CAMBRIA

February 24, 1998

Scott Seery
Alameda Health Care Services
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

MtBE ↑

Re: **Fourth Quarter 1997 Monitoring Report**
Shell Service Station
6039 College Avenue
Oakland, California
WIC #204-5508-3301
Cambria Project #240-314-497

Dear Mr. Seery:

On behalf of Shell Oil Products Company, Cambria Environmental Technology, Inc. (Cambria) is submitting this status 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

when?

Blaine Tech Services, Inc. (Blaine) of San Jose, California measured ground water depths, checked for separate-phase hydrocarbons (SPH), and collected ground water samples from selected site wells. No SPH was detected. The Blaine report describing these sampling activities and presenting the analytical results is included as Attachment A. Cambria compiled the ground water elevations and analytical data (Tables 1 and 2) and prepared a ground water elevation contour map (Figure 1). Historic SPH removal data is included in Table 3.

CAMBRIA
ENVIRONMENTAL
TECHNOLOGY, INC.
1144 65TH STREET,
SUITE B
OAKLAND,
CA 94608
PH: (510) 420-0700
FAX: (510) 420-9170

CAMBRIA

ANTICIPATED FIRST QUARTER 1998 ACTIVITIES

Quarterly Monitoring Activities: Blaine will gauge water levels, check for SPH, and sample selected site monitoring wells. 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.

REGISTERED GEOLOGIST
N. SCOTT MacLEOD
No. 5747
STATE OF CALIFORNIA

N. Scott MacLeod, R.G.
Principal Geologist

Attachments: A - Blaine Quarterly Ground Water Monitoring Report

cc: A. E. (Alex) Perez, Shell Oil Products Company, P.O. Box 8080, Martinez, California 94553
Tom Callaghan, San Francisco Bay Regional Water Quality Control Board, 2101 Webster Street, Suite 500, Oakland, California 94612

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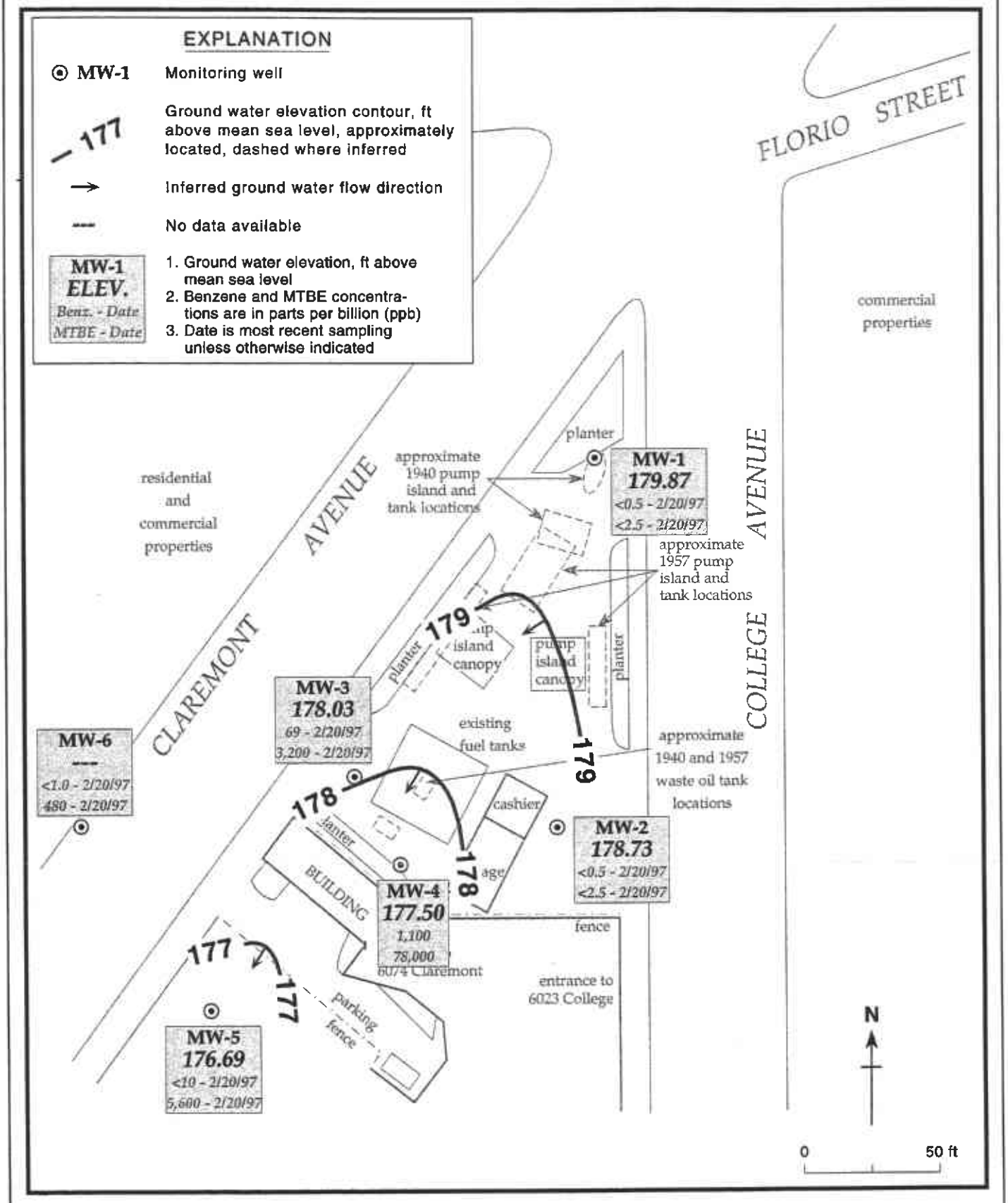

Figure 1. Ground Water Elevation Contours - November 3, 1997 - Shell Service Station, 6039 College Avenue, Oakland, California

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Sampling schedule: quarterly MW-4 Semi: annual MW-3, -5, -6 d/sc 1/15/97 MW-1, -2

Table 1. **Ground Water Elevations** - Shell Service Station WIC #204-5508-3301, 6039 College 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	02/15/90	195.89	17.73	---	178.16
	04/19/90		18.51	---	177.38
	05/14/90		18.92	---	176.97
	06/21/90		18.21	---	177.68
	09/12/90		19.81	---	176.08
	11/27/90		20.39	---	175.50
	03/08/91		16.85	---	179.04
	06/03/91		17.82	---	178.07
	08/30/91		19.87	---	176.02
	11/22/91		20.58	---	175.31
	03/18/92		13.55	---	182.34
	05/28/92		17.08	---	178.81
	08/19/92		19.07	---	176.82
	11/17/92		20.11	---	175.78
	02/12/93		12.10	---	183.79
	06/10/93		14.87	---	181.02
	08/18/93		16.90	---	178.99
	11/19/93		19.72	---	176.17
	02/28/94		15.08	---	180.81
	05/04/94		17.20	---	178.69
	08/10/94		18.76	---	177.13
	11/08/94		16.00	---	179.89
	02/01/95		10.18	---	185.71
	05/10/95		11.88	---	184.01
	08/24/95		15.60	---	180.29
	11/10/95		18.24	---	177.65
	02/24/96		9.88	---	186.01
	05/22/96		12.24	---	183.65
	08/19/96		15.86	---	180.03
	12/05/96		16.21	---	179.68
	01/08/97		9.73	---	186.16
	02/20/97		11.60	---	184.29
	05/30/97		15.02	---	180.87
	08/18/97		17.20	---	178.69
	11/03/97		16.02	---	179.87
MW-2	02/15/90	194.27	16.90	---	177.37
	04/19/90		17.69	---	176.58
	05/14/90		18.01	---	176.26
	06/21/90		17.39	---	176.88
	09/12/90		19.00	---	175.27
	11/27/90		19.44	---	174.83
	03/08/91		15.96	---	178.31
	06/03/91		17.00	---	177.27

