No stained soils or odors were observed during the excavation process.

With the removal of the fuel USTs and associated 75.95 tons of PCS as well as the removal of the waste oil UST and hydraulic lift, the sources of contamination on the site has been removed. No groundwater was encountered in the borings by DLH to a depth of 20 feet.

### Section 9.0 Recommendations

EnviroSound recommends that a No Further Action (NFA) designation be requested from the Washington Department of Ecology. All laboratory data from DLH and EnviroSound sampling activities will be inputted into the Department of Ecology EIM system when the system is updated in August 2013.

### Section 10.0 Limitations

The findings in this report are based on the results of field and laboratory investigations, along with the interpretation of surface and subsurface conditions associated with our soil samples. The data presented should be considered representative of the time of our observations. Changes in the condition of the property can occur over time by both natural processes and human activities. Additionally, changes in government codes, regulations or laws may occur.

A laboratory certified by the State of Washington, Department of Ecology, performed the analytical testing. The results are accurate only to the degree of testing accuracy required, the representative nature of the samples obtained, and professional interpretation.

This report has been prepared for the exclusive use of the client noted on the cover page, and their agents for specific application to the subject site. Use or reliance upon this report by a third party is at their own risk. EnviroSound does not make any representation or warranty, express or implied, to such other parties as to the accuracy or completeness of this report or the suitability of its use by such other parties for any purpose whatever, known or unknown, to EnviroSound.

If you have any questions, or if we can be of further assistance, please do not hesitate to contact our office at (360) 698-5950.

Respectfully submitted, EnviroSound Consulting, Inc.

Shawn E. Williams, L.G.

Senior Environmental Geologist

2208 Shawn E. Williams

7-29-13

# References

Phase II Environmental Site Assessment Activities for 2101 Burwell Place, Bremerton, WA. by DLH Environmental Consulting, dated June 17, 2010.

Underground Storage Tank Decommissioning and Final Cleanup Report for 2101 Burwell Place, Bremerton, WA. by DLH Environmental Consulting, dated January 12, 2011

# **PHOTOGRAPHS**



Photo 1: Former waste oil UST location in garage building. Building in process of being demolished.



Photo 2: Excavation in former waste oil location.



Photo 3. Sampling locations in the former waste oil UST area.



Photo 4. Begin excavation in the test pit outside the former garage building footprint.



Photo 5. Excavation in the area of the former USTs.



Map adapted from Kitsap parcel search 5/2013

Not to Scale



FIGURE 1. Vicinity Map
Project Name: Burwell Place
Location: Bremerton, Washington
Project: ESC13—E002
Client: Frick N Frack Holdings LLC
Date: May 2013



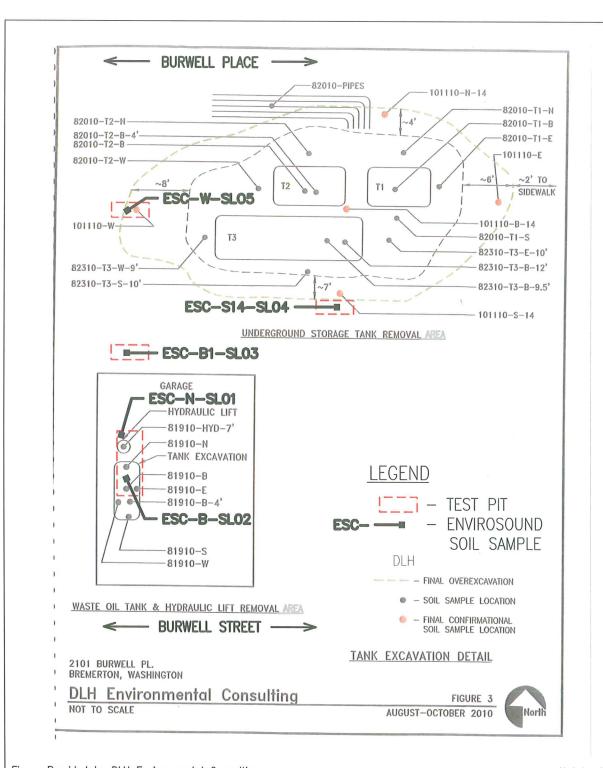


Figure Provided by DLH Environmental Consulting

Not to Scale



FIGURE 2. Site Map

Project Name: Burwell Place Location: Bremerton, Washington

Project: ESC13-E002 Client: Frick N Frack Holdings LLC

Date: May 2013



# Appendix A

# PHASE II ENVIRONMENTAL SITE ASSESSMENT ACTIVITIES

# L&E AUTO SALES 2101 BURWELL PLACE BREMERTON, WASHINGTON 98132

# **SUBMITTED TO:**

HARRY B. ROMBERG 11538 17<sup>TH</sup> AVENUE NE SEATTLE, WASHINGTON 98125

# PREPARED BY:

DONNA HEWITT, L.G.
DLH ENVIRONMENTAL CONSULTING
2400 NW 80<sup>TH</sup> STREET No. 114
SEATTLE, WASHINGTON 98117-4449

JUNE 17, 2010

# TABLE OF CONTENTS

		PAGE
1.0	PROJECT DESCRIPTION/SCOPE OF WORK  1.1 Background	1
2.0	METHODS OF INVESTIGATION	1
3.0	RESULTS OF INVESTIGATION 3.1 Soil Conditions 3.2 Groundwater 3.3 Hydrocarbon Testing	2 2 2 2
4.0	CONCLUSIONS	3
5.0	RECOMMENDATIONS	3
6.0	LIMITATIONS	4
TABL	.E	
	Table A: Soil Sample Analytical Results	3
APPE	ENDICES	
	APPENDIX A: Site Map, Site Sketch, Site Photographs	
	APPENDIX B: Laboratory Reports, Chain of Custody Forms	

# 1.0 PROJECT DESCRIPTION/SCOPE OF WORK

On June 3, 2010, Donna Hewitt of DLH Environmental Consulting (DLH) conducted a Phase II Site Assessment of the subject property located at 2101 Burwell Place in Bremerton, Washington.

The scope of work for this study was to access the subsurface soil and water (if applicable) by advancing a Geoprobe into the subsurface soil in six locations around the perimeter of the property. Ten soil samples were collected. Sample collection was conducted using a truck mounted Geoprobe. A site sketch showing locations of the borings is provided in Appendix A.

Geoprobe activities were completed by Cascade Drilling of Woodenville, Washington. Laboratory analysis was conducted by Friedman & Bruyah, Inc of Seattle, Washington.

# 1.1 Background

Previous historical evaluations identified the potential presence of a three-pump island gas station on the property. No evidence for the removal of the tanks was found; however, all three pump islands have been removed. Currently there is one waste oil tank (500-1000 gallon) located on the southwest corner of the property in a garage.

# 2.0 METHODS OF INVESTIGATION

DLH collected soil and water samples with a Geoprobe. This process involves driving a large-bore steel soil sampler (sealed piston sampler) to the required depth, then opening the sampler to advance a core (1.125" diameter) sampler, which collects soil samples. The soil samples were collected in 4-foot plastic sampling tubes. The soil was removed from the tubes and transferred directly into sterilized glassware sample jars furnished by the project laboratory.

No groundwater was found in any of the borings. The bore was advanced to 20 feet below ground level.

In an effort to minimize the loss of any volatile hydrocarbons that may have been present in the soil, the samples were stored in an iced chest until delivered to the laboratory.

All EPA-established sample-handling protocols, including chain of custody procedures, were observed during the course of the project. Laboratory results and chain of custody forms are located in Appendix B.

### 3.0 RESULTS OF INVESTIGATION

# 3.1 Soil Conditions

Subsurface native soils consisted of brown, very gravelly loam intermixed with grayish brown sandy loam. Some imported backfill materials were noted in Borings 2 and 3 (from 1 to 3 feet below ground level), which are most likely due to the road building along Burwell Street.

# 3.2 Groundwater

Groundwater was not encountered.

# 3.3 Hydrocarbon Testing

Soil samples were collected from each boring and tested for hydrocarbon identification using Method NWTPH-HCID. One sample (B1-6) was found to have diesel or heavy oil and subsequently that sample was analyzed using Method NWTPH-Dx. The results of laboratory analysis are presented in Table A. Laboratory reports are located in Appendix B.

Current Washington State Department of Ecology (WDOE) cleanup levels for diesel in soil using Method A are as follows:

Diesel and Heavy Oil 2000 ppm

(Taken from Model Toxics Control Act (MTCA) 173-360-900 Table 740-1 (soil) and Table 720-1)

# TABLE A Soil Sample Analytical Results

Sample Number	Location	Analytical Method	Results
B1-6	Boring 1, at 6 ft below ground level (bgl)	NWTPH-HCID NWTPH-Dx	Heavy oil detected 2500 ppm
B1-10	Boring 1, @ 10 ft bgl	NWTPH-HCID	BC
B2-15	Boring 2, @ 15 ft bgl	NWTPH-HCID	ВС
B3-15	Boring 3, @ 15 ft bgl	NWTPH-HCID	ВС
B4-15	Boring 4, @ 15 ft bgl	NWTPH-HCID	BC
B5-15	Boring 5, @ 15 ft bgl	NWTPH-HCID	вс
B5-20	Boring 5, @ 20 ft bgl	NWTPH-HCID	ВС
B6-3	Boring 6, @ 3 ft bgl	NWTPH-HCID	вс
B6-10	Boring 6, @ 10 ft bgl	NWTPH-HCID	вс
B6-15	Boring 6, @ 15 ft bgl	NWTPH-HCID	BC ·

NWTPH-HCID = Northwest total petroleum hydrocarbons identification

NWTPH-Dx

= Northwest total petroleum hydrocarbon for diesel and heavy oils

= Below Cleanup

# 4.0 CONCLUSIONS

Based on laboratory analytical results, one sample (B1-6) contained heavy oil above the current Washington State Department of Ecology Model Toxics Control Act (MTCA) cleanup level, which is 2000 ppm. This sample was collected 6 feet below the ground surface and the location was adjacent to the car service garage located on the southwest corner of the property.

# **5.0 RECOMMENDATIONS**

The waste oil tank located in the garage should be removed and any associated impacted soil should be mitigated. At that time, the soil in the area where B1-6 was found to have heavy oil contamination above the cleanup level should also be excavated and disposed of at a permitted facility (most likely Waste Management's Olympic View transfer station in Bremerton).

Since no data was found to confirm the removal of the former gasoline tanks, test pits should be dug to determine if the tanks are still in the ground and soil sampling can be conducted to confirm the presence or absence of petroleum impacted soils.

# **6.0 LIMITATIONS**

The soil borings completed during this project where located predominantly on the perimeter of the property to investigate whether or not contamination existed that could be migrating off site. The interior part of the property was not accessed and therefore is exempt from this study.

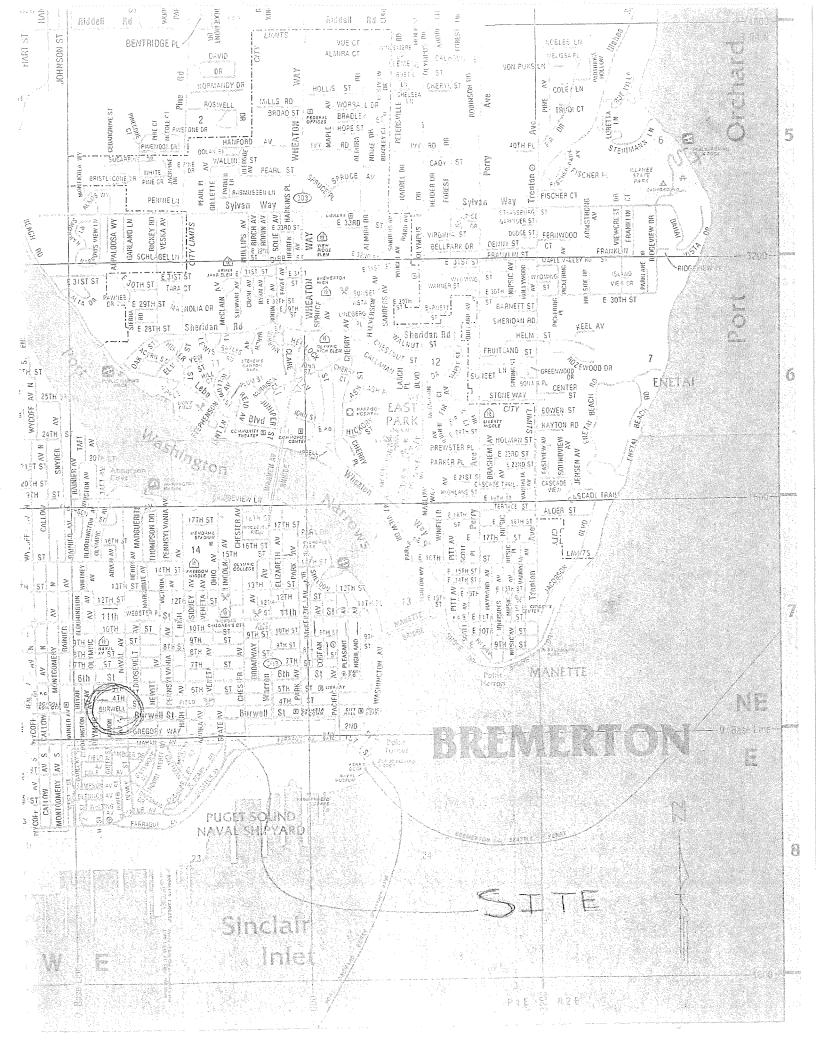
This report has been prepared for specific applications to this project in a manner consistent with the level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in the area.

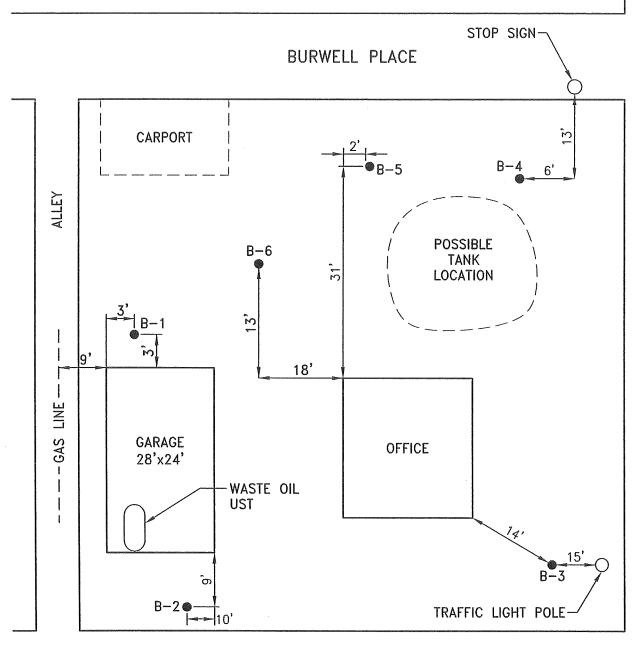
Recommendations and conclusions contained in this report are based on evaluation of technical information made available and reviewed during the course of this survey. Our work product and judgement rendered meet the standard of care of our profession at this time. Conclusions are based on site conditions and the analysis of samples taken from the site on June 3, 2010. This assessment covers the areas where soil samples were collected and based on information supplied by the current property owner. It does not confirm that the entire property is free of contamination.

DLH Environmental Consulting has no control over the accuracy of information provided by outside consultants, contractors, and agencies and, therefore, disclaims responsibility for any inaccuracies incurred. Also, DLH Environmental Consulting accepts no responsibility for verifying compliance with government regulations for hazardous material and waste use or storage at the subject facility.

This report is for the exclusive use of Harry B. Romberg, the Estate of Mevelyn Romberg, and their representatives. If new information becomes available as a result of future site work, which may include excavations, borings, studies, etc., DLH Environmental Consulting reserves the right to reevaluate the conclusions of this report and to provide amendments as required. This report is valid for a period of 6 months.

# APPENDIX A SITE MAP SITE SKETCH SITE PHOTOGRAPHS





**BURWELL STREET** 

L & E AUTO SALES 2101 BURWELL PL. BREMERTON, WASHINGTON

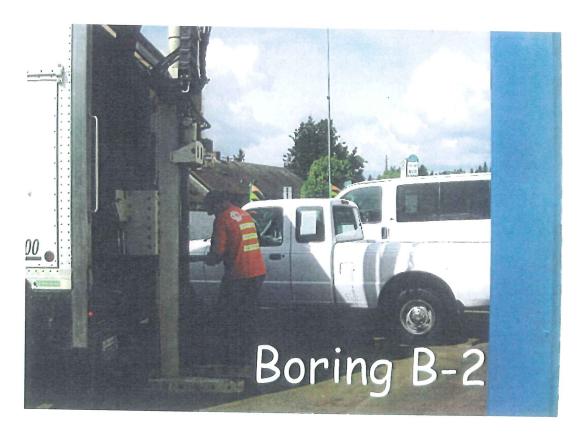
- BORING LOCATION

**DLH Environmental Consulting** 

NOT TO SCALE







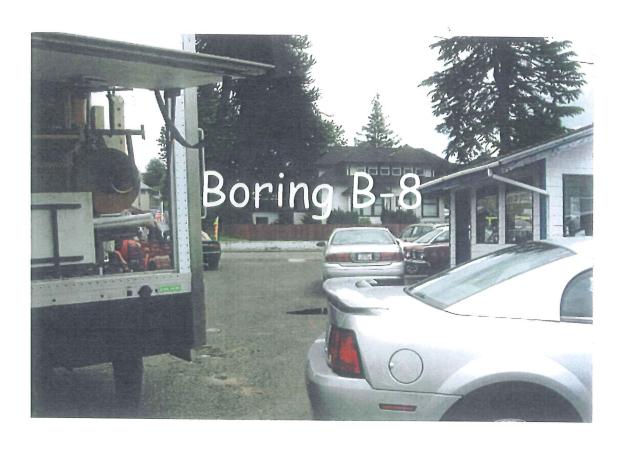












# APPENDIX B LABORATORY REPORTS CHAIN OF CUSTODY FORMS MTCA CLEANUP LEVELS TABLE 740-1

FORMS\COC\COC.DOC Fax (206) 283-5044 Ph. (206) 285-8282 Friedman & Bruya, Inc. City, State, ZIP SPAHL, WA 9K117 Seattle, WA 98119-3012 16th Avenue West Phone # 2060323133 BBB C | Henry warment & Poc. Com Address 2400 NW Both St #14 Company\_ Send Report To\_ 880900 12 21 3 س び い ! 50 B6-1600 50 C ج. ص 136 -6 Sample ID Ì į  $\overline{C}$ Š 5 0 2 رگ Received by Relinquished by: Relinquished by: Received by: Lab ID 0  $\omega$ 02 20 80 50 40 90 20 0 SIGNATURE 01/2/ Date から、つい 9:3 10:34 12/10 11/12 10,10 たのプー 12:20 アジング Time SAMPLE CHAIN OF CUSTODY SAMPLERS (signature) REMARKS PROJECT NAME, NO. Sample Type - W - E Soil しつなれる Auto Sales containers Zaz # of PRINT NAME TPH-Diesel TPH-Gasoline BTEX by 8021B VOCs by 8260 J 1 ANALYSES REQUESTED SVOCs by 8270 HFS PO #  $\bar{\nearrow}$  $\prec$ 火 0 クリチ  $\times$ COMPANY Dx Folar Up 03//0 ☐ Return samples
☐ Will call with instructions RUSH (2 Weeks) Dispose after 30 days Rush charges authorized by: Page # TURNAROUND TIME SAMPLE DISPOSAL 1/2/p DATE 1/8/140AP Notes HMIT

COY

# **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 11, 2010

Donna Hewitt, Project Manager DLH Environmental Consulting 2400 NW 80th St., 114 Seattle, WA 98117-4449

Dear Ms. Hewitt:

Included are the results from the testing of material submitted on June 3, 2010 from the L&E Auto Sales, F&BI 006038 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures DLH0611R.DOC

# **ENVIRONMENTAL CHEMISTS**

# CASE NARRATIVE

This case narrative encompasses samples received on June 3, 2010 by Friedman & Bruya, Inc. from the DLH Environmental Consulting L&E Auto Sales, F&BI 006038 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	DLH Environmental Consulting
006038-01	B1-6
006038-02	B1-10
006038-03	B2-15
006038-04	B3-15
006038-05	B4-15
006038-06	B5-15
006038-07	B5-20
006038-08	B6-3
006038-09	B6-10
006038-10	B6-15

All quality control requirements were acceptable.

