

*# 530*

C A M B R I A

February 8, 2002

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

*FEB 14 2002*

Re: **Fourth Quarter 2001 Monitoring Report**  
Shell-branded Service Station  
285 Hegenberger Road  
Oakland, California  
Incident #98995749  
Cambria Project #244-0734-002



Dear Mr. Chan:

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

#### HISTORICAL HYDROCARBON REMOVAL SUMMARY

A total of 707 pounds of vapor-phase hydrocarbons were removed by a soil-vapor extraction (SVE) system that operated at the site between August 1993 and February 1995.

#### FOURTH QUARTER 2001 ACTIVITIES

Oakland, CA  
San Ramon, CA  
Sonoma, CA

**Cambria**  
**Environmental**  
**Technology, Inc.**  
  
1144 65th Street  
Suite B  
Oakland, CA 94608  
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**Groundwater Monitoring:** Blaine Tech Services, Inc. (Blaine) of San Jose, California collected dissolved oxygen (DO) measurements, gauged water levels, sampled all wells, calculated groundwater elevations and compiled the gasoline constituents analytical data. Cambria compiled the non-gasoline constituents analytical data (Table 1) and prepared a groundwater elevation contour map (Figure 1). Blaine's report, presenting the laboratory report and supporting field documents, is included as Attachment A.

**Additional Oxygenate Analysis:** In addition to the regular quarterly analysis for total petroleum hydrocarbons as gasoline, benzene, toluene, ethylbenzene, xylenes (BTEX), and methyl-tertiary-butyl ether (MTBE), groundwater samples from monitoring wells MW-1 and MW-10 were analyzed for five additional oxygenates. Analytical results for MTBE, di-isopropyl ether, ethyl

tert-butyl ether, tert-amyl methyl ether, tert-butyl alcohol, and ethanol are presented in Table 2.

**Bio-attenuation Parameter Monitoring:** Bio-attenuation parameters have been measured in groundwater samples to determine the status of, and trends in, aerobic degradation of the site hydrocarbons in groundwater. In typical reducing environments, an inverse relationship between BTEX concentrations and concentrations of oxygen, nitrate, and sulfate, and a direct relationship between BTEX and ferrous iron concentrations are expected. The observed relationships between measured BTEX concentrations and the bioparameters are indicated in Table 1. In general, the evidence indicates that biological degradation of BTEX is occurring in groundwater at the site.



**Air-Sparge and SVE System Installation:** In Cambria's *Subsurface Investigation Report and Vapor-Extraction Test Report* dated May 12, 2000, Cambria proposed installation of an air-sparge and vapor-extraction system to remediate hydrocarbons within soil and groundwater. Cambria's proposal for installation of the air-sparge and vapor-extraction system was approved by the Alameda County Health Care Services Agency in a letter to Equiva dated June 21, 2000. On June 28, 2000, three additional air-sparge/SVE wells were installed at the proposed locations. Delays in electrical system installation were experienced during the project. A report detailing the remediation well installations will be submitted following start-up of the remediation system.

## ANTICIPATED FUTURE 2002 ACTIVITIES

**Groundwater Monitoring:** The next sampling event is scheduled for the second quarter of 2002. At that time, Blaine will collect DO measurements, gauge water levels, sample selected site wells and tabulate the data. Cambria will prepare a monitoring report.

**Air-Sparge and SVE System Start-up:** The air sparging portion of the remediation system will be started up in early February 2002. When groundwater levels decrease and expose sufficient well screen, SVE will begin.

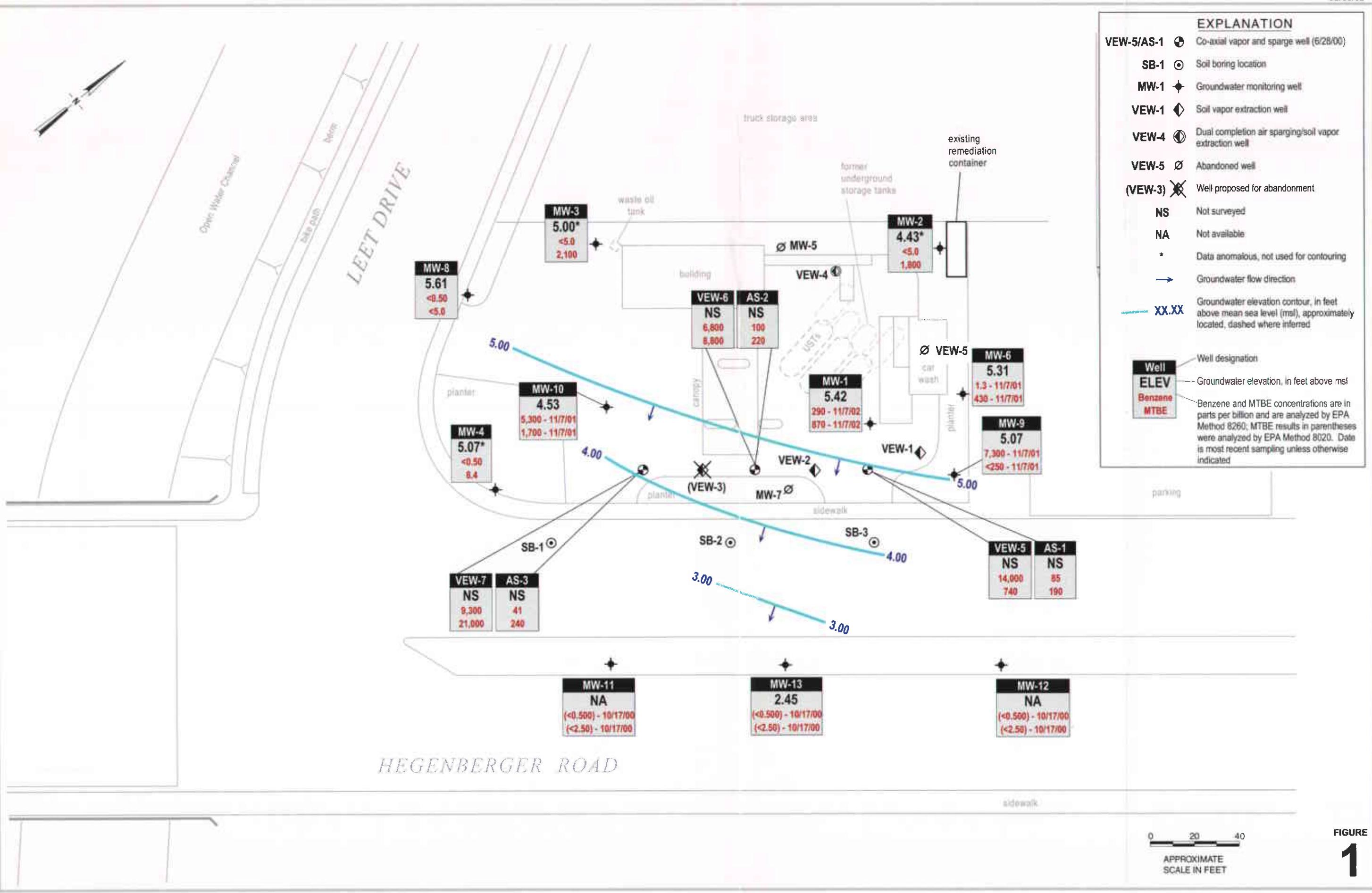
# Groundwater Elevation Contour Map

November 5, 2001

CAMBRIA

**FIGURE 1**

**Shell-branded Service Station**  
285 Hegenberger Road  
Oakland, California  
Incident #98995749



**Table 1.** Groundwater Analytical Data - Other Constituents - Shell-branded Service Station - Incident #98995749, 285 Hegenberger Road, Oakland, California

Well ID	Date	Motor Oil	Nitrate as Nitrate	Sulfate (Concentrations in ppm)	Ferrous Iron	DO	ORP (millivolts)
		←	→	←	→	←	→
MW-1	06/10/98	---	<1.0	3.3	14	0.5/0.5	-163/-178
	06/10/98 <sup>dup</sup>	---	<1.0	5.1	14	0.5/0.5	-163/-178
	12/30/98	<0.250	<1.0	6.8	9.2	1.6/1.4	-119/-107
	06/25/99	---	0.0800	1.39	11.40	1.2/2.1	-150/-148
	12/28/99	0.507	<5.00	<5.00	3.80	1.4/1.8	-156/-152
	05/31/00	<0.500	<1.00	11.9	1.30	0.98/2.27	2/-130
	10/17/00	<0.5	<0.200	2.68	7.98	4.0/3.1	-122/-114
	05/01/01	0.297	<0.2	<1	0.541	1.6/1.3	-125/-130
	11/07/01	<5	<0.2	<1	3.4	2.1/1.4	-42/-56
MW-2	06/10/98	---	<1.0	47	5.1	0.7/0.6	-155/-161
	12/30/98	<0.250	<1.0	84	7.6	1.3/1.2	-96/-107
	06/25/99	---	<0.0500	126	7.97	2.3/2.5	-101/-106
	12/28/99	<0.500	<5.00	98.8	0.380	2.1/2.4	-112/-120
	05/31/00	<0.500	6.89	129	0.130	1.8/2.7	-15/-73
	10/17/00	---	---	---	---	---	---
	11/05/01	<0.1	<0.2	3	0.43	0.6/1.1	-81/-111
MW-3	06/10/98	---	<1.0	15	3.5	0.8/0.9	-101/-149
	12/30/98	<0.250	<1.0	21	2.1	1.3/1.4	-84/-76
	06/25/99	---	<0.0500	4.74	8.73	1.4/1.9	-138/-148
	12/28/99	<0.500	<5.00	5.10	0.260	1.3/1.5	-86/-74
	05/31/00	<0.500	<1.00	19.3	22.6	1.2/2.2	-68/-103
	10/17/00	<0.5	<1.00	21.2	5.78	2.0/2.1	152/138
	05/01/01	<0.25	---	8.72	0.328	1.9/2.7	-63/-95
	05/29/01	---	0.45	---	---	3.0/1.9	78/-8
	11/05/01	<0.1	<0.2	6.6	0.19	0.5/1.9	-119/113
MW-4	12/30/98	<0.250	<1.0	9.6	1.6	1.7/1.6	-118/-111
	12/28/99	<0.500	<5.00	<5.00	<0.0100	1.4/1.5	-121/-117
	05/31/00	<0.500	---	---	---	---	---
	10/17/00	0.513	1.05	16.0	0.338	3.8/4.0	167/131
	11/05/01	<0.1	0.2	12	0.46	1.3/1.5	-126/112

**Table 1.** Groundwater Analytical Data - Other Constituents - Shell-branded Service Station - Incident #98995749, 285 Hegenberger Road, Oakland, California

Well ID	Date	Motor Oil	Nitrate as Nitrate ←	Sulfate	Ferrous Iron	DO	ORP (millivolts)
				(Concentrations in ppm)	→	→	
MW-6	06/10/98	----	<1.0	7.4	1.8	0.4/0.4	-159/-155
	12/30/98	<0.250	<1.0	120	0.46	2.1/1.6	-98/-107
	06/25/99	----	0.101	22.1	12.80	1.4/3.6	-143/-136
	12/28/99	0.568	<5.00	147	0.320	1.8/2.0	-108/-96
	05/31/00	<0.500	<1.00	19.2	0.704	0.92/2.30	-31/-91
	10/17/00	<0.5	<1.00	<5.00	3.31	2.5/2.1	-107/-126
	05/01/01	0.416	---	4.88	<0.1	2.2/1.6	-107/-112
	05/29/01	---	<0.1	---	---	2.0/1.3	33/-65
	11/07/01	<5	<0.2	44	2.4	2.4/1.8	60/51
MW-8	12/30/98	<0.250	12	54	0.031	0.8/0.9	-128/-121
	12/28/99	<0.500	<5.00	<5.00	<0.0100	1.0/0.9	-136/-121
	05/31/00	---	---	---	---	---	---
	10/17/00	<0.5	<1.00	23.2	1.12	4.0/4.1	114/119
	11/05/01	<0.1	0.59	22	0.13	0.6/1.3	-66/-75
MW-9	06/10/98	----	<1.0	6.6	21	0.3/0.4	-169/-188
	12/30/98	<0.250	<1.0	6.4	9.3	1.1/1.2	-107/-111
	06/25/99	----	0.0900	1.25	19.80	1.2/2.4	-164/-153
	12/28/99	<0.500	<5.00	<5.00	0.660	1.0/1.1	-111/-115
	05/31/00	<0.500	<1.00	13.9	1.41	2.8/a	-21/162
	10/17/00	<0.5	<1.00	<5.00	13.3	3.0/3.5	-126/-132
	05/01/01	<0.250	---	<1	2.66	1.6/1.0	-144/-154
	05/29/01	---	<0.1	---	---	1.9/1.5	45/-96
	11/07/01	<5	<0.2	<1	2.7	1.4/1.1	-39/-54
MW-10	06/10/98	----	<1.0	6.3	17	0.7/0.5	-149/-162
	12/30/98	<0.250	<1.0	8.0	17	1.0/0.7	-72/-89
	06/25/99	----	0.134	<1.00	15.80	0.9/2.5	-139/-119
	12/28/99	0.604	0.998	<5.00	2.20	1.2/1.4	-87/-92
	05/31/00	<0.500	<1.00	12.4	3.22	2.8/3.9	-28/-93
	10/17/00	<0.5	<1.00	<5.00	8.30	2.3/3.0	-160/-113
	05/01/01	0.884	---	<1	2.34	2.0/1.1	-129/-137
	05/29/01	---	<0.1	---	---	3.70/1.8	-15/-50
	11/07/01	<5	<0.2	<1	2.4	1.8/1.0	-139/-147

**Table 1.** Groundwater Analytical Data - Other Constituents - Shell-branded Service Station - Incident #98995749, 285 Hegenberger Road, Oakland, California

Well ID	Date	Motor Oil	Nitrate as Nitrate	Sulfate (Concentrations in ppm)	Ferrous Iron	DO	ORP (millivolts)
MW-11	12/30/98	<0.250	<1.0	1,000	0.21	0.7/0.6	-86/-74
	12/28/99	<0.500	<5.00	<5.00	<0.0100	0.8/1.0	-94/-67
	05/31/00	---	---	---	---	---	---
	10/17/00	<0.50	<1.00	1,140	1.74	4.1/4.0	81/64
MW-12	12/30/98	<0.250	6.1	1,500	0.06	1.3/0.9	-119/-106
	12/28/99	<0.500	<5.00	<5.00	<0.0100	1.0/1.2	-120/-110
	05/31/00	---	---	---	---	---	---
	10/17/00	<0.50	<1.00	182	0.0107	5.1/3.0	15/24
MW-13	12/30/98	<0.250	7.2	230	0.031	1.1/0.8	-111/-104
	12/28/99	<0.500	<5.00	<5.00	<0.0100	0.8/1.0	-117/-115
	05/31/00	---	---	---	---	---	---
	10/17/00	<0.5	<1.00	1,800	0.169	2.5/2.8	-10/19
VEW-5	10/17/00	<1	<1.00	15.0	2.64	3.0/3.1	-112/-126
	05/01/01	1.45	---	---	2.4	0.4/0.6	-95/-133
	11/05/01	<100	<0.2	<1	5.6	0.6/a	-108/a
VEW-6	10/17/00	<1	<1.00	17.7	4.16	2.0/2.1	-92/-115
	05/01/01	0.805	---	---	1.67	0.8/1.2	-108/-129
	05/29/01	---	0.49	---	---	3.0/1.7	-13/-53
	11/05/01	<100	<0.2	14	5.6	0.8/1.3	-145/-127
VEW-7	10/17/00	<1	<0.200	1.96	508	3.5/4.1	-87/-82
	05/01/01	0.348	---	---	1.97	0.8/0.8	-102/-120
	05/29/01	---	0.43	---	---	2.5/1.4	-21/-75
	11/05/01	<100	<0.2	4.1	4.8	3.52/a	-113/-147
AS-1	10/17/00	<1	<1.00	965	0.708	2.0/2.5	-109/-79
	11/05/01	<100	<0.2	830	0.21	0.4/0.5	-122/150
AS-2	10/17/00	<0.5	<1.00	3,810	2.46	3.1/3.0	-65/-69
	11/05/01	<100	<10	4,100	8.8	0.8/0.6	-97/-132

**Table 1.** **Groundwater Analytical Data - Other Constituents** - Shell-branded Service Station - Incident #98995749, 285 Hegenberger Road, Oakland, California

Well ID	Date	Motor Oil	Nitrate as Nitrate	Sulfate (Concentrations in ppm)	Ferrous Iron	DO	ORP (millivolts)
AS-3	10/17/00	1.26	<1.00	493	0.0402	3.1/3.0	26/29
	11/05/01	<100	<0.2	450	0.13	1.1/3.2	-71/-62
Ideal Aerobic Degradation Relationship:		Inverse	Inverse	Direct	Inverse	Direct	
Observed Relationship:		Inconclusive	Moderately Inverse	Moderately Direct	Moderately Inverse	Inconclusive	
<b>Abbreviations:</b>				<b>Notes:</b>			
ppm = Parts per million				---- = Not analyzed			
DO = Dissolved oxygen, measured in the field, reported as pre-purge/post-purge				<n = Below detection limit of n ppm			
ORP = Oxidation reduction potential, measured in the field, reported as pre-purge/post-purge				Motor oil by DHS LUFT			
				Ferrous iron analyzed by EPA Method 200.7			
				Nitrate as nitrate and sulfate analyzed by EPA Method 300.0			
				a = Post-purge reading not taken			

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**Table 2. Groundwater Analytical Data - Oxygenates - Shell-branded Service Station, Incident #98995749,  
285 Hegenberger Road, Oakland, California**

Sample ID	Date Sampled	MTBE	DIPE	ETBE (Concentrations in ppb)	TAME	TBA	Ethanol
MW-1	11/07/01	870	<2.0	<2.0	<2.0	380	<500
MW-10	11/07/01	1,700	<25	<25	<25	470	<500

**Abbreviations:**

MTBE = Methyl tert-butyl ether, analyzed by EPA Method 8260

DIPE = Di-isopropyl ether, analyzed by EPA Method 8260

ETBE = Ethyl tert-butyl ether, analyzed by EPA Method 8260

TAME = Tert-amyl methyl ether, analyzed by EPA Method 8260

TBA = Tert-butyl alcohol, analyzed by EPA Method 8260

Ethanol analyzed by EPA Method 8260

ppb = Parts per billion

**Blaine Groundwater Monitoring Report**  
**ATTACHMENT A**

**and Field Notes**

**BLAINE**  
TECH SERVICES



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December 10, 2001

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

Fourth Quarter 2001 Groundwater Monitoring at  
Shell-branded Service Station  
285 Hegenberger Road  
Oakland, CA

Monitoring performed on November 5 and 7, 2001

#### Groundwater Monitoring Report 011105-MG-1

This report covers the routine monitoring of groundwater wells at this Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, appropriate calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the 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. Our activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrological conditions or formulation of recommendations was performed.

Please call if you have any questions.

Yours truly,

Leon Gearhart  
Project Coordinator

LG/mrb

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

cc: Anni Kreml  
Cambria Environmental Technology, Inc.  
114 65<sup>th</sup> Street, Suite C  
Oakland, CA 94608-2411

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**285 Hegenberger Road**  
**Oakland, CA**  
**Wic #204-5508-5504**

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)	DO Reading (ppm)
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MW-1	02/16/1989	99,000	NA	20,000	23,000	5,700	2,300	NA	NA	6.64	3.83	2.81	NA
MW-1	05/23/1989	48,000	11,000	4,200	5,200	1,200	7,700	NA	NA	6.64	3.59	3.05	NA
MW-1	08/03/1989	63,000	11,000	5,500	5,500	3,200	9,500	NA	NA	6.64	4.04	2.60	NA
MW-1	12/15/1989	30,000	11,000	ND	ND	ND	ND	NA	NA	6.64	4.22	2.42	NA
MW-1	02/07/1990	93,000	10,000	13,000	9,600	2,400	14,000	NA	NA	6.64	4.60	2.04	NA
MW-1	04/18/1990	55,000	8,700	14,000	8,400	3,200	13,000	NA	NA	6.64	4.02	2.62	NA
MW-1	07/23/1990	73,000	3,600	16,000	7,400	2,800	15,000	NA	NA	6.64	4.17	2.47	NA
MW-1	09/27/1990	45,000	1,700	8,000	4,300	2,000	11,000	NA	NA	6.64	4.60	2.04	NA
MW-1	01/03/1991	43,000	3,100	10,000	3,400	1,900	11,000	NA	NA	6.64	4.88	1.76	NA
MW-1	04/10/1991	67,000	1,800	20,000	9,600	3,500	16,000	NA	NA	6.64	3.55	3.09	NA
MW-1	07/12/1991	NA	NA	NA	NA	NA	NA	NA	NA	6.64	3.97	2.67	NA
MW-1	10/08/1991	55,000	7,400	18,000	3,500	2,300	8,600	NA	NA	6.64	4.26	2.38	NA
MW-1	02/06/1992	48,000	15,000 a	12,000	2,800	1,900	7,400	NA	NA	6.64	4.94	1.70	NA
MW-1	05/04/1992	71,000	10,000 a	16,000	6,000	3,100	14,000	NA	NA	6.64	3.58	3.06	NA
MW-1	07/28/1992	68,000	18,000 a	21,000	5,500	3,400	15,000	NA	NA	6.64	3.91	2.73	NA
MW-1 (D)	07/28/1992	70,000	19,000 a	17,000	5,000	2,700	13,000	NA	NA	6.64	3.91	2.73	NA
MW-1	10/27/1992	53,000	1,300	18,000	3,700	3,400	11,000	NA	NA	6.64	4.79	1.85	NA
MW-1 (D)	10/27/1992	48,000	2,500 a	17,000	3,600	3,100	9,900	NA	NA	6.64	4.79	1.85	NA
MW-1	01/14/1993	84,000	2,200 a	17,000	5,400	3,000	13,000	NA	NA	6.64	3.39	3.25	NA
MW-1	04/23/1993	100,000	2,300 a	18,000	7,800	4,700	20,000	NA	NA	6.64	2.67	3.97	NA
MW-1	07/20/1993	41a	3,100 a	12,000	870	1,500	4,400	NA	NA	9.50	3.48	6.02	NA
MW-1	10/18/1993	33,000	8,100 a	14,000	1,200	2,000	4,900	NA	NA	9.50	4.20	5.30	NA
MW-1 (D)	10/18/1993	44,000	3,700 a	14,000	1,200	2,000	4,900	NA	NA	9.50	4.20	5.30	NA
MW-1	01/06/1994	71,000	9,000 a	9,000	870	1,600	5,100	NA	NA	9.50	4.13	5.37	NA
MW-1	04/12/1994	42,000	5,900	6,600	170	2,300	4,700	NA	NA	9.50	2.42	7.08	NA
MW-1 (D)	04/12/1994	40,000	4,700	6,300	180	2,000	4,400	NA	NA	9.50	2.42	7.08	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**285 Hegenberger Road**  
**Oakland, CA**  
**Wic #204-5508-5504**

