

## Letter of Transmittal

---

**ATTENTION:**

Ms Krystal Rodriguez  
Washington Department of Ecology  
15 West Yakima Avenue, Suite 200  
Yakima, WA 98902-3401

**DATE:**

4/14/05

---

**PROJECT REFERENCE:**

Former Unocal Bulk Fuel Terminal #0082,  
Chelan, WA

**PROJECT NUMBER:**

06940 248

---

**WE ARE SENDING YOU THE FOLLOWING:**

<u>Number of Originals</u>	<u>Number of Copies</u>	<u>Description</u>
1		Soil Boring Report



---

**REMARKS:**

Attached is the report for the soil boring work that was completed in February.

We are currently on track for performing the excavation work starting on April 25. I am completing a work plan for that work and will forward you a copy next week.

The schedule is to arrive on site on Monday, April 25, and prepare the site (create access for the trucks), and begin removal of overburden. The on-site lab is scheduled to arrive on Monday afternoon. I would expect by Tuesday we are prepared to remove contaminated soils.

We will have another person on-site. His name is Chad Thompson and he is a very well qualified excavation supervisor. He will be there the entire time, and I will be there part time.

I am not sure when you might want to visit the site. Let me know what you might like to do.

I will call you tomorrow to verify receipt.

---

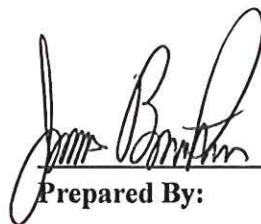
**SIGNATURE:**

James Borthen  
Chelan Project Manager

**ENSR International  
Redmond, Washington**

**Soil Boring Report**

**Former Unocal Bulk Plant #0082  
Chelan, Washington**



**Prepared By:**

**James Borthen, P.E.**

  
**Reviewed By:**

**Akos Fekete, L.G.**



**Akos Paul Fekete**

**ENSR Corporation  
March 2005  
Document Number 06940248-2**

## CONTENTS

<b>1.0 INTRODUCTION.....</b>	<b>1-1</b>
1.1 Purpose .....	1-1
1.2 Site History .....	1-2
<b>2.0 PROCEDURES.....</b>	<b>2-3</b>
2.1 Soil Sampling Strategy.....	2-3
2.2 Analytics .....	2-3
<b>3.0 RESULTS .....</b>	<b>3-4</b>
<b>4.0 DISCUSSION .....</b>	<b>4-5</b>
4.1 DOE Concerns .....	4-5
4.2 Recommended Actions.....	4-7
4.2.1 Excavation #1.....	4-7
4.2.2 Excavation #2.....	4-7
4.2.3 Excavation #3.....	4-7
4.2.4 Excavation #5.....	4-8
4.2.5 Excavations #4 and #6 .....	4-8
<b>5.0 SUMMARY.....</b>	<b>5-9</b>

## **LIST OF TABLES**

---

Table 1                    Soil Boring Sample Analytical Results

## **LIST OF FIGURES**

- |          |                            |
|----------|----------------------------|
| Figure 1 | Vicinity Map               |
| Figure 2 | Soil Boring Locations      |
| Figure 3 | Site Contamination Profile |

## 1.0 INTRODUCTION

This report presents the results of soil borings drilled at the site of the former Unocal Bulk Storage Plant #0082 in Chelan, Washington (Figure 1). It is an addendum to the Residual Soil Excavation Plan written in December 2004, which serves as a corrective action plan for achieving environmental closure at this site.

### 1.1 Purpose

The purpose of these borings was to more clearly define the lateral extents and vertical depth of contaminated soils. This information will be used to determine the location and amount of contaminated soils that will be removed during.

This work effort was intended to address some of the concerns identified by the Washington State Department of Ecology (DOE) concerning petroleum impacted soils remaining on the site (October 24, 2002 letter from DOE to Unocal, Mark Brearley). In response to past site assessment work at this site, and a request for a "No Further Action" letter, DOE listed four objectives that need to be met in order for this site to obtain closure. These four objectives are:

- 1 Address residual soil contamination at the site.
- 2 Provide additional information regarding Excavations 1,2, and 3.
- 3 Collect four consecutive quarters of ground water samples with contaminant levels below MTCA Method A levels.
- 4 Fully characterize the soil at the site, in particular, in the following areas:
  - Beneath the former truck unloaders (NE of TP-6)
  - Beneath the former oil/water separator
  - Beneath the fill drain ports of the former ASTs
  - Beneath the former catch basin
  - Beneath the joints/elbows of above and below ground product lines

This soil boring work effort will address as many of these issues as possible. The others will be covered during the excavation work planned for next month, and during quarterly ground water monitoring.

## 1.2 Site History

From approximately 1927 until 1989 this site was used as a bulk plant for the storage and distribution of petroleum fuel. In 1989, the bulk plant was permanently closed, and by 1992, all tanks (both above ground and underground) and structures had been demolished and removed.

Initial surface and subsurface assessments began in 1989, and continued through 2001. In 2001, 300 cubic yards of impacted soil were removed from six excavation pits.

Ground water monitoring occurred from 1991 to 1999 on a quarterly to semi-annual basis. By 2001, there were a total of eight monitoring wells on-site. From 2001 to 2002, quarterly groundwater samples were taken from all monitoring wells on the site. In 2001 an air sparge and soil vapor extraction (AS/SVE) system was installed to remediate impacted soil and groundwater. The system was deactivated in 2002.

In 2002 a request for no further action (NFA) was submitted. However, DOE determined that more information was needed with respect to possible remaining soil contamination.

During 2003 and 2004 quarterly groundwater sampling showed the presence of TPH-diesel (TPH-D) in two of eight monitoring wells (MW-1 and MW-5), which exceed MTCA Method A Cleanup Levels. A review of historical soil sampling and analysis data confirmed that contaminated soils had been left in place in the areas immediately surrounding those wells. It was determined that as long as those impacted soils remained in place the wells would be very slow to remediate.

## 2.0 PROCEDURES

### 2.1 Soil Sampling Strategy

A hollow stem auger drilling rig was used to drill the borings at selected locations on site. Figure 2 shows the locations of the eight borings. Each auger was advanced to the depth where ground water was encountered. Split spoon soil samples were removed from the borings at 5' depth increments. The spoon was cleaned using soap and water between each sample event.

In each boring, samples were collected every 5 feet of depth, starting at the 5 foot below ground surface (bgs) level. The sampling procedure, established prior to initiating drilling activities, was to field screen each sample using a PID detector. Samples at the 5 foot and 10 foot bgs levels that gave a positive indication on the PID were placed in jars and sent to the laboratory for analysis. All samples from the 15 foot, 20 foot, and 25 foot bgs levels were placed in jars and sent to the laboratory for analysis.

### 2.2 Analytics

Selected soil samples collected from the soil borings were submitted to North Creek Analytical (NCA) laboratories in Bothell, Washington under chain-of-custody (COC) protocol. Soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) by NWTPH-Gx and total petroleum hydrocarbons as diesel and heavy oils (TPH-d and TPH-o) by Method NWTPH-Dx with acid/silica gel cleanup. In addition the samples will also be analyzed for benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8021B.

### 3.0 RESULTS

Table 1 summarizes the samples where MTCA Method A soil Cleanup Levels were exceeded. The complete analytical results are given in Table 2.

The following borings were below reporting limits for all analytes: B-1, B-3, B-4, B-7, and B-8. Boring B-2 had reportable concentrations of gasoline, diesel and oil. However, this well was significantly below Model Toxics Control Act (MTCA) Method A cleanup levels [100 milligrams per kilogram (mg/kg), 2,000 mg/kg, and 2,000 mg/kg, respectively].

Only borings B-5 (located near MW-5), and B-6 (located just south of MW-1) encountered significant quantities of petroleum hydrocarbons (see Table 1 below). In boring B-5, gasoline and diesel concentrations exceeded MTCA Method A Cleanup Levels from the 10 foot level bgs down to 25 feet. The highest concentrations were at the 20 foot level. At the 10 foot level (the first sample analyzed), concentrations were significantly above MTCA Method A cleanup levels. At the 25 foot level, concentrations appear to be decreasing, but are not below MTCA.

In boring B-6, gasoline and diesel are above MTCA Method A levels. As with B-5, the highest concentrations are at the 20 foot level. The deepest sample (from 25 feet bgs) is below MTCA Method A levels.

**Table 1**  
**Soil Boring – Summary of Exceedences**

Well Number (Depth)	TPH-G	TPH-D
MTCA Method A	mg/kg	
B5(10-11.5)	281	3,080
B5(15-16.5)	1,070	2,870
B5(20.21.5)	1,140	4,690
B5(25-26.5)	373	2,260
B6(15-16.5)	242	1,800
B6(20-21.5)	378	7,370
B6(25-26.5)	30.8	86.7

## 4.0 DISCUSSION

Figure 3 provides a site plan showing the location of all of the assessment work that has been done to date. At each location, where chemical analysis has been performed, the results are listed. Where an analysis yielded concentrations above method reporting limits, the depth of the analysis is given and then the concentration. All concentrations are for TPH-Diesel unless otherwise noted. ND means that all samples at the location were below reporting limits. TPH means that Method 418.1 was used as a broad indicator of the presence of petroleum hydrocarbons.

Figure 1 also indicates the possible area of soils that are impacted at the 20 foot bgs level. Straight lines indicate a higher level of certainty as to the location of the line. Wavy lines may be only approximate.

### 4.1 DOE Concerns

As mentioned in Section 1.1, DOE has some specific issues at this site that need to be addressed prior achieving closure. The following discussion addresses as many of these issues as the information currently available allows. Unresolved issues will be covered during the excavation phase of work.

#### *1 Address residual soil contamination at the site.*

Historical site assessment work, and the associated sampling and analytical data, indicate that there are contaminated soils left in place. Particular areas of concern are the location of wells MW-1 and MW-5. These wells both encountered contaminated soils during drilling operations. This conclusion is supported by the persistent nature of contaminated ground water found in these two wells each quarter. Residual soil contamination is present following excavation operations (Excavation #1).

Excavations 3 and 5 may have impacted soils remaining in place. Repeatedly throughout the history of environmental assessment work at this site, the lack of conformational sampling left doubt as to whether all contaminated soils had been removed. Also, test pits and excavations frequently did not extend deep enough to confirm the vertical extents of contamination.

In Excavation 5, test pit TP-9 encountered contaminated soils at a depth of 10', which were never completely removed and investigation of the vertical extent of those contaminated soils was never conducted. During the current boring operations B-7 was advanced as close to TP-9 as possible. B-7 encountered no soils impacted above analytical reporting levels.

Excavation 3 will be investigated in detail during the excavation operations to be conducted in April.

*2 Provide additional information regarding Excavations 1,2, and 3.*

In Excavation #1, borings B-6 and B-5 confirmed the contamination believed to still exist in the areas of wells MW-1 and MW-5, respectively. Borings B-4 and B-8, combined with well MW-4, define the lateral extents of this contamination on the east side of the plume.

In Excavation #2, although MW-3 and geoprobe GP-4 were clean, contaminated soils were found in test pit TP-2 (1989) at a depth of 11 feet. A vertical extent to the contamination was never determined in TP-2. Boring B-3 was located near the center of this test pit area and advanced down to the water level. Boring B-3 was below analytical reporting limits for all analytes at all depths.

Due to the greater area of Excavation #3 and its associated piping issues, this area was not addressed in this work effort. It will be investigated during the April excavation work.

*3 Collect four consecutive quarters of ground water samples with contaminant levels below MTCA Method A levels.*

Groundwater monitoring will be initiated following the remedial excavation activities scheduled for April 2005. It is anticipated that MW-1 and MW-5 will be destroyed during these activities. They will be replaced in May 2005.

*4 Fully characterize the soil at the site, in particular, in the following areas:*

*Beneath the former truck unloaders (NE of TP-6)*

Boring B-6 was located near the truck unloaders. B-6 was heavily contaminated and will be addressed during excavation.

*Beneath the former oil/water separator*

Boring B-1 was located as close to the oil/water separator as possible. It was below analytical recording levels for all analytes.

*Beneath the fill drain ports of the former ASTs*

Boring B-7 was located near the above ground storage tanks. It was below analytical recording levels for all analytes.

*Beneath the former catch basin*

Boring B-2 was located near the catch basin. This boring had some detectable concentrations of gasoline, diesel and oil, but was far below MTCA Method A cleanup levels.

*Beneath the joints/elbows of above and below ground product lines.*

The joints and elbows associated with product pipe lines in the area of Excavation #3 were not addressed during the boring work due to the large area that they cover. They will be addressed during the excavation phase of work through use of trenches and test pits.

#### **4.2 Recommended Actions**

##### **4.2.1 Excavation #1**

Removal of soils in the area of B-5 may be required from above the 10 foot level to below 25 feet. The soil sampling results from well MW-5 are consistent with this, and suggest that the contaminated soils may not extend deeper than 29 feet.

Soils in the area of B-6 may require removal from above 15' to between 20 and 25 feet bgs based on the soil sampling results from well MW-1.

This soil boring effort has refined the lateral extent of residual soil contamination. Additional refinement will occur during the excavation process and confirmed through field and laboratory analysis.

##### **4.2.2 Excavation #2**

The absence of contamination in boring B-3 confirms that contaminated soils do not extend to the water table. Confirmation samples from this excavation area indicates that the soils comply with MTCA Method A Cleanup Levels for soils.

##### **4.2.3 Excavation #3**

Additional investigation should be performed in this area of the site during excavation operations in April. In particular:

TP-1(89)      TPH of 1900 ppm at 11'

Investigation of the pipeline area to confirm absence of leaked hydrocarbons through test pits.

Confirmation of the vertical extents of contamination by sampling at 13 feet bgs.

#### **4.2.4      Excavation #5**

The absence of contamination in boring B-7 confirms that contaminated soils do not extend to the ground water. This excavation area appears to meet MTCA Method A Cleanup Levels for soils.

#### **4.2.5      Excavations #4 and #6**

Based on confirmatory soil samples and previous test data, soils in these areas are below MTCA Method A cleanup levels and require no additional remedial action.

## 5.0 SUMMARY

Residual soil contamination remains in place in the area of wells MW-1 and MW-5 as shown in Figure 3. The highest concentrations appear to be at a depth of 20 feet bgs, but may range from 10 feet bgs to 25 feet bgs in some areas.

Figure 3 shows a target area in the eastern portion of the site. Also shown in Figure 3 are soil concentrations and depths for the various sampling points throughout the site. Concentrations are for TPH-Diesel, unless stated otherwise. This target area represents the estimated horizontal extents of contamination at the 20 foot bgs level. The area within this target zone is approximately 1100 square feet (120 square yards). Within this target area, soils with petroleum hydrocarbons exceeding MTCA Method A Cleanup Levels may extend down, on average, to a depth of 23 feet bgs. They may also extend up to approximately 14 feet. This gives an estimated volume of approximately 360 cubic yards.

The area of Excavation #3 still requires investigation.

Remaining areas of the site appear to be in compliance with MTCA regulations.

**Table 2**  
**Soil Boring Sample Analytical Results**  
**Former Unocal Bulk Fuel Terminal #0082**  
**Chelan, Washington**

Boring # (Depth)	Benzene <sup>a</sup>	Toluene <sup>a</sup>	Ethyl-Benzenes <sup>a</sup>	Total Xylenes <sup>a</sup>	TPH-G <sup>b</sup>	TPH-D <sup>c</sup>	TPH-O <sup>c</sup>
	MTCA Method A mg/kg	0.03	7	6	9	100/30	2,000
B1(3.5-4)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B1(8.5-9)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B1(13.5-14)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B1(18.5-20)	<0.0235	<0.0391	<0.0391	<0.0782	<3.91	<10.0	<25.0
B2(5-6.5)	<0.03	<0.05	<0.05	<0.10	<b>8.19</b>	<b>35.3</b>	<b>28.5</b>
B2(15-16.5)	<0.0427	<0.0712	<0.0712	<0.142	<7.12	<b>11.3</b>	<25.0
B2(20-21.5)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B2(25-26.5)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B3(15-16.5)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B3(20-21.5)	<0.0271	<0.0452	<0.0452	<0.0905	<4.52	<10.0	<25.0
B3(25-26.5)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B4(15-16.5)	<0.0269	<0.0448	<0.0448	<0.0897	<4.48	<10.0	<25.0
B4(20-21.5)	<0.0269	<0.0448	<0.0448	<0.0896	<4.48	<10.0	<25.0
B4(25-26.5)	<0.0248	<0.0413	<0.0413	<0.0826	<4.13	<10.0	<25.0
B5(10-11.5)	<0.03	<0.05	<0.05	<b>0.188</b>	<b>281</b>	<b>3,080</b>	<b>60.1</b>
B5(15-16.5)	<0.0250	<0.0416	<b>0.167</b>	<b>0.600</b>	<b>1,070</b>	<b>2,870</b>	<b>75.4</b>
B5(20-21.5)	<0.0247	<0.0412	<b>0.268</b>	<b>0.983</b>	<b>1,140</b>	<b>4,690</b>	<b>104</b>
B5(25-26.5)	<0.030	<0.050	<b>0.0769</b>	<b>0.143</b>	<b>373</b>	<b>2,260</b>	<125
B6(15-16.5)	<0.0267	<0.0444	<0.0444	<0.0889	<b>242</b>	<b>1,800</b>	<25.0
B6(20-21.5)	<0.0245	<0.0408	<0.0408	<0.0816	<b>378</b>	<b>7,370</b>	<b>58.6</b>
B6(25-26.5)	<0.0260	<0.0434	<0.0434	<0.0868	<b>30.8</b>	<b>86.7</b>	<25.0
B7(15-16.5)	<0.0300	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B7(20-21.5)	<0.0300	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B7(25-26.5)	<0.0249	<0.0415	<0.0415	<0.0828	<4.15	<10.0	<25.0
B8(15-16.5)	<0.0266	<0.0444	<0.0444	<0.0887	<4.44	<10.0	<25.0
B8(20-21.5)	<0.03	<0.05	<0.05	<0.10	<5.00	<10.0	<25.0
B8(25-26.5)	<0.0273	<0.0455	<0.0455	<0.0909	<4.55	<10.0	<25.0

**NOTES:**

- <sup>a</sup> Analyzed by EPA Method 8021B.
- <sup>b</sup> Gasoline range hydrocarbons analyzed by Ecology Northwest Method NWTPH-G.
- <sup>c</sup> Diesel and oil range hydrocarbons analyzed by Ecology Northwest Method NWTPH-Dx.

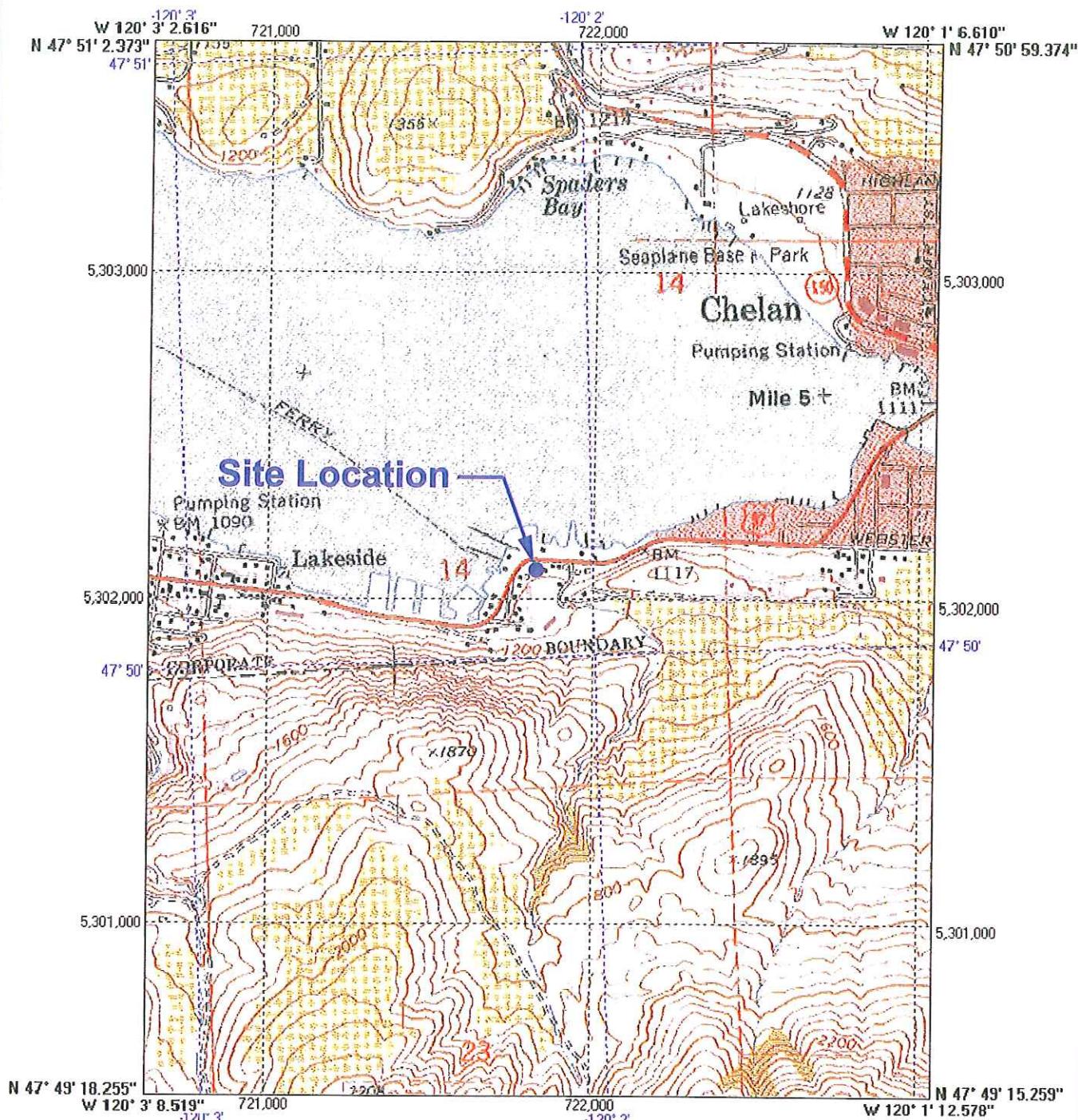
MTCA Model Toxics Control Act

Bold analytical concentrations indicates a concentration greater than analytical reporting limits.

Gray shading represents concentrations greater than MTCA Method A levels for soil

All concentrations in mg/kg

Chelan



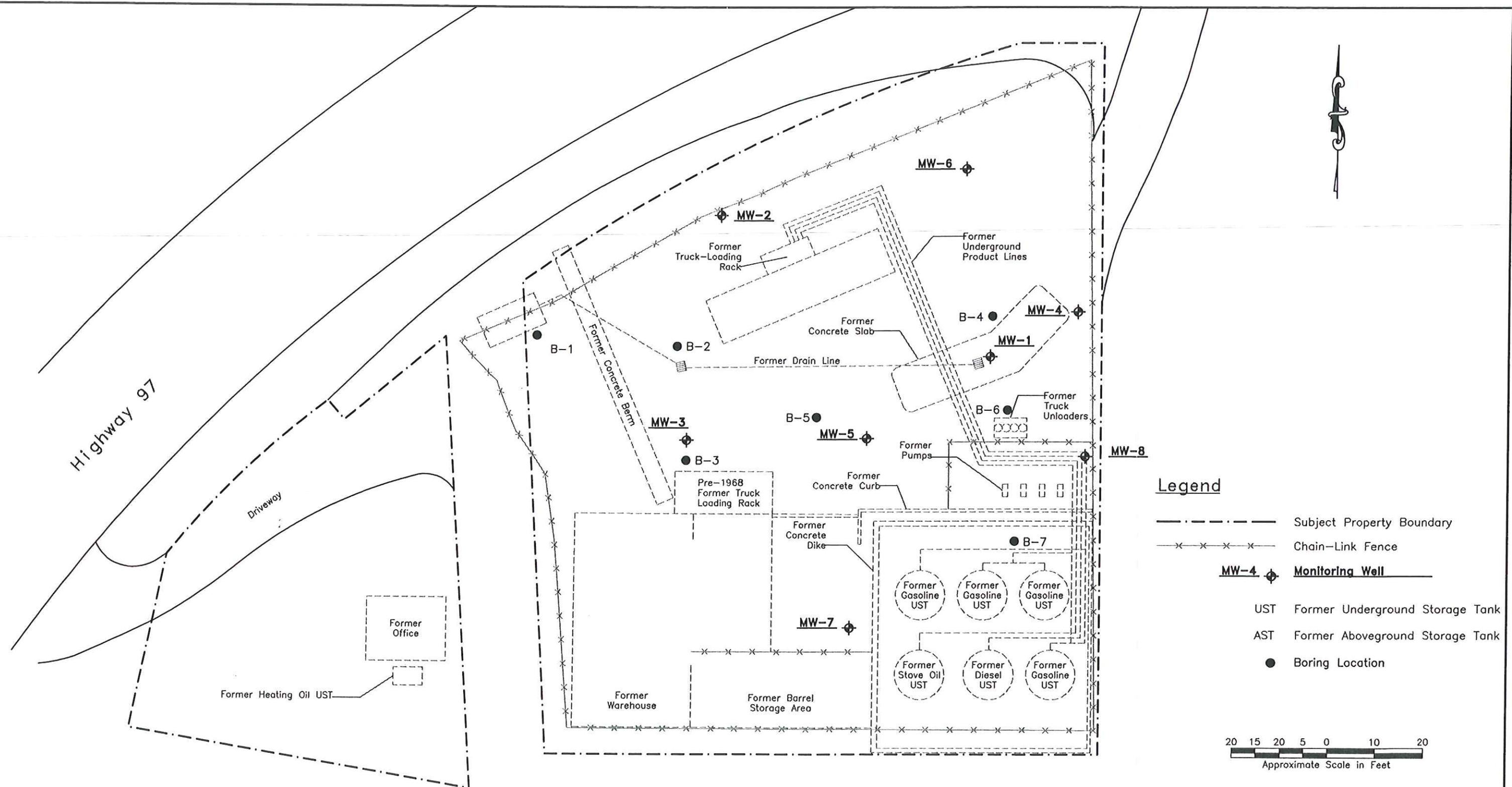
BigTopo Map

DRAWN:	K. Mongar
CHECKED:	A. Fekete
DATE:	November 10, 2004
FILENAME:	0694024813A
PROJECT NO:	06940-248-130

FIGURE 1  
SITE LOCATION

Former Unocal Bulk Plant No. 0082  
Highway 97 at East Street  
Chelan, Washington

**ENSR**  
INTERNATIONAL

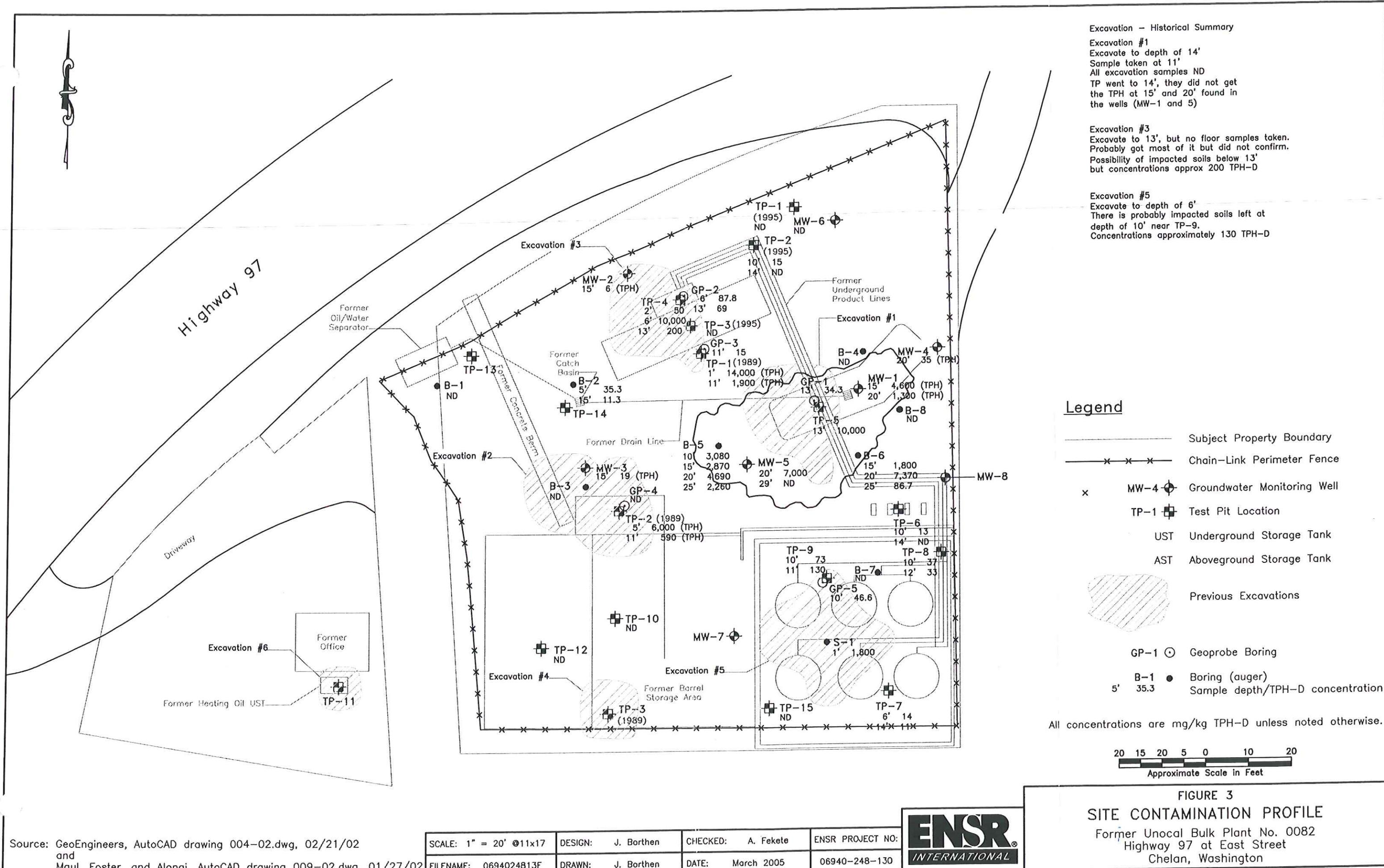


Source: GeoEngineers, AutoCAD File No. 004-02.dwg, 02/21/02

SCALE: 1" = 20' @11x17	DESIGN: jborthen	CHECKED: A. Fekete	ENSR PROJECT NO:
FILENAME: 0694024813B jb	DRAWN: jborthen	DATE: May 25, 2004	06940-248-130

**ENSR**  
INTERNATIONAL

**FIGURE 2**  
**SOIL BORING LOCATIONS**  
Former Unocal Bulk Plant No. 0082  
Highway 97 at East Street  
Chelan, Washington



Project Number: 06940-248 Client: UNOCAL				Boring Log											
Site Location: Chelan, WA				Boring Data											
Project Manager: Jim Borthen		Field Technician Bratz		2/13/2005		Sheet:		Use:		Boring Number: B-1	1 of 1	Boring Depth: 20ft			
Drilling Contractor: Cascade Drilling		Driller:		2/13/2005		Surface Elevation (ft-asl):		Equipment:		Auger-mounted Drill Rig	Water Depth: 18ft				
Depth	Sample Depth	Sample Number	Blow Counts (6")			Ree (%)	PID (ppm)	Field Identification							
1															
2															
3															
4	3.5-5ft	B-1 (3.5-4)	38	50	-	60	0.0	Poorly Sorted Fine-Course Brown Dry Sand, Pebble Inclusions No Odor							
5															
6															
7															
8	8.5-10ft	B-1 (8.5-9)	26	32	50	50	0.0	Poorly Sorted Fine-Course Brown Dry Sand, 30% Pebbles No Odor							
9															
10															
11															
12															
13	13.5-15ft	B-1 (13.5-14)	11	11	11	50	0.0	Poorly Sorted Fine-Course Brown Damp Sand, 30% Pebbles No Odor							
14															
15															
16															
17															
18	18.5-20ft	B-1 (18.5-20)	12	15	16	100	0.0	Well-Sorted Medium/Course Wet Sand No Odor							
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
32															
33															
34															
35															
36															

F: Fine; M: Medium; C: Coarse

Project Number: 06940-248 Client: UNOCAL				ENSAR		Boring Log						
Site Location: Chelan, WA				9521 Willows Rd. NE Redmond, Washington (425) 881-7700		Use: Boring Number: B-2 Sheet: 1 of 1 Surface Elevation (ft-ast):			Boring Data			
Project Manager: Jim Borthen Drilling Contractor: Cascade Drilling			ENSAR Bratz 2/15/2005 Driller: 2/15/2005		Equipment: Auger-mounted Drill Rig Inside Diameter: 0.5 ft Outside Diameter: 0.5 ft			Boring Depth: 25ft Water Depth: 20ft				
Depth	Sample Depth	Sample Number	Blow Counts (6")				Rec (%)	PID (ppm)	Field Identification			
1												
2												
3												
4												
5	5-6.5	B-2 (5-6.5)	15	15	15		75	0.0	Poorly Sorted Fine-Course Dark Brown Dry Sand, 10% Pebbles No Odor			
6												
7												
8												
9												
10	10-11.5	B-2 (10-11.5)	36	50			50	0.6	Poorly Sorted Fine-Course Dark Brown Dry Sand, 10% Pebbles No Odor			
11												
12												
13												
14												
15	15-16.5	B-2 (15-16.5)	20	30	42		80	0.0	Poorly Sorted Fine-Course Dark Brown Dry Sand, 30% Pebbles No Odor			
16												
17												
18												
19												
20	20-21.5	B-2 (20-21.5)	7	7	6		100	0.0	Poorly Sorted Fine-Course Dark Brown Wet Sand, 10% Pebbles No Odor			
21												
22												
23												
24												
25	25-26.5	B-2 (25-26.5)	17	50			100	0.0	Poorly Sorted Fine-Course Dark Brown Dry Sand, 10% Pebbles No Odor			
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												

F: Fine; M: Medium; C: Coarse

Project Number: 06940-248 Client: UNOCAL					ENSER.		Boring Log									
Site Location: Chelan, WA					9521 Willow Rd. NE Redmond, Washington (425) 881-7700		Use: Boring Number: B-3 Sheet: 1 of 1 Surface Elevation (ft-asl):			Boring Data						
Project Manager: Jim Bonnen			ENSR		Bratz	2/15/2005	Inside Diameter:	0.5 ft	Auger-mounted Drill Rig	Boring Depth: 25ft Water Depth: 22ft						
Drilling Contractor: Cascade Drilling	Driller:	2/15/2005			Inside Diameter:	0.5 ft	Outside Diameter:	0.5 ft	Auger-mounted Drill Rig	Boring Depth: 25ft Water Depth: 22ft						
Depth	Sample Depth	Sample Number	Blow Counts (6")			Rec (%)	PID (ppm)	Field Identification					Description			
1													Native Backfill			
2													Bentonite seal			
3																
4																
5	5-6.5	X	5	5	4	100	0.0	Well Sorted Fine Brown Damp Sand, <5% Pebbles No Odor								
6																
7																
8																
9																
10	10-11.5	X	27	30	35	50	0.0	Well Sorted Fine Brown Damp Sand, 10% Pebbles No Odor								
11																
12																
13																
14																
15	15-16.5	B-3 (15-16.5)	11	19	24	60	0.0	Poorly Sorted Fine-Course Brown Damp Sand, 10% Pebbles No Odor								
16																
17																
18																
19																
20	20-21.5	B-3 (20-21.5)	19	21	26	75	0.0	Well Sorted Fine/Medium Wet Brown Sand, <5% Pebbles No Odor								
21																
22																
23																
24																
25	25-26.5	B-3 (25-26.5)	7	18	19	100	2.3	Well Sorted Fine/Medium Wet Brown Sand, <5% Pebbles No Odor								
26																
27																
28																
29																
30																
31																
32																
33																
34																
35																
36																

F: Fine; M: Medium; C: Coarse

Project Number: 06940-248 Client: UNOCAL				ENSER		Boring Log						
Site Location: Chelan, WA				9521 Willows Rd. NE Redmond, Washington (425) 881-7700		Use: Boring Number: B-8 Sheet: 1 of 1 Surface Elevation (ft-psi):			Boring Data			
Project Manager: Jim Borthen Drilling Contractor: Cascade Drilling			ENSR Bratz, 2/16/2005 Driller: 2/16/2005		Equipment: Auger-mounted Drill Rig Inside Diameter: 0.5 ft Outside Diameter: 0.5 ft			Boring Depth: 25 ft Water Depth: 22 ft				
Depth	Sample Depth	Sample Number	Blow Counts (6")			Rec (%)	PID (ppm)	Field Identification				Description
1												Native Backfill
2												Bentonite seal
3												
4												
5	5-6.5	X	29	35	39	40	0.8	Poorly Sorted Fine-Course Brown Damp Sand, 10% Pebbles No Odor				
6												
7												
8												
9												
10	10-11.5	X	12	18	19	25	0.3	Poorly Sorted Fine-Course Brown Damp Sand, 30% Pebbles No Odor				
11												
12												
13												
14												
15	15-16.5	B-7 (15-16.5)	8	9	10	100	0.1	Well Sorted Fine Damp Brown Sand, 10% Pebbles No Odor				
16												
17												
18												
19												
20	20-21.5	B-7 (20-21.5)	14	16	19	75	0.3	Well Sorted Medium/Coarse Wet Brown Sand, No Pebbles No Odor				
21												
22												
23												
24												
25	25-26.5	B-7 (25-26.5)	15	15	15	100	0.1	Well Sorted Medium/Coarse Wet Brown Sand, No Pebbles No Odor				
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												

F: Fine; M: Medium; C: Coarse



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

11 March 2005

Jim Borthen  
ENSR-Redmond  
9521 Willows Road NE  
Redmond, WA 98052  
RE: UNOCAL #0082

Enclosed are the results of analyses for samples received by the laboratory on 02/17/05 14:53. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Jeff Gerdes". The signature is fluid and cursive, with "Jeff" on the first line and "Gerdes" on the second line.

