SUBSURFACE INVESTIGATION

Time Oil Facility 01-169
851 Broadway
Everett, Washington

June 21, 2005

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SOUND ENVIRONMENTAL STRATEGIES
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EXECUTIVE SUMMARY

Sound Environmental Strategies Corporation completed a Subsurface Investigation of the Time Oil Facility 01-169 located at 851 Broadway, in Everett, Washington, in general accordance with ASTM 1903-97, *Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process*, and guidelines established by the Washington State Department of Ecology (Ecology). The objective of the investigation was to characterize and delineate contaminated soil remaining on site following an earlier remediation program. The investigation consisted of drilling 12 borings in areas along the perimeter of the former remediation excavation where low concentrations of gasoline-range petroleum hydrocarbon (GRPH) -contaminated soil is known to remain. Two of the borings were completed as monitoring wells, once of which was dry. Project work also included laboratory analysis of representative soil and groundwater samples, evaluation of analytical data, and preparation of this report.

Soil containing GRPH and benzene in concentrations greater than their respective Model Toxics Control Act (MTCA) Method A cleanup levels (cleanup levels) were identified along the northern and southwestern edges of the former remediation excavation. Toluene, ethylbenzene and xylenes concentrations, with one exception, were less than their respective cleanup levels. The GRPH-contaminated horizon appears to be approximately 3 to 4 feet thick, and occurs at depths ranging from 3 to 14 feet below ground surface (bgs), depending on location.

Only monitoring well MW-1, located in the northeastern corner of the former remediation excavation, produced any groundwater. The groundwater sample contained 3,140 µg/L GRPH, exceeding the 800 µg/L cleanup level. Monitoring well MW-2, which is 30 feet deep and located downgradient from southwestern corner of the former excavation, produced no groundwater. This suggests that the groundwater in MW-1 is perched within the backfilled excavation, and shallow groundwater is not present outside the UST system backfill. Soil samples collected from borings along the north and southwest edges of the former excavation contained GRPH and benzene in concentrations greater than their respective cleanup levels.

Additional soil remediation will be required to bring the site into unconditional compliance with MTCA regulations. The most widespread chemical of concern is benzene, and to a lesser degree, GRPH. A 48-inch diameter sewer main will require shoring to access some of the affected soil. Based on current information, approximately 180 to 200 tons of GRPH-contaminated soil will require excavation and off-site disposal. An additional 525 to 550 tons of overlying uncontaminated soil can be excavated and stockpiled for later use as backfill. It is also likely that groundwater within the permeable backfill of the former UST system excavation will need to be addressed to bring the site into compliance with MTCA.

1.0 INTRODUCTION

On behalf of the Time Oil Company (Time Oil), Sound Environmental Strategies Corporation (SES) completed a subsurface investigation of Facility 01-169 located at 851 Broadway in Everett, Washington (the site). This investigation was completed in general accordance with ASTM 1903-97, *Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process*, and Time Oil Site Assessment Guidelines. This report presents the results of the subsurface investigation work completed in October, 2004.

The location of the site is shown in Figure 1. The investigation consisted of subsurface exploration using a combination direct push and hollow-stem auger drilling rig. Boring locations are shown in Figure 2. This work was authorized by and completed on behalf of Time Oil in accordance with SES' proposal, dated August 11, 2004.

1.1 BACKGROUND

GeoEngineers documented the removal of four underground storage tanks (USTs), two fuel dispenser islands, associated distribution piping, and contaminated soil in a report dated March 22, 2004. Approximately 1,460 tons of gasoline-range petroleum hydrocarbons (GRPH) were hauled off site for disposal at Rinker Materials, in Everett, Washington.

GRPH concentrations exceeded the Model Toxics Control Act (MTCA) Method A cleanup levels (used for comparative purposes and hereafter referred to as "cleanup levels") in 14 of 21 soil samples collected from the sidewalls and bottom of the remediation excavation (Figure 2). Analytical results from this phase of work are summarized in Table 1. One soil sample collected from the northeast corner of the excavation at a depth of 15 feet below ground surface (bgs) contained 14,000 mg/kg GRPH and 42 mg/kg benzene. Soil samples collected from the southwest corner of the excavation contained GRPH in concentrations ranging from 23 to 6,200 mg/kg, and benzene was detected at concentrations ranging from less than the detection limit to 3.6 mg/kg.

GeoEngineers concluded their report by stating that "gasoline-range hydrocarbons exceeding MTCA site-specific Method B cleanup levels remain on site, with the vertical and lateral extent of the impact being undefined by the UST removal." GeoEngineers also noted that MTCA worksheets predicted that shallow groundwater would be impacted by petroleum hydrocarbons at concentrations exceeding the cleanup levels. GeoEngineers recommended additional assessment of the site by drilling.

1.2 PROJECT OBJECTIVES

The objective(s) of the Subsurface Investigation were to:

- Assess the lateral and vertical extent of contaminated soil (requiring remediation under MTCA guidelines) remaining along the north, south, and west sides of the former excavation; and

- Ascertain whether groundwater inside and outside of the former UST excavation is contaminated with GRPH and BTEX in concentrations requiring further remediation.

1.3 SCOPE OF WORK

The scope of work for this investigation was developed through discussions with Time Oil representatives. Work on the project included the general following tasks:

- Use of a combination direct push/hollow-stem auger drilling unit to drill 12 borings, and build two monitoring wells;
- Collection and analysis of soil and groundwater samples for selected potential contaminants including GRPH, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and lead;
- Documenting observations in field notes and boring logs; and
- Preparation of this report.

A detailed description of SES' field procedures is presented In Appendix A.

2.0 SITE CHARACTERISTICS

At the time of the SES field effort, the site was developed with a single-story restaurant/store building, which was vacant. The western two-thirds of the site was paved with asphalt, and the eastern (rear) portion of the site was unpaved and covered with a mixture of native grasses. The extent of the excavation created during the UST removal and remediation effort was readily discernable by an area of fresh asphalt paving (shown in gray in Figure 2). There was a shipping container along the north end of the building.

2.1 TOPOGRAPHY

The polygonal, 0.43-acre site lies at an elevation of approximately 100 feet above mean sea level. The land surface slopes gently to the southwest toward a shallow depression centered at the intersection of Broadway Avenue North and Tower Street. Development in the immediate vicinity of the site is commercial.

2.2 SURFACE HYDROLOGY

Given the general southwesterly trend of topography in the immediate vicinity of the site, surface runoff flows to the southwest. On a larger scale, surface runoff flows to the northeast, toward the Snohomish River.

2.3 GEOLOGY AND GROUNDWATER HYDROLOGY

The site and surrounding area encompass a gently rolling upland deposited during the Vashon Stade of the last episode of continental glaciation, which ended approximately 13,500 years ago. Review of geologic maps (Newcomb, 1952) indicates that the site is underlain by Vashon Till, which consists of a dense heterogenous mixture of silt, sand, and gravel. The till is typically characterized by relatively low vertical hydraulic conductivity, and may contain lenses of perched groundwater. Based solely upon local topography, any shallow groundwater in the vicinity would likely flow in a generally southwesterly direction.

3.0 INVESTIGATION METHODS AND OBSERVATIONS

This section provides a summary of project field methods and observations made during the subsurface investigation of the site. Additional detail on general project methodologies is provided in Appendix A.

3.1 SOIL BORING AND SAMPLING

On October 6 and 7, 2004, 12 borings (B-1 through B-12) were advanced by a Washington State licensed driller (ESN) using a combination direct push/hollow-stem auger drilling rig. An SES Washington State licensed hydrogeologist was present on the site to direct drilling and sampling, and to visually classify soil in accordance with the Unified Soil Classification System (USCS). All borings were logged and soil cores assessed for chemical odors and staining. A photoionization detector (PID) was used to qualitatively assess core samples for the presence of ionizeable chemical contaminants. Observations, along with other relevant geologic and hydrologic conditions encountered during drilling, were recorded on boring logs, copies of which are presented in Appendix B.

Soil samples collected from clear plastic sleeves were placed in laboratory-prepared VOA vials labeled with boring number, sample interval, time, date, SES project number, and required analyses. Filled sample VOAs were placed immediately in a chilled ice chest and stored there until delivered to the project laboratory. Soil samples were not collected from intervals presenting no evidence (odor, PID reading, sheen) of contamination with petroleum hydrocarbon products.

Boring B-1, which was completed as a monitoring well (MW-1) was drilled to assess soil and groundwater conditions in the northeastern corner of the remediation excavation (the area with the deepest GRPH and BTEX impacts) where a soil sample collected during the earlier (GeoEngineers) remediation effort contained 14,000 mg/kg GRPH. Borings B-3, B-4, B-5, B-6, and B-8 were drilled along the western and southern edges of the remediation excavation to assess GRPH and BTEX impacts outside of the backfilled excavation. Boring B-7 was drilled to the north of the excavation to assess soil quality on the upgradient side of the excavation, primarily because evidence of contamination was noted while drilling MW-1. Boring B-9 was completed inside the south end of the backfilled excavation to assess conditions in this area. Borings B-2, B-10 (completed as monitoring well MW-2), B-11, and B-12 were completed to assess whether shallow groundwater was present and the lateral extent of any GRPH and/or BTEX impacted soil topographically downgradient from the backfilled excavation.

3.2 MONITORING WELLS AND GROUNDWATER SAMPLING

Two borings, MW-1 and MW-10, were completed as two-inch diameter monitoring wells. Each wellhead was protected with a steel, locking flush-mount monument.

Monitoring well MW-1 was constructed in the northeast corner of the backfilled excavation. The well was screened from 5 feet bgs to 20 feet bgs with 0.10 slot screen, and topped off with 5 feet of riser. The purpose of the well was to facilitate the collection of groundwater samples from what was the most highly contaminated portion of the former UST cavity, based on GeoEngineers earlier work.

Monitoring well MW-2 (constructed in Boring B-10) was drilled to the southwest and topographically downgradient of the backfilled excavation to assess groundwater conditions. The well was screened with 0.10 slot 2-inch PVC from 15 to 30 feet bgs, and topped with

15 feet of blank riser. This screened interval was selected to ensure that it was below the elevation of backfill in the excavation. To date, this monitoring well has not produced any groundwater, which suggests that shallow groundwater on the site is present only in the UST system excavation backfill in this area.

Thin zones of wet (but not saturated) soil were noted in borings B-4, B-5, B-6, B-7, B-8, B-11, and B-12 during drilling, as noted in the boring logs. To determine whether construction of monitoring wells in any of the borings was warranted, SES had the driller probe each boring with a steel rod after completion of the boring to determine whether the boring was likely to produce any groundwater. Initially, borings were allowed to remain open for an hour before probing and backfilling with bentonite chips. These borings remained dry, and monitoring wells therefore were installed in these borings.

The groundwater sample collected from monitoring well MW-1 was placed in laboratory-prepared glassware labeled with boring number, sample interval, time, date, SES project number, and required analyses. Filled sample containers were placed immediately in a chilled ice chest, and stored there until delivered to the project laboratory.

3.3 LABORATORY ANALYSIS

Selected soil and groundwater samples were submitted under chain-of-custody protocol to North Creek Analytical (NCA) in Bothell, Washington, for chemical analysis. A copy of the chain-of-custody form and laboratory-prepared analytical reports are provided in Appendix C. The single water sample was analyzed for GRPH, diesel-range petroleum hydrocarbons, VOCs, SVOCs, and lead. Seventeen soil samples were selected for analysis for GRPH and BTEX. Results are discussed in terms of cleanup levels in Section 4.2 of this report.

4.0 INVESTIGATION OBSERVATIONS AND RESULTS

4.1 FIELD OBSERVATIONS

In areas outside the former UST excavation, the site is underlain to depths of 10 to 14 feet bgs by dry to damp fill materials consisting of silty sand, sandy silt, gravel/sand/silt mixtures, and clay. There is a layer of slag up to 4-feet thick beneath the site along the southwestern portion of the study area. The slag consists of 0.2- to 0.5-inch diameter, dark gray to black, angular clasts. Native soil appears to be the clayey silts and sands observed from 9 to 12 feet bgs in of most of the borings. Figure 3 presents cross-sections that depict the distribution of the various soil types in the southwestern portion of the study area. The locations of Sections AA', BB', and CC' are shown as a dashed line in Figure 2.

Soil inside the former UST excavation appears to consist of dry sandy gravel pit run material. A thin layer of perched groundwater was noted at approximately 16.5 feet bgs near the base of the pit run backfill in boring MW-1 during drilling. Later measurement of the depth to groundwater, after monitoring well MW-1 had been constructed and groundwater levels allowed to equilibrate, indicated that groundwater is approximately 10 feet bgs in the vicinity of MW-1. Farther to the south within the former excavation in boring B-9 (Figure 2), no groundwater was detected. This suggests that the northeastern corner of the backfilled excavation, which was excavated to greater depths than elsewhere in the excavation, behaves as a "sump" into which water in the backfilled excavation drains and collects.

A 1 to 2-inch thick layer of perched groundwater was detected during drilling along the base of the slag layer in borings B-3, B-6, B-8, B-11, B-12, and in the boring for monitoring well MW-2. Monitoring well MW-2, which was drilled to a depth of approximately 30 feet and screened to prevent influx of water collected in excavation backfill, was dry when checked for water three days after the well had been constructed. The well remained dry when checked one week later. The absence of groundwater at 30 feet bgs suggests that, aside from a localized area of perched groundwater in the excavation backfill and a thin (1 to 2 inches) localized zone at the base of the slag fill layer, groundwater in the vicinity of the site is over 30 feet bgs.

4.2 GROUNDWATER ANALYTICAL RESULTS

The groundwater analytical results from the SES investigation are summarized in Table 2 and also in Figure 2. Copies of laboratory reports are presented in Appendix C.

The groundwater sample collected from monitoring well MW-1 contained 3,140 µg/L GRPH, exceeding the 800 µg/L cleanup level. Benzene, toluene, ethylbenzene, and total xylene concentrations were less than their respective cleanup levels. No diesel- or motor oil-range petroleum hydrocarbons were detected in the sample. Naphthalene, detected at a concentration of 19.1 µg/L, was the only SVOC detected in the sample. The naphthalene concentration was less than the 160 µg/L cleanup level. As noted earlier, monitoring well MW-2 was dry.

Groundwater at the site may be limited to the northeastern corner of the former UST hold. Given the apparent absence of groundwater elsewhere (B-9) in the excavation and at depth (MW-2), it appears that the groundwater encountered in monitoring well MW-1 is a localized occurrence. Since the UST system excavation was deepest in the vicinity of monitoring well MW-1, water infiltrating the relatively permeable excavation backfill collects at this sump-like location.

4.3 SOIL ANALYTICAL RESULTS

The soil sample collected from 16 feet bgs in boring B-7 contained 364 mg/kg GRPH, exceeding the 30 mg/kg cleanup level (Table 3, Figure 2). The soil sample also contained benzene (0.208 mg/kg) and xylenes (13.4 mg/kg) in concentrations exceeding their respective cleanup levels. Based on field evidence, the contaminated horizon appears to extend from 15.5 feet bgs to 16 feet bgs. The presence of GRPH, benzene, and xylenes in concentrations greater than their respective cleanup levels in this soil sample indicates that not all soil requiring remediation (soil containing GRPH and/or BTEX in concentrations exceeding cleanup levels but with concentrations sufficiently low to make in-field measurements ineffective) was removed from the area during remediation. Soil samples collected by GeoEngineers (EX-5-6, and EX-6-5) from depths of 5 to 7 feet bgs along the edges of the northeast portion of the UST system excavation, and analyzed for GRPH and BTEX, contained less than detectable concentrations of these contaminants (Table 1 and Figure 2). The depths from which these two samples were collected appear to have been higher in the soil column than the contamination detected at 16 feet bgs in boring B-7.

GRPH and benzene concentrations in soil samples collected from borings placed along the outside edge of the southwestern corner of the former remediation excavation (B-3, B-4, B-5, and B-6) contain GRPH and benzene in concentrations greater than their respective cleanup levels (Table 3, Figure 2). GRPH concentrations in soil samples collected from these borings ranged from less than detection to 338 mg/kg. Benzene concentrations ranged from less than the detection limit to 0.692 mg/kg. In GeoEngineer's compliance samples (EX-13-7, EX-14-7,

EX-23-6, EX-24-5, and EX-25-6) collected from the same area, GRPH concentrations ranged from 6 mg/kg to 6,200 mg/kg, and benzene concentrations ranged from less than 0.06 mg/kg to 3.6 mg/kg. Excavation farther to the southwest along the southwest end of the excavation during the earlier remediation effort was precluded by the presence of a 4-foot-diameter storm sewer main, which crosses the property. No evidence of contamination was noted in soil cores collected from boring B-8, and no samples were submitted for analysis. Based on field evidence and analytical results, the contaminated horizon along the southern edge of the former remediation excavation appears to occur from approximately 3 to 8 feet bgs. In the vicinity of boring B-6, there appear to be two contaminated horizons: one from 3 to 5 feet bgs, and another from 11 to 14 feet bgs.

The soil sample collected from 11 to 12 feet bgs in boring B-11 (located near the property boundary approximately 15 feet southwest of the former UST system excavation wall) contained 0.123 mg/kg benzene, exceeding the cleanup level. This occurrence appears to be related to the deeper contaminated horizon identified in boring B-6.

No evidence of contamination was noted while drilling borings B-2 or MW-2, which are both located on the downgradient side of the 4-foot-diameter storm sewer main. A sample of slag collected from the wet bottom of the slag interval in boring B-12 produced a PID reading of 1,280 ppm equivalent. Analysis of the sample indicates that, while GRPH and BTEX are present (Table 2 and Figure 2), concentrations are less than their respective cleanup levels. The data suggest that contaminated soil does not extend past the storm sewer main.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the information developed during this investigation, it appears that an as-yet-undefined volume of soil along the north-central edge of the former remediation excavation, and along the south-central and southwestern edge of the excavation contain GRPH, benzene, and in one instance, xylenes, in concentrations greater than their respective cleanup levels. Earlier work by GeoEngineers (GeoEngineers, 2004) data suggest that soil (comprising the former bottom of the excavation) in the northwest corner of the UST system excavation remains contaminated with GRPH and some BTEX components. Excavation of affected soil along the southwest side of the excavation during the earlier remediation effort appears to have been precluded by the presence of a buried storm sewer main.

SES recommends excavating GRPH-contaminated soil along the southwestern corner and north-central edge of the former remediation excavation, where GRPH and BTEX were documented to be present during this investigation. Excavation activities would best be supported by an on-site laboratory, which would facilitate decisions regarding the extent of excavating required to bring the site into compliance with MTCA regulations. Based on currently available data, SES estimates that approximately 180 to 200 tons of contaminated soil will require excavation and disposal, and an additional 525 to 550 tons of overlying uncontaminated soil will require excavation and storage on site for later use as backfill.

Prior to excavation, SES will need to coordinate with the City of Everett to shore and excavate under the storm sewer main and along the Broadway right-of-way. The services of a geotechnical/structural engineer will likely be needed to ascertain whether (1) the storm sewer main will require stabilization/shoring while excavating along the southwest end of the former remediation excavation, or (2) removal of contaminated soil from below the sewer on a section-

by-section basis would eliminate the need for shoring, and (3) shoring excavation walls along the Broadway right-of-way would be required.

Perched groundwater in the localized sump-like area in the northeastern corner of the excavation contains 3,140 µg/L GRPH, which exceeds the 800 µg/L cleanup level. Some form of dewatering and treatment will be necessary to bring the site into compliance.

No groundwater was encountered to 30 feet bgs on the southwest side of the former remediation excavation, suggesting that deeper aquifers are unlikely to have been affected by the release. The only groundwater encountered in any of the borings (aside from boring B-1 in which monitoring MW-1 was built) occurred as a 1-to 2-inch thick seam at the bottom of the slag layer encountered in borings on the southwestern portion of the study area.

6.0 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 the Time Oil and its representatives.

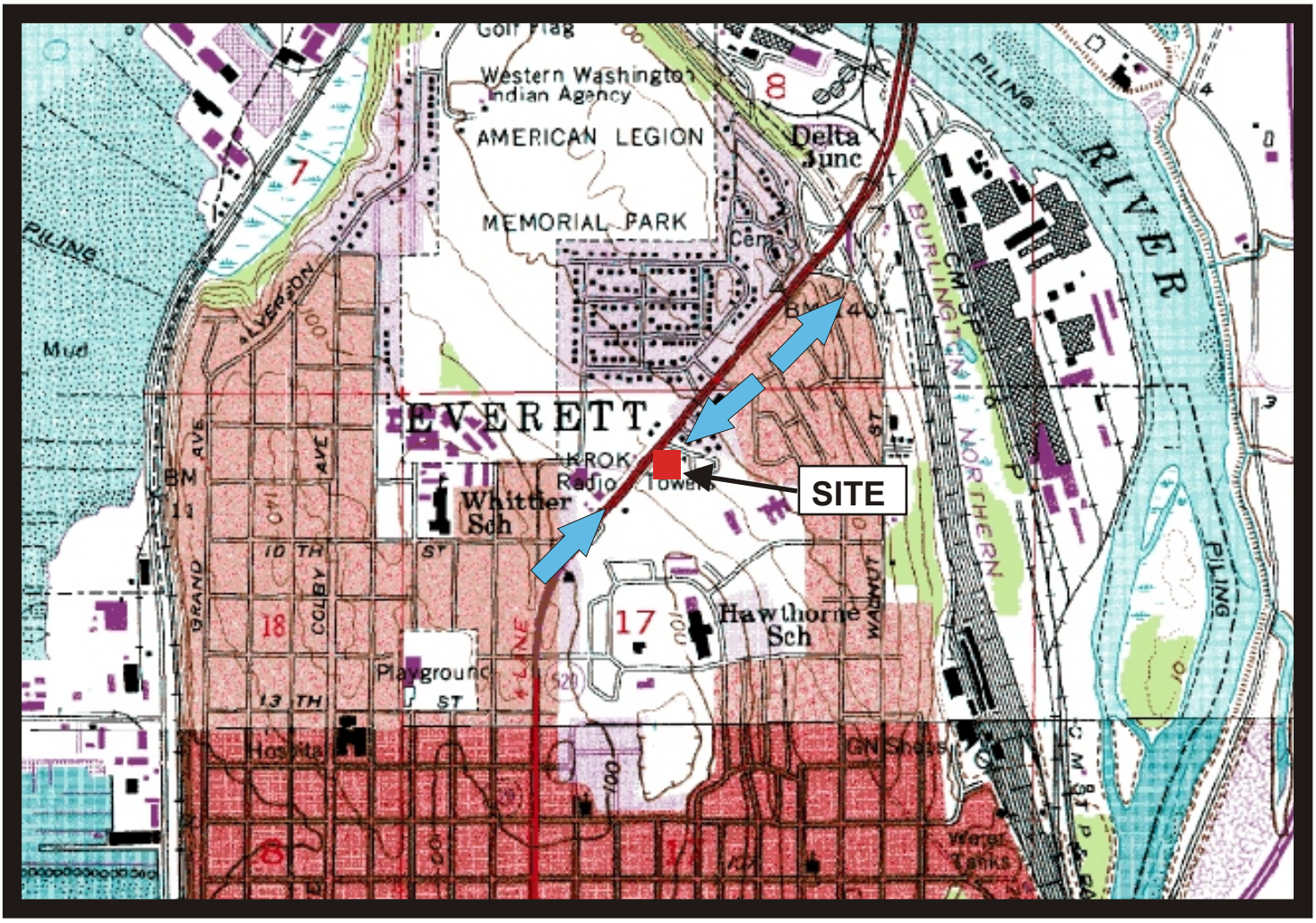
If new information is developed in future site work (which may include excavations, additional borings, or other studies), SES should be contracted to reevaluate the interpretations in this report, and to provide amendments as required.

7.0 REFERENCES

GeoEngineers, March 22, 2004, *UST Removal Site Assessment, Time Oil Facility #01-169*.

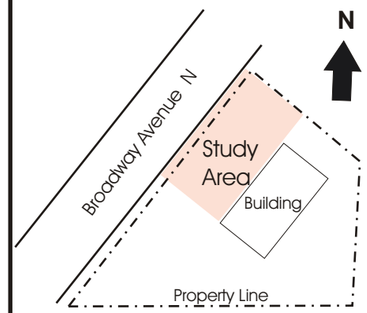
Newcomb, R.C., 1952, *Groundwater Resources of Snohomish County, Washington*, Water Supply Paper No. 1135, 133 pps., 2 plates, 6 tables, 19 figures.