Table 1. **Ground Water Elevations** - Shell Service Station WIC #204-5508-3301, 6039 College 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]
	08/30/91		18.95	---	175.32
	11/22/91		19.55	---	174.72
	03/18/92		12.91	---	181.36
	05/28/92		16.25	---	178.02
	08/19/92		18.21	---	176.06
	11/17/92		19.15	---	175.12
	02/12/93		11.60	---	182.67
	06/10/93		14.14	---	180.13
	08/18/93		16.10	---	178.17
	11/19/93		18.77	---	175.50
	02/28/94		14.35	---	179.92
	05/04/94		16.34	---	177.93
	08/10/94		15.79	---	178.48
	11/08/94		15.04	---	179.23
	02/01/95		10.08	---	184.19
	05/10/95		11.68	---	182.59
	08/24/95		14.94	---	179.33
	11/10/95		13.36	---	180.91
	02/24/96		9.90	---	184.37
	05/22/96		11.80	---	182.47
	08/19/96		15.08	---	179.19
	12/05/96		15.16	---	179.11
	01/08/97		9.76	---	184.51
	02/20/97		11.47	---	182.80
	05/30/97		14.30	---	179.97
	08/18/97		16.33	---	177.94
	11/03/97		15.54	---	178.73
MW-3	02/15/90	192.52	15.81	---	176.71
	04/19/90		16.57	---	175.95
	05/14/90		16.97	---	175.55
	06/21/90		16.27	---	176.25
	09/12/90		18.78	---	173.74
	11/27/90		18.27	---	174.25
	03/08/91		14.86	---	177.66
	06/03/91		15.84	---	176.68
	08/30/91		17.79	---	174.73
	11/22/91		18.40	---	174.12
	03/18/92		12.03	---	180.49
	05/28/92		15.16	---	177.36
	08/19/92		17.03	---	175.49
	11/17/92		17.94	---	174.58
	02/12/93		9.16	---	183.36
	06/10/93		13.20	---	179.32

Table 1. **Ground Water Elevations** - Shell Service Station WIC #204-5508-3301, 6039 College 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]
	08/18/93		14.93	---	177.59
	11/19/93		17.58	---	174.94
	02/28/94		13.30	---	179.22
	05/04/94		15.25	---	177.27
	08/10/94		16.63	---	175.89
	11/08/94		13.88	---	178.64
	02/01/95		9.25	---	183.27
	05/10/95		10.76	---	181.74
	08/24/95		13.90	---	178.62
	11/10/95		16.20	---	176.32
	02/24/96		8.93	---	183.59
	05/22/96		10.86	---	181.66
	08/19/96		13.97	---	178.55
	12/05/96		14.06	---	178.46
	02/20/97		10.60	---	181.92
	05/30/97		13.26	---	179.26
	08/18/97		15.21	---	177.31
	11/03/97		14.49	---	178.03
MW-4	02/15/90	193.37	16.73	---	176.65
	04/19/90		17.48	---	175.89
	05/14/90		17.88	---	175.49
	06/21/90		17.18	---	176.19
	09/12/90		17.85	---	175.52
	11/27/90		19.16	---	174.21
	03/08/91		15.77	---	177.60
	06/03/91		16.77	---	176.60
	08/30/91		18.71	---	174.66
	11/22/91		---	---	---
	03/18/92		13.15	0.24	180.41
	05/28/92		16.22	0.12	177.25
	08/19/92		18.05	0.09	175.39
	11/17/92		18.89	---	174.48
	02/12/93		11.78	<0.01	181.59
	06/10/93		14.20	---	179.17
	08/18/93		15.95	0.01	177.43
	11/19/93		18.48	0.01	174.90
	02/28/94		14.60	<0.01	178.77
	05/04/94		16.15	<0.01	177.22
	08/10/94		17.58	0.02	175.81
	11/08/94		15.05	0.05	178.36
	02/01/95		10.71	0.04	182.69
	05/10/95		11.90	0.06	181.52
	08/24/95		14.97	0.02	178.42

Table 1. **Ground Water Elevations** - Shell Service Station WIC #204-5508-3301, 6039 College 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]
	11/10/95		17.27	---	176.10
	02/24/96		10.44	0.03	182.95
	05/22/96		11.88	0.03	181.51
	08/19/96		15.23	0.02	178.16
	12/05/96		14.70	0.02	178.69
	01/08/97		11.60	0.02	181.79
	02/20/97		11.91	---	181.46
	05/30/97		14.68	---	178.69
	08/18/97		15.07	---	178.30
	11/03/97		**15.87**	**---**	**177.50**
MW-5	08/30/91	190.35	16.74	---	173.61
	11/22/91		17.27	---	173.08
	03/18/92		11.28	---	179.07
	05/28/92[b]		---	---	---
	08/19/92		15.99	---	174.36
	11/17/92		16.84	---	173.51
	02/12/93		10.30	---	180.05
	06/10/93		12.36	---	177.99
	08/18/93		14.02	---	176.33
	11/19/93		16.50	---	173.85
	02/28/94		12.55	---	177.80
	05/04/94		14.27	---	176.08
	08/10/94		15.60	---	174.75
	11/08/94		12.85	---	177.50
	02/01/95		8.98	---	181.37
	05/10/95		10.16	---	180.19
	08/24/95		12.98	---	177.37
	11/10/95		15.12	---	175.23
	02/24/96[b]		---	---	---
	05/22/96		10.10	---	180.25
	08/19/96		13.09	---	177.26
	12/05/96		13.31	---	177.04
	02/20/97		9.55	---	180.80
	05/30/97		12.40	---	177.95
	08/18/97		14.19	---	176.16
	11/03/97		**13.66**	**---**	**176.69**
MW-6	09/21/93	189.05	14.64	---	174.41
	11/19/93		---	---	---
	02/28/94		12.18	---	176.87
	05/04/94		13.62	---	175.43
	08/10/94		14.98	---	174.07
	11/08/94		12.20	---	176.85

Table 1. **Ground Water Elevations** - Shell Service Station WIC #204-5508-3301, 6039 College 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]
	02/01/95		8.70	---	180.35
	05/10/95		9.86	---	179.19
	08/24/95		12.46	---	176.59
	11/10/95		14.56	---	174.49
	02/24/96[b]		---	---	---
	05/22/96		10.23	---	178.82
	08/19/96		12.61	---	176.44
	12/05/96		12.47	---	176.58
	02/20/97		9.85	---	179.20
	05/30/97		11.96	---	177.09
	08/18/97		13.65	---	175.40
	11/03/97[b]		---	---	---
T-1	05/30/97	Not Surveyed	Dry	---	Dry
	08/18/97		Dry	---	Dry
	11/03/97		Dry	---	Dry
T-2	05/30/97	Not Surveyed	Dry	---	Dry
	08/18/97		Dry	---	Dry
	11/03/97		Dry	---	Dry

Notes:

a = When separate-phase hydrocarbons are present, ground water elevation is corrected by the relation: Corrected ground water elevation = (Top-of-Casing Elevation) - (depth to water) + (0.8 x separate-phase hydrocarbon thickness)
b = Well inaccessible
--- = Data not available
ft = Feet
msl = Mean sea level
TOC = Top of casing

Table 2a. **Analytic Results for Ground Water - Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California

