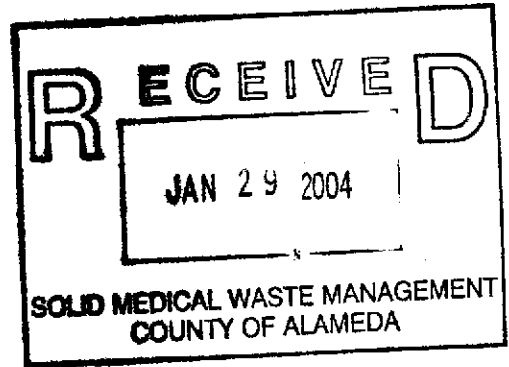




**Shell Oil Products US**

January 26, 2004

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



**Subject: Shell-branded Service Station**  
1800 Powell Street  
Emeryville, California

Dear Ms. chu:

Attached for your review and comment is a copy of the *Fourth Quarter 2003 Monitoring Report* for the above referenced site. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

As always, please feel free to contact me directly at (559) 645-9306 with any questions or concerns.

Sincerely,

**Shell Oil Products US**

*Karen Petryna*

Karen Petryna  
Sr. Environmental Engineer

January 26, 2004

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

Re: **Fourth Quarter 2003 Monitoring Report**  
Shell-branded Service Station  
1800 Powell Street  
Emeryville, California  
Incident # 98995349  
Cambria Project# 246-0894-002



Dear Ms. chu:

On behalf of Equilon Enterprises LLC dba Shell Oil Products US, Cambria Environmental Technology, Inc. (Cambria) is submitting this groundwater monitoring report in accordance with the reporting requirements of 23 CCR 2652d.

## **FOURTH QUARTER 2003 ACTIVITIES**

**Groundwater Monitoring:** Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled all site wells except S-9, calculated groundwater elevations, and compiled the analytical data. Monitoring well S-9 could not be gauged because it contained tar that has displaced groundwater. Cambria prepared a groundwater elevation contour map (Figure 1). Blaine's report, presenting the laboratory report and supporting field documents, is included as Attachment A.

## **ANTICIPATED FUTURE 2004 ACTIVITIES**

**Groundwater Monitoring:** The next sampling event is scheduled for the fourth quarter of 2004. At that time, Blaine will measure and remove any detected separate-phase hydrocarbons, gauge and sample all wells, and tabulate the data. Cambria will prepare a monitoring report.

**Cambria  
Environmental  
Technology, Inc.**

5900 Hollis Street  
Suite A  
Emeryville, CA 94608  
Tel (510) 420-0700  
Fax (510) 420-9170

**CLOSING**

We appreciate the opportunity to work with you on this project. Please call Matt Derby at (510) 420-3332 if you have any questions or comments.

Sincerely,  
**Cambria Environmental Technology, Inc**



Anni Kreml  
Senior Staff Scientist

Matthew W. Derby, P.E.  
Senior Project Engineer



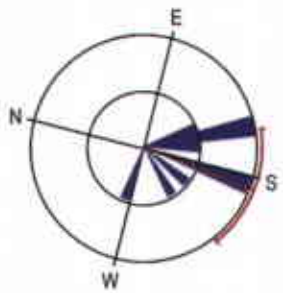
Figure: 1 - Groundwater Elevation Contour Map

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

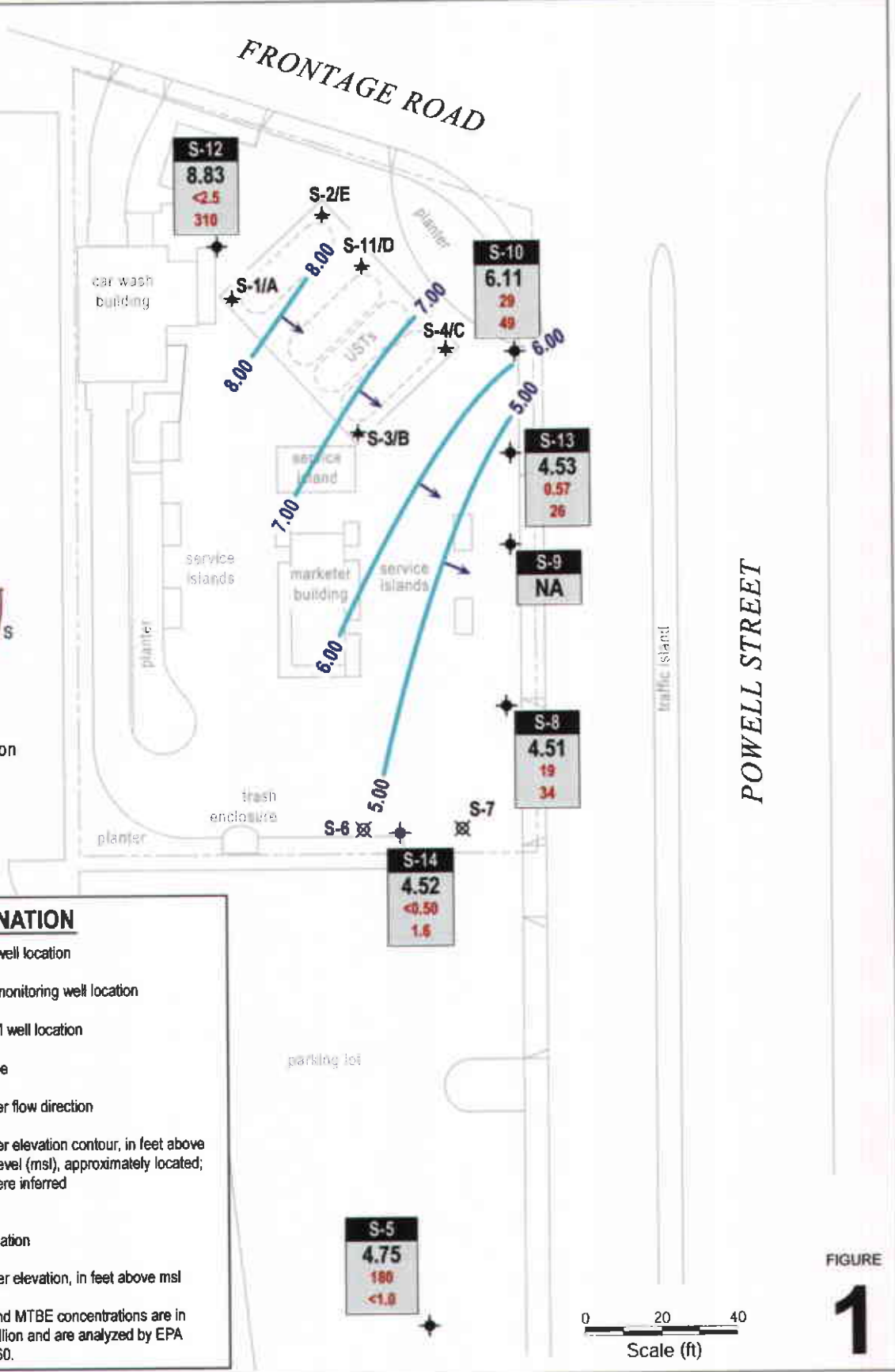
cc: Karen Petryna, Shell Oil Products US, 20945 S. Wilmington Ave., Carson, CA 90810

G:\Emeryville 1800 Powell\QM\4q03\4q03qm.doc

FRONTAGE ROAD



Groundwater Flow Direction  
(3Q96 to 4Q03)



**EXPLANATION**

- S-5 ◆ Monitoring well location
- S-6 ✕ Destroyed monitoring well location

S-1/A ★ Tank backfill well location

NA Not available

→ Groundwater flow direction

— XX.XX Groundwater elevation contour, in feet above mean sea level (msl), approximately located; dashed where inferred

Well	Well designation
ELEV	Groundwater elevation, in feet above msl
Benzene	Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8260.
MTBE	

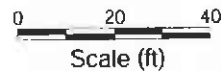


FIGURE  
**1**

G:\EMERYVILLE\_1800POWELL\FIGURES\4QM03.A1

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



C A M B R I A

**Groundwater Elevation Contour Map**

November 25, 2003

**BLAINE**  
TECH SERVICES, INC.



1680 ROGERS AVENUE  
SAN JOSE, CA 95112-1105  
(408) 573-7771 FAX  
(408) 573-0555 PHONE  
CONTRACTOR'S LICENSE #746684  
www.blainetech.com

December 16, 2003

Karen Petryna  
Shell Oil Products US  
P.O. Box 7869  
Burbank, CA 91510-7869

Fourth Quarter 2003 Groundwater Monitoring at  
Shell-branded Service Station  
1800 Powell Street  
Emeryville, CA

Monitoring performed on November 25, 2003

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**Groundwater Monitoring Report 031125-JP-1**

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.

**ATTACHMENT A**  
**Blaine Groundwater Monitoring Report**  
**and Field Notes**

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**1800 Powell Street**  
**Emeryville, CA**

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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
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
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

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. Our activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrological conditions or formulation of recommendations was performed.

Please call if you have any questions.

Yours truly,

Leon Gearhart  
Project Coordinator

LG/jt

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

cc: Anni Kreml  
Cambria Environmental Technology, Inc.  
5900 Hollis Street, Suite A  
Oakland, CA 94608



**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**1800 Powell Street**  
**Emeryville, CA**

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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
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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-5	11/02/2000	1,120	NA	191	2.78	<2.50	3.56	<12.5	NA	11.72	8.55	3.17	NA
S-5	12/27/2001	760	NA	110	2.4	<0.50	5.8	NA	<5.0	11.72	7.64	4.08	NA
S-5	11/26/2002	Well inaccessible		NA	NA	NA	NA	NA	NA	14.07	NA	NA	NA
S-5	12/06/2002	860	NA	130	2.3	<0.50	6.0	NA	<5.0	14.07	8.62	5.45	NA
S-5	11/25/2003	920	NA	180	3.0	<1.0	6.2	NA	<1.0	14.07	9.32	4.75	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
S-7	11/09/1985	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**1800 Powell Street**  
**Emeryville, CA**

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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
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
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

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**1800 Powell Street**  
**Emeryville, CA**

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)	TOC (MSL)	Depth to Water (ft)	GW Elevation (MSL)	SPH Thickness (ft)
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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	12/07/1999	770	NA	270	16	<2.0	33	75	NA	12.76	10.14	2.62	NA
S-8	11/02/2000	436	NA	75.8	6.18	0.549	14.9	81.5	NA	12.76	9.45	3.31	NA
S-8	12/27/2001	1,300	NA	62	11	1.8	31	NA	86	12.76	9.19	3.57	NA
S-8	11/26/2002	970	NA	58	3.8	0.51	15	NA	35	15.00	10.10	4.90	NA
<b>S-8</b>	<b>11/25/2003</b>	<b>400</b>	<b>NA</b>	<b>19</b>	<b>4.4</b>	<b>&lt;0.50</b>	<b>15</b>	<b>NA</b>	<b>34</b>	<b>15.00</b>	<b>10.49</b>	<b>4.51</b>	<b>NA</b>

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
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

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**1800 Powell Street**  
**Emeryville, CA**

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)	TOC (MSL)	Depth to Water (ft)	GW Elevation (MSL)	SPH Thickness (ft)
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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-9	02/29/1996 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	12.10	2.88	2.79
S-9	05/22/1996 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	11.71	2.44	1.75
S-9	07/30/1996 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	11/11/1996 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	9.00
S-9	11/03/1997 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	11/06/1998 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	12/07/1999 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	NA
S-9	11/02/2000 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	NA
S-9	12/27/2001 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	NA
S-9	11/26/2002 a	NA	NA	NA	NA	NA	NA	NA	NA	14.83	NA	NA	NA
<b>S-9</b>	<b>11/25/2003 a</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>14.83</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

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
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

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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
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	2,230	47	33	10	29	90	NA	12.58	7.95	4.63	NA
S-10	11/02/2000	536	14,500	32.0	3.08	<0.500	2.98	42.3	NA	12.58	7.05	5.53	NA

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S-10	12/27/2001	870	6,600	61	4.9	2.5	15	NA	26	12.58	7.43	5.15	NA
S-10	11/26/2002	720	9,800	56	3.5	<0.50	8.4	NA	52	15.11	9.75	5.36	NA
<b>S-10</b>	<b>11/25/2003</b>	<b>550</b>	<b>530 m</b>	<b>29</b>	<b>2.7</b>	<b>&lt;0.50</b>	<b>8.4</b>	<b>NA</b>	<b>49</b>	<b>15.11</b>	<b>9.00</b>	<b>6.11</b>	<b>NA</b>

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
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

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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	1,900	NA	12.84	8.32	4.52	NA
S-12	11/02/2000	132	4,000	0.642	<0.500	<0.500	1.07	1,900	2,230 k	12.84	7.50	5.34	NA
S-12	12/27/2001	230	2,700	<2.0	<2.0	<2.0	<2.0	NA	760	12.84	7.00	5.84	NA
S-12	11/26/2002	180	540	<1.0	<1.0	<1.0	1.7	NA	390	14.87	8.35	6.52	NA
S-12	11/25/2003	<250	2,600 m	<2.5	<2.5	<2.5	<5.0	NA	310	14.87	6.04	8.83	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
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

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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	12/07/1999	420	1,430	15	6.2	2.6	15	42	NA	12.59	9.72	2.87	NA
S-13	11/02/2000	257	4,240	4.89	1.92	<0.500	5.17	45.1	NA	12.59	7.15	5.44	NA
S-13	12/27/2001	300	6,400	7.2	0.84	<0.50	6.0	NA	34	12.59	9.35	3.24	NA
S-13	11/26/2002	160	850	<0.50	<0.50	<0.50	2.6	NA	23	14.47	9.80	4.67	NA
S-13	11/25/2003	180	5,100 m	0.57	0.55	<0.50	3.0	NA	26	14.47	9.94	4.53	NA
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



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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
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

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**1800 Powell Street**  
**Emeryville, CA**

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)	TOC (MSL)	Depth to Water (ft)	GW Elevation (MSL)	SPH Thickness (ft)
S-14	12/07/1999	970	5,920	1.0	1.1	0.59	3.5	2.6	NA	12.69	9.73	2.96	NA
S-14	11/02/2000	273	535,000	<0.500	<0.500	<0.500	1.59	<2.50	NA	12.69	9.98	2.71	NA
S-14	12/27/2001	68	20,000	<0.50	<0.50	<0.50	1.3	NA	<5.0	12.69	9.33	3.36	NA
S-14	11/26/2002	<50	2,400	<0.50	<0.50	<0.50	0.91	NA	<5.0	14.51	9.70	4.81	NA
S-14	11/25/2003	78 m	4,400 m	<0.50	<0.50	<0.50	1.2	NA	1.6	14.51	9.99	4.52	NA

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B, prior to December 27, 2001, by EPA Method 8015.

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

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to December 27, 2001, by EPA Method 8020.

MTBE = Methyl-tertiary-butyl ether

TOB = Top of Wellbox Elevation

TOC = Top of Casing 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

**Blaine Tech Services, Inc.**

December 12, 2003

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Attn.: Leon Gearhart  
Project#: 031125-JP1  
Project: 98995349  
Site: 1800 Powell St., Emeryville

Dear Mr. Gearhart,

Attached is our report for your samples received on 11/26/2003 17:43  
This report has been reviewed and approved for release. Reproduction of this report  
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after  
01/10/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,  
please call me at (925) 484-1919.

You can also contact me via email. My email address is: [vvancil@stl-inc.com](mailto:vvancil@stl-inc.com)

Sincerely,



Vincent Vancil  
Project Manager

**WELL CONCENTRATIONS**  
**Shell-Branded Service Station**  
**1800 Powell Street**  
**Emeryville, CA**

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)	TOC (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 of hydrocarbon range C18 - C36, possibly motor oil.

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.

k = This sample analyzed outside of EPA recommended holding time.

m = Hydrocarbon does not match pattern of laboratory's standard.

Beginning November 26, 2002, depth to water referenced to Top of Casing Elevation.

Active wells surveyed February 12, 2002, by Virgil Chavez Land Surveying of Vallejo, California.

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771Project: 031125-JP1  
98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
S-5	11/25/2003 12:15	Water	1
S-8	11/25/2003 13:10	Water	2
S-10	11/25/2003 13:30	Water	3
S-12	11/25/2003 12:40	Water	4
S-13	11/25/2003 11:05	Water	5
S-14	11/25/2003 10:35	Water	6

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566  
Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

12/12/2003 17:01

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.  
Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1  
98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Prep(s): 5030B	Test(s): 8260B
Sample ID: S-5	Lab ID: 2003-11-0952 - 1
Sampled: 11/25/2003 12:15	Extracted: 12/4/2003 20:28
Matrix: Water	QC Batch#: 2003/12/04-2B.62
Analysis Flag: 0 ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	920	100	ug/L	2.00	12/04/2003 20:28	
Benzene	180	1.0	ug/L	2.00	12/04/2003 20:28	
Toluene	3.0	1.0	ug/L	2.00	12/04/2003 20:28	
Ethylbenzene	ND	1.0	ug/L	2.00	12/04/2003 20:28	
Total xylenes	6.2	2.0	ug/L	2.00	12/04/2003 20:28	
Methyl tert-butyl ether (MTBE)	ND	1.0	ug/L	2.00	12/04/2003 20:28	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	104.2	76-130	%	2.00	12/04/2003 20:28	
Toluene-d8	101.6	78-115	%	2.00	12/04/2003 20:28	

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1

98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Prep(s):	5030B	Test(s):	8260B
Sample ID:	S-8	Lab ID:	2003-11-0952 - 2
Sampled:	11/25/2003 13:10	Extracted:	12/4/2003 20:50
Matrix:	Water	QC Batch#:	2003/12/04-2B.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	400	50	ug/L	1.00	12/04/2003 20:50	
Benzene	19	0.50	ug/L	1.00	12/04/2003 20:50	
Toluene	4.4	0.50	ug/L	1.00	12/04/2003 20:50	
Ethylbenzene	ND	0.50	ug/L	1.00	12/04/2003 20:50	
Total xylenes	15	1.0	ug/L	1.00	12/04/2003 20:50	
Methyl tert-butyl ether (MTBE)	34	0.50	ug/L	1.00	12/04/2003 20:50	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	97.3	76-130	%	1.00	12/04/2003 20:50	
Toluene-d8	97.6	78-115	%	1.00	12/04/2003 20:50	

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

12/12/2003 17:01

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1  
98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Prep(s):	5030B	Test(s):	8260B
Sample ID:	S-10	Lab ID:	2003-11-0952 - 3
Sampled:	11/25/2003 13:30	Extracted:	12/4/2003 21:12
Matrix:	Water	QC Batch#:	2003/12/04-2B.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	550	50	ug/L	1.00	12/04/2003 21:12	
Benzene	29	0.50	ug/L	1.00	12/04/2003 21:12	
Toluene	2.7	0.50	ug/L	1.00	12/04/2003 21:12	
Ethylbenzene	ND	0.50	ug/L	1.00	12/04/2003 21:12	
Total xylenes	8.4	1.0	ug/L	1.00	12/04/2003 21:12	
Methyl tert-butyl ether (MTBE)	49	0.50	ug/L	1.00	12/04/2003 21:12	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	103.9	76-130	%	1.00	12/04/2003 21:12	
Toluene-d8	96.1	78-115	%	1.00	12/04/2003 21:12	

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12/12/2003 17:01



**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1  
98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Prep(s): 5030B	Test(s): 8260B
Sample ID: S-12	Lab ID: 2003-11-0952-4
Sampled: 11/25/2003 12:40	Extracted: 12/4/2003 21:34
Matrix: Water	QC Batch#: 2003/12/04-2B.62
Analysis Flag: o ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	250	ug/L	5.00	12/04/2003 21:34	
Benzene	ND	2.5	ug/L	5.00	12/04/2003 21:34	
Toluene	ND	2.5	ug/L	5.00	12/04/2003 21:34	
Ethylbenzene	ND	2.5	ug/L	5.00	12/04/2003 21:34	
Total xylenes	ND	5.0	ug/L	5.00	12/04/2003 21:34	
Methyl tert-butyl ether (MTBE)	310	2.5	ug/L	5.00	12/04/2003 21:34	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	101.6	76-130	%	5.00	12/04/2003 21:34	
Toluene-d8	104.9	78-115	%	5.00	12/04/2003 21:34	

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12/12/2003 17:01

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1

98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Prep(s):	5030B	Test(s):	8260B
Sample ID:	S-13	Lab ID:	2003-11-0952 - 5
Sampled:	11/25/2003 11:05	Extracted:	12/4/2003 21:56
Matrix:	Water	QC Batch#:	2003/12/04-2B-62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	180	50	ug/L	1.00	12/04/2003 21:56	
Benzene	0.57	0.50	ug/L	1.00	12/04/2003 21:56	
Toluene	0.55	0.50	ug/L	1.00	12/04/2003 21:56	
Ethylbenzene	ND	0.50	ug/L	1.00	12/04/2003 21:56	
Total xylenes	3.0	1.0	ug/L	1.00	12/04/2003 21:56	
Methyl tert-butyl ether (MTBE)	26	0.50	ug/L	1.00	12/04/2003 21:56	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	92.5	76-130	%	1.00	12/04/2003 21:56	
Toluene-d8	106.0	78-115	%	1.00	12/04/2003 21:56	

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.

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1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1

98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Prep(s): 5030B	Test(s): 8260B
Sample ID: S-14	Lab ID: 2003-11-0952 - 6
Sampled: 11/25/2003 10:35	Extracted: 12/4/2003 22:19
Matrix: Water	QC Batch#: 2003/12/04-2B.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	78	50	ug/L	1.00	12/04/2003 22:19	g
Benzene	ND	0.50	ug/L	1.00	12/04/2003 22:19	
Toluene	ND	0.50	ug/L	1.00	12/04/2003 22:19	
Ethylbenzene	ND	0.50	ug/L	1.00	12/04/2003 22:19	
Total xylenes	1.2	1.0	ug/L	1.00	12/04/2003 22:19	
Methyl tert-butyl ether (MTBE)	1.6	0.50	ug/L	1.00	12/04/2003 22:19	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	93.7	76-130	%	1.00	12/04/2003 22:19	
Toluene-d8	97.3	78-115	%	1.00	12/04/2003 22:19	

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1

98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Batch QC Report					
Prep(s): 5030B				Test(s): 8260B	
Method Blank		Water		QC Batch # 2003/12/04-2B.62	
MB: 2003/12/04-2B.62-021				Date Extracted: 12/04/2003 18:21	

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	12/04/2003 18:21	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	12/04/2003 18:21	
Benzene	ND	0.5	ug/L	12/04/2003 18:21	
Toluene	ND	0.5	ug/L	12/04/2003 18:21	
Ethylbenzene	ND	0.5	ug/L	12/04/2003 18:21	
Total xylenes	ND	1.0	ug/L	12/04/2003 18:21	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	89.3	76-130	%	12/04/2003 18:21	
Toluene-d8	96.3	78-115	%	12/04/2003 18:21	

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

12/12/2003 17:01

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1  
98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Batch QC Report										
Prep(s): 5030B							Test(s): 8260B			
Laboratory Control Spike				Water			QC Batch # 2003/12/04-2B.62			
LCS	2003/12/04-2B.62-037			Extracted: 12/04/2003			Analyzed: 12/04/2003 17:37			
LCSD	2003/12/04-2B.62-052			Extracted: 12/04/2003			Analyzed: 12/04/2003 18:52			
Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	17.7	18.4	25	70.8	73.6	3.9	65-165	20		
Benzene	18.8	21.4	25	75.2	85.6	12.9	69-129	20		
Toluene	19.9	22.8	25	79.6	91.2	13.6	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	470	457	500	94.0	91.4		76-130			
Toluene-d8	474	512	500	94.8	102.4		78-115			

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1  
98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Batch QC Report			
Prep(s): 5030B			Test(s): 8260B
<b>Matrix Spike ( MS / MSD )</b>	<b>Water</b>		<b>QC Batch # 2003/12/04-2B.62</b>
S-14 >> MS			Lab ID: 2003-11-0952 - 006
MS: 2003/12/04-2B.62-041	Extracted: 12/04/2003	Analyzed: 12/04/2003 22:41	
		Dilution: 1.00	
MSD: 2003/12/04-2B.62-003	Extracted: 12/04/2003	Analyzed: 12/04/2003 23:03	
		Dilution: 1.00	

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample		ug/L	MS	MSD	RPD	Rec.	RPD	MS
Benzene	18.1	18.8	ND	25	72.4	75.2	3.8	69-129	20		
Toluene	19.3	19.9	ND	25	77.2	79.6	3.1	70-130	20		
Methyl tert-butyl ether	17.9	20.5	1.65	25	65.0	75.4	14.8	65-165	20		
<b>Surrogate(s)</b>											
1,2-Dichloroethane-d4	460	487		500	92.0	97.4		76-130			
Toluene-d8	500	470		500	100.0	93.9		78-115			

**Gas/BTEX/MTBE by 8260B (C6-C12)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1

98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

**Legend and Notes**

**Analysis Flag**

o

Reporting limits were raised due to high level of analyte present in the sample.

**Result Flag**

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

12/12/2003 17:01

**Diesel (C10-C24)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771Project: 031125-JP1  
98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
S-10	11/25/2003 13:30	Water	3
S-12	11/25/2003 12:40	Water	4
S-13	11/25/2003 11:05	Water	5
S-14	11/25/2003 10:35	Water	6

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

12/12/2003 17:01



**Diesel (C10-C24)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1

98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Prep(s): 3511	Test(s): 8015M
Sample ID: S-10	Lab ID: 2003-11-0952 - 3
Sampled: 11/25/2003 13:30	Extracted: 12/1/2003 17:55
Matrix: Water	QC Batch#: 2003/12/01-09.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	530	50	ug/L	1.00	12/05/2003 11:52	ndp
<i>Surrogate(s)</i> o-Terphenyl	72.8	50-150	%	1.00	12/05/2003 11:52	

**Diesel (C10-C24)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1  
98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Prep(s): 3511	Test(s): 8015M
Sample ID: S-12	Lab ID: 2003-11-0952 - 4
Sampled: 11/25/2003 12:40	Extracted: 12/1/2003 17:55
Matrix: Water	QC Batch#: 2003/12/01-09:10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	2600	50	ug/L	1.00	12/05/2003 12:19	ndp
<b>Surrogate(s)</b> o-Terphenyl	99.2	50-150	%	1.00	12/05/2003 12:19	

**Diesel (C10-C24)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1  
98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Prep(s): 3511	Test(s): 8015M
Sample ID: S-13	Lab ID: 2003-11-0952 - 5
Sampled: 11/25/2003 11:05	Extracted: 12/1/2003 17:55
Matrix: Water	QC Batch#: 2003/12/01-09.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	5100	50	ug/L	1.00	12/10/2003 07:34	ndp
<b>Surrogate(s)</b>						
o-Terphenyl	80.0	50-150	%	1.00	12/10/2003 07:34	

**Diesel (C10-C24)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1

98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Prep(s): 3511	Test(s): 8015M
Sample ID: S-14	Lab ID: 2003-11-0952 - 6
Sampled: 11/25/2003 10:35	Extracted: 12/1/2003 17:55
Matrix: Water	QC Batch#: 2003/12/01-09:10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	4400	50	ug/L	1.00	12/10/2003 07:03	ndp
<i>Surrogate(s)</i>						
o-Terphenyl	116.0	50-150	%	1.00	12/10/2003 07:03	

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

12/12/2003 17:01

**Diesel (C10-C24)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1

98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Batch QC Report					
Prep(s): 3511				Test(s): 8015M	
Method Blank		Water		QC Batch # 2003/12/01-09-10	
MB: 2003/12/01-09-10-001				Date Extracted: 12/01/2003 17:55	

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	12/03/2003 08:56	
<b>Surrogates(s)</b> o-Terphenyl	126.4	50-150	%	12/03/2003 08:56	

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

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12/12/2003 17:01

**Diesel (C10-C24)**

Blaine Tech Services, Inc.  
Attn.: Leon Gearhart

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1  
98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

Batch QC Report									
Prep(s): 3511					Test(s): 8015M				
Laboratory Control Spike			Water			QC Batch # 2003/12/01-09.10			
LCS	2003/12/01-09.10-002		Extracted: 12/01/2003			Analyzed: 12/03/2003 09:23			
LCSD	2003/12/01-09.10-003		Extracted: 12/01/2003			Analyzed: 12/04/2003 16:17			

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Diesel	806	820	680	118.5	120.6	1.8	60-150	25		
<b>Surrogates(s)</b> o-Terphenyl	1.33	1.72	1.25	106.4	137.6		50-150	0		

**Diesel (C10-C24)**

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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San Jose, CA 95112-1105

Phone: (408) 573-0555 Fax: (408) 573-7771

Project: 031125-JP1

98995349

Received: 11/26/2003 17:43

Site: 1800 Powell St., Emeryville

**Legend and Notes**

**Result Flag**

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

LAB: STL

SHELL Chain Of Custody Record

80661

Lab Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be Invoiced:

SCIENCE & ENGINEERING  
 TECHNICAL SERVICES  
 C&MT HOUSTON

Karen Petryna

2003-11-0952

INCIDENT NUMBER (S&E ONLY)

9 8 9 9 5 3 4 9

SAP or CRMT NUMBER (TS/CRMT)

DATE: 11/25/03

PAGE: 1 of 1

SAVING COMPANY <b>Blaine Tech Services</b>	LOG CODE <b>BTSS</b>	SITE ADDRESS (Street and City) <b>1800 Powell St., Emeryville</b>	GLOBAL ID NO. <b>T0600101231</b>
ADDRESS <b>1980 Rogers Avenue, San Jose, CA 95112</b>	EDP CELL NUMBER TO (Preferred Party or Designer)	PHONE NO. <b>(510) 420-3335</b>	CONSULTANT PROJECT NO. <b>031125-1P1</b>
PROJECT CONTACT (Name and Job Position) <b>Leon Gearhart</b>	EDP CELL NUMBER TO (Preferred Party or Designer) <b>Ann Kreml</b>	LAB USE ONLY	LAB USE ONLY
TELEPHONE <b>408-573-0555</b>	FAX <b>408-573-7774</b>	E-MAIL <b>lgearhart@blainetech.com</b>	LAB USE ONLY

TURNAROUND TIME (BUSINESS DAYS):  
 10 DAYS  5 DAYS  72 HOURS  48 HOURS  24 HOURS  LESS THAN 24 HOURS

LA - RW/CB REPORT FORMAT  UST AGENCY

GC/MS MTBE CONFIRMATION: HIGHEST \_\_\_\_\_ HIGHEST per BORING \_\_\_\_\_ ALL \_\_\_\_\_

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDO IS NOT NEEDED

S-8 AND S-14 ARE IN 6 NON-PRESERVED VOAS

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRIX	NO. OF CONT.	TPH - Gas Purgeable	BTX	MTBE (6021B - 5ppb RL)	MTBE (8250B - 0.5ppb RL)	Oxygenates (S) by (8260B)	Ethanol (8260B)	Methanol	1,2-DCA (8260B)	EDB (8260B)	TPH - Diesel, Extractable (601 Bm)
		DATE	TIME												
	S-5	11/25/03	1215	W	3	X	X	X							
	S-8		1310		3	X	X	X							
	<del>S-9</del>														
	S-10		1530		6	X	X	X						X	
	S-12		1240		6	X	X	X						X	
	S-13		1105		6	X	X	X						X	
	S-14		1035		6	X	X	X						X	

FIELD NOTES:  
 Container/Preservative or PID Readings or Laboratory Notes

2-6

TEMPERATURE ON RECEIPT: °C

USED NP VOAS

USED NP VOAS

Received by (Signature) <i>Matthew Pynch</i>	Received by (Signature) <i>[Signature]</i>	Date <u>11/26/03</u>	Time <u>1544</u>
Received by (Signature) <i>[Signature]</i>	Received by (Signature) <i>[Signature]</i>	Date <u>11/26/03</u>	Time <u>1743</u>

DO NOT DESTROY THIS WITH OADR REQUEST. RETURN TO FILE: Yellow and Pink to Client.

C&M Original (7/14) B&C-8702



# WELL GAUGING DATA

Project # 031125-JPI Date 11/25/03 Client shell

Site 1800 Powell, Emeryville

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
S-5	8	0	*			9.32	12.40	TOC	
S-8	3	0				10.49	18.30		
S-9	2	TAR PRESENT				—	—		
S-10	6	0				9.00	19.40		D
S-12	3					6.04	24.35		D
S-13	3	0				9.94	19.75		D
S-14	3	0				9.99	23.88	∇	D

\* - Gauged w/ stinger in well

## SHELL WELL MONITORING DATA SHEET

TS #: 03/125-JP1	Site: 1800 Powell, Emeryville
ampler: M. Pyrch	Date: 11/25/03
Well I.D.: S-5	Well Diameter: 2 3 4 6 <u>8</u>
Total Well Depth (TD): 12.40	Depth to Water (DTW): 9.32
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.93	

Large Method: Bailer Disposable Bailer Middleburg <u>Electric Submersible</u>	Waterra Peristaltic Extraction Pump Other _____	Sampling Method: <u>Bailer</u> Disposable Bailer Extraction Port Dedicated Tubing Other: _____
--	--	--

$\frac{18.0}{\text{Case Volume}} \times \frac{3}{\text{Specified Volumes}} = \frac{54.0}{\text{Calculated Volume}} \text{ Gals.}$	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
1200	63.6	6.6	1709	15	18	clear, odor
<del>1200</del> 1207	65.3	6.6	1878	16	36	11
1212	65.6	6.6	1907	31	54	17

Did well dewater? Yes No Gallons actually evacuated: 54.0

Sampling Date: 11/25/03 Sampling Time: 1215 Depth to Water: 9.87

Sample I.D.: S-5 Laboratory: Kiff SPL Other STL

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

EB I.D. (if applicable): @ \_\_\_\_\_ Duplicate I.D. (if applicable):

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

D.O. (if req'd):	Pre-purge:	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	Post-purge:	mV

# SHELL WELL MONITORING DATA SHEET

TS #: 03/25-JP1	Site: 1800 Powell, Emeryville
Amplifier: M. Pyrch	Date: 11/25/03
Well I.D.: 5-8	Well Diameter: 2 <u>(3)</u> 4 6 8
Total Well Depth (TD): 18.30	Depth to Water (DTW): 10.49
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.05	

Sample Method: Bailer      Water: Peristaltic      Sampling Method: Bailer  
 Disposable Bailer      Peristaltic      Disposable Bailer  
 Middleburg      Extraction Pump      Extraction Port  
Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

Case Volume	Specified Volumes	Calculated Volume	
2.8 (Gals.) X	3	= 8.4 Gals.	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
1259	63.1	6.8	1911	32	3.0	clear
1301	64.0	6.8	1918	25	<sup>JP</sup> 7.6.0	"
1303	63.6	6.7	1912	23	8.5	"

Used 3 WP. Vols b/c HCl in processed Vols Reacted w/ groundwater to fringes  
 Did well dewater? Yes No Gallons actually evacuated: 8.5

Sampling Date: 11/25/03      Sampling Time: 1310      Depth to Water: 11.17

Sample I.D.: 5-8      Laboratory: Kiff      SPL      Other: STL

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

SB I.D. (if applicable): @ Time      Duplicate I.D. (if applicable):

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
	D.R.P. (if req'd):	Pre-purge:	mV	Post-purge:

## SHELL WELL MONITORING DATA SHEET

TS #: 03/125-JPI	Site: 1800 Powell, Emeryville
Sampler: M. Pynch	Date: 11/25/03
Well I.D.: S-10	Well Diameter: 2 3 4 <b>5</b> 8
Total Well Depth (TD): 19.40	Depth to Water (DTW): 9.00
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <b>PVC</b> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.08	

Sample Method: **Bailer**      Water      Sampling Method: **Bailer**  
 Disposable Bailer      Peristaltic      Disposable Bailer  
 Middleburg      Extraction Pump      Extraction Port  
**Electric Submersible**      Other \_\_\_\_\_      Dedicated Tubing  
 Other: \_\_\_\_\_

$\frac{15.2 \text{ (Gals.)} \times 3}{\text{Specified Volume}} = \frac{45.6}{\text{Calculated Volume}} \text{ Gals.}$

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or <b>µS</b> )	Turbidity (NTUs)	Gals. Removed	Observations
1141	67.4	6.4	1144	28	15.5	clear, odor
1145	Dewatered @		20 gallons @	17.85 DTW		
1324	65.6	6.6	3758	>1000	-	gray, odor

Did well dewater? **Yes** No      Gallons actually evacuated: 20.0

Sampling Date: 11/25/03      Sampling Time: 1330      Depth to Water: 16.67 (site dependent)

Sample I.D.: S-10      Laboratory: KIF      SPL      Other **STL**

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

3B I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## SHELL WELL MONITORING DATA SHEET

WTS #: 03/125-JPI	Site: 1800 Powell, Emeryville
Sampler: M. Pyrch	Date: 11/25/03
Well I.D.: S-12	Well Diameter: 2 <u>3</u> 4 6 8
Total Well Depth (TD): 24.35	Depth to Water (DTW): 6.04
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grndc	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>9.70</u>	

Purge Method: Boiler      Waterra      Sampling Method: Boiler  
                   Disposable Boiler      Peristaltic      Disposable Boiler  
                   Middleburg      Extraction Pump      Extraction Port  
                   Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

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

$6.7 \text{ (Gals.)} \times 3 = 20.1 \text{ Gals.}$   
 Case Volume      Specified Volumes      Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>3</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
1124	67.2	6.6	2984	58	7.0	clear
1127	67.8	6.3	3410	23	14.0	"
1129	67.7	6.4	2533	16	20.5	"

Did well dewater? Yes No      Gallons actually evacuated: 20.5

Sampling Date: 11/25/03      Sampling Time: 1240      Depth to Water: 9.58

Sample I.D.: S-12      Laboratory: Kiff      SPL      Other: STL

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

SB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## WELL MONITORING DATA SHEET

TS #: 03/125-JP1	Site: 1800 Powell, Emeryville
Sampler: M. Pyrch	Date: 11/25/03
Well I.D.: S-13	Well Diameter: 2 (3) 4 6 8
Total Well Depth (TD): 19.75	Depth to Water (DTW): 9.94
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grnde	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <sup>JP</sup> 11.90 11.90	

Sample Method:  Bailer      Water:  Peristaltic      Sampling Method:  Bailer  
 Disposable Bailer       Extraction Pump       Disposable Bailer  
 Middleburg       Other \_\_\_\_\_       Extraction Port  
 Electric Submersible       Other \_\_\_\_\_       Dedicated Tubing

3.6 (Gals.) X 3 = 10.8 Gals.  
 Case Volume      Specified Volumes      Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or <del>µS</del> )	Turbidity (NTUs)	Gals. Removed	Observations
1057	68.9	6.7	9303	417	3.5	gray cloudy, odor
1059	69.4	6.8	<del>9303</del> 10.0 mS	283	7.0	n
<del>1100</del> 1100	69.2	6.8	10.8 mS	210	10.8	frothy, odor, cloudy

Did well dewater? Yes  No      Gallons actually evacuated: 11.0

Sampling Date: 11/25/03      Sampling Time: 1105      Depth to Water: 11.23

Sample I.D.: S-13      Laboratory: Kiff      SPL      Other:  STL

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

SB I.D. (if applicable): @ \_\_\_\_\_      Duplicate I.D. (if applicable):

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
	D.R.P. (if req'd):	mV	Post-purge:	mV

# SHELL WELL MONITORING DATA SHEET

TS #: 03/125-JP1	Site: 1800 Powell, Emeryville
Amplifier: M. Pyrch	Date: 11/25/03
Well I.D.: 5-14	Well Diameter: 2 <u>3</u> 4 6 8
Total Well Depth (TD): 23.88	Depth to Water (DTW): 9.99
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>FVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.76	

Sample Method:  Bailor       Water      Sampling Method: Bailer  
 Disposable Bailer       Peristaltic      Disposable Bailer  
 Middleburg       Extraction Pump      Extraction Port  
 Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing  
 Other: \_\_\_\_\_

<u>5.1</u> (Gals.) X	<u>3</u>	=	<u>15.3</u> Gals.	
Case Volume	Specified Volume		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
1024	64.7	6.2	3550	71	5.0	clear, odor
1027	66.9	6.4	4186	19	10.0	"
1031	67.8	6.5	4939	12	15.5	"

Water Readed w/ Hel in preserved vials (gas evolved) - used 6 AP. vials for sample  
 Did well dewater? Yes No      Gallons actually evacuated: 15.5

Sampling Date: 11/25/03      Sampling Time: 1035      Depth to Water: 10.37

Sample I.D.: <sup>JP</sup> ~~AA~~ 5-14      Laboratory: Kiff      SPL      Other: STL

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

EB I.D. (if applicable): @ Time      Duplicate I.D. (if applicable):

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

D.O. (if req'd):	Pre-purge:	mg/l	Post-purge:	mg/l
	Pre-purge:	mV	Post-purge:	mV