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CAMBRIA

February 25, 2002

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

MAR 01 2002

Re: **Fourth Quarter 2001 Monitoring Report**
Shell-branded Service Station
1800 Powell Street
Emeryville, California
Incident # 98995349
Cambria Project# 244-0894-002

Dear Ms. Hugo:

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

FOURTH QUARTER 2001 ACTIVITIES

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

Additional Oxygenate Analysis: In addition to the regular quarterly analysis for total petroleum hydrocarbons as gasoline, benzene, toluene, ethylbenzene, xylenes, and methyl-tertiary-butyl ether (MTBE), groundwater samples from monitoring wells S-8 and S-12 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 1.

Oakland, CA
San Ramon, CA
Sonoma, CA

Cambria Environmental Technology, Inc.

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

ANTICIPATED FUTURE 2002 ACTIVITIES

Groundwater Monitoring: The next sampling event is scheduled for the fourth quarter of 2002. At that time, Blaine will measure and remove any detected separate-phase hydrocarbons, gauge and sample all wells, and tabulate the data. Cambria will prepare a monitoring report.

CLOSING

We appreciate the opportunity to work with you on this project. Please call Stephan Bork at (510) 420-3344 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc

Anni Kreml
Senior Staff Scientist

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

REGISTERED GEOLOGIST
STEPHAN A. BORK
No. EG 2058
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

Figure: 1 - Groundwater Elevation Contour Map

Table: 1 - Groundwater Analytical Data - Oxygenates

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

cc: Karen Petryna, Equiva Services LLC, P.O. Box 7869, Burbank, California 91510-7869
Mr. Eddy So, RWQCB-SFBR, 1515 Clay St., Ste. 1400, Oakland, CA 94612

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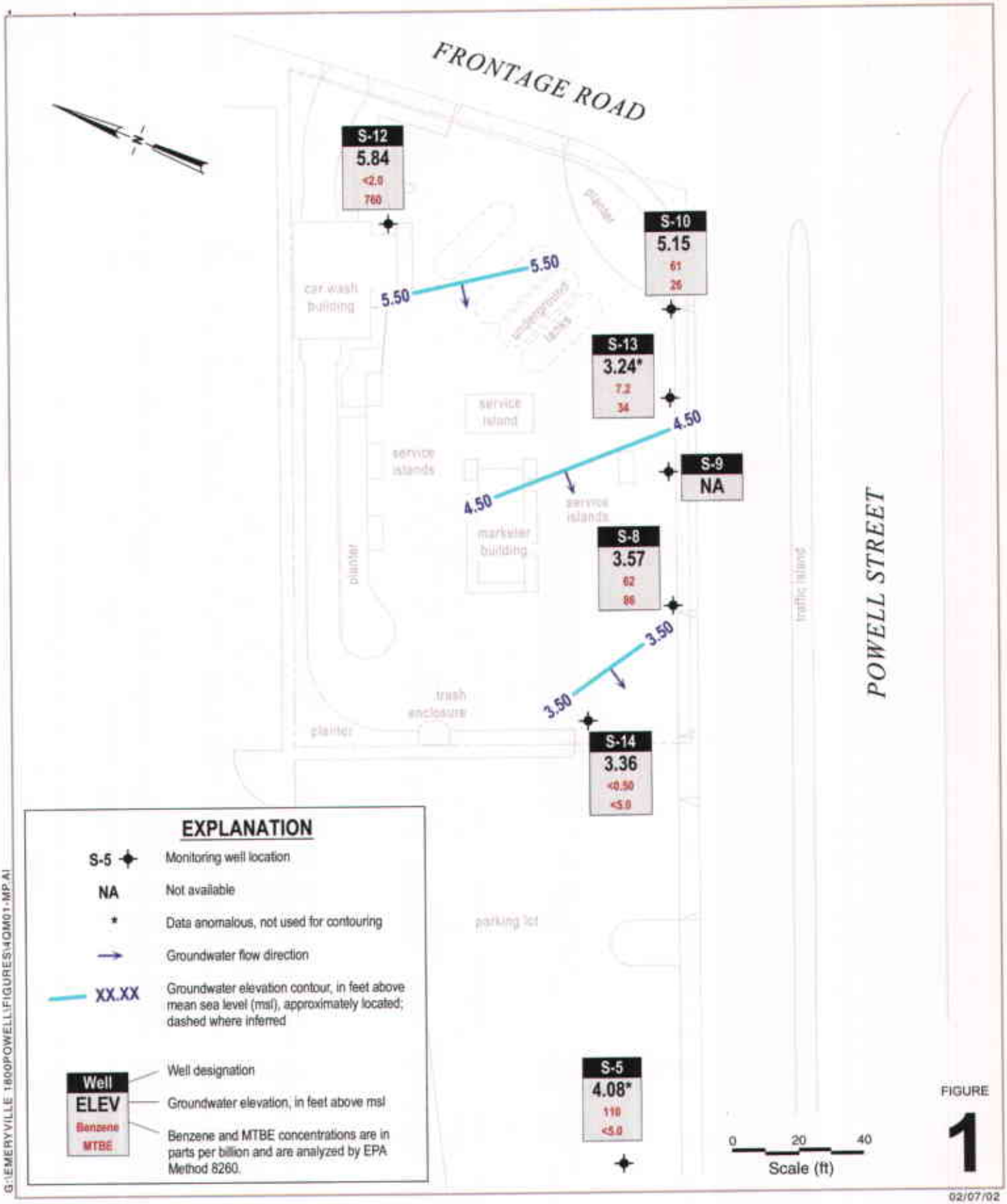

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FIGURE 1

02/07/02

Shell-branded Service Station
1800 Powell Street
Emeryville, California
Incident #98995349

CAMBRIA

Groundwater Elevation Contour Map

December 27, 2001

Table 1. **Groundwater Analytical Data - Oxygenates -** Shell-branded Service Station, Incident #98995349, 1800 Powell Street, Emeryville, California

Sample ID	Date Sampled	MTBE	DIPE	ETBE	TAME	TBA	Ethanol
		← (Concentrations in ppb) →					
S-8	12/27/01	86	<2.0	<2.0	<2.0	<50	<500
S-12	12/27/01	760	<2.0	<2.0	<2.0	550	<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

ATTACHMENT A

Blaine Groundwater Monitoring Report and Field Notes

BLAINE
TECH SERVICES, INC.

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

January 16, 2002

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

Fourth Quarter 2001 Groundwater Monitoring at
Shell-branded Service Station
1800 Powell Street
Emeryville, CA

Monitoring performed on December 27, 2001

Groundwater Monitoring Report **011227-MN-1**

This report covers the routine monitoring of groundwater wells at this Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Shell Martinez Manufacturing Complex.

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

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

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. In order to avoid compromising the objectivity necessary for the proper and disinterested performance of this work, Blaine Tech Services, Inc. concentrates on objective data collection and does not participate in the interpretation of analytical results, the definition of geological or hydrological conditions, the formulation of recommendations, or the marketing of remedial systems.

Please call if you have any questions.

Yours truly,

Leon Gearhart
Project Coordinator

LG/mrb

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

cc: Anni Kreml
Cambria Environmental Technology, Inc.
P.O. Box 259
Sonoma, CA 95476-0259

WELL CONCENTRATIONS
Shell-Branded Service Station
1800 Powell Street
Emeryville, CA
Wic #204-2495-0101

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)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-5	10/26/1984	3,000	NA	660	20	20	70	NA	NA	11.72	NA	NA	NA
S-5	02/09/1985	2,800	NA	740	20	20	140	NA	NA	11.72	NA	NA	NA
S-5	04/27/1985	4,300	NA	750	10	20	<30	NA	NA	11.72	NA	NA	NA
S-5	07/06/1985	1,500	NA	300	8	7	9	NA	NA	11.72	NA	NA	NA
S-5	10/24/1985	2,100	NA	760	10	40	50	NA	NA	11.72	NA	NA	NA
S-5	01/03/1986	1,300	NA	520	9	8	10	NA	NA	11.72	NA	NA	NA
S-5	07/05/1986	1,400	NA	500	10	4	<10	NA	NA	11.72	8.36	3.36	NA
S-5	10/18/1986	4,200	NA	1,100	9	14	7	NA	NA	11.72	NA	NA	NA
S-5	01/13/1987	4,500	6,100	1,100	15	30	25	NA	NA	11.72	NA	NA	NA
S-5	07/07/1987	3,200	NA	1,000	16	9	12	NA	NA	11.72	9.15	2.57	NA
S-5	10/10/1987	1,700	NA	16	5.7	5.2	8.9	NA	NA	11.72	9.67	2.05	NA
S-5	02/11/1988	1,300	NA	300	5	<5	<5	NA	NA	11.72	9.00	2.72	NA
S-5	05/10/1988	1,900	NA	490	<0.5	<5	<5	NA	NA	11.72	8.61	3.11	NA
S-5	08/31/1988	6,700	NA	760	26	<25	<25	NA	NA	11.72	9.61	2.11	NA
S-5	12/03/1988	2,900	NA	890	5.3	7.3	13	NA	NA	11.72	9.47	2.25	NA
S-5	02/16/1989	1,300	NA	280	3	3.4	9.4	NA	NA	11.72	8.29	3.43	NA
S-5	08/10/1989	1,700	NA	530	5.5	<5	5.8	NA	NA	11.72	9.30	2.42	NA
S-5	11/11/1989	NA	NA	NA	NA	NA	NA	NA	NA	11.72	9.42	2.30	NA
S-5	02/21/1994	1,000	NA	250	<5	<5	<5	NA	NA	11.72	7.95	3.77	NA
S-5 (D)	02/21/1994	1,300	NA	220	<5	<5	11	NA	NA	11.72	7.95	3.77	NA
S-5	05/16/1994	1,200	NA	230	<5	<5	<5	NA	NA	11.72	8.00	3.72	NA
S-5	08/09/1994	Well inaccessible		NA	NA	NA	NA	NA	NA	11.72	NA	NA	NA
S-5	11/09/1994	1,600	NA	220	3.2	1.8	5	NA	NA	11.72	8.32	3.40	NA
S-5 (D)	11/09/1994	1,600	NA	250	3.3	1.9	5.9	NA	NA	11.72	8.32	NA	NA
S-5	02/22/1995	Well inaccessible		NA	NA	NA	NA	NA	NA	11.72	NA	NA	NA
S-5	05/02/1995	Well inaccessible		NA	NA	NA	NA	NA	NA	11.72	NA	NA	NA

WELL CONCENTRATIONS
Shell-Branded Service Station
1800 Powell Street
Emeryville, CA
Wic #204-2495-0101

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)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-5	05/10/1995	910	NA	170	1.5	1.3	5.2	NA	NA	11.72	NA	NA	NA
S-5	08/24/1995	620	NA	210	<0.5	1.2	5.3	NA	NA	11.72	8.78	2.94	NA
S-5	12/08/1995	1,600	NA	510	3.3	1.5	6.6	NA	NA	11.72	9.78	1.94	NA
S-5 (D)	12/08/1995	1,600	NA	530	1.8	1.1	5.4	NA	NA	11.72	9.78	1.94	NA
S-5	02/29/1996	1,900	NA	470	5.8	<5.0	<5.0	46	NA	11.72	7.64	4.08	NA
S-5 (D)	02/29/1996	1,700	NA	440	5.4	<5.0	<5.0	40	NA	11.72	7.64	4.08	NA
S-5	05/22/1996	1,200	NA	490	<10	<10	<10	<50	NA	11.72	8.60	3.12	NA
S-5	07/30/1996	1,100	NA	400	<5.0	<5.0	6.9	<25	NA	11.72	9.40	2.32	NA
S-5	11/11/1996	Well inaccessible		NA	NA	NA	NA	NA	NA	11.72	NA	NA	NA
S-5	11/03/1997	Well inaccessible		NA	NA	NA	NA	NA	NA	11.72	NA	NA	NA
S-5	11/06/1998	620	NA	91	<0.50	0.64	4.0	<2.5	NA	11.72	8.25	3.47	NA
S-5	12/07/1999	Well inaccessible		NA	NA	NA	NA	NA	NA	11.72	NA	NA	NA
S-5	11/02/2000	1,120	NA	191	2.78	<2.50	3.56	<12.5	NA	11.72	8.55	3.17	NA
S-5	**12/27/2001**	**760**	**NA**	**110**	**2.4**	**<0.50**	**5.8**	**NA**	**<5.0**	**11.72**	**7.64**	**4.08**	**NA**
S-6	04/27/1985	6,500	NA	2,400	30	50	210	NA	NA	NA	NA	NA	NA
S-6	07/06/1985	3,700	NA	1,700	34	55	200	NA	NA	NA	NA	NA	NA
S-6	10/24/1985	23	<0.5	<5	10	NA	NA	NA	NA	NA	NA	<50	NA
S-6	11/08/1985	Well abandoned		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S-7	10/26/1984	50	NA	1.1	<1	<1	4	NA	NA	NA	NA	NA	NA
S-7	02/09/1985	NA	NA	0.9	<1	<1	<3	NA	NA	NA	NA	NA	NA
S-7	04/27/1985	<50	NA	<1	<1	<1	<3	NA	NA	NA	NA	NA	NA
S-7	07/06/1985	70	NA	2.2	<1	<1	<3	NA	NA	NA	NA	NA	NA
S-7	10/24/1985	6,200	NA	2,200	130	190	660	NA	NA	NA	NA	NA	NA
S-7	11/09/1985	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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S-8	10/26/1984	1,000	NA	610	9	1	42	NA	NA	12.76	NA	NA	NA
S-8	02/09/1985	500	NA	160	5	<2	17	NA	NA	12.76	NA	NA	NA
S-8	04/27/1985	2,700	NA	1500	20	10	40	NA	NA	12.76	NA	NA	NA
S-8	07/06/1985	440	NA	180	5	2	12	NA	NA	12.76	NA	NA	NA
S-8	10/24/1985	2,000	NA	1,100	17	5	70	NA	NA	12.76	NA	NA	NA
S-8	01/03/1986	1,900	NA	1,300	20	<10	70	NA	NA	12.76	NA	NA	NA
S-8	07/05/1986	1,600	NA	920	30	<10	60	NA	NA	12.76	9.50	3.26	NA
S-8	10/18/1986	1,400	NA	640	<10	<10	30	NA	NA	12.76	NA	NA	NA
S-8	01/13/1987	670	760	190	5.8	<0.5	19	NA	NA	12.76	NA	NA	NA
S-8	04/22/1987	2,400	NA	740	54	5.7	59	NA	NA	12.76	NA	NA	NA
S-8	07/07/1987	1,100	NA	450	15	<2.5	42	NA	NA	12.76	10.45	2.31	NA
S-8	10/10/1987	340	NA	4	0.6	<0.5	17	NA	NA	12.76	10.83	1.93	NA
S-8	02/11/1988	<1,000	NA	260	<10	<10	11	NA	NA	12.76	10.44	2.32	NA
S-8	05/10/1988	1,800	NA	700	14	<5	46	NA	NA	12.76	10.17	2.59	NA
S-8	08/31/1988	NA	NA	NA	NA	NA	NA	NA	NA	12.76	10.81	1.95	SPH
S-8	12/03/1988	960	NA	250	4.3	<2.5	14	NA	NA	12.76	10.81	1.95	NA
S-8	02/16/1989	2,700	NA	800	35	10	83	NA	NA	12.76	9.65	3.11	NA
S-8	05/28/1989	960	NA	710	25	84	80	NA	NA	12.76	10.46	2.30	NA
S-8	08/10/1989	1,300	NA	630	17	<5	46	NA	NA	12.76	10.59	2.17	NA
S-8	11/11/1989	910	NA	180	8	<2.5	15	NA	NA	12.76	10.29	2.47	NA
S-8	02/21/1994	3,200	NA	480	52	<5	130	NA	NA	12.76	9.52	3.24	NA
S-8	05/16/1994	1,000	NA	220	7.3	<5	28	NA	NA	12.76	9.49	3.27	NA
S-8 (D)	05/16/1994	1,000	NA	280	10	<5	29	NA	NA	12.76	9.49	3.27	NA
S-8	08/09/1994	400	NA	27	6.6	<0.5	18	NA	NA	12.76	10.37	2.39	NA
S-8	11/09/1994	650	NA	170	5.3	<0.5	17	NA	NA	12.76	9.58	3.18	NA

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Shell-Branded Service Station
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Wic #204-2495-0101

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)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-8	02/22/1995	650	NA	210	10	1.2	22	NA	NA	12.76	9.02	3.74	NA
S-8	05/02/1995	1,000	NA	280	17	1.4	32	NA	NA	12.76	8.45	4.31	NA
S-8	08/24/1995	480	NA	180	11	1	19	NA	NA	12.76	10.02	2.74	NA
S-8 (D)	08/24/1995	700	NA	180	6.5	<0.5	17	NA	NA	12.76	10.02	2.74	NA
S-8	12/08/1995	740	NA	230	6.9	0.7	15	NA	NA	12.76	10.65	2.11	NA
S-8	02/29/1996	740	NA	260	8.1	<5.0	19	58	NA	12.76	9.10	3.66	NA
S-8	05/22/1996	1,200	NA	350	10	<5.0	23	74	NA	12.76	10.14	2.62	NA
S-8	07/30/1996	530	NA	220	20	6.3	36	69	NA	12.76	10.51	2.25	NA
S-8	11/11/1996	540	NA	140	3.7	<2.0	17	42	NA	12.76	10.23	2.53	NA
S-8	11/03/1997	480	NA	54	3.5	<0.50	12	40	NA	12.76	9.40	3.36	NA
S-8	11/06/1998	740	NA	110	10	2.8	26	31	NA	12.76	9.78	2.98	NA
S-8	12/07/1999	770	NA	270	16	<2.0	33	75	NA	12.76	10.14	2.62	NA
S-8	11/02/2000	436	NA	75.8	6.18	0.549	14.9	81.5	NA	12.76	9.45	3.31	NA
S-8	**12/27/2001**	**1,300**	**NA**	**62**	**11**	**1.8**	**31**	**NA**	**86**	**12.76**	**9.19**	**3.57**	**NA**
S-9	10/26/1984	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	02/09/1985	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	1.30
S-9	04/27/1985	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	1.25
S-9	07/06/1985	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	1.20
S-9	10/24/1985	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	01/03/1986	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	04/11/1986	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	07/05/1986	NA	NA	NA	NA	NA	NA	NA	NA	12.75	9.67	3.08	SPH
S-9	10/18/1986	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	01/13/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	04/22/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH

WELL CONCENTRATIONS
Shell-Branded Service Station
1800 Powell Street
Emeryville, CA
Wic #204-2495-0101

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)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-9	07/07/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	10/10/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.75	22.30	-9.55	SPH
S-9	02/24/1994	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	05/16/1994	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	1.50
S-9	08/09/1994	NA	NA	NA	NA	NA	NA	NA	NA	12.75	11.80	NA	2.00
S-9	11/09/1994	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	02/22/1995	NA	NA	NA	NA	NA	NA	NA	NA	12.75	11.40	NA	2.38
S-9	05/02/1995	NA	NA	NA	NA	NA	NA	NA	NA	12.75	11.83	NA	2.12
S-9	12/08/1995	NA	NA	NA	NA	NA	NA	NA	NA	12.75	11.92	NA	1.06
S-9	02/29/1996 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	12.10	2.88	2.79
S-9	05/22/1996 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	11.71	2.44	1.75
S-9	07/30/1996 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	11/11/1996 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	9.00
S-9	11/03/1997 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	11/06/1998 a	NA	NA	NA	NA	NA	NA	NA	NA	12.75	NA	NA	SPH
S-9	12/07/1999 a	Well inaccessible		NA	NA	NA	NA	NA	NA	12.75	NA	NA	NA
S-9	11/02/2000 a	Well inaccessible		NA	NA	NA	NA	NA	NA	12.75	NA	NA	NA
S-9	**12/27/2001 a**	**Well inaccessible**		**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**12.75**	**NA**	**NA**	**NA**
S-10	10/26/1984	700,000	NA	37,000	100,000	20,000	110,000	NA	NA	12.58	NA	NA	NA
S-10	02/09/1985	6,500	NA	480	700	100	1,800	NA	NA	12.58	NA	NA	NA
S-10	04/27/1985	13,000	NA	1,300	500	600	3,700	NA	NA	12.58	NA	NA	NA
S-10	07/06/1985	14,000	NA	1,300	310	270	2,400	NA	NA	12.58	NA	NA	NA
S-10	10/24/1985	4,200	NA	580	34	4	440	NA	NA	12.58	NA	NA	NA
S-10	01/03/1986	1,700	NA	360	10	7.8	170	NA	NA	12.58	NA	NA	NA
S-10	04/11/1986	NA	NA	NA	NA	NA	NA	NA	NA	12.58	NA	NA	0.01

WELL CONCENTRATIONS
Shell-Branded Service Station
1800 Powell Street
Emeryville, CA
Wic #204-2495-0101

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)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-10	07/05/1986	NA	NA	NA	NA	NA	NA	NA	NA	12.58	9.16	3.42	0.01
S-10	10/18/1986	NA	NA	NA	NA	NA	NA	NA	NA	12.58	NA	NA	0.03
S-10	01/13/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.58	NA	NA	0.03
S-10	04/22/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.58	NA	NA	0.01
S-10	07/07/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.58	9.41	3.17	0.03
S-10	10/10/1987	NA	NA	NA	NA	NA	NA	NA	NA	12.58	7.77	4.81	SPH
S-10	02/11/1988	1,200	NA	470	16	<5	14	NA	NA	12.58	6.41	6.17	NA
S-10	05/10/1988	1,100	NA	100	6	4	19	NA	NA	12.58	9.04	3.54	NA
S-10	08/31/1988	NA	NA	NA	NA	NA	NA	NA	NA	12.58	9.38	3.20	0.01
S-10	12/03/1988	NA	NA	NA	NA	NA	NA	NA	NA	12.58	6.89	5.69	SPH
S-10	02/16/1989	530	NA	89	8.5	1.6	4.5	NA	NA	12.58	7.34	5.24	NA
S-10	05/28/1989	240	NA	65	3.8	2.2	8.6	NA	NA	12.58	6.60	5.98	NA
S-10	08/10/1989	250	NA	23	4.1	<1	6.4	NA	NA	12.58	9.09	3.49	NA
S-10	11/11/1989	320	NA	1.6	1.3	1.4	6.2	NA	NA	12.58	6.58	6.00	NA
S-10	02/21/1994	1,400	NA	190	9.9	<2.5	19	NA	NA	12.58	8.32	4.26	NA
S-10	05/16/1994	300	NA	45	8.6	6.2	19	NA	NA	12.58	8.35	4.23	NA
S-10	08/08/1994	700	NA	57	14	<0.5	9.3	NA	NA	12.58	8.66	3.92	NA
S-10	11/09/1994	640	NA	130	2	1.6	4.1	NA	NA	12.58	6.68	5.90	NA
S-10	02/22/1995	500	NA	65	5.9	1	8.2	NA	NA	12.58	9.12	3.46	NA
S-10	05/02/1995	530	NA	59	2.3	0.8	8.2	NA	NA	12.58	9.50	3.08	NA
S-10	08/24/1995	350	NA	35	4.6	<0.5	6.7	NA	NA	12.58	10.06	2.52	NA
S-10	12/08/1995	690	NA	28	4.6	0.9	8.6	NA	NA	12.58	10.08	2.50	NA
S-10	02/29/1996	430	NA	32	1.8	0.5	5.8	16	NA	12.58	5.32	7.26	NA
S-10	05/22/1996	100	1,200	19	0.63	<0.5	1.4	5.3	NA	12.58	6.04	6.54	NA
S-10	07/30/1996	240	13,000	17	<1.2	<1.2	7.8	11	NA	12.58	10.48	2.10	NA
S-10	11/11/1996	370	4,800	16	1.1	<0.5	7	94	NA	12.58	10.31	2.27	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)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-10	11/03/1997	340	1,100	6.7	2.1	<0.50	3.3	19	NA	12.58	9.53	3.05	NA
S-10 (D)	11/03/1997	310	1,100	7.8	1.3	<0.50	3.1	19	NA	12.58	9.53	3.05	NA
S-10	11/06/1998	<250	2,000	<2.5	<2.5	<2.5	6.5	900	NA	12.58	5.12	7.46	NA
S-10	12/07/1999	400	2,230	47	33	10	29	90	NA	12.58	7.95	4.63	NA
S-10	11/02/2000	536	14,500	32.0	3.08	<0.500	2.98	42.3	NA	12.58	7.05	5.53	NA
S-10	**12/27/2001**	**870**	**6,600**	**61**	**4.9**	**2.5**	**15**	**NA**	**26**	**12.58**	**7.43**	**5.15**	**NA**
S-12	07/06/1985	<250	2,200	0.71	<0.5	<0.5	<3.6	NA	NA	12.84	8.22	NA	NA
S-12	11/16/1985	<250	1,400	18	<2	<2	<5	NA	NA	12.84	NA	NA	NA
S-12	01/03/1986	<250	NA	24	2	<2	<5	NA	NA	12.84	NA	NA	NA
S-12	07/05/1986	80	NA	15	0.7	<0.5	2	NA	NA	12.84	8.27	4.57	NA
S-12	10/18/1986	150	NA	12	9	<0.5	3.6	NA	NA	12.84	NA	NA	NA
S-12	01/13/1987	120	1,000	3.6	0.8	<0.5	2.9	NA	NA	12.84	NA	NA	NA
S-12	04/22/1987	100	820	3.7	3.8	0.8	11	NA	NA	12.84	NA	NA	NA
S-12	07/07/1987	70	NA	2.5	0.8	<0.5	2.4	NA	NA	12.84	9.50	3.34	NA
S-12	10/10/1987	220	2,500	2.1	0.7	<0.5	1.2	NA	NA	12.84	9.90	2.94	NA
S-12	02/11/1988	110	2,500	0.8	<0.5	<0.5	1.3	NA	NA	12.84	9.43	3.41	NA
S-12	05/10/1988	140	3,800b	0.8	0.8	<0.5	2.5	NA	NA	12.84	8.65	4.19	NA
S-12	08/31/1988	190	2,600b	3	15	0.5	4.5	NA	NA	12.84	9.86	2.98	NA
S-12	12/03/1988	180	3,900b	1.2	1	1	7.7	NA	NA	12.84	9.93	2.91	NA
S-12	02/16/1989	350c	2,100b	0.6	<0.5	0.5	5.5	NA	NA	12.84	8.08	4.76	NA
S-12	05/28/1989	290	2,200	2	1.6	4.4	6	NA	NA	12.84	9.08	3.76	NA
S-12	08/10/1989	240	720	0.7	<0.5	<0.5	1.1	NA	NA	12.84	9.35	3.49	NA
S-12	11/11/1989	210c	4,100	0.7	0.5	<0.5	3.4	NA	NA	12.84	9.28	3.56	NA
S-12	02/21/1994	240d	2,200e	0.7	<0.5	<0.5	3.6	NA	NA	12.84	8.22	4.62	NA
S-12	05/16/1994	96	2,200	1.5	<0.5	<0.5	2	NA	NA	12.84	8.92	3.92	NA

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S-12	08/08/1994	110f	3,500g	<0.5	<0.5	<0.5	<0.5	NA	NA	12.84	NA	0.00	NA
S-12	11/09/1994	80	5,400g	80	<0.5	<0.5	0.6	NA	NA	12.84	7.56	5.28	NA
S-12	02/22/1995	110	2,900g,h	0.7	<0.5	<0.5	3.7	NA	NA	12.84	7.98	4.86	NA
S-12 (D)	02/22/1995	110	3,400g,h	4.8	7.1	<0.5	2.1	NA	NA	12.84	7.98	4.86	NA
S-12	05/02/1995	140	2,800	2.4	1.1	0.8	4.3	NA	NA	12.84	8.44	4.40	NA
S-12	08/24/1995	200	1,600	19	12	5.6	24	NA	NA	12.84	9.00	3.84	NA
S-12	12/08/1995	170	2,700	2.2	0.7	0.9	3.6	NA	NA	12.84	9.62	3.22	NA
S-12	02/29/1996	1,700	2,200	<5.0	<5.0	<5.0	<5.0	5,600	NA	12.84	7.64	5.20	NA
S-12	05/22/1996	<1,000	5,700	<10	<10	<10	<10	2,400	NA	12.84	8.94	3.90	NA
S-12	07/30/1996	<500	3,200	<5.0	<5.0	<5.0	<5.0	1,500	NA	12.84	9.71	3.13	NA
S-12 (D)	07/30/1996	<500	2,900	<5.0	<5.0	<5.0	<5.0	NA	2,000	12.84	9.71	3.13	NA
S-12	11/11/1996	<500	6,900	<5.0	<5.0	<5.0	<5.0	1,400	NA	12.84	9.65	3.19	NA
S-12	11/03/1997	110	2,800	2.1	<0.50	<0.50	1.3	NA	NA	12.84	8.73	4.11	NA
S-12	11/06/1998	<500	2,900	<5.0	<5.0	<5.0	<5.0	2,700	NA	12.84	8.85	3.99	NA
S-12	12/07/1999	<500	2,800	<5.0	<5.0	<5.0	<5.0	1,900	NA	12.84	8.32	4.52	NA
S-12	11/02/2000	132	4,000	0.642	<0.500	<0.500	1.07	1,900	2,230 k	12.84	7.50	5.34	NA
S-12	**12/27/2001**	**230**	**2,700**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**NA**	**760**	**12.84**	**7.00**	**5.84**	**NA**
S-13	07/06/1985	700	3,600	200	<5	<5	45	NA	NA	12.59	9.26	NA	NA
S-13	11/16/1985	1,900	2,000	700	160	70	340	NA	NA	12.59	NA	NA	NA
S-13	01/03/1986	2,800	NA	1,400	130	10	500	NA	NA	12.59	NA	NA	NA
S-13	07/05/1986	3,100	NA	1,800	60	40	270	NA	NA	12.59	9.47	3.12	NA
S-13	10/23/1986	3,400	NA	1,500	28	28	250	NA	NA	12.59	NA	NA	NA
S-13	01/13/1987	1,900	900	830	15	<10	99	NA	NA	12.59	NA	NA	NA
S-13	04/22/1987	2,900c	770h	1,100	20	30	140	NA	NA	12.59	NA	NA	NA
S-13	07/07/1987	1,500	NA	880	10	6	160	NA	NA	12.59	10.38	2.21	NA

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S-13	10/10/1987	480	2,400	830	15	<0.5	120	NA	NA	12.59	10.78	1.81	NA
S-13	02/11/1988	1,300	1,300	510	<10	<10	86	NA	NA	12.59	10.48	2.11	NA
S-13	05/10/1988	1,000	1,300b	470	<0.5	<5	50	NA	NA	12.59	9.48	3.11	NA
S-13	08/31/1988	NA	NA	NA	NA	NA	NA	NA	NA	12.59	10.74	1.85	SPH
S-13	12/03/1988	900	2,400b	290	4.6	<2.5	20	NA	NA	12.59	10.30	2.29	NA
S-13	02/16/1989	840c	1,200b	310	3.5	<2.5	27	NA	NA	12.59	7.60	4.99	NA
S-13	05/28/1989	2,100	4,600	1,100	19	50	350	NA	NA	12.59	10.60	1.99	NA
S-13	08/10/1989	900	2,300	230	16	6.9	65	NA	NA	12.59	10.58	2.01	NA
S-13	11/11/1989	2,800	2,800	200	15	8.6	58	NA	NA	12.59	9.84	2.75	NA
S-13	02/21/1994	700	1,800d	200	<5	<5	45	NA	NA	12.59	9.26	3.33	NA
S-13	05/16/1994	650	1,700	180	2.5	<2.5	21	NA	NA	12.59	9.62	2.97	NA
S-13	08/08/1994	470	2,600g	12	1.5	0.5	14	NA	NA	12.59	10.32	2.27	NA
S-13	11/09/1994	Well inaccessible		NA	NA	NA	NA	NA	NA	12.59	NA	NA	NA
S-13	02/22/1995	550	2,400g,h	190	4	<0.5	17	NA	NA	12.59	8.92	3.67	NA
S-13	05/02/1995	790	2,100	250	6.9	1.2	22	NA	NA	12.59	9.52	3.07	NA
S-13	08/24/1995	330	1,500	93	<0.5	<0.5	2	NA	NA	12.59	10.02	2.57	NA
S-13	12/08/1995	440	2,400	110	2.2	0.8	23	NA	NA	12.59	10.75	1.84	NA
S-13	02/29/1996	560	2,500	130	<5.0	<5.0	30	30	NA	12.59	9.02	3.57	NA
S-13	05/22/1996	430	3,700	55	1.6	310	27	<5.0	NA	12.59	10.20	2.39	NA
S-13	07/30/1996	230	1,600	30	2	1.4	17	15	NA	12.59	10.42	2.17	NA
S-13	11/11/1996	320	2,700	19	1.1	<0.5	14	3.5	NA	12.59	10.28	2.31	NA
S-13 (D)	11/11/1996	360	2,400	24	1.3	<0.5	15	4.5	NA	12.59	10.28	2.31	NA
S-13	11/03/1997	300	1,900	25	1.4	0.63	12	5.0	NA	12.59	9.36	3.23	NA
S-13	11/06/1998	390	1,300	53	2.9	1.1	13	17	NA	12.59	9.85	2.74	NA
S-13	12/07/1999	420	1,430	15	6.2	2.6	15	42	NA	12.59	9.72	2.87	NA
S-13	11/02/2000	257	4,240	4.89	1.92	<0.500	5.17	45.1	NA	12.59	7.15	5.44	NA

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S-13	**12/27/2001**	**300**	**6,400**	**7.2**	**0.84**	**<0.50**	**6.0**	**NA**	**34**	**12.59**	**9.35**	**3.24**	**NA**
S-14	11/16/1985	<250	400	3	<2	<2	<5	NA	NA	12.69	NA	NA	NA
S-14	01/03/1986	<250	NA	3	2	<2	<5	NA	NA	12.69	NA	NA	NA
S-14	04/22/1987	1,200	18,000	7.4	2.7	15	110	NA	NA	12.69	NA	NA	NA
S-14	07/07/1987	190	NA	6.5	0.6	1.9	26	NA	NA	12.69	10.32	2.37	NA
S-14	10/10/1987	4,900	21,000	7	1.2	<0.5	25	NA	NA	12.69	10.77	1.92	NA
S-14	02/11/1988	370	12,000c	4.6	<2.5	<2.5	26	NA	NA	12.69	10.40	2.29	NA
S-14	05/10/1988	660	2,200b	2.9	<2.5	<2.5	24	NA	NA	12.69	9.66	3.03	NA
S-14	08/31/1988	700	7,900	3.2	<2.5	<2.5	15	NA	NA	12.69	10.74	1.95	NA
S-14	12/03/1988	210	11,000b	<0.5	<0.5	0.8	6.8	NA	NA	12.69	10.69	2.00	NA
S-14	02/16/1989	130c	5,700b	<0.5	<0.5	<0.5	4.4	NA	NA	12.69	9.69	3.00	NA
S-14	05/28/1989	770	5,200	<0.5	<0.5	<0.5	4.5	NA	NA	12.69	10.42	2.27	NA
S-14	08/10/1989	920	8,800	<1	<1	1.6	17	NA	NA	12.69	10.54	2.15	NA
S-14	11/11/1989	710	28,000	20	57	25	69	NA	NA	12.69	9.91	2.78	NA
S-14	02/21/1994	2,800	3,600	<5	<5	<5	14	NA	NA	12.69	9.30	3.09	NA
S-14	02/21/1994	2,300d	3,600e	<5.0	<5	<5	14	NA	NA	12.69	9.30	3.39	NA
S-14	05/16/1994	310	6,700	<2.5	<2.5	<2.5	3.1	NA	NA	12.69	9.54	3.15	NA
S-14	08/08/1994	480l	2,900	<0.5	0.6	<0.5	0.8	NA	NA	12.69	10.29	2.40	NA
S-14 (D)	08/08/1994	590l	2,900	<0.5	0.6	<0.5	1.5	NA	NA	12.69	10.29	2.40	NA
S-14	11/09/1994	170i	6,400g	0.7	<0.5	<0.5	2.7	NA	NA	12.69	9.52	3.07	NA
S-14	02/22/1995	550	7,000g,h	<0.5	<0.5	<0.5	1.6	NA	NA	12.69	9.18	3.51	NA
S-14	05/02/1995	210	2,300	1	0.9	1.1	6.3	NA	NA	12.69	9.49	3.20	NA
S-14 (D)	05/02/1995	160	2,600	0.6	0.6	0.7	3.8	NA	NA	12.69	9.49	3.20	NA
S-14	08/24/1995	180	3,700	0.5	<0.5	<0.5	1.3	NA	NA	12.69	9.94	2.75	NA
S-14	12/08/1995	190	4,900	1	<0.5	0.6	4.6	NA	NA	12.69	10.65	2.04	NA

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S-14	02/29/1996	200	11,000	<0.5	<0.5	<0.5	2	3	NA	12.69	8.90	3.79	NA
S-14	05/22/1996	93	3,800	<0.5	<0.5	<0.5	1.6	<2.5	NA	12.69	10.10	2.59	NA
S-14 (D)	05/22/1996	150	3,900	<0.5	<0.5	<0.5	1.8	<2.5	NA	12.69	10.10	2.59	NA
S-14	07/30/1996	<50	2,500	<0.5	<0.5	<0.5	0.89	<2.5	NA	12.69	10.37	2.32	NA
S-14	11/11/1996	2,600	27,000	<2.5	<2.5	<2.5	3.9	<12	NA	12.69	10.29	2.40	NA
S-14	11/03/1997	430	1,800	<0.50	<0.50	<0.50	1.7	<2.5	NA	12.69	9.52	3.17	NA
S-14	11/06/1998	Well inaccessible		NA	NA	NA	NA	NA	NA	12.69	NA	NA	NA
S-14	12/07/1999	970	5,920	1.0	1.1	0.59	3.5	2.6	NA	12.69	9.73	2.96	NA
S-14	11/02/2000	273	535,000	<0.500	<0.500	<0.500	1.59	<2.50	NA	12.69	9.98	2.71	NA
S-14	**12/27/2001**	**68**	**20,000**	**<0.50**	**<0.50**	**<0.50**	**1.3**	**NA**	**<5.0**	**12.69**	**9.33**	**3.36**	**NA**

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B, prior to December 27, 2001, 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 December 27, 2001, by EPA Method 8020.

MTBE = Methyl-tertiary-butyl ether

TOB = Top of Wellbox Elevation

SPH = Separate-Phase Hydrocarbons

GW = Groundwater

ug/L = parts per billion

msl = Mean sea level

ft = Feet

<n = Below detection limit

(D) = Duplicate sample

NA = Not applicable

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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)	TOB (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)

Notes:

a = Tar-like substance in well, probably from previous landfill activities; not gasoline.

b = Compounds detected within the chromatographic range appear to be weathered diesel

c = Compounds detected within the chromatographic range of gasoline but not characteristic of the standard gasoline pattern.

d = The concentrations reported as gasoline for samples S-12 and S-14 are primarily due to the presence of a discrete peak.

e = The concentrations reported as diesel for samples S-12, S-13 and S-14 are due to the presence of a combination of diesel and a heavier petroleum product of hydrocarbon range C18 - C36, possibly motor oil.

f = The result for gasoline is an unknown hydrocarbon which consists of several peaks.

g = The positive result appears to be a heavier hydrocarbon than diesel.

h = Compounds detected within the chromatographic range of diesel appears to include gasoline compounds.

i = The positive result appears to be a heavier hydrocarbon than gasoline.

j = No MTBE could be determined due to co-elution with early eluting compounds.

k = This sample analyzed outside of EPA recommended holding time.

KIFF ANALYTICAL LLC

Report Number : 24103
Date : 1/9/2002

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

Subject : 6 Water Samples
Project Name : 1800 Powell, Emeryville
Project Number : 011227-MN
P.O. Number : 98995349

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,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 24103
Date : 1/9/2002

Subject : 6 Water Samples
Project Name : 1800 Powell, Emeryville
Project Number : 011227-MN
P.O. Number : 98995349

Case Narrative

Matrix Spike/Matrix Spike Duplicate Results associated with samples S-5, S-8, S-10, S-13 for the analyte Benzene were affected by the analyte concentrations already present in the un-spiked sample.

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 24103
Date : 1/9/2002

Project Name : **1800 Powell, Emeryville**
Project Number : **011227-MN**

Sample : **S-5** Matrix : Water Lab Number : 24103-01
Sample Date :12/27/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**110**	0.50	ug/L	EPA 8260B	1/3/2002
Toluene	**2.4**	0.50	ug/L	EPA 8260B	1/3/2002
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	1/3/2002
Total Xylenes	**5.8**	0.50	ug/L	EPA 8260B	1/3/2002
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	1/3/2002
TPH as Gasoline	**760**	50	ug/L	EPA 8260B	1/3/2002
Toluene - d8 (Surr)	98.6		% Recovery	EPA 8260B	1/3/2002
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	1/3/2002

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 24103
Date : 1/9/2002

Project Name : **1800 Powell, Emeryville**
Project Number : **011227-MN**

Sample : **S-8** Matrix : Water Lab Number : 24103-02
Sample Date :12/27/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**62**	0.50	ug/L	EPA 8260B	1/4/2002
Toluene	**11**	0.50	ug/L	EPA 8260B	1/4/2002
Ethylbenzene	**1.8**	0.50	ug/L	EPA 8260B	1/4/2002
Total Xylenes	**31**	0.50	ug/L	EPA 8260B	1/4/2002
Methyl-t-butyl ether (MTBE)	**86**	0.50	ug/L	EPA 8260B	1/4/2002
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	1/4/2002
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	1/4/2002
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	1/4/2002
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	1/4/2002
Ethanol	**< 500**	500	ug/L	EPA 8260B	1/4/2002
TPH as Gasoline	**1300**	50	ug/L	EPA 8260B	1/4/2002
Toluene - d8 (Surr)	95.0		% Recovery	EPA 8260B	1/4/2002
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	1/4/2002

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 24103
Date : 1/9/2002

Project Name : **1800 Powell, Emeryville**
Project Number : **011227-MN**

Sample : **S-10** Matrix : Water Lab Number : 24103-03
Sample Date :12/27/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**61**	0.50	ug/L	EPA 8260B	1/4/2002
Toluene	**4.9**	0.50	ug/L	EPA 8260B	1/4/2002
Ethylbenzene	**2.5**	0.50	ug/L	EPA 8260B	1/4/2002
Total Xylenes	**15**	0.50	ug/L	EPA 8260B	1/4/2002
Methyl-t-butyl ether (MTBE)	**26**	5.0	ug/L	EPA 8260B	1/4/2002
TPH as Gasoline	**870**	50	ug/L	EPA 8260B	1/4/2002
Toluene - d8 (Surr)	97.1		% Recovery	EPA 8260B	1/4/2002
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	1/4/2002
TPH as Diesel	**6600**	50	ug/L	M EPA 8015	1/8/2002

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 24103
Date : 1/9/2002

Project Name : **1800 Powell, Emeryville**
Project Number : **011227-MN**

Sample : **S-12** Matrix : Water Lab Number : 24103-04
Sample Date :12/27/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 2.0**	2.0	ug/L	EPA 8260B	1/4/2002
Toluene	**< 2.0**	2.0	ug/L	EPA 8260B	1/4/2002
Ethylbenzene	**< 2.0**	2.0	ug/L	EPA 8260B	1/4/2002
Total Xylenes	**< 2.0**	2.0	ug/L	EPA 8260B	1/4/2002
Methyl-t-butyl ether (MTBE)	**760**	2.0	ug/L	EPA 8260B	1/4/2002
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	1/4/2002
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	1/4/2002
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	1/4/2002
Tert-Butanol	**550**	50	ug/L	EPA 8260B	1/4/2002
Ethanol	**< 500**	500	ug/L	EPA 8260B	1/4/2002
TPH as Gasoline	**230**	200	ug/L	EPA 8260B	1/4/2002
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	1/4/2002
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	1/4/2002
TPH as Diesel	**2700**	50	ug/L	M EPA 8015	1/8/2002

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 24103
Date : 1/9/2002

Project Name : **1800 Powell, Emeryville**
Project Number : **011227-MN**

Sample : **S-13** Matrix : Water Lab Number : 24103-05
Sample Date :12/27/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**7.2**	0.50	ug/L	EPA 8260B	1/4/2002
Toluene	**0.84**	0.50	ug/L	EPA 8260B	1/4/2002
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	1/4/2002
Total Xylenes	**6.0**	0.50	ug/L	EPA 8260B	1/4/2002
Methyl-t-butyl ether (MTBE)	**34**	5.0	ug/L	EPA 8260B	1/4/2002
TPH as Gasoline	**300**	50	ug/L	EPA 8260B	1/4/2002
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	1/4/2002
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	1/4/2002
TPH as Diesel	**6400**	50	ug/L	M EPA 8015	1/8/2002

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 24103
Date : 1/9/2002

Project Name : **1800 Powell, Emeryville**
Project Number : **011227-MN**

Sample : **S-14** Matrix : Water Lab Number : 24103-06
Sample Date :12/27/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	1/4/2002
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	1/4/2002
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	1/4/2002
Total Xylenes	**1.3**	0.50	ug/L	EPA 8260B	1/4/2002
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	1/4/2002
TPH as Gasoline	**68**	50	ug/L	EPA 8260B	1/4/2002
Toluene - d8 (Surr)	99.3		% Recovery	EPA 8260B	1/4/2002
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	1/4/2002
TPH as Diesel	**20000**	50	ug/L	M EPA 8015	1/8/2002

Approved By: Joel Kiff

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

Report Number : 24103

Date : 1/9/2002

QC Report : Method Blank Data

Project Name : **1800 Powell, Emeryville**

Project Number : **011227-MN**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	1/7/2002
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/4/2002
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/4/2002
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/4/2002
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/4/2002
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	1/4/2002
Diisopropyl ether (DIPE)	< 2.0	2.0	ug/L	EPA 8260B	1/4/2002
Ethyl-t-butyl ether (ETBE)	< 2.0	2.0	ug/L	EPA 8260B	1/4/2002
Tert-amyl methyl ether (TAME)	< 2.0	2.0	ug/L	EPA 8260B	1/4/2002
Tert-Butanol	< 50	50	ug/L	EPA 8260B	1/4/2002
Ethanol	< 500	500	ug/L	EPA 8260B	1/4/2002
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/4/2002
Toluene - d8 (Surr)	99.6		%	EPA 8260B	1/4/2002
4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	1/4/2002
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/3/2002
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/3/2002
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/3/2002
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/3/2002
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	1/3/2002
Diisopropyl ether (DIPE)	< 2.0	2.0	ug/L	EPA 8260B	1/3/2002
Ethyl-t-butyl ether (ETBE)	< 2.0	2.0	ug/L	EPA 8260B	1/3/2002
Tert-amyl methyl ether (TAME)	< 2.0	2.0	ug/L	EPA 8260B	1/3/2002
Tert-Butanol	< 50	50	ug/L	EPA 8260B	1/3/2002
Ethanol	< 500	500	ug/L	EPA 8260B	1/3/2002
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/3/2002
Toluene - d8 (Surr)	99.5		%	EPA 8260B	1/3/2002
4-Bromofluorobenzene (Surr)	101		%	EPA 8260B	1/3/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/4/2002
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/4/2002
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/4/2002
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/4/2002
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	1/4/2002
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/4/2002
Toluene - d8 (Surr)	99.1		%	EPA 8260B	1/4/2002
4-Bromofluorobenzene (Surr)	104		%	EPA 8260B	1/4/2002

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 24103

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 1/9/2002

Project Name : **1800 Powell, Emeryville**

Project Number : **011227-MN**

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
TPH as Diesel	Blank	<50	1000	1000	1070	1160	ug/L	M EPA 8015	1/7/2002	107	116	7.97	70-130	25
Benzene	24129-02	<0.50	37.0	38.1	37.7	38.5	ug/L	EPA 8260B	1/4/2002	102	101	0.640	70-130	25
Toluene	24129-02	<0.50	37.0	38.1	37.2	38.1	ug/L	EPA 8260B	1/4/2002	100	100	0.424	70-130	25
Tert-Butanol	24129-02	<5.0	185	190	169	174	ug/L	EPA 8260B	1/4/2002	91.4	91.5	0.131	70-130	25
Methyl-t-Butyl Ether	24129-02	3.3	37.0	38.1	40.7	41.0	ug/L	EPA 8260B	1/4/2002	101	98.9	2.00	70-130	25
Benzene	24103-01	110	40.0	40.0	144	134	ug/L	EPA 8260B	1/3/2002	78.4	53.4	37.9	70-130	25
Toluene	24103-01	2.4	40.0	40.0	37.4	34.1	ug/L	EPA 8260B	1/3/2002	87.8	79.4	10.0	70-130	25
Tert-Butanol	24103-01	<5.0	200	200	171	171	ug/L	EPA 8260B	1/3/2002	85.3	85.4	0.123	70-130	25
Methyl-t-Butyl Ether	24103-01	<0.50	40.0	40.0	38.8	38.1	ug/L	EPA 8260B	1/3/2002	97.0	95.3	1.82	70-130	25
Benzene	24145-05	<0.50	40.0	40.0	37.3	36.3	ug/L	EPA 8260B	1/4/2002	93.4	90.7	2.85	70-130	25
Toluene	24145-05	<0.50	40.0	40.0	37.7	36.7	ug/L	EPA 8260B	1/4/2002	94.2	91.7	2.74	70-130	25
Tert-Butanol	24145-05	<5.0	200	200	169	170	ug/L	EPA 8260B	1/4/2002	84.4	84.9	0.549	70-130	25
Methyl-t-Butyl Ether	24145-05	<0.50	40.0	40.0	39.4	39.0	ug/L	EPA 8260B	1/4/2002	98.4	97.6	0.842	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 24103

QC Report : Laboratory Control Sample (LCS)

Date : 1/9/2002

Project Name : **1800 Powell, Emeryville**

Project Number : **011227-MN**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	20.0	ug/L	EPA 8260B	1/4/2002	102	70-130
Toluene	20.0	ug/L	EPA 8260B	1/4/2002	101	70-130
Tert-Butanol	100	ug/L	EPA 8260B	1/4/2002	91.0	70-130
Methyl-t-Butyl Ether	20.0	ug/L	EPA 8260B	1/4/2002	107	70-130
Benzene	40.0	ug/L	EPA 8260B	1/3/2002	96.1	70-130
Toluene	40.0	ug/L	EPA 8260B	1/3/2002	96.5	70-130
Tert-Butanol	200	ug/L	EPA 8260B	1/3/2002	86.1	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	1/3/2002	101	70-130
Benzene	40.0	ug/L	EPA 8260B	1/4/2002	93.2	70-130
Toluene	40.0	ug/L	EPA 8260B	1/4/2002	94.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	1/4/2002	85.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	1/4/2002	96.4	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

LAB: Kiff

EQUIVA Services LLC Chain Of Custody Record

Lab Identification (if necessary):

Address:

City, State, Zip:

Equiva Project Manager to be invoiced:

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

Karen Petryna

24103

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 5 3 4 9

SAP or CRMT NUMBER (TS/CRMT):

DATE: 12/27/01

PAGE: 1 of 1

CONSULTANT COMPANY: Blaine Tech Services

ADDRESS: 1680 Rogers Avenue

CITY: San Jose, CA 95112

TELEPHONE: 408-573-0555 FAX: 408-573-7771 E-MAIL: nsudano@blainetech.com

SITE ADDRESS (Street and City): 1800 Powell, Emeryville

PROJECT CONTACT (Report to): Nick Sudano

CONSULTANT PROJECT NO.: BTS # 011227-MN

SAMPLER NAME(S) (Print): Michael Ninokata

LAB USE ONLY

TURNAROUND TIME (BUSINESS DAYS): ☑ 10 DAYS ☐ 5 DAYS ☐ 72 HOURS ☐ 48 HOURS ☐ 24 HOURS ☐ LESS THAN 24 HOURS

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY: _____

GC/MS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: TEMPERATURE ON RECEIPT C°

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH- Gas, Purgeable	BTEX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5 ppbRL)	Oxygenates (5) by (8260)	Ethanol (8260B)	Methanol	1,2-DCA	EDB (8260B)		TPH-Diesel, Extractable (8015m)		MTBE (8260B) Confirmation, See note								FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
-	S-5	12/27/01	1027	GW	5	X	X	X								[redacted]		40								-01
-	S-8	"	949	"	"	X	X	X		X	X					[redacted]		40	12-28-01							-02
-	S-10	"	920	"	"	X	X	X								X										-03
-	S-12	"	900	"	"	X	X	X		X	X					X										-04
-	S-13	"	935	"	"	X	X	X								X										-05
-	S-14	"	1007	"	"	X	X	X								X										-06

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) John Cuttle/Kiff Analytical	Date: 12/28/01	Time: 1132

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

10/16/00 Revision

Q&Q Graphic (714) 898-9702

WELL GAUGING DATA

Project # 011227-MN Date 12/27/01 Client Equiva

Site 1800 Powell St, Emeryville

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	
6" S-5	8	0				~~7.65~~ 7.64	12.40		
S-8	3					9.19	18.30		
S-9	2					—	—		
S-10	6					7.43	19.40		
S-12	3					7.00	~~21.35~~		
S-13	3					9.35	19.75		
S-14	3					9.33	23.80		
	*	Gauged	w/ Stinger in well						

EQUIVA WELL MONITORING DATA SHEET

BTS #: 011227-MN1	Site: 98995349
Sampler: Mike N	Date: 12/27/01
Well I.D.: S-5	Well Diameter: 2 3 4 6 (8) ___
Total Well Depth: 12.40	Depth to Water: 7.64
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
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method: ✓ Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

12.84 (Gals.) X 3 = 37.2 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	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1019	63.5	7.0	2610	37	12.4	clear, odor
1021	64.0	6.9	2101	34	24.8	" "
1022	64.2	6.9	1984	22	37.2	" "
		Highly reactive w/ VOA				

Did well dewater? Yes (No) Gallons actually evacuated: 37.2

Sampling Time: 1027 Sampling Date: 12/27/01

Sample I.D.: S-5 Laboratory: Sequoia Columbia Other: Kiff

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

@ Time

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

EQUIVA WELL MONITORING DATA SHEET

BTS #: 011227-MN1	Site: 9899534 9
Sampler: Mike N	Date: 12/27/01
Well I.D.: S-8	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 18.30	Depth to Water: 9.19
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
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method: ✓ Bailer

- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

3.4 (Gals.) X 3 = 10.2 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	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
942	67.7	6.8	4044	> 200	3.4	Black, odor
943	68.6	6.7	2170	139	6.8	Grey, odor
944	68.7	6.7	2034	144	10.2	" "

Did well dewater? Yes (No) Gallons actually evacuated: 10.2

Sampling Time: 949 Sampling Date: 12/27/01

Sample I.D.: S-8 Laboratory: Sequoia Columbia Other: Kiff

Analyzed for: (TPH-G BTEX MTBE TPH-D) Other: oxygenates & Ethanol 8260

@ Time

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

7

EQUIVA WELL MONITORING DATA SHEET

BTS #: 011227-MN1	Site: 98995349
Sampler: Mike N	Date: 12/27/01
Well I.D.: S-9	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 / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: ✓Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: _____

_____(Gals.) X 3 = _____ 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	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
	Did not sample or purge tar in well					
	CHECKED FOR PRESENCE OF TAR W/ DISP. BAILER					
		PRESENCE: CONFIRMED				

Did well dewater? Yes No — Gallons actually evacuated:

Sampling Time: — Sampling Date: 12/27/01

Sample I.D.: S-9 — Laboratory: Sequoia Columbia Other: Kiff

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

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

7

EQUIVA WELL MONITORING DATA SHEET

BTS #: 011227-MN1	Site: 9899549
Sampler: Mike N	Date: 12/27/01
Well I.D.: S-10	Well Diameter: 2 3 4 (6) 8 ___
Total Well Depth: 19.40	Depth to Water: 7.43
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
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method: ✓ Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

17.6 (Gals.) X 3 = 52.8 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	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
911	64.6	6.7	1224	61	17.6	clear w/grey tint odor
913	65.5	6.5	724	82	35.2	" " "
915	65.2	6.4	661	80	52.8	" " "

Did well dewater? Yes (No) Gallons actually evacuated: 52.8

Sampling Time: 920 Sampling Date: 12/27/01

Sample I.D.: S-10 Laboratory: Sequoia Columbia Other: Kiff

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

@ Time

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

EM

7

EQUIVA WELL MONITORING DATA SHEET

BTS #: 011227-MN1	Site: 9899549
Sampler: Mike N	Date: 12/27/01
Well I.D.: S-12	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 24.35	Depth to Water: 7.00
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
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method: ✓ Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

6.4 (Gals.) X 3 = 19.2 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	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
852	62.5	6.2	2386	91	6.4	odor, clear w/ yellow tint.
854	65.6	6.5	2359	101	12.8	" "
855	67.6	6.4	2385	97	19.2	" "

Did well dewater? Yes (No) Gallons actually evacuated: 19.2

Sampling Time: 900 Sampling Date: 12/27/01

Sample I.D.: S-12 Laboratory: Sequoia Columbia Other: Kiff

Analyzed for: (TPH-G) BTEX MTBE TPH-D Other: Oxygenates & Ethanol (8260)

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

7

Em

EQUIVA WELL MONITORING DATA SHEET

BTS #: 011227-MN1	Site: 98995349
Sampler: Mike N	Date: 12/27/01
Well I.D.: S-13	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 19.75	Depth to Water: 9.35
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
- Waterra
- 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	radius² * 0.163

3.8 (Gals.) X 3 = 11.4 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
925	64.4	6.5	6662	79	3.8	Slightly Cloudy, strong odor
926	67.2	6.7	6568	>200	7.6	Black, odor
930	67.7	6.8	7049	>200	11.4	" "

Did well dewater? Yes (No) Gallons actually evacuated: 11.4

Sampling Time: 935 Sampling Date: 12/27/01

Sample I.D.: S-13 Laboratory: Sequoia Columbia Other Kiff

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

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

7

EQUIVA WELL MONITORING DATA SHEET

BTS #: 011227-MN1	Site: 98995349
Sampler: Mike N	Date: 12/27/01
Well I.D.: S-14	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 23.88	Depth to Water: 9.33
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)
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method: ✓Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

5.4 (Gals.) X 3 = 16.2 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	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
958	66.3	6.8	12430	7200	5.4	Black, odor
959	67.5	6.8	8443	7200	10.8	Grey, odor
1001	67.9	6.8	5882	7200	16.2	" "
1002	68.0	6.9	5777	142	21.6	Light grey, odor
	Very reactive		w/preservative	in VOA		

Did well dewater? Yes (No) Gallons actually evacuated: 21.6

Sampling Time: 1007 Sampling Date: 12/27/01

Sample I.D.: S-14 Laboratory: Sequoia Columbia Other: Kiff

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

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