

*Lenora Bldg SIT 3.6*

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ENVIR-TS094PU



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## SUMMARY REPORT

OF

## PHASE III REMEDIATION ACTIVITIES

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**The Lenora Building  
2101 Ninth Avenue  
Seattle, Washington**



**December 29, 2002**

**Prepared By:**

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Principal Soil Scientist**



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## 1.0 INTRODUCTION

This report summarizes Phase III remediation activities performed at the Lenora Building located on Lots 11 and 12 of Block 24 of Sarah A. Bell's Second Addition. The Lenora Building is located west of the intersection of Ninth Avenue and Lenora Street in Seattle, Washington (the "site"; Figure 1; Photographs 1 and 2). The site consists of a 42,800 square foot, two-story building with parking garage situated on 0.3 acres. The building essentially covers the entire 0.3 acres from lot line to lot line and was reportedly constructed in the early 1900's. Tenants within the building include architects, graphic designers, a hair salon and fine furniture showroom. Development of adjacent properties began as early 1905 with an assortment of commercial and industrial concerns, some of which included automobile sales and services companies. The site and surrounding properties are fully developed with little area not covered by impervious surfaces (e.g. asphalt, concrete, etc.)

Environmental Tank Service, Inc. (ETS) understands that the owners of the site, The Lenora Building LLC, have entered into a purchase and sales agreement with Cornish College. As part of Cornish College's due diligence, they contracted Geoengineers, Inc. to conduct a Phase I/Phase II Environmental Site Assessment.

### 1.1. Summary of Geoengineers, Inc. Phase I/Phase II

The *Geoengineers, Inc. Phase I/II Environmental Assessment* dated September 24, 2002 (Attachment 1) noted the presence of an unidentified underground storage tank (UST) in the south corner of the parking garage/basement. Soil borings were then completed by Geoengineers, Inc. beneath and adjacent to the site to assess subsurface soil and groundwater quality with respect to contaminants of concern listed in the Model Toxics Control Act cleanup regulation (MTCA; WAC 173-340). Geoengineers described the soils encountered during borings as, "generally consisted of sand and silt with varying amounts of gravel." In general, groundwater was not encountered in borings/temporary wells completed in the parking garage underneath the Lenora Building. The depths of these borings/temporary wells were as deep as 24-feet below the parking garage slab. Figure 2 illustrates the location of the reported UST and it's cross-sectional relationship to the Lenora Building foundation. As illustrated in Figure 2, ground surface on the Lenora Street side of the building is some 18-feet higher than the alley side of the building. This relatively drastic change in topography is consistent with the overall regional topography, and likely groundwater gradient, leading generally northward to Lake Union. Based on Geoengineers, Inc. data and the relatively strong topographic gradient, it appears that the portion of the foundation bordering the Lenora Street effectively acts as a barrier to prevent the shallow aquifer from going below the parking garage. The likely mechanism is to effectively shield groundwater around the Building. This is supported by the lack of groundwater in borings completed inside the Lenora Building up to 24-feet below the parking garage slab.



Groundwater samples collected from the two borings/temporary wells on the exterior of The Lenora Building had several chemicals of concern above MTCA Method A cleanup levels including petroleum hydrocarbons (two borings), arsenic (two borings), chromium (two borings), lead (two borings), and mercury (one boring). It is difficult to attribute the identified exterior groundwater impacts in part or whole to The Lenora Building because:

- The upgradient properties have been developed for nearly 100-years with tenants known for intensive use of identified constituents (e.g. automobiles sales/service). According to a 1905 Sanborn Map, Province Lumber Company occupied the lot immediately across the street and upgradient of the Lenora Building. A later 1949 Sanborn Map indicates that this same property was occupied by S. L. Salvage Inc. for the purpose of auto sales and salvage. The same business occupied this upgradient site until at least 1969. In addition, Washington State Department of Ecology database records indicate that their at least 10 known site with reported environmental subsurface issues within two blocks of the Lenora Building.
- One of the groundwater sample locations that contained MTCA exceedances of petroleum hydrocarbons, arsenic, chromium, and lead was collected upgradient of The Lenora Building.
- Geoengineers, Inc. data suggests that there is no hydraulic connection between the shallow aquifer and areas immediately beneath the footprint of The Lenora Building.

Soil samples collected from upgradient borings had MTCA exceedances of benzene, ethylbenzene, gasoline range hydrocarbons, and heavy oil range hydrocarbons. One soil sample collected beneath the parking garage slab had a total lead concentration of 890 milligrams/kilogram (mg/kg). A soil sample collected adjacent to the unidentified UST in the south corner of the parking garage had MTCA exceedances of heavy oil range hydrocarbons, naphthalenes, and benzo(A)-anthracene. The benzo-(A)-anthracene is likely due to the presence of contact with subsurface treated timbers during sample collection. Geoengineers field personnel reported seeing pieces of treated timbers during sample collection.

## **2.0 PHASE III REMEDIATION ACTIVITIES**

ETS was contracted by The Lenora Building LLC to remove remaining liquids in the UST (referred to UST1 herein) located in the southern portion of the parking garage, remove UST1, and excavate associated impacted soil identified in the Phase I/II Environmental Site Assessment. A six-inch diameter fill pipe extended approximately four feet up from the top of UST1. The west end of UST1, closest to the parking area, was covered with several inches of highly stained soil that exhibited a strong petroleum-like odor. The east end of the UST, closest to Lenora Street was covered with several feet of soil with no evidence of surficial petroleum hydrocarbon impacts. Based on these observations, it appeared that overfills were at least in part responsible for impacts identified in the Phase I/Phase II Environmental Assessment.

### ***2.1. UST 1 Liquids Removal and Disposal***

ETS mobilized to the site on September 24, 2002 with the vacuum truck subcontractor Protective Environmental Services, Inc. (PES). PES collected a sample of the 1,000-gallon UST1 contents and performed a field screening analysis for chlorinated solvents using a Chlo-D-Tect® test. The



field test result indicated that the UST1 liquids contained elevated concentrations of chlorinated solvents and would require handling as a Dangerous Waste. ETS collect a second sample of the UST1 liquid contents using a new, disposable plastic bailer and placed it in a laboratory provided eight-ounce glass jar. The filled sample container was placed in a pre-chilled cooler and transported under industry standard chain-of-custody procedures to Friedman and Bruya, Inc. in Seattle, Washington for laboratory analysis. Friedman and Bruya, Inc. is a Washington State Department of Ecology (Ecology) accredited laboratory in accordance with WAC 173-50. The laboratory reported that the UST1 contents contained a mixture of gasoline, diesel, and heavier range hydrocarbons. In addition, several chlorinated solvents were detected in the UST1 product sample. Laboratory analytical reports are presented as Attachment 2. ETS contacted Ms. Sheri Ryan with the Hazardous Waste and Toxics Reduction Program at Ecology headquarters and found that a previous tenant, Ihler Automotive, at the site had established a WAD number (WAD #988 485 512). A formal notice of name change as well as a Form 2 Notice of Dangerous Waste Activities was then submitted to Ecology.

ETS and PES then returned to the site on September 25, 2002 and pumped the UST1 contents and sludge into Department of Transportation approved 55-gallons drums. The drums were labeled and then transported to Phillips Environmental, Inc. in Seattle, Washington for treatment and disposal. Disposal certificates are presented as Attachment 3. The UST was inerted with carbon dioxide and then an access hole was cut in the top of UST1 to allow personnel access into the tank. The inside of the UST1 was manually cleaned and then three holes were core drilled equidistant in the bottom of the UST. A soil sample was collected from each coring location immediately underneath UST1 and placed it in a laboratory provided eight-ounce glass jar. The filled sample containers were placed in a pre-chilled cooler and transported under industry standard chain-of-custody procedures to Friedman and Bruya, Inc. in Seattle, Washington for laboratory analysis. Gasoline range hydrocarbons were detected at concentrations up to 350 mg/kg while diesel and heavier range hydrocarbons were detected at concentrations up to 21,000 mg/kg. Total lead concentrations ranged from 2,500 mg/kg to 6,700 mg/kg with TCLP lead concentrations ranging from 8.0 mg/L to 26 mg/L. Laboratory analytical reports are presented as Attachment 2.

## ***2.2. Soil Excavation, Transportation, and Disposal***

ETS mobilized to the site on November 30, 2002 with the vector truck subcontractor Rivers Edge Vector Services, Inc. Impacted soil in the immediate vicinity of UST1 was loosened with an electric rotohammer equipped with a spade and then vacuumed up into a plastic lined vector truck (Photographs 3 through 6). Soil removal activities were difficult due to limited site access. A concrete foundation for a structural column was located on the south side of the excavation area and large concrete foundation for a former hydraulic hoist was located on the north side of the excavation (Figure 2). Additionally the depth of the excavation was limited due to the proximity of the exterior wall footer and the relatively suspect condition of said footer. Excavated soil was transferred from the vector truck to a plastic-lined "half-high" rail container. The rail container was trucked to the transfer yard and transported to the Chemical Waste Management facility in Arlington, Oregon for biological treatment of hydrocarbons and stabilization of lead. Approximately 14 tons of impacted material was excavated and transported for treatment and disposal.



Soil lithology at the site consisted of dry to very slightly moist, non-cohesive, non-plastic light brown silty sand from ground surface to approximately 2.5-feet below ground surface (bgs). A large amount of debris (e.g. bricks, refuse, metal; Photograph 7) was encountered during the excavation of the upper two feet of soil surrounding UST1. Field evidence of petroleum hydrocarbon impacts (e.g. odor, staining, production of sheen in tap water) was readily apparent in the surface soil surrounding the fill pipe end of the excavation. No field evidence of petroleum hydrocarbon impacts were present on surface soils on the Lenora Street side of UST1. A sharp lithologic discontinuity was observed at 2.5 bgs where stiff, slightly moist, cohesive, moderately plastic silty clay was encountered. Field evidence of petroleum hydrocarbon impacts decreased rapidly in this soil horizon with increasing depth below ground surface. Field evidence of petroleum hydrocarbon impacts generally ceased at three feet bgs.

A heavy gauge chain was attached to UST1 and then pulled with a field vehicle to raise the UST on end (Photographs 8 through 10). UST1 was then cut into pieces with an electric reciprocating saw (Photographs 11 and 12), manually removed from the area, and then transported to Schnitzer Steel in Tacoma, WA for metal recycling. Visual inspection of UST1 yielded no evidence of holes, cracks, etc. The general condition of UST1 could be characterized as very good to excellent (Photograph 13). It appears that surfacial soil impacts immediately surrounding UST1 were caused by overfills rather than leaks from physical deformations (e.g. holes, cracks, etc.). In addition, the presence of dense clay at 2.5-feet bgs appears to have limited the downward migration of petroleum hydrocarbons due to overfills of UST1.

Additional soil underneath UST was excavated until a metal structure was encountered approximately underneath the middle portion of the former UST1. Additional excavation revealed the metal structure was a second 1,000-gallon UST (herein referred to as UST2). The top third of the south end of UST2 was excavated. Additional soil excavation was prevented due to structural hazards presented by the adjacent hoist and structural column foundations (See Figure 2). A product sample was collected field screened for chlorinated solvents using a Chlo-D-Tect® test. The field test result indicated that the UST1 liquids did not contain elevated concentrations of chlorinated solvents and therefore would not require handling as a Dangerous Waste. ETS collected a second sample of the UST2 liquid contents using a new, disposable plastic bailer and placed it in a laboratory provided eight-ounce glass jar. The filled sample container was placed in a pre-chilled cooler and transported under industry standard chain-of-custody procedures to Friedman and Bruya, Inc. in Seattle, Washington for laboratory analysis. The laboratory reported that the UST2 product contained a mixture of gasoline, diesel, and heavier range hydrocarbons. Laboratory analytical reports are presented as Attachment 2.

Subsequently, PES pumped approximately 350-gallons of the hydrocarbon product out of UST2 and transported it to Petroleum Reclaiming Service, Inc. in Tacoma, Washington for treatment and disposal. No water was found in UST2. The bill of lading (No. 5113) for UST2 contents is presented as Attachment 3. Personnel entry into UST2 was not possible due to structural hazards presented by the adjacent hoist and structural column foundations (See Figure 2).

No groundwater was encountered during excavation activities.



### **2.3. Confirmation Soil Sampling**

Confirmation soil samples were collected under the supervision of registered Site Assessor. Representatives from Geoengineers, Inc. were also present during sampling activities. A soil sample was collected immediately adjacent to UST2 at the top of the tank. This sample was designated Floor 4 UST Top. A hand auger was then advanced to approximately three feet below the bottom of UST2 immediately below Floor 4 UST Top using a stainless steel hand auger (Photograph 14). This sample was designated Floor 4 3' Below UST Three soil samples were collected from the bottom of the excavation and three soil samples were collected from the excavation sidewalls and placed in laboratory provided 4-ounce glass jars. The filled sample containers were placed in a pre-chilled cooler and transported under industry standard chain-of-custody procedures to Friedman and Bruya, Inc. in Seattle, Washington for analysis of polychlorinated biphenyls (PCBs) using United States Environmental Protection Agency (EPA) Method 8082, gasoline range hydrocarbons using Ecology Method NWTPH- Gx, diesel and heavier range hydrocarbons using Ecology Method NWTPH-Dx, total lead using EPA Method 6010, and volatile organic compounds using EPA Method 8280B.

#### **PCBs**

The laboratory reported that there were no detectable concentrations of any PCB species in any of the soil confirmation samples. Laboratory results for PCB analysis are summarized on Table 1.

#### **Lead**

Concentrations of total lead were either below the analytical method detection limit or the MTCA Method A cleanup level of 250 mg/kg. The highest reported total lead concentration was 38 mg/kg in sample Sidwall 2. Laboratory results for total lead analysis are summarized on Table 2.

#### **Gasoline Range Hydrocarbons**

Non-detectable concentrations of gasoline range hydrocarbons were reported in six of the eight sample locations. The other two sample locations had gasoline range hydrocarbon concentrations of 51 mg/kg immediately above UST2 (Floor 4 UST Top) and 240 mg/kg three feet below the bottom of UST2 (Floor 4 3'below UST). Both sample results are below the MTCA Method B cleanup level of 4,700 mg/kg. Laboratory results for gasoline range hydrocarbon analysis are summarized on Table 3.

#### **Diesel and Heavier Range Hydrocarbons**

Exceedances of the 2,000 mg/kg MTCA Method A cleanup level for diesel and heavier range hydrocarbons were reported at five of the eight sample locations. These exceedances range from a low of 4,400 mg/kg at Floor 1 to 30,000 mg/kg at Floor 4 3' below UST. Laboratory results for diesel and heavier range hydrocarbon analysis are summarized on Table 4.



### **Volatile Organic Compounds**

Table 830-1 of the MTCA cleanup regulation specifies required testing for petroleum releases from waste oil sites. Exceedances of the MTCA Method A cleanup level for the various VOC analytes of interest as specified by Table 830-1 occurred at only sample location, Floor 4 3' below UST. The concentration of naphthalenes, benzene, and total xylenes exceed respective MTCA Method A cleanup levels at this sample location. Laboratory results for VOC analysis are summarized on Table 5.

### ***2.4. Decommissioning of UST 2 and Backfilling of Excavation***

UST2 and surrounding impacted soil could not be removed due to structural presented by adjacent overhead hoist and column foundations as well as the building foundation fronting Lenora Street. Controlled density fill (cdf) was placed UST 2 and the bottom approximately two thirds of the excavation.

## **3.0 CLOSING**

Logistically challenging remediation activities conducted around and below UST1 and around UST2 were successful in removing a significant portion of the mass of identified soil impacts. Additional soil excavation is prohibited by overwhelming structural challenges presented by an adjacent hoist foundation, adjacent structural column foundation, and the adjacent nearly 100-year old building foundation and footer fronting Lenora Street (Figure 2).

No groundwater was encountered during Phase III remediation excavation activities. As evidenced by the Geoengineers, Inc. drilling data, The Lenora Building foundation acts as an effective groundwater barrier preventing migration of the shallow aquifer underneath The Lenora Building. The shallow aquifer appears to be shielded around the Building by the nearly 20-feet of subsurface foundation. The nearest groundwater below the footprint of the Building is at least 24-feet below the parking garage. Therefore, there is no contact between remaining soil impacts and groundwater. Remaining impacts are located in a dense clay stratum. The clay is gray in color typical of soils in the immediate Lake Union area. These soils are typically high in organic matter due to their historic location in fluctuating water levels.

The areas surrounding the subject remediation area and surrounding properties are fully developed with little or no areas that are not covered by impervious surfaces. Given that the source of contamination has been removed and the lack of surface water penetration, the potential for downward migration of remaining impacts is minimal at best. The potential for human contact, either dermal or inhalation, with remaining impacts is minimal because they are located in a largely inaccessible portion of the parking garage below nearly three feet of cdf and/or an additional four feet of soil. There are no reported public or private water supply wells in the vicinity of the site. The nearest surface water receptors are Lake Union and Elliot Bay which are both over 3,000-feet away from the site.

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Based on these facts and our professional judgement, the remaining impacts do not appear to present an ongoing threat to human health and the environment. Therefore, we respectfully request a determination of No Further Action for this site.

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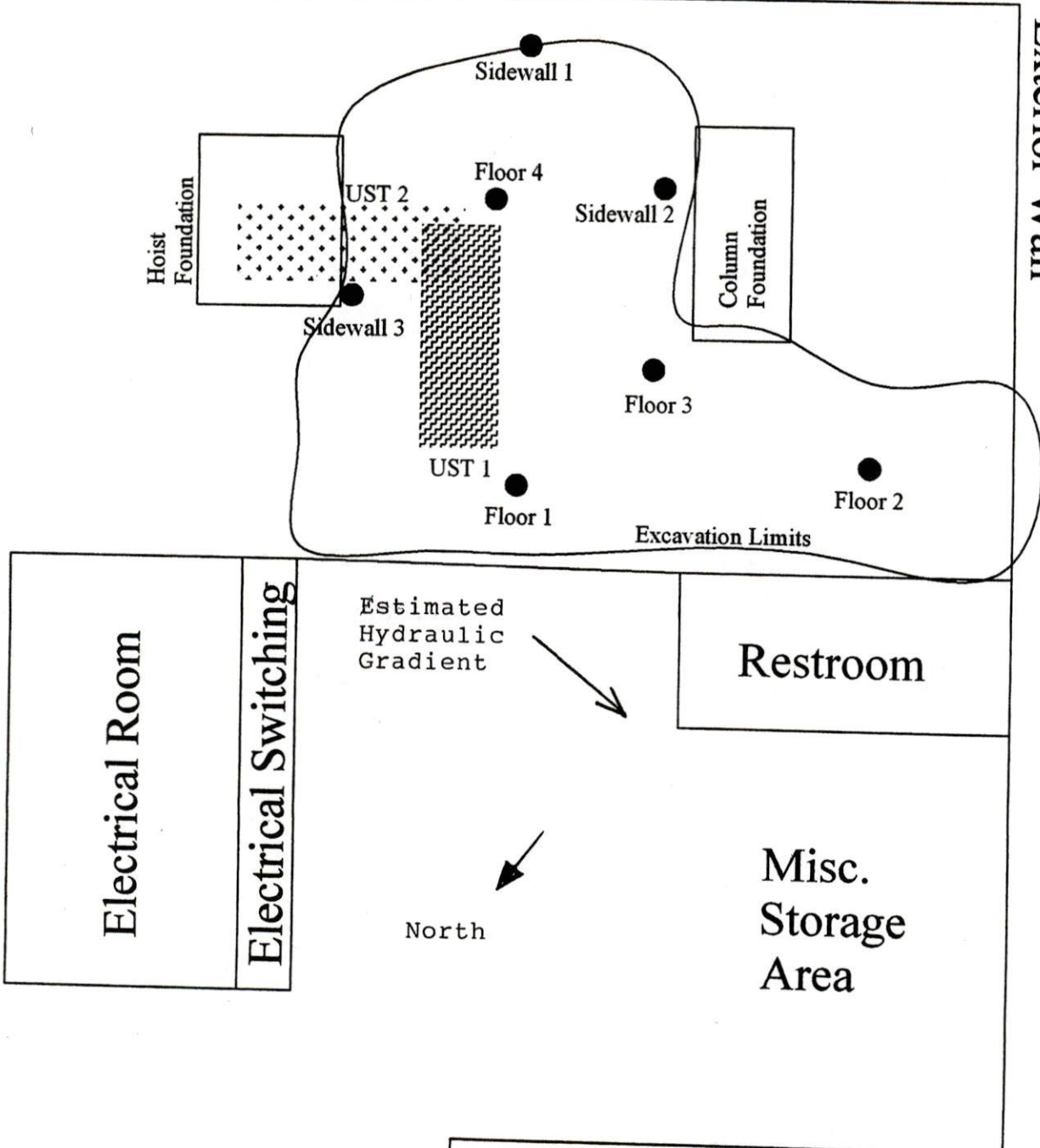
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## FIGURES

