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SOUND ENVIRONMENTAL CONSULTING

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UNDERGROUND STORAGE TANK CLOSURE SITE ASSESSMENT

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VALLEY I-5 MOTOR HOME
KENT, WASHINGTON

Prepared for:

Valley I-5 Motor Home
23051 Military Road South
Kent, Washington 98032

December 1998
File No. 1798

UNDERGROUND STORAGE TANK CLOSURE SITE ASSESSMENT

VALLEY I-5 MOTOR HOME KENT, WA.

Prepared for:

Valley I-5 Motor Homes
23051 Military Road S.
Kent, Washington 98032

Prepared by:

Sound Environmental Consulting
1912 Clorindi Cir NW
Gig Harbor, Washington 98335

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SITE SUMMARY INFORMATION

Site Name (owner):	Frank B. Lee
Street Address:	Valley I-5 Motor Home 23051 Military Road S. Kent, Washington 98032
Contact Telephone:	(253) 824-7170 Frank Lee or Don Hobert
General Contractor:	Joe Hall Construction, Inc. 1317 54th Ave. East Fife, Washington 98424-1226 (253) 922-6815
UST Decommissionor:	Joe Hall Construction, Inc. 1317 54th Avenue East Fife, Washington 98424-1226 (253) 922-6815
Site Assessor:	Sound Environmental Consulting 1912 Clorindi Cir NW Gig Harbor, Washington 98335 (253) 858-1870
Site Generator ID No.:	N/A
Map Location:	See Figures 1 and 2.
Site Map:	See Figure 3.
Groundwater:	Est. 30 feet below ground surface.
Direction of Flow:	Est. south/southeast (based on topography)
Site Soil Types:	Brown sandy soil; glacial hardpan at 10 ft.

1.0 INTRODUCTION

Joe Hall Construction was retained by Valley I-5 Motor Home to remove a fuel tank storage system consisting of two 2,000-gallon underground storage tanks (USTs), one 1,000-gallon waste oil UST, a fuel dispenser, and fuel lines from their sales office in Kent. Joe Hall Construction supervised decommissioning of the USTs in accordance with state requirements and guidelines . The location of the site is shown in Figures 1 and 2.

Sound Environmental Consulting (SEC) was retained by Joe Hall Construction to perform an UST site assessment, in accordance with Washington State Department of Ecology guidance and regulations. The assessment consisted of observing and documenting UST removal activities, collecting soil samples for analysis, evaluating subsurface conditions for the presence of fuel contamination, and preparing this site assessment report.

On October 20, 1998 three USTs were decommissioned to comply with the company's plan to meet the state's December 1998 time line for upgrading or decommissioning regulated USTs. The USTs were previously used to supply fuel to recreational vehicles, motor homes, and other equipment used at the facility.

Petroleum hydrocarbon contaminated soil was encountered during the removal of the USTs. The Washington State Department of Ecology (Ecology) was subsequently contacted in accordance with the 24-hour requirement for reporting a release of fuel.

Soil samples collected during tank decommissioning were submitted to Spectra Laboratories, Inc. in Fife on a 24-hour turn-around testing schedule. The analytical test results indicated that gasoline fuel was present in the soil at significant levels, several times above MTCA Method A soil cleanup levels.

The contaminated soil appeared to be located below a cracked pipe joint leading from an oil/water separator into the sewer piping system at the northwest corner of UST Excavation No. 2. The contaminated soil was stained gray from the fuel and extended downward to a layer of hardpan at a depth of about 10 feet below the ground surface.

About 20 to 30 cubic yards of soil was excavated during tank removal activities, and only about 7 cubic yards of this material was contaminated above the cleanup level of 100 ppm for WTPH-G. This soil was transported to Fife Sand & Gravel for treatment. Analytical testing confirmed that the soil remaining in the ground around the former UST excavations is below MTCA Method A cleanup levels.

This report addresses the reporting requirements for an UST Site Assessment as per the Washington State UST regulations (WAC 173-360) and Ecology's *Guidance for Site Checks and Site Assessments for Underground Storage Tanks* (February, 1992). This report includes an assessment of subsurface conditions, UST removal documentation, and recommendations for additional site characterization.

1.1 Purpose and Scope

The purpose of this report is to provide documentation for the removal of three USTs and an

evaluation of subsurface soil conditions at the site. The scope of investigation included the following:

- ✓ on-site inspection during tank removal activities;
- ✓ collection of subsurface soil samples for petroleum hydrocarbon analysis;
- ✓ assessment of the level of soil contamination;
- ✓ oversight for the removal of contaminated soil.

Preliminary activities included obtaining UST removal permits from the City of Federal Way Fire Department and filing a 30-day Notice with Ecology.

1.2 Site Description

Valley I-5 Motor Homes is located at 23051 Military Road South in Kent, Washington 98032. The site is situated on the east side of Interstate 5 at Kent Exit 149 (Figure 1). The site is occupied by a combined office, vehicle, and maintenance building; and "Recreational Vehicle" parking and storage. The property is covered nearly entirely by asphalt pavement and slopes to the south.

The site is accessible from the west side of Military Road through a locked gate located on the northeast side of the main office. Two 2,000-gallon unleaded gasoline USTs and one 1,000-gallon waste oil UST were excavated from the south side of the building during this UST Closure project. The unleaded gasoline tanks were situated end-to-end (aligned east/west) and were removed from one large excavation. The waste oil tank was formerly located on the southeast side of the building about 20 feet east of and parallel to the two other tanks.

The waste oil tank was reportedly used only to collect expended motor oil from vehicle maintenance, RV repair, etc.. Waste oil was collected inside the building and drained into a 1.5-inch diameter line through the building wall and directly into the tank. The tank was periodically pumped by a local service firm and annually tested for tightness. According to the owner, it is unusual for gasoline to discharge through the system, unless it was from a spill inside the building.

The lot behind the building (southern end) is used primarily for RV storage while awaiting repair work. Entrance to the back lot and former fuel service area is gained from either the east or west sides adjacent to the fence line.

A 14-foot long by 6.5 wide shed is located adjacent to the southwest end of the building. The shed houses an oil/water separator, an air compressor, and a small above-ground tank. A gasoline fuel dispenser was observed adjacent to the southwest corner of the building.

Figure 2 is a Site Plan Map illustrating the facility building features, approximate location of the former two 2,000-gallon gasoline and one 1,000-gallon waste oil USTs, soil sampling locations.

