

DATE: March 4, 2003

**CONOCOPHILLIPS CORPORATION  
GROUNDWATER MONITORING REPORT**

Site No.: 5353 Address: 600 Westlake Avenue North, Seattle, Washington  
ConocoPhillips Site Manager: Timothy D. Johnson  
Consultant/Contact Person: Environmental Resolutions, Inc./James S. Matthiessen  
Primary Agency/Regulatory ID No.: Washington State Department of Ecology

**RECEIVED**  
**MAR 11 2003**  
**ENVIRONMENTAL DEPARTMENT**  
**NORTHWEST REGION**

**WORK PERFORMED THIS QUARTER(S) [Fourth - 2002]:**

- Monitored 7, purged and sampled 4 groundwater monitoring wells

**WORK PROPOSED FOR NEXT QUARTER [First - 2003]:**

- Monitor 20, purge, and sample 19 groundwater monitoring wells

**SUMMARY:**

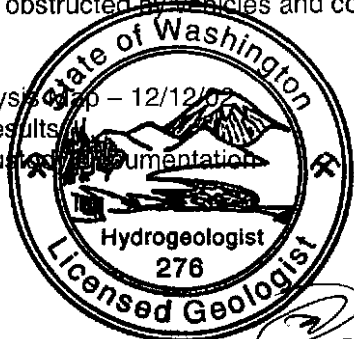
Frequency of Sampling Events:	<u>Quarterly</u>	(Quarterly, etc.)
Approximate Depth to Groundwater:	<u>10 to 13 feet</u>	(Measured Feet)
Groundwater Gradient:	<u>Not determined</u>	(Direction)
	<u>Not determined</u>	(Magnitude)
Maximum TPH-G/Benzene Concentrations:	<u>14,500/5,130</u>	(ppb)
Measurable Free Product Detected:	<u>No</u>	(Yes - ID well(s)/No)
Free Product Recovered This Quarter:	<u>Unknown</u>	(gallons)
Cumulative Free Product Recovered to Date:	<u>Unknown</u>	(gallons)
Bulk Soil Removed This Quarter:	<u>None</u>	(cubic yards)
Water Wells or Surface Waters w/in 2,000 ft:	<u>Lake Union, 400 ft</u>	(Distance &
Radius and Respective Direction:	<u>North</u>	Direction)
Current Remedial Action:	<u>VES/EFRT</u>	(SVE/AS/P&T, etc.)
Permits for Discharge:	<u>PSAPCA No. 4397</u>	(NPDES, POTW, etc.)

**DISCUSSION:**

- All 4 wells sampled contained hydrocarbon concentrations exceeding MTCA Method A Cleanup Levels.
- MW35, MW45, and MW50 were obstructed by vehicles and could not be accessed.

**ATTACHMENTS:**

- Plate 1: Groundwater Sample Analysis Report - 12/12/02
- Table 1: Groundwater Analytical Results
- Laboratory Reports and Chain of Custody Documentation
- Field Data Records



Prepared By:

*Yukiko Noguchi*

Yukiko Noguchi  
Staff Scientist

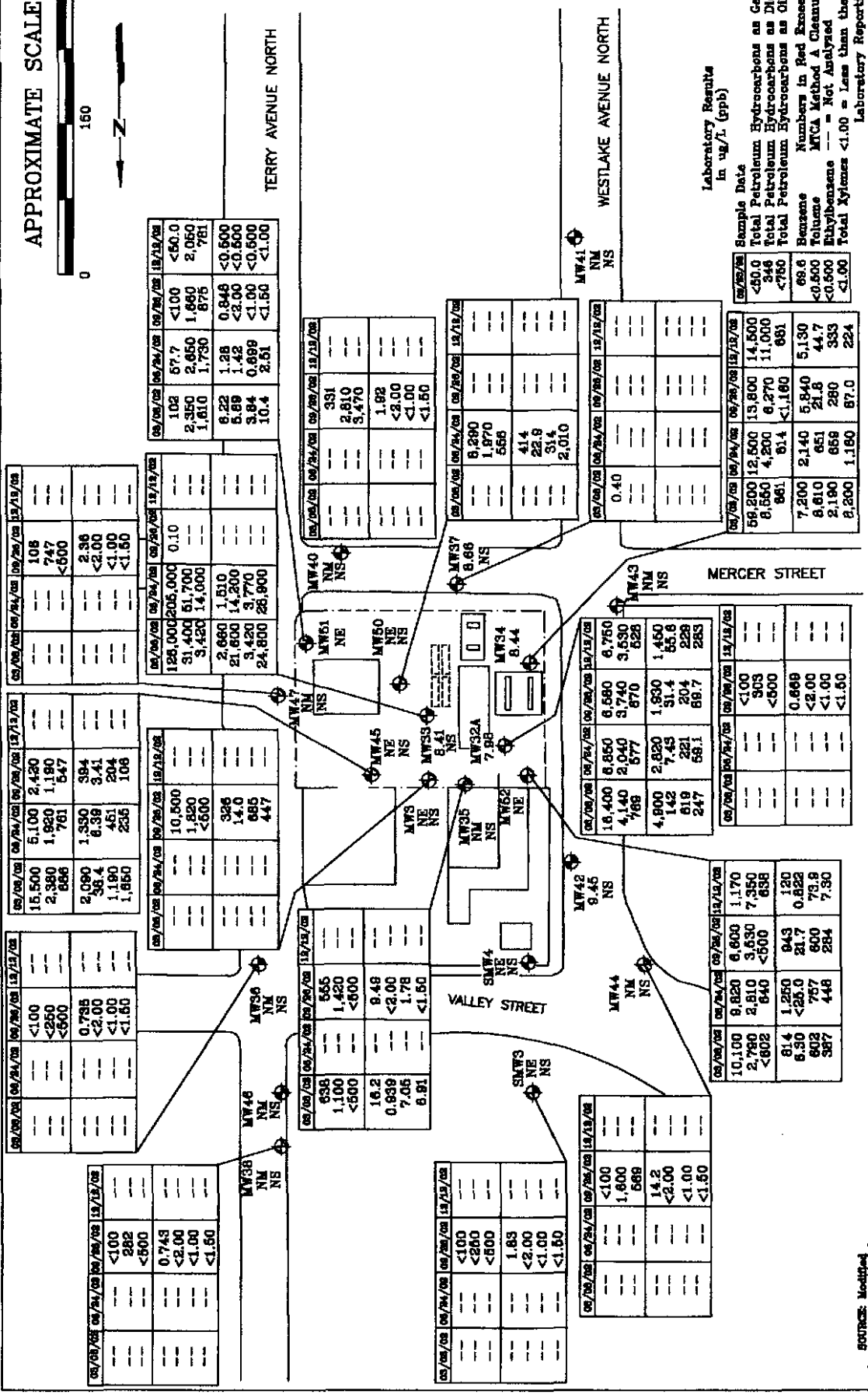
Reviewed By:

*John K. Meyer*

John K. Meyer, R.G.  
Branch Manager

cc: Washington State Department of Ecology, Northwest Regional Office  
Mr. Dave Cook, GeoEngineers

APPROXIMATE SCALE



Laboratory Results  
in ug/L (ppb)

Sample Date  
Total Petroleum Hydrocarbons as Gasoline  
Total Petroleum Hydrocarbons as Diesel  
Total Petroleum Hydrocarbons as Oil  
Benzene  
Toluene  
Ethylbenzene  
Total Xylenes <1.00 = Less than the Stated  
Laboratory Reporting Limit

PROJECT NO.  
31020

PLATE  
1

YN: 01/28/03

EXPLANATION

- MW37 Groundwater Monitoring Well
- 9.70 Groundwater Elevation
- 0.01 Free Product Thickness in Feet
- NM Not Measured
- NE Not Established
- NS Not Sampled

Groundwater elevation corrected for free product, where applicable.

**GROUNDWATER SAMPLE ANALYSIS MAP - 12/12/02**

TOSCO SITE NO. 5353

600 Westlake Avenue North  
Seattle, Washington



SOURCE: Modified from maps provided by Cimco/Phillips Corporation

TABLE 1  
GROUNDWATER ANALYTICAL RESULTS  
Tosco Site No. 5353  
600 Westlake Avenue North  
Seattle, Washington  
Page 1 of 9

Well Name	Sample Date	DTW	LPH	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X
SMW3 NE	03/08/95	10.25	0.00	--	<50	400	2,500	<0.5	<0.5	<0.5	<1.0
	06/06/95	10.23	0.00	--	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	09/07/95	10.89	0.00	--	<50	300	<750	<0.5	<0.5	<0.5	<1.0
	12/08/95	10.36	0.00	--	<50	300	<750	<0.5	<0.5	<0.5	<1.0
	04/01/96	10.07	0.00	--	34,000	4,000	2,900	6,400	42	2,100	3,000
	06/25/96	10.19	0.00	--	<50.0	320	<750	<0.500	<0.500	<0.500	<1.00
	09/27/96	11.12	0.00	--	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	03/28/97	10.19	0.00	--	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	06/30/97 <sup>NP</sup>	10.14	0.00	--	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	09/08/97 <sup>NP</sup>	10.85	0.00	--	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	12/19/97 <sup>NP</sup>	9.67	0.00	--	<50.0	521	<750	<0.500	<0.500	<0.500	<1.00
	03/16/98 <sup>NP</sup>	9.28	0.00	--	50.1	<250	<750	<0.500	<0.500	<0.500	<1.00
	06/26/98 <sup>NP</sup>	8.87	0.00	--	<50.0	500	<750	<0.500	<0.500	<0.500	<1.00
	09/23/98 <sup>NP</sup>	9.88	0.00	--	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	12/17/98 <sup>NP</sup>	9.22	0.00	--	<50.0	293	<750	<0.500	<0.500	<0.500	<1.00
	03/31/99 <sup>NP</sup>	9.01	0.00	--	<50.0	360	<750	<0.500	<0.500	0.526	4.97
	06/30/99 <sup>NP</sup>	9.55	0.00	--	<50.0	639	<750	<0.500	0.609	<0.500	1.32
	12/08/99 <sup>NP</sup>	8.75	0.00	--	<50.0	<484	<1,450	<0.500	<0.500	<0.500	<1.00
	06/20/00 <sup>NP</sup>	8.89	0.00	--	<50.0	<250	<750	<0.500	0.585	<0.500	1.86
	12/19/00	NM	--	--	--	--	--	--	--	--	--
	06/15/01 <sup>NP</sup>	7.23	0.00	--	<50.0	368	<866	<0.500	<0.500	<0.500	<1.00
	06/26/01	NM	--	--	--	--	--	--	--	--	--
	09/07/01 <sup>NP</sup>	9.19	0.00	--	<50.0	385	<571	<0.500	<0.500	<0.500	<1.00
	10/10/01	NM	--	--	--	--	--	--	--	--	--
12/28/01	8.89	0.00	--	<50.0	4,160	<500	<0.500	0.902	<0.500	2.78	
03/08/02	NM	--	--	--	--	--	--	--	--	--	
06/24/02	NM	--	--	--	--	--	--	--	--	--	
09/26/02	10.32	0.00	--	<100	<250	<500	1.83	<2.00	<1.00	<1.50	
12/12/02	NM	--	--	--	--	--	--	--	--	--	
SMW4 NE	03/08/95	8.14	0.00	--	39,000	4,100	5,100	13,000	<250	2,400	8,200
	06/06/95	8.90	0.00	--	41,000	5,600	<750	9,400	44	2,700	4,900
	09/07/95	8.99	0.00	--	--	--	--	--	--	--	--
	12/08/95	7.56	0.00	--	40,000	1,600	920	8,100	57	2,600	3,600
	04/01/96	8.13	0.00	--	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	06/25/96	8.20	0.00	--	28,100	2,680	630	3,900	81.4	1,710	1,710
	09/27/96	8.62	0.00	--	28,600	2,480	<750	6,090	<0.500	2,060	1,730
	03/28/97	8.20	0.00	--	--	--	--	--	--	--	--
	06/30/97	8.06	0.00	--	--	--	--	--	--	--	--
	09/08/97	9.00	0.00	--	--	--	--	--	--	--	--
	12/19/97	9.41	0.04	LPH Present	--	--	--	--	--	--	--
	03/16/98	9.09	0.00	--	--	--	--	--	--	--	--
	06/26/98	8.76	Trace	LPH Present	--	--	--	--	--	--	--
	09/23/98	9.96	0.05	LPH Present	--	--	--	--	--	--	--
	12/17/98	10.22	Trace	LPH Present	--	--	--	--	--	--	--
	03/31/99	8.70	Trace	LPH Present	--	--	--	--	--	--	--
	06/30/99	8.20	Trace	LPH Present	--	--	--	--	--	--	--
	12/08/99	Inaccessible	--	--	--	--	--	--	--	--	--
	06/20/00	Inaccessible	--	--	--	--	--	--	--	--	--
	12/19/00	Inaccessible	--	--	--	--	--	--	--	--	--
	06/15/01	Inaccessible	--	--	--	--	--	--	--	--	--
	06/26/01	NM	--	--	--	--	--	--	--	--	--
	09/07/01	Inaccessible	--	--	--	--	--	--	--	--	--
	10/10/01	NM	--	--	--	--	--	--	--	--	--
12/28/01	Inaccessible	--	--	--	--	--	--	--	--	--	
03/08/02	NM	--	--	--	--	--	--	--	--	--	
06/24/02	NM	--	--	--	--	--	--	--	--	--	
09/26/02	NM	--	--	--	--	--	--	--	--	--	
12/12/02	NM	--	--	--	--	--	--	--	--	--	
MW3 NE	10/10/01	10.11	0.00	--	14,100	4,080	1,990	1,070	<25.0	1,040	292
	12/28/01	9.61	0.00	--	3,340	1,810	<500	92.6	4.62	146	512
	03/08/02	NM	--	--	--	--	--	--	--	--	--
	06/24/02	NM	--	--	--	--	--	--	--	--	--
	09/26/02 <sup>b</sup>	10.96	--	--	10,600	1,820	<500	326	14.0	695	447
	12/12/02	NM	--	--	--	--	--	--	--	--	--

MTCA Method A Cleanup Levels  
Continued on page 2

1,000<sup>a</sup>      5      40      30      20

TABLE 1  
GROUNDWATER ANALYTICAL RESULTS  
Tosco Site No. 5353  
600 Westlake Avenue North  
Seattle, Washington  
Page 2 of 9

Well Name	Sample Date	DTW	LPH	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X	
MW32A 20.70	03/08/95	11.29	0.00	9.69	21,000	2,300	2,300	8,800	1,700	990	2,900	
	06/06/95	--	--	--	--	--	--	--	--	--	--	
	09/07/95	11.27	--	9.43	20,000	2,600	1,600	4,200	470	730	2,000	
	12/08/95	10.81	--	10.06	11,000	1,200	<750	1,600	86	420	810	
	04/01/96	10.90	--	9.80	7,900	1,400	1,000	2,200	58	300	490	
	06/25/96	10.98	--	9.72	7,500	1,280	<750	1,200	60.4	217	435	
	09/27/96	11.37	--	9.61	7,050	1,040	<750	1,570	37.4	284	416	
	03/28/97	11.26	--	9.72	--	--	--	--	--	--	--	
	06/30/97	10.89	--	--	--	--	--	--	--	--	--	
	09/08/97	11.67	0.00	--	9.31	--	--	--	--	--	--	
	12/19/97	11.42	0.00	--	9.28	--	--	--	--	--	--	
	03/16/98	11.30	0.00	--	9.40	--	--	--	--	--	--	
	06/26/98	11.29	0.00	--	9.41	--	--	--	--	--	--	
	09/23/98	11.97	0.00	--	8.73	--	--	--	--	--	--	
	12/17/98	11.09	0.00	--	9.61	--	--	--	--	--	--	
	03/31/99	10.47	0.00	--	10.23	--	--	--	--	--	--	
	06/30/99	9.60	0.00	--	11.10	--	--	--	--	--	--	
	12/08/99	11.07	0.00	--	9.63	--	--	--	--	--	--	
	06/20/00	11.40	0.00	--	9.30	--	--	--	--	--	--	
	12/19/00 <sup>NP</sup>	10.90	0.00	--	9.80	7,010	1,740	<750	4,430	136	438	182
	06/15/01 <sup>NP</sup>	11.31	0.00	--	9.39	13,700	2,810	<846	2,370	11.2	272	31.1
	06/26/01 <sup>NP</sup>	11.85	0.00	--	8.85	15,500	1,620	<750	6,780	1,110	1,230	1,020
	09/07/01 <sup>NP</sup>	10.81	0.00	--	9.89	17,100	4,220	822	6,870	19.9	684	110
	10/10/01	NM	--	--	--	--	--	--	--	--	--	--
	12/28/01	11.29	0.00	--	9.41	12,200	4,280	711	3,670	180	537	383
	03/08/02	11.49	0.00	--	9.21	16,400	4,140	769	4,900	142	619	247
	06/24/02	11.56	0.00	--	9.14	8,860	2,040	577	2,820	7.43	221	59.1
	09/26/02 <sup>b</sup>	12.88	0.00	--	7.82	6,580	3,740	670	1,930	31.4	204	89.7
	12/12/02	12.72	0.00	--	7.98	6,780	3,530	628	1,480	55.6	229	283
	MW33 20.75	03/08/95	11.16	0.00	9.73	4,900	1,400	2,000	860	<25	320	420
		06/06/95	--	--	--	--	--	--	--	--	--	--
		09/07/95	11.20	0.00	9.55	9,700	1,400	820	680	140	230	620
		12/08/95	--	--	--	13,000	1,900	1,800	800	240	280	760
04/01/96		11.00	0.00	9.75	5,200	980	<750	630	33	130	270	
06/25/96		11.05	0.00	9.70	2,700	1,030	<750	230	24.6	46.5	61.1	
09/27/96		11.13	0.00	9.76	5,150	1,180	<750	1,190	237	88.3	272	
03/28/97		11.19	0.00	9.70	--	--	--	--	--	--	--	
06/30/97		10.66	0.00	10.23	--	--	--	--	--	--	--	
09/08/97		10.48	0.00	10.41	--	--	--	--	--	--	--	
12/19/97		--	--	--	--	--	--	--	--	--	--	
03/16/98		--	--	--	--	--	--	--	--	--	--	
06/26/98		11.18	0.00	--	9.57	--	--	--	--	--	--	
09/23/98		11.90	0.00	--	8.85	--	--	--	--	--	--	
12/17/98		11.03	0.00	--	9.72	--	--	--	--	--	--	
03/31/99		10.38	0.00	--	10.37	--	--	--	--	--	--	
06/30/99		9.52	0.00	--	11.23	--	--	--	--	--	--	
12/08/99		10.97	0.00	--	9.78	--	--	--	--	--	--	
06/20/00		11.33	0.00	--	9.42	--	--	--	--	--	--	
12/19/00		Inaccessible	--	--	--	--	--	--	--	--	--	
06/15/01		12.72	2.50	--	10.16	LPH Present	--	--	--	--	--	
06/26/01		NM	--	--	--	--	--	--	--	--	--	
09/07/01		NM	0.3	--	--	LPH Present	--	--	--	--	--	
10/10/01		NM	--	--	--	--	--	--	--	--	--	
12/28/01		11.21	0.00	--	9.54	141,000	25,200	2,680	5,360	32,600	13,410	22,700
03/08/02	11.37	0.00	--	9.38	126,000	31,400	3,420	2,660	21,600	3,420	24,800	
06/24/02	11.36	0.00	--	9.39	205,000	51,700	14,000	1,610	14,200	3,770	28,900	
09/26/02	12.45	0.10	--	8.39	LPH Present	--	--	--	--	--		
12/12/02	12.34	0.00	--	8.41	--	--	--	--	--	--		
MTCA Method A Cleanup Levels						1,000 <sup>a</sup>		5	40	30	20	