# **ENVIRONMENTAL CHEMISTS**

Date of Report: 06/11/10 Date Received: 06/03/10

Project: L&E Auto Sales, F&BI 006038

Date Extracted: 06/07/10 Date Analyzed: 06/08/10

# RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR GASOLINE, DIESEL AND HEAVY OIL BY NWTPH-HCID Results Reported as Not Detected (ND) or Detected (D)

THE DATA PROVIDED BELOW WAS PERFORMED PER THE GUIDELINES ESTABLISHED BY THE WASHINGTON DEPARTMENT OF ECOLOGY AND WERE NOT DESIGNED TO PROVIDE INFORMATION WITHGARDS TO THE ACTUAL IDENTIFICATION OF ANY MATERIAL PRESENT

Sample ID Laboratory ID	<u>Gasoline</u>	$\underline{\text{Diesel}}$	<u>Heavy Oil</u>	Surrogate (% Recovery) (Limit 50-150)
B1-6 006038-01	ND	ND	D	105
B1-10 006038-02	ND	ND	ND	111
B2-15 006038-03	ND	ND	ND	101
B3-15 006038-04	ND	ND	ND	105
B4-15 006038-05	ND	ND	ND	103
B5-15 006038-06	ND	ND	ND	102
B5-20 006038-07	ND	ND	ND	106
B6-3 006038-08	ND	ND	ND	113
B6-10 006038-09	ND	ND	ND	111
B6-15 006038-10	ND	ND	ND	111
Method Blank 00-0843 MB	ND	ND	ND	102

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 250 mg/kg heavy oil.

# **ENVIRONMENTAL CHEMISTS**

Date of Report: 06/11/10 Date Received: 06/03/10

Project: L&E Auto Sales, F&BI 006038

Date Extracted: 06/09/10 Date Analyzed: 06/09/10

# RESULTS FROM THE ANALYSIS OF 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 <sub>25</sub> -C <sub>36</sub> )	Surrogate (% Recovery) (Limit 50-150)
B1-6 006038-01	250 х	2,500	83
Method Blank	<50	<250	90

# **ENVIRONMENTAL CHEMISTS**

Date of Report: 06/11/10 Date Received: 06/03/10

Project: L&E Auto Sales, F&BI 006038

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

Laboratory Code: 006091-03 (Matrix Spike)

			(Wet wt)	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	103	104	63-146	1

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diesel Extended	mg/kg (ppm)	5,000	93	79-144

#### FRIEDMAN & BRUYA, INC.

#### **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 Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- fc The compound is a common laboratory and field contaminant.
- 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 Analysis performed outside the method or client-specified holding time requirement.
- 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.
- js The surrogate 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.
- $\,\mathrm{nm}$  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.
- $\operatorname{pr}$  The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Table 740-1
Method A Soil Cleanup Levels
for Unrestricted Land Uses.<sup>a</sup>

Hazardous Substance	CAS Number	Cleanup Level
	5440.00.0	
Arsenic	7440-38-2	20 mg/kg <sup>b</sup>
Benzene	71-43-2	0.03 mg/kg <sup>c</sup>
Benzo(a)pyrene	50-32-8	0.1 mg/kg <sup>d</sup>
Cadmium	7440-43-9	2 mg/kg <sup>e</sup>
Chromium		
Chromium VI	18540-29-9	19 mg/kg <sup>f1</sup>
Chromium III	16065-83-1	2,000 mg/kg <sup>f2</sup>
DDT	50-29-3	3 mg/kg <sup>g</sup>
Ethylbenzene	100-41-4	6 mg/kg <sup>h</sup>
Ethylene dibromide (EDB)	106-93-4	0.005 mg/kg <sup>i</sup>
Lead	7439-92-1	250 mg/kg <sup>j</sup>
Lindane	58-89-9	0.01 mg/kg <sup>k</sup>
Methylene chloride	75-09-2	0.02 mg/kg <sup>l</sup>
Mercury (inorganic)	7439-97-6	2 mg/kg <sup>m</sup>
MTBE	1634-04-4	0.1 mg/kg <sup>n</sup>
Naphthalenes	91-20-3	5 mg/kg°
PAHs (carcinogenic)		See benzo(a)pyrene <sup>d</sup>
PCB Mixtures		l mg/kg <sup>p</sup>
Tetrachloroethylene	127-18-4	0.05 mg/kg <sup>q</sup>
Toluene	108-88-3	7 mg/kg <sup>r</sup>

Total Petroleum Hydrocarbons<sup>s</sup>

[Note: Must also test for and meet cleanup levels for other petroleum components--see footnotes!]

#### Gasoline Range Organics

Cuo	simo kango organion		
	Gasoline mixtures without benzene and the total of ethyl benzene, toluene and xylene are less than 1% of the gasoline mixture		100 mg/kg
	All other gasoline mixtures		30 mg/kg
Dies	sel Range Organics		2,000 mg/kg
Hea	vy Oils		2,000 mg/kg
Min	eral Oil		4,000 mg/kg
1,1,1 Tric	hloroethane	71-55-6	2 mg/kg <sup>t</sup>
Trichloro	ethylene	79-01-6	0.03 mg/kg <sup>u</sup>
Xylenes		1330-20-7	9 mg/kg <sup>v</sup>

#### Footnotes:

- Caution on misusing this table. This table has been developed for specific purposes. It is intended to provide conservative cleanup levels for sites undergoing routine cleanup actions or for sites with relatively few hazardous substances, and the site qualifies under WAC 173-340-7491 for an exclusion from conducting a simplified or site-specific terrestrial ecological evaluation, or it can be demonstrated using a terrestrial ecological evaluation under WAC 173-340-7492 or 173-340-7493 that the values in this table are ecologically protective for the site. This table may not be appropriate for defining cleanup levels at other sites. For these reasons, the values in this table should not automatically be used to define cleanup levels that must be met for financial, real estate, insurance coverage or placement, or similar transactions or purposes. Exceedances of the values in this table do not necessarily mean the soil must be restored to these levels at a site. The level of restoration depends on the remedy selected under WAC 173-340-350 through 173-
- b Arsenic. Cleanup level based on direct contact using Equation 740-2 and protection of ground water for drinking water use using the procedures in WAC 173-340-747(4), adjusted for natural background for soil.
- c Benzene. Cleanup level based on protection of ground water for drinking water use, using the procedures in WAC 173-340-747(4) and (6).
- d Benzo(a)pyrene. Cleanup level based on direct contact using Equation 740-2. If other carcinogenic PAHs are suspected of being present at the site, test for them and use this value as the total concentration that all carginogenic PAHs must meet using the toxicity equivalency methodology in WAC 173-340-708(8).
- e Cadmium. Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit for soil
- f1 Chromium VI. Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).
- f2 Chromium III. Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). Chromium VI must also be tested for and the cleanup level met when present at a site.
- g DDT (dichlorodiphenyltrichloroethane). Cleanup level based on direct contact using Equation 740-2.
- h Ethylbenzene. Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).
- i Ethylene dibromide (1,2 dibromoethane or EDB). Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4) and adjusted for the practical quantitation limit for soil.
- j Lead. Cleanup level based on preventing unacceptable blood lead levels
- k Lindane. Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4), adjusted for the practical quantitation limit.
- 1 Methylene chloride (dichloromethane). Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).
- m Mercury. Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).
- n Methyl tertiary-butyl ether (MTBE). Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).
- Naphthalenes. Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). This is a total value for naphthalene, 1methyl naphthalene and 2-methyl naphthalene.
- p PCB Mixtures. Cleanup level based on applicable federal law (40 C.F.R. 761.61). This is a total value for all PCBs.

- q Tetrachloroethylene. Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).
- Toluene. Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).
- s Total Petroleum Hydrocarbons (TPH).
  - TPH cleanup values have been provided for the most common petroleum products encountered at contaminated sites. Where there is a mixture of products or the product composition is unknown, samples must be tested using both the NWTPH-Gx and NWTPH-Dx methods and the lowest applicable TPH cleanup level must be met.
- Gasoline range organics means organic compounds measured using method NWTPH-Gx. Examples are aviation and automotive gasoline. The cleanup level is based on protection of ground water for noncarcinogenic effects during drinking water use using the procedures described in WAC 173-340-747(6). Two cleanup levels are provided. The lower value of 30 mg/kg can be used at any site. When using this lower value, the soil must also be tested for and meet the benzene soil cleanup level. The higher value of 100 mg/kg can only be used if the soil is tested and found to contain no benzene and the total of ethyl benzene, toluene and xylene are less than 1% of the gasoline mixture. No interpolation between these cleanup levels is allowed. In both cases, the soil cleanup level for any other carcinogenic components of the petroleum [such as EDB and EDC], if present at the site, must also be met. Also, in both cases, soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes, naphthalene, and MTBE], also must be met if these substances are found to exceed ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for gasoline releases.
- Diesel range organics means organic compounds measured using method NWTPH-Dx. Examples are diesel, kerosene, and #1 and #2 heating oil. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10). The soil cleanup level for any carcinogenic components of the petroleum [such as benzene and PAHs], if present at the site, must also be met. Soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes and naphthalenes], also must be met if these substances are found to exceed the ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for diesel releases.
- Heavy oils means organic compounds measured using NWTPH-Dx. Examples are #6 fuel oil, bunker C oil, hydraulic oil and waste oil. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10) and assuming a product composition similar to diesel fuel. The soil cleanup level for any carcinogenic components of the petroleum [such as benzene, PAHs and PCBs], if present at the site, must also be met. Soil cleanup levels for any noncarcinogenic components [such as toluene, ethylbenzene, xylenes and naphthalenes], also must be met if found to exceed the ground water cleanup levels at the site. See Table 830-1 for the minimum testing requirements for heavy oil releases.
- Mineral oil means non-PCB mineral oil, typically used as an insulator and coolant in electrical devices such as transformers and capacitors, measured using NWTPH-Dx. The cleanup level is based on preventing the accumulation of free product on the ground water, as described in WAC 173-340-747(10). Sites using this cleanup level must also analyze soil samples and meet the soil cleanup level for PCBs, unless it can be demonstrated that: (1) The release originated from an electrical device that was manufactured after July 1, 1979; or (2) oil containing PCBs was never used in the equipment suspected as the source of the release; or (3) it can be documented that the oil released was recently tested and did not contain PCBs. Method B must be used for releases of oils containing greater than 50 ppm PCBs.

- See Table 830-1 for the minimum testing requirements for mineral oil releases.
- t 1,1,1 Trichloroethane. Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).
- u Trichloroethylene. Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4).
- Xylenes. Cleanup level based on protection of ground water for drinking water use, using the procedures described in WAC 173-340-747(4). This is a total value for all xylenes.

#### WAC 173-340-900 Tables.

Table 720-1 Method A Cleanup Levels for Ground Water.<sup>a</sup>

Hazardous Substance	CAS Number	Cleanup Level
Arsenic	7440-38-2	5 ug/liter <sup>b</sup>
Benzene	71-43-2	5 ug/liter <sup>c</sup>
Benzo(a)pyrene	50-32-8	0.1 ug/liter <sup>d</sup>
Cadmium	7440-43-9	5 ug/liter <sup>e</sup>
Chromium (Total)	7440-47-3	50 ug/liter
DDT	50-29-3	0.3 ug/liter <sup>g</sup>
1,2 Dichloroethane (EDC)	107-06-2	5 ug/liter <sup>h</sup>
Ethylbenzene	100-41-4	700 ug/liter <sup>i</sup>
Ethylene dibromide (EDB)	106-93-4	0.01 ug/liter <sup>j</sup>
Gross Alpha Particle Activity		15 pCi/liter <sup>k</sup>
Gross Beta Particle Activity		4 mrem/yr <sup>1</sup>
Lead	7439-92-1	15 ug/liter <sup>m</sup>
Lindane	58-89-9	0.2 ug/liter <sup>n</sup>
Methylene chloride	75-09-2	5 ug/liter°
Mercury	7439-97-6	2 ug/liter <sup>p</sup>
MTBE ·	1634-04-4	20 ug/liter <sup>q</sup>
Naphthalenes	91-20-3	160 ug/liter <sup>r</sup>
PAHs (carcinogenic)		See benzo(a)pyrene <sup>d</sup>
PCB mixtures		0.1 ug/liter <sup>s</sup>
Radium 226 and 228		5 pCi/liter <sup>t</sup>
Radium 226		3 pCi/liter <sup>u</sup>
Tetrachloroethylene	127-18-4	5 ug/liter <sup>v</sup>
Toluene	108-88-3	1,000 ug/liter <sup>w</sup>
Total Petroleum Hydrocarbons <sup>x</sup>		

Total Petroleum Hydrocarbons<sup>x</sup>

[Note: Must also test for and meet cleanup levels for other petroleum components--see footnotes!]

#### Gasoline Range Organics

Benzene present in ground water		800 ug/liter
No detectable benzene in ground water		1,000 ug/liter
Diesel Range Organics		500 ug/liter
Heavy Oils		500 ug/liter
Mineral Oil		500 ug/liter
1,1,1 Trichloroethane	71-55-6	200 ug/liter <sup>y</sup>
Trichloroethylene	79-01-6	5 ug/liter²
Vinyl chloride	75-01-4	0.2 ug/liter <sup>au</sup>
Xylenes )	1330-20-7	1,000 ug/liter <sup>bb</sup>

#### Footnotes:

- a Caution on misusing this table. This table has been developed for specific purposes. It is intended to provide conservative cleanup levels for drinking water beneficial uses at sites undergoing routine cleanup actions or those sites with relatively few hazardous substances. This table may not be appropriate for defining cleanup levels at other sites. For these reasons, the values in this table should not automatically be used to define cleanup levels that must be met for financial, real estate, insurance coverage or placement, or similar transactions or purposes. Exceedances of the values in this table do not necessarily mean the ground water must be restored to those levels at all sites. The level of restoration depends on the remedy selected under WAC 173-340-350 through 173-340-390.
- Arsenic. Cleanup level based on background concentrations for state of Washington.
- c Benzene. Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).
- d Benzo(a)pyrene. Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61), adjusted to a 1 x 10<sup>-3</sup> risk. If other carcinogenic PAHs are suspected of being present at the site, test for them and use this value as the total concentration that all carcinogenic PAHs must meet using the toxicity equivalency methodology in WAC 173-340-708(8).
- e Cadmium. Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.62).
- f Chromium (Total). Cleanup level based on concentration derived using Equation 720-1 for hexavalent chromium. This is a total value for chromium III and chromium VI. If just chromium III is present at the site, a cleanup level of 100 ug/l may be used (based on WAC 246-290-310 and 40 C.F.R. 141.62).
- g DDT (dichlorodiphenyltrichloroethane). Cleanup levels based on concentration derived using Equation 720-2.
- h 1,2 Dichloroethane (ethylene dichloride or EDC). Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).
- Ethylbenzene. Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).
- j Ethylene dibromide (1,2 dibromoethane or EDB). Cleanup level based on concentration derived using Equation 720-2, adjusted for the practical quantitation limit.
- k Gross Alpha Particle Activity, excluding uranium. Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.15).
- Gross Beta Particle Activity, including gamma activity. Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.15).
- m Lead. Cleanup level based on applicable state and federal law (40 C.F.R. 141.80).
- n Lindane. Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).
- Methylene chloride (dichloromethane). Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).
- p Mercury. Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.62).
- Methyl tertiary-butyl ether (MTBE). Cleanup level based on federal drinking water advisory level (EPA-822-F-97-009, December 1997).
- r Naphthalenes. Cleanup level based on concentration derived using Equation 720-1. This is a total value for naphthalene, 1methyl naphthalene and 2-methyl naphthalene.
- s PCB mixtures. Cleanup level based on concentration derived using Equation 720-2, adjusted for the practical quantitation limit. This cleanup level is a total value for all PCBs.
- Radium 226 and 228. Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.15).
- u Radium 226. Cleanup level based on applicable state law (WAC 246-290-310).

- v Tetrachloroethylene. Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).
- w Toluene. Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).
- Total Petroleum Hydrocarbons (TPH). TPH cleanup values have been provided for the most common petroleum products encountered at contaminated sites. Where there is a mixture of products or the product composition is unknown, samples must be tested using both the NWTPH-Gx and NWTPH-Dx methods and the lowest applicable TPH cleanup level must be met.
- Gasoline range organics means organic compounds measured using method NWTPH-Gx. Examples are aviation and automotive gasoline. The cleanup level is based on protection of ground water for noncarcinogenic effects during drinking water use. Two cleanup levels are provided. The higher value is based on the assumption that no benzene is present in the ground water sample. If any detectable amount of benzene is present in the ground water sample, then the lower TPH cleanup level must be used. No interpolation between these cleanup levels is allowed. The ground water cleanup level for any carcinogenic components of the petroleum [such as benzene, EDB and EDC] and any noncarcinogenic components [such as ethylbenzene, toluene, xylenes and MTBE], if present at the site, must also be met. See Table 830-1 for the minimum testing requirements for gasoline releases.
- Diesel range organics means organic compounds measured using NWTPH-Dx. Examples are diesel, kerosene, and #1 and #2 heating oil. The cleanup level is based on protection from noncarcinogenic effects during drinking water use. The ground water cleanup level for any carcinogenic components of the petroleum [such as benzene and PAHs] and any noncarcinogenic components [such as ethylbenzene, toluene, xylenes and naphthalenes], if present at the site, must also be met. See Table 830-1 for the minimum testing requirements for diesel releases.
- Heavy oils means organic compounds measured using NWTPH-Dx. Examples are #6 fuel oil, bunker C oil, hydraulic oil and waste oil. The cleanup level is based on protection from noncarcinogenic effects during drinking water use, assuming a product composition similar to diesel fuel. The ground water cleanup level for any carcinogenic components of the petroleum [such as benzene, PAHs and PCBs] and any noncarcinogenic components [such as ethylbenzene, toluene, xylenes and naphthalenes], if present at the site, must also be met. See Table 830-1 for the minimum testing requirements for heavy oil releases.
- Mineral oil means non-PCB mineral oil, typically used as an insulator and coolant in electrical devices such as transformers and capacitors measured using NWTPH-Dx. The cleanup level is based on protection from noncarcinogenic effects during drinking water use. Sites using this cleanup level must analyze ground water samples for PCBs and meet the PCB cleanup level in this table unless it can be demonstrated that: (1) The release originated from an electrical device manufactured after July 1, 1979; or (2) oil containing PCBs was never used in the equipment suspected as the source of the release; or (3) it can be documented that the oil released was recently tested and did not contain PCBs. Method B (or Method C, if applicable) must be used for releases of oils containing greater than 50 ppm PCBs. See Table 830-1 for the minimum testing requirements for mineral oil releases.
- y 1,1,1 Trichloroethane. Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).
- Trichloroethylene. Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61).
- aa Vinyl chloride. Cleanup level based on applicable state and federal law (WAC 246-290-310 and 40 C.F.R. 141.61), adjusted to a 1 x 10<sup>-5</sup> risk.
- bb Xylenes. Cleanup level based on xylene not exceeding the maximum allowed cleanup level in this table for total petroleum hydrocarbons and on prevention of adverse aesthetic characteristics. This is a total value for all xylenes.

# APPENDIX C CERTIFICATIONS

### **GEOPROBE DATA**

(Resource Protection Well Report )



# It is hereby certified that Donna L. Hewitt

has satisfactorily complied with and completed the statutory requirements set forth in title 18 revised code of Washington to engage in practice as a

## Geologist

And is hereby authorized, empowered and granted the right to engage in that practice within the State of Washington subject to the state laws.