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)	DO Reading (ppm)
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MW-1	07/25/1994	13,000	7,000 a	4,400	110	460	1,400	NA	NA	9.50	3.37	6.13	NA
MW-1	10/25/1994	19,000	3,900	5,500	210	880	2,000	NA	NA	9.50	4.07	5.43	NA
MW-1	01/09/1995	37,000	8,600 a	6,700	800	2,800	8,900	NA	NA	9.50	2.65	6.85	NA
MW-1	04/11/1995	26,000	5,500	4,700	270	1,800	3,400	NA	NA	9.50	2.38	7.12	NA
MW-1	07/18/1995	57,000	7,000	7,500	880	4,100	11,000	NA	NA	9.50	3.49	6.01	NA
MW-1 (D)	07/19/1995	46,000	6,600	6,000	670	3,200	7,500	NA	NA	9.50	3.49	6.01	NA
MW-1	10/18/1995b	37,000	3,200	5,400	450	2,600	7,400	10,000	NA	9.50	NA	NA	NA
MW-1	01/09/1996	32,000	NA	3,000	240	1,900	3,500	6,100	NA	9.50	2.95	6.55	NA
MW-1	04/02/1996	30,000	NA	3,100	260	2.0	3,900	8.0	NA	9.50	2.00	7.50	NA
MW-1	10/03/1996	18,000	2,800	3,000	120	1,200	1,700	7,500	NA	9.50	3.21	6.29	2.2
MW-1	04/03/1997	29,000	3,000	2,300	170	2,300	2,900	4,300	NA	9.50	2.84	6.66	2.2
MW-1	10/08/1997	22,000	3,600	920	71	2,400	2,200	820	NA	9.50	2.58	6.92	1.5
MW-1	06/10/1998	13,000	2,900	860	<100	1,300	500	29,000	32,000	9.50	2.67	6.83	0.5/0.5
MW-1 (D)	06/10/1998	9,400	2,100	870	<50	1,300	520	28,000	NA	9.50	2.67	6.83	0.5/0.5
MW-1	12/30/1998	6,930	1,540	714	52.7	243	<25.0	9,000	NA	9.50	4.68	4.82	1.6/1.4
MW-1 *	06/25/1999	12,600	NA	1,110	44.7	1,340	710	6,080	NA	9.50	2.86	6.64	1.2/2.1
MW-1	12/28/1999	3,260	1,170	527	14.0	50.7	40.3	5,430	7,060b	9.50	3.23	6.27	1.4/1.8
MW-1	05/31/2000	6,820	2,050	1,620	<50.0	116	<50.0	6,070	4,710	9.50	2.39	7.11	0.98/2.27
MW-1	10/17/2000	2,530	995 a	388	<10.0	16.4	22.1	917	NA	9.50	2.05	7.45	4.0/3.1
MW-1	05/01/2001	12,300	1,510	1,480	19.5	205	111	4,160	NA	9.50	3.55	5.95	1.6/1.3
MW-1	11/05/2001	NA	NA	NA	NA	NA	NA	NA	9.85 e	4.43	5.42	0.4	
MW-1	11/07/2001	3,000	<1,000	290	6.0	11	15	NA	870	9.85	4.00	5.85	2.1/1.4

MW-2	02/16/1989	20,000	NA	200	900	2,700	9,600	NA	NA	7.68	5.33	2.35	NA
MW-2	05/23/1989	1,500	1,600	4.3	2.9	11	150	NA	NA	7.68	5.23	2.45	NA
MW-2	08/03/1989	15,000	7,400	75	120	850	2,200	NA	NA	7.68	6.03	1.65	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**285 Hegenberger Road**  
**Oakland, CA**  
**Wic #204-5508-5504**

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)	DO Reading (ppm)
MW-2	12/15/1989	5,000	2,600	52	13	4.1	290	NA	NA	7.68	6.43	1.25	NA
MW-2	02/07/1990	13,000	4,800	32	34	230	640	NA	NA	7.68	5.82	1.86	NA
MW-2	04/18/1990	9,800	3,200	33	19	460	1,700	NA	NA	7.68	5.88	1.80	NA
MW-2	07/23/1990	9,600	2,700	41	27	540	940	NA	NA	7.68	6.05	1.63	NA
MW-2	10/01/1990	390	1,600	3.4	15	8.5	25	NA	NA	7.68	NA	NA	NA
MW-2	01/03/1991	1,800	830	56	4.4	4.8	92	NA	NA	7.68	6.82	0.86	NA
MW-2	04/10/1991	1,900	280	ND	28	140	490	NA	NA	7.68	4.80	2.88	NA
MW-2	07/12/1991	8,100	1,100	89	66	350	930	NA	NA	7.68	5.70	1.98	NA
MW-2	10/08/1991	1,400	2,600	5.1	1.5	36	270	NA	NA	7.68	6.40	1.28	NA
MW-2	02/06/1992	2,000	5,400 a	7.8	2.5	130	210	NA	NA	7.68	6.40	1.28	NA
MW-2	05/04/1992	21	1,000	ND	ND	300	960	NA	NA	7.68	4.68	3.00	NA
MW-2	07/28/1992	2,100	830 a	7.7	3.3	130	310	NA	NA	7.68	5.86	1.82	NA
MW-2	10/27/1992	1,100	530	16	3.1	4.5	25	NA	NA	7.68	6.96	0.72	NA
MW-2	01/14/1993	290	170 a	5.2	3.1	8.4	21	NA	NA	7.68	4.12	3.56	NA
MW-2	04/23/1993	2,400	1,200 a	ND	ND	210	610	NA	NA	7.68	3.84	3.84	NA
MW-2	07/20/1993	440	130	1.7	1.7	15	38	NA	NA	10.55	5.17	5.38	NA
MW-2	10/18/1993	2,100	1,600 a	ND	ND	90	110	NA	NA	10.55	6.20	4.35	NA
MW-2	01/06/1994	1.9a	130	ND	6.7	7.1	12	NA	NA	10.55	5.39	5.16	NA
MW-2	04/12/1994	120	130	ND	ND	3.4	4.3	NA	NA	10.55	4.72	5.83	NA
MW-2	07/25/1994	0.18a	280 a	5.3	ND	6.2	8.2	NA	NA	10.55	5.44	5.11	NA
MW-2	10/25/1994	170	400	ND	ND	ND	ND	NA	NA	10.55	6.73	3.82	NA
MW-2	01/09/1995	ND	ND	ND	ND	ND	ND	NA	NA	10.55	4.34	6.21	NA
MW-2	04/11/1995	ND	ND	ND	ND	ND	ND	NA	NA	10.55	3.72	6.83	NA
MW-2	07/18/1995	250	160	2.8	0.5	12	13	NA	NA	10.55	4.91	5.64	NA
MW-2	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	10.55	5.88	4.67	NA
MW-2	01/09/1996	790	130	5.1	1.5	2.4	4.6	1,400	NA	10.55	4.75	5.80	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**285 Hegenberger Road**  
**Oakland, CA**  
**Wic #204-5508-5504**

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)	DO Reading (ppm)
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MW-2	04/02/1996	260	NA	<2	<2	13	6.9	540	NA	10.55	3.25	7.30	NA
MW-2	10/03/1996	<2,000	620	<20	<20	<20	<20	13,000	NA	10.55	5.27	5.28	2.3
MW-2	04/03/1997	<1,000	190	<10	<10	<10	<10	2,800	NA	10.55	3.99	6.56	2.2
MW-2	10/08/1997	<5,000	1,100	<50	<50	<50	<50	d	NA	10.55	5.03	5.52	1.6
MW-2	06/10/1998	120	310	1.7	<1.0	<1.0	<1.0	3,800	NA	10.55	4.11	6.44	0.7/0.6
MW-2	12/30/1998	<5,000	1,050	<50.0	<50.0	<50.0	<50.0	12,100	15,300	10.55	4.76	5.79	1.3/1.2
MW-2 *	06/25/1999	<1,000	NA	<10.0	<10.0	<10.0	<10.0	7,570	NA	10.55	4.63	5.92	2.3/2.5
MW-2	12/28/1999	228	446	4.54	<0.500	<0.500	<0.500	4,260	NA	10.55	4.95	5.60	2.1/2.4
MW-2	05/31/2000	597	187	19.3	<0.500	0.860	<0.500	2,480	NA	10.55	4.06	6.49	1.8/2.7
MW-2	10/17/2000	Well inaccessible		NA	NA	NA	NA	NA	NA	10.55	NA	NA	NA
MW-2	05/01/2001	Well inaccessible		NA	NA	NA	NA	NA	NA	10.55	NA	NA	NA
MW-2	11/05/2001	<500	610	<5.0	<5.0	<5.0	<5.0	NA	1,800	10.55	6.12	4.43	0.6/1.1

MW-3	02/16/1989	60,000	NA	5,500	ND	3,200	5,200	NA	NA	7.81	5.17	2.64	NA
MW-3	05/23/1989	ND	1,500	ND	200	ND	ND	NA	NA	7.81	5.09	2.72	NA
MW-3	08/03/1989	2,000	1,200	120	ND	ND	86	NA	NA	7.81	5.34	2.47	NA
MW-3	12/15/1989	5,200	1,700	380	12	17	410	NA	NA	7.81	6.02	1.79	NA
MW-3	02/07/1990	260	230	17	47	5.4	2.5	NA	NA	7.81	4.95	2.86	NA
MW-3	04/18/1990	260	ND	ND	ND	ND	9.4	NA	NA	7.81	5.55	2.26	NA
MW-3	07/23/1990	510	210	46	ND	ND	9.3	NA	NA	7.81	5.81	2.00	NA
MW-3	09/27/1990	460	350	6.3	1.2	ND	15	NA	NA	7.81	6.86	0.95	NA
MW-3	01/03/1991	4,800	630	920	1.7	ND	190	NA	NA	7.81	6.84	0.97	NA
MW-3	04/10/1991	120	60	1.2	8.8	3.5	21	NA	NA	7.81	4.93	2.88	NA
MW-3	07/12/1991	430	ND	12	0.8	ND	7.7	NA	NA	7.81	5.56	2.25	NA
MW-3	10/08/1991	770	560	140	ND	ND	53	NA	NA	7.81	6.62	1.19	NA
MW-3	02/06/1992	500	340 a	74	0.7	5.2	5.3	NA	NA	7.81	6.28	1.53	NA

**WELL CONCENTRATIONS**  
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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)	DO Reading (ppm)
MW-3	05/04/1992	310	290 a	47	0.9	17	16	NA	NA	7.81	4.65	3.16	NA
MW-3	07/28/1992	780	100 a	130	ND	13	4.2	NA	NA	7.81	5.56	2.25	NA
MW-3	10/27/1992	740	69a	92	ND	7.8	9.6	NA	NA	7.81	6.65	1.16	NA
MW-3	01/14/1993	ND	ND	2.4	2.8	ND	ND	NA	NA	7.81	3.88	3.93	NA
MW-3	04/23/1993b	NA	NA	NA	NA	NA	NA	NA	NA	7.81	NA	NA	NA
MW-3	07/20/1993b	NA	NA	NA	NA	NA	NA	NA	NA	11.25 (TOB)	NA	NA	NA
MW-3	10/18/1993b	NA	NA	NA	NA	NA	NA	NA	NA	11.25 (TOB)	NA	NA	NA
MW-3	01/06/1994	130	64	1.7	ND	ND	0.93	NA	NA	11.25 (TOB)	5.54	NA	NA
MW-3	04/12/1994	ND	75	0.82	ND	ND	0.7	NA	NA	11.25 (TOB)	4.82	NA	NA
MW-3	07/25/1994	0.06a	ND	2.8	ND	ND	0.7	NA	NA	11.25 (TOB)	6.03 (TOB)	5.22	NA
MW-3	10/25/1994	70	100	ND	ND	ND	ND	NA	NA	11.25 (TOB)	6.48	NA	NA
MW-3	01/09/1995	ND	ND	ND	ND	ND	ND	NA	NA	11.25 (TOB)	4.86 (TOB)	6.39	NA
MW-3	04/11/1995	ND	ND	ND	ND	ND	ND	NA	NA	11.25 (TOB)	4.22 (TOB)	7.03	NA
MW-3	07/18/1995	ND	90	2.8	ND	ND	ND	NA	NA	11.25 (TOB)	5.44 (TOB)	5.81	NA
MW-3	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	11.25 (TOB)	5.72	NA	NA
MW-3	01/09/1996	90	90	1.7	ND	<0.5	<0.5	61	NA	11.25 (TOB)	4.96	NA	NA
MW-3	04/02/1996	<50	NA	<0.5	<0.5	<0.5	<0.5	24	NA	11.25 (TOB)	3.43	NA	NA
MW-3	10/03/1996	<500	180	<5	<5	<5	<5	1,200	NA	11.25 (TOB)	5.39	NA	2.4
MW-3	04/03/1997	150	83	3.2	<0.50	<0.50	0.81	280	NA	11.25 (TOB)	4.20	NA	2.0
MW-3	10/08/1997	180	120	7.3	0.68	0.54	3.9	1,700	NA	11.25 (TOB)	5.51(TOB)	5.74	2.1
MW-3	06/10/1998	130	120	12	0.85	<0.50	2.1	600	NA	11.25 (TOB)	3.91(TOB)	7.34	0.8/0.9
MW-3	12/30/1998	<250	108	<2.50	<2.50	<2.50	<2.50	1,010	NA	11.25 (TOB)	5.76 (TOB)	5.49	1.3/1.4
MW-3 *	06/25/1999	269	NA	4.24	<2.50	<2.50	<2.50	1,180	NA	11.25 (TOB)	4.73	NA	1.4/1.9
MW-3	12/28/1999	333	122	41.4	6.48	6.57	21.3	2,680	NA	11.25 (TOB)	5.75 (TOB)	5.50	1.3/1.5
MW-3	05/31/2000	1,180	89.2	19.1	1.92	3.26	<1.00	2,130	NA	11.25 (TOB)	4.96 (TOB)	6.29	1.2/2.2
MW-3	10/17/2000	156	183 a	5.22	0.819	<0.500	1.53	2,250	NA	11.25 (TOB)	5.70 (TOB)	5.55	2.0/2.1

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
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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)	DO Reading (ppm)
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MW-3	05/01/2001	286	95.9	<2.50	<2.50	<2.50	<2.50	1,470	NA	11.25 (TOB)	4.88 (TOB)	6.37	1.9/2.7
MW-3	05/29/2001	NA	NA	NA	NA	NA	NA	NA	NA	11.25 (TOB)	5.25 (TOB)	6.00	3.0/1.9
MW-3	11/05/2001	<500	<50	<5.0	<5.0	<5.0	<5.0	NA	2,100	11.25 (TOB)	6.25 (TOB)	5.00	0.5/1.9

MW-4	05/23/1989	ND	ND	ND	ND	ND	ND	NA	NA	7.38	5.60	1.78	NA
MW-4	08/03/1989	ND	ND	ND	ND	ND	ND	NA	NA	7.38	6.37	1.01	NA
MW-4	12/15/1989	ND	ND	ND	ND	ND	ND	NA	NA	7.38	6.91	0.47	NA
MW-4	03/08/1990	ND	ND	ND	ND	ND	ND	NA	NA	7.38	6.06	1.32	NA
MW-4	04/18/1990	NA	NA	NA	NA	NA	NA	NA	NA	7.38	5.84	1.54	NA
MW-4	07/23/1990	ND	ND	ND	ND	ND	ND	NA	NA	7.38	6.92	0.46	NA
MW-4	09/27/1991	ND	ND	ND	ND	ND	ND	NA	NA	7.38	8.03	0.65	NA
MW-4	01/03/1991	NA	NA	NA	NA	NA	NA	NA	NA	7.38	7.54	-0.16	NA
MW-4	04/10/1991	ND	ND	ND	ND	ND	ND	NA	NA	7.38	5.06	2.32	NA
MW-4	07/12/1991	ND	ND	ND	ND	ND	ND	NA	NA	7.38	6.86	0.52	NA
MW-4	10/08/1991	ND	ND	ND	ND	ND	ND	NA	NA	7.38	7.44	-0.06	NA
MW-4	02/06/1992	120	2,500 a	ND	ND	ND	ND	NA	NA	7.38	7.29	0.09	NA
MW-4	05/04/1992	ND	53	ND	ND	ND	ND	NA	NA	7.38	5.33	2.05	NA
MW-4	07/28/1992	ND	60	ND	ND	ND	ND	NA	NA	7.38	6.95	0.43	NA
MW-4	10/27/1992	ND	ND	ND	ND	ND	ND	NA	NA	7.38	7.65	-0.27	NA
MW-4	01/14/1993	ND	ND	ND	ND	ND	ND	NA	NA	7.38	4.84	2.54	NA
MW-4	04/23/1993	ND	ND	ND	ND	ND	ND	NA	NA	7.38	4.84	2.54	NA
MW-4	07/20/1993	ND	ND	2.2	ND	1.1	7.7	NA	NA	10.28	6.47	3.81	NA
MW-4	10/18/1993	ND	ND	ND	1.2	ND	ND	NA	NA	10.28	7.35	2.93	NA
MW-4	01/06/1994	ND	ND	ND	ND	ND	ND	NA	NA	10.28	7.64	2.64	NA
MW-4	04/12/1994	ND	76	ND	ND	ND	ND	NA	NA	10.28	6.39	3.89	NA
MW-4	07/25/1994	ND	ND	ND	ND	ND	ND	NA	NA	10.28	7.00	3.28	NA

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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)	DO Reading (ppm)
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MW-4	10/25/1994	ND	ND	ND	ND	ND	NA	NA	10.28	7.53	2.75	NA	
MW-4	01/09/1995	ND	70 a	ND	ND	ND	NA	NA	10.28	4.90	5.38	NA	
MW-4	04/11/1995	ND	140	1.5	ND	0.6	3.4	NA	NA	10.28	5.04	5.24	NA
MW-4	07/18/1995	ND	160	13	3.4	ND	ND	NA	NA	10.28	6.18	4.10	NA
MW-4	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	10.28	6.63	3.65	NA
MW-4	01/09/1996	<50	ND	<0.5	ND	<0.5	<0.5	ND	NA	10.28	3.82	6.46	NA
MW-4	04/02/1996	<50	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	10.28	3.97	6.31	NA
MW-4	10/03/1996	<50	81	<0.5	<0.5	<0.5	<0.5	<2.5	NA	10.28	3.74	6.54	NA
MW-4	04/03/1997	<50	69	<0.50	<0.50	<0.50	<0.50	<2.5	NA	10.28	3.74	6.54	1.8
MW-4	10/08/1997	<50	75	<0.50	<0.50	<0.50	<0.50	13	NA	10.28	4.89	5.39	2.0
MW-4 (D)	10/08/1997	<50	NA	<0.50	<0.50	<0.50	<0.50	<2.5	NA	10.28	4.89	5.39	2.0
MW-4	06/10/1998	NA	NA	NA	NA	NA	NA	NA	NA	10.28	4.39	5.89	NA
MW-4	12/30/1998	<50.0	94.1	<0.500	<0.500	<0.500	0.580	7.33	NA	10.28	5.58	4.70	1.7/1.6
MW-4	06/25/1999	NA	NA	NA	NA	NA	NA	NA	NA	10.28	4.17	6.11	NA
MW-4	12/28/1999	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	10.28	4.54	5.74	1.4/1.5
MW-4	05/31/2000	NA	NA	NA	NA	NA	NA	NA	NA	10.28	3.85	6.43	NA
MW-4	10/17/2000	<50.0	274a	<0.500	<0.500	<0.500	<0.500	9.40	NA	10.28	3.50	6.78	3.8/4.0
MW-4	05/01/2001	NA	NA	NA	NA	NA	NA	NA	NA	10.28	4.10	6.18	NA
MW-4	11/05/2001	<50	<50	<0.50	<0.50	<0.50	<0.50	NA	8.4	10.28	5.21	5.07	1.3/1.5

MW-5	05/23/1989	26,000	7,000	1,500	280	ND	8,100	NA	NA	8.18	5.47	2.71	NA
MW-5	08/03/1989	12,000	8,700	860	94	ND	2,600	NA	NA	8.18	5.94	2.24	NA
MW-5	12/15/1989	1,000	710	22	35	18	44	NA	NA	8.18	6.75	1.43	NA
MW-5	02/07/1990	ND	620	0.8	ND	ND	ND	NA	NA	8.18	6.03	2.15	NA
MW-5	04/18/1990	19,000	5,000	4,500	850	97	8,000	NA	NA	8.18	5.80	2.38	NA
MW-5	07/23/1990	23,000	2,700	3,600	400	160	6,500	NA	NA	8.18	6.00	2.18	NA

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MW-5	09/23/1990	5,400	550	1,400	26	13	1,300	NA	NA	8.18	7.18	1.00	NA
MW-5	01/03/1991	860	560	280	2.8	0.8	45	NA	NA	8.18	7.17	1.01	NA
MW-5	04/10/1991	12,000	1,800	710	130	500	2,400	NA	NA	8.18	5.25	2.93	NA
MW-5	07/12/1991	24,000	1,700	2,200	280	430	5,700	NA	NA	8.18	5.70	2.48	NA
MW-5	10/08/1991	2,800	1,400	860	13	ND	580	NA	NA	8.18	6.50	1.68	NA
MW-5	02/06/1992	1,000	1,200	300	ND	14	62	NA	NA	8.18	6.35	1.83	NA
MW-5	05/04/1992	10,000	4,100 a	1,500	350	710	2,300	NA	NA	8.18	4.87	3.31	NA
MW-5	07/28/1992	12,000	3,800 a	2,200	63	1,400	3,500	NA	NA	8.18	5.73	2.45	NA
MW-5	10/27/1992	7,500	480 a	1,100	59	230	900	NA	NA	8.18	6.98	1.20	NA
MW-5	01/14/1993	7,700	1,100 a	420	49	570	840	NA	NA	8.18	4.70	3.48	NA
MW-5	04/23/1993	110,000	1,600 a	2,900	2,500	3,400	12,000	NA	NA	8.18	4.19	3.99	NA
MW-5	07/20/1993	18a	1,200 a	1,400	84	1,500	3,200	NA	NA	10.87	5.10	5.77	NA
MW-5	10/18/1993	14,000	5,800 a	2,000	100	2,300	5,100	NA	NA	10.87	5.79	5.08	NA
MW-5	01/06/1994	81,000	1,100 a	11,000	9,300	3,600	12,000	NA	NA	10.87	5.56	5.31	NA
MW-5	04/12/1994	17,000	4,100	2,900	380	430	1,300	NA	NA	10.87	4.90	5.97	NA
MW-5	07/25/1994	5,900	5,400 a	1,500	42	34	170	NA	NA	10.87	5.38	5.49	NA
MW-5	10/25/1994	2,300	1,900 a	35	3	ND	8	NA	NA	10.87	6.16	4.71	NA
MW-5	01/09/1995	8,300	3,700 a	1,500	95	330	1,900	NA	NA	10.87	4.60	6.27	NA
MW-5	04/11/1995	7,300	9,800	1,200	230	600	550	NA	NA	10.87	3.74	7.13	NA
MW-5	07/18/1995	17,000	5,100	2,300	730	770	2,500	NA	NA	10.87	4.97	5.90	NA
MW-5	10/18/1995	Well abandoned		NA	NA	NA	NA	NA	NA	10.87	5.67	5.20	NA

MW-6	05/23/1989	22,000	7,000	16	6.5	7	3,400	NA	NA	8.21	5.47	2.74	NA
MW-6	08/03/1989	28,000	8,800	1,200	130	2,100	2,800	NA	NA	8.21	5.91	2.30	NA
MW-6	12/15/1989	16,000	5,500	370	92	200	180	NA	NA	8.21	5.98	2.23	NA
MW-6	02/07/1990	22,000	2,600	520	85	630	770	NA	NA	8.21	5.47	2.74	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**285 Hegenberger Road**  
**Oakland, CA**  
**Wic #204-5508-5504**

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)	DO Reading (ppm)
MW-6	04/18/1990	21,000	5,700	900	77	2,700	2,700	NA	NA	8.21	5.80	2.41	NA
MW-6	07/23/1990	24,000	3,000	1,000	94	3,400	2,700	NA	NA	8.21	5.85	2.36	NA
MW-6	09/27/1990	22,000	ND	700	93	2,500	2,400	NA	NA	8.21	6.42	1.79	NA
MW-6	01/03/1991	25,000	960	1,000	88	2,600	3,700	NA	NA	8.21	6.73	1.48	NA
MW-6	04/10/1991	18,000	920	560	190	480	830	NA	NA	8.21	5.24	2.97	NA
MW-6	07/12/1991	9,500	1,900	670	51	1,100	920	NA	NA	8.21	5.78	2.43	NA
MW-6	10/08/1991	11,000	5,100	1,000	43	ND	ND	NA	NA	8.21	6.36	1.85	NA
MW-6	02/06/1992	7,200	1,500 a	560	8	720	160	NA	NA	8.21	6.15	2.06	NA
MW-6	05/04/1992	7,900	2,900 a	610	ND	1,500	240	NA	NA	8.21	5.07	3.14	NA
MW-6	07/28/1992	17,000	3,200 a	1,200	ND	3,000	610	NA	NA	8.21	5.85	2.36	NA
MW-6	10/27/1992	15,000	1,300 a	1,300	130	1,700	490	NA	NA	8.21	6.69	1.52	NA
MW-6	01/14/1993	4,900	1,600 a	80	31	330	37	NA	NA	8.21	4.52	3.69	NA
MW-6	04/23/1993	4,800	1,800 a	120	ND	780	73	NA	NA	8.21	4.32	3.89	NA
MW-6	07/20/1993	19a	910 a	570	18	1,100	130	NA	NA	11.04	5.39	5.65	NA
MW-6	10/18/1993	24,000	2,500 a	770	440	1,600	830	NA	NA	11.04	6.67	4.37	NA
MW-6	01/06/1994	20 a	2,300 a	450	30	530	52	NA	NA	11.04	5.66	5.38	NA
MW-6	04/12/1994	3,600	1,600	150	ND	340	21	NA	NA	11.04	4.91	6.13	NA
MW-6	07/25/1994	1,600	2,200 a	160	ND	ND	10	NA	NA	11.04	5.55	5.49	NA
MW-6 (D)	07/25/1994	1,000	2,400 a	160	ND	ND	18	NA	NA	11.04	5.55	5.49	NA
MW-6	10/25/1994	9,800	3,000 a	390	22	300	57	NA	NA	11.04	6.24	4.80	NA
MW-6	01/09/1995	2,200	800 a	74	12	400	39	NA	NA	11.04	4.58	6.46	NA
MW-6	04/11/1995	5,000	7,700	330	15	760	85	NA	NA	11.04	4.04	7.00	NA
MW-6	07/18/1995	4,200	1,700	320	11	490	22	NA	NA	11.04	5.01	6.03	NA
MW-6	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	11.04	5.86	5.18	NA
MW-6	01/09/1996	5,600	790	59	<5	180	12	14,000	NA	11.04	4.75	6.29	NA
MW-6	04/02/1996	1,500	NA	12	<5	170	9	1,900	NA	11.04	3.82	7.22	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**285 Hegenberger Road**  
**Oakland, CA**  
**Wic #204-5508-5504**

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)	DO Reading (ppm)
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MW-6	10/03/1996	2,600	1,800	110	<25	<25	<25	11,000	NA	11.04	5.27	5.77	2.2
MW-6	04/03/1997	<2,500	650	30	<25	32	<25	10,000	NA	11.04	4.42	6.62	2.0
MW-6	10/08/1997	1,900	1,100	31	<5.0	6.1	<5.0	2,600	NA	11.04	4.70	6.34	1.0
MW-6	06/10/1998	<1,000	1,500	17	12	14	88	14,000	NA	11.04	4.36	6.68	0.4/0.4
MW-6	12/30/1998	260	528	<2.50	<2.50	<2.50	<2.50	909	NA	11.04	4.98	6.06	2.1/1.6
MW-6 *	06/25/1999	<2,500	NA	<25.0	<25.0	<25.0	<25.0	8,850	7,630	11.04	4.81	6.23	1.4/3.6
MW-6	12/28/1999	526	416	7.60	<1.00	<1.00	<1.00	1,510	NA	11.04	5.17	5.87	1.8/2.0
MW-6	05/31/2000	2,870	998	45.7	4.70	8.61	<2.50	3,780	NA	11.04	4.58	6.46	0.92/2.30
MW-6	10/17/2000	2,370	944a	49.8	5.36	<5.00	<5.00	746	NA	11.04	4.80	6.24	2.5/2.1
MW-6	05/01/2001	3,000	706	2.72	<2.50	4.46	<2.50	473	NA	11.04	4.75	6.29	2.2/1.6
MW-6	05/29/2001	NA	NA	NA	NA	NA	NA	NA	NA	11.04	4.86	6.18	2.0/1.3
MW-6	11/05/2001	NA	NA	NA	NA	NA	NA	NA	NA	11.04	5.73	5.31	0.6
MW-6	11/07/2001	1,700	180	1.3	1.2	1.3	1.1	NA	430	11.04	5.75	5.29	2.4/1.8

MW-7	05/23/1989	47,000	11,000	3,500	5,000	1,500	7,800	NA	NA	7.44	5.48	1.96	NA
MW-7	08/03/1989	68,000	22,000	6,200	6,600	3,600	8,800	NA	NA	7.44	4.22	3.22	NA
MW-7	12/15/1989	100,000	12,000	4,500	5,300	1,300	5,300	NA	NA	7.44	4.58	2.86	NA
MW-7	02/07/1990	96,000	8,100	15,000	15,000	2,500	14,000	NA	NA	7.44	5.34	2.10	NA
MW-7	04/18/1990	94,000	10,000	25,000	13,000	3,300	13,000	NA	NA	7.44	4.92	2.52	NA
MW-7	07/23/1990	84,000	12,000	3,800	26,000	13,000	3,000	NA	NA	7.44	4.99	2.45	NA
MW-7	09/27/1990	43,000	ND	25,000	6,100	2,400	9,000	NA	NA	7.44	6.16	1.28	NA
MW-7	01/03/1991	78,000	3,100	26,000	16,000	3,000	14,000	NA	NA	7.44	4.96	2.48	NA
MW-7	04/10/1991	140,000	1,800	26,000	16,000	2,200	14,000	NA	NA	7.44	4.13	3.31	NA
MW-7	07/12/1991	79,000	1,100	7,700	7,200	2,300	10,000	NA	NA	7.44	4.98	2.46	NA
MW-7	10/08/1991	55,000	390 a	29,000	7,500	1,800	9,300	NA	NA	7.44	5.48	1.96	NA
MW-7	02/06/1992	63,000	9,600 a	16,000	8,700	1,600	7,400	NA	NA	7.44	5.05	2.39	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**285 Hegenberger Road**  
**Oakland, CA**  
**WIC #204-5508-5504**

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)	DO Reading (ppm)
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MW-7	05/04/1992	67,000	9,800 a	22,000	13,000	1,800	9,400	NA	NA	7.44	4.43	3.01	NA
MW-7	07/28/1992	85,000	13,000 a	26,000	17,000	2,900	15,000	NA	NA	7.44	4.88	2.56	NA
MW-7	10/27/1992	63,000	1,900 a	21,000	11,000	3,000	11,000	NA	NA	7.44	5.39	2.05	NA
MW-7	01/14/1993	120,000	2,300 a	28,000	21,000	1,600	15,000	NA	NA	7.44	4.26	3.18	NA
MW-7	04/23/1993	60,000	12,000 a	17,000	3,700	2,200	11,000	NA	NA	7.44	4.04	3.40	NA
MW-7 (D)	04/23/1993	50,000	14,000 a	17,000	4,200	2,200	11,000	NA	NA	7.44	4.04	3.40	NA
MW-7	07/20/1993	47,000	13,000	23,000	9,900	2,200	12,000	NA	NA	10.28	4.36	5.92	NA
MW-7	10/18/1993	44,000	10,000 a	22,000	3,800	2,600	10,000	NA	NA	10.28	5.14	5.14	NA
MW-7	01/06/1994	65,000	5,200 a	16,000	4,900	1,900	8,500	NA	NA	10.28	4.83	5.45	NA
MW-7	04/12/1994	68,000	3,400	12,000	2,000	580	6,400	NA	NA	10.28	4.24	6.04	NA
MW-7	07/25/1994	63,000	4,200 a	16,000	5,800	300	8,300	NA	NA	10.28	4.58	5.70	NA
MW-7	10/25/1994	46,000	3,800 a	16,000	3,700	1,200	7,300	NA	NA	10.28	5.07	5.21	NA
MW-7	01/09/1995	62,000	3,300 a	24,000	8,500	1,100	9,400	NA	NA	10.28	3.38	6.90	NA
MW-7 (D)	01/11/1995	57,000	3,200 a	9,500	7,900	620	8,000	NA	NA	10.28	3.38	6.90	NA
MW-7	04/11/1995	53,000	7,000	13,000	4,200	1,500	7,700	NA	NA	10.28	3.52	6.76	NA
MW-7 (D)	04/12/1995	55,000	7,600	11,000	3,700	1,300	6,400	NA	NA	10.28	3.52	6.76	NA
MW-7	07/18/1995	95,000	2,700	24,000	8,000	2,100	12,000	NA	NA	10.28	4.70	5.58	NA
MW-7	10/18/1995	Well abandoned		NA	NA	NA	NA	NA	NA	10.28	5.25	5.03	NA

MW-8	05/23/1989	ND	100	ND	ND	ND	ND	NA	NA	7.79	6.62	1.17	NA
MW-8	08/03/1989	ND	75	ND	ND	ND	ND	NA	NA	7.79	6.62	1.17	NA
MW-8	12/15/1989	ND	ND	ND	ND	ND	ND	NA	NA	7.79	6.71	1.08	NA
MW-8	03/08/1990	ND	ND	ND	ND	ND	ND	NA	NA	7.79	4.95	2.84	NA
MW-8	04/18/1990	NA	NA	NA	NA	NA	NA	NA	NA	7.79	6.40	1.89	NA
MW-8	07/23/1990	ND	ND	ND	ND	ND	ND	NA	NA	7.79	6.62	1.17	NA
MW-8	09/27/1990	ND	1,100	ND	ND	ND	ND	NA	NA	7.79	6.98	0.81	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**285 Hegenberger Road**  
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**Wic #204-5508-5504**

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)	DO Reading (ppm)
MW-8	01/03/1991	ND	ND	1.3	ND	ND	ND	NA	NA	7.79	7.03	0.76	NA
MW-8	04/10/1991	50	ND	0.7	1.1	0.8	1	NA	NA	7.79	4.40	3.39	NA
MW-8	07/12/1991	ND	ND	ND	ND	ND	ND	NA	NA	7.79	6.80	0.99	NA
MW-8	10/08/1991	ND	ND	1.4	ND	ND	ND	NA	NA	7.79	7.56	0.23	NA
MW-8	02/06/1992	ND	60 a	ND	0.7	ND	ND	NA	NA	7.79	6.94	0.85	NA
MW-8	05/04/1992	ND	210 a	ND	ND	ND	ND	NA	NA	7.79	5.86	1.93	NA
MW-8	07/28/1992	51	ND	ND	ND	1	0.6	NA	NA	7.79	6.94	0.85	NA
MW-8	10/27/1992	ND	ND	ND	6.6	ND	ND	NA	NA	7.79	7.83	-0.04	NA
MW-8	01/14/1993	ND	64a	ND	ND	ND	ND	NA	NA	7.79	3.60	4.19	NA
MW-8 (D)	01/14/1993	ND	NA	ND	ND	ND	ND	NA	NA	7.79	3.60	4.19	NA
MW-8	04/23/1993	ND	ND	ND	ND	ND	ND	NA	NA	7.79	4.12	3.67	NA
MW-8	07/20/1993	ND	ND	0.7	0.7	0.8	4.1	NA	NA	10.61	6.38	4.23	NA
MW-8	10/18/1993	ND	ND	ND	800	ND	ND	NA	NA	10.61	7.47	3.14	NA
MW-8	01/06/1994	ND	ND	ND	ND	ND	ND	NA	NA	10.61	7.20	3.41	NA
MW-8	04/12/1994	ND	ND	ND	ND	ND	ND	NA	NA	10.61	6.16	4.45	NA
MW-8	07/25/1994	ND	ND	ND	ND	ND	ND	NA	NA	10.61	6.94	3.67	NA
MW-8	10/25/1994	ND	ND	ND	1	ND	ND	NA	NA	10.61	7.43	3.18	NA
MW-8	01/09/1995	ND	70 a	ND	ND	ND	ND	NA	NA	10.61	3.98	6.63	NA
MW-8	04/11/1995	ND	78	0.63	1.3	ND	0.75	NA	NA	10.61	4.12	6.49	NA
MW-8	07/18/1995	ND	130	ND	ND	ND	ND	NA	NA	10.61	5.21	5.40	NA
MW-8	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	10.61	5.58	5.03	NA
MW-8	01/09/1996	<50	ND	<0.5	<0.5	<0.5	<0.5	ND	NA	10.61	5.09	5.52	NA
MW-8	04/02/1996	<50	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	10.61	3.42	7.19	NA
MW-8	10/03/1996	<50	<69	<0.5	<0.5	<0.5	<0.5	<2.5	NA	10.61	4.30	6.31	NA
MW-8	04/03/1997	<50	62	<0.50	<0.50	<0.50	0.91	<2.5	NA	10.61	4.58	6.03	2.6
MW-8	10/08/1997	<50	57	<0.50	<0.50	<0.50	<0.50	<2.5	NA	10.61	3.00	7.61	3.6

**WELL CONCENTRATIONS**  
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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)	DO Reading (ppm)
MW-8	06/10/1998	NA	NA	NA	NA	NA	NA	NA	NA	10.61	2.88	7.73	NA
MW-8	12/30/1998	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	NA	10.61	5.38	5.23	0.8/0.9
MW-8	06/25/1999	NA	NA	NA	NA	NA	NA	NA	NA	10.61	4.53	6.08	NA
MW-8	12/28/1999	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	10.61	4.93	5.68	1.0/0.9
MW-8	05/31/2000	NA	NA	NA	NA	NA	NA	NA	NA	10.61	4.02	6.59	NA
MW-8	10/17/2000	<50.0	143a	<0.500	<0.500	<0.500	<0.500	<2.50	NA	10.61	3.10	7.51	4.0/4.1
MW-8	05/01/2001	NA	NA	NA	NA	NA	NA	NA	NA	10.61	4.12	6.49	NA
MW-8	11/05/2001	<50	<50	<0.50	0.99	<0.50	<0.50	NA	<5.0	10.61	5.00	5.61	0.6/1.3
MW-9	08/03/1989	47,000	12,000	5,600	6,600	1,500	8,500	NA	NA	7.63	5.78	1.85	NA
MW-9	12/15/1989	88,000	9,200	4,300	5,400	140	5,600	NA	NA	7.63	5.24	2.39	NA
MW-9	02/07/1990	50,000	7,400	1,800	1,400	3,200	1,800	NA	NA	7.63	5.23	2.40	NA
MW-9	04/18/1990	50,000	7,500	14,000	11,000	730	10,000	NA	NA	7.63	5.34	2.29	NA
MW-9	07/23/1990	62,000	3,200	19,000	16,000	950	15,000	NA	NA	7.63	5.65	1.98	NA
MW-9	09/27/1990	30,000	2,700	16,000	6,500	980	11,000	NA	NA	7.63	5.96	1.67	NA
MW-9	01/03/1991	34,000	2,500	9,200	3,200	770	7,000	NA	NA	7.63	6.23	1.40	NA
MW-9	04/10/1991	66,000	2,200	17,000	13,000	1,400	14,000	NA	NA	7.63	4.65	2.98	NA
MW-9	07/12/1991	40,000	2,000	7,700	3,200	1,100	9,400	NA	NA	7.63	5.65	1.98	NA
MW-9	10/08/1991	20,000	4,700 a	11,000	640	240	6,000	NA	NA	7.63	6.08	1.55	NA
MW-9	02/06/1992	36,000	6,600 a	11,000	490	1,100	6,700	NA	NA	7.63	5.92	1.71	NA
MW-9	05/04/1992	31,000	5,800 a	11,000	1,700	1,200	8,700	NA	NA	7.63	4.80	2.83	NA
MW-9	07/28/1992	50,000	14,000	17,000	1,200	1,500	12,000	NA	NA	7.63	5.61	2.02	NA
MW-9	10/27/1992	43,000	880 a	15,000	680	1,700	8,100	NA	NA	7.63	6.24	1.39	NA
MW-9	01/14/1993	52,000	730 a	9,600	1,100	1,100	7,000	NA	NA	7.63	4.95	2.68	NA
MW-9	04/23/1993	45,000	8,000 a	11,000	1,400	1,500	10,000	NA	NA	7.63	4.54	3.09	NA
MW-9	07/20/1993	25,000	5,100	10,000	320	1,100	7,100	NA	NA	10.48	5.25	5.23	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**285 Hegenberger Road**  
**Oakland, CA**  
**Wic #204-5508-5504**

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)	DO Reading (ppm)
MW-9	10/18/1993	32,000	4,900 a	14,000	530	2,000	10,000	NA	NA	10.48	6.00	4.48	NA
MW-9	01/06/1994	41,000	7,700 a	15,000	810	1,400	9,000	NA	NA	10.48	5.62	4.86	NA
MW-9 (D)	01/06/1994	43,000	8,300 a	15,000	920	1,300	8,000	NA	NA	10.48	5.62	4.86	NA
MW-9	04/12/1994	39,000	2,000	8,300	ND	ND	4,000	NA	NA	10.48	4.31	6.17	NA
MW-9	07/25/1994	22,000	3,600 a	7,500	150	ND	4,100	NA	NA	10.48	5.43	5.05	NA
MW-9	10/25/1994	31,000	3,200 a	13,000	240	1,000	8,500	NA	NA	10.48	6.00	4.48	NA
MW-9 (D)	10/26/1994	31,000	3,500 a	13,000	220	1,100	8,300	NA	NA	10.48	6.00	4.48	NA
MW-9	01/09/1995	4,800	2,300 a	1,200	510	42	1,400	NA	NA	10.48	4.26	6.22	NA
MW-9	04/11/1995	20,000	3,400	5,100	460	400	3,400	NA	NA	10.48	4.08	6.40	NA
MW-9	07/18/1995	43,000	2,900	12,000	1,800	960	9,100	NA	NA	10.48	5.07	5.41	NA
MW-9	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	10.48	5.82	4.66	NA
MW-9	01/09/1996	64,000	2,800	12,000	5,400	1,800	10,000	2100	NA	10.48	4.36	6.12	NA
MW-9	04/02/1996	39,000	NA	10,000	100	520	4,100	<500	NA	10.48	3.86	6.62	NA
MW-9	10/03/1996	46,000	3,100	12,000	180	1,400	6,700	2,300	NA	10.48	4.90	5.58	1.4
MW-9	04/03/1997	36,000	2,300	9,700	140	580	3,900	<500	NA	10.48	3.98	6.50	1.8
MW-9	10/08/1997	34,000	3,500	6,900	<100	830	4,500	<125	NA	10.48	4.17	6.31	0.8
MW-9	06/10/1998	20,000	2,500	9,900	250	3,100	170	460	NA	10.48	3.84	6.64	0.3/0.4
MW-9	12/30/1998	30,100	1,900	8,500	166	603	3,340	<100	NA	10.48	4.72	5.76	1.1/1.2
MW-9 *	06/25/1999	26,300	NA	8,090	73.5	409	2,730	<100	NA	10.48	4.47	6.01	1.2/2.4
MW-9	12/28/1999	4,130	839	1,260	57.9	103	213	1,470	NA	10.48	4.82	5.66	1.0/1.1
MW-9	05/31/2000	8,210	1,300	9,290	62.3	141	908	565	NA	10.48	3.87	6.61	2.8/c
MW-9	10/17/2000	19,000	1,510 a	5,420	54.5	479	2,680	<250	NA	10.48	3.87	6.61	3.0/3.5
MW-9	05/01/2001	24,300	976	11,200	52.9	159	1,610	<250	NA	10.48	4.44	6.04	1.6/1.0
MW-9	05/29/2001	NA	NA	NA	NA	NA	NA	NA	NA	10.48	3.99	6.49	1.9/1.5
MW-9	11/05/2001	NA	NA	NA	NA	NA	NA	NA	NA	10.48	5.41	5.07	0.7
MW-9	11/07/2001	25,000	<1,000	7,300	85	630	4,100	NA	<250	10.48	5.60	4.88	1.4/1.1

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**285 Hegenberger Road**  
**Oakland, CA**  
**Wic #204-5508-5504**

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)	DO Reading (ppm)
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MW-10	12/15/1989	ND	3,100	1,500	ND	ND	ND	NA	NA	7.45	6.33	0.82	NA
MW-10	03/08/1990	25,000	1,800	17,000	330	2,100	1,400	NA	NA	7.45	5.41	2.00	NA
MW-10	04/18/1990	23,000	3,600	15,000	1,200	190	3,300	NA	NA	7.45	5.60	1.85	NA
MW-10	07/23/1990	18,000	1,900	12,000	380	ND	1,400	NA	NA	7.45	5.81	1.64	NA
MW-10	09/27/1990	9,500	430	13,000	100	1,800	230	NA	NA	7.45	6.64	0.81	NA
MW-10	01/03/1991	4,300	630	3,700	10	ND	110	NA	NA	7.45	6.96	0.49	NA
MW-10	04/10/1991	45,000	1,400	16,000	4,600	3,000	6,900	NA	NA	7.45	4.70	2.75	NA
MW-10	07/12/1991	ND	ND	ND	ND	ND	ND	NA	NA	7.45	5.90	1.55	NA
MW-10	10/08/1991	3,800	1,500 a	13,000	82	9	500	NA	NA	7.45	6.68	0.77	NA
MW-10	02/06/1992	22,000	1,600 a	12,000	ND	600	170	NA	NA	7.45	7.04	0.41	NA
MW-10	05/04/1992	39,000	8,000 a	14,000	5,000	1,800	5,000	NA	NA	7.45	4.69	2.76	NA
MW-10	07/28/1992	38,000	8,700 a	17,000	2,800	1,500	4,000	NA	NA	7.45	6.00	1.45	NA
MW-10	10/27/1992b	NA	NA	NA	NA	NA	NA	NA	NA	7.45	NA	NA	NA
MW-10	01/14/1993	26,000	950 a	10,000	ND	ND	160	NA	NA	7.45	6.07	1.38	NA
MW-10	04/23/1993	80,000	1,900 a	21,000	13,000	3,400	12,000	NA	NA	7.45	4.14	3.31	NA
MW-10	07/20/1993	31,000	4,800	14,000	4,200	1,700	5,500	NA	NA	10.61	5.62	4.99	NA
MW-10	10/18/1993	13,000	1,200 a	8,600	220	ND	450	NA	NA	10.61	6.43	4.18	NA
MW-10	01/06/1994	16,000	670 a	9,700	<125	<125	210	NA	NA	10.61	6.74	3.87	NA
MW-10	04/12/1994	16,000	860	5,600	ND	ND	ND	NA	NA	10.61	5.98	4.63	NA
MW-10	07/25/1994	2,300	2,100 a	1,400	26	25	51	NA	NA	10.61	6.31	4.30	NA
MW-10	10/25/1994	1,400	1,000 a	290	5	2	38	NA	NA	10.61	6.64	3.97	NA
MW-10	01/09/1995	16,000	2,300 a	7,500	1,400	230	1,500	NA	NA	10.61	5.70	4.91	NA
MW-10	04/11/1995	54,000	5,000	13,000	4,500	1,500	4,500	NA	NA	10.61	5.82	4.79	NA
MW-10	07/18/1995	72,000	2,600	20,000	7,200	2,800	9,000	NA	NA	10.61	6.79	3.82	NA
MW-10	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	10.61	5.31	5.30	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
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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)	DO Reading (ppm)
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MW-10	01/09/1996	32,000	2,100	8,000	1,600	880	3,200	12,000	NA	10.61	5.92	4.69	NA
MW-10	04/02/1996	68,000	NA	9,100	2,300	1,100	3,700	3,300	NA	10.61	5.43	5.18	NA
MW-10	10/03/1996	33,000	2,900	11,000	1,300	830	2,400	7,300	NA	10.61	6.07	4.54	1.7
MW-10 (D)	10/03/1996	40,000	3,300	12,000	1,700	1,100	3,100	6,500	NA	10.61	6.07	4.54	1.7
MW-10	04/03/1997	36,000	3,400	12,000	2,300	1,400	4,500	2,300	NA	10.61	3.45	7.16	1.8
MW-10 (D)	04/03/1997	52,000	3,000	12,000	2,300	1,400	4,500	2,100	NA	10.61	3.45	7.16	1.8
MW-10	10/08/1997	20,000	3,100	7,500	420	470	1,300	1,500	NA	10.61	3.72	6.89	1.2
MW-10	06/10/1998	48,000	2,500	14,000	2,600	1,500	4,800	1,800	NA	10.61	4.00	6.61	0.7/0.5
MW-10	12/30/1998	17,800	2,820	6,000	136	344	639	1,250	NA	10.61	5.26	5.35	1.0/0.7
MW-10 *	06/25/1999	17,600	NA	6,150	212	287	687	1,740	NA	10.61	4.49	6.12	0.9/2.5
MW-10	12/28/1999	10,800	1,400	3,370	155	321	626	3,740	NA	10.61	4.87	5.74	1.2/1.4
MW-10	05/31/2000	3,020	2,270	1,080	34.3	118	251	775	NA	10.61	3.48	7.13	2.8/3.9
MW-10	10/17/2000	15,500	1,750 a	7,450	54.7	387	308	3,840	4,300	10.61	4.25	6.36	2.3/3.0
MW-10	05/01/2001	27,900	2,260	9,920	1,050	1,020	2,370	2,180	NA	10.61	5.40	5.21	2.0/1.1
MW-10	05/29/2001	NA	NA	NA	NA	NA	NA	NA	NA	10.61	3.74	6.87	3.70/1.8
MW-10	11/05/2001	NA	NA	NA	NA	NA	NA	NA	NA	10.61	6.08	4.53	0.6
MW-10	11/07/2001	14,000	360	5,300	260	430	810	NA	1,700	10.61	5.45	5.16	1.8/1.0

MW-11	07/20/1993	50	ND	2.5	1.9	3.9	18	NA	NA	10.56	8.08	2.48	NA
MW-11	10/18/1993	ND	65	ND	ND	ND	ND	NA	NA	10.56	8.24	2.32	NA
MW-11	01/06/1994	ND	ND	ND	ND	ND	ND	NA	NA	10.56	8.47	2.09	NA
MW-11	04/12/1994	ND	ND	1.1	0.87	ND	1.5	NA	NA	10.56	8.44	2.12	NA
MW-11	07/25/1994	ND	ND	ND	ND	ND	ND	NA	NA	10.56	8.20	2.36	NA
MW-11	10/25/1994	ND	100	ND	ND	ND	ND	NA	NA	10.56	8.67	1.89	NA
MW-11	01/09/1995	ND	ND	ND	ND	ND	ND	NA	NA	10.56	7.63	2.93	NA
MW-11	04/11/1995	ND	140	ND	0.7	ND	0.5	NA	NA	10.56	8.06	2.50	NA

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MW-11	07/18/1995	ND	50	ND	ND	ND	ND	NA	NA	10.56	9.31	1.25	NA
MW-11	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	10.56	8.34	2.22	NA
MW-11	01/09/1996	<50	ND	<0.5	<0.5	<0.5	<0.5	ND	NA	10.56	8.22	2.34	NA
MW-11	04/02/1996	<50	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	10.56	7.97	2.59	NA
MW-11	10/03/1996	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	10.56	8.37	2.19	3.6
MW-11	04/03/1997	<50	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	10.56	8.31	2.25	2.2
MW-11	10/08/1997	<50	54	<0.50	<0.50	<0.50	<0.50	<2.5	NA	10.56	8.56	2.00	1.2
MW-11	06/10/1998	NA	NA	NA	NA	NA	NA	NA	NA	10.56	7.85	2.71	NA
MW-11	12/30/1998	<50.0	66.2	<0.500	<0.500	<0.500	<0.500	<2.00	NA	10.56	8.51	2.05	0.7/0.6
MW-11	06/25/1999	NA	NA	NA	NA	NA	NA	NA	NA	10.56	8.01	2.55	NA
MW-11	12/28/1999	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	10.56	8.39	2.17	0.8/1.0
MW-11	05/31/2000	NA	NA	NA	NA	NA	NA	NA	NA	10.56	7.38	3.18	NA
MW-11	10/17/2000	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	10.56	8.35	2.21	4.1/4.0
MW-11	05/01/2001	NA	NA	NA	NA	NA	NA	NA	NA	10.56	8.15	2.41	NA
MW-11	11/05/2001	Unable to locate		NA	NA	NA	NA	NA	NA	10.56	NA	NA	NA

MW-12	07/20/1993	ND	1,500	2.8	1.9	3.2	ND	NA	NA	9.56	6.76	2.80	NA
MW-12	10/18/1993	ND	ND	ND	ND	ND	ND	NA	NA	9.56	7.12	2.44	NA
MW-12	01/06/1994	ND	ND	ND	ND	ND	ND	NA	NA	9.56	7.15	2.41	NA
MW-12	04/12/1994	ND	ND	0.61	ND	ND	1.1	NA	NA	9.56	6.68	2.88	NA
MW-12	07/25/1994	ND	ND	ND	ND	ND	ND	NA	NA	9.56	6.83	2.73	NA
MW-12	10/25/1994	ND	ND	ND	ND	ND	ND	NA	NA	9.56	7.34	2.22	NA
MW-12	01/09/1995	ND	80 a	ND	ND	ND	ND	NA	NA	9.56	5.02	4.54	NA
MW-12	04/11/1995	ND	200	ND	ND	ND	ND	NA	NA	9.56	7.38	2.18	NA
MW-12	07/18/1995	ND	90	ND	ND	ND	ND	NA	NA	9.56	8.50	1.06	NA
MW-12	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	9.56	6.63	2.93	NA

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MW-12	01/09/1996	<50	ND	<0.5	<0.5	<0.5	<0.5	ND	NA	9.56	6.32	3.24	NA
MW-12	04/02/1996	<50	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	9.56	5.60	3.96	NA
MW-12	10/03/1996	<50	72	<0.5	<0.5	<0.5	<0.5	<2.5	NA	9.56	3.30	6.26	2.5
MW-12	04/03/1997	<50	74	<0.50	<0.50	<0.50	<0.50	<2.5	NA	9.56	6.13	3.43	2.2
MW-12	10/08/1997	<50	73	<0.50	<0.50	<0.50	<0.50	<2.5	NA	9.56	6.49	3.07	3.0
MW-12	06/10/1998	NA	NA	NA	NA	NA	NA	NA	NA	9.56	5.85	3.71	NA
MW-12	12/30/1998	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.00	NA	9.56	8.42	1.14	1.3/0.9
MW-12	06/25/1999	NA	NA	NA	NA	NA	NA	NA	NA	9.56	7.89	1.67	NA
MW-12	12/28/1999	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	9.56	8.26	1.30	1.0/1.2
MW-12	05/31/2000	NA	NA	NA	NA	NA	NA	NA	NA	9.56	7.21	2.35	NA
MW-12	10/17/2000	<50.0	82.9 a	<0.500	<0.500	<0.500	<0.500	<2.50	NA	9.56	6.80	2.76	5.1/3.0
MW-12	05/01/2001	NA	NA	NA	NA	NA	NA	NA	NA	9.56	5.95	3.61	NA
MW-12	11/05/2001	Unable to locate		NA	NA	NA	NA	NA	NA	9.56	NA	NA	NA

MW-13	07/20/1993	ND	1,500	ND	ND	ND	ND	NA	NA	10.10	8.32	1.78	NA	
MW-13 (D)	07/21/1993	ND	1,000	ND	ND	ND	ND	NA	NA	10.10	8.32	1.78	NA	
MW-13	10/18/1993	ND	ND	ND	ND	ND	ND	NA	NA	10.10	8.66	1.44	NA	
MW-13	01/06/1994	ND	ND	ND	ND	ND	ND	NA	NA	10.10	8.70	1.40	NA	
MW-13	04/12/1994	ND	100	1.7	1.2	0.59	2.4	NA	NA	10.10	8.20	1.90	NA	
MW-13	07/25/1994	ND	ND	ND	ND	ND	ND	NA	NA	10.10	8.39	1.71	NA	
MW-13	10/25/1994	ND	ND	ND	ND	ND	ND	NA	NA	10.10	8.70	1.40	NA	
MW-13	01/09/1995	ND	ND	ND	ND	ND	ND	NA	NA	10.10	7.35	2.75	NA	
MW-13	04/11/1995	ND	320	ND	ND	ND	ND	NA	NA	10.10	5.50	4.60	NA	
MW-13	07/18/1995	ND	ND	ND	ND	ND	ND	NA	NA	10.10	6.63	3.47	NA	
MW-13	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	10.10	8.12	1.98	NA	
MW-13	01/09/1996	<50	ND	<0.5	<0.5	<0.5	<0.5	<0.5	ND	NA	10.10	7.74	2.36	NA

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MW-13	04/02/1996	<50	NA	<0.5	<0.5	<0.5	<0.5	<2.5	NA	10.10	6.30	3.80	NA
MW-13	10/03/1996	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	10.10	6.50	3.60	3.0
MW-13	04/03/1997	<50	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	10.10	7.58	2.52	2.0
MW-13	10/08/1997	<50	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	10.10	8.17	1.93	1.0
MW-13	06/10/1998	NA	NA	NA	NA	NA	NA	NA	NA	10.10	7.54	2.56	NA
MW-13	12/30/1998	<50.0	69.0	<0.500	<0.500	<0.500	<0.500	<2.00	NA	10.10	6.91	3.19	1.1/0.8
MW-13	06/25/1999	NA	NA	NA	NA	NA	NA	NA	NA	10.10	6.31	3.79	NA
MW-13	12/28/1999	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	10.10	6.65	3.45	0.8/1.0
MW-13	05/31/2000	NA	NA	NA	NA	NA	NA	NA	NA	10.10	5.94	4.16	NA
MW-13	10/17/2000	<50.0	121 a	<0.500	<0.500	<0.500	<0.500	<2.50	NA	10.10	8.38	1.72	2.5/2.8
MW-13	05/01/2001	NA	NA	NA	NA	NA	NA	NA	NA	10.10	7.65	2.45	NA
MW-13	11/05/2001	Unable to locate		NA	NA	NA	NA	NA	NA	10.10	NA	NA	NA
VEW-5	09/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.91	NA	NA
VEW-5	10/17/2000	74,800	4,180 a	9,090	14,600	2,630	14,500	632	NA	NA	2.65	NA	3.0/3.1
VEW-5	05/01/2001	94,800	5,350	11,300	12,900	4,520	22,200	419	NA	NA	2.86	NA	0.4/0.6
VEW-5	11/05/2001	82,000	<1,600	14,000	7,400	2,900	15,000	NA	740	NA	4.11	NA	0.6/c
VEW-6	09/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.94	NA	NA
VEW-6	10/17/2000	63,800	4,820 a	6,940	2,750	2,760	18,700	3,700	NA	NA	3.13	NA	2.0/2.1
VEW-6	05/01/2001	57,000	3,460	6,280	697	2,640	15,800	6,240	NA	NA	3.25	NA	0.8/1.2
VEW-6	05/29/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.17	NA	3.0/1.7
VEW-6	11/05/2001	39,000	<1,300	6,800	380	1,900	7,900	NA	8,800	NA	4.35	NA	0.8/1.3
VEW-7	09/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.59	NA	NA
VEW-7	10/17/2000	74,300	3,990 a	11,900	12,500	1,640	15,500	36,600	NA	NA	3.72	NA	3.5/4.1

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**285 Hegenberger Road**  
**Oakland, CA**  
**Wic #204-5508-5504**

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)	DO Reading (ppm)
VEW-7	05/01/2001	46,000	1,930	7,250	5,300	1,960	9,820	15,600	16,900	NA	3.40	NA	0.8/0.8
VEW-7	05/29/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.54	NA	2.5/1.4
VEW-7	11/05/2001	38,000	<900	9,300	610	1,700	6,000	NA	21,000	NA	4.85	NA	3.52/c
AS-1	09/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.67	NA	NA
AS-1	10/17/2000	13,400	3,280 a	1,600	82.8	<20.0	2,600	498	NA	NA	5.50	NA	2.0/2.5
AS-1	05/01/2001	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AS-1	11/05/2001	5,300	<900	85	26	46	120	NA	190	NA	6.11	NA	0.4/0.5
AS-2	09/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.38	NA	NA
AS-2	10/17/2000	4,380	1,380 a	167	<10.0	225	680	315	NA	NA	5.50	NA	3.1/3.0
AS-2	05/01/2001	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AS-2	11/05/2001	2,200	<300	100	0.99	91	21	NA	220	NA	5.99	NA	0.8/0.6
AS-3	09/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.75	NA	NA
AS-3	10/17/2000	3,520	942 a	588	521	41.2	566	1,740	NA	NA	6.18	NA	3.1/3.0
AS-3	05/01/2001	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AS-3	11/05/2001	1,600	110	41	4.9	8.2	30	NA	240	NA	6.41	NA	1.1/3.2

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**285 Hegenberger Road**  
**Oakland, CA**  
**Wic #204-5508-5504**

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)	DO Reading (ppm)

**Abbreviations:**

TPPH = Total petroleum hydrocarbons as gasoline by modified EPA Method 8260B; prior to November 5, 2001, analyzed by EPA Method 8015.

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

BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to November 5, 2001, analuzed by EPA Method 8020.

MTBE = methyl-tertiary-butyl ether

TOC = Top of Casing Elevation

TOB = Top of Wellbox

GW = Groundwater

DO = Dissolved Oxygen

ug/L = parts per billion

ppm = parts per million

msl = Mean sea level

ft = Feet

<n = Below detection limit

D = Duplicate sample

n/n = Dissolved oxygen reading; pre-purge/post-purge.

NA = Not applicable

**Notes:**

a = Chromatogram pattern indicates an unidentified hydrocarbon.

b = Sample was analyzed outside of EPA recommended holding time.

c = Post-purge DO reading not taken.

d = Lab did not record detected result.

e = Change in casing elevation due to wellhead maintenance.

\* All diesel and motor oil samples for this event were lost in laboratory fire.



Report Number : 23196

Date : 11/16/2001

Nick Sudano  
Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112-1105

Subject : 6 Water Samples  
Project Name : 285 Hegenberger Road, Oakland  
Project Number : 011105-MG1  
P.O. Number : 98995749

Dear Mr. Sudano,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink that reads "Joel Kiff". Below the signature, the name "Joel Kiff" is printed in a smaller, black, sans-serif font.



Report Number : 23196  
Date : 11/16/2001

Subject : 6 Water Samples  
Project Name : 285 Hegenberger Road, Oakland  
Project Number : 011105-MG1  
P.O. Number : 98995749

## Case Narrative

The Method Reporting Limit for TPH as Diesel has been increased due to interference from Gasoline-Range Hydrocarbons for the following samples :

AS-1  
AS-2  
VEW-5  
VEW-6  
VEW-7

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 916-297-4800



Report Number : 23196

Date : 11/16/2001

Project Name : 285 Hegenberger Road, Oakland

Project Number : 011105-MG1

Sample : AS-1

Matrix : Water

Lab Number : 23196-01

Sample Date : 11/5/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	85	1.0	ug/L	EPA 8260B	11/8/2001
Toluene	26	1.0	ug/L	EPA 8260B	11/8/2001
Ethylbenzene	46	1.0	ug/L	EPA 8260B	11/8/2001
Total Xylenes	120	1.0	ug/L	EPA 8260B	11/8/2001
Methyl-t-butyl ether (MTBE)	190	10	ug/L	EPA 8260B	11/8/2001
TPH as Gasoline	5300	100	ug/L	EPA 8260B	11/8/2001
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	11/8/2001
4-Bromofluorobenzene (Surr)	91.6		% Recovery	EPA 8260B	11/8/2001
TPH as Diesel	< 900	900	ug/L	M EPA 8015	11/8/2001
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	11/8/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800



Report Number : 23196

Date : 11/16/2001

Project Name : 285 Hegenberger Road, Oakland

Project Number : 011105-MG1

Sample : AS-2

Matrix : Water

Lab Number : 23196-02

Sample Date : 11/5/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	100	0.50	ug/L	EPA 8260B	11/8/2001
Toluene	0.99	0.50	ug/L	EPA 8260B	11/8/2001
Ethylbenzene	91	0.50	ug/L	EPA 8260B	11/8/2001
Total Xylenes	21	0.50	ug/L	EPA 8260B	11/8/2001
Methyl-t-butyl ether (MTBE)	220	5.0	ug/L	EPA 8260B	11/8/2001
TPH as Gasoline	2200	50	ug/L	EPA 8260B	11/8/2001
Toluene - d8 (Sur)	96.7		% Recovery	EPA 8260B	11/8/2001
4-Bromofluorobenzene (Sur)	88.5		% Recovery	EPA 8260B	11/8/2001
TPH as Diesel	< 300	300	ug/L	M EPA 8015	11/8/2001
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	11/8/2001

Approved By: Joel Kiff



Report Number : 23196

Date : 11/16/2001

Project Name : 285 Hegenberger Road, Oakland

Project Number : 011105-MG1

Sample : AS-3

Matrix : Water

Lab Number : 23196-03

Sample Date : 11/5/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	41	0.50	ug/L	EPA 8260B	11/9/2001
Toluene	4.9	0.50	ug/L	EPA 8260B	11/9/2001
Ethylbenzene	8.2	0.50	ug/L	EPA 8260B	11/9/2001
Total Xylenes	30	0.50	ug/L	EPA 8260B	11/9/2001
Methyl-t-butyl ether (MTBE)	240	5.0	ug/L	EPA 8260B	11/9/2001
TPH as Gasoline	1600	50	ug/L	EPA 8260B	11/9/2001
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	11/9/2001
4-Bromofluorobenzene (Surr)	99.7		% Recovery	EPA 8260B	11/9/2001
TPH as Diesel	110	50	ug/L	M EPA 8015	11/8/2001
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	11/8/2001

Approved By: Joel Kiff



Report Number : 23196

Date : 11/16/2001

Project Name : 285 Hegenberger Road, Oakland

Project Number : 011105-MG1

Sample : VEW-5

Matrix : Water

Lab Number : 23196-04

Sample Date : 11/5/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	14000	50	ug/L	EPA 8260B	11/9/2001
Toluene	7400	25	ug/L	EPA 8260B	11/8/2001
Ethylbenzene	2900	25	ug/L	EPA 8260B	11/8/2001
Total Xylenes	15000	25	ug/L	EPA 8260B	11/8/2001
Methyl-t-butyl ether (MTBE)	740	250	ug/L	EPA 8260B	11/8/2001
TPH as Gasoline	82000	5000	ug/L	EPA 8260B	11/8/2001
Toluene - d8 (Surr)	97.0		% Recovery	EPA 8260B	11/8/2001
4-Bromofluorobenzene (Surr)	90.4		% Recovery	EPA 8260B	11/8/2001
TPH as Diesel	< 1600	1600	ug/L	M EPA 8015	11/8/2001
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	11/8/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800



Report Number : 23196

Date : 11/16/2001

Project Name : 285 Hegenberger Road, Oakland

Project Number : 011105-MG1

Sample : VEW-6

Matrix : Water

Lab Number : 23196-05

Sample Date : 11/5/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	6800	25	ug/L	EPA 8260B	11/8/2001
Toluene	380	25	ug/L	EPA 8260B	11/8/2001
Ethylbenzene	1900	25	ug/L	EPA 8260B	11/8/2001
Total Xylenes	7900	25	ug/L	EPA 8260B	11/8/2001
Methyl-t-butyl ether (MTBE)	8800	250	ug/L	EPA 8260B	11/8/2001
TPH as Gasoline	39000	5000	ug/L	EPA 8260B	11/8/2001
Toluene - d8 (Sur)	97.1		% Recovery	EPA 8260B	11/8/2001
4-Bromofluorobenzene (Sur)	89.3		% Recovery	EPA 8260B	11/8/2001
TPH as Diesel	< 1300	1300	ug/L	M EPA 8015	11/8/2001
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	11/8/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800



Report Number : 23196

Date : 11/16/2001

Project Name : 285 Hegenberger Road, Oakland

Project Number : 011105-MG1

Sample : VEW-7

Matrix : Water

Lab Number : 23196-06

Sample Date : 11/5/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	9300	50	ug/L	EPA 8260B	11/8/2001
Toluene	610	50	ug/L	EPA 8260B	11/8/2001
Ethylbenzene	1700	50	ug/L	EPA 8260B	11/8/2001
Total Xylenes	6000	50	ug/L	EPA 8260B	11/8/2001
Methyl-t-butyl ether (MTBE)	21000	500	ug/L	EPA 8260B	11/8/2001
TPH as Gasoline	38000	5000	ug/L	EPA 8260B	11/8/2001
Toluene - d8 (Surr)	96.4		% Recovery	EPA 8260B	11/8/2001
4-Bromofluorobenzene (Surr)	90.1		% Recovery	EPA 8260B	11/8/2001
TPH as Diesel	< 900	900	ug/L	M EPA 8015	11/9/2001
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	11/9/2001

Approved By: Joel Kiff

Report Number : 23196

Date : 11/16/2001

Project Name : **285 Hegenberger Road,**

Project Number : **011105-MG1**

23196 Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/8/2001
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	11/8/2001

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC 720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 23196

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 11/16/2001

Project Name : 285 Hegenberger Road,

Project Number : 011105-MG1

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Spike Recovery Data														
TPH as Diesel	Blank	<50	1000	1000	1050	1020	ug/L	M EPA 8015	11/8/2001 105	102	3.10	70-130	25	

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC  
720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 23196

Date : 11/16/2001

Project Name : **285 Hegenberger Road,**  
Project Number : **011105-MG1**

23196 Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/2001
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/8/2001
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/2001
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/8/2001
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	11/8/2001
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/8/2001
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	11/8/2001
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	11/8/2001

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC 720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 23196

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 11/16/2001

Project Name : 285 Hegenberger Road,

Project Number : 011105-MG1

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Recov.	Duplicate Spiked Sample Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
<b>Spike Recovery Data</b>														
Benzene	23204-01	<0.50	19.6	19.8	20.0	19.9	ug/L	EPA 8260B	11/8/2001	102	101	1.36	70-130	25
Toluene	23204-01	<0.50	19.6	19.8	20.3	20.2	ug/L	EPA 8260B	11/8/2001	104	102	1.33	70-130	25
Tert-Butanol	23204-01	<5.0	97.9	98.9	103	106	ug/L	EPA 8260B	11/8/2001	105	107	1.68	70-130	25
Methyl-t-Butyl Ether	23204-01	32	19.6	19.8	51.4	50.5	ug/L	EPA 8260B	11/8/2001	99.7	94.1	5.81	70-130	25

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Approved By: Joel Kiff



Project Name : **285 Hegenberger Road,**Project Number : **011105-MG1**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	20.0	ug/L	EPA 8260B	11/8/2001	104	70-130
Toluene	20.0	ug/L	EPA 8260B	11/8/2001	106	70-130
Tert-Butanol	100	ug/L	EPA 8260B	11/8/2001	111	70-130
Methyl-t-Butyl Ether	20.0	ug/L	EPA 8260B	11/8/2001	84.8	70-130

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Approved By: Joel Kiff



LAB: Kiff

Lab Identification (if necessary):

Address:

City, State, Zip:

## EQUIVA Services LLC Chain Of Custody Record

## Equiva Project Manager to be invoiced:

- SCIENCE & ENGINEERING  
 TECHNICAL SERVICES  
 CRM HOUSTON

Karen Petryna

23196

INCIDENT NUMBER (SAME ONE ONLY)

9 8 9 9 5 7 4 9

TSICRM#

DATE: 11-5-01PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services	LOG CODE: BTSS	SITE ADDRESS (Street and City): 285 Hegenberger Road, Oakland	GLOBAL ID NO.: T0600101245
ADDRESS: 1680 Rogers Avenue, San Jose, CA 95112	EDF DELIVERABLE TO (Responsible Party or Designee): Anni Kremi	PHONE NO.: 510-420-3335	E-MAIL: akremi@cambria-env.com
PROJECT CONTACT (Hardcopy or POF Report to): Nick Sudano	SAMPLER NAME(S) (P/M): Morgan G /Chris W/Sooch	CONSULTANT PROJECT NO.: BTS # 011105-MG	
TELEPHONE: 408-573-0555	FAX: 408-573-7771	EMAIL: nsudano@blainetech.com	LAB USE ONLY
TURNAROUND TIME (BUSINESS DAYS): <input checked="" type="checkbox"/> 10 DAYS <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 72 HOURS <input type="checkbox"/> 48 HOURS <input type="checkbox"/> 24 HOURS <input type="checkbox"/> LESS THAN 24 HOURS			

 1A - RWQCB REPORT FORMAT  1ST AGENCY:

DCMIS MTBE CONFIRMATION: HIGHEST \_\_\_\_\_ HIGHEST per BORING \_\_\_\_\_ ALL \_\_\_\_\_

SPECIAL INSTRUCTIONS OR NOTES: TEMPERATURE ON RECEIPT C° 

Fax copy of COC to  
 Nick Sudano of BTS  
 @ (408)573-7771

## REQUESTED ANALYSIS

Lab Use Only	Field Sample Identification				SAMPLING DATE	TIME	MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTEX	MTBE (8250B ± 5ppb RL)	MTBE (8250B - 0.5ppb RL)	Oxygenates (S) by (8250B)	Ethanol (8250B)	Methanol	1,2-DCA (8250B)	EDB (8250B)	TPH - Diesel, Extractable (8015m)	TPH - Motor Oil	Nitrate	Sulfate	Ferrous Iron	MTBE (8250B) Confirmation, See Note
	AS-1	AS-2	AS-3	VEN-5	VEN-6	VEN-7																	
101	AS-1	11/5 1220	W	8	X	X	X											X	X	X	X		
102	AS-2	11/5 1116		1	X	X	X											X	X	X	X		
103	AS-3	11/5 1038		1	X	X	X											X	X	X	X		
104	VEN-5	11/5 1340			X	X	X											X	X	X	X		
105	VEN-6	11/5 1301			X	X	X											X	X	X	X		
106	VEN-7	11/5 1155	↓	↓	X	X	X											X	X	X	X		

## FIELD NOTES:

Container/Preservative  
or PID Readings  
or Laboratory Notes

VOA's NP  
due to reaction  
w/ HCl.

Relinquished by: (Signature)

Received by: (Signature)

Date: 11/5/01

Time:

Relinquished by: (Signature)

Received by: (Signature)

Date: 11/5/01

Time:

Relinquished by: (Signature)

Received by: (Signature)

Date: 11/5/01

Time:

DISTRIBUTION: White with final report, Green to Pls, Yellow and Pink to Client.

John Cutts/Kiff Analytical

1430

10/16/00 Revision



Sequoia  
Analytical

1455 McDowell Blvd. North, Ste. D  
Petaluma, CA 94954  
(707) 792-1865  
FAX (707) 792-0342  
[www.sequoialabs.com](http://www.sequoialabs.com)

November 12, 2001

Joel Kiff  
Kiff Analytical  
720 Olive Drive, Suite D  
Davis, CA 95616  
RE: General / P111071

Enclosed are the results of analyses for samples received by the laboratory on 11/05/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Angelee Cari  
Client Services Representative

CA ELAP Certificate Number 2374



**Sequoia  
Analytical**

1455 McDowell Blvd. North, Ste. D  
Petaluma, CA 94954  
(707) 792-1865  
FAX (707) 792-0342  
[www.sequoialabs.com](http://www.sequoialabs.com)

Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/12/01 16:12

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AS-1	P111071-01	Water	11/05/01 12:20	11/05/01 15:30
AS-2	P111071-02	Water	11/05/01 11:16	11/05/01 15:30
AS-3	P111071-03	Water	11/05/01 10:30	11/05/01 15:30
VEW-5	P111071-04	Water	11/05/01 13:40	11/05/01 15:30
VEW-6	P111071-05	Water	11/05/01 13:01	11/05/01 15:30
VEW-7	P111071-06	Water	11/05/01 11:50	11/05/01 15:30



**Sequoia  
Analytical**

1455 McDowell Blvd. North, Ste. D  
Petaluma, CA 94954  
(707) 792-1865  
FAX (707) 792-0342  
[www.sequoialabs.com](http://www.sequoialabs.com)

Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/12/01 16:12

**Conventional Chemistry Parameters by APHA/EPA Methods**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>AS-1 (P111071-01) Water Sampled: 11/05/01 12:20 Received: 11/05/01 15:30</b>									
Ferrous Iron	210	100	ug/l	1	1110120	11/06/01	11/06/01	SM 3500 Fe D#4	
<b>AS-2 (P111071-02) Water Sampled: 11/05/01 11:16 Received: 11/05/01 15:30</b>									
Ferrous Iron	8800	500	ug/l	5	1110120	11/06/01	11/06/01	SM 3500 Fe D#4	
<b>AS-3 (P111071-03) Water Sampled: 11/05/01 10:30 Received: 11/05/01 15:30</b>									
Ferrous Iron	130	100	ug/l	1	1110120	11/06/01	11/06/01	SM 3500 Fe D#4	
<b>VEW-5 (P111071-04) Water Sampled: 11/05/01 13:40 Received: 11/05/01 15:30</b>									
Ferrous Iron	5600	500	ug/l	5	1110120	11/06/01	11/06/01	SM 3500 Fe D#4	
<b>VEW-6 (P111071-05) Water Sampled: 11/05/01 13:01 Received: 11/05/01 15:30</b>									
Ferrous Iron	5600	500	ug/l	5	1110120	11/06/01	11/06/01	SM 3500 Fe D#4	
<b>VEW-7 (P111071-06) Water Sampled: 11/05/01 11:50 Received: 11/05/01 15:30</b>									
Ferrous Iron	4800	500	ug/l	5	1110120	11/06/01	11/06/01	SM 3500 Fe D#4	

Sequoia Analytical - Petaluma

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**Sequoia  
Analytical**

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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/12/01 16:12

### Anions by EPA Method 300.0

#### Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AS-1 (P111071-01) Water	Sampled: 11/05/01 12:20	Received: 11/05/01 15:30							
Nitrate as N	ND	200	ug/l	1	1110144	11/06/01	11/06/01	EPA 300.0	
Sulfate as SO4	830000	100000	"	100	"	"	11/07/01	"	
AS-2 (P111071-02) Water	Sampled: 11/05/01 11:16	Received: 11/05/01 15:30							
Nitrate as N	ND	10000	ug/l	50	1110144	11/06/01	11/06/01	EPA 300.0	R-01
Sulfate as SO4	4100000	500000	"	500	1110177	11/08/01	11/09/01	"	
AS-3 (P111071-03) Water	Sampled: 11/05/01 10:30	Received: 11/05/01 15:30							
Nitrate as N	ND	200	ug/l	1	1110144	11/06/01	11/06/01	EPA 300.0	
Sulfate as SO4	450000	100000	"	100	"	"	11/07/01	"	
VEW-5 (P111071-04) Water	Sampled: 11/05/01 13:40	Received: 11/05/01 15:30							
Nitrate as N	ND	200	ug/l	1	1110144	11/06/01	11/06/01	EPA 300.0	
Sulfate as SO4	ND	1000	"	"	"	"	"	"	
VEW-6 (P111071-05) Water	Sampled: 11/05/01 13:01	Received: 11/05/01 15:30							
Nitrate as N	ND	200	ug/l	1	1110144	11/06/01	11/06/01	EPA 300.0	
Sulfate as SO4	14000	1000	"	"	"	"	"	"	
VEW-7 (P111071-06) Water	Sampled: 11/05/01 11:50	Received: 11/05/01 15:30							
Nitrate as N	ND	200	ug/l	1	1110144	11/06/01	11/06/01	EPA 300.0	
Sulfate as SO4	4100	1000	"	"	"	"	"	"	

Sequoia Analytical - Petaluma

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720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/12/01 16:12

**Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1110120 - General Preparation</b>										
<b>Blank (1110120-BLK1)</b> Prepared & Analyzed: 11/06/01										
Ferrous Iron	ND	100	ug/l							
<b>LCS (1110120-BS1)</b> Prepared & Analyzed: 11/06/01										
Ferrous Iron	766	100	ug/l	800	95.8	80-120				
<b>Matrix Spike (1110120-MS1)</b> Source: P111070-01      Prepared & Analyzed: 11/06/01										
Ferrous Iron	641	100	ug/l	870	430	24.3	75-125			QM-07
<b>Matrix Spike Dup (1110120-MSD1)</b> Source: P111070-01      Prepared & Analyzed: 11/06/01										
Ferrous Iron	568	100	ug/l	870	430	15.9	75-125	12.1	20	QM-07

Sequoia Analytical - Petaluma

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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/12/01 16:12

### Anions by EPA Method 300.0 - Quality Control

#### Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch 1110144 - General Preparation

**Blank (1110144-BLK1)** Prepared: 11/06/01 Analyzed: 11/07/01

Nitrate as N	ND	200	ug/l							
Sulfate as SO4	ND	1000	"							

**LCS (1110144-BS1)** Prepared: 11/06/01 Analyzed: 11/07/01

Nitrate as N	10100	200	ug/l	10000		101	90-110			
Sulfate as SO4	10800	1000	"	10000		108	90-110			

**Matrix Spike (1110144-MS1)** Source: P110576-04 Prepared: 11/06/01 Analyzed: 11/07/01

Nitrate as N	24500	1000	ug/l	25000	ND	97.0	80-120			
Sulfate as SO4	185000	5000	"	25000	160000	100	80-120			

**Matrix Spike Dup (1110144-MSD1)** Source: P110576-04 Prepared: 11/06/01 Analyzed: 11/07/01

Nitrate as N	24400	1000	ug/l	25000	ND	96.6	80-120	0.409	20	
Sulfate as SO4	182000	5000	"	25000	160000	88.0	80-120	1.63	20	

#### Batch 1110177 - General Preparation

**Blank (1110177-BLK1)** Prepared & Analyzed: 11/08/01

Sulfate as SO4	ND	1000	ug/l							
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**LCS (1110177-BS1)** Prepared & Analyzed: 11/08/01

Sulfate as SO4	10700	1000	ug/l	10000		107	90-110			
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**Matrix Spike (1110177-MS1)** Source: P110599-06 Prepared & Analyzed: 11/08/01

Sulfate as SO4	78600	5000	ug/l	25000	53000	102	80-120			
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**Matrix Spike (1110177-MS2)** Source: P110599-06 Prepared & Analyzed: 11/08/01

Sulfate as SO4	77100	5000	ug/l	25000	53000	96.4	80-120			
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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/12/01 16:12

**Anions by EPA Method 300.0 - Quality Control**  
**Sequoia Analytical - Petaluma**

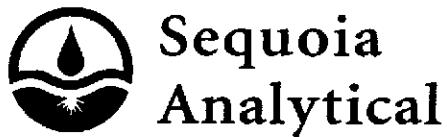
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 1110177 - General Preparation**

Matrix Spike Dup (1110177-MSD1)		Source: P110599-06		Prepared & Analyzed: 11/08/01						
Sulfate as SO4	77500	5000	ug/l	25000	53000	98.0	80-120	1.41	20	
Matrix Spike Dup (1110177-MSD2)		Source: P110599-06		Prepared & Analyzed: 11/08/01						
Sulfate as SO4	77400	5000	ug/l	25000	53000	97.6	80-120	0.388	20	

Sequoia Analytical - Petaluma

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Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/12/01 16:12

#### Notes and Definitions

QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

R-01 The Reporting Limit for this analyte has been raised to account for matrix interference.

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

RPD Relative Percent Difference



720 Olive Drive, Suite D  
Davis, CA 95616  
Lab: 530.297.4800  
Fax: 530.297.4803

Lab No. \_\_\_\_\_ Page \_\_\_\_ of \_\_\_\_

Project Manager: <b>JOEL KIFF</b>		Phone No.: <b>(530) 297-4800</b>		Chain-of-Custody Record and Analysis Request																											
Company/Address: <b>720 OLIVE DR. KIFF ANALYTICAL / DAVIS, CA 95616</b>		FAX No.: <b>(530) 297-4803</b>		Analysis Request																											
Project Number:	P.O. No.: <b>23196</b>	Email Address: _____ <input type="checkbox"/> .pdf <input type="checkbox"/> .xls <input type="checkbox"/> .doc <input type="checkbox"/> other																													
Project Name: <b>OAKLAND 285 HEGENBERGER ROAD,</b>		Sampler Signature: _____																													
Project Location: _____																															
Sample Designation	Sampling		Container	Preservative	Matrix	BTEX (8021B)		BTEX/TPH Gas/MTBE (8021B/M8015)		TPH as Diesel (M8015)		TPH Gas/BTEX/MTBE (8260B)		5 Oxygenates/TPH Gas/BTEX (8260B)		7 Oxygenates/TPH Gas/BTEX (8260B)		5 Oxygenates (8260B)		7 Oxygenates (8260B)		Lead Scav. (1.2 DCA & 1.2 EDB - 8260B)		EPA 8260B (Full List)		Volatile Halocarbons (EPA 8260B)		Lead (7421/23B/2) TOTAL (X) WET (X)		For Lab Use Only	
	Date	Time				40 ml VOA SLEEVE	Amber POLY	HCl HNO <sub>3</sub> ICE NONE	WATER SOIL																						
AS-1	11/5 1200		1 1																												
AS-2	11/6		1 1																												
AS-3	1030		1 1																												
VEW-5	1340		1 1																												
VEW-6	1301		1 1																												
VEW-7	1150		1 1	COOLER CUSTODY SEALS INTACT																											
<del>VEW-8</del>																															
<del>VEW-9</del>																															
<del>VEW-10</del>																															
Relinquished by: <i>John Carter/Kiff Analytical</i>	Date 11/05/1	Time 1530	Received by: <i>Gail Hansen</i>	Remarks:																											
Relinquished by:	Date	Time	Received by:																												
Relinquished by:	Date	Time	Received by Laboratory:	Bill to:																											



Report Number : 23197

Date : 11/16/2001

Nick Sudano  
Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112-1105

Subject : 4 Water Samples  
Project Name : 285 Hegenberger Road, Oakland  
Project Number : 011105-MG1  
P.O. Number : 98995749

Dear Mr. Sudano,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink that reads "Joel Kiff".

Joel Kiff



Report Number : 23197

Date : 11/16/2001

Subject : 4 Water Samples  
Project Name : 285 Hegenberger Road, Oakland  
Project Number : 011105-MG1  
P.O. Number : 98995749

## Case Narrative

Hydrocarbons reported as 'TPH as Diesel' for water sample MW-2 exhibit a chromatographic pattern that is not consistent with typical Diesel Fuel.

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 916-297-4800



Report Number : 23197

Date : 11/16/2001

Project Name : 285 Hegenberger Road, Oakland

Project Number : 011105-MG1

Sample : MW-2

Matrix : Water

Lab Number : 23197-01

Sample Date : 11/5/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 5.0	5.0	ug/L	EPA 8260B	11/9/2001
Toluene	< 5.0	5.0	ug/L	EPA 8260B	11/9/2001
Ethylbenzene	< 5.0	5.0	ug/L	EPA 8260B	11/9/2001
Total Xylenes	< 5.0	5.0	ug/L	EPA 8260B	11/9/2001
Methyl-t-butyl ether (MTBE)	1800	50	ug/L	EPA 8260B	11/9/2001
TPH as Gasoline	< 500	500	ug/L	EPA 8260B	11/9/2001
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	11/9/2001
4-Bromofluorobenzene (Surr)	111		% Recovery	EPA 8260B	11/9/2001
TPH as Diesel	610	50	ug/L	M EPA 8015	11/9/2001
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	11/9/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800



Report Number : 23197

Date : 11/16/2001

Project Name : 285 Hegenberger Road, Oakland

Project Number : 011105-MG1

Sample : MW-3

Matrix : Water

Lab Number : 23197-02

Sample Date : 11/5/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 5.0	5.0	ug/L	EPA 8260B	11/8/2001
Toluene	< 5.0	5.0	ug/L	EPA 8260B	11/8/2001
Ethylbenzene	< 5.0	5.0	ug/L	EPA 8260B	11/8/2001
Total Xylenes	< 5.0	5.0	ug/L	EPA 8260B	11/8/2001
Methyl-t-butyl ether (MTBE)	2100	50	ug/L	EPA 8260B	11/8/2001
TPH as Gasoline	< 500	500	ug/L	EPA 8260B	11/8/2001
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	11/8/2001
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	11/8/2001
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/9/2001
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	11/9/2001

Approved By: Joel Kiff



Report Number : 23197

Date : 11/16/2001

Project Name : 285 Hegenberger Road, Oakland

Project Number : 011105-MG1

Sample : MW-4

Matrix : Water

Lab Number : 23197-03

Sample Date : 11/5/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/7/2001
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/7/2001
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/7/2001
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/7/2001
Methyl-t-butyl ether (MTBE)	8.4	5.0	ug/L	EPA 8260B	11/7/2001
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/7/2001
Toluene - d8 (Sur)	101		% Recovery	EPA 8260B	11/7/2001
4-Bromofluorobenzene (Surr)	99.3		% Recovery	EPA 8260B	11/7/2001
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/10/2001
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	11/10/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800



Report Number : 23197

Date : 11/16/2001

Project Name : 285 Hegenberger Road, Oakland

Project Number : 011105-MG1

Sample : MW-8

Matrix : Water

Lab Number : 23197-04

Sample Date : 11/5/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/2001
Toluene	0.99	0.50	ug/L	EPA 8260B	11/8/2001
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/2001
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/8/2001
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	11/8/2001
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/8/2001
Toluene - d8 (Surrogate)	100		% Recovery	EPA 8260B	11/8/2001
4-Bromofluorobenzene (Surrogate)	86.3		% Recovery	EPA 8260B	11/8/2001
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/10/2001
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	11/10/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 23197

Date : 11/16/2001

Project Name : **285 Hegenberger Road,**  
Project Number : **011105-MG1**

23197 Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/7/2001
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/7/2001
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/7/2001
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/7/2001
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	11/7/2001
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/7/2001
Toluene - d8 (Sum)	101		% Recovery	EPA 8260B	11/7/2001
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	11/7/2001

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC 720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Project Name : 285 Hegenberger Road,

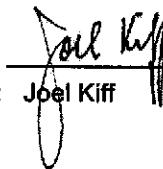
Project Number : 011105-MG1

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov.	Relative Percent Diff.
<b>Spike Recovery Data</b>														
Benzene	23175-04	<0.50	40.0	40.0	40.0	39.4	ug/L	EPA 8260B	11/7/2001100	98.6	1.51	70-130	25	
Toluene	23175-04	<0.50	40.0	40.0	40.4	39.6	ug/L	EPA 8260B	11/7/2001101	98.9	2.18	70-130	25	
Tert-Butanol	23175-04	<5.0	200	200	190	194	ug/L	EPA 8260B	11/7/200195.0	97.0	2.06	70-130	25	
Methyl-t-Butyl Ether	23175-04	8.5	40.0	40.0	50.5	50.4	ug/L	EPA 8260B	11/7/2001105	104	0.382	70-130	25	

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Approved By: Joel Kiff



**QC Report : Laboratory Control Sample (LCS)**

Report Number : 23197

Date : 11/16/2001

Project Name : **285 Hegenberger Road,**Project Number : **011105-MG1**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	11/7/2001	99.0	70-130
Toluene	40.0	ug/L	EPA 8260B	11/7/2001	99.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/7/2001	96.0	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/7/2001	102	70-130

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Approved By:

Joel Kiff

Report Number : 23197

Date : 11/16/2001

Project Name : **285 Hegenberger Road,**

Project Number : **011105-MG1**

**23197 Quality Control Data - Method Blank**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/7/2001
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	11/7/2001

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC    720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 23197

Date : 11/16/2001

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : 285 Hegenberger Road,

Project Number : 011105-MG1

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Spike Recovery Data														
TPH as Diesel	Blank	<50	1000	1000	1020	1120	ug/L	M EPA 8015	11/7/2001 1102	112	8.71	70-130	25	

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC  
720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 23197

Date : 11/16/2001

Project Name : 285 Hegenberger Road,

Project Number : 011105-MG1

23197 Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/7/2001
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/7/2001
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/7/2001
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/7/2001
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	11/7/2001
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/7/2001
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	11/7/2001
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	11/7/2001

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC 720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 23197

Date : 11/16/2001

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : 285 Hegenberger Road,

Project Number : 011105-MG1

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
<b>Spike Recovery Data</b>														
Benzene	23178-01	<0.50	19.9	19.9	20.7	20.6	ug/L	EPA 8260B	11/7/2001104	103	0.724	70-130	25	
Toluene	23178-01	<0.50	19.9	19.9	20.8	20.6	ug/L	EPA 8260B	11/7/2001104	103	0.868	70-130	25	
Tert-Butanol	23178-01	<5.0	99.7	99.6	114	112	ug/L	EPA 8260B	11/7/2001114	112	1.77	70-130	25	
Methyl-t-Butyl Ether	23178-01	140	19.9	19.9	153	146	ug/L	EPA 8260B	11/7/200171.4	39.9	56.6	70-130	25	

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Approved By: Joel Kiff



QC Report : Laboratory Control Sample (LCS)

Report Number : 23197

Date : 11/16/2001

Project Name : 285 Hegenberger Road,

Project Number : 011105-MG1

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	19.6	ug/L	EPA 8260B	11/7/2001	106	70-130
Toluene	19.6	ug/L	EPA 8260B	11/7/2001	105	70-130
Tert-Butanol	98.1	ug/L	EPA 8260B	11/7/2001	108	70-130
Methyl-t-Butyl Ether	19.6	ug/L	EPA 8260B	11/7/2001	91.8	70-130

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Approved By:

Joel Kiff

LAB: Kiff

Lab Identification (if necessary):

Address:

City, State, Zip:

## EQUIVA Services LLC Chain Of Custody Record

Equiva Project Manager to be Invoiced:

<input checked="" type="checkbox"/> SCIENCE & ENGINEERING
<input type="checkbox"/> TECHNICAL SERVICES
<input type="checkbox"/> CRMT HOUSTON

Karen Petryna

INCIDENT NUMBER (SIC ONLY)								
9	8	9	9	5	7	4	9	

SAFETY CRMT NUMBER (TS/CRMT)								
------------------------------	--	--	--	--	--	--	--	--

DATE: 11/5/01  
PAGE: 1 of 1

SAMPLING COMPANY: <b>Blaine Tech Services</b>			LOG CODE: <b>BTSS</b>	SITE ADDRESS (Street and City): <b>285 Hegenberger Road, Oakland</b>						GLOBAL ID NO.: <b>T0600101245</b>											
ADDRESS: <b>1680 Rogers Avenue, San Jose, CA 95112</b>			EDF DELIVERABLE TO (Responsible Party or Designee): <b>Anni Kreml</b>						PHONE NO.:	E-MAIL:		CONSULTANT PROJECT NO.:									
PROJECT CONTACT (Handcopy or PDF Report to): <b>Nick Sudano</b>			SAMPLER NAME(S) (Pin): <b>Suecheon Seung</b>						<b>510-420-3335</b>	<b>akreml@cambrria-env.com</b>		<b>BTS #011105-1161</b>									
TELEPHONE: <b>408-573-0666</b>			FAX: <b>408-573-7771</b>	E-MAIL: <b>nsudano@blainetech.com</b>							LAB USE ONLY										
TURNAROUND TIME (BUSINESS DAYS): <input checked="" type="checkbox"/> 10 DAYS <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 72 HOURS <input type="checkbox"/> 48 HOURS <input type="checkbox"/> 24 HOURS <input type="checkbox"/> LESS THAN 24 HOURS																					
<input type="checkbox"/> LA - RWQCB REPORT FORMAT <input type="checkbox"/> UST AGENCY:																					
GC/Ms MTBE CONFIRMATION: HIGHEST      HIGHEST per BORING      ALL																					
SPECIAL INSTRUCTIONS OR NOTES: <b>Fax Copy of COC to Nick Sudano @(408)573-7771</b>			TEMPERATURE ON RECEIPT C°																		
FIELD SAMPLE IDENTIFICATION			SAMPLING		MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTEX	MTBE (8201B - 5ppb RL)	MTBE (8260B - 0.5ppb RL)	Oxygenates (S) by (8260B)	Ethanol (8260B)	1,2-DCA (8260B)	EDS (8260B)	TPH - Diesel, Extractable (8016m)	TPH-Motor Oil	Nitrate	Sulfate	Ferrous Iron	MTBE (8260B) Confirmation, See Note	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
	MW-2	4/5	1157GW	8	X X X										X	X X X X					-01
	MW-3	↓	1303	↓	X X X										X	X X X X					-02
	MW-4	↓	1325	↓	X X X										X	X X X X					-03
	MW-8	↓	1330	↓	X X X										X	X X X X					-04
Relinquished by (Signature) <u>John Cuttle</u>			Received by: (Signature)												Date: <u>11/5/01</u>	Time:					
Relinquished by: (Signature)			Received by: (Signature)												Date: <u>11/5/01</u>	Time:					
Relinquished by: (Signature)			Received by: (Signature)												Date: <u>11/5/01</u>	Time:					

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

10/16/00 Revision

1435



Sequoia  
Analytical

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Petaluma, CA 94954  
(707) 792-1865  
FAX (707) 792-0342  
[www.sequoialabs.com](http://www.sequoialabs.com)

November 13 , 2001

Joel Kiff  
Kiff Analytical  
720 Olive Drive, Suite D  
Davis, CA 95616  
RE: General / P111070

Enclosed are the results of analyses for samples received by the laboratory on 11/05/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Angelee Cari  
Client Services Representative

CA ELAP Certificate Number 2374



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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/13/01 10:12

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2	P111070-01	Water	11/05/01 11:57	11/05/01 13:30
MW-3	P111070-02	Water	11/05/01 13:03	11/05/01 13:30
MW-4	P111070-03	Water	11/05/01 13:55	11/05/01 13:30
MW-8	P111070-04	Water	11/05/01 13:30	11/05/01 13:30



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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/13/01 10:12

### Conventional Chemistry Parameters by APHA/EPA Methods

#### Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-2 (P111070-01) Water Sampled: 11/05/01 11:57 Received: 11/05/01 13:30</b>									
Ferrous Iron	430	100	ug/l	1	1110120	11/06/01	11/06/01	SM 3500 Fe D#4	
<b>MW-3 (P111070-02) Water Sampled: 11/05/01 13:03 Received: 11/05/01 13:30</b>									
Ferrous Iron	190	100	ug/l	1	1110120	11/06/01	11/06/01	SM 3500 Fe D#4	
<b>MW-4 (P111070-03) Water Sampled: 11/05/01 13:55 Received: 11/05/01 13:30</b>									
Ferrous Iron	460	100	ug/l	1	1110120	11/06/01	11/06/01	SM 3500 Fe D#4	
<b>MW-8 (P111070-04) Water Sampled: 11/05/01 13:30 Received: 11/05/01 13:30</b>									
Ferrous Iron	130	100	ug/l	1	1110120	11/06/01	11/06/01	SM 3500 Fe D#4	

Sequoia Analytical - Petaluma

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/13/01 10:12

**Anions by EPA Method 300.0**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-2 (P111070-01) Water   Sampled: 11/05/01 11:57   Received: 11/05/01 13:30</b>									
Nitrate as N	ND	200	ug/l	1	1110144	11/06/01	11/06/01	EPA 300.0	
Sulfate as SO4	3000	1000	"	"	"	"	"	"	"
<b>MW-3 (P111070-02) Water   Sampled: 11/05/01 13:03   Received: 11/05/01 13:30</b>									
Nitrate as N	ND	200	ug/l	1	1110144	11/06/01	11/06/01	EPA 300.0	
Sulfate as SO4	6600	1000	"	"	"	"	"	"	"
<b>MW-4 (P111070-03) Water   Sampled: 11/05/01 13:55   Received: 11/05/01 13:30</b>									
Nitrate as N	200	200	ug/l	1	1110144	11/06/01	11/06/01	EPA 300.0	
Sulfate as SO4	12000	1000	"	"	"	"	"	"	"
<b>MW-8 (P111070-04) Water   Sampled: 11/05/01 13:30   Received: 11/05/01 13:30</b>									
Nitrate as N	590	200	ug/l	1	1110144	11/06/01	11/06/01	EPA 300.0	
Sulfate as SO4	22000	1000	"	"	"	"	"	"	"

Sequoia Analytical - Petaluma

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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/13/01 10:12

**Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1110120 - General Preparation</b>										
<b>Blank (1110120-BLK1)</b>										
Ferrous Iron										
ND										
Prepared & Analyzed: 11/06/01										
<b>LCS (1110120-BS1)</b>										
Ferrous Iron										
766										
100										
ug/l										
Prepared & Analyzed: 11/06/01										
<b>Matrix Spike (1110120-MS1)</b>										
Ferrous Iron										
641										
100										
ug/l										
Source: P111070-01										
Prepared & Analyzed: 11/06/01										
<b>Matrix Spike Dup (1110120-MSD1)</b>										
Ferrous Iron										
568										
100										
ug/l										
Source: P111070-01										
Prepared & Analyzed: 11/06/01										
75-125										
12.1										
20										
QM-07										

Sequoia Analytical - Petaluma

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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/13/01 10:12

**Anions by EPA Method 300.0 - Quality Control**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 1110144 - General Preparation**

Blank (1110144-BLK1)				Prepared: 11/06/01 Analyzed: 11/07/01				
Nitrate as N	ND	200	ug/l					
Sulfate as SO4	ND	1000	"					
LCS (1110144-BS1)					Prepared: 11/06/01 Analyzed: 11/07/01			
Nitrate as N	10100	200	ug/l	10000	101	90-110		
Sulfate as SO4	10800	1000	"	10000	108	90-110		
Matrix Spike (1110144-MS1)				Source: P110576-04	Prepared: 11/06/01 Analyzed: 11/07/01			
Nitrate as N	24500	1000	ug/l	25000	ND	97.0	80-120	
Sulfate as SO4	185000	5000	"	25000	160000	100	80-120	
Matrix Spike Dup (1110144-MSD1)				Source: P110576-04	Prepared: 11/06/01 Analyzed: 11/07/01			
Nitrate as N	24400	1000	ug/l	25000	ND	96.6	80-120	0.409
Sulfate as SO4	182000	5000	"	25000	160000	88.0	80-120	1.63
								20

Sequoia Analytical - Petaluma

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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/13/01 10:12

**Notes and Definitions**

- QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- 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
- RPD Relative Percent Difference





720 Olive Drive, Suite D  
Davis, CA 95616  
Lab: 530.297.4800  
Fax: 530.297.4803

Lab No. \_\_\_\_\_ Page \_\_\_\_ of \_\_\_\_

Project Manager: <b>JOEL KIFF</b>		Phone No.: <b>(530) 297-4800</b>		Chain-of-Custody Record and Analysis Request																							
Company/Address: <b>KIFF ANALYTICAL LLC / 720 OLIVE DRIVE</b>		FAX No.: <b>(530) 297-4803</b>		Analysis Request																							
Project Number:	P.O. No.: <b>23148</b>	Email Address: <input type="checkbox"/> .pdf <input type="checkbox"/> .xls <input type="checkbox"/> .doc <input type="checkbox"/> other																									
Project Name: <b>285 HEGENBERGER ROAD, OAKLAND</b>		Sampler Signature:																									
Project Location:																											
Sample Designation	Sampling		Container		Preservative		Matrix																				
	Date	Time	40 ml VOA SLEEVE	AMBER POT	HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL	BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/M8015)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1/2 DCA & 1/2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/239.2) TOTAL (X) W.E.T. (X)	NITRATE	SULFATE	FERROUS IRON	12 hr/24 hr/48 hr/72 hr/1 wk (10 DAYS) SAT
MW-2	11/5	1157	1	1							P111070-1											X	X	X			
MW-3		1303	1	1								-2										X	X	X			
MW-4		1355	1	1								-3										X	X	X			
MW-8		1330	1	1								-4										X	X	X			
COOLER CUSTODY SEALS INTACT <input type="checkbox"/>												NOT INTACT <input type="checkbox"/>															
COOLER TEMPERATURE <b>59 °C</b>																											
Relinquished by: <b>John Cottle / Kiff Analytical</b>		Date <b>11/05/01</b>	Time <b>1330</b>	Received by: <b>John Cottle</b>		Remarks:																					
Relinquished by:		Date	Time	Received by:																							
Relinquished by:		Date	Time	Received by Laboratory:		Bill to:																					



Report Number : 23252

Date : 11/19/2001

Nick Sudano  
Blaine Tech Services  
1680 Rogers Avenue  
San Jose, CA 95112-1105

Subject : 4 Water Samples  
Project Name : 285 Hegenberger Road, Oakland  
Project Number : 011107-C1  
P.O. Number : 98995749

Dear Mr. Sudano,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink that reads "Joel Kiff".

Joel Kiff



Report Number : 23252  
Date : 11/19/2001

Subject : 4 Water Samples  
Project Name : 285 Hegenberger Road, Oakland  
Project Number : 011107-C1  
P.O. Number : 98995749

## Case Narrative

The Method Reporting Limit for TPH as Diesel has been increased due to interference from Gasoline-Range Hydrocarbons for the following samples :

MW-1  
MW-9

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 916-297-4800



Report Number : 23252

Date : 11/19/2001

Project Name : 285 Hegenberger Road, Oakland

Project Number : 011107-C1

Sample : MW-1

Matrix : Water

Lab Number : 23252-01

Sample Date : 11/7/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	290	2.0	ug/L	EPA 8260B	11/10/2001
Toluene	6.0	2.0	ug/L	EPA 8260B	11/10/2001
Ethylbenzene	11	2.0	ug/L	EPA 8260B	11/10/2001
Total Xylenes	15	2.0	ug/L	EPA 8260B	11/10/2001
Methyl-t-butyl ether (MTBE)	870	2.0	ug/L	EPA 8260B	11/10/2001
Diisopropyl ether (DIPE)	< 2.0	2.0	ug/L	EPA 8260B	11/10/2001
Ethyl-t-butyl ether (ETBE)	< 2.0	2.0	ug/L	EPA 8260B	11/10/2001
Tert-amyl methyl ether (TAME)	< 2.0	2.0	ug/L	EPA 8260B	11/10/2001
Tert-Butanol	380	50	ug/L	EPA 8260B	11/10/2001
Ethanol	< 500	500	ug/L	EPA 8260B	11/10/2001
TPH as Gasoline	3000	200	ug/L	EPA 8260B	11/10/2001
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	11/10/2001
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	11/10/2001
TPH as Diesel	< 1000	1000	ug/L	M EPA 8015	11/11/2001
TPH as Motor Oil	< 5000	5000	ug/L	M EPA 8015	11/11/2001

Approved By: Joel Kiff



Report Number : 23252

Date : 11/19/2001

Project Name : 285 Hegenberger Road, Oakland

Project Number : 011107-C1

Sample : MW-6

Matrix : Water

Lab Number : 23252-02

Sample Date : 11/7/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	1.3	1.0	ug/L	EPA 8260B	11/9/2001
Toluene	1.2	1.0	ug/L	EPA 8260B	11/9/2001
Ethylbenzene	1.3	1.0	ug/L	EPA 8260B	11/9/2001
Total Xylenes	1.1	1.0	ug/L	EPA 8260B	11/9/2001
Methyl-t-butyl ether (MTBE)	430	10	ug/L	EPA 8260B	11/9/2001
TPH as Gasoline	1700	100	ug/L	EPA 8260B	11/9/2001
Toluene - d8 (Surr)	92.0		% Recovery	EPA 8260B	11/9/2001
4-Bromofluorobenzene (Surr)	114		% Recovery	EPA 8260B	11/9/2001
TPH as Diesel	180	50	ug/L	M EPA 8015	11/11/2001
TPH as Motor Oil	< 5000	5000	ug/L	M EPA 8015	11/11/2001

Approved By: Joel Kiff



Report Number : 23252

Date : 11/19/2001

Project Name : 285 Hegenberger Road, Oakland

Project Number : 011107-C1

Sample : MW-9

Matrix : Water

Lab Number : 23252-03

Sample Date : 11/7/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	7300	25	ug/L	EPA 8260B	11/8/2001
Toluene	85	25	ug/L	EPA 8260B	11/8/2001
Ethylbenzene	630	25	ug/L	EPA 8260B	11/8/2001
Total Xylenes	4100	25	ug/L	EPA 8260B	11/8/2001
Methyl-t-butyl ether (MTBE)	< 250	250	ug/L	EPA 8260B	11/8/2001
TPH as Gasoline	25000	5000	ug/L	EPA 8260B	11/8/2001
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	11/8/2001
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	11/8/2001
TPH as Diesel	< 1000	1000	ug/L	M EPA 8015	11/11/2001
TPH as Motor Oil	< 5000	5000	ug/L	M EPA 8015	11/11/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800



Report Number : 23252

Date : 11/19/2001

Project Name : 285 Hegenberger Road, Oakland

Project Number : 011107-C1

Sample : MW-10

Matrix : Water

Lab Number : 23252-04

Sample Date : 11/7/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	5300	25	ug/L	EPA 8260B	11/9/2001
Toluene	260	25	ug/L	EPA 8260B	11/9/2001
Ethylbenzene	430	25	ug/L	EPA 8260B	11/9/2001
Total Xylenes	810	25	ug/L	EPA 8260B	11/9/2001
Methyl-t-butyl ether (MTBE)	1700	25	ug/L	EPA 8260B	11/9/2001
Diisopropyl ether (DIPE)	< 25	25	ug/L	EPA 8260B	11/9/2001
Ethyl-t-butyl ether (ETBE)	< 25	25	ug/L	EPA 8260B	11/9/2001
Tert-amyl methyl ether (TAME)	< 25	25	ug/L	EPA 8260B	11/9/2001
Tert-Butanol	470	250	ug/L	EPA 8260B	11/9/2001
Ethanol	< 500	500	ug/L	EPA 8260B	11/9/2001
TPH as Gasoline	14000	5000	ug/L	EPA 8260B	11/9/2001
Toluene - d8 (Sur)	101		% Recovery	EPA 8260B	11/9/2001
4-Bromofluorobenzene (Sur)	103		% Recovery	EPA 8260B	11/9/2001
TPH as Diesel	360	50	ug/L	M EPA 8015	11/11/2001
TPH as Motor Oil	< 5000	5000	ug/L	M EPA 8015	11/11/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 23252

Date : 11/19/2001

Project Name : **285 Hegenberger Road,**

Project Number : **011107-C1**

**23252 Quality Control Data - Method Blank**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/10/2001
TPH as Motor Oil	< 5000	5000	ug/L	M EPA 8015	11/10/2001

Approved By: Joel Kiff

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number : 23252

Date : 11/19/2001

Project Name : 285 Hegenberger Road,

Project Number : 011107-C1

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Duplicate Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
<b>Spike Recovery Data</b>														
TPH as Diesel	Blank	<50	1000	1000	723	733	ug/L	M EPA 8015	11/10/2007	2.3	73.3	1.37	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 23252

Date : 11/19/2001

Project Name : 285 Hegenberger Road,

Project Number : 011107-C1

23252 Quality Control Data - Method Blank

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/2001
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/8/2001
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/2001
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/8/2001
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/8/2001
Diisopropyl ether (DIPE)	< 2.0	2.0	ug/L	EPA 8260B	11/8/2001
Ethyl-t-butyl ether (ETBE)	< 2.0	2.0	ug/L	EPA 8260B	11/8/2001
Tert-amyl methyl ether (TAME)	< 2.0	2.0	ug/L	EPA 8260B	11/8/2001
Tert-Butanol	< 50	50	ug/L	EPA 8260B	11/8/2001
Ethanol	< 500	500	ug/L	EPA 8260B	11/8/2001
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/8/2001
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	11/8/2001
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	11/8/2001

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC 720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 23252

Date : 11/19/2001

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : 285 Hegenberger Road,

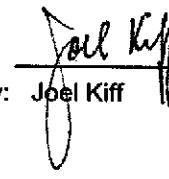
Project Number : 011107-C1

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Recov.	Duplicate Spiked Sample Recov.	Relative Percent Diff.	Spiked Sample Percent Recov.	Spiked Sample Limit	Relative Percent Diff. Limit
<b>Spike Recovery Data</b>															
Benzene	23204-01	<0.50	19.6	19.8	20.0	19.9	ug/L	EPA 8260B	11/8/2001102	101	1.36	70-130	25		
Toluene	23204-01	<0.50	19.6	19.8	20.3	20.2	ug/L	EPA 8260B	11/8/2001104	102	1.33	70-130	25		
Tert-Butanol	23204-01	<5.0	97.9	98.9	103	106	ug/L	EPA 8260B	11/8/2001105	107	1.68	70-130	25		
Methyl-t-Butyl Ether	23204-01	32	19.6	19.8	51.4	50.5	ug/L	EPA 8260B	11/8/200199.7	94.1	5.81	70-130	25		

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Approved By: Joel Kiff



**QC Report : Laboratory Control Sample (LCS)**

Report Number : 23252

Date : 11/19/2001

Project Name : **285 Hegenberger Road,**Project Number : **011107-C1**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	20.0	ug/L	EPA 8260B	11/8/2001	104	70-130
Toluene	20.0	ug/L	EPA 8260B	11/8/2001	106	70-130
Tert-Butanol	100	ug/L	EPA 8260B	11/8/2001	111	70-130
Methyl-t-Butyl Ether	20.0	ug/L	EPA 8260B	11/8/2001	84.8	70-130

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Approved By:

Joel Kiff

Riff

Lab Identification (if necessary):

Address:

City, State, Zip:

## EQUIVA Services LLC Chain Of Custody Record

23252

Equiva Project Manager to be invoiced:

<input checked="" type="checkbox"/> SCIENCE & ENGINEERING
<input type="checkbox"/> TECHNICAL SERVICES
<input type="checkbox"/> CRMT HOUSTON

Karen Petryna

INCIDENT NUMBER (S&amp;E ONLY)

9 8 9 9 5 7 4 9

SAP OR CRMT NUMBER (TS/CRMT)

DATE: 11-7-01

PAGE: 1 of 1

SAMPLING COMPANY:

Blaine Tech Services

ADDRESS:

1680 Rogers Avenue, San Jose, CA 95112

PROJECT CONTACT (Handcopy or PDF Report to):

H.L. Sudano

TELEPHONE:

408-573-0655

FAX:

408-573-7771

LOG CODE:

BTSS

SITE ADDRESS (Street and City):

285 Hegenberger Road, Oakland

EDF DELIVERABLE TO (Responsible Party or Designee):

Anni Kreml

SAMPLER NAME(S) (Print):

PHONE NO.:

510-420-3335

E-MAIL:

akreml@cambria-env.com

CONSULTANT PROJECT NO.:

011107-C1  
BTS #

THURAROUND TIME (BUSINESS DAYS):

10

DAYS

5 DAYS

72 HOURS

18 HOURS

24 HOURS

LESS THAN 24 HOURS

 RWQCB REPORT FORMAT  UST AGENCY:

GOMS MTBE CONFIRMATION: HIGHEST \_\_\_\_\_ HIGHEST per BORING \_\_\_\_\_ ALL \_\_\_\_\_

SPECIAL INSTRUCTIONS OR NOTES:

TEMPERATURE ON RECEIPT C°

Hank Castro

## REQUESTED ANALYSIS

## FIELD NOTES:

Container/Preservative  
or PID Readings  
or Laboratory Notes

Field Sample Identification	SAMPLING		MATRIX	NO. OF CONT.	ANALYSIS REQUESTED												ATB (8260B) Confirmation, See Note	
	DATE	TIME			BTEX	MTBE (8521B - 5ppb RL)	MTBE (8260B - 0.5ppb RL)	Oxygenates (5) by (8260B)	Ethanol (8260B)	Methanol	1,2-DCA (8260B)	EDB (8260B)	TPH - Diesel, Extractable (8015m)	TPH-Motor Oil	Nitrate	Sulfate	Ferrous Iron	
MW-1	11-7-949	W	8	8	X X	X X	X X	X X						X	X X X			-01
MW-6	11-7-924	W	8	8	X X	X X								X	X X X			-02
MW-9	11-7-1012	W	8	8	X X	X X								X	X X X			-03
MW-10	11-7-1035	W	8	8	X X	X X	X X	X X						X	X X X			-04

Released by: (Signature)

Hank Castro

Received by: (Signature)

Released by: (Signature)

Received by: (Signature)

Released by: (Signature)

Received by: (Signature)

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

Date: 11-7-01 Time: 12:45

Date: 11-7-01 Time: 12:45

Date: 11-7-01 Time: 12:45

10/16/00 Revision

Mutelle Woodruff / Riff Analytical



Sequoia  
Analytical

1455 McDowell Blvd. North, Ste. D  
Petaluma, CA 94954  
(707) 792-1865  
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[www.sequoialabs.com](http://www.sequoialabs.com)

November 12, 2001

Joel Kiff  
Kiff Analytical  
720 Olive Drive, Suite D  
Davis, CA 95616  
RE: General / P111122

Enclosed are the results of analyses for samples received by the laboratory on 11/07/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Angelee Cari  
Client Services Representative

CA ELAP Certificate Number 2374





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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/12/01 15:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	P111122-01	Water	11/07/01 00:00	11/07/01 14:40
MW-6	P111122-02	Water	11/07/01 00:00	11/07/01 14:40
MW-9	P111122-03	Water	11/07/01 00:00	11/07/01 14:40
MW-10	P111122-04	Water	11/07/01 00:00	11/07/01 14:40





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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/12/01 15:44

### Conventional Chemistry Parameters by APHA/EPA Methods

#### Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (P111122-01) Water   Sampled: 11/07/01 00:00   Received: 11/07/01 14:40</b>									
Ferrous Iron	3400	100	ug/l	1	1110194	11/07/01	11/07/01	SM 3500 Fe D#4	
<b>MW-6 (P111122-02) Water   Sampled: 11/07/01 00:00   Received: 11/07/01 14:40</b>									
Ferrous Iron	2400	100	ug/l	1	1110194	11/07/01	11/07/01	SM 3500 Fe D#4	
<b>MW-9 (P111122-03) Water   Sampled: 11/07/01 00:00   Received: 11/07/01 14:40</b>									
Ferrous Iron	2700	100	ug/l	1	1110194	11/07/01	11/07/01	SM 3500 Fe D#4	
<b>MW-10 (P111122-04) Water   Sampled: 11/07/01 00:00   Received: 11/07/01 14:40</b>									
Ferrous Iron	2400	100	ug/l	1	1110194	11/07/01	11/07/01	SM 3500 Fe D#4	

Sequoia Analytical - Petaluma

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/12/01 15:44

Anions by EPA Method 300.0

Sequoia Analytical - Petaluma

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>MW-1 (P111122-01) Water</b> Sampled: 11/07/01 00:00 Received: 11/07/01 14:40									
Nitrate as N	ND	200	ug/l	1	1110176	11/07/01	11/07/01	EPA 300.0	
Sulfate as SO4	ND	1000	"	"	"	"	"	"	"
<b>MW-6 (P111122-02) Water</b> Sampled: 11/07/01 00:00 Received: 11/07/01 14:40									
Nitrate as N	ND	200	ug/l	1	1110176	11/07/01	11/07/01	EPA 300.0	
Sulfate as SO4	44000	5000	"	5	1110211	11/08/01	11/09/01	"	
<b>MW-9 (P111122-03) Water</b> Sampled: 11/07/01 00:00 Received: 11/07/01 14:40									
Nitrate as N	ND	200	ug/l	1	1110176	11/07/01	11/07/01	EPA 300.0	
Sulfate as SO4	ND	1000	"	"	"	"	"	"	"
<b>MW-10 (P111122-04) Water</b> Sampled: 11/07/01 00:00 Received: 11/07/01 14:40									
Nitrate as N	ND	200	ug/l	1	1110176	11/07/01	11/07/01	EPA 300.0	
Sulfate as SO4	ND	1000	"	"	"	"	"	"	"

Sequoia Analytical - Petaluma

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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/12/01 15:44

**Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 1110194 - General Preparation</b>										
<b>Blank (1110194-BLK1)</b> Prepared & Analyzed: 11/07/01										
Ferrous Iron ND 100 ug/l										
<b>LCS (1110194-BS1)</b> Prepared & Analyzed: 11/07/01										
Ferrous Iron 790 100 ug/l 800 98.8 80-120										
<b>Matrix Spike (1110194-MS1)</b> Source: P111120-03 Prepared & Analyzed: 11/07/01										
Ferrous Iron 886 100 ug/l 870 ND 102 75-125										
<b>Matrix Spike Dup (1110194-MSD1)</b> Source: P111120-03 Prepared & Analyzed: 11/07/01										
Ferrous Iron 932 100 ug/l 870 ND 107 75-125 5.06 20										

Sequoia Analytical - Petaluma

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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/12/01 15:44

**Anions by EPA Method 300.0 - Quality Control**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

**Batch 1110176 - General Preparation**

<b>Blank (1110176-BLK1)</b>	Prepared & Analyzed: 11/07/01							
Nitrate as N	ND	200	ug/l					
Sulfate as SO4	ND	1000	"					

<b>LCS (1110176-BS1)</b>	Prepared & Analyzed: 11/07/01						
Nitrate as N	10000	200	ug/l	10000	100	90-110	
Sulfate as SO4	10500	1000	"	10000	105	90-110	

<b>Matrix Spike (1110176-MS1)</b>	Source: P111120-02	Prepared: 11/07/01 Analyzed: 11/08/01						
Nitrate as N	10000	400	ug/l	10000	ND	97.0	80-120	
Sulfate as SO4	16500	2000	"	10000	5000	115	80-120	

<b>Matrix Spike Dup (1110176-MSD1)</b>	Source: P111120-02	Prepared: 11/07/01 Analyzed: 11/08/01						
Nitrate as N	9990	400	ug/l	10000	ND	96.9	80-120	0.100
Sulfate as SO4	16500	2000	"	10000	5000	115	80-120	0.00

**Batch 1110211 - General Preparation**

<b>Blank (1110211-BLK1)</b>	Prepared: 11/08/01 Analyzed: 11/09/01						
Sulfate as SO4	ND	1000	ug/l				

<b>LCS (1110211-BS1)</b>	Prepared: 11/08/01 Analyzed: 11/09/01						
Sulfate as SO4	10900	1000	ug/l	10000	109	90-110	

<b>LCS Dup (1110211-BSD1)</b>	Prepared: 11/08/01 Analyzed: 11/09/01						
Sulfate as SO4	10500	1000	ug/l	10000	105	90-110	3.74

Sequoia Analytical - Petaluma

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Kiff Analytical  
720 Olive Drive, Suite D  
Davis CA, 95616

Project: General  
Project Number: 285 Hegenberger Rd., Oakland  
Project Manager: Joel Kiff

Reported:  
11/12/01 15:44

#### Notes and Definitions

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
RPD	Relative Percent Difference

23252

KIFF ANALYTICAL SUBCONTRACT FORM

Please mail results to :

JOEL KIFF  
KIFF ANALYTICAL  
720 OLIVE DRIVE, SUITE D  
DAVIS, CA 95616

Please fax to :

530-297-4803

Subcontract Lab:

Sequoia Analytical

1455 McDowell Blvd, North Suite D  
Petaluma, CA 94954

PROJECT NAME : 285 Hegenberger Road, Oakland

Account No. :

PROJECT NUMBER: 011107-C1

Sample	Matrix	Sampled	Tests	Due	Container
MW-1 P11122-OJ	WA	11/07/2001	Ferrous Iron	11/21/2001	
MW-1	WA	11/07/2001	Nitrate	11/21/2001	
MW-1	WA	11/07/2001	Sulfate	11/21/2001	
MW-6 -02	WA	11/07/2001	Ferrous Iron	11/21/2001	
MW-6	WA	11/07/2001	Nitrate	11/21/2001	
MW-6	WA	11/07/2001	Sulfate	11/21/2001	
MW-9 -03	WA	11/07/2001	Ferrous Iron	11/21/2001	
MW-9	WA	11/07/2001	Nitrate	11/21/2001	
MW-9	WA	11/07/2001	Sulfate	11/21/2001	
MW-10 -04	WA	11/07/2001	Ferrous Iron	11/21/2001	
MW-10	WA	11/07/2001	Nitrate	11/21/2001	
MW-10	WA	11/07/2001	Sulfate	11/21/2001	

COOLER CUSTODY SEALS INTACT   
NOT INTACT   
COOLER TEMPERATURE   
5.8 °C

Relinquished by : Darlene Marie / kiff

Date/Time: 11/07/01 1440

Received by:

John L. Hermann Sequoia

Relinquished by : \_\_\_\_\_

Date/Time: \_\_\_\_\_

Received by: \_\_\_\_\_

Relinquished by : \_\_\_\_\_

Date/Time: \_\_\_\_\_

Received by: \_\_\_\_\_

## WELL GAUGING DATA

Project # 011107-C1 Date 11-7-01 Client EguriaSite 285 Hesankberger Rd - back land

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 (PRB or TUC)	
2 MU-1	4					4.00 11.40	9.36		
1 MU-6	4					5.75	10.94		
3 MU-9	4					5.60	10.69		
4 MU-7C	4					5.45 <del>10.75</del>	10.02	↓	

# EQUIVA WELL MONITORING DATA SHEET

BTS #: 01/11/07-c1	Site: 9F995749
Sampler: Hank	Date: 11-7-01
Well I.D.: MW-1	Well Diameter: 2 3 <b>4</b> 6 8
Total Well Depth: 936	Depth to Water: <del>44.00</del> 4.00
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <b>PVC</b>	D.O. Meter (if req'd): <b>YSI</b> HACU

Purge Method:  Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible

Watermu  Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method:  Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

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

$$\frac{7.4 \text{ (Gals.)} \times 3}{1 \text{ Case Volume} \quad \text{Specified Volumes}} = \frac{10.2 \text{ Gals.}}{\text{Calculated Volume}}$$

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.55
2"	0.16	6"	1.47
3"	0.37	Other	$\text{radius}^2 \times 0.163$

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
942	67.2	7.4	1328	149	34	odor
943	67.4	7.2	1164	131	6.8	
944	67.1	7.1	1236	114	10.5	↓

Did well dewater? Yes  No Gallons actually evacuated: 10.5

Sampling Time: 949 Sampling Date: 11-7-01

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

Analyzed for:  TPH-G  BTEX  MTBE  TPH-D Other: Oil, Nitrate, Sulfate, Ferrous Iron

EB I.D. (if applicable):  Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):  Pre-purge: 2.1 mg/L  Post-purge: 1.4 mg/L

O.R.P. (if req'd):  Pre-purge: -42 mV  Post-purge: -56 mV

BLAINE

TECH SERVICES

1680 ROGERS AVE. • SAN JOSE, CA 95112-1105 • (408) 573-0588 • FAX: (408) 573-0589 • E-MAIL: [info@blainetech.com](mailto:info@blainetech.com)

# EQUIVA WELL MONITORING DATA SHEET

BTS #: 01/107-c1	Site: 98995749	
Sampler: Hank	Date: 11-7-01	
Well I.D.: MW-6	Well Diameter: 2 3 4 6 8	
Total Well Depth: 10.94	Depth to Water: 5.75	
Depth to Free Product:	Thickness of Free Product (feet):	
Referenced to: PVC	Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:  Bailer  
 Disposable Bailer  
 Middlebury  
 Electric Submersible

Waterra  
 Peristaltic  
 Extraction Pump  
Other \_\_\_\_\_

Sampling Method:  
 Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

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

Well Diameter	Multiplier	Well Diameter	Multipplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

3.3 (Gals.) X 5 = 99 Gals.  
1 Case Volume Specified Volumes Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
916	66.8	7.0	1252	>200	33	
917	65.9	7.1	1117	>200	6.6	
918	65.4	7.0	990	>200	10	

Did well dewater? Yes  No Gallons actually evacuated: 10

Sampling Time: 924 Sampling Date: 11-7-01

Sample I.D.: MW-6 Laboratory:  Kiff  Sequoia Other \_\_\_\_\_

Analyzed for:  TPH-G  BTEX  MTBE  TPH-D Other: Oil, Nitrate, Sulfate, Ferrrous Iron

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):  Pre-purge: 2.4 mg/L  Post-purge: 1.8 mg/L

O.R.P. (if req'd):  Pre-purge: 60 mV  Post-purge: 51 mV

# EQUIVA WELL MONITORING DATA SHEET

BTS #: 011107-c1	Site: 9F995749		
Sampler: Hank	Date: 11-7-01		
Well I.D.: MW-9	Well Diameter: 2 3 <u>4</u> 6 8		
Total Well Depth: 10.69	Depth to Water: 5.60		
Depth to Free Product:	Thickness of Free Product (feet):		
Referenced to: PVC	Grade	D.O. Meter (if req'd): YSI	HACH

Purge Method: Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible

Water to  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method:  
 Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

			Other:
Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

3.3 (Gals.) X 3 = 9.9 Gals.  
 1 Case Volume Specified Volumes Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1005	65.7	7.1	2802	64	3.3	odor
1006	65.2	7.1	3340	>200	6.6	Yellowish
1007	64.8	7.2	3394	>200	10	Colored

Did well dewater? Yes  No Gallons actually evacuated: 10

Sampling Time: 1012 Sampling Date: 11-7-01

Sample I.D.: MW-9 Laboratory: Kiff Sequoia Other

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Oil, Nitrate, Sulfate, Ferric Iron

EB I.D. (if applicable):    Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: 1.4 mg/L Post-purge: 1.1 mg/L

O.R.P. (if req'd): Pre-purge: -39 mV Post-purge: -54 mV

PLAINE

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# EQUIVA WELL MONITORING DATA SHEET

BTS #: 011107-C1	Site: 9F995749	
Sampler: Hank	Date: 11-7-01	
Well I.D.: MW-10	Well Diameter: 2 3 <u>4</u> 6 8	
Total Well Depth: 10.02	Depth to Water: 5.45	
Depth to Free Product:	Thickness of Free Product (feet):	
Referenced to: PVC	Grade	D.O. Meter (if req'd): YSI HACH

Purge Method: <input checked="" type="checkbox"/> Bailer Disposable Bailer Middleburg <input checked="" type="checkbox"/> Electric Submersible	Water to Peristaltic Extraction Pump Other _____	Sampling Method: <input checked="" type="checkbox"/> Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
<u>3</u> (Gals.) X <u>3</u> = <u>9</u> Gals.	1 Case Volume Specified Volumes Calculated Volume	Well Diameter Multiplier Well Diameter Multiplier 1" 0.04 4" 0.65 2" 0.16 6" 1.47 3" 0.37 Other $\pi r^2 \times 0.163$

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1028	69.4	7.0	2995	121	3	Color
1029	69.6	7.1	3021	64	6	
1030	68.2	7.0	3160	53	9	

Did well dewater? Yes  No Gallons actually evacuated: 9

Sampling Time: 1035 Sampling Date: 11-7-01

Sample I.D.: MW-10 Laboratory: Kiff Sequoia Other

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Oil, Nitrate, Sulfate, Ferrrous Iron

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: 1.8 mg/L Post-purge: 1.0 mg/L

D.R.P. (if req'd): Pre-purge: -139 mV Post-purge: -147 mV

BLAINE

TECH SERVICES

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www.blaines.com • E-MAIL: info@blaines.com

## WELL GAUGING DATA

Project # 011105-MG-1Date 11-5-01Client EquivaSite 285 Hegenberger Rd. - Oakland

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	Gauge protocol
MW-1	4					4.43	9.36	TOC	12
MW-2	4					6.12	9.60	↓	6
MW-3	4					6.25	10.11	TOB	3
MW-4	4					5.21	10.17	TOC	7
MW-6	4					5.73	10.97		8
MW-8	4					5.00	9.88		5
MW-9	4					5.41	10.76		10
MW-10	4					6.08	10.03		14
MW-11	4	Unable to locate				3.86			1
MW-12	4	Unable to locate				44.44			2
MW-13	4	Unable to locate				44.65			4
AS-1	1					6.41	14.78		15
AS-2	1					5.99	15.00		11
AS-3	1					9.44	14.91		9
VEW-5	4					4.11	9.54		17
VEW-6	4					4.35	9.94		16
VEW-7	4					4.85	9.76	↓	13

### WELL GAUGING DATA

 Project # 011105-

 Date 11/5/01

 Client FQVIVA

 Site 285 Hegenberger, 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	Free Post D.O.
MW-1	4					4.43	9.36	TOC	0.4/
MW-2	4					6.12	9.60	"	0.6/1.1
MW-3	4					6.25	10.11	TOB	0.5/1.9
MW-4	4					5.21	10.17	TOC	1.3/1.5
MW-6	4					5.73	10.91		0.6/
MW-8	4					5.00	9.88		0.6/1.3
MW-9	4					5.41	10.76		0.7/
MW-10	4					6.08	10.03	▼	0.6/

# EQUIVA WELL MONITORING DATA SHEET

BTS #: 011105 - MG - 1	Site: 285 Hegenberger Rd. Oakland	
Sampler: Morgan / Chris / Sooch	Date: 11-05-01	
Well I.D.: MW-2	Well Diameter: 2 3 <u>4</u> 6 8	
Total Well Depth: 9.60	Depth to Water: 6.12	
Depth to Free Product:	Thickness of Free Product (feet):	
Referenced to: PVC	Grade	D.O. Meter (if req'd): VSI HACH

Purge Method:  Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible

Waterra  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method:  Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

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

1 Case Volume	(Gals.) X	Specified Volumes	Calculated Volume	Well Diameter	Multiplier	Well Diameter	Multiplier
2.5	X	3	= 7.5 Gals.	1"	0.04	4"	0.65
				2"	0.16	6"	1.47
				3"	0.37	Other	radius <sup>2</sup> = 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1138	73.8	6.9	1472	23	2.5	BLACK SUT
1141	73.1	6.9	1481	17	5	LESS SUT
1150	71.9	6.8	1506	13	7.5	"

Did well dewater? Yes  No  Gallons actually evacuated: 7.5

Sampling Time: 1157 Sampling Date: 11-05-01

Sample I.D.: MW-2 Laboratory: Kiff Sequoia Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other: motor oil, nitrate, sulfate, ferrous iron

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: 0.6 mg/L Post-purge: 1.1 mg/L

O.R.P. (if req'd): Pre-purge: -81 mV Post-purge: -111 mV

SLAINE

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11-05-01

# EQUIVA WELL MONITORING DATA SHEET

BTS #: 011105-MG-1	Site: 285 Hegenberger Rd. Oakland.		
Sampler: Morgan / Chris W. Sooch	Date: 11-05-01		
Well I.D.: MW- <del>3</del> 3	Well Diameter: 2 3 <u>4</u> 6 8		
Total Well Depth: 10.11	Depth to Water: 6.25		
Depth to Free Product:	Thickness of Free Product (feet):		
Referenced to: PVC	Grade	D.O. Meter (if req'd): YSI	HACH

Purge Method:  Bailor  
 Disposable Bailor  
 Middleburg  
 Electric Submersible

Water:  Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method:  Bailor  
 Disposable Bailor  
 Extraction Port  
 Dedicated Tubing

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

\* SLOW PUMPING

$$\frac{2.5 \text{ (Gals.)} \times 3}{1 \text{ Case Volume} \quad \text{Specified Volumes}} = \frac{7.5 \text{ Gals.}}{\text{Calculated Volume}}$$

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.17
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1055	71.6	7.0	1237	29	2.5	ODOR
1059	72.3	7.0	1196	17	5.0	"
"				well dewatered @ 5 gal.		DTW = 8.90
1259	72.6	7.0	1305	22	—	DTW - 8.08

Did well dewater?  Yes  No Gallons actually evacuated: 5.

Sampling Time: 1303 Sampling Date: 11-05-01

Sample I.D.: MW-3 Laboratory:  Kiff  Sequoia  Other \_\_\_\_\_

Analyzed for:  TPH-G  BTEX  MTBE  TPH-D Other: NAPHTHA OIL, NITRATE, SULFATE, FERROUS IRON

EB I.D. (if applicable):  @  Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	0.5 mg/L	Post-purge:	1.9 mg/L
O.R.P. (if req'd):	Pre-purge:	-119 mV	Post-purge:	-113 mV

# EQUIVA WELL MONITORING DATA SHEET

BTS #: 011105 - MG - 1	Site: 285 Hegenberger Rd. Oakland		
Sampler: Morgan / Chris / Sooch	Date: 11-05-01		
Well I.D.: MW-4	Well Diameter: 2 3 <b>4</b> 6 8		
Total Well Depth: 10.17	Depth to Water: 5.21		
Depth to Free Product:	Thickness of Free Product (feet):		
Referenced to: PVC	Grade	D.O. Meter (if req'd): VSI	HACH

Purge Method:  Boiler      Waterra      Sampling Method:  Boiler  
 Disposable Bailer      Peristaltic       Disposable Bailer  
 Middleburg      Extraction Pump       Extraction Port  
 Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

\* Slow De-water

$$3.5 \text{ (Gals.)} \times \frac{3}{\text{Case Volume}} = \frac{10.5}{\text{Specified Volumes}} \text{ Gals. Calculated Volume}$$

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1235	69.8	7.2	2017	36	3.5	Mud over
1240	68.9	7.3	2409	26	7	SILTY
			- well de-watered @ 1 gal.			DTW = 9.47
1250	76.0	7.7	2420	25	—	DTW = 9.08

Did well dewater?  Yes    No      Gallons actually evacuated: 7

Sampling Time: 1355      Sampling Date: 11-05-01

Sample I.D.: MW-4      Laboratory: Kiff      Sequoia      Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other: motor oil, nitrate, sulfate, ferrous iron

EB I.D. (if applicable): @ Time      Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: 1.3 mg/L      Post-purge: 1.5 mg/L

O.R.P. (if req'd): Pre-purge: -126 mV      Post-purge: -112 mV

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# EQUIVA WELL MONITORING DATA SHEET

BTS #: 011105 - MG - 1	Site: 285 Hegenberger Rd. Oakland		
Sampler: Morgan / Chris / Sooch	Date: 11-05-01		
Well I.D.: MW-8	Well Diameter: 2 3 4 6 8		
Total Well Depth: 9.88	Depth to Water: 5.00		
Depth to Free Product:	Thickness of Free Product (feet):		
Referenced to: PVC	Grade	D.O. Meter (if req'd): YSI	HACH

Purge Method: Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible

Watera Peristaltic Extraction Pump Other \_\_\_\_\_

Sampling Method:  Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

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

\* Slow Recovery

1 Case Volume	(Gals.) X	Specified Volumes	Calculated Volume	Well Diameter	Multiplier	Well Diameter	Multiplier
3.5		3	= 10.5 Gals.	1"	0.04	4"	0.65
				2"	0.16	6"	1.47
				3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1115	74.5	7.0	271	20	3.5	clear
1116	73.9	6.8	888	21	7	
						well dewatered @ 7 gal.
						DTW = 8.43
1325	76.3	7.2	1162	13	—	DTW = 7.95

Did well dewater?  Yes No Gallons actually evacuated: 7

Sampling Time: 1330 Sampling Date: 11-05-01

Sample I.D.: MW-8 Laboratory: Kiff Sequoia Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other: motor oil, nitrate, sulfate, ferrous iron

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	0.6 mg/L	Post-purge:	1.3 mg/L
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O.R.P. (if req'd):	Pre-purge:	-60 mV	Post-purge:	-75 mV
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# EQUIVA WELL MONITORING DATA SHEET

BTS #: 011105-MG-1	Site: 285 Hegenberger Rd. Oakland		
Sampler: Morgan / Chris / Sosch	Date: 11-05-01		
Well I.D.: MW-11	Well Diameter: 2 3 <b>4</b> 6 8		
Total Well Depth:	Depth to Water:		
Depth to Free Product:	Thickness of Free Product (feet):		
Referenced to: <b>PVC</b>	Grade	D.O. Meter (if req'd):	VSI HACH

Purge Method: Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible

Watera  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

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

I Case Volume	(Gals.) X	<b>3</b>	=	Gals.	Well Diameter	Multiplier	Well Diameter	Multiplier	
						1"	0.04	4"	0.63
						2"	0.16	6"	1.47
						3"	0.37	Other	$\pi r^2 \cdot 0.163$

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
						Could not gauge and purge. Unable to locate because well was buried under landscaping

Did well dewater?	Yes	No	Gallons actually evacuated:
Sampling Time:	Sampling Date: 11-05-01		
Sample I.D.: MW-11	Laboratory: <b>Kiff</b> Equoia Other _____		
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: motor oil, sulfate, ferrous iron		
EB I.D. (if applicable):	Time	Duplicate I.D. (if applicable):	
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

BTS #: 01105-M4-1	Site: 285 Hegenberger Rd. Oakland		
Sampler: Morgan / Chris / Sooch	Date: 11-05-01		
Well I.D.: MW-12	Well Diameter: 2 3 <b>4</b> 6 8		
Total Well Depth:	Depth to Water:		
Depth to Free Product:	Thickness of Free Product (feet):		
Referenced to: <b>PVC</b>	Grade	D.O. Meter (if req'd): YSI	HACH

Purge Method: Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible      Watera  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing  
 Other \_\_\_\_\_

1 Case Volume	(Gals.) X <b>3</b>	Specified Volumes	Calculated Volume	Well Diameter	Multiplier	Well Diameter	Multiplier
				1"	0.04	4"	0.65
				2"	0.16	6"	1.47
				3"	0.37	Other	$\text{radius}^2 \cdot 0.163$

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
						Could not gauge or purge. Unable to locate well because it was buried under landscaping

Did well dewater? Yes No      Gallons actually evacuated:

Sampling Time:      Sampling Date: **[REDACTED]**

Sample I.D.: MW-12      Laboratory: **Kiff** Sequip Other

Analyzed for: TPH-G BTEX MTBE TPH-D Other: motor oil, nitrate, sulfate, fevrous iron.

EB I.D. (if applicable): **[REDACTED]** Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: **[REDACTED]** mg/L Post-purge: **[REDACTED]** mg/L

O.R.P. (if req'd): Pre-purge: **[REDACTED]** mV Post-purge: **[REDACTED]** mV

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# EQUIVA WELL MONITORING DATA SHEET

BTS #: 011105 - MG - 1	Site: 285 Hegenberger Rd, Oakland.	
Sampler: Morgan / Chris / Sooch	Date: 11/5/01	
Well I.D.: MW-13	Well Diameter: 2 3 4 6 8	
Total Well Depth:	Depth to Water:	
Depth to Free Product:	Thickness of Free Product (feet):	
Referenced to:	PVC	Grade
D.O. Meter (if req'd):	YSI	HACH

Purge Method: Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible

Water取  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing

I Case Volume	(Gals.) X	Specified Volumes	Calculated Volume	Well Diameter	Multiplier	Well Diameter	Multiplier
				1"	0.04	4"	0.65
				2"	0.16	6"	1.47
				3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
				Unable to locate well because it was buried by landscaping.		

Did well dewater?	Yes	No	Gallons actually evacuated:
Sampling Time:			Sampling Date:

Sample I.D.: MW-13	Laboratory:	Kiff	Sequoia	Other _____
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Analyzed for: TPH-G BTEX MTBE TPE	Other:
EB I.D. (if applicable): @	Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D	Other:
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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

BTS #: 011105 - MG - 1	Site: 285 Hegenberger Rd. Oakland		
Sampler: Morgan / Chris / Sooch	Date: 11-05-01		
Well I.D.: VEW-5	Well Diameter: 2 3 <u>4</u> 6 8		
Total Well Depth: 9.54	Depth to Water: 4.11		
Depth to Free Product:	Thickness of Free Product (feet):		
Referenced to: <u>PVC</u>	Grade	D.O. Meter (if req'd): <u>YSI</u>	HACH

Purge Method: Bailer Disposable Bailer Middleburg Electric Submersible	Watera Peristaltic Extraction Pump <u>Other 5/8" tubing</u> <u>w/ check valve</u>	Sampling Method: Bailer Disposable Bailer Extraction Port <u>Other: 5/8" tubing</u>																
$\frac{2.0 \text{ (Gals.)} \times 3}{\text{1 Case Volume}} = \frac{6.0 \text{ Gals.}}{\text{Specified Volumes}} \text{ Calculated Volume}$		<table border="1"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td><math>\pi r^2 \cdot 0.163</math></td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	$\pi r^2 \cdot 0.163$
Well Diameter	Multiplier	Well Diameter	Multiplier															
1"	0.04	4"	0.65															
2"	0.16	6"	1.47															
3"	0.37	Other	$\pi r^2 \cdot 0.163$															

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1325	71.6	6.9	2408	>200	2.25	Slight odor, dark green color, particles
1330	72.6	6.9	2080	>200	4.50	↓
1335	72.5	6.9	2140	>200	6.75	↓

Did well dewater? Yes No Gallons actually evacuated: 6.75

Sampling Time: 1340 Sampling Date: 11-05-01

Sample I.D.: VEW-5 Laboratory: Kiff Sequoia Other

Analyzed for: TPH-G BTEX MTBE TPH-D Other: motor oil, nitrate, sulfate, ferrous iron

EB I.D. (if applicable):   Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: 0.6 mg/L Post-purge: \_\_\_\_\_ mg/L

O.R.P. (if req'd): Pre-purge: -108 mV Post-purge: \_\_\_\_\_ mV

# EQUIVA WELL MONITORING DATA SHEET

BTS #: 011105 - MG - 1	Site: 285 Hegenberger Rd. Oakland		
Sampler: Morgan / Chris / Sooch	Date: 11-05-01		
Well I.D.: VEW- 6	Well Diameter: 2 3 (4) 6 8		
Total Well Depth: 9.94	Depth to Water: 4.35		
Depth to Free Product:	Thickness of Free Product (feet):		
Referenced to: <input checked="" type="checkbox"/> PVC	Grade	D.O. Meter (if req'd): <input checked="" type="checkbox"/> YSI	HACH

Purge Method: Bailer Disposable Bailer Middleburg Electric Submersible	Waterm Peristaltic Extraction Pump <del>Other</del> <i>5/8" tubing</i> <i>w/ check valve</i>	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing <del>Other</del> <i>5/8" tubing</i>
2.0 (Gals.) X 3 = 6.0 Gals.		Well Diameter Multiplier Well Diameter Multiplier 1" 0.04 4" 0.65 2" 0.16 6" 1.47 3" 0.37 Other radius <sup>2</sup> * 0.163
I Case Volume	Specified Volumes	Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1241	71.4	6.8	3984	>200	2.0	slight odor, green color, particles in H <sub>2</sub> O
1249	70.3	6.8	3109	>200	4.0	/
1257	70.3	6.8	2825	>200	6.0	/

Did well dewater? Yes  No Gallons actually evacuated: 6

Sampling Time: 1301 Sampling Date: 11-05-01

Sample I.D.: VEW- 6 Laboratory:  Kiff  Sequoia  Other

Analyzed for:  TPH-G  BTEX  MTBE  TPH-D Other: Motor oil, nitrate, sulfate, ferrous iron

EB I.D. (if applicable): <sup>@</sup> Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	0.8 mg/L	Post-purge:	1.3 mg/L
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O.R.P. (if req'd):	Pre-purge:	-145 mV	Post-purge:	-127 mV
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# EQUIVA WELL MONITORING DATA SHEET

BTS #: 011105 - MG - 1	Site: 285 Hegenberger Rd. Oakland	
Sampler: Morgan / Chris / Sooch	Date: 11-05-01	
Well I.D.: VEW- 7	Well Diameter: 2 3 4 <u>W/ 6 8</u> in inside	
Total Well Depth: 9.76	Depth to Water: 4.85	
Depth to Free Product:	Thickness of Free Product (feet):	
Referenced to: PVC	Grade	D.O. Meter (if req'd): YSI HACH

Purge Method: Bailer Disposable Bailer Middleburg Electric Submersible	Waterm Peristaltic Extraction Pump Other <u>5/8" tubing w/ check valve</u>	Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing
<u>1.8</u> (Gals.) X <u>3</u> = <u>5.4</u> Gals.	Specified Volumes	Calculated Volume
1 Case Volume		
Well Diameter Multiplier	Well Diameter Multiplier	
1" 0.04	4" 0.63	
2" 0.16	5" 1.47	
3" 0.37	Other $\text{radius}^2 * 0.163$	

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1139	72.6	6.8	5634	> 200	2.0	Oil - green color
1143	73.0	6.8	4641	> 200	4.0	
1150	72.8	6.9	4572	131	6.0	

Did well dewater? Yes No Gallons actually evacuated: 6.0

Sampling Time: 1155 Sampling Date: 11-05-01

Sample I.D.: VEW- 7 Laboratory: Kiff Sequoia Other

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Motor oil, nitrate, sulfate, ferrous iron

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	3.52 mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	-113 mV	Post-purge:	-147 mV

# EQUIVA WELL MONITORING DATA SHEET

BTS #: 011105 - MG - 1	Site: 285 Hegenberger Rd. Oakland		
Sampler: Morgan / Chris / Sooch	Date: 11-05-01		
Well I.D.: AS-1	Well Diameter: 2 3 4 6 8 <u>1</u>		
Total Well Depth: 14.78	Depth to Water: 6.11		
Depth to Free Product:	Thickness of Free Product (feet):		
Referenced to: <u>PVC</u>	Grade	D.O. Meter (if req'd): <u>YSI</u>	HACH

Purge Method: Bailer      Sampling Method: Bailer  
 Disposable Bailer      Disposable Bailer  
 Middleburg      Extraction Pump  
 Electric Submersible      ~~Water~~  
 Other 5/8" tubing      Peristaltic  
~~Extraction Pump~~  
~~Other: 5/8" tubing~~

Well Diameter	Multiplier	Well Diameter	Multipplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
12/11	70.4	7.0	10,090	>200	0.4	Odor, Sheen
12/13	70.3	7.0	10,400	>200	0.8	
12/15	70.1	7.0	10,450	>200	1.2	

Did well dewater? Yes No Gallons actually evacuated: 1.2

Sampling Time: 1220 Sampling Date: 11/15/01

Sample I.D.: AS-1 Laboratory: Kiff Sequoia Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Motor oil, nitrate, sulfate, ferrous iron

EB I.D. (if applicable): AS-1 Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): <u>Pre-purge</u>	<u>0.4</u> mg/L	Post-purge:	<u>0.5</u> mg/L
O.R.P. (if req'd): <u>Pre-purge</u>	<u>-122</u> mV	Post-purge:	<u>-150</u> mV

# EQUIVA WELL MONITORING DATA SHEET

BTS #: 011105 - MG - 1	Site: 285 Hegenberger Rd. Oakland		
Sampler: Morgan / Chris / Sooch	Date: 11-05-01		
Well I.D.: AS-2	Well Diameter: 2 3 4 6 8 <u>1</u>		
Total Well Depth: 15.00	Depth to Water: 5.99		
Depth to Free Product:	Thickness of Free Product (feet):		
Referenced to: PVC	Grade	D.O. Meter (if req'd): YSI	HACTI

Purge Method: Bailer  
 Water  
 Peristaltic  
 Disposable Bailer  
 Extraction Pump  
 Middleburg  
 Other 5/8" tubing  
 Electric Submersible  
 w/ check valve  
 Dedicated Tubing

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing  
 Other: 5/8" tubing

1 Case Volume	(Gals.) X	Specified Volumes	Calculated Volume	Well Diameter	Multiplier	Well Diameter	Multiplier
0.4		3	1.2 Gals.	1"	0.04	4"	0.65
				2"	0.16	6"	1.47
				3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1107	68.9	6.6	36,810	>200	0.5	Odor, Gray
1109	69.0	6.6	37,270	>200	1.0	
1111	68.6	6.6	38,380	>200	1.5	

Did well dewater? Yes No Gallons actually evacuated: 1.5

Sampling Time: 1116 Sampling Date: 11/5/01

Sample I.D.: AS-2 Laboratory: Kiff Sequoia Other

Analyzed for: TPH-G BTEX MTBE TPH-D Other: motor oil, nitrate, sulfate, ferrous iron

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	0.8 mg/L	Post-purge:	0.6 mg/L
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O.R.P. (if req'd):	Pre-purge:	-97 mV	Post-purge:	-132 mV
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# EQUIVA WELL MONITORING DATA SHEET

BTS #: 011105 - MG - 1	Site: 285 Hegenberger Rd. Oakland		
Sampler: Morgan / Chris / Sooch	Date: 11-05-01		
Well I.D.: AS-3	Well Diameter: 2 3 4 6 8 <u>1</u>		
Total Well Depth: 14.91	Depth to Water: <del>g. 4 ft</del> 6.41		
Depth to Free Product:	Thickness of Free Product (feet):		
Referenced to: PVC	Grade	D.O. Meter (if req'd): YSI HACH	

Purge Method: Bailer	<input checked="" type="checkbox"/> <u>Wideted</u>	Sampling Method: Bailer																
Disposable Bailer	<input type="checkbox"/>	Disposable Bailer																
Middleburg	<input type="checkbox"/> Peristaltic	Extraction Port																
Electric Submersible	<input type="checkbox"/> Extraction Pump	Dedicated Tubing																
	<input type="checkbox"/> Other <u>5/8" tubing</u> <u>w/ check valve</u>	<input checked="" type="checkbox"/> Other: <u>5/8" tubing</u>																
$\frac{0.3 \text{ (Gals.)} \times 3}{1 \text{ Case Volume}} = \frac{0.9}{\text{Specified Volumes}} \text{ Gals.}$		<table border="1"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier															
1"	0.04	4"	0.65															
2"	0.16	6"	1.47															
3"	0.37	Other	radius <sup>2</sup> * 0.163															

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
930	69.3	7.1	10,150	193	.4	Odor - green color
1032	69.2	7.2	10,600	108	.8	
1034	68.6	7.2	10,600	115	1.2	↓

Did well dewater? Yes No Gallons actually evacuated: 1.2

Sampling Time: 1038 Sampling Date: 11/5/01

Sample I.D.: AS-3 Laboratory: Kiff Sequoia Other \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other: motor oil, nitrate, sulfate, ferrous iron

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	<u>Pre-purge:</u>	<u>1.1</u> mg/L	<u>Post-purge:</u>	<u>3.2</u> mg/L
O.R.P. (if req'd):	<u>Pre-purge:</u>	<u>-71</u> mV	<u>Post-purge:</u>	<u>-62</u> mV