SUBSURFACE INVESTIGATION REPORT

Morris Street and North 4th Street Right-of-Ways
La Conner, Washington

August 10, 2005

Prepared for:

Town of La Conner
c/o Johannessen & Associates, PS
5413 Meridian Avenue North, Suite C
Seattle, Washington 98103

Prepared by:

Sound Environmental Strategies Corporation
2400 Airport Way South, Suite 200
Seattle, Washington 98134-2020

Prepared by:

Deborah H. Gardner, LEG, LHG
Senior Hydrogeologist

Reviewed by:

Bert Q. Hyde, LG/LHG #1813
Principal Hydrogeologist

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

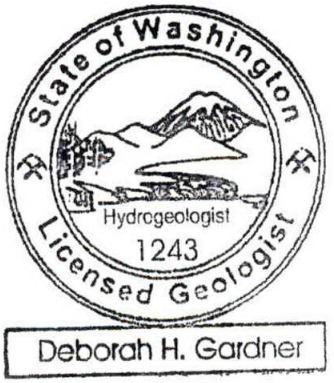


TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

TABLES AND CHARTS

FIGURES

APPENDICES

EXECUTIVE SUMMARY

Sound Environmental Strategies Corporation (SES) completed a subsurface investigation in the Morris Street and North 4th Street right-of-ways, at the 300 Block of Morris Street, La Conner, Washington (the Site). The work was conducted in accordance with SES proposal executed March 29, 2005. The objective of the investigation, which was conducted on behalf of the Town of La Conner, was to assess the potential sources, age, nature and extent of soil and groundwater contamination in the Morris Street and North 4th Street right-of-ways.

In March 2003, utility contractors encountered petroleum-contaminated soil (PCS) and four underground storage tanks (USTs) at the 300 Block of Morris Street. Subsequent upgrades to the storm sewers also encountered PCS in 4th Street between Morris Street and Centre Street. The private property at 315 Morris Street was occupied by a Chevron service station between approximately 1930 and 1989 (Adept, 2003). The locations of the USTs that were removed in 2003 extended into the Morris Street right-of-way.

The subsurface investigation consisted of drilling six borings in the Morris Street right-of-way between 3rd Street and 4th Street, and six borings in the North 4th Street right-of-way between Morris Street and Centre Street, adjacent to the former service station facility. Groundwater samples were collected from temporary wells at each of the twelve boring locations. Project work included a review of historical documents for the Site and adjacent properties, laboratory analysis of representative soil and groundwater samples, evaluation of the laboratory analytical data, and preparation of this report. The results of the subsurface investigation indicate the following:

- A release of diesel-range petroleum hydrocarbons (DRPH), gasoline-range petroleum hydrocarbons (GRPH) and associated compounds to soil and groundwater has been confirmed at the Site. Based upon the apparent eastward and southward distribution of GRPH documented at the former UST excavation in 2003, SES attributes the source(s) of petroleum hydrocarbons in soil and groundwater at the Site to former operation of a gasoline station at 315 Morris Street between approximately 1930 and 1989.

- The laboratory observed that the chromatogram for the diesel standard varies slightly from the patterns observed in chromatograms for the soil and groundwater samples that were collected at the Site. The pattern variation observed by the laboratory is consistent with projects in close proximity to septic systems or marine waters. The laboratory's observation is consistent with the geologic development of the Skagit River delta and the Site's proximity to Puget Sound (four city blocks).

- Concentrations of petroleum hydrocarbons in soil or groundwater samples collected southwest and south of the former UST excavation at 315 Morris Street were either not detected or were well below their respective Method A cleanup levels published in Washington State Model Toxics Control Act (MTCA). This observation is consistent with the apparent southeastward migration of petroleum hydrocarbons documented at the former UST excavation in 2003 (Adept, 2003).

- The variation of DRPH concentrations in groundwater samples collected at borings ROW-4, ROW-5, and ROW-6 suggests the potential for more than one release at 315

EXECUTIVE SUMMARY (continued)

Morris Street. Based upon the documented evidence for southward and eastward migration patterns at the Site, the former pump island, heating fuel UST, and/or the former bulk fuel tanks appear to be the closest, separate potential sources of petroleum hydrocarbons to the soil and groundwater at the Site.

- The horizontal and vertical distributions of petroleum hydrocarbons in soil and groundwater suggest a shallow release above the groundwater table in the vicinity of the former pump island, as evidenced by the field observations and analytical results for soil samples collected at borings ROW-6, ROW-7, ROW-11, and ROW-12.

- The results of analytical testing for selected petroleum naphtha compounds (piano compounds) suggest that boring ROW-12 is located closer to a common source of petroleum hydrocarbons than boring ROW-6. Given the absence of groundwater impacts adjacent to the 2003 UST excavation, and the similar distances from each boring to the former bulk tanks, the former pump island is a potential common source of petroleum hydrocarbons in soil and groundwater in borings ROW-6 and ROW-12.

- Similar proportions of the same petroleum naphtha compounds were detected in groundwater sample ROW-7-W, soil sample ROW-12-5, and soil sample ROW-6-6. This suggests that the soil in borings ROW-6 and ROW-12 and the groundwater in boring ROW-7 have been impacted by a common release of petroleum hydrocarbons.

- Petroleum fuel oxygenates were not detected in soil and groundwater samples collected at the Site.

- The pattern of DRPH, GRPH, and/or associated compounds in soil and groundwater suggests a groundwater flow direction (and resultant contaminant migration direction) to the southeast. The extent of migration in this direction is not fully defined.

1.0 INTRODUCTION

On behalf of the Town of La Conner, Sound Environmental Strategies Corporation (SES) completed a subsurface investigation of the right-of-ways intersecting the 300 Block of Morris Street, La Conner, Washington (herein referred to as "the Site"). This work was authorized by and completed on behalf of the Town of La Conner in accordance with SES' proposal dated December 22, 2004. This report presents the results of the subsurface investigation work completed in May 2005.

The location of the Morris Street and North 4th Street right-of-ways is shown on Figure 1. The investigation consisted of subsurface explorations using a direct-push drilling rig. Pertinent site features and boring locations are shown on Figure 2.

1.1 BACKGROUND

In March 2003, utility contractors encountered petroleum-contaminated soils (PCS) and four underground storage tanks (USTs) in the 300 Block of Morris Street. Subsequent upgrades to the storm sewers also encountered PCS in North 4th Street between Morris Street and Centre Street.

The property at the 315 Morris Street address was occupied by a Chevron service station between approximately 1930 and 1989 (Adept, 2003). The locations of the USTs that were removed in 2003 extended into the Morris Street right-of-way.

1.2 PROJECT OBJECTIVE

The objective of the subsurface investigation was to provide additional characterization of the petroleum hydrocarbon contaminants within the Morris Street and North 4th Street right-of-ways passing through the property located at 315 Morris Street, so that the source of the contaminants and (if possible) time of their release can be identified.

1.3 SCOPE OF WORK

The scope of work for this investigation was developed through discussions in December 2004 between SES, the Town of La Conner and their counsel. The authorized scope of work included the following tasks:

- Review of environmental work conducted in 2003 for the former owner of the property at 315 Morris Street (The Station House);
- Drilling of twelve borings at the Site using a direct-push drilling rig;
- Collection of representative soil and groundwater samples for laboratory analysis, and analysis of selected samples for DRPH; GRPH; benzene, toluene, ethylbenzene, and total xylenes (BTEX); extractable petroleum hydrocarbons (EPH); total lead, dissolved lead, and organic lead; and the American Society of Testing and Materials (ASTM) Method D 5134 list of petroleum naphthas (piano compounds); and
- Preparation of this report.

2.0 SITE DESCRIPTION

The Site is described as the public right-of-way within the 300 Block of Morris Street, and the North 4th Street right-of-way between Morris Street and Centre Street. Morris Street is paved with asphalt concrete and improved with concrete curb and sidewalks. Approximately 60 feet north of the Morris Street center-line, the concrete curb and sidewalks transition to the gravel shoulder of North 4th Street. The land surface is relatively flat-lying. Surface runoff is collected by catch basins and curb inlets that discharge to the municipal storm sewer system.

Public and private utilities installed at the Site include sanitary sewer, storm sewer, drinking water, power, natural gas, telecommunication duct-banks, cable television, and power for street lamps. Selected utility mains and side service connections are shown on Figure 2.

3.0 DOCUMENT REVIEW

SES reviewed the following documents prepared during the removal of the USTs and interim cleanup of soil at The Station House, 315 Morris Street, La Conner, Washington:

- Adept Geoscience & Environment (Adept), May 19, 2003, *Interim Soil Cleanup Report, Station House – Town of La Conner ROW 315 Morris Street, La Conner, Washington.*
- Adept, May 19, 2003, *Draft UST Removal & Site Assessment, Station House – Town of La Conner ROW 315 Morris Street, La Conner, Washington.*
- SES, April 9, 2003, *Fieldwork Progress Report, UST Decommissioning Adjacent to Right-of-Way Between 3rd and 4th Street, La Conner, WA.*
- SES, April 10, 2003, *Fieldwork Progress Report, UST Decommissioning Adjacent to Right-of-Way Between 3rd and 4th Street, La Conner, WA.*

According to the above-listed documents, four USTs were removed from the Morris Street right-of-way on April 9 and 10, 2003. The UST removal and interim cleanup activities were performed on behalf of the former owners of The Station House, Gerald and Donna Blades.

The estimated capacities of the USTs ranged from 550 to 1,100 gallons. The installation dates and former contents of the USTs are unknown. On the dates of removal, three of the USTs contained what was described as a mixture of gasoline and water, and the fourth was reportedly dry. A pump island has existed immediately east of the location of the former USTs since at least 1930.

A release of petroleum product to soil and groundwater was confirmed at the time of the UST removal activities. Interim cleanup activities completed in April 2003 concluded with a UST excavation that measured approximately 35 feet long, 15 feet wide, and 6 to 9 feet below surrounding street grades.

Upon completion of the interim cleanup action, the highest residual concentrations of GRPH occurred at the south and east sidewalls of the former UST excavation with concentrations of up to 3,200 milligrams per kilogram (mg/kg). The laboratory classified the petroleum hydrocarbons as a combination of diesel-range product, lube oil and/or highly weathered gasoline. The

petroleum fuel additives EDB, EDC, and methyl t-butyl ether (MTBE) were not detected in soil samples collected from the UST excavation.

4.0 INVESTIGATION METHODS AND OBSERVATIONS

This section provides a summary of project field methods and observations made during the subsurface investigation of the Site. Additional details on general field procedures, sampling protocols, and drilling technologies are provided in Appendix A.

4.1 COLLECTION OF SOIL SAMPLES

On May 9 and 10, 2005, twelve (12) soil borings (ROW-1 through ROW-12) were advanced by a Washington State licensed driller, ESN, of Lacey, Washington. ESN used a Geoprobe ® direct-push drilling rig to hydraulically advance a split-spoon sampler tube through the soil profile and retrieve soil core samples. The total depths of the soil borings ranged from 8 feet to 12 feet below ground surface (bgs), terminating in water-bearing sand or silt. The soil boring locations are shown on Figure 2 relative to current site features.

Soil borings were advanced at the Site at 20- to 45-foot intervals south and east of The Station House at 315 Morris Street to document subsurface soil and groundwater conditions at the following areas:

- East of the former bulk tanks (ROW-1, ROW-2, ROW-3);
- East of a current or former heating oil UST (ROW-4 and ROW-5);
- Northeast of the former pump island (ROW-6);
- South of the former pump island (ROW-11 and ROW-12);
- South and southwest of the former USTs (ROW-8, ROW-9, ROW-10); and
- Southeast of new storm sewer installations at the intersection of Morris Street and North 4th Street (ROW-7).

An SES Hydrogeologist was present on the Site to direct drilling and sampling activities, and to visually classify soil in accordance with the Unified Soil Classification System (USCS). The lithology of each soil boring was logged and continuous soil cores were field-screened for visual and olfactory indications of petroleum hydrocarbon odors, staining, or dyes. In addition, soil samples were field-screened for the relative presence of ionizable, volatile compounds using a photoionization detector (PID) equipped with a 10.6 electron volt lamp. Observations, along with other relevant geologic and hydrologic conditions encountered during drilling, were recorded on the soil boring logs. The location of each soil boring was measured relative to a reference point that corresponds to the corner of the edge of right-of-way northwest of the intersection of Morris Street and North 4th Street. Lithologic logs of each soil boring are presented in Appendix B.

Discrete soil samples collected from the sampling tools were placed in laboratory-prepared containers labeled with soil boring number, sample interval, time, date, SES project number, and required analyses. Soil samples slated for analysis of volatile compounds such as BTEX

and GRPH were contained at the Site and extracted at the laboratory in accordance with United States Environmental Protection Agency (EPA) Method 5034B. Filled sample containers were placed immediately in a chilled ice chest, stored and delivered under chain-of-custody protocols to the project laboratory.

4.2 COLLECTION OF GROUNDWATER SAMPLES

Upon completion of each soil boring, temporary wells were installed in each boring. The temporary wells were constructed from disposable, one-inch diameter, polyvinyl chloride (PVC) slotted pipe. A temporary well remained in each boring until after groundwater had recharged sufficiently for pumping.

Groundwater samples were collected using a peristaltic pump with disposable, polyethylene tubing to prevent cross-contamination between soil borings. Groundwater samples were discharged directly from the tubing into laboratory containers appropriate for each analysis to be performed. Due to the slow groundwater recharge conditions that prevailed at the Site, sampling was initiated before purging had achieved non-turbid sample conditions.

4.3 LABORATORY ANALYSIS

One to three soil samples and one groundwater sample collected at each boring were selected for laboratory analysis based on the results of field screening. Selected soil and groundwater samples were submitted under chain-of-custody protocols to Friedman & Bruya, Inc., in Seattle, Washington, for the following laboratory analyses:

- TRPH and DRPH by Northwest Method NWTPH- Dx;
- GRPH by Northwest Method NWTPH- Gx; and
- BTEX by EPA Method 8021B.

In addition, selected samples were analyzed by the following methods:

- Organic lead and manganese speciation by EPA Method 8082 modified (groundwater);
- Total lead by EPA Method 6010 (soil);
- Total and dissolved lead by EPA Method 200.8 (groundwater)
- MTCA Table 830-1 polynuclear aromatic hydrocarbons (PAH) by EPA Method 8270C (soil);
- Extractable Petroleum Hydrocarbons (EPH) by Ecology Method EPH (soil); and
- ASTM Method 5134 list of petroleum naphthas (piano compounds) by EPA Method 8260B (soil and groundwater).

A copy of the chain-of-custody form and laboratory-prepared analytical reports are provided in Appendix C and Appendix D. The analytical results are discussed in Sections 5.2 and 5.3 of this report.

5.0 SUBSURFACE INVESTIGATION RESULTS

This section presents a description of the subsurface soil and groundwater conditions encountered at the Site, and the results of soil and groundwater analytical testing. The soil and groundwater analytical results are summarized in comparison with Washington State Model Toxics Control Act (MTCA) cleanup levels in Tables 1 through 6.

5.1 SOIL AND GROUNDWATER CONDITIONS

Soil conditions were similar in each of the soil borings advanced at the Site. In general, granular fill associated with roadbed construction was encountered in the uppermost 2 to 3 feet of the soil profile at each soil boring. Soft, clayey to peaty silts underlie the fill from 2 to approximately 8 feet bgs. Water-bearing sands and silty sands were encountered from approximately 8 feet bgs to the depths explored. These soil conditions are interpreted to represent post-glacial alluvial and intertidal deposits of the Skagit River delta. Detailed boring logs are provided in Appendix B.

5.2 SOIL RESULTS

Soil samples were field-screened at the time of drilling for odor and visual indications of petroleum hydrocarbon contamination. Measurement of volatile emissions from soil samples were recorded at periodic depth intervals using a PID. The soil analytical results from the subsurface investigation are presented in Tables 1, 4, and 5, Chart 1, and Figure 3. The recorded PID measurements are also presented on Table 1. Copies of the analytical laboratory reports are presented in Appendix C. Copies of the sample chromatograms are included in Appendix D. The soil analytical results indicate the following:

- Concentrations of GRPH and/or at least one associated compound in soil exceed their respective MTCA Method A cleanup levels for unrestricted land use at borings ROW-4, ROW-5, ROW-6, ROW-7, ROW-11, and ROW-12. No petroleum hydrocarbon compounds were detected in soil samples collected at borings ROW-1, ROW-2, ROW-3, ROW-8, ROW-9, or ROW-10.

- Within the North 4th Street right-of-way, DRPH is commonly detected in soil samples where GRPH is detected. The laboratory concluded that the diesel result contains material overlapping from the gasoline range.

- The maximum concentrations of GRPH and benzene in soil are 560 and 2.3 micrograms per gram (µg/g), respectively, at a depth of 5 feet bgs at boring ROW-12. Boring ROW-12 was advanced southeast of the former pump island at 315 Morris Street.

- Carcinogenic PAH compounds were not detected in soil samples ROW-6-6 or ROW-7-10, where concentration of GRPH and/or DRPH exceeded their respective MTCA Method A cleanup levels for unrestricted land use. The results of PAH and EPH analysis may be utilized to calculate risk-based Method B cleanup levels for soil.

- Concentrations of total lead in soil are below the MTCA Method A cleanup levels for unrestricted land use.

- The petroleum fuel oxygenates ethanol, t-butyl ether (TBA), MTBE, di-isopropyl ether (DIPE), ethyl t-butyl ether (ETBE) and t-amyl methyl ether (TAME) were not detected in selected soil samples where concentrations of GRPH exceeded the MTCA Method A

cleanup level. The laboratory Practical Quantitation Limit (PQL) for MTBE is well below the MTCA Method A cleanup level in soil for unrestricted land use. MTCA cleanup levels have not been established for ethanol, TBA, DIPE, ETBE, or TAME.

- The concentrations of piano compounds in the soil samples collected at borings ROW-6 and ROW-12 are consistent with the GRPH and BTEX analytical results. The results of analytical testing for piano compounds may have implications for the proximity of boring ROW-12 to potential source(s) of volatile petroleum hydrocarbons. When comparing the analytical results between the soil samples ROW-6-6 and ROW-12-5, concentrations of the more volatile piano compounds are typically higher in soil sample ROW-12-5, and concentrations of the less volatile piano compounds are typically higher in soil samples ROW-6-6, as illustrated on Chart 1. Boring ROW-12 was advanced 20 feet southeast of the former pump island at 315 Morris Street, and boring ROW-6 was advanced 45 feet northeast of the former pump island at 315 Morris Street. The laboratory analytical results are provided in Appendix C for future reference.

5.3 GROUNDWATER RESULTS

The following conditions were observed in connection with groundwater at the Site:

- Wet to water-bearing soil conditions were encountered below depths of 3 to 4 feet bgs at each of the boring locations.

- Groundwater sample extraction rates from the clayey silt were slower than one liter per hour. Groundwater sample extraction rates from the underlying, slightly silty sands typically were faster than one liter per minute.

- An hydrocarbon sheen was observed on the groundwater samples collected at borings ROW-7, ROW-11 and ROW-12.

- A weak to moderate petroleum hydrocarbon odor was associated with the groundwater samples collected at borings ROW-5 and ROW-6.

- No odor or sheen was associated with the groundwater samples collected at borings ROW-1, ROW-2, ROW-3, ROW-4, ROW-8, ROW-9 and ROW-10.

The groundwater analytical results from the subsurface investigation are summarized in Tables 2, 3, 4, and 6, and Figure 4. Copies of the analytical laboratory reports are presented in Appendix C. Copies of the sample chromatograms are included in Appendix D. The groundwater analytical results indicate the following:

- Concentrations of DRPH, GRPH and/or BTEX compounds in groundwater exceeded their respective cleanup levels for unrestricted land use at boring locations ROW-3, ROW-4, ROW-5, ROW-6, ROW-7, ROW-11, and ROW-12.

- The highest concentration of DRPH documented in groundwater at the Site is 1,400 µg/L at borings ROW-7 and ROW-12. The highest concentration of GRPH documented in groundwater at the Site is 7,000 µg/L at boring ROW-7. The highest concentration of benzene documented in groundwater at the Site is 1,100 µg/L at boring ROW-12.

- Concentrations of total lead in groundwater at borings ROW-4, ROW-7, ROW-10, and ROW-12 exceed the MTCA Method A cleanup level for unrestricted land use.

- Carcinogenic PAH compounds were not detected in groundwater samples ROW-7-W or ROW-10-W. Naphthalene, acenaphthene, fluorine, and phenanthrene were detected in groundwater sample ROW-7-W.

- No organic lead was detected in the groundwater sample collected at boring ROW-12, and the PQL was well below the MTCA Method A cleanup level for unrestricted land use. The volumes of petroleum product contained in the groundwater samples collected at borings ROW-7 and ROW-11 were insufficient to confirm whether organic lead is present in groundwater at those locations.

- The petroleum fuel oxygenates ethanol, TBA, MTBE, DIPE, ETBE, and TAME were not detected in groundwater samples collected at borings ROW-7, ROW-11, and ROW-12, where concentrations of GRPH exceeded the MTCA Method A cleanup level.

- The concentrations of piano compounds in the groundwater sample collected at boring ROW-7 are consistent with the GRPH and BTEX analytical results. Similar proportions of the same piano compounds were detected in groundwater sample ROW-7-W, soil sample ROW-12-5, and soil sample ROW-6-6, as shown on Chart 2. The laboratory analytical results are provided in Appendix C for future reference.

- The laboratory observed that the chromatogram for the diesel standard varies slightly from the patterns observed in chromatograms for the soil and groundwater samples that were collected at the Site. The laboratory observed that the pattern variation is consistent with projects in close proximity to septic systems or marine waters.

6.0 CONCLUSIONS

Based on the document review in Section 3.0, and an assessment of the soil and groundwater analytical results, SES concludes the following:

- A release of DRPH, GRPH and associated compounds to soil and groundwater has been confirmed at the Site. Based upon the apparent eastward and southward distribution of GRPH documented at the former UST excavation in 2003, SES attributes the source(s) of petroleum hydrocarbons in soil and groundwater at the Site to the former operation of a gasoline station at 315 Morris Street between approximately 1930 and 1989.

- The laboratory observed that the chromatogram for the diesel standard varies slightly from the patterns observed in chromatograms for the soil and groundwater samples that were collected at the Site. The laboratory observed that the pattern variation is consistent with projects in close proximity to septic systems or marine waters. The laboratory's observation is consistent with the geologic development of the Skagit River delta and the Site's proximity to Puget Sound (four city blocks).

- Concentrations of petroleum hydrocarbons in soil or groundwater samples collected southwest and south of the former UST excavation at 315 Morris Street were either not

detected or were well below their respective MTCA Method A cleanup levels. This observation is consistent with the apparent southeastward migration of petroleum hydrocarbons documented at the former UST excavation in 2003 (Adept, 2003).

- The variation of DRPH concentrations in groundwater samples collected at borings ROW-4, ROW-5, and ROW-6 suggest the potential for more than one release at 315 Morris Street. Based upon the documented evidence for southward and eastward migration patterns at the Site, the former pump island, heating fuel UST, and/or the former bulk fuel tanks appear to be the closest, separate potential sources of petroleum hydrocarbon to the soil and groundwater at the Site.

- The horizontal and vertical distributions of petroleum hydrocarbons in soil and groundwater suggest a shallow release above the groundwater table in the vicinity of the former pump island, as evidenced by the field observations and analytical results for soil samples collected at borings ROW-6, ROW-7, ROW-11, and ROW-12. Specifically, petroleum hydrocarbon impacts occur above 8 feet bgs in borings ROW-6, ROW-11, and ROW-12, and below 8 feet bgs in boring ROW-7.

- The results of analytical testing for piano compounds suggest that boring ROW-12 is located closer to a common source of petroleum hydrocarbons, than boring ROW-6 as indicated on Chart 1. Given the absence of groundwater impacts adjacent to the 2003 UST excavation, and the similar distances from each boring to the former bulk tanks, SES concludes that the former pump island is a potential common source of petroleum hydrocarbons in soil and groundwater at borings ROW-6 and ROW-12.

- Similar proportions of the same piano compounds were detected in groundwater sample ROW-7-W, soil sample ROW-12-5, and soil sample ROW-6-6, as indicated on Chart 2. SES concludes that the soil in borings ROW-6 and ROW-12 and the groundwater at boring ROW-7 have been impacted by a common release of petroleum hydrocarbons.

- Petroleum fuel oxygenates were not detected in soil and groundwater samples collected at the Site. One explanation for the absence petroleum fuel oxygenates in GRPH-contaminated soil and groundwater is that the documented release consisted of petroleum hydrocarbon blends that were formulated without common oxygenate compounds.

- The pattern of DRPH, GRPH, and/or associated compounds in soil and groundwater suggests a groundwater flow direction (and resultant contaminant migration direction) to the southeast. The extent of migration in this direction is not fully defined.

7.0 STANDARD LIMITATIONS

The findings and conclusions documented in this report have been prepared for the specific application to this project and have been developed in a manner consistent with that level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in the area. A potential always remains for the presence of unknown, unidentified, or unforeseen subsurface contamination on portions of the property not sampled, such as under the building. No warranty, expressed or implied, is made. This report is for the exclusive use of Town of La Conner and its representatives.

If new information is developed in future site work (which may include excavations, additional borings, or other studies), SES should be contracted to reevaluate the interpretations in this report, and to provide amendments as required.

8.0 REFERENCES

Adept Geoscience & Environment, May 19, 2003, *Interim Soil Cleanup Report, Station House – Town of La Conner ROW 315 Morris Street. La Conner, Washington.*

Adept Geoscience & Environment, May 19, 2003, *Draft UST Removal & Site Assessment, Station House – Town of La Conner ROW 315 Morris Street. La Conner, Washington.*

SES, April 9, 2003, *Fieldwork Progress Report, UST Decommissioning Adjacent to Right-of-Way Between 3rd and 4th Street, La Conner, WA.*

SES April 10, 2003, *Fieldwork Progress Report, UST Decommissioning Adjacent to Right-of-Way Between 3rd and 4th Street, La Conner, WA.*

SOUND ENVIRONMENTAL STRATEGIES

Table 1
Soil Analytical Results
Morris Street and North 4th Street Right-of-Ways
La Conner, Washington

Sample Location	Date Sampled	Sample Depth (feet bgs)	PID Results	Sample ID	TRPH	DRPH	GRPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total Lead
ROW-1	5/9/2005	3	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
		6	0.0	ROW-1-6	<250	<50	<2	<0.02	<0.02	<0.02	<0.06	NA
		8	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
		10	0.0	ROW-1-10	NA	NA	NA	NA	NA	NA	NA	NA
ROW-2	5/9/2005	2	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5	0.0	ROW-2-5	<250	<50	<2	<0.02	<0.02	<0.02	<0.06	NA
		8	0.0	ROW-2-8	NA	NA	NA	NA	NA	NA	NA	NA
ROW-3	5/9/2005	3	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
		6	0.0	ROW-3-6	<250	<50	<2	<0.02	<0.02	<0.02	<0.06	NA
		9	0.0	ROW-3-9	NA	NA	NA	NA	NA	NA	NA	NA
ROW-4	5/9/2005	2	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3	822	NS	NS	NS	NS	NS	NS	NS	NS	NS
		6	765	ROW-4-5	260x	260x	25	**0.25**	<0.02	1.3	2.1	7
		8	0.0	ROW-4-8	NA	NA	NA	NA	NA	NA	NA	NA
		10	22.3	ROW-4-10	<250	<50	<2	<0.02	<0.02	<0.02	<0.06	NA
ROW-5	5/9/2005	3	604	ROW-5-3	<250	<50	6	**0.22**	0.04	0.08	0.07	NS
		6	1466	ROW-5-6	1,500x	1,500x	**150d**	**1.5d**	<0.04d	**6.2d**	8.1d	NS
		8	37.2	NS	NS	NS	NS	NS	NS	NS	NS	NS
		9	0.0	ROW-5-9	<250	<50	<2	**0.46**	0.03	<0.02	0.07	NS
ROW-6	5/9/2005	6	1915	ROW-6-6	**2,800x**	**2,800x**	**400d**	**4.0d**	<0.04d	**17d**	**43d**	14
		8	40.6	NS	NS	NS	NS	NS	NS	NS	NS	NS
		9	552	NS	NS	NS	NS	NS	NS	NS	NS	NS
		11	20.2	ROW-6-11	<250	<50	<2	**0.07**	<0.02	<0.02	<0.06	NA
ROW-7	5/10/2005	3	0.0	ROW-7-3	NA	NA	NA	NA	NA	NA	NA	NA
		6	46.5	ROW-7-6	<250	<50	<2	<0.02	<0.02	<0.02	<0.06	7
		8	49.9	NS	NS	NS	NS	NS	NS	NS	NS	NS
		10	>2,000	ROW-7-10	1900x'	1900x'	**200d**	**1.6d**	0.58d	**8.7d**	**7.2d**	14
ROW-8	5/10/2005	3	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
		6	0.0	ROW-8-6	<250	<50	<2	<0.02	<0.02	<0.02	<0.06	NA
		8	0.0	ROW-8-8	<250	<50	<2	<0.02	<0.02	<0.02	<0.06	NA

SOUND ENVIRONMENTAL STRATEGIES

Table 1
Soil Analytical Results
Morris Street and North 4th Street Right-of-Ways
La Conner, Washington

Sample Location	Date Sampled	Sample Depth (feet bgs)	PID Results	Sample ID	TRPH	DRPH	GRPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total Lead
ROW-9	5/10/2005	3	0.0	ROW-9-3	NA	NA	NA	NA	NA	NA	NA	NA
		6	21.5	ROW-9-6	<250	<50	<2	<0.02	<0.02	<0.02	<0.06	NA
		10	20.5	ROW-9-10	<250	<50	<2	<0.02	<0.02	<0.02	<0.06	NA
		12	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
ROW-10	5/10/2005	2	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
		6	4.4	ROW-10-6	<250	<50	<2	<0.02	<0.02	<0.02	<0.06	NA
		8	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
		10	0.0	ROW-10-10	<250	<50	<2	<0.02	<0.02	<0.02	<0.06	NA
		12	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
ROW-11	5/10/2005	2.5	>2,000	ROW-11-2.5	<250	<50	**82**	**0.13**	0.23	1.5	1.3	NA
		6	1330	ROW-11-6	<250	<50	**350d**	**1.4d**	0.53d	**9.8d**	**16d**	8
		8	94.1	ROW-11-8	<250	<50	**110**	**0.53**	0.32	3.3ve	8.4ve	NA
		10	23.4	ROW-11-10	<250	<50	2	**0.14**	<0.02	<0.02	<0.06	<2
		12	12.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
ROW-12	5/10/2005	2	0.0	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5	1689	ROW-12-5	<250	<50	**560d**	**2.3d**	1.3d	**19d**	**39d**	11
		6	107	ROW-12-6	<250	<50	**60**	**0.89**	0.15	3.2ve	3.8	NA
		10	51.8	ROW-12-10	<250	<50	23	**1.5**	0.05	1.8	1.4	7
		12	0.0	ROW-12-12	<250	<50	5.1	**0.72**	<0.02	0.07	0.07	NA
MTCA Method A Cleanup Levels for Unrestricted Use					2,000		30	0.03	7.00	6.00	9.00	250

All sampling conducted May 9 and 10, 2005. Sample results reported in micrograms per gram (µg/g).

Diesel extended-range petroleum hydrocarbons (DxRPH) by NWTPH-D Extended.

Gasoline-range petroleum hydrocarbons (GRPH) by NWTPH-G.

Benzene, toluene, ethylbenzene and total xylenes (BTEX) by EPA Method 8021B.

Total lead by EPA Method 6010.

PID = photoionization detector equipped with a 10.0 eV lamp and calibrated to isobutylene standard.

< = Analyte not detected above the laboratory practical quantitation limit.

ve = The value reported exceeded the caibration range established for the analyte. The reported concentration is an estimat

MTCA = Washington State Model Toxics Control Act.

Method A Cleanup Levels for soil from MTCA Table 740-1 in WAC 173-340 -900, amended February 12, 2001.

BOLD = analyte above MTCA Method A cleanup levels, amended February 12, 2001.

TRPH = total recoverable petroleum hydrocarbons

NA = Not Analyzed.

NS = Not Sampled

d = The sample was diluted.

x = The sample contains material in both the diesel and gasoine ranges. The diesel result contains material overlapping from the gasoline range.

x' = The pattern of peaks is not indicative of diesel. The result is due to overlap from the gasoline range.

SOUND ENVIRONMENTAL STRATEGIES

Table 2
Groundwater Analytical Results - Petroleum Hydrocarbons
Morris Street and North 4th Street Right-of-Ways
La Conner, Washington

Sample Number	Date Sampled	TRPH	DRPH	GRPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
ROW-1-W	5/9/2005	<250	<50	<100	<1	<1	<1	<3	NA
ROW-2-W	5/9/2005	<250x	130x	<100	<1	<1	<1	<3	NA
ROW-3-W	5/9/2005	**940x**	**820x**	<100	<1	2	<1	<3	NA
ROW-4-W	5/9/2005	**1100y**	**1100y**	570	**24**	1	17	30	<1
ROW-5-W	5/9/2005	<250z	130z	700d	**100d**	2d	10d	12d	NA
ROW-6-W	5/9/2005	**800z**	**800z**	**3900d**	**780d**	7d	94d	210d	NA
ROW-7-W	5/10/2005	**1400x'**	**1400x'**	**7,000d**	**190d**	35d	320d	360d	<1
ROW-8-W	5/10/2005	<250	<50	<100	<1	<1	<1	<3	NA
ROW-9-W	5/10/2005	<250x	68x	<100	<1	<1	<1	<3	NA
ROW-10-W	5/10/2005	<250x	140x	68	<1	<1	<1	<3	NA
ROW-11-W	5/10/2005	**530x'**	**510x'**	**2400d**	**290d**	<20d	32d	<60d	<1
ROW-12-W	5/10/2005	**1400x'**	**1400x'**	**4900d**	**1100d**	<20d	21d	60d	<1
MTCA Method A Cleanup Levels*		500		800	5	1,000	700.00	1,000	20
MTCA Method B Cleanup Levels*		NE		NE	0.795	1,600	800	16,000	NE

Sample results reported in micrograms per liter (µg/L).

Gasoline-range petroleum hydrocarbons (GRPH) by NWTPH-G.

Total recoverable petroleum hydrocarbons (TRPH) and diesel-range petroleum hydrocarbons (DRPH) by NWTPH-D Extended.