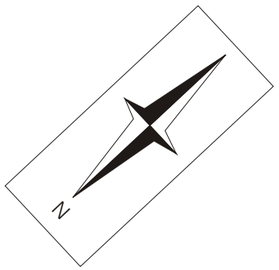
FIGURES



SOUND ENVIRONMENTAL STRATEGIES www.soundenvironmental.com	**Time Oil Facility (#01-169)** **851 Broadway** **Everett, WA**	Date: November 2004 Drawn by: WHR Chk by: BQH SES project No: 440-1 File ID: Figure #1	**FIGURE 1** **SITE LOCATION MAP**

Inset: Site Plan





Soil (mg/kg)	17' bgs	18' bgs
GRPH	32.7	ND
Benzene	ND	ND
Toluene	ND	ND
Ethylbenzene	ND	ND
Xylenes	0.419	ND

Water (ug/L)	
GRPH	3,140
Benzene	0.666
Toluene	0.736
Ethylbenzene	57.9
Xylenes	221.6

Building

Sidewalk

Property Line

EX-6-5 <3/<0.03

MW-1

EX-9-7 <3/<0.03

Asphalt Patch

EX-26-5; <3/0.03

Soil (mg/kg)	12' bgs
GRPH	12.4
Benzene	ND
Toluene	ND
Ethylbenzene	0.209
Xylenes	0.428

EX-11-7 <3/<0.03

EX-25-6 6/0.05

48" Sewer Main

Former Pump Island

Former Distribution Lines

EX-20-17 <3/<0.03

EX-5-6 <3/<0.03

B-7

B-9

EX-22-8 <3/10

B-4

B'

Section BB'

B-5

EX-1-14 120/0.2

Former UST

EX-2-13 12/0.07

Former UST

Former UST

EX-3-13 160/0.2

Former UST

Former Pump Island

EX-24-5 6,200/<3.0

EX-27-9 <3/<0.03

EX-23-6 2,800/3.6

B-3

C'

B-2, No field evidence for contamination

Section CC'

EX-13-17 93/<0.06

Former Distribution Lines

EX-14-7 23/0.2

Asphalt Patch

B-8

A

Section AA'

B-6

MW-2 (B-10) Dry on 10/7/04. No field evidence for contamination

No field evidence for contamination

Water Line

B-11

B

A'

C

B-12

Sidewalk

Study Area

Broadway North

Vacant Property

Soil (mg/kg)	16' bgs
GRPH	364
Benzene	0.208
Toluene	1.51
Ethylbenzene	2.72
Xylenes	13.4

Soil (mg/kg)	5' bgs	6' bgs	7' bgs
GRPH	ND	ND	ND
Benzene	0.053	0.215	0.124
Toluene	ND	ND	ND
Ethylbenzene	ND	ND	ND
Xylenes	ND	0.384	0.305

Soil (mg/kg)	4' bgs	5' bgs	7' bgs
GRPH	ND	ND	10.2
Benzene	0.0597	0.101	0.196
Toluene	ND	ND	ND
Ethylbenzene	ND	0.0719	0.385
Xylenes	ND	0.294	1.72

Soil (mg/kg)	7' bgs	8' bgs
GRPH	64.3	62.5
Benzene	0.628	0.692
Toluene	0.826	ND
Ethylbenzene	1.44	ND
Xylenes	6.47	0.286

Soil (mg/kg)	4' bgs	11.5' bgs	14' bgs
GRPH	18.4	338	101
Benzene	0.256	0.187	0.388
Toluene	ND	0.078	ND
Ethylbenzene	0.314	1.36	0.495
Xylenes	2.01	6.76	1.99

Soil (mg/kg)	12' bgs
GRPH	13
Benzene	0.123
Toluene	0.832
Ethylbenzene	0.112
Xylenes	0.298

Soil (mg/kg)	12' bgs
GRPH	20.6
Benzene	ND
Toluene	ND
Ethylbenzene	0.107
Xylenes	0.120

Legend

- SES Monitoring Well
- SES Soil Boring
- GeoEngineers' Compliance Sample EX-1-1 = Sample Name
- 23/4 GRPH/Benzene Conc. Red where greater than cleanup level
- Inferred Direction of Shallow Groundwater Flow Based on Topography

0 10 20 40

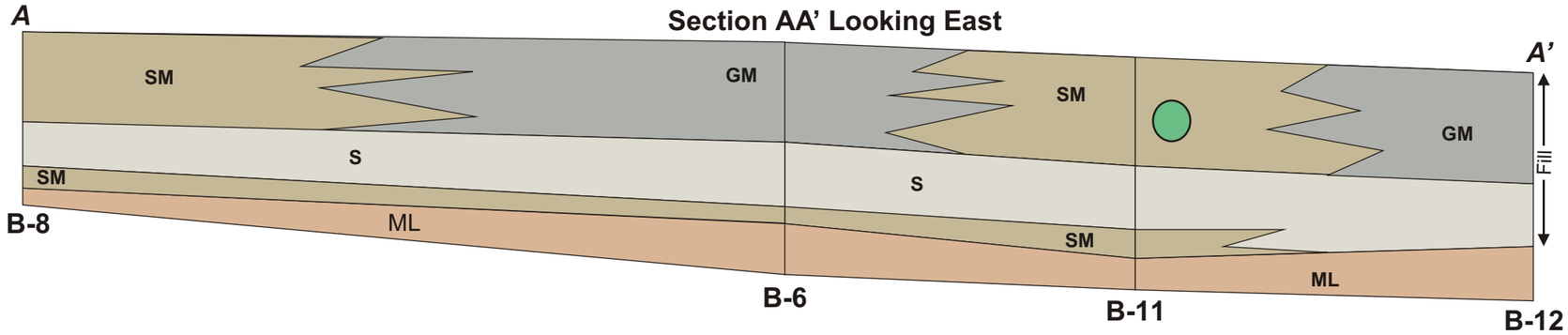
SCALE (FEET)

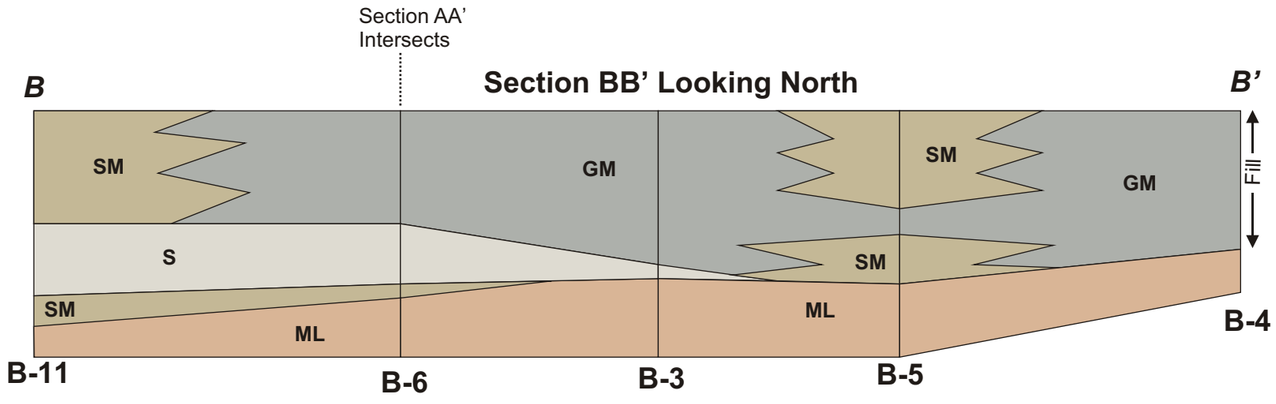
SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

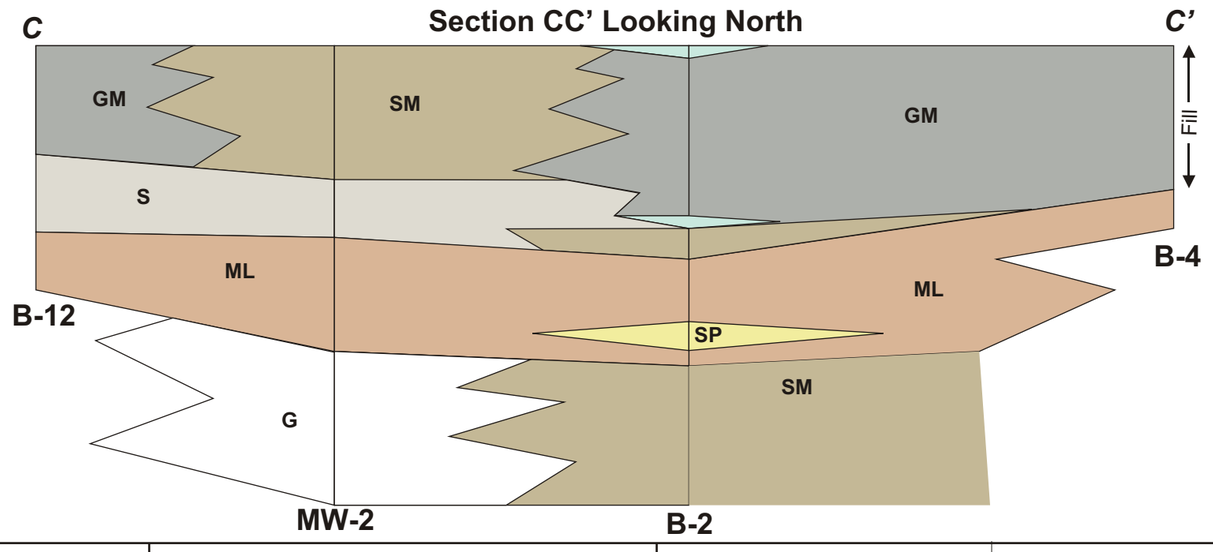
Time Oil Facility 01-169
851 Broadway
Everett, WA

Date: 10/04
Drawn by: WHR
Chk by: BQH
SES project No:440-2
Fiel ID: Figure 2

FIGURE 2
SITE PLAN
(NW Corner of Site)







LEGEND

S	Slag
GM	Gravel-sand-silt mixtures
SM	Silty sands, and sandy silts
ML	Clayey silts and sands
CL	Clay
SP	Gravelly sands
G	Gravel reported by driller, no core
	48" Concrete Sewer Main

0
5
10
15

VERTICAL SCALE (Feet)

0 10 20

HORIZONTAL SCALE (Feet)

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Time Oil Facility 01-169
851 Broadway
Everett, WA

Date: October, 2004
Drawn by: WHR
Chk by:BQH
SES project No: 440-2
File ID: Figure 3

FIGURE 3

GEOLOGIC CROSS SECTIONS

TABLES

Table 1
Summary of Chemical Analytical Results - Soil[1]
Time Oil Facility #01-169, Everett, Washington

Soil Sample Number	Date Sampled	Depth (feet)	GRPH[2] (mg/kg)	Benzene[3] (mg/kg)	Toluene[3] (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes[3] (mg/kg)	Methyl Tert-Butyl Ether[3] (mg/kg)	1,2-Dichloroethane (EDC)[4] (µg/kg)	1,2-Dibromoethane (EDB)[4] (µg/kg)	Naphthalene[5] (mg/kg)	Lead[5] (mg/kg)
EX-1-14	12/02/03	14	120	0.2	< 0.1[7]	1.4	10	–	–	–	–	–
EX-2-13	12/02/03	13	12	0.07	0.1	0.3	2.3	–	–	–	–	–
EX-3-13	12/02/03	13	160	0.2	0.1	2.0	12	–	–	–	–	–
EX-4-13	12/02/03	13	4	< 0.03	< 0.05	0.1	0.3	–	–	–	–	< 4.2[7]
EX-5-6	12/02/03	6	< 3	< 0.03	< 0.05	< 0.05	< 0.2	–	–	–	–	–
EX-6-5	12/02/03	5	< 3	< 0.03	< 0.05	< 0.05	< 0.2	–	–	–	–	–
EX-9-7	12/02/03	7	< 3	< 0.03	< 0.05	< 0.05	< 0.2	–	–	–	–	–
EX-11-7	12/02/03	7	< 3	< 0.03	< 0.05	< 0.05	< 0.2	–	–	–	–	–
EX-12-7	12/02/03	7	69	0.3	< 0.05	0.3	2.1	–	–	–	–	–
EX-13-7	12/02/03	7	93	< 0.06	0.1	0.6	4.4	–	–	–	–	–
EX-14-7	12/02/03	7	23	0.2	1.4	0.4	2.0	–	–	–	–	–
EX-17-3	12/02/03	3	3,900	< 3.0[7]	10	22	150	–	–	–	–	–
EX-18-3	12/02/03	3	4,700	< 3.0[7]	50	39	220	–	–	–	–	–
EX-19-3C[8]	12/02/03	3	990	0.8	3.4	9.0	51	–	–	–	–	–
EX-20-15[9]	12/02/03	15	14,000	42	33	200	1,100	< 20[7]	< 1,100[7]	< 1,100[7]	35	–
EX-21-17	12/02/03	17	< 3	< 0.03	< 0.05	< 0.05	< 0.2	< 0.1	< 11	< 11	< 0.02	–
EX-22-8	12/05/03	8	< 3	10	< 0.05	< 0.05	< 0.2	–	–	–	–	–
EX-23-6	12/05/03	6	2,800	3.6	33	30	150	–	–	–	–	–
EX-24-5[9]	12/05/03	5	6,200	< 3.0[7]	7.1	68	320	–	–	–	–	–
EX-25-6	12/05/03	6	6	0.05	< 0.05	< 0.05	0.4	–	–	–	–	–
EX-26-5	12/05/03	5	< 3	< 0.03	< 0.05	< 0.05	< 0.2	–	–	–	–	–
EX-27-9[10]	12/05/03	9	< 3	< 0.03	< 0.05	< 0.05	< 0.2	–	–	–	–	–
DSP-1	12/02/03	1	310	0.3	0.6	2.8	18	–	–	–	–	< 4.7[7]
MTCA[11] Method A cleanup levels			100/30[12]	0.03	7	6	9	100	N/L[13]	5	5	250

1. Chemical analyses conducted by CCI Analytical Laboratories of Everett.
2. GRPH = Gasoline-range petroleum hydrocarbons by Northwest Method NWTPH-Gx.
3. Benzene, toluene, ethylbenzene, total xylenes, and methyl tert-butyl ether as analyzed by EPA Method 8021.
4. EDB and EDC analyzed by EPA 8260.
5. Naphthalene analyzed by EPA 8270 SIM. Expanded napthalenes analytical data is presented in Attachment D.
6. Lead analyzed by EPA 6010.
7. Laboratory reporting limits are increased because of sample dilution during analysis.
8. Composite sample collected below western fuel dispenser island.
9. Volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH) analyses by WDOE-VPH and WDOE-EPH, respectively. VPH and EPH analytical results are presented in Attachment D.
10. Sample collected from overexcavation completed beyond sample EX-19-3C.
11. MTCA = Washington State, Model Toxics Control Act, Method A Cleanup levels.
12. 100 mg/kg when benzene is not present and 30 mg/kg when benzene is present.
13. MTCA Method A cleanup level for EDC is not available.

mg/kg = milligrams per kilogram. µg/kg = micrograms per kilogram. – = not analyzed.

Bold font indicates soil samples from areas of excavation with total petroleum hydrocarbon concentrations exceeding site-specific cleanup value of 3,176 mg/kg.

Red indicates concentration exceeding MTCA Method A cleanup level.

Table data taken from *UST Removal Site Assessment* (GeoEngineers, March 22, 2004).

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Table 2
Summary of Analytical Results – Groundwater (µg/L)
Time Oil Facility #01-169
851 Broadway, Everett, Washington

Soil Sample Number	MTCA Method A Cleanup Levels	MW-1
Date Sampled		10/07/04
Depth (feet)		(ug/L)
Benzene	5	0.666
Toluene	1,000	0.736
Ethylbenzene	700	57.9/41.1
Total Xylenes	1,000	221.6/171
TPH-G	800/1,000	3,140
TPH-D	500	ND
TPH-Motor Oil	500	ND
n-Butylbenzene		27.2
Isopropylbenzene		11.5
Naphthalene	160	19.1
n-Propylbenzene		48.8
1,2,4-Trimethylbenzene		316
1,3,5-Trimethylbenzene		107
Semi-volatile Organics		ND
Lead	15	0.00109

Chemical analyses conducted by North Creek Analytical laboratory.
TPH-G = gasoline-range petroleum hydrocarbons by Northwest Method NWTPH-Gx.
TPH-D =diesel-range petroleum hydrocarbons by Northwest Method NWTPH-Dx.
Benzene, toluene, ethylbenzene, total xylenes as analyzed by EPA Method 8021.
MTCA = Washington State, Model Toxics Control Act, Method A Cleanup levels.
Red indicates concentration exceeding MTCA Method A cleanup level.
µg/L = micrograms per liter

SOUND ENVIRONMENTAL STRATEGIES
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Table 3
Summary of Analytical Results – Soil
Time Oil Facility #01-169
851 Broadway, Everett, Washington

Soil Sample Number	Date Sampled	Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	TPH-G (mg/kg)
B1-17	10/06/04	17	ND	ND	ND	0.419	32.7
B1-18	10/06/04	18	ND	ND	ND	ND	ND
B3-7	10/06/04	7	0.628	0.0826	1.44	6.47	64.3
B3-8	10/06/04	8	0.692	ND	ND	0.286	62.5
B4-5	10/06/04	5	0.053	ND	ND	ND	ND
B4-6	10/06/04	6	0.215	ND	ND	0.384	ND
B4-7	10/06/04	7	0.124	ND	ND	0.305	ND
B5-4	10/06/04	4	0.0597	ND	ND	ND	ND
B5-5	10/06/04	5	0.101	ND	0.0719	0.294	ND
B5-7	10/06/04	7	0.196	ND	0.385	1.72	10.2
B6-4	10/06/04	4	0.256	ND	0.314	2.01	18.4
B6-11.5	10/06/04	11.5	0.187	0.0780	1.36	6.76	338
B6-14	10/06/04	14	0.388	ND	0.495	1.99	101
B-7-16	10/07/04	16	0.208	1.51	2.72	13.4	364
B-9-12	10/07/04	12	ND	ND	0.209	0.428	12.4
B11-12	10/07/04	12	0.123	0.0832	0.112	0.298	13.0
B12-12	10/07/04	12	ND	ND	0.107	0.120	20.6
MTCA Method A cleanup levels			0.03	7	6	9	100/30[a]

Chemical analyses conducted by North Creek Analytical (NCA)
Benzene, toluene, ethylbenzene, total xylenes analyzed by EPA Method 8021.
MTCA = Washington State, Model Toxics Control Act, Method A Cleanup levels.
TPH-G = petroleum hydrocarbons as gasoline by Northwest Method NWTPH-Gx.
TPH-Dx = petroleum hydrocarbons as diesel by Northwest Method NWTPH-Dx.
mg/kg = micrograms per kilogram
Red indicates concentration exceeding MTCA Method A cleanup level.
[a]100 mg/kg when benzene is not present and 30 mg/kg when benzene is present.

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 drilling program, the public underground utilities alert service was notified of drilling 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. Additionally a private locating service, Locating, Inc. was subcontracted by SES to check for on-site utilities and to clear each proposed drilling location.

A.3 DRILLING AND MONITORING WELL INSTALLATION

Borings and monitoring well installations were completed by ESN, of Olympia, Washington. Drilling procedures were as follows:

- Borings were completed using a combination hollow-stem auger/geoprobe direct push drill rig.

- Tools were cleaned before beginning each boring by following the decontamination procedures described in Section A.5.

- During drilling, soil cores 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 recovered soil core was divided and a small portion was placed in a plastic bag with a small amount of water to visually assess the sample for the presence of stains and/or chemical films. Intervals selected for potential laboratory chemical analysis were left undisturbed and handled as described in Section A.4.

- Soil characteristics including texture, color, hardness, and moisture content were recorded on boring logs. Soil 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 sampler was opened longitudinally and the 24 and 48-inch plastic sample sleeves containing the undisturbed soil samples were extracted using decontaminated stainless steel sampling tools.

Soil was collected from selected areas throughout the 24 and 48 inch core run, and placed into laboratory-prepared 4 oz. glass sample jars. Each soil sample container was labeled as detailed in Section A.6.4, and recorded on the Chain-of-Custody form (see 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 project laboratory.

All sampling equipment was decontaminated, as detailed in Section A.5.

A.4.2 Groundwater Samples

Groundwater samples were collected using a peristaltic pump with dedicated tubing to prevent cross-contamination. Prior to the collection of groundwater samples, each monitoring well was purged of approximately three well volumes of water to ensure that the samples were representative of ambient conditions. Purge water was poured into a 10-gallon drum, and stored pending disposal. Water samples were collected directly from the PVC tubing output form the pump, and placed into appropriate laboratory-prepared glass containers, which were labeled as described in Section A.6.4 and placed into a chilled cooler maintained at 4 degrees Centigrade or lower until delivered to the project laboratory. Groundwater sample custody was documented as described in Section A.6.3.

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 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 potentially dangerous wastes, including gloves, samplers, sleeves, and wash water were placed in 10-gallon drums and left on site pending analysis. These materials can be disposed of during the remediation of the site, or alternatively can be picked up by a waste disposal company.

A.6 FIELD DOCUMENTATION

Physical parameters were documented throughout the project. Documentation included field notebooks, boring logs, hydrologic data sheets, sampling field data sheets, Chain-of-Custody forms, and sample labels. Each of the forms of documentation is described in detail below.

A.6.1 Field Documentation

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

- Date of entry;
- Purpose of sampling;
- Description of sample(s);
- Number and size of sample(s) taken;
- Description of sampling point(s);
- Date and time of sample collection;
- Sample identification number(s);
- References, such as maps or photographs of the site;
- Written notes of field observations; and
- Any field measurements, such as pH, temperature, 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. Field personnel logged and signed data entries. 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, textures, grain sizes, colors, hardness, moisture, and other properties noted in the field. Soil types were classified using 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 well log forms 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. On this project, SES' project geologist entered standard sample information on the project Chain-of-Custody form at the time each sample was collected.

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, analyte preservative(s), if any, and the sampler's initials.

A.7 ANALYTICAL LABORATORY TESTING PROGRAM

Samples intended for chemical analysis were submitted to [Lab name] of [city], 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 was 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 and all instrument calibrations were acceptable.
- All 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
Water appears to be in excavation "bath tub." Sandy soil below fill is not saturated.
Sheen on water in washtub after cleaning auger.

Drilling Co./Driller:	ESN / Don
Drilling Method:	Combo
Location:	15' N, 12' W from NW corner
Surface Condition:	Asphalt
Total Depth (ft) :	20
First GW Depth (ft) :	16

Moisture Content:
Dry = Dry, Dp = Damp, Mst = 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								Auger, no sample in backfill to 16 feet		
1										
2										
3										
4										
5										
6										
7										
8							Fill			
9										
10									▼	
11								(Water at 10.5 feet bgs after well built)		
12										
13										
14										
15										
16									▽	
							GP	Wet, gray, sandy GRAVEL backfill, moderate hydrocarbon odor		
17			100		B-1-17			Damp to moist, silty, well-sorted, medium to fine-grained SAND, 1 to 2% gravel, weak hydrocarbon odor		
18					B-1-18		SM			
19			100		B-1-19			Monitoring well installed as depicted above right, using 2-inch diameter PVC, 0.010 slot screen, 3-20 silica sand, and 1-3 bentonite chips.		
20			100		B-1-20					
21								Boring terminated at 20 feet below ground surface.		

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Everett Facility 01-169
851 North Broadway
Everett, Washington

Date Started: 10/6/2004
Date Finished: 10/6/2004
Logged By: W.H. Rodgers
Chk By: B.Q. Hyde
SES Project No.: 0440-002
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\440-2 TIME OIL EVERETT BORING LOGS.GPJ

BORING LOG
MW-1 (B-1)

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Don
Drilling Method:	Probe
Location:	9' N, 47' W from SW corner
Surface Condition:	Asphalt
Total Depth (ft) :	29
First GW Depth (ft) :	

Moisture Content:
Dry = Dry, Dp = Damp, Mst = 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							CL	Asphalt, gravel, sand FILL Moist, medium dense, gray-blue CLAY, plastic.		
2		3.7	100					Damp, silty, gray, well-sorted, fine to medium-grained SAND, medium dense with 10% gravel clasts to 1 inch, no hydrocarbon odor		
3										
4								Gravel ends at 3.5 feet		
5		1.8								
6			100				SM			
7										
8										
9								Pot shard - fill? wet from 7 to 8 feet, dry below		
10		6	100							
11										
12					No Samples		CL	Moist, blue-gray, plastic CLAY		
13		6.3					SM	Damp, dark gray-brown, plastic CLAY, no hydrocarbon odor Damp, gray, silty, well-sorted, medium-grained, dense SAND (wet 13 to 13.2 feet)		
14			100							
15								Damp, dense, plastic, silty CLAY, gray-green at 13.8 feet grades to buff at 16 feet, mottled oxide/buff 14 to 16 feet, no hydrocarbon odor		
16							CL-ML			
17								Damp, grades to buff, sandy, silty CLAY, oxide/buff mottling, dense, hard, no hydrocarbon odor		
18		0	100							
19							SP	Damp, gray, gravelly SAND, angular gravel to .25 inch, sand well-sorted, medium-grained grades to silty sand at 24 feet, no hydrocarbon odor		
20							SW-SM	Damp (moist to wet), gray, silty, clayey SAND		
21								Dry, buff, silty, well-sorted, fine-grained SAND with trace gravel, dense, no hydrocarbon odor		
22			100							
23										
24										
25							SM			
26										
27			100							
28										
29										
30								Boring terminated at 29 feet below ground surface.		

SOUND ENVIRONMENTAL STRATEGIES
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Everett Facility 01-169
851 North Broadway
Everett, Washington

Date Started: 10/6/2004
Date Finished: 10/6/2004
Logged By: W.H. Rodgers
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SES Project No.: 0440-002
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\440-2 TIME OIL EVERETT BORING LOGS.GPJ

BORING LOG
B-2

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Don
Drilling Method:	Combo
Location:	50' W of building, 21' N of SW corner
Surface Condition:	Asphalt
Total Depth (ft) :	16
First GW Depth (ft) :	

Moisture Content:
Dry = Dry, Dp = Damp, Mst = 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							Fill	Gray fill with asphalt		
1					B-3-1			Damp, gray, silty SAND with gravel to 1 inch		
2			100		B-3-2					
3		0			B-3-3					
4		6			B-3-4			weak hydrocarbon odor at 3 to 4 feet		
5		0			B-3-5		SM			
6		0	100		B-3-6					
7		25			B-3-7					
8		30			B-3-8			darker than 6 to 7 foot interval, very faint to no hydrocarbon odor (moderate hydrocarbon odor from 7 to 8 feet)		
9		20								
10		3	100				Fill	Damp, coarse, black slag, no hydrocarbon odor		
11								Damp, gray-blue, very fine-grained, sandy SILT, no hydrocarbon odor, grades to buff clay		
12							ML			
13								2-inch gravel seam		
14			100					Buff, plastic, hard, silty CLAY		
15							CL-ML			
16								no hydrocarbon odor Boring terminated at 16 feet below ground surface.		
17										
18										
19										
20										

SOUND ENVIRONMENTAL STRATEGIES
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Everett Facility 01-169
851 North Broadway
Everett, Washington

Date Started: 10/6/2004
Date Finished: 10/6/2004
Logged By: W.H. Rodgers
Chk By: B.Q. Hyde
SES Project No.: 0440-002
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\440-2 TIME OIL EVERETT BORING LOGS.GPJ

BORING LOG
B-3

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Don
Drilling Method:	Combo
Location:	29' W of building, 14' N of SW corner
Surface Condition:	Asphalt
Total Depth (ft) :	12
First GW Depth (ft) :	

Moisture Content:
Dry = Dry, Dp = Damp, Mst = 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							Fill	Gravel fill, asphalt		
1								Damp, buff to blue-gray, silty SAND with 10% gravel		
2			100							
3										
4					B-4-4					
5		3			B-4-5		SP-SM			
6		10	100		B-4-6					
7		6			B-4-7					
8		10						Wet		
9								Wet		
10			100					Moist, blue-gray, sandy, clayey SILT, semi-plastic, 10% gravel to 0.5 inches		
11							ML			
12								Boring terminated at 12 feet below ground surface.		
13										
14										
15										
16										
17										
18										
19										
20										

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

Everett Facility 01-169
851 North Broadway
Everett, Washington

Date Started: 10/6/2004
Date Finished: 10/6/2004
Logged By: W.H. Rodgers
Chk By: B.Q. Hyde
SES Project No.: 0440-002
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\440-2 TIME OIL EVERETT BORING LOGS.GPJ

BORING LOG
B-4

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Don
Drilling Method:	Combo
Location:	13' W, 1' N of B4
Surface Condition:	Asphalt
Total Depth (ft) :	16
First GW Depth (ft) :	

Moisture Content:
Dry = Dry, Dp = Damp, Mst = 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							Fill	Asphalt, gravel		
1								Damp, blue-gray, silty, fine to medium-grained, well-sorted SAND		
2			100							
3		3					SM	3 to 6 feet - weak hydrocarbon odor		
4					B-5-4					
5		2.5			B-5-5			Wet, 5 to 6.5 feet		
6		0	100		B-5-6			6 to 7 feet - very faint hydrocarbon odor		
7		0			B-5-7					
8		27					Fill	Damp, dark gray, clayey slag, no hydrocarbon odor		
9							SM	Damp, blue-gray, silty, fine-grained, well-sorted SAND, no hydrocarbon odor		
10		8	100							
11								pot shard		
12								Damp to moist, gray to brown, clayey, silty SAND with trace gravel, no hydrocarbon odor Wet 12.1 to 12.3 feet		
13										
14		3.5	100				ML			
15										
16								Boring terminated at 16 feet below ground surface.		
17										
18										
19										
20										

SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

Everett Facility 01-169
851 North Broadway
Everett, Washington

Date Started: 10/6/2004
Date Finished: 10/6/2004
Logged By: W.H. Rodgers
Chk By: B.Q. Hyde
SES Project No.: 0440-002
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\440-2 TIME OIL EVERETT BORING LOGS.GPJ

BORING LOG
B-5

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Don
Drilling Method:	Combo
Location:	58' W of building 24' N of SW corner
Surface Condition:	Asphalt
Total Depth (ft) :	16
First GW Depth (ft) :	

Moisture Content:
Dry = Dry, Dp = Damp, Mst = 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								Asphalt		
1								Damp to moist, gray, silty, gravelly SAND		
2			100							
3		10								
4		2.5			B-6-4		SW-SM			
5		0								
6		1	100							
7		0								
8		0						Wet, black slag, very strong hydrocarbon odor		
9		0					Fill			
10			100							
11		800								
12		85			B-6-11.5		SM	Globules in sheen test at 11.3 to 11.5 feet Damp, organic, silty, brown SAND, very faint hydrocarbon odor		
13		300						Damp, plastic, gray-oxide orange mottled, clayey SILT, weak to moderate hydrocarbon odor		
14			100		B-6-14		ML			
15										
16		8						Boring terminated at 16 feet below ground surface.		
17										
18										
19										
20										

SOUND ENVIRONMENTAL STRATEGIES
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Everett Facility 01-169
851 North Broadway
Everett, Washington

Date Started: 10/6/2004
Date Finished: 10/6/2004
Logged By: W.H. Rodgers
Chk By: B.Q. Hyde
SES Project No.: 0440-002
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\440-2 TIME OIL EVERETT BORING LOGS.GPJ

BORING LOG
B-6

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Don
Drilling Method:	Combo
Location:	26' N, 33' W of NW corner
Surface Condition:	Asphalt
Total Depth (ft) :	20
First GW Depth (ft) :	

Moisture Content:
Dry = Dry, Dp = Damp, Mst = 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								Asphalt, gravel		
1								Damp, gray, very silty, fine to medium-grained, well-sorted SAND, medium dense, <10% gravel to 1", no hydrocarbon odor		
2			100							
3										
4										
5		6					SM			
6		0	100					Same as above, but moist to wet with lenses plant material, 30% gravel		
7								Very faint hydrocarbon odor 7 to 8 feet		
8										
9										
10			100				ML	Wet, brown, clayey SILT, weak hydrocarbon odor		
11										
12							CL	Damp, gray-green, silty CLAY, mottled with oxide spots, plastic, no hydrocarbon odor		
13										
14		0	100					Damp, gray, silty, fine-grained, well-sorted SAND, no hydrocarbon odor to 15.7 feet		
15										
16		110			B-7-16			Moist		
17		27					SM	Buff, slightly silty, fine to medium-grained SAND with scattered gravel clasts to 1.3"		
18			100							
19										
20		20								
21								Boring terminated at 20 feet below ground surface.		

SOUND ENVIRONMENTAL STRATEGIES
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Everett Facility 01-169
851 North Broadway
Everett, Washington

Date Started: 10/7/2004
Date Finished: 10/7/2004
Logged By: W.H. Rodgers
Chk By: B.Q. Hyde
SES Project No.: 0440-002
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\440-2 TIME OIL EVERETT BORING LOGS.GPJ

BORING LOG
B-7

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Don
Drilling Method:	Combo
Location:	57' W of building 14' S of NW corner
Surface Condition:	Asphalt
Total Depth (ft) :	12
First GW Depth (ft) :	

Moisture Content:
Dry = Dry, Dp = Damp, Mst = 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								Asphalt, gravel Damp, tan, slightly silty, fine-grained SAND with sporadic gravel to 0.75 inches, mottled with oxide stain, no hydrocarbon odor		
1–2			85				SW-SM			
2–3										
3–4										
4–5										
5–6										
6–7			75				Fill	Black, angular slag to 0.75 inches, dry to 10 feet, wet at 10 to 10.2 feet, no hydrocarbon odor		
7–8										
8–9										
9–10		0								
10–11			100				SP-SM	Damp, gray, silty SAND, no hydrocarbon odor		
11–12							ML	Damp, gray, clayey SILT with oxide mottling		
12–13								Boring terminated at 12 feet below ground surface.		
13–14										
14–15										
15–16										
16–17										
17–18										
18–19										
19–20										

SOUND ENVIRONMENTAL STRATEGIES
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Everett Facility 01-169
851 North Broadway
Everett, Washington

Date Started: 10/7/2004
Date Finished: 10/7/2004
Logged By: W.H. Rodgers
Chk By: B.Q. Hyde
SES Project No.: 0440-002
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\440-2 TIME OIL EVERETT BORING LOGS.GPJ

BORING LOG
B-8

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Don
Drilling Method:	Combo
Location:	41' N, 31' W of SW corner
Surface Condition:	Asphalt
Total Depth (ft) :	12
First GW Depth (ft) :	

Moisture Content:
Dry = Dry, Dp = Damp, Mst = 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							Fill	Asphalt, gravel		
1								Tank excavation backfill, gravelly SAND, dry to 9.5 feet, moist from 9.5 to 10.8 feet, no hydrocarbon odor		
2			100							
3										
4										
5										
6			100				SP			
7										
8										
9										
10			100							
11		18					CL-ML	Damp, plastic, medium-gray to gray-green with oxide mottling, silty CLAY; very faint hydrocarbon odor at 11.5 feet		
12					B-9-12			Boring terminated at 12 feet below ground surface.		
13										
14										
15										
16										
17										
18										
19										
20										

SOUND ENVIRONMENTAL STRATEGIES
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Everett Facility 01-169
851 North Broadway
Everett, Washington

Date Started: 10/7/2004
Date Finished: 10/7/2004
Logged By: W.H. Rodgers
Chk By: B.Q. Hyde
SES Project No.: 0440-002
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\440-2 TIME OIL EVERETT BORING LOGS.GPJ

BORING LOG
B-9

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Don
Drilling Method:	Combo
Location:	60' W of building N of SW corner 7'
Surface Condition:	Asphalt
Total Depth (ft) :	30
First GW Depth (ft) :	

Moisture Content:
Dry = Dry, Dp = Damp, Mst = 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							Fill	Asphalt, gravel		
1–8			100				SM	Gray-green, silty, fine-grained, well-sorted SAND, damp, grading to moist with depth, no hydrocarbon odor		
6–8			100							
8–12			100				Fill	Black, angular, slag FILL, wet from 12 to 12.2 feet, no hydrocarbon odor to 12 feet		
12–16			100				CL-ML	Mottled, gray, oxide, silty CLAY, plastic, dense, mixed with well-sorted, fine-grained sand from 15.8 to 16 feet, damp grading to almost dry at 16 feet, no hydrocarbon odor		
16–30		0	0				GP-GC	Augered from 16 to 30 feet, driller reports gravel layer after 20 feet, harder drilling to 30 feet. Driller tried to end sand at 14 feet but wet sand pulled up to 13 feet as auger pulled out.		
16–30								Monitoring well installed as depicted above right, using 2-inch diameter PVC, 0.010 slot screen, 13-30 silica sand, and 1-13 bentonite chips.		
30–32								Boring terminated at 30 feet below ground surface.		

SOUND ENVIRONMENTAL STRATEGIES
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Everett Facility 01-169
851 North Broadway
Everett, Washington

Date Started: 10/7/2004
Date Finished: 10/7/2004
Logged By: W.H. Rodgers
Chk By: B.Q. Hyde
SES Project No.: 0440-002
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\440-2 TIME OIL EVERETT BORING LOGS.GPJ

BORING LOG
MW-2 (B-10)

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Don
Drilling Method:	Combo
Location:	12' W, 8.8' S of B6
Surface Condition:	Asphalt
Total Depth (ft) :	16
First GW Depth (ft) :	

Moisture Content:
Dry = Dry, Dp = Damp, Mst = 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								Concrete		
1								Damp to dry, tan, silty, fine-grained, well-sorted SAND, 10% gravel to 1.75 inches, no hydrocarbon odor		
2			30				SW-SM			
3										
4										
5										
6			100				ML	Damp, gray, fine-grained, sandy SILT with clay, slightly plastic, wet from 6 to 6.8 feet, no hydrocarbon odor		
7										
8								Dry, black, angular slag, no hydrocarbon odor		
9										
10			100				Fill			
11										
12		25			B-11-12					
13		0	100				SP-SM	Damp, gray, plastic, clayey, silty SAND, no hydrocarbon odor. Wet from 11.5 to 12.5 feet with moderate hydrocarbon odor		
14		0								
15			0					no recovery		
16								Boring terminated at 16 feet bgs.		
17										
18										
19										
20										

SOUND ENVIRONMENTAL STRATEGIES
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Everett Facility 01-169
851 North Broadway
Everett, Washington

Date Started: 10/7/2004
Date Finished: 10/7/2004
Logged By: W.H. Rodgers
Chk By: B.Q. Hyde
SES Project No.: 0440-002
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\440-2 TIME OIL EVERETT BORING LOGS.GPJ

BORING LOG
B-11

Log of Exploratory Boring:

Notes

Drilling Co./Driller:	ESN / Don
Drilling Method:	Combo
Location:	23' S, 12' W of B6
Surface Condition:	Asphalt
Total Depth (ft) :	16
First GW Depth (ft) :	

Moisture Content:
Dry = Dry, Dp = Damp, Mst = 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								Concrete		
1								Damp to dry, tan, silty, fine-grained, well-sorted SAND, 10% gravel to 1.75 inches, no hydrocarbon odor		
2			80				SW-SM			
3										
4										
5										
6			100				ML	Damp, gray, fine-grained, sandy SILT with clay, slightly plastic, no hydrocarbon odor Wet from 6 to 6.8 feet		
7										
8								Dry, black, angular slag, no hydrocarbon odor		
9										
10			75				Fill			
11										
12		80			B-12-12			Wet from 11.5 to 12.5 feet with moderate hydrocarbon odor		
13							SW-SM	Damp, gray, plastic, clayey, silty SAND, no hydrocarbon odor		
14			0					no recovery		
15										
16								Boring terminated at 16 feet below ground surface.		
17										
18										
19										
20										

SOUND ENVIRONMENTAL STRATEGIES
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Everett Facility 01-169
851 North Broadway
Everett, Washington

Date Started: 10/7/2004
Date Finished: 10/7/2004
Logged By: W.H. Rodgers
Chk By: B.Q. Hyde
SES Project No.: 0440-002
File ID.: C:\PROGRAM FILES\GINT\PROJECTS\440-2 TIME OIL EVERETT BORING LOGS.GPJ

BORING LOG
B-12

APPENDIX C
Laboratory Reports

www.ncalabs.com

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
425.420.9200 fax 425.420.9210
Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588
Anchorage 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119
907.563.9200 fax 907.563.9210

22 November 2004

Bill Rodgers
Sound Environmental Strategies
2400 Airport Way South, Suite 200
Seattle, WA/USA 98134-2020

RE: Time Oil Everett

Enclosed are the results of analyses for samples received by the laboratory on 10/08/04 16:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Amar Gill
Project Manager

CASE NARRATIVE for B4J0410

Client: Sound Environmental Strategies
Project Manager: Bill Rodgers
Project Name: Time Oil Everett
Project Number: 440-2

1.0 DESCRIPTION OF CASE

One (1) water and Four (4) soil samples were submitted for the analysis of:

- Gasoline Range Hydrocarbons and BTEX by NWTPH-G and EPA 8021B
- Semivolatile Petroleum Products by NWTPH-Dx
- Total Metals by EPA 6000/7000 Series Methods
- Volatile Organic Compounds by EPA Method 8260B
- Semivolatile Organic Compounds by EPA Method 8270C

2.0 COMMENTS ON SAMPLE RECEIPT

The samples were received 8th October 2004 at a temperature of 5.4°C and logged in 12th October 2004. Project samples B-7-16 and B-9-12 were received in pre-tared 40mL voa vials. These vials were weighed in the laboratory in order to calculate the mass of the soil plug. 10mL's of Methanol was injected into the voa vials prior to analysis.

3.0 PREPARATION AND ANALYSIS

Gasoline Range Hydrocarbons and BTEX by NWTPH-G and EPA 8021B
Project samples B-7-16 and B-9-12 are reported on an as received basis since the dry weight could not be determined on the sample provided. No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

Semivolatile Petroleum Products by NWTPH-Dx
No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

Total Metals by EPA 6000/7000 Series Methods
No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

Amar Gill
Project Manager
North Creek Analytical

CASE NARRATIVE for B4J0410

Volatile Organic Compounds by EPA Method 8260B
No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

Semivolatile Organic Compounds by EPA Method 8270C
The recovery for acid surrogates, 2-FP and Phenol-d6 in project sample MW-1 were below control limits. The sample was extracted into analytical batch 4J13066 for which the following QC failures were observed. All surrogate recoveries were below control limits in the batch Blank other then p-Terphenyl-d14. The percent recovery for the following compounds was below control limits in both the Blank Spike and Blank Spike duplicate, 4-Chloro-3-methylphenol, 2-Chlorophenol and Phenol. Recovery of Pentachlorophenol was below control limits in the Blank Spike. Recovery of Acenaphthalene was below control limits in the Blank Spike Duplicate. The Relative Percent Difference of spike compounds, 1,4-Dichlorobenzene and Pentachlorophenol were outside control limits. Recoveries of acid surrogates, 2-FP, Phenol-d6 and 2,4,6-TBP were below control limits in both the Blank Spike and Blank Spike Duplicate. Since only a single liter sample volume was provided for this analysis, re-extraction and re-analysis was not possible.

Amar Gill
Project Manager
North Creek Analytical

SAMPLE CHAIN OF CUSTODY

Send Report To Bill Rodgers

Company Sound Environmental Strategies

Address 2960 Airport Way S #200

City, State, ZIP Seattle, WA 98134

Phone # (206) 306-1900 Fax # (206) 306-1907

SAMPLERS (signature) WHR

PROJECT NAME/NO. 470-2 PO #

REMARKS Revised Chain of Custody — Gas/BTEX

Page # _____ of _____

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

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

Sample ID	Lab ID	Date	Time (PST)	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	MTBE	Total Lead	Notes
MW-1		10-7-04	12:00	Water	6	X	X	X	X	X		X	X	0410
B-7-16			09:50	Soil	2		X							2-0.5G 4-VOA 01
B-9-12			10:19	Soil	2		X							Gas/BTEX 02
B-6-12			14:55	Soil	1		X							03
B12-12			15:30	Soil	1		X							04
														05
														5-4° 370

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: WHR	William H. Rodgers	SES	10-8-04	
Received by: Sherman Roland	Sherman Roland	NCA	10-8-04	2:00
Relinquished by: Sherman Roland	SHERMAN Roland	NCA	10-8-04	16:30
Received by: [signature]	PRMRY TOATS	NCA	10/8/04	16:30

SAMPLE CHAIN OF CUSTODY

Send Report To: Bill Rodgers

Company: Sound Environmental Strategies

Address: 2[illegible]00 Airport Way S #200

City, State, ZIP: Seattle, WA 98134

Phone # (206) 306-1900 Fax # (206) 306-1907

SAMPLERS (*signature*): WHR

PROJECT NAME/NO.: [illegible]0-2

PO #

REMARKS: Gas/BTEX

Page # ______ of ______

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	MTBE	Total Lead					Notes	
																		B4J0410	
MW-1		10-7-04		Water	[illegible]	X	X	X	X	X		X	X					2-0.5L 4-VOA	01
B-7-16		↓		Soil	[illegible]		X											Gas/BTEX	02
B-9-12				Soil	[illegible]		X											↓	03
[illegible]-12				Soil	1		X												04
B12-12				Soil	1		X												05
																		5.4° WTO	

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: WHR	William H. Rodgers	SES	10-8-04	
Received by: Sherman Roland	Sherman Roland	N.C.A	10-8-04	2:00
Relinquished by: Sherman Roland	SHERMAN ROLAND	NCA	10-8-04	16:30
Received by: [illegible]	PRANY TONTZ	NCA	10/8/04	1630

Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244
425.420.9200 fax 425.420.9210
Spokane 11922 E. 1st Avenue, Spokane Valley, WA 99206-5302
509.924.9200 fax 509.924.9290
Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132
503.906.9200 fax 503.906.9210
Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711
541.383.9310 fax 541.382.7588
Anchorage 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119
907.563.9200 fax 907.563.9210

Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	B4J0410-01	Water	10/07/04 12:00	10/08/04 16:30
B-7-16	B4J0410-02	Soil	10/07/04 09:50	10/08/04 16:30
B-9-12	B4J0410-03	Soil	10/07/04 10:19	10/08/04 16:30
B11-12	B4J0410-04	Soil	10/07/04 14:55	10/08/04 16:30
B12-12	B4J0410-05	Soil	10/07/04 15:30	10/08/04 16:30

North Creek Analytical - Bothell

Amar Gill, Project Manager

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (B4J0410-01) Water Sampled: 10/07/04 12:00 Received: 10/08/04 16:30									
Gasoline Range Hydrocarbons	**3140**	50.0	ug/l	1	4J15007	10/16/04	10/17/04	NWTPH-Gx/8021B	
Benzene	**0.666**	0.500	"	"	"	"	"	"	
Toluene	**0.736**	0.500	"	"	"	"	"	"	
Ethylbenzene	**41.1**	0.500	"	"	"	"	"	"	
Xylenes (total)	**171**	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*162 %*	*58-144*			"	"	"	"	*S-04*
Surrogate: 4-BFB (PID)	*105 %*	*68-140*			"	"	"	"	
B-7-16 (B4J0410-02) Soil Sampled: 10/07/04 09:50 Received: 10/08/04 16:30									
Gasoline Range Hydrocarbons	**364**	6.42	mg/kg wet	1	4J16004	10/17/04	10/18/04	NWTPH-Gx/8021B	
Benzene	**0.208**	0.0385	"	"	"	"	"	"	
Toluene	**1.51**	0.0642	"	"	"	"	"	"	
Ethylbenzene	**2.72**	0.0642	"	"	"	"	"	"	
Xylenes (total)	**13.4**	0.128	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*192 %*	*50-150*			"	"	"	"	*S-04*
Surrogate: 4-BFB (PID)	*102 %*	*53-142*			"	"	"	"	
B-9-12 (B4J0410-03) Soil Sampled: 10/07/04 10:19 Received: 10/08/04 16:30									
Gasoline Range Hydrocarbons	**12.4**	6.61	mg/kg wet	1	4J16004	10/17/04	10/18/04	NWTPH-Gx/8021B	
Benzene	ND	0.0396	"	"	"	"	"	"	
Toluene	ND	0.0661	"	"	"	"	"	"	
Ethylbenzene	**0.209**	0.0661	"	"	"	"	"	"	
Xylenes (total)	**0.428**	0.132	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*109 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*105 %*	*53-142*			"	"	"	"	

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B11-12 (B4J0410-04) Soil Sampled: 10/07/04 14:55 Received: 10/08/04 16:30									
Gasoline Range Hydrocarbons	**13.0**	5.00	mg/kg dry	1	4J19004	10/19/04	10/20/04	NWTPH-Gx/8021B	
Benzene	**0.123**	0.0300	"	"	"	"	"	"	
Toluene	**0.0832**	0.0500	"	"	"	"	"	"	
Ethylbenzene	**0.112**	0.0500	"	"	"	"	"	"	
Xylenes (total)	**0.298**	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*59.8 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*86.8 %*	*53-142*			"	"	"	"	
B12-12 (B4J0410-05) Soil Sampled: 10/07/04 15:30 Received: 10/08/04 16:30									**A-01**
Gasoline Range Hydrocarbons	**20.6**	5.00	mg/kg dry	1	4J19004	10/19/04	10/20/04	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	**0.107**	0.0500	"	"	"	"	"	"	
Xylenes (total)	**0.120**	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*84.0 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*99.1 %*	*53-142*			"	"	"	"	

North Creek Analytical - Bothell

Amar Gill, Project Manager

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Semivolatile Petroleum Products by NWTPH-Dx (w/o Acid/Silica Gel Clean-up)
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (B4J0410-01) Water Sampled: 10/07/04 12:00 Received: 10/08/04 16:30									
Diesel Range Hydrocarbons	ND	0.500	mg/l	1	4J14064	10/14/04	10/18/04	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	1.00	"	"	"	"	"	"	
Surrogate: 2-FBP	*93.8 %*	*50-150*			"	"	"	"	
Surrogate: Octacosane	*99.2 %*	*50-150*			"	"	"	"	

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Total Metals by EPA 6000/7000 Series Methods
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (B4J0410-01) Water Sampled: 10/07/04 12:00 Received: 10/08/04 16:30									
Lead	**0.00109**	0.00100	mg/l	1	4J13009	10/13/04	10/14/04	EPA 6020	

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (B4J0410-01) Water Sampled: 10/07/04 12:00 Received: 10/08/04 16:30									
Acetone	ND	200	ug/l	10	4J13028	10/13/04	10/13/04	EPA 8260B	
Benzene	ND	10.0	"	"	"	"	"	"	
Bromobenzene	ND	10.0	"	"	"	"	"	"	
Bromochloromethane	ND	10.0	"	"	"	"	"	"	
Bromodichloromethane	ND	10.0	"	"	"	"	"	"	
Bromoform	ND	10.0	"	"	"	"	"	"	
Bromomethane	ND	20.0	"	"	"	"	"	"	
2-Butanone	ND	100	"	"	"	"	"	"	
n-Butylbenzene	**27.2**	10.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	10.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	10.0	"	"	"	"	"	"	
Carbon disulfide	ND	10.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	10.0	"	"	"	"	"	"	
Chlorobenzene	ND	10.0	"	"	"	"	"	"	
Chloroethane	ND	10.0	"	"	"	"	"	"	
Chloroform	ND	10.0	"	"	"	"	"	"	
Chloromethane	ND	50.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	10.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	10.0	"	"	"	"	"	"	
Dibromochloromethane	ND	10.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	50.0	"	"	"	"	"	"	
1,2-Dibromoethane	ND	10.0	"	"	"	"	"	"	
Dibromomethane	ND	10.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	10.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	10.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	10.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	10.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	10.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	10.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	10.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	10.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	10.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	10.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	10.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	10.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	10.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	10.0	"	"	"	"	"	"	

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (B4J0410-01) Water Sampled: 10/07/04 12:00 Received: 10/08/04 16:30									
Ethylbenzene	**57.9**	10.0	ug/l	10	4J13028	10/13/04	10/13/04	EPA 8260B	
Hexachlorobutadiene	ND	10.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	20.0	"	"	"	"	"	"	
2-Hexanone	ND	100	"	"	"	"	"	"	
Isopropylbenzene	**11.5**	10.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	10.0	"	"	"	"	"	"	
4-Methyl-2-pentanone	ND	100	"	"	"	"	"	"	
Methylene chloride	ND	50.0	"	"	"	"	"	"	
Naphthalene	**19.1**	10.0	"	"	"	"	"	"	
n-Propylbenzene	**48.8**	10.0	"	"	"	"	"	"	
Styrene	ND	10.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	10.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	10.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	10.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	10.0	"	"	"	"	"	"	
Tetrachloroethene	ND	10.0	"	"	"	"	"	"	
Toluene	ND	10.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	10.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	10.0	"	"	"	"	"	"	
Trichloroethene	ND	10.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	10.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	10.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**316**	10.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	**107**	10.0	"	"	"	"	"	"	
Vinyl chloride	ND	10.0	"	"	"	"	"	"	
o-Xylene	**19.7**	10.0	"	"	"	"	"	"	
m,p-Xylene	**219**	20.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4	*108 %*	*70-130*			"	"	"	"	
Surrogate: Toluene-d8	*99.0 %*	*70-130*			"	"	"	"	
Surrogate: 4-BFB	*96.5 %*	*70-130*			"	"	"	"	
Acetone	ND	10.0	"	"	4J13040	10/13/04	10/13/04	"	
Benzene	**0.460**	0.200	"	"	"	"	"	"	
Bromobenzene	ND	0.500	"	"	"	"	"	"	
Bromochloromethane	ND	0.200	"	"	"	"	"	"	
Bromodichloromethane	ND	0.200	"	"	"	"	"	"	
Bromoform	ND	0.200	"	"	"	"	"	"	
Bromomethane	ND	2.00	"	"	"	"	"	"	
2-Butanone	ND	2.00	"	"	"	"	"	"	

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (B4J0410-01) Water Sampled: 10/07/04 12:00 Received: 10/08/04 16:30									
n-Butylbenzene	**18.5**	0.200	ug/l	1	4J13040	10/13/04	10/13/04	EPA 8260B	E
sec-Butylbenzene	**4.41**	0.200	"	"	"	"	"	"	
tert-Butylbenzene	ND	0.500	"	"	"	"	"	"	
Carbon disulfide	ND	0.500	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.200	"	"	"	"	"	"	
Chlorobenzene	ND	0.200	"	"	"	"	"	"	
Chloroethane	ND	1.00	"	"	"	"	"	"	
Chloroform	ND	0.200	"	"	"	"	"	"	
Chloromethane	ND	1.00	"	"	"	"	"	"	
2-Chlorotoluene	ND	0.500	"	"	"	"	"	"	
4-Chlorotoluene	ND	0.500	"	"	"	"	"	"	
Dibromochloromethane	ND	0.200	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	0.500	"	"	"	"	"	"	
1,2-Dibromoethane	ND	0.200	"	"	"	"	"	"	
Dibromomethane	ND	0.200	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.200	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.200	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.200	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.500	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.200	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.200	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.200	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.200	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.200	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.200	"	"	"	"	"	"	
1,3-Dichloropropane	ND	0.200	"	"	"	"	"	"	
2,2-Dichloropropane	ND	0.500	"	"	"	"	"	"	
1,1-Dichloropropene	ND	0.200	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.200	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.200	"	"	"	"	"	"	
Ethylbenzene	**59.4**	0.200	"	"	"	"	"	"	E-01
Hexachlorobutadiene	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.00	"	"	"	"	"	"	
2-Hexanone	ND	2.00	"	"	"	"	"	"	
Isopropylbenzene	**14.6**	0.500	"	"	"	"	"	"	E
p-Isopropyltoluene	**9.03**	0.200	"	"	"	"	"	"	E
4-Methyl-2-pentanone	ND	2.00	"	"	"	"	"	"	
Methylene chloride	ND	5.00	"	"	"	"	"	"	

North Creek Analytical - Bothell

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Volatile Organic Compounds by EPA Method 8260B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (B4J0410-01) Water Sampled: 10/07/04 12:00 Received: 10/08/04 16:30									
Naphthalene	**19.0**	0.500	ug/l	1	4J13040	10/13/04	10/13/04	EPA 8260B	E
n-Propylbenzene	**52.2**	0.500	"	"	"	"	"	"	E-01
Styrene	ND	0.500	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	0.200	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	0.200	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	0.200	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.500	"	"	"	"	"	"	
Tetrachloroethene	ND	0.200	"	"	"	"	"	"	
Toluene	**0.690**	0.200	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.200	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.200	"	"	"	"	"	"	
Trichloroethene	ND	0.200	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.500	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.500	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	**131**	0.200	"	"	"	"	"	"	E-01
1,3,5-Trimethylbenzene	**83.9**	0.500	"	"	"	"	"	"	E-01
Vinyl chloride	ND	0.200	"	"	"	"	"	"	
o-Xylene	**22.8**	0.250	"	"	"	"	"	"	E
m,p-Xylene	**131**	0.500	"	"	"	"	"	"	E-01
Surrogate: 1,2-DCA-d4	*102 %*	*70-130*			"	"	"	"	
Surrogate: Toluene-d8	*99.0 %*	*70-130*			"	"	"	"	
Surrogate: 4-BFB	*102 %*	*70-130*			"	"	"	"	

