CAMBRIA

October 25, 2002

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

Re: **Third 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.

THIRD 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

Subsurface Investigation: On June 21, 2002, Cambria submitted a *Subsurface Investigation Report* to the Alameda County Health Care Services Agency (ACHCSA) outlining several recommendations for the site, including oxygen releasing compound (ORC) installation, site conceptual model (SCM) development, cross-sectional diagram preparation, and a door-to-door basement survey. Following completion of these items, Cambria recommended soil-vapor sample collection. Because more than 60 days have passed without comment from the ACHCSA since submittal of these recommendations, Cambria will proceed with the recommendations as outlined below pursuant to the authority granted in California Code of Regulations, Title 23, Division 3, Chapter 16, Section 2722(e).

ORC Installation: Cambria recommends the installation of ORCs in wells MW-5 and V-2 to enhance intrinsic biodegradation at the site. Dissolved oxygen 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 ACHCSA, Blaine will implement this recommendation during the first quarter 2003.

Door-to-Door Basement Survey, Cross-Sectional Diagram Preparation and 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

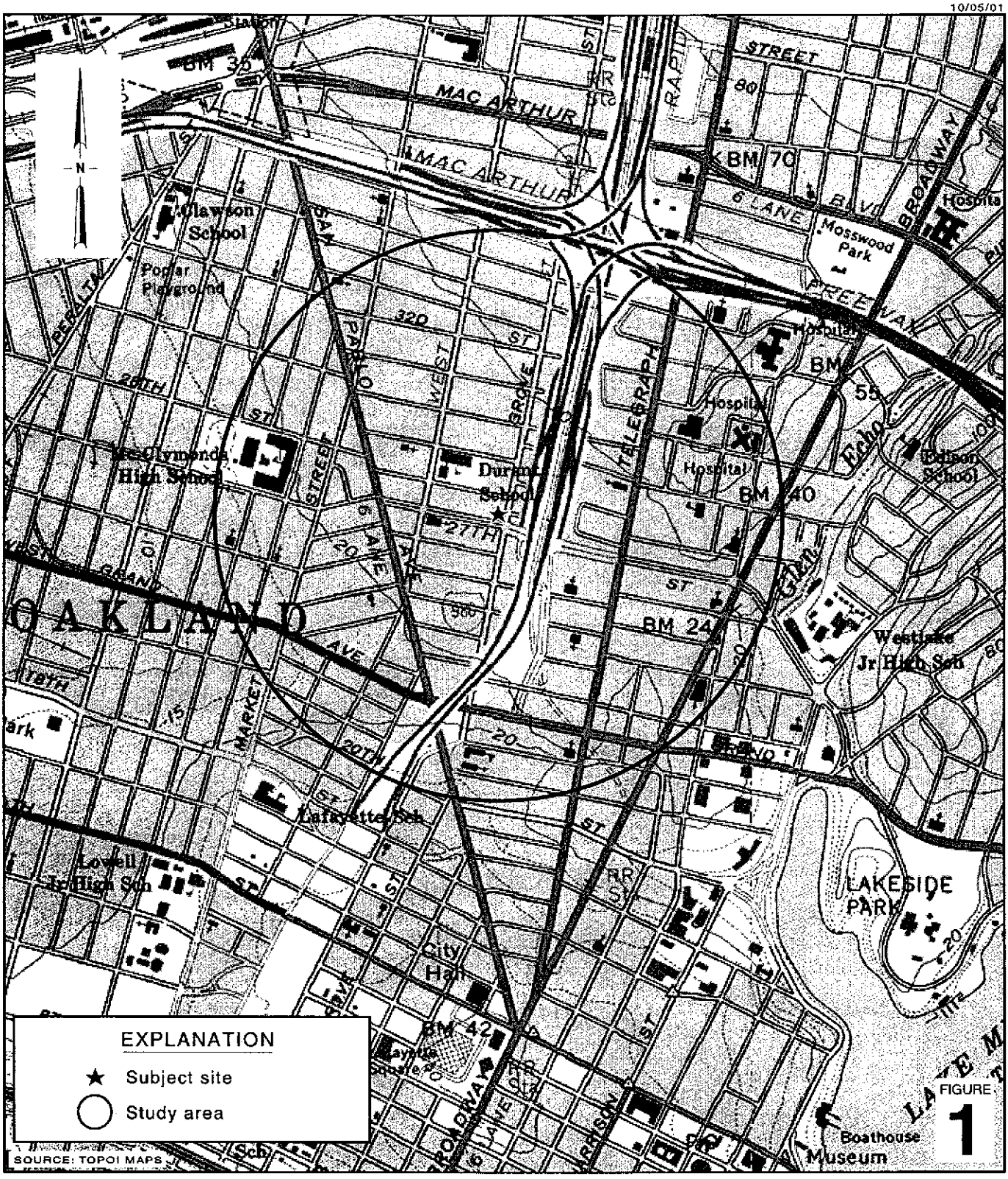
Figures: 1 - Vicinity/Area Well Survey Map
2 - Groundwater Elevation Contour Map

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

G:\Oakland 2703 Martin Luther King Jr\Qm\3q02\3q02qm.doc

10/05/01



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

FIGURE 1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

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

CAMBRIA

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

09/24/02

residential

service bays

vent lines

office

wooden car port

former dispenser areas

former USTs

B-21 B-22 B-13 B-5 B-17 B-8 B-6 B-9 B-19 B-20 B-7 B-3 B-1 B-4 B-18 B-10

MW-1 15.78* <0.50 <5.0

MW-5 15.06* 7,500 <500

V-1 15.18* 1.6 <5.0

TP1-N TP4-E TP2-S TP3-W

V-2 15.22 3,600 <200

MW-4 15.57 440 <5.0

MW-2 14.50 <0.50 <5.0

MW-3 14.67 <0.50 <5.0

15.50 15.00 14.50

7' Depth

SS

MARTIN LUTHER KING JR WAY

27th STREET

SD

SS (9' Depth)

3.5' Depth

SD (9' Depth)

5' Depth

SS (5.5' Depth)

EXPLANATION

- MW-1 — Monitoring well location
- V-1 — Soil vapor well location, not used for contouring
- B-10 — Soil boring location
- B-20 — Soil boring location (4/02)
- TP1-N — UST excavation samples
- * — Data anomalous, not used for contouring
- Groundwater flow direction
- XX.XX — Groundwater elevation contour, in feet above mean sea level (msl), approximately located, dashed where inferred
- Well / ELEV / Benzene / MTBE — Well designation; Groundwater elevation, in feet above msl; Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8260
- Storm drain
- Sanitary sewer line
- Flow direction indicator

N W E S

Groundwater Flow Direction
(2Q00 through 3Q02)

0 10 20 40
Scale (ft)

FIGURE
2

Groundwater Elevation Contour Map

July 18, 2002

CAMBRIA

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

G:\OAKLAND 2703 MLK\FIGURES\2Q0402-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

August 9, 2002

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

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

Monitoring performed on July 18, 2002

Groundwater Monitoring Report **020718-AM-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.
1144 65th 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)
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-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
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

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)*	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-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-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-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

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	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-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
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

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	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-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
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

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)	10/01/1998	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**

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)

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.

KIFF ANALYTICAL LLC

Report Number : 27592
Date : 7/28/2002

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 : 020718-AM2
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,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 27592
Date : 7/28/2002

Project Name : **2703 Martin Luther King Jr. Way, Oakland**
Project Number : **020718-AM2**

Sample : **MW-1** Matrix : Water Lab Number : 27592-01
Sample Date :7/18/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	7/22/2002
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	7/22/2002
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	7/22/2002
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	7/22/2002
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	7/22/2002
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	7/22/2002
Toluene - d8 (Surr)	99.4		% Recovery	EPA 8260B	7/22/2002
4-Bromofluorobenzene (Surr)	99.3		% Recovery	EPA 8260B	7/22/2002

Sample : **MW-2** Matrix : Water Lab Number : 27592-02
Sample Date :7/18/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	7/22/2002
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	7/22/2002
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	7/22/2002
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	7/22/2002
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	7/22/2002
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	7/22/2002
Toluene - d8 (Surr)	85.6		% Recovery	EPA 8260B	7/22/2002
4-Bromofluorobenzene (Surr)	96.6		% Recovery	EPA 8260B	7/22/2002

Joel Kiff

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 27592
Date : 7/28/2002

Project Name : **2703 Martin Luther King Jr. Way, Oakland**
Project Number : **020718-AM2**

Sample : **MW-3** Matrix : Water Lab Number : 27592-03
Sample Date :7/18/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	7/22/2002
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	7/22/2002
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	7/22/2002
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	7/22/2002
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	7/22/2002
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	7/22/2002
Toluene - d8 (Surr)	85.4		% Recovery	EPA 8260B	7/22/2002
4-Bromofluorobenzene (Surr)	97.0		% Recovery	EPA 8260B	7/22/2002

Sample : **MW-4** Matrix : Water Lab Number : 27592-04
Sample Date :7/18/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**440**	2.0	ug/L	EPA 8260B	7/25/2002
Toluene	**1.3**	0.50	ug/L	EPA 8260B	7/26/2002
Ethylbenzene	**200**	0.50	ug/L	EPA 8260B	7/26/2002
Total Xylenes	**98**	0.50	ug/L	EPA 8260B	7/26/2002
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	7/26/2002
TPH as Gasoline	**3400**	50	ug/L	EPA 8260B	7/26/2002
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	7/26/2002
4-Bromofluorobenzene (Surr)	96.1		% Recovery	EPA 8260B	7/26/2002

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 27592
Date : 7/28/2002

Project Name : **2703 Martin Luther King Jr. Way, Oakland**
Project Number : **020718-AM2**

Sample : **MW-5** Matrix : Water Lab Number : 27592-05
Sample Date :7/18/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**7500**	50	ug/L	EPA 8260B	7/25/2002
Toluene	**4700**	50	ug/L	EPA 8260B	7/25/2002
Ethylbenzene	**2700**	50	ug/L	EPA 8260B	7/25/2002
Total Xylenes	**15000**	50	ug/L	EPA 8260B	7/25/2002
Methyl-t-butyl ether (MTBE)	**< 500**	500	ug/L	EPA 8260B	7/25/2002
TPH as Gasoline	**75000**	5000	ug/L	EPA 8260B	7/25/2002
Toluene - d8 (Surr)	96.4		% Recovery	EPA 8260B	7/25/2002
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	7/25/2002

Sample : **V-1** Matrix : Water Lab Number : 27592-06
Sample Date :7/18/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**1.6**	0.50	ug/L	EPA 8260B	7/23/2002
Toluene	**1.2**	0.50	ug/L	EPA 8260B	7/23/2002
Ethylbenzene	**1.2**	0.50	ug/L	EPA 8260B	7/23/2002
Total Xylenes	**6.1**	0.50	ug/L	EPA 8260B	7/23/2002
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	7/23/2002
TPH as Gasoline	**100**	50	ug/L	EPA 8260B	7/23/2002
Toluene - d8 (Surr)	86.1		% Recovery	EPA 8260B	7/23/2002
4-Bromofluorobenzene (Surr)	95.0		% Recovery	EPA 8260B	7/23/2002

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 27592
Date : 7/28/2002

Project Name : **2703 Martin Luther King Jr. Way, Oakland**
Project Number : **020718-AM2**