Benzene, toluene, ethylbenzene and total xylenes (BTEX) and MTBE by EPA Method 8260B.

MTBE = methyl t-butyl ether

MTCA = Washington State Model Toxics Control Act.

Method A Cleanup Levels for groundwater from The Model Toxics Control Act (MTCA) Table 720-1 in WAC 173-340-900, amended February 12, 2001.

MTCA Method B cleanup levels for groundwater from Cleanup Levels and Risk Calculations (CLARC) database.

BOLD = analyte above MTCA 2001 Method A Cleanup levels.

< = Analyte not detected above the laboratory practical quantitation limit.

NA = Not analyzed for the indicated compound.

NE = No action level established for the indicated method.

d = The sample was diluted.

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

w = The result is due to material overlapping from the gasoline range

x = The pattern of peaks is not indicative of diesel.

x' = The pattern of peaks is not indicative of diesel. The result is due to overlap from the gasoline range.

y = The pattern of peaks is not indicative of diesel and also contains material overlapping from the gasoine range.

z = The diesel result is due to material overlapping from the gasoline range.

SOUND ENVIRONMENTAL STRATEGIES

Table 3
Groundwater Analytical Results – Inorganic Lead and Organic Lead and Manganese
Morris Street and North 4th Street Right-of-Ways
La Conner, Washington

Sample Number	Date Sampled	Total Lead	Dissolved Lead	TML	TMEL	DMDEL	MTEL	TEL	MMT
ROW-4-W	5/9/2005	45	2	NS	NS	NS	NS	NS	NS
ROW-7-W	5/10/2005	20	6	<75	<75	<75	<75	<75	<75
ROW-10-W	5/10/2005	17	<1	<75	<75	<75	<75	<75	<75
ROW-12-W	5/10/2005	19	<1	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
MTCA Action Levels for Unrestricted Use		*15	NE	*15					

Sample results reported in micrograms per liter (ug/L).

< = Analyte not detected above the laboratory practical quantitation limit.

NA = Not Analyzed, NS = Not Sampled, NE = Not Established

Total and dissolved lead by EPA Method 6010.

Organic lead by EPA Method 8082 Modified.

* Total Lead

MTCA = Washington State Model Toxics Control Act.

TML = Tetramethyl Lead

TMEL = Trimethylethyl Lead

DMDEL = Dimethyldiethyl Lead

MTEL = Methyltriethyl Lead

TEL = Tetraethyl Lead

MMT = Methylcyclopentadienyl Manganese Tricarbonyl

Method A Cleanup Levels for groundwater from The Model Toxics Control Act (MTCA) Table 720-1 in WAC 173-340-900, amended February 12, 2001.

SOUND ENVIRONMENTAL STRATEGIES

Table 4
Soil and Groundwater Analytical Results - Petroleum Fuel Oxygenates
Morris Street and North 4th Street Right-of-Ways
La Conner, Washington

Sample ID	Date Sampled	Ethanol	TBA	MTBE	DIPE	ETBE	TAME
Soil							
ROW-11-6	5/10/2005	<50	<1	<0.05	<0.05	<0.05	<0.05
ROW-12-5	5/10/2005	<50	<1	<0.05	<0.05	<0.05	<0.05
MTCA Method A Soil Cleanup Levels*		NE	NE	0.1	NE	NE	NE
MTCA Method B Soil Cleanup Levels*		NE	NE	69,000	NE	NE	NE
Groundwater							
ROW-7-W	5/10/2005	<1000	<200	<1	<1	<1	<1
ROW-11-W	5/10/2005	<1000	<200	<1	<1	<1	<1
ROW-12-W	5/10/2005	<1000	<200	<1	<1	<1	<1
MTCA Method A Groundwater Cleanup Levels*		NE	NE	20	NE	NE	NE
MTCA Method B Groundwater Cleanup Levels*		NE	NE	6,900	NE	NE	NE

Sample results for soil reported in micrograms per gram (µg/g).

Sample results for groundwater reported in micrograms per liter (µg/L).

Petroleum Fuel Oxygenates by EPA Method 8260B.

< = Analyte not detected above the laboratory practical quantitation limit.

NE= Cleanup level not established

DIPE = diisopropyl ether

ETBE = ethyl t-butyl ether

MTBE = methyl t-butyl ether

TAME = t-amyl methyl ether

TBA = t-butyl alcohol

MTCA 2001 Method A Cleanup Levels for soil from The Model Toxics Control Act (MTCA) amendment Table 740-1 WAC 173-340 -900 Tables.

MTCA 2001 Method A Cleanup Levels for groundwater from The Model Toxics Control Act (MTCA) amendment Table 720-1 WAC 173-340-900 Tables.

MTCA Method B cleanup levels for groundwater from Cleanup Levels and Risk Calculations (CLARC) database.

BOLD = analyte above MTCA 2001 Method A Cleanup levels.

SOUND ENVIRONMENTAL STRATEGIES

Table 5
Soil Analytical Results - Polynuclear Aromatic Hydrocarbons
Morris Street and North 4th Street Right-of-Ways
La Conner, Washington

Sample Location	Date Sampled	Sample Depth (feet bgs)	Sample ID	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene
ROW-6	5/9/2005	6	ROW-6-6	**18**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
ROW-7	5/10/2005	10	ROW-7-10	**17 ve**	<0.050	<0.050	0.120	0.180	<0.050	<0.050	0.057	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
MTCA Method A Cleanup Levels for Unrestricted Use				5	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
MTCA Method B Cleanup Levels				160	NE	NE	640	NE	2,400	640	480	0.0120	0.0120	0.0120	0.0120	0.0120	0.0120	0.0120	NE

All sampling conducted May 9 and 10, 2005. Sample results reported in micrograms per gram (µg/g) .

Poynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270C.

ve = The value reported exceeded the calibration range of the instrument. The reported concentration is an estimate.

< = Analyte not detected above the laboratory practical quantitation limit.

MTCA = Washington State Model Toxics Control Act.

Method A Cleanup Levels for soil from MTCA Table 740-1 in WAC 173-340 -900, amended February 12, 2001.

BOLD = analyte above MTCA Method A cleanup levels, amended February 12, 2001.

MTCA Method B cleanup levels for groundwater from Cleanup Levels and Risk Calculations (CLARC) database.

SOUND ENVIRONMENTAL STRATEGIES

Table 6
Groundwater Analytical Results - Polynuclear Aromatic Hydrocarbons
Morris Street and North 4th Street Right-of-Ways
La Conner, Washington

Sample Location	Date Sampled	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene
ROW-7-W	5/10/2005	56 ve	< 0.1	0.1	0.3	0.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ROW-7-W (d)	5/10/2005	53 d	< 5 d	< 5 d	< 5 d	< 5 d	< 5 d	< 5 d	< 5 d	< 5 d	< 5 d	< 5 d	< 5 d	< 5 d	< 5 d	< 5 d	< 5 d
ROW-10-W	5/10/2005	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
MTCA Method A Cleanup Levels for Unrestricted Land Use		160	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
MTCA Method B Cleanup Levels		160	960	NE	640	NE	4,800	640	480	0.0120	0.0120	0.0120	0.0120	0.0120	0.0120	0.0120	NE

All sampling conducted May 9 and 10, 2005. Sample results reported in micrograms per gram (µg/L) .

Poynuclear aromatic hydrocarbons (PAHs) by EPA Method 8270C.

ve = The value reported exceeded the calibration range of the instrument. The reported concentration is an estimate.

d = 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.

< = Analyte not detected above the laboratory practical quantitation limit.

MTCA = Washington State Model Toxics Control Act.

Method A Cleanup Levels for groundwater from MTCA Table 720-1 in WAC 173-340-900, amended February 12, 2001.

BOLD = analyte above MTCA Method A cleanup levels, amended February 12, 2001.

MTCA Method B cleanup levels for groundwater from Cleanup Levels and Risk Calculations (CLARC) database.

CHART 1

COMPARISON OF CONCENTRATIONS OF PIANO COMPOUNDS IN SOIL SAMPLES ROW-6-6 AND ROW-12-5

MORRIS STREET AND 4TH STREET RIGHT-OF-WAYS

LA CONNER, WASHINGTON

SES PROJECT NO. 0361-001-02

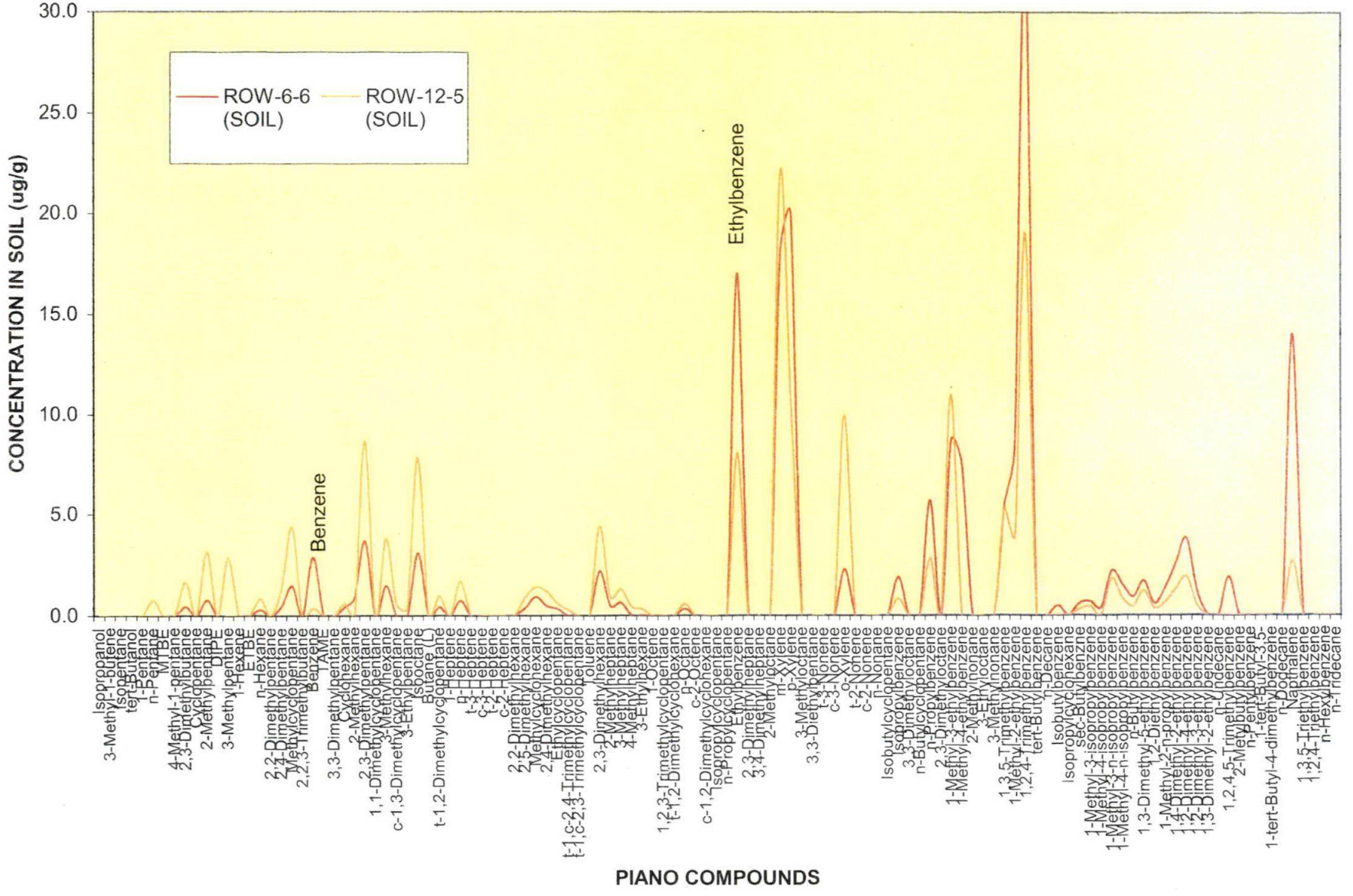


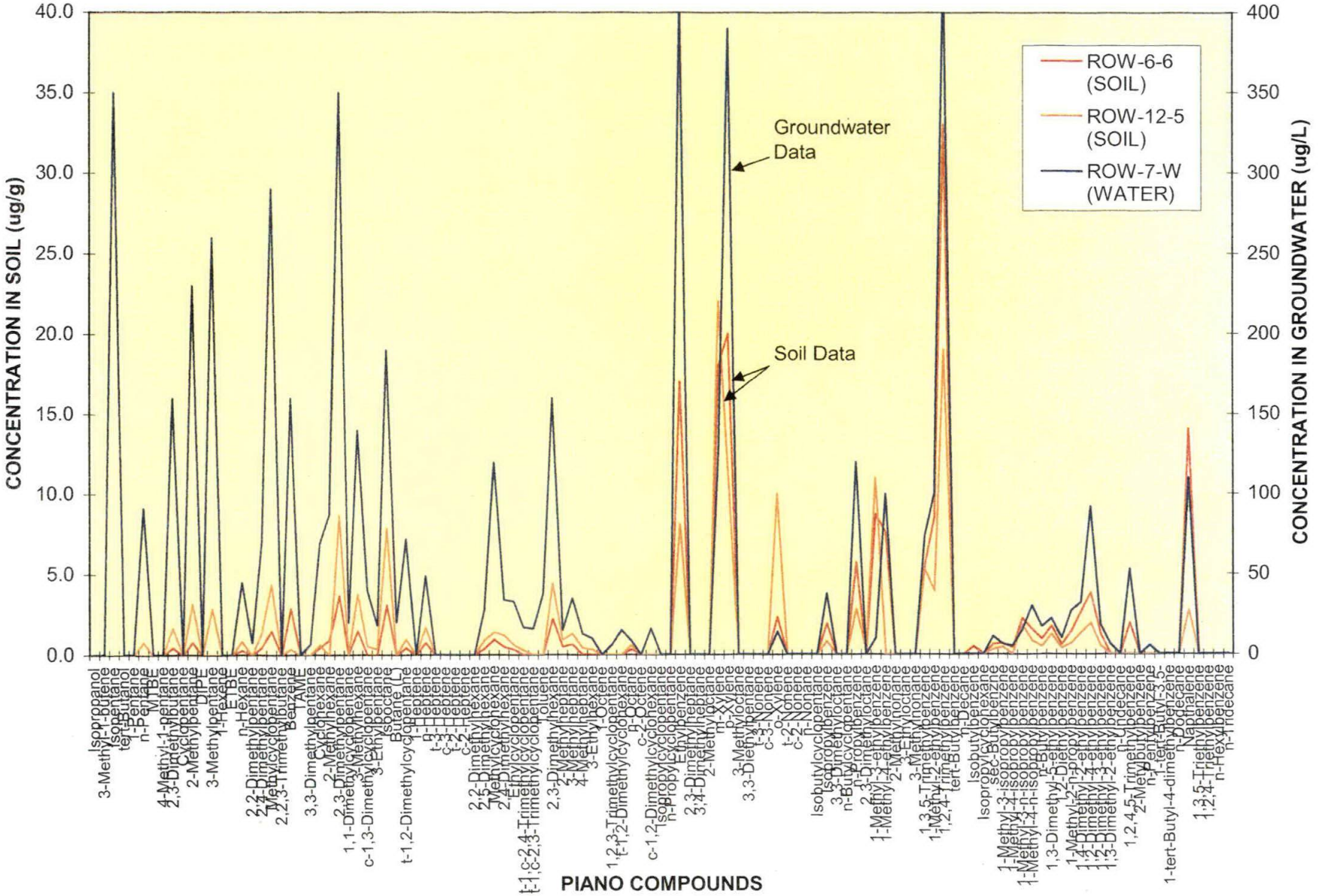
CHART 2

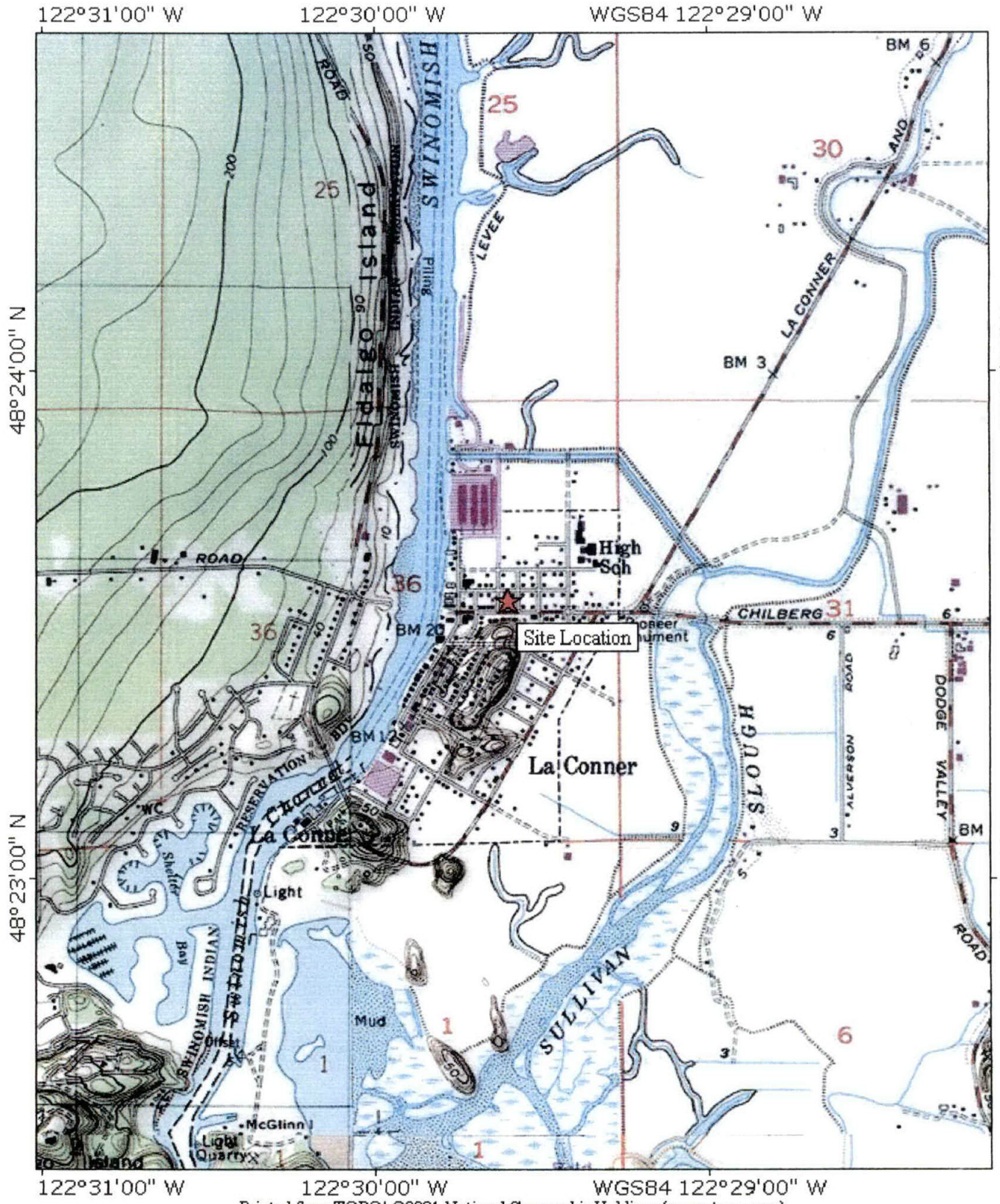
OCCURRENCE OF PIANO COMPOUNDS IN SOIL AND GROUNDWATER SAMPLES

MORRIS STREET AND 4TH STREET RIGHT-OF-WAYS

LA CONNER, WASHINGTON

SES PROJECT NO. 0361-001-02





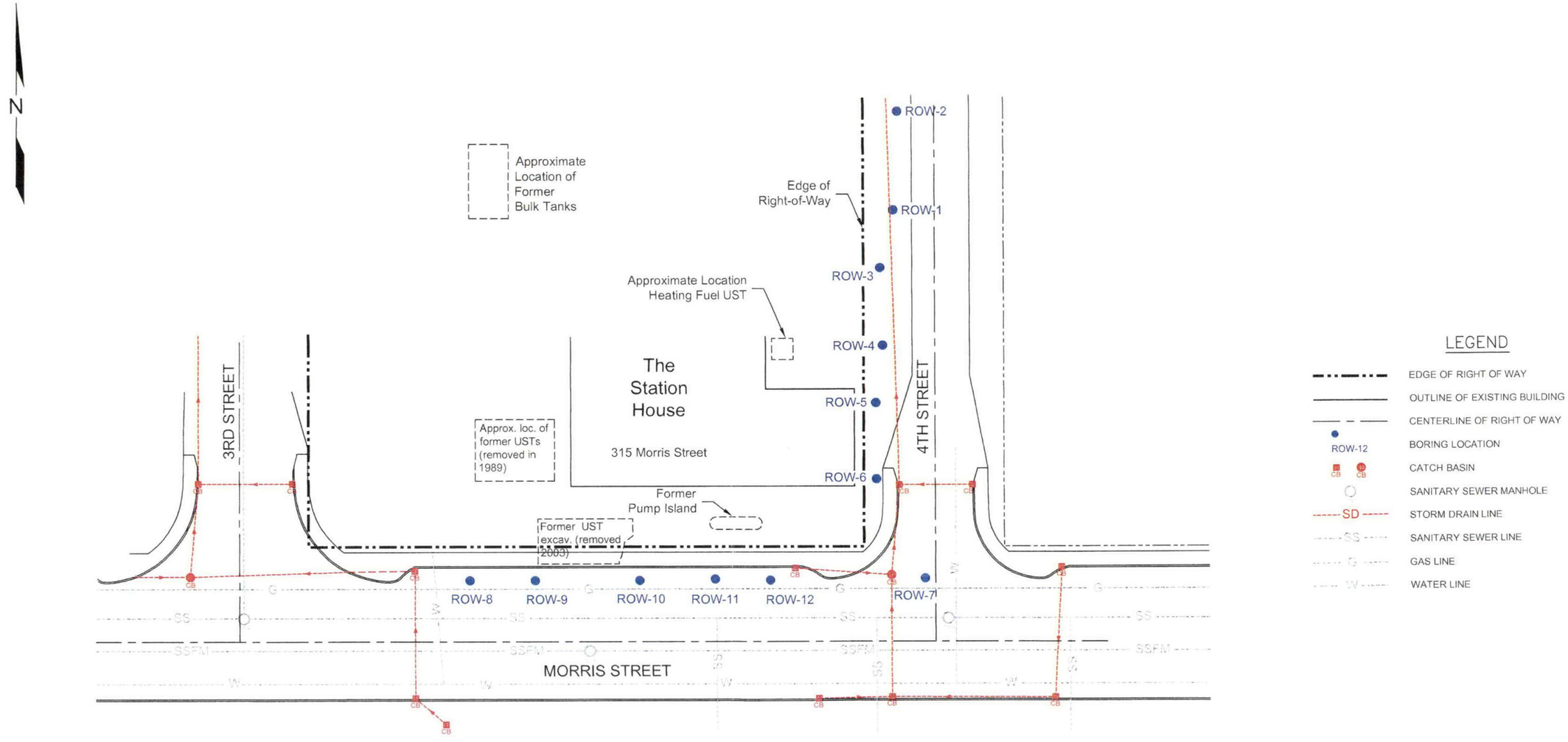
SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

N

Date: July 21, 2005
Drawn By: D. Richardson
Chk By: D. Gardner
SES Project No.: 0361-001-02
File ID: 361-1-2 figure 1 site vicinity map.doc

Town of La Conner
300 Block Morris Street
La Conner, Washington

FIGURE 1
Site Vicinity Map



REFERENCES:

Leonard, Boudinot, & Skodje Inc. 2005. *Construction Record Drawing RP2, Morris Street Improvements, STA 12+50 to STA 16+50, Roadway Plan and Profile.* April 4.

Leonard, Boudinot, & Skodje Inc. 2005. *Construction Record Drawing RP2, Morris Street Improvements, STA 16+50 to STA 21+00, Roadway Plan and Profile.* April 4.

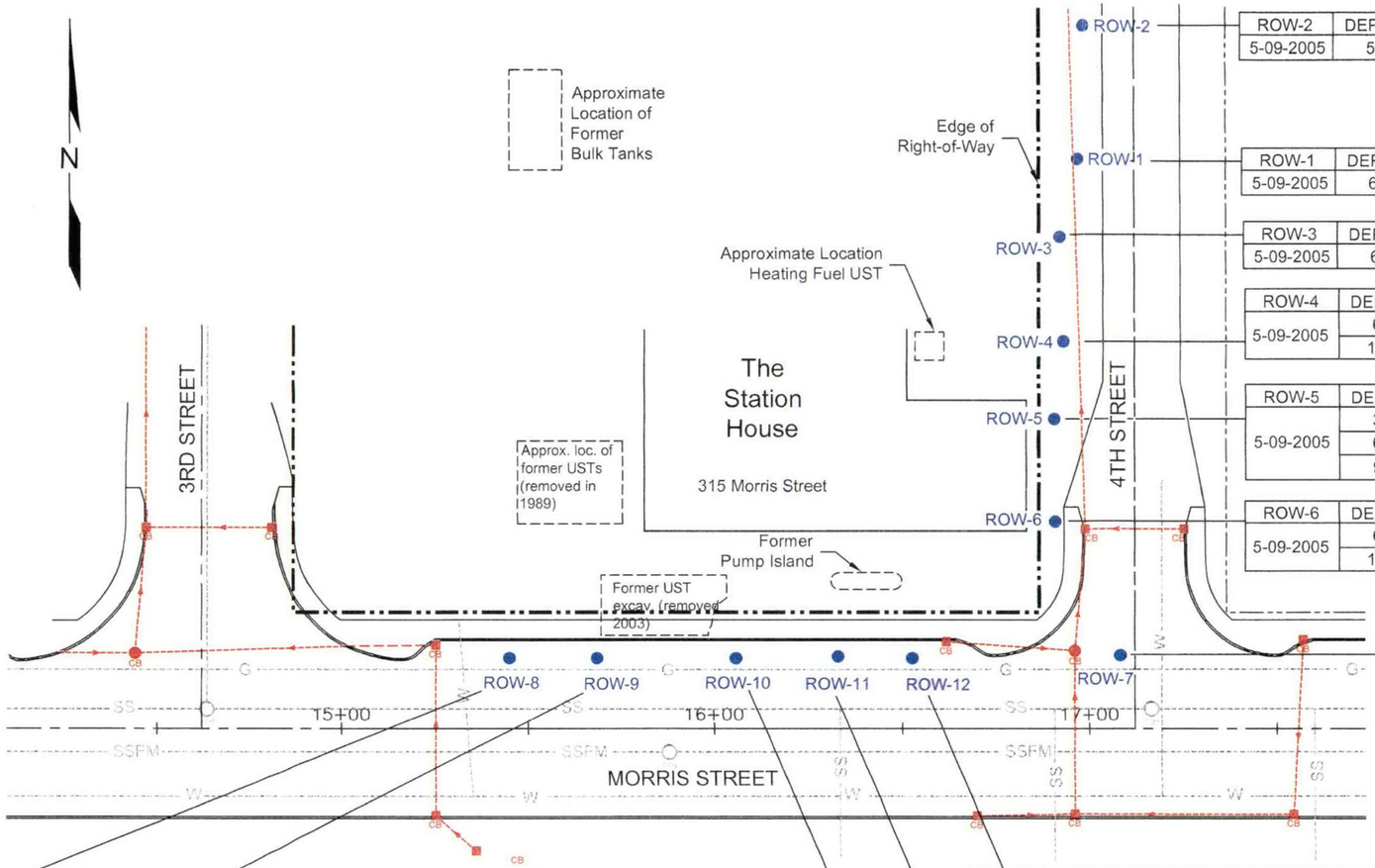
SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

DATE: 06/10/2005
DRAWN BY: BTS
CHK BY: DHG
CAD FILE: FIG2 EXPL LOCA

PROJECT NAME: TOWN OF LA CONNER
LOCATION: 300 BLOCK MORRIS STREET
LA CONNER, WASHINGTON
SES PROJECT NUMBER: 0361-001-02

40 20 0 40
SCALE IN FEET

FIGURE 2
EXPLORATION LOCATION PLAN



ROW-2	DEPTH	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-09-2005	5'	<250	<50	<2	<0.02	<0.02	<0.02	<0.06

ROW-1	DEPTH	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-09-2005	6'	<250	<50	<2	<0.02	<0.02	<0.02	<0.06

ROW-3	DEPTH	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-09-2005	6'	<250	<50	<2	<0.02	<0.02	<0.02	<0.06

ROW-4	DEPTH	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-09-2005	6'	260x	260x	25	**0.25**	<0.02	1.3	2.1
	10'	<250	<50	<2	<0.02	<0.02	<0.02	<0.06

ROW-5	DEPTH	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-09-2005	3'	<250	<50	6	**0.22**	0.04	0.08	0.07
	6'	1,500x	1,500x	**150d**	**1.5d**	<0.04d	**6.2d**	8.1d
	9'	<250	<50	<2	**0.46**	0.03	<0.02	0.07

ROW-6	DEPTH	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-09-2005	6'	**2,800x**	**2,800x**	**400d**	**4.0d**	<0.04d	**17d**	**43d**
	11'	<250	<50	<2	**0.07**	<0.02	<0.02	<0.06

ROW-7	DEPTH	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-09-2005	6'	<250	<50	<2	<0.02	<0.02	<0.02	<0.06
	10'	1,900x	1,900x	**200d**	**1.6d**	0.58d	**8.7d**	**7.2d**

ROW-8	DEPTH	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-10-2005	6'	<250	<50	<2	<0.02	<0.02	<0.02	<0.06
	8'	<250	<50	<2	<0.02	<0.02	<0.02	<0.06

ROW-9	DEPTH	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-10-2005	6'	<250	<50	<2	<0.02	<0.02	<0.02	<0.06
	10'	<250	<50	<2	<0.02	<0.02	<0.02	<0.06

ROW-12	DEPTH	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-10-2005	5'	<250	<50	**560d**	**2.3d**	1.3d	**19d**	**39d**
	6'	<250	<50	**60**	**0.89**	0.15	3.2ve	3.8
	10'	<250	<50	23	**1.5**	0.05	1.8	1.4
	12'	<250	<50	5.1	**0.72**	<0.02	0.07	0.07

ROW-11	DEPTH	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-10-2005	2.5'	<250	<50	**82**	**0.13**	0.23	1.5	1.3
	6'	<250	<50	**350d**	**1.4d**	0.53d	**9.8d**	**16d**
	8'	<250	<50	**110**	**0.53**	0.32	3.3ve	8.4ve
	10'	<250	<50	2	**0.14**	<0.02	<0.02	<0.06

ROW-10	DEPTH	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-10-2005	6'	<250	<50	<2	<0.02	<0.02	<0.02	<0.06
	10'	<250	<50	<2	<0.02	<0.02	<0.02	<0.06

NOTE:
REFER TO TABLES 1 AND 2, AND APPENDIX C, FOR EXPLANATION OF LABORATORY DATA QUALIFIERS.

REFERENCES:

Leonard, Boudinot, & Skodje Inc. 2005. *Construction Record Drawing RP2, Morris Street Improvements, STA 12+50 to STA 16+50, Roadway Plan and Profile.* April 4.

Leonard, Boudinot, & Skodje Inc. 2005. *Construction Record Drawing RP2, Morris Street Improvements, STA 16+50 to STA 21+00, Roadway Plan and Profile.* April 4.