Jeff Gerdes  
Project Manager



**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

ENSR-Redmond  
9521 Willows Road NE  
Redmond, WA 98052

Project: UNOCAL #0082  
Project Number: 06940-248  
Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B1(3.5-4)	B5B0435-01	Soil	02/15/05 12:00	02/17/05 14:53
B1(8.5-9)	B5B0435-02	Soil	02/15/05 12:05	02/17/05 14:53
B1(13.5-14)	B5B0435-03	Soil	02/15/05 12:10	02/17/05 14:53
B1(18.5-20)	B5B0435-04	Soil	02/15/05 12:15	02/17/05 14:53
B2(5-6.5)	B5B0435-05	Soil	02/15/05 13:00	02/17/05 14:53
B2(15-16.5)	B5B0435-06	Soil	02/15/05 13:10	02/17/05 14:53
B2(20-21.5)	B5B0435-07	Soil	02/15/05 13:15	02/17/05 14:53
B2(25-26.5)	B5B0435-08	Soil	02/15/05 13:20	02/17/05 14:53
B3(15-16.5)	B5B0435-09	Soil	02/15/05 14:00	02/17/05 14:53
B3(20-21.5)	B5B0435-10	Soil	02/15/05 14:25	02/17/05 14:53
B3(25-26.5)	B5B0435-11	Soil	02/15/05 14:30	02/17/05 14:53
B4(15-16.5)	B5B0435-12	Soil	02/16/05 11:35	02/17/05 14:53
B4(20-21.5)	B5B0435-13	Soil	02/16/05 11:40	02/17/05 14:53
B4(25-26.5)	B5B0435-14	Soil	02/16/05 11:45	02/17/05 14:53
B5(10-11.5)	B5B0435-15	Soil	02/15/05 16:15	02/17/05 14:53
B5(15-16.5)	B5B0435-16	Soil	02/15/05 16:20	02/17/05 14:53
B5(20-21.5)	B5B0435-17	Soil	02/15/05 16:25	02/17/05 14:53
B5(25-26.5)	B5B0435-18	Soil	02/15/05 16:30	02/17/05 14:53
B6(15-16.5)	B5B0435-19	Soil	02/16/05 10:40	02/17/05 14:53
B6(20-21.5)	B5B0435-20	Soil	02/16/05 10:45	02/17/05 14:53
B6(25-26.5)	B5B0435-21	Soil	02/16/05 10:50	02/17/05 14:53
B7(15-16.5)	B5B0435-22	Soil	02/15/05 15:15	02/17/05 14:53
B7(20-21.5)	B5B0435-23	Soil	02/15/05 15:20	02/17/05 14:53
B7(25-26.5)	B5B0435-24	Soil	02/15/05 15:30	02/17/05 14:53
B8(15-16.5)	B5B0435-25	Soil	02/16/05 08:50	02/17/05 14:53
B8(20-21.5)	B5B0435-26	Soil	02/16/05 08:55	02/17/05 14:53
B8(25-26.5)	B5B0435-27	Soil	02/16/05 09:00	02/17/05 14:53

North Creek Analytical - Bothell

Jeff Gerdes, 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.*



ENSR-Redmond  
9521 Willows Road NE  
Redmond, WA 98052

**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

Project: UNOCAL #0082  
Project Number: 06940-248  
Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

**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
<b>B1(3.5-4) (B5B0435-01) Soil Sampled: 02/15/05 12:00 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B25025	02/25/05	02/26/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	"
Toluene	ND	0.0500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.100	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	69.0 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	101 %	53-142			"	"	"	"	"
<b>B1(8.5-9) (B5B0435-02) Soil Sampled: 02/15/05 12:05 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	"
Toluene	ND	0.0500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.100	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	78.3 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	100 %	53-142			"	"	"	"	"
<b>B1(13.5-14) (B5B0435-03) Soil Sampled: 02/15/05 12:10 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	"
Toluene	ND	0.0500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.100	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	77.6 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	101 %	53-142			"	"	"	"	"

North Creek Analytical - Bothell

Jeff Gerdes, 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.*



**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

ENSR-Redmond  
 9521 Willows Road NE  
 Redmond, WA 98052

Project: UNOCAL #0082  
 Project Number: 06940-248  
 Project Manager: Jim Borthen

Reported:  
 03/11/05 07:49

### 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
<b>B1(18.5-20) (B5B0435-04) Soil Sampled: 02/15/05 12:15 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	3.91	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0235	"	"	"	"	"	"	"
Toluene	ND	0.0391	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0391	"	"	"	"	"	"	"
Xylenes (total)	ND	0.0782	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	80.5 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	102 %	53-142			"	"	"	"	"
<b>B2(5-6.5) (B5B0435-05) Soil Sampled: 02/15/05 13:00 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	8.19	5.00	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	"
Toluene	ND	0.0500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.100	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	80.7 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	102 %	53-142			"	"	"	"	"
<b>B2(15-16.5) (B5B0435-06) Soil Sampled: 02/15/05 13:10 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	7.12	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0427	"	"	"	"	"	"	"
Toluene	ND	0.0712	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0712	"	"	"	"	"	"	"
Xylenes (total)	ND	0.142	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	79.0 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	100 %	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.

Jeff Gerdes, Project Manager

*North Creek Analytical, Inc.  
 Environmental Laboratory Network*

Page 3 of 27



**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 Empyre 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

ENSR-Redmond  
 9521 Willows Road NE  
 Redmond, WA 98052

Project: UNOCAL #0082  
 Project Number: 06940-248  
 Project Manager: Jim Borthen

Reported:  
 03/11/05 07:49

**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
<b>B2(20-21.5) (B5B0435-07) Soil Sampled: 02/15/05 13:15 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	SB25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	"
Toluene	ND	0.0500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.100	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	79.8 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	100 %	53-142			"	"	"	"	"
<b>B2(25-26.5) (B5B0435-08) Soil Sampled: 02/15/05 13:20 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	SB25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	"
Toluene	ND	0.0500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.100	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	80.3 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	100 %	53-142			"	"	"	"	"
<b>B3(15-16.5) (B5B0435-09) Soil Sampled: 02/15/05 14:00 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	SB25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	"
Toluene	ND	0.0500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.100	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	70.9 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	100 %	53-142			"	"	"	"	"

North Creek Analytical - Bothell

Jeff Gerdes, 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.



**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

ENSR-Redmond  
 9521 Willows Road NE  
 Redmond, WA 98052

Project: UNOCAL #0082  
 Project Number: 06940-248  
 Project Manager: Jim Borthen

Reported:  
 03/11/05 07:49

**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
<b>B3(20-21.5) (B5B0435-10) Soil Sampled: 02/15/05 14:25 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	4.52	mg/kg dry	1	SB25025	02/25/05	02/26/05	NWTPH-Gx/8021B	
Benzene	ND	0.0271	"	"	"	"	"	"	"
Toluene	ND	0.0452	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0452	"	"	"	"	"	"	"
Xylenes (total)	ND	0.0905	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	73.4 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	100 %	53-142			"	"	"	"	"
<b>B3(25-26.5) (B5B0435-11) Soil Sampled: 02/15/05 14:30 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	SB25025	02/25/05	02/26/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	"
Toluene	ND	0.0500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.100	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	74.3 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	98.8 %	53-142			"	"	"	"	"
<b>B4(15-16.5) (B5B0435-12) Soil Sampled: 02/16/05 11:35 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	4.48	mg/kg dry	1	SB25025	02/25/05	02/26/05	NWTPH-Gx/8021B	
Benzene	ND	0.0269	"	"	"	"	"	"	"
Toluene	ND	0.0448	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0448	"	"	"	"	"	"	"
Xylenes (total)	ND	0.0897	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	76.2 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	99.3 %	53-142			"	"	"	"	"

North Creek Analytical - Bothell

Jeff Gerdes, 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.



ENSR-Redmond  
9521 Willows Road NE  
Redmond, WA 98052

**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

Project: UNOCAL #0082  
Project Number: 06940-248  
Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

**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
<b>B4(20-21.5) (B5B0435-13) Soil Sampled: 02/16/05 11:40 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	4.48	mg/kg dry	1	SB25025	02/25/05	02/26/05	NWTPH-Gx/8021B	
Benzene	ND	0.0269	"	"	"	"	"	"	"
Toluene	ND	0.0448	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0448	"	"	"	"	"	"	"
Xylenes (total)	ND	0.0896	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	78.5 %	50-150			"	"	"	"	
<i>Surrogate: 4-BFB (PID)</i>	101 %	53-142			"	"	"	"	
<b>B4(25-26.5) (B5B0435-14) Soil Sampled: 02/16/05 11:45 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	4.13	mg/kg dry	1	SB25025	02/25/05	02/26/05	NWTPH-Gx/8021B	
Benzene	ND	0.0248	"	"	"	"	"	"	"
Toluene	ND	0.0413	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0413	"	"	"	"	"	"	"
Xylenes (total)	ND	0.0826	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	79.9 %	50-150			"	"	"	"	
<i>Surrogate: 4-BFB (PID)</i>	100 %	53-142			"	"	"	"	
<b>B5(10-11.5) (B5B0435-15) Soil Sampled: 02/15/05 16:15 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	281	5.00	mg/kg dry	1	SB25025	02/25/05	02/26/05	NWTPH-Gx/8021B	G-02
Benzene	ND	0.0300	"	"	"	"	"	"	"
Toluene	ND	0.0500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	"
Xylenes (total)	0.188	0.100	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	124 %	50-150			"	"	"	"	
<i>Surrogate: 4-BFB (PID)</i>	106 %	53-142			"	"	"	"	

North Creek Analytical - Bothell

Jeff Gerdes, 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.



ENSR-Redmond  
9521 Willows Road NE  
Redmond, WA 98052

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

Project: UNOCAL #0082  
Project Number: 06940-248  
Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

**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
<b>B5(15-16.5) (B5B0435-16) Soil Sampled: 02/15/05 16:20 Received: 02/17/05 14:53</b>									
Benzene	ND	0.0250	mg/kg dry	1	SB25025	02/25/05	02/26/05	NWTPH-Gx/8021B	
Toluene	ND	0.0416	"	"	"	"	"	"	
Ethylbenzene	0.167	0.0416	"	"	"	"	"	"	
Xylenes (total)	0.600	0.0833	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	>200 %	50-150			"	"	"	"	S-04
Surrogate: 4-BFB (PID)	146 %	53-142			"	"	"	"	S-04
<b>B5(15-16.5) (B5B0435-16RE1) Soil Sampled: 02/15/05 16:20 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	1070	16.7	mg/kg dry	4	SB27003	02/27/05	02/28/05	NWTPH-Gx/8021B	G-02
Surrogate: 4-BFB (FID)	119 %	50-150			"	"	"	"	
<b>B5(20-21.5) (B5B0435-17) Soil Sampled: 02/15/05 16:25 Received: 02/17/05 14:53</b>									
Benzene	ND	0.0247	mg/kg dry	1	SB25025	02/25/05	02/25/05	NWTPH-Gx/8021B	
Toluene	ND	0.0412	"	"	"	"	"	"	
Xylenes (total)	0.983	0.0823	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	>200 %	50-150			"	"	"	"	S-04
Surrogate: 4-BFB (PID)	164 %	53-142			"	"	"	"	S-04
<b>B5(20-21.5) (B5B0435-17RE1) Soil Sampled: 02/15/05 16:25 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	1140	16.5	mg/kg dry	4	SB25025	02/25/05	02/26/05	NWTPH-Gx/8021B	G-02
Ethylbenzene	0.268	0.165	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	120 %	50-150			"	"	"	"	
Surrogate: 4-BFB (PID)	116 %	53-142			"	"	"	"	
<b>B5(25-26.5) (B5B0435-18) Soil Sampled: 02/15/05 16:30 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	373	5.00	mg/kg dry	1	SB25025	02/25/05	02/26/05	NWTPH-Gx/8021B	G-02
Benzene	ND	0.0300	"	"	"	"	"	"	
Toluene	ND	0.0500	"	"	"	"	"	"	
Ethylbenzene	0.0769	0.0500	"	"	"	"	"	"	
Xylenes (total)	0.143	0.100	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	111 %	50-150			"	"	"	"	
Surrogate: 4-BFB (PID)	112 %	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.

Jeff Gerdes, Project Manager



**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

**ENSR-Redmond**  
 9521 Willows Road NE  
 Redmond, WA 98052

Project: UNOCAL #0082  
 Project Number: 06940-248  
 Project Manager: Jim Borthen

**Reported:**  
 03/11/05 07:49

### 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
<b>B6(15-16.5) (B5B0435-19) Soil Sampled: 02/16/05 10:40 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	242	4.44	mg/kg dry	1	5B25025	02/25/05	02/26/05	NWTPH-Gx/8021B	G-02
Benzene	ND	0.0267	"	"	"	"	"	"	"
Toluene	ND	0.0444	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0444	"	"	"	"	"	"	"
Xylenes (total)	ND	0.0889	"	"	"	"	"	"	"
Surrogate: 4-BFB (FID)	102 %	50-150			"	"	"	"	"
Surrogate: 4-BFB (PID)	106 %	53-142			"	"	"	"	"
<b>B6(20-21.5) (B5B0435-20) Soil Sampled: 02/16/05 10:45 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	378	4.08	mg/kg dry	1	5B25025	02/25/05	02/25/05	NWTPH-Gx/8021B	G-02
Benzene	ND	0.0245	"	"	"	"	"	"	"
Toluene	ND	0.0408	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0408	"	"	"	"	"	"	"
Xylenes (total)	0.230	0.0816	"	"	"	"	"	"	I-06
Surrogate: 4-BFB (FID)	103 %	50-150			"	"	"	"	"
Surrogate: 4-BFB (PID)	100 %	53-142			"	"	"	"	"
<b>B6(25-26.5) (B5B0435-21) Soil Sampled: 02/16/05 10:50 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	30.8	4.34	mg/kg dry	1	5B27003	02/27/05	02/28/05	NWTPH-Gx/8021B	G-01
Benzene	ND	0.0260	"	"	"	"	"	"	"
Toluene	ND	0.0434	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0434	"	"	"	"	"	"	"
Xylenes (total)	ND	0.0868	"	"	"	"	"	"	"
Surrogate: 4-BFB (FID)	72.6 %	50-150			"	"	"	"	"
Surrogate: 4-BFB (PID)	99.7 %	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.

Jeff Gerdes, Project Manager



**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 99206-5303  
 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

ENSR-Redmond  
9521 Willows Road NE  
Redmond, WA 98052

Project: UNOCAL #0082  
Project Number: 06940-248  
Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

**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
<b>B7(15-16.5) (B5B0435-22) Soil Sampled: 02/15/05 15:15 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B27003	02/27/05	02/27/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	"
Toluene	ND	0.0500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.100	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	78.1 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	113 %	53-142			"	"	"	"	"
<b>B7(20-21.5) (B5B0435-23) Soil Sampled: 02/15/05 15:20 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	5B27003	02/27/05	02/27/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	"
Toluene	ND	0.0500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.100	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	78.8 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	105 %	53-142			"	"	"	"	"
<b>B7(25-26.5) (B5B0435-24) Soil Sampled: 02/15/05 15:30 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	4.15	mg/kg dry	1	5B27003	02/27/05	02/27/05	NWTPH-Gx/8021B	
Benzene	ND	0.0249	"	"	"	"	"	"	"
Toluene	ND	0.0415	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0415	"	"	"	"	"	"	"
Xylenes (total)	ND	0.0829	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	81.3 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	98.9 %	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.

Jeff Gerdes, Project Manager



**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

ENSR-Redmond  
 9521 Willows Road NE  
 Redmond, WA 98022

Project: UNOCAL #0082  
 Project Number: 06940-248  
 Project Manager: Jim Borthen

**Reported:**  
 03/11/05 07:49

**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
<b>B8(15-16.5) (B5B0435-25) Soil Sampled: 02/16/05 08:50 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	4.44	mg/kg dry	1	SB27003	02/27/05	02/27/05	NWTPH-Gx/8021B	
Benzene	ND	0.0266	"	"	"	"	"	"	"
Toluene	ND	0.0444	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0444	"	"	"	"	"	"	"
Xylenes (total)	ND	0.0887	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	70.8 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	98.7 %	53-142			"	"	"	"	"
<b>B8(20-21.5) (B5B0435-26) Soil Sampled: 02/16/05 08:55 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	5.00	mg/kg dry	1	SB27003	02/27/05	02/27/05	NWTPH-Gx/8021B	
Benzene	ND	0.0300	"	"	"	"	"	"	"
Toluene	ND	0.0500	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0500	"	"	"	"	"	"	"
Xylenes (total)	ND	0.100	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	71.9 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	100 %	53-142			"	"	"	"	"
<b>B8(25-26.5) (B5B0435-27) Soil Sampled: 02/16/05 09:00 Received: 02/17/05 14:53</b>									
Gasoline Range Hydrocarbons	ND	4.55	mg/kg dry	1	SB27003	02/27/05	02/27/05	NWTPH-Gx/8021B	
Benzene	ND	0.0273	"	"	"	"	"	"	"
Toluene	ND	0.0455	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0455	"	"	"	"	"	"	"
Xylenes (total)	ND	0.0909	"	"	"	"	"	"	"
<i>Surrogate: 4-BFB (FID)</i>	74.4 %	50-150			"	"	"	"	"
<i>Surrogate: 4-BFB (PID)</i>	99.4 %	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.

Jeff Gerdes, Project Manager



**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

ENSR-Redmond  
9521 Willows Road NE  
Redmond, WA 98052

Project: UNOCAL #0082  
Project Number: 06940-248  
Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

### Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>B1(3.5-4) (B5B0435-01) Soil Sampled: 02/15/05 12:00 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	SB18051	02/18/05	02/21/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	"
<i>Surrogate: 2-FBP</i>	54.5 %	50-150			"	"	"	"	"
<i>Surrogate: Octacosane</i>	94.6 %	50-150			"	"	"	"	"
<b>B1(8.5-9) (B5B0435-02) Soil Sampled: 02/15/05 12:05 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	SB18051	02/18/05	02/21/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	"
<i>Surrogate: 2-FBP</i>	55.8 %	50-150			"	"	"	"	"
<i>Surrogate: Octacosane</i>	90.8 %	50-150			"	"	"	"	"
<b>B1(13.5-14) (B5B0435-03) Soil Sampled: 02/15/05 12:10 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	SB18051	02/18/05	02/21/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	"
<i>Surrogate: 2-FBP</i>	55.6 %	50-150			"	"	"	"	"
<i>Surrogate: Octacosane</i>	92.4 %	50-150			"	"	"	"	"
<b>B1(18.5-20) (B5B0435-04) Soil Sampled: 02/15/05 12:15 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	SB18051	02/18/05	02/21/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	"
<i>Surrogate: 2-FBP</i>	50.8 %	50-150			"	"	"	"	"
<i>Surrogate: Octacosane</i>	91.6 %	50-150			"	"	"	"	"
<b>B2(5.6-5) (B5B0435-05) Soil Sampled: 02/15/05 13:00 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	35.3	10.0	mg/kg dry	1	SB18051	02/18/05	02/21/05	NWTPH-Dx	D-09
Lube Oil Range Hydrocarbons	28.5	25.0	"	"	"	"	"	"	"
<i>Surrogate: 2-FBP</i>	59.6 %	50-150			"	"	"	"	"
<i>Surrogate: Octacosane</i>	98.2 %	50-150			"	"	"	"	"

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.

Jeff Gerdes, Project Manager



**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

ENSR-Redmond  
9521 Willows Road NE  
Redmond, WA 98052

Project: UNOCAL #0082  
Project Number: 06940-248  
Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

### Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>B2(15-16.5) (B5B0435-06) Soil</b> Sampled: 02/15/05 13:10 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	11.3	10.0	mg/kg dry	1	5B18051	02/18/05	02/21/05	NWTPH-Dx	D-06
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	"
<i>Surrogate: 2-FBP</i>	51.4 %	50-150			"	"	"	"	"
<i>Surrogate: Octacosane</i>	94.5 %	50-150			"	"	"	"	"
<b>B2(20-21.5) (B5B0435-07) Soil</b> Sampled: 02/15/05 13:15 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B18051	02/18/05	02/21/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	"
<i>Surrogate: 2-FBP</i>	54.2 %	50-150			"	"	"	"	"
<i>Surrogate: Octacosane</i>	91.1 %	50-150			"	"	"	"	"
<b>B2(25-26.5) (B5B0435-08) Soil</b> Sampled: 02/15/05 13:20 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	"
<i>Surrogate: 2-FBP</i>	68.3 %	50-150			"	"	"	"	"
<i>Surrogate: Octacosane</i>	106 %	50-150			"	"	"	"	"
<b>B3(15-16.5) (B5B0435-09) Soil</b> Sampled: 02/15/05 14:00 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	"
<i>Surrogate: 2-FBP</i>	75.7 %	50-150			"	"	"	"	"
<i>Surrogate: Octacosane</i>	109 %	50-150			"	"	"	"	"
<b>B3(20-21.5) (B5B0435-10) Soil</b> Sampled: 02/15/05 14:25 Received: 02/17/05 14:53									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	"
<i>Surrogate: 2-FBP</i>	80.5 %	50-150			"	"	"	"	"
<i>Surrogate: Octacosane</i>	121 %	50-150			"	"	"	"	"

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.

Jeff Gerdes, Project Manager



**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

**ENSR-Redmond**  
 9521 Willows Road NE  
 Redmond, WA 98052

Project: UNOCAL #0082  
 Project Number: 06940-248  
 Project Manager: Jim Borthen

**Reported:**  
 03/11/05 07:49

**Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up**  
**North Creek Analytical - Bothell**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>B3(25-26.5) (B5B0435-11) Soil Sampled: 02/15/05 14:30 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	SB23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	"
<i>Surrogate: 2-FBP</i>	74.1 %	50-150			"	"	"	"	"
<i>Surrogate: Octacosane</i>	112 %	50-150			"	"	"	"	"
<b>B4(15-16.5) (B5B0435-12) Soil Sampled: 02/16/05 11:35 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	SB23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	"
<i>Surrogate: 2-FBP</i>	64.2 %	50-150			"	"	"	"	"
<i>Surrogate: Octacosane</i>	87.4 %	50-150			"	"	"	"	"
<b>B4(20-21.5) (B5B0435-13) Soil Sampled: 02/16/05 11:40 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	SB23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	"
<i>Surrogate: 2-FBP</i>	76.3 %	50-150			"	"	"	"	"
<i>Surrogate: Octacosane</i>	110 %	50-150			"	"	"	"	"
<b>B4(25-26.5) (B5B0435-14) Soil Sampled: 02/16/05 11:45 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	SB23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	"
<i>Surrogate: 2-FBP</i>	73.4 %	50-150			"	"	"	"	"
<i>Surrogate: Octacosane</i>	113 %	50-150			"	"	"	"	"
<b>B5(10-11.5) (B5B0435-15) Soil Sampled: 02/15/05 16:15 Received: 02/17/05 14:53</b>									
Lube Oil Range Hydrocarbons	60.1	25.0	mg/kg dry	1	SB23056	02/23/05	02/25/05	NWTPH-Dx	D-10
<i>Surrogate: Octacosane</i>	194 %	50-150			"	"	"	"	S-04

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.*

Jeff Gerdes, Project Manager



**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

**ENSR-Redmond**  
 9521 Willows Road NE  
 Redmond, WA 98052

**Project:** UNOCAL #0082  
**Project Number:** 06940-248  
**Project Manager:** Jim Borthen

**Reported:**  
03/11/05 07:49

**Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up**  
**North Creek Analytical - Bothell**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>B5(10-11.5) (B5B0435-15RE1) Soil Sampled: 02/15/05 16:15 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	3080	200	mg/kg dry	20	SB23056	02/23/05	02/27/05	NWTPH-Dx	
Surrogate: 2-FBP	ND	50-150		"	"	"	"	"	S-01
Surrogate: Octacosane	ND	50-150		"	"	"	"	"	S-01
<b>B5(15-16.5) (B5B0435-16) Soil Sampled: 02/15/05 16:20 Received: 02/17/05 14:53</b>									
Lube Oil Range Hydrocarbons	75.4	25.0	mg/kg dry	1	SB23056	02/23/05	02/25/05	NWTPH-Dx	D-10
Surrogate: Octacosane	>200 %	50-150		"	"	"	"	"	S-04
<b>B5(15-16.5) (B5B0435-16RE1) Soil Sampled: 02/15/05 16:20 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	2870	200	mg/kg dry	20	SB23056	02/23/05	02/27/05	NWTPH-Dx	
Surrogate: 2-FBP	ND	50-150		"	"	"	"	"	S-01
Surrogate: Octacosane	ND	50-150		"	"	"	"	"	S-01
<b>B5(20-21.5) (B5B0435-17) Soil Sampled: 02/15/05 16:25 Received: 02/17/05 14:53</b>									
Lube Oil Range Hydrocarbons	104	25.0	mg/kg dry	1	SB23056	02/23/05	02/25/05	NWTPH-Dx	D-10
Surrogate: Octacosane	>200 %	50-150		"	"	"	"	"	S-04
<b>B5(20-21.5) (B5B0435-17RE1) Soil Sampled: 02/15/05 16:25 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	4690	400	mg/kg dry	40	SB23056	02/23/05	02/27/05	NWTPH-Dx	
Surrogate: 2-FBP	ND	50-150		"	"	"	"	"	S-01
Surrogate: Octacosane	ND	50-150		"	"	"	"	"	S-01
<b>B5(25-26.5) (B5B0435-18) Soil Sampled: 02/15/05 16:30 Received: 02/17/05 14:53</b>									
Lube Oil Range Hydrocarbons	ND	125	mg/kg dry	5	SB23056	02/23/05	02/25/05	NWTPH-Dx	
Surrogate: Octacosane	151 %	50-150		"	"	"	"	"	S-04

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.

Jeff Gerdes, Project Manager



**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

ENSR-Redmond  
9521 Willows Road NE  
Redmond, WA 98052

Project: UNOCAL #0082  
Project Number: 06940-248  
Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

**Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up**  
**North Creek Analytical - Bothell**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>B5(25-26.5) (B5B0435-18RE1) Soil Sampled: 02/15/05 16:30 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	2260	100	mg/kg dry	10	5B23056	02/23/05	02/27/05	NWTPH-Dx	
Surrogate: 2-FBP	ND	50-150		"	"	"	"	"	S-01
Surrogate: Octacosane	ND	50-150		"	"	"	"	"	S-01
<b>B6(15-16.5) (B5B0435-19) Soil Sampled: 02/16/05 10:40 Received: 02/17/05 14:53</b>									
Lube Oil Range Hydrocarbons	ND	25.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Surrogate: Octacosane	162 %	50-150		"	"	"	"	"	S-04
<b>B6(15-16.5) (B5B0435-19RE1) Soil Sampled: 02/16/05 10:40 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	1800	100	mg/kg dry	10	5B23056	02/23/05	02/27/05	NWTPH-Dx	
Surrogate: 2-FBP	ND	50-150		"	"	"	"	"	S-01
Surrogate: Octacosane	ND	50-150		"	"	"	"	"	S-01
<b>B6(20-21.5) (B5B0435-20) Soil Sampled: 02/16/05 10:45 Received: 02/17/05 14:53</b>									
Lube Oil Range Hydrocarbons	58.6	25.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	D-10
Surrogate: Octacosane	161 %	50-150		"	"	"	"	"	S-04
<b>B6(20-21.5) (B5B0435-20RE1) Soil Sampled: 02/16/05 10:45 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	7370	400	mg/kg dry	40	5B23056	02/23/05	02/27/05	NWTPH-Dx	
Surrogate: 2-FBP	ND	50-150		"	"	"	"	"	S-01
Surrogate: Octacosane	ND	50-150		"	"	"	"	"	S-01
<b>B6(25-26.5) (B5B0435-21) Soil Sampled: 02/16/05 10:50 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	86.7	10.0	mg/kg dry	1	5B23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	
Surrogate: 2-FBP	82.8 %	50-150		"	"	"	"	"	
Surrogate: Octacosane	119 %	50-150		"	"	"	"	"	

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.

Jeff Gerdes, Project Manager



**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

ENSR-Redmond  
9521 Willows Road NE  
Redmond, WA 98052

Project: UNOCAL #0082  
Project Number: 06940-248  
Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

**Semivolatile Petroleum Products by NWTPH-Dx with Acid/Silica Gel Clean-up**  
**North Creek Analytical - Bothell**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>B8(25-26.5) (B5B0435-27) Soil Sampled: 02/16/05 09:00 Received: 02/17/05 14:53</b>									
Diesel Range Hydrocarbons	ND	10.0	mg/kg dry	1	SB23056	02/23/05	02/25/05	NWTPH-Dx	
Lube Oil Range Hydrocarbons	ND	25.0	"	"	"	"	"	"	"
Surrogate: 2-FBP	83.8 %	50-150			"	"	"	"	"
Surrogate: Octacosane	110 %	50-150			"	"	"	"	"

North Creek Analytical - Bothell

Jeff Gerdes, 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.*

**ENSR-Redmond**  
 9521 Willows Road NE  
 Redmond, WA 98052

Project: UNOCAL #0082  
 Project Number: 06940-248  
 Project Manager: Jim Borthen

**Reported:**  
 03/11/05 07:49

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>B1(3.5-4) (B5B0435-01) Soil Sampled: 02/15/05 12:00 Received: 02/17/05 14:53</b>									
Dry Weight	92.7	1.00	%	1	5B19003	02/19/05	02/20/05	BSOPSPLO03R08	
<b>B1(8.5-9) (B5B0435-02) Soil Sampled: 02/15/05 12:05 Received: 02/17/05 14:53</b>									
Dry Weight	97.7	1.00	%	1	5B19003	02/19/05	02/20/05	BSOPSPLO03R08	
<b>B1(13.5-14) (B5B0435-03) Soil Sampled: 02/15/05 12:10 Received: 02/17/05 14:53</b>									
Dry Weight	95.5	1.00	%	1	SB19003	02/19/05	02/20/05	BSOPSPLO03R08	
<b>B1(18.5-20) (B5B0435-04) Soil Sampled: 02/15/05 12:15 Received: 02/17/05 14:53</b>									
Dry Weight	88.1	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPLO03R08	
<b>B2(5-6.5) (B5B0435-05) Soil Sampled: 02/15/05 13:00 Received: 02/17/05 14:53</b>									
Dry Weight	97.7	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPLO03R08	
<b>B2(15-16.5) (B5B0435-06) Soil Sampled: 02/15/05 13:10 Received: 02/17/05 14:53</b>									
Dry Weight	94.3	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPLO03R08	
<b>B2(20-21.5) (B5B0435-07) Soil Sampled: 02/15/05 13:15 Received: 02/17/05 14:53</b>									
Dry Weight	90.5	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPLO03R08	
<b>B2(25-26.5) (B5B0435-08) Soil Sampled: 02/15/05 13:20 Received: 02/17/05 14:53</b>									
Dry Weight	81.0	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPLO03R08	
<b>B3(15-16.5) (B5B0435-09) Soil Sampled: 02/15/05 14:00 Received: 02/17/05 14:53</b>									
Dry Weight	92.7	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPLO03R08	

North Creek Analytical - Bothell



Jeff Gerdes, 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.*



**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

ENSR-Redmond  
 9521 Willows Road NE  
 Redmond, WA 98052

Project: UNOCAL #0082  
 Project Number: 06940-248  
 Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>B3(20-21.5) (B5B0435-10) Soil Sampled: 02/15/05 14:25 Received: 02/17/05 14:53</b>									
Dry Weight	84.8	1.00	%	1	SB20008	02/20/05	02/21/05	BSOPSPL003R08	
<b>B3(25-26.5) (B5B0435-11) Soil Sampled: 02/15/05 14:30 Received: 02/17/05 14:53</b>									
Dry Weight	84.8	1.00	%	1	SB20008	02/20/05	02/21/05	BSOPSPL003R08	
<b>B4(15-16.5) (B5B0435-12) Soil Sampled: 02/16/05 11:35 Received: 02/17/05 14:53</b>									
Dry Weight	92.7	1.00	%	1	SB20008	02/20/05	02/21/05	BSOPSPL003R08	
<b>B4(20-21.5) (B5B0435-13) Soil Sampled: 02/16/05 11:40 Received: 02/17/05 14:53</b>									
Dry Weight	90.2	1.00	%	1	SB20008	02/20/05	02/21/05	BSOPSPL003R08	
<b>B4(25-26.5) (B5B0435-14) Soil Sampled: 02/16/05 11:45 Received: 02/17/05 14:53</b>									
Dry Weight	87.3	1.00	%	1	SB20008	02/20/05	02/21/05	BSOPSPL003R08	
<b>B5(10-11.5) (B5B0435-15) Soil Sampled: 02/15/05 16:15 Received: 02/17/05 14:53</b>									
Dry Weight	95.8	1.00	%	1	SB20008	02/20/05	02/21/05	BSOPSPL003R08	
<b>B5(15-16.5) (B5B0435-16) Soil Sampled: 02/15/05 16:20 Received: 02/17/05 14:53</b>									
Dry Weight	96.2	1.00	%	1	SB20008	02/20/05	02/21/05	BSOPSPL003R08	
<b>B5(20-21.5) (B5B0435-17) Soil Sampled: 02/15/05 16:25 Received: 02/17/05 14:53</b>									
Dry Weight	89.6	1.00	%	1	SB20008	02/20/05	02/21/05	BSOPSPL003R08	
<b>B5(25-26.5) (B5B0435-18) Soil Sampled: 02/15/05 16:30 Received: 02/17/05 14:53</b>									
Dry Weight	87.6	1.00	%	1	SB20008	02/20/05	02/21/05	BSOPSPL003R08	

North Creek Analytical - Bothell

Jeff Gerdes, 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.



**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

ENSR-Redmond  
 9521 Willows Road NE  
 Redmond, WA 98052

Project: UNOCAL #0082  
 Project Number: 06940-248  
 Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>B6(15-16.5) (B5B0435-19) Soil Sampled: 02/16/05 10:40 Received: 02/17/05 14:53</b>									
Dry Weight	94.0	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
<b>B6(20-21.5) (B5B0435-20) Soil Sampled: 02/16/05 10:45 Received: 02/17/05 14:53</b>									
Dry Weight	79.3	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
<b>B6(25-26.5) (B5B0435-21) Soil Sampled: 02/16/05 10:50 Received: 02/17/05 14:53</b>									
Dry Weight	87.0	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
<b>B7(15-16.5) (B5B0435-22) Soil Sampled: 02/15/05 15:15 Received: 02/17/05 14:53</b>									
Dry Weight	95.8	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
<b>B7(20-21.5) (B5B0435-23) Soil Sampled: 02/15/05 15:20 Received: 02/17/05 14:53</b>									
Dry Weight	92.0	1.00	%	1	5B20008	02/20/05	02/21/05	BSOPSPL003R08	
<b>B7(25-26.5) (B5B0435-24) Soil Sampled: 02/15/05 15:30 Received: 02/17/05 14:53</b>									
Dry Weight	91.1	1.00	%	1	5B20009	02/20/05	02/21/05	BSOPSPL003R08	
<b>B8(15-16.5) (B5B0435-25) Soil Sampled: 02/16/05 08:50 Received: 02/17/05 14:53</b>									
Dry Weight	89.3	1.00	%	1	5B20009	02/20/05	02/21/05	BSOPSPL003R08	
<b>B8(20-21.5) (B5B0435-26) Soil Sampled: 02/16/05 08:55 Received: 02/17/05 14:53</b>									
Dry Weight	92.4	1.00	%	1	5B20009	02/20/05	02/21/05	BSOPSPL003R08	
<b>B8(25-26.5) (B5B0435-27) Soil Sampled: 02/16/05 09:00 Received: 02/17/05 14:53</b>									
Dry Weight	84.2	1.00	%	1	5B20009	02/20/05	02/21/05	BSOPSPL003R08	

North Creek Analytical - Bothell

Jeff Gerdes, 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.



ENSR-Redmond  
9521 Willows Road NE  
Redmond, WA 98052

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

Project: UNOCAL #0082  
Project Number: 06940-248  
Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

## 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	RPD Limit	Notes
<b>Batch 5B25025: Prepared 02/25/05 Using EPA 5030B (MeOH)</b>										
<b>Blank (5B25025-BLK1)</b>										
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	"							
<i>Surrogate: 4-BFB (FID)</i>	2.14		"	3.00		71.3	50-150			
<i>Surrogate: 4-BFB (PID)</i>	2.89		"	3.00		96.3	53-142			
<b>LCS (5B25025-BS1)</b>										
Gasoline Range Hydrocarbons	45.4	5.00	mg/kg	50.0		90.8	75-125			
Benzene	0.607	0.0300	"	0.730		83.2	75-125			
Toluene	3.28	0.0500	"	3.64		90.1	75-125			
Ethylbenzene	0.880	0.0500	"	0.855		103	75-125			Q-41
Xylenes (total)	4.11	0.100	"	4.17		98.6	75-125			
<i>Surrogate: 4-BFB (FID)</i>	2.46		"	3.00		82.0	50-150			
<i>Surrogate: 4-BFB (PID)</i>	2.71		"	3.00		90.3	53-142			
<b>LCS Dup (5B25025-BSD1)</b>										
Gasoline Range Hydrocarbons	46.0	5.00	mg/kg	50.0		92.0	75-125	1.31	25	
Benzene	0.658	0.0300	"	0.730		90.1	75-125	8.06	25	
Toluene	3.08	0.0500	"	3.64		84.6	75-125	6.29	25	
Ethylbenzene	0.825	0.0500	"	0.855		96.5	75-125	6.45	25	Q-41
Xylenes (total)	3.86	0.100	"	4.17		92.6	75-125	6.27	25	
<i>Surrogate: 4-BFB (FID)</i>	2.63		"	3.00		87.7	50-150			
<i>Surrogate: 4-BFB (PID)</i>	2.57		"	3.00		85.7	53-142			
<b>Matrix Spike (5B25025-MS1)</b>										
								<b>Source: B5B0435-02</b>		
Gasoline Range Hydrocarbons	61.5	5.00	mg/kg dry	51.2	3.86	113	42-125			
Benzene	0.638	0.0300	"	0.747	ND	85.4	45-125			
Toluene	3.32	0.0500	"	3.73	0.0122	88.7	55-125			
Ethylbenzene	0.875	0.0500	"	0.875	0.00447	99.5	53-132			
Xylenes (total)	4.13	0.100	"	4.27	0.0177	96.3	59-125			
<i>Surrogate: 4-BFB (FID)</i>	2.96		"	3.07		96.4	50-150			
<i>Surrogate: 4-BFB (PID)</i>	2.61		"	3.07		85.0	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.

Jeff Gerdes, Project Manager



**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

ENSR-Redmond  
 9521 Willows Road NE  
 Redmond, WA 98052

Project: UNOCAL #0082  
 Project Number: 06940-248  
 Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

**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 5B25025: Prepared 02/25/05 Using EPA 5030B (MeOH)**

**Matrix Spike Dup (5B25025-MSD1)**

					Source: B5B0435-02				
Gasoline Range Hydrocarbons	57.7	5.00	mg/kg dry	51.2	3.86	105	42-125	6.38	40
Benzene	0.638	0.0300	"	0.747	ND	85.4	45-125	0.00	40
Toluene	3.32	0.0500	"	3.73	0.0122	88.7	55-125	0.00	40
Ethylbenzene	0.878	0.0500	"	0.875	0.00447	99.8	53-132	0.342	40
Xylenes (total)	4.11	0.100	"	4.27	0.0177	95.8	59-125	0.485	40
<i>Surrogate: 4-BFB (FID)</i>	2.96		"	3.07		96.4	50-150		
<i>Surrogate: 4-BFB (PID)</i>	2.58		"	3.07		84.0	53-142		

**Batch 5B27003: Prepared 02/27/05 Using EPA 5030B (MeOH)**

**Blank (5B27003-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	"						
<i>Surrogate: 4-BFB (FID)</i>	2.37		"	3.00		79.0	50-150		
<i>Surrogate: 4-BFB (PID)</i>	3.02		"	3.00		101	53-142		

**LCS (5B27003-BS1)**

Gasoline Range Hydrocarbons	46.6	5.00	mg/kg	50.0		93.2	75-125		
Benzene	0.598	0.0300	"	0.730		81.9	75-125		
Toluene	3.08	0.0500	"	3.64		84.6	75-125		
Ethylbenzene	0.822	0.0500	"	0.855		96.1	75-125		
Xylenes (total)	3.79	0.100	"	4.17		90.9	75-125		
<i>Surrogate: 4-BFB (FID)</i>	2.48		"	3.00		82.7	50-150		
<i>Surrogate: 4-BFB (PID)</i>	2.46		"	3.00		82.0	53-142		

North Creek Analytical - Bothell

Jeff Gerdes, 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.*



**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

ENSR-Redmond  
 9521 Willows Road NE  
 Redmond, WA 98052

Project: UNOCAL #0082  
 Project Number: 06940-248  
 Project Manager: Jim Borthen

Reported:  
 03/11/05 07:49

## 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	RPD Limit	Notes
<b>Batch 5B27003: Prepared 02/27/05 Using EPA 5030B (MeOH)</b>										
<b>LCS Dup (5B27003-BSD1)</b>										
Gasoline Range Hydrocarbons	59.1	5.00	mg/kg	50.0	118	75-125	23.7	25		
Benzene	0.641	0.0300	"	0.730	87.8	75-125	6.94	25		
Toluene	3.29	0.0500	"	3.64	90.4	75-125	6.59	25		
Ethylbenzene	0.888	0.0500	"	0.855	104	75-125	7.72	25		
Xylenes (total)	4.08	0.100	"	4.17	97.8	75-125	7.37	25		
<i>Surrogate: 4-BFB (FID)</i>	2.87		"	3.00	95.7	50-150				
<i>Surrogate: 4-BFB (PID)</i>	2.40		"	3.00	80.0	53-142				
<b>Matrix Spike (5B27003-MS1)</b>										
					<b>Source: B5B0616-02</b>					
Gasoline Range Hydrocarbons	83.4	6.31	mg/kg dry	74.0	4.01	107	42-125			
Benzene	1.01	0.0378	"	1.08	ND	93.5	45-125			
Toluene	4.82	0.0631	"	5.39	0.0211	89.0	55-125			
Ethylbenzene	1.27	0.0631	"	1.27	0.0124	99.0	53-132			
Xylenes (total)	5.99	0.126	"	6.17	0.0262	96.7	59-125			
<i>Surrogate: 4-BFB (FID)</i>	4.20		"	4.44	94.6	50-150				
<i>Surrogate: 4-BFB (PID)</i>	3.75		"	4.44	84.5	53-142				
<b>Matrix Spike Dup (5B27003-MSD1)</b>										
					<b>Source: B5B0616-02</b>					
Gasoline Range Hydrocarbons	77.1	6.31	mg/kg dry	74.0	4.01	98.8	42-125	7.85	40	
Benzene	0.923	0.0378	"	1.08	ND	85.5	45-125	9.00	40	
Toluene	4.83	0.0631	"	5.39	0.0211	89.2	55-125	0.207	40	
Ethylbenzene	1.27	0.0631	"	1.27	0.0124	99.0	53-132	0.00	40	
Xylenes (total)	5.99	0.126	"	6.17	0.0262	96.7	59-125	0.00	40	
<i>Surrogate: 4-BFB (FID)</i>	4.04		"	4.44	91.0	50-150				
<i>Surrogate: 4-BFB (PID)</i>	3.77		"	4.44	84.9	53-142				

North Creek Analytical - Bothell

Jeff Gerdes, 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.



ENSR-Redmond  
9521 Willows Road NE  
Redmond, WA 98052

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

Project: UNOCAL #0082  
Project Number: 06940-248  
Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

**Semivolatile Petroleum Products by NWTPH-Dx with 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
<b>Batch 5B18051: Prepared 02/18/05 Using EPA 3550B</b>										
<b>Blank (5B18051-BLK1)</b>										
Diesel Range Hydrocarbons	ND	10.0	mg/kg							
Lube Oil Range Hydrocarbons	ND	25.0	"							
<i>Surrogate: 2-FBP</i>	4.75		"	8.33		57.0	50-150			
<i>Surrogate: Octacosane</i>	8.10		"	8.33		97.2	50-150			
<b>LCS (5B18051-BS1)</b>										
Diesel Range Hydrocarbons	66.3	10.0	mg/kg	66.7		99.4	61-120			
<i>Surrogate: 2-FBP</i>	5.94		"	8.33		71.3	50-150			
<b>LCS Dup (5B18051-BSD1)</b>										
Diesel Range Hydrocarbons	65.0	10.0	mg/kg	66.7		97.5	61-120	1.98	40	
<i>Surrogate: 2-FBP</i>	6.05		"	8.33		72.6	50-150			
<b>Duplicate (5B18051-DUP1)</b>										
Diesel Range Hydrocarbons	7.55	10.0	mg/kg dry		4.20			57.0	50	Q-07
Lube Oil Range Hydrocarbons	45.9	25.0	"		21.8			71.2	50	Q-07
<i>Surrogate: 2-FBP</i>	5.15		"	8.99		57.3	50-150			
<i>Surrogate: Octacosane</i>	8.37		"	8.99		93.1	50-150			
<b>Batch 5B23056: Prepared 02/23/05 Using EPA 3550B</b>										
<b>Blank (5B23056-BLK1)</b>										
Diesel Range Hydrocarbons	ND	10.0	mg/kg							
Lube Oil Range Hydrocarbons	ND	25.0	"							
<i>Surrogate: 2-FBP</i>	6.43		"	8.33		77.2	50-150			
<i>Surrogate: Octacosane</i>	10.1		"	8.33		121	50-150			

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.*

Jeff Gerdes, Project Manager



**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

ENSR-Redmond  
 9521 Willows Road NE  
 Redmond, WA 98052

Project: UNOCAL #0082  
 Project Number: 06940-248  
 Project Manager: Jim Borthen

**Reported:**  
 03/11/05 07:49

**Semivolatile Petroleum Products by NWTPH-Dx with 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	RPD Limit	Notes
<b>Batch 5B23056: Prepared 02/23/05 Using EPA 3550B</b>										
<b>LCS (5B23056-BS1)</b>										
Diesel Range Hydrocarbons	57.2	10.0	mg/kg	66.7		85.8	61-120			
<i>Surrogate: 2-FBP</i>	6.31		"	8.33		75.8	50-150			
<b>LCS Dup (5B23056-BSD1)</b>										
Diesel Range Hydrocarbons	59.0	10.0	mg/kg	66.7		88.5	61-120	3.10	40	
<i>Surrogate: 2-FBP</i>	6.65		"	8.33		79.8	50-150			
<b>Duplicate (5B23056-DUP1)</b>										
Lube Oil Range Hydrocarbons	79.5	125	mg/kg dry		42.8			60.0	50	Q-02
<i>Surrogate: Octacosane</i>	17.2		"	9.42		183	50-150			S-04
<b>Duplicate (5B23056-DUP2)</b>										
Diesel Range Hydrocarbons	3860	200	mg/kg dry		2260			52.3	50	Q-02
Lube Oil Range Hydrocarbons	78.3	500	"		68.4			13.5	50	
<i>Surrogate: 2-FBP</i>	ND		"	9.42		ND	50-150			S-01
<i>Surrogate: Octacosane</i>	ND		"	9.42		ND	50-150			S-01

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.*

Jeff Gerdes, Project Manager



**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

ENSR-Redmond  
9521 Willows Road NE  
Redmond, WA 98052

Project: UNOCAL #0082  
Project Number: 06940-248  
Project Manager: Jim Borthen

Reported:  
03/11/05 07:49

### Notes and Definitions

- D-06 The sample chromatographic pattern does not resemble the fuel standard used for quantitation.
- D-09 Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
- D-10 The heavy oil range organics present are due to hydrocarbons eluting primarily in the diesel range.
- G-01 Results reported for the gas range are primarily due to overlap from diesel range hydrocarbons.
- G-02 The chromatogram for this sample does not resemble a typical gasoline pattern. Please refer to the sample chromatogram.
- I-06 The analyte concentration may be artificially elevated due to coeluting compounds or components.
- Q-02 The spike recovery for this QC sample is outside of NCA established control limits due to sample matrix interference.
- Q-07 The RPD value for this QC sample is above the established control limit. Review of associated QC indicates the high RPD does not represent an out-of-control condition for the batch.
- Q-41 This analyte had a high bias in the associated calibration verification standard.
- S-01 The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interferences.
- 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

Jeff Gerdes, 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.*



## ENSR CHAIN OF CUSTODY REPORT

Facility Number:	0084
Site Address:	Buy 97 # East St.
City, State, ZIP:	Chelan, WA
P.O. Number:	
CERT INFO: (check one)	<input checked="" type="checkbox"/> Evaluation <input type="checkbox"/> Remediation <input type="checkbox"/> Clearance <input type="checkbox"/> Miscellaneous
<input type="checkbox"/> Detection <input type="checkbox"/> Demolition	

Name:	ENSR
Address:	Redmond 7700
Phone:	425-881-8500 Fax:
Project No.:	WA040 00940 248
Project Manager:	Jim Bonthen
Samples collected by: Eric Baltz	

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX	NUMBER OF CONTAINERS (W, S, O)	NW Series												
				<input type="checkbox"/> AK	<input type="checkbox"/> OR	<input type="checkbox"/> WA	<input checked="" type="checkbox"/> NW	<input type="checkbox"/> PCBs only	<input type="checkbox"/> PCBs + PCDDs/PCDFs	<input type="checkbox"/> PCDDs/PCDFs	<input type="checkbox"/> PCDFs only	<input type="checkbox"/> GC/MS Volatiles	<input type="checkbox"/> GC/MS Semivolatiles	<input type="checkbox"/> BPA 2870	<input type="checkbox"/> or 8310	<input type="checkbox"/> Lead: Total or Dissolved
1. B1 (3.5 - 4)	2/15 1200	X	2				X									
2. B1 (8.5 - 9)	1205	S													-02	
3. B1 (13.5 - 14)	1210															-03
4. B1 (18.5 - 20)	1215															-04
5. B2 (5 - 6.5)	1300															-05
6. B2 (15 - 16.5)	1310															-06
7. B2 (20 - 21.5)	1315															-07
8. B2 (25 - 26.5)	1320															-08
9. B3 (15 - 16.5)	1400															-09
10. B3 (20 - 21.5)	1425	↓														-10

Requiring Party	Firm	Date/Time	Received by	Firm	Date/Time
1.	ENSR	2/17/05 055	City Creek Corp	N/A	2/17/05 14:52
2.					
3.					

Were all requested results provided?  yes  no      Define "no" on back  
 Were the results within the requested turnaround?  yes  no

Final approval signature:

Date: 4.2 2005

Chain of Custody Record #: B5B0435

Quality Assurance Data Level:  
 A: Standard + Chromatograms  
 B: Standard Summary

Laboratory Turnaround Days:  
 5  3  2  1

Comments: White - Laboratory      Yellow - Consultant

Page 1 of 3

Distribution:



## ENSR CHAIN OF CUSTODY REPORT

Facility Number:	0082		
Site Address:	1100 97 <sup>th</sup> East Street Chehalis, WA		
City, State, ZIP:			
P.O. Number:			
CERT INFO: (check one)	<input checked="" type="checkbox"/> Evaluation	<input type="checkbox"/> Remediation	<input type="checkbox"/> Closure
	<input type="checkbox"/> Demolition	<input type="checkbox"/> Miscellaneous	

Name:	ENSR
Address:	Reedwood
Phone:	425-388-17700
Project No.:	Unocal 06940 248
Project Manager:	Jim Bonner
Samples collected by:	Eric Boz

11720 North Creek Parkway N #400 • Bothell, WA 98011-3244 • 425-420-9200 • Fax 9-.0  
 11922 E 1st Ave • Spokane, WA 99206-5302 • 509-924-9200 • Fax 924-9290  
 9405 SW Nimbus Ave • Beaverton, OR 97008-7184 • 503-906-9200 • Fax 906-9210  
 20332 Empire Ave NW • Bend, OR 97701-5712 • 541-383-9310 • Fax 382-7588  
 2000 W International Airport Rd #A10 • Anchorage, AK 99502-1119 • 907-563-9200 • Fax 563-9210

Chain of Custody Record #: <input type="text"/>
Quality Assurance Data Level: <input checked="" type="checkbox"/> A <input type="checkbox"/> B: Standard + Chromatograms
Laboratory Turnaround Days: <input checked="" type="checkbox"/> 5 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 1

NCA SAMPLE NUMBER <b>B5B0435.11</b>
Method (g) or 8310 PAC: 8270 SIM EPA 8270 GC/MS Semivol. HPA 8260 GC/MS Volatiles or PPHs only Pesticides/PCBs Volatile HPA Halogens W/SD cleanup
Level: Total or Dissolved TCI or RCRA
-12

AK <input type="checkbox"/> OR <input type="checkbox"/> WA <input type="checkbox"/> NW Series
TPH-HC1D TPH-Qs BTX Only BPA 8021 Mod. TPH-Diesel BTX TPH-Diesel Bxntndd TPH-Diesel TPH-Diesel W/SD cleanup
X X X

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W, S, O)	NUMBER OF CONTAINERS
1.B3 (25-26.5)	3/15 1430	S 2	
2.B4 (15-16.5)	3/16 1135		
3.B4 (20-21.5)	3/16 1140		
4.B4 (25-26.5)	3/16 1145		
5.B5 (10-11.5)	3/15 1615		
6.B5 (15-16.5)	3/15 1620		
7.B5 (20-21.5)	3/15 1625		
8.B5 (25-26.5)	3/15 1630		
9.B6 (15-16.5)	3/16 1040		
10.B6 (20-21.5)	3/16 1045		

Date/Time	Received by	Date/Time
1/16/05 14:55	John Gandy M	1/16/05 14:55
Were all requested results provided? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Define "no"	
Were the results within the requested turnaround? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	on back	
Final approval signature: <input type="text"/>	Firm: <input type="text"/>	
Comments: <input type="text"/>	Comments: <input type="text"/>	
Page 2 of 3	Page 1 of 3	
Ensr: <input type="text"/>	White - Laboratory: <input type="text"/>	
Distribution: <input type="text"/>	Yellow - Consultant: <input type="text"/>	
Page:	Date:	



## Revised Chain of Custody

11720 North Creek Parkway N #400 • Bothell, WA 98011-3244 • 425-420-5200 • Fax: 924-2210  
 11922 E 1st Ave • Spokane, WA 99206-5302 • 509-924-5200 • Fax: 924-2250  
 9405 SW Nimbus Ave • Beaverton, OR 97008-7184 • 503-905-5200 • Fax: 905-5210  
 20332 Empire Ave #E1 • Bend, OR 97701-5712 • 541-383-9310 • Fax: 382-7588  
 2000 W International Airport Rd WA10 • Anchorage, AK 99502-1119 • 907-563-5200 • Fax: 563-5210

## ENSR CHAIN OF CUSTODY REPORT

Facility Number:	0082
Site Address:	Hwy 97 & East St.
City, State, ZIP:	Chelan, WA
P.O. Number:	
CERT INFO: (check one)	<input checked="" type="checkbox"/> Evaluation <input type="checkbox"/> Remediation <input type="checkbox"/> Closure <input type="checkbox"/> Miscellaneous
Detection	

Name:	ENSR
Address:	Redmond
Phone:	425-881-7700
Project No.:	W-0082 06940 248
Project Manager:	Jim Borstner
Samples collected by:	Eric Blantz

Chain of Custody Record #:	B5B0435
Quality Assurance Data Level:	<input checked="" type="checkbox"/> A <input type="checkbox"/> B: Standard + Crosscheck
Laboratory Turnaround Day:	<input checked="" type="checkbox"/> 5 <input type="checkbox"/> 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX	NUMBER OF CONTAINERS (W, S, O)	NCA SAMPLE NUMBER												
				TPH-Qrs	TPH-HC1D	TPH-D1001	TPH-D1002	TPH-D1003	TPH-D1004	TPH-D1005	TPH-D1006	TPH-D1007	TPH-D1008	TPH-D1009	TPH-D1010	
1. B6 (25° - 26.5°)	3/6 1050	J	2			X										
2.B7 (15° - 16.5°)	3/6 1515															
3.B7 (20° - 21.5°)	3/6 1520															
4.B7 (25° - 26.5°)	3/6 1530															
5.B8 (15° - 16.5°)	3/6 0850															
6.B8 (20° - 21.5°)	3/6 0855															
7.B8 (25° - 26.5°)	3/6 0900	V														
8. TRIP BLANK	2/15/05 12:00	S	4													
9.																
10.																

Date/Time:	2/16/05 12:55
Comments:	Initial sample NPA
1. Were all requested results provided?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Were the results within the requested turnaround?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No "No" on back
3. Final approval signature:	



## ENSR CHAIN OF CUSTODY REPORT

11720 North Creek Parkway N #400 • Bothell, WA 98011-8244 • 425-420-9200 • Fax .10  
11922 E 1st Ave • Spokane, WA 99206-5302 • 509-924-9200 • Fax 9a--9290  
9405 Embassy Ave • Beaverton, OR 97005-7184 • 503-926-9200 • Fax 905-9210  
20332 Embassy Ave #F1 • Bend, OR 97701-5712 • 541-383-9310 • Fax 382-7588  
3000 W International Airport Rd #A10 • Anchorage, AK 99502-1119 • 907-563-9200 • Fax 563-9210

ENSR CHAIN OF CUSTODY REPORT	
Facility Number:	0082
Site Address:	High 97 & East St. Chester, PA
City, State, ZIP:	
P.O. Number:	
CERT INFO: (check one)	
<input type="checkbox"/> Detection	<input checked="" type="checkbox"/> Evaluation
<input type="checkbox"/> Demolition	<input type="checkbox"/> Closure
<input type="checkbox"/> Remediation	<input type="checkbox"/> Miscellaneous
Project No.: UACR-06940 248	
Project Manager: Jim Baughman	
Samples collected by: Eric Blattz	
Name: ENSR	Address: Redmond
Phone: 425-881-7700	Fax:
Chain of Custody Record #:	
B3 B0430	
Quality Assurance Data Level:	
<input checked="" type="checkbox"/> A	
A: Standard + Chronology	
<input type="checkbox"/> B: Standard + Chronology	
Laboratory Turnaround Days:	
<input checked="" type="checkbox"/> 5	
<input type="checkbox"/> 3	
<input type="checkbox"/> 2	
<input type="checkbox"/> 1	

Requester/Comments	Date/Time	Firm	Received by	Date/Time	Firm	Date/Time
	2/17/05 1455	Cathy Combs NPA		2/17/05 14:55		
1.						
2.						
3.						

Page 3 of 3

Comments:

ENR COC rev 1/2003

Were all requested results provided?  yes  no  
Were the results within the requested turnaround?  yes  no  
Final approval signature: \_\_\_\_\_  
Firm: \_\_\_\_\_ Date: \_\_\_\_\_

Quantitation Report

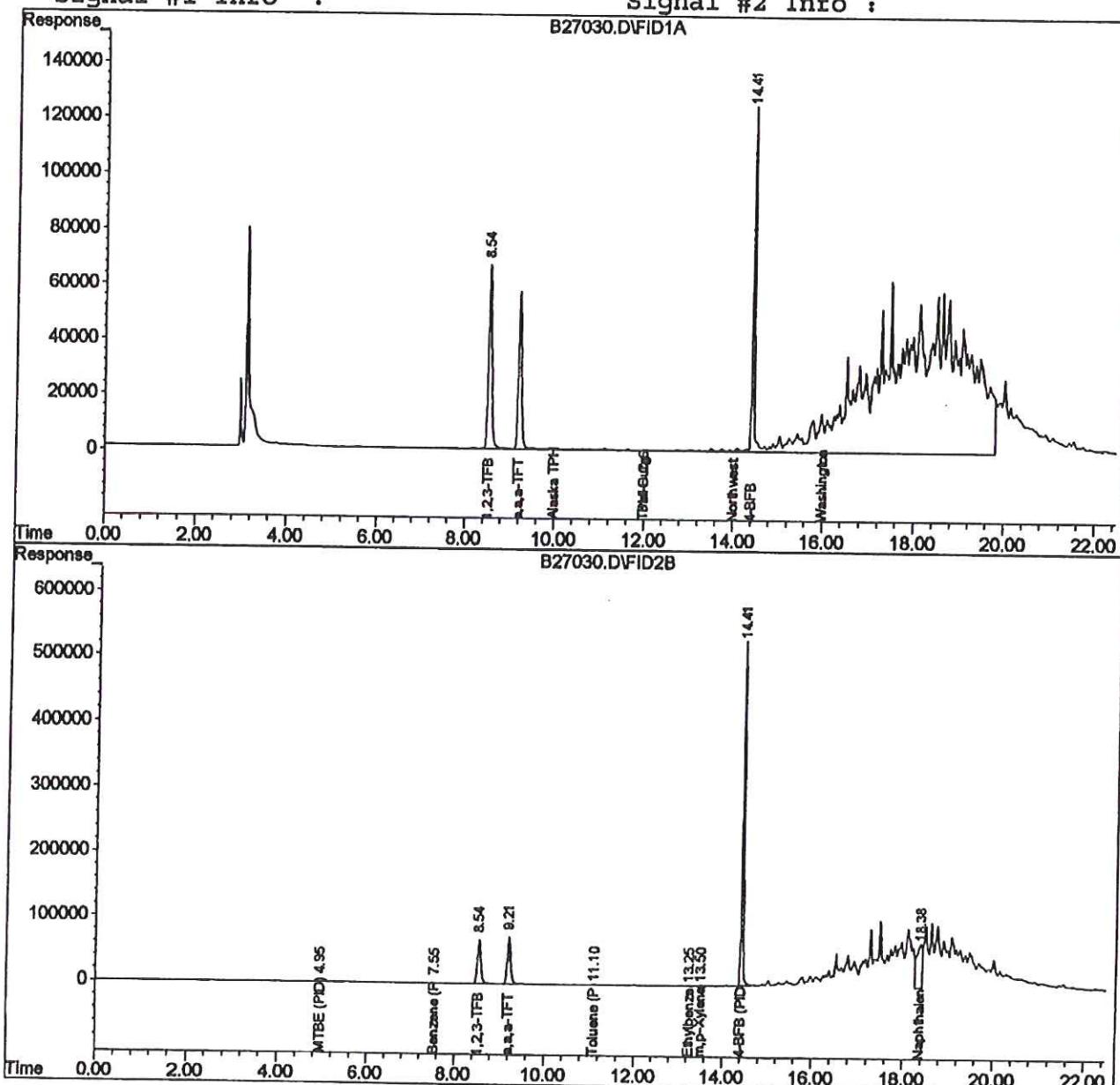
Signal #1 : D:\HPCHEM\3\DATA\022705\B27030.D\FID1A.CH Vial: 30  
 Signal #2 : D:\HPCHEM\3\DATA\022705\B27030.D\FID2B.CH  
 Acq On : 28 Feb 2005 2:00 Operator: aa  
 Sample : b5b0435-21 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Mar 2 15:20 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Sun Feb 27 12:58:01 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

Volume Inj. :

Signal #1 Phase :  
Signal #1 Info :

Signal #2 Phase:  
Signal #2 Info :

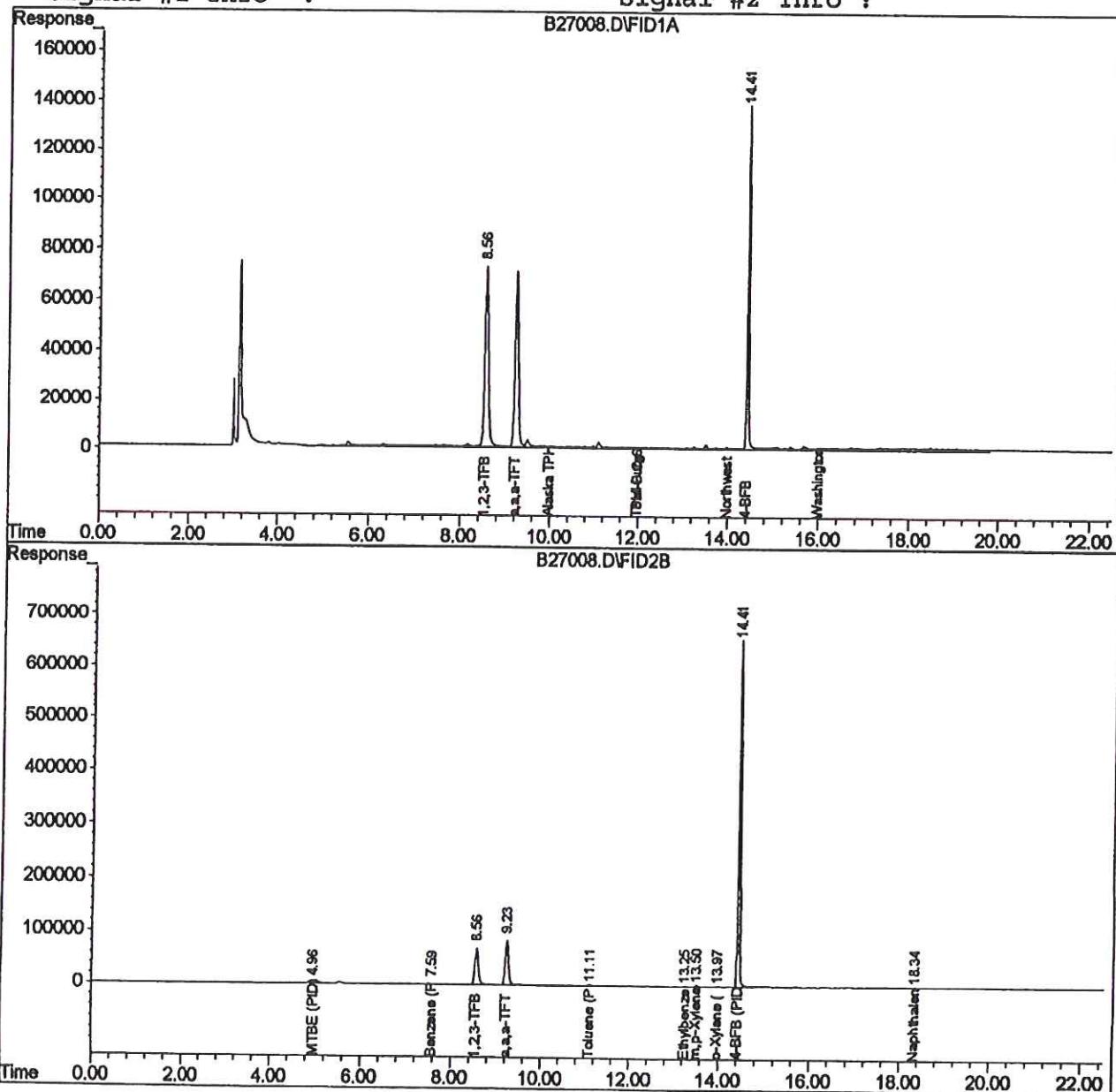


Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022705\B27008.D\FID1A.CH Vial: 8  
 Signal #2 : D:\HPCHEM\3\DATA\022705\B27008.D\FID2B.CH  
 Acq On : 27 Feb 2005 15:11 Operator: aa  
 Sample : b5b0435-22 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 27 15:34 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Sun Feb 27 12:58:01 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

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



Quantitation Report

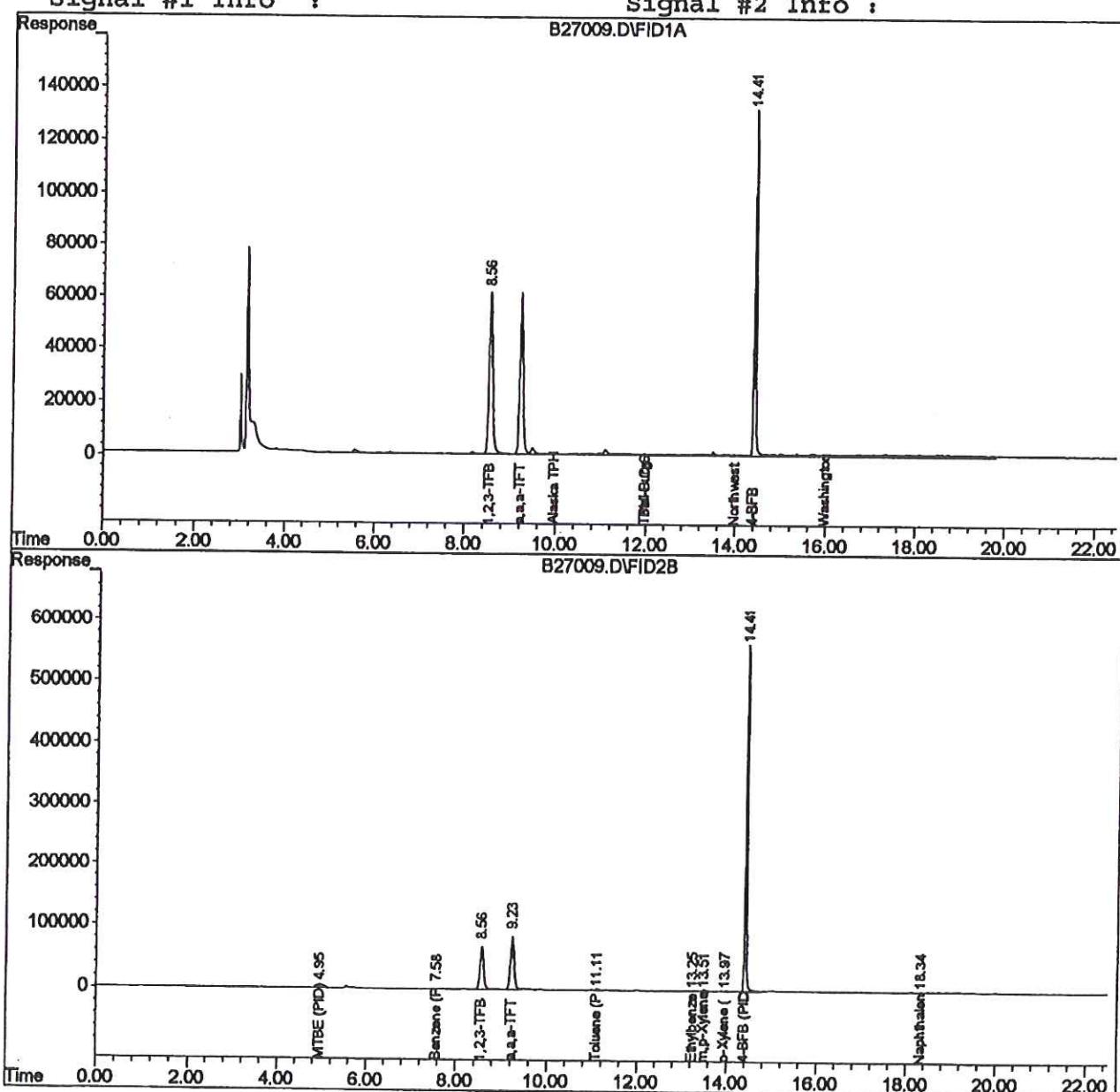
Signal #1 : D:\HPCHEM\3\DATA\022705\B27009.D\FID1A.CH Vial: 9  
 Signal #2 : D:\HPCHEM\3\DATA\022705\B27009.D\FID2B.CH  
 Acq On : 27 Feb 2005 15:40 Operator: aa  
 Sample : b5b0435-23 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 27 16:03 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Sun Feb 27 12:58:01 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

Volume Inj. :

Signal #1 Phase :  
Signal #1 Info :

Signal #2 Phase:  
Signal #2 Info :



Quantitation Report

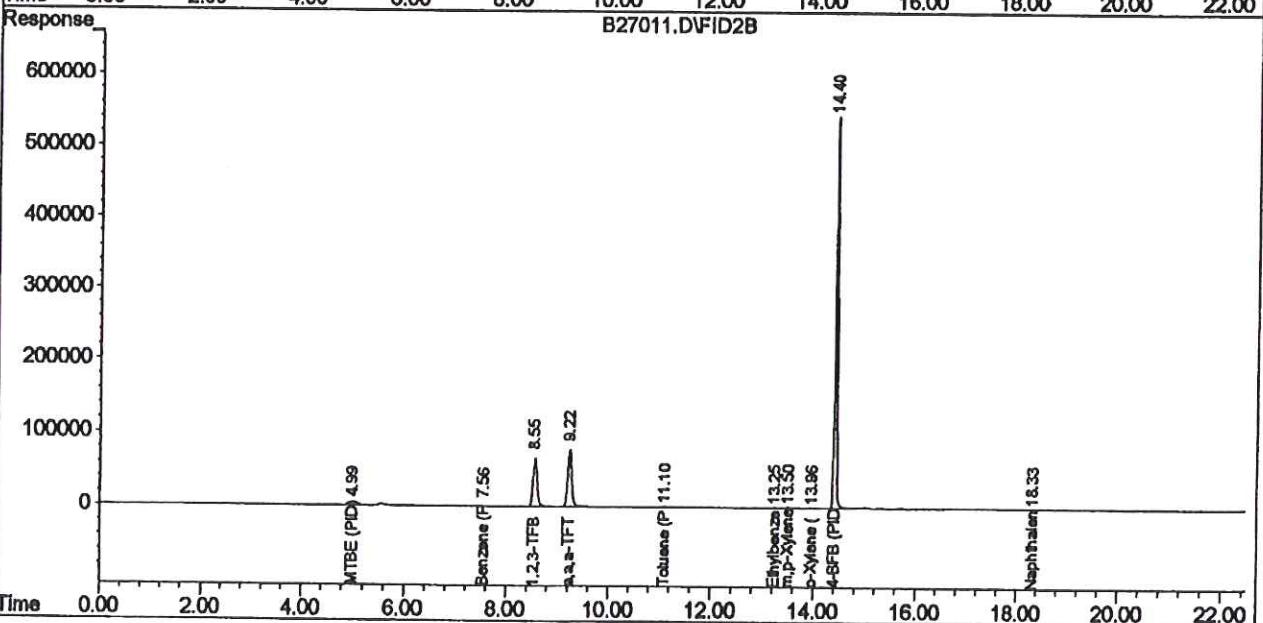
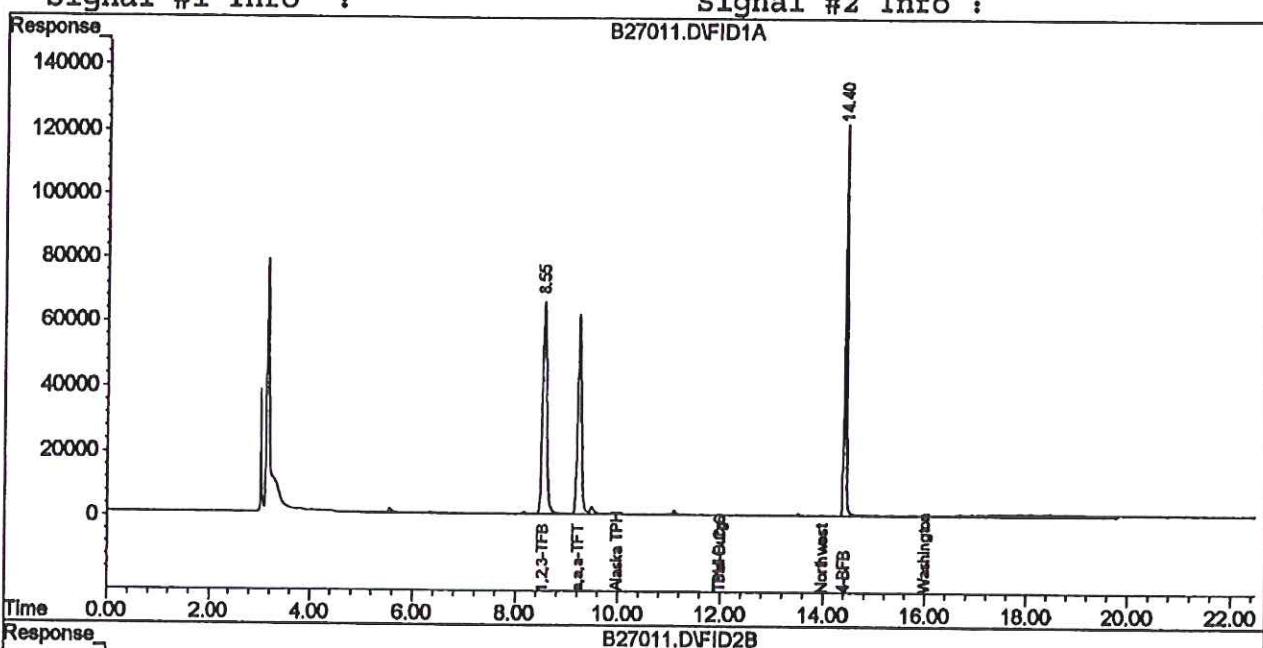
Signal #1 : D:\HPCHEM\3\DATA\022705\B27011.D\FID1A.CH Vial: 11  
 Signal #2 : D:\HPCHEM\3\DATA\022705\B27011.D\FID2B.CH  
 Acq On : 27 Feb 2005 16:40 Operator: aa  
 Sample : b5b0435-25 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 27 17:03 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Sun Feb 27 12:58:01 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

Volume Inj. :

Signal #1 Phase :  
Signal #1 Info :

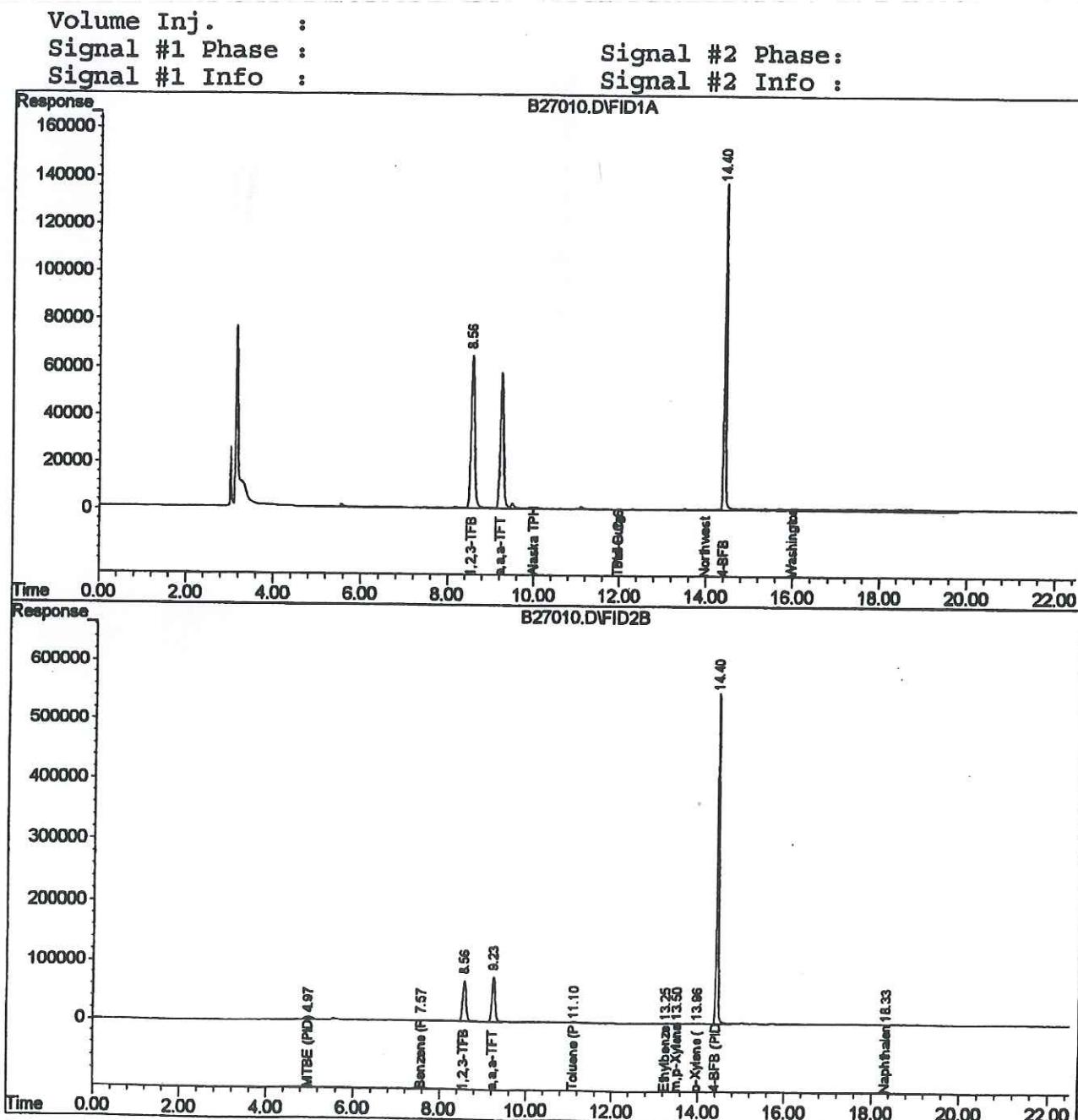
Signal #2 Phase:  
Signal #2 Info :



Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022705\B27010.D\FID1A.CH Vial: 10  
 Signal #2 : D:\HPCHEM\3\DATA\022705\B27010.D\FID2B.CH  
 Acq On : 27 Feb 2005 16:10 Operator: aa  
 Sample : b5b0435-24 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 27 16:33 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Sun Feb 27 12:58:01 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M



Quantitation Report

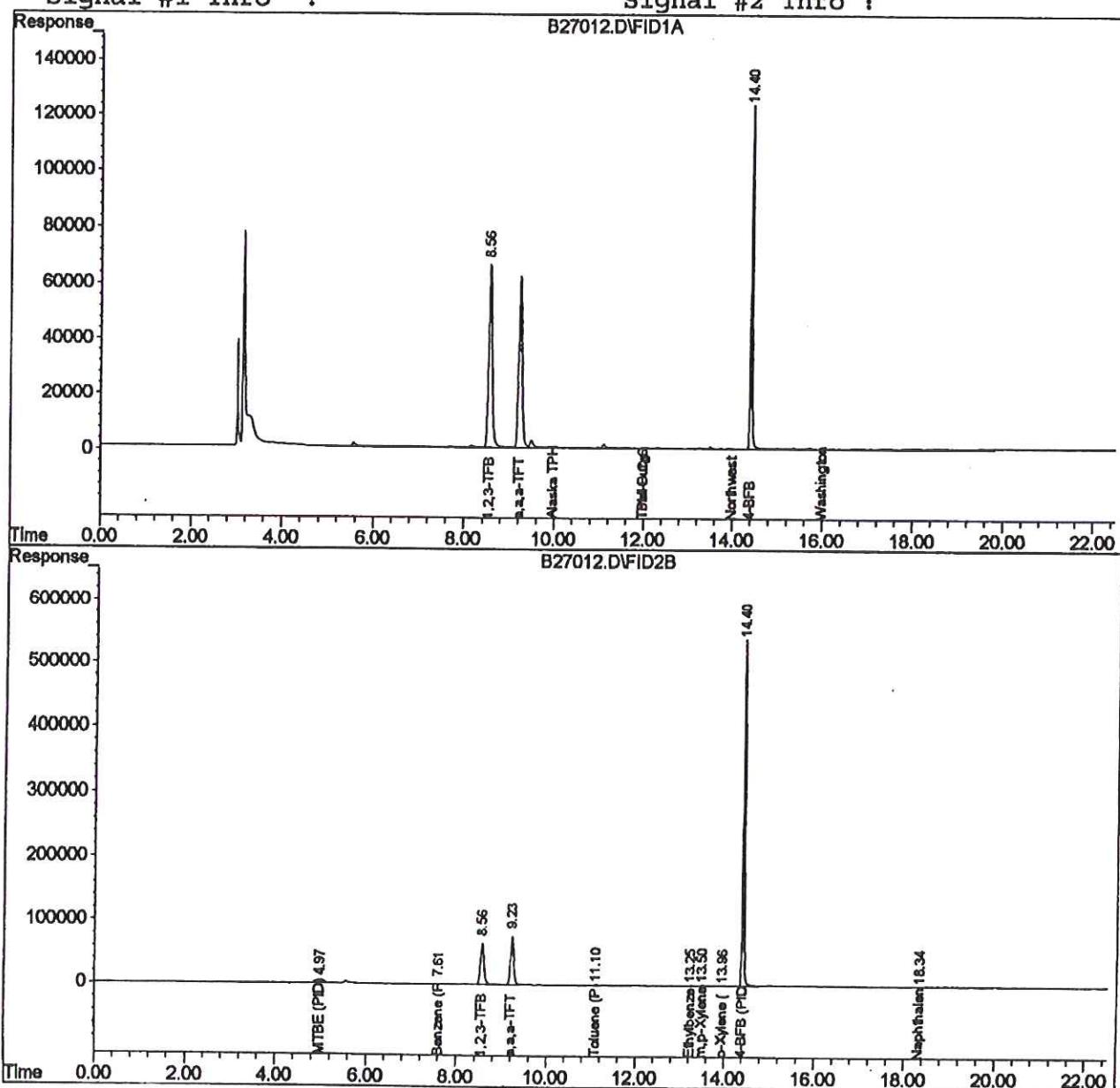
Signal #1 : D:\HPCHEM\3\DATA\022705\B27012.D\FID1A.CH Vial: 12  
 Signal #2 : D:\HPCHEM\3\DATA\022705\B27012.D\FID2B.CH  
 Acq On : 27 Feb 2005 17:09 Operator: aa  
 Sample : b5b0435-26 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 27 17:32 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Sun Feb 27 12:58:01 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

Volume Inj. :

Signal #1 Phase :  
Signal #1 Info :

Signal #2 Phase:  
Signal #2 Info :



Quantitation Report

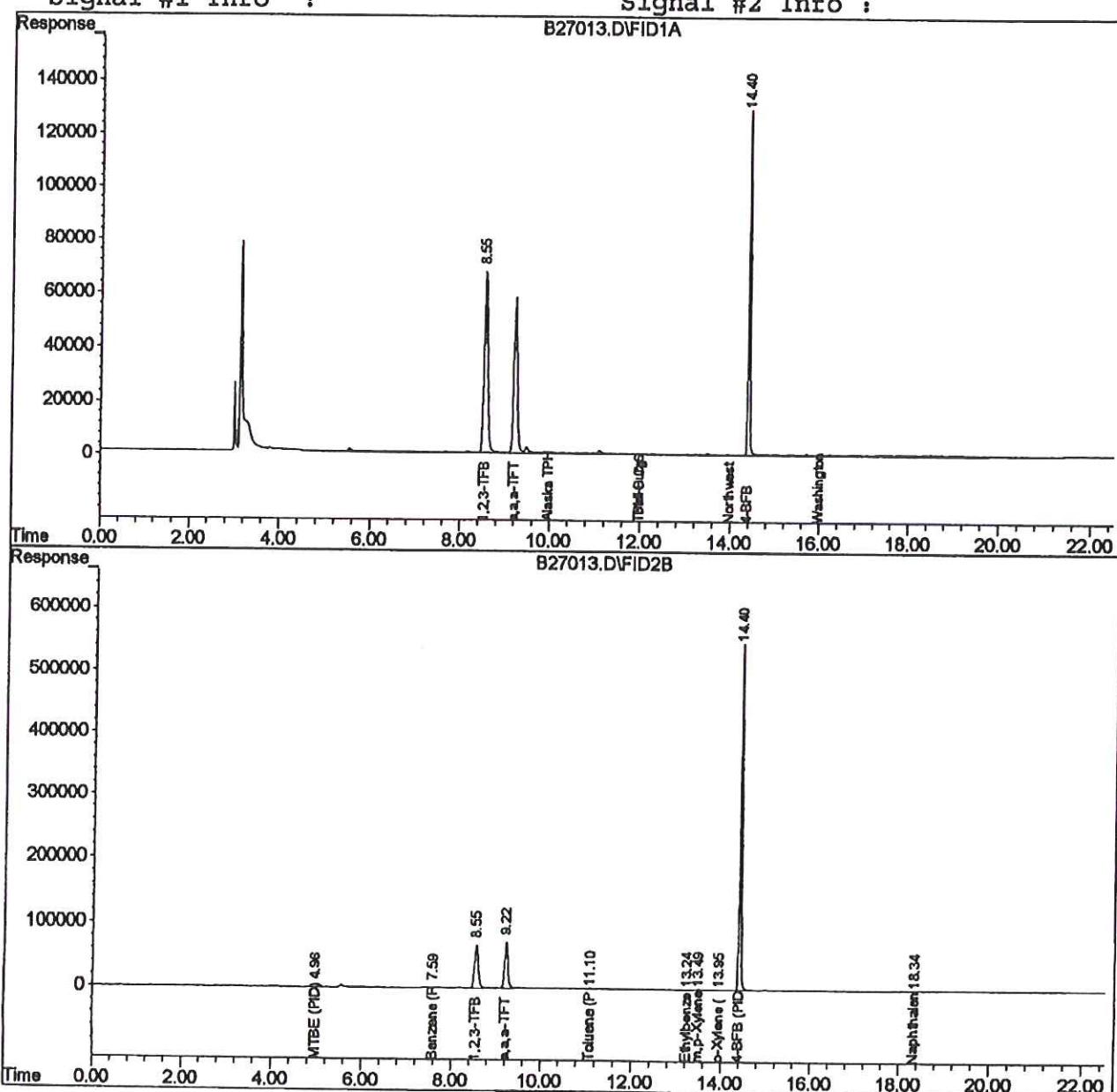
Signal #1 : D:\HPCHEM\3\DATA\022705\B27013.D\FID1A.CH Vial: 13  
 Signal #2 : D:\HPCHEM\3\DATA\022705\B27013.D\FID2B.CH  
 Acq On : 27 Feb 2005 17:39 Operator: aa  
 Sample : b5b0435-27 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 27 18:02 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Sun Feb 27 12:58:01 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

Volume Inj. :

Signal #1 Phase :  
Signal #1 Info :

Signal #2 Phase:  
Signal #2 Info :

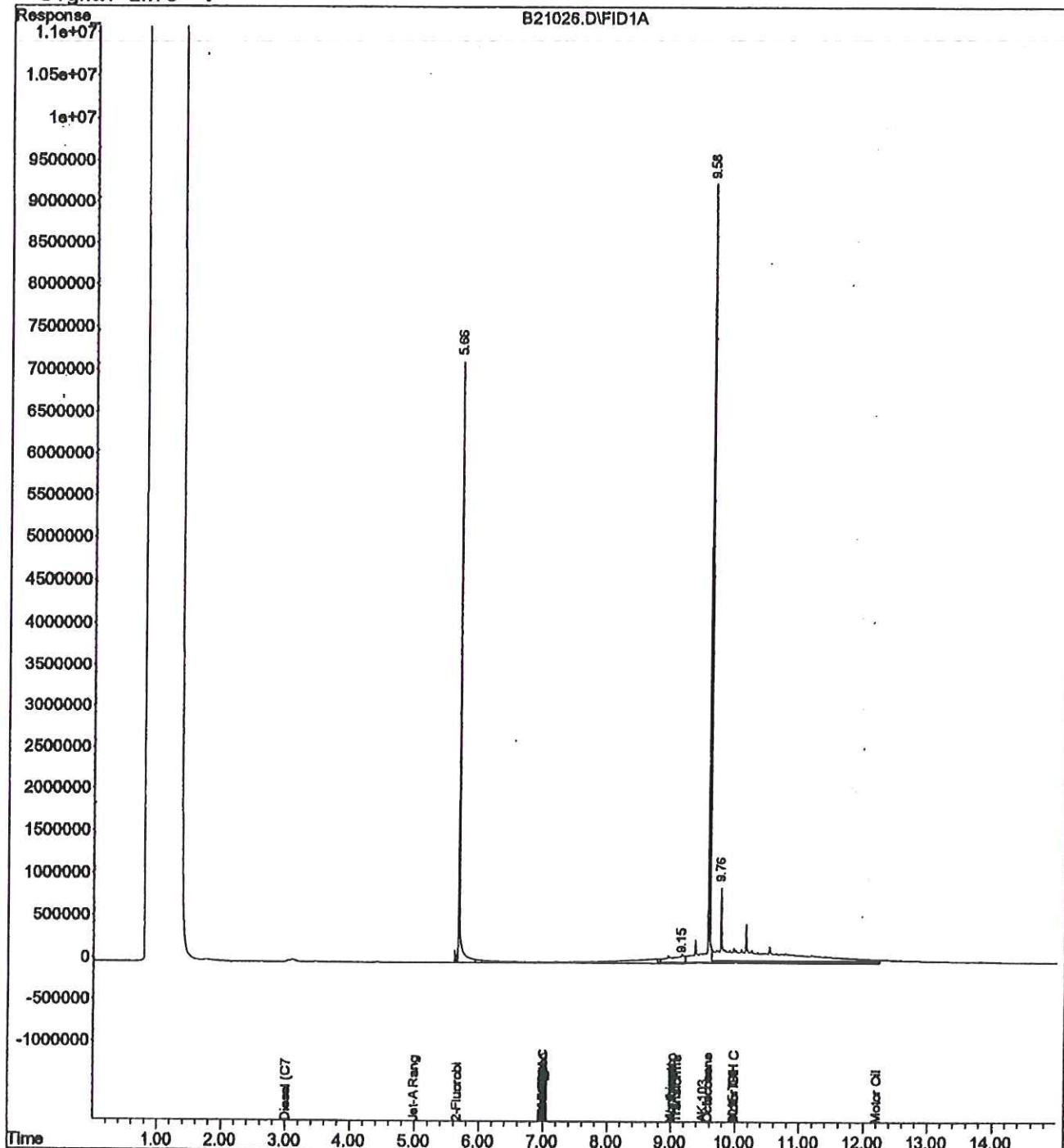


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022105\B21026.D Vial: 12  
Acq On : 21 Feb 2005 13:55 Operator: GSM  
Sample : b5b0435-01 Inst : GC #9  
Misc : 1x nwdx sg s Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 21 14:10 2005 Quant Results File: TFB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TFB0305.M (Chemstation Integrator)  
Title : TPH-D Front  
Last Update : Tue Feb 15 19:44:58 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

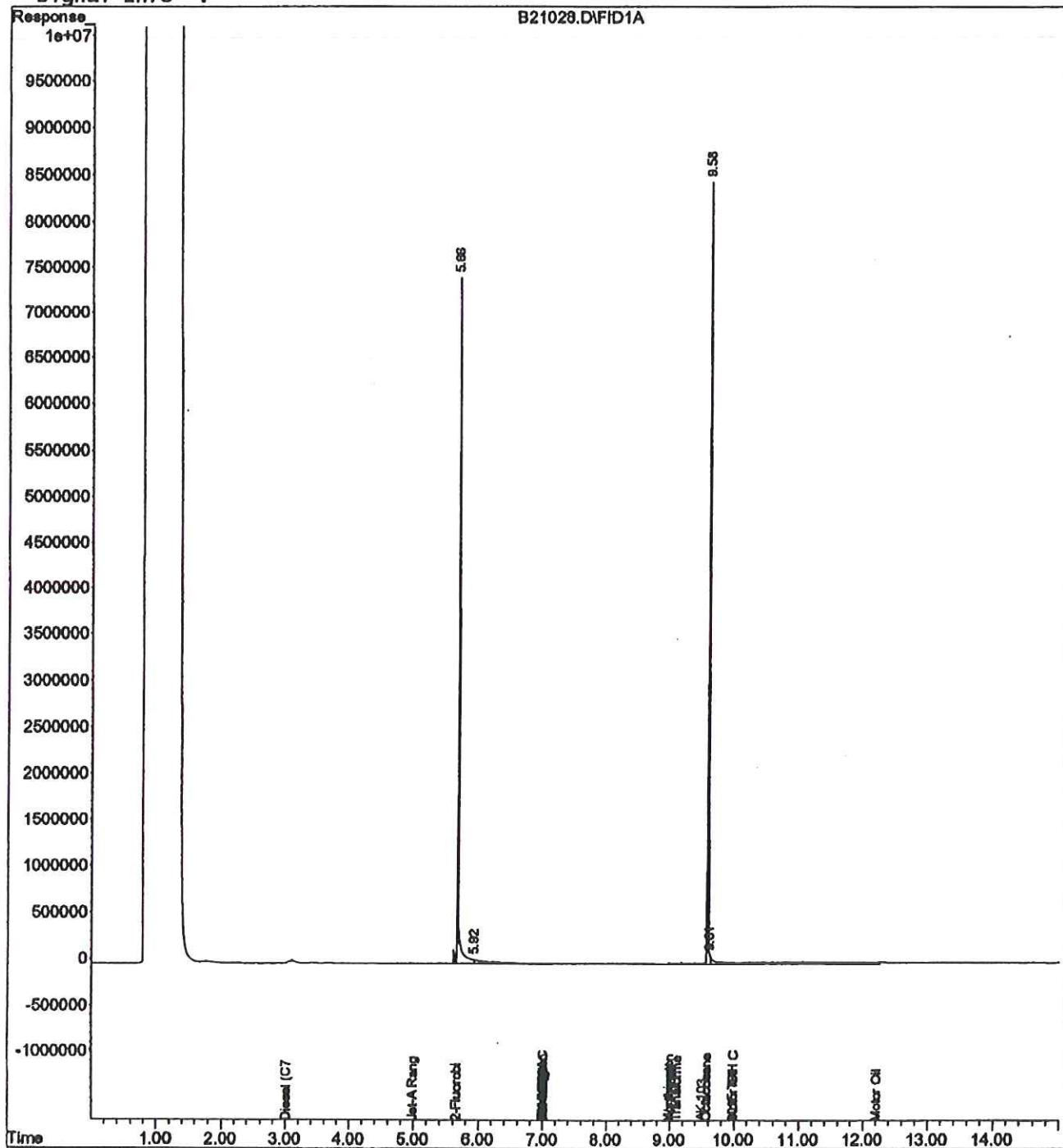


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022105\B21028.D Vial: 13  
Acq On : 21 Feb 2005 14:18 Operator: GSM  
Sample : b5b0435-02 Inst : GC #9  
Misc : 1x nwdx sg s Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 21 14:33 2005 Quant Results File: TFB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TFB0305.M (Chemstation Integrator)  
Title : TPH-D Front  
Last Update : Tue Feb 15 19:44:58 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

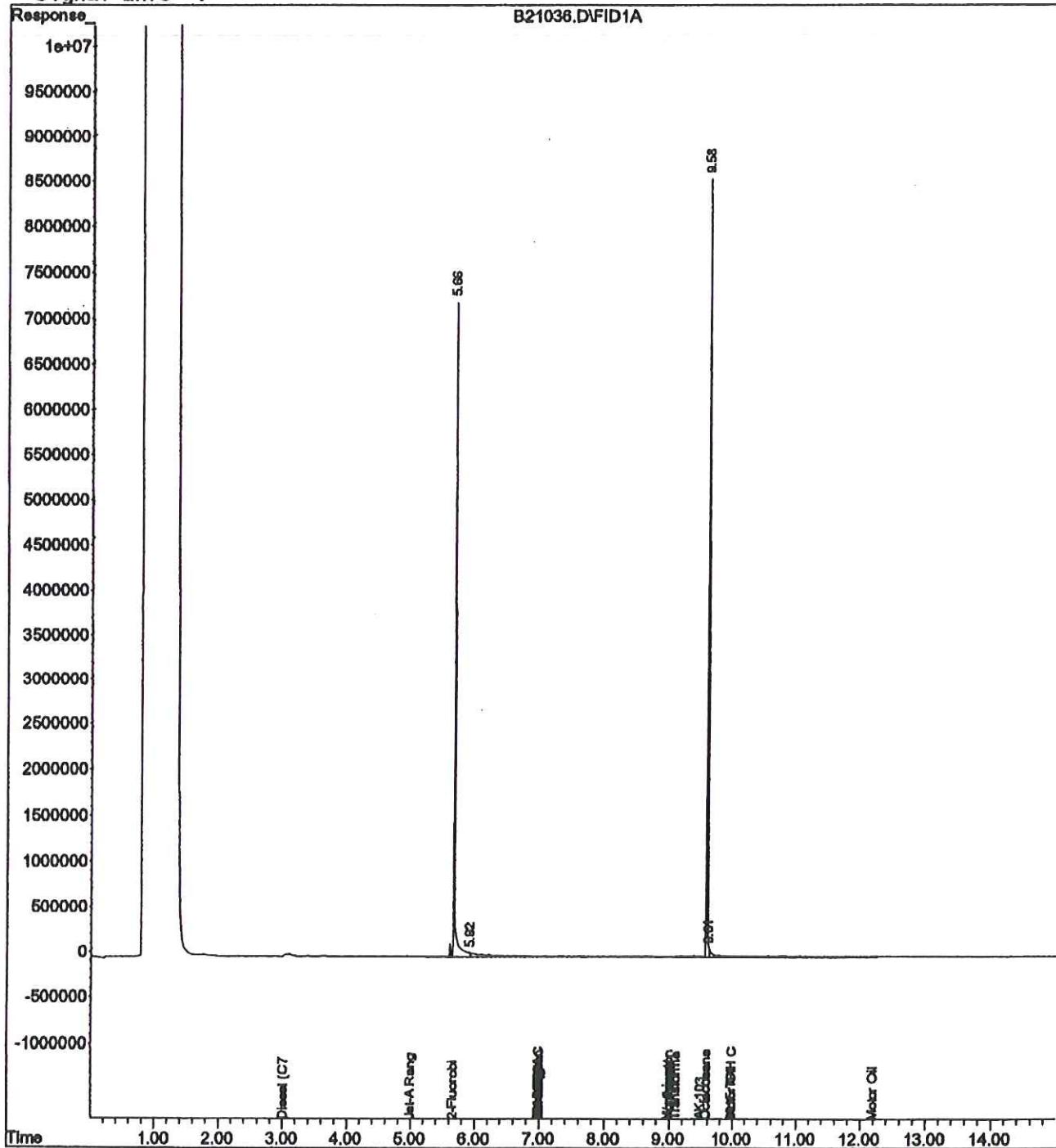


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022105\B21036.D Vial: 14  
Acq On : 21 Feb 2005 16:09 Operator: GSM  
Sample : b5b0435-03 Inst : GC #9  
Misc : 1x nwdx sg s Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 21 16:24 2005 Quant Results File: TFB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TFB0305.M (Chemstation Integrator)  
Title : TPH-D Front  
Last Update : Tue Feb 15 19:44:58 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :



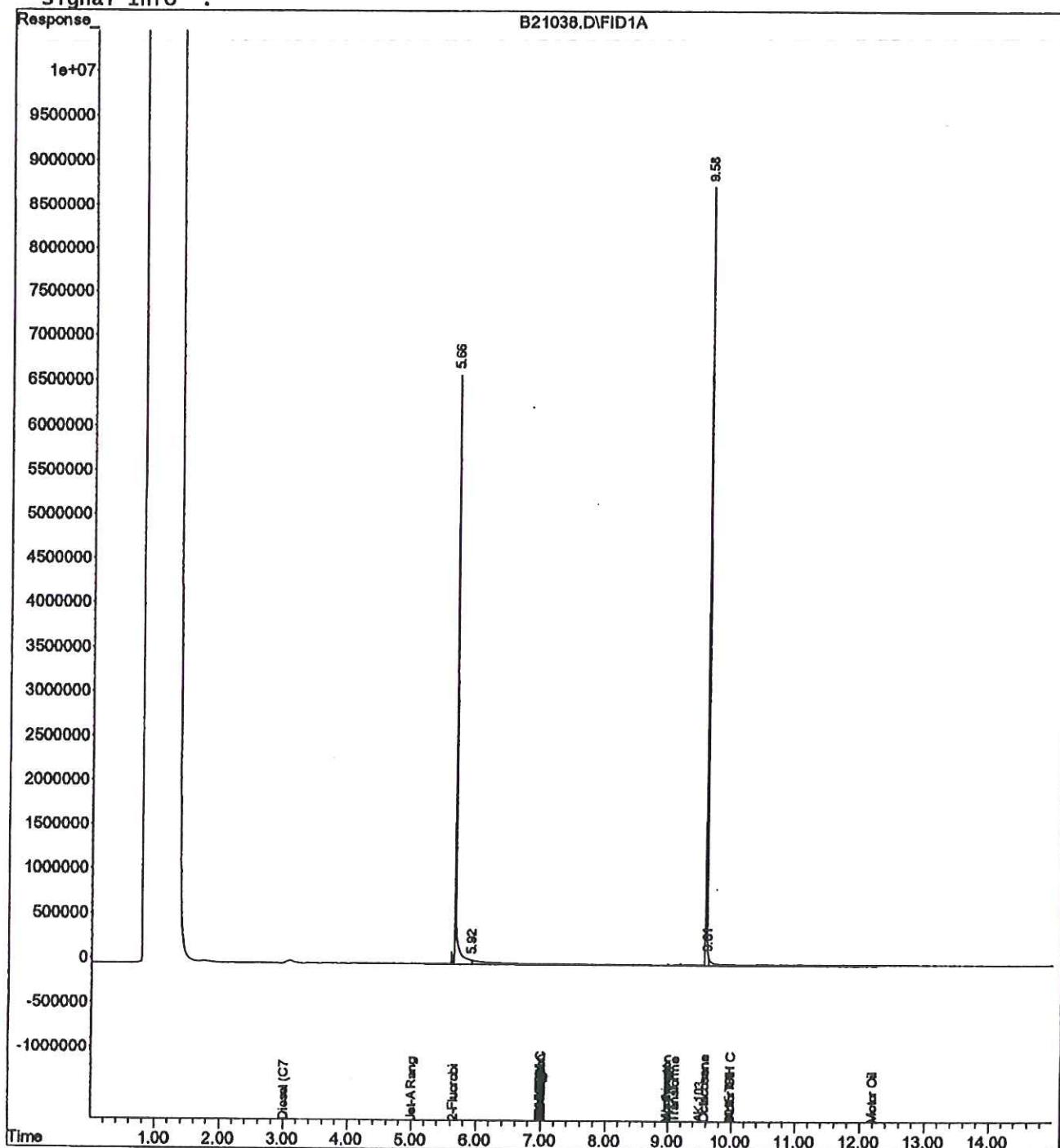
## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022105\B21038.D Vial: 15  
Acq On : 21 Feb 2005 16:32 Operator: GSM  
Sample : b5b0435-04 Inst : GC #9  
Misc : 1x nwdx sg s Multiplr: 1.00  
IntFile : SURR.E

Quant Time: Feb 21 16:47 2005 Quant Results File: TFB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TFB0305.M (Chemstation Integrator)  
Title : TPH-D Front  
Last Update : Tue Feb 15 19:44:58 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

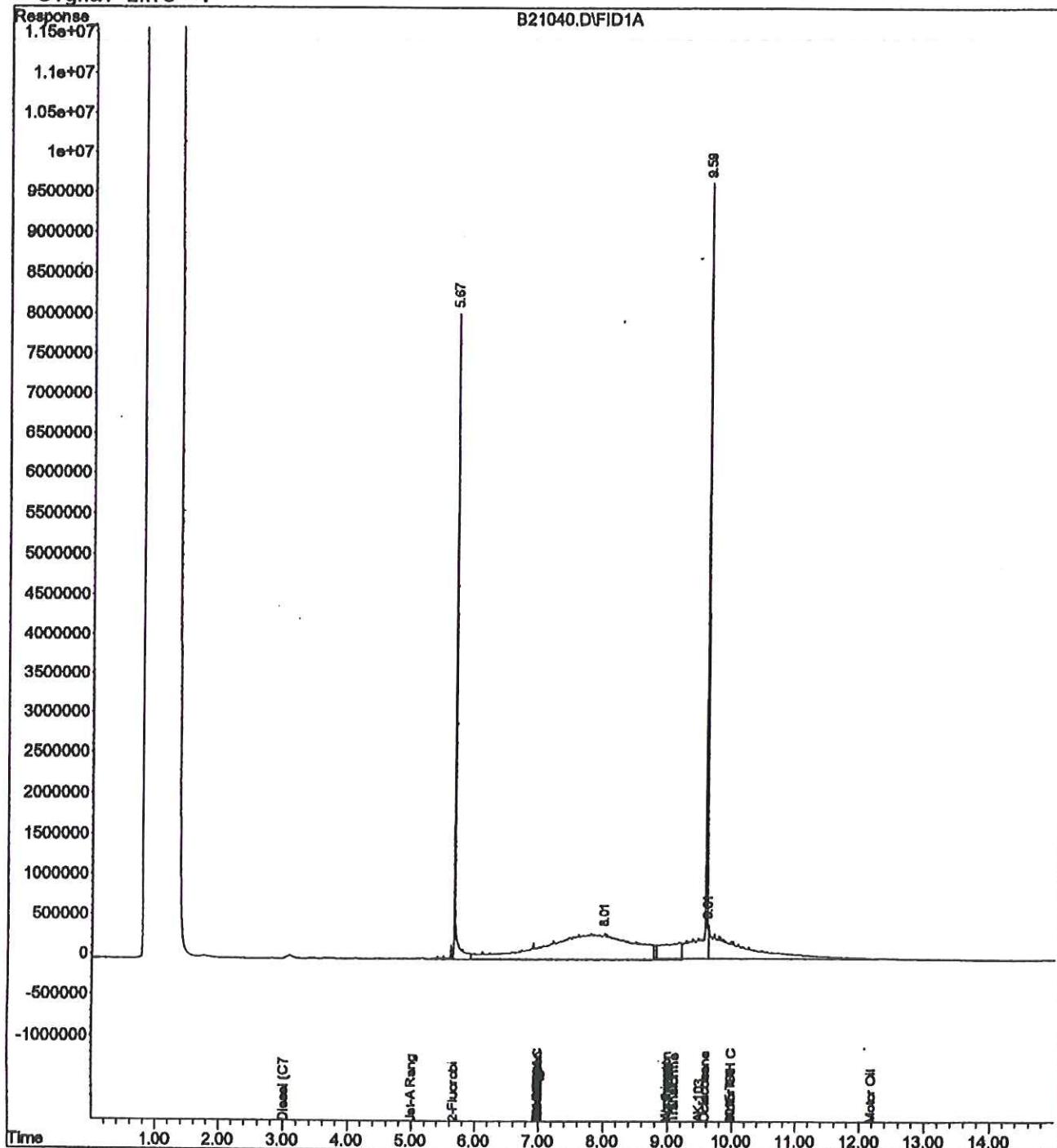


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022105\B21040.D Vial: 16  
Acq On : 21 Feb 2005 16:55 Operator: GSM  
Sample : b5b0435-05 Inst : GC #9  
Misc : 1x nwdx sg s Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 21 17:11 2005 Quant Results File: TFB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TFB0305.M (Chemstation Integrator)  
Title : TPH-D Front  
Last Update : Tue Feb 15 19:44:58 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

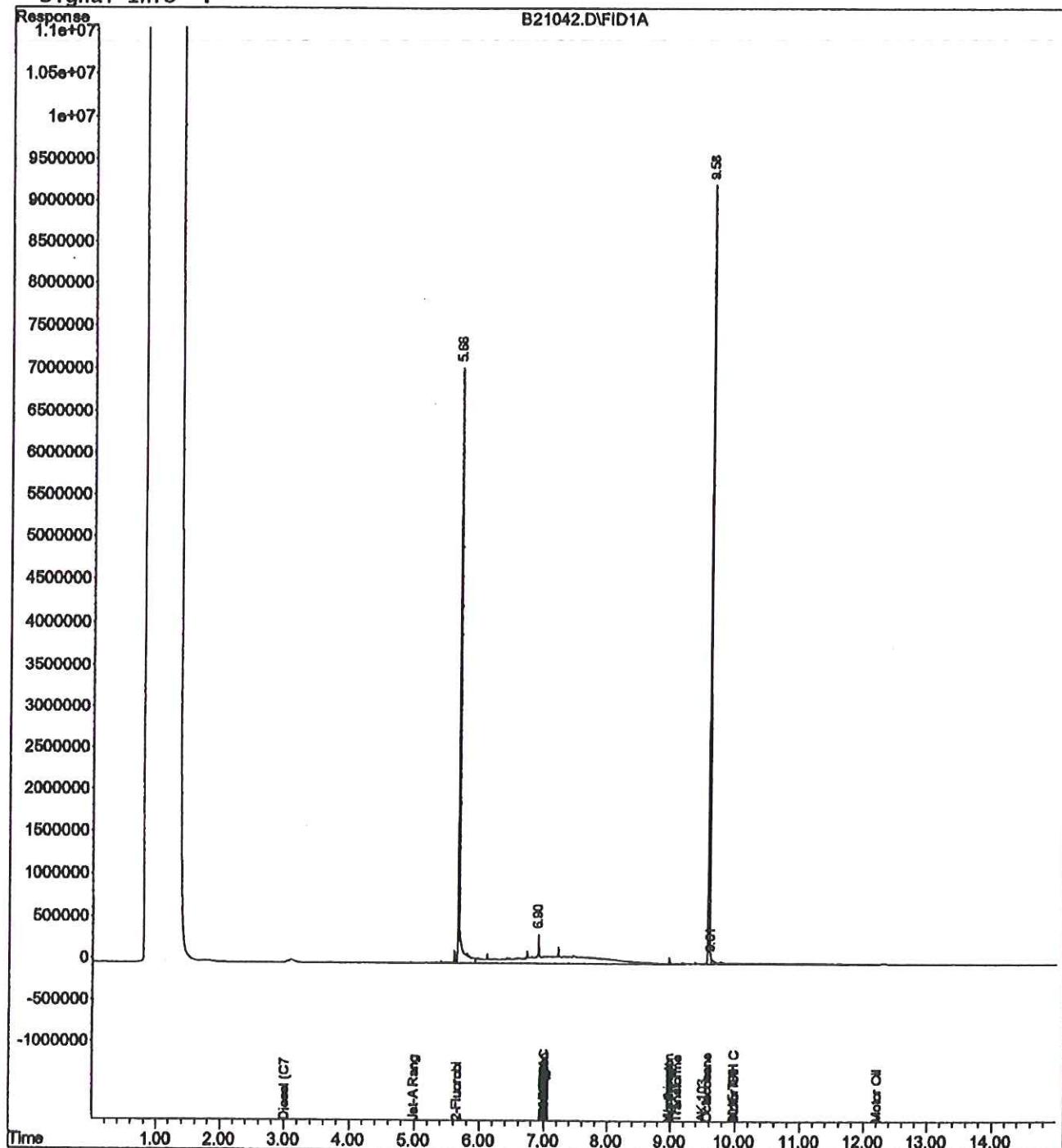


**Quantitation Report (Not Reviewed)**

Data File : D:\HPCHEM\1\DATA\022105\B21042.D Vial: 17  
Acq On : 21 Feb 2005 17:19 Operator: GSM  
Sample : b5b0435-06 Inst : GC #9  
Misc : 1x nwdx sg s Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 21 17:34 2005 Quant Results File: TFB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TFB0305.M (Chemstation Integrator)  
Title : TPH-D Front  
Last Update : Tue Feb 15 19:44:58 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

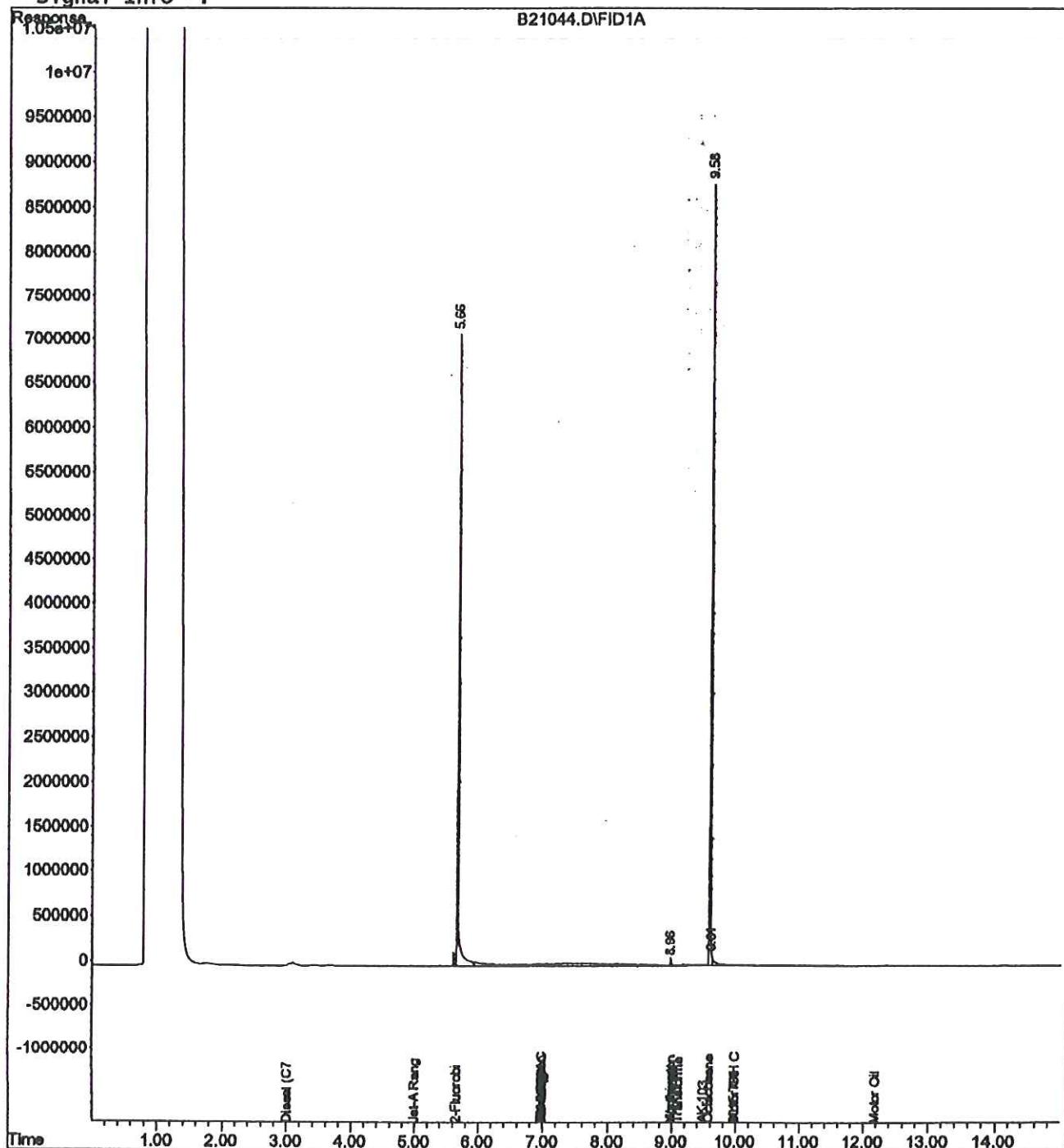


**Quantitation Report (Not Reviewed)**

Data File : D:\HPCHEM\1\DATA\022105\B21044.D Vial: 18  
Acq On : 21 Feb 2005 17:42 Operator: GSM  
Sample : b5b0435-07 Inst : GC #9  
Misc : 1x nwdx sg s Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 21 17:57 2005 Quant Results File: TFB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TFB0305.M (Chemstation Integrator)  
Title : TPH-D Front  
Last Update : Tue Feb 15 19:44:58 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

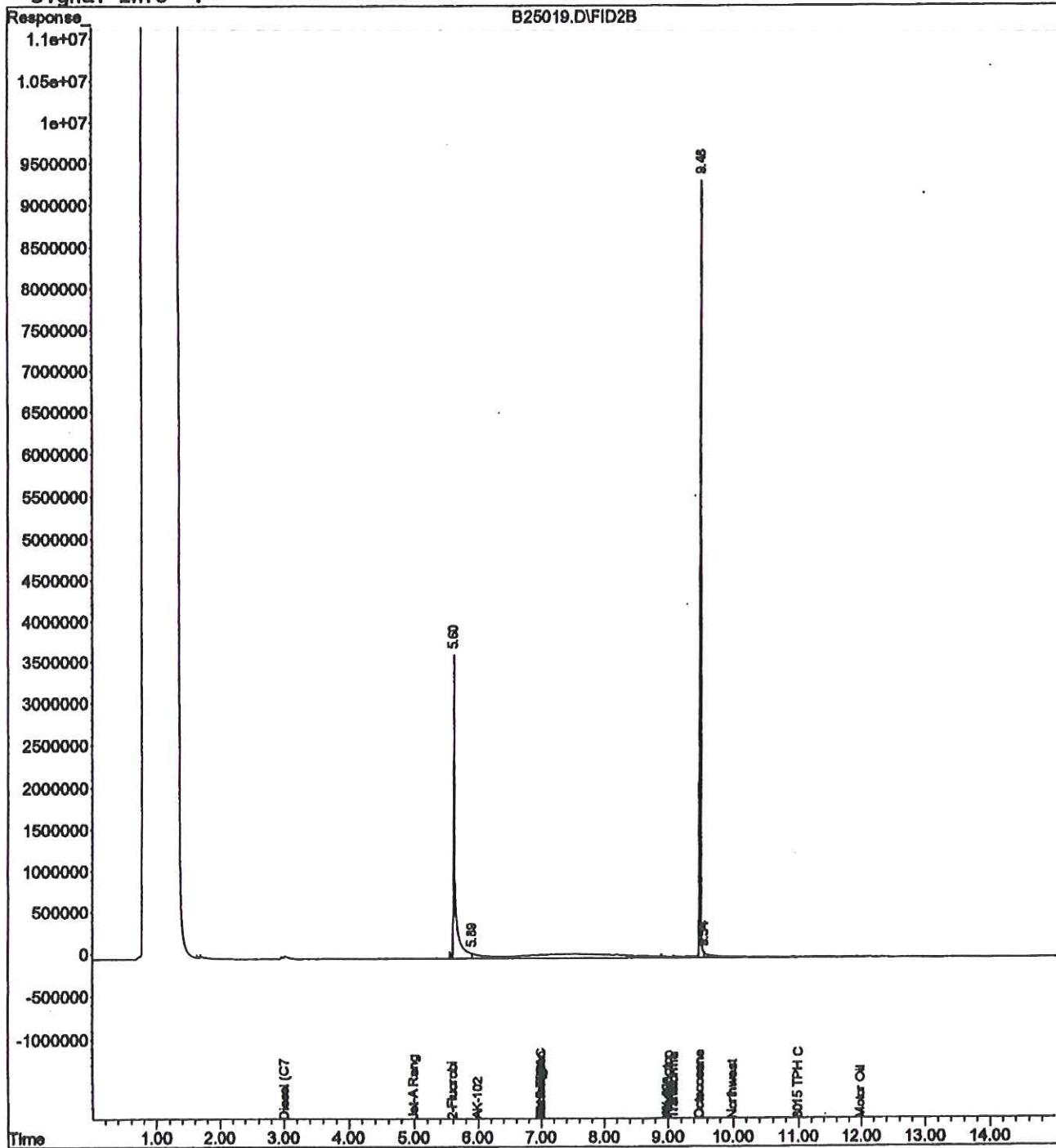


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25019.D vial: 17  
Acq On : 25 Feb 2005 12:36 Operator: GSM  
Sample : b5b0435-08 Inst : GC #9  
Misc : 1x nwdx sg s Multipllr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 12:52 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :



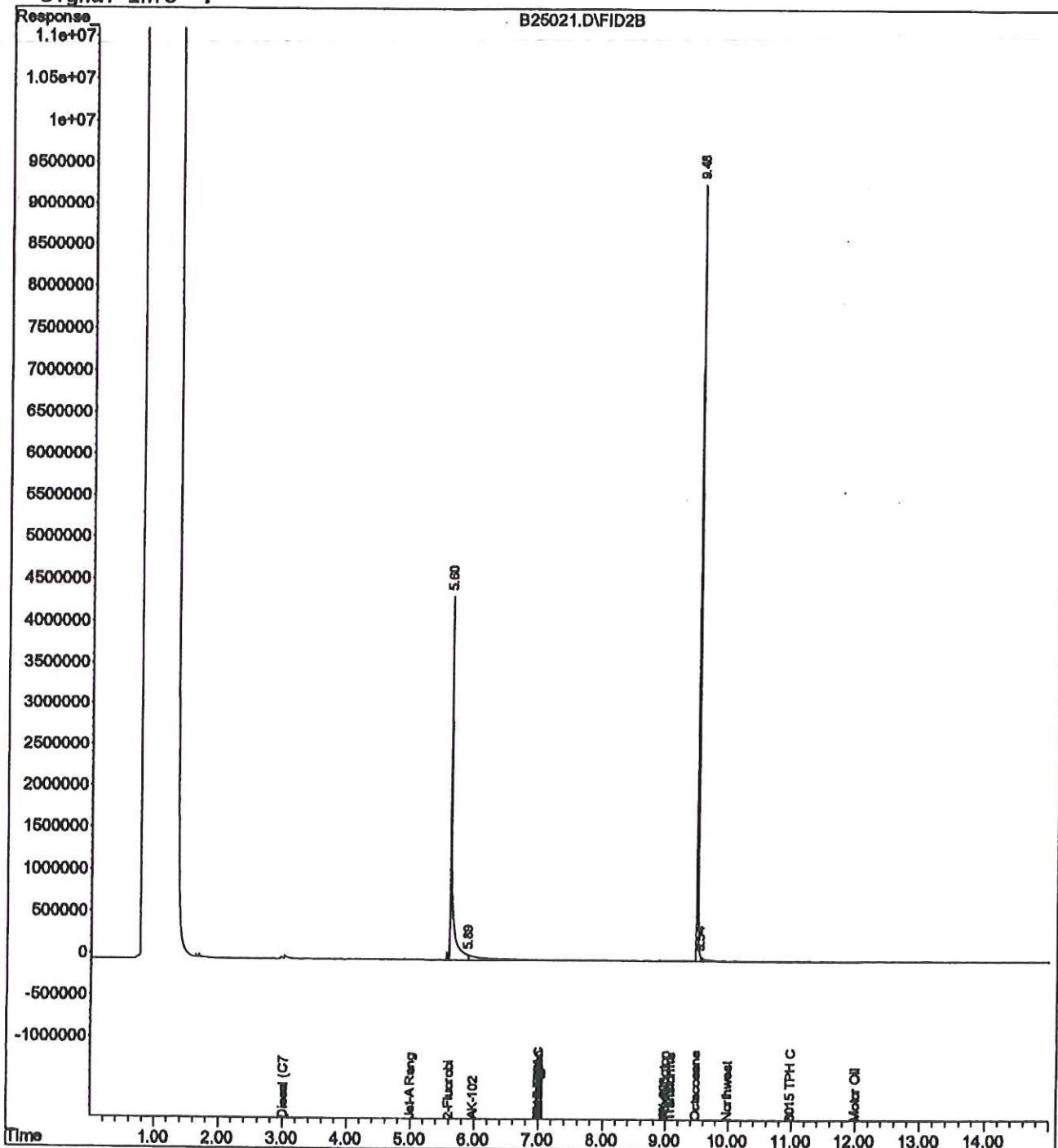
## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25021.D      Vial: 18  
Acq On : 25 Feb 2005 12:59      Operator: GSM  
Sample : b5b0435-09      Inst : GC #9  
Misc : 1x nwdx sg s      Multiplr: 1.00  
IntFile : SURR.E

Quant Time: Feb 25 13:15 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

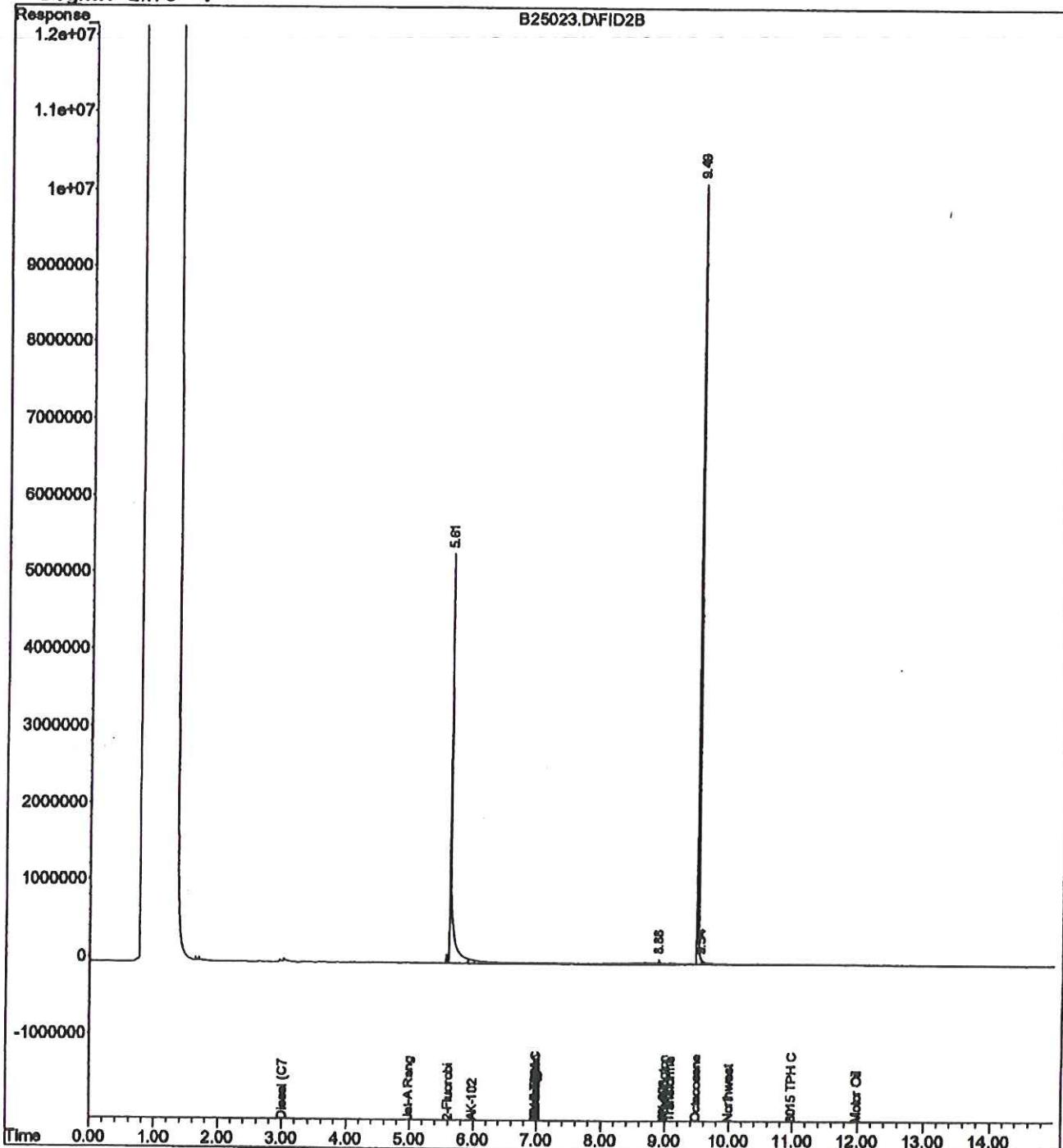


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25023.D      Vial: 19  
Acq On : 25 Feb 2005 13:23      Operator: GSM  
Sample : b5b0435-10      Inst : GC #9  
Misc : 1x nwdx sg s      Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 13:38 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :



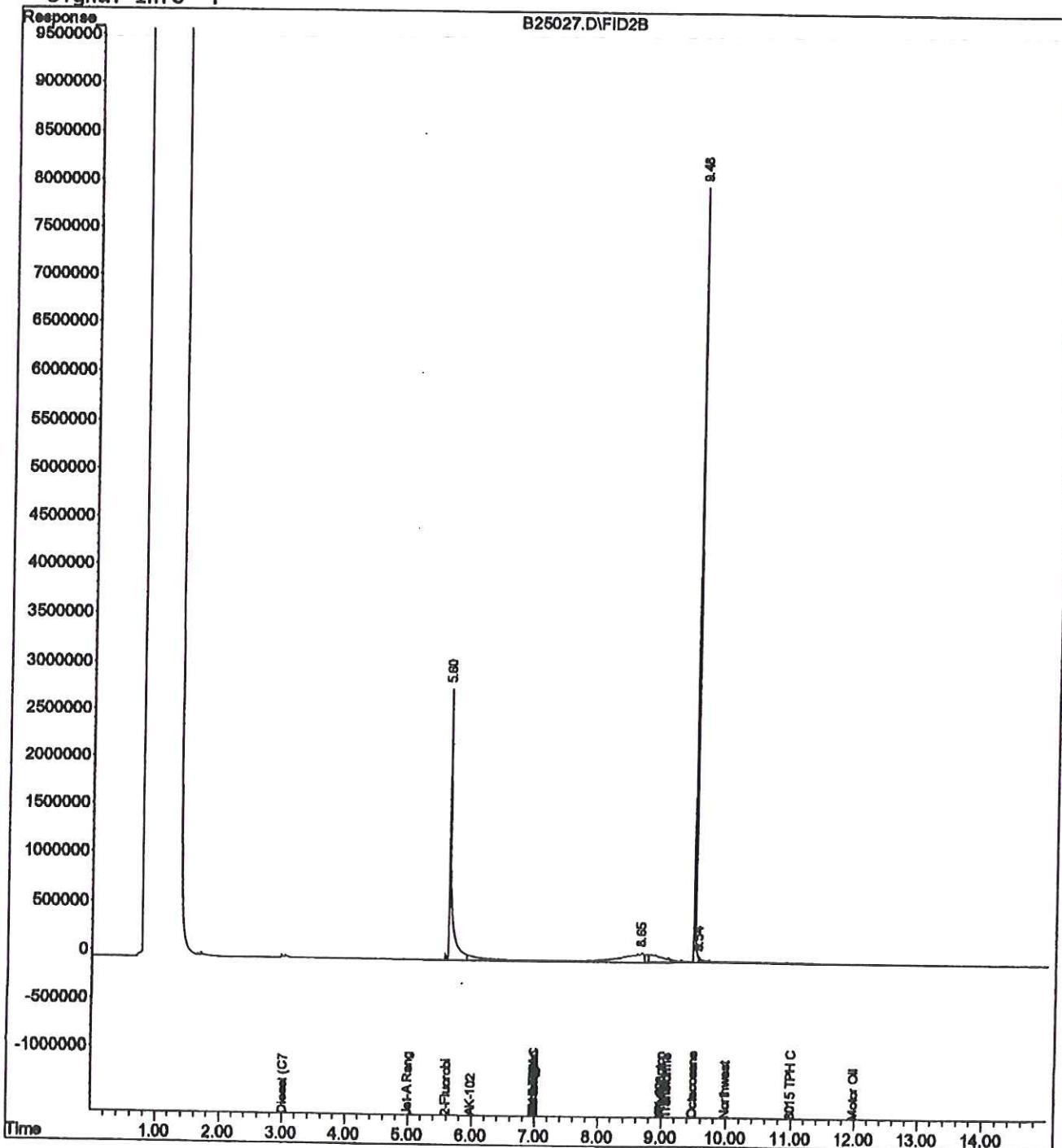
## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25027.D  
Acq On : 25 Feb 2005 14:09  
Sample : b5b0435-12  
Misc : 1x nwdx sg s  
IntFile : SURR.E  
Quant Time: Feb 25 14:25 2005 Quant Results File: TRB0305.RES

Vial: 21  
Operator: GSM  
Inst : GC #9  
Multiplr: 1.00

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

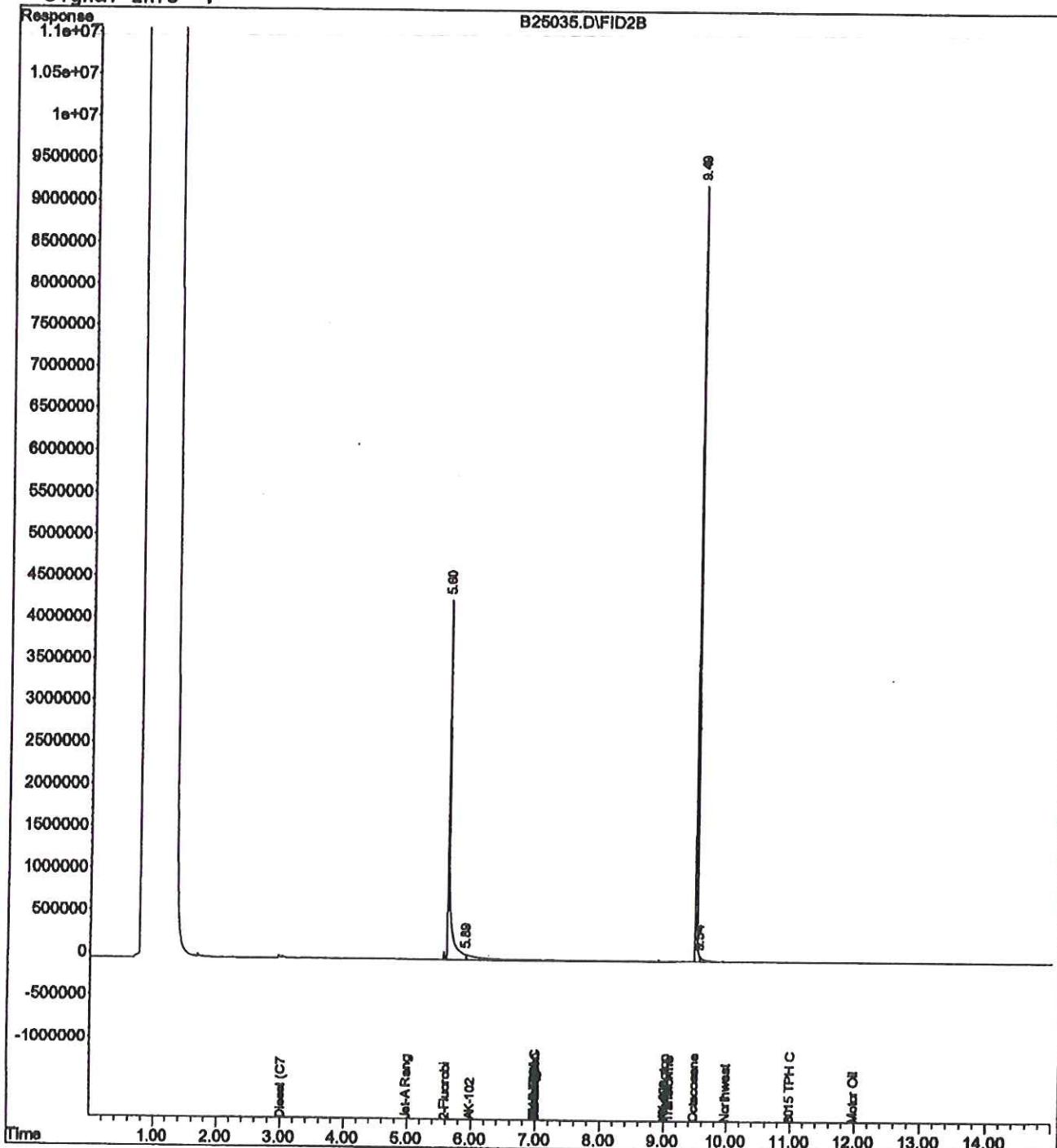


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25035.D      Vial: 22  
Acq On : 25 Feb 2005 15:51      Operator: GSM  
Sample : b5b0435-13      Inst : GC #9  
Misc : 1x nwdx sg s      MultiplR: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 16:06 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

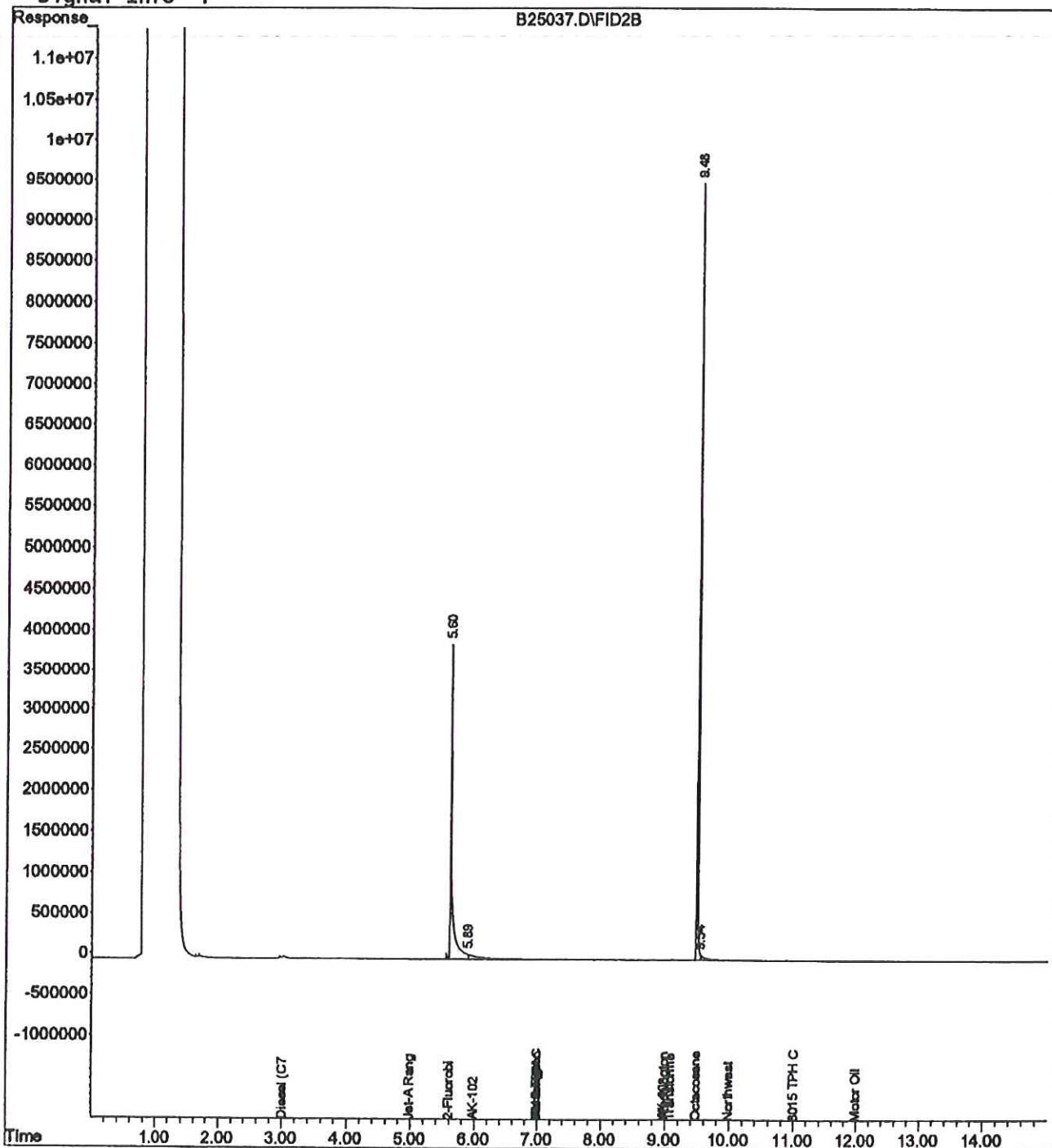


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25037.D      vial: 23  
Acq On : 25 Feb 2005 16:14      Operator: GSM  
Sample : b5b0435-14      Inst : GC #9  
Misc : 1x nwdx sg s      Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 16:30 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

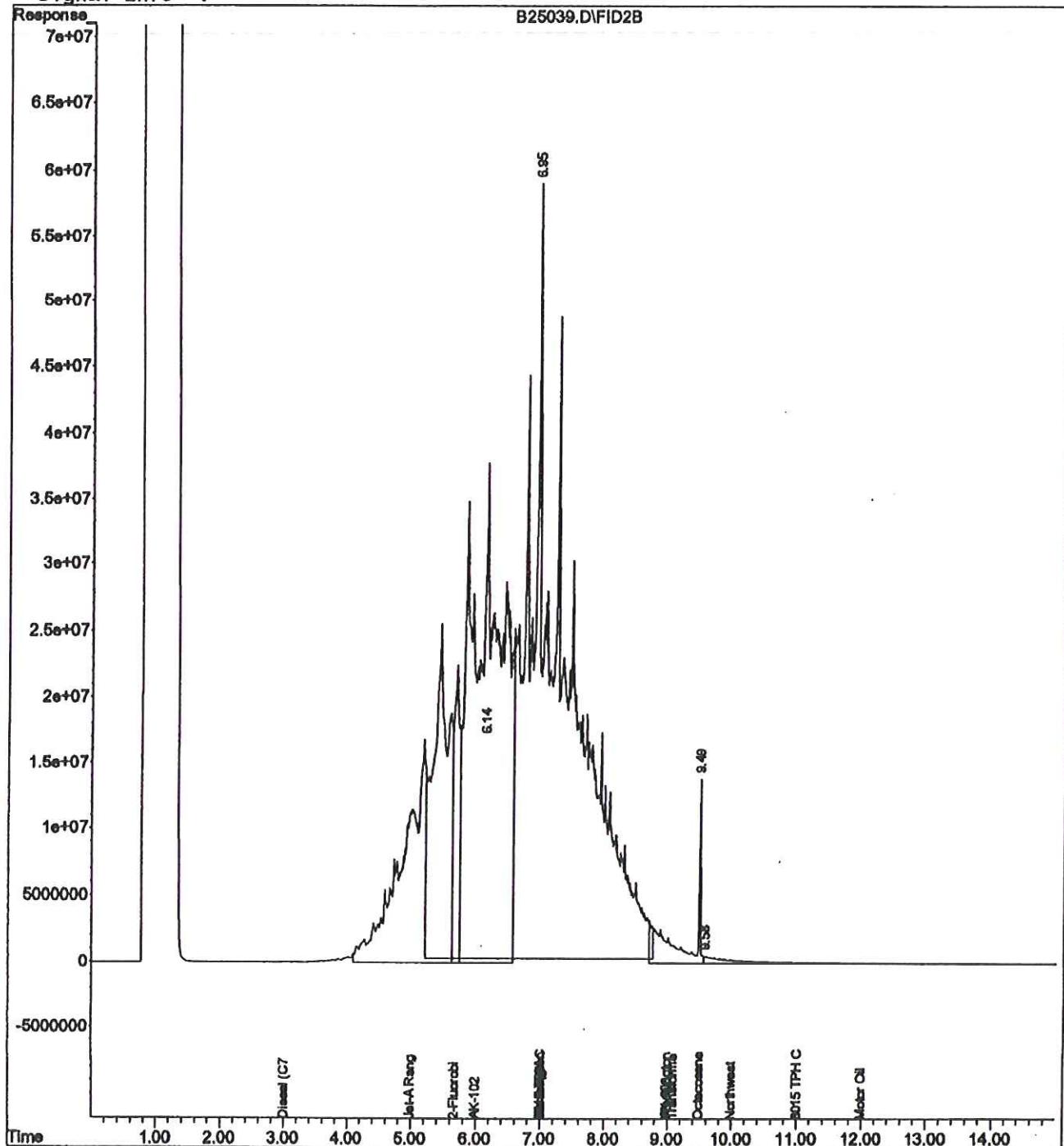


**Quantitation Report (Not Reviewed)**

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25039.D Vial: 24  
Acq On : 25 Feb 2005 16:38 Operator: GSM  
Sample : b5b0435-15 Inst : GC #9  
Misc : 1x nwdx sg s Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 16:53 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj.  
Signal Phase  
Signal Info

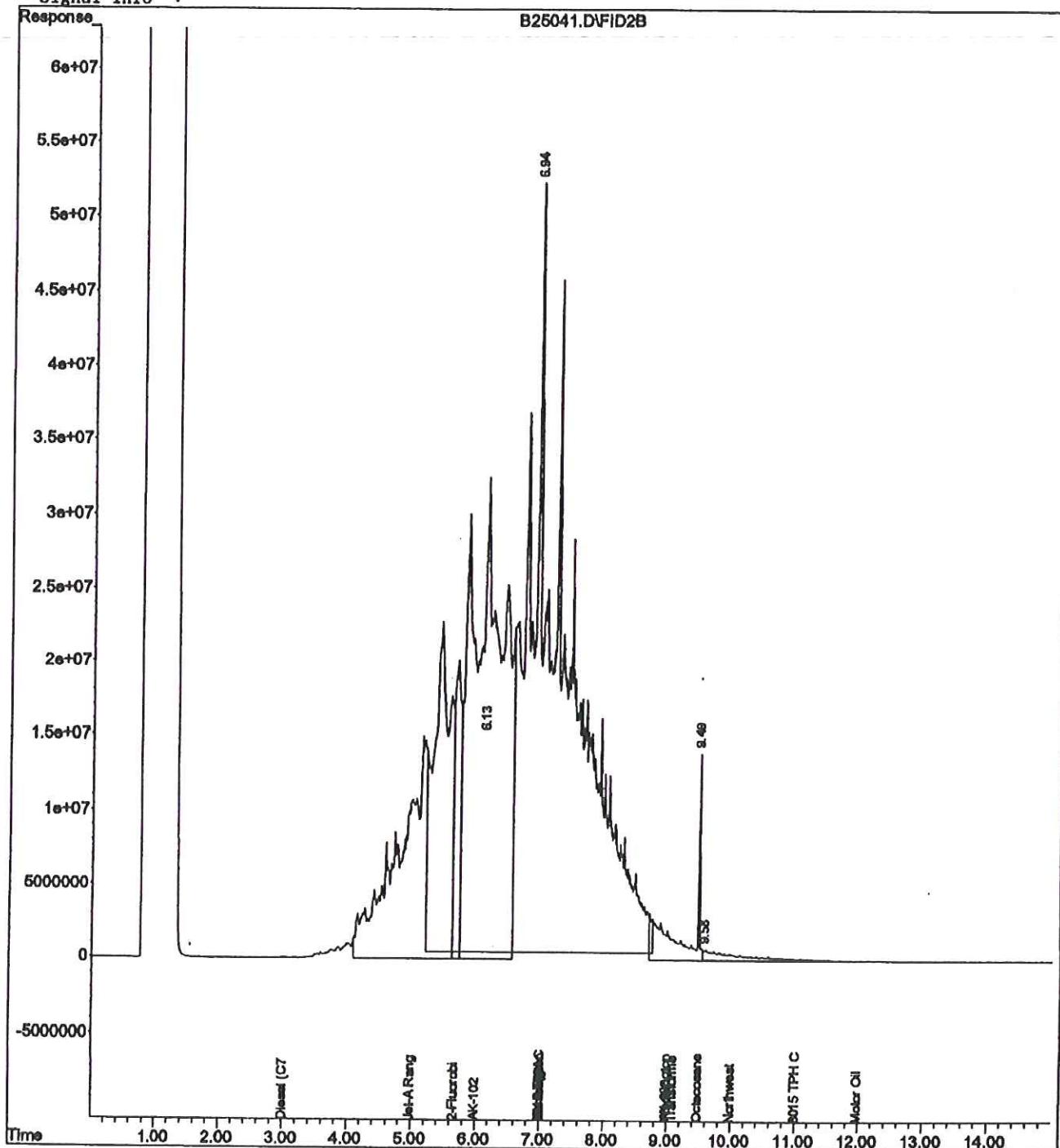


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25041.D Vial: 25  
Acq On : 25 Feb 2005 17:01 Operator: GSM  
Sample : b5b0435-16 Inst : GC #9  
Misc : 1x nwdx sg s Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 17:16 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

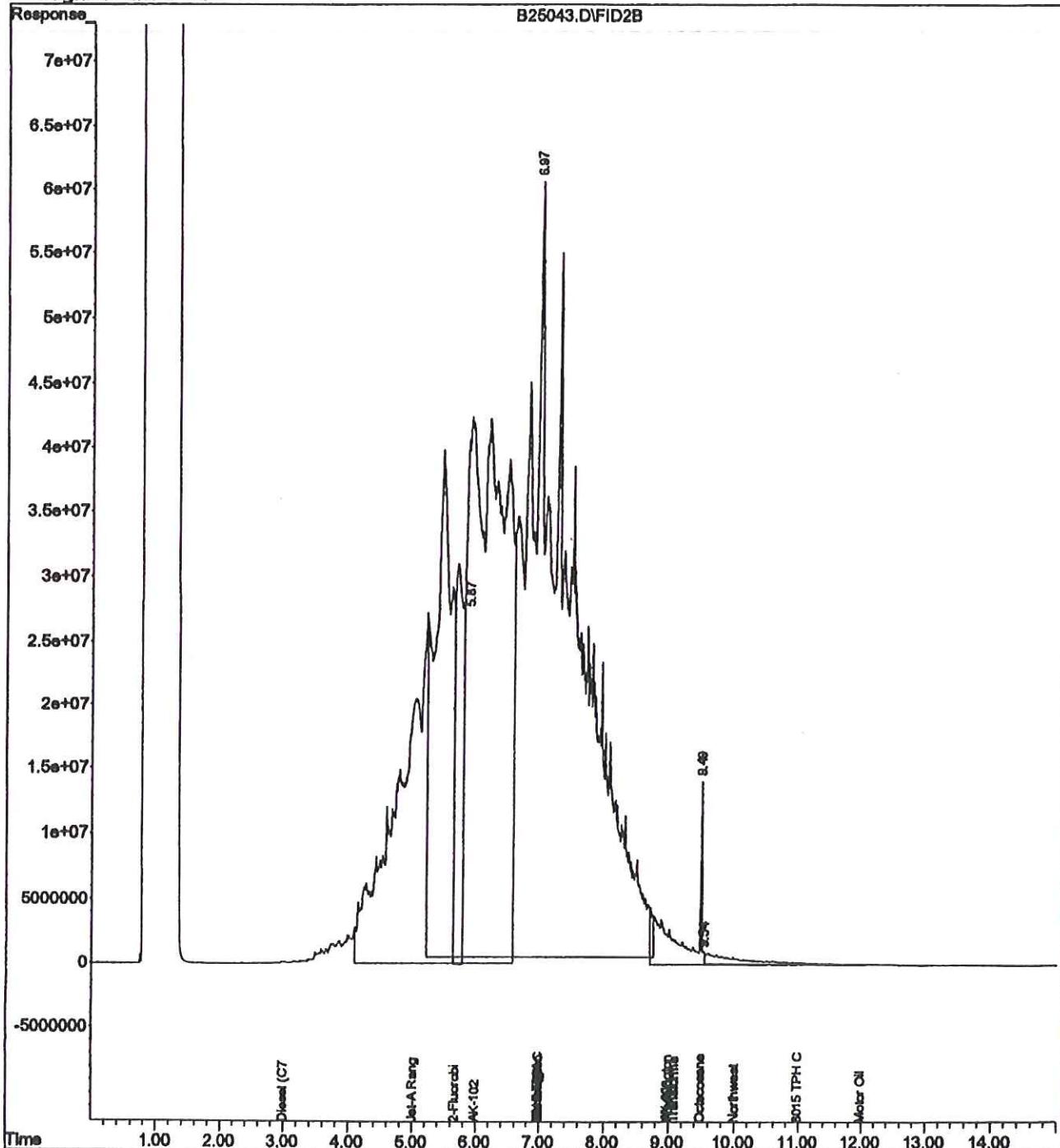


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25043.D Vial: 26  
Acq On : 25 Feb 2005 17:24 Operator: GSM  
Sample : b5b0435-17 Inst : GC #9  
Misc : 1x nwdx sg s Multipllr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 17:40 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

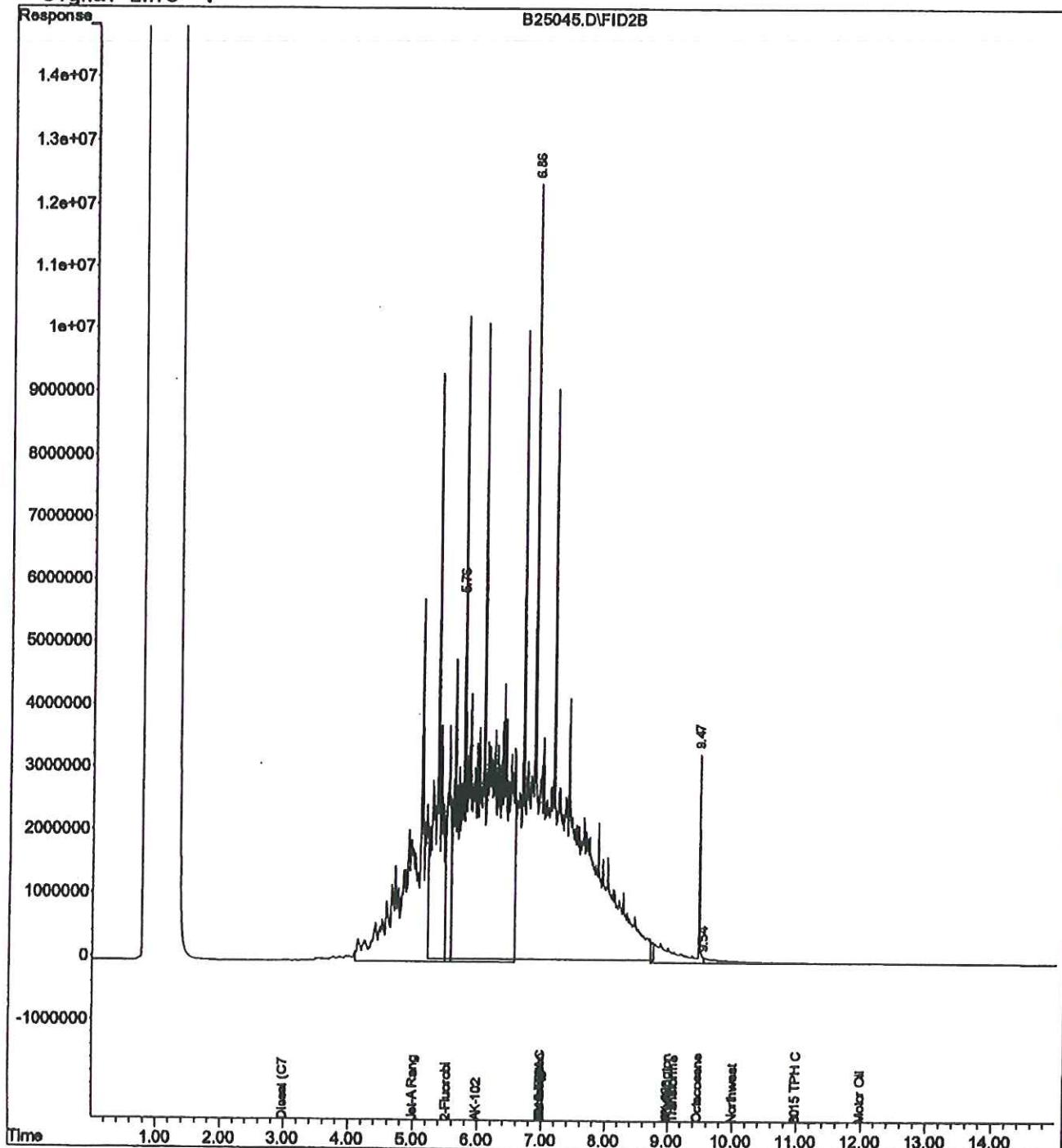


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25045.D Vial: 27  
Acq On : 25 Feb 2005 17:47 Operator: GSM  
Sample : b5b0435-18 Inst : GC #9  
Misc : 5x nwdx sg s Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 18:03 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :



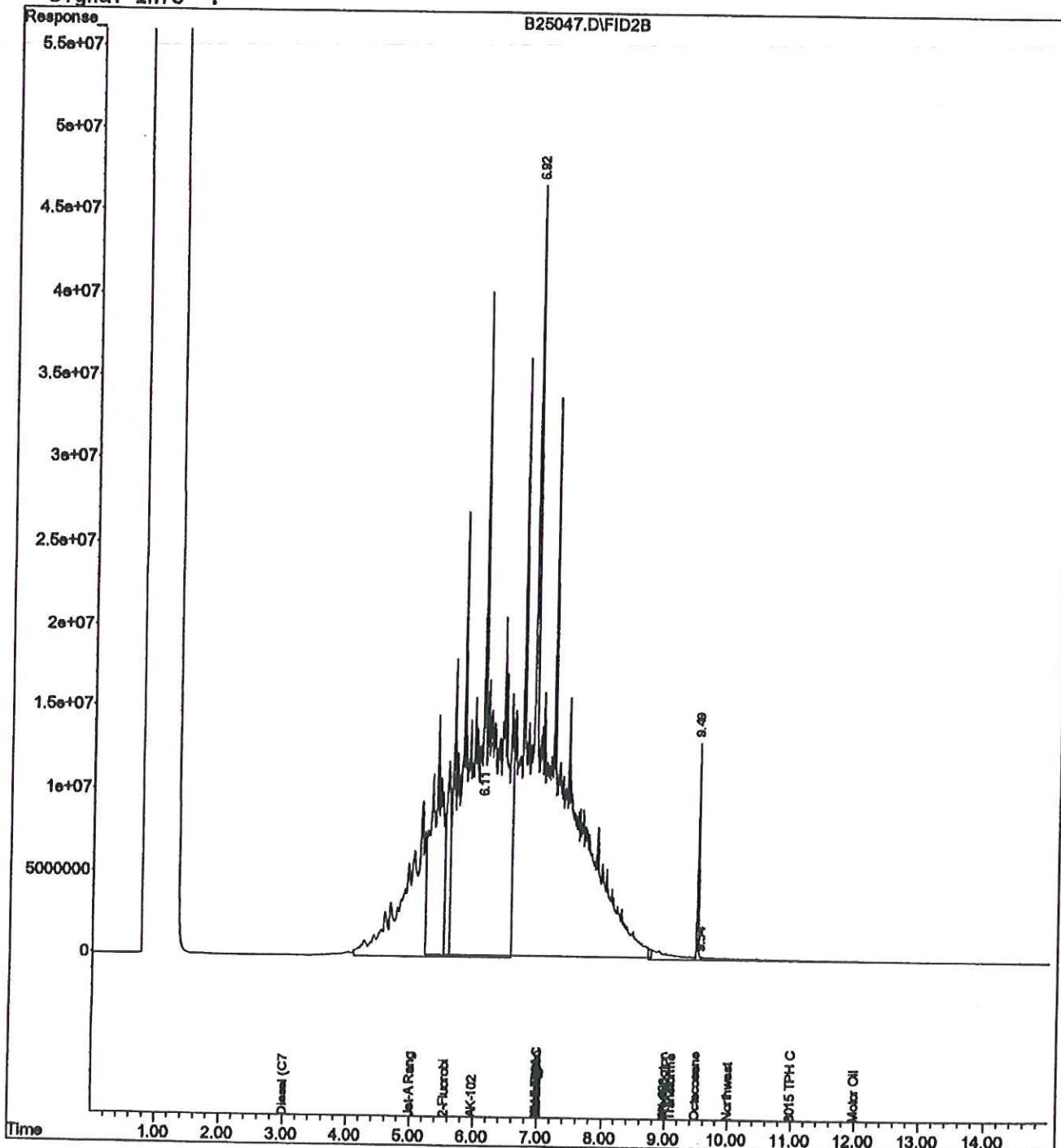
## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25047.D  
Acq On : 25 Feb 2005 18:11  
Sample : b5b0435-19  
Misc : 1x nwdx sg s  
IntFile : SURR.E  
Quant Time: Feb 25 18:26 2005 Quant Results File: TRB0305.RES

vial: 28  
Operator: GSM  
Inst : GC #9  
Multiplr: 1.00

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :



Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25033.D\FID1A.CH Vial: 33  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25033.D\FID2B.CH  
 Acq On : 26 Feb 2005 4:07 Operator: tmk  
 Sample : b5b0435-01 r1 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 26 4:30 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

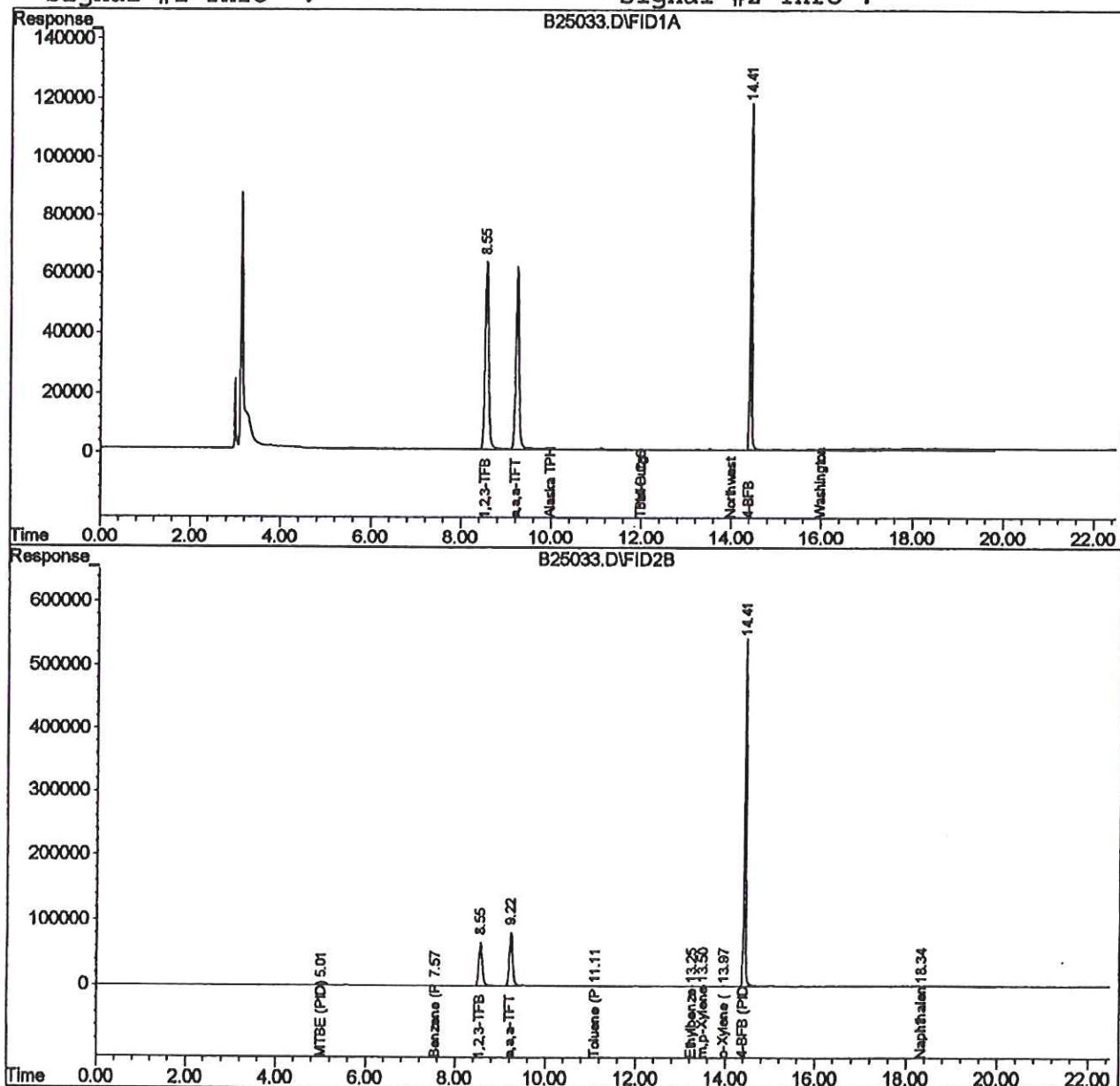
Volume Inj. :

Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :



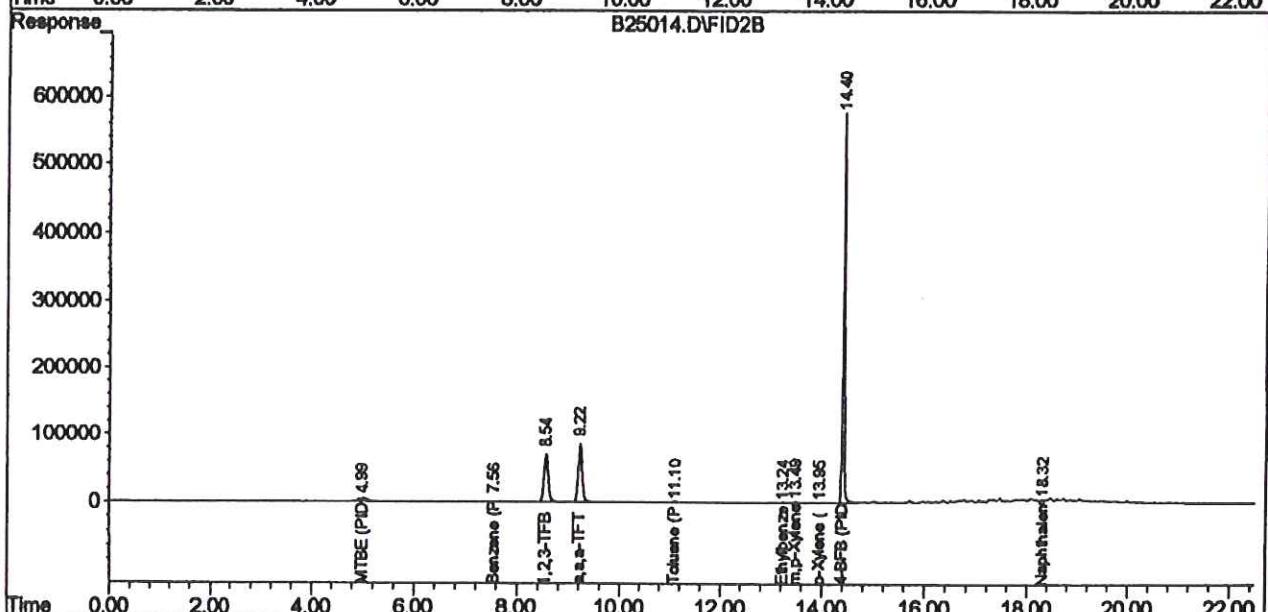
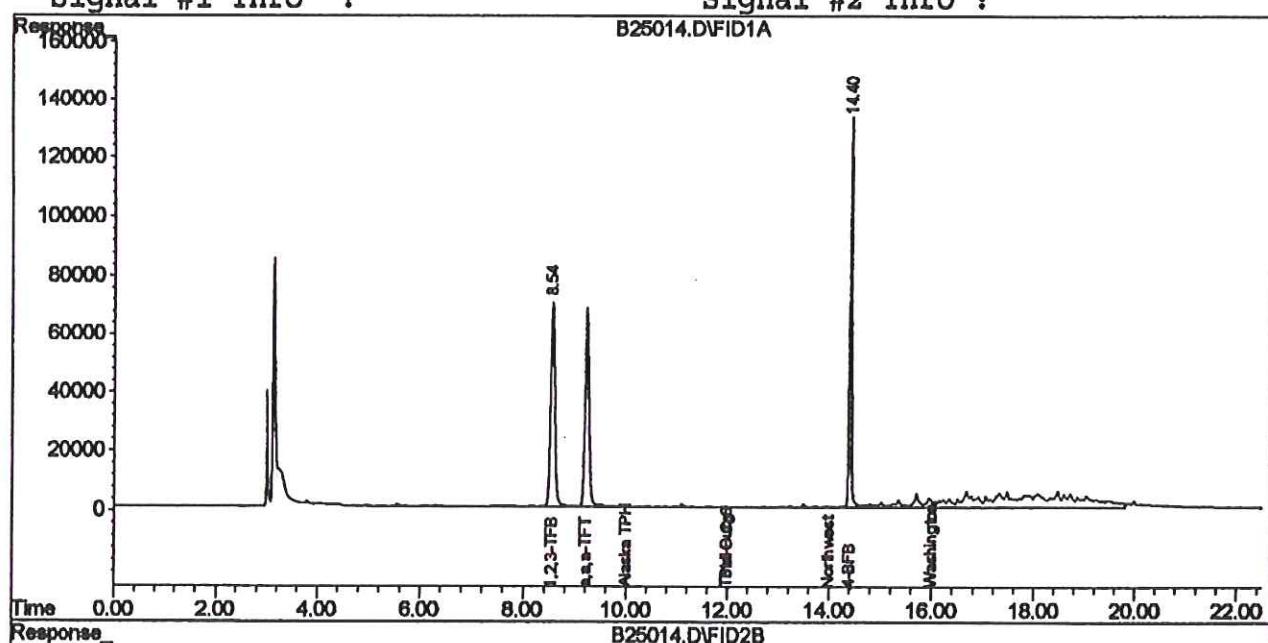
Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25014.D\FID1A.CH Vial: 14  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25014.D\FID2B.CH  
 Acq On : 25 Feb 2005 17:26 Operator: tmk  
 Sample : b5b0435-02 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 25 17:49 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

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

Signal #2 Phase:  
 Signal #2 Info :



# Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25015.D\FID1A.CH Vial: 15  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25015.D\FID2B.CH  
 Acq On : 25 Feb 2005 17:56 Operator: tmk  
 Sample : b5b0435-03 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 25 18:19 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

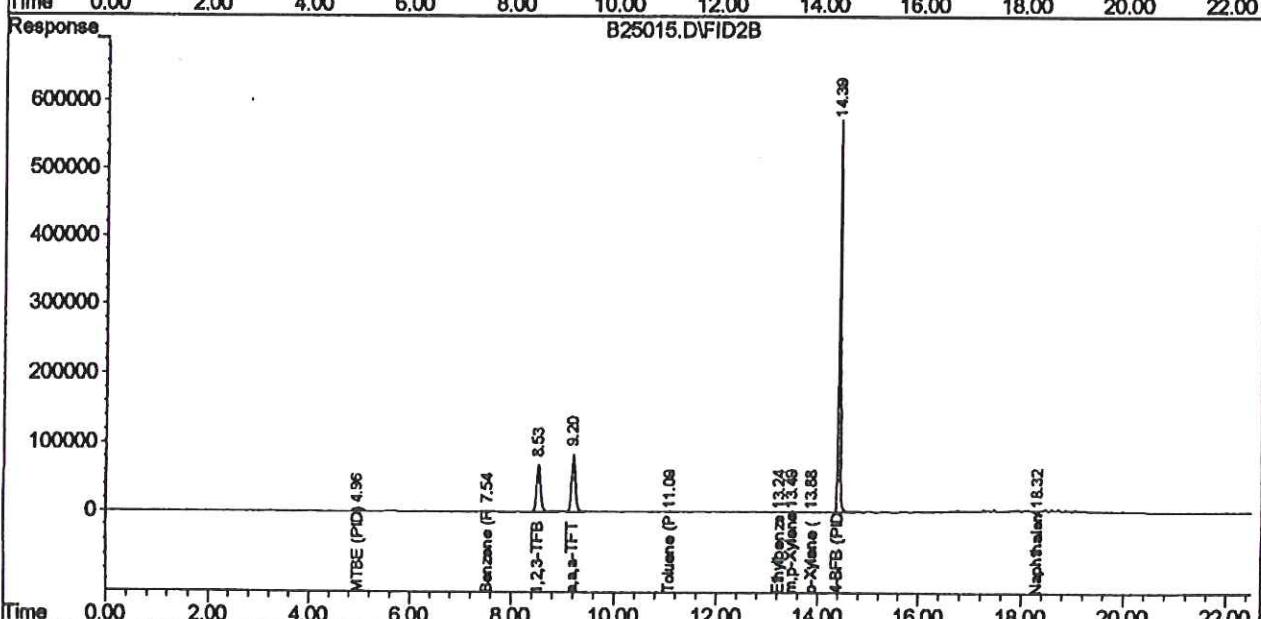
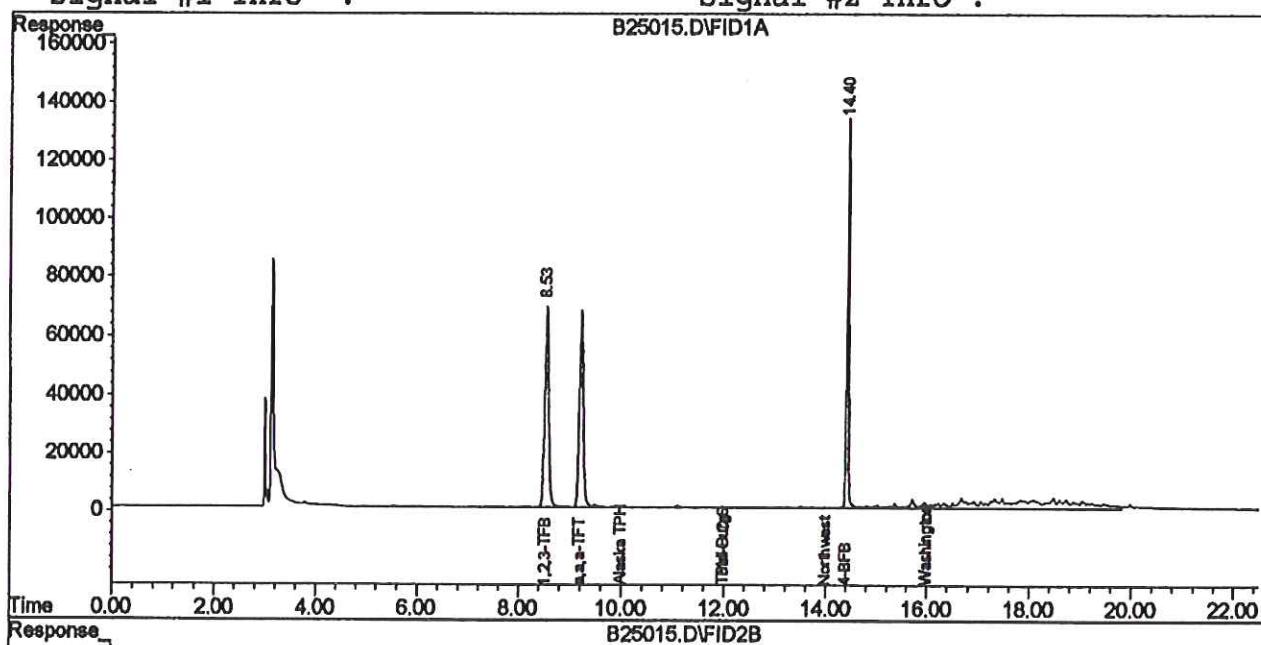
Volume Inj. :

Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :



# Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25016.D\FID1A.CH Vial: 16  
Signal #2 : D:\HPCHEM\3\DATA\022505\B25016.D\FID2B.CH  
Acq On : 25 Feb 2005 18:26 Operator: tmk  
Sample : b5b0435-04 Inst : GC #6  
Misc : 1x 100 uL Multiplr: 1.00  
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
Quant Time: Feb 25 18:49 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
Title : TPH-G/BTEX 8015/8021 Method  
Last Update : Wed Jan 26 17:03:34 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TGA2505.M

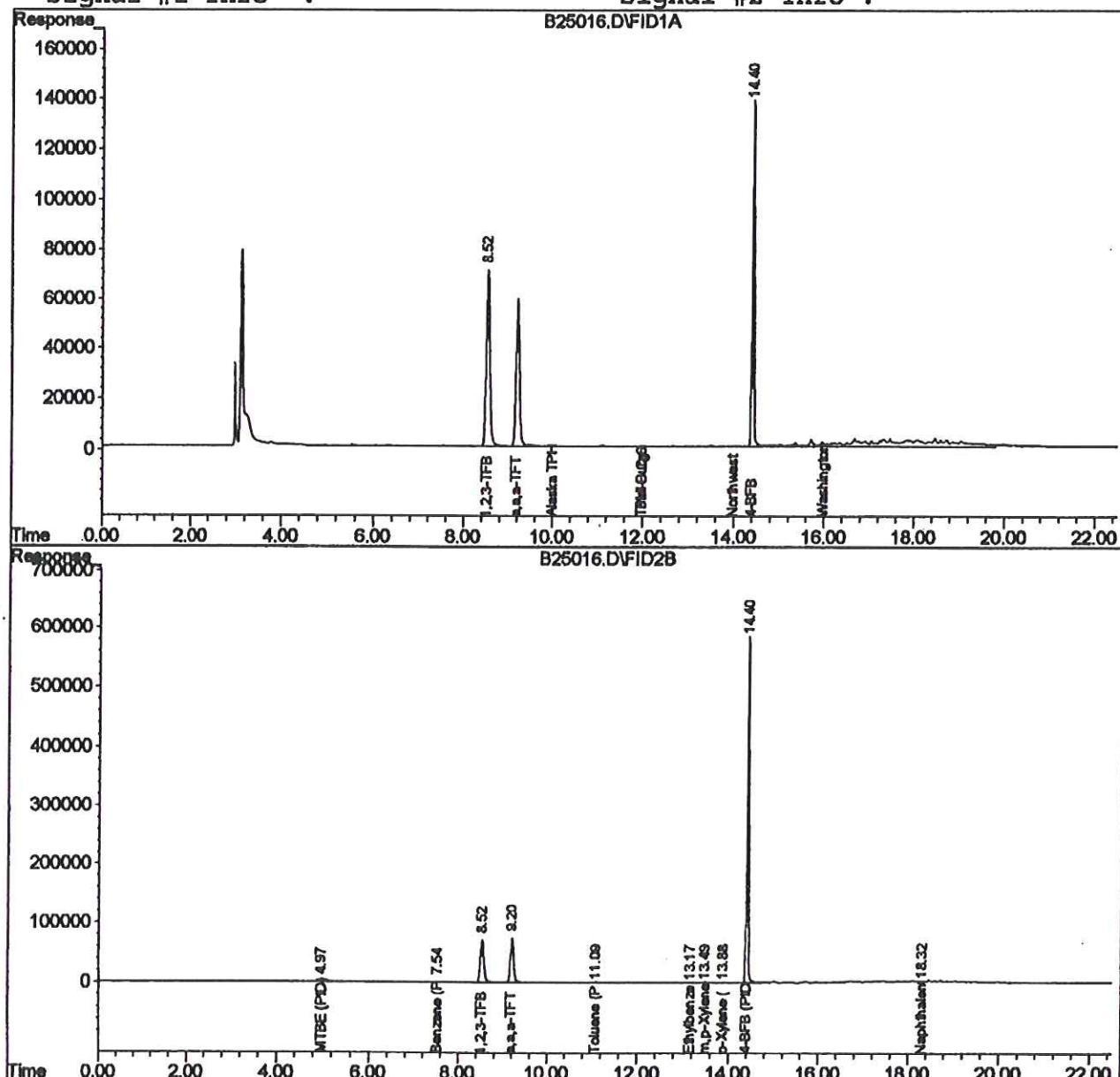
Volume Inj. :

Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :



# Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25020.D\FID1A.CH Vial: 20  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25020.D\FID2B.CH  
 Acq On : 25 Feb 2005 21:46 Operator: tmk  
 Sample : b5b0435-05 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 26 18:35 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

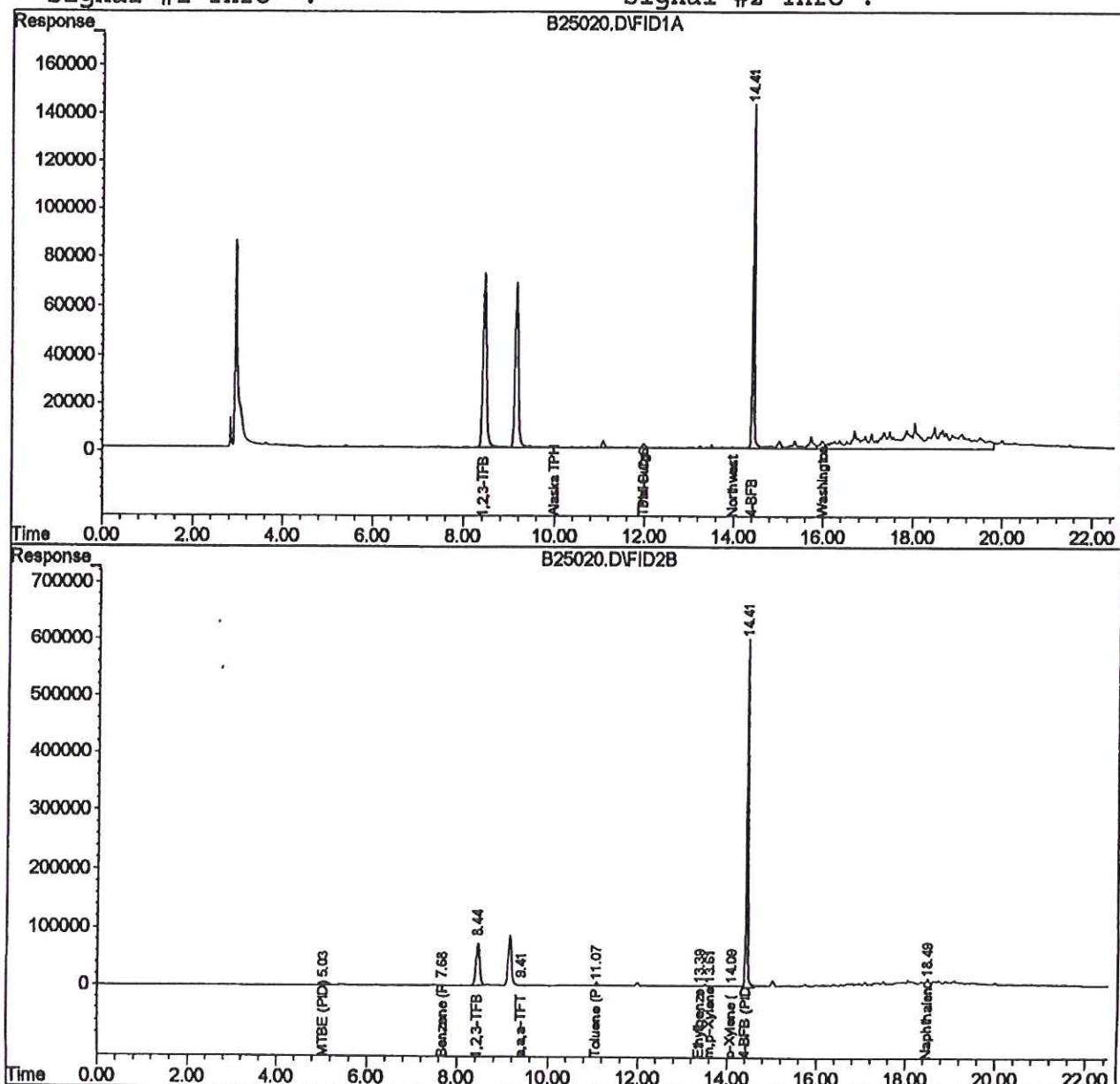
Volume Inj. :

Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :



# Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25021.D\FID1A.CH Vial: 21  
Signal #2 : D:\HPCHEM\3\DATA\022505\B25021.D\FID2B.CH  
Acq On : 25 Feb 2005 22:15 Operator: tmk  
Sample : b5b0435-06 Inst : GC #6  
Misc : 1x 100 uL Multiplr: 1.00  
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
Quant Time: Feb 25 22:38 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
Title : TPH-G/BTEX 8015/8021 Method  
Last Update : Wed Jan 26 17:03:34 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TGA2505.M

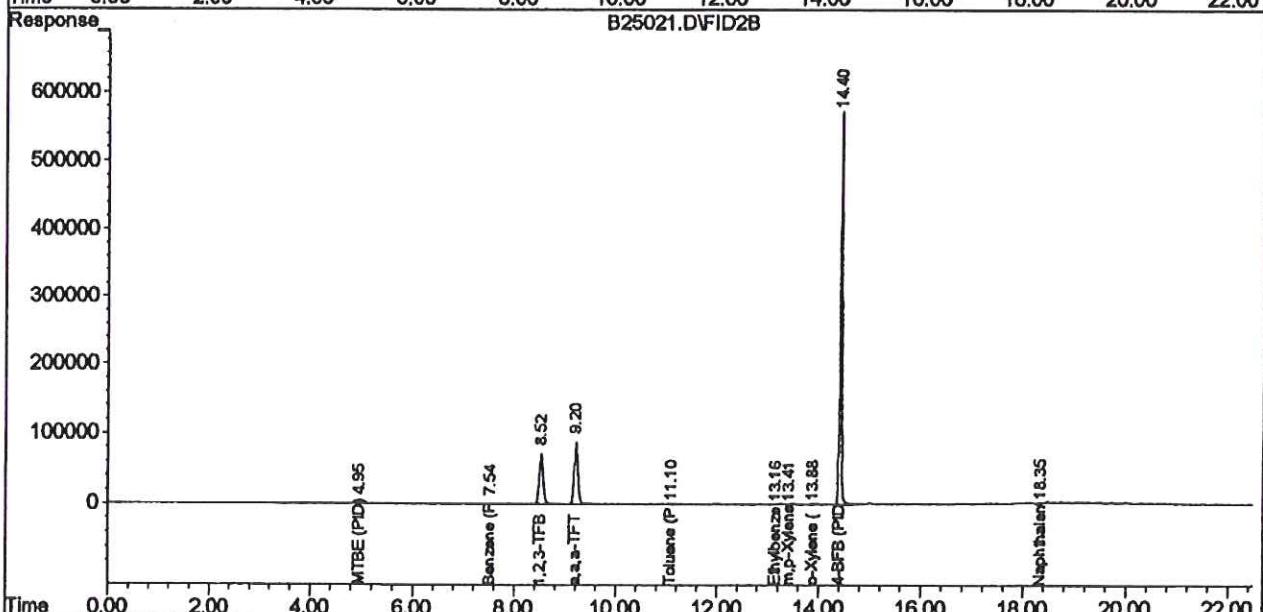
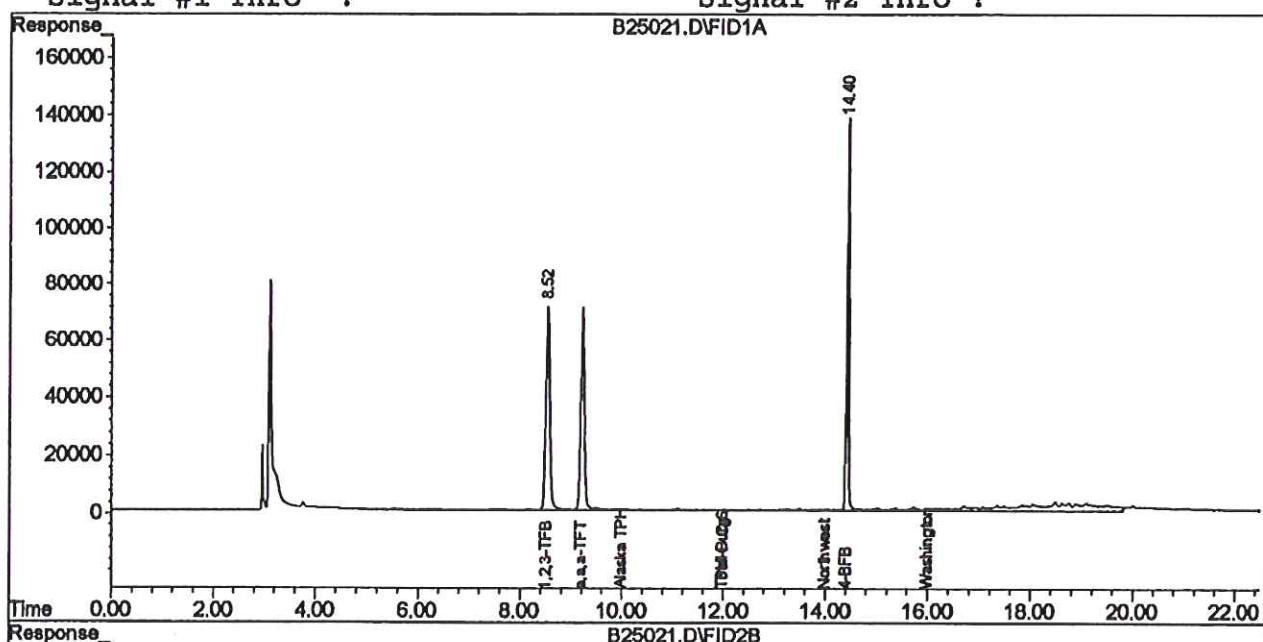
Volume Inj. :

Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :



Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25022.D\FID1A.CH Vial: 22  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25022.D\FID2B.CH  
 Acq On : 25 Feb 2005 22:44 Operator: tmk  
 Sample : b5b0435-07 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 25 23:09 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

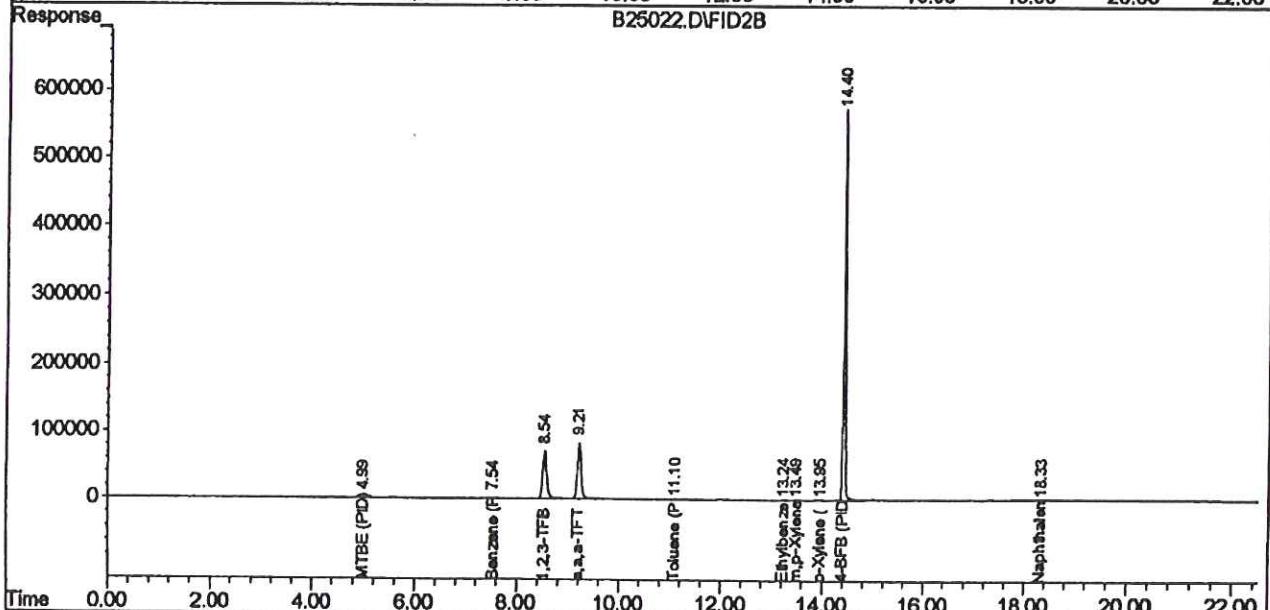
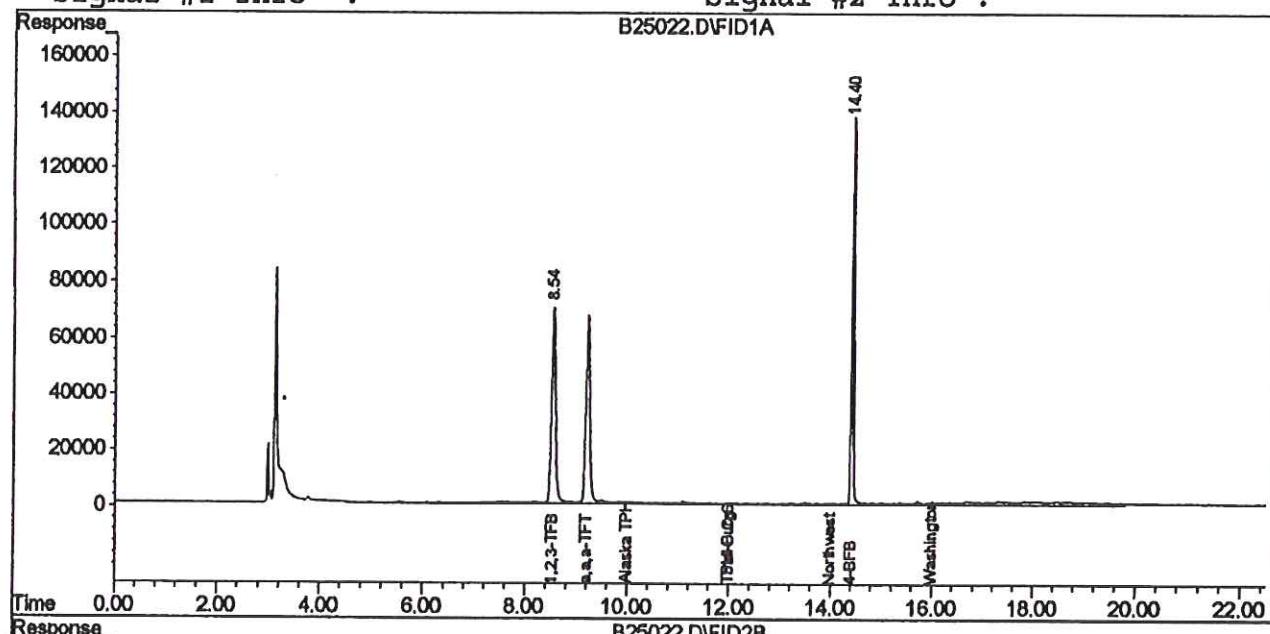
Volume Inj. :

Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :



Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25023.D\FID1A.CH Vial: 23  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25023.D\FID2B.CH  
 Acq On : 25 Feb 2005 23:14 Operator: tmk  
 Sample : b5b0435-08 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 25 23:37 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

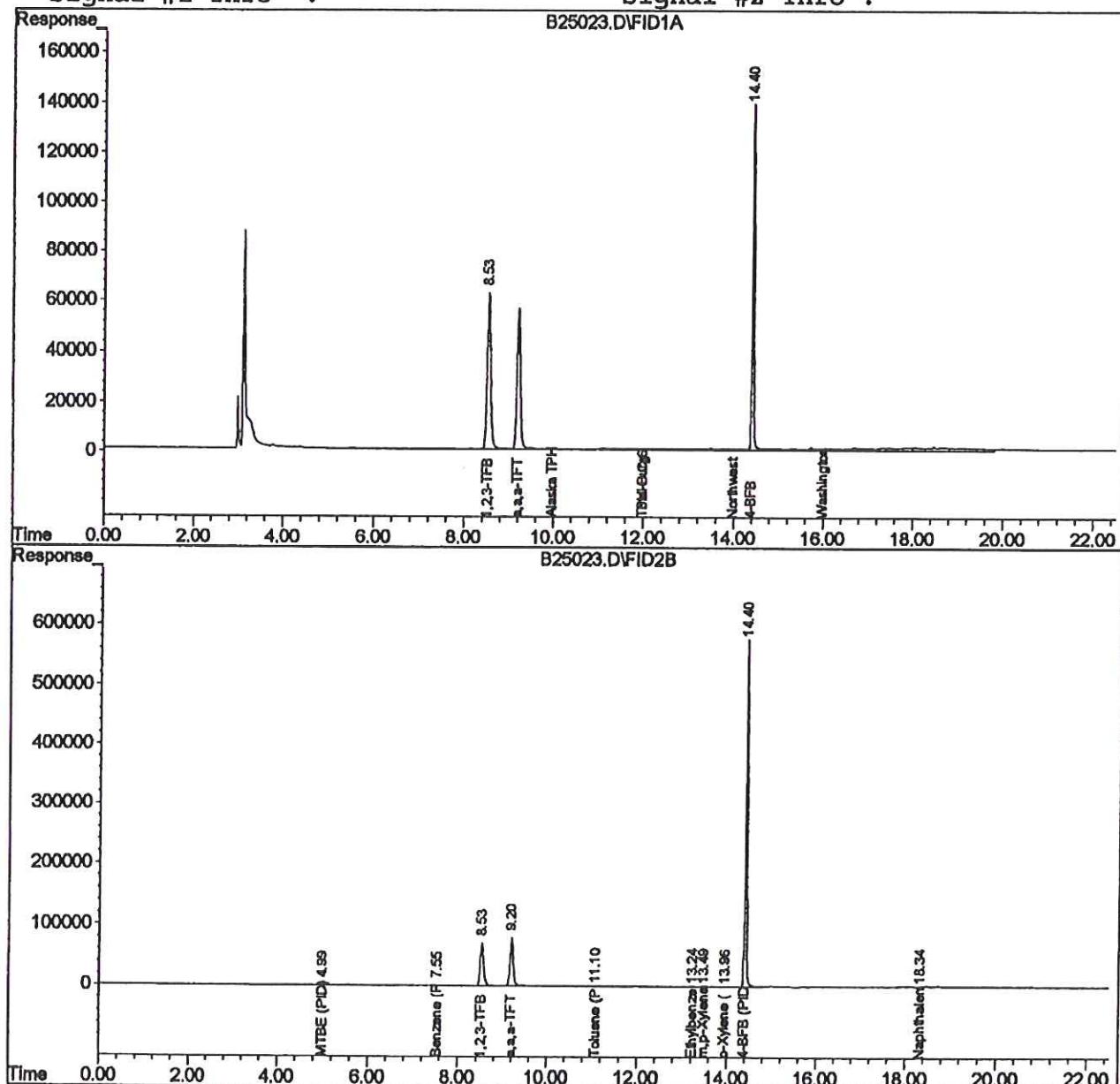
Volume Inj. :

Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :



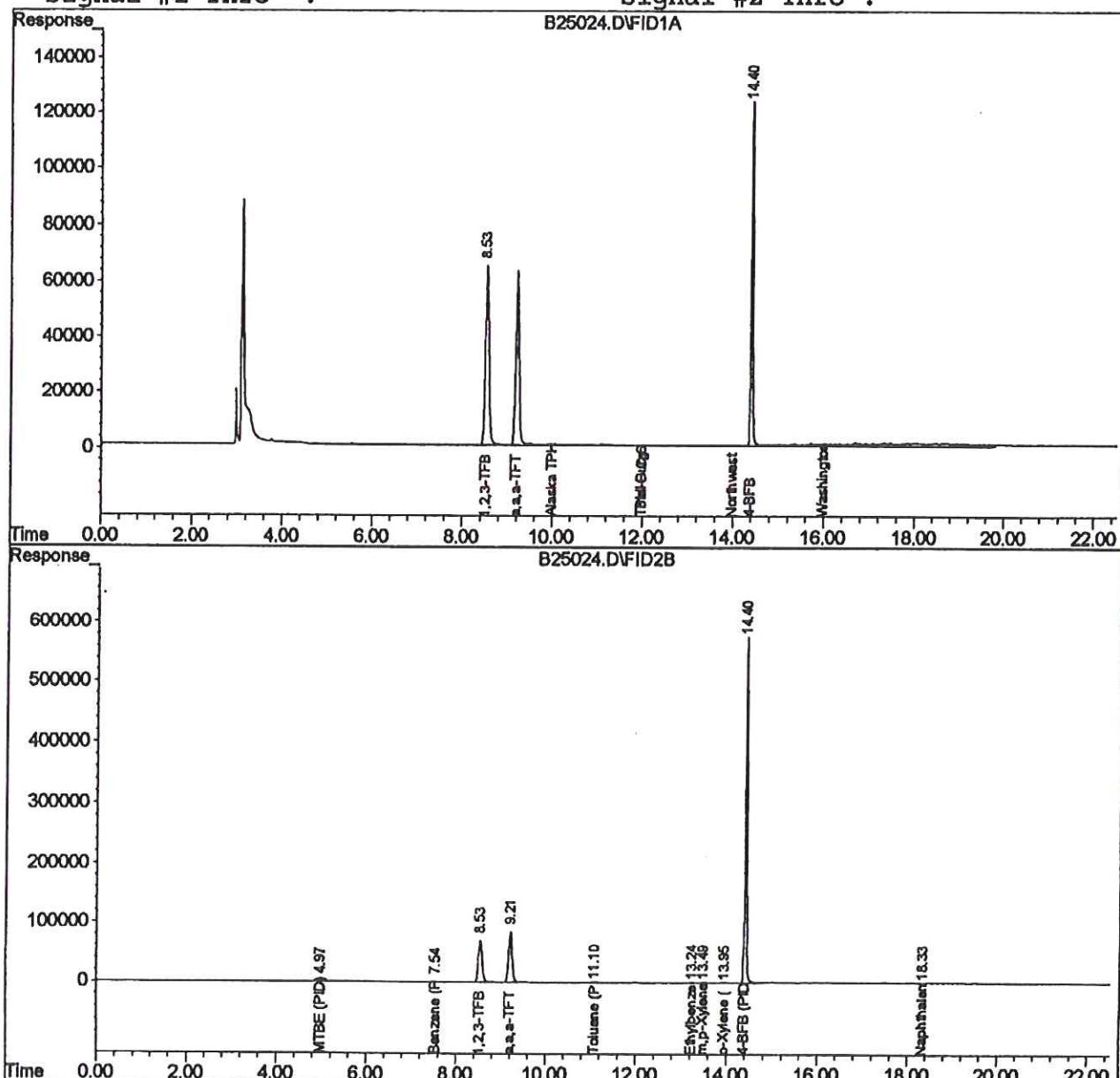
Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25024.D\FID1A.CH Vial: 24  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25024.D\FID2B.CH  
 Acq On : 25 Feb 2005 23:43 Operator: tmk  
 Sample : b5b0435-09 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 26 0:06 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

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

Signal #2 Phase:  
 Signal #2 Info :



# Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25025.D\FID1A.CH Vial: 25  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25025.D\FID2B.CH  
 Acq On : 26 Feb 2005 00:12 Operator: tmk  
 Sample : b5b0435-10 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 26 0:35 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

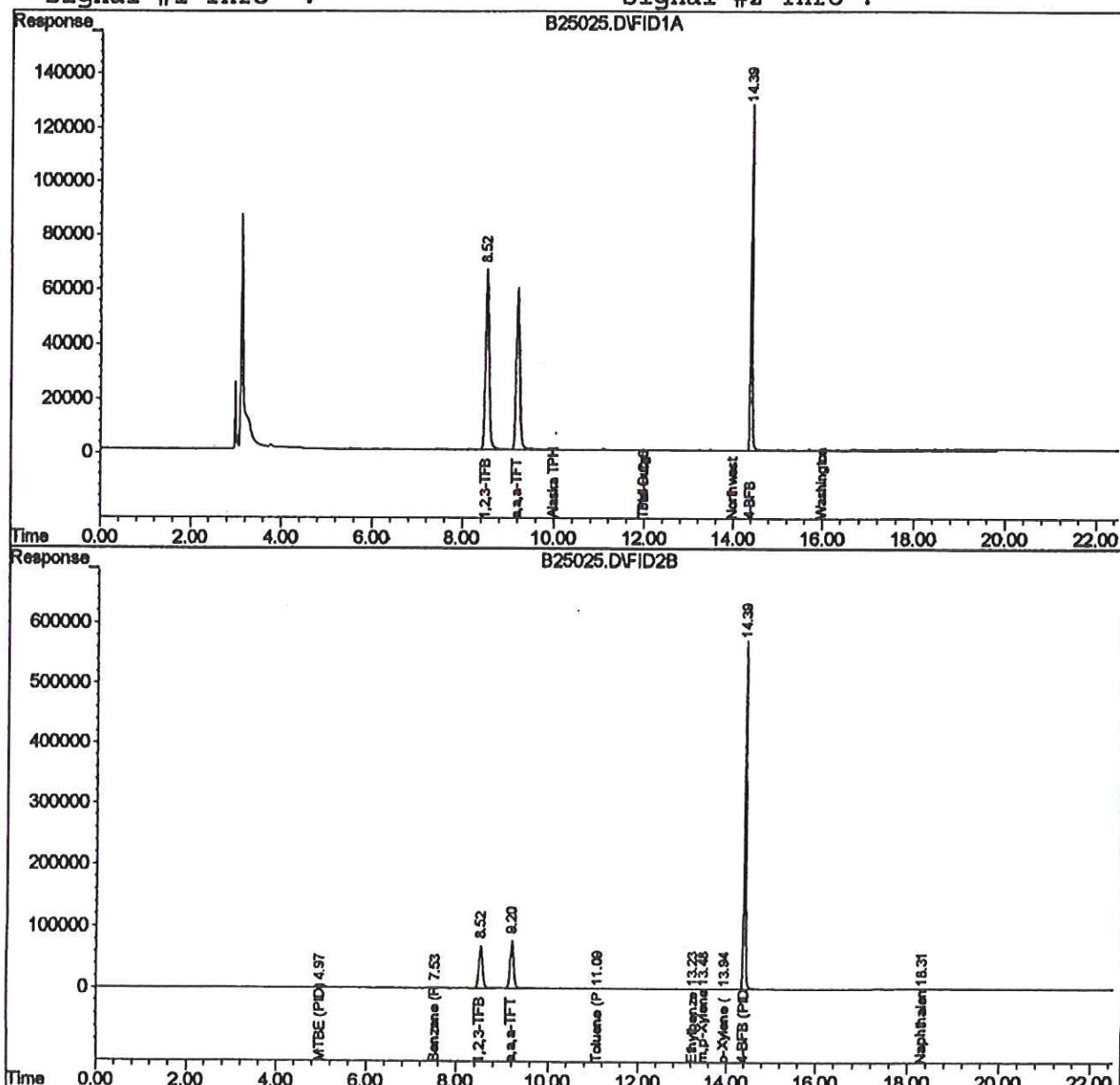
Volume Inj. :

Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :



Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25026.D\FID1A.CH Vial: 26  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25026.D\FID2B.CH  
 Acq On : 26 Feb 2005 00:41 Operator: tmk  
 Sample : b5b0435-11 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Mar 4 17:40 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

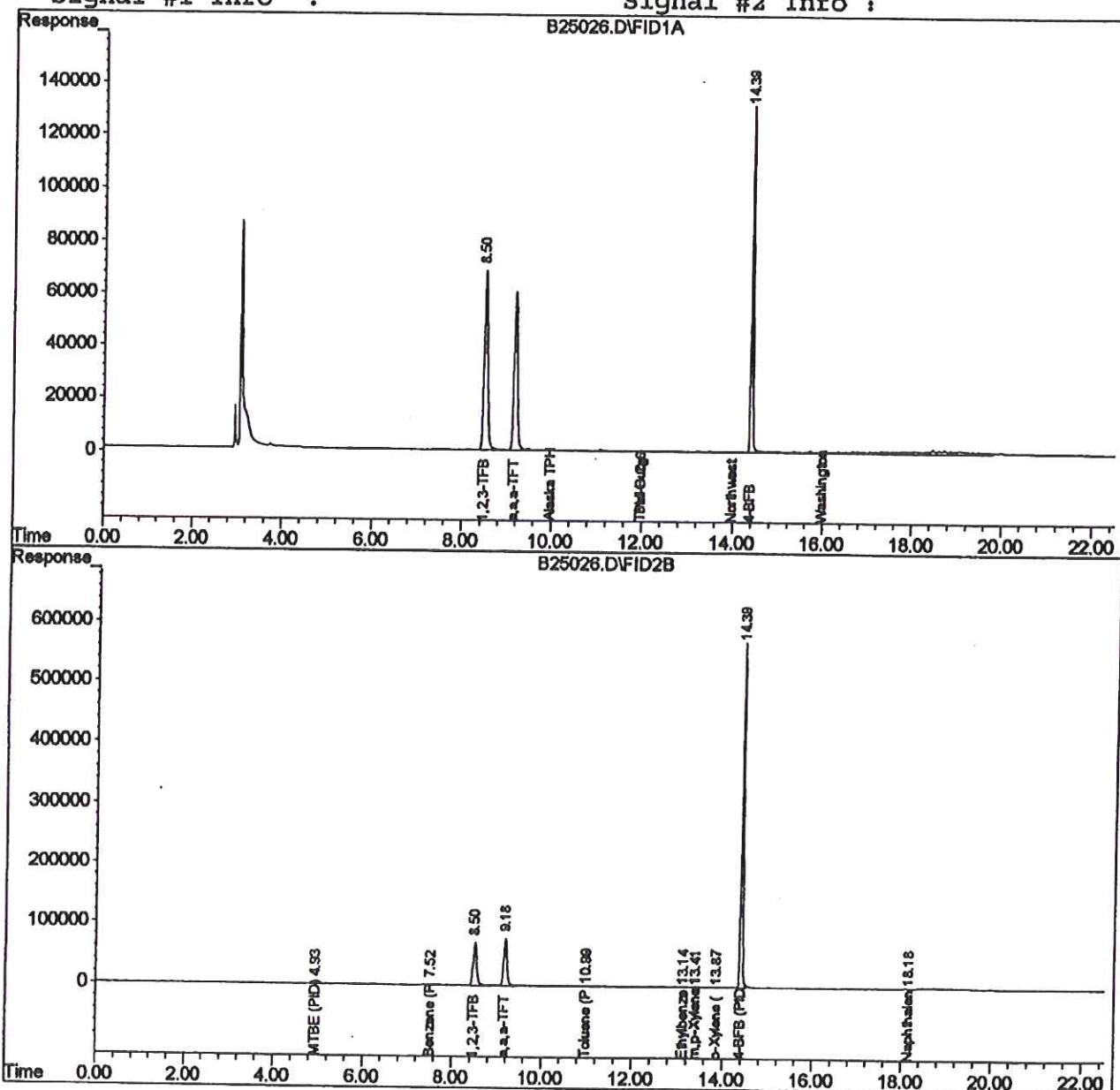
Volume Inj. :

Signal #1 Phase :

Signal #2 Phase:

Signal #1 Info :

Signal #2 Info :



Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25027.D\FID1A.CH Vial: 27  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25027.D\FID2B.CH  
 Acq On : 26 Feb 2005 1:11 Operator: tmk  
 Sample : b5b0435-12 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Mar 4 17:40 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

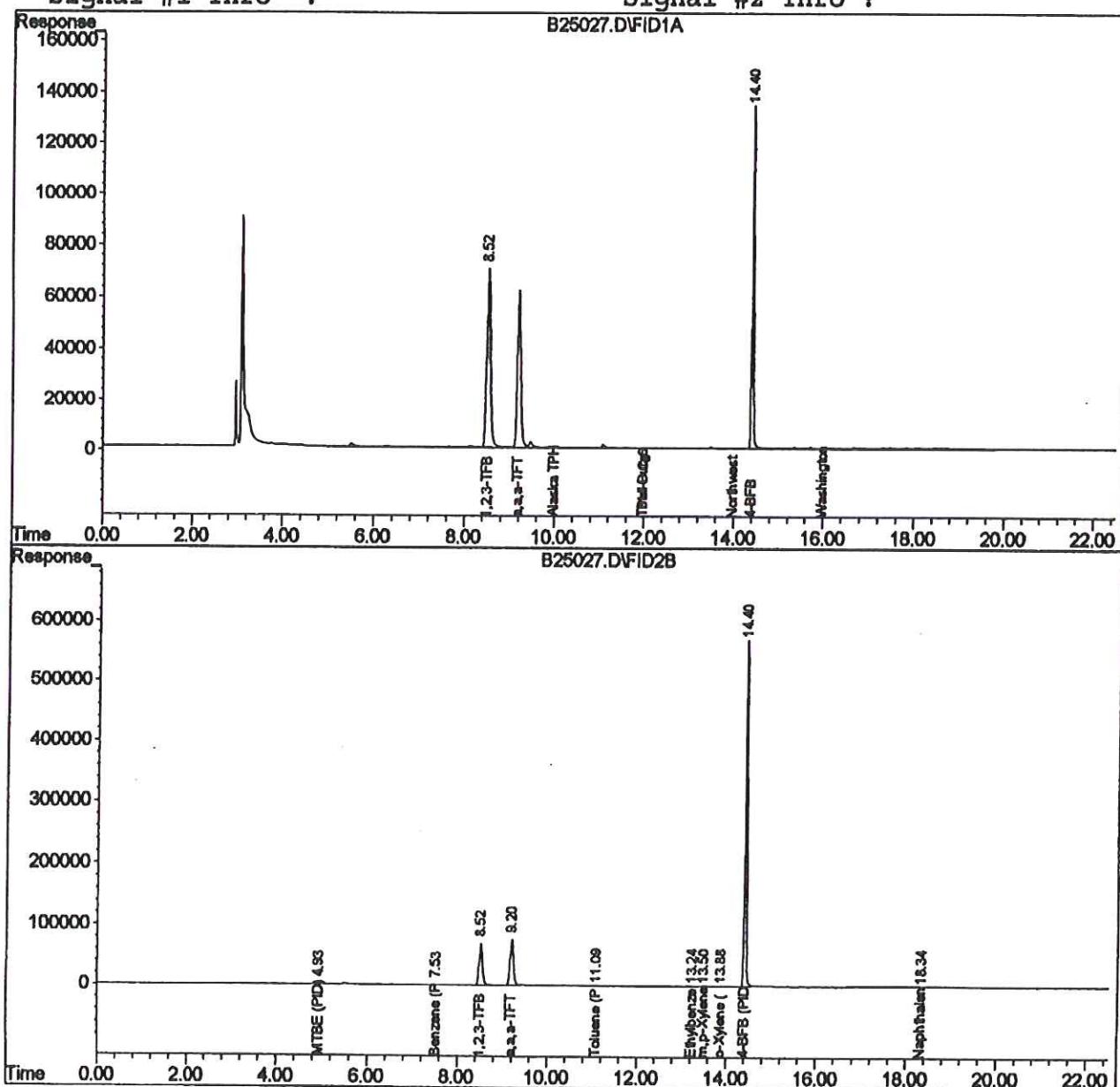
Volume Inj. :

Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :



Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25028.D\FID1A.CH Vial: 28  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25028.D\FID2B.CH  
 Acq On : 26 Feb 2005 1:40 Operator: tmk  
 Sample : b5b0435-13 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 26 2:03:42 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

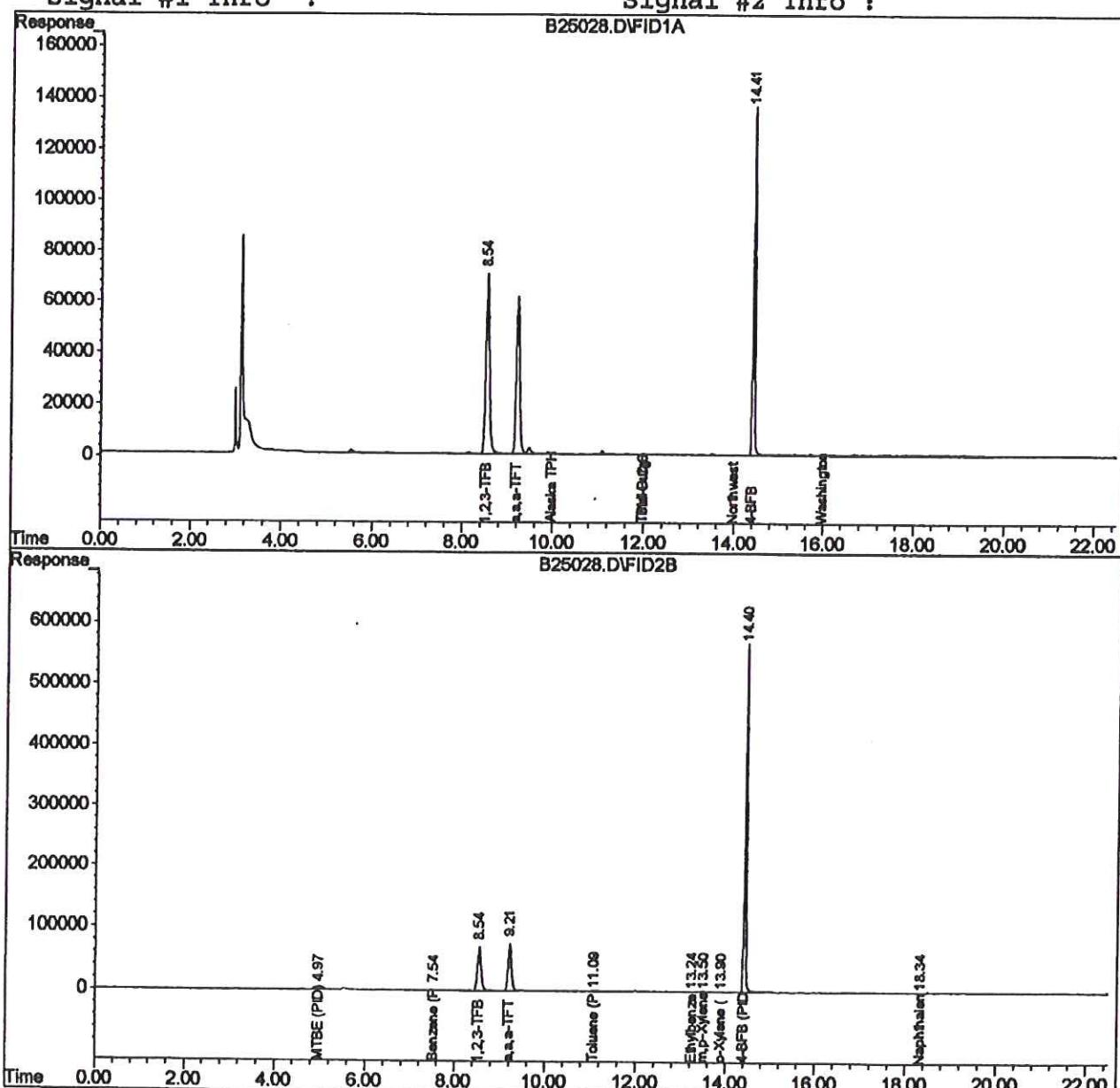
Volume Inj. :

Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :



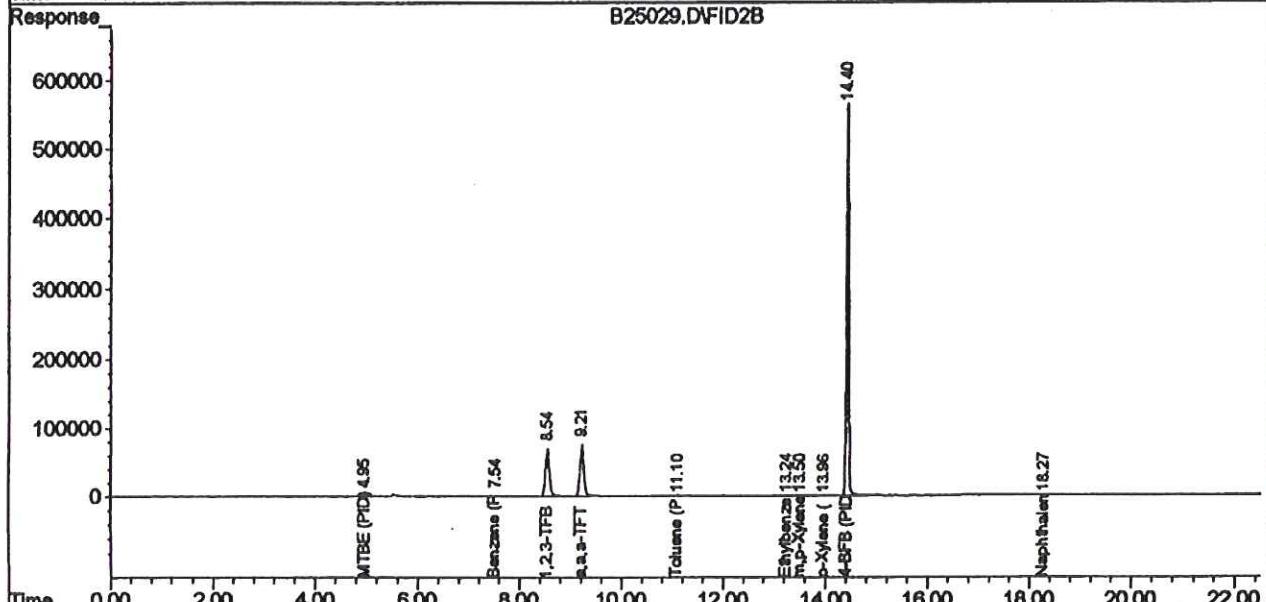
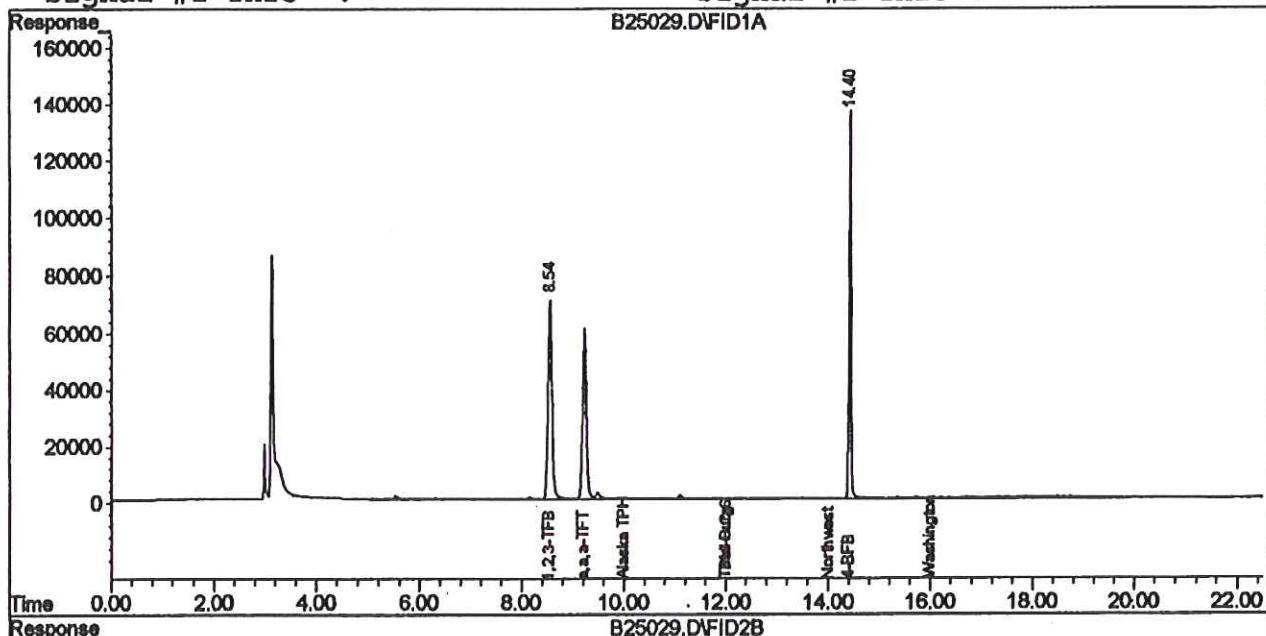
Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25029.D\FID1A.CH Vial: 29  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25029.D\FID2B.CH  
 Acq On : 26 Feb 2005 2:09 Operator: tmk  
 Sample : b5b0435-14 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 26 2:32 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth: TGA2505.M

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

Signal #2 Phase:  
 Signal #2 Info :



Quantitation Report

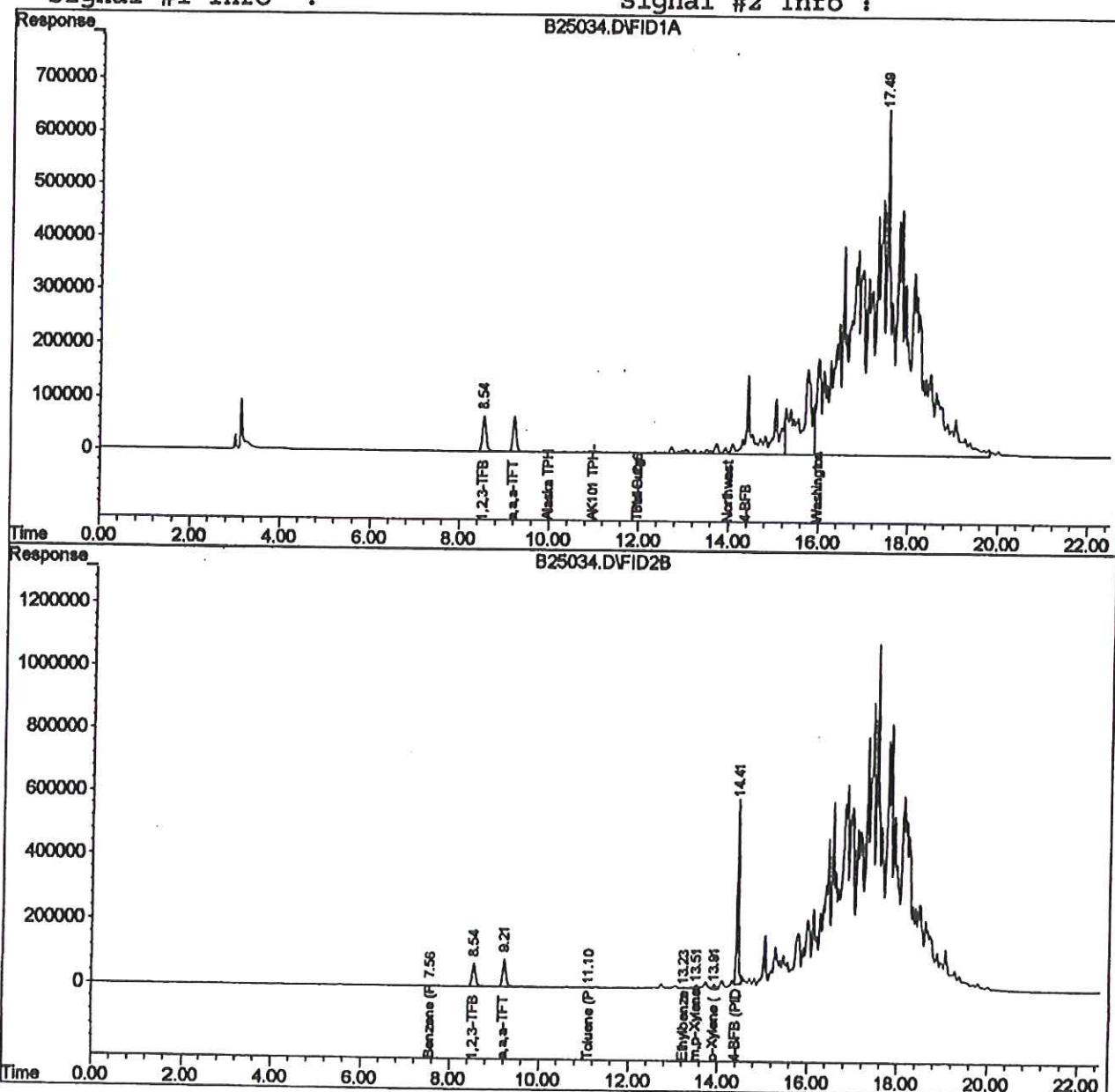
Signal #1 : D:\HPCHEM\3\DATA\022505\B25034.D\FID1A.CH Vial: 34  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25034.D\FID2B.CH  
 Acq On : 26 Feb 2005 4:36 Operator: tmk  
 Sample : b5b0435-15 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Mar 8 19:12 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

Volume Inj. :

Signal #1 Phase :  
Signal #1 Info :

Signal #2 Phase:  
Signal #2 Info :



Quantitation Report

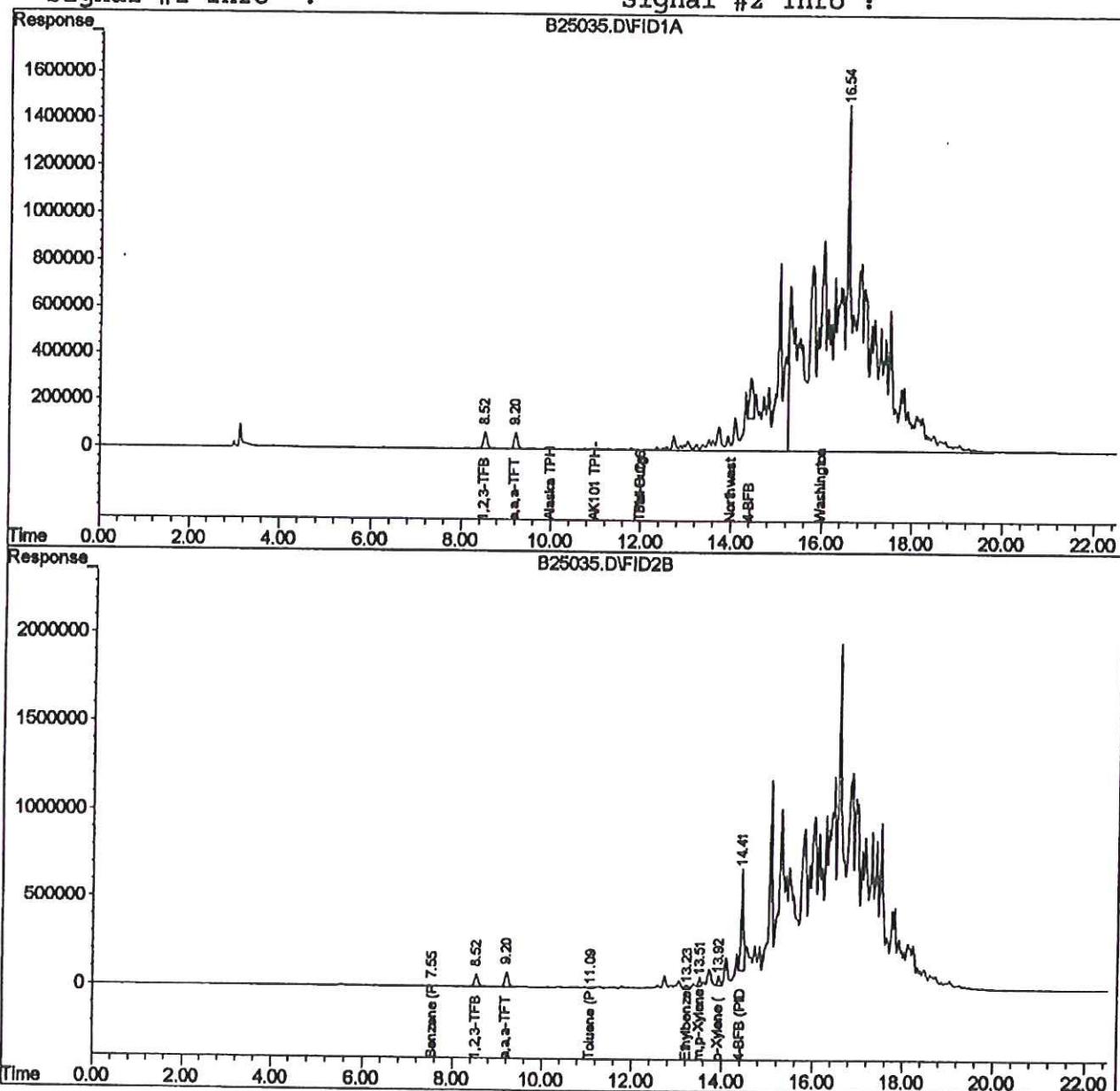
Signal #1 : D:\HPCHEM\3\DATA\022505\B25035.D\FID1A.CH Vial: 35  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25035.D\FID2B.CH  
 Acq On : 26 Feb 2005 5:05 Operator: tmk  
 Sample : b5b0435-16 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Mar 8 19:18 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

Volume Inj. :

Signal #1 Phase :  
Signal #1 Info :

Signal #2 Phase:  
Signal #2 Info :



# Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25036.D\FID1A.CH Vial: 36  
Signal #2 : D:\HPCHEM\3\DATA\022505\B25036.D\FID2B.CH  
Acq On : 26 Feb 2005 5:35 Operator: tmk  
Sample : b5b0435-17rel Inst : GC #6  
Misc : 4x 25 uL Multiplr: 1.00  
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
Quant Time: Mar 8 19:21 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
Title : TPH-G/BTEX 8015/8021 Method  
Last Update : Wed Jan 26 17:03:34 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TGA2505.M

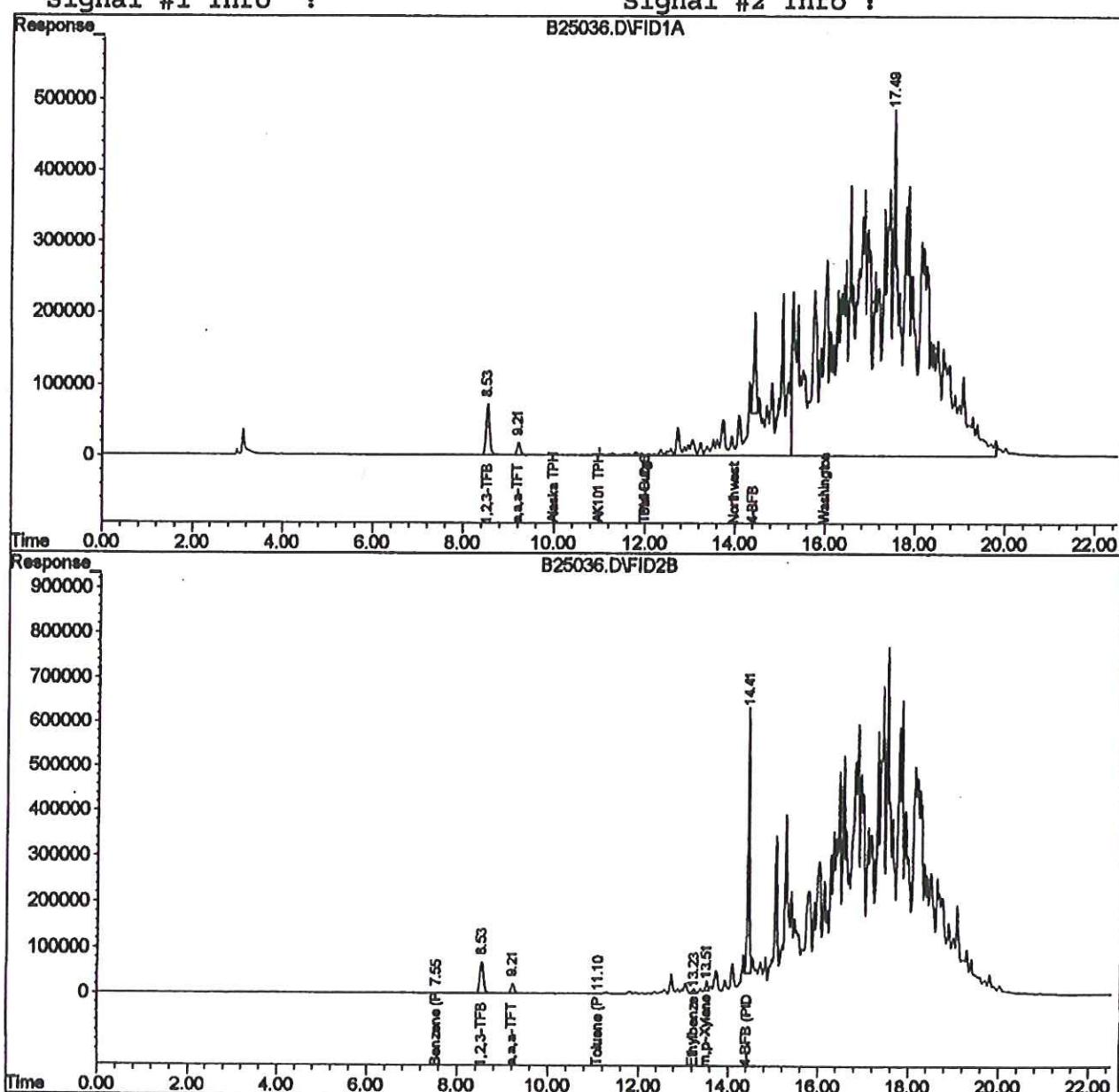
Volume Inj. :

Signal #1 Phase :

Signal #2 Phase:

Signal #1 Info :

Signal #2 Info :



# Quantitation Report

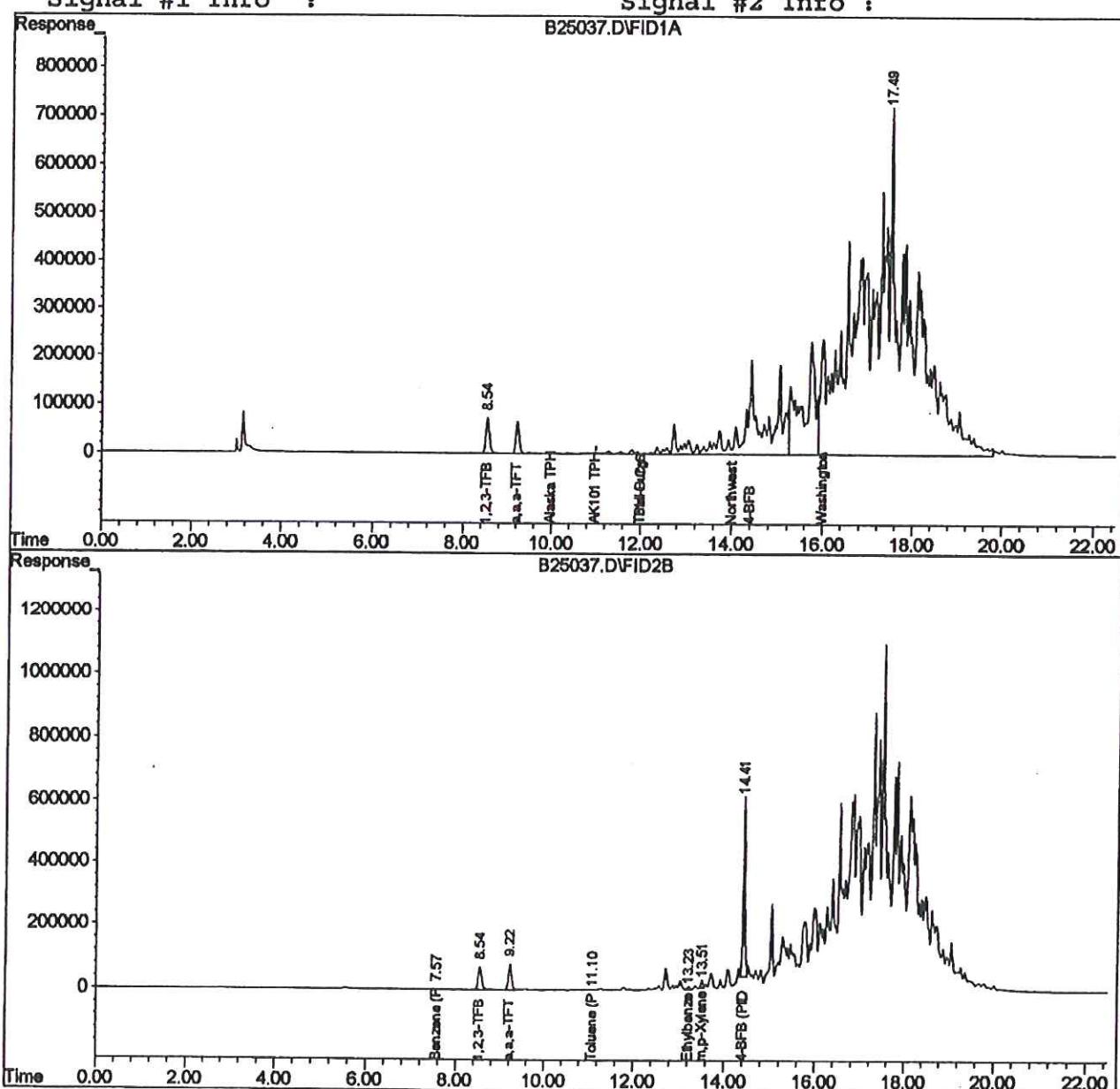
Signal #1 : D:\HPCHEM\3\DATA\022505\B25037.D\FID1A.CH Vial: 37  
Signal #2 : D:\HPCHEM\3\DATA\022505\B25037.D\FID2B.CH  
Acq On : 26 Feb 2005 6:05 Operator: tmk  
Sample : b5b0435-18 Inst : GC #6  
Misc : 1x 100 uL Multiplr: 1.00  
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
Quant Time: Mar 8 19:22 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
Title : TPH-G/BTEX 8015/8021 Method  
Last Update : Wed Jan 26 17:03:34 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TGA2505.M

Volume Inj. :

Signal #1 Phase :  
Signal #1 Info :

Signal #2 Phase:  
Signal #2 Info :



# Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25038.D\FID1A.CH Vial: 38  
Signal #2 : D:\HPCHEM\3\DATA\022505\B25038.D\FID2B.CH  
Acq On : 26 Feb 2005 6:34 Operator: tmk  
Sample : b5b0435-19 Inst : GC #6  
Misc : 1x 100 uL Multiplr: 1.00  
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
Quant Time: Mar 8 19:25 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
Title : TPH-G/BTEX 8015/8021 Method  
Last Update : Wed Jan 26 17:03:34 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TGA2505.M

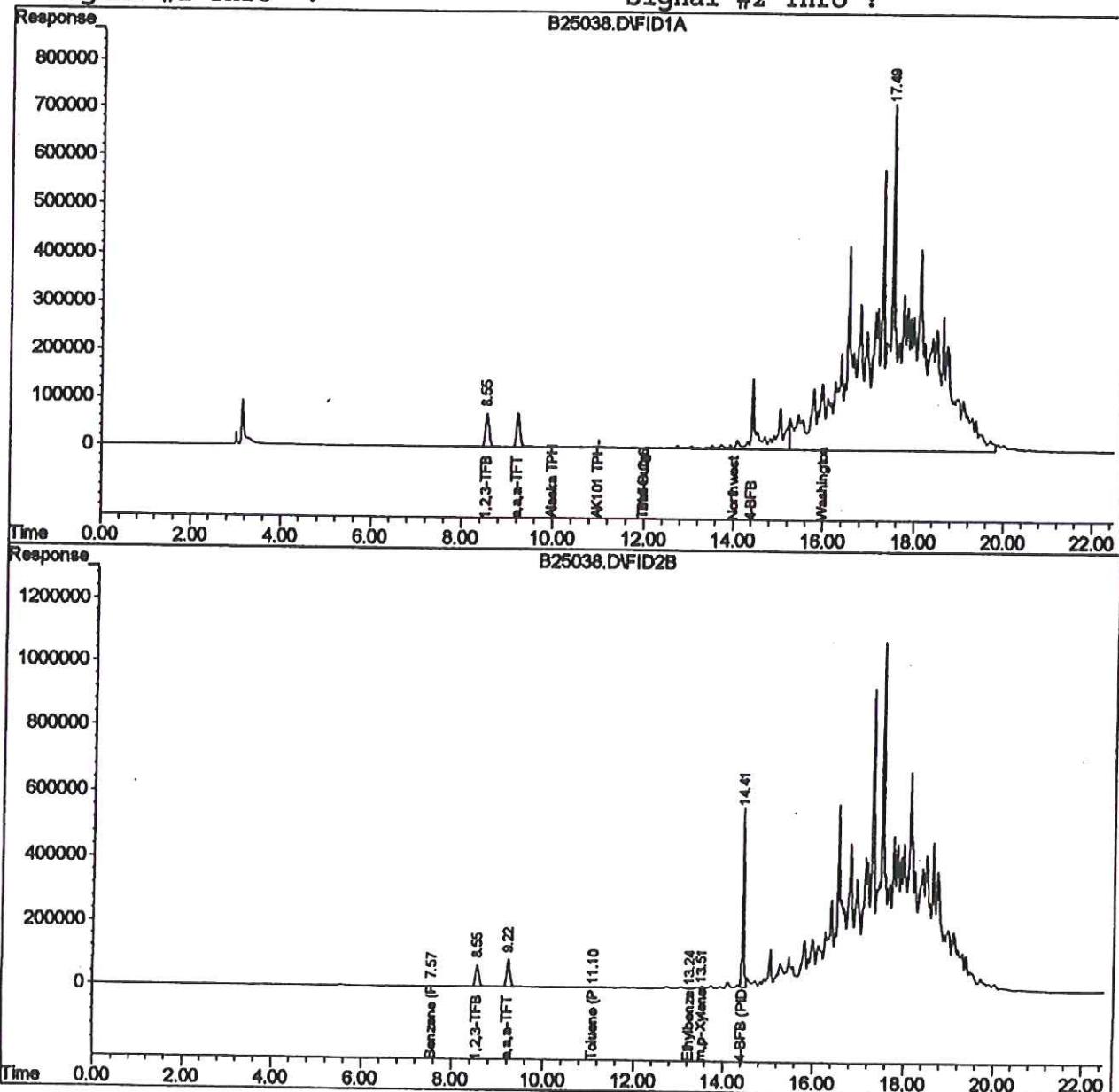
Volume Inj. :

Signal #1 Phase :

Signal #1 Info :

Signal #2 Phase:

Signal #2 Info :



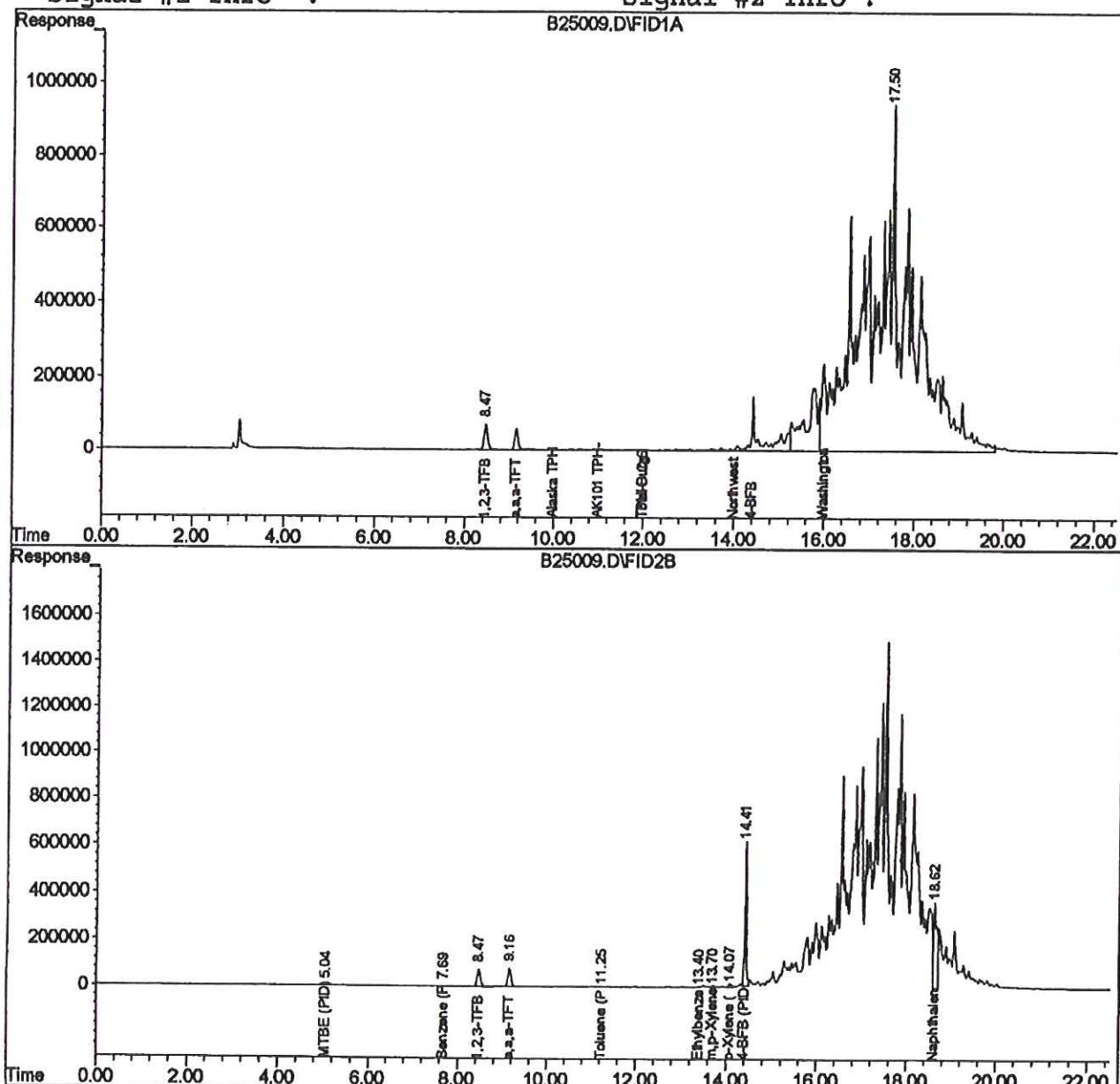
# Quantitation Report

Signal #1 : D:\HPCHEM\3\DATA\022505\B25009.D\FID1A.CH Vial: 9  
 Signal #2 : D:\HPCHEM\3\DATA\022505\B25009.D\FID2B.CH  
 Acq On : 25 Feb 2005 14:41 Operator: tmk  
 Sample : b5b0435-20 Inst : GC #6  
 Misc : 1x 100 uL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
 Quant Time: Feb 25 15:25 2005 Quant Results File: TGA2505.RES

Quant Method : D:\HPCHEM\3\METHODS\TGA2505.M (Chemstation Integrator)  
 Title : TPH-G/BTEX 8015/8021 Method  
 Last Update : Wed Jan 26 17:03:34 2005  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TGA2505.M

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

Signal #2 Phase:  
 Signal #2 Info :



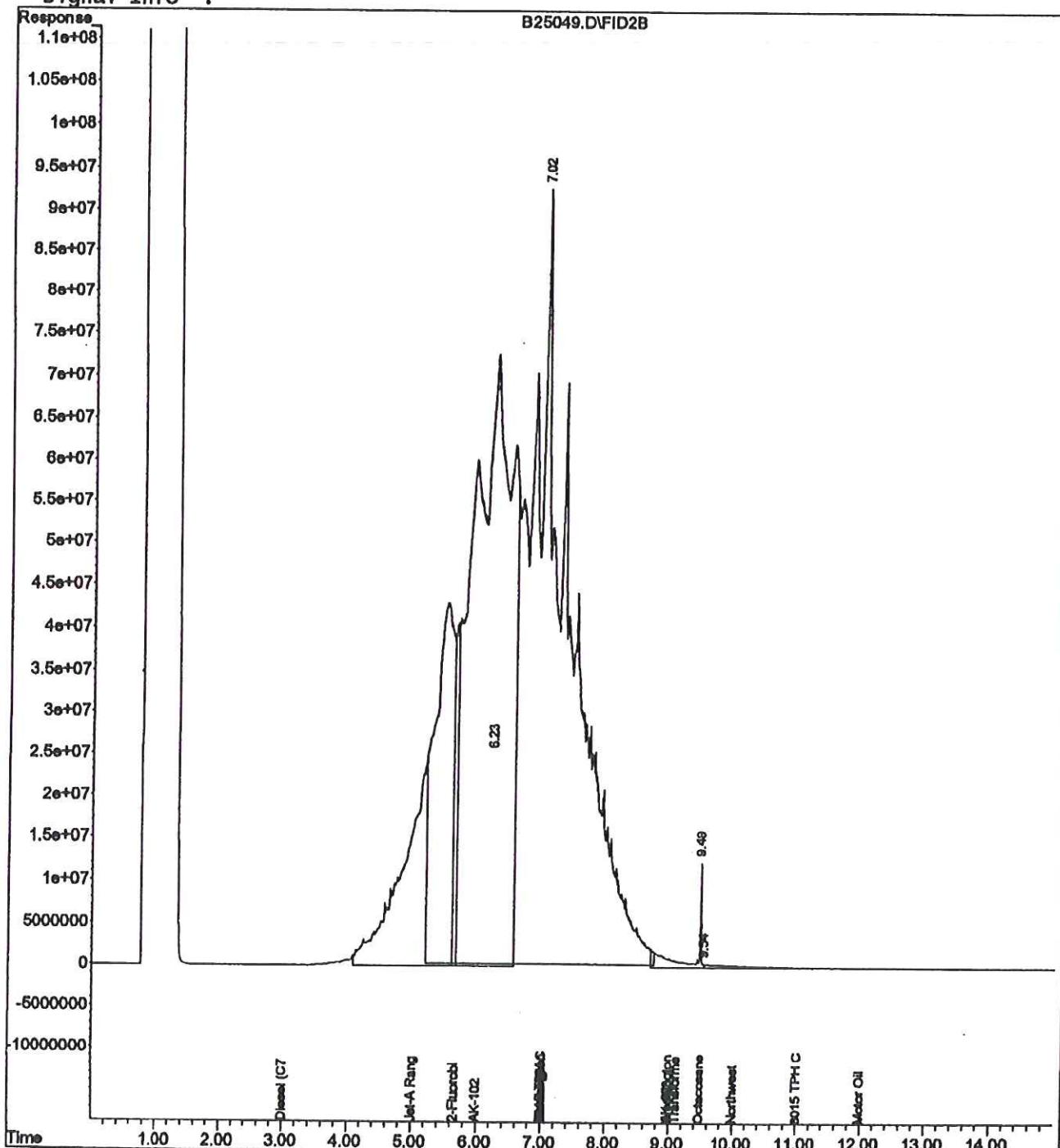
## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25049.D      Vial: 29  
Acq On : 25 Feb 2005 18:34      Operator: GSM  
Sample : b5b0435-20      Inst : GC #9  
Misc : 1x nwdx sg s      Multiplr: 1.00  
IntFile : SURR.E

Quant Time: Feb 25 18:50 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

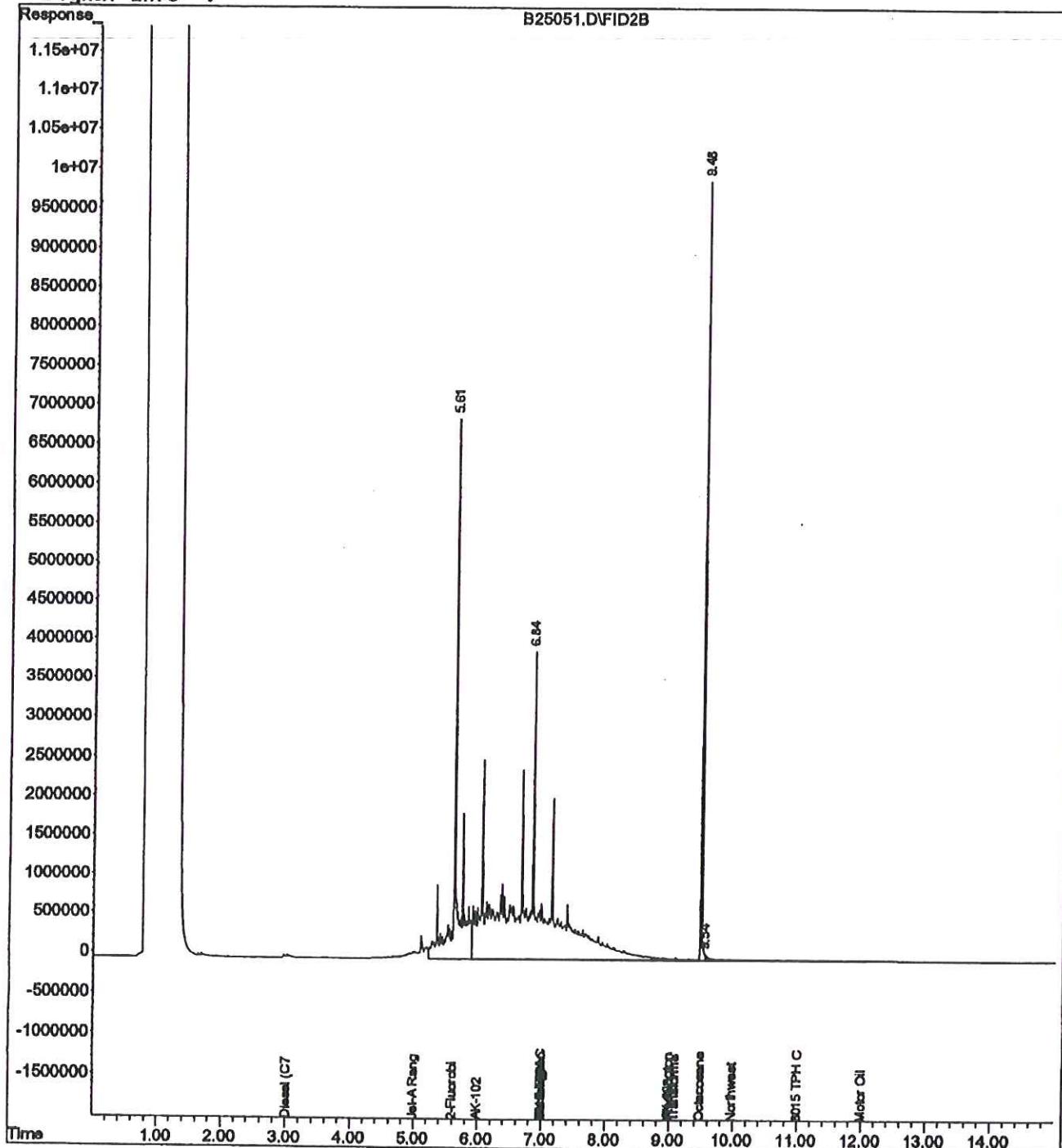


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25051.D Vial: 30  
Acq On : 25 Feb 2005 18:57 Operator: GSM  
Sample : b5b0435-21 Inst : GC #9  
Misc : 1x nwdx sg s Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 19:13 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

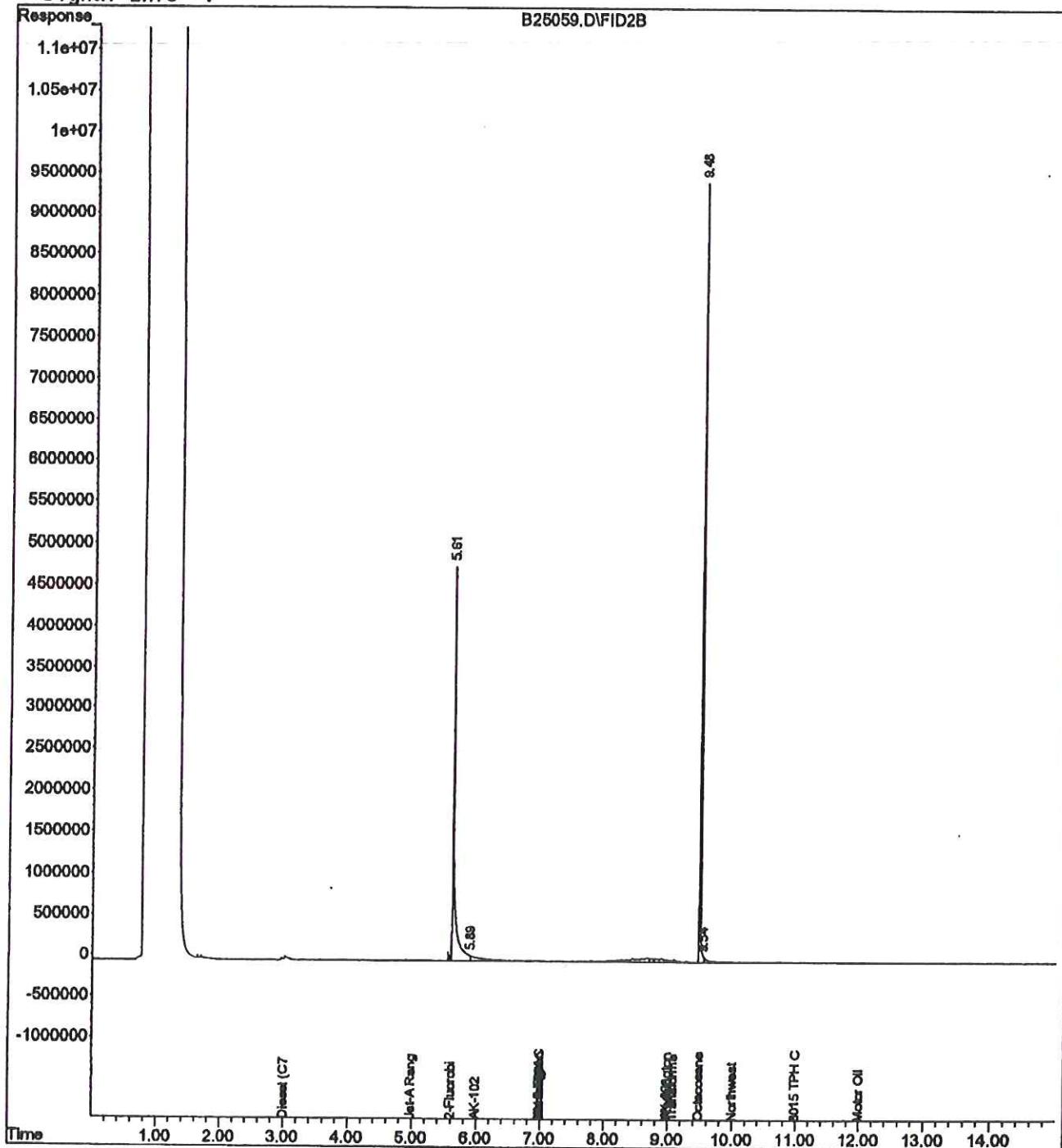


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25059.D Vial: 31  
Acq On : 25 Feb 2005 20:30 Operator: GSM  
Sample : b5b0435-22 Inst : GC #9  
Misc : 1x nwdx sg s Multipllr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 20:46 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

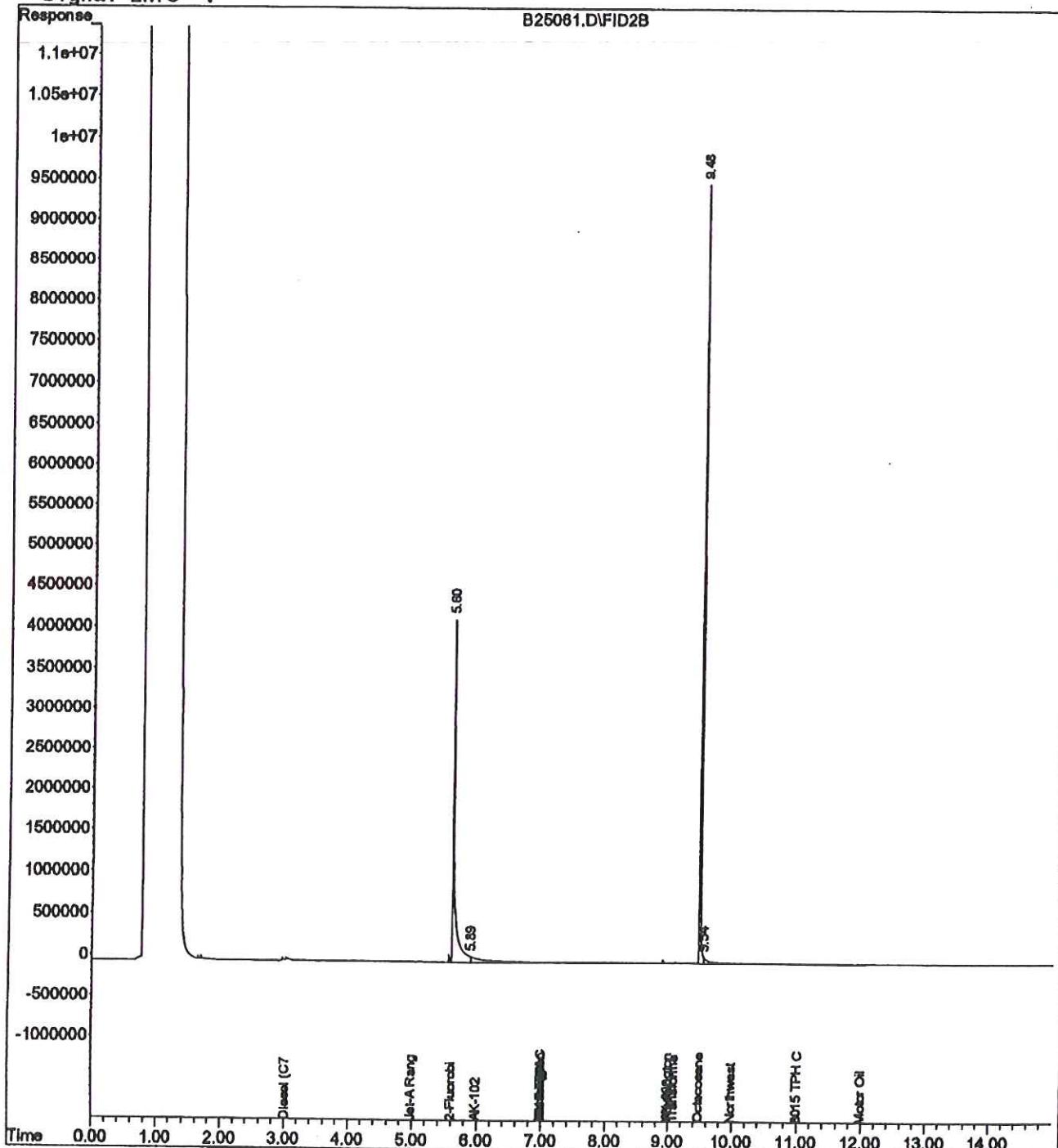


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25061.D Vial: 32  
Acq On : 25 Feb 2005 20:53 Operator: GSM  
Sample : b5b0435-23 Inst : GC #9  
Misc : 1x nwdx sg s Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 21:09 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

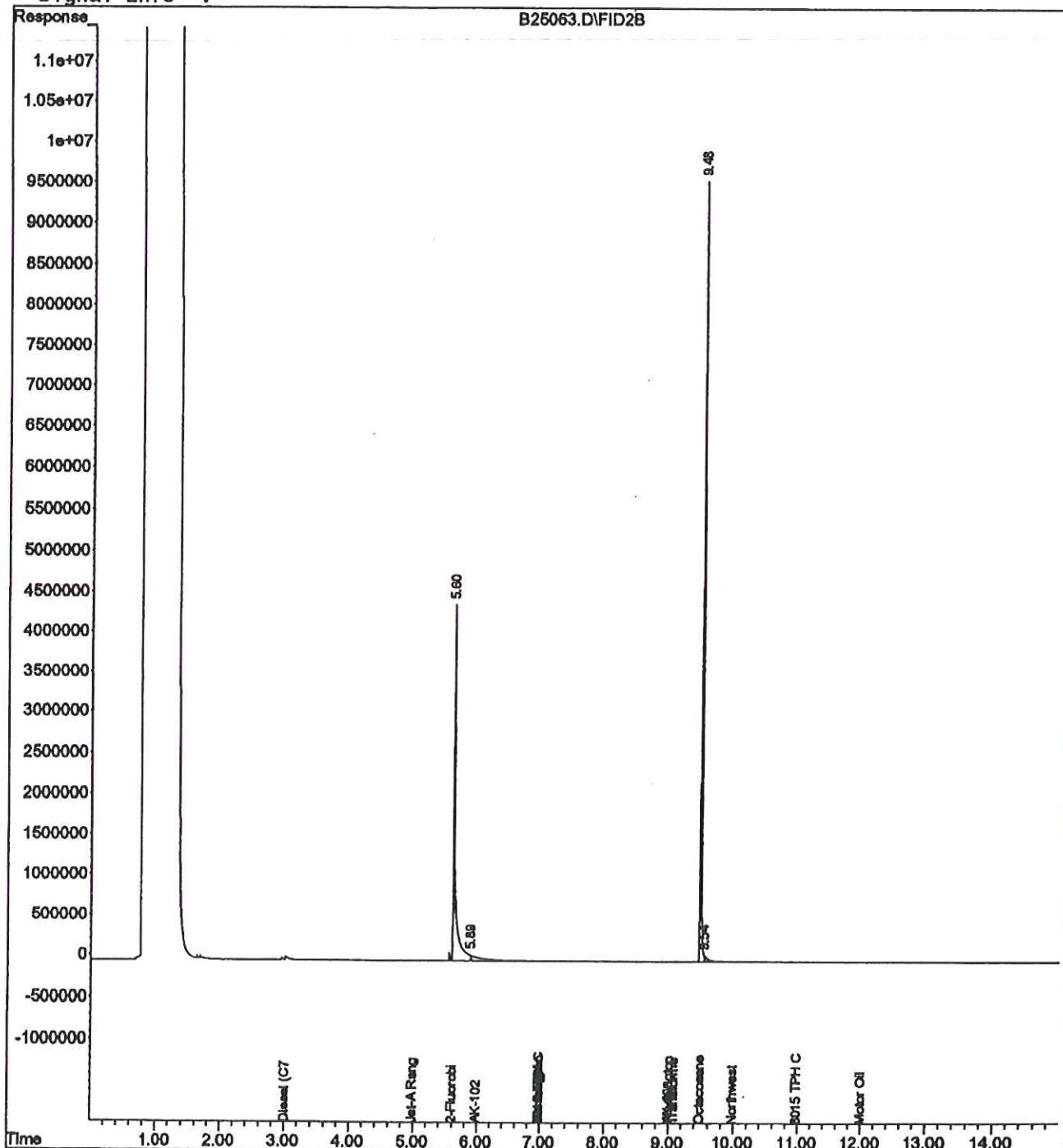


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25063.D      Vial: 33  
Acq On : 25 Feb 2005 21:16      Operator: GSM  
Sample : b5b0435-24      Inst : GC #9  
Misc : 1x nwdx sg s      Multipllr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 21:32 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

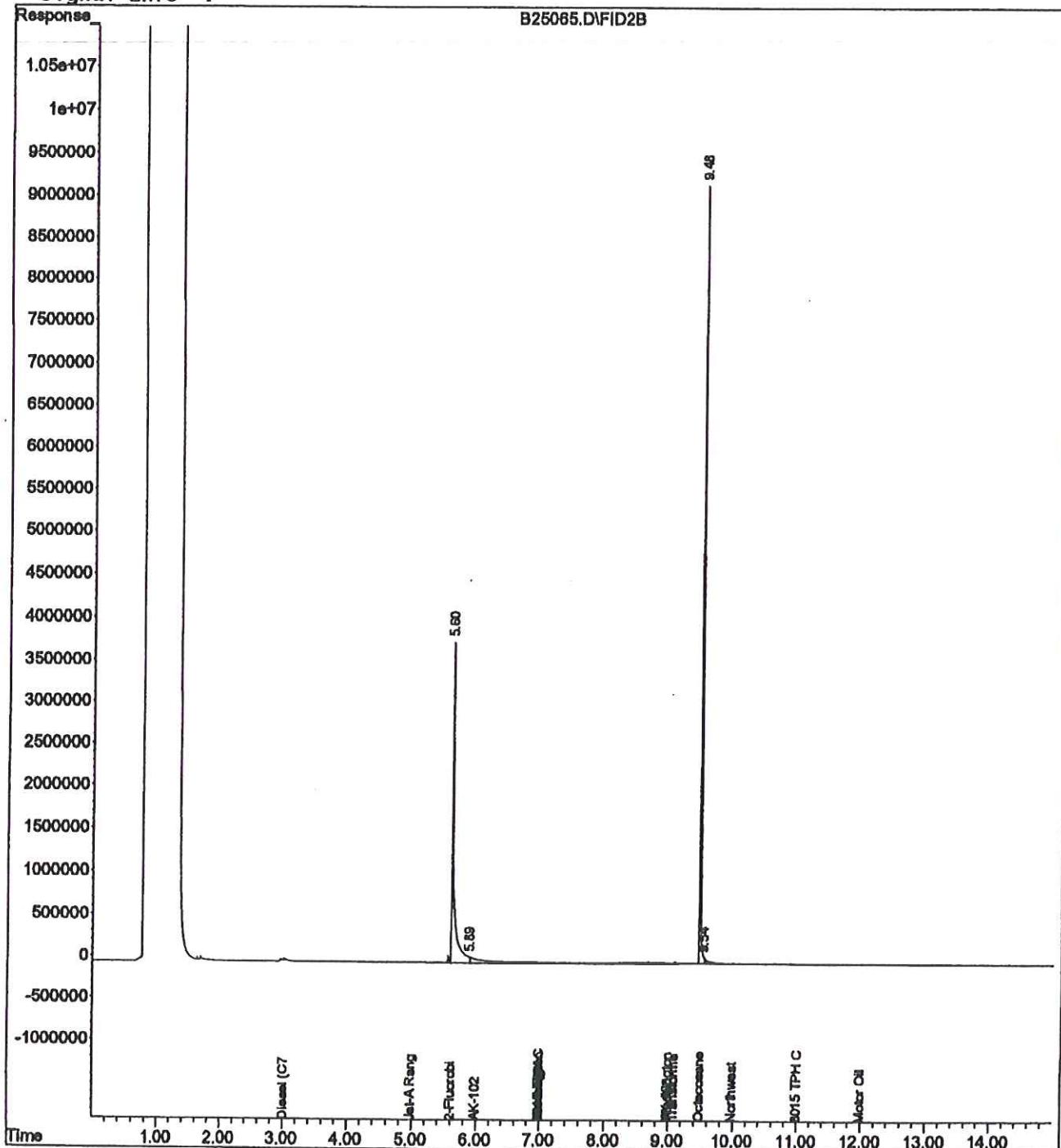


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25065.D Vial: 34  
Acq On : 25 Feb 2005 21:39 Operator: GSM  
Sample : b5b0435-25 Inst : GC #9  
Misc : 1x nwdx sg s Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 21:55 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

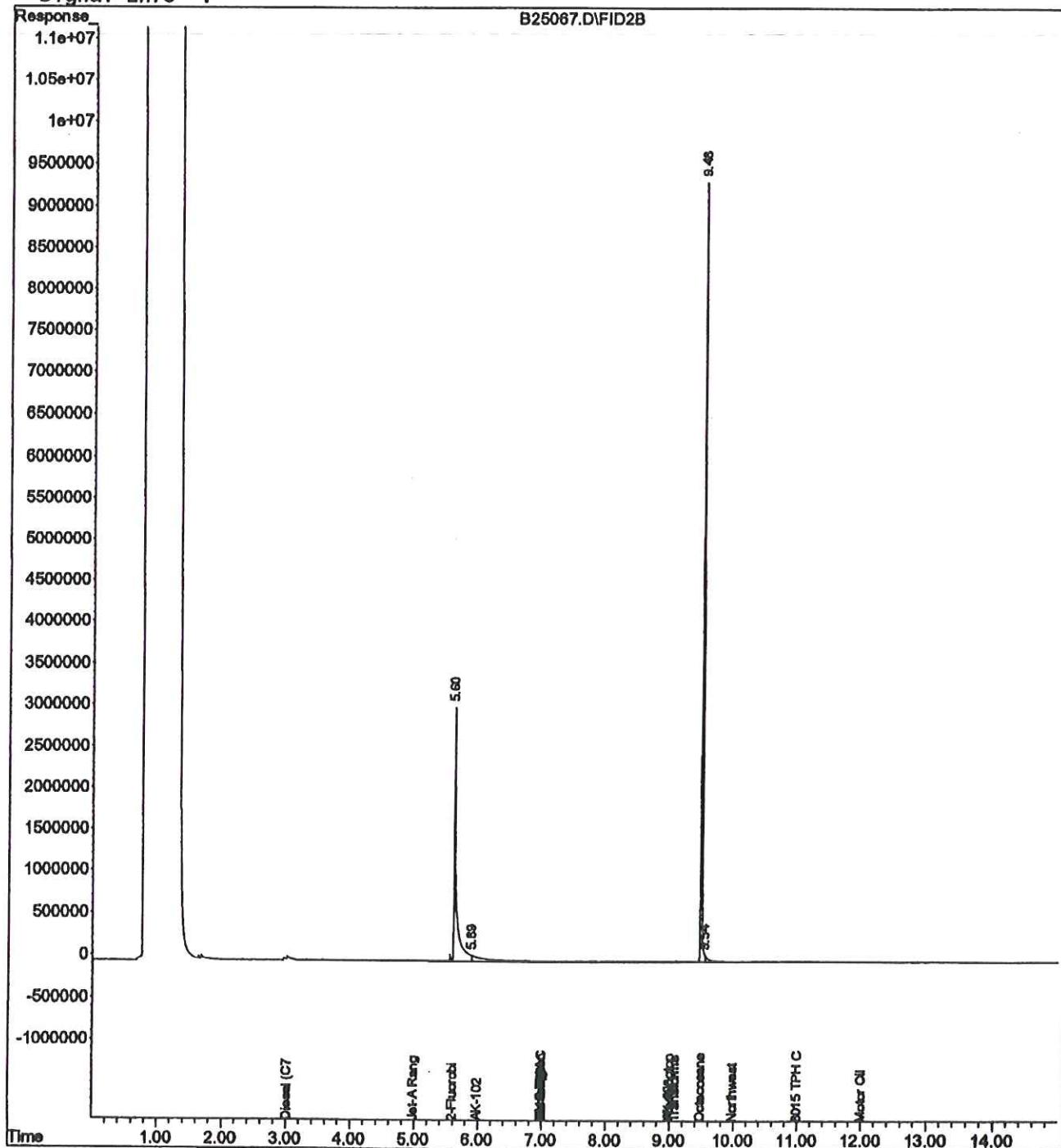


## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25067.D Vial: 35  
Acq On : 25 Feb 2005 22:02 Operator: GSM  
Sample : b5b0435-26 Inst : GC #9  
Misc : 1x nwdx sg s Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 22:18 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :



## Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\022505.SEC\B25069.D      vial: 36  
Acq On : 25 Feb 2005 22:25      Operator: GSM  
Sample : b5b0435-27      Inst : GC #9  
Misc : 1x nwdx sg s      Multiplr: 1.00  
IntFile : SURR.E  
Quant Time: Feb 25 22:40 2005 Quant Results File: TRB0305.RES

Quant Method : D:\HPCHEM\1\METHODS\TRB0305.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Mon Feb 14 20:05:01 2005  
Response via : Multiple Level Calibration  
DataAcq Meth : TFB0305.M

Volume Inj. :  
Signal Phase :  
Signal Info :