Lenora Street

Exterior Wall

Exterior Wall

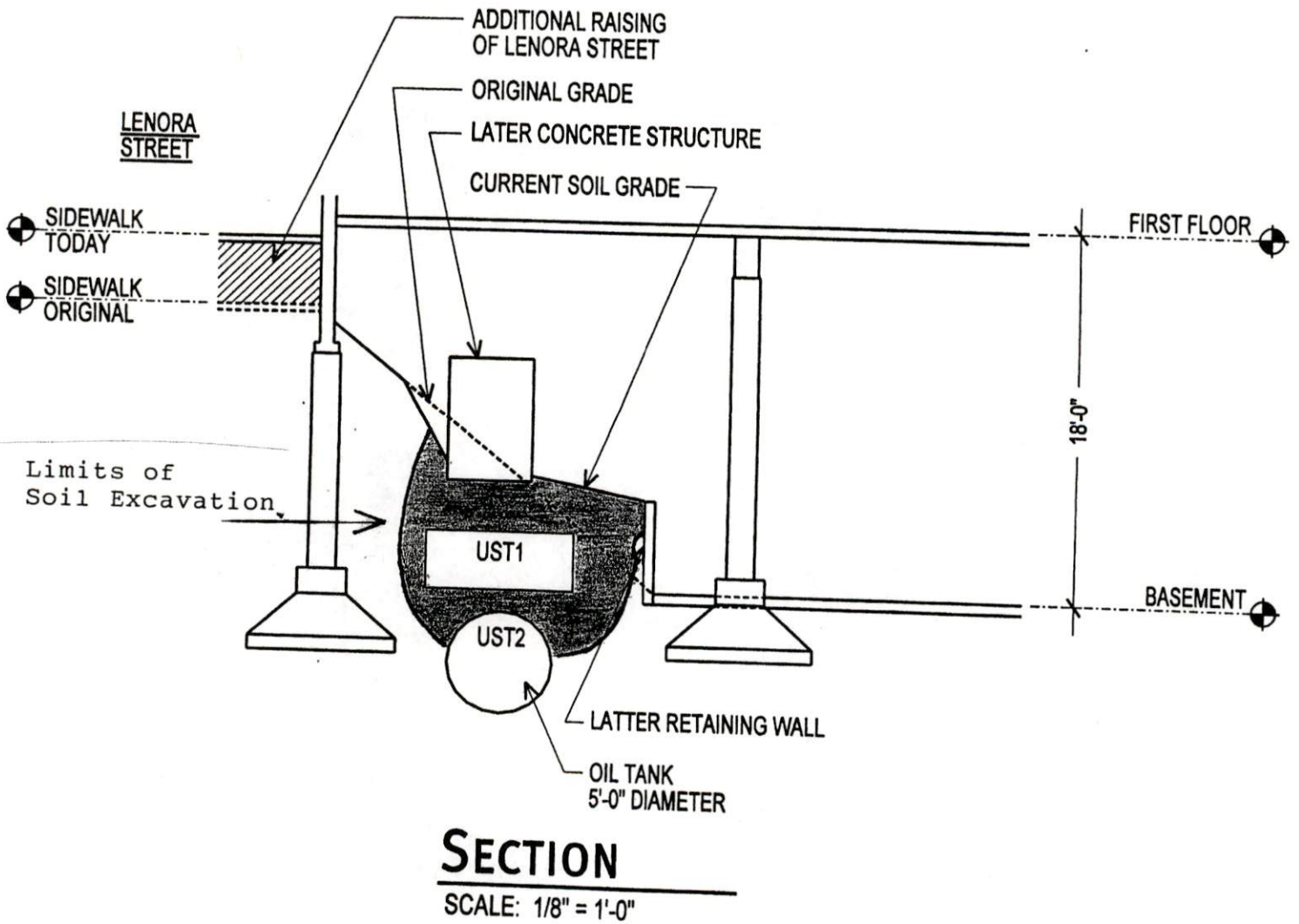
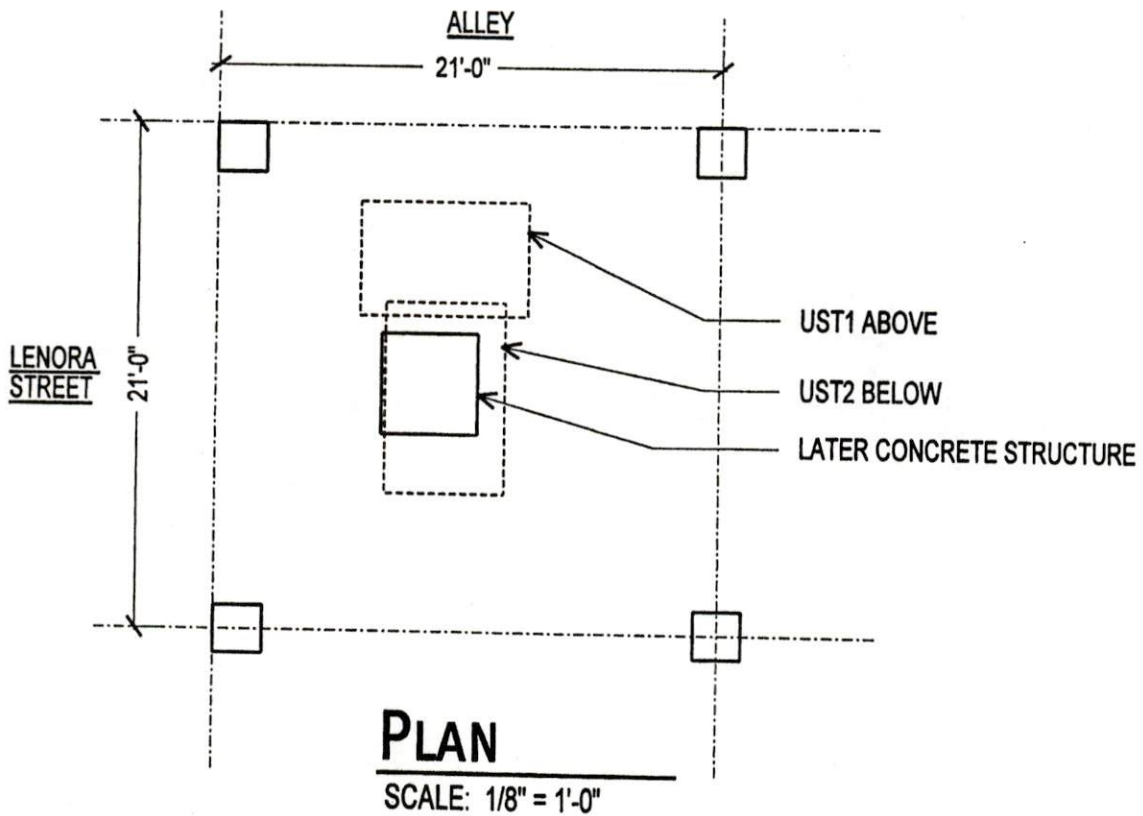


Parking Area

### Lenora Building Phase III

### Figure 1 - Site Map with Sample Locations

SIZE	FSCM NO.	DWG NO.	REV
		MVFig01	0
SCALE	Environmental Tank Service, Inc.		SHEET 1 of 1
None			



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## PHOTOGRAPHS



Photograph 1 – The Lenora Building (looking northwesterly).



Photograph 2 – The Lenora Building (looking northerly).



Photograph 3 – Excavation of impacted soil using vector truck.



Photograph 4 – Excavation of impacted soil using vector truck.



Photograph 5 (Above) –  
Excavation of impacted  
soil using vector truck.



Photograph 6 (right) –  
Excavation of soil adjacent to UST1.  
(Note adjacent concrete foundation.)



Photograph 7 – Miscellaneous debris in upper 2-feet around UST1.



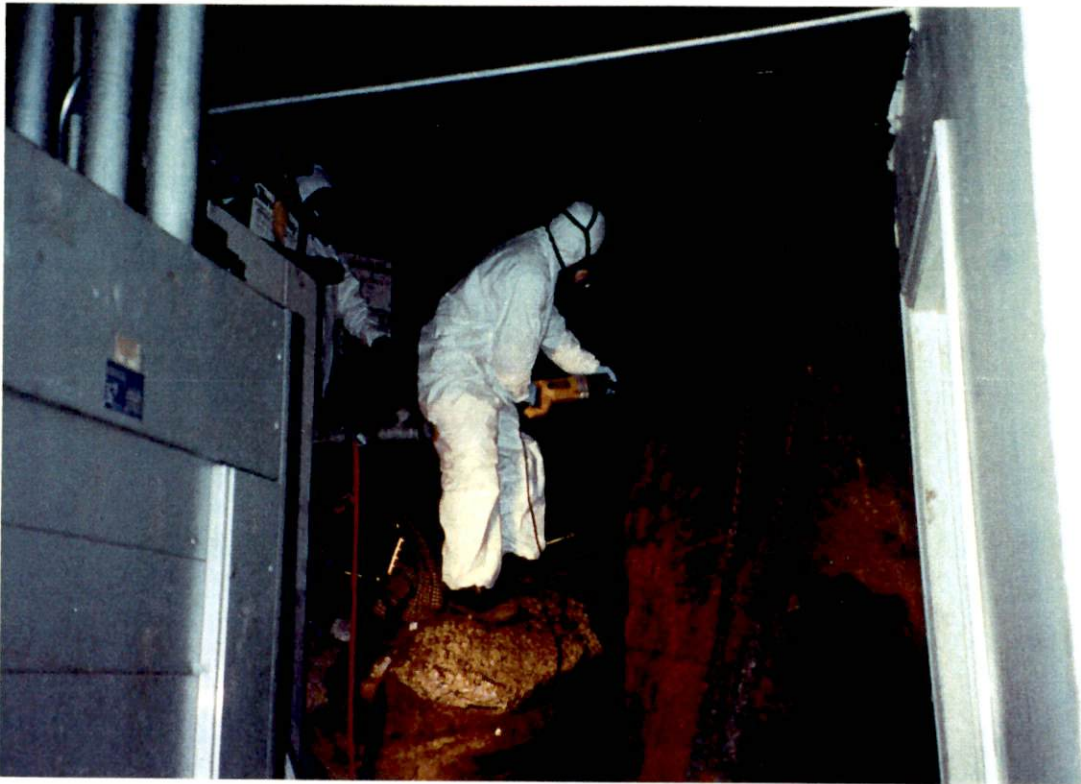
Photograph 8 – Lifting up UST1 (Note the tight clearance).



Photograph 9 (above) –  
Lifting up UST1  
(Note the tight clearance).



Photograph 10 (right) –  
Lifting up UST1  
(Note the tight clearance).



Photograph 11 – Cutting up UST1 into manageable pieces.



Photograph 12 – Cutting up UST1 into manageable pieces.



Photograph 13 (above) –  
Lower half of UST1.



Photograph 14 (right) –  
Collection of samples  
adjacent to UST2.

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## **TABLES**



## TABLE 1 - PCBs IN SOIL The Lenora Building 2101 Ninth Avenue Seattle, Washington

Sample Name	Sample Date	Aroclor	Aroclor	Aroclor	Aroclor	Aroclor	Aroclor	Aroclor	Aroclor
		1221 (µg/g) <sup>2</sup>	1232 (µg/g)	1016 (µg/g)	1241 (µg/g)	1248 (µg/g)	1254 (µg/g)	1260 (µg/g)	1262 (µg/g)
Floor 1	12/11/02	ND <sup>3</sup>	ND	ND	ND	ND	ND	ND	ND
Floor 2	12/11/02	ND	ND	ND	ND	ND	ND	ND	ND
Floor 3	12/11/02	ND	ND	ND	ND	ND	ND	ND	ND
Floor 4 UST Top	12/11/02	ND	ND	ND	ND	ND	ND	ND	ND
Floor 4 3' below UST	12/11/02	ND	ND	ND	ND	ND	ND	ND	ND
Sidewall 1	12/11/02	ND	ND	ND	ND	ND	ND	ND	ND
Sidewall 2	12/11/02	ND	ND	ND	ND	ND	ND	ND	ND
Sidewall 3	12/11/02	ND	ND	ND	ND	ND	ND	ND	ND
MTCA Method A Cleanup Level <sup>4</sup>		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Analytical Method Detection Limit		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

**Notes:**

<sup>1</sup> EPA Method 8082

<sup>2</sup> Micrograms per gram

<sup>3</sup> Analyte concentration not detected above the analytical method detection limit.

<sup>4</sup> Model Toxics Control Act WAC 173- 340



## TABLE 2 - TOTAL LEAD IN SOIL The Lenora Building 2101 Ninth Avenue Seattle, Washington

Sample Name	Sample Date	Total Lead <sup>1</sup> ( $\mu\text{g/g}$ ) <sup>2</sup>
Floor 1	12/11/02	33
Floor 2	12/11/02	30
Floor 3	12/11/02	ND <sup>3</sup>
Floor 4 UST Top	12/11/02	<b>2200<sup>4,5</sup></b>
Floor 4 3' below UST	12/11/02	16
Sidewall 1	12/11/02	20
Sidewall 2	12/11/02	38
Sidewall 3	12/11/02	-- <sup>6</sup>
MTCA Method A Cleanup Level <sup>7</sup>		250
Analytical Method Detection Limit		2

Notes:

<sup>1</sup> EPA Method 6010

<sup>2</sup> Micrograms per gram

<sup>3</sup> Analyte concentration not detected above the analytical method detection limit.

<sup>4</sup> Analyte exceeds the MTCA Method A cleanup level.

<sup>5</sup> Soil in this sample location remediated by removal.

<sup>6</sup> Not enough sample to perform analysis.

<sup>7</sup> Model Toxics Control Act WAC 173- 340



**TABLE 3 - GASOLINE RANGE  
HYDROCARBONS IN SOIL  
The Lenora Building  
2101 Ninth Avenue  
Seattle, Washington**

Sample Name	Sample Date	Gasoline Range Hydrocarbons <sup>1</sup> ( $\mu\text{g/g}$ ) <sup>2</sup>
Floor 1	12/11/02	<5 <sup>3</sup>
Floor 2	12/11/02	<5
Floor 3	12/11/02	<1
Floor 4 UST Top	12/11/02	51
Floor 4 3' below UST	12/11/02	240
Sidewall 1	12/11/02	<10
Sidewall 2	12/11/02	<5
Sidewall 3	12/11/02	<1
MTCA Method B Cleanup Level <sup>4</sup>		4,700 <sup>5</sup>

Notes:

<sup>1</sup> Gasoline range hydrocarbons measured by Ecology Method NWTPH - Gx.

<sup>2</sup> Micrograms per gram

<sup>3</sup> Analyte concentration not detected above the sample specific analyte detection limit.

<sup>4</sup> Model Toxics Control Act WAC 173- 340

<sup>5</sup> Method B direct contact values from Table 740-1.



## TABLE 4 - DIESEL AND HEAVIER RANGE HYDROCARBONS IN SOIL

### The Lenora Building 2101 Ninth Avenue Seattle, Washington

Sample Name	Sample Date	Diesel and Heavier Range <sup>1</sup> (C <sub>10</sub> -C <sub>36</sub> ) (µg/g) <sup>2</sup>
Floor 1	12/11/02	<b>4,400<sup>3</sup></b>
Floor 2	12/11/02	<b>3,200</b>
Floor 3	12/11/02	ND <sup>4</sup>
Floor 4 UST Top	12/11/02	<b>14,000</b>
Floor 4 3' below UST	12/11/02	<b>27,000</b>
Sidewall 1	12/11/02	<b>30,000</b>
Sidewall 2	12/11/02	790
Sidewall 3	12/11/02	110
MTCA Method A Cleanup Level <sup>5</sup>		2,000
Analytical Method Detection Limit		50

**Notes:**

<sup>1</sup> Diesel and heavier range hydrocarbons measured by Ecology Method NWTPH - D Extended

<sup>2</sup> Micrograms per gram

<sup>3</sup> **4,400** Analyte concentration exceeds MTCA Method A Cleanup Level

<sup>4</sup> Analyte not detected above the analytical method detection limit.

<sup>5</sup> Model Toxics Control Act WAC 173- 340



**TABLE 5 - ORGANIC COMPOUNDS IN SOIL**  
**The Lenora Building**  
**2101 Ninth Avenue**  
**Seattle, Washington**

Sample Name	Sample Date	Napthalenes <sup>1</sup> (µg/g) <sup>2</sup>	Benzene (µg/g)	Toluene (µg/g)	Ethyl- benzene (µg/g)	Total Xylenes (µg/g)	Dibromo- ethane, 1-2 (µg/g)	Dichloro- ethane, 1-2 (µg/g)	MTBE (µg/g)
Floor 1	12/11/02	ND <sup>3</sup>	ND	ND	ND	ND	ND	ND	ND
Floor 2	12/11/02	ND	ND	ND	ND	ND	ND	ND	ND
Floor 3	12/11/02	ND	ND	ND	ND	ND	ND	ND	ND
Floor 4 UST Top	12/11/02	0.19	ND	ND	ND	0.29	ND	ND	ND
Floor 4 3' below UST	12/11/02	<b>9.9<sup>4</sup></b>	<b>0.26</b>	2.5	3.1	<b>14.2</b>	ND	ND	ND
Sidewall 1	12/11/02	0.65	ND	0.088	0.054	0.33	ND	ND	ND
Sidewall 2	12/11/02	ND	ND	0.047	ND	0.028	ND	ND	ND
Sidewall 3	12/11/02	ND	ND	ND	ND	ND	ND	ND	ND
MTCA Method A Cleanup Level <sup>5</sup>		5	0.03	7	6	9	0.005		0.1
Analytical Method Detection Limit		0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025

**Notes:**

- <sup>1</sup> All analytes measured using EPA Method 8260B
- <sup>2</sup> Micrograms per gram
- <sup>3</sup> Analyte concentration not detected above the analytical method detection limit.
- <sup>4</sup> Analyte concentration exceeds MTCA Method A cleanup level.
- <sup>5</sup> Model Toxics Control Act WAC 173- 340

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FAX: 1-253-939-2898

## ATTACHMENTS

3260 "B" St. N.W., Suite E  
Auburn, WA 98001  
ENVIR-TS094PU



Seattle: 1-206-622-6040  
Tacoma: 1-253-474-6242  
So. King: 1-253-833-4375  
FAX: 1-253-939-2898

## **ATTACHMENT 1**

### **Geoengineer's Inc. Phase I/II ESA**

3260 "B" St. N.W., Suite E  
Auburn, WA 98001  
ENVIR-TS094PU



Seattle: 1-206-622-6040  
Tacoma: 1-253-474-6242  
So. King: 1-253-833-4375  
FAX: 1-253-939-2898

## **ATTACHMENT 2**

### **Laboratory Analytical Reports**

FRIEDMAN & BRUYA, INC.

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 8, 2002

Tom Vaughn, Project Manager  
Environmental Tank Service, Inc.  
3260 B Street, NW Suite #E  
Auburn, WA 98001

Dear Mr. Vaughn:

Included are the results from the testing of material submitted on September 24, 2002 from your Murphy-Vearey project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
ETS1008R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	Murphy-Vearey S1	Client:	Environmental Tank Services
Date Received:	09/24/02	Project:	Murphy-Vearey
Date Extracted:	09/24/02	Lab ID:	209183-01 (215ul)
Date Analyzed:	09/25/02	Data File:	092430.D
Matrix:	Product	Instrument:	5972 -Ins
Units:	ug/g (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	106	54	133
1,2-Dichloroethane-d4	109	48	140
Toluene-d8	96	47	145
4-Bromofluorobenzene	98	52	139

Compounds:	Concentration ug/g (ppm)
Vinyl chloride	<5
Chloroethane	<5
1,1-Dichloroethene	<5
trans-1,2-Dichloroethene	<5
1,1-Dichloroethane	<5
cis-1,2-Dichloroethene	<5
1,2-Dichloroethane (EDC)	68
1,1,1-Trichloroethane	<5
Benzene	22
Trichloroethene	360
Toluene	2,900 ve
Tetrachloroethene	2,200
Ethylbenzene	270
m,p-Xylene	1,200
o-Xylene	400

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	Murphy Vearey S1	Client:	Environmental Tank Services
Date Received:	09/24/02	Project:	Murphy-Vearey
Date Extracted:	09/24/02	Lab ID:	209183-01 1/10
Date Analyzed:	09/24/02	Data File:	092414.D
Matrix:	Product	Instrument:	5972 -Ins
Units:	ug/g (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	0 vo	54	133
1,2-Dichloroethane-d4	0 vo	48	140
Toluene-d8	121	47	145
4-Bromofluorobenzene	131	52	139

Compounds:	Concentration ug/g (ppm)
Vinyl chloride	<500
Chloroethane	<500
1,1-Dichloroethene	<500
trans-1,2-Dichloroethene	<500
1,1-Dichloroethane	<500
cis-1,2-Dichloroethene	<500
1,2-Dichloroethane (EDC)	<500
1,1,1-Trichloroethane	<500
Benzene	<500
Trichloroethene	<500
Toluene	3,900
Tetrachloroethene	2,200
Ethylbenzene	<500
m,p-Xylene	1,600
o-Xylene	<500

vo - The value reported fell outside the control limits established for this analyte.

