CAMBRIA

October 15, 1996

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

ENVIRONMENTAL PROTECTION
96 DEC 10 AM 8:

Re: **Third Quarter 1996**
Shell Service Station
WIC #204-5508-5306
3420 San Pablo Avenue
Oakland, California

Dear Ms. Hugo:

On behalf of Shell Oil Products Company, Cambria Environmental Technology, Inc. (Cambria) is submitting this quarterly monitoring report for the site referenced above in accordance with the requirements specified in California Administrative Code Title 23 Waters, Division 3, Chapter 16, Article 5, Section 2652.d.

Activities This Quarter:

- Blaine Tech Services, Inc. (BTS) of San Jose, California measured ground water depths and collected ground water samples from the site wells (Figure 1). The BTS report describing these activities and the analytical report for the ground water samples are included as Attachment A.
- Cambria summarized SPH 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,
SUITE B
OAKLAND,
CA 94608
PH. (510) 420-0700
FAX (510) 420-9170

Anticipated Activities Next Quarter:

Cambria will submit a report presenting a summary of activities for the upcoming quarter.

We look forward to working with you on this project. Please call us if you have any questions.

Sincerely,
Cambria Environmental Technology, Inc.

N. Scott MacLeod, R.G.
Principal Geologist

Attachments: A - BTS Ground Water Monitoring Report

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

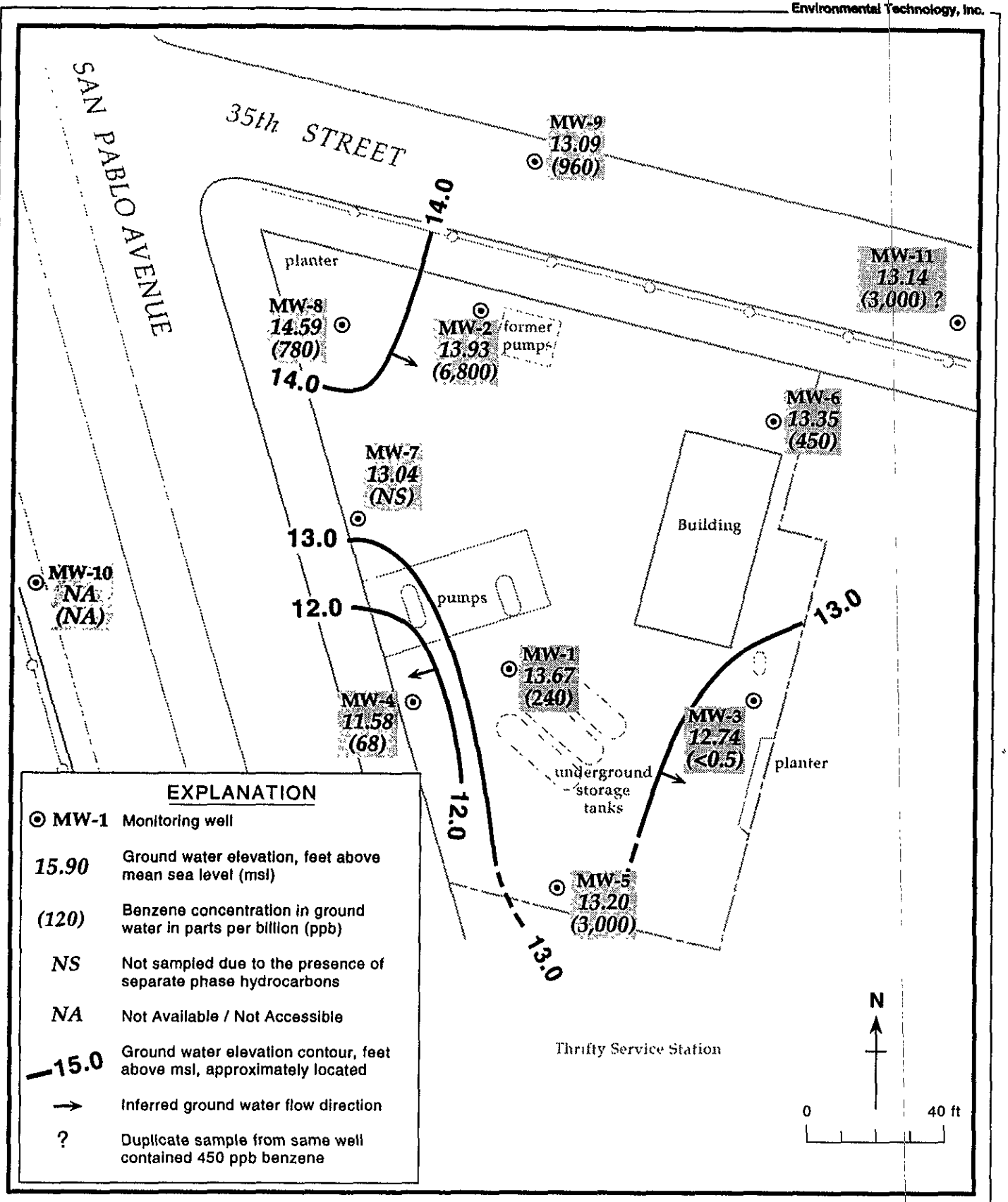

Figure 1. Monitoring Well Locations, Ground Water Elevation Contours, and Benzene Concentration in Ground Water - July 30, 1996 - Shell Service Station WIC #204-5508-5306, 3420 San Pablo Avenue, Oakland, California

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	0.06
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
	Total Separate-Phase Hydrocarbons Removed			19.88

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)	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[a]
	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**
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
	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**

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)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl)[a]
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**
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
	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**

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)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl)[a]
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[a]
	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**
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[a]
	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**

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)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl)[a]
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
	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**
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**

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)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl)[a]
