CAMBRIA

January 27, 1998

Susan Hugo
Alameda County Department of
Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Fourth Quarter 1997 Monitoring Report**
Shell Service Station
3420 San Pablo Avenue
Oakland, California
WIC #204-5508-5306
Cambria Project #240-0314-497

Dear Ms. Hugo:

On behalf of Shell Oil Products Company (Shell), Cambria Environmental Technology, Inc. (Cambria) is submitting this monitoring report to satisfy the quarterly reporting requirements prescribed by California Administrative Code Title 23, Waters, Division 3, Chapter 16, Article 5, Section 2652.d.

FOURTH QUARTER 1997 ACTIVITIES

Station Renovation: As you discussed in an April 3, 1997 telephone conversation with Paul Waite of Cambria, the Shell service station at 3420 San Pablo Avenue, Oakland, California is undergoing building renovations. Although the facility is not currently operational, it will be used as a service station and community center when the renovations are completed. We will inform you when the renovations are completed and if the plans for this facility change in the future. Monitoring wells MW-3 and MW-6 were abandoned, with your approval, on December 5, 1997. A well abandonment report will be submitted under separate cover.

Ground Water Monitoring: Blaine Tech Services, Inc. (Blaine) of San Jose, California measured ground water depths and collected water samples from the site wells (Figure 1). The Blaine report, describing these sampling activities and presenting the analytic results, is included as Attachment A. Cambria summarized separate-phase hydrocarbon removal (Table 1), calculated ground water elevations (Table 2), compiled the analytic data (Table 3), and prepared a ground water elevation contour map (Figure 1).

CAMBRIA
ENVIRONMENTAL
TECHNOLOGY, INC.
1144 65TH STREET,
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ANTICIPATED FIRST QUARTER 1998 ACTIVITIES

Blaine will gauge ground water elevations, check for separate-phase hydrocarbons, and sample selected monitoring wells. Building renovations should continue. Ground water monitoring wells to replace the two wells that were destroyed will be installed after onsite construction activities are complete. Cambria will submit a report presenting a summary of activities for the upcoming quarter.

CLOSING

We appreciate the opportunity to work with you on this project. Please call if you have any questions.

Sincerely,
Cambria Environmental Technology, Inc.

Khaled B. Rahman, R.G., C.H.G.
Senior Geologist

REGISTERED GEOLOGIST
KHALED B. RAHMAN
No. 0251
CERTIFIED
HYDROGEOLOGIST
Exp. 7/31/99
STATE OF CALIFORNIA

Attachments: A - Blaine Quarterly Ground Water Monitoring Report

cc: A.E.(Alex) Perez, Shell Oil Products Company, P.O. Box 8080, Martinez, California 94553

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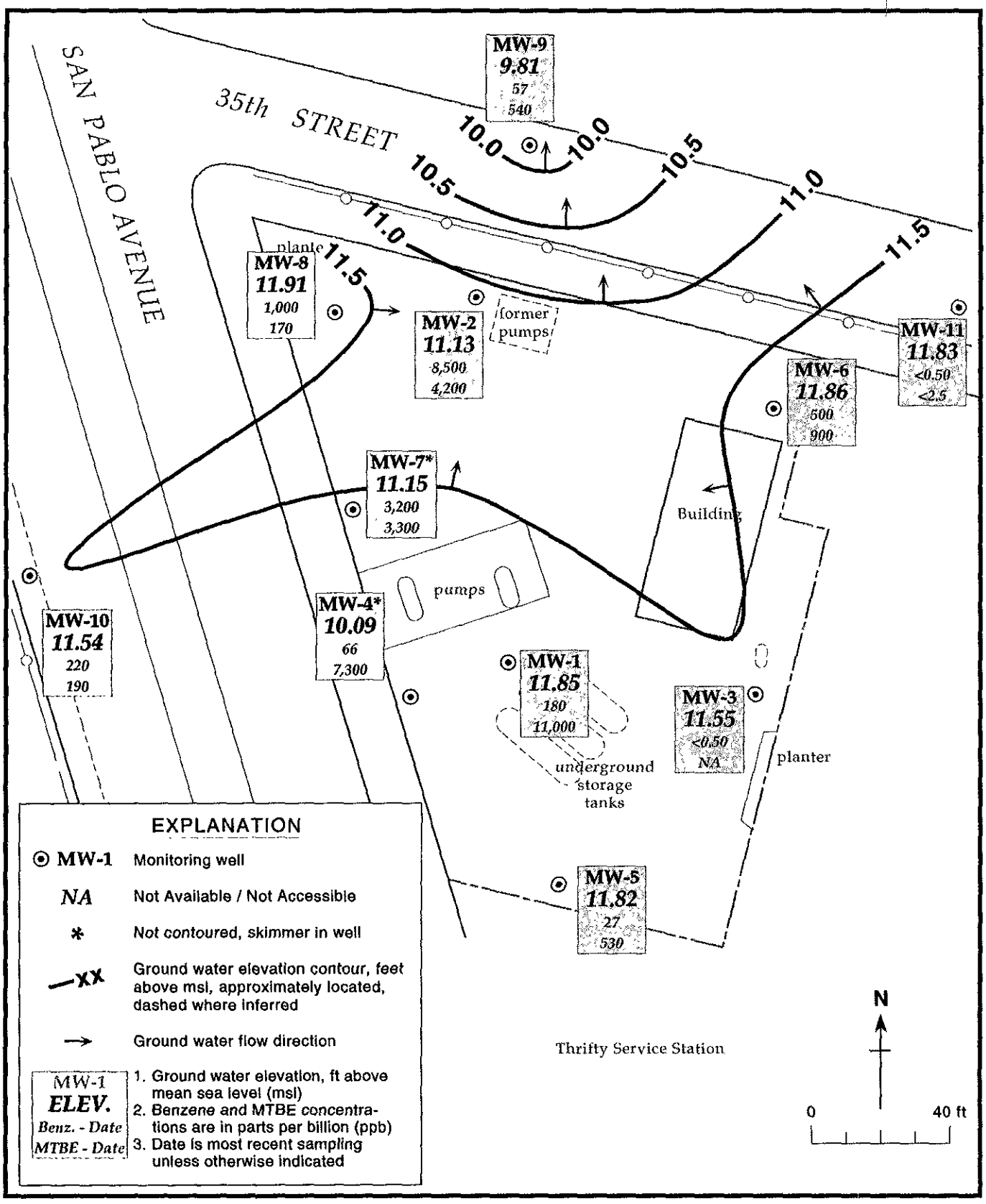

Figure 1. Ground Water Elevation Contours - October 8, 1997 - Shell Service Station WIC #204-5508-5306, 3420 San Pablo Avenue, Oakland, California

Table 1. **Separate-Phase Hydrocarbon Removal** - Shell Service Station WIC #204-5508-5306, 3420 San Pablo Avenue, Oakland, California

Well ID	Date	Separate-Phase Hydrocarbon Thickness (ft)	Separate-Phase Hydrocarbons Removed (lbs)	Cumulative Separate-Phase Hydrocarbons Removed (lbs)
MW-1	10/23/91	0.01	---	---
	05/04/92	<0.01	---	---
	10/12/92	0.09	---	---
	01/12/93	0.02	3.12	3.12
	04/06/93	<0.01	0.78	3.90
	07/12/93	0.01	0.18	4.08
	10/13/93	0.01	0.06	4.14
	01/20/94	0.01	0.03	4.17
	04/03/94	0.02	0.12	4.29
MW-2	10/12/92	0.03	---	---
	01/12/93	0.01	1.56	1.56
	04/06/93	<0.01	0.78	2.34
	04/03/94	<0.01	0.03	2.37
MW-4	10/12/92	0.78	---	---
	01/12/93	1.0	---	---
	04/06/93	0.95	---	---
	07/12/93	0.03	6.36	6.36
	10/13/93	0.12	0.78	7.14
	01/20/94	0.02	0.03	7.17
	04/13/94	0.01	0.12	7.29
	10/27/94	0.03	0.79	8.08
	01/03/95	0.01	0.16	8.24
	04/13/95	0.03	0.16	8.40
MW-5	10/12/92	0.01	---	---
	01/12/93	<0.01	---	---
	10/13/93	0.03	---	---
	01/20/94	0.01	---	---
	04/13/94	0.01	0.03	0.03
MW-6	10/12/92	0.48	---	---
	01/12/93	<0.01	---	---
	10/13/93	0.2	---	---
	01/20/94	0.02	---	---
	04/13/94	0.01	0.03	0.03
	07/19/94	0.07	0.03	0.06
	10/27/94	0.11	1.43	1.49
	01/03/95	0.02	0.12	1.61
	04/13/95	0.02	0.13	1.74

Table 1. **Separate-Phase Hydrocarbon Removal** - Shell Service Station WIC #204-5508-5306, 3420 San Pablo Avenue, Oakland, California (continued)

