Shell Oil Products US

May 16, 2003

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

Subject: **Shell-branded Service Station**
5755 Broadway
Oakland, California

Dear Ms. Drogos:

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

Karen Petryna

Karen Petryna
Sr. Environmental Engineer

P.O. Box 7869 Burbank, CA 91510-7869 Phone (559) 645-9306 Facsimile (559) 645-5643

CAMBRIA

May 16, 2003

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

Re: **First Quarter 2003 Monitoring Report**
Shell-branded Service Station
5755 Broadway
Oakland, California
Incident #98995756
Cambria Project #245-0483-002

Dear Ms. Drogos:

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.

HISTORICAL REMEDIATION SUMMARY

The site location is shown on Figures 1 and 2. Mobile groundwater extraction (GWE) using a vacuum truck was conducted periodically at the site from April to November 2000. A single dual-phase vacuum extraction (DVE) event was performed at the site on February 7, 2001, and monthly mobile DVE was conducted at the site from May to November 2001. GWE and DVE have collectively extracted approximately 20,038 gallons of groundwater from wells S-2, H-1, and T-2, and removed 0.46 pounds of methyl tertiary-butyl ether (MTBE). Subsequent to Alameda County Health Care Services Agency notification in our November 7, 2001 *Third Quarter 2001 Monitoring Report*, Cambria suspended monthly DVE from wells S-2 and H-1 due to the low influent volume of groundwater from S-2 and the low influent MTBE concentrations from H-1.

Cambria Environmental Technology, Inc.

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

FIRST QUARTER 2003 ACTIVITIES

Groundwater Monitoring: Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled scheduled site wells, calculated groundwater elevations, and compiled the analytical data. Cambria prepared a vicinity map that includes previously submitted well survey information (Figure 1) and a groundwater elevation contour map (Figure 2).

On January 2, 2003, Blaine sampled wells S-2 and H-1 for volatile organics and metals as required by the East Bay Municipal Utility District as part of a discharge permit application for the site. Blaine's report, presenting the laboratory reports and supporting field documents for the both the January 2, 2003 sampling and the regular quarterly event performed on January 30, 2003, is included as Attachment A.

GWE System Design and Permitting: Cambria submitted an *Interim Remedial Work Plan* dated March 14, 2003 describing installation of a GWE system. We submitted the zoning application to the City of Oakland planning department on January 31, 2003 and the building permit application on April 15, 2003.

ANTICIPATED SECOND QUARTER 2003 ACTIVITIES

Groundwater Monitoring: Blaine will gauge and sample selected site wells, including the horizontal well (without purging), and tabulate the data. A groundwater monitoring report will be prepared.

GWE System Design and Permitting: Cambria will proceed with completing the permitting process for the fixed system. Due to the localized nature of the groundwater impact, before proceeding with installation of the system, we will first install a temporary system to pump from well S-2. This system will consist of a pump and associated controls to extract groundwater from the well, which will discharge to a Baker tank located on site. Water will be periodically offhauled from the Baker tank.

Data from subsequent sampling events will be evaluated to determine whether installation of the permanent GWE system is warranted.

CLOSING

We appreciate the opportunity to work with you on this project. Please call Diane Lundquist at (510) 420-3334 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc

Diane Lundquist, P.E.
Principal Engineer

Figures: 1 - Vicinity/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
Thrifty Oil Company, c/o Mr. Raymond Fredricksen, PO Box 2128, Santa Fe Springs, CA 90670

G:\Oakland 5755 Broadway\QM\1q03\1q03qm.doc

02/13/02

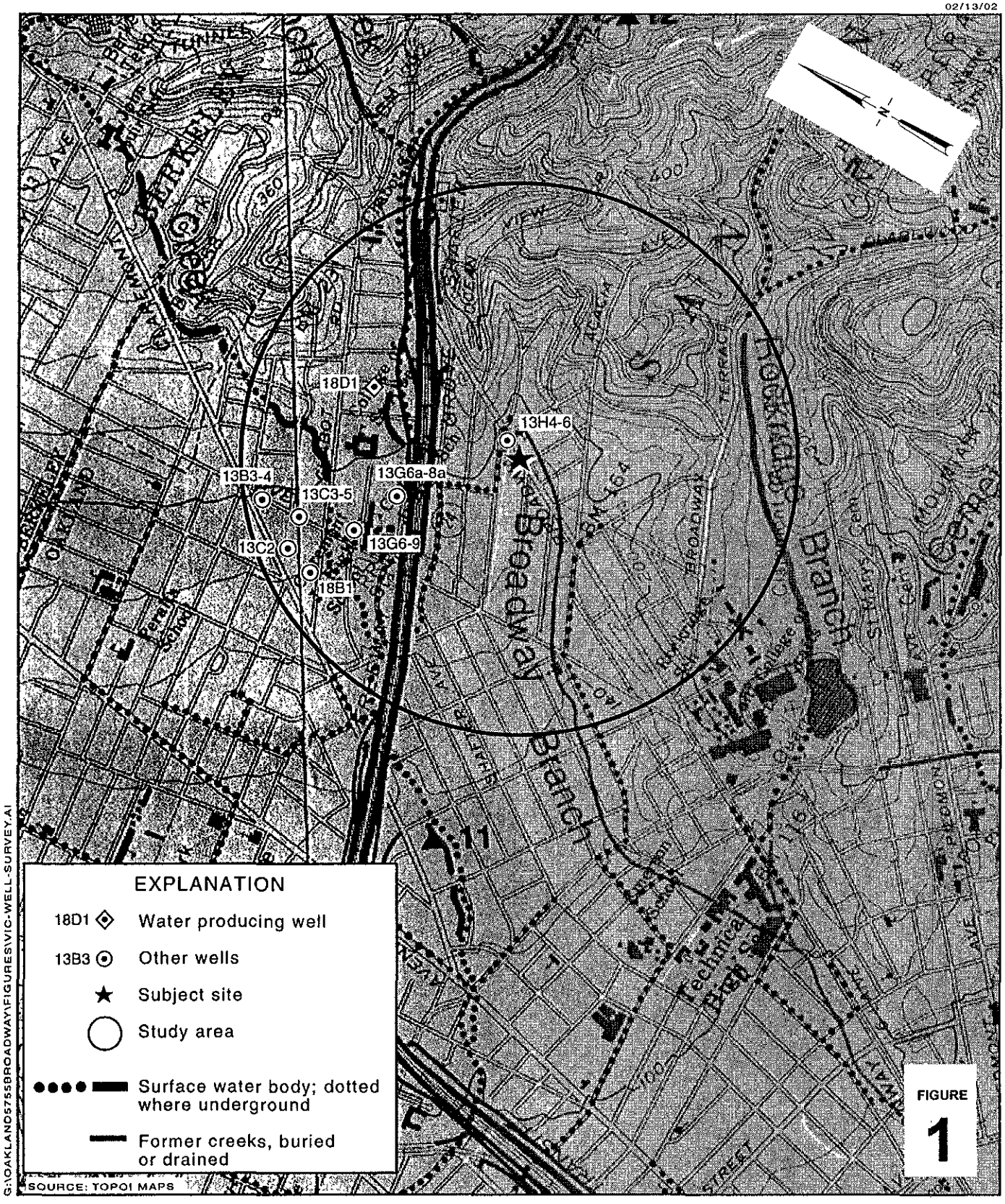

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FIGURE 1

Shell-branded Service Station

5755 Broadway
Oakland, California
Incident #98995756

CAMBRIA

Vicinity / Well Survey Map

(1/2-Mile Radius)

04/03/03

Groundwater Elevation Contour Map

January 30, 2003

EXPLANATION

- S-1 — Monitoring well location
- T-1 — Tank backfill well location
- T-3 — Pre-pack monitoring well location
- H-1 — Horizontal extraction well location
- B-1 — Soil boring location (Miller-Brooks, 8/6-7/02)
- → Groundwater flow direction
- XX.XX — Groundwater elevation contour, in feet above mean sea level (msl), approximately located
- 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.
- Sanitary sewer line (SS)
- Storm drain (SD)
- Overhead powerline (E)
- Flow direction
- Manhole
- 4.5 fbg — Feet below grade

Water Producing Well
18D1

Location of Nearest Sensitive Receptor Relative to Site
(1,320 ft., N4°W)

Groundwater Flow Direction
(09/07/99 to 01/30/03)

S-3
181.38
<0.50
<5.0

T-1

S-2
178.70
670
9,300

S-1
179.77
<0.50
27

T-2
181.29
11
160

H-1
178.53
0.99
21

B-1 B-2 B-3 B-4 B-5 B-6 B-7 B-8 B-9 B-10 B-11 T-3

181.00 180.00 179.00

station building
residential
approximate property line
USTs
pumps
water and air
planter
sidewalk
TAFT STREET
BROADWAY
crosswalk
grout barrier
trench
4" SCH 40 PVC vertical access pipe to horizontal well H-1
4" horizontal groundwater extraction well
6.5 fbg
2.2 fbg
2.1 fbg
4 fbg
0.6 fbg
4.8 fbg
8.5 fbg
7 fbg
18"ϕ SS
12" ϕ SD
21"ϕ SS
6"ϕ SS
SS
E

0 15 30 60
SCALE 1 30 FEET

FIGURE
2

Shell-branded Service Station
5755 Broadway
Oakland, California
Incident #98995756

CAMBRIA

G:\OAKLAND\5755BROADWAY\FIGURES\M02-MP AI

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 11, 2003

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

First Quarter 2003 Groundwater Monitoring at
Shell-branded Service Station
5755 Broadway
Oakland, CA

Monitoring performed on January 2 and 30, 2003

Groundwater Monitoring Report **030130-RH-2**

This report covers the routine monitoring of groundwater wells at this Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the 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
Shell-branded Service Station
5755 Broadway
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)
S-1	01/25/1991	<30	<0.3	<0.3	<0.3	<0.3	NA	NA	100.00	3.88	96.12	NA
S-1	06/03/1991	<30	<0.3	<0.3	<0.3	<0.3	NA	NA	100.00	3.51	96.49	NA
S-1	08/30/1991	<30	<0.3	<0.3	<0.3	<0.3	NA	NA	100.00	4.24	95.76	NA
S-1	11/22/1991	<30	2.3	<0.46	0.3	<0.65	NA	NA	100.00	4.29	95.71	NA
S-1	03/13/1992	<30	<0.52	<0.3	<0.3	<0.3	NA	NA	100.00	2.87	97.13	NA
S-1	05/28/1992	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	3.79	96.21	NA
S-1	08/19/1992	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	4.43	95.57	NA
S-1	11/18/1992	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	4.34	95.66	NA
S-1	02/10/1993	51	1.4	<0.5	<0.5	<0.5	NA	NA	100.00	4.20	95.80	NA
S-1 (D)	02/10/1993	<50	1.2	<0.5	<0.5	<0.5	NA	NA	100.00	4.20	95.80	NA
S-1	06/11/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	3.39	96.61	NA
S-1	08/03/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	3.69	96.31	NA
S-1	11/02/1993	70a	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	4.26	95.74	NA
S-1	12/16/1993	NA	NA	NA	NA	NA	NA	NA	100.00	2.73	97.27	NA
S-1	02/01/1994	60a	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	3.38	96.62	NA
S-1	05/04/1994	<50	1.1	<0.5	<0.5	<0.5	NA	NA	100.00	3.00	97.00	NA
S-1	08/18/1994	<50	0.6	<0.5	<0.5	<0.5	NA	NA	100.00	3.70	96.30	NA
S-1 (D)	08/18/1994	60a	0.5	<0.5	<0.5	<0.5	NA	NA	100.00	3.70	96.30	NA
S-1	11/09/1994	<50	4	<0.5	<0.5	<0.5	NA	NA	100.00	2.52	97.48	NA
S-1	02/22/1995	50	0.8	0.7	<0.5	1.3	NA	NA	100.00	4.08	95.92	NA
S-1	05/02/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	2.58	97.42	NA
S-1	08/30/1995	<50	1.7	<0.5	<0.5	<0.5	NA	NA	100.00	3.48	96.52	NA
S-1	11/28/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	3.99	96.01	NA
S-1	02/02/1996	<50	11	<0.5	0.9	<0.5	NA	NA	100.00	2.00	98.00	NA
S-1	03/09/1996	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	3.38	99.62	NA
S-1	08/22/1996	<50	1.5	<0.5	<0.5	<0.5	130	NA	100.00	3.43	96.57	NA
S-1	11/07/1996	<50	<0.5	<0.5	<0.5	<0.5	57	NA	100.00	3.70	96.30	4.33

WELL CONCENTRATIONS
Shell-branded Service Station
5755 Broadway
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)
S-1	02/20/1997	<50	0.64	<0.50	<0.50	1.6	6.5	NA	100.00	3.60	96.40	2
S-1	05/30/1997	<50	<0.50	<0.50	<0.50	<0.50	46	NA	100.00	3.47	96.53	7
S-1 (D)	05/30/1997	<50	<0.50	<0.50	<0.50	<0.50	47	NA	100.00	3.47	96.53	7
S-1	08/21/1997	<50	<0.50	<0.50	<0.50	0.84	26	NA	100.00	3.01	96.99	3.1
S-1	11/03/1997	<50	<0.50	1.1	<0.50	1.3	190	NA	100.00	3.66	96.34	2
S-1	01/20/1998	110	7.9	2.8	4.4	13	53	NA	100.00	1.84	98.16	4.6
S-1 (D)	01/20/1998	130	9.2	6.9	5.2	15	93	NA	100.00	1.84	98.16	4.6
S-1	02/16/1999	<50	<0.50	<0.50	<0.50	<0.50	8.6	NA	100.00	2.43	97.57	2.2
S-1	09/07/1999	NA	NA	NA	NA	NA	NA	NA	100.00	2.84	97.16	NA
S-1	02/02/2000	<50.0	<0.500	<0.500	<0.500	<0.500	202	NA	100.00	3.10	96.90	2.1
S-1	04/26/2000	NA	NA	NA	NA	NA	NA	NA	100.00	2.91	97.09	NA
S-1	07/25/2000	<50.0	<0.500	<0.500	<0.500	<0.500	811	NA	100.00	3.21	96.79	1.8
S-1	11/15/2000	NA	NA	NA	NA	NA	NA	NA	100.00	3.18	96.82	NA
S-1	02/12/2001	<50.0	<0.500	<0.500	<0.500	<0.500	209	NA	100.00	1.34	98.66	2.2
S-1	06/07/2001	NA	NA	NA	NA	NA	NA	NA	100.00	1.27	98.73	NA
S-1	08/31/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	100.00	3.16	96.84	4.0
S-1	12/05/2001	NA	NA	NA	NA	NA	NA	2.6	100.00	1.90	98.10	NA
S-1	01/31/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	100.00	2.67	97.33	NA
S-1	06/04/2002	NA	NA	NA	NA	NA	NA	NA	100.00	1.87	98.13	NA
S-1	07/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	100.00	2.01	97.99	NA
S-1	11/07/2002	NA	NA	NA	NA	NA	NA	NA	181.89	3.01	178.88	NA
S-1	11/14/2002	NA	NA	NA	NA	NA	NA	NA	181.89	3.40	178.49	NA
S-1	**01/30/2003**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**	**27**	**181.89**	**2.12**	**179.77**	**NA**
S-2	01/25/1991	450	140	1.8	6.2	15	NA	NA	98.92	4.52	94.40	NA
S-2	06/03/1991	490	150	2.7	8.2	7	NA	NA	98.92	4.02	94.90	NA
S-2	08/30/1991	70	0.37	<0.3	<0.3	<0.3	NA	NA	98.92	4.70	94.22	NA
S-2	11/22/1991	1,600	110	9.3	29	150	NA	NA	98.92	4.72	94.20	NA

WELL CONCENTRATIONS
Shell-branded Service Station
5755 Broadway
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)
S-2	03/13/1992	1,300	210	5.7	34	79	NA	NA	98.92	3.47	95.45	NA
S-2	05/28/1992	100	28	<0.5	<0.5	<0.5	NA	NA	98.92	4.45	94.45	NA
S-2	08/19/1992	470	42	<0.5	8.3	4	NA	NA	98.92	4.84	94.08	NA
S-2	11/18/1992	490	43	39	17	29	NA	NA	98.92	4.73	94.19	NA
S-2	02/10/1993	19,000	710	760	80	370	NA	NA	98.92	4.83	94.09	NA
S-2	06/11/1993	33,000	3,100	1,600	370	1,100	NA	NA	98.92	3.74	95.18	NA
S-2	08/03/1993	18,000	1,400	130	81	130	NA	NA	98.92	4.23	94.69	NA
S-2 (D)	08/03/1993	19,000	1,400	140	86	150	NA	NA	98.92	4.23	94.69	NA
S-2	11/02/1993	12,000a	470	47	31	92	NA	NA	98.92	4.72	94.20	NA
S-2 (D)	11/02/1993	13,000a	530	47	35	96	NA	NA	98.92	4.72	94.20	NA
S-2	12/16/1993	NA	NA	NA	NA	NA	NA	NA	98.92	3.00	95.92	NA
S-2	02/01/1994	31,000a	430	46	50	130	NA	NA	98.92	3.48	95.44	NA
S-2 (D)	02/01/1994	31,000a	300	33	30	100	NA	NA	98.92	3.48	95.44	NA
S-2	05/04/1994	3,900	1,200	31	53	71	NA	NA	98.92	3.26	95.66	NA
S-2 (D)	05/04/1994	4,500	1,200	37	57	110	NA	NA	98.92	3.26	95.66	NA
S-2	08/18/1994	24,000	600	8.3	15	27	NA	NA	98.92	3.98	94.94	NA
S-2	11/09/1994	1,400a	240	9.3	13	20	NA	NA	98.92	3.10	95.82	NA
S-2 (D)	11/09/1994	1,800	260	8.5	13	21	NA	NA	98.92	3.10	95.82	NA
S-2	02/22/1995	29,000	550	18	12	63	NA	NA	98.92	4.02	94.90	NA
S-2 (D)	02/22/1995	28,000	530	17	10	60	NA	NA	98.92	4.02	94.90	NA
S-2	05/02/1995	4,400	1,000	25	38	77	NA	NA	98.92	2.86	96.06	NA
S-2 (D)	05/02/1995	4,400	1,000	26	41	83	NA	NA	98.92	2.86	96.06	NA
S-2	08/30/1995	800	350	20	6.7	16	NA	NA	98.92	4.06	94.86	NA
S-2 (D)	08/30/1995	960	220	22	12	48	NA	NA	98.92	4.06	94.86	NA
S-2	11/28/1995	2,000	230	220	50	230	NA	NA	98.92	4.48	94.44	NA
S-2 (D)	11/28/1995	2,100	240	230	51	230	NA	NA	98.92	4.48	94.44	NA
S-2	02/02/1996	18,000	540	18	12	22	NA	NA	98.92	1.99	96.93	NA
S-2 (D)	02/02/1996	11,000	600	18	13	28	NA	NA	98.92	1.99	96.93	NA

WELL CONCENTRATIONS
Shell-branded Service Station
5755 Broadway
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)
S-2	03/09/1996	3,800	1,500	27	30	58	NA	NA	98.92	3.27	95.65	NA
S-2 (D)	03/09/1996	3,500	1,300	24	21	53	NA	NA	98.92	3.27	95.65	NA
S-2	08/22/1996	<20,000	490	<200	<200	<200	43,000	NA	98.92	3.85	95.07	NA
S-2 (D)	08/22/1996	<20,000	570	<200	<200	<200	59,000	51,000	98.92	3.85	95.07	NA
S-2	11/07/1996	<5,000	290	<50	<50	<50	32,000	NA	98.92	4.00	94.92	3.51
S-2 (D)	11/07/1996	<5,000	290	<50	<50	<50	32,000	NA	98.92	4.00	94.92	3.51
S-2	02/20/1997	<10,000	520	<100	<100	<100	28,000	NA	98.92	3.20	95.72	1
S-2 (D)	02/20/1997	<10,000	520	<100	<100	<100	35,000	NA	98.92	3.20	95.72	1
S-2	05/30/1997	150	15	11	3.5	15	11	NA	98.92	3.87	95.05	6
S-2	08/21/1997	1,600	220	<10	20	<10	18,000	NA	98.92	3.29	95.63	3.3
S-2 (D)	08/21/1997	1,500	180	<10	16	<10	21,000	NA	98.92	3.29	95.63	3.3
S-2	11/03/1997	1,000	94	<10	<10	<10	<50	NA	98.92	4.02	94.90	1.8
S-2	01/20/1998	590	110	8.3	18	23	7,800	NA	98.92	1.54	97.38	3.2
S-2	07/23/1998	2,600	840	<10	44	22	15,000	NA	98.92	2.89	96.03	NA
S-2	02/16/1999	680	140	6.1	10	18	19,000	NA	98.92	1.86	97.06	2.0
S-2	09/07/1999	<2,000	248	<20.0	<20.0	<20.0	22,800	NA	98.92	3.66	95.26	1.8
S-2	02/02/2000	103	0.825	<0.500	<0.500	<0.500	11,700	10,500	98.92	4.02	94.90	2.0
S-2	04/26/2000	4,040	799	<20.0	40.9	255	19,000	17,100b	98.92	2.63	96.29	2.3
S-2	07/25/2000	1,120	195	5.94	5.62	11.3	26,600	21,100	98.92	3.42	95.50	0.6
S-2b	11/15/2000	613	35.6	<5.00	<5.00	7.36	18,100	17,800	98.92	3.31	95.61	1.8
S-2	02/12/2001	9,010	1,430	<20.0	219	848	28,300	17,000	98.92	1.47	97.45	2.0
S-2	06/07/2001	31,000	1,000	<25	630	3,200	NA	17,000	98.92	3.43	95.49	10.4
S-2	08/31/2001	50,000	950	<20	1,500	6,000	NA	17,000	98.92	4.72	94.20	0.9
S-2	12/05/2001	49,000	590	7.2	1,400	4,900	NA	11,000	98.92	1.53	97.39	NA
S-2	01/31/2002	37,000	860	<25	1,100	4,000	NA	14,000	98.92	2.13	96.79	NA
S-2	06/04/2002	150,000	800	<20	1,200	4,000	NA	9,200	98.92	2.24	96.68	NA
S-2	07/25/2002	37,000	350	<20	660	2,400	NA	10,000	98.92	2.03	96.89	NA
S-2	11/14/2002	25,000	510	<25	590	2,000	NA	10,000	180.79	3.17	177.62	NA

WELL CONCENTRATIONS
Shell-branded Service Station
5755 Broadway
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)
S-2	**01/02/2003**	**NA**	**710**	**<25**	**560**	**2,074**	**NA**	**NA**	**180.79**	**2.15**	**178.64**	**NA**
S-2	**01/30/2003**	**21,000**	**670**	**<20**	**360**	**1,200**	**NA**	**9,300**	**180.79**	**2.09**	**178.70**	**NA**
S-3	01/25/1991	<30	<0.3	<0.3	<0.3	<0.3	NA	NA	101.67	3.84	97.83	NA
S-3	06/03/1991	<30	<0.3	0.3	0.3	0.3	NA	NA	101.67	3.25	98.42	NA
S-3	08/03/1991	<30	<0.3	<0.3	<0.3	<0.3	NA	NA	101.67	4.73	96.94	NA
S-3	11/22/1991	<30	<0.3	<0.3	<0.3	<0.3	NA	NA	101.67	4.81	96.86	NA
S-3	03/13/1992	<30	<0.3	0.3	0.3	0.3	NA	NA	101.67	2.29	99.38	NA
S-3	05/28/1992	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	3.62	98.05	NA
S-3	08/19/1992	<50	<0.5	<0.5	<0.5	0.5	NA	NA	101.67	4.66	97.01	NA
S-3	11/18/1992	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	4.51	97.16	NA
S-3	02/10/1993	30	1.9	3.2	2.4	5.6	NA	NA	101.67	4.36	97.31	NA
S-3	06/11/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	2.91	98.76	NA
S-3 (D)	06/11/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	2.91	98.76	NA
S-3	08/03/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	3.70	97.97	NA
S-3	11/02/1993	Well inaccessible		NA	NA	NA	NA	NA	101.67	NA	NA	NA
S-3	12/16/1993	NA	NA	NA	NA	NA	NA	NA	101.67	2.12	99.55	NA
S-3	02/01/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	2.90	98.77	NA
S-3	05/04/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	2.54	99.13	NA
S-3	08/18/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	3.51	98.16	NA
S-3	11/09/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	2.44	99.23	NA
S-3	02/22/1995	80	<0.5	0.5	<0.5	0.5	NA	NA	101.67	4.12	97.55	NA
S-3	05/02/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	2.83	98.84	NA
S-3	08/30/1995	<50	0.5	<0.5	<0.5	<0.5	NA	NA	101.67	3.16	98.51	NA
S-3	11/28/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	3.87	97.80	NA
S-3	02/02/1996	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	2.24	99.43	NA
S-3	03/09/1996	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	3.05	98.62	NA
S-3	08/22/1996	<50	0.8	<0.5	<0.5	<0.5	<2.5	NA	101.67	2.85	98.82	4.6

WELL CONCENTRATIONS
Shell-branded Service Station
5755 Broadway
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)
S-3	11/07/1996	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	101.67	3.35	98.32	4.6
S-3	02/20/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	101.67	3.00	98.67	1
S-3	05/30/1997	140	14	10	3.3	14	8.6	NA	101.67	3.00	98.67	8
S-3	08/21/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	101.67	2.94	98.73	3.3
S-3	11/03/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	101.67	3.36	98.31	2.4
S-3 (D)	11/03/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	101.67	3.36	98.31	2.4
S-3	01/20/1998	Well inaccessible		NA	NA	NA	NA	NA	101.67	NA	NA	NA
S-3	07/23/1998	NA	NA	NA	NA	NA	NA	NA	101.67	2.69	98.98	NA
S-3	02/16/1999	<50	<0.50	0.92	0.59	3.9	3.7	NA	101.67	2.20	99.47	2.8
S-3	09/07/1999	NA	NA	NA	NA	NA	NA	NA	101.67	2.81	98.86	NA
S-3	02/02/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	101.67	3.97	97.70	2.7
S-3	04/26/2000	NA	NA	NA	NA	NA	NA	NA	101.67	2.96	98.71	NA
S-3	07/25/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	101.67	3.00	98.67	0.8
S-3	11/15/2000	NA	NA	NA	NA	NA	NA	NA	101.67	2.86	98.81	NA
S-3	02/12/2001	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	101.67	2.47	99.20	2.3
S-3	06/07/2001	NA	NA	NA	NA	NA	NA	NA	101.67	2.78	98.89	NA
S-3	08/31/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	101.67	3.94	97.73	0.5
S-3	12/05/2001	NA	NA	NA	NA	NA	NA	NA	101.67	2.05	99.62	NA
S-3	01/31/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	101.67	2.29	99.38	NA
S-3	06/04/2002	NA	NA	NA	NA	NA	NA	NA	101.67	2.56	99.11	NA
S-3	07/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	101.67	2.70	98.97	NA
S-3	11/14/2002	NA	NA	NA	NA	NA	NA	NA	183.54	3.43	180.11	NA
S-3	**01/30/2003**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**	**<5.0**	**183.54**	**2.16**	**181.38**	**NA**
H-1	12/05/2001	150	<0.50	8.3	1.6	16	NA	52	NA	1.43	NA	NA
H-1	01/31/2002	3,200	12	<0.50	5.7	3.7	NA	650	NA	2.34	NA	NA
H-1	06/04/2002	280,000	<10	150	62	9,500	NA	<100	NA	2.56	NA	NA
H-1	07/25/2002	8,200	2.2	46	5.3	99	NA	<10	NA	2.83	NA	NA

WELL CONCENTRATIONS
Shell-branded Service Station
5755 Broadway
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)
H-1	11/14/2002	1,700	2.1	2.6	1.5	14	NA	380	180.63	3.74	176.89	NA
H-1	**01/02/2003**	**NA**	**1.1**	**<0.50**	**<0.50**	**3.6**	**NA**	**NA**	**180.63**	**1.45**	**179.18**	**NA**
H-1	**01/30/2003**	**630**	**0.99**	**2.0**	**1.6**	**12**	**NA**	**21**	**180.63**	**2.10**	**178.53**	**NA**
T-1	05/30/1997	NA	NA	NA	NA	NA	NA	NA	NA	2.65	NA	NA
T-1	08/21/1997	NA	NA	NA	NA	NA	NA	NA	NA	2.69	NA	NA
T-1	11/03/1997	NA	NA	NA	NA	NA	NA	NA	NA	3.09	NA	NA
T-1	01/20/1998	NA	NA	NA	NA	NA	NA	NA	NA	0.61	NA	NA
T-1	07/23/1998	NA	NA	NA	NA	NA	NA	NA	NA	2.32	NA	NA
T-1	02/16/1999	NA	NA	NA	NA	NA	NA	NA	NA	1.95	NA	NA
T-1	09/07/1999	NA	NA	NA	NA	NA	NA	NA	NA	2.48	NA	NA
T-1	02/02/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	2.66	NA	2.5
T-1	04/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	2.56	NA	NA
T-1	07/25/2000	NA	NA	NA	NA	NA	NA	NA	NA	2.60	NA	NA
T-1	11/15/2000	NA	NA	NA	NA	NA	NA	NA	NA	2.47	NA	NA
T-1	02/12/2001	NA	NA	NA	NA	NA	NA	NA	NA	1.20	NA	NA
T-1	06/07/2001	NA	NA	NA	NA	NA	NA	NA	NA	2.36	NA	NA
T-1	08/31/2001	NA	NA	NA	NA	NA	NA	NA	NA	3.45	NA	NA
T-1	01/09/2002 c	NA	NA	NA	NA	NA	NA	NA	183.08	NA	NA	NA
T-2	05/30/1997	NA	NA	NA	NA	NA	NA	NA	NA	1.81	NA	NA
T-2	08/21/1997	NA	NA	NA	NA	NA	NA	NA	NA	1.89	NA	NA
T-2	11/03/1997	NA	NA	NA	NA	NA	NA	NA	NA	2.25	NA	NA
T-2	01/20/1998	NA	NA	NA	NA	NA	NA	NA	NA	0.55	NA	NA
T-2	07/23/1998	NA	NA	NA	NA	NA	NA	NA	NA	1.21	NA	NA
T-2	02/16/1999	NA	NA	NA	NA	NA	NA	NA	NA	1.08	NA	NA
T-2	09/07/1999	NA	NA	NA	NA	NA	NA	NA	NA	0.72	NA	NA
T-2	02/02/2000	1,540	53.4	20.8	11.4	21.8	1,330	NA	NA	0.98	NA	3.0

WELL CONCENTRATIONS
Shell-branded Service Station
5755 Broadway
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)
T-2	04/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	1.02	NA	NA
T-2	07/25/2000	815	17.6	10.8	1.63	3.47	133	NA	NA	1.80	NA	0.8
T-2	11/15/2000	NA	NA	NA	NA	NA	NA	NA	NA	1.68	NA	NA
T-2	02/12/2001	310	7.48	7.76	0.693	2.28	301	NA	NA	1.45	NA	1.6
T-2	06/07/2001	NA	NA	NA	NA	NA	NA	NA	NA	1.57	NA	NA
T-2	08/31/2001	720	30	0.67	<0.50	2.3	NA	540	NA	2.69	NA	0.8
T-2	12/05/2001	NA	NA	NA	NA	NA	NA	NA	NA	0.58	NA	NA
T-2	01/31/2002	NA	NA	NA	NA	NA	NA	NA	NA	1.32	NA	NA
T-2	02/04/2002	1,000	41	30	4.6	20	NA	1,200	NA	1.46	NA	NA
T-2	06/04/2002	NA	NA	NA	NA	NA	NA	NA	NA	1.50	NA	NA
T-2	07/25/2002	660	11	0.59	<0.50	2.6	NA	97	NA	1.53	NA	NA
T-2	11/14/2002	NA	NA	NA	NA	NA	NA	NA	182.30	2.39	179.91	NA
T-2	**01/30/2003**	**560**	**11**	**<0.50**	**<0.50**	**0.53**	**NA**	**160**	**182.30**	**1.01**	**181.29**	**NA**
T-3	05/30/1997	NA	NA	NA	NA	NA	NA	NA	NA	2.31	NA	NA
T-3	08/21/1997	NA	NA	NA	NA	NA	NA	NA	NA	1.57	NA	NA
T-3	11/03/1997	NA	NA	NA	NA	NA	NA	NA	NA	3.50	NA	NA
T-3	01/20/1998	NA	NA	NA	NA	NA	NA	NA	NA	0.76	NA	NA
T-3	07/23/1998	NA	NA	NA	NA	NA	NA	NA	NA	0.82	NA	NA
T-3	02/16/1999	NA	NA	NA	NA	NA	NA	NA	NA	0.55	NA	NA
T-3	09/07/1999	NA	NA	NA	NA	NA	NA	NA	NA	2.89	NA	NA
T-3	02/02/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	3.02	NA	2.9
T-3	04/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	2.81	NA	NA
T-3	07/25/2000	NA	NA	NA	NA	NA	NA	NA	NA	3.00	NA	NA
T-3	11/15/2000	NA	NA	NA	NA	NA	NA	NA	NA	1.70	NA	NA
T-3	02/12/2001	NA	NA	NA	NA	NA	NA	NA	NA	2.11	NA	NA
T-3	06/07/2001	NA	NA	NA	NA	NA	NA	NA	NA	1.68	NA	NA
T-3	08/31/2001	NA	NA	NA	NA	NA	NA	NA	NA	3.14	NA	NA

WELL CONCENTRATIONS
Shell-branded Service Station
5755 Broadway
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)
T-3	01/09/2002 c	NA	NA	NA	NA	NA	NA	NA	180.95	NA	NA	NA

Abbreviations:
TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to June 7, 2001, analyzed by EPA Method 8015.
BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to June 7, 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
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:
a = Chromatogram pattern indicated an unidentified hydrocarbon.
b = This sample analyzed outside of EPA recommended hold time.
c = Survey date only.
Site surveyed January 9, 2002, by Virgil Chavez Land Surveying of Vallejo, California.

KIFF ANALYTICAL LLC

Report Number : 31216
Date : 2/6/03

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

Subject : 5 Water Samples
Project Name : 5755 Broadway, Oakland
Project Number : 030130-RH2
P.O. Number : 98995756

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 : 31216
Date : 2/6/03

Project Name : **5755 Broadway, Oakland**
Project Number : **030130-RH2**

Sample : **S-1** Matrix : Water Lab Number : 31216-01
Sample Date :1/30/03

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	2/2/03
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	2/2/03
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	2/2/03
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	2/2/03
Methyl-t-butyl ether (MTBE)	**27**	5.0	ug/L	EPA 8260B	2/2/03
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	2/2/03
Toluene - d8 (Surr)	97.6		% Recovery	EPA 8260B	2/2/03
4-Bromofluorobenzene (Surr)	99.4		% Recovery	EPA 8260B	2/2/03

Sample : **S-2** Matrix : Water Lab Number : 31216-02
Sample Date :1/30/03

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**670**	20	ug/L	EPA 8260B	2/4/03
Toluene	**< 20**	20	ug/L	EPA 8260B	2/4/03
Ethylbenzene	**360**	20	ug/L	EPA 8260B	2/4/03
Total Xylenes	**1200**	20	ug/L	EPA 8260B	2/4/03
Methyl-t-butyl ether (MTBE)	**9300**	200	ug/L	EPA 8260B	2/4/03
TPH as Gasoline	**21000**	2000	ug/L	EPA 8260B	2/4/03
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	2/4/03
4-Bromofluorobenzene (Surr)	99.8		% Recovery	EPA 8260B	2/4/03

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 31216
Date : 2/6/03

Project Name : **5755 Broadway, Oakland**
Project Number : **030130-RH2**

Sample : **S-3** Matrix : Water Lab Number : 31216-03
Sample Date :1/30/03

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	2/2/03
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	2/2/03
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	2/2/03
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	2/2/03
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	2/2/03
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	2/2/03
Toluene - d8 (Surr)	97.6		% Recovery	EPA 8260B	2/2/03
4-Bromofluorobenzene (Surr)	98.0		% Recovery	EPA 8260B	2/2/03

Sample : **H-1** Matrix : Water Lab Number : 31216-04
Sample Date :1/30/03

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**0.99**	0.50	ug/L	EPA 8260B	2/2/03
Toluene	**2.0**	0.50	ug/L	EPA 8260B	2/2/03
Ethylbenzene	**1.6**	0.50	ug/L	EPA 8260B	2/2/03
Total Xylenes	**12**	0.50	ug/L	EPA 8260B	2/2/03
Methyl-t-butyl ether (MTBE)	**21**	5.0	ug/L	EPA 8260B	2/2/03
TPH as Gasoline	**630**	50	ug/L	EPA 8260B	2/2/03
Toluene - d8 (Surr)	98.1		% Recovery	EPA 8260B	2/2/03
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	2/2/03

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 31216
Date : 2/6/03

Project Name : **5755 Broadway, Oakland**
Project Number : **030130-RH2**

Sample : **T-2** Matrix : Water Lab Number : 31216-05
Sample Date :1/30/03

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**11**	0.50	ug/L	EPA 8260B	2/2/03
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	2/2/03
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	2/2/03
Total Xylenes	**0.53**	0.50	ug/L	EPA 8260B	2/2/03
Methyl-t-butyl ether (MTBE)	**160**	5.0	ug/L	EPA 8260B	2/2/03
TPH as Gasoline	**560**	50	ug/L	EPA 8260B	2/2/03
Toluene - d8 (Surr)	98.3		% Recovery	EPA 8260B	2/2/03
4-Bromofluorobenzene (Surr)	98.0		% Recovery	EPA 8260B	2/2/03

Approved By: Joel Kiff

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

Report Number : 31216

Date : 2/6/03

QC Report : Method Blank Data

Project Name : **5755 Broadway, Oakland**

Project Number : **030130-RH2**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	2/2/03
Toluene	< 0.50	0.50	ug/L	EPA 8260B	2/2/03
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	2/2/03
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	2/2/03
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	2/2/03
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	2/2/03
Toluene - d8 (Surr)	96.4		%	EPA 8260B	2/2/03
4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	2/2/03
Benzene	< 0.50	0.50	ug/L	EPA 8260B	2/2/03
Toluene	< 0.50	0.50	ug/L	EPA 8260B	2/2/03
Ethylbenzene	< 0 50	0.50	ug/L	EPA 8260B	2/2/03
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	2/2/03
Methyl-t-butyl ether (MTBE)	< 5.0	5 0	ug/L	EPA 8260B	2/2/03
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	2/2/03
Toluene - d8 (Surr)	97.0		%	EPA 8260B	2/2/03
4-Bromofluorobenzene (Surr)	98.3		%	EPA 8260B	2/2/03
Benzene	< 0.50	0.50	ug/L	EPA 8260B	2/3/03
Toluene	< 0.50	0.50	ug/L	EPA 8260B	2/3/03
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	2/3/03
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	2/3/03
Methyl-t-butyl ether (MTBE)	< 5.0	5 0	ug/L	EPA 8260B	2/3/03
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	2/3/03
Toluene - d8 (Surr)	102		%	EPA 8260B	2/3/03
4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	2/3/03

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 31216

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 2/6/03

Project Name : **5755 Broadway, Oakland**

Project Number : **030130-RH2**

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	31216-04	0.99	40.0	40.0	43.4	41.7	ug/L	EPA 8260B	2/2/03	106	102	4.04	70-130	25
Toluene	31216-04	2.0	40.0	40.0	40.7	39.5	ug/L	EPA 8260B	2/2/03	96.9	93.8	3.25	70-130	25
Tert-Butanol	31216-04	<5.0	200	200	197	199	ug/L	EPA 8260B	2/2/03	98.6	99.4	0.808	70-130	25
Methyl-t-Butyl Ether	31216-04	21	40.0	40.0	61.6	63.1	ug/L	EPA 8260B	2/2/03	101	104	3.58	70-130	25
Benzene	31216-05	11	40.0	40.0	48.4	46.4	ug/L	EPA 8260B	2/2/03	93.5	88.5	5.49	70-130	25
Toluene	31216-05	<0.50	40.0	40.0	37.3	36.4	ug/L	EPA 8260B	2/2/03	93.3	91.1	2.44	70-130	25
Tert-Butanol	31216-05	13	200	200	204	204	ug/L	EPA 8260B	2/2/03	95.4	95.5	0.0524	70-130	25
Methyl-t-Butyl Ether	31216-05	160	40.0	40.0	198	196	ug/L	EPA 8260B	2/2/03	105	98.7	6.42	70-130	25
Benzene	31267-01	<0.50	40.0	40.0	40.6	39.4	ug/L	EPA 8260B	2/3/03	102	98.4	3.10	70-130	25
Toluene	31267-01	<0.50	40.0	40.0	39.6	38.2	ug/L	EPA 8260B	2/3/03	99.1	95.4	3.75	70-130	25
Tert-Butanol	31267-01	<5.0	200	200	197	195	ug/L	EPA 8260B	2/3/03	98.7	97.7	1.08	70-130	25
Methyl-t-Butyl Ether	31267-01	1.3	40.0	40.0	39.4	39.1	ug/L	EPA 8260B	2/3/03	95.2	94.7	0.553	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 31216

Date : 2/6/03

QC Report : Laboratory Control Sample (LCS)

Project Name : **5755 Broadway, Oakland**

Project Number : **030130-RH2**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	2/2/03	98.4	70-130
Toluene	40.0	ug/L	EPA 8260B	2/2/03	92.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	2/2/03	99.9	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	2/2/03	88.4	70-130
Benzene	40.0	ug/L	EPA 8260B	2/2/03	97.2	70-130
Toluene	40.0	ug/L	EPA 8260B	2/2/03	89.0	70-130
Tert-Butanol	200	ug/L	EPA 8260B	2/2/03	98.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	2/2/03	107	70-130
Benzene	40.0	ug/L	EPA 8260B	2/3/03	103	70-130
Toluene	40.0	ug/L	EPA 8260B	2/3/03	101	70-130
Tert-Butanol	200	ug/L	EPA 8260B	2/3/03	101	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	2/3/03	97.8	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

SHELL Chain Of Custody Record

Lab Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be invoiced: Karen Petryna

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

31216

INCIDENT NUMBER (S&E ONLY): 98995756

SAP or CRMT NUMBER (TS/CRMT):

DATE: 1/30/03

PAGE: 1 of 1

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS (Street and City):	GLOBAL ID NO.:
Blaine Tech Services	BTSS	5755 Broadway, Oakland	T0600101270

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	BTS #030130-RH2

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

SAMPLER NAME(S) (Print): Ryan Hamstead

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°
	S-1	1/30/03	1215	GW	3	X	X	X								-01
	S-2		1290			X	X	X								-02
	S-3		1145			X	X	X								-03
	H-1		1000			X	X	X								-04
	T-2		1133			X	X	X								-05

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

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Ryan Hamstead			
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date	Time:
	Kristi A. Brenner Kiff Analytical	01/31/03	1055

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

10/16/00 Revision

Q&Q Graphic (714) 898-9702

KIFF ANALYTICAL LLC

Report Number : 30728
Date : 1/8/2003

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

Subject : 2 Water Samples
Project Name : 5755 Broadway, Oakland
Project Number : 030102-SS3
P.O. Number : 98995756

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 : 30728
Date : 1/8/2003

Subject : 2 Water Samples
Project Name : 5755 Broadway, Oakland
Project Number : 030102-SS3
P.O. Number : 98995756

Case Narrative

The Method Reporting Limit for n-Butylbenzene has been increased due to the presence of an interfering compound for samples S-2 and H-1. The Method Reporting Limits for sample S-2 have been increased due to the high level of Methyl-t-butyl ether in the sample.

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 30728

Date : 1/8/2003

Sample : **S-2**

Project Name : **5755 Broadway, Oakland**

Project Number : **030102-SS3**

Date Analyzed : 1/5/2003

Lab Number : 30728-01

Matrix : Water

Sample Date :1/2/2003

Analysis Method: EPA 8260B

Parameter	Measured Value	MRL [1]	Units
Dichlorodifluoromethane	< 25	25	ug/L
Chloromethane	< 25	25	ug/L
Vinyl Chloride	< 25	25	ug/L
Bromomethane	< 1000	1000	ug/L
Chloroethane	*< 25*	*25*	*ug/L*
Trichlorofluoromethane	< 25	25	ug/L
1,1-Dichloroethene	< 25	25	ug/L
Methylene Chloride	< 250	250	ug/L
trans-1,2-Dichloroethene	< 25	25	ug/L
1,1-Dichloroethane	< 25	25	ug/L
2,2-Dichloropropane	< 25	25	ug/L
cis-1,2-Dichloroethene	< 25	25	ug/L
Chloroform	< 25	25	ug/L
Bromochloromethane	< 25	25	ug/L
1,1,1-Trichloroethane	< 25	25	ug/L
1,1-Dichloropropene	< 25	25	ug/L
1,2-Dichloroethane	< 25	25	ug/L
Carbon Tetrachloride	< 25	25	ug/L
Benzene	**710**	25	ug/L
Trichloroethene	< 25	25	ug/L
1,2-Dichloropropane	*< 25*	*25*	*ug/L*
Bromodichloromethane	< 25	25	ug/L
Dibromomethane	< 25	25	ug/L
cis-1,3-Dichloropropene	< 25	25	ug/L
Toluene	< 25	25	ug/L
trans-1,3-Dichloropropene	< 25	25	ug/L
1,1,2-Trichloroethane	< 25	25	ug/L
1,3-Dichloropropane	< 25	25	ug/L
Tetrachloroethene	< 25	25	ug/L
Dibromochloromethane	< 25	25	ug/L
1,2-Dibromoethane	< 25	25	ug/L
Chlorobenzene	< 25	25	ug/L
1,1,1,2-Tetrachloroethane	< 25	25	ug/L
Ethylbenzene	**560**	25	ug/L
P,M-Xylene	**2000**	50	ug/L
O-Xylene	**74**	25	ug/L
Styrene	< 25	25	ug/L
Isopropyl benzene	**78**	25	ug/L

Parameter	Measured Value	MRL [1]	Units
Bromoform	< 25	25	ug/L
1,1,2,2-Tetrachloroethane	< 25	25	ug/L
1,2,3-Trichloropropane	< 25	25	ug/L
n-Propylbenzene	**270**	25	ug/L
Bromobenzene	*< 25*	*25*	*ug/L*
1,3,5-Trimethylbenzene	**940**	25	ug/L
2+4-Chlorotoluene	< 50	50	ug/L
tert-Butylbenzene	< 25	25	ug/L
1,2,4-Trimethylbenzene	**2500**	25	ug/L
sec-Butylbenzene	**39**	25	ug/L
p-Isopropyltoluene	< 25	25	ug/L
1,3-Dichlorobenzene	< 25	25	ug/L
1,4-Dichlorobenzene	< 25	25	ug/L
n-Butylbenzene	< 1000	1000	ug/L
1,2-Dichlorobenzene	< 25	25	ug/L
1,2-Dibromo-3-chloropropane	< 25	25	ug/L
1,2,4-Trichlorobenzene	< 25	25	ug/L
Hexachlorobutadiene	< 25	25	ug/L
Naphthalene	**500**	25	ug/L
1,2,3-Trichlorobenzene	< 25	25	ug/L
Dibromofluoromethane (Surr)	106		% Recovery
1,2-Dichloroethane-d4 (Surr)	105		% Recovery
Toluene-d8 (Surr)	91.7		% Recovery
4-Bromofluorobenzene (Surr)	118		% Recovery

1) MRL = Method reporting limit
tr = Trace detected below reporting limit

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 30728

Date : 1/8/2003

Sample : **H-1**

Project Name : **5755 Broadway, Oakland**

Project Number : **030102-SS3** Date Analyzed : 1/5/2003 Lab Number : 30728-02

Matrix : Water Sample Date :1/2/2003 Analysis Method: EPA 8260B

Parameter	Measured Value	MRL [1]	Units
Dichlorodifluoromethane	< 0.50	0.50	ug/L
Chloromethane	< 0.50	0.50	ug/L
Vinyl Chloride	< 0.50	0.50	ug/L
Bromomethane	< 20	20	ug/L
Chloroethane	< 0.50	0.50	ug/L
Trichlorofluoromethane	< 0.50	0.50	ug/L
1,1-Dichloroethene	< 0.50	0.50	ug/L
Methylene Chloride	< 5.0	5.0	ug/L
trans-1,2-Dichloroethene	< 0.50	0.50	ug/L
1,1-Dichloroethane	< 0.50	0.50	ug/L
2,2-Dichloropropane	< 0.50	0.50	ug/L
cis-1,2-Dichloroethene	< 0.50	0.50	ug/L
Chloroform	< 0.50	0.50	ug/L
Bromochloromethane	< 0.50	0.50	ug/L
1,1,1-Trichloroethane	< 0.50	0.50	ug/L
1,1-Dichloropropene	< 0.50	0.50	ug/L
1,2-Dichloroethane	< 2.0	2.0	ug/L
Carbon Tetrachloride	< 0.50	0.50	ug/L
Benzene	**1.1**	0.50	ug/L
Trichloroethene	< 0.50	0.50	ug/L
1,2-Dichloropropane	< 0.50	0.50	ug/L
Bromodichloromethane	< 0.50	0.50	ug/L
Dibromomethane	< 0.50	0.50	ug/L
cis-1,3-Dichloropropene	< 0.50	0.50	ug/L
Toluene	< 0.50	0.50	ug/L
trans-1,3-Dichloropropene	< 0.50	0.50	ug/L
1,1,2-Trichloroethane	< 0.50	0.50	ug/L
1,3-Dichloropropane	< 0.50	0.50	ug/L
Tetrachloroethene	< 0.50	0.50	ug/L
Dibromochloromethane	< 0.50	0.50	ug/L
1,2-Dibromoethane	< 2.0	2.0	ug/L
Chlorobenzene	< 0.50	0.50	ug/L
1,1,1,2-Tetrachloroethane	< 0.50	0.50	ug/L
Ethylbenzene	< 0.50	0.50	ug/L
P,M-Xylene	**1.9**	1.0	ug/L
O-Xylene	**1.7**	0.50	ug/L
Styrene	< 0.50	0.50	ug/L
Isopropyl benzene	< 0.50	0.50	ug/L

Parameter	Measured Value	MRL [1]	Units
Bromoform	< 0.50	0.50	ug/L
1,1,2,2-Tetrachloroethane	< 0.50	0.50	ug/L
1,2,3-Trichloropropane	< 0.50	0.50	ug/L
n-Propylbenzene	< 0.50	0.50	ug/L
Bromobenzene	< 0.50	0.50	ug/L
1,3,5-Trimethylbenzene	**0.87**	0.50	ug/L
2+4-Chlorotoluene	< 1.0	1.0	ug/L
tert-Butylbenzene	< 0.50	0.50	ug/L
1,2,4-Trimethylbenzene	**1.8**	0.50	ug/L
sec-Butylbenzene	< 0.50	0.50	ug/L
p-Isopropyltoluene	< 0.50	0.50	ug/L
1,3-Dichlorobenzene	< 0.50	0.50	ug/L
1,4-Dichlorobenzene	< 0.50	0.50	ug/L
n-Butylbenzene	< 5.0	5.0	ug/L
1,2-Dichlorobenzene	< 0.50	0.50	ug/L
1,2-Dibromo-3-chloropropane	< 0.50	0.50	ug/L
1,2,4-Trichlorobenzene	< 0.50	0.50	ug/L
Hexachlorobutadiene	< 0.50	0.50	ug/L
Naphthalene	< 0.50	0.50	ug/L
1,2,3-Trichlorobenzene	< 0.50	0.50	ug/L
Dibromofluoromethane (Surr)	106		% Recovery
1,2-Dichloroethane-d4 (Surr)	104		% Recovery
Toluene-d8 (Surr)	92.9		% Recovery
4-Bromofluorobenzene (Surr)	120		% Recovery

1) MRL = Method reporting limit
tr = Trace detected below reporting limit

Approved By: Joel Kiff

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

Report Number : 30728

Date : 1/8/2003

QC Report : Method Blank Data

Project Name : **5755 Broadway, Oakland**

Project Number : **030102-SS3**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Dichlorodifluoromethane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Chloromethane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Vinyl Chloride	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Bromomethane	< 20	20	ug/L	EPA 8260B	1/5/2003
Chloroethane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Trichlorofluoromethane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,1-Dichloroethene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Methylene Chloride	< 5.0	5.0	ug/L	EPA 8260B	1/5/2003
trans-1,2-Dichloroethene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,1-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
2,2-Dichloropropane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
cis-1,2-Dichloroethene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Chloroform	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Bromochloromethane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,1,1-Trichloroethane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,1-Dichloropropene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,2-Dichloroethane	< 2.0	2.0	ug/L	EPA 8260B	1/5/2003
Carbon Tetrachloride	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Trichloroethene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,2-Dichloropropane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Bromodichloromethane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Dibromomethane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
cis-1,3-Dichloropropene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
trans-1,3-Dichloropropene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,1,2-Trichloroethane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,3-Dichloropropane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Tetrachloroethene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Dibromochloromethane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,2-Dibromoethane	< 2.0	2.0	ug/L	EPA 8260B	1/5/2003
Chlorobenzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,1,1,2-Tetrachloroethane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
P,M-Xylene	< 1.0	1.0	ug/L	EPA 8260B	1/5/2003
O-Xylene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Styrene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Isopropyl benzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Bromoform	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,1,2,2-Tetrachloroethane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,2,3-Trichloropropane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
n-Propylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Bromobenzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,3,5-Trimethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
2+4-Chlorotoluene	< 1.0	1.0	ug/L	EPA 8260B	1/5/2003
tert-Butylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,2,4-Trimethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
sec-Butylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
p-Isopropyltoluene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,3-Dichlorobenzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,4-Dichlorobenzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
n-Butylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,2-Dichlorobenzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,2-Dibromo-3-chloropropane	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,2,4-Trichlorobenzene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Hexachlorobutadiene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
Naphthalene	< 0.50	0.50	ug/L	EPA 8260B	1/5/2003
1,2,3-Trichlorobenzene	< 0 50	0.50	ug/L	EPA 8260B	1/5/2003
Dibromofluoromethane (Surr)	103		%	EPA 8260B	1/5/2003
1,2-Dichloroethane-d4 (Surr)	112		%	EPA 8260B	1/5/2003
Toluene - d8 (Surr)	91.3		%	EPA 8260B	1/5/2003
4-Bromofluorobenzene (Surr)	116		%	EPA 8260B	1/5/2003

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 30728

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 1/8/2003

Project Name : **5755 Broadway, Oakland**

Project Number : **030102-SS3**

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
1,1-Dichloroethane	30691-01	<0.50	39.9	39.8	43.6	40.9	ug/L	EPA 8260B	1/5/03	109	103	6.09	70-130	25
Benzene	30691-01	1.1	39.9	39.8	43.9	43.3	ug/L	EPA 8260B	1/5/03	107	106	1.27	70-130	25
1,2-Dichloroethane	30691-01	<0.50	39.9	39.8	35.2	34.4	ug/L	EPA 8260B	1/5/03	88.3	86.3	2.32	70-130	25
Toluene	30691-01	<0.50	39.9	39.8	37.4	37.2	ug/L	EPA 8260B	1/5/03	93.8	93.5	0.320	70-130	25
Chlorobenzene	30691-01	<0.50	39.9	39.8	46.6	45.6	ug/L	EPA 8260B	1/5/03	117	114	1.92	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 30728

QC Report : Laboratory Control Sample (LCS)

Date : 1/8/2003

Project Name : **5755 Broadway, Oakland**

Project Number : **030102-SS3**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
1,1-Dichloroethane	20.0	ug/L	EPA 8260B	1/5/03	105	70-130
Benzene	20.0	ug/L	EPA 8260B	1/5/03	102	70-130
1,2-Dichloroethane	20.0	ug/L	EPA 8260B	1/5/03	87.7	70-130
Toluene	20.0	ug/L	EPA 8260B	1/5/03	90.2	70-130
Chlorobenzene	20.0	ug/L	EPA 8260B	1/5/03	113	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Shell Oil Products US

Certificate of Analysis Number:

03010140

Report To:		Project Name:	INC#98995756	
KIFF Analytical		Site:	5755 Broadway	
Joel Kiff		Site Address:	5755 Broadway	
2795 2nd Street			Oakland	CA
Suite 300		PO Number:		
Davis		State:	California	
CA		State Cert. No.:	01142CA	
95616-		Date Reported:	1/17/2003	
ph (530) 297-4800	fax: (530) 297-4808			

This Report Contains A Total Of 12 Pages

Excluding This Page

1/17/2003

Date

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:

Shell Oil Products US

Certificate of Analysis Number:

03010140

Report To:		Project Name:	INC#98995756	
KIFF Analytical		Site:	5755 Broadway	
Joel Kiff		Site Address:	5755 Broadway	
2795 2nd Street			Oakland	CA
Suite 300		PO Number:		
Davis		State:	California	
CA		State Cert. No.:	01142CA	
95616-		Date Reported:	1/17/2003	
ph (530) 297-4800	fax: (530) 297-4808			

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Bernadette Fini
Customer Service Manager

1/17/2003
Date

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Shell Oil Products US

Certificate of Analysis Number:

03010140

Report To:
KIFF Analytical
Joel Kiff
2795 2nd Street
Suite 300
Davis
CA
95616-
ph (530) 297-4800 fax: (530) 297-4803

Fax To:
KIFF Analytical
Joel Kiff fax (530) 297-4808

Project Name: INC#98995756
Site: 5755 Broadway
Site Address: 5755 Broadway
Oakland CA
PO Number:
State: California
State Cert. No.: 01142CA
Date Reported: 1/17/2003

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
S-2	03010140-01	Water	1/2/2003 12:00:00 PM	1/7/2003 9:30:00 AM		☐
H-1	03010140-02	Water	1/2/2003 11:40:00 AM	1/7/2003 9:30:00 AM		☐

Bernadette Fini
Customer Service Manager

1/17/2003
Date

Joel Grice
Laboratory Director

Ted Yen
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: S-2 **Collected:** 01/02/2003 12:00 **SPL Sample ID:** 03010140-01

Site: 5755 Broadway

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
MERCURY, TOTAL			**MCL**	**E245.1**	**Units: mg/L**		
Mercury	ND	0.0002	1		01/10/03 9:46	R_T	1457949

Prep Method	Prep Date	Prep Initials
E245.1	01/10/2003 6:45	R_T

METALS BY METHOD 200.7, TOTAL			MCL	E200.7	Units: mg/L		
Antimony	0.114	0.005	1		01/16/03 12:56	NS	1465789
Arsenic	0.0118	0.005	1		01/16/03 12:56	NS	1465789
Lead	ND	0.005	1		01/16/03 12:56	NS	1465789
Selenium	ND	0.005	1		01/16/03 12:56	NS	1465789
Thallium	ND	0.005	1		01/16/03 12:56	NS	1465789
Barium	0.168	0.005	1		01/08/03 13:29	EG	1464088
Beryllium	ND	0.003	1		01/08/03 13:29	EG	1464088
Cadmium	ND	0.005	1		01/08/03 13:29	EG	1464088
Chromium	0.0168	0.01	1		01/08/03 13:29	EG	1464088
Cobalt	ND	0.01	1		01/08/03 13:29	EG	1464088
Copper	ND	0.01	1		01/08/03 13:29	EG	1464088
Molybdenum	ND	0.02	1		01/08/03 13:29	EG	1464088
Nickel	ND	0.02	1		01/08/03 13:29	EG	1464088
Silver	ND	0.01	1		01/08/03 13:29	EG	1464088
Vanadium	0.0103	0.005	1		01/08/03 13:29	EG	1464088
Zinc	ND	0.02	1		01/08/03 13:29	EG	1464088

Prep Method	Prep Date	Prep Initials
E200.7	01/08/2003 8:15	MW

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: H-1 **Collected:** 01/02/2003 11:40 **SPL Sample ID:** 03010140-02

Site: 5755 Broadway

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
MERCURY, TOTAL			**MCL**	**E245.1**	**Units: mg/L**		
Mercury	ND	0.0002	1		01/10/03 9:48	R_T	1457950

Prep Method	Prep Date	Prep Initials
E245.1	01/10/2003 6:45	R_T

METALS BY METHOD 200.7, TOTAL			MCL	E200.7	Units: mg/L		
Antimony	0.0438	0.005	1		01/16/03 13:31	NS	1465795
Arsenic	0.00849	0.005	1		01/16/03 13:31	NS	1465795
Lead	0.039	0.005	1		01/16/03 13:31	NS	1465795
Selenium	ND	0.005	1		01/16/03 13:31	NS	1465795
Thallium	ND	0.005	1		01/16/03 13:31	NS	1465795
Barium	0.232	0.005	1		01/08/03 14:06	EG	1464094
Beryllium	ND	0.003	1		01/08/03 14:06	EG	1464094
Cadmium	0.00812	0.005	1		01/08/03 14:06	EG	1464094
Chromium	ND	0.01	1		01/08/03 14:06	EG	1464094
Cobalt	ND	0.01	1		01/08/03 14:06	EG	1464094
Copper	0.0627	0.01	1		01/08/03 14:06	EG	1464094
Molybdenum	ND	0.02	1		01/08/03 14:06	EG	1464094
Nickel	ND	0.02	1		01/08/03 14:06	EG	1464094
Silver	ND	0.01	1		01/08/03 14:06	EG	1464094
Vanadium	0.00807	0.005	1		01/08/03 14:06	EG	1464094
Zinc	1.99	0.02	1		01/08/03 14:06	EG	1464094

Prep Method	Prep Date	Prep Initials
E200.7	01/08/2003 8:15	MW

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

Quality Control Documentation

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

Shell Oil Products US

INC#98995756

Analysis: Mercury, Total
Method: E245.1
WorkOrder: 03010140
Lab Batch ID: 24696

Method Blank

RunID: HGLB_030110A-1457938 Units: mg/L
Analysis Date: 01/10/2003 9:18 Analyst: R_T
Preparation Date: 01/10/2003 6:45 Prep By: R_T Method E245.1

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
03010140-01A	S-2
03010140-02A	H-1

Analyte	Result	Rep Limit
Mercury	ND	0.0002

Laboratory Control Sample (LCS)

RunID: HGLB_030110A-1457939 Units: mg/L
Analysis Date: 01/10/2003 9:21 Analyst: R_T
Preparation Date: 01/10/2003 6:45 Prep By: R_T Method E245.1

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	0.002	0.002094	105	80	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 03010065-01
RunID: HGLB_030110A-1457941 Units: mg/L
Analysis Date: 01/10/2003 9:26 Analyst: R_T
Preparation Date: 01/10/2003 6:45 Prep By: R_T Method E245.1

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Mercury	ND	0.002	0.002118	105.9	0.002	0.002108	105.4	0.4659	20	75	125

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

Shell Oil Products US

INC#98995756

Analysis: Metals by Method 200.7, Total
Method: E200.7
WorkOrder: 03010140
Lab Batch ID: 24717

Method Blank

RunID: TJA_030108E-1464086 Units: mg/L
Analysis Date: 01/08/2003 13:16 Analyst: EG
Preparation Date: 01/08/2003 8:15 Prep By: MW Method E200.7

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
03010140-01A	S-2
03010140-02A	H-1

Analyte	Result	Rep Limit
Barium	ND	0.005
Beryllium	ND	0.003
Cadmium	ND	0.005
Chromium	ND	0.01
Cobalt	ND	0.01
Copper	ND	0.01
Molybdenum	ND	0.02
Nickel	ND	0.02
Silver	ND	0.01
Vanadium	ND	0.005
Zinc	ND	0.02

Laboratory Control Sample (LCS)

RunID: TJA_030108E-1464087 Units: mg/L
Analysis Date: 01/08/2003 13:21 Analyst: EG
Preparation Date: 01/08/2003 8:15 Prep By: MW Method E200.7

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Barium	1	1.069	107	85	115
Beryllium	1	1.031	103	85	115
Cadmium	1	1.016	102	85	115
Chromium	1	1.002	100	85	115
Cobalt	1	1.051	105	85	115
Copper	1	1.037	104	85	115
Molybdenum	1	1.063	106	85	115
Nickel	1	1.044	104	85	115
Silver	1	1.074	107	85	115
Vanadium	1	1.035	104	85	115
Zinc	1	1.07	107	85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 03010140-01
RunID: TJA_030108E-1464089 Units: mg/L
Analysis Date: 01/08/2003 13:35 Analyst: EG
Preparation Date: 01/08/2003 8:15 Prep By: MW Method E200.7

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

Shell Oil Products US

INC#98995756

Analysis: Metals by Method 200.7, Total
Method: E200.7
WorkOrder: 03010140
Lab Batch ID: 24717

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Barium	0.1683	1	1.157	98.91	1	1.118	95.02	4.004	20	85	115
Beryllium	ND	1	1.082	108.2	1	1.001	100.1	7.817	20	85	115
Cadmium	ND	1	1.055	105.5	1	0.9725	97.25	8.095	20	85	115
Chromium	0.01682	1	1.053	103.6	1	0.9727	95.59	8.049	20	85	115
Cobalt	ND	1	1.069	106.9	1	0.9901	99.01	7.705	20	85	115
Copper	ND	1	1.055	105.0	1	0.9809	97.61	7.292	20	85	115
Molybdenum	ND	1	1.103	110.0	1	1.024	102.1	7.444	20	85	115
Nickel	ND	1	1.068	105.4	1	0.9962	98.26	7.005	20	85	115
Silver	ND	1	1.009	100.9	1	0.9751	97.51	3.420	20	85	115
Vanadium	0.01033	1	1.082	107.2	1	1.003	99.23	7.699	20	85	115
Zinc	ND	1	1.113	110.5	1	1.031	102.3	7.698	20	85	115

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

Shell Oil Products US

INC#98995756

Analysis: Metals by Method 200.7, Total
Method: E200.7

WorkOrder: 03010140
Lab Batch ID: 24717-T

Method Blank

RunID: TJAT_030116A-1465787 Units: mg/L
Analysis Date: 01/16/2003 12:42 Analyst: NS
Preparation Date: 01/08/2003 8:15 Prep By: MW Method E200.7

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
03010140-01A	S-2
03010140-02A	H-1

Analyte	Result	Rep Limit
Antimony	ND	0.005
Arsenic	ND	0.005
Lead	ND	0.005
Selenium	ND	0.005
Thallium	ND	0.005

Laboratory Control Sample (LCS)

RunID: TJAT_030116A-1465788 Units: mg/L
Analysis Date: 01/16/2003 12:47 Analyst: NS
Preparation Date: 01/08/2003 8:15 Prep By: MW Method E200.7

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Antimony	1	1.034	103	85	115
Arsenic	1	1.013	101	85	115
Lead	1	1.009	101	85	115
Selenium	1	1.033	103	85	115
Thallium	1	1.022	102	85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 03010140-01
RunID: TJAT_030116A-1465790 Units: mg/L
Analysis Date: 01/16/2003 13:01 Analyst: NS
Preparation Date: 01/08/2003 8:15 Prep By: MW Method E200.7

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Antimony	0.1135	1	1.173	105.9	1	1.106	99.27	6.492	20	85	115
Arsenic	0.01184	1	1.054	104.3	1	0.9902	97.84	6.350	20	85	115
Lead	ND	1	1.019	101.7	1	0.9593	95.76	6.014	20	85	115
Selenium	ND	1	1.068	106.8	1	1.008	100.8	5.792	20	85	115
Thallium	ND	1	1.043	104.3	1	0.9808	98.08	6.158	20	85	115

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	03010140	Received By:	NB
Date and Time Received:	1/7/2003 9:30:00 AM	Carrier name:	FedEx
Temperature:	3	Chilled by:	Water Ice

1.	Shipping container/cooler in good condition?	Ye	☑	No ☐	Not Present	☐
2.	Custody seals intact on shippping container/cooler?	Ye	☑	No ☐	Not Present	☐
3.	Custody seals intact on sample bottles?	Ye	☐	No ☐	Not Present	☑
4.	Chain of custody present?	Ye	☑	No ☐		
5.	Chain of custody signed when relinquished and receiv	Ye	☑	No ☐		
6.	Chain of custody agrees with sample labels?	Ye	☑	No ☐		
7.	Samples in proper container/bottle?	Ye	☑	No ☐		
8.	Sample containers intact?	Ye	☑	No ☐		
9.	Sufficient sample volume for indicated test?	Ye	☑	No ☐		
10.	All samples received within holding time?	Ye	☑	No ☐		
11.	Container/Temp Blank temperature in compliance?	Ye	☑	No ☐		
12.	Water - VOA vials have zero headspace	Ye	☐	No ☐	Not Applicable	☑
13.	Water - pH acceptable upon receipt?	Ye	☑	No ☐	Not Applicable	☐

SPL Representative: _____ Contact Date & Time: _____

Client Name Contacted: _____

Non Conformance Issues: _____

Client Instructions: _____

6 5010140

KIFF ANALYTICAL LLC

2795 Second Street, Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4803

Southern Petroleum Laboratory
Houston, TX

Lab No. ________ Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF to): Joel Kiff

EDF Report? X Yes __ No

Company/Address: Kiff Analytical, LLC

Recommended but not mandatory to complete this section:

Sampling Company Log Code: BTSS

Global ID: T0600101270

EDF Deliverable to (Email Address): inbox@kiffanalytical.com

Phone No.:

FAX No.:

Project Number: 030102-SS3

P.O. No.: 30728

Project Name: 5755 Broadway, Oakland

E-mail address: inbox@kiffanalytical.com

Project Address:

Analysis Request

Sample Designation	Sampling Date	Sampling Time	Container: Glass Jar	Poly	Amber			Preservative: HCl	HNO3	ICE	NONE	Matrix: WATER	SOIL		CAM 17 METALS BY 200.7								Date due: January 17, 2003	For Lab Use Only
S-2	1/2/03	1200		1					X	X		X			X								X	
H-1	1/2/03	1140		1					X	X		X			X								X	

Relinquished by:	Date	Time	Received by:
[signature] / Kiff Analytical	010603	1405	
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by Laboratory:
	1/7/03	0930	[signature]

Remarks: Return Shipped Coolers

Incident# 98995756

Bill to: Karen Petryna

SHELL Chain Of Custody Record

Lab Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be invoiced: Karen Petryna

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

30728

INCIDENT NUMBER (S&E ONLY): 98995756

SAP or CRMT NUMBER (TS/CRMT):

DATE: 1/2/03

PAGE: 1 of 1

SAMPLING COMPANY	LOG CODE	SITE ADDRESS (Street and City)	GLOBAL ID NO.
Blaine Tech Services	BTSS	5755 Broadway, Oakland	T0600101270

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	BTS # 030102-SS

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

SAMPLER NAME(S) (Print): SUCHEON SUNG

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)	8260 FULL SUITE	CAM 17 METALS BY 200.7							TEMPERATURE ON RECEIPT C°
	S-2	1/2/03	1200	GW	4											X	X							-01
	H-1	"	1140	"	"											X	X							-02

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

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) John Cuttle/Kiff Analytical	Date: 010303	Time: 1053

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 # 030930-R42 Date 1/30/03 Client Shell

Site 5755 Broadway, 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	
S-1	3					2.12	11.68		
S-2	4		gauged w/ stinger		in well	2.09 ~~2.16~~	9.63		
S-3	4					2.16	9.71		
H-1	4		gauged w/ stinger		in well	2.10	12.04		
T-2	12					1.01	13.02		
		T-2: check w/ disp. bailer for product before and saw none.							

SHELL WELL MONITORING DATA SHEET

BTS #: 030130-RH2	Site: 5755 Broadway, Oakland
Sampler: Ryan H	Date: 1/30/03
Well I.D.: S-1	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth (TD): 11.68	Depth to Water (DTW): 2.12
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 4.07	

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

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

3.5 (Gals.) X	3	=	10.5 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 (uS))	Turbidity (NTUs)	Gals. Removed	Observations
1025	64.6	7.7	470	>200	3.5	cloudy
1028	63.1	7.9	430	107	7.0	turbid
1033	62.7	7.8	448	110	10.5	"

Did well dewater? Yes (No) Gallons actually evacuated: 10.5

Sampling Date: 1/30/03 Sampling Time: 1215 Depth to Water: 5.92 @ site departure

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

SHELL WELL MONITORING DATA SHEET

BTS #: 030130-RH-2	Site: 5755 Broadway, Oakland
Sampler: Ryan H	Date: 1/30/03
Well I.D.: S-2	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 9.63	Depth to Water (DTW): 2.09
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 3.60	

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

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

5.0 (Gals.) X	3	=	15.0 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
1137	62.6	7.0	1005	59.2	5.0	Clear
	Well dewatered @ 6.0 gal					DTW = 7.14
1230	63.1	7.0	975	36.2	6.0	Clear

Did well dewater? (Yes) No Gallons actually evacuated: 6.0

Sampling Date: 1/30/03 Sampling Time: 1230 Depth to Water: 3.60

Sample I.D.: S-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 #: 030130-RH2	Site: 5755 Broadway, Oakland
Sampler: Ryan H	Date: 1/30/03
Well I.D.: S-3	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 9.71	Depth to Water (DTW): 2.16
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 3.67	

Purge Method: Bailer, Disposable Bailer, Middleburg, (Electric Submersible), Waterra, Peristaltic, Extraction Pump, Other_____

Sampling Method: (Bailer), Disposable Bailer, Extraction Port, Dedicated Tubing, Other:_____

1 Case Volume	Specified Volumes	Calculated Volume
5 (Gals.) X	3 =	15 Gals.

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
1042	62.9	7.5	735	55.0	5.0	clear
1043	Well dewatered @		7.5 gal			DTW = 7.52
1145	64.3	7.2	712	34.2	7.5	clear

Did well dewater? (Yes) No Gallons actually evacuated: 7.5

Sampling Date: 1/30/03 Sampling Time: 1145 Depth to Water: ~~7~~ 3.45

Sample I.D.: S-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 #: 030130-RH2	Site: 5755 Broadway, Oakland
Sampler: RyanH	Date: 1/30/03
Well I.D.: H-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 12.04	Depth to Water (DTW): 2.10
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) 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 / Waterra / Peristaltic / Extraction Pump / Other ____

Sampling Method: Bailer / (Disposable Bailer) / Extraction Port / Dedicated Tubing / Other: ____

Grab (Gals.) X 3 = 0 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
1000	63.1	6.5	299	54.4	0	clear w/ debris

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

Sampling Date: 1/30/03 Sampling Time: 1000 Depth to Water: 2.10

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

SHELL WELL MONITORING DATA SHEET

BTS #: 030130-RH-2	Site: 5755 Broadway, Oakland
Sampler: RyanH	Date: 1/30/03
Well I.D.: T-2	Well Diameter: 2 3 4 6 8 (12)
Total Well Depth (TD): 13.02	Depth to Water (DTW): ~~13~~ 1.01
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 3.41	

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

Sampling Method: (Bailer), Disposable Bailer, Extraction Port, Dedicated Tubing, Other:_____

70 (Gals.) X 3 = 210 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

5.87 ~~5.87~~ - 12

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1100	60.6	7.4	626	40.9	70.0	clear, odor
1115	60.9	7.4	641	36.9	140.0	" "
1128	60.3	7.4	641	31.5	210.0	" "

Did well dewater? Yes (No) Gallons actually evacuated: 210.0

Sampling Date: 1/30/03 Sampling Time: 1133 Depth to Water: 1.01

Sample I.D.: T-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

WELL GAUGING DATA

Project # 030102-553 Date 1/2/03 Client SHELL

Site 5755 BROADWAY OAKLAND, CA.

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
S-2	4					2.15	9.63		
H-1	4					1.45	12.04	↓	
GAUGED	W/	STINGER	IN	HOLE					

SHELL WELL MONITORING DATA SHEET

BTS #: 030102-553	Site: 5755 BROADWAY OAKLAND
Sampler: SOOCH	Date: 1/2/03
Well I.D.: S-2	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 9.63	Depth to Water (DTW): 2.15
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 3.65	

Purge Method: Bailer / Disposable Bailer / Middleburg / (Electric Submersible) / Waterra / Peristaltic / Extraction Pump / Other____

Sampling Method: (Bailer) / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ____

5 (Gals.) X	3	=	15 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
1147	62.9	6.9	1006	15	5	CLEAR / GAS ODOR
WELL DEWATERED @ 5 gal.						DTW = 7.65
1200	63.5	7.0	985	14	———	CLEAR / GAS ODOR

Did well dewater? (Yes) No Gallons actually evacuated: 5

Sampling Date: 1/2/03 Sampling Time: 1200 Depth to Water: 6.10 @ SITE DEPART.

Sample I.D.: S-2 Laboratory: (Kiff) SPL Other____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: EPA 8260 FULL SUITE + CAM 17 METALS BY 200.7

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 #: 030102-553	Site: 5755 BROADWAY OAKLAND
Sampler: SOOCH	Date: 1/2/03
Well I.D.: H-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 12.04	Depth to Water (DTW): ~~12.04~~ 1.45
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 3.57	

Purge Method: Bailer, Disposable Bailer, Middleburg, (Electric Submersible), Waterra, Peristaltic, Extraction Pump, Other_____

Sampling Method: (Bailer), Disposable Bailer, Extraction Port, Dedicated Tubing, Other:_____

7 (Gals.) X 3 = 21 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
1132	62.8	7.5	624	40	7	CLEAR
1134	63.5	7.4	590	34	14	"
1136	63.8	7.4	581	20	21	"

Did well dewater? Yes (No) Gallons actually evacuated: 21

Sampling Date: 1/2/03 Sampling Time: 1140 Depth to Water: 3.55

Sample I.D.: H-1 Laboratory: (Kiff) SPL Other_____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: EPA 8260 FULL SUITE + CAM 17 METALS BY 200.7

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