

9/1/00

Need MW log of MW-4 to see if
MSE is being removed or if it is
just migrating offsite

August 10, 2000

C A M B R I A

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

Re: **First Quarter 2000 Monitoring and Remediation Report**
Shell-branded Service Station
8930 Bancroft Avenue
Oakland, California
Incident #98995742
Cambria Project #242-1408-002

00 AUG 14 PM 3:52
ENVIRONMENTAL
PROTECTION



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.

FIRST QUARTER 2000 ACTIVITIES

Groundwater Monitoring: Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled all site wells, calculated groundwater elevations, and compiled the analytical data. Cambria prepared a groundwater elevation contour map (Figure 1). Blaine's report, presenting the laboratory report and supporting field documents, is included as Attachment A.

Groundwater Extraction: Cambria continued weekly groundwater extraction from MW-4 using a vacuum truck and stinger arrangement. Mass removal data is presented in Table 1.

ANTICIPATED SECOND QUARTER 2000 ACTIVITIES

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

Alameda County Health Care Services Agency (ACHCSA) Letter Response: In response to ACHSCA's letter dated November 1, 1999, Cambria will perform a conduit study and well survey to include in a site conceptual model for the site. This information will be included in the second quarter 2000 monitoring report.

Oakland, CA
San Ramon, CA
Sonoma, CA
Portland, OR

**Cambria
Environmental
Technology, Inc.**

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

Groundwater Extraction: Cambria will continue weekly groundwater extraction from MW-4.

CLOSING

We appreciate the opportunity to work with you on this project. Please call Troy Buggle at (510) 420-3333 if you have any questions or comments.



Sincerely,
Cambria Environmental Technology, Inc


Troy A. Buggle
Senior Staff Scientist


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

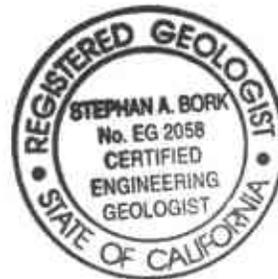


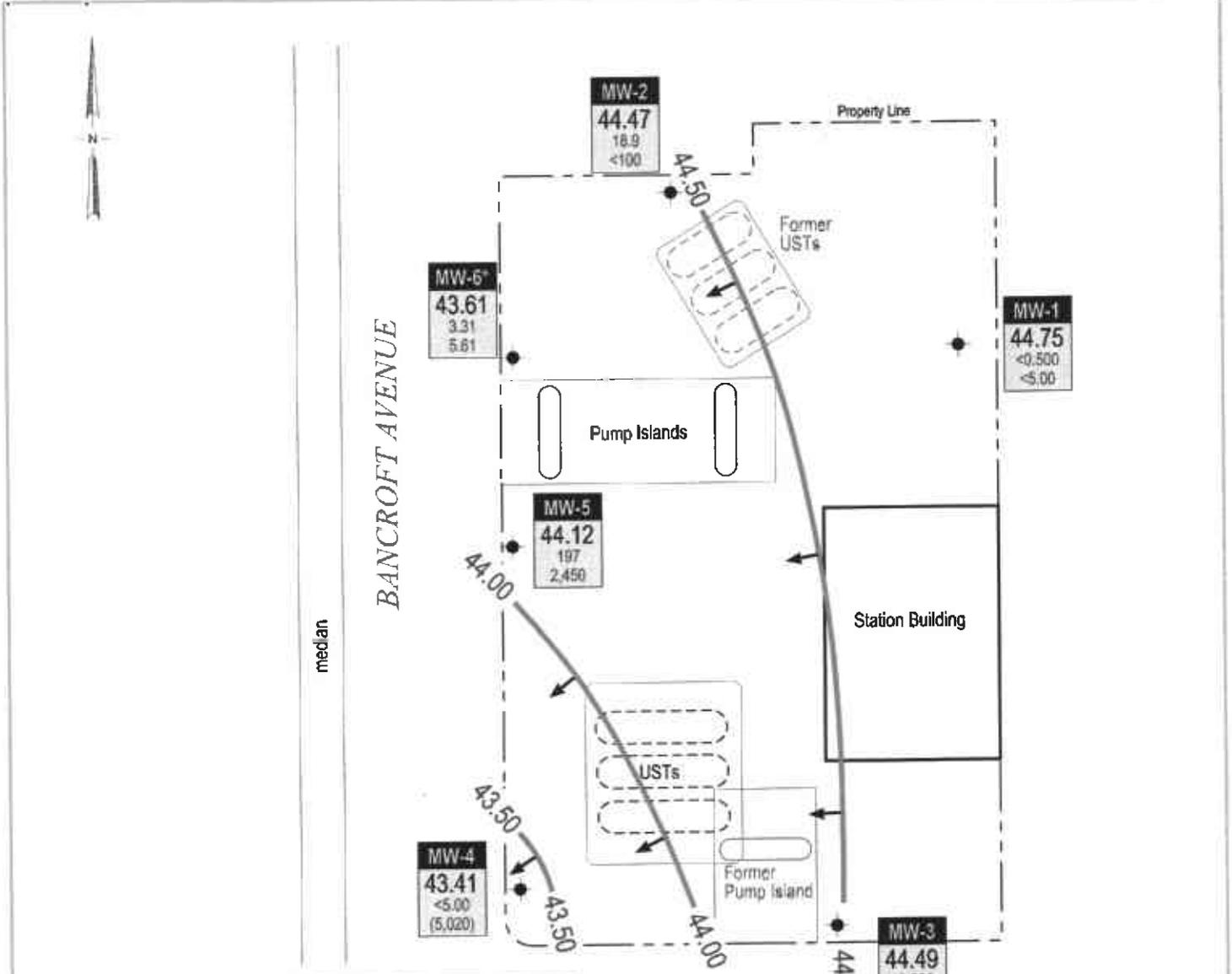
Figure: 1 - Groundwater Elevation Contour Map

Table: 1 - Mass Removal Data

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

cc: Karen Petryna, Equiva Services LLC, P.O. Box 7869, Burbank, California 91510-7869
Leroy Griffin, City of Oakland Fire Department, 505 14th Street. Suite 702, Oakland,
CA 94612

g:\oakland8930bancroft\qm\lq00qm.doc



EXPLANATION

MW-1 ◆ Monitoring well location

* Data anomalous; well not contoured

→ Groundwater flow direction

— XX.XX Groundwater elevation contour, in feet above mean sea level (msl), approximately located; dashed where inferred

Well — Well designation

ELEV — Groundwater elevation, in feet above msl

Benzene
MTBE — Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8020; MTBE results in parentheses are analyzed by EPA Method 8260

90TH AVENUE



Scale (ft)

FIGURE

1

Shell-branded Service Station

8930 Bancroft Avenue
Oakland, California
Incident #98995742



C A M B R I A

Groundwater Elevation Contour Map

March 22, 2000

G:\OAKLAND\8930BANCROFT\FIGURE1\FIGURE1.CMD-AKP.DWG

CAMBRIA

Table 1: Mass Removal Data - Shell-branded Service Station, Incident #98995742, 8930 Bancroft ,Oakland, CA

Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH* Concentration (ppb)	TPPH Removed (lb)	TPPH Removed To Date (lb)	Benzene* Concentration (ppb)	Benzene Removed (lb)	Benzene Removed to Date (lb)	MtBE* Concentration (ppb)	MtBE Removed (lb)	MtBE Removed To Date (lb)
03/15/00	MW-4	650	650	12/23/99	< 100	< 0.00054	< 0.00054	< 1.0	< 0.00001	< 0.00001	8,400	0.04556	0.04556
03/22/00	MW-4	100	750	03/22/00	< 500	< 0.00042	< 0.00096	< 5.00	< 0.00000	< 0.00001	5,020	0.00419	0.04975
03/27/00	MW-4	75	825	03/22/00	< 500	< 0.00031	< 0.00127	< 5.00	< 0.00000	< 0.00001	5,020	0.00314	0.05289
04/03/00	MW-4	150	975	03/22/00	< 500	< 0.00063	< 0.00190	< 5.00	< 0.00001	< 0.00002	5,020	0.00628	0.05917
04/17/00	MW-4	300	1,275	03/22/00	< 500	< 0.00125	< 0.00315	< 5.00	< 0.00001	< 0.00003	5,020	0.01257	0.07174
04/24/00	MW-4	150	1,425	03/22/00	< 500	< 0.00063	< 0.00378	< 5.00	< 0.00001	< 0.00004	5,020	0.00628	0.07802
Total Gallons Extracted:			1,425	Total Pounds Removed: < 0.00378						< 0.00004	0.07802		
				Total Gallons Removed: < 0.00062						< 0.00001	0.01258		

Abbreviations & Notes:

TPPH = Total purgeable hydrocarbons as gasoline

MtBE = Methyl tert-butyl ether

µg/L = Micrograms per liter

ppb = Parts per billion, equivalent to µg/L

lb = Pound

SPH = Separate Phase Hydrocarbons

L = Liter

gal = Gallon

g = Gram

* = Concentration based on most recent groundwater monitoring results

Mass removed based on the formula: volume extracted (gal) x Concentration (µg/L) x (g/10⁶µg) x (pound/453.6g) x (3.785 L/gal)

Volume removal data based on the formula: density (in gms/cc) x 9.339 (ccxlbs/gmsxgals)

MTBE data in bold font by 8260, all other MTBE by 8020

ATTACHMENT A
Blaine Groundwater Monitoring Report
and Field Notes



1680 ROGERS AVENUE
SAN JOSE, CA 95112-1105
(408) 573-7771 FAX
(408) 573-0555 PHONE
CONTRACTOR'S LICENSE #746684
www.blainetech.com

April 21, 2000

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

First Quarter 2000 Groundwater Monitoring at
Shell-branded Service Station
8930 Bancroft Avenue
Oakland, CA

Monitoring performed on March 22, 2000

Groundwater Monitoring Report 000322-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, 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. Purge water (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/jt

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

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

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

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
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MW-1	12/17/1998	<50	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	53.19	11.87	41.32
MW-1	03/09/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	53.19	8.21	44.98
MW-1	06/16/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	53.19	15.04	38.15
MW-1	09/30/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	53.19	16.02	37.17
MW-1	12/23/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	NA	53.19	14.78	38.41
MW-1	03/22/2000	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	53.19	8.44	44.75

MW-2	12/17/1998	9,900	NA	<5.0	37	22	47	48	<20	52.66	11.65	41.01
MW-2	03/09/1999	2,760	NA	12.3	7.50	85.4	444	<50.0	NA	52.66	8.07	44.59
MW-2	06/16/1999	2,570	NA	36.3	11.6	6.19	10.8	<50.0	NA	52.66	14.63	38.03
MW-2	09/30/1999	1,960	NA	19.1	3.20	4.55	26.9	<25.0	NA	52.66	15.63	37.03
MW-2	12/23/1999	145	NA	1.30	<0.500	<0.500	0.899	<2.50	NA	52.66	14.42	38.24
MW-2	03/22/2000	6,060	NA	18.9	<10.0	210	651	<100	NA	52.66	8.19	44.47

MW-3	12/17/1998	<50	NA	<0.50	<0.50	<0.50	<0.50	10	11	51.30	11.85	39.45
MW-3	03/09/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	51.30	6.53	44.77
MW-3	06/16/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<5.00	NA	51.30	12.71	38.59
MW-3	09/30/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	5.14	NA	51.30	14.07	37.23
MW-3	12/23/1999	<500	NA	<5.00	<5.00	<5.00	<5.00	<25.0	NA	51.30	12.82	38.48
MW-3	03/22/2000	<50.0	NA	<0.500	1.48	<0.500	1.90	<5.00	NA	51.30	6.81	44.49

MW-4	12/17/1998	700	NA	4.3	0.88	<0.50	<0.50	21,000	26,000	50.73	10.80	39.93
MW-4	03/09/1999	83.9	NA	<0.500	<0.500	<0.500	<0.500	17,900	23,700	50.73	6.91	43.82
MW-4	06/16/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	10,600	19,200	50.73	12.84	37.89

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

Well ID	Date	TPPH (ug/L)	TEPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
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MW-4	09/30/1999	51.2	NA	<0.500	<0.500	<0.500	<0.500	12,200	12,300	50.73	13.74	36.99
MW-4	12/23/1999	<100	NA	<1.00	<1.00	<1.00	<1.00	7,990	8,400	50.73	12.40	38.33
MW-4	03/22/2000	<500	NA	<5.00	<5.00	<5.00	<5.00	4,970	5,020	50.73	7.32	43.41

MW-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-5	09/30/1999	484	NA	1.93	0.511	<0.500	<0.500	159	NA	51.43	14.41	37.02
MW-5	12/23/1999	944	NA	4.59	17.7	3.79	16.7	214	NA	51.43	14.07	37.36
MW-5	03/22/2000	8,770	NA	197	96.5	<50.0	188	2,450	NA	51.43	7.31	44.12

MW-6	12/17/1998	940	NA	27	0.32	2.4	2.3	3.0	3.2	51.88	11.37	40.51
MW-6	03/09/1999	336	NA	7.78	1.60	2.40	6.36	<10.0	NA	51.88	8.10	43.78
MW-6	06/16/1999	308	NA	2.45	<0.500	<0.500	<0.500	7.39	NA	51.88	14.49	37.39
MW-6	09/30/1999	80.2	NA	<0.500	<0.500	<0.500	<0.500	24.8	NA	51.88	15.30	36.58
MW-6	12/23/1999	149	NA	0.518	<0.500	<0.500	<0.500	6.43	NA	51.88	13.19	38.69
MW-6	03/22/2000	382	NA	3.31	2.18	0.619	2.35	5.61	NA	51.88	8.27	43.61

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

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

NA = Not applicable



April 6, 2000

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

RE: Equiva/L003224

Dear Ann Pember:

Enclosed are the results of analyses for sample(s) received by the laboratory on March 23, 2000. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Wayne Stevenson
Project Manager

CA ELAP Certificate Number I2360





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva Project Number: 000322-S1 Project Manager: Ann Pember	Sampled: 3/22/00 Received: 3/23/00 Reported: 4/6/00
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ANALYTICAL REPORT FOR L003224

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-1	L003224-01	Water	3/22/00
MW-2	L003224-02	Water	3/22/00
MW-3	L003224-03	Water	3/22/00
MW-4	L003224-04	Water	3/22/00
MW-5	L003224-05	Water	3/22/00
MW-6	L003224-06	Water	3/22/00





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva(2) Project Number: 000322-S1 Project Manager: Leah Davis	Sampled: 3/22/00 Received: 3/23/00 Reported: 4/6/00
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT
Sequoia Analytical - San Carlos**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-1				<u>L003224-01</u>		<u>Water</u>		
Purgeable Hydrocarbons as Gasoline	0040010	4/4/00	4/4/00		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		105	%	
MW-2				<u>L003224-02</u>		<u>Water</u>		
Purgeable Hydrocarbons as Gasoline	0040010	4/4/00	4/4/00		1000	6060	ug/l	1
Benzene	"	"	"		10.0	18.9	"	
Toluene	"	"	"		10.0	ND	"	
Ethylbenzene	"	"	"		10.0	210	"	
Xylenes (total)	"	"	"		10.0	651	"	
Methyl tert-butyl ether	"	"	"		100	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		107	%	
MW-3				<u>L003224-03</u>		<u>Water</u>		
Purgeable Hydrocarbons as Gasoline	0040019	4/5/00	4/5/00		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	1.48	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	1.90	"	
Methyl tert-butyl ether	"	"	"		5.00	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		104	%	
MW-4				<u>L003224-04</u>		<u>Water</u>		
Purgeable Hydrocarbons as Gasoline	0040010	4/4/00	4/4/00		500	ND	ug/l	
Benzene	"	"	"		5.00	ND	"	
Toluene	"	"	"		5.00	ND	"	
Ethylbenzene	"	"	"		5.00	ND	"	
Xylenes (total)	"	"	"		5.00	ND	"	
Methyl tert-butyl ether	0040019	4/5/00	4/5/00		250	4970	"	
Surrogate: a,a,a-Trifluorotoluene	0040010	4/4/00	4/4/00	70.0-130		101	%	
MW-5				<u>L003224-05</u>		<u>Water</u>		
Purgeable Hydrocarbons as Gasoline	0040019	4/5/00	4/5/00		5000	8770	ug/l	1
Benzene	"	"	"		50.0	197	"	
Toluene	"	"	"		50.0	96.5	"	
Ethylbenzene	"	"	"		50.0	ND	"	
Xylenes (total)	"	"	"		50.0	188	"	





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva(2) Project Number: 000322-S1 Project Manager: Leah Davis	Sampled: 3/22/00 Received: 3/23/00 Reported: 4/6/00
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT
Sequoia Analytical - San Carlos**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
MW-5 (continued)				<u>L003224-05</u>			<u>Water</u>	
Methyl tert-butyl ether	0040019	4/5/00	4/5/00		500	2450	ug/l	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		93.8	%	
MW-6				<u>L003224-06</u>			<u>Water</u>	
Purgeable Hydrocarbons as Gasoline	0040019	4/5/00	4/5/00		50.0	382	ug/l	1
Benzene	"	"	"		0.500	3.31	"	
Toluene	"	"	"		0.500	2.18	"	
Ethylbenzene	"	"	"		0.500	0.619	"	
Xylenes (total)	"	"	"		0.500	2.35	"	
Methyl tert-butyl ether	"	"	"		5.00	5.61	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		107	%	





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva(2) Project Number: 000322-S1 Project Manager: Leah Davis	Sampled: 3/22/00 Received: 3/23/00 Reported: 4/6/00
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**MTBE by EPA Method 8260A
Sequoia Analytical - San Carlos**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
<u>MW-4</u>				<u>L003224-04</u>			<u>Water</u>	
Methyl tert-butyl ether	0040016	4/5/00	4/5/00		100	5020	ug/l	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	76.0-114		97.8	%	





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva Project Number: 000322-S1 Project Manager: Ann Pember	Sampled: 3/22/00 Received: 3/23/00 Reported: 4/6/00
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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*
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Batch: 0040010	Date Prepared: 4/4/00		Extraction Method: EPA 5030B [P/T]							
Blank	0040010-BLK1									
Purgeable Hydrocarbons as Gasoline	4/4/00			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		11.2	"	70.0-130	112			

LCS	0040010-BS1									
Benzene	4/4/00	10.0		10.0	ug/l	70.0-130	100			
Toluene	"	10.0		9.33	"	70.0-130	93.3			
Ethylbenzene	"	10.0		9.49	"	70.0-130	94.9			
Xylenes (total)	"	30.0		28.2	"	70.0-130	94.0			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		11.1	"	70.0-130	111			

LCS	0040010-BS2									
Purgeable Hydrocarbons as Gasoline	4/4/00	250		232	ug/l	70.0-130	92.8			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		11.7	"	70.0-130	117			

Matrix Spike	0040010-MS1	L003207-03								
Benzene	4/4/00	10.0	ND	10.3	ug/l	60.0-140	103			
Toluene	"	10.0	ND	9.68	"	60.0-140	96.8			
Ethylbenzene	"	10.0	ND	9.79	"	60.0-140	97.9			
Xylenes (total)	"	30.0	ND	29.2	"	60.0-140	97.3			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.7	"	70.0-130	107			

Matrix Spike Dup	0040010-MSD1	L003207-03								
Benzene	4/4/00	10.0	ND	9.15	ug/l	60.0-140	91.5	25.0	11.8	
Toluene	"	10.0	ND	8.22	"	60.0-140	82.2	25.0	16.3	
Ethylbenzene	"	10.0	ND	8.18	"	60.0-140	81.8	25.0	17.9	
Xylenes (total)	"	30.0	ND	24.7	"	60.0-140	82.3	25.0	16.7	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		8.72	"	70.0-130	87.2			

Batch: 0040019	Date Prepared: 4/5/00		Extraction Method: EPA 5030B [P/T]							
Blank	0040019-BLK1									
Purgeable Hydrocarbons as Gasoline	4/5/00			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva Project Number: 000322-S1 Project Manager: Ann Pember	Sampled: 3/22/00 Received: 3/23/00 Reported: 4/6/00
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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*
Blank (continued)	0040019-BLK1									
Methyl tert-butyl ether	4/5/00			ND	ug/l	5.00				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.6	"	70.0-130	106			
LCS	0040019-BS1									
Benzene	4/5/00	10.0		11.9	ug/l	70.0-130	119			
Toluene	"	10.0		11.3	"	70.0-130	113			
Ethylbenzene	"	10.0		11.1	"	70.0-130	111			
Xylenes (total)	"	30.0		34.2	"	70.0-130	114			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		11.1	"	70.0-130	111			
LCS	0040019-BS2									
Purgeable Hydrocarbons as Gasoline	4/5/00	250		278	ug/l	70.0-130	111			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		11.6	"	70.0-130	116			
Matrix Spike	0040019-MS1		L003234-10							
Purgeable Hydrocarbons as Gasoline	4/5/00	250	ND	271	ug/l	60.0-140	108			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.6	"	70.0-130	106			
Matrix Spike Dup	0040019-MSD1		L003234-10							
Purgeable Hydrocarbons as Gasoline	4/5/00	250	ND	264	ug/l	60.0-140	106	25.0	1.87	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.6	"	70.0-130	106			





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva Project Number: 000322-S1 Project Manager: Ann Pember	Sampled: 3/22/00 Received: 3/23/00 Reported: 4/6/00
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**MTBE 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: 0040016		Date Prepared: 4/5/00			Extraction Method: EPA 5030B [MeOH]					
Blank		0040016-BLK1								
Methyl tert-butyl ether	4/5/00			ND	ug/l	2.00				
Surrogate: 1,2-Dichloroethane-d4	"	50.0		51.9	"	76.0-114	104			
LCS		0040016-BS1								
Methyl tert-butyl ether	4/5/00	50.0		44.4	ug/l	70.0-130	88.8			
Surrogate: 1,2-Dichloroethane-d4	"	50.0		50.2	"	76.0-114	100			
Matrix Spike		0040016-MS1		L004013-01						
Methyl tert-butyl ether	4/5/00	50.0	ND	46.5	ug/l	60.0-140	93.0			
Surrogate: 1,2-Dichloroethane-d4	"	50.0		52.7	"	76.0-114	105			
Matrix Spike Dup		0040016-MSD1		L004013-01						
Methyl tert-butyl ether	4/5/00	50.0	ND	46.5	ug/l	60.0-140	93.0	25.0	0	
Surrogate: 1,2-Dichloroethane-d4	"	50.0		51.8	"	76.0-114	104			





Blaine Tech Services 1680 Rogers Avenue San Jose, CA 95112	Project: Equiva Project Number: 000322-S1 Project Manager: Ann Pember	Sampled: 3/22/00 Received: 3/23/00 Reported: 4/6/00
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Notes and Definitions

#	Note
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- 1 Chromatogram Pattern: Gasoline C6-C12
- 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



BLAINE

TECH SERVICES INC.

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

CONDUCT ANALYSIS TO DETECT

LAB Seruvia DHS # _____
ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
 EPA RWQCB REGION _____
 LIA
 OTHER

CHAIN OF CUSTODY
000322-S1

CLIENT
Equiva - Karen Petryna

SITE
8930 Bancroft Ave.

Oakland, CA

L003224

SAMPLE I.D.	Date	Time	MATRIX S = SOIL W = H ₂ O	CONTAINERS TOTAL
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C = COMPOSITE ALL CONTAINERS

TPH - gas, BTEX	MTBE by 8020	MTBE by 8260	TPH - diesel	Oxygenates by 8260	1,2-DCA & EDB by 8010
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SPECIAL INSTRUCTIONS
Send invoice to Equiva
Incident # 98995742
Send report to Blaine Tech Services
Attn: Ann Pember

SAMPLE I.D.	Date	Time	MATRIX	CONTAINERS	TPH - gas, BTEX	MTBE by 8020	MTBE by 8260	TPH - diesel	Oxygenates by 8260	1,2-DCA & EDB by 8010	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-1	3/22	1455	W	3	X	X					Confirm Highest Hit By EPA 8260			
MW-2		1435	W	3	X	X								
MW-3		1523	W	3	X	X								
MW-4		1520	W	3	X	X								
MW-5		1350	W	3	X	X								
MW-6	✓	1505	W	3	X	X								

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	RESULTS NEEDED	
	163		Stephan Whisenhunt	NO LATER THAN	
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Steph Whisenhunt	3/23/00	9:40	[Signature]	3/23/00	9:40
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
[Signature]	3/23/00		[Signature]	3-23	1532
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
[Signature]	3/23/00	11:19	Kevin Coz	3/23	1630
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #		
[Signature]	3-23				

EQUIVA WELL MONITORING DATA SHEET

Project #: 000322-S1	Job #: 204-5508-1305
Sampler: Stephan	Date: 3/22/00
Well I.D.: MW-1	Well Diameter: 2 (3) 4 6 8
Total Well Depth: 16.79	Depth to Water: 8.44
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

Sampling Method:

Bailer
 Extraction Port
 Other: _____

Other: _____

3.09	x	3	=	9.27	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1440	63.9	5.6	307.1	308	3.09	Turbid/odor
1445	65.5	6.0	303.7	494	6.18	
1450	64.0	6.1	303.6		9.27	

Did well dewater? Yes No Gallons actually evacuated: 10

Sampling Time: 1455 Sampling Date: 3/22/00

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 #: 000322-51	Job # 204-5508-1305
Sampler: Oscar	Date: 3-22-00
Well I.D.: MW-2	Well Diameter: 2 (3) 4 6 8
Total Well Depth: 19.61	Depth to Water: 8.19
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: _____

4.2	X	3	=	12.6	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1429	69.3	5.6	309	7200	5	
1430	67.2	5.8	305	7200	10	
1430	67.3	6.0	321	7200	13	

Did well dewater? Yes No Gallons actually evacuated: 13

Sampling Time: 1435 Sampling Date: 3-22-00

Sample I.D.: MW2 Laboratory: Sequoia BC Other _____

Analyzed for: TRH-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 #: 000322-51	Job # 204-5508-1305
Sampler: OSKAR	Date: 3/22/00
Well I.D.: MW-3	Well Diameter: 2 (3) 4 6 8
Total Well Depth: 19.69	Depth to Water: 6.81
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

Sampling Method: Bailer Extraction Port Other: _____

Other: _____

4.7	x	3	=	14	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1515	66.7	6.6	325	7200	5	odor ok
1516	67.3	6.4	310	>200	10	Pumping
1517	68.0	6.4	309	7200	14	Dark gray

Did well dewater? Yes No

Gallons actually evacuated: 14

Sampling Time: 1523 Sampling Date: 3/22/00

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 #: 000322-51	Job # 204-5508-1305
Sampler: Stephan	Date: 3/22/00
Well I.D.: MW-4	Well Diameter: 2 (3) 4 6 8
Total Well Depth: 19.49	Depth to Water: 7.32
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: _____
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4.50	x	3	=	13.51	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1505	68.0	6.3	427.3	539	4.50	Turbid
1510	66.9	6.5	428.9	833	9.00	ii
1515	66.8	6.5	427.2	792	13.50	io

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: 14
Sampling Time: 1520	Sampling Date: 3/22/00
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 #: 000222-S1	Job # 204-5508-1305
Sampler: OSCON	Date: 3-22-00
Well I.D.: MW-5	Well Diameter: 2 (3) 4 6 8
Total Well Depth: 19.60	Depth to Water: 7.31
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: _____

4.5	x	3	=	13.5	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1443	69.1	6.4	316	>200	5	
1344	68.1	6.3	322	>200	10	
1345	68.3	6.3	318	>200	14	

Did well dewater? Yes No Gallons actually evacuated: 19

Sampling Time: 1350 Sampling Date: 3-22-00

Sample I.D.: MW5 Laboratory: Sequoia BC Other _____

Analyzed for: IPH-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 #: 000322-51	Job # 204-5508-1305
Sampler: Oscar	Date: 3-22-00
Well I.D.: MW-6	Well Diameter: 2 (3) 4 6 8
Total Well Depth: 19.67	Depth to Water: 8.27
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: _____

4.2	X	3	=	12.6	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1458	67.8	6.5	251	2200	5	
1459	67.4	6.4	361	7200	10	
1500	67.6	6.3	369	198	13	

Did well dewater? Yes No Gallons actually evacuated: 13

Sampling Time: 1505 Sampling Date: 3-22-00

Sample I.D.: MW6 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