PACIFIC
ENVIRONMENTAL
GROUP, INC.

October 25, 1995
Project 305-079.2E

Mr. R. Jeff Granberry
Shell Oil Products Company
P.O. Box 4023
Concord, California 94524

Re: Quarterly Report - Third Quarter 1995
Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California
WIC No 204-5508-5504

Dear Mr. Granberry:

The following presents the results of the third quarter monitoring program and status of remediation for the site referenced above. This letter has been prepared for Shell Oil Products Company (Shell) by Pacific Environmental Group, Inc. (PACIFIC).

REMEDIAL PROGRESS SUMMARY

Progress toward site remediation is presented in the following table.

Analyte	Total Mass Removed (pounds) Third Quarter 1995	Cumulative
Soil Vapor Extraction		
TPPH	0.00*	707.05
Benzene	0.00*	6.88

TPPH = Total purgeable petroleum hydrocarbons
* = System not operated during current reporting period.

QUARTERLY MONITORING FINDINGS

Groundwater monitoring wells were gauged on July 18, 1995, and sampled on July 19, 1995, by Blaine Tech Services, Inc. (Blaine), at the direction of PACIFIC. Groundwater elevation contours for the sampling date are shown on Figure 1; groundwater elevation data are presented in Table 1.

2025 Gateway Place, Suite 440, San Jose, California 95110 (408) 441-7500 FAX (408) 441-7539

All groundwater samples were analyzed for the presence of total purgeable petroleum hydrocarbons (TPPH), benzene, toluene, ethylbenzene, xylenes (BTEX compounds), and total extractable petroleum hydrocarbons (TEPH). TPPH, benzene, and TEPH concentrations for the July 1995 sampling event are shown on Figure 2. Corresponding groundwater analytical data are presented in Table 2. Hydrocarbon ranges for positive results of TPPH and TEPH can be found in the certified analytical report. Blaine's groundwater sampling report, which includes field data and the certified analytical report, is presented as Attachment A.

Well Abandonment

Well VEW-5 was abandoned by over-drilling on September 14, 1995, according to Alameda County Health Care Services Agency requirements, prior to construction of the overlaying car wash facilities.

REMEDIAL SYSTEM PERFORMANCE EVALUATION

Remedial System Description

The soil vapor extraction (SVE) system consists of a 7.5-horsepower vacuum blower connected to four SVE wells (Wells VEW-1 through VEW-4). Extracted soil vapor is treated by catalytic oxidation before discharge to the atmosphere. A process flow diagram of the system is shown on Figure 3.

Remedial System Operation

SVE system operation began on August 30, 1993. On February 9, 1995, the SVE system was shut down due to high groundwater levels and low influent concentrations. The SVE system did not operate during the current reporting period.

Remedial Objectives

The remedial objective for the site is to reduce petroleum hydrocarbon concentrations in impacted soil and groundwater beneath the site. To evaluate progress toward meeting the remedial objective, the following system parameters were monitored:

- SVE system petroleum hydrocarbon mass removal rates,
- SVE well vapor composition,
- SVE system influence, and
- dissolved petroleum hydrocarbon concentration trends.

Progress toward meeting the remedial objectives for the site is discussed below.

Petroleum Hydrocarbon Mass Removal

Mass removal data for the remedial system are presented in the table at the beginning of this letter, in Table 3, and shown on Figure 4. SVE system hydrocarbon concentrations are shown on Figure 5.

SVE Well Vapor Composition

Soil vapor samples were not obtained during the reporting period. Individual SVE well analytical data are presented in Table 4.

SVE Influence

SVE system influence was not measured during the reporting period.

Dissolved Petroleum Hydrocarbon Concentration Trends

The groundwater concentrations of TPPH and benzene in all associated site wells appear to have been stabilized or reduced due to remedial system. Concentration trends are presented in Table 2.

RECOMENDATIONS

Based on the consistency of the low influent hydrocarbon concentrations (Figure 5), additional SVE is not recommended. To further address hydrocarbon mass still present in soil and groundwater below the site, PACIFIC recommends implementing an enhanced bioremediation program. Elements of this program may include:

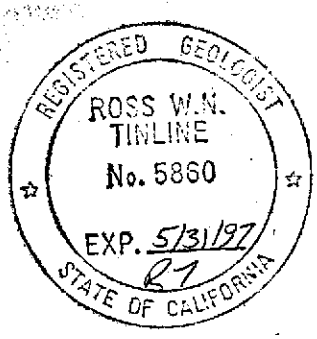
- Low flow biosparging.
- Low flow bioventing.
- Use of solid oxygen releasing compound units (magnesium peroxide).
- Addition of a nutrient solution containing hydrogen peroxide, nitrogen sources, phosphorous sources, and trace minerals.

A proposal for enhanced bioremediation program implementation will be prepared and submitted by November 15, 1995. as of 12/10/95 I haven't seen this proposal. BC

If you have any questions or comments regarding the contents of this letter, please call.

Sincerely,

Pacific Environmental Group, Inc.



Ross W. N. Tinline
Project Geologist
RG 5860

Attachments:
- Table 1 - Groundwater Elevation Data
- Table 2 - Groundwater Analytical Data - Total Petroleum Hydrocarbons (TPPH, BTEX Compounds, TEPH, and TPH as Motor Oil)
- Table 3 - Soil Vapor Extraction System Performance Data
- Table 4 - Vapor-Phase Analytical Data - Total Petroleum Hydrocarbons (TPH as Gasoline and BTEX Compounds)
- Figure 1 - Groundwater Elevation Contour Map
- Figure 2 - TPPH/Benzene/TEPH Concentration Map
- Figure 3 - Soil Vapor Extraction Process Flow Diagram
- Figure 4 - Soil Vapor Extraction System Mass Removal Data
- Figure 5 - Soil Vapor Extraction System Hydrocarbon Concentrations
- Attachment A - Groundwater Sampling Report

cc: Mr. Brad Boschetto, Shell Oil Products Company (without attachments)
Mr. Barney Chan, Alameda County Health Care Services
Mr. Richard Hiett, Regional Water Quality Control Board - San Francisco Bay Region (without attachments)
Ms. Anne Singley, Shell Oil Products Company (without attachments)
Mr. Joseph J. Armayo, Heller, Ehrman, White and McAuliffe (without attachments)

Table 1
Groundwater Elevation Data

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-1	02/16/89	6.64	3.83	2.81
	05/23/89		3.59	3.05
	08/03/89		4.04	2.60
	12/15/89		4.22	2.42
	02/07/90		4.60	2.04
	04/18/90		4.02	2.62
	07/23/90		4.17	2.47
	09/27/90		4.60	2.04
	01/03/91		4.88	1.76
	04/10/91		3.55	3.09
	07/12/91		3.97	2.67
	10/08/91		4.26	2.38
	02/06/92		4.94	1.70
	05/04/92		3.58	3.06
	07/28/92		3.91	2.73
	10/27/92		4.79	1.85
	01/14/93		3.39	3.25
	04/23/93		2.67	3.97
	07/20/93	9.50	3.48	6.02
	10/18/93		4.20	5.30
	01/06/94		4.13	5.37
	04/12/94		2.42	7.08
	07/25/94		3.37	6.13
	10/25/94		4.07	5.43
	01/09/95		2.65	6.85
	04/11/95		2.38	7.12
	07/18/95		3.49	6.01
MW-2	02/16/89	7.68	5.33	2.35
	05/23/89		5.23	2.45
	08/03/89		6.03	1.65
	12/15/89		6.43	1.25
	02/07/90		5.82	1.86
	04/18/90		5.88	1.80
	07/23/90		6.05	1.63
	01/03/91		6.82	0.86
	04/10/91		4.80	2.88
	07/12/91		5.70	1.98
	10/08/91		6.40	1.28
	02/06/92		6.40	1.28
	05/04/92		4.68	3.00
	07/28/92		5.86	1.82
	10/27/92		6.96	0.72
	01/14/93		4.12	3.56
	04/23/93		3.84	3.84

Table 1 (continued)
Groundwater Elevation Data

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-2 (cont.)	07/20/93	10.55	5.17	5.38
	10/18/93		6.20	4.35
	01/06/94		5.39	5.16
	04/12/94		4.72	5.83
	07/25/94		5.44	5.11
	10/25/94		6.73	3.82
	01/09/95		4.34	6.21
	04/11/95		3.72	6.83
	07/18/95		4.91	5.64
MW-3	02/16/89	7.81	5.17	2.64
	05/23/89		5.09	2.72
	08/03/89		5.34	2.47
	12/15/89		6.02	1.79
	02/07/90		4.95	2.86
	04/18/90		5.55	2.26
	07/23/90		5.81	2.00
	09/27/90		6.86	0.95
	01/03/91		6.84	0.97
	04/10/91		4.93	2.88
	07/12/91		5.56	2.25
	10/08/91		6.62	1.19
	02/06/92		6.28	1.53
	05/04/92		4.65	3.16
	07/28/92		5.56	2.25
	10/27/92		6.65	1.16
	01/14/93		3.88	3.93
	04/23/93		-------- Well Inaccessible --------	
	07/20/93	11.25 (TOB)	-------- Well Inaccessible --------	
	10/18/93		-------- Well Inaccessible --------	
	01/06/94		5.54	N/A
	04/12/94		4.82	N/A
	07/25/94		6.03 (TOB)	5.22
	10/25/94		6.48	N/A
	01/09/95		4.86 (TOB)	6.39
	04/11/95		4.22 (TOB)	7.03
	07/18/95		5.44 (TOB)	5.81
MW-4	05/23/89	7.38	5.60	1.78
	08/03/89		6.37	1.01
	12/15/89		6.91	0.47
	03/08/90		6.06	1.32
	04/18/90		5.84	1.54
	07/23/90		6.92	0.46
	07/23/90		6.92	0.46
	09/27/91		8.03	0.65

Table 1 (continued)
Groundwater Elevation Data

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-4 (cont.)	01/03/91		7.54	-0.16
	04/10/91		5.06	2.32
	07/12/91		6.86	0.52
	10/08/91		7.44	-0.06
	02/06/92		7.29	0.09
	05/04/92		5.33	2.05
	07/28/92		6.95	0.43
	10/27/92		7.65	-0.27
	01/14/93		4.84	2.54
	04/23/93		4.84	2.54
	07/20/93	10.28	6.47	3.81
	10/18/93		7.35	2.93
	01/06/94		7.64	2.64
	04/12/94		6.39	3.89
	07/25/94		7.00	3.28
	10/25/94		7.53	2.75
	01/09/95		4.90	5.38
	04/11/95		5.04	5.24
	07/18/95		6.18	4.10
MW-5	05/23/89	8.18	5.47	2.71
	08/03/89		5.94	2.24
	12/15/89		6.75	1.43
	02/07/90		6.03	2.15
	04/18/90		5.80	2.38
	07/23/90		6.00	2.18
	09/23/90		7.18	1.00
	01/03/91		7.17	1.01
	04/10/91		5.25	2.93
	07/12/91		5.70	2.48
	10/08/91		6.50	1.68
	02/06/92		6.35	1.83
	05/04/92		4.87	3.31
	07/28/92		5.73	2.45
	10/27/92		6.98	1.20
	01/14/93		4.70	3.48
	04/23/93		4.19	3.99
	07/20/93	10.87	5.10	5.77
	10/18/93		5.79	5.08
	01/06/94		5.56	5.31
	04/12/94		4.90	5.97
	07/25/94		5.38	5.49
	10/25/94		6.16	4.71
	01/09/95		4.60	6.27
	04/11/95		3.74	7.13
	07/18/95		4.97	5.90

Table 1 (continued)
Groundwater Elevation Data

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-6	05/23/89	8.21	5.47	2.74
	08/03/89		5.91	2.30
	12/15/89		5.98	2.23
	02/07/90		5.47	2.74
	04/18/90		5.80	2.41
	07/23/90		5.85	2.36
	09/27/90		6.42	1.79
	01/03/91		6.73	1.48
	04/10/91		5.24	2.97
	07/12/91		5.78	2.43
	10/08/91		6.36	1.85
	02/06/92		6.15	2.06
	05/04/92		5.07	3.14
	07/28/92		5.85	2.36
	10/27/92		6.69	1.52
	01/14/93		4.52	3.69
	04/23/93		4.32	3.89
	07/20/93	11.04	5.39	5.65
	10/18/93		6.67	4.37
	01/06/94		5.66	5.38
	04/12/94		4.91	6.13
	07/25/94		5.55	5.49
	10/25/94		6.24	4.80
	01/09/95		4.58	6.46
	04/11/95		4.04	7.00
	07/18/95		5.01	6.03
MW-7	05/23/89	7.44	5.48	1.96
	08/03/89		4.22	3.22
	12/15/89		4.58	2.86
	02/07/90		5.34	2.10
	04/18/90		4.92	2.52
	07/23/90		4.99	2.45
	09/27/90		6.16	1.28
	01/03/91		4.96	2.48
	04/10/91		4.13	3.31
	07/12/91		4.98	2.46
	10/08/91		5.48	1.96
	02/06/92		5.05	2.39
	05/04/92		4.43	3.01
	07/28/92		4.88	2.56
	10/27/92		5.39	2.05
	01/14/93		4.26	3.18
	04/23/93		4.04	3.40
	07/20/93	10.28	4.36	5.92

Table 1 (continued)
Groundwater Elevation Data

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-7 (cont.)	10/18/93		5.14	5.14
	01/06/94		4.83	5.45
	04/12/94		4.24	6.04
	07/25/94		4.58	5.70
	10/25/94		5.07	5.21
	01/09/95		3.38	6.90
	04/11/95		3.52	6.76
	07/18/95		4.70	5.58
MW-8	05/23/89	7.79	6.62	1.17
	08/03/89		6.62	1.17
	12/15/89		6.71	1.08
	03/08/90		4.95	2.84
	04/18/90		6.40	1.89
	07/23/90		6.62	1.17
	09/27/90		6.98	0.81
	01/03/91		7.03	0.76
	04/10/91		4.40	3.39
	07/12/91		6.80	0.99
	10/08/91		7.56	0.23
	02/06/92		6.94	0.85
	05/04/92		5.86	1.93
	07/28/92		6.94	0.85
	10/27/92		7.83	-0.04
	01/14/93		3.60	4.19
	04/23/93		4.12	3.67
	07/20/93	10.61	6.38	4.23
	10/18/93		7.47	3.14
	01/06/94		7.20	3.41
	04/12/94		6.16	4.45
	07/25/94		6.94	3.67
	10/25/94		7.43	3.18
	01/09/95		3.98	6.63
	04/11/95		4.12	6.49
	07/18/95		5.21	5.40
MW-9	08/03/89	7.63	5.78	1.85
	12/15/89		5.24	2.39
	02/07/90		5.23	2.40
	04/18/90		5.34	2.29
	07/23/90		5.65	1.98
	09/27/90		5.96	1.67
	01/03/91		6.23	1.40
	04/10/91		4.65	2.98
	07/12/91		5.65	1.98
	10/08/91		6.08	1.55

Table 1 (continued)
Groundwater Elevation Data

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-9 (cont.)	02/06/92		5.92	1.71
	05/04/92		4.80	2.83
	07/28/92		5.61	2.02
	10/27/92		6.24	1.39
	01/14/93		4.95	2.68
	04/23/93		4.54	3.09
	07/20/93	10.48	5.25	5.23
	10/18/93		6.00	4.48
	01/06/94		5.62	4.86
	04/12/94		4.31	6.17
	07/25/94		5.43	5.05
	10/25/94		6.00	4.48
	01/09/95		4.26	6.22
	04/11/95		4.08	6.40
	07/18/95		5.07	5.41
MW-10	12/15/89	7.45	6.33	0.82
	03/08/90		5.41	2.00
	04/18/90		5.60	1.85
	07/23/90		5.81	1.64
	09/27/90		6.64	0.81
	01/03/91		6.96	0.49
	04/10/91		4.70	2.75
	07/12/91		5.90	1.55
	10/08/91		6.68	0.77
	02/06/92		7.04	0.41
	05/04/92		4.69	2.76
	07/28/92		6.00	1.45
	10/27/92		-------- Well Inaccessible --------	
	01/14/93		6.07	1.38
	04/23/93		4.14	3.31
	07/20/93	10.61	5.62	4.99
	10/18/93		6.43	4.18
	01/06/94		6.74	3.87
	04/12/94		5.98	4.63
	07/25/94		6.31	4.30
	10/25/94		6.64	3.97
	01/09/95		5.70	4.91
	04/11/95		5.82	4.79
	07/18/95		6.79	3.82
MW-11	07/20/93	10.56	8.08	2.48
	10/18/93		8.24	2.32
	01/06/94		8.47	2.09
	04/12/94		8.44	2.12
	07/25/94		8.20	2.36

Table 1 (continued)
Groundwater Elevation Data

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-11 (cont.)	10/25/94		8.67	1.89
	01/09/95		7.63	2.93
	04/11/95		8.06	2.50
	07/18/95		9.31	1.25
MW-12	07/20/93	9.56	6.76	2.80
	10/18/93		7.12	2.44
	01/06/94		7.15	2.41
	04/12/94		6.68	2.88
	07/25/94		6.83	2.73
	10/25/94		7.34	2.22
	01/09/95		5.02	4.54
	04/11/95		7.38	2.18
	07/18/95		8.50	1.06
MW-13	07/20/93	10.10	8.32	1.78
	10/18/93		8.66	1.44
	01/06/94		8.70	1.40
	04/12/94		8.20	1.90
	07/25/94		8.39	1.71
	10/25/94		8.70	1.40
	01/09/95		7.35	2.75
	04/11/95		5.50	4.60
	07/18/95		6.63	3.47

MSL = Mean sea level
TOC = Top of casing
TOB = Top of box elevation
N/A = Not available

Table 2
Groundwater Analytical Data
Total Petroleum Hydrocarbons
(TPPH, BTEX Compounds, TEPH, and TPH as Motor Oil)

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Sampled	TPPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylenes (ppm)	TEPH (ppm)		TPH as Motor Oil (ppm)
MW-1	02/16/92	99	20	23	5.7	23	NA		NA
	05/23/92	48	4.2	5.2	1.2	7.7	11		NA
	08/04/89	63	5.5	5.5	3.2	9.5	11		NA
	12/15/89	30	ND	ND	ND	ND	11		NA
	02/07/90	93	13	9.6	2.4	14	10		NA
	04/18/90	55	14	8.4	3.2	13	8.7		NA
	07/24/90	73	16	7.4	2.8	15	3.6		NA
	10/01/90	45	8	4.3	2	11	1.7		NA
	01/02/91	43	10	3.4	1.9	11	3.1		NA
	04/09/91	67	20	9.6	3.5	16	1.8		NA
	07/11/91	NR	NR	NR	NR	NR	NR		NA
	10/08/91	55	18	3.5	2.3	8.6	7.4		NA
	02/06/92	48	12	2.8	1.9	7.4	15	a	NA
	05/05/92	71	16	6	3.1	14	10	a	NA
	07/28/92	68	21	5.5	3.4	15	18	a	ND
	07/28/92(D)	70	17	5	2.7	13	19	a	ND
	10/27/92	53	18	3.7	3.4	11	1.3		NA
	10/27/92(D)	48	17	3.6	3.1	9.9	2.5	a	NA
	01/15/93	84	17	5.4	3	13	22	a	ND
	04/23/93	100	18	7.8	4.7	20	23	a	ND
	07/20/93	41 d	12	0.87	1.5	4.4	3.1	a	NA
	10/18/93	33	14	1.2	2	4.9	8.1	a	0.96
	10/18/93(D)	44	14	1.2	2	4.9	3.7	a	0.67
	01/06/94	71	9	0.87	1.6	5.1	9	a	ND
	04/12/94	42	6.6	0.17	2.3	4.7	5.9		2.5
	04/12/94(D)	40	6.3	0.18	2	4.4	4.7		2.2
	07/25/94	13	4.4	0.11	0.46	1.4	7.0	a	ND
	10/26/94	19	5.5	0.21	0.88	2	3.9		ND
	01/11/95	37	6.7	0.8	2.8	8.9	8.6	a	ND
	04/11/95	26	4.7	0.27	1.8	3.4	5.5		ND
	07/19/95	57	7.5	0.88	4.1	11	7.0		NC
	07/19/95(D)	46	6.0	0.67	3.2	7.5	6.6		NC
MW-2	02/16/89	20	0.2	0.9	2.7	9.6	NA		NA
	05/23/89	1.5	0.0043	0.0029	0.011	0.15	1.6		NA
	08/04/89	15	0.075	0.12	0.85	2.2	7.4		NA
	12/15/89	5	0.052	0.013	0.0041	0.29	2.6		NA
	02/07/90	13	0.032	0.034	0.23	0.64	4.8		NA
	04/18/90	9.8	0.033	0.019	0.46	1.7	3.2		NA
	07/24/90	9.6	0.041	0.027	0.54	0.94	2.7		NA
	10/01/90	0.39	0.0034	0.015	0.0085	0.025	1.6		NA
	01/02/91	1.8	0.056	0.0044	0.0048	0.092	0.83		NA
	04/09/91	1.9	ND	0.028	0.14	0.49	0.28		NA
	07/11/91	8.1	0.089	0.066	0.35	0.93	1.1		NA
	10/08/91	1.4	0.0051	0.0015	0.036	0.27	2.6		NA
	02/06/92	2	0.0078	0.0025	0.13	0.21	5.4	a	NA
	05/05/92	21 b	ND	ND	0.3	0.96	1		NA
	07/28/92	2.1	0.0077	0.0033	0.13	0.31	0.83	a	0.32
	10/27/92	1.1	0.016	0.0031	0.0045	0.025	0.53		NA
	01/15/93+	0.29	0.0052	0.0031	0.0084	0.021	0.17	b	NA
	04/23/93	2.4	ND	ND	0.21	0.61	1.2	a	ND
	07/21/93	0.44	0.0017	0.0017	0.015	0.038	0.13		NA

Table 2 (continued)
Groundwater Analytical Data
Total Petroleum Hydrocarbons
(TPPH, BTEX Compounds, TEPH, and TPH as Motor Oil)

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Sampled	TPPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylenes (ppm)	TEPH (ppm)		TPH as Motor Oil (ppm)
MW-2	10/18/93	2.1	ND	ND	0.09	0.11	1.6	a	0.51
(cont.)	01/06/94	1.9 e	ND	0.0067	0.0071	0.012	0.13		ND
	04/12/94	0.12	ND	ND	0.0034	0.0043	0.13		0.17
	07/25/94	0.18 f	0.0053	ND	0.0062	0.0082	0.28	a	ND
	10/26/94	0.17	ND	ND	ND	ND	0.4		ND
	01/11/95	ND	ND	ND	ND	ND	ND		ND
	04/11/95	ND	ND	ND	ND	ND	ND		ND
	07/19/95	0.25	0.0028	0.0005	0.012	0.013	0.16		NC
MW-3	02/16/89	60	5.5	0.2	3.2	5.2	NA		NA
	05/23/89	ND	ND	ND	ND	ND	1.5		NA
	08/04/89	2	0.12	0.012	ND	0.086	1.2		NA
	12/15/89	5.2	0.38	0.047	0.017	0.41	1.7		NA
	03/08/90	0.26	0.017	ND	0.0054	0.0025	0.23		NA
	04/19/90	0.26	ND	ND	ND	0.0094	ND		NA
	07/24/90	0.51	0.046	0.0012	ND	0.0093	0.21		NA
	09/28/90	0.46	0.0063	0.0017	ND	0.015	0.35		NA
	01/02/91	4.8	0.92	0.0088	ND	0.19	0.63		NA
	04/09/91	0.12	0.0012	0.0008	0.0035	0.021	0.06		NA
	07/11/91	0.43	0.012	ND	ND	0.0077	ND		NA
	10/08/91	0.77	0.14	0.0007	ND	0.053	0.56		NA
	02/06/91	0.5	0.074	0.0009	0.0052	0.0053	0.34	a	NA
	05/04/92	0.31	0.047	ND	0.017	0.016	0.29	a	NA
	07/28/92 **	0.78	0.13	ND	0.013	0.0042	0.1	a	0.12
	10/27/92 **	0.74	0.092	0.0028	0.0078	0.0096	0.069	a	0.1
	01/15/93	ND	0.0024	ND	ND	ND	ND		0.12
	04/23/93	---------- Well Inaccessible ----------							
	07/20/93	---------- Well Inaccessible ----------							
	10/18/93	---------- Well Inaccessible ----------							
	01/06/94	0.13	0.0017	ND	ND	0.00093	0.064		ND
	04/12/94	ND	0.00082	ND	ND	0.0007	0.075		0.086
	07/25/94	0.06 f	0.0028	ND	ND	0.0007	ND		ND
	10/26/94	0.07	ND	ND	ND	ND	0.1		ND
	01/11/95	ND	ND	ND	ND	ND	ND		ND
	04/11/95	ND	ND	ND	ND	ND	ND		ND
	07/19/95	ND	0.0028	ND	ND	ND	0.09		NC
MW-4	05/23/89	ND	ND	ND	ND	ND	ND		NA
	08/04/89	ND	ND	ND	ND	ND	ND		NA
	12/15/89	ND	ND	ND	ND	ND	ND		NA
	03/08/90	ND	ND	ND	ND	ND	ND		NA
	07/25/90	ND	ND	ND	ND	ND	ND		NA
	09/28/90	ND	ND	ND	ND	ND	ND		NA
	04/09/91	ND	ND	ND	ND	ND	ND		NA
	07/11/91	ND	ND	ND	ND	ND	ND		NA
	10/08/91	ND	ND	ND	ND	ND	ND		NA
	02/06/92	0.12	ND	ND	ND	ND	2.5	a	NA
	05/04/92	ND	ND	ND	ND	ND	0.053		NA
	07/28/92	ND	ND	ND	ND	ND	0.06		ND
	10/27/92	ND	ND	ND	ND	ND	ND		NA
	01/14/93	ND	ND	ND	ND	ND	ND		0.12
	04/23/93	ND	ND	ND	ND	ND	ND		0.17

Table 2 (continued)
Groundwater Analytical Data
Total Petroleum Hydrocarbons
(TPPH, BTEX Compounds, TEPH, and TPH as Motor Oil)

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Sampled	TPPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylenes (ppm)	TEPH (ppm)	TPH as Motor Oil (ppm)
MW-4	07/21/93	ND	0.0022	0.0012	0.0011	0.0077	ND	NA
(cont.)	10/18/93	ND	ND	ND	ND	ND	ND	0.2
	01/06/94	ND	ND	ND	ND	ND	ND	ND
	04/13/94	ND	ND	ND	ND	ND	0.076	0.39
	07/26/94	ND	ND	ND	ND	ND	ND	ND
	10/26/94	ND	ND	ND	ND	ND	ND	ND
	01/11/95	ND	ND	ND	ND	ND	0.07 b,g	ND
	04/11/95	ND	0.0015	0.0034	0.0006	0.0034	0.14	ND
	07/19/95	ND	0.013	ND	ND	ND	0.16	NC
MW-5	05/23/89	26	1.5	0.28	ND	8.1	7	NA
	08/05/89	12	0.86	0.094	ND	2.6	8.7	NA
	12/15/89	1	0.022	0.035	0.018	0.044	0.71	NA
	02/08/90	ND	0.0008	ND	ND	ND	0.62	NA
	04/19/90	19	4.5	0.85	0.097	8	5	NA
	07/24/90	23	3.6	0.4	0.16	6.5	2.7	NA
	09/28/90	5.4	1.4	0.026	0.013	1.3	0.55	NA
	01/02/91	0.86	0.28	0.0028	0.0008	0.045	0.56	NA
	04/09/91	12	0.71	0.13	0.5	2.4	1.8	NA
	07/11/91	24	2.2	0.28	0.43	5.7	1.7	NA
	10/08/91	2.8	0.86	0.013	ND	0.58	1.4	NA
	02/06/92	1	0.3	ND	0.014	0.062	1.2	NA
	05/05/92	10	1.5	0.35	0.71	2.3	4.1 a	NA
	07/28/92	12	2.2	0.063	1.4	3.5	3.8 a	1.2
	10/27/92	7.5	1.1	0.059	0.23	0.9	0.48 a	NA
	01/15/93	7.7	0.42	0.049	0.57	0.84	1.1 c	0.43
	04/23/93	110	2.9	2.5	3.4	12	16 a	ND
	07/21/93	18 d	1.4	0.084	1.5	3.2	1.2 a	NA
	10/18/93	14	2	0.1	2.3	5.1	5.8 a	0.86
	01/06/94	81	11	9.3	3.6	12	11 a	ND
	04/12/94	17	2.9	0.38	0.43	1.3	4.1	2.2
	07/25/94	5.9	1.5	0.042	0.034	0.17	5.4 a	ND
	10/26/94	2.3	0.035	0.0028	ND	0.0081	1.9 a	720
	01/11/95	8.3	1.5	0.095	0.33	1.9	3.7 c	ND
	04/11/95	7.3	1.2	0.23	0.6	0.55	9.8	ND
	07/19/95	17	2.3	0.73	0.77	2.5	5.1	NC
MW-6	05/23/89	22	0.016	0.0065	0.0066	3.4	7	NA
	08/04/89	28	1.2	0.13	2.1	2.8	8.8	NA
	12/15/89	16	0.37	0.092	0.2	0.18	5.5	NA
	02/07/90	22	0.52	0.085	0.63	0.77	2.6	NA
	04/18/90	21	0.9	0.077	2.7	2.7	5.7	NA
	07/24/90	24	1	0.094	3.4	2.7	3	NA
	10/01/90	22	0.7	0.093	2.5	2.4	ND	NA
	01/02/91	25	1	0.088	2.6	3.7	0.96	NA
	04/09/91	18	0.56	0.19	0.48	0.83	0.92	NA
	07/11/91	9.5	0.67	0.051	1.1	0.92	1.9	NA
	10/08/91	11	1	0.043	ND	ND	5.1	NA
	02/06/92	7.2	0.56	0.008	0.72	0.16	15 a	NA
	05/05/92	7.9	0.61	ND	1.5	0.24	2.9 a	NA
	07/28/92	17	1.2	ND	3	0.61	3.2 a	ND
	10/27/92	15	1.3	0.13	1.7	0.49	1.3 a	NA

