CAMBRIA

8-13-97
report

ENVIRONMENTAL PROTECTION
97 AUG 21 PM 2:53

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

Re: **Second Quarter 1997 Monitoring Report**
Shell Service Station
5251 Hopyard Road
Pleasanton, California
WIC #204-6138-0907
Cambria Project #240-314-297

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.

SECOND QUARTER 1997 ACTIVITIES

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

ANTICIPATED FUTURE 1997 ACTIVITIES

The next ground water monitoring event is scheduled for second quarter 1998. At that time, Blaine will gauge water levels and sample selected site monitoring wells, and Cambria will submit a report presenting a summary of these activities.

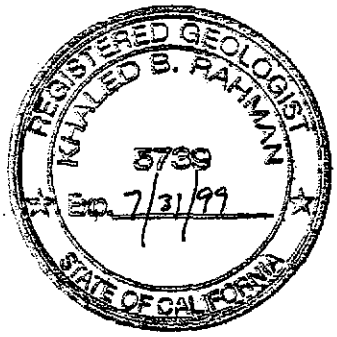
CAMBRIA
ENVIRONMENTAL
TECHNOLOGY, INC.
1144 65TH STREET,
SUITE B
OAKLAND,
CA 94608
PH: (510) 420-0700
FAX: (510) 420-9170

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 4023, Concord, California 94524
Kevin Graves, Regional Water Quality Control Board - San Francisco Bay Region, 2101 Webster Street, Suite 500, Oakland, California 94612
Ted Klenk, Pleasanton Fire Department, 4444 Railroad Street, Pleasanton, California 94566

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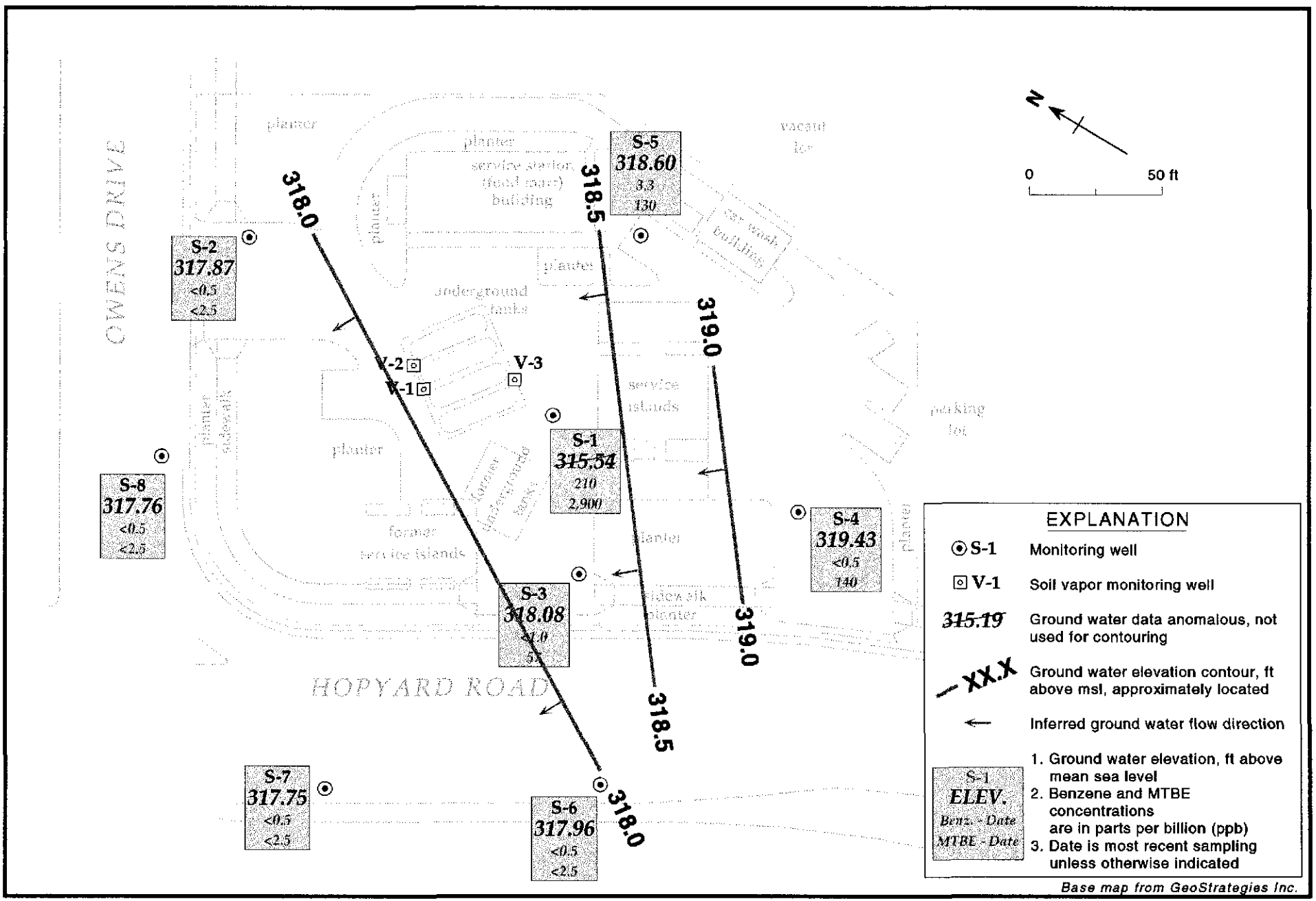

Figure 1. Ground Water Elevation Contours - May 12, 1997 - Shell Service Station WIC# 204-6138-0907, 5251 Hopyard Road, Pleasanton, California

Table 1. **Ground Water Elevations and Analytic Results** - Shell Service Station WIC #204-6138-0907, 5251 Hopyard Road, Pleasanton, California

Well ID and Sampling Frequency	Sampling Date	Top-of-Box (ft msl)	Depth to Water (ft)	G W Elevation (ft msl)	TPH-G	TPH-D	B	T	E	X	MTBE	DO
					← parts per billion (µg/L) →							mg/L
S-1	01/25/91	326.73	---	---	2,500	1,500	460	<25	130	36	---	---
(Annually)	04/06/91		---	---	6,700	2,600[a]	2,600	14	580	250	---	---
	07/24/91		---	---	8,800	3,800[a]	2,300	30	640	220	---	---
	10/18/91		8.85	317.88	12,000	3,300[a]	3,600	380	990	580	---	---
	01/23/92		---	---	1,600	890	450	3.0	120	17	---	---
	04/27/92		---	---	1,100[g]	500[a]	610	<10	110	10	---	---
	07/21/92		---	---	5,100	290[c]	1,900	54	460	140	---	---
	10/16/92		---	---	13,000	390[c]	3,200	310	780	360	---	---
	01/23/93		7.96	318.77	2,300	30[d]	640	<5	110	13	---	---
	04/28/93		9.07	317.66	4,600	390	780	<0.5	250	<0.5	---	---
	09/22/93		8.68	318.05	3,000	610[a]	660	28	160	17	---	---
	12/08/93		8.23	318.50	520	280	210	<2.5	49	<2.5	---	---
	03/04/94		8.81	317.92	640	---	190	1.4	18	1.3	---	---
	03/04/94[dup]		8.81	317.92	640	---	180	1.7	17	1.3	---	---
	06/16/94		8.80	317.93	2,500	---	390	9.5	31	7.5	---	---
	06/16/94[dup]		8.80	317.93	2,000	---	410	7.8	120	20	---	---
	09/13/94		8.62	318.11	1,400	---	310	7.7	29	8.5	---	---
	09/13/94[dup]		8.62	318.11	1,400	---	240	7.9	44	6.3	---	---
	05/05/95		11.54	315.19	800	---	120	3.6	26	2.7	---	---
	05/05/95[dup]		11.54	315.19	710	---	110	3.4	19	2.7	---	---
	05/21/96		8.88	317.85	1,500	---	170	8.5	120	6.7	---	---
	05/12/97		**11.19**	**315.54**	**4,700**	**---**	**200**	**15**	**210**	**20**	**2,300**	**2.4**
	05/12/97[dup]		**11.19**	**315.54**	**4,800**	**---**	**210**	**16**	**190**	**16**	**3,200(2,900)**	**2.4**
S-2	01/25/91	326.59	---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
(Annually)	04/16/91		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/24/91		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	10/18/91		8.83	317.76	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---

Table 1. **Ground Water Elevations and Analytic Results** - Shell Service Station WIC #204-6138-0907, 5251 Hopyard Road, Pleasanton, California (continued)