Given under the hand and seal of the director this fifth day of June, 2002.

Geologist Licensing Board

No. 899

#### RESOURCE PROTECTION WELL REPORT CURRENT SE07392 AED 9619 (SUBMIT ONE WELL REPORT PER WELL INSTALLED) Notice of Intent No. Construction/Decommission Type of Well Construction Resource Protection Decommission ORIGINAL INSTALLATION Notice Geotechnical Soil Boring of Intent Number Property Owner <u>L & E Auto Sales</u> Site Address 2101 Burwell Pl. Consulting Firm DLH Environmental Consultants City Bremerton County 18-Kitsap EWM Unique Ecology Well ID Location 1/4 SW 1/4 SW Sec 14 Town 24N R1E Tag No. wwm WELL, CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for Lat/Long (s,t,r Lat Deg Lat Min/Sec construction of this well, and its compliance with all Washington well construction standards still Required) Long Deg \_\_\_\_x Long Min/Sec Materials used and the information reported above are true to my best knowledge and belief Tax Parcel No. Driller Traince Name (Print) Goble 14527 Cased or <u>Uncased</u> Diameter \_\_\_\_\_ 2 11 \_\_\_\_ Static Level \_\_\_\_ Driller/Trainee, Signature Driller/Trainee License No. 6/3/2010 Work/Decommission Start Date If trainee, licesned drillers' Signature and License No. Work/Decommision Completed Date 6/3/10 Well Data W10-263 Construction/Design Formation Description CONCRETE SURFACE SEAL FTFILL $\mathbf{FT}$ BREUM SOMOY SIGT BACKFILL BENTONITE CHIPS

Scale 1" =

Page \_\_\_\_\_of \_\_\_\_

15

DEPTH OF BORING

ECY 050-12 (Rec=v 2/01)

#### Notice of Intent No. 5807392 AED 9619 (SUBMIT ONE WELL REPORT PER WELL INSTALLED) Construction/Decommission Type of Well Construction Resource Protection Decommission ORIGINAL INSTALLATION Notice Geotechnical Soil Boring of Intent Number Property Owner <u>L & E Auto Sales</u> Site Address 2101 Burwell Pl. Consulting Firm DLH Environmental Consultants City Bremerton County 18-Kitsap EWM Unique Ecology Well ID Location 1/4 SW 1/4 SW Sec 14 Town 24N R1E Tag No. wwm WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for Lat/Long (s,t,r Lat Deg x Lat Min/Sec construction of this well, and its compliance with all Washington well construction standards still Required) Long Deg x Long Min/Sec Materials used and the information reported above are true to my best knowledge and belief Tax Parcel No. Driller Trainee Name (Print) Goble , 14524 Cased or <u>Uncased</u> Diameter 211 Static Level Driller/Trainee Signature Driller/Trainee License No. Work/Decommision Start Date 6/3/2010 If trainee, licesned drillers' Work/Decommision Completed Date 6/3/10 Signature and License No. Well Data W10-263 Construction/Design Formation Description CONCRETE SURFACE SEAL FT 02-15 FT Breun Sanoy S.47 BACKFILL BENTONITE CHIPS FT DEPTH OF BORING

Page \_\_\_\_\_\_ of \_\_\_\_\_

ECY 050-12 (Rec=v 2/01)

**CURRENT** 

RESOURCE PROTECTION WELL REPORT

(SUBMIT ONE WELL REPORT PER WELL	UN WELL RE Installed)	PORT		RENT e of Intent No.	580739	2 AED	9/19
Construction/Decommission	·			Type of Well			. /0. /
Construction				Resource Pro	ata ation		
Decommission ORIGINAL INSTALLATIO	N Notice			Geotechnica:			
of Intent Number		Property Own	er L&F	Auto Sales	1 2011 Doring		
C tr' E' cours		Site Address	2101 Bu				
Consulting Firm DLH Environmental C	Consultants	City Bremerto			ounty 18-Kitsa		
Unique Ecology Well ID Tag No.		Location	1/4 SW	1/4 <u>SW</u> Sec <u>14</u>	_Town <u>24N</u> _R	1EEWM	I
WELL CONSTRUCTION CERTIFICATION: I constructed and		T (/T / )				wwm	
construction of this well, and its compliance with all Washington		Lat/Long (s,t,r still Required)			Lat Min/Sec	X	
Materials used and the information reported above are true to my			Long Deg	X	Long Min/Sec	X	
Driller Trainee Name (Print) Goble		Tax Parcel No.		72 Whiteholder - 110000000000000000000000000000000000			
Driller/Trainee Signature		Cased or Uncase	<u>d</u> Diameter	2"	Stati	c Level	
Driller/Trainee License No.	2901	Work/Decommi	sion Start Da	te 6/3/20	010		
If trainee, licesned drillers'			**************************************	CHARLES		***************************************	
Signature and License No.		Work/Decommi	sion Complet	ed Date	5/3/10		
Construction/Design	Wel	<sub>ll Data</sub> W10-263	l	Forr	nation Description	on	
	CONCRETE SURF	FACE SEAL	FT	0 -	2 Fill	FT	
	BACKFILL	BENTEROIT CHIPS	i	02- Brown	15 Samoy S	FT	
				0 -		FT	
	DEPTH OF BORING	15	FT				

Page \_\_\_\_\_\_ of \_\_\_\_\_

ECY 050-12 (Rec=v 2/01)

RESOURCE PROTECTION WELL REPORT CURRENT

RESOURCE PROTECTION V	VELL REP	ORT	CUR	RENT			
(SUBMIT ONE WELL REPORT PER WELL INSTAL	LED)		Notice	of Intent No.	580/3	92 AED 9	619
Construction/Decommission				Type of Well			
Construction				Resource Pro	tection		
Decommission ORIGINAL INSTALLATION Notice	?		Ī	Geotechnical			
of Intent Number		Property Owne	r <u>L&amp;E/</u>	Auto Sales			
Consulting Firm DI H Environmental On the			2101 Bury	vell Pl.			
Consulting Firm DLH Environmental Consulta	nts (	City Bremertor	)	C	ounty 18-Kit		
Unique Ecology Well ID	1	Location	1/4.SW :	1/4 SW Sec 14	Town 24M	R1E EWM	
Tag No.			OW	014 200 14		wwm	
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept re		Lat/Long (s,t,r	Lat Deg	x	Lat Min/Sec	x	
construction of this well, and its compliance with all Washington well constru		still Required)	Long Deg _	Х	Long Min/Sec	X	
Materials used and the information reported above are true to my best knowled	dge and belief	Tax Parcel No.					
Driller Traince Name (Print) Goble 1452	7			21/	***************************************		
Driller/Trainee License No.		Cased or <u>Uncased</u>	Diameter _	2"	Sta	tic Level	
		Work/Decommis	ion Start Date	6/3/20	)10		
If trainee, licesned drillers'			Carry	C		-	
Signature and License No.		Work/Decommis	ion Complete	d Date	13/10		
Construction/Design	Well I	Data W10-263		Form	// nation Descript	ion	
BACK	CRETE SURFA	BENTONITY CHIPS			J FILL Samoy	FT S. T	
	OF BORING	15	_FT				

Page of

ECY 050-12 (Rec=v 2/01)

RESOURCE PROTECTION WELL REPORT

RESOURCE PROTECT] (SUBMIT ONE WELL REPORT PER WELL	ON WELL RI	EPORT	CU	RRENT	SE0739:	7 * 1 E
Construction/Decommission	,		14061		500,07	- Itc
Construction				Type of Well		
Decommission ORIGINAL INSTALLATION	ON Notice			Resource P		
of Intent Number	or wonce	Property Own	er lor		al Soil Boring	
Consulting Firm DLH Environmental	Consultants	Site Address City Bremerto	2101 Bu		County 18-Kitsap	
Unique Ecology Well ID Tag No		Location	1/4 SW		Town 24N R1E	EWM
WELL CONSTRUCTION CERTIFICATION: I constructed an construction of this well, and its compliance with all Washington Materials used and the information reported above are true to my	n well construction standards  best knowledge and belief	Lat/Long (s,t,r still Required) Tax Parcel No.		x	Lat Min/Sec	WWM x x
Driller Traince Name (Print) Goble  Driller/Traince Signature	KASEY	. Cased or <u>Uncase</u>	d Diameter	ي ا	Statio I -	1
Driller/Trainee License No.	12901	Work/Decommi			Static Le	vei
If trainee, licesned drillers' Signature and License No.						***
Signature and License No.		Work/Decommis	sion Complet	ed Date	6/3/10	
Construction/Design	We	ell Data W10-263		For	mation Description	
	CONCRETE SUR	FACE SEAL	FT	0 -	<u>2</u> гт Ги	
	BACKFILL	BENTOUT CHIPS		0 2 - Brain	15 FT Samoy Sig	-
				0 -	FT.	
	DEPTH OF BORING	15	_FT			

Page \_\_\_\_of \_\_\_

ECY 050-12 (Rec=v 2/01)

KESOURCE PROTECTION WELL RE (SUBMIT ONE WELL REPORT PER WELL INSTALLED)		RRENT	7392 AE09619
Construction/Decommission	14051		1.392 ACO7617
Construction		Type of Well	
Decommission ORIGINAL INSTALLATION Notice		Resource Protection	
of Intent Number	Property Owner   8	Geotechnical Soil Boring  Auto Sales	3
Country Pine Divis	Site Address 2101 Bu		The state of the s
Consulting Firm DLH Environmental Consultants	City Bremerton	County <u>18-</u>	
Unique Ecology Well ID	Location 1/4 SW	1/4 SW Sec 14 Town 24	N R1E EWM
Tag No.	all and analysis of the second section of the sectio	Exercises (Section 1)	wwm
WELL CONSTRUCTION CERTIFICATION: I constructed and/or accept responsibility for	Lat/Long (s,t,r Lat Deg		C X
construction of this well, and its compliance with all Washington well construction standards  Materials used and the information reported above are true to my best knowledge and belief	still Required) Long Deg	x Long Min/S	Sec x
	Tax Parcel No.	•	
Driller Traince Name (Print) 30ble, K45E4  Driller/Traince Signature	Cased or <u>Uncased</u> Diameter	a''	Static Level
Driller/Trainee License No. 2501	W-1/D		Million Workship Control
If trainee, licesned drillers'	Work/Decommission Start Da	6/3/2010	And the second s
Signature and License No.	Work/Decommision Comple	ted Date $\frac{\zeta/3}{10}$	
Construction/Design We	ell Data W10-263	Formation Descri	ription
CONCRETE SUR	FACE SEAL FT	0 - Z Fill	
BACKFILL	19 FT BENTOWNE CHIPS	0 2 - 20 Blown Saw	- FT y Silt
		0 -	_ FT
DEPTH OF BORING	FT		

Page \_\_\_\_of

ECY 050-12 (Rec=v 2/01)

**KESOURCE PROTECTION WELL REPORT** 

Scale 1" = \_\_

# Appendix B

#### UNDERGROUND STORAGE TANK DECOMMISSIONING AND FINAL CLEANUP REPORT

#### 2101 BURWELL PLACE BREMERTON, WASHINGTON 98312 WDOE RELEASE # 623271

SUBMITTED TO:

DOROTHY ROMBERG AND ESTATE OF MEVELYN ROMBERG C/O HARRY B. ROMBERG JR. 11538 17<sup>TH</sup> AVENUE NE SEATTLE, WASHINGTON 98125

DONNA HEWITT, L.G.

DLH ENVIRONMENTAL CONSULTING

2400 NW 80<sup>TH</sup> STREET PMB 114

**SEATTLE, WASHINGTON 98117** 

**JANUARY 12, 2011** 

#### **TABLE OF CONTENTS**

1.0	PROJECT DESCRIPTION/SCOPE OF WORK	1
2.0	METHODS OF INVESTIGATION	2
3.0	RESULTS OF INVESTIGATION 3.1 Soil Conditions 3.2 Groundwater 3.3 Observation of Tank Removal Activities 3.3.1 Waste Oil Tank 3.3.2. Gasoline Tanks 3.4 Hydrocarbon Testing 3.5 Observation of Soil Removal Activities 3.6 Final Confirmational Soil Sampling and Analysis	3 3 3 3 4 4 4 5
4.0	FINAL CLEANUP OPERATIONS	5
5.0	WASHINGTON DEPARTMENT OF ECOLOGY REQUIREMENTS	5
6.0	CONCLUSIONS	5
7.0	RECOMMENDATIONS	6
8.0	LIMITATIONS	6
TABL	ES	<b>€</b> (4.1)
TA TA	ABLE A — Waste Oil Tank (T4) Soil Sampling Analytical Results ABLE B Tank 1 & Tank 2 - Initial Soil Sampling Analytical Results ABLE C Tank 3 - Initial Soil Sampling Analytical Results ABLE D — Tank Excavation (T1, T2 and T3) - Final Confirmational Soil Sampling Analytical Results	7 8 9 10
APPE	ENDICES	
AF AF	PPENDIX A Site Map, Site Sketch, Site Photographs PPENDIX B Laboratory Reports, Chain of Custody Forms PPENDIX C Washington State Department of Ecology UST Site Chec Site Assessment Forms PPENDIX D Tank and Soil Disposal Data PPENDIX E Certifications	klists and

#### 1.0 PROJECT DESCRIPTION/SCOPE OF WORK

Historical data research conducted by DLH Environmental Consulting in May 2010 confirmed that one (1) waste oil tank was located in a garage on the Property. In addition, interviews with onsite personnel indicated that at least one (1) gasoline tank might be located on the Property and that it might have been associated with a taxi cab company that formerly occupied the site. Historical aerial photograph research indicated that there were three (3) pump islands located on the northeastern corner of the Property. Kitsap County files indicated that there were three (3) underground storage tanks (USTs) on-site, but no information regarding the removal of tanks was found.

Subsurface investigations (using a Geoprobe) conducted in June 2010 confirmed that there were heavy oil-impacted soils along the southwestern portion of the Property adjacent to the garage. No other impacted soils were discovered, but the sample locations were primarily on the perimeter of the Property. However, one boring was placed in an area that was believed to be down gradient from the pump islands noted in historical aerial photographs.

After the waste oil tank and an old hydraulic lift were removed on August 19, 2010, exploratory work was completed to locate any other UST's. As a result, three (3) USTs were discovered on the northeast corner of the property. They were subsequently removed along with 75.95 tons of petroleum-impacted soil.

The USTs were removed by Pacific Environmental Services Company (PESCO) and disposed of by Marine Vacuum Services, Inc. Impacted soils were disposed of at the Waste Management Olympic View Transfer Station in Bremerton, Washington. Donna Hewitt of DLH Environmental Consulting (DLH) was onsite during the removal of all of the tanks. Ms. Hewitt is an ICC Decommissioning Supervisor (#1044716-U2) and a Washington State Site Assessor (#1044716-U2) (certifications are included as Appendix E). Washington Department of Ecology (Ecology) Site Check and Site Assessment Forms are located in Appendix C. Laboratory analysis was conducted by Friedman & Bruya Inc. located in Seattle, Washington and laboratory reports are provided in Appendix B.

#### The following tanks were decommissioned:

Tank Number	Size	Contents	Removal Date
Tank 1 (T1)	1000 gallon	gasoline	8/20/10
Tank 2 (T2)	1000 gallon	gasoline	8/20/10
Tank 3 (T3)	2000 gallon	gasoline	8/23/10
Tank (T4)	250 Gallon	waste oil	8/19/10

As part of the site assessment, soil samples were collected and analyzed from the tank excavations. Stockpiled soils were also sampled and analyzed. Required WDOE checklist forms were completed and are part of this report (see Appendix C).

#### 2.0 METHODS OF INVESTIGATION

Small excavations were dug in the northeast corner of the Property where the pump islands were noted in the historical aerial photographs (see Appendix A for site maps and photographs). Numerous product lines were found underneath several layers of asphalt. The soil around the product lines was removed and the lines followed until the tops of the tanks were discovered. The tops of the tanks were exposed, the fill tubes opened, and the tanks inerted with dry ice. The tanks were then removed from the ground. The tanks were empty and had numerous holes in the bottoms

Soil samples were collected for hydrocarbon analysis from a minimum of two feet below each tank, from the sidewalls of the tank excavation, and from the final limits of the excavation. Samples were also taken below product lines and from stockpiled soils. After initial laboratory analysis confirmed hydrocarbon contamination exceeding Model Toxics Control Act (MTCA) Method A cleanup levels, the impacted soil was removed (75.95 tons) and final confirmational soil samples were collected from the walls and bottom of the final excavation limits.

Soil samples were collected and placed in sterilized glassware furnished by the project laboratory. In an effort to minimize the possible loss of any volatile hydrocarbons that may have been present in the soil, the samples were stored in an iced chest until delivered to the laboratory. All EPA-established sample-handling protocols, including chain of custody procedures, were observed during the course of the project.

Samples were analyzed according to the Ecology document "Guidance for Site Checks and Site Assessments for Underground Storage Tanks," February 1991 (Revised October 1992).

Soil samples collected from around the waste oil tank were analyzed for diesel-range petroleum hydrocarbons and heavy oil-range petroleum hydrocarbons using Method NWTPH-Dx. Additional analysis of soil collected adjacent to the tank during Geoprobe drilling activities included volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs) and RCRA 8 metals. Laboratory data confirmed that only heavy oil was detected in the soils.

Soil samples collected around the other three tanks were analyzed for the presence of gasoline and benzene, toluene, ethylbenzene, and xylenes (BTEX), using EPA Method 8021B and NWTPH-Gx, and lead, using EPA-Method 200.8.

#### 3.0 RESULTS OF INVESTIGATION

#### 3.1 Soil Conditions

Soils surrounding the USTs were a mixture of imported non-native fill material (including old brick and crushed asphalt) underlain by native clay.

#### 3.2 Groundwater

Water was not encountered during tank and soil removal activities. The depth of the excavation was approximately 16 feet below ground surface.

#### 3.3 Observation of Tank Removal Activities

Donna Hewitt of DLH Environmental Consulting, a licensed UST Decommissioning Supervisor and Site Assessor was onsite during all tank removal activities.

#### 3.3.1 Waste Oil Tank

The owner of L&E Auto Sales confirmed that the contents of the waste tank had been removed approximately 6 months prior to the tank removal operations. The waste oil tank was located underneath a concrete slab inside the garage. After the slab was removed, the top of the tank was exposed and soils from the sides of that tank were removed. During the soil removal process, an old hydraulic lift was discovered just north of the end of the waste oil tank. Both the tank and the hydraulic lift were removed and soil samples were collected from the bottom and sides of the final excavation. The tank was inspected for holes and found to be in poor condition although no obvious holes were noted.

#### 3.3.2 Gasoline Tanks

Product lines were discovered during exploratory digging on the northeast corner of the site. The lines were exposed, and three major product lines and vent lines were unearthed. The product lines were followed until the tops of three (3) USTs were found. The tops of the USTs were exposed, then the tanks were inerted with dry ice and subsequently removed from the ground. The first two USTs (Tank 1 and Tank 2) were completely empty. Tank 3 had a little water in the bottom but all three tanks were in poor, rusty condition and full of holes.

Strong odors were noted around and below the tanks and bluish grey soils were noted at depths starting at approximately 6-7 feet below ground surface (bgs). This was the bottom level of both Tank 1 and Tank 2.

#### 3.4 Hydrocarbon Testing

Soil samples collected from the waste oil tank were analyzed for diesel-range petroleum hydrocarbons and heavy oil-range petroleum hydrocarbons using Method NWTPH-Dx. Additional analysis of soil samples collected adjacent to the tank during Geoprobe drilling activities included VOCs, PCBs and RCRA 8 metals. Laboratory data confirmed that only heavy oil was present in the soils. Laboratory results for soil samples collected from the waste oil tank are summarized in Table A, and laboratory results are located in Appendix B.

Soil samples collected around the other three USTs were analyzed for the presence of gasoline and BTEX, using EPA Method 8021B and NWTPH-Gx, and lead using EPA Method 200.8.