Table 2 (continued)
Groundwater Analytical Data
Total Petroleum Hydrocarbons
(TPPH, BTEX Compounds, TEPH, and TPH as Motor Oil)

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Sampled	TPPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylenes (ppm)	TEPH (ppm)		TPH as Motor Oil (ppm)
MW-6	01/14/93	4.9	0.08	0.031	0.33	0.037	1.6	a	ND
(cont.)	04/23/93	4.8	0.12	ND	0.78	0.073	1.8	a	ND
	07/20/93	19 d	0.57	0.018	1.1	0.13	0.91	a	NA
	10/18/93	24	0.77	0.44	1.6	0.83	2.5	a	0.83
	01/06/94	20 d	0.45	0.03	0.53	0.052	2.3a	a	ND
	04/12/94	3.6	0.15	ND	0.34	0.021	1.6		0.58
	07/25/94	1.6	0.16	ND	ND	0.01	2.2	a *	ND *
	07/25/94(D)	1	0.16	ND	ND	0.018	2.4	a	ND
	10/26/94	9.8	0.39	0.022	0.3	0.057	3.0	a	ND
	01/09/95	2.2	0.074	0.012	0.4	0.039	0.8	a	ND
	04/11/95	5	0.33	0.015	0.76	0.085	7.7		ND
	07/19/95	4.2	0.32	0.011	0.49	0.022	1.7		NC
MW-7	05/23/89	47	3.5	5	1.5	7.8	11		NA
	08/04/89	68	6.2	6.6	3.6	8.8	22		NA
	12/15/89	100	4.5	5.3	1.3	5.3	12		NA
	02/08/90	96	15	15	2.5	14	8.1		NA
	04/19/90	94	25	13	3.3	13	10		NA
	07/24/90	84	3.8	26	13	3	12		NA
	09/28/90	43	25	6.1	2.4	9	ND		NA
	01/02/91	78	26	16	3	14	3.1		NA
	04/09/91	140	26	16	2.2	14	1.8		NA
	07/11/91	79	7.7	7.2	2.3	10	1.1		NA
	10/08/91	55	29	7.5	1.8	9.3	0.39	a	NA
	02/06/92	63	16	8.7	1.6	7.4	9.6	a	NA
	05/05/92	67	22	13	1.8	9.4	9.8	a	NA
	07/28/92	85	26	17	2.9	15	13	a	ND
	10/27/92	63	21	11	3	11	1.9	a	NA
	01/14/93	120	28	21	1.6	15	2.3	a	NA
	04/23/93	60	17	3.7	2.2	11	12	a	ND
	04/23/93(D)	50	17	4.2	2.2	11	14	a	ND
	07/21/93	47	23	9.9	2.2	12	13		NA
	10/18/93	44	22	3.8	2.6	10	10	a	1
	01/06/94	65	16	4.9	1.9	8.5	5.2	a	ND
	04/12/94	68	12	2	0.58	6.4	3.4		0.75
	07/25/94	63	16	5.8	0.3	8.3	4.2	a	ND
	10/26/94	46	16	3.7	1.2	7.3	3.8	a	ND
	01/11/95	62	24	8.5	1.1	9.4	3.3	c	ND
	01/11/95(D)	57	9.5	7.9	0.62	8	3.2	c	ND
	04/12/95	53	13	4.2	1.5	7.7	7		ND
	04/12/95(D)	55	11	3.7	1.3	6.4	7.6		ND
	07/19/95	95	24	8.0	2.1	12	2.7		NC
MW-8	05/23/89	ND	ND	ND	ND	ND	0.1		NA
	08/04/89	ND	ND	ND	ND	ND	0.075		NA
	12/15/89	ND	ND	ND	ND	ND	ND		NA
	03/08/90	ND	ND	ND	ND	ND	ND		NA
	07/25/90	ND	ND	ND	ND	ND	ND		NA
	09/28/90	ND	ND	ND	ND	ND	1.1		NA
	01/02/91	ND	0.0013	ND	ND	ND	ND		NA
	04/09/91	0.05	0.0007	0.0011	0.0008	0.001	ND		NA
	07/11/91	ND	ND	ND	ND	ND	ND		NA

Table 2 (continued)
Groundwater Analytical Data
Total Petroleum Hydrocarbons
(TPPH, BTEX Compounds, TEPH, and TPH as Motor Oil)

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Sampled	TPPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylenes (ppm)	TEPH (ppm)		TPH as Motor Oil (ppm)
MW-8	10/08/91	ND	0.0014	ND	ND	ND	ND		NA
(cont.)	02/06/92	ND	ND	0.0007	ND	ND	0.06	a	NA
	05/04/92	ND	ND	ND	ND	ND	0.21	b	NA
	07/28/92	0.051	ND	ND	0.001	0.0006	ND		0.15
	10/27/92	ND	ND	0.0066	ND	ND	ND		NA
	01/14/93	ND	ND	ND	ND	ND	0.064	b	NA
	01/14/93(D)	ND	ND	ND	ND	ND	NA		NA
	04/23/93	ND	ND	ND	ND	ND	ND		0.15
	07/21/93	ND	0.0007	0.0007	0.0008	0.0041	ND		NA
	10/18/93	ND	ND	0.8	ND	ND	ND		0.17
	01/06/94	ND	ND	ND	ND	ND	ND		ND
	04/13/94	ND	ND	ND	ND	ND	ND		0.22
	07/26/94	ND	ND	ND	ND	ND	ND		ND
	10/26/94	ND	ND	0.001	ND	ND	ND		ND
	01/11/95	ND	ND	ND	ND	ND	0.07	b,g	ND
	04/11/95	ND	0.00063	0.0013	ND	0.00075	0.078		ND
	07/19/95	ND	ND	ND	ND	ND	0.13		NC
MW-9	08/04/89	47	5.6	6.6	1.5	8.5	12		NA
	12/15/89	88	4.3	5.4	0.14	5.6	9.2		NA
	02/08/90	50	1.8	1.4	3.2	1.8	7.4		NA
	04/19/90	50	14	11	0.73	10	7.5		NA
	07/24/90	62	19	16	0.95	15	3.2		NA
	09/28/90	30	16	6.5	0.98	11	2.7		NA
	01/02/91	34	9.2	3.2	0.77	7	2.5		NA
	04/09/91	66	17	13	1.4	14	2.2		NA
	07/11/91	40	7.7	3.2	1.1	9.4	2		NA
	10/08/91	20	11	0.64	0.24	6	4.7	a	NA
	02/06/92	36	11	0.49	1.1	6.7	6.6	a	NA
	05/05/92	31	11	1.7	1.2	8.7	5.8	a	NA
	07/28/92	50	17	1.2	1.5	12	14		ND
	10/27/92	43	15	0.68	1.7	8.1	0.88	a	NA
	01/15/93	52	9.6	1.1	1.1	7	0.73	a	NA
	04/23/93	45	11	1.4	1.5	10	8	a	0.15
	07/21/93	25	10	0.32	1.1	7.1	5.1		NA
	10/18/93	32	14	0.53	2	10	4.9	a	NA
	01/06/94	41	15	0.81	1.4	9	7.7	a	NA
	01/06/94(D)	43	15	0.92	1.3	8	8.3	a	NA
	04/13/94	39	8.3	ND	ND	4	2		0.22
	07/26/94	22	7.5	0.15	ND	4.1	3.6	a	ND
	10/26/94	31	13	0.24	1	8.5	3.2	a	ND
	10/26/94(D)	31	13	0.22	1.1	8.3	3.5	a	NA
	01/11/95	4.8	1.2	0.51	0.042	1.4	2.3	c	ND
	04/12/95	20	5.1	0.46	0.4	3.4	3.4		ND
	07/19/95	43	12	1.8	0.96	9.1	2.9		NC
MW-10	12/15/89	ND	1.5	ND	ND	ND	3.1		NA
	03/08/90	25	17	0.33	2.1	1.4	1.8		NA
	04/19/90	23	15	1.2	0.19	3.3	3.6		NA
	07/25/90	18	12	0.38	ND	1.4	1.9		NA
	09/28/90	9.5	13	0.1	1.8	0.23	0.43		NA
	01/02/91	4.3	3.7	0.0097	ND	0.11	0.63		NA

Table 2 (continued)
Groundwater Analytical Data
Total Petroleum Hydrocarbons
(TPPH, BTEX Compounds, TEPH, and TPH as Motor Oil)

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Sampled	TPPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylenes (ppm)	TEPH (ppm)		TPH as Motor Oil (ppm)
MW-10	04/09/91	45	16	4.6	3	6.9	1.4		NA
(cont.)	07/11/91	ND	ND	ND	ND	ND	ND		NA
	10/08/91	3.8	13	0.082	0.0091	0.5	1.5	a	NA
	02/06/92	22	12	ND	0.6	0.17	1.6	a	NA
	05/05/92	39	14	5	1.8	5	8	a	NA
	07/28/92	38	17	2.8	1.5	4	8.7	a	ND
	10/27/92	---------- Well Inaccessible ----------							
	01/14/93	26	10	ND	ND	0.16	0.95	c	0.2
	04/23/93	80	21	13	3.4	12	19	a	ND
	07/21/93	31	14	4.2	1.7	5.5	4.8		NA
	10/18/93	13	8.6	0.22	ND	0.45	1.2	a	0.61
	01/06/94	16	9.7	<0.125	<0.125	0.21	0.67	a	0.62
	04/13/94	16	5.6	ND	ND	ND	0.86		0.27
	07/25/94	2.3	1.4	0.026	0.025	0.051	2.1	a	ND
	10/26/94	1.4	0.29	0.005	0.0017	0.038	1.0	a	ND
	01/11/95	16	7.5	1.4	0.23	1.5	2.3	c	ND
	04/11/95	54	13	4.5	1.5	4.5	5		ND
	07/19/95	72	20	7.2	2.8	9	2.6		NC
MW-11	07/20/93	0.05	0.0025	0.0019	0.0039	0.018	ND		NA
	10/18/93	ND	ND	ND	ND	ND	0.065		0.26
	01/06/94	ND	ND	ND	ND	ND	ND		ND
	04/13/94	ND	0.0011	0.00087	ND	0.0015	ND		ND
	07/25/94	ND	ND	ND	ND	ND	ND		ND
	10/26/94	ND	ND	ND	ND	ND	0.1		ND
	01/11/95	ND	ND	ND	ND	ND	ND		ND
	04/11/95	ND	ND	0.0007	ND	0.0005	0.14		ND
	07/19/95	ND	ND	ND	ND	ND	0.050		NC
MW-12	07/20/93	ND	0.0028	0.0019	0.0032	ND	0.015		NA
	10/18/93	ND	ND	ND	ND	ND	ND		0.12
	01/06/94	ND	ND	ND	ND	ND	ND		ND
	04/13/94	ND	0.00061	ND	ND	0.0011	ND		ND
	07/25/94	ND	ND	ND	ND	ND	ND		ND
	10/26/94	ND	ND	ND	ND	ND	ND		ND
	01/09/95	ND	ND	ND	ND	ND	0.080	b	ND
	04/11/95	ND	ND	ND	ND	ND	0.2		ND
	07/19/95	ND	ND	ND	ND	ND	0.090		NC
MW-13	07/21/93	ND	ND	ND	ND	ND	0.0015		NA
	07/21/93(D)	ND	ND	ND	ND	ND	0.001		NA
	10/18/93	ND	ND	ND	ND	ND	ND		0.1
	01/06/94	ND	ND	ND	ND	ND	ND		ND
	04/13/94	ND	0.0017	0.0012	0.00059	0.0024	0.1		0.072
	07/25/94	ND	ND	ND	ND	ND	ND		ND
	10/26/94	ND	ND	ND	ND	ND	ND		ND

Table 2 (continued)
Groundwater Analytical Data
Total Petroleum Hydrocarbons
(TPPH, BTEX Compounds, TEPH, and TPH as Motor Oil)

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Sampled	TPPH (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylenes (ppm)	TEPH (ppm)	TPH as Motor Oil (ppm)
MW-13	01/09/95	ND	ND	ND	ND	ND	ND	ND
(cont.)	04/11/95	ND	ND	ND	ND	ND	0.32	ND
	07/19/95	ND	ND	ND	ND	ND	ND	NC

TPPH = Total purgeable petroleum hydrocarbons
TEPH = Total extractable petroleum hydrocarbons
ppm = Parts per million
ND = Not detected
NA = Not analyzed
NR = Not reported
NC = Analyses included in TEPH (C10-C28).
(D) = Duplicate sample
\+ = TPH as diesel analysis from April 8, 1993.
* = Sampled August 4, 1994.
** = Also analyzed for oil and grease; results ND

Laboratory noted the following:

a. Compound detected and calculated as TPH as diesel primarily appears to be due to to a lighter petroleum product.
b. Compound detected and calculated as diesel appears to be a heavier hydrocarbon compound.
c. Compound detected as TPH as diesel is due to the presence of a combination of a heavier petroleum product and a lighter petroleum product.
d. Compound detected as gasoline is due to the presence of a combination of gasoline and a discrete peak not indicative of gasoline.
e. Compound detected as gasoline is due to the presence of a discrete peak not indicative of gasoline.
f. Result has an atypical gasoline pattern.
g. Result is an unknown hydrocarbon that consists of a single peak.

Prior to June 1995, TPPH was calculated as gasoline and TEPH was calculated as diesel and motor oil.
See individual certified analytical reports for detection limits.

Table 3
Soil Vapor Extraction System Performance Data

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Sample ID	Date Sampled	Hourmeter Reading (hrs)	Flow Rate (scfm)	TPPH Influent Concentration (ppmv)	TPPH Removal Rate (lbs/day)	TPPH Removed to Date (lbs)	Benzene Influent Concentration (ppmv)	Benzene Removal Rate (lbs/day)	Benzene Removed to Date (lbs)
INFL	08/30/93	6,248	34	7,801	99.35	0.00	123.63	1.29	0.00
INFL	08/31/93	6,250	37	2,364	33.52	5.54	28.46	0.33	0.07
INFL	09/01/93	6,260	30	3,073	35.17	19.85	48.88	0.46	0.23
INFL	09/02/93	6,269	46	2,080	36.62	33.31	54.63	0.79	0.47
INFL	09/08/93	6,361	25	591	5.64	114.30	27.31	0.21	2.39
INFL	09/14/93	6,502 a	29	780	8.48	155.78	13.80	0.12	3.38
INFL	10/27/93	1,190.00 b	85	121	3.90	155.78	1.52	0.04	3.38
INFL	10/28/93	1,213.57	85	187	6.03	160.66	5.18	0.14	3.47
INFL	10/29/93	1,328.37	87	187	6.18	189.86	4.03	0.11	4.06
INFL	11/11/93	1,511.20	90	260	8.90	247.28	5.46	0.15	5.06
INFL	11/22/93	1,779.22	74	194	5.45	327.41	ND	0.00	5.92
INFL	12/09/93	2,183.44	68	35	0.92	381.06	ND	0.00	5.92
INFL	01/11/94	2,591.27	60	165	3.77	420.92	ND	0.00	5.92
INFL	01/27/94	2,976.94	74	151	4.26	485.44	ND	0.00	5.92
INFL	02/10/94	3,199.56	67	31	0.78	508.81	ND	0.00	5.92
INFL	03/02/94	3,678.57	60	12	0.28	519.42	0.58	0.01	6.03
INFL	03/09/94	3,688.03	70	50	1.32	519.74	0.12	0.00	6.03
INFL	03/24/94	4,051.56	48	43	0.78	535.63	0.78	0.01	6.14
INFL	04/11/94	4,482.67	42	ND	0.00	542.60	ND	0.00	6.25
INFL	04/21/94	4,662.97	45	12	0.20	543.35	ND	0.00	6.25
INFL	05/10/94	5,114.89	40	24	0.36	548.60	0.08	0.00	6.26
INFL	06/08/94	5,187.80	40 c	111	1.69	551.71	ND	0.00	6.26
INFL	06/21/94	5,500.70	64	92	2.24	577.35	ND	0.00	6.26
INFL	06/28/94	5,531.03 d	50	78	1.48	579.70	ND	0.00	6.26
INFL	09/13/94	6,481.00 e	65	284	7.01	579.70	1.5	0.03	6.26
INFL	09/20/94	6,644.00	56	92	1.96	610.17	0.60	0.01	6.40
INFL	09/28/94	6,841.00	50	69	1.30	623.57	0.35	0.01	6.46
INFL	10/11/94	7,155.00	48	40	0.73	636.90	ND	0.00	6.50
INFL	10/31/94	7,631.00	60	61	1.40	658.07	ND	0.00	6.50
INFL	11/10/94	7,871.33	50	402	7.64	703.34	4.6	0.07	6.86
INFL	11/23/94	7,883.71	44	3.1 f	0.05	705.32	ND f	0.00	6.88
INFL	12/13/94	8,367.43	35	ND	0.00	705.84	ND	0.00	6.88

Table 3 (continued)
Soil Vapor Extraction System Performance Data

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

				TPPH			Benzene		
Sample ID	Date Sampled	Hourmeter Reading (hrs)	Flow Rate (scfm)	Influent Concentration (ppmv)	Removal Rate (lbs/day)	Removed to Date (lbs)	Influent Concentration (ppmv)	Removal Rate (lbs/day)	Removed to Date (lbs)
INFL	12/27/94	8,699.00	30	7.8	0.09	706.46	ND	0.00	6.88
INFL	01/10/95	9,019.51	43	ND	0.00	707.05	ND	0.00	6.88
INFL	02/09/95	9,743.77	57	ND	0.00	707.05	ND	0.00	6.88

TOTAL POUNDS TPPH REMOVED:	**707.05**
TOTAL GALLONS TPPH REMOVED:	**115.91**
TOTAL POUNDS BENZENE REMOVED:	**6.88**
TOTAL GALLONS BENZENE REMOVED:	**0.94**

TPPH = Total purgeable petroleum hydrocarbons
hrs = Hours
scfm = Standard cubic feet per minute
ppmv = Parts per million by volume
lbs = Pounds
ND = Not detected
See certified analytical reports for detection limits.

a. Internal combustion engine shut down 09/14/94.
b. King-Buck Cat-Ox start-up on 10/27/93.
c. Estimated flow rate.
d. System temporarily shut down June 28, 1994; King-Buck Cat-Ox removed to different site.
e. Cat-Ox installation and startup on 09/13/94.
f. Samples taken on December 1, 1994.

Prior to June 1995, TPPH was reported as TPH calculated as gasoline.

Table 4
Vapor-Phase Analytical Data
Total Petroleum Hydrocarbons
(TPPH and BTEX Compounds)

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

Well Number	Date Sampled	TPPH (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)
VEW-1	08/30/93	140,000	3,300	860	1,400	3,400
	09/14/93	53,000	1,000	850	57	1,900
	10/27/93	26,000	660	450	300	1,300
	12/22/93	5.3	ND	0.097	0.11	0.75
	09/13/94	23,000	190	ND	59	120
	10/31/94	680	ND	0.88	ND	3.5
VEW-2	08/30/93	21,000	ND	ND	180	190
	09/14/93	4,200	23	26	8.0	250
	10/27/93	1,400	ND	ND	8.0	13
	12/22/93	ND	ND	ND	ND	0.25
	09/13/94	2,600	ND	ND	5.2	ND
	10/31/94	670	1.8	ND	1.9	1.7
VEW-3	08/30/93	41,000	ND	62	510	390
	09/14/93	3,100	ND	6.4	14	79
	10/27/93	3,000	ND	ND	49	45
	12/22/93	ND	ND	ND	ND	0.27
	09/13/94	1,200	3.0	ND	5.4	1.8
	10/31/94	750	ND	ND	ND	ND
VEW-4	08/30/93	12,000	ND	ND	74	98
	09/14/93	5,200	ND	27	ND	160
	10/27/93	1,100	ND	4.0	10	22
	12/22/93	NS	NS	NS	NS	NS
	09/13/94	1,400	ND	ND	2.9	ND
	10/31/94	320	1.2	ND	1.1	0.95
VEW-5	08/30/93	120,000	ND	200	1,900	1,500
	09/14/93	3,500	ND	ND	21	64
	10/27/93	9,400	ND	ND	100	71
	12/22/93	150	ND	ND	ND	0.25
	09/13/94	3,600	5.7	ND	8.0	ND
	10/31/94	960	3.2	ND	ND	2.4

TPPH = Total purgeable petroleum hydrocarbons
µg/L = Micrograms per liter
ND = Not detected
NS = Not sampled
Prior to June 1995, TPPH was reported as TPH calculated as gasoline.

N

CHANNEL

LEET DRIVE

TRUCK STORAGE AREA

MW-3 (5.81)

MW-5 (5.90)

VEW-4

MW-2 (5.64)

WASTE OIL TANK

STATION BUILDING

MW-8 (5.40)

UNDERGROUND FUEL STORAGE TANKS

FORMER UNDERGROUND FUEL STORAGE TANKS

VEW-5

CANOPY

PLANTER

MW-6 (6.03)

6.0

MW-10 (3.82)

MW-1 (6.01)

VEW-1

PARKING

VEW-3

VEW-2

MW-9 (5.41)

MW-4 (4.10)

PLANTER

MW-7 (5.58)

5.0

SIDEWALK

3.0 ODUCT ISLANDS

4.0

HEGENBERGER ROAD

3.0

2.0

2.0

MW-13 (3.47)

MW-11 (1.25)

MW-12 (1.06)

SIDEWALK

LEGEND

MW-7 ◉ GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

VEW-1 ▲ EXISTING SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION

VEW-4 △ DUAL COMPLETION AIR SPARGING/SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION

VEW-5 Ø ABANDONED WELL LOCATION AND DESIGNATION

(5.90) GROUNDWATER ELEVATION IN FEET - MSL, 7-18-95

6.0 GROUNDWATER ELEVATION CONTOUR IN FEET - MSL, 7-18-95

APPROXIMATE DIRECTION OF GROUNDWATER FLOW

APPROXIMATE GRADIENT = 0.025

PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE

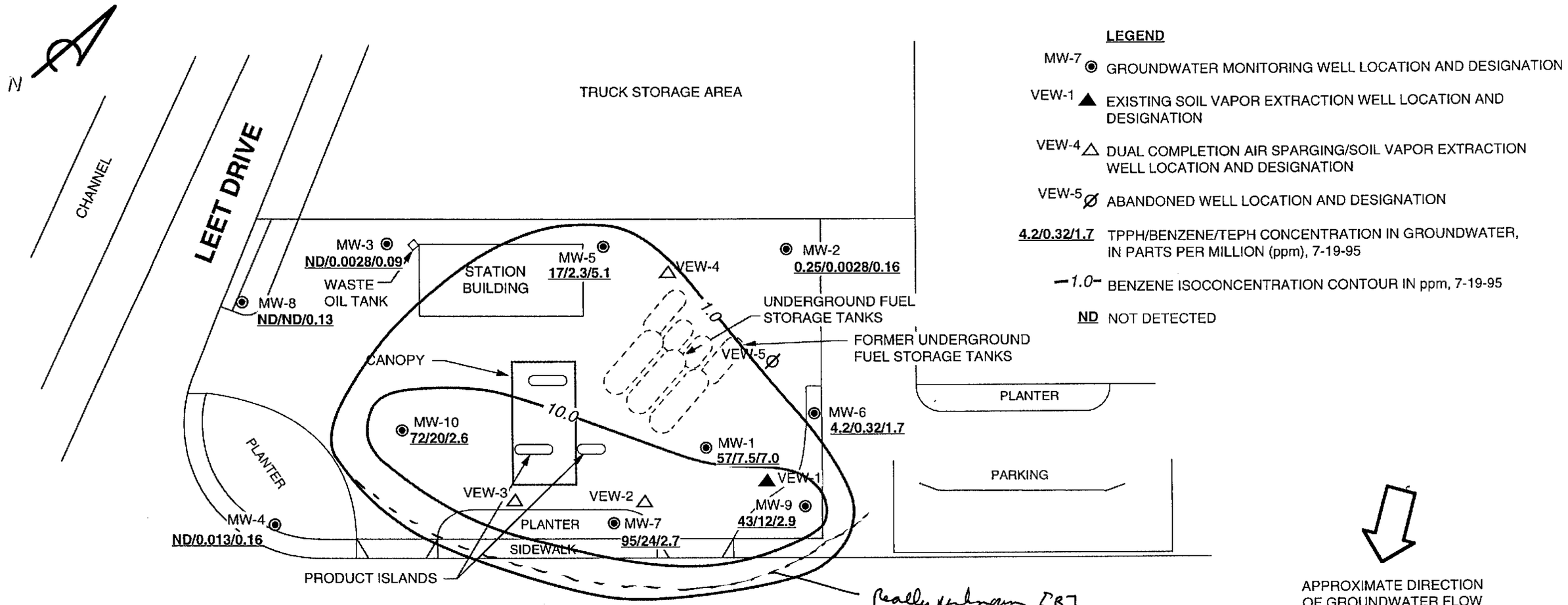
0 40 80 FEET

SHELL SERVICE STATION
285 Hegenberger Road at Leet Drive
Oakland, California

GROUNDWATER ELEVATION CONTOUR MAP

FIGURE: 1

PROJECT: 305-079.2E



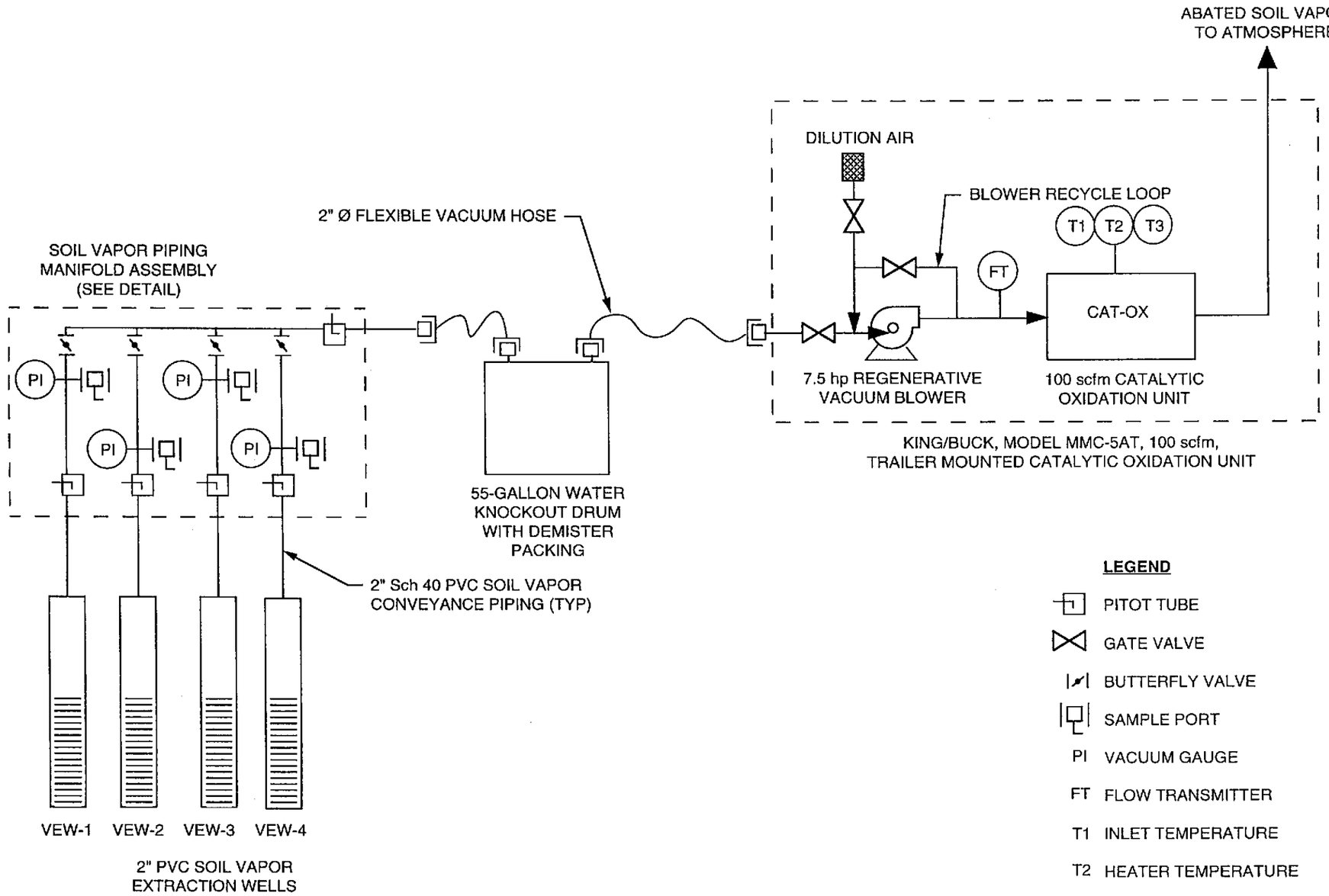
PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE
0 40 80 FEET

SHELL SERVICE STATION
285 Hegenberger Road at Leet Drive
Oakland, California

TPPH/BENZENE/TEPH CONCENTRATION MAP

FIGURE:
2
PROJECT:
305-079.2E



PACIFIC ENVIRONMENTAL GROUP, INC.

NO SCALE

SHELL SERVICE STATION
285 Hegenberger Road at Leet Drive
Oakland, California

SOIL VAPOR EXTRACTION PROCESS FLOW DIAGRAM

FIGURE:
3
PROJECT:
305-079.2E

Figure 4
Soil Vapor Extraction System Mass Removal Data

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California

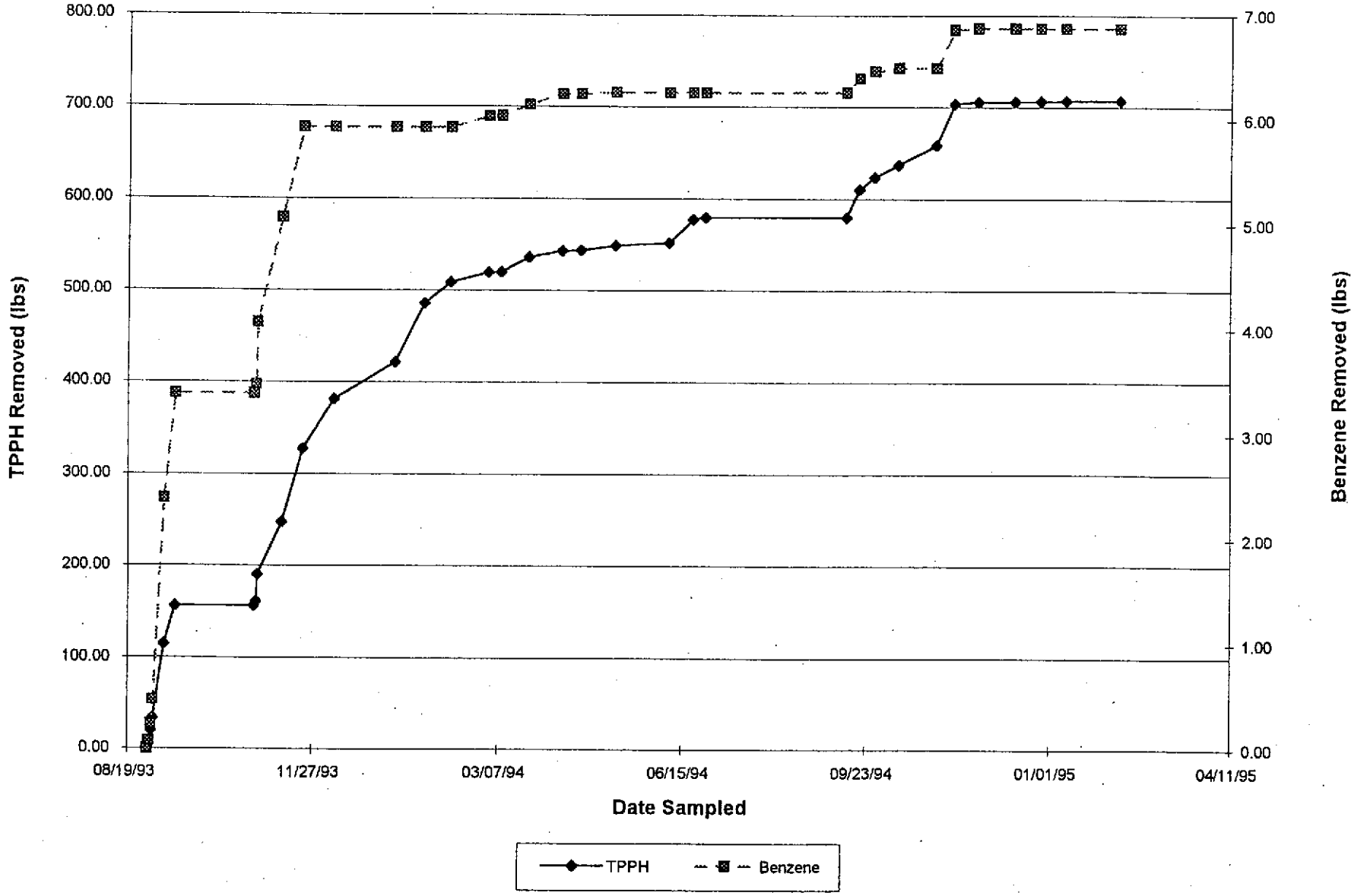
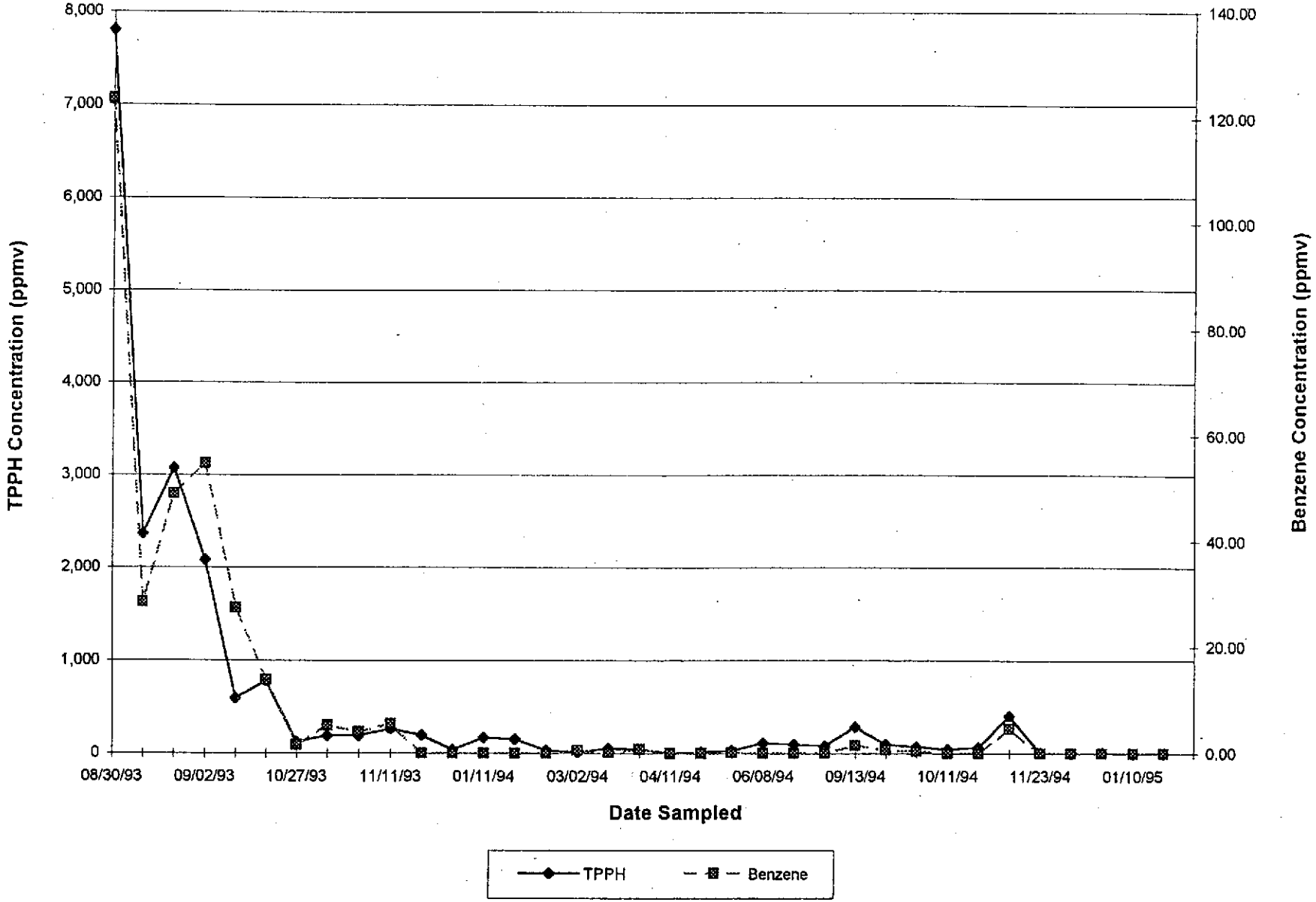


Figure 5
Soil Vapor Extraction System Hydrocrbon Concentrations

Shell Service Station
285 Hegenberger Road at Leet Drive
Oakland, California



3050792E\3Q95TBL.XLS!FIGURE 5

October 25, 1995

ATTACHMENT A

GROUNDWATER SAMPLING REPORT

BLAINE
TECH SERVICES INC.

985 TIMOTHY DRIV
SAN JOSE, CA 9513
(408) 995-553
FAX (408) 293-877

August 4, 1995

Shell Oil Company
P.O. Box 4023
Concord, CA 94524

Attn: Daniel Kirk

SITE:
Shell WIC #204-5508-5504
285 Hegenburger Road
Oakland, California

QUARTER:
3rd quarter of 1995

QUARTERLY GROUNDWATER SAMPLING REPORT 950718-C-2

This report contains data collected during routine inspection, gauging and sampling of groundwater monitoring wells performed by Blaine Tech Services, Inc. in response to the request of the consultant who is overseeing work at this site on behalf of our mutual client, Shell Oil Company. Data collected in the course of our field work is presented in a TABLE OF WELL GAUGING DATA. The field information was collected during our preliminary gauging and inspection of the wells, the subsequent evacuation of each well prior to sampling, and at the time of sampling.

Measurements taken include the total depth of the well and the depth to water. The surface of water was further inspected for the presence of immiscibles which may be present as a thin film (a sheen on the surface of the water) or as a measurable free product zone (FPZ). At intervals during the evacuation phase, the purge water was monitored with instruments that measure electrical conductivity (EC), potential hydrogen (pH), temperature (degrees Fahrenheit), and turbidity (NTU). In the interest of simplicity, fundamental information is tabulated here, while the bulk of the information is turned over directly to the consultant who is making professional interpretations and evaluations of the conditions at the site.

STANDARD PROCEDURES

Evacuation

Groundwater wells are thoroughly purged before sampling to insure that the sample is collected from water that has been newly drawn into the well from the surrounding geologic formation. The selection of equipment to evacuate each well is based on the physical characteristics of the well and what is known about the performance of the formation in which the well has been installed. There are several suitable devices which can be used for evacuation. The most commonly employed devices are air or gas actuated pumps, electric submersible pumps, and hand or mechanically actuated bailers. Our personnel frequently employ USGS/Middleburg positive displacement pumps or similar air actuated pumps which do not agitate the water standing in the well.

Normal evacuation removes three case volumes of water from the well. More than three case volumes of water are removed in cases where more evacuation is needed to achieve stabilization of water parameters and when requested by the local implementing agency. Less water may be removed in cases where the well dewaters and does not recharge to 80% of its original volume within two hours and any additional time our personnel have reason to remain at the site. In such cases, our personnel return to the site within twenty four hours and collect sample material from the water which has recharged into the well case.

Decontamination

All apparatus is brought to the site in clean and serviceable condition. The equipment is decontaminated after each use and before leaving the site. Effluent water from purging and on-site equipment cleaning is collected and transported to Shell's Martinez Manufacturing Complex in Martinez, California.

Free Product Skimmer

The column headed, VOLUME OF IMMISCIBLES REMOVED (ml) is included in the TABLE OF WELL GAUGING DATA to cover situations where a free product skimming device must be removed from the well prior to gauging. Skimmers are installed in wells with a free product zone on the surface of the water. The skimmer is a free product recovery device which often prevents normal well gauging and free product zone measurements. The 2.0" and 3.0" PetroTraps fall into the category of devices that obstruct normal gauging. In cases where the consultant elects to have our personnel pull the skimmers out of the well and gauge the well, our personnel perform the additional task of draining the accumulated free product out of the PetroTrap before putting it back in the well. This

recovered free product is measured and logged in the VOLUME OF IMMISCIBLES REMOVED column. Gauging at such sites is performed in accordance with specific directions from the professional consulting firm overseeing work at the site on Shell's behalf.

Sample Containers

Sample material is collected in specially prepared containers which are provided by the laboratory that performs the analyses.

Sampling

Sample material is collected in stainless steel bailer type devices normally fitted with both a top and a bottom check valve. Water is promptly decanted into new sample containers in a manner which reduces the loss of volatile constituents and follows the applicable EPA standard for handling volatile organic and semi-volatile compounds.

Following collection, samples are promptly placed in an ice chest containing prefrozen blocks of an inert ice substitute such as Blue Ice or Super Ice. The samples are maintained in either an ice chest or a refrigerator until delivered into the custody of the laboratory.

Sample Designations

All sample containers are identified with a site designation and a discrete sample identification number specific to that particular groundwater well. Additional standard notations (e.g. time, date, sampler) are also made on the label.

Chain of Custody

Samples are continuously maintained in an appropriate cooled container while in our custody and until delivered to the laboratory under a standard Shell Oil Company chain of custody. If the samples are taken charge of by a different party (such as another person from our office, a courier, etc.) prior to being delivered to the laboratory, appropriate release and acceptance records are made on the chain of custody (time, date, and signature of the person releasing the samples followed by the time, date and signature of the person accepting custody of the samples).

Hazardous Materials Testing Laboratory

The samples obtained at this site were delivered to National Environmental Testing, Inc. in Santa Rosa, California. NET is a California Department of Health Services certified Hazardous Materials Testing Laboratory and is listed as DOHS HMTL #1386.

Objective Information Collection

Blaine Tech Services, Inc. performs specialized environmental sampling and documentation as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. performs no consulting and does not become involved in the marketing or installation of remedial systems of any kind. Blaine Tech Services, Inc. is concerned only with the generation of objective information, not with the use of that information to support evaluations and recommendations concerning the environmental condition of the site. Even the straightforward interpretation of objective analytical data is better performed by interested regulatory agencies, and those engineers and geologists who are engaged in the work of providing professional opinions about the site and proposals to perform additional investigation or design remedial systems.

Reportage

Submission of this report and the attached laboratory report to interested regulatory agencies is handled by the consultant in charge of the project. Any professional evaluations or recommendations will be made by the consultant under separate cover.

Please call if we can be of any further assistance.

Richard C. Blaine

RCB/lp

attachments: table of well gauging data
chain of custody
certified analytical report

cc: Pacific Environmental Group
2025 Gateway Place, Suite #440
San Jose, CA 95110
ATTN: Rhonda Barrick

TABLE OF WELL GAUGING DATA

WELL I.D.	DATA COLLECTION DATE	MEASUREMENT REFERENCED TO	QUALITATIVE OBSERVATIONS (sheen)	DEPTH TO FIRST IMMISCIBLES LIQUID (FPZ) (feet)	THICKNESS OF IMMISCIBLES LIQUID ZONE (feet)	VOLUME OF IMMISCIBLES REMOVED (ml)	DEPTH TO WATER (feet)	DEPTH TO WELL BOTTOM (feet)
MW-1*	7/18/95	TOC	--	NONE	--	--	3.49	9.44
MW-2	7/18/95	TOC	--	NONE	--	--	4.91	9.63
MW-3	7/18/95	TOC	--	NONE	--	--	4.80	9.55
MW-4	7/18/95	TOC	--	NONE	--	--	6.18	10.20
MW-5	7/18/95	TOC	ODOR	NONE	--	--	4.97	9.80
MW-6	7/18/95	TOC	--	NONE	--	--	5.01	11.14
MW-7	7/18/95	TOC	--	NONE	--	--	4.70	10.06
MW-8	7/18/95	TOC	--	NONE	--	--	5.21	9.67
MW-9	7/18/95	TOC	--	NONE	--	--	5.07	10.83
MW-10	7/18/95	TOC	--	NONE	--	--	6.79	10.09
MW-11	7/18/95	TOC	--	NONE	--	--	9.31	14.00
MW-12	7/18/95	TOC	--	NONE	--	--	8.50	14.40
MW-13	7/18/95	TOC	--	NONE	--	--	6.63	14.62

* Sample DUP was a duplicate sample taken from well MW-1.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 950718C2

Date:
Page 1 of 2

Site Address: 285 Hegenberger Road, Oakland

WIC#: 204-5508-5504

Shell Engineer: Dan Kirk
Phone No.: (510) 675-6168
Fax #: 675-6160

Consultant Name & Address: Blaine Tech Services, Inc. 985 Timothy Drive San Jose, CA 95133

Consultant Contact: Jim Keller
Phone No.: (408) 995-5535
Fax #: 293-8773

Comments:

Sampled by: [signature]

Printed Name: SCOTT BRODERICK

Analysis Required — LAB: NET

CHECK ONE (1) BOX ONLY	CT/DT
Quarterly Monitoring	[X] 5441
Site Investigation	[ ] 5441
Soil Classify/Disposal	[ ] 5442
Water Classify/Disposal	[ ] 5443
Soil/Air Rem. or Sys. O & M	[ ] 5452
Water Rem. or Sys. O & M	[ ] 5453
Other	[ ]

TURN AROUND TIME: 24 hours [ ]; 48 hours [ ]; 16 days [X] (Normal); Other [ ]

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	MOTOR OIL	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW1	7/19			X		5		X				X	X		VOAS LITERS	HCL -	N		
MW2	↓			X		5		X				X	X		↓	↓	↓		
MW3	↓			X		5		X				X	X		↓	↓	↓		
MW4	↓			X		5		X				X	X		↓	↓	↓		
MW5	↓			X		5		X				X	X		↓	↓	↓		
MW6	↓			X		5		X				X	X		↓	↓	↓		
MW7	↓			X		5		X				X	X		↓	↓	↓		
MW8	↓			X		5		X				X	X		↓	↓	↓		

Relinquished By (signature)	Printed Name	Date/Time	Received (signature)	Printed Name	Date/Time
[signature]	SCOTT BRODERICK	Date: Time:	[signature]	FLOYD FREEMAN	Date: 7-20-95 Time: 1031
[signature]	FLOYD FREEMAN	Date: 7-20-95 Time: 1345	[signature]	M. Dowling	Date: 7/20/95 Time: 1345
[signature]	M Dowling	Date: 7-20-95 Time: 1540	[signature]	PHIL PROSSER	Date: 7/20/95 Time: 1540

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 950718CZ

Date:
Page 2 of 2

Site Address: 285 Hegenberger Road, Oakland

WIC#: 204-5508-5504

Shell Engineer: Dan Kirk — Phone No.: (510) 675-6168 Fax #: 675-6160

Consultant Name & Address: Blaine Tech Services, Inc. 985 Timothy Drive San Jose, CA 95133

Consultant Contact: Jim Keller — Phone No.: (408) 995-5535 Fax #: 293-8773

Comments:

Sampled by:

Printed Name: SCOTT BROOKS

LAB: NET

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	MOTOR OIL		Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW9	7/19			X		5		Y				X	X			VOA's 1-LITER	HCL	N		
MW10				X		5		X				X	X							
MW11				X		5		X				X	X							
MW12				X		5		X				X	X							
MW13				X		5		X				X	X							
DUP				X		5		X				X	X							
EB				X		5		X				X	X							
TB				X		2						X								

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
	SCOTT BROOKS			Floyd Freeman	FLOYD FREEMAN	7-20-95	1036
Floyd Freeman	FLOYD FREEMAN	7-20-95	1345			7/20/95	1345
		7-20-95	1540		PHIL TROSSER	7/20/95	1540

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

CHECK ONE (1) BOX ONLY		C1/01
Quarterly Monitoring	X	6441
Site Investigation		6441
Soil Closure/Disposal		6442
Water Closure/Disposal		6443
Soil/Air Rem. or Sys. O & M		6462
Water Rem. or Sys. O & M		6463
Other		

TURN AROUND TIME: 24 hours ☐ 48 hours ☐ 10 days X (Normal) Other ☐ ____

NOTE: Notify lab as soon as Possible of 24/48 hrs. TAT.

Shell Copy

NET NATIONAL ENVIRONMENTAL TESTING, INC.

Santa Rosa Division
3636 North Laughlin Road
Suite 110
Santa Rosa, CA 95403-8226
Tel: (707) 526-7200
Fax: (707) 541-2333

Jim Keller
Blaine Tech Services
985 Timothy Dr.
San Jose, CA 95133

Date: 07/30/1995
NET Client Acct. No: 1821
NET Job No: 95.02849
Received: 07/20/1995

Client Reference Information

Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Ken Larson
Division Manager

Jennifer L. Roseberry
Project Manager

Enclosure(s)

Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

SAMPLE DESCRIPTION: MW1
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246544

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	50						07/21/1995	3031
Purgeable TPH	57,000		2,000	ug/L	5030/M8015		07/21/1995	3031
Carbon Range: C6 to C12	--						07/21/1995	3031
METHOD 8020 (GC, Liquid)	--						07/21/1995	3031
Benzene	7,500	FG	100	ug/L	8020		07/25/1995	3034
Toluene	880		20	ug/L	8020		07/21/1995	3031
Ethylbenzene	4,100	FG	100	ug/L	8020		07/25/1995	3034
Xylenes (Total)	11,000	FG	100	ug/L	8020		07/25/1995	3034
SURROGATE RESULTS	--						07/21/1995	3031
Bromofluorobenzene (SURR)	118			% Rec.	8020		07/21/1995	3031
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	5						07/24/1995	1038
Extractable TPH	7,000		200	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

FG : Compound quantitated at a 200X dilution factor.

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 95.02849

Date: 07/30/1995
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Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

SAMPLE DESCRIPTION: MW2
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246545

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						07/21/1995	3031
Purgeable TPH	250		50	ug/L	5030/M8015		07/21/1995	3031
Carbon Range: C6 to C12	--						07/21/1995	3031
METHOD 8020 (GC, Liquid)	--						07/21/1995	3031
Benzene	2.8		0.5	ug/L	8020		07/21/1995	3031
Toluene	0.5		0.5	ug/L	8020		07/21/1995	3031
Ethylbenzene	12		0.5	ug/L	8020		07/21/1995	3031
Xylenes (Total)	13		0.5	ug/L	8020		07/21/1995	3031
SURROGATE RESULTS	--						07/21/1995	3031
Bromofluorobenzene (SURR)	119			% Rec.	8020		07/21/1995	3031
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	1						07/24/1995	1038
Extractable TPH	160		50	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

SAMPLE DESCRIPTION: MW3
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246546

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						07/21/1995	3031
Purgeable TPH	ND		50	ug/L	5030/M8015		07/21/1995	3031
Carbon Range: C6 to C12	--						07/21/1995	3031
METHOD 8020 (GC, Liquid)	--						07/21/1995	3031
Benzene	2.8	C	0.5	ug/L	8020		07/21/1995	3031
Toluene	ND		0.5	ug/L	8020		07/21/1995	3031
Ethylbenzene	ND		0.5	ug/L	8020		07/21/1995	3031
Xylenes (Total)	ND		0.5	ug/L	8020		07/21/1995	3031
SURROGATE RESULTS	--						07/21/1995	3031
Bromofluorobenzene (SURR)	113			% Rec.	8020		07/21/1995	3031
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	1						07/24/1995	1038
Extractable TPH	90		50	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

C : Positive result confirmed by secondary column or GC/MS analysis.

Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

SAMPLE DESCRIPTION: MW4
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246547

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						07/21/1995	3031
Purgeable TPH	ND		50	ug/L	5030/M8015		07/21/1995	3031
Carbon Range: C6 to C12	--						07/21/1995	3031
METHOD 8020 (GC, Liquid)	--						07/21/1995	3031
Benzene	13	C	0.5	ug/L	8020		07/21/1995	3031
Toluene	ND		0.5	ug/L	8020		07/21/1995	3031
Ethylbenzene	ND		0.5	ug/L	8020		07/21/1995	3031
Xylenes (Total)	ND		0.5	ug/L	8020		07/21/1995	3031
SURROGATE RESULTS	--						07/21/1995	3031
Bromofluorobenzene (SURR)	110			% Rec.	8020		07/21/1995	3031
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	1						07/24/1995	1038
Extractable TPH	160		50	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

C : Positive result confirmed by secondary column or GC/MS analysis.

Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

SAMPLE DESCRIPTION: MW5
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246548

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	50						07/21/1995	3031
Purgeable TPH	17,000		2,000	ug/L	5030/M8015		07/21/1995	3031
Carbon Range: C6 to C12	--						07/21/1995	3031
METHOD 8020 (GC, Liquid)	--						07/21/1995	3031
Benzene	2,300		20	ug/L	8020		07/21/1995	3031
Toluene	730		20	ug/L	8020		07/21/1995	3031
Ethylbenzene	770		20	ug/L	8020		07/21/1995	3031
Xylenes (Total)	2,500		20	ug/L	8020		07/21/1995	3031
SURROGATE RESULTS	--						07/21/1995	3031
Bromofluorobenzene (SURR)	119			% Rec.	8020		07/21/1995	3031
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	5						07/24/1995	1038
Extractable TPH	5,100		200	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

SAMPLE DESCRIPTION: MW6
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246549

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	10						07/21/1995	3031
Purgeable TPH	4,200		500	ug/L	5030/M8015		07/21/1995	3031
Carbon Range: C6 to C12	--						07/21/1995	3031
METHOD 8020 (GC, Liquid)	--						07/21/1995	3031
Benzene	320		5	ug/L	8020		07/21/1995	3031
Toluene	11		5	ug/L	8020		07/21/1995	3031
Ethylbenzene	490		5	ug/L	8020		07/21/1995	3031
Xylenes (Total)	22		5	ug/L	8020		07/21/1995	3031
SURROGATE RESULTS	--						07/21/1995	3031
Bromofluorobenzene (SURR)	118			% Rec.	8020		07/21/1995	3031
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	1						07/24/1995	1038
Extractable TPH	1,700		50	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

SAMPLE DESCRIPTION: MW7
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246550

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	100						07/21/1995	3031
Purgeable TPH	95,000		5,000	ug/L	5030/M8015		07/21/1995	3031
Carbon Range: C6 to C12	--						07/21/1995	3031
METHOD 8020 (GC, Liquid)	--						07/21/1995	3031
Benzene	24,000	FI	500	ug/L	8020		07/25/1995	3034
Toluene	8,000	FI	500	ug/L	8020		07/25/1995	3034
Ethylbenzene	2,100		50	ug/L	8020		07/21/1995	3031
Xylenes (Total)	12,000		50	ug/L	8020		07/21/1995	3031
SURROGATE RESULTS	--						07/21/1995	3031
Bromofluorobenzene (SURR)	116			% Rec.	8020		07/21/1995	3031
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	1						07/24/1995	1038
Extractable TPH	2,700		50	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

FI : Compound quantitated at a 1000X dilution factor.

Client Name: Blaine Tech Services
Client Acct: 1821
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SAMPLE DESCRIPTION: MW8
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246551

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						07/21/1995	3031
Purgeable TPH	ND		50	ug/L	5030/M8015		07/21/1995	3031
Carbon Range: C6 to C12	--						07/21/1995	3031
METHOD 8020 (GC, Liquid)	--						07/21/1995	3031
Benzene	ND		0.5	ug/L	8020		07/21/1995	3031
Toluene	ND		0.5	ug/L	8020		07/21/1995	3031
Ethylbenzene	ND		0.5	ug/L	8020		07/21/1995	3031
Xylenes (Total)	ND		0.5	ug/L	8020		07/21/1995	3031
SURROGATE RESULTS	--						07/21/1995	3031
Bromofluorobenzene (SURR)	104			% Rec.	8020		07/21/1995	3031
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	1						07/24/1995	1038
Extractable TPH	130		50	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 95.02849

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Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

SAMPLE DESCRIPTION: MW9
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246552

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	100						07/25/1995	3034
Purgeable TPH	43,000		5,000	ug/L	5030/M8015		07/25/1995	3034
Carbon Range: C6 to C12	--						07/25/1995	3034
METHOD 8020 (GC, Liquid)	--						07/25/1995	3034
Benzene	12,000	FH	250	ug/L	8020		07/27/1995	3040
Toluene	1,800		50	ug/L	8020		07/25/1995	3034
Ethylbenzene	960		50	ug/L	8020		07/25/1995	3034
Xylenes (Total)	9,100		50	ug/L	8020		07/25/1995	3034
SURROGATE RESULTS	--						07/25/1995	3034
Bromofluorobenzene (SURR)	115			% Rec.	8020		07/25/1995	3034
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	1						07/24/1995	1038
Extractable TPH	2,900		50	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

FH : Compound quantitated at a 500X dilution factor.

Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

SAMPLE DESCRIPTION: MW10
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246553

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	50						07/21/1995	3031
Purgeable TPH	72,000		2,000	ug/L	5030/M8015		07/21/1995	3031
Carbon Range: C6 to C12	--						07/21/1995	3031
METHOD 8020 (GC, Liquid)	--						07/21/1995	3031
Benzene	20,000	FH	250	ug/L	8020		07/25/1995	3034
Toluene	7,200	FH	250	ug/L	8020		07/25/1995	3034
Ethylbenzene	2,800	FH	250	ug/L	8020		07/25/1995	3034
Xylenes (Total)	9,000	FH	250	ug/L	8020		07/25/1995	3034
SURROGATE RESULTS	--						07/21/1995	3031
Bromofluorobenzene (SURR)	106			% Rec.	8020		07/21/1995	3031
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	1						07/24/1995	1038
Extractable TPH	2,600		50	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

FH : Compound quantitated at a 500X dilution factor.

Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

SAMPLE DESCRIPTION: MW11
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246554

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						07/21/1995	3031
Purgeable TPH	ND		50	ug/L	5030/M8015		07/21/1995	3031
Carbon Range: C6 to C12	--						07/21/1995	3031
METHOD 8020 (GC, Liquid)	--						07/21/1995	3031
Benzene	ND		0.5	ug/L	8020		07/21/1995	3031
Toluene	ND		0.5	ug/L	8020		07/21/1995	3031
Ethylbenzene	ND		0.5	ug/L	8020		07/21/1995	3031
Xylenes (Total)	ND		0.5	ug/L	8020		07/21/1995	3031
SURROGATE RESULTS	--						07/21/1995	3031
Bromofluorobenzene (SURR)	96			% Rec.	8020		07/21/1995	3031
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	1						07/24/1995	1038
Extractable TPH	50		50	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

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SAMPLE DESCRIPTION: MW12
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246555

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						07/21/1995	3031
Purgeable TPH	ND		50	ug/L	5030/M8015		07/21/1995	3031
Carbon Range: C6 to C12	--						07/21/1995	3031
METHOD 8020 (GC, Liquid)	--						07/21/1995	3031
Benzene	ND		0.5	ug/L	8020		07/21/1995	3031
Toluene	ND		0.5	ug/L	8020		07/21/1995	3031
Ethylbenzene	ND		0.5	ug/L	8020		07/21/1995	3031
Xylenes (Total)	ND		0.5	ug/L	8020		07/21/1995	3031
SURROGATE RESULTS	--						07/21/1995	3031
Bromofluorobenzene (SURR)	91			% Rec.	8020		07/21/1995	3031
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	1						07/24/1995	1038
Extractable TPH	90		50	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

SAMPLE DESCRIPTION: MW13
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246556

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						07/21/1995	3029
Purgeable TPH	ND		50	ug/L	5030/M8015		07/21/1995	3029
Carbon Range: C6 to C12	--						07/21/1995	3029
METHOD 8020 (GC, Liquid)	--						07/21/1995	3029
Benzene	ND		0.5	ug/L	8020		07/21/1995	3029
Toluene	ND		0.5	ug/L	8020		07/21/1995	3029
Ethylbenzene	ND		0.5	ug/L	8020		07/21/1995	3029
Xylenes (Total)	ND		0.5	ug/L	8020		07/21/1995	3029
SURROGATE RESULTS	--						07/21/1995	3029
Bromofluorobenzene (SURR)	80			% Rec.	8020		07/21/1995	3029
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	1						07/24/1995	1038
Extractable TPH	ND		50	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

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Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

SAMPLE DESCRIPTION: DUP
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246557

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	100						07/24/1995	3033
Purgeable TPH	46,000		5,000	ug/L	5030/M8015		07/24/1995	3033
Carbon Range: C6 to C12	--						07/24/1995	3033
METHOD 8020 (GC, Liquid)	--						07/24/1995	3033
Benzene	6,000	FI	500	ug/L	8020		07/26/1995	3036
Toluene	670		50	ug/L	8020		07/24/1995	3033
Ethylbenzene	3,200		50	ug/L	8020		07/24/1995	3033
Xylenes (Total)	7,500		50	ug/L	8020		07/24/1995	3033
SURROGATE RESULTS	--						07/24/1995	3033
Bromofluorobenzene (SURR)	100			% Rec.	8020		07/24/1995	3033
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	5						07/24/1995	1038
Extractable TPH	6,600		200	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

FI : Compound quantitated at a 1000X dilution factor.

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 95.02849

Date: 07/30/1995
ELAP Cert: 1386

Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

SAMPLE DESCRIPTION: EB
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246558

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						07/21/1995	3031
Purgeable TPH	ND		50	ug/L	5030/M8015		07/21/1995	3031
Carbon Range: C6 to C12	--						07/21/1995	3031
METHOD 8020 (GC, Liquid)	--						07/21/1995	3031
Benzene	ND		0.5	ug/L	8020		07/21/1995	3031
Toluene	ND		0.5	ug/L	8020		07/21/1995	3031
Ethylbenzene	ND		0.5	ug/L	8020		07/21/1995	3031
Xylenes (Total)	ND		0.5	ug/L	8020		07/21/1995	3031
SURROGATE RESULTS	--						07/21/1995	3031
Bromofluorobenzene (SURR)	92			% Rec.	8020		07/21/1995	3031
METHOD 3510/8015-M (Shell)						07/21/1995		
DILUTION FACTOR*	1						07/24/1995	1038
Extractable TPH	ND		50	ug/L	3510/M8015		07/24/1995	1038
Carbon range: C10 to C28	--						07/24/1995	1038

Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

SAMPLE DESCRIPTION: TB
Date Taken: 07/19/1995
Time Taken:
NET Sample No: 246559

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 5030/8015-M (Shell)								
DILUTION FACTOR*	1						07/21/1995	3031
Purgeable TPH	ND		50	ug/L	5030/M8015		07/21/1995	3031
Carbon Range: C6 to C12	--						07/21/1995	3031
METHOD 8020 (GC, Liquid)	--						07/21/1995	3031
Benzene	ND		0.5	ug/L	8020		07/21/1995	3031
Toluene	ND		0.5	ug/L	8020		07/21/1995	3031
Ethylbenzene	ND		0.5	ug/L	8020		07/21/1995	3031
Xylenes (Total)	ND		0.5	ug/L	8020		07/21/1995	3031
SURROGATE RESULTS	--						07/21/1995	3031
Bromofluorobenzene (SURR)	92			% Rec.	8020		07/21/1995	3031

Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 5030/8015-M (Shell)							
Purgeable TPH	100.0	0.50	0.50	mg/L	07/21/1995	lss	3029
Benzene	91.0	4.55	5.00	ug/L	07/21/1995	lss	3029
Toluene	86.8	4.34	5.00	ug/L	07/21/1995	lss	3029
Ethylbenzene	97.8	4.89	5.00	ug/L	07/21/1995	lss	3029
Xylenes (Total)	96.7	14.5	15.0	ug/L	07/21/1995	lss	3029
Bromofluorobenzene (SURR)	92.0	92	100	% Rec.	07/21/1995	lss	3029
METHOD 5030/8015-M (Shell)							
Purgeable TPH	96.0	0.48	0.50	mg/L	07/21/1995	lss	3031
Benzene	114.6	5.73	5.00	ug/L	07/21/1995	lss	3031
Toluene	107.8	5.39	5.00	ug/L	07/21/1995	lss	3031
Ethylbenzene	108.6	5.43	5.00	ug/L	07/21/1995	lss	3031
Xylenes (Total)	109.3	16.4	15.0	ug/L	07/21/1995	lss	3031
Bromofluorobenzene (SURR)	110.0	110	100	% Rec.	07/21/1995	lss	3031
METHOD 5030/8015-M (Shell)							
Purgeable TPH	104.0	0.52	0.50	mg/L	07/24/1995		3033
Benzene	91.2	4.56	5.00	ug/L	07/24/1995		3033
Toluene	89.6	4.48	5.00	ug/L	07/24/1995		3033
Ethylbenzene	93.0	4.65	5.00	ug/L	07/24/1995		3033
Xylenes (Total)	93.3	14.0	15.0	ug/L	07/24/1995		3033
Bromofluorobenzene (SURR)	87.0	87	100	% Rec.	07/24/1995		3033
METHOD 5030/8015-M (Shell)							
Purgeable TPH	102.0	0.51	0.50	mg/L	07/25/1995	lss	3034
Benzene	108.2	5.41	5.00	ug/L	07/25/1995	lss	3034
Toluene	104.0	5.20	5.00	ug/L	07/25/1995	lss	3034
Ethylbenzene	103.0	5.15	5.00	ug/L	07/25/1995	lss	3034
Xylenes (Total)	105.3	15.8	15.0	ug/L	07/25/1995	lss	3034
Bromofluorobenzene (SURR)	107.0	107	100	% Rec.	07/25/1995	lss	3034
METHOD 5030/8015-M (Shell)							
Purgeable TPH	110.0	0.55	0.50	mg/L	07/26/1995	lss	3036
Benzene	95.0	4.75	5.00	ug/L	07/26/1995	lss	3036
Toluene	90.6	4.53	5.00	ug/L	07/26/1995	lss	3036
Ethylbenzene	86.6	4.33	5.00	ug/L	07/26/1995	lss	3036
Xylenes (Total)	92.0	13.8	15.0	ug/L	07/26/1995	lss	3036
Bromofluorobenzene (SURR)	100.0	100	100	% Rec.	07/26/1995	lss	3036
METHOD 5030/8015-M (Shell)							
Purgeable TPH	104.0	0.52	0.50	mg/L	07/27/1995	lss	3040
Benzene	99.8	4.99	5.00	ug/L	07/27/1995	lss	3040
Toluene	100.6	5.03	5.00	ug/L	07/27/1995	lss	3040
Ethylbenzene	95.2	4.76	5.00	ug/L	07/27/1995	lss	3040
Xylenes (Total)	102.0	15.3	15.0	ug/L	07/27/1995	lss	3040
Bromofluorobenzene (SURR)	107.0	107	100	% Rec.	07/27/1995	lss	3040
METHOD 3510/8015-M (Shell)							
Extractable TPH	113.2	1132	1000	mg/L	07/24/1995	tdn	1038

Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials	Run Batch Number
METHOD 5030/8015-M (Shell)						
Purgeable TPH	ND	0.05	mg/L	07/21/1995	lss	3029
Benzene	ND	0.5	ug/L	07/21/1995	lss	3029
Toluene	ND	0.5	ug/L	07/21/1995	lss	3029
Ethylbenzene	ND	0.5	ug/L	07/21/1995	lss	3029
Xylenes (Total)	ND	0.5	ug/L	07/21/1995	lss	3029
Bromofluorobenzene (SURR)	80		% Rec.	07/21/1995	lss	3029
METHOD 5030/8015-M (Shell)						
Purgeable TPH	ND	0.05	mg/L	07/24/1995		3033
Benzene	ND	0.5	ug/L	07/24/1995		3033
Toluene	ND	0.5	ug/L	07/24/1995		3033
Ethylbenzene	ND	0.5	ug/L	07/24/1995		3033
Xylenes (Total)	ND	0.5	ug/L	07/24/1995		3033
Bromofluorobenzene (SURR)	85		% Rec.	07/24/1995		3033
METHOD 5030/8015-M (Shell)						
Purgeable TPH	ND	0.05	mg/L	07/21/1995	lss	3031
Benzene	ND	0.5	ug/L	07/21/1995	lss	3031
Toluene	ND	0.5	ug/L	07/21/1995	lss	3031
Ethylbenzene	ND	0.5	ug/L	07/21/1995	lss	3031
Xylenes (Total)	ND	0.5	ug/L	07/21/1995	lss	3031
Bromofluorobenzene (SURR)	108		% Rec.	07/21/1995	lss	3031
METHOD 5030/8015-M (Shell)						
Purgeable TPH	ND	0.05	mg/L	07/25/1995	lss	3034
Benzene	ND	0.5	ug/L	07/25/1995	lss	3034
Toluene	ND	0.5	ug/L	07/25/1995	lss	3034
Ethylbenzene	ND	0.5	ug/L	07/25/1995	lss	3034
Xylenes (Total)	ND	0.5	ug/L	07/25/1995	lss	3034
Bromofluorobenzene (SURR)	110		% Rec.	07/25/1995	lss	3034
METHOD 5030/8015-M (Shell)						
Purgeable TPH	ND	0.05	mg/L	07/26/1995	lss	3036
Benzene	ND	0.5	ug/L	07/26/1995	lss	3036
Toluene	ND	0.5	ug/L	07/26/1995	lss	3036
Ethylbenzene	ND	0.5	ug/L	07/26/1995	lss	3036
Xylenes (Total)	ND	0.5	ug/L	07/26/1995	lss	3036
Bromofluorobenzene (SURR)	97		% Rec.	07/26/1995	lss	3036
METHOD 5030/8015-M (Shell)						
Purgeable TPH	ND	0.05	mg/L	07/27/1995	lss	3040
Benzene	ND	0.5	ug/L	07/27/1995	lss	3040
Toluene	ND	0.5	ug/L	07/27/1995	lss	3040
Ethylbenzene	ND	0.5	ug/L	07/27/1995	lss	3040
Xylenes (Total)	ND	0.5	ug/L	07/27/1995	lss	3040
Bromofluorobenzene (SURR)	103		% Rec.	07/27/1995	lss	3040
METHOD 3510/8015-M (Shell)						
Extractable TPH	ND	0.05	mg/L	07/24/1995	tdn	1038

Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Units	Date Analyzed	Run Batch	Sample Spiked
METHOD 5030/8015-M (Shell)											246458
Purgeable TPH	96.0	94.0	2.1	0.50	ND	0.48	0.47	mg/L	07/21/1995	3029	246458
Benzene	95.1	88.8	6.9	9.87	ND	9.39	8.76	ug/L	07/21/1995	3029	246458
Toluene	95.7	92.5	3.4	30.5	ND	29.2	28.2	ug/L	07/21/1995	3029	246458
METHOD 5030/8015-M (Shell)											246828
Purgeable TPH	116.0	112.0	3.5	0.50	1.1	1.68	1.66	mg/L	07/24/1995	3033	246828
Benzene	75.8	75.8	0.0	6.99	7.0	12.3	12.3	ug/L	07/24/1995	3033	246828
Toluene	108.3	106.3	1.9	25.2	3.5	30.8	30.3	ug/L	07/24/1995	3033	246828
METHOD 5030/8015-M (Shell)											246545
Purgeable TPH	114.0	112.0	1.8	0.50	0.25	0.82	0.81	mg/L	07/21/1995	3031	246545
Benzene	97.5	97.5	0.0	8.0	2.8	10.6	10.6	ug/L	07/21/1995	3031	246545
Toluene	107.3	110.6	3.0	30.3	0.5	33.0	34.0	ug/L	07/21/1995	3031	246545
METHOD 5030/8015-M (Shell)											246834
Purgeable TPH	102.0	102.0	0.0	0.50	ND	0.51	0.51	mg/L	07/25/1995	3034	246834
Benzene	100.6	101.3	0.7	8.00	ND	8.05	8.10	ug/L	07/25/1995	3034	246834
Toluene	100.3	100.6	0.3	32.1	ND	32.2	32.3	ug/L	07/25/1995	3034	246834
METHOD 5030/8015-M (Shell)											246940
Purgeable TPH	118.0	120.0	1.7	0.50	ND	0.59	0.60	mg/L	07/26/1995	3036	246940
Benzene	109.7	112.0	2.1	7.10	ND	7.79	7.95	ug/L	07/26/1995	3036	246940
Toluene	97.7	100.4	2.6	26.6	ND	26.0	26.7	ug/L	07/26/1995	3036	246940
METHOD 5030/8015-M (Shell)											246623
Purgeable TPH	108.0	106.0	1.9	0.50	0.14	0.68	0.67	mg/L	07/27/1995	3040	246623
Benzene	121.6	117.4	3.5	8.01	ND	9.74	9.40	ug/L	07/27/1995	3040	246623
Toluene	99.0	97.0	2.0	29.9	0.7	30.3	29.7	ug/L	07/27/1995	3040	246623
METHOD 3510/8015-M (Shell)											246487
Extractable TPH	92.0	87.5	5.0	2.00	0.15	1.99	1.90	mg/L	07/24/1995	1038	246487

Client Name: Blaine Tech Services
Client Acct: 1821
NET Job No: 95.02849

Date: 07/30/1995
ELAP Cert: 1386
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Ref: Shell 285 Hegenberger Rd., Oakland, CA/950718-C2

LABORATORY CONTROL SAMPLE REPORT

Parameter	LCS % Recovery	Duplicate LCS % Recovery	RPD	LCS Amount Found	Duplicate LCS Amount Found	LCS Amount Expected	Units	Date Analyzed	Analyst Initials	Run Batch
METHOD 3510/8015-M (Shell)										
Extractable TPH	78.6			0.786		1.00	mg/L	07/24/1995	tdn	1038

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
*	:	Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
ICVS	:	Initial Calibration Verification Standard (External Standard).
mean	:	Average; sum of measurements divided by number of measurements.
mg/Kg (ppm)	:	Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
mg/L	:	Concentration in units of milligrams of analyte per liter of sample.
mL/L/hr	:	Milliliters per liter per hour.
MPN/100 mL	:	Most probable number of bacteria per one hundred milliliters of sample.
N/A	:	Not applicable.
NA	:	Not analyzed.
ND	:	Not detected; the analyte concentration is less than applicable listed reporting limit.
NTU	:	Nephelometric turbidity units.
RPD	:	Relative percent difference, 100 [Value 1 - Value 2]/mean value.
SNA	:	Standard not available.
ug/Kg (ppb)	:	Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
ug/L	:	Concentration in units of micrograms of analyte per liter of sample.
umhos/cm	:	Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

COOLER RECEIPT FORM

roject: 9507182 Log No: 7687
ooler received on: 9/20/95 and checked on 9/20/95 by
(signature)

ere custody papers present?.....~~YES~~ NO

ere custody papers properly filled out?.....~~YES~~ NO

ere the custody papers signed?.....~~YES~~ NO

as sufficient ice used?.....~~YES~~ NO TEMP.: 0°C.

id all bottles arrive in good condition (unbroken)?.....~~YES~~ NO

id bottle labels match COC?.....~~YES~~ NO

ere proper bottles used for analysis indicated?.....~~YES~~ NO

orrect preservatives used?.....~~YES~~ NO

OA vials checked for headspace bubbles?.....YES NO
Note which voas (if any) had bubbles:*

Sample descriptor:	Number of vials:
MW1	2
MW7	2
MW9	2
MW10	1
Dup	2
TB	2

*All VOAs with headspace bubbles have been set aside so they will not be used for analysis.....YES NO

List here all other jobs received in the same cooler:

Client Job #	NET log #

(coolerrec)

SHELL WELL MONITORING DATA SHEET

Project #: 950718C1	Wic #: 204550055O4
Sampler: SCOTT BRODERICK	Start Date: 7-18-95
Well I.D.: MW1	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 9.44 After	Depth to Water: Before 3.49 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other:

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

3.9 (1 Case Volume) x 3 (Specified Volumes) = 11.7 gallons

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ____

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ____

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1339	76.6	7.8	2500	11	4	
1340	WELL DEWATERED @ 4 GALS.					
1233	DTW	6.19				
1238	68.0	7.6	2400	19		
D.O.	2.9	MG/L				

Did Well Dewater? YES If yes, gals. 4 Gallons Actually Evacuated: 4

Sampling Time: 1249 Sampling Date: 7-19-95

Sample I.D.: MW1 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL
(Circle)

Duplicate I.D.: DUP @ 1257 Cleaning Blank I.D.:

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL
(Circle)

SHELL WELL MONITORING DATA SHEET

Project #: 9507181	Wic #: 204550855504
Sampler: SCOTT BRODERICK	Start Date: 7-18-95
Well I.D.: MW 2	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 9.63 After	Depth to Water: Before 4.91 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other:

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

3.1 (1 Case Volume) x 3 (Specified Volumes) = 9.3 gallons

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ____

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ____

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1038	73.6	7.4	1500	11	3.5	
1039	WELL	DEWATERED @		3.5 GALS		
0912	DTW	5.06				
0914	68.4	7.1	1600	6		
D.O.	2.7	MG/L				

Did Well Dewater? YES If yes, gals. 3.5 Gallons Actually Evacuated: 3.5

Sampling Time: 0922 Sampling Date: 7-19-95

Sample I.D.: MW-2 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL
(Circle)

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)

SHELL WELL MONITORING DATA SHEET

Project #: 9507/8C1	Wic #: 204550055504
Sampler: SCOTT BRODERICK	Start Date: 7-18-95
Well I.D.: MW3	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 9.55 After	Depth to Water: Before 4.80 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other:

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

3.1	x	3	=	9.3
1 Case Volume		Specified Volumes		gallons

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ___

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ___

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1021	74.8	6.8	1100	9.2	4	
1022	WELL DEWATERED @			4 GALS.		
0847	DTW	4.96				
0852	66.8	6.9	1200	12		
D.O.	2.6	MG/L				

Did Well Dewater? YES If yes, gals. 4 Gallons Actually Evacuated: 4

Sampling Time: 0859 Sampling Date: 7-19-95

Sample I.D.: MW3 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL
(Circle)

Duplicate I.D.: Cleaning Blank I.D.: EB DONE @

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL 0906
(Circle)

SHELL WELL MONITORING DATA SHEET

Project #: 9507/8C1	Wic #: 204/5508 5504
Sampler: SCOTT BRODERICK	Start Date: 7-18-95
Well I.D.: MW4	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 10.20 After	Depth to Water: Before 6.18 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other:	

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

2.6 (1 Case Volume) x 3 (Specified Volumes) = 7.8 gallons

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ___

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ___

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1136	72.2	7.0	2600	26.3	3	
1137	WELL DEWATERED @			3 GALS		
1005	DTW	6.87				
1008	67.6	7.1	2500	18		
D.O.	2.5	MG/L				

Did Well Dewater? YES If yes, gals. 3 Gallons Actually Evacuated: 3

Sampling Time: 1017 Sampling Date: 7-19-95

Sample I.D.: MW4 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL
(Circle)

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)

SHELL WELL MONITORING DATA SHEET

Project #: 9507181	Wic #: 204550855504
Sampler: SCOTT BRODERICK	Start Date: 7-18-95
Well I.D.: MW5	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 9.90 After	Depth to Water: Before 4.97 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other:

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

1 Case Volume	x	Specified Volumes	=	gallons
3.1	x	3	=	9.3

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ___

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ___

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1314	73.2	7.4	2400	180	3.1	STRONG ODOR
1315	WELL DEWATERED @			3.5 GALS		
1157	DTW	5.32				
1202	65.8	7.2	2500	32		
D.O.	2.6	MG/L				

Did Well Dewater? YES If yes, gals. 3.5 Gallons Actually Evacuated: 3.5

Sampling Time: 1213 Sampling Date: 7-19-95

Sample I.D.: MW5 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL
(Circle)

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)

SHELL WELL MONITORING DATA SHEET

Project #: 950718C1	Wic #: 204550855504
Sampler: SCOTT BRODERICK	Start Date: 7-18-95
Well I.D.: MW6	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 11.14 After	Depth to Water: Before 5.01 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other:	

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

4.0 (1 Case Volume) x 3 (Specified Volumes) = 12.0 gallons

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ___

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ___

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1238	71.6	7.0	1900	27	4	
1239	WELL DEWATERED @			6 GALS		
1120	DTW	5.93				
1125	66.0	7.2	1700	10		
D.O.	2.8	MG/L				

Did Well Dewater? YES If yes, gals. 6 Gallons Actually Evacuated: 6

Sampling Time: 1137 Sampling Date: 7-19-95

Sample I.D.: MW6 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL
(Circle)

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)

SHELL WELL MONITORING DATA SHEET

Project #: 9507181	Wic #: 204550855504
Sampler: SCOTT BRODERICK	Start Date: 7-18-95
Well I.D.: MW 7	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 10.06 After	Depth to Water: Before 4.70 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other:

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

3.5 (1 Case Volume) x 3 (Specified Volumes) = 10.5 gallons

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ___

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ___

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1250	70.4	7.7	5300	29	4	GOLDEN COLOR
1251	WELL DEWATERED @			4 GALS		
1140	DTW	5.47				
1144	68.4	7.5	5200	20		
D.O.	2.9	MG/L				

Did Well Dewater? YES If yes, gals. 4 Gallons Actually Evacuated: 4

Sampling Time: 1153 Sampling Date: 7-19-95

Sample I.D.: MW7 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL
(Circle)

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)

SHELL WELL MONITORING DATA SHEET

Project #: 9507181	Wic #: 204550855504
Sampler: SCOTT BRODERICK	Start Date: 7-18-95
Well I.D.: MW8	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 9.67 After	Depth to Water: Before 5.21 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other:	

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

1 Case Volume	x	Specified Volumes	=	gallons
2.7	x	3	=	8.1

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ___

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ___

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1053	76.0	6.7	960	33	3	
1054	WELL DEWATERED @			3 GALS		
0926	DTW	6.07				
0931	67.8	6.8	1000	23		
D.O.	2.6	MG/L				

Did Well Dewater? Y/(N) If yes, gals. 3 Gallons Actually Evacuated: 3

Sampling Time: 0939 Sampling Date: 7-19-95

Sample I.D.: MW8 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL
(Circle)

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)

SHELL WELL MONITORING DATA SHEET

Project #: 9507181	Wic #: 204550855504
Sampler: SCOTT BRODERICK	Start Date: 7-18-95
Well I.D.: MW9	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 10.83 After	Depth to Water: Before 5.07 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other:	

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

3.7 (1 Case Volume) x 3 (Specified Volumes) = 11.1 gallons

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ____

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ____

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1327	70.0	7.8	3900	17	4	
1328	WELL DEWATERED @			4 GALS		
1217	DTW	5.85				
1222	68.8	7.7	4000	27		
D.O.	2.4	MG/L				

Did Well Dewater? YES If yes, gals. 4 Gallons Actually Evacuated: 4

Sampling Time: 1230 Sampling Date: 7-19-95

Sample I.D.: MW 9 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL
(Circle)

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)

SHELL WELL MONITORING DATA SHEET

Project #: 950718C1	Wic #: 204550855504
Sampler: SCOTT BRODERICK	Start Date: 7-18-95
Well I.D.: MW10	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 10.09 After	Depth to Water: Before 6.79 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other:

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

2.1	x	3	=	6.3
1 Case Volume		Specified Volumes		gallons

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ___

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ___

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1218	75.0	6.5	2200	41	2.5	
1219	WELL DEWATERED @			2.5 GALS		
1059	DTW	6.85				
1104	68.6	6.8	2300	30		
D.O.	3.0	MG/L				

Did Well Dewater? YES If yes, gals. 2.5 Gallons Actually Evacuated: 2.5

Sampling Time: 1116 Sampling Date: 7-19-95

Sample I.D.: MW10 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL
(Circle)

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)

SHELL WELL MONITORING DATA SHEET

Project #: 9507181	Wic #: 204550855504
Sampler: SCOTT BRODERICK	Start Date: 7-18-95
Well I.D.: MW11	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 14.00 After	Depth to Water: Before 9.31 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other:	

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

3	x	3	=	9
1 Case Volume		Specified Volumes		gallons

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ____

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ____

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1116	69.6	6.9	>10,000	19	3	
1117	WELL DEWATERED @			4 GALS		
0946	DTW	10.28				
0950	65.2	6.7	>10,000	13		
D.O.	3.1	MG/L				

Did Well Dewater? YES If yes, gals. 4 Gallons Actually Evacuated: 4

Sampling Time: 0959 Sampling Date: 7-19-95

Sample I.D.: MW11 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL
(Circle)

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)

SHELL WELL MONITORING DATA SHEET

Project #: 9507181	Wic #: 204550855504
Sampler: SCOTT BRODERICK	Start Date: 7-18-95
Well I.D.: MW12	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 14.40 After	Depth to Water: Before 8.50 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade	Other:

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

3.8 (1 Case Volume) x 3 (Specified Volumes) = 11.4 gallons

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ____

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ____

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1152	69.0	7.6	5600	5	4	
1153	WELL DEWATERED	@	4	GALS		
1027	DTW	10.61				
1031	65.8	7.2	5500	4		
D.O.	3.1	MG/L				

Did Well Dewater? YES If yes, gals. 4 Gallons Actually Evacuated: 4

Sampling Time: 1042 Sampling Date: 7-19-95

Sample I.D.: MW12 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL
(Circle)

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)

SHELL WELL MONITORING DATA SHEET

Project #: 9507181	Wic #: 204550855504
Sampler: SCOTT BRODERICK	Start Date: 7-18-95
Well I.D.: MW13	Well Diameter: (circle one) 2 3 (4) 6 ___
Total Well Depth: Before 14.62 After	Depth to Water: Before 6.63 After
Depth to Free Product:	Thickness of Free Product (feet):
Measurements referenced to: (PVC) Grade Other:	

Well Diameter	VCF	Well Diameter	VCF
1"	0.04	6"	1.47
2"	0.16	8"	2.61
3"	0.37	10"	4.08
4"	0.65	12"	5.87
5"	1.02	16"	10.43

5.2 (1 Case Volume) x 3 (Specified Volumes) = 15.6 gallons

Purging: Bailer
Disposable Bailer
Middleburg
(Electric Submersible)
Extraction Pump
Other ___

Sampling: (Bailer)
Disposable Bailer
Extraction Port
Other ___

TIME	TEMP. (F)	pH	COND.	TURBIDITY:	VOLUME REMOVED:	OBSERVATIONS:
1207	68.8	7.4	710,000	7	5.5	
1208	WELL DEWATERED @ 6 GALS					
1046	DTW	9.20				
1050	66.0	7.2	710,000	11		
D.O.	2.8	MG/L				

Did Well Dewater? YES If yes, gals. 6 Gallons Actually Evacuated: 6

Sampling Time: 1052 Sampling Date: 7-19-95

Sample I.D.: MW13 Laboratory: NET

Analyzed for: (TPH-G) (BTEX) (TPH-D) (OTHER:) MOTOR OIL
(Circle)

Duplicate I.D.: Cleaning Blank I.D.:

Analyzed for: TPH-G BTEX TPH-D OTHER:
(Circle)