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
	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**
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]		**---**	**---**	**---**

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)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation (ft above msl)[a]
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

Notes:

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.

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

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	MTBE
			<---------- parts per billion (ug\L) ---------->					
MW-1	08/06/91[SPH]	10.86	----	----	----	----	----	----
	10/23/91	11.05	32,000	2,700	550	360	3,700	----
	01/28/92	10.84	14,000	1,000	450	106	1,600	----
	05/05/92	9.42	98,000	11,000	3,500	1,200	18,000	----
	07/13/92	11.36	11,000	1,100	740	130	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	530	140	1,300	----
	10/27/94	10.49	23,000	1,200	990	130	960	----
	01/03/95	6.15	31,000	610	1,200	160	5,000	----
	04/13/95	5.24	20,000	340	680	42	2,900	----
	06/3095	7.24	16,000	450	460	62	1,200	----
	10/11/95	9.48	8,400	660	510	47	850	8,000
	10/13/95	----	7.400	730	490	54	1,100	8,200
	01/17/96	6.48	24,000	570	820	110	2,900	15,000
	04/10/96	5.38	20,000	120	420	11	1,400	15,000
	07/30/96	**7.61**	**7,900**	**240**	**170**	**22**	**300**	**12000****
MW-2	08/06/91	9.72	50,000	15,000	2,700	----	13,000	----
	10/23/91	10.03	120,000	11,000	3,500	1,400	19,000	----
	01/28/92	8.78	49,000	7,400	1,800	800	8,300	----
	05/05/92	7.58	52,000	12,000	2,200	1,100	12,000	----
	07/13/92	9.63	47,000	15,000	4,500	2,400	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	2,400	950	11,000	----
	10/13/93	10.28	54,000	14,000	3,700	1,200	22,000	----
	0 1/20/94	----	----	----	----	----	----	----
	04/13/94	7.35	79,000	9,400	2,100	740	12,000	----
	04/13/94[dup]	7.35	110,000	11,000	2,400	710	13,000	----
	07/19/94	8.24	63,000	13,000	1,900	810	13,000	----
	07/19/94[dup]	8.24	12,000	12,000	340	140	12,000	----
	10/27/94	10.26	64,000	8,800	2,100	480	10,000	----
	01/03/95	6.44	67,000	9,800	2,800	720	11,000	----

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

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	MTBE
			<----------parts per billion (ug\L)---------->					
	01/03/95[dup]	6.44	58,000	9,700	2,700	620	12,000	----
	04/13/95	5.89	83,000	10,000	2,600	490	13,000	----
	04/13/95[dup]	5.89	74,000	9,500	2,100	350	11,000	----
	06/30/95	7.41	65,000	12,000	2,400	1,800	12,000	----
	10/11/95	8.02	68,000	8,800	3,000	840	13,000	1,400
	01/17/96	7.42	79,000	12,000	2,700	640	14,000	2,200
	01/17/96[dup]	7.42	78,000	12,000	2,500	920	12,000	2,500
	04/10/96	6.91	84,000	7,200	1,700	310	7,800	2,900
	07/30/96	**7.63**	**26,000**	**6,800**	**1,300**	**210**	**5,500**	**4,500**
MW-3	08/06/91	11.18	430	8	4	1	15	----
	10/23/91	11.69	390	2.10	0.48	<0.3	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	0.9	2.3	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**
MW-4	08/06/91	10.57	1,300	28	68	18	150	----
	10/23/91	10.46	1,900	97	38	6.10	77	----
	01/28/92	9.54	200	7.60	3	<0.5	3.30	----
	05/04/92	8.33	690	98	13	3	<1	----
	07/13/92	9.87	1,500	140	17	2.90	12	----
	07/13/92[dup]	9.87	870	95	10	1.90	7.10	----