Laboratory results for soil samples collected around the other three USTs are summarized in Tables B and C. Laboratory reports are located in Appendix B.

#### 3.5 Observation of Soil Removal Activities

Based on soil sample analysis, it was determined that contamination existed underneath all three USTs and along the sidewalls of the tank excavation. On October 10, 2010, contaminated soils (75.95 tons) were removed and transported to the Waste Management Olympic View Transfer Station for disposal under Waste Manifest # 102441.

#### 3.6 Final Confirmational Soil Sampling and Analysis

Once the confirmed impacted soil was removed, final confirmation samples were collected from the sidewalls and bottom of the excavation. Laboratory data confirmed that impacted soil still remains on the south and west ends of the gasoline tank excavation. In addition, no soils were removed from in and around the waste oil tank located in the garage. Laboratory results for the final confirmation samples are summarized in Table D, and laboratory reports are located in Appendix B.

#### **4.0 FINAL CLEANUP OPERATIONS**

Impacted soils were disposed of at the Waste Management Olympic View Transfer Station in Bremerton, Washington. A total of 75.95 tons was disposed of on October 11, 2010. Impacted soil still remains on the south and west side of the tank excavation. Additionally, no soil was removed from the garage where the former waste oil tank (T4) was located.

#### 5.0 WASHINGTON STATE DEPARTMENT OF ECOLOGY REQUIREMENTS

Ecology requires UST checklists and site assessment forms to be filled out during UST decommissioning projects. These forms have been completed and are located in Appendix C.

#### 6.0 CONCLUSIONS

The following conclusions are based on the results of the soil sample analyses:

- Analysis of soil samples collected around and under the waste oil and hydraulic lift in the garage indicated that heavy oil impacted soils remain on the Property.
- Impacted soils associated with the three gasoline tanks located on the northwestern portion of the property were confirmed. The three tanks were removed along with 75.95 tons of impacted soils. The impacted soils were disposed of at the Olympic View Transfer Station in Bremerton, Washington.
- Confirmational soil sampling and analysis of the gasoline tank excavation indicates that impacted soils remains along the south and west ends of the excavation.
- All tanks, product lines, and vent lines were removed and disposed of according to current requirements.

#### 7.0 RECOMMENDATIONS

Since impacted soils still remain on the Property, it is recommended that they be removed. The garage will need to be demolished in order to remove the soils associated with the waste oil tank. The most cost - effective approach may be to dovetail remediation with any future development of the Property.

#### 8.0 LIMITATIONS

This report has been prepared for specific application to this project in a manner consistent with the level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in the area.

Recommendations and conclusions contained in this report are based on evaluation of technical information made available and reviewed during the course of this survey. Our work product and judgements rendered meet the standard of care of our profession at this time. No other warranty, expressed or implied, is made concerning the professional conclusions and recommendations included in this report.

DLH Environmental Consulting shall not be responsible for conditions or consequences arising from relevant facts that were withheld, concealed, or not fully disclosed at the time this evaluation was performed.

DLH Environmental Consulting has no control over the accuracy of information provided by outside consultants, contractors, and agencies and, therefore, disclaims responsibility for any inaccuracies incurred. Also, DLH Environmental Consulting accepts no responsibility for verifying compliance with government regulations for hazardous material and waste use or storage at the subject facility.

The underlying philosophy in formulating the conclusions and recommendations was to reduce uncertainties regarding the property and pertaining to environmental hazards, to the degree possible. Therefore, the results of this assessment should be viewed as reasonably accurate estimates, given the project limitations of the existing environmental condition of the property.

This report is for the exclusive use of Harry B Romberg Jr. and his representatives. If new information becomes available as a result of future site work, which may include excavations, borings, studies, etc., DLH Environmental Consulting reserves the right to reevaluate the conclusions of this report and to provide amendments as required.

## TABLE A Waste Oil Tank (T4) Soil Sampling Analytical Results

SAMPLE NUMBER	LOCATION	ANALYSIS	RESULTS
81910 - N	north sidewall at approximately 4 ft bgl	NWTPH-DX	Diesel 7,100 ppm Motor Oil 27,000 ppm
81910 - S	south sidewall at approximately 4 ft bgl	NWTPH-DX	'Diesel < 50 ppm Motor Oil < 250 ppm
81910 - E	east sidewall at approximately 4 ft bgl	NWTPH-DX	Diesel < 50 ppm Motor Oil < 250 ppm
81910 - W	west sidewall at approximately 4 ft bgl	NWTPH-DX	Diesel < 50 ppm Motor Oil < 250 ppm
81910 - B	bottom of excavation below tank at approximately 5 ft bgl	NWTPH-DX	Diesel 11,000 ppm Motor Oil 33,000 ppm
81910 - B+4	bottom of excavation below tank at approximately 8 ft bgl	NWTPH-DX	Diesel 5,600 ppm Motor Oil 13,000 ppm
81910 - Hyd-7'	below hydraulic lift approximately 8 ft bgl	NWTPH-DX	Diesel < 50ppm Motor Oil < 250 ppm

Note: Current MTCA cleanup level for diesel and heavy oil is 2000 ppm WTPH = Washington Total Petroleum Hydrocarbon

Dχ Diesel and heavy oils ppm bgl ft = Parts per million (soil)
= Below ground level

#### TABLE B Tank 1 & Tank 2 - Initial Soil Sampling Analytical Results

SAMPLE NUMBER	LOCATION	ANALYSIS	RESULTS
82010 - Pipes	Below product lines	NWTPH-Gx BTEX	< 2 ppm AC
82010 - T1-B	Tank 1 - below tank at 8 ft bgl	NWTPH-Gx BTEX Lead	<b>5,100</b> ppm <b>AC</b> 19.6
82010 - T1-E	Tank 1- east sidewall at 8 ft bgl	NWTPH-Gx BTEX	< 2 ppm BC
82010 - T1-N	Tank 1- north sidewall at 8 ft bgl	NWTPH-Gx BTEX	4,900 ppm AC
82010 - T1-S	Tank 1- south sidewall at 8 ft bgl	NWTPH-Gx BTEX	7,400 ppm AC
82010 - T2-N	Tank 2- north sidewall at 8 ft bgl	NWTPH-Gx BTEX	8,700 ppm AC
82010 - T2-B2	Tank 2- below tank at 8 ft bgl	NWTPH-Gx BTEX Lead	12,000 ppm AC 18.3
82010 - T2-W	Tank 2- west sidewall at 8 ft bgl	NWTPH-Gx BTEX	<b>120</b> ppm BC
82010 - T2-B-4	Tank 2 - 4 ft below bottom of tank at 12 ft bgl	NWTPH-Gx BTEX	20,000 ppm AC

Current MTCA cleanup level for gasoline in soil is 100 ppm or 30 ppm if benzene is present. Cleanup levels for BTEX as follows B=0.03 ppm, T=7 ppm, E= 6 ppm, X=9 ppm Cleanup level for lead is 250 ppm

Washington Total Petroleum Hydrocarbon Gasoline WTPH

Gx

Benzene, toluene, ethyl-benzene, xylene (gasoline additives)
Parts per million (soil)
Below cleanup
Above Cleanup **BTEX** 

ppm BC

ΑĊ bgl ft Below ground level

#### TABLE C Tank 3 - Initial Soil Sampling Analytical Results

SAMPLE NUMBER	LOCATION	ANALYSIS	RESULTS
82310 - T3-B-9.5	Tank 3, below tank at 9.5 ft bgl	NWTPH-Gx BTEX	6,600 ppm AC
82310 - T3-B-12	Tank 3, below tank at 12 ft bgl	NWTPH-Gx BTEX	32 ppm AC
82310 - T3-W-9	Tank 3, below tank at 12 ft bgl	NWTPH-Gx BTEX lead	6,600 ppm AC 19.6
82310 - T3-S-10	Tank 3, south sidewall at 10 ft bgl	NWTPH-Gx BTEX	8,900 ppm AC
82310 - T3-E-10	Tank 3, east sidewall at 10 ft bgl	NWTPH-Gx BTEX	15 ppm BC
82310 - PIPES	product pipes associated with Tank 3	NWTPH-Gx BTEX	Archived - no analysis
82310 - paint white	paint from garage	TCLP-200.8/ Pb	2.76 ppm
82310 - paint blue	paint from garage	TCLP-200.8/ Pb	3.19 ppm

Current MTCA cleanup level for gasoline in soil is 100 ppm or 30 ppm if benzene is present. Cleanup levels for BTEX as follows B=0.03 ppm, T=7 ppm, E= 6 ppm, X=9 ppm Cleanup level for lead is 250 ppm

Washington Total Petroleum Hydrocarbon Gasoline WTPH

Gx

Benzene, toluene, ethyl-benzene, xylene (gasoline additives)
Parts per million (soil) BTEX

ppm bgl ft Below ground level

Feet

#### TABLE D <u>Tank Excavation (T1, T2 and T3) -</u> <u>Final Confirmational Soil Sampling Analytical Results</u>

SAMPLE NUMBER	LOCATION	ANALYSIS	RESULTS
101110 - B-14	Bottom of excavation at 14 ft bgl	NWTPH-Gx BTEX	< 5 ppm BC
101110 - S-14	South sidewall of excavation at 14 ft bgl	NWTPH-Gx BTEX	140 ppm AC
101110 - N-14	North sidewall of excavation at 14 ft bgl	NWTPH-Gx BTEX	3 ppm BC
101110 - E-14	East sidewall of excavation at 14 ft bgl	NWTPH-Gx BTEX	5.9 ppm BC
101110 - W-14	West sidewall of excavation at 14 ft bgl	NWTPH-Gx BTEX	5,700 ppm AC

Note: Current MTCA cleanup level for gasoline in soil is 100 ppm or 30 ppm if benzene is present. Cleanup levels for BTEX as follows B=0.03 ppm, T=7 ppm, E=6 ppm, X=9 ppm Cleanup level for lead is 250 ppm

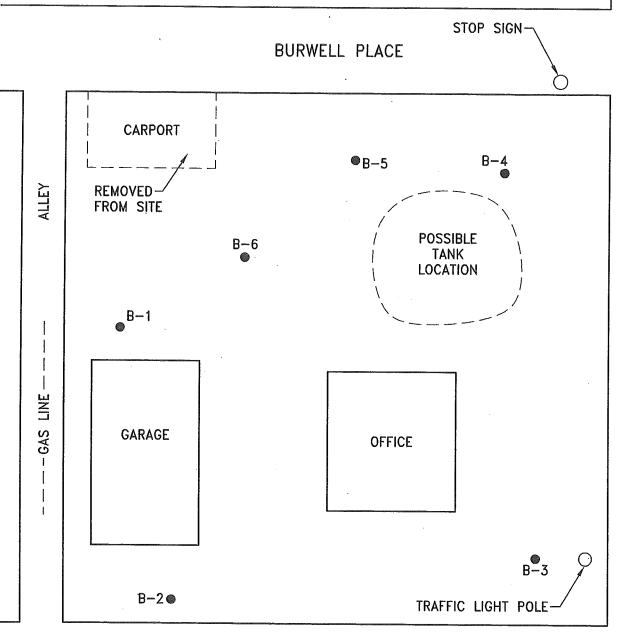
WTPH = Washington Total Petroleum Hydrocarbon Gasoline

Gx BTEX Benzene, toluene, ethyl-benzene, xylene (gasoline additives)

ppm Parts per million (soil) ВС Below cleanup AC Above Cleanup bgl Below ground level

# APPENDIX A SITE MAP SITE SKETCH SITE PHOTOGRAPHS





**BURWELL STREET** 

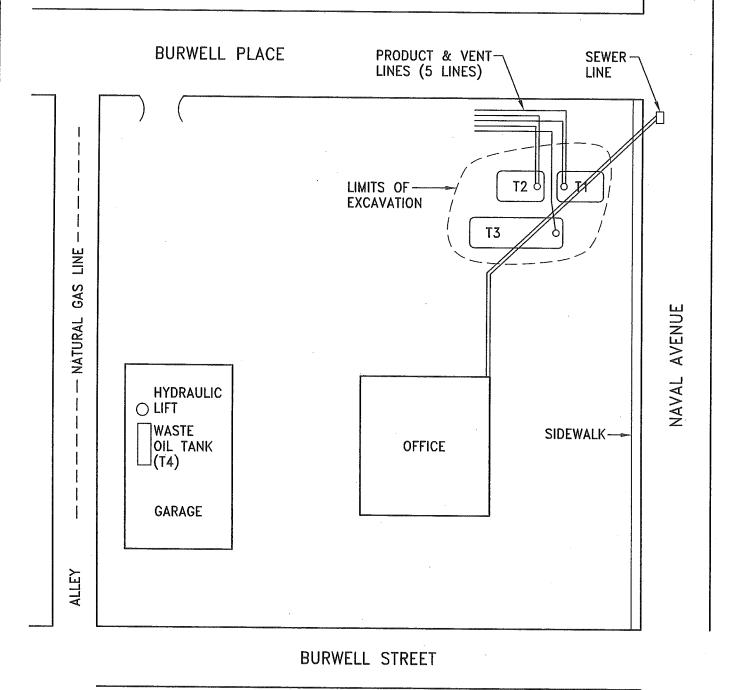
L & E AUTO SALES 2101 BURWELL PL. BREMERTON, WASHINGTON

DLH Environmental Consulting

NOT TO SCALE

- BORING LOCATION





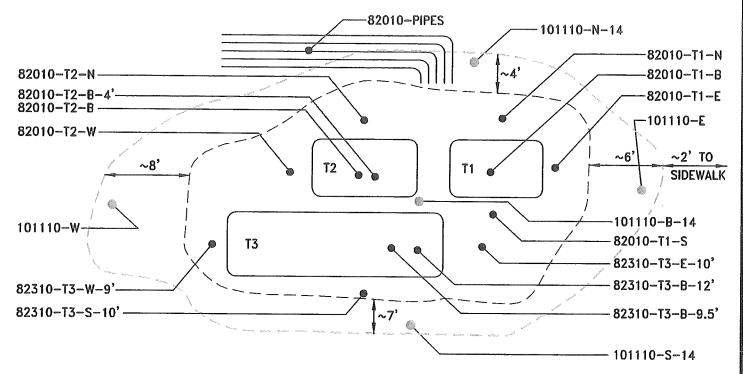
L & E AUTO SALES 2101 BURWELL PL. BREMERTON, WASHINGTON

DLH Environmental Consulting

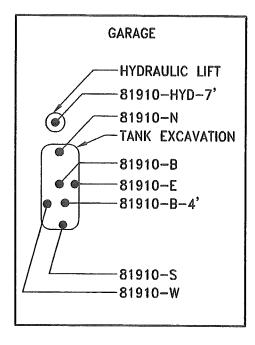
NOT TO SCALE

FIGURE 2 AUGUST 2010





UNDERGROUND STORAGE TANK REMOVAL



WASTE OIL TANK & HYDRAULIC LIFT REMOVAL

- FINAL OVEREXCAVATION
- SOIL SAMPLE LOCATION
- FINAL CONFIRMATIONAL SOIL SAMPLE LOCATION

FIGURE 3

TANK EXCAVATION DETAIL

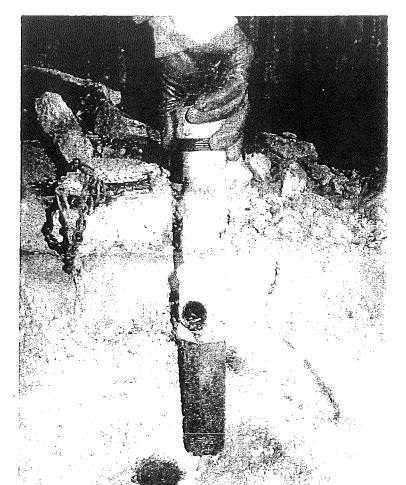
L & E AUTO SALES 2101 BURWELL PL. BREMERTON, WASHINGTON

**DLH Environmental Consulting** 

NOT TO SCALE

AUGUST-OCTOBER 2010



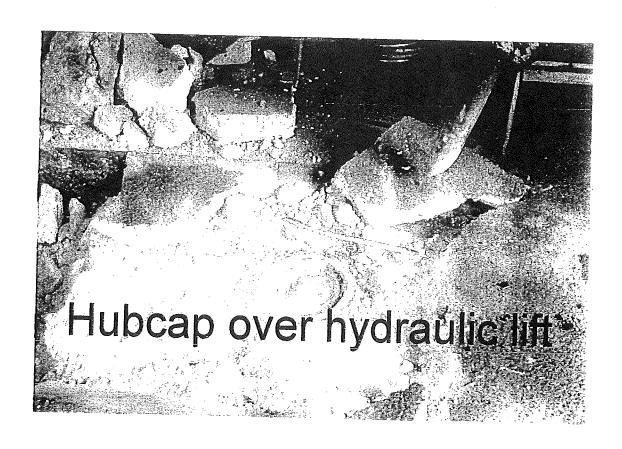


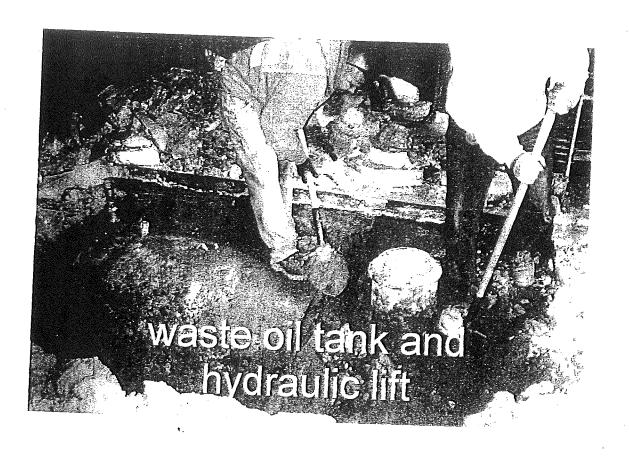
Waste oil tank fill

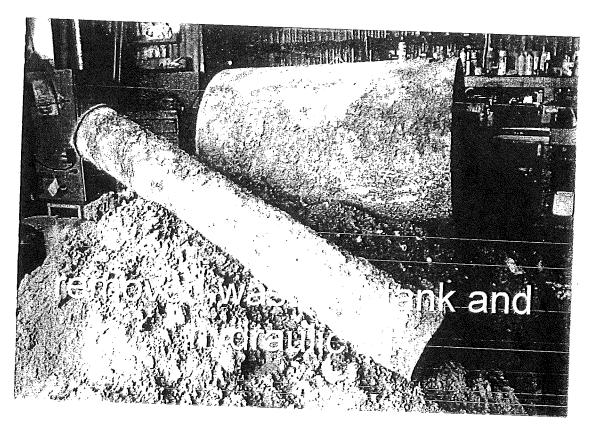


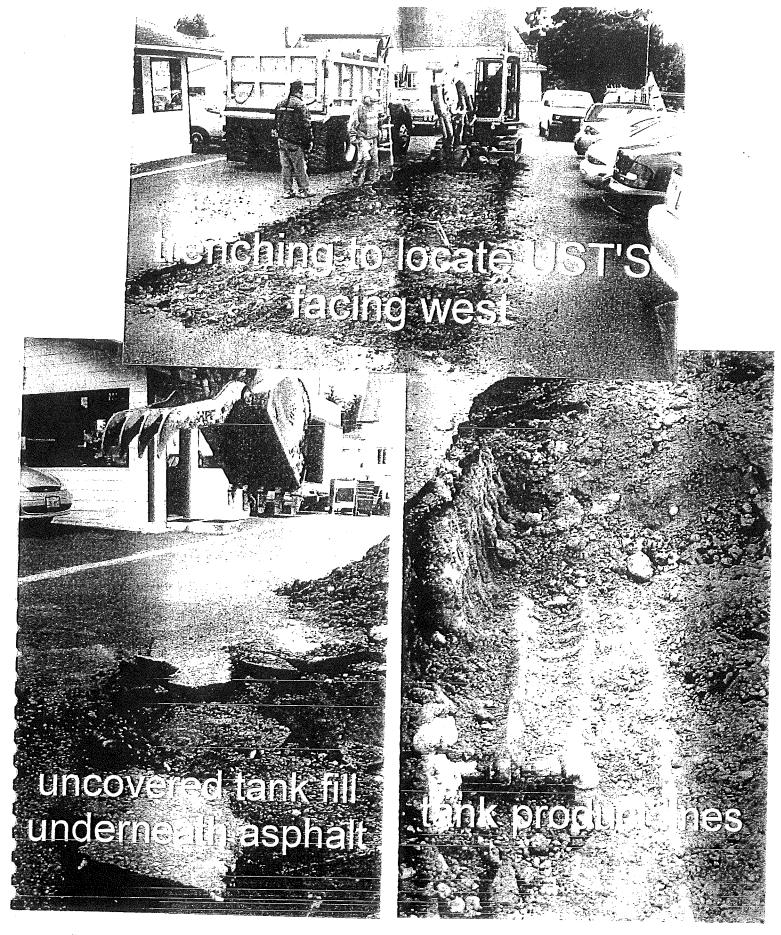
DLH ENVIRONMENTAL CONSULTING SEATTLE, WASHINGTON 206-632-3123



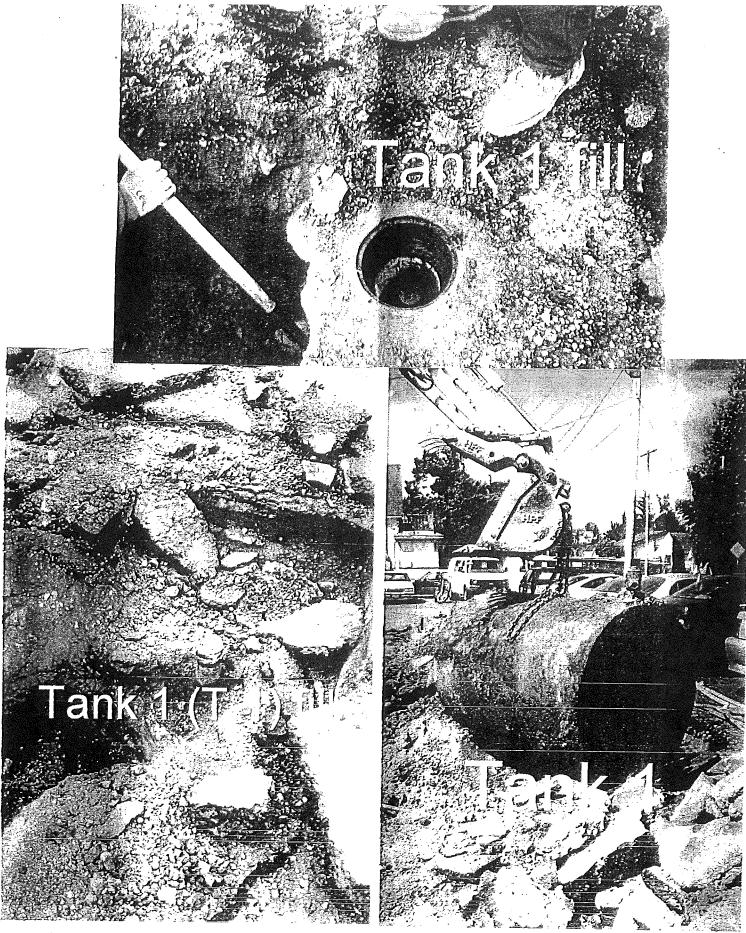




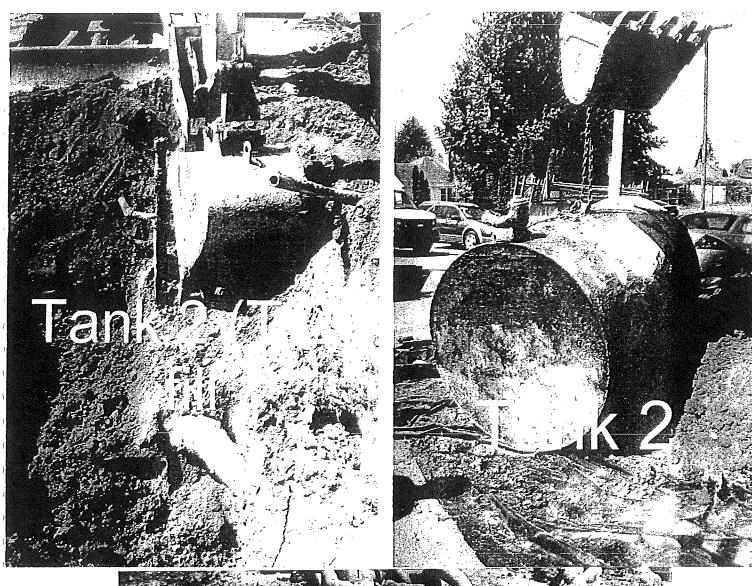




DLH ENVIRONMENTAL CONSULTING SEATTLE, WASHINGTON 206-632-3123

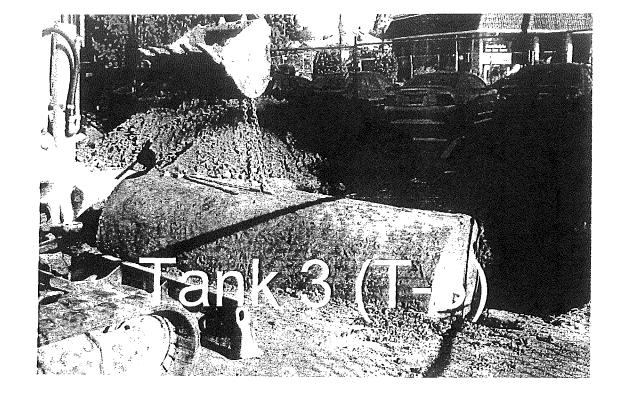


DLH ENVIRONMENTAL CONSULTING SEATTLE, WASHINGTON 206-632-3123





DLH ENVIRONMENTAL CONSULTING SEATTLE, WASHINGTON 206-632-3123









# APPENDIX B LABORATORY REPORTS CHAIN OF CUSTODY FORMS

#### **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

October 20, 2010

Donna Hewitt, Project Manager DLH Environmental Consulting 2400 NW 80th St., 114 Seattle, WA 98117-4449

Dear Ms. Hewitt:

Included are the results from the testing of material submitted on October 11, 2010 from the L&E Auto, F&BI 010117 project. There are 4 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures DLH1020R.DOC

#### ENVIRONMENTAL CHEMISTS

#### CASE NARRATIVE

This case narrative encompasses samples received on October 11, 2010 by Friedman & Bruya, Inc. from the DLH Environmental Consulting L&E Auto, F&BI 010117 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	DLH Environmental Consulting
010117-01	101110-B-14
010117-02	101110-S-14
010117-03	101110-N-14
010117-04	101110-E-14
010117-05	101110-W-14

All quality control requirements were acceptable.

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 10/20/10 Date Received: 10/11/10

Project: L&E Auto, F&BI 010117

Date Extracted: 10/12/10

Date Analyzed: 10/14/10 and 10/19/10

#### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

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

Sample ID Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 50-150)
101110-B-14 010117-01	< 0.02	< 0.02	< 0.02	<0.06	<5	111
101110-S-14 010117-02	< 0.02	0.35	0.47	4.3	140	124
101110-N-14 <sub>010117-03</sub>	< 0.02	< 0.02	< 0.02	<0.06	3	97
101110-E-14 010117-04	< 0.02	< 0.02	0.042	0.43	5.9	130
101110-W-14 010117-05 1/100	<2	68	72	420	5,700	ip ·
Method Blank	<0.02	<0.02	<0.02	<0.06	<5	117

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 10/20/10 Date Received: 10/11/10

Project: L&E Auto, F&BI 010117

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benzene Toluene Ethylbenzene Xylenes Gasoline	mg/kg (ppm) mg/kg (ppm) mg/kg (ppm) mg/kg (ppm) mg/kg (ppm)	$0.5 \\ 0.5 \\ 0.5 \\ 1.5 \\ 20$	88 107 108 105 120	91 107 109 106 115	69-120 70-117 65-123 66-120 71-131	$egin{array}{c} 3 & & & & & & & & & & & & & & & & & & $

#### 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 Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- ${\it fc-The}$  compound is a common laboratory and field contaminant.
- 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 Analysis performed outside the method or client-specified holding time requirement.
- 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.
- ${
  m jl}$  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.
- js The surrogate 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.
- $\rm nm$  The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- $\operatorname{pc}$  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 Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

SAMPLE DISPOSAL  SAMPLE DISPOSAL  SAMPLE DISPOSAL  SAMPLE DISPOSAL  O Will call with instructions	ANAL YSES REQUESTED	
1 Henri ragmente 2 &		
City, State, ZIP Set 114, WY-		

7	//	
7		
X X /		
	The same of the sa	

Samples received at | 9.0°C

FORMS\COC\COC.DOC

#### **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

September 7, 2010

Donna Hewitt, Project Manager DLH Environmental Consulting 2400 NW 80th St., 114 Seattle, WA 98117-4449

Dear Ms. Hewitt:

Included are the results from the testing of material submitted on August 23, 2010 from the L&E, F&BI 008262 project. There are 12 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures DLH0907R.DOC

#### ENVIRONMENTAL CHEMISTS

#### CASE NARRATIVE

This case narrative encompasses samples received on August 23, 2010 by Friedman & Bruya, Inc. from the DLH Environmental Consulting L&E, F&BI 008262 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	DLH Environmental Consulting
008262-01	82310-T3-B-9'5"
008262-02	82310-T3-B-12'
008262-03	82310-T3-W-9
008262-04	82310-T3-S-10
008262-05	82310-T3-E-10
008262-06	82310-Paint-White
008262-07	82310-Paint-Blue
008262-08	82310-Pipes.W-2

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 09/07/10 Date Received: 08/23/10 Project: L&E, F&BI 008262

Date Extracted: 08/31/10 and 09/02/10 Date Analyzed: 09/01/10 and 09/02/10

#### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

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

Sample ID Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 50-132)
82310-T3-B-9'5" 008262-01 1/100	<2	93	120	790 ve	6,600	ip
82310-T3-B-12' <sub>008262-02</sub>	0.09	1.6	0.80	4.6	32	123
82310-T3-W-9 <sub>008262-03</sub> 1/200	9.1	320	170	1,100	6,600	ip
82310-T3-S-10 008262-04 1/100	<2	49	100	830	8,900	ip
82310-T3-E-10 008262-05	<0.02	0.075	0.11	0.75	15	108
Method Blank 00-1348 MB2	<0.02	< 0.02	<0.02	<0.06	<2	74
Method Blank 00-1409 MB	<0.02	< 0.02	< 0.02	<0.06	<2	116

#### ENVIRONMENTAL CHEMISTS

## Analysis For Total Metals By EPA Method 200.8

Client ID:

82310-T3-W-9

Date Received:

08/23/10 08/24/10

Date Extracted: Date Analyzed:

Internal Standard:

08/26/10

Matrix:

Soil

Units:

mg/kg (ppm)

Client:

DLH Environmental Consulting

Project:

L&E, F&BI 008262

Lab ID:

008262-03

Data File: Instrument: 008262-03.019

Operator:

ICPMS1 AP

Lower

Upper

Limit: % Recovery:

60

Limit: 125

Concentration

92

Analyte:

Holmium

mg/kg (ppm)

Lead

#### ENVIRONMENTAL CHEMISTS

# Analysis For Total Metals By EPA Method 200.8

Client ID:

Method Blank

Date Received:

NA 08/23/10 Date Extracted:

Date Analyzed:

08/26/10 Soil

Matrix: Units:

mg/kg (ppm)

Client:

DLH Environmental Consulting L&E, F&BI 008262

Project: Lab ID:

I0-457 mb

Data File:

I0-457 mb.018

Instrument: Operator:

ICPMS1 AP

Lower

Upper Limit:

Internal Standard:

Holmium

% Recovery:

88

Limit: 60

125

Concentration

Analyte:

mg/kg (ppm)

Lead

<1

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261

Client ID:

82310-Paint-White

Client:

DLH Environmental Consulting

Date Received:

08/23/10

Project:

L&E, F&BI 008262

Date Extracted:

08/31/10 09/01/10

Lab ID:

008262-06

Date Analyzed: Matrix:

Paint

Data File:

008262-06.038

Units:

Instrument:

mg/L (ppm)

Operator:

ICPMS1 AP

Internal Standard:

Lower

Upper

Holmium

% Recovery: 104

Limit: 60

Limit: 125

Concentration

Analyte:

mg/L (ppm)

TCLP Limit

Lead

2.76

#### **ENVIRONMENTAL CHEMISTS**

## Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261 $\,$

Client ID:

82310-Paint-Blue

08/23/10

Date Received: Date Extracted:

Internal Standard:

08/31/10 09/01/10

Date Analyzed: Matrix:

Paint

Units:

mg/L (ppm)

Client:

DLH Environmental Consulting

Project:

L&E, F&BI 008262

Lab ID:

008262-07

Data File:

008262-07.041 ICPMS1

Instrument:

AP

Operator:

Lower

Upper Limit:

Limit: 60

125

Concentration

% Recovery:

109

Analyte:

Holmium

mg/L (ppm)

TCLP Limit

Lead

3.19

# ENVIRONMENTAL CHEMISTS

Analysis for TCLP Metals By EPA Method 200.8 and 40 CFR PART 261  $\,$ 

Client ID:

Method Blank

Date Received:

NA

Date Extracted: Date Analyzed:

08/31/10 09/01/10 Paint

Matrix: Units:

mg/L (ppm)

Client:

DLH Environmental Consulting

Project: Lab ID:

L&E, F&BI 008262I0-477 mb

Data File:

I0-477 mb.036 ICPMS1

Instrument:

Operator: ΑP

Internal Standard:

Holmium

% Recovery:

105

Lower Limit: 60

Upper Limit:

125

Analyte:

Concentration

mg/L (ppm)

TCLP Limit

Lead

<1

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 09/07/10 Date Received: 08/23/10 Project: L&E, F&BI 008262

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 008237-05 (Duplicate)

Euseravery court	Reporting	(Wet Wt)	(Wet Wt) Duplicate	Relative Percent Difference
Analyte	Units	Sample Result	Result	(Limit 20)
Benzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Toluene	mg/kg (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Xylenes	mg/kg (ppm)	< 0.06	< 0.06	nm
Gasoline	mg/kg (ppm)	4	<2	nm

			$\operatorname{Percent}$	
A.	Reporting	$\operatorname{Spike}$	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	0.5	104	66-121
Toluene	mg/kg (ppm)	0.5	102	72 - 128
Ethylbenzene	mg/kg (ppm)	0.5	102	69 - 132
Xylenes	mg/kg (ppm)	1.5	110	69-131
Gasoline	mg/kg (ppm)	20	125	61-153

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 09/07/10 Date Received: 08/23/10 Project: L&E, F&BI 008262

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 008262-08 (Duplicate)

Analyte	Reporting Units	(Wet Wt) Sample Result	(Wet Wt) Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Toluene	mg/kg (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Xylenes	mg/kg (ppm)	< 0.06	< 0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

			$\operatorname{Percent}$	
	Reporting	$\operatorname{Spike}$	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	0.5	98	69-120
Toluene	mg/kg (ppm)	0.5	103	70-117
Ethylbenzene	mg/kg (ppm)	0.5	108	65-123
Xylenes	mg/kg (ppm)	1.5	103	66-120
Gasoline	mg/kg (ppm)	20	95	71-131

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 09/07/10 Date Received: 08/23/10 Project: L&E, F&BI 008262

#### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 008250-01 (Matrix Spike)

				Percent	$\operatorname{Percent}$		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Lead	mg/kg (ppm)	20	5.27	98 b	100 b	65-126	2

			$\operatorname{Percent}$		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Lead	mg/kg (ppm)	20	106	81-120	

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 09/07/10 Date Received: 08/23/10 Project: L&E, F&BI 008262

#### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF PAINT SAMPLES FOR TCLP METALS USING EPA METHOD 200.8 AND 40 CFR PART 261

Laboratory Code: 008262-06 (Matrix Spike)

				$\operatorname{Percent}$	$\operatorname{Percent}$		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Lead	mg/L (ppm)	1.0	2.76	95 b	102 b	50-150	7 b

			$\operatorname{Percent}$		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Lead	mg/L (ppm)	1.0	95	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 Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- ${\it fc-The}$  compound is a common laboratory and field contaminant.
- 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 Analysis performed outside the method or client-specified holding time requirement.
- 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.
- ${\bf J}$  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.
- js The surrogate 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.
- $\operatorname{pc}$  The sample was received in a container not approved by the method. The value reported should be considered an estimate.
- $\operatorname{pr}$  The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

3:10 8 TIME A Standard (2 Weeks)

RUSH
Rush charges authorized by: シスの高 □ Return samples
□ Will call with instructions TURNAROUND TIME SAMPLE DISPOSAL Notes Dispose after 30 days 8/23/10 To or Prop DATE 152 MVR/TO ANAL YSES REQUESTED FEBI COMPANY  $\prec$ SAMPLE CHAIN OF CUSTODY ME 8/23× # Q HES **2AOC2 PX 8270** Pool JIL **AOCs PA 8500** BLEX by 8021B メ 100 X PRINT NAME TPH-Gasoline Michael Gostales lessiG-H4T Sample Type | containers SAMPLERS (signature) # of PROJECT NAME AND M t यि यव Ţ j T Paintonip Paint Chip REMARKS Soil , Š , Š Phone # 206-632-3123 Fax # allhenviragement-प्रभेत 00:00 5 5. 4.37 9.7 7.7 9.25 Time Address 2400 NW BOTH ST #114 SIGNATURE 4/23 City, State, IIP Sea HU, Wing 98117 8/23/10 Date Relinquished by: Kelinquished by: Send Report To DONI 2 14 1 08 A-D Received by 82310-Paint-Will 06 the 3-10 Och -D 102 A-D 05A-D Received by: Lab ID 01 R-10 - Rond-Blue 107 & - W-0 163 A-1 5 8-121 82310-73-8-96 82310-Piges.W-2 3012 16th Avenue West Friedman & Bruya, Inc. Fax (206) 283-5044 FORMS\COC\COC.DOC Seattle, WA 98119-Ph. (206) 285-8282 C22500 Sample ID Company\_

į

#### **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

August 26, 2010

Donna Hewitt, Project Manager DLH Environmental Consulting 2400 NW 80th St., 114 Seattle, WA 98117-4449

Dear Ms. Hewitt:

Included are the results from the testing of material submitted on August 20, 2010 from the L&E, F&BI 008255 project. There are 8 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures DLH0826R.DOC

#### **ENVIRONMENTAL CHEMISTS**

#### CASE NARRATIVE

This case narrative encompasses samples received on August 20, 2010 by Friedman & Bruya, Inc. from the DLH Environmental Consulting L&E, F&BI 008255 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	DLH Environmental Consulting
008255-01	82010-Pipes
008255-02	82010-T1-B
008255-03	82010-T1-E
008255-04	82010-T1-N
008255-05	82010-T1-S
008255-06	82010-T2-N
008255-07	82010-T2-B-2
008255-08	82010-T2-W
008255-09	82010-T2-B-4

All quality control requirements were acceptable.

