

Paresh Khatri  
Hazardous Materials Specialist  
Alameda County Environmental Health  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577

**RECEIVED**

3:03 pm, Feb 07, 2011

Alameda County  
Environmental Health

ARCADIS U.S., Inc.  
100 Montgomery Street  
Suite 300  
San Francisco  
California 94104  
Tel 415.374.2744  
Fax 415.374.2745

Subject:

ACEH Response to UST Cleanup Fund Five Year Review for Fuel Leak Case No. RO0000403 and GeoTracker Global ID T0600100210  
BP #11133, 2220 98<sup>th</sup> Avenue, Oakland, California

ENVIRONMENTAL

Dear Mr. Khatri:

Date:  
December 16, 2010

ARCADIS U.S., Inc (ARCADIS) has prepared this letter in response to the State Water Resources Control Board Underground Storage Tank Cleanup Fund (USTCF) 5-Year Review Summary which recommends closure consideration for BP site 11133, located at 2220 98<sup>th</sup> Avenue, Oakland, California (Site). In light of the USTCF's recommendation, ARCADIS has decided not to implement the proposed sulfate injection pilot test and instead proposes that the site be considered for a low-risk closure based on the following:

Contact:  
Hollis Phillips

Phone:  
415-374-2744 x13

Email:  
Hollis.Phillips@arcadis-us.com

Our ref:  
GP09BPNA.C107

- Since 2008, hydrocarbon concentrations in site groundwater have generally exhibited decreasing concentration trends for all constituents of concern (Table 1, Table 2 and Appendix A). These concentrations trends are indicative of a stable and shrinking plume.
- Site geochemical data indicate that there is on-going natural biodegradation at the site, driven by aquifer bacteria that consume hydrocarbons as electron donors, while drawing electron acceptors from the natural groundwater flow and from mineral deposits in the aquifer matrix. Groundwater geochemical parameters at AW-1, where concentrations are the most elevated onsite, show depleted dissolved phase electron acceptors (oxygen, nitrate and sulfate) and elevated carbon dioxide (Table 3) which are indicative active biodegradation.
- IW-3 was recently installed in the vicinity of AW-1 and groundwater analytical data indicate low hydrocarbon concentrations at this location (Table 1). The low hydrocarbon concentrations observed in the former source area indicate that biodegradation of source mass has likely occurred.

Mr. Paresh Khatri  
December 16, 2010

- The site has been adequately characterized.
- Exposure pathways, receptors, and potential risks, threats, and other environmental concerns have been identified and assessed.

If you have any questions or comments regarding the contents of this letter, please do not hesitate to contact me at 415.374.2744 x13 or by e-mail at [Hollis.Phillips@arcadis-us.com](mailto:Hollis.Phillips@arcadis-us.com).

Sincerely,

A handwritten signature in blue ink, appearing to read "H.E. Phillips".

Senior Geologist

Attachments:

Table 1 – Summary of Groundwater Monitoring Data

Table 2 – Summary of Fuel Additives Analytical Data

Table 3 – Biodegradation Parameters

Hydrographs

Copies:

File

Electronic copy uploaded to Geotracker

Re: Letter Response ACEH Response to UST Cleanup Fund Five Year Review  
Former British Petroleum Station #11133  
2220 98<sup>th</sup> Avenue  
Oakland, California  
ACEH Case # RO0000403

ENVIRONMENT

"I declare that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct."

Date:  
December 16, 2010

Submitted by:

Contact:  
Hollis E. Phillips

ARCADIS U.S., Inc

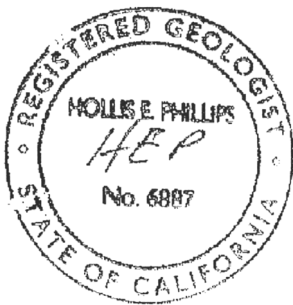
Phone:  
415.374.2744 ext 13



Email:  
Hollis.phillips@arcadis-us.com

Hollis E. Phillips, PG  
Project Manager

Our ref:  
GP09BPNA.C107



**Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses**  
**Former BP Station #11133, 2220 98th Ave., Oakland, CA**

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
AW-1															
4/5/1991	--	38.11	25.44	--	12.67	4,100	1,500	69	100	83	--	--	SUP	--	
4/1/1992	--	38.11	23.22	--	14.89	--	--	--	--	--	--	--	--	--	
4/2/1992	--	38.11	--	--	--	11,000	1,800	210	210	490	--	--	APP	--	
7/6/1992	--	38.11	24.89	--	13.22	6,500	4,000	40	290	530	--	--	ANA	--	
10/7/1992	--	38.11	26.55	--	11.56	4,700	1,500	41	47	300	--	--	ANA	--	
10/7/1992	--	38.11	--	--	--	2,900	1,200	25	37	210	--	--	ANA	--	e
1/14/1993	--	38.11	--	--	--	4,100	1,700	28	130	230	--	--	PACE	--	m, e
1/14/1993	--	38.11	23.73	--	14.38	2,800	830	31	140	240	--	--	PACE	--	m
4/22/1993	--	38.11	--	--	--	39,000	14,000	530	1,800	6,100	987	--	PACE	--	c, m
7/15/1993	--	38.11	22.50	--	15.61	6,200	2,200	28	210	540	838	--	PACE	--	c, m
10/21/1993	--	38.11	24.32	--	13.79	2,400	820	13	55	120	832	--	PACE	--	c, m
1/27/1994	--	38.11	23.72	--	14.39	3,500	1,400	26	130	220	650	--	PACE	--	c, n
4/21/1994	--	38.11	22.48	--	15.63	40,000	12,000	1,900	1,600	5,000	1,119	1.4	PACE	--	m
9/9/1994	--	38.11	23.04	--	15.07	3,500	1,600	5	200	250	--	2.1	PACE	--	m
9/9/1994	--	38.11	--	--	--	3,900	1,900	5.5	190	240	--	--	PACE	--	e
12/21/1994	--	38.11	21.70	--	16.41	7,600	3,100	36	370	320	855	1.6	PACE	--	m
1/30/1995	--	38.11	17.71	--	20.40	35,000	23,000	650	3,200	4,100	--	1.7	ATI	--	
4/10/1995	--	38.11	--	--	--	56,000	17,000	2,000	3,900	10,000	--	--	ATI	--	e
4/10/1995	--	38.11	20.04	--	18.07	60,000	18,000	2,000	4,300	11,000	--	7.9	ATI	--	
6/29/1995	--	38.11	20.60	--	17.51	72,000	10,000	7,300	4,200	15,000	--	6.2	ATI	--	
6/29/1995	--	38.11	--	--	--	86,000	12,000	8,400	4,800	18,000	--	--	ATI	--	e
9/18/1995	--	38.11	21.87	--	16.24	--	--	--	--	--	--	--	--	--	
9/19/1995	--	38.11	--	--	--	65,000	12,000	3,100	4,400	14,000	1,000	8.5	ATI	--	
12/7/1995	--	38.11	22.06	--	16.05	25,000	8,700	<50	2,500	1,300	1,100	2.9	ATI	--	
3/28/1996	--	38.11	16.91	--	21.20	24,000	11,000	<100	3,200	3,390	<1000	6.6	SPL	--	
6/20/1996	--	38.11	20.82	--	17.29	38,000	6,900	1,100	3,200	7,300	<100	6.4	SPL	--	
10/11/1996	--	38.11	23.20	--	14.91	33,000	8,500	69	3,300	4,230	580	6.3	SPL	--	
1/2/1997	--	38.11	20.41	--	17.70	32,000	8,000	<50	3,100	2,300	700	6.7	SPL	--	
4/14/1997	--	38.11	21.61	--	16.50	--	--	--	--	--	--	--	--	--	
4/15/1997	--	38.11	--	--	--	31,000	5,000	160	2,400	4,540	340	5.4	SPL	--	
7/2/1997	--	38.11	21.17	--	16.94	26,000	5,800	<100	2,600	2,200	<1000	6.2	SPL	--	

**Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses**  
**Former BP Station #11133, 2220 98th Ave., Oakland, CA**

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>AW-1 Cont.</b>															
9/30/1997	--	38.11	21.48	--	16.63	29,000	9,200	17	1,400	130	560	6.9	SPL	--	
1/21/1998	--	38.11	20.02	--	18.09	50,000	6,900	450	3,200	4,450	720	5.8	SPL	--	
4/9/1998	--	38.11	13.37	--	24.74	--	--	--	--	--	--	--	--	--	
4/10/1998	--	38.11	--	--	--	46,000	5,800	1,900	3,000	7,400	1,000	4.3	SPL	--	
6/19/1998	--	38.11	--	--	--	43,000	6,800	260	3,100	3,490	620	--	SPL	--	e
6/19/1998	--	38.11	19.12	--	18.99	42,000	6,600	200	3,000	3,350	660	4.9	SPL	--	
11/30/1998	--	38.11	21.13	--	16.98	23,000	6,700	<25	3,100	130	710/820	--	SPL	--	g
1/21/1999	--	38.11	20.77	--	17.34	25,000	4,800	54	2,800	780	1,000	--	SPL	--	
4/30/1999	--	38.11	20.80	--	17.31	21,000	5,300	67	2,800	750	1,500	--	SPL	--	
7/9/1999	--	38.11	20.41	--	17.70	11,000	3,000	<10	760	180	1,300	--	SPL	--	
11/3/1999	--	38.11	20.82	--	17.29	--	--	--	--	--	--	--	--	--	
1/12/2000	--	38.11	19.99	--	18.12	330,000	5,300	10	2,900	560	2,200	--	PACE	--	
4/13/2000	--	38.11	20.14	--	17.97	--	--	--	--	--	--	--	--	--	
5/24/2000	--	38.11	20.17	--	17.94	--	--	--	--	--	--	--	--	--	
6/1/2000	--	38.11	23.05	--	15.06	--	--	--	--	--	--	--	--	--	
6/8/2000	--	38.11	17.08	--	21.03	--	--	--	--	--	--	--	--	--	
6/15/2000	--	38.11	16.93	--	21.18	--	--	--	--	--	--	--	--	--	
7/26/2000	--	38.11	20.07	--	18.04	15,000	290	98	77	220	37,000	--	PACE	--	
10/24/2000	--	38.11	20.10	--	18.01	--	--	--	--	--	--	--	--	--	
1/19/2001	--	38.11	19.82	--	18.29	7,600	2,220	10.9	415	58.4	1,630	--	PACE	--	
7/24/2001	--	38.11	19.86	--	18.25	9,600	2,140	6.34	281	43	1,440	--	PACE	--	
1/18/2002	--	38.11	15.60	--	22.51	20,000	2,170	75.2	1,800	2,080	1,250	--	PACE	--	
8/1/2002	--	38.11	19.55	--	18.56	14,000	2,150	<12.5	197	42.4	1,120	--	PACE	--	
1/16/2003	--	38.11	16.32	--	21.79	15,000	2,300	75	1,600	1,800	1,100	--	SEQ	--	p
7/7/2003	--	38.11	19.80	--	18.31	9,700	1,600	<25	540	110	1,100	--	SEQ	--	q, u
02/05/2004	--	38.11	18.75	--	19.36	12,000	2,000	<50	820	590	930	--	SEQM	6.7	
07/01/2004	P	38.11	19.72	--	18.39	9,900	2,600	<25	300	<25	1,100	--	SEQM	6.5	
03/16/2005	P	38.11	18.78	--	19.33	10,000	1,100	30	630	560	720	0.8	SEQM	6.7	
07/22/2005	P	38.11	15.53	--	22.58	8,000	770	5.4	520	50	510	--	SEQM	6.5	
01/25/2006	P	38.11	18.10	--	20.01	6,400	1,200	10	490	290	490	--	SEQM	7.0	
7/6/2006	P	38.11	17.44	--	20.67	6,200	1,300	70	570	180	270	--	TAMC	6.8	