North Creek Analytical - Bothell

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Semivolatile Organic Compounds by EPA Method 8270C
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (B4J0410-01) Water Sampled: 10/07/04 12:00 Received: 10/08/04 16:30									**X**
Acenaphthene	ND	21.3	ug/l	1	4J13066	10/13/04	10/27/04	EPA 8270C	
Acenaphthylene	ND	21.3	"	"	"	"	"	"	
Aniline	ND	21.3	"	"	"	"	"	"	
Anthracene	ND	21.3	"	"	"	"	"	"	
Benzo (a) anthracene	ND	21.3	"	"	"	"	"	"	
Benzo (a) pyrene	ND	21.3	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	21.3	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	21.3	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	21.3	"	"	"	"	"	"	
Benzoic Acid	ND	42.6	"	"	"	"	"	"	
Benzyl alcohol	ND	21.3	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	21.3	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	21.3	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	21.3	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	106	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	21.3	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	21.3	"	"	"	"	"	"	
Carbazole	ND	21.3	"	"	"	"	"	"	
4-Chloroaniline	ND	21.3	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	21.3	"	"	"	"	"	"	
2-Chloronaphthalene	ND	21.3	"	"	"	"	"	"	
2-Chlorophenol	ND	21.3	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	21.3	"	"	"	"	"	"	
Chrysene	ND	21.3	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	21.3	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	21.3	"	"	"	"	"	"	
Dibenzofuran	ND	21.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	21.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	21.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	21.3	"	"	"	"	"	"	
3,3´-Dichlorobenzidine	ND	21.3	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	21.3	"	"	"	"	"	"	
Diethyl phthalate	ND	21.3	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	21.3	"	"	"	"	"	"	
Dimethyl phthalate	ND	21.3	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	21.3	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	42.6	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	21.3	"	"	"	"	"	"	

North Creek Analytical - Bothell

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Semivolatile Organic Compounds by EPA Method 8270C
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (B4J0410-01) Water Sampled: 10/07/04 12:00 Received: 10/08/04 16:30									**X**
2,6-Dinitrotoluene	ND	21.3	ug/l	1	4J13066	10/13/04	10/27/04	EPA 8270C	
Fluoranthene	ND	21.3	"	"	"	"	"	"	
Fluorene	ND	21.3	"	"	"	"	"	"	
Hexachlorobenzene	ND	21.3	"	"	"	"	"	"	
Hexachlorobutadiene	ND	21.3	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	21.3	"	"	"	"	"	"	
Hexachloroethane	ND	21.3	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	21.3	"	"	"	"	"	"	
Isophorone	ND	21.3	"	"	"	"	"	"	
2-Methylnaphthalene	ND	21.3	"	"	"	"	"	"	
2-Methylphenol	ND	21.3	"	"	"	"	"	"	
3 & 4-Methylphenol	ND	21.3	"	"	"	"	"	"	
Naphthalene	ND	21.3	"	"	"	"	"	"	
2-Nitroaniline	ND	21.3	"	"	"	"	"	"	
3-Nitroaniline	ND	21.3	"	"	"	"	"	"	
4-Nitroaniline	ND	21.3	"	"	"	"	"	"	
Nitrobenzene	ND	21.3	"	"	"	"	"	"	
2-Nitrophenol	ND	21.3	"	"	"	"	"	"	
4-Nitrophenol	ND	21.3	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	21.3	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	21.3	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	21.3	"	"	"	"	"	"	
Pentachlorophenol	ND	21.3	"	"	"	"	"	"	
Phenanthrene	ND	21.3	"	"	"	"	"	"	
Phenol	ND	21.3	"	"	"	"	"	"	
Pyrene	ND	21.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	21.3	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	21.3	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	21.3	"	"	"	"	"	"	
Surrogate: 2-FBP	*70.5 %*	*41-129*			"	"	"	"	
Surrogate: 2-FP	*14.5 %*	*18-124*			"	"	"	"	*S-04*
Surrogate: Nitrobenzene-d5	*72.3 %*	*44-124*			"	"	"	"	
Surrogate: Phenol-d6	*37.1 %*	*25-122*			"	"	"	"	
Surrogate: p-Terphenyl-d14	*90.9 %*	*10-132*			"	"	"	"	
Surrogate: 2,4,6-TBP	*91.9 %*	*19-132*			"	"	"	"	

North Creek Analytical - Bothell

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Physical Parameters by APHA/ASTM/EPA Methods
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B11-12 (B4J0410-04) Soil	**Sampled: 10/07/04 14:55**	**Received: 10/08/04 16:30**							
Dry Weight	**88.0**	1.00	%	1	4J19032	10/19/04	10/20/04	BSOPSPL003R08	
B12-12 (B4J0410-05) Soil	**Sampled: 10/07/04 15:30**	**Received: 10/08/04 16:30**							
Dry Weight	**91.5**	1.00	%	1	4J19032	10/19/04	10/20/04	BSOPSPL003R08	

North Creek Analytical - Bothell

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J15007: Prepared 10/16/04 Using EPA 5030B (P/T)										
Blank (4J15007-BLK1)										
Gasoline Range Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surrogate: 4-BFB (FID)	*40.4*		"	*48.0*		*84.2*	*58-144*			
Surrogate: 4-BFB (PID)	*41.8*		"	*48.0*		*87.1*	*68-140*			
LCS (4J15007-BS1)										
Gasoline Range Hydrocarbons	506	50.0	ug/l	502		101	80-120			
Benzene	5.72	0.500	"	6.21		92.1	80-120			
Toluene	32.7	0.500	"	34.9		93.7	80-120			
Ethylbenzene	7.96	0.500	"	8.38		95.0	80-120			
Xylenes (total)	39.5	1.00	"	40.6		97.3	80-120			
Surrogate: 4-BFB (FID)	*48.8*		"	*48.0*		*102*	*58-144*			
Surrogate: 4-BFB (PID)	*42.8*		"	*48.0*		*89.2*	*68-140*			
LCS Dup (4J15007-BSD1)										
Gasoline Range Hydrocarbons	532	50.0	ug/l	502		106	80-120	5.01	25	
Benzene	5.82	0.500	"	6.21		93.7	80-120	1.73	25	
Toluene	33.4	0.500	"	34.9		95.7	80-120	2.12	25	
Ethylbenzene	8.15	0.500	"	8.38		97.3	80-120	2.36	25	
Xylenes (total)	40.5	1.00	"	40.6		99.8	80-120	2.50	25	
Surrogate: 4-BFB (FID)	*50.3*		"	*48.0*		*105*	*58-144*			
Surrogate: 4-BFB (PID)	*43.2*		"	*48.0*		*90.0*	*68-140*			
Matrix Spike (4J15007-MS1)					**Source: B4J0318-01**					
Gasoline Range Hydrocarbons	1160	50.0	ug/l	502	660	99.6	58-129			
Benzene	8.22	0.500	"	6.21	2.43	93.2	46-130			
Toluene	34.8	0.500	"	34.9	0.736	97.6	60-124			
Ethylbenzene	9.16	0.500	"	8.38	0.292	106	56-141			
Xylenes (total)	42.7	1.00	"	40.6	2.21	99.7	66-132			
Surrogate: 4-BFB (FID)	*80.1*		"	*48.0*		*167*	*58-144*			*S-04*
Surrogate: 4-BFB (PID)	*54.4*		"	*48.0*		*113*	*68-140*			

North Creek Analytical - Bothell

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J15007: Prepared 10/16/04 Using EPA 5030B (P/T)										
Matrix Spike Dup (4J15007-MSD1)					**Source: B4J0318-01**					
Gasoline Range Hydrocarbons	1100	50.0	ug/l	502	660	87.6	58-129	5.31	25	
Benzene	7.94	0.500	"	6.21	2.43	88.7	46-130	3.47	40	
Toluene	33.6	0.500	"	34.9	0.736	94.2	60-124	3.51	40	
Ethylbenzene	8.61	0.500	"	8.38	0.292	99.3	56-141	6.19	40	
Xylenes (total)	40.9	1.00	"	40.6	2.21	95.3	66-132	4.31	40	
Surrogate: 4-BFB (FID)	*78.8*		*"*	*48.0*		*164*	*58-144*			*S-04*
Surrogate: 4-BFB (PID)	*54.0*		*"*	*48.0*		*112*	*68-140*			
Batch 4J16004: Prepared 10/17/04 Using EPA 5030B (MeOH)										
Blank (4J16004-BLK1)										
Gasoline Range Hydrocarbons	ND	5.00	mg/kg							
Benzene	ND	0.0300	"							
Toluene	ND	0.0500	"							
Ethylbenzene	ND	0.0500	"							
Xylenes (total)	ND	0.100	"							
Surrogate: 4-BFB (FID)	*2.42*		*"*	*2.40*		*101*	*50-150*			
Surrogate: 4-BFB (PID)	*2.46*		*"*	*2.40*		*102*	*53-142*			
LCS (4J16004-BS1)										
Gasoline Range Hydrocarbons	27.8	5.00	mg/kg	25.1		111	75-125			
Benzene	0.329	0.0300	"	0.310		106	75-125			
Toluene	1.75	0.0500	"	1.75		100	75-125			
Ethylbenzene	0.441	0.0500	"	0.419		105	75-125			
Xylenes (total)	2.13	0.100	"	2.03		105	75-125			
Surrogate: 4-BFB (FID)	*2.67*		*"*	*2.40*		*111*	*50-150*			
Surrogate: 4-BFB (PID)	*2.39*		*"*	*2.40*		*99.6*	*53-142*			

North Creek Analytical - Bothell

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J16004: Prepared 10/17/04 Using EPA 5030B (MeOH)										
LCS Dup (4J16004-BSD1)										
Gasoline Range Hydrocarbons	28.1	5.00	mg/kg	25.1		112	75-125	1.07	25	
Benzene	0.310	0.0300	"	0.310		100	75-125	5.95	25	
Toluene	1.64	0.0500	"	1.75		93.7	75-125	6.49	25	
Ethylbenzene	0.411	0.0500	"	0.419		98.1	75-125	7.04	25	
Xylenes (total)	1.99	0.100	"	2.03		98.0	75-125	6.80	25	
Surrogate: 4-BFB (FID)	*2.66*		*"*	*2.40*		*111*	*50-150*			
Surrogate: 4-BFB (PID)	*2.19*		*"*	*2.40*		*91.2*	*53-142*			
Matrix Spike (4J16004-MS1)					**Source: B4J0546-01**					
Gasoline Range Hydrocarbons	19.7	2.61	mg/kg dry	18.0	1.30	102	42-125			
Benzene	0.225	0.0156	"	0.223	ND	101	45-125			
Toluene	1.19	0.0261	"	1.25	0.0111	94.3	55-125			
Ethylbenzene	0.302	0.0261	"	0.300	0.00761	98.1	53-132			
Xylenes (total)	1.46	0.0522	"	1.46	0.0329	97.7	59-125			
Surrogate: 4-BFB (FID)	*1.92*		*"*	*1.72*		*112*	*50-150*			
Surrogate: 4-BFB (PID)	*1.62*		*"*	*1.72*		*94.2*	*53-142*			
Matrix Spike Dup (4J16004-MSD1)					**Source: B4J0546-01**					
Gasoline Range Hydrocarbons	19.8	2.61	mg/kg dry	18.0	1.30	103	42-125	0.506	40	
Benzene	0.251	0.0156	"	0.223	ND	113	45-125	10.9	40	
Toluene	1.36	0.0261	"	1.25	0.0111	108	55-125	13.3	40	
Ethylbenzene	0.339	0.0261	"	0.300	0.00761	110	53-132	11.5	40	
Xylenes (total)	1.64	0.0522	"	1.46	0.0329	110	59-125	11.6	40	
Surrogate: 4-BFB (FID)	*1.93*		*"*	*1.72*		*112*	*50-150*			
Surrogate: 4-BFB (PID)	*1.78*		*"*	*1.72*		*103*	*53-142*			
Batch 4J19004: Prepared 10/19/04 Using EPA 5030B (MeOH)										
Blank (4J19004-BLK1)										
Gasoline Range Hydrocarbons	ND	5.00	mg/kg							
Benzene	ND	0.0300	"							
Toluene	ND	0.0500	"							
Ethylbenzene	ND	0.0500	"							
Xylenes (total)	ND	0.100	"							
Surrogate: 4-BFB (FID)	*2.98*		*"*	*4.00*		*74.5*	*50-150*			

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J19004: Prepared 10/19/04 Using EPA 5030B (MeOH)										
Blank (4J19004-BLK1)										
Surrogate: 4-BFB (PID)	*4.17*		*mg/kg*	*4.00*		*104*	*53-142*			
LCS (4J19004-BS1)										
Gasoline Range Hydrocarbons	26.6	5.00	mg/kg	27.5		96.7	75-125			
Benzene	0.327	0.0300	"	0.340		96.2	75-125			
Toluene	1.78	0.0500	"	1.92		92.7	75-125			
Ethylbenzene	0.477	0.0500	"	0.460		104	75-125			
Xylenes (total)	2.26	0.100	"	2.22		102	75-125			
Surrogate: 4-BFB (FID)	*3.79*		*"*	*4.00*		*94.8*	*50-150*			
Surrogate: 4-BFB (PID)	*3.96*		*"*	*4.00*		*99.0*	*53-142*			
LCS Dup (4J19004-BSD1)										
Gasoline Range Hydrocarbons	26.4	5.00	mg/kg	27.5		96.0	75-125	0.755	25	
Benzene	0.346	0.0300	"	0.340		102	75-125	5.65	25	
Toluene	1.85	0.0500	"	1.92		96.4	75-125	3.86	25	
Ethylbenzene	0.487	0.0500	"	0.460		106	75-125	2.07	25	
Xylenes (total)	2.35	0.100	"	2.22		106	75-125	3.90	25	
Surrogate: 4-BFB (FID)	*3.58*		*"*	*4.00*		*89.5*	*50-150*			
Surrogate: 4-BFB (PID)	*3.95*		*"*	*4.00*		*98.8*	*53-142*			
Matrix Spike (4J19004-MS1)					**Source: B4J0545-01**					
Gasoline Range Hydrocarbons	20.3	5.00	mg/kg dry	28.6	2.19	63.3	42-125			
Benzene	0.320	0.0300	"	0.354	ND	90.4	45-125			
Toluene	1.77	0.0500	"	1.99	0.0129	88.3	55-125			
Ethylbenzene	0.476	0.0500	"	0.479	ND	99.4	53-132			
Xylenes (total)	2.28	0.100	"	2.32	ND	98.3	59-125			
Surrogate: 4-BFB (FID)	*2.94*		*"*	*4.16*		*70.7*	*50-150*			
Surrogate: 4-BFB (PID)	*4.05*		*"*	*4.16*		*97.4*	*53-142*			

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J19004: Prepared 10/19/04 Using EPA 5030B (MeOH)										
Matrix Spike Dup (4J19004-MSD1)					**Source: B4J0545-01**					
Gasoline Range Hydrocarbons	24.2	5.00	mg/kg dry	28.6	2.19	77.0	42-125	17.5	40	
Benzene	0.307	0.0300	"	0.354	ND	86.7	45-125	4.15	40	
Toluene	1.73	0.0500	"	1.99	0.0129	86.3	55-125	2.29	40	
Ethylbenzene	0.466	0.0500	"	0.479	ND	97.3	53-132	2.12	40	
Xylenes (total)	2.24	0.100	"	2.32	ND	96.6	59-125	1.77	40	
Surrogate: 4-BFB (FID)	*3.41*		*"*	*4.16*		*82.0*	*50-150*			
Surrogate: 4-BFB (PID)	*3.91*		*"*	*4.16*		*94.0*	*53-142*			

Amar Gill, Project Manager

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Semivolatile Petroleum Products by NWTPH-Dx (w/o Acid/Silica Gel Clean-up) - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J14064: Prepared 10/14/04 Using EPA 3520C										
Blank (4J14064-BLK1)										
Diesel Range Hydrocarbons	ND	0.250	mg/l							
Lube Oil Range Hydrocarbons	ND	0.500	"							
Surrogate: 2-FBP	*0.196*		*"*	*0.210*		*93.3*	*70-130*			
Surrogate: Octacosane	*0.213*		*"*	*0.200*		*106*	*70-130*			
LCS (4J14064-BS1)										
Diesel Range Hydrocarbons	1.96	0.250	mg/l	1.87		105	65-135			
Surrogate: 2-FBP	*0.181*		*"*	*0.210*		*86.2*	*70-130*			
LCS Dup (4J14064-BSD1)										
Diesel Range Hydrocarbons	1.77	0.250	mg/l	1.87		94.7	65-135	10.2	30	
Surrogate: 2-FBP	*0.176*		*"*	*0.210*		*83.8*	*70-130*			

North Creek Analytical - Bothell

Amar Gill, Project Manager

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Total Metals by EPA 6000/7000 Series Methods - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13009: Prepared 10/13/04 Using EPA 3020A										
Blank (4J13009-BLK1)										
Lead	ND	0.00100	mg/l							
LCS (4J13009-BS1)										
Lead	0.0717	0.00100	mg/l	0.0800		89.6	80-120			
LCS Dup (4J13009-BSD1)										
Lead	0.0752	0.00100	mg/l	0.0800		94.0	80-120	4.77	20	
Duplicate (4J13009-DUP1)					**Source: B4J0324-01**					
Lead	ND	0.00100	mg/l		ND			NA	20	
Matrix Spike (4J13009-MS1)					**Source: B4J0324-01**					
Lead	0.0744	0.00100	mg/l	0.0800	ND	93.0	78-125			
Matrix Spike Dup (4J13009-MSD1)					**Source: B4J0324-01**					
Lead	0.0731	0.00100	mg/l	0.0800	ND	91.4	78-125	1.76	20	
Post Spike (4J13009-PS1)					**Source: B4J0324-01**					
Lead	0.0926		ug/ml	0.0995	ND	93.1	75-125			

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13028: Prepared 10/13/04 Using EPA 5030B										
Blank (4J13028-BLK1)										
Acetone	ND	20.0	ug/l							
Benzene	ND	1.00	"							
Bromobenzene	ND	1.00	"							
Bromochloromethane	ND	1.00	"							
Bromodichloromethane	ND	1.00	"							
Bromoform	ND	1.00	"							
Bromomethane	ND	2.00	"							
2-Butanone	ND	10.0	"							
n-Butylbenzene	ND	1.00	"							
sec-Butylbenzene	ND	1.00	"							
tert-Butylbenzene	ND	1.00	"							
Carbon disulfide	ND	1.00	"							
Carbon tetrachloride	ND	1.00	"							
Chlorobenzene	ND	1.00	"							
Chloroethane	ND	1.00	"							
Chloroform	ND	1.00	"							
Chloromethane	ND	5.00	"							
2-Chlorotoluene	ND	1.00	"							
4-Chlorotoluene	ND	1.00	"							
Dibromochloromethane	ND	1.00	"							
1,2-Dibromo-3-chloropropane	ND	5.00	"							
1,2-Dibromoethane	ND	1.00	"							
Dibromomethane	ND	1.00	"							
1,2-Dichlorobenzene	ND	1.00	"							
1,3-Dichlorobenzene	ND	1.00	"							
1,4-Dichlorobenzene	ND	1.00	"							
Dichlorodifluoromethane	ND	1.00	"							
1,1-Dichloroethane	ND	1.00	"							
1,2-Dichloroethane	ND	1.00	"							
1,1-Dichloroethene	ND	1.00	"							
cis-1,2-Dichloroethene	ND	1.00	"							
trans-1,2-Dichloroethene	ND	1.00	"							
1,2-Dichloropropane	ND	1.00	"							
1,3-Dichloropropane	ND	1.00	"							
2,2-Dichloropropane	ND	1.00	"							

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13028: Prepared 10/13/04 Using EPA 5030B										
Blank (4J13028-BLK1)										
1,1-Dichloropropene	ND	1.00	ug/l							
cis-1,3-Dichloropropene	ND	1.00	"							
trans-1,3-Dichloropropene	ND	1.00	"							
Ethylbenzene	ND	1.00	"							
Hexachlorobutadiene	ND	1.00	"							
Methyl tert-butyl ether	ND	2.00	"							
2-Hexanone	ND	10.0	"							
Isopropylbenzene	ND	1.00	"							
p-Isopropyltoluene	ND	1.00	"							
4-Methyl-2-pentanone	ND	10.0	"							
Methylene chloride	ND	5.00	"							
Naphthalene	ND	1.00	"							
n-Propylbenzene	ND	1.00	"							
Styrene	ND	1.00	"							
1,2,3-Trichlorobenzene	ND	1.00	"							
1,2,4-Trichlorobenzene	ND	1.00	"							
1,1,1,2-Tetrachloroethane	ND	1.00	"							
1,1,2,2-Tetrachloroethane	ND	1.00	"							
Tetrachloroethene	ND	1.00	"							
Toluene	ND	1.00	"							
1,1,1-Trichloroethane	ND	1.00	"							
1,1,2-Trichloroethane	ND	1.00	"							
Trichloroethene	ND	1.00	"							
Trichlorofluoromethane	ND	1.00	"							
1,2,3-Trichloropropane	ND	1.00	"							
1,2,4-Trimethylbenzene	ND	1.00	"							
1,3,5-Trimethylbenzene	ND	1.00	"							
Vinyl chloride	ND	1.00	"							
o-Xylene	ND	1.00	"							
m,p-Xylene	ND	2.00	"							
Surrogate: 1,2-DCA-d4	*21.3*		*"*	*20.0*		*106*	*70-130*			
Surrogate: Toluene-d8	*19.1*		*"*	*20.0*		*95.5*	*70-130*			
Surrogate: 4-BFB	*19.6*		*"*	*20.0*		*98.0*	*70-130*			

North Creek Analytical - Bothell

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13028: Prepared 10/13/04 Using EPA 5030B										
LCS (4J13028-BS1)										
Benzene	10.7	1.00	ug/l	10.0		107	80-120			
Chlorobenzene	10.4	1.00	"	10.0		104	77-120			
1,1-Dichloroethene	10.1	1.00	"	10.0		101	80-120			
Methyl tert-butyl ether	9.32	2.00	"	10.0		93.2	80-120			
Toluene	10.3	1.00	"	10.0		103	80-120			
Trichloroethene	10.6	1.00	"	10.0		106	80-120			
Surrogate: 1,2-DCA-d4	*19.3*		*"*	*20.0*		*96.5*	*70-130*			
Surrogate: Toluene-d8	*19.5*		*"*	*20.0*		*97.5*	*70-130*			
Surrogate: 4-BFB	*18.6*		*"*	*20.0*		*93.0*	*70-130*			
LCS Dup (4J13028-BSD1)										
Benzene	9.99	1.00	ug/l	10.0		99.9	80-120	6.86	20	
Chlorobenzene	9.92	1.00	"	10.0		99.2	77-120	4.72	20	
1,1-Dichloroethene	9.45	1.00	"	10.0		94.5	80-120	6.65	20	
Methyl tert-butyl ether	8.83	2.00	"	10.0		88.3	80-120	5.40	20	
Toluene	10.1	1.00	"	10.0		101	80-120	1.96	20	
Trichloroethene	9.13	1.00	"	10.0		91.3	80-120	14.9	20	
Surrogate: 1,2-DCA-d4	*18.9*		*"*	*20.0*		*94.5*	*70-130*			
Surrogate: Toluene-d8	*20.1*		*"*	*20.0*		*100*	*70-130*			
Surrogate: 4-BFB	*19.4*		*"*	*20.0*		*97.0*	*70-130*			
Matrix Spike (4J13028-MS1)					**Source: B4J0150-02**					
Benzene	11.2	1.00	ug/l	10.0	ND	112	63-148			
Chlorobenzene	10.8	1.00	"	10.0	ND	108	80-128			
1,1-Dichloroethene	11.0	1.00	"	10.0	ND	110	59-158			
Methyl tert-butyl ether	9.97	2.00	"	10.0	ND	99.7	60-140			
Toluene	11.4	1.00	"	10.0	ND	114	72-127			
Trichloroethene	10.8	1.00	"	10.0	0.430	104	80-126			
Surrogate: 1,2-DCA-d4	*20.2*		*"*	*20.0*		*101*	*70-130*			
Surrogate: Toluene-d8	*20.5*		*"*	*20.0*		*102*	*70-130*			
Surrogate: 4-BFB	*19.6*		*"*	*20.0*		*98.0*	*70-130*			

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13028: Prepared 10/13/04 Using EPA 5030B										
Matrix Spike Dup (4J13028-MSD1)					**Source: B4J0150-02**					
Benzene	10.6	1.00	ug/l	10.0	ND	106	63-148	5.50	20	
Chlorobenzene	10.6	1.00	"	10.0	ND	106	80-128	1.87	20	
1,1-Dichloroethene	10.2	1.00	"	10.0	ND	102	59-158	7.55	30	
Methyl tert-butyl ether	10.8	2.00	"	10.0	ND	108	60-140	7.99	30	
Toluene	10.8	1.00	"	10.0	ND	108	72-127	5.41	20	
Trichloroethene	11.0	1.00	"	10.0	0.430	106	80-126	1.83	20	
Surrogate: 1,2-DCA-d4	*20.0*		*"*	*20.0*		*100*	*70-130*			
Surrogate: Toluene-d8	*20.2*		*"*	*20.0*		*101*	*70-130*			
Surrogate: 4-BFB	*19.4*		*"*	*20.0*		*97.0*	*70-130*			
Batch 4J13040: Prepared 10/13/04 Using EPA 5030B										
Blank (4J13040-BLK1)										
Acetone	ND	10.0	ug/l							
Benzene	ND	0.200	"							
Bromobenzene	ND	0.500	"							
Bromochloromethane	ND	0.200	"							
Bromodichloromethane	ND	0.200	"							
Bromoform	ND	0.200	"							
Bromomethane	ND	2.00	"							
2-Butanone	ND	2.00	"							
n-Butylbenzene	ND	0.200	"							
sec-Butylbenzene	ND	0.200	"							
tert-Butylbenzene	ND	0.500	"							
Carbon disulfide	ND	0.500	"							
Carbon tetrachloride	ND	0.200	"							
Chlorobenzene	ND	0.200	"							
Chloroethane	ND	1.00	"							
Chloroform	ND	0.200	"							
Chloromethane	ND	1.00	"							
2-Chlorotoluene	ND	0.500	"							
4-Chlorotoluene	ND	0.500	"							
Dibromochloromethane	ND	0.200	"							
1,2-Dibromo-3-chloropropane	ND	0.500	"							
1,2-Dibromoethane	ND	0.200	"							
Dibromomethane	ND	0.200	"							

North Creek Analytical - Bothell

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Amar Gill, Project Manager

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13040: Prepared 10/13/04 Using EPA 5030B										
Blank (4J13040-BLK1)										
1,2-Dichlorobenzene	ND	0.200	ug/l							
1,3-Dichlorobenzene	ND	0.200	"							
1,4-Dichlorobenzene	ND	0.200	"							
Dichlorodifluoromethane	ND	0.500	"							
1,1-Dichloroethane	ND	0.200	"							
1,2-Dichloroethane	ND	0.200	"							
1,1-Dichloroethene	ND	0.200	"							
cis-1,2-Dichloroethene	ND	0.200	"							
trans-1,2-Dichloroethene	ND	0.200	"							
1,2-Dichloropropane	ND	0.200	"							
1,3-Dichloropropane	ND	0.200	"							
2,2-Dichloropropane	ND	0.500	"							
1,1-Dichloropropene	ND	0.200	"							
cis-1,3-Dichloropropene	ND	0.200	"							
trans-1,3-Dichloropropene	ND	0.200	"							
Ethylbenzene	ND	0.200	"							
Hexachlorobutadiene	ND	0.500	"							
Methyl tert-butyl ether	ND	1.00	"							
2-Hexanone	ND	2.00	"							
Isopropylbenzene	ND	0.500	"							
p-Isopropyltoluene	ND	0.200	"							
4-Methyl-2-pentanone	ND	2.00	"							
Methylene chloride	ND	5.00	"							
Naphthalene	ND	0.500	"							
n-Propylbenzene	ND	0.500	"							
Styrene	ND	0.500	"							
1,2,3-Trichlorobenzene	ND	0.200	"							
1,2,4-Trichlorobenzene	ND	0.200	"							
1,1,1,2-Tetrachloroethane	ND	0.200	"							
1,1,2,2-Tetrachloroethane	ND	0.500	"							
Tetrachloroethene	ND	0.200	"							
Toluene	ND	0.200	"							
1,1,1-Trichloroethane	ND	0.200	"							
1,1,2-Trichloroethane	ND	0.200	"							
Trichloroethene	ND	0.200	"							