#### ENVIRONMENTAL CHEMISTS

Date of Report: 08/26/10 Date Received: 08/20/10 Project: L&E, F&BI 008255 Date Extracted: 08/23/10

Date Analyzed: 08/23/10 and 08/24/10

#### RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

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

Sample ID Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 50-150)
82010-Pipes 008255-01	< 0.02	< 0.02	< 0.02	< 0.06	<2	114
82010-T1-B 008255-02 1/40	<0.8	19	40	300	5,100	ip
82010-T1-E 008255-03	< 0.02	< 0.02	<0.02	<0.06	<2	85
82010-T1-N 008255-04 1/40	<0.8	3.6	15	69	4,900	ip
82010-T1-S 008255-05 1/40	<0.8	15	36	280	7,400	ip
82010-T2-N 008255-06 1/100	6.0	92	100	720	8,700	ip
82010-T2-B-2 008255-07 1/10	1.5	120	110	790	12,000	ip
82010-T2-W 008255-08	<0.02	0.15	0.32	2.0	120	76
82010-T2-B-4 008255-09 1/10	3.4	460	290	2,000	20,000	ip
Method Blank 00-1305 MB	< 0.02	<0.02	< 0.02	<0.06	<2	74

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Total Metals By EPA Method 200.8

Client ID:

82010-T1-B

Date Received:

08/20/10 08/23/10

Date Extracted: Date Analyzed:

08/23/10

Matrix: Units:

Soil

mg/kg (ppm)

Client:

DLH Environmental Consulting

Project:

L&E, F&BI 008255

Lab ID:

008255-02 008255-02.015

Data File: Instrument:

ICPMS1

Operator:

AP

Upper

Internal Standard:

Holmium

% Recovery:

97

Lower Limit: 60

Limit: 125

Concentration

Analyte:

mg/kg (ppm)

Lead

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Total Metals By EPA Method 200.8

Client ID:

82010-T2-B-2

Date Received:
Date Extracted:

08/20/10 08/23/10

Date Analyzed:

Matrix: Units: 08/23/10 08/23/10

Soil mg/kg (ppm) Client:

DLH Environmental Consulting

Project:

L&E, F&BI 008255

Lab ID:

008255-07 002555-07.016

Data File: Instrument:

ICPMS1

Operator:

AP

Lower

Upper

Internal Standard:

Holmium

% Recovery:

99

Lower Limit: Limit:

Concentration

Analyte:

mg/kg (ppm)

Lead

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Total Metals By EPA Method 200.8

Client ID:

Method Blank

Date Received:
Date Extracted:

NA 08/23/10

Date Analyzed:

08/23/10 Soil

Matrix: Units:

mg/kg (ppm)

Client:

DLH Environmental Consulting

Project:

L&E, F&BI 008255

Lab ID: Data File: I0-457 mb I0-457 mb.018

Instrument:

ICPMS1

Operator:

AP

Lower

 $\operatorname{Upper}$ 

 $Internal\ Standard:$ 

Holmium

% Recovery:

89

Limit: 60 Limit:

Concentration

Analyte:

mg/kg (ppm)

Lead

<1

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/26/10 Date Received: 08/20/10 Project: L&E, F&BI 008255

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 008255-01 (Duplicate)

Laboratory code.	000 <b>2</b> 00 01 (2 aprio	(Wet Wt)	(Wet Wt)	Relative Percent
	Reporting	Sample	Duplicate	Difference
Analyte	Units	Result	Result	(Limit 20)
Benzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Toluene	mg/kg (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Xylenes	mg/kg (ppm)	< 0.06	< 0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

			$\operatorname{Percent}$	
	Reporting	$\operatorname{Spike}$	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	0.5	79	69-120
Toluene	mg/kg (ppm)	0.5	85	70-117
Ethylbenzene	mg/kg (ppm)	0.5	81	65-123
Xylenes	mg/kg (ppm)	1.5	84	66-120
Gasoline	mg/kg (ppm)	20	108	71-131

#### ENVIRONMENTAL CHEMISTS

Date of Report: 08/26/10 Date Received: 08/20/10 Project: L&E, F&BI 008255

#### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 008250-01 (Matrix Spike)

				Percent	$\operatorname{Percent}$		
	Reporting	Spike	Sample	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	Result	MS	MSD	Criteria	(Limit 20)
Lead	mg/kg (ppm)	20	5.27	98 b	100 b	65-126	2

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Lead	mg/kg (ppm)	20	106	81-120

#### **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.
- ${\tt ca}$   ${\tt The}$  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.
- $\mbox{d} v$  Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- fc The compound is a common laboratory and field contaminant.
- 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 Analysis performed outside the method or client-specified holding time requirement.
- 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.
- ${
  m jr}$  The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- js The surrogate 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.
- $\operatorname{pr}$  The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

8/20/10 NSYAI Rush charges authorized by: ☐ Return samples ☐ Will call with instructions THENAROUND TIME SAMPLE DISPOSAL Nispose after 30 days ☐ Standard (2 Weeks) 4 - 24 Are Rus H SE PO # SAMPLE CHAIN OF CUSTOUY ADI CON SAMPLERS (signature) PROJECT NAME AND ロッロ REMARKS Phone # 206-632-3123 Fax # all henri ragment-0 Address 2400 NW BOTH ST #117 City, State, ZIP Ser HK, WY 9KII7 Sent Report to 1803, 14 1803, 4 552800 Company

	Parkting to the consequence of t							9,1		11.45			,		
	Notes							he-HS	,	45-4) SM2		TIME	4:20	2	
,						•		Rus		Ru		DATE	01/02/8		
ANAL YSES REQUESTED	HES  SAOCS PA 8270		×					X				COMPANY	DCH	Kha	
[A]	TPH-Diesel TPH-Gasoline VOCs by 8260	×	XX	メメ	X   X	XX	<del>                                    </del>	XX	XX	XX		NAME	tain the	Jahl	
	# of containers	7	S.	カ	ゴ	7	ا . ام	N	7	7	$\times$	PRINT NAME	7 3440	Mae (	
	Sample Type	Soci								<del>-</del>	<u> </u>	_	<u> </u>	Mec	
.	Time	(0:25	12:13	(2.15.	12:17	R:21	70:E	80:C	101.6	3.15	$\times$	· 知		7	
	Date	01/00/8								<del>}</del>	$\times$	SIGNATURE			
	Lab ID	OI A-1)	02 A-E	03A-1	100 A-D	(1-A 20)	106-A-D	D-1 40	08A1)	09 A-1)	·	e.	Relinquished by:	Received by:	Dollary ichod b
	Sample ID	82010- Pipes	8-11-01088		マートノ	5-12-	N-C]-	~ T2-B-3	M-E]_	1-12-B-4 199A-1			3012 16th Avenue West		0000 100 000

B

Ş Samples received at 24

Relinquished by:

Ph. (206) 285-8282

×

A

Received by:

FORMS/COC/COC.DOC Fax (206) 283-5044

#### **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

August 24, 2010

Donna Hewitt, Project Manager DLH Environmental Consulting 2400 NW 80th St., 114 Seattle, WA 98117-4449

Dear Ms. Hewitt:

Included are the results from the testing of material submitted on August 19, 2010 from the L&E, F&BI 008231 project. There are 4 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures DLH0824R.DOC

#### **ENVIRONMENTAL CHEMISTS**

#### CASE NARRATIVE

This case narrative encompasses samples received on August 19, 2010 by Friedman & Bruya, Inc. from the DLH Environmental Consulting L&E, F&BI 008231 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	DLH Environmental Consulting
008231-01	81910-N
008231-02	81910-S
008231-03	81910-E
008231-04	81910-W
008231-05	81910-B
008231-06	81910-B+4'
008231-07	81910-Hyd-7'

All quality control requirements were acceptable.

## FRIEDMAN & BRUYA, INC.

## **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/24/10 Date Received: 08/19/10 Project: L&E, F&BI 008231 Date Extracted: 08/20/10 Date Analyzed: 08/20/10

## RESULTS FROM THE ANALYSIS OF 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	$\frac{\text{Diesel Range}}{\text{(C}_{10}\text{-C}_{25})}$	$rac{ ext{Motor Oil Range}}{ ext{(C}_{25} ext{-C}_{36} ext{)}}$	Surrogate (% Recovery) (Limit 53-144)
81910-N <sub>008231-01</sub>	7,100	27,000	93
81910-S <sub>008231-02</sub>	<50	<250	93
81910-E 008231-03	< 50	<250	91
81910-W <sub>008231-04</sub>	<50	<250	92
81910-B 008231-05	11,000	33,000	87
81910-B+4' 008231-06	5,600	13,000	95
81910-Hyd-7' 008231-07	<50	<250	91
Method Blank 00-1292 MB	<50	<250	92

## FRIEDMAN & BRUYA, INC.

## **ENVIRONMENTAL CHEMISTS**

Date of Report: 08/24/10 Date Received: 08/19/10 Project: L&E, F&BI 008231

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

Laboratory Code: 008231-01 (Matrix Spike)

			(Wet wt)	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	21,000	33 b	19 b	64-133	54 b

Laboratory Code: Laboratory Control Sample

			$\operatorname{Percent}$	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diesel Extended	mg/kg (ppm)	5,000	107	58-147

## FRIEDMAN & BRUYA, INC.

## **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 Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.
- fb Analyte present in the blank and the sample.
- ${\it fc}$  The compound is a common laboratory and field contaminant.
- 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 Analysis performed outside the method or client-specified holding time requirement.
- 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.
- ${\bf J}$  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.
- js The surrogate 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.
- $\operatorname{pr}$  The sample was received with incorrect preservation. The value reported should be considered an estimate.
- ve Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

HSNO 24 ho いるよれ Standard (2 Weeks) 24 4k & RUSH 2 Smple Only TIME TURNAROUND TIME Rush charges authorized by: O Return samples
O Will call with instructions SAMPLE DISPOSAL Notes ODispose after 30 days DATE D1/61/80 3H ANALYSES REQUESTED COMPANY - 2BT *±*1 *×*1. PO# HES RUSH Samples SAOCs by 8270 VOCs by 8260 LANGE OF ALS ON OUNTODS Hali 4 TPH-Gasoline PRINT NAME TPH-Diesel Sample Type | containers! SAMPLERS (signature PROJECT NAMEANO Phone # 206. 632.3123 Par# Mhenry won merch C.O. Apl. Com # of 2 61111 782 REMARKS Ġ, 21:01 01/6/ Time 1.48 City, State, ZIP Ser Hy WA 98117 SIGNATURE Address 2400 NW 80th St #114 Date Relinquished by: Relinguished by: 40 Lab ID 02 50 05 0,0 Received by: Send Report To HV0-7 P+4. Friedman & Bruya, Inc. 3012 16th Avenue West Seattle, WA 98119-2029 Company D 0  $\eta$ 3 Sample ID Ph. (206) 285-8282 Fax (206) 283-5044 FORMS\COC\COC.DOC 00823 -01618

Samples received at 22 °C

## **APPENDIX C**

## WASHINGTON STATE DEPARTMENT OF ECOLOGY UST SITE CHECK/SITE ASSESSMENT FORMS.

WASHINGTON STATE DEPARTMENT OF ECOLOGY	

## UNDERGROUND STORAGE TANK

Owner	For Office Use Only #	
Site #_		

	TEMPORARY/PEF	RMANENT CLOSUF	1E	nee Osc Omy
	and SITE ASSESS		Owner #	
WASHINGTON STATE	See back of form		Site #	
E C O L O G Y	Please type or print info	opropriate box(es)		
	Temporary	✓ Permanent	Change-In-	Site Assessment/
	Tank Closure	Tank Closure	Change-In- Service	Site Assessment/ Site Check
SITE INFORMA	TION:			
Site ID Number (on i	nvoice or available from Ec	ology if the tanks are registe	ered):	
Site/Business Name	LIE AUTO S	ales Creman	A)	
Site Address:	2101 Bu	rwell Place	Telephone:	(360) 377-4683
	Street Bremein City	ton	W P-Slate	98311
			State	ZIP-Code
TANK INFORM	Closure Date	Tark Caracita	Outstand Others	CONTAMINATION
Tankib	8/29/10	Tank Capacity	Substance Stored	PRESENT AT THE TIME OF CLOSURE
T <sub>2</sub>	8/20/10	1000 gal	gasoline	
		Ų.	- gasoline	Yes
		2000 gal	gasoline	Yes No
	_ <u>8   19   10</u>	250 gillen	Waste Oil	
				Unknown
				Check unknown if no obvious contamination was
				observed and sample results have not yet been
	-			received from analytical lab
UŠT SYSTEM C	OWNER/OPERATOR	· Dorothy Rombe	rgettanana	
UST,Owner/Operator:		Estate of Mer	elyn Romberg	
Owners Signature:	to cothy Rom	elyn Komberg Lena Telephol	ne: (306) 365-9306	k
Address: 11538 1	7th Ave NE	*	,	
50 mH)	Street		P.O. Box	a Sin &
<u>Jean .</u>	City		State	ZIP-Code
TANK CLOSUR	E/CHANGE-IN-SER	VICE PERFORMED I	BY:	
Service Provider:(	<u>ESCO</u>	(	License Number:	
Licensed Supervisor: -	Donna Hewitt	(For PESCO)	Decommissioning License Number:	
Supervisors Signature	:	well		
Address:	51		2049 P.O. Box	
	PORT TO	wnsend	P.O. 80x	98368
Telephone: ( <u>\( \frac{\( \) \}}{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\( \) \}}{\} \}}{\) \\ \right)}}}} \end{\( \frac{\( \) \}}{\}}}}{\) \end{\( \frac{\( \frac{\) \}}{\} }}}}} \end{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\) \}}{\} }}}}{\} \end{\( \frac{\( \frac{\( \frac{\( \frac{\) \}}{\} }}}}} \end{\) \end{\( \frac{\( \frac{\) \}}{\} }}} \end{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\) \}{\} }}}}{\} \end{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\) \}}{\} }}}}}{\} \end{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\) \} \}}{\} }}}{\} \end{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\( \frac{\) \}{\) \}}}}{\} \end{\( \frac{\( \frac{\( \frac{\) \}}{\}}}}{\} \endit)}}} \end{\( \frac{\( \frac{\( \frac{\) \}}{\}}}}{\} \end{\) \end{\) \} \} \end{\( \frac{\( \frac{\} }}}{\} \end{\( \frac{\( \frac{\) \}}{\}}}{\} \end{\) \end{\( \frac{\} }}}{\} \end{\( \frac{\) \} \end{\( \frac{\) \end{\) \end{\( \frac{\} }}{\} \end{\( \frac{\} }}{\} \end{\) \end{\( \frac{\} }}{\} \end{\) \end{\) \}}}{\} \end{\( \frac{\} }}{\} \end{\) \end{\( \frac{\} }}{\} </u>	222-9219		State	ZIP-Code
	TE ASSESSMENT (	CONDUCTED BY:		
- ARE-SARIES AND				

Telephone. (1900)		<del></del>
SITE CHECK/SITE ASSESSMENT CONDUCTED BY:		
Name of Registered Site Assessor: DONNA HEWITT		
Telephone: (206) (232-3123		
Address: 2400 NW Both Street Pmb +	# (14 P.O. Box	
Sea Hle W	UA-	98117
City	State	ZIP-Code



				0.0000000000000000000000000000000000000	30233394	- TOP   TOP	
m	rv	7	m 80	 	J Fa	$\mathbf{r}$	S
8	111	- 31	W 4	\$20x53	818		- Marie
8	ιъ,	re B	B 10	 ( a W	8 1.4	7 A B	( United

When a release has **not** been confirmed and reported, this Site Check/Site Assessment Checklist must be completed and signed by a person registered with the Department of Ecology. The results of the site check or site assessment must be included with this checklist. This form must be submitted to Ecology at the address shown below within 30 days after completion of the site check/site assessment.

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

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

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

CHECKLIST: Please initial each item in the appropriate box.

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

Underground Storage Tank Section Department of Ecology P. O. Box 47655 Olympia, WA 98504-7655

SITE INFORMATION Site ID Number (on invoice or ava		
Site/Business Name:	Anto Sales Clees	ac)
Site Address: 2101 Bur	well place Telephone	:(206) 377-6683
Brevner		98311 ZIP-Code
TANK INFORMATION		
Tank ID No.	Tank Capacity	Substance Stored
71	1000	al gasoline
72	1000 ga	e gasoline
T3	2000 ga	O gasoline
T4	250 gallon	waste Oil
REASON FOR CONDUCTING SI	TE CHECK/SITE ASSESSMEN	IT.
Investigate suspected Extend temporary clo UST system undergo UST system permand UST system permand Abandoned tank con	d release due to on-site environ de release due to off-site environ is ure of UST system for more the ing change-in-service. The entity closed-in-place ently closed with tank removed taining product.  To delegated agency for UST second Hanks during History	mental contamination.  nan 12 months.  ystem closed before 12/22/88.

Each it	tem of the following checklist shall be initialed by the person registered with the Department of I signature appears below.	_	8
1.	The location of the UST site is shown on the vicinity map.	YES	NO
2.	A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in the Site Assessment Guidance)	V	- 1 A
3.	A summary of UST system data is provided. (see Section 3.1)		V
4.	The soils characteristics at the UST site are described. (see Section 5.2)	V	V
5.	Is there apparent groundwater in the tank excavation?		
6.	A brief description of the surrounding land is provided. (see Section 3.1)	V	
7.	Information has been provided indicating the number and types of samples collected, methods used to collect and analyze the samples, and the name and address of the laboratory used to perform the analyses.	V	
8.	A sketch or sketches showing the following items is provided:		-
	- location and ID number for all field samples collected	V	A Commence
	- groundwater samples distinguished from soil samples (if applicable)	NA	ļ
	- samples collected from stockpiled excavated soil	1	
	- tank and piping locations and limits of excavation pit	V	
<del></del>	- adjacent structures and streets	1	
	- approximate locations of any on-site and nearby utilities	W	
9.	If sampling procedures different from those specified in the guidance were used, has justification for using these alternative sampling procedures been provided? (see Section 3.4)	V	
10.	A table is provided showing laboratory results for each sample collected including: sample ID number, constituents analyzed for and corresponding concentration, analytical method and detection limit for that method.	V	
11.	Any factors that may have compromised the quality of the data or validity of the results are described.	V	
12.	The results of this site check/site assessment indicate that a confirmed release of regulated substance has occured.	1	
SITEA	ASSESSOR INFORMATION  DONNA HEWITT 724		
		гн	
DITOINE	SS ADDRESS: 2400 NW 80th St Pmb 114 TELEPHONE: (24) 632-3	ロ. 2127	>
BOSHACO	Seattle  CITY  FIRMAFFILIATED WITH  STATE  ZIP+CODE	<u>ر ۳۰</u>	)
	Dea Tile WH 1011		<del></del>
descri	eby certify that I have been in responsible charge of performing the site check/site assessm ibed above. Persons submitting false information are subject to penalties under Chapter 1	nent	
WAC.			
	8/31/2010		
	Date Signature of Person Registered with Eco	ology	

TANK-T3

Each it	EKUST  tem of the following checklist shall be initialed by the person registered with the Department of increase the company of the person registered with the Department of its state.	Ecolog	ЗУ
whose :	signature appears below.	YES	NO
1.	The location of the UST site is shown on the vicinity map.	1	T
2.	A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in the Site Assessment Guidance)	V	
3.	A summary of UST system data is provided. (see Section 3.1)		V
4.	The soils characteristics at the UST site are described. (see Section 5.2)	V	<u></u>
5.	Is there apparent groundwater in the tank excavation?		
6.	A brief description of the surrounding land is provided. (see Section 3.1)	V	
7.	Information has been provided indicating the number and types of samples collected, methods used to collect and analyze the samples, and the name and address of the laboratory used to perform the analyses.	V	
8.	A sketch or sketches showing the following items is provided:		
	- location and ID number for all field samples collected	V	
	- groundwater samples distinguished from soil samples (if applicable)	NA	
	- samples collected from stockpiled excavated soil	1	
	<ul> <li>tank and piping locations and limits of excavation pit</li> </ul>	v	
<del></del>	- adjacent structures and streets	TV	
	- approximate locations of any on-site and nearby utilities	L	
9.	If sampling procedures different from those specified in the guidance were used, has justification for using these alternative sampling procedures been provided? (see Section 3.4)	V	
10.	A table is provided showing laboratory results for each sample collected including: sample ID number, constituents analyzed for and corresponding concentration, analytical method and detection limit for that method.	1	
11.	Any factors that may have compromised the quality of the data or validity of the results are described.	V	
12.	The results of this site check/site assessment indicate that a confirmed release of regulated substance has occured.	1	
SITE A	ASSESSOR INFORMATION		
	DONNA HEWITT DLH		
<del></del>	PEDCON DECISTEDED WITH ECOLOGY	rų	
DIIGINES	2400 NUI BOTH ST PMb 114 TELEPHONE (200) 632-3	n ≥123	,
DUUM,	SS ADDRESS: 2400 NW 80th St Pmb 114 TELEPHONE: (200) 632-3  Sea HIE WA 98117  CITY STATE ZIP+CODE	<u>ر ۲۰۰</u>	
**************************************	CITY STATE ZIP+CODE		
	by certify that I have been in responsible charge of performing the site check/site assessm		
descri	ibed above. Persons submitting false information are subject to penalties under Chapter 1	173-36	30
WAC.		• •	J
	8/31/2010		
	Date Signature of Person Registered with Ecol	oloav	