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>AW-1 Cont.</b>															
1/8/2007	P	38.11	16.74	--	21.37	3700	690	19	110	30	380	2.53	TAMC	6.77	
7/10/2007	P	38.11	17.30	--	20.81	4,200	560	12	93	40	220	1.79	TAMC	6.90	
1/15/2008	P	38.11	15.96	--	22.15	5,000	670	<10	490	200	230	0.92	TAMC	6.91	
7/15/2008	P	38.11	18.63	--	19.48	3,400	340	4.5	27	17	<0.50	1.80	CEL	6.79	
10/21/2008	P	38.11	19.96	--	18.15	1,900	160	<5.0	15	<5.0	120	2.40	CEL	7.01	
1/6/2009	P	38.11	19.13	--	18.98	5,000	670	<5.0	84	<5.0	170	1.37	CEL	6.09	
4/21/2009	P	38.11	16.96	--	21.15	7,900	510	<10	90	46	160	2.29	CEL	7.28	
7/21/2009	P	38.11	18.72	--	19.39	5,900	560	<10	92	10	170	17.46	CEL	7.23	y
3/18/2010	P	38.11	13.84	--	24.27	4,900	260	<10	540	180	<10	0.68	TAMC	6.57	
<b>7/29/2010</b>	<b>NP</b>	<b>38.11</b>	<b>16.95</b>	<b>--</b>	<b>21.16</b>	<b>3,100</b>	<b>120</b>	<b>1.1</b>	<b>88</b>	<b>5.9</b>	<b>&lt;0.50</b>	<b>0.92</b>	<b>TAMC</b>	<b>7.4</b>	
<b>AW-2</b>															
4/5/1991	--	36.83	22.36	--	14.47	<50	<0.3	<0.3	<0.3	<0.3	--	--	SUP	--	
4/1/1992	--	36.83	20.81	--	16.02	--	--	--	--	--	--	--	--	--	
4/2/1992	--	36.83	--	--	--	130	25	2.3	0.7	2.1	--	--	APP	--	
7/6/1992	--	36.83	23.57	--	13.26	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	
10/7/1992	--	36.83	25.24	--	11.59	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	
1/14/1993	--	36.83	20.82	--	16.01	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	m
4/22/1993	--	36.83	19.37	--	17.46	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	m
7/15/1993	--	36.83	21.29	--	15.54	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	PACE	--	m
10/21/1993	--	36.83	23.14	--	13.69	<50	1.3	1.1	0.9	2.1	<5.0	--	PACE	--	m
1/27/1994	--	36.83	22.34	--	14.49	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	m
4/21/1994	--	36.83	21.15	--	15.68	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.0	PACE	--	m
9/9/1994	--	36.83	22.09	--	14.74	<50	<0.5	<0.5	<0.5	<0.5	--	4.1	PACE	--	m
12/21/1994	--	36.83	20.12	--	16.71	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.0	PACE	--	m
1/30/1995	--	36.83	16.65	--	20.18	<50	<0.50	<0.50	<0.50	<1.0	--	2.5	ATI	--	
4/10/1995	--	36.83	16.22	--	20.61	<50	<0.50	<0.50	<0.50	<1.0	--	4.4	ATI	--	
6/29/1995	--	36.83	17.55	--	19.28	<50	<0.50	<0.50	<0.50	<1.0	--	7.8	ATI	--	
9/18/1995	--	36.83	19.87	--	16.96	--	--	--	--	--	--	--	--	--	
9/19/1995	--	36.83	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	4.5	ATI	--	
9/19/1995	--	36.83	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	e



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Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>AW-2 Cont.</b>															
01/25/2006	P	36.83	14.17	--	22.66	280	110	<1.0	3.9	8.7	12	--	SEQM	7.1	
7/6/2006	--	36.83	14.00	--	22.83	--	--	--	--	--	--	--	--	--	
1/8/2007	P	36.83	15.85	--	20.98	1900	550	160	58	180	40	2.09	TAMC	7.2	
7/10/2007	--	36.83	17.25	--	19.58	--	--	--	--	--	--	--	--	--	
1/15/2008	P	36.83	15.75	--	21.08	2,300	900	87	100	140	48	0.83	TAMC	6.79	
7/15/2008	P	36.83	17.99	--	18.84	6,400	1,700	550	340	940	<50	2.14	CEL	7.05	
10/21/2008	P	36.83	19.19	--	17.64	2,600	580	96	110	180	16	1.65	CEL	7.33	
1/6/2009	P	36.83	18.45	--	18.38	2,100	440	54	67	110	11	0.84	CEL	6.94	
4/21/2009	P	36.83	16.05	--	20.78	3,400	600	140	99	190	10	1.89	CEL	7.42	
7/21/2009	P	36.83	18.07	--	18.76	3,200	550	150	98	220	13	9.29	CEL	7.32	y
3/18/2010	--	36.83	13.92	--	22.91	--	--	--	--	--	--	--	--	--	
<b>7/29/2010</b>	<b>P</b>	<b>36.83</b>	<b>16.65</b>	<b>--</b>	<b>20.18</b>	<b>2,400</b>	<b>650</b>	<b>98</b>	<b>170</b>	<b>430</b>	<b>&lt;2.5</b>	<b>0.62</b>	<b>TAMC</b>	<b>7.4</b>	
<b>AW-3</b>															
4/5/1991	--	39.13	23.90	--	15.23	5,200	980	450	95	310	--	--	SUP	--	
4/1/1992	--	39.13	22.50	--	16.63	4,700	890	47	43	110	--	--	APP	--	
7/6/1992	--	39.13	23.26	--	15.87	3,900	3,100	30	80	99	--	--	ANA	--	
10/7/1992	--	39.13	24.75	--	14.38	5,000	2,600	<0.5	<0.5	59	--	--	ANA	--	
1/14/1993	--	39.13	23.59	--	15.54	350	250	<0.5	<0.5	<0.5	--	--	PACE	--	m
4/22/1993	--	39.13	19.42	--	19.71	240	71	2.4	0.6	4	--	--	PACE	--	m
7/15/1993	--	39.13	20.09	--	19.04	650	71	2.8	1.5	1.1	37.3	--	PACE	--	c, m
10/21/1993	--	39.13	--	--	--	170	6.1	2	1.7	4.4	--	--	PACE	--	e
10/21/1993	--	39.13	21.88	--	17.25	160	4.8	1.7	1.6	3.6	8.95	--	PACE	--	m
1/27/1994	--	39.13	--	--	--	90	2.9	0.5	<0.5	<0.5	--	--	PACE	--	e
1/27/1994	--	39.13	22.33	--	16.80	92	2.1	<0.5	<0.5	<0.5	7.37	--	PACE	--	m
4/21/1994	--	39.13	20.96	--	18.17	150	3.6	0.8	0.9	2.5	9.36	1.3	PACE	--	m
9/9/1994	--	39.13	21.60	--	17.53	53	<0.5	<0.5	<0.5	<0.5	--	1.9	PACE	--	m
12/21/1994	--	39.13	--	--	--	--	--	--	--	--	--	--	--	--	f
1/30/1995	--	39.13	--	--	--	--	--	--	--	--	--	--	--	--	f
4/10/1995	--	39.13	--	--	--	--	--	--	--	--	--	--	--	--	f
6/29/1995	--	39.13	15.41	--	23.72	<50	<0.50	<0.50	<0.50	<1.0	--	8.0	ATI	--	





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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>AW-3 Cont.</b>															
7/24/2001	--	39.13	18.55	--	20.58	--	--	--	--	--	--	--	--	--	
1/18/2002	--	39.13	14.49	--	24.64	--	--	--	--	--	--	--	--	--	
8/1/2002	--	39.13	14.27	--	24.86	--	--	--	--	--	--	--	--	--	
1/16/2003	--	39.13	14.25	--	24.88	--	--	--	--	--	--	--	--	--	
7/7/2003	--	39.13	14.70	--	24.43	--	--	--	--	--	--	--	--	--	
02/05/2004	--	39.13	14.61	--	24.52	--	--	--	--	--	--	--	--	--	
07/01/2004	--	39.13	15.62	--	23.51	--	--	--	--	--	--	--	--	--	
03/16/2005	P	39.13	12.70	--	26.43	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	SEQM	7.3	
07/22/2005	--	39.13	13.44	--	25.69	--	--	--	--	--	--	--	--	--	
01/25/2006	--	39.13	13.56	--	25.57	--	--	--	--	--	--	--	--	--	
7/6/2006	--	39.13	11.60	--	27.53	--	--	--	--	--	--	--	--	--	
1/8/2007	--	39.13	14.97	--	24.16	--	--	--	--	--	--	--	--	--	
7/10/2007	--	39.13	15.81	--	23.32	--	--	--	--	--	--	--	--	--	
1/15/2008	--	39.13	15.97	--	23.16	--	--	--	--	--	--	--	--	--	
7/15/2008	--	39.13	16.70	--	22.43	--	--	--	--	--	--	--	--	--	
10/21/2008	--	39.13	18.16	--	20.97	--	--	--	--	--	--	--	--	--	
1/6/2009	--	39.13	18.35	--	20.78	--	--	--	--	--	--	--	--	--	
4/21/2009	--	39.13	15.57	--	23.56	--	--	--	--	--	--	--	--	--	
7/21/2009	--	39.13	17.22	--	21.91	--	--	--	--	--	--	--	--	--	
3/18/2010	--	39.13	14.25	--	24.88	--	--	--	--	--	--	--	--	--	
<b>7/29/2010</b>	--	<b>39.13</b>	<b>15.23</b>	--	<b>23.90</b>	--	--	--	--	--	--	--	--	--	
<b>AW-4</b>															
4/5/1991	--	39.08	25.12	--	13.96	110,000	40,000	13,000	2,000	5,500	--	--	SUP	--	
4/1/1992	--	39.08	--	--	--	210,000	55,000	23,000	2,900	7,000	--	--	APP	--	e
4/1/1992	--	39.08	23.56	--	15.52	230,000	57,000	31,000	2,900	7,600	--	--	APP	--	
7/6/1992	--	39.08	25.87	--	13.21	38,000	16,000	5,400	2,000	6,100	--	--	ANA	--	
10/7/1992	--	39.08	27.53	--	11.55	120,000	41,000	26,000	4,700	13,000	--	--	ANA	--	
1/14/1993	--	39.08	24.12	--	14.96	62,000	18,000	14,000	2,700	7,700	1,400	--	PACE	--	c, m
4/22/1993	--	39.08	21.47	--	17.61	18,000	1,100	2,100	320	3,500	--	--	PACE	--	m
7/15/1993	--	39.08	23.30	--	15.78	21,000	820	2,300	590	3,800	1,978	--	PACE	--	c, m

**Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses**  
**Former BP Station #11133, 2220 98th Ave., Oakland, CA**

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>AW-4 Cont.</b>															
10/21/1993	--	39.08	25.08	--	14.00	11,000	570	83	630	2,300	4,600	--	PACE	--	c, m
1/27/1994	--	39.08	24.61	--	14.47	12,000	420	460	600	2,200	6,400	--	PACE	--	c, m
4/21/1994	--	39.08	22.96	--	16.12	12,000	110	250	150	1,900	16,010	1.5	PACE	--	c, m
4/21/1994	--	39.08	--	--	--	14,000	71	160	29	1,200	13,000	--	PACE	--	c, e
9/9/1994	--	39.08	23.85	--	15.23	9,700	75	64	280	2,000	--	2.1	PACE	--	m
12/21/1994	--	39.08	--	--	--	--	--	--	--	--	--	--	--	--	f
1/30/1995	--	39.08	--	--	--	--	--	--	--	--	--	--	--	--	f
4/10/1995	--	39.08	18.07	--	21.01	3,700	69	8.7	44	130	--	8.5	ATI	--	
6/29/1995	--	39.08	19.25	--	19.83	8,000	62	190	190	1,100	--	7.5	ATI	--	
9/18/1995	--	39.08	20.73	--	18.35	--	--	--	--	--	--	--	--	--	
9/19/1995	--	39.08	--	--	--	12,000	660	1,600	200	1,900	7,100	8.3	ATI	--	
12/7/1995	--	39.08	22.49	--	16.59	41,000	8,400	7,200	710	6,300	5,200	3.6	ATI	--	
3/28/1996	--	39.08	16.49	--	22.59	--	--	--	--	--	--	--	--	--	f
6/20/1996	--	39.08	16.00	--	23.08	<50	<0.5	<1	<1	<1	12	--	SPL	--	
10/11/1996	--	39.08	19.52	--	19.56	36,000	12,000	5,500	<25	3,800	880/1000	6.2	SPL	--	g
1/2/1997	--	39.08	15.80	--	23.28	<50	<0.5	<1.0	<1.0	<1.0	22	6.4	SPL	--	
1/2/1997	--	39.08	--	--	--	<50	61	3.8	3.5	8.1	110	--	SPL	--	e
4/14/1997	--	39.08	17.01	--	22.07	--	--	--	--	--	--	--	--	--	
4/15/1997	--	39.08	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	5.4	SPL	--	
7/2/1997	--	39.08	19.68	--	19.40	<50	21	<1.0	<1.0	<1.0	41	4.1	SPL	--	
9/30/1997	--	39.08	22.71	--	16.37	--	--	--	--	--	--	--	--	--	f
1/21/1998	--	39.08	15.89	--	23.19	13,000	2,900	<10	230	314	3,100	3.9	SPL	--	
4/9/1998	--	39.08	13.50	--	25.58	--	--	--	--	--	--	--	--	--	
4/10/1998	--	39.08	--	--	--	890	<0.5	<1	<1	<1	730	4.9	SPL	--	
6/19/1998	--	39.08	14.75	--	24.33	60	<0.5	<1.0	<1.0	<1.0	34	4.3	SPL	--	
11/30/1998	--	39.08	19.25	--	19.83	--	--	--	--	--	--	--	--	--	
1/21/1999	--	39.08	18.94	--	20.14	3,700	830	93	200	360	30	--	--	--	
4/30/1999	--	39.08	19.10	--	19.98	--	--	--	--	--	--	--	--	--	
7/9/1999	--	39.08	18.93	--	20.15	76,000	12,000	6,600	2,000	8,700	320	--	SPL	--	
11/3/1999	--	39.08	20.65	--	18.43	--	--	--	--	--	--	--	--	--	
1/12/2000	--	39.08	21.21	--	17.87	67,000	12,000	3,500	2,900	15,000	280	--	PACE	--	





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Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>AW-5 Cont.</b>															
4/10/1998	--	38.51	--	--	--	3,500	<0.5	<1.0	<1.0	<1.0	3,000	5.4	SPL	--	
6/19/1998	--	38.51	17.39	--	21.12	3,300	<0.5	<1.0	<1.0	<1.0	2,500	5.2	SPL	--	
11/30/1998	--	38.51	--	--	--	--	--	--	--	--	--	--	--	--	f
1/21/1999	--	38.51	21.22	--	17.29	2,800	<1.0	<1.0	<1.0	<1.0	1,800	--	SPL	--	
4/30/1999	--	38.51	21.50	--	17.01	--	--	--	--	--	--	--	--	--	
7/9/1999	--	38.51	20.15	--	18.36	4,000	<1.0	<1.0	<1.0	<1.0	3400/3500	--	SPL	--	g
11/3/1999	--	38.51	22.04	--	16.47	--	--	--	--	--	--	--	--	--	
1/12/2000	--	38.51	22.59	--	15.92	1,000	7.3	30	6.7	40	4,600	--	PACE	--	j (TPH-g/GRO)
4/13/2000	--	38.51	23.11	--	15.40	--	--	--	--	--	--	--	--	--	
7/26/2000	--	38.51	22.72	--	15.79	1,800	94	35	5.9	27	16,000	--	PACE	--	
10/24/2000	--	38.51	20.15	--	18.36	--	--	--	--	--	--	--	--	--	
1/19/2001	--	38.51	19.79	--	18.72	2,600	<0.5	<0.5	<0.5	<0.5	4,580	--	PACE	--	
7/24/2001	--	38.51	20.17	--	18.34	5,400	18.4	17.2	<12.5	40.8	5,170	--	PACE	--	
1/18/2002	--	38.51	17.34	--	21.17	3,800	343	0.738	<0.5	<1.0	3,750	--	PACE	--	
8/1/2002	--	38.51	19.49	--	19.02	5,300	<12.5	<12.5	<12.5	<25	3,470	--	PACE	--	
1/16/2003	--	38.51	17.30	--	21.21	1,400	140	<10	<10	<10	1,600	--	SEQ	--	p
7/7/2003	--	38.51	18.43	--	20.08	1,400	<10	<10	<10	<10	980	--	SEQ	--	q
02/05/2004	--	38.51	17.24	--	21.27	1,800	<10	<10	<10	<10	810	--	SEQM	6.7	
07/01/2004	P	38.51	19.43	--	19.08	1,100	<5.0	<5.0	<5.0	<5.0	550	--	SEQM	6.6	
03/16/2005	P	38.51	15.30	--	23.21	<5,000	<50	<50	<50	130	890	2.1	SEQM	6.7	
07/22/2005	P	38.51	17.22	--	21.29	<500	5.2	<5.0	<5.0	6.9	390	--	SEQM	6.6	
01/25/2006	P	38.51	15.28	--	23.23	<500	<5.0	<5.0	<5.0	<5.0	26	--	SEQM	7.0	
7/6/2006	P	38.51	15.93	--	22.58	220	<5.0	<5.0	<5.0	<5.0	170	--	TAMC	6.5	
1/8/2007	P	38.51	17.90	--	20.61	170	<2.5	<2.5	<2.5	<2.5	220	5.22	TAMC	6.84	
7/10/2007	P	38.51	19.00	--	19.51	350	<2.5	<2.5	<2.5	<2.5	360	1.96	TAMC	7.02	
1/15/2008	P	38.51	18.16	--	20.35	130	0.54	<0.50	<0.50	<0.50	85	0.90	TAMC	6.82	w
7/15/2008	P	38.51	19.88	--	18.63	100	<0.50	<0.50	<0.50	<0.50	11	2.13	CEL	6.85	
10/21/2008	P	38.51	20.88	--	17.63	86	<0.50	<0.50	<0.50	<0.50	63	1.01	CEL	7.10	
1/6/2009	P	38.51	20.28	--	18.23	150	<1.0	<1.0	<1.0	<1.0	26	0.70	CEL	6.22	
4/21/2009	P	38.51	18.07	--	20.44	100	<0.50	<0.50	<0.50	<0.50	5.1	2.09	CEL	7.35	
7/21/2009	P	38.51	19.70	--	18.81	83	<0.50	<0.50	<0.50	<0.50	25	6.50	CEL	7.14	y

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Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>AW-5 Cont.</b>															
3/18/2010	P	38.51	16.18	--	22.33	<50	<0.50	<0.50	<0.50	<1.0	72	0.74	TAMC	6.64	
<b>7/29/2010</b>	<b>P</b>	<b>38.51</b>	<b>18.00</b>	<b>--</b>	<b>20.51</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>1.9</b>	<b>1.32</b>	<b>TAMC</b>	<b>7.0</b>	
<b>AW-6</b>															
4/5/1991	--	37.08	22.48	--	14.60	1,100	80	19	1.4	230	--	--	SUP	--	
4/1/1992	--	37.08	22.50	--	14.58	--	--	--	--	--	--	--	--	--	
4/2/1992	--	37.08	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	APP	--	
7/6/1992	--	37.08	22.74	--	14.34	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	
10/7/1992	--	37.08	24.64	--	12.44	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	
1/14/1993	--	37.08	22.36	--	14.72	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	m
4/22/1993	--	37.08	22.82	--	14.26	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	m
7/15/1993	--	37.08	20.49	--	16.59	<50	<0.5	<0.5	<0.5	0.8	<5.0	--	PACE	--	m
10/21/1993	--	37.08	22.84	--	14.24	<50	0.5	0.6	<0.5	0.7	<5.0	--	PACE	--	m
1/27/1994	--	37.08	22.33	--	14.75	<50	<0.5	0.9	3.1	12	<5.0	--	PACE	--	m
4/21/1994	--	37.08	20.66	--	16.42	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.7	PACE	--	m
9/9/1994	--	37.08	21.57	--	15.51	<50	0.9	<0.5	<0.5	0.5	--	2.9	PACE	--	m
12/21/1994	--	37.08	19.40	--	17.68	<50	1.8	0.8	0.8	3.2	5.19	1.1	PACE	--	m
1/30/1995	--	37.08	16.74	--	20.34	<50	<0.50	<0.50	<0.50	<1.0	--	2.2	ATI	--	
1/30/1995	--	37.08	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	ATI	--	e
4/10/1995	--	37.08	16.01	--	21.07	<50	<0.50	<0.50	<0.50	<1.0	--	8.6	ATI	--	
6/29/1995	--	37.08	17.54	--	19.54	<50	<0.50	<0.50	<0.50	<1.0	--	6.3	ATI	--	
9/18/1995	--	37.08	19.65	--	17.43	--	--	--	--	--	--	--	--	--	
9/19/1995	--	37.08	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	25	8.3	ATI	--	
12/7/1995	--	37.08	20.35	--	16.73	<50	<0.50	<0.50	<0.50	<1.0	16	4.7	ATI	--	
3/28/1996	--	37.08	14.99	--	22.09	<50	<0.5	<1	<1	<1	<10	4.0	SPL	--	
6/20/1996	--	37.08	15.59	--	21.49	<50	<0.5	<1	<1	<1	<10	4.6	SPL	--	
10/11/1996	--	37.08	19.09	--	17.99	<50	<0.5	<1.0	<1.0	<1.0	<10	5.3	SPL	--	
1/2/1997	--	37.08	15.11	--	21.97	<50	<0.5	<1.0	<1.0	<1.0	<10	5.5	SPL	--	
4/14/1997	--	37.08	16.25	--	20.83	<50	<0.5	<1.0	<1.0	<1.0	<10	3.9	SPL	--	
7/2/1997	--	37.08	17.99	--	19.09	<50	<0.5	<1.0	<1.0	<1.0	<10	5.2	SPL	--	
9/30/1997	--	37.08	20.50	--	16.58	<50	<0.5	<1.0	<1.0	<1.0	<10	6.0	SPL	--	

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Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>AW-6 Cont.</b>															
1/21/1998	--	37.08	15.72	--	21.36	160	<0.5	<1.0	<1.0	<1.0	110	5.0	SPL	--	
4/9/1998	--	37.08	13.31	--	23.77	--	--	--	--	--	--	--	--	--	
4/10/1998	--	37.08	--	--	--	370	<0.5	<1.0	<1.0	<1.0	300	4.3	SPL	--	
6/19/1998	--	37.08	15.18	--	21.90	830	2	<1.0	<1.0	<1.0	690	4.0	SPL	--	
11/30/1998	--	37.08	--	--	--	--	--	--	--	--	--	--	--	--	f
1/21/1999	--	37.08	15.78	--	21.30	2,300	<1.0	<1.0	<1.0	<1.0	1,900	--	SPL	--	
4/30/1999	--	37.08	16.01	--	21.07	--	--	--	--	--	--	--	--	--	
7/9/1999	--	37.08	17.63	--	19.45	--	--	--	--	--	--	--	--	--	
11/3/1999	--	37.08	18.42	--	18.66	--	--	--	--	--	--	--	--	--	
1/12/2000	--	37.08	19.92	--	17.16	<50	<0.5	<0.5	<0.5	<0.5	2,700	--	PACE	--	
4/13/2000	--	37.08	19.87	--	17.21	--	--	--	--	--	--	--	--	--	
7/26/2000	--	37.08	19.99	--	17.09	--	--	--	--	--	--	--	--	--	
10/24/2000	--	37.08	18.12	--	18.96	--	--	--	--	--	--	--	--	--	
1/19/2001	--	37.08	17.04	--	20.04	2,700	<0.5	<0.5	<0.5	<0.5	4,850	--	PACE	--	
7/24/2001	--	37.08	17.83	--	19.25	--	--	--	--	--	--	--	--	--	
1/18/2002	--	37.08	15.54	--	21.54	5,500	614	<0.5	<0.5	<1.0	5,390	--	PACE	--	
8/1/2002	--	37.08	16.98	--	20.10	--	--	--	--	--	--	--	--	--	
1/16/2003	--	37.08	15.05	--	22.03	2,900	<20	<20	<20	63	2,500	--	SEQ	--	p
7/7/2003	--	37.08	16.58	--	20.50	--	--	--	--	--	--	--	--	--	
02/05/2004	--	37.08	15.84	--	21.24	7,000	<50	<50	<50	<50	5,400	--	SEQM	6.7	
07/01/2004	P	37.08	17.91	--	19.17	9,600	<50	<50	<50	<50	4,600	--	SEQM	6.5	
03/16/2005	P	37.08	16.04	--	21.04	6,700	<25	<25	<25	<25	4,400	3.0	SEQM	6.8	
07/22/2005	P	37.08	14.20	--	22.88	<5,000	<50	<50	<50	<50	5,500	--	SEQM	6.7	
01/25/2006	P	37.08	14.17	--	22.91	<5,000	<50	<50	<50	<50	3,000	--	SEQM	7.0	
7/6/2006	P	37.08	14.82	--	22.26	3,100	<50	<50	<50	<50	2,800	--	TAMC	6.5	
1/8/2007	P	37.08	15.72	--	21.36	5100	<50	<50	<50	<50	7400	3.18	TAMC	6.78	
7/10/2007	P	37.08	16.99	--	20.09	3,700	<100	<100	<100	<100	3,900	2.09	TAMC	6.83	w
1/15/2008	P	37.08	15.55	--	21.53	120	1.1	<1.0	<1.0	<1.0	150	0.58	TAMC	6.80	w
7/15/2008	P	37.08	17.84	--	19.24	130	<0.50	<0.50	<0.50	<0.50	270	2.12	CEL	6.87	
10/21/2008	P	37.08	18.92	--	18.16	81	<5.0	<5.0	<5.0	<5.0	160	1.01	CEL	7.19	
1/6/2009	P	37.08	18.37	--	18.71	76	<5.0	<5.0	<5.0	<5.0	97	0.94	CEL	6.23	



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Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>AW-6 Cont.</b>															
4/21/2009	P	37.08	15.97	--	21.11	<50	<0.50	<0.50	<0.50	<0.50	22	4.29	CEL	7.38	
7/21/2009	P	37.08	17.90	--	19.18	76	<0.50	<0.50	<0.50	<0.50	93	10.79	CEL	7.09	y
3/18/2010	P	37.08	14.13	--	22.95	<50	<0.50	<0.50	<0.50	<1.0	93	0.68	TAMC	6.75	
<b>7/29/2010</b>	<b>P</b>	<b>37.08</b>	<b>16.46</b>	<b>--</b>	<b>20.62</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>46</b>	<b>0.84</b>	<b>TAMC</b>	<b>7.0</b>	
<b>AW-7</b>															
4/5/1991	--	37.60	23.38	--	14.22	<50	0.4	0.7	<0.3	<0.3	--	--	SUP	--	
4/1/1992	--	37.60	21.92	--	15.68	--	--	--	--	--	--	--	--	--	
4/2/1992	--	37.60	--	--	--	<50	<0.5	3.2	1	5.4	--	--	APP	--	
7/6/1992	--	37.60	24.50	--	13.10	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	
10/7/1992	--	37.60	26.18	--	11.42	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	
1/14/1993	--	37.60	22.03	--	15.57	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	m
4/22/1993	--	37.60	21.18	--	16.42	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	m
7/15/1993	--	37.60	22.09	--	15.51	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	PACE	--	m
10/21/1993	--	37.60	24.05	--	13.55	51	5	4.2	3.5	8.2	<5.0	--	PACE	--	m
1/27/1994	--	37.60	23.40	--	14.20	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	PACE	--	m
4/21/1994	--	37.60	22.24	--	15.36	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.5	PACE	--	m
9/9/1994	--	37.60	22.94	--	14.66	<50	<0.5	<0.5	<0.5	0.5	--	4.3	PACE	--	m
12/21/1994	--	37.60	20.86	--	16.74	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.2	PACE	--	m
1/30/1995	--	37.60	17.51	--	20.09	<50	<0.50	<0.50	<0.50	<1.0	--	2.7	ATI	--	
4/10/1995	--	37.60	16.69	--	20.91	<50	<0.50	<0.50	<0.50	<1.0	--	4.8	ATI	--	
6/29/1995	--	37.60	18.33	--	19.27	<50	<0.50	<0.50	<0.50	<1.0	--	7.6	ATI	--	
9/18/1995	--	37.60	20.68	--	16.92	--	--	--	--	--	--	--	--	--	
9/19/1995	--	37.60	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	5.1	ATI	--	
12/7/1995	--	37.60	22.15	--	15.45	<50	<0.50	<0.50	<0.50	<1.0	<5.0	5.2	ATI	--	
3/28/1996	--	37.60	16.38	--	21.22	<50	<0.5	<1	<1	<1	<10	3.9	SPL	--	
6/20/1996	--	37.60	17.02	--	20.58	<50	<0.5	<1	<1	<1	<10	5.0	SPL	--	
10/11/1996	--	37.60	20.47	--	17.13	<50	<0.5	<1.0	<1.0	<1.0	<10	6.3	SPL	--	
1/2/1997	--	37.60	16.70	--	20.90	<50	<0.5	<1.0	<1.0	<1.0	<10	6.2	SPL	--	
4/14/1997	--	37.60	17.96	--	19.64	<50	<0.5	<1.0	<1.0	<1.0	<10	5.0	SPL	--	
7/2/1997	--	37.60	19.11	--	18.49	<50	<0.5	<1.0	<1.0	<1.0	<10	5.4	SPL	--	

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Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>AW-7 Cont.</b>															
9/30/1997	--	37.60	22.97	--	14.63	<250	<2.5	<5.0	<5.0	<5.0	1,100	6.5	SPL	--	
1/21/1998	--	37.60	16.50	--	21.10	<50	<0.5	<1.0	<1.0	<1.0	<10	4.9	SPL	--	
4/9/1998	--	37.60	13.56	--	24.04	<50	<0.5	<1.0	<1.0	<1.0	<10	4.9	SPL	--	
6/19/1998	--	37.60	15.41	--	22.19	<50	<0.5	<1.0	<1.0	<1.0	<10	4.4	SPL	--	
11/30/1998	--	37.60	18.90	--	18.70	--	--	--	--	--	--	--	--	--	
1/21/1999	--	37.60	18.39	--	19.21	--	--	--	--	--	--	--	--	--	
4/30/1999	--	37.60	18.54	--	19.06	--	--	--	--	--	--	--	--	--	
7/9/1999	--	37.60	17.98	--	19.62	--	--	--	--	--	--	--	--	--	
11/3/1999	--	37.60	20.22	--	17.38	--	--	--	--	--	--	--	--	--	
1/12/2000	--	37.60	19.46	--	18.14	--	--	--	--	--	--	--	--	--	
4/13/2000	--	37.60	19.59	--	18.01	--	--	--	--	--	--	--	--	--	
7/26/2000	--	37.60	19.69	--	17.91	--	--	--	--	--	--	--	--	--	
10/24/2000	--	37.60	18.78	--	18.82	--	--	--	--	--	--	--	--	--	
1/19/2001	--	37.60	--	--	--	--	--	--	--	--	--	--	--	--	f
7/25/2001	--	37.60	--	--	--	--	--	--	--	--	--	--	--	--	f
1/18/2002	--	37.60	--	--	--	--	--	--	--	--	--	--	--	--	o
8/1/2002	--	37.60	--	--	--	--	--	--	--	--	--	--	--	--	o
1/16/2003	--	37.60	--	--	--	--	--	--	--	--	--	--	--	--	o
7/7/2003	--	37.60	--	--	--	--	--	--	--	--	--	--	--	--	o
02/05/2004	--	37.60	--	--	--	--	--	--	--	--	--	--	--	--	o
07/01/2004	--	37.60	--	--	--	--	--	--	--	--	--	--	--	--	o
03/16/2005	--	37.60	--	--	--	--	--	--	--	--	--	--	--	--	o
07/22/2005	--	37.60	--	--	--	--	--	--	--	--	--	--	--	--	o
01/25/2006	--	37.60	--	--	--	--	--	--	--	--	--	--	--	--	o
<b>AW-8</b>															
4/5/1991	--	40.86	26.68	--	14.18	80	1.9	2.2	0.5	1.3	--	--	SUP	--	
4/1/1992	--	40.86	25.11	--	15.75	73	<0.5	0.7	<0.5	0.6	--	--	APP	--	
7/6/1992	--	40.86	26.43	--	14.43	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	
10/7/1992	--	40.86	28.59	--	12.27	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	
1/14/1993	--	40.86	25.55	--	15.31	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	m



