



ARCADIS U.S., Inc.  
100 Montgomery Street, Suite 300  
San Francisco, California 94104  
Tel 415.374.2744  
Fax 415.374.2745  
[www.arcadis-us.com](http://www.arcadis-us.com)

Re: Third Quarter 2011 Monitoring Report  
Former BP Station #11133  
2220 98<sup>th</sup> Avenue  
Oakland, California  
ACEH Case #RO0000403

**RECEIVED**

**9:41 am, Nov 01, 2011**

Alameda County  
Environmental Health

**ENVIRONMENTAL**

"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:  
10/31/2011

Submitted by:  
ARCADIS U.S., Inc.

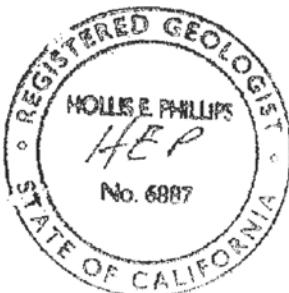
Hollis E. Phillips, PG  
Project Manager

Contact:  
Hollis E. Phillips

Phone:  
415.374.2744 ext 13

Email:  
[Hollis.phillips@arcadis-us.com](mailto:Hollis.phillips@arcadis-us.com)

Our ref:  
GP09BPNA.C107



Imagine the result

Prepared for

Ms. Hollis Phillips, PG  
Senior Geologist  
ARCADIS-US, Inc.  
100 Montgomery Street, Ste. 300  
San Francisco, California 94104

On behalf of

Atlantic Richfield Company  
PO Box 1257  
San Ramon, California 94583

Prepared by



**Third Quarter 2011 Monitoring Report**

Former BP Station #11133  
2220 98<sup>th</sup> Avenue, Oakland, California  
ACEH Case #RO0000403

875 Cotting Lane, Suite G  
Vacaville, California 95688  
(707) 455-7290  
[www.broadbentinc.com](http://www.broadbentinc.com)

October 31, 2011

Project No. 09-88-656

Broadbent & Associates, Inc.  
875 Cotting Ln., Suite G  
Vacaville, CA 95688  
(707) 455-7290 Tel  
(707) 455-7295 Fax



October 31, 2011

Project No. 09-88-656

ARCADIS-US, INC.  
100 Montgomery Street, Ste. 300  
San Francisco, CA 94104

Attn.: Ms. Hollis Phillips, PG

Re: Third Quarter 2011 Monitoring Report, Former BP Service Station #11133, 2220  
98<sup>th</sup> Avenue, Oakland, Alameda County, California; ACEH Case #RO0000403

Dear Ms. Phillips:

Attached is the Third Quarter 2011 Monitoring Report for Former BP Service Station #11133 located at 2220 98<sup>th</sup> Avenue in Oakland, California. Should you have questions regarding the work performed or results obtained, please do not hesitate to contact us at (707) 455-7290.

Sincerely,  
BROADBENT & ASSOCIATES, INC.

A handwritten signature in blue ink, appearing to read "Samuel W. Barkley".

Samuel W. Barkley  
Senior Staff Geologist

A handwritten signature in blue ink, appearing to read "Thomas A. Sparrowe".

Thomas A. Sparrowe, P.G.  
Senior Geologist



Enclosures

cc: Mr. Paresh Khatri, Alameda County Environmental Health (submitted via ACEH ftp site)  
Electronic copy uploaded to GeoTracker

**THIRD QUARTER 2011  
MONITORING REPORT  
FORMER BP SERVICE STATION #11133, OAKLAND, CALIFORNIA**

Broadbent & Associates, Inc. (BAI) is pleased to present this *Third Quarter 2011 Monitoring Report* on behalf of ARCADIS-US, Inc. and Atlantic Richfield Company (a BP affiliated company) for Former BP Service Station #11133 located in Oakland, Alameda County, California. Monitoring activities at the site were performed in accordance with the reporting requirements issued by the Alameda County Environmental Health Services Agency (ACEH). Details of work performed, discussion of results, and recommendations are provided below.

Facility Name / Address:	Former BP Service Station #11133 / 2220 98 <sup>th</sup> Avenue, Oakland, CA
Client Project Manager / Title:	Ms. Hollis Phillips, PG
BAI Contact:	Sam Barkley & Tom Sparrowe, (707) 455-7290
BAI Project No.:	09-88-656
Primary Regulatory Agency / ID No.:	ACEH / Case #RO0000403
Current phase of project:	Monitoring
List of Acronyms / Abbreviations:	See end of report text for list of acronyms/abbreviations used in report.

**WORK PERFORMED THIS QUARTER (Third Quarter 2011):**

- Conducted groundwater monitoring/sampling for Third Quarter 2011 on July 14, 2011.

**WORK SCHEDULED FOR NEXT QUARTER (Fourth Quarter 2011):**

- Submit *Third Quarter 2011 Monitoring Report* (contained herein).
- No environmental work is scheduled for Fourth Quarter 2011.

**ADDITIONAL WORK RECOMMENDED FOR NEXT QUARTER (Fourth Quarter 2011)**

- None.

**GROUNDWATER MONITORING PLAN SUMMARY:**

Groundwater level gauging:	All wells	(Semi-Annually: 1Q & 3Q)
Groundwater sample collection:	MW-1,MW-3,AW-1,AW-4,AW-5, AW-6, & RW-1 AW-2	(Semi-Annually: 1Q & 3Q) (Annually: 3Q)
Biodegradation indicator parameter monitoring:	DO, pH, Total Alkalinity, NO <sub>3</sub> , SO <sub>4</sub> , Soluble Sulfide, CO <sub>2</sub> , CH <sub>4</sub> , Fe <sup>2+</sup> , Mn <sup>2+</sup>	

**QUARTERLY RESULTS SUMMARY:**

**LNAPL**

LNAPL observed this quarter:	None	
LNAPL recovered this quarter:	None	(gal)
Cumulative LNAPL recovered:	None	(gal)

**Groundwater Elevation and Gradient:**

Depth to groundwater:	1.99 VW-2 to 16.70 AW-5	(ft below TOC)
Gradient direction:	West	(compass direction)
Gradient magnitude:	0.01	(ft/ft)
Average change in elevation:	- 0.79	(ft since last measurement)

**Laboratory Analytical Data**

Summary:	GRO was detected in AW-4, MW-1 and RW-1. Ethylbenzene was detected in AW-1 and AW-4. MTBE was detected in AW-1, AW-4, AW-5, AW-6, and RW-1. TBA was detected in AW-1, AW-5, RW-1. Total Xylenes was detected in AW-1, AW-4, and RW-1. TAME was detected in AW-1, AW-6, and AW-4. Benzene was detected in AW-4, AW-1, and RW-1. Other petroleum hydrocarbon constituents were below detection levels.
----------	--

## ACTIVITIES CONDUCTED & RESULTS:

Third Quarter 2011 groundwater monitoring was conducted on July 14, 2011 by BAI personnel in accordance with the monitoring plan summary detailed above. Well AW-7 was not monitored due to not being able to be located within the thick bushes in the Bancroft Avenue center-divide. Depth to water measurements ranged from 1.99 ft at VW-2 to 16.70 ft at AW-5. Resulting groundwater surface elevations ranged from 21.81 ft at AW-5 to 26.60 ft at MW-2. Groundwater elevations are summarized in Table 1. Water level elevations yielded a potentiometric groundwater gradient to the west at approximately 0.01 ft/ft. Field methods used during groundwater monitoring are provided in Appendix A. Field data sheets are included in Appendix B. A Site Location Map is presented as Drawing 1. Potentiometric groundwater elevation contours are presented in Drawing 2.

Groundwater samples were collected on July 14, 2011, consistent with the current monitoring schedule. No irregularities were reported during sampling. Samples were submitted under chain-of-custody protocol to TestAmerica Laboratories, Inc. (TestAmerica) of Pleasanton, California for analysis of Gasoline-Range Organics (GRO, C6-C12) by EPA Method 8015M; for Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX), Methyl Tertiary Butyl Ether (MTBE), Ethyl Tertiary Butyl Ether (ETBE), Tert-Amyl Methyl Ether (TAME), Di-Isopropyl Ether (DIPE), 1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA), Tert-Butyl Alcohol (TBA) and Ethanol by EPA Method 8260. Additionally, certain inorganic compounds which are biodegradation indicator parameters were monitored for well AW-2 to evaluate intrinsic bioremediation in groundwater. Indicator parameters monitored include the following: Total Alkalinity, Dissolved Oxygen (DO), Oxidation Reduction Potential (ORP), Dissolved Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Ferrous Iron (Fe<sup>2+</sup>), Manganese (Mn<sup>2+</sup>), Nitrate (NO<sub>3</sub>), Dissolved Sulfide (SO<sub>3</sub>) and Sulfate (SO<sub>4</sub>). Temperature, pH, DO, and ORP were measured in the field. Fe<sup>2+</sup>, alkalinity, SO<sub>3</sub>, CO<sub>2</sub>, CH<sub>4</sub>, Mn<sup>2+</sup>, NO<sub>3</sub> and SO<sub>4</sub> were submitted to TestAmerica for analysis. There were no significant irregularities except for the laboratory reported that the sample for SO<sub>3</sub> from well AW-2 was received and analyzed past holding time. The laboratory analytical report, including chain-of-custody documentation, is provided in Appendix C.

Hydrocarbons in the GRO range were detected above the laboratory reporting limit in four wells sampled at concentrations up to 1,600 µg/L in AW-1. Benzene was detected above the laboratory reporting limit in three wells sampled at concentrations up to 35 µg/L in AW-1. Ethylbenzene was detected above the laboratory reporting limit in two of the wells sampled at a concentration of 92 µg/L in AW-1. Total Xylenes were detected above the laboratory reporting limit in three wells sampled at concentrations up to 6.8 µg/L in well AW-1. MTBE was detected above the laboratory reporting limit in five wells sampled at concentrations up to 47 µg/L in AW-6. TBA was detected above the laboratory reporting limit in three of the wells sampled at concentrations up to 20 µg/L in RW-1. TAME was detected above the laboratory reporting limit in three wells sampled at concentrations up to 9.8 µg/L in AW-6. The remaining analytes were not detected above their laboratory reporting limits in the wells sampled this last monitoring event.

The resulting laboratory analysis of the inorganic compounds for well AW-2 are as follows: CO<sub>2</sub> was detected at a concentration of 26 mg/L; CH<sub>4</sub> was detected at a concentration of 0.0010 mg/L; SO<sub>4</sub> was detected at a concentration of 26 mg/L; Mn<sup>2+</sup> was detected at a concentration of 0.19 mg/L; and Total Alkalinity was measured at 100 mg/L; SO<sub>3</sub> and NO<sub>3</sub> were not detected in well AW-2. The pH readings of the seven wells sampled ranged between 6.98 and 7.28. The DO readings of the seven wells sampled ranged from 0.57 mg/L to 1.46 mg/L. The ORP readings of the seven wells sampled ranged from -50 mV to 82 mV.

Groundwater monitoring laboratory analytical results are summarized in Table 1 and Table 2. The results of the laboratory analysis of the inorganic compounds can be found in the laboratory analytical report in Appendix C. The most recent GRO, Benzene, and MTBE concentrations are also presented in Drawing 2. Groundwater monitoring data (GEO\_WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 database. Upload confirmation receipts are provided in Appendix D.

## DISCUSSION:

Groundwater levels were between historic minimum and maximum elevations for each well monitored. Groundwater elevations yielded a variable potentiometric groundwater flow direction and horizontal gradient to the west at approximately 0.01 ft/ft, generally consistent with the historic flow direction and gradient data presented in Table 3.

This event's detected analytical concentrations were within the historic minimum and maximum ranges recorded for each well, with the following exceptions: GRO reached historic minimum in well MW-1 with a concentration of 330 µg/L; MTBE reached historic minimum in well AW-5 with concentration of 0.87 µg/L; TBA reached historic minimum in AW-2 and AW-5 with concentrations of non-detect and 4.1 µg/L respectively; and Ethylbenzene reached historic minimum in well MW-1 with a concentration of non-detect. Recent and historic laboratory analytical results are summarized in Table 1 and Table 2.

## RECOMMENDATIONS:

Based on the Third Quarter 2011 results and historically decreasing concentration trends observed in wells associated with the Site, ARCADIS intends to submit a request for closure during Fourth Quarter 2011.

## LIMITATIONS:

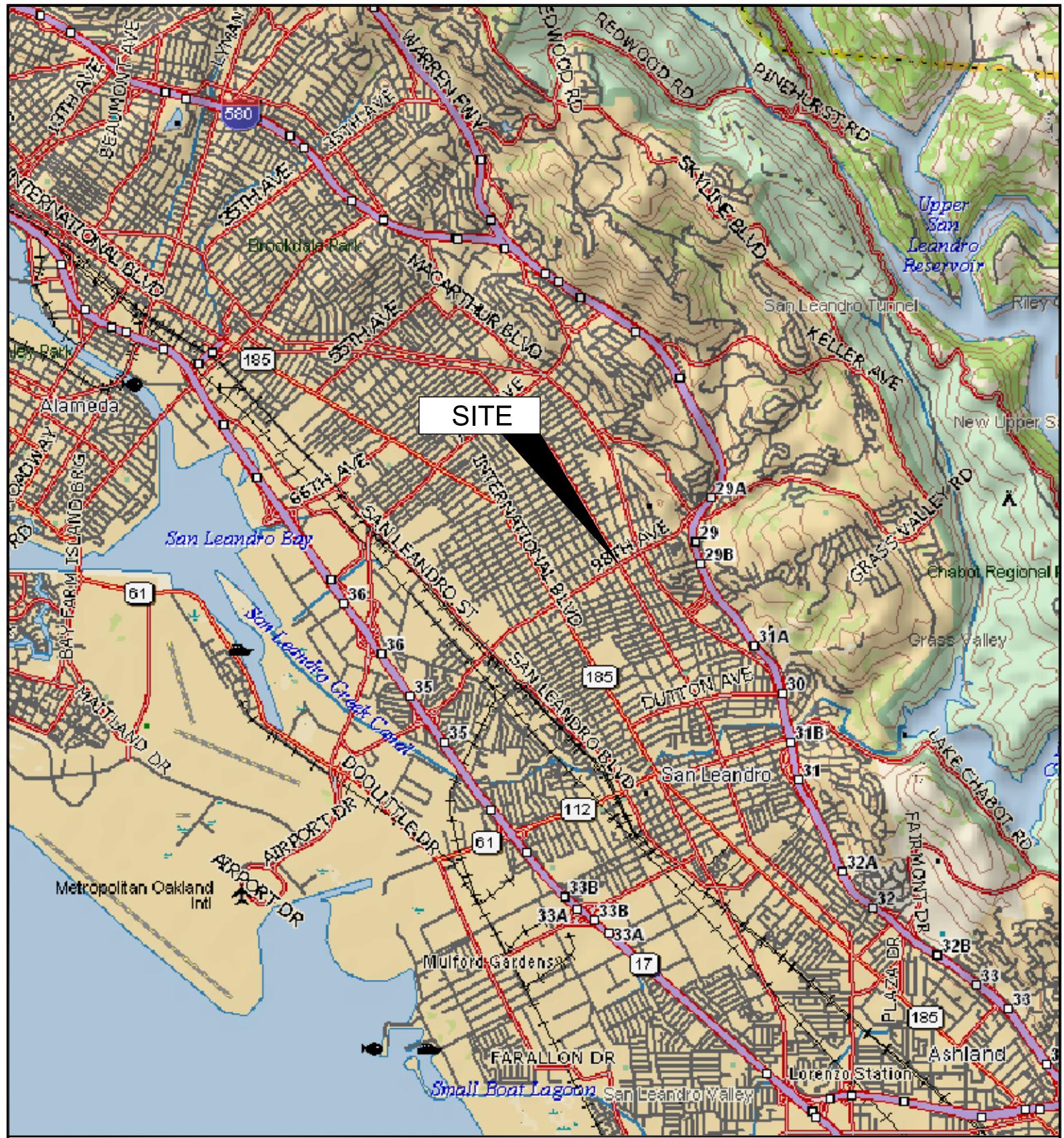
The findings presented in this report are based upon observations of field personnel, points investigated, results of laboratory tests performed by TestAmerica Laboratories, Inc. (Pleasanton, California), and our understanding of ACEH requirements. Our services were performed in accordance with the generally accepted standard of practice at the time this report was written. No other warranty, expressed or implied was made. This report has been prepared for the exclusive use of ARCADIS-US, Inc. and Atlantic Richfield Company (a BP affiliated company). It is possible that variations in soil or groundwater conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

## ATTACHMENTS:

- Drawing 1: Site Location Map
- Drawing 2: Third Quarter 2011 Groundwater Elevation Contours and Analytical Summary Map, July 14, 2011
- Table 1: Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses
- Table 2: Summary of Fuel Additives Analytical Data
- Table 3: Historical Groundwater Gradient – Direction and Magnitude
- Table 4: Bio-Degradation Parameters
- Appendix A: Field Methods
- Appendix B: Field Data Sheets
- Appendix C: Laboratory Report and Chain-of-Custody Documentation
- Appendix D: GeoTracker Upload Confirmation Receipts

**LIST OF COMMONLY USED ACCRONYMS/ABBREVIATIONS:**

ACEH:	Alameda County Environmental Health	ft/ft:	feet per foot
BAI:	Broadbent & Associates, Inc.	gal:	Gallons
BTEX:	Benzene, Toluene, Ethylbenzene, Total Xylenes	GRO:	Gasoline-Range Organics
1,2-DCA:	1,2-Dichloroethane	LNAPL:	Light Non-Aqueous Phase Liquid
DIPE:	Di-Isopropyl Ether	MTBE:	Methyl Tertiary Butyl Ether
DO:	Dissolved Oxygen	NO <sub>3</sub> :	Nitrate
DRO:	Diesel-Range Organics	SO <sub>3</sub>	Dissolved Sulfide
EDB:	1,2-Dibromomethane	SO <sub>4</sub> :	Sulfate
ORP:	Oxidation Reduction Potential	TAME:	Tert-Amyl Methyl Ether
EPA:	Environmental Protection Agency	TBA:	Tertiary Butyl Ether
ETBE:	Ethyl Tertiary Butyl Ether	TOC:	Top of Casing
Fe <sup>2+</sup> :	Ferrous Iron	µg/L:	Micrograms per liter
CH <sub>4</sub>	Methane	mV	Millivolt
Mn <sup>2+</sup>	Manganese	CO <sub>2</sub>	Dissolved Carbon Dioxide



0 1 2  
APPROXIMATE SCALE (mi)

IMAGE SOURCE: DELORME

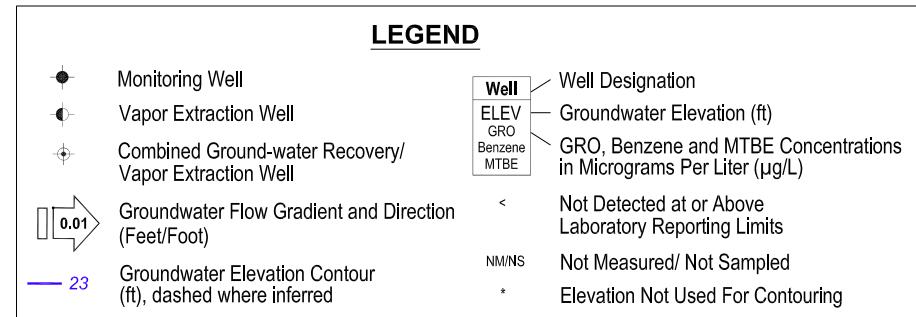
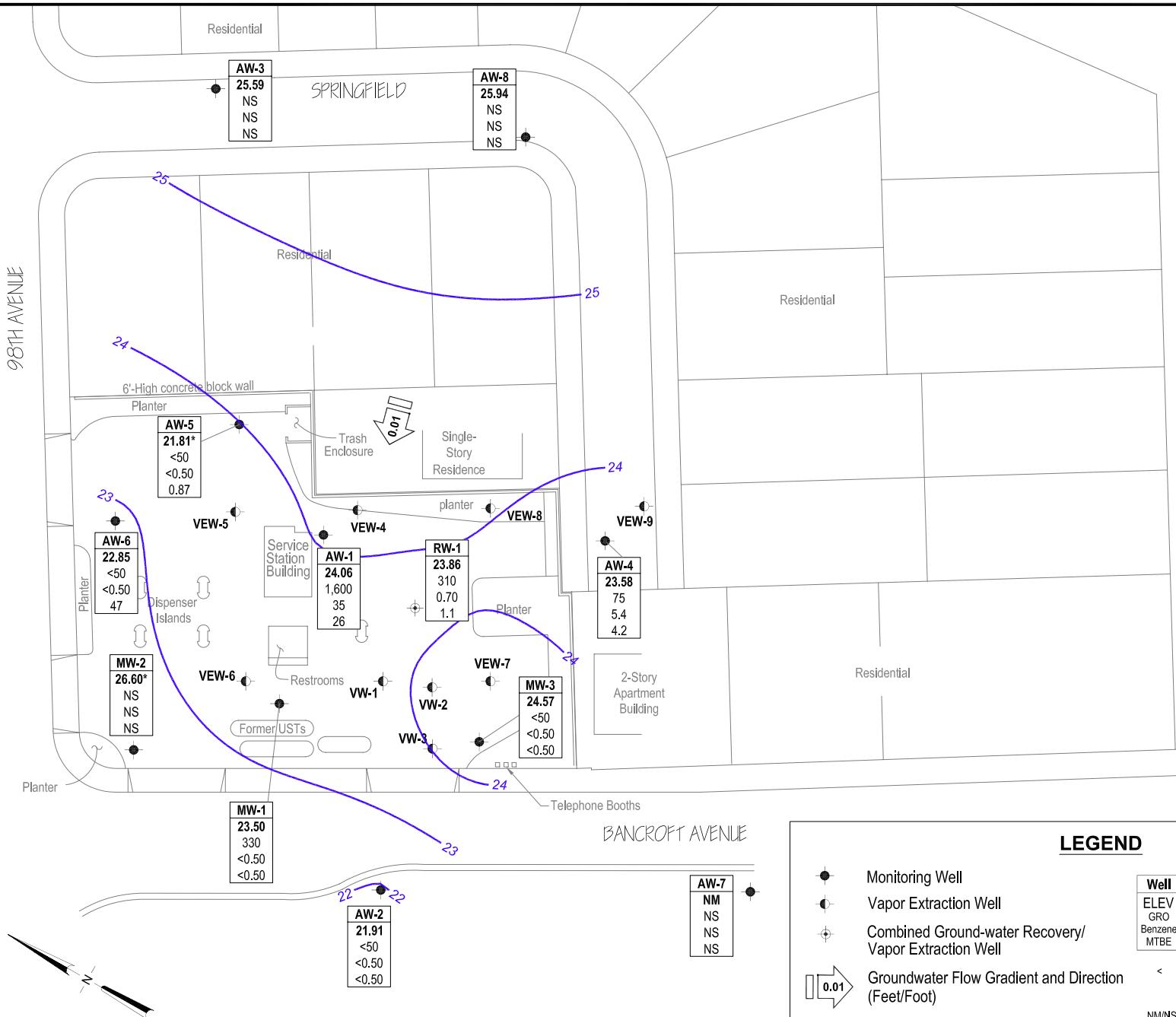


**BROADBENT & ASSOCIATES, INC.**  
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL  
1324 Mangrove Ave. Suite 212, Chico, California 95926  
Project No.: 06-88-656 Date: 9/30/2009

Former BP Service Station #11133  
2220 98th Avenue  
Oakland, California

Site Location Map

Drawing 1



0 60 120  
SCALE (ft)



**BROADBENT & ASSOCIATES, INC.**  
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL  
1324 Mangrove Ave. Suite 212, Chico, California 95926  
Project No.: 09-88-656 Date: 8/18/2011

Former BP Service Station #11133  
2220 98th Avenue  
Oakland, California

Groundwater Elevation Contours  
and Analytical Summary Map  
14 July 2011

Drawing 2

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>AW-1</b>														
4/5/1991	--	38.11	25.44	0.00	12.67	4,100	1,500	69	100	83	--	--	--	
4/1/1992	--		23.22	0.00	14.89	--	--	--	--	--	--	--	--	
4/2/1992	--		--	--	--	11,000	1,800	210	210	490	--	--	--	
7/6/1992	--		24.89	0.00	13.22	6,500	4,000	40	290	530	--	--	--	
10/7/1992	--		26.55	0.00	11.56	2,900	1,200	25	37	210	--	--	--	e
10/7/1992	--		26.55	0.00	11.56	4,700	1,500	41	47	300	--	--	--	
1/14/1993	--		23.73	0.00	14.38	4,100	1,700	28	130	230	--	--	--	m, e
1/14/1993	--		23.73	0.00	14.38	2,800	830	31	140	240	--	--	--	m
4/22/1993	--		--	--	--	39,000	14,000	530	1,800	6,100	987	--	--	c, m
7/15/1993	--		22.50	0.00	15.61	6,200	2,200	28	210	540	838	--	--	c, m
10/21/1993	--		24.32	0.00	13.79	2,400	820	13	55	120	832	--	--	c, m
1/27/1994	--		23.72	0.00	14.39	3,500	1,400	26	130	220	650	--	--	c, n
4/21/1994	--		22.48	0.00	15.63	40,000	12,000	1,900	1,600	5,000	1,119	1.4	--	m
9/9/1994	--		23.04	0.00	15.07	3,900	1,900	5.5	190	240	--	--	--	e
9/9/1994	--		23.04	0.00	15.07	3,500	1,600	5	200	250	--	2.1	--	m
12/21/1994	--		21.70	0.00	16.41	7,600	3,100	36	370	320	855	1.6	--	m
1/30/1995	--		17.71	0.00	20.40	35,000	23,000	650	3,200	4,100	--	1.7	--	
4/10/1995	--		20.04	0.00	18.07	56,000	17,000	2,000	3,900	10,000	--	--	--	e
4/10/1995	--		20.04	0.00	18.07	60,000	18,000	2,000	4,300	11,000	--	7.9	--	
6/29/1995	--		20.60	0.00	17.51	86,000	12,000	8,400	4,800	18,000	--	--	--	e
6/29/1995	--		20.60	0.00	17.51	72,000	10,000	7,300	4,200	15,000	--	6.2	--	
9/18/1995	--		21.87	0.00	16.24	--	--	--	--	--	--	--	--	
9/19/1995	--		--	--	--	65,000	12,000	3,100	4,400	14,000	1,000	8.5	--	
12/7/1995	--		22.06	0.00	16.05	25,000	8,700	<50	2,500	1,300	1,100	2.9	--	
3/28/1996	--		16.91	0.00	21.20	24,000	11,000	<100	3,200	3,390	<1000	6.6	--	
6/20/1996	--		20.82	0.00	17.29	38,000	6,900	1,100	3,200	7,300	<100	6.4	--	
10/11/1996	--		23.20	0.00	14.91	33,000	8,500	69	3,300	4,230	580	6.3	--	
1/2/1997	--		20.41	0.00	17.70	32,000	8,000	<50	3,100	2,300	700	6.7	--	
4/14/1997	--		21.61	0.00	16.50	--	--	--	--	--	--	--	--	
4/15/1997	--		--	--	--	31,000	5,000	160	2,400	4,540	340	5.4	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>AW-1 Cont.</b>														
7/2/1997	--	38.11	21.17	0.00	16.94	26,000	5,800	<100	2,600	2,200	<1000	6.2	--	
9/30/1997	--		21.48	0.00	16.63	29,000	9,200	17	1,400	130	560	6.9	--	
1/21/1998	--		20.02	0.00	18.09	50,000	6,900	450	3,200	4,450	720	5.8	--	
4/9/1998	--		13.37	0.00	24.74	--	--	--	--	--	--	--	--	
4/10/1998	--		--	--	--	46,000	5,800	1,900	3,000	7,400	1,000	4.3	--	
6/19/1998	--		19.12	0.00	18.99	43,000	6,800	260	3,100	3,490	620	--	--	e
6/19/1998	--		19.12	0.00	18.99	42,000	6,600	200	3,000	3,350	660	4.9	--	
11/30/1998	--		21.13	0.00	16.98	23,000	6,700	<25	3,100	130	710/820	--	--	g
1/21/1999	--		20.77	0.00	17.34	25,000	4,800	54	2,800	780	1,000	--	--	
4/30/1999	--		20.80	0.00	17.31	21,000	5,300	67	2,800	750	1,500	--	--	
7/9/1999	--		20.41	0.00	17.70	11,000	3,000	<10	760	180	1,300	--	--	
11/3/1999	--		20.82	0.00	17.29	--	--	--	--	--	--	--	--	
1/12/2000	--		19.99	0.00	18.12	330,000	5,300	10	2,900	560	2,200	--	--	
4/13/2000	--		20.14	0.00	17.97	--	--	--	--	--	--	--	--	
5/24/2000	--		20.17	0.00	17.94	--	--	--	--	--	--	--	--	
6/1/2000	--		23.05	0.00	15.06	--	--	--	--	--	--	--	--	
6/8/2000	--		17.08	0.00	21.03	--	--	--	--	--	--	--	--	
6/15/2000	--		16.93	0.00	21.18	--	--	--	--	--	--	--	--	
7/26/2000	--		20.07	0.00	18.04	15,000	290	98	77	220	37,000	--	--	
10/24/2000	--		20.10	0.00	18.01	--	--	--	--	--	--	--	--	
1/19/2001	--		19.82	0.00	18.29	7,600	2,220	10.9	415	58.4	1,630	--	--	
7/24/2001	--		19.86	0.00	18.25	9,600	2,140	6.34	281	43	1,440	--	--	
1/18/2002	--		15.60	0.00	22.51	20,000	2,170	75.2	1,800	2,080	1,250	--	--	
8/1/2002	--		19.55	0.00	18.56	14,000	2,150	<12.5	197	42.4	1,120	--	--	
1/16/2003	--		16.32	0.00	21.79	15,000	2,300	75	1,600	1,800	1,100	--	--	p
7/7/2003	--		19.80	0.00	18.31	9,700	1,600	<25	540	110	1,100	--	--	q, u
02/05/2004	--		18.75	0.00	19.36	12,000	2,000	<50	820	590	930	--	6.7	
07/01/2004	P		19.72	0.00	18.39	9,900	2,600	<25	300	<25	1,100	--	6.5	
03/16/2005	P		18.78	0.00	19.33	10,000	1,100	30	630	560	720	0.8	6.7	
07/22/2005	P		15.53	0.00	22.58	8,000	770	5.4	520	50	510	--	6.5	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>AW-1 Cont.</b>														
01/25/2006	P	38.11	18.10	0.00	20.01	6,400	1,200	10	490	290	490	--	7.0	
7/6/2006	P		17.44	0.00	20.67	6,200	1,300	70	570	180	270	--	6.8	
1/8/2007	P		16.74	0.00	21.37	3700	690	19	110	30	380	2.53	6.77	
7/10/2007	P		17.30	0.00	20.81	4,200	560	12	93	40	220	1.79	6.90	
1/15/2008	P		15.96	0.00	22.15	5,000	670	<10	490	200	230	0.92	6.91	
7/15/2008	P		18.63	0.00	19.48	3,400	340	4.5	27	17	<0.50	1.80	6.79	
10/21/2008	P		19.96	0.00	18.15	1,900	160	<5.0	15	<5.0	120	2.40	7.01	
1/6/2009	P		19.13	0.00	18.98	5,000	670	<5.0	84	<5.0	170	1.37	6.09	
4/21/2009	P		16.96	0.00	21.15	7,900	510	<10	90	46	160	2.29	7.28	
7/21/2009	P		18.72	0.00	19.39	5,900	560	<10	92	10	170	17.46	7.23	y
3/18/2010	P		13.84	0.00	24.27	4,900	260	<10	540	180	<10	0.68	6.57	
7/29/2010	NP		16.95	0.00	21.16	3,100	120	1.1	88	5.9	<0.50	0.92	7.4	
11/12/2010	--		18.92	0.00	19.19	--	--	--	--	--	--	--	--	
2/22/2011	NP		13.25	0.00	24.86	<50	<0.50	<0.50	<0.50	<1.0	0.56	0.75	6.28	
<b>7/14/2011</b>	<b>P</b>		<b>14.05</b>	<b>0.00</b>	<b>24.06</b>	<b>1,600</b>	<b>35</b>	<b>&lt;0.50</b>	<b>92</b>	<b>6.8</b>	<b>26</b>	<b>1.46</b>	<b>7.29</b>	
<b>AW-2</b>														
4/5/1991	--	36.83	22.36	0.00	14.47	<50	<0.3	<0.3	<0.3	<0.3	--	--	--	
4/1/1992	--		20.81	0.00	16.02	--	--	--	--	--	--	--	--	
4/2/1992	--		--	--	--	130	25	2.3	0.7	2.1	--	--	--	
7/6/1992	--		23.57	0.00	13.26	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
10/7/1992	--		25.24	0.00	11.59	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
1/14/1993	--		20.82	0.00	16.01	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	m
4/22/1993	--		19.37	0.00	17.46	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	m
7/15/1993	--		21.29	0.00	15.54	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	m
10/21/1993	--		23.14	0.00	13.69	<50	1.3	1.1	0.9	2.1	<5.0	--	--	m
1/27/1994	--		22.34	0.00	14.49	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	m
4/21/1994	--		21.15	0.00	15.68	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.0	--	m
9/9/1994	--		22.09	0.00	14.74	<50	<0.5	<0.5	<0.5	<0.5	--	4.1	--	m
12/21/1994	--		20.12	0.00	16.71	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.0	--	m
1/30/1995	--		16.65	0.00	20.18	<50	<0.50	<0.50	<0.50	<1.0	--	2.5	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>AW-2 Cont.</b>														
4/10/1995	--	36.83	16.22	0.00	20.61	<50	<0.50	<0.50	<0.50	<1.0	--	4.4	--	
6/29/1995	--		17.55	0.00	19.28	<50	<0.50	<0.50	<0.50	<1.0	--	7.8	--	
9/18/1995	--		19.87	0.00	16.96	--	--	--	--	--	--	--	--	
9/19/1995	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	e
9/19/1995	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	4.5	--	
12/7/1995	--		21.31	0.00	15.52	<50	<0.50	<0.50	<0.50	<1.0	<5.0	4.9	--	
3/28/1996	--		15.61	0.00	21.22	<50	<0.5	<1	<1	<1	<10	4.1	--	
6/20/1996	--		16.30	0.00	20.53	<50	<0.5	<1	<1	<1	<10	5.2	--	
10/11/1996	--		19.60	0.00	17.23	<50	<0.5	<1.0	<1.0	<1.0	<10	6.0	--	
1/2/1997	--		15.97	0.00	20.86	<50	<0.5	<1.0	<1.0	<1.0	<10	6.1	--	
4/14/1997	--		17.19	0.00	19.64	<50	<0.5	<1.0	<1.0	<1.0	<10	5.3	--	
7/2/1997	--		18.11	0.00	18.72	<50	<0.5	<1.0	<1.0	<1.0	<10	5.7	--	
9/30/1997	--		18.52	0.00	18.31	<50	<0.5	<1.0	<1.0	<1.0	860	5.4	--	
1/21/1998	--		14.46	0.00	22.37	160	13	<1.0	<1.0	<1.0	110	4.9	--	
4/9/1998	--		12.85	0.00	23.98	--	--	--	--	--	--	--	--	
4/10/1998	--		--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	3.9	--	
6/19/1998	--		14.37	0.00	22.46	60	<0.5	<1.0	<1.0	<1.0	<10	3.6	--	
11/30/1998	--		16.90	0.00	19.93	--	--	--	--	--	--	--	--	
1/21/1999	--		16.87	0.00	19.96	<50	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	
4/30/1999	--		17.01	0.00	19.82	--	--	--	--	--	--	--	--	
7/9/1999	--		17.83	0.00	19.00	--	--	--	--	--	--	--	--	
11/3/1999	--		19.74	0.00	17.09	--	--	--	--	--	--	--	--	
1/12/2000	--		19.90	0.00	16.93	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	
4/13/2000	--		19.75	0.00	17.08	--	--	--	--	--	--	--	--	
7/26/2000	--		19.86	0.00	16.97	--	--	--	--	--	--	--	--	
10/24/2000	--		18.77	0.00	18.06	--	--	--	--	--	--	--	--	
1/19/2001	--		--	--	--	--	--	--	--	--	--	--	--	f
7/24/2001	--		--	--	--	--	--	--	--	--	--	--	--	f
1/18/2002	--		15.17	0.00	21.66	<50	<0.5	<0.5	<0.5	<1.0	<0.5	--	--	
8/1/2002	--		17.17	0.00	19.66	--	--	--	--	--	--	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>AW-2 Cont.</b>														
1/16/2003	--	36.83	14.81	0.00	22.02	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	p
7/7/2003	--		16.65	0.00	20.18	--	--	--	--	--	--	--	--	
02/05/2004	--		15.37	0.00	21.46	<50	3.0	<0.50	<0.50	<0.50	5.1	--	6.6	
07/01/2004	--		17.55	0.00	19.28	--	--	--	--	--	--	--	--	
03/16/2005	P		14.58	0.00	22.25	<50	0.75	<0.50	1.1	1.1	<0.50	1.7	6.7	
07/22/2005	--		15.41	0.00	21.42	--	--	--	--	--	--	--	--	
01/25/2006	P		14.17	0.00	22.66	280	110	<1.0	3.9	8.7	12	--	7.1	
7/6/2006	--		14.00	0.00	22.83	--	--	--	--	--	--	--	--	
1/8/2007	P		15.85	0.00	20.98	1900	550	160	58	180	40	2.09	7.2	
7/10/2007	--		17.25	0.00	19.58	--	--	--	--	--	--	--	--	
1/15/2008	P		15.75	0.00	21.08	2,300	900	87	100	140	48	0.83	6.79	
7/15/2008	P		17.99	0.00	18.84	6,400	1,700	550	340	940	<50	2.14	7.05	
10/21/2008	P		19.19	0.00	17.64	2,600	580	96	110	180	16	1.65	7.33	
1/6/2009	P		18.45	0.00	18.38	2,100	440	54	67	110	11	0.84	6.94	
4/21/2009	P		16.05	0.00	20.78	3,400	600	140	99	190	10	1.89	7.42	
7/21/2009	P		18.07	0.00	18.76	3,200	550	150	98	220	13	9.29	7.32	y
3/18/2010	--		13.92	0.00	22.91	--	--	--	--	--	--	--	--	
7/29/2010	P		16.65	0.00	20.18	2,400	650	98	170	430	<2.5	0.62	7.4	
11/12/2010	--		18.10	0.00	18.73	--	--	--	--	--	--	--	--	
2/22/2011	--		14.21	0.00	22.62	--	--	--	--	--	--	--	--	
7/14/2011	P		14.92	0.00	21.91	<50	<0.50	<0.50	<0.50	<1.0	<0.50	0.71	7.23	
<b>AW-3</b>														
4/5/1991	--	39.13	23.90	0.00	15.23	5,200	980	450	95	310	--	--	--	
4/1/1992	--		22.50	0.00	16.63	4,700	890	47	43	110	--	--	--	
7/6/1992	--		23.26	0.00	15.87	3,900	3,100	30	80	99	--	--	--	
10/7/1992	--		24.75	0.00	14.38	5,000	2,600	<0.5	<0.5	59	--	--	--	
1/14/1993	--		23.59	0.00	15.54	350	250	<0.5	<0.5	<0.5	--	--	--	m
4/22/1993	--		19.42	0.00	19.71	240	71	2.4	0.6	4	--	--	--	m
7/15/1993	--		20.09	0.00	19.04	650	71	2.8	1.5	1.1	37.3	--	--	c, m
10/21/1993	--		21.88	0.00	17.25	170	6.1	2	1.7	4.4	--	--	--	e

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
AW-3 Cont.														
10/21/1993	--	39.13	21.88	0.00	17.25	160	4.8	1.7	1.6	3.6	8.95	--	--	m
1/27/1994	--		22.33	0.00	16.80	90	2.9	0.5	<0.5	<0.5	--	--	--	e
1/27/1994	--		22.33	0.00	16.80	92	2.1	<0.5	<0.5	<0.5	7.37	--	--	m
4/21/1994	--		20.96	0.00	18.17	150	3.6	0.8	0.9	2.5	9.36	1.3	--	m
9/9/1994	--		21.60	0.00	17.53	53	<0.5	<0.5	<0.5	<0.5	--	1.9	--	m
12/21/1994	--		--	--	--	--	--	--	--	--	--	--	--	f
1/30/1995	--		--	--	--	--	--	--	--	--	--	--	--	f
4/10/1995	--		--	--	--	--	--	--	--	--	--	--	--	f
6/29/1995	--		15.41	0.00	23.72	<50	<0.50	<0.50	<0.50	<1.0	--	8.0	--	
9/18/1995	--		17.83	0.00	21.30	--	--	--	--	--	--	--	--	
9/19/1995	--		--	--	--	61,000	11,000	2,900	4,100	13,000	790	7.4	--	
12/7/1995	--		19.27	0.00	19.86	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	e
12/7/1995	--		19.27	0.00	19.86	<50	<0.50	<0.50	<0.50	<1.0	<5.0	3.4	--	
3/28/1996	--		13.85	0.00	25.28	<50	<0.5	<1	<1	<1	<10	4.1	--	
3/28/1996	--		13.85	0.00	25.28	<50	<0.5	<1	<1	<1	<10	--	--	e
6/20/1996	--		14.47	0.00	24.66	<50	<0.5	<1	<1	<1	<10	--	--	e
6/20/1996	--		14.47	0.00	24.66	<50	<0.5	<1	<1	<1	<10	4.2	--	
10/11/1996	--		17.97	0.00	21.16	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	e
10/11/1996	--		17.97	0.00	21.16	<50	<0.5	<1.0	<1.0	<1.0	<10	4.7	--	
1/2/1997	--		13.00	0.00	26.13	<50	<0.5	<1.0	<1.0	<1.0	<10	5.6	--	
4/14/1997	--		14.36	0.00	24.77	<50	<0.5	<1.0	<1.0	<1.0	<10	5.0	--	
4/15/1997	--		--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	e
7/2/1997	--		15.87	0.00	23.26	<50	<0.5	<1.0	<1.0	<1.0	<10	5.4	--	
9/30/1997	--		17.50	0.00	21.63	<250	<2.5	<5.0	<5.0	<5.0	810	5.7	--	
1/21/1998	--		11.98	0.00	27.15	150	<0.5	<1.0	<1.0	1.2	110	--	--	e
1/21/1998	--		11.98	0.00	27.15	140	<0.5	<1.0	<1.0	<1.0	99	4.6	--	
4/9/1998	--		9.45	0.00	29.68	--	--	--	--	--	--	--	--	
4/10/1998	--		--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	--	--	e
4/10/1998	--		--	--	--	<50	<0.5	<1.0	<1.0	1.6	<10	4.5	--	
6/19/1998	--		12.13	0.00	27.00	<50	<0.5	<1.0	<1.0	<1.0	<10	4.4	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
AW-3 Cont.						--	--	--	--	--	--	--	--	
11/30/1998	--	39.13	15.91	0.00	23.22	--	--	--	--	--	--	--	--	
1/21/1999	--		15.93	0.00	23.20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	--	--	
4/30/1999	--		15.98	0.00	23.15	--	--	--	--	--	--	--	--	
7/9/1999	--		14.58	0.00	24.55	--	--	--	--	--	--	--	--	
11/3/1999	--		17.43	0.00	21.70	--	--	--	--	--	--	--	--	
1/12/2000	--		18.30	0.00	20.83	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	
4/13/2000	--		18.89	0.00	20.24	--	--	--	--	--	--	--	--	
7/26/2000	--		18.67	0.00	20.46	--	--	--	--	--	--	--	--	
10/24/2000	--		18.98	0.00	20.15	--	--	--	--	--	--	--	--	
1/19/2001	--		16.74	0.00	22.39	--	--	--	--	--	--	--	--	
7/24/2001	--		18.55	0.00	20.58	--	--	--	--	--	--	--	--	
1/18/2002	--		14.49	0.00	24.64	--	--	--	--	--	--	--	--	
8/1/2002	--		14.27	0.00	24.86	--	--	--	--	--	--	--	--	
1/16/2003	--		14.25	0.00	24.88	--	--	--	--	--	--	--	--	
7/7/2003	--		14.70	0.00	24.43	--	--	--	--	--	--	--	--	
02/05/2004	--		14.61	0.00	24.52	--	--	--	--	--	--	--	--	
07/01/2004	--		15.62	0.00	23.51	--	--	--	--	--	--	--	--	
03/16/2005	P		12.70	0.00	26.43	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	7.3	
07/22/2005	--		13.44	0.00	25.69	--	--	--	--	--	--	--	--	
01/25/2006	--		13.56	0.00	25.57	--	--	--	--	--	--	--	--	
7/6/2006	--		11.60	0.00	27.53	--	--	--	--	--	--	--	--	
1/8/2007	--		14.97	0.00	24.16	--	--	--	--	--	--	--	--	
7/10/2007	--		15.81	0.00	23.32	--	--	--	--	--	--	--	--	
1/15/2008	--		15.97	0.00	23.16	--	--	--	--	--	--	--	--	
7/15/2008	--		16.70	0.00	22.43	--	--	--	--	--	--	--	--	
10/21/2008	--		18.16	0.00	20.97	--	--	--	--	--	--	--	--	
1/6/2009	--		18.35	0.00	20.78	--	--	--	--	--	--	--	--	
4/21/2009	--		15.57	0.00	23.56	--	--	--	--	--	--	--	--	
7/21/2009	--		17.22	0.00	21.91	--	--	--	--	--	--	--	--	
3/18/2010	--		14.25	0.00	24.88	--	--	--	--	--	--	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
AW-3 Cont.						--	--	--	--	--	--	--	--	
7/29/2010	--	39.13	15.23	0.00	23.90	--	--	--	--	--	--	--	--	
11/12/2010	--		17.12	0.00	22.01	--	--	--	--	--	--	--	--	
2/22/2011	--		14.40	0.00	24.73	--	--	--	--	--	--	--	--	
7/14/2011	--		13.54	0.00	25.59	--	--	--	--	--	--	--	--	
AW-4														
4/5/1991	--	39.08	25.12	0.00	13.96	110,000	40,000	13,000	2,000	5,500	--	--	--	
4/1/1992	--		23.56	0.00	15.52	210,000	55,000	23,000	2,900	7,000	--	--	--	e
4/1/1992	--		23.56	0.00	15.52	230,000	57,000	31,000	2,900	7,600	--	--	--	
7/6/1992	--		25.87	0.00	13.21	38,000	16,000	5,400	2,000	6,100	--	--	--	
10/7/1992	--		27.53	0.00	11.55	120,000	41,000	26,000	4,700	13,000	--	--	--	
1/14/1993	--		24.12	0.00	14.96	62,000	18,000	14,000	2,700	7,700	1,400	--	--	c, m
4/22/1993	--		21.47	0.00	17.61	18,000	1,100	2,100	320	3,500	--	--	--	m
7/15/1993	--		23.30	0.00	15.78	21,000	820	2,300	590	3,800	1,978	--	--	c, m
10/21/1993	--		25.08	0.00	14.00	11,000	570	83	630	2,300	4,600	--	--	c, m
1/27/1994	--		24.61	0.00	14.47	12,000	420	460	600	2,200	6,400	--	--	c, m
4/21/1994	--		22.96	0.00	16.12	14,000	71	160	29	1,200	13,000	--	--	c, e
4/21/1994	--		22.96	0.00	16.12	12,000	110	250	150	1,900	16,010	1.5	--	c, m
9/9/1994	--		23.85	0.00	15.23	9,700	75	64	280	2,000	--	2.1	--	m
12/21/1994	--		--	--	--	--	--	--	--	--	--	--	--	f
1/30/1995	--		--	--	--	--	--	--	--	--	--	--	--	f
4/10/1995	--		18.07	0.00	21.01	3,700	69	8.7	44	130	--	8.5	--	
6/29/1995	--		19.25	0.00	19.83	8,000	62	190	190	1,100	--	7.5	--	
9/18/1995	--		20.73	0.00	18.35	--	--	--	--	--	--	--	--	
9/19/1995	--		--	--	--	12,000	660	1,600	200	1,900	7,100	8.3	--	
12/7/1995	--		22.49	0.00	16.59	41,000	8,400	7,200	710	6,300	5,200	3.6	--	
3/28/1996	--		16.49	0.00	22.59	--	--	--	--	--	--	--	--	f
6/20/1996	--		16.00	0.00	23.08	<50	<0.5	<1	<1	<1	12	--	--	
10/11/1996	--		19.52	0.00	19.56	36,000	12,000	5,500	<25	3,800	880/1000	6.2	--	g
1/2/1997	--		15.80	0.00	23.28	<50	61	3.8	3.5	8.1	110	--	--	e
1/2/1997	--		15.80	0.00	23.28	<50	<0.5	<1.0	<1.0	<1.0	22	6.4	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
AW-4 Cont.						--	--	--	--	--	--	--	--	
4/14/1997	--	39.08	17.01	0.00	22.07	--	--	--	--	--	--	--	--	
4/15/1997	--		--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	5.4	--	
7/2/1997	--		19.68	0.00	19.40	<50	21	<1.0	<1.0	<1.0	41	4.1	--	
9/30/1997	--		22.71	0.00	16.37	--	--	--	--	--	--	--	--	f
1/21/1998	--		15.89	0.00	23.19	13,000	2,900	<10	230	314	3,100	3.9	--	
4/9/1998	--		13.50	0.00	25.58	--	--	--	--	--	--	--	--	
4/10/1998	--		--	--	--	890	<0.5	<1	<1	<1	730	4.9	--	
6/19/1998	--		14.75	0.00	24.33	60	<0.5	<1.0	<1.0	<1.0	34	4.3	--	
11/30/1998	--		19.25	0.00	19.83	--	--	--	--	--	--	--	--	
1/21/1999	--		18.94	0.00	20.14	3,700	830	93	200	360	30	--	--	
4/30/1999	--		19.10	0.00	19.98	--	--	--	--	--	--	--	--	
7/9/1999	--		18.93	0.00	20.15	76,000	12,000	6,600	2,000	8,700	320	--	--	
11/3/1999	--		20.65	0.00	18.43	--	--	--	--	--	--	--	--	
1/12/2000	--		21.21	0.00	17.87	67,000	12,000	3,500	2,900	15,000	280	--	--	
4/13/2000	--		21.33	0.00	17.75	--	--	--	--	--	--	--	--	
5/24/2000	--		19.84	0.00	19.24	--	--	--	--	--	--	--	--	
6/1/2000	--		19.04	0.00	20.04	--	--	--	--	--	--	--	--	
6/8/2000	--		18.32	0.00	20.76	--	--	--	--	--	--	--	--	
6/15/2000	--		16.70	0.00	22.38	--	--	--	--	--	--	--	--	
7/26/2000	--		21.50	0.00	17.58	910	<0.5	<0.5	<0.5	<0.5	3,500	--	--	
10/24/2000	--		22.00	0.00	17.08	--	--	--	--	--	--	--	--	
1/19/2001	--		18.97	0.00	20.11	6,600	2,460	24	497	534	267	--	--	
7/24/2001	--		18.55	0.00	20.53	5,100	1,080	143	409	827	115	--	--	
1/18/2002	--		17.22	0.00	21.86	3,900	442	241	157	681	85.3	--	--	
8/1/2002	--		--	--	--	--	--	--	--	--	--	--	--	f
1/16/2003	--		16.85	0.00	22.23	2,900	260	160	120	590	<120	--	--	p
7/7/2003	--		17.94	0.00	21.14	600	90	7.9	18	36	56	--	--	q
02/05/2004	--		16.94	0.00	22.14	420	40	3.1	15	27	40	--	6.8	
07/01/2004	P		18.24	0.00	20.84	6,000	970	200	310	1,500	64	--	6.7	
03/16/2005	P		16.16	0.00	22.92	3,600	71	31	200	870	23	0.6	6.5	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
AW-4 Cont.														
07/22/2005	P	39.08	15.89	0.00	23.19	4,800	750	48	300	840	59	--	6.7	
01/25/2006	P		15.48	0.00	23.60	<500	13	<5.0	14	62	12	--	7.0	
7/6/2006	P		14.87	0.00	24.21	2,800	430	21	230	680	39	--	6.7	
1/8/2007	P		16.48	0.00	22.60	190	6.6	<0.50	4.1	14	38	3.00	6.80	
7/10/2007	P		17.95	0.00	21.13	160	2.7	<0.50	0.90	1.0	27	2.54	7.19	
1/15/2008	P		17.70	0.00	21.38	150	<0.50	<0.50	0.71	<0.50	17	1.30	6.75	
7/15/2008	P		18.74	0.00	20.34	250	44	1.1	44	78	25	2.64	6.91	
10/21/2008	P		20.07	0.00	19.01	270	1.6	<1.0	<1.0	<1.0	18	1.54	7.25	
1/6/2009	P		19.45	0.00	19.63	230	0.88	<0.50	<0.50	<0.50	8.3	0.70	6.31	
4/21/2009	P		17.00	0.00	22.08	260	4.6	1.6	21	28	4.1	3.51	7.48	
7/21/2009	P		18.96	0.00	20.12	200	4.8	<0.50	6.9	2.8	8.6	6.14	7.04	y
3/18/2010	P		14.92	0.00	24.16	240	<0.50	<0.50	15	21	2.5	0.79	6.71	
7/29/2010	NP		17.34	0.00	21.74	290	25	<0.50	14	6.5	<0.50	1.07	7.2	
11/12/2010	--		19.10	0.00	19.98	--	--	--	--	--	--	--	--	
2/22/2011	NP		15.10	0.00	23.98	150	<0.50	<0.50	<0.50	<1.0	2.9	0.65	6.51	
7/14/2011	P		15.50	0.00	23.58	75	5.4	<0.50	1.7	2.2	4.2	0.77	6.98	
AW-5														
4/5/1991	--	38.51	25.48	0.00	13.03	420	31	7.5	20	68	--	--	--	
4/1/1992	--		23.95	0.00	14.56	--	--	--	--	--	--	--	--	
4/2/1992	--		--	--	--	4,000	270	63	190	290	--	--	--	
7/6/1992	--		26.48	0.00	12.03	1,400	160	<2.5	250	58	--	--	--	
10/7/1992	--		28.18	0.00	10.33	360	12	0.6	8.7	5	--	--	--	
1/14/1993	--		24.15	0.00	14.36	1,700	270	7.5	130	62	--	--	--	m
4/22/1993	--		22.43	0.00	16.08	3,500	780	29	240	210	--	--	--	m, e
4/22/1993	--		22.43	0.00	16.08	2,700	780	30	220	180	--	--	--	m
7/15/1993	--		24.31	0.00	14.20	1,300	68	8.3	64	99	<50	--	--	m, e
7/15/1993	--		24.31	0.00	14.20	1,300	69	16	67	120	<50	--	--	m
10/21/1993	--		26.05	0.00	12.46	510	9.6	1.5	17	45	75	--	--	c, m
1/27/1994	--		26.42	0.00	12.09	420	3.3	<0.5	1	0.9	48.9	--	--	m
4/21/1994	--		24.36	0.00	14.15	1,000	110	25	56	27	75	1.3	--	c, m

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
AW-5 Cont.														
9/9/1994	--	38.51	24.55	0.00	13.96	210	<0.5	<0.5	0.5	0.9	--	2.7	--	m
12/21/1994	--		22.30	0.00	16.21	340	<0.5	15	3.3	1.4	104	--	--	m, e
12/21/1994	--		22.30	0.00	16.21	410	<0.5	20	4.3	1.4	114	1.1	--	m
1/30/1995	--		18.88	0.00	19.63	210	0.6	11	8.8	2	--	1.5	--	
4/10/1995	--		18.44	0.00	20.07	500	1.4	0.59	6.5	4.3	--	8.3	--	
6/29/1995	--		19.92	0.00	18.59	490	1.2	0.58	7.3	2.2	--	6.9	--	d
9/18/1995	--		22.15	0.00	16.36	--	--	--	--	--	--	--	--	
9/19/1995	--		--	--	--	260	0.62	<0.50	3.1	1.1	110	8.2	--	
12/7/1995	--		23.75	0.00	14.76	60	<0.50	<0.50	<0.50	<1.0	210	4.3	--	
3/28/1996	--		17.76	0.00	20.75	<50	<0.5	<1	<1	<1	63	3.0	--	
6/20/1996	--		18.46	0.00	20.05	<50	<0.5	<1	<1	<1	<10	3.6	--	
10/11/1996	--		21.84	0.00	16.67	<50	<0.5	<1.0	<1.0	<1.0	<10	4.5	--	
1/2/1997	--		18.01	0.00	20.50	<50	<0.5	<1.0	<1.0	<1.0	<10	4.6	--	
4/14/1997	--		19.35	0.00	19.16	<50	<0.5	<1.0	<1.0	<1.0	<10	5.1	--	
7/2/1997	--		20.29	0.00	18.22	<50	<0.5	<1.0	<1.0	<1.0	<10	4.0	--	
9/30/1997	--		23.15	0.00	15.36	<250	<2.5	<5.0	<5.0	<5.0	1,300	6.3	--	
1/21/1998	--		17.33	0.00	21.18	6,100	<0.5	2.1	<1.0	<1.0	3,700	4.5	--	
4/9/1998	--		15.25	0.00	23.26	--	--	--	--	--	--	--	--	
4/10/1998	--		--	--	--	3,500	<0.5	<1.0	<1.0	<1.0	3,000	5.4	--	
6/19/1998	--		17.39	0.00	21.12	3,300	<0.5	<1.0	<1.0	<1.0	2,500	5.2	--	
11/30/1998	--		--	--	--	--	--	--	--	--	--	--	--	f
1/21/1999	--		21.22	0.00	17.29	2,800	<1.0	<1.0	<1.0	<1.0	1,800	--	--	
4/30/1999	--		21.50	0.00	17.01	--	--	--	--	--	--	--	--	
7/9/1999	--		20.15	0.00	18.36	4,000	<1.0	<1.0	<1.0	<1.0	3400/3500	--	--	g
11/3/1999	--		22.04	0.00	16.47	--	--	--	--	--	--	--	--	
1/12/2000	--		22.59	0.00	15.92	1,000	7.3	30	6.7	40	4,600	--	--	j (TPH-g/GRO)
4/13/2000	--		23.11	0.00	15.40	--	--	--	--	--	--	--	--	
7/26/2000	--		22.72	0.00	15.79	1,800	94	35	5.9	27	16,000	--	--	
10/24/2000	--		20.15	0.00	18.36	--	--	--	--	--	--	--	--	
1/19/2001	--		19.79	0.00	18.72	2,600	<0.5	<0.5	<0.5	<0.5	4,580	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>AW-5 Cont.</b>														
7/24/2001	--	38.51	20.17	0.00	18.34	5,400	18.4	17.2	<12.5	40.8	5,170	--	--	
1/18/2002	--		17.34	0.00	21.17	3,800	343	0.738	<0.5	<1.0	3,750	--	--	
8/1/2002	--		19.49	0.00	19.02	5,300	<12.5	<12.5	<12.5	<25	3,470	--	--	
1/16/2003	--		17.30	0.00	21.21	1,400	140	<10	<10	<10	1,600	--	--	p
7/7/2003	--		18.43	0.00	20.08	1,400	<10	<10	<10	<10	980	--	--	q
02/05/2004	--		17.24	0.00	21.27	1,800	<10	<10	<10	<10	810	--	6.7	
07/01/2004	P		19.43	0.00	19.08	1,100	<5.0	<5.0	<5.0	<5.0	550	--	6.6	
03/16/2005	P		15.30	0.00	23.21	<5,000	<50	<50	<50	130	890	2.1	6.7	
07/22/2005	P		17.22	0.00	21.29	<500	5.2	<5.0	<5.0	6.9	390	--	6.6	
01/25/2006	P		15.28	0.00	23.23	<500	<5.0	<5.0	<5.0	<5.0	26	--	7.0	
7/6/2006	P		15.93	0.00	22.58	220	<5.0	<5.0	<5.0	<5.0	170	--	6.5	
1/8/2007	P		17.90	0.00	20.61	170	<2.5	<2.5	<2.5	<2.5	220	5.22	6.84	
7/10/2007	P		19.00	0.00	19.51	350	<2.5	<2.5	<2.5	<2.5	360	1.96	7.02	
1/15/2008	P		18.16	0.00	20.35	130	0.54	<0.50	<0.50	<0.50	85	0.90	6.82	w
7/15/2008	P		19.88	0.00	18.63	100	<0.50	<0.50	<0.50	<0.50	11	2.13	6.85	
10/21/2008	P		20.88	0.00	17.63	86	<0.50	<0.50	<0.50	<0.50	63	1.01	7.10	
1/6/2009	P		20.28	0.00	18.23	150	<1.0	<1.0	<1.0	<1.0	26	0.70	6.22	
4/21/2009	P		18.07	0.00	20.44	100	<0.50	<0.50	<0.50	<0.50	5.1	2.09	7.35	
7/21/2009	P		19.70	0.00	18.81	83	<0.50	<0.50	<0.50	<0.50	25	6.50	7.14	y
3/18/2010	P		16.18	0.00	22.33	<50	<0.50	<0.50	<0.50	<1.0	72	0.74	6.64	
7/29/2010	P		18.00	0.00	20.51	<50	<0.50	<0.50	<0.50	<1.0	1.9	1.32	7.0	
11/12/2010	--		19.73	0.00	18.78	--	--	--	--	--	--	--	--	
2/22/2011	NP		15.67	0.00	22.84	<50	<0.50	<0.50	<0.50	<1.0	1.9	0.57	6.40	
7/14/2011	P		16.70	0.00	21.81	<50	<0.50	<0.50	<0.50	<1.0	0.87	0.72	7.03	
<b>AW-6</b>														
4/5/1991	--	37.08	22.48	0.00	14.60	1,100	80	19	1.4	230	--	--	--	
4/1/1992	--		22.50	0.00	14.58	--	--	--	--	--	--	--	--	
4/2/1992	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
7/6/1992	--		22.74	0.00	14.34	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
10/7/1992	--		24.64	0.00	12.44	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
AW-6 Cont.														
1/14/1993	--	37.08	22.36	0.00	14.72	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	m
4/22/1993	--		22.82	0.00	14.26	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	m
7/15/1993	--		20.49	0.00	16.59	<50	<0.5	<0.5	<0.5	0.8	<5.0	--	--	m
10/21/1993	--		22.84	0.00	14.24	<50	0.5	0.6	<0.5	0.7	<5.0	--	--	m
1/27/1994	--		22.33	0.00	14.75	<50	<0.5	0.9	3.1	12	<5.0	--	--	m
4/21/1994	--		20.66	0.00	16.42	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.7	--	m
9/9/1994	--		21.57	0.00	15.51	<50	0.9	<0.5	<0.5	0.5	--	2.9	--	m
12/21/1994	--		19.40	0.00	17.68	<50	1.8	0.8	0.8	3.2	5.19	1.1	--	m
1/30/1995	--		16.74	0.00	20.34	<50	<0.50	<0.50	<0.50	<1.0	--	--	--	e
1/30/1995	--		16.74	0.00	20.34	<50	<0.50	<0.50	<0.50	<1.0	--	2.2	--	
4/10/1995	--		16.01	0.00	21.07	<50	<0.50	<0.50	<0.50	<1.0	--	8.6	--	
6/29/1995	--		17.54	0.00	19.54	<50	<0.50	<0.50	<0.50	<1.0	--	6.3	--	
9/18/1995	--		19.65	0.00	17.43	--	--	--	--	--	--	--	--	
9/19/1995	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	25	8.3	--	
12/7/1995	--		20.35	0.00	16.73	<50	<0.50	<0.50	<0.50	<1.0	16	4.7	--	
3/28/1996	--		14.99	0.00	22.09	<50	<0.5	<1	<1	<1	<10	4.0	--	
6/20/1996	--		15.59	0.00	21.49	<50	<0.5	<1	<1	<1	<10	4.6	--	
10/11/1996	--		19.09	0.00	17.99	<50	<0.5	<1.0	<1.0	<1.0	<10	5.3	--	
1/2/1997	--		15.11	0.00	21.97	<50	<0.5	<1.0	<1.0	<1.0	<10	5.5	--	
4/14/1997	--		16.25	0.00	20.83	<50	<0.5	<1.0	<1.0	<1.0	<10	3.9	--	
7/2/1997	--		17.99	0.00	19.09	<50	<0.5	<1.0	<1.0	<1.0	<10	5.2	--	
9/30/1997	--		20.50	0.00	16.58	<50	<0.5	<1.0	<1.0	<1.0	<10	6.0	--	
1/21/1998	--		15.72	0.00	21.36	160	<0.5	<1.0	<1.0	<1.0	110	5.0	--	
4/9/1998	--		13.31	0.00	23.77	--	--	--	--	--	--	--	--	
4/10/1998	--		--	--	--	370	<0.5	<1.0	<1.0	<1.0	300	4.3	--	
6/19/1998	--		15.18	0.00	21.90	830	2	<1.0	<1.0	<1.0	690	4.0	--	
11/30/1998	--		--	--	--	--	--	--	--	--	--	--	--	f
1/21/1999	--		15.78	0.00	21.30	2,300	<1.0	<1.0	<1.0	<1.0	1,900	--	--	
4/30/1999	--		16.01	0.00	21.07	--	--	--	--	--	--	--	--	
7/9/1999	--		17.63	0.00	19.45	--	--	--	--	--	--	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
AW-6 Cont.						--	--	--	--	--	--	--	--	
11/3/1999	--	37.08	18.42	0.00	18.66	--	--	--	--	--	--	--	--	
1/12/2000	--		19.92	0.00	17.16	<50	<0.5	<0.5	<0.5	<0.5	2,700	--	--	
4/13/2000	--		19.87	0.00	17.21	--	--	--	--	--	--	--	--	
7/26/2000	--		19.99	0.00	17.09	--	--	--	--	--	--	--	--	
10/24/2000	--		18.12	0.00	18.96	--	--	--	--	--	--	--	--	
1/19/2001	--		17.04	0.00	20.04	2,700	<0.5	<0.5	<0.5	<0.5	4,850	--	--	
7/24/2001	--		17.83	0.00	19.25	--	--	--	--	--	--	--	--	
1/18/2002	--		15.54	0.00	21.54	5,500	614	<0.5	<0.5	<1.0	5,390	--	--	
8/1/2002	--		16.98	0.00	20.10	--	--	--	--	--	--	--	--	
1/16/2003	--		15.05	0.00	22.03	2,900	<20	<20	<20	63	2,500	--	--	p
7/7/2003	--		16.58	0.00	20.50	--	--	--	--	--	--	--	--	
02/05/2004	--		15.84	0.00	21.24	7,000	<50	<50	<50	<50	5,400	--	6.7	
07/01/2004	P		17.91	0.00	19.17	9,600	<50	<50	<50	<50	4,600	--	6.5	
03/16/2005	P		16.04	0.00	21.04	6,700	<25	<25	<25	<25	4,400	3.0	6.8	
07/22/2005	P		14.20	0.00	22.88	<5,000	<50	<50	<50	<50	5,500	--	6.7	
01/25/2006	P		14.17	0.00	22.91	<5,000	<50	<50	<50	<50	3,000	--	7.0	
7/6/2006	P		14.82	0.00	22.26	3,100	<50	<50	<50	<50	2,800	--	6.5	
1/8/2007	P		15.72	0.00	21.36	5100	<50	<50	<50	<50	7400	3.18	6.78	
7/10/2007	P		16.99	0.00	20.09	3,700	<100	<100	<100	<100	3,900	2.09	6.83	w
1/15/2008	P		15.55	0.00	21.53	120	1.1	<1.0	<1.0	<1.0	150	0.58	6.80	w
7/15/2008	P		17.84	0.00	19.24	130	<0.50	<0.50	<0.50	<0.50	270	2.12	6.87	
10/21/2008	P		18.92	0.00	18.16	81	<5.0	<5.0	<5.0	<5.0	160	1.01	7.19	
1/6/2009	P		18.37	0.00	18.71	76	<5.0	<5.0	<5.0	<5.0	97	0.94	6.23	
4/21/2009	P		15.97	0.00	21.11	<50	<0.50	<0.50	<0.50	<0.50	22	4.29	7.38	
7/21/2009	P		17.90	0.00	19.18	76	<0.50	<0.50	<0.50	<0.50	93	10.79	7.09	y
3/18/2010	P		14.13	0.00	22.95	<50	<0.50	<0.50	<0.50	<1.0	93	0.68	6.75	
7/29/2010	P		16.46	0.00	20.62	<50	<0.50	<0.50	<0.50	<1.0	46	0.84	7.0	
11/12/2010	--		17.76	0.00	19.32	--	--	--	--	--	--	--	--	
2/22/2011	P		13.53	0.00	23.55	<50	<0.50	<0.50	<0.50	<1.0	4.6	0.85	6.41	
7/14/2011	P		14.23	0.00	22.85	<50	<0.50	<0.50	<0.50	<1.0	47	0.77	7.02	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
AW-7														
4/5/1991	--	37.60	23.38	0.00	14.22	<50	0.4	0.7	<0.3	<0.3	--	--	--	
4/1/1992	--		21.92	0.00	15.68	--	--	--	--	--	--	--	--	
4/2/1992	--		--	--	--	<50	<0.5	3.2	1	5.4	--	--	--	
7/6/1992	--		24.50	0.00	13.10	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
10/7/1992	--		26.18	0.00	11.42	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
1/14/1993	--		22.03	0.00	15.57	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	m
4/22/1993	--		21.18	0.00	16.42	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	m
7/15/1993	--		22.09	0.00	15.51	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	m
10/21/1993	--		24.05	0.00	13.55	51	5	4.2	3.5	8.2	<5.0	--	--	m
1/27/1994	--		23.40	0.00	14.20	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	m
4/21/1994	--		22.24	0.00	15.36	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.5	--	m
9/9/1994	--		22.94	0.00	14.66	<50	<0.5	<0.5	<0.5	0.5	--	4.3	--	m
12/21/1994	--		20.86	0.00	16.74	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.2	--	m
1/30/1995	--		17.51	0.00	20.09	<50	<0.50	<0.50	<0.50	<1.0	--	2.7	--	
4/10/1995	--		16.69	0.00	20.91	<50	<0.50	<0.50	<0.50	<1.0	--	4.8	--	
6/29/1995	--		18.33	0.00	19.27	<50	<0.50	<0.50	<0.50	<1.0	--	7.6	--	
9/18/1995	--		20.68	0.00	16.92	--	--	--	--	--	--	--	--	
9/19/1995	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	5.1	--	
12/7/1995	--		22.15	0.00	15.45	<50	<0.50	<0.50	<0.50	<1.0	<5.0	5.2	--	
3/28/1996	--		16.38	0.00	21.22	<50	<0.5	<1	<1	<1	<10	3.9	--	
6/20/1996	--		17.02	0.00	20.58	<50	<0.5	<1	<1	<1	<10	5.0	--	
10/11/1996	--		20.47	0.00	17.13	<50	<0.5	<1.0	<1.0	<1.0	<10	6.3	--	
1/2/1997	--		16.70	0.00	20.90	<50	<0.5	<1.0	<1.0	<1.0	<10	6.2	--	
4/14/1997	--		17.96	0.00	19.64	<50	<0.5	<1.0	<1.0	<1.0	<10	5.0	--	
7/2/1997	--		19.11	0.00	18.49	<50	<0.5	<1.0	<1.0	<1.0	<10	5.4	--	
9/30/1997	--		22.97	0.00	14.63	<250	<2.5	<5.0	<5.0	<5.0	1,100	6.5	--	
1/21/1998	--		16.50	0.00	21.10	<50	<0.5	<1.0	<1.0	<1.0	<10	4.9	--	
4/9/1998	--		13.56	0.00	24.04	<50	<0.5	<1.0	<1.0	<1.0	<10	4.9	--	
6/19/1998	--		15.41	0.00	22.19	<50	<0.5	<1.0	<1.0	<1.0	<10	4.4	--	
11/30/1998	--		18.90	0.00	18.70	--	--	--	--	--	--	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>AW-7 Cont.</b>														
1/21/1999	--	37.60	18.39	0.00	19.21	--	--	--	--	--	--	--	--	
4/30/1999	--		18.54	0.00	19.06	--	--	--	--	--	--	--	--	
7/9/1999	--		17.98	0.00	19.62	--	--	--	--	--	--	--	--	
11/3/1999	--		20.22	0.00	17.38	--	--	--	--	--	--	--	--	
1/12/2000	--		19.46	0.00	18.14	--	--	--	--	--	--	--	--	
4/13/2000	--		19.59	0.00	18.01	--	--	--	--	--	--	--	--	
7/26/2000	--		19.69	0.00	17.91	--	--	--	--	--	--	--	--	
10/24/2000	--		18.78	0.00	18.82	--	--	--	--	--	--	--	--	
1/19/2001	--		--	--	--	--	--	--	--	--	--	--	--	f
7/25/2001	--		--	--	--	--	--	--	--	--	--	--	--	f
1/18/2002	--		--	--	--	--	--	--	--	--	--	--	--	o
8/1/2002	--		--	--	--	--	--	--	--	--	--	--	--	o
1/16/2003	--		--	--	--	--	--	--	--	--	--	--	--	o
7/7/2003	--		--	--	--	--	--	--	--	--	--	--	--	o
02/05/2004	--		--	--	--	--	--	--	--	--	--	--	--	o
07/01/2004	--		--	--	--	--	--	--	--	--	--	--	--	o
03/16/2005	--		--	--	--	--	--	--	--	--	--	--	--	o
07/22/2005	--		--	--	--	--	--	--	--	--	--	--	--	o
01/25/2006	--		--	--	--	--	--	--	--	--	--	--	--	o
2/22/2011	--		--	--	--	--	--	--	--	--	--	--	--	f
<b>AW-8</b>														
4/5/1991	--	40.86	26.68	0.00	14.18	80	1.9	2.2	0.5	1.3	--	--	--	
4/1/1992	--		25.11	0.00	15.75	73	<0.5	0.7	<0.5	0.6	--	--	--	
7/6/1992	--		26.43	0.00	14.43	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
10/7/1992	--		28.59	0.00	12.27	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
1/14/1993	--		25.55	0.00	15.31	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	m
4/22/1993	--		22.29	0.00	18.57	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	m
7/15/1993	--		23.42	0.00	17.44	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	m
10/21/1993	--		25.15	0.00	15.71	<50	1.9	1.8	1.3	3.3	<5.0	--	--	m
1/27/1994	--		25.42	0.00	15.44	<50	<0.5	0.5	0.6	8.5	<5.0	--	--	m

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
AW-8 Cont.														
4/21/1994	--	40.86	24.14	0.00	16.72	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.5	--	m
9/9/1994	--		24.55	0.00	16.31	<50	<0.5	<0.5	<0.5	<0.5	--	2.4	--	m
12/21/1994	--		22.72	0.00	18.14	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.1	--	m
1/30/1995	--		19.75	0.00	21.11	<50	<0.50	1	<0.50	1	--	0.8	--	
4/10/1995	--		17.78	0.00	23.08	<50	<0.50	<0.50	<0.50	<1.0	--	8.3	--	
6/29/1995	--		18.18	0.00	22.68	<50	<0.50	<0.50	<0.50	<1.0	--	8.3	--	
9/18/1995	--		20.20	0.00	20.66	--	--	--	--	--	--	--	--	
9/19/1995	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	7.7	--	
12/7/1995	--		21.54	0.00	19.32	<50	<0.50	<0.50	<0.50	<1.0	<5.0	4.4	--	
3/28/1996	--		15.77	0.00	25.09	<50	<0.5	<1	<1	<1	<10	3.8	--	
6/20/1996	--		16.41	0.00	24.45	<50	<0.5	<1	<1	<1	<10	3.6	--	
10/11/1996	--		19.90	0.00	20.96	<50	<0.5	<1.0	<1.0	<1.0	<10	6.4	--	
1/2/1997	--		15.89	0.00	24.97	<50	<0.5	<1.0	<1.0	<1.0	<10	5.9	--	
4/14/1997	--		17.07	0.00	23.79	<50	<0.5	<1.0	<1.0	<1.0	<10	4.6	--	
7/2/1997	--		18.67	0.00	22.19	<50	<0.5	<1.0	<1.0	<1.0	<10	5.6	--	
9/30/1997	--		22.52	0.00	18.34	<50	<5	<10	<10	<10	820	6.7	--	
1/21/1998	--		16.01	0.00	24.85	<50	<0.5	<1.0	<1.0	<1.0	<10	5.2	--	
4/9/1998	--		11.18	0.00	29.68	<50	<0.5	<1.0	<1.0	<1.0	<10	4.4	--	
6/19/1998	--		13.01	0.00	27.85	<50	<0.5	<1.0	<1.0	<1.0	<10	4.1	--	
11/30/1998	--		17.46	0.00	23.40	--	--	--	--	--	--	--	--	
1/21/1999	--		17.47	0.00	23.39	--	--	--	--	--	--	--	--	
4/30/1999	--		17.60	0.00	23.26	--	--	--	--	--	--	--	--	
7/9/1999	--		16.50	0.00	24.36	--	--	--	--	--	--	--	--	
11/3/1999	--		19.29	0.00	21.57	--	--	--	--	--	--	--	--	
1/12/2000	--		21.49	0.00	19.37	--	--	--	--	--	--	--	--	
4/13/2000	--		21.60	0.00	19.26	--	--	--	--	--	--	--	--	
7/26/2000	--		21.53	0.00	19.33	--	--	--	--	--	--	--	--	
10/24/2000	--		19.37	0.00	21.49	--	--	--	--	--	--	--	--	
1/19/2001	--		18.60	0.00	22.26	--	--	--	--	--	--	--	--	
7/24/2001	--		18.22	0.00	22.64	--	--	--	--	--	--	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
AW-8 Cont.						--	--	--	--	--	--	--	--	
1/18/2002	--	40.86	16.29	0.00	24.57	--	--	--	--	--	--	--	--	
8/1/2002	--		17.25	0.00	23.61	--	--	--	--	--	--	--	--	
1/16/2003	--		15.82	0.00	25.04	--	--	--	--	--	--	--	--	
7/7/2003	--		18.55	0.00	22.31	--	--	--	--	--	--	--	--	
02/05/2004	--		--	--	--	--	--	--	--	--	--	--	--	t
07/01/2004	--		18.25	0.00	22.61	--	--	--	--	--	--	--	--	t
03/16/2005	P		15.20	0.00	25.66	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.5	7.3	
07/22/2005	--		--	--	--	--	--	--	--	--	--	--	--	f
01/25/2006	--		--	--	--	--	--	--	--	--	--	--	--	f
7/6/2006	--		13.05	0.00	27.81	--	--	--	--	--	--	--	--	
1/8/2007	--		16.57	0.00	24.29	--	--	--	--	--	--	--	--	
7/10/2007	--		17.73	0.00	23.13	--	--	--	--	--	--	--	--	
1/15/2008	--		17.88	0.00	22.98	--	--	--	--	--	--	--	--	
7/15/2008	--		18.57	0.00	22.29	--	--	--	--	--	--	--	--	
10/21/2008	--		20.09	0.00	20.77	--	--	--	--	--	--	--	--	
1/6/2009	--		20.20	0.00	20.66	--	--	--	--	--	--	--	--	
4/21/2009	--		--	--	--	--	--	--	--	--	--	--	--	f
7/21/2009	--		--	--	--	--	--	--	--	--	--	--	--	f
3/18/2010	--		15.52	0.00	25.34	--	--	--	--	--	--	--	--	
7/29/2010	--		17.03	0.00	23.83	--	--	--	--	--	--	--	--	
11/12/2010	--		19.10	0.00	21.76	--	--	--	--	--	--	--	--	
2/22/2011	--		--	--	--	--	--	--	--	--	--	--	--	f
7/14/2011	--		14.92	0.00	25.94	--	--	--	--	--	--	--	--	
AW-9														
1/2/1997	--	37.78	10.00	0.00	27.78	<50	<0.5	<1.0	<1.0	<1.0	<10	6.7	--	
4/14/1997	--		--	--	--	--	--	--	--	--	--	--	--	f
7/2/1997	--		12.71	0.00	25.07	<50	<0.5	<1.0	<1.0	<1.0	<10	6.0	--	
9/30/1997	--		21.22	0.00	16.56	<50	<0.5	<1.0	<1.0	<1.0	<10	6.8	--	
1/21/1998	--		10.26	0.00	27.52	<50	<0.5	<1.0	<1.0	<1.0	<10	5.3	--	
4/9/1998	--		6.77	0.00	31.01	<50	<0.5	<1.0	<1.0	<1.0	<10	5.6	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>AW-9 Cont.</b>														
6/19/1998	--	37.78	8.96	0.00	28.82	<50	<0.5	<1.0	<1.0	<1.0	<10	4.8	--	
1/8/2007	--		17.35	0.00	20.43	--	--	--	--	--	--	--	--	
7/10/2007	--		18.65	0.00	19.13	--	--	--	--	--	--	--	--	
1/15/2008	--		18.51	0.00	19.27	--	--	--	--	--	--	--	--	
7/15/2008	--		19.56	0.00	18.22	--	--	--	--	--	--	--	--	
10/21/2008	--		21.07	0.00	16.71	--	--	--	--	--	--	--	--	
1/6/2009	--		21.00	0.00	16.78	--	--	--	--	--	--	--	--	
4/21/2009	--		18.28	0.00	19.50	--	--	--	--	--	--	--	--	
7/21/2009	--		20.00	0.00	17.78	--	--	--	--	--	--	--	--	
3/18/2010	--		16.45	0.00	21.33	--	--	--	--	--	--	--	--	
7/29/2010	--		18.07	0.00	19.71	--	--	--	--	--	--	--	--	
11/12/2010	--		20.03	0.00	17.75	--	--	--	--	--	--	--	--	
2/22/2011	--		18.25	0.00	19.53	--	--	--	--	--	--	--	--	
<b>7/14/2011</b>	<b>--</b>		<b>15.85</b>	<b>0.00</b>	<b>21.93</b>	--	--	--	--	--	--	--	--	
<b>IW-1</b>														
11/12/2010	--	NS	19.39	0.00	--	--	--	--	--	--	--	--	--	
<b>IW-2</b>														
11/12/2010	--	NS	19.80	0.00	--	--	--	--	--	--	--	0.67	6.27	
<b>IW-3</b>														
11/12/2010	P	NS	16.95	0.00	--	1,000	5.8	2.9	8.3	8.5	2.5	--	--	
<b>MW-1</b>														
4/5/1991	--	34.46	--	--	--	--	--	--	--	--	--	--	--	
4/1/1992	--		11.25	0.00	23.21	--	--	--	--	--	--	--	--	
7/6/1992	--		13.61	0.00	20.85	--	--	--	--	--	--	--	--	
10/7/1992	--		15.15	0.00	19.31	--	--	--	--	--	--	--	--	
1/14/1993	--		10.73	0.00	23.73	--	--	--	--	--	--	--	--	
4/22/1993	--		11.64	0.00	22.82	--	--	--	--	--	--	--	--	
7/15/1993	--		13.50	0.00	20.96	--	--	--	--	--	--	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-1 Cont.						--	--	--	--	--	--	--	--	
10/21/1993	--	34.46	15.21	0.00	19.25	--	--	--	--	--	--	--	--	
1/27/1994	--		17.48	0.00	16.98	--	--	--	--	--	--	--	--	
4/21/1994	--		10.94	0.00	23.52	110,000	1,400	9,100	3,400	30,000	11,000	1.6	--	c
9/9/1994	--		13.80	0.00	20.66	--	--	--	--	--	--	--	--	
12/21/1994	--		12.60	0.00	21.86	--	--	--	--	--	--	--	--	
1/30/1995	--		--	--	--	--	--	--	--	--	--	--	--	
4/10/1995	--		10.62	0.00	23.84	--	--	--	--	--	--	--	--	
6/29/1995	--		18.72	0.00	15.74	--	--	--	--	--	--	--	--	
9/18/1995	--		12.92	0.00	21.54	--	--	--	--	--	--	--	--	
12/7/1995	--		13.82	0.00	20.64	--	--	--	--	--	--	--	--	
3/28/1996	--		10.03	0.00	24.43	--	--	--	--	--	--	--	--	
6/20/1996	--		11.29	0.00	23.17	--	--	--	--	--	--	--	--	
10/11/1996	--		14.86	0.00	19.60	--	--	--	--	--	--	--	--	
1/2/1997	--		11.03	0.00	23.43	--	--	--	--	--	--	--	--	
4/14/1997	--		12.25	0.00	22.21	--	--	--	--	--	--	--	--	
4/15/1997	--		--	--	--	35,000	130	650	1,700	8,200	4,800	--	--	
7/2/1997	--		14.11	0.00	20.35	42,000	<250	<500	2,000	9,600	<5000	5.5	--	
9/30/1997	--		14.40	0.00	20.06	61,000	130	1,100	2,700	14,600	2,000	6.7	--	
1/21/1998	--		7.99	0.00	26.47	14,000	11	60	310	1,790	1,300	4.5	--	
4/9/1998	--		7.89	0.00	26.57	--	--	--	--	--	--	--	--	
4/10/1998	--		--	--	--	45,000	380	520	2,100	6,800	9,300	5.3	--	
6/19/1998	--		10.31	0.00	24.15	35,000	170	100	1,100	3,590	5,000	4.9	--	
11/30/1998	--		11.16	0.00	23.30	10,000	100	24	350	1,040	1800/2800	--	--	g
1/21/1999	--		10.76	0.00	23.70	18,000	120	37	590	1,800	2,700	--	--	
4/30/1999	--		10.78	0.00	23.68	17,000	240	89	1,100	1,900	1,600	--	--	
7/9/1999	--		12.62	0.00	21.84	58,000	140	100	1,800	6,900	1,200	--	--	
11/3/1999	--		14.00	0.00	20.46	20,000	62	42	620	2,100	630	--	--	
1/12/2000	--		15.25	0.00	19.21	72,000	110	120	2,400	8,200	630	--	--	
4/13/2000	--		15.57	0.00	18.89	37,000	300	32	1,000	1,700	810	--	--	
5/24/2000	--		11.75	0.00	22.71	--	--	--	--	--	--	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-1 Cont.						--	--	--	--	--	--	--	--	
6/1/2000	--	34.46	11.41	0.00	23.05	--	--	--	--	--	--	--	--	
6/8/2000	--		11.68	0.00	22.78	--	--	--	--	--	--	--	--	
6/15/2000	--		11.85	0.00	22.61	--	--	--	--	--	--	--	--	
7/26/2000	--		16.19	0.00	18.27	10,000	480	210	470	710	1,100	--	--	
10/24/2000	--		13.89	0.00	20.57	9,900	31	7.2	550	1,200	4,400	--	--	
1/19/2001	--		12.90	0.00	21.56	57,000	199	7.66	1,170	3,260	514	--	--	
7/24/2001	--		13.55	0.00	20.91	27,000	96.7	<5.0	548	1,460	285	--	--	
1/18/2002	--		10.91	0.00	23.55	25,000	150	31.5	597	1,040	138	--	--	
8/1/2002	--		12.97	0.00	21.49	25,000	80.2	17.7	714	1,280	489	--	--	
1/16/2003	--		10.45	0.00	24.01	22,000	170	110	630	670	<500	--	--	p
7/7/2003	--		12.40	0.00	22.06	9,900	42	<5.0	160	150	24	--	--	q, u
02/05/2004	--		10.26	0.00	24.20	6,200	56	11	250	210	9.2	--	6.9	
07/01/2004	--		13.20	0.00	21.26	18,000	<50	<50	210	300	<50	--	--	u
03/16/2005	P		9.62	0.00	24.84	7,600	33	5.4	200	130	<5.0	0.9	6.9	
07/22/2005	P		11.23	0.00	23.23	15,000	<10	<10	110	130	<10	--	6.8	u
01/25/2006	P		8.75	0.00	25.71	8,300	8.4	4.8	130	120	<2.5	--	7.3	u
7/6/2006	P		10.36	0.00	24.10	5,100	<2.5	<2.5	16	12	<2.5	--	6.9	
1/8/2007	P		11.55	0.00	22.91	2700	4.6	0.66	35	27	2.1	1.83	6.92	
7/10/2007	P		13.01	Sheen	21.45	1,800	1.9	<0.50	13	4.8	2.4	2.16	7.04	
1/15/2008	P		10.96	0.00	23.50	2,900	8.0	4.0	84	87	1.2	0.94	7.13	
7/15/2008	P		13.82	0.00	20.64	3,200	<0.50	<0.50	8.5	4.8	<0.50	1.20	7.06	
10/21/2008	P		14.70	0.00	19.76	2,300	2.6	<0.50	5.4	2.4	<0.50	1.99	7.30	
1/6/2009	P		13.67	0.00	20.79	2,600	15	1.8	13	3.4	<0.50	0.67	6.90	
4/21/2009	P		12.31	0.00	22.15	1,500	2.0	<0.50	1.7	<0.50	<0.50	1.99	7.54	
7/21/2009	P		13.85	0.00	20.61	2,900	<0.50	<0.50	4.6	1.2	<0.50	6.20	7.43	y
3/18/2010	P		9.29	Sheen	25.17	1,900	1.2	<0.50	5.2	2.7	<0.50	0.90	6.89	
7/29/2010	NP		12.63	0.00	21.83	1,600	<2.5	<2.5	<2.5	<5.0	<2.5	0.48	7.3	
11/12/2010	--		15.72	0.00	18.74	--	--	--	--	--	--	--	--	
2/22/2011	NP		8.03	0.00	26.43	1,400	<0.50	<0.50	0.92	<1.0	<0.50	1.53	6.30	
7/14/2011	NP		10.96	0.00	23.50	330	<0.50	<0.50	<0.50	<1.0	<0.50	0.71	7.07	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-2														
4/5/1991	--	35.50	16.62	0.00	18.88	<50	0.6	0.9	<0.3	<0.3	--	--	--	
4/1/1992	--		11.25	0.00	24.25	--	--	--	--	--	--	--	--	
4/2/1992	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
7/6/1992	--		12.72	0.00	22.78	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
10/7/1992	--		15.08	0.00	20.42	<50	<0.5	1.8	<0.5	2.3	--	--	--	
1/14/1993	--		9.69	0.00	25.81	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	m
4/22/1993	--		10.46	0.00	25.04	<50	<0.5	<0.5	<0.5	<0.5	30	--	--	c
7/15/1993	--		12.02	0.00	23.48	<50	<0.5	<0.5	<0.5	<0.5	21.7	--	--	c, m
10/21/1993	--		13.12	0.00	22.38	<50	0.7	0.9	<0.5	0.9	14.9	--	--	m
1/27/1994	--		12.01	0.00	23.49	<50	0.6	<0.5	<0.5	<0.5	11.5	--	--	m
4/21/1994	--		10.60	0.00	24.90	<50	<0.5	<0.5	<0.5	<0.5	11.4	1.1	--	m
9/9/1994	--		12.42	0.00	23.08	<50	<0.5	<0.5	<0.5	0.6	--	2.2	--	m
12/21/1994	--		10.85	0.00	24.65	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.2	--	m
1/30/1995	--		8.38	0.00	27.12	<50	<0.50	<0.50	<0.50	<1.0	--	1.7	--	
4/10/1995	--		9.00	0.00	26.50	<50	<0.50	<0.50	<0.50	<1.0	--	7.8	--	
6/29/1995	--		9.91	0.00	25.59	<50	<0.50	<0.50	<0.50	<1.0	--	9.1	--	
9/18/1995	--		10.98	0.00	24.52	--	--	--	--	--	--	--	--	
9/19/1995	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	7.2	--	
12/7/1995	--		12.30	0.00	23.20	<50	<0.50	<0.50	<0.50	<1.0	<5.0	2.4	--	
3/28/1996	--		8.57	0.00	26.93	<50	<0.5	<1	<1	<1	<10	3.2	--	
6/20/1996	--		9.77	0.00	25.73	<50	<0.5	<1	<1	<1	<10	4.2	--	
10/11/1996	--		13.32	0.00	22.18	<50	<0.5	<1.0	<1.0	<1.0	<10	6.3	--	
1/2/1997	--		9.60	0.00	25.90	<50	<0.5	<1.0	<1.0	<1.0	<10	6.7	--	
4/14/1997	--		10.93	0.00	24.57	<50	<0.5	<1.0	<1.0	<1.0	<10	5.7	--	
7/2/1997	--		12.57	0.00	22.93	<50	<0.5	<1.0	<1.0	<1.0	<10	5.9	--	
9/30/1997	--		12.91	0.00	22.59	<50	<0.5	<1.0	<1.0	<1.0	<10	6.3	--	
1/21/1998	--		10.12	0.00	25.38	160	<0.5	<1.0	<1.0	<1.0	100	5.4	--	
4/9/1998	--		6.82	0.00	28.68	--	--	--	--	--	--	--	--	
4/10/1998	--		--	--	--	<50	1	<1.0	<1.0	<1.0	23	5.0	--	
6/19/1998	--		9.00	0.00	26.50	<50	<0.5	<1.0	<1.0	<1.0	<10	4.9	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>MW-2 Cont.</b>														
11/30/1998	--	35.50	9.44	0.00	26.06	--	--	--	--	--	--	--	--	--
1/21/1999	--		8.96	0.00	26.54	<50	<1.0	<1.0	<1.0	<1.0	1.9	--	--	
4/30/1999	--		9.15	0.00	26.35	--	--	--	--	--	--	--	--	
7/9/1999	--		10.82	0.00	24.68	--	--	--	--	--	--	--	--	
11/3/1999	--		11.86	0.00	23.64	--	--	--	--	--	--	--	--	
1/12/2000	--		12.35	0.00	23.15	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	
4/13/2000	--		13.01	0.00	22.49	--	--	--	--	--	--	--	--	
7/26/2000	--		13.01	0.00	22.49	--	--	--	--	--	--	--	--	
10/24/2000	--		11.57	0.00	23.93	--	--	--	--	--	--	--	--	
1/19/2001	--		10.52	0.00	24.98	--	--	--	--	--	--	--	--	
7/24/2001	--		11.13	0.00	24.37	--	--	--	--	--	--	--	--	
1/18/2002	--		8.85	0.00	26.65	--	--	--	--	--	--	--	--	
8/1/2002	--		10.47	0.00	25.03	--	--	--	--	--	--	--	--	
1/14/2003	--		8.49	0.00	27.01	--	--	--	--	--	--	--	--	
7/7/2003	--		9.63	0.00	25.87	--	--	--	--	--	--	--	--	
02/05/2004	--		8.40	0.00	27.10	--	--	--	--	--	--	--	--	
07/01/2004	NP		9.94	0.00	25.56	--	--	--	--	--	--	--	--	
03/16/2005	P		8.39	0.00	27.11	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	7.1	
07/22/2005	--		8.80	0.00	26.70	--	--	--	--	--	--	--	--	
01/25/2006	--		7.85	0.00	27.65	--	--	--	--	--	--	--	--	
7/6/2006	--		8.33	0.00	27.17	--	--	--	--	--	--	--	--	
1/8/2007	--		9.35	0.00	26.15	--	--	--	--	--	--	--	--	
7/10/2007	--		10.45	0.00	25.05	--	--	--	--	--	--	--	--	
1/15/2008	--		18.83	0.00	16.67	--	--	--	--	--	--	--	--	
7/15/2008	--		11.07	0.00	24.43	--	--	--	--	--	--	--	--	
10/21/2008	--		11.30	0.00	24.20	--	--	--	--	--	--	--	--	
1/6/2009	--		11.00	0.00	24.50	--	--	--	--	--	--	--	--	
4/21/2009	--		10.00	0.00	25.50	--	--	--	--	--	--	--	--	
7/21/2009	--		11.10	0.00	24.40	--	--	--	--	--	--	--	--	
3/18/2010	--		7.93	0.00	27.57	--	--	--	--	--	--	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>MW-2 Cont.</b>														
7/29/2010	--	35.50	10.31	0.00	25.19	--	--	--	--	--	--	--	--	
11/12/2010	--		10.84	0.00	24.66	--	--	--	--	--	--	--	--	
2/22/2011	--		7.11	0.00	28.39	--	--	--	--	--	--	--	--	
7/14/2011	--		<b>8.90</b>	<b>0.00</b>	<b>26.60</b>	--	--	--	--	--	--	--	--	
<b>MW-3</b>														
4/5/1991	--	36.53	17.84	0.00	18.69	<50	<0.3	<0.3	<0.3	<0.3	--	--	--	
4/1/1992	--		15.64	0.00	20.89	--	--	--	--	--	--	--	--	
4/2/1992	--		--	--	--	<50	1.4	<0.5	<0.5	<0.5	--	--	--	
7/6/1992	--		19.03	0.00	17.50	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
10/7/1992	--		21.83	0.00	14.70	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
1/14/1993	--		15.96	0.00	20.57	350	<0.5	<0.5	<0.5	<0.5	714	--	--	c, m
4/22/1993	--		16.20	0.00	20.33	2,800	<0.5	<0.5	<0.5	<0.5	3,600	--	--	c, m
7/15/1993	--		16.82	0.00	19.71	1,400	1.2	<0.5	2	3.5	2,204	--	--	c, m
10/21/1993	--		18.84	0.00	17.69	370	2.1	2.3	2.3	6	847	--	--	c, m
1/27/1994	--		18.00	0.00	18.53	1,300	6.3	<0.5	<0.5	<0.5	3,892	--	--	c, m
4/21/1994	--		16.62	0.00	19.91	2,000	<0.5	<0.5	<0.5	<0.5	3,864	1.4	--	c, m
9/9/1994	--		18.38	0.00	18.15	1,300	<0.5	<0.5	0.5	1.2	--	3.0	--	m
12/21/1994	--		15.28	0.00	21.25	420	16	0.7	3.5	5.9	800	1.9	--	m
1/30/1995	--		12.62	0.00	23.91	<50	<0.50	<0.50	<0.50	<1.0	--	2.5	--	
4/10/1995	--		12.41	0.00	24.12	150	<0.50	<0.50	<0.50	<1.0	--	6.9	--	
6/29/1995	--		14.95	0.00	21.58	100	<0.50	<0.50	<0.50	<1.0	--	6.4	--	d (TPH-g)
9/18/1995	--		15.82	0.00	20.71	--	--	--	--	--	--	--	--	
9/19/1995	--		--	--	--	82	<0.50	<0.50	<0.50	<1.0	260	7.0	--	
12/7/1995	--		17.09	0.00	19.44	<50	<0.50	<0.50	<0.50	<1.0	91	4.5	--	
3/28/1996	--		11.90	0.00	24.63	<50	<0.5	<1	<1	<1	230	4.2	--	
6/20/1996	--		12.66	0.00	23.87	260	<0.5	<1	<1	<1	370	4.4	--	
10/11/1996	--		16.23	0.00	20.30	330	<0.5	<1.0	<1.0	<1.0	440	5.8	--	
1/2/1997	--		12.17	0.00	24.36	<50	<0.5	<1.0	<1.0	<1.0	140	6.0	--	
4/14/1997	--		13.45	0.00	23.08	--	--	--	--	--	--	--	--	
4/15/1997	--		--	--	--	1,500	<0.5	<1.0	<1.0	<1.0	1,800	5.6	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-3 Cont.														
7/2/1997	--	36.53	15.60	0.00	20.93	880	<0.5	<1.0	<1.0	<1.0	940	5.3	--	
9/30/1997	--		17.16	0.00	19.37	40,000	13,000	2,400	870	3,100	510	6.6	--	
1/21/1998	--		11.77	0.00	24.76	120	<0.5	<1.0	<1.0	<1.0	98	4.7	--	
4/9/1998	--		9.42	0.00	27.11	950	<0.5	<1.0	<1.0	<1.0	890	5.7	--	
6/19/1998	--		15.28	0.00	21.25	1,800	<0.5	<1.0	<1.0	<1.0	1,900	4.7	--	
6/19/1998	--		12.09	0.00	24.44	1,800	<0.5	<1.0	<1.0	<1.0	1,900	4.7	--	
6/19/1998	--		15.28	0.00	21.25	1,800	<0.5	<1.0	<1.0	<1.0	1,900	4.7	--	
6/19/1998	--		12.09	0.00	24.44	1,800	<0.5	<1.0	<1.0	<1.0	1,900	4.7	--	
1/21/1999	--		14.67	0.00	21.86	1,100	<1.0	<1.0	<1.0	<1.0	1,200	--	--	
4/30/1999	--		16.00	0.00	20.53	--	--	--	--	--	--	--	--	
7/9/1999	--		14.64	0.00	21.89	470	<1.0	<1.0	<1.0	<1.0	460/470	--	--	g
11/3/1999	--		16.39	0.00	20.14	--	--	--	--	--	--	--	--	
1/12/2000	--		16.80	0.00	19.73	<50	<0.5	<0.5	<0.5	<0.5	34	--	--	
4/13/2000	--		16.43	0.00	20.10	--	--	--	--	--	--	--	--	
7/26/2000	--		16.93	0.00	19.60	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	
10/24/2000	--		15.69	0.00	20.84	--	--	--	--	--	--	--	--	
1/19/2001	--		14.84	0.00	21.69	<50	<0.5	<0.5	<0.5	1	25.9	--	--	
7/23/2001	--		15.11	0.00	21.42	62	<0.5	<0.5	<0.5	<1.5	28.7	--	--	
1/18/2002	--		12.37	0.00	24.16	<50	<0.5	<0.5	<0.5	<1.0	17.8	--	--	
8/1/2002	--		14.44	0.00	22.09	66	<0.5	<0.5	<0.5	<1.0	<0.5	--	--	
1/16/2003	--		12.07	0.00	24.46	<50	<0.50	<0.50	<0.50	<0.50	20	--	--	p
7/7/2003	--		13.90	0.00	22.63	<50	<0.50	<0.50	<0.50	<0.50	8.8	--	--	q
02/05/2004	--		12.60	0.00	23.93	<50	<0.50	<0.50	<0.50	<0.50	4.6	--	7.0	
07/01/2004	--		14.57	0.00	21.96	<50	<0.50	<0.50	<0.50	<0.50	3.3	--	--	
03/16/2005	P		11.03	0.00	25.50	<50	<0.50	<0.50	<0.50	<0.50	4.4	1.5	6.8	
07/22/2005	P		12.68	0.00	23.85	<50	<0.50	<0.50	<0.50	<0.50	4.1	--	6.8	
01/25/2006	P		11.35	0.00	25.18	81	<0.50	<0.50	<0.50	<0.50	3.0	--	6.9	
7/6/2006	P		11.47	0.00	25.06	<50	<0.50	<0.50	<0.50	<0.50	3.0	--	6.9	
1/8/2007	P		12.92	0.00	23.61	<50	<0.50	<0.50	<0.50	<0.50	3.2	2.87	7.12	
7/10/2007	P		14.46	0.00	22.07	<50	<0.50	<0.50	<0.50	<0.50	2.8	2.87	7.25	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>MW-3 Cont.</b>														
1/15/2008	P	36.53	12.99	0.00	23.54	<50	<0.50	<0.50	<0.50	<0.50	0.88	1.04	7.10	
7/15/2008	P		15.30	0.00	21.23	<50	<0.50	<0.50	<0.50	<0.50	1.3	1.60	7.06	
10/21/2008	P		16.30	0.00	20.23	<50	<0.50	<0.50	<0.50	<0.50	0.94	2.21	7.28	
1/6/2009	P		15.45	0.00	21.08	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.02	6.43	
4/21/2009	P		13.90	0.00	22.63	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.26	7.59	
7/21/2009	P		15.28	0.00	21.25	<50	<0.50	<0.50	<0.50	<0.50	0.60	15.16	7.43	y
3/18/2010	P		11.65	0.00	24.88	<50	<0.50	<0.50	<0.50	<1.0	<0.50	0.73	7.05	
7/29/2010	NP		13.96	0.00	22.57	<50	<0.50	<0.50	<0.50	<1.0	<0.50	1.12	7.8	
11/12/2010	--		15.38	0.00	21.15	--	--	--	--	--	--	--	--	
2/22/2011	P		11.30	0.00	25.23	<50	<0.50	<0.50	<0.50	<1.0	0.50	0.70	6.60	
<b>7/14/2011</b>	<b>P</b>		<b>11.96</b>	<b>0.00</b>	<b>24.57</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>0.88</b>	<b>7.21</b>	
<b>QC-2</b>														
10/7/1992	--	37.73	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
1/14/1993	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i, m
4/22/1993	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i, m
7/15/1993	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	i, m
10/21/1993	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
1/27/1994	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
4/21/1994	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
9/9/1994	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
12/21/1994	--		--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	i
1/30/1995	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	--	i
4/10/1995	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	--	i
6/27/1995	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	--	i
9/19/1995	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	i
12/7/1995	--		--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	i
3/28/1996	--		--	--	--	<50	<0.5	<1	<1	<1	<10	--	--	i
6/20/1996	--		--	--	--	<50	<0.5	<1	<1	<1	<10	--	--	i
<b>RW-1</b>														

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>RW-1 Cont.</b>														
4/5/1991	--	37.73	--	--	--	--	--	--	--	--	--	--	--	
4/1/1992	--		22.81	0.00	14.92	--	--	--	--	--	--	--	--	
7/6/1992	--		26.92	0.00	10.81	--	--	--	--	--	--	--	--	
10/7/1992	--		28.51	0.00	9.22	--	--	--	--	--	--	--	--	
1/14/1993	--		23.75	0.00	13.98	--	--	--	--	--	--	--	--	
4/22/1993	--		22.70	0.00	15.03	--	--	--	--	--	--	--	--	
7/15/1993	--		26.10	0.00	11.63	--	--	--	--	--	--	--	--	
10/21/1993	--		25.40	0.00	12.33	--	--	--	--	--	--	--	--	
1/27/1994	--		28.02	0.00	9.71	--	--	--	--	--	--	--	--	
4/21/1994	--		23.10	0.00	14.63	--	--	--	--	--	--	--	--	
9/9/1994	--		24.39	0.00	13.34	--	--	--	--	--	--	--	--	
12/21/1994	--		--	--	--	--	--	--	--	--	--	--	--	h
12/7/1995	--		25.71	0.00	12.02	150,000	34,000	35,000	4,300	21,000	2,700	--	--	
3/28/1996	--		16.75	0.00	20.98	--	--	--	--	--	--	--	--	
6/20/1996	--		25.10	0.00	12.63	--	--	--	--	--	--	--	--	h
10/11/1996	--		25.51	0.00	12.22	130,000	20,000	32,000	2,800	20,700	1400/1200	7.4	--	g
1/2/1997	--		24.49	0.00	13.24	--	--	--	--	--	--	--	--	
4/14/1997	--		23.99	0.00	13.74	--	--	--	--	--	--	--	--	
4/15/1997	--		--	--	--	1,800,000	38,000	190,000	48,000	281,000	<25000	--	--	
7/2/1997	--		16.40	0.00	21.33	130,000	19,000	54,000	4,700	33,400	<10000	--	--	e
7/2/1997	--		16.40	0.00	21.33	140,000	19,000	55,000	4,400	32,400	<10000	5.7	--	
9/30/1997	--		27.97	0.00	9.76	140,000	17,000	29,000	2,500	15,900	1,200	--	--	e
9/30/1997	--		27.97	0.00	9.76	110,000	13,000	22,000	2,000	12,500	1,100	7.0	--	
1/21/1998	--		14.14	0.00	23.59	270,000	21,000	48,000	3,500	25,000	1,100	4.8	--	
4/9/1998	--		25.01	0.00	12.72	--	--	--	--	--	--	--	--	
4/10/1998	--		--	--	--	220,000	26,000	46,000	4,400	24,500	<2500	5.1	--	
6/19/1998	--		11.43	0.00	26.30	180,000	19,000	32,000	3,000	17,400	<2500	4.6	--	
11/30/1998	--		7.87	0.00	29.86	--	--	--	--	--	--	--	--	
1/21/1999	--		18.90	0.00	18.83	260,000	24,000	46,000	5,100	30,000	1,700	--	--	
7/9/1999	--		18.58	0.00	19.15	--	--	--	--	--	--	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>RW-1 Cont.</b>														
11/3/1999	--	37.73	20.85	0.00	16.88	160,000	19,000	37,000	3,800	25,000	1,500	--	--	
1/12/2000	--		21.20	0.00	16.53	240,000	18,000	46,000	5,800	26,000	2,100	--	--	
4/13/2000	--		21.71	0.00	16.02	120,000	2,100	33,000	2,800	28,000	1,500	--	--	
5/24/2000	--		21.89	0.00	15.84	--	--	--	--	--	--	--	--	
6/1/2000	--		16.30	0.00	21.43	--	--	--	--	--	--	--	--	
6/8/2000	--		17.88	0.00	19.85	--	--	--	--	--	--	--	--	
6/15/2000	--		16.72	0.00	21.01	--	--	--	--	--	--	--	--	
6/20/2000	--		21.04	0.00	16.69	--	--	--	--	--	--	--	--	
7/7/2000	--		17.21	0.00	20.52	--	--	--	--	--	--	--	--	
7/20/2000	--		21.87	0.00	15.86	--	--	--	--	--	--	--	--	
7/26/2000	--		21.45	0.00	16.28	67,000	160	5,300	2,100	18,000	1,100	--	--	
7/31/2000	--		22.11	0.00	15.62	--	--	--	--	--	--	--	--	
8/8/2000	--		17.80	0.00	19.93	--	--	--	--	--	--	--	--	
8/16/2000	--		17.92	0.00	19.81	--	--	--	--	--	--	--	--	
8/23/2000	--		18.11	0.00	19.62	--	--	--	--	--	--	--	--	
10/24/2000	--		18.93	0.00	18.80	--	--	--	--	--	--	--	--	
10/25/2000	--		19.04	0.00	18.69	360,000	18,000	78,000	34,000	180,000	2,100	--	--	k
1/19/2001	--		18.19	0.00	19.54	110,000	9,450	19,600	3,510	21,100	1,270	--	--	
7/24/2001	--		17.93	0.00	19.80	--	--	--	--	--	--	--	--	1
1/18/2002	--		14.87	0.00	22.86	63,000	2,060	4,370	1,770	13,900	491	--	--	
8/1/2002	--		16.84	0.00	20.89	60,000	1,210	2,200	1,520	10,600	390	--	--	
1/16/2003	--		14.42	0.00	23.31	34,000	2,500	2,700	780	5,300	680	--	--	p
7/7/2003	--		16.11	0.00	21.62	50,000	640	280	1,600	10,000	<250	--	--	q, u
07/01/2004	P		16.75	0.00	20.98	47,000	320	87	1,900	7,500	72	--	6.7	
03/16/2005	P		12.48	0.00	25.25	17,000	28	23	350	590	53	1.0	6.8	
07/22/2005	P		14.40	0.00	23.33	5,900	50	35	120	220	51	--	6.7	u
01/25/2006	P		12.00	0.00	25.73	7,000	22	5.9	190	--	34	--	7.1	
7/6/2006	P		13.01	0.00	24.72	16,000	37	14	470	230	64	--	6.8	
1/8/2007	P		14.75	0.00	22.98	2400	16	10	56	54	22	3.61	6.86	
7/10/2007	P		16.21	0.00	21.52	3,800	4.4	2.8	72	22	21	2.65	6.98	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>RW-1 Cont.</b>														
1/15/2008	P	37.73	14.63	0.00	23.10	1,700	21	1.6	45	10	14	1.31	6.82	
7/15/2008	P		17.04	0.00	20.69	1,600	<0.50	0.66	4.4	3.0	12	1.32	6.95	
10/21/2008	P		18.44	0.00	19.29	3,600	<0.50	1.3	19	10	12	0.79	7.17	
1/6/2009	P		17.50	0.00	20.23	1,300	<0.50	<0.50	1.6	2.7	7.0	1.02	6.43	
4/21/2009	P		15.37	0.00	22.36	2,000	27	1.9	30	16	6.0	0.86	7.38	x
7/21/2009	P		17.20	0.00	20.53	870	<0.50	<0.50	<0.50	0.57	7.0	13.31	7.35	y
3/18/2010	P		12.87	Sheen	24.86	2,500	<2.5	<2.5	2.7	<5.0	<2.5	0.74	6.73	
7/29/2010	NP		15.90	0.00	21.83	450	<0.50	<0.50	<0.50	1.4	3.5	--	7.1	
11/12/2010	--		17.25	0.00	20.48	--	--	--	--	--	--	--	--	
2/22/2011	NP		12.60	0.00	25.13	170	<0.50	<0.50	<0.50	<1.0	0.54	0.45	6.5	
<b>7/14/2011</b>	<b>P</b>		<b>13.87</b>	<b>0.00</b>	<b>23.86</b>	<b>310</b>	<b>0.70</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>3.1</b>	<b>1.1</b>	<b>0.57</b>	<b>7.14</b>	
<b>VEW-4</b>														
07/22/2005	P	NS	14.04	0.00	--	680	41	24	20	67	<0.50	--	6.8	
1/15/2008	P		15.05	0.00	--	350	19	1.1	5.0	3.3	<0.50	0.54	6.99	
7/15/2008	P		17.24	0.00	--	53	<0.50	<0.50	<0.50	<0.50	<0.50	0.59	6.95	
10/21/2008	--		--	--	--	--	--	--	--	--	--	--	--	v
1/6/2009	--		18.00	0.00	--	--	--	--	--	--	--	--	--	
4/21/2009	P		15.81	0.00	--	610	5.9	0.64	4.0	1.9	<0.50	1.99	7.41	
7/21/2009	P		17.60	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	8.99	7.24	y
3/18/2010	--		12.91	0.00	--	--	--	--	--	--	--	--	--	
7/29/2010	--		15.82	0.00	--	--	--	--	--	--	--	--	--	
11/12/2010	--		17.68	0.00	--	--	--	--	--	--	--	--	--	
2/22/2011	--		13.33	0.00	--	--	--	--	--	--	--	--	--	
<b>7/14/2011</b>	<b>--</b>		<b>13.94</b>	<b>0.00</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>VEW-5</b>														
07/22/2005	--	NS	--	--	--	--	--	--	--	--	--	--	--	v
1/15/2008	--		--	--	--	--	--	--	--	--	--	--	--	v
7/15/2008	--		--	--	--	--	--	--	--	--	--	--	--	v
10/21/2008	--		--	--	--	--	--	--	--	--	--	--	--	v

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
<b>VEW-5 Cont.</b>														
1/6/2009	--	NS	--	--	--	--	--	--	--	--	--	--	--	v
4/21/2009	--		--	--	--	--	--	--	--	--	--	--	--	v
7/21/2009	--		--	--	--	--	--	--	--	--	--	--	--	v
3/18/2010	--		--	--	--	--	--	--	--	--	--	--	--	v
7/29/2010	--		--	--	--	--	--	--	--	--	--	--	--	v
11/12/2010	--		--	--	--	--	--	--	--	--	--	--	--	v
2/22/2011	--		10.07	0.00	--	--	--	--	--	--	--	--	--	
<b>7/14/2011</b>	<b>--</b>		<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>v</b>
<b>VEW-6</b>														
1/15/2008	--	NS	11.83	0.00	--	--	--	--	--	--	--	--	--	
7/15/2008	--		14.81	0.00	--	--	--	--	--	--	--	--	--	
10/21/2008	--		16.02	0.00	--	--	--	--	--	--	--	--	--	
1/6/2009	--		14.70	0.00	--	--	--	--	--	--	--	--	--	
4/21/2009	--		13.34	0.00	--	--	--	--	--	--	--	--	--	
7/21/2009	--		14.90	0.00	--	--	--	--	--	--	--	--	--	
3/18/2010	--		10.39	0.00	--	--	--	--	--	--	--	--	--	
7/29/2010	--		14.65	0.00	--	--	--	--	--	--	--	--	--	
11/12/2010	--		14.73	0.00	--	--	--	--	--	--	--	--	--	
2/22/2011	--		13.33	0.00	--	--	--	--	--	--	--	--	--	
<b>7/14/2011</b>	<b>--</b>		<b>12.02</b>	<b>0.00</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	
<b>VEW-7</b>														
1/15/2008	--	NS	13.24	0.00	--	--	--	--	--	--	--	--	--	
7/15/2008	--		15.91	0.00	--	--	--	--	--	--	--	--	--	
10/21/2008	--		16.89	0.00	--	--	--	--	--	--	--	--	--	
1/6/2009	--		16.00	0.00	--	--	--	--	--	--	--	--	--	
4/21/2009	--		14.30	0.00	--	--	--	--	--	--	--	--	--	
7/21/2009	--		15.98	0.00	--	--	--	--	--	--	--	--	--	
3/18/2010	--		11.16	0.00	--	--	--	--	--	--	--	--	--	
7/29/2010	--		14.67	0.00	--	--	--	--	--	--	--	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
VEW-7 Cont.														
11/12/2010	--	NS	16.10	0.00	--	--	--	--	--	--	--	--	--	
2/22/2011	--		11.17	0.00	--	--	--	--	--	--	--	--	--	
7/14/2011	--		12.89	0.00	--	--	--	--	--	--	--	--	--	
VEW-8	P	NS	14.24	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	6.8	
07/22/2005	--		--	--	--	--	--	--	--	--	--	--	--	v
1/15/2008	--		--	--	--	--	--	--	--	--	--	--	--	v
7/15/2008	--		--	--	--	--	--	--	--	--	--	--	--	v
10/21/2008	--		--	--	--	--	--	--	--	--	--	--	--	v
1/6/2009	--		--	--	--	--	--	--	--	--	--	--	--	v
4/21/2009	--		16.53	0.00	--	--	--	--	--	--	--	--	--	
7/21/2009	--		--	--	--	--	--	--	--	--	--	--	--	v
3/18/2010	--		14.05	0.00	--	--	--	--	--	--	--	--	--	
7/29/2010	--		16.24	0.00	--	--	--	--	--	--	--	--	--	
11/12/2010	--		--	--	--	--	--	--	--	--	--	--	--	v
2/22/2011	--		13.69	0.00	--	--	--	--	--	--	--	--	--	
7/14/2011	--		14.49	0.00	--	--	--	--	--	--	--	--	--	
VEW-9														
1/15/2008	--	NS	5.31	0.00	--	--	--	--	--	--	--	--	--	
7/15/2008	--		--	--	--	--	--	--	--	--	--	--	--	v
10/21/2008	--		--	--	--	--	--	--	--	--	--	--	--	v
1/6/2009	--		--	--	--	--	--	--	--	--	--	--	--	f
4/21/2009	--		6.18	0.00	--	--	--	--	--	--	--	--	--	
7/21/2009	--		--	--	--	--	--	--	--	--	--	--	--	v
3/18/2010	--		5.32	0.00	--	--	--	--	--	--	--	--	--	
7/29/2010	--		7.03	0.00	--	--	--	--	--	--	--	--	--	a
11/12/2010	--		--	--	--	--	--	--	--	--	--	--	--	v
2/22/2011	--		5.50	0.00	--	--	--	--	--	--	--	--	--	
7/14/2011	--		6.58	0.00	--	--	--	--	--	--	--	--	--	
VW-1														

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
VW-1 Cont.						--	--	--	--	--	--	--	--	v
1/15/2008	--	NS	--	--	--	--	--	--	--	--	--	--	--	v
7/15/2008	--		--	--	--	--	--	--	--	--	--	--	--	v
10/21/2008	--		--	--	--	--	--	--	--	--	--	--	--	v
1/6/2009	--		--	--	--	--	--	--	--	--	--	--	--	v
4/21/2009	--		--	--	--	--	--	--	--	--	--	--	--	v
7/21/2009	--		--	--	--	--	--	--	--	--	--	--	--	v
3/18/2010	--		9.80	0.00	--	--	--	--	--	--	--	--	--	
7/29/2010	--		--	--	--	--	--	--	--	--	--	--	--	v
11/12/2010	--		--	--	--	--	--	--	--	--	--	--	--	v
2/22/2011	--		9.56	0.00	--	--	--	--	--	--	--	--	--	
7/14/2011	--		--	--	--	--	--	--	--	--	--	--	--	v
VW-2						--	--	--	--	--	--	--	--	
1/15/2008	--	NS	0.25	0.00	--	--	--	--	--	--	--	--	--	
7/15/2008	--		0.65	0.00	--	--	--	--	--	--	--	--	--	
10/21/2008	--		0.68	0.00	--	--	--	--	--	--	--	--	--	
1/6/2009	--		0.45	0.00	--	--	--	--	--	--	--	--	--	
4/21/2009	--		0.45	0.00	--	--	--	--	--	--	--	--	--	
7/21/2009	--		0.52	0.00	--	--	--	--	--	--	--	--	--	
3/18/2010	--		0.50	0.00	--	--	--	--	--	--	--	--	--	
7/29/2010	--		--	--	--	--	--	--	--	--	--	--	--	b
11/12/2010	--		0.81	0.00	--	--	--	--	--	--	--	--	--	
2/22/2011	--		--	--	--	--	--	--	--	--	--	--	--	b
7/14/2011	--		1.99	0.00	--	--	--	--	--	--	--	--	--	
VW-3						--	--	--	--	--	--	--	--	
1/15/2008	--	NS	2.08	0.00	--	--	--	--	--	--	--	--	--	
7/15/2008	--		4.10	0.00	--	--	--	--	--	--	--	--	--	
10/21/2008	--		4.95	0.00	--	--	--	--	--	--	--	--	--	
1/6/2009	--		5.40	0.00	--	--	--	--	--	--	--	--	--	
4/21/2009	--		4.57	0.00	--	--	--	--	--	--	--	--	--	

Table 1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

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

Well ID and Date Monitored	P/NP	TOC Elevation (feet)	Depth to Water (feet)	LNAPL Thickness (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
VW-3 Cont.						--	--	--	--	--	--	--	--	
7/21/2009	--	NS	5.22	0.00	--	--	--	--	--	--	--	--	--	
3/18/2010	--		5.42	0.00	--	--	--	--	--	--	--	--	--	
7/29/2010	--		5.60	0.00	--	--	--	--	--	--	--	--	--	
11/12/2010	--		6.06	0.00	--	--	--	--	--	--	--	--	--	
2/22/2011	--		5.32	0.00	--	--	--	--	--	--	--	--	--	
<b>7/14/2011</b>	<b>--</b>		<b>4.83</b>	<b>0.00</b>	--	--	--	--	--	--	--	--	--	
OW-1														
11/12/2010	--	NS	19.01	0.00	--	--	--	--	--	--	--	--	--	

Symbols & Abbreviations:

-- = 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.

MP = Micro Purged

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 oversite 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

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 ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
AW-1									
4/22/1993	--	--	987	--	--	--	--	--	
7/15/1993	--	--	838	--	--	--	--	--	
10/21/1993	--	--	832	--	--	--	--	--	
1/27/1994	--	--	650	--	--	--	--	--	
4/21/1994	--	--	1,119	--	--	--	--	--	
12/21/1994	--	--	855	--	--	--	--	--	
9/19/1995	--	--	1,000	--	--	--	--	--	
12/7/1995	--	--	1,100	--	--	--	--	--	
3/28/1996	--	--	<1000	--	--	--	--	--	
6/20/1996	--	--	<100	--	--	--	--	--	
10/11/1996	--	--	580	--	--	--	--	--	
1/2/1997	--	--	700	--	--	--	--	--	
4/15/1997	--	--	340	--	--	--	--	--	
7/2/1997	--	--	<1000	--	--	--	--	--	
9/30/1997	--	--	560	--	--	--	--	--	
1/21/1998	--	--	720	--	--	--	--	--	
4/10/1998	--	--	1,000	--	--	--	--	--	
6/19/1998	--	--	620	--	--	--	--	--	
6/19/1998	--	--	660	--	--	--	--	--	
11/30/1998	--	--	710/820	--	--	--	--	--	
1/21/1999	--	--	1,000	--	--	--	--	--	
4/30/1999	--	--	1,500	--	--	--	--	--	
7/9/1999	--	--	1,300	--	--	--	--	--	
1/12/2000	--	--	2,200	--	--	--	--	--	
7/26/2000	--	--	37,000	--	--	--	--	--	
1/19/2001	--	--	1,630	--	--	--	--	--	
7/24/2001	--	--	1,440	--	--	--	--	--	
1/18/2002	--	--	1,250	--	--	--	--	--	
8/1/2002	--	--	1,120	--	--	--	--	--	
1/16/2003	--	--	1,100	--	--	--	--	--	
7/7/2003	<5,000	<1,000	1,100	<25	<25	190	--	--	
02/05/2004	<10,000	<2,000	930	<50	<50	160	<50	<50	

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>AW-1 Cont.</b>									
07/01/2004	<5,000	<1,000	1,100	<25	<25	170	<25	<25	
03/16/2005	<5,000	<1,000	720	<25	<25	130	<25	<25	
07/22/2005	<1,000	<200	510	<5.0	<5.0	93	31	<5.0	
01/25/2006	<6,000	<400	490	<10	<10	94	21	<10	
7/6/2006	<6,000	<400	270	<10	<10	49	<10	<10	
1/8/2007	<3000	240	380	<5.0	<5.0	64	<5.0	--	
7/10/2007	<6,000	<400	220	<10	<10	36	<10	<10	
1/15/2008	<6,000	<400	230	<10	<10	45	<10	<10	
7/15/2008	<300	<10	<0.50	<0.50	<0.50	15	<0.50	<0.50	
10/21/2008	<3,000	390	120	<5.0	<5.0	22	<5.0	<5.0	
1/6/2009	<3,000	190	170	<5.0	<5.0	28	<5.0	<5.0	
4/21/2009	<6,000	<200	160	<10	<10	27	<10	<10	
7/21/2009	<6,000	<200	170	<10	<10	30	<10	<10	
3/18/2010	<2,000	<80	<10	<10	<10	19	<10	<10	
7/29/2010	<100	<4.0	<0.50	<0.50	<0.50	16	<0.50	<0.50	
2/22/2011	<250	<4.0	0.56	<0.50	<0.50	<0.50	<0.50	<0.50	
7/14/2011	<250	20	26	<0.50	<0.50	4.9	<0.50	<0.50	
<b>AW-2</b>									
7/15/1993	--	--	<5.0	--	--	--	--	--	
10/21/1993	--	--	<5.0	--	--	--	--	--	
4/21/1994	--	--	<5.0	--	--	--	--	--	
12/21/1994	--	--	<5.0	--	--	--	--	--	
9/19/1995	--	--	<5.0	--	--	--	--	--	
9/19/1995	--	--	<5.0	--	--	--	--	--	
12/7/1995	--	--	<5.0	--	--	--	--	--	
3/28/1996	--	--	<10	--	--	--	--	--	
6/20/1996	--	--	<10	--	--	--	--	--	
10/11/1996	--	--	<10	--	--	--	--	--	
1/2/1997	--	--	<10	--	--	--	--	--	
4/14/1997	--	--	<10	--	--	--	--	--	
7/2/1997	--	--	<10	--	--	--	--	--	

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>AW-2 Cont.</b>									
9/30/1997	--	--	860	--	--	--	--	--	
1/21/1998	--	--	110	--	--	--	--	--	
4/10/1998	--	--	<10	--	--	--	--	--	
6/19/1998	--	--	<10	--	--	--	--	--	
1/21/1999	--	--	<1.0	--	--	--	--	--	
1/12/2000	--	--	<0.5	--	--	--	--	--	
1/18/2002	--	--	<0.5	--	--	--	--	--	
1/16/2003	--	--	<2.5	--	--	--	--	--	
02/05/2004	<100	<20	5.1	<0.50	<0.50	<0.50	<0.50	<0.50	
03/16/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
01/25/2006	<600	<40	12	<1.0	<1.0	1.0	<1.0	<1.0	
1/8/2007	<3000	<200	40	<5.0	<5.0	<5.0	<5.0	--	
1/15/2008	<6,000	<400	48	<10	<10	<10	<10	<10	
7/15/2008	<30,000	<1,000	<50	<50	<50	<50	<50	<50	
10/21/2008	<7,500	<250	16	<12	<12	<12	<12	<12	
1/6/2009	<6,000	<200	11	<10	<10	<10	<10	<10	
4/21/2009	<6,000	<200	10	<10	<10	<10	<10	<10	
7/21/2009	<6,000	<200	13	<10	<10	<10	<10	<10	
7/29/2010	<500	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
7/14/2011	<250	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>AW-3</b>									
7/15/1993	--	--	37.3	--	--	--	--	--	
10/21/1993	--	--	8.95	--	--	--	--	--	
1/27/1994	--	--	7.37	--	--	--	--	--	
4/21/1994	--	--	9.36	--	--	--	--	--	
9/19/1995	--	--	790	--	--	--	--	--	
12/7/1995	--	--	<5.0	--	--	--	--	--	
12/7/1995	--	--	<5.0	--	--	--	--	--	
3/28/1996	--	--	<10	--	--	--	--	--	
3/28/1996	--	--	<10	--	--	--	--	--	
6/20/1996	--	--	<10	--	--	--	--	--	

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>AW-3 Cont.</b>									
6/20/1996	--	--	<10	--	--	--	--	--	
10/11/1996	--	--	<10	--	--	--	--	--	
10/11/1996	--	--	<10	--	--	--	--	--	
1/2/1997	--	--	<10	--	--	--	--	--	
4/14/1997	--	--	<10	--	--	--	--	--	
4/15/1997	--	--	<10	--	--	--	--	--	
7/2/1997	--	--	<10	--	--	--	--	--	
9/30/1997	--	--	810	--	--	--	--	--	
1/21/1998	--	--	110	--	--	--	--	--	
1/21/1998	--	--	99	--	--	--	--	--	
4/10/1998	--	--	<10	--	--	--	--	--	
4/10/1998	--	--	<10	--	--	--	--	--	
6/19/1998	--	--	<10	--	--	--	--	--	
1/21/1999	--	--	<1.0	--	--	--	--	--	
1/12/2000	--	--	<0.5	--	--	--	--	--	
03/16/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>AW-4</b>									
1/14/1993	--	--	1,400	--	--	--	--	--	
7/15/1993	--	--	1,978	--	--	--	--	--	
10/21/1993	--	--	4,600	--	--	--	--	--	
1/27/1994	--	--	6,400	--	--	--	--	--	
4/21/1994	--	--	13,000	--	--	--	--	--	
4/21/1994	--	--	16,010	--	--	--	--	--	
9/19/1995	--	--	7,100	--	--	--	--	--	
12/7/1995	--	--	5,200	--	--	--	--	--	
6/20/1996	--	--	12	--	--	--	--	--	
10/11/1996	--	--	880/1000	--	--	--	--	--	
1/2/1997	--	--	110	--	--	--	--	--	
1/2/1997	--	--	22	--	--	--	--	--	
4/15/1997	--	--	<10	--	--	--	--	--	
7/2/1997	--	--	41	--	--	--	--	--	

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>AW-4 Cont.</b>									
1/21/1998	--	--	3,100	--	--	--	--	--	
4/10/1998	--	--	730	--	--	--	--	--	
6/19/1998	--	--	34	--	--	--	--	--	
1/21/1999	--	--	30	--	--	--	--	--	
7/9/1999	--	--	320	--	--	--	--	--	
1/12/2000	--	--	280	--	--	--	--	--	
7/26/2000	--	--	3,500	--	--	--	--	--	
1/19/2001	--	--	267	--	--	--	--	--	
7/24/2001	--	--	115	--	--	--	--	--	
1/18/2002	--	--	85.3	--	--	--	--	--	
1/16/2003	--	--	<120	--	--	--	--	--	
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	
7/29/2010	<100	<4.0	<0.50	<0.50	<0.50	0.57	<0.50	<0.50	
2/22/2011	<250	<4.0	2.9	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>7/14/2011</b>	<b>&lt;250</b>	<b>&lt;4.0</b>	<b>4.2</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>0.55</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	
<b>AW-5</b>									

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>AW-5 Cont.</b>									
7/15/1993	--	--	<50	--	--	--	--	--	
7/15/1993	--	--	<50	--	--	--	--	--	
10/21/1993	--	--	75	--	--	--	--	--	
1/27/1994	--	--	48.9	--	--	--	--	--	
4/21/1994	--	--	75	--	--	--	--	--	
12/21/1994	--	--	104	--	--	--	--	--	
12/21/1994	--	--	114	--	--	--	--	--	
9/19/1995	--	--	110	--	--	--	--	--	
12/7/1995	--	--	210	--	--	--	--	--	
3/28/1996	--	--	63	--	--	--	--	--	
6/20/1996	--	--	<10	--	--	--	--	--	
10/11/1996	--	--	<10	--	--	--	--	--	
1/2/1997	--	--	<10	--	--	--	--	--	
4/14/1997	--	--	<10	--	--	--	--	--	
7/2/1997	--	--	<10	--	--	--	--	--	
9/30/1997	--	--	1,300	--	--	--	--	--	
1/21/1998	--	--	3,700	--	--	--	--	--	
4/10/1998	--	--	3,000	--	--	--	--	--	
6/19/1998	--	--	2,500	--	--	--	--	--	
1/21/1999	--	--	1,800	--	--	--	--	--	
7/9/1999	--	--	3400/3500	--	--	--	--	--	
1/12/2000	--	--	4,600	--	--	--	--	--	
7/26/2000	--	--	16,000	--	--	--	--	--	
1/19/2001	--	--	4,580	--	--	--	--	--	
7/24/2001	--	--	5,170	--	--	--	--	--	
1/18/2002	--	--	3,750	--	--	--	--	--	
8/1/2002	--	--	3,470	--	--	--	--	--	
1/16/2003	--	--	1,600	--	--	--	--	--	
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	

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>AW-5 Cont.</b>									
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	
1/15/2008	<300	200	85	<0.50	<0.50	21	<0.50	<0.50	
7/15/2008	<300	100	11	<0.50	<0.50	2.4	<0.50	<0.50	
10/21/2008	<300	130	63	<0.50	<0.50	16	<0.50	<0.50	
1/6/2009	<600	150	26	<1.0	<1.0	5.0	<1.0	<1.0	
4/21/2009	<300	130	5.1	<0.50	<0.50	1.3	<0.50	<0.50	
7/21/2009	<300	110	25	<0.50	<0.50	5.2	<0.50	<0.50	
3/18/2010	<100	52	72	<0.50	<0.50	16	<0.50	<0.50	
7/29/2010	<100	44	1.9	<0.50	<0.50	<0.50	<0.50	<0.50	
2/22/2011	<250	28	1.9	0.50	<0.50	<0.50	<0.50	<0.50	
<b>7/14/2011</b>	<b>&lt;250</b>	<b>4.1</b>	<b>0.87</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	
<b>AW-6</b>									
7/15/1993	--	--	<5.0	--	--	--	--	--	
10/21/1993	--	--	<5.0	--	--	--	--	--	
1/27/1994	--	--	<5.0	--	--	--	--	--	
4/21/1994	--	--	<5.0	--	--	--	--	--	
12/21/1994	--	--	5.19	--	--	--	--	--	
9/19/1995	--	--	25	--	--	--	--	--	
12/7/1995	--	--	16	--	--	--	--	--	
3/28/1996	--	--	<10	--	--	--	--	--	
6/20/1996	--	--	<10	--	--	--	--	--	
10/11/1996	--	--	<10	--	--	--	--	--	
1/2/1997	--	--	<10	--	--	--	--	--	
4/14/1997	--	--	<10	--	--	--	--	--	
7/2/1997	--	--	<10	--	--	--	--	--	
9/30/1997	--	--	<10	--	--	--	--	--	
1/21/1998	--	--	110	--	--	--	--	--	

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>AW-6 Cont.</b>									
4/10/1998	--	--	300	--	--	--	--	--	
6/19/1998	--	--	690	--	--	--	--	--	
1/21/1999	--	--	1,900	--	--	--	--	--	
1/12/2000	--	--	2,700	--	--	--	--	--	
1/19/2001	--	--	4,850	--	--	--	--	--	
1/18/2002	--	--	5,390	--	--	--	--	--	
1/16/2003	--	--	2,500	--	--	--	--	--	
02/05/2004	<10,000	<2,000	5,400	<50	<50	1,800	<50	<50	
07/01/2004	<10,000	<2,000	4,600	<50	<50	1,600	<50	<50	
03/16/2005	<5,000	<1,000	4,400	<25	<25	1,400	<25	<25	
07/22/2005	<10,000	<2,000	5,500	<50	<50	1,400	<50	<50	
01/25/2006	<30,000	<2,000	3,000	<50	<50	940	<50	<50	
7/6/2006	<30,000	<2,000	2,800	<50	<50	780	<50	<50	
1/8/2007	<30000	<2000	7400	<50	<50	1900	<50	--	
7/10/2007	<60,000	<4,000	3,900	<100	<100	890	<100	<100	
1/15/2008	<600	<40	150	<1.0	<1.0	42	<1.0	<1.0	
7/15/2008	<300	20	270	<0.50	<0.50	66	<0.50	<0.50	
10/21/2008	<3,000	<100	160	<5.0	<5.0	37	<5.0	<5.0	
1/6/2009	<3,000	<100	97	<5.0	<5.0	23	<5.0	<5.0	
4/21/2009	<300	26	22	<0.50	<0.50	3.0	<0.50	<0.50	
7/21/2009	<300	<10	93	<0.50	<0.50	28	<0.50	<0.50	
3/18/2010	<100	83	93	<0.50	<0.50	22	<0.50	<0.50	
7/29/2010	<100	<4.0	46	<0.50	<0.50	10	<0.50	<0.50	
2/22/2011	<250	<4.0	4.6	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>7/14/2011</b>	<b>&lt;250</b>	<b>&lt;4.0</b>	<b>47</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>9.8</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	
<b>AW-7</b>									
7/15/1993	--	--	<5.0	--	--	--	--	--	
10/21/1993	--	--	<5.0	--	--	--	--	--	
1/27/1994	--	--	<5.0	--	--	--	--	--	
4/21/1994	--	--	<5.0	--	--	--	--	--	
12/21/1994	--	--	<5.0	--	--	--	--	--	

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>AW-7 Cont.</b>									
9/19/1995	--	--	<5.0	--	--	--	--	--	
12/7/1995	--	--	<5.0	--	--	--	--	--	
3/28/1996	--	--	<10	--	--	--	--	--	
6/20/1996	--	--	<10	--	--	--	--	--	
10/11/1996	--	--	<10	--	--	--	--	--	
1/2/1997	--	--	<10	--	--	--	--	--	
4/14/1997	--	--	<10	--	--	--	--	--	
7/2/1997	--	--	<10	--	--	--	--	--	
9/30/1997	--	--	1,100	--	--	--	--	--	
1/21/1998	--	--	<10	--	--	--	--	--	
4/9/1998	--	--	<10	--	--	--	--	--	
6/19/1998	--	--	<10	--	--	--	--	--	
<b>AW-8</b>									
7/15/1993	--	--	<5.0	--	--	--	--	--	
10/21/1993	--	--	<5.0	--	--	--	--	--	
1/27/1994	--	--	<5.0	--	--	--	--	--	
4/21/1994	--	--	<5.0	--	--	--	--	--	
12/21/1994	--	--	<5.0	--	--	--	--	--	
9/19/1995	--	--	<5.0	--	--	--	--	--	
12/7/1995	--	--	<5.0	--	--	--	--	--	
3/28/1996	--	--	<10	--	--	--	--	--	
6/20/1996	--	--	<10	--	--	--	--	--	
10/11/1996	--	--	<10	--	--	--	--	--	
1/2/1997	--	--	<10	--	--	--	--	--	
4/14/1997	--	--	<10	--	--	--	--	--	
7/2/1997	--	--	<10	--	--	--	--	--	
9/30/1997	--	--	820	--	--	--	--	--	
1/21/1998	--	--	<10	--	--	--	--	--	
4/9/1998	--	--	<10	--	--	--	--	--	
6/19/1998	--	--	<10	--	--	--	--	--	
03/16/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>AW-9</b>									
1/2/1997	--	--	<10	--	--	--	--	--	
7/2/1997	--	--	<10	--	--	--	--	--	
9/30/1997	--	--	<10	--	--	--	--	--	
1/21/1998	--	--	<10	--	--	--	--	--	
4/9/1998	--	--	<10	--	--	--	--	--	
6/19/1998	--	--	<10	--	--	--	--	--	
<b>IW-1</b>									
<b>IW-2</b>									
<b>IW-3</b>									
11/12/2010	--	--	2.5	--	--	--	--	--	
<b>MW-1</b>									
4/21/1994	--	--	11,000	--	--	--	--	--	
4/15/1997	--	--	4,800	--	--	--	--	--	
7/2/1997	--	--	<5000	--	--	--	--	--	
9/30/1997	--	--	2,000	--	--	--	--	--	
1/21/1998	--	--	1,300	--	--	--	--	--	
4/10/1998	--	--	9,300	--	--	--	--	--	
6/19/1998	--	--	5,000	--	--	--	--	--	
11/30/1998	--	--	1800/2800	--	--	--	--	--	
1/21/1999	--	--	2,700	--	--	--	--	--	
4/30/1999	--	--	1,600	--	--	--	--	--	
7/9/1999	--	--	1,200	--	--	--	--	--	
11/3/1999	--	--	630	--	--	--	--	--	
1/12/2000	--	--	630	--	--	--	--	--	
4/13/2000	--	--	810	--	--	--	--	--	
7/26/2000	--	--	1,100	--	--	--	--	--	
10/24/2000	--	--	4,400	--	--	--	--	--	
1/19/2001	--	--	514	--	--	--	--	--	
7/24/2001	--	--	285	--	--	--	--	--	

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>MW-1 Cont.</b>									
1/18/2002	--	--	138	--	--	--	--	--	
8/1/2002	--	--	489	--	--	--	--	--	
1/16/2003	--	--	<500	--	--	--	--	--	
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	
7/29/2010	<500	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
2/22/2011	<250	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>7/14/2011</b>	<b>&lt;250</b>	<b>&lt;4.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	
<b>MW-2</b>									
4/22/1993	--	--	30	--	--	--	--	--	
7/15/1993	--	--	21.7	--	--	--	--	--	
10/21/1993	--	--	14.9	--	--	--	--	--	
1/27/1994	--	--	11.5	--	--	--	--	--	
4/21/1994	--	--	11.4	--	--	--	--	--	
12/21/1994	--	--	<5.0	--	--	--	--	--	
9/19/1995	--	--	<5.0	--	--	--	--	--	
12/7/1995	--	--	<5.0	--	--	--	--	--	

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>MW-2 Cont.</b>									
3/28/1996	--	--	<10	--	--	--	--	--	
6/20/1996	--	--	<10	--	--	--	--	--	
10/11/1996	--	--	<10	--	--	--	--	--	
1/2/1997	--	--	<10	--	--	--	--	--	
4/14/1997	--	--	<10	--	--	--	--	--	
7/2/1997	--	--	<10	--	--	--	--	--	
9/30/1997	--	--	<10	--	--	--	--	--	
1/21/1998	--	--	100	--	--	--	--	--	
4/10/1998	--	--	23	--	--	--	--	--	
6/19/1998	--	--	<10	--	--	--	--	--	
1/21/1999	--	--	1.9	--	--	--	--	--	
1/12/2000	--	--	<0.5	--	--	--	--	--	
03/16/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>MW-3</b>									
1/14/1993	--	--	714	--	--	--	--	--	
4/22/1993	--	--	3,600	--	--	--	--	--	
7/15/1993	--	--	2,204	--	--	--	--	--	
10/21/1993	--	--	847	--	--	--	--	--	
1/27/1994	--	--	3,892	--	--	--	--	--	
4/21/1994	--	--	3,864	--	--	--	--	--	
12/21/1994	--	--	800	--	--	--	--	--	
9/19/1995	--	--	260	--	--	--	--	--	
12/7/1995	--	--	91	--	--	--	--	--	
3/28/1996	--	--	230	--	--	--	--	--	
6/20/1996	--	--	370	--	--	--	--	--	
10/11/1996	--	--	440	--	--	--	--	--	
1/2/1997	--	--	140	--	--	--	--	--	
4/15/1997	--	--	1,800	--	--	--	--	--	
7/2/1997	--	--	940	--	--	--	--	--	
9/30/1997	--	--	510	--	--	--	--	--	
1/21/1998	--	--	98	--	--	--	--	--	

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-3 Cont.									
4/9/1998	--	--	890	--	--	--	--	--	
6/19/1998	--	--	1,900	--	--	--	--	--	
6/19/1998	--	--	1,900	--	--	--	--	--	
6/19/1998	--	--	1,900	--	--	--	--	--	
6/19/1998	--	--	1,900	--	--	--	--	--	
1/21/1999	--	--	1,200	--	--	--	--	--	
7/9/1999	--	--	460/470	--	--	--	--	--	
1/12/2000	--	--	34	--	--	--	--	--	
7/26/2000	--	--	<0.5	--	--	--	--	--	
1/19/2001	--	--	25.9	--	--	--	--	--	
7/23/2001	--	--	28.7	--	--	--	--	--	
1/18/2002	--	--	17.8	--	--	--	--	--	
8/1/2002	--	--	<0.5	--	--	--	--	--	
1/16/2003	--	--	20	--	--	--	--	--	
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	
1/15/2008	<300	<20	0.88	<0.50	<0.50	<0.50	<0.50	<0.50	
7/15/2008	<300	<10	1.3	<0.50	<0.50	<0.50	<0.50	<0.50	
10/21/2008	<300	<10	0.94	<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	0.60	<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	
7/29/2010	<100	17	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
2/22/2011	<250	<4.0	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>MW-3 Cont.</b>									
7/14/2011	<250	<4.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>QC-2</b>									
7/15/1993	--	--	<5.0	--	--	--	--	--	
9/19/1995	--	--	<5.0	--	--	--	--	--	
12/7/1995	--	--	<5.0	--	--	--	--	--	
3/28/1996	--	--	<10	--	--	--	--	--	
6/20/1996	--	--	<10	--	--	--	--	--	
<b>RW-1</b>									
12/7/1995	--	--	2,700	--	--	--	--	--	
10/11/1996	--	--	1400/1200	--	--	--	--	--	
4/15/1997	--	--	<25000	--	--	--	--	--	
7/2/1997	--	--	<10000	--	--	--	--	--	
7/2/1997	--	--	<10000	--	--	--	--	--	
9/30/1997	--	--	1,200	--	--	--	--	--	
9/30/1997	--	--	1,100	--	--	--	--	--	
1/21/1998	--	--	1,100	--	--	--	--	--	
4/10/1998	--	--	<2500	--	--	--	--	--	
6/19/1998	--	--	<2500	--	--	--	--	--	
1/21/1999	--	--	1,700	--	--	--	--	--	
11/3/1999	--	--	1,500	--	--	--	--	--	
1/12/2000	--	--	2,100	--	--	--	--	--	
4/13/2000	--	--	1,500	--	--	--	--	--	
7/26/2000	--	--	1,100	--	--	--	--	--	
10/25/2000	--	--	2,100	--	--	--	--	--	
1/19/2001	--	--	1,270	--	--	--	--	--	
1/18/2002	--	--	491	--	--	--	--	--	
8/1/2002	--	--	390	--	--	--	--	--	
1/16/2003	--	--	680	--	--	--	--	--	
7/7/2003	<50,000	<10,000	<250	<250	<250	<250	--	--	
07/01/2004	<10,000	<2,000	72	<50	<50	<50	<50	<50	

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>RW-1 Cont.</b>									
03/16/2005	<2,000	<400	53	<10	<10	<10	<10	<10	
07/22/2005	<500	<100	51	<2.5	<2.5	5.6	<2.5	<2.5	
01/25/2006	<3,000	<200	34	<5.0	<5.0	<5.0	<5.0	<5.0	
7/6/2006	<6,000	<400	64	<10	<10	<10	<10	<10	
1/8/2007	<6000	<400	22	<10	<10	<10	<10	--	
7/10/2007	<600	<40	21	<1.0	<1.0	<1.0	<1.0	<1.0	
1/15/2008	<600	<40	14	<1.0	<1.0	1.3	<1.0	<1.0	
7/15/2008	<300	<10	12	<0.50	<0.50	1.0	<0.50	<0.50	
10/21/2008	<300	17	12	<0.50	<0.50	<0.50	<0.50	<0.50	
1/6/2009	<300	14	7.0	<0.50	<0.50	0.63	<0.50	<0.50	
4/21/2009	<300	47	6.0	<0.50	<0.50	0.58	<0.50	<0.50	b
7/21/2009	<300	15	7.0	<0.50	<0.50	0.67	<0.50	<0.50	
3/18/2010	<500	<20	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
7/29/2010	<100	11	3.5	<0.50	<0.50	<0.50	<0.50	<0.50	
2/22/2011	<250	<4.0	0.54	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>7/14/2011</b>	<b>&lt;250</b>	<b>8.9</b>	<b>1.1</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	
<b>VEW-4</b>									
07/22/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
1/15/2008	<300	<20	<0.50	<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	
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	
<b>VEW-5</b>									
<b>VEW-6</b>									
<b>VEW-7</b>									
<b>VEW-8</b>									
07/22/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
<b>VEW-9</b>									

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

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
VW-1									
VW-2									
VW-3									
OW-1									

Symbols & Abbreviations:

-- = 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

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. Historical Groundwater Gradient - Direction and Magnitude**  
**Former BP Station #11133, 2220 98th Ave., Oakland, CA**

Date Measured	Approximate Gradient Direction	Approximate Gradient Magnitude (ft/ft)
1/25/2006	Variable: East to Southwest	0.03 to 0.09
7/6/2006	Variable: East to West towards Center	0.04 to 0.05
1/8/2007	Variable: East to West towards Center	0.03 to 0.05
7/10/2007	West	0.01
1/15/2008	West-Southwest	0.006
7/15/2008	West-Southwest	0.01
10/21/2008	West-Southwest	0.01
1/6/2009	West	0.009
4/21/2009	West	0.01
7/21/2009	West	0.01
3/18/2010	West	0.008
7/29/2010	West	0.008
11/12/2010	West-Southwest	0.01
2/22/2011	Variable: North to West	0.03 to 0.04
<b>7/14/2011</b>	<b>West</b>	<b>0.01</b>

Notes:

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

Well ID and Date Monitored	Concentrations in mg/L										ORP (mV)	pH	Footnote
	Dissolved Oxygen	Nitrate (NO3)	Manganese	Ferrous Iron	Sulfate (SO4)	Dissolved Sulfide	Hydrogen Sulfide	Dissolved CO2	Methane	Total Alkalinity			
<b>AW-1</b>													
03/16/2005	0.8	<0.5	6.5	3.4	0.58	<1.000	--	81.4	3.29	420	-10	6.7	
1/15/2008	0.92	<0.5	6.4	3.2	1.9	<1.000	--	190	3.2	410	-58	6.91	a, b
7/15/2008	1.80	<0.1	7.2	6.0	<1	<1.000	--	400	2.09	488	-96.5	6.79	
10/21/2008	2.40	<0.1	8.08	2.0	2.5	<0.050	--	178	0.381	498	-130.1	7.01	b, c
1/6/2009	1.37	<0.1	7.81	3.0	1.4	<0.050	--	190	0.593	446	-128	6.09	
4/21/2009	2.29	<0.1	7.07	3.6	1.8	<0.050	--	189	1.65	456	-126.7	7.28	
7/21/2009	17.46	<0.1	7.64	2.9	1.8	<0.050	--	278	1.92	480	-137.6	7.23	a, e
3/18/2010	0.68	--	--	--	--	--	--	--	--	--	-38	6.57	
2/22/2011	0.75	<1.0	0.53	3.8	2.6	<0.100	--	130	1.5	150	--	6.28	
7/14/2011	1.46	--	--	--	--	--	--	--	--	--	61	7.29	
<b>AW-2</b>													
1/15/2008	0.83	4.4	1.1	<0.5	21	<1.000	--	52	0.21	190	-88	6.79	a
7/15/2008	2.14	0.44	1.57	0.5	38	<0.050	--	100	0.00742	168	-190.1	7.05	
10/21/2008	1.65	0.89	1.13	0.5	36	<0.050	--	24.2	0.111	176	-47.2	7.33	c, d
1/6/2009	0.84	0.39	0.996	0.6	22	<0.050	--	28.1	0.0504	168	129	6.94	
4/21/2009	1.89	0.86	1.24	0.39	22	<0.050	--	37.6	0.209	162	53.3	7.42	
7/21/2009	9.29	0.16	0.63	0.1	29	<0.050	--	38.2	0.174	144	97.3	7.32	a, e
7/14/2011	0.71	<1.0	0.19	<0.10	26	<0.10	--	25	0.0010	100	82	7.23	
<b>AW-4</b>													
03/16/2005	0.6	<0.5	5.6	1.4	71	<1.000	--	54.2	0.585	310	10	6.5	
1/15/2008	1.30	<0.5	5	1.5	82	<1.000	--	120	0.61	390	-91	6.75	a, b
7/15/2008	2.64	<0.1	7.11	6.0	47	<0.050	--	354	0.777	598	-90.0	6.91	
10/21/2008	1.54	<0.1	8.44	3.0	61	<0.050	--	101	0.0753	510	-123.3	7.25	c, d
1/6/2009	0.70	<0.1	6.33	0.5	78	<0.050	--	76.4	0.148	400	-29	6.31	
4/21/2009	3.51	<0.1	4.88	3.4	83	<0.050	--	77.5	0.33	328	-102.9	7.48	
7/21/2009	6.14	<0.1	7.34	2.5	68	<0.050	--	75.3	0.638	414	-159.9	7.04	a, e
3/18/2010	0.79	--	--	--	--	--	--	--	--	--	-57	6.71	
2/22/2011	0.65	<1.0	5.4	4.3	84	<0.100	--	82	0.68	310	--	6.51	
7/14/2011	0.77	--	--	--	--	--	--	--	--	--	-21	6.98	

**Table 4. Bio-Degradation Parameters**  
**Former BP Station #11133, 2220 98th Ave., Oakland, CA**

Well ID and Date Monitored	Concentrations in mg/L										ORP (mV)	pH	Footnote
	Dissolved Oxygen	Nitrate (NO3)	Manganese	Ferrous Iron	Sulfate (SO4)	Dissolved Sulfide	Hydrogen Sulfide	Dissolved CO2	Methane	Total Alkalinity			
<b>AW-5</b>													
1/15/2008	0.90	<0.5	2.3	1.4	12	<1.000	--	79	0.12	230	-101	6.82	a
7/15/2008	2.13	<0.1	2.56	0.5	12	<0.050	--	161	0.00929	238	-97.9	6.85	
10/21/2008	1.01	<0.1	1.68	0.5	14	<0.050	--	57.8	0.0598	216	-84.9	7.10	c, d
1/6/2009	0.70	<0.1	2.92	0.5	13	<0.050	--	52.4	0.106	224	-79	6.22	
4/21/2009	2.09	<0.1	2.71	1.5	10	<0.050	--	57.7	0.142	216	-43.8	7.35	
7/21/2009	6.50	<0.1	2.43	1.1	9.3	<0.050	--	63.7	0.0913	226	-139.1	7.14	a, e
2/22/2011	0.57	<1.0	2.3	1.2	15	<0.100	--	52	0.081	200	--	6.40	
7/14/2011	0.72	--	--	--	--	--	--	--	--	--	-50	7.03	
<b>AW-6</b>													
1/15/2008	0.58	<0.5	1.2	<0.1	21	<1.000	--	41	0.05	150	-94	6.80	a
7/15/2008	2.12	<0.1	1.37	0.0	23	<0.050	--	163	0.00127	160	-40.8	6.87	
10/21/2008	1.01	<0.1	1.29	0.5	20	<0.050	--	39.4	0.104	152	-33.9	7.19	c, d
1/6/2009	0.94	<0.1	1.36	0.5	21	<0.050	--	37.5	0.0691	156	-25	6.23	
4/21/2009	4.29	<0.1	0.167	<0.1	17	<0.050	--	46.6	0.00112	166	35.0	7.38	
7/21/2009	10.79	<0.1	2.05	<0.1	16	<0.050	--	39.1	0.127	168	-39.9	7.09	a, e
3/18/2010	0.68	--	--	--	--	--	--	--	--	--	-32	6.75	
2/22/2011	0.85	<1.0	0.2	<0.10	31	<0.100	--	38	0.0038	150	--	6.41	
7/14/2011	0.77	--	--	--	--	--	--	--	--	--	18	7.02	
<b>IW-3</b>													
<b>MW-1</b>													
03/16/2005	0.9	<0.5	7.7	2.7	13	<1.000	--	49.9	4.55	310	-175	6.9	
1/15/2008	0.94	<0.5	8.1	1.3	51	<1.000	--	67	2.9	320	-150	7.13	a
7/15/2008	1.20	<0.1	8.39	0.5	50	<0.050	--	29.2	1.09	326	-174.7	7.06	
10/21/2008	1.99	<0.1	8.05	4.0	27	<0.050	--	18.7	0.303	360	-200.0	7.30	c
1/6/2009	0.67	<0.1	10.1	1.6	59	<0.050	--	21.3	0.277	368	225	6.90	
4/21/2009	1.99	<0.1	8.54	1.7	90	<0.050	--	59.3	0.839	326	-196.9	7.54	
7/21/2009	6.20	<0.1	9.25	0.46	120	<0.050	--	67.2	1.12	320	-208.3	7.43	a, e
3/18/2010	0.90	--	--	--	--	--	--	--	--	--	-70	6.89	
2/22/2011	1.53	<1.0	4.7	2.1	94	<0.100	--	54	0.29	220	--	6.30	

**Table 4. Bio-Degradation Parameters**  
**Former BP Station #11133, 2220 98th Ave., Oakland, CA**

Well ID and Date Monitored	Concentrations in mg/L										ORP (mV)	pH	Footnote
	Dissolved Oxygen	Nitrate (NO <sub>3</sub> )	Manganese	Ferrous Iron	Sulfate (SO <sub>4</sub> )	Dissolved Sulfide	Hydrogen Sulfide	Dissolved CO <sub>2</sub>	Methane	Total Alkalinity			
<b>MW-1 Cont.</b>													
7/14/2011	0.71	--	--	--	--	--	--	--	--	--	66	7.07	
<b>MW-2</b>													
03/16/2005	1.3	5.3	2.2	0.7	38	<1.000	--	7.37	<0.0010	85	30	7.1	
<b>MW-3</b>													
1/15/2008	1.04	2.5	0.12	<0.1	44	<1.000	--	29	<0.0010	130	-128	7.10	a
7/15/2008	1.60	0.82	0.0618	0.5	78	<0.050	--	29	<0.0010	112	-47.6	7.06	
10/21/2008	2.21	0.64	0.0193	0.5	52	<0.050	--	15.4	<0.0010	92	-120.6	7.28	c
1/6/2009	1.02	0.42	0.0255	0.0	38	<0.050	--	14	<0.0010	94	-22	6.43	
4/21/2009	2.26	0.36	0.0469	<0.1	44	<0.050	--	22.4	<0.0010	108	-119.9	7.59	
7/21/2009	15.16	0.97	0.153	<0.1	48	<0.050	--	20.9	<0.0010	116	-35.5	7.43	a, e
3/18/2010	0.73	--	--	--	--	--	--	--	--	--	-50	7.05	
2/22/2011	0.70	1.5	0.3	<0.10	54	<0.100	--	26	<0.0010	130	--	6.60	
7/14/2011	0.88	--	--	--	--	--	--	--	--	--	63	7.21	
<b>RW-1</b>													
1/15/2008	1.31	<0.5	6.1	1.8	5	<1.000	--	110	1.1	350	-143	6.82	a
7/15/2008	1.32	<0.1	7.03	0.5	21	<0.050	--	212	0.212	358	-239.9	6.95	
10/21/2008	0.79	<0.1	6.84	1.0	10	<0.050	--	73.5	1.35	352	-188.4	7.17	b, c
1/6/2009	1.02	<0.1	6.41	1.0	13	<0.050	--	64.7	0.279	322	-279	6.43	
4/21/2009	0.86	<0.1	6.79	0.67	5.2	0.100	--	77.4	1.27	370	-159.1	7.38	
7/21/2009	13.31	<0.1	7.38	0.13	30	<0.050	--	62.8	0.479	356	-252.5	7.35	a, e
3/18/2010	0.74	--	--	--	--	--	--	--	--	--	-102	6.73	
2/22/2011	0.45	<1.0	1.6	0.64	15	<0.100	--	28	0.05	110	--	6.5	
7/14/2011	0.57	--	--	--	--	--	--	--	--	--	-101	7.14	
<b>VEW-4</b>													
1/15/2008	0.54	3	0.88	<0.5	31	<1.000	--	50	0.84	210	-36	6.99	a
7/15/2008	0.59	<0.1	2.15	2.0	22	<0.050	--	90.9	0.174	254	-29	6.95	
4/21/2009	1.99	<0.1	2.8	0.2	13	<0.050	--	44.7	0.365	254	-110.1	7.41	
7/21/2009	8.99	<0.1	0.891	<0.1	24	<0.050	--	41.1	0.00207	254	-40.3	7.24	a, e

Symbols & Abbreviations:

< = 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

Notes:

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

**APPENDIX A**  
**FIELD METHODS**

## BROADBENT & ASSOCIATES INC. FIELD PROCEDURES

### A.1 QUALITY ASSURANCE/QUALITY CONTROL FIELD PROTOCOLS

Field protocols have been implemented to enhance the accuracy and reliability of data collection, ground-water sample collection, transportation and laboratory analysis. Discussion of these protocols is provided below.

#### A.1.1 Water Level & Free-Product Measurement

Prior to ground-water sample collection from each monitoring well, the presence of separate-phase hydrocarbons (SPH or free product, FP) and depth to ground water shall be measured. Depth to ground water will be measured with a standard water level indicator that has been decontaminated prior to its use in accordance with procedures discussed below. Depth to groundwater will be gauged from a saw cut notch at the top of the well casing on each well head. Where FP is suspected, the initial gauging will be done with an oil-water interface probe. Once depth to water has been measured, the first retrieval of a new disposable bailer will be scrutinized for the presence of SPH/FP.

#### A.1.2 Monitoring Well Purging

Subsequent to measuring depth to ground water and prior to the collection of ground-water samples, purging of standing water within the monitoring well will be performed if called for. Consistent with the American Society for Testing and Materials (ASTM) Standard D6452-99, Section 7.1, the well will be purged of approximately three wetted-casing volumes of water, or until the well is dewatered, or until monitored field parameters indicate stabilization. The well will be purged using a pre-cleaned disposable bailer or submersible pump and disposable plastic tubing dedicated to each individual well. The well will be purged at a low flow rate to minimize the possibility of purging the well dry. So that the sample collected is representative of formation water, several field parameters will be monitored during the purging process. The sample will not be collected until these parameters (i.e. temperature, pH, and conductivity) have stabilized to within 10% of the previously measured value. If a well is purged dry, the sample should not be collected until the well has recovered to a minimum 50% of its initial volume.

#### A.1.3 Ground-Water Sample Collection

Once the wells are satisfactorily purged, water samples will be collected from each well. Water samples for organic analyses will be collected using a pre-cleaned, new, disposable bailer and transferred into the appropriate, new, laboratory-prepared containers such that no head space or air bubbles are present in the sample container (if appropriate to the analysis). The samples will be properly labeled (i.e. sample identification, sampler initials, date/time of collection, site location, requested analyses), placed in an ice chest with bagged ice or ice substitute, and delivered to the contracted analytical laboratory.

#### A.1.4 Surface Water Sample Collection

Unless specified otherwise, surface water samples will be collected from mid-depth in the central area of the associated surface water body. Water samples will be collected into appropriate, new, laboratory-prepared containers by dipping the container into the surface water unless the container has a preservative present. If a sample preservative is present, a new, cleaned non-preserved surrogate container will be used to obtain the sample which will then be directly transferred into a new, laboratory-provided, preserved container. Samples will be properly labeled and transported as described above.

#### A.1.5 Decontamination Protocol

Prior to use in each well, re-usable ground-water sampling equipment (e.g., water level indicator, oil-interface probe, purge pump, etc.) will be decontaminated. Decontamination protocol will include thoroughly cleaning with a solution of Liquinox, rinsing with clean water, and final rinsing with control water (potable water of known quality, distilled, or de-ionized water). Pre-cleaned new disposable bailers and disposable plastic tubing will be dedicated to each individual well.

#### A.1.6 Chain of Custody Procedures

Sample identification documents will be carefully prepared so identification and chain of custody can be maintained and sample disposition can be controlled. The sample identification documents include Chain-of-Custody (COC) records and Daily Field Report forms. Chain of custody procedures are outlined below.

##### Field Custody Procedures

The field sampler is individually responsible for the care and custody of the samples collected until they are properly transferred.

Samples will have unique labels. The information on these labels will correspond to the COC which shows the identification of individual samples and the contents of the shipping container. The original COC will accompany the shipment and a copy will be retained by the field sampler.

##### Transfer of Custody and Shipment

A COC will accompany samples during transfer and shipment. When transferring samples, the individual relinquishing and the individual receiving the samples will each sign, date, and note the time on the COC. This documents the sample custody transfer.

Samples will be packaged properly for shipment and dispatched to the appropriate laboratory for analysis, with a separate COC accompanying each shipment. Shipments will be accompanied by the original COC. Samples will be delivered by BAI personnel to the laboratory, or shipped by responsible courier. When a shipping courier is utilized, the sample shipment number will be identified on the COC.

#### A.1.7 Field Records

In addition to sample identification numbers and COC records, Daily Field Report records will be maintained by field staff to provide daily records of significant events, observations, and measurements during field investigations. These documents will contain observed information such as: the personnel present, site conditions, sampling procedures, measurement procedures, calibration records, equipment used, supplies used, etc. Field measurements will be recorded on the appropriate forms. Entries on the data forms will be signed and dated. The data forms will be kept as permanent file records.

**APPENDIX B**  
**FIELD DATA SHEETS**

DATE: 7-14-11

PERSONNEL: JR

WEATHER: OVERCAST

PROJECT NO.: 09-88-656

COMMENTS:

Equip:	Geosquit	Tubing	Bailers	DO	wli	Ec/pH

Well ID	Time	MEASURING POINT	DTW (FT)	PRODUCT THICKNESS	pH	Cond. (X100)	Temp. (C/F)	DO (mg/l)	Redox (mV)	Iron (mg/l)	Alk. (mg/l)	WELL HEAD CONDITION: VAULT, BOLTS, CAP, LOCK, ETC
		TOC										
MW-1	1446		10.96									
MW-2	0751		8.90									
MW-3	1526		11.96									
AW-1	1053		14.05									
AW-2	1246		14.92									
AW-3	1322		13.54									
AW-4	1236		15.650									
AW-5	1006		16.527.0									
AW-6	0844		14.23									
AW-7	—	—										CANT LOCATE
AW-8	1324		14.92									
AW-9	1331		15.85									
RW-1	1603		13.87									
VW-1	0758		DRY									
VW-2	0805		KRKR KR 1.99									
VW-3	0813		4.83									
Vew-4	0824		13.94									
Vew-5	0827		2.81									
Vew-6	0830		12.02									
Vew-7	0807		12.89									
Vew-8	0811		14.49									
Vew-9	1230	▼	6.58									



**BROADBENT & ASSOCIATES, INC.**

ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

**Micropurging Groundwater Sampling Data Sheet**

Well I.D.:

AW-6

Project Name/Location:

84 11133

Project #: 09-88-656

Sampler's Name:

JR

Date: 7/14/11

Purging Equipment:

GSPUMP

Sampling Equipment:

GSPUMP

Casing Type: PVC

**\*UNIT CASING VOLUMES**

Casing Diameter: 6.4 inch

2" = 0.61 L/lin ft.

Total Well Depth: 34.10 feet

3" = 1.39 L/lin ft.

Depth to Water: 14.23 feet

4" = 2.47 L/lin ft.

Water Column Thickness: 19.87 feet

6" = 5.56 L/lin ft.

Unit Casing Volume\*: x 2.47 Liter / foot

Casing Water Volume: = 49.08 Liters

\*\*One foot below water  
level or top of screen,  
whichever is lower

Top of Screen 20 feet

Intake Depth\*\*: 20 feet

Free product measurement (if present):

Purged (L)	Time (24:00)	Flow (L/min)	DO (mg/L)	ORP (mV)	Conductance ( $\mu$ S)	Temperature (Fahrenheit)	pH	Water Level (feet)
0	0912	x	2.05	4	359.7	18.5	6.79	14.52
0.5	0919		142	7	389	18.5	7.06	14.68
1.0	0926		0.77	15	377	18.8	7.02	14.85
1.5	0936		0.77	18	368	18.6	7.02	15.02
2.0								

Total Water Volume Purged: 1.5 Liters

Depth to Water at Sample Collection: feet

Sample Collection Time: 0940 Purged Dry? (Y/N)

Comments:



**BROADBENT & ASSOCIATES, INC.**

ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

**Micropurging Groundwater Sampling Data Sheet**

Well I.D.:

AW-5

Project Name/Location:

11133

Project #: 09-88-656

Sampler's Name:

JR

Date: 7/14/11

Purging Equipment:

GEO PUMP

Sampling Equipment:

GEO PUMP

Casing Type: PVC

**\*UNIT CASING VOLUMES**

Casing Diameter:

4 inch

2" = 0.61 L/lin ft.

Total Well Depth:

42.90 feet

3" = 1.39 L/lin ft.

Depth to Water:

16.7 feet

4" = 2.47 L/lin ft.

Water Column Thickness:

26.28 feet

6" = 5.56 L/lin ft.

Unit Casing Volume\*:

x 2.47 Liter / foot

\*\*One foot below water  
level or top of screen,  
whichever is lower

Casing Water Volume:

= 64.91 Liters

Top of Screen

20 feet

Intake Depth\*\*:

20 feet

Free product measurement (if present):

Purged (L)	Time (24:00)	Flow (L/min)	DO (mg/L)	ORP (mV)	Conductance ( $\mu$ S)	Temperature (Fahrenheit)	pH	Water Level (feet)
0	1010	X	1.7	-40	4764	18.4	6.78	16.68 78
0.5	1016		0.92	-44	475	18.6	7.04	16.87
1.0	1023		0.82	-43	478	18.7	7.04	16.89
1.5	1032		0.72	-50	475	18.7	7.03	16.92

Total Water Volume Purged:

1.5 Liters

Depth to Water at Sample Collection:

feet

Sample Collection Time:

1035

Purged Dry? (Y/N) N

Comments:

---



---



---



---



**BROADBENT & ASSOCIATES, INC.**

ENGINEERING, WATER RESOURCES &amp; ENVIRONMENTAL

**Micropurging Groundwater Sampling Data Sheet**Well I.D.: AW-4Project Name/Location: W133Project #: 09-88-656Sampler's Name: JBDate: 7/14/11Purging Equipment: PumpSampling Equipment: Ground

Casing Type: PVC

**\*UNIT CASING VOLUMES**Casing Diameter: 2 inch

2" = 0.61 L/lin ft.

Total Well Depth: 32.79 feet

3" = 1.39 L/lin ft.

Depth to Water: 15.50 feet

4" = 2.47 L/lin ft.

Water Column Thickness: 17.14 feet

6" = 5.56 L/lin ft.

Unit Casing Volume\*: x 0.61 Liter / foot**\*\*One foot below water level or top of screen, whichever is lower**Casing Water Volume: = 10.46 LitersTop of Screen 13 feetIntake Depth\*\*: 16.65 feet

Free product measurement (if present):

Purged (L)	Time (24:00)	Flow (L/min)	DO (mg/L)	ORP (mV)	Conductance (µS)	Temperature (Fahrenheit)	pH	Water Level (feet)
0	1248	X	1.29	15	1156	17.9	6.77	15.58
0.5	1253		0.70	-26	1081	17.8	7.01	15.63
1.0	1300		0.65	-21	1088	18.1	6.98	15.70
1.5	1307		0.17		1095	17.9	6.98	15.72

Total Water Volume Purged: 1.5 LitersDepth to Water at Sample Collection: 13.0 feetSample Collection Time: 13:00

Purged Dry? (Y / N)

Comments:

---

---

---

---

---



**BROADBENT & ASSOCIATES, INC.**

ENGINEERING, WATER RESOURCES &amp; ENVIRONMENTAL

**Micropurging Groundwater Sampling Data Sheet**

Well I.D.:

MW-1

Project Name/Location:

WB3Project #: 09-88-656

Sampler's Name:

JLDate: 7/14/04

Purging Equipment:

GeoPump

Sampling Equipment:

GeoPump

Casing Type: PVC

**\*UNIT CASING VOLUMES**

Casing Diameter:

2 inch

2" = 0.61 L/lin ft.

Total Well Depth:

28.35 feet

3" = 1.39 L/lin ft.

Depth to Water:

10.96 feet

4" = 2.47 L/lin ft.

Water Column Thickness:

= 17.39 feet

6" = 5.56 L/lin ft.

Unit Casing Volume\*:

x 0.61 Liter / foot\*\*One foot below water  
level or top of screen,  
whichever is lower

Casing Water Volume:

= 10.61 Liters

Top of Screen

10 feetIntake Depth\*\*:  
11.96 feet

Free product measurement (if present):

Purged (L)	Time (24:00)	Flow (L/min)	DO (mg/L)	ORP (mV)	Conductance (µS)	Temperature (Fahrenheit)	pH	Water Level (feet)
0	1453	x	1.09	-59	421.8	20.7	6.67	11.01
0.5	180		0.77	66	425	20.4	7.04	11.08
1.0	1508		0.59		425	20.5	7.05	11.10
1.5	1513		0.71		426	20.3	7.07	11.12

Total Water Volume Purged: 1.5 LitersDepth to Water at Sample Collection: 1515 feetSample Collection Time: 1515 Purged Dry? (Y/N) N

Comments:

---

---

---

---



**BROADBENT & ASSOCIATES, INC.**  
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

**Micropurging Groundwater Sampling Data Sheet**

Well I.D.: MW-3

Project Name/Location: 11C33

Project #: 09 88-656

Sampler's Name: JL

Date: 1/14/04

Purging Equipment: Geopump

Sampling Equipment: GeoPump

Casing Type: PVC

**\*UNIT CASING VOLUMES**

2" = 0.61 L/lin ft.

Casing Diameter: 2 inch

3" = 1.39 L/lin ft.

Total Well Depth: 34.15 feet

4" = 2.47 L/lin ft.

Depth to Water: 11.96 feet

6" = 5.56 L/lin ft.

Water Column Thickness: = 22.19 feet

\*\*One foot below water  
level or top of screen,  
whichever is lower

Unit Casing Volume\*: x 0.61 Liter / foot

Casing Water Volume: = 1354 Liters

Top of Screen: 4 feet

Intake Depth\*\*: 4 feet

Free product measurement (if present):

Purged (L)	Time (24:00)	Flow (L/min)	DO (mg/L)	ORP (mV)	Conductance (µS)	Temperature (Fahrenheit)	pH	Water Level (feet)
0	132	X	1.49	19	374.8	19.0	7.12	12.26
0.5	133		1.01	36	388	18.7	7.29	12.35
1.0	134		0.70	52	396	18.9	7.22	12.39
1.5	135		0.88	63	413.8	18.8	7.21	12.40

Total Water Volume Purged: 1.5 Liters

Depth to Water at Sample Collection: 15.55 feet

Purged Dry? (Y / N)

Sample Collection Time: 1555

Comments:

---



---



---



---



---



**BROADBENT & ASSOCIATES, INC.**  
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

**Micropurging Groundwater Sampling Data Sheet**

Well I.D.:

RW-1

Project Name/Location:

1133

Project #: 09-88-686

Sampler's Name:

VL

Date: 7/4/94

Purging Equipment:

Gepump

Sampling Equipment:

Gepump

Casing Type: PVC

**\*UNIT CASING VOLUMES**

Casing Diameter:

6 inch

2" = 0.61 L/lin ft.

Total Well Depth:

31.70 feet

3" = 1.39 L/lin ft.

Depth to Water:

13.87 feet

4" = 2.47 L/lin ft.

Water Column Thickness:

= 23.83 feet

6" = 5.56 L/lin ft.

Unit Casing Volume\*:

x 5.56 Liter / foot

\*\*One foot below water  
level or top of screen,  
whichever is lower

Casing Water Volume:

= 132.49 Liters

Top of Screen

15 feet

Intake Depth\*\*:

13.07 feet

Free product measurement (if present):

Purged (L)	Time (24:00)	Flow (L/min)	DO (mg/L)	ORP (mV)	Conductance ( $\mu$ S)	Temperature (Fahrenheit)	pH	Water Level (feet)
0	1611	X	1.66	-91	558.9	20.0	6.72	13.90
0.5	1616		0.85	-89	551	20.5	7.4	13.97
1.0	1623		0.86	-93	552	20.7	7.16	14.03
1.5	1629		0.57	-101	554	20.8	7.14	14.11

Total Water Volume Purged:

1.5

Liters

Depth to Water at Sample Collection:

feet

Sample Collection Time:

1633

Purged Dry? (Y / N)

Comments:

---



---



---



---



---

NO. 690030

## NON-HAZARDOUS WASTE DATA FORM

BESI #

Generator's Name and Mailing Address  BP WEST COAST PRODUCTS, LLC P.O. BOX 80249 RANCHO SANTA MARGARITA, CA 92688		Generator's Site Address (if different than mailing address)  FORMER ARCO 11133 2220 98TH AVE. OAKLAND, CA 94603		
Generator's Phone: 949-460-5200		Container type transported to receiving facility:		
<input type="checkbox"/> Drums <input type="checkbox"/> Vacuum Truck <input type="checkbox"/> Roll-off Truck <input type="checkbox"/> Dump Truck <input type="checkbox"/> Other _____		<input type="checkbox"/> Drums <input type="checkbox"/> Vacuum Truck <input type="checkbox"/> Roll-off Truck <input type="checkbox"/> Dump Truck <input type="checkbox"/> Other _____		
Quantity <u>3G</u>		Quantity _____ Volume _____		
WASTE DESCRIPTION <u>NON-HAZARDOUS WATER</u>		GENERATING PROCESS <u>WELL PURGING / DECON WATER</u>		
COMPONENTS OF WASTE		PPM	%	
1. <u>WATER</u>		<u>99-100%</u>	<u>3.</u>	
2. <u>TPH</u>		<u>&lt;1%</u>	<u>4.</u>	
Waste Profile _____		PROPERTIES: pH <u>7-10</u> <input type="checkbox"/> SOLID <input checked="" type="checkbox"/> LIQUID <input type="checkbox"/> SLUDGE <input type="checkbox"/> SLURRY <input type="checkbox"/> OTHER _____		
HANDLING INSTRUCTIONS: <u>WEAR ALL APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.</u>				
Generator Printed/Typed Name  <u>Emily Leamer</u> On behalf of BP West Coast Products, LLC		Signature _____		
		Month	Day	Year
The Generator certifies that the waste as described is 100% non-hazardous				
Transporter 1 Company Name  <u>BAY</u>		Phone#  <u>707-455-7290</u>		
Transporter 1 Printed/Typed Name  <u>Sam Barkley</u>		Signature _____		Month Day Year  <u>7/18/11</u>
Transporter Acknowledgment of Receipt of Materials				
Transporter 2 Company Name		Phone#		
Transporter 2 Printed/Typed Name		Signature		Month Day Year
Transporter Acknowledgment of Receipt of Materials				
Designated Facility Name and Site Address  INSTRAT, INC. 1105 AIRPORT RD. RIO VISTA, CA 94571		Phone#  <u>530-753-1829</u>		
Printed/Typed Name		Signature		Month Day Year
Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.				

**APPENDIX C**

**LABORATORY REPORT  
AND CHAIN-OF-CUSTODY DOCUMENTATION**

1

2

3

4

5

6

7

8

9

10

11

12

13

14

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica San Francisco

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-36279-1

Client Project/Site: BP #11133, Oakland

For:

ARCADIS U.S., Inc.

155 Montgomery Street

Suite 1500

San Francisco, California 94104

Attn: Hollis Phillips

Authorized for release by:

07/28/2011 12:01:13 PM

Dimple Sharma

Project Manager I

dimple.sharma@testamericainc.com

### LINKS

Review your project  
results through

TotalAccess

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

# Table of Contents

Cover Page .....	1
Table of Contents .....	2
Definitions/Glossary .....	3
Case Narrative .....	4
Detection Summary .....	5
Client Sample Results .....	7
QC Sample Results .....	15
QC Association Summary .....	22
Lab Chronicle .....	25
Certification Summary .....	27
Method Summary .....	28
Sample Summary .....	29
Chain of Custody .....	30
Receipt Checklists .....	31

# Definitions/Glossary

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

## Qualifiers

### Wet Chemistry

Qualifier	Qualifier Description
H3	Sample was received and analyzed past holding time.
HFT	The holding time for this test is immediate. It was analyzed in the laboratory as soon as possible after receipt.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⊗	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

# Case Narrative

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

## Job ID: 720-36279-1

### Laboratory: TestAmerica Los Angeles

#### Corrective Action Report

ID: 4975  
**Department:** Sample Control  
**Date:** 07/17/2011

#### Identification and Definition of Problem:

A copy of the chain of custody (COC) record was not received with the workshare samples. The sampler's name is also not indicated in any of the documents submitted with this workshare project. The NELAC Standards require that the sampler be identified on the COC record.

#### Corrective Action Taken:

Client was notified of the above anomalies, via the Sample Confirmation report e-mailed on 7-18-2011.

Quality Assurance Approval by William Daystrom on 07/22/2011 01:15 PM.

### Laboratory: TestAmerica San Francisco

#### Narrative

#### Job Narrative 720-36279-1

#### Comments

No additional comments.

#### Receipt

All samples were received in good condition within temperature requirements.

#### GC/MS VOA

No analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

## Detection Summary

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

### **Client Sample ID: MW-1 (7/14/11) Lab Sample ID: 720-36279-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C6-C12	330		50		ug/L	1		8260B/CA_LUFTM	Total/NA

### **Client Sample ID: MW-3 (7/14/11) Lab Sample ID: 720-36279-2**

No Detections.
----------------

### **Client Sample ID: AW-1 (7/14/11) Lab Sample ID: 720-36279-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
MTBE	26		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Benzene	35		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Ethylbenzene	92		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Xylenes, Total	6.8		1.0		ug/L	1		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C6-C12	1600		50		ug/L	1		8260B/CA_LUFTM	Total/NA
TBA	20		4.0		ug/L	1		8260B/CA_LUFTM	Total/NA
TAME	4.9		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA

### **Client Sample ID: AW-2 (7/14/11) Lab Sample ID: 720-36279-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	25		0.17	0.070	mg/L	1.0		RSK SOP-175	Total
Methane	0.0010		0.00099	0.00050	mg/L	1.0		RSK SOP-175	Total
Manganese	0.19		0.020		mg/L	1		200.7 Rev 4.4	Total/NA
Sulfate	26		10		mg/L	10		300.0	Total/NA
Alkalinity	100		5.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO <sub>3</sub>	100		5.0		mg/L	1		SM 2320B	Total/NA

### **Client Sample ID: AW-4 (7/14/11) Lab Sample ID: 720-36279-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
MTBE	4.2		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Benzene	5.4		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Ethylbenzene	1.7		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Xylenes, Total	2.2		1.0		ug/L	1		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C6-C12	75		50		ug/L	1		8260B/CA_LUFTM	Total/NA
TAME	0.55		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA

### **Client Sample ID: AW-5 (7/14/11) Lab Sample ID: 720-36279-6**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
MTBE	0.87		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
TBA	4.1		4.0		ug/L	1		8260B/CA_LUFTM	Total/NA

### **Client Sample ID: AW-6 (7/14/11) Lab Sample ID: 720-36279-7**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
MTBE	47		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
TAME	9.8		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA

### **Client Sample ID: RW-1 (7/14/11) Lab Sample ID: 720-36279-8**

TestAmerica San Francisco

## Detection Summary

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

**Client Sample ID: RW-1 (7/14/11) (Continued)**

**Lab Sample ID: 720-36279-8**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
MTBE	1.1		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Benzene	0.70		0.50		ug/L	1		8260B/CA_LUFTM	Total/NA
Xylenes, Total	3.1		1.0		ug/L	1		8260B/CA_LUFTM	Total/NA
Gasoline Range Organics (GRO) -C6-C12	310		50		ug/L	1		8260B/CA_LUFTM	Total/NA
TBA	8.9		4.0		ug/L	1		8260B/CA_LUFTM	Total/NA

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

**Client Sample ID: MW-1 (7/14/11)**

**Lab Sample ID: 720-36279-1**

Date Collected: 07/14/11 15:15  
Date Received: 07/14/11 17:33

Matrix: Water

**Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			07/20/11 12:00	1
Benzene	ND		0.50		ug/L			07/20/11 12:00	1
EDB	ND		0.50		ug/L			07/20/11 12:00	1
1,2-DCA	ND		0.50		ug/L			07/20/11 12:00	1
Ethylbenzene	ND		0.50		ug/L			07/20/11 12:00	1
Toluene	ND		0.50		ug/L			07/20/11 12:00	1
Xylenes, Total	ND		1.0		ug/L			07/20/11 12:00	1
<b>Gasoline Range Organics (GRO) -C6-C12</b>	<b>330</b>			50	ug/L			07/20/11 12:00	1
TBA	ND		4.0		ug/L			07/20/11 12:00	1
Ethanol	ND		250		ug/L			07/20/11 12:00	1
DIPE	ND		0.50		ug/L			07/20/11 12:00	1
TAME	ND		0.50		ug/L			07/20/11 12:00	1
Ethyl t-butyl ether	ND		0.50		ug/L			07/20/11 12:00	1
<b>Surrogate</b>	<b>% Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	98			67 - 130				07/20/11 12:00	1
1,2-Dichloroethane-d4 (Surr)	102			67 - 130				07/20/11 12:00	1
Toluene-d8 (Surr)	102			70 - 130				07/20/11 12:00	1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

**Client Sample ID: MW-3 (7/14/11)**

**Lab Sample ID: 720-36279-2**

**Matrix: Water**

Date Collected: 07/14/11 15:55  
Date Received: 07/14/11 17:33

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			07/20/11 13:32	1
Benzene	ND		0.50		ug/L			07/20/11 13:32	1
EDB	ND		0.50		ug/L			07/20/11 13:32	1
1,2-DCA	ND		0.50		ug/L			07/20/11 13:32	1
Ethylbenzene	ND		0.50		ug/L			07/20/11 13:32	1
Toluene	ND		0.50		ug/L			07/20/11 13:32	1
Xylenes, Total	ND		1.0		ug/L			07/20/11 13:32	1
Gasoline Range Organics (GRO) -C6-C12	ND		50		ug/L			07/20/11 13:32	1
TBA	ND		4.0		ug/L			07/20/11 13:32	1
Ethanol	ND		250		ug/L			07/20/11 13:32	1
DIPE	ND		0.50		ug/L			07/20/11 13:32	1
TAME	ND		0.50		ug/L			07/20/11 13:32	1
Ethyl t-butyl ether	ND		0.50		ug/L			07/20/11 13:32	1
<b>Surrogate</b>		<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene		95		67 - 130				07/20/11 13:32	1
1,2-Dichloroethane-d4 (Surr)		99		67 - 130				07/20/11 13:32	1
Toluene-d8 (Surr)		99		70 - 130				07/20/11 13:32	1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

**Client Sample ID: AW-1 (7/14/11)**

**Lab Sample ID: 720-36279-3**

Date Collected: 07/14/11 11:33  
Date Received: 07/14/11 17:33

Matrix: Water

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	26		0.50		ug/L			07/20/11 17:06	1
Benzene	35		0.50		ug/L			07/20/11 17:06	1
EDB	ND		0.50		ug/L			07/20/11 17:06	1
1,2-DCA	ND		0.50		ug/L			07/20/11 17:06	1
Ethylbenzene	92		0.50		ug/L			07/20/11 17:06	1
Toluene	ND		0.50		ug/L			07/20/11 17:06	1
Xylenes, Total	6.8		1.0		ug/L			07/20/11 17:06	1
Gasoline Range Organics (GRO) -C6-C12	1600		50		ug/L			07/20/11 17:06	1
TBA	20		4.0		ug/L			07/20/11 17:06	1
Ethanol	ND		250		ug/L			07/20/11 17:06	1
DIPE	ND		0.50		ug/L			07/20/11 17:06	1
TAME	4.9		0.50		ug/L			07/20/11 17:06	1
Ethyl t-butyl ether	ND		0.50		ug/L			07/20/11 17:06	1
<hr/>									
<b>Surrogate</b>	<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	104		67 - 130					07/20/11 17:06	1
1,2-Dichloroethane-d4 (Surr)	102		67 - 130					07/20/11 17:06	1
Toluene-d8 (Surr)	103		70 - 130					07/20/11 17:06	1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

**Client Sample ID: AW-2 (7/14/11)**

**Lab Sample ID: 720-36279-4**

**Matrix: Water**

Date Collected: 07/14/11 14:20  
Date Received: 07/14/11 17:33

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	ND		0.50		ug/L			07/20/11 14:33	1
Benzene	ND		0.50		ug/L			07/20/11 14:33	1
EDB	ND		0.50		ug/L			07/20/11 14:33	1
1,2-DCA	ND		0.50		ug/L			07/20/11 14:33	1
Ethylbenzene	ND		0.50		ug/L			07/20/11 14:33	1
Toluene	ND		0.50		ug/L			07/20/11 14:33	1
Xylenes, Total	ND		1.0		ug/L			07/20/11 14:33	1
Gasoline Range Organics (GRO) -C6-C12	ND		50		ug/L			07/20/11 14:33	1
TBA	ND		4.0		ug/L			07/20/11 14:33	1
Ethanol	ND		250		ug/L			07/20/11 14:33	1
DIPE	ND		0.50		ug/L			07/20/11 14:33	1
TAME	ND		0.50		ug/L			07/20/11 14:33	1
Ethyl t-butyl ether	ND		0.50		ug/L			07/20/11 14:33	1
<b>Surrogate</b>		<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	93			67 - 130				07/20/11 14:33	1
1,2-Dichloroethane-d4 (Surr)	101			67 - 130				07/20/11 14:33	1
Toluene-d8 (Surr)	98			70 - 130				07/20/11 14:33	1

## Method: RSK SOP-175 - Dissolved Gases in Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	25		0.17	0.070	mg/L		07/18/11 06:30	07/18/11 08:27	1.0
Methane	0.0010		0.00099	0.00050	mg/L		07/18/11 06:30	07/18/11 08:39	1.0

## Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.19		0.020		mg/L		07/19/11 08:00	07/19/11 20:42	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	26		10		mg/L			07/15/11 07:02	10
Nitrate as NO3	ND		1.0		mg/L			07/15/11 06:45	1
Alkalinity	100		5.0		mg/L			07/15/11 10:54	1
Bicarbonate Alkalinity as CaCO3	100		5.0		mg/L			07/15/11 10:54	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			07/15/11 10:54	1
Hydroxide Alkalinity	ND		5.0		mg/L			07/15/11 10:54	1
Ferrous Iron	ND		0.10		mg/L			07/14/11 19:22	1

## Method: SM4500-S D - INORGANICS - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Sulfide	ND	H3 HFT	0.10		mg/l		07/16/11 14:00	07/19/11 21:16	1.0

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

**Client Sample ID: AW-4 (7/14/11)**

**Lab Sample ID: 720-36279-5**

Date Collected: 07/14/11 13:10  
Date Received: 07/14/11 17:33

Matrix: Water

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	4.2		0.50		ug/L			07/20/11 15:04	1
Benzene	5.4		0.50		ug/L			07/20/11 15:04	1
EDB	ND		0.50		ug/L			07/20/11 15:04	1
1,2-DCA	ND		0.50		ug/L			07/20/11 15:04	1
Ethylbenzene	1.7		0.50		ug/L			07/20/11 15:04	1
Toluene	ND		0.50		ug/L			07/20/11 15:04	1
Xylenes, Total	2.2		1.0		ug/L			07/20/11 15:04	1
Gasoline Range Organics (GRO) -C6-C12	75		50		ug/L			07/20/11 15:04	1
TBA	ND		4.0		ug/L			07/20/11 15:04	1
Ethanol	ND		250		ug/L			07/20/11 15:04	1
DIPE	ND		0.50		ug/L			07/20/11 15:04	1
TAME	0.55		0.50		ug/L			07/20/11 15:04	1
Ethyl t-butyl ether	ND		0.50		ug/L			07/20/11 15:04	1
<hr/>									
<b>Surrogate</b>	<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	97		67 - 130					07/20/11 15:04	1
1,2-Dichloroethane-d4 (Surr)	101		67 - 130					07/20/11 15:04	1
Toluene-d8 (Surr)	100		70 - 130					07/20/11 15:04	1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

**Client Sample ID: AW-5 (7/14/11)**

**Lab Sample ID: 720-36279-6**

**Matrix: Water**

Date Collected: 07/14/11 10:35  
Date Received: 07/14/11 17:33

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>MTBE</b>	<b>0.87</b>		0.50		ug/L			07/20/11 15:34	1
Benzene	ND		0.50		ug/L			07/20/11 15:34	1
EDB	ND		0.50		ug/L			07/20/11 15:34	1
1,2-DCA	ND		0.50		ug/L			07/20/11 15:34	1
Ethylbenzene	ND		0.50		ug/L			07/20/11 15:34	1
Toluene	ND		0.50		ug/L			07/20/11 15:34	1
Xylenes, Total	ND		1.0		ug/L			07/20/11 15:34	1
Gasoline Range Organics (GRO) -C6-C12	ND		50		ug/L			07/20/11 15:34	1
<b>TBA</b>	<b>4.1</b>		4.0		ug/L			07/20/11 15:34	1
Ethanol	ND		250		ug/L			07/20/11 15:34	1
DIPE	ND		0.50		ug/L			07/20/11 15:34	1
TAME	ND		0.50		ug/L			07/20/11 15:34	1
Ethyl t-butyl ether	ND		0.50		ug/L			07/20/11 15:34	1
<hr/>									
<b>Surrogate</b>	<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	92		67 - 130					07/20/11 15:34	1
1,2-Dichloroethane-d4 (Surr)	100		67 - 130					07/20/11 15:34	1
Toluene-d8 (Surr)	98		70 - 130					07/20/11 15:34	1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

**Client Sample ID: AW-6 (7/14/11)**

**Lab Sample ID: 720-36279-7**

**Matrix: Water**

Date Collected: 07/14/11 09:40  
Date Received: 07/14/11 17:33

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>MTBE</b>	<b>47</b>		0.50	ug/L			07/20/11 16:05		1
Benzene	ND		0.50	ug/L			07/20/11 16:05		1
EDB	ND		0.50	ug/L			07/20/11 16:05		1
1,2-DCA	ND		0.50	ug/L			07/20/11 16:05		1
Ethylbenzene	ND		0.50	ug/L			07/20/11 16:05		1
Toluene	ND		0.50	ug/L			07/20/11 16:05		1
Xylenes, Total	ND		1.0	ug/L			07/20/11 16:05		1
Gasoline Range Organics (GRO) -C6-C12	ND		50	ug/L			07/20/11 16:05		1
TBA	ND		4.0	ug/L			07/20/11 16:05		1
Ethanol	ND		250	ug/L			07/20/11 16:05		1
DIPE	ND		0.50	ug/L			07/20/11 16:05		1
<b>TAME</b>	<b>9.8</b>		0.50	ug/L			07/20/11 16:05		1
Ethyl t-butyl ether	ND		0.50	ug/L			07/20/11 16:05		1
<hr/>									
<b>Surrogate</b>	<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	91		67 - 130				07/20/11 16:05		1
1,2-Dichloroethane-d4 (Surr)	98		67 - 130				07/20/11 16:05		1
Toluene-d8 (Surr)	98		70 - 130				07/20/11 16:05		1

# Client Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

**Client Sample ID: RW-1 (7/14/11)**

**Lab Sample ID: 720-36279-8**

**Matrix: Water**

Date Collected: 07/14/11 16:33  
Date Received: 07/14/11 17:33

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MTBE	1.1		0.50		ug/L			07/20/11 16:35	1
Benzene	0.70		0.50		ug/L			07/20/11 16:35	1
EDB	ND		0.50		ug/L			07/20/11 16:35	1
1,2-DCA	ND		0.50		ug/L			07/20/11 16:35	1
Ethylbenzene	ND		0.50		ug/L			07/20/11 16:35	1
Toluene	ND		0.50		ug/L			07/20/11 16:35	1
Xylenes, Total	3.1		1.0		ug/L			07/20/11 16:35	1
Gasoline Range Organics (GRO) -C6-C12	310		50		ug/L			07/20/11 16:35	1
TBA	8.9		4.0		ug/L			07/20/11 16:35	1
Ethanol	ND		250		ug/L			07/20/11 16:35	1
DIPE	ND		0.50		ug/L			07/20/11 16:35	1
TAME	ND		0.50		ug/L			07/20/11 16:35	1
Ethyl t-butyl ether	ND		0.50		ug/L			07/20/11 16:35	1
<b>Surrogate</b>		<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	97			67 - 130				07/20/11 16:35	1
1,2-Dichloroethane-d4 (Surr)	102			67 - 130				07/20/11 16:35	1
Toluene-d8 (Surr)	101			70 - 130				07/20/11 16:35	1

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-95535/4

Matrix: Water

Analysis Batch: 95535

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
	Result	Qualifier								
MTBE	ND		0.50		ug/L			07/20/11 09:28	1	
Benzene	ND		0.50		ug/L			07/20/11 09:28	1	
EDB	ND		0.50		ug/L			07/20/11 09:28	1	
1,2-DCA	ND		0.50		ug/L			07/20/11 09:28	1	
Ethylbenzene	ND		0.50		ug/L			07/20/11 09:28	1	
Toluene	ND		0.50		ug/L			07/20/11 09:28	1	
m-Xylene & p-Xylene	ND		1.0		ug/L			07/20/11 09:28	1	
o-Xylene	ND		0.50		ug/L			07/20/11 09:28	1	
Xylenes, Total	ND		1.0		ug/L			07/20/11 09:28	1	
Gasoline Range Organics (GRO)	ND		50		ug/L			07/20/11 09:28	1	
-C6-C12										
TBA	ND		4.0		ug/L			07/20/11 09:28	1	
Ethanol	ND		250		ug/L			07/20/11 09:28	1	
DIPE	ND		0.50		ug/L			07/20/11 09:28	1	
TAME	ND		0.50		ug/L			07/20/11 09:28	1	
Ethyl t-butyl ether	ND		0.50		ug/L			07/20/11 09:28	1	
<b>MB</b>		<b>MB</b>								
Surrogate	<b>% Recovery</b>		<b>Qualifier</b>		<b>Limits</b>					
	90				67 - 130					
4-Bromofluorobenzene	103		67 - 130						07/20/11 09:28	
1,2-Dichloroethane-d4 (Surr)	96		70 - 130						07/20/11 09:28	
Toluene-d8 (Surr)									07/20/11 09:28	

Lab Sample ID: LCS 720-95535/5

Matrix: Water

Analysis Batch: 95535

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike		Result	LCS	LCS	Unit	D	% Rec	Limits	% Rec.	
	Added										
MTBE	25.0		26.8			ug/L		107	62 - 130		
Benzene	25.0		25.8			ug/L		103	82 - 127		
EDB	25.0		27.3			ug/L		109	70 - 130		
1,2-DCA	25.0		25.8			ug/L		103	70 - 126		
Ethylbenzene	25.0		26.8			ug/L		107	86 - 135		
Toluene	25.0		25.9			ug/L		104	83 - 129		
m-Xylene & p-Xylene	50.0		54.0			ug/L		108	70 - 142		
o-Xylene	25.0		27.7			ug/L		111	89 - 136		
TBA	500		509			ug/L		102	82 - 116		
Ethanol	500		440			ug/L		88	31 - 216		
DIPE	25.0		26.2			ug/L		105	74 - 155		
TAME	25.0		26.8			ug/L		107	79 - 129		
Ethyl t-butyl ether	25.0		26.9			ug/L		108	70 - 130		
<b>LCS</b>		<b>LCS</b>									
Surrogate	<b>% Recovery</b>		<b>Qualifier</b>		<b>Limits</b>						
	101		67 - 130								
4-Bromofluorobenzene	98		67 - 130								
1,2-Dichloroethane-d4 (Surr)	101		70 - 130								

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-95535/7**

**Matrix: Water**

**Analysis Batch: 95535**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

Analyte		Spike	LCS	LCS	Unit	D	% Rec	% Rec.
		Added	Result	Qualifier				
Gasoline Range Organics (GRO)	-C6-C12	500	405		ug/L	81	58 - 106	
<b>Surrogate</b>								
		LCS	LCS					
		% Recovery	Qualifier	Limits				
4-Bromofluorobenzene		99		67 - 130				
1,2-Dichloroethane-d4 (Surr)		100		67 - 130				
Toluene-d8 (Surr)		102		70 - 130				

**Lab Sample ID: LCSD 720-95535/6**

**Matrix: Water**

**Analysis Batch: 95535**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte		Spike	LCSD	LCSD	Unit	D	% Rec	% Rec.	RPD
		Added	Result	Qualifier					
MTBE		25.0	28.1		ug/L	112	62 - 130	5	20
Benzene		25.0	26.0		ug/L	104	82 - 127	1	20
EDB		25.0	28.6		ug/L	114	70 - 130	5	20
1,2-DCA		25.0	26.4		ug/L	106	70 - 126	2	20
Ethylbenzene		25.0	26.9		ug/L	108	86 - 135	0	20
Toluene		25.0	25.9		ug/L	104	83 - 129	0	20
m-Xylene & p-Xylene		50.0	54.3		ug/L	109	70 - 142	1	20
o-Xylene		25.0	27.8		ug/L	111	89 - 136	0	20
TBA		500	499		ug/L	100	82 - 116	2	20
Ethanol		500	436		ug/L	87	31 - 216	1	30
DIPE		25.0	26.2		ug/L	105	74 - 155	0	20
TAME		25.0	27.5		ug/L	110	79 - 129	3	20
Ethyl t-butyl ether		25.0	27.2		ug/L	109	70 - 130	1	20
<b>Surrogate</b>									
		LCSD	LCSD						
		% Recovery	Qualifier	Limits					
4-Bromofluorobenzene		101		67 - 130					
1,2-Dichloroethane-d4 (Surr)		101		67 - 130					
Toluene-d8 (Surr)		101		70 - 130					

**Lab Sample ID: LCSD 720-95535/8**

**Matrix: Water**

**Analysis Batch: 95535**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**

Analyte		Spike	LCSD	LCSD	Unit	D	% Rec	% Rec.	RPD
		Added	Result	Qualifier					
Gasoline Range Organics (GRO)	-C6-C12	500	424		ug/L	85	58 - 106	5	20
<b>Surrogate</b>									
		LCSD	LCSD						
		% Recovery	Qualifier	Limits					
4-Bromofluorobenzene		99		67 - 130					
1,2-Dichloroethane-d4 (Surr)		98		67 - 130					
Toluene-d8 (Surr)		102		70 - 130					

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: 720-36279-1 MS

Matrix: Water

Analysis Batch: 95535

Client Sample ID: MW-1 (7/14/11)

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS		% Rec.		Limits
	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec	
MTBE	ND		25.0	28.3		ug/L		113	60 - 138
Benzene	ND		25.0	25.7		ug/L		103	60 - 140
EDB	ND		25.0	28.7		ug/L		115	60 - 140
1,2-DCA	ND		25.0	25.8		ug/L		103	60 - 140
Ethylbenzene	ND		25.0	25.9		ug/L		103	60 - 140
Toluene	ND		25.0	24.9		ug/L		100	60 - 140
m-Xylene & p-Xylene	ND		50.0	52.0		ug/L		104	60 - 140
o-Xylene	ND		25.0	27.4		ug/L		108	60 - 140
TBA	ND		500	489		ug/L		98	60 - 140
Ethanol	ND		500	452		ug/L		90	60 - 140
DIPE	ND		25.0	26.2		ug/L		105	60 - 140
TAME	ND		25.0	27.9		ug/L		112	60 - 140
Ethyl t-butyl ether	ND		25.0	27.5		ug/L		110	60 - 140
<b>MS MS</b>									
<b>Surrogate</b>	<b>% Recovery</b>	<b>Qualifier</b>		<b>Limits</b>					
4-Bromofluorobenzene	101			67 - 130					
1,2-Dichloroethane-d4 (Surr)	101			67 - 130					
Toluene-d8 (Surr)	103			70 - 130					

Lab Sample ID: 720-36279-1 MSD

Matrix: Water

Analysis Batch: 95535

Client Sample ID: MW-1 (7/14/11)

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD		% Rec.		RPD	Limit	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	% Rec			
MTBE	ND		25.0	27.7		ug/L		111	60 - 138	2	20
Benzene	ND		25.0	26.1		ug/L		104	60 - 140	2	20
EDB	ND		25.0	27.6		ug/L		110	60 - 140	4	20
1,2-DCA	ND		25.0	25.4		ug/L		102	60 - 140	2	20
Ethylbenzene	ND		25.0	26.3		ug/L		105	60 - 140	2	20
Toluene	ND		25.0	25.8		ug/L		103	60 - 140	4	20
m-Xylene & p-Xylene	ND		50.0	53.0		ug/L		106	60 - 140	2	20
o-Xylene	ND		25.0	27.9		ug/L		110	60 - 140	2	20
TBA	ND		500	498		ug/L		100	60 - 140	2	20
Ethanol	ND		500	495		ug/L		99	60 - 140	9	20
DIPE	ND		25.0	26.5		ug/L		106	60 - 140	1	20
TAME	ND		25.0	27.4		ug/L		110	60 - 140	2	20
Ethyl t-butyl ether	ND		25.0	27.5		ug/L		110	60 - 140	0	20
<b>MSD MSD</b>											
<b>Surrogate</b>	<b>% Recovery</b>	<b>Qualifier</b>		<b>Limits</b>							
4-Bromofluorobenzene	101			67 - 130							
1,2-Dichloroethane-d4 (Surr)	97			67 - 130							
Toluene-d8 (Surr)	103			70 - 130							

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

## Method: RSK SOP-175 - Dissolved Gases in Water

**Lab Sample ID:** 11G0168-BLK1

**Matrix:** Water

**Analysis Batch:** 11G0168

**Client Sample ID:** Method Blank

**Prep Type:** Total

**Prep Batch:** 11G0168\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	ND		0.17	0.070	mg/L		07/18/11 05:45	07/18/11 06:14	1.00

**Lab Sample ID:** 11G0168-BS1

**Matrix:** Water

**Analysis Batch:** 11G0168

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total

**Prep Batch:** 11G0168\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec.	Limits
Carbon dioxide	16.88	16.2		mg/L		96	70 - 130

**Lab Sample ID:** 11G0168-BSD1

**Matrix:** Water

**Analysis Batch:** 11G0168

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total

**Prep Batch:** 11G0168\_P

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec.	RPD	Limit
Carbon dioxide	16.88	16.1		mg/L		96	70 - 130	0.3

**Lab Sample ID:** 11G0169-BLK1

**Matrix:** Water

**Analysis Batch:** 11G0169

**Client Sample ID:** Method Blank

**Prep Type:** Total

**Prep Batch:** 11G0169\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		0.00099	0.00050	mg/L		07/18/11 05:45	07/18/11 06:27	1.00

**Lab Sample ID:** 11G0169-BS1

**Matrix:** Water

**Analysis Batch:** 11G0169

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total

**Prep Batch:** 11G0169\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec.	Limits
Methane	0.04767	0.0495		mg/L		104	70 - 125

**Lab Sample ID:** 11G0169-BSD1

**Matrix:** Water

**Analysis Batch:** 11G0169

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total

**Prep Batch:** 11G0169\_P

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	% Rec.	RPD	Limit
Methane	0.04767	0.0489		mg/L		103	70 - 125	1

## Method: 200.7 Rev 4.4 - Metals (ICP)

**Lab Sample ID:** MB 720-95453/1-A

**Client Sample ID:** Method Blank

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 95611

**Prep Batch:** 95453

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		0.020	0.020	mg/L		07/19/11 08:00	07/19/11 20:12	1

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

## Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

**Lab Sample ID:** LCS 720-95453/2-A

**Matrix:** Water

**Analysis Batch:** 95611

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 95453

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit mg/L	D	% Rec.	Limits
Manganese	1.00	1.01				101	85 - 115

**Lab Sample ID:** LCSD 720-95453/3-A

**Matrix:** Water

**Analysis Batch:** 95611

**Client Sample ID:** Lab Control Sample Dup

**Prep Type:** Total/NA

**Prep Batch:** 95453

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit mg/L	D	% Rec.	RPD	Limit	
Manganese	1.00	0.980				98	85 - 115	4	20

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID:** MB 720-95312/60

**Matrix:** Water

**Analysis Batch:** 95312

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit mg/L	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.0					07/15/11 00:10	1
Nitrate as NO <sub>3</sub>	ND		1.0		mg/L			07/15/11 00:10	1

**Lab Sample ID:** LCS 720-95312/61

**Matrix:** Water

**Analysis Batch:** 95312

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit mg/L	D	% Rec.	Limits
Sulfate	10.0	9.91		mg/L		99	90 - 110
Nitrate as NO <sub>3</sub>	10.0	9.94		mg/L		99	90 - 110

## Method: SM 2320B - Alkalinity

**Lab Sample ID:** MB 720-95280/2

**Matrix:** Water

**Analysis Batch:** 95280

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit mg/L	D	Prepared	Analyzed	Dil Fac
Alkalinity	ND		5.0		mg/L			07/15/11 08:44	1
Bicarbonate Alkalinity as CaCO <sub>3</sub>	ND		5.0		mg/L			07/15/11 08:44	1
Carbonate Alkalinity as CaCO <sub>3</sub>	ND		5.0		mg/L			07/15/11 08:44	1
Hydroxide Alkalinity	ND		5.0		mg/L			07/15/11 08:44	1

**Lab Sample ID:** LCS 720-95280/3

**Matrix:** Water

**Analysis Batch:** 95280

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit mg/L	D	% Rec.	Limits
Alkalinity	250	238		mg/L		95	80 - 120

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

## Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCSD 720-95280/4

Matrix: Water

Analysis Batch: 95280

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte		Spike	LCSD	LCSD	Unit	D	% Rec.	Limits	RPD	RPD Limit
		Added	Result	Qualifier						
Alkalinity		250	239		mg/L		96	80 - 120	0	20

## Method: SM 3500 FE D - Iron, Ferrous and Ferric

Lab Sample ID: MB 720-95229/1

Matrix: Water

Analysis Batch: 95229

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Ferrous Iron	ND		0.10		mg/L			07/14/11 19:22	1

Lab Sample ID: LCS 720-95229/2

Matrix: Water

Analysis Batch: 95229

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	% Rec.	Limits	RPD	RPD Limit
	Added	Result	Qualifier						
Ferrous Iron		1.00	1.02	mg/L		103	80 - 120		

Lab Sample ID: LCSD 720-95229/3

Matrix: Water

Analysis Batch: 95229

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	% Rec.	Limits	RPD	RPD Limit
	Added	Result	Qualifier						
Ferrous Iron		1.00	1.05	mg/L		105	80 - 120	2	20

Lab Sample ID: 720-36279-4 MS

Matrix: Water

Analysis Batch: 95229

Client Sample ID: AW-2 (7/14/11)

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	% Rec.	Limits
	Result	Qualifier	Added						
Ferrous Iron	ND		1.00	1.09		mg/L		101	75 - 125

Lab Sample ID: 720-36279-4 MSD

Matrix: Water

Analysis Batch: 95229

Client Sample ID: AW-2 (7/14/11)

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	% Rec.	Limits
	Result	Qualifier	Added						
Ferrous Iron	ND		1.00	1.09		mg/L		101	75 - 125

## Method: SM4500-S D - INORGANICS

Lab Sample ID: 11G2188-BLK1

Matrix: Water

Analysis Batch: 11G2188

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 11G2188\_P

Analyte	Blank	Blank	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Dissolved Sulfide	ND		0.10		mg/l		07/19/11 19:02	07/19/11 21:16	1.00

# QC Sample Results

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

## Method: SM4500-S D - INORGANICS (Continued)

Lab Sample ID: 11G2188-BS1

Matrix: Water

Analysis Batch: 11G2188

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 11G2188\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec.	Limits
Dissolved Sulfide	0.560	0.587		mg/l	105	80 - 120		

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

## GC/MS VOA

### Analysis Batch: 95535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-95535/4	Method Blank	Total/NA	Water	8260B/CA_LUFT MS	1
LCS 720-95535/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	2
LCSD 720-95535/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	3
LCS 720-95535/7	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT MS	4
LCSD 720-95535/8	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT MS	5
720-36279-1	MW-1 (7/14/11)	Total/NA	Water	8260B/CA_LUFT MS	6
720-36279-1 MS	MW-1 (7/14/11)	Total/NA	Water	8260B/CA_LUFT MS	7
720-36279-1 MSD	MW-1 (7/14/11)	Total/NA	Water	8260B/CA_LUFT MS	8
720-36279-2	MW-3 (7/14/11)	Total/NA	Water	8260B/CA_LUFT MS	9
720-36279-4	AW-2 (7/14/11)	Total/NA	Water	8260B/CA_LUFT MS	10
720-36279-5	AW-4 (7/14/11)	Total/NA	Water	8260B/CA_LUFT MS	11
720-36279-6	AW-5 (7/14/11)	Total/NA	Water	8260B/CA_LUFT MS	12
720-36279-7	AW-6 (7/14/11)	Total/NA	Water	8260B/CA_LUFT MS	13
720-36279-8	RW-1 (7/14/11)	Total/NA	Water	8260B/CA_LUFT MS	14
720-36279-3	AW-1 (7/14/11)	Total/NA	Water	8260B/CA_LUFT MS	

## GC Volatiles

### Analysis Batch: 11G0168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G0168-BS1	Lab Control Sample	Total	Water	RSK SOP-175	11G0168_P
11G0168-BSD1	Lab Control Sample Dup	Total	Water	RSK SOP-175	11G0168_P
11G0168-BLK1	Method Blank	Total	Water	RSK SOP-175	11G0168_P
720-36279-4	AW-2 (7/14/11)	Total	Water	RSK SOP-175	11G0168_P

### Analysis Batch: 11G0169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G0169-BS1	Lab Control Sample	Total	Water	RSK SOP-175	11G0169_P
11G0169-BSD1	Lab Control Sample Dup	Total	Water	RSK SOP-175	11G0169_P
11G0169-BLK1	Method Blank	Total	Water	RSK SOP-175	11G0169_P
720-36279-4	AW-2 (7/14/11)	Total	Water	RSK SOP-175	11G0169_P

### Prep Batch: 11G0168\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G0168-BS1	Lab Control Sample	Total	Water	GC-RSK	
11G0168-BSD1	Lab Control Sample Dup	Total	Water	GC-RSK	
11G0168-BLK1	Method Blank	Total	Water	GC-RSK	
720-36279-4	AW-2 (7/14/11)	Total	Water	GC-RSK	

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

## GC Volatiles (Continued)

### Prep Batch: 11G0169\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G0169-BS1	Lab Control Sample	Total	Water	GC-RSK	
11G0169-BSD1	Lab Control Sample Dup	Total	Water	GC-RSK	
11G0169-BLK1	Method Blank	Total	Water	GC-RSK	
720-36279-4	AW-2 (7/14/11)	Total	Water	GC-RSK	

## Metals

### Prep Batch: 95453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-95453/1-A	Method Blank	Total/NA	Water	200.7	
LCS 720-95453/2-A	Lab Control Sample	Total/NA	Water	200.7	
LCSD 720-95453/3-A	Lab Control Sample Dup	Total/NA	Water	200.7	
720-36279-4	AW-2 (7/14/11)	Total/NA	Water	200.7	

### Analysis Batch: 95611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-95453/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	95453
LCS 720-95453/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	95453
LCSD 720-95453/3-A	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	95453
720-36279-4	AW-2 (7/14/11)	Total/NA	Water	200.7 Rev 4.4	95453

## General Chemistry

### Analysis Batch: 95229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-95229/1	Method Blank	Total/NA	Water	SM 3500 FE D	
LCS 720-95229/2	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
LCSD 720-95229/3	Lab Control Sample Dup	Total/NA	Water	SM 3500 FE D	
720-36279-4	AW-2 (7/14/11)	Total/NA	Water	SM 3500 FE D	
720-36279-4 MS	AW-2 (7/14/11)	Total/NA	Water	SM 3500 FE D	
720-36279-4 MSD	AW-2 (7/14/11)	Total/NA	Water	SM 3500 FE D	

### Analysis Batch: 95280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-95280/2	Method Blank	Total/NA	Water	SM 2320B	
LCS 720-95280/3	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 720-95280/4	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
720-36279-4	AW-2 (7/14/11)	Total/NA	Water	SM 2320B	

### Analysis Batch: 95312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-95312/60	Method Blank	Total/NA	Water	300.0	
LCS 720-95312/61	Lab Control Sample	Total/NA	Water	300.0	
720-36279-4	AW-2 (7/14/11)	Total/NA	Water	300.0	
720-36279-4	AW-2 (7/14/11)	Total/NA	Water	300.0	

## Wet Chemistry

### Analysis Batch: 11G2188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G2188-BLK1	Method Blank	Dissolved	Water	SM4500-S D	11G2188_P

TestAmerica San Francisco

# QC Association Summary

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

## Wet Chemistry (Continued)

### Analysis Batch: 11G2188 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G2188-BS1 720-36279-4	Lab Control Sample AW-2 (7/14/11)	Dissolved Dissolved	Water Water	SM4500-S D SM4500-S D	11G2188_P 11G2188_P

### Prep Batch: 11G2188\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11G2188-BLK1	Method Blank	Dissolved	Water	General Prep	
11G2188-BS1 720-36279-4	Lab Control Sample AW-2 (7/14/11)	Dissolved Dissolved	Water Water	General Prep General Prep	

# Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

## Client Sample ID: MW-1 (7/14/11)

Date Collected: 07/14/11 15:15

Date Received: 07/14/11 17:33

## Lab Sample ID: 720-36279-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	95535	07/20/11 12:00	AC	TAL SF

## Client Sample ID: MW-3 (7/14/11) Lab Sample ID: 720-36279-2

Date Collected: 07/14/11 15:55 Matrix: Water

Date Received: 07/14/11 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	95535	07/20/11 13:32	AC	TAL SF

## Client Sample ID: AW-1 (7/14/11) Lab Sample ID: 720-36279-3

Date Collected: 07/14/11 11:33 Matrix: Water

Date Received: 07/14/11 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	95535	07/20/11 17:06	AC	TAL SF

## Client Sample ID: AW-2 (7/14/11) Lab Sample ID: 720-36279-4

Date Collected: 07/14/11 14:20 Matrix: Water

Date Received: 07/14/11 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	95535	07/20/11 14:33	AC	TAL SF
Total	Prep	GC-RSK		1.0	11G0168_P	07/18/11 06:30	YZ	TAL LA
Total	Analysis	RSK SOP-175		1.0	11G0168	07/18/11 08:27	YZ	TAL LA
Total	Prep	GC-RSK		1.0	11G0169_P	07/18/11 06:30	YZ	TAL LA
Total	Analysis	RSK SOP-175		1.0	11G0169	07/18/11 08:39	YZ	TAL LA
Total/NA	Prep	200.7			95453	07/19/11 08:00	JR	TAL SF
Total/NA	Analysis	200.7 Rev 4.4		1	95611	07/19/11 20:42	BA	TAL SF
Total/NA	Analysis	SM 3500 FE D		1	95229	07/14/11 19:22	EYT	TAL SF
Total/NA	Analysis	SM 2320B		1	95280	07/15/11 10:54	DAF	TAL SF
Total/NA	Analysis	300.0		1	95312	07/15/11 06:45	EYT	TAL SF
Total/NA	Analysis	300.0		10	95312	07/15/11 07:02	EYT	TAL SF
Dissolved	Prep	General Prep		1.0	11G2188_P	07/16/11 14:00	EL	TAL IRV
Dissolved	Analysis	SM4500-S D		1.0	11G2188	07/19/11 21:16	EL	TAL IRV

## Client Sample ID: AW-4 (7/14/11) Lab Sample ID: 720-36279-5

Date Collected: 07/14/11 13:10 Matrix: Water

Date Received: 07/14/11 17:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	95535	07/20/11 15:04	AC	TAL SF

## Lab Chronicle

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

### Client Sample ID: AW-5 (7/14/11)

Date Collected: 07/14/11 10:35  
Date Received: 07/14/11 17:33

### Lab Sample ID: 720-36279-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	95535	07/20/11 15:34	AC	TAL SF

### Client Sample ID: AW-6 (7/14/11)

Date Collected: 07/14/11 09:40  
Date Received: 07/14/11 17:33

### Lab Sample ID: 720-36279-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	95535	07/20/11 16:05	AC	TAL SF

### Client Sample ID: RW-1 (7/14/11)

Date Collected: 07/14/11 16:33  
Date Received: 07/14/11 17:33

### Lab Sample ID: 720-36279-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	95535	07/20/11 16:35	AC	TAL SF

#### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Avenue, Suite 100, Irvine, CA 92614, TEL (949) 261-1022

TAL LA = TestAmerica Los Angeles, 3585 Cadillac Avenue, Suite A, Costa Mesa, CA 92626, TEL 714-258-8610

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

## Certification Summary

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica San Francisco	California	State Program	9	2496
TestAmerica Irvine	Arizona	State Program	9	AZ0671
TestAmerica Irvine	California	LA Cty Sanitation Districts	9	10256
TestAmerica Irvine	California	NELAC	9	1108CA
TestAmerica Irvine	California	State Program	9	2706
TestAmerica Irvine	Guam	State Program	9	Cert. No. 10.001r
TestAmerica Irvine	Hawaii	State Program	9	N/A
TestAmerica Irvine	Nevada	State Program	9	CA015312007A
TestAmerica Irvine	Northern Mariana Islands	State Program	9	MP0002
TestAmerica Irvine	USDA	USDA		P330-09-00080
TestAmerica Los Angeles	Arizona	State Program	9	AZ0727
TestAmerica Los Angeles	Florida	NELAC	4	E87652
TestAmerica Los Angeles	L-A-B	DoD ELAP		L2273
TestAmerica Los Angeles	Louisiana	NELAC	6	01948
TestAmerica Los Angeles	New York	NELAC	2	11851
TestAmerica Los Angeles	Oregon	NELAC	10	CA200013
TestAmerica Los Angeles	Washington	State Program	10	C579

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

## Method Summary

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

Method	Method Description	Protocol	Laboratory
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL SF
RSK SOP-175	Dissolved Gases in Water		TAL LA
200.7 Rev 4.4	Metals (ICP)	EPA	TAL SF
300.0	Anions, Ion Chromatography	MCAWW	TAL SF
SM 2320B	Alkalinity	SM	TAL SF
SM 3500 FE D	Iron, Ferrous and Ferric	SM	TAL SF
SM4500-S D	INORGANICS		TAL IRV

### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Avenue, Suite 100, Irvine, CA 92614, TEL (949) 261-1022

TAL LA = TestAmerica Los Angeles, 3585 Cadillac Avenue, Suite A, Costa Mesa, CA 92626, TEL 714-258-8610

TAL SF = TestAmerica San Francisco, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

## Sample Summary

Client: ARCADIS U.S., Inc.  
Project/Site: BP #11133, Oakland

TestAmerica Job ID: 720-36279-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-36279-1	MW-1 (7/14/11)	Water	07/14/11 15:15	07/14/11 17:33
720-36279-2	MW-3 (7/14/11)	Water	07/14/11 15:55	07/14/11 17:33
720-36279-3	AW-1 (7/14/11)	Water	07/14/11 11:33	07/14/11 17:33
720-36279-4	AW-2 (7/14/11)	Water	07/14/11 14:20	07/14/11 17:33
720-36279-5	AW-4 (7/14/11)	Water	07/14/11 13:10	07/14/11 17:33
720-36279-6	AW-5 (7/14/11)	Water	07/14/11 10:35	07/14/11 17:33
720-36279-7	AW-6 (7/14/11)	Water	07/14/11 09:40	07/14/11 17:33
720-36279-8	RW-1 (7/14/11)	Water	07/14/11 16:33	07/14/11 17:33

San Francisco

1220 Quarry Lane

Pleasanton, CA 94566

Richmond, CA 94800  
phone 925 484 1818 fax 925 600 3002

**720-36279**  
Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL DEFENSE

IN ENVIRONMENTAL ACTS

TestAmerica Laboratories, Inc.

## Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 720-36279-1

Login Number: 36279

List Source: TestAmerica San Francisco

List Number: 1

Creator: Hoang, Julie

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

**APPENDIX D**

**GEOTRACKER UPLOAD CONFIRMATION RECEIPTS**

---

STATE WATER RESOURCES CONTROL BOARD

# GEOTRACKER ESI

UPLOADING A EDF FILE

## SUCCESS

Processing is complete. No errors were found!  
Your file has been successfully submitted!

Submittal Type: EDF - Monitoring Report - Semi-Annually  
Submittal Title: 3Q11 GW Monitoring  
Facility Global ID: T0600100210  
Facility Name: BP #11133  
File Name: 720-36279-1.zip  
Organization Name: Broadbent & Associates, Inc.  
Username: BROADBENT-C  
IP Address: 67.118.40.90  
Submittal Date/Time: 8/18/2011 10:41:35 AM  
Confirmation Number: 3613584160

[VIEW QC REPORT](#)

[VIEW DETECTIONS REPORT](#)

Copyright © 2011 State of California

---

STATE WATER RESOURCES CONTROL BOARD

# GEOTRACKER ESI

UPLOADING A GEO\_WELL FILE

## SUCCESS

Processing is complete. No errors were found!  
Your file has been successfully submitted!

<u>Submittal Type:</u>	GEO_WELL
<u>Submittal Title:</u>	3Q11 GEO_WELL 11133
<u>Facility Global ID:</u>	T0600100210
<u>Facility Name:</u>	BP #11133
<u>File Name:</u>	GEO_WELL.zip
<u>Organization Name:</u>	Broadbent & Associates, Inc.
<u>Username:</u>	BROADBENT-C
<u>IP Address:</u>	67.118.40.90
<u>Submittal Date/Time:</u>	8/18/2011 10:46:09 AM
<u>Confirmation Number:</u>	1350234270