

C A M B R I A

May 28, 1999

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

Re: **First Quarter 1999 Monitoring Report**
Shell-branded Service Station
610 Market Street
Oakland, California
Incident #99895750
Cambria Project #24-314-199



Dear Mr. Seto:

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 the 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 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

C A M B R I A

Larry Seto
May 28, 1999

CLOSING

We appreciate the opportunity to work with you on this project. Please call Brian Busch at (510) 420-3312 if you have any questions or comments.

Sincerely,

Cambria Environmental Technology, Inc



Brian Busch
Project Environmental Scientist

Ailsa S. 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

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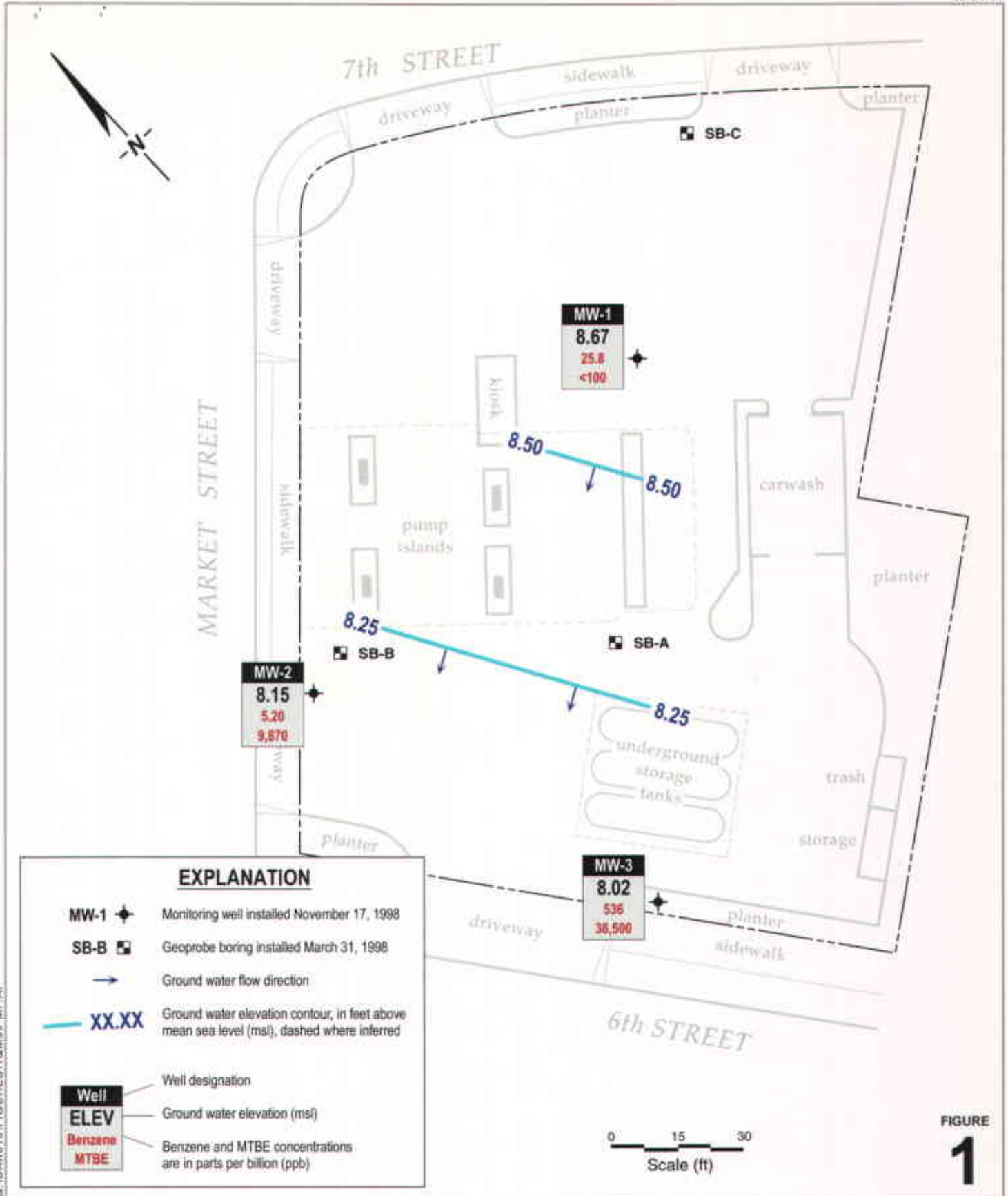