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Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>AW-8 Cont.</b>															
10/24/2000	--	40.86	19.37	--	21.49	--	--	--	--	--	--	--	--	--	
1/19/2001	--	40.86	18.60	--	22.26	--	--	--	--	--	--	--	--	--	
7/24/2001	--	40.86	18.22	--	22.64	--	--	--	--	--	--	--	--	--	
1/18/2002	--	40.86	16.29	--	24.57	--	--	--	--	--	--	--	--	--	
8/1/2002	--	40.86	17.25	--	23.61	--	--	--	--	--	--	--	--	--	
1/16/2003	--	40.86	15.82	--	25.04	--	--	--	--	--	--	--	--	--	
7/7/2003	--	40.86	18.55	--	22.31	--	--	--	--	--	--	--	--	--	
02/05/2004	--	40.86	--	--	--	--	--	--	--	--	--	--	--	--	t
07/01/2004	--	40.86	18.25	--	22.61	--	--	--	--	--	--	--	--	--	t
03/16/2005	P	40.86	15.20	--	25.66	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.5	SEQM	7.3	
07/22/2005	--	40.86	--	--	--	--	--	--	--	--	--	--	--	--	f
01/25/2006	--	40.86	--	--	--	--	--	--	--	--	--	--	--	--	f
7/6/2006	--	40.86	13.05	--	27.81	--	--	--	--	--	--	--	--	--	
1/8/2007	--	40.86	16.57	--	24.29	--	--	--	--	--	--	--	--	--	
7/10/2007	--	40.86	17.73	--	23.13	--	--	--	--	--	--	--	--	--	
1/15/2008	--	40.86	17.88	--	22.98	--	--	--	--	--	--	--	--	--	
7/15/2008	--	40.86	18.57	--	22.29	--	--	--	--	--	--	--	--	--	
10/21/2008	--	40.86	20.09	--	20.77	--	--	--	--	--	--	--	--	--	
1/6/2009	--	40.86	20.20	--	20.66	--	--	--	--	--	--	--	--	--	
4/21/2009	--	40.86	--	--	--	--	--	--	--	--	--	--	--	--	f
7/21/2009	--	40.86	--	--	--	--	--	--	--	--	--	--	--	--	f
3/18/2010	--	40.86	15.52	--	25.34	--	--	--	--	--	--	--	--	--	
<b>7/29/2010</b>	<b>--</b>	<b>40.86</b>	<b>17.03</b>	<b>--</b>	<b>23.83</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>AW-9</b>															
1/2/1997	--	37.78	10.00	--	27.78	<50	<0.5	<1.0	<1.0	<1.0	<10	6.7	SPL	--	
4/14/1997	--	37.78	--	--	--	--	--	--	--	--	--	--	--	--	f
7/2/1997	--	37.78	12.71	--	25.07	<50	<0.5	<1.0	<1.0	<1.0	<10	6.0	SPL	--	
9/30/1997	--	37.78	21.22	--	16.56	<50	<0.5	<1.0	<1.0	<1.0	<10	6.8	SPL	--	
1/21/1998	--	37.78	10.26	--	27.52	<50	<0.5	<1.0	<1.0	<1.0	<10	5.3	SPL	--	
4/9/1998	--	37.78	6.77	--	31.01	<50	<0.5	<1.0	<1.0	<1.0	<10	5.6	SPL	--	



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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>MW-1 Cont.</b>															
6/20/1996	--	34.46	11.29	--	23.17	--	--	--	--	--	--	--	--	--	
10/11/1996	--	34.46	14.86	--	19.60	--	--	--	--	--	--	--	--	--	
1/2/1997	--	34.46	11.03	--	23.43	--	--	--	--	--	--	--	--	--	
4/14/1997	--	34.46	12.25	--	22.21	--	--	--	--	--	--	--	--	--	
4/15/1997	--	34.46	--	--	--	35,000	130	650	1,700	8,200	4,800	--	SPL	--	
7/2/1997	--	34.46	14.11	--	20.35	42,000	<250	<500	2,000	9,600	<5000	5.5	SPL	--	
9/30/1997	--	34.46	14.40	--	20.06	61,000	130	1,100	2,700	14,600	2,000	6.7	SPL	--	
1/21/1998	--	34.46	7.99	--	26.47	14,000	11	60	310	1,790	1,300	4.5	SPL	--	
4/9/1998	--	34.46	7.89	--	26.57	--	--	--	--	--	--	--	--	--	
4/10/1998	--	34.46	--	--	--	45,000	380	520	2,100	6,800	9,300	5.3	SPL	--	
6/19/1998	--	34.46	10.31	--	24.15	35,000	170	100	1,100	3,590	5,000	4.9	SPL	--	
11/30/1998	--	34.46	11.16	--	23.30	10,000	100	24	350	1,040	1800/2800	--	SPL	--	g
1/21/1999	--	34.46	10.76	--	23.70	18,000	120	37	590	1,800	2,700	--	SPL	--	
4/30/1999	--	34.46	10.78	--	23.68	17,000	240	89	1,100	1,900	1,600	--	SPL	--	
7/9/1999	--	34.46	12.62	--	21.84	58,000	140	100	1,800	6,900	1,200	--	SPL	--	
11/3/1999	--	34.46	14.00	--	20.46	20,000	62	42	620	2,100	630	--	PACE	--	
1/12/2000	--	34.46	15.25	--	19.21	72,000	110	120	2,400	8,200	630	--	PACE	--	
4/13/2000	--	34.46	15.57	--	18.89	37,000	300	32	1,000	1,700	810	--	PACE	--	
5/24/2000	--	34.46	11.75	--	22.71	--	--	--	--	--	--	--	--	--	
6/1/2000	--	34.46	11.41	--	23.05	--	--	--	--	--	--	--	--	--	
6/8/2000	--	34.46	11.68	--	22.78	--	--	--	--	--	--	--	--	--	
6/15/2000	--	34.46	11.85	--	22.61	--	--	--	--	--	--	--	--	--	
7/26/2000	--	34.46	16.19	--	18.27	10,000	480	210	470	710	1,100	--	PACE	--	
10/24/2000	--	34.46	13.89	--	20.57	9,900	31	7.2	550	1,200	4,400	--	PACE	--	
1/19/2001	--	34.46	12.90	--	21.56	57,000	199	7.66	1,170	3,260	514	--	PACE	--	
7/24/2001	--	34.46	13.55	--	20.91	27,000	96.7	<5.0	548	1,460	285	--	PACE	--	
1/18/2002	--	34.46	10.91	--	23.55	25,000	150	31.5	597	1,040	138	--	PACE	--	
8/1/2002	--	34.46	12.97	--	21.49	25,000	80.2	17.7	714	1,280	489	--	PACE	--	
1/16/2003	--	34.46	10.45	--	24.01	22,000	170	110	630	670	<500	--	SEQ	--	p
7/7/2003	--	34.46	12.40	--	22.06	9,900	42	<5.0	160	150	24	--	SEQ	--	q, u
02/05/2004	--	34.46	10.26	--	24.20	6,200	56	11	250	210	9.2	--	SEQM	6.9	

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>MW-1 Cont.</b>															
07/01/2004	--	34.46	13.20	--	21.26	18,000	<50	<50	210	300	<50	--	SEQM	--	u
03/16/2005	P	34.46	9.62	--	24.84	7,600	33	5.4	200	130	<5.0	0.9	SEQM	6.9	
07/22/2005	P	34.46	11.23	--	23.23	15,000	<10	<10	110	130	<10	--	SEQM	6.8	u
01/25/2006	P	34.46	8.75	--	25.71	8,300	8.4	4.8	130	120	<2.5	--	SEQM	7.3	u
7/6/2006	P	34.46	10.36	--	24.10	5,100	<2.5	<2.5	16	12	<2.5	--	TAMC	6.9	
1/8/2007	P	34.46	11.55	--	22.91	2700	4.6	0.66	35	27	2.1	1.83	TAMC	6.92	
7/10/2007	P	34.46	13.01	SHEEN	21.45	1,800	1.9	<0.50	13	4.8	2.4	2.16	TAMC	7.04	
1/15/2008	P	34.46	10.96	--	23.50	2,900	8.0	4.0	84	87	1.2	0.94	TAMC	7.13	
7/15/2008	P	34.46	13.82	--	20.64	3,200	<0.50	<0.50	8.5	4.8	<0.50	1.20	CEL	7.06	
10/21/2008	P	34.46	14.70	--	19.76	2,300	2.6	<0.50	5.4	2.4	<0.50	1.99	CEL	7.30	
1/6/2009	P	34.46	13.67	--	20.79	2,600	15	1.8	13	3.4	<0.50	0.67	CEL	6.90	
4/21/2009	P	34.46	12.31	--	22.15	1,500	2.0	<0.50	1.7	<0.50	<0.50	1.99	CEL	7.54	
7/21/2009	P	34.46	13.85	--	20.61	2,900	<0.50	<0.50	4.6	1.2	<0.50	6.20	CEL	7.43	y
3/18/2010	P	34.46	9.29	SHEEN	25.17	1,900	1.2	<0.50	5.2	2.7	<0.50	0.90	TAMC	6.89	
<b>7/29/2010</b>	<b>NP</b>	<b>34.46</b>	<b>12.63</b>	<b>--</b>	<b>21.83</b>	<b>1,600</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;5.0</b>	<b>&lt;2.5</b>	<b>0.48</b>	<b>TAMC</b>	<b>7.3</b>	
<b>MW-2</b>															
4/5/1991	--	35.50	16.62	--	18.88	<50	0.6	0.9	<0.3	<0.3	--	--	SUP	--	
4/1/1992	--	35.50	11.25	--	24.25	--	--	--	--	--	--	--	--	--	
4/2/1992	--	35.50	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	APP	--	
7/6/1992	--	35.50	12.72	--	22.78	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	
10/7/1992	--	35.50	15.08	--	20.42	<50	<0.5	1.8	<0.5	2.3	--	--	ANA	--	
1/14/1993	--	35.50	9.69	--	25.81	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	m
4/22/1993	--	35.50	10.46	--	25.04	<50	<0.5	<0.5	<0.5	<0.5	30	--	PACE	--	c
7/15/1993	--	35.50	12.02	--	23.48	<50	<0.5	<0.5	<0.5	<0.5	21.7	--	PACE	--	c, m
10/21/1993	--	35.50	13.12	--	22.38	<50	0.7	0.9	<0.5	0.9	14.9	--	PACE	--	m
1/27/1994	--	35.50	12.01	--	23.49	<50	0.6	<0.5	<0.5	<0.5	11.5	--	PACE	--	m
4/21/1994	--	35.50	10.60	--	24.90	<50	<0.5	<0.5	<0.5	<0.5	11.4	1.1	PACE	--	m
9/9/1994	--	35.50	12.42	--	23.08	<50	<0.5	<0.5	<0.5	0.6	--	2.2	PACE	--	m
12/21/1994	--	35.50	10.85	--	24.65	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.2	PACE	--	m
1/30/1995	--	35.50	8.38	--	27.12	<50	<0.50	<0.50	<0.50	<1.0	--	1.7	ATI	--	





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Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>MW-2 Cont.</b>															
02/05/2004	--	35.50	8.40	--	27.10	--	--	--	--	--	--	--	--	--	
07/01/2004	NP	35.50	9.94	--	25.56	--	--	--	--	--	--	--	--	--	
03/16/2005	P	35.50	8.39	--	27.11	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	SEQM	7.1	
07/22/2005	--	35.50	8.80	--	26.70	--	--	--	--	--	--	--	--	--	
01/25/2006	--	35.50	7.85	--	27.65	--	--	--	--	--	--	--	--	--	
7/6/2006	--	35.50	8.33	--	27.17	--	--	--	--	--	--	--	--	--	
1/8/2007	--	35.50	9.35	--	26.15	--	--	--	--	--	--	--	--	--	
7/10/2007	--	35.50	10.45	--	25.05	--	--	--	--	--	--	--	--	--	
1/15/2008	--	35.50	18.83	--	16.67	--	--	--	--	--	--	--	--	--	
7/15/2008	--	35.50	11.07	--	24.43	--	--	--	--	--	--	--	--	--	
10/21/2008	--	35.50	11.30	--	24.20	--	--	--	--	--	--	--	--	--	
1/6/2009	--	35.50	11.00	--	24.50	--	--	--	--	--	--	--	--	--	
4/21/2009	--	35.50	10.00	--	25.50	--	--	--	--	--	--	--	--	--	
7/21/2009	--	35.50	11.10	--	24.40	--	--	--	--	--	--	--	--	--	
3/18/2010	--	35.50	7.93	--	27.57	--	--	--	--	--	--	--	--	--	
<b>7/29/2010</b>	<b>--</b>	<b>35.50</b>	<b>10.31</b>	<b>--</b>	<b>25.19</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>MW-3</b>															
4/5/1991	--	36.53	17.84	--	18.69	<50	<0.3	<0.3	<0.3	<0.3	--	--	SUP	--	
4/1/1992	--	36.53	15.64	--	20.89	--	--	--	--	--	--	--	--	--	
4/2/1992	--	36.53	--	--	--	<50	1.4	<0.5	<0.5	<0.5	--	--	APP	--	
7/6/1992	--	36.53	19.03	--	17.50	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	
10/7/1992	--	36.53	21.83	--	14.70	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	
1/14/1993	--	36.53	15.96	--	20.57	350	<0.5	<0.5	<0.5	<0.5	714	--	PACE	--	c, m
4/22/1993	--	36.53	16.20	--	20.33	2,800	<0.5	<0.5	<0.5	<0.5	3,600	--	PACE	--	c, m
7/15/1993	--	36.53	16.82	--	19.71	1,400	1.2	<0.5	2	3.5	2,204	--	PACE	--	c, m
10/21/1993	--	36.53	18.84	--	17.69	370	2.1	2.3	2.3	6	847	--	PACE	--	c, m
1/27/1994	--	36.53	18.00	--	18.53	1,300	6.3	<0.5	<0.5	<0.5	3,892	--	PACE	--	c, m
4/21/1994	--	36.53	16.62	--	19.91	2,000	<0.5	<0.5	<0.5	<0.5	3,864	1.4	PACE	--	c, m
9/9/1994	--	36.53	18.38	--	18.15	1,300	<0.5	<0.5	0.5	1.2	--	3.0	PACE	--	m
12/21/1994	--	36.53	15.28	--	21.25	420	16	0.7	3.5	5.9	800	1.9	PACE	--	m

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Former BP Station #11133, 2220 98th Ave., Oakland, CA**

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>MW-3 Cont.</b>															
1/30/1995	--	36.53	12.62	--	23.91	<50	<0.50	<0.50	<0.50	<1.0	--	2.5	ATI	--	
4/10/1995	--	36.53	12.41	--	24.12	150	<0.50	<0.50	<0.50	<1.0	--	6.9	ATI	--	
6/29/1995	--	36.53	14.95	--	21.58	100	<0.50	<0.50	<0.50	<1.0	--	6.4	ATI	--	d (TPH-g)
9/18/1995	--	36.53	15.82	--	20.71	--	--	--	--	--	--	--	--	--	
9/19/1995	--	36.53	--	--	--	82	<0.50	<0.50	<0.50	<1.0	260	7.0	ATI	--	
12/7/1995	--	36.53	17.09	--	19.44	<50	<0.50	<0.50	<0.50	<1.0	91	4.5	ATI	--	
3/28/1996	--	36.53	11.90	--	24.63	<50	<0.5	<1	<1	<1	230	4.2	SPL	--	
6/20/1996	--	36.53	12.66	--	23.87	260	<0.5	<1	<1	<1	370	4.4	SPL	--	
10/11/1996	--	36.53	16.23	--	20.30	330	<0.5	<1.0	<1.0	<1.0	440	5.8	SPL	--	
1/2/1997	--	36.53	12.17	--	24.36	<50	<0.5	<1.0	<1.0	<1.0	140	6.0	SPL	--	
4/14/1997	--	36.53	13.45	--	23.08	--	--	--	--	--	--	--	--	--	
4/15/1997	--	36.53	--	--	--	1,500	<0.5	<1.0	<1.0	<1.0	1,800	5.6	SPL	--	
7/2/1997	--	36.53	15.60	--	20.93	880	<0.5	<1.0	<1.0	<1.0	940	5.3	SPL	--	
9/30/1997	--	36.53	17.16	--	19.37	40,000	13,000	2,400	870	3,100	510	6.6	SPL	--	
1/21/1998	--	36.53	11.77	--	24.76	120	<0.5	<1.0	<1.0	<1.0	98	4.7	SPL	--	
4/9/1998	--	36.53	9.42	--	27.11	950	<0.5	<1.0	<1.0	<1.0	890	5.7	SPL	--	
6/19/1998	--	36.53	15.28	--	21.25	1,800	<0.5	<1.0	<1.0	<1.0	1,900	4.7	SPL	--	
6/19/1998	--	36.53	12.09	--	24.44	1,800	<0.5	<1.0	<1.0	<1.0	1,900	4.7	SPL	--	
1/21/1999	--	36.53	14.67	--	21.86	1,100	<1.0	<1.0	<1.0	<1.0	1,200	--	SPL	--	
4/30/1999	--	36.53	16.00	--	20.53	--	--	--	--	--	--	--	--	--	
7/9/1999	--	36.53	14.64	--	21.89	470	<1.0	<1.0	<1.0	<1.0	460/470	--	SPL	--	g
11/3/1999	--	36.53	16.39	--	20.14	--	--	--	--	--	--	--	--	--	
1/12/2000	--	36.53	16.80	--	19.73	<50	<0.5	<0.5	<0.5	<0.5	34	--	PACE	--	
4/13/2000	--	36.53	16.43	--	20.10	--	--	--	--	--	--	--	--	--	
7/26/2000	--	36.53	16.93	--	19.60	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	PACE	--	
10/24/2000	--	36.53	15.69	--	20.84	--	--	--	--	--	--	--	--	--	
1/19/2001	--	36.53	14.84	--	21.69	<50	<0.5	<0.5	<0.5	1	25.9	--	PACE	--	
7/23/2001	--	36.53	15.11	--	21.42	62	<0.5	<0.5	<0.5	<1.5	28.7	--	PACE	--	
1/18/2002	--	36.53	12.37	--	24.16	<50	<0.5	<0.5	<0.5	<1.0	17.8	--	PACE	--	
8/1/2002	--	36.53	14.44	--	22.09	66	<0.5	<0.5	<0.5	<1.0	<0.5	--	PACE	--	
1/16/2003	--	36.53	12.07	--	24.46	<50	<0.50	<0.50	<0.50	<0.50	20	--	SEQ	--	p

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>MW-3 Cont.</b>															
7/7/2003	--	36.53	13.90	--	22.63	<50	<0.50	<0.50	<0.50	<0.50	8.8	--	SEQ	--	q
02/05/2004	--	36.53	12.60	--	23.93	<50	<0.50	<0.50	<0.50	<0.50	4.6	--	SEQM	7.0	
07/01/2004	--	36.53	14.57	--	21.96	<50	<0.50	<0.50	<0.50	<0.50	3.3	--	SEQM	--	
03/16/2005	P	36.53	11.03	--	25.50	<50	<0.50	<0.50	<0.50	<0.50	4.4	1.5	SEQM	6.8	
07/22/2005	P	36.53	12.68	--	23.85	<50	<0.50	<0.50	<0.50	<0.50	4.1	--	SEQM	6.8	
01/25/2006	P	36.53	11.35	--	25.18	81	<0.50	<0.50	<0.50	<0.50	3.0	--	SEQM	6.9	
7/6/2006	P	36.53	11.47	--	25.06	<50	<0.50	<0.50	<0.50	<0.50	3.0	--	TAMC	6.9	
1/8/2007	P	36.53	12.92	--	23.61	<50	<0.50	<0.50	<0.50	<0.50	3.2	2.87	TAMC	7.12	
7/10/2007	P	36.53	14.46	--	22.07	<50	<0.50	<0.50	<0.50	<0.50	2.8	2.87	TAMC	7.25	
1/15/2008	P	36.53	12.99	--	23.54	<50	<0.50	<0.50	<0.50	<0.50	0.88	1.04	TAMC	7.10	
7/15/2008	P	36.53	15.30	--	21.23	<50	<0.50	<0.50	<0.50	<0.50	1.3	1.60	CEL	7.06	
10/21/2008	P	36.53	16.30	--	20.23	<50	<0.50	<0.50	<0.50	<0.50	0.94	2.21	CEL	7.28	
1/6/2009	P	36.53	15.45	--	21.08	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.02	CEL	6.43	
4/21/2009	P	36.53	13.90	--	22.63	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.26	CEL	7.59	
7/21/2009	P	36.53	15.28	--	21.25	<50	<0.50	<0.50	<0.50	<0.50	0.60	15.16	CEL	7.43	y
3/18/2010	P	36.53	11.65	--	24.88	<50	<0.50	<0.50	<0.50	<1.0	<0.50	0.73	TAMC	7.05	
<b>7/29/2010</b>	<b>NP</b>	<b>36.53</b>	<b>13.96</b>	<b>--</b>	<b>22.57</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50</b>	<b>1.12</b>	<b>TAMC</b>	<b>7.8</b>	
<b>QC-2</b>															
10/7/1992	--	37.73	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	i
1/14/1993	--	37.73	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	i, m
4/22/1993	--	37.73	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	i, m
7/15/1993	--	37.73	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	PACE	--	i, m
10/21/1993	--	37.73	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	i
1/27/1994	--	37.73	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	i
4/21/1994	--	37.73	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	i
9/9/1994	--	37.73	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	i
12/21/1994	--	37.73	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	i
1/30/1995	--	37.73	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	ATI	--	i
4/10/1995	--	37.73	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	ATI	--	i
6/27/1995	--	37.73	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	ATI	--	i



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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>RW-1 Cont.</b>															
4/10/1998	--	37.73	--	--	--	220,000	26,000	46,000	4,400	24,500	<2500	5.1	SPL	--	
6/19/1998	--	37.73	11.43	--	26.30	180,000	19,000	32,000	3,000	17,400	<2500	4.6	SPL	--	
11/30/1998	--	37.73	7.87	--	29.86	--	--	--	--	--	--	--	--	--	
1/21/1999	--	37.73	18.90	--	18.83	260,000	24,000	46,000	5,100	30,000	1,700	--	SPL	--	
7/9/1999	--	37.73	18.58	--	19.15	--	--	--	--	--	--	--	--	--	
11/3/1999	--	37.73	20.85	--	16.88	160,000	19,000	37,000	3,800	25,000	1,500	--	PACE	--	
1/12/2000	--	37.73	21.20	--	16.53	240,000	18,000	46,000	5,800	26,000	2,100	--	PACE	--	
4/13/2000	--	37.73	21.71	--	16.02	120,000	2,100	33,000	2,800	28,000	1,500	--	PACE	--	
5/24/2000	--	37.73	21.89	--	15.84	--	--	--	--	--	--	--	--	--	
6/1/2000	--	37.73	16.30	--	21.43	--	--	--	--	--	--	--	--	--	
6/8/2000	--	37.73	17.88	--	19.85	--	--	--	--	--	--	--	--	--	
6/15/2000	--	37.73	16.72	--	21.01	--	--	--	--	--	--	--	--	--	
6/20/2000	--	37.73	21.04	--	16.69	--	--	--	--	--	--	--	--	--	
7/7/2000	--	37.73	17.21	--	20.52	--	--	--	--	--	--	--	--	--	
7/20/2000	--	37.73	21.87	--	15.86	--	--	--	--	--	--	--	--	--	
7/26/2000	--	37.73	21.45	--	16.28	67,000	160	5,300	2,100	18,000	1,100	--	PACE	--	
7/31/2000	--	37.73	22.11	--	15.62	--	--	--	--	--	--	--	--	--	
8/8/2000	--	37.73	17.80	--	19.93	--	--	--	--	--	--	--	--	--	
8/16/2000	--	37.73	17.92	--	19.81	--	--	--	--	--	--	--	--	--	
8/23/2000	--	37.73	18.11	--	19.62	--	--	--	--	--	--	--	--	--	
10/24/2000	--	37.73	18.93	--	18.80	--	--	--	--	--	--	--	--	--	
10/25/2000	--	37.73	19.04	--	18.69	360,000	18,000	78,000	34,000	180,000	2,100	--	PACE	--	k
1/19/2001	--	37.73	18.19	--	19.54	110,000	9,450	19,600	3,510	21,100	1,270	--	PACE	--	
7/24/2001	--	37.73	17.93	--	19.80	--	--	--	--	--	--	--	--	--	l
1/18/2002	--	37.73	14.87	--	22.86	63,000	2,060	4,370	1,770	13,900	491	--	PACE	--	
8/1/2002	--	37.73	16.84	--	20.89	60,000	1,210	2,200	1,520	10,600	390	--	PACE	--	
1/16/2003	--	37.73	14.42	--	23.31	34,000	2,500	2,700	780	5,300	680	--	SEQ	--	p
7/7/2003	--	37.73	16.11	--	21.62	50,000	640	280	1,600	10,000	<250	--	SEQ	--	q, u
07/01/2004	P	37.73	16.75	--	20.98	47,000	320	87	1,900	7,500	72	--	SEQM	6.7	
03/16/2005	P	37.73	12.48	--	25.25	17,000	28	23	350	590	53	1.0	SEQM	6.8	
07/22/2005	P	37.73	14.40	--	23.33	5,900	50	35	120	220	51	--	SEQM	6.7	u









**Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses**  
**Former BP Station #11133, 2220 98th Ave., Oakland, CA**

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
<b>VW-3</b>															
1/15/2008	--	--	2.08	--	--	--	--	--	--	--	--	--	--	--	--
7/15/2008	--	--	4.10	--	--	--	--	--	--	--	--	--	--	--	--
10/21/2008	--	--	4.95	--	--	--	--	--	--	--	--	--	--	--	--
1/6/2009	--	--	5.40	--	--	--	--	--	--	--	--	--	--	--	--
4/21/2009	--	--	4.57	--	--	--	--	--	--	--	--	--	--	--	--
7/21/2009	--	--	5.22	--	--	--	--	--	--	--	--	--	--	--	--
3/18/2010	--	--	5.42	--	--	--	--	--	--	--	--	--	--	--	--
7/29/2010	--	--	5.60	--	--	--	--	--	--	--	--	--	--	--	--
<b>IW-3</b>															
11/12/2010	--	--	--	--	--	1,000	5.8	2.9	8.3	8.5	2.5	--	--	--	--

#### ABBREVIATIONS & SYMBOLS:

-- = Not analyzed/applicable/measured/available  
< = Not detected at or above specified laboratory reporting limit  
DO = Dissolved oxygen  
DTW = Depth to water in ft bgs  
ft bgs = Feet below ground surface  
ft MSL = Feet above mean sea level  
GRO = Gasoline range organics  
GWE = Groundwater elevation in ft MSL  
mg/L = Milligrams per liter  
MTBE = Methyl tert-butyl ether  
NP = Well not purged prior to sampling  
P = Well purged prior to sampling  
TOC = Top of casing in ft MSL  
TPH-g = Total petroleum hydrocarbons as gasoline  
µg/L = Micrograms per liter  
ANA = Anametrix, Inc.  
PACE = Pace, Inc.  
ATI = Analytical Technologies, Inc.  
CEI = Ceimic Corporation  
SPL = Southern Petroleum Laboratories  
SEQ/SEQM = Sequoia Analytical/Sequoia Analytical Morgan Hill Laboratories  
CEL = CalScience Environmental Laboratories, Inc.

#### FOOTNOTES:

a = Mud in well.  
b = Well full of water.  
c = A copy of the documentation for this data is included in Appendix C of Alistoreport 10-025-13-003.  
d = MTBE peak. See documentation in Appendix C of Alisto report 10-025-13-003.  
e = Blind duplicate.  
f = Well inaccessible.  
g = EPA Methods 8020/8260 used.  
h = Well not monitored and/or sampled due to vapor extraction system.  
i = Travel blank.  
j = This gasoline does not include MTBE.  
k = Well was sampled on a different date from the other wells due to lack of proper equipment.  
l = Unable to sample due to nature of product.  
m = A copy of the documentation for this data is included in Blaine Tech Services, Inc., Report 010724-B-2. The data for sampling events January 14, 1993 and April 22, 1993 has been destroyed. No chromatograms could be located for samples AW-2 on January 27, 1994, and for samples AW-1, AW-2, AW-3, AW-4, AW-5, AW-6, AW-7, AW-8, MW-2 and MW-3 on September 9, 1994.  
n = On June 1, 2001, after reviewing chromatograms, Sequoia reported the value as <5.0.  
o = Unable to locate well.  
p = TPH-g data analyzed by EPA Method 8015B modified; BTEX and MTBE by EPA Method 8021B  
q = TPH-g, BTEX, and MTBE analyzed by EPA method 8260B beginning on the third quarter 2003 sampling event 07/07/03.  
r = Discrete peak at C5.  
t = Well was not gauged during the quarter due to an oversight by the technician.  
u = Sheen in well.  
v = Well was dry.  
w = Hydrocarbon result partly due to individ. peak(s) in quant. range.  
x = Sample taken from VOA vial with air bubble > 6mm diameter.  
y = DO value suspect.

#### NOTES:

Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. TPH-g was changed to GRO. The resulting data may be impacted by the potential of non-TPH-g analytes within the requested fuel range resulting in a higher concentration being reported.

Beginning in the second quarter 2004, the carbon range for GRO was changed from C6-C10 to C4-C12.

Values for DO and pH were obtained through field measurements.

GWEs adjusted assuming a specific gravity of 0.75 for free product

GRO analysis was completed by EPA method 8260B (C4-C12) for samples collected from the time period April 2006 through February 4, 2008. The analysis for GRO was changed to EPA method 8015B (C6-C12) for samples collected from the time period February 5, 2008 through the present.

Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.



**Table 2. Summary of Fuel Additives Analytical Data  
Former BP Station #11133, 2220 98th Ave., Oakland, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>AW-3</b>									
03/16/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>AW-4</b>									
7/7/2003	<1,000	<200	56	<5.0	<5.0	<5.0	--	--	
02/05/2004	<200	<40	40	<1.0	<1.0	3.7	<1.0	<1.0	
07/01/2004	<1,000	<200	64	<5.0	<5.0	9.6	<5.0	<5.0	
03/16/2005	<500	<100	23	<2.5	<2.5	<2.5	<2.5	<2.5	
07/22/2005	<2,000	<400	59	<10	<10	<10	<10	<10	
01/25/2006	<3,000	<200	12	<5.0	<5.0	<5.0	<5.0	<5.0	
7/6/2006	<3,000	<5.0	39	<5.0	<5.0	<5.0	<5.0	<5.0	
1/8/2007	<300	<20	38	<0.50	<0.50	6.2	<0.50	--	
7/10/2007	<300	<20	27	<0.50	<0.50	4.2	<0.50	<0.50	
1/15/2008	<300	<20	17	<0.50	<0.50	2.3	<0.50	<0.50	
7/15/2008	<300	<10	25	<0.50	<0.50	3.4	<0.50	<0.50	
10/21/2008	<600	<20	18	<1.0	<1.0	1.9	<1.0	<1.0	
1/6/2009	<300	<10	8.3	<0.50	<0.50	0.81	<0.50	<0.50	
4/21/2009	<300	<10	4.1	<0.50	<0.50	<0.50	<0.50	<0.50	
7/21/2009	<300	<10	8.6	<0.50	<0.50	0.89	<0.50	<0.50	
3/18/2010	<100	<4.0	2.5	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>7/29/2010</b>	<b>&lt;100</b>	<b>&lt;4.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>0.57</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	
<b>AW-5</b>									
7/7/2003	<2,000	1,200	980	<10	<10	210	--	--	
02/05/2004	<2,000	1,200	810	<10	<10	160	<10	<10	
07/01/2004	<1,000	1,600	550	<5.0	<5.0	94	<5.0	<5.0	
03/16/2005	<10,000	2,100	890	<50	<50	190	<50	<50	
07/22/2005	<1,000	370	390	<5.0	<5.0	78	<5.0	<5.0	
01/25/2006	<3,000	580	26	<5.0	<5.0	5.2	<5.0	<5.0	
7/6/2006	<3,000	240	170	<5.0	<5.0	37	<5.0	<5.0	
1/8/2007	<1500	240	220	<2.5	<2.5	51	<2.5	--	
7/10/2007	<1,500	110	360	<2.5	<2.5	92	<2.5	<2.5	



**Table 2. Summary of Fuel Additives Analytical Data**  
**Former BP Station #11133, 2220 98th Ave., Oakland, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>MW-1</b>									
7/7/2003	<1,000	<200	24	<5.0	<5.0	<5.0	--	--	
02/05/2004	<1,000	<200	9.2	<5.0	<5.0	<5.0	<5.0	<5.0	
07/01/2004	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
03/16/2005	<1,000	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
07/22/2005	<2,000	<400	<10	<10	<10	<10	<10	<10	
01/25/2006	<1,500	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
7/6/2006	<1,500	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
1/8/2007	<300	<20	2.1	<0.50	<0.50	<0.50	<0.50	--	
7/10/2007	<300	<20	2.4	<0.50	<0.50	<0.50	<0.50	<0.50	
1/15/2008	<300	<20	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	
7/15/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/21/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1/6/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
4/21/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
7/21/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
3/18/2010	<100	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>7/29/2010</b>	<b>&lt;500</b>	<b>&lt;20</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	<b>&lt;2.5</b>	
<b>MW-2</b>									
03/16/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>MW-3</b>									
7/7/2003	<100	<20	8.8	<0.50	<0.50	0.65	--	--	
02/05/2004	<100	<20	4.6	<0.50	<0.50	<0.50	<0.50	<0.50	
07/01/2004	<100	<20	3.3	<0.50	<0.50	<0.50	<0.50	<0.50	
03/16/2005	<100	<20	4.4	<0.50	<0.50	<0.50	<0.50	<0.50	
07/22/2005	<100	<20	4.1	<0.50	<0.50	<0.50	<0.50	<0.50	
01/25/2006	<300	<20	3.0	<0.50	<0.50	<0.50	<0.50	<0.50	
7/6/2006	<300	<50	3.0	<0.50	<0.50	<0.50	<0.50	<0.50	
1/8/2007	<300	<20	3.2	<0.50	<0.50	<0.50	<0.50	--	
7/10/2007	<300	<20	2.8	<0.50	<0.50	<0.50	<0.50	<0.50	







ABBREVIATIONS & SYMBOLS:

-- = Not analyzed/applicable/measured/available

< = Not detected at or above specified laboratory reporting limit

1,2-DCA = 1,2-Dichloroethane

DIPE = Di-isopropyl ether

EDB = 1,2-Dibromoethane

ETBE = Ethyl tert-butyl ether

MTBE = Methyl tert-butyl ether

TAME = tert-Amyl methyl ether

TBA = tert-Butyl alcohol

µg/L = Micrograms per Liter

FOOTNOTES:

a = Calibration verification for ethanol is within method limits but outside contractual limits.

b = Sample taken from VOA vial with air bubble > 6mm diameter.

NOTES:

All volatile organic compounds analyzed using EPA Method 8260B.

Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

**Table 3. Bio-Degradation Parameters**  
**Former BP Station #11133, 2220 98th Ave., Oakland, CA**

Well and Sample Date	pH	ORP (mV)	Total Alkalinity (µg/L)	DO (mg/L)	Nitrate NO3 (µg/L)	Sulfate SO4 (µg/L)	Soluble Sulfide (µg/L)	CO2 (µg/L)	Methane (µg/L)	Manganese (µg/L)	Ferrous Iron (mg/L)	Comments
<b>AW-1</b>												
3/16/2005	6.7	-10	420,000	0.8	<500	580	<1,000	81,400	3,290	6,500	3.4	
1/15/2008	6.91	-58	410,000	0.92	<500	1,900	<1,000	190,000	3,200	6,400	3.2	a, b
7/15/2008	6.79	-96.5	488,000	6.0	<100	<1,000	<1,000	400,000	2,090	7,200	6.0	
10/21/2008	7.01	-130.1	498,000	2.40	<100	2,500	<50	178,000	381	8,080	2.0	b, c
1/6/2009	6.09	-128	446,000	1.39	<100	1,400	<50	190,000	593	7,810	3.0	
4/21/2009	7.28	-126.7	456,000	2.29	<100	1,800	<50	189,000	1,650	7,070	3.6	
7/21/2009	7.23	-137.6	480,000	17.46	<100	1,800	<50	278,000	1,920	7,640	2.9	a, e
3/18/2010	6.57	-38	--	0.68	--	--	--	--	--	--	--	
<b>AW-2</b>												
1/15/2008	6.79	-88	190,000	0.83	4,400	21,000	<1,000	52,000	210	1,100	<0.5	a
7/15/2008	7.05	-190.1	168,000	2.14	440	38,000	<50	100,000	7.42	1,570	0.5	
10/21/2008	7.33	-47.2	176,000	1.65	890	36,000	<50	24,200	111	1,130	0.5	c, d
1/6/2009	6.94	129	168,000	0.84	390	22,000	<50	28,100	50.4	996	0.6	
4/21/2009	7.42	53.3	162,000	1.89	860	22,000	<50	37,600	209	1,240	0.39	
7/21/2009	7.32	97.3	144,000	9.29	160	29,000	<50	38,200	174	630	0.1	a, e
<b>AW-4</b>												
3/16/2005	6.5	10	310,000	0.6	<500	71,000	<1,000	54,200	585	5,600	1.4	
1/15/2008	6.75	-91	390,000	1.30	<500	82,000	<1,000	120,000	610	5,000	1.5	a, b
7/15/2008	6.91	-90.0	598,000	2.64	<100	47,000	<50	354,000	777	7,110	6.0	
10/21/2008	7.25	-123.3	510,000	1.54	<100	61,000	<50	101,000	75.3	8,440	3.0	c, d
1/6/2009	6.31	-29	400,000	0.70	<100	78,000	<50	76,400	148	6,330	0.5	
4/21/2009	7.48	-102.9	328,000	3.51	<100	83,000	<50	77,500	330	4,880	3.4	
7/21/2009	7.04	-159.9	414,000	6.14	<100	68,000	<50	75,300	638	7,340	2.5	a, e
3/18/2010	6.71	-57	--	0.79	--	--	--	--	--	--	--	
<b>AW-5</b>												
1/15/2008	6.82	-101	230,000	0.90	<500	12,000	<1,000	79,000	120	2,300	1.4	a
7/15/2008	6.85	-97.9	238,000	2.13	<100	12,000	<50	161,000	9.29	2,560	0.5	
10/21/2008	7.10	-84.9	216,000	1.01	<100	14,000	<50	57,800	59.8	1,680	0.5	c, d
1/6/2009	6.22	-79	224,000	0.70	<100	13,000	<50	52,400	106	2,920	0.5	

**Table 3. Bio-Degradation Parameters**  
**Former BP Station #11133, 2220 98th Ave., Oakland, CA**

Well and Sample Date	pH	ORP (mV)	Total Alkalinity (µg/L)	DO (mg/L)	Nitrate NO3 (µg/L)	Sulfate SO4 (µg/L)	Soluble Sulfide (µg/L)	CO2 (µg/L)	Methane (µg/L)	Manganese (µg/L)	Ferrous Iron (mg/L)	Comments
<b>AW-5 Cont.</b>												
4/21/2009	7.35	-43.8	216,000	2.09	<100	10,000	<50	57,700	142	2,710	1.5	
7/21/2009	7.14	-139.1	226,000	6.50	<100	9,300	<50	63,700	91.3	2,430	1.1	a, e
3/18/2010	6.64	--	--	0.74	--	--	--	--	--	--	--	
<b>AW-6</b>												
1/15/2008	6.80	-94	150,000	0.58	<500	21,000	<1,000	41,000	50	1,200	<0.1	a
7/15/2008	6.87	-40.8	160,000	2.12	<100	23,000	<50	163,000	1.27	1,370	0.0	
10/21/2008	7.19	-33.9	152,000	1.01	<100	20,000	<50	39,400	104	1,290	0.5	c, d
1/6/2009	6.23	-25	156,000	0.94	<100	21,000	<50	37,500	69.1	1,360	0.5	
4/21/2009	7.38	35.0	166,000	4.29	<100	17,000	<50	46,600	1.12	167	<0.1	
7/21/2009	7.09	-39.9	168,000	10.79	<100	16,000	<50	39,100	127	2,050	<0.1	a, e
3/18/2010	6.75	-32	--	0.68	--	--	--	--	--	--	--	
<b>MW-1</b>												
3/16/2005	6.9	-175	310,000	0.9	<500	13,000	<1,000	49,900	4,550	7,700	2.7	
1/15/2008	7.13	-150	320,000	0.94	<500	51,000	<1,000	67,000	2,900	8,100	1.3	a
7/15/2008	7.06	-174.7	326,000	1.20	<100	50,000	<50	29,200	1,090	8,390	0.5	
10/21/2008	7.30	-200.0	360,000	1.99	<100	27,000	<50	18,700	303	8,050	4.0	c
1/6/2009	6.90	225	368,000	0.69	<100	59,000	<50	21,300	277	10,100	1.6	
4/21/2009	7.54	-196.9	326,000	1.99	<100	90,000	<50	59,300	839	8,540	1.7	
7/21/2009	7.43	-208.3	320,000	6.20	<100	120,000	<50	67,200	1,120	9,250	0.46	a, e
3/18/2010	6.89	-70	--	0.90	--	--	--	--	--	--	--	
<b>MW-2</b>												
3/16/2005	7.1	30	85,000	1.3	5,300	38,000	<1,000	7,370	<1.0	2,200	0.7	
<b>MW-3</b>												
1/15/2008	7.10	-128	130,000	1.04	2,500	44,000	<1,000	29,000	<1.0	120	<0.1	a
7/15/2008	7.06	-47.6	112,000	1.60	820	78,000	<50	29,000	<1.0	61.8	0.5	
10/21/2008	7.28	-120.6	92,000	2.21	640	52,000	<50	15,400	<1.0	19.3	0.5	c
1/6/2009	6.43	-22	94,000	1.02	420	38,000	<50	14,000	<1.0	25.5	0.0	
4/21/2009	7.59	-119.9	108,000	2.26	360	44,000	<50	22,400	<1.0	46.9	<0.1	

**Table 3. Bio-Degradation Parameters**  
**Former BP Station #11133, 2220 98th Ave., Oakland, CA**

Well and Sample Date	pH	ORP (mV)	Total Alkalinity (µg/L)	DO (mg/L)	Nitrate NO3 (µg/L)	Sulfate SO4 (µg/L)	Soluble Sulfide (µg/L)	CO2 (µg/L)	Methane (µg/L)	Manganese (µg/L)	Ferrous Iron (mg/L)	Comments
<b>MW-3 Cont.</b>												
7/21/2009	7.43	-35.5	116,000	15.16	970	48,000	<50	20,900	<1.0	153	<0.1	a, e
3/18/2010	7.05	-50	--	0.73	--	--	--	--	--	--	--	
<b>RW-1</b>												
1/15/2008	6.82	-143	350,000	1.31	<500	5,000	<1,000	110,000	1,100	6,100	1.8	a
7/15/2008	6.95	-239.9	358,000	1.32	<100	21,000	<50	212,000	212	7,030	0.5	
10/21/2008	7.17	-188.4	352,000	0.79	<100	10,000	<50	73,500	1,350	6,840	1.0	b, c
1/6/2009	6.43	-279	322,000	0.30	<100	13,000	<50	64,700	279	6,410	1.0	
4/21/2009	7.38	-159.1	370,000	0.86	<100	5,200	100	77,400	1,270	6,790	0.67	
7/21/2009	7.35	-252.5	356,000	13.21	<100	30,000	<50	62,800	479	7,380	0.13	a, e
3/18/2010	6.73	-102	--	0.74	--	--	--	--	--	--	--	
<b>VEW-4</b>												
1/15/2008	6.99	-36	210,000	0.54	3,000	31,000	<1,000	50,000	840	880	<0.5	a
7/15/2008	6.95	-29	254,000	0.59	<100	22,000	<50	90,900	174	2,150	2.0	
4/21/2009	7.41	-110.1	254,000	1.99	<100	13,000	<50	44,700	365	2,800	0.2	
7/21/2009	7.24	-40.3	254,000	8.99	<100	24,000	<50	41,100	2.07	891	<0.1	a, e

ABBREVIATIONS AND SYMBOLS:

<= Not detected at or above specified laboratory reporting limit

ORP = Oxygen reduction potential

DO = Dissolved oxygen

CO<sub>2</sub> = Carbon dioxide

mV = Millivolts

µg/L = Micrograms per liter

mg/L = Milligrams per liter

FOOTNOTES:

a = Sample received after holding time expired for soluble sulfide and ferrous iron analyses

b = Sample analyzed after holding time expired for nitrate analysis

c = Sample received after holding time expired for dissolved sulfide analysis

d = Sample received after holding time expired for nitrate analysis

e = DO value suspect

Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