Continued on page 3

TABLE 1  
GROUNDWATER ANALYTICAL RESULTS  
Tosco Site No. 5353  
600 Westlake Avenue North  
Seattle, Washington  
Page 3 of 9

Well Name	Sample Date	DTW	LPH	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X
MW34 21.42	03/08/95	11.62	0.00	10.08	6,200	1,108	480	2,400	1,500	250	1,300
	06/06/95	11.73	0.00	9.97	9,100	2,300	<750	4,200	1,000	330	1,200
	09/07/95	11.57	0.00	9.85	15,900	1,800	930	4,800	2,300	560	2,000
	12/08/95	10.92	0.00	10.50	68,000	2,900	1,600	12,000	9,200	1,200	5,500
	04/01/96	11.21	0.00	10.21	10,000	1,900	<750	5,800	580	520	1,200
	06/25/96	11.19	0.00	10.23	13,700	1,160	<750	4,190	1,110	393	1,740
	09/27/96	11.58	0.00	10.12	16,300	1,030	<750	5,010	2,520	541	1,310
	03/28/97	11.47	0.00	10.23	--	--	--	--	--	--	--
	06/30/97 <sup>NP</sup>	11.19	0.00	10.51	2,970	311	<750	1,930	15.7	271	631
	09/08/97 <sup>NP</sup>	11.74	0.00	9.96	8,380	455	<750	3,920	645	567	1,270
	12/19/97	NM	--	--	--	--	--	--	--	--	--
	03/16/98	NM	--	--	--	--	--	--	--	--	--
	06/26/98 <sup>NP</sup>	11.42	0.00	10.00	76,900	3,090	<750	13,400	11,190	2,310	9,080
	09/23/98 <sup>NP</sup>	12.23	0.00	9.19	9,040	3,000	799	3,540	243	636	1,650
	12/17/98 <sup>NP</sup>	11.35	0.00	10.07	80,960	5,470	1,380	14,200	10,800	3,110	11,800
	03/31/99 <sup>NP</sup>	10.85	0.00	10.57	33,400	1,910	<750	6,970	1,740	1,400	3,820
	06/30/99 <sup>NP</sup>	10.18	0.00	11.24	28,900	4,840	984	4,340	1,320	1,480	3,610
	12/08/99 <sup>NP</sup>	11.33	0.00	10.09	62,400	2,500	<1,360	12,900	7,440	3,240	9,210
	06/20/00 <sup>NP</sup>	11.88	0.00	9.74	25,060	<250	<750	6,360	480	2,190	3,930
	12/19/00	NM	--	--	--	--	--	--	--	--	--
	06/15/01 <sup>NP</sup>	11.85	0.00	9.57	28,860	4,780	<883	5,300	90.0	1,930	2,190
	06/26/01	NM	--	--	--	--	--	--	--	--	--
	09/07/01 <sup>NP</sup>	11.86	0.00	9.56	17,900	4,610	722	3,540	44.9	1,610	2,180
	10/10/01	NM	--	--	--	--	--	--	--	--	--
12/28/01	11.46	0.00	9.96	19,000	8,400	752	5,320	1,200	406	1,010	
03/08/02	11.70	0.00	9.72	59,200	8,550	681	7,200	8,610	2,190	8,200	
06/24/02	11.91	0.00	9.51	12,500	4,200	814	2,140	651	659	1,160	
09/26/02 <sup>b</sup>	12.80	0.00	8.62	13,800	6,270	<1,160	5,840	21.8	280	87.8	
12/12/02	12.98	0.00	8.44	14,500	11,000	681	5,130	44.7	333	224	
MW35 20.10	03/08/95	10.67	0.00	9.60	2,600	1,200	1,300	400	<25	120	83
	06/06/95	10.67	0.00	9.60	810	1,000	830	62	1.4	27	36
	09/07/95	10.87	0.00	9.43	--	--	--	--	--	--	--
	12/08/95	--	--	--	--	--	--	--	--	--	--
	04/01/96	--	--	--	--	--	--	--	--	--	--
	06/25/96	11.11	0.00	8.99	1,820	850	<750	68.2	1.11	26.7	17.6
	09/27/96	10.64	0.00	9.63	959	524	<750	38.8	0.990	10.4	6.18
	03/28/97 <sup>NP</sup>	11.28	0.00	8.99	1,370	333	<750	151	2.36	31.9	10.7
	03/28/97	11.28	0.00	8.99	1,800	<250	<750	280	2.62	49.1	8.04
	06/30/97 <sup>NP</sup>	10.19	0.00	10.08	1,900	<250	<750	348	<2.50	85	7.31
	09/08/97 <sup>NP</sup>	10.86	0.00	9.41	4,200	<250	<750	1,480	16.2	231	68.2
	12/19/97	NM	--	--	--	--	--	--	--	--	--
	03/16/98 <sup>NP</sup>	10.64	0.00	9.46	905	381	<750	410	4.24	<2.50	<5.00
	06/26/98 <sup>NP</sup>	10.65	0.00	9.45	1,300	642	<750	600	<10.0	46.1	<20.0
	09/23/98 <sup>NP</sup>	11.38	0.00	8.72	685	659	<750	243	<2.50	<2.50	<5.00
	12/17/98 <sup>NP</sup>	10.49	0.00	9.61	899	572	<750	402	<2.50	10.8	9.99
	03/31/99	Obstructed by vehicle	--	--	--	--	--	--	--	--	--
	06/30/99	Obstructed by vehicle	--	--	--	--	--	--	--	--	--
	12/08/99	Obstructed by vehicle	--	--	--	--	--	--	--	--	--
	06/20/00	Obstructed by vehicle	--	--	--	--	--	--	--	--	--
	12/19/00	Obstructed by vehicle	--	--	--	--	--	--	--	--	--
	06/15/01	NM	--	--	--	--	--	--	--	--	--
	06/26/01 <sup>NP</sup>	10.60	0.00	9.50	504	464	<750	11.3	27.5	5.52	28.4
	09/04/01 <sup>NP</sup>	10.54	0.00	9.56	263	903	<564	2.36	<0.500	<0.500	<1.00
10/10/01	NM	--	--	--	--	--	--	--	--	--	
12/28/01	10.54	0.00	9.56	691	1,180	<500	28.7	0.898	14.1	13.2	
03/08/02	10.72	0.00	9.38	638	1,100	<500	16.2	0.939	7.05	6.91	
06/24/02	Obstructed by vehicle	--	--	--	--	--	--	--	--	--	
09/26/02 <sup>b</sup>	11.90	0.00	8.20	665	1,420	<500	9.49	<2.00	1.78	<1.50	
12/12/02	Obstructed by vehicle	--	--	--	--	--	--	--	--	--	
MTCM Method A Cleanup Levels					1,000 <sup>a</sup>			5	40	30	20

Continued on page 4

TABLE 1  
GROUNDWATER ANALYTICAL RESULTS  
Tosco Site No. 5353  
600 Westlake Avenue North  
Seattle, Washington  
Page 4 of 9

Well Name	Sample Date	DTW	LPH	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X	
MW36 17.80	03/08/95	9.07	0.00	8.97	<50	560	1,200	2.6	<0.5	<0.5	<1.0	
	06/06/95	7.92	0.00	10.12	<50	<250	<750	1	<0.5	<0.5	<1.0	
	09/07/95	8.11	0.00	9.69	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	
	12/08/95	9.00	0.00	8.80	<50	610	1,200	1.1	<0.5	<0.5	<1.0	
	04/01/96	9.00	0.00	8.80	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	
	06/25/96	8.97	0.00	--	<50.0	<250	<750	0.58	0.500	<0.500	<1.00	
	09/27/96	7.53	0.00	10.51	<50.0	<250	<750	1.18	<0.500	<0.500	<1.00	
	03/28/97	9.21	0.00	8.83	<50.0	<250	<750	0.810	<0.500	<0.500	<1.00	
	06/30/97 <sup>NP</sup>	8.88	0.00	11.16	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	
	09/08/97 <sup>NP</sup>	9.21	0.00	8.83	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	
	12/19/97 <sup>NP</sup>	10.09	0.00	7.71	<50.0	<250	<750	0.606	<0.500	<0.500	<1.00	
	03/16/98 <sup>NP</sup>	9.29	0.00	8.51	56.6	287	<750	<0.500	<0.500	<0.500	<1.00	
	06/26/98 <sup>NP</sup>	8.47	0.00	9.33	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	
	09/23/98 <sup>NP</sup>	9.89	0.00	7.91	<50.0	<250	<750	0.737	<0.500	<0.500	1.13	
	12/17/98 <sup>NP</sup>	10.00	0.00	7.80	<50.0	288	<750	0.533	<0.500	<0.500	<1.00	
	03/31/99 <sup>NP</sup>	8.96	0.00	8.84	<50.0	321	<750	0.759	<0.500	<0.500	<1.00	
	06/30/99 <sup>NP</sup>	8.44	0.00	9.36	<50.0	<250	<750	1.29	<0.500	<0.500	<1.00	
	12/08/99 <sup>NP</sup>	10.05	0.00	7.75	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	
	06/20/00 <sup>NP</sup>	8.47	0.00	9.33	172	<250	<750	<0.500	0.583	1.78	11.1	
	12/19/00 <sup>NP</sup>	9.50	0.00	8.30	106	<250	<750	0.529	1.51	1.08	7.14	
	06/15/01 <sup>NP</sup>	8.00	0.00	9.80	<50.0	298	<750	0.691	0.648	0.530	1.53	
	06/25/01	NM	--	--	--	--	--	--	--	--	--	--
	09/07/01 <sup>NP</sup>	8.70	0.00	9.10	<50.0	<250	<500	0.897	<0.500	<0.500	<1.00	
	10/10/01	NM	--	--	--	--	--	--	--	--	--	--
12/28/01	9.57	0.00	8.23	<50.0	387	<500	0.773	0.748	<0.500	1.78		
03/08/02	NM	--	--	--	--	--	--	--	--	--	--	
06/24/02	NM	--	--	--	--	--	--	--	--	--	--	
09/26/02	10.16	0.00	7.64	<100	<250	<500	0.735	<2.00	<1.00	<1.50		
12/12/02	NM	--	--	--	--	--	--	--	--	--	--	
MW37 21.01	03/08/95	11.94	0.00	9.24	34	3,200	1,400	3,100	2,400	1,200	6,700	
	06/06/95	11.76	0.01	9.43	45	4,600	2,500	3,700	2,400	1,300	7,900	
	06/06/95	11.76	0.01	9.43	90	--	--	5,100	6,000	2,400	14,000	
	09/07/95	11.17	0.00	9.84	--	--	--	--	--	--	--	
	12/08/95	10.22	0.00	10.79	--	--	--	--	--	--	--	
	04/01/96	10.79	0.02	10.22	LPH Present	--	--	--	--	--	--	
	06/25/96	10.82	0.20	10.19	LPH Present	--	--	--	--	--	--	
	09/27/96	11.47	0.05	9.75	LPH Present	--	--	--	--	--	--	
	03/28/97 <sup>NP</sup>	11.14	0.25	10.40	60,100	7,570	789	1,530	2,180	1,550	7,440	
	03/28/97	11.14	0.25	10.40	287,000	45,100	<8,250	6,570	13,200	4,930	22,900	
	06/30/97	10.80	0.02	10.23	LPH Present	--	--	--	--	--	--	
	09/08/97	11.41	0.23	9.77	LPH Present	--	--	--	--	--	--	
	12/19/97	11.28	0.02	9.75	LPH Present	--	--	--	--	--	--	
	03/16/98	11.11	0.01	9.91	LPH Present	--	--	--	--	--	--	
	06/26/98	11.32	0.01	9.70	LPH Present	--	--	--	--	--	--	
	09/23/98	12.01	0.03	9.03	LPH Present	--	--	--	--	--	--	
	12/17/98	11.00	Trace	10.01	LPH Present	--	--	--	--	--	--	
	03/31/99	--	Trace	--	LPH Present	--	--	--	--	--	--	
	06/30/99	DRY	0.30	--	LPH Present	--	--	--	--	--	--	
	12/08/99	11.11	--	9.90	--	--	--	--	--	--	--	
	06/20/00	11.50	--	9.51	--	--	--	--	--	--	--	
	12/19/00	11.50	0.50	9.94	LPH Present	--	--	--	--	--	--	
	06/15/01 <sup>NP</sup>	11.35	0.03	9.68	LPH Present	--	--	--	--	--	--	
	06/26/01	NM	--	--	--	--	--	--	--	--	--	
09/07/01 <sup>NP</sup>	11.43	0.00	9.58	159,000	22,100	14,600	3,420	12,600	4,440	27,000		
10/10/01	NM	--	--	--	--	--	--	--	--	--		
12/28/01 <sup>NP</sup>	11.00	0.20	10.18	LPH Present	--	--	--	--	--	--		
03/08/02	11.61	0.40	9.74	LPH Present	--	--	--	--	--	--		
06/24/02	Inaccessible	--	--	--	--	--	--	--	--	--		
09/26/02	12.38	0.00	8.63	--	--	--	--	--	--	--		
12/12/02	12.35	0.00	8.66	--	--	--	--	--	--	--		
MTCA Method A Cleanup Levels					1,000 <sup>a</sup>	5	40	30	20			

Continued on page 5

TABLE 1  
GROUNDWATER ANALYTICAL RESULTS  
Tosco Site No. 5353  
600 Westlake Avenue North  
Seattle, Washington  
Page 5 of 9

Well Name	Sample Date	DTW	LPH	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X
MW38 16.52	03/08/95	--	--	--	--	--	--	--	--	--	--
	06/06/95	--	--	--	--	--	--	--	--	--	--
	09/07/95	--	--	--	--	--	--	--	--	--	--
	12/08/95	--	--	--	--	--	--	--	--	--	--
	04/01/96	--	--	--	--	--	--	--	--	--	--
	06/25/96	--	--	--	--	--	--	--	--	--	--
	09/27/96	--	--	--	--	--	--	--	--	--	--
	03/28/97	9.23	0.00	7.60	<50	<250	<750	<0.500	<0.500	<0.500	<1.00
	06/30/97	--	--	--	--	--	--	--	--	--	--
	09/08/97	--	--	--	--	--	--	--	--	--	--
	12/19/97	NM	--	--	--	--	--	--	--	--	--
	03/16/98	NM	--	--	--	--	--	--	--	--	--
	06/26/98	NM	--	--	--	--	--	--	--	--	--
	09/23/98	NM	--	--	--	--	--	--	--	--	--
	12/17/98	NM	--	--	--	--	--	--	--	--	--
	03/31/99	NM	--	--	--	--	--	--	--	--	--
	06/30/99	NM	--	--	--	--	--	--	--	--	--
	12/08/99	NM	--	--	--	--	--	--	--	--	--
	06/20/00	NM	--	--	--	--	--	--	--	--	--
	12/19/00	NM	--	--	--	--	--	--	--	--	--
	06/15/01	NM	--	--	--	--	--	--	--	--	--
	06/26/01	NM	--	--	--	--	--	--	--	--	--
	09/07/01	NM	--	--	--	--	--	--	--	--	--
10/10/01	NM	--	--	--	--	--	--	--	--	--	
12/28/01	8.95	0.00	7.56	<50.0	403	<500	0.636	1.33	0.554	2.59	
03/08/02	NM	--	--	--	--	--	--	--	--	--	
06/24/02	NM	--	--	--	--	--	--	--	--	--	
09/26/02 <sup>b</sup>	8.87	0.00	7.65	<100	282	<500	0.743	<2.00	<1.00	<1.50	
12/12/02	NM	--	--	--	--	--	--	--	--	--	
MW40 20.89	03/08/95	10.98	0.00	10.14	960	2,600	2,600	11	<0.5	11	<1.0
	06/06/95	11.18	0.00	9.94	1,500	2,300	1,600	6.8	4.3	4.1	2.1
	09/07/95	11.08	0.00	9.81	650	13,000	66,000	11	0.91	0.57	<1.0
	12/08/95	10.30	0.00	10.59	500	1,400	4,800	2.7	3	<0.5	<1.0
	04/01/96	10.56	0.00	10.33	520	3,200	13,000	1.2	<0.5	0.55	<1.0
	06/25/96	10.69	0.00	10.20	500	2,700	8,460	<0.500	9.82	<0.500	<1.00
	09/27/96	10.95	0.00	10.17	602	3,550	9,860	0.604	41.1	0.525	<1.0
	03/28/97	10.92	0.00	10.20	--	--	--	--	--	--	--
	06/30/97	--	--	--	--	--	--	--	--	--	--
	09/08/97	--	--	--	--	--	--	--	--	--	--
	12/19/97 <sup>NP</sup>	11.11	0.00	9.78	325	3,260	12,600	<0.500	0.504	0.663	2.44
	03/16/98	NM	--	--	--	--	--	--	--	--	--
	06/26/98	NM	--	--	--	--	--	--	--	--	--
	09/23/98	NM	--	--	--	--	--	--	--	--	--
	12/17/98 <sup>NP</sup>	10.86	0.00	10.03	384	2,840	9,620	<0.500	<0.500	<0.500	<1.00
	03/31/99	NM	--	--	--	--	--	--	--	--	--
	06/30/99	NM	--	--	--	--	--	--	--	--	--
	12/08/99	NM	--	--	--	--	--	--	--	--	--
	06/20/00	NM	--	--	--	--	--	--	--	--	--
	12/09/00	NM	--	--	--	--	--	--	--	--	--
	12/19/00	NM	--	--	--	--	--	--	--	--	--
	06/15/01	NM	--	--	--	--	--	--	--	--	--
	06/26/01	NM	--	--	--	--	--	--	--	--	--
09/07/01	NM	--	--	--	--	--	--	--	--	--	
10/10/01	NM	--	--	--	--	--	--	--	--	--	
12/28/01	10.75	0.00	10.14	449	4,000	5,090	2.12	2.19	1.38	3.88	
03/08/02	NM	--	--	--	--	--	--	--	--	--	
06/24/02	NM	--	--	--	--	--	--	--	--	--	
09/26/02	12.69	0.00	8.20	331	2,810	3,470	1.92	<2.00	<1.00	<1.50	
12/12/02	NM	--	--	--	--	--	--	--	--	--	
MTCA Method A Cleanup Levels					1,000 <sup>a</sup>			5	40	30	20

Continued on page 6

TABLE 1  
GROUNDWATER ANALYTICAL RESULTS  
Tosco Site No. 5353  
600 Westlake Avenue North  
Seattle, Washington  
Page 6 of 9