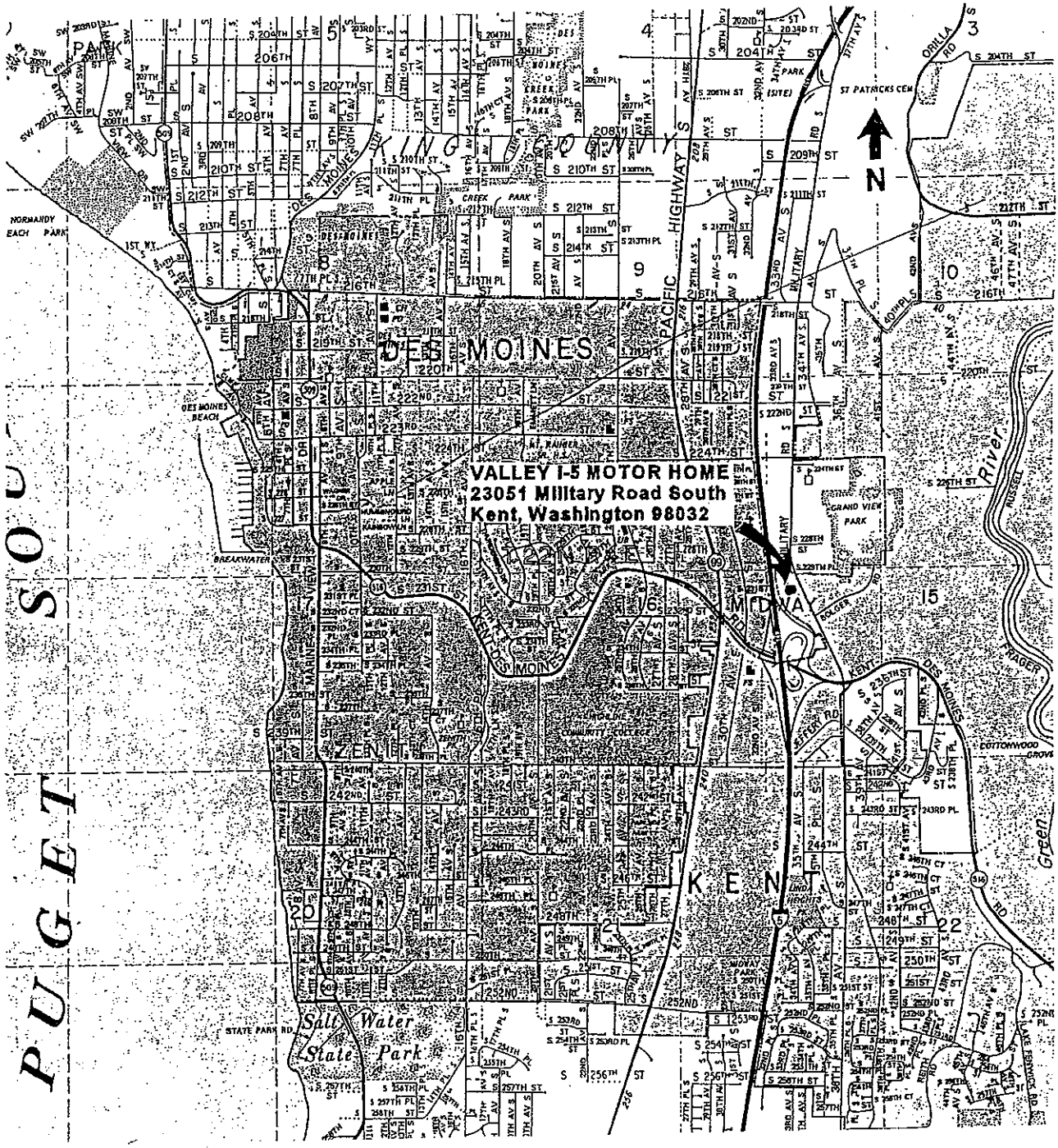

FIGURE 1 SITE VICINITY MAP

Sound Environmental Consulting

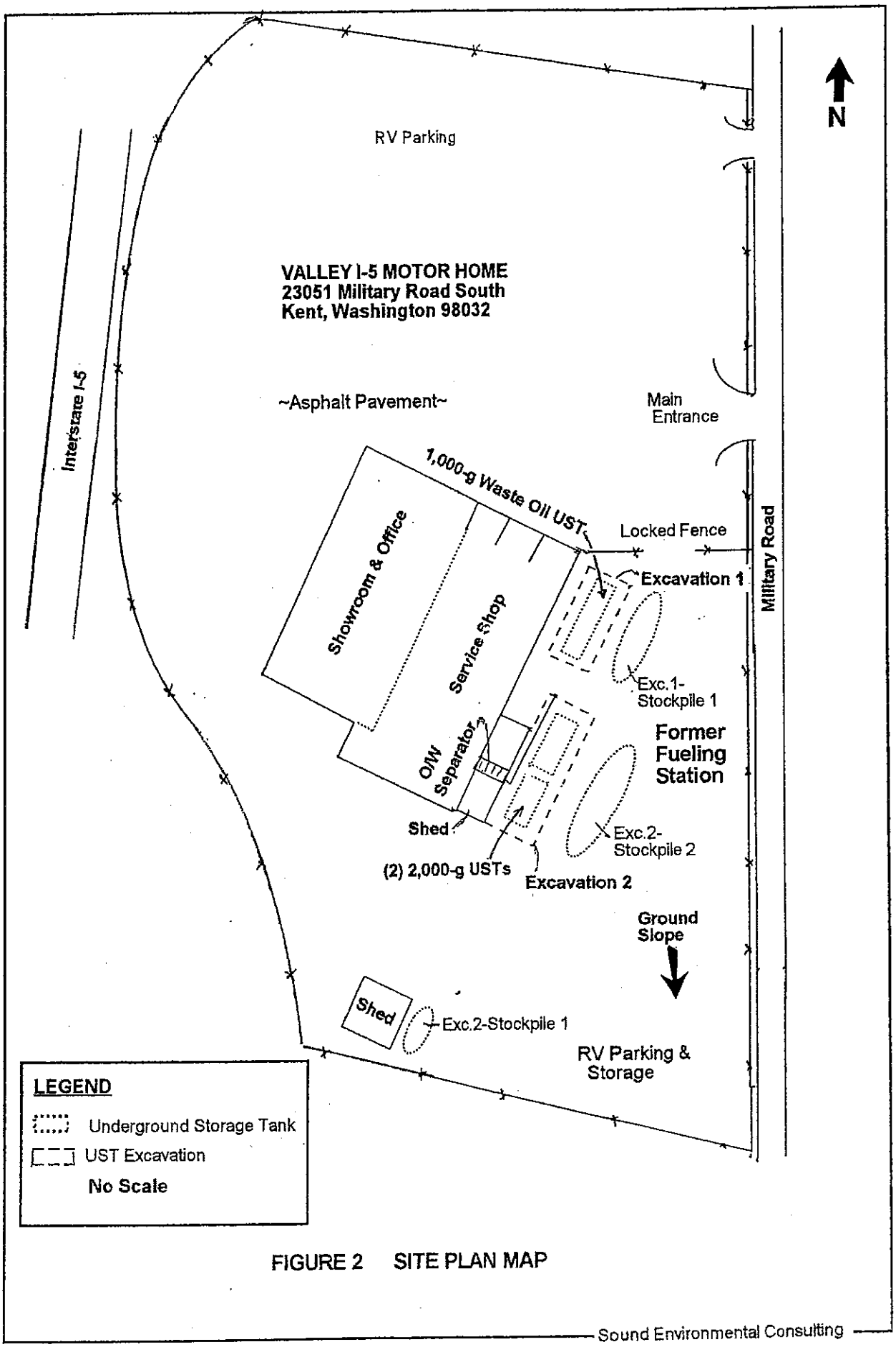

FIGURE 2 SITE PLAN MAP

Sound Environmental Consulting

2.0 UST REMOVAL

The former fueling system, was constructed in about 1978 and consisted of one waste oil tank and two unleaded gasoline tanks, a fuel dispenser, fuel lines, and vent lines. The location of the former fueling station and UST excavation is illustrated in Figure 2.

The fueling system, (not including the waste oil tank) was situated in about a 20 ft. x 20 ft. area. The fuel dispenser was located at the southwest corner of the building, about 12 feet north of the former western-most UST (Tank No.1).

The two 2,000-gallon gasoline USTs were located end-to-end with the length of the tanks oriented in an east to west direction, with about two feet of separation between the tanks. One excavation was required to remove these two tanks and another excavation was necessary to remove the 1,000-gallon waste oil UST, located about 20 feet further to the east.

2.1 On-Site Activities

On October 20, 1998, Joe Hall Construction, Inc. (Fife, Washington) removed two 2,000-gallon gasoline USTs and one 1,000-gallon waste oil UST from the Valley I-5 Motor Home site. The tanks were pumped of remaining product, cleaned, and inserted with dry ice (carbon dioxide) before commencement of excavation activities.

An UST site assessor (Mr. Richard C. Alvord, C.P.G.) representing Sound Environmental Consulting was on-site to oversee and document tank removal activities, collect soil samples from the UST excavation, and assess subsurface soils for present and past releases of fuel.

A single excavation measuring 10 ft. x 16 ft. x 8 ft. (deep) was constructed to remove the 1,000-gallon waste oil tank and an excavation measuring 24 ft. x 10 ft. x 10 ft. (deep) was constructed to remove the two gasoline USTs. The UST excavations are identified by numeric order of construction, i.e., Excavation 1, 2, and 3.

After the tanks were excavated, we immediately inspected the condition of subsurface soils below the bottom of the tanks and the general condition of the tanks. We also measured the dimensions of the tanks to confirm their respective storage capacity. Table 1 shows the field measurements of the dimensions of each of the tanks.

TABLE 1. UST FIELD MEASUREMENTS

UST ID (west to east)	Description	Field Measurements	Actual Volume	Nominal Volume Confirmed
Tank 1	2,000-g unl.	8' 9"x 6' diam.	1,850-g	2,000-g
Tank 2	2,000-g unl.	8' 9"x 6' diam.	1,850-g	2,000-g
Tank 3	1,000-g w.o.	12' x 3' 8" diam.	950-g	1,000-g

The nominal volume listed for each tank was confirmed by our field measurements. All three tanks were single-wall steel construction and appeared to be in good condition. The tanks exhibited areas of surface rust but did not have any obvious holes, significant pitting, or extensive corrosion. The eastern-most 2,000-gallon gasoline UST in Excavation No. 2 still had the manufacture's label affixed to the end of the tank that indicated: "Ace Tank Equipment". Having the label still intact after about 20 years implies that little corrosive activity has occurred in the subsurface soils.

Strong gasoline-type fuel odors were observed in the soil near the east end of Tank 2, near the discharge line below the o/w separator (see Figure 2). No olfactory or visual signs of fuel contamination were observed in the soils during the removal of Tank 1, and 3. Additional discussion is provided below regarding excavation and remediation of contaminated soils below the o/w separator.

UST appurtenances (e.g. fuel lines, vent lines connected to the tanks, and fuel dispenser) were removed with the tanks. The tanks were properly prepared and labeled, and then loaded onto a flat bed truck for transport to the Joe Hall Construction facility in Fife, Washington for disposal.

