CAMBRIA

February 2, 1998

Eva Chu
Alameda County Department of
Environmental Health
Hazardous Materials Division
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502-6577

8240

Re: **Fourth Quarter 1997 Monitoring Report**
Shell Service Station
1601 Webster Street
Alameda, California 94501
WIC #204-0072-0403
Cambria Project #24-314-497

Dear Ms. Chu:

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

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

ANTICIPATED FUTURE 1998 ACTIVITIES

The next sampling event is scheduled for second quarter 1998. At that time, Blaine will measure ground water depths and collect ground water samples from the site wells and Cambria will submit a report presenting a summary of activities at the site.

CAMBRIA
ENVIRONMENTAL
TECHNOLOGY, INC.
1144 65TH STREET,
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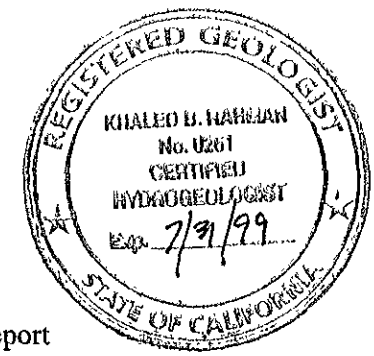
CAMBRIA

CLOSING

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

Sincerely,
Cambria Environmental Technology, Inc.

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



Attachments: A - Blaine Quarterly Ground Water Monitoring Report

cc: A.E. (Alex) Perez, Shell Oil Products Company, P.O. Box 8080, Martinez, California 94553
Brad Boschetto, Shell Oil Products Company, 3611 S. Harbor Blvd, Suite 160, Santa Ana, California 92704

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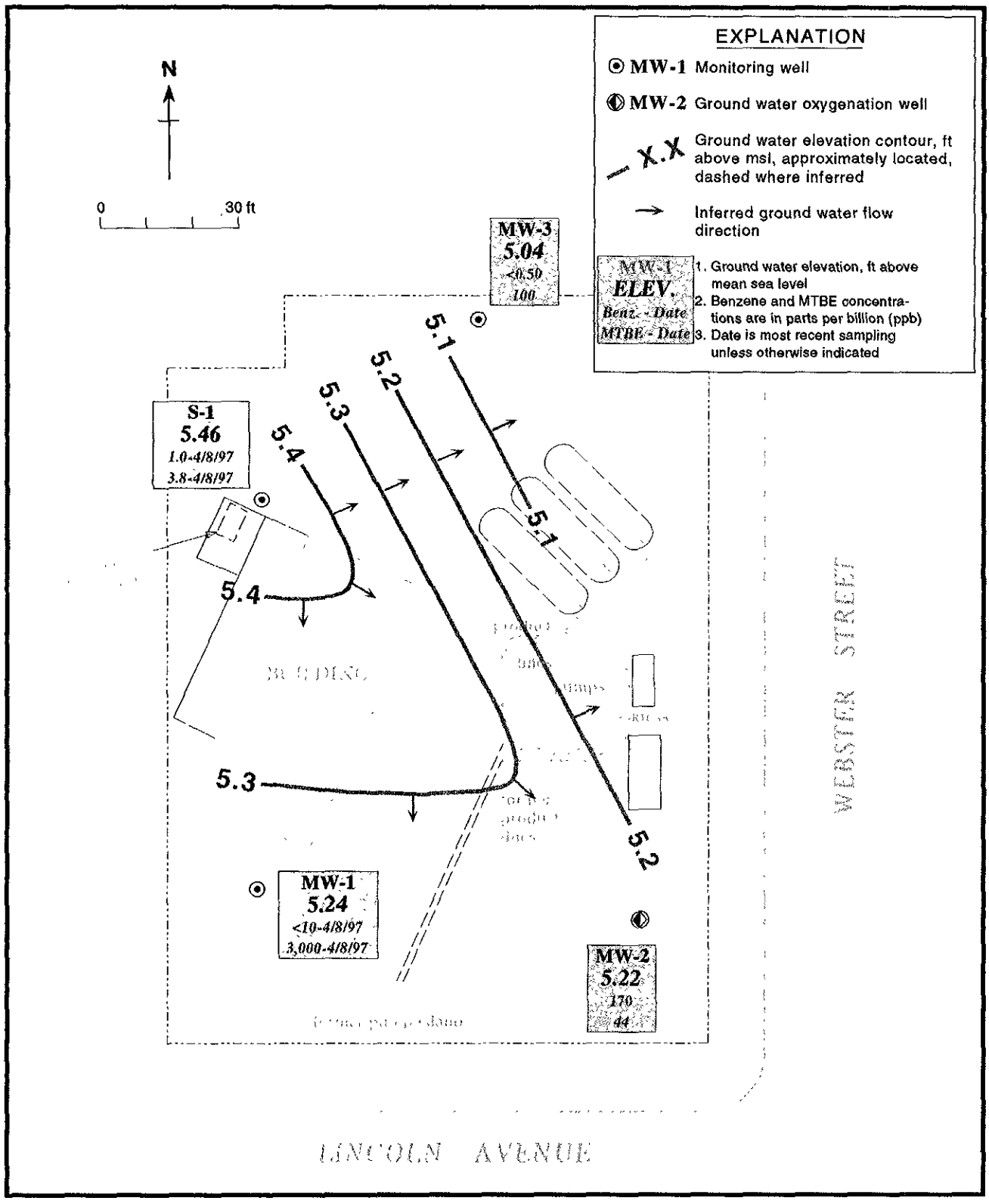

