



RECEIVED

4:58 pm, Oct 29, 2010

Alameda County
Environmental Health

Re: Third Quarter 2010 Ground-Water Monitoring Report
Former BP Station #11133
2220 98th Avenue
Oakland, California
ACEH Case #RO0000403

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

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:
10/27/2010

Submitted by:
ARCADIS U.S., Inc.

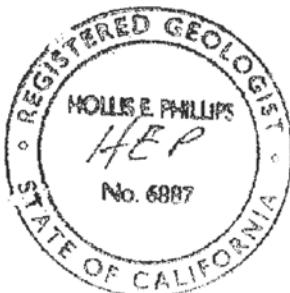
Hollis E. Phillips, PG
Project Manager

Contact:
Hollis E. Phillips

Phone:
415.374.2744 ext 13

Email:
Hollis.phillips@arcadis-us.com

Our ref:
GP09BPNA.C107



Prepared for

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

On behalf of

Atlantic Richfield Company
PO Box 1257
San Ramon, California 94583

Prepared by

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

1324 Mangrove Avenue, Suite 212
Chico, California 95926
(530) 566-1400
www.broadbentinc.com

October 27, 2010

Project No. 09-88-656

Third Quarter 2010 Ground-Water Monitoring Report

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

Broadbent & Associates, Inc.
1324 Mangrove Ave., Suite 212
Chico, CA 95926
Voice (530) 566-1400
Fax (530) 566-1401



October 27, 2010

Project No. 09-88-656

ARCADIS
100 Montgomery Street, Ste. 300
San Francisco, California 94104

Attn.: Ms. Hollis Phillips, PG

Re: Third Quarter 2010 Ground-Water Monitoring Report, Former BP Service Station
#11133, 2220 98th Avenue, Oakland, Alameda County, California;
ACEH Case #RO0000403

Dear Ms. Phillips:

Provided herein is the *Third Quarter 2010 Ground-Water Monitoring Report* for Former BP Service Station #11133 located at 2220 98th Avenue, Oakland, California (Site). This report presents the results of ground-water monitoring conducted at the Site during the Third Quarter of 2010.

Should you have questions regarding the work performed or results obtained, please do not hesitate to contact us at (530) 566-1400.

Sincerely,

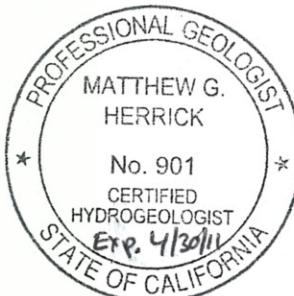
BROADBENT & ASSOCIATES, INC.

A handwritten signature in blue ink that appears to read "Jason Duda".

Jason Duda
Project Scientist

A handwritten signature in blue ink that appears to read "Matthew G. Herrick".

Matthew G. Herrick, P.G., C.HG.
Senior Hydrogeologist



Enclosure

cc: Mr. Paresh Khatri, Alameda County Environmental Health (Submitted via ACEH ftp site)
Ms. Shelby Lathrop, ConocoPhillips, 76 Broadway, Sacramento, California 95818
Electronic copy uploaded to GeoTracker

STATION #11133 GROUND-WATER MONITORING REPORT

Facility: #11133	Address: 2220 98 th Avenue, Oakland
ARCADIS Project Manager:	Ms. Hollis Phillips, PG
Consulting Co./Contact Persons:	Broadbent & Associates, Inc.(BAI)/Jason Duda & Matt Herrick (530) 566-1400
Primary Agency/Regulatory ID No.:	Alameda County Environmental Health (ACEH) ACEH Case #RO0000403
Consultant Project No.:	09-88-656
Facility Permits/Permitting Agency:	NA

WORK PERFORMED THIS QUARTER (Third Quarter 2010):

1. Conducted ground-water monitoring/sampling for Third Quarter 2010. Work performed by BAI on July 29, 2010.

WORK PROPOSED FOR NEXT QUARTER (Fourth Quarter 2010):

1. Prepared and submitted this *Third Quarter 2010 Ground-Water Monitoring Report* (contained herein).
2. No environmental work is scheduled at the Site during the Fourth Quarter of 2010.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	<u>Ground-water monitoring/sampling</u>
Frequency of ground-water monitoring:	<u>All Wells Semi-Annually (1Q & 3Q)</u>
Frequency of ground-water sampling:	<u>Semi-Annually (1Q & 3Q) = MW-1, MW-3, AW-1, AW-4, AW-5, AW-6 & RW-1; Annual (3Q) = AW-2</u>
Is free product (FP) present on-site:	<u>No</u>
FP recovered this quarter:	<u>None</u>
Current remediation techniques:	<u>NA</u>
Depth to ground water (below TOC):	<u>10.31 ft (MW-2) to 18.07 ft (AW-9)</u>
General ground-water flow direction:	<u>West</u>
Approximate hydraulic gradient:	<u>0.008 ft/ft</u>

DISCUSSION:

Third Quarter 2010 ground-water monitoring and sampling was conducted at Station #11133 on July 29, 2010 by BAI. Water levels were gauged in 12 of the 13 wells scheduled to be gauged at the Site. Well AW-7 could not be located (this well has not been able to be located since First Quarter 2001). Wells VW-1 through VW-3 and VEW-4 through VEW-9 were also gauged to assess well integrity. Well VEW-5 and VW-1 were dry. Water was observed at the top of the casing within well VW-2 and mud was present within well VEW-9 at approximately 7.03 feet below ground surface. No other irregularities were noted during water level gauging. Depth to ground-water measurements ranged from 10.31 ft at well MW-2 to 18.07 ft in well AW-9. Resulting ground-water surface elevations ranged from 25.19 ft above datum in well MW-2 to 19.71 ft in well AW-9. Water level elevations yielded a potentiometric ground-water flow direction and gradient magnitude toward the west at approximately 0.008 ft/ft. Ground-water monitoring field data sheets are provided within Appendix A. Measured depths to ground water and respective ground-water elevations are summarized in Table 1. Current and historic ground-

water flow directions and gradients are provided in Table 3. A Site Location Map is provided as Drawing 1. Potentiometric ground-water elevation contours are presented in Drawing 2.

Consistent with the current ground-water sampling schedule, water samples were collected from wells: AW-1, AW-2, AW-4, AW-5, AW-6, MW-1, MW-3, and RW-1. No irregularities were reported during sampling. Samples were submitted under chain-of-custody protocol to TestAmerica Laboratories, Inc. (Pleasanton, California), for analysis of Gasoline Range Organics (GRO, C6-12), Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX), tert-Amyl methyl ether (TAME), tert-Butyl alcohol (TBA), Di-isopropyl ether (DIPE), 1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA), Ethanol, Ethyl tert-butyl ether (ETBE), and Methyl tert-butyl ether (MTBE) by EPA Method 8260B. No irregularities were encountered during laboratory analysis of applicable samples. Ground-water sampling field data sheets and the laboratory analytical report, including chain-of-custody documentation, are provided in Appendix A.

Gasoline range organics (GRO) were detected above the laboratory reporting limits in five of the eight wells sampled at concentrations up to 3,100 micrograms per liter ($\mu\text{g}/\text{L}$) in well AW-1. Benzene was detected above the laboratory reporting limit in three of the eight wells sampled at concentrations up to 650 $\mu\text{g}/\text{L}$ in well AW-2. Toluene was detected above the laboratory reporting limit in two of the eight wells sampled at concentrations of 1.1 $\mu\text{g}/\text{L}$ in well AW-1 and 98 $\mu\text{g}/\text{L}$ in well AW-2. Ethylbenzene was detected above the laboratory reporting limit in three of the eight wells sampled at concentrations up to 170 $\mu\text{g}/\text{L}$ in well AW-2. Total Xylenes were detected above the laboratory reporting limit in four of the eight wells sampled at concentrations up to 430 $\mu\text{g}/\text{L}$ in well AW-2. TAME was detected above the laboratory reporting limit in three of the eight wells sampled at concentrations up to 16 $\mu\text{g}/\text{L}$ in well AW-1. TBA was detected above the laboratory reporting limit in three of the eight wells sampled at concentrations up to 44 $\mu\text{g}/\text{L}$ in well AW-5. MTBE was detected above the laboratory reporting limit in three of the eight wells sampled at concentrations up to 46 $\mu\text{g}/\text{L}$ in well AW-6. The remaining analytes were not detected above their laboratory reporting limits in the eight wells sampled this quarter. Historic laboratory analytical results are summarized in Table 1, Table 2 and Table 4. The most recent GRO, Benzene, and MTBE concentrations are also presented in Drawing 2. Ground-water monitoring data (GEO_WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 Database. Upload confirmation receipts are provided in Appendix B.

CONSLUSIONS AND RECOMMENDATIONS:

Water level elevations were between historic minimum and maximum ranges for each well. The potentiometric ground-water flow direction and gradient of 0.008 ft/ft to the west is consistent with historical data. Detected concentrations of petroleum hydrocarbons were within the historic minimum and maximum ranges recorded for each well sampled this quarter with the following exceptions: Benzene and Toluene reached historic minimum concentrations in well AW-1, MTBE reached historic minimum concentrations in well AW-5, and TBA reached historic minimum concentrations in well AW-5 and GRO reached a historic minimum concentration in well RW-1. No environmental work is scheduled to occur at the site during the Fourth Quarter of 2010. The next semi-annual ground-water monitoring and sampling event is scheduled to be conducted during the First Quarter of 2011.

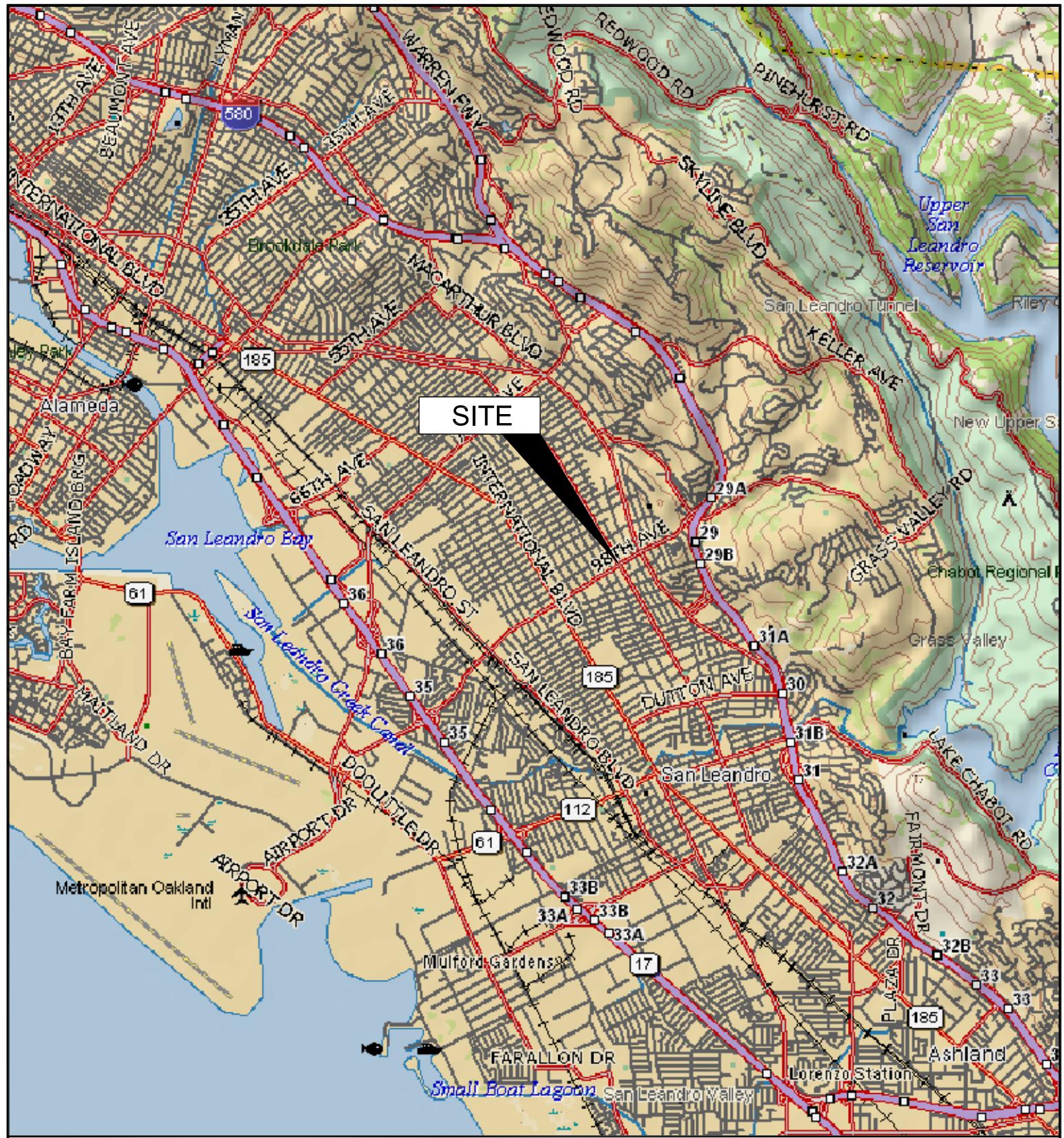
CLOSURE:

The findings presented in this report are based upon: observations of BAI field personnel (see Appendix A), the points investigated, and results of laboratory tests performed by TestAmerica (Pleasanton, California). 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 ground-water 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, Former BP Service Station #11133, 2220 98th Avenue, Oakland, California
- Drawing 2. Ground-Water Elevation Contour and Analytical Summary Map, July 29, 2010, Former BP Service Station #11133, 2220 98th Avenue, Oakland, California
- Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #11133, 2220 98th Avenue, Oakland, California
- Table 2. Summary of Fuel Additives Analytical Data, Station #11133, 2220 98th Avenue, Oakland, California
- Table 3. Historical Ground-Water Flow Direction and Gradient, Station #11133, 2220 98th Avenue, Oakland, California
- Table 4. Bio-Degradation Parameters, Station #11133, 2220 98th Avenue, Oakland, California
- Appendix A. BAI Ground-Water Sampling Data (Includes Field Data Sheets, Laboratory Report, Chain-of-Custody Documentation, Non-Hazardous Waste Data Form, and Field Procedures)
- Appendix B. GeoTracker Upload Confirmations



0 1 2
APPROXIMATE SCALE (mi)

IMAGE SOURCE: DELORME

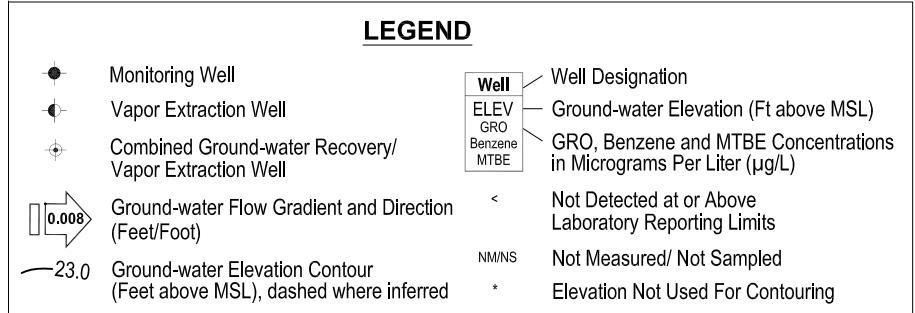
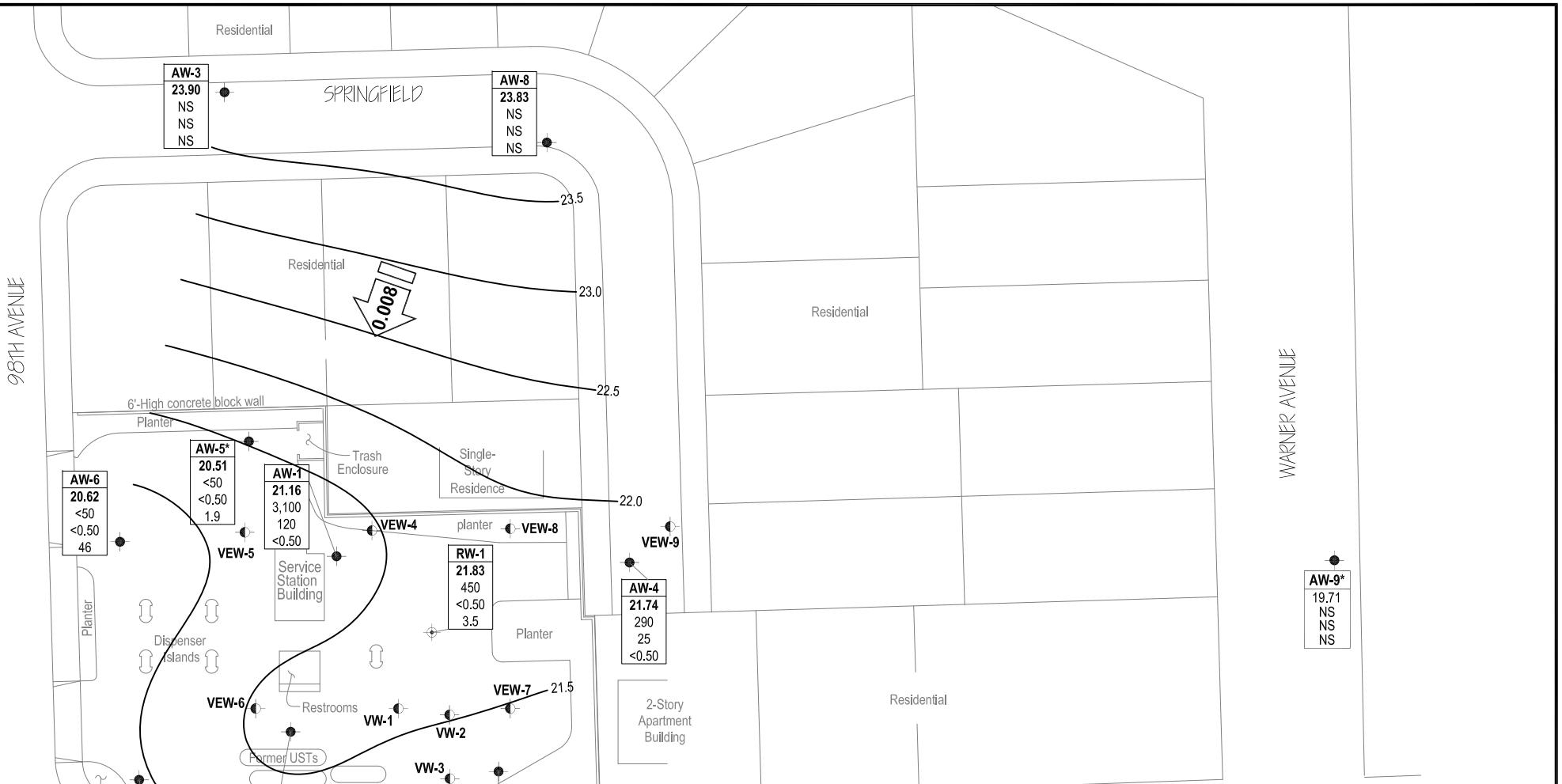


BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California 95926
Project No.: 06-88-656 Date: 9/30/2009

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: 08/19/10

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

Ground-Water Elevation Contour and Analytical Summary Map
July 29, 2010

Drawing 2

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

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

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

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

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

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

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

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

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

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-2 Cont.																
12/7/1995	--	36.83	21.31	--	15.52	<50	<0.50	<0.50	<0.50	<1.0	<5.0	4.9	ATI	--		
3/28/1996	--	36.83	15.61	--	21.22	<50	<0.5	<1	<1	<1	<10	4.1	SPL	--		
6/20/1996	--	36.83	16.30	--	20.53	<50	<0.5	<1	<1	<1	<10	5.2	SPL	--		
10/11/1996	--	36.83	19.60	--	17.23	<50	<0.5	<1.0	<1.0	<1.0	<10	6.0	SPL	--		
1/2/1997	--	36.83	15.97	--	20.86	<50	<0.5	<1.0	<1.0	<1.0	<10	6.1	SPL	--		
4/14/1997	--	36.83	17.19	--	19.64	<50	<0.5	<1.0	<1.0	<1.0	<10	5.3	SPL	--		
7/2/1997	--	36.83	18.11	--	18.72	<50	<0.5	<1.0	<1.0	<1.0	<10	5.7	SPL	--		
9/30/1997	--	36.83	18.52	--	18.31	<50	<0.5	<1.0	<1.0	<1.0	860	5.4	SPL	--		
1/21/1998	--	36.83	14.46	--	22.37	160	13	<1.0	<1.0	<1.0	110	4.9	SPL	--		
4/9/1998	--	36.83	12.85	--	23.98	--	--	--	--	--	--	--	--	--	--	
4/10/1998	--	36.83	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	3.9	SPL	--		
6/19/1998	--	36.83	14.37	--	22.46	60	<0.5	<1.0	<1.0	<1.0	<10	3.6	SPL	--		
11/30/1998	--	36.83	16.90	--	19.93	--	--	--	--	--	--	--	--	--	--	
1/21/1999	--	36.83	16.87	--	19.96	<50	<1.0	<1.0	<1.0	<1.0	<1.0	--	SPL	--		
4/30/1999	--	36.83	17.01	--	19.82	--	--	--	--	--	--	--	--	--	--	
7/9/1999	--	36.83	17.83	--	19.00	--	--	--	--	--	--	--	--	--	--	
11/3/1999	--	36.83	19.74	--	17.09	--	--	--	--	--	--	--	--	--	--	
1/12/2000	--	36.83	19.90	--	16.93	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	PACE	--		
4/13/2000	--	36.83	19.75	--	17.08	--	--	--	--	--	--	--	--	--	--	
7/26/2000	--	36.83	19.86	--	16.97	--	--	--	--	--	--	--	--	--	--	
10/24/2000	--	36.83	18.77	--	18.06	--	--	--	--	--	--	--	--	--	--	
1/19/2001	--	36.83	--	--	--	--	--	--	--	--	--	--	--	--	f	
7/24/2001	--	36.83	--	--	--	--	--	--	--	--	--	--	--	--	f	
1/18/2002	--	36.83	15.17	--	21.66	<50	<0.5	<0.5	<0.5	<1.0	<0.5	--	PACE	--		
8/1/2002	--	36.83	17.17	--	19.66	--	--	--	--	--	--	--	--	--	--	
1/16/2003	--	36.83	14.81	--	22.02	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	SEQ	--	p	
7/7/2003	--	36.83	16.65	--	20.18	--	--	--	--	--	--	--	--	--	--	
02/05/2004	--	36.83	15.37	--	21.46	<50	3.0	<0.50	<0.50	<0.50	5.1	--	SEQM	6.6		
07/01/2004	--	36.83	17.55	--	19.28	--	--	--	--	--	--	--	--	--	--	
03/16/2005	P	36.83	14.58	--	22.25	<50	0.75	<0.50	1.1	1.1	<0.50	1.7	SEQM	6.7		
07/22/2005	--	36.83	15.41	--	21.42	--	--	--	--	--	--	--	--	--	--	

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

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-3 Cont.																
9/18/1995	--	39.13	17.83	--	21.30	--	--	--	--	--	--	--	--	--	--	
9/19/1995	--	39.13	--	--	--	61,000	11,000	2,900	4,100	13,000	790	7.4	ATI	--		
12/7/1995	--	39.13	19.27	--	19.86	<50	<0.50	<0.50	<0.50	<1.0	<5.0	3.4	ATI	--		
12/7/1995	--	39.13	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	e	
3/28/1996	--	39.13	--	--	--	<50	<0.5	<1	<1	<1	<10	--	SPL	--	e	
3/28/1996	--	39.13	13.85	--	25.28	<50	<0.5	<1	<1	<1	<10	4.1	SPL	--		
6/20/1996	--	39.13	14.47	--	24.66	<50	<0.5	<1	<1	<1	<10	4.2	SPL	--		
6/20/1996	--	39.13	--	--	--	<50	<0.5	<1	<1	<1	<10	--	SPL	--	e	
10/11/1996	--	39.13	17.97	--	21.16	<50	<0.5	<1.0	<1.0	<1.0	<10	4.7	SPL	--		
10/11/1996	--	39.13	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	--	SPL	--	e	
1/2/1997	--	39.13	13.00	--	26.13	<50	<0.5	<1.0	<1.0	<1.0	<10	5.6	SPL	--		
4/14/1997	--	39.13	14.36	--	24.77	<50	<0.5	<1.0	<1.0	<1.0	<10	5.0	SPL	--		
4/15/1997	--	39.13	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	--	SPL	--	e	
7/2/1997	--	39.13	15.87	--	23.26	<50	<0.5	<1.0	<1.0	<1.0	<10	5.4	SPL	--		
9/30/1997	--	39.13	17.50	--	21.63	<250	<2.5	<5.0	<5.0	<5.0	810	5.7	SPL	--		
1/21/1998	--	39.13	11.98	--	27.15	140	<0.5	<1.0	<1.0	<1.0	99	4.6	SPL	--		
1/21/1998	--	39.13	--	--	--	150	<0.5	<1.0	<1.0	1.2	110	--	SPL	--	e	
4/9/1998	--	39.13	9.45	--	29.68	--	--	--	--	--	--	--	--	--		
4/10/1998	--	39.13	--	--	--	<50	<0.5	<1.0	1.4	1.7	<10	--	SPL	--	e	
4/10/1998	--	39.13	--	--	--	<50	<0.5	<1.0	<1.0	1.6	<10	4.5	SPL	--		
6/19/1998	--	39.13	12.13	--	27.00	<50	<0.5	<1.0	<1.0	<1.0	<10	4.4	SPL	--		
11/30/1998	--	39.13	15.91	--	23.22	--	--	--	--	--	--	--	--	--		
1/21/1999	--	39.13	15.93	--	23.20	<50	<1.0	<1.0	<1.0	<1.0	<1.0	--	SPL	--		
4/30/1999	--	39.13	15.98	--	23.15	--	--	--	--	--	--	--	--	--		
7/9/1999	--	39.13	14.58	--	24.55	--	--	--	--	--	--	--	--	--		
11/3/1999	--	39.13	17.43	--	21.70	--	--	--	--	--	--	--	--	--		
1/12/2000	--	39.13	18.30	--	20.83	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	PACE	--		
4/13/2000	--	39.13	18.89	--	20.24	--	--	--	--	--	--	--	--	--		
7/26/2000	--	39.13	18.67	--	20.46	--	--	--	--	--	--	--	--	--		
10/24/2000	--	39.13	18.98	--	20.15	--	--	--	--	--	--	--	--	--		
1/19/2001	--	39.13	16.74	--	22.39	--	--	--	--	--	--	--	--	--		

