



ENVIRONMENTAL
PROTECTION

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March 19, 1997

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

Re: **Fourth Quarter 1996 Quarterly Monitoring Report**
Shell Service Station
999 San Pablo Avenue
Albany, California
WIC #204-0079-0109

Dear Ms. Hugo:

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 1996 ACTIVITIES

This site was remodeled in November, including replacing the underground storage tanks and over-excavating the tank pit. The highest hydrocarbon concentrations detected in soil were 1,500 ppm TPH-g, 8.9 ppm MTBE, and 0.12 ppm benzene. We will submit a report of this work shortly.

Blaine Tech Services, Inc. (Blaine) of San Jose, California measured ground water depths and collected water samples from the site wells (Figure 1). The Blaine report, describing these sampling activities and presenting the analytic results is included as Attachment A.

Cambria calculated ground water elevations (Table 1), compiled the analytic data (Table 2) and prepared a ground water elevation contour map (Figure 1).

ANTICIPATED FIRST QUARTER 1997 ACTIVITIES

Cambria will submit a report presenting a summary of next quarter's activities.

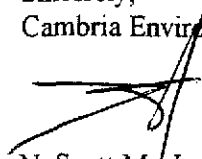
CAMBRIA
ENVIRONMENTAL
TECHNOLOGY, INC.
1144 65TH STREET,
SUITE B
OAKLAND,
CA 94608
PH: (510) 420-0700
FAX: (510) 420-9170

Ms. Hugo
March 19, 1997

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

Sincerely,
Cambria Environmental Technology, Inc.



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 4023 Concord, California 94524

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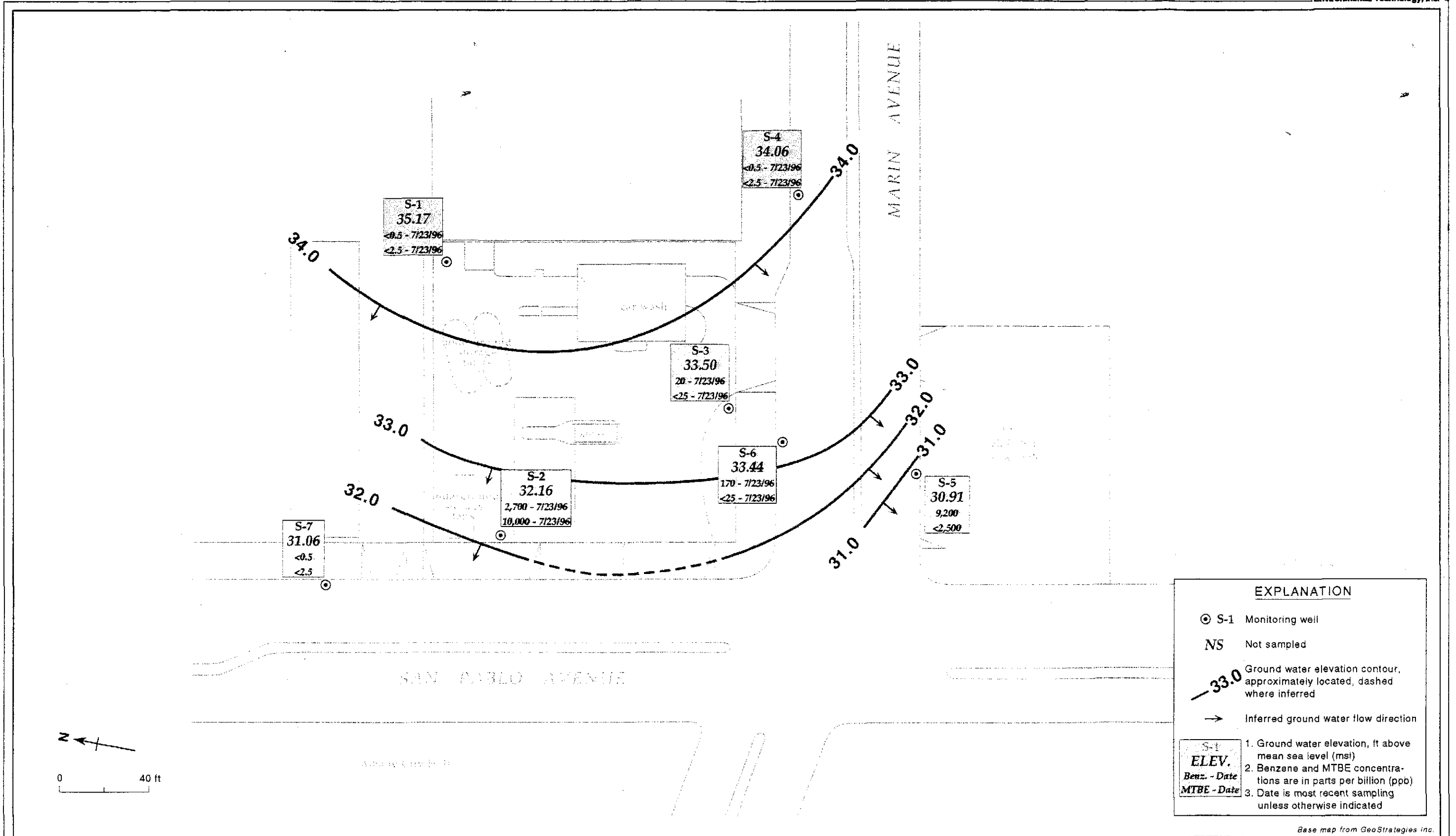


Figure 1. Ground Water Elevation Contours - December 10, 1996 - Shell Service Station WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California

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Table 1. Ground Water Elevations - Shell Service Station WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California

Well ID	Date	Top-of-Vault Elevation	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation ^a (ft above msl)
S-1	05/13/91	42.73	8.24	---	34.49
	08/23/91		8.37	---	34.36
	11/07/91		8.30	---	34.43
	01/28/92		7.84	---	34.89
	05/06/92		7.95	---	34.78
	08/26/92		8.24	---	34.49
	10/28/92		8.52	---	34.21
	01/19/93		6.54	---	36.19
	04/29/93		7.93	---	34.80
	07/22/93		8.09	---	34.64
	10/21/93		9.43	---	33.30
	01/04/94		8.25	---	34.48
	04/13/94		8.02	---	34.71
	07/25/94		8.22	---	34.51
	10/10/94		8.29	---	34.44
	01/26/95		6.88	---	35.85
	04/21/95		7.65	---	35.08
	07/28/95		7.90	---	34.83
	10/31/95		7.72	---	35.01
	01/10/96		8.24	---	34.49
04/25/96	7.74	---	34.99		
07/23/96	7.92	---	34.81		
	12/10/96		7.56	---	35.17
S-2	05/13/91	40.73	8.50	---	32.23
	08/23/91		8.80	---	31.93
	11/07/91		8.61	---	32.12
	01/28/92		7.80	---	32.93
	05/06/92		8.10	---	32.63
	08/26/92		8.37	---	32.36
	10/28/92		8.64	---	32.09
	01/19/93		5.82	---	34.91
	04/29/93		7.70	---	33.03
	07/22/93		8.38	---	32.35
	10/21/93		8.58	---	32.15
	01/04/94		7.70	---	33.03
	04/13/94		7.62	---	33.11
	07/25/94		7.86	---	32.87
	10/10/94		8.12	---	32.61
	01/26/95		6.38	---	34.35
	04/21/95		7.01	---	33.72
	07/28/95		7.82	---	32.91
	10/31/95		7.57	---	33.16
	01/10/96		8.13	---	32.60
04/25/96	7.72	---	33.01		

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Table 1. Ground Water Elevations - Shell Service Station WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California

Well ID	Date	Top-of-Vault Elevation	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation ^a (ft above msl)
	07/23/96		8.10	---	32.63
	12/10/96		8.57	---	32.16
S-3	05/13/91	41.46	7.90	---	33.56
	08/23/91		8.14	---	33.32
	11/07/91		7.91	---	33.55
	01/28/92		7.53	---	33.93
	05/06/92		7.55	---	33.91
	08/26/92		7.53	---	33.93
	10/28/92		7.95	---	33.51
	01/19/93		6.12	---	35.34
	04/29/93		7.27	---	34.19
	07/22/93		7.62	---	33.84
	10/21/93		7.81	---	33.65
	01/04/94		7.49	---	33.97
	04/13/94		7.32	---	34.14
	07/25/94		7.66	---	33.80
	10/10/94		7.49	---	33.97
	01/26/95		6.50	---	34.96
	04/21/95		6.79	---	34.67
	07/28/95		7.28	---	34.18
	10/31/95		6.74	---	34.72
	01/10/96		7.48	---	33.98
	04/25/96		6.90	---	34.56
	07/23/96		7.04	---	34.42
	12/10/96		7.96	---	33.50
S-4	05/13/91	41.10	7.44	---	33.66
	08/23/91		8.32	---	32.78
	11/07/91		8.32	---	32.78
	01/28/92		7.40	---	33.70
	05/06/92		7.21	---	33.89
	08/26/92		8.13	---	32.97
	10/28/92		8.73	---	32.37
	01/19/93		5.86	---	35.24
	04/29/93		7.02	---	34.08
	07/22/93		7.76	---	33.34
	10/21/93		8.53	---	32.57
	01/04/94		7.92	---	33.18
	04/13/94		7.71	---	33.39
	07/25/94		7.82	---	33.28
	10/10/94		8.15	---	32.95
	01/26/95		5.73	---	35.37
	04/21/95		6.26	---	34.84
	07/28/95		7.80	---	33.30

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Table 1. Ground Water Elevations - Shell Service Station WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California

Well ID	Date	Top-of-Vault Elevation	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation ^a (ft above msl)
	10/31/95		8.45	---	32.65
	01/10/96		8.26	---	32.84
	04/25/96		7.14	---	33.96
	07/23/96		8.18	---	32.92
	12/10/96		7.04	---	34.06
S-5	05/13/91	39.99	14.60	6.48	30.57
	08/23/91		15.14	5.50	29.25
	11/07/91		15.10	5.35	29.17
	01/28/92		14.05	4.90	29.86
	05/06/92		14.31	5.66	30.21
	08/26/92		14.26	3.80	28.77
	10/28/92		14.22	3.81	28.82
	01/19/93		12.36	3.96	30.80
	04/29/93		9.64	0.90	31.07
	07/22/93		9.55	0.90	31.16
	10/21/93		11.23	0.73	29.34
	01/04/94		11.69	1.90	29.82
	04/13/94		11.42	1.62	29.87
	07/25/94		12.01	1.79	29.41
	10/10/94		12.05	1.8	29.38
	01/26/95		8.42	1.72	32.95
	04/21/95		10.03	1.17	30.90
	07/28/95		11.42	1.87	30.07
	10/31/95		13.21	0.54	27.21
	01/10/96		12.05	0.13	28.04
	04/25/96		9.68	0.03	30.33
	07/23/96		9.82	0.04	30.20
	12/10/96		9.10	0.03	30.91
S-6	05/13/91	40.12	7.82	---	32.30
	08/23/91		9.58	---	30.54
	11/07/91		10.86	---	29.26
	01/28/92		8.97	---	31.15
	05/06/92		8.27	---	31.85
	08/26/92		9.57	---	31.55
	10/28/92		8.90	---	32.22
	01/19/93		4.84	---	35.28
	04/29/93		5.61	---	34.51
	07/22/93		6.56	---	33.56
	10/21/93		8.73	---	31.39
	01/04/94		7.14	---	32.98
	04/13/94		7.21	---	32.91
	07/25/94		6.85	---	33.27
	10/10/94		6.20	---	33.92

Table 1. Ground Water Elevations - Shell Service Station WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California

Well ID	Date	Top-of-Vault Elevation	Depth to Water (ft)	Separate-Phase Hydrocarbon Thickness (ft)	Ground Water Elevation ^a (ft above msl)
	01/26/95		4.89	---	35.23
	04/21/95		5.61	---	34.51
	07/28/95		5.30	---	34.82
	10/31/95		4.98	---	35.14
	01/10/96		5.67	---	34.45
	04/25/96		5.23	---	34.89
	07/23/96		5.40	---	34.72
	12/10/96		6.68	---	33.44
S-7	05/13/91	40.10	10.56	---	29.54
	08/23/91		11.16	---	28.94
	11/07/91		11.48	---	28.62
	01/28/92		10.72	---	29.38
	05/06/92		10.34	---	29.76
	08/26/92		11.13	---	28.97
	10/28/92		11.52	---	28.58
	01/19/93		8.68	---	31.42
	04/29/93		9.90	---	30.20
	07/22/93		---	---	---
	10/21/93		11.10	---	29.00
	01/04/94		10.40	---	29.70
	04/13/94		10.20	---	29.90
	07/25/94		10.48	---	29.62
	10/10/94		10.64	---	29.46
	01/26/95		7.75	---	32.35
	04/21/95		8.51	---	31.59
	07/28/95		10.20	---	29.90
	10/31/95		10.86	---	29.24
	01/10/96		10.33	---	29.77
	04/25/96		9.13	---	30.97
	07/23/96		10.18	---	29.92
	12/10/96		9.04	---	31.06

Notes and Abbreviations

a = Ground water elevation = (top of casing elevation x 0.8 hydrocarbon thickness) - (depth to water)

Table 2. Analytic Results for Ground Water - Former Shell Service Station, WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California (continued)

Well ID & Sampling Frequency	Date	Depth to Water (ft)	TPH-G	←————— parts per billion (µg/L) —————→				MTBE	HDM Units units/L	DO (mg/L)
				B	T	E	X			
S-1 (Bi-annually, 1st & 3rd Qtrs)	05/13/91	8.24	1,500	20	2.6	86	74	---	---	---
	08/23/91	8.37	2,900	27	<2.5	75	18	---	---	---
	11/07/91	8.30	2,900	8	2.5	46	26	---	---	---
	01/28/92	7.84	2,000	11	<2.5	60	20	---	---	---
	05/06/92	7.95	1,200	5.5	<2.5	80	36	---	---	---
	07/29/93	8.24	2,000	9.4	<2.5	130	<2.5	---	---	---
	10/28/92	8.52	1,300	27	3.2	72	13	---	---	---
	01/19/93	6.54	1,500	13	3	29	31	---	---	---
	04/29/93	7.93	2,000	15	<2.5	82	<65	---	---	---
	07/22/93	8.09	620	1.1	4.2	3.5	13	---	---	---
	10/21/93	9.43	1,200	34	25	15	9.5	---	---	---
	01/04/94	8.25	860	<2.5	<2.5	5.7	5.3	---	---	---
	07/25/94	8.22	1,200	8.3	7.4	15	20	---	---	---
	01/26/95	6.88	1,000	12	0.6	12	420	---	---	---
	07/28/95	7.90	660	7.2	1.0	11	8.9	---	---	4.0
	01/10/96	8.24	1,100	3.5	7.0	5.1	9.4	---	---	7.4
	07/23/96	7.92	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	2.7
12/10/96	7.56	---	---	---	---	---	---	---	0.6	
S-2 (Bi-annually, 1st & 3rd Qtrs)	05/13/91	8.50	23,000	3,900	230	1,100	3,200	---	---	---
	08/23/91	8.80	23,000	4,400	260	1,900	2,400	---	---	---
	11/07/91	8.61	40,000	4,000	160	1,020	3,400	---	---	---
	01/28/92	7.80	22,000	1,600	70	420	1,700	---	---	---
	05/06/92	8.10	20,000	2,600	110	860	1,900	---	---	---
	07/29/92	8.37	42,000	5,000	160	1,100	3,500	---	---	---
	10/28/92	8.64	34,000	4,800	330	1,600	2,900	---	---	---
	01/19/93	5.82	20,000	2,300	370	660	1,300	---	---	---
	04/29/93	7.70	40,000	2,000	67	900	1,900	---	---	---
	07/22/93	8.38	22,000	3,000	120	1,000	1,600	---	---	---
07/22/93 ^{dup}	8.38	17,000	3,000	110	1,000	1,500	---	---	---	

Table 2. Analytic Results for Ground Water - Former Shell Service Station, WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California (continued)

Well ID & Sampling Frequency	Date	Depth to Water (ft)	TPH-G	B	T	E	X	MTBE	HDM Units units/L	DO (mg/L)
	10/21/93	8.58	14,000	2,800	74	870	1,100	---	---	---
	10/21/93 ^{dup}	8.58	13,000	3,200	53	960	820	---	---	---
	01/04/94	7.70	21,000	2,100	67	990	770	---	---	---
	01/04/94 ^{dup}	7.70	22,000	2,000	64	910	750	---	---	---
	07/25/94	7.86	43,000	2,600	490	990	1,300	---	---	---
	01/26/95	6.38	21,000	790	12	290	570	---	10 ⁴ to 10 ⁵ ab	5.5
	07/28/95	7.82	14,000	2,400	360	960	370	---	---	4.0
	01/10/96	8.13	17,000	1,400	<50	480	170	---	---	7.2
	07/23/96	8.10	16,000	2,700	69	1,100	110	9,500	---	2.2
	07/23/96 ^{dup}	8.10	11,000	2,600	68	1,000	96	10,000*	10 ⁵ g	2.2
	12/10/96	8.57	---	---	---	---	---	---	---	0.5
S-3 (Bi-annually, 1st & 3rd Qtrs)	05/13/91	7.90	3,300	30	3.6	26	13	---	---	---
	08/23/91	8.14	2,000	25	4	9.3	4.5	---	---	---
	11/07/91	7.91	4,000	20	3.9	5	4.9	---	---	---
	01/28/92	7.53	2,100	21	7.6	6.7	15	---	---	---
	01/28/92 ^{dup}	7.53	2,100	18	6.1	7.1	14	---	---	---
	05/06/92	7.55	6,600	38	51	45	65	---	---	---
	07/29/92	7.53	5,800	18	12	29	60	---	---	---
	10/28/92	7.95	3,000	55	11	16	32	---	---	---
	01/19/93	6.12	3,100	<5	5.1	11	16	---	---	---
	04/29/93	7.27	3,000	31	22	<5	14	---	---	---
	07/22/93	7.62	2,600	3.1	43	23	53	---	---	---
	10/21/93	7.81	2,500	73	14	16	32	---	---	---
	01/04/94	7.49	4,800	13	21	<12.5	33	---	---	---
	07/25/94	7.66	2,600	6.1	4.0	3.8	12	---	---	---
	01/26/95	6.50	3,600	30	6.8	5.6	19	---	---	---
	01/26/95 ^{dup}	6.50	2,200	9.9	15	14	22	---	---	---
	07/28/95	7.28	3,700	27	9.3	20	34	---	---	4.0
	01/10/96	7.48	4,000	10	<0.5	13	28	---	---	6.1

Table 2. Analytic Results for Ground Water - Former Shell Service Station, WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California (continued)

Well ID & Sampling Frequency	Date	Depth to Water (ft)	TPH-G	B	T	E	X	MTBE	HDM Units units/L	DO (mg/L)
	07/23/96	7.04	2,100	20	<0.5	<0.5	<0.5	<25	---	2.1
	12/10/96	7.56	---	---	---	---	---	---	---	0.7
S-4 (Annually 1st Qtr)	05/13/91	7.44	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	08/23/91	8.32	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	11/07/91	8.32	260	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/28/92	7.40	110 ^c	<0.5	<0.5	<0.5	<0.5	---	---	---
	05/06/92	7.21	54	<0.5	<0.5	<0.5	<0.5	---	---	---
	07/29/92	8.13	67	<0.5	<0.5	<0.5	<0.5	---	---	---
	10/28/92	8.73	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/19/93	5.86	86	1.2	0.7	2.7	15	---	---	---
	04/29/93	7.02	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	04/29/93 ^{dup}	7.02	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	07/22/93	7.76	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	10/21/93	8.53	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/04/94	7.92	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/26/95	5.73	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	07/28/95	7.80	---	---	---	---	---	---	---	---
	01/10/96	8.26	<50	1.0	2.8	<0.5	2.1	---	---	2.8
	07/23/96	8.18	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	3.8
	12/10/96	7.04	---	---	---	---	---	---	---	3.9
S-5 (Quarterly)	05/13/91 ^{SPH}	14.60	---	---	---	---	---	---	---	---
	08/23/91 ^{SPH}	15.14	---	---	---	---	---	---	---	---
	11/07/91 ^{SPH}	15.10	---	---	---	---	---	---	---	---
	01/28/92 ^{SPH}	14.05	---	---	---	---	---	---	---	---
	05/06/92 ^{SPH}	14.31	---	---	---	---	---	---	---	---
	07/29/92 ^{SPH}	14.26	---	---	---	---	---	---	---	---
	10/28/92 ^{SPH}	14.22	---	---	---	---	---	---	---	---
01/19/93 ^{SPH}	12.36	---	---	---	---	---	---	---	---	

Table 2. Analytic Results for Ground Water - Former Shell Service Station, WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California (continued)

Well ID & Sampling Frequency	Date	Depth to Water (ft)	← parts per billion (µg/L) →					MTBE	HDM Units units/L	DO (mg/L)
			TPH-G	B	T	E	X			
	04/29/93 ^{SPH}	9.64	---	---	---	---	---	---	---	---
	07/22/93 ^{SPH}	9.55	---	---	---	---	---	---	---	---
	10/21/93 ^{SPH}	11.23	---	---	---	---	---	---	---	---
	01/04/94 ^{SPH}	11.69	---	---	---	---	---	---	---	---
	07/25/94 ^{SPH}	12.01	---	---	---	---	---	---	---	---
	10/10/94 ^{SPH}	12.05	---	---	---	---	---	---	---	---
	01/26/95 ^{SPH}	9.80	---	---	---	---	---	---	---	---
	04/21/95 ^{SPH}	10.03	---	---	---	---	---	---	---	---
	07/28/95 ^{SPH}	11.42	---	---	---	---	---	---	---	---
	10/31/95 ^{SPH}	---	---	---	---	---	---	---	---	---
	01/10/96 ^{SPH}	12.05	---	---	---	---	---	---	---	---
	04/25/96 ^{SPH}	9.68	---	---	---	---	---	---	---	---
	07/23/96	9.82	---	---	---	---	---	---	---	---
	12/10/96 ^{SPH}	9.10	270,000	8,800	29,000	5,200	37,000	<2,500	---	---
	12/10/96 ^{dup}	9.10	400,000	9,200	32,000	7,200	50,000	<2,500	---	---
S-6	05/13/91	7.82	13,000	600	140	210	310	---	---	---
(Bi-annually,	08/23/91	9.58	9,800	480	80	120	150	---	---	---
1st & 3rd	11/07/91	10.86	6,200	240	23	25	27	---	---	---
Qtrs)	01/28/92	8.97	5,600	250	15	41	36	---	---	---
	05/06/92	8.27	7,100	330	29	110	210	---	---	---
	07/29/92	9.57	13,000	240	<50	56	780	---	---	---
	10/28/92	8.90	10,000	470	210	67	170	---	---	---
	01/19/93	4.84	4,800	100	26	27	45	---	---	---
	04/29/93	5.61	7,000	430	20	<12.5	42	---	---	---
	07/22/93	6.56	5,800	260	120	65	150	---	---	---
	10/21/93	8.73	5,500	270	69	120	140	---	---	---
	01/04/94	7.14	7,100	180	58	63	62	---	---	---
	07/25/94	6.85	12,000	190	52	30	39	---	---	---
	07/25/94 ^{dup}	6.85	7,200	170	32	31	34	---	---	---

Table 2. Analytic Results for Ground Water - Former Shell Service Station, WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California (continued)

Well ID & Sampling Frequency	Date	Depth to Water (ft)	TPH-G	B	T	E	X	MTBE	HDM Units units/L	DO (mg/L)
	01/26/95	4.89	5,800	120	23	24	44	---	---	---
	07/28/95	5.30	4,400	210	23	34	60	---	---	3.0
	07/28/95 ^{dup}	5.30	6,100	230	20	38	59	---	---	3.0
	01/10/96	5.67	6,800	170	87	35	105	---	---	2.2
	01/10/96 ^{dup}	5.67	7,800	230	120	50	210	---	---	2.2
	07/23/96	5.40	2,600	170	<0.5	<0.5	8.5	<25	---	1.4
	12/10/96	6.68	---	---	---	---	---	---	---	0.7
S-7 (Quarterly)	05/13/91	10.56	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	08/23/91	11.16	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	11/07/91	11.48	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/28/92	10.72	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	05/06/92	10.34	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	07/29/92	11.13	160	<0.5	<0.5	<0.5	<0.5	---	---	---
	10/28/92	11.52	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/19/93	8.68	50	1.1	0.6	1.9	9.2	---	---	---
	04/29/93	9.90	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	07/22/93 ^d	---	---	---	---	---	---	---	---	---
	10/21/93	11.10	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/04/94	10.40	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	04/13/94	10.20	<50	1.4	0.61	<0.5	0.64	---	---	---
	04/13/94 ^{dup}	10.20	<50	1.4	0.61	<0.5	0.66	---	---	---
	07/25/94	10.48	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	10/10/94 ^e	10.64	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/26/95	7.75	<50	<0.5	<0.5	<0.5	<0.5	---	10 ³ to 10 ⁵ ab	4.6
	04/21/95	8.51	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	07/28/95	10.20	<50	<0.5	<0.5	<0.5	<0.5	---	---	3.0
	10/31/95	10.86	<50	<0.5	<0.5	<0.5	<0.5	---	---	4.9
01/10/96	10.33	<50	<0.5	2.0	<0.5	2.6	---	---	7.6	
04/25/96	9.13	<50	<0.5	<0.5	<0.5	<0.5	<2.5	10 ⁰ to 10 ⁵ ab	6.2	

A

CAMBRIA

Table 2. Analytic Results for Ground Water - Former Shell Service Station, WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California (continued)

Well ID & Sampling Frequency	Date	Depth to Water (ft)	TPH-G	B	T	E	X	MTBE	HDM Units units/L	DO (mg/L)
	07/23/96	10.18	<50	<0.5	<0.5	<0.5	<0.5	14	10 ⁰ g	3.7
	12/10/96	9.04	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	4.6
Trip Blank	01/28/92		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	04/29/93		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	07/22/93		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	10/21/93		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/04/94		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	04/13/94		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	07/25/94		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	10/10/94		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	01/26/95		<50	<0.5	0.7	<0.5	<0.5	---	---	---
	04/21/95		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	07/28/95		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
	10/31/95		<50	<0.5	<0.5	<0.5	<0.5	---	---	---
DTSC MCLs			NE	1	100 ^f	680	1,750	---	---	---

Table 2. Analytic Results for Ground Water - Former Shell Service Station, WIC #204-0079-0109, 999 San Pablo Avenue, Albany, California (continued)

Notes and Abbreviations

TPH-G = Total petroleum hydrocarbons as gasoline by Modified EPA Method 8015

B = Benzene by EPA Method 8020

T = Toluene by EPA Method 8020

E = Ethylbenzene by EPA Method 8020

X = Xylenes by EPA Method 602 or 8020

MTBE = Methyl tertiary butyl ether by Method 8020

--- = Not analyzed

DTSC MCLs = California Department of Toxic Substances Control maximum
contaminant
levels for drinking water

NE = Not established

<n = Not detected at detection limits of n ppb

dup = Duplicate sample

SPH = Separate-phase hydrocarbons detected, no sample collected

DO = Dissolved Oxygen

HDM = Hydrocarbon Degrading Microbes.

a = Simple method

b = Estimated number

c = Compounds detected and calculated as gasoline are not characteristic of the
standard

gasoline chromatographic pattern

d = Well inaccessible

e = Sample analyzed for Total Dissolved Solids (450,000 ppb)

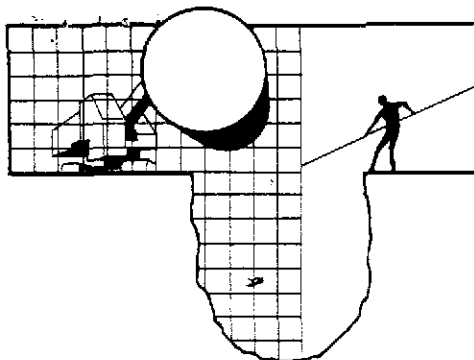
f = DTSC recommended action level for drinking water; MCL not established

g = Estimated BTEX degrading units per liter.

* = MTBE confirmed by EPA Method 8260

ATTACHMENT A

Blaine Quarterly Ground Water Monitoring Report



BLAINE TECH SERVICES INC.

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

December 20, 1996

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

Attn: R. Jeff Granberry

Shell WIC #204-0079-0109
999 San Pablo Avenue
Albany, California

4th Quarter 1996

Quarterly Groundwater Monitoring Report 961210-S-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) 995-5535 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: Paul Waite

(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)
S-1	12/10/96	TOB	--	NONE	--	--	7.56	11.68
S-2	12/10/96	TOB	--	NONE	--	--	8.57	12.06
S-3	12/10/96	TOB	ODOR	NONE	--	--	7.96	12.14
S-4	12/10/96	TOB	--	NONE	--	--	7.04	14.13
S-5 *	12/10/96	TOB	FREE PRODUCT	9.07	0.03	600	9.10	--
S-6	12/10/96	TOB	--	NONE	--	--	6.68	15.13
S-7	12/10/96	TOB	--	NONE	--	--	9.04	14.99

* Sample DUP was a duplicate sample taken from well S-5.



SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: 961210-51

Date:

Page 1 of 1

Site Address: 999 San Pablo Ave., Albany

WIC#: 204-0079-0109

Shell Engineer: R. Jeff Granberry
Phone No.: (510) 675-6168
Fax #: 675-6172

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

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

Comments:

Sampled by: Doug Sanders

Printed Name: DOUG SANDERS

Analysis Required

LAB: SEQUOIA

CHECK ONE (IF BOX ONLY)	CI/DI	TURN AROUND TIME
Quarterly Monitoring <input checked="" type="checkbox"/>	6441	24 hours <input type="checkbox"/>
Site Investigation <input type="checkbox"/>	6441	48 hours <input type="checkbox"/>
Soil Clarity/Disposal <input type="checkbox"/>	6442	16 days <input checked="" type="checkbox"/> (Normal)
Water Clarity/Disposal <input type="checkbox"/>	6443	Other <input type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	6462	NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT.
Water Rem. or Sys. O & M <input type="checkbox"/>	6463	
Other <input type="checkbox"/>		

Sample ID	Date	Sludge	Soil	Water	Air	No. of conds.	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	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
S-5	12/10/96			X		3		A	C			X	X					
S-7	12/10/96			X		3						X	X					9612794
EB	12/10/96			X		3						X	X					
DUP	12/10/96			X		3						X	X					

Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>DOUG SANDERS</u>	Date: <u>12-11-96</u>	Time: <u>10:45</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>FUTCHER</u>	Date: <u>12/11/96</u>	Time: <u>10:45</u>
Relinquished By (signature): <u>[Signature]</u>	Printed Name:	Date: <u>12/11/96</u>	Time:	Received (signature): <u>[Signature]</u>	Printed Name:	Date:	Time:
Relinquished By (signature): <u>[Signature]</u>	Printed Name:	Date:	Time:	Received (signature): <u>[Signature]</u>	Printed Name: <u>P. LE</u>	Date: <u>12-11-96</u>	Time: <u>12:40</u>

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



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600
(510) 988-9600
(916) 921-9600

FAX (415) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Project: Shell Albany/961210-S1

Enclosed are the results from samples received at Sequoia Analytical on December 11, 1996.
The requested analyses are listed below:

<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DATE COLLECTED</u>	<u>TEST METHOD</u>
9612794 -01	LIQUID, S-5	12/10/96	TPGBMW Purgeable TPH/BTEX
9612794 -02	LIQUID, S-7	12/10/96	TPGBMW Purgeable TPH/BTEX
9612794 -03	LIQUID, EB	12/10/96	TPGBMW Purgeable TPH/BTEX
9612794 -04	LIQUID, DUP	12/10/96	TPGBMW Purgeable TPH/BTEX

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

Very truly yours,

SEQUOIA ANALYTICAL


Peggy Penner
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Shell Albany/961210-S1 Sample Descript: S-5 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9612794-01	Sampled: 12/10/96 Received: 12/11/96 Analyzed: 12/16/96 Reported: 12/19/96
--	--	---

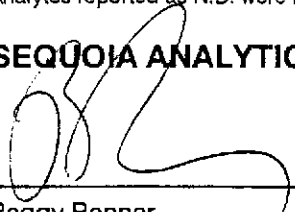
QC Batch Number: GC121696BTEX21A
 Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50000	270000
Methyl t-Butyl Ether	2500	N.D.
Benzene	500	8800
Toluene	500	29000
Ethyl Benzene	500	5200
Xylenes (Total)	500	37000
Chromatogram Pattern:		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	101

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

SEQUOIA ANALYTICAL - ELAP #1210


 Peggy Penner
 Project Manager



Blaine Technical Services	Client Proj. ID: Shell Albany/961210-S1	Sampled: 12/10/96
985 Timothy Drive	Sample Descript: S-7	Received: 12/11/96
San Jose, CA 95133	Matrix: LIQUID	
Attention: Jim Keller	Analysis Method: 8015Mod/8020	Analyzed: 12/16/96
	Lab Number: 9612794-02	Reported: 12/19/96

QC Batch Number: GC121696BTEX21A
Instrument ID: GCHP21

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	97

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager





Blaine Technical Services 985 Timothy Drive San Jose, CA 95133 Attention: Jim Keller	Client Proj. ID: Shell Albany/961210-S1 Sample Descript: EB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9612794-03	Sampled: 12/10/96 Received: 12/11/96 Analyzed: 12/16/96 Reported: 12/19/96
---	---	---

QC Batch Number: GC121696BTEX21A
Instrument ID: GCHP21

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	95

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Denner
Project Manager



Blaine Technical Services 985 Timothy Drive San Jose, CA 95133	Client Proj. ID: Shell Albany/961210-S1 Sample Descript: DUP Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9612794-04	Sampled: 12/10/96 Received: 12/11/96 Analyzed: 12/16/96 Reported: 12/19/96
Attention: Jim Keller		

QC Batch Number: GC121696BTEX21A
Instrument ID: GCHP21


Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50000	400000
Methyl t-Butyl Ether	2500	N.D.
Benzene	500	9200
Toluene	500	32000
Ethyl Benzene	500	7200
Xylenes (Total)	500	50000
Chromatogram Pattern:		C6-C12

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	101

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

SEQUOIA ANALYTICAL - ELAP #1210


Peggy Penner
Project Manager



Sequoia
Analytical

680 Chesapeake Drive
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Blaine Technical Services
985 Timothy Drive
San Jose, CA 95133
Attention: Jim Keller

Client Proj. ID: Shell Albany/961210-S1

Received: 12/11/96

Lab Proj. ID: 9612794

Reported: 12/19/96

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 7 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



Sequoia Analytical

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FAX (916) 921-0100

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

Client Project ID: Shell Albany / 961210-S1
Matrix: Liquid

Work Order #: 9612794-01-04

Reported: Dec 20, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC121696BTEX21A	GC121696BTEX21A	GC121696BTEX21A	GC121696BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	G. Fish	G. Fish	G. Fish	G. Fish
MS/MSD #:	961258807	961258807	961258807	961258807
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/16/96	12/16/96	12/16/96	12/16/96
Analyzed Date:	12/16/96	12/16/96	12/16/96	12/16/96
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.4	9.9	10	30
MS % Recovery:	94	99	100	100
Dup. Result:	9.4	10	10	31
MSD % Recov.:	94	100	100	103
RPD:	0.0	1.0	0.0	3.3
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK121696	BLK121696	BLK121696	BLK121696
Prepared Date:	12/16/96	12/16/96	12/16/96	12/16/96
Analyzed Date:	12/16/96	12/16/96	12/16/96	12/16/96
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	11	10	10	31
LCS % Recov.:	110	100	100	103

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

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

Please Note:

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

94-01-04.BLA < 1 >