	IANK-	17	
Each	<b>CKLIST</b> item of the following checklist shall be initialed by the person registered with the Department of e signature appears below.		
1		YES	NO
1.	The location of the UST site is shown on the vicinity map.	V	
2.	A brief summary of information obtained during the site inspection is provided. (see Section 3.2 in the Site Assessment Guidance)	V	
3.	A summary of UST system data is provided. (see Section 3.1)		V
4.	The soils characteristics at the UST site are described. (see Section 5.2)	1	V
5.	Is there apparent groundwater in the tank excavation?		
6.	A brief description of the surrounding land is provided. (see Section 3.1)	V	
7.	Information has been provided indicating the number and types of samples collected, methods used to collect and analyze the samples, and the name and address of the laboratory used to perform the analyses.	V	
8.	A sketch or sketches showing the following items is provided:		
	- location and ID number for all field samples collected	V	
	- groundwater samples distinguished from soil samples (if applicable)	NA	
	- samples collected from stockpiled excavated soil	2	
	- tank and piping locations and limits of excavation pit	2	-
	- adjacent structures and streets	1	
	- approximate locations of any on-site and nearby utilities	1	
9.	If sampling procedures different from those specified in the guidance were used, has justification for using these alternative sampling procedures been provided? (see Section 3.4)	V	
10.	A table is provided showing laboratory results for each sample collected including: sample ID number, constituents analyzed for and corresponding concentration, analytical method and detection limit for that method.	V	
11.	Any factors that may have compromised the quality of the data or validity of the results are described.	V	
12.	The results of this site check/site assessment indicate that a confirmed release of regulated substance has occured.	1	
SITE	ASSESSOR INFORMATION		
	DONNA HEWITT DLH		
BUSINE	PERSON REGISTERED WITH ECOLOGY  SS ADDRESS: 2400 NW 80th St Pmb 114 TELEPHONE:(20) 632-3  Seattle WA 98117  CITY STATE ZIP+CODE		
	SS ADDRESS: 2900 NW 80' St PMb 114 TELEPHONE: (200) 632-3	125	
	Seattle WA 98117		
I here	by certify that I have been in responsible charge of performing the site check/site assessmibed above. Persons submitting false information are subject to penalties under Chapter 1	ent 73-360	)
	8/31/2010		
<del></del>			
	Date Signature of Person Registered with Ecolo	ogy	1

## APPENDIX D TANK CLEANING AND SOIL DISPOSAL DATA

## Marine Vacuum Service, Inc.

GENERAL CONTRACTOR
CONTRACTORS LICENSE # MARINVS097JA

P0. Box 24263 Seattle, Washington 98124

Telephone (206) 762-0240

FAX (206) 763-8084

1-800-540-7491

## STORAGE TANK

## CERTIFICATE OF DESTRUCTION

DATE: 8/20 - 8/23/2010

ATTN: Pacific Environmental Service

TANK OWNER: L&E auto Sales

TANK LOCATION: 2101 Burwell pl, Bremerton, wa

TANK DESCRIPTION: 1-300 gallon & 2-500 gallon tanks

LAST CONTENTS HELD IN TANKS: Oil and Water,

Marine Vacuum Service, Inc certifies that the tank mentioned above was pumped of all liquid materials and washed clean with a high-pressure washer and soap solution. The tank has been disposed of by metal recycling and contents therein have been disposed of according to all Local, State and Federal Regulations.

Thank you,

Lucas Meier Dispatcher

DBE # D4M1302341

EPA # WAD980974521

A MINORITY BUSINESS ENTERPRISE ID # D4M1302341

## **Olympic View Transfer Station**

9300 SW Barney White Road, Port Orchard Washington

## **Profile # 102441WA**

## PERMIT TO DISPOSE OF NON-HAZARDOUS MATERIALS

This permit authorizes disposal of Customer's waste materials in	accordance with the Industrial
Waste & Disposal Services Agreement dated _	
	EXPIRES: 12/16/2010

GENERATOR: DOROTHY ROMBERG AND ESTATE OF MEVELYN ROMBERG - CS2

DESCRIPTION:PCS - GASOLINE		VOLUME	E:60 tons
CO-MINGLE SEGREGATE	CLEAN-UP		
M	ATERIAL		
LOCATION: BREMERTON, WASHINGTON		COUNTY:*	Kitsap
227 NAVAL AVENUE			
The state of the s			
CONTACT: HARRY ROMBERG		PHONE: 26	
		FAX: h	romb@aol.com
Recertification:     Yes   No			
BILLING: PESCO VIA WM SALES	PO#: N/A		JOB#: N/A
TYPE OF DISPOSAL/SPECIAL HANDLING:  ******PLEASE CALL OVTS TO SCH	•	contaminated	
APPROVED: KRISTIN CASTNER	DATE: <b>1</b>	0/09/10 3:	:54:56 PM

A COPY OF THIS PERMIT MUST BE SHOWN BY EACH DRIVER PROJECTS MUST BE SCHEDULED WITH FACILITY MANAGEMENT CALL: 360-674-2297



WASTE MANAGEMENT

2009 OLYMPIC VIEW TRANSFER STATION BILL OF LADING/WEIGH TICKET	OLYM <del>PIC V</del> IEW TRANSFER STATION
Generator Name & Address:  Dorothy Romberg and Estate of Melelyn Romberg 227 Naval Arenve Bremerton, WA	To: Pescalcia WM Soles  Profile # 1074411.10
Billing: Pesco VI2 WM Sole. Contact Person: Harry Romberg	G-51,080
Telephone #: 206 365-9302  Acknowledgement of Loading	MTTRIC5 Juelly Signature:
Name (Please Print)  Signature  Deliver To: Olympic View Transfer Station 9300 SW Barney White Road Port Orchard, WA 98367  Tel# (360) 674-2297  Monday-Friday 8:00am-5:00pm  Transporter Name:	Pacific Environmental  Company  Do-11-10  Date  Disposal Facility: Columbia Ridge Landfill & Recycling Facility 18177 Cedar Springs Lane Arlington, Oregon 97812 Tel# (541)454-2030
Truck #: Tek #5  Container#:	Waste Profile#: 102 HH I WA  Waste Type: CS2   PCS-Gasoline  Expiration Date: 12-16-10
THOMAS WESTERSUND Driver's name (Please Print)  Monas Sussalund Driver's Signature	10-11-10 Date

OLYMPIC VIEW TRANSFER STATION BILL OF LADING/WEIGH TICKET	OLYMPIC VIEW TRANSFER STATION
Generator Name & Address: Dorothy Rombers and Estate of	
Melelyn Romberg 227 Naval Arenie	C5-2 14413 Date: 10/11/10 To: Pesco VIZWM Sales
Bremerton, WA	Prof. (e#102441WA
Billing: Pesco VI2 WM Sole	G-32,060
Contact Person: Harry Romberg	N 15.880
Telephone #: 206 365-9302	Tek 794 TON PAC 120 John Signature:
Acknowledgement of Loading	
Name (Please Print)	Pacific Environmental
John & Tyso Signature	Date
Deliver To: Olympic View Transfer Station 9300 SW Barney White Road Port Orchard, WA 98367	Disposal Facility: Columbia Ridge Landfill & Recycling Facility 18177 Cedar Springs Lane
Tel# (360) 674-2297 Monday-Friday 8:00am-5:00pm Transporter Name:	Arlington, Oregon 97812 Tel# (541)454-2030
$\sim$	Waste Profile#: 102 441WA
Truck #: TRK: 1/20	Waste Type: CS2/PCS-Gasoline
Container#:	Expiration Date: 12 -1(0 - 10
Driver's name (Please Print)	
Joh J. Mynn	) 10-11-10

OLYMPIC VIEW TRANSFER STATION BILL OF LADING/WEIGH TICKET	OLYMPIC VIEW TRANSFER STATION
Generator Name & Address:  Dorothy Rombers  and Estate of  Mellelin n	
Melelyn Romberg 227 Naval Arenve Bremerton, WA	Date: 10/11/10 Pescovia WM Sales  Profile# 102441WA
Billing: Pesco via my Sale	G-55300
Contact Person: Harry Romberg	71 20180
Telephone #: 206 365-9302	79,120
	TRK 45 Sucher Signature:
Acknowledgement of Loading	
Name (Please Print)	Pacific Environmental
HOMES Stesterland Signature	_10-11-10
Deliver To:	Date
Olympic View Transfer Station 9300 SW Barney White Road Port Orchard, WA 98367 Tel# (360) 674-2297 Monday-Friday 8:00am-5:00pm Transporter Name:	Disposal Facility: Columbia Ridge Landfill & Recycling Facility 18177 Cedar Springs Lane Arlington, Oregon 97812 Tel# (541)454-2030
	Waste Profile#: 102 441WA
Truck #: Tek#5	Waste Type: CS2/PCS-Gasoline
Container#:	Expiration Date: 12 -1(0 - 10)
THOMAS WESTERSUND Driver's name (Please Print)  Monas Statume	
Driver's Signature	10-11-10 Date
	A Park and the second s

;

2009 OLYMPIC VIEW TRANSFER STATION BILL OF LADING/WEIGH TICKET	OLYM <u>PIC VIEW</u> TRANSFER STATION
Generator Name & Address: Dorothy Rombers and Estate of	
Metelyn Romberg 227 Naval Arenve Bremerton, WA	To: Pesco via WM Sales  Profile #102441 WA
Billing: Pesco VI2 WM Soles	G-49140
Contact Person: Harry Romberg Telephone #: 206 365-9302	N 22920
Acknowledgement of Loading	Tex July Signature:
Name (Please Print)	Pacific Environmental
Makes Statutural Signature	10-11-10 Date
Deliver To: Olympic View Transfer Station 9300 SW Barney White Road Port Orchard, WA 98367 Tel# (360) 674-2297 Monday-Friday 8:00am-5:00pm	Disposal Facility: Columbia Ridge Landfill & Recycling Facility 18177 Cedar Springs Lane Arlington, Oregon 97812 Tel# (541)454-2030
Transporter Name:	Waste Profile#: 102 441WA
Truck #: TRK#5	Waste Type: CS2/PCS-Gasoline
Container#:	Expiration Date: $12 - 16 - 10$
THOMAS WESTERLUSO Driver's name (Please Print)	
Monas Sistalind  Driver's Signature	10-11-10
Solding Cold	Date

**(** 

OLYMPIC VIEW TRANSFER STATION BILL OF LADING/WEIGH TICKET	OLYMPIC VIEW
- TOTAL TOTAL	TRANSFER STATION
Generator Name & Address:  Dorothy Romberg  and Estate of	
Melelyn Romberg 227 Naval Arenve Bremerton, WA	To: Pesco via WM Sales
	Profile# 102491 WA
Billing: Pesco via my Soles	T-16,140
Contact Person: Harry Romberg	N 15,500
Telephone #: 2063(5-9302	TACIZO July (4) Signature:
Acknowledgement of Loading	
Name (Please Print)	Pacific Environmental
Signature	$\frac{10}{10}$
Deliver To: Olympic View Transfer Station 9300 SW Barney White Road Port Orchard, WA 98367 Tel# (360) 674-2297 Monday-Friday 8:00am-5:00pm	Disposal Facility: Columbia Ridge Landfill & Recycling Facility 18177 Cedar Springs Lane Arlington, Oregon 97812 Tel# (541)454-2030
Transporter Name:	Waste Profile#: 102 441WA
Truck #: Tek: 1/20	Waste Type: CS2/PCS-Gosoline
Container#:	Expiration Date: $12 - 10 - 10$
Driver's Signature	10/11/70
Direct 3 orginature	Date

## 2009 **OLYMPIC VIEW TRANSFER STATION** OLYMPIC-VIEW BILL OF LADING/WEIGH TICKET TRANSFER STATION Generator Name & Address: Dorothy Rombers and Estate of Metelyn Romberg 227 Naval Arenve Bremerton, WA Billing: Pesco VI2 WM Soles Contact Person: Harry Romberg Telephone #: 206 365-9302 Signature: Acknowledgement of Loading THOMAS NESTERLUNG Name (Please Print) was Kestulund Signature Date Deliver To: Disposal Facility: Olympic View Transfer Station Columbia Ridge Landfill & Recycling Facility 9300 SW Barney White Road 18177 Cedar Springs Lane Port Orchard, WA 98367 Arlington, Oregon 97812 Tel# (360) 674-2297 Tel# (541)454-2030 Monday-Friday 8:00am-5:00pm Transporter Name: 1 Waste Profile#: 102441WA Truck #: Tell -Container#: Expiration Date: 12 -16 - 10 THOMAS NESTERLUND Driver's name (Please Print) 10-11-10 Driver's Signature

OLYMPIC VIEW TRANSFER STATION BILL OF LADING/WEIGH TICKET	OLYMPIC VIEW TRANSFER STATION
Generator Name & Address: Dorothy Romberg and Estate of Melelyn Romberg 227 Naval Arenve Bremerton, WA	CS-2 14442 Date: 10/11/10 To: Pesco VIZ WM Soles  profile # 102441WA
Billing: Pesco via wy Soles	G-30540 T-16120
Contact Person: Harry Romberg	N 14470
Telephone #: 206 365-9302	Tek Justin FONS PAC 120 Signature:
Acknowledgement of Loading	
Name (Please Print)	Pacific Environmental Company
Signature Signature	Data Data
Deliver To: Olympic View Transfer Station 9300 SW Barney White Road Port Orchard, WA 98367 Tel# (360) 674-2297 Monday-Friday 8:00am-5:00pm	Disposal Facility: Columbia Ridge Landfill & Recycling Facility 18177 Cedar Springs Lane Arlington, Oregon 97812 Tel# (541)454-2030
Transporter Name: PAC ENV	Waste Profile#: 102441WA
Truck #: Tek /20	Waste Type: CS2/PCS-Gosoline
Container#:	Expiration Date: 12 -1(0 - 10
Driver's name (Please Print)	
Driver's Signature	Date   D- 11-10

## APPENDIX E PERMITS AND CERTIFICATIONS

# TERNATIONAL CODE COUNCI

# DONNA HEWITT

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: The International Code Council attests that the individual named on this certificate has satisfactorily

# UST Decommissioning

Given this day of July 1, 2009

Certificate No. 1044716-U2



President, Board of Directors

Adolf Zubia

Chief Executive Officer Richard P. Weiland



The individual named hereon is CERTIFIED in the category shown, having been so certified pursuant to successful completion of the prescribed written examinations.

Expiration date: June 8, 2012 No. 1044716

Not valid unless signed by certificate holder. ICC certification attests to competent knowledge of codes and standards

DONNA HEWITT 2400 NW 80TH ST PMB 114 SEATTLE, WA 98117

From:

Certification and Testing Department

Date:

July 1, 2010

Subject:

June 8, 2010 ADMINISTRATION

Examination:

WASHINGTON STATE SITE ASSESSMENT

Congratulations! You have demonstrated a commitment to the code enforcement profession by successfully achieving ICC certification. Your wallet card is enclosed. Your certification information will be posted on the Certification Website as an Active Certification. <a href="http://www.iccsafe.org/ACCREDITATION">http://www.iccsafe.org/ACCREDITATION</a>

RENEWAL: Prior to the expiration date shown on your wallet card, we will mail you a reminder notice with information on certification renewal to your address on record. If your address has changed, please see CHANGE OF ADDRESS below. Unless otherwise specified, we will mail the renewal reminder notice 6 months before your Certification expiration date. This is done so far in advance because we want to help ensure you have sufficient time to accrue the necessary Continuing Education Units (CEUs).

AST/UST certification renewal – Certification is valid for a two year period. You may renew by retaking and passing the exam. State licensing may vary. Contact the appropriate state agency in charge of AST/UST work for information on licensing requirements.

ICC California UST Inspector certification renewal – Certification is valid for a two year period. Renew by retaking and passing the exam or by fulfilling the continuing educational requirements approved by the State Water Resources Control Board, Underground requirements.

NAFED certification renewal – NAFED must receive your application for recertification and documentation within 60 days prior to the expiration date of the current certification. <a href="http://www.nafed.org/certification/">http://www.nafed.org/certification/</a>

Renewal of certifications is the responsibility of the certified individual. Please make sure you keep track of your renewal date(s).

CHANGE OF ADDRESS: It is extremely important that you **notify** ICC Renewal Department **of any change of address** to avoid the possibility of your renewal information not being received. The change of address form is located on the ICC website at <a href="http://www.iccsafe.org/Accreditation/Pages/safety.aspx">http://www.iccsafe.org/Accreditation/Pages/safety.aspx</a>.

If you have achieved a NAFED certification you must notify NAFED of any change of address. http://www.nafed.org

Best wishes for continued success in your career, and thank you for your interest in the Certification Programs of the International Code Council.

Yours very truly.

Certification and Testing Department

Enclosure

Birmingham District Office Certification and Testing Department 900 Montclair Road Birmingham, Alabama 35213 Tel: 888-422-7233 extension 5524 Fax: 205-599-9897 www.iccsafe.org





## It is hereby certified that Donna L. Hewitt

has satisfactorily complied with and completed the statutory requirements set forth in title 18 revised code of Washington to engage in practice as a

## Geologist

And is hereby authorized, empowered and granted the right to engage in that practice within the State of Washington subject to the state laws.



Given under the hand and seal of the director this fifth day of June, 2002.

Geologist Licensing Board

No. 899

PROD	ACORD, CERTIF	ICATE OF LIABI	LITY INS	URANCI	OP ID	Œ	DATE (MM/DD/YYY)
95 I	urance Brokers Ltd. North Research Dr St ardsville IL 62025		HOLDER	R. THIS CERTIFIC	DIHEN-1 SUED AS A MATTER OF ORIGHTS UPON THE CE ATE DOES NOT AMEND AFFORDED BY THE POL	RTIFIC	CATE
INSURE	ne:618-692-9800 Fax	:618-692-9865	INSURERS	S AFFORDING CO	VERAGE		NAIC #
			INSURER A:	American	Safety RRG, Inc		25448
1	DLH Environmenta	l Consulting	INSURER B:				
1	2400 NW 80th Str Seattle WA 98117		INSURER D:				
COVE	RAGES		INSURER E:			<u></u>	
	CIES. AGGREGATE LIMITS SHOUN MAY H	HAVE BEEN ISSUED TO THE INSURED NAM ANY CONTRACT OR OTHER DOCUMENT W THE POLICIES DESCRIBED HEREIN IS SUI AVE BEEN REDUCED BY PAID CLAIMS.	MED ABOVE FOR THE MITH RESPECT TO WH BJECT TO ALL THE TE	POLICY PERIOD INDIC IICH THIS CERTIFICAT RMS, EXCLUSIONS AN	ATED. NOTWITHSTANDING E MAY BE ISSUED OR ID CONDITIONS OF SUCH		
LTR INS	RD TYPE OF INSURANCE	POLICY NUMBER		E POLICY EXPIRATION DATE (MM/DD/YY			
A	GENERAL LIABILITY  X COMMERCIAL GENERAL LIABILITY  CLAIMS MADE X OCCU		04/24/10		EACH OCCURRENCE		1,000,000
	X POLLUTION LIAB	ENV013037-10-05			PREMISES (Ea occurence)  MED EXP (Any one person)		50,000 5,000
		_ EMANT2021-T0-02	04/24/10	04/24/11	PERSONAL & ADV INJURY		,000,000
	GEN'L AGGREGATE LIMIT APPLIES PE	R:			GENERAL AGGREGATE	\$ 1	,000,000
	POLICY PRO- JECT LOC AUTOMOBILE LIABILITY				PRODUCTS - COMP/OP AGO	3   \$ 1	,000,000
	ANY AUTO ALL OWNED AUTOS	÷			COMBINED SINGLE LIMIT (Ea accident)	\$	
	SCHEDULED AUTOS HIRED AUTOS				BODILY INJURY (Per person)	\$	
	NON-OWNED AUTOS				BODILY INJURY (Per accident)	\$	
	GARAGE LIABILITY				PROPERTY DAMAGE (Per accident)	\$	
	ANY AUTO			47	AUTO ONLY - EA ACCIDENT	\$	
-	EVERCOUNTED				OTHER THAN EA ACC	+	
!	EXCESS/UMBRELLA LIABILITY  OCCUR  CLAIMS MADE				EACH OCCURRENCE	\$	
	GEAMAG MADE				AGGREGATE	\$	
	DEDUCTIBLE					\$	
WOR	RETENTION \$					\$	
EMPL	(ERS COMPENSATION AND OYERS' LIABILITY				WC STATU- OTH- TORY LIMITS ER	\$	
OFFIC	ROPRIETOR/PARTNER/EXECUTIVE ER/MEMBER EXCLUDED?				E.L. EACH ACCIDENT	\$	
SPECI	describe under AL PROVISIONS below				E.L. DISEASE - EA EMPLOYEE		
OTHE					E.L. DISEASE - POLICY LIMIT	\$	
i	fessional Liab.	ENV013037-10-05	04/24/10	04/24/11	Aggregate		000,000
r in	formational and bidd	ES/EXCLUSIONS ADDED BY ENDORSEM ing purposes.	ENT / SPECIAL PROVI	SIONS	Ea. Claim	Ι,(	000,000
RIFICA	ATE HOLDER		CANCELLATIO	N			
	INFORMATIONAL PURPO	INFORMA SES	SHOULD ANY OF T DATE THEREOF, T NOTICE TO THE CE	THE ABOVE DESCRIBE HE ISSUING INSURER ERTIFICATE HOLDER I ATION OR LIABILITY O	D POLICIES BE CANCELLED B WILL ENDEAVOR TO MAIL 3 NAMED TO THE LEFT, BUT FAIL OF ANY KIND UPON THE INSURI	0D	DAYS WRITTEN
			AUTHORIZED REPRE	S	1 // h.		
RD 25	(2001/08)			ILLED II.	MUM		
			<del>\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ </del>	7	® ACORD CO	RPOF	RATION 1988

# Appendix C



February 25, 2013

Mr. Shawn Williams Enviro Sound Consulting 3388 Byron St, Suite 200 Silverdale, WA 98383

Dear Mr. Williams,

On February 22nd, 2 samples were received by our laboratory and assigned our laboratory project number EV13020122. The project was identified as your ESC13-E002. 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



CLIENT:

**Enviro Sound Consulting** 

3388 Byron St, Suite 200

Silverdale, WA 98383

**CLIENT CONTACT:** 

Shawn Williams

**CLIENT PROJECT:** CLIENT SAMPLE ID ESC13-E002

ESC-E002-N-SL01

DATE:

2/25/2013

2/22/2013

ALS JOB#:

EV13020122

ALS SAMPLE#:

-01

DATE RECEIVED:

2/22/2013 9:00:00 AM

**COLLECTION DATE:** WDOE ACCREDITATION: C601

L	Α	1 /	۱,	۲.	Ŀ١	S	U	L I	S	100

			REPORTING	DILUTION		ANALYSIS A		
ANALYTE	METHOD	RESULTS	LIMITS	FACTOR	UNITS	DATE	BY	
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	02/23/2013	EBS	
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	02/23/2013	EBS	_
						ANALYSIS A	NALYSIS	
SURROGATE	METHOD	%REC				DATE	BY	
C25	NWTPH-DX	93.7				02/23/2013	FRS	

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



CLIENT:

**Enviro Sound Consulting** 

3388 Byron St, Suite 200

Silverdale, WA 98383

**CLIENT CONTACT: CLIENT PROJECT:** 

Shawn Williams

**CLIENT SAMPLE ID** 

\$ \$ \$400 (\$Q\$) (\$100 (\$124))

ESC13-E002 ESC-E002-B-SL02

DATE:

2/25/2013

ALS JOB#: ALS SAMPLE#:

EV13020122 -02

2/22/2013

2/22/2013 9:15:00 AM

**COLLECTION DATE:** WDOE ACCREDITATION: C601

DATE RECEIVED:

DATA RESULTS

			REPORTING	DILUTION		ANALYSIS A	NALYSIS
ANALYTE	METHOD	RESULTS	LIMITS	FACTOR	UNITS	DATE	BY
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	02/23/2013	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	02/23/2013	EBS
						ANALYSIS A	NALYSIS
SURROGATE	METHOD	%REC				DATE	BY
C25	NWTPH-DX	86.1				02/23/2013	EBS

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



CLIENT:

**Enviro Sound Consulting** 

3388 Byron St, Suite 200

Silverdale, WA 98383

Shawn Williams

CLIENT CONTACT: CLIENT PROJECT:

ESC13-E002

DATE:

2/25/2013

ALS SDG#:

EV13020122

WDOE ACCREDITATION: C601

LABORATORY BLANK RESULTS

MB-021513S - Batch 3476 - Soil by NWTPH-DX

			REPORTING	DILUTION		ANALYSIS A	ANALYSIS
ANALYTE	METHOD	RESULTS	LIMITS	FACTOR	UNITS	DATE	BY
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	02/15/2013	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	02/15/2013	EBS



CLIENT:

**Enviro Sound Consulting** 

3388 Byron St, Suite 200

Silverdale, WA 98383

**CLIENT CONTACT: CLIENT PROJECT:** 

TPH-Diesel Range - BSD

Shawn Williams ESC13-E002

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 3476 - Soil by NWTPH-DX

SPIKED COMPOUND TPH-Diesel Range - BS

METHOD NWTPH-DX

NWTPH-DX

%REC 98.4

96.6

RPD

2

QUAL

ANALYSIS ANALYSIS DATE

2/25/2013

C601

EV13020122

BY

02/15/2013 **EBS** 

02/15/2013 EBS

APPROVED BY

DATE:

ALS SDG#:

WDOE ACCREDITATION:

Laboratory Director



April 1, 2013

Mr. Shawn Williams Enviro Sound Consulting 3388 Byron St, Suite 200 Silverdale, WA 98383

Dear Mr. Williams,

On March 29th, 5 samples were received by our laboratory and assigned our laboratory project number EV13030176. The project was identified as your ESC13-E002. 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



CLIENT:

**Enviro Sound Consulting** 

3388 Byron St, Suite 200

Silverdale, WA 98383

**CLIENT CONTACT:** 

Shawn Williams

CLIENT PROJECT: CLIENT SAMPLE ID

er en retronoment

ESC13-E002

ESC-E002-B1-SL03

4/1/2013 DATE:

ALS JOB#:

EV13030176

ALS SAMPLE#:

-01

DATE RECEIVED:

3/29/2013 3/28/2013 9:30:00 AM

**COLLECTION DATE:** WDOE ACCREDITATION:

C601

DA	TA R	ESL	ILTS	

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS A	NALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	04/01/2013	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	04/01/2013	EBS
SURROGATE	METHOD	%REC				ANALYSIS A	NALYSIS BY
C25	NWTPH-DX	86.3				04/01/2013	EBS

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



CLIENT:

TFT

**Enviro Sound Consulting** 

3388 Byron St, Suite 200

Silverdale, WA 98383

CLIENT CONTACT: CLIENT PROJECT:

Shawn Williams

CLIENT SAMPLE ID

ESC13-E002

ESC-E002-S14-SL4

DATE: 4/1/2013

ALS JOB#:

EV13030176

ALS SAMPLE#:

-02

DATE RECEIVED:

3/29/2013

**COLLECTION DATE:** 

3/28/2013 10:15:00 AM

03/29/2013

03/29/2013

DLC

DLC

WDOE ACCREDITATION:

C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS A	NALYSIS BY	
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	03/29/2013	DLC	
Benzene	EPA-8021	U	0.030	1	MG/KG	03/29/2013	DLC	
Toluene	EPA-8021	U	0.050	1	MG/KG	03/29/2013	DLC	
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/29/2013	DLC	
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/29/2013	DLC	
SURROGATE	METHOD	%REC				ANALYSIS A	NALYSIS BY	
TFT	NWTPH-GX	74.8				03/29/2013	DLC	

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

EPA-8021

75.3



CLIENT:

Enviro Sound Consulting 3388 Byron St, Suite 200

Silverdale, WA 98383

**CLIENT CONTACT: CLIENT PROJECT:** 

Shawn Williams ESC13-E002

**CLIENT SAMPLE ID** 

ESC-E002-W-SL5

DATE:

4/1/2013

ALS JOB#:

EV13030176

ALS SAMPLE#:

-03

DATE RECEIVED:

3/29/2013

**COLLECTION DATE:** 

3/28/2013 10:30:00 AM

WDOE ACCREDITATION:

C601

			WBOL	TOOKEDITATI	JIV. COC	ול		
		DA	TA RESULTS					
ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS A	NALYSIS BY	
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	03/29/2013	DLC	
Benzene	EPA-8021	U	0.030	1	MG/KG	03/29/2013	DLC	
Toluene	EPA-8021	U	0.050	1	MG/KG	03/29/2013	DLC	
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/29/2013	DLC	
Xylenes	EPA-8021	U	0.20	1	MG/KG	03/29/2013	DLC	_ :
						ANALYSIS A	ANALYSIS	
SURROGATE	METHOD	%REC				DATE	BY	
TFT	NWTPH-GX	67.1				03/29/2013	DLC	
TFT	EPA-8021	75.9				03/29/2013	DLC	;

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



CLIENT:

**Enviro Sound Consulting** 

3388 Byron St, Suite 200

Silverdale, WA 98383

CLIENT CONTACT: CLIENT PROJECT:

Shawn Williams ESC13-E002 DATE:

4/1/2013

ALS SDG#:

EV13030176

WDOE ACCREDITATION:

C601

					LA				

## MBG-032713S - Batch 3594 - Soil by NWTPH-GX

ANALYTE	METHOD	DE0111 = 0	REPORTING	DILUTION		ANALYSIS A	ANALYSIS
· · · · · · ·		RESULTS	LIMITS	FACTOR	UNITS	DATE	BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	03/27/2013	DLC

## MB-032713S - Batch 3594 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS A	NALYSIS BY
Benzene Toluene	EPA-8021	U	0.030	1	MG/KG	03/27/2013	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	03/27/2013	DLC
Xylenes	EPA-8021	U	0.050	1	MG/KG	03/27/2013	DLC
7,9101103	EPA-8021	U	0.20	1	MG/KG	03/27/2013	DLC

## MB-032513S - Batch 3591 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS BY	
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	03/25/2013	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	03/25/2013	EBS



CLIENT:

Enviro Sound Consulting

3388 Byron St, Suite 200

Silverdale, WA 98383

Shawn Williams

CLIENT CONTACT: CLIENT PROJECT:

ESC13-E002

DATE:

4/1/2013

ALS SDG#:

EV13030176

WDOE ACCREDITATION:

C601

## LABORATORY CONTROL SAMPLE RESULTS

## ALS Test Batch ID: 3594 - Soil by NWTPH-GX

SPIKED COMPOUND TPH-Volatile Range - BS	<b>METHOD</b> NWTPH-GX	%REC	RPD	QUAL	ANALYSIS Date	ANALYSIS BY
TPH-Volatile Range - BSD	NWTPH-GX	74.9			03/27/2013	DLC
	IVVIPH-GX	72.1	4		03/27/2013	DLC

## ALS Test Batch ID: 3594 - Soil by EPA-8021

SPIKED COMPOUND Benzene - BS Benzene - BSD	<b>METHOD</b> EPA-8021 EPA-8021	%REC 91.0	RPD	QUAL	ANALYSIS DATE 03/27/2013	ANALYSIS BY DLC
Toluene - BS	EPA-8021	91.2 93.5	0		03/27/2013	DLC
Toluene - BSD	EPA-8021	92.9	4		03/27/2013	DLC
Ethylbenzene - BS	EPA-8021	90.5	'		03/27/2013	DLC
Ethylbenzene - BSD	EPA-8021	90.8	0		03/27/2013	DLC
Xylenes - BS	EPA-8021	92.7	U		03/27/2013	DLC
Xylenes - BSD	EPA-8021	93.3	4		03/27/2013	DLC
		33.3			03/27/2013	DLC

## ALS Test Batch ID: 3591 - Soil by NWTPH-DX

SPIKED COMPOUND TPH-Diesel Range - BS	<b>METHOD</b> NWTPH-DX	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BSD	NWTPH-DX	84.3	_		03/25/2013	EBS
	MANIEU-DY	92.2	9		03/25/2013	EBS

APPROVED BY

Laboratory Director

http://www.alsglobal.com 8620 Holly Drive, Suite 100 Phone (425) 356-2600 (425) 356-2626 Fax Everett, WA 98208 ALS Environmental

# Laboratory Analysis Request Chain Of Custody/

(Laboratory Use Only) ALS Job#

EV13030176

Ö

Date >-4-13 Page.

RECEIVED IN GOOD CONDITION? N 1 NUMBER OF CONTAINERS W OTHER (Specify) TCLP-Metals ☐ VOV ☐ Semi-Vol ☐ Pest ☐ Herbs Netals Other (Specify) Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐ BCB ☐ Pesticides ☐ by EPA 8081/8082 Olycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM 40/04 Semivolatile Organic Compounds by EPA 8270 70/2/ EDB \ EDC py EPA 8260 (soil) EDB / EDC by EPA 8260 SIM (water) Volatile Organic Compounds by EPA 8260 ANALYSIS REQUESTED Halogenated Volatiles by EPA 8260 MTBE by EPA-8021 ☐ EPA-8260 ☐ BTEX by EPA-8021  $\times$ メ × NWTPH-GX XO-H4TWN имтрн-нсір 3 LAB#  $(\mathcal{L})$ E-MAIL: Shawn @ Frieds or a いると 0 TYPE 9 Sol Sol ঐ Š 5 FAX: 3 60-678-Consulting F5c-Fco2-13/-5403 3-28-13 0930 アイク B 20 TIME 7838 200 ESC-EOUZ-SH-SCH 3-28-17 1015 Street 3. FSC-E002-EJ-515 3-28-13 4. FSC-E002-SP1-8667-28-13 J. (1.00) 3-28-13 DATE ESC 13-E002 Social Enriko Sound 5150 FSC-E02-5/25/27 Errigo Shawa SAMPLE I.D. PHONE: 360. 698. Silverelale ADDRESS: 3388 PROJECT ID: P.O. NUMBER REPORT TO COMPANY: INVOICE TO COMPANY: ATTENTION: ADDRESS က် 7, ဖ ထ တ်

SPECIAL INSTRUCTIONS

SIGNATURES (Name, Company, Date, Time):

Received By: Relinquished By:

2. Relinquished By: \_ Received By:

Organic, Metals & Inorganic Analysis SAME 2 ო 2 10 Standard

Fuels & Hydrocarbon Analysis က to Inda

TURNAROUND REQUESTED in Business Days\* ر 2 الا Specify: \* Turnaround request less than standard may incur Rush Charges

CCI Analytical Laboratories 8620 Holly Drive Everett, WA 98208 Phone (425) 356-2600 (206) 292-9059 Seattle (425) 356-2626 Fax http://www.ccilabs.com

## Laboratory Analysis Request Chain Of Custody/

(Laboratory Use Only) EN 13020122 CCI Job#

		Τ			in.	OHIC	JNO.	ט מר	)Ur	) NH 4	12 ^	יייכו	ul .	1		T			lance the same of	1	- diago		1		1	_
		IECEIVED IN GOOD CONDITION?							w	7	-	+			-	-			-	-	_					
										N p	3	N	-	+	_		+	- -		-	-					
Č	5									+-	-	-		+	$\dashv$		+	-+			+-	-				
	ے			_									+	-	_					+	-  -		-	+-	_	
-	OTHER (Snecify)												+-	-			-	_		+				+-	-	_
a													+-	+			+-	-		-	_	_		-		
D <sub>2</sub> C	김												+	+			+	+		+-	-		-			_
1												-	-	+	$\exists$		+	$\dashv$		-	+			-	+	
Date 2 22 18 Page				lerbs [	l□ ts	99 □	lo√-ir	nas [	] <b>A</b> 0	 ∧ [] s	letal	CLP-N	1	+	-		+-	+		-				+-	-	
N		Netals Other (Specify)  CLP-Metals □ VOA□ Semi-Vol□ Pest □ Herbs □										+-	+	+		+-	+		-	+			-	-		
Date		□ JAT □ log hg □ 8-ARDR □ 6-AJTML □									V	-				$\dashv$			+			+-	+-			
	İ	OCB								1	$\vdash$	+		-	+		$\vdash$	+			-	+	_			
		Olycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM										1		$\dagger$	$\dagger$		-	-			-		٦			
		Semivolatile Organic Compounds by EPA 8270										+	-	+-				+			-		1			
	EDB \ EDC PA EPA 8260 (soll)									1			+			$\dagger$			-		1					
		Halogenated Volatiles by EPA 8260 Volatile Organic Compounds by EPA 8260																+		<del></del>	$\vdash$		1			
													-					+			_	-	1			
	STE																	$\dagger$				-	1			
	딇	MTBE by EPA-8021 □ EPA-8260 □												1			1	1				1				
	ANALYSIS REQUESTED	BTEX by EPA-8021													1		_									
	SIS									X	9-H	TTWN							-							1
	3	XQ-H9TWV							X	X												1				
	A		T	Variation in the last	,	7	4	and the same of th	·	CID	1-Hc	ITWN														
							P					AB#														
			3				3		. 17	8			}													
				2		3	K					-			+			+			-	+				l
				2		Q,	2,0					TYPE	~		+											
İ		2		R		8	5					į.	₹,	_(	À			_			_					
		Consulting		S	3	3	4					TIME	Ó	N	)									·		
	١	32	Lonsulting liber 5t 200 98383 FAX: 360-698-9829			F	60	8	3				ĺ			ļ										
s.con	2007	1	1	2	90	Ϋ́	MAI	Y				ш	71-	-3.												
Silab	ŏ,	2 7 7 5 6 1										DATE	77:	j												
VWW.C	M	173742 N									$\vdash$	2	<u>ء</u> ا .				╁	_		_	-					
http://www.ccilabs.com	ESC13-	1 3 2 2 5									75	562														
اع	7	Z Z	3	8	b	Ø	ļ	S				<u>.</u>	7	Q												
	3	, k	ら	8	3	2		U				SAMPLE I.D.	2	1												
				3	You	3	ġġ					SAM	Ŋ	F/S												
1	PROJECT ID:	ANY:		ESS:	2,7	Ü	UMBE	AN TO	NOL	SS:			ij	5												
	PROJECT ID REPORT TO COMPANY: PROJECT MANAGER: SADDRESS:					PHON	P.O. NUMBER:	INVOICE TO COMPANY:	ATTENTION:	ADDRESS:			1. ESC-E002-N-540/2-22-14 0900 So.	2 PBC-E002-18-562 1-22-13 09/5 C.	 	က က	4	 :	5.	9		<u> </u>	% %	් ග්		
-			_														•			_			~	٠,	0	

SPECIAL INSTRUCTIONS

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions. SIGNATURES (Name, Company, Date, Time);

٥i

Organic, Metals & Inorganic Analysis	Standard Fuels & Hydrocarbon Analysis	Save Save
--------------------------------------	---------------------------------------	-----------

TURNAROUND REQUESTED in Business Days\* Specify: \_ \* Turnaround request less than standard may incur Rush Charges

		-	