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

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	MTBE
			<---------- parts per billion (ug\L) ---------->					
	10/12/92[SPH]	12.43	----	----	----	----	----	----
	01/12/93[SPH]	7.12	----	----	----	----	----	----
	04/06/93[SPH]	7.23	----	----	----	----	----	----
	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	230	43	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	160	<0.5	350	----
	10/11/95	10.30	3,000	29	100	10	82	9,700
	01/17/96	6.68	9,700	190	190	<0.5	410	4,500
	04/10/96	7.90	2800	16	22	<0.5	50	6,100
	07/30/96	**8.73**	**1,600**	**68**	**58**	**<12**	**39**	**8,500**
MW-5	08/06/91	10.23	9,100	210	240	27	660	----
	10/23/91	10.89	12,000	92	230	18	450	----
	01/28/92	8.45	3,300	130	180	10	220	----
	05/04/92	8.05	3,900	95	260	<12.5	120	----
	07/13/92	10.00	4,100	180	250	12	73	----
	10/12/92[SPH]	11.83	----	----	----	----	----	----
	01/12/93[SPH]	6.10	----	----	----	----	----	----
	04/06/93	6.18	6,200	71	53	<0.5	150	----
	07/12/93	9.59	3,400	130	170	<0.5	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	180	13	260	----
	10/27/94	10.14	6,900	82	210	<5	1110	----
	01/03/95	5.84	12,000	110	790	46	510	----
	04/13/95	5.28	10,000	61	330	<20	140	----
	06/30/95	7.43	12,000	180	440	8.60	340	----
	10/11/95	8.90	11,000	<50	440	<50	340	5,100
	10/11/96[dup]	8.90	11,000	95	440	<50	330	660
	01/17/96	6.40	82000	330	960	120	1,400	820

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

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	MTBE
			<----------parts per billion (ug\L)---------->					
	04/10/96	5.70	23,000	<50	<50	190	MO	
	04/10/96[dup]	5.70	19,000	84	<50	200	590	
	07/30/96	**7.71**	**10,000**	**83**	**250**	**<0.50**	**110**	**710**
MW-6	08/06/91	10.61	28,000	1,400	1,300	200	4,200	----
	10/23/91	11.68	53,000	1,400	1,800	230	6,700	----
	01/28/92	8.90	87,000	1,200	2,000	470	6,600	----
	05/05/92	8.01	230,000	<500	3,200	<500	11,000	----
	07/13/92	10.77	2,700,000	<2,500	14,000	3,500	36,000	----
	10/12/92[SPH]	8.68	----	----	----	----	----	----
	01/12/93[SPH]	6.40	----	----	----	----	----	----
	04/06/93	5.93	320,000	2,500	980	14,000	14,000	----
	07/12/93	10.25	31,000	1,100	150	4,500	4,500	----
	07/12/93[dup]	10.25	25,000	1,200	270	4,800	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	12,000	6,100	29,000	----
	10/11/95	10.06	30,000	130	1,400	<50	4,200	710
	01/17/96	6.91	450,000	510	2,700	1,400	11,000	630
	04/10/96	5.92	22000	47	350	<10	860	<50
	07/30/96	**8.97**	**38,000**	**3,000**	**1,100**	**<100**	**2,600**	**560**
	07/30/96[dup]	**8.97**	**38,000**	**450**	**1,000**	**100**	**3,100**	**800**
MW-7	08/06/91	8.00	13,000	4,300	770	76	730	----
	10/23/91	8.16	18,000	3,200	660	31	770	----
	01/28/92	7.11	5,000	1,200	220	<10	54	----
	05/05/92	6.47	9,500	3,100	620	72	880	----
	07/13/92	7.73	20,000	4,200	1,600	130	1,100	----
	10/12/92	9.97	16,000	2,500	560	170	170	----
	01/12/93	6.26	15,000	2,300	690	<50	440	----
	04/06/93	5.92	26,000	5,400	1,200	<0.5	3,000	----
	04/06/93[dup]	5.92	21,000	5,200	1,200	180	3,000	----
	07/12/93	7.27	10,000	3,000	510	100	530	----
	10/13/93	9.40	59,000	13,000	4,400	4,400	20,000	----

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

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	MTBE
			<---------- parts per billion (ug\L) ---------->					
	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	14,000	8,500	52,000	----
	10/11/95[SPH]	7.88	----	----	----	----	----	----
	01/17/96[SPH]	7.26	----	----	----	----	----	----
	04/10/96[SPH]	6.98	----	----	----	----	----	----
	07/30/96	**7.34**	----	----	----	----	----	----
MW-8	08/06/91	9.60	32,000	3,700	1,400	1,100	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	1,400	750	6,300	----
	05/05/92	6.48	180,000	2,200	2,700	2,000	13,000	----
	07/13/92	8.55	56,000	4,500	2,700	1,500	9,100	----
	10/12/92	9.97	34,000	2,400	1,400	550	6,400	----
	10/12/92[dup]	9.97	34,000	3,100	1,500	700	7,200	----
	01/12/93	6.94	110,000	2,100	2,400	1,200	12,000	----
	04/06/93	5.72	38,000	2,500	1,100	840	4,900	----
	07/12/93	7.65	27,000	2,800	1,200	990	5,300	----
	10/13193	8.25	32,000	3,300	1,600	1,300	8,400	----
	10/13/93[dup]	8.25	47,000	3,200	1,600	1,300	8,500	----
	01/20/94	7.25	78,000	1,900	1,300	670	6,600	----
	01/20/94[dup]	7.25	60,000	1,700	1,100	680	5,500	----
	04/13/94	7.12	41,000	1,300	1,200	720	6,000	----
	07/19/94	7.43	140,000	1,800	2,000	1,400	9,000	----
	10/27/94	7.55	32,000	1,200	1,200	670	5,700	----
	10/27/94[dup]	7.55	42,000	1,100	1,100	650	5,700	----
	01/03/95	6.04	38,000	1,000	1,500	700	7,500	----
	04/13/95	5.04	31,000	1,200	1,000	570	5,300	----
	06/30/95	5.72	110,000	2,000	2,000	1,500	9,700	----
	10/11/95	7.06	36,000	170	1,300	60	6,300	510
	01/17/96	5.84	38,000	1,000	1,100	520	6,200	950
	04/10/96	5.03	54,000	650	850	260	4,700	<250
	07/30/96	**6.36**	**33,000**	**780**	**830**	**330**	**4,200**	**1,700**

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

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	MTBE
			<-------- parts per billion (ug\L) -------->					
MW-9	08/06/91	10.33	11,000	1,700	520	95	1,400	----
	10/23/91	11.13	20,000	1,000	CO.3	47	940	----
	01/28/92	9.02	3,500	120	280	<10	36	----
	05/04/92	7.67	7,700	1,200	380	<50	630	----
	07/20/92	10.26	11,000	910	220	<50	1,200	----
	10/12/92	12.19	2,100	340	77	15	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	150	6.90	400	----
	04/13/94	7.81	6,000	1,000	450	<20	420	----
	07/19/94	8.96	12,000	1,400	740	<5	1,200	----
	10/27/94	11.00	10,000	1,200	280	160	860	----
	01/03/95	6.60	4,400	680	180	7.70	370	----
	04/13/95	6.73	1,700	270	69	<10	170	----
	06/30/95	7.32	14,000	2,200	900	18	2,600	----
	06/30/95[dup]	7.32	13,000	2,100	870	17	2,500	----
	10/11/95	8.10	9,600	35	360	12	980	590
	01/17/96	5.75	2,800	150	54	7.41	130	170
	04/10/96	5.17	5,200	290	92	<5	220	240
	07/30/96	**8.1**	**5,100**	**960**	**380**	**<10**	**770**	**670**
MW-10	10/23/91	8.57	27,000	1,600	1,800	110	510	----
	01/28/92	7.60	3,800	360	170	14	39	----
	05/04/92	7.54	3,000	360	140	<12.5	26	----
	07/20/92	8.59	15,000	400	180	<25	67	----
	10/12/92	10.23	16,000	320	360	<50	100	----
	01/12/93[b]	----	----	----	----	----	----	----
	04/06/93	6.70	14,000	370	880	<0.5	210	----
	07/12/93	8.05	10,000	440	890	58	220	----
	10/13/93	8.25	15,000	1,000	810	51	170	----
	01/20/94	7.20	12,000	820	1,100	56	350	----
	04/13/94	7.57	18,000	760	700	36	130	----
	07/19/94	8.18	24,000	400	800	2.30	22	----
	10/27/94	8.68	11,000	360	310	43	89	----
	01/03/95	6.86	17,000	770	690	38	160	----
	04/13/95	6.91	9,900	650	280	16	40	----
	06/30/95	7.61	12,000	750	480	20	130	----

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

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	MTBE
			<----------parts per billion (ug\L)---------->					
	01/17/96	7.00	17,000	870	93	260	830	
	04/10/96	6.80	14,000	470	110	38	370	
	07/30/96	----	----	----	----	----	----	----
MW-11	10/23/91	8.06	140	<12	0.37	<0.3	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]	----	----	----	----	----	----	----
	10/13/93	11.47	<50	<0.5	<0.5	<0.5	<0.5	----
	01/20/94	909	<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**
Bailer 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	<0.5	0.67	<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

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

Well ID	Date Sampled	Depth to Water (ft)	TPH-G	B	E	T	X	MTBE
			<----------parts per billion (ug\L)---------->					
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
DHS MCLs	-----	----	NE	I	680	100c	1,750	NE

Abbreviations:

MTBE = Methyl t-butyl ether by EPA Method 8020
TPH-G = Total petroleum hydrocarbons as gasoline by Modified EPA Method 8015
B = Benzene by EPA Method 8020
E = Ethylbenzene by EPA Method 8020
T = Toluene by EPA Method 8020
X = Xylenes by EPA Method 8020
NE = Not established
DHS MCLs = California Department of Health Services maximum contaminant levels for drinking water
---- = Not analyzed
< n = Not detected at detection limits of n ppb
dup = Duplicate sample
SPH = Not sampled, separate-phase hydrocarbons detected in well

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 = DHS recommended action level; MCL not established
* = The result for gasoline is an unknown hydrocarbon which consists of a single peak as confirmed by NET Laboratory
** = MTBE confirmed by EPA Method 8260

ATTACHMENT A

Ground Water Monitoring Report And Analytic Report

BLAINE
TECH SERVICES INC.

985 TIMOTHY DRIVE
SAN JOSE, CA 95133
(408) 995-5535
FAX (408) 293-8773

August 19, 1996

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

Attn: R. Jeff Granberry

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

3rd Quarter 1996

Quarterly Groundwater Monitoring Report 960730-J-2

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) 995-5535 ext. 201.

Yours truly,

Francis Thie

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

cc: Weiss Associates
5500 Shellmound Street
Emeryville, CA 94608-2411
Attn: Grady Glasser

(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	7/30/96	TOC	--	NONE	--	--	7.61	25.00
MW-2	7/30/96	TOC	ODOR	NONE	--	--	7.63	19.18
MW-3	7/30/96	TOC	--	NONE	--	--	9.04	27.42
MW-4	7/30/96	TOC	SHEEN/ODOR	--	--	--	8.73	25.24
MW-5	7/30/96	TOC	ODOR	NONE	--	--	7.71	24.94
MW-6 *	7/30/96	TOC	SHEEN/ODOR	--	--	--	8.97	19.91
MW-7	7/30/96	TOC	FREE PRODUCT	7.31	0.03	--	7.34	--
MW-8	7/30/96	TOC	ODOR	NONE	--	--	6.36	19.94
MW-9	7/30/96	TOC	--	NONE	--	--	8.10	19.70
MW-10	7/30/96	INACCESSIBLE						
MW-11	7/30/96	TOC	--	NONE	--	--	8.92	18.90

* Sample DUP was a duplicate sample taken from well MW-6.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 960730-52

Date:
Page 1 of 2

Site Address: 3420 San Pablo Ave. Oakland

WIC#: 204-5506-5306

Shell Engineer: ~~Don Kick~~ R. Jeff Granberry — 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: Matt James

LAB: SEQ

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
1 MW-1	7/30			W		3						X	X						Confirm
2 MW-2						3						X	X						Highest MTBE
3 MW-3						3						X	X						Hit by
4 MW-4						3						X	X						EPA 8260
5 MW-5						3						X	X						
6 MW-6						3						X	X						
7 MW-8						3						X	X						
8 MW-9	↓			↓		3						X	X						

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
Quarterly Monitoring	X 6441	24 hours
Site Investigation	6441	48 hours
Soil Classify/Disposal	6442	15 days X (Normal)
Water Classify/Disposal	6443	Other
Soil/Air Rem. or Sys. O & M	6452	NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.
Water Rem. or Sys. O & M	6453	
Other		

	Printed Name:	Date:	Time:
Relinquished By (signature):		7-31-96	1635
Relinquished By (signature):	John Howe	7-31-96	1150
Relinquished By (signature):			

	Printed Name:	Date:	Time:
Received (signature):	John Howe	7-31-96	1035
Received (signature):			
Received (signature):	Richterling	7-31-96	1150

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

2nd Copy of Custody

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 960730-J2

Date:
Page 2 of 2

Site Address: 3420 San Pablo Ave. Oakland

WIC#: 204-5506-5306

Shell Engineer: ~~Dan Kirk~~ R. Jeff Granberry
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: Matt James

LAB: SEQ

Analysis Required

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.