LEGEND

- EDGE OF RIGHT OF WAY
- OUTLINE OF EXISTING BUILDING
- CENTERLINE OF RIGHT OF WAY
- ROW-12 — BORING LOCATION
- CB — CATCH BASIN
- SANITARY SEWER MANHOLE
- SD — STORM DRAIN LINE
- SS — SANITARY SEWER LINE
- G — GAS LINE
- W — WATER LINE
- 1.5 — SAMPLE RESULTS REPORTED IN MICROGRAMS PER GRAM (ug/g).
- 350 — REPORTED CONCENTRATION EXCEEDS MTCA METHOD A GROUNDWATER CLEANUP LEVEL FOR UNRESTRICTED LAND USE.
- GRPH — TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- DRPH — TOTAL PETROLEUM HYDROCARBONS AS DIESEL
- TRPH — TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

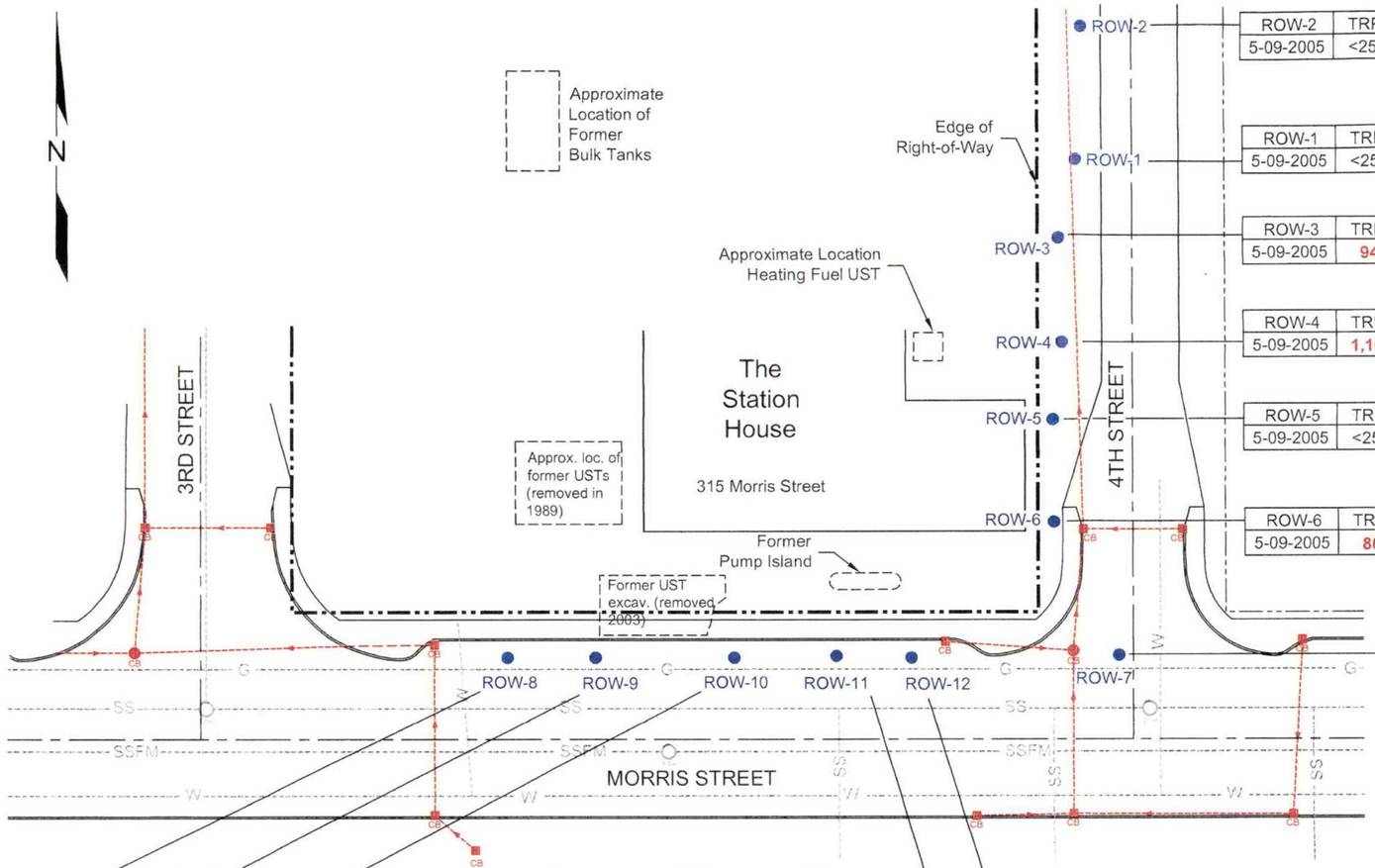
SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

DATE: 06/10/2005
DRAWN BY: BTS
CHK BY: DHG
CAD FILE: FIG3 CONC IN SOIL

PROJECT NAME: TOWN OF LA CONNER
LOCATION: 300 BLOCK MORRIS STREET
LA CONNER, WASHINGTON
SES PROJECT NUMBER: 0361-001-02

40 20 0 40
SCALE IN FEET

FIGURE 3
CONCENTRATION OF PETROLEUM HYDROCARBONS IN SOIL



ROW-2	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-09-2005	<250x	130x	<100	<1	<1	<1	<3

ROW-1	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-09-2005	<250	<50	<100	<1	<1	<1	<3

ROW-3	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-09-2005	940y	820y	<100	<1	2	<1	<3

ROW-4	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-09-2005	1,100y	1,100y	570	24	1	17	30

ROW-5	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-09-2005	<250z	130z	700d	100d	2d	10d	12d

ROW-6	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-09-2005	800z	800z	3,900d	780d	7d	94d	210d

ROW-7	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-10-2005	1,400x	1,400x	7,000d	190d	35d	320d	360d

ROW-8	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-10-2005	<250	<50	<100	<1	<1	<1	<3

ROW-9	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-10-2005	<250x	68x	<100	<1	<1	<1	<3

ROW-10	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-10-2005	<250x	140x	68	<1	<1	<1	<3

ROW-11	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-10-2005	530x	510x	2,400d	290d	<20d	32d	<60d

ROW-12	TRPH	DRPH	GRPH	BENZENE	TOLUENE	ETHYLBENZENE	TOTAL XYLENES
5-10-2005	1,400	1,400x	4,900d	1,100d	<20d	21d	60d

NOTE:
REFER TO TABLES 1 AND 2, AND APPENDIX C, FOR EXPLANATION OF LABORATORY DATA QUALIFIERS.

REFERENCES:

Leonard, Boudinot, & Skodje Inc. 2005. *Construction Record Drawing RP2, Morris Street Improvements, STA 12+50 to STA 16+50, Roadway Plan and Profile.* April 4.

Leonard, Boudinot, & Skodje Inc. 2005. *Construction Record Drawing RP2, Morris Street Improvements, STA 16+50 to STA 21+00, Roadway Plan and Profile.* April 4.

LEGEND

- EDGE OF RIGHT OF WAY
- OUTLINE OF EXISTING BUILDING
- CENTERLINE OF RIGHT OF WAY
- ROW-12 — BORING LOCATION
- CB — CATCH BASIN
- SANITARY SEWER MANHOLE
- SD — STORM DRAIN LINE
- SS — SANITARY SEWER LINE
- G — GAS LINE
- W — WATER LINE
- 35 — SAMPLE RESULTS REPORTED IN MICROGRAMS PER LITER (ug/L).
- 1,400 — REPORTED CONCENTRATION EXCEEDS MTCA METHOD A CLEANUP LEVEL FOR UNRESTRICTED LAND USE.
- GRPH — TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- DRPH — TOTAL PETROLEUM HYDROCARBONS AS DIESEL
- TRPH — TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

DATE: 06/10/2005
DRAWN BY: BTS
CHK BY: DHG
CAD FILE: FIG4 CONC IN GW

PROJECT NAME: TOWN OF LA CONNER
LOCATION: 300 BLOCK MORRIS STREET
LA CONNER, WASHINGTON
SES PROJECT NUMBER: 0361-001-02

40 20 0 40
SCALE IN FEET

FIGURE 4
CONCENTRATION OF PETROLEUM HYDROCARBONS IN GROUNDWATER

APPENDIX A
Standard Project Methods and Practices

STANDARD PROJECT METHODS AND PRACTICES

A.1 HEALTH AND SAFETY PLAN

As part of the investigation, SES prepared a project-specific Health and Safety Plan (HASP) in accordance with Chapter 296-62 of the Washington Administrative Code (WAC) and 29 CFR 1910.120 (Code of Federal Regulations). The HASP identified potential physical and chemical hazards associated with the investigation, and specified requirements regarding personal protection and safety monitoring protocols. Health and safety meetings were held on site at the beginning of each workday to review aspects of the HASP, and to provide on opportunity for SES site workers to discuss health and safety issues or concerns. On-site SES personnel involved with the field activities were required to be familiar with and comply with provisions stipulated in the HASP. Subcontractors on the site were required to have their own HASP identifying potential physical and chemical hazards associated with their own work practices.

A.2 UTILITY LOCATES

Before implementing the subsurface, the Underground Utilities Locating Center was notified of subsurface exploration activities. The service contacted appropriate agencies and/or companies with underground utilities in the area. These agencies then marked the location of their utilities along the rights-of-way and property easements.

A.3 DRILLING ACTIVITIES

Drilling activities were conducted by ESN of Lacey, Washington. Drilling procedures were as follows:

- Borings were completed using a Geoprobe ®, direct-push drill rig.
- Sampling tools were cleaned before beginning each boring by following the decontamination procedures described in Section A.5.
- During drilling, soil core samples were collected using a decontaminated, stainless steel sampler lined with clear PVC sleeves. At each interval, the sampler was driven 24 to 48 inches using hydraulic pressure.
- Selected portions of each recovered soil core sample were placed in a plastic bag so that the presence or absence of volatile organic compounds could be verified using a photo-ionization detector. Intervals of each recovered soil core sample selected for potential laboratory chemical analysis were handled per the procedures described in Section A.4.
- Soil characteristics including texture, color, hardness, and moisture content were recorded on boring logs. The soil conditions were classified using the Unified Soil Classification System (USCS). The depths of any changes in lithologies and first encountered groundwater were also noted on the boring logs.
- Waste materials, including drill cuttings and decontamination water generated during the field program, were handled as described in Section A.5.

A.4 SAMPLE COLLECTION AND HANDLING PROCEDURES

A.4.1 Soil Samples

The sample tube was opened longitudinally and the 36- and 48-inch plastic sample sleeves containing the soil core were extracted using decontaminated, stainless steel sampling tools. When sampling in water-bearing soil conditions, sampling proceeded using stainless steel, split-spoon samplers that were decontaminated as described in Section A.5.

Soil was collected from selected intervals of the recovered soil core, and placed into laboratory-prepared 4 oz. glass sample jars. Each soil sample container was labeled as described in Section A.6.4, and recorded on the chain-of-custody form (Section A.6.3). All samples were placed immediately into a chilled cooler maintained at 4 degrees Centigrade or lower, where they were stored until delivered to the laboratory.

A.4.2 Groundwater Samples

Upon completion of each soil boring, temporary wells were installed in each borehole. The temporary wells were constructed from one-inch diameter, polyvinyl chloride (PVC) slotted pipe. Groundwater samples were collected using a peristaltic pump with dedicated, polyethylene tubing to prevent cross-contamination between borings. Water samples were placed directly from the polyethylene tubing into laboratory-prepared glass containers appropriate for each analysis to be performed and placed into a chilled cooler maintained at 4 degrees Centigrade or lower until delivered to the project laboratory. Samples were labeled as described in Section A.6.4. Groundwater sample custody was documented as described in Section A.6.3. Following collection of each groundwater sample, the temporary well was withdrawn and disposed.

A.5 EQUIPMENT DECONTAMINATION AND WASTE HANDLING

Field equipment decontamination procedures are intended to prevent cross-contamination from one boring to another, and from one sample interval to another. Non-expendable boring and sampling equipment was thoroughly cleaned between each use. Equipment or materials that could not be completely decontaminated, such as sleeves and disposable bailers, were discarded and new materials used.

Before and after each use, all down-hole equipment (i.e., split-spoon sampler, water level indicator, bailer, etc.) was washed in an aqueous solution of cleanser, and then rinsed with distilled or de-ionized water.

All soil cuttings, purge-water and wash water were placed into two 55-gallon drums and staged at the Town of La Conner Public Works Shop pending analysis.

A.6 FIELD DOCUMENTATION

Physical parameters were documented throughout the project. Documentation included boring logs, chain-of-custody forms, and sample labels. Each of the forms of documentation is described in detail below.

A.6.1 Field Documentation

Field documentation recorded at the time of sample collection provides an unambiguous record of each sample. Field documentation was recorded on each boring log. Recorded field data included the following, as appropriate:

- Date(s) and time(s) of entry;
- Description of sample(s);
- Number and size of sample(s) taken;
- Locations of sampling point(s);
- Date and time of sample collection;
- Sample identification number(s);
- Written notes of field observations; and
- Any field measurements, such as pH, temperature, PID readings, or resistance to penetration.

Field notes were as descriptive and as inclusive as possible; allowing independent parties to reconstruct sampling particulars from the recorded information. Language was objective, factual, and free of inappropriate terminology. All field documentation was retained and filed by SES.

A.6.2 Boring Logs

A written log was compiled for each boring by the attending Geologist as the boring was advanced. Each log includes descriptions of lithologies, texture, grain size, color, hardness, moisture, and other properties noted in the field. Soil types were classified in accordance with ASTM Method D2488-00 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), and the Unified Soil Classification System. If the boring was completed as a monitoring well, well construction details were included on the boring log, and the approximate depth to groundwater was noted. At the completion of a drilling project, SES retained all original boring logs in the project file.

A.6.3 Chain-of-Custody Form

The chain-of-custody documents created whenever samples are collected, transferred, stored, analyzed, and destroyed are designed to create an accurate record of the possession and disposition of samples. Chain-of-custody records can be used to trace the possession and handling of a sample from the moment of its collection through analysis and reporting of analytical values.

The project chain-of-custody form included information regarding the site name, sample identification numbers (assigned by the sampler in the field), sample date(s), sample location(s), and the type of analysis required. Whenever the sample(s) were transferred from one party to another, both parties signed the chain-of-custody form and recorded the date and time of the transfer. The chain-of-custody form accompanied the samples through all custodial entities until received by the project laboratory, where the form is filed.

A.6.4 Sample Labels

Sample labels were filled out and affixed to appropriate containers at the time of sample collection. Each label was completed with indelible ink and included information regarding the

SES project number and name, sample ID number, sample location, date and time of collection, and analyte preservative(s), if any.

A.7 ANALYTICAL LABORATORY TESTING PROGRAM

Samples intended for chemical analysis were submitted to Friedman & Bruya, Inc. of Seattle, Washington under chain-of-custody protocol. All samples were contained, handled, and analyzed in accordance with accepted U.S. Environmental Protection Agency (EPA) and/or Washington State Department of Ecology protocols.

A.7.1 Laboratory Reporting

Results from laboratory analyses are reported on Laboratory Data Sheets. The summary sheets present information including the sample date, sample identification numbers, and results of analyses. The laboratory manager or supervisor signs the data sheets.

Prior to reporting the analytical data, the data were reviewed and verified by the project chemist. The purpose of this review was to verify the following:

- All blanks, duplicates, and matrix and surrogate spike recoveries were within the quality acceptance limits.
- All instrument calibrations were acceptable.
- Computations were performed correctly, and all sample results were correctly identified and reported. The analytical laboratory's project manager performs this review.

A.7.2 Laboratory Quality Assurance and Quality Control

The project laboratory was capable of performing analyses in accordance with the Federal Safe Drinking Water Act and Ecology regulations. In addition, the laboratory is accredited by Ecology for hazardous materials analysis. A copy of the laboratory's QA/QC manual and accreditation certificate are available for review upon request. Laboratory data quality was verified based on independent review by qualified SES personnel.

A.8 PROJECT REPORT QUALITY ASSURANCE

The quality of this report was assured through technical review of the report and other project deliverables by peers and SES principals. Individual sections of the report were reviewed by professionals with relevant technical expertise to ensure that data, technical issues, and regulatory interpretations are accurate and applicable. The Project Manager provided the complete draft deliverable (including all figures, tables, and appendices in final format) to the Principal-in-Charge for final review before submittal. The Principal-in-Charge is ultimately responsible for the technical quality of all client submittals generated as part of this project.

APPENDIX B
Boring Logs

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Eric
Drilling Method:	Strataprobe
Location:	122' N, 11' E of Ref Pt
Surface Condition:	Gravel shoulder
Total Depth (ft) :	10
First GW Depth (ft) :	4

Moisture Content:
Dry = Dry, Dp = Damp, Mst = Moist, Vmst = Very Moist, Wet = Wet

Hydrocarbon Odor: NO = no odor, VFO = very faint odor
WO = weak odor, MO = moderate odor, SO = strong odor

Water Levels
▼ After Completion
▽ During Drilling

Depth (feet)	Blow Count	PID	Sample Recovery	Sample Interval	Sample ID	Lithography	USCS Class	Description	Moisture Content	Well Detail
0										
1										
2			75							
		0					GM	Moist, dense, silty, sandy GRAVEL, tan, no hydrocarbon odor (Fill)		
3					ROW-1-3					
								Moist, soft, clayey, SILT with root fibers, gray, no hydrocarbon odor		
4									▽	
								Wet below 4 feet		
5										
		0								
6			75		ROW-1-6		ML			
								with fine sand below 6 feet, no hydrocarbon odor		
7										
		0								
8										
9			100							
		0					SP	Wet, loose, medium-grained SAND with trace silt, black, no hydrocarbon odor		
10					ROW-1-10					
								Boring terminated at 10 feet bgs.		
11										
12										
13										
14										
15										

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

La Conner Property
300 Block of Morris Street
La Conner, Washington

Date Started: 5/9/2005
Date Finished: 5/9/2005
Logged By: DH Gardner
Chk By: RK Bixby
SES Project No.: 0361-001-02
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\0361-001-002 LA CONNER BORING LOGS.GPJ

BORING LOG
ROW-1

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Eric
Drilling Method:	Strataprobe
Location:	163' N, 13' E of Ref Pt
Surface Condition:	Gravel shoulder
Total Depth (ft) :	8
First GW Depth (ft) :	3.5

Moisture Content:
Dry = Dry, Dp = Damp, Mst = Moist, Vmst = Very Moist, Wet = Wet

Hydrocarbon Odor: NO = no odor, VFO = very faint odor
WO = weak odor, MO = moderate odor, SO = strong odor

Water Levels
▼ After Completion
▽ During Drilling

Depth (feet)	Blow Count	PID	Sample Recovery	Sample Interval	Sample ID	Lithography	USCS Class	Description	Moisture Content	Well Detail
0–2		0	50				GM	Damp, medium-dense, silty, sandy GRAVEL, crushed gravel, tan, no hydrocarbon odor (Fill)		
2–3							OL	Wet, soft, organic, clayey SILT with sand, black, no hydrocarbon odor	▽	
3–5		0			ROW-2-5		ML	Wet, soft, clayey SILT with root fibers, gray, no hydrocarbon odor		
5–6			100							
6–7										
7–8		0			ROW-2-8		SP	Wet, loose, fine to medium-grained SAND with trace silt, black, no hydrocarbon odor		
8								Boring terminated at 8 feet bgs.		
9–15										

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

La Conner Property
300 Block of Morris Street
La Conner, Washington

Date Started: 5/9/2005
Date Finished: 5/9/2005
Logged By: DH Gardner
Chk By: RK Bixby
SES Project No.: 0361-001-02
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\0361-001-002 LA CONNER BORING LOGS.GPJ

BORING LOG
ROW-2

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Eric
Drilling Method:	Strataprobe
Location:	100' N, 6' E of Ref Pt
Surface Condition:	Gravel shoulder
Total Depth (ft) :	10
First GW Depth (ft) :	5

Moisture Content:
Dry = Dry, Dp = Damp, Mst = Moist, Vmst = Very Moist, Wet = Wet

Hydrocarbon Odor: NO = no odor, VFO = very faint odor
WO = weak odor, MO = moderate odor, SO = strong odor

Water Levels
▼ After Completion
▽ During Drilling

Depth (feet)	Blow Count	PID	Sample Recovery	Sample Interval	Sample ID	Lithography	USCS Class	Description	Moisture Content	Well Detail
0–2			60				GW	Moist, medium dense, silty, sandy GRAVEL, crushed gravel, tan, no hydrocarbon odor (Fill)		
2–4		0					ML	Wet, soft, clayey SILT, gray, no hydrocarbon odor		
4–5							OL	Wet, soft, organic SILT, black, no hydrocarbon odor	▽	
5–7		0	90		ROW-3-6		ML	Wet, soft, SILT with clay, with root fibers, gray, no hydrocarbon odor		
7–9		0			ROW-3-9		ML	Wet, soft, fine sandy SILT, gray black, no hydrocarbon odor		
10								Boring terminated at 10 feet bgs.		

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

La Conner Property
300 Block of Morris Street
La Conner, Washington

Date Started: 5/9/2005
Date Finished: 5/9/2005
Logged By: DH Gardner
Chk By: RK Bixby
SES Project No.: 0361-001-02
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\0361-001-002 LA CONNER BORING LOGS.GPJ

BORING LOG
ROW-3

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Eric
Drilling Method:	Strataprobe
Location:	73' N, 6' E of Ref Pt
Surface Condition:	Gravel shoulder
Total Depth (ft) :	10
First GW Depth (ft) :	5.5

Moisture Content:
Dry = Dry, Dp = Damp, Mst = Moist, Vmst = Very Moist, Wet = Wet

Hydrocarbon Odor: NO = no odor, VFO = very faint odor
WO = weak odor, MO = moderate odor, SO = strong odor

Water Levels
▼ After Completion
▽ During Drilling

Depth (feet)	Blow Count	PID	Sample Recovery	Sample Interval	Sample ID	Lithography	USCS Class	Description	Moisture Content	Well Detail
0										
1							GM	Moist, medium dense, silty, sandy GRAVEL, crushed gravel, weak hydrocarbon odor (Fill)		
2		0	70							
3		822						Wet, soft, clayey SILT with root fibers, gray, moderate hydrocarbon odor, no recovery from 2.7 to 4 feet		
4										
5					ROW-4-5				▽	
6		765	80				ML			
7										
8		0			ROW-4-8					
9			100							
10		22.3			ROW-4-10		SP	Wet, loose, fine to medium SAND with trace silt, black, no hydrocarbon odor		
11								Boring terminated at 10 feet bgs.		
12										
13										
14										
15										

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

La Conner Property
300 Block of Morris Street
La Conner, Washington

Date Started: 5/9/2005
Date Finished: 5/9/2005
Logged By: DH Gardner
Chk By: RK Bixby
SES Project No.: 0361-001-02
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\0361-001-002 LA CONNER BORING LOGS.GPJ

BORING LOG
ROW-4

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Eric
Drilling Method:	Strataprobe
Location:	52' N, 4' E of Ref Pt
Surface Condition:	Gravel shoulder
Total Depth (ft) :	10
First GW Depth (ft) :	6

Moisture Content:
Dry = Dry, Dp = Damp, Mst = Moist, Vmst = Very Moist, Wet = Wet

Hydrocarbon Odor: NO = no odor, VFO = very faint odor
WO = weak odor, MO = moderate odor, SO = strong odor

Water Levels
▼ After Completion
▽ During Drilling

Depth (feet)	Blow Count	PID	Sample Recovery	Sample Interval	Sample ID	Lithography	USCS Class	Description	Moisture Content	Well Detail
0										
1										
2			75				GM	Moist, medium dense, silty sandy GRAVEL, crushed cravel, tan, no hydrocarbon odor (Fill)		
3		604			ROW-5-3			Wet, soft, clayey SILT with root fibers, gray, moderate hydrocarbon odor		
4										
5										
6		1466	90		ROW-5-6		ML	Sheen observed between 6 and 8 feet, strong hydrocarbon odor	▽	
7										
8		37.2								
9			100		ROW-5-9		ML	Wet, soft, fine sandy SILT, black, weak hydrocarbon odor		
10		0.8						Boring terminated at 10 feet bgs.		
11										
12										
13										
14										
15										

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

La Conner Property
300 Block of Morris Street
La Conner, Washington

Date Started: 5/9/2005
Date Finished: 5/9/2005
Logged By: DH Gardner
Chk By: RK Bixby
SES Project No.: 0361-001-02
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\0361-001-002 LA CONNER BORING LOGS.GPJ

BORING LOG
ROW-5

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Eric
Drilling Method:	Strataprobe
Location:	21' N, 4' E of Ref Pt
Surface Condition:	Asphalt Apron
Total Depth (ft) :	11
First GW Depth (ft) :	6.5

Moisture Content:
Dry = Dry, Dp = Damp, Mst = Moist, Vmst = Very Moist, Wet = Wet

Hydrocarbon Odor: NO = no odor, VFO = very faint odor
WO = weak odor, MO = moderate odor, SO = strong odor

Water Levels
▼ After Completion
▽ During Drilling

Depth (feet)	Blow Count	PID	Sample Recovery	Sample Interval	Sample ID	Lithography	USCS Class	Description	Moisture Content	Well Detail
0										
1								Moist, medium dense, silty sandy GRAVEL, crushed gravel, no hydrocarbon odor (Fill)		
2			20				GM			
3								No recovery from 1.5 to 4 feet, soft soil conditions noted at 3 feet.		
4										
5								Wet, soft, clayey SILT with root fibers, gray, moderate to strong hydrocarbon odor and sheen from 5 to 7 feet.		
6		1915			ROW-6-6				▽	
7							ML			
8		40.6						weak to moderate hydrocarbon odor 7 to 8 feet		
9		552						strong hydrocarbon odor 9 to 10 feet		
10										
11		20.2			ROW-6-11		SP	Wet, loose, fine to medium SAND with trace silt, black, weak hydrocarbon odor		
								Boring terminated at 11 feet bgs.		
12										
13										
14										
15										

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

La Conner Property
300 Block of Morris Street
La Conner, Washington

Date Started: 5/9/2005
Date Finished: 5/9/2005
Logged By: DH Gardner
Chk By: RK Bixby
SES Project No.: 0361-001-02
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\0361-001-002 LA CONNER BORING LOGS.GPJ

BORING LOG
ROW-6

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Eric
Drilling Method:	Strataprobe
Location:	18' E, 10' S of Ref Pt
Surface Condition:	Asphalt Pavement
Total Depth (ft) :	10
First GW Depth (ft) :	6

Moisture Content:
Dry = Dry, Dp = Damp, Mst = Moist, Vmst = Very Moist, Wet = Wet

Hydrocarbon Odor: NO = no odor, VFO = very faint odor
WO = weak odor, MO = moderate odor, SO = strong odor

Water Levels
▼ After Completion
▽ During Drilling

Depth (feet)	Blow Count	PID	Sample Recovery	Sample Interval	Sample ID	Lithography	USCS Class	Description	Moisture Content	Well Detail
0										
1							GM	Moist, medium dense, silty sandy GRAVEL, crushed gravel, tan, no hydrocarbon odor (Fill)		
2			70							
3		0			ROW-7-3			Wet, soft, peaty, clayey SILT, tan mottled, no hydrocarbon odor		
4										
5										
6		46.5	80		ROW-7-6		ML	Gray below 6 feet, no hydrocarbon odor	▽	
7										
8		49.9						No hydrocarbon odor		
9			100				SP	Wet, loose, fine to medium SAND with trace silt, black, strong hydrocarbon odor and sheen		
10		>2000			ROW-7-10			Boring terminated at 10 feet bgs.		
11										
12										
13										
14										
15										

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Eric
Drilling Method:	Strataprobe
Location:	145' W, 10' S of Ref Pt
Surface Condition:	Asphalt Pavement
Total Depth (ft) :	12
First GW Depth (ft) :	6

Moisture Content:
Dry = Dry, Dp = Damp, Mst = Moist, Vmst = Very Moist, Wet = Wet

Hydrocarbon Odor: NO = no odor, VFO = very faint odor
WO = weak odor, MO = moderate odor, SO = strong odor

Water Levels
▼ After Completion
▽ During Drilling

Depth (feet)	Blow Count	PID	Sample Recovery	Sample Interval	Sample ID	Lithography	USCS Class	Description	Moisture Content	Well Detail
0–2			60				GM	Moist, medium dense, silty, sandy GRAVEL, tan, no hydrocarbon odor (Fill)		
2–6		0					ML	Wet, soft, clayey SILT with root fibers, tan mottled, moderate sewer odor		
6		0	80		ROW-8-6				▽	
6–8							ML	Wet, soft, fine sandy SILT, tan-gray, no hydrocarbon odor		
8		0			ROW-8-8					
8–10							ML			
10			0							
11								No recovery from 8 to 12 feet, no hydrocarbon odor noted from sample liner		
12		0								
12–15								Boring terminated at 12 feet bgs.		

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

La Conner Property
300 Block of Morris Street
La Conner, Washington

Date Started: 5/10/2005
Date Finished: 5/10/2005
Logged By: DH Gardner
Chk By: RK Bixby
SES Project No.: 0361-001-02
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\0361-001-002 LA CONNER BORING LOGS.GPJ

BORING LOG
ROW-8

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Eric
Drilling Method:	Strataprobe
Location:	121' W, 10' S of Ref Pt
Surface Condition:	Asphalt Pavement
Total Depth (ft) :	12
First GW Depth (ft) :	6

Moisture Content:
Dry = Dry, Dp = Damp, Mst = Moist, Vmst = Very Moist, Wet = Wet

Hydrocarbon Odor: NO = no odor, VFO = very faint odor
WO = weak odor, MO = moderate odor, SO = strong odor

Water Levels
▼ After Completion
▽ During Drilling

Depth (feet)	Blow Count	PID	Sample Recovery	Sample Interval	Sample ID	Lithography	USCS Class	Description	Moisture Content	Well Detail
0										
1										
2			70				GM	Moist, medium dense, silty sandy GRAVEL, angular gravel, tan, no hydrocarbon odor (Fill)		
3		0			ROW-9-3			Wet, soft, clayey SILT with root fibers, gray mottled, weak sewer odor		
4										
5							ML			
6		21.5	90		ROW-9-6			Peaty, no hydrocarbon odor	▽	
7										
8		20.5						Wet, loose, fine to medium SAND with silt, black, no hydrocarbon odor		
9										
10		0	100		ROW-9-10		SP-SM			
11										
12								Boring terminated at 12 feet bgs.		
13										
14										
15										

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

La Conner Property
300 Block of Morris Street
La Conner, Washington

Date Started: 5/10/2005
Date Finished: 5/10/2005
Logged By: DH Gardner
Chk By: RK Bixby
SES Project No.: 0361-001-02
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\0361-001-002 LA CONNER BORING LOGS.GPJ

BORING LOG
ROW-9

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Eric
Drilling Method:	Strataprobe
Location:	84' W, 10' S of Ref Pt
Surface Condition:	Asphalt Pavement
Total Depth (ft) :	12
First GW Depth (ft) :	6

Moisture Content:
Dry = Dry, Dp = Damp, Mst = Moist, Vmst = Very Moist, Wet = Wet

Hydrocarbon Odor: NO = no odor, VFO = very faint odor
WO = weak odor, MO = moderate odor, SO = strong odor

Water Levels
▼ After Completion
▽ During Drilling

Depth (feet)	Blow Count	PID	Sample Recovery	Sample Interval	Sample ID	Lithography	USCS Class	Description	Moisture Content	Well Detail
0–2		0	50				GM	Moist, medium dense, silty sandy, GRAVEL, crushed gravel, tan, no hydrocarbon odor (Fill)		
2–6							ML	Soft drilling from 2 to 4 feet, no sample recovery from 2 to 4 feet Wet, soft, peaty clayey SILT, tan, weak hydrocarbon odor		
6		4.4	75		ROW-10-6				▽	
6–7								Gradational contact		
7–8							ML	Wet, soft, fine sandy SILT with root fibers, gray, no hydrocarbon odor		
8		0								
9–12		0	50		ROW-10-10		SP-SM	Wet, loose, fine SAND with silt, black, weak hydrocarbon odor		
12		0								
12–15								Boring terminated at 12 feet bgs.		

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

La Conner Property
300 Block of Morris Street
La Conner, Washington

Date Started: 5/10/2005
Date Finished: 5/10/2005
Logged By: DH Gardner
Chk By: RK Bixby
SES Project No.: 0361-001-02
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\0361-001-002 LA CONNER BORING LOGS.GPJ

BORING LOG
ROW-10

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Eric
Drilling Method:	Strataprobe
Location:	57' W, 10' S of Ref Pt
Surface Condition:	Asphalt Pavement
Total Depth (ft) :	12
First GW Depth (ft) :	6

Moisture Content:
Dry = Dry, Dp = Damp, Mst = Moist, Vmst = Very Moist, Wet = Wet

Hydrocarbon Odor: NO = no odor, VFO = very faint odor
WO = weak odor, MO = moderate odor, SO = strong odor

Water Levels
▼ After Completion
▽ During Drilling

Depth (feet)	Blow Count	PID	Sample Recovery	Sample Interval	Sample ID	Lithography	USCS Class	Description	Moisture Content	Well Detail
0										
1							GM	Moist, dense, silty sandy GRAVEL, crushed gravel, tan, no hydrocarbon odor (Fill)		
2			50							
		>2000			ROW-11-2.5			Wet, soft, clayey SILT with root fibers, tan mottled, strong hydrocarbon odor		
3										
4							ML			
5										
6		1330			ROW-11-6				▽	
								Peaty, gray, moderate hydrocarbon odor		
7							ML	Wet, soft, fine sandy SILT with root fibers, gray, moderate hydrocarbon odor		
8		94.1			ROW-11-8					
								Wet, loose, fine SAND with silt, black, weak hydrocarbon odor		
9										
10		23.4			ROW-11-10		SP-SM			
11										
12		12.5			ROW-11-12					
								Boring terminated at 12 feet bgs.		
13										
14										
15										

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

La Conner Property
300 Block of Morris Street
La Conner, Washington

Date Started: 5/10/2005
Date Finished: 5/10/2005
Logged By: DH Gardner
Chk By: RK Bixby
SES Project No.: 0361-001-02
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\0361-001-002 LA CONNER BORING LOGS.GPJ

BORING LOG
ROW-11

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Eric
Drilling Method:	Strataprobe
Location:	36' W, 10' S of Ref Pt
Surface Condition:	Asphalt Pavement
Total Depth (ft) :	12
First GW Depth (ft) :	10

Moisture Content:
Dry = Dry, Dp = Damp, Mst = Moist, Vmst = Very Moist, Wet = Wet

Hydrocarbon Odor: NO = no odor, VFO = very faint odor
WO = weak odor, MO = moderate odor, SO = strong odor

Water Levels
▼ After Completion
▽ During Drilling

Depth (feet)	Blow Count	PID	Sample Recovery	Sample Interval	Sample ID	Lithography	USCS Class	Description	Moisture Content	Well Detail
0										
1							GM	Moist, dense, silty sandy GRAVEL, crushed gravel, tan, no hydrocarbon odor		
2		0	50					Wet, soft, clayey SILT with root fibers, gray, strong hydrocarbon odor Wet zone at 2 feet		
3										
4										
5		1689			ROW-12-5		ML			
6		107	50		ROW-12-6					
7								No sample recovery 6 to 8 feet		
8								Wet, soft, organic SILT with fine sand, black, weak hydrocarbon odor		
9										
10		51.8	100		ROW12-10		OL	Groundwater seepage encountered at 10 feet	▽	
11										
12		0			ROW-12-12			no hydrocarbon odor		
								Boring terminated at 12 feet bgs.		
13										
14										
15										

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

La Conner Property
300 Block of Morris Street
La Conner, Washington

Date Started: 5/10/2005
Date Finished: 5/10/2005
Logged By: DH Gardner
Chk By: RK Bixby
SES Project No.: 0361-001-02
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\0361-001-002 LA CONNER BORING LOGS.GPJ

BORING LOG
ROW-12

APPENDIX C
Laboratory 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

May 27, 2005

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

Dear Ms. Gardner:

Included are the results from the testing of material submitted on May 10, 2005 from the La Conner, PO#0361-001-002, F&BI 505097 project. There are 26 pages included in this report. Samples ROW-7-W, ROW-10-W, and ROW-12-W were sent to Analytical Resources, Inc. for total and dissolved lead analysis. The report generated by ARI will be forwarded to your office upon receipt.

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
SOU0527R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097
Date Extracted: 05/20/05
Date Analyzed: 05/23/05 and 05/24/05

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)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 69-150)
ROW-7-6 505097-02	<0.02	<0.02	<0.02	<0.06	<2	84
ROW-7-10 d 505097-03	1.6	0.58	8.7	7.2	200	98
ROW-8-6 505097-04	<0.02	<0.02	<0.02	<0.06	<2	86
ROW-8-8 505097-05	<0.02	<0.02	<0.02	<0.06	<2	85
ROW-9-6 505097-07	<0.02	<0.02	<0.02	<0.06	<2	85
ROW-9-10 505097-08	<0.02	<0.02	<0.02	<0.06	<2	86
ROW-10-6 505097-09	<0.02	<0.02	<0.02	<0.06	<2	85
ROW-10-10 505097-10	<0.02	<0.02	<0.02	<0.06	<2	85
ROW-11-2.5 505097-11	0.13	0.23	1.5	1.3	82	118
ROW-11-6 d 505097-12	1.4	0.53	9.8	16	350	88

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

d - The sample was diluted. Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097
Date Extracted: 05/20/05
Date Analyzed: 05/23/05 and 05/24/05

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)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 69-150)
ROW-11-8 505097-13	0.53	0.32	3.3 ve	8.4 ve	110	101
ROW-11-10 505097-14	0.14	<0.02	<0.02	<0.06	2	85
ROW-12-5 d 505097-16	2.3	1.3	19	39	560	92
ROW-12-6 505097-17	0.89	0.15	3.2 ve	3.8	60	96
ROW-12-10 505097-18	1.5	0.05	1.8	1.4	23	90
ROW-12-12 505097-19	0.72	<0.02	0.07	0.07	5.1	88
Method Blank	<0.02	<0.02	<0.02	<0.06	<2	86

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

d - The sample was diluted. Detection limits are raised due to dilution.

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097
Date Extracted: 05/16/05
Date Analyzed: 05/16/05

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

Results Reported as µg/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 69-150)
ROW-7-W d 505097-20	190	35	320	360	7,000	88
ROW-8-W 505097-21	<1	<1	<1	<3	<100	86
ROW-9-W 505097-22	<1	<1	<1	<3	<100	85
ROW-10-W 505097-23	<1	<1	<1	<3	68	85
ROW-11-W d 505097-24	290	<20	32	<60	2,400	86
ROW-12-W d 505097-25	1,100	<20	21	60	4,900	86
Method Blank	<1	<1	<1	<3	<50	83

d - The sample was diluted.

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097
Date Extracted: 05/11/05
Date Analyzed: 05/12/05

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx
Extended to Include Motor Oil Range Compounds

Results Reported as µg/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	TRPH (C_{10}-C_{36})	Surrogate (% Recovery) (Limit 68-143)
ROW-7-W x 505097-20	1,400	1,400	92
ROW-8-W 505097-21	<50	<250	88
ROW-9-W x 505097-22	68	<250	87
ROW-10-W x 505097-23	140	<250	86
ROW-11-W x 505097-24	510	530	88
ROW-12-W x 505097-25	1,400	1,400	93
Method Blank	<50	<250	86

x - The pattern of peaks present is not indicative of diesel. The result is due to overlap from the gasoline range.

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097
Date Extracted: 05/13/05
Date Analyzed: 05/13/05, 05/14/05, and 05/16/05

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 µg/g (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	TRPH (C_{10}-C_{36})	Surrogate (% Recovery) (Limit 67-131)
ROW-7-6 505097-02	<50	<250	94
ROW-7-10 x 505097-03	1,900	1,900	91
ROW-8-6 505097-04	<50	<250	100
ROW-8-8 505097-05	<50	<250	91
ROW-9-6 505097-07	<50	<250	99
ROW-9-10 505097-08	<50	<250	94
ROW-10-6 505097-09	<50	<250	90
ROW-10-10 505097-10	<50	<250	93
ROW-11-2.5 505097-11	<50	<250	93
ROW-11-6 505097-12	<50	<250	106
ROW-11-8 505097-13	<50	<250	96

x - The pattern of peaks present is not indicative of diesel. The result is due to overlap from the gasoline range.

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097
Date Extracted: 05/13/05
Date Analyzed: 05/13/05, 05/14/05, and 05/16/05

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 µg/g (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	TRPH (C_{10}-C_{36})	Surrogate (% Recovery) (Limit 67-131)
ROW-11-10 505097-14	<50	<250	94
ROW-12-5 505097-16	<50	<250	96
ROW-12-6 505097-17	<50	<250	98
ROW-12-10 505097-18	<50	<250	94
ROW-12-12 505097-19	<50	<250	99
Method Blank	<50	<250	97

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097
Date Extracted: 05/12/05
Date Analyzed: 05/12/05

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS
BY EPA METHOD 6010

Results Reported on a Dry Weight Basis
Results Reported as µg/g (ppm)

Sample ID Laboratory ID	Total Lead
ROW-7-6 505097-02	7
ROW-7-10 505097-03	14
ROW-11-6 505097-12	8
ROW-11-10 505097-14	<2
ROW-12-5 505097-16	11
ROW-12-10 505097-18	7
Method Blank	<2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	ROW-11-6	Client:	Sound Environmental Strategies
Date Received:	05/10/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/11/05	Lab ID:	505097-12
Date Analyzed:	05/11/05	Data File:	051119.D
Matrix:	soil	Instrument:	GCMS5
Units:	ug/g (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	104	36	146
1,2-Dichloroethane-d4	109	40	139
Toluene-d8	102	36	152
4-Bromofluorobenzene	103	67	124

Compounds:	Concentration ug/g (ppm)
Ethanol	<50
t-Butyl alcohol (TBA)	<1
Methyl t-butyl ether (MTBE)	<0.05
Diisopropyl ether (DIPE)	<0.05
Ethyl t-butyl ether (ETBE)	<0.05
t-Amyl methyl ether (TAME)	<0.05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	ROW-12-5	Client:	Sound Environmental Strategies
Date Received:	05/10/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/11/05	Lab ID:	505097-16
Date Analyzed:	05/11/05	Data File:	051120.D
Matrix:	soil	Instrument:	GCMS5
Units:	ug/g (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	102	36	146
1,2-Dichloroethane-d4	107	40	139
Toluene-d8	101	36	152
4-Bromofluorobenzene	101	67	124

Compounds:	Concentration ug/g (ppm)
Ethanol	<50
t-Butyl alcohol (TBA)	<1
Methyl t-butyl ether (MTBE)	<0.05
Diisopropyl ether (DIPE)	<0.05
Ethyl t-butyl ether (ETBE)	<0.05
t-Amyl methyl ether (TAME)	<0.05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	Method Blank	Client:	Sound Environmental Strategies
Date Received:	Not Applicable	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/11/05	Lab ID:	05-629 mb
Date Analyzed:	05/12/05	Data File:	051129.D
Matrix:	soil	Instrument:	GCMS5
Units:	ug/g (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	104	36	146
1,2-Dichloroethane-d4	109	40	139
Toluene-d8	101	36	152
4-Bromofluorobenzene	120	67	124

Compounds:	Concentration ug/g (ppm)
Ethanol	<50
t-Butyl alcohol (TBA)	<1
Methyl t-butyl ether (MTBE)	<0.05
Diisopropyl ether (DIPE)	<0.05
Ethyl t-butyl ether (ETBE)	<0.05
t-Amyl methyl ether (TAME)	<0.05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	ROW-7-W	Client:	Sound Environmental Strategies
Date Received:	05/10/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/11/05	Lab ID:	505097-20
Date Analyzed:	05/11/05	Data File:	051107.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	101	83	129
1,2-Dichloroethane-d4	102	67	133
Toluene-d8	99	73	140
4-Bromofluorobenzene	102	84	136

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<200
Methyl t-butyl ether (MTBE)	<1
Diisopropyl ether (DIPE)	<1
Ethyl t-butyl ether (ETBE)	<1
t-Amyl methyl ether (TAME)	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	ROW-11-W	Client:	Sound Environmental Strategies
Date Received:	05/10/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/11/05	Lab ID:	505097-24
Date Analyzed:	05/11/05	Data File:	051109.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	102	83	129
1,2-Dichloroethane-d4	104	67	133
Toluene-d8	100	73	140
4-Bromofluorobenzene	106	84	136

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<200
Methyl t-butyl ether (MTBE)	<1
Diisopropyl ether (DIPE)	<1
Ethyl t-butyl ether (ETBE)	<1
t-Amyl methyl ether (TAME)	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	ROW-12-W	Client:	Sound Environmental Strategies
Date Received:	05/10/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/11/05	Lab ID:	505097-25
Date Analyzed:	05/11/05	Data File:	051110.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	104	83	129
1,2-Dichloroethane-d4	107	67	133
Toluene-d8	102	73	140
4-Bromofluorobenzene	106	84	136

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<200
Methyl t-butyl ether (MTBE)	<1
Diisopropyl ether (DIPE)	<1
Ethyl t-butyl ether (ETBE)	<1
t-Amyl methyl ether (TAME)	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	Method Blank	Client:	Sound Environmental Strategies
Date Received:	Not Applicable	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/11/05	Lab ID:	05-599 mb
Date Analyzed:	05/11/05	Data File:	051105.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	105	83	129
1,2-Dichloroethane-d4	110	67	133
Toluene-d8	103	73	140
4-Bromofluorobenzene	117	84	136

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<200
Methyl t-butyl ether (MTBE)	<1
Diisopropyl ether (DIPE)	<1
Ethyl t-butyl ether (ETBE)	<1
t-Amyl methyl ether (TAME)	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PNA Compounds By EPA Method 8270C SIM

Client Sample ID:	ROW-7-W	Client:	Sound Environmental Strategies
Date Received:	05/10/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/13/05	Lab ID:	505097-20
Date Analyzed:	05/17/05	Data File:	051623.D
Matrix:	water	Instrument:	GCMS3
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	80	28	139
Benzo(a)anthracene-d12	91	28	145

Compounds:	Concentration ug/L (ppb)
Naphthalene	56 ve
Acenaphthylene	<0.1
Acenaphthene	0.1
Fluorene	0.3
Phenanthrene	0.3
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Benzo(a)pyrene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenzo(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1

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 PNA Compounds By EPA Method 8270C SIM

Client Sample ID:	ROW-7-W	Client:	Sound Environmental Strategies
Date Received:	05/10/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/13/05	Lab ID:	505097-20 1/50
Date Analyzed:	05/18/05	Data File:	051820.D
Matrix:	water	Instrument:	GCMS3
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	72	28	139
Benzo(a)anthracene-d12	81	28	145

Compounds:	Concentration ug/L (ppb)
Naphthalene	53
Acenaphthylene	<5
Acenaphthene	<5
Fluorene	<5
Phenanthrene	<5
Anthracene	<5
Fluoranthene	<5
Pyrene	<5
Benz(a)anthracene	<5
Chrysene	<5
Benzo(b)fluoranthene	<5
Benzo(k)fluoranthene	<5
Benzo(a)pyrene	<5
Indeno(1,2,3-cd)pyrene	<5
Dibenzo(a,h)anthracene	<5
Benzo(g,h,i)perylene	<5

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 PNA Compounds By EPA Method 8270C SIM

Client Sample ID:	ROW-10-W	Client:	Sound Environmental Strategies
Date Received:	05/10/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/13/05	Lab ID:	505097-23
Date Analyzed:	05/17/05	Data File:	051624.D
Matrix:	water	Instrument:	GCMS3
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	72	28	139
Benzo(a)anthracene-d12	85	28	145

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Benzo(a)pyrene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenzo(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PNA Compounds By EPA Method 8270C SIM

Client Sample ID:	Method Blank	Client:	Sound Environmental Strategies
Date Received:	Not Applicable	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/13/05	Lab ID:	05-646mb
Date Analyzed:	05/17/05	Data File:	051622.D
Matrix:	water	Instrument:	GCMS3
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	72	28	139
Benzo(a)anthracene-d12	88	28	145

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Benzo(a)pyrene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenzo(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHODS 8021B AND 8015M

Laboratory Code: 505097-19 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	µg/g (ppm)	0.72	1.2	h
Toluene	µg/g (ppm)	<0.02	0.04	a
Ethylbenzene	µg/g (ppm)	0.07	0.18	h
Xylenes	µg/g (ppm)	0.07	0.16	h
Gasoline	µg/g (ppm)	5	9	h

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	µg/g (ppm)	0.5	78	71-115
Toluene	µg/g (ppm)	0.5	100	62-124
Ethylbenzene	µg/g (ppm)	0.5	91	67-120
Xylenes	µg/g (ppm)	1.5	83	60-123
Gasoline	µg/g (ppm)	20	89	58-134

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

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

h - RPD results are likely outside control limits due to sample inhomogeneity.

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097

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

Laboratory Code: 505158-03 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	µg/L (ppb)	<1	<1	nm
Toluene	µg/L (ppb)	<1	<1	nm
Ethylbenzene	µg/L (ppb)	<1	<1	nm
Xylenes	µg/L (ppb)	<3	<3	nm
Gasoline	µg/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	µg/L (ppb)	50	88	80-123
Toluene	µg/L (ppb)	50	110	78-121
Ethylbenzene	µg/L (ppb)	50	99	75-123
Xylenes	µg/L (ppb)	150	93	66-123
Gasoline	µg/L (ppb)	1,000	99	66-124

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

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	µg/L (ppb)	2,500	122	111	68-144	9

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097

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

Laboratory Code: 505097-14 (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)	5,000	<50	104	102	71-130	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	µg/g (ppm)	5,000	98	69-134

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS BY EPA METHOD 6010

Laboratory Code: 505098-04 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	RPD (Limit 20)
Lead	µg/g (ppm)	<2	3	nm	0-20

Laboratory Code: 505095-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Control Limits
Lead	µg/g (ppm)	50	<2	96	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	µg/g (ppm)	50	108	70-130

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

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097

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

Laboratory Code: 505096-05 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Ethanol	µg/g (ppm)	<50	<50	nm
t-Butyl alcohol (TBA)	µg/g (ppm)	<1	<1	nm
Methyl t-butyl ether (MTBE)	µg/g (ppm)	<0.05	<0.05	nm
Diisopropyl ether (DIPE)	µg/g (ppm)	<0.05	<0.05	nm
Ethyl t-butyl ether (ETBE)	µg/g (ppm)	<0.05	<0.05	nm
t-Amyl methyl ether (TAME)	µg/g (ppm)	<0.05	<0.05	nm

Laboratory Code: 505096-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Ethanol	µg/g (ppm)	125	<50	99	50-150
t-Butyl alcohol (TBA)	µg/g (ppm)	12.5	<1	107	42-159
Methyl t-butyl ether (MTBE)	µg/g (ppm)	2.5	<0.05	99	42-139
Diisopropyl ether (DIPE)	µg/g (ppm)	2.5	<0.05	110	52-134
Ethyl t-butyl ether (ETBE)	µg/g (ppm)	2.5	<0.05	114	52-134
t-Amyl methyl ether (TAME)	µg/g (ppm)	2.5	<0.05	109	51-132

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Ethanol	µg/g (ppm)	125	100	70-130
t-Butyl alcohol (TBA)	µg/g (ppm)	12.5	106	69-143
Methyl t-butyl ether (MTBE)	µg/g (ppm)	2.5	99	70-131
Diisopropyl ether (DIPE)	µg/g (ppm)	2.5	104	71-132
Ethyl t-butyl ether (ETBE)	µg/g (ppm)	2.5	113	69-134
t-Amyl methyl ether (TAME)	µg/g (ppm)	2.5	107	73-131

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

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Ethanol	µg/L (ppb)	2,500	112	104	70-130	8
t-Butyl alcohol (TBA)	µg/L (ppb)	250	120	115	69-149	4
Methyl t-butyl ether (MTBE)	µg/L (ppb)	50	99	106	78-128	7
Diisopropyl ether (DIPE)	µg/L (ppb)	50	107	113	74-139	6
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	50	112	116	75-134	3
t-Amyl methyl ether (TAME)	µg/L (ppb)	50	107	113	75-124	5

Date of Report: 05/27/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR PNA'S BY EPA METHOD 8270C SIM

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	µg/L (ppb)	5	102	107	62-111	5
Acenaphthylene	µg/L (ppb)	5	93	98	65-121	5
Acenaphthene	µg/L (ppb)	5	92	97	66-120	5
Fluorene	µg/L (ppb)	5	88	94	63-120	7
Phenanthrene	µg/L (ppb)	5	96	96	61-121	0
Anthracene	µg/L (ppb)	5	90	95	56-120	6
Fluoranthene	µg/L (ppb)	5	92	98	63-121	6
Pyrene	µg/L (ppb)	5	90	96	66-124	7
Benz(a)anthracene	µg/L (ppb)	5	88	94	58-124	7
Chrysene	µg/L (ppb)	5	88	94	61-119	7
Benzo(b)fluoranthene	µg/L (ppb)	5	95	97	57-137	2
Benzo(k)fluoranthene	µg/L (ppb)	5	92	94	61-130	2
Benzo(a)pyrene	µg/L (ppb)	5	85	87	57-133	3
Indeno(1,2,3-cd)pyrene	µg/L (ppb)	5	73	75	60-127	3
Dibenzo(a,h)anthracene	µg/L (ppb)	5	105	108	63-127	3
Benzo(g,h,i)perylene	µg/L (ppb)	5	102	105	58-124	3

505097

SAMPLE CHAIN OF CUSTODY ME 05-10-05 A04/AI4/V2/VS4

Page # 1 of 3

Send Report To DEE GARDNER

Company SOUND ENVIRONMENTAL STRATEGIES

Address 2400 AIRPORT WAY S., STE 200

City, State, ZIP SEATTLE, WA 98134-200

Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (signature)

PROJECT NAME/NO. LACONNER

PO # 0361-001-002

REMARKS IN THE EVENT THAT PRODUCT QUANTITIES ARE INSUFFICIENT FOR PIANOS, THEN RUN PIANOS ON SOIL SAMPLES ROW-11-6 ~~AND~~ ROW-5-6.
* FIELD INDICATIONS - CALIBRATE ACCORDINGLY

TURNAROUND TIME
- [x] Standard (2 Weeks)
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Dispose after 30 days
- [ ] Return samples
- [x] Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	TOTAL Pb				HOLD	Notes
ROW-7-3	01 A-E ~~05.10.05~~	05.10.05	0920	S	5											X	
ROW-7-6	02 A-E		0925	S	5	X	X	X				X					
ROW-7-10	03 A-E		0930	S	5	X	X	X				X					*
ROW-8-6	04 A-E		1015	S	5	X	X	X									
ROW-8-8	05 A-E		1020	S	5	X	X	X									
ROW-9-3	06 A-E		1055	S	5											X	
ROW-9-6	07 A-E		1100	S	5	X	X	X									
ROW-9-10	08 A-E		1105	S	5	X	X	X									
ROW-10-6	09 A-E		1140	S	5	X	X	X									
ROW-10-10	10 A-E	↓	1145	S	5	X	X	X									

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:		DEE GARDNER	SES	05.10.05	1740
Received by:		Eric Young	FBI	5/10/05	1741
Relinquished by:					
Received by:					

FCRMS\COC\COC.DOC

505077

SAMPLE CHAIN OF CUSTODY

ME 05-10-05 AI4/VZ/VS4

Page # 2 of 3

Send Report To DEE GARDNER

Company SOUND ENVIRONMENTAL STRATEGIES

Address 2400 AIRPORT WAY S., STE 200

City, State, ZIP SEATTLE, WA 98134-200

Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (signature) DW

PROJECT NAME/NO. LACONNER

PO # 0361-001-002

REMARKS SEE PAGE 1 OF 3

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: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	PIANO	TOTAL Pb	DISS. Pb	OXYGENATES BY 8260B	ORGANIC LEAD SPECIES	HOLD	Notes
ROW-11-2.5	11 A-E	05.10.05	1230	S	5	X	X	X									*
ROW-11-6	12 A-E		1235	S	5	X	X	X				X		X			*
ROW-11-8	13 A-E		1235	S	5	X	X	X									
ROW-11-10	14 A-E		1240	S	5							X				X	
ROW-11-12	~~15~~		1240	S	5	X	X	X									Didn't received (NP) 5-10-05
ROW-12-5	16 A-E		1325	S	5	X	X	X				X		X			*
ROW-12-6	17 A-E		1325	S	5	X	X	X									
ROW-12-10	18 A-E		1330	S	5	X	X	X				X					
ROW-12-12	19 A-E		1330	S	5	X	X	X									
ROW-7-W	20 A-H	V	0945	W	9	X	X	X		X	X	X	X	X	X		* CALL TO CONFIRM PIANO AND TEL

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

FORMS\COC\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	DW	DEE GARDNER	SES	05.10.05	1740
Received by:		ERIC YOUNG	FBI	5/10/05	17[illegible]
Relinquished by:					
Received by:					

505097

SAMPLE CHAIN OF CUSTODY ME 05-10-05 A04/AI4/V2/V8

Page # 3 of 3

Send Report To DEE GARDNER

Company SOUND ENVIRONMENTAL STRATEGIES

Address 2400 AIRPORT WAY S., STE 200

City, State, ZIP SEATTLE, WA 98134-200

Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (signature) DM

PROJECT NAME/NO. LACONNER

PO # 0361-001-002

REMARKS SEE PAGE 1 OF 3

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	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	PLANO	TOTAL Pb	DISS Pb	OXYGENATES BY 8260B	ORGANIC LEAD SPECIES		Notes
ROW-8-W	21 A-E	05.10.05	1040	W	5	X	X	X									
ROW-9-W	22 A-E		1110	W	5	X	X	X									
ROW-10-W	23 A-H		1150	W	8	X	X	X		X		X	X		X		CALL TO (*) CONFIRM TEL
ROW-11-W	24 A-F		1245	W	6	X	X	X						X			*
ROW-12-W	25 A-I	↓	1335	W	9	X	X	X			X	X	X	X	X		* CALL TO CONFIRM PLANO + TEL

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: DM	DEE GARDNER	SES	05.10.05	1740
Received by:	Eric Young	FBI	5/10/05	1741
Relinquished by:				
Received by:				

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

FORMS\COC\COC.DOC

Analytical Resources, Incorporated
Analytical Chemists and Consultants

May 25, 2005

Mike Erdahl
Friedman & Bruya, Inc.
3012 – 16th Avenue West
Seattle, WA 98119-2029

RE: Project: 505097 PO# G-397
ARI Job IB12

Dear Mike,

Please find enclosed the original Chain of Custody (COC) record and analytical results for the project referenced above. Analytical Resources, Inc. accepted six water samples in good condition on May 12, 2005.

Selected samples were analyzed for total and dissolved lead, as requested on the COC. The total metals samples were received unpreserved. The samples were pH adjusted prior to preparation.

No analytical complications were noted.

Copies of these reports and all associated raw data will be kept on file electronically at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,
ANALYTICAL RESOURCES, INC.

Stephanie Lucas

Stephanie Lucas
Project Manager
(206) 695-6213
steph@arilabs.com

I812

SAMPLE CHAIN OF CUSTODY

8.5

Send Report To Michael Erdahl
Company Friedman and Bruya, Inc.
Address 3012 16th Ave W
City, State, ZIP Seattle, WA 98119
Phone # (206) 285-8282 Fax # (206) 283-5044

SAMPLERS *(signature)*

PROJECT NAME/NO. 505097

PO # G-397

REMARKS
Please Fax Results

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: Total Pb	Dissolved Pb	Notes
ROW-7-W		5/10/05	09:45	W	2	✓	✓	
ROW-10-W		↓	11:50	↓	↓	✓	✓	
ROW-12-W		↓	13:35	↓	↓	✓	✓	

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:		Michael Erdahl	FEBruc	5/11/05	12:45
Received by:	Michelle DesJardin	Michelle DesJardin	ARI	5/12/05	17:00
Relinquished by:					
Received by					

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: ROW-7-W
SAMPLE

Lab Sample ID: IB12A
LIMS ID: 05-8291
Matrix: Water
Data Release Authorized:
Reported: 05/23/05

QC Report No: IB12-Friedman & Bruya
Project: PO# G-397
505097
Date Sampled: 05/10/05
Date Received: 05/12/05

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/16/05	200.8	05/20/05	7439-92-1	Lead	1	20	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: ROW-10-W
SAMPLE

Lab Sample ID: IB12B
LIMS ID: 05-8292
Matrix: Water
Data Release Authorized:
Reported: 05/23/05

QC Report No: IB12-Friedman & Bruya
Project: PO# G-397
505097
Date Sampled: 05/10/05
Date Received: 05/12/05

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/16/05	200.8	05/20/05	7439-92-1	Lead	1	17	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: ROW-12-W
SAMPLE

Lab Sample ID: IB12C
LIMS ID: 05-8293
Matrix: Water
Data Release Authorized:
Reported: 05/23/05

QC Report No: IB12-Friedman & Bruya
Project: PO# G-397
505097
Date Sampled: 05/10/05
Date Received: 05/12/05

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/16/05	200.8	05/20/05	7439-92-1	Lead	1	19	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: ROW-7-W
SAMPLE

Lab Sample ID: IB12D
LIMS ID: 05-8294
Matrix: Water
Data Release Authorized:
Reported: 05/23/05

QC Report No: IB12-Friedman & Bruya
Project: PO# G-397
505097
Date Sampled: 05/10/05
Date Received: 05/12/05

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/16/05	200.8	05/20/05	7439-92-1	Lead	1	6	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: ROW-10-W
SAMPLE

Lab Sample ID: IB12E
LIMS ID: 05-8295
Matrix: Water
Data Release Authorized:
Reported: 05/23/05

QC Report No: IB12-Friedman & Bruya
Project: PO# G-397
505097
Date Sampled: 05/10/05
Date Received: 05/12/05

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/16/05	200.8	05/20/05	7439-92-1	Lead	1	1	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: ROW-12-W
SAMPLE

Lab Sample ID: IB12F
LIMS ID: 05-8296
Matrix: Water
Data Release Authorized:
Reported: 05/23/05

QC Report No: IB12-Friedman & Bruya
Project: PO# G-397
505097
Date Sampled: 05/10/05
Date Received: 05/12/05

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/16/05	200.8	05/20/05	7439-92-1	Lead	1	1	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: METHOD BLANK

Lab Sample ID: IB12MB
LIMS ID: 05-8291
Matrix: Water
Data Release Authorized:
Reported: 05/23/05

QC Report No: IB12-Friedman & Bruya
Project: PO# G-397
505097
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/16/05	200.8	05/20/05	7439-92-1	Lead	1	1	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: LAB CONTROL

Lab Sample ID: IB12LCS
LIMS ID: 05-8291
Matrix: Water
Data Release Authorized: PJL
Reported: 05/23/05

QC Report No: IB12-Friedman & Bruya
Project: PO# G-397
505097
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Lead	200.8	23.7	25.0	94.8%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

PRESERVATION VERIFICATION 05/13/05
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: IB12

Inquiry Number: NONE
Analysis Requested: 05/13/05
Contact: Erdahl, Michael
Client: Friedman & Bruya
Logged by: BLK
Sample Set Used: Yes-423
Validatable Package: No
Deliverables:

PC: Stephanie
VTSR: 05/12/05

Project #: 505097
Project: PO# G-397
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
05-8291 IB12A	ROW-7-W						TOT										< 2	1104060	2.5mL	5-13-05 DM
05-8292 IB12B	ROW-10-W						TOT										↓	↓	↓	↓
05-8293 IB12C	ROW-12-W						TOT										↓	↓	↓	↓
05-8294 IB12D	ROW-7-W						DIS							Y						
05-8295 IB12E	ROW-10-W						DIS							Y						
05-8296 IB12F	ROW-12-W						DIS							Y						

Checked By gl Date 5/13/05

Analytical Resources, Incorporated
Analytical Chemists and Consultants

May 25, 2005

Mike Erdahl
Friedman & Bruya, Inc.
3012 – 16th Avenue West
Seattle, WA 98119-2029

RE: Project: 505081 PO# G-397
ARI Job IB13

Dear Mike,

Please find enclosed the original Chain of Custody (COC) record and analytical results for the project referenced above. Analytical Resources, Inc. accepted one water sample in good condition on May 12, 2005.

The sample was analyzed for total and dissolved lead, as requested on the COC. The total metals sample was received unpreserved. The sample was pH adjusted prior to preparation. The method blank and spike blank were batched with ARI Job **IB12**. Data is included in this package.

No analytical complications were noted.

Copies of these reports and all associated raw data will be kept on file electronically at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,
ANALYTICAL RESOURCES, INC.

Stephanie Lucas
Project Manager
(206) 695-6213
steph@arilabs.com

IB13

SAMPLE CHAIN OF CUSTODY

7.5

Page # 1 of 1

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SAMPLERS *(signature)*

PROJECT NAME/NO. 505081

PO # G-397

REMARKS

Please Fax Results

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: Total Pb	Dissolved Pb									Notes
ROW-4-W		5/9/05	11:15	W	2	✓	✓									

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:		Michael Erdahl	FEBruya	5/10/05	11:00 am
Received by:	Michelle DesJardin	Michelle DesJardin	ART	5/12/05	17:00
Relinquished by:					
Received by:					

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: ROW-4-W
SAMPLE

Lab Sample ID: IB13A
LIMS ID: 05-8297
Matrix: Water
Data Release Authorized:
Reported: 05/23/05

QC Report No: IB13-Friedman & Bruya
Project: PO# G-397
505081
Date Sampled: 05/09/05
Date Received: 05/12/05

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/16/05	200.8	05/20/05	7439-92-1	Lead	1	45	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: ROW-4-W
SAMPLE

Lab Sample ID: IB13B
LIMS ID: 05-8298
Matrix: Water
Data Release Authorized
Reported: 05/23/05

QC Report No: IB13-Friedman & Bruya
Project: PO# G-397
505081
Date Sampled: 05/09/05
Date Received: 05/12/05

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/16/05	200.8	05/20/05	7439-92-1	Lead	1	2	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: METHOD BLANK

Lab Sample ID: IB12MB
LIMS ID: 05-8291
Matrix: Water
Data Release Authorized:
Reported: 05/23/05

QC Report No: IB12-Friedman & Bruya
Project: PO# G-397
505097
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/16/05	200.8	05/20/05	7439-92-1	Lead	1	1	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: LAB CONTROL

Lab Sample ID: IB12LCS
LIMS ID: 05-8291
Matrix: Water
Data Release Authorized: MJL
Reported: 05/23/05

QC Report No: IB12-Friedman & Bruya
Project: PO# G-397
505097
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Lead	200.8	23.7	25.0	94.8%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

PRESERVATION VERIFICATION 05/13/05
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: IB13

Inquiry Number: NONE
Analysis Requested: 05/13/05
Contact: Erdahl, Michael
Client: Friedman & Bruya
Logged by: BLK
Sample Set Used: Yes-423
Validatable Package: No
Deliverables:

PC: Stephanie
VTSR: 05/12/05

Project #: 505081
Project: PO# G-397
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
05-8297 IB13A	ROW-4-W						TOT Fail										<2	1104060	2.5mL	5-13-05 DM
05-8298 IB13B	ROW-4-W						Diss							Y						

Checked By CJL Date 5/13/05

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

May 18, 2005

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

Dear Ms. Gardner:

Included are the results from the testing of material submitted on May 9, 2005 from the LaConner, PO#0361-001-002, F&BI 505081 project. There are 16 pages included in this report. Sample ROW-4-W was sent to Analytical Resources, Inc. for total and dissolved lead analysis. The report generated by ARI will be forwarded to your office upon receipt.

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
sou0518r.doc

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/18/05
Date Received: 05/09/05
Project: LaConner, PO#0361-001-002, F&BI 505081
Date Extracted: 05/09/05
Date Analyzed: 05/10/05, 05/11/05, and 05/12/05

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

Results Reported as µg/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 69-150)
ROW-1-W 505081-16	<1	<1	<1	<3	<100	85
ROW-2-W 505081-17	<1	<1	<1	<3	<100	85
ROW-3-W 505081-18	<1	2	<1	<3	<100	86
ROW-4-W 505081-19	24	1	17	30	570	89
ROW-5-W d 505081-20	100	2	10	12	700	88
ROW-6-W d 505081-21	780	7	94	210	3,900	97
Method Blank	<1	<1	<1	<3	<100	85

d - The sample was diluted for benzene.

Date of Report: 05/18/05
Date Received: 05/09/05
Project: LaConner, PO#0361-001-002, F&BI 505081
Date Extracted: 05/10/05
Date Analyzed: 05/11/05 and 05/12/05

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

Results Reported on a Dry Weight Basis
Results Reported as µg/g (ppm)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 69-150)
ROW-1-6 505081-02	<0.02	<0.02	<0.02	<0.06	<2	85
ROW-2-5 505081-04	<0.02	<0.02	<0.02	<0.06	<2	85
ROW-3-6 505081-06	<0.02	<0.02	<0.02	<0.06	<2	85
ROW-4-5 505081-08	0.25	<0.02	1.3	2.1	25	86
ROW-4-10 505081-10	<0.02	<0.02	<0.02	<0.06	<2	85
ROW-5-3 505081-11	0.22	0.04	0.08	0.07	6	91
ROW-5-6 d 505081-12	1.5	<0.4	6.2	8.1	150	88
ROW-5-9 505081-13	0.46	0.03	<0.02	0.07	<2	85
ROW-6-6 d 505081-14	4.0	<0.4	17	43	400	89
ROW-6-11 505081-15	0.07	<0.02	<0.02	<0.06	<2	86
Method Blank	<0.02	<0.02	<0.02	<0.06	<2	86

d - The sample was diluted. Detection limits are raised due to dilution.

Date of Report: 05/18/05
Date Received: 05/09/05
Project: LaConner, PO#0361-001-002, F&BI 505081
Date Extracted: 05/10/05
Date Analyzed: 05/12/05

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL USING METHOD NWTPH-Dx
Extended to Include Motor Oil Range Compounds
Results Reported as µg/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	TRPH (C_{10}-C_{36})	Surrogate (% Recovery) (Limit 68-143)
ROW-1-W 505081-16	<50	<250	82
ROW-2-W x 505081-17	130	<250	82
ROW-3-W x 505081-18	820	940	92
ROW-4-W y 505081-19	1,100	1,100	ip
ROW-5-W z 505081-20	130	<250	ip
ROW-6-W z 505081-21	800	800	ip
Method Blank	<50	<250	78

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

x - The pattern of peaks present is not indicative of diesel.

y – The pattern of peaks present is not indicative of diesel and also contains material overlapping from the gasoline range.

z – The result is due to material overlapping from the gasoline range.

Date of Report: 05/18/05
Date Received: 05/09/05
Project: LaConner, PO#0361-001-002, F&BI 505081
Date Extracted: 05/10/05
Date Analyzed: 05/11/05

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 µg/g (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	TRPH (C_{10}-C_{36})	Surrogate (% Recovery) (Limit 67-131)
ROW-1-6 505081-02	<50	<250	87
ROW-2-5 505081-04	<50	<250	87
ROW-3-6 505081-06	<50	<250	86
ROW-4-5 x 505081-08	260	260	84
ROW-4-10 505081-10	<50	<250	85
ROW-5-3 505081-11	<50	<250	86
ROW-5-6 x 505081-12	1,500	1,500	87
ROW-5-9 505081-13	<50	<250	91
ROW-6-6 x 505081-14	2,800	2,800	92
ROW-6-11 505081-15	<50	<250	87
Method Blank	<50	<250	83

x - The sample contains material in both the diesel and gasoline ranges. The diesel result contains material overlapping from the gasoline range.

Date of Report: 05/18/05
Date Received: 05/09/05
Project: LaConner, PO#0361-001-002, F&BI 505081
Date Extracted: 05/10/05
Date Analyzed: 05/10/05

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES
FOR TOTAL METALS
BY EPA METHOD 6010

Results Reported on a Dry Weight Basis
Results Reported as µg/g (ppm)

Sample ID Laboratory ID	Total Lead
ROW-4-5 505051-08	7
ROW-5-6 505051-12	14
Method Blank	<2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	ROW-4-W	Client:	Sound Environmental Strategies
Date Received:	05/09/05	Project:	LaConner, PO#0361-001-002
Date Extracted:	05/10/05	Lab ID:	505081-19
Date Analyzed:	05/10/05	Data File:	051007.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	104	83	129
1,2-Dichloroethane-d4	115	67	133
Toluene-d8	101	73	140
4-Bromofluorobenzene	103	84	136

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<200
Methyl t-butyl ether (MTBE)	<1
Diisopropyl ether (DIPE)	<1
Ethyl t-butyl ether (ETBE)	<1
t-Amyl methyl ether (TAME)	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	Method Blank	Client:	Sound Environmental Strategies
Date Received:	Not Applicable	Project:	LaConner, PO#0361-001-002
Date Extracted:	05/10/05	Lab ID:	05-583 mb
Date Analyzed:	05/10/05	Data File:	051005.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	104	83	129
1,2-Dichloroethane-d4	117	67	133
Toluene-d8	104	73	140
4-Bromofluorobenzene	117	84	136

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<200
Methyl t-butyl ether (MTBE)	<1
Diisopropyl ether (DIPE)	<1
Ethyl t-butyl ether (ETBE)	<1
t-Amyl methyl ether (TAME)	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	ROW-5-6	Client:	Sound Environmental Strategies
Date Received:	05/09/05	Project:	LaConner, PO#0361-001-002
Date Extracted:	05/11/05	Lab ID:	505081-12
Date Analyzed:	05/11/05	Data File:	051118.D
Matrix:	soil	Instrument:	GCMS5
Units:	ug/g (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	103	36	146
1,2-Dichloroethane-d4	111	40	139
Toluene-d8	103	36	152
4-Bromofluorobenzene	102	67	124

Compounds:	Concentration ug/g (ppm)
Ethanol	<50
t-Butyl alcohol (TBA)	<1
Methyl t-butyl ether (MTBE)	<0.05
Diisopropyl ether (DIPE)	<0.05
Ethyl t-butyl ether (ETBE)	<0.05
t-Amyl methyl ether (TAME)	<0.05

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID:	Method Blank	Client:	Sound Environmental Strategies
Date Received:	Not Applicable	Project:	LaConner, PO#0361-001-002
Date Extracted:	05/11/05	Lab ID:	05-629 mb
Date Analyzed:	05/12/05	Data File:	051129.D
Matrix:	soil	Instrument:	GCMS5
Units:	ug/g (ppm)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	104	36	146
1,2-Dichloroethane-d4	109	40	139
Toluene-d8	101	36	152
4-Bromofluorobenzene	120	67	124

Compounds:	Concentration ug/g (ppm)
Ethanol	<50
t-Butyl alcohol (TBA)	<1
Methyl t-butyl ether (MTBE)	<0.05
Diisopropyl ether (DIPE)	<0.05
Ethyl t-butyl ether (ETBE)	<0.05
t-Amyl methyl ether (TAME)	<0.05

Date of Report: 05/18/05
Date Received: 05/09/05
Project: LaConner, PO#0361-001-002, F&BI 505081

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

Laboratory Code: 505081-16 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	µg/L (ppb)	<1	<1	nm
Toluene	µg/L (ppb)	<1	<1	nm
Ethylbenzene	µg/L (ppb)	<1	<1	nm
Xylenes	µg/L (ppb)	<3	<3	nm
Gasoline	µg/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	µg/L (ppb)	50	88	80-123
Toluene	µg/L (ppb)	50	114	78-121
Ethylbenzene	µg/L (ppb)	50	101	75-123
Xylenes	µg/L (ppb)	150	92	66-123
Gasoline	µg/L (ppb)	1,000	85	66-124

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

Date of Report: 05/18/05
Date Received: 05/09/05
Project: LaConner, PO#0361-001-002, F&BI 505081

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: 505081-15 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	µg/g (ppm)	.07	..23	h
Toluene	µg/g (ppm)	<0.02	<0.02	nm
Ethylbenzene	µg/g (ppm)	<0.02	<0.02	nm
Xylenes	µg/g (ppm)	<0.06	<0.06	nm
Gasoline	µg/g (ppm)	<1	<1	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	µg/g (ppm)	0.5	76	71-115
Toluene	µg/g (ppm)	0.5	94	62-124
Ethylbenzene	µg/g (ppm)	0.5	88	67-120
Xylenes	µg/g (ppm)	1.5	90	60-123
Gasoline	µg/g (ppm)	20	103	58-134

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
h - RPD results are likely outside control limits due to sample inhomogeneity.

Date of Report: 05/18/05
Date Received: 05/09/05
Project: LaConner, PO#0361-001-002, F&BI 505081

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	µg/L (ppb)	2,500	102	108	68-144	6

Date of Report: 05/18/05
Date Received: 05/09/05
Project: LaConner, PO#0361-001-002, F&BI 505081

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

Laboratory Code: 505081-10 (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)	5,000	<50	105	102	71-130	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	µg/g (ppm)	5,000	98	69-134

Date of Report: 05/18/05
Date Received: 05/09/05
Project: LaConner, PO#0361-001-002, F&BI 505081

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS BY EPA METHOD 6010

Laboratory Code: 505070-10 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	RPD (Limit 20)
Lead	µg/g (ppm)	7	9	a	0-20

Laboratory Code: 505070-10 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Control Limits
Lead	µg/g (ppm)	50	7	80	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	µg/g (ppm)	50	114	70-130

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

Date of Report: 05/18/05
Date Received: 05/09/05
Project: LaConner, PO#0361-001-002, F&BI 505081

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

Laboratory Code: 505082-02 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Ethanol	µg/L (ppb)	<1,000	<1,000	nm
t-Butyl alcohol (TBA)	µg/L (ppb)	<200	<200	nm
Methyl t-butyl ether (MTBE)	µg/L (ppb)	<1	<1	nm
Diisopropyl ether (DIPE)	µg/L (ppb)	<1	<1	nm
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	<1	<1	nm
t-Amyl methyl ether (TAME)	µg/L (ppb)	<1	<1	nm

Laboratory Code: 505066-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Ethanol	µg/L (ppb)	2,500	<1,000	96	50-150
t-Butyl alcohol (TBA)	µg/L (ppb)	250	<200	106	77-133
Methyl t-butyl ether (MTBE)	µg/L (ppb)	50	<1	96	65-130
Diisopropyl ether (DIPE)	µg/L (ppb)	50	<1	103	62-130
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	50	<1	108	60-133
t-Amyl methyl ether (TAME)	µg/L (ppb)	50	<1	105	63-136

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Ethanol	µg/L (ppb)	2,500	103	70-130
t-Butyl alcohol (TBA)	µg/L (ppb)	250	106	69-149
Methyl t-butyl ether (MTBE)	µg/L (ppb)	50	95	78-128
Diisopropyl ether (DIPE)	µg/L (ppb)	50	100	74-139
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	50	106	75-134
t-Amyl methyl ether (TAME)	µg/L (ppb)	50	101	75-124

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

Date of Report: 05/18/05
Date Received: 05/09/05
Project: LaConner, PO#0361-001-002, F&BI 505081

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

Laboratory Code: 505096-05 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Ethanol	µg/g (ppm)	<50	<50	nm
t-Butyl alcohol (TBA)	µg/g (ppm)	<1	<1	nm
Methyl t-butyl ether (MTBE)	µg/g (ppm)	<0.05	<0.05	nm
Diisopropyl ether (DIPE)	µg/g (ppm)	<0.05	<0.05	nm
Ethyl t-butyl ether (ETBE)	µg/g (ppm)	<0.05	<0.05	nm
t-Amyl methyl ether (TAME)	µg/g (ppm)	<0.05	<0.05	nm

Laboratory Code: 505096-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Ethanol	µg/g (ppm)	125	<50	99	50-150
t-Butyl alcohol (TBA)	µg/g (ppm)	12.5	<1	107	42-159
Methyl t-butyl ether (MTBE)	µg/g (ppm)	2.5	<0.05	99	42-139
Diisopropyl ether (DIPE)	µg/g (ppm)	2.5	<0.05	110	52-134
Ethyl t-butyl ether (ETBE)	µg/g (ppm)	2.5	<0.05	114	52-134
t-Amyl methyl ether (TAME)	µg/g (ppm)	2.5	<0.05	109	51-132

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Ethanol	µg/g (ppm)	125	100	70-130
t-Butyl alcohol (TBA)	µg/g (ppm)	12.5	106	69-143
Methyl t-butyl ether (MTBE)	µg/g (ppm)	2.5	99	70-131
Diisopropyl ether (DIPE)	µg/g (ppm)	2.5	104	71-132
Ethyl t-butyl ether (ETBE)	µg/g (ppm)	2.5	113	69-134
t-Amyl methyl ether (TAME)	µg/g (ppm)	2.5	107	73-131

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

505081

SAMPLE CHAIN OF CUSTODY

ME 05-09-05 -1/V2/VS2/AO

Send Report To DEE GARDNER
Company SOUND ENVIRONMENTAL STRATEGIES
Address 2400 AIRPORT WAY S., STE 200
City, State, ZIP SEATTLE, WA 98134-200
Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (signature) DM
PROJECT NAME/NO. LACONNER
PO # 0361-001-002
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: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	TOTAL Pb	OXYGENATES by 8260B			HOLD	Notes
ROW-1-3	01 A-E	05.09.05	0835	S	5											X	
ROW-1-6	02 A-E	"	0840	S	5	X	X	X									
ROW-1-10	03 A-E	"	0845	S	5											X	
ROW-2-5	04 A-E	"	0930	S	5	X	X	X									
ROW-2-8	05 A-E	"	0935	S	5											X	
ROW-3-6	06 A-E	"	1010	S	5	X	X	X									
ROW-3-9	07 A-E	"	1015	S	5											X	
ROW-4-5	08 A-E	"	1050	S	5	X	X	X				X					
ROW-4-8	09 A-E	"	1050	S	5											X	
ROW-4-10	10 A-E	"	1105	S	5	X	X	X									

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: DM	DEE GARDNER	SES	05.09.05	1330
Received by: Corey League	Corey League	SES	5.09.05	1330
Relinquished by: Corey League	Corey League	SES	5.09.05	1515
Received by: Nhan Phan	Nhan Phan	Friedman + Bruya	5-9-05	15:15

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

505081

SAMPLE CHAIN OF CUSTODY

ME 05-09-05 VT/V2/VS2/AU

Page # 2 of 3

Send Report To DEE GARDNER

Company SOUND ENVIRONMENTAL STRATEGIES

Address 2400 AIRPORT WAY S., STE 200

City, State, ZIP SEATTLE, WA 98134-200

Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (*signature*)

PROJECT NAME/NO.: LACONNER

PO #: 0361-001-002

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	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	TOTAL Pb	Diss Pb	OXYGENATES BY 8260B			Notes
						ANALYSES REQUESTED											
ROW-5-3	11 A-E	05.09.05	1145	S	5	X	X	X									
ROW-5-6	12 A-D		1150	S	5	X	X	X				X		X			
ROW-5-9	13 A-E		1200	S	5	X	X	X									
ROW-6-6	14 A-E		1245	S	5	X	X	X									
ROW-6-11	15 A-E		1250	S	5	X	X	X									
ROW-1-W	16 A-E		0900	W	5	X	X	X									
ROW-2-W	17 A-E		0945	W	5	X	X	X									
ROW-3-W	18 A-E		1030	W	5	X	X	X									
ROW-4-W	19 A-G		1115	W	7	X	X	X				X	X	X			
ROW-5-W	20 A-E		1220	W	5	X	X	X									

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

FORMS\COC\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	DW	DEE GARDNER	SES	05.09.05	1330
Received by:		Corey League	SES	5.09.05	1330
Relinquished by:		Corey League	SES	5.09.05	1515
Received by:		Nhan Phan	Friedman & Bruya	5-09-05	15:15

505081

SAMPLE CHAIN OF CUSTODY

ME 05-09-05 ATH/VZ/VSZ/AD

Page # 3 of 3

Send Report To DEE GARDNER

Company SOUND ENVIRONMENTAL STRATEGIES

Address 2400 AIRPORT WAY S., STE 200

City, State, ZIP SEATTLE, WA 98134-200

Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (*signature*)

PROJECT NAME/NO.: LACONNER

PO #: 0361-001-002

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	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS						Notes
ROW-6-W	21 A-E	05.09.05	1300	W	5	X	X	X									

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	DEE GARDNER	SES	05.09.05	1330
Received by:	Corey League	SES	5.09.05	1330
Relinquished by:	Corey League	SES	5.09.05	1515
Received by:	Nhan Phan	Friedman & Bruya	5-9-05	15:15

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

FORMS\COC\COC.DOC

Analytical Resources, Incorporated
Analytical Chemists and Consultants

June 6, 2005

Charlene Morrow
Friedman & Bruya, Inc.
3012 – 16th Avenue West
Seattle, WA 98119-2029

RE: Project: 505097 PO# G-431
ARI Job IC27

Dear Charlene,

Please find enclosed the original Chain of Custody (COC) record and analytical results for the above referenced project. Analytical Resources, Inc. accepted one soil sample in good condition on May 25, 2005.

The sample was analyzed for EPH (extractable petroleum hydrocarbon), as requested on the COC. No analytical complications were noted.

Quality control analysis results are included for your review. Copies of the reports and all associated raw data will be kept on file electronically at ARI. If you have any questions or require additional information, please contact your project manager.

Sincerely,
ANALYTICAL RESOURCES, INC.

Stephanie Lucas
Project Manager
(206) 695-6213
steph@arilabs.com

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH

Sample ID: MB-052605
METHOD BLANK

Lab Sample ID: MB-052605
LIMS ID: 05-8978
Matrix: Soil
Data Release Authorized:
Reported: 06/02/05

QC Report No: IC27-Friedman & Bruya
Project: PO# G-431
505097
Date Sampled: NA
Date Received: NA

Date Extracted: 05/26/05
Percent Moisture: NA

Sample Amount: 10.0 g
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 05/30/05 17:54
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 05/31/05 16:37
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	2,000	< 2,000 U
C10-C12 Aliphatics	2,000	< 2,000 U
C12-C16 Aliphatics	2,000	< 2,000 U
C16-C21 Aliphatics	2,000	< 2,000 U
C21-C34 Aliphatics	2,000	< 2,000 U
C8-C10 Aromatics	2,000	< 2,000 U
C10-C12 Aromatics	2,000	< 2,000 U
C12-C16 Aromatics	2,000	< 2,000 U
C16-C21 Aromatics	2,000	< 2,000 U
C21-C34 Aromatics	2,000	< 2,000 U

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	81.5%
Aromatic	Ortho-terphenyl	77.8%

METHOD BLANK

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH

Sample ID: ROW-7-10
SAMPLE

Lab Sample ID: IC27A
LIMS ID: 05-8978
Matrix: Soil
Data Release Authorized:
Reported: 06/02/05

QC Report No: IC27-Friedman & Bruya
Project: PO# G-431
505097
Date Sampled: 05/10/05
Date Received: 05/25/05

Date Extracted: 05/26/05
Percent Moisture: 17.8%

Sample Amount: 1.64 g-dry-wt
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 05/30/05 18:25
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 05/31/05 17:08
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	12,000	210,000
C10-C12 Aliphatics	12,000	200,000
C12-C16 Aliphatics	12,000	110,000
C16-C21 Aliphatics	12,000	53,000
C21-C34 Aliphatics	12,000	30,000
C8-C10 Aromatics	12,000	79,000
C10-C12 Aromatics	12,000	93,000
C12-C16 Aromatics	12,000	52,000
C16-C21 Aromatics	12,000	21,000
C21-C34 Aromatics	12,000	< 12,000 U

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	63.2%
Aromatic	Ortho-terphenyl	79.4%

ROW-7-10

ANALYTICAL RESOURCES INCORPORATED

AREPH SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: IC27-Friedman & Bruya
Project: PO# G-431
505097

Client ID	OTER	TOT OUT
MB-052605	77.8%	0
LCS-052605	87.4%	0
ROW-7-10	79.4%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = Ortho-terphenyl	(50-150)	(50-150)

Prep Method: SW3550B
Log Number Range: 05-8978 to 05-8978

ANALYTICAL RESOURCES INCORPORATED

ALEPH SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: IC27-Friedman & Bruya
Project: PO# G-431
505097

Client ID	COD	TOT OUT
MB-052605	81.5%	0
LCS-052605	84.1%	0
ROW-7-10	63.2%	0

	LCS/MB LIMITS	QC LIMITS
(COD) = 1-Chlorooctadecane	(50-150)	(50-150)

Prep Method: SW3550B
Log Number Range: 05-8978 to 05-8978

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH

Sample ID: LCS-052605
LAB CONTROL

Lab Sample ID: LCS-052605
LIMS ID: 05-8978
Matrix: Soil
Data Release Authorized:
Reported: 06/02/05

QC Report No: IC27-Friedman & Bruya
Project: PO# G-431
505097
Date Sampled: NA
Date Received: NA

Date Extracted: 05/26/05

Sample Amount: 10.0 g
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 05/30/05 18:09
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 05/31/05 16:53
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
C8-C10 Aliphatics	8400	15000	56.0%
C10-C12 Aliphatics	9400	15000	62.7%
C12-C16 Aliphatics	12000	15000	80.0%
C16-C21 Aliphatics	12000	15000	80.0%
C10-C12 Aromatics	11500	15000	76.7%
C12-C16 Aromatics	12500	15000	83.3%
C16-C21 Aromatics	25900	30000	86.3%
C21-C34 Aromatics	27000	30000	90.0%

Results reported in µg/kg

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	84.1%
Aromatic	Ortho-terphenyl	87.4%

505097

SAMPLE CHAIN OF CUSTODY ME 05-10-05 A04/AI4/V2/VS4

Send Report To DEE GARDNER

Company SOUND ENVIRONMENTAL STRATEGIES

Address 2400 AIRPORT WAY S., STE 200

City, State, ZIP SEATTLE, WA 98134-200

Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (signature) DM

PROJECT NAME/NO. LACONNER

PO # 03601-001-002

REMARKS IN THE EVENT THAT PRODUCT QUANTITIES ARE INSUFFICIENT FOR PIANOS, THEN RUN PIANOS ON SOIL SAMPLES ROW-11-6 ~~AND~~ ROW-5-6.
* FIELD INDICATIONS - CALIBRATE ACCOLDINGLY

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: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	TOTAL Pb	EDH/PAH			HOLD	Notes
ROW-7-3	01 A-E ~~05.10.05~~	05.10.05	0920	S	5											X	
ROW-7-6	02 A-E		0925	S	5	X	X	X				X					
ROW-7-10	03 A-E		0930	S	5	X	X	X				X	(X)				*
ROW-8-6	04 A-E		1015	S	5	X	X	X									
ROW-8-8	05 A-E		1020	S	5	X	X	X									
ROW-9-3	06 A-E		1055	S	5											X	
ROW-9-6	07 A-E		1100	S	5	X	X	X									
ROW-9-10	08 A-E		1105	S	5	X	X	X									
ROW-10-6	09 A-E		1140	S	5	X	X	X									
ROW-10-10	10 A-E	↓	1145	S	5	X	X	X									

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

FORMS\COC\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	DM	DEE GARDNER	SES	05.10.05	1740
Received by:		Eric Young	~~FBI~~	5/10/05	17 41
Relinquished by:					
Received by:					

505097

SAMPLE CHAIN OF CUSTODY

ME 05-10-05 AU4/AI4/VZ/VS4

Send Report To DEE GARDNER

Company SOUND ENVIRONMENTAL STRATEGIES

Address 2400 AIRPORT WAY S., STE 200

City, State, ZIP SEATTLE, WA 98134-200

Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (signature) DWN

PROJECT NAME/NO. LACONNER

PO # 0361-001-002

REMARKS SEE PAGE 1 OF 3

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: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	PIANO [redacted]	TOTAL Pb	Diss. Pb	OXYGENATES by 8260B	ORGANIC LEAD SPECIES	HOLD	Notes
ROW-11-2.5	11 A-E	05.10.05	1230	S	5	X	X	X									* ⊗ per Dee Gardner 5/5/05
ROW-11-6	12 A-E		1235	S	5	X	X	X				X		X			*
ROW-11-8	13 A-E		1235	S	5	X	X	X									
ROW-11-10	14 A-E		1240	S	5	⊗	⊗	⊗				X				X	
ROW-11-12	~~15~~		1240	S	5	~~X~~	~~X~~	~~X~~									Didn't received (NP) 5-10-05
ROW-12-5	16 A-E		1325	S	5	X	X	X			X	X		X	[redacted]		*
ROW-12-6	17 A-E		1325	S	5	X	X	X									
ROW-12-10	18 A-E		1330	S	5	X	X	X				X					
ROW-12-12	19 A-E		1330	S	5	X	X	X									
ROW-7-W	20 A-H	↓	0945	W	9	X	X	X		X	⊗	X	X	X	⊗		* CALL TO CONFIRM PIANO AND TEL

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: DWN	DEE GARDNER	SES	05.10.05	1740
Received by:	ERIC YOUNG	FBT	5/10/05	17[illegible]
Relinquished by:				
Received by:				

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

FORMS\COC\COC.DOC

505097

SAMPLE CHAIN OF CUSTODY

ME 05-10-05 A04/AI4/VZ/V8

Page # 3 of 3

Send Report To DEE GARDNER

Company SOUND ENVIRONMENTAL STRATEGIES

Address 2400 AIRPORT WAY S., STE 200

City, State, ZIP SEATTLE, WA 98134-200

Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (signature) DM

PROJECT NAME/NO. LACONNER

PO # 03601-001-002

REMARKS SEE PAGE 1 OF 3

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	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	PLANO	TOTAL Pb	DISS Pb	OXYGENATES BY 8260B	ORGANIC LEAD SPECIES		Notes
ROW-8-W	21 A-E	05.10.05	1040	W	5	X	X	X									
ROW-9-W	22 A-E		1110	W	5	X	X	X									
ROW-10-W	23 A-H		1150	W	8	X	X	X		X	⊗	X	X		⊗		(*) CALL TO CONFIRM TEL
ROW-11-W	24 A-F		1245	W	6	X	X	X						X			*
ROW-12-W	25 A-I	↓	1335	W	9	X	X	X			X	X	X	X	⊗		* CALL TO CONFIRM PLANO + TEL

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: DM	DEE GARDNER	SES	05.10.05	1740
Received by:	Eric Young	FBI	5/10/05	17 45
Relinquished by:				
Received by:				

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

FORMS\COC\COC.DOC

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

June 22, 2005

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

Dear Ms. Gardner:

Included are the additional results from the testing of material submitted on May 10, 2005 from the La Conner, PO#0361-001-002, F&BI 505097 project. There are 14 pages included in this report. Sample ROW-7-10 was sent to Analytical Resources, Inc. for EPH analysis. Review of the enclosed report indicates that all quality assurance was acceptable.

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
SOU0622R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/22/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097
Date Extracted: 06/02/05
Date Analyzed: 06/08/05

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR ORGANIC LEAD AND MANGANESE SPECIATION BY METHOD 8082 MODIFIED

Results Reported as µg/L (ppb)

Sample ID Laboratory ID	TML	TMEL	DMDEL	MTEL	TEL	MMT	Surrogate (% Rec.) (Limit 50-150)
ROW-7-W d 505097-20	<75	<75	<75	<75	<75	<75	95
ROW-10-W d 505097-23	<75	<75	<75	<75	<75	<75	138
ROW-12-W 505097-25	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	149
Method Blank	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	125

TML	Tetramethyl Lead
TMEL	Trimethylethyl Lead
DMDEL	Dimethyldiethyl Lead
MTEL	Methyltriethyl Lead
TEL	Tetraethyl Lead
MMT	Methylcyclopentadienyl Manganese Tricarbonyl

d - The sample was diluted due to limited sample volume. Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PNA Compounds By EPA Method 8270C SIM

Client Sample ID:	ROW-7-10	Client:	Sound Environmental Strategies
Date Received:	05/10/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/25/05	Lab ID:	505097-03 1/10
Date Analyzed:	05/26/05	Data File:	052609.D
Matrix:	soil	Instrument:	GCMS3
Units:	ug/kg (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	76	38	158
Benzo(a)anthracene-d12	77	35	146

Compounds:	Concentration ug/kg (ppb)
Naphthalene	17,000 ve
Acenaphthylene	<50
Acenaphthene	<50
Fluorene	120
Phenanthrene	180
Anthracene	<50
Fluoranthene	<50
Pyrene	57
Benz(a)anthracene	<50
Chrysene	<50
Benzo(b)fluoranthene	<50
Benzo(k)fluoranthene	<50
Benzo(a)pyrene	<50
Indeno(1,2,3-cd)pyrene	<50
Dibenzo(a,h)anthracene	<50
Benzo(g,h,i)perylene	<50

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.

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 PNA Compounds By EPA Method 8270C SIM

Client Sample ID:	ROW-7-10	Client:	Sound Environmental Strategies
Date Received:	05/10/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/25/05	Lab ID:	505097-03 1/500
Date Analyzed:	05/26/05	Data File:	052607.D
Matrix:	soil	Instrument:	GCMS3
Units:	ug/kg (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	275 vo	38	158
Benzo(a)anthracene-d12	110	35	146

Compounds:	Concentration ug/kg (ppb)
Naphthalene	18,000
Acenaphthylene	<2,500
Acenaphthene	<2,500
Fluorene	<2,500
Phenanthrene	<2,500
Anthracene	<2,500
Fluoranthene	<2,500
Pyrene	<2,500
Benz(a)anthracene	<2,500
Chrysene	<2,500
Benzo(b)fluoranthene	<2,500
Benzo(k)fluoranthene	<2,500
Benzo(a)pyrene	<2,500
Indeno(1,2,3-cd)pyrene	<2,500
Dibenzo(a,h)anthracene	<2,500
Benzo(g,h,i)perylene	<2,500

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 PNA Compounds By EPA Method 8270C SIM

Client Sample ID:	Method Blank	Client:	Sound Environmental Strategies
Date Received:	Not Applicable	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/25/05	Lab ID:	05-698mb2
Date Analyzed:	05/25/05	Data File:	052514.D
Matrix:	soil	Instrument:	GCMS3
Units:	ug/kg (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	71	38	158
Benzo(a)anthracene-d12	74	35	146

Compounds:	Concentration ug/kg (ppb)
Naphthalene	<5
Acenaphthylene	<5
Acenaphthene	<5
Fluorene	<5
Phenanthrene	<5
Anthracene	<5
Fluoranthene	<5
Pyrene	<5
Benz(a)anthracene	<5
Chrysene	<5
Benzo(b)fluoranthene	<5
Benzo(k)fluoranthene	<5
Benzo(a)pyrene	<5
Indeno(1,2,3-cd)pyrene	<5
Dibenzo(a,h)anthracene	<5
Benzo(g,h,i)perylene	<5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PIANO Compounds By EPA Method 8260B Modified

Client sample ID:	ROW-12-5	Client:	Sound Environmental Strategies
Date Received:	05/10/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	06/16/05	Lab ID:	505097-16
Date Analyzed:	06/17/05	Data File:	061615.D
Matrix:	Soil	Instrument:	GCMS4
Units:	ug/g	Operator:	YA

Surrogates:	%Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	102	50	150
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration: ug/g	Compounds:	Concentration: ug/g
Isopropanol	<1.5	n-Propylcyclopentane	<0.25
3-Methyl-1-butene	<0.25	Ethylbenzene	8.1 ve
Isopentane	<0.25	2,3-Dimethylheptane	<0.25
tert-Butanol	<1.5	3,4-Dimethylheptane	<0.25
1-Pentene	<0.25	2-Methyloctane	<0.25
n-Pentane	0.80	m-Xylene	22 ve
MTBE	<0.25	p-Xylene	11 ve
4-Methyl-1-pentene	<0.25	3-Methyloctane	<0.25
2,3-Dimethylbutane	1.7	3,3-Diethylpentane	<0.25
Cyclopentane	<0.25	t-3-Nonene	<0.25
2-Methylpentane	3.2	c-3-Nonene	<0.25
DIPE	<0.25	o-Xylene	10 ve
3-Methylpentane	2.9	t-2-Nonene	<0.25
1-Hexene	<0.25	c-2-Nonene	<0.25
ETBE	<0.25	n-Nonane	<0.25
n-Hexane	0.86	Isobutylcyclopentane	<0.25
2,2-Dimethylpentane	<0.25	Isopropylbenzene	0.81
2,4-Dimethylpentane	1.4	3,3-Dimethyloctane	<0.25
Methylcyclopentane	4.4	n-Butylcyclopentane	<0.25
2,2,3-Trimethylbutane	<0.25	n-Propylbenzene	2.8
Benzene	0.38	2,3-Dimethyloctane	<0.25
TAME	<0.25	1-Methyl-3-ethylbenzene	11 ve
3,3-Dimethylpentane	<0.25	1-Methyl-4-ethylbenzene	4.0
Cyclohexane	0.62	2-Methylnonane	<0.25
2-Methylhexane	3.0	3-Ethyloctane	<0.25
2,3-Dimethylpentane	8.7 ve	3-Methylnonane	<0.25
1,1-Dimethylcyclopentane	<0.25	1,3,5-Trimethylbenzene	5.3
3-Methylhexane	3.8	1-Methyl-2-ethylbenzene	3.9
c-1,3-Dimethylcyclopentane	0.53	1,2,4-Trimethylbenzene	19 ve
3-Ethylpentane	0.36	tert-Butylbenzene	<0.25
Isooctane	7.9 ve	n-Decane	<2.5
Butane	<2.5 L		

L - The reported concentration was generated from a library search.

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 PIANO Compounds By EPA Method 8260B Modified

Client sample ID:	ROW-12-5	Client:	Sound Environmental Strategies
Date Received:	05/10/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	06/16/05	Lab ID:	505097-16
Date Analyzed:	06/17/05	Data File:	061615.D
Matrix:	Soil	Instrument:	GCMS4
Units:	ug/g	Operator:	YA

Surrogates:	%Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	102	50	150
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration: ug/g
t-1,2-Dimethylcyclopentane	0.98
1-Heptene	<0.25
n-Heptane	1.7
t-3-Heptene	<0.25
c-3-Heptene	<0.25
t-2-Heptene	<0.25
c-2-Heptene	<0.25
2,2-Dimethylhexane	<0.25
2,5-Dimethylhexane	0.89
Methylcyclohexane	1.4
2,4-Dimethylhexane	1.2
Ethylcyclopentane	0.59
t-1,c-2,4-Trimethylcyclopentane	0.28
t-1,c-2,3-Trimethylcyclopentane	0.30
Toluene	0.40
2,3-Dimethylhexane	4.4
2-Methylheptane	0.91
3-Methylheptane	1.3
4-Methylheptane	0.42
3-Ethylhexane	0.31
1-Octene	<0.25
1,2,3-Trimethylcyclopentane	<0.25
t-1,2-Dimethylcyclohexane	<0.25
n-Octane	0.56
c-2-Octene	<0.25
c-1,2-Dimethylcyclohexane	<0.25
Isopropylcyclopentane	<0.25

Compounds:	Concentration: ug/g
Isobutylbenzene	<0.25
Isopropylcyclohexane	<0.25
sec-Butylbenzene	0.29
1-Methyl-3-isopropylbenzene	0.42
1-Methyl-4-isopropylbenzene	<0.25
1-Methyl-3-n-propylbenzene	1.8
1-Methyl-4-n-propylbenzene	0.81
n-Butylbenzene	0.44
1,3-Dimethyl-5-ethylbenzene	1.2
1,2-Diethylbenzene	0.34
1-Methyl-2-n-propylbenzene	0.66
1,4-Dimethyl-2-ethylbenzene	1.3
1,2-Dimethyl-4-ethylbenzene	1.9
1,3-Dimethyl-2-ethylbenzene	<0.25
1,2-Dimethyl-3-ethylbenzene	0.48
n-Undecane	<2.5
1,2,4,5-Tetramethylbenzene	1.0
2-Methylbutylbenzene	<0.25
n-Pentylbenzene	<0.25
1-tert-Butyl-3,5-dimethylbenzene	<0.25
1-tert-Butyl-4-ethylbenzene	<0.25
n-Dodecane	<2.5
Naphthalene	2.7
1,3,5-Triethylbenzene	<0.25
1,2,4-Triethylbenzene	<0.25
n-Hexylbenzene	<0.25
n-Tridecane	<2.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PIANO Compounds By EPA Method 8260B Modified

Client sample ID:	ROW-7-W	Client:	Sound Environmental Strategies
Date Received:	05/10/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	06/03/05	Lab ID:	505097-20
Date Analyzed:	06/04/05	Data File:	060308.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L	Operator:	YA

Surrogates:	%Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	91	50	150
1,2-Dichloroethane-d4	86	50	150
Toluene-d8	92	50	150
4-Bromofluorobenzene	96	50	150

Compounds:	Concentration: ug/L	Compounds:	Concentration: ug/L
Isopropanol	<25	n-Propylcyclopentane	<5
3-Methyl-1-butene	<5	Ethylbenzene	410 ve
Isopentane	350 ve	2,3-Dimethylheptane	<5
tert-Butanol	<25	3,4-Dimethylheptane	<5
1-Pentene	<5	2-Methyloctane	<5
n-Pentane	91	m-Xylene	130
MTBE	<5	p-Xylene	390 ve
4-Methyl-1-pentene	<5	3-Methyloctane	<5
2,3-Dimethylbutane	160 ve	3,3-Diethylpentane	<5
Cyclopentane	<5	t-3-Nonene	<5
2-Methylpentane	230 ve	c-3-Nonene	<5
DIPE	<5	o-Xylene	14
3-Methylpentane	260 ve	t-2-Nonene	<5
1-Hexene	<5	c-2-Nonene	<5
ETBE	<5	n-Nonane	<5
n-Hexane	45	Isobutylcyclopentane	<5
2,2-Dimethylpentane	7.3	Isopropylbenzene	38
2,4-Dimethylpentane	70	3,3-Dimethyloctane	<5
Methylcyclopentane	290 ve	n-Butylcyclopentane	<5
2,2,3-Trimethylbutane	<5	n-Propylbenzene	120
Benzene	160 ve	2,3-Dimethyloctane	<5
TAME	<5	1-Methyl-3-ethylbenzene	10
3,3-Dimethylpentane	6.6	1-Methyl-4-ethylbenzene	100
Cyclohexane	69	2-Methylnonane	<5
2-Methylhexane	87	3-Ethyloctane	<5
2,3-Dimethylpentane	350 ve	3-Methylnonane	<5
1,1-Dimethylcyclopentane	20	1,3,5-Trimethylbenzene	74
3-Methylhexane	140	1-Methyl-2-ethylbenzene	100
c-1,3-Dimethylcyclopentane	40	1,2,4-Trimethylbenzene	430 ve
3-Ethylpentane	18	tert-Butylbenzene	<5
Isooctane	190 ve	n-Decane	<5
Butane	20 L		

L - The reported concentration was generated from a library search.