Note: The sample was diluted due to the presence of high levels of material. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	Method Blank	Client:	Environmental Tank Services
Date Received:	Not Applicable	Project:	Murphy-Vearey
Date Extracted:	09/24/02	Lab ID:	02-759 mb2
Date Analyzed:	09/24/02	Data File:	092413.D
Matrix:	Product	Instrument:	5972 -Ins
Units:	ug/g (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	107	54	133
1,2-Dichloroethane-d4	108	48	140
Toluene-d8	105	47	145
4-Bromofluorobenzene	102	52	139

Compounds:	Concentration ug/g (ppm)
Vinyl chloride	<5
Chloroethane	<5
1,1-Dichloroethene	<5
trans-1,2-Dichloroethene	<5
1,1-Dichloroethane	<5
cis-1,2-Dichloroethene	<5
1,2-Dichloroethane (EDC)	<5
1,1,1-Trichloroethane	<5
Benzene	<5
Trichloroethene	<5
Toluene	<5
Tetrachloroethene	<5
Ethylbenzene	<5
m,p-Xylene	<5
o-Xylene	<5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/08/02

Date Received: 09/24/02

Project: Murphy-Vearey

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF PRODUCT  
SAMPLES FOR VOLATILES BY EPA METHOD 8260B

Laboratory Code: 209104-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
1,1-Dichloroethene	µg/g (ppm)	<100	<100	nm
Benzene	µg/g (ppm)	580	600	3
Trichloroethene	µg/g (ppm)	<100	<100	nm
Toluene	µg/g (ppm)	22,000	22,000	0
Chlorobenzene	µg/g (ppm)	<100	<100	nm

Laboratory Code: 209104-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
1,1-Dichloroethene	µg/g (ppm)	500	<100	92	51-159
Benzene	µg/g (ppm)	500	580	110	81-119
Trichloroethene	µg/g (ppm)	500	<100	115	61-125
Toluene	µg/g (ppm)	500	22,000	135 b	62-131
Chlorobenzene	µg/g (ppm)	500	<100	86	77-125

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
1,1-Dichloroethene	µg/g (ppm)	500	95	93	53-161	2
Benzene	µg/g (ppm)	500	108	107	74-129	1
Trichloroethene	µg/g (ppm)	500	99	98	68-125	1
Toluene	µg/g (ppm)	500	88	89	65-131	1
Chlorobenzene	µg/g (ppm)	500	87	88	81-119	1

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

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.

CHAIN OF CUSTODY

Send Report To Tom Vaughn  
 Company Environmental Tank Services  
 Address 3260 B Street, NW Suite #E  
 City, State, ZIP Auburn, WA 98001  
 Phone # (206) 622-6040 Fax # (253) 939-2898

SAMPLERS (signature) \_\_\_\_\_

PROJECT NAME/NO. MURPHY-VEAREY PO # \_\_\_\_\_

REMARKS \_\_\_\_\_

TURNAROUND TIME

Standard (2 Weeks)  
 RUSH \_\_\_\_\_  
 Rush charges authorized by: \_\_\_\_\_

SAMPLE DISPOSAL

Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes								
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOC's by 8260	SVOCS by 8270	HFS	ID	Chlorinated Solvent											
<u>MURPHY-VEAREY S101</u>		<u>9/24/02</u>	<u>2:00</u>		<u>1</u>								<u>✓</u>	<u>ID</u>	<u>Chlorinated Solvent</u>									

Friedman & Bruya, Inc.  
 3012 16th Avenue West  
 Seattle, WA 98119-2029  
 Ph. (206) 285-8282  
 Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
	<u>BRAD REILLY</u>	<u>ETS, INC.</u>	<u>9/24-02</u>	<u>2:41</u>
	<u>ERIC YOUNG</u>	<u>FRI</u>	<u>✓</u>	<u>3:00</u>
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

---

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 8, 2002

Tom Vaughn, Project Manager  
Environmental Tank Service, Inc.  
3260 B Street, NW Suite #E  
Auburn, WA 98001

Dear Mr. Vaughn:

Included are the results from the testing of material submitted on September 26, 2002 from your Murphy Varey project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
ETS1008R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/08/02  
Date Received: 09/26/02  
Project: Murphy Varey  
Date Extracted: 09/27/02  
Date Analyzed: 09/27/02

**RESULTS FROM THE ANALYSIS OF THE 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 WITH REGARDS TO THE ACTUAL IDENTIFICATION  
OF ANY MATERIAL PRESENT

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	<u>Surrogate</u> (% Recovery)
UST 1 209199-01	D	D	D	121
UST 2 209199-02	ND	ND	D	99
UST 3 209199-03	D	D	D	97
Method Blank	ND	ND	ND	100

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 100 mg/kg heavy oil.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/08/02  
Date Received: 09/26/02  
Project: Murphy Varey  
Date Extracted: 10/01/02  
Date Analyzed: 10/01/02

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

**Extended to Include Motor Oil Range Compounds**

Results Reported on a Dry Weight Basis

Results Reported as  $\mu\text{g/g}$  (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Extended</u> (C <sub>10</sub> -C <sub>36</sub> )	<u>Surrogate</u> (% Recovery) (Limit 45-147)
UST 1 d 209199-01	19,000	56
UST 2 d 209199-02	7,200	89
UST 3 d 209199-03	21,000	58
Method Blank	<50	87

d - The sample was diluted.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/08/02  
 Date Received: 09/26/02  
 Project: Murphy Varey  
 Date Extracted: 10/01/02  
 Date Analyzed: 10/02/02 and 10/03/02

**RESULTS FROM THE ANALYSIS OF THE 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 µg/g (ppm)**

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 76-118)
UST 1 d 209199-01	<0.2	<0.2	<0.2	0.5	16	114
UST 2 d 209199-02	<0.2	0.7	<0.2	0.4	<10	114
UST 3 d 209199-03	<0.2	<0.2	<0.2	3.7	350	97
Method Blank	<0.02	<0.02	<0.02	<0.02	<1	114

d - The sample was diluted due to matrix effect (foamy). Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/08/02  
Date Received: 09/26/02  
Project: Murphy Varey  
Date Extracted: 09/30/02  
Date Analyzed: 09/30/02

RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES  
FOR TOTAL METALS  
BY INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)

Results Reported as  $\mu\text{g/g}$  (ppm)

<u>Sample ID</u> Laboratory ID	<u>Total Lead</u>
UST 1 d 209199-01	6,200
UST 2 d 209199-02	2,500
UST 3 d 209199-03	6,700
Method Blank	<2.0

d - The sample was diluted.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/08/02

Date Received: 09/26/02

Project: Murphy Varey

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

Laboratory Code: 209215-02 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Diesel Extended	µg/g (ppm)	<50	<50	nm

Laboratory Code: 209215-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	µg/g (ppm)	500	<50	108	104	60-187	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	µg/g (ppm)	500	112	67-140

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/08/02

Date Received: 09/26/02

Project: Murphy Varey

**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: 210003-02 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	µg/g (ppm)	<0.02	<0.02	nm
Toluene	µg/g (ppm)	<0.02	<0.02	nm
Ethylbenzene	µg/g (ppm)	<0.02	<0.02	nm
Xylenes	µg/g (ppm)	<0.02	<0.02	nm
Gasoline	µg/g (ppm)	<1	<1	nm

Laboratory Code: 210003-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Benzene	µg/g (ppm)	0.5	<0.02	100	102	34-136	2
Toluene	µg/g (ppm)	0.5	<0.02	102	106	35-140	4
Ethylbenzene	µg/g (ppm)	0.5	<0.02	103	106	37-150	3
Xylenes	µg/g (ppm)	1.5	<0.02	108	108	36-143	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Benzene	µg/g (ppm)	0.5	102	106	60-122	4
Toluene	µg/g (ppm)	0.5	106	110	60-126	4
Ethylbenzene	µg/g (ppm)	0.5	107	112	56-130	5
Xylenes	µg/g (ppm)	1.5	115	117	58-128	2
Gasoline	µg/g (ppm)	20	101	103	43-143	2

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/08/02

Date Received: 09/26/02

Project: Murphy Varey

**QUALITY ASSURANCE RESULTS  
FROM TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Laboratory Code: 209049-29 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Lead	µg/g (ppm)	440	520	17	0-20

Laboratory Code: 209049-29 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	Acceptance Criteria
Lead	µg/g (ppm)	20	440	b	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Lead	µg/g (ppm)	20	107	111	80-120	4

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.

### SAMPLE CHAIN OF CUSTODY

Send Report To Tom Vaughn  
 Company Environmental Tank Service, Inc.  
 Address 32100 "B" St. NW, Suite E  
 City, State, ZIP Auburn, WA 98001  
 Phone # (253) 833-4375 Fax # (253) 939-2898

SAMPLERS (signature) <u>Tom Vaughn</u>	
PROJECT NAME/NO. <u>Murphy Varey</u>	PO #
REMARKS	

Page # 1 of 1

**TURNAROUND TIME**  
 Standard (2 Weeks)  
 RUSH \_\_\_\_\_  
 Rush charges authorized by: \_\_\_\_\_

**SAMPLE DISPOSAL**  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	TPH-HClP	Lead			
UST 1	01	9/25	0930		1									X	X	Strong odor
UST 2	02	↓	↓		1									X	X	↓
UST 3	03	↓	↓		1									X	X	Strong odor
<del>_____</del>																

Friedman & Bruya, Inc.  
 3012 16th Avenue West  
 Seattle, WA 98119-2029  
 Ph. (206) 285-8282  
 Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Tom Vaughn</u>	<u>Tom Vaughn</u>	<u>ETS</u>	<u>9-25</u>	<u>1400</u>
Received by: <u>Eric Young</u>	<u>ERIC YOUNG</u>	<u>F&amp;B INC.</u>	<u>9/25</u>	<u>1410</u>
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

---

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 16, 2002

Tom Vaughn, Project Manager  
Environmental Tank Service, Inc.  
3260 B Street, NW Suite #E  
Auburn, WA 98001

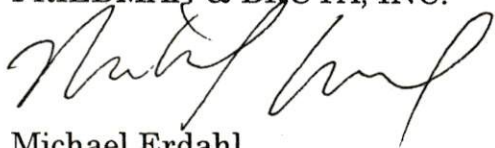
Dear Mr. Vaughn:

Included are the additional results from the testing of material submitted on September 26, 2002 from your Murphy Varey project.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
ETS1016R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/24/02  
Date Received: 09/12/02  
Project: Murphy Varey  
Date Extracted: 09/17/02  
Date Analyzed: 09/17/02

**RESULTS FROM THE ANALYSIS OF THE PRODUCT SAMPLE  
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 WITH REGARDS TO THE ACTUAL IDENTIFICATION  
OF ANY MATERIAL PRESENT

<u>Sample ID</u> Laboratory ID	<u>Gasoline</u>	<u>Diesel</u>	<u>Heavy Oil</u>	<u>Surrogate</u> (% Recovery)
UST liquid 209080-01	D	D	D	94
Method Blank	ND	ND	ND	100

ND - Material not detected at or above 20 mg/kg gas, 50 mg/kg diesel and 100 mg/kg heavy oil.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/16/02

Date Received: 09/26/02

Project: Murphy Varey

Date Extracted: 10/11/02

Date Analyzed: 10/11/02

**RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES  
FOR TCLP METALS IN ACCORDANCE WITH  
40 CFR PART 261**

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Lead</u>
UST 1 209199-01	26
UST 2 209199-02	8.0
UST 3 209199-03	14
Method Blank	<0.5
<i>TCLP Limit</i>	5.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/16/02

Date Received: 09/26/02

Project: Murphy Varey

**QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF THE SOIL  
SAMPLES FOR TCLP METALS IN ACCORDANCE WITH  
40 CFR PART 261  
Results Reported as mg/L (ppm)**

Laboratory Code: 209199-03 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Lead	mg/L (ppm)	14	12	15	0-20

Laboratory Code: 209199-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	Acceptance Criteria
Lead	mg/L (ppm)	40	8.0	79	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/L (ppm)	40	89	90	80-120	1

# SAMPLE CHAIN OF CUSTODY

Send Report To Tom Vaughn  
 Company Environmental Tank Service, Inc.  
 Address 3260 "B" St. NW, Suite E  
 City, State, ZIP Auburn, WA 98001  
 Phone #(253)833-4375 Fax #(253)939-2898

SAMPLERS (signature) <u>Tom Vaughn</u>	
PROJECT NAME/NO. <u>Murphy Varey</u>	PO #
REMARKS	

Page # 1 of 1

**TURNAROUND TIME**  
 Standard (2 Weeks)  
 RUSH  
 Rush charges authorized by: \_\_\_\_\_

**SAMPLE DISPOSAL**  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED											Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	TPH-HClD	Lead	TCLP-Pb			
UST 1	01	9/25	0930		1	X	X	X					X	X	X	<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">                     STRENGTH                      9/25/02                 </div> Strong odor ↓ Strong odor	
UST 2	02	↓	↓		1	X	X	X					X	X	X		
UST 3	03	↓	↓		1	X	X	X					X	X	X		
<del>                     [Crossed out section]                 </del>						9/30/02											<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;">                     STRENGTH                      9/30/02                 </div>

Friedman & Bruya, Inc.  
 3012 16th Avenue West  
 Seattle, WA 98119-2029  
 Ph. (206) 285-8282  
 Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Tom Vaughn</u>	<u>Tom Vaughn</u>	<u>ETS</u>	<u>9-25</u>	<u>1400</u>
Received by: <u>Eric Young</u>	<u>ERIC YOUNG</u>	<u>F&amp;B INC.</u>	<u>9/25</u>	<u>1410</u>
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

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  
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e-mail: fbi@isomedia.com

December 5, 2002

Tom Vaughn, Project Manager  
Environmental Tank Service, Inc.  
3260 B Street, NW Suite #E  
Auburn, WA 98001

Dear Mr. Vaughn:

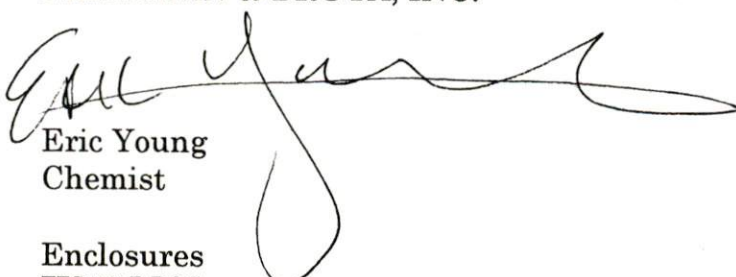
Included are the results from the testing of material submitted on December 4, 2002 from your MV-Seattle project. The product sample submitted for forensic evaluation arrived in good condition. Upon its arrival, the sample UST2 Product was assigned our laboratory project number 212025 and was placed in a refrigerator maintained at 4°C until removed for sample processing.

The sample UST2 Product was diluted and analyzed using a gas chromatograph with a flame ionization detector (GC/FID) and an electron capture detector (ECD). The data generated yielded information on the boiling range and general chemical composition of the material present. The GC/FID and GC/ECD traces are enclosed. A GC/FID trace of a standard consisting of normal alkanes is also provided for reference purposes.

Please contact us if additional consultation is needed by our firm in the interpretation of the analytical results provided. We appreciate this opportunity to be of service to you and hope you will call if you should have any questions. We will hold your samples for 30 days before disposal unless directed otherwise.

Sincerely,

FRIEDMAN & BRUYA, INC.



Eric Young  
Chemist

Enclosures  
ETS1205R.DOC

Date of Report: 12/05/02  
Date Received: 12/04/02  
Project: MV-Seattle  
Date Extracted: 12/04/02  
Date Analyzed: 12/04/02

**RESULTS FROM THE ANALYSIS OF THE PRODUCT SAMPLE  
FOR FORENSIC EVALUATION  
BY CAPILLARY GAS CHROMATOGRAPHY  
USING A FLAME IONIZATION DETECTOR (FID)  
AND ELECTRON CAPTURE DETECTOR (ECD)**

Sample ID

GC Characterization

UST2 Product

The GC trace using the flame ionization detector (FID) showed the presence of low, medium, and high boiling compounds. The patterns displayed by these peaks are indicative of mixture of gasoline, middle distillates which may include kerosene and diesel fuel, and a higher boiling product such as mineral oil, lube oil, and similar materials.

The low boiling compounds appear as a ragged pattern of peaks eluting from  $n$ -C<sub>7</sub> to  $n$ -C<sub>13</sub> showing a maximum near  $n$ -C<sub>10</sub>. This correlates with a temperature range of approximately 100°C to 240°C with a maximum near 170°C. Within this range, the GC/FID trace showed the presence of peaks which are indicative of C<sub>3</sub>-benzenes and methylnaphthalenes. These are common constituents present in gasoline. The low level or absence of toluene, ethylbenzene, and the xylenes in the sample indicates that extensive degradation has occurred to the fuel.

The medium boiling compounds appear as a regular pattern of peaks on top of a broad hump or unresolved complex mixture (UCM). This material elutes from  $n$ -C<sub>8</sub> to  $n$ -C<sub>24</sub> showing a maximum near  $n$ -C<sub>14</sub>. This correlates with a temperature range of approximately 130°C to 390°C with a maximum near 250°C. Within this range, the peaks are present which are indicative of the normal alkanes as well as isoprenoids including norpristane, pristane, and phytane.

Date of Report: 12/05/02  
Date Received: 12/04/02  
Project: MV-Seattle  
Date Extracted: 12/04/02  
Date Analyzed: 12/04/02

**RESULTS FROM THE ANALYSIS OF THE PRODUCT SAMPLE  
FOR FORENSIC EVALUATION  
BY CAPILLARY GAS CHROMATOGRAPHY  
USING A FLAME IONIZATION DETECTOR (FID)  
AND ELECTRON CAPTURE DETECTOR (ECD)**

Sample ID

GC Characterization

UST2 Product (continued)

The high boiling compounds appear as an irregular pattern of peaks on top of a broad hump or unresolved complex mixture (UCM). This material elutes from *n*-C<sub>18</sub> to *n*-C<sub>32</sub> showing a maximum near *n*-C<sub>25</sub>. This correlates with a temperature range of approximately 320°C to 470°C with a maximum near 400°C.

It should also be noted that the GC/ECD trace of the sample showed the presence of a peak eluting before 4 minutes. The presence of this peak indicates that a halogenated compound may also be present in this sample.

The large peak seen near 25 minutes on the GC/FID trace is pentacosane, added as a quality assurance check for this GC analysis. There is a second surrogate present that is seen on the GC/ECD trace at about 26 minutes which is dibutyl chlorendate.

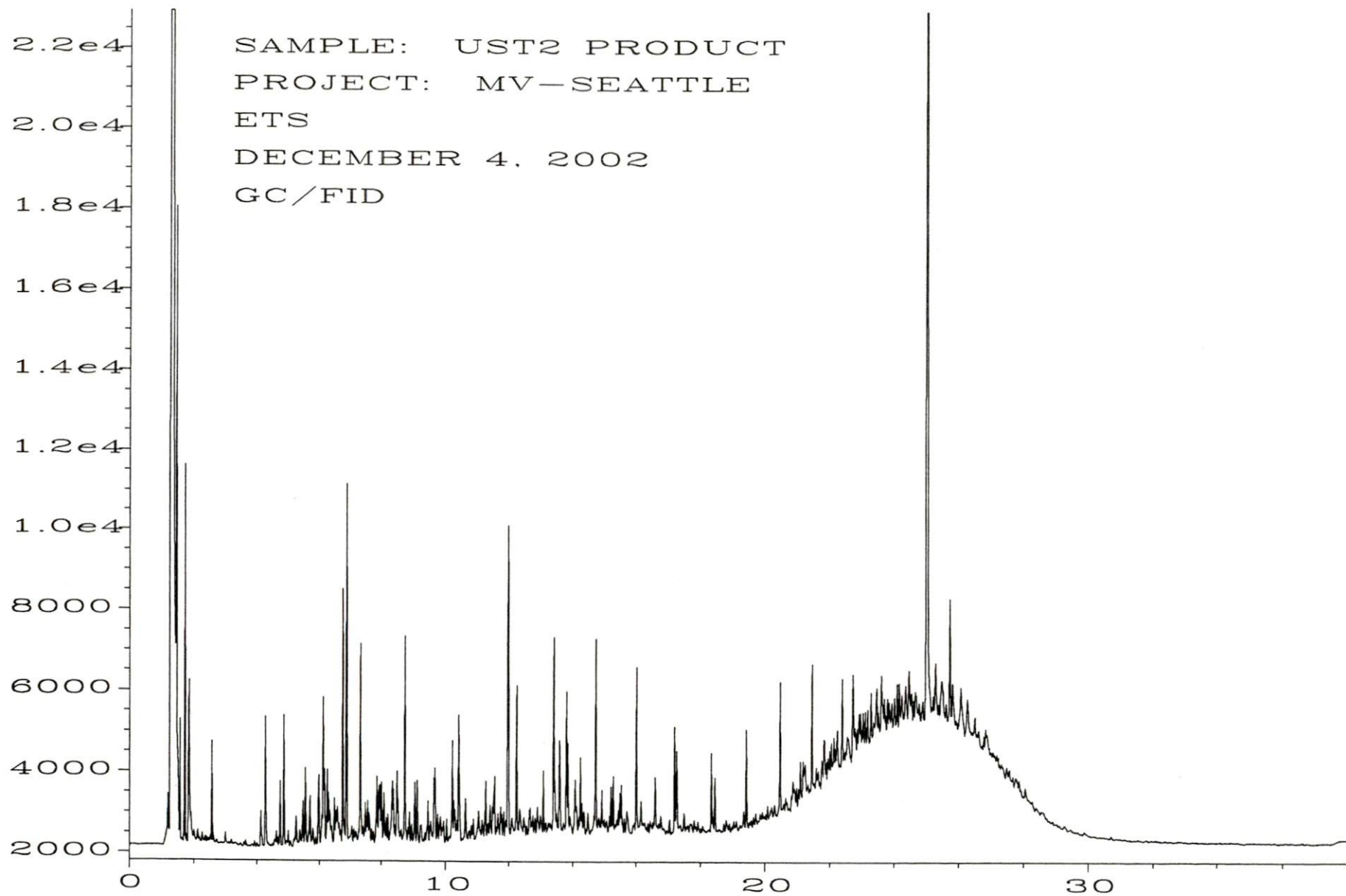


Fig. 1 in C:\HPCHEM\1\DATA\12-04-02\005F0201.D

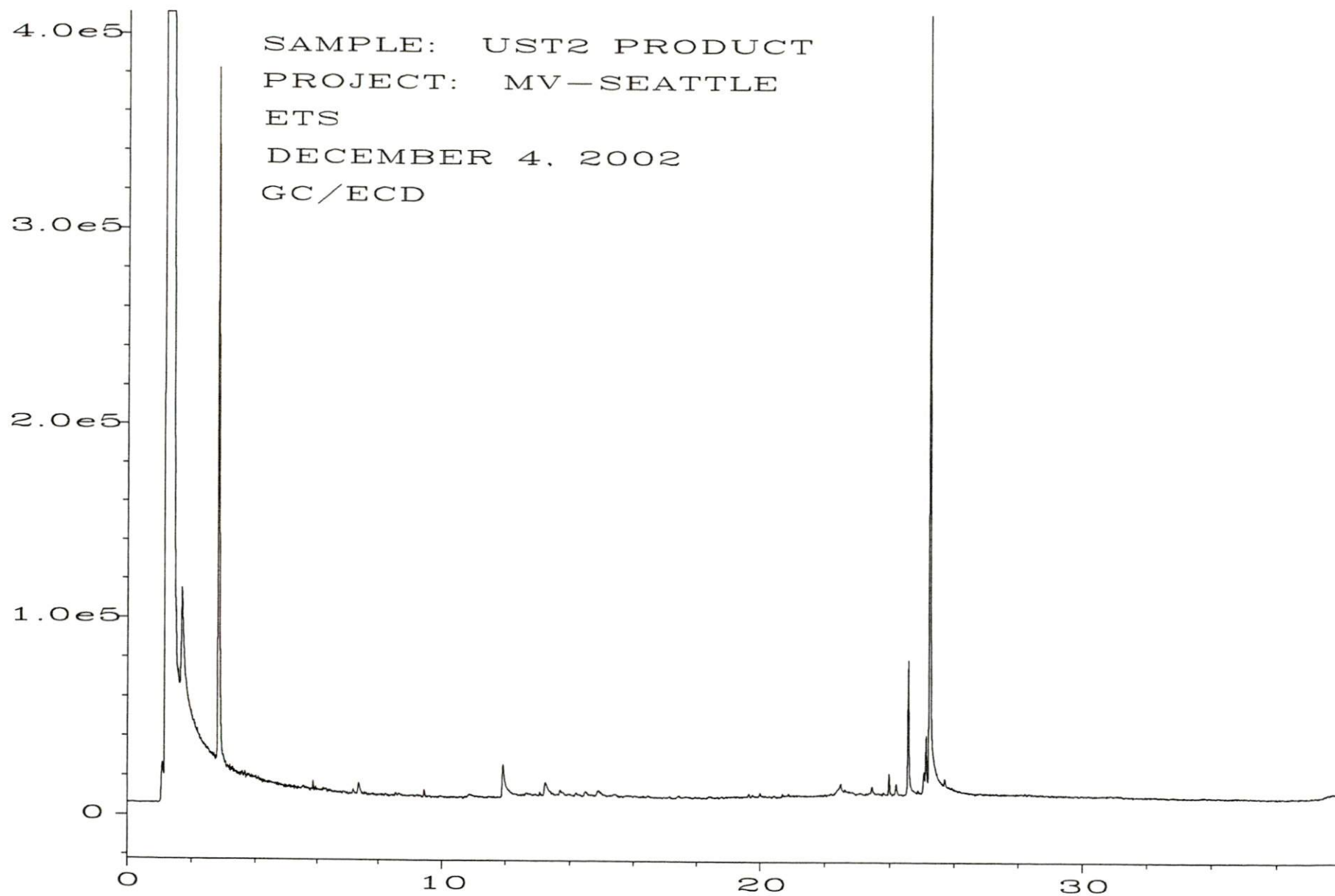


Fig. 2 in C:\HPCHEM\1\DATA\12-04-02\005R0201.D

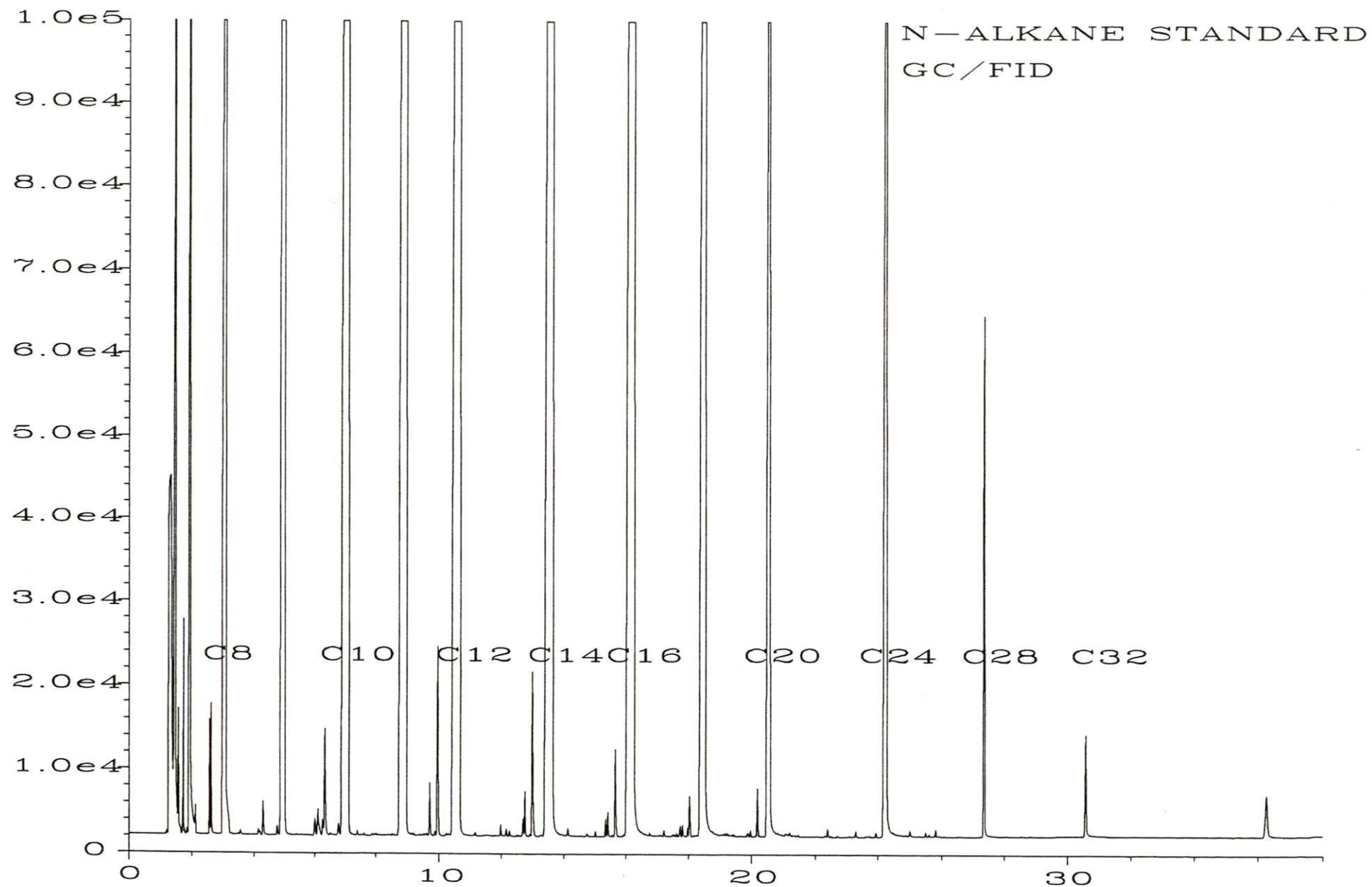
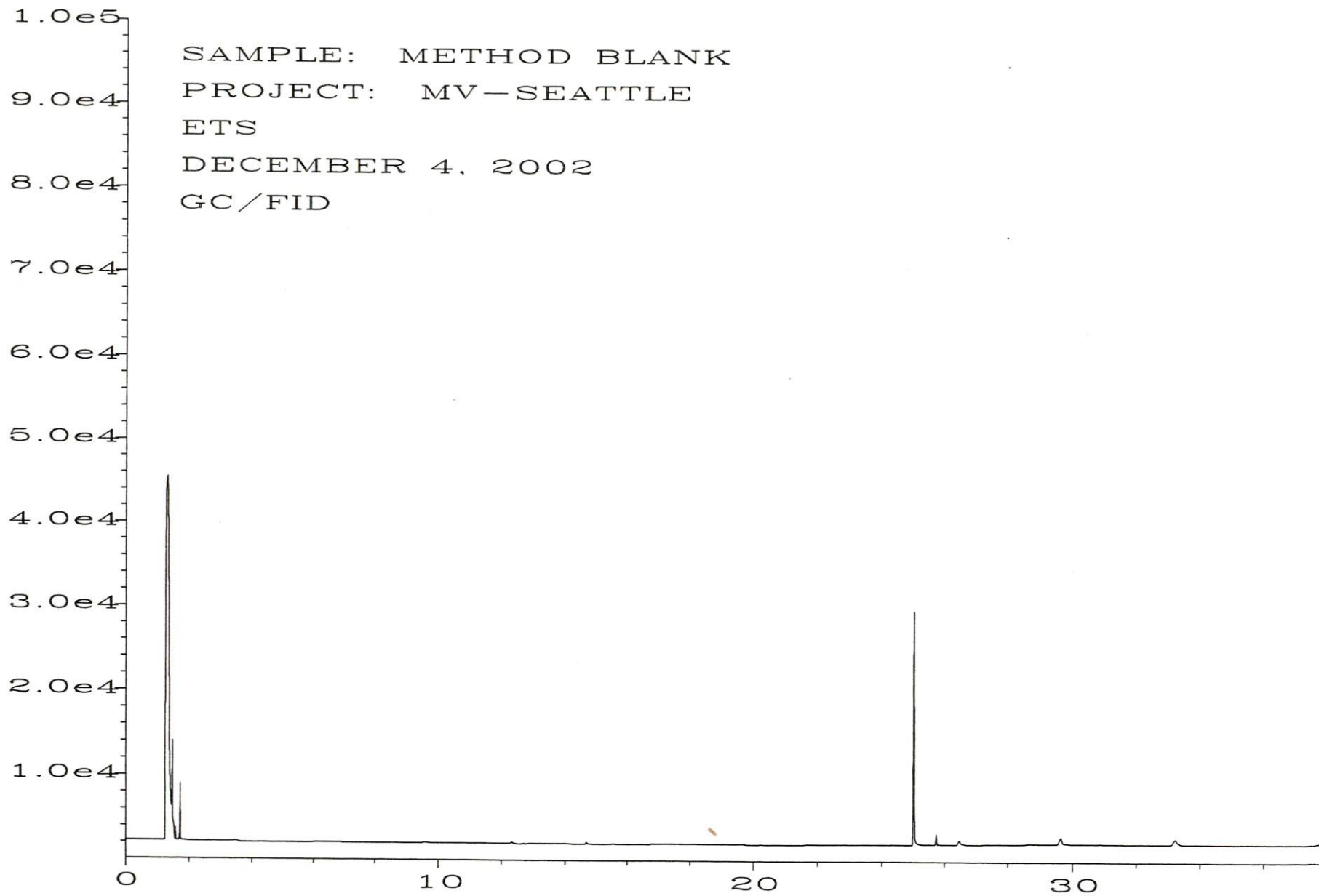


Fig. 1 in C:\HPCHEM\1\DATA\12-04-02\100F0601.D



Sig. 1 in C:\HPCHEM\1\DATA\12-04-02\002F0201.D

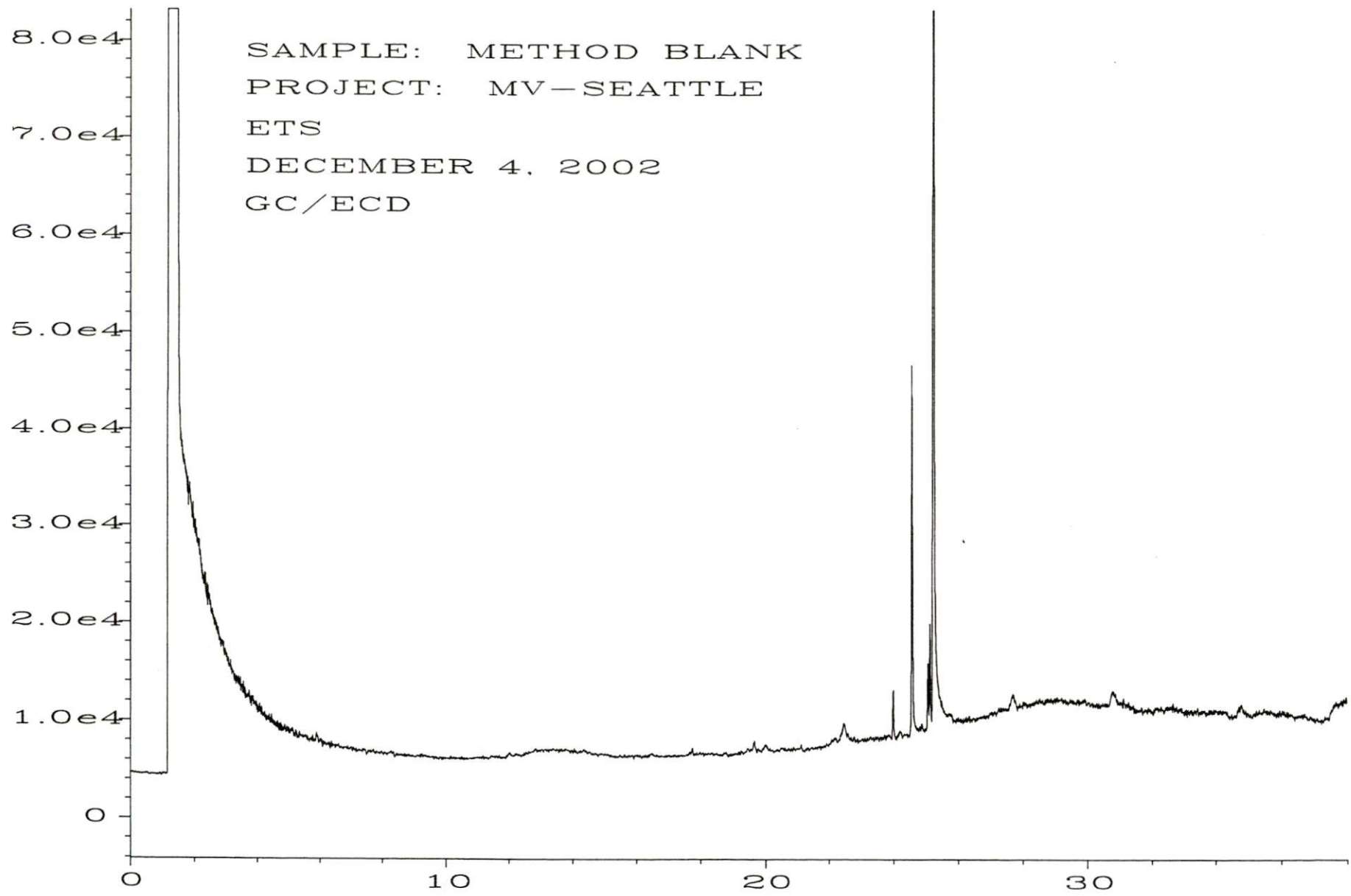


Fig. 2 in C:\HPCHEM\1\DATA\12-04-02\002R0201.D



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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January 7, 2003

Tom Vaughn, Project Manager  
Environmental Tank Service, Inc.  
3260 B Street, NW Suite #E  
Auburn, WA 98001

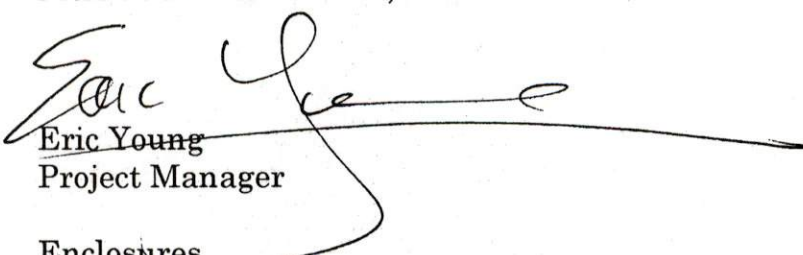
Dear Mr. Vaughn:

Included are the results from the testing of material submitted on December 2, 2002 from the MV-Seattle, F&BI 212150 project. There 30 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Eric Young  
Project Manager

Enclosures  
ETS0107R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/07/03  
Date Received: 12/02/02  
Project: MV-Seattle, F&BI 212150  
Date Extracted: 12/19/02  
Date Analyzed: 12/19/02

**RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-Gx**

Results Reported on a Dry Weight Basis

Results Reported as  $\mu\text{g/g}$  (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 41-145)
Floor 1 d 212150-01	<5	88
Floor 2 d 212150-02	<5	83
Floor 3 212150-03	<1	81
Floor 4 UST Top d 212150-04	51	125
Floor 4 3' below UST d 212150-05	240	129
Sidewall 1 d 212150-06	<10	88
Sidewall 2 d 212150-07	<5	88
Sidewall 3 212150-08	<1	83
Method Blank	<1	84

d - The sample was diluted due to matrix effect (foamy). Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/07/03  
Date Received: 12/02/02  
Project: MV-Seattle, F&BI 212150  
Date Extracted: 12/19/02  
Date Analyzed: 12/19/02

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

**Extended to Include Motor Oil Range Compounds**

Results Reported on a Dry Weight Basis

Results Reported as  $\mu\text{g/g}$  (ppm)

<u>Sample ID</u> Laboratory ID	<u>Diesel Extended</u> (C <sub>10</sub> -C <sub>36</sub> )	<u>Surrogate</u> (% Recovery) (Limit 45-153)
Floor 1 d 212150-01	4,400	101
Floor 2 d 212150-02	3,200	100
Floor 3 212150-03	<50	110
Floor 4 UST Top d 212150-04	14,000	67
Floor 4 3' below UST d 212150-05	27,000	100
Sidewall 1 d 212150-06	30,000	132
Sidewall 2 212150-07	790	105
Sidewall 3 212150-08	110	108
Method Blank	<50	103

d - The sample was diluted.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID: Floor 1  
 Date Received: 12/02/02  
 Date Extracted: 12/20/02  
 Date Analyzed: 12/20/02  
 Matrix: Soil  
 Units: ug/g (ppm)

Client: Environmental Tank Services  
 Project: MV-Seattle, F&BI 212150  
 Lab ID: 212150-01  
 Data File: 122012.D  
 Instrument: 5972 -Ins  
 Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	80	41	136
1,2-Dichloroethane-d4	81	41	135
Toluene-d8	88	36	134
4-Bromofluorobenzene	78	16	179

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Dichlorodifluoromethane	<0.025	1,3-Dichloropropane	<0.025
Chloromethane	<0.025	Tetrachloroethene	0.03
Vinyl chloride	<0.025	Dibromochloromethane	<0.025
Bromomethane	<0.025	1,2-Dibromoethane (EDB)	<0.025
Chloroethane	<0.025	Chlorobenzene	<0.025
Trichlorofluoromethane	<0.025	Ethylbenzene	<0.025
Acetone	<0.25	1,1,1,2-Tetrachloroethane	<0.025
1,1-Dichloroethene	<0.025	m,p-Xylene	<0.025
Methylene chloride	<0.25	o-Xylene	<0.025
Methyl t-butyl ether (MTBE)	<0.025	Styrene	<0.025
trans-1,2-Dichloroethene	<0.025	Isopropylbenzene	<0.025
1,1-Dichloroethane	<0.025	Bromoform	<0.025
2,2-Dichloropropane	<0.025	n-Propylbenzene	<0.025
cis-1,2-Dichloroethene	<0.025	Bromobenzene	<0.025
Chloroform	<0.025	1,3,5-Trimethylbenzene	<0.025
2-Butanone (MEK)	<0.25	1,1,2,2-Tetrachloroethane	<0.025
1,2-Dichloroethane (EDC)	<0.025	1,2,3-Trichloropropane	<0.025
1,1,1-Trichloroethane	<0.025	2-Chlorotoluene	<0.025
1,1-Dichloropropene	<0.025	4-Chlorotoluene	<0.025
Carbon Tetrachloride	<0.025	tert-Butylbenzene	<0.025
Benzene	<0.025	1,2,4-Trimethylbenzene	<0.025
Trichloroethene	<0.025	sec-Butylbenzene	<0.025
1,2-Dichloropropane	<0.025	p-Isopropyltoluene	<0.025
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.025
Dibromomethane	<0.025	1,4-Dichlorobenzene	<0.025
4-Methyl-2-pentanone	<0.25	1,2-Dichlorobenzene	<0.025
cis-1,3-Dichloropropene	<0.025	1,2-Dibromo-3-chloropropane	<0.025
Toluene	<0.025	1,2,4-Trichlorobenzene	<0.025
trans-1,3-Dichloropropene	<0.025	Hexachlorobutadiene	<0.025
1,1,2-Trichloroethane	<0.025	Naphthalene	<0.025
2-Hexanone	<0.25	1,2,3-Trichlorobenzene	<0.025

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID: Floor 2  
 Date Received: 12/02/02  
 Date Extracted: 12/20/02  
 Date Analyzed: 12/20/02  
 Matrix: Soil  
 Units: ug/g (ppm)

Client: Environmental Tank Services  
 Project: MV-Seattle, F&BI 212150  
 Lab ID: 212150-02  
 Data File: 122013.D  
 Instrument: 5972 -Ins  
 Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	75	41	136
1,2-Dichloroethane-d4	77	41	135
Toluene-d8	78	36	134
4-Bromofluorobenzene	72	16	179

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Dichlorodifluoromethane	<0.025	1,3-Dichloropropane	<0.025
Chloromethane	<0.025	Tetrachloroethene	0.089
Vinyl chloride	<0.025	Dibromochloromethane	<0.025
Bromomethane	<0.025	1,2-Dibromoethane (EDB)	<0.025
Chloroethane	<0.025	Chlorobenzene	<0.025
Trichlorofluoromethane	<0.025	Ethylbenzene	<0.025
Acetone	<0.25	1,1,1,2-Tetrachloroethane	<0.025
1,1-Dichloroethene	<0.025	m,p-Xylene	<0.025
Methylene chloride	<0.25	o-Xylene	<0.025
Methyl t-butyl ether (MTBE)	<0.025	Styrene	<0.025
trans-1,2-Dichloroethene	<0.025	Isopropylbenzene	<0.025
1,1-Dichloroethane	<0.025	Bromoform	<0.025
2,2-Dichloropropane	<0.025	n-Propylbenzene	<0.025
cis-1,2-Dichloroethene	<0.025	Bromobenzene	<0.025
Chloroform	<0.025	1,3,5-Trimethylbenzene	<0.025
2-Butanone (MEK)	<0.25	1,1,2,2-Tetrachloroethane	<0.025
1,2-Dichloroethane (EDC)	<0.025	1,2,3-Trichloropropane	<0.025
1,1,1-Trichloroethane	<0.025	2-Chlorotoluene	<0.025
1,1-Dichloropropene	<0.025	4-Chlorotoluene	<0.025
Carbon Tetrachloride	<0.025	tert-Butylbenzene	<0.025
Benzene	<0.025	1,2,4-Trimethylbenzene	<0.025
Trichloroethene	<0.025	sec-Butylbenzene	<0.025
1,2-Dichloropropane	<0.025	p-Isopropyltoluene	<0.025
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.025
Dibromomethane	<0.025	1,4-Dichlorobenzene	<0.025
4-Methyl-2-pentanone	<0.25	1,2-Dichlorobenzene	<0.025
cis-1,3-Dichloropropene	<0.025	1,2-Dibromo-3-chloropropane	<0.025
Toluene	<0.025	1,2,4-Trichlorobenzene	<0.025
trans-1,3-Dichloropropene	<0.025	Hexachlorobutadiene	<0.025
1,1,2-Trichloroethane	<0.025	Naphthalene	<0.025
2-Hexanone	<0.25	1,2,3-Trichlorobenzene	<0.025

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID: Floor 3  
 Date Received: 12/02/02  
 Date Extracted: 12/20/02  
 Date Analyzed: 12/20/02  
 Matrix: Soil  
 Units: ug/g (ppm)

Client: Environmental Tank Services  
 Project: MV-Seattle, F&BI 212150  
 Lab ID: 212150-03  
 Data File: 122014.D  
 Instrument: 5972 -Ins  
 Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	62	41	136
1,2-Dichloroethane-d4	64	41	135
Toluene-d8	69	36	134
4-Bromofluorobenzene	61	16	179

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Dichlorodifluoromethane	<0.025	1,3-Dichloropropane	<0.025
Chloromethane	<0.025	Tetrachloroethene	<0.025
Vinyl chloride	<0.025	Dibromochloromethane	<0.025
Bromomethane	<0.025	1,2-Dibromoethane (EDB)	<0.025
Chloroethane	<0.025	Chlorobenzene	<0.025
Trichlorofluoromethane	<0.025	Ethylbenzene	<0.025
Acetone	<0.25	1,1,1,2-Tetrachloroethane	<0.025
1,1-Dichloroethene	<0.025	m,p-Xylene	<0.025
Methylene chloride	<0.25	o-Xylene	<0.025
Methyl t-butyl ether (MTBE)	<0.025	Styrene	<0.025
trans-1,2-Dichloroethene	<0.025	Isopropylbenzene	<0.025
1,1-Dichloroethane	<0.025	Bromoform	<0.025
2,2-Dichloropropane	<0.025	n-Propylbenzene	<0.025
cis-1,2-Dichloroethene	<0.025	Bromobenzene	<0.025
Chloroform	<0.025	1,3,5-Trimethylbenzene	<0.025
2-Butanone (MEK)	<0.25	1,1,2,2-Tetrachloroethane	<0.025
1,2-Dichloroethane (EDC)	<0.025	1,2,3-Trichloropropane	<0.025
1,1,1-Trichloroethane	<0.025	2-Chlorotoluene	<0.025
1,1-Dichloropropene	<0.025	4-Chlorotoluene	<0.025
Carbon Tetrachloride	<0.025	tert-Butylbenzene	<0.025
Benzene	<0.025	1,2,4-Trimethylbenzene	<0.025
Trichloroethene	<0.025	sec-Butylbenzene	<0.025
1,2-Dichloropropane	<0.025	p-Isopropyltoluene	<0.025
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.025
Dibromomethane	<0.025	1,4-Dichlorobenzene	<0.025
4-Methyl-2-pentanone	<0.25	1,2-Dichlorobenzene	<0.025
cis-1,3-Dichloropropene	<0.025	1,2-Dibromo-3-chloropropane	<0.025
Toluene	<0.025	1,2,4-Trichlorobenzene	<0.025
trans-1,3-Dichloropropene	<0.025	Hexachlorobutadiene	<0.025
1,1,2-Trichloroethane	<0.025	Naphthalene	<0.025
2-Hexanone	<0.25	1,2,3-Trichlorobenzene	<0.025

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID: Floor 4 UST Top  
 Date Received: 12/02/02  
 Date Extracted: 12/20/02  
 Date Analyzed: 12/20/02  
 Matrix: Soil  
 Units: ug/g (ppm)

Client: Environmental Tank Services  
 Project: MV-Seattle, F&BI 212150  
 Lab ID: 212150-04  
 Data File: 122010.D  
 Instrument: 5972 -Ins  
 Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	64	41	136
1,2-Dichloroethane-d4	66	41	135
Toluene-d8	56	36	134
4-Bromofluorobenzene	58	16	179

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Dichlorodifluoromethane	<0.025	1,3-Dichloropropane	<0.025
Chloromethane	<0.025	Tetrachloroethene	1.6
Vinyl chloride	<0.025	Dibromochloromethane	<0.025
Bromomethane	<0.025	1,2-Dibromoethane (EDB)	<0.025
Chloroethane	<0.025	Chlorobenzene	<0.025
Trichlorofluoromethane	<0.025	Ethylbenzene	<0.025
Acetone	<0.25	1,1,1,2-Tetrachloroethane	<0.025
1,1-Dichloroethene	<0.025	m,p-Xylene	0.17
Methylene chloride	<0.25	o-Xylene	0.12
Methyl t-butyl ether (MTBE)	<0.025	Styrene	<0.025
trans-1,2-Dichloroethene	<0.025	Isopropylbenzene	<0.025
1,1-Dichloroethane	<0.025	Bromoform	<0.025
2,2-Dichloropropane	<0.025	n-Propylbenzene	<0.025
cis-1,2-Dichloroethene	<0.025	Bromobenzene	<0.025
Chloroform	<0.025	1,3,5-Trimethylbenzene	0.20
2-Butanone (MEK)	<0.25	1,1,2,2-Tetrachloroethane	<0.025
1,2-Dichloroethane (EDC)	<0.025	1,2,3-Trichloropropane	<0.025
1,1,1-Trichloroethane	<0.025	2-Chlorotoluene	<0.025
1,1-Dichloropropene	<0.025	4-Chlorotoluene	<0.025
Carbon Tetrachloride	<0.025	tert-Butylbenzene	<0.025
Benzene	<0.025	1,2,4-Trimethylbenzene	0.49
Trichloroethene	0.027	sec-Butylbenzene	<0.025
1,2-Dichloropropane	<0.025	p-Isopropyltoluene	0.041
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.025
Dibromomethane	<0.025	1,4-Dichlorobenzene	<0.025
4-Methyl-2-pentanone	<0.25	1,2-Dichlorobenzene	<0.025
cis-1,3-Dichloropropene	<0.025	1,2-Dibromo-3-chloropropane	<0.025
Toluene	<0.025	1,2,4-Trichlorobenzene	<0.025
trans-1,3-Dichloropropene	<0.025	Hexachlorobutadiene	<0.025
1,1,2-Trichloroethane	<0.025	Naphthalene	0.19
2-Hexanone	<0.25	1,2,3-Trichlorobenzene	<0.025

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID: Floor 4 3' below UST	Client: Environmental Tank Services
Date Received: 12/02/02	Project: MV-Seattle, F&BI 212150
Date Extracted: 12/20/02	Lab ID: 212150-05
Date Analyzed: 12/20/02	Data File: 122016.D
Matrix: Soil	Instrument: 5972 -Ins
Units: ug/g (ppm)	Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	69	41	136
1,2-Dichloroethane-d4	70	41	135
Toluene-d8	60	36	134
4-Bromofluorobenzene	55	16	179

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Dichlorodifluoromethane	<0.025	1,3-Dichloropropane	<0.025
Chloromethane	<0.025	Tetrachloroethene	0.069
Vinyl chloride	<0.025	Dibromochloromethane	<0.025
Bromomethane	<0.025	1,2-Dibromoethane (EDB)	<0.025
Chloroethane	<0.025	Chlorobenzene	0.27
Trichlorofluoromethane	<0.025	Ethylbenzene	3.1
Acetone	1.5	1,1,1,2-Tetrachloroethane	<0.025
1,1-Dichloroethene	<0.025	m,p-Xylene	10
Methylene chloride	0.26 lc	o-Xylene	4.2
Methyl t-butyl ether (MTBE)	<0.025	Styrene	<0.025
trans-1,2-Dichloroethene	<0.025	Isopropylbenzene	0.50
1,1-Dichloroethane	<0.025	Bromoform	<0.025
2,2-Dichloropropane	<0.025	n-Propylbenzene	1.3
cis-1,2-Dichloroethene	<0.025	Bromobenzene	<0.025
Chloroform	<0.025	1,3,5-Trimethylbenzene	2.2
2-Butanone (MEK)	<0.25	1,1,2,2-Tetrachloroethane	<0.025
1,2-Dichloroethane (EDC)	<0.025	1,2,3-Trichloropropane	<0.025
1,1,1-Trichloroethane	<0.025	2-Chlorotoluene	<0.025
1,1-Dichloropropene	<0.025	4-Chlorotoluene	<0.025
Carbon Tetrachloride	<0.025	tert-Butylbenzene	0.048
Benzene	0.26	1,2,4-Trimethylbenzene	9.4
Trichloroethene	<0.025	sec-Butylbenzene	0.32
1,2-Dichloropropane	<0.025	p-Isopropyltoluene	0.33
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.025
Dibromomethane	<0.025	1,4-Dichlorobenzene	<0.025
4-Methyl-2-pentanone	<0.25	1,2-Dichlorobenzene	<0.025
cis-1,3-Dichloropropene	<0.025	1,2-Dibromo-3-chloropropane	<0.025
Toluene	2.5	1,2,4-Trichlorobenzene	<0.025
trans-1,3-Dichloropropene	<0.025	Hexachlorobutadiene	<0.025
1,1,2-Trichloroethane	<0.025	Naphthalene	9.9
2-Hexanone	<0.25	1,2,3-Trichlorobenzene	<0.025

lc - The presence of the compound indicated is likely due to laboratory contamination.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID: Sidewall 1  
 Date Received: 12/02/02  
 Date Extracted: 12/20/02  
 Date Analyzed: 12/20/02  
 Matrix: Soil  
 Units: ug/g (ppm)

Client: Environmental Tank Services  
 Project: MV-Seattle, F&BI 212150  
 Lab ID: 212150-06  
 Data File: 122017.D  
 Instrument: 5972 -Ins  
 Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	79	41	136
1,2-Dichloroethane-d4	81	41	135
Toluene-d8	85	36	134
4-Bromofluorobenzene	76	16	179

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Dichlorodifluoromethane	<0.025	1,3-Dichloropropane	<0.025
Chloromethane	<0.025	Tetrachloroethene	0.094
Vinyl chloride	<0.025	Dibromochloromethane	<0.025
Bromomethane	<0.025	1,2-Dibromoethane (EDB)	<0.025
Chloroethane	<0.025	Chlorobenzene	<0.025
Trichlorofluoromethane	<0.025	Ethylbenzene	0.054
Acetone	<0.25	1,1,1,2-Tetrachloroethane	<0.025
1,1-Dichloroethene	<0.025	m,p-Xylene	0.23
Methylene chloride	0.30 lc	o-Xylene	0.11
Methyl t-butyl ether (MTBE)	<0.025	Styrene	<0.025
trans-1,2-Dichloroethene	<0.025	Isopropylbenzene	<0.025
1,1-Dichloroethane	<0.025	Bromoform	<0.025
2,2-Dichloropropane	<0.025	n-Propylbenzene	0.059
cis-1,2-Dichloroethene	<0.025	Bromobenzene	<0.025
Chloroform	<0.025	1,3,5-Trimethylbenzene	0.12
2-Butanone (MEK)	<0.25	1,1,2,2-Tetrachloroethane	<0.025
1,2-Dichloroethane (EDC)	<0.025	1,2,3-Trichloropropane	<0.025
1,1,1-Trichloroethane	<0.025	2-Chlorotoluene	<0.025
1,1-Dichloropropene	<0.025	4-Chlorotoluene	<0.025
Carbon Tetrachloride	<0.025	tert-Butylbenzene	<0.025
Benzene	<0.025	1,2,4-Trimethylbenzene	0.46
Trichloroethene	<0.025	sec-Butylbenzene	<0.025
1,2-Dichloropropane	<0.025	p-Isopropyltoluene	0.030
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.025
Dibromomethane	<0.025	1,4-Dichlorobenzene	<0.025
4-Methyl-2-pentanone	<0.25	1,2-Dichlorobenzene	<0.025
cis-1,3-Dichloropropene	<0.025	1,2-Dibromo-3-chloropropane	<0.025
Toluene	0.088	1,2,4-Trichlorobenzene	<0.025
trans-1,3-Dichloropropene	<0.025	Hexachlorobutadiene	<0.025
1,1,2-Trichloroethane	<0.025	Naphthalene	0.65
2-Hexanone	<0.25	1,2,3-Trichlorobenzene	<0.025

lc - The presence of the compound indicated is likely due to laboratory contamination.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID: Sidewall 2  
 Date Received: 12/02/02  
 Date Extracted: 12/20/02  
 Date Analyzed: 12/20/02  
 Matrix: Soil  
 Units: ug/g (ppm)

Client: Environmental Tank Services  
 Project: MV-Seattle, F&BI 212150  
 Lab ID: 212150-07  
 Data File: 122015.D  
 Instrument: 5972 -Ins  
 Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	82	41	136
1,2-Dichloroethane-d4	83	41	135
Toluene-d8	91	36	134
4-Bromofluorobenzene	84	16	179

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Dichlorodifluoromethane	<0.025	1,3-Dichloropropane	<0.025
Chloromethane	<0.025	Tetrachloroethene	<0.025
Vinyl chloride	<0.025	Dibromochloromethane	<0.025
Bromomethane	<0.025	1,2-Dibromoethane (EDB)	<0.025
Chloroethane	<0.025	Chlorobenzene	<0.025
Trichlorofluoromethane	<0.025	Ethylbenzene	<0.025
Acetone	<0.25	1,1,1,2-Tetrachloroethane	<0.025
1,1-Dichloroethene	<0.025	m,p-Xylene	0.028
Methylene chloride	<0.25	o-Xylene	<0.025
Methyl t-butyl ether (MTBE)	<0.025	Styrene	<0.025
trans-1,2-Dichloroethene	<0.025	Isopropylbenzene	<0.025
1,1-Dichloroethane	<0.025	Bromoform	<0.025
2,2-Dichloropropane	<0.025	n-Propylbenzene	<0.025
cis-1,2-Dichloroethene	<0.025	Bromobenzene	<0.025
Chloroform	<0.025	1,3,5-Trimethylbenzene	<0.025
2-Butanone (MEK)	<0.25	1,1,2,2-Tetrachloroethane	<0.025
1,2-Dichloroethane (EDC)	<0.025	1,2,3-Trichloropropane	<0.025
1,1,1-Trichloroethane	<0.025	2-Chlorotoluene	<0.025
1,1-Dichloropropene	<0.025	4-Chlorotoluene	<0.025
Carbon Tetrachloride	<0.025	tert-Butylbenzene	<0.025
Benzene	<0.025	1,2,4-Trimethylbenzene	0.059
Trichloroethene	<0.025	sec-Butylbenzene	<0.025
1,2-Dichloropropane	<0.025	p-Isopropyltoluene	<0.025
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.025
Dibromomethane	<0.025	1,4-Dichlorobenzene	<0.025
4-Methyl-2-pentanone	<0.25	1,2-Dichlorobenzene	<0.025
cis-1,3-Dichloropropene	<0.025	1,2-Dibromo-3-chloropropane	<0.025
Toluene	0.047	1,2,4-Trichlorobenzene	<0.025
trans-1,3-Dichloropropene	<0.025	Hexachlorobutadiene	<0.025
1,1,2-Trichloroethane	<0.025	Naphthalene	<0.025
2-Hexanone	<0.25	1,2,3-Trichlorobenzene	<0.025

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID: Sidewall 3  
 Date Received: 12/02/02  
 Date Extracted: 12/20/02  
 Date Analyzed: 12/20/02  
 Matrix: Soil  
 Units: ug/g (ppm)

Client: Environmental Tank Services  
 Project: MV-Seattle, F&BI 212150  
 Lab ID: 212150-08  
 Data File: 122009.D  
 Instrument: 5972 -Ins  
 Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	78	41	136
1,2-Dichloroethane-d4	79	41	135
Toluene-d8	88	36	134
4-Bromofluorobenzene	80	16	179

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Dichlorodifluoromethane	<0.05	1,3-Dichloropropane	<0.05
Chloromethane	<0.05	Tetrachloroethene	<0.05
Vinyl chloride	<0.05	Dibromochloromethane	<0.05
Bromomethane	<0.05	1,2-Dibromoethane (EDB)	<0.05
Chloroethane	<0.05	Chlorobenzene	<0.05
Trichlorofluoromethane	<0.05	Ethylbenzene	<0.05
Acetone	<0.5	1,1,1,2-Tetrachloroethane	<0.05
1,1-Dichloroethene	<0.05	m,p-Xylene	<0.05
Methylene chloride	<0.5	o-Xylene	<0.05
Methyl t-butyl ether (MTBE)	<0.05	Styrene	<0.05
trans-1,2-Dichloroethene	<0.05	Isopropylbenzene	<0.05
1,1-Dichloroethane	<0.05	Bromoform	<0.05
2,2-Dichloropropane	<0.05	n-Propylbenzene	<0.05
cis-1,2-Dichloroethene	<0.05	Bromobenzene	<0.05
Chloroform	<0.05	1,3,5-Trimethylbenzene	<0.05
2-Butanone (MEK)	<0.5	1,1,2,2-Tetrachloroethane	<0.05
1,2-Dichloroethane (EDC)	<0.05	1,2,3-Trichloropropane	<0.05
1,1,1-Trichloroethane	<0.05	2-Chlorotoluene	<0.05
1,1-Dichloropropene	<0.05	4-Chlorotoluene	<0.05
Carbon Tetrachloride	<0.05	tert-Butylbenzene	<0.05
Benzene	<0.03	1,2,4-Trimethylbenzene	<0.05
Trichloroethene	<0.05	sec-Butylbenzene	<0.05
1,2-Dichloropropane	<0.05	p-Isopropyltoluene	<0.05
Bromodichloromethane	<0.05	1,3-Dichlorobenzene	<0.05
Dibromomethane	<0.05	1,4-Dichlorobenzene	<0.05
4-Methyl-2-pentanone	<0.5	1,2-Dichlorobenzene	<0.05
cis-1,3-Dichloropropene	<0.05	1,2-Dibromo-3-chloropropane	<0.05
Toluene	<0.05	1,2,4-Trichlorobenzene	<0.05
trans-1,3-Dichloropropene	<0.05	Hexachlorobutadiene	<0.05
1,1,2-Trichloroethane	<0.05	Naphthalene	<0.05
2-Hexanone	<0.5	1,2,3-Trichlorobenzene	<0.05

Note: The sample was diluted due to an insufficient amount of sample. Detection limits are raised due to dilution.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID: Method Blank	Client: Environmental Tank Services
Date Received: Not Applicable	Project: MV-Seattle, F&BI 212150
Date Extracted: 12/20/02	Lab ID: 02-968 mb
Date Analyzed: 12/20/02	Data File: 122008.D
Matrix: Soil	Instrument: 5972 -Ins
Units: ug/g (ppm)	Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	93	41	136
1,2-Dichloroethane-d4	97	41	135
Toluene-d8	106	36	134
4-Bromofluorobenzene	90	16	179

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Dichlorodifluoromethane	<0.025	1,3-Dichloropropane	<0.025
Chloromethane	<0.025	Tetrachloroethene	<0.025
Vinyl chloride	<0.025	Dibromochloromethane	<0.025
Bromomethane	<0.025	1,2-Dibromoethane (EDB)	<0.025
Chloroethane	<0.025	Chlorobenzene	<0.025
Trichlorofluoromethane	<0.025	Ethylbenzene	<0.025
Acetone	<0.25	1,1,1,2-Tetrachloroethane	<0.025
1,1-Dichloroethene	<0.025	m,p-Xylene	<0.025
Methylene chloride	<0.25	o-Xylene	<0.025
Methyl t-butyl ether (MTBE)	<0.025	Styrene	<0.025
trans-1,2-Dichloroethene	<0.025	Isopropylbenzene	<0.025
1,1-Dichloroethane	<0.025	Bromoform	<0.025
2,2-Dichloropropane	<0.025	n-Propylbenzene	<0.025
cis-1,2-Dichloroethene	<0.025	Bromobenzene	<0.025
Chloroform	<0.025	1,3,5-Trimethylbenzene	<0.025
2-Butanone (MEK)	<0.25	1,1,2,2-Tetrachloroethane	<0.025
1,2-Dichloroethane (EDC)	<0.025	1,2,3-Trichloropropane	<0.025
1,1,1-Trichloroethane	<0.025	2-Chlorotoluene	<0.025
1,1-Dichloropropene	<0.025	4-Chlorotoluene	<0.025
Carbon Tetrachloride	<0.025	tert-Butylbenzene	<0.025
Benzene	<0.025	1,2,4-Trimethylbenzene	<0.025
Trichloroethene	<0.025	sec-Butylbenzene	<0.025
1,2-Dichloropropane	<0.025	p-Isopropyltoluene	<0.025
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.025
Dibromomethane	<0.025	1,4-Dichlorobenzene	<0.025
4-Methyl-2-pentanone	<0.25	1,2-Dichlorobenzene	<0.025
cis-1,3-Dichloropropene	<0.025	1,2-Dibromo-3-chloropropane	<0.025
Toluene	<0.025	1,2,4-Trichlorobenzene	<0.025
trans-1,3-Dichloropropene	<0.025	Hexachlorobutadiene	<0.025
1,1,2-Trichloroethane	<0.025	Naphthalene	<0.025
2-Hexanone	<0.25	1,2,3-Trichlorobenzene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270C

Client Sample ID: Floor 1  
 Date Received: 12/02/02  
 Date Extracted: 12/19/02  
 Date Analyzed: 01/02/03  
 Matrix: Soil  
 Units: ug/g (ppm)

Client: Environmental Tank Service, Inc.  
 Project: MV-Seattle, F&BI 212150  
 Lab ID: 212150-01 1/50  
 Data File: 010221.D  
 Instrument: GCMS3  
 Operator: YA

Surrogates:	% Recovery	Lower Limit	Upper Limit
2-Fluorophenol	47	41	115
Phenol-d6	35 vo	49	109
Nitrobenzene-d5	53	53	114
2-Fluorobiphenyl	86	47	114
2,4,6-Tribromophenol	0 vo	45	122
Terphenyl-d14	92	49	116

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Phenol	<15	3-Nitroaniline	<1.5
Bis(2-Chloroethyl) ether	<1.5	Acenaphthene	<1.5
2-Chlorophenol	<15	2,4-Dinitrophenol	<15
1,3-Dichlorobenzene	<1.5	Dibenzofuran	<1.5
1,4-Dichlorobenzene	<1.5	2,4-Dinitrotoluene	<1.5
1,2-Dichlorobenzene	<1.5	4-Nitrophenol	<15
Benzyl alcohol	<1.5	Diethyl phthalate	<1.5
Bis(2-chloroisopropyl) ether	<1.5	Fluorene	<1.5
2-Methylphenol	<15	4-Chlorophenyl phenyl ether	<1.5
Hexachloroethane	<1.5	N-Nitrosodiphenylamine	<1.5
N-Nitroso-di-n-propylamine	<1.5	4-Nitroaniline	<1.5
4-Methylphenol	<15	4,6-Dinitro-2-methylphenol	<15
Nitrobenzene	<1.5	4-Bromophenyl phenyl ether	<1.5
Isophorone	<1.5	Hexachlorobenzene	<1.5
2-Nitrophenol	<15	Pentachlorophenol	<15
2,4-Dimethylphenol	<15	Phenanthrene	<1.5
Benzoic acid	<1.5	Anthracene	<1.5
Bis(2-Chloroethoxy)methane	<1.5	Carbazole	<1.5
2,4-Dichlorophenol	<15	Di-n-butyl phthalate	<1.5
1,2,4-Trichlorobenzene	<1.5	Fluoranthene	<1.5
Naphthalene	<1.5	Pyrene	<1.5
Hexachlorobutadiene	<1.5	Benzyl butyl phthalate	<1.5
4-Chloroaniline	<1.5	3,3'-Dichlorobenzidine	<1.5
4-Chloro-3-methylphenol	<15	Benz(a)anthracene	<1.5
2-Methylnaphthalene	<1.5	Chrysene	<1.5
Hexachlorocyclopentadiene	<1.5	Bis(2-Ethylhexyl) phthalate	<1.5
2,4,6-Trichlorophenol	<15	Di-n-octyl phthalate	<1.5
2,4,5-Trichlorophenol	<15	Benzo(a)pyrene	<1.5
2-Chloronaphthalene	<1.5	Benzo(b)fluoranthene	<1.5
2-Nitroaniline	<1.5	Benzo(k)fluoranthene	<1.5
Dimethyl phthalate	<1.5	Indeno(1,2,3-cd)pyrene	<1.5
Acenaphthylene	<1.5	Dibenzo(a,h)anthracene	<1.5
2,6-Dinitrotoluene	<1.5	Benzo(g,h,i)perylene	<1.5

vo - The value reported fell outside the control limits established for this analyte.

Note: The sample was diluted due to high levels of interfering compounds. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270C

Client Sample ID: Floor 2  
 Date Received: 12/02/02  
 Date Extracted: 12/19/02  
 Date Analyzed: 01/02/03  
 Matrix: Soil  
 Units: ug/g (ppm)

Client: Environmental Tank Service, Inc.  
 Project: MV-Seattle, F&BI 212150  
 Lab ID: 212150-02 1/50  
 Data File: 010222.D  
 Instrument: GCMS3  
 Operator: YA

Surrogates:	% Recovery	Lower Limit	Upper Limit
2-Fluorophenol	47	41	115
Phenol-d6	35 vo	49	109
Nitrobenzene-d5	55	53	114
2-Fluorobiphenyl	81	47	114
2,4,6-Tribromophenol	0 vo	45	122
Terphenyl-d14	89	49	116

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Phenol	<15	3-Nitroaniline	<1.5
Bis(2-Chloroethyl) ether	<1.5	Acenaphthene	<1.5
2-Chlorophenol	<15	2,4-Dinitrophenol	<15
1,3-Dichlorobenzene	<1.5	Dibenzofuran	<1.5
1,4-Dichlorobenzene	<1.5	2,4-Dinitrotoluene	<1.5
1,2-Dichlorobenzene	<1.5	4-Nitrophenol	<15
Benzyl alcohol	<1.5	Diethyl phthalate	<1.5
Bis(2-chloroisopropyl) ether	<1.5	Fluorene	<1.5
2-Methylphenol	<15	4-Chlorophenyl phenyl ether	<1.5
Hexachloroethane	<1.5	N-Nitrosodiphenylamine	<1.5
N-Nitroso-di-n-propylamine	<1.5	4-Nitroaniline	<1.5
4-Methylphenol	<15	4,6-Dinitro-2-methylphenol	<15
Nitrobenzene	<1.5	4-Bromophenyl phenyl ether	<1.5
Isophorone	<1.5	Hexachlorobenzene	<1.5
2-Nitrophenol	<15	Pentachlorophenol	<15
2,4-Dimethylphenol	<15	Phenanthrene	<1.5
Benzoic acid	<1.5	Anthracene	<1.5
Bis(2-Chloroethoxy)methane	<1.5	Carbazole	<1.5
2,4-Dichlorophenol	<15	Di-n-butyl phthalate	<1.5
1,2,4-Trichlorobenzene	<1.5	Fluoranthene	<1.5
Naphthalene	<1.5	Pyrene	<1.5
Hexachlorobutadiene	<1.5	Benzyl butyl phthalate	<1.5
4-Chloroaniline	<1.5	3,3'-Dichlorobenzidine	<1.5
4-Chloro-3-methylphenol	<15	Benz(a)anthracene	<1.5
2-Methylnaphthalene	<1.5	Chrysene	<1.5
Hexachlorocyclopentadiene	<1.5	Bis(2-Ethylhexyl) phthalate	<1.5
2,4,6-Trichlorophenol	<15	Di-n-octyl phthalate	<1.5
2,4,5-Trichlorophenol	<15	Benzo(a)pyrene	<1.5
2-Chloronaphthalene	<1.5	Benzo(b)fluoranthene	<1.5
2-Nitroaniline	<1.5	Benzo(k)fluoranthene	<1.5
Dimethyl phthalate	<1.5	Indeno(1,2,3-cd)pyrene	<1.5
Acenaphthylene	<1.5	Dibenzo(a,h)anthracene	<1.5
2,6-Dinitrotoluene	<1.5	Benzo(g,h,i)perylene	<1.5

vo - The value reported fell outside the control limits established for this analyte.

Note: The sample was diluted due to high levels of interfering compounds. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270C

Client Sample ID: Floor 3	Client: Environmental Tank Service, Inc.
Date Received: 12/02/02	Project: MV-Seattle, F&BI 212150
Date Extracted: 12/19/02	Lab ID: 212150-03 1/50
Date Analyzed: 01/02/03	Data File: 010223.D
Matrix: Soil	Instrument: GCMS3
Units: ug/g (ppm)	Operator: YA

Surrogates:	% Recovery	Lower Limit	Upper Limit
2-Fluorophenol	51	41	115
Phenol-d6	31 vo	49	109
Nitrobenzene-d5	57	53	114
2-Fluorobiphenyl	91	47	114
2,4,6-Tribromophenol	0 vo	45	122
Terphenyl-d14	77	49	116

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Phenol	<15	3-Nitroaniline	<1.5
Bis(2-Chloroethyl) ether	<1.5	Acenaphthene	<1.5
2-Chlorophenol	<15	2,4-Dinitrophenol	<15
1,3-Dichlorobenzene	<1.5	Dibenzofuran	<1.5
1,4-Dichlorobenzene	<1.5	2,4-Dinitrotoluene	<1.5
1,2-Dichlorobenzene	<1.5	4-Nitrophenol	<15
Benzyl alcohol	<1.5	Diethyl phthalate	<1.5
Bis(2-chloroisopropyl) ether	<1.5	Fluorene	<1.5
2-Methylphenol	<15	4-Chlorophenyl phenyl ether	<1.5
Hexachloroethane	<1.5	N-Nitrosodiphenylamine	<1.5
N-Nitroso-di-n-propylamine	<1.5	4-Nitroaniline	<1.5
4-Methylphenol	<15	4,6-Dinitro-2-methylphenol	<15
Nitrobenzene	<1.5	4-Bromophenyl phenyl ether	<1.5
Isophorone	<1.5	Hexachlorobenzene	<1.5
2-Nitrophenol	<15	Pentachlorophenol	<15
2,4-Dimethylphenol	<15	Phenanthrene	<1.5
Benzoic acid	<1.5	Anthracene	<1.5
Bis(2-Chloroethoxy)methane	<1.5	Carbazole	<1.5
2,4-Dichlorophenol	<15	Di-n-butyl phthalate	<1.5
1,2,4-Trichlorobenzene	<1.5	Fluoranthene	<1.5
Naphthalene	<1.5	Pyrene	<1.5
Hexachlorobutadiene	<1.5	Benzyl butyl phthalate	<1.5
4-Chloroaniline	<1.5	3,3'-Dichlorobenzidine	<1.5
4-Chloro-3-methylphenol	<15	Benz(a)anthracene	<1.5
2-Methylnaphthalene	<1.5	Chrysene	<1.5
Hexachlorocyclopentadiene	<1.5	Bis(2-Ethylhexyl) phthalate	<1.5
2,4,6-Trichlorophenol	<15	Di-n-octyl phthalate	<1.5
2,4,5-Trichlorophenol	<15	Benzo(a)pyrene	<1.5
2-Chloronaphthalene	<1.5	Benzo(b)fluoranthene	<1.5
2-Nitroaniline	<1.5	Benzo(k)fluoranthene	<1.5
Dimethyl phthalate	<1.5	Indeno(1,2,3-cd)pyrene	<1.5
Acenaphthylene	<1.5	Dibenzo(a,h)anthracene	<1.5
2,6-Dinitrotoluene	<1.5	Benzo(g,h,i)perylene	<1.5

vo - The value reported fell outside the control limits established for this analyte.

Note: The sample was diluted due to high levels of interfering compounds. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270C

Client Sample ID: Floor 4 UST Top	Client: Environmental Tank Service, Inc.
Date Received: 12/02/02	Project: MV-Seattle, F&BI 212150
Date Extracted: 12/19/02	Lab ID: 212150-04 1/50
Date Analyzed: 01/02/03	Data File: 010224.D
Matrix: Soil	Instrument: GCMS3
Units: ug/g (ppm)	Operator: YA

	% Recovery	Lower Limit	Upper Limit
Surrogates:			
2-Fluorophenol	0 vo	41	115
Phenol-d6	0 vo	49	109
Nitrobenzene-d5	0 vo	53	114
2-Fluorobiphenyl	81	47	114
2,4,6-Tribromophenol	0 vo	45	122
Terphenyl-d14	97	49	116

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Phenol	<7.5	3-Nitroaniline	<7.5
Bis(2-Chloroethyl) ether	<7.5	Acenaphthene	<7.5
2-Chlorophenol	<7.5	2,4-Dinitrophenol	<7.5
1,3-Dichlorobenzene	<7.5	Dibenzofuran	<7.5
1,4-Dichlorobenzene	<7.5	2,4-Dinitrotoluene	<7.5
1,2-Dichlorobenzene	<7.5	4-Nitrophenol	<7.5
Benzyl alcohol	<7.5	Diethyl phthalate	<7.5
Bis(2-chloroisopropyl) ether	<7.5	Fluorene	<7.5
2-Methylphenol	<7.5	4-Chlorophenyl phenyl ether	<7.5
Hexachloroethane	<7.5	N-Nitrosodiphenylamine	<7.5
N-Nitroso-di-n-propylamine	<7.5	4-Nitroaniline	<7.5
4-Methylphenol	<7.5	4,6-Dinitro-2-methylphenol	<7.5
Nitrobenzene	<7.5	4-Bromophenyl phenyl ether	<7.5
Isophorone	<7.5	Hexachlorobenzene	<7.5
2-Nitrophenol	<7.5	Pentachlorophenol	<7.5
2,4-Dimethylphenol	<7.5	Phenanthrene	<7.5
Benzoic acid	<7.5	Anthracene	<7.5
Bis(2-Chloroethoxy)methane	<7.5	Carbazole	<7.5
2,4-Dichlorophenol	<7.5	Di-n-butyl phthalate	<7.5
1,2,4-Trichlorobenzene	<7.5	Fluoranthene	<7.5
Naphthalene	<7.5	Pyrene	<7.5
Hexachlorobutadiene	<7.5	Benzyl butyl phthalate	<7.5
4-Chloroaniline	<7.5	3,3'-Dichlorobenzidine	<7.5
4-Chloro-3-methylphenol	<7.5	Benz(a)anthracene	<7.5
2-Methylnaphthalene	<7.5	Chrysene	<7.5
Hexachlorocyclopentadiene	<7.5	Bis(2-Ethylhexyl) phthalate	11
2,4,6-Trichlorophenol	<7.5	Di-n-octyl phthalate	<7.5
2,4,5-Trichlorophenol	<7.5	Benzo(a)pyrene	<7.5
2-Chloronaphthalene	<7.5	Benzo(b)fluoranthene	<7.5
2-Nitroaniline	<7.5	Benzo(k)fluoranthene	<7.5
Dimethyl phthalate	<7.5	Indeno(1,2,3-cd)pyrene	<7.5
Acenaphthylene	<7.5	Dibenzo(a,h)anthracene	<7.5
2,6-Dinitrotoluene	<7.5	Benzo(g,h,i)perylene	<7.5

vo - The value reported fell outside the control limits established for this analyte.

Note: The sample was diluted due to high levels of interfering compounds. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270C

Client Sample ID: Floor 4 3' Below UST	Client: Environmental Tank Service, Inc.
Date Received: 12/02/02	Project: MV-Seattle, F&BI 212150
Date Extracted: 12/19/02	Lab ID: 212150-05 1/50
Date Analyzed: 01/02/03	Data File: 010225.D
Matrix: Soil	Instrument: GCMS3
Units: ug/g (ppm)	Operator: YA

Surrogates:	% Recovery	Lower Limit	Upper Limit
2-Fluorophenol	0 vo	41	115
Phenol-d6	0 vo	49	109
Nitrobenzene-d5	0 vo	53	114
2-Fluorobiphenyl	91	47	114
2,4,6-Tribromophenol	0 vo	45	122
Terphenyl-d14	97	49	116

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Phenol	<75	3-Nitroaniline	<7.5
Bis(2-Chloroethyl) ether	<7.5	Acenaphthene	<7.5
2-Chlorophenol	<75	2,4-Dinitrophenol	<75
1,3-Dichlorobenzene	<7.5	Dibenzofuran	<7.5
1,4-Dichlorobenzene	<7.5	2,4-Dinitrotoluene	<7.5
1,2-Dichlorobenzene	<7.5	4-Nitrophenol	<75
Benzyl alcohol	<7.5	Diethyl phthalate	<7.5
Bis(2-chloroisopropyl) ether	<7.5	Fluorene	<7.5
2-Methylphenol	<75	4-Chlorophenyl phenyl ether	<7.5
Hexachloroethane	<7.5	N-Nitrosodiphenylamine	<7.5
N-Nitroso-di-n-propylamine	<7.5	4-Nitroaniline	<7.5
4-Methylphenol	<75	4,6-Dinitro-2-methylphenol	<75
Nitrobenzene	<7.5	4-Bromophenyl phenyl ether	<7.5
Isophorone	<7.5	Hexachlorobenzene	<7.5
2-Nitrophenol	<75	Pentachlorophenol	<75
2,4-Dimethylphenol	<75	Phenanthrene	<7.5
Benzoic acid	<7.5	Anthracene	<7.5
Bis(2-Chloroethoxy)methane	<7.5	Carbazole	<7.5
2,4-Dichlorophenol	<75	Di-n-butyl phthalate	<7.5
1,2,4-Trichlorobenzene	<7.5	Fluoranthene	<7.5
Naphthalene	20	Pyrene	<7.5
Hexachlorobutadiene	<7.5	Benzyl butyl phthalate	<7.5
4-Chloroaniline	<7.5	3,3'-Dichlorobenzidine	<7.5
4-Chloro-3-methylphenol	<75	Benz(a)anthracene	<7.5
2-Methylnaphthalene	61	Chrysene	<7.5
Hexachlorocyclopentadiene	<7.5	Bis(2-Ethylhexyl) phthalate	7.7
2,4,6-Trichlorophenol	<75	Di-n-octyl phthalate	<7.5
2,4,5-Trichlorophenol	<75	Benzo(a)pyrene	<7.5
2-Chloronaphthalene	<7.5	Benzo(b)fluoranthene	<7.5
2-Nitroaniline	<7.5	Benzo(k)fluoranthene	<7.5
Dimethyl phthalate	<7.5	Indeno(1,2,3-cd)pyrene	<7.5
Acenaphthylene	<7.5	Dibenzo(a,h)anthracene	<7.5
2,6-Dinitrotoluene	<7.5	Benzo(g,h,i)perylene	<7.5

vo - The value reported fell outside the control limits established for this analyte.

Note: The sample was diluted due to high levels of interfering compounds. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270C

Client Sample ID: Sidewall-1  
 Date Received: 12/02/02  
 Date Extracted: 12/19/02  
 Date Analyzed: 01/03/03  
 Matrix: Soil  
 Units: ug/g (ppm)

Client: Environmental Tank Service, Inc.  
 Project: MV-Seattle, F&BI 212150  
 Lab ID: 212150-06 1/50  
 Data File: 010226.D  
 Instrument: GCMS3  
 Operator: YA

Surrogates:	% Recovery	Lower Limit	Upper Limit
2-Fluorophenol	0 vo	41	115
Phenol-d6	0 vo	49	109
Nitrobenzene-d5	0 vo	53	114
2-Fluorobiphenyl	93	47	114
2,4,6-Tribromophenol	0 vo	45	122
Terphenyl-d14	104	49	116

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Phenol	<75	3-Nitroaniline	<7.5
Bis(2-Chloroethyl) ether	<7.5	Acenaphthene	<7.5
2-Chlorophenol	<75	2,4-Dinitrophenol	<75
1,3-Dichlorobenzene	<7.5	Dibenzofuran	<7.5
1,4-Dichlorobenzene	<7.5	2,4-Dinitrotoluene	<7.5
1,2-Dichlorobenzene	<7.5	4-Nitrophenol	<75
Benzyl alcohol	<7.5	Diethyl phthalate	<7.5
Bis(2-chloroisopropyl) ether	<7.5	Fluorene	<7.5
2-Methylphenol	<75	4-Chlorophenyl phenyl ether	<7.5
Hexachloroethane	<7.5	N-Nitrosodiphenylamine	<7.5
N-Nitroso-di-n-propylamine	<7.5	4-Nitroaniline	<7.5
4-Methylphenol	<75	4,6-Dinitro-2-methylphenol	<75
Nitrobenzene	<7.5	4-Bromophenyl phenyl ether	<7.5
Isophorone	<7.5	Hexachlorobenzene	<7.5
2-Nitrophenol	<75	Pentachlorophenol	<75
2,4-Dimethylphenol	<75	Phenanthrene	<7.5
Benzoic acid	<7.5	Anthracene	<7.5
Bis(2-Chloroethoxy)methane	<7.5	Carbazole	<7.5
2,4-Dichlorophenol	<75	Di-n-butyl phthalate	<7.5
1,2,4-Trichlorobenzene	<7.5	Fluoranthene	<7.5
Naphthalene	<7.5	Pyrene	<7.5
Hexachlorobutadiene	<7.5	Benzyl butyl phthalate	<7.5
4-Chloroaniline	<7.5	3,3'-Dichlorobenzidine	<7.5
4-Chloro-3-methylphenol	<75	Benz(a)anthracene	<7.5
2-Methylnaphthalene	<7.5	Chrysene	<7.5
Hexachlorocyclopentadiene	<7.5	Bis(2-Ethylhexyl) phthalate	<7.5
2,4,6-Trichlorophenol	<75	Di-n-octyl phthalate	<7.5
2,4,5-Trichlorophenol	<75	Benzo(a)pyrene	<7.5
2-Chloronaphthalene	<7.5	Benzo(b)fluoranthene	<7.5
2-Nitroaniline	<7.5	Benzo(k)fluoranthene	<7.5
Dimethyl phthalate	<7.5	Indeno(1,2,3-cd)pyrene	<7.5
Acenaphthylene	<7.5	Dibenzo(a,h)anthracene	<7.5
2,6-Dinitrotoluene	<7.5	Benzo(g,h,i)perylene	<7.5

vo - The value reported fell outside the control limits established for this analyte.

Note: The sample was diluted due to high levels of interfering compounds. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270C

Client Sample ID: Sidewall-2	Client: Environmental Tank Service, Inc.
Date Received: 12/02/02	Project: MV-Seattle, F&BI 212150
Date Extracted: 12/19/02	Lab ID: 212150-07 1/50
Date Analyzed: 01/03/03	Data File: 010227.D
Matrix: Soil	Instrument: GCMS3
Units: ug/g (ppm)	Operator: YA

Surrogates:	% Recovery	Lower Limit	Upper Limit
2-Fluorophenol	52	41	115
Phenol-d6	31 vo	49	109
Nitrobenzene-d5	60	53	114
2-Fluorobiphenyl	91	47	114
2,4,6-Tribromophenol	0 vo	45	122
Terphenyl-d14	89	49	116

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Phenol	<15	3-Nitroaniline	<1.5
Bis(2-Chloroethyl) ether	<1.5	Acenaphthene	<1.5
2-Chlorophenol	<15	2,4-Dinitrophenol	<15
1,3-Dichlorobenzene	<1.5	Dibenzofuran	<1.5
1,4-Dichlorobenzene	<1.5	2,4-Dinitrotoluene	<1.5
1,2-Dichlorobenzene	<1.5	4-Nitrophenol	<15
Benzyl alcohol	<1.5	Diethyl phthalate	<1.5
Bis(2-chloroisopropyl) ether	<1.5	Fluorene	<1.5
2-Methylphenol	<15	4-Chlorophenyl phenyl ether	<1.5
Hexachloroethane	<1.5	N-Nitrosodiphenylamine	<1.5
N-Nitroso-di-n-propylamine	<1.5	4-Nitroaniline	<1.5
4-Methylphenol	<15	4,6-Dinitro-2-methylphenol	<15
Nitrobenzene	<1.5	4-Bromophenyl phenyl ether	<1.5
Isophorone	<1.5	Hexachlorobenzene	<1.5
2-Nitrophenol	<15	Pentachlorophenol	<15
2,4-Dimethylphenol	<15	Phenanthrene	<1.5
Benzoic acid	<1.5	Anthracene	<1.5
Bis(2-Chloroethoxy)methane	<1.5	Carbazole	<1.5
2,4-Dichlorophenol	<15	Di-n-butyl phthalate	<1.5
1,2,4-Trichlorobenzene	<1.5	Fluoranthene	<1.5
Naphthalene	<1.5	Pyrene	<1.5
Hexachlorobutadiene	<1.5	Benzyl butyl phthalate	<1.5
4-Chloroaniline	<1.5	3,3'-Dichlorobenzidine	<1.5
4-Chloro-3-methylphenol	<15	Benz(a)anthracene	<1.5
2-Methylnaphthalene	<1.5	Chrysene	<1.5
Hexachlorocyclopentadiene	<1.5	Bis(2-Ethylhexyl) phthalate	<1.5
2,4,6-Trichlorophenol	<15	Di-n-octyl phthalate	<1.5
2,4,5-Trichlorophenol	<15	Benzo(a)pyrene	<1.5
2-Chloronaphthalene	<1.5	Benzo(b)fluoranthene	<1.5
2-Nitroaniline	<1.5	Benzo(k)fluoranthene	<1.5
Dimethyl phthalate	<1.5	Indeno(1,2,3-cd)pyrene	<1.5
Acenaphthylene	<1.5	Dibenzo(a,h)anthracene	<1.5
2,6-Dinitrotoluene	<1.5	Benzo(g,h,i)perylene	<1.5

vo - The value reported fell outside the control limits established for this analyte.

Note: The sample was diluted due to high levels of interfering compounds. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Semivolatile Compounds By EPA Method 8270C

Client Sample ID: Sidewall-3  
 Date Received: 12/02/02  
 Date Extracted: 12/19/02  
 Date Analyzed: 12/30/02  
 Matrix: Soil  
 Units: ug/g (ppm)

Client: Environmental Tank Service, Inc.  
 Project: MV-Seattle, F&BI 212150  
 Lab ID: 212150-08  
 Data File: 123011.D  
 Instrument: GCMS3  
 Operator: YA

Surrogates:	% Recovery	Lower Limit	Upper Limit
2-Fluorophenol	93	41	115
Phenol-d6	91	49	109
Nitrobenzene-d5	98	53	114
2-Fluorobiphenyl	91	47	114
2,4,6-Tribromophenol	100	45	122
Terphenyl-d14	89	49	116

Compounds:	Concentration ug/g (ppm)	Compounds:	Concentration ug/g (ppm)
Phenol	<0.3	3-Nitroaniline	<0.03
Bis(2-Chloroethyl) ether	<0.03	Acenaphthene	<0.03
2-Chlorophenol	<0.3	2,4-Dinitrophenol	<0.3
1,3-Dichlorobenzene	<0.03	Dibenzofuran	<0.03
1,4-Dichlorobenzene	<0.03	2,4-Dinitrotoluene	<0.03
1,2-Dichlorobenzene	<0.03	4-Nitrophenol	<0.3
Benzyl alcohol	<0.03	Diethyl phthalate	<0.03
Bis(2-chloroisopropyl) ether	<0.03	Fluorene	<0.03
2-Methylphenol	<0.3	4-Chlorophenyl phenyl ether	<0.03
Hexachloroethane	<0.03	N-Nitrosodiphenylamine	<0.03
N-Nitroso-di-n-propylamine	<0.03	4-Nitroaniline	<0.03
4-Methylphenol	<0.3	4,6-Dinitro-2-methylphenol	<0.3
Nitrobenzene	<0.03	4-Bromophenyl phenyl ether	<0.03
Isophorone	<0.03	Hexachlorobenzene	<0.03
2-Nitrophenol	<0.3	Pentachlorophenol	<0.3
2,4-Dimethylphenol	<0.3	Phenanthrene	<0.03
Benzoic acid	<0.03	Anthracene	<0.03
Bis(2-Chloroethoxy)methane	<0.03	Carbazole	<0.03
2,4-Dichlorophenol	<0.3	Di-n-butyl phthalate	<0.03
1,2,4-Trichlorobenzene	<0.03	Fluoranthene	<0.03
Naphthalene	<0.03	Pyrene	0.04
Hexachlorobutadiene	<0.03	Benzyl butyl phthalate	0.04
4-Chloroaniline	<0.03	3,3'-Dichlorobenzidine	<0.03
4-Chloro-3-methylphenol	<0.3	Benz(a)anthracene	<0.03
2-Methylnaphthalene	<0.03	Chrysene	<0.03
Hexachlorocyclopentadiene	<0.03	Bis(2-Ethylhexyl) phthalate	0.06
2,4,6-Trichlorophenol	<0.3	Di-n-octyl phthalate	<0.03
2,4,5-Trichlorophenol	<0.3	Benzo(a)pyrene	<0.03
2-Chloronaphthalene	<0.03	Benzo(b)fluoranthene	<0.03
2-Nitroaniline	<0.03	Benzo(k)fluoranthene	<0.03
Dimethyl phthalate	<0.03	Indeno(1,2,3-cd)pyrene	<0.03
Acenaphthylene	<0.03	Dibenzo(a,h)anthracene	<0.03
2,6-Dinitrotoluene	<0.03	Benzo(g,h,i)perylene	<0.03

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270C

Client Sample ID: Method Blank  
 Date Received: Not Applicable  
 Date Extracted: 12/19/02  
 Date Analyzed: 12/30/02  
 Matrix: Soil  
 Units: ug/g (ppm)

Client: Environmental Tank Service, Inc.  
 Project: MV-Seattle, F&BI 212150  
 Lab ID: 02-940 mb2  
 Data File: 123009.D  
 Instrument: GCMS3  
 Operator: YA

Surrogates:	% Recovery	Lower Limit	Upper Limit
2-Fluorophenol	93	41	115
Phenol-d6	92	49	109
Nitrobenzene-d5	102	53	114
2-Fluorobiphenyl	95	47	114
2,4,6-Tribromophenol	99	45	122
Terphenyl-d14	87	49	116

Compounds:	Concentration ug/g (ppm)
Phenol	<0.3
Bis(2-Chloroethyl) ether	<0.03
2-Chlorophenol	<0.3
1,3-Dichlorobenzene	<0.03
1,4-Dichlorobenzene	<0.03
1,2-Dichlorobenzene	<0.03
Benzyl alcohol	<0.03
Bis(2-chloroisopropyl) ether	<0.03
2-Methylphenol	<0.3
Hexachloroethane	<0.03
N-Nitroso-di-n-propylamine	<0.03
4-Methylphenol	<0.3
Nitrobenzene	<0.03
Isophorone	<0.03
2-Nitrophenol	<0.3
2,4-Dimethylphenol	<0.3
Benzoic acid	<0.03
Bis(2-Chloroethoxy)methane	<0.03
2,4-Dichlorophenol	<0.3
1,2,4-Trichlorobenzene	<0.03
Naphthalene	<0.03
Hexachlorobutadiene	<0.03
4-Chloroaniline	<0.03
4-Chloro-3-methylphenol	<0.3
2-Methylnaphthalene	<0.03
Hexachlorocyclopentadiene	<0.03
2,4,6-Trichlorophenol	<0.3
2,4,5-Trichlorophenol	<0.3
2-Chloronaphthalene	<0.03
2-Nitroaniline	<0.03
Dimethyl phthalate	<0.03
Acenaphthylene	<0.03
2,6-Dinitrotoluene	<0.03

Compounds:	Concentration ug/g (ppm)
3-Nitroaniline	<0.03
Acenaphthene	<0.03
2,4-Dinitrophenol	<0.3
Dibenzofuran	<0.03
2,4-Dinitrotoluene	<0.03
4-Nitrophenol	<0.3
Diethyl phthalate	<0.03
Fluorene	<0.03
4-Chlorophenyl phenyl ether	<0.03
N-Nitrosodiphenylamine	<0.03
4-Nitroaniline	<0.03
4,6-Dinitro-2-methylphenol	<0.3
4-Bromophenyl phenyl ether	<0.03
Hexachlorobenzene	<0.03
Pentachlorophenol	<0.3
Phenanthrene	<0.03
Anthracene	<0.03
Carbazole	<0.03
Di-n-butyl phthalate	<0.03
Fluoranthene	<0.03
Pyrene	<0.03
Benzyl butyl phthalate	<0.03
3,3'-Dichlorobenzidine	<0.03
Benz(a)anthracene	<0.03
Chrysene	<0.03
Bis(2-Ethylhexyl) phthalate	<0.03
Di-n-octyl phthalate	<0.03
Benzo(a)pyrene	<0.03
Benzo(b)fluoranthene	<0.03
Benzo(k)fluoranthene	<0.03
Indeno(1,2,3-cd)pyrene	<0.03
Dibenzo(a,h)anthracene	<0.03
Benzo(g,h,i)perylene	<0.03

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/07/03  
 Date Received: 12/02/02  
 Project: MV-Seattle, F&BI 212150  
 Date Extracted: 12/20/02  
 Date Analyzed: 12/23/02

**RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES  
 FOR PCBs AS AROCLORS  
 USING EPA METHOD 8082  
 Results Reported as  $\mu\text{g/g}$  (ppm)**

<u>Sample ID</u> Laboratory ID	Aroclor								<u>Surrogate</u> (% Recovery)
	<u>1221</u>	<u>1232</u>	<u>1016</u>	<u>1242</u>	<u>1248</u>	<u>1254</u>	<u>1260</u>	<u>1262</u>	
Floor 1 212150-01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	73
Floor 2 212150-02	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	52
Floor 3 212150-03	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	86
Floor 4 UST Top 212150-04	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	74
Floor 4 3' below UST 212150-05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	85
Sidewall 1 212150-06	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	93
Sidewall 2 212150-07	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	83
Sidewall 3 212150-08	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	81
Method Blank	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	107

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/07/03  
Date Received: 12/02/02  
Project: MV-Seattle, F&BI 212150  
Date Extracted: 12/23/02  
Date Analyzed: 12/24/02

**RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES  
FOR TOTAL METALS  
BY INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Results Reported as  $\mu\text{g/g}$  (ppm)

<u>Sample ID</u> Laboratory ID	<u>Total Lead</u>
Floor 1 212150-01	33
Floor 2 212150-02	30
Floor 3 212150-03	<2.0
Floor 4 UST Top 212150-04	2,200 ve
Floor 4 3' below UST 212150-05	16
Sidewall 1 212150-06	20
Sidewall 2 212150-07	38
Method Blank	<2.0

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/07/03

Date Received: 12/02/02

Project: MV-Seattle, F&BI 212150

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-Gx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Gasoline	µg/g (ppm)	20	108	104	51-141	4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/07/03  
 Date Received: 12/02/02  
 Project: MV-Seattle, F&BI 212150

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

Laboratory Code: 212151-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Diesel Extended	µg/g (ppm)	<50	<50	nm

Laboratory Code: 212151-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	µg/g (ppm)	500	<50	129	119	62-142	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	µg/g (ppm)	500	120	66-132

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 01/07/03  
 Date Received: 12/02/02  
 Project: MV-Seattle, F&BI 212150

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
 FOR VOLATILES BY EPA METHOD 8260B**

Laboratory Code: 212150-03 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
1,1-Dichloroethene	µg/g (ppm)	<0.025	<0.025	nm
Benzene	µg/g (ppm)	<0.025	<0.025	nm
Trichloroethene	µg/g (ppm)	<0.025	<0.025	nm
Toluene	µg/g (ppm)	<0.025	<0.025	nm
Chlorobenzene	µg/g (ppm)	<0.025	<0.025	nm

Laboratory Code: 212150-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
1,1-Dichloroethene	µg/g (ppm)	2.5	<0.025	38	30-117
Benzene	µg/g (ppm)	2.5	<0.025	61	41-118
Trichloroethene	µg/g (ppm)	2.5	<0.025	58	35-115
Toluene	µg/g (ppm)	2.5	<0.025	52	34-114
Chlorobenzene	µg/g (ppm)	2.5	<0.025	55	41-113

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
1,1-Dichloroethene	µg/g (ppm)	2.5	72	73	43-136	1
Benzene	µg/g (ppm)	2.5	88	91	50-136	3
Trichloroethene	µg/g (ppm)	2.5	85	83	52-126	2
Toluene	µg/g (ppm)	2.5	78	78	57-121	0
Chlorobenzene	µg/g (ppm)	2.5	82	84	64-118	2

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/07/03  
 Date Received: 12/02/02  
 Project: MV-Seattle, F&BI 212150

**QUALITY ASSURANCE RESULTS  
 FOR THE ANALYSIS OF SOIL SAMPLES FOR ETHERS  
 USING EPA METHOD 8260B**

Laboratory Code: 212150-03 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Methyl t-butyl ether (MTBE)	µg/g (ppm)	<0.025	<0.025	nm

Laboratory Code: 212150-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Methyl t-butyl ether (MTBE)	µg/g (ppm)	2.5	<0.025	64	58-100

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Methyl t-butyl ether (MTBE)	µg/g (ppm)	2.5	92	86	64-109	7

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 01/07/03  
 Date Received: 12/02/02  
 Project: MV-Seattle, F&BI 212150

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
 FOR SEMIVOLATILES BY EPA METHOD 8270C**

Laboratory Code: 212150-08 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Phenol	µg/g (ppm)	<0.3	<0.3	nm
2-Chlorophenol	µg/g (ppm)	<0.3	<0.3	nm
1,4-Dichlorobenzene	µg/g (ppm)	<0.03	<0.03	nm
N-Nitroso-di-n-propylamine	µg/g (ppm)	<0.03	<0.03	nm
1,2,4-Trichlorobenzene	µg/g (ppm)	<0.03	<0.03	nm
4-Chloro-3-methylphenol	µg/g (ppm)	<0.3	<0.3	nm
Acenaphthene	µg/g (ppm)	<0.03	<0.03	nm
2,4-Dinitrotoluene	µg/g (ppm)	<0.03	<0.03	nm
4-Nitrophenol	µg/g (ppm)	<0.3	<0.3	nm
Pentachlorophenol	µg/g (ppm)	<0.3	<0.3	nm
Pyrene	µg/g (ppm)	0.04	0.04	0

Laboratory Code: 212150-08 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Phenol	µg/g (ppm)	2.5	<0.3	84	17-138
2-Chlorophenol	µg/g (ppm)	2.5	<0.3	88	25-131
1,4-Dichlorobenzene	µg/g (ppm)	1.7	<0.03	87	40-122
N-Nitroso-di-n-propylamine	µg/g (ppm)	1.7	<0.03	64	38-127
1,2,4-Trichlorobenzene	µg/g (ppm)	1.7	<0.03	90	42-128
4-Chloro-3-methylphenol	µg/g (ppm)	2.5	<0.3	83	21-137
Acenaphthene	µg/g (ppm)	1.7	<0.03	91	48-120
2,4-Dinitrotoluene	µg/g (ppm)	1.7	<0.03	73	25-136
4-Nitrophenol	µg/g (ppm)	2.5	<0.3	59	11-133
Pentachlorophenol	µg/g (ppm)	2.5	<0.3	77	13-142
Pyrene	µg/g (ppm)	1.7	0.04	82	57-119

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/07/03

Date Received: 12/02/02

Project: MV-Seattle, F&BI 212150

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR SEMIVOLATILES BY EPA METHOD 8270C**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Phenol	µg/g (ppm)	2.5	94	94	18-135	0
2-Chlorophenol	µg/g (ppm)	2.5	97	98	24-132	1
1,4-Dichlorobenzene	µg/g (ppm)	1.7	95	96	33-125	1
N-Nitroso-di-n-propylamine	µg/g (ppm)	1.7	92	91	27-133	1
1,2,4-Trichlorobenzene	µg/g (ppm)	1.7	97	98	34-133	1
4-Chloro-3-methylphenol	µg/g (ppm)	2.5	88	89	21-136	1
Acenaphthene	µg/g (ppm)	1.7	97	100	35-129	3
2,4-Dinitrotoluene	µg/g (ppm)	1.7	99	104	20-141	4
4-Nitrophenol	µg/g (ppm)	2.5	77	87	6-135	13
Pentachlorophenol	µg/g (ppm)	2.5	70	73	8-151	4
Pyrene	µg/g (ppm)	1.7	74	74	39-143	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/07/03

Date Received: 12/02/02

Project: MV-Seattle, F&BI 212150

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES  
FOR POLYCHLORINATED BIPHENYLS AS AROCLORS  
BY EPA METHOD 8082**

Laboratory Code: 211159-04 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Aroclor 1016	µg/g (ppm)	<0.1	<0.1	nm
Aroclor 1260	µg/g (ppm)	<0.1	<0.1	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	µg/g (ppm)	0.8	87	89	65-135	2
Aroclor 1260	µg/g (ppm)	0.8	84	87	65-135	4

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/07/03

Date Received: 12/02/02

Project: MV-Seattle, F&BI 212150

**QUALITY ASSURANCE RESULTS  
FROM TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Laboratory Code: 212161-09 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Lead	µg/g (ppm)	4.2	4.5	7	0-20

Laboratory Code: 212161-09 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	Acceptance Criteria
Lead	µg/g (ppm)	20	4.2	84	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Lead	µg/g (ppm)	20	101	100	80-120	1

KEY 12/18/02 D03

Send Report To Tom Vaughn  
 Company Environmental Tank Service, Inc.  
 Address 3260 "B" St. NW, Suite E  
 City, State, ZIP Auburn, WA 98001  
 Phone # (253) 833-4375 Fax # (253) 939-2898

SAMPLERS (signature) Tom Vaughn  
 PROJECT NAME/NO. MV-Seattle PO # \_\_\_\_\_  
 REMARKS \_\_\_\_\_