Well Name	Sample Date	DTW	LPH	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X
MW41 27.00	03/08/95	14.72	--	12.48	<50	<250	<750	1.6	<0.5	<0.5	<1.0
	06/06/95	15.02	--	12.18	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	09/07/95	15.00	--	12.00	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	12/08/95	16.30	--	10.70	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	04/01/96	15.02	--	11.98	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	06/25/96	15.07	--	11.93	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	09/27/96	15.42	0.00	11.78	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	03/28/97	15.27	0.00	11.93	--	--	--	--	--	--	--
	06/30/97	--	--	--	--	--	--	--	--	--	--
	09/08/97	--	--	--	--	--	--	--	--	--	--
	12/19/97	NM	--	--	--	--	--	--	--	--	--
	03/16/98	NM	--	--	--	--	--	--	--	--	--
	06/26/98	NM	--	--	--	--	--	--	--	--	--
	09/23/98	NM	--	--	--	--	--	--	--	--	--
	12/17/98	NM	--	--	--	--	--	--	--	--	--
	03/31/99	NM	--	--	--	--	--	--	--	--	--
	06/30/99	NM	--	--	--	--	--	--	--	--	--
	12/08/99	NM	--	--	--	--	--	--	--	--	--
	06/20/00	NM	--	--	--	--	--	--	--	--	--
	12/19/00	NM	--	--	--	--	--	--	--	--	--
	06/15/01	NM	--	--	--	--	--	--	--	--	--
	06/26/01	NM	--	--	--	--	--	--	--	--	--
	09/07/01	NM	--	--	--	--	--	--	--	--	--
	10/10/01	NM	--	--	--	--	--	--	--	--	--
12/28/01	NM	--	--	--	--	--	--	--	--	--	
03/08/02	NM	--	--	--	--	--	--	--	--	--	
06/24/02	NM	--	--	--	--	--	--	--	--	--	
09/26/02	NM	--	--	--	--	--	--	--	--	--	
12/12/02	NM	--	--	--	--	--	--	--	--	--	
MW42 20.34	03/08/95	9.45	0.00	10.91	130	670	1,200	780	<25	<25	<50
	06/06/95	9.37	0.00	10.89	120	920	1,500	500	<0.56	<0.5	<1.0
	09/07/95	9.50	0.00	10.84	3,000	780	1,200	210	4.1	42	230
	12/08/95	8.95	0.00	11.39	200	1,300	1,800	380	<2.0	<2.0	<4.0
	04/01/96	9.03	0.00	11.31	180	650	<750	290	0.52	<0.5	<1.0
	06/25/96	9.07	0.00	11.27	150	720	<750	150	<0.500	<0.500	<1.00
	09/27/96	9.12	0.00	11.24	<250	534	<750	228	<2.50	<2.50	<5.00
	03/28/97	9.09	0.00	11.27	--	--	--	--	--	--	--
	06/30/97	8.92	0.00	11.44	--	--	--	--	--	--	--
	09/08/97	9.57	0.00	10.79	--	--	--	--	--	--	--
	12/19/97	NM	--	--	--	--	--	--	--	--	--
	03/16/98	9.53	0.00	10.81	--	--	--	--	--	--	--
	06/26/98	9.51	0.00	10.83	--	--	--	--	--	--	--
	09/23/98	9.96	0.00	10.38	--	--	--	--	--	--	--
	12/17/98	9.10	0.00	11.24	--	--	--	--	--	--	--
	03/31/99	9.00	0.00	11.34	--	--	--	--	--	--	--
	06/30/99	8.60	0.00	11.74	--	--	--	--	--	--	--
	12/08/99	8.00	0.00	12.34	--	--	--	--	--	--	--
	06/20/00	NM	--	--	--	--	--	--	--	--	--
	12/19/00	NM	--	--	--	--	--	--	--	--	--
	06/15/01	9.41	0.00	10.93	--	--	--	--	--	--	--
	06/26/01	NM	--	--	--	--	--	--	--	--	--
	09/07/01	9.66	0.00	10.68	--	--	--	--	--	--	--
	10/10/01	NM	--	--	--	--	--	--	--	--	--
12/28/01	10.28	0.00	10.06	--	--	--	--	--	--	--	
03/08/02	9.75	0.00	10.59	--	--	--	--	--	--	--	
06/24/02	NM	--	--	--	--	--	--	--	--	--	
09/26/02	10.81	0.00	9.53	--	--	--	--	--	--	--	
12/12/02	10.89	0.00	9.45	--	--	--	--	--	--	--	
MTCA Method A Cleanup Levels					1,000 <sup>a</sup>	5	40	30	20		

Continued on page 7



TABLE 1  
GROUNDWATER ANALYTICAL RESULTS  
Tosco Site No. 5353  
600 Westlake Avenue North  
Seattle, Washington  
Page 7 of 9

Well Name	Sample Date	DTW	LPH	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X
MW43 21.04	03/08/95	11.35	0.00	9.94	<50	650	2,400	125	<0.5	<0.5	<1.0
	06/06/95	11.45	0.00	9.84	<50	890	1,600	8.2	<0.5	<0.5	<1.0
	09/07/95	11.14	0.00	9.90	<50	<250	850	10	<0.5	<0.5	<1.0
	12/08/95	10.85	0.00	10.19	<50	980	3,100	137	<0.5	<0.5	<1.0
	04/01/96	10.98	0.00	10.06	<50	300	<750	4.5	<0.5	<0.5	<1.0
	06/25/96	11.06	0.00	9.98	<50.0	370	<750	2.57	<0.500	<0.500	<1.00
	09/27/96	11.33	0.00	9.96	<50.0	339	<750	4.4	<0.5	<0.500	<1.00
	03/28/97	11.13	0.00	9.98	<50.0	<250	<750	5.88	0.884	<0.500	2.47
	06/30/97 <sup>NP</sup>	7.08	0.00	14.21	<50.0	<250	<750	59.2	<0.500	<0.500	<1.00
	09/08/97 <sup>NP</sup>	11.46	0.00	9.83	83	<250	<750	35.5	<0.500	2.10	3.08
	12/19/97	NM	--	--	--	--	--	--	--	--	--
	03/16/98 <sup>NP</sup>	11.09	0.00	9.95	76.3	408	<750	26.5	<0.500	<0.500	<1.00
	06/26/98 <sup>NP</sup>	11.26	0.00	9.78	<50.0	346	<750	68.6	<0.500	<0.500	<1.00
	09/23/98 <sup>NP</sup>	11.75	0.00	9.29	<50.0	267	<750	9.05	<0.500	<0.500	<1.00
	12/17/98 <sup>NP</sup>	11.07	0.00	9.97	<50.0	<250	<750	33.0	<0.500	<0.500	<1.00
	03/31/99 <sup>NP</sup>	10.97	0.00	10.07	<50.0	267	<750	9.84	<0.500	0.782	2.47
	06/30/99 <sup>NP</sup>	9.97	0.00	11.07	146	253	<750	28.2	7.47	2.95	17.5
	12/08/99 <sup>NP</sup>	11.05	0.00	9.98	<50.0	<250	<750	20.5	<0.500	<0.500	<1.00
	06/20/00 <sup>NP</sup>	11.40	0.00	9.64	<50.0	<250	<750	3.79	<0.500	<0.500	<1.00
	12/19/00 <sup>NP</sup>	11.40	0.00	9.64	55.9	253	<749	2.97	0.948	0.730	4.78
	06/15/01 <sup>NP</sup>	11.32	0.00	9.72	<50.0	405	<750	0.670	<0.500	<0.500	1.22
	06/26/01	NM	--	--	--	--	--	--	--	--	--
	09/07/01 <sup>NP</sup>	11.46	0.00	9.58	<50.0	<293	<587	<0.500	<0.500	<0.500	<1.00
	10/10/01	NM	--	--	--	--	--	--	--	--	--
	12/28/01	11.17	0.00	9.87	52.0	487	<500	5.61	1.18	0.558	3.34
	03/08/02	NM	--	--	--	--	--	--	--	--	--
	06/24/02	NM	--	--	--	--	--	--	--	--	--
09/26/02 <sup>b</sup>	12.28	0.00	8.76	<100	303	<500	0.669	<2.00	<1.00	<1.50	
12/12/02	NM	--	--	--	--	--	--	--	--	--	
MW44 18.73	03/08/95	9.44	0.00	10.46	<50	290	940	<0.5	<0.5	<0.5	<1.0
	06/06/95	8.28	0.00	10.62	<50	<250	820	<0.5	<0.5	<0.5	1.6
	09/07/95	7.94	0.00	10.79	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	12/08/95	8.09	0.00	10.64	<50	520	2,600	<0.5	<0.5	<0.5	<1.0
	04/01/96	7.98	0.00	10.75	<50	<250	<750	<0.5	<0.5	<0.5	<1.0
	06/25/96	7.90	0.00	10.83	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	09/27/96	8.28	0.00	10.59	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	03/28/97	8.07	0.00	10.83	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	06/30/97 <sup>NP</sup>	7.84	0.00	11.06	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	09/08/97 <sup>NP</sup>	8.65	0.00	10.25	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	12/19/97 <sup>NP</sup>	8.51	0.00	10.22	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	03/16/98 <sup>NP</sup>	8.43	0.00	10.30	60.0	310	<750	<0.500	<0.500	<0.500	<1.00
	06/26/98 <sup>NP</sup>	8.37	0.00	10.36	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	09/23/98 <sup>NP</sup>	9.30	0.00	9.43	<50.0	343	<750	<0.500	<0.500	<0.500	<1.00
	12/17/98 <sup>NP</sup>	8.10	0.00	10.63	<50.0	271	<750	<0.500	<0.500	<0.500	<1.00
	03/31/99 <sup>NP</sup>	8.18	0.00	10.55	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	06/30/99 <sup>NP</sup>	8.03	0.00	10.70	<50.0	393	<750	<0.500	0.619	<0.500	1.21
	12/08/99 <sup>NP</sup>	8.52	0.00	10.21	<50.0	281	<750	<0.500	<0.500	<0.500	<1.00
	06/20/00 <sup>NP</sup>	9.53	0.00	9.20	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	12/19/00 <sup>NP</sup>	9.20	0.00	9.53	301	330	<750	<0.500	1.64	2.76	22.1
	06/15/01 <sup>NP</sup>	8.44	0.00	10.29	<50.0	468	<841	<0.500	<0.500	<0.500	<1.00
	06/26/01	NM	--	--	--	--	--	--	--	--	--
	09/07/01 <sup>NP</sup>	9.48	0.00	9.25	10,300	4,250	849	1,050	6.97	9.45	51.0
	10/10/01	NM	--	--	--	--	--	--	--	--	--
	12/28/01	9.31	0.00	9.42	90.6	823	<500	10.9	1.40	0.644	4.04
	03/08/02	NM	--	--	--	--	--	--	--	--	--
	06/24/02	NM	--	--	--	--	--	--	--	--	--
09/26/02 <sup>b</sup>	10.79	0.00	7.94	<100	1,600	588	14.2	<2.00	<1.00	<1.50	
12/12/02	NM	--	--	--	--	--	--	--	--	--	
MTCA Method A Cleanup Levels						1,000 <sup>a</sup>		5	40	30	20

Continued on page 8

TABLE 1  
GROUNDWATER ANALYTICAL RESULTS  
Tosco Site No. 5353  
600 Westlake Avenue North  
Seattle, Washington  
Page 8 of 9

Well Name	Sample Date	DTW	LPH	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X
MW45	09/07/01 <sup>NP</sup>	9.80	0.00	--	<50.0	375	<606	<0.500	<0.500	<0.500	<1.00
NE	10/10/01	NM	--	--	--	--	--	--	--	--	--
	12/28/01	9.03	0.00	--	17,300	2,210	587	2,130	73.4	1,330	2,970
	03/08/02	9.12	0.00	--	15,500	2,380	688	2,090	38.4	1,190	1,650
	06/24/02	9.00	0.00	--	5,100	1,920	761	1,330	6.39	461	235
	09/26/02 <sup>b</sup>	10.20	0.00	--	2,420	1,190	547	394	3.41	204	106
	12/12/02	Obstructed by vehicle		--	--	--	--	--	--	--	--
MW46	03/08/95	8.00	0.00	8.91	<50	720	3,600	<0.5	<0.5	<0.5	<1.0
16.91	06/06/95	7.30	0.00	10.01	<50	<250	1,400	<0.5	<0.5	<0.5	<1.0
	09/07/95	7.80	0.00	8.93	<50	710	5,600	<0.5	<0.5	<0.5	<1.0
	12/08/95	8.32	0.00	8.59	<50	1,400	14,000	<0.5	<0.5	<0.5	<1.0
	04/01/96	7.04	0.00	9.87	<50	<400	2,800	<0.5	<0.5	<0.5	<1.0
	06/25/96	7.85	0.00	9.06	<50.0	440	2,090	<0.500	<0.500	<0.500	<1.00
	09/27/96	7.57	0.00	9.74	<50.0	267	<750	0.518	<0.500	<0.500	<1.00
	03/28/97	7.25	0.00	10.06	<50.0	<250	<750	<0.500	1.25	<0.500	2.06
	06/30/97	7.12	0.00	10.19	--	--	--	--	--	--	--
	09/08/97	8.82	0.00	8.49	--	--	--	--	--	--	--
	12/19/97 <sup>NP</sup>	9.40	0.00	7.51	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	03/16/98	NM	--	--	--	--	--	--	--	--	--
	06/26/98	NM	--	--	--	--	--	--	--	--	--
	09/23/98	NM	--	--	--	--	--	--	--	--	--
	12/17/98 <sup>NP</sup>	9.20	0.00	7.71	<50.0	354	<750	<0.500	<0.500	<0.500	<1.00
	03/31/99	NM	--	--	--	--	--	--	--	--	--
	06/30/99	NM	--	--	--	--	--	--	--	--	--
	12/08/99	NM	--	--	--	--	--	--	--	--	--
	06/20/00	NM	--	--	--	--	--	--	--	--	--
	12/19/00*	12.70	0.00	4.21	226	277	<750	<0.500	2.18	2.53	18.0
	06/15/01 <sup>NP</sup>	7.19	0.00	9.72	<50.0	295	<750	<0.500	<0.500	<0.500	1.39
	06/26/01	NM	--	--	--	--	--	--	--	--	--
	09/07/01	NM	--	--	--	--	--	--	--	--	--
	10/10/01	NM	--	--	--	--	--	--	--	--	--
	12/28/01	Covered by asphalt		--	--	--	--	--	--	--	--
	03/08/02	NM	--	--	--	--	--	--	--	--	--
	06/24/02	NM	--	--	--	--	--	--	--	--	--
	09/26/02	Unable to locate		--	--	--	--	--	--	--	--
	12/12/02	NM	--	--	--	--	--	--	--	--	--
MW47	03/08/95	10.88	0.00	9.16	<50	330	1,600	5.9	<0.5	<0.5	<1.0
19.83	06/06/95	10.91	0.00	9.13	70	380	780	15	0.59	<0.5	2.3
	09/07/95	10.76	0.00	9.07	<50	260	<750	1.7	<0.5	<0.5	<1.0
	12/08/95	10.40	0.00	9.43	740	580	2,000	<0.5	<0.5	<0.5	<1.0
	04/01/96	10.67	0.00	9.16	<50	<250	<750	4.4	<0.5	<0.5	<1.0
	06/25/96	10.71	0.00	9.12	110	400	<750	14.4	<0.500	<0.500	<1.00
	09/27/96	10.85	0.00	9.19	<50.0	<250	<750	4.34	<0.500	<0.500	<1.00
	03/28/97 <sup>NP</sup>	10.92	0.00	9.12	64.5	<250	<750	7.61	<0.500	<0.500	1.57
	03/28/97	10.92	0.00	9.12	177	<250	<750	52.5	<0.500	<0.500	<1.00
	06/30/97	--	--	--	--	--	--	--	--	--	--
	09/08/97	--	--	--	--	--	--	--	--	--	--
	12/19/97	--	--	--	--	--	--	--	--	--	--
	03/16/98	--	--	--	--	--	--	--	--	--	--
	06/26/98 <sup>NP</sup>	10.78	0.00	9.05	<50.0	356	<750	27.3	<0.500	<0.500	<1.00
	09/23/98	--	--	--	--	--	--	--	--	--	--
	12/17/98 <sup>NP</sup>	10.61	0.00	9.22	<50.0	<250	<750	3.34	<0.500	<0.500	1.12
	03/31/99	9.65	0.00	10.18	--	--	--	--	--	--	--
	06/30/99	--	0.00	--	--	--	--	--	--	--	--
	12/08/99	--	--	--	--	--	--	--	--	--	--
	06/20/00 <sup>NP</sup>	10.94	0.00	8.89	<50.0	<250	<750	<1.30	<0.500	<0.500	<1.00
	12/19/00 <sup>NP</sup>	11.20	0.00	8.63	1,310	357	<750	<0.500	5.10	10.6	77.3
	06/15/01	10.98	0.00	8.85	<50.0	591	<952	0.709	0.504	<0.500	1.18
	06/26/01	NM	--	--	--	--	--	--	--	--	--
	09/07/01 <sup>NP</sup>	11.14	0.00	8.69	<50.0	356	<500	<0.500	<0.500	<0.500	<1.00
	10/10/01	NM	--	--	--	--	--	--	--	--	--
	12/28/01	10.90	0.00	8.93	181	542	<500	7.64	1.49	4.79	37.6
	03/08/02	NM	--	--	--	--	--	--	--	--	--
	06/24/02	NM	--	--	--	--	--	--	--	--	--
	09/26/02 <sup>b</sup>	11.85	0.00	7.98	106	747	<500	2.36	<2.00	<1.00	<1.50
	12/12/02	NM	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Levels						1,000 <sup>a</sup>	5	40	30	20	

Continued on page 9

TABLE 1  
GROUNDWATER ANALYTICAL RESULTS  
Tosco Site No. 5353  
600 Westlake Avenue North  
Seattle, Washington  
Page 9 of 9

Well Name	Sample Date	DTW	LPH	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X
MW50 NE	10/10/01	11.11	0.00	--	8,870	2,200	<606	674	221	392	778
	12/28/01	10.45	0.00	--	23,200	3,480	<500	1,630	3,690	991	4,480
	03/08/02	Obstructed by vehicle	--	--	--	--	--	--	--	--	--
	06/24/02	10.84	0.00	--	8,290	1,970	556	414	22.9	314	2,010
	09/26/02	Obstructed by vehicle	--	--	--	--	--	--	--	--	--
	12/12/02	Obstructed by vehicle	--	--	--	--	--	--	--	--	--
MW51 NE	10/10/01	11.88	0.00	--	671	11,700	2,160	10.1	10.4	7.75	16.6
	12/28/01	11.20	0.00	--	831	2,170	3,100	37.0	78.6	30.4	81.2
	03/08/02	11.38	0.00	--	102	2,350	1,610	6.22	5.89	3.84	10.4
	06/24/02	11.60	0.00	--	57.7	2,650	1,730	1.28	1.42	0.699	2.51
	09/26/02 <sup>b</sup>	12.18	0.00	--	<100	1,660	875	0.848	<2.00	<1.00	<1.50
	12/12/02	12.28	0.00	--	<50.0	2,050	781	<0.500	<0.500	<0.500	<1.00
MW52 NE	10/10/01	10.79	0.00	--	13,400	1,460	<582	1,160	<10.0	827	793
	12/28/01	10.22	0.00	--	7,800	1,890	895	834	5.87	509	479
	03/08/02	10.42	0.00	--	10,100	2,790	<602	814	6.30	602	357
	06/24/02	10.58	0.00	--	9,820	2,810	640	1,260	<25.0	787	448
	09/26/02 <sup>b</sup>	11.51	0.00	--	6,600	3,530	<500	843	21.7	600	284
	12/12/02	11.61	0.00	--	1,178	7,950	638	120	0.822	73.9	7.30
<b>MTCA Method A Cleanup Levels</b>					1,000 <sup>a</sup>			5	40	30	20

**EXPLANATION:**

All concentrations are in ug/L (ppb).

