

# C A M B R I A

August 16, 2000

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

Re: **Second Quarter 2000 Monitoring Report**  
Former Shell Service Station  
1230 14th Street  
Oakland, California  
Incident #97088250  
Cambria Project #242-0233-002

00 AUG 18 PM 3:14  
CAMBRIA  
TECHNOLOGY



Dear Mr. Seto:

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.

## SECOND QUARTER 2000 ACTIVITIES

**Groundwater Monitoring:** Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged water levels, measured dissolved oxygen (DO) concentrations, sampled selected wells, and calculated groundwater elevations. Cambria prepared a groundwater elevation contour map (Figure 1). Blaine's report, with supporting field notes, is included as Attachment A.

## ANTICIPATED THIRD QUARTER 2000 ACTIVITIES

**Groundwater Monitoring:** Blaine will gauge water levels, measure DO concentrations, sample selected site wells, and tabulate the data. Cambria will prepare a monitoring report.

**Site Conceptual Model:** In correspondence dated May 11, 2000, Larry Seto of the Alameda County Health Care Services Agency (ACHCSA) concurred with Cambria's proposal for a Site Conceptual Model (SCM). Cambria will begin to develop a SCM for the site and submit the results to the ACHCSA.

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

**Vapor Extraction Pilot Test:** Cambria will perform a five-day pilot vapor extraction test on wells VW/AS-1 and MW-1. The test will be conducted to evaluate the effectiveness of this technique on the elevated benzene concentrations in the vicinity of these wells.

**CLOSING**

We appreciate the opportunity to work with you on this project. Please call Darren Croteau at (510) 420-3331 if you have any questions or comments.



Sincerely,  
**Cambria Environmental Technology, Inc**

Darren Croteau  
Project Geologist

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

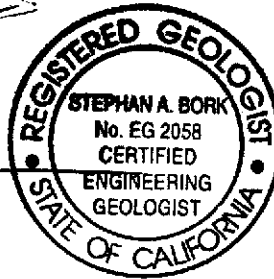
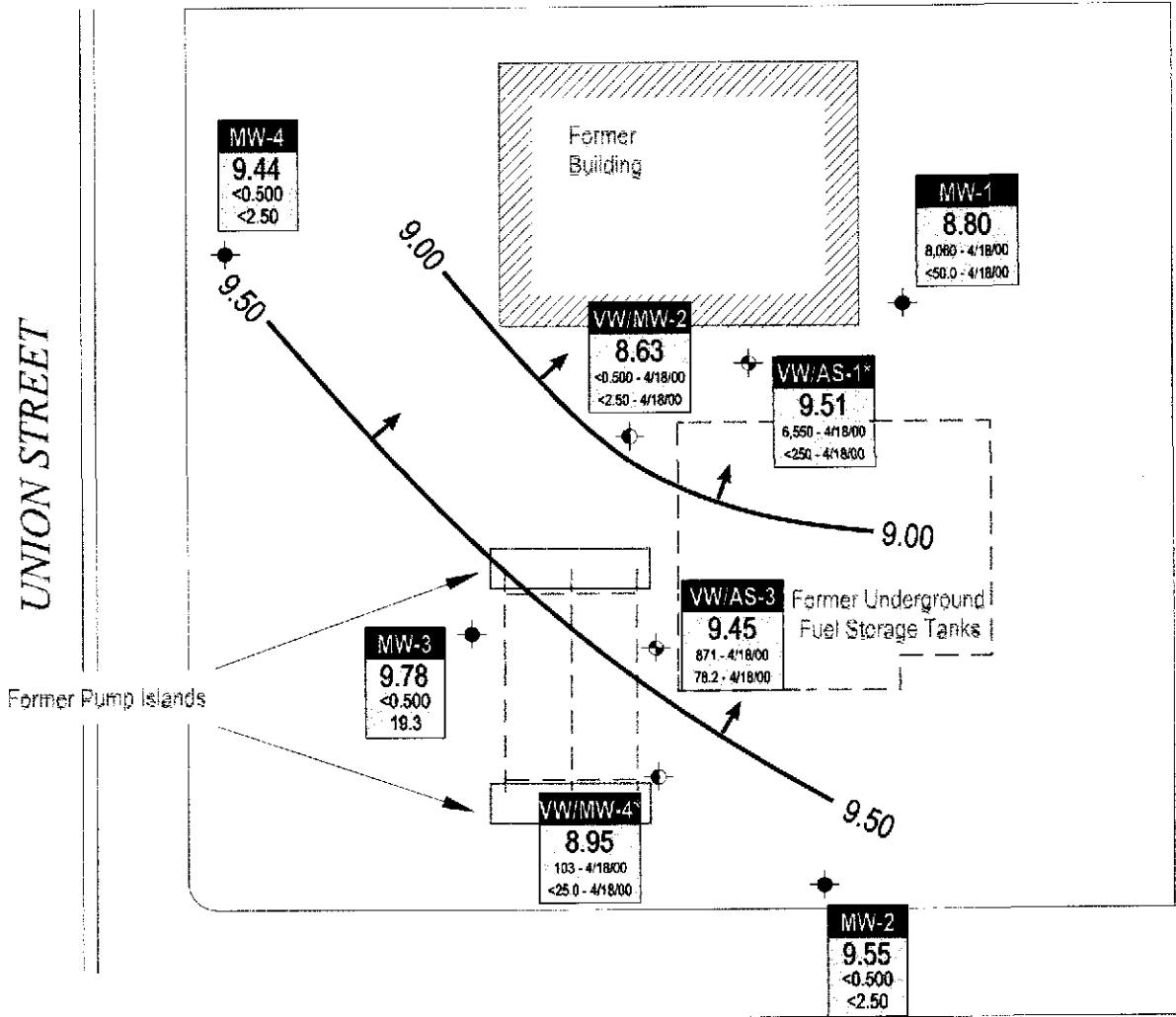


Figure: 1 - Groundwater Elevation Contour Map

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

cc: Karen Petryna, Equiva Services LLC, P.O. Box 7869, Burbank, California 91501-7869  
Tom Saberi, 1045 Airport Boulevard, Suite 12, South San Francisco, CA 94080  
Matthew Dudley, Sedgwick, Detert, Moran, & Arnold, 1 Embarcadero Center,  
16th Floor, San Francisco, California 94111-3628