Page # 1 of 1  
 TURNAROUND TIME  
 Standard (2 Weeks)  
 RUSH  
 Rush charges authorized by: \_\_\_\_\_  
 SAMPLE DISPOSAL  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260 w/MTBE	SVOCs by 8270	HFS	MwTPH-DX	Lead	8260 GM	PCB'S	
Floor 1	01	12/15	0900	Soil	01	X	X	X	X	X	X	X	X	X		
Floor 2	02					X	X	X	X	X	X	X	X	X		
Floor 3	03					X	X	X	X	X	X	X	X	X		
Floor 4 UST Top	04					X	X	X	X	X	X	X	X	X		
Floor 4 3' below UST	05					X	X	X	X	X	X	X	X	X		
Sidewall -1	06					X	X	X	X	X	X	X	X	X		
Sidewall 2	07	✓	✓	✓	✓	X	X	X	X	X	X	X	X	X		
Sidewall 3	08	12/15	1145	soil	01	X	X	X	X	X	X	X	X	X		
(Signature)						LEG 12/19/02										

Friedman & Bruya, Inc.  
 3012 16th Avenue West  
 Seattle, WA 98119-2029  
 Ph. (206) 285-8282  
 Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Tom Vaughn</u>	<u>Tom Vaughn</u>	<u>ETS</u>	<u>12-18</u>	<u>1400</u>
Received by: <u>Eric Young</u>	<u>Eric Young</u>	<u>FBI</u>	<u>12-18</u>	<u>1420</u>
Relinquished by:				
Received by:				

3260 "B" St. N.W., Suite E  
Auburn, WA 98001  
ENVIR-TS094PU



Seattle: 1-206-622-6040  
Tacoma: 1-253-474-6242  
So. King: 1-253-833-4375  
FAX: 1-253-939-2898

## **ATTACHMENT 3**

### **Disposal Certificates**

21268916  
 IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550  
 GENERATOR  
 FACILITY

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. WA D98048551B311270		Manifest Document No. 311270		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.			
3. Generator's Name and Mailing Address MURPHY KEAREY 3101 9TH AVE. SEATTLE, WA 98118				A. State Manifest Document Number 21268916							
4. Generator's Phone (206) 341-9875				B. State Generator's ID							
5. Transporter 1 Company Name S&B SPECIALISTS 1701 E. DST TACOMA, WA 98421				6. US EPA ID Number WA H 010101162112		C. State Transporter's ID (Reserved)					
7. Transporter 2 Company Name				8. US EPA ID Number		D. Transporter's Phone 253-388-1675		E. State Transporter's ID (Reserved)			
9. Designated Facility Name and Site Address Romix Environmental 2081 Bay Road East Palo Alto, Ca 94303				10. US EPA ID Number CA R D 010914521657		F. Transporter's Phone		G. State Facility's ID			
						H. Facility's Phone 650-342-1638					
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol			
a. FLAMMABLE LIQUIDS, TOXIC, NOS, 3, UN1992, PG11, RC(00)				918 Dm		010990		6			
b.								I. Waste Number State: <del>0000</del> EPA/Other: 0001			
c.								State			
d.								EPA/Other			
J. Additional Descriptions for Materials Listed Above 11) ADDITIONAL WASTE CODES F003, F002, D035, D008, D007				K. Handling Codes for Wastes Listed Above							
				a.		b.					
				c.		d.					
15. Special Handling Instructions and Additional Information In case of emergency call 1-800-766-4248											
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.  If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.											
Printed/Typed Name C. B. Smith				Signature <i>C. B. Smith</i>		Month 10		Day 10		Year 02	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Michael Johnson				Signature <i>Michael Johnson</i>		Month 10		Day 10		Year 02	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name				Signature		Month		Day		Year	
19. Discrepancy Indication Space											
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name				Signature		Month		Day		Year	

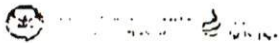
DO NOT WRITE BELOW THIS LINE.

(Form designed for use on nine (12-pitch) typewriter.)

Form Approved OMB No. 1051-0039

CWM!

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No W A D 9 8 E 4 E 5 5 1 2	Manifest Document No 00001	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address LENORA BUILDING LLC 2101 9TH AVE SEATTLE WA 98121				A. State Manifest Document Number		
4. Generator's Phone (206) 341-9875				B. State Generator's ID		
5. Transporter 1 Company Name RIVERS EDGE SVC.		6. USEPA ID Number WAH000010914		C. State Transporter's ID		
7. Transporter 2 Company Name UNION PACIFIC RAILROAD		8. USEPA ID Number NED001792910		D. Transporter's Phone (253) 972-8988		
9. Designated Facility Name and Site Address CWMNW, INC. 17629 CEDAR SPRINGS LANE ARLINGTON OR 9712-9709		10. USEPA ID Number ORD089452353		E. State Transporter's ID		
				F. Transporter's Phone (800) 346-3488		
				G. State Facility's ID		
				H. Facility's Phone (541) 454-2643		
GENERATOR	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	1. Waste No.
	a. X RD, HAZARDOUS WASTE, SOLID, N. G. S. 9, NA3077, III, (LEAD), D308	001	CM		D	D008
	b.					
	c.					
	d.					
J. Additional Descriptions for Materials Listed Above a. CU3101 LEAD CNTMTD SOIL, RQ=10LBS				K. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information a. CU3101 2000 EPG#17:  EMERGENCY CONTACT# (800) 424-9300 (CWM! Contract)  CONTAINER# WMXU 400023						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. I am a large quantity generator. I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize the waste generated and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name		Signature		Month Day Year		
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month Day Year		
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name		Signature		Month Day Year		
19. Discrepancy Indication Space						
20. Facility Owner or Operator Certification (Receipt of Hazardous Waste as Covered by this Manifest except as noted below)						
Printed/Typed Name		Signature		Month Day Year		



12/19/02

LAND DISPOSAL NOTIFICATION AND CERTIFICATION FORM (PHASE II)

AP-703121

Generator Name: LENORA BUILDING LLC

Manifest Doc. No.: \_\_\_\_\_

Profile Number: C03101 SOIL

State Manifest No.: \_\_\_\_\_

1. Is this waste a non-wastewater or wastewater? (See 40 CFR 268.2) Check UMC: Nonwastewater / Wastewater
2. If this waste is subject to any California List restrictions enter the letter from below (either A or B.1) next to each restriction that is applicable:  
HOCs, PCBs, Acid, Metals, Cyanides
3. Identify ALL USEPA hazardous waste codes that apply to this waste shipment, as defined by 40 CFR 261. For each waste code, identify the corresponding subcategory, or check NONE if the waste code has no subcategory. Spent solvent and California List treatment standards are listed on the following page. If P039, multi-source leachate applies those constituents must be listed and attached by the generator. If D001-D043 requires treatment of the characteristic and meet 268.48 standards, then the underlying hazardous constituent(s) present in the waste must be listed and attached.

REF #	4. US EPA HAZARDOUS WASTE CODE(S)	5. SUBCATEGORY ENTER THE SUBCATEGORY DESCRIPTION. IF NOT APPLICABLE, SIMPLY CHECK NONE		6. HOW MUST THE WASTE BE MANAGED? ENTER LETTER FROM BELOW
		DESCRIPTION	NONE	
1	D008		X	A
2				
3				
4				

To identify P039 or D001-D043 underlying hazardous constituent(s), use the "P039/Underlying Hazardous Constituent Form" provided (CWM-2004) and check here: \_\_\_\_\_  
 If no UMCs are present in the waste upon its initial generation check here: X  
 To list additional USEPA waste code(s) and subcategory(ies), use the supplemental sheet provided (CWM-2005-2) and check here: \_\_\_\_\_  
 Disposal facility monitors for all UMCs check here: \_\_\_\_\_  
 If waste will be managed in a system regulated under the CWA, or a Class 1 injection well under the SDWA check here: \_\_\_\_\_

HOW MUST THE WASTE BE MANAGED? In column 6 above, enter the letter (A, B1, B3, B4, B6, C, D, or E) below that describes how the waste must be managed to comply with the land disposal regulations (40 CFR 268.7). Please understand that if you enter the letter B1, B3, B4, B6 or D you are making the appropriate certification as provided below. (States authorized by EPA to manage the LDR program may have regulatory citations different from the 40 CFR citations listed below. Where these regulatory citations differ, your certification will be deemed to refer to those state citations instead of the 40 CFR citations.)

- A. RESTRICTED WASTE REQUIRES TREATMENT  
This waste must be treated to the applicable treatment standards set forth in 40 CFR Part 268 Subpart D, 268.32, or RCRA Section 3004(d).  
For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."
- B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS  
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR part 268.48 and 268.32 without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."
- B.3 GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS  
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based upon my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with 40 CFR Part 264 Subpart D or Part 265 Subpart D, or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and I have been unable to detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."
- B.4 DECHARACTERIZED WASTE REQUIRES TREATMENT FOR UNDERLYING HAZARDOUS CONSTITUENTS  
"I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 or 268.49, to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."
- B.6 RESTRICTED DEBRIS TREATED TO ALTERNATE PERFORMANCE STANDARDS  
"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in 40 CFR 268.45 without impermissible dilution of the prohibited wastes. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."
- C. RESTRICTED WASTE SUBJECT TO A VARIANCE  
This waste is subject to a national capacity variance, a treatability variance, or a case-by-case extension. Enter the effective date of prohibition in column 6 above.  
For Hazardous Debris: "This hazardous debris is subject to the alternative treatment standards of 40 CFR Part 268.45."
- D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT  
"I certify under penalty of law that I have personally examined and am familiar with the waste through analysis and testing of through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR part 268 subpart D. I believe that the information I submitted is true, accurate and complete. I am aware there are significant penalties for submitting false certification, including the possibility of a fine and imprisonment."
- E. WASTE IS NOT CURRENTLY SUBJECT TO PART 268 RESTRICTIONS  
This waste is a newly identified waste that is not currently subject to any 40 CFR Part 268 restrictions.

I hereby certify that all information submitted in this and all associated documents is complete and accurate, to the best of my knowledge and information.

Signature: Tom Vayner Title: Agent for The Lenora Co. Date: 12-19-02  
 1998 Chemical Waste Management, Inc. - 05/99 - Form CWM-2005-A  
 Container # WMX4 40023

COPY

UNION PACIFIC RAILROAD

FORM 23144 (Rev. 12-92)



TRAILER USE AGREEMENT, EIA INTERCHANGE REPORT, AND INSPECTION REPORT

TRAILER/CONTAINER ID WMXU 400023	ORIGIN SEATTLE	DESTINATION GILLIAM	RAMP POINT	DATE 02/12/90-09:59
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WAYBILL NO.	WAYBILL DATE	PLAN	COMMODITY	SHIPPER MANBEM	CHASSIS ID PVTZ 001931	SEAL NUMBER CU3101
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UNION PACIFIC RAILROAD

ON NOTIFIED	NOTIFICATION TIME	DELIVERY REQUESTED	SUPV.
EVENTS	TIME	DRAYAGE	CARRIER
TRAILER GROUNDED			
DEPARTURE/DELIVERY			
ARRIVAL/RECEIPT	12/30-09:57	WMSE	WMSE

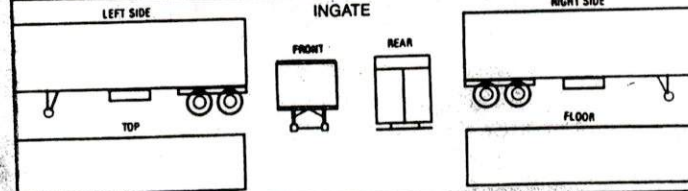
63100  
35200  
27900

WEIGHT	ACTUAL PLACEMENT	TRAILER RELEASE
--------	------------------	-----------------

I declare contents of this trailer/container does not contain Hazardous material.

DRIVER \_\_\_\_\_

BY INSPECTION SYMBOL "B" = BENT - "C" = CUT - "H" = HOLE



MAIN DEFECTS \_\_\_\_\_

000023  
A1ETDW 4320T  
CU3101  
UT 2001  
931

DRIVER

SEAL = CU3101

CLEARANCE LIGHTS	TARPS	FLAPS	CLEARANCE LIGHTS	TARPS	FLAPS
REFLECTORS	BRAKE DEFECTS	REAR END PROTECTION	REFLECTORS	BRAKE DEFECTS	REAR END PROTECTION
SIDE MARKERS	LANDING GEAR	BEGINNING HUB READING	SIDE MARKERS	LANDING GEAR	BEGINNING HUB READING
WIRING	UNDER CARRIAGE	LICENSE NUMBER	WIRING	UNDER CARRIAGE	LICENSE NUMBER
SAE-ATA 7 WAY PLUG	WHEEL LUGS		SAE-ATA 7 WAY PLUG	WHEEL LUGS	

DRIVERS NAME	DRIVERS NAME
LDT/AREA/PAD = CAR	000
DRIVER NAME = D W KRLETZMAN	

POSITION	BRAND NO.	CONDITION	POSITION	BRAND	CONDITION	POSITION	BRAND	CONDITION
RO FRONT			LO FRONT			LO FRONT		
RI FRONT			LI FRONT			LI FRONT		
RO REAR			LO REAR			LO REAR		
RI REAR			LI REAR			LI REAR		
SPARE			SPARE			SPARE		

HERMO SETTING	OUTSIDE TEMP	INSIDE TEMP	FUEL READING	HOUR METER READING	REEFER UNIT OPERATING <input type="checkbox"/> YES <input type="checkbox"/> NO
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INSPECTED AND ALL DEFICIENCIES AND EXCEPTIONS ARE NOTED ABOVE (SIGN BELOW)

USER/MOTOR CARRIER	DATE	USER/MOTOR CARRIER	DATE
	12-30-90		
RAILROAD COMPANY	TIME	RAILROAD COMPANY	TIME
	PLACE		PLACE

USER AND RAILROAD COMPANY UNDERSTAND AND AGREE THAT THE TERMS AND CONDITIONS OF THIS AGREEMENT ARE SET FORTH ON THE REVERSE OF THIS SHEET AND ARE BINDING ON BOTH PARTIES HERETO. CHARGES TO APPLY FOR USE OF TRAILER SHALL BE AS DESIGNATED IN APPLICABLE TARIFFS OR CIRCULARS, INCLUDING SUPPLEMENTS THERETO OR REISSUES THEREOF OR CHARGES AS SET FORTH IN PROPERLY EXECUTED INTERCHANGE AGREEMENT.

COPY

UNION PACIFIC RAILROAD

FORM 23144 (Rev 12-92)



J1 TRAILER USE AGREEMENT, EIA INTERCHANGE REPORT, AND INSPECTION REPORT

TRAILER/CONTAINER ID WMXU 400083	ORIGIN SEATTLE WA	DESTINATION BILLIAM OR	RAMP POINT BENT	DATE 02/12/30-09:57
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WAYBILL NO 597948	WAYBILL DATE 12/30-00	PLAN 003	COMMODITY HAZWST	SHIPPER WASTEMANAGEMENT	CHASSIS ID PVTZ 001931	SEAL NUMBER DU3101
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WEIGHT L 00000 27900	TYPE K4H	SPECIAL CONDITIONS CF C9	PERSON NOTIFIED	NOTIFICATION TIME	DELIVERY REQUESTED	SUPV.
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CUSTOMER  
WASTE MANAGEMENT

ADDRESS  
17629 CEDAR SPRINGS LN

CITY  
BILLIAM

STATE  
OR

ZIP CODE  
97812

EVENTS	TIME	DRAYAGE	CARRIER
TRAILER GROUNDED			
DEPARTURE/DELIVERY			
ARRIVAL/RECEIPT	12/30-09:57	WMSE	WMSE

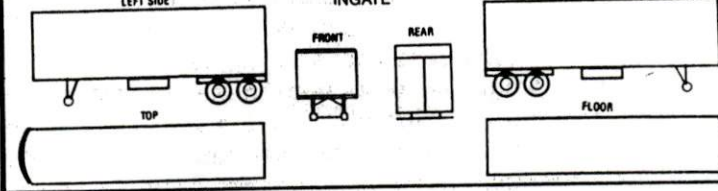
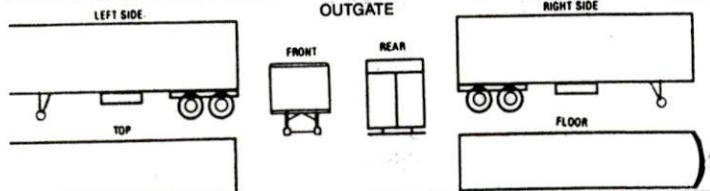
PLAN 2 DATA

SERVICE REQUIRED <input type="checkbox"/> DOCK <input type="checkbox"/> DROP <input type="checkbox"/> STAY	UNLOADING WEIGHT	ACTUAL PLACEMENT	TRAILER RELEASE
---	------------------	------------------	-----------------

DRIVERS LICENSE/STATE LICENSED:  
LIC = KRIETDW4300T WA  
DRIVER

I declare contents of this trailer/container does not contain Hazardous material.  
DRIVER

DEFINE AND MARK CLEARLY ALL DAMAGE OR DEFICIENCIES FOUND BY INSPECTION SYMBOL "B" = BENT - "C" = CUT - "H" = HOLE



PLAIN DEFECTS

EXPLAIN DEFECTS

CLEARANCE LIGHTS	TARPS	FLAPS	CLEARANCE LIGHTS	TARPS	FLAPS
REFLECTORS	BRAKE DEFECTS	REAR END PROTECTION	REFLECTORS	BRAKE DEFECTS	REAR END PROTECTION
SIDE MARKERS	LANDING GEAR	BEGINNING HUB READING	SIDE MARKERS	LANDING GEAR	ENDING HUB READING
WIRING	UNDER CARRIAGE	LICENSE NUMBER	WIRING	UNDER CARRIAGE	LICENSE NUMBER
SAE-ATA 7 WAY PLUG	WHEEL LUGS		SAE-ATA 7 WAY PLUG	WHEEL LUGS	

DRIVERS NAME  
LOT/AREA/PAD = CAR 000  
DRVR NAME = D W KRIETZMAN

DRIVERS NAME

POSITION	BRAND NO.	CONDITION	POSITION	BRAND	CONDITION	POSITION	BRAND NO.	CONDITION	POSITION	BRAND	CONDITION
R O FRONT			L O FRONT			R O FRONT			L O FRONT		
R I FRONT			L I FRONT			R I FRONT			L I FRONT		
R O REAR			L O REAR			R O REAR			L O REAR		
R I REAR			L I REAR			R I REAR			L I REAR		
SPARE			SPARE			SPARE			SPARE		

HERMO SETTING	OUTSIDE TEMP	INSIDE TEMP	FUEL READING	HOUR METER READING	REEFER UNIT OPERATING <input type="checkbox"/> YES <input type="checkbox"/> NO
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INSPECTED AND ALL DEFICIENCIES AND EXCEPTIONS ARE NOTED ABOVE (SIGN BELOW)

SER/MOTOR CARRIER <i>[Signature]</i>	DATE 12-30-21	USER/MOTOR CARRIER	DATE
RAILROAD COMPANY	TIME	RAILROAD COMPANY	TIME
	PLACE		PLACE

SEER AND RAILROAD COMPANY UNDERSTAND AND AGREE THAT THE TERMS AND CONDITIONS OF THIS AGREEMENT ARE SET FORTH ON THE REVERSE OF THIS SHEET AND ARE BINDING ON BOTH PARTIES HERETO. CHARGES TO APPLY FOR USE OF TRAILER SHALL BE AS DESIGNATED IN APPLICABLE TARIFFS OR CIRCULARS, INCLUDING SUPPLEMENTS THERETO OR REISSUES THEREOF OR CHARGES AS SET FORTH IN PROPERLY EXECUTED INTERCHANGE AGREEMENT.

Emergency Contact Telephone Number

**UNIFORM HAZARDOUS WASTE MANIFEST**

Generator's US EPA ID No. **WA D9 8848.55120001** Manifest Document No. **11671**

2. Page 1 Information in the shaded areas is not required by Federal law.

Generator's Name and Mailing Address  
**Lorona Building  
2101 9th Ave Seattle WA 98121**

A. State Manifest Document Number

4. Generator's Phone **(206) 341-9875**

B. State Generator's ID

5. Transporter 1 Company Name **Rivers Edge Service** 6. US EPA ID Number **WA H 00 001 0314**

C. State Transporter's ID

7. Transporter 2 Company Name 8. US EPA ID Number

D. Transporter's Phone **253 872 8988**

9. Designated Facility Name and Site Address **(WMMNW) Inc.  
176299 Cedar Springs Lane  
Arlington, OR 97912** 10. US EPA ID Number **10 R D 0 8 9 4 5 2 3 5 3**

E. State Transporter's ID  
F. Transporter's Phone  
G. State Facility's ID  
H. Facility's Phone **541 454 2643**

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers		13. Total Quantity	14. Unit Wt/Vol	Waste No.
	HM	No.			
a. <input checked="" type="checkbox"/> RQ, Hazardous waste, Solid, N.O.S., NA30T1, III. (Lead), 0008		0.01	CM		0008
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above  
**a. CU3101 Lead contaminated soil, RQ-10165**

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information  
**CU3101 2006 EPG4M1 Container # WMX4400023**

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

Printed/Typed Name **Tom Vaughn** Signature **Tom Vaughn** Authorized Agent Month Day Year **2 22 2002**

17. Transporter 1 Acknowledgement of Receipt of Materials  
Printed/Typed Name **DAVID KRIZETZMAN** Signature **David Krizetzman** Month Day Year **2 23 2002**

18. Transporter 2 Acknowledgement of Receipt of Materials  
Printed/Typed Name **LIZ SATHRE** Signature **Liz Sathre** Month Day Year **2 23 2002**

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.  
Printed/Typed Name Signature Month Day Year