FIGURE 1

Shell-branded Service Station
 610 Market Street
 Oakland, California
 Incident #98995750



C A M B R I A

Ground Water Elevation Contour Map

March 9, 1999

ATTACHMENT A

Blaine Ground Water Monitoring Report

BLAINE
TECH SERVICES INC.



1880 ROGERS AVENUE
SAN JOSE, CA 95112-1105
(408) 573-7771 FAX
(408) 573-0555 PHONE

May 3, 1999

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

First Quarter 1999 Groundwater Monitoring at
SHELL -branded Service Station
610 Market Street
Oakland, CA

Monitoring performed on March 9, 1999

Groundwater Monitoring Report **990309-Z-1**

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
1144 65th St. Suite C
Oakland, CA 94608-2411

WELL CONCENTRATIONS
Shell-branded Service Station
610 Market Street
Oakland, California
WIC #204-5508-5702

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)
MW-1	12/17/1998	2200	20	<10	110	420	<50	NA	21.70	13.71	7.99
MW-1	03/09/1999	4320	25.8	<10.0	338	474	<100	NA	21.70	13.03	8.67
MW-2	12/17/1998	<5000	<50	<50	<50	<50	11,000	NA	19.61	12.07	7.54
MW-2	03/09/1999	<250	5.20	<2.50	<2.50	<2.50	9,870	NA	19.61	11.46	8.15
MW-3	12/17/1998	30,000	890	110	2100	4300	42,000	43,000	19.05	11.65	7.40
MW-3	03/09/1999	22,700	536	<200	1030	1510	35,400	38,500	19.05	11.03	8.02

Abbreviations:

- TPPH = Total petroleum hydrocarbons as gasoline 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



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March 30, 1999

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

RE: Shell(2)/L903079

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 610 Market St., Oakland
Project Manager: Fran Thie

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

ANALYTICAL REPORT FOR L903079

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW1	L903079-01	Water	3/9/99
MW2	L903079-02	Water	3/9/99
MW3	L903079-03	Water	3/9/99





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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 610 Market St., Oakland Project Manager: Fran Thie	Sampled: 3/9/99 Received: 3/10/99 Reported: 3/30/99
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Sample Description: MW1
Laboratory Sample Number: L903079-01

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	9030043	3/11/99	3/11/99		1000	4320	ug/l	2
Benzene	"	"	"		10.0	25.8	"	
Toluene	"	"	"		10.0	ND	"	
Ethylbenzene	"	"	"		10.0	338	"	
Xylenes (total)	"	"	"		10.0	474	"	
Methyl tert-butyl ether	"	"	"		100	ND	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70.0-130		110	%	





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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 610 Market St., Oakland Project Manager: Fran Thie	Sampled: 3/9/99 Received: 3/10/99 Reported: 3/30/99
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Sample Description: **MW2**
Laboratory Sample Number: **L903079-02**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
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		250	ND	ug/l	1
Benzene	"	"	"		2.50	5.20	"	
Toluene	"	"	"		2.50	ND	"	
Ethylbenzene	"	"	"		2.50	ND	"	
Xylenes (total)	"	"	"		2.50	ND	"	
Methyl tert-butyl ether	"	"	"		500	9870	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		91.8	%	





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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 610 Market St., Oakland Project Manager: Fran Thie	Sampled: 3/9/99 Received: 3/10/99 Reported: 3/30/99
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Sample Description: MW3
Laboratory Sample Number: L903079-03

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	9030049	3/12/99	3/12/99		20000	22700	ug/l	2
Benzene	"	"	"		200	536	"	
Toluene	"	"	"		200	ND	"	
Ethylbenzene	"	"	"		200	1030	"	
Xylenes (total)	"	"	"		200	1510	"	
Methyl tert-butyl ether	"	"	"		2000	35400	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		92.2	%	

MTBE Confirmation by EPA Method 8260A

Methyl tert-butyl ether	9030124	3/29/99	3/29/99		500	38500	ug/l	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	76.0-114		101	%	





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 610 Market St., 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 LURT/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: 9030043			Date Prepared: 3/11/99			Extraction Method: EPA 5030B [P/T]				
Blank			9030043-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		12.2	"	70.0-130	122			
LCS			9030043-BS1							
Purgeable Hydrocarbons as Gasoline	3/11/99	250		228	ug/l	70.0-130	91.2			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		18.5	"	70.0-130	185			3
Matrix Spike			9030043-MS1 L903019-07							
Purgeable Hydrocarbons as Gasoline	3/11/99	250	ND	225	ug/l	60.0-140	90.0			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		19.5	"	70.0-130	195			3
Matrix Spike Dup			9030043-MSD1 L903019-07							
Purgeable Hydrocarbons as Gasoline	3/11/99	250	ND	243	ug/l	60.0-140	97.2	25.0	7.69	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		18.7	"	70.0-130	187			3
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			
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	





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Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 610 Market St., 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 MEBE 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*
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Matrix Spike Dup (continued)	9030049-MSD1	L903050-01								
Surrogate: <i>a,a,a</i> -Trifluorotoluene	3/12/99	10.0		9.34	ug/l	70.0-130	93.4			





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Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112

Project: Shell(2)
Project Number: Shell 610 Market St., Oakland
Project Manager: Fran Thie

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

MPBE 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		9030124-BLK1								
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		9030124-BLK2								
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		9030124-BS1								
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		9030124-BS2								
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			





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Shell(2) Project Number: Shell 610 Market St., 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 MTBE is reported from a separate analysis.
- 2 Chromatogram Pattern: C6-C12
- 3 High surrogate recovery due to spike.
- 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





Silo Address: 610 Market St., Oakland CA
 WIC#: 204-5508-5702 L903079
 Shell Engineer: Karen Petryna Phone No.: _____ Fax #: _____
 Consultant Name & Address: Blaine Tech Services, Inc, 1680 Rogers Ave, San Jose, CA 95112 (408)
 Consultant Contact: Francis Thie Phone No.: 573-0555 Fax #: 573-7771
 Comments: 990309-21

Analysis Required

LAB: sequoia

CHECK ONE (S) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring <input type="checkbox"/>	4441	24 hours <input type="checkbox"/>
Site Investigation <input type="checkbox"/>	4441	48 hours <input type="checkbox"/>
Soil Classify/Disposal <input type="checkbox"/>	4442	15 days <input type="checkbox"/> (Harmful)
Water Classify/Disposal <input type="checkbox"/>	4443	Other <input type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	4452	
Water Rem. or Sys. O & M <input type="checkbox"/>	4453	
Other <input type="checkbox"/>		

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

Sampled by: Jeremy
 Printed Name: Jeremy

Sample ID	Date	Sludge	Soil	Water	Air	No. of conds.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/502), MTBE	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N	
MW1	3/9			W		3	X		X								
MW2	↓			↓		↓	X		X								
MW3	↓			↓		↓	X		X								

UST AGENCY: BTB

MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
*Confirm	Highest
MTBE	by 8200

Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>Jeremy</u>	Date: <u>3/10</u>	Time: <u>9:50</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>LANCE DAVISON</u>	Date: <u>3/10</u>	Time: <u>9:50</u>
Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>Corey Pulaski</u>	Date: <u>3/10/99</u>	Time: <u>11:30</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>GOPEL</u>	Date: <u>3/10/99</u>	Time: <u>13:27</u>
Relinquished By (signature): <u>[Signature]</u>	Printed Name: <u>Corey Pulaski</u>	Date: <u>3/10/99</u>	Time: <u>11:30</u>	Received (signature): <u>[Signature]</u>	Printed Name: <u>GOPEL</u>	Date: <u>3/10/99</u>	Time: <u>13:27</u>

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