North Creek Analytical - Bothell

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13040: Prepared 10/13/04 Using EPA 5030B										
Blank (4J13040-BLK1)										
Trichlorofluoromethane	ND	0.500	ug/l							
1,2,3-Trichloropropane	ND	0.500	"							
1,2,4-Trimethylbenzene	ND	0.200	"							
1,3,5-Trimethylbenzene	ND	0.500	"							
Vinyl chloride	ND	0.200	"							
o-Xylene	ND	0.250	"							
m,p-Xylene	ND	0.500	"							
Surrogate: 1,2-DCA-d4	*3.87*		*"*	*4.00*		*96.8*	*70-130*			
Surrogate: Toluene-d8	*3.86*		*"*	*4.00*		*96.5*	*70-130*			
Surrogate: 4-BFB	*4.04*		*"*	*4.00*		*101*	*70-130*			
LCS (4J13040-BS1)										
Acetone	38.0	10.0	ug/l	40.0		95.0	80-120			
Benzene	3.78	0.200	"	4.00		94.5	80-120			
Bromobenzene	3.76	0.500	"	4.00		94.0	80-120			
Bromochloromethane	3.92	0.200	"	4.00		98.0	80-120			
Bromodichloromethane	3.97	0.200	"	4.00		99.2	80-120			
Bromoform	3.71	0.200	"	4.00		92.8	80-120			
Bromomethane	3.93	2.00	"	4.00		98.2	80-120			
2-Butanone	37.7	2.00	"	40.0		94.2	80-120			
n-Butylbenzene	4.17	0.200	"	4.00		104	80-120			
sec-Butylbenzene	4.01	0.200	"	4.00		100	80-120			
tert-Butylbenzene	4.06	0.500	"	4.00		102	80-120			
Carbon disulfide	4.02	0.500	"	4.00		100	80-120			
Carbon tetrachloride	3.95	0.200	"	4.00		98.8	80-120			
Chlorobenzene	3.88	0.200	"	4.00		97.0	80-120			
Chloroethane	4.12	1.00	"	4.00		103	80-120			
Chloroform	3.90	0.200	"	4.00		97.5	80-120			
Chloromethane	3.81	1.00	"	4.00		95.2	80-120			
2-Chlorotoluene	3.70	0.500	"	4.00		92.5	80-120			
4-Chlorotoluene	4.24	0.500	"	4.00		106	80-120			
Dibromochloromethane	3.80	0.200	"	4.00		95.0	80-120			
1,2-Dibromo-3-chloropropane	3.76	0.500	"	4.00		94.0	80-120			
1,2-Dibromoethane	3.80	0.200	"	4.00		95.0	80-120			
Dibromomethane	3.74	0.200	"	4.00		93.5	80-120			

Amar Gill, Project Manager

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13040: Prepared 10/13/04 Using EPA 5030B										
LCS (4J13040-BS1)										
1,2-Dichlorobenzene	3.82	0.200	ug/l	4.00		95.5	80-120			
1,3-Dichlorobenzene	3.83	0.200	"	4.00		95.8	80-120			
1,4-Dichlorobenzene	3.83	0.200	"	4.00		95.8	80-120			
Dichlorodifluoromethane	3.97	0.500	"	4.00		99.2	80-120			
1,1-Dichloroethane	3.83	0.200	"	4.00		95.8	80-120			
1,2-Dichloroethane	3.65	0.200	"	4.00		91.2	80-120			
1,1-Dichloroethene	4.05	0.200	"	4.00		101	80-120			
cis-1,2-Dichloroethene	3.95	0.200	"	4.00		98.8	80-120			
trans-1,2-Dichloroethene	3.94	0.200	"	4.00		98.5	80-120			
1,2-Dichloropropane	3.72	0.200	"	4.00		93.0	80-120			
1,3-Dichloropropane	3.71	0.200	"	4.00		92.8	80-120			
2,2-Dichloropropane	4.54	0.500	"	4.00		114	65-138			
1,1-Dichloropropene	4.06	0.200	"	4.00		102	80-120			
cis-1,3-Dichloropropene	3.96	0.200	"	4.00		99.0	80-120			
trans-1,3-Dichloropropene	3.91	0.200	"	4.00		97.8	80-120			
Ethylbenzene	3.91	0.200	"	4.00		97.8	80-120			
Hexachlorobutadiene	4.08	0.500	"	4.00		102	80-120			
Methyl tert-butyl ether	3.78	1.00	"	4.00		94.5	80-120			
2-Hexanone	37.2	2.00	"	40.0		93.0	80-120			
Isopropylbenzene	3.96	0.500	"	4.00		99.0	80-120			
p-Isopropyltoluene	4.05	0.200	"	4.00		101	80-120			
4-Methyl-2-pentanone	36.5	2.00	"	40.0		91.2	80-120			
Methylene chloride	3.72	5.00	"	4.00		93.0	80-120			
Naphthalene	3.84	0.500	"	4.00		96.0	80-120			
n-Propylbenzene	4.01	0.500	"	4.00		100	80-120			
Styrene	3.94	0.500	"	4.00		98.5	80-120			
1,2,3-Trichlorobenzene	3.90	0.200	"	4.00		97.5	80-120			
1,2,4-Trichlorobenzene	3.98	0.200	"	4.00		99.5	80-120			
1,1,1,2-Tetrachloroethane	3.79	0.200	"	4.00		94.8	80-120			
1,1,2,2-Tetrachloroethane	3.84	0.500	"	4.00		96.0	80-120			
Tetrachloroethene	3.92	0.200	"	4.00		98.0	80-120			
Toluene	3.79	0.200	"	4.00		94.8	80-120			
1,1,1-Trichloroethane	3.97	0.200	"	4.00		99.2	80-120			
1,1,2-Trichloroethane	3.81	0.200	"	4.00		95.2	80-120			
Trichloroethene	3.92	0.200	"	4.00		98.0	80-120			

North Creek Analytical - Bothell

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13040: Prepared 10/13/04 Using EPA 5030B										
LCS (4J13040-BS1)										
Trichlorofluoromethane	4.01	0.500	ug/l	4.00		100	80-120			
1,2,3-Trichloropropane	3.64	0.500	"	4.00		91.0	80-120			
1,2,4-Trimethylbenzene	3.92	0.200	"	4.00		98.0	80-120			
1,3,5-Trimethylbenzene	3.92	0.500	"	4.00		98.0	80-120			
Vinyl chloride	4.05	0.200	"	4.00		101	80-120			
o-Xylene	3.94	0.250	"	4.00		98.5	80-120			
m,p-Xylene	7.99	0.500	"	8.00		99.9	80-120			
Surrogate: 1,2-DCA-d4	*3.93*		*"*	*4.00*		*98.2*	*70-130*			
Surrogate: Toluene-d8	*3.92*		*"*	*4.00*		*98.0*	*70-130*			
Surrogate: 4-BFB	*3.96*		*"*	*4.00*		*99.0*	*70-130*			
LCS Dup (4J13040-BSD1)										
Acetone	47.0	10.0	ug/l	40.0		118	80-120	21.2	30	
Benzene	4.29	0.200	"	4.00		107	80-120	12.6	30	
Bromobenzene	4.17	0.500	"	4.00		104	80-120	10.3	30	
Bromochloromethane	4.32	0.200	"	4.00		108	80-120	9.71	30	
Bromodichloromethane	4.22	0.200	"	4.00		106	80-120	6.10	30	
Bromoform	4.23	0.200	"	4.00		106	80-120	13.1	30	
Bromomethane	4.37	2.00	"	4.00		109	80-120	10.6	30	
2-Butanone	43.7	2.00	"	40.0		109	80-120	14.7	30	
n-Butylbenzene	4.66	0.200	"	4.00		116	80-120	11.1	30	
sec-Butylbenzene	4.42	0.200	"	4.00		110	80-120	9.73	30	
tert-Butylbenzene	4.28	0.500	"	4.00		107	80-120	5.28	30	
Carbon disulfide	4.46	0.500	"	4.00		112	80-120	10.4	30	
Carbon tetrachloride	4.30	0.200	"	4.00		108	80-120	8.48	30	
Chlorobenzene	4.30	0.200	"	4.00		108	80-120	10.3	30	
Chloroethane	4.48	1.00	"	4.00		112	80-120	8.37	30	
Chloroform	4.21	0.200	"	4.00		105	80-120	7.64	30	
Chloromethane	4.05	1.00	"	4.00		101	80-120	6.11	30	
2-Chlorotoluene	4.09	0.500	"	4.00		102	80-120	10.0	30	
4-Chlorotoluene	4.64	0.500	"	4.00		116	80-120	9.01	30	
Dibromochloromethane	4.29	0.200	"	4.00		107	80-120	12.1	30	
1,2-Dibromo-3-chloropropane	4.01	0.500	"	4.00		100	80-120	6.44	30	
1,2-Dibromoethane	4.23	0.200	"	4.00		106	80-120	10.7	30	
Dibromomethane	4.16	0.200	"	4.00		104	80-120	10.6	30	

North Creek Analytical - Bothell

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13040: Prepared 10/13/04 Using EPA 5030B										
LCS Dup (4J13040-BSD1)										
1,2-Dichlorobenzene	4.33	0.200	ug/l	4.00		108	80-120	12.5	30	
1,3-Dichlorobenzene	4.30	0.200	"	4.00		108	80-120	11.6	30	
1,4-Dichlorobenzene	4.25	0.200	"	4.00		106	80-120	10.4	30	
Dichlorodifluoromethane	4.33	0.500	"	4.00		108	80-120	8.67	30	
1,1-Dichloroethane	4.29	0.200	"	4.00		107	80-120	11.3	30	
1,2-Dichloroethane	4.18	0.200	"	4.00		104	80-120	13.5	30	
1,1-Dichloroethene	4.38	0.200	"	4.00		110	80-120	7.83	30	
cis-1,2-Dichloroethene	4.35	0.200	"	4.00		109	80-120	9.64	30	
trans-1,2-Dichloroethene	4.36	0.200	"	4.00		109	80-120	10.1	30	
1,2-Dichloropropane	4.14	0.200	"	4.00		104	80-120	10.7	30	
1,3-Dichloropropane	4.19	0.200	"	4.00		105	80-120	12.2	30	
2,2-Dichloropropane	5.00	0.500	"	4.00		125	65-138	9.64	30	
1,1-Dichloropropene	4.49	0.200	"	4.00		112	80-120	10.1	30	
cis-1,3-Dichloropropene	4.31	0.200	"	4.00		108	80-120	8.46	30	
trans-1,3-Dichloropropene	4.45	0.200	"	4.00		111	80-120	12.9	30	
Ethylbenzene	4.40	0.200	"	4.00		110	80-120	11.8	30	
Hexachlorobutadiene	4.55	0.500	"	4.00		114	80-120	10.9	30	
Methyl tert-butyl ether	4.18	1.00	"	4.00		104	80-120	10.1	30	
2-Hexanone	46.3	2.00	"	40.0		116	80-120	21.8	30	
Isopropylbenzene	4.41	0.500	"	4.00		110	80-120	10.8	30	
p-Isopropyltoluene	4.59	0.200	"	4.00		115	80-120	12.5	30	
4-Methyl-2-pentanone	44.0	2.00	"	40.0		110	80-120	18.6	30	
Methylene chloride	4.16	5.00	"	4.00		104	80-120	11.2	30	
Naphthalene	4.16	0.500	"	4.00		104	80-120	8.00	30	
n-Propylbenzene	4.38	0.500	"	4.00		110	80-120	8.82	30	
Styrene	4.46	0.500	"	4.00		112	80-120	12.4	30	
1,2,3-Trichlorobenzene	4.41	0.200	"	4.00		110	80-120	12.3	30	
1,2,4-Trichlorobenzene	4.49	0.200	"	4.00		112	80-120	12.0	30	
1,1,1,2-Tetrachloroethane	4.31	0.200	"	4.00		108	80-120	12.8	30	
1,1,2,2-Tetrachloroethane	4.14	0.500	"	4.00		104	80-120	7.52	30	
Tetrachloroethene	4.36	0.200	"	4.00		109	80-120	10.6	30	
Toluene	4.24	0.200	"	4.00		106	80-120	11.2	30	
1,1,1-Trichloroethane	4.28	0.200	"	4.00		107	80-120	7.52	30	
1,1,2-Trichloroethane	4.22	0.200	"	4.00		106	80-120	10.2	30	
Trichloroethene	4.25	0.200	"	4.00		106	80-120	8.08	30	

North Creek Analytical - Bothell

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Amar Gill, Project Manager

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Volatile Organic Compounds by EPA Method 8260B - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13040: Prepared 10/13/04 Using EPA 5030B										
LCS Dup (4J13040-BSD1)										
Trichlorofluoromethane	4.34	0.500	ug/l	4.00		108	80-120	7.90	30	
1,2,3-Trichloropropane	4.24	0.500	"	4.00		106	80-120	15.2	30	
1,2,4-Trimethylbenzene	4.37	0.200	"	4.00		109	80-120	10.9	30	
1,3,5-Trimethylbenzene	4.35	0.500	"	4.00		109	80-120	10.4	30	
Vinyl chloride	4.20	0.200	"	4.00		105	80-120	3.64	30	
o-Xylene	4.41	0.250	"	4.00		110	80-120	11.3	30	
m,p-Xylene	8.81	0.500	"	8.00		110	80-120	9.76	30	
Surrogate: 1,2-DCA-d4	*3.94*		*"*	*4.00*		*98.5*	*70-130*			
Surrogate: Toluene-d8	*4.05*		*"*	*4.00*		*101*	*70-130*			
Surrogate: 4-BFB	*4.02*		*"*	*4.00*		*100*	*70-130*			

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13066: Prepared 10/13/04 Using EPA 3510C										
Blank (4J13066-BLK1)										**X**
Acenaphthene	ND	5.00	ug/l							
Acenaphthylene	ND	5.00	"							
Aniline	ND	5.00	"							
Anthracene	ND	5.00	"							
Benzo (a) anthracene	ND	5.00	"							
Benzo (a) pyrene	ND	5.00	"							
Benzo (b) fluoranthene	ND	5.00	"							
Benzo (k) fluoranthene	ND	5.00	"							
Benzo (ghi) perylene	ND	5.00	"							
Benzoic Acid	ND	10.0	"							
Benzyl alcohol	ND	5.00	"							
Bis(2-chloroethoxy)methane	ND	5.00	"							
Bis(2-chloroethyl)ether	ND	5.00	"							
Bis(2-chloroisopropyl)ether	ND	5.00	"							
Bis(2-ethylhexyl)phthalate	ND	25.0	"							
4-Bromophenyl phenyl ether	ND	5.00	"							
Butyl benzyl phthalate	ND	5.00	"							
Carbazole	ND	5.00	"							
4-Chloroaniline	ND	5.00	"							
4-Chloro-3-methylphenol	ND	5.00	"							
2-Chloronaphthalene	ND	5.00	"							
2-Chlorophenol	ND	5.00	"							
4-Chlorophenyl phenyl ether	ND	5.00	"							
Chrysene	ND	5.00	"							
Di-n-butyl phthalate	ND	5.00	"							
Dibenz (a,h) anthracene	ND	5.00	"							
Dibenzofuran	ND	5.00	"							
1,2-Dichlorobenzene	ND	5.00	"							
1,3-Dichlorobenzene	ND	5.00	"							
1,4-Dichlorobenzene	ND	5.00	"							
3,3´-Dichlorobenzidine	ND	5.00	"							
2,4-Dichlorophenol	ND	5.00	"							
Diethyl phthalate	ND	5.00	"							
2,4-Dimethylphenol	ND	5.00	"							
Dimethyl phthalate	ND	5.00	"							

North Creek Analytical - Bothell

Amar Gill, Project Manager

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907.563.9200 fax 907.563.9210

Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13066: Prepared 10/13/04 Using EPA 3510C										
Blank (4J13066-BLK1)										**X**
4,6-Dinitro-2-methylphenol	ND	5.00	ug/l							
2,4-Dinitrophenol	ND	10.0	"							
2,4-Dinitrotoluene	ND	5.00	"							
2,6-Dinitrotoluene	ND	5.00	"							
Fluoranthene	ND	5.00	"							
Fluorene	ND	5.00	"							
Hexachlorobenzene	ND	5.00	"							
Hexachlorobutadiene	ND	5.00	"							
Hexachlorocyclopentadiene	ND	5.00	"							
Hexachloroethane	ND	5.00	"							
Indeno (1,2,3-cd) pyrene	ND	5.00	"							
Isophorone	ND	5.00	"							
2-Methylnaphthalene	ND	5.00	"							
2-Methylphenol	ND	5.00	"							
3 & 4-Methylphenol	ND	5.00	"							
Naphthalene	ND	5.00	"							
2-Nitroaniline	ND	5.00	"							
3-Nitroaniline	ND	5.00	"							
4-Nitroaniline	ND	5.00	"							
Nitrobenzene	ND	5.00	"							
2-Nitrophenol	ND	5.00	"							
4-Nitrophenol	ND	5.00	"							
N-Nitrosodi-n-propylamine	ND	5.00	"							
N-Nitrosodiphenylamine	ND	5.00	"							
Di-n-octyl phthalate	ND	5.00	"							
Pentachlorophenol	ND	5.00	"							
Phenanthrene	ND	5.00	"							
Phenol	ND	5.00	"							
Pyrene	ND	5.00	"							
1,2,4-Trichlorobenzene	ND	5.00	"							
2,4,5-Trichlorophenol	ND	5.00	"							
2,4,6-Trichlorophenol	ND	5.00	"							
Surrogate: 2-FBP	*8.68*		"	*25.0*		*34.7*	*41-129*			
Surrogate: 2-FP	*0.0400*		"	*25.0*		*0.160*	*18-124*			
Surrogate: Nitrobenzene-d5	*9.18*		"	*25.0*		*36.7*	*44-124*			

North Creek Analytical - Bothell

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Amar Gill, Project Manager

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13066: Prepared 10/13/04 Using EPA 3510C										
Blank (4J13066-BLK1)										**X**
Surrogate: Phenol-d6	*0.310*		*ug/l*	*25.0*		*1.24*	*25-122*			
Surrogate: p-Terphenyl-d14	*19.5*		*"*	*25.0*		*78.0*	*10-132*			
Surrogate: 2,4,6-TBP	*0.470*		*"*	*25.0*		*1.88*	*19-132*			
LCS (4J13066-BS1)										**X**
Acenaphthene	34.2	5.00	ug/l	50.0		68.4	66-119			
4-Chloro-3-methylphenol	9.48	5.00	"	50.0		19.0	48-132			
2-Chlorophenol	0.950	5.00	"	50.0		1.90	23-134			
1,4-Dichlorobenzene	30.9	5.00	"	50.0		61.8	43-122			
2,4-Dinitrotoluene	45.4	5.00	"	50.0		90.8	67-129			
4-Nitrophenol	15.2	5.00	"	50.0		30.4	12-153			
N-Nitrosodi-n-propylamine	34.4	5.00	"	50.0		68.8	41-141			
Pentachlorophenol	12.8	5.00	"	50.0		25.6	34-130			
Phenol	2.03	5.00	"	50.0		4.06	20-124			
Pyrene	37.6	5.00	"	50.0		75.2	59-134			
1,2,4-Trichlorobenzene	33.6	5.00	"	50.0		67.2	52-120			
Surrogate: 2-FBP	*16.5*		*"*	*25.0*		*66.0*	*41-129*			
Surrogate: 2-FP	*ND*		*"*	*25.0*		*ND*	*18-124*			
Surrogate: Nitrobenzene-d5	*16.5*		*"*	*25.0*		*66.0*	*44-124*			
Surrogate: Phenol-d6	*0.810*		*"*	*25.0*		*3.24*	*25-122*			
Surrogate: p-Terphenyl-d14	*21.8*		*"*	*25.0*		*87.2*	*10-132*			
Surrogate: 2,4,6-TBP	*1.51*		*"*	*25.0*		*6.04*	*19-132*			
LCS Dup (4J13066-BSD1)										**X**
Acenaphthene	27.6	5.00	ug/l	50.0		55.2	66-119	21.4	49	
4-Chloro-3-methylphenol	8.61	5.00	"	50.0		17.2	48-132	9.62	49	
2-Chlorophenol	1.10	5.00	"	50.0		2.20	23-134	14.6	61	
1,4-Dichlorobenzene	23.2	5.00	"	50.0		46.4	43-122	28.5	26	
2,4-Dinitrotoluene	40.2	5.00	"	50.0		80.4	67-129	12.1	29	
4-Nitrophenol	17.3	5.00	"	50.0		34.6	12-153	12.9	37	
N-Nitrosodi-n-propylamine	25.7	5.00	"	50.0		51.4	41-141	29.0	36	
Pentachlorophenol	21.5	5.00	"	50.0		43.0	34-130	50.7	32	
Phenol	2.06	5.00	"	50.0		4.12	20-124	1.47	53	
Pyrene	42.4	5.00	"	50.0		84.8	59-134	12.0	50	
1,2,4-Trichlorobenzene	23.6	5.00	"	50.0		47.2	52-120	35.0	25	
Surrogate: 2-FBP	*12.1*		*"*	*25.0*		*48.4*	*41-129*			

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Amar Gill, Project Manager

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J13066: Prepared 10/13/04 Using EPA 3510C										
LCS Dup (4J13066-BSD1)										**X**
Surrogate: 2-FP	*ND*		*ug/l*	*25.0*		*ND*	*18-124*			
Surrogate: Nitrobenzene-d5	*11.9*		*"*	*25.0*		*47.6*	*44-124*			
Surrogate: Phenol-d6	*0.880*		*"*	*25.0*		*3.52*	*25-122*			
Surrogate: p-Terphenyl-d14	*20.2*		*"*	*25.0*		*80.8*	*10-132*			
Surrogate: 2,4,6-TBP	*3.24*		*"*	*25.0*		*13.0*	*19-132*			

North Creek Analytical - Bothell

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Amar Gill, Project Manager

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Physical Parameters by APHA/ASTM/EPA Methods - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J19032: Prepared 10/19/04 Using General Preparation										
Blank (4J19032-BLK1)										
Dry Weight	100	1.00	%							

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907.563.9200 fax 907.563.9210

Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/22/04 10:31

Notes and Definitions

A-01	Sample had headspace due to lab use.
E	Estimated value. The reported value exceeds the calibration range of the analysis.
E-01	Estimated value. The reported value exceeds the capacity of the detector and therefore is unreliable.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
X	See case narrative.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

North Creek Analytical - Bothell

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Amar Gill, Project Manager

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907.563.9200 fax 907.563.9210

17 November 2004

Bill Rodgers
Sound Environmental Strategies
2400 Airport Way South, Suite 200
Seattle, WA/USA 98134-2020

RE: Time Oil Everett

Enclosed are the results of analyses for samples received by the laboratory on 10/07/04 15:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Amar Gill
Project Manager

CASE NARRATIVE for B4J0407

Client: Sound Environmental Strategies
Project Manager: Bill Rodgers
Project Name: Time Oil Everett
Project Number: 440-2

1.0 DESCRIPTION OF CASE

Thirteen (13) soil samples were submitted for the analysis of Gasoline Hydrocarbons and BTEX by NWTPH-G and 8021B.

2.0 COMMENTS ON SAMPLE RECEIPT

The sample was received 7th October 2004 at a temperature of 7.6°C and logged in 12th October 2004. The samples were received outside the recommended temperature range of 2 to 6 Degrees Celsius. Each sample was received in two 40mL Methanol preserved voa vials. A dry weight correction cannot be conducted on a methanol preserved sample. All reported results are provided on an as received basis.

3.0 PREPARATION AND ANALYSIS

Gasoline Hydrocarbons and BTEX by NWTPH-G and 8021B
No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

Amar Gill
Project Manager
North Creek Analytical

B4J0407

Page # 1 of 2

Send Report To Bill Rogers

Company Sound Environmental Strategies

Address 2400 Airport Way S #200

City, State, ZIP Seattle, WA 98134

Phone # (206) 306-1900 Fax # (206) 306-1907

SAMPLERS (signature) WH Rd

PROJECT NAME/NO. 446-2

PO #

REMARKS Time Oil Everett

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

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

Revised Chain of Custody

Sample ID	Lab ID	Date	Time (PST)	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Notes
B1-17' ✓		10-6-04	12:00	S	2		X					Analyze for Gasoline/BTEX
B1-18' ✓			↓				X					
B3-7' ✓			13:59				X					
B3-8' ✓			13:58				X					
B4-5 ✓			12:00				X					
B4-6 ✓							X					
B4-7 ✓							X					
B5-4 ✓			↓				X					
B5-5 ✓			14:45				X					
B5-7 ✓			12:00				X					↓

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: WH Rd	William H Rogers	SES	10-7-04	
Received by: Sherman Roland	Sherman Roland	NCA	10-7-04	11:00
Relinquished by: Sherman Roland	Sherman Roland	NCA	10-7-04	15:40
Received by: [signature]	PRAMY TONTZ	NCA	10/7/04	1540

NCA

Send Report To: Bill Rodgers

Company: Sound Environmental Strategies

Address: 2400 Airport Way S #200

City, State, ZIP: Seattle, WA 98134

Phone # (206) 306-1900 Fax # (206) 306-1907

SAMPLERS (signature): WH Rodgers

PROJECT NAME/NO.: 440-2

PO #:

REMARKS: Time Oil Everett

Page # 2 of 2

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

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

Revised Chain of Custody

Sample ID	Lab ID	Date	Time (PST)	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Notes
~~B5~~												
B6-4 ✓		10-6-04	12:00	Soil	2		X					Analyze for Gasoline/BTEX
B6-11.5 ✓		↓	↓	↓	↓		X					
B6-14		↓	↓	↓	↓		X					

NCA

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: WH Rodgers	William H. Rodgers	SES	10-7-04	
Received by: Sherman Roland	SHERMAN Roland	NCA	10-7-04	11:00
Relinquished by: Sherman Roland	SHERMAN Roland	NCA	10-7-04	15:40
Received by: Prady Tonty	PRADY TONTY	NCA	10/7/04	1540

SAMPLE CHAIN OF CUSTODY

Send Report To: Bill Rodgers
Company: Sound Environmental Strategies
Address: 2400 Airport Way S #200
City, State, ZIP: Seattle, WA 98134
Phone # (206) 306-1900 Fax # (206) 306-1907

SAMPLERS (signature): WH Rodgers
PROJECT NAME/NO.: 440-2
PO #:
REMARKS: Time Oil Everett

Page # 1 of 2

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

SAMPLE DISPOSAL
- [x] 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
B1-17'		10-6-04		S	2		X					B4J0407
B1-18'							X					Analyze for Gasoline/BTEX
B3-7'							X					
B3-8'							X					
B4-5							X					
B4-6							X					
B4-7							X					
B5-4							X					
B5-5							X					
B5-7							X					

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: WH Rodgers	William H Rodgers	SES	10-7-04	
Received by: Sherman Roland	SHERMAN ROLAND	NCA	10-7-04	11:00
Relinquished by: Sherman Roland	SHERMAN ROLAND	NCA	10-7-04	15:40
Received by: [signature]	PRANY TONTY	NCA	10/7/04	1540

NCA

7-6-470

SAMPLE CHAIN OF CUSTODY

Send Report To: Bill Rodgers

Company: Sound Environmental Strategies

Address: 2400 Airport Way S #200

City, State, ZIP: Seattle, WA 98134

Phone # (206) 306-1900 Fax # (206) 306-1907

SAMPLERS (signature): WHR

PROJECT NAME/NO.: 440-2

PO #:

REMARKS: Time Oil Everett

Page # 2 of 2

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

SAMPLE DISPOSAL
- [x] 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
~~B6~~																		SEJ0407
B6-4		10-16-04		Soil	2		X											Analyse for Gasoline/BTEX
B6-11.5		↓		↓	↓		X											
B6-14		↓		↓	↓		X											

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: WHR	William H. Rodgers	SES	10-7-04	
Received by: Sherman Roland	SHERMAN Roland	NCA	10-7-04	11:00
Relinquished by: Sherman Roland	SHERMAN Roland	NCA	10-7-04	15:40
Received by: Tony	PRAMA TONTY	NCA	10/7/04	1540

NCA

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/17/04 08:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B1-17'	B4J0407-01	Soil	10/06/04 12:00	10/07/04 15:40
B1-18'	B4J0407-02	Soil	10/06/04 12:00	10/07/04 15:40
B3-7'	B4J0407-03	Soil	10/06/04 13:59	10/07/04 15:40
B3-8'	B4J0407-04	Soil	10/06/04 13:58	10/07/04 15:40
B4-5'	B4J0407-05	Soil	10/06/04 12:00	10/07/04 15:40
B4-6'	B4J0407-06	Soil	10/06/04 12:00	10/07/04 15:40
B4-7'	B4J0407-07	Soil	10/06/04 12:00	10/07/04 15:40
B5-4'	B4J0407-08	Soil	10/06/04 12:00	10/07/04 15:40
B5-5'	B4J0407-09	Soil	10/06/04 14:45	10/07/04 15:40
B5-7'	B4J0407-10	Soil	10/06/04 12:00	10/07/04 15:40
B6-4'	B4J0407-11	Soil	10/06/04 12:00	10/07/04 15:40
B6-11.5'	B4J0407-12	Soil	10/06/04 12:00	10/07/04 15:40
B6-14'	B4J0407-13	Soil	10/06/04 12:00	10/07/04 15:40

North Creek Analytical - Bothell

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/17/04 08:22

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B1-17' (B4J0407-01RE1) Soil Sampled: 10/06/04 12:00 Received: 10/07/04 15:40									
Gasoline Range Hydrocarbons	**32.7**	7.28	mg/kg wet	1	4J20004	10/20/04	10/20/04	NWTPH-Gx/8021B	
Benzene	ND	0.0437	"	"	"	"	"	"	
Toluene	ND	0.0728	"	"	"	"	"	"	
Ethylbenzene	ND	0.0728	"	"	"	"	"	"	
Xylenes (total)	**0.419**	0.146	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*108 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*95.4 %*	*53-142*			"	"	"	"	
B1-18' (B4J0407-02) Soil Sampled: 10/06/04 12:00 Received: 10/07/04 15:40									
Gasoline Range Hydrocarbons	ND	8.08	mg/kg wet	1	4J20004	10/20/04	10/20/04	NWTPH-Gx/8021B	
Benzene	ND	0.0485	"	"	"	"	"	"	
Toluene	ND	0.0808	"	"	"	"	"	"	
Ethylbenzene	ND	0.0808	"	"	"	"	"	"	
Xylenes (total)	ND	0.162	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*94.1 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*91.0 %*	*53-142*			"	"	"	"	
B3-7' (B4J0407-03) Soil Sampled: 10/06/04 13:59 Received: 10/07/04 15:40									
Gasoline Range Hydrocarbons	**64.3**	6.49	mg/kg wet	1	4J18022	10/18/04	10/19/04	NWTPH-Gx/8021B	
Benzene	**0.628**	0.0389	"	"	"	"	"	"	
Toluene	**0.0826**	0.0649	"	"	"	"	"	"	
Ethylbenzene	**1.44**	0.0649	"	"	"	"	"	"	
Xylenes (total)	**6.47**	0.130	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*119 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*98.1 %*	*53-142*			"	"	"	"	

North Creek Analytical - Bothell

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/17/04 08:22

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B3-8' (B4J0407-04) Soil Sampled: 10/06/04 13:58 Received: 10/07/04 15:40									
Gasoline Range Hydrocarbons	**62.5**	10.2	mg/kg wet	1	4J18022	10/18/04	10/19/04	NWTPH-Gx/8021B	G-01
Benzene	**0.692**	0.0612	"	"	"	"	"	"	
Toluene	ND	0.102	"	"	"	"	"	"	
Ethylbenzene	ND	0.102	"	"	"	"	"	"	
Xylenes (total)	**0.286**	0.204	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*96.9 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*93.7 %*	*53-142*			"	"	"	"	
B4-5' (B4J0407-05) Soil Sampled: 10/06/04 12:00 Received: 10/07/04 15:40									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg wet	1	4J18022	10/18/04	10/19/04	NWTPH-Gx/8021B	
Benzene	**0.0530**	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	
Xylenes (total)	ND	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*95.8 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*91.5 %*	*53-142*			"	"	"	"	
B4-6' (B4J0407-06) Soil Sampled: 10/06/04 12:00 Received: 10/07/04 15:40									
Gasoline Range Hydrocarbons	ND	6.34	mg/kg wet	1	4J18022	10/18/04	10/19/04	NWTPH-Gx/8021B	
Benzene	**0.215**	0.0380	"	"	"	"	"	"	
Toluene	ND	0.0634	"	"	"	"	"	"	
Ethylbenzene	ND	0.0634	"	"	"	"	"	"	
Xylenes (total)	**0.384**	0.127	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*95.1 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*92.8 %*	*53-142*			"	"	"	"	

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Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/17/04 08:22

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B4-7' (B4J0407-07) Soil Sampled: 10/06/04 12:00 Received: 10/07/04 15:40									
Gasoline Range Hydrocarbons	ND	5.99	mg/kg wet	1	4J18022	10/18/04	10/19/04	NWTPH-Gx/8021B	
Benzene	**0.124**	0.0359	"	"	"	"	"	"	
Toluene	ND	0.0599	"	"	"	"	"	"	
Ethylbenzene	ND	0.0599	"	"	"	"	"	"	
Xylenes (total)	**0.305**	0.120	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*88.9 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*91.3 %*	*53-142*			"	"	"	"	
B5-4' (B4J0407-08) Soil Sampled: 10/06/04 12:00 Received: 10/07/04 15:40									
Gasoline Range Hydrocarbons	ND	6.21	mg/kg wet	1	4J18022	10/18/04	10/19/04	NWTPH-Gx/8021B	
Benzene	**0.0597**	0.0373	"	"	"	"	"	"	
Toluene	ND	0.0621	"	"	"	"	"	"	
Ethylbenzene	ND	0.0621	"	"	"	"	"	"	
Xylenes (total)	ND	0.124	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*97.0 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*91.9 %*	*53-142*			"	"	"	"	
B5-5' (B4J0407-09) Soil Sampled: 10/06/04 14:45 Received: 10/07/04 15:40									
Gasoline Range Hydrocarbons	ND	6.66	mg/kg wet	1	4J20004	10/20/04	10/20/04	NWTPH-Gx/8021B	
Benzene	**0.101**	0.0399	"	"	"	"	"	"	
Toluene	ND	0.0666	"	"	"	"	"	"	
Ethylbenzene	**0.0719**	0.0666	"	"	"	"	"	"	
Xylenes (total)	**0.294**	0.133	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*90.9 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*89.7 %*	*53-142*			"	"	"	"	

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Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B5-7' (B4J0407-10) Soil Sampled: 10/06/04 12:00 Received: 10/07/04 15:40									
Gasoline Range Hydrocarbons	**10.2**	6.08	mg/kg wet	1	4J20004	10/20/04	10/20/04	NWTPH-Gx/8021B	
Benzene	**0.196**	0.0365	"	"	"	"	"	"	
Toluene	ND	0.0608	"	"	"	"	"	"	
Ethylbenzene	**0.385**	0.0608	"	"	"	"	"	"	
Xylenes (total)	**1.72**	0.122	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*97.3 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*93.2 %*	*53-142*			"	"	"	"	
B6-4' (B4J0407-11) Soil Sampled: 10/06/04 12:00 Received: 10/07/04 15:40									
Gasoline Range Hydrocarbons	**18.4**	6.11	mg/kg wet	1	4J20004	10/20/04	10/20/04	NWTPH-Gx/8021B	
Benzene	**0.256**	0.0366	"	"	"	"	"	"	
Toluene	ND	0.0611	"	"	"	"	"	"	
Ethylbenzene	**0.314**	0.0611	"	"	"	"	"	"	
Xylenes (total)	**2.01**	0.122	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*110 %*	*50-150*			"	"	"	"	
Surrogate: 4-BFB (PID)	*95.2 %*	*53-142*			"	"	"	"	
B6-11.5' (B4J0407-12) Soil Sampled: 10/06/04 12:00 Received: 10/07/04 15:40									
Gasoline Range Hydrocarbons	**338**	6.82	mg/kg wet	1	4J20004	10/20/04	10/20/04	NWTPH-Gx/8021B	
Benzene	**0.187**	0.0409	"	"	"	"	"	"	
Toluene	**0.0780**	0.0682	"	"	"	"	"	"	
Ethylbenzene	**1.36**	0.0682	"	"	"	"	"	"	
Xylenes (total)	**6.76**	0.136	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*163 %*	*50-150*			"	"	"	"	*S-04*
Surrogate: 4-BFB (PID)	*106 %*	*53-142*			"	"	"	"	

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North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B6-14' (B4J0407-13) Soil Sampled: 10/06/04 12:00 Received: 10/07/04 15:40									
Gasoline Range Hydrocarbons	**101**	5.00	mg/kg wet	1	4J20004	10/20/04	10/20/04	NWTPH-Gx/8021B	
Benzene	**0.388**	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	**0.495**	0.0500	"	"	"	"	"	"	
Xylenes (total)	**1.99**	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*182 %*	*50-150*			"	"	"	"	*S-04*
Surrogate: 4-BFB (PID)	*108 %*	*53-142*			"	"	"	"	

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Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J18022: Prepared 10/18/04 Using EPA 5030B (MeOH)										
Blank (4J18022-BLK1)										
Gasoline Range Hydrocarbons	ND	5.00	mg/kg							
Benzene	ND	0.0300	"							
Toluene	ND	0.0500	"							
Ethylbenzene	ND	0.0500	"							
Xylenes (total)	ND	0.100	"							
Surrogate: 4-BFB (FID)	*2.14*		"	*2.40*		*89.2*	*50-150*			
Surrogate: 4-BFB (PID)	*2.09*		"	*2.40*		*87.1*	*53-142*			
LCS (4J18022-BS1)										
Gasoline Range Hydrocarbons	26.3	5.00	mg/kg	25.1		105	75-125			
Benzene	0.289	0.0300	"	0.310		93.2	75-125			
Toluene	1.67	0.0500	"	1.75		95.4	75-125			
Ethylbenzene	0.409	0.0500	"	0.419		97.6	75-125			
Xylenes (total)	2.01	0.100	"	2.03		99.0	75-125			
Surrogate: 4-BFB (FID)	*2.48*		"	*2.40*		*103*	*50-150*			
Surrogate: 4-BFB (PID)	*2.14*		"	*2.40*		*89.2*	*53-142*			
LCS Dup (4J18022-BSD1)										
Gasoline Range Hydrocarbons	27.6	5.00	mg/kg	25.1		110	75-125	4.82	25	
Benzene	0.304	0.0300	"	0.310		98.1	75-125	5.06	25	
Toluene	1.74	0.0500	"	1.75		99.4	75-125	4.11	25	
Ethylbenzene	0.425	0.0500	"	0.419		101	75-125	3.84	25	
Xylenes (total)	2.11	0.100	"	2.03		104	75-125	4.85	25	
Surrogate: 4-BFB (FID)	*2.49*		"	*2.40*		*104*	*50-150*			
Surrogate: 4-BFB (PID)	*2.13*		"	*2.40*		*88.8*	*53-142*			
Matrix Spike (4J18022-MS1)					**Source: B4J0407-01**					
Gasoline Range Hydrocarbons	61.2	6.15	mg/kg wet	30.9	35.2	84.1	42-125			
Benzene	0.363	0.0369	"	0.382	0.0190	90.1	45-125			
Toluene	2.00	0.0615	"	2.15	0.0171	92.2	55-125			
Ethylbenzene	0.588	0.0615	"	0.515	0.131	88.7	53-132			
Xylenes (total)	2.71	0.123	"	2.50	0.338	94.9	59-125			
Surrogate: 4-BFB (FID)	*3.69*		"	*2.95*		*125*	*50-150*			
Surrogate: 4-BFB (PID)	*2.70*		"	*2.95*		*91.5*	*53-142*			

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Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/17/04 08:22

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J18022: Prepared 10/18/04 Using EPA 5030B (MeOH)										
Matrix Spike Dup (4J18022-MSD1)					**Source: B4J0407-01**					
Gasoline Range Hydrocarbons	62.9	6.15	mg/kg wet	30.9	35.2	89.6	42-125	2.74	40	
Benzene	0.371	0.0369	"	0.382	0.0190	92.1	45-125	2.18	40	
Toluene	2.07	0.0615	"	2.15	0.0171	95.5	55-125	3.44	40	
Ethylbenzene	0.611	0.0615	"	0.515	0.131	93.2	53-132	3.84	40	
Xylenes (total)	2.82	0.123	"	2.50	0.338	99.3	59-125	3.98	40	
Surrogate: 4-BFB (FID)	*3.72*		*"*	*2.95*		*126*	*50-150*			
Surrogate: 4-BFB (PID)	*2.69*		*"*	*2.95*		*91.2*	*53-142*			
Batch 4J20004: Prepared 10/20/04 Using EPA 5030B (MeOH)										
Blank (4J20004-BLK1)										
Gasoline Range Hydrocarbons	ND	5.00	mg/kg							
Benzene	ND	0.0300	"							
Toluene	ND	0.0500	"							
Ethylbenzene	ND	0.0500	"							
Xylenes (total)	ND	0.100	"							
Surrogate: 4-BFB (FID)	*2.21*		*"*	*2.40*		*92.1*	*50-150*			
Surrogate: 4-BFB (PID)	*2.09*		*"*	*2.40*		*87.1*	*53-142*			
LCS (4J20004-BS1)										
Gasoline Range Hydrocarbons	24.8	5.00	mg/kg	25.1		98.8	75-125			
Benzene	0.287	0.0300	"	0.310		92.6	75-125			
Toluene	1.65	0.0500	"	1.75		94.3	75-125			
Ethylbenzene	0.400	0.0500	"	0.419		95.5	75-125			
Xylenes (total)	1.99	0.100	"	2.03		98.0	75-125			
Surrogate: 4-BFB (FID)	*2.53*		*"*	*2.40*		*105*	*50-150*			
Surrogate: 4-BFB (PID)	*2.12*		*"*	*2.40*		*88.3*	*53-142*			

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Amar Gill, Project Manager

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Anchorage 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119
907.563.9200 fax 907.563.9210

Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/17/04 08:22

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4J20004: Prepared 10/20/04 Using EPA 5030B (MeOH)										
LCS Dup (4J20004-BSD1)										
Gasoline Range Hydrocarbons	25.9	5.00	mg/kg	25.1		103	75-125	4.34	25	
Benzene	0.279	0.0300	"	0.310		90.0	75-125	2.83	25	
Toluene	1.61	0.0500	"	1.75		92.0	75-125	2.45	25	
Ethylbenzene	0.391	0.0500	"	0.419		93.3	75-125	2.28	25	
Xylenes (total)	1.94	0.100	"	2.03		95.6	75-125	2.54	25	
Surrogate: 4-BFB (FID)	*2.52*		*"*	*2.40*		*105*	*50-150*			
Surrogate: 4-BFB (PID)	*2.14*		*"*	*2.40*		*89.2*	*53-142*			
Matrix Spike (4J20004-MS1)					**Source: B4J0482-01**					**Q-02**
Gasoline Range Hydrocarbons	276	13.3	mg/kg dry	18.6	192	452	42-125			
Benzene	0.975	0.0800	"	0.230	0.176	347	45-125			
Toluene	4.66	0.133	"	1.30	0.0281	356	55-125			
Ethylbenzene	5.23	0.133	"	0.311	4.28	305	53-132			
Xylenes (total)	23.7	0.267	"	1.51	17.5	411	59-125			
Surrogate: 4-BFB (FID)	*2.61*		*"*	*1.78*		*147*	*50-150*			
Surrogate: 4-BFB (PID)	*1.73*		*"*	*1.78*		*97.2*	*53-142*			
Matrix Spike Dup (4J20004-MSD1)					**Source: B4J0482-01**					**Q-02**
Gasoline Range Hydrocarbons	279	13.3	mg/kg dry	18.6	192	468	42-125	1.08	40	
Benzene	1.02	0.0800	"	0.230	0.176	367	45-125	4.51	40	
Toluene	5.04	0.133	"	1.30	0.0281	386	55-125	7.84	40	
Ethylbenzene	5.33	0.133	"	0.311	4.28	338	53-132	1.89	40	
Xylenes (total)	24.2	0.267	"	1.51	17.5	444	59-125	2.09	40	
Surrogate: 4-BFB (FID)	*2.65*		*"*	*1.78*		*149*	*50-150*			
Surrogate: 4-BFB (PID)	*1.75*		*"*	*1.78*		*98.3*	*53-142*			

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Anchorage 2000 W International Airport Road, Suite A-10, Anchorage, AK 99502-1119
907.563.9200 fax 907.563.9210

Sound Environmental Strategies	Project: Time Oil Everett	
2400 Airport Way South, Suite 200	Project Number: 440-2	**Reported:**
Seattle, WA/USA 98134-2020	Project Manager: Bill Rodgers	11/17/04 08:22

Notes and Definitions

G-01	Results reported for the gas range are primarily due to overlap from diesel range hydrocarbons.
Q-02	The spike recovery for this QC sample is outside of NCA established control limits due to sample matrix interference.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

North Creek Analytical - Bothell

Amar Gill, Project Manager

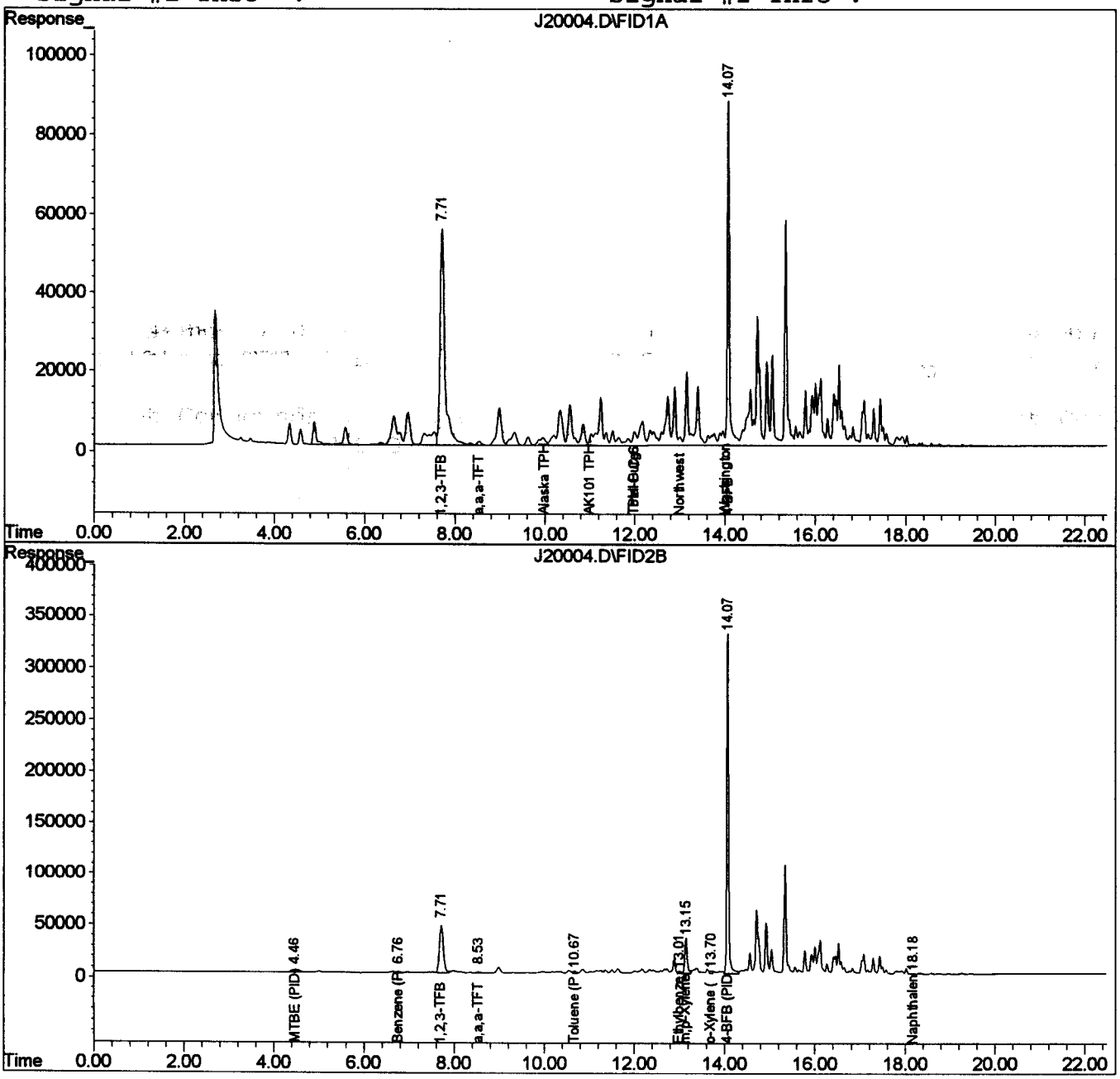
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\102004\J20004.D\FID1A.CH Vial: 4
Signal #2 : C:\HPCHEM\2\DATA\102004\J20004.D\FID2B.CH
Acq On : 20 Oct 2004 16:04 Operator: mam
Sample : b4j0407-01re1 Inst : GC #4
Misc : 1x 100uL Multiplr: 1.00
IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E
Quant Time: Oct 20 16:27 2004 Quant Results File: BTXI1204.RES

Quant Method : C:\HPCHEM\2\METHODS\BTXI1204.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Oct 17 17:49:24 2004
Response via : Multiple Level Calibration
DataAcq Meth : BTXI1204.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

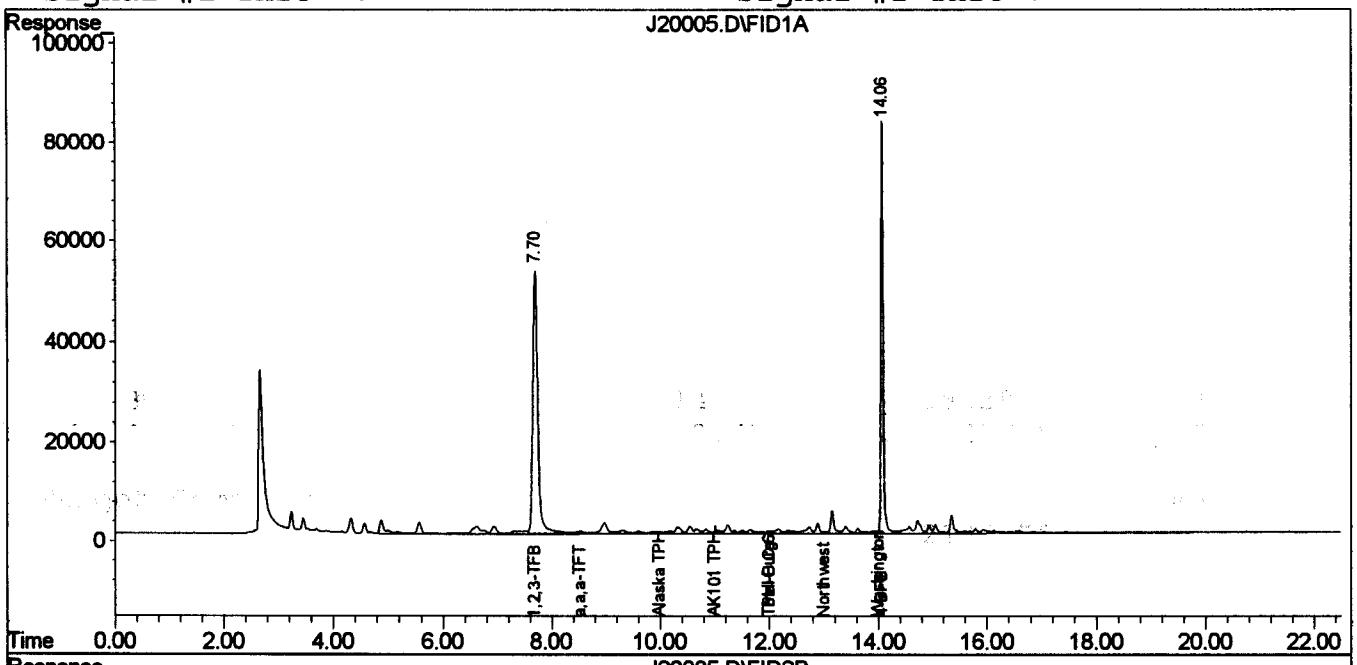


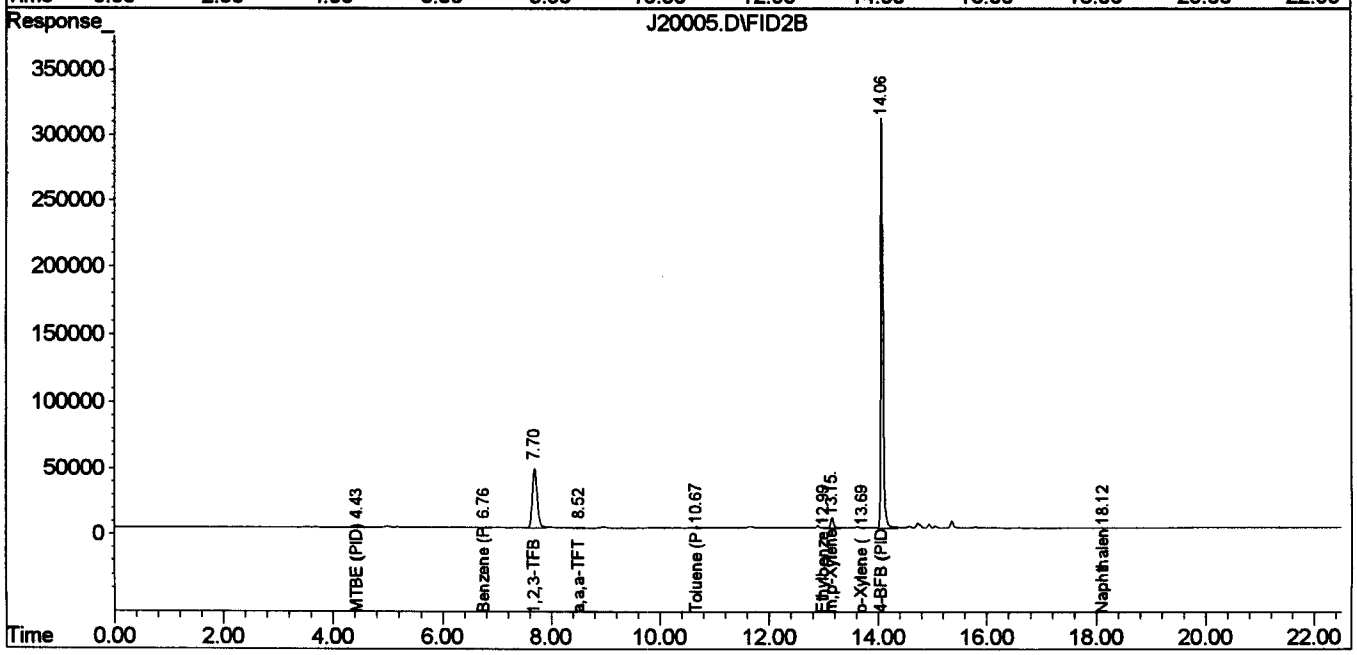
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\102004\J20005.D\FID1A.CH Vial: 5
Signal #2 : C:\HPCHEM\2\DATA\102004\J20005.D\FID2B.CH
Acq On : 20 Oct 2004 16:33 Operator: mam
Sample : b4j0407-02re1 Inst : GC #4
Misc : 1x 100uL Multiplr: 1.00
IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E
Quant Time: Oct 20 16:56 2004 Quant Results File: BTXI1204.RES

Quant Method : C:\HPCHEM\2\METHODS\BTXI1204.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Oct 17 17:49:24 2004
Response via : Multiple Level Calibration
DataAcq Meth : BTXI1204.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



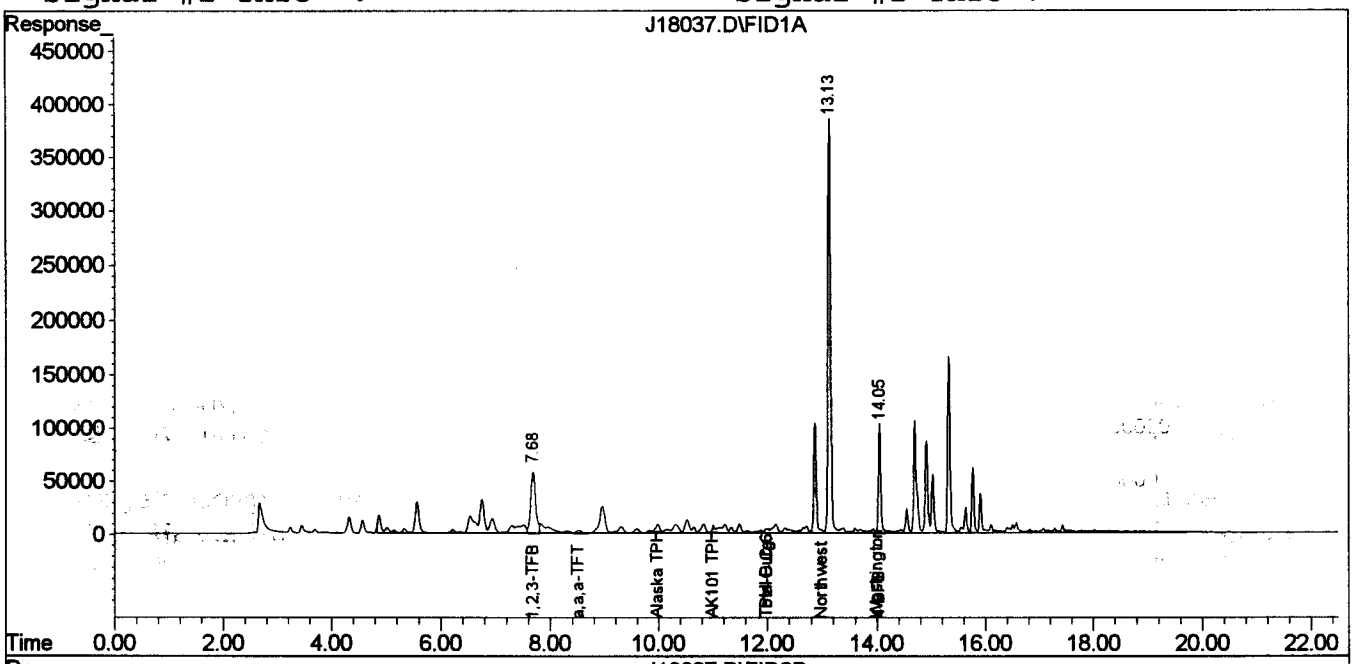


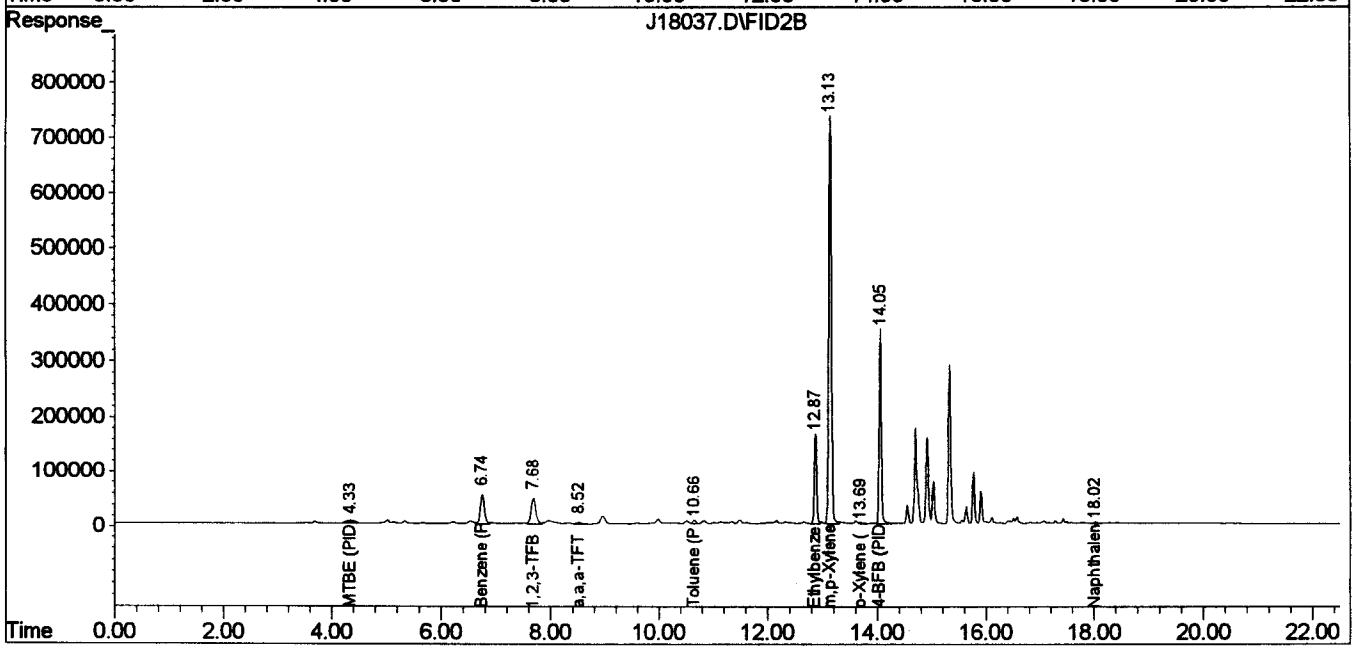
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\101804\J18037.D\FID1A.CH Vial: 37
Signal #2 : C:\HPCHEM\2\DATA\101804\J18037.D\FID2B.CH
Acq On : 19 Oct 2004 3:57 Operator: mam
Sample : b4j0407-03 Inst : GC #4
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E
Quant Time: Oct 19 4:20 2004 Quant Results File: BTXI1204.RES

Quant Method : C:\HPCHEM\2\METHODS\BTXI1204.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Oct 17 17:49:24 2004
Response via : Multiple Level Calibration
DataAcq Meth : BTXI1204.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



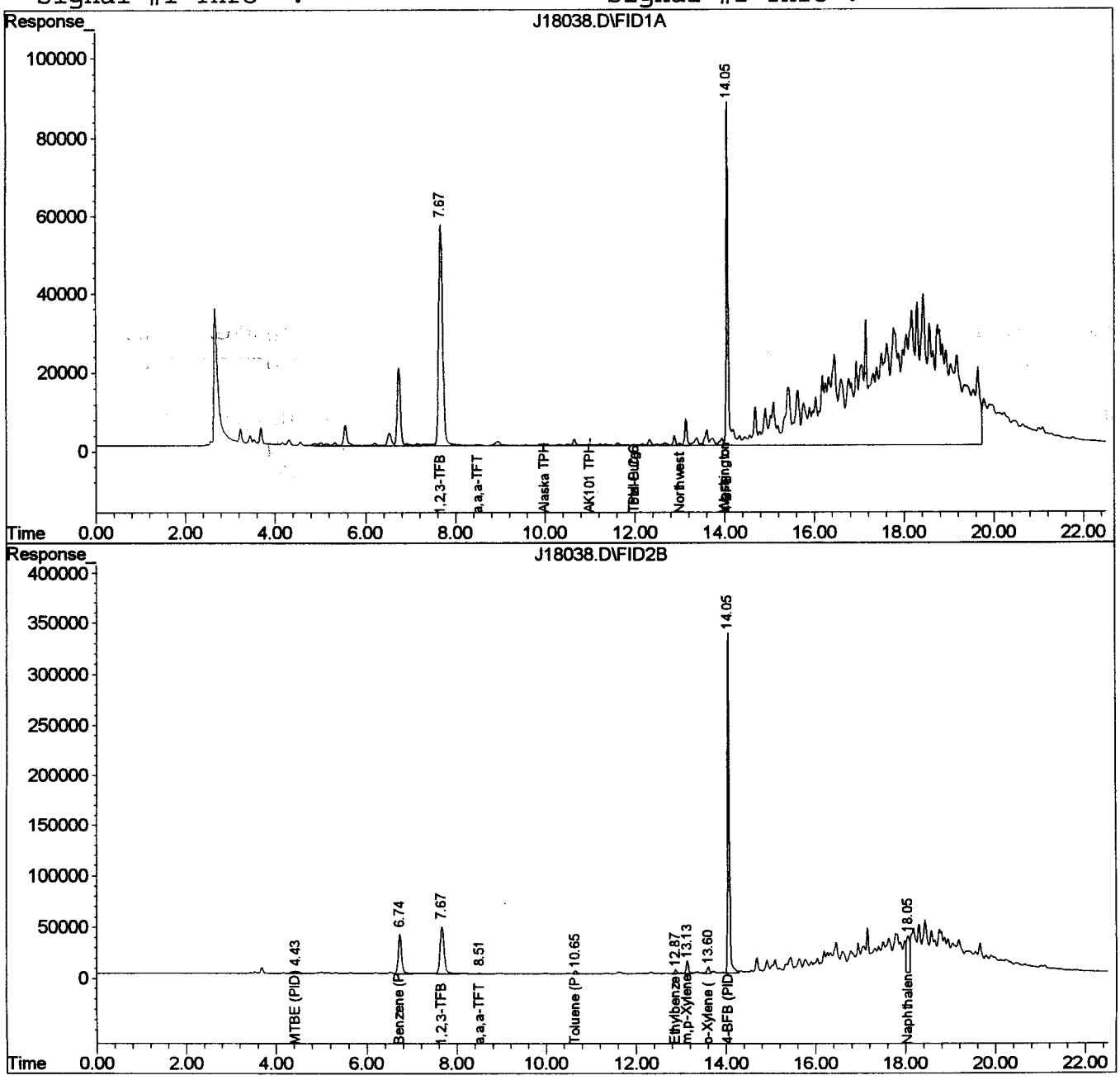


Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\101804\J18038.D\FID1A.CH Vial: 38
Signal #2 : C:\HPCHEM\2\DATA\101804\J18038.D\FID2B.CH
Acq On : 19 Oct 2004 4:27 Operator: mam
Sample : b4j0407-04 Inst : GC #4
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E
Quant Time: Oct 19 4:49 2004 Quant Results File: BTXI1204.RES

Quant Method : C:\HPCHEM\2\METHODS\BTXI1204.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Oct 17 17:49:24 2004
Response via : Multiple Level Calibration
DataAcq Meth : BTXI1204.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

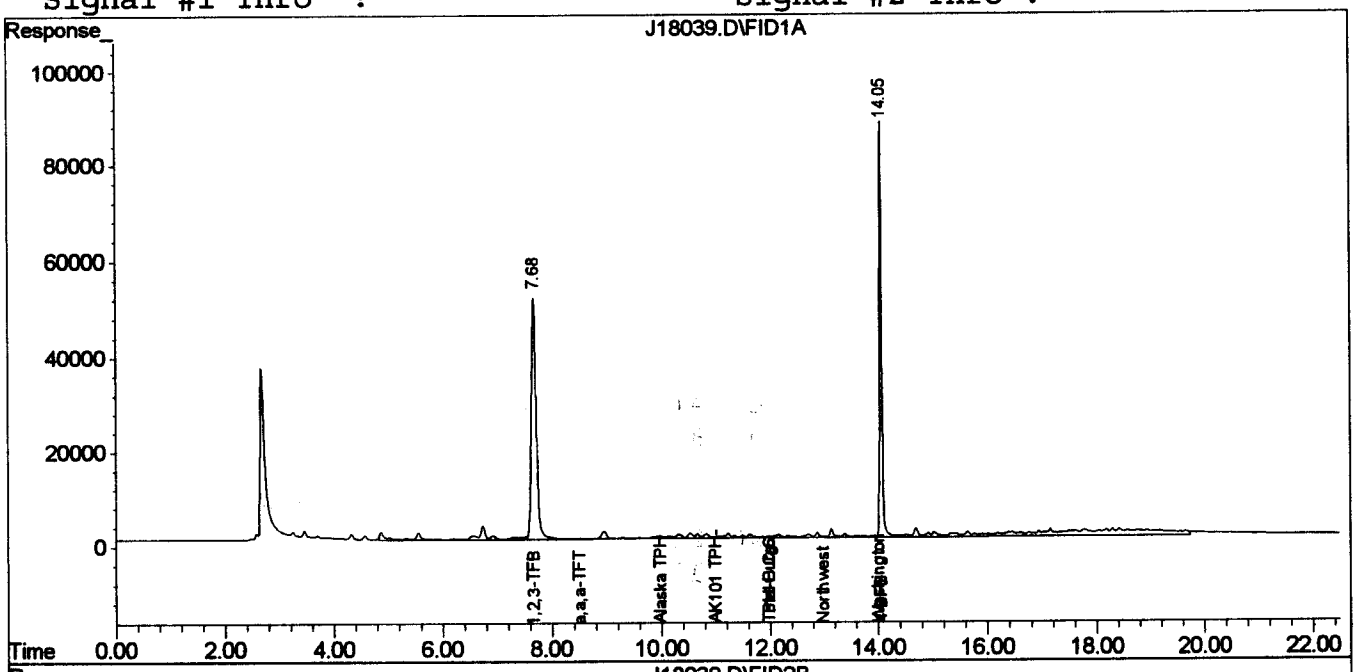


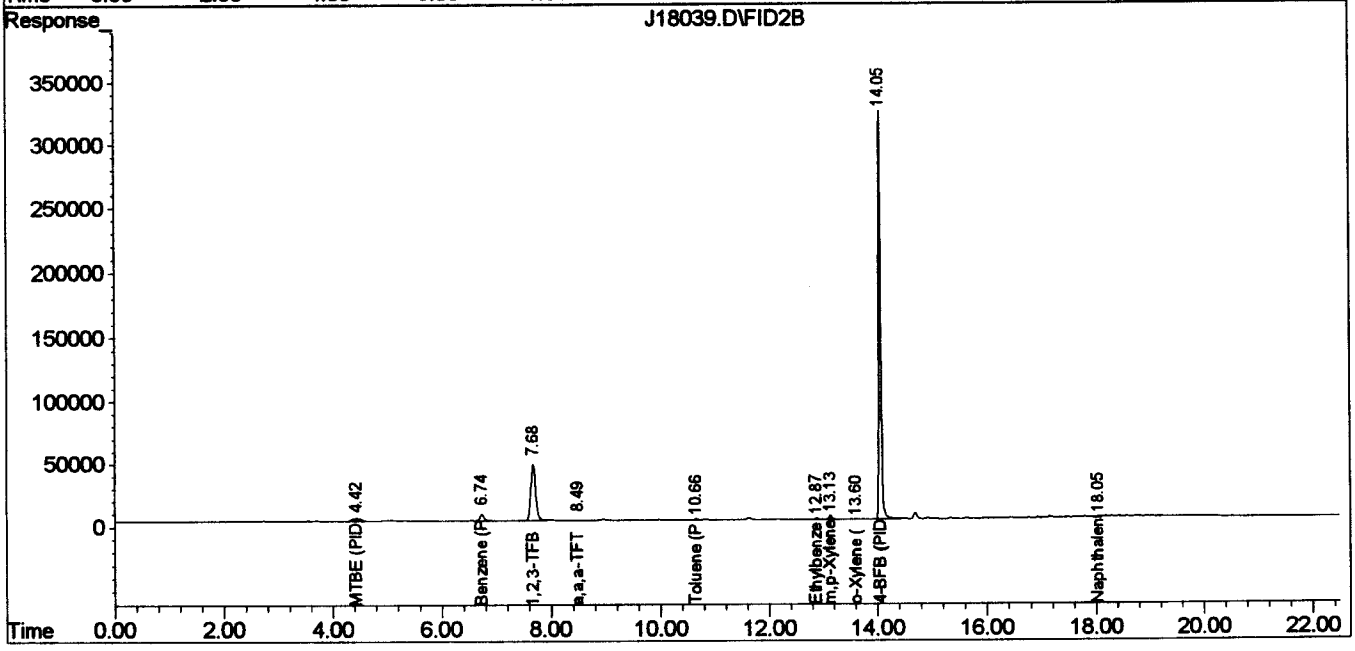
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\101804\J18039.D\FID1A.CH Vial: 39
Signal #2 : C:\HPCHEM\2\DATA\101804\J18039.D\FID2B.CH
Acq On : 19 Oct 2004 4:56 Operator: mam
Sample : b4j0407-05 Inst : GC #4
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E
Quant Time: Oct 19 5:19 2004 Quant Results File: BTXI1204.RES

Quant Method : C:\HPCHEM\2\METHODS\BTXI1204.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Oct 17 17:49:24 2004
Response via : Multiple Level Calibration
DataAcq Meth : BTXI1204.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



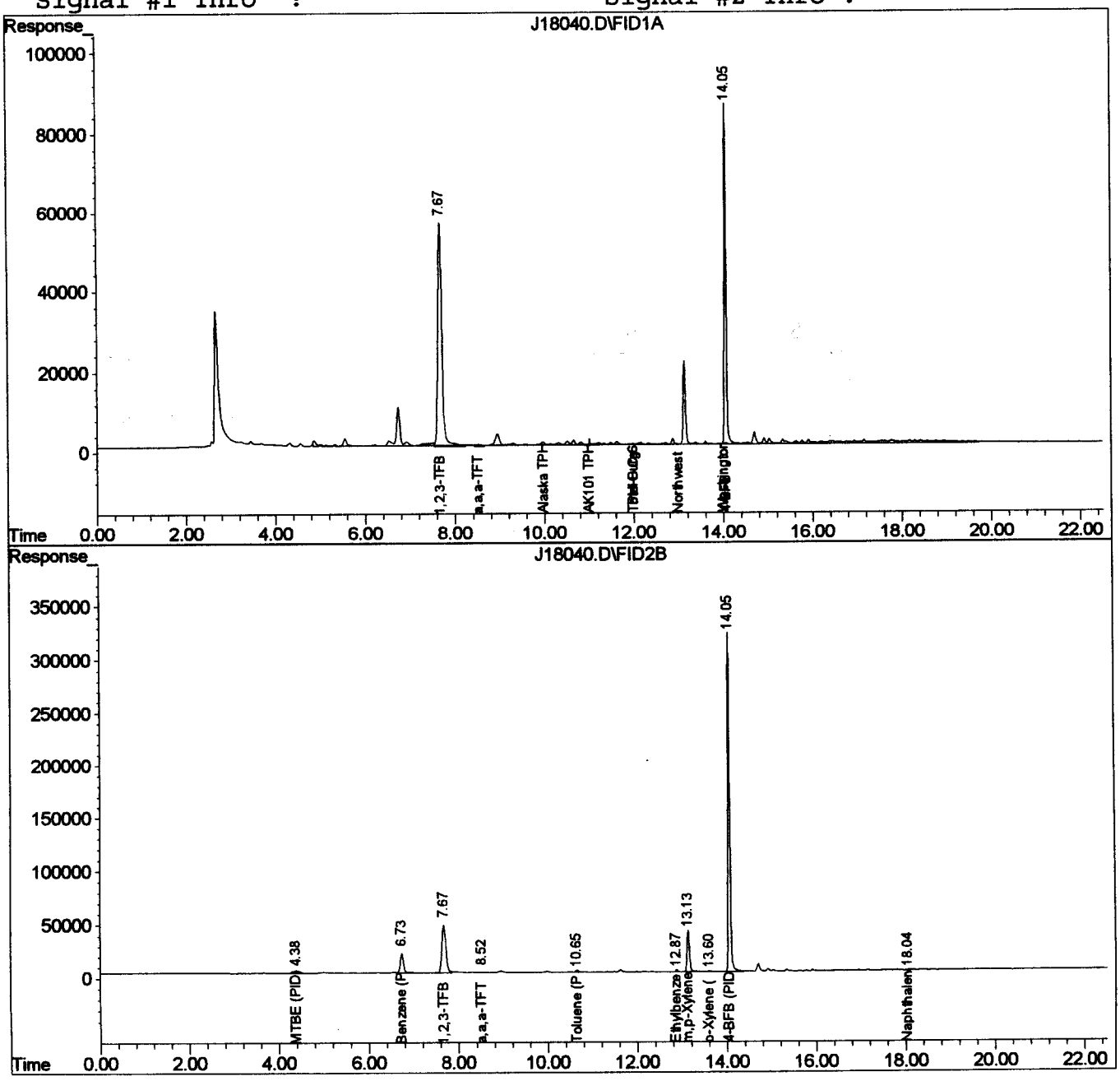


Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\101804\J18040.D\FID1A.CH Vial: 40
Signal #2 : C:\HPCHEM\2\DATA\101804\J18040.D\FID2B.CH
Acq On : 19 Oct 2004 5:26 Operator: mam
Sample : b4j0407-06 Inst : GC #4
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E
Quant Time: Oct 19 5:49 2004 Quant Results File: BTXI1204.RES

Quant Method : C:\HPCHEM\2\METHODS\BTXI1204.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Oct 17 17:49:24 2004
Response via : Multiple Level Calibration
DataAcq Meth : BTXI1204.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

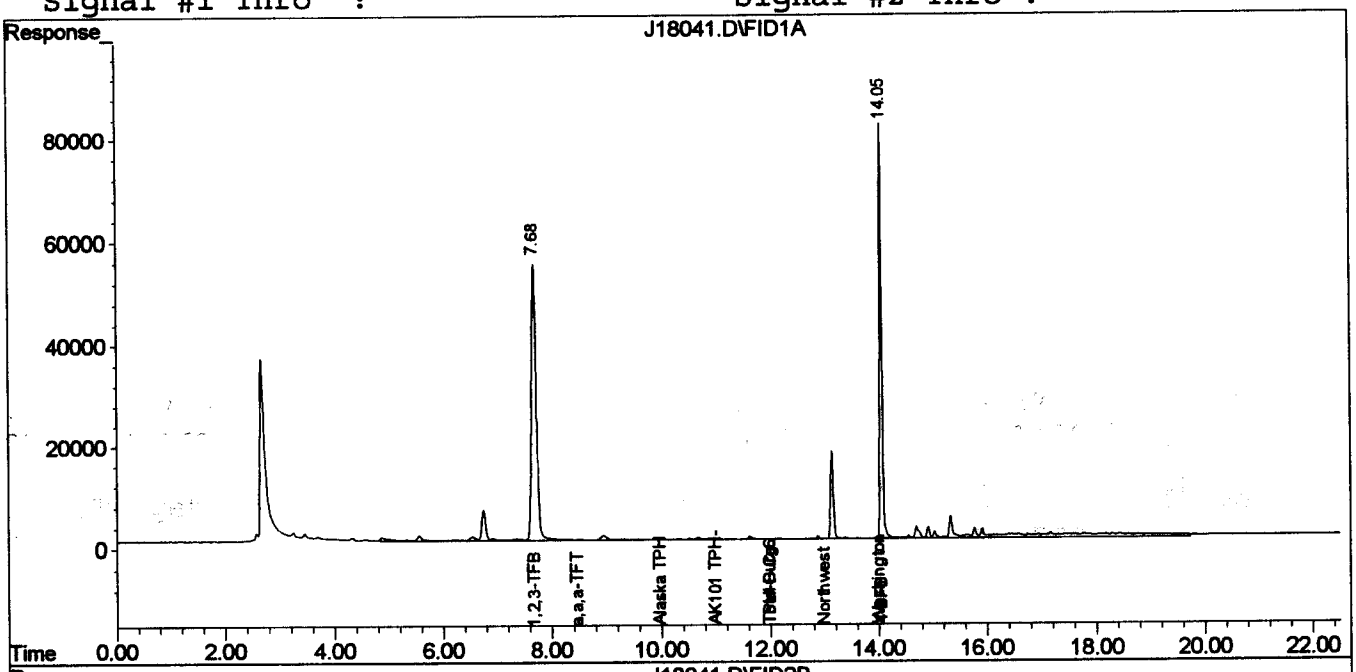


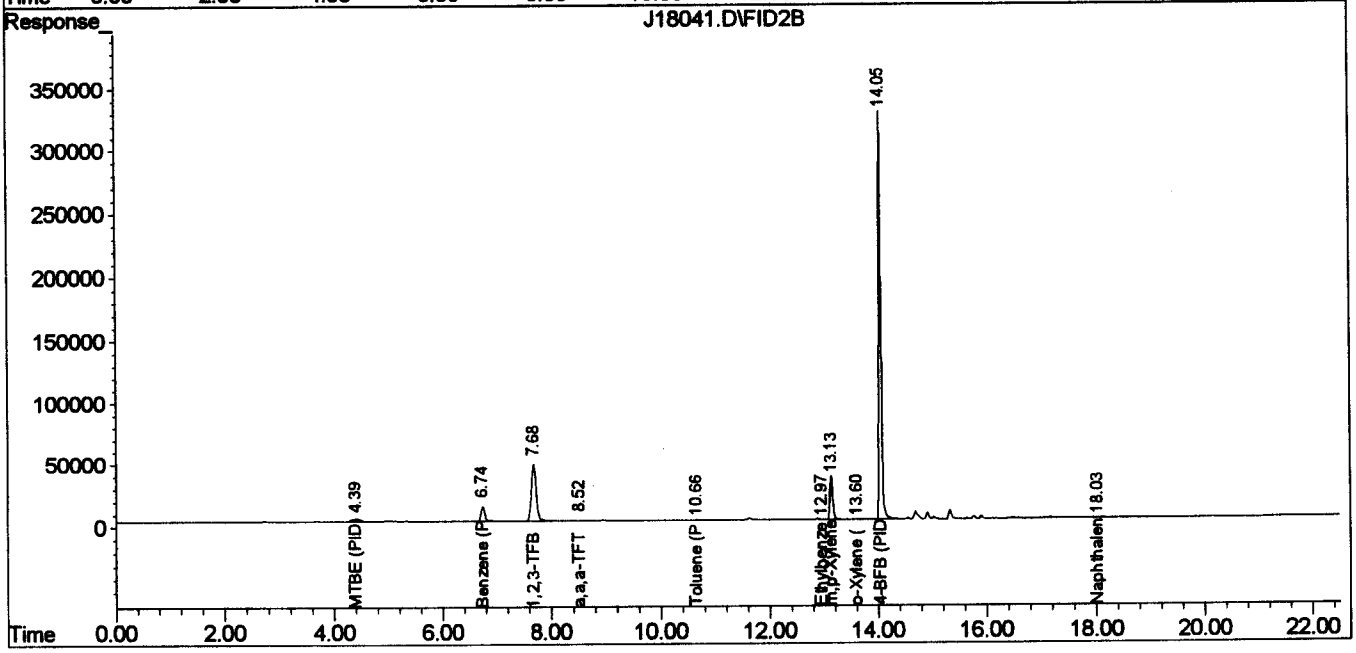
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\101804\J18041.D\FID1A.CH Vial: 41
Signal #2 : C:\HPCHEM\2\DATA\101804\J18041.D\FID2B.CH
Acq On : 19 Oct 2004 5:56 Operator: mam
Sample : b4j0407-07 Inst : GC #4
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E
Quant Time: Oct 19 6:18 2004 Quant Results File: BTXI1204.RES

Quant Method : C:\HPCHEM\2\METHODS\BTXI1204.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Oct 17 17:49:24 2004
Response via : Multiple Level Calibration
DataAcq Meth : BTXI1204.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



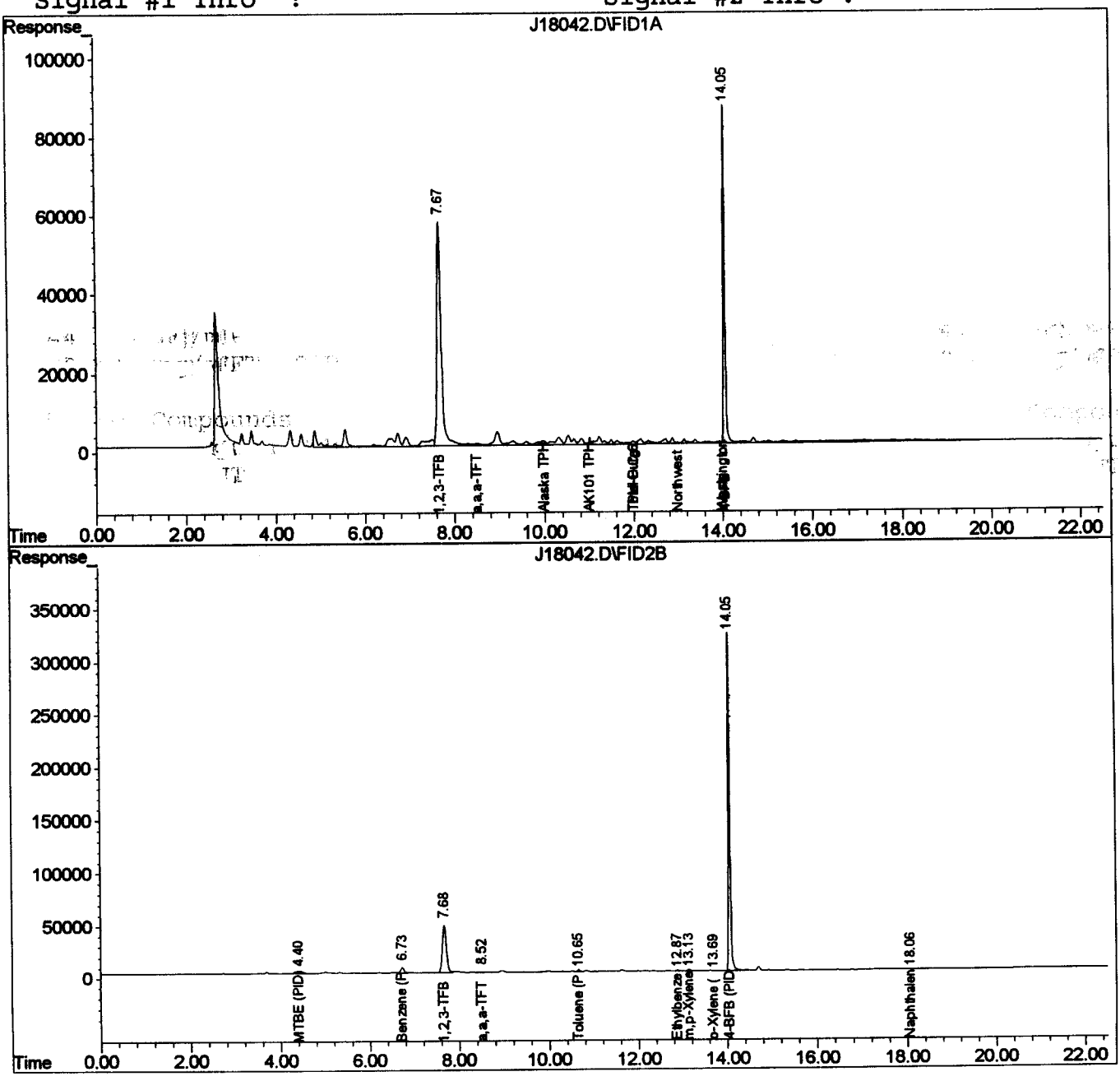


Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\101804\J18042.D\FID1A.CH Vial: 42
Signal #2 : C:\HPCHEM\2\DATA\101804\J18042.D\FID2B.CH
Acq On : 19 Oct 2004 6:25 Operator: mam
Sample : b4j0407-08 Inst : GC #4
Misc : 1x 100 uL Multiplr: 1.00
IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E
Quant Time: Oct 19 6:48 2004 Quant Results File: BTXI1204.RES

Quant Method : C:\HPCHEM\2\METHODS\BTXI1204.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Oct 17 17:49:24 2004
Response via : Multiple Level Calibration
DataAcq Meth : BTXI1204.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

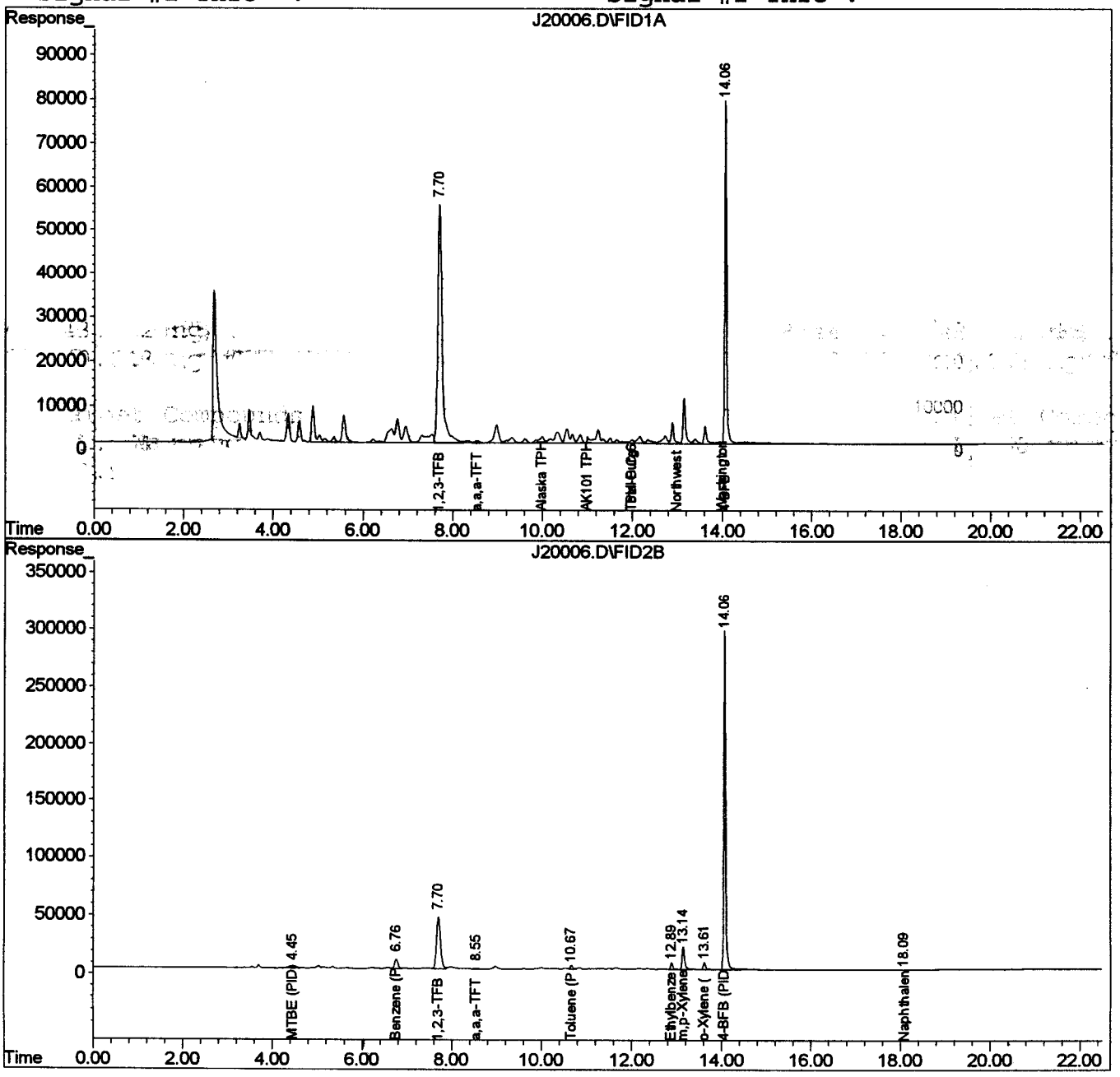


Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\102004\J20006.D\FID1A.CH Vial: 6
Signal #2 : C:\HPCHEM\2\DATA\102004\J20006.D\FID2B.CH
Acq On : 20 Oct 2004 17:03 Operator: mam
Sample : b4j0407-09 Inst : GC #4
Misc : 1x 100uL Multiplr: 1.00
IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E
Quant Time: Oct 20 17:25 2004 Quant Results File: BTXI1204.RES

Quant Method : C:\HPCHEM\2\METHODS\BTXI1204.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Oct 17 17:49:24 2004
Response via : Multiple Level Calibration
DataAcq Meth : BTXI1204.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

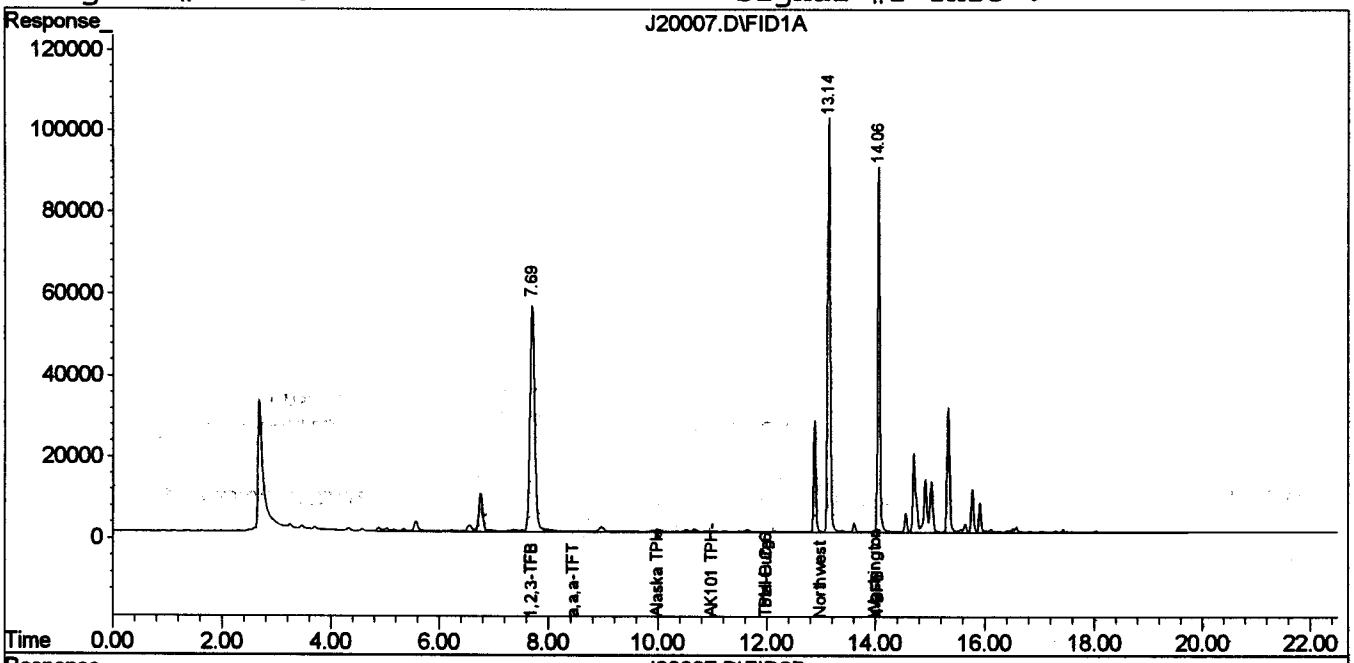


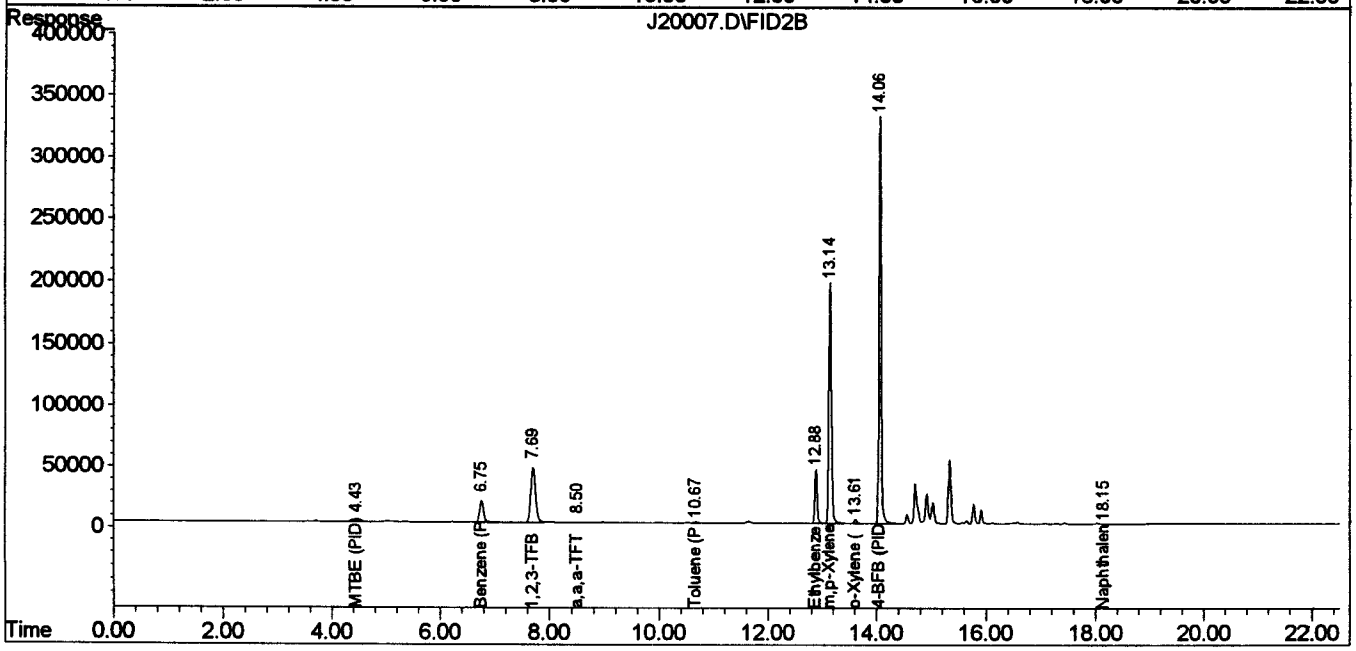
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\102004\J20007.D\FID1A.CH Vial: 7
Signal #2 : C:\HPCHEM\2\DATA\102004\J20007.D\FID2B.CH
Acq On : 20 Oct 2004 17:32 Operator: mam
Sample : b4j0407-10 Inst : GC #4
Misc : 1x 100uL Multiplr: 1.00
IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E
Quant Time: Oct 20 17:55 2004 Quant Results File: BTXI1204.RES

Quant Method : C:\HPCHEM\2\METHODS\BTXI1204.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Oct 17 17:49:24 2004
Response via : Multiple Level Calibration
DataAcq Meth : BTXI1204.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



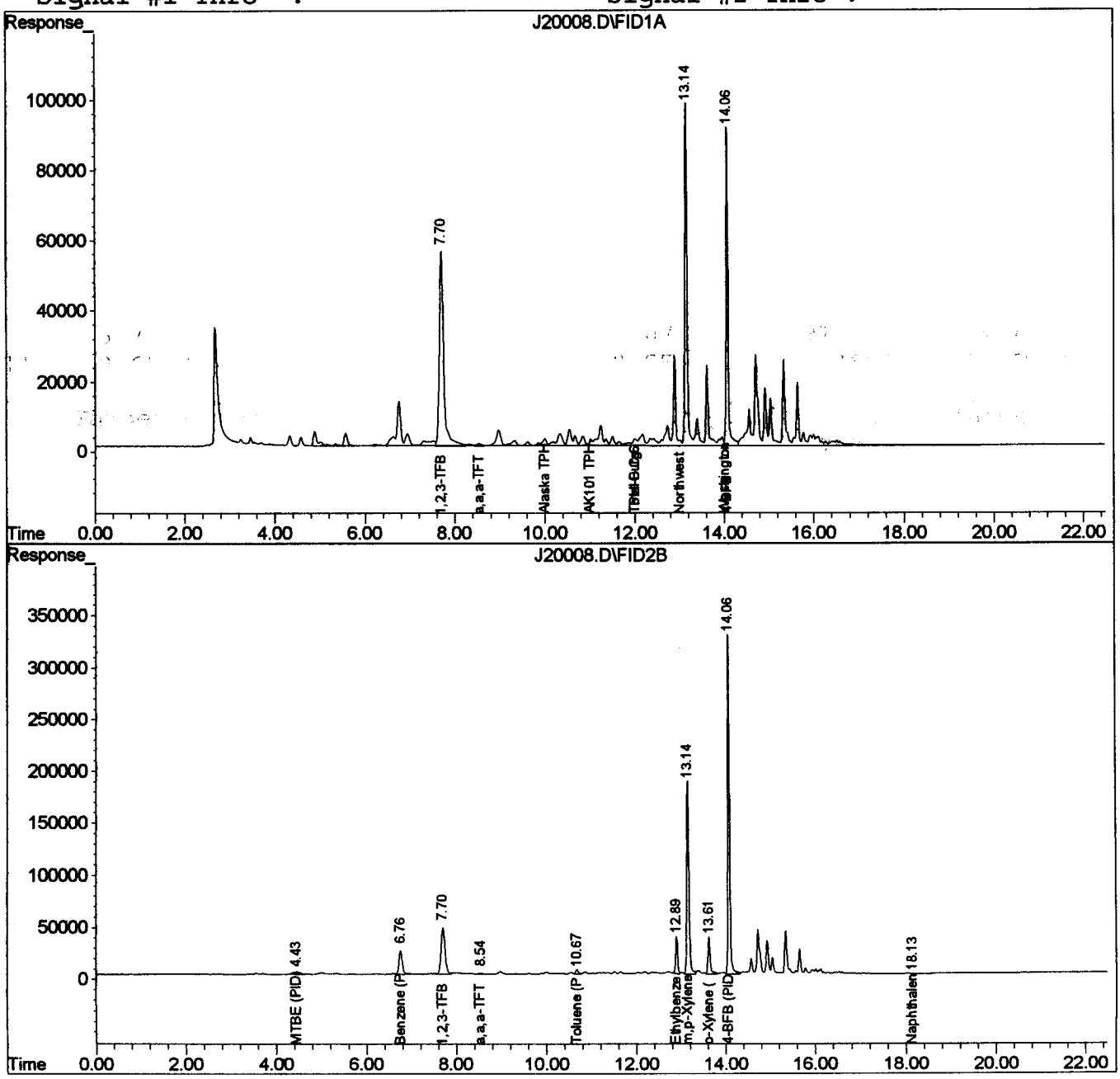


Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\102004\J20008.D\FID1A.CH Vial: 8
Signal #2 : C:\HPCHEM\2\DATA\102004\J20008.D\FID2B.CH
Acq On : 20 Oct 2004 18:02 Operator: mam
Sample : b4j0407-11 Inst : GC #4
Misc : 1x 100uL Multiplr: 1.00
IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E
Quant Time: Oct 21 14:10 2004 Quant Results File: BTXI1204.RES

Quant Method : C:\HPCHEM\2\METHODS\BTXI1204.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Oct 17 17:49:24 2004
Response via : Multiple Level Calibration
DataAcq Meth : BTXI1204.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

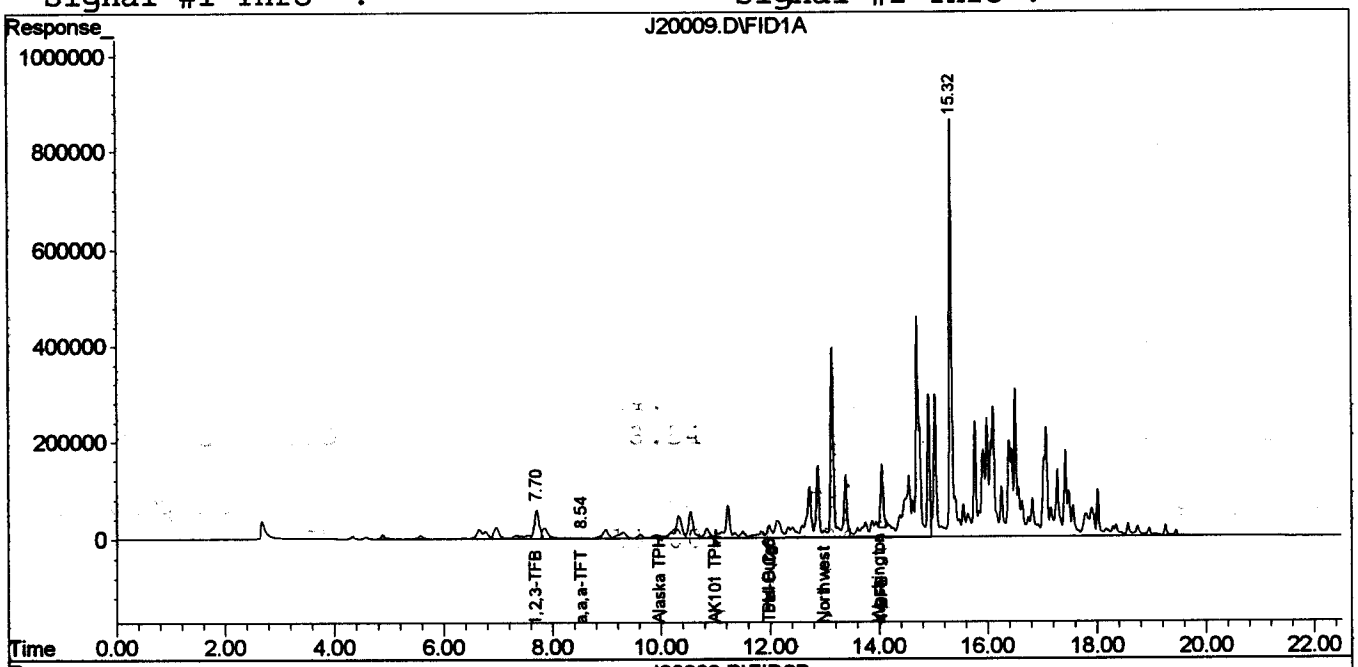


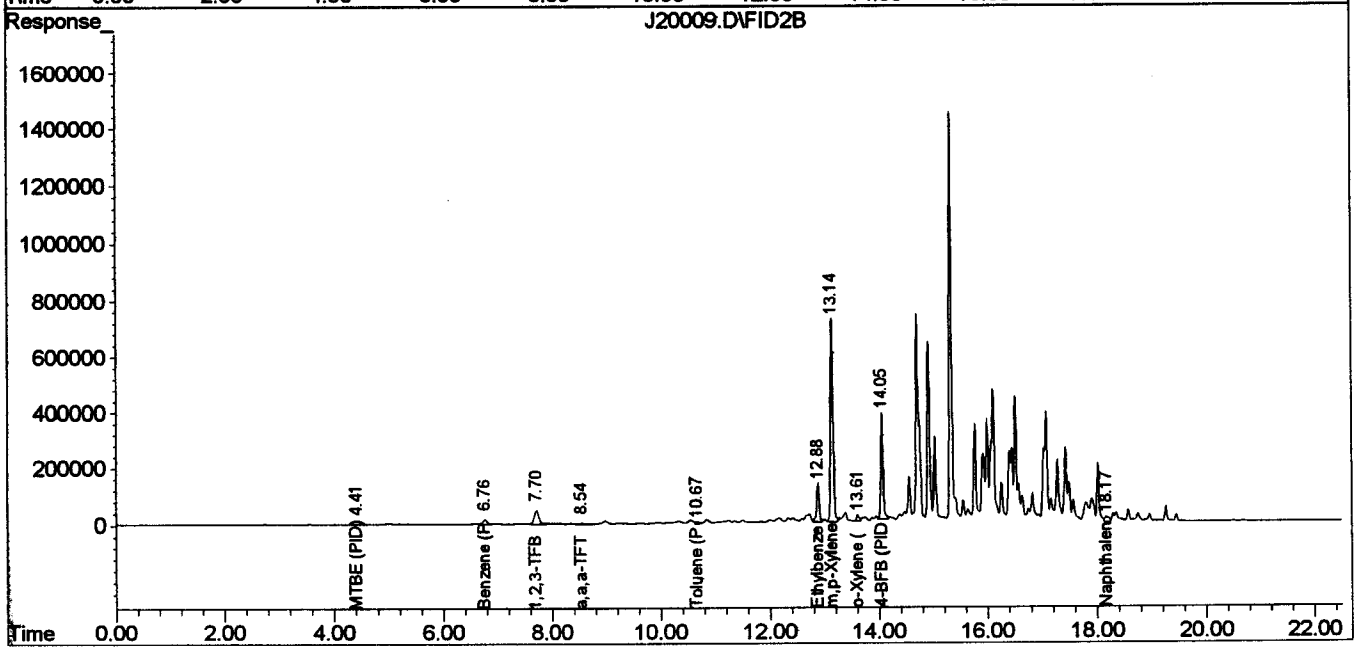
Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\102004\J20009.D\FID1A.CH Vial: 9
Signal #2 : C:\HPCHEM\2\DATA\102004\J20009.D\FID2B.CH
Acq On : 20 Oct 2004 18:31 Operator: mam
Sample : b4j0407-12 Inst : GC #4
Misc : 1x 100uL Multiplr: 1.00
IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E
Quant Time: Oct 21 14:15 2004 Quant Results File: BTXI1204.RES

Quant Method : C:\HPCHEM\2\METHODS\BTXI1204.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Oct 17 17:49:24 2004
Response via : Multiple Level Calibration
DataAcq Meth : BTXI1204.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report

Signal #1 : C:\HPCHEM\2\DATA\102004\J20010.D\FID1A.CH Vial: 10
Signal #2 : C:\HPCHEM\2\DATA\102004\J20010.D\FID2B.CH
Acq On : 20 Oct 2004 19:01 Operator: mam
Sample : b4j0407-13 Inst : GC #4
Misc : 1x 100uL Multiplr: 1.00
IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E
Quant Time: Oct 21 14:24 2004 Quant Results File: BTXI1204.RES

Quant Method : C:\HPCHEM\2\METHODS\BTXI1204.M (Chemstation Integrator)
Title : TPH-G/BTEX 8015/8021 Method
Last Update : Sun Oct 17 17:49:24 2004
Response via : Multiple Level Calibration
DataAcq Meth : BTXI1204.M

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :