

CAMBRIA

September 30, 1999

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

Re: Second Quarter 1999 Monitoring Report

Shell-branded Service Station 8930 Bancroft Avenue Oakland, California Incident #98995742 Cambria Project #241-1408-002



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.

SECOND 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 and including supporting field documents, is included as Attachment A.

ANTICIPATED THIRD QUARTER 1999 ACTIVITIES

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

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

Cambria Environmental Technology, Inc. Underground Storage Tank (UST) Removal and Repacement: On July 8, 1999, UST removal and replacement activities were initiated. Details of the UST removal and related sampling activities will be presented in a forthcoming report.

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

CAMBRIA

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

3

Darryk Ataide, REA I

Project Manager

Ailsa Le May, R.G.

Senior Geologist

Figure:

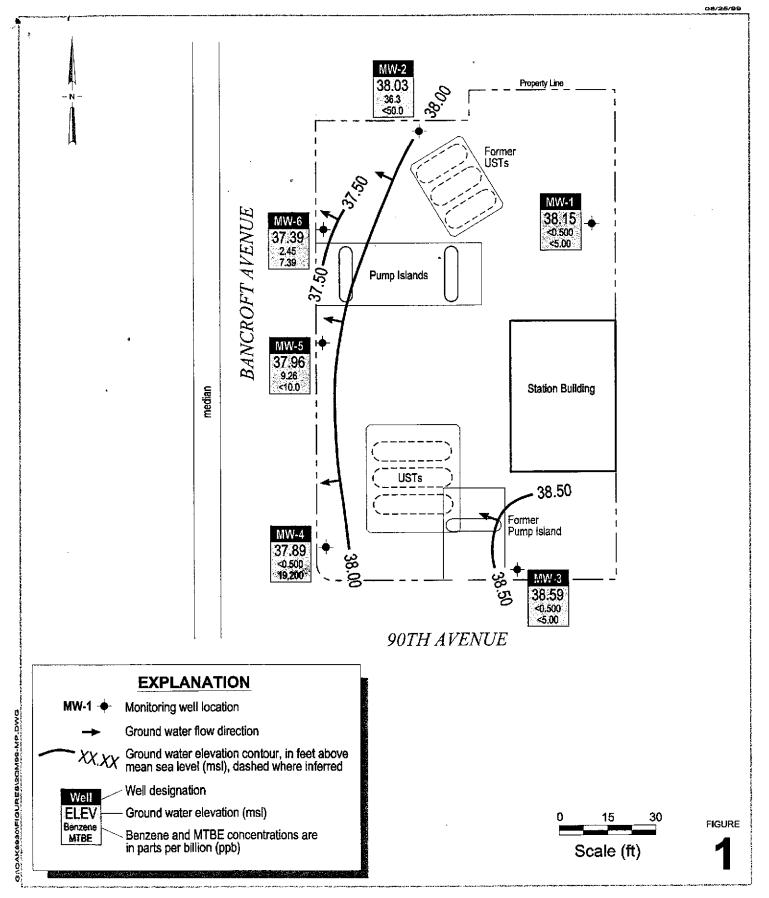
1 - Ground Water Elevation Contour Map

Attachment: A - Blaine Ground Water Monitoring Report and Field Notes

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

NO. 6717

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Shell-branded Service Station

8930 Bancroft Avenue Oakland, California Incident #98995742



Ground Water Elevation Contour Map

ATTACHMENT A

Blaine Ground Water Monitoring Report and Field Notes



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

August 18, 1999

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

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

Monitoring performed on June 16, 1999

Groundwater Monitoring Report 990616-S-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, apprioriate 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

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,

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

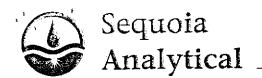
WELL CONCENTRATIONS

Shell-branded Service Station

8930 Bancroft Avenue Oakland, CA

Wic #204-5508-1305

Well ID	Date	ТРРН	TEPH	В	т	E	х	MTBE 8020	MTBE 8260	тос	Depth to Water	GW Elevation
1101115	Duto	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(MSL)	(ft.)	(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 🦠	53.49	15.04	38.15
												:
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-2	06/16/1999	2570	NA	36.3	11.6	6.19	10.8	< 50.0	NA .	52.66	14.63	38.03
		•				•						
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-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 ¹	ं<0.500∜	<0.500	ं<0.500	<0.500	ា0,600 ៖	-19,200	50.73	12.84	37.89
. 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-5 ″	06/16/1999	646	° NA ∵	9.26	1.05	<1.00	ं<1.00∮	<10.0	∮ NA	51,43	13.47	37.96
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



July 8, 1999

Ann Pember Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

RE: Shell(2)/L906280

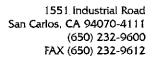
Dear Ann Pember:

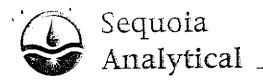
Enclosed are the results of analyses for sample(s) received by the laboratory on June 17, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tim Costello Lab Director

CA ELAP Certificate Number 1-2360





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Project: Shell(2)

Project Manager:

Project Number: Equiva 8930 Bancroft Ave./990616-S1

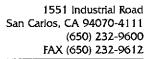
Sampled: 6/16/99 Received: 6/17/99

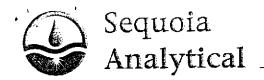
Reported: 7/8/99

ANALYTICAL REPORT FOR L906280

Ann Pember

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-1	L906280-01	Water	6/16/99
MW-2	L906280-02	Water	6/16/99
MW-3	L906280-03	Water	6/16/99
MW-4	L906280-04	Water	6/16/99
MW-5	L906280-05	Water	6/16/99
MW-6	L906280-06	Water	6/16/99





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112 Project: Shell(2)

Equiva 8930 Bancroft Ave./990616-S1

Sampled: 6/16/99

Project Number: Project Manager:

Ann Pember

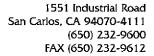
Received: 6/17/99 Reported: 7/8/99

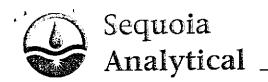
Sample Description:

Laboratory Sample Number:

MW-1 L906280-01

	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		<u>Segue</u>	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX ar	nd MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9060130	6/23/99	6/23/99		50.0	ND	ug/l	
Benzene .	11	Ħ	17		0.500	ND	*1	
Toluene	11	н	H		0.500	ND	н	
Ethylbenzene	#	н	Ħ		0.500	ND	Ħ	
Xylenes (total)	Ħ	H	н		0.500	ND	Ħ	
Methyl tert-butyl ether	*1	n	Ħ		5.00	ND	71	
Surrogate: a,a,a-Trifluorotoluene	n	"	π	70.0-130		84.6	%	



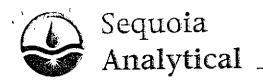


Sample Description:

Laboratory Sample Number:

MW-2 L906280-02

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
Allaryte	Пишпосл	Tiepareu	Allalyzeu	Surrogate Limits	Limit	Result	Onts	110103
		Seque	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C1	2), BTEX ar	d MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9060150	6/27/99	6/27/99		500	2570	ug/l	l
Benzene .	Ħ	#	н ,		5.00	36.3	17	
Toluene	н	#	10		5.00	11.6	ft	
Ethylbenzene	н	11 .	11		5.00	6.19	#	
Xylenes (total)	*1	tr	11		5.00	10.8	**	
Methyl tert-butyl ether	Ħ	11	n		50.0	ND	Ħ	•
Surrogate: a,a,a-Trifluorotoluene	#	n	"	70.0-130		113	%	

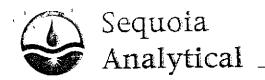


Sample Description:

Laboratory Sample Number:

MW-3 L906280-03

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Seque	ia Analytica	l - San Carios				
Total Purgeable Hydrocarbons (C6-C	12), BTEX ar	d MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9060142	6/25/99	6/25/99		50.0	ND	ug/l	
Benzene	ti	H	H		0.500	ND	*1	
Toluene	Ħ	n	n		0.500	ND	Ħ	
Ethylbenzene	11	11	m		0.500	ND	**	
Xylenes (total)	17	11	rv .		0.500	ND	**	
Methyl tert-butyl ether	n	11	H		5.00	ND	Ħ.	
Surrogate: a,a,a-Trifluorotoluene	n	11	#	70.0-130		88.1	%	

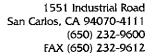


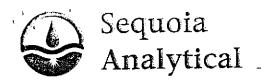
Sample Description:

Laboratory Sample Number:

MW-4 L906280-04

Laboratory Damptor Carrot			2,00200	• -				
	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*
		Saan	nia Analystics	ıl - San Carlos				
Total Purgeable Hydrocarbons (C6-C	12), BTEX ar							
Purgeable Hydrocarbons as Gasoline	9060130	6/23/99	6/24/99	-	50.0	ND	ug/l	
Benzene	H	н	н		0.500	ND	π	
Toluene	н	**	н		0.500	ND	n	
Ethylbenzene	IT	n	**		0.500	ND	н	
Xylenes (total)	H	11	**		0.500	ND	n	
Methyl tert-butyl ether	9060137	6/24/99	6/24/99		250	10600	W.	
Surrogate: a,a,a-Trifluorotoluene	9060130	6/23/99	6/23/99	70.0-130		83.7	%	
MTBE by EPA Method 8260A								2
Methyl tert-butyl ether	9070007	7/6/99	7/6/99		200	19200	ug/l	
Surrogate: 1,2-Dichloroethane-d4	"	н	,,	76.0-114		101	%	





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112

Shell(2) Project:

Project Number: Equiva 8930 Bancroft Ave./990616-S1 Project Manager:

Ann Pember

Sampled: 6/16/99 Received: 6/17/99

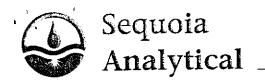
7/8/99 Reported:

Sample Description:

Laboratory Sample Number:

MW-5 L906280-05

A1-4-	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
Analyte	Number	Prepareu	Analyzed	Surrogate Lumis	Lann	Result	Ollits	110003
		Seque	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C1	2), BTEX at	d MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9060150	6/27/99	6/27/99		100	646	ug/l	1
Benzene	11	rr .	n		1.00	9,26	tt	
Toluene	11	H	n		1.00	1.05	11	
Ethylbenzene	11	*	Ħ		1.00	ND	11	
Xylenes (total)	11	н	н		1.00	ND	11	
Methyl tert-butyl ether	1f	n .	n		10.0	ND	11	
Surrogate: a,a,a-Trifluorotoluene	#	"	"	70.0-130		99.0	%	

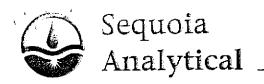


Sample Description:

Laboratory Sample Number:

MW-6 L906280-06

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method/ Surrogate Limits	Reporting Limit	Result	Units	Notes*
		Seque	oia Analytica	l - San Carlos				
Total Purgeable Hydrocarbons (C6-C1	2), BTEX an	d MTBE by	DHS LUFT					
Purgeable Hydrocarbons as Gasoline	9060142	6/25/99	6/25/99		50.0	308	ug/l	
Benzene	IT.	11	H.		0.500	2.45	Ħ	
Toluene	ir	11	H		0.500	ND	11	
Ethylbenzene	Ħ	11	н		0.500	ND	11	
Xylenes (total)	н .	11	н		0.500	ND	11	
Methyl tert-butyl ether	н	51	H		5.00	7.39	1t	
Surrogate: a,a,a-Trifluorotoluene	"	"	**	70.0-130		<i>87.6</i>	%	



Blaine	Tech Services	Project:	Shell(2)	Sampled:	6/16/99
1680 R	Rogers Avenue	Project Number:	Equiva 8930 Bancroft Ave./990616-S1	Received:	6/17/99
San Jos	se, CA 95112	Project Manager:	Ann Pember	Reported:	7/8/99

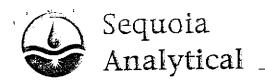
Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control Sequoia Analytical - San Carlos

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
<u> </u>	-									
Batch: 9060130	Date Prepa	red: 6/23/9	<u>9</u>		Extrac	ction Method: EP.	A 5030B	(P/T)		
Blank	9060130-B	<u>LK1</u>								
Purgeable Hydrocarbons as Gasoline	6/23/99			ND	ug/l	50.0				
Benzene	#			ND	41	0.500				
Toluene	11			ND	FF .	0.500				
Ethylbenzene	11			ND	**	0.500				
Xylenes (total)	11			ND	11	0.500	•			
Methyl tert-butyl ether	11			ND	Ħ	5.00				
Surrogate: a,a,a-Trifluorotoluene	n	10.0		9.36	"	70.0-130	93.6			
LCS	9060130-BS	<u>51</u>							-	
Benzene	6/23/99	10.0		8.21	ug/i	70.0-130	82.1			
Toluene	85	10.0		8.32	"	70.0-130	83.2			
Ethylbenzene	н	10.0		8.42	17	70.0-130	84.2			
Xylenes (total)	11	30.0		25.5	н	70.0-130	85.0			
Surrogate: a,a,a-Trifluorotoluene	II	10.0		8.61	"	70.0-130	86.1			
Matrix Spike	9060130-M	S1								
Benzene	6/24/99	10.0		8.04	ug/I	60.0-140	80.4			
Toluene	ii	10.0		8.98	"	60.0-140	89.8			
Ethylbenzene	11	10.0		7.82	H	60.0-140	78.2			
Xylenes (total)	11	30.0		23.2	17	60.0-140	77.3			
Surrogate: a,a,a-Trifluorotoluene	H	10.0		7.93	#1	70.0-130	79.3			
Matrix Spike Dup	9060130-M	SD1								
Benzene	6/24/99	10.0		8.25	ug/l	60.0-140	82.5	25.0	2.58	
Toluene	11	10.0		8.39	11	60.0-140	83.9	25.0	6.79	
Ethylbenzene	Ħ	10.0		8.07	H	60.0-140	80.7	25.0	3.15	
Xylenes (total)	11	30.0		24.2	#	60.0-140	72.6	25.0	6.27	
Surrogate: a,a,a-Trifluorotoluene	n	10.0		8.17	"	70.0-130	81.7	-		
Batch: 9060142	Date Prepa		9		Extrac	ction Method: EP.	A 5030B	[P/T]		
<u>Blank</u>	<u>9060142-BI</u>	LK1								
Purgeable Hydrocarbons as Gasoline	6/25/99			ND	ug/l	50.0				
Benzene	11			ND	H	0.500				
Toluene	#1			ND	Ħ	0.500				
Ethylbenzene	11			ND	**	0.500				
Xylenes (total)	11			ND	n	0.500				
Methyl tert-butyl ether	**			ND	H	5.00				
Surrogate: a,a,a-Trifluorotoluene	#	10.0		9.67	rr	70.0-130	96.7			

Sequoia Analytical - San Carlos

*Refer to end of report for text of notes and definitions.

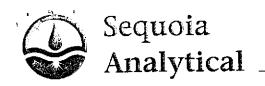




Blaine Tech Services	Project:	Shell(2)	Sampled:	6/16/99
1680 Rogers Avenue	Project Number:	Equiva 8930 Bancroft Ave./990616-S1	Received:	6/17/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported:	7/8/99

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control Sequoia Analytical - San Carlos

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	<u>%</u>	Notes*
Batch: 9060150	Date Prepar	red: 6/27/9	<u>99</u>		Extrac	tion Method: EPA	A 5030B	[P/T]		
Blank	9060150-BI	<u>.K1</u>								
Purgeable Hydrocarbons as Gasoline	6/27/99			ND	ug/l	50.0				
Benzene	n			ND	11	0.500				
Toluene	n			ND	17	0.500				
Ethylbenzene	11			ND	17	0.500				
Xylenes (total)	11			ND	P	0.500	,			
Methyl tert-butyl ether	11			ND	'n	5.00				
Surrogate: a,a,a-Trifluorotoluene	tt	10.0		8.17	H	70.0-130	81.7			
LCS	9060150-BS	<u> </u>								•
Purgeable Hydrocarbons as Gasoline	6/27/99	250		218	ug/l	70.0-130	87.2			
Surrogate: a,a,a-Trifluorotoluene	n	10.0		8.03	"	70.0-130	80.3			
Matrix Spike	9060150-M	S1 L9	906279-02							
Purgeable Hydrocarbons as Gasoline	6/27/99		ND	232	ug/l	60.0-140	92.8			
Surrogate: a,a,a-Trifluorotoluene	n	10.0	. ,	8.16	"	70.0-130	81.6			
Matrix Spike Dup	9060150-M	SD1 L	906279-02							
Purgeable Hydrocarbons as Gasoline	6/27/99	250	ND	222	ug/l	60.0-140	88.8	25.0	4.41	
Surrogate: a,a,a-Trifluorotoluene	n	10.0		7.73	"	70.0-130	77.3			

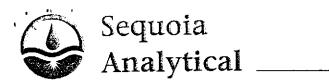


Blaine Tech Services	Project:	Shell(2)	Sampled:	6/16/99
1680 Rogers Avenue	Project Number:	Equiva 8930 Bancroft Ave./990616-S1	Received:	6/17/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported:	7/8/99

MTBE by EPA Method 8260A/Quality Control Sequoia Analytical - San Carlos

	Date	Spike	Sample	QC		Reporting Limit		RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
D-4-L. 0070007	Date Prepa	mode 7/2/06	.		Evtras	tion Method: EP	4 5030P	IP/T)		
Batch: 9070007	9070007-B		2		EXITAC	tion Method: E12	A JUJUD	11/1		
Blank M. d. Leather Lather		<u>rvi</u>		ND	Л	2.00				
Methyl tert-butyl ether	7/2/99	50.0		52.4	ug/l	76.0-114	105	-		
Surrogate: 1,2-Dichloroethane-d4	.	30.0		32.4		70.0-114	103			
Blank	9070007-B	LK2								
Methyl tert-butyl ether	7/6/99			ND	ug/l	2.00				
Surrogate: 1,2-Dichloroethane-d4	н	50.0		53.1	"	76.0-114	106			
Blank	9070007-B	LK3								
Methyl tert-butyl ether	7/7/99			ND	ug/l	0.500				
Surrogate: 1,2-Dichloroethane-d4	rr .	50.0		53.1	#	76.0-114	106			
LCS	9070007-B	S1								
Methyl tert-butyl ether	7/2/99	50.0		49.7	ug/l	70.0-130	99.4			
Surrogate: 1,2-Dichloroethane-d4	"	50.0		51.0	#	76.0-114	102			
LCS	9070007-B	S2								
Methyl tert-butyl ether	7/6/99	50.0		53.7	ug/l	70.0-130	107			
Surrogate: 1,2-Dichloroethane-d4	ti .	50.0		54.5	n	76.0-114	109			
LCS	9070007-B	S 3								
Methyl tert-butyl ether	7/7/99	50.0		54.7	ug/l	70.0-130	109			
Surrogate: 1,2-Dichloroethane-d4	H	50.0		51.9	n	76.0-114	104			
Matrix Spike	9070007-M	ISI L	907011-04							
Methyl tert-butyl ether	7/2/99	50.0	127	166	ug/l	60.0-140	78.0			
Surrogate: 1,2-Dichloroethane-d4	"	50.0		52.3	п	76.0-114	105			
Matrix Spike Dup	9070007-M	SD1 L	907011-04							
Methyl tert-butyl ether	7/2/99	50.0	127	171	ug/l	60.0-140	88.0	25.0	12.0	
Surrogate: 1,2-Dichloroethane-d4	"	50.0		52.0	п	76.0-114	104			





Blaine Tech Services	Project:	Shell(2)	Sampled:	6/16/99
1680 Rogers Avenue	Project Number:	Equiva 8930 Bancroft Ave./990616-S1	Received:	6/17/99
San Jose, CA 95112	Project Manager:	Ann Pember	Reported:	7/8/99

Notes and Definitions

#	Note
1	Chromatogram Pattern: Gasoline C6-C12
2	MTBE was confirmed pass hold-time.
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

	WELL GAUGING DATA	
Project#_	9906/6-51 Date 6/16/99	Client Shell
-	8930 Buckett (3a Kland
Site		

Well ID	WeIl Size (in.)	Sheen /		Thickness of Immiscible Liquid (ft.)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
					15,04	18.20	7oc	2
MW-2 MW-3. MW-4 MW-5 MW-6	3					18.75	- 1	6
MW-3	3					19,35		/
MW-H	3				12,84	19,51		4
MW-5	3					19,49		3
Mui-6	3			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14.49	19.64		5
-								
			# # # # # # # # # # # # # # # # # # #					
	<u> </u>		**************************************					

		-		7 P P P P P P P P P P P P P P P P P P P			**************************************	
-				1			**************************************	

Project #: 990616-51	Job# 204-S508-1305
Sampler: <a>C	Date: (0//6/99
Well I.D.: MW-	Well Diameter: 2 3 4 6 8
Total Well Depth: 3,20	Depth to Water: 15.04
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (VC) Grade	D.O. Meter (if req'd): YSI HACH
	Well Diameter Multiplier
2" 0.16 3- 0.37	5* 1.02 6* 1.47
4" 0.65	Other radius ² • 0.163
	Sampling Method: Bailer
Purge Method: Bailer Middleburg	Extraction Port
Electric Submersible	Other:
Extraction Pump	Other.
·	
Other:	
\mathbf{x}	= 3.3 Gals.
1 Case Volume (Gals.) Specified V	
Time Temp (°F) pH Cond.	Turbidity Gals. Removed Observations
10:53 71.8 18.0 300	21.5 1.5
10:55 71.2 8.0 250	13.0 3.0
10:57 70.0 7.0 270	142 4
10.3(1/0" 10.70	
Did well dewater? Yes No	Gallons actually evacuated:
Sampling Time: [1-00	Sampling Date: 6/6/99
Sample I.D.: MW-	Laboratory: (Sequoia BC Other
Analyzed for TPH-G BTEX MTBE TPH-D	Other:
D.O. (if req'd): Pre-purge	:: Post-purge: mg/L
O.R.P. (if req'd): Pre-purge	mV Post-purge: mV

	#b #	277	<i></i>				
Project #: 99666-51				Job# 204-5508-1305			
Sampler: (0.5)				Date: 6//6/99			
Well I.D.	: M	N-2		Well Diameter	r: 2 3 4	6 8 _	
Total We	ll Depth:	18,5	75	Depth to Wate	r: 14.63		
Depth to	Free Produ	uct:		Thickness of I	Free Product (fe	eet):	
Reference	ed to:	PVC	Grade	D.O. Meter (if	reg'd):	YSI HA	ACH
	Well Diame	ter	Multiplier		Multiplier		
	2*	·	0.16	5 "	1.02		4
	3"		0.37	6*	1.47		
	4*		0.65	Other rad	ius ² * 0.163		<i>*</i>
Purge Metho	od:	Bailer		Sampling Method:	Bailer		
_		Middleburg	•	. 0	Extraction Port		
	€1e	ctric Submers	The	Other:			
	,			Outer.		-	
		Extraction Pun	ıp				
	Other:						_
			J	1	5 / <	•	}
:		ره	x	=	Gals.		
	1 Case Vol	ume (Gals.)	Specified Vo	olumes Cai	culated Volume		
Time	Temp (°F)	рН	Cond.	Turbidity	Gals. Removed	Observa	tions
12°t6	73.4	8,1	200	<200	1.5	Odor)
12:48	74.2	9.3	400	2200	3		
12:50	72,8	8.2	400	4200	5		
				,			
4). 4.							-
Did well o	lewater?	Yes (No)	Gallons actuall	y evacuated:	5	
Sampling	Time:	13:00		Sampling Date	: 6/16	199	
Sample I.I	D.: MV	v-2		Laboratory: (Sequoia BC	Other	
Analyzed	for TPH-	G BTEX	MTBE TPH-D	Other:			
D.O. (if re	:q'd):		Pre-purge:	$^{mg}\!/_{\!\mathrm{L}}$	Post-purge:		mg/L
O.R.P. (if	req'd):		Pre-purge:	mV	Post-purge:		mV

Project #:	9906	0 (0-	51	Job# 204	-5508-	305	
Sampler: KPS				Date: 6/16/9			
Well I.D.:	: MW	ر کی	e	Well Diameter:	2 3 4	6 8	
Total We	ll Depth:	19	35	Depth to Water	: 12.71		
Depth to 1	Free Produ	ct:		Thickness of F	ree Product (fee	et):	
Reference	d to:	(PVC)	Grade	D.O. Meter (if	req'd):	YSI HACH	
	Well Diamet 2" 3" 4"		Multiplier V 0.16 0.37 0.65	5" 6"	<u>Aultiplier</u> 1.02 1.47 1s ² * 0.163		
Purge Metho	od;	Bailer		Sampling Method:	Bailer		
	`	Middle <u>burg</u>	_		Extraction Port	•	
	_	ctric Submers	=	Other:			
	E Other:	xtraction Pum	ıp				
	Other.	یان (<u> </u>		7 7		
	<i>L</i>		x	=	Gals.		
	1 Case Vol	ume (Gals.)	Specified Vo	lumes Cale	culated Volume		
Time	Temp (°F)	pН	Cond.	Turbidity	Gals. Removed	Observations	
10:20	66.6	8.0	900	88	3	•	
10:24	68.4	8.2	850	92	S	odor	
10:29	69.8	7.8	750	87	8	ador	
,			·				
Did well	dewater?	Yes (No	Gallons actuall	y evacuated: (8	
Sampling	Time: (J:40		Sampling Date	C 110 10	19	
Sample I.	D.: /	Ww-?	2	Laboratory: (Sequoia BC	Other	
Analyzed	for: TPH-	G BTEX	мтве трн-д	Other:			
D.O. (if r	eq'd):	W Valored	Pre-purge:	mg/L	Post-purge:	mg/ _L	
O.R.P. (if	f req'd):		Pre-purge:	mV	Post-purge:	mV	

Project #:	9900	010-5	51	Job# 2	14-2508	-/3GS	-
Sampler:	P	5		Date: 6	116199		
Well I.D.:	: Mw	-4	·	Well Diame	ter: 2 (3) 4	6 8	
Total Wel	l Depth:	19.5		Depth to Wa	iter: 12.8 ²	t	
Depth to Free Product:				Thickness o	f Free Product (fe	et):	
Reference	d to:	PVC	Grade	D.O. Meter	(if req'd):	YSI HACH	
	Well Diamet	ier !		Well Diameter	Multiplier		
	2"		0.16 0.37	5 " 6"	1.02 1.47		
	4"		0,65	=	radius ² * 0.163		
Purge Metho	nd:	Bailer		Sampling Meth	od: Bailer	·	
•	,	Middleburg	~	~	Extraction Port		
	Ele	ctric Submers	- \	Orth	ner:		
		extraction Pum		Ou.		-	
	Other:		ıp				
[Cuici.)	<u> </u>		
	1	, D	X _	_ =	$+_{\circ}$ \supset Gals.		
	1 Case Vol	ume (Gals.)	Specified Vo	olumes	Calculated Volume		
Time	Temp (°F)	pН	Cond.	Turbidity	Gals. Removed	Observation	1S
11:51	72.0	8.3	200	40	2.5		
11:53	73.4	8.3	300	165	5.0		
11:56	720	8.2	300	160	8		
	,						
Did well	dewater?	Yes (No)	Gallons actu	ally evacuated:	7	
Sampling	Time:	12:00		Sampling Da	ate: 6/6/	49	
Sample I.	D.: M	w-4		Laboratory:	Sequoia BC	Other	
Analyzed	for: (TPH-	G BTEX	MTBE TEH-D	Other:			
D.O. (if re	eq'd):		Pre-purge:	111	Pe/ _L Post-purge:		$^{ m mg}/_{ m L}$
O.R.P. (if	req'd):		Pre-purge:	n	1V Post-purge:		mV

Project #: 9906651	Job# 204-5508-1305
Sampler: 25	Date: 6/16/99
Well I.D.: MW-S	Well Diameter: 2 (3) 4 6 8
Total Well Depth: 19,49	Depth to Water: 3.47
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 - 3" 0.37	5" 1.02 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:	
0 2 2	
X	$\underline{\hspace{1cm}} = \underline{\hspace{1cm}} (O_{\ell} O_{\ell})$ Gals.
1 Case Volume (Gals.) Specified V	olumes Calculated Volume
Time Temp (°F) pH Cond.	Turbidity Gals. Removed Observations
11:21 73.8 7.0 250	11-06 2,5
11:24 72.8 7.0 260	63.6 5
11:27 71.0 7,1 200	$\left(09.1\right)$
Did well dewater? Yes (No)	Gallons actually evacuated:
Sampling Time: 1:30	Sampling Date: 6/16/99
Sample I.D.: MW-S	Laboratory: Sequoia BC Other
Analyzed for: TPH-G BTEX MTBE TPH-D	Other:
D.O. (if req'd): Pre-purge	Post-purge:
O.R.P. (if req'd): Pre-purge	mV Post-purge: mV

Project #	<u>: 44</u>	06/6	0-51	Job# 200	4~5508	<u>-1305</u>
Sampler:	K)5	;	Date: 6/	116/99	
Well I.D.	: M	N-6	v	Well Diameter	r: 2 3 4	6 8
Total We	ll Depth:	19,	64	Depth to Wate	er: 14.4	-9
Depth to	Free Prod	uct:	<u>.</u>	Thickness of F	Free Product (fe	et):
Referenc	ed to:	(PVC)	Grade	D.O. Meter (if	req'd):	YSI HACH
	Well Diame 2" 4 3" 4"	eter	<u>Multiplier</u> 0.16 0.37 0.65	5" 6"	<u>Multiplier</u> 1.02 1.47 ius ² * 0.163	
Purge Meth	od:	Bailer		Sampling Method:	Bailer	
	`	Middleburg			Extraction Port	
		ectric Submers		Other		
	Other:	Extraction Pun	i p			
	Outer.	<u></u>			0 -	
		. 4	x	<u> </u>	S. Gals.	
	1 Case Vol	ume (Gals.)	Specified Vo	olumes Cal	culated Volume	
Time	Temp (°F)	pН	Cond.	Turbidity	Gals. Removed	Observations
12:22	70.2	8,3	250	179	2	
12:24	7(8	8.3	2-50	121	4	
12:26	72.8	8:2	300	172	6	
	,					
Did well	dewater?	Yes (No	Gallons actuall	y evacuated:	6
Sampling	Time:	126	30	Sampling Date	: 6//6/	99
Sample I.	D.: M	\w-(1)	Laboratory:	Sequoia BC	Other
Analyzed	for: TPH-	G BTEX	MTBE TPH-D	Other:		
D.O. (if re	eq'd):		Pre-purge:	mg _{/L}	Post-purge:	mg/
O.R.P. (if	req'd):		Pre-purge:	mV	Post-purge:	mV