J32

	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
9	MW-11	7/30			W		3						X	X							* Confirm
10	EB	↓			↓		3						X	X							Highest MTBE
11	Dup	↓			↓		3						X	X							Hit by
																					EPA 8260

Relinquished By (signature):	Printed Name:	Date/Time	Received (signature):	Printed Name:	Date/Time
[signature]		Date: 7-31-96 Time: 1035	[signature]	John Howe	Date: 7-31-96 Time: 1035
[signature]	John Howe	Date: 7-31-96 Time: 1150			Date: Time:
		Date: Time:	[signature]	Rich Herling	Date: 7/31/96 Time: 1150

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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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 Technical Services
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Project: Shell, Oakland, 960730-J2

Enclosed are the results from samples received at Sequoia Analytical on July 31, 1996. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
9607J34 -01	LIQUID, MW-1	07/30/96	MTBEMW Methyl t-Butyl Ethe
9607J34 -01	LIQUID, MW-1	07/30/96	TPGBMW Purgeable TPH/BTEX
9607J34 -02	LIQUID, MW-2	07/30/96	TPGBMW Purgeable TPH/BTEX
9607J34 -03	LIQUID, MW-3	07/30/96	TPGBMW Purgeable TPH/BTEX
9607J34 -04	LIQUID, MW-4	07/30/96	TPGBMW Purgeable TPH/BTEX
9607J34 -05	LIQUID, MW-5	07/30/96	TPGBMW Purgeable TPH/BTEX
9607J34 -06	LIQUID, MW-6	07/30/96	TPGBMW Purgeable TPH/BTEX
9607J34 -07	LIQUID, MW-8	07/30/96	TPGBMW Purgeable TPH/BTEX
9607J34 -08	LIQUID, MW-9	07/30/96	TPGBMW Purgeable TPH/BTEX
9607J34 -09	LIQUID, MW-11	07/30/96	TPGBMW Purgeable TPH/BTEX
9607J34 -10	LIQUID, EB	07/30/96	TPGBMW Purgeable TPH/BTEX
9607J34 -11	LIQUID, Dup	07/30/96	TPGBMW 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, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Technical Services	Client Proj. ID: Shell, Oakland, 960730-J2	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: MW-1	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: EPA 8260	Analyzed: 08/12/96
Attention: Jim Keller	Lab Number: 9607J34-01	Reported: 08/13/96

QC Batch Number: MS0808968260H6A
Instrument ID: H6

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	200	9800

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	100
Toluene-d8	88	110	104
4-Bromofluorobenzene	86	115	101

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

SEQUOIA ANALYTICAL - ELAP #1210

Reggy Penner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Technical Services	Client Proj. ID: Shell, Oakland, 960730-J2	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: MW-1	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/07/96
Attention: Jim Keller	Lab Number: 9607J34-01	Reported: 08/13/96

QC Batch Number: GC080796BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**2000**	**7900**
Methyl t-Butyl Ether	**100**	**12000**
Benzene	**20**	**240**
Toluene	**20**	**22**
Ethyl Benzene	**20**	**170**
Xylenes (Total)	**20**	**300**
Chromatogram Pattern:		**GAS**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	98

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 Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell, Oakland, 960730-J2
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9607J34-02

Sampled: 07/30/96
Received: 07/31/96

Analyzed: 08/07/96
Reported: 08/13/96

QC Batch Number: GC080796BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10000	26000
Methyl t-Butyl Ether	500	4500
Benzene	100	6800
Toluene	100	210
Ethyl Benzene	100	1300
Xylenes (Total)	100	5500
Chromatogram Pattern:		GAS

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	101

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 Technical Services	Client Proj. ID: Shell, Oakland, 960730-J2	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: MW-3	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/06/96
Attention: Jim Keller	Lab Number: 9607J34-03	Reported: 08/13/96

QC Batch Number: GC080696BTEX02A
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**	**57**
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:		
Discrete Peak		**C6-C7**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	143 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Reggy Penner
Project Manager

Sequoia Analytical

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Blaine Technical Services	Client Proj. ID: Shell, Oakland, 960730-J2	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: MW-4	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/06/96
Attention: Jim Keller	Lab Number: 9607J34-04	Reported: 08/13/96

QC Batch Number: GC080696BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**1250**	**1600**
Methyl t-Butyl Ether	**62**	**8500**
Benzene	**12**	**68**
Toluene	12	N.D.
Ethyl Benzene	**12**	**58**
Xylenes (Total)	**12**	**39**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	89

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

Blaine Technical Services	Client Proj. ID: Shell, Oakland, 960730-J2	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: MW-5	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/06/96
Attention: Jim Keller	Lab Number: 9607J34-05	Reported: 10/15/96

QC Batch Number: GC080696BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**500**	**10000**
Methyl t-Butyl Ether	**25**	**710**
Benzene	**5.0**	**83**
Toluene	5.0	N.D.
Ethyl Benzene	**5.0**	**250**
Xylenes (Total)	**5.0**	**110**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	122

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 Technical Services	Client Proj. ID: Shell, Oakland, 960730-J2	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: MW-6	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/06/96
Attention: Jim Keller	Lab Number: 9607J34-06	Reported: 10/15/96

QC Batch Number: GC080696BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**10000**	**38000**
Methyl t-Butyl Ether	**500**	**560**
Benzene	**100**	**3000**
Toluene	100	N.D.
Ethyl Benzene	**100**	**1100**
Xylenes (Total)	**100**	**2600**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	109

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 Technical Services	Client Proj. ID: Shell, Oakland, 960730-J2	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: MW-8	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/06/96
Attention: Jim Keller	Lab Number: 9607J34-07	Reported: 08/13/96

QC Batch Number: GC080696BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**5000**	**33000**
Methyl t-Butyl Ether	**250**	**1700**
Benzene	**50**	**780**
Toluene	**50**	**330**
Ethyl Benzene	**50**	**830**
Xylenes (Total)	**50**	**4200**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	125

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Technical Services	Client Proj. ID: Shell, Oakland, 960730-J2	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: MW-9	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/06/96
Attention: Jim Keller	Lab Number: 9607J34-08	Reported: 08/13/96

QC Batch Number: GC080696BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**1000**	**5100**
Methyl t-Butyl Ether	**50**	**670**
Benzene	**10**	**960**
Toluene	10	N.D.
Ethyl Benzene	**10**	**380**
Xylenes (Total)	**10**	**770**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	107

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Technical Services	Client Proj. ID: Shell, Oakland, 960730-J2	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: MW-11	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/06/96
Attention: Jim Keller	Lab Number: 9607J34-09	Reported: 08/13/96

QC Batch Number: GC080696BTEX03A
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	131 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

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Blaine Technical Services	Client Proj. ID: Shell, Oakland, 960730-J2	Sampled: 07/30/96
985 Timothy Drive	Sample Descript: EB	Received: 07/31/96
San Jose, CA 95133	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 08/06/96
Attention: Jim Keller	Lab Number: 9607J34-10	Reported: 08/13/96

QC Batch Number: GC080696BTEX03A
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	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 Technical Services
985 Timothy Drive
San Jose, CA 95133

Attention: Jim Keller

Client Proj. ID: Shell, Oakland, 960730-J2
Sample Descript: Dup
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9607J34-11

Sampled: 07/30/96
Received: 07/31/96

Analyzed: 08/07/96
Reported: 08/13/96

QC Batch Number: GC080796BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10000	38000
Methyl t-Butyl Ether	500	800
Benzene	100	450
Toluene	100	100
Ethyl Benzene	100	1000
Xylenes (Total)	100	3100
Chromatogram Pattern:		GAS

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

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Blaine Tech Services, Inc.	Client Project ID:	Shell, Oakland / 960730-J2	
985 Timothy Drive	Matrix:	Liquid	
San Jose, CA 95133			
Attention: Jim Keller	Work Order #:	9607J34 -01	Reported: Aug 14, 1996

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0808968260H6A	MS0808968260H6A	MS0808968260H6A	MS0808968260H6A	MS0808968260H6A
Analy. Method:	EPA 8260	EPA 8260	EPA 8260	EPA 8260	EPA 8260
Prep. Method:	N/A	N/A	N/A	N/A	N/A
Analyst:	M. Williams	M. Williams	M. Williams	M. Williams	M. Williams
MS/MSD #:	960805201	960805201	960805201	960805201	960805201
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	-	-	-	-	-
Analyzed Date:	8/8/96	8/8/96	8/8/96	8/8/96	8/8/96
Instrument I.D.#:	H6	H6	H6	H6	H6
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
Result:	47	48	50	48	48
MS % Recovery:	94	96	100	96	96
Dup. Result:	45	46	50	47	48
MSD % Recov.:	90	92	100	94	96
RPD:	4.3	4.3	0.0	2.1	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	VDB081296	VDB081296	VDB081296	VDB081296	VDB081296
Prepared Date:	8/12/96	8/12/96	8/12/96	8/12/96	8/12/96
Analyzed Date:	8/12/96	8/12/96	8/12/96	8/12/96	8/12/96
Instrument I.D.#:	H6	H6	H6	H6	H6
Conc. Spiked:	50 µg/L	50 µg/L	50 µg/L	50 µg/L	50 µg/L
LCS Result:	38	44	46	44	46
LCS % Recov.:	76	88	92	88	92
MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130
Control Limits					

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

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

Sequoia Analytical

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Blaine Tech Services, Inc.
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Client Project ID: Shell, Oakland / 960730-J2
Matrix: Liquid
Work Order #: 9607J34-03-06

Reported: Aug 14, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC080696BTEX02A	GC080696BTEX02A	GC080696BTEX02A	GC080696BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	9607E2107	9607E2107	9607E2107	9607E2107
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/6/96	8/6/96	8/6/96	8/6/96
Analyzed Date:	8/6/96	8/6/96	8/6/96	8/6/96
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.7	9.6	9.6	28
MS % Recovery:	97	96	96	93
Dup. Result:	10	10	10	30
MSD % Recov.:	100	100	100	100
RPD:	3.0	4.1	4.1	6.9
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK080696	BLK080696	BLK080696	BLK080696
Prepared Date:	8/6/96	8/6/96	8/6/96	8/6/96
Analyzed Date:	8/6/96	8/6/96	8/6/96	8/6/96
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.6	9.5	9.6	29
LCS % Recov.:	96	95	96	97

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

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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Blaine Tech Services, Inc.
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Client Project ID: Shell, Oakland / 960730-J2
Matrix: Liquid
Work Order #: 9607J34-07, 09, 10

Reported: Aug 14, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC080696BTEX03A	GC080696BTEX03A	GC080696BTEX03A	GC080696BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	9607E2107	9607E2107	9607E2107	9607E2107
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/6/96	8/6/96	8/6/96	8/6/96
Analyzed Date:	8/6/96	8/6/96	8/6/96	8/6/96
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.9	9.9	9.7	29
MS % Recovery:	99	99	97	97
Dup. Result:	9.8	9.8	9.6	29
MSD % Recov.:	98	98	96	97
RPD:	1.0	1.0	1.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK080696	BLK080696	BLK080696	BLK080696
Prepared Date:	8/6/96	8/6/96	8/6/96	8/6/96
Analyzed Date:	8/6/96	8/6/96	8/6/96	8/6/96
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.7	9.7	9.6	29
LCS % Recov.:	97	97	96	97

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130
Control Limits				

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

Please Note:
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Blaine Tech Services, Inc.	Client Project ID:	Shell, Oakland / 960730-J2	
985 Timothy Drive	Matrix:	Liquid	
San Jose, CA 95133			
Attention: Jim Keller	Work Order #:	9607J34-08	Reported: Aug 14, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC080696BTEX21A	GC080696BTEX21A	GC080696BTEX21A	GC080696BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	9607E2108	9607E2108	9607E2108	9607E2108
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/6/96	8/6/96	8/6/96	8/6/96
Analyzed Date:	8/6/96	8/6/96	8/6/96	8/6/96
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	10	31
MS % Recovery:	100	100	100	103
Dup. Result:	10	9.9	10	31
MSD % Recov.:	100	99	100	103
RPD:	0.0	1.0	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK080696	BLK080696	BLK080696	BLK080696
Prepared Date:	8/6/96	8/6/96	8/6/96	8/6/96
Analyzed Date:	8/6/96	8/6/96	8/6/96	8/6/96
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.7	9.9	10	31
LCS % Recov.:	97	99	100	103
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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Blaine Tech Services, Inc.
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Client Project ID: Shell, Oakland / 960730-J2
Matrix: Liquid
Work Order #: 9607J34-01-02, 11

Reported: Aug 14, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC080796BTEX21A	GC080796BTEX21A	GC080796BTEX21A	GC080796BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	960800817	960800817	960800817	960800817
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	8/7/96	8/7/96	8/7/96	8/7/96
Analyzed Date:	8/7/96	8/7/96	8/7/96	8/7/96
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	10	30
MS % Recovery:	100	100	100	100
Dup. Result:	10	11	10	31
MSD % Recov.:	100	110	100	103
RPD:	0.0	9.5	0.0	3.3
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK080796	BLK080796	BLK080796	BLK080796
Prepared Date:	8/7/96	8/7/96	8/7/96	8/7/96
Analyzed Date:	8/7/96	8/7/96	8/7/96	8/7/96
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	11	11	11	32
LCS % Recov.:	110	110	110	107
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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