Wellhead elevations were taken from prior consultant's reports.

DTW = Depth to water in feet below top of casing except where noted in prior reports

LPH = Liquid-phase petroleum hydrocarbon thickness in feet

GW Elev. = Groundwater elevation relative to DTW data; corrected for LPH where applicable using a specific gravity of 0.85

TPH-G = Total Petroleum Hydrocarbons as Gasoline by Ecology Method NWTPH-Gx

TPH-D and TPH-O = Total Petroleum Hydrocarbons as Diesel and as Oil, respectively, by Ecology Method NWTPH-Dx

B = Benzene; T = Toluene; E = Ethylbenzene; X = Total Xylenes

BTEX = Aromatic compounds by EPA Method 8021B

< = Less than the stated laboratory reporting limit

NE = Not Established; NM = Not Measured; -- = Not Analyzed or Sampled

<sup>NP</sup> Not Purged

<sup>a</sup> Total Petroleum Hydrocarbons

<sup>b</sup> TPH-D & TPH-O did not resemble chromatogram used for quantitation.

Shaded values equal or exceed MTCA Method A Cleanup Levels.

Data collected before 12/19/97 were taken from prior consultants.

\*MW46 identified as MW9 on chain of custody and official laboratory report

\*\*SMW3 identified as SMW2 on chain of custody and official laboratory report

## CASE NARRATIVE for B2L0357.

Client: ERI.  
Project Manager: John Meyer  
Project Name: TOSCO #5353  
Project Number: 1020

### 1.0 DESCRIPTION OF CASE

Four (4) Water samples were submitted for the analysis of

- Gas Range Hydrocarbons and BTEX compounds using NWTPH-Gx and EPA 8021B
- Diesel and Residual Range Hydrocarbons using NWTPH-Dx

### 2.0 COMMENTS ON SAMPLE RECEIPT

The samples were received and logged in 13<sup>th</sup> December 2002 at a temperature of 3.4°C. All sample containers were in tact and correctly preserved.

### 3.0 PREPARATION AND ANALYSIS

*Gas Range Hydrocarbons and BTEX compounds using NWTPH-Gx and EPA 8021B*

The samples were initially extracted into analytical batch 2L24003 for which the Benzene in three samples was outside calibration range; the samples were re-extracted and re-analyzed using a more appropriate dilution. Unfortunately sample MW34 was not re-analyzed at this time. Sample MW34 was finally re-analyzed at the correct dilution in analytical batch 3A24002; the sample was analyzed outside the method established hold time. Both the initial and re-analyzed results for sample MW34 have been reported. The results match well. No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

---

Amar Gill  
Project Manager  
North Creek Analytical

CASE NARRATIVE for B2L0357.

*Diesel and Residual Range Hydrocarbons using NWTPH-Dx*

No additional anomalies or discrepancies were associated with this analysis other than those already qualified in the data.

"I certify that this data package is in compliance with the Contract both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature."

---

Amar Gill  
Project Manager  
North Creek Analytical



**Seattle** 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244  
425.420.9200 fax 425.420.9210  
**Spokane** East 11115 Montgomery, Suite B, Spokane, WA 99206-4776  
509.924.9200 fax 509.924.9290  
**Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132  
503.906.9200 fax 503.906.9210  
**Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711  
541.383.9310 fax 541.382.7588  
**Anchorage** 3209 Denali Street, Anchorage, AK 99503  
907.334.9200 fax 907.334.9210

24 January 2003

John Meyer  
ERI  
815 Industry Dr  
Tukwila, WA/USA 98188  
RE: TOSCO #5353

Enclosed are **amended** results of analyses for samples received by the laboratory on 12/13/02 16:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Amar Gill  
Project Manager



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244  
 425.420.9200 fax 425.420.9210  
 Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776  
 509.924.9200 fax 509.924.9290  
 Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132  
 503.906.9200 fax 503.906.9210  
 Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711  
 541.383.9310 fax 541.382.7588  
 Anchorage 3209 Denali Street, Anchorage, AK 99503  
 907.334.9200 fax 907.334.9210

ERI  
 815 Industry Dr  
 Tukwila WA/USA, 98188

Project: TOSCO #5353  
 Project Number: 1020  
 Project Manager: John Meyer

**Amended Report**  
 Issued: 01/24/03 16:49

**ANALYTICAL REPORT FOR SAMPLES - Amended**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW32A	B2L0357-01	Water	12/12/02 12:00	12/13/02 16:20
MW34	B2L0357-02	Water	12/12/02 12:00	12/13/02 16:20
MW51	B2L0357-03	Water	12/12/02 12:00	12/13/02 16:20
MW52	B2L0357-04	Water	12/12/02 11:00	12/13/02 16:20

North Creek Analytical - Bothell

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

Amar Gill, Project Manager

North Creek Analytical, Inc.  
 Environmental Laboratory Network



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244  
 425.420.9200 fax 425.420.9210  
 Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776  
 509.924.9200 fax 509.924.9290  
 Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132  
 503.906.9200 fax 503.906.9210  
 Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711  
 541.383.9310 fax 541.382.7588  
 Anchorage 3209 Denali Street, Anchorage, AK 99503  
 907.334.9200 fax 907.334.9210

ERI  
 815 Industry Dr  
 Tukwila WA/USA, 98188

Project: TOSCO #5353  
 Project Number: 1020  
 Project Manager: John Meyer

Amended Report  
 Issued: 01/24/03 16:49

**Volatile Petroleum Products and BTEX by NWTPH-Gx and EPA 8021B**  
**North Creek Analytical - Bothell**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW32A (B2L0357-01) Water</b> Sampled: 12/12/02 12:00 Received: 12/13/02 16:20									
Gasoline Range Hydrocarbons	6750	500	ug/l	10	2L24003	12/24/02	12/24/02	NWTPH-Gx/8021B	
Toluene	55.6	5.00	"	"	"	"	"	"	
Ethylbenzene	229	5.00	"	"	"	"	"	"	
Xylenes (total)	283	10.0	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	123 %	57-125			"	"	"	"	
Surrogate: 4-BFB (PID)	110 %	62-120			"	"	"	"	
<b>MW32A (B2L0357-01RE1) Water</b> Sampled: 12/12/02 12:00 Received: 12/13/02 16:20									
Benzene	1450	25.0	ug/l	50	2L26003	12/24/02	12/26/02	NWTPH-Gx/8021B	
Surrogate: 4-BFB (PID)	101 %	62-120			"	"	"	"	
<b>MW34 (B2L0357-02) Water</b> Sampled: 12/12/02 12:00 Received: 12/13/02 16:20									
Gasoline Range Hydrocarbons	14500	1250	ug/l	25	2L24003	12/24/02	12/24/02	NWTPH-Gx/8021B	
Benzene	5410	12.5	"	"	"	"	"	"	E
Toluene	44.7	12.5	"	"	"	"	"	"	
Ethylbenzene	333	12.5	"	"	"	"	"	"	
Xylenes (total)	224	25.0	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	107 %	57-125			"	"	"	"	
Surrogate: 4-BFB (PID)	102 %	62-120			"	"	"	"	
<b>MW34 (B2L0357-02RE1) Water</b> Sampled: 12/12/02 12:00 Received: 12/13/02 16:20 <span style="float: right;">I-02, X</span>									
Benzene	5130	50.0	ug/l	100	3A24002	12/24/02	01/24/03	NWTPH-Gx/8021B	
Surrogate: 4-BFB (PID)	92.3 %	62-120			"	"	"	"	
<b>MW51 (B2L0357-03) Water</b> Sampled: 12/12/02 12:00 Received: 12/13/02 16:20									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	2L24003	12/24/02	12/24/02	NWTPH-Gx/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	93.3 %	57-125			"	"	"	"	
Surrogate: 4-BFB (PID)	99.8 %	62-120			"	"	"	"	

North Creek Analytical - Bothell

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

Amar Gill, Project Manager

North Creek Analytical, Inc.  
 Environmental Laboratory Network





Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244  
 425.420.9200 fax 425.420.9210  
 Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776  
 509.924.9200 fax 509.924.9290  
 Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132  
 503.906.9200 fax 503.906.9210  
 Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711  
 541.383.9310 fax 541.382.7588  
 Anchorage 3209 Denall Street, Anchorage, AK 99503  
 907.334.9200 fax 907.334.9210

ERI 815 Industry Dr Tukwila WA/USA, 98188	Project: TOSCO #5353 Project Number: 1020 Project Manager: John Meyer	Amended Report Issued: 01/24/03 16:49
---	---	--

**Volatile Petroleum Products and BTEX by NWTPH-Gx and EPA 8021B  
 North Creek Analytical - Bothell**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW52 (B2L0357-04) Water</b> Sampled: 12/12/02 11:00 Received: 12/13/02 16:20									
Gasoline Range Hydrocarbons	1170	50.0	ug/l	1	2L24003	12/24/02	12/24/02	NWTPH-Gx/8021B	
Toluene	0.822	0.500	"	"	"	"	"	"	
Ethylbenzene	73.9	0.500	"	"	"	"	"	"	
Xylenes (total)	7.30	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	168 %	57-125			"	"	"	"	S-04
Surrogate: 4-BFB (PID)	127 %	62-120			"	"	"	"	S-04
<b>MW52 (B2L0357-04RE1) Water</b> Sampled: 12/12/02 11:00 Received: 12/13/02 16:20									
Benzene	120	2.50	ug/l	5	2L26003	12/24/02	12/26/02	NWTPH-Gx/8021B	
Surrogate: 4-BFB (PID)	106 %	62-120			"	"	"	"	

North Creek Analytical - Bothell

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

Amar Gill, Project Manager

North Creek Analytical, Inc.  
 Environmental Laboratory Network



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244  
 425.420.9200 fax 425.420.9210  
 Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776  
 509.924.9200 fax 509.924.9290  
 Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132  
 503.906.9200 fax 503.906.9210  
 Bend 20332 Emplre Avenue, Suite F-1, Bend, OR 97701-5711  
 541.383.9310 fax 541.382.7588  
 Anchorage 3209 Denali Street, Anchorage, AK 99503  
 907.334.9200 fax 907.334.9210

ERI  
 815 Industry Dr  
 Tukwila WA/USA, 98188

Project: TOSCO #5353  
 Project Number: 1020  
 Project Manager: John Meyer

**Amended Report**  
 Issued: 01/24/03 16:49

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW32A (B2L0357-01) Water Sampled: 12/12/02 12:00 Received: 12/13/02 16:20</b>									
Diesel Range Hydrocarbons	3.53	0.250	mg/l	1	2L19008	12/19/02	12/20/02	NWTPH-Dx	
Lube Oil Range Hydrocarbons	0.528	0.500	"	"	"	"	"	"	
Surrogate: 2-FBP	100 %	50-150			"	"	"	"	
Surrogate: Octacosane	84.4 %	50-150			"	"	"	"	
<b>MW34 (B2L0357-02) Water Sampled: 12/12/02 12:00 Received: 12/13/02 16:20</b>									
Diesel Range Hydrocarbons	11.0	1.25	mg/l	5	2L19008	12/19/02	12/21/02	NWTPH-Dx	
Lube Oil Range Hydrocarbons	0.681	0.500	"	1	"	"	12/20/02	"	
Surrogate: 2-FBP	82.6 %	50-150			"	"	12/21/02	"	
Surrogate: Octacosane	90.7 %	50-150			"	"	12/20/02	"	
<b>MW51 (B2L0357-03) Water Sampled: 12/12/02 12:00 Received: 12/13/02 16:20</b>									
Diesel Range Hydrocarbons	2.05	0.250	mg/l	1	2L19008	12/19/02	12/20/02	NWTPH-Dx	
Lube Oil Range Hydrocarbons	0.781	0.500	"	"	"	"	"	"	
Surrogate: 2-FBP	80.4 %	50-150			"	"	"	"	
Surrogate: Octacosane	83.6 %	50-150			"	"	"	"	
<b>MW52 (B2L0357-04) Water Sampled: 12/12/02 11:00 Received: 12/13/02 16:20</b>									
Diesel Range Hydrocarbons	7.35	0.500	mg/l	2	2L19008	12/19/02	12/21/02	NWTPH-Dx	
Lube Oil Range Hydrocarbons	0.638	0.500	"	1	"	"	12/20/02	"	
Surrogate: 2-FBP	109 %	50-150			"	"	12/21/02	"	
Surrogate: Octacosane	83.2 %	50-150			"	"	12/20/02	"	

North Creek Analytical - Bothell

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

Amar Gill, Project Manager

North Creek Analytical, Inc.  
 Environmental Laboratory Network



**Seattle** 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244  
 425.420.9200 fax 425.420.9210  
**Spokane** East 11115 Montgomery, Suite B, Spokane, WA 99206-4776  
 509.924.9200 fax 509.924.9290  
**Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132  
 503.906.9200 fax 503.906.9210  
**Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711  
 541.383.9310 fax 541.382.7588  
**Anchorage** 3209 Denali Street, Anchorage, AK 99503  
 907.334.9200 fax 907.334.9210

ERI  
 815 Industry Dr  
 Tukwila WA/USA, 98188

Project: TOSCO #5353  
 Project Number: 1020  
 Project Manager: John Meyer

**Amended Report**  
 Issued: 01/24/03 16:49

**Volatile Petroleum Products and BTEX by NWTPH-Gx 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 2L24003: Prepared 12/24/02 Using EPA 5030B (P/T)**

**Blank (2L24003-BLK1)**

Gasoline Range Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surrogate: 4-BFB (FID)	44.6		"	48.0		92.9	57-125			
Surrogate: 4-BFB (PID)	46.4		"	48.0		96.7	62-120			

**LCS (2L24003-BS1)**

Gasoline Range Hydrocarbons	454	50.0	ug/l	500		90.8	80-120			
Benzene	6.07	0.500	"	6.20		97.9	80-120			
Toluene	32.1	0.500	"	37.3		86.1	80-120			
Ethylbenzene	8.92	0.500	"	8.90		100	80-120			
Xylenes (total)	41.3	1.00	"	43.6		94.7	80-120			
Surrogate: 4-BFB (FID)	49.2		"	48.0		102	57-125			
Surrogate: 4-BFB (PID)	45.5		"	48.0		94.8	62-120			

**LCS Dup (2L24003-BS1)**

Gasoline Range Hydrocarbons	454	50.0	ug/l	500		90.8	80-120	0.00	25	
Benzene	5.77	0.500	"	6.20		93.1	80-120	5.07	40	
Toluene	32.1	0.500	"	37.3		86.1	80-120	0.00	40	
Ethylbenzene	8.35	0.500	"	8.90		93.8	80-120	6.60	40	
Xylenes (total)	39.6	1.00	"	43.6		90.8	80-120	4.20	40	
Surrogate: 4-BFB (FID)	45.2		"	48.0		94.2	57-125			
Surrogate: 4-BFB (PID)	40.6		"	48.0		84.6	62-120			

**Matrix Spike (2L24003-MS1)**

**Source: B2L0356-02**

Gasoline Range Hydrocarbons	425	50.0	ug/l	500	19.5	81.1	70-130			
Benzene	5.96	0.500	"	6.20	ND	96.1	80-134			
Toluene	32.6	0.500	"	37.3	ND	87.4	68-114			
Ethylbenzene	8.43	0.500	"	8.90	0.0988	93.6	72-128			
Xylenes (total)	39.0	1.00	"	43.6	0.217	89.0	67-125			
Surrogate: 4-BFB (FID)	48.3		"	48.0		101	57-125			
Surrogate: 4-BFB (PID)	45.4		"	48.0		94.6	62-120			

North Creek Analytical - Bothell

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

Amar Gill, Project Manager



**Seattle** 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244  
 425.420.9200 fax 425.420.9210  
**Spokane** East 11115 Montgomery, Suite B, Spokane, WA 99206-4776  
 509.924.9200 fax 509.924.9290  
**Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132  
 503.906.9200 fax 503.906.9210  
**Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711  
 541.383.9310 fax 541.382.7588  
**Anchorage** 3209 Denali Street, Anchorage, AK 99503  
 907.334.9200 fax 907.334.9210

ERI  
 815 Industry Dr  
 Tukwila WA/USA, 98188

Project: TOSCO #5353  
 Project Number: 1020  
 Project Manager: John Meyer

**Amended Report**  
 Issued: 01/24/03 16:49

**Volatile Petroleum Products and BTEX by NWTPH-Gx 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 2L24003: Prepared 12/24/02 Using EPA 5030B (P/T)**

**Matrix Spike Dup (2L24003-MSD1)**

Source: B2L0356-02

Gasoline Range Hydrocarbons	425	50.0	ug/l	500	19.5	81.1	70-130	0.00	25	
Benzene	5.96	0.500	"	6.20	ND	96.1	80-134	0.00	40	
Toluene	33.2	0.500	"	37.3	ND	89.0	68-114	1.82	40	
Ethylbenzene	8.53	0.500	"	8.90	0.0988	94.7	72-128	1.18	40	
Xylenes (total)	39.8	1.00	"	43.6	0.217	90.8	67-125	2.03	40	
Surrogate: 4-BFB (FID)	48.0		"	48.0		100	57-125			
Surrogate: 4-BFB (PID)	45.7		"	48.0		95.2	62-120			

**Batch 2L26003: Prepared 12/26/02 Using EPA 5030B (P/T)**

**Blank (2L26003-BLK1)**

Gasoline Range Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surrogate: 4-BFB (FID)	45.0		"	48.0		93.8	57-125			
Surrogate: 4-BFB (PID)	48.2		"	48.0		100	62-120			

**LCS (2L26003-BS1)**

Gasoline Range Hydrocarbons	456	50.0	ug/l	500		91.2	80-120			
Benzene	5.93	0.500	"	6.20		95.6	80-120			
Toluene	32.1	0.500	"	37.3		86.1	80-120			
Ethylbenzene	8.25	0.500	"	8.90		92.7	80-120			
Xylenes (total)	40.3	1.00	"	43.6		92.4	80-120			
Surrogate: 4-BFB (FID)	50.9		"	48.0		106	57-125			
Surrogate: 4-BFB (PID)	46.0		"	48.0		95.8	62-120			

North Creek Analytical - Bothell

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

Amar Gill, Project Manager

North Creek Analytical, Inc.  
 Environmental Laboratory Network

Page 6 of 10



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244  
 425.420.9200 fax 425.420.9210  
 Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776  
 509.924.9200 fax 509.924.9290  
 Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132  
 503.906.9200 fax 503.906.9210  
 Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711  
 541.383.9310 fax 541.382.7588  
 Anchorage 3209 Denali Street, Anchorage, AK 99503  
 907.334.9200 fax 907.334.9210

ERI  
 815 Industry Dr  
 Tukwila WA/USA, 98188

Project: TOSCO #5353  
 Project Number: 1020  
 Project Manager: John Meyer

Amended Report  
 Issued: 01/24/03 16:49

**Volatile Petroleum Products and BTEX by NWTPH-Gx 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 2L26003: Prepared 12/26/02 Using EPA 5030B (P/T)**

**LCS Dup (2L26003-BSD1)**

Gasoline Range Hydrocarbons	457	50.0	ug/l	500		91.4	80-120	0.219	25	
Benzene	6.02	0.500	"	6.20		97.1	80-120	1.51	40	
Toluene	32.8	0.500	"	37.3		87.9	80-120	2.16	40	
Ethylbenzene	8.65	0.500	"	8.90		97.2	80-120	4.73	40	
Xylenes (total)	40.9	1.00	"	43.6		93.8	80-120	1.48	40	
Surrogate: 4-BFB (FID)	50.8		"	48.0		106	57-125			
Surrogate: 4-BFB (PID)	46.1		"	48.0		96.0	62-120			

**Matrix Spike (2L26003-MS1)**

Source: B2L0355-18

Gasoline Range Hydrocarbons	524	50.0	ug/l	500	73.9	90.0	70-130			
Benzene	6.04	0.500	"	6.20	ND	97.4	80-134			
Toluene	33.2	0.500	"	37.3	0.371	88.0	68-114			
Ethylbenzene	8.51	0.500	"	8.90	0.120	94.3	72-128			
Xylenes (total)	40.6	1.00	"	43.6	0.823	91.2	67-125			
Surrogate: 4-BFB (FID)	49.2		"	48.0		102	57-125			
Surrogate: 4-BFB (PID)	45.2		"	48.0		94.2	62-120			

**Matrix Spike Dup (2L26003-MSD1)**

Source: B2L0355-18

Gasoline Range Hydrocarbons	506	50.0	ug/l	500	73.9	86.4	70-130	3.50	25	
Benzene	5.95	0.500	"	6.20	ND	96.0	80-134	1.50	40	
Toluene	32.2	0.500	"	37.3	0.371	85.3	68-114	3.06	40	
Ethylbenzene	8.31	0.500	"	8.90	0.120	92.0	72-128	2.38	40	
Xylenes (total)	38.6	1.00	"	43.6	0.823	86.6	67-125	5.05	40	
Surrogate: 4-BFB (FID)	50.0		"	48.0		104	57-125			
Surrogate: 4-BFB (PID)	45.6		"	48.0		95.0	62-120			

**Batch 3A24002: Prepared 01/24/03 Using EPA 5030B (P/T)**

**Blank (3A24002-BLK1)**

Gasoline Range Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surrogate: 4-BFB (FID)	42.2		"	48.0		87.9	57-125			
Surrogate: 4-BFB (PID)	44.6		"	48.0		92.9	62-120			

North Creek Analytical - Bothell

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

Amar Gill, Project Manager

North Creek Analytical, Inc.  
 Environmental Laboratory Network

Page 7 of 10



**Seattle** 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244  
 425.420.9200 fax 425.420.9210  
**Spokane** East 11115 Montgomery, Suite B, Spokane, WA 99206-4776  
 509.924.9200 fax 509.924.9290  
**Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132  
 503.906.9200 fax 503.906.9210  
**Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711  
 541.383.9310 fax 541.382.7588  
**Anchorage** 3209 Denali Street, Anchorage, AK 99503  
 907.334.9200 fax 907.334.9210

ERI  
 815 Industry Dr  
 Tukwila WA/USA, 98188

Project: TOSCO #5353  
 Project Number: 1020  
 Project Manager: John Meyer

**Amended Report**  
 Issued: 01/24/03 16:49

**Volatile Petroleum Products and BTEX by NWTPH-Gx 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 3A24002: Prepared 01/24/03 Using EPA 5030B (P/T)**

**LCS (3A24002-BS1)**

Gasoline Range Hydrocarbons	457	50.0	ug/l	502		91.0	80-120			
Benzene	6.87	0.500	"	6.21		111	80-120			
Toluene	35.3	0.500	"	38.1		92.7	80-120			
Ethylbenzene	8.97	0.500	"	8.94		100	80-120			
Xylenes (total)	43.9	1.00	"	44.0		99.8	80-120			
Surrogate: 4-BFB (FID)	45.5		"	48.0		94.8	57-125			
Surrogate: 4-BFB (PID)	44.0		"	48.0		91.7	62-120			

**LCS Dup (3A24002-BSD1)**

Gasoline Range Hydrocarbons	446	50.0	ug/l	502		88.8	80-120	2.44	25	
Benzene	6.68	0.500	"	6.21		108	80-120	2.80	40	
Toluene	33.8	0.500	"	38.1		88.7	80-120	4.34	40	
Ethylbenzene	8.63	0.500	"	8.94		96.5	80-120	3.86	40	
Xylenes (total)	42.0	1.00	"	44.0		95.5	80-120	4.42	40	
Surrogate: 4-BFB (FID)	46.5		"	48.0		96.9	57-125			
Surrogate: 4-BFB (PID)	43.8		"	48.0		91.2	62-120			

**Matrix Spike (3A24002-MS1)**

Source: B3A0379-01

Gasoline Range Hydrocarbons	501	50.0	ug/l	502	24.2	95.0	70-130			
Benzene	7.46	0.500	"	6.21	0.349	115	80-134			
Toluene	35.9	0.500	"	38.1	ND	94.2	68-114			
Ethylbenzene	9.23	0.500	"	8.94	ND	103	72-128			
Xylenes (total)	44.7	1.00	"	44.0	0.390	101	67-125			
Surrogate: 4-BFB (FID)	46.8		"	48.0		97.5	57-125			
Surrogate: 4-BFB (PID)	43.4		"	48.0		90.4	62-120			

**Matrix Spike Dup (3A24002-MSD1)**

Source: B3A0379-01

Gasoline Range Hydrocarbons	496	50.0	ug/l	502	24.2	94.0	70-130	1.00	25	
Benzene	7.59	0.500	"	6.21	0.349	117	80-134	1.73	40	
Toluene	36.2	0.500	"	38.1	ND	95.0	68-114	0.832	40	
Ethylbenzene	9.33	0.500	"	8.94	ND	104	72-128	1.08	40	
Xylenes (total)	45.1	1.00	"	44.0	0.390	102	67-125	0.891	40	
Surrogate: 4-BFB (FID)	46.0		"	48.0		95.8	57-125			
Surrogate: 4-BFB (PID)	43.5		"	48.0		90.6	62-120			

North Creek Analytical - Bothell

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

Amar Gill, Project Manager

North Creek Analytical, Inc.  
 Environmental Laboratory Network

Page 8 of 10



**Seattle** 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244  
 425.420.9200 fax 425.420.9210  
**Spokane** East 11115 Montgomery, Suite B, Spokane, WA 99206-4776  
 509.924.9200 fax 509.924.9290  
**Portland** 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132  
 503.906.9200 fax 503.906.9210  
**Bend** 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711  
 541.383.9310 fax 541.382.7588  
**Anchorage** 3209 Denali Street, Anchorage, AK 99503  
 907.334.9200 fax 907.334.9210

ERI  
 815 Industry Dr  
 Tukwila WA/USA, 98188

Project: TOSCO #5353  
 Project Number: 1020  
 Project Manager: John Meyer

**Amended Report**  
 Issued: 01/24/03 16:49

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 2L19008: Prepared 12/19/02 Using EPA 3520C**

**Blank (2L19008-BLK1)**

Diesel Range Hydrocarbons	ND	0.250	mg/l							
Lube Oil Range Hydrocarbons	ND	0.500	"							
Surrogate: 2-FBP	0.260		"	0.320		81.2	50-150			
Surrogate: Octacosane	0.249		"	0.320		77.8	50-150			

**LCS (2L19008-BS1)**

Diesel Range Hydrocarbons	1.58	0.250	mg/l	2.00		79.0	63-107			
Surrogate: 2-FBP	0.262		"	0.320		81.9	50-150			

**LCS Dup (2L19008-BSD1)**

Diesel Range Hydrocarbons	1.59	0.250	mg/l	2.00		79.5	63-107	0.631	40	
Surrogate: 2-FBP	0.262		"	0.320		81.9	50-150			

North Creek Analytical - Bothell

Amar Gill, Project Manager

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

North Creek Analytical, Inc.  
 Environmental Laboratory Network

Page 9 of 10



Seattle 11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8244  
 425.420.9200 fax 425.420.9210  
 Spokane East 11115 Montgomery, Suite B, Spokane, WA 99206-4776  
 509.924.9200 fax 509.924.9290  
 Portland 9405 SW Nimbus Avenue, Beaverton, OR 97008-7132  
 503.906.9200 fax 503.906.9210  
 Bend 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711  
 541.383.9310 fax 541.382.7588  
 Anchorage 3209 Denali Street, Anchorage, AK 99503  
 907.334.9200 fax 907.334.9210

ERI 815 Industry Dr Tukwila WA/USA, 98188	Project: TOSCO #5353 Project Number: 1020 Project Manager: John Meyer	<b>Amended Report</b> Issued: 01/24/03 16:49
---	---	---

**Notes and Definitions**

- E Estimated value. The reported value exceeds the calibration range of the analysis.
- I-02 This sample was analyzed outside of the recommended holding time.
- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- X See case narrative.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

North Creek Analytical - Bothell

Amar Gill, Project Manager

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





11720 North Creek Pkwy N, Suite 400, Bothell, WA 98011-8223  
 (425) 420-9200 FAX 420-9210  
 East 11115 Montgomery, Suite B, Spokane, WA 98206-4776  
 (509) 924-9200 FAX 924-9290  
 9405 S.W. Nimbus Avenue, Beaverton, OR 97008-7132  
 (503) 906-9200 FAX 906-9210  
 20332 Empire Avenue, Suite F-1, Bend, OR 97701-5711  
 (541) 383-9310 FAX 382-7588

# TOSCO CHAIN OF CUSTODY REPORT B2L0357

Facility Number: 5353  
 Site Address: 600 Westlake Ave N  
 City, State, ZIP: SPARTAN, WA  
 Project/AWO Code: \_\_\_\_\_  
 Tosco Manager: Tim Schisler  
 FACILITY TYPE: (check one)  BP/☉  Terminal/Bulk Plant  
 Brown Bear  Former 76 Site  Other

Firm: ELI Project# 1020  
 Address: \_\_\_\_\_  
 Phone: (206) 575-6220 Fax: X6923  
 Project Manager: JAMES HATHAWAY E-mail: \_\_\_\_\_  
 Sample Collection by: Roy MOOSE

Quality Assurance Data Level:  
 A: Standard Summary  
 B  
 B: Standard + Chromatograms  
 Laboratory Turnaround Days:  
 0  1  2  3  4  5  
 10 Day - Standard

SAMPLE IDENTIFICATION	SAMPLING DATE / TIME	MATRIX (W.S.O)	# OF CON-TAINERS
1. <u>KW32A</u>	<u>12/12/02</u>	<u>W</u>	<u>5</u>
2. <u>MW34</u>	<u>12:00pm</u>	<u>W</u>	<u>1</u>
3. <u>MW31</u>	<u>11:00</u>	<u>W</u>	<u>1</u>
4. <u>MW52</u>			
5.			
6.			
7.			
8.			
9.			
10.			

TPH-HCID	TPH-Gas	BTEX	EPA 8021 Mod. TPH-Gas + BTEX	TPH-Diesel	TPH-Diesel Extended	TPH-Diesel-Bxt	W/SG Cleanup	Halogen Volatiles	EPA 8021 Pesticides/PCBs or PCBs Only	GCMS Volatiles	EPA 8260 GCMS SemiVols.	EPA 8270 PAHs	8270 SIM or 8310 Lead: Total or Dissolved	TCLP or RCRA Metals (8)

NCA SAMPLE NUMBER  
B2L0357-01  
-02  
-03  
-04

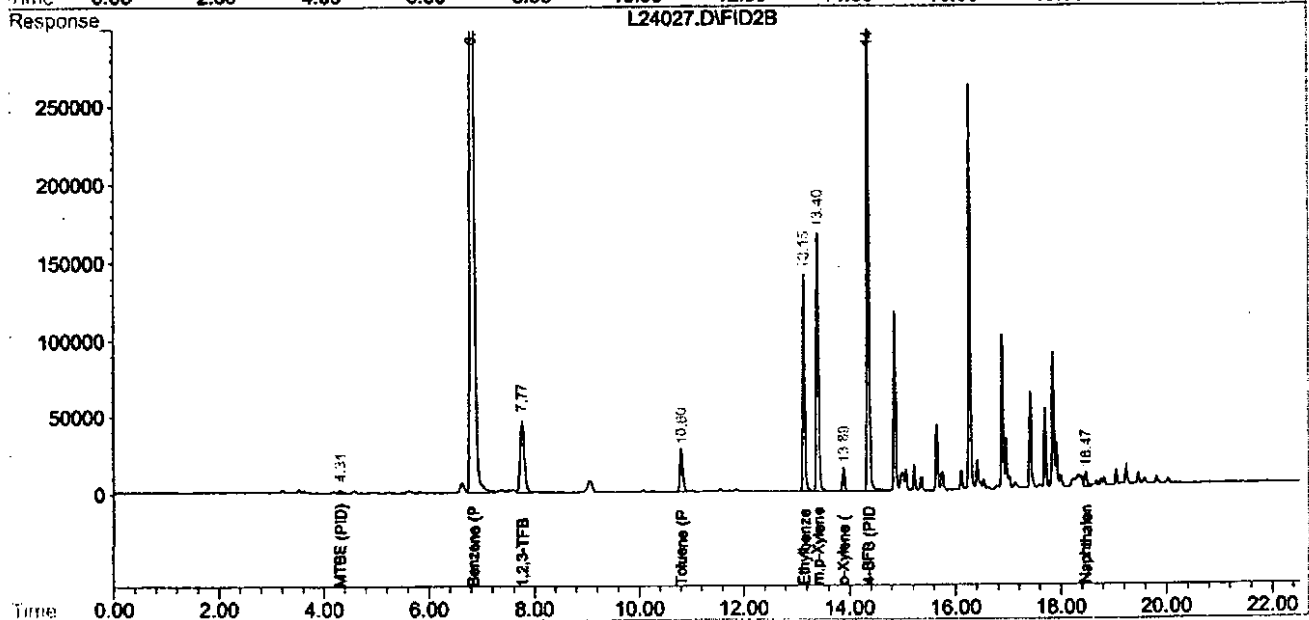
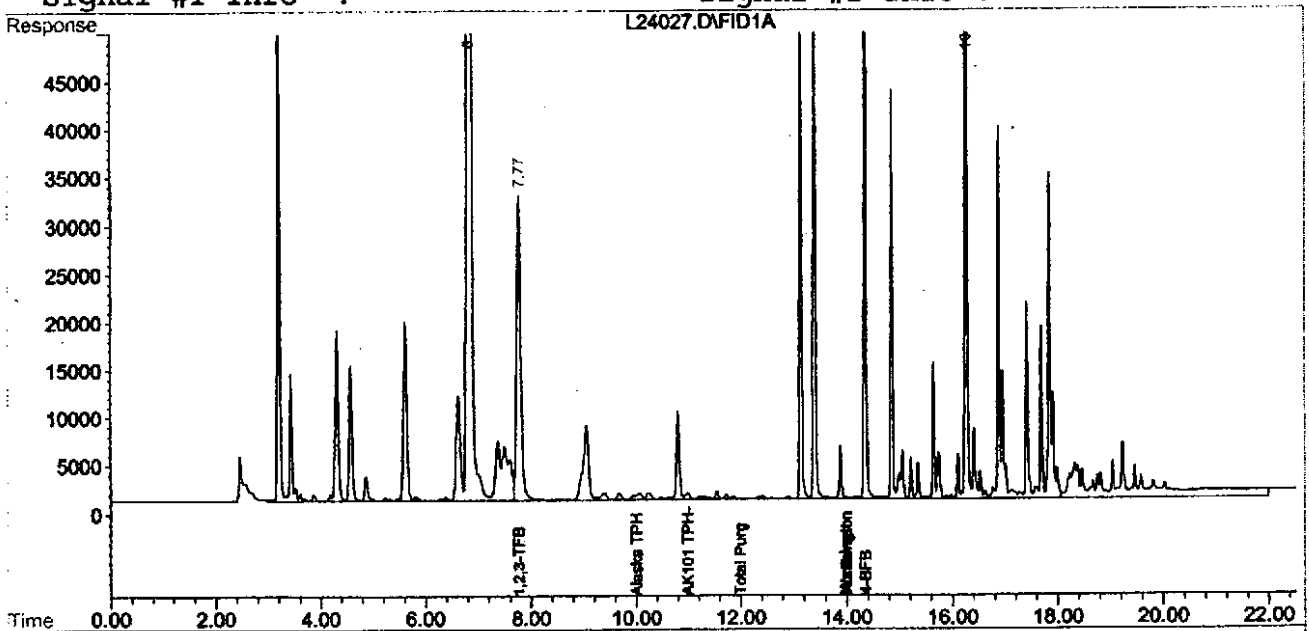
Requisitioned by: Roy F. Moore Firm: ELI Date & Time: 12/12/02  
12/13/02 16:20 Firm: NCA Date & Time: 12/13/02 12:05  
 Comments: \_\_\_\_\_

Quantitation Report

Signal #1 : D:\HPCHEM\4\DATA\122402\L24027.D\FID1A.CH Vial: 27  
Signal #2 : D:\HPCHEM\4\DATA\122402\L24027.D\FID2B.CH  
Acq On : 24 Dec 2002 19:08 Operator: cm  
Sample : b2L0357-01 Inst : GC #8  
Misc : 10x 500 uL Multiplr: 1.00  
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
Quant Time: Dec 24 19:31 2002 Quant Results File: TEST1202.RES

Quant Method : D:\HPCHEM\4\METHODS\TEST1202.M (Chemstation Integrator)  
Title : TPH-G Water Method  
Last Update : Fri Dec 20 14:24:38 2002  
Response via : Multiple Level Calibration  
DataAcq Meth : TEST1202.M

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

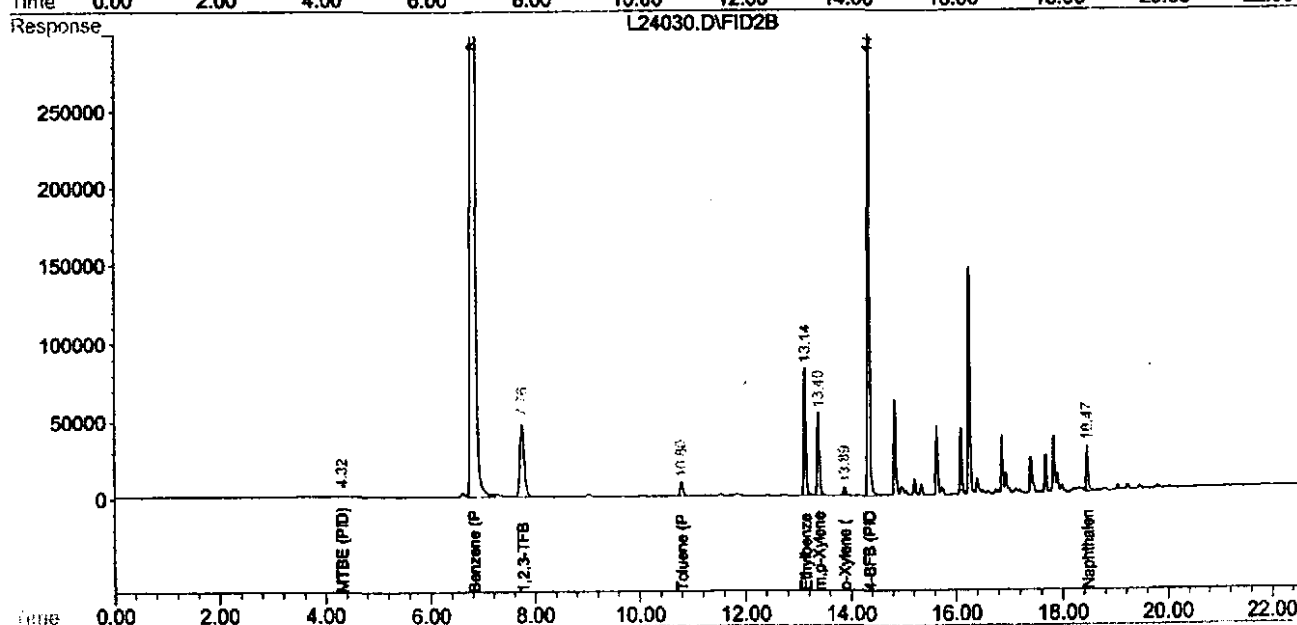
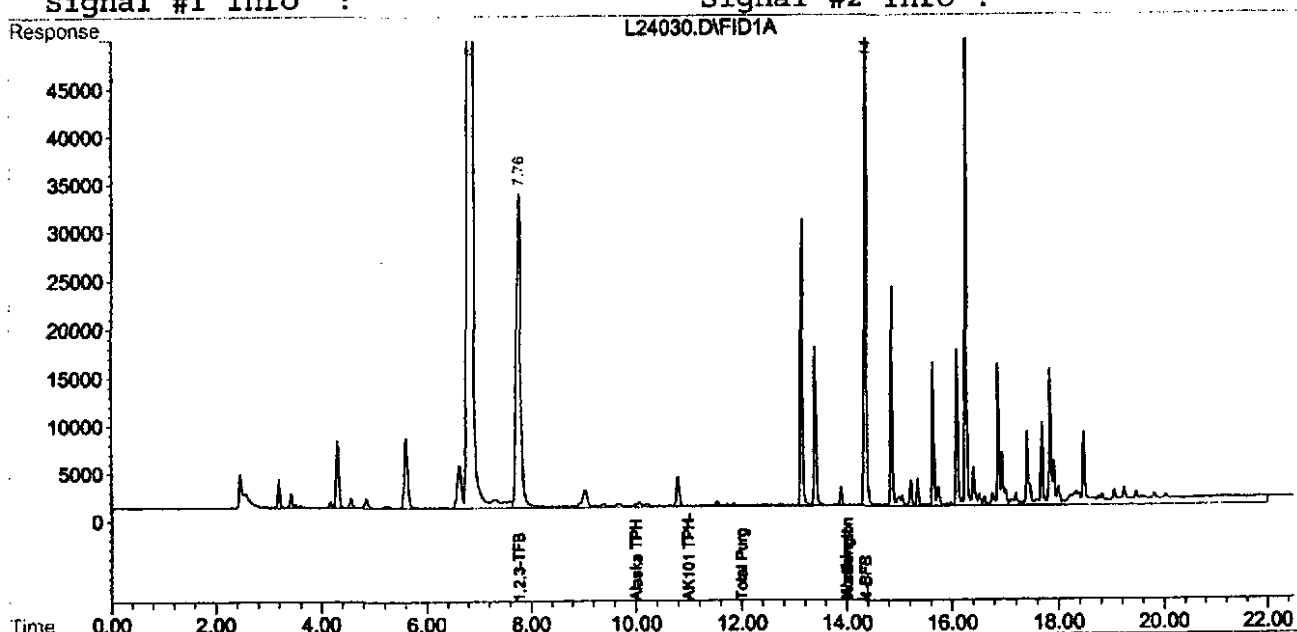


# Quantitation Report

Signal #1 : D:\HPCHEM\4\DATA\122402\L24030.D\FID1A.CH Vial: 30  
Signal #2 : D:\HPCHEM\4\DATA\122402\L24030.D\FID2B.CH  
Acq On : 24 Dec 2002 20:34 Operator: cm  
Sample : b2L0357-02 Inst : GC #8  
Misc : 25x 200 uL Multiplr: 1.00  
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
Quant Time: Dec 24 20:57 2002 Quant Results File: TEST1202.RES

Quant Method : D:\HPCHEM\4\METHODS\TEST1202.M (Chemstation Integrator)  
Title : TPH-G Water Method  
Last Update : Fri Dec 20 14:24:38 2002  
Response via : Multiple Level Calibration  
DataAcq Meth : TEST1202.M

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

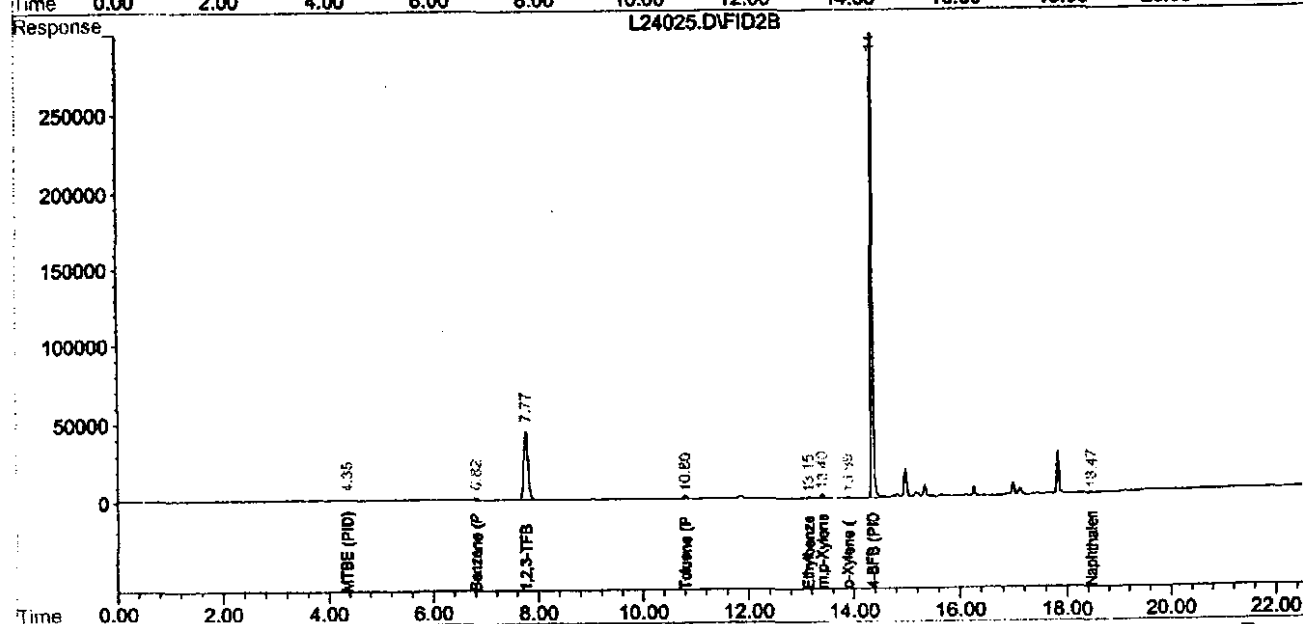
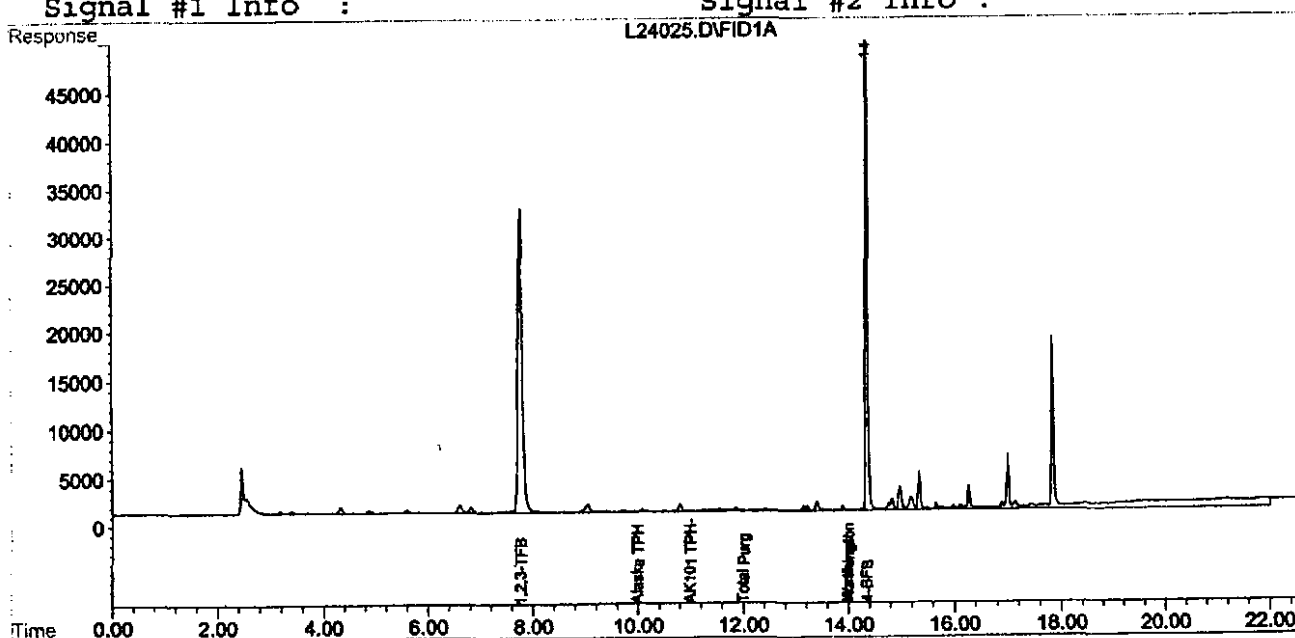


Quantitation Report

Signal #1 : D:\HPCHEM\4\DATA\122402\L24025.D\FID1A.CH Vial: 25  
 Signal #2 : D:\HPCHEM\4\DATA\122402\L24025.D\FID2B.CH  
 Acq On : 24 Dec 2002 18:11 Operator: cm  
 Sample : b2L0357-03 Inst : GC #8  
 Misc : 1x 5 mL Multiplr: 1.00  
 IntFile Signal #1: TPH.E IntFile Signal #2: SURRE2.E  
 Quant Time: Dec 24 18:33 2002 Quant Results File: TEST1202.RES

Quant Method : D:\HPCHEM\4\METHODS\TEST1202.M (Chemstation Integrator)  
 Title : TPH-G Water Method  
 Last Update : Fri Dec 20 14:24:38 2002  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TEST1202.M

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

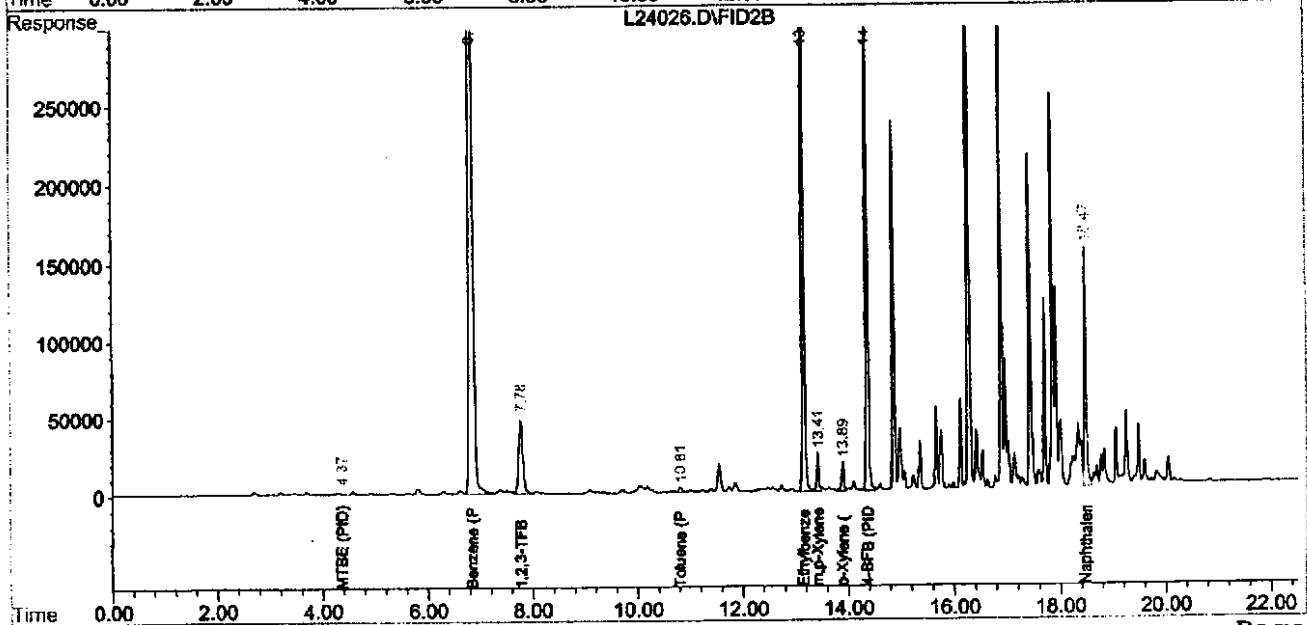
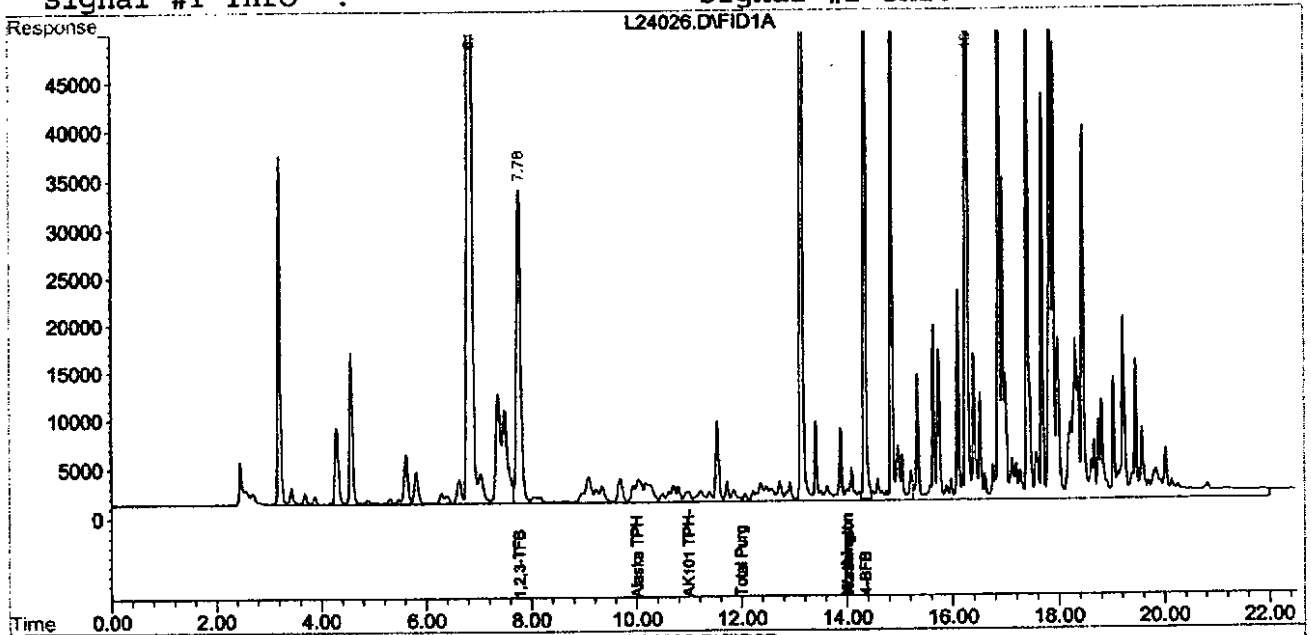


Quantitation Report

Signal #1 : D:\HPCHEM\4\DATA\122402\L24026.D\FID1A.CH Vial: 26  
Signal #2 : D:\HPCHEM\4\DATA\122402\L24026.D\FID2B.CH  
Acq On : 24 Dec 2002 18:39 Operator: cm  
Sample : b2L0357-04 Inst : GC #8  
Misc : 1x 5 mL Multiplr: 1.00  
IntFile Signal #1: TPH.E IntFile Signal #2: SURR2.E  
Quant Time: Dec 24 19:02 2002 Quant Results File: TEST1202.RES

Quant Method : D:\HPCHEM\4\METHODS\TEST1202.M (Chemstation Integrator)  
Title : TPH-G Water Method  
Last Update : Fri Dec 20 14:24:38 2002  
Response via : Multiple Level Calibration  
DataAcq Meth : TEST1202.M

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

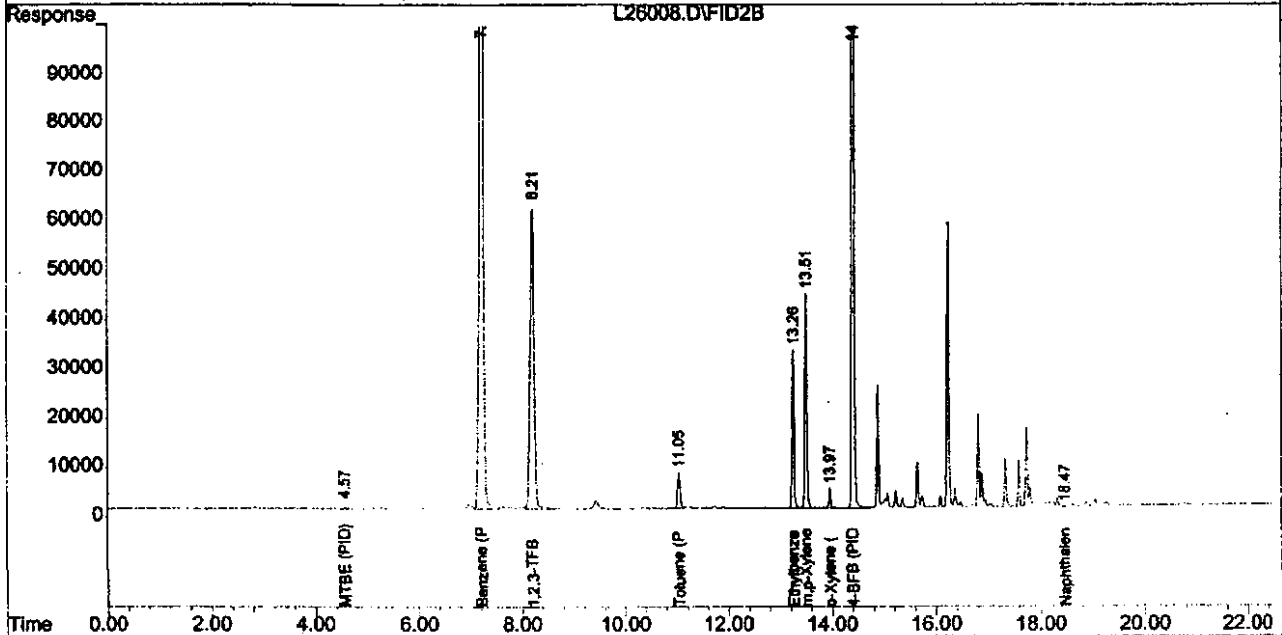
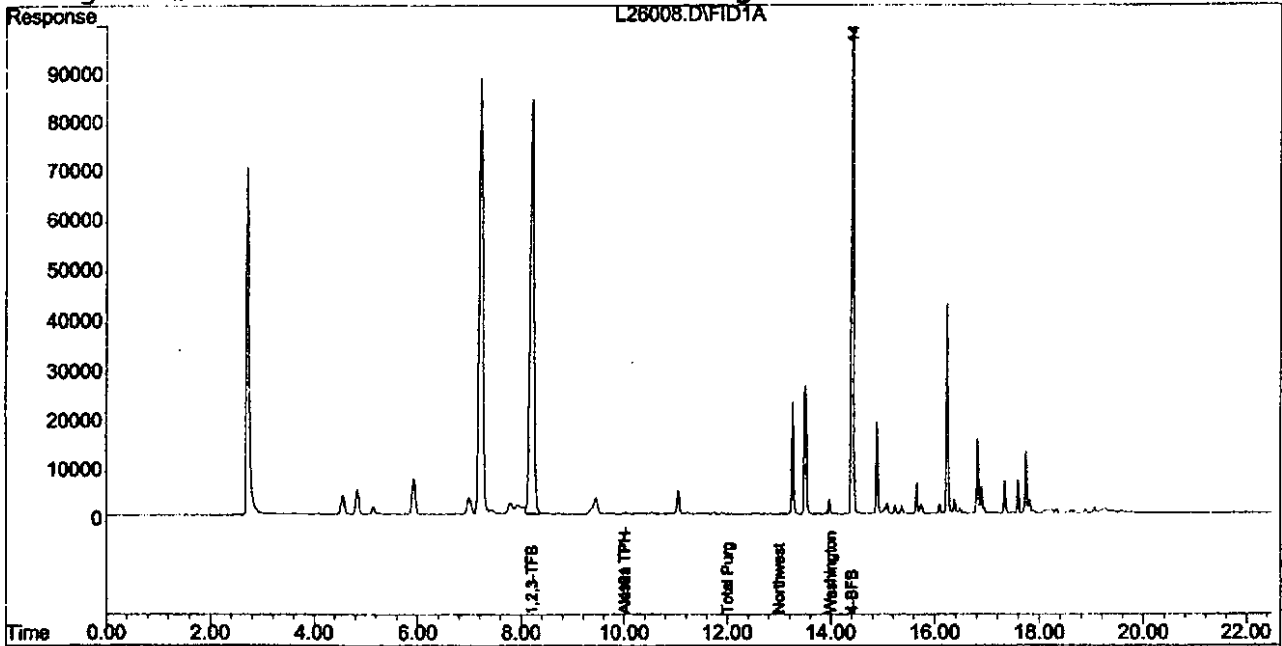


Quantitation Report

Signal #1 : E:\HPCHEM\2\DATA\122602\L26008.D\FID1A.CH Vial: 8  
Signal #2 : E:\HPCHEM\2\DATA\122602\L26008.D\FID2B.CH  
Acq On : 26 Dec 2002 11:15 Operator: cm  
Sample : b2L0357-01rel Inst : GC-14  
Misc : 50X 100 uL Multiplr: 1.00  
IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E  
Quant Time: Dec 26 11:38 2002 Quant Results File: TEST1202.RES

Quant Method : E:\HPCHEM\2\METHODS\TEST1202.M (Chemstation Integrator)  
Title : TPH-G Method  
Last Update : Thu Dec 26 10:01:38 2002  
Response via : Multiple Level Calibration  
DataAcq Meth : TEST1202.M

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

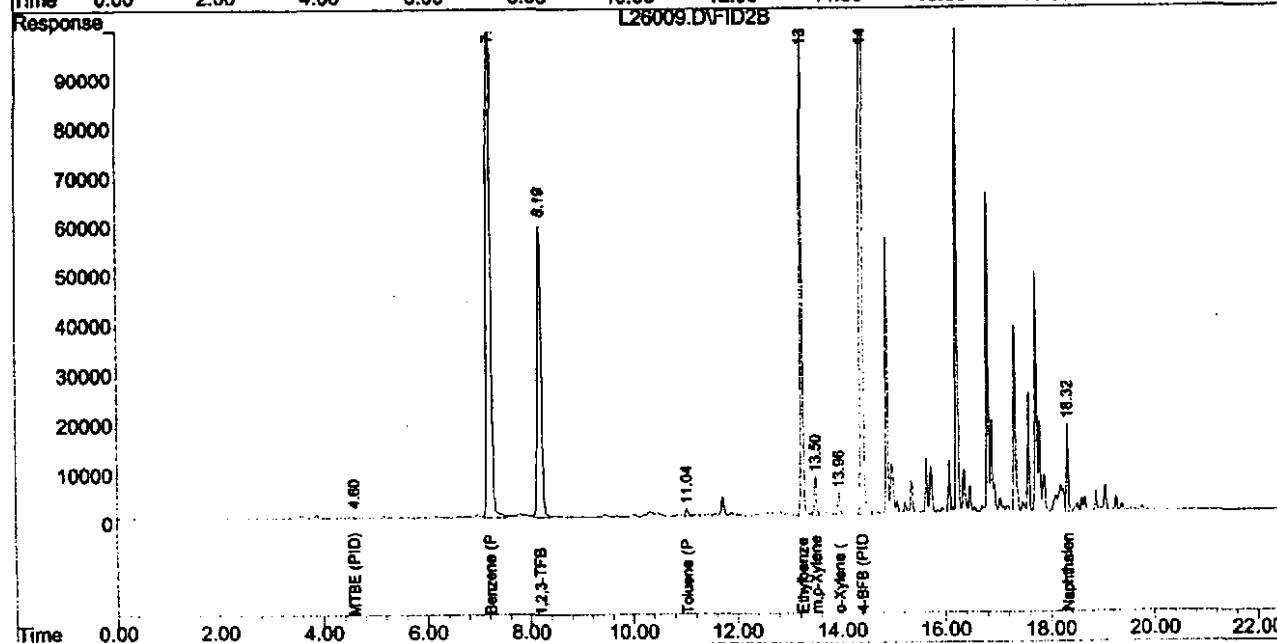
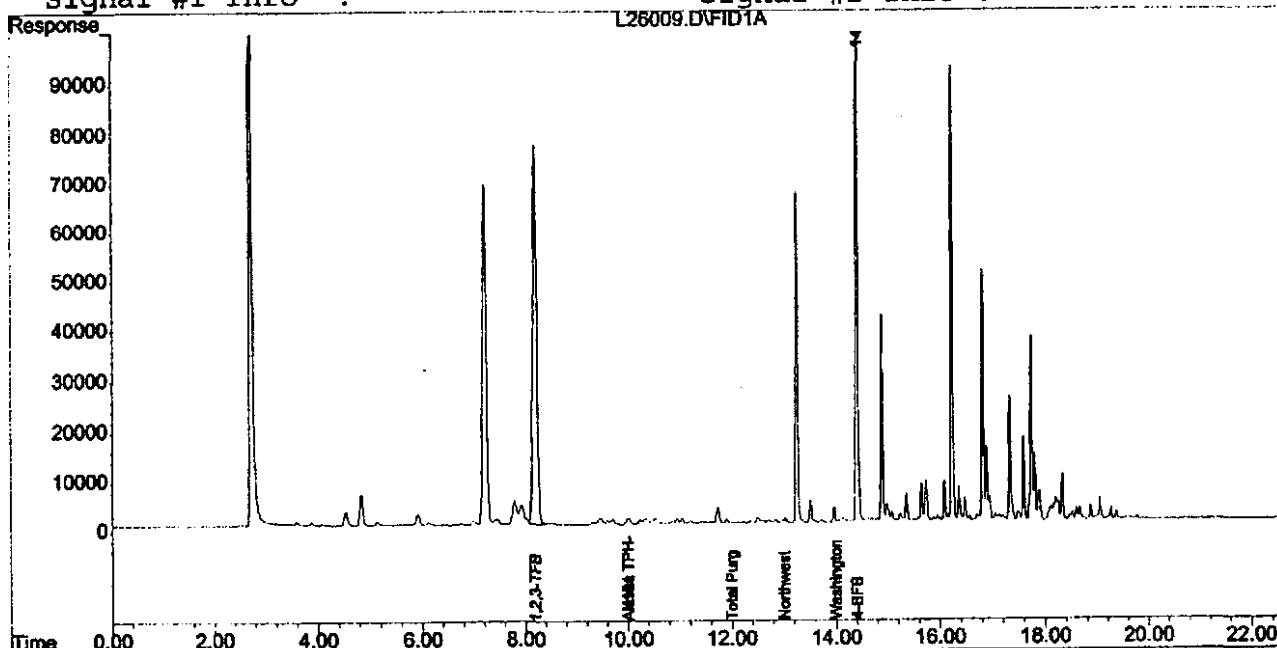


Quantitation Report

Signal #1 : E:\HPCHEM\2\DATA\122602\L26009.D\FID1A.CH Vial: 9  
 Signal #2 : E:\HPCHEM\2\DATA\122602\L26009.D\FID2B.CH  
 Acq On : 26 Dec 2002 11:49 Operator: cm  
 Sample : b2L0357-04rel Inst : GC-14  
 Misc : 5X 1 mL Multiplr: 1.00  
 IntFile Signal #1: SURR.E IntFile Signal #2: SURR2.E  
 Quant Time: Dec 26 12:12 2002 Quant Results File: TEST1202.RES

Quant Method : E:\HPCHEM\2\METHODS\TEST1202.M (Chemstation Integrator)  
 Title : TPH-G Method  
 Last Update : Thu Dec 26 10:01:38 2002  
 Response via : Multiple Level Calibration  
 DataAcq Meth : TEST1202.M

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



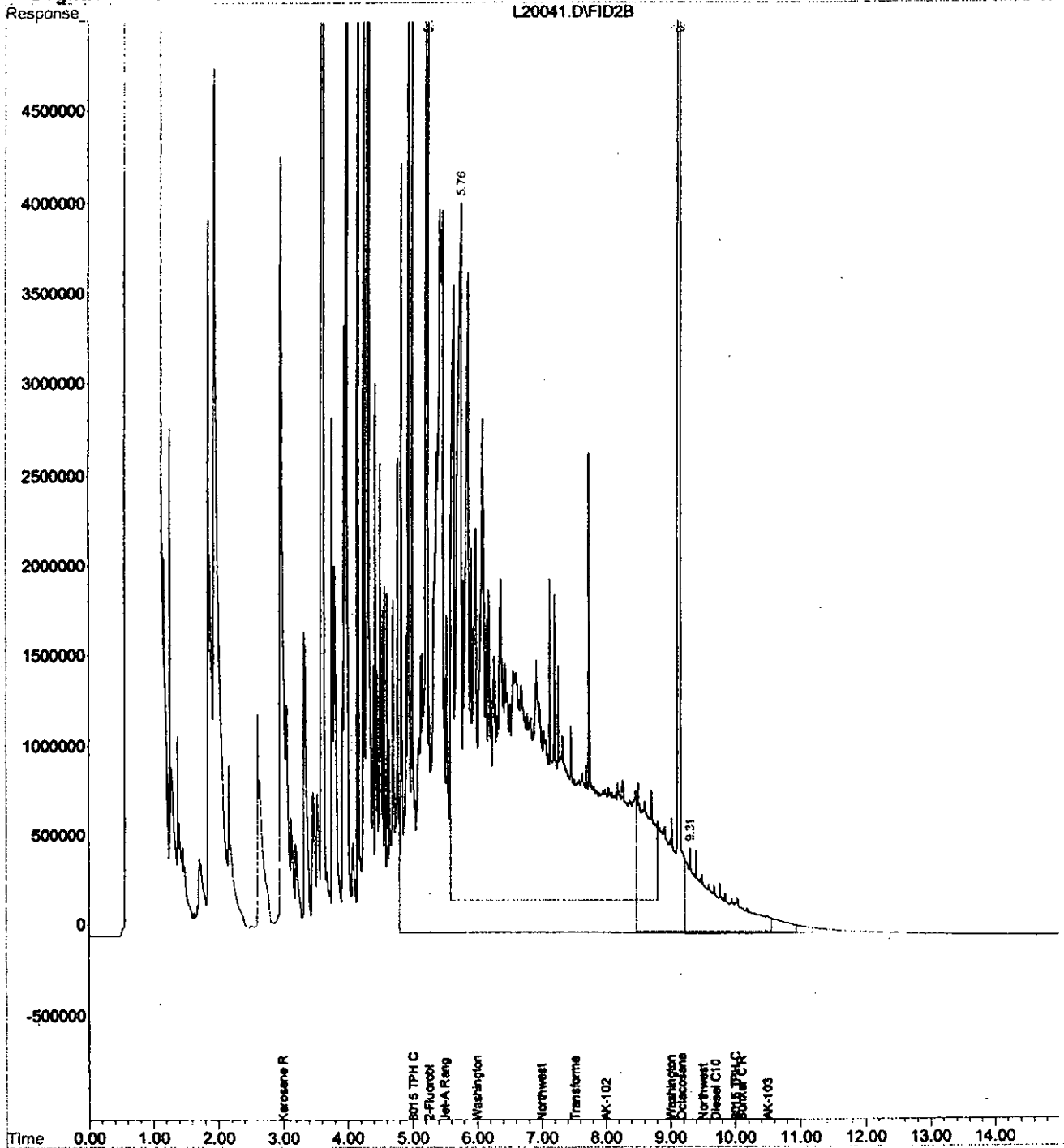
Quantitation Report

Data File : C:\HPCHEM\1\DATA.SEC\L20041.D  
Acq On : 12-20-02 19:34:51  
Sample : B2L0357-01  
Misc :  
IntFile : SURR.E  
Quant Time: Dec 20 19:50 2002

Vial: 9  
Operator: GAP  
Inst : GC #9  
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\L0602T9R.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Sun Dec 15 15:09:22 2002  
Response via : Multiple Level Calibration  
DataAcq Meth : L0602T9F.M

Volume Inj. :  
Signal Phase :  
Signal Info :





Quantitation Report

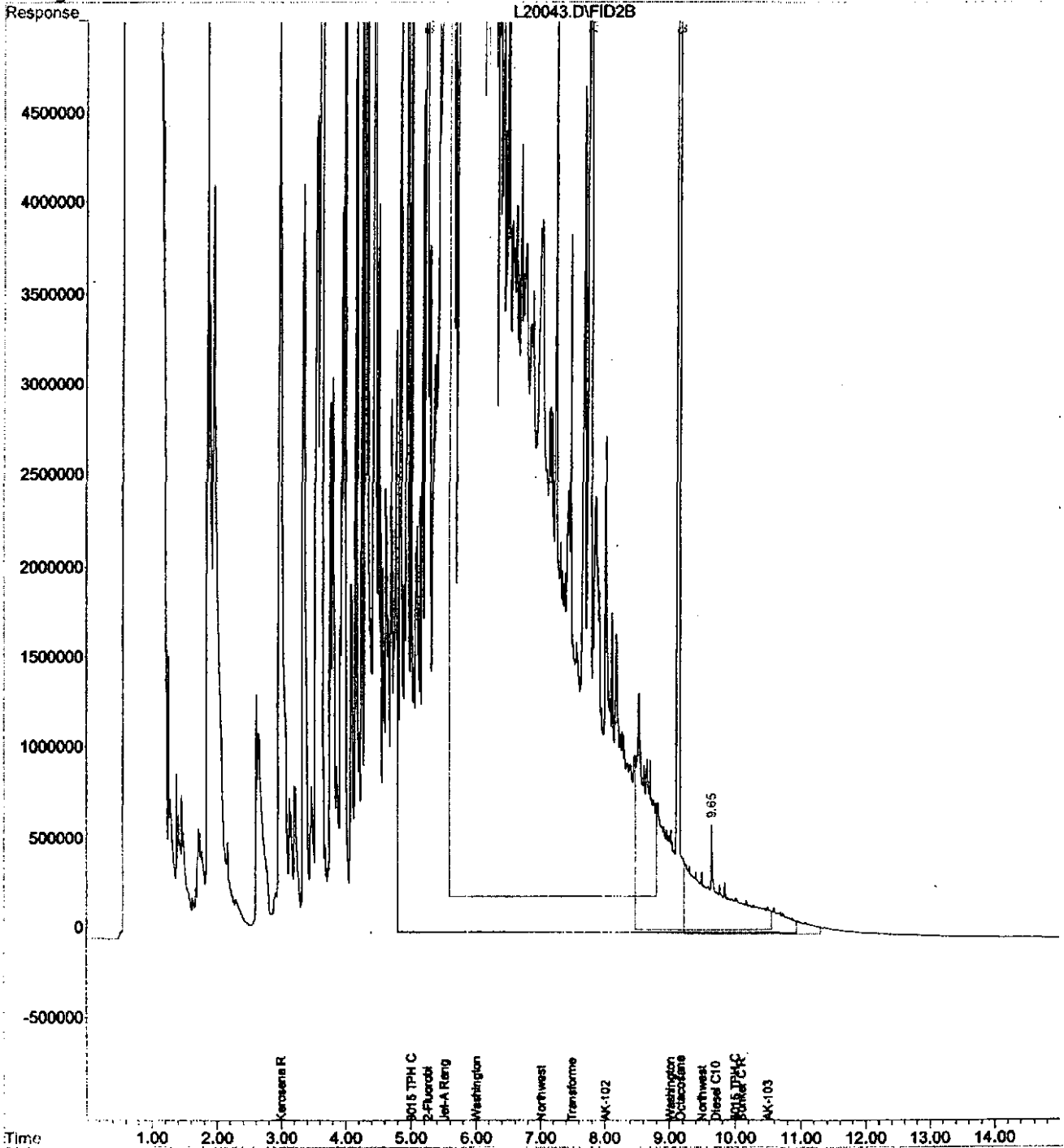
Data File : C:\HPCHEM\1\DATA.SEC\L20043.D  
Acq on : 12-20-02 19:57:30  
Sample : B2L0357-02  
Misc :  
IntFile : SURR.E  
Quant Time: Dec 20 20:13 2002

Vial: 10  
Operator: GAP  
Inst : GC #9  
Multiplr: 1.00

Quant Results File: L0602T9R.RES

Quant Method : C:\HPCHEM\1\METHODS\L0602T9R.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Sun Dec 15 15:09:22 2002  
Response via : Multiple Level Calibration  
DataAcq Meth : L0602T9F.M

Volume Inj. :  
Signal Phase :  
Signal Info :



Quantitation Report

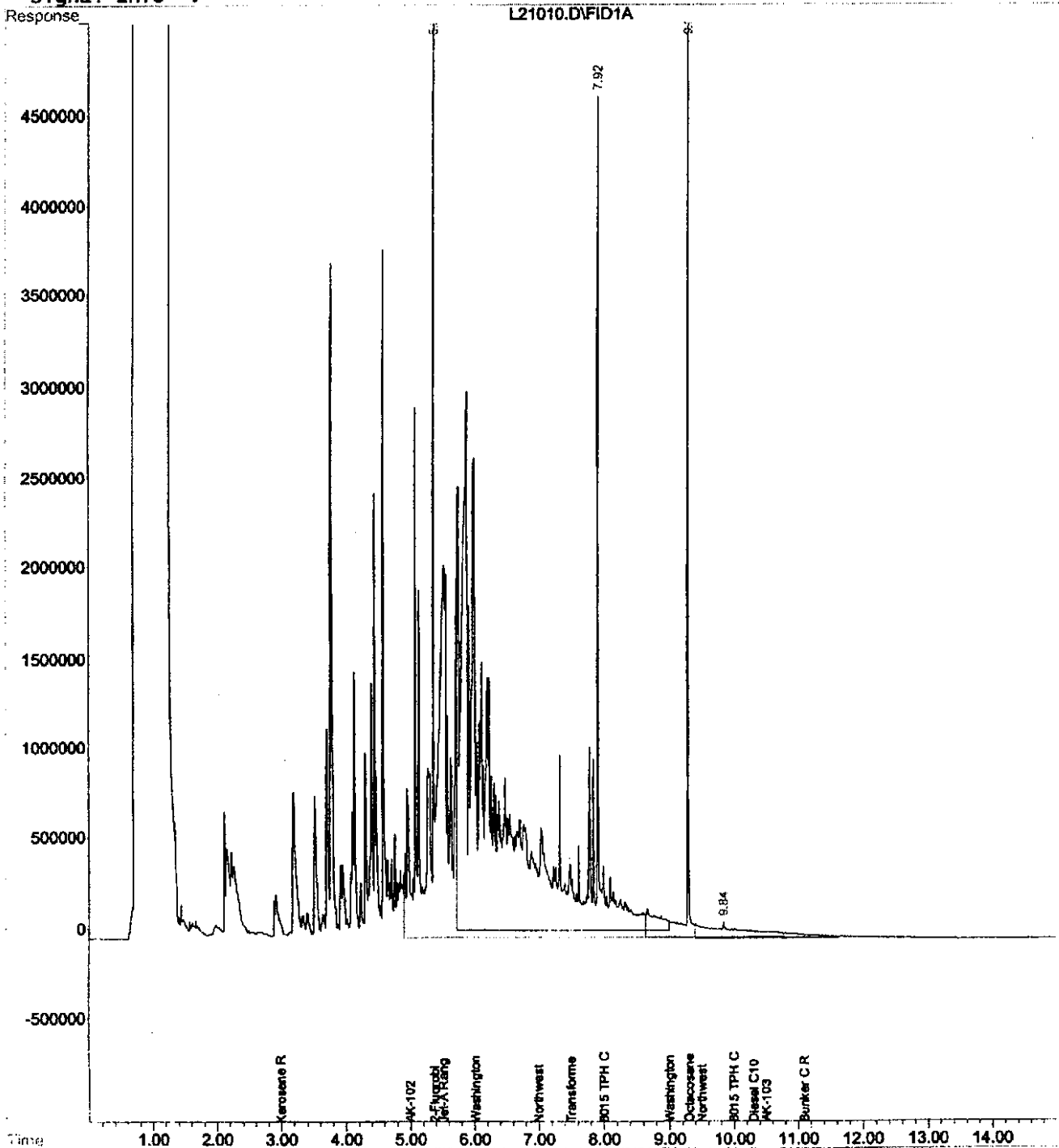
Data File : C:\HPCHEM\1\DATA\L21010.D  
Acq On : 12-21-02 10:46:42  
Sample : b210357-02  
Misc : 5X R1 for NW diesel  
IntFile : SURR.E  
Quant Time: Dec 21 11:02 2002

Vial: 4  
Operator: EP  
Inst : GC #9  
Multiplr: 1.00

Quant Results File: L0602T9F.RES

Quant Method : C:\HPCHEM\1\METHODS\L0602T9F.M (Chemstation Integrator)  
Title : TPH-D Front  
Last Update : Sun Dec 15 15:01:51 2002  
Response via : Multiple Level Calibration  
DataAcq Meth : L0602T9F.M

Volume Inj. :  
Signal Phase :  
Signal Info :



Quantitation Report

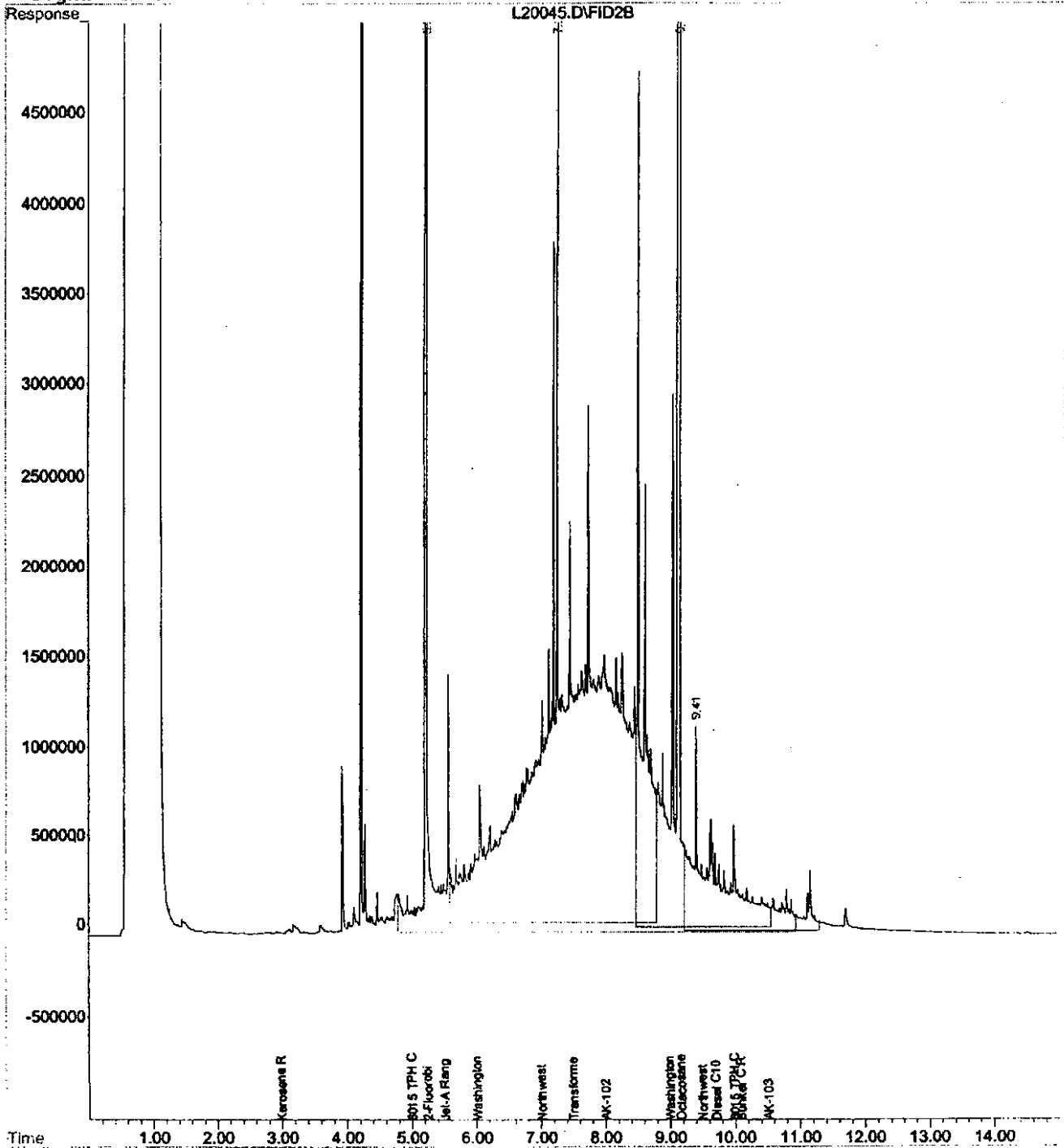
Data File : C:\HPCHEM\1\DATA.SEC\L20045.D  
Acq On : 12-20-02 20:20:09  
Sample : B2L0357-03  
Misc :  
IntFile : SURR.E  
Quant Time: Dec 20 20:35 2002

Vial: 11  
Operator: GAP  
Inst : GC #9  
Multiplr: 1.00

Quant Results File: L0602T9R.RES

Quant Method : C:\HPCHEM\1\METHODS\L0602T9R.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Sun Dec 15 15:09:22 2002  
Response via : Multiple Level Calibration  
DataAcq Meth : L0602T9F.M

Volume Inj. :  
Signal Phase :  
Signal Info :



Quantitation Report

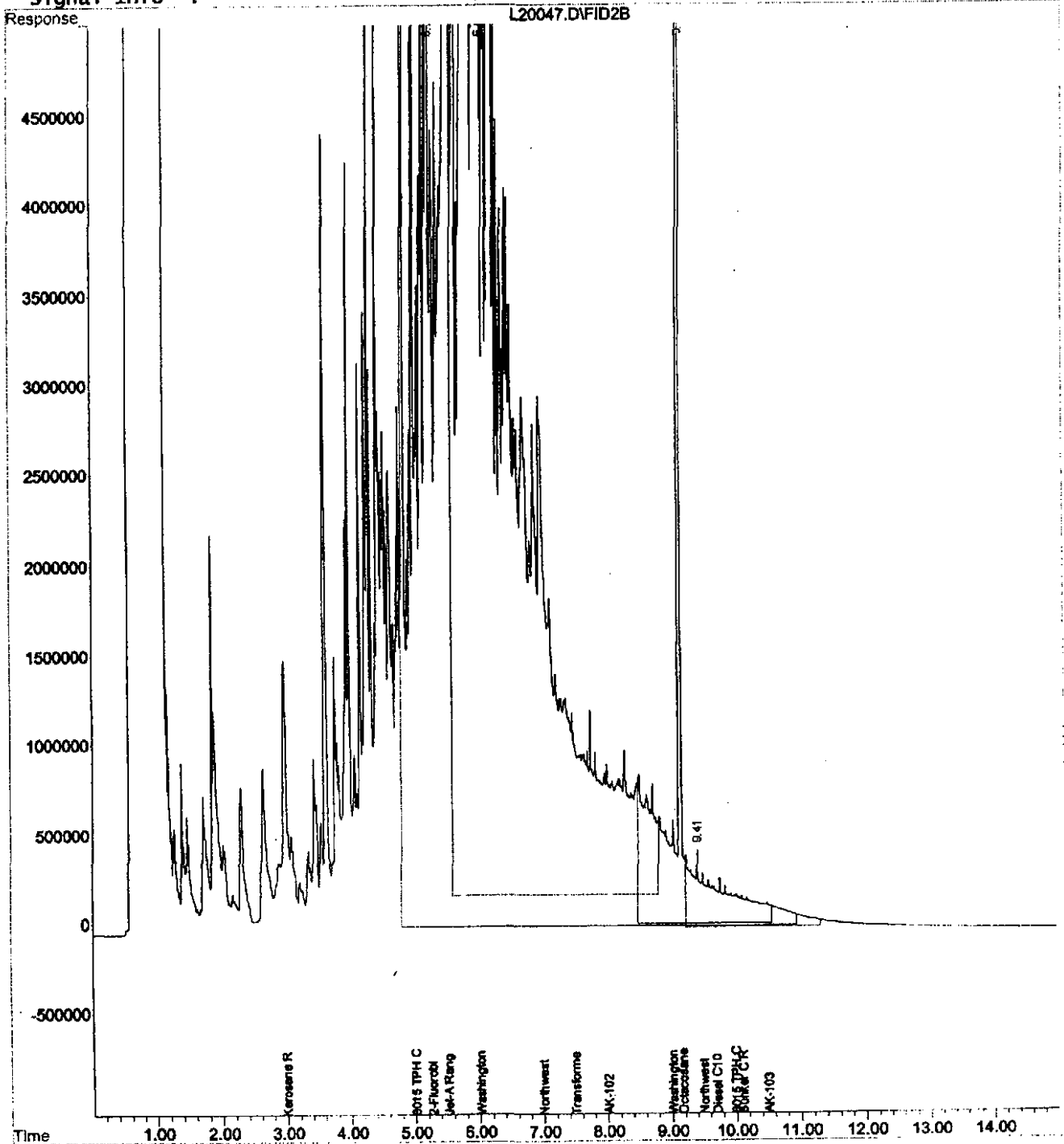
Data File : C:\HPCHEM\1\DATA.SEC\L20047.D  
Acq On : 12-20-02 20:42:42  
Sample : B2L0357-04  
Misc :  
IntFile : SURR.E  
Quant Time: Dec 20 20:58 2002

Vial: 12  
Operator: GAP  
Inst : GC #9  
Multiplr: 1.00

Quant Results File: L0602T9R.RES

Quant Method : C:\HPCHEM\1\METHODS\L0602T9R.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Sun Dec 15 15:09:22 2002  
Response via : Multiple Level Calibration  
DataAcq Meth : L0602T9F.M

Volume Inj. :  
Signal Phase :  
Signal Info :

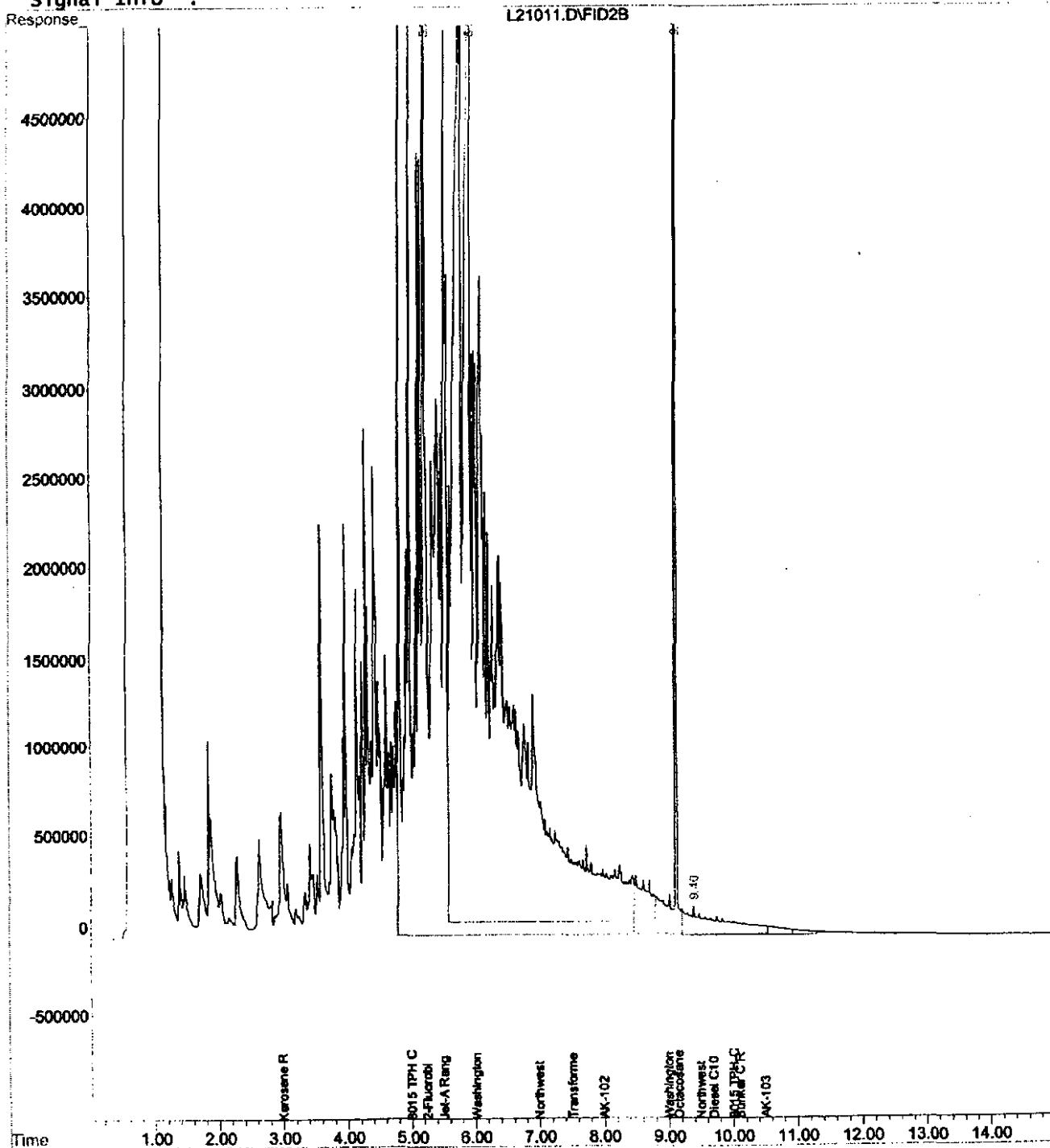


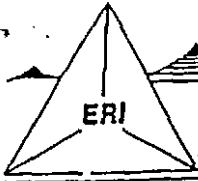
Quantitation Report

Data File : C:\HPCHEM\1\DATA.SEC\L21011.D  
Acq On : 12-21-02 11:09:10  
Sample : b210357-04  
Misc : 2X R1 for NW diesel  
IntFile : SURR.E  
Quant Time: Dec 21 14:27 2002  
vial: 5  
Operator: EP  
Inst : GC #9  
Multiplr: 1.00  
Quant Results File: L0602T9R.RES

Quant Method : C:\HPCHEM\1\METHODS\L0602T9R.M (Chemstation Integrator)  
Title : TPH-D Rear  
Last Update : Sun Dec 15 15:09:22 2002  
Response via : Multiple Level Calibration  
DataAcq Meth : L0602T9F.M

Volume Inj. :  
Signal Phase :  
Signal Info :





GROUNDWATER SAMPLING - FIELD LOG

Client Name: 10510 3333  
Location: WESTLAKE AVE  
Field Crew: DAVID ASE

ERI Job No. 1020  
Field Cleaning Performed:  
Analysis:

Date: 12/12/02 Page 1 of 1

\* - Case Volume =  $(\frac{d_{max}^3 - d_{min}^3}{6}) \times \pi \times F$  Where F =  
0.163 for a 2" inside diameter well casing  
0.652 for a 4" inside diameter well casing  
1.467 for a 6" inside diameter well casing

Well No.	Time	Depth Water (ft.)	Depth Well (ft.)	Case Dia. (in)	Case Vol. gal	Purge Vol. (gal)	Conduct. AS/CH (X1000)	Temp. Deg F	pH	TURB. NTU	PID PPH	Comments
MW 37		12.75										
MW 46			19.30									
MW 38		12.08	50.0	1.5	1.5							REFRT OBSTRUCTED BY VEHICLE
MW 39			22.80									
MW 52		11.61	17.45	1	3							OBSTRUCTED BY VEHICLE
MW 38A		22.72	22.38	1.5	4.5							
MW 39		12.90	21.40	1.5	4.5							
MW 50			15.00									
MW 53		12.76	24.57									OBSTRUCTED BY VEHICLE REFRT
MW 42		10.89										MONITOR ONLY

1997 Fremont Drive SE, Renton, Washington 98085 206-227-0280