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

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

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

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Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-4 Cont.																
4/13/2000	--	39.08	21.33	--	17.75	--	--	--	--	--	--	--	--	--	--	
5/24/2000	--	39.08	19.84	--	19.24	--	--	--	--	--	--	--	--	--	--	
6/1/2000	--	39.08	19.04	--	20.04	--	--	--	--	--	--	--	--	--	--	
6/8/2000	--	39.08	18.32	--	20.76	--	--	--	--	--	--	--	--	--	--	
6/15/2000	--	39.08	16.70	--	22.38	--	--	--	--	--	--	--	--	--	--	
7/26/2000	--	39.08	21.50	--	17.58	910	<0.5	<0.5	<0.5	<0.5	3,500	--	PACE	--		
10/24/2000	--	39.08	22.00	--	17.08	--	--	--	--	--	--	--	--	--	--	
1/19/2001	--	39.08	18.97	--	20.11	6,600	2,460	24	497	534	267	--	PACE	--		
7/24/2001	--	39.08	18.55	--	20.53	5,100	1,080	143	409	827	115	--	PACE	--		
1/18/2002	--	39.08	17.22	--	21.86	3,900	442	241	157	681	85.3	--	PACE	--		
8/1/2002	--	39.08	--	--	--	--	--	--	--	--	--	--	--	--	--	f
1/16/2003	--	39.08	16.85	--	22.23	2,900	260	160	120	590	<120	--	SEQ	--	p	
7/7/2003	--	39.08	17.94	--	21.14	600	90	7.9	18	36	56	--	SEQ	--	q	
02/05/2004	--	39.08	16.94	--	22.14	420	40	3.1	15	27	40	--	SEQM	6.8		
07/01/2004	P	39.08	18.24	--	20.84	6,000	970	200	310	1,500	64	--	SEQM	6.7		
03/16/2005	P	39.08	16.16	--	22.92	3,600	71	31	200	870	23	0.6	SEQM	6.5		
07/22/2005	P	39.08	15.89	--	23.19	4,800	750	48	300	840	59	--	SEQM	6.7		
01/25/2006	P	39.08	15.48	--	23.60	<500	13	<5.0	14	62	12	--	SEQM	7.0		
7/6/2006	P	39.08	14.87	--	24.21	2,800	430	21	230	680	39	--	TAMC	6.7		
1/8/2007	P	39.08	16.48	--	22.60	190	6.6	<0.50	4.1	14	38	3.00	TAMC	6.80		
7/10/2007	P	39.08	17.95	--	21.13	160	2.7	<0.50	0.90	1.0	27	2.54	TAMC	7.19		
1/15/2008	P	39.08	17.70	--	21.38	150	<0.50	<0.50	0.71	<0.50	17	1.30	TAMC	6.75		
7/15/2008	P	39.08	18.74	--	20.34	250	44	1.1	44	78	25	2.64	CEL	6.91		
10/21/2008	P	39.08	20.07	--	19.01	270	1.6	<1.0	<1.0	<1.0	18	1.54	CEL	7.25		
1/6/2009	P	39.08	19.45	--	19.63	230	0.88	<0.50	<0.50	<0.50	8.3	0.70	CEL	6.31		
4/21/2009	P	39.08	17.00	--	22.08	260	4.6	1.6	21	28	4.1	3.51	CEL	7.48		
7/21/2009	P	39.08	18.96	--	20.12	200	4.8	<0.50	6.9	2.8	8.6	6.14	CEL	7.04	y	
3/18/2010	P	39.08	14.92	--	24.16	240	<0.50	<0.50	15	21	2.5	0.79	TAMC	6.71		
7/29/2010	NP	39.08	17.34	--	21.74	290	25	<0.50	14	6.5	<0.50	1.07	TAMC	7.2		
AW-5																

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-5 Cont.																
4/5/1991	--	38.51	25.48	--	13.03	420	31	7.5	20	68	--	--	SUP	--		
4/1/1992	--	38.51	23.95	--	14.56	--	--	--	--	--	--	--	--	--	--	
4/2/1992	--	38.51	--	--	--	4,000	270	63	190	290	--	--	APP	--		
7/6/1992	--	38.51	26.48	--	12.03	1,400	160	<2.5	250	58	--	--	ANA	--		
10/7/1992	--	38.51	28.18	--	10.33	360	12	0.6	8.7	5	--	--	ANA	--		
1/14/1993	--	38.51	24.15	--	14.36	1,700	270	7.5	130	62	--	--	PACE	--	m	
4/22/1993	--	38.51	22.43	--	16.08	2,700	780	30	220	180	--	--	PACE	--	m	
4/22/1993	--	38.51	--	--	--	3,500	780	29	240	210	--	--	PACE	--	m, e	
7/15/1993	--	38.51	24.31	--	14.20	1,300	69	16	67	120	<50	--	PACE	--	m	
7/15/1993	--	38.51	--	--	--	1,300	68	8.3	64	99	<50	--	PACE	--	m, e	
10/21/1993	--	38.51	26.05	--	12.46	510	9.6	1.5	17	45	75	--	PACE	--	c, m	
1/27/1994	--	38.51	26.42	--	12.09	420	3.3	<0.5	1	0.9	48.9	--	PACE	--	m	
4/21/1994	--	38.51	24.36	--	14.15	1,000	110	25	56	27	75	1.3	PACE	--	c, m	
9/9/1994	--	38.51	24.55	--	13.96	210	<0.5	<0.5	0.5	0.9	--	2.7	PACE	--	m	
12/21/1994	--	38.51	22.30	--	16.21	410	<0.5	20	4.3	1.4	114	1.1	PACE	--	m	
12/21/1994	--	38.51	--	--	--	340	<0.5	15	3.3	1.4	104	--	PACE	--	m, e	
1/30/1995	--	38.51	18.88	--	19.63	210	0.6	11	8.8	2	--	1.5	ATI	--		
4/10/1995	--	38.51	18.44	--	20.07	500	1.4	0.59	6.5	4.3	--	8.3	ATI	--		
6/29/1995	--	38.51	19.92	--	18.59	490	1.2	0.58	7.3	2.2	--	6.9	ATI	--	d	
9/18/1995	--	38.51	22.15	--	16.36	--	--	--	--	--	--	--	--	--	--	
9/19/1995	--	38.51	--	--	--	260	0.62	<0.50	3.1	1.1	110	8.2	ATI	--		
12/7/1995	--	38.51	23.75	--	14.76	60	<0.50	<0.50	<0.50	<1.0	210	4.3	ATI	--		
3/28/1996	--	38.51	17.76	--	20.75	<50	<0.5	<1	<1	<1	63	3.0	SPL	--		
6/20/1996	--	38.51	18.46	--	20.05	<50	<0.5	<1	<1	<1	<10	3.6	SPL	--		
10/11/1996	--	38.51	21.84	--	16.67	<50	<0.5	<1.0	<1.0	<1.0	<10	4.5	SPL	--		
1/2/1997	--	38.51	18.01	--	20.50	<50	<0.5	<1.0	<1.0	<1.0	<10	4.6	SPL	--		
4/14/1997	--	38.51	19.35	--	19.16	<50	<0.5	<1.0	<1.0	<1.0	<10	5.1	SPL	--		
7/2/1997	--	38.51	20.29	--	18.22	<50	<0.5	<1.0	<1.0	<1.0	<10	4.0	SPL	--		
9/30/1997	--	38.51	23.15	--	15.36	<250	<2.5	<5.0	<5.0	<5.0	1,300	6.3	SPL	--		
1/21/1998	--	38.51	17.33	--	21.18	6,100	<0.5	2.1	<1.0	<1.0	3,700	4.5	SPL	--		
4/9/1998	--	38.51	15.25	--	23.26	--	--	--	--	--	--	--	--	--	--	

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

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

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

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

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

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

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Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
AW-8 Cont.															
4/22/1993	--	40.86	22.29	--	18.57	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	m
7/15/1993	--	40.86	23.42	--	17.44	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	PACE	--	m
10/21/1993	--	40.86	25.15	--	15.71	<50	1.9	1.8	1.3	3.3	<5.0	--	PACE	--	m
1/27/1994	--	40.86	25.42	--	15.44	<50	<0.5	0.5	0.6	8.5	<5.0	--	PACE	--	m
4/21/1994	--	40.86	24.14	--	16.72	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.5	PACE	--	m
9/9/1994	--	40.86	24.55	--	16.31	<50	<0.5	<0.5	<0.5	<0.5	--	2.4	PACE	--	m
12/21/1994	--	40.86	22.72	--	18.14	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.1	PACE	--	m
1/30/1995	--	40.86	19.75	--	21.11	<50	<0.50	1	<0.50	1	--	0.8	ATI	--	
4/10/1995	--	40.86	17.78	--	23.08	<50	<0.50	<0.50	<0.50	<1.0	--	8.3	ATI	--	
6/29/1995	--	40.86	18.18	--	22.68	<50	<0.50	<0.50	<0.50	<1.0	--	8.3	ATI	--	
9/18/1995	--	40.86	20.20	--	20.66	--	--	--	--	--	--	--	--	--	
9/19/1995	--	40.86	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	7.7	ATI	--	
12/7/1995	--	40.86	21.54	--	19.32	<50	<0.50	<0.50	<0.50	<1.0	<5.0	4.4	ATI	--	
3/28/1996	--	40.86	15.77	--	25.09	<50	<0.5	<1	<1	<1	<10	3.8	SPL	--	
6/20/1996	--	40.86	16.41	--	24.45	<50	<0.5	<1	<1	<1	<10	3.6	SPL	--	
10/11/1996	--	40.86	19.90	--	20.96	<50	<0.5	<1.0	<1.0	<1.0	<10	6.4	SPL	--	
1/2/1997	--	40.86	15.89	--	24.97	<50	<0.5	<1.0	<1.0	<1.0	<10	5.9	SPL	--	
4/14/1997	--	40.86	17.07	--	23.79	<50	<0.5	<1.0	<1.0	<1.0	<10	4.6	SPL	--	
7/2/1997	--	40.86	18.67	--	22.19	<50	<0.5	<1.0	<1.0	<1.0	<10	5.6	SPL	--	
9/30/1997	--	40.86	22.52	--	18.34	<50	<5	<10	<10	<10	820	6.7	SPL	--	
1/21/1998	--	40.86	16.01	--	24.85	<50	<0.5	<1.0	<1.0	<1.0	<10	5.2	SPL	--	
4/9/1998	--	40.86	11.18	--	29.68	<50	<0.5	<1.0	<1.0	<1.0	<10	4.4	SPL	--	
6/19/1998	--	40.86	13.01	--	27.85	<50	<0.5	<1.0	<1.0	<1.0	<10	4.1	SPL	--	
11/30/1998	--	40.86	17.46	--	23.40	--	--	--	--	--	--	--	--	--	
1/21/1999	--	40.86	17.47	--	23.39	--	--	--	--	--	--	--	--	--	
4/30/1999	--	40.86	17.60	--	23.26	--	--	--	--	--	--	--	--	--	
7/9/1999	--	40.86	16.50	--	24.36	--	--	--	--	--	--	--	--	--	
11/3/1999	--	40.86	19.29	--	21.57	--	--	--	--	--	--	--	--	--	
1/12/2000	--	40.86	21.49	--	19.37	--	--	--	--	--	--	--	--	--	
4/13/2000	--	40.86	21.60	--	19.26	--	--	--	--	--	--	--	--	--	
7/26/2000	--	40.86	21.53	--	19.33	--	--	--	--	--	--	--	--	--	

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

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

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

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-9 Cont.																
6/19/1998	--	37.78	8.96	--	28.82	<50	<0.5	<1.0	<1.0	<1.0	<10	4.8	SPL	--		
1/8/2007	--	37.78	17.35	--	20.43	--	--	--	--	--	--	--	--	--	--	
7/10/2007	--	37.78	18.65	--	19.13	--	--	--	--	--	--	--	--	--	--	
1/15/2008	--	37.78	18.51	--	19.27	--	--	--	--	--	--	--	--	--	--	
7/15/2008	--	37.78	19.56	--	18.22	--	--	--	--	--	--	--	--	--	--	
10/21/2008	--	37.78	21.07	--	16.71	--	--	--	--	--	--	--	--	--	--	
1/6/2009	--	37.78	21.00	--	16.78	--	--	--	--	--	--	--	--	--	--	
4/21/2009	--	37.78	18.28	--	19.50	--	--	--	--	--	--	--	--	--	--	
7/21/2009	--	37.78	20.00	--	17.78	--	--	--	--	--	--	--	--	--	--	
3/18/2010	--	37.78	16.45	--	21.33	--	--	--	--	--	--	--	--	--	--	
7/29/2010	--	37.78	18.07	--	19.71	--	--	--	--	--	--	--	--	--	--	
MW-1																
4/5/1991	--	34.46	--	--	--	--	--	--	--	--	--	--	--	--	--	
4/1/1992	--	34.46	11.25	--	23.21	--	--	--	--	--	--	--	--	--	--	
7/6/1992	--	34.46	13.61	--	20.85	--	--	--	--	--	--	--	--	--	--	
10/7/1992	--	34.46	15.15	--	19.31	--	--	--	--	--	--	--	--	--	--	
1/14/1993	--	34.46	10.73	--	23.73	--	--	--	--	--	--	--	--	--	--	
4/22/1993	--	34.46	11.64	--	22.82	--	--	--	--	--	--	--	--	--	--	
7/15/1993	--	34.46	13.50	--	20.96	--	--	--	--	--	--	--	--	--	--	
10/21/1993	--	34.46	15.21	--	19.25	--	--	--	--	--	--	--	--	--	--	
1/27/1994	--	34.46	17.48	--	16.98	--	--	--	--	--	--	--	--	--	--	
4/21/1994	--	34.46	10.94	--	23.52	110,000	1,400	9,100	3,400	30,000	11,000	1.6	PACE	--	c	
9/9/1994	--	34.46	13.80	--	20.66	--	--	--	--	--	--	--	--	--	--	
12/21/1994	--	34.46	12.60	--	21.86	--	--	--	--	--	--	--	--	--	--	
1/30/1995	--	34.46	--	--	--	--	--	--	--	--	--	--	--	--	--	
4/10/1995	--	34.46	10.62	--	23.84	--	--	--	--	--	--	--	--	--	--	
6/29/1995	--	34.46	18.72	--	15.74	--	--	--	--	--	--	--	--	--	--	
9/18/1995	--	34.46	12.92	--	21.54	--	--	--	--	--	--	--	--	--	--	
12/7/1995	--	34.46	13.82	--	20.64	--	--	--	--	--	--	--	--	--	--	
3/28/1996	--	34.46	10.03	--	24.43	--	--	--	--	--	--	--	--	--	--	

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

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

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

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

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Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
MW-2 Cont.																
4/10/1995	--	35.50	9.00	--	26.50	<50	<0.50	<0.50	<0.50	<1.0	--	7.8	ATI	--		
6/29/1995	--	35.50	9.91	--	25.59	<50	<0.50	<0.50	<0.50	<1.0	--	9.1	ATI	--		
9/18/1995	--	35.50	10.98	--	24.52	--	--	--	--	--	--	--	--	--	--	
9/19/1995	--	35.50	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	7.2	ATI	--		
12/7/1995	--	35.50	12.30	--	23.20	<50	<0.50	<0.50	<0.50	<1.0	<5.0	2.4	ATI	--		
3/28/1996	--	35.50	8.57	--	26.93	<50	<0.5	<1	<1	<1	<10	3.2	SPL	--		
6/20/1996	--	35.50	9.77	--	25.73	<50	<0.5	<1	<1	<1	<10	4.2	SPL	--		
10/11/1996	--	35.50	13.32	--	22.18	<50	<0.5	<1.0	<1.0	<1.0	<10	6.3	SPL	--		
1/2/1997	--	35.50	9.60	--	25.90	<50	<0.5	<1.0	<1.0	<1.0	<10	6.7	SPL	--		
4/14/1997	--	35.50	10.93	--	24.57	<50	<0.5	<1.0	<1.0	<1.0	<10	5.7	SPL	--		
7/2/1997	--	35.50	12.57	--	22.93	<50	<0.5	<1.0	<1.0	<1.0	<10	5.9	SPL	--		
9/30/1997	--	35.50	12.91	--	22.59	<50	<0.5	<1.0	<1.0	<1.0	<10	6.3	SPL	--		
1/21/1998	--	35.50	10.12	--	25.38	160	<0.5	<1.0	<1.0	<1.0	100	5.4	SPL	--		
4/9/1998	--	35.50	6.82	--	28.68	--	--	--	--	--	--	--	--	--	--	
4/10/1998	--	35.50	--	--	--	<50	1	<1.0	<1.0	<1.0	23	5.0	SPL	--		
6/19/1998	--	35.50	9.00	--	26.50	<50	<0.5	<1.0	<1.0	<1.0	<10	4.9	SPL	--		
11/30/1998	--	35.50	9.44	--	26.06	--	--	--	--	--	--	--	--	--	--	
1/21/1999	--	35.50	8.96	--	26.54	<50	<1.0	<1.0	<1.0	<1.0	1.9	--	SPL	--		
4/30/1999	--	35.50	9.15	--	26.35	--	--	--	--	--	--	--	--	--	--	
7/9/1999	--	35.50	10.82	--	24.68	--	--	--	--	--	--	--	--	--	--	
11/3/1999	--	35.50	11.86	--	23.64	--	--	--	--	--	--	--	--	--	--	
1/12/2000	--	35.50	12.35	--	23.15	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	PACE	--		
4/13/2000	--	35.50	13.01	--	22.49	--	--	--	--	--	--	--	--	--	--	
7/26/2000	--	35.50	13.01	--	22.49	--	--	--	--	--	--	--	--	--	--	
10/24/2000	--	35.50	11.57	--	23.93	--	--	--	--	--	--	--	--	--	--	
1/19/2001	--	35.50	10.52	--	24.98	--	--	--	--	--	--	--	--	--	--	
7/24/2001	--	35.50	11.13	--	24.37	--	--	--	--	--	--	--	--	--	--	
1/18/2002	--	35.50	8.85	--	26.65	--	--	--	--	--	--	--	--	--	--	
8/1/2002	--	35.50	10.47	--	25.03	--	--	--	--	--	--	--	--	--	--	
1/14/2003	--	35.50	8.49	--	27.01	--	--	--	--	--	--	--	--	--	--	
7/7/2003	--	35.50	9.63	--	25.87	--	--	--	--	--	--	--	--	--	--	

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

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

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

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

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

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
QC-2 Cont.						<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	i	
9/19/1995	--	37.73	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	i	
12/7/1995	--	37.73	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	i	
3/28/1996	--	37.73	--	--	--	<50	<0.5	<1	<1	<1	<10	--	SPL	--	i	
6/20/1996	--	37.73	--	--	--	<50	<0.5	<1	<1	<1	<10	--	SPL	--	i	
RW-1																
4/5/1991	--	37.73	--	--	--	--	--	--	--	--	--	--	--	--	--	
4/1/1992	--	37.73	22.81	--	14.92	--	--	--	--	--	--	--	--	--	--	
7/6/1992	--	37.73	26.92	--	10.81	--	--	--	--	--	--	--	--	--	--	
10/7/1992	--	37.73	28.51	--	9.22	--	--	--	--	--	--	--	--	--	--	
1/14/1993	--	37.73	23.75	--	13.98	--	--	--	--	--	--	--	--	--	--	
4/22/1993	--	37.73	22.70	--	15.03	--	--	--	--	--	--	--	--	--	--	
7/15/1993	--	37.73	26.10	--	11.63	--	--	--	--	--	--	--	--	--	--	
10/21/1993	--	37.73	25.40	--	12.33	--	--	--	--	--	--	--	--	--	--	
1/27/1994	--	37.73	28.02	--	9.71	--	--	--	--	--	--	--	--	--	--	
4/21/1994	--	37.73	23.10	--	14.63	--	--	--	--	--	--	--	--	--	--	
9/9/1994	--	37.73	24.39	--	13.34	--	--	--	--	--	--	--	--	--	--	
12/21/1994	--	37.73	--	--	--	--	--	--	--	--	--	--	--	--	--	h
12/7/1995	--	37.73	25.71	--	12.02	150,000	34,000	35,000	4,300	21,000	2,700	--	ATI	--		
3/28/1996	--	37.73	16.75	--	20.98	--	--	--	--	--	--	--	--	--	--	
6/20/1996	--	37.73	25.10	--	12.63	--	--	--	--	--	--	--	--	--	--	h
10/11/1996	--	37.73	25.51	--	12.22	130,000	20,000	32,000	2,800	20,700	1400/1200	7.4	SPL	--	g	
1/2/1997	--	37.73	24.49	--	13.24	--	--	--	--	--	--	--	--	--	--	
4/14/1997	--	37.73	23.99	--	13.74	--	--	--	--	--	--	--	--	--	--	
4/15/1997	--	37.73	--	--	--	1,800,000	38,000	190,000	48,000	281,000	<25000	--	SPL	--		
7/2/1997	--	37.73	16.40	--	21.33	140,000	19,000	55,000	4,400	32,400	<10000	5.7	SPL	--		
7/2/1997	--	37.73	--	--	--	130,000	19,000	54,000	4,700	33,400	<10000	--	SPL	--	e	
9/30/1997	--	37.73	--	--	--	140,000	17,000	29,000	2,500	15,900	1,200	--	SPL	--	e	
9/30/1997	--	37.73	27.97	--	9.76	110,000	13,000	22,000	2,000	12,500	1,100	7.0	SPL	--		
1/21/1998	--	37.73	14.14	--	23.59	270,000	21,000	48,000	3,500	25,000	1,100	4.8	SPL	--		
4/9/1998	--	37.73	25.01	--	12.72	--	--	--	--	--	--	--	--	--	--	

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

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
RW-1 Cont.															
01/25/2006	P	37.73	12.00	--	25.73	7,000	22	5.9	190	--	34	--	SEQM	7.1	
7/6/2006	P	37.73	13.01	--	24.72	16,000	37	14	470	230	64	--	TAMC	6.8	
1/8/2007	P	37.73	14.75	--	22.98	2400	16	10	56	54	22	3.61	TAMC	6.86	
7/10/2007	P	37.73	16.21	--	21.52	3,800	4.4	2.8	72	22	21	2.65	TAMC	6.98	
1/15/2008	P	37.73	14.63	--	23.10	1,700	21	1.6	45	10	14	1.31	TAMC	6.82	
7/15/2008	P	37.73	17.04	--	20.69	1,600	<0.50	0.66	4.4	3.0	12	1.32	CEL	6.95	
10/21/2008	P	37.73	18.44	--	19.29	3,600	<0.50	1.3	19	10	12	0.79	CEL	7.17	
1/6/2009	P	37.73	17.50	--	20.23	1,300	<0.50	<0.50	1.6	2.7	7.0	1.02	CEL	6.43	
4/21/2009	P	37.73	15.37	--	22.36	2,000	27	1.9	30	16	6.0	0.86	CEL	7.38	x
7/21/2009	P	37.73	17.20	--	20.53	870	<0.50	<0.50	<0.50	0.57	7.0	13.31	CEL	7.35	y
3/18/2010	P	37.73	12.87	SHEEN	24.86	2,500	<2.5	<2.5	2.7	<5.0	<2.5	0.74	TAMC	6.73	
7/29/2010	NP	37.73	15.90	--	21.83	450	<0.50	<0.50	<0.50	1.4	3.5	--	TAMC	7.1	
VEW-4															
07/22/2005	P	--	14.04	--	--	680	41	24	20	67	<0.50	--	SEQM	6.8	
1/15/2008	P	--	15.05	--	--	350	19	1.1	5.0	3.3	<0.50	0.54	TAMC	6.99	
7/15/2008	P	--	17.24	--	--	53	<0.50	<0.50	<0.50	<0.50	<0.50	0.59	CEL	6.95	
10/21/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
1/6/2009	--	--	18.00	--	--	--	--	--	--	--	--	--	--	--	--
4/21/2009	P	--	15.81	--	--	610	5.9	0.64	4.0	1.9	<0.50	1.99	CEL	7.41	
7/21/2009	P	--	17.60	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	8.99	CEL	7.24	y
3/18/2010	--	--	12.91	--	--	--	--	--	--	--	--	--	--	--	
7/29/2010	--	--	15.82	--	--	--	--	--	--	--	--	--	TAMC	--	
VEW-5															
07/22/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
1/15/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
7/15/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
10/21/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
1/6/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
4/21/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v

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

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

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
VEW-5 Cont.						--	--	--	--	--	--	--	--	--	--	v
7/21/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
3/18/2010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
7/29/2010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
VEW-6						--	--	--	--	--	--	--	--	--	--	
1/15/2008	--	--	11.83	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2008	--	--	14.81	--	--	--	--	--	--	--	--	--	--	--	--	
10/21/2008	--	--	16.02	--	--	--	--	--	--	--	--	--	--	--	--	
1/6/2009	--	--	14.70	--	--	--	--	--	--	--	--	--	--	--	--	
4/21/2009	--	--	13.34	--	--	--	--	--	--	--	--	--	--	--	--	
7/21/2009	--	--	14.90	--	--	--	--	--	--	--	--	--	--	--	--	
3/18/2010	--	--	10.39	--	--	--	--	--	--	--	--	--	--	--	--	
7/29/2010	--	--	14.65	--	--	--	--	--	--	--	--	--	--	--	--	
VEW-7						--	--	--	--	--	--	--	--	--	--	
1/15/2008	--	--	13.24	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2008	--	--	15.91	--	--	--	--	--	--	--	--	--	--	--	--	
10/21/2008	--	--	16.89	--	--	--	--	--	--	--	--	--	--	--	--	
1/6/2009	--	--	16.00	--	--	--	--	--	--	--	--	--	--	--	--	
4/21/2009	--	--	14.30	--	--	--	--	--	--	--	--	--	--	--	--	
7/21/2009	--	--	15.98	--	--	--	--	--	--	--	--	--	--	--	--	
3/18/2010	--	--	11.16	--	--	--	--	--	--	--	--	--	--	--	--	
7/29/2010	--	--	14.67	--	--	--	--	--	--	--	--	--	--	--	--	
VEW-8						--	--	--	--	--	--	--	--	--	--	
07/22/2005	P	--	14.24	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	6.8		
1/15/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
7/15/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
10/21/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
1/6/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
4/21/2009	--	--	16.53	--	--	--	--	--	--	--	--	--	--	--	--	
7/21/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v

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

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

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
VEW-8 Cont.						--	--	--	--	--	--	--	--	--	--	
3/18/2010	--	--	14.05	--	--	--	--	--	--	--	--	--	--	--	--	
7/29/2010	--	--	16.24	--	--	--	--	--	--	--	--	--	--	--	--	
VEW-9						--	--	--	--	--	--	--	--	--	--	
1/15/2008	--	--	5.31	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
10/21/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
1/6/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	f
4/21/2009	--	--	6.18	--	--	--	--	--	--	--	--	--	--	--	--	
7/21/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
3/18/2010	--	--	5.32	--	--	--	--	--	--	--	--	--	--	--	--	
7/29/2010	--	--	7.03	--	--	--	--	--	--	--	--	--	--	--	--	a
VW-1						--	--	--	--	--	--	--	--	--	--	
1/15/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	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	--	--	--	--	--	--	--	--	--	--	--	--	
7/29/2010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
VW-2						--	--	--	--	--	--	--	--	--	--	
1/15/2008	--	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2008	--	--	0.65	--	--	--	--	--	--	--	--	--	--	--	--	
10/21/2008	--	--	0.68	--	--	--	--	--	--	--	--	--	--	--	--	
1/6/2009	--	--	0.45	--	--	--	--	--	--	--	--	--	--	--	--	
4/21/2009	--	--	0.45	--	--	--	--	--	--	--	--	--	--	--	--	
7/21/2009	--	--	0.52	--	--	--	--	--	--	--	--	--	--	--	--	
3/18/2010	--	--	0.50	--	--	--	--	--	--	--	--	--	--	--	--	
7/29/2010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	b

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

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

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

ABBREVIATIONS & SYMBOLS:

-- = Not analyzed/applicable/measured/available

< = Not detected at or above specified laboratory reporting limit

DO = Dissolved oxygen

DTW = Depth to water in ft bgs

ft bgs = Feet below ground surface

ft MSL = Feet above mean sea level

GRO = Gasoline range organics

GWE = Groundwater elevation in ft MSL

mg/L = Milligrams per liter

MTBE = Methyl tert-butyl ether

NP = Well not purged prior to sampling

P = Well purged prior to sampling

TOC = Top of casing in ft MSL

TPH-g = Total petroleum hydrocarbons as gasoline

µg/L = Micrograms per liter

ANA = Anametrix, Inc.

PACE = Pace, Inc.

ATI = Analytical Technologies, Inc.

CEI = Ceimic Corporation

SPL = Southern Petroleum Laboratories

SEQ/SEQM= Sequoia Analytical/Sequoia Analytical Morgan Hill Laboratories

CEL = CalScience Environmental Laboratories, Inc.

FOOTNOTES:

a = Mud in well.

b = Well full of water.

c = A copy of the documentation for this data is included in Appendix C of Alistoreport 10-025-13-003.

d = MTBE peak. See documentation in Appendix C of Alisto report 10-025-13-003.

e = Blind duplicate.

f = Well inaccessible.

g = EPA Methods 8020/8260 used.

h = Well not monitored and/or sampled due to vapor extraction system.

i = Travel blank.

j = This gasoline does not include MTBE.

k = Well was sampled on a different date from the other wells due to lack of proper equipment.

l = Unable to sample due to nature of product.

m = A copy of the documentation for this data is included in Blaine Tech Services, Inc., Report 010724-B-2. The data for sampling events January 14, 1993 and April 22, 1993 has been destroyed. No chromatograms could be located for samples AW-2 on January 27, 1994, and for samples AW-1, AW-2, AW-3, AW-4, AW-5, AW-6, AW-7, AW-8, MW-2 and MW-3 on September 9, 1994.

n = On June 1, 2001, after reviewing chromatograms, Sequoia reported the value as <5.0.

o = Unable to locate well.

p = TPH-g data analyzed by EPA Method 8015B modified; BTEX and MTBE by EPA Method 8021B

q = TPH-g, BTEX, and MTBE analyzed by EPA method 8260B beginning on the third quarter 2003 sampling event 07/07/03.

r = Discrete peak at C5.

t = Well was not gauged during the quarter due to an 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.

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

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
AW-1									
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	
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	
AW-2									
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	

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
AW-3									
03/16/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
AW-4									
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	
AW-5									
7/7/2003	<2,000	1,200	980	<10	<10	210	--	--	
02/05/2004	<2,000	1,200	810	<10	<10	160	<10	<10	
07/01/2004	<1,000	1,600	550	<5.0	<5.0	94	<5.0	<5.0	
03/16/2005	<10,000	2,100	890	<50	<50	190	<50	<50	
07/22/2005	<1,000	370	390	<5.0	<5.0	78	<5.0	<5.0	
01/25/2006	<3,000	580	26	<5.0	<5.0	5.2	<5.0	<5.0	
7/6/2006	<3,000	240	170	<5.0	<5.0	37	<5.0	<5.0	
1/8/2007	<1500	240	220	<2.5	<2.5	51	<2.5	--	
7/10/2007	<1,500	110	360	<2.5	<2.5	92	<2.5	<2.5	

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
AW-5 Cont.									
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	
AW-6									
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	
AW-7									
AW-8									
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 and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-1									
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	
MW-2									
03/16/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-3									
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	

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-3 Cont.									
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	
RW-1									
7/7/2003	<50,000	<10,000	<250	<250	<250	<250	--	--	
07/01/2004	<10,000	<2,000	72	<50	<50	<50	<50	<50	
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	
VEW-4									
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	

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
VEW-4 Cont.									
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	
VEW-8									
07/22/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

ABBREVIATIONS & SYMBOLS:

-- = Not analyzed/applicable/measured/available

< = Not detected at or above specified laboratory reporting limit

1,2-DCA = 1,2-Dichloroethane

DIPE = Di-isopropyl ether

EDB = 1,2-Dibromoethane

ETBE = Ethyl tert-butyl ether

MTBE = Methyl tert-butyl ether

TAME = tert-Amyl methyl ether

TBA = tert-Butyl alcohol

µg/L = Micrograms per Liter

FOOTNOTES:

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

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

NOTES:

All volatile organic compounds analyzed using EPA Method 8260B.

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

Table 3. Historical Ground-Water Flow Direction and Gradient

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

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
1/25/2006	Variable: East to Southwest	0.03 to 0.09
7/6/2006	Variable: East to W towards Center	0.04 to 0.05
1/8/2007	Variable: East to W 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

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

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

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

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

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

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

Well and Sample Date	pH	ORP (mV)	Total Alkalinity ($\mu\text{g/L}$)	DO (mg/L)	Nitrate NO ₃ ($\mu\text{g/L}$)	Sulfate SO ₄ ($\mu\text{g/L}$)	Soluble Sulfide ($\mu\text{g/L}$)	CO ₂ ($\mu\text{g/L}$)	Methane ($\mu\text{g/L}$)	Manganese ($\mu\text{g/L}$)	Ferrous Iron (mg/L)	Comments
MW-3 Cont.												
7/21/2009	7.43	-35.5	116,000	15.16	970	48,000	<50	20,900	<1.0	153	<0.1	a, e
3/18/2010	7.05	-50	--	0.73	--	--	--	--	--	--	--	
RW-1												
1/15/2008	6.82	-143	350,000	1.31	<500	5,000	<1,000	110,000	1,100	6,100	1.8	a
7/15/2008	6.95	-239.9	358,000	1.32	<100	21,000	<50	212,000	212	7,030	0.5	
10/21/2008	7.17	-188.4	352,000	0.79	<100	10,000	<50	73,500	1,350	6,840	1.0	b, c
1/6/2009	6.43	-279	322,000	0.30	<100	13,000	<50	64,700	279	6,410	1.0	
4/21/2009	7.38	-159.1	370,000	0.86	<100	5,200	100	77,400	1,270	6,790	0.67	
7/21/2009	7.35	-252.5	356,000	13.21	<100	30,000	<50	62,800	479	7,380	0.13	a, e
3/18/2010	6.73	-102	--	0.74	--	--	--	--	--	--	--	
VIEW-4												
1/15/2008	6.99	-36	210,000	0.54	3,000	31,000	<1,000	50,000	840	880	<0.5	a
7/15/2008	6.95	-29	254,000	0.59	<100	22,000	<50	90,900	174	2,150	2.0	
4/21/2009	7.41	-110.1	254,000	1.99	<100	13,000	<50	44,700	365	2,800	0.2	
7/21/2009	7.24	-40.3	254,000	8.99	<100	24,000	<50	41,100	2.07	891	<0.1	a, e

ABBREVIATIONS AND SYMBOLS:

< = Not detected at or above specified laboratory reporting limit

ORP = Oxygen reduction potential

DO = Dissolved oxygen

CO₂ = Carbon dioxide

mV = Millivolts

µg/L = Micrograms per liter

mg/L = Milligrams per liter

FOOTNOTES:

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

b = Sample analyzed after holding time expired for nitrate analysis

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

d = Sample received after holding time expired for nitrate analysis

e = DO value suspect

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

APPENDIX A

**BAI GROUND-WATER SAMPLING DATA
(INCLUDES FIELD DATA SHEETS, LABORATORY REPORT, CHAIN-OF-CUSTODY
DOCUMENTATION, NON-HAZARDOUS WASTE DATA FORM, AND FIELD
PROCEDURES)**

FIELD DATA REPORT

DATE: 7/29/10
PERSONNEL: SB + FF
WEATHER: Overcast

PROJECT NO.: 09-88-656
COMMENTS:

Equip:	Geosquirt	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
* Mw-1	1025	TOC	12.63									NP
	2	1023	10.31									NP
*	3	1014	13.96									NP
*	4W-1	1017	16.95									P
*	2	1214	16.65									
*	3	1144	15.23									NP
*	4	1156	17.34									P
*	5	1019	18.00									P
*	6	1022	16.46									can't find well - landscape
*	7	1211	—									
*	8	1147	17.03									
*	9	1238	18.07									
*	RW-1	1006	15.90									NP
VW-1	0955	Dry										well full of water, plugged last
	2	0959	—									
	3	1003	5.60									
VW-4	1008	15.82										
	5	1010	Dry									
	6	1011	14.675									
	7	1004	14.67									
	8	1007	16.24									mud in well at 7.03ft
	9	1152	7.03									

fabric covers
well-brg metal
detector next
time



Groundwater Sampling Data Sheet

Well I.D.: MW-3
Project Name/Location: S11133 Project #: 09-88-656
Sampler's Name: SB & EF Date: 7/29/10
Purging Equipment: buster
Sampling Equipment: buster

Casing Type: PVC

Casing Diameter: _____ inch *UNIT CASING VOLUMES
Total Well Depth: _____ feet 2" = 0.16 gal/lin ft.
Depth to Water: _____ feet 3" = 0.37 gal/lin ft.
Water Column Thickness: _____ feet 4" = 0.65 gal/lin ft.
Unit Casing Volume*: _____ x _____ gallon / foot 6" = 1.47 gal/lin ft.
Casing Water Volume: _____ = _____ gallons
Casing Volume: _____ x 3 each
Estimated Purge Volume: _____ = _____ gallons

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (μS)	Temperature (Fahrenheit)	pH	Observations
0	1039	1.12	341	-	391.0	66.8	7.8	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: _____ gallons

Depth to Water at Sample Collection: _____ feet

Sample Collection Time: 1040 Purged Dry? (Y/N)

Comments: NP



Groundwater Sampling Data Sheet

Well I.D.:

IMW-1

Project Name/Location:

11133

Project #: 09-88-656

Sampler's Name:

SB & EF

Date: 7/29/10

Purging Equipment:

baler

Sampling Equipment:

baler

Casing Type: PVC

Casing Diameter:

inch

*UNIT CASING VOLUMES

Total Well Depth:

feet

2" = 0.16 gal/lin ft.

Depth to Water:

feet

3" = 0.37 gal/lin ft.

Water Column Thickness:

feet

4" = 0.65 gal/lin ft.

Unit Casing Volume*:

x gallon / foot

6" = 1.47 gal/lin ft.

Casing Water Volume:

= gallons

Casing Volume:

x 3 each

Estimated Purge Volume:

= gallons

Free product measurement (if present):

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (µS)	Temperature (Fahrenheit)	pH	Observations
0	1044	0.48	367	—	551.0	68.5	7.3	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged:

— gallons

Depth to Water at Sample Collection:

— feet

Sample Collection Time:

1045

Purged Dry? (Y/N)

Comments: NP



Groundwater Sampling Data Sheet

Well I.D.:

AW-1

Project Name/Location: 11133 Project #: 09-88-654
Sampler's Name: SB & ER Date: 7/29/10
Purging Equipment: Baile
Sampling Equipment: Baile

Casing Type: PVC

Casing Diameter: _____ inch *UNIT CASING VOLUMES
Total Well Depth: _____ feet 2" = 0.16 gal/lin ft.
Depth to Water: _____ feet 3" = 0.37 gal/lin ft.
Water Column Thickness: _____ feet 4" = 0.65 gal/lin ft.
Unit Casing Volume*: _____ x _____ gallon / foot 6" = 1.47 gal/lin ft.
Casing Water Volume: _____ = _____ gallons
Casing Volume: _____ x 3 each
Estimated Purge Volume: _____ = _____ gallons

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (μ S)	Temperature (Fahrenheit)	pH	Observations
0	1052	0.92	311	-	421.9	68.0	7.4	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: _____ gallons

Depth to Water at Sample Collection: _____ feet

Sample Collection Time: 1053 Purged Dry? (Y/N)

Comments:



Groundwater Sampling Data Sheet

Well I.D.:

RW-1

Project Name/Location: 11133 Project #: 09-88-6058

Sampler's Name: SB & BF Date: 7/29/10

Purging Equipment: bailer

Sampling Equipment: bailer

Casing Type: PVC

Casing Diameter: _____ inch *UNIT CASING VOLUMES

Total Well Depth: _____ feet 2" = 0.16 gal/lin ft.

Depth to Water: - _____ feet 3" = 0.37 gal/lin ft.

Water Column Thickness: = _____ feet 4" = 0.65 gal/lin ft.

Unit Casing Volume*: x _____ gallon / foot 6" = 1.47 gal/lin ft.

Casing Water Volume: = _____ gallons

Casing Volume: x 3 each

Estimated Purge Volume: = _____ gallons

Free product measurement (if present): _____

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (μ S)	Temperature (Fahrenheit)	pH	Observations
0	1104		292	-	667.3	70.4	7.1	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged: _____ gallons

Depth to Water at Sample Collection: _____ feet

Sample Collection Time: 1105 Purged Dry? (Y/N)

Comments: _____



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ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

Groundwater Sampling Data Sheet

Well I.D.:

AW 10400-5

Project Name/Location:

11133

Project #: 09-68-686

Sampler's Name:

CB + EF

Date: 7/29/10

Purging Equipment:

bailer

Sampling Equipment:

bailer

Casing Type: PVC

Casing Diameter:

4 inch

***UNIT CASING VOLUMES**

Total Well Depth:

42.90 feet

2" = 0.16 gal/lin ft.

Depth to Water:

18.00 feet

3" = 0.37 gal/lin ft.

Water Column Thickness:

= 24.91 feet

4" = 0.65 gal/lin ft.

Unit Casing Volume*:

x 0.65 gallon / foot

6" = 1.47 gal/lin ft.

Casing Water Volume:

= 16.18 gallons

Casing Volume:

x 3 each

Estimated Purge Volume:

= 48.55 gallons

Free product measurement (if present):

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (μ S)	Temperature (Fahrenheit)	pH	Observations
0	1112	1.32	159	-	474.8	70.2	7.0	
3	1116	x	x	x	459.4	68.5	7.0	
5	1118	x	x	x	466.1	67.9	7.0	
		x	x	x				
		x	x	x				
		x	x	x				
		x	x	x				
		x	x	x				

Total Water Volume Purged:

5.0 gallons

Depth to Water at Sample Collection:

- feet

Sample Collection Time:

1125

Purged Dry? (Y/N)

Comments:

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ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

Groundwater Sampling Data Sheet

Well I.D.: AW-6

Project Name/Location: 11133 Project #: 02-88-656

Sampler's Name: SB & EF Date: 7/29/10

Purging Equipment: baiter

Sampling Equipment: baiter

Casing Type: PVC

Casing Diameter: 4 inch *UNIT CASING VOLUMES
 Total Well Depth: 34.10 feet 2" = 0.16 gal/lin ft.
 Depth to Water: 16.46 feet 3" = 0.37 gal/lin ft.
 Water Column Thickness: = 17.64 feet 4" = 0.65 gal/lin ft.
 Unit Casing Volume*: x 0.65 gallon / foot 6" = 1.47 gal/lin ft.
 Casing Water Volume: = 11.46 gallons
 Casing Volume: x 3 each
 Estimated Purge Volume: = 34.39 gallons

Free product measurement (if present):

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (μS)	Temperature (Fahrenheit)	pH	Observations
0	1130	0.84	53	-	339.9	72.0	7.4	
2.0	1131	x	x	x	342.9	70.4	7.1	
5.0	1134	x	x	x	358.6	70.0	7.0	
		x	x	x				
		x	x	x				
		x	x	x				
		x	x	x				
		x	x	x				

Total Water Volume Purged: 5.0 gallons

Depth to Water at Sample Collection: — feet

Sample Collection Time: 1138 Purged Dry? (Y/N) N

Comments:



Groundwater Sampling Data Sheet

Well I.D.:

AW-4

Project Name/Location:

11133

Project #: 09-88-656

Sampler's Name:

SB & EFC

Date: 7/29/10

Purging Equipment:

Binder

Sampling Equipment:

Binder

Casing Type: PVC

Casing Diameter:

inch

*UNIT CASING VOLUMES

Total Well Depth:

feet

2" = 0.16 gal/lin ft.

Depth to Water:

feet

3" = 0.37 gal/lin ft.

Water Column Thickness:

feet

4" = 0.65 gal/lin ft.

Unit Casing Volume*:

x gallon / foot

6" = 1.47 gal/lin ft.

Casing Water Volume:

= gallons

Casing Volume:

x each

Estimated Purge Volume:

= gallons

Free product measurement (if present):

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (μ S)	Temperature (Fahrenheit)	pH	Observations
0	1159	1.07	29	-	925.8	72.1	7.2	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged:

— gallons

Depth to Water at Sample Collection:

— feet

Sample Collection Time:

1200

Purged Dry? (Y/N)

Comments:



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Groundwater Sampling Data Sheet

Well I.D.:

AW-2

Project Name/Location:

11133

Project #: 06-88-656

Sampler's Name:

SB & EF

Date: 7/29/10

Purging Equipment:

boiler

Sampling Equipment:

boiler

Casing Type: PVC

Casing Diameter:

2 inch

***UNIT CASING VOLUMES**

Total Well Depth:

24.83 feet

2" = 0.16 gal/lin ft.

Depth to Water:

16.65 feet

3" = 0.37 gal/lin ft.

Water Column Thickness:

18.18 feet

4" = 0.65 gal/lin ft.

Unit Casing Volume*:

0.16 gallon / foot

6" = 1.47 gal/lin ft.

Casing Water Volume:

2.9 gallons

Casing Volume:

3 each

Estimated Purge Volume:

8.7 gallons

Free product measurement (if present):

Purged (gallons)	Time (24:00)	DO	ORP (mV)	Fe	Conductance (μ S)	Temperature (Fahrenheit)	pH	Observations
<u>0</u>	<u>1217</u>	<u>0.62</u>	<u>71</u>	—	<u>310.4</u>	<u>69.0</u>	<u>7.8</u>	
<u>2</u>	<u>1220</u>	X	X	X	<u>302.5</u>	<u>68.7</u>	<u>7.6</u>	
<u>4</u>	<u>1223</u>	X	X	X	<u>315.7</u>	<u>68.0</u>	<u>7.4</u>	
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				
		X	X	X				

Total Water Volume Purged:

4.0 gallons

Depth to Water at Sample Collection:

— feet

Sample Collection Time:

1225

Purged Dry? (Y / N)

Comments:

ANALYTICAL REPORT

Job Number: 720-29667-1

Job Description: BP #11133, Oakland

For:

ARCADIS U.S., Inc.
155 Montgomery Street
Suite 1500
San Francisco, CA 94104

Attention: Hollis Phillips



Approved for release.
Dimple Sharma
Project Manager I
8/12/2010 3:29 PM

Dimple Sharma
Project Manager I
dimple.sharma@testamericainc.com
08/12/2010

cc: Mr. Jason Duda
Mr. Ben McKenna

CA ELAP Certification # 2496

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Job Narrative
720-29667-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No other analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Lab Sample ID Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
720-29667-1 MW-1 (7/29/10)					
Gasoline Range Organics (GRO)-C6-C12		1600	250	ug/L	8260B/CA_LUFTMS
720-29667-2 MW-3 (7/29/10)					
TBA		17	4.0	ug/L	8260B/CA_LUFTMS
720-29667-3 AW-1 (7/29/10)					
Benzene		120	2.5	ug/L	8260B/CA_LUFTMS
Ethylbenzene		88	2.5	ug/L	8260B/CA_LUFTMS
Toluene		1.1	0.50	ug/L	8260B/CA_LUFTMS
Xylenes, Total		5.9	1.0	ug/L	8260B/CA_LUFTMS
TAME		16	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C6-C12		3100	250	ug/L	8260B/CA_LUFTMS
720-29667-4 AW-4 (7/29/10)					
Benzene		25	0.50	ug/L	8260B/CA_LUFTMS
Ethylbenzene		14	0.50	ug/L	8260B/CA_LUFTMS
Xylenes, Total		6.5	1.0	ug/L	8260B/CA_LUFTMS
TAME		0.57	0.50	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C6-C12		290	50	ug/L	8260B/CA_LUFTMS
720-29667-5 AW-5 (7/29/10)					
MTBE		1.9	0.50	ug/L	8260B/CA_LUFTMS
TBA		44	4.0	ug/L	8260B/CA_LUFTMS
720-29667-6 AW-6 (7/29/10)					
MTBE		46	0.50	ug/L	8260B/CA_LUFTMS
TAME		10	0.50	ug/L	8260B/CA_LUFTMS
720-29667-7 RW-1 (7/29/10)					
MTBE		3.5	0.50	ug/L	8260B/CA_LUFTMS
Xylenes, Total		1.4	1.0	ug/L	8260B/CA_LUFTMS
TBA		11	4.0	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C6-C12		450	50	ug/L	8260B/CA_LUFTMS

EXECUTIVE SUMMARY - Detections

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Lab Sample ID Analyte	Client Sample ID Analyte	Result / Qualifier	Reporting Limit	Units	Method
720-29667-8	AW-2 (7/29/10)				
Benzene		650	2.5	ug/L	8260B/CA_LUFTMS
Ethylbenzene		170	2.5	ug/L	8260B/CA_LUFTMS
Toluene		98	2.5	ug/L	8260B/CA_LUFTMS
Xylenes, Total		430	5.0	ug/L	8260B/CA_LUFTMS
Gasoline Range Organics (GRO)-C6-C12		2400	250	ug/L	8260B/CA_LUFTMS

METHOD SUMMARY

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Description	Lab Location	Method	Preparation Method
Matrix Water			
8260B / CA LUFT MS Purge and Trap	TAL SF TAL SF	SW846 8260B/CA_LUFTMS SW846 5030B	

Lab References:

TAL SF = TestAmerica San Francisco

Method References:

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

SAMPLE SUMMARY

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
720-29667-1	MW-1 (7/29/10)	Water	07/29/2010 1045	07/30/2010 1550
720-29667-2	MW-3 (7/29/10)	Water	07/29/2010 1040	07/30/2010 1550
720-29667-3	AW-1 (7/29/10)	Water	07/29/2010 1053	07/30/2010 1550
720-29667-4	AW-4 (7/29/10)	Water	07/29/2010 1200	07/30/2010 1550
720-29667-5	AW-5 (7/29/10)	Water	07/29/2010 1125	07/30/2010 1550
720-29667-6	AW-6 (7/29/10)	Water	07/29/2010 1138	07/30/2010 1550
720-29667-7	RW-1 (7/29/10)	Water	07/29/2010 1105	07/30/2010 1550
720-29667-8	AW-2 (7/29/10)	Water	07/29/2010 1225	07/30/2010 1550

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Client Sample ID: **MW-1 (7/29/10)**

Lab Sample ID: 720-29667-1

Date Sampled: 07/29/2010 1045

Client Matrix: Water

Date Received: 07/30/2010 1550

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-75788	Instrument ID:	HP5
Preparation:	5030B		Lab File ID:	080510010.D
Dilution:	5.0		Initial Weight/Volume:	10 mL
Date Analyzed:	08/05/2010 1327		Final Weight/Volume:	10 mL
Date Prepared:	08/05/2010 1327			

Analyte	Result (ug/L)	Qualifier	RL
MTBE	ND		2.5
Benzene	ND		2.5
EDB	ND		2.5
1,2-DCA	ND		2.5
Ethylbenzene	ND		2.5
Toluene	ND		2.5
Xylenes, Total	ND		5.0
TBA	ND		20
Ethanol	ND		500
DIPE	ND		2.5
TAME	ND		2.5
Ethyl t-butyl ether	ND		2.5
Gasoline Range Organics (GRO)-C6-C12	1600		250

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		67 - 130
Toluene-d8 (Surr)	97		70 - 130

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Client Sample ID: MW-3 (7/29/10)

Lab Sample ID: 720-29667-2

Date Sampled: 07/29/2010 1040

Client Matrix: Water

Date Received: 07/30/2010 1550

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-75609	Instrument ID:	HP9
Preparation:	5030B		Lab File ID:	08031016.D
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	08/03/2010 1755		Final Weight/Volume:	10 mL
Date Prepared:	08/03/2010 1755			

Analyte	Result (ug/L)	Qualifier	RL
MTBE	ND		0.50
Benzene	ND		0.50
EDB	ND		0.50
1,2-DCA	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	17		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	103		67 - 130
Toluene-d8 (Surr)	94		70 - 130

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Client Sample ID: AW-1 (7/29/10)

Lab Sample ID: 720-29667-3

Date Sampled: 07/29/2010 1053

Client Matrix: Water

Date Received: 07/30/2010 1550

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-75609	Instrument ID:	HP9
Preparation:	5030B		Lab File ID:	08031017.D
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	08/03/2010 1827		Final Weight/Volume:	10 mL
Date Prepared:	08/03/2010 1827			

Analyte	Result (ug/L)	Qualifier	RL
MTBE	ND		0.50
EDB	ND		0.50
1,2-DCA	ND		0.50
Toluene	1.1		0.50
Xylenes, Total	5.9		1.0
TBA	ND		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	16		0.50
Ethyl t-butyl ether	ND		0.50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	108		67 - 130
1,2-Dichloroethane-d4 (Surr)	106		67 - 130
Toluene-d8 (Surr)	99		70 - 130

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Client Sample ID: **AW-1 (7/29/10)**

Lab Sample ID: 720-29667-3

Date Sampled: 07/29/2010 1053

Client Matrix: Water

Date Received: 07/30/2010 1550

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-75788	Instrument ID:	HP5
Preparation:	5030B		Lab File ID:	080510011.D
Dilution:	5.0		Initial Weight/Volume:	10 mL
Date Analyzed:	08/05/2010 1400		Final Weight/Volume:	10 mL
Date Prepared:	08/05/2010 1400			

Analyte	Result (ug/L)	Qualifier	RL
Benzene	120		2.5
Ethylbenzene	88		2.5
Gasoline Range Organics (GRO)-C6-C12	3100		250

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	102		67 - 130
1,2-Dichloroethane-d4 (Surr)	105		67 - 130
Toluene-d8 (Surr)	97		70 - 130

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Client Sample ID: AW-4 (7/29/10)

Lab Sample ID: 720-29667-4

Date Sampled: 07/29/2010 1200

Client Matrix: Water

Date Received: 07/30/2010 1550

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-75609	Instrument ID:	HP9
Preparation:	5030B		Lab File ID:	08031014.D
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	08/03/2010 1651		Final Weight/Volume:	10 mL
Date Prepared:	08/03/2010 1651			

Analyte	Result (ug/L)	Qualifier	RL
MTBE	ND		0.50
Benzene	25		0.50
EDB	ND		0.50
1,2-DCA	ND		0.50
Ethylbenzene	14		0.50
Toluene	ND		0.50
Xylenes, Total	6.5		1.0
TBA	ND		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	0.57		0.50
Ethyl t-butyl ether	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	290		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	103		67 - 130
1,2-Dichloroethane-d4 (Surr)	106		67 - 130
Toluene-d8 (Surr)	99		70 - 130

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Client Sample ID: AW-5 (7/29/10)

Lab Sample ID: 720-29667-5

Date Sampled: 07/29/2010 1125

Client Matrix: Water

Date Received: 07/30/2010 1550

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-75682	Instrument ID:	CHMSV2
Preparation:	5030B		Lab File ID:	08041022.D
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	08/04/2010 1953		Final Weight/Volume:	10 mL
Date Prepared:	08/04/2010 1953			

Analyte	Result (ug/L)	Qualifier	RL
MTBE	1.9		0.50
Benzene	ND		0.50
EDB	ND		0.50
1,2-DCA	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	44		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	95		67 - 130
1,2-Dichloroethane-d4 (Surr)	111		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Client Sample ID: AW-6 (7/29/10)

Lab Sample ID: 720-29667-6

Date Sampled: 07/29/2010 1138

Client Matrix: Water

Date Received: 07/30/2010 1550

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-75682	Instrument ID:	CHMSV2
Preparation:	5030B		Lab File ID:	08041023.D
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	08/04/2010 2025		Final Weight/Volume:	10 mL
Date Prepared:	08/04/2010 2025			

Analyte	Result (ug/L)	Qualifier	RL
MTBE	46		0.50
Benzene	ND		0.50
EDB	ND		0.50
1,2-DCA	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	10		0.50
Ethyl t-butyl ether	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	97		67 - 130
1,2-Dichloroethane-d4 (Surr)	109		67 - 130
Toluene-d8 (Surr)	98		70 - 130

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Client Sample ID: **RW-1 (7/29/10)**Lab Sample ID: 720-29667-7
Client Matrix: WaterDate Sampled: 07/29/2010 1105
Date Received: 07/30/2010 1550**8260B/CA_LUFTMS 8260B / CA LUFT MS**

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-75788	Instrument ID:	HP5
Preparation:	5030B		Lab File ID:	080510012.D
Dilution:	1.0		Initial Weight/Volume:	10 mL
Date Analyzed:	08/05/2010 1433		Final Weight/Volume:	10 mL
Date Prepared:	08/05/2010 1433			

Analyte	Result (ug/L)	Qualifier	RL
MTBE	3.5		0.50
Benzene	ND		0.50
EDB	ND		0.50
1,2-DCA	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
Xylenes, Total	1.4		1.0
TBA	11		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	450		50

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	99		67 - 130
1,2-Dichloroethane-d4 (Surr)	105		67 - 130
Toluene-d8 (Surr)	99		70 - 130

Analytical Data

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Client Sample ID: AW-2 (7/29/10)

Lab Sample ID: 720-29667-8

Date Sampled: 07/29/2010 1225

Client Matrix: Water

Date Received: 07/30/2010 1550

8260B/CA_LUFTMS 8260B / CA LUFT MS

Method:	8260B/CA_LUFTMS	Analysis Batch: 720-75748	Instrument ID:	HP5
Preparation:	5030B		Lab File ID:	080410043.D
Dilution:	5.0		Initial Weight/Volume:	10 mL
Date Analyzed:	08/05/2010 0644		Final Weight/Volume:	10 mL
Date Prepared:	08/05/2010 0644			

Analyte	Result (ug/L)	Qualifier	RL
MTBE	ND		2.5
Benzene	650		2.5
EDB	ND		2.5
1,2-DCA	ND		2.5
Ethylbenzene	170		2.5
Toluene	98		2.5
Xylenes, Total	430		5.0
TBA	ND		20
Ethanol	ND		500
DIPE	ND		2.5
TAME	ND		2.5
Ethyl t-butyl ether	ND		2.5
Gasoline Range Organics (GRO)-C6-C12	2400		250

Surrogate	%Rec	Qualifier	Acceptance Limits
4-Bromofluorobenzene	98		67 - 130
1,2-Dichloroethane-d4 (Surr)	111		67 - 130
Toluene-d8 (Surr)	92		70 - 130

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description
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Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:720-75609					
LCS 720-75609/5	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCS 720-75609/7	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-75609/6	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
LCSD 720-75609/8	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-75609/4	Method Blank	T	Water	8260B/CA_LUFT	
720-29667-2	MW-3 (7/29/10)	T	Water	8260B/CA_LUFT	
720-29667-3	AW-1 (7/29/10)	T	Water	8260B/CA_LUFT	
720-29667-4	AW-4 (7/29/10)	T	Water	8260B/CA_LUFT	
720-29667-4MS	Matrix Spike	T	Water	8260B/CA_LUFT	
720-29667-4MSD	Matrix Spike Duplicate	T	Water	8260B/CA_LUFT	
Analysis Batch:720-75682					
LCS 720-75682/5	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCS 720-75682/7	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-75682/6	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
LCSD 720-75682/8	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-75682/4	Method Blank	T	Water	8260B/CA_LUFT	
720-29667-5	AW-5 (7/29/10)	T	Water	8260B/CA_LUFT	
720-29667-6	AW-6 (7/29/10)	T	Water	8260B/CA_LUFT	
Analysis Batch:720-75748					
LCS 720-75748/6	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCS 720-75748/8	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-75748/7	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
LCSD 720-75748/9	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-75748/5	Method Blank	T	Water	8260B/CA_LUFT	
720-29667-8	AW-2 (7/29/10)	T	Water	8260B/CA_LUFT	
Analysis Batch:720-75788					
LCS 720-75788/5	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCS 720-75788/7	Lab Control Sample	T	Water	8260B/CA_LUFT	
LCSD 720-75788/6	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
LCSD 720-75788/8	Lab Control Sample Duplicate	T	Water	8260B/CA_LUFT	
MB 720-75788/4	Method Blank	T	Water	8260B/CA_LUFT	
720-29667-1	MW-1 (7/29/10)	T	Water	8260B/CA_LUFT	
720-29667-3	AW-1 (7/29/10)	T	Water	8260B/CA_LUFT	
720-29667-7	RW-1 (7/29/10)	T	Water	8260B/CA_LUFT	

Report Basis

T = Total

Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Method Blank - Batch: 720-75609

Method: 8260B/CA_LUFTMS

Preparation: 5030B

Lab Sample ID: MB 720-75609/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/03/2010 1024
Date Prepared: 08/03/2010 1024

Analysis Batch: 720-75609
Prep Batch: N/A
Units: ug/L

Instrument ID: HP9
Lab File ID: 08031004.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
MTBE	ND		0.50
Benzene	ND		0.50
EDB	ND		0.50
1,2-DCA	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
m-Xylene & p-Xylene	ND		1.0
o-Xylene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50
Surrogate	% Rec	Acceptance Limits	
4-Bromofluorobenzene	86	67 - 130	
1,2-Dichloroethane-d4 (Surr)	104	67 - 130	
Toluene-d8 (Surr)	91	70 - 130	

Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-75609**

**Method: 8260B/CA_LUFTMS
Preparation: 5030B**

LCS Lab Sample ID: LCS 720-75609/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/03/2010 1110
Date Prepared: 08/03/2010 1110

Analysis Batch: 720-75609
Prep Batch: N/A
Units: ug/L

Instrument ID: HP9
Lab File ID: 08031005.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-75609/6
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/03/2010 1143
Date Prepared: 08/03/2010 1143

Analysis Batch: 720-75609
Prep Batch: N/A
Units: ug/L

Instrument ID: HP9
Lab File ID: 08031006.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec.						LCS Qual	LCSD Qual
	LCS	LCSD	Limit	RPD	RPD Limit			
MTBE	97	100	62 - 130	4	20			
Benzene	101	100	82 - 127	1	20			
EDB	103	105	70 - 130	1	20			
1,2-DCA	103	103	70 - 126	0	20			
Ethylbenzene	117	115	86 - 135	2	20			
Toluene	103	101	83 - 129	1	20			
m-Xylene & p-Xylene	117	115	70 - 142	2	20			
o-Xylene	114	113	89 - 136	1	20			
TBA	108	102	82 - 116	5	20			
Ethanol	123	117	31 - 216	5	20			
DIPE	103	105	74 - 155	2	20			
TAME	99	102	79 - 129	3	20			
Ethyl t-butyl ether	98	101	70 - 130	3	20			
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits			
4-Bromofluorobenzene	102		104		67 - 130			
1,2-Dichloroethane-d4 (Surr)	98		100		67 - 130			
Toluene-d8 (Surr)	95		94		70 - 130			

Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-75609**

**Method: 8260B/CA_LUFTMS
Preparation: 5030B**

LCS Lab Sample ID:	LCS 720-75609/7	Analysis Batch:	720-75609	Instrument ID:	HP9
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	08031007.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	08/03/2010 1215			Final Weight/Volume:	10 mL
Date Prepared:	08/03/2010 1215				

LCSD Lab Sample ID:	LCSD 720-75609/8	Analysis Batch:	720-75609	Instrument ID:	HP9
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	08031008.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	08/03/2010 1246			Final Weight/Volume:	10 mL
Date Prepared:	08/03/2010 1246				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Gasoline Range Organics (GRO)-C6-C12	79	80	58 - 106	2	20		
Surrogate		LCS % Rec	LCSD % Rec		Acceptance Limits		
4-Bromofluorobenzene	101		102			67 - 130	
1,2-Dichloroethane-d4 (Surr)	104		101			67 - 130	
Toluene-d8 (Surr)	98		97			70 - 130	

Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-75609**

Method: 8260B/CA_LUFTMS

Preparation: 5030B

MS Lab Sample ID: 720-29667-4 Analysis Batch: 720-75609
 Client Matrix: Water Prep Batch: N/A
 Dilution: 1.0
 Date Analyzed: 08/03/2010 1546
 Date Prepared: 08/03/2010 1546

Instrument ID: HP9
 Lab File ID: 08031012.D
 Initial Weight/Volume: 10 mL
 Final Weight/Volume: 10 mL

MSD Lab Sample ID: 720-29667-4 Analysis Batch: 720-75609
 Client Matrix: Water Prep Batch: N/A
 Dilution: 1.0
 Date Analyzed: 08/03/2010 1618
 Date Prepared: 08/03/2010 1618

Instrument ID: HP9
 Lab File ID: 08031013.D
 Initial Weight/Volume: 10 mL
 Final Weight/Volume: 10 mL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
MTBE	118	130	60 - 138	10	20		
Benzene	83	95	60 - 140	6	20		
EDB	94	102	60 - 140	8	20		
1,2-DCA	92	99	60 - 140	7	20		
Ethylbenzene	95	104	60 - 140	6	20		
Toluene	86	92	60 - 140	7	20		
m-Xylene & p-Xylene	98	106	60 - 140	7	20		
o-Xylene	98	105	60 - 140	6	20		
TBA	95	98	60 - 140	3	20		
Ethanol	119	106	60 - 140	11	20		
DIPE	102	107	60 - 140	5	20		
TAME	97	106	60 - 140	9	20		
Ethyl t-butyl ether	97	104	60 - 140	7	20		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
4-Bromofluorobenzene	106		105		67 - 130		
1,2-Dichloroethane-d4 (Surr)	103		104		67 - 130		
Toluene-d8 (Surr)	99		98		70 - 130		

Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Method Blank - Batch: 720-75682

Method: 8260B/CA_LUFTMS

Preparation: 5030B

Lab Sample ID: MB 720-75682/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/04/2010 1031
Date Prepared: 08/04/2010 1031

Analysis Batch: 720-75682
Prep Batch: N/A
Units: ug/L

Instrument ID: CHMSV2
Lab File ID: 08041005.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
MTBE	ND		0.50
Benzene	ND		0.50
EDB	ND		0.50
1,2-DCA	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
m-Xylene & p-Xylene	ND		1.0
o-Xylene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50
Surrogate	% Rec	Acceptance Limits	
4-Bromofluorobenzene	99	67 - 130	
1,2-Dichloroethane-d4 (Surr)	98	67 - 130	
Toluene-d8 (Surr)	98	70 - 130	

Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Lab Control Sample/

Lab Control Sample Duplicate Recovery Report - Batch: 720-75682

Method: 8260B/CA_LUFTMS

Preparation: 5030B

LCS Lab Sample ID:	LCS 720-75682/5	Analysis Batch:	720-75682	Instrument ID:	CHMSV2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	08041006.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	08/04/2010 1103			Final Weight/Volume:	10 mL
Date Prepared:	08/04/2010 1103				
LCSD Lab Sample ID:	LCSD 720-75682/6	Analysis Batch:	720-75682	Instrument ID:	CHMSV2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	08041007.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	08/04/2010 1136			Final Weight/Volume:	10 mL
Date Prepared:	08/04/2010 1136				

Analyte	% Rec.					LCS Qual	LCSD Qual
	LCS	LCSD	Limit	RPD	RPD Limit		
MTBE	108	109	62 - 130	1	20		
Benzene	93	92	82 - 127	0	20		
EDB	101	100	70 - 130	1	20		
1,2-DCA	98	99	70 - 126	0	20		
Ethylbenzene	105	103	86 - 135	2	20		
Toluene	93	92	83 - 129	1	20		
m-Xylene & p-Xylene	108	106	70 - 142	1	20		
o-Xylene	102	101	89 - 136	1	20		
TBA	98	98	82 - 116	0	20		
Ethanol	80	74	31 - 216	7	20		
DIPE	106	107	74 - 155	1	20		
TAME	119	121	79 - 129	2	20		
Ethyl t-butyl ether	107	108	70 - 130	1	20		
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits		
4-Bromofluorobenzene	99		100		67 - 130		
1,2-Dichloroethane-d4 (Surr)	97		98		67 - 130		
Toluene-d8 (Surr)	100		100		70 - 130		

Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-75682**

**Method: 8260B/CA_LUFTMS
Preparation: 5030B**

LCS Lab Sample ID:	LCS 720-75682/7	Analysis Batch:	720-75682	Instrument ID:	CHMSV2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	08041008.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	08/04/2010 1209			Final Weight/Volume:	10 mL
Date Prepared:	08/04/2010 1209				

LCSD Lab Sample ID:	LCSD 720-75682/8	Analysis Batch:	720-75682	Instrument ID:	CHMSV2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	08041009.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	08/04/2010 1241			Final Weight/Volume:	10 mL
Date Prepared:	08/04/2010 1241				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Gasoline Range Organics (GRO)-C6-C12	90	86	58 - 106	4	20		
Surrogate		LCS % Rec	LCSD % Rec		Acceptance Limits		
4-Bromofluorobenzene	100		101			67 - 130	
1,2-Dichloroethane-d4 (Surr)	101		101			67 - 130	
Toluene-d8 (Surr)	100		100			70 - 130	

Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Method Blank - Batch: 720-75748

Method: 8260B/CA_LUFTMS

Preparation: 5030B

Lab Sample ID: MB 720-75748/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/04/2010 2058
Date Prepared: 08/04/2010 2058

Analysis Batch: 720-75748
Prep Batch: N/A
Units: ug/L

Instrument ID: HP5
Lab File ID: 080410025.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
MTBE	ND		0.50
Benzene	ND		0.50
EDB	ND		0.50
1,2-DCA	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
m-Xylene & p-Xylene	ND		1.0
o-Xylene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50

Surrogate	% Rec	Acceptance Limits
4-Bromofluorobenzene	92	67 - 130
1,2-Dichloroethane-d4 (Surr)	98	67 - 130
Toluene-d8 (Surr)	93	70 - 130

Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Lab Control Sample/

Lab Control Sample Duplicate Recovery Report - Batch: 720-75748

Method: 8260B/CA_LUFTMS

Preparation: 5030B

LCS Lab Sample ID:	LCS 720-75748/6	Analysis Batch:	720-75748	Instrument ID:	HP5
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	080410026.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	08/04/2010 2130			Final Weight/Volume:	10 mL
Date Prepared:	08/04/2010 2130				

LCSD Lab Sample ID:	LCSD 720-75748/7	Analysis Batch:	720-75748	Instrument ID:	HP5
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	080410027.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	08/04/2010 2203			Final Weight/Volume:	10 mL
Date Prepared:	08/04/2010 2203				

Analyte	% Rec.		RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD				
MTBE	102	101	62 - 130	0	20	
Benzene	95	95	82 - 127	0	20	
EDB	104	102	70 - 130	2	20	
1,2-DCA	97	96	70 - 126	1	20	
Ethylbenzene	101	101	86 - 135	0	20	
Toluene	96	98	83 - 129	1	20	
m-Xylene & p-Xylene	101	101	70 - 142	0	20	
o-Xylene	104	103	89 - 136	0	20	
TBA	95	94	82 - 116	2	20	
Ethanol	98	112	31 - 216	13	20	
DIPE	99	99	74 - 155	0	20	
TAME	112	111	79 - 129	0	20	
Ethyl t-butyl ether	102	102	70 - 130	0	20	
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits	
4-Bromofluorobenzene	100		98		67 - 130	
1,2-Dichloroethane-d4 (Surr)	97		95		67 - 130	
Toluene-d8 (Surr)	96		95		70 - 130	

Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-75748**

**Method: 8260B/CA_LUFTMS
Preparation: 5030B**

LCS Lab Sample ID:	LCS 720-75748/8	Analysis Batch:	720-75748	Instrument ID:	HP5
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	080410028.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	08/04/2010 2235			Final Weight/Volume:	10 mL
Date Prepared:	08/04/2010 2235				

LCSD Lab Sample ID:	LCSD 720-75748/9	Analysis Batch:	720-75748	Instrument ID:	HP5
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	080410029.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	08/04/2010 2308			Final Weight/Volume:	10 mL
Date Prepared:	08/04/2010 2308				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Gasoline Range Organics (GRO)-C6-C12	92	93	58 - 106	1	20		
Surrogate		LCS % Rec	LCSD % Rec		Acceptance Limits		
4-Bromofluorobenzene	98		98			67 - 130	
1,2-Dichloroethane-d4 (Surr)	100		98			67 - 130	
Toluene-d8 (Surr)	95		95			70 - 130	

Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Method Blank - Batch: 720-75788

Method: 8260B/CA_LUFTMS

Preparation: 5030B

Lab Sample ID: MB 720-75788/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/05/2010 0948
Date Prepared: 08/05/2010 0948

Analysis Batch: 720-75788
Prep Batch: N/A
Units: ug/L

Instrument ID: HP5
Lab File ID: 080510004.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
MTBE	ND		0.50
Benzene	ND		0.50
EDB	ND		0.50
1,2-DCA	ND		0.50
Ethylbenzene	ND		0.50
Toluene	ND		0.50
m-Xylene & p-Xylene	ND		1.0
o-Xylene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		4.0
Ethanol	ND		100
DIPE	ND		0.50
TAME	ND		0.50
Ethyl t-butyl ether	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50
Surrogate	% Rec	Acceptance Limits	
4-Bromofluorobenzene	96	67 - 130	
1,2-Dichloroethane-d4 (Surr)	102	67 - 130	
Toluene-d8 (Surr)	93	70 - 130	

Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-75788**

**Method: 8260B/CA_LUFTMS
Preparation: 5030B**

LCS Lab Sample ID: LCS 720-75788/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/05/2010 1036
Date Prepared: 08/05/2010 1036

Analysis Batch: 720-75788
Prep Batch: N/A
Units: ug/L

Instrument ID: HP5
Lab File ID: 080510005.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-75788/6
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 08/05/2010 1108
Date Prepared: 08/05/2010 1108

Analysis Batch: 720-75788
Prep Batch: N/A
Units: ug/L

Instrument ID: HP5
Lab File ID: 080510006.D
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec.						LCS Qual	LCSD Qual
	LCS	LCSD	Limit	RPD	RPD Limit			
MTBE	115	112	62 - 130	3	20			
Benzene	107	104	82 - 127	3	20			
EDB	120	115	70 - 130	4	20			
1,2-DCA	111	107	70 - 126	3	20			
Ethylbenzene	112	109	86 - 135	3	20			
Toluene	110	105	83 - 129	4	20			
m-Xylene & p-Xylene	111	108	70 - 142	3	20			
o-Xylene	114	112	89 - 136	2	20			
TBA	101	97	82 - 116	4	20			
Ethanol	79	91	31 - 216	13	20			
DIPE	109	105	74 - 155	4	20			
TAME	125	122	79 - 129	2	20			
Ethyl t-butyl ether	114	111	70 - 130	3	20			
Surrogate	LCS % Rec		LCSD % Rec		Acceptance Limits			
4-Bromofluorobenzene	102		100		67 - 130			
1,2-Dichloroethane-d4 (Surr)	102		98		67 - 130			
Toluene-d8 (Surr)	97		96		70 - 130			

Quality Control Results

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 720-75788**

**Method: 8260B/CA_LUFTMS
Preparation: 5030B**

LCS Lab Sample ID:	LCS 720-75788/7	Analysis Batch:	720-75788	Instrument ID:	HP5
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	080510007.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	08/05/2010 1141			Final Weight/Volume:	10 mL
Date Prepared:	08/05/2010 1141				

LCSD Lab Sample ID:	LCSD 720-75788/8	Analysis Batch:	720-75788	Instrument ID:	HP5
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	080510008.D
Dilution:	1.0	Units:	ug/L	Initial Weight/Volume:	10 mL
Date Analyzed:	08/05/2010 1214			Final Weight/Volume:	10 mL
Date Prepared:	08/05/2010 1214				

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Gasoline Range Organics (GRO)-C6-C12	97	97	58 - 106	1	20		
Surrogate		LCS % Rec	LCSD % Rec		Acceptance Limits		
4-Bromofluorobenzene	98		101			67 - 130	
1,2-Dichloroethane-d4 (Surr)	98		101			67 - 130	
Toluene-d8 (Surr)	96		96			70 - 130	

San Francisco
1220 Quarry Lane

Pleasanton, CA 94566

phone 925.484.1919 fax 925.600.3002

72D-29667
Chain of Custody Record

125990
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

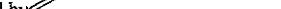
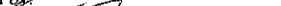
Client Contact		Project Manager: Jason Duda			Site Contact:			Date:		COC No: 1 of 1 COCs		
Broadbent and Associates, Inc.		Tel/Fax: 530-566-1400/530-566-1401			Lab Contact: Dimple Sharma			Carrier:				
Address: 1324 Mangrove Ave. Suite 212		Analysis Turnaround Time								Job No. 23°, 26°C		
City/State/Zip: Chico, CA 95926		Calendar (C) or Work Days (W)								SDG No.		
(530) 566-1400	Phone	TAT if different from Below										
(530) 566-1401	FAX	<input type="checkbox"/>	2 weeks									
Project Name: BP 11133		<input type="checkbox"/>	1 week									
Site: 2220 98th Avenue, Oakland, CA		<input type="checkbox"/>	2 days									
P O # GP09BPNA.C107		<input type="checkbox"/>	1 day									
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	GRO by 8260B	BTEx and 5 Osys by 8260B	EDB, i2-BCA, and iRhamol by 8260B	Sample Specific Notes:	
MW-1	(7/29/10)	7/29/10	1045	AQ		3	X	X	X			
MW-3	(7/29/10)		1040			3	X	X	X			
AW-1	(7/29/10)		1053			3	X	X	X			
AW-4	(7/29/10)		1200			3	X	X	X			
AW-5	(7/29/10)		1128			3	X	X	X			
AW-6	(7/29/10)		1138			3	X	X	X			
RW-1	(7/29/10)	4	1105	↓		3	X	X	X			
AW-2	(7/29/10)		1225									
TB- 1133 - 7/29/10												Hold TB
Preservation Used: 1= Ice; 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other												
Possible Hazard Identification						Sample Disposal / A fee may be assessed if samples are retained longer than 1 month)						
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Other	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For	Months			

Preservation Used: 1= Ice, 2= HCl; 3= H₂SO₄; 4=HNO₃; 5=NaOH; 6= Other

Possible Hazard Identification

Non-Hazard Flammable Skin Irritant Poison B Unknown Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements & Comments:

Relinquished by 	Company: BAI	Date/Time: 7/30/10 180	Received by: 	Company: Les America	Date/Time: 7/30/10 1550
Relinquished by 	Company: Les America	Date/Time: 7/30/10	Received by: 	Company: Les America	Date/Time:
Relinquished by 	Company: Les America	Date/Time:	Received by:	Company:	Date/Time:

Login Sample Receipt Check List

Client: ARCADIS U.S., Inc.

Job Number: 720-29667-1

Login Number: 29667

List Source: TestAmerica San Francisco

Creator: Thomas, Bryan

List Number: 1

Question	T / F / NA	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	True	
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	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

NO. 683418

NON-HAZARDOUS WASTE DATA FORM

GENERATOR

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**

24-HOUR EMERGENCY PHONE: **800-424-9300**

Container type removed from site:

Drums Vacuum Truck Roll-off Truck Dump Truck

Drums Vacuum Truck Roll-off Truck Dump Truck

Other _____

Other _____

Quantity **14 G**

Quantity _____ Volume _____

WASTE DESCRIPTION **NON-HAZARDOUS WATER**

GENERATING PROCESS **WELL PURGING / DECON WATER**

COMPONENTS OF WASTE	PPM	%
WATER	99-100%	

COMPONENTS OF WASTE	PPM	%
3.		

2.	TPH	<1%	
-----------	------------	---------------	--

4.		
-----------	--	--

Waste Profile _____ PROPERTIES: pH **7-10** SOLID LIQUID SLUDGE SLURRY OTHER _____

HANDLING INSTRUCTIONS: **WEAR ALL APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.**

Generator Printed/Typed Name

EMILY LEARNER

Signature

Month Day Year

3 1 10

On Behalf of BP West Coast Products, LLC

The Generator certifies that the waste as described is 100% non-hazardous

Transporter 1 Company Name **BAI** Phone# **707-455-7290** Month Day Year

Transporter 1 Printed/Typed Name **Eric Fawcett** Signature **Eric Fawcett** Phone# **83310** Month Day Year

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.** Phone# **530-753-1829**
1105 AIRPORT RD.
RIO VISTA, CA 94571

RECEIVING FACILITY
Printed/Typed Name _____ Signature _____ Month Day Year

Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.

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

GEOTRACKER UPLOAD CONFIRMATIONS

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>	3Q10 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>	8/23/2010 12:03:30 PM
<u>Confirmation Number:</u>	5833833098

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: 3Q10 GW Monitoring
Facility Global ID: T0600100210
Facility Name: BP #11133
File Name: 720-29667-1.zip
Organization Name: Broadbent & Associates, Inc.
Username: BROADBENT-C
IP Address: 67.118.40.90
Submittal Date/Time: 8/23/2010 12:08:13 PM
Confirmation Number: **7535706520**

[VIEW QC REPORT](#)

[VIEW DETECTIONS REPORT](#)