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**Shell Oil Products US**

December 9, 2002

Mr. Don Hwang  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Alameda County  
DEC 12 2002  
Environmental Health

**Subject:** Former Shell Service Station  
2703 Martin Luther King Jr. Way  
Oakland, California

Dear Mr. Hwang:

Attached for your review and comment is a copy of the *Fourth Quarter 2002 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**

A handwritten signature in cursive script that reads "Karen Petryna".

Karen Petryna  
Sr. Environmental Engineer

December 6, 2002

Mr. Don Hwang  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Re: **Fourth Quarter 2002 Monitoring Report**  
Former Shell Service Station  
2703 Martin Luther King Jr. Way  
Oakland, California  
Incident #97093397  
Cambria Project #244-0781-002



Dear Mr. Hwang:

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 2002 ACTIVITIES**

**Groundwater Monitoring:** Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled the site wells, measured dissolved oxygen (DO) concentrations in selected wells, calculated groundwater elevations, and compiled the analytical data. Cambria prepared a vicinity map which includes previously submitted well survey information (Figure 1) and a groundwater elevation contour map (Figure 2). Blaine's report, presenting the laboratory report and supporting field documents, is included as Attachment A.

## **ANTICIPATED FUTURE ACTIVITIES**

**Groundwater Monitoring:** Blaine will gauge and sample all wells, measure DO concentrations in selected wells, and tabulate the data. Cambria will prepare a monitoring report.

Oakland, CA  
San Ramon, CA  
Sonoma, CA

**Cambria  
Environmental  
Technology, Inc.**

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

***Oxygen Releasing Compound (ORC) Installation:*** Cambria recommends the installation of ORCs in wells MW-5 and V-2 to enhance intrinsic biodegradation at the site. DO measurements will be collected in wells MW-1, MW-5, V-1 and V-2 while ORCs are installed at the site. Unless otherwise directed by the Alameda County Health Care Services Agency (ACHCSA), Blaine will implement this recommendation during the first quarter 2003.

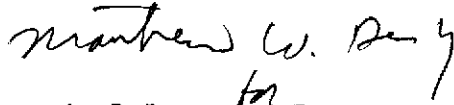
***Door-to-Door Basement Survey, Cross-Sectional Diagram Preparation and Site Conceptual Model (SCM) Development:*** Cambria will complete cross-sectional diagrams of the site using available boring logs and historical soil analytical results to identify potential source areas onsite. Per an October 8, 2002 telephone conversation between Mr. Don Hwang of the ACHCSA and Jacquelyn Jones of Cambria, the cross-sectional diagrams will be provided to the ACHCSA prior to completion of the remaining recommendations. Cambria will also complete a 500-foot door-to-door basement and tank survey to identify any potential sensitive receptors or additional sources (including domestic wells, basements or underground heating or oil tanks) in the immediate site vicinity, and will develop an SCM for the site. Cambria will present the survey results with the cross-sectional diagrams and SCM, and make recommendations of proposed locations for soil-vapor sample collection.



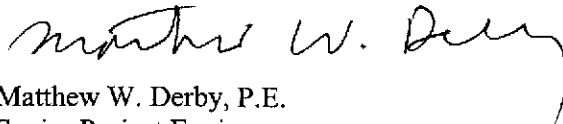
**CLOSING**

We appreciate the opportunity to work with you on this project. Please call Jacquelyn Jones at (510) 420-3316 if you have any questions or comments.

Sincerely,  
**Cambria Environmental Technology, Inc**



Jacquelyn L. Jones  
Project Geologist



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

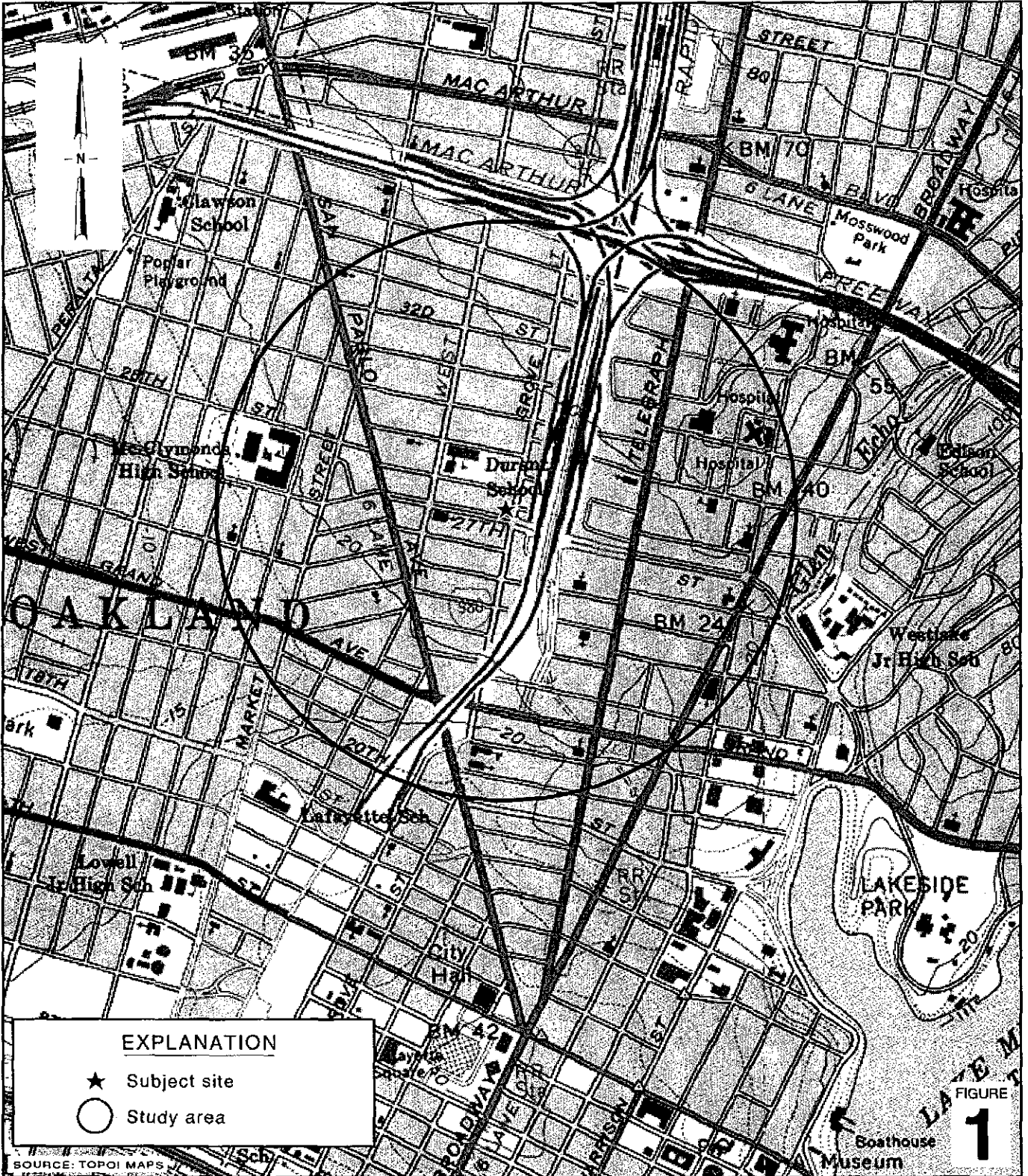


Figures: 1 - Vicinity/Area Well Survey Map  
2 - Groundwater Elevation Contour Map

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

cc: Karen Petryna, Shell Oil Products US, P.O. Box 7869, Burbank, CA 91510-7869  
Rodney & Janet Kwan, 1834 Alameda Ave., Alameda, CA 94501

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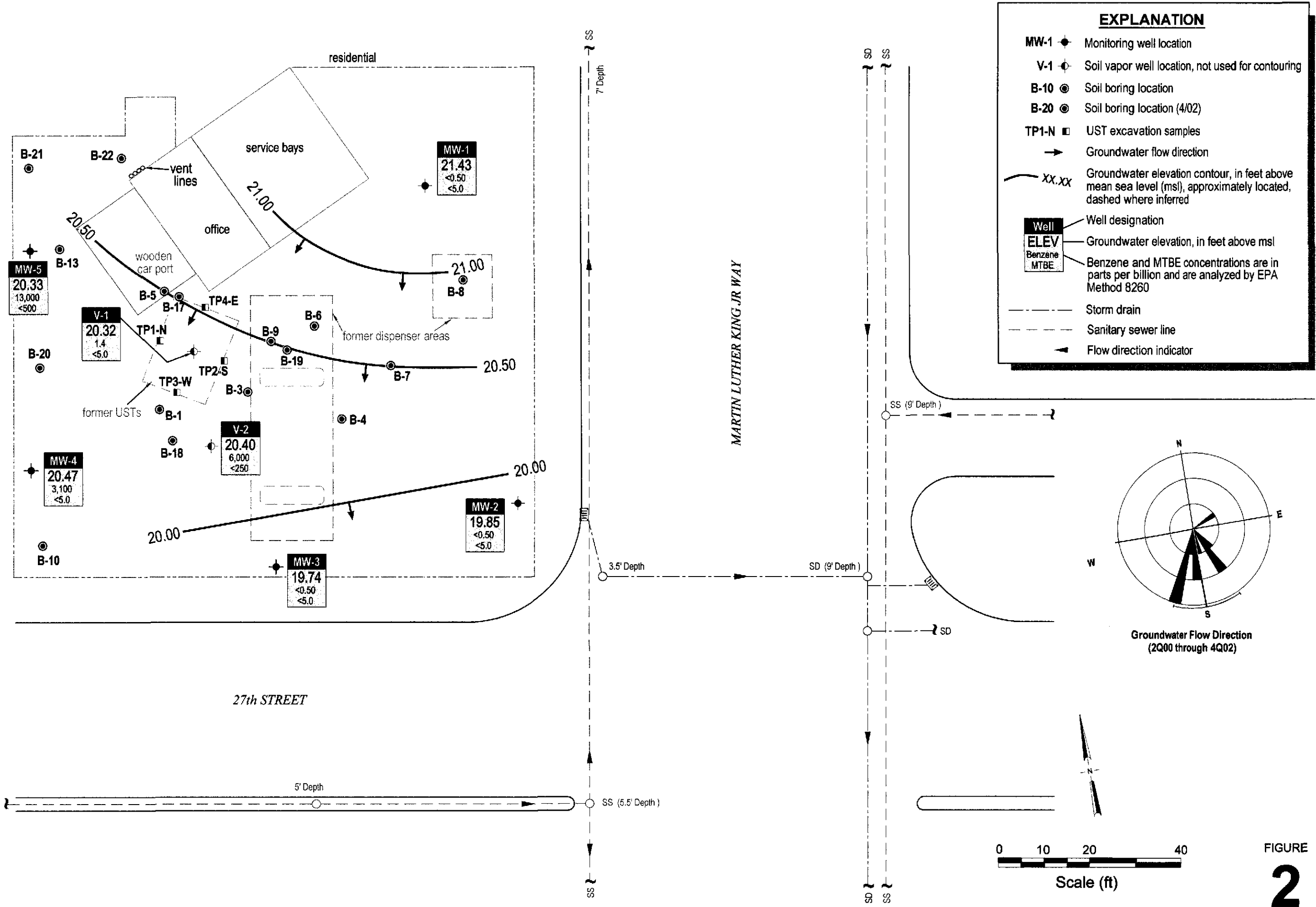
SOURCE: TOPOI MAPS

**Former Shell Service Station**  
 2703 Martin Luther King Jr. Way  
 Oakland, California  
 Incident #97093397



C A M B R I A

**Vicinity / Area Well Survey Map**  
 (1/2 - Mile Radius)



**Groundwater Elevation Contour Map**

October 21, 2002



C A M B R I A

**FIGURE 2**

**Former Shell Service Station**  
 2703 Martin Luther King Jr. Way  
 Oakland, California  
 Incident #97093397

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

**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

November 13, 2002

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

Fourth Quarter 2002 Groundwater Monitoring at  
Former Shell Service Station  
2703 Martin Luther King Jr. Way  
Oakland, CA

Monitoring performed on October 21, 2002

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**Groundwater Monitoring Report 021021-DW-3**

This report covers the routine monitoring of groundwater wells at this Former Shell 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 Martinez Refining Company.

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. 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 Sheets

cc: Anni Kreml  
Cambria Environmental Technology, Inc.  
1144 65<sup>th</sup> Street, Suite C  
Oakland, CA 94608-2411

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**2703 Martin Luther King Way**  
**Oakland, CA**

Well ID	Date	TPPH (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)	DO Reading (ppm)
MW-1 (B-11)	08/02/1996	NA	NA	NA	NA	NA	NA	NA	23.53	NA	NA	NA
MW-1 (B-11)	08/05/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.53	8.76	14.77	NA
MW-1 (B-11) (D)	08/05/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.53	NA	NA	NA
MW-1 (B-11)	10/17/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.53	9.88	13.65	NA
MW-1 (B-11)	01/08/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.53	6.82	16.71	NA
MW-1 (B-11)	04/07/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.53	7.89	15.64	NA
MW-1 (B-11)	07/02/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.53	8.71	14.82	NA
MW-1 (B-11)	10/24/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.53	9.26	14.27	NA
MW-1 (B-11)	01/09/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.53	7.94	15.59	NA
MW-1 (B-11)	04/02/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.53	7.21	16.32	NA
MW-1 (B-11)	07/14/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.53	7.78	15.75	NA
MW-1 (B-11)	10/01/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.53	8.39	15.14	NA
MW-1 (B-11)	01/18/1999	<50.0	<0.500	0.785	<0.500	<0.500	2.36	NA	23.53	8.28	15.25	NA
MW-1 (B-11)	04/29/1999	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.53	8.41	15.12	NA
MW-1 (B-11)	08/23/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	23.53	8.17	15.36	NA
MW-1 (B-11)	10/06/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	23.53	9.37	14.16	NA
MW-1 (B-11)	01/27/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	23.53	7.52	16.01	NA
MW-1 (B-11)	04/18/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	23.53	7.66	15.87	NA
MW-1 (B-11)	07/19/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	23.53	7.81	15.72	NA
MW-1 (B-11)	10/24/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	23.53	8.33	15.20	NA
MW-1 (B-11)	01/04/2001	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	23.53	8.33	15.20	NA
MW-1 (B-11)	05/03/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	23.53	7.83	15.70	NA
MW-1 (B-11)	07/09/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	23.53	8.60	14.93	NA
MW-1	10/18/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	23.53	9.01	14.52	0.2
MW-1	01/24/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	23.53	7.68	15.85	2.1

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**2703 Martin Luther King Way**  
**Oakland, CA**

Well ID	Date	TPPH (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)	DO Reading (ppm)
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MW-1	04/04/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	23.53	7.38	16.15	1.1
MW-1	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	23.53	7.75	15.78	2.2
MW-1	10/21/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	29.53	8.10	21.43	1.6

MW-2 (B-12)*	07/17/1996	<50	<0.50	0.69	<0.50	<0.50	<2.5	NA	22.47	NA	NA	NA
MW-2 (B-12)*	08/05/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	22.47	8.35	14.12	NA
MW-2 (B-12)*	10/17/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	22.47	9.32	13.15	NA
MW-2 (B-12) (D)*	10/17/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	22.47	NA	NA	NA
MW-2 (B-12)*	01/08/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	22.47	6.80	15.67	NA
MW-2 (B-12) (D)*	01/08/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	22.47	NA	NA	NA
MW-2 (B-12)*	04/07/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	22.47	7.81	14.66	NA
MW-2 (B-12)*	07/02/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	22.47	8.27	14.20	NA
MW-2 (B-12)*	10/24/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	22.47	9.12	13.35	NA
MW-2 (B-12)*	01/09/1998	<50	<0.50	<0.50	<0.50	<0.50	6.3	NA	22.47	7.41	15.06	NA
MW-2 (B-12)*	04/02/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	22.47	6.59	15.88	NA
MW-2 (B-12)*	07/14/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	22.47	7.49	14.98	NA
MW-2 (B-12)*	10/01/1998	<50	<0.50	<0.50	<0.50	0.59	<2.5	NA	22.47	8.58	13.89	NA
MW-2 (B-12)*	01/18/1999	<50.0	<0.500	0.971	<0.500	<0.500	2.47	NA	22.47	8.68	13.79	NA
MW-2 (B-12)*	04/29/1999	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	22.47	8.62	13.85	NA
MW-2 (B-12)*	08/23/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	22.47	7.43	15.04	NA
MW-2 (B-12)*	10/06/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	22.47	9.00	13.47	NA
MW-2 (B-12)*	01/27/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	22.47	8.15	14.32	NA
MW-2 (B-12)*	04/18/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	22.47	7.04	15.43	NA
MW-2 (B-12)*	07/19/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	22.47	7.13	15.34	NA
MW-2 (B-12)*	10/24/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	22.47	8.78	13.69	NA
MW-2 (B-12)*	01/04/2001	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	22.47	8.33	14.14	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**2703 Martin Luther King Way**  
**Oakland, CA**

Well ID	Date	TPPH (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)	DO Reading (ppm)
MW-2 (B-12)*	05/03/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	22.47	7.24	15.23	NA
MW-2 (B-12)*	07/09/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	22.47	8.55	13.92	NA
MW-2	10/18/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	22.47	9.42	13.05	NA
MW-2	01/24/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	22.47	7.23	15.24	NA
MW-2	04/04/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	22.47	6.90	15.57	NA
MW-2	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	22.47	7.97	14.50	NA
MW-2	10/21/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	28.47	8.62	19.85	NA
MW-3	04/25/2001	NA	NA	NA	NA	NA	NA	NA	22.30	7.16	15.14	NA
MW-3	05/03/2001	<100	<0.50	<0.50	<0.50	<0.50	NA	<5.0	22.30	7.28	15.02	NA
MW-3	07/09/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	22.30	8.45	13.85	NA
MW-3	10/18/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	22.30	9.44	12.86	NA
MW-3	01/24/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	22.30	5.88	16.42	NA
MW-3	04/04/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	22.30	6.68	15.62	NA
MW-3	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	22.30	7.63	14.67	NA
MW-3	10/21/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	28.30	8.56	19.74	NA
MW-4	04/25/2001	NA	NA	NA	NA	NA	NA	NA	22.51	7.05	15.46	NA
MW-4	05/03/2001	8,000	3,500	24	37	350	NA	<200	22.51	6.66	15.85	NA
MW-4	07/09/2001	16,000	4,100	32	890	790	NA	<200	22.51	8.28	14.23	NA
MW-4	10/18/2001	12,000	3,300	<20	430	220	NA	<200	22.51	9.40	13.11	NA
MW-4	01/24/2002	5,500	1,200	<5.0	280	240	NA	<50	22.51	5.73	16.78	NA
MW-4	04/04/2002	2,000	350	1.4	13	7.8	NA	<10	22.51	5.62	16.89	NA
MW-4	07/18/2002	3,400	440	1.3	200	98	NA	<5.0	22.51	6.94	15.57	NA
MW-4	10/21/2002	16,000	3,100	11	1,200	970	NA	<5.0	28.51	8.04	20.47	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**2703 Martin Luther King Way**  
**Oakland, CA**

Well ID	Date	TPPH (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)	DO Reading (ppm)
MW-5	04/25/2001	NA	NA	NA	NA	NA	NA	NA	23.54	7.36	16.18	NA
MW-5	05/03/2001	160,000	12,000	20,000	3,600	23,000	NA	<500	23.54	7.77	15.77	NA
MW-5	07/09/2001	130,000	11,000	19,000	4,500	22,000	NA	<500	23.54	9.32	14.22	NA
MW-5	10/18/2001	120,000	12,000	23,000	4,200	21,000	NA	<500	23.54	9.39	14.15	0.5
MW-5	01/24/2002	34,000	3,300	3,300	960	6,000	NA	<100	23.54	7.05	16.49	4.0
MW-5	04/04/2002	32,000	2,100	2,800	730	6,400	NA	<200	23.54	6.89	16.65	1.0
MW-5	07/18/2002	75,000	7,500	4,700	2,700	15,000	NA	<500	23.54	8.48	15.06	1.2
<b>MW-5</b>	<b>10/21/2002</b>	<b>140,000</b>	<b>13,000</b>	<b>18,000</b>	<b>4,000</b>	<b>26,000</b>	<b>NA</b>	<b>&lt;500</b>	<b>29.54</b>	<b>9.21</b>	<b>20.33</b>	<b>1.1</b>
B-10 *	07/17/1996	20000	400	<100	<100	870	<500	NA	NA	NA	NA	NA
B-13*	07/17/1996	290000	34000	21000	9900	47000	<2500	NA	NA	NA	NA	NA
V-1	08/02/1996	NA	NA	NA	NA	NA	NA	NA	23.26	NA	NA	NA
V-1	08/05/1996	NA	NA	NA	NA	NA	NA	NA	23.26	8.58	14.68	NA
V-1	10/17/1996	NA	NA	NA	NA	NA	NA	NA	23.26	10.02	13.24	NA
V-1	01/16/1997	9,500	1,200	250	280	880	<50	NA	23.26	5.55	17.71	NA
V-1	04/07/1997	2,200	42	<5.0	130	15	<25	NA	23.26	7.40	15.86	NA
V-1	07/02/1997	2,600	340	5.8	49	12	74	<4.0	23.26	8.94	14.32	NA
V-1	10/24/1997	57,000	5,200	2,300	3,600	16,000	1,900	<200	23.26	9.43	13.83	NA
V-1	01/09/1998	23,000	2,400	1,700	1,300	2,300	310	NA	23.26	6.81	16.45	NA
V-1 (D)	01/09/1998	24,000	2,500	1,800	1,400	2,400	450	NA	23.26	NA	NA	NA
V-1	04/02/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.26	4.58	18.68	NA
V-1 (D)	04/02/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.26	NA	NA	NA
V-1	07/14/1998	160	1.9	<0.50	4.2	<0.50	6.1	NA	23.26	7.51	15.75	NA
V-1	10/01/1998	440	18	<0.50	11	0.80	7.9	NA	23.26	8.49	14.77	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**2703 Martin Luther King Way**  
**Oakland, CA**

Well ID	Date	TPPH (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)	DO Reading (ppm)
V-1	01/18/1999	697	55.7	0.839	28.2	<0.500	9.35	NA	23.26	8.59	14.67	NA
V-1	04/29/1999	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	23.26	8.69	14.57	NA
V-1	08/23/1999	457	33.4	3.59	16.3	<0.500	13.9	NA	23.26	8.99	14.27	NA
V-1	10/06/1999	714	53.7	0.740	8.69	<0.500	9.83	NA	23.26	9.55	13.71	NA
V-1	01/27/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	23.26	7.19	16.07	NA
V-1	04/18/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	23.26	7.67	15.59	NA
V-1	07/19/2000	255	21.7	<0.500	10.2	<0.500	7.33	<1.00a	23.26	7.53	15.73	NA
V-1	10/24/2000	200	4.05	0.566	<0.500	<0.500	7.82	NA	23.26	7.38	15.88	NA
V-1	01/04/2001	128	1.77	<0.500	<0.500	<0.500	6.40	<10.0b	23.26	8.41	14.85	NA
V-1	05/03/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	23.26	7.20	16.06	NA
V-1	07/09/2001	110	4.4	<0.50	0.88	1.7	NA	<5.0	23.26	9.22	14.04	NA
V-1	10/18/2001	1,500	180	12	43	46	NA	<5.0	23.26	10.08	13.18	0.8
V-1	01/24/2002	210	7.1	15	4.6	32	NA	<5.0	23.26	6.44	16.82	3.5
V-1	04/04/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	23.26	6.18	17.08	1.0
V-1	07/18/2002	100	1.6	1.2	1.2	6.1	NA	<5.0	23.26	8.08	15.18	1.7
V-1	10/21/2002	210	1.4	<0.50	1.0	1.3	NA	<5.0	29.26	8.94	20.32	1.2
V-2	08/02/1996	NA	NA	NA	NA	NA	NA	NA	22.80	NA	NA	NA
V-2	08/05/1996	NA	NA	NA	NA	NA	NA	NA	22.80	7.94	14.86	NA
V-2	10/17/1996	NA	NA	NA	NA	NA	NA	NA	22.80	9.30	13.50	NA
V-2	01/08/1997	69,000	4,800	2,800	2,700	13,000	750	NA	22.80	5.82	16.98	NA
V-2	04/07/1997	90,000	4,400	1,900	3,300	14,000	<500	NA	22.80	7.10	15.70	NA
V-2 (D)	04/07/1997	77,000	4,400	2,000	3,200	14,000	<250	NA	22.80	NA	NA	NA
V-2	07/02/1997	82,000	5,500	2,700	3,500	16,000	530	<100	22.80	8.35	14.45	NA
V-2 (D)	07/02/1997	85,000	5,600	2,800	3,600	17,000	520	<100	22.80	NA	NA	NA
V-2	10/24/1997	7,300	1,100	97	230	180	91	<12	22.80	10.03	12.77	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**2703 Martin Luther King Way**  
**Oakland, CA**

Well ID	Date	TPPH (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)	DO Reading (ppm)
V-2 (D)	10/24/1997	12,000	1,700	340	650	630	120	<20	22.80	NA	NA	NA
V-2	01/09/1998	40,000	4,100	1,500	2,500	9,000	280	NA	22.80	6.94	15.86	NA
V-2	04/02/1998	62,000	6,800	2,400	3,400	14,000	<250	NA	22.80	5.35	17.45	NA
V-2	07/14/1998	43,000	4,700	1,100	2,500	6,600	<250	NA	22.80	6.48	16.32	NA
V-2 (D)	07/14/1998	48,000	5,100	1,300	2,600	8,100	<250	NA	22.80	NA	NA	NA
V-2	10/01/1998	53,000	5,200	1,800	3,200	10,000	83	NA	22.80	8.41	14.39	NA
V-2 (D)	10/01/1998	55,000	5,300	1,900	3,300	11,000	65	NA	22.80	NA	NA	NA
V-2	01/18/1999	47,100	5,800	1,960	3,450	10,200	<100	NA	22.80	8.29	14.51	NA
V-2	04/29/1999	65,000	6,100	2,800	3,200	12,000	540	NA	22.80	8.19	14.61	NA
V-2	08/23/1999	59,600	6,240	2,190	3,900	14,700	390	NA	22.80	8.44	14.36	NA
V-2	10/06/1999	63,800	4,820	1,860	2,840	11,100	<1000	NA	22.80	8.96	13.84	NA
V-2	01/27/2000	59,600	10,200	2,840	3,450	12,100	<500	NA	22.80	7.57	15.23	NA
V-2	04/18/2000	45,000	6,050	2,700	3,340	12,200	<250	NA	22.80	8.14	14.66	NA
V-2	07/19/2000	31,800	4,440	1,270	2,390	6,820	<500	NA	22.80	8.21	14.59	NA
V-2	10/24/2000	40,100	4,810	1,730	2,960	8,650	734	<10.0	22.80	8.53	14.27	NA
V-2	01/04/2001	37,500	4,510	1,390	2,710	6,880	375	NA	22.80	8.03	14.77	NA
V-2	05/03/2001	51,000	4,000	1,900	2,800	8,200	NA	<200	22.80	6.63	16.17	NA
V-2	07/09/2001	9,600	710	190	180	1,400	NA	<25	22.80	8.75	14.05	NA
V-2	10/18/2001	20,000	2,000	540	560	6,000	NA	<50	22.80	9.60	13.20	0.4
V-2	01/24/2002	36,000	2,900	870	1,700	5,900	NA	<100	22.80	5.93	16.87	4.0
V-2	04/04/2002	49,000	3,900	1,500	2,900	9,300	NA	<200	22.80	5.78	17.02	0.9
V-2	07/18/2002	50,000	3,600	1,300	2,800	9,300	NA	<200	22.80	7.58	15.22	1.3
V-2	10/21/2002	86,000	6,000	1,900	4,200	20,000	NA	<250	28.80	8.40	20.40	1.3

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**2703 Martin Luther King Way**  
**Oakland, CA**

Well ID	Date	TPPH (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)	DO Reading (ppm)
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**Abbreviations:**

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to May 3, 2001, analyzed by EPA Method 8015.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to May 3, 2001, analyzed by EPA Method 8020.

MTBE = Methyl-tertiary-butyl ether

TOC = Top of Casing Elevation

SPH = Separate-Phase Hydrocarbons

GW = Groundwater

DO = Dissolved Oxygen reading

ug/L = Parts per billion

ppm = Parts per million

MSL = Mean sea level

ft = Feet

<n = Below detection limit

D = Duplicate sample

NA = Not applicable

**Notes:**

\* = Water sample from Boring

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

b = Due to error of Sequoia Analytical laboratories, well V-1 confirmed for MTBE by EPA Method 8260 instead of V-2.

Site surveyed June 14, 2001, by Virgil Chavez Land Surveying of Vallejo, California.

Site surveyed August 13, 2002, by Virgil Chavez Land Surveying of Vallejo, California.





Report Number : 29310

Date : 10/29/02

Leon Gearhart  
Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112-1105

Subject : 7 Water Samples  
Project Name : 2703 Martin Luther King Jr. Way, Oakland  
Project Number : 021021-DW-3  
P.O. Number : 97093397

Dear Mr. Gearhart,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink that reads "Joel Kiff". The signature is written in a cursive style with a large initial "J".

Joel Kiff



Report Number : 29310

Date : 10/29/02

Project Name : 2703 Martin Luther King Jr. Way, Oakland

Project Number : 021021-DW-3

Sample : MW-1

Matrix : Water

Lab Number : 29310-01

Sample Date :10/21/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	10/25/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/25/02
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/25/02
4-Bromofluorobenzene (Surr)	97.8		% Recovery	EPA 8260B	10/25/02

Sample : MW-2

Matrix : Water

Lab Number : 29310-02

Sample Date :10/21/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	10/25/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/25/02
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/25/02
4-Bromofluorobenzene (Surr)	98.3		% Recovery	EPA 8260B	10/25/02

Approved By:  Joel Kiff



Report Number : 29310

Date : 10/29/02

Project Name : 2703 Martin Luther King Jr. Way, Oakland

Project Number : 021021-DW-3

Sample : MW-3

Matrix : Water

Lab Number : 29310-03

Sample Date :10/21/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	10/25/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/25/02
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/25/02
4-Bromofluorobenzene (Surr)	97.1		% Recovery	EPA 8260B	10/25/02

Sample : MW-4

Matrix : Water

Lab Number : 29310-04

Sample Date :10/21/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	3100	20	ug/L	EPA 8260B	10/28/02
Toluene	11	5.0	ug/L	EPA 8260B	10/26/02
Ethylbenzene	1200	5.0	ug/L	EPA 8260B	10/26/02
Total Xylenes	970	5.0	ug/L	EPA 8260B	10/26/02
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	10/25/02
TPH as Gasoline	16000	500	ug/L	EPA 8260B	10/26/02
Toluene - d8 (Surr)	98.1		% Recovery	EPA 8260B	10/26/02
4-Bromofluorobenzene (Surr)	97.1		% Recovery	EPA 8260B	10/26/02

Approved By:  Joel Kiff



Report Number : 29310

Date : 10/29/02

Project Name : 2703 Martin Luther King Jr. Way, Oakland

Project Number : 021021-DW-3

Sample : MW-5

Matrix : Water

Lab Number : 29310-05

Sample Date :10/21/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>13000</b>	50	ug/L	EPA 8260B	10/27/02
<b>Toluene</b>	<b>18000</b>	50	ug/L	EPA 8260B	10/27/02
<b>Ethylbenzene</b>	<b>4000</b>	50	ug/L	EPA 8260B	10/27/02
<b>Total Xylenes</b>	<b>26000</b>	50	ug/L	EPA 8260B	10/27/02
<b>Methyl-t-butyl ether (MTBE)</b>	<b>&lt; 500</b>	500	ug/L	EPA 8260B	10/27/02
<b>TPH as Gasoline</b>	<b>140000</b>	5000	ug/L	EPA 8260B	10/27/02
Toluene - d8 (Surr)	95.1		% Recovery	EPA 8260B	10/27/02
4-Bromofluorobenzene (Surr)	94.8		% Recovery	EPA 8260B	10/27/02

Sample : V-1

Matrix : Water

Lab Number : 29310-06

Sample Date :10/21/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>1.4</b>	0.50	ug/L	EPA 8260B	10/26/02
<b>Toluene</b>	<b>&lt; 0.50</b>	0.50	ug/L	EPA 8260B	10/26/02
<b>Ethylbenzene</b>	<b>1.0</b>	0.50	ug/L	EPA 8260B	10/26/02
<b>Total Xylenes</b>	<b>1.3</b>	0.50	ug/L	EPA 8260B	10/26/02
<b>Methyl-t-butyl ether (MTBE)</b>	<b>&lt; 5.0</b>	5.0	ug/L	EPA 8260B	10/26/02
<b>TPH as Gasoline</b>	<b>210</b>	50	ug/L	EPA 8260B	10/26/02
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/26/02
4-Bromofluorobenzene (Surr)	97.2		% Recovery	EPA 8260B	10/26/02

Approved By:  Joel Kiff



Report Number : 29310

Date : 10/29/02

Project Name : 2703 Martin Luther King Jr. Way, Oakland

Project Number : 021021-DW-3

Sample : V-2

Matrix : Water

Lab Number : 29310-07

Sample Date :10/21/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>6000</b>	25	ug/L	EPA 8260B	10/27/02
<b>Toluene</b>	<b>1900</b>	25	ug/L	EPA 8260B	10/27/02
<b>Ethylbenzene</b>	<b>4200</b>	25	ug/L	EPA 8260B	10/27/02
<b>Total Xylenes</b>	<b>20000</b>	25	ug/L	EPA 8260B	10/27/02
<b>Methyl-t-butyl ether (MTBE)</b>	<b>&lt; 250</b>	250	ug/L	EPA 8260B	10/27/02
<b>TPH as Gasoline</b>	<b>86000</b>	2500	ug/L	EPA 8260B	10/27/02
Toluene - d8 (Surr)	96.3		% Recovery	EPA 8260B	10/27/02
4-Bromofluorobenzene (Surr)	92.9		% Recovery	EPA 8260B	10/27/02

Approved By:  Joel Kiff

Report Number : 29310

Date : 10/29/02

**QC Report : Method Blank Data**

Project Name : **2703 Martin Luther King Jr. Way, Oakland**

Project Number : **021021-DW-3**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/27/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/27/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/27/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/27/02
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	10/27/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/27/02
Toluene - d8 (Surr)	106		%	EPA 8260B	10/27/02
4-Bromofluorobenzene (Surr)	96.9		%	EPA 8260B	10/27/02
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	10/25/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/25/02
Toluene - d8 (Surr)	100		%	EPA 8260B	10/25/02
4-Bromofluorobenzene (Surr)	98.1		%	EPA 8260B	10/25/02
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	10/25/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/25/02
Toluene - d8 (Surr)	100		%	EPA 8260B	10/25/02
4-Bromofluorobenzene (Surr)	96.6		%	EPA 8260B	10/25/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/25/02
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	10/25/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/25/02
Toluene - d8 (Surr)	98.8		%	EPA 8260B	10/25/02
4-Bromofluorobenzene (Surr)	94.8		%	EPA 8260B	10/25/02

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC


2795 2nd St. Suite 300 Davis, CA 95616 530-297-4800

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : 2703 Martin Luther King

Project Number : 021021-DW-3

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	29379-02	1.2	100	100	95.9	91.3	ug/L	EPA 8260B	10/27/02	94.7	90.1	4.98	70-130	25
Toluene	29379-02	<0.50	100	100	96.4	90.0	ug/L	EPA 8260B	10/27/02	96.4	90.0	6.89	70-130	25
Tert-Butanol	29379-02	<5.0	500	500	484	445	ug/L	EPA 8260B	10/27/02	96.9	89.0	8.47	70-130	25
Methyl-t-Butyl Ether	29379-02	<0.50	100	100	97.5	90.8	ug/L	EPA 8260B	10/27/02	97.5	90.8	7.11	70-130	25
Benzene	29351-01	<0.50	40.0	40.0	42.0	41.0	ug/L	EPA 8260B	10/25/02	105	102	2.38	70-130	25
Toluene	29351-01	<0.50	40.0	40.0	42.5	41.5	ug/L	EPA 8260B	10/25/02	106	104	2.31	70-130	25
Tert-Butanol	29351-01	<5.0	200	200	209	208	ug/L	EPA 8260B	10/25/02	104	104	0.168	70-130	25
Methyl-t-Butyl Ether	29351-01	<0.50	40.0	40.0	39.8	39.3	ug/L	EPA 8260B	10/25/02	99.6	98.2	1.39	70-130	25
Benzene	29363-04	<0.50	40.0	40.0	41.6	39.8	ug/L	EPA 8260B	10/25/02	104	99.6	4.35	70-130	25
Toluene	29363-04	<0.50	40.0	40.0	41.8	40.0	ug/L	EPA 8260B	10/25/02	104	100	4.30	70-130	25
Tert-Butanol	29363-04	<5.0	200	200	206	206	ug/L	EPA 8260B	10/25/02	103	103	0.0486	70-130	25
Methyl-t-Butyl Ether	29363-04	<0.50	40.0	40.0	39.0	38.8	ug/L	EPA 8260B	10/25/02	97.6	97.0	0.565	70-130	25
Benzene	29314-26	<0.50	40.0	40.0	40.2	40.0	ug/L	EPA 8260B	10/26/02	100	100	0.449	70-130	25
Toluene	29314-26	<0.50	40.0	40.0	41.1	41.3	ug/L	EPA 8260B	10/26/02	103	103	0.388	70-130	25
Tert-Butanol	29314-26	29	200	200	240	236	ug/L	EPA 8260B	10/26/02	106	104	1.82	70-130	25
Methyl-t-Butyl Ether	29314-26	180	40.0	40.0	281	283	ug/L	EPA 8260B	10/26/02	249	255	2.28	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

## QC Report : Laboratory Control Sample (LCS)

Project Name : 2703 Martin Luther King

Project Number : 021021-DW-3

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	10/27/02	89.1	70-130
Toluene	40.0	ug/L	EPA 8260B	10/27/02	90.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	10/27/02	97.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	10/27/02	91.0	70-130
Benzene	40.0	ug/L	EPA 8260B	10/25/02	99.8	70-130
Toluene	40.0	ug/L	EPA 8260B	10/25/02	102	70-130
Tert-Butanol	200	ug/L	EPA 8260B	10/25/02	99.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	10/25/02	101	70-130
Benzene	40.0	ug/L	EPA 8260B	10/25/02	100	70-130
Toluene	40.0	ug/L	EPA 8260B	10/25/02	104	70-130
Tert-Butanol	200	ug/L	EPA 8260B	10/25/02	99.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	10/25/02	102	70-130
Benzene	40.0	ug/L	EPA 8260B	10/25/02	101	70-130
Toluene	40.0	ug/L	EPA 8260B	10/25/02	102	70-130
Tert-Butanol	200	ug/L	EPA 8260B	10/25/02	99.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	10/25/02	98.2	70-130

KIFF ANALYTICAL, LLC

Approved By:  Joel Kiff



**STEEL Chain of Custody Record**

Lab Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be invoiced:

Karen Petryna

29310

- SCIENCE & ENGINEERING
- TECHNICAL SERVICES
- CRMT HOUSTON

INCIDENT NUMBER (S&E ONLY)

9 7 0 9 3 3 9 7

SAP or CRMT NUMBER (TS/CRMT)

DATE: 10-21-02

PAGE: 1 of 1

SAMPLING COMPANY: <b>Blaine Tech Services</b>		LOG CODE: <b>BTSS</b>	SITE ADDRESS (Street and City): <b>2703 Martin Luther King Jr. Way, Oakland</b>		GLOBAL ID NO.: <b>T0600101876</b>
ADDRESS: <b>1680 Rogers Avenue, San Jose, CA 95112</b>			EDF DELIVERABLE TO (Responsible Party or Designee): <b>Anni Kreml</b>	PHONE NO.: <b>510-420-3335</b>	E-MAIL: <b>ShellOaklandEDF@cambria-env.com</b>
PROJECT CONTACT (Hardcopy or PDF Report to): <b>Leon Gearhart</b>			SAMPLER NAME(S) (Print): <b>Dave Walter</b>		CONSULTANT PROJECT NO.: <b>021021-DWJ</b>
TELEPHONE: <b>408-573-0555</b>	FAX: <b>408-573-7771</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 - RWQCB REPORT FORMAT  UST AGENCY: \_\_\_\_\_

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

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

**REQUESTED ANALYSIS**

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5ppb RL)	Oxygenates (5) by (8260B)	Ethanol (8260B)	Methanol	1,2-DCA (8260B)	EDB (8260B)	TPH - Diesel, Extractable (8015m)	TEMPERATURE ON RECEIPT C°	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
		DATE	TIME														
	MW-1	10-21	14:50	W	3	X	X	X									-01
	MW-2		15:03			X	X	X									-02
	MW-3		15:15			X	X	X									-03
	MW-4		15:25			X	X	X									-04
	MW-5		16:10			X	X	X									-05
	V-1		15:35			X	X	X									-06
	V-2		15:40			X	X	X									-07

Relinquished by: (Signature) <i>David C. Salt</i>	Received by: (Signature) _____	Date: _____	Time: _____
Relinquished by: (Signature) _____	Received by: (Signature) _____	Date: _____	Time: _____
Relinquished by: (Signature) _____	Received by: (Signature) <i>John Cutler / KPA Analytical</i>	Date: <i>102202</i>	Time: <i>1029</i>

## WELL GAUGING DATA

Project # 021021-0W-3 Date 10-21-02 Client Shell

Site 2703 Martin Luther King, Jr Way Oakland

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 <del>TOB</del>	
MW-1	2					8.10	20.02		1
MW-2	2					8.62	19.04		2
MW-3	4					8.56	20.00		3
MW-4	4					8.04	19.90		5
MW-5	4					9.21	19.97		7
V-1	2					8.94	12.10		4
V-2	2					8.40	12.60		U

## SHELL WELL MONITORING DATA SHEET

BTS #: 021021-DW-3	Site: 2703 Martin Luther King, Jr Way Oakland
Sampler: Dave Walker	Date: 10-21-02
Well I.D.: MW-1	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): 20.02	Depth to Water (DTW): 8.10
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): <u>(YSI)</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method:  Bailor  Disposable Bailor  Middleburg  Electric Submersible

Water  Peristaltic  Extraction Pump  Other

Sampling Method:  Bailor  Disposable Bailor  Extraction Port  Dedicated Tubing

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

(Gals.) X <u>not</u> = _____ Gals.	<table border="1" style="font-size: small;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <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> </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														
I Case Volume	Specified Volumes      Calculated Volume																

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
14:50	70.7	6.9	1169	12	—	

Did well dewater?    Yes    No                      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: 10-21-02    Sampling Time: 14:50    Depth to Water: \_\_\_\_\_

Sample I.D.: MW-1                      Laboratory: (Kitt)    SPL    Other \_\_\_\_\_

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	<u>(Post-purge)</u>	1.6	mg/L
	O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## SHELL WELL MONITORING DATA SHEET

BTS #: <u>021021-DW-3</u>	Site: <u>2703 Martin Luther King, Jr Way Oakland</u>
Sampler: <u>Dave Walker</u>	Date: <u>10-21-02</u>
Well I.D.: <u>MW-2</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): <u>19.04</u>	Depth to Water (DTW): <u>8.62</u>
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]:	

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

_____ (Gals.) X <u>not used</u> = _____ Gals. 1 Case Volume      Specified Volumes      Calculated Volume	<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 $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
<u>15:03</u>	<u>70.6</u>	<u>6.7</u>	<u>1060</u>	<u>14</u>	—	

Did well dewater?    Yes    No                      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: 10-21-02    Sampling Time: 15:03                      Depth to Water: \_\_\_\_\_

Sample I.D.: MW-2                                      Laboratory: Kiff    SPL    Other \_\_\_\_\_

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

## SHELL WELL MONITORING DATA SHEET

BTS #: 021021-DW-3	Site: 2703 Martin Luther King, Jr Way Oakland
Sampler: Dave Wulber	Date: 10-21-02
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8
Total Well Depth (TD): 20.00	Depth to Water (DTW): 8.56
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Gmde	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: ~~Aniler~~  
~~Disposable Bailer~~  
~~Middleburg~~  
~~Electric Submersible~~

Water  
Peristaltic  
Extraction Pump  
Other

Sampling Method: ~~Bailer~~  
~~Disposable Bailer~~  
Extraction Port  
Dedicated Tubing

Other:

(Gals.) X	<i>not used</i>	=	Gals.	
I 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 μS)	Turbidity (NTUs)	Gals. Removed	Observations
15:45	68.1	6.6	1139	25	—	

Did well dewater? Yes No      Gallons actually evacuated: —

Sampling Date: 10-21-02      Sampling Time: 15:15      Depth to Water:

Sample I.D.: MW-3      Laboratory: (Kiff)      SPL      Other

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:      mg/L      ~~Post-purge:~~      mg/L

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

## SHELL WELL MONITORING DATA SHEET

BTS #: 071021-DW-3	Site: 2703 Martin Luther King, Jr Way Oakland
Sampler: Dave Walker	Date: 10-21-02
Well I.D.: MW-4	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 19.90	Depth to Water (DTW): 8.04
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]:	

Purge Method: ~~Bailes~~ ~~Disposable Bailer~~ ~~Middleburg~~ ~~Electric Submersible~~ ~~Water~~ ~~Peristaltic~~ ~~Extraction Pump~~ ~~Other~~

Sampling Method: Bailer ~~Disposable Bailer~~ ~~Extraction Port~~ ~~Dedicated Tubing~~

(Gals.) X <u>1.63</u> = _____ Gals. Case Volume Specified Volumes Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multplier</th> <th>Well Diameter</th> <th>Multplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.09</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	Multplier	Well Diameter	Multplier	1"	0.09	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multplier	Well Diameter	Multplier														
1"	0.09	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
15:25	65.9	6.8	1266	23	—	

Did well dewater? Yes No Gallons actually evacuated: —

Sampling Date: 10-21-02 Sampling Time: 15:25 Depth to Water:

Sample I.D.: MW-4 Laboratory: Kiff SPL Other

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

O.R.P. (if req'd): Pre-purge: \_\_\_\_\_ mV Post-purge: \_\_\_\_\_ mV

## SHELL WELL MONITORING DATA SHEET

BTS #: 021021-DW-3	Site: 2703 Martin Luther King, Jr Way Oakland
Sampler: Dave Walker	Date: 10-21-02
Well I.D.: MW-5	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 19.97	Depth to Water (DTW): <del>8.94</del> 9.21
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): <u>(YSI)</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: ~~Bailer~~ ~~Disposable Bailer~~ ~~Middleburg~~ ~~Electric Submersible~~ Water/Peristaltic Extraction Pump Other \_\_\_\_\_

Sampling Method: ~~Bailer~~ Disposable Bailer ~~Extraction Port~~ ~~Dedicated Tubing~~ Other: \_\_\_\_\_

(Gals.) X <u>mb</u> <u>5</u> = _____ Gals.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiflier</th> <th>Well Diameter</th> <th>Multiflier</th> </tr> <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> </table>	Well Diameter	Multiflier	Well Diameter	Multiflier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiflier	Well Diameter	Multiflier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														
I Case Volume	Specified Volumes      Calculated Volume																

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
<u>10:10</u>	<u>64.6</u>	<u>6.7</u>	<u>1358</u>	<u>6</u>	—	

Did well dewater?    Yes    No                      Gallons actually evacuated:   

Sampling Date: 10-21-02    Sampling Time: 10:10    Depth to Water: \_\_\_\_\_

Sample I.D.: MW-5                      Laboratory: (Kiff)    SPL    Other \_\_\_\_\_

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: 1.1 mg/L

O.R.P. (if req'd):    Pre-purge: \_\_\_\_\_ mV    Post-purge: \_\_\_\_\_ mV

10175  
Don



# State Water Resources Control Board



**Winston H. Hickox**  
Secretary for  
Environmental  
Protection

**Division of Clean Water Programs**  
1001 I Street • Sacramento, California 95814  
P.O. Box 944212 • Sacramento, California • 94244-2120  
(916) 341-5714 • FAX (916) 341-5806 • www.swrcb.ca.gov/cwphome/ustcf

**Gray Davis**  
Governor

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our website at www.swrcb.ca.gov.*

MAR - 2 2001

STIP 454 DH

Deborah Pryor  
c/o Equiva Services LLC  
Shell Oil Company  
P O Box 7869  
Burbank, CA 91510-7869

**UNDERGROUND STORAGE TANK CLEANUP FUND (FUND), NOTICE OF ELIGIBILITY DETERMINATION: CLAIM NUMBER 016202; FOR SITE ADDRESS: 2703 MARTIN LUTHER KING JR. WY, OAKLAND**

Your claim has been accepted for placement on the Priority List in Priority Class "D" with a deductible of \$10,000.

We have completed our initial review. The next step in the claim review process is to conduct a compliance review.

**Compliance Review:** Staff reviews, verifies, and processes claims based on the priority and rank within a priority class. After the Board adopts the Priority List, your claim will remain on the Priority List until your Priority Class and rank are reached. At that time, staff will conduct an extensive Compliance Review at the local regulatory agency or Regional Water Quality Control Board. During this Compliance Review, staff may request additional information needed to verify eligibility. Once the Compliance Review is completed, staff will determine if the claim is valid or must be rejected. If the claim is valid, a Letter of Commitment will be issued obligating funds toward the cleanup. If staff determine that you have not complied with regulations governing site cleanup, you have not supplied necessary information or documentation, or your claim application contains a material error, the claim will be rejected. In such event, you will be issued a Notice of Intended Removal from the Priority List, informed of the basis for the proposed removal of your claim, and provided an opportunity to correct the condition that is the basis for the proposed removal. Your claim will be barred from further participation in the Fund, if the claim application contains a material error resulting from fraud or intentional or negligent misrepresentation.

**Record keeping:** During your cleanup project you should keep complete and well organized records of all corrective action activity and payment transactions. If you are eventually issued a Letter of Commitment, you will be required to submit: (1) copies of detailed invoices for all corrective action activity performed (including subcontractor invoices), (2) copies of canceled checks used to pay for work shown on the invoices, (3) copies of technical documents (bids, narrative work description, reports), and (4) evidence that the claimant paid for the work performed (not paid by another party). These documents are necessary for reimbursement and failure to submit them could impact the amount of reimbursement made by the Fund. *It is not necessary to submit these documents at this time; however, they will definitely be required prior to reimbursement.*

**Compliance with Corrective Action Requirements:** In order to be reimbursed for your eligible costs of cleanup incurred after December 2, 1991, you must have complied with corrective action requirements of

**California Environmental Protection Agency**





Article 11, Chapter 16, Division 3, Title 23, California Code of Regulations. Article 11 categorized the corrective action process into *phases*. In addition, Article 11 requires the responsible party to submit an *investigative workplan/Corrective Action Plan* (CAP) before performing any work. This phasing process and the workplan/CAP requirements were intended to:

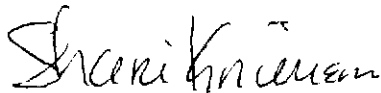
1. help the responsible party undertake the necessary corrective action in a cost-effective, efficient and timely manner;
2. enable the regulatory agency to review and approve the proposed cost-effective corrective action alternative before any corrective action work was performed; and
3. ensure the Fund will only reimburse the most cost-effective corrective action alternative required by the regulatory agency to achieve the minimum cleanup necessary to protect human health, safety and the environment.

In some limited situations *interim cleanup* will be necessary to mitigate a demonstrated immediate hazard to public health, or the environment. Program regulations allow the responsible party to undertake interim remedial action after: (1) notifying the regulatory agency of the proposed action, and; (2) complying with any requirements that the regulatory agency may set. Interim remedial action should only be proposed when necessary to mitigate an immediate demonstrated hazard. ***Implementing interim remedial action does not eliminate the requirement for a CAP and an evaluation of the most cost-effective corrective action alternative.***

**Three bids and Cost Preapproval:** Only corrective action costs required by the regulatory agency to protect human health, safety and the environment can be claimed for reimbursement. You must comply with all regulatory agency time schedules and requirements and you must obtain three bids for any required corrective action. Unless waived in writing, you are required to obtain preapproval of costs for all future corrective action work. ***If you do not obtain three bids and cost preapproval, reimbursement is not assured and costs may be rejected as ineligible.***

If you have any questions, please contact me at (916) 341-5714.

Sincerely,



Shari Knieriem  
Claims Review Unit  
Underground Storage Tank Cleanup Fund

cc: Mr. Steve Morse  
RWQCB, Region 2  
1515 Clay Street, Ste. 1400  
Oakland, CA 94612

Ms. Susan Hugo  
Alameda County EHD  
1131 Harbor Bay Pkway, 2nd Fl.  
Alameda, CA 94502-6577