

20-2433

C A M B R I A

February 26, 2002

MAR 01 2002

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

Re: **Fourth Quarter 2001 Monitoring Report and Closure Request**  
Former Shell Service Station  
2160 Otis Drive  
Alameda, California  
Incident #98995140  
Cambria Project #244-0627-002



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.

**FOURTH QUARTER 2001 ACTIVITIES**

**Groundwater Monitoring:** Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled well MW-3 and compiled the analytical data. Cambria prepared a benzene and methyl tertiary butyl ether (MTBE) concentration map (Figure 1). Blaine's report, presenting the laboratory report and supporting field documents, is included as Attachment A.

**Additional Oxygenate Analysis:** As requested in your November 8, 2001 correspondence, in addition to the regular quarterly analysis for total petroleum hydrocarbons as gasoline, benzene, toluene, ethylbenzene, xylenes and MTBE, groundwater samples from monitoring well MW-3 were additionally analyzed for four extra oxygenates by EPA Method 8260. Analytical results for MTBE, diisopropyl ether, ethyl tertiary butyl ether, tertiary amyl methyl ether, and tertiary butyl alcohol are presented on Table 1. None of the additional analytes were detected.

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 FUTURE ACTIVITIES**

**Closure Request:** Your November 8, 2001 correspondence indicated that the site would be reviewed for possible closure pending results of additional oxygenate analysis. As stated above, none of the additional oxygenates analyzed during the fourth quarter 2001 event were detected at the site. The site is no longer a gasoline station and has been completely developed as a commercial building. Based on the lack of significant subsurface impact, Cambria respectfully requests site closure be granted by the Alameda County Health Care Services Agency (ACHCSA) and the Regional Water Quality Control Board at this time.



**Groundwater Monitoring:** During ACHCSA case closure review, Cambria will suspend quarterly monitoring activities at the site. Please contact us if there are any additional requirements for closure.

**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**



*Stephan A. Bork*  
for: Jacquelyn L. Jones  
Project Geologist

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

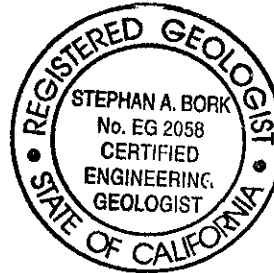


Figure: 1 - Benzene and MTBE Concentration Map

Table: 1 - Groundwater Analytical Data - Oxygenates

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

cc: Karen Petryna, Equiva Services LLC, P.O. Box 7869, Burbank, California 91510-7869  
Harsch Investment Group, 523 West Plaza, Alameda, CA 94501

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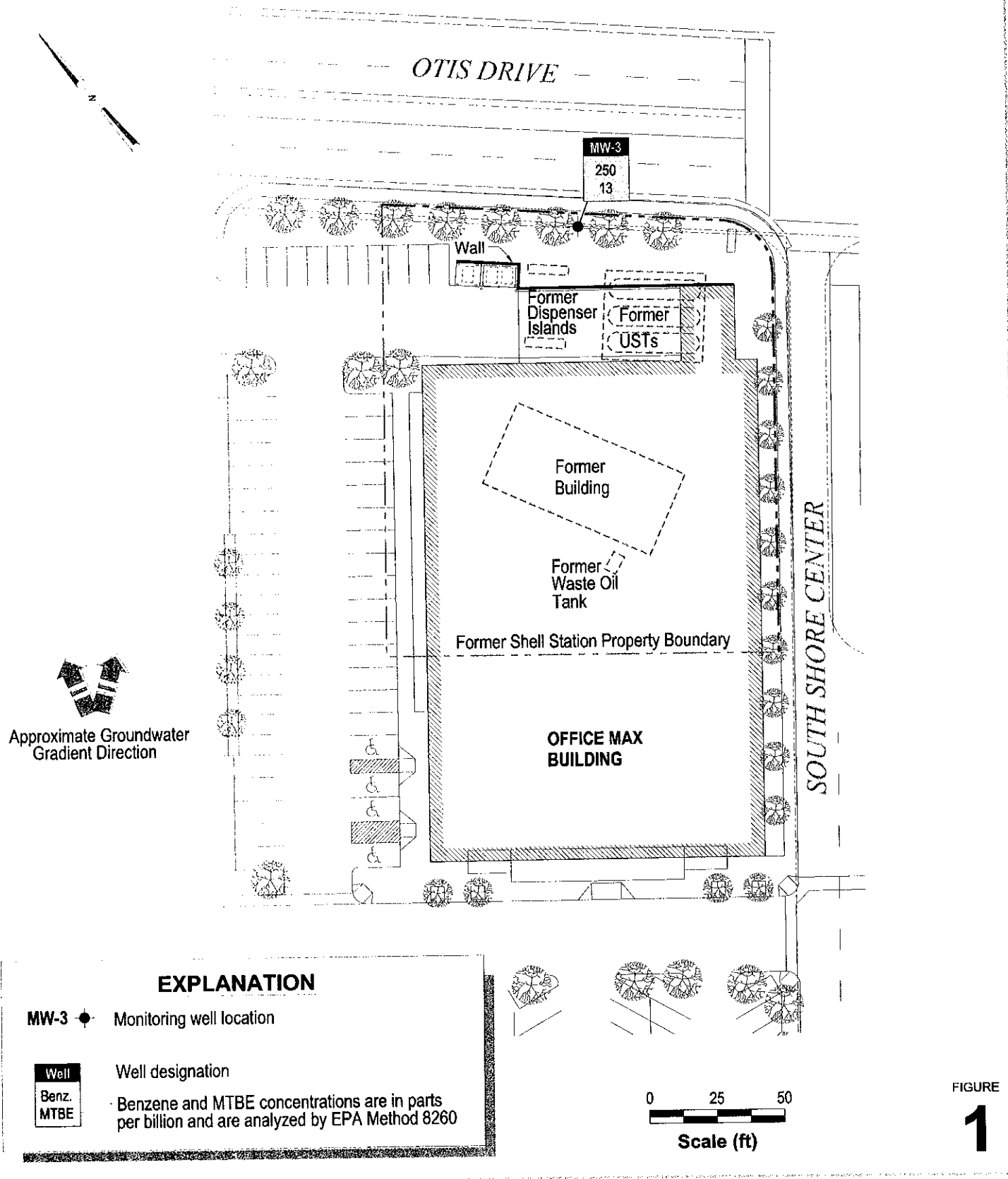


FIGURE 1

**Former Shell Service Station**  
 2160 Otis Street  
 Alameda, California  
 Incident #98995140



C A M B R I A

**Benzene and MTBE  
 Concentration Map**

December 20, 2001

# CAMBRIA

**Table 1. Groundwater Analytical Data - Oxygenates - Shell-branded Service Station, Incident #98995140, 2160 Otis Drive, Alameda, California**

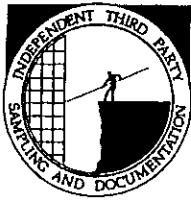
Sample ID	Date Sampled	MTBE	DIPE	ETBE (Concentrations in ppb)	TAME	TBA
MW-3	12/20/01	13	<2.0	<2.0	<2.0	<50

**Abbreviations:**

MTBE = Methyl tert-butyl ether, analyzed by EPA Method 8260  
 DIPE = Di-isopropyl ether, analyzed by EPA Method 8260  
 ETBE = Ethyl tert-butyl ether, analyzed by EPA Method 8260  
 TAME = Tert-amyl methyl ether, analyzed by EPA Method 8260  
 TBA = Tert-butyl alcohol, analyzed by EPA Method 8260  
 ppb = Parts per billion

**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

January 15, 2002

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

Fourth Quarter 2001 Groundwater Monitoring at  
Former Shell Service Station  
2160 Otis Drive  
Alameda, CA

Monitoring performed on December 20, 2001

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Groundwater Monitoring Report **011220-DA-3**

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/mrb

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

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



**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**2160 Otis Street**  
**Alameda, CA**

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)
S-1	09/04/1987	NA	NA	<5	<5	<5	<5	NA	NA	NA	NA	NA
S-1	09/11/1989	<50	<100	<0.5	<1	<1	<3	NA	NA	5.1	4.29	0.81
S-1	04/11/1990	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	4	1.1
S-1	07/10/1990	<90	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	4.25	0.85
S-1	10/09/1990	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	4.46	0.64
S-1	01/17/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	4.53	0.57
S-1	04/09/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	4.2	0.9
S-1	07/10/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	4.42	0.68
S-1	10/09/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	4.87	0.23
S-1	01/24/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	4.9	0.2
S-1	04/23/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	4.66	0.44
S-1	07/01/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	4.85	0.25
S-1	10/02/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	4.8	0.3
S-1	01/05/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	5.38	-0.28
S-1	04/08/1993	NA	NA	NA	NA	NA	NA	NA	NA	5.1	3.69	1.41
S-1	07/20/1993	NA	NA	NA	NA	NA	NA	NA	NA	5.1	4.2	0.9
S-1	10/15/1993	NA	NA	NA	NA	NA	NA	NA	NA	5.1	4.38	0.72
S-1	01/07/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	4.19	0.91
S-1 (D)	01/07/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	4.03	1.07
S-1	07/26/1994	NA	NA	NA	NA	NA	NA	NA	NA	5.1	4.76	0.34
S-1	11/01/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	4.84	0.26
S-1	01/13/1995	NA	NA	NA	NA	NA	NA	NA	NA	5.1	4.07	1.03
S-1	04/20/1995	<50	NA	2.2	0.6	2.2	2.5	NA	NA	5.1	4.14	0.96
S-1	05/23/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	5.1	3.51	1.59
S-1	Well destroyed		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-1	04/11/1990	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	6	5.23	0.77

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**2160 Otis Street**  
**Alameda, CA**

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)
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MW-1	07/10/1990	100	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	5.4	0.6
MW-1	10/09/1990	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	5.61	0.39
MW-1	01/17/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	5.66	0.34
MW-1	04/09/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	4.96	1.04
MW-1	07/10/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	5.52	0.48
MW-1	10/09/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	5.7	0.3
MW-1	01/24/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	5.51	0.49
MW-1	04/23/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	5.14	0.86
MW-1	07/01/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	4.48	1.52
MW-1	10/02/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	5.8	0.2
MW-1	01/05/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	5.34	0.66
MW-1 (D)	01/05/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	NA	NA
MW-1	04/08/1993	NA	NA	NA	NA	NA	NA	NA	NA	6	4.62	1.38
MW-1	07/20/1993	NA	NA	NA	NA	NA	NA	NA	NA	6	5.2	0.8
MW-1	10/15/1993	NA	NA	NA	NA	NA	NA	NA	NA	6	4.37	1.63
MW-1	01/07/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	5.26	0.74
MW-1	04/13/1994	NA	NA	NA	NA	NA	NA	NA	NA	6	5.01	0.99
MW-1	07/26/1994	NA	NA	NA	NA	NA	NA	NA	NA	6	5.38	0.62
MW-1	08/18/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	5.4	0.6
MW-1	10/11/1994	<50	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	6	5.6	0.4
MW-1	01/13/1995	NA	NA	NA	NA	NA	NA	NA	NA	6	5.56	0.44
MW-1	04/20/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	6	4.4	1.6
MW-1	Well destroyed		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

MW-2	04/11/1990	200a	220	2.7	<0.5	0.5	2.4	NA	NA	3.29	4.51	-1.22
MW-2	07/10/1990	570a	450	150	<0.5	0.9	3.1	NA	NA	3.29	4.61	-1.32
MW-2	10/09/1990	190a	51	55	<0.5	<0.5	<0.5	NA	NA	3.29	4.74	-1.45
MW-2	01/17/1991	350a	<50	51	<0.5	<0.5	<0.5	NA	NA	3.29	4.73	-1.44

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
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**Alameda, CA**

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-2	04/09/1991	NA	<50	21	<5	<5	<5	NA	NA	3.29	4.09	-0.8
MW-2	07/10/1991	50a	<50	8.4	<0.5	<0.5	<0.5	NA	NA	3.29	4.66	-1.37
MW-2	10/09/1991	150	NA	22	<0.5	<0.5	<0.5	NA	NA	3.29	4.81	-1.52
MW-2	01/24/1992	<50	NA	4.8	<0.5	<0.5	<0.5	NA	NA	3.29	4.66	-1.37
MW-2	04/23/1992	<50	NA	2.3	1.5	<0.5	<0.5	NA	NA	3.29	4.51	-1.22
MW-2	07/01/1992	130a	NA	19	<0.5	<0.5	<0.5	NA	NA	3.29	4.57	-1.28
MW-2	10/02/1992	120a	NA	7.8	<0.5	<0.5	<0.8	NA	NA	3.29	4.8	-1.51
MW-2	01/05/1993	200a	NA	9	<0.5	0.6	1.8	NA	NA	3.29	4.39	-1.1
MW-2	04/08/1993	170a	NA	9.6	<0.5	<0.5	1.6	NA	NA	3.29	4.15	-0.86
MW-2	07/20/1993	80a	NA	16	1.3	1.4	6.1	NA	NA	3.29	4.4	-1.11
MW-2	10/15/1993	400a	NA	37	0.6	1.1	4.7	NA	NA	3.29	5.41	-2.12
MW-2	01/07/1994	86a	NA	12	<0.5	<0.5	1.1	NA	NA	3.29	4.34	-1.05
MW-2	04/13/1994	<50	NA	14	<0.5	<0.5	<0.5	NA	NA	3.29	4.29	-1
MW-2	07/26/1994	290	NA	51	<0.5	<0.5	<0.5	NA	NA	3.29	4.56	-1.27
MW-2	11/11/1994	<50	NA	3.5	<0.5	<0.5	<0.5	NA	NA	3.29	4.68	-1.39
MW-2	01/13/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	3.29	3.48	-0.19
MW-2	04/20/1995	<50	NA	<0.5	<0.5	1	3.6	NA	NA	3.29	3.78	-0.49
MW-2 (D)	04/20/1995	<50	NA	9.9	<0.5	<0.5	<0.5	NA	NA	3.29	NA	NA
MW-2	05/23/1995	<50	NA	5.8	<0.5	<0.5	<0.5	NA	NA	3.29	3.87	-0.58
MW-2	Well destroyed		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-3	03/20/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.23	NA
MW-3	03/22/2001	1,000	1,100	80	16	7.9	72	NA	72	NA	5.21	NA
MW-3	05/30/2001	3,100	<1,500	170	50	150	340	NA	100	NA	5.57	NA
MW-3	09/17/2001	130	130	0.79	<0.50	<0.50	<0.50	NA	180	NA	5.93	NA
MW-3	12/20/2001	1,800	<900	250	4.8	4.0	51	NA	13	NA	5.06	NA
BH-C	12/17/1992	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**2160 Otis Street**  
**Alameda, CA**

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)
BH-D	12/17/1992	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
BH-E	12/17/1992	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	07/10/1990	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	10/09/1990	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	01/17/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	04/09/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	07/10/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	10/09/1991	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	01/24/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	04/23/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	07/01/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	10/02/1992	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	01/05/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	04/08/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	07/20/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	10/15/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	01/07/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	04/13/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	10/11/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	11/01/1994	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	01/13/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	04/20/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA
TB	05/23/1995	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**2160 Otis Street**  
**Alameda, CA**

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)
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Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to March 22, 2001, analyzed by EPA Method 8015.

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

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to March 22, 2001, analyzed by EPA Method 8020.

MTBE = Methyl-tertiary-butyl ether

TOC = Top of Casing Elevation

GW = Groundwater

BH-C = Grab Ground Water Sample

ug/L = parts per billion

msl = Mean sea level

ft = Feet

<n = Below detection limit

Notes:

a = Chromatogram pattern indicated an unidentified hydrocarbon.



Report Number : 24047

Date : 01/03/2002

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

Subject : 1 Water Sample  
Project Name : 2160 Otis Dr., Alameda  
Project Number : 011220-DA3  
P.O. Number : 98995140

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,

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

Joel Kiff



Report Number : 24047

Date : 01/03/2002

Subject : 1 Water Sample  
Project Name : 2160 Otis Dr., Alameda  
Project Number : 011220-DA3  
P.O. Number : 98995140

## Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for sample MW-3. Although there was a Diesel hit in the Method Blank, the amount of Gasoline interference in the sample was greater than 5 times the amount in the blank, therefore no data was flagged.

Approved By:  \_\_\_\_\_  
Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 916-297-4800



Report Number : 24047

Date : 1/3/2002

Project Name : 2160 Otis Dr., Alameda

Project Number : 011220-DA3

Sample : MW-3

Matrix : Water

Lab Number : 24047-01

Sample Date :12/20/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>250</b>	1.0	ug/L	EPA 8260B	1/1/2002
<b>Toluene</b>	<b>4.8</b>	0.50	ug/L	EPA 8260B	12/30/2001
<b>Ethylbenzene</b>	<b>4.0</b>	0.50	ug/L	EPA 8260B	12/30/2001
<b>Total Xylenes</b>	<b>51</b>	0.50	ug/L	EPA 8260B	12/30/2001
<b>Methyl-t-butyl ether (MTBE)</b>	<b>13</b>	0.50	ug/L	EPA 8260B	12/30/2001
<b>Diisopropyl ether (DIPE)</b>	<b>&lt; 2.0</b>	2.0	ug/L	EPA 8260B	12/30/2001
<b>Ethyl-t-butyl ether (ETBE)</b>	<b>&lt; 2.0</b>	2.0	ug/L	EPA 8260B	12/30/2001
<b>Tert-amyl methyl ether (TAME)</b>	<b>&lt; 2.0</b>	2.0	ug/L	EPA 8260B	12/30/2001
<b>Tert-Butanol</b>	<b>&lt; 50</b>	50	ug/L	EPA 8260B	12/30/2001
<b>TPH as Gasoline</b>	<b>1800</b>	50	ug/L	EPA 8260B	12/30/2001
Toluene - d8 (Surr)	97.0		% Recovery	EPA 8260B	12/30/2001
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	12/30/2001
<b>TPH as Diesel</b>	<b>&lt; 900</b>	900	ug/L	M EPA 8015	12/30/2001

Approved By:  Joel Kiff

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



Report Number : 24047

Date : 1/3/2002

**QC Report : Method Blank Data**

Project Name : **2160 Otis Dr., Alameda**

Project Number : **011220-DA3**

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
TPH as Diesel	86	50	ug/L	M EPA 8015	1/2/2002
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/29/2001
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/29/2001
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/29/2001
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/29/2001
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/29/2001
Diisopropyl ether (DIPE)	< 2.0	2.0	ug/L	EPA 8260B	12/29/2001
Ethyl-t-butyl ether (ETBE)	< 2.0	2.0	ug/L	EPA 8260B	12/29/2001
Tert-amyl methyl ether (TAME)	< 2.0	2.0	ug/L	EPA 8260B	12/29/2001
Tert-Butanol	< 50	50	ug/L	EPA 8260B	12/29/2001
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/29/2001
Toluene - d8 (Surr)	98.5		%	EPA 8260B	12/29/2001
4-Bromofluorobenzene (Surr)	104		%	EPA 8260B	12/29/2001

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
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KIFF ANALYTICAL, LLC

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

Approved By:  Joel Kiff

Report Number : 24047

Date : 1/3/2002

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : 2160 Otis Dr., Alameda

Project Number : 011220-DA3

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
TPH as Diesel	Blank	86	1000	1000	820	820	ug/L	M EPA 8015	12/28/2007	73.3	73.3	0.00	70-130	25
Benzene	24035-10	<0.50	19.9	19.9	15.9	15.4	ug/L	EPA 8260B	12/29/2008	80.0	77.6	3.01	70-130	25
Toluene	24035-10	<0.50	19.9	19.9	15.7	15.0	ug/L	EPA 8260B	12/29/2007	78.7	75.2	4.58	70-130	25
Tert-Butanol	24035-10	<5.0	99.7	99.6	95.6	97.0	ug/L	EPA 8260B	12/29/2009	95.9	97.4	1.58	70-130	25
Methyl-t-Butyl Ether	24035-10	<0.50	19.9	19.9	16.4	17.0	ug/L	EPA 8260B	12/29/2008	82.2	85.1	3.53	70-130	25

KIFF ANALYTICAL, LLC

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

Approved By:  Joel Kiff

QC Report : Laboratory Control Sample (LCS)

Report Number : 24047

Date : 1/3/2002

Project Name : 2160 Otis Dr., Alameda

Project Number : 011220-DA3

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	19.6	ug/L	EPA 8260B	12/30/200	96.8	70-130
Toluene	19.6	ug/L	EPA 8260B	12/30/200	94.5	70-130
Tert-Butanol	98.0	ug/L	EPA 8260B	12/30/200	94.6	70-130
Methyl-t-Butyl Ether	19.6	ug/L	EPA 8260B	12/30/200	89.3	70-130

KIFF ANALYTICAL, LLC

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

Approved By:  \_\_\_\_\_  
Joel Kiff

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
- TECHNICAL SERVICES
- CRMT HOUSTON

Karen Petryna

24047

INCIDENT NUMBER (S&E ONLY)

9 8 9 9 5 1 4 0

SAP or CRMT NUMBER (TS/CRMT)

DATE: 12/20/01

PAGE: 1 of 1

SAMPLING COMPANY: <b>Blaine Tech Services</b>		LOG CODE: <b>BTSS</b>	SITE ADDRESS (Street and City): <b>2160 Otis Dr., Alameda</b>		GLOBAL ID NO.: <b>600101236</b>
ADDRESS: <b>1680 Rogers Avenue, San Jose, CA 95112</b>		EDF DELIVERABLE TO (Responsible Party or Designee): <b>Anni Kremi</b>		PHONE NO.: <b>(510) 420-3335</b>	E-MAIL: <b>akremi@cambria-env.com</b>
PROJECT CONTACT (Hardcopy or PDF Report to): <b>Nick Sudano</b>		CONSULTANT PROJECT NO: <b>BTS # 011220-PA3</b>		LAB USE ONLY	
TELEPHONE: <b>408-573-0555</b>	FAX: <b>408-573-7771</b>	E-MAIL: <b>nsudano@blainetech.com</b>		SAMPLER NAME(S) (PIN): <b>David Albut</b>	

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

### FIELD NOTES:

Container/Preservative  
or PID Readings  
or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5ppb RL)	Oxygenates (5) by (8260B)	Ethanol (8260B)	Methanol	1,2-DCA (8260B)	EOB (8260B)	TPH - Diesel, Extractable (8015m)	MTBE (8260B) Confirmation, See Note	FIELD NOTES	
		DATE	TIME															
	MW-3	12/20/01	1720	W	5	X	X	X	X						X			-01

Relinquished by: (Signature) <u>David A. Albut</u>	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) <u>John C. Kiff Analytical</u>	Date: <u>12/20/01</u>	Time: <u>1150</u>

C&G Graphic (714) 958-9702

# WELL GAUGING DATA

Project # 01220-0A2 Date 12/20/01 Client Equiviva

Site 2160 Otis Dr. Alameda

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-3	2					5.06	17.9a	TOC	

## EQUIVA WELL MONITORING DATA SHEET

BTS #: 011220-DA3	Site: 2160 Otis Dr. Alameda
Sampler: DA	Date: 12/20/01
Well I.D.: MW-3	Well Diameter: 2 3 4 6 8 _____
Total Well Depth: 17.99	Depth to Water: 5.06
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> 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: \_\_\_\_\_

2	(Gals.) X	3	=	6	Gals.
I Case Volume		Specified Volumes		Calculated Volume	

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
<u>2"</u>	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1706	57.1	7.0	1466	7200	2	cloudy, brown
1711	58.8	7.4	1499	"	4	"
1714	57.8	7.4	1491	"	6	"

Did well dewater? Yes  No  Gallons actually evacuated: 6.3

Sampling Time: 1720 Sampling Date: 12/20/01

Sample I.D.: MW-3 Laboratory: Sequoia Columbia Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Oxygenates by 8260

EB I.D. (if applicable): @ \_\_\_\_\_ Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

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