Well/Boring ID (Qtrs Sampled)	Date Sampled	Depth to Water (ft)	TPH-G	MTBE	B	T	E	X
			← (Concentrations in µg/L) →					
MW-1 (Discontinued)	02/13/90	17.73	95	---	ND	0.67	0.37	3.2
	05/14/90	18.92	95	---	0.70	0.57	0.71	3.5
	09/12/90	19.81	ND	---	ND	ND	ND	ND
	11/27/90	20.39	---	---	---	---	---	---
	03/08/91	16.85	ND	---	ND	ND	ND	ND
	06/03/91	17.82	ND	---	ND	ND	ND	ND
	08/30/91	19.87	16.85	---	ND	ND	ND	ND
	11/22/91	20.58	<50	---	<0.5	<0.5	<0.5	<0.5
	03/18/92	13.55	<30	---	<0.3	<0.3	<0.3	<0.3
	05/28/92	17.08	<50	---	<0.5	<0.5	<0.5	<0.5
	08/19/92	19.07	<50	---	<0.5	<0.5	<0.5	<0.5
	11/17/92	20.11	<50	---	<0.5	<0.5	<0.5	<0.5
	02/12/93	12.10	<50	---	<0.5	<0.5	<0.5	<0.5
	06/10/93	14.87	<50	---	<0.5	<0.5	<0.5	<0.5
	06/10/93[dup]	14.87	<50	---	<0.5	<0.5	<0.5	<0.5
	08/18/93	16.90	<50	---	<0.5	<0.5	<0.5	<0.5
	11/19/93	19.72	<50	---	<0.5	<0.5	<0.5	<0.5
	02/18/94	15.08	<50	---	<0.5	<0.5	<0.5	1.7
	05/04/94	17.20	<50	---	<0.5	<0.5	<0.5	<0.5
	08/10/94	18.76	<50	---	<0.5	<0.5	<0.5	<0.5
	08/10/94[dup]	18.76	<50	---	<0.5	<0.5	<0.5	<0.5
	11/08/94	16.00	<50	---	<0.5	<0.5	<0.5	<0.5
	02/01/95	10.18	<50	---	<0.5	<0.5	<0.5	<0.5
	05/10/95	11.88	<50	---	<0.5	<0.5	<0.5	<0.5
	08/24/95	15.60	<50	---	<0.5	<0.5	<0.5	<0.5
	11/10/95	18.24	<50	---	<0.5	<0.5	<0.5	<0.5
	02/24/96	9.88	<50	---	<0.5	<0.5	<0.5	<0.5
	05/22/96	12.24	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	08/19/96	15.86	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	12/05/96	16.21	160	<2.5	7.3	8.2	5.5	23
	01/08/97	9.73	<50	<2.5	<0.50	<0.50	<0.50	<0.50
	02/20/97	11.60	<50	<2.5	<0.50	<0.50	<0.50	<0.50
	02/20/97[dup]	11.60	<50	<2.5	<0.50	<0.50	<0.50	<0.50

Table 2a. **Analytic Results for Ground Water - Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Boring ID (Qtrs Sampled)	Date Sampled	Depth to Water (ft)	TPH-G	MTBE	B	T	E	X
			← (Concentrations in µg/L) →					
MW-2 (Discontinued)	02/13/90	16.90	ND	---	ND	ND	ND	ND
	05/14/90	18.01	ND	---	ND	ND	ND	ND
	09/12/90	19.00	ND	---	ND	ND	ND	ND
	11/27/90	19.44	ND	---	ND	ND	ND	ND
	03/08/91	15.96	ND	---	ND	ND	ND	ND
	06/03/91	17.00	ND	---	ND	ND	ND	ND
	08/30/91	18.95	ND	---	ND	ND	ND	ND
	11/22/91	19.55	<50	---	<0.5	<0.5	<0.5	<0.5
	03/18/92	12.91	<30	---	<0.3	<0.3	<0.3	<0.3
	05/28/92	16.25	<50	---	<0.5	<0.5	<0.5	<0.5
	08/19/92	18.21	<50	---	<0.5	2	1.2	1.9
	11/17/92	19.15	<50	---	<0.5	2	1.2	1.9
	02/12/93[dup]	11.60	<50	---	<0.5	<0.5	<0.5	<0.5
	02/12/93	11.60	<50	---	<0.5	<0.5	<0.5	<0.5
	06/10/93	14.14	<50	---	<0.5	<0.5	<0.5	<0.5
	08/18/93	16.10	<50	---	<0.5	<0.5	<0.5	<0.5
	08/18/93[dup]	16.10	<50	---	<0.5	<0.5	<0.5	<0.5
	11/19/93	18.77	<50	---	<0.5	<0.5	<0.5	<0.5
	02/18/94	14.55	<50	---	<0.5	<0.5	<0.5	1.6
	05/04/94	16.34	<50	---	<0.5	<0.5	<0.5	<0.5
	08/10/94	15.79	<50	---	<0.5	<0.5	<0.5	<0.5
	11/08/94	15.04	<50	---	<0.5	<0.5	<0.5	<0.5
	02/01/95	10.08	<50	---	<0.5	<0.5	<0.5	<0.5
	05/10/95	11.68	<50	---	<0.5	<0.5	<0.5	<0.5
	08/24/95	14.94	<50	---	<0.5	<0.5	<0.5	<0.5
	11/10/95	13.36	<50	---	1.7	0.8	1.4	4.9
	02/24/96	9.90	<50	---	<0.5	<0.5	<0.5	<0.5
	02/24/96[dup]	9.90	<50	---	<0.5	<0.5	<0.5	<0.5
	05/22/96	11.80	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	08/19/96	15.08	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	08/19/96[dup]	15.08	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	12/05/96	15.16	<50	<2.5	1.5	1.6	1.2	5.2
	01/08/97	9.76	<50	<2.5	<0.50	<0.50	<0.50	<0.50
	02/20/97	11.47	<50	<2.5	<0.50	<0.50	<0.50	<0.50

Table 2a. **Analytic Results for Ground Water - Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Boring ID (Qtrs Sampled)	Date Sampled	Depth to Water (ft)	TPH-G	MTBE	B	T	E	X
			← (Concentrations in µg/L) →					
MW-3 (1st Quarter)	02/13/90	15.81	4,700	---	320	29	110	33
	02/13/90[dup]	15.81	4,600	---	380	8.6	160	57
	05/14/90	16.97	1,400	---	130	8.6	40	17
	05/14/90[dup]	16.97	8,200	---	120	31	38	13
	09/12/90	18.78	2,000	---	58	5.8	16	15
	11/27/90	18.27	540	---	18	1.5	8.7	2.5
	03/08/91	14.86	3,400	---	630	33	270	18
	06/03/91	15.84	1,700	---	260	13	98	24
	08/30/91	17.79	870	---	44	6.1	10	2.9
	11/22/91	18.40	310	---	18	1.2	3.3	2.9
	03/18/92	12.03	67,100	---	620	28	220	38
	05/28/92	15.16	2,300	---	200	9	71	17
	08/19/92	17.03	5,700	---	71	77	52	130
	11/17/92	17.94	3,600	---	16	8.6	24	50
	02/12/93	9.16	4,700	---	820	58	130	77
	06/10/93	13.20	2,200	---	310	23	89	23
	08/18/93	14.93	260	---	27	2.0	7.0	2.2
	11/19/93	17.58	1,500[a]	---	24	54	37	17
	02/18/94	13.30	2,700	---	65	5.2	16	6.3
	02/18/94[dup]		3,100	---	82	6.7	19	7.9
	05/04/94	15.25	780	---	120	7.5	21	6.9
	05/04/94[dup]	15.25	920	---	120	7.7	22	7.1
	08/10/94	16.63	920	---	20	2.3	3.0	2.2
	11/08/94	13.88	1,300	---	180	16	7.0	12
	11/08/94[dup]	13.88	1,200	---	170	15	7.2	11
	02/01/95	9.25	1,400	---	210	8.5	11	8.7
	05/10/95	10.76	460	---	97	10	1.0	19
	08/24/95	13.90	640	---	68	21	14	19
	11/10/95	16.20	350	---	15	2.3	1.2	2.5
	02/24/96	8.93	3,300	---	240	53	38	55
	05/22/96	10.86	1,300	3,500	110	15	<10	<10
	08/19/96	13.97	350	340	15	3.3	3.4	3.3
	12/05/96	14.06	290	370	12	7.6	5.4	16

Table 2a. **Analytic Results for Ground Water - Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Boring ID (Qtrs Sampled)	Date Sampled	Depth to Water (ft)	TPH-G	MTBE	B	T	E	X
			← (Concentrations in µg/L) →					
	12/05/96[dup]	14.06	290	360	13	7.6	5.8	17
	02/20/97	10.60	980	3,200	69	7.9	14	15
MW-4 (Quarterly)	02/13/90	16.73	ND	---	ND	ND	ND	ND
	05/14/90	17.88	650	---	160	7	1.9	3.1
	09/12/90	17.85	440	---	91	1.1	0.75	0.79
	09/12/90[dup]	17.85	520	---	85	0.71	0.71	0.81
	11/27/90	19.16	470	---	64	1.2	0.80	2.7
	03/08/91	15.77	1,100	---	330	3.5	88	5.8
	06/03/91	16.77	670	---	240	2.3	1.6	2.3
	08/30/91	18.71	570	---	64	1.8	0.9	0.9
	11/22/91[SPH]	---	---	---	---	---	---	---
	03/18/92[SPH]	13.15	---	---	---	---	---	---
	05/28/92[SPH]	16.22	---	---	---	---	---	---
	08/19/92[SPH]	18.05	---	---	---	---	---	---
	11/17/92[SPH]	18.89	---	---	---	---	---	---
	02/12/93[SPH]	11.78	---	---	---	---	---	---
	06/10/93	14.20	---	---	---	---	---	---
	08/18/93[SPH]	15.95	---	---	---	---	---	---
	11/19/93[SPH]	18.48	---	---	---	---	---	---
	02/28/94[SPH]	14.60	---	---	---	---	---	---
	05/04/94[SPH]	16.15	---	---	---	---	---	---
	08/10/94[SPH]	17.58	---	---	---	---	---	---
	11/08/94[SPH]	15.05	---	---	---	---	---	---
	02/01/95[SPH]	10.71	---	---	---	---	---	---
	05/10/95	11.90	---	---	---	---	---	---
	08/24/95	14.97	---	---	---	---	---	---
	11/10/95	17.27	4,700	---	100	22	23	38
	02/24/96	10.44	---	---	---	---	---	---
	08/19/96[SPH]	15.23	---	---	---	---	---	---
	12/05/96[SPH]	14.07	---	---	---	---	---	---
	01/08/97	11.60	<10,000	24,000	<100	<100	<100	<100
	02/20/97	11.91	<10,000	59,000	490	<100	<100	<100
	05/30/97	14.68	<2,000	6,100	72	<20	<20	<20

Table 2a. **Analytic Results for Ground Water - Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Boring ID (Qtrs Sampled)	Date Sampled	Depth to Water (ft)	TPH-G	MTBE	B	T	E	X
			← (Concentrations in µg/L) →					
	08/18/97	15.07	<5,000	31,000	150	570	<50	130
	11/03/97	15.87	32,000	78,000[e]	1,100	6,100	640	3,600
MW-5 (1st Quarter)	08/30/91	16.74	ND	---	ND	ND	ND	ND
	11/22/91	17.27	<50	---	<0.5	<0.5	<0.5	<0.5
	03/18/92	11.28	<30	---	<0.3	<0.3	<0.3	<0.3
	05/28/92[b]	---	---	---	---	---	---	---
	08/19/92	15.99	<50	---	<0.5	<0.5	<0.5	<0.5
	11/17/92	16.84	<50	---	<0.5	<0.5	<0.5	<0.5
	02/12/93	10.30	<50	---	<0.5	<0.5	<0.5	<0.5
	06/10/93	12.36	<50	---	<0.5	<0.5	<0.5	<0.5
	08/18/93	14.02	<50	---	<0.5	<0.5	<0.5	<0.5
	11/19/93	16.50	<50	---	<0.5	<0.5	<0.5	<0.5
	11/19/93[dup]	16.50	<50	---	<0.5	<0.5	<0.5	<0.5
	02/18/94	12.55	<50	---	<0.5	<0.5	<0.5	<0.5
	05/04/94	14.27	<50	---	<0.5	<0.5	<0.5	<0.5
	08/10/94	15.60	70[f]	---	<0.5	<0.5	<0.5	<0.5
	11/08/94	12.85	<50	---	<0.5	<0.5	<0.5	<0.5
	02/01/95	8.98	<50	---	<0.5	<0.5	<0.5	<0.5
	05/10/95	10.16	<50	---	<0.5	<0.5	<0.5	<0.5
	05/10/95[dup]	10.16	<50	---	<0.5	<0.5	<0.5	<0.5
	08/24/95	12.98	<50	---	<0.5	<0.5	<0.5	<0.5
	11/10/95	15.12	<50	---	<0.5	<0.5	<0.5	<0.5
	02/24/96[b]	---	---	---	---	---	---	---
	05/22/96	10.10	<2,000	9,800	<20	<20	<20	<20
	08/19/96	13.09	<2,500	13,000	<25	<25	<25	<25
	12/05/96	13.31	<500	2,800	<5.0	<5.0	<5.0	<5.0
	02/20/97	9.55	<1,000	5,600	<10	<10	<10	<10
MW-6 (1st Quarter)	09/21/93	14.64	<50	---	<0.5	<0.5	<0.5	<0.5
	11/19/93[c]	---	---	---	---	---	---	---
	02/28/94	12.18	98[d]	---	<0.5	<0.5	<0.5	<0.5
	05/04/94	13.62	<50	---	<0.5	<0.5	<0.5	<0.5
	08/10/94	14.98	80[f]	---	<0.5	<0.5	<0.5	<0.5

Table 2a. **Analytic Results for Ground Water - Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Boring ID (Qtrs Sampled)	Date Sampled	Depth to Water (ft)	TPH-G	MTBE	B	T	E	X
			← (Concentrations in µg/L) →					
	11/08/94[b]	12.20	---	---	---	---	---	---
	02/01/95	8.70	120	---	3.5	21	3.4	22
	02/01/95[dup]	8.70	110	---	0.6	0.6	0.5	0.9
	05/10/95	9.86	---	---	---	---	---	---
	08/24/95	12.46	80	---	<0.5	<0.5	1.8	2.4
	08/24/95[dup]	12.46	70	---	<0.5	<0.5	1.2	1.3
	11/10/95	14.56	<50	---	<0.5	<0.5	<0.5	<0.5
	11/10/95	14.56	60	---	<0.5	<0.5	<0.5	<0.5
	02/24/96[b]	---	---	---	---	---	---	---
	05/22/96	10.23	<50	290	<0.5	<0.5	<0.5	<0.5
	08/19/96	12.61	<1,250	1,100	<12	<12	<12	<12
	12/05/96	12.47	<125	440	<1.2	<1.2	<1.2	<1.2
	02/20/97	9.85	<100	480	<1.0	<1.0	<1.0	<1.0
BH-A	09/09/93	16.50	4,900	---	18	<5	54	11
BH-B	09/09/93	15.85	<50	---	<0.5	<0.5	<0.5	<0.5
BH-C[e]	09/10/93	15.80	640[f]	---	3.5	<0.5	0.6	<0.5
BH-D[e]	09/10/93	14.2	24,000[f]	---	720	86	44	11
Bailer Blank	08/19/92	---	<50	---	<0.5	<0.5	<0.5	<0.5
	11/17/92	---	<50	---	<0.5	<0.5	<0.5	<0.5
Trip Blank	02/13/90	---	ND	---	ND	ND	ND	ND
	05/14/90	---	ND	---	ND	ND	ND	ND
	09/12/90	---	ND	---	ND	ND	ND	ND
	03/08/91	---	ND	---	ND	ND	ND	ND
	06/03/91	---	ND	---	ND	ND	ND	ND
	08/30/91	---	ND	---	ND	ND	ND	ND
	03/18/92	---	<30	---	<0.3	<0.3	<0.3	<0.3
	05/28/92	---	<50	---	<0.5	<0.5	<0.5	<0.5
	08/19/92	---	<50	---	<0.5	<0.5	<0.5	<0.5

Table 2a. **Analytic Results for Ground Water - Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Boring ID (Qtrs Sampled)	Date Sampled	Depth to Water (ft)	TPH-G	MTBE	B	T	E	X
			← (Concentrations in µg/L) →					
	11/17/92	---	<50	---	<0.5	<0.5	<0.5	<0.5
	02/12/93	---	<50	---	<0.5	<0.5	<0.5	<0.5
	06/10/93	---	<50	---	<0.5	<0.5	<0.5	<0.5
	11/19/93	---	<50	---	<0.5	<0.5	<0.5	<0.5
	02/28/94	---	<50	---	<0.5	<0.5	<0.5	<0.5
	05/04/94	---	<50	---	<0.5	<0.5	<0.5	<0.5
	08/10/94	---	<50	---	<0.5	<0.5	<0.5	<0.5
	11/08/94	---	<50	---	<0.5	<0.5	<0.5	<0.5
	02/01/95	---	<50	---	<0.5	<0.5	<0.5	<0.5
	05/10/95	---	<50	---	<0.5	<0.5	<0.5	<0.5
	08/24/95	---	<50	---	<0.5	<0.5	<0.5	<0.5
	11/10/95	---	<50	---	<0.5	0.7	<0.5	<0.5
MCLs			NE	---	1	150	700	1,750

Abbreviations:

TPH-G = Total petroleum hydrocarbons as gasoline by Modified EPA Method 8015
MTBE = Methyl tert-Butyl Ether by EPA Method 8020
B = Benzene by EPA Method 8020
T = Toluene by EPA Method 8020
E = Ethylbenzene by EPA Method 8020
X = Xylenes by EPA Method 8020
NE = Not established
ND = Not detected
MCLs = California Primary Maximum Contaminant Levels for drinking water (22 CCR 64444)
--- = Not analyzed
dup = Duplicate sample
µg/L = Micrograms per liter

Notes:

a = Concentration reported as gasoline is due to the presence of gasoline and a discrete peak not indicative of gasoline
b = Well inaccessible and not sampled
c = Well inadvertently not sampled
d = The concentration reported as gasoline is primarily due to the presence of a discrete peak not indicative of gasoline
e = Due to chain of custody miscommunication, analyses run after holding time expiration
f = The positive result has an atypical pattern for gasoline analysis
g = MTBE result was reported above the calibration range, therefore the result should be considered an estimate

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Table 2b. **Analytical Results for Groundwater - Non-Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California

Well/Boring ID (Qtrs Sampled)	Date Sampled	Depth to Water (ft)	TPH-D	TPH-MO	POG	Naphthalene*	2-Methylnaphthalene*	DO (mg/L)
			← parts per billion (µg/L) →					
MW-1 (Discontinued)	02/13/90	17.73	650	770	---	---	---	---
	05/14/90	18.92	ND	770	---	---	---	---
	09/12/90	19.81	84	ND	---	---	---	---
	11/27/90	20.39	---	---	---	---	---	---
	03/08/91	16.85	50	ND	---	---	---	---
	06/03/91	17.82	ND	ND	---	---	---	---
	08/30/91	19.87	520	ND	---	---	---	---
	11/22/91	20.58	<50	<500	---	---	---	---
	03/18/92	13.55	<50	---	---	---	---	---
	05/28/92	17.08	<50	---	---	---	---	---
	08/19/92	19.07	<50	---	---	---	---	---
	11/17/92	20.11	<50	---	---	---	---	---
	02/12/93	12.10	<50	---	---	---	---	---
	06/10/93	14.87	---	---	---	---	---	---
	06/10/93[dup]	14.87	---	---	---	---	---	---
	08/18/93	16.90	---	---	---	---	---	---
	11/19/93	19.72	---	---	---	---	---	---
	02/18/94	15.08	---	---	---	---	---	---
	05/04/94	17.20	---	---	---	---	---	---
	08/10/94	18.76	---	---	---	---	---	---
	08/10/94[dup]	18.76	---	---	---	---	---	---
	11/08/94	16.00	---	---	---	---	---	---
	02/01/95	10.18	---	---	---	---	---	---
	05/10/95	11.88	---	---	---	---	---	---
	08/24/95	15.60	---	---	---	---	---	---
	11/10/95	18.24	---	---	---	---	---	---
	02/24/96	9.88	---	---	---	---	---	---
	05/22/96	12.24	---	---	---	---	---	---
	08/19/96	15.86	---	---	---	---	---	---
	12/05/96	16.21	---	---	---	---	---	8.6
	02/20/97	11.60	---	---	---	---	---	8.0
MW-2 (Discontinued)	02/13/90	16.90	560	ND	---	---	---	---
	05/14/90	18.01	ND	ND	---	---	---	---

Table 2b. **Analytic Results for Groundwater - Non-Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Borring ID (Qtrs Sampled)	Date Sampled	Depth to Water (ft)	TPH-D	TPH-MO	POG	Naphthalene*	2-Methylnaphthalene*	DO (mg/L)
			← parts per billion (µg/L) →					
	09/12/90	19.00	ND	ND	---	---	---	---
	11/27/90	19.44	ND	ND	---	---	---	---
	03/08/91	15.96	ND	ND	---	---	---	---
	06/03/91	17.00	ND	ND	---	---	---	---
	08/30/91	18.95	ND	ND	---	---	---	---
	11/22/91	19.55	<50	<500	---	---	---	---
	03/18/92	12.91	---	---	---	---	---	---
	05/28/92	16.25	---	---	---	---	---	---
	08/19/92	18.21	---	---	---	---	---	---
	11/17/92	19.15	---	---	---	---	---	---
	02/12/93[dup]	11.60	---	---	---	---	---	---
	02/12/93	11.60	---	---	---	---	---	---
	06/10/93	14.14	---	---	---	---	---	---
	08/18/93	16.10	---	---	---	---	---	---
	08/18/93[dup]	16.10	---	---	---	---	---	---
	11/19/93	18.77	---	---	---	---	---	---
	02/18/94	14.55	---	---	---	---	---	---
	05/04/94	16.34	---	---	---	---	---	---
	08/10/94	15.79	---	---	---	---	---	---
	11/08/94	15.04	---	---	---	---	---	---
	02/01/95	10.08	---	---	---	---	---	---
	05/10/95	11.68	---	---	---	---	---	---
	08/24/95	14.94	---	---	---	---	---	---
	11/10/95	13.36	---	---	---	---	---	---
	02/24/96	9.90	---	---	---	---	---	---
	02/24/96[dup]	9.90	---	---	---	---	---	---
	05/22/96	11.80	---	---	---	---	---	---
	08/19/96	15.08	---	---	---	---	---	---
	08/19/96[dup]	15.08	---	---	---	---	---	---
	12/05/96	15.16	---	---	---	---	---	7.0
	02/20/97	11.47	---	---	---	---	---	7.1

Table 2b. **Analytic Results for Groundwater - Non-Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Boring ID (Qtrs Sampled)	Date Sampled	Depth to Water (ft)	TPH-D	TPH-MO	POG	Naphthalene*	2-Methylnaphthalene*	DO (mg/L)
			← parts per billion (µg/L) →					
MW-3 (1st Quarter)	02/13/90	15.81	3,100	3,000	---	---	---	---
	02/13/90[dup]	15.81	4,500	8,300	---	---	---	---
	05/14/90	16.97	620	40,000	---	---	---	---
	05/14/90[dup]	16.97	660	10,000	---	---	---	---
	09/12/90	18.78	1,500	19,000	---	---	---	---
	11/27/90	18.27	240	460	---	---	---	---
	03/08/91	14.86	2,100	ND	---	---	---	---
	06/03/91	15.84	690[a]	ND	---	---	---	---
	08/30/91	17.79	370[b]	500	---	---	---	---
	11/22/91	18.40	140	500	---	---	---	---
	03/18/92	12.03	1,900	20,000	---	---	---	---
	05/28/92	15.16	1,100[c]	4,600	---	---	---	---
	08/19/92	17.03	1,000[c]	1,800	---	---	---	---
	11/17/92	17.94	160[c]	1,200	---	---	---	---
	02/12/93	9.16	560[c]	<50	---	---	---	---
	06/10/93	13.20	---	940[d]	---	---	---	---
	08/18/93	14.93	---	460[d]	---	---	---	---
	11/19/93	17.58	---	960[d]	<5,000	---	---	---
	02/18/94	13.30	---	1,600	<5,000	---	---	---
	02/18/94[dup]		---	2,200	<5,000	---	---	---
	05/04/94	15.25	---	710	<5,000	e	e	---
	05/04/94[dup]	15.25	---	1,600	<5,000	f	f	---
	08/10/94	16.63	---	<500	<5,000	ND	ND	---
	11/08/94	13.88	---	1,300	---	---	---	---
	11/08/94[dup]	13.88	---	730	---	---	---	---
	02/01/95	9.25	---	900[j]	---	27	ND	---
	05/10/95	10.76	---	---	<5,000	ND	ND	---
	08/24/95	13.90	---	---	<5,000	12	ND	---
	11/10/95	16.20	---	---	<5,000	---	---	---
	02/24/96	8.93	---	---	<5,000	---	---	---
	05/22/96	10.86	---	---	<5,000	37	8.4	---
	08/19/96	13.97	---	---	9,200	ND	ND	---
	12/05/96	14.06	---	---	---	ND	ND	8.4

