



Shell Oil Products US

April 3, 2003

Alameda County
APR 08 2003
Environmental Health

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

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 *First 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

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

Karen Petryna
Sr. Environmental Engineer

April 3, 2003

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

Re: **First Quarter 2003 Monitoring Report**
Former Shell Service Station
2703 Martin Luther King Jr. Way
Oakland, California
Incident #97093397
Cambria Project #245-0781-002



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.

FIRST QUARTER 2003 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.

Oxygen Releasing Compound (ORC): ORCs are currently installed in onsite well V-2 to enhance intrinsic biodegradation at the site. ORCs are scheduled to be replaced at the site during the second quarter 2003. In addition, as noted in our December 6, 2002 *Fourth Quarter 2002 Monitoring Report*, Cambria recommends installing ORCs in well MW-5. DO measurements will be collected in wells MW-1, MW-5, V-1 and V-2 while ORCs are installed at the site.

**Cambria
Environmental
Technology, Inc.**

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

ANTICIPATED SECOND QUARTER 2003 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.

ORCs: The ORCs in well V-2 are scheduled to be replaced during the second quarter 2003. In addition, unless otherwise directed by the Alameda County Health Care Services Agency (ACHCSA), Blaine will install ORCs in well MW-5 at the site.



Door-to-Door Basement Survey, Cross-Sectional Diagram Preparation, and Site Conceptual Model (SCM) Development: On June 21, 2002, Cambria submitted a *Subsurface Investigation Report* to the ACHCSA outlining several recommendations for the site, including SCM development, cross-sectional diagram preparation, and a door-to-door basement survey. Following completion of these items, Cambria recommended soil-vapor sample collection. Per an October 8, 2002 telephone conversation between Mr. Don Hwang of the ACHCSA and Jacquelyn Jones of Cambria, the cross-sectional diagrams and survey data will be provided to the ACHCSA prior to determination of vapor sampling applicability. Based on this, Cambria will complete cross-sectional diagrams of the site using available boring logs and historical soil analytical results to identify potential source areas onsite. 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 during the second quarter 2003.

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

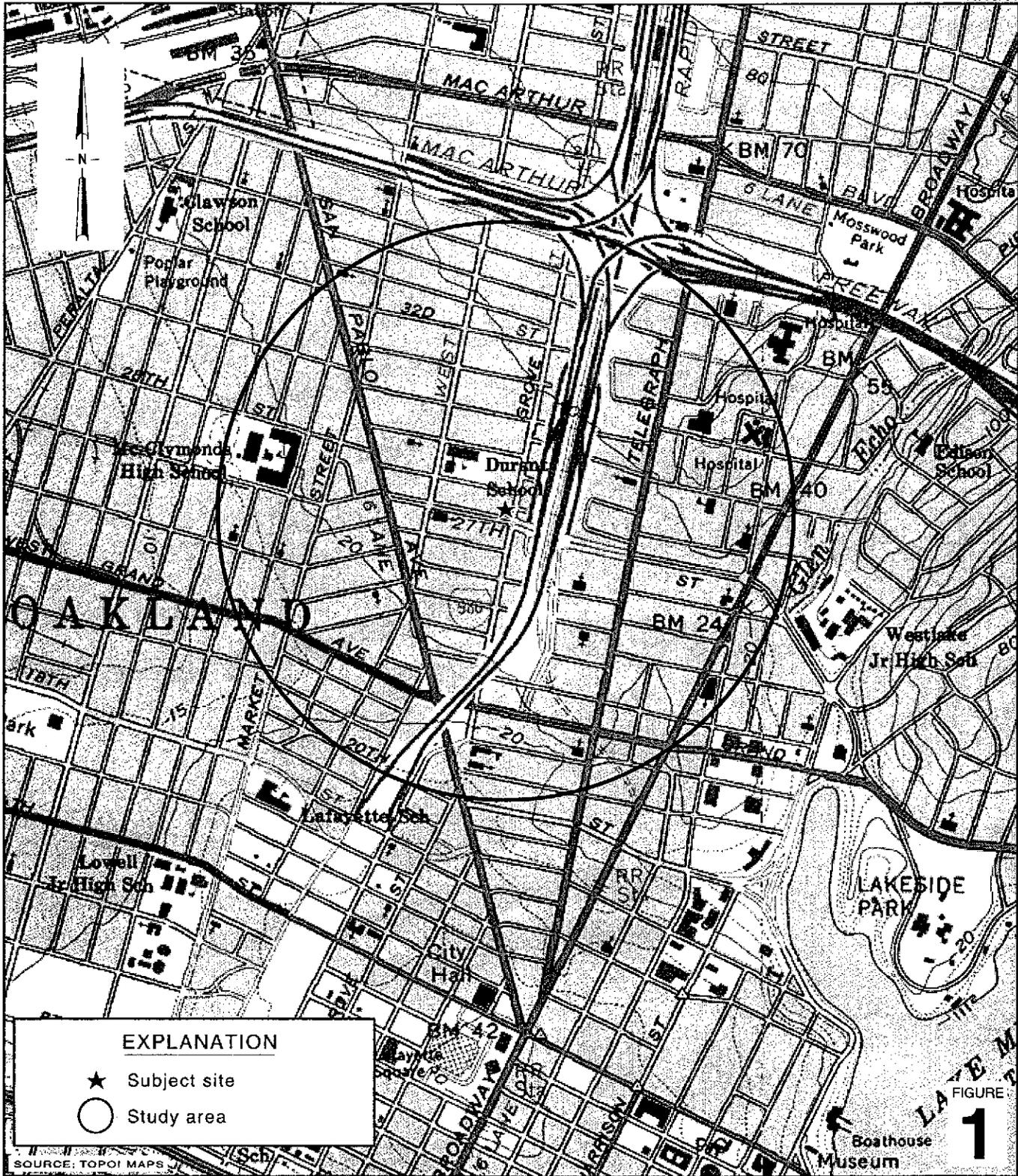


- Figures: 1 - Vicinity/Area Well Survey Map
 2 - Groundwater Elevation Contour Map

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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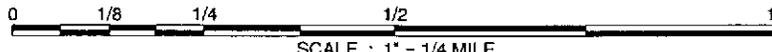


G:\OAKLAND 2703 MLK\FIGURES\VIC-WELL-SURVEY.A1

SOURCE: TOPOI MAPS

EXPLANATION

- ★ Subject site
- Study area

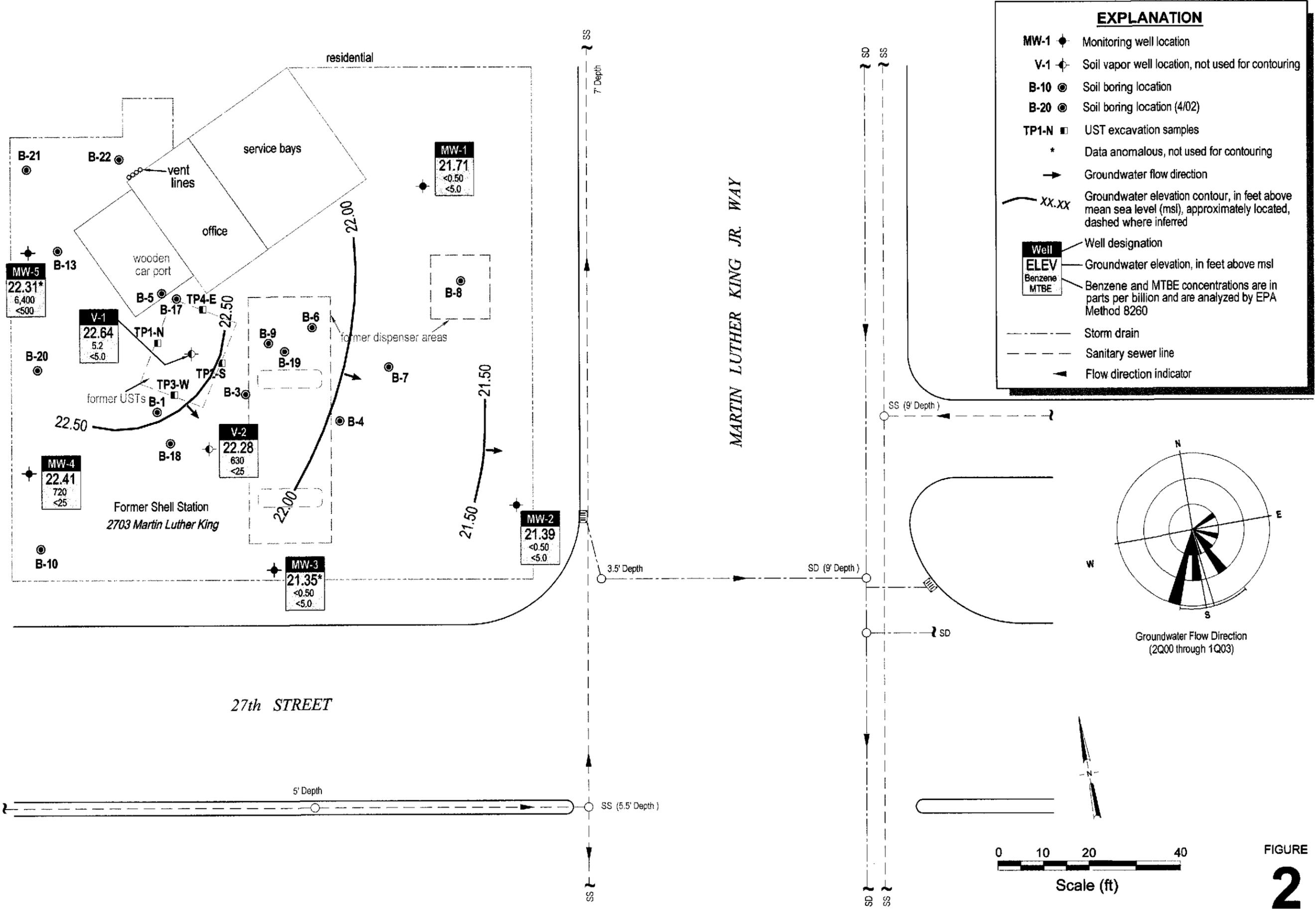


Former Shell Service Station
 2703 Martin Luther King Jr. Way
 Oakland, California
 Incident #97093397



C A M B R I A

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



Groundwater Elevation Contour Map

January 21, 2003

C A M B R I A



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

FIGURE 2

G:\OAKLAND 2703 MLK\FIGURES\COM03-MP.DWG

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

February 21, 2003

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

First Quarter 2003 Groundwater Monitoring at
Former Shell Service Station
2703 Martin Luther King Jr. Way
Oakland, CA

Monitoring performed on January 21, 2003

Groundwater Monitoring Report 030121-DA-2

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.
5900 Hollis Street, Suite A
Oakland, CA 94608

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)
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-1	01/21/2003	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	29.53	7.82	21.71	0.6
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

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-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
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-2	01/21/2003	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	28.47	7.08	21.39	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-3	01/21/2003	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	28.30	6.95	21.35	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

WELL CONCENTRATIONS
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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-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
MW-4	01/21/2003	3,600	720	3.9	110	58	NA	<25	28.51	6.10	22.41	NA
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
MW-5	10/21/2002	140,000	13,000	18,000	4,000	26,000	NA	<500	29.54	9.21	20.33	1.1
MW-5	01/21/2003	47,000	6,400	3,500	370	8,300	NA	<500	29.54	7.23	22.31	0.8
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

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 (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
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-1	01/21/2003	61	5.2	<0.50	<0.50	<0.50	NA	<5.0	29.26	6.62	22.64	0.6
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

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	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
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

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	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
V-2	01/21/2003	13,000	630	200	300	2,400	NA	<25	28.80	6.52	22.28	1.2

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

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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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 : 31051

Date : 1/27/2003

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 : 030121-DA2
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, looped "J" and "K".

Joel Kiff



Report Number : 31051

Date : 1/27/2003

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

Project Number : 030121-DA2

Sample : MW-1

Matrix : Water

Lab Number : 31051-01

Sample Date :1/21/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	1/23/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/23/2003
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	1/23/2003
4-Bromofluorobenzene (Surr)	93.5		% Recovery	EPA 8260B	1/23/2003

Sample : MW-2

Matrix : Water

Lab Number : 31051-02

Sample Date :1/21/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	1/23/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/23/2003
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	1/23/2003
4-Bromofluorobenzene (Surr)	93.8		% Recovery	EPA 8260B	1/23/2003

Approved By:  Joel Kiff



Report Number : 31051

Date : 1/27/2003

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

Project Number : 030121-DA2

Sample : MW-3

Matrix : Water

Lab Number : 31051-03

Sample Date :1/21/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	1/23/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/23/2003
Toluene - d8 (Surr)	107		% Recovery	EPA 8260B	1/23/2003
4-Bromofluorobenzene (Surr)	93.4		% Recovery	EPA 8260B	1/23/2003

Sample : MW-4

Matrix : Water

Lab Number : 31051-04

Sample Date :1/21/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	720	2.5	ug/L	EPA 8260B	1/23/2003
Toluene	3.9	2.5	ug/L	EPA 8260B	1/23/2003
Ethylbenzene	110	2.5	ug/L	EPA 8260B	1/23/2003
Total Xylenes	58	2.5	ug/L	EPA 8260B	1/23/2003
Methyl-t-butyl ether (MTBE)	< 25	25	ug/L	EPA 8260B	1/23/2003
TPH as Gasoline	3600	250	ug/L	EPA 8260B	1/23/2003
Toluene - d8 (Surr)	94.3		% Recovery	EPA 8260B	1/23/2003
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	1/23/2003

Approved By:  Joel Kiff

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



Report Number : 31051

Date : 1/27/2003

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

Project Number : 030121-DA2

Sample : MW-5

Matrix : Water

Lab Number : 31051-05

Sample Date :1/21/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	6400	50	ug/L	EPA 8260B	1/23/2003
Toluene	3500	50	ug/L	EPA 8260B	1/23/2003
Ethylbenzene	370	50	ug/L	EPA 8260B	1/23/2003
Total Xylenes	8300	50	ug/L	EPA 8260B	1/23/2003
Methyl-t-butyl ether (MTBE)	< 500	500	ug/L	EPA 8260B	1/23/2003
TPH as Gasoline	47000	5000	ug/L	EPA 8260B	1/23/2003
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	1/23/2003
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	1/23/2003

Sample : V-1

Matrix : Water

Lab Number : 31051-06

Sample Date :1/21/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	5.2	0.50	ug/L	EPA 8260B	1/23/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	1/23/2003
TPH as Gasoline	61	50	ug/L	EPA 8260B	1/23/2003
Toluene - d8 (Surr)	109		% Recovery	EPA 8260B	1/23/2003
4-Bromofluorobenzene (Surr)	94.1		% Recovery	EPA 8260B	1/23/2003

Approved By:  Joel Kiff



Report Number : 31051

Date : 1/27/2003

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

Project Number : 030121-DA2

Sample : V-2

Matrix : Water

Lab Number : 31051-07

Sample Date :1/21/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	630	2.5	ug/L	EPA 8260B	1/24/2003
Toluene	200	2.5	ug/L	EPA 8260B	1/24/2003
Ethylbenzene	300	2.5	ug/L	EPA 8260B	1/24/2003
Total Xylenes	2400	2.5	ug/L	EPA 8260B	1/24/2003
Methyl-t-butyl ether (MTBE)	< 25	25	ug/L	EPA 8260B	1/24/2003
TPH as Gasoline	13000	250	ug/L	EPA 8260B	1/24/2003
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	1/24/2003
4-Bromofluorobenzene (Surr)	99.7		% Recovery	EPA 8260B	1/24/2003

Approved By:  Joel Kiff

Report Number : 31051

Date : 1/27/2003

QC Report : Method Blank Data

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

Project Number : **030121-DA2**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/23/2003
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	1/23/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/23/2003
Toluene - d8 (Surr)	98.8		%	EPA 8260B	1/23/2003
4-Bromofluorobenzene (Surr)	99.8		%	EPA 8260B	1/23/2003
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/22/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/22/2003
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/22/2003
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/22/2003
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	1/22/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/22/2003
Toluene - d8 (Surr)	100		%	EPA 8260B	1/22/2003
4-Bromofluorobenzene (Surr)	95.9		%	EPA 8260B	1/22/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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Approved By:  _____
 Joel Kiff

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : 2703 Martin Luther King

Project Number : 030121-DA2

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 Recov. Limit	Relative Percent Diff. Limit
Benzene	31052-05	2.4	40.0	39.7	38.2	38.3	ug/L	EPA 8260B	1/23/03	89.6	90.5	1.00	70-130	25
Toluene	31052-05	<0.50	40.0	39.7	37.8	37.9	ug/L	EPA 8260B	1/23/03	94.5	95.6	1.10	70-130	25
Tert-Butanol	31052-05	83	200	198	273	295	ug/L	EPA 8260B	1/23/03	94.7	107	11.9	70-130	25
Methyl-t-Butyl Ether	31052-05	170	40.0	39.7	198	200	ug/L	EPA 8260B	1/23/03	77.8	84.3	7.99	70-130	25
Benzene	31032-03	<0.50	40.0	40.0	40.6	39.9	ug/L	EPA 8260B	1/22/03	102	99.8	1.66	70-130	25
Toluene	31032-03	<0.50	40.0	40.0	40.6	40.0	ug/L	EPA 8260B	1/22/03	102	100	1.56	70-130	25
Tert-Butanol	31032-03	<5.0	200	200	206	209	ug/L	EPA 8260B	1/22/03	103	105	1.64	70-130	25
Methyl-t-Butyl Ether	31032-03	28	40.0	40.0	73.0	73.2	ug/L	EPA 8260B	1/22/03	112	113	0.489	70-130	25

KIFF ANALYTICAL, LLC

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

Approved By:  Joel Kiff

Report Number : 31051

Date : 1/27/2003

QC Report : Laboratory Control Sample (LCS)

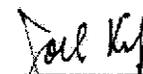
Project Name : 2703 Martin Luther King

Project Number : 030121-DA2

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	1/23/03	93.3	70-130
Toluene	40.0	ug/L	EPA 8260B	1/23/03	94.0	70-130
Tert-Butanol	200	ug/L	EPA 8260B	1/23/03	97.7	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	1/23/03	98.6	70-130
Benzene	40.0	ug/L	EPA 8260B	1/22/03	92.8	70-130
Toluene	40.0	ug/L	EPA 8260B	1/22/03	105	70-130
Tert-Butanol	200	ug/L	EPA 8260B	1/22/03	91.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	1/22/03	102	70-130

KIFF ANALYTICAL, LLC

Approved By:



Joel Kiff

Lab Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be invoiced:

Karen Petryna

31051

INCIDENT NUMBER (S&E ONLY)

9 7 0 9 3 3 9 7

SAP or CRMT NUMBER (TS/CRMT)

DATE: 03/01/21/03

PAGE: 1 of 1

SCIENCE & ENGINEERING

TECHNICAL SERVICES

GRANT HOUSTON

SAMPLING COMPANY Blaine Tech Services		LOG CODE BTSS	SITE ADDRESS (Street and City): 2703 Martin Luther King Jr. Way, Oakland		GLOBAL ID NO.: T0600101876
ADDRESS 1680 Rogers Avenue, San Jose, CA 95112		EDF DELIVERABLE TO (Responsible Party or Designer): Anni Kremi		PHONE NO.: 510-420-3335	E-MAIL: ShellOaklandEDF@cambria-env.com
PROJECT CONTACT (Hardcopy or PDF Report to): Leon Gearhart		CONSULTANT PROJECT NO. BTS #030121-DAL		LAB USE ONLY	
TELEPHONE 408-573-0555	FAX: 408-573-7771	E-MAIL: lgearhart@blainetech.com		SAMPLER NAME(S) (Print): David Albut / Ryan Hanstedt	

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

TPH - Gas, Purgeable	BTEX	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)
X	X	X							
X	V	X							
X	X	X							
X	X	X							
X	X	X							
X	X	X							
X	X	X							

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

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTEX	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°
		DATE	TIME													
	MW-1	1/21/03	1446	GW	3	X	X	X								-01
	MW-2		1500			X	V	X								-02
	MW-3		1510			X	X	X								-03
	MW-4		1520			X	X	X								-04
	MW-5		1535			X	X	X								-05
	V-1		1459			X	X	X								-06
	V-2		1519			X	X	X								-07

Retinquished by (Signature) <i>David Albut</i>	Received by (Signature) <i>[Signature]</i>	Date: _____	Time: _____
Retinquished by (Signature) <i>[Signature]</i>	Received by (Signature) <i>[Signature]</i>	Date: _____	Time: _____
Retinquished by (Signature) <i>[Signature]</i>	Received by (Signature) <i>B. J. Brennan</i>	Date: 012203	Time: 1113

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

10/18/00 Revision

Q&Q Graphic (714) 898-9702

WELL GAUGING DATA

Project # 030121-DAL Date 1/21/03 Client Shell

Site 2703 Martin Luther King 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 TOC
MW-1	2					7.82	20.02	TOC
MW-2	2					7.08	19.04	↓
MW-3	4					6.95	20.00	
MW-4	4					6.10	19.90	
MW-5	4					7.23	19.97	
V-1	2					6.62	12.10	
V-2	2	Removed ORC's to gauge				6.52	12.60	

SHELL WELL MONITORING DATA SHEET

BTS #: 030121-DA-1	Site: 2703 MLK Oakland, CA
Sampler: DA	Date: 1/21/03
Well I.D.: MW-1	Well Diameter: <input checked="" type="radio"/> 2 3 4 6 8
Total Well Depth (TD): 20.02	Depth to Water (DTW): 20.02 7.82
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> VCR Grade	D.O. Meter (if req'd): <input checked="" type="radio"/> YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: <input checked="" type="checkbox"/> Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Middleburg <input type="checkbox"/> Electric Submersible	Water: <input type="checkbox"/> Peristaltic <input type="checkbox"/> Extraction Pump <input type="checkbox"/> Other _____	Sampling Method: <input checked="" type="checkbox"/> Bailer <input type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing Other: _____
--	---	--

(Gals.) X No Purge = _____ Gals.
 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
<input checked="" type="radio"/> 2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or <input checked="" type="radio"/> µS)	Turbidity (NTUs)	Gals. Removed	Observations
1443 1446	63.7	7.9	6896	26	0	clear

Did well dewater? Yes No Gallons actually evacuated: ~~0~~

Sampling Date: 1/21/03 Sampling Time: 1446 Depth to Water: —

Sample I.D.: MW-1 Laboratory: KIF 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:	0.6 mg/L
O.R.P. (if req'd):	Pre-purge:	_____ mV	Post-purge:	_____ mV

SHELL WELL MONITORING DATA SHEET

BTS #: 03E121-DA-1	Site: 2703 MLK Oakland, CA
Sampler: RH	Date: 1/21/07
Well I.D.: MW-2	Well Diameter: 2 3 4 6 8
Total Well Depth (TD):	Depth to Water (DTW): 7.08
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(VC)</u> Gmde	D.O. Meter (if req'd): YSI 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

$\text{Grab (Gals.)} \times \frac{\text{Specified Volume}}{\text{Calculated Volume}} = \text{Gals.}$	<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>radius² * 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 ² * 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 ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
1500	64.1	7.3	1080	33.6	0	clear

Did well dewater? Yes No Gallons actually evacuated: ~~0~~

Sampling Date: 1/21/07 Sampling Time: 1500 Depth to Water: 7.08

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

SHELL WELL MONITORING DATA SHEET

BTS #: <u>030121-DA-1</u>	Site: <u>2703 MLK Oakland, CA</u>
Sampler: <u>RH</u>	Date: <u>1/21/03</u>
Well I.D.: <u>MW-3</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth (TD):	Depth to Water (DTW): <u>6.95</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: Bailer Disposable Bailer Middleburg Electric Submersible	Water: Peristaltic Extraction Pump Other:	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing Other:
---	---	---

$\frac{6.95 \text{ (Gals.)} \times \text{Ø}}{\text{Specified Volume}} = \frac{\text{Ø}}{\text{Calculated Volume}} \text{ Gals.}$ 1 Case 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>1.07</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.07	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.07														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
1510	63.3	7.0	1246	29.2	Ø	clear
/						

Did well dewater? Yes No	Gallons actually evacuated: <u>Ø</u>	
Sampling Date: <u>1/21/03</u>	Sampling Time: <u>1510</u>	Depth to Water: <u>7 6.95</u>
Sample I.D.: <u>MW-3</u>	Laboratory: <u>Kiff</u> SPL Other	
Analyzed for: <u>TPH-G</u> <u>BTEX</u> <u>MTBE</u> 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: <u>mg/L</u>	Post-purge: <u>mg/L</u>	
O.R.P. (if req'd): Pre-purge: <u>mV</u>	Post-purge: <u>mV</u>	

SHELL WELL MONITORING DATA SHEET

BTS #: 030121-DA-1	Site: 2703 MLK Oakland, CA
Sampler: RH	Date: 1/21/03
Well I.D.: MW-4	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth (TD):	Depth to Water (DTW): 6.10
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: Bailer Disposable Bailer Middleburg Electric Submersible	Water Peristaltic Extraction Pump Other	Sampling Method: <u>Bailer</u> Disposable Bailer Extraction Port Dedicated Tubing Other:
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<u>Grab</u> (Gals.) X \emptyset		=		\emptyset 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 ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
1520	62.2	6.9	1684	17.6	\emptyset	clear

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

Sampling Date: 1/21/03 Sampling Time: 1520 Depth to Water: 6.10

Sample I.D.: MW-4 Laboratory: (1) SPL Other _____

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

SHELL WELL MONITORING DATA SHEET

BTS #: 030121-DA-1	Site: 2703 MLK Oakland, CA
Sampler: DA	Date: MW-5
Well I.D.: MW-5	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 19.97	Depth to Water (DTW): 7.23
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>1990</u> Grade	D.O. Meter (if req'd): <u>YSI</u> EACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u> </u>	

Purge Method: Bailer Waterra Sampling Method: Bailer
 Disposable Bailer Peristaltic Disposable Bailer
 Middleburg Extraction Pump Extraction Port
 Electric Submersible Other _____ Dedicated Tubing

Other: _____

(Gals.) X <u>No Purge</u> = _____ Gals. Case Volume Specified Volume 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><u>4"</u></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>radius² * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	<u>4"</u>	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius ² * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	<u>4"</u>	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius ² * 0.163														

Time	Temp (°F)	pH	Cond. (mS or <u>µS</u>)	Turbidity (NTUs)	Gals. Removed	Observations
1532	61.8	7.4	2146	8.6	<u> </u>	grey, odor

Did well dewater? Yes Gallons actually evacuated:

Sampling Date: 1/21/03 Sampling Time: 1535 Depth to Water:

Sample I.D.: MW-5 Laboratory: KIF SPL Other _____

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

SHELL WELL MONITORING DATA SHEET

BTS #: 030121-DA-1	Site: 2703 MLK Oakland, CA
Sampler: DA	Date: 1/21/03
Well I.D.: √-1	Well Diameter: ② 3 4 6 8
Total Well Depth (TD): 12.10	Depth to Water (DTW): 6.62
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (RSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: ~~Bailer~~ Water Sampling Method: Bailer
~~Disposable Bailer~~ Peristaltic X Disposable Bailer
~~Middleburg~~ Extraction Pump Extraction Port
~~Electric Submersible~~ Other _____ Dedicated Tubing

(Gals.) X <u>No Purge</u> = _____ Gals.	
I Case Volume Specified Volumes Calculated Volume	

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1505	61.8	7.3	4660	19	—	clear

Did well dewater? Yes No Gallons actually evacuated: —

Sampling Date: 1/21/03 Sampling Time: 1459 Depth to Water: —

Sample I.D.: √-1 Laboratory: (KIF) 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: 0.6 mg/L

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

SHELL WELL MONITORING DATA SHEET

BTS #: 030121-DA-1	Site: 2703 MLK Oakland, CA
Sampler: DA	Date: 1/21/03
Well I.D.: V-2	Well Diameter: ② 3 4 6 8
Total Well Depth (TD): 12.60	Depth to Water (DTW): 6.52
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>EST</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: —	

Purge Method: ~~Bailer~~ Water Sampling Method: Bailer
~~Disposable Bailer~~ Peristaltic Disposable Bailer
~~Middleburg~~ Extraction Pump Extraction Port
~~Electric Submersible~~ Other _____ Dedicated Tubing

Other: _____

(Gals.) X <u>No Purge</u> = _____ Gals.	Well Diameter	Multiplier	Well Diameter	Multiplier
Case Volume Specified Volatiles Calculated Volume	1"	0.04	4"	0.65
	2"	0.16	6"	1.47
	3"	0.37	Other	radius ² * 0.163

Time	Temp (°F)	pH	Cond. (mS or <u>US</u>)	Turbidity (NTUs)	Gals. Removed	Observations
1517	62.1	8.1	2948	102	—	cloudy, odor

Did well dewater? Yes No Gallons actually evacuated: —

Sampling Date: 1/21/03 Sampling Time: 1519 Depth to Water: —

Sample I.D.: V-2 Laboratory: KIT SPL Other _____

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