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**EXPLANATION**

- MW-1 ● Monitoring well location
- VW/AS-1 ⊕ Combination air sparge/soil vapor extraction well
- VW/MW-2 ⊕ Combination soil vapor extraction well/monitoring well
- \* 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

14TH STREET

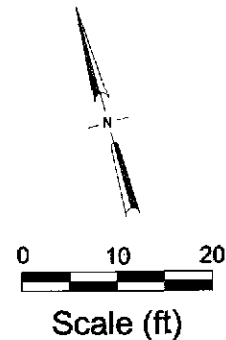


FIGURE 1

S:\OAKLAND\1230-14TH\FIGURES\2000-MP-DWG

**Former Shell Service Station**  
 1230 14th Street  
 Oakland, California  
 Incident #97088250



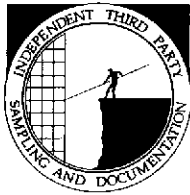
C A M B R I A

**Groundwater Elevation Contour Map**

April 17, 2000

**ATTACHMENT A**  
**Blaine Groundwater Monitoring Report**  
**and Field Notes**

**BLAINE**  
TECH SERVICES INC.



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

June 2, 2000

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

Second Quarter 2000 Groundwater Monitoring at  
Former Shell Service Station  
1230 14<sup>th</sup> Street  
Oakland, CA

Monitoring performed on April 17 and 18, 2000

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**Groundwater Monitoring Report 000417-S-2**

This report covers the routine monitoring of groundwater wells at this Former Shell 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 Martinez Refining Company.

Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. 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 Sheets

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

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**1230 14th Street**  
**Oakland, CA**  
**Wic #204-5508-3103**

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)	DO Reading (ppm)
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MW-1	3/25/96	37,000	7,400	1,500	720	3,300	<500	NA	18.58	9.53	9.05	NA
MW-1	6/21/96	35,000	9,900	460	340	3,500	890	NA	18.58	10.72	7.86	NA
MW-1	9/26/96	19,000	8,200	510	780	790	<250	NA	18.58	12.88	5.70	NA
MW-1	12/19/96	27,000	120	1,200	1,400	2,800	<100	NA	18.58	12.59	5.99	NA
MW-1	12/19/96	32,000	12,000	1,300	1,600	3,100	830	NA	18.58	12.59	5.99	NA
MW-1	3/25/97	39,000	13,000	1,600	840	3,100	730	NA	18.58	11.10	7.48	1.2
MW-1	6/26/97	NA	NA	NA	NA	NA	NA	NA	18.58	12.42	6.16	NA
MW-1	9/26/97	NA	NA	NA	NA	NA	NA	NA	18.58	13.31	5.27	0.8
MW-1	12/5/97	NA	NA	NA	NA	NA	NA	NA	18.58	12.65	5.93	0.3
MW-1	2/19/98	16,000	5,500	450	500	800	<500	NA	18.58	6.46	12.12	2.4
MW-1	6/8/98	NA	NA	NA	NA	NA	NA	NA	18.58	6.62	11.96	1.2
MW-1	8/25/98	NA	NA	NA	NA	NA	NA	NA	18.58	11.83	6.75	2.8
MW-1	12/28/98	NA	NA	NA	NA	NA	NA	NA	18.58	12.01	6.57	2.6
MW-1	3/26/99	NA	NA	NA	NA	NA	NA	NA	18.58	9.15	9.43	2.2
MW-1	6/30/99	NA	NA	NA	NA	NA	NA	NA	18.58	11.22	7.36	3.8
MW-1	9/30/99	NA	NA	NA	NA	NA	NA	NA	18.58	11.89	6.69	3.0
MW-1	12/27/99	34,800	8,660	953	956	2,770	<1,000	NA	18.58	13.55	5.03	2.4/2.1
MW-1	1/21/00	40,600	14,700	1,850	1,210	3,670	<500	NA	18.58	13.42	5.16	2.8
MW-1	3/7/00	NA	NA	NA	NA	NA	NA	NA	18.58	8.11	10.47	0.4
MW-1	4/17/00	NA	NA	NA	NA	NA	NA	NA	18.58	9.78	8.80	3.0/3.4
MW-1	4/18/00	18,300	8,060	543	528	872	<50.0	NA	18.58	NA	NA	NA

MW-2	3/25/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	17.90	8.19	9.71	NA
MW-2	6/21/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	17.90	9.94	7.96	NA
MW-2	9/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	17.90	12.15	5.75	NA
MW-2	12/19/96	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	17.90	11.70	6.20	NA
MW-2	3/25/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	17.90	9.25	8.65	1.8
MW-2	6/26/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	17.90	11.36	6.54	2.4

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**1230 14th Street**  
**Oakland, CA**  
**Wic #204-5508-3103**

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)	DO Reading (ppm)
MW-2	9/26/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	17.90	12.56	5.34	1.1
MW-2	9/26/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	17.90	12.56	5.34	1.1
MW-2	12/5/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	17.90	11.15	6.75	0.7
MW-2	2/19/98	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	17.90	5.61	12.29	2.7
MW-2	6/8/98	<50	<0.30	<0.30	<0.30	<0.60	<10	NA	17.90	5.58	12.32	3.2
MW-2	8/25/98	NA	NA	NA	NA	NA	NA	NA	17.90	10.67	7.23	1.7
MW-2	12/28/98	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	NA	17.90	11.65	6.25	0.4/0.8
MW-2	3/26/99	NA	NA	NA	NA	NA	NA	NA	17.90	8.60	9.30	0.7
MW-2	6/30/99	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	17.90	10.30	7.60	2.3
MW-2	9/30/99	NA	NA	NA	NA	NA	NA	NA	17.90	10.77	7.13	1.9
MW-2	12/27/99	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	17.90	12.21	5.69	0.7/0.7
MW-2	3/7/00	NA	NA	NA	NA	NA	NA	NA	17.90	7.13	10.77	1.1
MW-2	4/17/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	17.90	8.35	9.55	1.8/1.8
MW-3	3/25/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.18	8.47	9.71	NA
MW-3	6/21/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.18	10.40	7.78	NA
MW-3	9/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.18	12.45	5.73	NA
MW-3	12/19/96	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	18.18	12.14	6.02	NA
MW-3	3/25/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.18	9.54	8.64	2.2
MW-3	6/26/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.18	11.66	6.52	3.6
MW-3	9/26/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.18	12.85	5.33	1.1
MW-3	12/5/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.18	11.44	6.74	0.6
MW-3	2/19/98	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.18	6.78	11.40	3.6
MW-3	6/8/98	<50	<0.30	<0.30	<0.30	<0.60	<10	NA	18.18	6.82	11.36	3.8
MW-3	6/8/98	<50	<0.30	<0.30	<0.30	<0.60	<10	NA	18.18	6.82	11.36	3.8
MW-3	8/25/98	NA	NA	NA	NA	NA	NA	NA	18.18	11.09	7.09	1.2
MW-3	12/28/98	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	NA	18.18	11.84	6.34	0.9/0.6
MW-3	3/26/99	NA	NA	NA	NA	NA	NA	NA	18.18	8.57	9.61	0.8