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 PIANO Compounds By EPA Method 8260B Modified

Client sample ID:	ROW-7-W	Client:	Sound Environmental Strategies
Date Received:	05/10/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	06/03/05	Lab ID:	505097-20
Date Analyzed:	06/04/05	Data File:	060308.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L	Operator:	YA

Surrogates:	%Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	91	50	150
1,2-Dichloroethane-d4	86	50	150
Toluene-d8	92	50	150
4-Bromofluorobenzene	96	50	150

Compounds:	Concentration: ug/L	Compounds:	Concentration: ug/L
t-1,2-Dimethylcyclopentane	72	Isobutylbenzene	9.0
1-Heptene	<5	Isopropylcyclohexane	<5
n-Heptane	49	sec-Butylbenzene	11
t-3-Heptene	<5	1-Methyl-3-isopropylbenzene	6.3
c-3-Heptene	<5	1-Methyl-4-isopropylbenzene	5.2
t-2-Heptene	<5	1-Methyl-3-n-propylbenzene	15
c-2-Heptene	<5	1-Methyl-4-n-propylbenzene	30
2,2-Dimethylhexane	<5	n-Butylbenzene	17
2,5-Dimethylhexane	28	1,3-Dimethyl-5-ethylbenzene	22
Methylcyclohexane	120	1,2-Diethylbenzene	10
2,4-Dimethylhexane	34	1-Methyl-2-n-propylbenzene	27
Ethylcyclopentane	33	1,4-Dimethyl-2-ethylbenzene	32
t-1,c-2,4-Trimethylcyclopentane	17	1,2-Dimethyl-4-ethylbenzene	92
t-1,c-2,3-Trimethylcyclopentane	16	1,3-Dimethyl-2-ethylbenzene	6.2
Toluene	38	1,2-Dimethyl-3-ethylbenzene	18
2,3-Dimethylhexane	160 ve	n-Undecane	<25
2-Methylheptane	15	1,2,4,5-Tetramethylbenzene	53
3-Methylheptane	35	2-Methylbutylbenzene	<5
4-Methylheptane	13	n-Pentylbenzene	5.3
3-Ethylhexane	9.9	1-tert-Butyl-3,5-dimethylbenzene	<5
1-Octene	<5	1-tert-Butyl-4-ethylbenzene	<5
1,2,3-Trimethylcyclopentane	5.9	n-Dodecane	<25
t-1,2-Dimethylcyclohexane	15	Naphthalene	110
n-Octane	8.7	1,3,5-Triethylbenzene	<5
c-2-Octene	<5	1,2,4-Triethylbenzene	<5
c-1,2-Dimethylcyclohexane	16	n-Hexylbenzene	<5
Isopropylcyclopentane	<5	n-Tridecane	<25

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 PIANO Compounds By EPA Method 8260B Modified

Client sample ID:	Method Blank	Client:	Sound Environmental Strategies
Date Received:	Not Applicable	Project:	La Conner, PO#0361-001-002
Date Extracted:	06/16/05	Lab ID:	mb s
Date Analyzed:	06/16/05	Data File:	061613.D
Matrix:	Soil	Instrument:	GCMS4
Units:	ug/g	Operator:	YA

Surrogates:	%Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	101	50	150
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration: ug/g	Compounds:	Concentration: ug/g
Isopropanol	<1.5	n-Propylcyclopentane	<0.25
3-Methyl-1-butene	<0.25	Ethylbenzene	<0.25
Isopentane	<0.25	2,3-Dimethylheptane	<0.25
tert-Butanol	<1.5	3,4-Dimethylheptane	<0.25
1-Pentene	<0.25	2-Methyloctane	<0.25
n-Pentane	<0.25	m-Xylene	<0.25
MTBE	<0.25	p-Xylene	<0.25
4-Methyl-1-pentene	<0.25	3-Methyloctane	<0.25
2,3-Dimethylbutane	<0.25	3,3-Diethylpentane	<0.25
Cyclopentane	<0.25	t-3-Nonene	<0.25
2-Methylpentane	<0.25	c-3-Nonene	<0.25
DIPE	<0.25	o-Xylene	<0.25
3-Methylpentane	<0.25	t-2-Nonene	<0.25
1-Hexene	<0.25	c-2-Nonene	<0.25
ETBE	<0.25	n-Nonane	<0.25
n-Hexane	<0.25	Isobutylcyclopentane	<0.25
2,2-Dimethylpentane	<0.25	Isopropylbenzene	<0.25
2,4-Dimethylpentane	<0.25	3,3-Dimethyloctane	<0.25
Methylcyclopentane	<0.25	n-Butylcyclopentane	<0.25
2,2,3-Trimethylbutane	<0.25	n-Propylbenzene	<0.25
Benzene	<0.25	2,3-Dimethyloctane	<0.25
TAME	<0.25	1-Methyl-3-ethylbenzene	<0.25
3,3-Dimethylpentane	<0.25	1-Methyl-4-ethylbenzene	<0.25
Cyclohexane	<0.25	2-Methylnonane	<0.25
2-Methylhexane	<0.25	3-Ethyloctane	<0.25
2,3-Dimethylpentane	<0.25	3-Methylnonane	<0.25
1,1-Dimethylcyclopentane	<0.25	1,3,5-Trimethylbenzene	<0.25
3-Methylhexane	<0.25	1-Methyl-2-ethylbenzene	<0.25
c-1,3-Dimethylcyclopentane	<0.25	1,2,4-Trimethylbenzene	<0.25
3-Ethylpentane	<0.25	tert-Butylbenzene	<0.25
Isooctane	<0.25	n-Decane	<2.5
Butane	<2.5 L		

L - The reported concentration was generated from a library search.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PIANO Compounds By EPA Method 8260B Modified

Client sample ID:	Method Blank	Client:	Sound Environmental Strategies
Date Received:	Not Applicable	Project:	La Conner, PO#0361-001-002
Date Extracted:	06/16/05	Lab ID:	mb s
Date Analyzed:	06/16/05	Data File:	061613.D
Matrix:	Soil	Instrument:	GCMS4
Units:	ug/g	Operator:	YA

Surrogates:	%Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	101	50	150
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration: ug/g	Compounds:	Concentration: ug/g
t-1,2-Dimethylcyclopentane	<0.25	Isobutylbenzene	<0.25
1-Heptene	<0.25	Isopropylcyclohexane	<0.25
n-Heptane	<0.25	sec-Butylbenzene	<0.25
t-3-Heptene	<0.25	1-Methyl-3-isopropylbenzene	<0.25
c-3-Heptene	<0.25	1-Methyl-4-isopropylbenzene	<0.25
t-2-Heptene	<0.25	1-Methyl-3-n-propylbenzene	<0.25
c-2-Heptene	<0.25	1-Methyl-4-n-propylbenzene	<0.25
2,2-Dimethylhexane	<0.25	n-Butylbenzene	<0.25
2,5-Dimethylhexane	<0.25	1,3-Dimethyl-5-ethylbenzene	<0.25
Methylcyclohexane	<0.25	1,2-Diethylbenzene	<0.25
2,4-Dimethylhexane	<0.25	1-Methyl-2-n-propylbenzene	<0.25
Ethylcyclopentane	<0.25	1,4-Dimethyl-2-ethylbenzene	<0.25
t-1,c-2,4-Trimethylcyclopentane	<0.25	1,2-Dimethyl-4-ethylbenzene	<0.25
t-1,c-2,3-Trimethylcyclopentane	<0.25	1,3-Dimethyl-2-ethylbenzene	<0.25
Toluene	<0.25	1,2-Dimethyl-3-ethylbenzene	<0.25
2,3-Dimethylhexane	<0.25	n-Undecane	<2.5
2-Methylheptane	<0.25	1,2,4,5-Tetramethylbenzene	<0.25
3-Methylheptane	<0.25	2-Methylbutylbenzene	<0.25
4-Methylheptane	<0.25	n-Pentylbenzene	<0.25
3-Ethylhexane	<0.25	1-tert-Butyl-3,5-dimethylbenzene	<0.25
1-Octene	<0.25	1-tert-Butyl-4-ethylbenzene	<0.25
1,2,3-Trimethylcyclopentane	<0.25	n-Dodecane	<2.5
t-1,2-Dimethylcyclohexane	<0.25	Naphthalene	<0.25
n-Octane	<0.25	1,3,5-Triethylbenzene	<0.25
c-2-Octene	<0.25	1,2,4-Triethylbenzene	<0.25
c-1,2-Dimethylcyclohexane	<0.25	n-Hexylbenzene	<0.25
Isopropylcyclopentane	<0.25	n-Tridecane	<2.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PIANO Compounds By EPA Method 8260B Modified

Client sample ID:	Method Blank	Client:	Sound Environmental Strategies
Date Received:	Not Applicable	Project:	La Conner, PO#0361-001-002
Date Extracted:	06/16/05	Lab ID:	mb w
Date Analyzed:	06/17/05	Data File:	061608.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L	Operator:	YA

Surrogates:	%Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	110	50	150
1,2-Dichloroethane-d4	106	50	150
Toluene-d8	104	50	150
4-Bromofluorobenzene	102	50	150

Compounds:	Concentration: ug/L	Compounds:	Concentration: ug/L
Isopropanol	<25	n-Propylcyclopentane	<5
3-Methyl-1-butene	<5	Ethylbenzene	<5
Isopentane	<5	2,3-Dimethylheptane	<5
tert-Butanol	<25	3,4-Dimethylheptane	<5
1-Pentene	<5	2-Methyloctane	<5
n-Pentane	<5	m-Xylene	<5
MTBE	<5	p-Xylene	<5
4-Methyl-1-pentene	<5	3-Methyloctane	<5
2,3-Dimethylbutane	<5	3,3-Diethylpentane	<5
Cyclopentane	<5	t-3-Nonene	<5
2-Methylpentane	<5	c-3-Nonene	<5
DIPE	<5	o-Xylene	<5
3-Methylpentane	<5	t-2-Nonene	<5
1-Hexene	<5	c-2-Nonene	<5
ETBE	<5	n-Nonane	<5
n-Hexane	<5	Isobutylcyclopentane	<5
2,2-Dimethylpentane	<5	Isopropylbenzene	<5
2,4-Dimethylpentane	<5	3,3-Dimethyloctane	<5
Methylcyclopentane	<5	n-Butylcyclopentane	<5
2,2,3-Trimethylbutane	<5	n-Propylbenzene	<5
Benzene	<5	2,3-Dimethyloctane	<5
TAME	<5	1-Methyl-3-ethylbenzene	<5
3,3-Dimethylpentane	<5	1-Methyl-4-ethylbenzene	<5
Cyclohexane	<5	2-Methylnonane	<5
2-Methylhexane	<5	3-Ethyloctane	<5
2,3-Dimethylpentane	<5	3-Methylnonane	<5
1,1-Dimethylcyclopentane	<5	1,3,5-Trimethylbenzene	<5
3-Methylhexane	<5	1-Methyl-2-ethylbenzene	<5
c-1,3-Dimethylcyclopentane	<5	1,2,4-Trimethylbenzene	<5
3-Ethylpentane	<5	tert-Butylbenzene	<5
Isooctane	<5	n-Decane	<5
Butane	<5 L		

L - The reported concentration was generated from a library search.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PIANO Compounds By EPA Method 8260B Modified

Client sample ID:	Method Blank	Client:	Sound Environmental Strategies
Date Received:	Not Applicable	Project:	La Conner, PO#0361-001-002
Date Extracted:	06/16/05	Lab ID:	mb w
Date Analyzed:	06/17/05	Data File:	061608.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L	Operator:	YA

Surrogates:	%Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	110	50	150
1,2-Dichloroethane-d4	106	50	150
Toluene-d8	104	50	150
4-Bromofluorobenzene	102	50	150

Compounds:	Concentration: ug/L	Compounds:	Concentration: ug/L
t-1,2-Dimethylcyclopentane	<5	Isobutylbenzene	<5
1-Heptene	<5	Isopropylcyclohexane	<5
n-Heptane	<5	sec-Butylbenzene	<5
t-3-Heptene	<5	1-Methyl-3-isopropylbenzene	<5
c-3-Heptene	<5	1-Methyl-4-isopropylbenzene	<5
t-2-Heptene	<5	1-Methyl-3-n-propylbenzene	<5
c-2-Heptene	<5	1-Methyl-4-n-propylbenzene	<5
2,2-Dimethylhexane	<5	n-Butylbenzene	<5
2,5-Dimethylhexane	<5	1,3-Dimethyl-5-ethylbenzene	<5
Methylcyclohexane	<5	1,2-Diethylbenzene	<5
2,4-Dimethylhexane	<5	1-Methyl-2-n-propylbenzene	<5
Ethylcyclopentane	<5	1,4-Dimethyl-2-ethylbenzene	<5
t-1,c-2,4-Trimethylcyclopentane	<5	1,2-Dimethyl-4-ethylbenzene	<5
t-1,c-2,3-Trimethylcyclopentane	<5	1,3-Dimethyl-2-ethylbenzene	<5
Toluene	<5	1,2-Dimethyl-3-ethylbenzene	<5
2,3-Dimethylhexane	<5	n-Undecane	<25
2-Methylheptane	<5	1,2,4,5-Tetramethylbenzene	<5
3-Methylheptane	<5	2-Methylbutylbenzene	<5
4-Methylheptane	<5	n-Pentylbenzene	<5
3-Ethylhexane	<5	1-tert-Butyl-3,5-dimethylbenzene	<5
1-Octene	<5	1-tert-Butyl-4-ethylbenzene	<5
1,2,3-Trimethylcyclopentane	<5	n-Dodecane	<25
t-1,2-Dimethylcyclohexane	<5	Naphthalene	<5
n-Octane	<5	1,3,5-Triethylbenzene	<5
c-2-Octene	<5	1,2,4-Triethylbenzene	<5
c-1,2-Dimethylcyclohexane	<5	n-Hexylbenzene	<5
Isopropylcyclopentane	<5	Tridecane	<25

Date of Report: 06/22/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR ORGANIC LEAD AND MANGANESE BY EPA METHOD 8082 MODIFIED

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Tetramethyl lead	µg/L (ppb)	5	97	102	70-130	5
Tetraethyl lead	µg/L (ppb)	5	101	108	70-130	7
MMT	µg/L (ppb)	5	99	109	70-130	10

Date of Report: 06/22/05
Date Received: 05/10/05
Project: La Conner, PO#0361-001-002, F&BI 505097

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PNA'S BY EPA METHOD 8270C SIM

Laboratory Code: 505255-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Naphthalene	µg/kg (ppb)	5	<5	nm
Acenaphthylene	µg/kg (ppb)	<5	<5	nm
Acenaphthene	µg/kg (ppb)	<5	<5	nm
Fluorene	µg/kg (ppb)	<5	<5	nm
Phenanthrene	µg/kg (ppb)	12	12	0
Anthracene	µg/kg (ppb)	6	<5	nm
Fluoranthene	µg/kg (ppb)	26	19	31 a
Pyrene	µg/kg (ppb)	30	21	35 a
Benz(a)anthracene	µg/kg (ppb)	13	9	36 a
Chrysene	µg/kg (ppb)	17	11	43 a
Benzo(b)fluoranthene	µg/kg (ppb)	21	13	47 a
Benzo(k)fluoranthene	µg/kg (ppb)	8	6	29 a
Benzo(a)pyrene	µg/kg (ppb)	20	13	42 a
Indeno(1,2,3-cd)pyrene	µg/kg (ppb)	13	8	48 a
Dibenzo(a,h)anthracene	µg/kg (ppb)	<5	<5	nm
Benzo(g,h,i)perylene	µg/kg (ppb)	16	9	56 a

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	µg/kg (ppb)	170	103	88	69-105	16
Acenaphthylene	µg/kg (ppb)	170	90	97	62-117	8
Acenaphthene	µg/kg (ppb)	170	97	106	66-115	9
Fluorene	µg/kg (ppb)	170	92	101	62-116	9
Phenanthrene	µg/kg (ppb)	170	76	81	68-109	7
Anthracene	µg/kg (ppb)	170	73	78	56-102	7
Fluoranthene	µg/kg (ppb)	170	89	93	64-115	5
Pyrene	µg/kg (ppb)	170	88	92	67-118	5
Benz(a)anthracene	µg/kg (ppb)	170	88	94	53-121	6
Chrysene	µg/kg (ppb)	170	94	102	59-115	9
Benzo(b)fluoranthene	µg/kg (ppb)	170	110	103	58-132	6
Benzo(k)fluoranthene	µg/kg (ppb)	170	104	100	66-120	5
Benzo(a)pyrene	µg/kg (ppb)	170	90	84	49-116	7
Indeno(1,2,3-cd)pyrene	µg/kg (ppb)	170	86	72	61-121	18
Dibenzo(a,h)anthracene	µg/kg (ppb)	170	118	102	63-126	14
Benzo(g,h,i)perylene	µg/kg (ppb)	170	108	94	55-121	14

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

IC27

SAMPLE CHAIN OF CUSTODY AMB

Page # 1 of 1

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SAMPLERS *(signature)*

PROJECT NAME/NO. 505097

PO # G-431

REMARKS

Please Fax Results

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: NWTPH											Notes
ROW-7-10		0930	5/10/05	S	1	✓											

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Michael Erdahl	FEBinc	5/25/05	10:30am
Received by:	Brian Kesler	ARI	5/25/05	1410
Relinquished by:				
Received by:				

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

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

June 22, 2005

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

Dear Ms. Gardner:

Included are the additional results from the testing of material submitted on May 9, 2005 from the La Conner, PO#0361-001-002, F&BI 505081 project. There are 8 pages included in this report. Sample ROW-6-6 was sent to Analytical Resources, Inc. for EPH analysis. Review of the enclosed report indicates that all quality assurance was acceptable.

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
SOU0622R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PNA Compounds By EPA Method 8270C SIM

Client Sample ID:	ROW-6-6	Client:	Sound Environmental Strategies
Date Received:	05/19/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/24/05	Lab ID:	505081-14 1/10
Date Analyzed:	05/26/05	Data File:	052608.D
Matrix:	soil	Instrument:	GCMS3
Units:	ug/kg (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	89	38	158
Benzo(a)anthracene-d12	90	35	146

Compounds:	Concentration ug/kg (ppb)
Naphthalene	7,200 ve
Acenaphthylene	<50
Acenaphthene	57
Fluorene	150
Phenanthrene	140
Anthracene	<50
Fluoranthene	<50
Pyrene	<50
Benz(a)anthracene	<50
Chrysene	<50
Benzo(b)fluoranthene	<50
Benzo(k)fluoranthene	<50
Benzo(a)pyrene	<50
Indeno(1,2,3-cd)pyrene	<50
Dibenzo(a,h)anthracene	<50
Benzo(g,h,i)perylene	<50

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.

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 PNA Compounds By EPA Method 8270C SIM

Client Sample ID:	ROW-6-6	Client:	Sound Environmental Strategies
Date Received:	05/19/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/24/05	Lab ID:	505081-14 1/100
Date Analyzed:	05/26/05	Data File:	052606.D
Matrix:	soil	Instrument:	GCMS3
Units:	ug/kg (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	108	38	158
Benzo(a)anthracene-d12	82	35	146

Compounds:	Concentration ug/kg (ppb)
Naphthalene	6,300
Acenaphthylene	<500
Acenaphthene	<500
Fluorene	<500
Phenanthrene	<500
Anthracene	<500
Pyrene	<500
Benz(a)anthracene	<500
Chrysene	<500
Benzo(b)fluoranthene	<500
Benzo(k)fluoranthene	<500
Benzo(a)pyrene	<500
Benzo(g,h,i)perylene	<500

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 PNA Compounds By EPA Method 8270C SIM

Client Sample ID:	Method Blank	Client:	Sound Environmental Strategies
Date Received:	Not Applicable	Project:	La Conner, PO#0361-001-002
Date Extracted:	05/25/05	Lab ID:	05-698mb2
Date Analyzed:	05/25/05	Data File:	052514.D
Matrix:	soil	Instrument:	GCMS3
Units:	ug/kg (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	71	38	158
Benzo(a)anthracene-d12	74	35	146

Compounds:	Concentration ug/kg (ppb)
Naphthalene	<5
Acenaphthylene	<5
Acenaphthene	<5
Fluorene	<5
Phenanthrene	<5
Anthracene	<5
Fluoranthene	<5
Pyrene	<5
Benz(a)anthracene	<5
Chrysene	<5
Benzo(b)fluoranthene	<5
Benzo(k)fluoranthene	<5
Benzo(a)pyrene	<5
Indeno(1,2,3-cd)pyrene	<5
Dibenzo(a,h)anthracene	<5
Benzo(g,h,i)perylene	<5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PIANO Compounds By EPA Method 8260B Modified

Client sample ID:	ROW-6-6	Client:	Sound Environmental Strategies
Date Received:	05/09/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	06/16/05	Lab ID:	505081-14
Date Analyzed:	06/17/05	Data File:	061614.D
Matrix:	Soil	Instrument:	GCMS4
Units:	ug/g	Operator:	YA

Surrogates:	%Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	101	50	150
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration: ug/g	Compounds:	Concentration: ug/g
Isopropanol	<1.5	n-Propylcyclopentane	<0.25
3-Methyl-1-butene	<0.25	Ethylbenzene	17 ve
Isopentane	<0.25	2,3-Dimethylheptane	<0.25
tert-Butanol	<1.5	3,4-Dimethylheptane	<0.25
1-Pentene	<0.25	2-Methyloctane	<0.25
n-Pentane	<0.25	m-Xylene	18 ve
MTBE	<0.25	p-Xylene	20 ve
4-Methyl-1-pentene	<0.25	3-Methyloctane	<0.25
2,3-Dimethylbutane	0.47	3,3-Diethylpentane	<0.25
Cyclopentane	<0.25	t-3-Nonene	<0.25
2-Methylpentane	0.81	c-3-Nonene	<0.25
DIPE	<0.25	o-Xylene	2.3
3-Methylpentane	<0.25	t-2-Nonene	<0.25
1-Hexene	<0.25	c-2-Nonene	<0.25
ETBE	<0.25	n-Nonane	<0.25
n-Hexane	0.31	Isobutylcyclopentane	<0.25
2,2-Dimethylpentane	<0.25	Isopropylbenzene	1.9
2,4-Dimethylpentane	0.49	3,3-Dimethyloctane	<0.25
Methylcyclopentane	1.5	n-Butylcyclopentane	<0.25
2,2,3-Trimethylbutane	<0.25	n-Propylbenzene	5.7
Benzene	2.9	2,3-Dimethyloctane	<0.25
TAME	<0.25	1-Methyl-3-ethylbenzene	8.7 ve
3,3-Dimethylpentane	<0.25	1-Methyl-4-ethylbenzene	7.6 ve
Cyclohexane	0.46	2-Methylnonane	<0.25
2-Methylhexane	0.93	3-Ethyloctane	<0.25
2,3-Dimethylpentane	3.7	3-Methylnonane	<0.25
1,1-Dimethylcyclopentane	<0.25	1,3,5-Trimethylbenzene	5.5
3-Methylhexane	1.5	1-Methyl-2-ethylbenzene	8.5 ve
c-1,3-Dimethylcyclopentane	<0.25	1,2,4-Trimethylbenzene	33 ve
3-Ethylpentane	<0.25	tert-Butylbenzene	<0.25
Isooctane	3.1	n-Decane	<2.5
Butane	<2.5 L		

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

L - The reported concentration was generated from a library search.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PIANO Compounds By EPA Method 8260B Modified

Client sample ID:	ROW-6-6	Client:	Sound Environmental Strategies
Date Received:	05/09/05	Project:	La Conner, PO#0361-001-002
Date Extracted:	06/16/05	Lab ID:	505081-14
Date Analyzed:	06/17/05	Data File:	061614.D
Matrix:	Soil	Instrument:	GCMS4
Units:	ug/g	Operator:	YA

Surrogates:	%Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	101	50	150
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration: ug/g	Compounds:	Concentration: ug/g
t-1,2-Dimethylcyclopentane	0.44	Isobutylbenzene	0.46
1-Heptene	<0.25	Isopropylcyclohexane	<0.25
n-Heptane	0.75	sec-Butylbenzene	0.59
t-3-Heptene	<0.25	1-Methyl-3-isopropylbenzene	0.67
c-3-Heptene	<0.25	1-Methyl-4-isopropylbenzene	0.38
t-2-Heptene	<0.25	1-Methyl-3-n-propylbenzene	2.2
c-2-Heptene	<0.25	1-Methyl-4-n-propylbenzene	1.5
2,2-Dimethylhexane	<0.25	n-Butylbenzene	0.90
2,5-Dimethylhexane	0.37	1,3-Dimethyl-5-ethylbenzene	1.7
Methylcyclohexane	0.93	1,2-Diethylbenzene	0.57
2,4-Dimethylhexane	0.47	1-Methyl-2-n-propylbenzene	1.4
Ethylcyclopentane	0.33	1,4-Dimethyl-2-ethylbenzene	2.6
t-1,c-2,4-Trimethylcyclopentane	<0.25	1,2-Dimethyl-4-ethylbenzene	3.8
Toluene	<0.25	1,2-Dimethyl-3-ethylbenzene	1.2
2,3-Dimethylhexane	2.2	n-Undecane	<2.5
2-Methylheptane	0.47	1,2,4,5-Tetramethylbenzene	1.9
3-Methylheptane	0.64	2-Methylbutylbenzene	<0.25
4-Methylheptane	<0.25	n-Pentylbenzene	<0.25
3-Ethylhexane	<0.25	1-tert-Butyl-3,5-dimethylbenzene	<0.25
1-Octene	<0.25	1-tert-Butyl-4-ethylbenzene	<0.25
1,2,3-Trimethylcyclopentane	<0.25	n-Dodecane	<2.5
t-1,2-Dimethylcyclohexane	<0.25	Naphthalene	14 ve
n-Octane	0.32	1,3,5-Triethylbenzene	<0.25
c-2-Octene	<0.25	1,2,4-Triethylbenzene	<0.25
c-1,2-Dimethylcyclohexane	<0.25	n-Hexylbenzene	<0.25
Isopropylcyclopentane	<0.25	n-Tridecane	<2.5

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 PIANO Compounds By EPA Method 8260B Modified

Client sample ID:	Method Blank	Client:	Sound Environmental Strategies
Date Received:	Not Applicable	Project:	La Conner, PO#0361-001-0021
Date Extracted:	06/16/05	Lab ID:	mb s
Date Analyzed:	06/16/05	Data File:	061613.D
Matrix:	Soil	Instrument:	GCMS4
Units:	ug/g	Operator:	YA

Surrogates:	%Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	101	50	150
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration: ug/g	Compounds:	Concentration: ug/g
Isopropanol	<1.5	n-Propylcyclopentane	<0.25
3-Methyl-1-butene	<0.25	Ethylbenzene	<0.25
Isopentane	<0.25	2,3-Dimethylheptane	<0.25
tert-Butanol	<1.5	3,4-Dimethylheptane	<0.25
1-Pentene	<0.25	2-Methyloctane	<0.25
n-Pentane	<0.25	m-Xylene	<0.25
MTBE	<0.25	p-Xylene	<0.25
4-Methyl-1-pentene	<0.25	3-Methyloctane	<0.25
2,3-Dimethylbutane	<0.25	3,3-Diethylpentane	<0.25
Cyclopentane	<0.25	t-3-Nonene	<0.25
2-Methylpentane	<0.25	c-3-Nonene	<0.25
DIPE	<0.25	o-Xylene	<0.25
3-Methylpentane	<0.25	t-2-Nonene	<0.25
1-Hexene	<0.25	c-2-Nonene	<0.25
ETBE	<0.25	n-Nonane	<0.25
n-Hexane	<0.25	Isobutylcyclopentane	<0.25
2,2-Dimethylpentane	<0.25	Isopropylbenzene	<0.25
2,4-Dimethylpentane	<0.25	3,3-Dimethyloctane	<0.25
Methylcyclopentane	<0.25	n-Butylcyclopentane	<0.25
2,2,3-Trimethylbutane	<0.25	n-Propylbenzene	<0.25
Benzene	<0.25	2,3-Dimethyloctane	<0.25
TAME	<0.25	1-Methyl-3-ethylbenzene	<0.25
3,3-Dimethylpentane	<0.25	1-Methyl-4-ethylbenzene	<0.25
Cyclohexane	<0.25	2-Methylnonane	<0.25
2-Methylhexane	<0.25	3-Ethyloctane	<0.25
2,3-Dimethylpentane	<0.25	3-Methylnonane	<0.25
1,1-Dimethylcyclopentane	<0.25	1,3,5-Trimethylbenzene	<0.25
3-Methylhexane	<0.25	1-Methyl-2-ethylbenzene	<0.25
c-1,3-Dimethylcyclopentane	<0.25	1,2,4-Trimethylbenzene	<0.25
3-Ethylpentane	<0.25	tert-Butylbenzene	<0.25
Isooctane	<0.25	n-Decane	<2.5
Butane	<2.5 L		

L - The reported concentration was generated from a library search.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PIANO Compounds By EPA Method 8260B Modified

Client sample ID:	Method Blank	Client:	Sound Environmental Strategies
Date Received:	Not Applicable	Project:	La Conner, PO#0361-001-002
Date Extracted:	06/16/05	Lab ID:	mb s
Date Analyzed:	06/16/05	Data File:	061613.D
Matrix:	Soil	Instrument:	GCMS4
Units:	ug/g	Operator:	YA

Surrogates:	%Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	101	50	150
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration: ug/g	Compounds:	Concentration: ug/g
t-1,2-Dimethylcyclopentane	<0.25	Isobutylbenzene	<0.25
1-Heptene	<0.25	Isopropylcyclohexane	<0.25
n-Heptane	<0.25	sec-Butylbenzene	<0.25
t-3-Heptene	<0.25	1-Methyl-3-isopropylbenzene	<0.25
c-3-Heptene	<0.25	1-Methyl-4-isopropylbenzene	<0.25
t-2-Heptene	<0.25	1-Methyl-3-n-propylbenzene	<0.25
c-2-Heptene	<0.25	1-Methyl-4-n-propylbenzene	<0.25
2,2-Dimethylhexane	<0.25	n-Butylbenzene	<0.25
2,5-Dimethylhexane	<0.25	1,3-Dimethyl-5-ethylbenzene	<0.25
Methylcyclohexane	<0.25	1,2-Diethylbenzene	<0.25
2,4-Dimethylhexane	<0.25	1-Methyl-2-n-propylbenzene	<0.25
Ethylcyclopentane	<0.25	1,4-Dimethyl-2-ethylbenzene	<0.25
t-1,c-2,4-Trimethylcyclopentane	<0.25	1,2-Dimethyl-4-ethylbenzene	<0.25
t-1,c-2,3-Trimethylcyclopentane	<0.25	1,3-Dimethyl-2-ethylbenzene	<0.25
Toluene	<0.25	1,2-Dimethyl-3-ethylbenzene	<0.25
2,3-Dimethylhexane	<0.25	n-Undecane	<2.5
2-Methylheptane	<0.25	1,2,4,5-Tetramethylbenzene	<0.25
3-Methylheptane	<0.25	2-Methylbutylbenzene	<0.25
4-Methylheptane	<0.25	n-Pentylbenzene	<0.25
3-Ethylhexane	<0.25	1-tert-Butyl-3,5-dimethylbenzene	<0.25
1-Octene	<0.25	1-tert-Butyl-4-ethylbenzene	<0.25
1,2,3-Trimethylcyclopentane	<0.25	n-Dodecane	<2.5
t-1,2-Dimethylcyclohexane	<0.25	Naphthalene	<0.25
n-Octane	<0.25	1,3,5-Triethylbenzene	<0.25
c-2-Octene	<0.25	1,2,4-Triethylbenzene	<0.25
c-1,2-Dimethylcyclohexane	<0.25	n-Hexylbenzene	<0.25
Isopropylcyclopentane	<0.25	n-Tridecane	<2.5

Date of Report: 06/22/05
Date Received: 05/09/05
Project: La Conner, PO#0361-001-002, F&BI 505081

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PNA'S BY EPA METHOD 8270C SIM

Laboratory Code: 505255-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Naphthalene	µg/kg (ppb)	5	<5	nm
Acenaphthylene	µg/kg (ppb)	<5	<5	nm
Acenaphthene	µg/kg (ppb)	<5	<5	nm
Fluorene	µg/kg (ppb)	<5	<5	nm
Phenanthrene	µg/kg (ppb)	12	12	0
Anthracene	µg/kg (ppb)	6	<5	nm
Fluoranthene	µg/kg (ppb)	26	19	31 a
Pyrene	µg/kg (ppb)	30	21	35 a
Benz(a)anthracene	µg/kg (ppb)	13	9	36 a
Chrysene	µg/kg (ppb)	17	11	43 a
Benzo(b)fluoranthene	µg/kg (ppb)	21	13	47 a
Benzo(k)fluoranthene	µg/kg (ppb)	8	6	29 a
Benzo(a)pyrene	µg/kg (ppb)	20	13	42 a
Indeno(1,2,3-cd)pyrene	µg/kg (ppb)	13	8	48 a
Dibenzo(a,h)anthracene	µg/kg (ppb)	<5	<5	nm
Benzo(g,h,i)perylene	µg/kg (ppb)	16	9	56 a

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	µg/kg (ppb)	170	103	88	69-105	16
Acenaphthylene	µg/kg (ppb)	170	90	97	62-117	8
Acenaphthene	µg/kg (ppb)	170	97	106	66-115	9
Fluorene	µg/kg (ppb)	170	92	101	62-116	9
Phenanthrene	µg/kg (ppb)	170	76	81	68-109	7
Anthracene	µg/kg (ppb)	170	73	78	56-102	7
Fluoranthene	µg/kg (ppb)	170	89	93	64-115	5
Pyrene	µg/kg (ppb)	170	88	92	67-118	5
Benz(a)anthracene	µg/kg (ppb)	170	88	94	53-121	6
Chrysene	µg/kg (ppb)	170	94	102	59-115	9
Benzo(b)fluoranthene	µg/kg (ppb)	170	110	103	58-132	6
Benzo(k)fluoranthene	µg/kg (ppb)	170	104	100	66-120	5
Benzo(a)pyrene	µg/kg (ppb)	170	90	84	49-116	7
Indeno(1,2,3-cd)pyrene	µg/kg (ppb)	170	86	72	61-121	18
Dibenzo(a,h)anthracene	µg/kg (ppb)	170	118	102	63-126	14
Benzo(g,h,i)perylene	µg/kg (ppb)	170	108	94	55-121	14

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

IC28

SAMPLE CHAIN OF CUSTODY AMB

Page # 1 of 1

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SAMPLERS *(signature)*

PROJECT NAME/NO. 505081

PO # 6-431

REMARKS

Please Fax Results

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: NWTPH-Dx EPH	Notes
Row-6-6		5/9/05	1245	S	1	✓	

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:		Michael Erdahl	FEBruya	5/25/05	1430
Received by:		Brian Kesel	ARI	5/25/05	1410
Relinquished by:					
Received by:					

Analytical Resources, Incorporated
Analytical Chemists and Consultants

June 6, 2005

Charlene Morrow
Friedman & Bruya, Inc.
3012 – 16th Avenue West
Seattle, WA 98119-2029

RE: Project: 505081 PO# G-431
ARI Job IC28

Dear Charlene,

Please find enclosed the original Chain of Custody (COC) record and analytical results for the above referenced project. Analytical Resources, Inc. accepted one soil sample in good condition on May 25, 2005.