Well ID and Sampling Frequency	Sampling Date	Top-of-Box (ft msl)	Depth to Water (ft)	G W Elevation (ft msl)	TPH-G	TPH-D	B	T	E	X	MTBE	DO
					← parts per billion (µg/L) →							mg/L
	01/23/92		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	04/27/92		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/17/92		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	10/16/92		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	01/23/93		8.10	318.49	<50	140[b]	<0.5	<0.5	<0.5	<0.5	---	---
	04/28/93		9.06	317.53	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	09/22/93		8.91	317.68	---	---	---	---	---	---	---	---
	12/08/93		9.07	317.52	---	---	---	---	---	---	---	---
	03/04/94		8.90	317.69	---	---	---	---	---	---	---	---
	06/16/94		8.98	317.61	---	---	---	---	---	---	---	---
	09/13/94		8.78	317.81	<50	---	<0.5	2.5	<0.5	<0.5	---	---
	05/05/95		8.60	317.99	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/21/96		8.75	317.84	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/12/97		**8.72**	**317.87**	**<50**	**---**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<2.5**	**3.4**
S-3 (Annually)	01/25/91	327.38	---	---	870	330	230	<2.5	130	<2.5	---	---
	04/16/91		---	---	190	140[a]	12	0.8	6.2	1.5	---	---
	07/24/91		---	---	1,700	1,200[a]	450	4.4	150	2.9	---	---
	10/18/91		9.64	317.74	1,900	500	370	3.1	120	220	---	---
	01/23/92		---	---	2,000	650[a]	580	3.0	200	<0.5	---	---
	04/27/92		---	---	1,100	230[a]	150	<3	76	14	---	---
	07/17/92		---	---	810	58	200	<2.5	57	3.8	---	---
	10/16/92		---	---	440	190[c]	79	1.8	18	4.6	---	---
	01/23/93		8.81	318.57	670	170[d]	79	1.5	46	15	---	---
	04/28/93		9.87	317.51	2,000	<50	300	3.4	210	38	---	---
	09/22/93		9.65	317.73	4,800	670[a]	2,000	34	150	51	---	---
	12/08/93		9.26	318.12	1,200	11	440	<5.0	120	29	---	---
	03/04/94		9.64	317.74	630	---	130	<0.5	17	0.80	---	---
	06/16/94		9.78	317.60	1,800	---	430	19	35	21	---	---

Table 1. **Ground Water Elevations and Analytic Results** - Shell Service Station WIC #204-6138-0907, 5251 Hopyard Road, Pleasanton, California (continued)

Well ID and Sampling Frequency	Sampling Date	Top-of-Box (ft msl)	Depth to Water (ft)	G W Elevation (ft msl)	TPH-G	TPH-D	B	T	E	X	MTBE	DO
					← parts per billion (µg/L) →							mg/L
	05/05/95		9.38	318.00	160	---	50	0.9	7.2	4.1	---	---
	05/21/96		9.41	317.97	270	---	45	<0.5	1.4	<0.5	---	---
	05/21/96[dup]		9.41	317.97	210	---	<0.5	<0.5	.95	<0.5	---	---
	05/12/97		**9.30**	**318.08**	**420**	**---**	**<1.0**	**<1.0**	**<1.0**	**<1.0**	**57**	**2.5**
S-4 (Annually)	01/25/91	327.38	---	---	<50	<50	<0.5	1.5	<0.5	2.8	---	---
	04/16/91		---	---	<50	0.7	<0.5	<0.5	<0.5	<0.5	---	---
	07/24/91		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	10/18/91		8.82	318.56	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	01/23/92		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	04/27/92		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/17/92		---	---	<500	74	<0.5	<0.5	<0.5	<0.5	---	---
	10/16/92		---	---	<500	<50	<0.5	<0.5	<0.5	<0.5	---	---
	01/23/93		8.32	319.06	<500	94[b]	<0.5	<0.5	<0.5	<0.5	---	---
	04/28/93		9.76	317.62	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	09/22/93		9.30	318.08	---	---	---	---	---	---	---	---
	12/08/93		9.74	317.64	---	---	---	---	---	---	---	---
	03/04/94		9.60	317.78	---	---	---	---	---	---	---	---
	06/16/94		9.42	317.96	---	---	---	---	---	---	---	---
	05/05/95		9.02	318.36	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/21/96		9.29	318.09	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/12/97		**7.95**	**319.43**	**<50**	**---**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**140**	**2.5**
S-5 (Annually)	01/25/91	327.76	---	---	<50	<50	<0.5	<0.5	<0.5	0.7	---	---
	04/16/91		---	---	<50	<50	<0.5	<0.5	<0.5	0.8	---	---
	07/24/91		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	10/18/91		10.00	317.76	120[e]	<50	4.3	<0.5	1.0	0.7	---	---
	01/23/92		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	04/27/92		---	---	50	<50	<0.5	<0.5	<0.5	0.6	---	---

Table 1. **Ground Water Elevations and Analytic Results** - Shell Service Station WIC #204-6138-0907, 5251 Hopyard Road, Pleasanton, California (continued)