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MW-3	6/30/99	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	18.18	10.61	7.57	4.8
MW-3	9/30/99	NA	NA	NA	NA	NA	NA	NA	18.18	11.53	6.65	1.4
MW-3	12/27/99	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	18.18	12.35	5.83	1.4/2.5
MW-3	3/7/00	NA	NA	NA	NA	NA	NA	NA	18.17	7.36	10.81	5.8
MW-3	4/17/00	<50.0	<0.500	<0.500	<0.500	<0.500	19.3	NA	18.17	8.09	9.78	6.5/5.1
MW-4	3/25/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.01	9.20	8.81	NA
MW-4	6/21/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.01	10.25	7.76	NA
MW-4	9/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.01	12.29	5.72	NA
MW-4	12/19/96	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	18.01	12.47	5.54	NA
MW-4	3/25/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.01	9.44	8.57	1.8
MW-4	6/26/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.01	11.57	6.44	6.2
MW-4 (D)	6/26/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.01	11.57	6.44	6.2
MW-4	9/26/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.01	12.75	5.26	2.1
MW-4	12/5/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.01	11.37	6.64	1.0
MW-4 (D)	12/5/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.01	11.37	6.64	1.0
MW-4	2/19/98	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	18.01	5.59	12.42	6.5
MW-4	6/8/98	<50	<0.30	<0.30	<0.30	<0.60	<10	NA	18.01	5.65	12.36	2.6
MW-4	8/25/98	NA	NA	NA	NA	NA	NA	NA	18.01	10.98	7.03	2.4
MW-4	12/28/98	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	NA	18.01	11.83	6.18	1.3/1.2
MW-4	3/26/99	NA	NA	NA	NA	NA	NA	NA	18.01	8.40	9.61	1.9
MW-4	6/30/99	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	18.01	10.53	7.48	7.6
MW-4	9/30/99	NA	NA	NA	NA	NA	NA	NA	18.01	11.03	6.98	2.6
MW-4	12/27/99	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	18.01	12.53	5.48	1.9/0.8
MW-4	3/7/00	NA	NA	NA	NA	NA	NA	NA	18.01	7.00	11.01	6.5
MW-4	4/17/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	18.01	8.57	9.44	5.1/5.1
VW/MW-2	3/25/96	13,000	900	920	180	1,500	<250	NA	18.30	9.04	9.26	NA

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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)	DO Reading (ppm)
VW/MW-2	6/21/96	27,000	4,100	1,100	1,400	3,200	700	NA	18.30	10.48	7.82	NA
VW/MW-2	9/26/96	27,000	5,300	1,900	980	2,200	<500	NA	18.30	12.52	5.78	NA
VW/MW-2 (D)	9/26/96	29,000	5,800	2,200	1,100	2,500	<250	NA	18.30	12.52	5.78	NA
VW/MW-2	12/19/96	50,000	6,200	5,100	1,700	5,600	590	NA	18.30	12.42	5.88	NA
VW/MW-2	3/25/97	210	5.6	<0.50	0.52	<0.50	14	NA	18.30	9.83	8.47	2.0
VW/MW-2 (D)	3/25/97	250	1.7	0.58	0.51	<0.50	4.7	NA	18.30	9.83	8.47	2.0
VW/MW-2	6/26/97	NA	NA	NA	NA	NA	NA	NA	18.30	12.43	5.87	NA
VW/MW-2	9/26/97	NA	NA	NA	NA	NA	NA	NA	18.30	12.98	5.32	0.9
VW/MW-2	12/5/97	NA	NA	NA	NA	NA	NA	NA	18.30	12.20	6.10	0.4
VW/MW-2	2/19/98	<50	1.5	<0.50	<0.50	0.71	<2.5	NA	18.30	5.83	12.47	3.6
VW/MW-2	6/8/98	NA	NA	NA	NA	NA	NA	NA	18.30	5.80	12.50	1.0
VW/MW-2	8/25/98	NA	NA	NA	NA	NA	NA	NA	18.30	11.72	6.58	4.8
VW/MW-2	12/28/98	NA	NA	NA	NA	NA	NA	NA	18.30	11.69	6.61	2.7
VW/MW-2	3/26/99	NA	NA	NA	NA	NA	NA	NA	18.30	8.75	9.55	2.8
VW/MW-2	6/30/99	NA	NA	NA	NA	NA	NA	NA	18.30	10.72	7.58	4.7
VW/MW-2	9/30/99	NA	NA	NA	NA	NA	NA	NA	18.30	12.24	6.06	4.9
VW/MW-2	12/27/99	13,500	1,330	1,310	490	1,400	<250	NA	18.30	13.92	4.38	2.1/1.9
VW/MW-2	1/21/00	12,100	2,200	1,080	429	1,120	<250	NA	18.30	13.26	5.04	2.8
VW/MW-2	3/7/00	NA	NA	NA	NA	NA	NA	NA	18.28	7.87	10.41	3.7
VW/MW-2	4/17/00	NA	NA	NA	NA	NA	NA	NA	18.28	9.65	8.63	3.7/4.1
VW/MW-2	4/18/00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	18.28	NA	NA	NA
VW/MW-4	3/25/96	83,000	6,500	7,000	2,000	11,000	<250	NA	18.14	8.45	9.69	NA
VW/MW-4 (D)	3/25/96	84,000	6,400	7,000	2,100	12,000	<250	NA	18.14	8.45	9.69	NA
VW/MW-4	6/21/96	110,000	14,000	15,000	3,700	17,000	1,700	NA	18.14	10.38	7.76	NA
VW/MW-4 (D)	6/21/96	100,000	12,000	12,000	2,900	13,000	<1,000	NA	18.14	10.38	7.76	NA
VW/MW-4	9/26/96	52,000	13,000	2,700	2,100	3,200	<500	NA	18.14	12.43	5.71	NA
VW/MW-4	12/19/96	75,000	15,000	6,600	3,000	7,600	<1,250	NA	18.14	11.87	6.27	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**1230 14th Street**  
**Oakland, CA**  
**Wic #204-5508-3103**

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)	DO Reading (ppm)
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VW/MW-4	3/25/97	56,000	4,700	1,500	2,500	6,300	580	NA	18.14	9.60	8.54	2.4
VW/MW-4	6/26/97	NA	NA	NA	NA	NA	NA	NA	18.14	12.36	5.78	NA
VW/MW-4	9/26/97	NA	NA	NA	NA	NA	NA	NA	18.14	12.82	5.32	0.4
VW/MW-4	12/5/97	NA	NA	NA	NA	NA	NA	NA	18.14	12.15	5.99	0.3
VW/MW-4	2/19/98	4,100	320	40	44	520	<50	NA	18.14	5.85	12.29	1.8
VW/MW-4 (D)	02/19/98	4,300	340	44	47	540	<50	NA	18.14	5.85	12.29	1.8
VW/MW-4	6/8/98	NA	NA	NA	NA	NA	NA	NA	18.14	5.87	12.27	1.8
VW/MW-4	8/25/98	NA	NA	NA	NA	NA	NA	NA	18.14	10.96	7.18	2.5
VW/MW-4	12/28/98	NA	NA	NA	NA	NA	NA	NA	18.14	11.28	6.86	0.9
VW/MW-4	3/26/99	NA	NA	NA	NA	NA	NA	NA	18.14	8.45	9.69	1.9
VW/MW-4	6/30/99	NA	NA	NA	NA	NA	NA	NA	18.14	9.70	8.44	3.6
VW/MW-4	9/30/99	NA	NA	NA	NA	NA	NA	NA	18.14	11.78	6.36	2.6
VW/MW-4	12/27/99	33,900	3,740	2,000	1,130	5,090	587	NA	18.14	12.63	5.51	0.4/0.2
VW/MW-4	01/21/200	13,900	1,560	568	227	1,990	<500	21.0a	18.14	13.07	5.07	1.0
VW/MW-4	3/7/00	NA	NA	NA	NA	NA	NA	NA	18.13	7.82	10.31	0.9
VW/MW-4	4/17/00	NA	NA	NA	NA	NA	NA	NA	18.18	9.18	8.95	1.4/1.9
VW/MW-4	4/18/00	757	103	8.59	30.8	84.2	<25.0	NA	18.13	NA	NA	NA

VW/AS-1	3/25/96	NA	NA	NA	NA	NA	NA	NA	18.60	8.98	9.62	NA
VW/AS-1	6/21/96	NA	NA	NA	NA	NA	NA	NA	18.60	10.95	7.65	NA
VW/AS-1	9/26/96	NA	NA	NA	NA	NA	NA	NA	18.60	12.98	5.62	NA
VW/AS-1	12/19/96	NA	NA	NA	NA	NA	NA	NA	18.60	12.67	5.93	NA
VW/AS-1	3/25/97	NA	NA	NA	NA	NA	NA	NA	18.60	10.12	8.48	NA
VW/AS-1	6/26/97	NA	NA	NA	NA	NA	NA	NA	18.60	12.34	6.26	NA
VW/AS-1	9/26/97	NA	NA	NA	NA	NA	NA	NA	18.60	13.40	5.20	NA
VW/AS-1	12/5/97	NA	NA	NA	NA	NA	NA	NA	18.60	11.96	6.64	5.2
VW/AS-1	2/19/98	NA	NA	NA	NA	NA	NA	NA	18.60	6.22	12.38	1.3
VW/AS-1	6/8/98	NA	NA	NA	NA	NA	NA	NA	18.60	6.20	12.40	1.0

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**1230 14th Street**  
**Oakland, CA**  
**Wic #204-5508-3103**

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)	DO Reading (ppm)
VW/AS-1	8/25/98	NA	NA	NA	NA	NA	NA	NA	18.60	11.59	7.01	1.6
VW/AS-1	12/28/98	NA	NA	NA	NA	NA	NA	NA	18.60	11.74	6.86	1.3
VW/AS-1	3/26/99	NA	NA	NA	NA	NA	NA	NA	18.60	9.20	9.40	1.3
VW/AS-1	6/30/99	NA	NA	NA	NA	NA	NA	NA	18.60	11.08	7.52	2.1
VW/AS-1	9/30/99	NA	NA	NA	NA	NA	NA	NA	18.60	11.94	6.66	1.9
VW/AS-1	12/27/99	8,940	2,000	95.7	1,200	570	606	NA	18.60	11.01	7.59	1.6/1.8
VW/AS-1	3/7/00	NA	NA	NA	NA	NA	NA	NA	18.59	7.35	11.24	NA
VW/AS-1	4/17/00	NA	NA	NA	NA	NA	NA	NA	18.59	9.08	9.51	1.9/2.0
VW/AS-1	4/18/00	20,800	6,550	1,220	2,270	1,720	250	NA	18.59	NA	NA	NA
VW/AS-3	3/25/96	NA	NA	NA	NA	NA	NA	NA	18.17	8.50	9.67	NA
VW/AS-3	6/21/96	NA	NA	NA	NA	NA	NA	NA	18.17	10.42	7.75	NA
VW/AS-3	9/26/96	NA	NA	NA	NA	NA	NA	NA	18.17	12.49	5.68	NA
VW/AS-3	12/19/96	NA	NA	NA	NA	NA	NA	NA	18.17	12.28	5.89	NA
VW/AS-3	3/25/97	NA	NA	NA	NA	NA	NA	NA	18.17	9.61	8.56	NA
VW/AS-3	6/26/97	NA	NA	NA	NA	NA	NA	NA	18.17	11.80	6.37	NA
VW/AS-3	9/26/97	NA	NA	NA	NA	NA	NA	NA	18.17	12.89	5.28	NA
VW/AS-3	12/5/97	NA	NA	NA	NA	NA	NA	NA	18.17	11.38	6.79	1.8
VW/AS-3	2/19/98	NA	NA	NA	NA	NA	NA	NA	18.17	6.24	11.93	1.3
VW/AS-3	6/8/98	NA	NA	NA	NA	NA	NA	NA	18.17	6.25	11.92	1.2
VW/AS-3	8/25/98	NA	NA	NA	NA	NA	NA	NA	18.17	11.43	6.74	1.3
VW/AS-3	12/28/98	NA	NA	NA	NA	NA	NA	NA	18.17	11.63	6.54	1.7
VW/AS-3	3/26/99	NA	NA	NA	NA	NA	NA	NA	18.17	8.92	9.25	1.5
VW/AS-3	6/30/99	NA	NA	NA	NA	NA	NA	NA	18.17	10.71	7.46	2.5
VW/AS-3	9/30/99	NA	NA	NA	NA	NA	NA	NA	18.17	11.78	6.39	1.5
VW/AS-3	12/27/99	488	47.9	2.60	16.9	8.50	35.4	NA	18.17	12.57	5.60	1.5/2.1
VW/AS-3	3/7/00	NA	NA	NA	NA	NA	NA	NA	18.14	4.82	13.32	NA
VW/AS-3	4/17/00	NA	NA	NA	NA	NA	NA	NA	18.14	8.69	9.45	2.0/2.4

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**1230 14th Street**  
**Oakland, CA**  
**Wic #204-5508-3103**

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)	DO Reading (ppm)
VW/AS-3	4/18/00	3,110	871	<5.00	141	56.8	78.2	NA	18.14	NA	NA	NA

**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

DO = Dissolved Oxygen

NA = Not applicable

ug/L = parts per billion

ppm = parts per million

msl = Mean sea level

ft = Feet

<n = Below detection limit

D = Duplicate sample

n/n = Pre-purge/Post-purge DO Readings

**Notes:**

a = Sample was analyzed outside of the EPA recommended holding time.



# Sequoia Analytical

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Morgan Hill, CA 95037  
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[www.sequoialabs.com](http://www.sequoialabs.com)

May 3, 2000

Nick Sudano  
Blaine Tech Services (Shell)  
1680 Rogers Avenue  
San Jose, CA 95112

RE: Shell

Dear Nick Sudano

Enclosed are the results of analyses for sample(s) received by the laboratory on April 19, 2000. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ted Terrasas  
Project Manager

CA ELAP Certificate Number 1210





Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Shell Project Number: 1230 14th Street, Oakland Project Manager: Nick Sudano	Sampled: 4/17/00 to 4/18/00 Received: 4/19/00 Reported: 5/3/00 11:13
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## ANALYTICAL REPORT FOR SAMPLES:

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-2	MJD0577-01	Water	4/17/00
MW-3	MJD0577-02	Water	4/17/00
MW-4	MJD0577-03	Water	4/17/00
MW-1	MJD0577-04	Water	4/18/00
VW/MW-2	MJD0577-05	Water	4/18/00
VW/MW-4	MJD0577-06	Water	4/18/00
VW/AS-1	MJD0577-07	Water	4/18/00
VW/AS-3	MJD0577-08	Water	4/18/00





Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Shell Project Number: 1230 14th Street, Oakland Project Manager: Nick Sudano	Sampled: 4/17/00 to 4/18/00 Received: 4/19/00 Reported: 5/3/00 11:13
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT  
Sequoia Analytical - Morgan Hill**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
<b>MW-2</b>							<b>Water</b>	
				<b>MJD0577-01</b>				
Purgeable Hydrocarbons	0D27003	4/27/00	4/27/00	DHS LUFT	50.0	ND	ug/l	
Benzene	"	"	"	DHS LUFT	0.500	ND	"	
Toluene	"	"	"	DHS LUFT	0.500	ND	"	
Ethylbenzene	"	"	"	DHS LUFT	0.500	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.500	ND	"	
Methyl tert-butyl ether	"	"	"	DHS LUFT	2.50	ND	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70-130		105	%	
<b>MW-3</b>							<b>Water</b>	
				<b>MJD0577-02</b>				
Purgeable Hydrocarbons	0D27003	4/27/00	4/27/00	DHS LUFT	50.0	ND	ug/l	
Benzene	"	"	"	DHS LUFT	0.500	ND	"	
Toluene	"	"	"	DHS LUFT	0.500	ND	"	
Ethylbenzene	"	"	"	DHS LUFT	0.500	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.500	ND	"	
Methyl tert-butyl ether	"	"	"	DHS LUFT	2.50	19.3	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70-130		102	%	
<b>MW-4</b>							<b>Water</b>	
				<b>MJD0577-03</b>				
Purgeable Hydrocarbons	0D27003	4/27/00	4/27/00	DHS LUFT	50.0	ND	ug/l	
Benzene	"	"	"	DHS LUFT	0.500	ND	"	
Toluene	"	"	"	DHS LUFT	0.500	ND	"	
Ethylbenzene	"	"	"	DHS LUFT	0.500	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.500	ND	"	
Methyl tert-butyl ether	"	"	"	DHS LUFT	2.50	ND	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70-130		94.6	%	
<b>MW-1</b>							<b>Water</b>	
				<b>MJD0577-04</b>				
Purgeable Hydrocarbons	0D26003	4/26/00	4/26/00	DHS LUFT	1000	18300	ug/l	P-01
Benzene	"	"	4/27/00	DHS LUFT	100	8060	"	
Toluene	"	"	4/26/00	DHS LUFT	10.0	543	"	
Ethylbenzene	"	"	"	DHS LUFT	10.0	528	"	
Xylenes (total)	"	"	"	DHS LUFT	10.0	872	"	
Methyl tert-butyl ether	"	"	"	DHS LUFT	50.0	ND	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70-130		108	%	
<b>VW/MW-2</b>							<b>Water</b>	
				<b>MJD0577-05</b>				
Purgeable Hydrocarbons	0D27001	4/27/00	4/27/00	DHS LUFT	50.0	ND	ug/l	
Benzene	"	"	"	DHS LUFT	0.500	ND	"	







Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Shell Project Number: 1230 14th Street, Oakland Project Manager: Nick Sudano	Sampled: 4/17/00 to 4/18/00 Received: 4/19/00 Reported: 5/3/00 11:13
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT  
Sequoia Analytical - Morgan Hill**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
<b><u>VW/MW-2 (continued)</u></b>		<b><u>MJD0577-05</u></b>			<b><u>Water</u></b>			
Toluene	0D27001	4/27/00	4/27/00	DHS LUFT	0.500	ND	ug/l	
Ethylbenzene	"	"	"	DHS LUFT	0.500	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.500	ND	"	
Methyl tert-butyl ether	"	"	"	DHS LUFT	2.50	ND	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70-130		111	%	
<b><u>VW/MW-4</u></b>		<b><u>MJD0577-06</u></b>			<b><u>Water</u></b>			
<b>Purgeable Hydrocarbons</b>	0D27001	4/27/00	4/27/00	DHS LUFT	500	757	ug/l	
<b>Benzene</b>	"	"	"	DHS LUFT	5.00	103	"	
<b>Toluene</b>	"	"	"	DHS LUFT	5.00	8.59	"	
<b>Ethylbenzene</b>	"	"	"	DHS LUFT	5.00	30.8	"	
<b>Xylenes (total)</b>	"	"	"	DHS LUFT	5.00	84.2	"	
<b>Methyl tert-butyl ether</b>	"	"	"	DHS LUFT	25.0	ND	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70-130		87.3	%	
<b><u>VW/AS-1</u></b>		<b><u>MJD0577-07</u></b>			<b><u>Water</u></b>			
<b>Purgeable Hydrocarbons</b>	0D27001	4/27/00	4/27/00	DHS LUFT	5000	20800	ug/l	
<b>Benzene</b>	"	"	"	DHS LUFT	50.0	6550	"	
<b>Toluene</b>	"	"	"	DHS LUFT	50.0	1220	"	
<b>Ethylbenzene</b>	"	"	"	DHS LUFT	50.0	2270	"	
<b>Xylenes (total)</b>	"	"	"	DHS LUFT	50.0	1720	"	
<b>Methyl tert-butyl ether</b>	"	"	"	DHS LUFT	250	ND	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70-130		102	%	
<b><u>VW/AS-3</u></b>		<b><u>MJD0577-08</u></b>			<b><u>Water</u></b>			
<b>Purgeable Hydrocarbons</b>	0D26003	4/26/00	4/26/00	DHS LUFT	500	3110	ug/l	P-01
<b>Benzene</b>	"	"	4/27/00	DHS LUFT	10.0	871	"	
<b>Toluene</b>	"	"	4/26/00	DHS LUFT	5.00	ND	"	
<b>Ethylbenzene</b>	"	"	"	DHS LUFT	5.00	141	"	
<b>Xylenes (total)</b>	"	"	"	DHS LUFT	5.00	56.8	"	
<b>Methyl tert-butyl ether</b>	"	"	"	DHS LUFT	25.0	78.2	"	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	"	"	"	70-130		117	%	





Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Shell Project Number: 1230 14th Street, Oakland Project Manager: Nick Sudano	Sampled: 4/17/00 to 4/18/00 Received: 4/19/00 Reported: 5/3/00 11:13
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**Conventional Chemistry Parameters by APHA/EPA Methods  
Sequoia Analytical - Morgan Hill**

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
<u>MW-2</u> TRPH	0D20036	4/20/00	4/21/00	<u>MJD0577-01</u> SM 5520B/F	5.00	ND	<u>Water</u> mg/l	
<u>MW-3</u> TRPH	0D20036	4/20/00	4/21/00	<u>MJD0577-02</u> SM 5520B/F	5.00	ND	<u>Water</u> mg/l	
<u>MW-4</u> TRPH	0D20036	4/20/00	4/21/00	<u>MJD0577-03</u> SM 5520B/F	5.00	ND	<u>Water</u> mg/l	
<u>MW-1</u> TRPH	0D20036	4/20/00	4/21/00	<u>MJD0577-04</u> SM 5520B/F	5.00	ND	<u>Water</u> mg/l	
<u>VW/MW-2</u> TRPH	0D20036	4/20/00	4/21/00	<u>MJD0577-05</u> SM 5520B/F	5.00	ND	<u>Water</u> mg/l	
<u>VW/MW-4</u> TRPH	0D20036	4/20/00	4/21/00	<u>MJD0577-06</u> SM 5520B/F	5.00	ND	<u>Water</u> mg/l	
<u>VW/AS-1</u> TRPH	0D20036	4/20/00	4/21/00	<u>MJD0577-07</u> SM 5520B/F	5.00	ND	<u>Water</u> mg/l	
<u>VW/AS-3</u> TRPH	0D20036	4/20/00	4/21/00	<u>MJD0577-08</u> SM 5520B/F	5.00	ND	<u>Water</u> mg/l	





Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Shell Project Number: 1230 14th Street, Oakland Project Manager: Nick Sudano	Sampled: 4/17/00 to 4/18/00 Received: 4/19/00 Reported: 5/3/00 11:13
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control  
Sequoia Analytical - Morgan Hill**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Batch: 0D26003</b>			<b>Date Prepared: 4/26/00</b>			<b>Extraction Method: EPA 5030B [P/T]</b>				
<b>Blank</b>			<b>0D26003-BLK1</b>							
Purgeable Hydrocarbons	4/26/00			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	"	2.50				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.7	"	70-130	107			
<b>LCS</b>			<b>0D26003-BS1</b>							
Benzene	4/26/00	10.0		11.3	ug/l	70-130	113			
Toluene	"	10.0		10.00	"	70-130	100			
Ethylbenzene	"	10.0		9.24	"	70-130	92.4			
Xylenes (total)	"	30.0		27.9	"	70-130	93.0			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.7	"	70-130	107			
<b>Matrix Spike</b>			<b>0D26003-MS1 MJD0582-01</b>							
Benzene	4/26/00	10.0	ND	11.0	ug/l	60-140	110			
Toluene	"	10.0	ND	9.83	"	60-140	98.3			
Ethylbenzene	"	10.0	ND	9.20	"	60-140	92.0			
Xylenes (total)	"	30.0	ND	27.6	"	60-140	92.0			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.4	"	70-130	104			
<b>Matrix Spike Dup</b>			<b>0D26003-MSD1 MJD0582-01</b>							
Benzene	4/26/00	10.0	ND	11.3	ug/l	60-140	113	25	2.69	
Toluene	"	10.0	ND	10.1	"	60-140	101	25	2.71	
Ethylbenzene	"	10.0	ND	9.36	"	60-140	93.6	25	1.72	
Xylenes (total)	"	30.0	ND	28.2	"	60-140	94.0	25	2.15	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.5	"	70-130	105			
<b>Batch: 0D27001</b>			<b>Date Prepared: 4/27/00</b>			<b>Extraction Method: EPA 5030B [P/T]</b>				
<b>Blank</b>			<b>0D27001-BLK1</b>							
Purgeable Hydrocarbons	4/27/00			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	"	2.50				





Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Shell Project Number: 1230 14th Street, Oakland Project Manager: Nick Sudano	Sampled: 4/17/00 to 4/18/00 Received: 4/19/00 Reported: 5/3/00 11:13
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control  
Sequoia Analytical - Morgan Hill**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
<b>Blank (continued)</b>										
<b>0D27001-BLK1</b>										
Surrogate: a,a,a-Trifluorotoluene	4/27/00	10.0		10.1	ug/l	70-130	101			
<b>LCS</b>										
<b>0D27001-BS1</b>										
Purgeable Hydrocarbons	4/27/00	250		212	ug/l	70-130	84.8			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.9	"	70-130	109			
<b>Matrix Spike</b>										
<b>0D27001-MS1 MJD0696-01</b>										
Purgeable Hydrocarbons	4/27/00	250	ND	214	ug/l	60-140	85.6			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.8	"	70-130	108			
<b>Matrix Spike Dup</b>										
<b>0D27001-MSD1 MJD0696-01</b>										
Purgeable Hydrocarbons	4/27/00	250	ND	222	ug/l	60-140	88.8	25	3.67	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.8	"	70-130	108			
<b>Batch: 0D27003</b>										
<b>Blank</b>			<b>Date Prepared: 4/27/00</b>			<b>Extraction Method: EPA 5030B [P/T]</b>				
<b>0D27003-BLK1</b>										
Purgeable Hydrocarbons	4/27/00			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	"		2.50			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.4	"	70-130	104			
<b>LCS</b>										
<b>0D27003-BS1</b>										
Purgeable Hydrocarbons	4/27/00	250		262	ug/l	70-130	105			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.2	"	70-130	102			
<b>Matrix Spike</b>										
<b>0D27003-MS1 MJD0696-15</b>										
Purgeable Hydrocarbons	4/27/00	250	ND	219	ug/l	60-140	87.6			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		11.4	"	70-130	114			
<b>Matrix Spike Dup</b>										
<b>0D27003-MSD1 MJD0696-15</b>										
Purgeable Hydrocarbons	4/27/00	250	ND	220	ug/l	60-140	88.0	25	0.456	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		12.2	"	70-130	122			





Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Shell Project Number: 1230 14th Street, Oakland Project Manager: Nick Sudano	Sampled: 4/17/00 to 4/18/00 Received: 4/19/00 Reported: 5/3/00 11:13
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**Conventional Chemistry Parameters by APHA/EPA Methods/Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit	Recov. %	RPD Limit	RPD %	Notes*
<b>Batch: 0D20036</b>	<b>Date Prepared: 4/20/00</b>					<b>Extraction Method: General Prep</b>				
<b>Blank</b>	<b>0D20036-BLK1</b>									
TRPH	4/21/00			ND	mg/l	5.00				
<b>LCS</b>	<b>0D20036-BS1</b>									
TRPH	4/21/00	10.0		9.00	mg/l	70-130	90.0			
<b>LCS Dup</b>	<b>0D20036-BSD1</b>									
TRPH	4/21/00	10.0		8.70	mg/l	70-130	87.0	30	3.39	





Blaine Tech Services (Shell) 1680 Rogers Avenue San Jose, CA 95112	Project: Shell Project Number: 1230 14th Street, Oakland Project Manager: Nick Sudano	Sampled: 4/17/00 to 4/18/00 Received: 4/19/00 Reported: 5/3/00 11:13
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### Notes and Definitions

#	Note
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- P-01 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

10F2

CONDUCT ANALYSIS TO DETECT

C = COMPOSITE ALL CONTAINERS

TPH - gas, BTEX	MTBE by 8020	MTBE by 8260	TPH - diesel	Oxygenates by 8260	1,2-DCA & EDB by 8010	TOG
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LAB

DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

- EPA
- LIA
- OTHER
- RWQCB REGION

**MJ00577**

SPECIAL INSTRUCTIONS

Send invoice to Equiva  
 Incident # 97088250  
 Send report to Blaine Tech Services  
 Attn: Ann Pember

CHAIN OF CUSTODY

CLIENT: Equiva - Karen Petryna

SITE: 1230 14th Street  
 Oakland, CA

SAMPLE I.D.	Date	Time	MATRIX S = SOIL W = H <sub>2</sub> O	CONTAINERS TOTAL
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SAMPLE I.D.	Date	Time	MATRIX S = SOIL W = H <sub>2</sub> O	CONTAINERS TOTAL	TPH - gas, BTEX	MTBE by 8020	MTBE by 8260	TPH - diesel	Oxygenates by 8260	1,2-DCA & EDB by 8010	TOG	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
<del>MW-1</del>															
MW-2	4/17/00	1448	W	5	X	X					X				1
MW-3	4/17/00	1510	W	5	X	X					X				2
MW-4	4/17/00	1543	W	5	X	X					X				3
KW/MW-2															
KW/MW-4															
KW/AS-1															
KW/AS-2															

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	RESULTS NEEDED NO LATER THAN	
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
RELEASED BY	4/19/00	9:18	RECEIVED BY	4/19/00	9:18
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
RELEASED BY	4/19/00		BN	4/19/00	12:56
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #		

# 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 \_\_\_\_\_ DHS # \_\_\_\_\_  
 ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

EPA  RWOCB REGION \_\_\_\_\_  
 LIA  
 OTHER

MJ00577

CHAIN OF CUSTODY

CLIENT: Equiva - Karen Petryna

SITE: 1230 14th Street  
 Oakland, CA

C = COMPOSITE ALL CONTAINERS

TPH - gas, BTEX	MTBE by 8020	MTBE by 8260	TPH - diesel	Oxygenates by 8260	1,2-DCA & EDB by 8010	TDS
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SAMPLE I.D.	DATE	TIME	MATRIX		CONTAINERS	
			S = SOIL	W = H <sub>2</sub> O	TOTAL	
MW-1	4/18/00	13:45	W	W	5	
VW/MW-2		13:00	W	W	5	
VW/MW-4		13:22	W	W	5	
VW/AS-1		12:40	W	W	5	
VW/AS-3		12:10	W	W	5	

SPECIAL INSTRUCTIONS

Send invoice to Equiva

Incident # 97088250

Send report to Blaine Tech Services

Attn: Ann Pember

ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
			4
			5
			6
			7
			8

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	RESULTS NEEDED NO LATER THAN	
	4/18/00	14:00	[Signature]		
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
[Signature]	4/19/00	9:18	[Signature]	4/19/00	9:18
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
[Signature]	4/19/00		BN (MH)	4/19/00	
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #		



WELL GAUGING DATA

Project # 000417-52 Date 4/17/00 Client Shell

Site 1230 14<sup>th</sup> St. Oakland, CA

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-1	2	Pulled out ORC				9.78	20.91	TOC	
MW-2	2					8.35	21.53		
MW-3	2					8.39	19.38		
MW-4	2					8.57	19.77		
MW/MW-2	2	Pulled out ORC				9.65	20.31		
MW/MW-4	2	Pulled out ORC				9.18	18.56		
MW/AS-1	1					9.08	18.77		
MW/AS-3	1					8.69	19.55		✓

## EQUIVA WELL MONITORING DATA SHEET

Project #: 000417-SZ	Job #: 204-5508-3103
Sampler: ST	Date: 4/18/00
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8
Total Well Depth: 20.91	Depth to Water: 9.70
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC 10L Grade	D.O. Meter (if req'd): YSP HACH

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

Purge Method: Bailer  
 Middleburg  
 Electric Submersible  
 Extraction Pump

Other: \_\_\_\_\_

Sampling Method: Bailer  
 Extraction Port  
 Other: \_\_\_\_\_

1.8	x	3	=	5.4	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
13:32	64.5	7.2	1633	2200	2	
13:36	65.1	7.2	1742	2200	4	
13:40	64.9	7.2	1700	2200	6	

Did well dewater? Yes  No

Gallons actually evacuated: 6

Sampling Time: 13:45      Sampling Date: 4/18/00

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

Analyzed for: TPH-C BTEX MTBE TPH-D Other: TOS

D.O. (if req'd):	Pre-purge:	3.0 mg/L	Post-purge:	3.4 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## EQUIVA WELL MONITORING DATA SHEET

Project #: 000417-S2	Job #: 204-5508-3103
Sampler: Stephan	Date: 4/17/00
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8
Total Well Depth: 9.77	Depth to Water: 8.57
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multitier	Well Diameter	Multitier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius <sup>2</sup> * 0.163

Purge Method:  Bailler Middleburg  
 Electric Submersible Extraction Pump  
 Other: \_\_\_\_\_

Sampling Method:  Bailler Extraction Port  
 Other: \_\_\_\_\_

1.79	x	3	=	5.38	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1530	71.1	6.4	367.9	137	2	Turbid
1534	68.4	6.4	290.9	87	4	"
1538	67.8	6.4	285.4	73	6	"

Did well dewater? Yes  No

Gallons actually evacuated: 6

Sampling Time: 1543      Sampling Date: 4/17/00

Sample I.D.: MW-4      Laboratory: (Sequoia) BC Other \_\_\_\_\_

Analyzed for: (TPH-G BTEX MTBE) TPH-D Other: TOG

D.O. (if req'd):	Pre-purge:	5.1 <sup>mg/L</sup>	Post-purge:	5.1 <sup>mg/L</sup>
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# EQUIVA WELL MONITORING DATA SHEET

Project #: <u>000417-SZ</u>	Job # <u>204 - 5508 - 3103</u>
Sampler: <u>ST</u>	Date: <u>4/17/00</u>
Well I.D.: <u>VW/MW-2</u>	Well Diameter: <u>(2)</u> 3 4 6 8 <u>    </u>
Total Well Depth: <u>20.31</u>	Depth to Water: <u>9.65</u>
Depth to Free Product: <u>    </u>	Thickness of Free Product (feet): <u>    </u>
Referenced to: <u>PVC 702</u> Grade <u>    </u>	D.O. Meter (if req'd): <u>(YSI)</u> HACH

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

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

<u>1.7</u>	x	<u>3</u>	=	<u>5.1</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
<u>17:49</u>	<u>67.3</u>	<u>6.9</u>	<u>808</u>	<u>7200</u>	<u>2</u>	
<u>17:52</u>	<u>66.9</u>	<u>6.9</u>	<u>814</u>	<u>7200</u>	<u>4</u>	
<u>17:55</u>	<u>67.1</u>	<u>6.9</u>	<u>809</u>	<u>7200</u>	<u>6</u>	

Did well dewater? Yes  No       Gallons actually evacuated: 6

Sampling Time: 13:00      Sampling Date: 4/19/00

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

Analyzed for: (TPH-G) (BTEX) (MTBE) (TPH-D) Other: TCO

D.O. (if req'd):	Pre-purge: <u>3.7</u> mg/L	Post-purge: <u>4.1</u> mg/L
O.R.P. (if req'd):	Pre-purge: <u>    </u> mV	Post-purge: <u>    </u> mV

# EQUIVA WELL MONITORING DATA SHEET

Project #: 000417-52	Job #: <del>000417-52</del> 204-5508-31
Sampler: GT	Date: 4/18/00
Well I.D.: <del>2</del> VW/AS-3	Well Diameter: 2 3 4 6 8 <u>1</u>
Total Well Depth: 19.55	Depth to Water: 8.69
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PTC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

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

1.04

Purge Method: Bailer Middleburg Electric Submersible Extraction Pump

Sampling Method: Bailer Extraction Port

Other: \_\_\_\_\_

4	x	3	=	1.2	Gals.
Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
12:00	64.1	6.7	1039	7200	.5	
12:03	65.1	6.7	1070	143	1.0	
12:07	64.9	6.7	1074	127	1.5	

Did well dewater? Yes  No

Gallons actually evacuated: 1.5

Sampling Time: 12:10

Sampling Date: 4/18/00

Sample I.D.: VW/AS-3

Laboratory: Sequoia BC Other \_\_\_\_\_

Analyzed for: TPH-C BTEX MTBE TPH-D Other: TO5

D.O. (if req'd):	Pre-purge: 2.0 <sup>mg/L</sup>	Post-purge: 2.4 <sup>mg/L</sup>
O.R.P. (if req'd):	Pre-purge: _____ mV	Post-purge: _____ mV