

C A M B R I A

COPIY

Leroy Griffin
City of Oakland Fire Department
505 14th Street, Suite 702
Alameda, California 94502

June 2, 1999
Site: Oakland 8930
Proj. Rem. Rpt. Bill
1 2 3 4 5 6

Re: **First Quarter 1999 Monitoring Report**
Shell-branded Service Station
8930 Bancroft Avenue
Oakland, California
Incident #98995742
Cambria Project #24-314-199



Dear Mr. Griffin:

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

FIRST QUARTER 1999 ACTIVITIES

Ground Water Monitoring: Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled all site wells. Blaine calculated ground water elevations and compiled the analytical data. Cambria prepared a ground water elevation contour map (Figure 1). The Blaine report, presenting the laboratory report, is included as Attachment A.

ANTICIPATED SECOND QUARTER 1999 ACTIVITIES

Ground Water Monitoring: Blaine will gauge and sample all site wells and tabulate the data. Cambria will prepare a monitoring report.

Oakland, CA
Sonoma, CA
Portland, OR
Seattle, WA

**Cambria
Environmental
Technology, Inc.**

1144 65th Street
Suite B
Oakland, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

CLOSING

We appreciate the opportunity to work with you on this project. Please call Darryk Ataide at (510) 420-3339 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc



Darryk Ataide, REA I
Project Manager

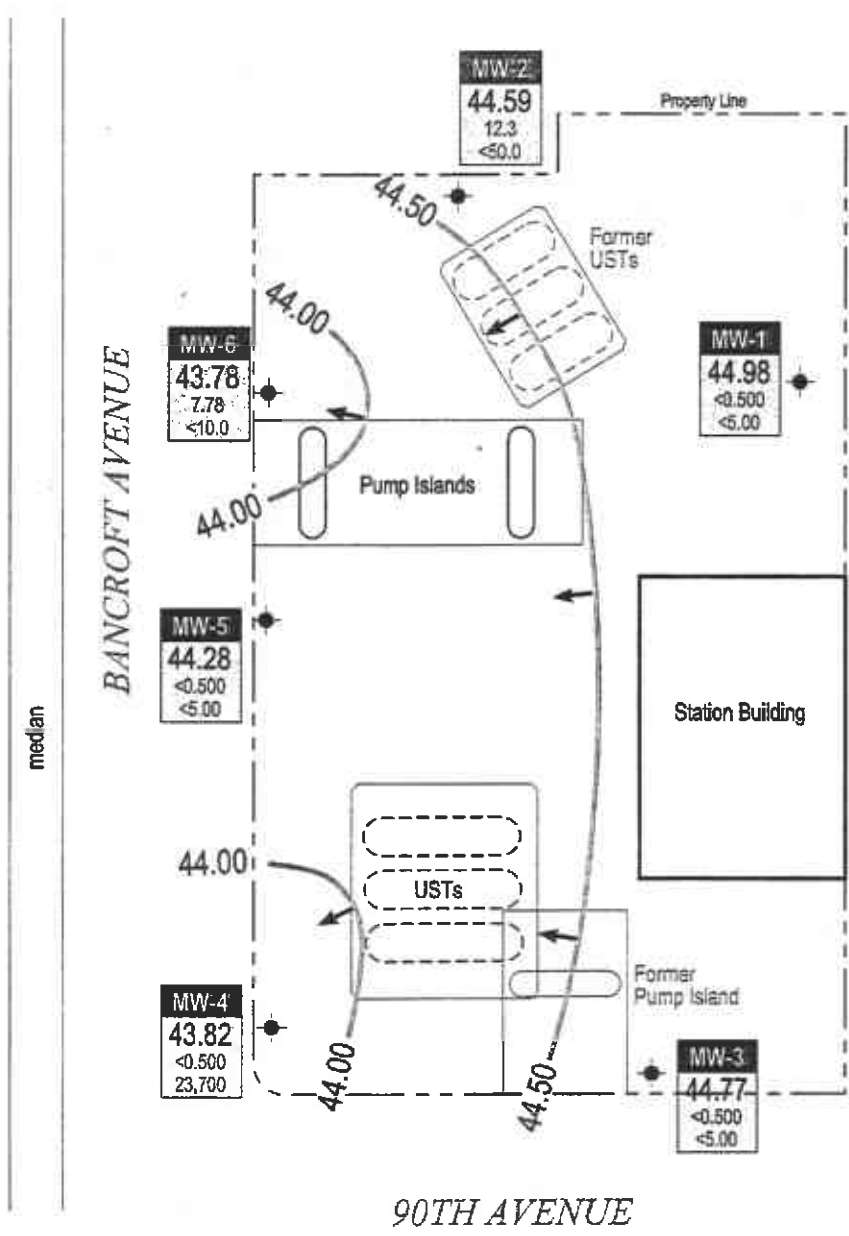
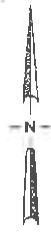
Ailsa Le May, R.G.
Senior Geologist



Figure: 1 - Ground Water Elevation Contour Map
Attachment: A - Blaine Ground Water Monitoring Report

cc: Karen Petryna, Equiva Services LLC, P.O. Box 6249, Carson, California 90749-6249

g:\oak8930\qml1q99qm.doc



90TH AVENUE

EXPLANATION

- MW-1 ◆ Monitoring well location
- Ground water flow direction
- xx.xx Ground water elevation contour, in feet above mean sea level (msl), dashed where inferred
- Well designation
- ELEV Ground water elevation (msl)
- Benzene and MTBE concentrations are in parts per billion (ppb)

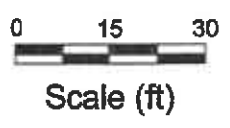


FIGURE 1

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



C A M B R I A

Ground Water Elevation Contour Map

March 9, 1999

G:\OAK\8930\FIGURES\FIG1\M99-MP.DWG

ATTACHMENT A
Blaine Ground Water Monitoring Report

BLAINE
TECH SERVICES INC.



1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
(408) 573-7771 FAX
(408) 573-0555 PHONE

April 26, 1999

Karen Petryna
Equiva Services LLC
P.O. Box 6249
Carson, CA 90749-6249

First Quarter 1999 Groundwater Monitoring at
Shell-branded Service Station
8930 Bancroft Avenue
Oakland, CA

Monitoring performed on March 9, 1999

Groundwater Monitoring Report **990309-Z-4**

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, appropriate 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. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. concentrates on objective data collection and does not participate in the interpretation of analytical results, the definition of geological or hydrological conditions, the formulation of recommendations, or the marketing of remedial systems.

Please call if you have any questions.

Yours truly,

A handwritten signature in black ink, appearing to read "Deidre Kerwin", with a long horizontal flourish extending to the right.

Deidre Kerwin
Operations Manager

DK/mt

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, California

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-2	12/17/1998	9900	NA	<5.0	37	22	47	48	<20	52.66	11.65	41.01
MW-2	03/09/1999	2760	NA	12.3	7.50	85.4	444	<50.0	NA	52.66	8.07	44.59
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-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	8.91	43.82
MW-5	12/17/1998	750	NA	<0.50	17	1.8	3.5	33	32	51.43	11.51	39.92
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-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

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015

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

BTEX = benzene, toluene, ethylbenzene, xylenes 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



Sequoia
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March 30, 1999

Fran Thie
Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

RE: Shell(2)/L903080

Dear Fran Thie:

Enclosed are the results of analyses for sample(s) received by the laboratory on March 10, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Mike Gregory
Project Manager D.M.





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Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Project: Shell(2)
Project Number: Shell 8930 Bancroft, Oakland
Project Manager: Fran Thie

Sampled: 3/9/99
Received: 3/10/99
Reported: 3/30/99

ANALYTICAL REPORT FOR L903080

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-1	L903080-01	Water	3/9/99
MW-2	L903080-02	Water	3/9/99
MW-3	L903080-03	Water	3/9/99
MW-4	L903080-04	Water	3/9/99
MW-5	L903080-05	Water	3/9/99
MW-6	L903080-06	Water	3/9/99





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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 8930 Bancroft, Oakland Project Manager: Fran Thie	Sampled: 3/9/99 Received: 3/10/99 Reported: 3/30/99
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Sample Description: MW-1
Laboratory Sample Number: L903080-01

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
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Sequoia Analytical - San Carlos

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Purgeable Hydrocarbons as Gasoline	9030049	3/12/99	3/12/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		5.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		95.9	%	





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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 8930 Bancroft, Oakland Project Manager: Fran Thie	Sampled: 3/9/99 Received: 3/10/99 Reported: 3/30/99
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Sample Description: MW-2
Laboratory Sample Number: L903080-02

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
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Sequoia Analytical - San Carlos

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Purgeable Hydrocarbons as Gasoline	9030052	3/12/99	3/12/99		500	2760	ug/l	1
Benzene	"	"	"		5.00	12.3	"	
Toluene	"	"	"		5.00	7.50	"	
Ethylbenzene	"	"	"		5.00	85.4	"	
Xylenes (total)	"	"	"		5.00	444	"	
Methyl tert-butyl ether	"	"	"		50.0	ND	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70.0-130		125	%	





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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 8930 Bancroft, Oakland Project Manager: Fran Thie	Sampled: 3/9/99 Received: 3/10/99 Reported: 3/30/99
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Sample Description: MW-3
Laboratory Sample Number: L903080-03

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
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Sequoia Analytical - San Carlos

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Purgeable Hydrocarbons as Gasoline	9030044	3/11/99	3/11/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		5.00	ND	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70.0-130		87.4	%	





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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 8930 Bancroft, Oakland Project Manager: Fran Thie	Sampled: 3/9/99 Received: 3/10/99 Reported: 3/30/99
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Sample Description: MW-4
Laboratory Sample Number: L903080-04

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
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Sequoia Analytical - San Carlos

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Purgeable Hydrocarbons as Gasoline	9030049	3/12/99	3/12/99		50.0	83.9	ug/l	1
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	9030064	3/16/99	3/16/99		500	17900	"	
Surrogate: <i>a,a,a-Trifluorotoluene</i>	9030049	3/12/99	3/12/99	70.0-130		88.6	%	

MTBE Confirmation by EPA Method 8260A

Methyl tert-butyl ether	9030124	3/29/99	3/29/99		500	23700	ug/l	3
Surrogate: <i>1,2-Dichloroethane-d4</i>	"	"	"	76.0-114		100	%	





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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 8930 Bancroft, Oakland Project Manager: Fran Thie	Sampled: 3/9/99 Received: 3/10/99 Reported: 3/30/99
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Sample Description: MW-5
Laboratory Sample Number: L903080-05

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
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Sequoia Analytical - San Carlos

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Purgeable Hydrocarbons as Gasoline	9030065	3/12/99	3/16/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		5.00	ND	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70.0-130		95.9	%	





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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 8930 Bancroft, Oakland Project Manager: Fran Thie	Sampled: 3/9/99 Received: 3/10/99 Reported: 3/30/99
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Sample Description: MW-6
Laboratory Sample Number: L903080-06

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
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Sequoia Analytical - San Carlos

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Purgeable Hydrocarbons as Gasoline	9030049	3/12/99	3/12/99		100	336	ug/l	1
Benzene	"	"	"		1.00	7.78	"	
Toluene	"	"	"		1.00	1.60	"	
Ethylbenzene	"	"	"		1.00	2.40	"	
Xylenes (total)	"	"	"		1.00	6.36	"	
Methyl tert-butyl ether	"	"	"		10.0	ND	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70.0-130		92.9	%	





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 8930 Bancroft, Oakland Project Manager: Fran Thie	Sampled: 3/9/99 Received: 3/10/99 Reported: 3/30/99
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFF/Quality Control
Sequoia Analytical - San Carlos**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9030044			Date Prepared: 3/11/99			Extraction Method: EPA 5030B [P/T]				
Blank			9030044-BLK1							
Purgeable Hydrocarbons as Gasoline	3/11/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Methyl tert-butyl ether	"			ND	"	5.00				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.8	"	70.0-130	108			
LCS			9030044-BS1							
Benzene	3/11/99	10.0		8.72	ug/l	70.0-130	87.2			
Toluene	"	10.0		8.71	"	70.0-130	87.1			
Ethylbenzene	"	10.0		8.64	"	70.0-130	86.4			
Xylenes (total)	"	30.0		26.0	"	70.0-130	86.7			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.97	"	70.0-130	99.7			
Matrix Spike			9030044-MS1		L903025-01					
Benzene	3/11/99	10.0	ND	8.75	ug/l	60.0-140	87.5			
Toluene	"	10.0	ND	8.66	"	60.0-140	86.6			
Ethylbenzene	"	10.0	ND	8.58	"	60.0-140	85.8			
Xylenes (total)	"	30.0	ND	25.9	"	60.0-140	86.3			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.13	"	70.0-130	91.3			
Matrix Spike Dup			9030044-MSD1		L903025-01					
Benzene	3/11/99	10.0	ND	8.65	ug/l	60.0-140	86.5	25.0	1.15	
Toluene	"	10.0	ND	8.56	"	60.0-140	85.6	25.0	1.16	
Ethylbenzene	"	10.0	ND	8.49	"	60.0-140	84.9	25.0	1.05	
Xylenes (total)	"	30.0	ND	25.4	"	60.0-140	84.7	25.0	1.87	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.10	"	70.0-130	91.0			
Batch: 9030049			Date Prepared: 3/12/99			Extraction Method: EPA 5030B [P/T]				
Blank			9030049-BLK1							
Purgeable Hydrocarbons as Gasoline	3/12/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Methyl tert-butyl ether	"			ND	"	5.00				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.2	"	70.0-130	102			





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 8930 Bancroft, Oakland Project Manager: Fran Thie	Sampled: 3/9/99 Received: 3/10/99 Reported: 3/30/99
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Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
LCS										
9030049-BS1										
Purgeable Hydrocarbons as Gasoline	3/12/99	250		263	ug/l	70.0-130	105			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.51	"	70.0-130	95.1			
Matrix Spike										
9030049-MS1 L903050-01										
Purgeable Hydrocarbons as Gasoline	3/12/99	250	ND	275	ug/l	60.0-140	110			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.2	"	70.0-130	102			
Matrix Spike Dup										
9030049-MSD1 L903050-01										
Purgeable Hydrocarbons as Gasoline	3/12/99	250	ND	253	ug/l	60.0-140	101	25.0	8.53	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.34	"	70.0-130	93.4			
Batch: 9030052										
Blank										
Date Prepared: 3/12/99										
Extraction Method: EPA 5030B [P/T]										
9030052-BLK1										
Purgeable Hydrocarbons as Gasoline	3/12/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Methyl tert-butyl ether	"			ND	"	5.00				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.2	"	70.0-130	102			
LCS										
9030052-BS1										
Benzene	3/12/99	10.0		10.1	ug/l	70.0-130	101			
Toluene	"	10.0		10.1	"	70.0-130	101			
Ethylbenzene	"	10.0		10.3	"	70.0-130	103			
Xylenes (total)	"	30.0		31.6	"	70.0-130	105			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.7	"	70.0-130	107			
Matrix Spike										
9030052-MS1 L903050-02										
Benzene	3/12/99	10.0	ND	10.3	ug/l	60.0-140	103			
Toluene	"	10.0	ND	10.3	"	60.0-140	103			
Ethylbenzene	"	10.0	ND	10.3	"	60.0-140	103			
Xylenes (total)	"	30.0	ND	31.6	"	60.0-140	105			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.9	"	70.0-130	109			
Matrix Spike Dup										
9030052-MSD1 L903050-02										
Benzene	3/12/99	10.0	ND	10.3	ug/l	60.0-140	103	25.0	0	
Toluene	"	10.0	ND	10.3	"	60.0-140	103	25.0	0	
Ethylbenzene	"	10.0	ND	10.2	"	60.0-140	102	25.0	0.976	
Xylenes (total)	"	30.0	ND	32.2	"	60.0-140	107	25.0	1.89	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.4	"	70.0-130	104			





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 8930 Bancroft, Oakland Project Manager: Fran Thie	Sampled: 3/9/99 Received: 3/10/99 Reported: 3/30/99
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Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUPT/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9030065			Date Prepared: 3/12/99			Extraction Method: EPA 5030B [P/T]				
Blank			9030065-BLK1							
Purgeable Hydrocarbons as Gasoline	3/16/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Methyl tert-butyl ether	"			ND	"	5.00				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.0	"	70.0-130	100			
LCS			9030065-BS1							
Purgeable Hydrocarbons as Gasoline	3/16/99	250		233	ug/l	70.0-130	93.2			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		11.8	"	70.0-130	118			
Matrix Spike			9030065-MS1							
Benzene	3/16/99	10.0		8.76	ug/l	60.0-140	87.6			
Toluene	"	10.0		8.78	"	60.0-140	87.8			
Ethylbenzene	"	10.0		9.21	"	60.0-140	92.1			
Xylenes (total)	"	30.0		25.7	"	60.0-140	85.8			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.25	"	70.0-130	92.5			
Matrix Spike Dup			9030065-MSD1							
Benzene	3/16/99	10.0		9.14	ug/l	60.0-140	91.4	25.0	4.25	
Toluene	"	10.0		9.25	"	60.0-140	92.5	25.0	5.21	
Ethylbenzene	"	10.0		9.62	"	60.0-140	96.2	25.0	4.35	
Xylenes (total)	"	30.0		28.7	"	60.0-140	95.7	25.0	11.0	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.03	"	70.0-130	90.3			





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 8930 Bancroft, Oakland Project Manager: Fran Thie	Sampled: 3/9/99 Received: 3/10/99 Reported: 3/30/99
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**MTBE Confirmation by EPA Method 8260A/Quality Control
Sequoia Analytical - San Carlos**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 9030124			Date Prepared: 3/26/99			Extraction Method: EPA 5030B [P/T]				
Blank										
Methyl tert-butyl ether	3/26/99			ND	ug/l	2.00				
Surrogate: 1,2-Dichloroethane-d4	"	50.0		48.9	"	76.0-114	97.8			
Blank										
Methyl tert-butyl ether	3/29/99			ND	ug/l	2.00				
Surrogate: 1,2-Dichloroethane-d4	"	50.0		51.7	"	76.0-114	103			
LCS										
Methyl tert-butyl ether	3/26/99	50.0		47.8	ug/l	70.0-130	95.6			
Surrogate: 1,2-Dichloroethane-d4	"	50.0		48.0	"	76.0-114	96.0			
LCS										
Methyl tert-butyl ether	3/29/99	50.0		52.8	ug/l	70.0-130	106			
Surrogate: 1,2-Dichloroethane-d4	"	50.0		52.0	"	76.0-114	104			





Sequoia
Analytical

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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 8930 Bancroft, Oakland Project Manager: Fran Thie	Sampled: 3/9/99 Received: 3/10/99 Reported: 3/30/99
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Notes and Definitions

#	Note
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- 1 Chromatogram pattern: C6-C12
- 3 This analysis was run past hold time. The results should be considered estimates for th
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- Recov. Recovery
- RPD Relative Percent Difference





SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: 990309-24

Date:

Page (of)

Site Address: 8930 Bancroft, Oakland

WIC#: 204-5508-1305 L903080

Shell Engineer: Karen Petryna
 Phone No: (510) 236-9139
 Fax #:

Consultant Name & Address: Blaine Tech Services, Inc.
 1680 Rogers Ave., San Jose CA 95112

Consultant Contact: Fran Thie
 Phone No: (408) 5730555
 Fax #: 573-7771

Comments: 990309-24

Sampled by: Seremy

Printed Name: [Signature]

Analysis Required

TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602) / <u>MTBE</u>	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N
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LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring <input type="checkbox"/>	4481	24 hours <input type="checkbox"/>
Site Investigation <input type="checkbox"/>	4441	48 hours <input type="checkbox"/>
Soil Classfy/Disposal <input type="checkbox"/>	4442	18 days <input type="checkbox"/> (Normal)
Water Classfy/Disposal <input type="checkbox"/>	4443	Other <input type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	4482	
Water Rem. or Sys. O & M <input type="checkbox"/>	4483	
Other <input type="checkbox"/>		

NOTE: Notify lab as soon as possible of 24/48 hrs. TAT.

UST AGENCY: BTS

Sample ID	Date	Sludge	Soil	Water	Alt	No. of conis.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602) / <u>MTBE</u>	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
MW-1	3/9			W		3	X		X								*confirm	highest
MW-2							X		X								MTBE	hit by
MW-3							X		X								8260	
MW-4							X		X									
MW-5							X		X									
MW-6							X		X									

Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>Seremy</u>	Date: <u>3/10</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>LAUREN DAVISON</u>	Date: <u>3/10/99</u>
Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>LAUREN DAVISON</u>	Date: <u>3-10-99</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>[Signature]</u>	Date: <u>[Signature]</u>
Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>GERI</u>	Date: <u>3/11/99</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>GERI</u>	Date: <u>3/11/99</u>

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

EQUIVA WELL MONITORING DATA SHEET

Project #: <u>990309-24</u>	Job # <u>204-5508-1305</u>
Sampler: <u>JR</u>	Date: <u>3-9-99</u>
Well I.D.: <u>MW-1</u>	Well Diameter: 2 <u>(3)</u> 4 6 8 <u> </u>
Total Well Depth: <u>18.36</u>	Depth to Water: <u>8.21</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

Purge Method: Bailer Sampling Method: Bailer
 Middleburg * Extraction Port
 Electric Submersible Other: _____
 Extraction Pump

<u>3.8</u>	x	<u>3</u>	=	<u>11.4</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1230	63.6	7.3	352	7200	4	visid
1234	64.0	7.4	300	7200	8	
1238	64.2	7.4	320	7200	12	

Did well dewater? Yes No Gallons actually evacuated: 12

Sampling Time: 1241 Sampling Date: 3-9-99

Sample I.D.: MW-1 Laboratory: Sequoia BC Other _____

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

Project #: 990309-24	Job # 204-5508-1305
Sampler: JR	Date: 3-9-99
Well I.D.: MW-2	Well Diameter: 2 (3) 4 6 8
Total Well Depth: 19.76	Depth to Water: 8.07
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

Purge Method: Bailer Sampling Method: Bailer
 Middleburg Extraction Port
 Electric Submersible Other: _____
 Extraction Pump

Other: _____

<u>4.3</u>	x	<u>3</u>	=	<u>12.9</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1243	64.8	7.0	250	7200	4.5	turbid
1344	64.6	7.1	240	7200	9	odo -
1345	64.4	7.0	210	7200	13	

Did well dewater? Yes No Gallons actually evacuated: 13

Sampling Time: 1348 Sampling Date: 3-9-99

Sample I.D.: MW-2 Laboratory: Sequoia BC Other _____

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

Project #: 990309-24	Job # 204-5508-1305
Sampler: JR	Date: 3-9-99
Well I.D.: MW-3	Well Diameter: 2 (3) 4 6 8
Total Well Depth: 19.60	Depth to Water: 6.53
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

Purge Method: Bailer Middleburg Electric Submersible Extraction Pump Other: _____

Sampling Method: Bailer Extraction Port Other: _____

4.7	x	3	=	14.1	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1249	62.6	7.1	200	7200	5	turned
1250	63.0	7.0	250	7200	10	
1251	63.2	7.0	270	7200	15	

Did well dewater? Yes No Gallons actually evacuated: 15

Sampling Time: 1255 Sampling Date: 3-9-99

Sample I.D.: MW-3 Laboratory: Sequoia BC Other: _____

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

Project #: 990309-24	Job # 204-5508-1305
Sampler: JR	Date: 3-9-99
Well I.D.: MW-4	Well Diameter: 2 (3) 4 6 8
Total Well Depth: 19.60	Depth to Water: 6.91
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

Purge Method: Bailer Middleburg Electric Submersible X Extraction Pump

Other: _____

Sampling Method: Bailer X Extraction Port

Other: _____

4.7	x	3	=	14.1	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1302	65.0	7.0	330	>200	5	turbid
1303	64.8	6.9	400	>200	10	
1304	65.2	6.9	410	>200	15	

Did well dewater? Yes No

Gallons actually evacuated: 15

Sampling Time: 1307

Sampling Date: 3-9-99

Sample I.D.: MW-4

Laboratory: Sequoia BC Other _____

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

Project #: 990309-24	Job # 204-5508-1305
Sampler: JR	Date: 3-9-99
Well I.D.: MW-5	Well Diameter: 2 (3) 4 6 8
Total Well Depth: 19.65	Depth to Water: 7.15
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

Purge Method: Bailer Middleburg Electric Submersible Extraction Pump

Other: _____

Sampling Method: Bailer Extraction Port

Other: _____

4.6	x	3	=	13.8	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1315	63.8	7.1	350	7200	5	turbid
1316	63.6	7.0	300	7200	10	
1317	64.0	7.0	280	7200	14	

Did well dewater? Yes No Gallons actually evacuated: **14**

Sampling Time: **1320** Sampling Date: **3-9-99**

Sample I.D.: **MW-5** Laboratory: **Sequoia** BC Other _____

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

Project #: 990309-24	Job # 204-5508-1305
Sampler: JR	Date: 3-9-99
Well I.D.: MW-6	Well Diameter: 2 (3) 4 6 8
Total Well Depth: 1952	Depth to Water: 8.10
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius ² * 0.163

Purge Method: Bailer Middleburg Electric Submersible Extraction Pump Other: _____

Sampling Method: Bailer Extraction Port Other: _____

<u>4.2</u>	x	<u>3</u>	=	<u>12.6</u> Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1331	65.0	7.0	380	>200	5	turbid
1332	64.8	6.9	360	7200	10	
1333	65.2	6.8	240	>200	13	

Did well dewater? Yes No Gallons actually evacuated: **(3)**

Sampling Time: **1335** Sampling Date: **3-9-99**

Sample I.D.: **MW-6** Laboratory: **Sequoia** BC Other: _____

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

4/26

WELL HEAD INSPECTION CHECKLIST AND REPAIR ORDER

Client _____ Shell 204-5508-1347 _____
Site address _____ 8930 BANCROFT _____
OAKLAND _____

Inspection date: 3-9-99
Inspected by: JR
BTS Event # 990309-24

1. Lid on the box? Yes No	5. Water standing in the well box?	7. Can cap be pulled loose?
2. Lid whole?	5a. Standing above well top?	8. Can cap seal out water?
3. Lid secure?	5b. Standing below well top?	9. Padlock present?
4. Lid seal intact?	5c. Water even with top of well cap?	10. Padlock found locked?
	6. Well cap/plug present?	11. Padlock functional?

Check box if *no deficiencies* were found. Note below deficiencies you were able to correct.

Well I.D.	Deficiency	Corrective Action Taken

Note below all deficiencies that could not be corrected and *still need to be corrected*.

Well I.D.	Persisting Deficiency	BTS Office assigns or defers Correction to:	Date assigned	Date corrected

Office review and assignments made by _____ date _____