Sample : **V-2** Matrix : Water Lab Number : 27592-07
Sample Date :7/18/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**3600**	20	ug/L	EPA 8260B	7/25/2002
Toluene	**1300**	20	ug/L	EPA 8260B	7/25/2002
Ethylbenzene	**2800**	20	ug/L	EPA 8260B	7/25/2002
Total Xylenes	**9300**	20	ug/L	EPA 8260B	7/25/2002
Methyl-t-butyl ether (MTBE)	**< 200**	200	ug/L	EPA 8260B	7/25/2002
TPH as Gasoline	**50000**	2000	ug/L	EPA 8260B	7/25/2002
Toluene - d8 (Surr)	95.8		% Recovery	EPA 8260B	7/25/2002
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	7/25/2002

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 27592

Date : 7/28/2002

QC Report : Method Blank Data

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

Project Number : **020718-AM2**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	7/23/2002
Toluene	< 0.50	0.50	ug/L	EPA 8260B	7/23/2002
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	7/23/2002
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	7/23/2002
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	7/23/2002
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	7/23/2002
Toluene - d8 (Surr)	98.5		%	EPA 8260B	7/23/2002
4-Bromofluorobenzene (Surr)	103		%	EPA 8260B	7/23/2002
Benzene	< 0.50	0.50	ug/L	EPA 8260B	7/22/2002
Toluene	< 0.50	0.50	ug/L	EPA 8260B	7/22/2002
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	7/22/2002
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	7/22/2002
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	7/22/2002
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	7/22/2002
Toluene - d8 (Surr)	98.1		%	EPA 8260B	7/22/2002
4-Bromofluorobenzene (Surr)	98.8		%	EPA 8260B	7/22/2002
Benzene	< 0.50	0.50	ug/L	EPA 8260B	7/22/2002
Toluene	< 0.50	0.50	ug/L	EPA 8260B	7/22/2002
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	7/22/2002
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	7/22/2002
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	7/22/2002
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	7/22/2002
Toluene - d8 (Surr)	86.1		%	EPA 8260B	7/22/2002
4-Bromofluorobenzene (Surr)	96.8		%	EPA 8260B	7/22/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 27592

Date : 7/28/2002

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **2703 Martin Luther King**

Project Number : **020718-AM2**

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	27547-01	<0.50	19.9	20.0	21.2	21.1	ug/L	EPA 8260B	7/23/02	107	106	0.823	70-130	25
Toluene	27547-01	<0.50	19.9	20.0	20.7	20.4	ug/L	EPA 8260B	7/23/02	104	102	1.94	70-130	25
Tert-Butanol	27547-01	<5.0	99.5	99.8	99.2	97.9	ug/L	EPA 8260B	7/23/02	99.7	98.1	1.53	70-130	25
Methyl-t-Butyl Ether	27547-01	<0.50	19.9	20.0	19.8	20.2	ug/L	EPA 8260B	7/23/02	99.4	101	1.94	70-130	25
Benzene	27592-01	<0.50	40.0	40.0	42.6	39.8	ug/L	EPA 8260B	7/22/02	106	99.4	6.97	70-130	25
Toluene	27592-01	<0.50	40.0	40.0	42.1	39.5	ug/L	EPA 8260B	7/22/02	105	98.8	6.30	70-130	25
Tert-Butanol	27592-01	<5.0	200	200	213	210	ug/L	EPA 8260B	7/22/02	107	105	1.41	70-130	25
Methyl-t-Butyl Ether	27592-01	<0.50	40.0	40.0	41.3	38.9	ug/L	EPA 8260B	7/22/02	103	97.3	5.93	70-130	25
Benzene	27594-01	<0.50	40.0	40.0	41.2	40.7	ug/L	EPA 8260B	7/22/02	103	102	1.44	70-130	25
Toluene	27594-01	<0.50	40.0	40.0	35.0	33.8	ug/L	EPA 8260B	7/22/02	87.6	84.5	3.58	70-130	25
Tert-Butanol	27594-01	<5.0	200	200	196	192	ug/L	EPA 8260B	7/22/02	97.8	96.2	1.71	70-130	25
Methyl-t-Butyl Ether	27594-01	<0.50	40.0	40.0	44.6	43.2	ug/L	EPA 8260B	7/22/02	111	108	3.03	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 27592

QC Report : Laboratory Control Sample (LCS)

Date : 7/28/2002

Project Name : **2703 Martin Luther King**

Project Number : **020718-AM2**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	20.0	ug/L	EPA 8260B	7/23/02	107	70-130
Toluene	20.0	ug/L	EPA 8260B	7/23/02	103	70-130
Tert-Butanol	100	ug/L	EPA 8260B	7/23/02	98.6	70-130
Methyl-t-Butyl Ether	20.0	ug/L	EPA 8260B	7/23/02	99.2	70-130
Benzene	40.0	ug/L	EPA 8260B	7/22/02	101	70-130
Toluene	40.0	ug/L	EPA 8260B	7/22/02	93.1	70-130
Tert-Butanol	200	ug/L	EPA 8260B	7/22/02	102	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	7/22/02	106	70-130
Benzene	40.0	ug/L	EPA 8260B	7/22/02	106	70-130
Toluene	40.0	ug/L	EPA 8260B	7/22/02	89.0	70-130
Tert-Butanol	200	ug/L	EPA 8260B	7/22/02	96.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	7/22/02	115	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

LAB: [illegible]

SHELL Chain Of Custody Record

Lab Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be invoiced:

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

Karen Petryna

27592

INCIDENT NUMBER (S&E ONLY): 97093397

SAP or CRMT NUMBER (TS/CRMT):

DATE: 7-16-02

PAGE: 1 of 1

SAMPLING COMPANY	LOG CODE	SITE ADDRESS (Street and City)	GLOBAL ID NO.
Blaine Tech Services	BTSS	2703 Martin Luther King Jr. Way, Oakland	T0600101876

ADDRESS	EDF DELIVERABLE TO (Responsible Party or Designee)	PHONE NO.	E-MAIL	CONSULTANT PROJECT NO.
1680 Rogers Avenue, San Jose, CA 95112	Anni Kreml	510-420-3335	ShellOaklandEDF@cambria-env.com	020718-AM2

PROJECT CONTACT (Hardcopy or PDF Report to)	TELEPHONE	FAX	E-MAIL	BTS #
Leon Gearhart	408-573-0555	408-573-7771	lgearhart@blainetech.com	

SAMPLER NAME(S) (Print): Albert MARRERO

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 DATE	SAMPLING TIME	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°
	MW-1	7-16-02	10:56	W	3	X	X	X								-01
	MW-2		11:02			X	X	X								-02
	MW-3		11:20			X	X	X								-03
	MW-4		11:35			X	X	X								-04
	MW-5		12:50			X	X	X								-05
	V-1		12:15			X	X	X								-06
	V-2		12:30			X	X	X								-07

FIELD NOTES:

Container/Preservative or PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]			
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	John Cerutti Kiff Analytical	071902	1156

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

10/16/00 Revision

Q&Q Graphic (714) 898-9702

WELL GAUGING DATA

Project # 020718-M2 Date 7-16-02 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 TOC	
MW1	2					7.75	20.02		
MW-2	2					7.97	19.04		
MW-3	4					7.63	20.00		
MW-4	4					6.94	19.90		
MW-5	4					8.46	19.97		
V-1	2					8.08	12.10		
V-2	2					7.58	12.60	↓	

SHELL WELL MONITORING DATA SHEET

BTS #: 020716-AM-2	Site: 2703 Martin Luther King Hwy
Sampler: AM	Date: 7-16-02
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 20.02	Depth to Water: 7.75
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Purge Method: Bailer X / Disposable Bailer / Middleburg / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: X Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: _____

No purge

_____(Gals.) X _____ = _____ Gals.
1 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	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
10:56	71.4	7.2	1307	7.8	0	Clear

Did well dewater? Yes (No) Gallons actually evacuated:

Sampling Time: 10:56 Sampling Date: 7-16-02

Sample I.D.: MW-1 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):	2.2	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

SHELL WELL MONITORING DATA SHEET

BTS #: 020716-AM-2	Site: 2703 Martin Luther King Wy
Sampler: AM	Date: 7-16-02
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 19.04	Depth to Water: 7.97
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

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

No purge

_____(Gals.) X _____ = _____ Gals.
1 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	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
11:05	76.5	7.0	1216	117	0	clear

Did well dewater? Yes (No) Gallons actually evacuated: 0

Sampling Time: 11:05 Sampling Date: 7-16-02

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

SHELL WELL MONITORING DATA SHEET

BTS #: 020716-AM-3	Site: 2703 Martin Luther King Hwy
Sampler: AM	Date: 7-16-02
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 20.00	Depth to Water: 7.63
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method: Bailer X; Disposable Bailer; Middleburg; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: X Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

No purge

_____(Gals.) X _____ = _____ Gals.
1 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	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
11:20	70.9	7.0	1114	37	0	clear

Did well dewater? Yes (No) Gallons actually evacuated: 0

Sampling Time: 11:20 Sampling Date: 7-16-02

Sample I.D.: MW-3 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 #: 020716-AM-3	Site: 2703 Martin Luther King Wy
Sampler: AM	Date: 7-16-02
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 19.90	Depth to Water: 6.94
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method: Bailer / Disposable Bailer / Middleburg / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: / Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other:

No purge

_____(Gals.) X _____ = _____ Gals.
1 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	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
11:35	66.9	7.1	1111	14	0	clear

Did well dewater? Yes (No) Gallons actually evacuated: 0

Sampling Time: 11:35 Sampling Date: 7-16-02

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 #: 020716-AM-3	Site: 2703 Martin Luther King Wy
Sampler: AM	Date: 7-16-02
Well I.D.: MW-5	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 19.97	Depth to Water: 8.46
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Purge Method: Bailer (K) Waterra
Disposable Bailer Peristaltic
Middleburg Extraction Pump
Electric Submersible Other ___

Sampling Method: (Y) Bailer
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: ___

No Purge

___ (Gals.) X ___ = ___ Gals.
1 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	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
12:00	73.4		1176	14	0	Clear

Did well dewater? Yes (No) Gallons actually evacuated: 0

Sampling Time: 12:00 Sampling Date: 7-16-02

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

SHELL WELL MONITORING DATA SHEET

BTS #: 020716-AM-2	Site: 2703 Martin Luther King Hwy
Sampler: AM	Date: 7-16-02
Well I.D.: MW-1	Well Diameter: 2 3 4 6 8 ___
Total Well Depth: 12.10	Depth to Water: 8.08
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Purge Method: Bailer / Disposable Bailer / Middleburg / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: _____

No purge

_____(Gals.) X _____ = _____ Gals.
1 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	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
12:15	70.6	7.0	1461	15	0	clear
	S		S		S	

Did well dewater? Yes (No) Gallons actually evacuated: 0

Sampling Time: 12:15 Sampling Date: 7-16-02

Sample I.D.: MW-1 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:)	1.7 mg/L
O.R.P. (if req'd):	Pre-purge:		mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 020716-AM-2	Site: 2703 Martin Luther King Hwy
Sampler: AM	Date: 7-16-02
Well I.D.: U-2	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 12.60	Depth to Water: 7.58
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Purge Method: Bailer X; Disposable Bailer; Middleburg; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: X Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

No purge

_____(Gals.) X _____ = _____ Gals.
1 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	radius² * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
12:30	70.3	7.0	1397	54	0	clear

Did well dewater? Yes (No) Gallons actually evacuated: 0

Sampling Time: 12:30 Sampling Date: 7-16-02

Sample I.D.: U-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:)	1.3 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV