RO-404

Consider sensitive receptor survey done!
Do fate & transport, determine when irrigation well at 1300 feet away will be impacted.

CAMBRIA

November 26, 2001

If plume has gone that far, sample irrigation well

eva chu
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

NOV 29 2001

Re: **Third Quarter 2001 Monitoring**
Former Shell Service Station
8930 Bancroft Avenue
Oakland, California
Incident #98995742
Cambria Project #243-1408-002

Dear Ms. chu:

On behalf of Equiva Services LLC, Cambria Environmental Technology, Inc. (Cambria) is submitting this groundwater monitoring report in accordance with the reporting requirements of 23 CCR 2652d.

REMEDIATION SUMMARY

Weekly groundwater extraction (GWE) was performed on well MW-4 during March through May 2000. Approximately 1,075 gallons of water were extracted from the well and an estimated 0.1 pounds of MTBE were removed. GWE was discontinued due to low extraction volumes.

THIRD QUARTER 2001 ACTIVITIES

Groundwater Monitoring: Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled selected site 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.

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

ANTICIPATED FOURTH QUARTER 2001 ACTIVITIES

Groundwater Monitoring: Blaine will gauge and sample selected site wells and tabulate the data. Cambria will prepare a monitoring report.

Oxygen Releasing Compound (ORC) Installation: Cambria recommends installing ORC in well MW-4 to enhance the biological degradation of residual chemicals in groundwater at the site. Blaine will install ORC in well MW-4 during the fourth quarter 2001 and replace the ORC approximately every six months. To monitor the effectiveness of the ORC, Blaine will measure dissolved oxygen concentrations in well MW-4 and in upgradient (background) well MW-3 prior to the installation of ORC and quarterly thereafter.

CAMBRIA

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

Stephan A. Bork, C.E.G., C.HG.
Associate Hydrogeologist

REGISTERED GEOLOGIST
STEPHAN A. BORK
No. EG 2058
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

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

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

cc: Karen Petryna, Equiva Services LLC, P.O. Box 7869, Burbank, California 91510-7869
Leroy Griffin, Fire Prevention Bureau, 250 Frank Ogawa Plaza, 3rd Floor, Suite 3341, Oakland, CA 94612
Sidhu Associates, 8930 Bancroft Ave., Oakland, CA 94605

g:\oakland8930bancroft\qm3q01qm.doc

09/28/01

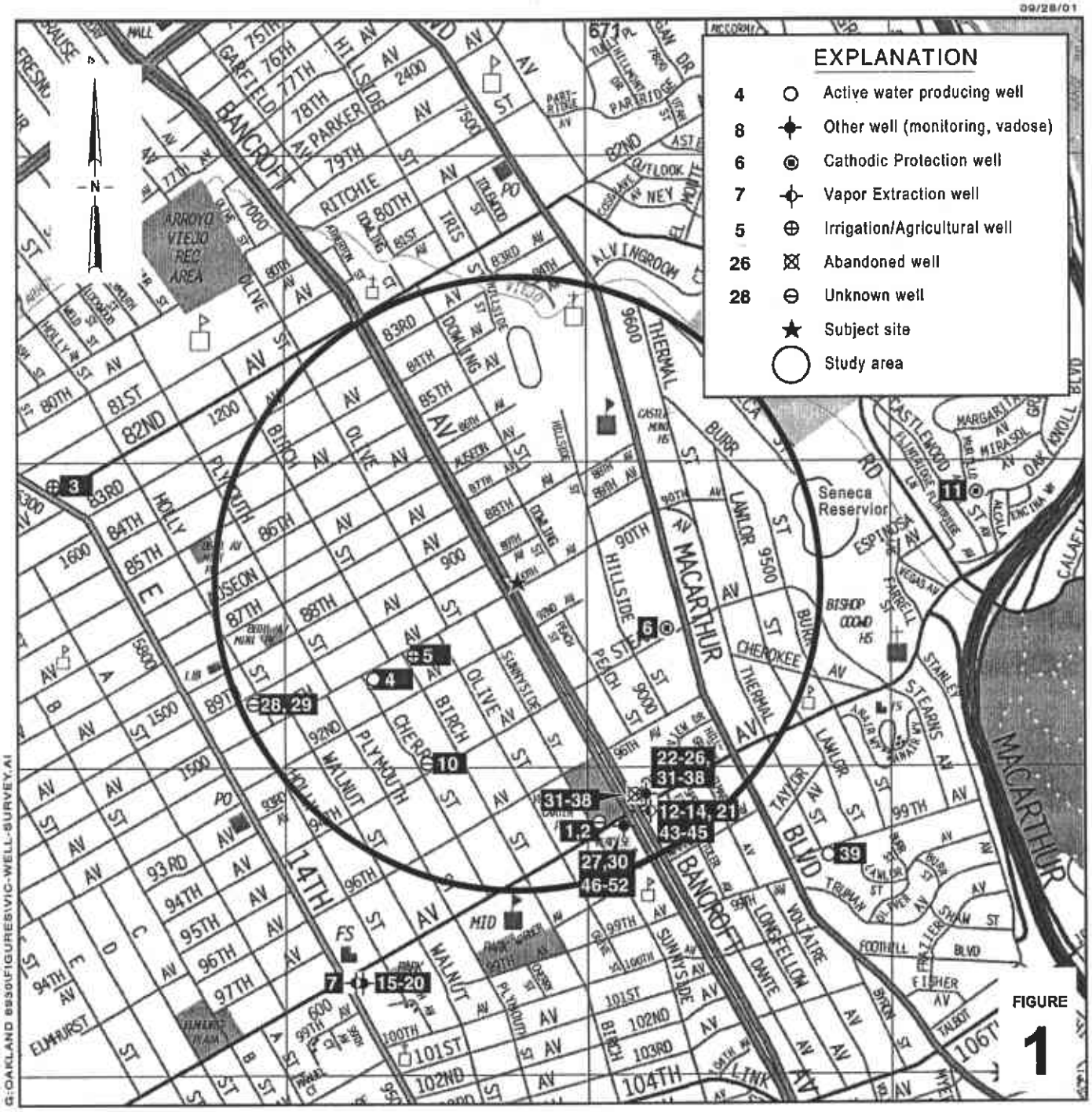

FIGURE 1

0 1/8 1/4 1/2 1

SCALE 1:1/4 MILES

G:\OAKLAND 8930\FIGURES\VIC-WELL-SURVEY.AI

Shell-branded Service Station
8930 Bancroft Avenue
Oakland, California
Incident #98995742

CAMBRIA

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

Groundwater Elevation Contour Map

September 20, 2001

EXPLANATION

- MW-1 — Monitoring well location
- SB-A — Cambria soil boring location (04/01/01)
- Groundwater flow direction
- XX.XX — Groundwater elevation contour, in feet above mean sea level (msl), approximately located
- Well designation
- ELEV — Groundwater elevation, in feet above msl
- Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8260; results in parentheses were analyzed by EPA Method 8020.
- Sanitary Sewer line
- Storm Drain line
- Storm drain flow direction
- Drain inlet
- Manhole
- FL — Flowline elevation (msl)

NOTE: Conduit locations are approximate

MW-1 37.66 (<0.50) - 6/27/01 (<2.5) - 6/27/01
MW-2 37.47 <0.50 <5.0
MW-3 37.95 (<0.50) - 6/27/01 (<2.5) - 6/27/01
MW-4 37.43 3.8 940
MW-5 37.48 <0.50 21
MW-6 37.18 <0.50 <5.0

37.75 37.75 37.50 37.50 37.25 37.25

station building
property line
former USTs
pump islands
former pump island
USTs
48" storm drain
12" storm drain
FL = 51.30'
FL = 43.97'
15" storm drain
FL = 44.99'
FL = 44.21'
FL = 44.03'
FL = 43.06'
FL = 46.11'
median
42" storm drain
FL = 45.00'
10" sanitary sewer
8" sanitary sewer
90TH AVENUE
BANCROFT AVENUE
SB-A
SB-B
SB-C
sidewalk
residential property
residential property
residential property

0 15 30 60
Scale (ft)

FIGURE 2

Shell-branded Service Station
8930 Bancroft Avenue
Oakland, California
Incident #98995742

CAMBRIA

G:\OAKLAND\8930BANCROFT\FIGURES\3CAM01.MFI 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

October 19, 2001

Karen Petryna
Equiva Services LLC
P.O. Box 7869
Burbank, CA 91510-7869

Third Quarter 2001 Groundwater Monitoring at
Shell-branded Service Station
8930 Bancroft Avenue
Oakland, CA

Monitoring performed on September 20, 2001

Groundwater Monitoring Report **010920-D-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 Shell Martinez Manufacturing Complex.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

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,

Nick Sudano
Project Coordinator

NS/jt

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

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

WELL CONCENTRATIONS
Shell-branded Service Station
8930 Bancroft Avenue
Oakland, CA
Wic #204-5508-1305

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
MW-1	12/17/1998	<50	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	53.19	11.87	41.32
MW-1	03/09/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	53.19	8.21	44.98
MW-1	06/16/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	53.19	15.04	38.15
MW-1	09/30/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	53.19	16.02	37.17
MW-1	12/23/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	53.19	14.78	38.41
MW-1	03/22/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	53.19	8.44	44.75
MW-1	06/01/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	53.19	13.71	39.48
MW-1	09/08/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	53.19	14.95	38.24
MW-1	12/04/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	5.82	NA	53.19	13.85	39.34
MW-1	03/09/2001	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	53.19	9.07	44.12
MW-1	06/27/2001	<50	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	53.19	14.90	38.29
MW-1	**09/20/2001**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**53.19**	**15.53**	**37.66**
MW-2	12/17/1998	9,900	NA	<5.0	37	22	47	48	<20	52.66	11.65	41.01
MW-2	03/09/1999	2,760	NA	12.3	7.50	85.4	444	<50.0	NA	52.66	8.07	44.59
MW-2	06/16/1999	2,570	NA	36.3	11.6	6.19	10.8	<50.0	NA	52.66	14.63	38.03
MW-2	09/30/1999	1,960	NA	19.1	3.20	4.55	26.9	<25.0	NA	52.66	15.63	37.03
MW-2	12/23/1999	145	NA	1.30	<0.500	<0.500	0.899	<2.50	NA	52.66	14.42	38.24
MW-2	03/22/2000	6,060	NA	18.9	<10.0	210	651	<100	NA	52.66	8.19	44.47
MW-2	06/01/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	52.66	11.46	41.20
MW-2	09/08/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	52.66	14.63	38.03
MW-2	12/04/2000	201	NA	1.35	<0.500	3.39	8.58	<2.50	NA	52.66	13.45	39.21
MW-2	03/09/2001	396	NA	2.82	<0.500	8.69	18.7	<2.50	NA	52.66	8.89	43.77
MW-2	06/27/2001	<50	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	52.66	14.88	37.78
MW-2	**09/20/2001**	**<50**	**NA**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**	**<5.0**	**52.66**	**15.19**	**37.47**

WELL CONCENTRATIONS
Shell-branded Service Station
8930 Bancroft Avenue
Oakland, CA
Wic #204-5508-1305

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
MW-3	12/17/1998	<50	NA	<0.50	<0.50	<0.50	<0.50	10	11	51.30	11.85	39.45
MW-3	03/09/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	51.30	6.53	44.77
MW-3	06/16/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	51.30	12.71	38.59
MW-3	09/30/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	5.14	NA	51.30	14.07	37.23
MW-3	12/23/1999	<500	NA	<5.00	<5.00	<5.00	<5.00	<25.0	NA	51.30	12.82	38.48
MW-3	03/22/2000	<50.0	NA	<0.500	1.48	<0.500	1.90	<5.00	NA	51.30	6.81	44.49
MW-3	06/01/2000	<50.0	NA	<0.500	0.821	<0.500	<0.500	4.39	NA	51.30	11.85	39.45
MW-3	09/08/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	3.62	NA	51.30	12.55	38.75
MW-3	12/04/2000	<50.0	NA	<0.500	<0.500	<0.500	0.588	4.74	NA	51.30	11.65	39.65
MW-3	03/09/2001	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	51.30	7.28	44.02
MW-3	06/27/2001	<50	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	51.30	13.16	38.14
MW-3	**09/20/2001**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**51.30**	**13.35**	**37.95**
MW-4	12/17/1998	700	NA	4.3	0.88	<0.50	<0.50	21,000	26,000	50.73	10.80	39.93
MW-4	03/09/1999	83.9	NA	<0.500	<0.500	<0.500	<0.500	17,900	23,700	50.73	6.91	43.82
MW-4	06/16/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	10,600	19,200	50.73	12.84	37.89
MW-4	09/30/1999	51.2	NA	<0.500	<0.500	<0.500	<0.500	12,200	12,300	50.73	13.74	36.99
MW-4	12/23/1999	<100	NA	<1.00	<1.00	<1.00	<1.00	7,990	8,400	50.73	12.40	38.33
MW-4	03/22/2000	<500	NA	<5.00	<5.00	<5.00	<5.00	4,970	5,020	50.73	7.32	43.41
MW-4	06/01/2000	<100	NA	<1.00	<1.00	<1.00	<1.00	5,260	3,580	50.73	11.50	39.23
MW-4	09/08/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	3,610	3,300a	50.73	12.55	38.18
MW-4	12/04/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	2,960	3,520a	50.73	11.77	38.96
MW-4	03/09/2001	<50.0	NA	<0.500	<0.500	<0.500	<0.500	1,930	2,500	50.73	7.48	43.25
MW-4	06/27/2001	<50	NA	<0.50	<0.50	<0.50	<0.50	1,100	1,100	50.73	12.97	37.76
MW-4	**09/20/2001**	**<250**	**NA**	**3.8**	**14**	**2.6**	**7.8**	**NA**	**940**	**50.73**	**13.30**	**37.43**
MW-5	12/17/1998	750	NA	<0.50	17	1.8	3.5	33	32	51.43	11.51	39.92

WELL CONCENTRATIONS
Shell-branded Service Station
8930 Bancroft Avenue
Oakland, CA
Wic #204-5508-1305

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
MW-5	03/09/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	51.43	7.15	44.28
MW-5	06/16/1999	646	NA	9.26	1.05	<1.00	<1.00	<10.0	NA	51.43	13.47	37.96
MW-5	09/30/1999	484	NA	1.93	0.511	<0.500	<0.500	159	NA	51.43	14.41	37.02
MW-5	12/23/1999	944	NA	4.59	17.7	3.79	16.7	214	NA	51.43	14.07	37.36
MW-5	03/22/2000	8,770	NA	197	96.5	<50.0	188	2,450	NA	51.43	7.31	44.12
MW-5	06/01/2000	227	NA	0.565	<0.500	<0.500	<0.500	35.9	NA	51.43	12.15	39.28
MW-5	09/08/2000	159	NA	0.606	<0.500	<0.500	1.74	1,000	NA	51.43	13.30	38.13
MW-5	12/04/2000	1,510	NA	19.2	<10.0	<10.0	134	1,360	NA	51.43	12.19	39.24
MW-5	03/09/2001	3,460	NA	37.9	121	40.6	208	235	NA	51.43	7.79	43.64
MW-5	06/27/2001	310	NA	0.97	<0.50	<0.50	<0.50	14	NA	51.43	13.89	37.54
MW-5	**09/20/2001**	**310**	**NA**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**	**21**	**51.43**	**13.95**	**37.48**
MW-6	12/17/1998	940	NA	27	0.32	2.4	2.3	3.0	3.2	51.88	11.37	40.51
MW-6	03/09/1999	336	NA	7.78	1.60	2.40	6.36	<10.0	NA	51.88	8.10	43.78
MW-6	06/16/1999	308	NA	2.45	<0.500	<0.500	<0.500	7.39	NA	51.88	14.49	37.39
MW-6	09/30/1999	80.2	NA	<0.500	<0.500	<0.500	<0.500	24.8	NA	51.88	15.30	36.58
MW-6	12/23/1999	149	NA	0.518	<0.500	<0.500	<0.500	6.43	NA	51.88	13.19	38.69
MW-6	03/22/2000	382	NA	3.31	2.18	0.619	2.35	5.61	NA	51.88	8.27	43.61
MW-6	06/01/2000	158	NA	0.830	<0.500	<0.500	1.10	10.9	NA	51.88	11.13	40.75
MW-6	09/08/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	51.88	14.28	37.60
MW-6	12/04/2000	231	NA	4.93	<0.500	<0.500	<0.500	4.57	NA	51.88	12.62	39.26
MW-6	03/09/2001	789	NA	11.6	2.72	<2.00	<2.00	28.0	NA	51.88	8.65	43.23
MW-6	06/27/2001	140	NA	<0.50	1.1	<0.50	<0.50	<2.5	NA	51.88	14.95	36.93
MW-6	**09/20/2001**	**<50**	**NA**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**	**<5.0**	**51.88**	**14.70**	**37.18**

WELL CONCENTRATIONS
Shell-branded Service Station
8930 Bancroft Avenue
Oakland, CA
Wic #204-5508-1305

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to September 20, 2001 analyzed by EPA Method 8015

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

BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to September 20, 2001 analyzed by EPA Method 8020

MTBE = methyl-tertiary-butyl ether by EPA Method 8020

TOC = Top of Casing Elevation

GW = Groundwater

ug/L = parts per billion

msl = Mean sea level

ft = Feet

<n = Below detection limit

NA = Not applicable

Notes:

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

KIFF ANALYTICAL LLC

Report Number : 22478
Date : 10/8/2001

Nick Sudano
Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112-1105

Subject : 4 Water Samples
Project Name : 8930 Bancroft Avenue, Oakland
Project Number : 010920-D2
P.O. Number : 98995742

Dear Mr. Sudano,

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 : 22478

Date : 10/8/2001

Project Name : **8930 Bancroft Avenue, Oakland**

Project Number : **010920-D2**

Sample : **MW-2** Matrix : Water Lab Number : 22478-01

Sample Date :9/20/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/4/2001
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	10/4/2001
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/4/2001
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	10/4/2001
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	10/4/2001
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	10/4/2001
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	10/4/2001
4-Bromofluorobenzene (Surr)	96.0		% Recovery	EPA 8260B	10/4/2001

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 22478

Date : 10/8/2001

Project Name : **8930 Bancroft Avenue, Oakland**

Project Number : **010920-D2**

Sample : **MW-4** Matrix : Water Lab Number : 22478-02

Sample Date :9/20/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	3.8	2.5	ug/L	EPA 8260B	10/4/2001
Toluene	14	2.5	ug/L	EPA 8260B	10/4/2001
Ethylbenzene	2.6	2.5	ug/L	EPA 8260B	10/4/2001
Total Xylenes	7.8	2.5	ug/L	EPA 8260B	10/4/2001
Methyl-t-butyl ether (MTBE)	940	2.5	ug/L	EPA 8260B	10/4/2001
Diisopropyl ether (DIPE)	< 2.5	2.5	ug/L	EPA 8260B	10/4/2001
Ethyl-t-butyl ether (ETBE)	< 2.5	2.5	ug/L	EPA 8260B	10/4/2001
Tert-amyl methyl ether (TAME)	2.6	2.5	ug/L	EPA 8260B	10/4/2001
Tert-Butanol	< 50	50	ug/L	EPA 8260B	10/4/2001
Ethanol	< 500	500	ug/L	EPA 8260B	10/4/2001
TPH as Gasoline	< 250	250	ug/L	EPA 8260B	10/4/2001
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	10/4/2001
4-Bromofluorobenzene (Surr)	106		% Recovery	EPA 8260B	10/4/2001

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 22478

Date : 10/8/2001

Project Name : **8930 Bancroft Avenue, Oakland**

Project Number : **010920-D2**

Sample : **MW-5** Matrix : Water Lab Number : 22478-03

Sample Date :9/20/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/3/2001
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	10/3/2001
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/3/2001
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	10/3/2001
Methyl-t-butyl ether (MTBE)	**21**	0.50	ug/L	EPA 8260B	10/3/2001
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	10/3/2001
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	10/3/2001
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	10/3/2001
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	10/3/2001
Ethanol	**< 500**	500	ug/L	EPA 8260B	10/3/2001
TPH as Gasoline	**310**	50	ug/L	EPA 8260B	10/3/2001
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	10/3/2001
4-Bromofluorobenzene (Surr)	106		% Recovery	EPA 8260B	10/3/2001

Approved By: Joel Kiff

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KIFF ANALYTICAL LLC

Report Number : 22478

Date : 10/8/2001

Project Name : **8930 Bancroft Avenue, Oakland**

Project Number : **010920-D2**

Sample : **MW-6** Matrix : Water Lab Number : 22478-04

Sample Date :9/20/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/4/2001
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	10/4/2001
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/4/2001
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	10/4/2001
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	10/4/2001
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	10/4/2001
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/4/2001
4-Bromofluorobenzene (Surr)	94.8		% Recovery	EPA 8260B	10/4/2001

Approved By: Joel Kiff

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

Report Number : 22478

Date : 10/8/2001

Project Name : **8930 Bancroft Avenue,**

Project Number : **010920-D2**

22478 Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/4/2001
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	10/4/2001
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	10/4/2001
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	10/4/2001
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	10/4/2001
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	10/4/2001
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	10/4/2001
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	10/4/2001
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	10/4/2001
Ethanol	**< 500**	500	ug/L	EPA 8260B	10/4/2001
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	10/4/2001
Toluene - d8 (Surr)	98.6		% Recovery	EPA 8260B	10/4/2001
4-Bromofluorobenzene (Surr)	99.5		% Recovery	EPA 8260B	10/4/2001

Approved By: Joel Kiff

Report Number : 22478

Date : 10/8/2001

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **8930 Bancroft Avenue,**

Project Number : **010920-D2**

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
Spike Recovery Data														
Benzene	22478-01	<0.50	20.1	19.0	19.8	18.3	ug/L	EPA 8260B	10/4/2001	98.3	96.2	2.08	70-130	25
Toluene	22478-01	<0.50	20.1	19.0	20.1	18.5	ug/L	EPA 8260B	10/4/2001	99.7	97.4	2.31	70-130	25
Tert-Butanol	22478-01	<5.0	101	95.0	98.2	92.9	ug/L	EPA 8260B	10/4/2001	97.5	97.7	0.215	70-130	25
Methyl-t-Butyl Ether	22478-01	<0.50	20.1	19.0	19.6	17.9	ug/L	EPA 8260B	10/4/2001	97.1	94.1	3.14	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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Report Number : 22478

Date : 10/8/2001

QC Report : Laboratory Control Sample (LCS)

Project Name : **8930 Bancroft Avenue,**

Project Number : **010920-D2**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	10/3/2001	101	70-130
Toluene	40.0	ug/L	EPA 8260B	10/3/2001	103	70-130
Tert-Butanol	200	ug/L	EPA 8260B	10/3/2001	98.3	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	10/3/2001	92.9	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

LAB: KIFF

EQUIVA Services LLC Chain Of Custody Record

Lab Identification (if necessary):

Address:

City, State, Zip:

Equiva Project Manager to be invoiced:

☑ SCIENCE & ENGINEERING

[redacted]

☐ CRMT HOUSTON

Karen Petryna

22478

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 6 7 4 2

SAP or CRMT NUMBER (TS/CRMT): [redacted]

DATE: 9/20/04

PAGE: 1 of 1

CONSULTANT COMPANY: Blaine Tech Services

ADDRESS: 1680 Rogers Avenue

CITY: San Jose, CA 95112

TELEPHONE: 408-573-0555 FAX: 408-573-7771 E-MAIL: nsudano@blainetech.com

SITE ADDRESS (Street and City): 8930 Bancroft Avenue, Oakland

PROJECT CONTACT (Report to): Nick Sudano

CONSULTANT PROJECT NO.: BTS # 010920-B2

SAMPLER NAME(S) (Print): Jeremy Jones / George Dreninger

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: TEMPERATURE ON RECEIPT C°

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 - 0.5 ppbRL)	Oxygenates (5) by (8260)	Ethanol (8260B)	Methanol	1,2-DCA (8260B)	EDB (8260B)	TPH-Diesel, Extractable (8015m)		MTBE (8260B) Confirmation, See note								FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
	MW-2	9/20/04	1445	W	3	X	X	X																-01
	MW-4		1412			X	X	X		X	X													-02
	MW-5		1426			X	X	X		X	X													-03
	MW-6		1425			X	X	X																-04

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Jeremy Jones			
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	John Cuttle / Kiff Bradford	092101	1118

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 # 010920-DL Date 9/20/01 Client EQUILVA

Site 8930 Bancroft, Oakland

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-1	3					15.53	16.88		
MW-2	3					15.19	19.20		
MW-3	3					13.35	19.66		
MW-4	3					13.30	19.57		
MW-5	3					13.95	19.64		
MW-6	3					14.70	19.70	TOC	

EQUIVA WELL MONITORING DATA SHEET

BTS #: 010920-D2	Site: 98995742
Sampler: GMO	Date: 9/20/01
Well I.D.: MW-2	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 19.20	Depth to Water: 15.19
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: ____

1.5 (Gals.) X 3 = 4.5 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.	Turbidity	Gals. Removed	Observations
1428	70.0	6.43	355	32	1.5	Clear
1434	70.1	6.34	359	113	3	Clear/Cloudy
1440	69.8	6.39	366	129	4.5	Cloudy
					DTW -	16.01

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

Sampling Time: 1445 Sampling Date: 9/20/01

Sample I.D.: MW-2 Laboratory: (Kiff) Sequoia 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

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EQUIVA WELL MONITORING DATA SHEET

BTS #: 010920-D2	Site: 98995742
Sampler: GMO	Date: 9/20/01
Well I.D.: MW-4	Well Diameter: 2 (3) 4 6 8 ____
Total Well Depth: 19.66	Depth to Water: 13.35
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; (X) Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other ____

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

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

2 3 (Gals.) X 3 = 6.9 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1405	77.3	7.1	1750	7200	3	VERY SILTY
1406	76.5	7.1	1690	7200	5	
1407	76.3	7.1	1683	7200	7	

Did well dewater? Yes (No) Gallons actually evacuated: 7

Sampling Time: 1412 Sampling Date: 9/20/01

Sample I.D.: MW-4 Laboratory: (Kiff) Sequoia 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

EQUIVA WELL MONITORING DATA SHEET

BTS #: 010920-D2	Site: 98995742
Sampler: GMO	Date: 9/20/01
Well I.D.: MW-5	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 19.64	Depth to Water: 13.95
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; X Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other ____

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

2.1 (Gals.) X 3 = 6.3 Gals.
Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1419	76.2	6.9	366	>200	3	
1420	76.0	6.9	312	>200	5	
1421	76.1	6.9	353	>200	7	

Did well dewater? Yes (No) Gallons actually evacuated: 7

Sampling Time: 1424 Sampling Date: 9/20/01

Sample I.D.: MW-5 Laboratory: (Kiff) Sequoia 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

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EQUIVA WELL MONITORING DATA SHEET

BTS #: 010920-D2	Site: 98995742
Sampler: GMO	Date: 9/20/01
Well I.D.: MW-6	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 19.70	Depth to Water: 14.70
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: ____

1.9 (Gals.) X 3 = 5.7 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.	Turbidity	Gals. Removed	Observations
1405	74.4	6.66	463	101	2	Cloudy
1409	71.9	6.54	400	171	4	Turbid/black
1415	71.0	6.58	419	>200	6	Turbid/black
* Wellbox	was	filled w/	water-	water in		wellbox
may	have	seeped	into	well-		
					DTW-	15.00

Did well dewater? Yes (No) Gallons actually evacuated: 11

Sampling Time: ~~752~~ 1425 Sampling Date: 9/20/01

Sample I.D.: MW-6 Laboratory: (Kiff) Sequoia 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	