The sample was analyzed for EPH (extractable petroleum hydrocarbon), as requested on the COC. No analytical complications were noted.

Quality control analysis results are included for your review. Copies of the reports and all associated raw data will be kept on file electronically at ARI. If you have any questions or require additional information, please contact your project manager.

Sincerely,
ANALYTICAL RESOURCES, INC.

Stephanie Lucas
Project Manager
(206) 695-6213
steph@arilabs.com

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH

Sample ID: MB-052605
METHOD BLANK

Lab Sample ID: MB-052605
LIMS ID: 05-8979
Matrix: Soil
Data Release Authorized: MW
Reported: 06/02/05

QC Report No: IC28-Friedman & Bruya
Project: PO# G-431
505081
Date Sampled: NA
Date Received: NA

Date Extracted: 05/26/05
Percent Moisture: NA

Sample Amount: 10.0 g
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 05/30/05 17:54
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 05/31/05 16:37
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	2,000	< 2,000 U
C10-C12 Aliphatics	2,000	< 2,000 U
C12-C16 Aliphatics	2,000	< 2,000 U
C16-C21 Aliphatics	2,000	< 2,000 U
C21-C34 Aliphatics	2,000	< 2,000 U
C8-C10 Aromatics	2,000	< 2,000 U
C10-C12 Aromatics	2,000	< 2,000 U
C12-C16 Aromatics	2,000	< 2,000 U
C16-C21 Aromatics	2,000	< 2,000 U
C21-C34 Aromatics	2,000	< 2,000 U

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	81.5%
Aromatic	Ortho-terphenyl	77.8%

METHOD BLANK

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH

Sample ID: ROW-6-6
SAMPLE

Lab Sample ID: IC28A
LIMS ID: 05-8979
Matrix: Soil
Data Release Authorized: MW
Reported: 06/02/05

QC Report No: IC28-Friedman & Bruya
Project: PO# G-431
505081
Date Sampled: 05/09/05
Date Received: 05/25/05

Date Extracted: 05/26/05
Percent Moisture: 38.6%

Sample Amount: 1.23 g-dry-wt
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 05/30/05 18:40
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 05/31/05 17:24
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	16,000	190,000
C10-C12 Aliphatics	16,000	400,000
C12-C16 Aliphatics	16,000	520,000
C16-C21 Aliphatics	16,000	76,000
C21-C34 Aliphatics	16,000	< 16,000 U
C8-C10 Aromatics	16,000	330,000
C10-C12 Aromatics	16,000	210,000
C12-C16 Aromatics	16,000	210,000
C16-C21 Aromatics	16,000	77,000
C21-C34 Aromatics	16,000	< 16,000 U

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	82.4%
Aromatic	Ortho-terphenyl	70.4%

ROW-6-6

ANALYTICAL RESOURCES INCORPORATED

AREPH SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: IC28-Friedman & Bruya
Project: PO# G-431
505081

Client ID	OTER	TOT OUT
MB-052605	77.8%	0
LCS-052605	87.4%	0
ROW-6-6	70.4%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = Ortho-terphenyl	(50-150)	(50-150)

Prep Method: SW3550B
Log Number Range: 05-8979 to 05-8979

ANALYTICAL RESOURCES INCORPORATED

ALEPH SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: IC28-Friedman & Bruya
Project: PO# G-431
505081

Client ID	COD	TOT OUT
MB-052605	81.5%	0
LCS-052605	84.1%	0
ROW-6-6	82.4%	0

	LCS/MB LIMITS	QC LIMITS
(COD) = 1-Chlorooctadecane	(50-150)	(50-150)

Prep Method: SW3550B
Log Number Range: 05-8979 to 05-8979

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH

Sample ID: LCS-052605
LAB CONTROL

Lab Sample ID: LCS-052605
LIMS ID: 05-8979
Matrix: Soil
Data Release Authorized:
Reported: 06/02/05

QC Report No: IC28-Friedman & Bruya
Project: PO# G-431
505081
Date Sampled: NA
Date Received: NA

Date Extracted: 05/26/05

Sample Amount: 10.0 g
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 05/30/05 18:09
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Aromatic
Date Analyzed: 05/31/05 16:53
Instrument/Analyst: FID4A/JGR

Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
C8-C10 Aliphatics	8400	15000	56.0%
C10-C12 Aliphatics	9400	15000	62.7%
C12-C16 Aliphatics	12000	15000	80.0%
C16-C21 Aliphatics	12000	15000	80.0%
C10-C12 Aromatics	11500	15000	76.7%
C12-C16 Aromatics	12500	15000	83.3%
C16-C21 Aromatics	25900	30000	86.3%
C21-C34 Aromatics	27000	30000	90.0%

Results reported in µg/kg

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	84.1%
Aromatic	Ortho-terphenyl	87.4%

505081

SAMPLE CHAIN OF CUSTODY

ME 05-09-05 TI4/V2/VS2/AO

Send Report To DEE GARDNER

Company SOUND ENVIRONMENTAL STRATEGIES

Address 2400 AIRPORT WAY S., STE 200

City, State, ZIP SEATTLE, WA 98134-200

Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (signature) [signature]

PROJECT NAME/NO. LACONNER

PO # 0361-001-002

REMARKS

Page # 1 of 3

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	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	TOTAL Pb	OXYGENATES by 8260			HOLD	Notes
ROW-1-3	01 A-E	05.09.05	0835	S	5											X	
ROW-1-6	02 A-E		0840	S	5	X	X	X									
ROW-1-10	03 A-E		0845	S	5											X	
ROW-2-5	04 A-E		0930	S	5	X	X	X									
ROW-2-8	05 A-E		0935	S	5											X	
ROW-3-6	06 A-E		1010	S	5	X	X	X									
ROW-3-9	07 A-E		1015	S	5											X	
ROW-4-5	08 A-E		1050	S	5	X	X	X				X					
ROW-4-8	09 A-E		1050	S	5											X	
ROW-4-10	10 A-E	↓	1105	S	5	X	X	X									

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: [signature]	DEE GARDNER	SES	05.09.05	1330
Received by: [signature]	Corey League	SES	5.09.05	1330
Relinquished by: [signature]	Corey League	SES	5.09.05	1515
Received by: [signature]	Nhan Phan	Friedman & Bruya	5.9.05	15:15

FORMS\COC\COC.DOC

505081

SAMPLE CHAIN OF CUSTODY

ME 05-09-05 / T/VC/VS2/A

Send Report To DEE GARDNER

Company SOUND ENVIRONMENTAL STRATEGIES

Address 2400 AIRPORT WAY S., STE 200

City, State, ZIP SEATTLE, WA 98134-200

Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (signature) [signature]

PROJECT NAME/NO. LACONNER

PO # 0361-001-002

REMARKS

Page # 2 of 3

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	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	TOTAL Pb	DISS Pb	OXYGENATES BY 8260	PIANO	EPH/PAH	Notes
ROW-5-3	11 A-E	05.09.05	1145	S	5	X	X	X									① per Dee Gardner 5/25/05 ms
ROW-5-6	12 A-D		1150	S	5	X	X	X				X		X			
ROW-5-9	13 A-E		1200	S	5	X	X	X									
ROW-6-6	14 A-E		1245	S	5	X	X	X							ⓘ	ⓘ	
ROW-6-11	15 A-E		1250	S	5	X	X	X									
ROW-1-W	16 A-E		0900	W	5	X	X	X									
ROW-2-W	17 A-E		0945	W	5	X	X	X									
ROW-3-W	18 A-E		1030	W	5	X	X	X									
ROW-4-W	19 A-G		1115	W	7	X	X	X				X	X	X			
ROW-5-W	20 A-E	↓	1220	W	5	X	X	X									

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: [signature]	DEE GARDNER	SES	05.09.05	1330
Received by: [signature]	Corey League	SES	5.09.05	1330
Relinquished by: [signature]	Corey League	SES	5.09.05	1515
Received by: [signature]	Nhan Phan	Friedman & Bruya	5-09-05	15:15

FORMS\COC\COC.DOC

505081

SAMPLE CHAIN OF CUSTODY

ME 05-09-05 ATY/12/VS2/A

Page # 3 of 3

Send Report To DEE GARDNER

Company SOUND ENVIRONMENTAL STRATEGIES

Address 2400 AIRPORT WAY S., STE 200

City, State, ZIP SEATTLE, WA 98134-200

Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (signature)

PROJECT NAME/NO. LACONNER

PO # 0361-001-002

REMARKS

TURNAROUND TIME
- ☐ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by:

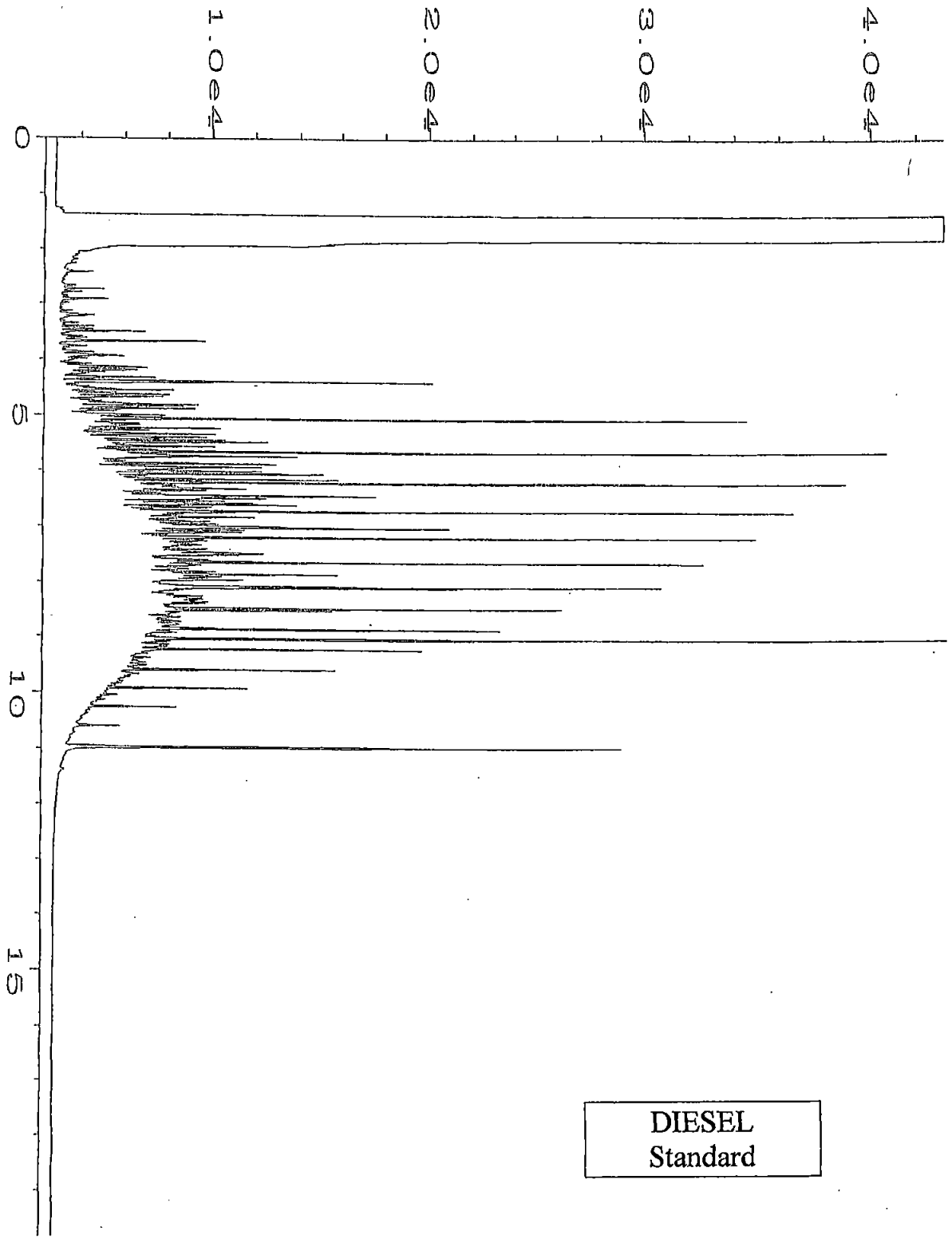
SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS						Notes
ROW-6-W	21 A-E	05.09.05	1300	W	5	X	X	X									

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

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		DEE GARDNER	SES	09.09.05	1330
Received by:		Corey League	SES	5.09.05	1330
Relinquished by:		Corey League	SES	5.09.05	1575
Received by:		Nhan Phan	Friedman & Bruya	5-9-05	15:15

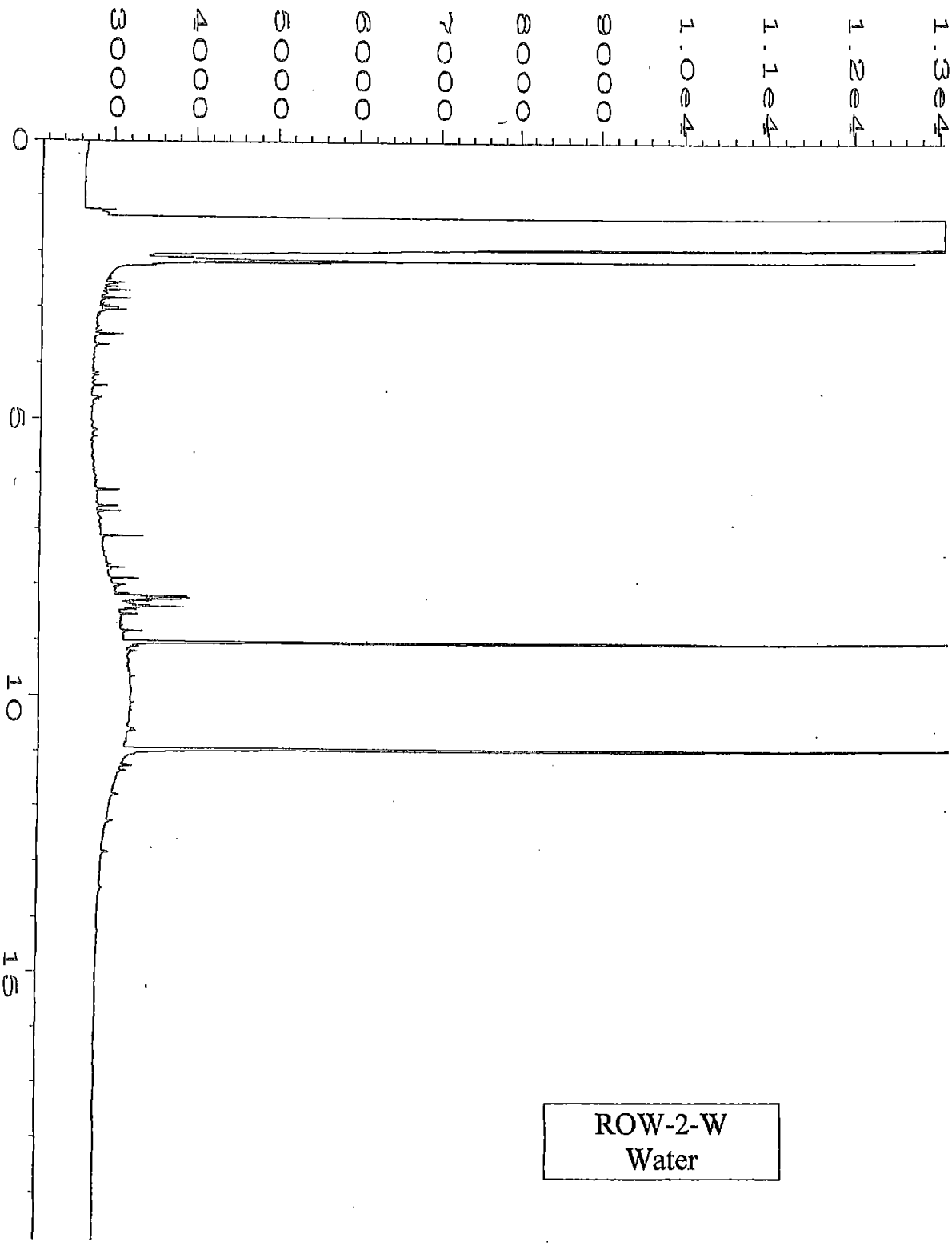
APPENDIX D
Chromatograms



DIESEL
Standard

Data File Name : E:\GC6\05-13-05\002F0101.D
Operator : ME
Instrument : GC #6
Sample Name : 500 WADF 20-51
Run Time Bar Code:
Acquired on : 13 May 05 09:18 AM
Report Created on: 22 Jun 05 10:24 AM

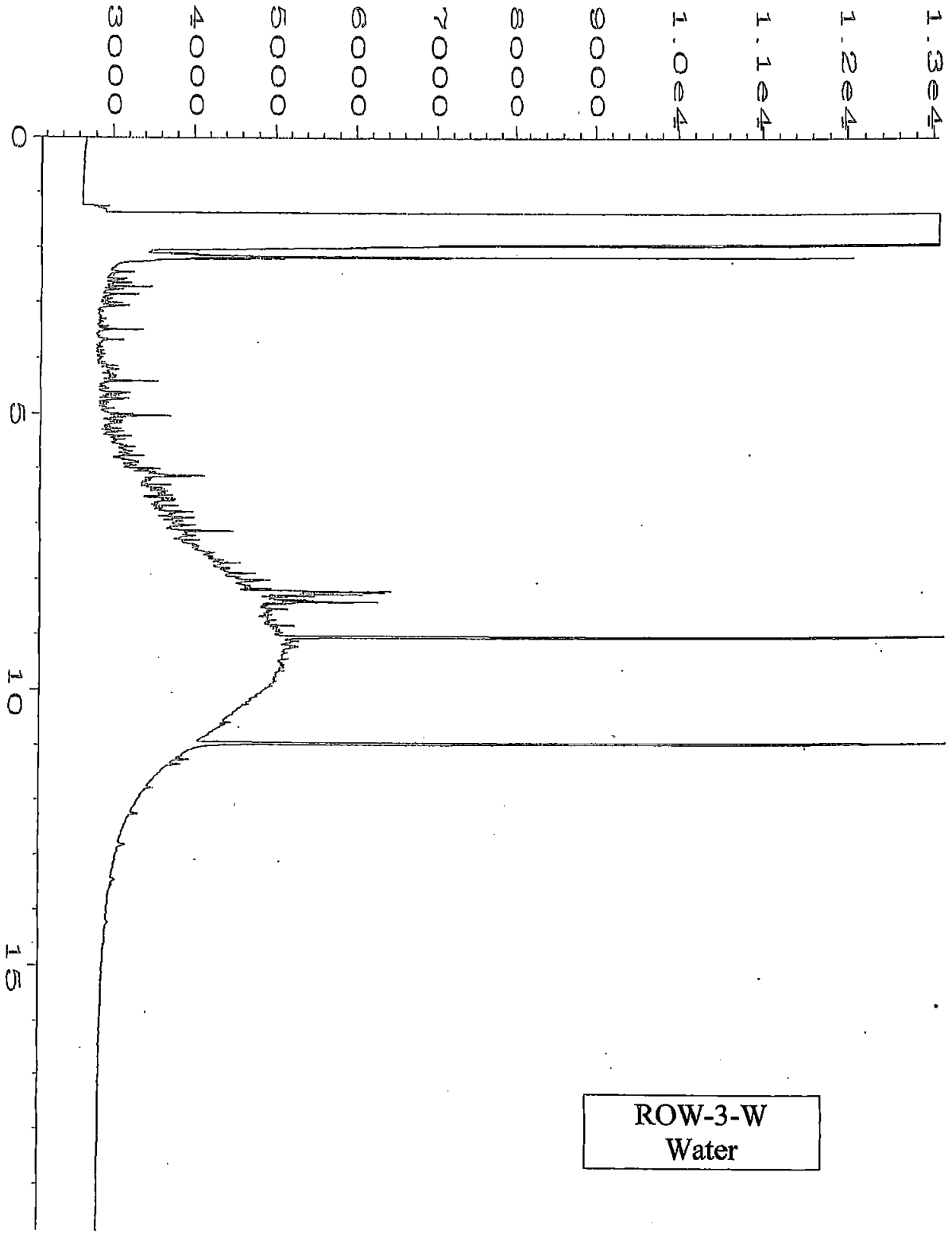
Page Number : 1
Vial Number : 2
Injection Number : 1
Sequence Line : 1
Instrument Method: TPHD.MTH
Analysis Method : DEFAULT.MTH



ROW-2-W
Water

Data File Name : E:\GC6\05-11-05\032F1101.D
Operator : ME
Instrument : GC #6
Sample Name : 505081-17
Run Time Bar Code:
Acquired on : 12 May 05 00:32 AM
Report Created on: 22 Jun 05 10:28 AM

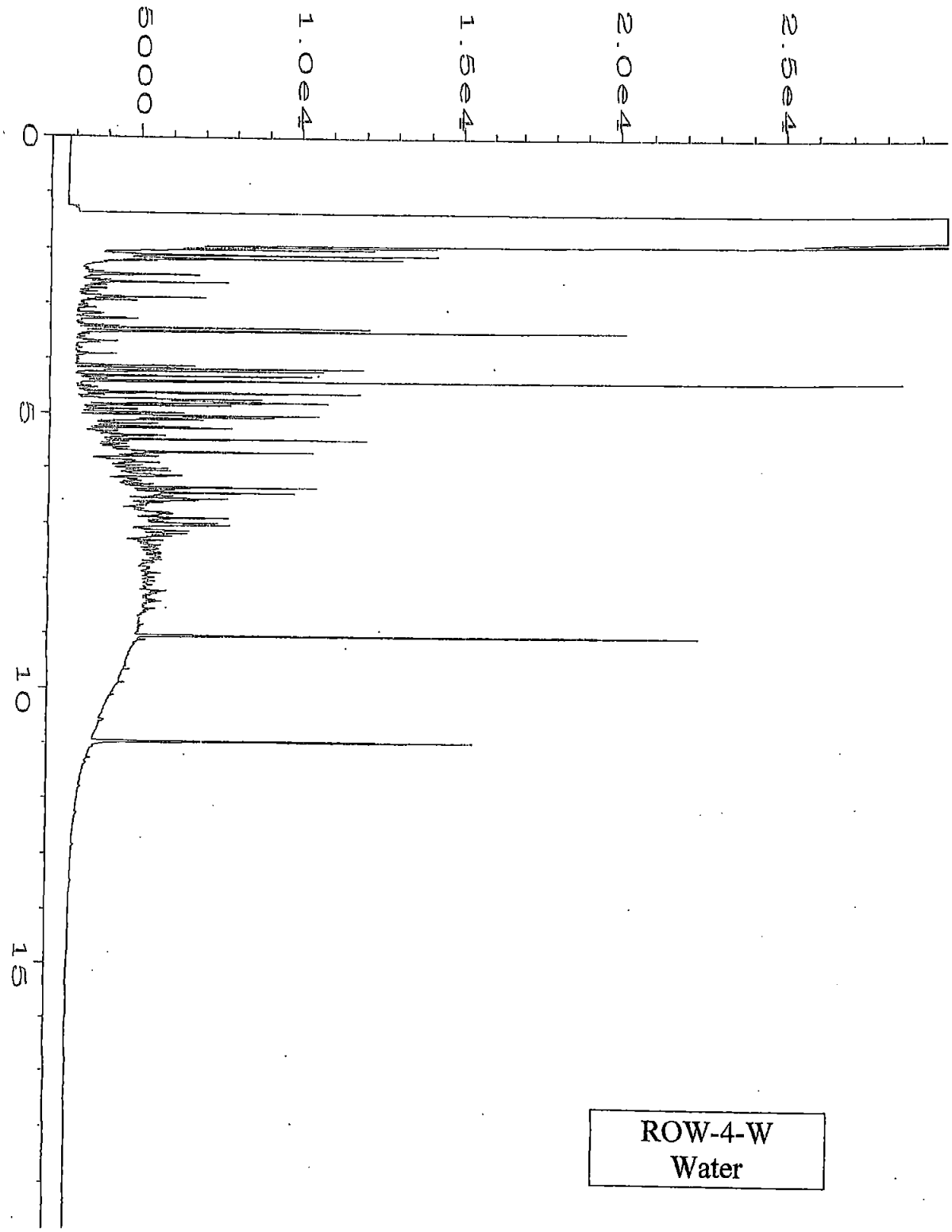
Page Number : 1
Vial Number : 32
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHD.MTH
Analysis Method : DEFAULT.MTH



ROW-3-W
Water

Data File Name : E:\GC6\05-11-05\033F1101.D
Operator : ME
Instrument : GC #6
Sample Name : 505081-18
Run Time Bar Code:
Acquired on : 12 May 05 00:58 AM
Report Created on: 22 Jun 05 10:29 AM

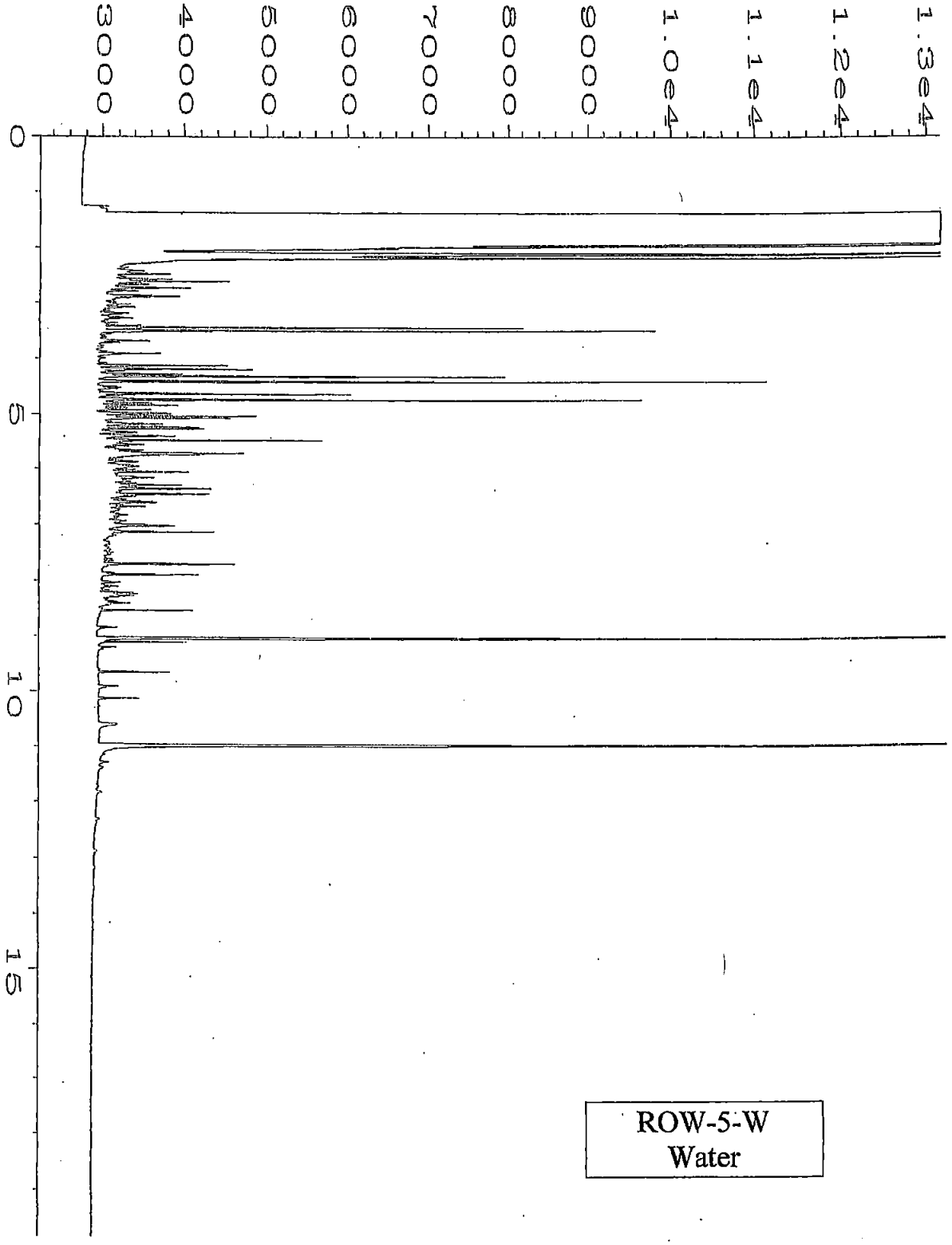
Page Number : 1
Vial Number : 33
Injection Number : 1
Sequence Line : 11
Instrument Method: TPHD.MTH
Analysis Method : DEFAULT.MTH



ROW-4-W
Water

Data File Name : E:\GC6\05-12-05\016F0601.D
Operator : ME
Instrument : GC #6
Sample Name : 505081-19
Run Time Bar Code:
Acquired on : 12 May 05 11:28 AM
Report Created on: 22 Jun 05 10:28 AM

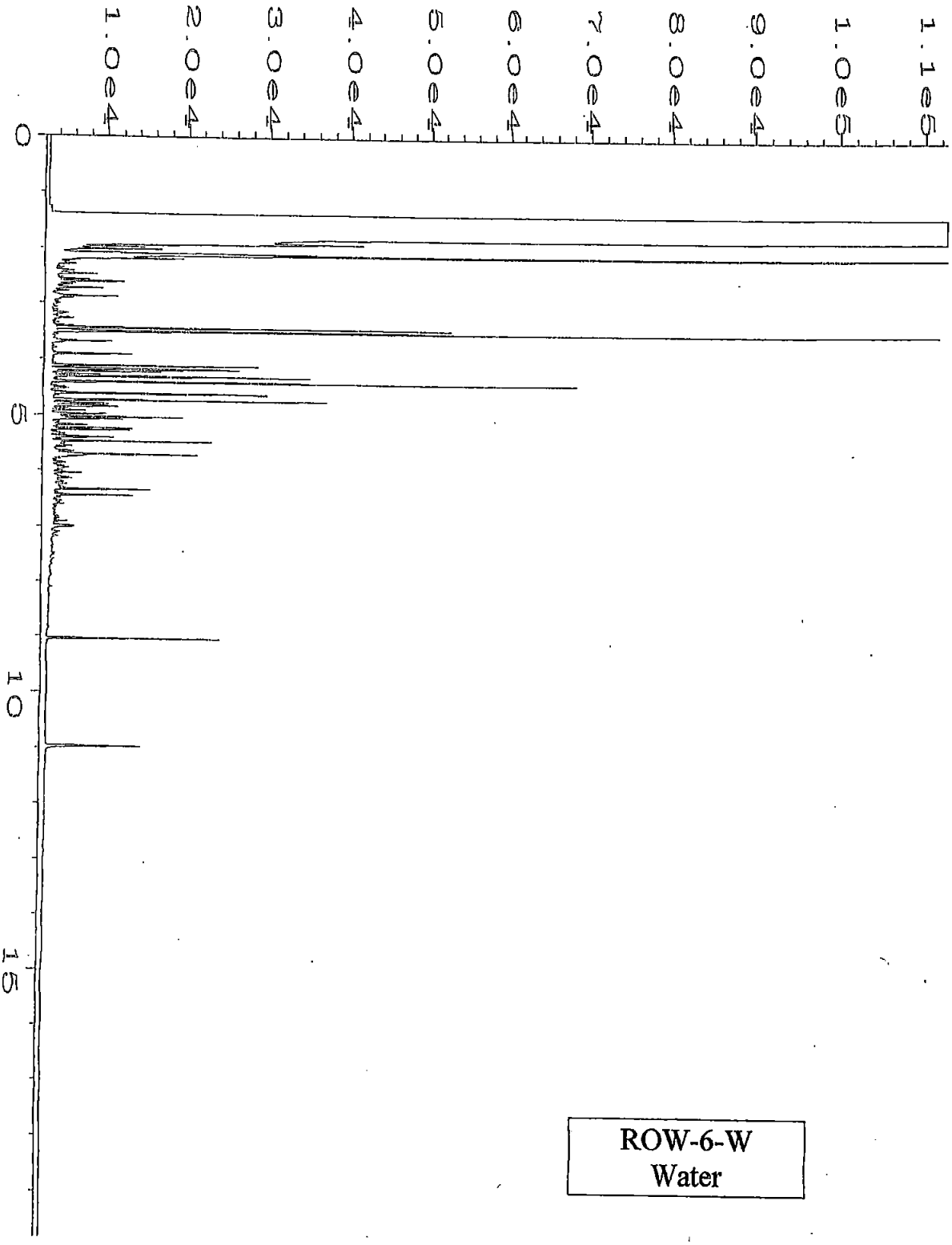
Page Number : 1
Vial Number : 16
Injection Number : 1
Sequence Line : 6
Instrument Method: TPHD.MTH
Analysis Method : DEFAULT.MTH



ROW-5-W
Water

Data File Name : E:\GC6\05-12-05\017F0601.D
Operator : ME
Instrument : GC #6
Sample Name : 505081-20
Run Time Bar Code:
Acquired on : 12 May 05 11:54 AM
Report Created on: 22 Jun 05 10:28 AM

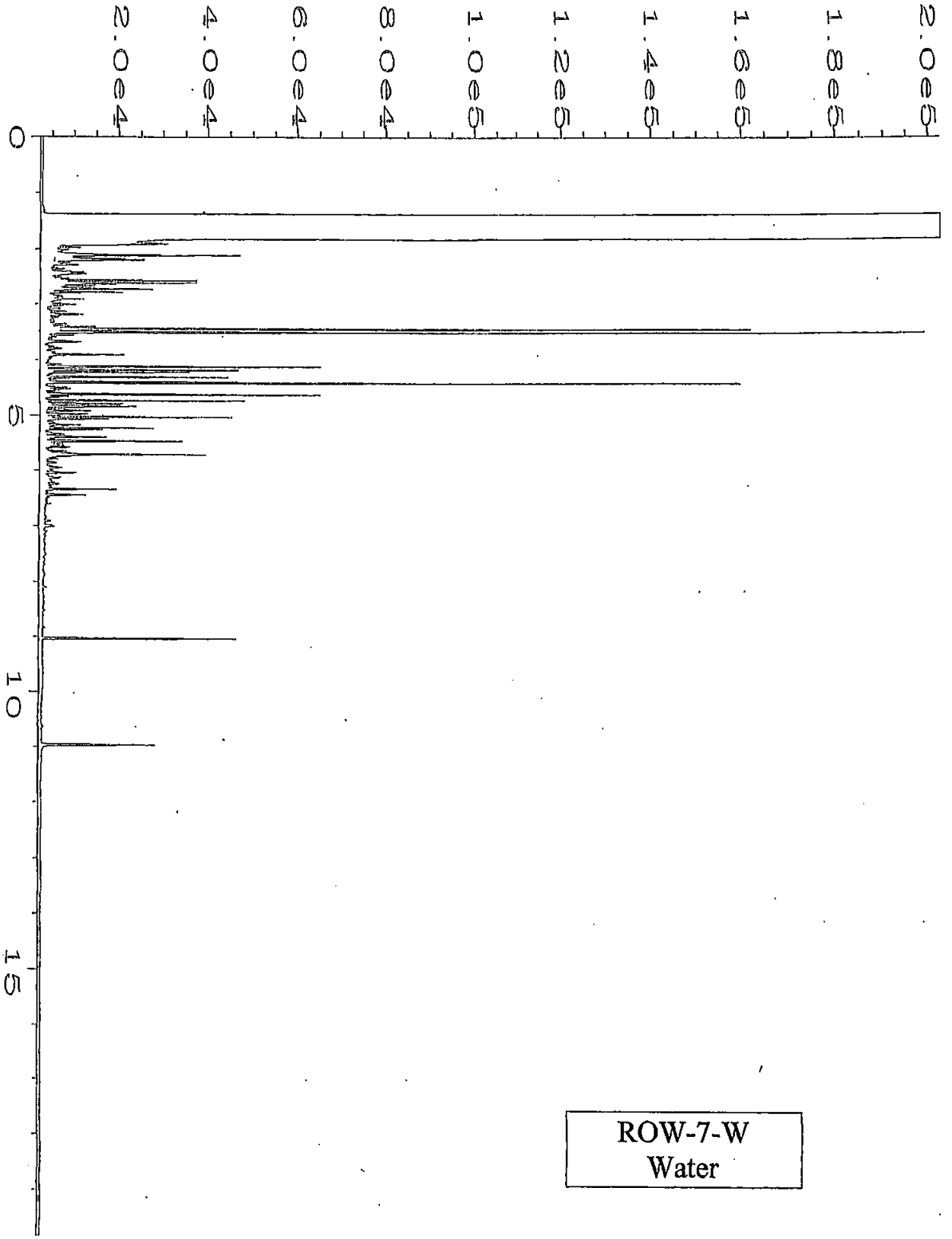
Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 6
Instrument Method: TPHD.MTH
Analysis Method : DEFAULT.MTH



ROW-6-W
Water

Data File Name : E:\GC6\05-12-05\018F0601.D
Operator : ME
Instrument : GC #6
Sample Name : 505081-21
Run Time Bar Code:
Acquired on : 12 May 05 12:19 PM
Report Created on: 22 Jun 05 10:28 AM

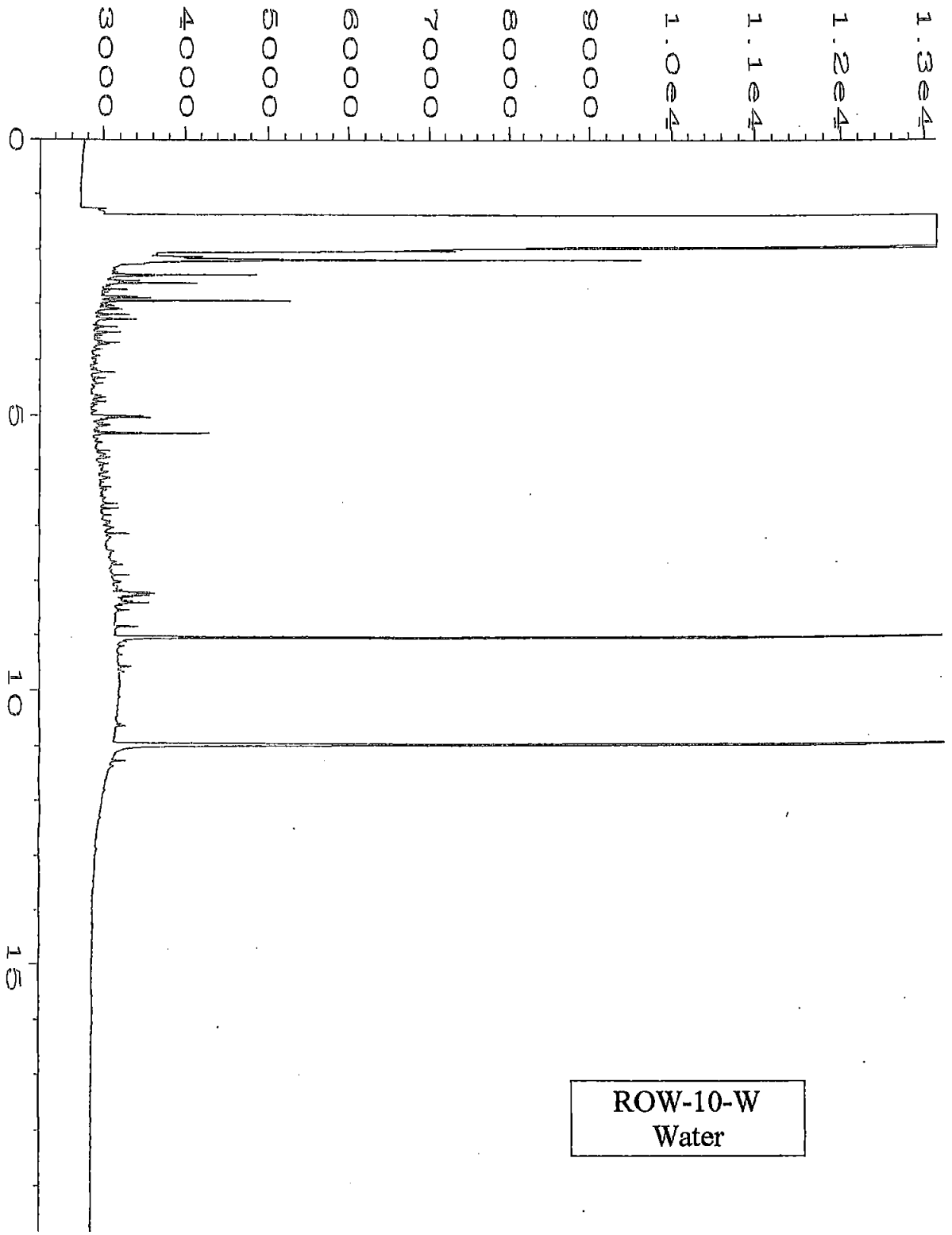
Page Number : 1
Vial Number : 18
Injection Number : 1
Sequence Line : 6
Instrument Method: TPHD.MTH
Analysis Method : DEFAULT.MTH



ROW-7-W
Water

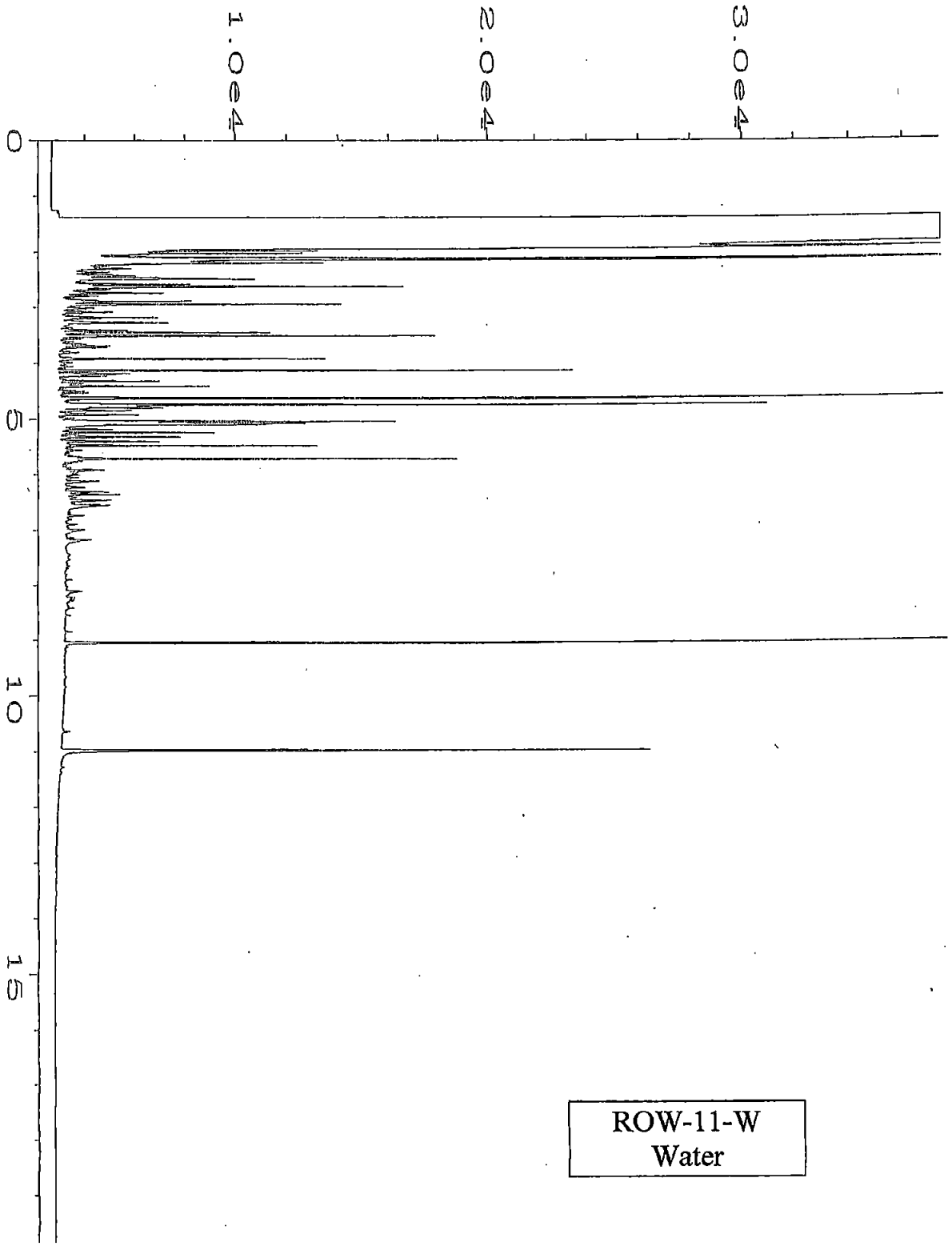
Data File Name : E:\GC6\05-12-05\009F0701.D
Operator : ME
Instrument : GC #6
Sample Name : 505097-20
Run Time Bar Code:
Acquired on : 12 May 05 12:45 PM
Report Created on: 22 Jun 05 10:26 AM

Page Number : 1
Vial Number : 9
Injection Number : 1
Sequence Line : 7
Instrument Method: TPHD.MTH
Analysis Method : DEFAULT.MTH



ROW-10-W
Water

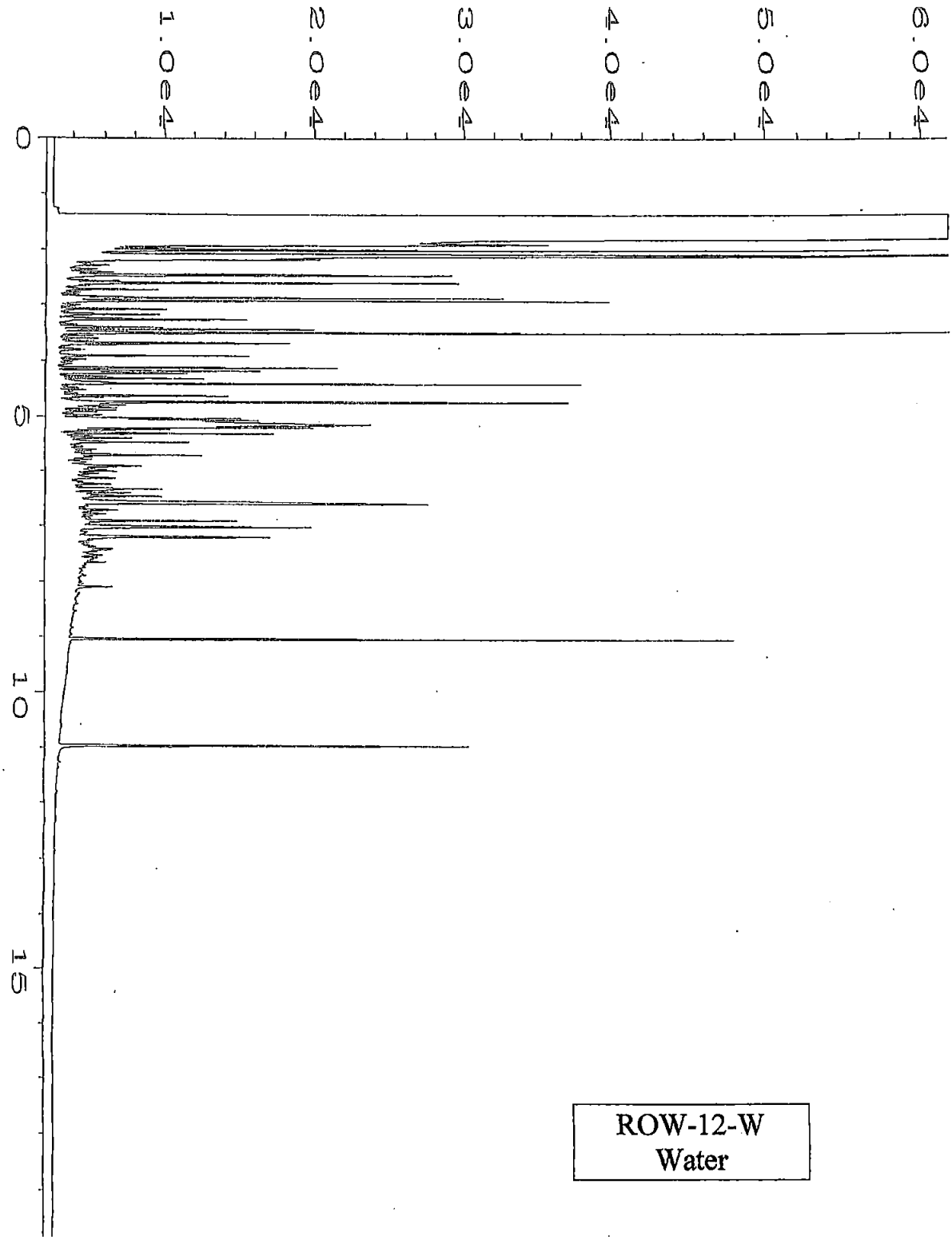
Data File Name	: E:\GC6\05-12-05\012F0701.D		
Operator	: ME	Page Number	: 1
Instrument	: GC #6	Vial Number	: 12
Sample Name	: 505097-23	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 7
Acquired on	: 12 May 05 02:02 PM	Instrument Method	: TPHD.MTH
Report Created on	: 22 Jun 05 10:26 AM	Analysis Method	: DEFAULT.MTH



ROW-11-W
Water

Data File Name : E:\GC6\05-12-05\013F0701.D
Operator : ME
Instrument : GC #6
Sample Name : 505097-24
Run Time Bar Code:
Acquired on : 12 May 05 02:28 PM
Report Created on: 22 Jun 05 10:27 AM

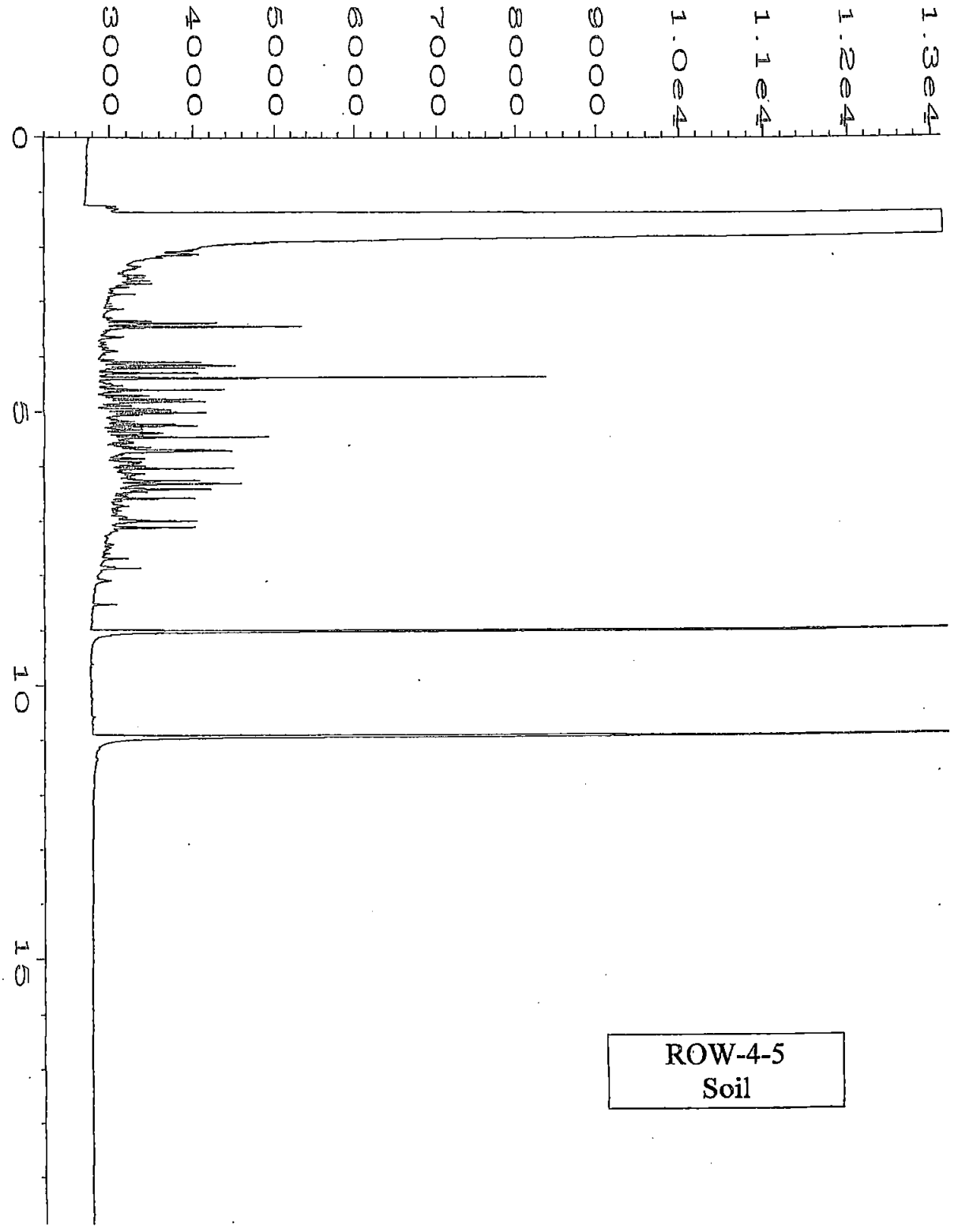
Page Number : 1
Vial Number : 13
Injection Number : 1
Sequence Line : 7
Instrument Method: TPHD.MTH
Analysis Method : DEFAULT.MTH



ROW-12-W
Water

Data File Name : E:\GC6\05-12-05\014F0701.D
Operator : ME
Instrument : GC #6
Sample Name : 505097-25
Run Time Bar Code:
Acquired on : 12 May 05 02:53 PM
Report Created on: 22 Jun 05 10:27 AM

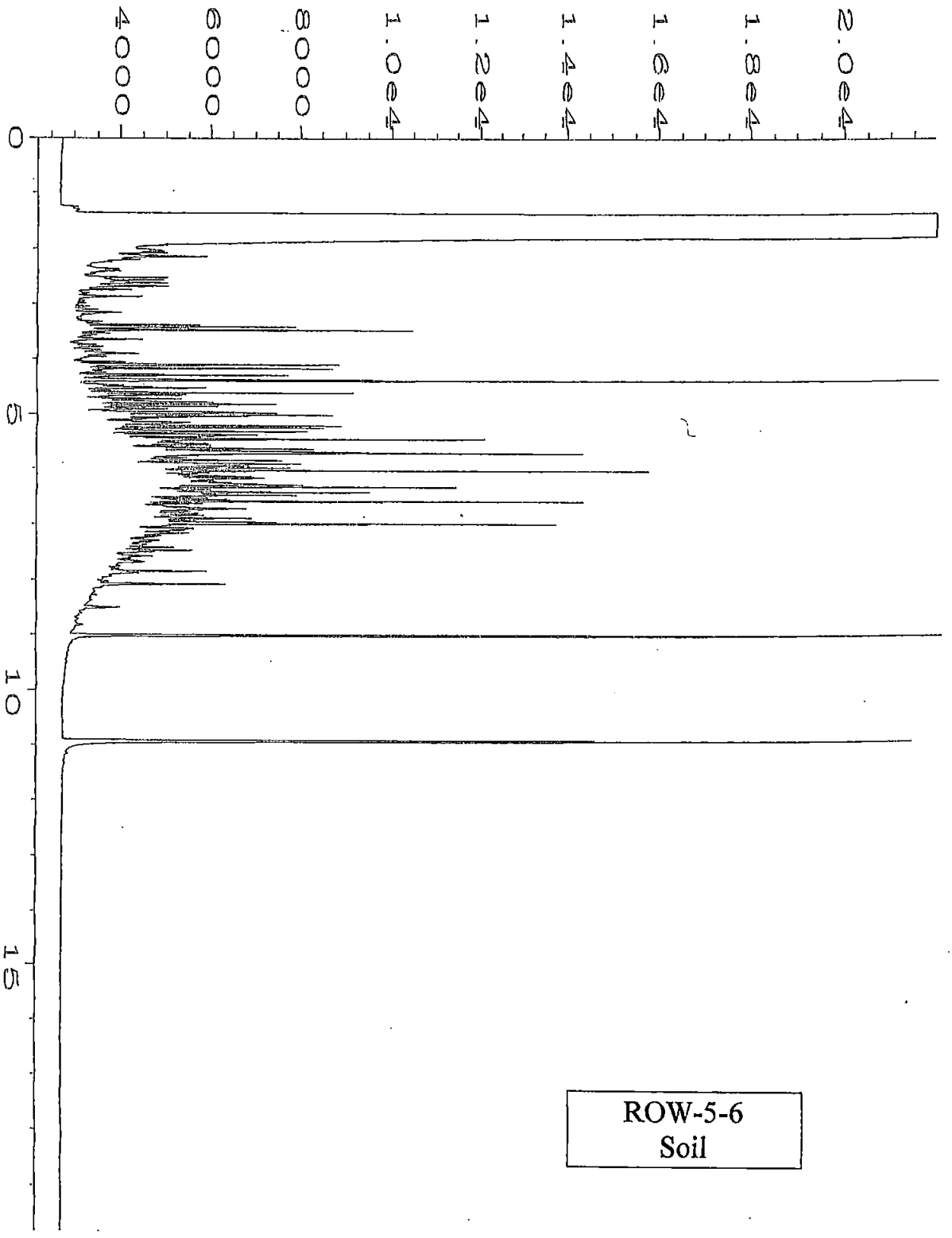
Page Number : 1
Vial Number : 14
Injection Number : 1
Sequence Line : 7
Instrument Method: TPHD.MTH
Analysis Method : DEFAULT.MTH



ROW-4-5
Soil

Data File Name : E:\GC6\05-10-05\040F1501.D
Operator : ME
Instrument : GC #6
Sample Name : 505081-08
Run Time Bar Code:
Acquired on : 11 May 05 04:33 AM
Report Created on: 22 Jun 05 10:37 AM

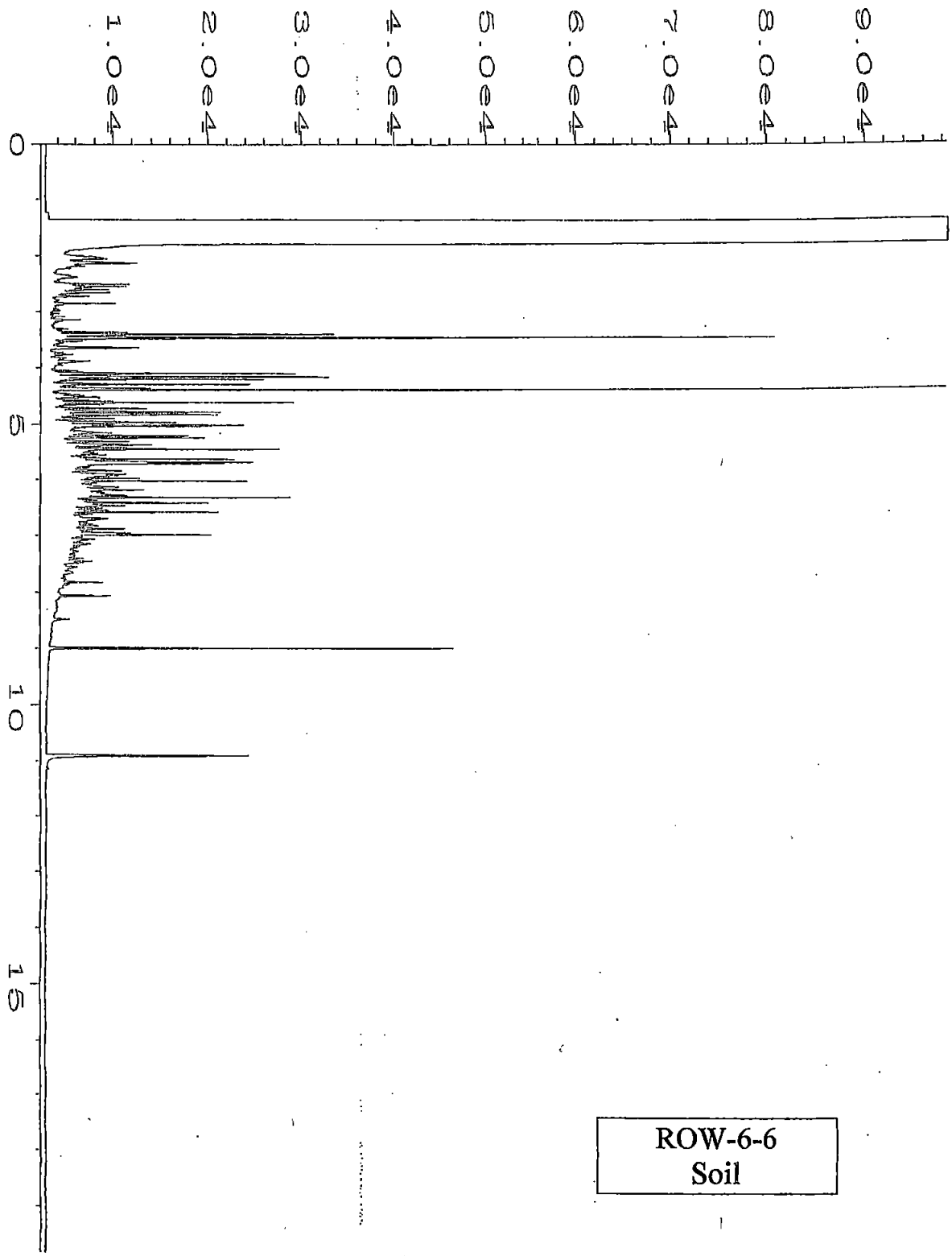
Page Number : 1
Vial Number : 40
Injection Number : 1
Sequence Line : 15
Instrument Method: TPHD.MTH
Analysis Method : DEFAULT.MTH



ROW-5-6
Soil

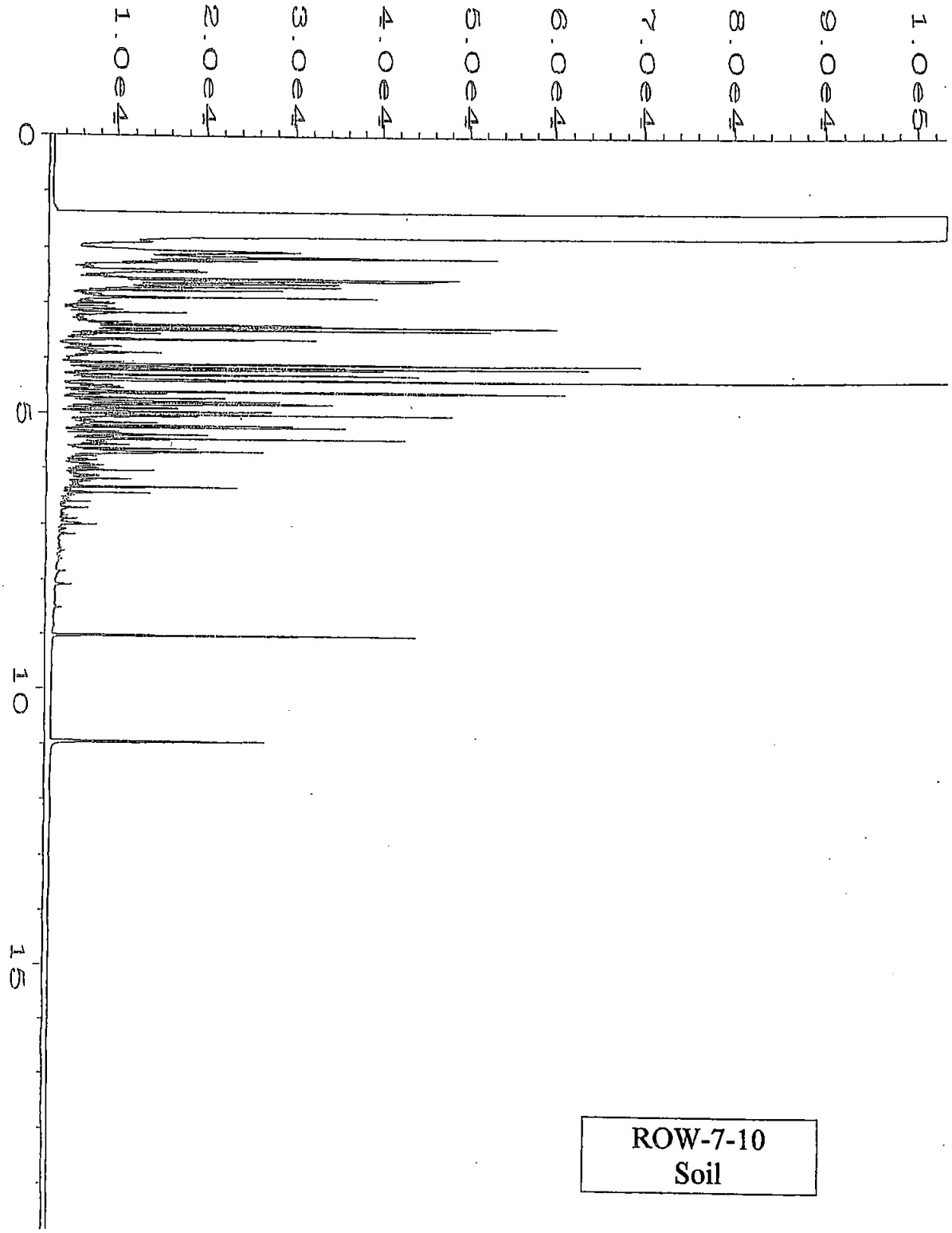
Data File Name : E:\GC6\05-10-05\043F1501.D
Operator : ME
Instrument : GC #6
Sample Name : 505081-12
Run Time Bar Code:
Acquired on : 11 May 05 05:52 AM
Report Created on: 22 Jun 05 10:37 AM

Page Number : 1
Vial Number : 43
Injection Number : 1
Sequence Line : 15
Instrument Method: TPHD.MTH
Analysis Method : DEFAULT.MTH



ROW-6-6
Soil

Data File Name	: E:\GC6\05-10-05\045F1501.D		
Operator	: ME	Page Number	: 1
Instrument	: GC #6	Vial Number	: 45
Sample Name	: 505081-14	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 15
Acquired on	: 11 May 05 06:44 AM	Instrument Method	: TPHD.MTH
Report Created on	: 22 Jun 05 10:37 AM	Analysis Method	: DEFAULT.MTH



ROW-7-10
Soil

Data File Name : E:\GC6\05-13-05\025F1001.D
Operator : ME
Instrument : GC #6
Sample Name : 505097-03
Run Time Bar Code:
Acquired on : 13 May 05 09:45 PM
Report Created on: 22 Jun 05 10:24 AM

Page Number : 1
Vial Number : 25
Injection Number : 1
Sequence Line : 10
Instrument Method: TPHD.MTH
Analysis Method : DEFAULT.MTH