Well ID and Sampling Frequency	Sampling Date	Top-of-Box (ft msl)	Depth to Water (ft)	G W Elevation (ft msl)	TPH-G	TPH-D	B	T	E	X	MTBE	DO
					← parts per billion (µg/L) →							mg/L
	07/17/92		---	---	<50	70	<0.5	<0.5	<0.5	<0.5	---	---
	10/16/92		---	---	230	57	13	<0.5	4.9	4.3	---	---
	01/23/93		8.88	318.88	<50	150[b]	<0.5	<0.5	<0.5	<0.5	---	---
	04/28/93		10.20	317.56	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	09/22/93		9.92	317.84	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	12/08/93		10.19	317.57	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	03/04/94		9.95	317.81	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	06/16/94		10.02	317.74	<50	---	0.9	<0.5	<0.5	<0.5	---	---
	05/05/95		9.58	318.18	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/21/96		9.84	317.92	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/12/97		**9.16**	**318.60**	**360**	**---**	**3.3**	**<0.50**	**17**	**9.8**	**130**	**4.2**
S-6 (Annually)	01/25/91	326.56	---	---	<50	<50	<0.5	1.7	<0.5	2.8	---	---
	04/16/91		---	---	<50	<50	<0.5	<0.5	<0.5	0.6	---	---
	07/24/91		---	---	<50	<50	<0.5	<0.5	<0.5	0.5	---	---
	10/18/91		8.84	317.22	<50	<50	<0.5	<0.5	<0.5	0.5	---	---
	01/23/92		---	---	<50	<50	<0.5	<0.5	<0.5	0.5	---	---
	04/27/92		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/17/92		---	---	400	130	<0.5	<0.5	<0.5	<0.5	---	---
	10/16/92		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	01/23/93		7.82	318.74	<50	230[b]	<0.5	<0.5	<0.5	<0.5	---	---
	04/28/93		9.00	317.56	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	09/22/93		8.61	317.96	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	12/08/93		10.02	316.54	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	03/04/94		8.88	317.68	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	06/16/94		9.04	317.52	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/05/95		8.54	318.02	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/21/96		8.62	317.94	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/12/97		**8.60**	**317.96**	**<50**	**---**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**	**2.6**

Table 1. **Ground Water Elevations and Analytic Results** - Shell Service Station WIC #204-6138-0907, 5251 Hopyard Road, Pleasanton, California (continued)

Well ID and Sampling Frequency	Sampling Date	Top-of-Box (ft msl)	Depth to Water (ft)	G W Elevation (ft msl)	TPH-G	TPH-D	B	T	E	X	MTBE	DO
					← parts per billion (µg/L) →							mg/L
S-7 (Annually)	01/25/91	326.49	---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	04/16/91		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/24/91		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	10/18/91		8.92	317.57	<50	140[f]	<0.5	<0.5	<0.5	<0.5	---	---
	01/23/92		---	---	<50	140[f]	<0.5	<0.5	<0.5	<0.5	---	---
	04/27/92		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/17/92		---	---	<50	<50	<0.5	1.8	0.6	4.1	---	---
	10/16/92		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	01/23/93		8.06	318.43	<50	110[b]	<0.5	<0.5	<0.5	<0.5	---	---
	04/28/93		8.94	317.55	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	09/22/93		8.57	317.92	---	---	---	---	---	---	---	---
	12/08/93		9.00	317.49	---	---	---	---	---	---	---	---
	03/04/94		8.96	317.53	---	---	---	---	---	---	---	---
	06/16/94		9.12	317.37	---	---	---	---	---	---	---	---
	05/05/95		8.58	317.91	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/21/96		8.64	317.85	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/12/97		**8.74**	**317.75**	**<50**	**---**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**	**2.3**
S-8 (Annually)	01/25/91	325.32	---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	04/16/91		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/24/91		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	10/18/91		7.62	317.70	<50	360[f]	<0.5	<0.5	<0.5	<0.5	---	---
	01/23/92		---	---	<50	90	<0.5	<0.5	<0.5	<0.5	---	---
	04/27/92		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	07/17/92		---	---	53	<50	<0.5	1.0	<0.5	1.8	---	---
	10/16/92		---	---	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	01/23/93		7.00	318.32	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---
	04/28/93		7.77	317.55	<50	<50	<0.5	<0.5	<0.5	<0.5	---	---

Table 1. **Ground Water Elevations and Analytic Results** - Shell Service Station WIC #204-6138-0907, 5251 Hopyard Road, Pleasanton, California (continued)

Well ID and Sampling Frequency	Sampling Date	Top-of-Box (ft msl)	Depth to Water (ft)	G W Elevation (ft msl)	TPH-G	TPH-D	B	T	E	X	MTBE	DO
					← parts per billion (µg/L) →							mg/L
	09/22/93		7.67	317.65	<50	160	<0.5	<0.5	<0.5	<0.5	---	---
	12/08/93		7.76	317.56	<50	210	<0.5	<0.5	<0.5	<0.5	---	---
	03/04/94		7.66	317.66	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	06/16/94		7.78	317.54	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/05/95		7.42	317.90	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/21/96		7.50	317.82	<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/12/97		**7.56**	**317.76**	**<50**	**---**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**	**1.6**
Trip Blank	03/04/94				<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	06/16/94				<50	---	<0.5	<0.5	<0.5	<0.5	---	---
	05/05/95				<50	---	<0.5	<0.5	<0.5	<0.5	---	---
MCLs					NE	NE	1	150	700	1,750	NE	NE

Table 1. **Ground Water Elevations and Analytic Results** - Shell Service Station WIC #204-6138-0907, 5251 Hopyard Road, Pleasanton, California (continued)

Abbreviations:

ft msl = Feet above mean sea level
GW = Ground Water
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 8020
E = Ethylbenzene by EPA Method 8020
T = Toluene by EPA Method 8020
X = Xylenes by EPA Method 8020
NE = Not established
MCLs = California primary maximum contaminant levels for drinking water (22 CCR 64444)
<n = Not detected at detection limits of n µg/L
dup = Duplicate sample
--- = Not analyzed
MTBE = Methyl tert-Butyl Ether by EPA Method 8020. Result in parentheses indicates MTBE by EPA Method 8260.
DO = Dissolved Oxygen
µg/L = Micrograms per liter
mg/L = Milligrams per liter

Notes:

a = Compounds detected as diesel appear to be the less volatile constituents of gasoline.
b = The concentration reported as diesel primarily due to the presence of a heavier petroleum product.
c = The concentration reported as diesel due to the presence of a lighter petroleum product.
d = Concentrations reported as diesel includes a heavier petroleum product.
e = Compounds detected within the chromatographic range of gasoline but not characteristic of the standard gasoline pattern.
f = Compounds detected within the chromatographic range of diesel but not characteristic of the standard diesel pattern.
g = The chromatographic pattern of the purgeable hydrocarbons found in the sample is similar to the pattern of weathered gasoline.

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

June 3, 1997

Shell Oil Company
P.O. Box 5278
Concord, CA 94520-9998

Attn: Alex Perez

Shell WIC #204-6138-0907
5251 Hopyard Road
Pleasanton, California

2nd Quarter 1997

Quarterly Groundwater Monitoring Report 970512-L-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,

Deedee Keene for:

Francis Thie

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

cc: Cambria Environmental
1144 65th St., 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)
S-1 *	5/12/97	TOB	ODOR	NONE	--	--	11.19	29.93
S-2	5/12/97	TOB	--	NONE	--	--	8.72	24.55
S-3	5/12/97	TOB	--	NONE	--	--	9.30	24.78
S-4	5/12/97	TOB	--	NONE	--	--	7.95	24.47
S-5	5/12/97	TOB	--	NONE	--	--	9.16	24.72
S-6	5/12/97	TOB	--	NONE	--	--	8.60	26.10
S-7	5/12/97	TOB	--	NONE	--	--	8.74	25.45
S-8	5/12/97	TOB	--	NONE	--	--	7.56	25.25

* Sample DUP was a duplicate sample taken from well S-1.

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: 970512-L1

Date: 5.12.97
Page 1 of 2

PAGE. 2/3

408 573 7771

BLAINE TECH SERVICES

15:03

Site Address: 5251 Hopyard Rd., Pleasanton, CA

WIC#: 204-6138-0907

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

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

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

Comments:

Sampled by: [signature]

Printed Name: LAD GILCHRIST

LAB: SEQUOIA

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
S-1	5/12			X		3						X							Confirm highest	
S-2				X		3						X							MTBE not by 8260	
S-3				X		3						X								
S-4				X		3						X								
S-5				X		3						X								
S-6				X		3						X								
S-7				X		3						X								
S-8				X		3						X								

CHECK ONE (1) BOX ONLY

- 8015 Modified
- BTEX 8020/602
- Volatile Organics 8240
- Chem/Physical
- 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 hr. TAT.

970570.1

UST AGENCY:

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
[signature]	LAD GILCHRIST	5/13/97	11:15	[signature]	Fulcher	5/13/97	11:15
Relinquished By (signature):	Printed Name:	Date:	Time:	Received (signature):	Printed Name:	Date:	Time:
Relinquished By (signature):	Printed Name:	Date:	Time:	Received (signature):	Printed Name:	Date:	Time:

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

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING

CHAIN OF CUSTODY RECORD 9705201

Date: 5-12-97
Page 2 of 2

Site Address: [illegible]

WIC #: [illegible]

Shell Engineer: R. Jeff Cranberry Phone #: [illegible]

Consultant: Blaine Tech Services, Inc. [illegible]

Consultant Contact: Fran Thie

Phone No.: (408) 995-5535
Fax #: 293-8773

Comments:

Sampled by: Tod Nichols

Printed Name: TAD GILCHRIST

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 624)	Test for Disposal	Combination TPH 8015 & BTEX	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
DUP	5/12			X		3						X						
EB	5/12			X		3						X						

Water Disp./Disposal ☐ 4465
Soil/Air Rem. or Sys. O & M ☐ 4452
Water Rem. or Sys. O & M ☐ 4453
Other ☐

Other ☐ ____

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

9705201

UST AGENCY: ____

Relinquished By (signature):	Printed Name:	Date:	Time:	Received (signature):	Printed Name:	Date:	Time:
Tod Nichols	TAD GILCHRIST	5/13/97	11:15	[signature]	Fulcher	5/13/97	11:15
Relinquished By (signature):	Printed Name:	Date:	Time:	Received (signature):	Printed Name:	Date:	Time:
Relinquished By (signature):	Printed Name:	Date:	Time:	Received (signature):	Printed Name:	Date:	Time:

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

End Of Chain of Custody

(WED) 15:04 BLAINE TECH SERVICES 408 573 7771 P.03

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

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

Project: Shell Pleasanton/970512-L1

Enclosed are the results from samples received at Sequoia Analytical on May 13, 1997. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE COLLECTED	TEST METHOD
9705701 -01	LIQUID, S-1	05/12/97	TPGBMW Purgeable TPH/BTEX
9705701 -02	LIQUID, S-2	05/12/97	TPGBMW Purgeable TPH/BTEX
9705701 -03	LIQUID, S-3	05/12/97	TPGBMW Purgeable TPH/BTEX
9705701 -04	LIQUID, S-4	05/12/97	TPGBMW Purgeable TPH/BTEX
9705701 -05	LIQUID, S-5	05/12/97	TPGBMW Purgeable TPH/BTEX
9705701 -06	LIQUID, S-6	05/12/97	TPGBMW Purgeable TPH/BTEX
9705701 -07	LIQUID, S-7	05/12/97	TPGBMW Purgeable TPH/BTEX
9705701 -08	LIQUID, S-8	05/12/97	TPGBMW Purgeable TPH/BTEX
9705701 -09	LIQUID, DUP	05/12/97	MTBEMW Methyl t-Butyl Ethe
9705701 -09	LIQUID, DUP	05/12/97	TPGBMW Purgeable TPH/BTEX
9705701 -10	LIQUID, EB	05/12/97	TPGBMW Purgeable TPH/BTEX

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

Very truly yours,

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

Sequoia Analytical

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

Blaine Tech Services	Client Proj. ID: Shell Pleasanton/970512-L1	Sampled: 05/12/97
1680 Rogers Avenue	Sample Descript: S-1	Received: 05/13/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/17/97
Attention: Fran Thie	Lab Number: 9705701-01	Reported: 05/27/97

QC Batch Number: GC051797BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**500**	**4700**
Methyl t-Butyl Ether	**25**	**2300**
Benzene	**5.0**	**200**
Toluene	**5.0**	**15**
Ethyl Benzene	**5.0**	**210**
Xylenes (Total)	**5.0**	**20**
Chromatogram Pattern:		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	174 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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

Blaine Tech Services	Client Proj. ID: Shell Pleasanton/970512-L1	Sampled: 05/12/97
1680 Rogers Avenue	Sample Descript: S-2	Received: 05/13/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/16/97
Attention: Fran Thie	Lab Number: 9705701-02	Reported: 05/27/97

QC Batch Number: GC051697BTEX07A
Instrument ID: GCHP07

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	102

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 Pleasanton/970512-L1	Sampled: 05/12/97
1680 Rogers Avenue	Sample Descript: S-3	Received: 05/13/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/17/97
Attention: Fran Thie	Lab Number: 9705701-03	Reported: 05/27/97

QC Batch Number: GC051797BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**100**	**420**
Methyl t-Butyl Ether	**5.0**	**57**
Benzene	1.0	N.D.
Toluene	1.0	N.D.
Ethyl Benzene	1.0	N.D.
Xylenes (Total)	1.0	N.D.
Chromatogram Pattern:		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	107

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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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 Pleasanton/970512-L1	Sampled: 05/12/97
1680 Rogers Avenue	Sample Descript: S-4	Received: 05/13/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/16/97
Attention: Fran Thie	Lab Number: 9705701-04	Reported: 05/27/97

QC Batch Number: GC051697BTEX07A
Instrument ID: GCHP07

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**	**140**
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	108

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 Pleasanton/970512-L1	Sampled: 05/12/97
1680 Rogers Avenue	Sample Descript: S-5	Received: 05/13/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/16/97
Attention: Fran Thie	Lab Number: 9705701-05	Reported: 05/27/97

QC Batch Number: GC051697BTEX07A
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**360**
Methyl t-Butyl Ether	**2.5**	**130**
Benzene	**0.50**	**3.3**
Toluene	0.50	N.D.
Ethyl Benzene	**0.50**	**17**
Xylenes (Total)	**0.50**	**9.8**
Chromatogram Pattern:		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	102

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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

Blaine Tech Services	Client Proj. ID: Shell Pleasanton/970512-L1	Sampled: 05/12/97
1680 Rogers Avenue	Sample Descript: S-6	Received: 05/13/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/16/97
Attention: Fran Thie	Lab Number: 9705701-06	Reported: 05/27/97

QC Batch Number: GC051697BTEX07A
Instrument ID: GCHP07

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	94

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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

Blaine Tech Services	Client Proj. ID: Shell Pleasanton/970512-L1	Sampled: 05/12/97
1680 Rogers Avenue	Sample Descript: S-7	Received: 05/13/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/19/97
Attention: Fran Thie	Lab Number: 9705701-07	Reported: 05/27/97

QC Batch Number: GC051997BTEX07A
Instrument ID: GCHP07

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	118

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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

Blaine Tech Services	Client Proj. ID: Shell Pleasanton/970512-L1	Sampled: 05/12/97
1680 Rogers Avenue	Sample Descript: S-8	Received: 05/13/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/16/97
Attention: Fran Thie	Lab Number: 9705701-08	Reported: 05/27/97

QC Batch Number: GC051697BTEX07A
Instrument ID: GCHP07

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	102

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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 Pleasanton/970512-L1	Sampled: 05/12/97
1680 Rogers Avenue	Sample Descript: DUP	Received: 05/13/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: EPA 8260	Analyzed: 05/21/97
Attention: Fran Thie	Lab Number: 9705701-09	Reported: 05/27/97

QC Batch Number: MS051597MTBEH6A
Instrument ID: H6

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	67	**2900**

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	76	114	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, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services	Client Proj. ID: Shell Pleasanton/970512-L1	Sampled: 05/12/97
1680 Rogers Avenue	Sample Descript: DUP	Received: 05/13/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/16/97
Attention: Fran Thie	Lab Number: 9705701-09	Reported: 05/27/97

QC Batch Number: GC051697BTEX07A
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**1000**	**4800**
Methyl t-Butyl Ether	**50**	**3200**
Benzene	**10**	**210**
Toluene	**10**	**16**
Ethyl Benzene	**10**	**190**
Xylenes (Total)	**10**	**16**
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, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blaine Tech Services	Client Proj. ID: Shell Pleasanton/970512-L1	Sampled: 05/12/97
1680 Rogers Avenue	Sample Descript: EB	Received: 05/13/97
San Jose, CA 95112	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/19/97
Attention: Fran Thie	Lab Number: 9705701-10	Reported: 05/27/97

QC Batch Number: GC051997BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	94

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner
Project Manager

Sequoia Analytical

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

Client Proj. ID: Shell Pleasanton/970512-L1

Lab Proj. ID: 9705701

Received: 05/13/97

Reported: 05/27/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 10 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

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Blaine Tech Services, Inc.	Client Project ID:	Shell Pleasanton / 970512-L1	
1680 Rogers Avenue	Matrix:	Liquid	
San Jose, CA 95112			
Attention: Fran Thie	Work Order #:	9705701 -01, 03	Reported: May 28, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC051797BTEX18A	GC051797BTEX18A	GC051797BTEX18A	GC051797BTEX18A	GC051797BTEX18A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015 M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Heider	J. Heider	J. Heider	J. Heider	J. Heider
MS/MSD #:	970537103	970537103	970537103	970537103	970537103
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/17/97	5/17/97	5/17/97	5/17/97	5/17/97
Analyzed Date:	5/17/97	5/17/97	5/17/97	5/17/97	5/17/97
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	7.9	8.4	8.8	25	57
MS % Recovery:	79	84	88	83	95
Dup. Result:	7.5	8.3	8.6	25	57
MSD % Recov.:	75	83	86	83	95
RPD:	5.2	1.2	2.3	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK051797	BLK051797	BLK051797	BLK051797	BLK051797
Prepared Date:	5/17/97	5/17/97	5/17/97	5/17/97	5/17/97
Analyzed Date:	5/17/97	5/17/97	5/17/97	5/17/97	5/17/97
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	7.8	8.3	8.8	26	57
LCS % Recov.:	78	83	88	87	95
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Peggy Perner
Project Manager

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Blaine Tech Services, Inc.	Client Project ID:	Shell Pleasanton / 970512-L1	
1680 Rogers Avenue	Matrix:	Liquid	
San Jose, CA 95112			
Attention: Fran Thie	Work Order #:	9705701-02, 04-06, 08-09	Reported: May 28, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC051697BTEX07A	GC051697BTEX07A	GC051697BTEX07A	GC051697BTEX07A	GC051697BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015 M
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 #:	970536009	970536009	970536009	970536009	970536009
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/16/97	5/16/97	5/16/97	5/16/97	5/16/97
Analyzed Date:	5/16/97	5/16/97	5/16/97	5/16/97	5/16/97
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	10	11	11	34	72
MS % Recovery:	100	110	110	113	120
Dup. Result:	9.3	9.8	10	31	64
MSD % Recov.:	93	98	100	103	107
RPD:	7.3	12	9.5	9.2	12
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK051697	BLK051697	BLK051697	BLK051697	BLK051697
Prepared Date:	5/16/97	5/16/97	5/16/97	5/16/97	5/16/97
Analyzed Date:	5/16/97	5/16/97	5/16/97	5/16/97	5/16/97
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.2	9.7	10	31	64
LCS % Recov.:	92	97	100	103	107
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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Blaine Tech Services, Inc.	Client Project ID:	Shell Pleasanton / 970512-L1	
1680 Rogers Avenue	Matrix:	Liquid	
San Jose, CA 95112			
Attention: Fran Thie	Work Order #:	9705701-07	Reported: May 28, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC051997BTEX07A	GC051997BTEX07A	GC051997BTEX07A	GC051997BTEX07A	GC051997BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015 M
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 #:	970537809	970537809	970537809	970537809	970537809
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/19/97	5/19/97	5/19/97	5/19/97	5/19/97
Analyzed Date:	5/19/97	5/19/97	5/19/97	5/19/97	5/19/97
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.6	10	11	32	69
MS % Recovery:	96	100	110	107	115
Dup. Result:	9.6	10	11	32	68
MSD % Recov.:	96	100	110	107	113
RPD:	0.0	0.0	0.0	0.0	1.5
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK051997	BLK051997	BLK051997	BLK051997	BLK051997
Prepared Date:	5/19/97	5/19/97	5/19/97	5/19/97	5/19/97
Analyzed Date:	5/19/97	5/19/97	5/19/97	5/19/97	5/19/97
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.4	9.9	10	31	66
LCS % Recov.:	94	99	100	103	110

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

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Blaine Tech Services, Inc.	Client Project ID:	Shell Pleasanton / 970512-L1	
1680 Rogers Avenue	Matrix:	Liquid	
San Jose, CA 95112			
Attention: Fran Thie	Work Order #:	9705701-10	Reported: May 28, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC051997BTEX06A	GC051997BTEX06A	GC051997BTEX06A	GC051997BTEX06A	GC051997BTEX06A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015 M
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 #:	970537809	970537809	970537809	970537809	970537809
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/19/97	5/19/97	5/19/97	5/19/97	5/19/97
Analyzed Date:	5/19/97	5/19/97	5/19/97	5/19/97	5/19/97
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	8.0	8.2	8.6	25	76
MS % Recovery:	80	82	86	83	127
Dup. Result:	7.7	8.2	8.7	25	75
MSD % Recov.:	77	82	87	83	125
RPD:	3.8	0.0	1.2	0.0	1.3
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK051997	BLK051997	BLK051997	BLK051997	BLK051997
Prepared Date:	5/19/97	5/19/97	5/19/97	5/19/97	5/19/97
Analyzed Date:	5/19/97	5/19/97	5/19/97	5/19/97	5/19/97
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	7.8	8.2	8.6	26	74
LCS % Recov.:	78	82	86	87	123
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Peggy Penner
Project Manager

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Blaine Tech Services, Inc.	Client Project ID:	Shell Pleasanton / 970512-L1	
1680 Rogers Avenue	Matrix:	Liquid	
San Jose, CA 95112			
Attention: Fran Thie	Work Order #:	9705701-09	Reported: May 28, 1997

QUALITY CONTROL DATA REPORT

Analyte:	MTBE
QC Batch#:	MS051597MTBEH6A
Analy. Method:	EPA 8260
Prep. Method:	N.A.
Analyst:	M. Williams
MS/MSD #:	970523708
Sample Conc.:	80
Prepared Date:	5/15/97
Analyzed Date:	5/15/97
Instrument I.D.#:	MS-H6
Conc. Spiked:	50 µg/L
Result:	130
MS % Recovery:	100
Dup. Result:	130
MSD % Recov.:	100
RPD:	0.0
RPD Limit:	0-25

LCS #:	VMB052197
Prepared Date:	-
Analyzed Date:	5/21/97
Instrument I.D.#:	H6
Conc. Spiked:	50 µg/L
LCS Result:	51
LCS % Recov.:	102

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

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