Table 2b. **Analytic Results for Groundwater - Non-Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Borring ID (Qtrs Sampled)	Date Sampled	Depth to Water (ft)	TPH-D	TPH-MO	POG	Naphthalene*	2-Methylnaphthalene*	DO (mg/L)
			← parts per billion (µg/L) →					
	12/05/96[dup]	14.06	---	---	---	ND	ND	8.4
	02/20/97	10.60	---	---	<5,000	23	<5.0	8.2
MW-4 (Quarterly)	02/13/90	16.73	1,200	3,000	---	---	---	---
	05/14/90	17.88	350	12,000	---	---	---	---
	09/12/90	17.85	260	2,600	---	---	---	---
	09/12/90[dup]	17.85	1,100	16,000	---	---	---	---
	11/27/90	19.16	2,400	1,000	---	---	---	---
	03/08/91	15.77	2,600	15,000	---	---	---	---
	06/03/91	16.77	1,100	ND	---	6.5	---	---
	08/30/91	18.71	280	2,000	---	11.0	---	---
	11/22/91[SPH]	---	---	---	---	---	---	---
	03/18/92[SPH]	13.15	---	---	---	---	---	---
	05/28/92[SPH]	16.22	---	---	---	---	---	---
	08/19/92[SPH]	18.05	---	---	---	---	---	---
	11/17/92[SPH]	18.89	---	---	---	---	---	---
	02/12/93[SPH]	11.78	---	---	---	---	---	---
	06/10/93	14.20	---	---	---	---	---	---
	08/18/93[SPH]	15.95	---	---	---	---	---	---
	11/19/93[SPH]	18.48	---	---	---	---	---	---
	02/28/94[SPH]	14.60	---	---	---	---	---	---
	05/04/94[SPH]	16.15	---	---	---	---	---	---
	08/10/94[SPH]	17.58	---	---	---	---	---	---
	11/08/94[SPH]	15.05	---	---	---	---	---	---
	02/01/95[SPH]	10.71	---	---	---	---	---	---
	05/10/95	11.90	---	---	---	---	---	---
	08/24/95	14.97	---	---	---	---	---	---
	11/10/95	17.27	---	---	29,000	---	---	---
	02/24/96	10.44	---	---	---	---	---	---
	08/19/96[SPH]	15.23	---	---	---	---	---	---
	12/05/96[SPH]	14.07	---	---	---	---	---	---
	02/20/97	11.91	---	---	8,700	5.6	<5.0	7.0
	05/30/97	14.68	---	---	8,100	<5.0	<5.0	9.0

Table 2b. **Analytic Results for Groundwater - Non-Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Boring ID (Qtrs Sampled)	Date Sampled	Depth to Water (ft)	TPH-D	TPH-MO	POG	Naphthalene*	2-Methylnaphthalene*	DO (mg/L)
			← parts per billion (µg/L) →					
	08/18/97	15.07	---	---	67,000	<5.0	<5.0	3.9
	11/03/97	15.87	---	---	160,000	120	57	1.8
MW-5 (1st Quarter)	08/30/91	16.74	80	ND	---	---	---	---
	11/22/91	17.27	<50	<500	---	---	---	---
	03/18/92	11.28	<50	---	---	---	---	---
	05/28/92[g]	---	---	---	---	---	---	---
	08/19/92	15.99	<50	---	---	---	---	---
	11/17/92	16.84	<50	---	---	---	---	---
	02/12/93	10.30	<50	---	---	---	---	---
	06/10/93	12.36	---	---	---	---	---	---
	08/18/93	14.02	---	---	---	---	---	---
	11/19/93	16.50	---	---	---	---	---	---
	11/19/93[dup]	16.50	---	---	---	---	---	---
	02/18/94	12.55	---	---	---	---	---	---
	05/04/94	14.27	---	---	---	---	---	---
	08/10/94	15.60	---	---	---	---	---	---
	11/08/94	12.85	---	---	---	---	---	---
	02/01/95	8.98	---	---	---	---	---	---
	05/10/95	10.16	---	---	---	---	---	---
	05/10/95[dup]	10.16	---	---	---	---	---	---
	08/24/95	12.98	---	---	---	---	---	---
	11/10/95	15.12	---	---	---	---	---	---
	02/24/96[i]	---	---	---	---	---	---	---
	05/22/96	10.10	---	---	---	---	---	---
	08/19/96	13.09	---	---	---	---	---	---
	12/05/96	13.31	---	---	---	---	---	4.0
	02/20/97	9.55	---	---	---	---	---	4.2
MW-6 (1st Quarter)	09/21/93	14.64	<50	---	<5,000	<10-50	<10-50	---
	11/19/93[h]	---	---	---	---	---	---	---
	02/28/94	12.18	---	---	<5,000	---	---	---
	05/04/94	13.62	---	---	<5,000	<2-10	<2-10	---

Table 2b. **Analytic Results for Groundwater - Non-Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Borring ID (Qtrs Sampled)	Date Sampled	Depth to Water (ft)	TPH-D	TPH-MO	POG	Naphthalene*	2-Methylnaphthalene*	DO (mg/L)
			← parts per billion (µg/L) →					
	08/10/94	14.98	---	---	<5,000	ND	ND	---
	11/08/94[j]	12.20	---	---	---	---	---	---
	02/01/95	8.70	---	---	---	---	---	---
	02/01/95[dup]	8.70	---	---	---	---	---	---
	05/10/95	9.86	---	---	---	---	---	---
	08/24/95	12.46	---	---	---	---	---	---
	08/24/95[dup]	12.46	---	---	---	---	---	---
	11/10/95	14.56	---	---	---	---	---	---
	11/10/95	14.56	---	---	---	---	---	---
	02/24/96[j]	---	---	---	---	---	---	---
	05/22/96	10.23	---	---	---	---	---	---
	08/19/96	12.61	---	---	---	---	---	---
	12/05/96	12.47	---	---	---	---	---	3.6
	02/20/97	9.85	---	---	---	---	---	3.9
BH-A	09/09/93	16.50	2,900[e]	---	<5,000	23	13	---
BH-B	09/09/93	15.85	150	---	<5,000	ND	ND	---
BH-C[i]	09/10/93	15.80	100	---	<5,000	ND	ND	---
BH-D[i]	09/10/93	14.2	25,000[e]	---	20,000	18	75	---
Bailer Blank	08/19/92	---	---	---	---	---	---	---
	11/17/92	---	---	---	---	---	---	---
Trip Blank	02/13/90	---	---	---	---	---	---	---
	05/14/90	---	---	---	---	---	---	---
	09/12/90	---	---	---	---	---	---	---
	03/08/91	---	---	---	---	---	---	---
	06/03/91	---	---	---	---	---	---	---
	08/30/91	---	---	---	---	---	---	---
	03/18/92	---	<50	---	---	---	---	---

Table 2b. **Analytic Results for Groundwater - Non-Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Well/Boring ID (Qtrs Sampled)	Date Sampled	Depth to Water (ft)	TPH-D	TPH-MO	POG	Naphthalene*	2-Methylnaphthalene*	DO (mg/L)
			← parts per billion (µg/L) →					
	05/28/92	---	---	---	---	---	---	---
	08/19/92	---	---	---	---	---	---	---
	11/17/92	---	---	---	---	---	---	---
	02/12/93	---	---	---	---	---	---	---
	06/10/93	---	---	---	---	---	---	---
	11/19/93	---	---	---	---	---	---	---
	02/28/94	---	---	---	---	---	---	---
	05/04/94	---	---	---	---	---	---	---
	08/10/94	---	---	---	---	---	---	---
	11/08/94	---	---	---	---	---	---	---
	02/01/95	---	---	---	---	---	---	---
	05/10/95	---	---	---	---	---	---	---
	08/24/95	---	---	---	---	---	---	---
	11/10/95	---	---	---	---	---	---	---

Table 2b. **Analytic Results for Groundwater - Non-Gasoline Components** - Shell Service Station WIC #204-5508-3301, 6039 College Avenue, Oakland, California (continued)

Abbreviations:

TPH-D = Total petroleum hydrocarbons as diesel by modified EPA Method 8015
TPH-MO = Total petroleum hydrocarbons as motor oil by modified EPA Method 8015
POG = Polar oil & grease by EPA Method 5520B/F
DO = Dissolved oxygen
* = Semi-volatile organic compounds by EPA Method 8270; only detected compounds tabulated
--- = Not analyzed or measured
<n = Not detected at detection limits of n µg/L
ND = Not detected, detection limit not known
SPH = Separate-phase hydrocarbons in well, not sampled
dup = Duplicate sample
mg/L = milligrams per liter
µg/L = micrograms per lite
ft = Feet

Notes:

a = Positive results for diesel appear to be less volatile constituents of gasoline
b = Positive results for diesel has a typical diesel pattern
c = Concentration reported as diesel is primarily due to the presence of a lighter petroleum product, possibly gasoline or kerosene
d = Concentration reported as motor oil is due to the presence of a combination of motor oil and a lighter petroleum product of hydrocarbon range C6-C12, possibly gasoline
e = Compounds are within chromatographic range of gasoline but are not characteristic of the standard gasoline pattern
f = Results include compounds apparently due to gasoline as well as those due to diesel
g = Well inaccessible and not sampled
h = Well inadvertently not sampled
i = Due to chain of custody miscommunication analyses run after holding time expiration
j = Concentration reported as motor oil is due to the presence of heavier and lighter petroleum products

Table 3. **Separate-Phase Hydrocarbon Removal** - Shell Service Station
WIC #204-5508-3301, 6039 College Avenue, Oakland, California

Well ID	Date	Separate-Phase Hydrocarbon Thickness (ft)	Separate-Phase Hydrocarbons Removed (lbs)	Cumulative Hydrocarbons Removed (lbs)
MW-4[a]	01/15/92	---	3.12	3.12
	02/15/92	---	3.12	6.24
	03/18/92	0.24	---	6.24
	04/29/92	---	1.50	7.74
	05/28/92	0.12	0.18	7.92
	08/19/92	0.09	0.96	8.86
	11/17/92	---	0.96	9.82
	02/12/93	<0.01	---	9.82
	06/10/93	0.02	0.06	9.88
	08/18/93	0.01	0.06	9.94
	11/19/93	0.01	0.06	10.00
	02/28/94	0.01	0.06	10.06
	05/04/94	0.00	0.06	10.12
	08/10/94	0.02	0.06	10.18
	11/10/94	0.05	0.08	10.26
	02/01.95	0.04	0.06	10.32
	05/10/95	0.06	0.16	10.48
	08/24/95	0.02	---	10.48
	11/10/95	<0.01	---	10.48
	02/24/96	0.03	0.44	10.92
	05/22/96	0.03	---	10.92
	08/19/96	0.02	---	10.92
	12/05/96	0.02	---	10.92
	01/08/97	0.02	0.08	11.00
	05/30/97	---	---	11.00
	08/18/97	---	---	11.00
	11/03/97	---	---	11.00

Abbreviations & Notes:

ft = Feet
lbs = Pounds
--- = Not measured or no hydrocarbons removed
a = Petrotrap separate-phase hydrocarbon skimmer installed in well

CAMBRIA

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

December 16, 1997

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

Attn: Alex Perez

Shell WIC #204-5508-3301
6039 College Avenue
Oakland, California

4th Quarter 1997

Groundwater Monitoring Report 971103-D-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	11/03/97	TOC	--	NONE	--	--	16.02	24.47
MW-2	11/03/97	TOC	--	NONE	--	--	15.54	24.38
MW-3	11/03/97	TOC	--	NONE	--	--	14.49	24.90
MW-4	11/03/97	TOC	SHEEN	NONE	--	--	15.87	24.49
MW-5	11/03/97	TOC	--	NONE	--	--	13.66	28.67
MW-6	11/03/97	INACCESSIBLE	--					
T-1	11/03/97	TOC	--	NONE	--	--	DRY	4.31
T-2	11/03/97	TOC	--	NONE	--	--	DRY	8.01

9711254

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: ~~204-5508-3301~~ 97103-01

Date: 11/3/97
Page 1 of 1

Site Address: 6039 College Ave., Oakland

WIC#: 204-5508-3301

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: Daniel Vanor

Printed Name: Daniel Vanor

LAB: Sequoia

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602) + MTBE	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	EPA 8270	Oil + Grease	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW-4	11/3			X		7	X		X				X	X					3 VOAs 2 L HCL, 2L unpreserved	

CHECK ONE (1) BOX ONLY

	CT/DT	TURN AROUND TIME
Quarterly Monitoring	☒ 6441	24 hours ☐
Site Investigation	☐ 6441	48 hours ☐
Soil Closure/Disposal	☐ 6442	10 days ☒ (Norm
Water Closure/Disposal	☐ 6443	Other ☐
Soil/Air Rem. or Syst. O & M	☐ 6452	
Water Rem. or Syst. O & M	☐ 6453	
Other	☐	

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

Relinquished By (signature):	Printed Name:	Date: 11/4/97 Time: 11:40	Received (signature):
Relinquished By (signature):	Printed Name:	Date: 11/4/97 Time:	Received (signature):
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):

Printed Name: Fulcher — Date: 11/4/97 Time: 11:40
Printed Name: — Date: Time:
Printed Name: — Date: 11/4/97

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/971103-D1

Enclosed are the results from samples received at Sequoia Analytical on November 4, 1997. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
9711254 -01	LIQUID, MW-4	11/03/97	TRPH (SM 5520 B&F)
9711254 -01	LIQUID, MW-4	11/03/97	8270 SemiVolatile Organi
9711254 -01	LIQUID, MW-4	11/03/97	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
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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/971103-D1

Lab Proj. ID: 9711254

Sampled: 11/03/97
Received: 11/04/97
Analyzed: see below

Reported: 12/01/97

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9711254-01 Sample Desc : **LIQUID,MW-4**				
TRPH (SM 5520 B&F)	**mg/L**	**11/12/97**	**5.0**	**160**

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, (650) 364-9600, FAX (650) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services	Client Proj. ID: Shell Oakland/971103-D1	Sampled: 11/03/97
1680 Rogers Avenue	Sample Descript: MW-4	Received: 11/04/97
San Jose, CA 95112	Matrix: LIQUID	Extracted: 11/10/97
	Analysis Method: EPA 8270	Analyzed: 11/11/97
Attention: Fran Thie	Lab Number: 9711254-01	Reported: 12/01/97

QC Batch Number: MS1110978270EXA
Instrument ID: F4

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acenaphthene	5.0	N.D.
Acenaphthylene	5.0	N.D.
Anthracene	5.0	N.D.
Benzoic Acid	10	N.D.
Benzo(a)anthracene	5.0	N.D.
Benzo(b)fluoranthene	5.0	N.D.
Benzo(k)fluoranthene	5.0	N.D.
Benzo(g,h,i)perylene	5.0	N.D.
Benzo(a)pyrene	5.0	N.D.
Benzyl alcohol	5.0	N.D.
Bis(2-chloroethoxy)methane	5.0	N.D.
Bis(2-chloroethyl)ether	5.0	N.D.
Bis(2-chloroisopropyl)ether	5.0	N.D.
Bis(2-ethylhexyl)phthalate	10	N.D.
4-Bromophenyl phenyl ether	5.0	N.D.
Butyl benzyl phthalate	5.0	N.D.
4-Chloroaniline	10	N.D.
2-Chloronaphthalene	5.0	N.D.
4-Chloro-3-methylphenol	5.0	N.D.
2-Chlorophenol	5.0	N.D.
4-Chlorophenyl phenyl ether	5.0	N.D.
Chrysene	5.0	N.D.
Dibenzo(a,h)anthracene	5.0	N.D.
Dibenzofuran	5.0	N.D.
Di-n-butyl phthalate	10	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
3,3-Dichlorobenzidine	10	N.D.
2,4-Dichlorophenol	5.0	N.D.
Diethyl phthalate	5.0	N.D.
2,4-Dimethylphenol	5.0	N.D.
Dimethyl phthalate	5.0	N.D.
4,6-Dinitro-2-methylphenol	10	N.D.
2,4-Dinitrophenol	10	N.D.
2,4-Dinitrotoluene	5.0	N.D.
2,6-Dinitrotoluene	5.0	N.D.
Di-n-octyl phthalate	5.0	N.D.
Fluoranthene	5.0	N.D.

Sequoia Analytical

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

Blaine Tech Services	Client Proj. ID: Shell Oakland/971103-D1	Sampled: 11/03/97
1680 Rogers Avenue	Sample Descript: MW-4	Received: 11/04/97
San Jose, CA 95112	Matrix: LIQUID	Extracted: 11/10/97
	Analysis Method: EPA 8270	Analyzed: 11/11/97
Attention: Fran Thie	Lab Number: 9711254-01	Reported: 12/01/97

QC Batch Number: MS1110978270EXA
Instrument ID: F4

Analyte	Detection Limit ug/L	Sample Results ug/L
Fluorene	5.0	N.D.
Hexachlorobenzene	5.0	N.D.
Hexachlorobutadiene	5.0	N.D.
Hexachlorocyclopentadiene	10	N.D.
Hexachloroethane	5.0	N.D.
Indeno(1,2,3-cd)pyrene	5.0	N.D.
Isophorone	5.0	N.D.
2-Methylnaphthalene	**5.0**	**57**
2-Methylphenol	5.0	N.D.
4-Methylphenol	5.0	N.D.
Naphthalene	**5.0**	**120**
2-Nitroaniline	10	N.D.
3-Nitroaniline	10	N.D.
4-Nitroaniline	10	N.D.
Nitrobenzene	5.0	N.D.
2-Nitrophenol	5.0	N.D.
4-Nitrophenol	10	N.D.
n-Nitrosodiphenylamine	5.0	N.D.
n-Nitroso-di-n-propylamine	5.0	N.D.
Pentachlorophenol	10	N.D.
Phenanthrene	5.0	N.D.
Phenol	5.0	N.D.
Pyrene	5.0	N.D.
1,2,4-Trichlorobenzene	5.0	N.D.
2,4,5-Trichlorophenol	10	N.D.
2,4,6-Trichlorophenol	5.0	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorophenol	21	110	47
Phenol-d5	10	110	37
Nitrobenzene-d5	35	114	72
2-Fluorobiphenyl	43	116	81
2,4,6-Tribromophenol	10	123	94
p-Terphenyl-d14	33	141	50

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 Tech Services	Client Proj. ID: Shell Oakland/971103-D1	Sampled: 11/03/97
1680 Rogers Avenue	Sample Descript: MW-4	Received: 11/04/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 11/15/97
Attention: Fran Thie	Lab Number: 9711254-01	Reported: 12/01/97

QC Batch Number: GC111597BTEX22A
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10000	32000
Methyl t-Butyl Ether	500	78000 (J)
Benzene	100	1100
Toluene	100	6100
Ethyl Benzene	100	640
Xylenes (Total)	100	3600
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	110

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, (650) 364-9600, FAX (650) 364-9233
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Blaine Tech Services, Inc.	Client Project ID:	Shell Oakland / 971103-D1	
1680 Rogers Ave.	Matrix:	Liquid	
San Jose, CA 95112			
Attention: Fran Thie	Work Order #:	9711254 -01	Reported: Dec 2, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Total Recoverable Petroleum Hydrocarbons
QC Batch#:	IN110597552000A
Analy. Method:	SM 5520 BF
Prep. Method:	N.A.

Analyst:	P. Cheung
MS/MSD #:	BLK110597
Sample Conc.:	N.D.
Prepared Date:	11/5/97
Analyzed Date:	11/6/97
Instrument I.D.#:	MANUAL
Conc. Spiked:	10 mg/L
Result:	9.2
BS % Recovery:	92
Dup. Result:	7.9
BSD % Recov.:	79
RPD:	15
RPD Limit:	0-30

LCS #:	LCS111197
Prepared Date:	11/11/97
Analyzed Date:	11/12/97
Instrument I.D.#:	MANUAL
Conc. Spiked:	10 mg/L
LCS Result:	8.7
LCS % Recov.:	87

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

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 / 971103-D1
Matrix: Liquid
Work Order #: 9711254-01
Reported: Dec 2, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC111597BTEX22A	GC111597BTEX22A	GC111597BTEX22A	GC111597BTEX22A	GC111597BTEX22A
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 #:	971161103	971161103	971161103	971161103	971161103
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/15/97	11/15/97	11/15/97	11/15/97	11/15/97
Analyzed Date:	11/15/97	11/15/97	11/15/97	11/15/97	11/15/97
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	8.7	8.5	8.6	24	50
MS % Recovery:	87	85	86	80	83
Dup. Result:	8.6	8.8	8.7	24	51
MSD % Recov.:	86	88	87	80	85
RPD:	1.2	3.5	1.2	0.0	2.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK111597	BLK111597	BLK111597	BLK111597	BLK111597
Prepared Date:	11/15/97	11/15/97	11/15/97	11/15/97	11/15/97
Analyzed Date:	11/15/97	11/15/97	11/15/97	11/15/97	11/15/97
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	10	10	29	58
LCS % Recov.:	100	100	100	97	97
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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Matrix: Liquid
Work Order #: 9711254-01
Reported: Dec 2, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine
QC Batch#:	MS1110978270EXA	MS1110978270EXA	MS1110978270EXA	MS1110978270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	971125401	971125401	971125401	971125401
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/10/97	11/10/97	11/10/97	11/10/97
Analyzed Date:	11/11/97	11/11/97	11/11/97	11/11/97
Instrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
Result:	97	167	158	167
MS % Recovery:	49	84	79	84
Dup. Result:	122	180	163	175
MSD % Recov.:	61	90	82	88
RPD:	23	7.5	3.1	4.7
RPD Limit:	0-30	0-30	0-30	0-30
LCS #:	LCS111097	LCS111097	LCS111097	LCS111097
Prepared Date:	11/10/97	11/10/97	11/10/97	11/10/97
Analyzed Date:	11/11/97	11/11/97	11/11/97	11/11/97
Instrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
LCS Result:	170	159	142	164
LCS % Recov.:	85	80	71	82
MS/MSD LCS Control Limits	12-110	27-123	36-97	41-116

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QUALITY CONTROL DATA REPORT

Analyte:	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol	Acenaphthene	4-Nitrophenol
QC Batch#:	MS1110978270EXA	MS1110978270EXA	MS1110978270EXA	MS1110978270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	971125401	971125401	971125401	971125401
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/10/97	11/10/97	11/10/97	11/10/97
Analyzed Date:	11/11/97	11/11/97	11/11/97	11/11/97
Instrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
Result:	169	171	166	69
MS % Recovery:	85	86	83	35
Dup. Result:	176	178	164	72
MSD % Recov.:	88	89	82	36
RPD:	4.1	4.0	1.2	4.3
RPD Limit:	0-30	0-30	0-30	0-30
LCS #:	LCS111097	LCS111097	LCS111097	LCS111097
Prepared Date:	11/10/97	11/10/97	11/10/97	11/10/97
Analyzed Date:	11/11/97	11/11/97	11/11/97	11/11/97
Instrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	200 µg/L
LCS Result:	160	161	136	121
LCS % Recov.:	80	81	68	61
MS/MSD LCS Control Limits	39-98	23-97	46-118	10-80

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Reported: Dec 2, 1997

QUALITY CONTROL DATA REPORT

Analyte:	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
QC Batch#:	MS1110978270EXA	MS1110978270EXA	MS1110978270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3510	EPA 3510	EPA 3510
Analyst:	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	971125401	971125401	971125401
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	11/10/97	11/10/97	11/10/97
Analyzed Date:	11/11/97	11/11/97	11/11/97
Instrument I.D.#:	F4	F4	F4
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L
Result:	179	190	112
MS % Recovery:	90	95	56
Dup. Result:	182	183	119
MSD % Recov.:	91	92	60
RPD:	1.7	3.8	6.1
RPD Limit:	0-30	0-30	0-30
LCS #:	LCS111097	LCS111097	LCS111097
Prepared Date:	11/10/97	11/10/97	11/10/97
Analyzed Date:	11/11/97	11/11/97	11/11/97
Instrument I.D.#:	F4	F4	F4
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L
LCS Result:	155	126	137
LCS % Recov.:	78	63	69
MS/MSD LCS Control Limits	24-96	9-103	26-127

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Client Proj. ID: Shell Oakland/971103-D1

Lab Proj. ID: 9711254

Received: 11/04/97

Reported: 12/01/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 11 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

MTBE Note: MTBE result was reported above the calibration range therefore the results should be considered an estimate.

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