Figure 1. Ground Water Elevation Contours - October 16, 1997 - Shell Service Station WIC #204-0072-0403, 1601 Webster Street, Alameda, California

Table 1. **Ground Water Elevations** - Shell Service Station WIC #204-0072-0403, 1601 Webster Street, Alameda, California

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
MW-1	04/11/90	13.80	8.22	5.58
	07/18/90		9.14	4.66
	10/18/90		10.37	3.43
	01/25/91		10.41	3.39
	04/11/91		7.37	6.43
	07/18/91		8.86	4.94
	10/17/91		10.47	3.33
	01/24/92		9.18	4.62
	04/23/92		6.95	6.85
	07/22/92		8.01	5.79
	10/02/92		9.81	3.99
	01/05/93		7.26	6.54
	04/08/93	13.80[a]	5.85	7.95
	07/20/93		6.83	6.97
	10/15/93		8.07	5.73
	01/07/94		7.82	5.98
	04/13/94		6.91	6.89
	07/26/94		7.51	6.29
	10/06/94		8.71	5.09
	01/26/95		5.43	8.37
	04/20/95		5.50	8.30
	07/12/95		6.48	7.32
	10/12/95		7.44	6.36
	01/11/96		6.95	6.85
	04/10/96		5.78	8.02
	07/12/96		6.65	7.15
	10/17/96		7.48	6.32
	04/08/97		6.16	7.64
	10/16/97		**8.56**	**5.24**
MW-2	04/11/90	13.20	7.69	5.51
	07/18/90		8.56	4.64
	10/18/90		9.76	3.44
	01/25/91		9.78	3.42
	04/11/91		6.87	6.33
	07/18/91		8.27	4.93
	10/17/91		9.89	3.31
	01/24/92		8.60	4.60
	04/23/92		6.48	6.72
	07/02/92		7.37	5.83
	10/02/92		9.20	4.00
	01/05/93		6.80	6.40
	04/08/93	13.20[a]	5.40	7.80
	07/20/93		6.05	7.15

Table 1. **Ground Water Elevations** - Shell Service Station WIC #204-0072-0403, 1601 Webster Street, Alameda, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
	10/15/93		7.04	6.16
	01/07/94		6.99	6.21
	04/13/94		6.20	7.00
	07/26/94		6.63	6.57
	10/06/94		7.75	5.45
	01/26/95		4.49	8.71
	04/20/95		5.28	7.92
	07/12/95		5.84	7.36
	10/12/95		6.68	6.52
	01/11/96		6.29	6.91
	04/10/96		5.48	7.72
	07/12/96		6.02	7.18
	10/17/96		6.95	6.25
	04/08/97		5.83	7.37
	10/16/97		**7.98**	**5.22**
MW-3	04/08/93	12.80	5.48	7.32
	07/20/93		6.38	6.42
	10/15/93		7.53	5.27
	01/07/94		7.38	5.42
	04/13/94		6.50	6.30
	07/26/94		7.00	5.80
	10/06/94		8.10	4.70
	01/26/95		5.00	7.80
	04/20/95		5.24	7.56
	07/12/95		6.10	6.70
	10/12/95		6.98	5.82
	01/11/96		6.48	6.32
	04/10/96		5.57	7.23
	07/12/96		6.23	6.57
	10/17/96		7.18	5.62
	04/08/97		5.75	7.05
	10/16/97		**7.76**	**5.04**
S-1	09/11/89	13.77	9.82	3.95
	04/11/90		8.41	5.36
	07/18/90		9.31	4.46
	10/18/90		10.43	3.34
	01/25/91		10.49	3.28
	04/11/91		7.68	6.09
	07/18/91		8.95	4.82
	10/17/91		10.62	3.15
	01/24/92		9.32	4.45
	04/23/92		7.27	6.50

Table 1. **Ground Water Elevations** - Shell Service Station WIC #204-0072-0403, 1601 Webster Street, Alameda, California (continued)

Well ID	Date	Top-of-Casing Elevation (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
	07/02/92		8.19	5.58
	10/02/92		9.95	3.82
	01/05/93		7.64	6.13
	04/08/93	13.74[a]	6.10	7.64
	07/20/93		7.18	6.56
	10/15/93		8.39	5.35
	01/07/94		8.19	5.55
	04/13/94		7.22	6.52
	07/26/94		7.82	5.92
	10/06/94		9.01	4.73
	01/26/95		5.65	8.09
	04/20/95		6.82	6.92
	07/12/95		6.74	7.00
	10/12/95		7.76	5.98
	01/11/96		7.24	6.50
	04/10/96		5.80	7.94
	07/12/96		6.60	7.14
	10/17/96		7.63	6.11
	04/08/97		6.00	7.74
	10/16/97		**8.28**	**5.46**

Abbreviations and Notes:

a = Top of casing resurveyed on March 30, 1993
ft = Feet
msl = Mean sea level

Table 2. **Analytic Results for Ground Water** - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, California