Well ID	Date	Separate-Phase Hydrocarbon Thickness (ft)	Separate-Phase Hydrocarbons Removed (lbs)	Cumulative Separate-Phase Hydrocarbons Removed (lbs)
MW-7	01/20/94	0.05	---	---
	04/13/94	0.16	0.66	0.66
	07/19/94	0.20	0.04	0.70
	10/27/94	0.04	1.11	1.81
	01/03/95	0.02	0.16	1.97
	04/13/95	0.02	0.16	2.13
	10/31/95	0.04	0.80	2.93
	01/17/96	0.04	0.09	3.02
	04/10/96	0.05	0.00	3.02
	07/03/96	0.03	0.00	3.02
	10/17/96	0.02	0.16	3.18
	07/14/97	0.03	0.16	3.34
	10/08/97	**0.01**	**0.0**	**3.34**
	Total Separate-Phase Hydrocarbons Removed			**20.17**

Notes and Abbreviations:

ft = Feet
lbs = Pounds
--- = Not available
Weight of separate-phase hydrocarbons converted from volume using the relation: 1 liter gasoline = 1.61 pounds

Table 2. **Ground Water Elevations** - Shell Service Station WIC #204-5508-5306, 3420 San Pablo Avenue, Oakland, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft below TOC))	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl)[a]
MW-1	08/06/91	21.28	10.86	---	10.43
	10/23/91		11.05	0.01	10.24
	01/28/92		10.84	---	10.44
	05/04/92		9.42	<0.01	11.86
	07/13/92		11.36	---	9.92
	10/12/92		13.14	0.09	8.21
	01/12/93		7.52	0.02	13.78
	04/06/93		7.13	<0.01	14.16
	07/12/93		11.02	0.01	10.27
	10/13/93		12.18	0.01	9.11
	01/20/94		9.18	0.01	12.10
	04/13/94		8.72	0.02	12.58
	07/19/94		8.76	---	12.52
	10/27/94		10.49	---	10.79
	01/03/95		6.15	---	15.13
	04/13/95		5.24	---	16.04
	06/30/95		7.24	---	14.04
	10/11/91		9.48	---	11.80
	01/17/96		6.48	---	14.80
	04/10/96		5.38	---	15.90
	07/30/96		7.61	---	13.67
	10/17/96		8.66	---	12.62
	01/22/97		5.00	---	16.28
	04/01/97		6.42	---	14.86
	07/14/97		8.92	---	12.36
	10/08/97		**9.43**	**---**	**11.85**
MW-2	08/06/91	21.56	9.72	---	11.84
	10/23/91		10.03	---	11.53
	01/28/92		8.78	---	12.78
	05/04/92		7.58	---	13.98
	07/13/92		9.63	---	11.93
	10/12/92		11.66	0.03	9.92
	01/12/93		7.13	0.01	14.44
	04/06/93		6.40	<0.01	15.17
	07/12/93		8.75	---	12.81
	10/13/93		10.28	---	11.28
	01/20/94		---	---	---
	04/13/94		7.35	<0.01	14.22
	07/19/94		8.24	---	13.32
	10/27/94		10.26	---	13.32
	01/03/95		6.44	---	15.12
	04/13/95		5.89	---	15.67
	06/30/95		7.41	---	14.15

Table 2. **Ground Water Elevations** - Shell Service Station WIC #204-5508-5306, 3420 San Pablo, Avenue, Oakland, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft below TOC))	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl)[a]
	10/11/95		8.02	---	13.54
	01/17/96		7.42	---	14.14
	04/10/96		6.91	---	14.65
	07/30/96		7.63	---	13.93
	10/17/96		8.28	---	13.29
	01/22/97		7.09	---	14.47
	04/01/97		6.91	---	14.65
	07/14/97		9.93	---	11.63
	10/08/97		**10.43**	**---**	**11.13**
MW-3	08/06/91	21.78	11.18	---	10.60
	10/23/91		11.69	---	10.09
	01/28/92		9.99	---	11.79
	05/04/92		9.46	---	12.32
	07/13/92		11.29	---	10.49
	10/12/92		13.10	---	8.68
	01/12/93		7.32	---	14.46
	04/06/93		7.44	---	14.34
	07/12/93		10.62	---	11.16
	10/13/93		12.05	---	9.73
	01/20/94		9.62	---	12.16
	04/13/94		9.15	---	12.63
	07/19/94		10.13	---	11.65
	10/27/94		11.66	---	10.12
	01/03/95		6.89	---	14.89
	04/13/95		6.79	---	14.99
	06/30/95		8.94	---	12.84
	10/11/95		10.62	---	11.16
	01/17/96		7.18	---	14.60
	04/10/96		6.76	---	15.02
	07/30/96		9.04	---	12.74
	10/17/96		9.04	---	12.74
	01/22/97		5.03	---	16.75
	04/01/97		8.23	---	13.55
	07/14/97		9.09	---	12.69
	10/08/97		**10.23**	**---**	**11.55**
MW-4	08/06/91	20.31	10.57	---	9.74
	10/23/91		10.46	---	9.85
	01/28/92		9.54	---	10.77
	05/04/92		8.33	---	11.98
	07/13/92		9.87	---	10.44
	10/12/92		12.43	0.78	8.50
	01/12/93		7.12	1.0	13.99

Table 2. **Ground Water Elevations** - Shell Service Station WIC #204-5508-5306, 3420 San Pablo, Avenue, Oakland, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft below TOC))	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl)[a]
	04/06/93		7.23	0.95	13.84
	07/12/93		10.08	0.03	10.25
	10/13/93		11.35	0.12	9.06
	01/20/94		9.06	0.02	11.26
	04/13/94		8.58	0.01	11.74
	07/19/94		9.71	---	10.60
	10/27/94		10.60	0.03	9.73
	01/03/95		5.49	0.01	14.83
	04/13/95		6.53	0.03	13.80
	06/30/95		9.57	---	10.74
	10/11/95		10.30	---	10.01
	01/17/96		6.68	---	13.63
	04/10/96		7.90	---	12.41
	07/30/96		8.73	---	11.58
	10/17/96		9.97	---	10.34
	01/22/97		5.26	---	15.05
	04/01/97		8.02	---	12.29
	07/14/97		10.05	---	10.26
	10/08/97		**10.22**	**---**	**10.09**
MW-5	08/06/91	20.91	10.23	---	10.68
	10/23/91		10.89	---	10.02
	01/28/92		8.45	---	12.46
	05/04/92		8.05	---	12.86
	07/13/92		10.00	---	10.91
	10/12/92		11.83	0.01	9.09
	01/12/93		6.10	<0.01	14.81
	04/06/93		6.18	---	14.73
	07/12/93		9.59	---	11.32
	10/13/93		10.80	0.03	10.13
	01/20/94		7.42	0.01	13.49
	04/13/94		7.05	0.01	13.87
	07/19/94		8.57	---	12.34
	10/27/94		10.14	---	10.77
	01/03/95		5.84	---	15.07
	04/13/95		5.28	---	15.63
	06/30/95		7.43	---	13.48
	10/11/95		8.90	---	12.01
	01/17/96		6.40	---	14.51
	04/10/96		5.70	---	15.21
	07/30/96		7.71	---	13.20
	10/17/96		9.04	---	11.87
	01/22/97		4.85	---	16.06
	04/01/97		6.54	---	14.37

Table 2. **Ground Water Elevations** - Shell Service Station WIC #204-5508-5306, 3420 San Pablo, Avenue, Oakland, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft below TOC))	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl)[a]
	07/14/97		8.54	---	12.37
	10/08/97		**9.09**	**---**	**11.82**
MW-6	08/06/91	22.32	10.61	---	11.71
	10/23/91		11.68	---	10.64
	01/28/92		8.90	---	13.42
	05/04/92		8.01	---	14.31
	07/13/92		10.77	---	11.55
	10/12/92		13.36	0.48	9.34
	01/12/93		6.40	<0.01	15.92
	04/06/93		5.93	---	16.39
	07/12/93		10.25	---	12.07
	10/13/93		12.28	0.2	10.20
	01/20/94		9.14	0.02	13.20
	04/13/94		7.67	0.01	14.66
	07/19/94		10.07	0.07	12.31
	10/27/94		11.84	0.11	10.57
	01/03/95		7.80	0.02	14.54
	04/13/95		5.77	0.02	16.57
	06/30/95		7.78	---	14.54
	10/11/95		10.06	---	12.26
	01/17/96		6.91	---	15.41
	04/10/96		5.92	---	16.40
	07/30/96		8.97	---	13.35
	10/17/96		9.87	---	12.45
	01/22/97		4.43	---	17.89
	04/01/97		6.84	---	15.48
	07/14/97		10.30	---	12.02
	10/08/97		**10.46**	**---**	**11.86**
MW-7	08/06/91	20.36	8.00	---	12.36
	10/23/91		8.16	---	12.20
	01/28/92		7.11	---	13.25
	05/04/92		6.47	---	13.89
	07/13/92		7.73	---	12.63
	10/12/92		8.68	---	11.68
	01/12/93		6.26	---	14.10
	04/06/93		5.92	---	14.44
	07/12/93		7.27	---	13.09
	10/13/93		9.40	---	10.96
	01/20/94		7.03	0.05	13.37
	04/13/94		6.56	0.16	13.93
	07/19/94		6.91	0.20	13.61
	10/27/94		8.28	0.04	12.11

Table 2. **Ground Water Elevations** - Shell Service Station WIC #204-5508-5306, 3420 San Pablo, Avenue, Oakland, California (*continued*)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft below TOC))	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl)[a]
	01/03/95		6.48	0.02	13.90
	04/13/95		6.54	0.02	13.84
	06/30/95		7.08	---	13.28
	10/11/95		7.88	0.04	12.51
	01/17/96		7.26	0.04	13.13
	04/10/96		6.98	0.05	13.42
	07/30/96		7.34	0.03	13.04
	10/17/96		7.63	0.02	12.75
	01/22/97		6.46	---	13.90
	04/01/97		6.97	---	13.39
	07/14/97		8.90	0.03	11.48
	10/08/97		**9.21**	**0.01**	**11.15**
MW-8	08/06/91	20.95	9.60	---	11.35
	10/23/91		9.73	---	11.22
	01/28/92		7.72	---	13.23
	05/04/92		6.48	---	14.47
	07/13/92		8.55	---	12.40
	10/12/92		9.97	---	10.98
	01/12/93		6.94	---	14.01
	04/06/93		5.72	---	15.23
	07/12/93		7.65	---	13.30
	10/13/93		8.25	---	12.70
	01/20/94		7.25	---	13.70
	04/13/94		7.12	---	13.83
	07/19/94		7.43	---	13.52
	10/27/94		7.55	---	13.40
	01/03/95		6.04	---	14.91
	04/13/95		5.04	---	15.91
	06/30/95		5.72	---	15.23
	10/11/95		7.06	---	13.89
	01/17/96		5.84	---	15.11
	04/10/96		5.03	---	15.92
	07/30/96		6.36	---	14.59
	10/17/96		5.94	---	15.01
	01/22/97		5.93	---	15.02
	04/01/97		6.24	---	14.71
	07/14/97		8.59	---	12.36
	10/08/97		**9.04**	**---**	**11.91**
MW-9	08/06/91	21.19	10.33	---	10.86
	10/23/91		11.13	---	10.06
	01/28/92		9.02	---	12.17
	05/04/92		7.67	---	13.52

Table 2. **Ground Water Elevations** - Shell Service Station WIC #204-5508-5306, 3420 San Pablo, Avenue, Oakland, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft below TOC))	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl)[a]
	07/13/92		10.26	---	10.93
	10/12/92		12.19	---	9.0
	01/12/93[b]		---	---	---
	04/06/93[b]		---	---	---
	07/12/93[b]		---	---	---
	10/13/92		11.17	---	10.02
	01/20/94		8.03	---	13.16
	04/13/94		7.81	---	13.38
	07/19/94		8.96	---	12.23
	10/27/94		11.00	---	10.19
	01/03/95		6.60	---	14.59
	04/13/95		6.73	---	14.46
	06/30/95		7.32	---	13.87
	10/11/95		8.10	---	13.09
	01/17/96		5.75	---	15.44
	04/10/96		5.17	---	16.02
	07/30/96		8.10	---	13.09
	10/17/96		9.12	---	12.07
	01/22/97		4.72	---	16.47
	04/01/97		6.86	---	14.33
	07/14/97		10.04	---	11.15
	10/08/97		**11.38**	**---**	**9.81**
MW-10	10/23/91	19.74	8.57	---	11.17
	01/28/92		7.60	---	12.14
	05/04/92		7.54	---	12.20
	07/13/92		8.59	---	11.15
	10/12/92		10.23	---	9.51
	01/12/93[b]		---	---	---
	04/06/93		6.70	---	13.04
	07/12/93[b]		8.05	---	11.69
	10/13/93		8.25	---	11.49
	01/20/94		7.20	---	12.54
	04/13/94		7.57	---	12.17
	07/19/94		8.18	---	11.56
	10/27/94		8.68	---	11.06
	01/03/95		6.86	---	12.88
	04/13/95		6.91	---	12.83
	06/30/95		7.61	---	12.13
	10/11/95		---	---	---
	01/17/96		7.00	---	12.74
	07/30/96[b]		---	---	---
	10/17/96		---	---	---
	01/22/97		6.68	---	13.06

Table 2. **Ground Water Elevations** - Shell Service Station WIC #204-5508-5306, 3420 San Pablo, Avenue, Oakland, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft below TOC))	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl)[a]
	04/01/97		7.34	---	12.40
	07/14/97		8.10	---	11.64
	10/08/97		**8.20**	**---**	**11.54**
MW-11	10/23/91	22.06	14.00	---	8.06
	01/28/92		8.74	---	3.32
	05/04/92		8.29	---	13.77
	07/13/92		10.50	---	11.56
	10/12/92		12.40	---	9.66
	01/12/93[b]		---	---	---
	04/06/93[b]		---	---	---
	07/12/93[b]		---	---	---
	10/13/93		11.47	---	10.59
	01/20/94		9.09	---	12.97
	04/13/94		8.02	---	14.04
	07/19/94		9.82	---	12.24
	10/27/94		11.66	---	10.40
	01/03/95		6.15	---	15.91
	04/13/95		6.00	---	16.06
	06/30/95		8.31	---	13.75
	10/11/95		10.30	---	11.76
	01/17/96		6.45	---	15.61
	04/10/96		6.05	---	16.01
	07/30/96		8.92	---	13.14
	10/17/96		9.24	---	12.82
	01/22/97		5.12	---	16.94
	04/01/97		7.41	---	14.65
	07/14/97		9.74	---	12.32
	10/08/97		**10.23**	**---**	**11.83**

Notes and Abbreviations:

a = When separate-phase hydrocarbons are present ground water elevation is adjusted using the relation: Ground Water Elevation = Top-of-casing elevation - depth to water + (0.8 x hydrocarbon thickness)
b = Well inaccessible; covered by construction debris
--- = Not measured/not available
ft = Feet
msl = Mean sea level
TOC = Top of casing

Table 3. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-5306, 3420 San Pablo Avenue, Oakland, California

Well ID	Date Sampled	Depth to water (ft below TOC)	TPH-G	B	T	E	X	MTBE	DO (mg/L)
			← (µg/L) →						
MW-1	08/06/91[SPH]	10.86	----	----	----	----	----	----	----
	10/23/91	11.05	32,000	2,700	360	550	3,700	----	----
	01/28/92	10.84	14,000	1,000	106	450	1,600	----	----
	05/05/92	9.42	98,000	11,000	1,200	3,500	18,000	----	----
	07/13/92	11.36	11,000	1,100	130	740	1,300	----	----
	10/12/92[SPH]	13.14	----	----	----	----	----	----	----
	01/12/93[SPH]	7.52	----	----	----	----	----	----	----
	04/06/93[SPH]	7.13	----	----	----	----	----	----	----
	07/12/93[SPH]	11.02	----	----	----	----	----	----	----
	10/13/93[SPH]	12.18	----	----	----	----	----	----	----
	01/20/94[SPH]	9.18	----	----	----	----	----	----	----
	04/13/94[SPH]	8.72	----	----	----	----	----	----	----
	07/19/94	8.76	17,000	420	140	530	1,300	----	----
	10/27/94	10.49	23,000	1,200	130	990	960	----	----
	01/03/95	6.15	31,000	610	160	1,200	5,000	----	----
	04/13/95	5.24	20,000	340	42	680	2,900	----	----
	06/3095	7.24	16,000	450	62	460	1,200	----	----
	10/11/95	9.48	8,400	660	47	510	850	8,000	----
	10/13/95	----	7,400	730	54	490	1,100	8,200	----
	01/17/96	6.48	24,000	570	110	820	2,900	15,000	----
	04/10/96	5.38	20,000	120	11	420	1,400	15,000	----
	07/30/96	7.61	7,900	240	22	170	300	12,000	----
	10/17/96	8.66	6,600	1,000	20	120	130	10,000	1.4
	01/22/97	5.00	13,000	170	<50	330	1,200	18,000	1.6
	04/01/97	6.42	7,900	240	26	130	200	6,400	1.4
	07/14/97	8.92	5,000	<20	<20	59	61	9,000	1.9
	10/08/97	**9.43**	**3,200**	**180**	**7.6**	**18**	**6.1**	**11,000**	**4.8**
MW-2	08/06/91	9.72	50,000	15,000	----	2,700	13,000	----	----
	10/23/91	10.03	120,000	11,000	1,400	3,500	19,000	----	----
	01/28/92	8.78	49,000	7,400	800	1,800	8,300	----	----
	05/05/92	7.58	52,000	12,000	1,100	2,200	12,000	----	----
	07/13/92	9.63	47,000	15,000	2,400	4,500	16,000	----	----
	10/12/92[SPH]	11.66	----	----	----	----	----	----	----
	01/12/93[SPH]	7.13	----	----	----	----	----	----	----
	04/06/93[SPH]	6.40	----	----	----	----	----	----	----
	07/12/93	8.75	59,000	12,000	950	2,400	11,000	----	----
	10/13/93	10.28	54,000	14,000	1,200	3,700	22,000	----	----
	01/20/94	----	----	----	----	----	----	----	----
	04/13/94	7.35	79,000	9,400	740	2,100	12,000	----	----
	04/13/94[dup]	7.35	110,000	11,000	710	2,400	13,000	----	----
	07/19/94	8.24	63,000	13,000	810	1,900	13,000	----	----
	07/19/94[dup]	8.24	12,000	12,000	140	340	12,000	----	----
	10/27/94	10.26	64,000	8,800	480	2,100	10,000	----	----
	01/03/95	6.44	67,000	9,800	720	2,800	11,000	----	----
	01/03/95[dup]	6.44	58,000	9,700	620	2,700	12,000	----	----
	04/13/95	5.89	83,000	10,000	490	2,600	13,000	----	----
	04/13/95[dup]	5.89	74,000	9,500	350	2,100	11,000	----	----
	06/30/95	7.41	65,000	12,000	1,800	2,400	12,000	----	----
	10/11/95	8.02	68,000	8,800	840	3,000	13,000	1,400	----

Table 3. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-5306, 3420 San Pablo Avenue, Oakland, California

Well ID	Date Sampled	Depth to water (ft below TOC)	TPH-G	B	T	E	X	MTBE	DO (mg/L)
			← (µg/L) →						
	01/17/96	7.42	79,000	12,000	640	2,700	14,000	2,200	----
	01/17/96[dup]	7.42	78,000	12,000	920	2,500	12,000	2,500	----
	04/10/96	6.91	84,000	7,200	310	1,700	7,800	2,900	----
	07/30/96	7.63	26,000	6,800	210	1,300	5,500	4,500	----
	10/17/96	8.27	46,000	9,800	340	2,000	6,500	4,900	1.8
	01/22/97	7.09	52,000	6,200	220	1,400	6,600	3,000	1.9
	01/22/97[dup]	7.09	54,000	6,100	230	1,400	6,500	2,600	1.9
	04/01/97	6.91	69,000	6,000	380	2,400	11,000	3,800	2.0
	07/14/97	9.93	53,000	7,700	260	1,600	5,200	2,400	1.2
	07/14/97[dup]	9.93	59,000	8,700	400	1,900	6,900	2,700	1.2
	10/08/97	**10.43**	**56,000**	**8,500**	**320**	**1,600**	**5,100**	**4,200**	**2.1**
	10/08/97[dup]	**10.43**	**53,000**	**8,300**	**330**	**1,600**	**5,200**	**2,900**	**2.1**
MW-3	08/06/91	11.18	430	8	1	4	15	----	----
	10/23/91	11.69	390	2.10	<0.3	0.48	2	----	----
	01/28/92	9.99	190	<0.5	<0.5	<0.5	<0.5	----	----
	05/04/92	9.46	190	<1	<1	<1	0.71	----	----
	07/20/92	11.29	200[a]	<0.5	<0.5	<0.5	<0.5	----	----
	10/12/92	13.10	180[a]	<0.5	<0.5	<0.5	<0.5	----	----
	01/12/93	7.32	180	<0.5	2.3	0.9	5.6	----	----
	01/12/93[dup]	7.32	260	<0.5	<0.5	<0.5	<0.5	----	----
	04/06/93	7.44	280	<0.5	<0.5	<0.5	<0.5	----	----
	07/12/93	10.62	310[a]	<0.5	<0.5	<0.5	<0.5	----	----
	10/13/93	12.05	150	<0.5	<0.5	<0.5	<0.5	----	----
	01/20/94	9.62	180	<0.5	<0.5	<0.5	<0.5	----	----
	04/13/94	9.15	270	<0.5	<0.5	<0.5	<0.5	----	----
	07/19/94	10.13	190*	<0.5	<0.5	<0.5	<0.5	----	----
	10/27/94	11.66	160*	<0.5	<0.5	<0.5	<0.5	----	----
	01/03/95	6.89	100*	<0.5	<0.5	<0.5	<0.5	----	----
	04/13/95	6.79	120*	<0.5	<0.5	<0.5	<0.5	----	----
	06/30/95	8.94	180*	<0.5	<0.5	<0.5	<0.5	----	----
	10/11/95	10.62	150	2.2	<0.5	<0.5	<0.5	2.3	----
	01/17/96	7.18	120	<0.5	<0.5	<0.5	<0.5	7.8	----
	04/10/96	6.76	160	<0.5	<0.5	<0.5	<0.5	12	----
	07/30/96	9.04	57	<0.5	<0.5	<0.5	<0.5	<2.5	----
	10/17/96	9.04	<50	<0.5	<0.5	<0.5	<0.5	<2.5	2.0
	01/22/97	5.03	<50	<0.5	<0.5	<0.5	<0.5	3.7	2.4
	04/01/97	8.23	71	<0.50	<0.50	<0.50	<0.50	---[c]	1.6
	07/14/97	9.09	<50	<0.50	<0.50	<0.50	1.5	---[c]	1.9
	10/08/97	**10.23**	**73**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**---[c]**	**5.5**
MW-4	08/06/91	10.57	1,300	28	18	68	150	----	----
	10/23/91	10.46	1,900	97	6.10	38	77	----	----
	01/28/92	9.54	200	7.60	<0.5	3	3.30	----	----
	05/04/92	8.33	690	98	3	13	<1	----	----
	07/13/92	9.87	1,500	140	2.90	17	12	----	----
	07/13/92[dup]	9.87	870	95	1.90	10	7.10	----	----
	10/12/92[SPH]	12.43	----	----	----	----	----	----	----
	01/12/93[SPH]	7.12	----	----	----	----	----	----	----
	04/06/93[SPH]	7.23	----	----	----	----	----	----	----

Table 3. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-5306, 3420 San Pablo Avenue, Oakland, California

Well ID	Date Sampled	Depth to water (ft below TOC)	TPH-G	B	T	E	X	MTBE	DO (mg/L)
			← (µg/L) →						
	07/12/93[SPH]	10.08	----	----	----	----	----	----	----
	10/13/93[SPH]	11.35	----	----	----	----	----	----	----
	01/20/94[SPH]	9.06	----	----	----	----	----	----	----
	04/13/84[SPH]	8.58	----	----	----	----	----	----	----
	07/18/94	9.71	12,000	230	43	230	660	----	----
	10/27/94[SPH]	10.60	----	----	----	----	----	----	----
	01/03/95[SPH]	5.49	----	----	----	----	----	----	----
	04/13/95[SPH]	6.53	----	----	----	----	----	----	----
	06/30/95	9.57	7,400	140	<0.5	160	350	----	----
	10/11/95	10.30	3,000	29	10	100	82	9,700	----
	01/17/96	6.68	9,700	190	<0.5	190	410	4,500	----
	04/10/96	7.90	2,800	16	<0.5	22	50	6,100	----
	07/30/96	8.73	1,600	68	<12	58	39	8,500	2.8
	10/17/96	7.63	4,800	120	<25	150	96	11,000	2.8
	01/22/97	5.26	12,000	83	<20	170	240	4,300	2.6
	04/01/97	8.02	4,800	65	<5.0	81	93	3,200	2.4
	07/14/97	10.05	2,400	35	<10	30	20	6,000	2.0
	10/08/97	**10.22**	**2,900**	**66**	**<20**	**<20**	**<20**	**7,300**	**5.9**
MW-5	08/06/91	10.23	9,100	210	27	240	660	----	----
	10/23/91	10.89	12,000	92	18	230	450	----	----
	01/28/92	8.45	3,300	130	10	180	220	----	----
	05/04/92	8.05	3,900	95	<12.5	260	120	----	----
	07/13/92	10.00	4,100	180	12	250	73	----	----
	10/12/92[SPH]	11.83	----	----	----	----	----	----	----
	01/12/93[SPH]	6.10	----	----	----	----	----	----	----
	04/06/93	6.18	6,200	71	<0.5	53	150	----	----
	07/12/93	9.59	3,400	130	<0.5	170	130	----	----
	10/13/93[SPH]	10.80	----	----	----	----	----	----	----
	01/20/94[SPH]	7.42	----	----	----	----	----	----	----
	04/13/94[SPH]	7.05	----	----	----	----	----	----	----
	07/19/94	8.57	11,000	180	13	180	260	----	----
	10/27/94	10.14	6,900	82	<5	210	1110	----	----
	01/03/95	5.84	12,000	110	46	790	510	----	----
	04/13/95	5.28	10,000	61	<20	330	140	----	----
	06/30/95	7.43	12,000	180	8.60	440	340	----	----
	10/11/95	8.90	11,000	<50	<50	440	340	5,100	----
	10/11/96[dup]	8.90	11,000	95	<50	440	330	660	----
	01/17/96	6.40	82,000	330	120	960	1,400	820	----
	04/10/96	5.70	23,000	<50	<50	360	190	770	----
	04/10/96[dup]	5.70	19,000	84	<50	430	200	590	----
	07/30/96	7.71	38,000	3,000	<100	1,100	2,600	560	----
	10/17/96	9.04	13,000	36	<10	210	160	720	1.4
	10/17/96[dup]	9.04	11,000	75	<10	180	150	450	1.4
	01/22/97	4.85	20,000	63	<50	380	390	650	1.6
	04/01/97	6.54	16,000	110	<50	390	320	2,200	1.4
	07/14/97	8.54	15,000	70	<20	220	170	450	1.8
	10/08/97	**9.09**	**9,100**	**27**	**11**	**170**	**57**	**530**	**4.7**

Table 3. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-5306, 3420 San Pablo Avenue, Oakland, California

Well ID	Date Sampled	Depth to water (ft below TOC)	TPH-G	B	T	E	X	MTBE	DO (mg/L)
			←			(µg/L)		→	
MW-6	08/06/91	10.61	28,000	1,400	200	1,300	4,200	----	----
	10/23/91	11.68	53,000	1,400	230	1,800	6,700	----	----
	01/28/92	8.90	87,000	1,200	470	2,000	6,600	----	----
	05/05/92	8.01	230,000	<500	<500	3,200	11,000	----	----
	07/13/92	10.77	2,700,000	<2,500	3,500	14,000	36,000	----	----
	10/12/92[SPH]	8.68	----	----	----	----	----	----	----
	01/12/93[SPH]	6.40	----	----	----	----	----	----	----
	04/06/93	5.93	320,000	2,500	14,000	980	14,000	----	----
	07/12/93	10.25	31,000	1,100	4,500	150	4,500	----	----
	07/12/93[dup]	10.25	25,000	1,200	4,800	270	4,800	----	----
	10/13/93[SPH]	12.28	----	----	----	----	----	----	----
	01/20/94[SPH]	9.14	----	----	----	----	----	----	----
	04/13/94[SPH]	7.67	----	----	----	----	----	----	----
	07/19/94[SPH]	10.07	----	----	----	----	----	----	----
	10/27/94[SPH]	11.84	----	----	----	----	----	----	----
	01/03/95[SPH]	7.80	----	----	----	----	----	----	----
	04/13/95[SPH]	5.77	----	----	----	----	----	----	----
	06/30/95	7.78	1,100,000	6,600	6,100	12,000	29,000	----	----
	10/11/95	10.06	30,000	130	<50	1,400	4,200	710	----
	01/17/96	6.91	450,000	510	1,400	2,700	11,000	630	----
	04/10/96	5.92	22,000	47	<10	350	860	<50	----
	07/30/96	8.97	38,000	3,000	<100	1,100	2,600	560	----
	07/30/96[dup]	8.97	38,000	450	100	1,000	3,100	800	----
	10/17/96 [SPH]	9.87	34,000	470	<100	1,300	3,900	<500	1.0
	01/22/97	4.43	26,000	<100	<100	600	1,700	<500	1.3
	04/01/97	6.84	30,000	96	33	840	2,600	190	1.4
	07/14/97	10.30	29,000	200	<100	690	2,000	<500	2.3
	10/08/97	**10.46**	**55,000**	**500**	**110**	**640**	**1,500**	**900**	**0.0**
MW-7	08/06/91	8.00	13,000	4,300	76	770	730	----	----
	10/23/91	8.16	18,000	3,200	31	660	770	----	----
	01/28/92	7.11	5,000	1,200	<10	220	54	----	----
	05/05/92	6.47	9,500	3,100	72	620	880	----	----
	07/13/92	7.73	20,000	4,200	130	1,600	1,100	----	----
	10/12/92	9.97	16,000	2,500	170	560	170	----	----
	01/12/93	6.26	15,000	2,300	<50	690	440	----	----
	04/06/93	5.92	26,000	5,400	<0.5	1,200	3,000	----	----
	04/06/93[dup]	5.92	21,000	5,200	180	1,200	3,000	----	----
	07/12/93	7.27	10,000	3,000	100	510	530	----	----
	10/13/93	9.40	59,000	13,000	4,400	4,400	20,000	----	----
	01/20/94[SPH]	7.03	----	----	----	----	----	----	----
	04/13/94[SPH]	6.56	----	----	----	----	----	----	----
	07/19/94[SPH]	6.91	----	----	----	----	----	----	----
	10/27/94[SPH]	8.28	----	----	----	----	----	----	----
	01/03/95[SPH]	6.48	----	----	----	----	----	----	----
	04/13/95[SPH]	6.54	----	----	----	----	----	----	
	06/30/95	7.08	900,000	11,000	8,500	14,000	52,000	----	----
	10/11/95[SPH]	7.88	----	----	----	----	----	----	----
	01/17/96[SPH]	7.26	----	----	----	----	----	----	----
	04/10/96[SPH]	6.98	----	----	----	----	----	----	----

Table 3. **Analytic Results for Ground Water** - Shell Service Station WIC #204-5508-5306, 3420 San Pablo Avenue, Oakland, California

Well ID	Date Sampled	Depth to water (ft below TOC)	TPH-G	B	T	E	X	MTBE	DO (mg/L)
			←		(µg/L)			→	
	07/30/96	7.34	----	----	----	----	----	----	----
	10/17/96[SPH]	7.63	---	---	---	---	---	---	---
	01/22/97	6.46	56,000	2,000	520	1,400	8,400	1,800	0.5
	04/01/97	6.97	66,000	3,600	460	2,400	10,000	2,300	1.6
	07/14/97[SPH]	8.90	---	---	---	---	---	---	---
	10/08/97	**9.21**	**68,000**	**3,200**	**470**	**2,400**	**9,700**	**3,300**	**2.1**
MW-8	08/06/91	9.60	32,000	3,700	1,100	1,400	6,100	----	----
	10/23/91	9.73	63,000	4,800	1,300	1,300	6,900	----	----
	01/28/92	7.72	32,000	1,900	750	1,400	6,300	----	----
	05/05/92	6.48	180,000	2,200	2,000	2,700	13,000	----	----
	07/13/92	8.55	56,000	4,500	1,500	2,700	9,100	----	----
	10/12/92	9.97	34,000	2,400	550	1,400	6,400	----	----
	10/12/92[dup]	9.97	34,000	3,100	700	1,500	7,200	----	----
	01/12/93	6.94	110,000	2,100	1,200	2,400	12,000	----	----
	04/06/93	5.72	38,000	2,500	840	1,100	4,900	----	----
	07/12/93	7.65	27,000	2,800	990	1,200	5,300	----	----
	10/13193	8.25	32,000	3,300	1,300	1,600	8,400	----	----
	10/13/93[dup]	8.25	47,000	3,200	1,300	1,600	8,500	----	----
	01/20/94	7.25	78,000	1,900	670	1,300	6,600	----	----
	01/20/94[dup]	7.25	60,000	1,700	680	1,100	5,500	----	----
	04/13/94	7.12	41,000	1,300	720	1,200	6,000	----	----
	07/19/94	7.43	140,000	1,800	1,400	2,000	9,000	----	----
	10/27/94	7.55	32,000	1,200	670	1,200	5,700	----	----
	10/27/94[dup]	7.55	42,000	1,100	650	1,100	5,700	----	----
	01/03/95	6.04	38,000	1,000	700	1,500	7,500	----	----
	04/13/95	5.04	31,000	1,200	570	1,000	5,300	----	----
	06/30/95	5.72	110,000	2,000	1,500	2,000	9,700	----	----
	10/11/95	7.06	36,000	170	60	1,300	6,300	510	----
	01/17/96	5.84	38,000	1,000	520	1,100	6,200	950	----
	04/10/96	5.03	54,000	650	260	850	4,700	<250	----
	07/30/96	6.36	33,000	780	330	830	4,200	1,700	----
	10/17/96	5.94	35,000	750	300	1,100	5,000	1,200	1.6
	01/22/97	5.93	25,000	260	78	420	2,400	120	1.8
	04/01/97	6.24	22,000	680	180	550	2,500	260	1.8
	07/14/97	8.59	29,000	870	200	850	3,100	500	1.4
	10/08/97	**9.04**	**27,000**	**1,000**	**190**	**960**	**3,000**	**170**	**4.6**
MW-9	08/06/91	10.33	11,000	1,700	95	520	1,400	----	----
	10/23/91	11.13	20,000	1,000	47	<0.3	940	----	----
	01/28/92	9.02	3,500	120	<10	280	36	----	----
	05/04/92	7.67	7,700	1,200	<50	380	630	----	----
	07/20/92	10.26	11,000	910	<50	220	1,200	----	----
	10/12/92	12.19	2,100	340	15	77	44	----	
	01/12/93[b]	----	----	----	----	----	----	----	----
	04/06/93[b]	----	----	----	----	----	----	----	----
	07/12/93[b]	----	----	----	----	----	----	----	----
	10/13/93	11.17	2,900	140	<5	<5	120	----	----
	01/20/94	8.03	1,700	380	6.90	150	400	----	----
	04/13/94	7.81	6,000	1,000	<20	450	420	----	----

Table 3. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-5306, 3420 San Pablo Avenue, Oakland, California

Well ID	Date Sampled	Depth to water (ft below TOC)	TPH-G	B	T	E	X	MTBE	DO (mg/L)
			←		(µg/L)			→	
	07/19/94	8.96	12,000	1,400	<5	740	1,200	----	----
	10/27/94	11.00	10,000	1,200	160	280	860	----	----
	01/03/95	6.60	4,400	680	7.70	180	370	----	----
	04/13/95	6.73	1,700	270	<10	69	170	----	----
	06/30/95	7.32	14,000	2,200	18	900	2,600	----	----
	06/30/95[dup]	7.32	13,000	2,100	17	870	2,500	----	----
	10/11/95	8.10	9,600	35	12	360	980	590	----
	01/17/96	5.75	2,800	150	7.41	54	130	170	----
	04/10/96	5.17	5,200	290	<5	92	220	240	----
	07/30/96	8.1	5,100	960	<10	380	770	670	----
	10/17/96	9.12	15,000	2,100	<25	590	1,300	1,500	2.4
	01/22/97	4.72	5,600	690	<5.0	140	310	620	2.2
	04/01/97	6.86	4,000	590	<10	140	200	600	2.2
	04/01/97[dup]	6.86	4,800	660	<25	160	230	810	2.2
	07/14/97	10.04	7,100	860	<10	51	230	950	3.8
	10/08/97	**11.38**	**1,500**	**57**	**<2.0**	**2.0**	**13**	**540**	**8.2**
MW-10	10/23/91	8.57	27,000	1,600	110	1,800	510	----	----
	01/28/92	7.60	3,800	360	14	170	39	----	----
	05/04/92	7.54	3,000	360	<12.5	140	26	----	----
	07/20/92	8.59	15,000	400	<25	180	67	----	----
	10/12/92	10.23	16,000	320	<50	360	100	----	----
	01/12/93[b]	----	----	----	----	----	----	----	----
	04/06/93	6.70	14,000	370	<0.5	880	210	----	----
	07/12/93	8.05	10,000	440	58	890	220	----	----
	10/13/93	8.25	15,000	1,000	51	810	170	----	----
	01/20/94	7.20	12,000	820	56	1,100	350	----	----
	04/13/94	7.57	18,000	760	36	700	130	----	----
	07/19/94	8.18	24,000	400	2.30	800	22	----	----
	10/27/94	8.68	11,000	360	43	310	89	----	----
	01/03/95	6.86	17,000	770	38	690	160	----	----
	04/13/95	6.91	9,900	650	16	280	40	----	----
	06/30/95	7.61	12,000	750	20	480	130	----	----
	01/17/96	7.00	17,000	870	260	93	830	----	----
	04/10/96	6.80	14,000	470	38	110	370	----	----
	07/30/96	----	----	----	----	----	----	----	----
	10/17/96	---	---	---	---	---	---	---	---
	01/22/97	6.68	10,000	520	<20	64	32	180	3.1
	04/01/97	7.34	11,000	590	<20	53	32	210	2.8
	07/14/97	8.10	6,600	410	13	28	11	89	1.4
	10/08/97	**8.2**	**7,600**	**220**	**13**	**65**	**22**	**190**	**6.4**
MW-11	10/23/91	8.06	140	<12	<0.3	0.37	0.56	----	----
	01/28/92	13.32	<50	<0.5	<0.5	<0.5	<0.5	----	----
	05/04/92	13.77	<50	<0.5	<0.5	<0.5	<0.5	----	----
	07/13/92	11.56	140	<0.5	<0.5	<0.5	<0.5	----	----
	10/12/92	12.40	75	<0.5	<0.5	<0.5	<0.5	----	----
	01/12/93[b]	----	----	----	----	----	----	----	----
	04/06/93[b]	----	----	----	----	----	----	----	----
	07/12/93[b]	----	----	----	----	----	----	----	----

Table 3. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-5306, 3420 San Pablo Avenue, Oakland, California

Well ID	Date Sampled	Depth to water (ft below TOC)	TPH-G	B	T	E	X	MTBE	DO (mg/L)
			←			(µg/L)		→	
	10/13/93	11.47	<50	<0.5	<0.5	<0.5	<0.5	----	----
	01/20/94	9.09	<50	<0.5	<0.5	<0.5	<0.5	----	----
	04/13/94	8.02	<50	<0.5	<0.5	<0.5	<0.5	----	----
	07/19/94	9.82	50	<0.5	<0.5	<0.5	<0.5	----	----
	10/27/94	11.66	60*	<0.5	<0.5	<0.5	<0.5	----	----
	01/03/95	6.15	<50	<0.5	<0.5	<0.5	<0.5	----	----
	04/13/95	6.00	<50	<0.5	<0.5	<0.5	<0.5	----	----
	06/30/95	8.31	70	<0.5	<0.5	<0.5	<0.5	----	----
	10/11/95	10.30	60	53	<0.5	<0.5	0.80	3.0	----
	01/17/96	6.45	<50	<0.5	<0.5	<0.5	<0.5	<2	----
	04/10/96	6.05	<50	<0.5	<0.5	<0.5	<0.5	3.9	----
	07/30/96	8.92	<50	<0.5	<0.5	<0.5	<0.5	<2.5	----
	10/17/96	9.24	3,000	28	23	29	210	76	----
	01/22/97	5.12	<50	<0.5	<0.5	<0.5	<0.5	<2.5	3.7
	04/01/97	7.41	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.8
	07/14/97	9.74	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.9
	10/08/97	**10.23**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**	**2.4**
Equipment Blank	07/13/92	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	07/20/92	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	10/12/92	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	04/13/94	----	<50	<0.5	0.67	<0.5	<0.5	----	----
	07/19/94	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	10/27/94	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	01/03/95	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	04/13/95	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	06/30/95	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	10/11/95	----	<50	<0.5	<0.5	<0.5	<0.5	<0.5	----
	01/17/96	----	<50	<0.5	<0.5	<0.5	<0.5	<2	----
Trip Blank	01/28/92	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	05/05/92	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	07/13/92	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	07/20/92	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	10/12/92	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	01/12/93	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	04/06/93	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	07/12/93	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	10/13/93	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	01/20/94	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	04/13/94	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	07/19/94	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	10/27/94	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	01/03/95	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	04/13/95	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	06/30/95	----	<50	<0.5	<0.5	<0.5	<0.5	----	----
	10/11/95	----	<50	<0.5	<0.5	<0.5	<0.5	<0.5	----
MCLs			NE	1	150	700	1,750	NE	----

Table 3. Analytic Results for Ground Water - Shell Service Station WIC #204-5508-5306, 3420 San Pablo Avenue, Oakland, California

Well ID	Date Sampled	Depth to water (ft below TOC)	TPH-G	B	T	E	X	MTBE	DO
			← (µg/L) →						(mg/L)

Abbreviations:

TPH-G = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
B = Benzene by EPA Method 8020
T = Toluene by EPA Method 8020
E = Ethylbenzene by EPA Method 8020
X = Xylenes by EPA Method 8020
MTBE = Methyl tert-butyl ether by EPA Method 8020
DO = Dissolved oxygen
NE = Not established
MCLs = California Primary maximum contaminant levels for drinking water (22 CCR 64444)
---- = Not analyzed
< n = Not detected at detection limits of n µg/L
dup = Duplicate sample
SPH = Not sampled, separate-phase hydrocarbons detected in well
µg/L = Micrograms per liter
mg/L = Milligrams per liter
TOC = Top of casing

Notes:

a = Concentration reported as gasoline is due to the presence of a discrete hydrocarbon peak that is not indicative of gasoline
b = Not sampled; well inaccessible
c = Analytic laboratory noted that MTBE could not be quantified due to co-eluting compounds
* = The result for gasoline is an unknown hydrocarbon which consists of a single peak as confirmed by NET Laboratory

ATTACHMENT A

Blaine Quarterly Ground Water Monitoring Report

BLAINE
TECH SERVICES INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112
(408) 573-7771 FAX
(408) 573-0555 PHONE

October 30, 1997

Shell Oil Company
P.O. Box 8080
Martinez, CA 94553

Attn: Alex Perez

Shell WIC #204-5508-5306
3420 San Pablo Avenue
Oakland, California

4th Quarter 1997

Groundwater Monitoring Report 971008-M-1

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. Copies of our Sampling Report along with the laboratory's Certified Analytical Report are forwarded to the consultant overseeing work at this site. Submission of the assembled documents to interested regulatory agencies will be made by the designated consultant.

Groundwater monitoring at this site was performed in accordance with Standard Operating Procedures provided to the interested regulatory agencies. If you have any questions about the work performed at this site please call me at (408) 573-0555 ext. 201.

Yours truly,

Francis Thie

attachments: Table of Well Gauging Data
Chain of Custody
Field Data Sheets
Certified Analytical Report

cc: Cambria Environmental Technology, Inc.
1144 65th Street, Suite C
Oakland, CA 94608
Attn: Josh Bergstrom

(Any professional evaluations or recommendations will be made by the consultant under separate cover.)

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	10/08/97	TOC	--	NONE	--	--	9.43	25.02
MW-2 *	10/08/97	TOC	--	NONE	--	--	10.43	19.23
MW-3	10/08/97	TOC	--	NONE	--	--	10.23	27.47
MW-4	10/08/97	TOC	--	NONE	--	--	10.22	25.22
MW-5	10/08/97	TOC	--	NONE	--	--	9.09	24.92
MW-6	10/08/97	TOC	--	NONE	--	--	10.46	19.91
MW-7	10/08/97	TOC	--	9.20	0.01	--	9.21	19.43
MW-8	10/08/97	TOC	--	NONE	--	--	9.04	19.94
MW-9	10/08/97	TOC	--	NONE	--	--	11.38	19.50
MW-10	10/08/97	TOC	--	NONE	--	--	8.20	18.72
MW-11	10/08/97	TOC	--	NONE	--	--	10.23	18.78

* Sample DUP was a duplicate sample taken from well MW-2.

4710712

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 971008-m1

Date: 10-8-97
Page 1 of 2

Site Address: 3420 San Pablo Ave., Oakland, CA

WIC#: 204-5506-5306

Shell Engineer: Alex Perez
Phone No.: (510) 675-6168
Fax #: 675-6172

Consultant Name & Address: Blaine Tech Services, Inc.
1680 Rogers Ave., San Jose, CA 95112

Consultant Contact: Fran Thie
Phone No.: (408) 573-0555
Fax #: 573-7771

Comments:

Sampled by: [signature]

Printed Name: John A. Madrigal

LAB: Sequoia

CHECK ONE (1) BOX ONLY		CT/DT
G.W. Monitoring	☒	4461
Site Investigation	☐	4441
Soil Classify/Disposal	☐	4442
Water Classify/Disposal	☐	4443
Soil/Air Rem. or Sys. O & M	☐	4452
Water Rem. or Sys. O & M	☐	4453
Other	☐	

TURN AROUND TIME
- 24 hours ☐
- 48 hours ☐
- 16 days ☒ (Normal)
- Other ☐ ______

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

UST AGENCY: ______ 9 12 08

Analysis Required

	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 mTBE			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
01	mw-1	10/8			X		3						X				40ml	HCl			
02	mw-2	|			X		|						X				|	|			
03	mw-3	|			X		|					X				|	|			
04	mw-4	|			X		|					X				|	|			
05	mw-5	|			X		|					X				|	|			
06	mw-6	|			X		|					X				|	|			
07	mw-7	|			X		|					X				|	|			
08	mw-8	10/8			X		3						X				40ml	HCl			

Relinquished By (signature):	Printed Name:	Date/Time	Received (signature):	Printed Name:	Date/Time
[signature]	John A. Madrigal	Date: 10/9/97 Time: 11:20	[signature]	Ray	Date: 10/9/97 Time: 11:26
[signature]	Ray	Date: 10/9 Time:	[illegible]		Date: Time:
[illegible]	[illegible]	Date: Time:	J. Downs	T. Downs	Date: 10/9/97 Time: 1208

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

9710712

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 971008-m1

Date: 10-8-97
Page 2 of 2

Site Address: 3420 San Pablo Ave., Oakland, CA

WIC#: 204-5506-5306

Shell Engineer: Alex Perez — Phone No.: (510) 675-6168 Fax #: 675-6172

Consultant Name & Address: Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112

Consultant Contact: Fran Thie — Phone No.: (408) 573-0555 Fax #: 573-7771

Comments:

Sampled by: John Madrigal

Printed Name: John A. Madrigal

LAB: Sequoia

Analysis Required

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 inTBC			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
9 mw-9	10/8			X		3						X				40ml	HCl			
0 mw-10	"			X		"						X				"	"			
1 mw-11	"			X		"						X				"	"			
2 DUP	"			X		"						X				"	"			
3 EB	10/8			X		3						X				40ml	HCl			

UST AGENCY: OC 9 12 08

	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
Relinquished By (signature): John Madrigal	John A. Madrigal	10/9/97	11:20	Received (signature): Ray	Ray	10/9/97	11:20
Relinquished By (signature): Ray	Ray	10/9/97		Received (signature):	Printed Name:	Date:	Time:
Relinquished By (signature):	Printed Name:	Date:	Time:	Received (signature): J. Downs	Printed Name: T. DOWNS	Date: 10/9/97	Time: 1205

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

Shell Oil Chain of Custody

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112
Attention: Fran Thie

Project: Shell Oakland/971008-M1

Enclosed are the results from samples received at Sequoia Analytical on October 9, 1997. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
9710712 -01	LIQUID, MW-1	10/08/97	TPGM2W Purgeable TPH/BTEX
9710712 -02	LIQUID, MW-2	10/08/97	TPGM2W Purgeable TPH/BTEX
9710712 -03	LIQUID, MW-3	10/08/97	TPGM2W Purgeable TPH/BTEX
9710712 -04	LIQUID, MW-4	10/08/97	TPGM2W Purgeable TPH/BTEX
9710712 -05	LIQUID, MW-5	10/08/97	TPGM2W Purgeable TPH/BTEX
9710712 -06	LIQUID, MW-6	10/08/97	TPGM2W Purgeable TPH/BTEX
9710712 -07	LIQUID, MW-7	10/08/97	TPGM2W Purgeable TPH/BTEX
9710712 -08	LIQUID, MW-8	10/08/97	TPGM2W Purgeable TPH/BTEX
9710712 -09	LIQUID, MW-9	10/08/97	TPGM2W Purgeable TPH/BTEX
9710712 -10	LIQUID, MW-10	10/08/97	TPGM2W Purgeable TPH/BTEX
9710712 -11	LIQUID, MW-11	10/08/97	TPGM2W Purgeable TPH/BTEX
9710712 -12	LIQUID, DUP	10/08/97	TPGM2W Purgeable TPH/BTEX
9710712 -13	LIQUID, EB	10/08/97	TPGM2W Purgeable TPH/BTEX

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Shell Oakland/971008-M1
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9710712-01

Sampled: 10/08/97
Received: 10/09/97

Analyzed: 10/18/97
Reported: 10/23/97

QC Batch Number: GC101897BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	3200
Methyl t-Butyl Ether	100	11000
Benzene	5.0	180
Toluene	5.0	7.6
Ethyl Benzene	5.0	18
Xylenes (Total)	5.0	6.1
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	181 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thle

Client Proj. ID: Shell Oakland/971008-M1
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9710712-02

Sampled: 10/08/97
Received: 10/09/97

Analyzed: 10/21/97
Reported: 10/23/97

QC Batch Number: GC102197BTEX07A
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	12500	56000
Methyl t-Butyl Ether	625	4200
Benzene	125	8500
Toluene	125	320
Ethyl Benzene	125	1600
Xylenes (Total)	125	5100
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	119

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

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Blaine Tech Services	Client Proj. ID: Shell Oakland/971008-M1	Sampled: 10/08/97
1680 Rogers Avenue	Sample Descript: MW-3	Received: 10/09/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/18/97
Attention: Fran Thie	Lab Number: 9710712-03	Reported: 10/23/97

QC Batch Number: GC101897BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**73**
Methyl t-Butyl Ether	**2.5**	**-**
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		**C6-C7**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	133 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

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Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Shell Oakland/971008-M1
Sample Descript: MW-4
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9710712-04

Sampled: 10/08/97
Received: 10/09/97

Analyzed: 10/21/97
Reported: 10/23/97

QC Batch Number: GC102197BTEX07A
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**2000**	**2900**
Methyl t-Butyl Ether	**100**	**7300**
Benzene	**20**	**66**
Toluene	20	N.D.
Ethyl Benzene	20	N.D.
Xylenes (Total)	20	N.D.
Chromatogram Pattern:		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	133 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

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Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Shell Oakland/971008-M1
Sample Descript: MW-5
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9710712-05

Sampled: 10/08/97
Received: 10/09/97

Analyzed: 10/18/97
Reported: 10/23/97

QC Batch Number: GC101897BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	9100
Methyl t-Butyl Ether	25	530
Benzene	5.0	27
Toluene	5.0	11
Ethyl Benzene	5.0	170
Xylenes (Total)	5.0	57
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	102

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

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Blaine Tech Services	Client Proj. ID: Shell Oakland/971008-M1	Sampled: 10/08/97
1680 Rogers Avenue	Sample Descript: MW-6	Received: 10/09/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/20/97
Attention: Fran Thie	Lab Number: 9710712-06	Reported: 10/23/97

QC Batch Number: GC102097BTEX07A
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	2500	55000
Methyl t-Butyl Ether	125	900
Benzene	25	500
Toluene	25	110
Ethyl Benzene	25	640
Xylenes (Total)	25	1500
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	106

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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Blaine Tech Services	Client Proj. ID: Shell Oakland/971008-M1	Sampled: 10/08/97
1680 Rogers Avenue	Sample Descript: MW-7	Received: 10/09/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/20/97
Attention: Fran Thie	Lab Number: 9710712-07	Reported: 10/23/97

QC Batch Number: GC102097BTEX07A
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	5000	68000
Methyl t-Butyl Ether	250	3300
Benzene	50	3200
Toluene	50	470
Ethyl Benzene	50	2400
Xylenes (Total)	50	9700
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	171 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

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Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Shell Oakland/971008-M1
Sample Descript: MW-8
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9710712-08

Sampled: 10/08/97
Received: 10/09/97

Analyzed: 10/22/97
Reported: 10/23/97

QC Batch Number: GC102297BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	2500	27000
Methyl t-Butyl Ether	125	170
Benzene	25	1000
Toluene	25	190
Ethyl Benzene	25	960
Xylenes (Total)	25	3000
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	103

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

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Blaine Tech Services	Client Proj. ID: Shell Oakland/971008-M1	Sampled: 10/08/97
1680 Rogers Avenue	Sample Descript: MW-9	Received: 10/09/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/22/97
Attention: Fran Thie	Lab Number: 9710712-09	Reported: 10/23/97

QC Batch Number: GC102297BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	200	1500
Methyl t-Butyl Ether	10	540
Benzene	2.0	57
Toluene	2.0	N.D.
Ethyl Benzene	2.0	2.0
Xylenes (Total)	2.0	13
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	111

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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Blaine Tech Services	Client Proj. ID: Shell Oakland/971008-M1	Sampled: 10/08/97
1680 Rogers Avenue	Sample Descript: MW-10	Received: 10/09/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/18/97
Attention: Fran Thie	Lab Number: 9710712-10	Reported: 10/23/97

QC Batch Number: GC101897BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	7600
Methyl t-Butyl Ether	25	190
Benzene	5.0	220
Toluene	5.0	13
Ethyl Benzene	5.0	65
Xylenes (Total)	5.0	22
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	138 Q

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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Blaine Tech Services	Client Proj. ID: Shell Oakland/971008-M1	Sampled: 10/08/97
1680 Rogers Avenue	Sample Descript: MW-11	Received: 10/09/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/22/97
Attention: Fran Thie	Lab Number: 9710712-11	Reported: 10/23/97

QC Batch Number: GC102297BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	123

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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Blaine Tech Services	Client Proj. ID: Shell Oakland/971008-M1	Sampled: 10/08/97
1680 Rogers Avenue	Sample Descript: DUP	Received: 10/09/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/21/97
Attention: Fran Thie	Lab Number: 9710712-12	Reported: 10/23/97

QC Batch Number: GC102197BTEX07A
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	12500	53000
Methyl t-Butyl Ether	625	2900
Benzene	125	8300
Toluene	125	330
Ethyl Benzene	125	1600
Xylenes (Total)	125	5200
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	96

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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Blaine Tech Services	Client Proj. ID: Shell Oakland/971008-M1	Sampled: 10/08/97
1680 Rogers Avenue	Sample Descript: EB	Received: 10/09/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/18/97
Attention: Fran Thie	Lab Number: 9710712-13	Reported: 10/23/97

QC Batch Number: GC101897BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	87

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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Blaine Tech Services, Inc.
1680 Rogers Ave.
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Shell Oakland / 971008-M1
Matrix: Liquid
Work Order #: 9710712 -01, 03, 05

Reported: Oct 24, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC101897BTEX02A	GC101897BTEX02A	GC101897BTEX02A	GC101897BTEX02A	GC101897BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	971098004	971098004	971098004	971098004	971098004
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/18/97	10/18/97	10/18/97	10/18/97	10/18/97
Analyzed Date:	10/18/97	10/18/97	10/18/97	10/18/97	10/18/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	10	9.6	9.8	29	65
MS % Recovery:	100	96	98	97	108
Dup. Result:	9.9	9.5	9.7	29	65
MSD % Recov.:	99	95	97	97	108
RPD:	1.0	1.0	1.0	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK101897	BLK101897	BLK101897	BLK101897	BLK101897
Prepared Date:	10/18/97	10/18/97	10/18/97	10/18/97	10/18/97
Analyzed Date:	10/18/97	10/18/97	10/18/97	10/18/97	10/18/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	8.8	8.5	8.6	26	57
LCS % Recov.:	88	85	86	87	96
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Peggy Renner
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

Sequoia Analytical

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Blaine Tech Services, Inc.
1680 Rogers Ave.
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Shell Oakland / 971008-M1
Matrix: Liquid
Work Order #: 9710712-02, 04, 12
Reported: Oct 24, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC102197BTEX07A	GC102197BTEX07A	GC102197BTEX07A	GC102197BTEX07A	GC102197BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Porter	A. Porter	A. Porter	A. Porter	A. Miraftab
MS/MSD #:	971086502	971086502	971086502	971086502	971086502
Sample Conc.:	1.3	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/21/97	10/21/97	10/21/97	10/21/97	10/21/97
Analyzed Date:	10/21/97	10/21/97	10/21/97	10/21/97	10/21/97
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	10	9.1	9.4	27	64
MS % Recovery:	87	91	94	90	107
Dup. Result:	11	9.7	10	29	68
MSD % Recov.:	97	97	100	97	113
RPD:	9.5	6.4	6.2	7.1	6.1
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK102197	BLK102197	BLK102197	BLK102197	BLK102197
Prepared Date:	10/21/97	10/21/97	10/21/97	10/21/97	10/21/97
Analyzed Date:	10/21/97	10/21/97	10/21/97	10/21/97	10/21/97
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.8	9.2	9.2	28	63
LCS % Recov.:	98	92	92	93	105
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

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Blaine Tech Services, Inc.
1680 Rogers Ave.
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Shell Oakland / 971008-M1
Matrix: Liquid
Work Order #: 9710712-06-07

Reported: Oct 24, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC102097BTEX07A	GC102097BTEX07A	GC102097BTEX07A	GC102097BTEX07A	GC102097BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Porter	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	971075412	971075412	971075412	971075412	971075412
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/20/97	10/20/97	10/20/97	10/20/97	10/20/97
Analyzed Date:	10/20/97	10/20/97	10/20/97	10/20/97	10/20/97
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.4	9.0	8.8	26	61
MS % Recovery:	94	90	88	87	102
Dup. Result:	11	10	10	30	69
MSD % Recov.:	110	100	100	100	115
RPD:	16	11	13	14	12
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK102097	BLK102097	BLK102097	BLK102097	BLK102097
Prepared Date:	10/20/97	10/20/97	10/20/97	10/20/97	10/20/97
Analyzed Date:	10/20/97	10/20/97	10/20/97	10/20/97	10/20/97
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	9.9	9.8	30	68
LCS % Recov.:	100	99	98	100	113
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

Please Note:
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** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services, Inc.
1680 Rogers Ave.
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Shell Oakland / 971008-M1
Matrix: Liquid
Work Order #: 9710712-08-09, 11
Reported: Oct 24, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC102297BTEX06A	GC102297BTEX06A	GC102297BTEX06A	GC102297BTEX06A	GC102297BTEX06A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Porter	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	9710A8304	9710A8304	9710A8304	9710A8304	9710A8304
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/22/97	10/22/97	10/22/97	10/22/97	10/22/97
Analyzed Date:	10/22/97	10/22/97	10/22/97	10/22/97	10/22/97
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.6	9.7	10	30	66
MS % Recovery:	96	97	100	100	110
Dup. Result:	9.8	9.8	10	30	66
MSD % Recov.:	98	98	100	100	110
RPD:	2.1	1.0	0.0	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK102297	BLK102297	BLK102297	BLK102297	BLK102297
Prepared Date:	10/22/97	10/22/97	10/22/97	10/22/97	10/22/97
Analyzed Date:	10/22/97	10/22/97	10/22/97	10/22/97	10/22/97
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	10	11	32	70
LCS % Recov.:	100	100	110	107	117
MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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Blaine Tech Services, Inc.
1680 Rogers Ave.
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Shell Oakland / 971008-M1
Matrix: Liquid
Work Order #: 9710712-10

Reported: Oct 24, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC101897BTEX17A	GC101897BTEX17A	GC101897BTEX17A	GC101897BTEX17A	GC101897BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	971098004	971098004	971098004	971098004	971098004
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/18/97	10/18/97	10/18/97	10/18/97	10/18/97
Analyzed Date:	10/18/97	10/18/97	10/18/97	10/18/97	10/18/97
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.2	9.0	8.9	27	62
MS % Recovery:	92	90	89	90	103
Dup. Result:	9.2	9.2	9.1	27	63
MSD % Recov.:	92	92	91	90	105
RPD:	0.0	2.2	2.2	0.0	1.6
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK101897	BLK101897	BLK101897	BLK101897	BLK101897
Prepared Date:	10/18/97	10/18/97	10/18/97	10/18/97	10/18/97
Analyzed Date:	10/18/97	10/18/97	10/18/97	10/18/97	10/18/97
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.2	9.0	9.0	27	62
LCS % Recov.:	92	90	90	90	103
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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Blaine Tech Services, Inc.
1680 Rogers Ave.
San Jose, CA 95112
Attention: Fran Thie

Client Project ID: Shell Oakland / 971008-M1
Matrix: Liquid
Work Order #: 9710712-13

Reported: Oct 24, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC101897BTEX03A	GC101897BTEX03A	GC101897BTEX03A	GC101897BTEX03A	GC101897BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	971098004	971098004	971098004	971098004	971098004
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/18/97	10/18/97	10/18/97	10/18/97	10/18/97
Analyzed Date:	10/18/97	10/18/97	10/18/97	10/18/97	10/18/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	8.9	8.7	8.7	24	71
MS % Recovery:	89	87	87	80	118
Dup. Result:	8.7	8.4	8.4	23	68
MSD % Recov.:	87	84	84	77	113
RPD:	2.3	3.5	3.5	4.3	4.3
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK101897	BLK101897	BLK101897	BLK101897	BLK101897
Prepared Date:	10/18/97	10/18/97	10/18/97	10/18/97	10/18/97
Analyzed Date:	10/18/97	10/18/97	10/18/97	10/18/97	10/18/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.0	8.8	8.8	24	70
LCS % Recov.:	90	88	88	80	117
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Attention: Fran Thie	Client Proj. ID: Shell Oakland/971008-M1 Lab Proj. ID: 9710712	Received: 10/09/97 Reported: 10/23/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 21 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

Please note: Sample 9710712-01 was analyzed at two dilutions in order to obtain the lowest DL possible for the BTEX compounds.

No MTBE could be reported for sample 9710712-03 due to co-elution with early eluting compounds.

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager