

# C A M B R I A

March 1, 2000

Ms. Susan Hugo  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, 2nd Floor  
Alameda, California 94502

Re: **Quarterly Status Report - First Quarter 2000**  
Shell-branded Service Station  
1800 Powell  
Emeryville, CA  
Incident No. 98995349

Dear Ms. Hugo:

On behalf of Equiva Services LLC, Cambria Environmental Technology, Inc. is submitting this letter in accordance with the reporting requirements of 23 CCR 2652d.

## Current Quarter's Activities

No activities were required or performed at this site during the first quarter of 2000.

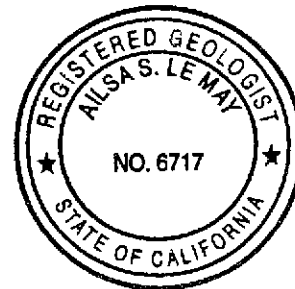
## Proposed Activities

Annual monitoring of the site wells will be conducted during the fourth quarter of 2000.

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

Sincerely,  
**Cambria Environmental Technology, Inc.**

  
Ailsa S. Le May, R.G.  
Senior Geologist



Oakland, CA  
Sonoma, CA  
Portland, OR  
Seattle, WA

cc: Karen Petryna, Equiva Services LLC, P.O. Box 7869, Burbank California 91501-7869

**Cambria  
Environmental  
Technology, Inc.**

1144 65th Street  
Suite B  
Oakland, CA 94608  
Tel (510) 420-0700  
Fax (510) 420-9170

# C A M B R I A

ENVIRONMENTAL  
PROTECTION

February 16, 2000

Susan Hugo  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

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Re: **Fourth Quarter 1999 Monitoring Report**  
Shell-branded Service Station  
1800 Powell Street  
Emeryville, California  
Incident # 98995349  
Cambria Project# 242-0894-002



Dear Ms. Hugo:

On behalf of Equiva Services LLC, Cambria Environmental Technology, Inc. (Cambria) is submitting this ground water monitoring report in accordance with the reporting requirements of 23 CCR 2652d.

## FOURTH QUARTER 1999 ACTIVITIES

**Ground Water Monitoring:** Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled all site wells except well S-9. Well S-9 contained thick, black separate-phase hydrocarbons (SPH). Blaine calculated ground water elevations and compiled the analytical data. Cambria prepared a ground water elevation contour map (Figure 1). The Blaine report, presenting the laboratory report and including supporting field documents, is included as Attachment A.

## ANTICIPATED FUTURE 2000 ACTIVITIES

**Ground Water Monitoring:** The next sampling event is scheduled for the fourth quarter of 2000. At that time, Blaine will measure and remove any detected SPH, gauge and sample all wells, and tabulate the data. Cambria will prepare a monitoring report.

Oakland, CA  
Sonoma, CA  
Portland, OR  
Seattle, WA

**Cambria  
Environmental  
Technology, Inc.**

1144 65th Street  
Suite B  
Oakland, CA 94608  
Tel (510) 420-0700  
Fax (510) 420-9170

**CLOSING**

We appreciate the opportunity to work with you on this project. Please call Ailsa Le May at (510) 420-3344 if you have any questions or comments.

Sincerely,  
**Cambria Environmental Technology, Inc**



Anni Kreml  
Senior Staff Scientist

Ailsa S. Le May, R.G.  
Senior Geologist



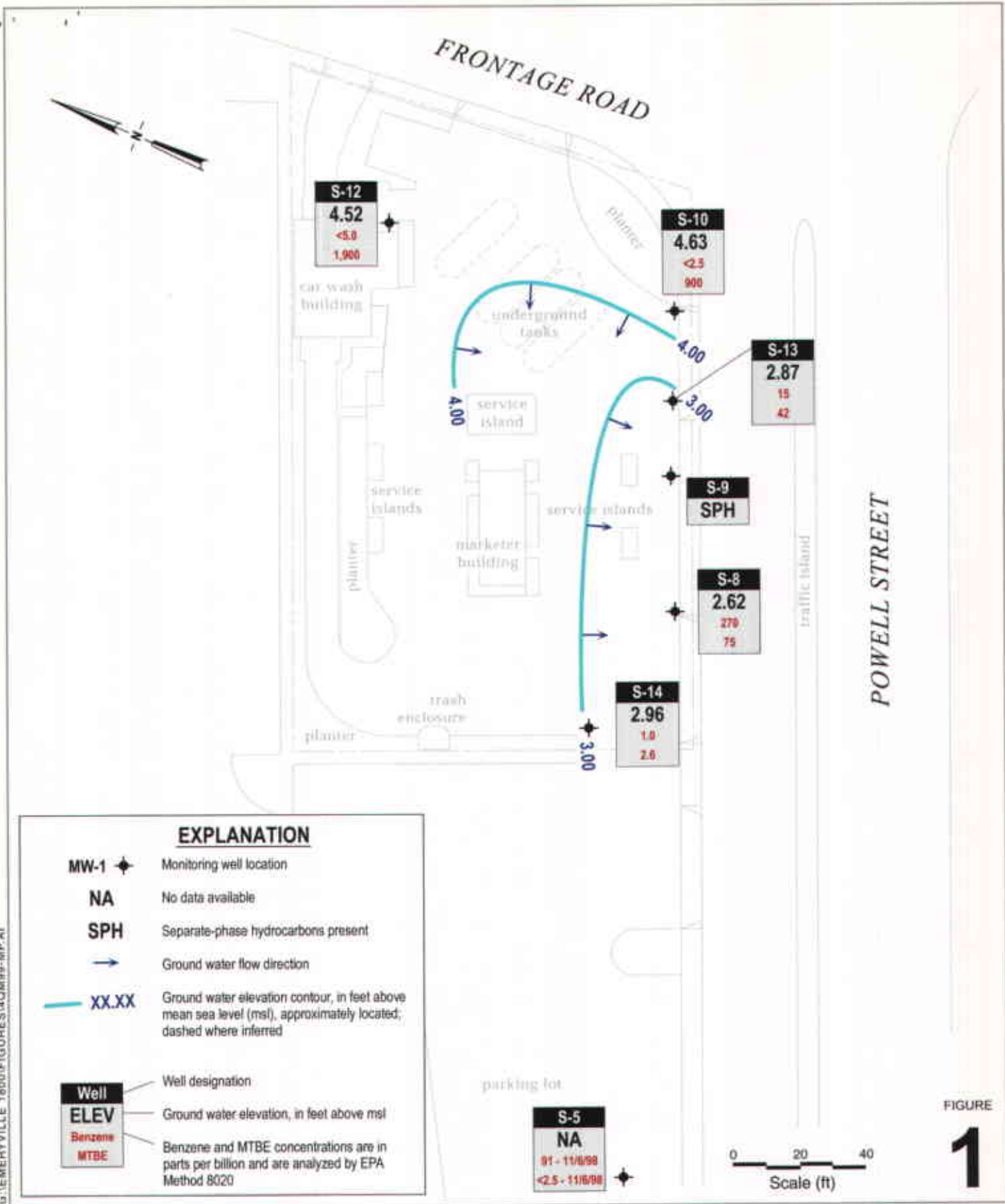
Figure: 1 - Ground Water Elevation Contour Map

Attachment: A - Blaine Ground Water Monitoring Report and Field Notes

cc: Karen Petryna, Equiva Services LLC, P.O. Box 7869, Burbank, California 91501-7869  
Mr. Eddy So, RWQCB-SFBR, 1515 Clay St., Ste. 1400, Oakland, CA 94612  
James N. & Sharman R. Hardwick, 4695 Thornton Ave., Fremont, CA 94536

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**Shell-branded Service Station**  
 1800 Powell Street  
 Emeryville, California  
 Incident #98995349



C A M B R I A

**Ground Water Elevation Contour Map**

December 7, 1999

**ATTACHMENT A**

Blaine Ground Water Monitoring Report  
and Field Notes

**BLAINE**  
TECH SERVICES INC.



1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
(408) 573-7771 FAX  
(408) 573-0555 PHONE

January 7, 2000

Karen Petryna  
Equiva Services LLC  
P.O. Box 7869  
Burbank, CA 91510-7869

Fourth Quarter 1999 Groundwater Monitoring at  
Shell-branded Service Station  
1800 Powell Street  
Emeryville, CA

Monitoring performed on December 7, 1999

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Groundwater Monitoring Report **991207-K-3**

This report covers the routine monitoring of groundwater wells at this Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Shell Martinez Manufacturing Complex.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. concentrates on objective data collection and does not participate in the interpretation of analytical results, the definition of geological or hydrological conditions, the formulation of recommendations, or the marketing of remedial systems.

Please call if you have any questions.

Yours truly,

A handwritten signature in black ink, appearing to read "Deidre Kerwin". The signature is fluid and cursive, with a large initial "D" and "K".

Deidre Kerwin  
Operations Manager

DK/ek

attachments: Cumulative Table of WELL CONCENTRATIONS  
Certified Analytical Report  
Field Data Sheet

cc: Anni Kreml  
Cambria Environmental Technology, Inc.  
P.O. Box 259  
Sonoma, CA 95476-0259

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**1800 Powell Street**  
**Emeryville, CA**  
**Wic #204-2495-0101**

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
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S-5	10/26/1984	3,000	NA	660	20	20	70	NA	NA	11.72	NA	NA	NA
S-5	02/09/1985	2,800	NA	740	20	20	140	NA	NA	11.72	NA	NA	NA
S-5	04/27/1985	4,300	NA	750	10	20	<30	NA	NA	11.72	NA	NA	NA
S-5	07/06/1985	1,500	NA	300	8	7	9	NA	NA	11.72	NA	NA	NA
S-5	10/24/1985	2,100	NA	760	10	40	50	NA	NA	11.72	NA	NA	NA
S-5	01/03/1986	1,300	NA	520	9	8	10	NA	NA	11.72	NA	NA	NA
S-5	07/05/1986	1,400	NA	500	10	4	<10	NA	NA	11.72	8.36	3.36	NA
S-5	10/18/1986	4,200	NA	1,100	9	14	7	NA	NA	11.72	NA	NA	NA
S-5	01/13/1987	4,500	6,100	1,100	15	30	25	NA	NA	11.72	NA	NA	NA
S-5	07/07/1987	3,200	NA	1,000	16	9	12	NA	NA	11.72	9.15	2.57	NA
S-5	10/10/1987	1,700	NA	16	5.7	5.2	8.9	NA	NA	11.72	9.67	2.05	NA
S-5	02/11/1988	1,300	NA	300	5	<5	<5	NA	NA	11.72	9.00	2.72	NA
S-5	05/10/1988	1,900	NA	490	<0.5	<5	<5	NA	NA	11.72	8.61	3.11	NA
S-5	08/31/1988	6,700	NA	760	26	<25	<25	NA	NA	11.72	9.61	2.11	NA
S-5	12/03/1988	2,900	NA	890	5.3	7.3	13	NA	NA	11.72	9.47	2.25	NA
S-5	02/16/1989	1,300	NA	280	3	3.4	9.4	NA	NA	11.72	8.29	3.43	NA
S-5	08/10/1989	1,700	NA	530	5.5	<5	5.8	NA	NA	11.72	9.30	2.42	NA
S-5	11/11/1989	NA	NA	NA	NA	NA	NA	NA	NA	11.72	9.42	2.30	NA
S-5	02/21/1994	1,000	NA	250	<5	<5	<5	NA	NA	11.72	7.95	3.77	NA
S-5 (D)	02/21/1994	1,300	NA	220	<5	<5	11	NA	NA	11.72	7.95	3.77	NA
S-5	05/16/1994	1,200	NA	230	<5	<5	<5	NA	NA	11.72	8.00	3.72	NA
S-5	08/09/1994	Well inaccessible		NA	NA	NA	NA	NA	NA	11.72	NA	NA	NA
S-5	11/09/1994	1,600	NA	220	3.2	1.8	5	NA	NA	11.72	8.32	3.40	NA
S-5 (D)	11/09/1994	1,600	NA	250	3.3	1.9	5.9	NA	NA	11.72	8.32	NA	NA



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**Shell-Branded Service Station**  
**1800 Powell Street**  
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Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
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S-5	02/22/1995	Well inaccessible		NA	NA	NA	NA	NA	NA	11.72	NA	NA	NA
S-5	05/02/1995	Well inaccessible		NA	NA	NA	NA	NA	NA	11.72	NA	NA	NA
S-5	05/10/1995	910	NA	170	1.5	1.3	5.2	NA	NA	11.72	NA	NA	NA
S-5	08/24/1995	620	NA	210	<0.5	1.2	5.3	NA	NA	11.72	8.78	2.94	NA
S-5	12/08/1995	1,600	NA	510	3.3	1.5	6.6	NA	NA	11.72	9.78	1.94	NA
S-5 (D)	12/08/1995	1,600	NA	530	1.8	1.1	5.4	NA	NA	11.72	9.78	1.94	NA
S-5	02/29/1996	1,900	NA	470	5.8	<5.0	<5.0	46	NA	11.72	7.64	4.08	NA
S-5 (D)	02/29/1996	1,700	NA	440	5.4	<5.0	<5.0	40	NA	11.72	7.64	4.08	NA
S-5	05/22/1996	1,200	NA	490	<10	<10	<10	<50	NA	11.72	8.60	3.12	NA
S-5	07/30/1996	1,100	NA	400	<5.0	<5.0	6.9	<25	NA	11.72	9.40	2.32	NA
S-5	11/11/1996	Well inaccessible		NA	NA	NA	NA	NA	NA	11.72	NA	NA	NA
S-5	11/03/1997	Well inaccessible		NA	NA	NA	NA	NA	NA	11.72	NA	NA	NA
S-5	11/06/1998	620	NA	91	<0.50	0.64	4.0	<2.5	NA	11.72	8.25	3.47	NA
S-5	12/07/1999	Well inaccessible		NA	NA	NA	NA	NA	NA	11.72	NA	NA	NA

S-6	04/27/1985	6,500	NA	2,400	30	50	210	NA	NA	NA	NA	NA	NA
S-6	07/06/1985	3,700	NA	1,700	34	55	200	NA	NA	NA	NA	NA	NA
S-6	10/24/1985	23	<0.5	<5	10	NA	NA	NA	NA	NA	NA	<50	NA
S-6	11/08/1985	Well abandoned		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

S-7	10/26/1984	50	NA	1.1	<1	<1	4	NA	NA	NA	NA	NA	NA
S-7	02/09/1985	NA	NA	0.9	<1	<1	<3	NA	NA	NA	NA	NA	NA
S-7	04/27/1985	<50	NA	<1	<1	<1	<3	NA	NA	NA	NA	NA	NA
S-7	07/06/1985	70	NA	2.2	<1	<1	<3	NA	NA	NA	NA	NA	NA
S-7	10/24/1985	6,200	NA	2,200	130	190	660	NA	NA	NA	NA	NA	NA

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S-7	11/09/1985	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S-8	10/26/1984	1,000	NA	610	9	1	42	NA	NA	12.76	NA	NA	NA
S-8	02/09/1985	500	NA	160	5	<2	17	NA	NA	12.76	NA	NA	NA
S-8	04/27/1985	2,700	NA	1500	20	10	40	NA	NA	12.76	NA	NA	NA
S-8	07/06/1985	440	NA	180	5	2	12	NA	NA	12.76	NA	NA	NA
S-8	10/24/1985	2,000	NA	1,100	17	5	70	NA	NA	12.76	NA	NA	NA
S-8	01/03/1986	1,900	NA	1,300	20	<10	70	NA	NA	12.76	NA	NA	NA
S-8	07/05/1986	1,600	NA	920	30	<10	60	NA	NA	12.76	9.50	3.26	NA
S-8	10/18/1986	1,400	NA	640	<10	<10	30	NA	NA	12.76	NA	NA	NA
S-8	01/13/1987	670	760	190	5.8	<0.5	19	NA	NA	12.76	NA	NA	NA
S-8	04/22/1987	2,400	NA	740	54	5.7	59	NA	NA	12.76	NA	NA	NA
S-8	07/07/1987	1,100	NA	450	15	<2.5	42	NA	NA	12.76	10.45	2.31	NA
S-8	10/10/1987	340	NA	4	0.6	<0.5	17	NA	NA	12.76	10.83	1.93	NA
S-8	02/11/1988	<1,000	NA	260	<10	<10	11	NA	NA	12.76	10.44	2.32	NA
S-8	05/10/1988	1,800	NA	700	14	<5	46	NA	NA	12.76	10.17	2.59	NA
S-8	08/31/1988	NA	NA	NA	NA	NA	NA	NA	NA	12.76	10.81	1.95	SPH
S-8	12/03/1988	960	NA	250	4.3	<2.5	14	NA	NA	12.76	10.81	1.95	NA
S-8	02/16/1989	2,700	NA	800	35	10	83	NA	NA	12.76	9.65	3.11	NA
S-8	05/28/1989	960	NA	710	25	84	80	NA	NA	12.76	10.46	2.30	NA
S-8	08/10/1989	1,300	NA	630	17	<5	46	NA	NA	12.76	10.59	2.17	NA
S-8	11/11/1989	910	NA	180	8	<2.5	15	NA	NA	12.76	10.29	2.47	NA
S-8	02/21/1994	3,200	NA	480	52	<5	130	NA	NA	12.76	9.52	3.24	NA
S-8	05/16/1994	1,000	NA	220	7.3	<5	28	NA	NA	12.76	9.49	3.27	NA
S-8 (D)	05/16/1994	1,000	NA	280	10	<5	29	NA	NA	12.76	9.49	3.27	NA

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**Wic #204-2495-0101**

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S-8	08/09/1994	400	NA	27	6.6	<0.5	18	NA	NA	12.76	10.37	2.39	NA
S-8	11/09/1994	650	NA	170	5.3	<0.5	17	NA	NA	12.76	9.58	3.18	NA
S-8	02/22/1995	650	NA	210	10	1.2	22	NA	NA	12.76	9.02	3.74	NA
S-8	05/02/1995	1,000	NA	280	17	1.4	32	NA	NA	12.76	8.45	4.31	NA
S-8	08/24/1995	480	NA	180	11	1	19	NA	NA	12.76	10.02	2.74	NA
S-8 (D)	08/24/1995	700	NA	180	6.5	<0.5	17	NA	NA	12.76	10.02	2.74	NA
S-8	12/08/1995	740	NA	230	6.9	0.7	15	NA	NA	12.76	10.65	2.11	NA
S-8	02/29/1996	740	NA	260	8.1	<5.0	19	58	NA	12.76	9.10	3.66	NA
S-8	05/22/1996	1,200	NA	350	10	<5.0	23	74	NA	12.76	10.14	2.62	NA
S-8	07/30/1996	530	NA	220	20	6.3	36	69	NA	12.76	10.51	2.25	NA
S-8	11/11/1996	540	NA	140	3.7	<2.0	17	42	NA	12.76	10.23	2.53	NA
S-8	11/03/1997	480	NA	54	3.5	<0.50	12	40	NA	12.76	9.40	3.36	NA
S-8	11/06/1998	740	NA	110	10	2.8	26	31	NA	12.76	9.78	2.98	NA
S-8	12/07/1998	770	NA	210	16	<2.0	13	75	NA	12.76	10.14	2.62	NA

S-9	10/26/1984	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	02/09/1985	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	1.30
S-9	04/27/1985	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	1.25
S-9	07/06/1985	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	1.20
S-9	10/24/1985	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	01/03/1986	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	04/11/1986	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	07/05/1986	NA	NA	NA	NA	NA	NA	NA	NA	12.75	9.67	3.08	SPH
S-9	10/18/1986	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	01/13/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
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Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
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S-9	04/22/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	07/07/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	10/10/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.75	22.30	-9.55	SPH
S-9	02/24/1994	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	05/16/1994	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	1.50
S-9	08/09/1994	NA	NA	NA	NA	NA	NA	NA	NA	12.75	11.80	NA	2.00
S-9	11/09/1994	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	02/22/1995	NA	NA	NA	NA	NA	NA	NA	NA	12.75	11.40	NA	2.38
S-9	05/02/1995	NA	NA	NA	NA	NA	NA	NA	NA	12.75	11.83	NA	2.12
S-9	12/08/1995	NA	NA	NA	NA	NA	NA	NA	NA	12.75	11.92	NA	1.06
S-9a	02/29/96a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	12.10	2.88	2.79
S-9a	05/22/96a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	11.71	2.44	1.75
S-9a	07/30/96a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9a	11/11/96a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	9.00
S-9a	11/03/1997	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9a	11/06/1998	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9a	12/07/1999	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH

S-10	10/26/1984	700,000	NA	37,000	100,000	20,000	110,000	NA	NA	12.58	NA	NA	NA
S-10	02/09/1985	6,500	NA	480	700	100	1,800	NA	NA	12.58	NA	NA	NA
S-10	04/27/1985	13,000	NA	1,300	500	600	3,700	NA	NA	12.58	NA	NA	NA
S-10	07/06/1985	14,000	NA	1,300	310	270	2,400	NA	NA	12.58	NA	NA	NA
S-10	10/24/1985	4,200	NA	580	34	4	440	NA	NA	12.58	NA	NA	NA
S-10	01/03/1986	1,700	NA	360	10	7.8	170	NA	NA	12.58	NA	NA	NA
S-10	04/11/1986	NA	NA	NA	NA	NA	NA	NA	NA	12.58	NA	NA	0.01

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**1800 Powell Street**  
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**Wic #204-2495-0101**

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-10	07/05/1986	NA	NA	NA	NA	NA	NA	NA	NA	12.58	9.16	3.42	0.01
S-10	10/18/1986	NA	NA	NA	NA	NA	NA	NA	NA	12.58	NA	NA	0.03
S-10	01/13/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.58	NA	NA	0.03
S-10	04/22/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.58	NA	NA	0.01
S-10	07/07/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.58	9.41	3.17	0.03
S-10	10/10/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.58	7.77	4.81	SPH
S-10	02/11/1988	1,200	NA	470	16	<5	14	NA	NA	12.58	6.41	6.17	NA
S-10	05/10/1988	1,100	NA	100	6	4	19	NA	NA	12.58	9.04	3.54	NA
S-10	08/31/1988	NA	NA	NA	NA	NA	NA	NA	NA	12.58	9.38	3.20	0.01
S-10	12/03/1988	NA	NA	NA	NA	NA	NA	NA	NA	12.58	6.89	5.69	SPH
S-10	02/16/1989	530	NA	89	8.5	1.6	4.5	NA	NA	12.58	7.34	5.24	NA
S-10	05/28/1989	240	NA	65	3.8	2.2	8.6	NA	NA	12.58	6.60	5.98	NA
S-10	08/10/1989	250	NA	23	4.1	<1	6.4	NA	NA	12.58	9.09	3.49	NA
S-10	11/11/1989	320	NA	1.6	1.3	1.4	6.2	NA	NA	12.58	6.58	6.00	NA
S-10	02/21/1994	1,400	NA	190	9.9	<2.5	19	NA	NA	12.58	8.32	4.26	NA
S-10	05/16/1994	300	NA	45	8.6	6.2	19	NA	NA	12.58	8.35	4.23	NA
S-10	08/08/1994	700	NA	57	14	<0.5	9.3	NA	NA	12.58	8.66	3.92	NA
S-10	11/09/1994	640	NA	130	2	1.6	4.1	NA	NA	12.58	6.68	5.90	NA
S-10	02/22/1995	500	NA	65	5.9	1	8.2	NA	NA	12.58	9.12	3.46	NA
S-10	05/02/1995	530	NA	59	2.3	0.8	8.2	NA	NA	12.58	9.50	3.08	NA
S-10	08/24/1995	350	NA	35	4.6	<0.5	6.7	NA	NA	12.58	10.06	2.52	NA
S-10	12/08/1995	690	NA	28	4.6	0.9	8.6	NA	NA	12.58	10.08	2.50	NA
S-10	02/29/1996	430	NA	32	1.8	0.5	5.8	16	NA	12.58	5.32	7.26	NA
S-10	05/22/1996	100	1,200	19	0.63	<0.5	1.4	5.3	NA	12.58	6.04	6.54	NA
S-10	07/30/1996	240	13,000	17	<1.2	<1.2	7.8	11	NA	12.58	10.48	2.10	NA

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**1800 Powell Street**  
**Emeryville, CA**  
**Wic #204-2495-0101**

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
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S-10	11/11/1996	370	4,800	16	1.1	<0.5	7	94	NA	12.58	10.31	2.27	NA
S-10	11/03/1997	340	1,100	6.7	2.1	<0.50	3.3	19	NA	12.58	9.53	3.05	NA
S-10 (D)	11/03/1997	310	1,100	7.8	1.3	<0.50	3.1	19	NA	12.58	9.53	3.05	NA
S-10	11/06/1998	<250	2,000	<2.5	<2.5	<2.5	6.5	900	NA	12.58	5.12	7.46	NA
S-10	12/07/1999	400	2,280	7	3	0	29	90	NA	12.58	7.95	3.69	NA

S-12	07/06/1985	<250	2,200	0.71	<0.5	<0.5	<3.6	NA	NA	12.84	8.22	NA	NA
S-12	11/16/1985	<250	1,400	18	<2	<2	<5	NA	NA	12.84	NA	NA	NA
S-12	01/03/1986	<250	NA	24	2	<2	<5	NA	NA	12.84	NA	NA	NA
S-12	07/05/1986	80	NA	15	0.7	<0.5	2	NA	NA	12.84	8.27	4.57	NA
S-12	10/18/1986	150	NA	12	9	<0.5	3.6	NA	NA	12.84	NA	NA	NA
S-12	01/13/1987	120	1,000	3.6	0.8	<0.5	2.9	NA	NA	12.84	NA	NA	NA
S-12	04/22/1987	100	820	3.7	3.8	0.8	11	NA	NA	12.84	NA	NA	NA
S-12	07/07/1987	70	NA	2.5	0.8	<0.5	2.4	NA	NA	12.84	9.50	3.34	NA
S-12	10/10/1987	220	2,500	2.1	0.7	<0.5	1.2	NA	NA	12.84	9.90	2.94	NA
S-12	02/11/1988	110	2,500	0.8	<0.5	<0.5	1.3	NA	NA	12.84	9.43	3.41	NA
S-12	05/10/1988	140	3,800b	0.8	0.8	<0.5	2.5	NA	NA	12.84	8.65	4.19	NA
S-12	08/31/1988	190	2,600b	3	15	0.5	4.5	NA	NA	12.84	9.86	2.98	NA
S-12	12/03/1988	180	3,900b	1.2	1	1	7.7	NA	NA	12.84	9.93	2.91	NA
S-12	02/16/1989	350c	2,100b	0.6	<0.5	0.5	5.5	NA	NA	12.84	8.08	4.76	NA
S-12	05/28/1989	290	2,200	2	1.6	4.4	6	NA	NA	12.84	9.08	3.76	NA
S-12	08/10/1989	240	720	0.7	<0.5	<0.5	1.1	NA	NA	12.84	9.35	3.49	NA
S-12	11/11/1989	210c	4,100	0.7	0.5	<0.5	3.4	NA	NA	12.84	9.28	3.56	NA
S-12	02/21/1994	240d	2,200e	0.7	<0.5	<0.5	3.6	NA	NA	12.84	8.22	4.62	NA
S-12	05/16/1994	96	2,200	1.5	<0.5	<0.5	2	NA	NA	12.84	8.92	3.92	NA

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**1800 Powell Street**  
**Emeryville, CA**  
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Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
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S-12	08/08/1994	110f	3,500g	<0.5	<0.5	<0.5	<0.5	NA	NA	12.84	NA	0.00	NA
S-12	11/09/1994	80	5,400g	80	<0.5	<0.5	0.6	NA	NA	12.84	7.56	5.28	NA
S-12	02/22/1995	110	2,900g,h	0.7	<0.5	<0.5	3.7	NA	NA	12.84	7.98	4.86	NA
S-12 (D)	02/22/1995	110	3,400g,h	4.8	7.1	<0.5	2.1	NA	NA	12.84	7.98	4.86	NA
S-12	05/02/1995	140	2,800	2.4	1.1	0.8	4.3	NA	NA	12.84	8.44	4.40	NA
S-12	08/24/1995	200	1,600	19	12	5.6	24	NA	NA	12.84	9.00	3.84	NA
S-12	12/08/1995	170	2,700	2.2	0.7	0.9	3.6	NA	NA	12.84	9.62	3.22	NA
S-12	02/29/1996	1,700	2,200	<5.0	<5.0	<5.0	<5.0	5,600	NA	12.84	7.64	5.20	NA
S-12	05/22/1996	<1,000	5,700	<10	<10	<10	<10	2,400	NA	12.84	8.94	3.90	NA
S-12	07/30/1996	<500	3,200	<5.0	<5.0	<5.0	<5.0	1,500	NA	12.84	9.71	3.13	NA
S-12 (D)	07/30/1996	<500	2,900	<5.0	<5.0	<5.0	<5.0	NA	2,000	12.84	9.71	3.13	NA
S-12	11/11/1996	<500	6,900	<5.0	<5.0	<5.0	<5.0	1,400	NA	12.84	9.65	3.19	NA
S-12	11/03/1997	110	2,800	2.1	<0.50	<0.50	1.3	NA	NA	12.84	8.73	4.11	NA
S-12	11/06/1998	<500	2,900	<5.0	<5.0	<5.0	<5.0	2,700	NA	12.84	8.85	3.99	NA
S-12	12/07/1999	500	2,800	<5.0	<5.0	<5.0	<5.0	1,800	NA	12.84	8.32	5.52	NA

S-13	07/06/1985	700	3,600	200	<5	<5	45	NA	NA	12.59	9.26	NA	NA
S-13	11/16/1985	1,900	2,000	700	160	70	340	NA	NA	12.59	NA	NA	NA
S-13	01/03/1986	2,800	NA	1,400	130	10	500	NA	NA	12.59	NA	NA	NA
S-13	07/05/1986	3,100	NA	1,800	60	40	270	NA	NA	12.59	9.47	3.12	NA
S-13	10/23/1986	3,400	NA	1,500	28	28	250	NA	NA	12.59	NA	NA	NA
S-13	01/13/1987	1,900	900	830	15	<10	99	NA	NA	12.59	NA	NA	NA
S-13	04/22/1987	2,900c	770h	1,100	20	30	140	NA	NA	12.59	NA	NA	NA
S-13	07/07/1987	1,500	NA	880	10	6	160	NA	NA	12.59	10.38	2.21	NA
S-13	10/10/1987	480	2,400	830	15	<0.5	120	NA	NA	12.59	10.78	1.81	NA

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
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**Emeryville, CA**  
**Wic #204-2495-0101**

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-13	02/11/1988	1,300	1,300	510	<10	<10	86	NA	NA	12.59	10.48	2.11	NA
S-13	05/10/1988	1,000	1,300b	470	<0.5	<5	50	NA	NA	12.59	9.48	3.11	NA
S-13	08/31/1988	NA	NA	NA	NA	NA	NA	NA	NA	12.59	10.74	1.85	SPH
S-13	12/03/1988	900	2,400b	290	4.6	<2.5	20	NA	NA	12.59	10.30	2.29	NA
S-13	02/16/1989	840c	1,200b	310	3.5	<2.5	27	NA	NA	12.59	7.60	4.99	NA
S-13	05/28/1989	2,100	4,600	1,100	19	50	350	NA	NA	12.59	10.60	1.99	NA
S-13	08/10/1989	900	2,300	230	16	6.9	65	NA	NA	12.59	10.58	2.01	NA
S-13	11/11/1989	2,800	2,800	200	15	8.6	58	NA	NA	12.59	9.84	2.75	NA
S-13	02/21/1994	700	1,800d	200	<5	<5	45	NA	NA	12.59	9.26	3.33	NA
S-13	05/16/1994	650	1,700	180	2.5	<2.5	21	NA	NA	12.59	9.62	2.97	NA
S-13	08/08/1994	470	2,600g	12	1.5	0.5	14	NA	NA	12.59	10.32	2.27	NA
S-13	11/09/1994	Well inaccessible		NA	NA	NA	NA	NA	NA	12.59	NA	NA	NA
S-13	02/22/1995	550	2,400g,h	190	4	<0.5	17	NA	NA	12.59	8.92	3.67	NA
S-13	05/02/1995	790	2,100	250	6.9	1.2	22	NA	NA	12.59	9.52	3.07	NA
S-13	08/24/1995	330	1,500	93	<0.5	<0.5	2	NA	NA	12.59	10.02	2.57	NA
S-13	12/08/1995	440	2,400	110	2.2	0.8	23	NA	NA	12.59	10.75	1.84	NA
S-13	02/29/1996	560	2,500	130	<5.0	<5.0	30	30	NA	12.59	9.02	3.57	NA
S-13	05/22/1996	430	3,700	55	1.6	310	27	<5.0	NA	12.59	10.20	2.39	NA
S-13	07/30/1996	230	1,600	30	2	1.4	17	15	NA	12.59	10.42	2.17	NA
S-13	11/11/1996	320	2,700	19	1.1	<0.5	14	3.5	NA	12.59	10.28	2.31	NA
S-13 (D)	11/11/1996	360	2,400	24	1.3	<0.5	15	4.5	NA	12.59	10.28	2.31	NA
S-13	11/03/1997	300	1,900	25	1.4	0.63	12	5.0	NA	12.59	9.36	3.23	NA
S-13	11/06/1998	390	1,300	53	2.9	1.1	13	17	NA	12.59	9.85	2.74	NA
S-13	12/07/1998	420	430	15	5.2	2.6	5	42	NA	12.59	9.72	2.87	NA



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Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-14	11/16/1985	<250	400	3	<2	<2	<5	NA	NA	12.69	NA	NA	NA
S-14	01/03/1986	<250	NA	3	2	<2	<5	NA	NA	12.69	NA	NA	NA
S-14	04/22/1987	1,200	18,000	7.4	2.7	15	110	NA	NA	12.69	NA	NA	NA
S-14	07/07/1987	190	NA	6.5	0.6	1.9	26	NA	NA	12.69	10.32	2.37	NA
S-14	10/10/1987	4,900	21,000	7	1.2	<0.5	25	NA	NA	12.69	10.77	1.92	NA
S-14	02/11/1988	370	12,000c	4.6	<2.5	<2.5	26	NA	NA	12.69	10.40	2.29	NA
S-14	05/10/1988	660	2,200b	2.9	<2.5	<2.5	24	NA	NA	12.69	9.66	3.03	NA
S-14	08/31/1988	700	7,900	3.2	<2.5	<2.5	15	NA	NA	12.69	10.74	1.95	NA
S-14	12/03/1988	210	11,000b	<0.5	<0.5	0.8	6.8	NA	NA	12.69	10.69	2.00	NA
S-14	02/16/1989	130c	5,700b	<0.5	<0.5	<0.5	4.4	NA	NA	12.69	9.69	3.00	NA
S-14	05/28/1989	770	5,200	<0.5	<0.5	<0.5	4.5	NA	NA	12.69	10.42	2.27	NA
S-14	08/10/1989	920	8,800	<1	<1	1.6	17	NA	NA	12.69	10.54	2.15	NA
S-14	11/11/1989	710	28,000	20	57	25	69	NA	NA	12.69	9.91	2.78	NA
S-14	02/21/1994	2,800	3,600	<5	<5	<5	14	NA	NA	12.69	9.30	3.09	NA
S-14	02/21/1994	2,300d	3,600e	<5.0	<5	<5	14	NA	NA	12.69	9.30	3.39	NA
S-14	05/16/1994	310	6,700	<2.5	<2.5	<2.5	3.1	NA	NA	12.69	9.54	3.15	NA
S-14	08/08/1994	480i	2,900	<0.5	0.6	<0.5	0.8	NA	NA	12.69	10.29	2.40	NA
S-14 (D)	08/08/1994	590i	2,900	<0.5	0.6	<0.5	1.5	NA	NA	12.69	10.29	2.40	NA
S-14	11/09/1994	170i	6,400g	0.7	<0.5	<0.5	2.7	NA	NA	12.69	9.52	3.07	NA
S-14	02/22/1995	550	7,000g,h	<0.5	<0.5	<0.5	1.6	NA	NA	12.69	9.18	3.51	NA
S-14	05/02/1995	210	2,300	1	0.9	1.1	6.3	NA	NA	12.69	9.49	3.20	NA
S-14 (D)	05/02/1995	160	2,600	0.6	0.6	0.7	3.8	NA	NA	12.69	9.49	3.20	NA
S-14	08/24/1995	180	3,700	0.5	<0.5	<0.5	1.3	NA	NA	12.69	9.94	2.75	NA
S-14	12/08/1995	190	4,900	1	<0.5	0.6	4.6	NA	NA	12.69	10.65	2.04	NA
S-14	02/29/1996	200	11,000	<0.5	<0.5	<0.5	2	3	NA	12.69	8.90	3.79	NA

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S-14	05/22/1996	93	3,800	<0.5	<0.5	<0.5	1.6	<2.5	NA	12.69	10.10	2.59	NA
S-14 (D)	05/22/1996	150	3,900	<0.5	<0.5	<0.5	1.8	<2.5	NA	12.69	10.10	2.59	NA
S-14	07/30/1996	<50	2,500	<0.5	<0.5	<0.5	0.89	<2.5	NA	12.69	10.37	2.32	NA
S-14	11/11/1996	2,600	27,000	<2.5	<2.5	<2.5	3.9	<12	NA	12.69	10.29	2.40	NA
S-14	11/03/1997	430	1,800	<0.50	<0.50	<0.50	1.7	<2.5	NA	12.69	9.52	3.17	NA
S-14	11/06/1998	Well inaccessible		NA	NA	NA	NA	NA	NA	12.69	NA	NA	NA
S-14	12/07/1999	970	5,920	1.1	1.3	1.3	3.6	2.6	NA	12.69	9.75	2.96	NA

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015

TEPH = Total petroleum hydrocarbons as diesel by modified EPA Method 8015

BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8020

MTBE = methyl-tertiary-butyl ether

TOB = Top of Wellbox Elevation

SPH = Separate-Phase Hydrocarbons

GW = Groundwater

ug/L = parts per billion

msl = Mean sea level

ft = Feet

<n = Below detection limit

(D) = Duplicate sample

NA = Not applicable

**WELL CONCENTRATIONS**  
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**Emeryville, CA**  
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Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
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Notes:

- a = Tar-like substance in well, probably from previous landfill activities; not gasoline
- b = Compounds detected within the chromatographic range appear to be weathered diesel
- c = Compounds detected within the chromatographic range of gasoline but not characteristic of the standard gasoline pattern
- d = The concentrations reported as gasoline for samples S-12 and S-14 are primarily due to the presence of a discrete peak
- e = The concentrations reported as diesel for samples S-12, S-13 and S-14 are due to the presence of a combination of diesel and a heavier petroleum product
- f = The result for gasoline is an unknown hydrocarbon which consists of several peaks
- g = The positive result appears to be a heavier hydrocarbon than diesel
- h = Compounds detected within the chromatographic range of diesel appears to include gasoline compounds
- i = The positive result appears to be a heavier hydrocarbon than gasoline
- j = No MTBE could be determined due to co-elution with early eluting compounds



# Sequoia Analytical

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December 22, 1999

Leah Davis  
Blaine Tech Services (Shell)  
1680 Rogers Avenue  
San Jose, CA 95112

RE: Equiva 1800 Powell, Emeryville/M912304

Dear Leah Davis

Enclosed are the results of analyses for sample(s) received by the laboratory on December 8, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kayvan Kimyai  
Project Manager D.M.

CA ELAP Certificate Number 1210





Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva Project Number: 1800 Powell, Emeryville Project Manager: Leah Davis	Sampled: 12/7/99 Received: 12/8/99 Reported: 12/22/99
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**ANALYTICAL REPORT FOR M912304**

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
S-8	M912304-01	Water	12/7/99
S-10	M912304-02	Water	12/7/99
S-12	M912304-03	Water	12/7/99
S-13	M912304-04	Water	12/7/99
S-14	M912304-05	Water	12/7/99





Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva Project Number: 1800 Powell, Emeryville Project Manager: Leah Davis	Sampled: 12/7/99 Received: 12/8/99 Reported: 12/22/99
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**Diesel Hydrocarbons (C9-C24) by DHS LUFT  
Sequoia Analytical - Morgan Hill**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<b>S-10</b> Diesel Range Hydrocarbons Surrogate: <i>n</i> -Pentacosane	9120591 "	12/17/99 "	12/20/99 "	<u>M912304-02</u> 50.0-150	0.0500	2.23 113	<u>Water</u> mg/l %	1
<b>S-12</b> Diesel Range Hydrocarbons Surrogate: <i>n</i> -Pentacosane	9120591 "	12/17/99 "	12/20/99 "	<u>M912304-03</u> 50.0-150	0.0500	2.80 201	<u>Water</u> mg/l %	2 3
<b>S-13</b> Diesel Range Hydrocarbons Surrogate: <i>n</i> -Pentacosane	9120591 "	12/17/99 "	12/20/99 "	<u>M912304-04</u> 50.0-150	0.0500	1.43 140	<u>Water</u> mg/l %	2
<b>S-14</b> Diesel Range Hydrocarbons Surrogate: <i>n</i> -Pentacosane	9120591 "	12/17/99 "	12/21/99 "	<u>M912304-05</u> 50.0-150	0.100	5.92 154	<u>Water</u> mg/l %	1.D 3.D





Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva Project Number: 1800 Powell, Emeryville Project Manager: Leah Davis	Sampled: 12/7/99 Received: 12/8/99 Reported: 12/22/99
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT  
Sequoia Analytical - Walnut Creek**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
				<b>M912304-01</b>			<b>Water</b>	
<b>S-8</b>								
<b>Purgeable Hydrocarbons</b>	9L16004	12/16/99	12/16/99	EPA 8015M/8020	200	770	ug/l	D
<b>Benzene</b>	"	"	"	EPA 8015M/8020	2.0	270	"	D
<b>Toluene</b>	"	"	"	EPA 8015M/8020	2.0	16	"	D
<b>Ethylbenzene</b>	"	"	"	EPA 8015M/8020	2.0	ND	"	D
<b>Xylenes (total)</b>	"	"	"	EPA 8015M/8020	2.0	33	"	D
<b>Methyl tert-butyl ether</b>	"	"	"	EPA 8015M/8020	10	75	"	D
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	70-130		110	%	
				<b>M912304-02</b>			<b>Water</b>	
<b>S-10</b>								
<b>Purgeable Hydrocarbons</b>	9L16004	12/16/99	12/16/99	EPA 8015M/8020	250	400	ug/l	D
<b>Benzene</b>	"	"	"	EPA 8015M/8020	2.5	47	"	D
<b>Toluene</b>	"	"	"	EPA 8015M/8020	2.5	33	"	D
<b>Ethylbenzene</b>	"	"	"	EPA 8015M/8020	2.5	10	"	D
<b>Xylenes (total)</b>	"	"	"	EPA 8015M/8020	2.5	29	"	D
<b>Methyl tert-butyl ether</b>	"	"	"	EPA 8015M/8020	13	90	"	D
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	70-130		110	%	
				<b>M912304-03</b>			<b>Water</b>	
<b>S-12</b>								
<b>Purgeable Hydrocarbons</b>	9L16004	12/16/99	12/16/99	EPA 8015M/8020	500	ND	ug/l	D
<b>Benzene</b>	"	"	"	EPA 8015M/8020	5.0	ND	"	D
<b>Toluene</b>	"	"	"	EPA 8015M/8020	5.0	ND	"	D
<b>Ethylbenzene</b>	"	"	"	EPA 8015M/8020	5.0	ND	"	D
<b>Xylenes (total)</b>	"	"	"	EPA 8015M/8020	5.0	ND	"	D
<b>Methyl tert-butyl ether</b>	"	"	"	EPA 8015M/8020	25	1900	"	D
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	70-130		110	%	
				<b>M912304-04</b>			<b>Water</b>	
<b>S-13</b>								
<b>Purgeable Hydrocarbons</b>	9L15011	12/15/99	12/15/99	EPA 8015M/8020	250	420	ug/l	D
<b>Benzene</b>	"	"	"	EPA 8015M/8020	2.5	15	"	D
<b>Toluene</b>	"	"	"	EPA 8015M/8020	2.5	6.2	"	D
<b>Ethylbenzene</b>	"	"	"	EPA 8015M/8020	2.5	2.6	"	D
<b>Xylenes (total)</b>	"	"	"	EPA 8015M/8020	2.5	15	"	D
<b>Methyl tert-butyl ether</b>	"	"	"	EPA 8015M/8020	13	42	"	D
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	70-130		90.0	%	
				<b>M912304-05</b>			<b>Water</b>	
<b>S-14</b>								
<b>Purgeable Hydrocarbons</b>	9L16004	12/16/99	12/16/99	EPA 8015M/8020	50	970	ug/l	
<b>Benzene</b>	"	"	"	EPA 8015M/8020	0.50	1.0	"	
<b>Toluene</b>	"	"	"	EPA 8015M/8020	0.50	1.1	"	
<b>Ethylbenzene</b>	"	"	"	EPA 8015M/8020	0.50	0.59	"	
<b>Xylenes (total)</b>	"	"	"	EPA 8015M/8020	0.50	3.5	"	





Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva Project Number: 1800 Powell, Emeryville Project Manager: Leah Davis	Sampled: 12/7/99 Received: 12/8/99 Reported: 12/22/99
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT  
Sequoia Analytical - Walnut Creek**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
<b>S-14 (continued)</b>				<u>M912304-05</u>			<u>Water</u>	
<b>Methyl tert-butyl ether</b>	9L16004	12/16/99	12/16/99	EPA 8015M/8020	2.5	2.6	ug/l	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	"	"	"	70-130		86.7	%	







Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva Project Number: 1800 Powell, Emeryville Project Manager: Leah Davis	Sampled: 12/7/99 Received: 12/8/99 Reported: 12/22/99
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**Diesel Hydrocarbons (C9-C24) by DHS LUFT/Quality Control  
Sequoia Analytical - Morgan Hill**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Batch: 9120591</b>		<b>Date Prepared: 12/17/99</b>			<b>Extraction Method: EPA 3510B</b>					
<b>Blank</b>		<b>9120591-BLK1</b>								
Diesel Range Hydrocarbons	12/20/99			ND	mg/l	0.0500				
Surrogate: n-Pentacosane	"	0.100		0.103	"	50.0-150	103			
<b>LCS</b>		<b>9120591-BS1</b>								
Diesel Range Hydrocarbons	12/20/99	1.00		0.777	mg/l	60.0-140	77.7			
Surrogate: n-Pentacosane	"	0.100		0.0988	"	50.0-150	98.8			
<b>LCS Dup</b>		<b>9120591-BSD1</b>								
Diesel Range Hydrocarbons	12/20/99	1.00		0.802	mg/l	60.0-140	80.2	50.0	3.17	
Surrogate: n-Pentacosane	"	0.100		0.0982	"	50.0-150	98.2			





Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva Project Number: 1800 Powell, Emeryville Project Manager: Leah Davis	Sampled: 12/7/99 Received: 12/8/99 Reported: 12/22/99
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control  
Sequoia Analytical - Walnut Creek**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Batch: 9L15011</b>			<b>Date Prepared: 12/15/99</b>		<b>Extraction Method: EPA 5030B [P/T]</b>					
<b>Blank</b>			<b>9L15011-BLK1</b>							
Purgeable Hydrocarbons	12/15/99			ND	ug/l	50				
Benzene	"			ND	"	0.50				
Toluene	"			ND	"	0.50				
Ethylbenzene	"			ND	"	0.50				
Xylenes (total)	"			ND	"	0.50				
Methyl tert-butyl ether	"			ND	"	2.5				
Surrogate: a,a,a-Trifluorotoluene	"	30.0		31.2	"	70-130	104			
<b>LCS</b>			<b>9L15011-BS1</b>							
Benzene	12/15/99	20.0		19.2	ug/l	70-130	96.0			
Toluene	"	20.0		19.5	"	70-130	97.5			
Ethylbenzene	"	20.0		18.0	"	70-130	90.0			
Xylenes (total)	"	60.0		62.2	"	70-130	104			
Surrogate: a,a,a-Trifluorotoluene	"	30.0		30.2	"	70-130	101			
<b>Matrix Spike</b>			<b>9L15011-MS1 W912285-01</b>							
Benzene	12/15/99	20.0	ND	18.3	ug/l	70-130	91.5			
Toluene	"	20.0	ND	18.7	"	70-130	93.5			
Ethylbenzene	"	20.0	ND	19.6	"	70-130	98.0			
Xylenes (total)	"	60.0	ND	58.7	"	70-130	97.8			
Surrogate: a,a,a-Trifluorotoluene	"	30.0		30.7	"	70-130	102			
<b>Matrix Spike Dup</b>			<b>9L15011-MSD1 W912285-01</b>							
Benzene	12/15/99	20.0	ND	19.3	ug/l	70-130	96.5	20	5.32	
Toluene	"	20.0	ND	19.5	"	70-130	97.5	20	4.19	
Ethylbenzene	"	20.0	ND	19.7	"	70-130	98.5	20	0.509	
Xylenes (total)	"	60.0	ND	60.9	"	70-130	102	20	3.68	
Surrogate: a,a,a-Trifluorotoluene	"	30.0		30.2	"	70-130	101			
<b>Batch: 9L16004</b>			<b>Date Prepared: 12/16/99</b>		<b>Extraction Method: EPA 5030B [P/T]</b>					
<b>Blank</b>			<b>9L16004-BLK1</b>							
Purgeable Hydrocarbons	12/16/99			ND	ug/l	50				
Benzene	"			ND	"	0.50				
Toluene	"			ND	"	0.50				
Ethylbenzene	"			ND	"	0.50				
Xylenes (total)	"			ND	"	0.50				
Methyl tert-butyl ether	"			ND	"	2.5				
Surrogate: a,a,a-Trifluorotoluene	"	30.0		36.0	"	70-130	120			





Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva Project Number: 1800 Powell, Emeryville Project Manager: Leah Davis	Sampled: 12/7/99 Received: 12/8/99 Reported: 12/22/99
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control  
Sequoia Analytical - Walnut Creek**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b><u>LCS</u></b>		<b><u>9L16004-BS1</u></b>								
Benzene	12/16/99	20.0		19.5	ug/l	70-130	97.5			
Toluene	"	20.0		20.0	"	70-130	100			
Ethylbenzene	"	20.0		20.7	"	70-130	104			
Xylenes (total)	"	60.0		62.1	"	70-130	103			
Surrogate: a,a,a-Trifluorotoluene	"	30.0		30.7	"	70-130	102			
<b><u>Matrix Spike</u></b>		<b><u>9L16004-MS1</u></b>	<b><u>W912273-05</u></b>							
Benzene	12/16/99	20.0	ND	20.2	ug/l	70-130	101			
Toluene	"	20.0	ND	21.1	"	70-130	106			
Ethylbenzene	"	20.0	ND	20.9	"	70-130	104			
Xylenes (total)	"	60.0	ND	64.0	"	70-130	107			
Surrogate: a,a,a-Trifluorotoluene	"	30.0		31.5	"	70-130	105			
<b><u>Matrix Spike Dup</u></b>		<b><u>9L16004-MSD1</u></b>	<b><u>W912273-05</u></b>							
Benzene	12/16/99	20.0	ND	19.9	ug/l	70-130	99.5	20	1.50	
Toluene	"	20.0	ND	20.3	"	70-130	101	20	3.86	
Ethylbenzene	"	20.0	ND	20.8	"	70-130	104	20	0.480	
Xylenes (total)	"	60.0	ND	62.9	"	70-130	105	20	1.73	
Surrogate: a,a,a-Trifluorotoluene	"	30.0		31.0	"	70-130	103			





Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva Project Number: 1800 Powell, Emeryville Project Manager: Leah Davis	Sampled: 12/7/99 Received: 12/8/99 Reported: 12/22/99
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**Notes and Definitions**

#	Note
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- D Data reported from a dilution.
- 1 Chromatogram Pattern: Weathered Diesel C9-C24
- 2 Chromatogram Pattern: Unidentified Hydrocarbons C9-C24
- 3 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- Recov. Recovery
- RPD Relative Percent Difference



# BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1105  
FAX (408) 573-7771  
PHONE (408) 573-0555

CHAIN OF					
CLIENT Equiva - Karen Petryna					
SITE 1800 Powell					
Emeryville, CA					

C = COMPOSITE ALL CONTAINERS

CONDUCT ANALYSIS TO DETECT					
TPH - gas, BTEX	MTBE by 8020	MTBE by 8260	TPH - diesel	Oxygenates by 8260	
X	X				
X	X		X		
X	X		X		
X	X		X		
X	X		X		

LAB Sequoia DHS # \_\_\_\_\_

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

EPA  RWQCB REGION \_\_\_\_\_

LIA

OTHER

SPECIAL INSTRUCTIONS

*M 912309*

Send invoice to Equiva

Incident # 98995349

Send report to Blaine Tech Services, Inc.

ATTN: Ann Pember

SAMPLE I.D.	DATE	TIME	MATRIX	CONTAINERS		C = COMPOSITE ALL CONTAINERS	TPH - gas, BTEX	MTBE by 8020	MTBE by 8260	TPH - diesel	Oxygenates by 8260	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
			S= SOIL W=H <sub>2</sub> O	TOTAL											
S-8	12/7/99	1611	W	3	mix		X	X							01
/ S-10	↓	1423	↓	5	↓		X	X		X					02
/ S-12	↓	1445	↓	5	↓		X	X		X					03
/ S-13	↓	1516	↓	5	↓		X	X		X					04
/ S-14	↓	1540	↓	5	↓		X	X		X					05
															<del>06</del>

SAMPLING COMPLETED	DATE 12/7/99	TIME 1611	SAMPLING PERFORMED BY <i>Matthew Smith</i>	RESULTS NEEDED NO LATER THAN
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RELEASED BY <i>Matthew Smith</i>	DATE 12/8/99	TIME 11:40	RECEIVED BY <i>Steve JH</i>	DATE 12/8/99	TIME 11:40
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RELEASED BY <i>Steve JH</i>	DATE 12/8/99	TIME	RECEIVED BY <i>TJT CMH</i>	DATE 12-8-99	TIME 14:45
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RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
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SHIPPED VIA	DATE SENT	TIME SENT	COOLER #
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## SHELL WELL MONITORING DATA SHEET

Project #: <b>991207-K3</b>	WIC #: <b>204-2495-0101</b>
Sampler: <b>MAST</b>	Date: <b>12/7/99</b>
Well I.D.: <b>S-8</b>	Well Diameter: 2 <b>3</b> 4 6 8 _____
Total Well Depth: <b>18.80</b>	Depth to Water: <b>10.14</b>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <b>PVC</b> Grade	D.O. Meter (if req'd): <b>YSI</b> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Purge Method:

Bailer  
Middleburg  
~~Electric Submersible~~  
Extraction Pump

Sampling Method:

Bailer  
Extraction Port

Other: \_\_\_\_\_

Other: \_\_\_\_\_

<b>3.2</b>	<b>X</b>	<b>3</b>	<b>=</b>	<b>9.6</b>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1601	70.2	6.71	4876	113	3.5	
1605	71.2	6.72	4761	93	7	
1609	71.8	6.73	4466	88	10	

Did well dewater? Yes  No Gallons actually evacuated: **10**

Sampling Time: **1611** Sampling Date: **12/7/99**

Sample I.D.: **S-8** Laboratory: Sequoia Crosby

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

Equipment Blank I.D.: @ \_\_\_\_\_ Duplicate I.D.:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
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## SHELL WELL MONITORING DATA SHEET

Project #: <b>991207-k3</b>	WIC #: <b>204-2495-0101</b>
Sampler: <b>MATT</b>	Date: <b>12/7/99</b>
Well I.D.: <b>S-13</b>	Well Diameter: 2 <input type="radio"/> 3 <input checked="" type="radio"/> 4 <input type="radio"/> 6 <input type="radio"/> 8 <input type="radio"/> _____
Total Well Depth: <b>20.21</b>	Depth to Water: <b>9.72</b>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="checkbox"/> <b>EVG</b> Grade	D.O. Meter (if req'd): YSI <input type="checkbox"/> HACH <input type="checkbox"/>

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Purge Method:  Bailer      Sampling Method:  **Bailer**  
 Middleburg       Extraction Port  
 **Electric** Submersible      Other: \_\_\_\_\_  
 Extraction Pump

Other: \_\_\_\_\_

<b>3.9</b>	x	<b>3</b>	=	<b>11.7</b>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1510	68.2	6.72	11390	7200	4	odor /
1511	69.8	6.66	6515	7200	8	foamy
1512	70.1	6.78	10280	7200	12	↓
1513	70.9	6.81	10410	7200	16	✓

Did well dewater? Yes   **No**      Gallons actually evacuated: **16**

Sampling Time: **1516**      Sampling Date: **12/7/99**

Sample I.D.: **S-13**      Laboratory:  **Sequoa** Crosby

Analyzed for:  **TPH-G**  **BTEX**  **MTBE**  **TRH-D** Other: \_\_\_\_\_

Equipment Blank I.D.: \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D.: \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
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## SHELL WELL MONITORING DATA SHEET

Project #: <b>991207-K3</b>	WIC #: <b>204-2495-0101</b>
Sampler: <b>MATT</b>	Date: <b>12/7/99</b>
Well I.D.: <b>S-14</b>	Well Diameter: 2 <input checked="" type="radio"/> 4 <input type="radio"/> 6 <input type="radio"/> 8 <input type="radio"/>
Total Well Depth: <b>23.78</b>	Depth to Water: <b>9.73</b>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <b>PVC</b> Grade	D.O. Meter (if req'd): <b>YSI</b> <input checked="" type="checkbox"/> <b>HACH</b> <input type="checkbox"/>

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Purge Method: **Bailer**      Sampling Method: **Bailer**  
**Middleburg**      **Extraction Port**  
**Electric Submersible**      Other: \_\_\_\_\_  
**Extraction Pump**  
 Other: \_\_\_\_\_

<b>5.2</b>	X	<b>3</b>	=	<b>15.6</b>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1535	66.8	6.68	7754	76	5.5	odor
1536	68.3	6.68	5708	34	11	↓
1537	68.7	6.70	5939	38	16	✓

Did well dewater? Yes  No       Gallons actually evacuated: **16**

Sampling Time: **1540**      Sampling Date: **12/7/99**

Sample I.D.: **S-14**      Laboratory: **Sequon** Crosby

Analyzed for: **TPH-G** **BTEX** **MTBE** **TPH-D** Other: \_\_\_\_\_

Equipment Blank I.D.: \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D.: \_\_\_\_\_

Analyzed for: **TPH-G** **BTEX** **MTBE** **TPH-D** Other: \_\_\_\_\_

D.O. (if req'd): Pre-purge: \_\_\_\_\_ mg/L      Post-purge: \_\_\_\_\_ mg/L