2.2 Subsurface Conditions

Soils

Subsurface soils at the site consisted of about 7 feet of dry, brown, sandy soil fill, with occasional gravel and tree roots, underlain by compact brown sand and gravel with occasional cobbles to a depth of about 10 feet. Glacial "hardpan" was encountered at a depth of 10 feet below the surface. The hardpan consisted of a very dense and compact mix of gray sand and gravel.

Representatives from Valley I-5 indicated that about 5 to 10 feet of fill material was imported to the south end of the site in 1978 during construction of the facility. Several houses were moved or demolished at this time to accommodate the construction of Valley I-5 Motor Home. Our observations of subsurface soils exposed in both of the UST excavations were consistent with the reports of fill material placed in this area of the site.

About a one-foot thick layer of brown, dry sand packing was present immediately below each tank, at about 8.5 feet in depth below the ground surface. The sand was placed below the tanks for packing and settlement during installation.

Subsurface soils in Excavation 2 were dry to a depth of 16 feet below the ground surface. Excavation 2 remained open for seven days while the UST and contaminated soil were removed and analytical testing was completed. No infiltration of groundwater or surface water was observed in any of the excavations during this project.

A third excavation (Excavation 3) was constructed on October 27, 1998 in the eastern part of Excavation 2 to remove contaminated soil below the O/W separator and to assess the lateral extent of the contamination in a southerly direction. The excavation measured 10 ft. x 10 ft. x 4 ft. deep (depth below the bottom of Excavation 2). The total depth at the southeast corner of the excavation (Excavations 2 & 3) was 16 feet.

Excavation of contaminated soils at the top of the hardpan layer, extended laterally to the south, 8

feet beyond the initial tank excavation. Analytical testing and field observations confirmed that the glacial hardpan layer impeded vertical migration of the contamination.

After removing the contaminated soil, the excavation measured 18 feet south of the shed and 12 feet to the west. The western-most part of the original excavation, just west of the shed was filled in to within three feet of the ground surface because subsurface soils in this area were not contaminated by fuel. Soil excavated from around each tank was temporarily stockpiled on-site, pending testing for re-use as backfill in the excavations or off-site disposal .

A copy of the Underground Storage Tank Cleaning Certificate and other documents related to product and tank disposal are provided in Appendix A; a copy of the Underground Storage Tank Closure and Site Assessment Notice is provided in Appendix B. Plates 1 to 4 are color-copy photographs of the oil water separator, repair of the discharge pipe, Excavation 2, and contaminated soil stockpile.

3.0 SOIL SAMPLING

Soil samples were collected from the UST excavations after the tanks and suspected contaminated soil were removed. Sampling methodology was performed in accordance with Washington State UST regulations (WAC 173-360) and guidelines, as discussed below.

Subsurface soils at the site consisted of about seven feet of dry, brown, sandy soil fill, with occasional gravel and tree roots, underlain by compact brown sand and gravel with occasional cobbles to a depth of about 10 feet. Glacial "hardpan", consisting of a very dense, compact mix of gray sand and gravel was encountered at a depth of 10 feet below the surface.

A total of 14 soil samples were collected for analysis from the three UST excavations. Three soil samples were collected from Excavation 1, one on the north sidewall at a depth of 6 ft. below the ground surface (4 ft. below vent line), one on the west sidewall at a depth of 6.5 feet below the ground surface (4 ft. below fill line), and below the tank at a depth of 7.5 feet below the ground surface.

Three soil samples were also collected from around the excavation of former Tank 2, including one on the north sidewall at a depth of 7 ft., one on the south sidewall at a depth of 8.0 ft., one on the east sidewall at a depth of 10 ft., one below Tanks 1 and 2. Soil samples were collected according to Washington State Department of Ecology guidance for conducting UST site assessments. The soil sampling locations are illustrated in Figure 3.

All soil samples from the excavation were collected using a backhoe bucket. Fresh, representative soil was exposed on the excavation sidewalls and bottom and then collected in the backhoe bucket. Soil samples were collected directly from the backhoe bucket and placed into glass containers, and then stored in an ice cooler prior to analysis.

Sample containers were labeled according to the sampling location. For example, the soil sample collected from the north sidewall of the waste oil tank excavation was identified as "Exc.1-North @ 6.5 ft.". Samples collected below each tank were labeled as "Tank 1-Bottom @ 10 ft.", etc.. Chain of Custody Records were completed and submitted to the analytical laboratory to track sample possession and provide a request for analysis.

3.1 Soil Stockpiles

Approximately 20 to 30 cubic yards of soil were removed from the three UST excavations and moved into about three separate stockpiles (see Figure 2) for temporary storage. Depending on the test results, the soil will be re-used as backfill material or will be transported for off-site disposal. Only the soil excavated from below the oil/water separator contained petroleum hydrocarbons above cleanup levels.

Each soil stockpile was placed on plastic sheeting to prevent any contact with the ground surface. The three stockpiles were also completely covered with plastic sheeting to contain the soil and minimize possible dispersal of petroleum hydrocarbon contamination.

On October 20 and 22, 1998, three soil samples were collected for laboratory analysis of gasoline-

fraction petroleum hydrocarbons. The samples were collected at equally spaced distances across the length of the stockpile, at about 6 to 12 inches below the surface using a stainless steel spade. Sample No. "Stockpile #1" was representative of surficial soils above Tanks 1 and 2; Sample No. "Stockpile #2" was representative of soils adjacent to Tanks 1 and 2; and Sample No. "Stockpile #3 was representative of contaminated soils excavated from below the oil/water separator. The samples were placed in 8-ounce glass containers and preserved in an ice cooler prior to laboratory analysis.

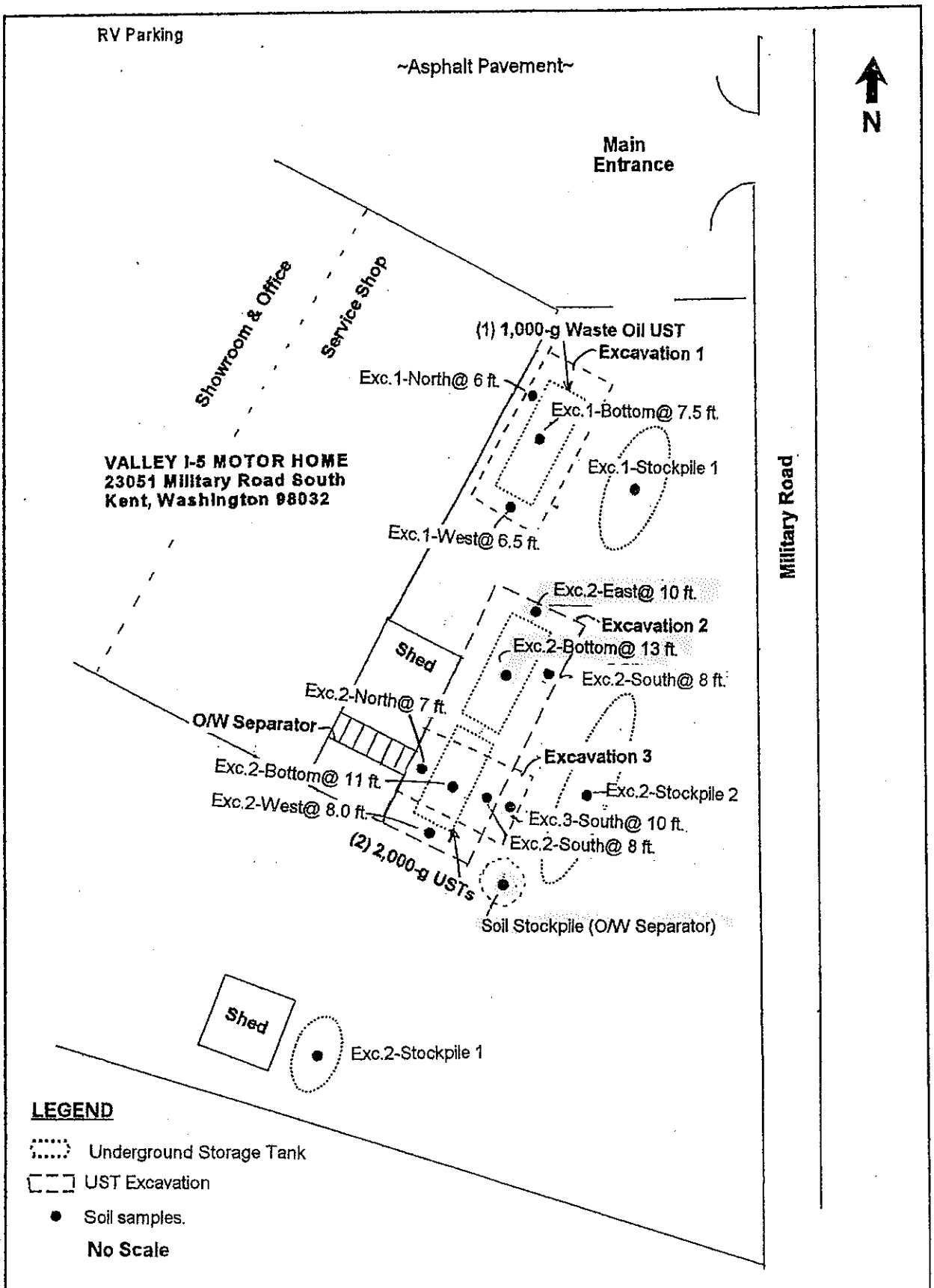

FIGURE 3 LOCATION OF UST EXCAVATIONS AND SOIL SAMPLES

Sound Environmental Consulting

4.0 ANALYTICAL TEST RESULTS

A total of 14 soil samples were collected from the UST excavations and the soil stockpiles, and analyzed by Spectra Laboratories, Inc. (Fife, Washington) for the presence of petroleum hydrocarbons. Analytical testing was conducted for gasoline-fraction petroleum hydrocarbons using Washington State Method WTPH-G with distinction for benzene, toluene, ethylbenzene, and xylenes (BTEX); for diesel-fraction petroleum hydrocarbons and heavy oil using Method WTPH-D-Extended; for waste oil using EPA Method TPH-418.1; and for total lead using EPA Method 6010. These test parameters are required or strongly recommended by the State for regulated UST sites that have previously or currently stored gasoline or diesel fuel.

Analytical testing for gasoline, diesel fuel, waste oil, or total lead was based on the reported contents of the former tanks. All soil samples collected from Excavation 2, formerly occupied by two unleaded gasoline tanks were tested for WTPH-G with distinction for BTEX. BTEX was analyzed only if WTPH-G was present in the sample.

The goal of an UST Site Assessment is to determine if a release of product has occurred. Therefore, analytical testing of soil around the waste oil tank was limited to two basic indicator parameters, TPH-418.1 and total lead. A number of other test parameters would likely be included for additional investigation or site characterization following a confirmed release.

One soil sample was collected below the O/W separator and tested for WTPH-G with BTEX distinction, diesel-range (WTPH-D) and oil-range hydrocarbons (TPH), and total lead. The analytical test results were compared to Method A Cleanup Levels identified in the Washington State Model Toxics Control Act (MTCA, WAC 173-340) to determine if any of the testing parameters exceeded the soil cleanup criteria. A summary of the analytical test results and Method A Cleanup Levels for petroleum hydrocarbons in soil are shown in Table 2. The analytical laboratory reports and Chain of Custody Records are provided in Appendix C.

Significant concentrations of gasoline fuel were detected in soil samples collected from the east end of UST Excavation 2, below the oil/water separator. The analytical test results indicated that 1,512 ppm WTPH-G was detected in the soil (Stockpile O/W separator) collected from below the o/w separator, which significantly exceeds the MTCA Method A Cleanup Level of 100 ppm for WTPH-G in soil; 110 ppm WTPH-G was detected at a depth of 10 feet below the ground surface on the east end of Excavation 2; 478 ppm WTPH-G was detected below Tank 2 at a depth of 13 feet below the ground surface. Xylenes and ethylbenzene were also detected slightly above MTCA Method A Cleanup Levels in the sample collected below Tank 2. Xylenes also exceeded their respective MTCA Method A Cleanup Level of 20 ppm in soil collected below the O/W separator.

Contaminant levels in all other samples submitted for analysis were either well below their respective MTCA Method A Cleanup Level or below the analytical laboratory detection limit.

4.1 Analytical Laboratory Quality Control (QC)

Laboratory Quality Control (QC) for the soil sample test results included testing surrogate recoveries for individual samples, method blanks, matrix spike, and matrix spike duplicates. The QC results were acceptable for all samples tested, suggesting that the analytical test results reported for this investigation are reasonable and accurate.

TABLE 2. SUMMARY OF ANALYTICAL TEST RESULTS FOR SOIL SAMPLES (ppm)

SAMPLE IDENTIFICATION	DATE	TPH-418.1	WTPH-D	WTPH-G	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENE	TOTAL LEAD
Exc.1-North@ 6 ft.	10/20/98	<20							5
Exc.1-West@ 6.5 ft.	"	<20							6
Exc.1-Bottom@ 7.5 ft.	"	<20							<4
Exc.1-Stockpile 1	"	48							<4
Exc.2-North@ 7 ft.	"			<20	NT	NT	NT	NT	
Exc.2-West@ 8.0 ft.	"			<20	NT	NT	NT	NT	
Exc.2-Bottom@ 11 ft.	"			<20	NT	NT	NT	NT	
Exc.2-South@ 8 ft.	"			43	0.17 J	<0.25	1.87	10.4	
Exc.2-East@ 10 ft.	"			110	<0.25	<0.25	0.77	4.97	
Exc.2-Bottom@ 13 ft.	"			478	<0.25	3.75	22.2	133	
Exc.2-Stockpile 1	"			<20	ND	ND	0.29	2.7	ND
Exc.2-Stockpile 2	"			<20	ND	0.063	0.67	4.4	ND
Exc.3-South@ 10 ft.	10/27/98			<20	<0.25	<0.25	0.13 J	0.74	
Soil Stockpile (O/W Separator)	"	<100	<25	1,512	<0.5	<0.5	<0.5	32.0	7
MTCA-METHOD A	–	200	200	100	0.50	40	20	20	250

Notes:

Shading indicates parameter exceeds MTCA Method A Soil Cleanup Level.
ND is "Not Detected"

5.0 CONCLUSIONS

The analytical test results confirmed that a release of product impacted subsurface soils in a relatively small area; however, the release was more likely a result of a malfunctioning oil/water separator located adjacent to Tank 2 and not a result of the fueling system.

In October, 1998 two 2,000-gallon unleaded gasoline USTs and one 1,000-gallon waste oil tank were decommissioned by excavation and off-site disposal. The tanks were transported to the Joe Hall Construction, Inc. facility in Fife for dismantling and scraping.

The source of the release appears to be more likely related to the damaged O/W separator and not the former fueling system because:

1) the three underground tanks and appurtenances did not exhibit any indication of obvious leaks, holes, or corrosion that could reasonably account for the soil contamination encountered at the site;

2) annual tank tightness tests passed without exception, according to the owner;

3) the contaminated soil was observed in the UST excavation directly below the O/W separator and above the top elevation of the tank, implying that the source of the release is the O/W separator and not the UST system;

The O/W discharge pipe and joint were repaired by Joe Hall Construction, Inc. during the course of investigating the extent of site contamination and subsequent excavation of contaminated soils. The contaminated soil was stained gray and exhibited moderate to strong gasoline-like odors. The stained soils were observed extending downward from the discharge pipe joint that was connected to the O/W separator nearly two feet above the top of the UST.

Gasoline-fraction petroleum hydrocarbons (WTPH-G) were detected in subsurface soils below the oil/water separator, ranging from 110 ppm to 1,512 ppm, which exceeds the MTCA Method A Cleanup Level of 100 ppm for WTPH-G. Approximately 7 cubic yards of gasoline-fraction petroleum hydrocarbon contaminated soils were excavated from about a 10 ft. x 10 ft. area, between the o/w separator and a glacial hardpan layer, about 10 feet below the ground surface.

The contaminated soil was subsequently transported to Fife Sand & Gravel for off-site treatment. Additional testing indicated that the soil around the perimeter of the excavation was below MTCA Method A Cleanup Levels for gasoline-fraction petroleum hydrocarbons.

This UST Site Assessment resulted in the discovery of petroleum contaminated soils that are likely unrelated to the former fueling system. However, the owner is still obligated to report and investigate site contamination under the provisions of the Model Toxics Control Act Cleanup Regulation, WAC 173-340. Reporting requirements appear to be the main difference between UST sites and other contaminated sites. The owner is required to report a release of hazardous substances at an UST site within 24-hours of release confirmation, and within 90 days of discovery at other sites. Additional reporting requirements may be applicable for independent interim actions at UST sites.

6.0 RECOMMENDATIONS

The results of this Site Assessment suggested that the former fueling system did not release product into the environment; therefore, further investigation of subsurface soils at the site related to the former fueling system is not necessary.

About 7 cubic yards of petroleum contaminated soils exceeding MTCA Method A cleanup levels for WTPH-G, ethylbenzene and xylenes were excavated from below an O/W separator in the UST excavation (Excavation 2 & 3). The soil was transported to Fife Sand & Gravel for treatment. Additional testing confirmed that the contaminated soil was removed and soil at the southern extent of the excavation did not exceed MTCA Method A Cleanup Levels. Additional investigation or remediation of soils below the O/W separator is not necessary based on the confirmation test results.

Oil/water separators may currently be regulated by individual permits through Ecology's storm water program. Reporting requirements or notification to your Ecology inspector may be applicable for repair and maintenance of oil/water separators, depending on the provisions of your permit.

A copy of this report should be forwarded to the Washington State Department of Ecology to satisfy notification requirements for UST removal, discovery of site contamination, and site remediation activities. A completed Underground Storage Tank Closure and Site Assessment Notice is provided in Appendix B for the owner's signature and submittal to Ecology.

Plate 1. Oil/Water Separator Inside Shed on South Side of Building. (View to NE).

Plate 2. Patch Repair on Discharge Pipe Below O/W Separator.

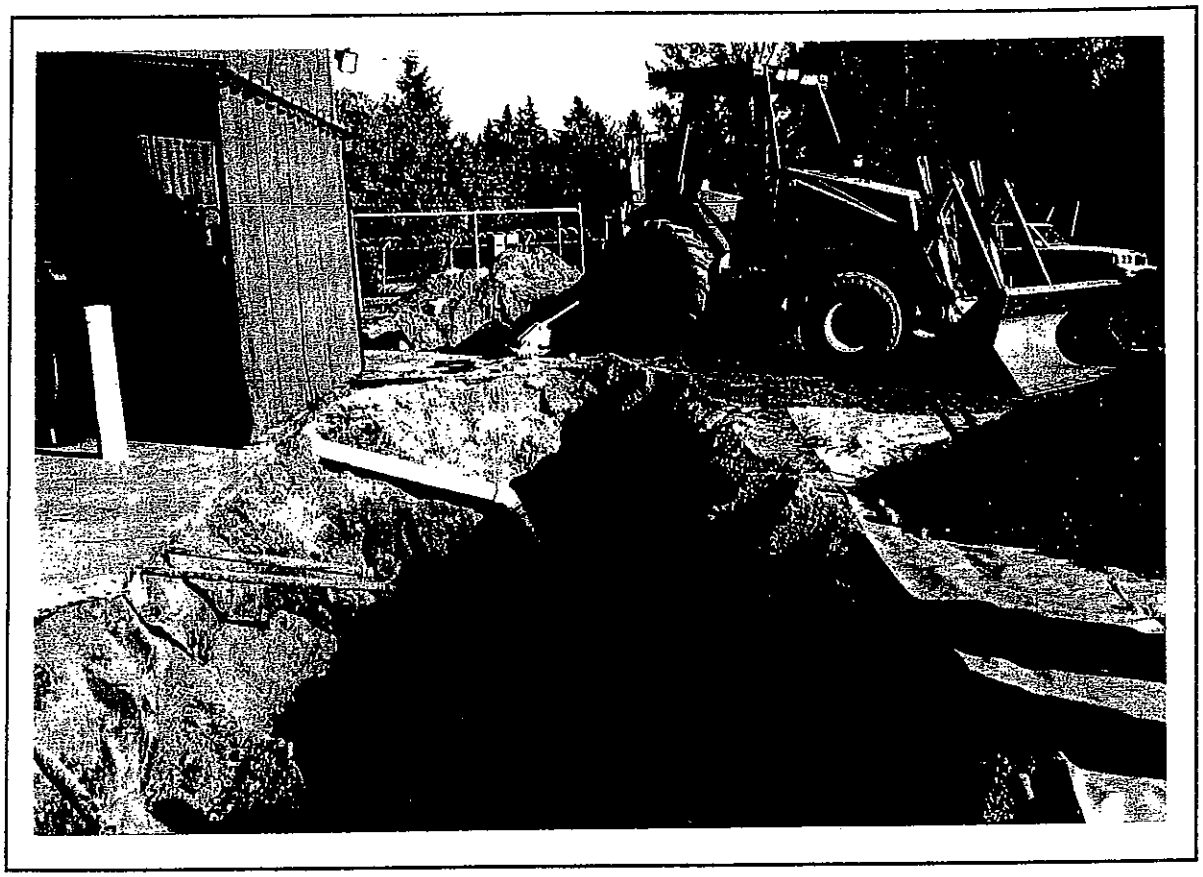

Plate 3. Excavation 2, after Removing (2)-2,000-g Gasoline USTs. O/W Discharge Pipe at NE End of Excavation. (View to NE).

Plate 4. Contaminated Soil from Below the O/W Separator. Note 1,000-g Waste Oil Tank in Background.

APPENDIX A

UNDERGROUND STORAGE TANK CLEANING & DISPOSAL DOCUMENTS

PHILIP SERVICES corp.

INDUSTRIAL SERVICES GROUP

Western Region

TANK CLEAN CERTIFICATE

Tank Description

500 Gal Oil Tank

Tank Location

Valley Jct

The above described tank has been cleaned by Philip Services Corp. and is certified ready for disposal.

NOTE: This certificate is not a "Safe For Hot Work Permit."

Philip Services Corp authorized signatures:

Printed name: Rick Brown

Signature: R. Brown

Title: Foreman

Date: 10-19-96

Oil Tank has 1" of heavy oil sludge in bottom.

Helping Clients Attain a Competative Advantage in a Global Market

1629 E. ALEXANDER AVE., SUITE A, TACOMA, WA 98421, (253) 593-4821 FAX (253) 593-4829

PHILIP SERVICES CORP.
INDUSTRIAL SERVICES GROUP
Western Region

TANK CLEAN CERTIFICATE

Tank Description

2,000 Gas Tank #1

Tank Location

Valley J-5

The above described tank has been cleaned by Philip Services Corp. and is certified ready for disposal.

NOTE: This certificate is not a "Safe For Hot Work Permit."

Philip Services Corp authorized signatures:

Printed name: Rich Braun

Signature: R. Braun

Title: Foreman

Date: 10-19-94

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PHILIP SERVICES CORP

INDUSTRIAL SERVICES GROUP

Western Region

TRIPLE RINSE CERTIFICATE

Tank Description

2000 Gals Tank #2

Tank Location

Valley I-5

The above described tank has been triple rinsed and emptied by Philip Services Corp. and is ready for excavation.

NOTE: This certificate is not a "Safe For Hot Work Permit."

Philip Services Corp authorized signatures:

Printed name: Rich Brunner

Signature: Rich Brunner

Title: Foreman

Date: 10-5-98

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1629 E. ALEXANDER AVE., SUITE A, TACOMA, WA 98421, (253) 593-4821 FAX (253) 593-4829

DOE - Joyce Smith (360) 407-7206 / FAX: (360) 407-7154
Lisa Shriver (360) 407-7203

ECOLOGY

UNDERGROUND STORAGE TANK

30 DAY NOTICE

8/14/98

See back of form for instructions

FOR OFFICE USE ONLY NW LS
Site ID #: 7000
Owner ID #: U 7343
Once validated by Ecology, this form serves as your temporary permit for the tanks listed below.

Please ✓ the appropriate box: ■ Intent to Close

NOTE: COPY TO JOE HALL CONSTRUCTION PER COVER SHEET REQUEST.....

Site Information

Site ID Number _____ (Available from Ecology if the tanks are registered)
Site/Business Name VALLEY I-5
Site Address (Street) 23051 MILITARY ROAD SOUTH
City/State KENT, WASHINGTON
Zip Code 98031 Telephone (206) 824-7170

Owner Information

(This form will be returned to this address)
UST Owner/Operator VALLEY I-5
Mailing Address (Street) 23051 MILITARY ROAD SOUTH
(P.O. Box) n/a
City/State KENT, WASHINGTON
Zip Code 98032 Telephone (206) 824-7170

Tank Installation Company (If known). Fill out this section ONLY if tanks are being installed.

Service Company N/A Contact Name _____
Address (Street) _____ (P.O. Box) _____
City _____ State _____ Zip Code _____ Telephone ( ) _____

RECEIVED AUG 14 1998 ECOLOGY

Tank Permanent Closure Company (If known). Fill out this section ONLY if tanks are being closed.

Service Company JOE HALL CONSTRUCTION, INC. Contact Name ROBERT WALKER
Address (Street) 2317 54TH AVENUE EAST (P.O. Box) N/A
City FIFE State WA Zip Code 98424 Telephone (253) 922-6815

CORRECTED COPY

Tank Closure Information

Fill out this section ONLY if tanks are being closed.

Tank ID	Projected Closure Date	Tank Capacity	Substance Stored	Date Tank Last Used	Is There Product in the Tank (Yes/No)	If No, Date Tank Was Pumped
	9/98	2,000	GASOLINE		YES	
	9/98	2,000	GASOLINE		YES	
	9/98	500	WASTE OIL		YES	

Tank Installation Information

Fill out this section ONLY if tanks are being installed.

Tank ID	Approx. Install Date
N/A	

To receive this document in an alternative format, contact the TOXICS CLEANUP

OUND TESTING, INC.
P.O. BOX 16204 SEATTLE, WA 98116
(206) 932-0206

MARINE CHEMIST CERTIFICATE

SERIAL № 43700

JOE HALL CONSTRUCTION	VALLEY I-5	20 OCT 98
Survey Requested by	Vessel Owner or Agent	Date
3 UST	UST	KENT 23051 MILITARY RD
Vessel	Type of Vessel	Specific Location of Vessel
UNL. GASOLINE, WASTE OIL	CG-O, VISUAL	1010 HRS
Last Three (3) Cargoes	Test Method	Time Survey Completed

2, 2K GAL GASOLINE TANK } SAFE FOR EXCAVATION /
1 2K GAL WASTE TANKS } SAFE TO TRANSPORT

TANKS ARE INERTED WITH CO_2 AND CONTAIN LESS THAN 5% OXYGEN.

In the event of any physical or atmospheric changes adversely affecting the gas-free condition of the above spaces, or if in any doubt, immediately stop all work and contact the undersigned Marine Chemist.

QUALIFICATIONS: Transfer of ballast or manipulation of valves or closure equipment tending to alter conditions in pipe lines, tanks or compartments subject to gas accumulation, unless specifically approved in this Certificate, requires inspection and endorsement or reissue of Certificate for the spaces so affected. All lines, vents, heating coils, valves, and similarly enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated.

STANDARD SAFETY DESIGNATIONS

SAFE FOR WORKERS Means that in the compartment or space so designated (a) the oxygen content of the atmosphere is at least 19.5 percent by volume, and that, (b) toxic materials in the atmosphere are within permissible concentrations, and that, (c) the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the Marine Chemist's Certificate.

NOT SAFE FOR WORKERS Means that in the compartment or space so designated, the requirements of Safe for Workers has not been met.

SAFE FOR HOT WORK: Means that in the compartment so designated: (a) oxygen content of the atmosphere is at least 19.5 percent by volume, with the exception of inerted spaces or where external hot work is to be performed; and that, (b) the concentration of flammable materials in the atmosphere is below 10 percent of the lower flammable limit; and that, (c) the residues are not capable of producing a higher concentration than permitted by (b) above under existing atmospheric conditions in the presence of fire, and while maintained as directed on the Marine Chemist's Certificate; and further, that, (d) all adjacent spaces have been cleaned sufficiently to prevent the spread of fire, or are satisfactorily inerted, or, in the case of fuel tanks, or lube oil tanks, or engine room or fire room bilges, have been treated in accordance with the Marine Chemist's requirements.

NOT SAFE FOR HOT WORK. Means that in the compartment so designated, the requirements of Safe for Hot Work have not been met

SAFE FOR REPAIR YARD ENTRY Means that the compartments and spaces of the flammable cryogenic liquid carrier so designated, (a) have been tested by sampling at remote sampling stations, and results indicate the atmosphere tested to be above 19.5 percent oxygen, and less than 10 percent of the lower flammable limit, or (b) are inerted

CHEMIST'S ENDORSEMENT This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306-1980 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

"The undersigned acknowledges receipt of this Certificate under Section 2-3 of NFPA 306-1980 and understands conditions and limitations under which it was issued"

Signed [signature] Name Company

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions

20 OCT 98 Date Signed [signature] Marine Chemist Certificate No 632

[redacted]

CITY OF KENT

FIRE PREVENTION DIVISION
220 4 Ave S, Kent WA 98032
(253) 813-3000

Mayor Jim White

TEMPORARY PERMIT

NO: T702

PROJECT NAME: Valley I5 ADDRESS OF SITE: 23051 Military Rd South

INSTALLER/CONT: Joe Hall Const. Inc. PHONE: 253. 922. 6815

ADDRESS: 1317 54th Ave E. Fife DATE ISSUED: _____ EXPIRATION DATE: _____

INSPECTOR: _____ DATE FINALED: _____

- DESCRIBE PROJECT:

Removal of: 3 UST 2-1000 gal gas, 1 w/o -550.

- Call For Inspection 24 Hours Before Removal.
- Comply Item #7 of Kent Fire Guidelines, Criteria For Removal of Underground Tanks.

All Proper Precautions Taken
Witnessed Clean/Rinse Papers & Gas Free Papers

G H Simpson
10/24/98

30045
PAID
SEP 2 1 1998
CITY OF KENT
TREASURY

PLEASE POST IN A CONSPICUOUS PLACE ON THE SITE – NON TRANSFERRABLE

for L. Wass
FIRE MARSHAL

AFFILIATE PEI PETROLEUM EQUIPMENT INSTITUTE

JOE HALL CONSTRUCTION, INC.

JO-EH-AC*259RT

1317 54th Avenue East
Fife, Washington 98424-1226
FAX: (253) 922-6828

TACOMA (253)922-6815
FED WAY/SEA (253)838-1027

TOLL FREE (800)777-6815
SEA/BELV (206)587-0470

TANK DISPOSAL CERTIFICATION

DATE: 10/26/98

TO: VALLEY I-5

ATTN: DON HOBERT

P.O. BOX 3040

KENT, WA 98032

P.O.# _____ JOE HALL JOB# G-98-084

THIS DOCUMENT SERVES AS CERTIFICATION THAT JOE HALL CONSTRUCTION, INC. HAS PROPERLY CLEANED AND DISPOSED OF THE FOLLOWING TANKS IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL RULES AND REGULATIONS.

LOCATION OF TANKS: VALLEY I-5 / 23051 MILITARY ROAD SOUTH / KENT, WA 98032

DISCRIPTION OF TANKS : (Total Number Of Tanks & Gallonage Capacity)
(1) 500 GALLON STEEL WASTE OIL TANK
(2) 2,000 GALLON STEEL GASOLINE TANKS

DATE CLEANED: 10/19 & 10/23/98 - PHILIP ENVIRONMENTAL/ALLWASTE ENVIRONMENTAL

DATE OF DISPOSAL: 10/26/98

METHOD OF DISPOSAL: SCRAPED STEEL

LOCATION OF DISPOSAL: SCHNITZER STEEL INDUSTRIES, INC.
1902 MARINE VIEW DRIVE / TACOMA, WA 98422

SIGNATURE: _____

APPENDIX B

UNDERGROUND STORAGE TANK CLOSURE AND SITE ASSESSMENT NOTICE

UNDERGROUND STORAGE TANK
Site Check/Site Assessment Checklist

WASHINGTON STATE DEPARTMENT OF ECOLOGY

For Office Use Only	
Owner #	
Site #	

INSTRUCTIONS:

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

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

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

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

CHECKLIST: Please initial each item in the appropriate box.

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

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

SITE INFORMATION

Site ID Number (on invoice or available from Ecology if the tanks are registered): _____

Site/Business Name: Valley I-5 Motor Home

Site Address: 23051 Military Rd. (Street) Telephone: (800) 562-2323

Kent (City) WA (State) 98032 (ZIP-Code)

TANK INFORMATION

Tank ID No.	Tank Capacity	Substance Stored
T-1	2,000-g	Unl. Gasoline
T-2	2,000-g	Unl. Gasoline
T-3	1,000-g	Waste oil

REASON FOR CONDUCTING SITE CHECK/SITE ASSESSMENT

Check one:

- ____ Investigate suspected release due to on-site environmental contamination.
- ____ Investigate suspected release due to off-site environmental contamination.
- ____ Extend temporary closure of UST system for more than 12 months.
- ____ UST system undergoing change-in-service.
- ____ UST system permanently closed-in-place.
- X UST system permanently closed with tank removed.
- ____ Abandoned tank containing product.
- ____ Required by Ecology or delegated agency for UST system closed before 12/22/88.
- ____ Other (describe): _____

G-98-084

WASHINGTON STATE DEPARTMENT OF ECOLOGY

UNDERGROUND STORAGE TANK TEMPORARY/PERMANENT CLOSURE and SITE ASSESSMENT NOTICE

See back of form for instructions
Please ☑ the appropriate box(es)
Please type or print information

For Office Use Only
Owner #
Site #

[ ] Temporary Tank Closure [X] Permanent Tank Closure [ ] Change-In-Service [ ] Site Assessment/ Site Check

SITE INFORMATION:

Site ID Number (on invoice or available from Ecology if the tanks are registered): 7000 (OWNER ID# U7343)

Site/Business Name: VALLEY I-5

Site Address: 23051 MILITARY ROAD SOUTH (Street) Telephone: (206) 824-7170

KENT, (City) WASHINGTON (State) 98032 (ZIP-Code)

TANK INFORMATION:

Tank ID	Closure Date	Tank Capacity	Substance Stored
#1 336189	10/23/98	2,000	GASOLINE
#2 336073	10/23/98	2,000	GASOLINE
#3 336188	10/23/98	~~500~~ 1000	WASTE OIL

CONTAMINATION PRESENT AT THE TIME OF CLOSURE

[ ] Yes [ ] No [X] Unknown

Check unknown if no obvious contamination was observed and sample results have not yet been received from analytical lab.

UST SYSTEM OWNER/OPERATOR:

UST Owner/Operator: VALLEY I-5

Owners Signature: X [signature] Telephone: (206) 824-7170

Address: 23051 MILITARY ROAD SOUTH (Street) P.O. BOX 3040 (P.O. Box)

KENT, (City) WA (State) 98032 (ZIP-Code)

TANK CLOSURE/CHANGE-IN-SERVICE PERFORMED BY:

Service Provider: JOE HALL CONSTRUCTION, INC. License Number: S-000028

Licensed Supervisor: DENNIS PADILLA Decommissioning License Number: 1057223-26

Supervisors Signature: X [signature]

Address: 1317 54TH AVENUE EAST (Street) (P.O. Box)

FIFE, (City) WASHINGTON (State) 98424-1226 (ZIP-Code)

Telephone: (253) 922-6815 / FAX: (253) 922-6828

SITE CHECK/SITE ASSESSMENT CONDUCTED BY:

Name of Registered Site Assessor: RICHARD C. ALVORD, C.P.G. (SOUND ENVIRONMENTAL CONSULTING)

Telephone: (253) 858-1870

Address: 1912 CLORINDI CIRCLE N.W. (Street)

GIG HARBOR, (City) WA (State) 98335 (ZIP-Code) (P.O. Box)

ECY 020-34

APPENDIX C

ANALYTICAL LABORATORY REPORTS, AND CHAIN OF CUSTODY RECORDS

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

October 22, 1998

Sound Environmental Consulting
1912 Clorindi Circle NW
Gig Harbor, WA 98335

Attn: Richard Alvord

Sample ID: Exc.1-North @6'
Project: Valley I-5 Motor Home
Sample Matrix: Soil
Date Sampled: 10/20/98
Date Received: 10/20/98
Date Analyzed: 10/21/98
Spectra Project: S810-143
Spectra #5763
RUSH

Total Petroleum Hydrocarbons, mg/Kg	<20
Total Lead, mg/Kg	5

Total Petroleum Hydrocarbons testing performed by WTPH-418.1 Modified
Total Lead Testing performed by EPA Method 6010

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

October 22, 1998

Sound Environmental Consulting
1912 Clorindi Circle NW
Gig Harbor, WA 98335

Attn: Richard Alvord

Sample ID: Exc.1-West @6.5'
Project: Valley I-5 Motor Home
Sample Matrix: Soil
Date Sampled: 10/20/98
Date Received: 10/20/98
Date Analyzed: 10/21/98
Spectra Project: S810-143
Spectra #5764
RUSH

Total Petroleum Hydrocarbons, mg/Kg	<20
Total Lead, mg/Kg	6

Total Petroleum Hydrocarbons testing performed by WTPH-418.1 Modified
Total Lead Testing performed by EPA Method 6010

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

October 22, 1998

Sound Environmental Consulting
1912 Clorindi Circle NW
Gig Harbor, WA 98335

Attn: Richard Alvord

Sample ID: Exc.1-Bottom @7.5'
Project: Valley I-5 Motor Home
Sample Matrix: Soil
Date Sampled: 10/20/98
Date Received: 10/20/98
Date Analyzed: 10/21/98
Spectra Project: S810-143
Spectra #5765
RUSH

Total Petroleum Hydrocarbons, mg/Kg	<20
Total Lead, mg/Kg	<4

Total Petroleum Hydrocarbons testing performed by WTPH-418.1 Modified
Total Lead Testing performed by EPA Method 6010

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

October 22, 1998

Sound Environmental Consulting
1912 Clorindi Circle NW
Gig Harbor, WA 98335

Attn: Richard Alvord

Sample ID: Exc.1-Stockpile
Project: Valley I-5 Motor Home
Sample Matrix: Soil
Date Sampled: 10/20/98
Date Received: 10/20/98
Date Analyzed: 10/21/98
Spectra Project: S810-143
Spectra #5766
RUSH

Total Petroleum Hydrocarbons, mg/Kg	48
Total Lead, mg/Kg	<4

Total Petroleum Hydrocarbons testing performed by WTPH-418.1 Modified
Total Lead Testing performed by EPA Method 6010

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

October 22, 1998

Sound Environmental Consulting
1912 Clorindi
Gig Harbor, WA 98335

Attn: Richard Alvord

Project: Valley I-5 Motor Home
Sample Matrix: Soil
Date Sampled: 10/20/98
Date Received: 10/20/98
Date Analyzed: 10/21/98
Spectra Project: S810-143
RUSH

Spectra #	Sample ID:	WTPH-G, mg/Kg dry wt.	Surrogate Recoveries Toluene D-8	BFB
5767	Exc. 2-North @7'	<20	100%	98%
5768	Exc. 2-West @8'	<20	97%	102%
5769	Exc. 2-Bottom @11'	<20	102%	95%
5770	Exc. 2-South @8'	43	100%	93%
5771	Exc. 2-East @10'	110	100%	98%
5772	Exc. 2-Bottom @13'	478	100%	99%
5773	Exc. 2-Stockpile-1	<20	101%	94%
5774	Exc. 2-Stockpile-2	<20	100%	94%

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

October 22, 1998

Sound Environmental Consulting
1912 Clorindi Circle NW
Gig Harbor, WA 98335

Attn: Richard Alvord

Sample ID: Exc. 2-South @8'
P.O. #Joe Hall #G-98084
Project: Valley I-5 Motor Home
Sample Matrix: Soil
Date Sampled: 10/20/98
Date Received: 10/20/98
Spectra Project: S810-143
Spectra #5770 RUSH

BTEX, EPA Method 624/8260
Dilution Factor: 50

Date Analyzed: 10/21/98
Units: mg/Kg

	CAS#	
Benzene	71-43-2	0.17J
Toluene	108-88-3	<0.25
Ethylbenzene	100-41-4	1.87
Total Xylenes	—	10.4

J = Estimated Value. Result is below normal reporting limits.

Surrogate Percent Recoveries:

Toluene-d8	107%
4-Bromofluorobenzene	86%

CAS# = Chemical Abstract Services Registry Number

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

October 22, 1998

Sound Environmental Consulting
1912 Clorindi Circle NW
Gig Harbor, WA 98335

Attn: Richard Alvord

Sample ID: Exc. 2-East @10'
P.O. #Joe Hall #G-98084
Project: Valley I-5 Motor Home
Sample Matrix: Soil
Date Sampled: 10/20/98
Date Received: 10/20/98
Spectra Project: S810-143
Spectra #5771 RUSH

BTEX, EPA Method 624/8260
Dilution Factor: 50

Date Analyzed: 10/21/98
Units: mg/Kg

	CAS#	
Benzene	71-43-2	<0.25
Toluene	108-88-3	<0.25
Ethylbenzene	100-41-4	0.77
Total Xylenes	—	4.97

Surrogate Percent Recoveries:

Toluene-d8	107%
4-Bromofluorobenzene	91%

CAS# = Chemical Abstract Services Registry Number

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

October 22, 1998

Sound Environmental Consulting
1912 Clorindi Circle NW
Gig Harbor, WA 98335

Attn: Richard Alvord

Sample ID:Exc.2-Bottom @13'
P.O. #Joe Hall #G-98084
Project:Valley I-5 Motor Home
Sample Matrix: Soil
Date Sampled: 10/20/98
Date Received: 10/20/98
Spectra Project: S810-143
Spectra #5772 RUSH

BTEX, EPA Method 624/8260
Dilution Factor: 50

Date Analyzed: 10/21/98
Units: mg/Kg

	CAS#	
Benzene	71-43-2	<0.25
Toluene	108-88-3	3.75
Ethylbenzene	100-41-4	22.2
Total Xylenes	___	133

Surrogate Percent Recoveries:

Toluene-d8	103%
4-Bromofluorobenzene	98%

CAS# = Chemical Abstract Services Registry Number

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

October 22, 1998

Sound Environmental Consulting
1912 Clorindi Circle NW
Gig Harbor, WA 98335

Attn: Richard Alvord

EPA Method: 418.1 Mod.
Sample Matrix: Soil
Spectra Project: S810-143
Applies to Spectra #'s
5763 - 5766

HYDROCARBON ANALYSIS
QUALITY CONTROL RESULTS

MS/MSD

Spiked Sample: S809-268-5378 Date Analyzed: 10-1-98
Units: mg/Kg

Compound	Sample Result	Spike Amount	Spike Result	% Recovery	Dup. Result	Dup. % Recovery	RPD
TPH	<20	255	275	103	262	98	5

METHOD BLANK

Date Extracted: 10-21-98 Date Analyzed: 10-21-98

Total Petroleum Hydrocarbons, mg/Kg <20

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

October 22, 1998

Sound Environmental Consulting
1912 Clorindi Circle NW
Gig Harbor, WA 98335

Attn: Richard Alvord

METHOD BLANK
Sample Matrix: Soil
Spectra Project: S810-143
Applies to Spectra #'s
5770 - 5772

BTEX, EPA Method 624/8260
Dilution Factor: 50

Date Analyzed: 10/21/98
Units: mg/Kg

	CAS#	
Benzene	71-43-2	<0.25
Toluene	108-88-3	<0.25
Ethylbenzene	100-41-4	<0.25
Total Xylenes	---	<0.25

Surrogate Percent Recoveries:

Toluene-d8	104%
4-Bromofluorobenzene	91%

CAS# = Chemical Abstract Services Registry Number

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

October 22, 1998

Sound Environmental Consulting
1912 Clorindi Circle NW
Gig Harbor, WA 98335

Attn: Richard Alvord

METHOD BLANK
Date Analyzed: 10-21-98
Spectra Project: S810-143
Applies to Spectra #'s
5763 - 5766

Total Lead, mg/Kg	<4

Total Lead Testing performed by EPA Method 6010

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

CHAIN of CUSTODY

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838

CLIENT: Sound Environmental Cons.
PROJECT: Valley I-5 Motor Home
CONTACT: Rick ALVORD
PHONE: (253) 858-1870
PURCHASE ORDER #:

SAMPLE ID	DATE	TIME	MATRIX	NUMBER OF CONTAINERS	WTPH-HCID	BTEX/WTPH-G	BTEX	WTPH-G	WTPH-D	TPH 418.1	F.O.G. 413.1/413.2	8260 VOA	8260 CHLOR SOLVENTS	8270 SEMI-VOA	PAH/PNA-8270	8080 ORG. CHLOR PEST.	8082 PCB	TCLP METALS (8)	TCLP-VOA	TCLP 8270 SEMI-VOA	TCLP PEST.	TCLP HERB.	TOTAL METALS ICP/DCP	TOTAL METALS GFAA	TOTAL LEAD	pH 9040/9045	TOX 9020/9076	TOC 9060/PSEP	FLASH POINT	SOLIDS (SPECIFY)				NORMAL / RUSH	LAB ID
Exc.1-North@6'	10/20/98		Soil					X		X															X									
Exc.1-West@6½'										X															X									
Exc.1-Bottom@7½'										X															X									
Exc.2-NORTH@7'								X																										
Exc.2-West@8'								X																										
Exc.2-Bottom@11'								X																										
Exc.2-South@8'								X																										
Exc.2-East@10'								X																										
Exc.2-Bottom@13'								X																										
Exc.2-Stockpile-1	↓		↓					X																										
Exc.2-Stockpile-2								X																										
Exc.2-Stockpile																																		

HYDROCARBONS | ORGANICS | TCLP D-LIST | METALS | OTHER

RETURN
DISPOSE
Fee applies

SPECIAL INSTRUCTIONS/COMMENTS:

Request 24 hr - Turn.
CHANGE Joe Hall Const. Acc.
Job No. 698084
Run BTEX if WTPH-G is pos.

	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY	Richard Alvord	Rick ALVORD	SEC	10/20/98	4:58
RECEIVED BY	D. Tristan	D. Tristan	Spectra	10/20/98	4:58
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 18% per annum interest. Customer agrees to pay all costs of collection including reasonable attorney's fees and all other associated costs of collection regardless of whether suit is filed.

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

October 28, 1998

Sound Environmental Consulting
1912 Clorindi Circle NW
Gig Harbor, WA 98335

Attn: Richard Alvord

Sample ID: EXC. 3-South @10'
Project: Valley I-5 Motor Home
Sample Matrix: Soil
Date Sampled: 10-27-98
Date Received: 10-27-98
Spectra Project: S810-190
Spectra #5891
RUSH

BTEX, EPA Method 8260
Dilution Factor: 50

Date Analyzed: 10-27-98
Units: mg/Kg

	CAS#	
Benzene	71-43-2	<0.25
Toluene	108-88-3	<0.25
Ethylbenzene	100-41-4	0.13J
Total Xylenes	—	0.74
WTPH-G, mg/Kg		<20

Surrogate Percent Recoveries:

Toluene-d8	45%*
4-Bromofluorobenzene	87%

CAS# = Chemical Abstract Services Registry Number

J = Estimated value, result is less than normal reporting limits.
*Surrogate out of limits due to matrix effects.

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

October 28, 1998

Sound Environmental Consulting
1912 Clorindi Circle NW
Gig Harbor, WA 98335

Attn: Richard Alvord

METHOD BLANK
Sample Matrix: Soil
Spectra Project: S810-190
Applies to Spectra #'s
5891 and 5893

BTEX, EPA Method 8260
Dilution Factor: 50

Date Analyzed: 10-27-98
Units: mg/Kg

	CAS#	
Benzene	71-43-2	<0.25
Toluene	108-88-3	<0.25
Ethylbenzene	100-41-4	<0.25
Total Xylenes	—	<0.25

WTPH-G, mg/Kg <20

Surrogate Percent Recoveries:

Toluene-d8	109%
4-Bromofluorobenzene	91%

CAS# = Chemical Abstract Services Registry Number

WTPH-D, mg/Kg dry wt. <25
Heavy Oils <100
Surrogate Percent Recovery - p-Terphenyl 94%

Total Lead (Pb), mg/Kg <4

Total Lead testing performed by EPA Method 6010

SPECTRA LABORATORIES, INC.

Steven G. Hibbs, Laboratory Manager

SPECTRA Laboratories, Inc.

2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850

October 28, 1998

Sound Environmental Consulting
1912 Clorindi Circle NW
Gig Harbor, WA 98335

Attn: Richard Alvord

Sample ID: Soil Stockpile
(O/W Separator)
Project: Valley I-5 Motor Home
Sample Matrix: Soil
Date Sampled: 10-27-98
Date Received: 10-27-98
Spectra Project: S810-190
Spectra #5893 RUSH

BTEX, EPA Method 8260
Dilution Factor: 500

Date Analyzed: 10-27-98
Units: mg/Kg

	CAS#	
Benzene	71-43-2	<0.5
Toluene	108-88-3	<0.5
Ethylbenzene	100-41-4	<0.5
Total Xylenes	___	32.0

WTPH-G, mg/Kg 1,512

Surrogate Percent Recoveries:
Toluene-d8 106%
4-Bromofluorobenzene 98%

CAS# = Chemical Abstract Services Registry Number

WTPH-D, mg/Kg dry wt. <25
Heavy Oils <100
Surrogate Percent Recovery - p-Terphenyl 158%

Total Lead (Pb), mg/Kg 7

Total Lead testing performed by EPA Method 6010

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2221 Ross Way • Tacoma, WA 98421 • (253) 272-4850 • Fax (253) 572-9838

CHAIN of CUSTODY

PAGE 1 of 1

CLIENT: Sound Environmental Cons.
PROJECT: Valley I-5 Motor Home
CONTACT: Rick ALVORD
PHONE: (253) 858-1870
PURCHASE ORDER #:

SAMPLE ID	DATE	TIME	MATRIX	NUMBER OF CONTAINERS	WTPH-HCID	BTEX/WTPH-G	BTEX	WTPH-G	WTPH-D	TPH	F.O.G. 413.1/413.2	8260 VOA	8260 CHLOR SOLVENTS	8270 SEMI-VOA	PAH/PNA-8270	8080 ORG. CHLOR PEST.	8082 PCB	TCLP METALS (8)	TCLP-VOA	TCLP 8270 SEMI-VOA	TCLP PEST.	TCLP HERB.	TOTAL METALS ICP/DCP	TOTAL METALS GFAA	TOTAL LEAD	pH 9040/9045	TOX 9020/9076	TOC 9060/PSEP	FLASH POINT	SOLIDS (SPECIFY)				NORMAL/ RUSH
Exc 3-South @ 10'		10/27/98	Soil	(1)			X	X																										
Exc 3a-South @ 10'				(ARCHIVE)																														
Soil Stockpile (O/W Separator)							X	X	X	X															X									

RETURN
DISPOSE
Fee applies
LAB ID

SPECIAL INSTRUCTIONS/COMMENTS:

24 hr turn, verbal asap
Charge Joe Hall Const Account
Thanks!
PREVIOUS

	SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
RELINQUISHED BY	Rick Alvord	Rick ALVORD	SEC	10/27/98	1224
RECEIVED BY	Vicki Cline	Vicki Cline	Spectra	10/27/98	1224
RELINQUISHED BY					
RECEIVED BY					

Payment Terms: Net 30 days. Past due accounts subject to 18% per annum interest. Customer agrees to pay all costs of collection including reasonable

SAND & GRAVEL
3120 Freeman Road East
Fife, Washington 98424-3623
Phone: (253) 922-7710
Fax: (253) 926-0815

****

*****CERTIFICATE OF DISPOSAL*****

****

FIFE SAND & GRAVEL BIOREMEDIATION FACILITY HAS:

RECEIVED: 4.91 TONS OF MATERIAL;

FROM: VALLEY I-5;

ON THE FOLLOWING DATES: OCT 28, 1998.

THIS MATERIAL WILL BE BIOREMEDIATED IN ACCORDANCE WITH THE TERMS OF FSG'S SOLID WASTE PERMIT, #27-705.

Susan Kelley Wilson
SUSAN KELLEY WILSON, MNGR

15 DEC 98
DATE