Well ID and Sample Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	T	E	X	c-1,2-DCE	1,2-DCA	TOG	MTBE	DO (mg/L)
			← parts per billion (µg/L) →										
MW-1 (Annually, 2nd Qtr.)	04/11/90	8.22	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10,000	—	—
	07/18/90	9.14	<50	—	<0.5	<0.5	<0.5	<0.5	3	<0.5	<5,000	—	—
	10/18/90	10.37	<50	—	<0.5	<0.5	<0.5	<0.5	7.9	<0.5	<5,000	—	—
	01/25/91	10.41	<50	—	<0.5	<0.5	<0.5	<0.5	5.6	<0.5	—	—	—
	04/11/91	7.37	<50	—	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	—	—	—
	07/18/91	8.86	<50	—	<0.5	<0.5	<0.5	<0.5	4.4	<0.5	—	—	—
	10/17/91	10.47	<50	—	<0.5	<0.5	<0.5	<0.5	7.2	<0.5	—	—	—
	01/24/92	9.18	<50	—	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	—	—	—
	04/23/92	6.95	<50		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	—
	07/02/92	8.01	<50	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	—
	10/02/92	9.81	<50	—	<0.5	<0.5	<0.5	<0.5	2	<0.5	—	—	—
	01/05/93	7.26	<50	—	<0.5	<0.5	<0.5	<0.5	2	<0.5	—	—	—
	04/08/93[a]	5.85	<50	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	—	—
	07/20/93[b]	6.83	<50	—	<0.5	<0.5	<0.5	<0.5	0.76	<0.5	—	—	—
	10/15/93	8.07	<50	—	<0.5	<0.5	<0.5	<0.5	0.71	<0.5	—	—	—
	01/07/94	7.82	<50	—	<0.5	<0.5	<0.5	<0.5	3.1	0.85	—	—	5.5
	04/13/94	6.91	<50	—	<0.5	<0.5	<0.5	<0.5	3.6	0.95	—	—	—
	07/26/94	7.51	<50	—	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	—	—	2.8
	10/06/94[c]	8.71	<50	—	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	—	—	4.0
	04/20/95	5.50	<50	—	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	—	—	—
	04/10/96	5.78	<50	—	<0.5	<0.5	<0.5	<0.5	—	—	—	<2.5	—
	07/12/96	6.65	—	—	—	—	—	—	—	—	—	—	—
	10/17/96	7.48	—	—	—	—	—	—	—	—	—	—	—
	04/08/97	6.16	<1,000	—	<10	<10	<10	<10	<1.2	<1.2	—	3,000	2.6
MW-2 (Biannually, 2nd & 4th Qtr.)	04/11/90	7.69	580	430	20	4.9	1.2	73	<0.5	1.1	<10,000	—	—
	07/18/90	8.56	1,400	—	110	310	71	310	<0.5	0.7	<5,000	—	—
	10/18/90	9.76	1,900	1,300[d]	110	470	89	400	<0.5	0.9	<5,000	—	—
	01/25/91	9.78	8,100	—	430	1,200	480	2,600	<0.5	0.8	—	—	—
	04/11/91	6.87	2,600	—	130	150	250	330	<0.5	<0.5	—	—	—
	07/15/91	8.27	1,300	—	100	59	84	120	<0.5	0.8	—	—	—
	10/17/91	9.89	2,100	—	180	260	150	520	<0.5	0.6	—	—	—
	01/24/92	8.60	7,100	—	450	450	960	1,600	110	<0.5	—	—	—
	04/23/92	6.48	16,000	—	320	740	650	2,600	<2.5	<2.5	—	—	—

Table 2. **Analytic Results for Ground Water** - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, California (continued)

Well ID and Sample Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	T	E	X	c-1,2-DCE	1,2-DCA	TOG	MTBE	DO (mg/L)
			← parts per billion (µg/L) →										
	07/02/92	7.37	33,000	---	2,500	3,700	2,000	9,600	<50	<50	---	---	---
	10/02/92	9.20	7,000	---	960	650	570	1,200	<50	<50	---	---	---
	01/05/93	6.80	8,900	---	550	500	600	1,900	<2	<2	---	---	---
	04/08/93	5.40	13,000	---	670	580	900	2,900	0.68	<0.5	---	---	---
	04/08/93[dup]	5.40	13,000	---	830	740	1,100	3,700	0.64	<0.5	---	---	---
	07/20/93	6.05	10,000	---	1,200	630	1,100	4,000	0.87	<0.5	---	---	---
	07/20/93[dup]	6.05	12,000	---	1,200	600	1,100	3,800	0.80	<0.5	---	---	---
	10/15/93	7.04	24,000	---	1,400	3,400	1,200	5,200	<0.5	<0.5	---	---	---
	10/15/93[dup]	7.04	19,000	---	1,200	2,800	1,000	4,400	<0.5	<0.5	---	---	---
	01/07/94	6.99	27,000	---	1,300	2,700	1,900	7,900	<10	<10	---	---	3.6
	01/07/94[dup]	6.99	33,000	---	1,100	2,300	1,700	6,900	<10	<10	---	---	3.6
	04/13/94	6.20	16,000	---	460	93	820	2,700	<25	<25	---	---	---
	04/13/94[dup]	6.20	18,000	---	500	100	880	3,000	<25	<25	---	---	---
	07/26/94	6.63	25,000	---	1,600	1,500	1,500	6,800	<0.4	<0.4	---	---	3.2
	07/26/94[dup]	6.63	28,000	---	1,700	1,600	1,600	7,300	<0.4	<0.4	---	---	3.2
	10/06/94	7.75	15,000	---	850	650	1,000	4,000	<0.4	<0.4	---	---	2.4
	10/06/94[dup]	7.75	17,000	---	1000	630	1,200	4,500	<0.4	<0.4	---	---	2.4
	01/26/95	4.49	3,200	---	63	14	300	1,000	<0.4	<0.4	---	---	1.6
	01/26/95[dup]	4.49	3,100	---	31	13	140	820	<0.4	<0.4	---	---	1.6
	04/20/95	5.28	<50	---	4.4	<0.5	1.3	3.3	<0.4	<0.4	---	---	---
	04/20/95[dup]	5.28	<50	---	0.5	<0.5	0.6	3.3	<0.4	<0.4	---	---	---
	07/12/95	5.84	<50	---	1.1	1.1	<0.5	<0.5	---	---	---	---	10.4
	07/12/95[dup]	5.84	<50	---	0.9	0.8	<0.5	<0.5	---	---	---	---	10.4
	10/12/95	6.68	370	---	20	3.0	8.2	92	<0.5	<0.4	---	---	6.4
	01/11/96	6.29	90	---	3.8	<0.5	3.5	3.0	0.6	<0.4	---	---	5.8
	04/10/96	5.48	61	---	9.9	<0.5	3.6	1.8	---	---	---	<2.5	---
	04/10/96[dup]	5.48	54	---	10	<0.5	4.0	1.7	---	---	---	<2.5	---
	07/12/96	6.02	510	---	25	1.9	39	61	<1.0	<1.0	---	3.3	2.3
	07/12/96[dup]	6.02	510	---	24	2.0	38	59	<1.0	<1.0	---	5.5	2.3
	10/17/96	6.95	4,100	---	130	13	280	590	0.52	<0.5	---	26	2.2
	10/17/96[dup]	6.95	3,500	---	120	12	230	510	0.58	<0.5	---	(<20)	2.2
	04/08/97	5.83	1,500	---	77	19	120	32	0.59	<0.50	---	5.7	2.6

Table 2. **Analytic Results for Ground Water** - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, California (continued)

Well ID and Sample Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	T	E	X	c-1,2-DCE	1,2-DCA	TOG	MTBE	DO (mg/L)
			← parts per billion (µg/L) →										
	10/16/97	**7.98**	**4,000**	**---**	**160**	**<5.0**	**250**	**140**	**<2.5**	**<2.5**	**---**	**44**	**2.4**
	10/16/97[dup]	**7.98**	**4,000**	**---**	**170**	**<5.0**	**270**	**98**	**<1.0**	**<1.0**	**---**	**<2.5**	**2.4**
MW-3	02/25/93	5.37	58	140	<0.5	<0.5	2.5	6.4	<0.5	1.5	<5,000	---	---
(Biannually,	04/08/93	5.48	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---
2nd & 4th Qtr.)	07/20/93[e]	6.38	<50	---	1.2	<0.5	<0.5	<0.5	<0.5	2.8	---	---	---
	10/15/93[f]	7.53	60	---	<0.5	<0.5	<0.5	<0.5	<0.5	0.55	---	---	---
	01/07/94	7.38	74	---	<0.5	<0.5	<0.5	0.76	<0.5	0.91	---	---	4.6
	04/13/94	6.50	<50	---	<0.5	<0.5	<0.5	<0.5	<1.3	<1.3	---	---	---
	07/26/94	7.00	750[g]	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	---	1.7
	10/06/94	8.10	1,900[g]	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	---	3.0
	01/26/95	5.00	580[g]	---	<0.5	<0.5	<0.5	1.3	<0.4	<0.4	---	---	1.3
	04/20/95	5.24	<50	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	---	---
	07/12/95	6.10	50	---	4.2	2.9	<0.5	0.9	---	---	---	---	7.2
	10/12/95	6.98	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	---	---	7.1
	10/12/95[dup]	6.98	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	---	---	7.1
	01/11/96	6.48	50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	---	---	6.4
	01/11/96[dup]	6.48	50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.4	---	---	---
	04/10/96	5.57	200	---	<2.0	<2.0	<2.0	<2.0	---	---	---	670	---
	07/12/96	6.23	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	230	3.5
	10/17/96	7.18	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	<2.5	3.0
	04/08/97	5.75	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	---	240	3.0
	10/16/97	**7.76**	**<50**	**---**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<1.0**	**---**	**100**	**2.2**
S-1	09/04/87[h]		---	---	<5	<5	<5	<5	<0.5	<0.5	---	---	---
(Annually,	09/11/89[i]	9.82	<50	<100	<0.5	<1	<1	<3	<0.5	<0.5	<1,000	---	---
2nd Qtr.)	04/11/90	8.41	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10,000	---	---
	07/18/90	9.31	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5,000	---	---
	10/18/90	10.43	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5,000	---	---
	01/25/91	10.49	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	04/11/91	7.68	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	07/18/91	8.95	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	10/17/91	10.62	<50	---	<0.5	<0.5	<0.5	<5	---	---	---	---	---
	01/24/92	9.32	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---

Table 2. **Analytic Results for Ground Water** - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, California (continued)

Well ID and Sample Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	T	E	X	c-1,2-DCE	1,2-DCA	TOG	MTBE	DO (mg/L)
			← parts per billion (µg/L) →										
	04/23/92	7.27	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	07/02/92	8.19	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	10/02/92	9.95	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	01/05/93	7.64	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	04/08/93	6.10	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	07/20/93	7.18	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	10/15/93	8.39	<50	---	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/07/94	8.19	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	6.8
	04/13/94	7.22	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	07/26/94	7.82	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	2.6
	10/06/94	9.01	<50	---	<0.5	<0.5	<0.5	<0.5	<0.4	<0.4	---	---	6.0
	04/20/95	6.82	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	04/10/96	5.80	<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	<2.5	---
	07/12/96	6.60	---	---	---	---	---	---	---	---	---	---	---
	10/17/96	7.63	---	---	---	---	---	---	---	---	---	---	---
	04/08/97	6.00	<50	---	0.73	<0.50	<0.50	1.7	---	---	---	3.8	2.8
	04/08/97[dup]	6.00	<50	---	1.0	0.64	0.65	2.4	---	---	---	<2.5	2.8
Trip Blank	07/18/90		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	10/18/90		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	01/25/91		<50	---	<0.5	<0.5	<0.5	0.8	---	---	---	---	---
	04/11/91		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	07/18/91		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	10/17/91		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	01/24/92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	04/23/92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	07/02/92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	10/02/92		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	01/05/93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	04/08/93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	07/20/93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	10/15/93		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	01/07/94		<50	---	<0.5	<0.5	<0.5	<0.5	---	---	---	---	---
	04/13/94		<50	---	<0.5	<0.5[5]	<0.5	<0.5	---	---	---	---	---

Table 2. **Analytic Results for Ground Water** - Shell Service Station, WIC #204-0072-0403, 1601 Webster Street, Alameda, California (continued)

Well ID and Sample Frequency	Date Sampled	Depth to Water (ft)	TPH-G	TPH-D	B	T	E	X	c-1,2-DCE	1,2-DCA	TOG	MTBE	DO (mg/L)
			← parts per billion (µg/L) →										
	07/26/94		<50	—	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
	10/06/94		<50	—	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
	01/26/95		<50	—	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
	04/20/95		<50	—	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
	07/12/95		<50	—	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—
	10/12/95		<50	—	<0.5	<0.5	<0.5	—	—	—	—	—	—
	07/12/96		<50	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	<2..5	—
	10/17/96		<50	—	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	—	<2.5	—
													—
MCLs			NE	NE	1	150	700	1,750	6.0	0.5	NE	NE	—

Abbreviations:

TPH-G = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
TPH-D = Total petroleum hydrocarbons as diesel by modified EPA Method 8015
B = Benzene by EPA Method 602, 624, or 8020
T = Toluene by EPA Method 602, 624, or 8020
E = Ethylbenzene by EPA Method 602, 624, or 8020
X = Xylenes by EPA Method 602, 624, or 8020
c-1,2-DCE = *cis-1,2-dichloroethene by EPA Method 601 or 624*
1,2-DCA = 1,2-dichloroethane by EPA Method 601 or 624
TOG = Total non-polar oil and grease by American Public Health Association Standard Method 503E
DO = Dissolved oxygen
<n = Not detected at detection limit of n µg/L
— = Not analyzed/measured
dup = *Duplicate sample*
ft = Feet
µg/L = Micrograms per liter
mg/L = Milligrams per liter
MCLs = California Primary maximum contaminant level for drinking water (22 CCR 64444)
NE = Not established

Notes:

a = Chloroform detected at 0.71 µg/L by EPA Method 8010
b = Chloroform detected at 1.1 µg/L by EPA Method 8010
c = Trichloroethylene detected at 1.7 µg/L
d = Compounds detected and calculated as diesel appear to be the less volatile constituents of gasoline
e = Chloroform detected at 1.5 µg/L by EPA Method 8010
f = Chloroform detected at 3.6 µg/L by EPA Method 8010
g = The result for gasoline is an unknown hydrocarbon which consists of a single peak
h = 0.12 mg/L acetone detected by EPA Method 624; no other volatile organic compounds detected
i = Metals detected by EPA Method 6010; 0.020 mg/L chromium, 0.060 mg/L lead and 0.030 mg/L zinc; no cadmium detected above detection limit of 0.010 mg/L; no PCBs or semi-volatile compounds detected by EPA Method 625
j = 0.54 µg/L toluene detected in equipment blank

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

November 14, 1997

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

Attn: Alex Perez

Shell WIC #204-0072-0403
1601 Webster Street
Alameda, California

4th Quarter 1997

Groundwater Monitoring Report 971016-G-1

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

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

Yours truly,

Francis Thie

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

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

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

TABLE OF WELL GAUGING DATA

WELL I.D.	DATA COLLECTION DATE	MEASUREMENT REFERENCED TO	QUALITATIVE OBSERVATIONS (sheen)	DEPTH TO FIRST IMMISCIBLES LIQUID (FPZ) (feet)	THICKNESS OF IMMISCIBLES LIQUID ZONE (feet)	VOLUME OF IMMISCIBLES REMOVED (ml)	DEPTH TO WATER (feet)	DEPTH TO WELL BOTTOM (feet)
MW-1	10/16/97	TOC	–	NONE	–	–	8.56	20.72
MW-2 *	10/16/97	TOC	ODOR	NONE	–	–	7.98	19.15
MW-3	10/16/97	TOC	–	NONE	–	–	7.76	19.44
S-1	10/16/97	TOC	–	NONE	–	–	8.28	19.33

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

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 971016-61

Date: 10/16/97
Page 1 of 1

Site Address: 1601 Webster St., Alameda, CA

WIC#: 204-0072-0403

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

Consultant Name & Address: Blaine Tech Services. Inc.

Consultant Contact: Fran Thie — Phone No.: (408) Fax #:

Comments:

Sampled by:

Printed Name: Morgan Gillies

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)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020 / MTBE	EPA 601		Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
1 MW-2	10/16/97			X		6						X	X							
2 MW-3	↓			↓		↓						X	X							
3 EB												X	X							
4 Dup												X	X							

CHECK ONE (1) BOX ONLY | CT/DT | TURN AROUND TIME

- G.W. Monitoring [X] 4461 — 24 hours [ ]
- Site Investigation [ ] 4441 — 48 hours [ ]
- Soil Classify/Disposal [ ] 4442 — 15 days [X] (Normal)
- Water Classify/Disposal [ ] 4443 — Other [ ]
- Soil/Air Rem. or Sys. O & M [ ] 4452
- Water Rem. or Sys. O & M [ ] 4453
- Other [ ]

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

UST AGENCY:

Relinquished By (signature)	Printed Name	Date / Time	Received (signature)	Printed Name	Date / Time
	Morgan Gillies	Date: 10-17-97 Time: 8:30		Ray	Date: 10/17/97 Time: 11:20
		Date: 10-17-97 Time:			Date: Time:
		Date: Time:			Date: 10/17/97 Time: 1201

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

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 Alameda/971016-G1

Enclosed are the results from samples received at Sequoia Analytical on October 17, 1997. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
9710B15 -01	LIQUID, MW-2	10/16/97	601 Purgeable Halocarbons
9710B15 -01	LIQUID, MW-2	10/16/97	TPGM2W Purgeable TPH/BTEX
9710B15 -02	LIQUID, MW-3	10/16/97	601 Purgeable Halocarbons
9710B15 -02	LIQUID, MW-3	10/16/97	TPGM2W Purgeable TPH/BTEX
9710B15 -03	LIQUID, EB	10/16/97	601 Purgeable Halocarbons
9710B15 -03	LIQUID, EB	10/16/97	TPGM2W Purgeable TPH/BTEX
9710B15 -04	LIQUID, DUP	10/16/97	601 Purgeable Halocarbons
9710B15 -04	LIQUID, DUP	10/16/97	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	Client Proj. ID: Shell Alameda/971016-G1	Sampled: 10/16/97
1680 Rogers Avenue	Sample Descript: MW-2	Received: 10/17/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: EPA 601	Analyzed: 10/30/97
Attention: Fran Thie	Lab Number: 9710B15-01	Reported: 11/03/97

QC Batch Number: GC102597801009A
Instrument ID: GCHP09

Purgeable Halocarbons (EPA 601)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	2.5	N.D.
Bromoform	2.5	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	2.5	N.D.
Chlorobenzene	2.5	N.D.
Chloroethane	5.0	N.D.
2-Chloroethylvinyl ether	5.0	N.D.
Chloroform	2.5	N.D.
Chloromethane	5.0	N.D.
Dibromochloromethane	2.5	N.D.
1,2-Dichlorobenzene	2.5	N.D.
1,3-Dichlorobenzene	2.5	N.D.
1,4-Dichlorobenzene	2.5	N.D.
1,1-Dichloroethane	2.5	N.D.
1,2-Dichloroethane	2.5	N.D.
1,1-Dichloroethene	2.5	N.D.
cis-1,2-Dichloroethene	2.5	N.D.
trans-1,2-Dichloroethene	2.5	N.D.
1,2-Dichloropropane	2.5	N.D.
cis-1,3-Dichloropropene	2.5	N.D.
trans-1,3-Dichloropropene	2.5	N.D.
Methylene chloride	25	N.D.
1,1,2,2-Tetrachloroethane	2.5	N.D.
Tetrachloroethene	2.5	N.D.
1,1,1-Trichloroethane	2.5	N.D.
1,1,2-Trichloroethane	2.5	N.D.
Trichloroethene	2.5	N.D.
Trichlorofluoromethane	2.5	N.D.
Vinyl chloride	5.0	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	70	130	88

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
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	Client Proj. ID: Shell Alameda/971016-G1	Sampled: 10/16/97
1680 Rogers Avenue	Sample Descript: MW-2	Received: 10/17/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/22/97
Attention: Fran Thie	Lab Number: 9710B15-01	Reported: 11/03/97

QC Batch Number: GC102297BTEX03A
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**	**4000**
Methyl t-Butyl Ether	**25**	**44**
Benzene	**5.0**	**160**
Toluene	5.0	N.D.
Ethyl Benzene	**5.0**	**250**
Xylenes (Total)	**5.0**	**140**
Chromatogram Pattern:		**C6-C12**

Surrogates	**Control Limits %**		**% Recovery**
Trifluorotoluene	70	130	97

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 Alameda/971016-G1	Sampled: 10/16/97
1680 Rogers Avenue	Sample Descript: MW-3	Received: 10/17/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: EPA 601	Analyzed: 10/30/97
Attention: Fran Thle	Lab Number: 9710B15-02	Reported: 11/03/97

QC Batch Number: GC102597801009A
Instrument ID: GCHP09

Purgeable Halocarbons (EPA 601)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	1.0	N.D.
Bromoform	1.0	N.D.
Bromomethane	4.0	N.D.
Carbon Tetrachloride	1.0	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethylvinyl ether	2.0	N.D.
Chloroform	1.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	1.0	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
1,1-Dichloroethane	1.0	N.D.
1,2-Dichloroethane	1.0	N.D.
1,1-Dichloroethene	1.0	N.D.
cis-1,2-Dichloroethene	1.0	N.D.
trans-1,2-Dichloroethene	1.0	N.D.
1,2-Dichloropropane	1.0	N.D.
cis-1,3-Dichloropropene	1.0	N.D.
trans-1,3-Dichloropropene	1.0	N.D.
Methylene chloride	10	N.D.
1,1,2,2-Tetrachloroethane	1.0	N.D.
Tetrachloroethene	1.0	N.D.
1,1,1-Trichloroethane	1.0	N.D.
1,1,2-Trichloroethane	1.0	N.D.
Trichloroethene	1.0	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl chloride	2.0	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	70	130	84

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
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	Client Proj. ID: Shell Alameda/971016-G1	Sampled: 10/16/97
1680 Rogers Avenue	Sample Descript: MW-3	Received: 10/17/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/23/97
Attention: Fran Thie	Lab Number: 9710B15-02	Reported: 11/03/97

QC Batch Number: GC102397BTEX02A
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	N.D.
Methyl t-Butyl Ether	**2.5**	**100**
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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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 Alameda/971016-G1
Sample Descript: EB
Matrix: LIQUID
Analysis Method: EPA 601
Lab Number: 9710B15-03

Sampled: 10/16/97
Received: 10/17/97

Analyzed: 10/30/97
Reported: 11/03/97

QC Batch Number: GC102597801009A
Instrument ID: GCHP09

Purgeable Halocarbons (EPA 601)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	2.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	70	130	95

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 Alameda/971016-G1	Sampled: 10/16/97
1680 Rogers Avenue	Sample Descript: EB	Received: 10/17/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/22/97
Attention: Fran Thle	Lab Number: 9710B15-03	Reported: 11/03/97

QC Batch Number: GC102297BTEX03A
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	105

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

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Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Attention: Fran Thie

Client Proj. ID: Shell Alameda/971016-G1
Sample Descript: DUP
Matrix: LIQUID
Analysis Method: EPA 601
Lab Number: 9710B15-04

Sampled: 10/16/97
Received: 10/17/97

Analyzed: 10/30/97
Reported: 11/03/97

QC Batch Number: GC103097801009A
Instrument ID: GCHP09

Purgeable Halocarbons (EPA 601)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	1.0	N.D.
Bromoform	1.0	N.D.
Bromomethane	4.0	N.D.
Carbon Tetrachloride	1.0	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethylvinyl ether	2.0	N.D.
Chloroform	1.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	1.0	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
1,1-Dichloroethane	1.0	N.D.
1,2-Dichloroethane	1.0	N.D.
1,1-Dichloroethene	1.0	N.D.
cis-1,2-Dichloroethene	1.0	N.D.
trans-1,2-Dichloroethene	1.0	N.D.
1,2-Dichloropropane	1.0	N.D.
cis-1,3-Dichloropropene	1.0	N.D.
trans-1,3-Dichloropropene	1.0	N.D.
Methylene chloride	10	N.D.
1,1,2,2-Tetrachloroethane	1.0	N.D.
Tetrachloroethene	1.0	N.D.
1,1,1-Trichloroethane	1.0	N.D.
1,1,2-Trichloroethane	1.0	N.D.
Trichloroethene	1.0	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl chloride	2.0	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	70	130	90

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

Blaine Tech Services	Client Proj. ID: Shell Alameda/971016-G1	Sampled: 10/16/97
1680 Rogers Avenue	Sample Descript: DUP	Received: 10/17/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/22/97
Attention: Fran Thie	Lab Number: 9710B15-04	Reported: 11/03/97

QC Batch Number: GC102297BTEX03A
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**	**4000**
Methyl t-Butyl Ether	2.5	N.D.
Benzene	**5.0**	**170**
Toluene	5.0	N.D.
Ethyl Benzene	**5.0**	**270**
Xylenes (Total)	**5.0**	**98**
Chromatogram Pattern:		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	100

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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

Client Project ID: Shell Alameda / 971016-G1
Matrix: Liquid
Work Order #: 9710B15 -01, 03-04
Reported: Nov 4, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC102297BTEX03A	GC102297BTEX03A	GC102297BTEX03A	GC102297BTEX03A	GC102297BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	971091007	971091007	971091007	971091007	971091007
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/22/97	10/22/97	10/22/97	10/22/97	10/22/97
Analyzed Date:	10/22/97	10/22/97	10/22/97	10/22/97	10/22/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	8.8	8.6	8.6	24	72
MS % Recovery:	88	86	86	80	120
Dup. Result:	8.7	8.5	8.5	24	71
MSD % Recov.:	87	85	85	80	118
RPD:	1.1	1.2	1.2	0.0	1.4
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK102297	BLK102297	BLK102297	BLK102297	BLK102297
Prepared Date:	10/22/97	10/22/97	10/22/97	10/22/97	10/22/97
Analyzed Date:	10/22/97	10/22/97	10/22/97	10/22/97	10/22/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.0	8.8	8.8	24	73
LCS % Recov.:	90	88	88	80	122
MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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

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

Sequoia Analytical

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

Client Project ID: Shell Alameda / 971016-G1
Matrix: Liquid
Work Order #: 9710B15-02

Reported: Nov 4, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC102397BTEX02A	GC102397BTEX02A	GC102397BTEX02A	GC102397BTEX02A	GC102397BTEX02A
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:	S. Fong	S. Fong	S. Fong	S. Fong	S. Fong
MS/MSD #:	9710B1404	9710B1404	9710B1404	9710B1404	9710B1404
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/23/97	10/23/97	10/23/97	10/23/97	10/23/97
Analyzed Date:	10/23/97	10/23/97	10/23/97	10/23/97	10/23/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	10	9.3	9.5	29	63
MS % Recovery:	100	93	95	97	105
Dup. Result:	10	9.5	9.6	29	63
MSD % Recov.:	100	95	96	97	105
RPD:	0.0	2.1	1.0	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK102397	BLK102397	BLK102397	BLK102397	BLK102397
Prepared Date:	10/23/97	10/23/97	10/23/97	10/23/97	10/23/97
Analyzed Date:	10/23/97	10/23/97	10/23/97	10/23/97	10/23/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.8	9.4	9.5	29	63
LCS % Recov.:	98	94	95	97	105

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

SEQUOIA ANALYTICAL

Peggy Renner
Project Manager

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

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

Client Project ID: Shell Alameda / 971016-G1
Matrix: Liquid
Work Order #: 9710B15-01, 02, 03
Reported: Nov 4, 1997

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-Benzene
QC Batch#:	GC102597060109A	GC102597060109A	GC102597060109A
Analy. Method:	EPA 601	EPA 601	EPA 601
Prep. Method:	EPA 5030	EPA 5030	EPA 5030
Analyst:	E. Cunanan	E. Cunanan	E. Cunanan
MS/MSD #:	9710B5201	9710B5201	9710B5201
Sample Conc.:	31	N.D.	N.D.
Prepared Date:	10/25/97	10/25/97	10/25/97
Analyzed Date:	10/25/97	10/25/97	10/25/97
Instrument I.D.#:	GCHP9	GCHP9	GCHP9
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
Dilution Factor:	10	10	10
Result:	250	220	230
MS % Recovery:	88	88	92
Dup. Result:	240	210	220
MSD % Recov.:	84	84	88
RPD:	4.1	4.7	4.4
RPD Limit:	0-25	0-25	0-25
LCS #:	BLK102997	BLK102997	BLK102997
Prepared Date:	10/29/97	10/29/97	10/29/97
Analyzed Date:	10/29/97	10/29/97	10/29/97
Instrument I.D.#:	GCHP9	GCHP9	GCHP9
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
LCS Result:	21	21	23
LCS % Recov.:	84	84	92
MS/MSD Control Limits	60-140	60-140	60-140
LCS Control Limits	65-135	70-130	70-130

SEQUOIA ANALYTICAL

Reggy 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 Alameda / 971016-G1
Matrix: Liquid
Work Order #: 9710B15-04
Reported: Nov 4, 1997

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-Benzene
QC Batch#:	GC103097060109A	GC103097060109A	GC103097060109A
Analy. Method:	EPA 601	EPA 601	EPA 601
Prep. Method:	EPA 5030	EPA 5030	EPA 5030
Analyst:	E. Cunanan	E. Cunanan	E. Cunanan
MS/MSD #:	9710B1504	9710B1504	9710B1504
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	10/29/97	10/29/97	10/29/97
Analyzed Date:	10/30/97	10/30/97	10/30/97
Instrument I.D.#:	GCHP9	GCHP9	GCHP9
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
Dilution Factor:	2	2	2
Result:	42	40	42
MS % Recovery:	84	80	84
Dup. Result:	43	41	44
MSD % Recov.:	86	82	88
RPD:	2.4	2.5	4.7
RPD Limit:	0-25	0-25	0-25
LCS #:	BLK102997	BLK102997	BLK102997
Prepared Date:	10/29/97	10/29/97	10/29/97
Analyzed Date:	10/29/97	10/29/97	10/29/97
Instrument I.D.#:	GCHP9	GCHP9	GCHP9
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
LCS Result:	21	21	23
LCS % Recov.:	84	84	92
MS/MSD Control Limits	60-140	60-140	60-140
LCS Control Limits	65-135	70-130	70-130

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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

Client Proj. ID: Shell Alameda/971016-G1
Lab Proj. ID: 9710B15

Received: 10/17/97
Reported: 11/03/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 14 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager