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Alameda County
Environmental Health



Atlantic Richfield Company
(a BP affiliated company)

P.O. Box 1257
San Ramon, CA 94583
Phone: (925) 275-3801
Fax: (925) 275-3815

15 April 2009

Re: First Quarter 2009 Ground-Water Monitoring Report
Former BP Service Station # 11133
2220 98th Avenue
Oakland, California
ACEH Case #RO0000403

"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."

Submitted by:

A handwritten signature in black ink that reads "Paul Supple".

Paul Supple
Environmental Business Manager

Prepared for

Mr. Paul Supple
Environmental Business Manager
Atlantic Richfield Company
P.O. Box 1257
San Ramon, California 94583

Prepared by



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

15 April 2009

Project No. 06-88-656

First Quarter 2009 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



15 April 2009

Project No. 06-88-656

Atlantic Richfield Company
P.O. Box 1257
San Ramon, California 94583
Submitted via ENFOS

Attn.: Mr. Paul Supple

Re: First Quarter 2009 Ground-Water Monitoring Report, Former BP Service Station #11133,
2220 98th Avenue, Oakland, Alameda County, California;
ACEH Case #RO0000403

Dear Mr. Supple:

Provided herein is the *First Quarter 2009 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 First Quarter of 2009.

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

Sincerely,

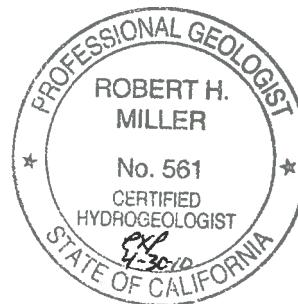
BROADBENT & ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read "Matthew G. Herrick".

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

A handwritten signature in black ink, appearing to read "Robert H. Miller".

Robert H. Miller, P.G., C.HG.
Principal 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
Environmental Business Manager:	Mr. Paul Supple
Consulting Co./Contact Persons:	Broadbent & Associates, Inc.(BAI)/Rob Miller & Matt Herrick (530) 566-1400
Primary Agency/Regulatory ID No.:	Alameda County Environmental Health (ACEH) ACEH Case #RO0000403
Consultant Project No.:	06-88-656
Facility Permits/Permitting Agency:	NA

WORK PERFORMED THIS QUARTER (First Quarter 2009):

1. Prepared and submitted *Fourth Quarter 2008 Ground-Water Monitoring Report* (BAI, 01/30/2009).
2. Conducted ground-water monitoring/sampling for First Quarter 2009. Work performed by Stratus Environmental, Inc. (Stratus) on 6 January 2009.
3. Prepared and submitted *Soil & Ground-Water Investigation Work Plan* (BAI, 03/17/2009) requested by ACEH in their letter dated 16 January 2009.

WORK PROPOSED FOR NEXT QUARTER (Second Quarter 2009):

1. Prepared and submitted this *First Quarter 2009 Ground-Water Monitoring Report* (contained herein).
2. Conduct ground-water monitoring and sampling for Second Quarter 2009.
3. Prepare and submit Feasibility Study and Corrective Action Plan requested by ACEH in their letter dated 16 January 2009.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	Ground-water monitoring/sampling
Frequency of ground-water monitoring:	Semi-Annually (1Q & 3Q): Wells MW-1, MW-2, MW-3, AW-1 through AW-9, RW-1
Frequency of ground-water sampling:	Semi-Annually (1Q & 3Q): Wells MW-1, MW-3, AW-1, AW-4, AW-5, AW-6, and RW-1 Annually (1Q): Well AW-2 Not Sampled: Wells MW-2, AW-3, AW-7, AW-8, AW-9
Is free product (FP) present on-site:	No
FP recovered this quarter:	None
Current remediation techniques:	NA
Depth to ground water (below TOC):	11.00 ft (MW-2) to 21.00 ft (AW-9)
General ground-water flow direction:	West
Approximate hydraulic gradient:	0.009 ft/ft

DISCUSSION:

First Quarter 2009 ground-water monitoring and sampling was conducted at Station #11133 on 6 January 2009 by Stratus. Water levels were gauged in 12 of the 13 wells scheduled to be gauged at the Site. Stratus reported that 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. Wells VW-1, VEW-5 and VEW-8 were dry. Well VEW-9 was inaccessible due to a parked car. No other irregularities were noted during water level gauging. Depth to ground-water

measurements ranged from 11.00 ft at well MW-2 to 21.00 ft at well AW-9. Resulting ground-water surface elevations ranged from 24.50 ft above mean sea level in well MW-2 to 16.78 ft at well AW-9. Water level elevations were between historic minimum and maximum ranges for each well, as summarized in Table 1. Water level elevations yielded a potentiometric ground-water flow direction and gradient magnitude toward the west at approximately 0.009 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. Potentiometric ground-water elevation contours are presented in Drawing 1.

Consistent with the current ground-water sampling schedule, ground-water samples were collected from eight 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 Calscience Environmental Laboratories, Inc. (Garden Grove, California), for analysis of Gasoline Range Organics (GRO, C6-12) by the EPA Method 8015B; for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA Method 8260B; and 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. Bio-degradation parameters including dissolved oxygen, oxygen reduction potential (ORP), conductivity, pH, temperature, total alkalinity, nitrate, sulfate, dissolved sulfide, carbon dioxide, methane, manganese and ferrous iron were also monitored during this quarter. 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 seven of the eight wells sampled at concentrations up to 5,000 micrograms per liter ($\mu\text{g/L}$) in well AW-1. Benzene was detected above the laboratory reporting limit in four of the eight wells sampled at concentrations up to 670 $\mu\text{g/L}$ in well AW-1. Toluene was detected above the laboratory reporting limit in two of the eight wells sampled at concentrations of 54 $\mu\text{g/L}$ in well AW-2 and 1.8 $\mu\text{g/L}$ in well MW-1. Ethylbenzene was detected above the laboratory reporting limit in four of the eight wells sampled at concentrations up to 84 $\mu\text{g/L}$ in well AW-1. Total Xylenes were detected above the laboratory reporting limit in three of the eight wells sampled at concentrations up to 110 $\mu\text{g/L}$ in well AW-2. TAME was detected above the laboratory reporting limit in five of the eight wells sampled at concentrations up to 28 $\mu\text{g/L}$ in well AW-1. TBA was detected above the laboratory reporting limit in three of the eight wells sampled at concentrations up to 190 $\mu\text{g/L}$ in well AW-1. MTBE was detected above the laboratory reporting limit in six of the eight wells sampled at concentrations up to 170 $\mu\text{g/L}$ in well AW-1. The remaining fuel additives and oxygenates were not detected above their laboratory reporting limits in the eight wells sampled this quarter. A summary of bio-degradation parameters is provided in Table 4.

Review of specific biodegradation monitoring parameters provided in Table 4 indicate anaerobic conditions on the Site and within the plume. This ascertainment is based on the generally low DO concentrations observed in a majority of the wells, depleted nitrate and sulfate concentrations, and the presence of ferrous iron (Fe^{2+}). Furthermore, the presence of methane, manganese, and carbon dioxide in a majority of the wells suggests the occurrence of anaerobic biodegradation. The negative ORP readings observed at the Site indicate reducing conditions and the relatively high total alkalinity measurements suggest the presence of bioactivity. Results from the biodegradation monitoring parameters for First Quarter 2009 are generally comparable to the results obtained in the Fourth Quarter 2008.

Detected analyte concentrations were within the historic minimum and maximum ranges recorded for each well, with the following exceptions: MTBE (8.3 $\mu\text{g/L}$) and TAME (0.81 $\mu\text{g/L}$) concentrations reported in well AW-4 were the lowest on record for this well; TAME reached a minimum concentration in well AW-6 (23 $\mu\text{g/L}$); and GRO (1,300 $\mu\text{g/L}$), Ethylbenzene (1.6 $\mu\text{g/L}$), Total Xylenes (2.7 $\mu\text{g/L}$), and

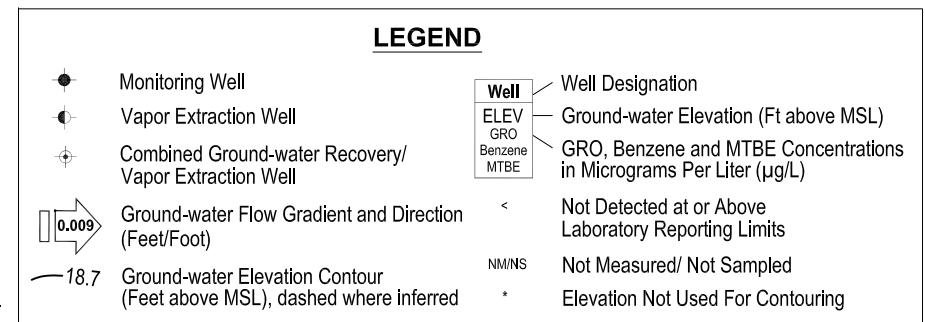
MTBE (7.0 µg/L) concentrations reported in well RW-1 were the lowest on record for this well. Historic laboratory analytical results are summarized in Table 1, Table 2 and Table 4. A copy of the laboratory analytical report, including chain-of-custody documentation are provided in Appendix A. First Quarter 2009 groundwater monitoring data (GEO_WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 Database. Upload confirmation pages are provided in Appendix B.

CLOSURE:

The findings presented in this report are based upon: observations of Stratus field personnel (see Appendix A), the points investigated, and results of laboratory tests performed by Calscience (Garden Grove, 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 Atlantic Richfield 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. Ground-Water Elevation Contour and Analytical Summary Map, 6 January 2009, 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. Stratus Ground-Water Sampling Data Package (Includes Field Data Sheets, Laboratory Report, Chain-of-Custody Documentation, Non-Hazardous Waste Data Form, and Field Procedures)
- Appendix B. GeoTracker Upload Confirmation



0 60 120

SCALE (ft)



BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California 95926
Project No.: 06-88-656 Date: 2/13/09

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

Ground-Water Elevation Contour and Analytical Summary Map
6 January 2009

Drawing

1

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

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	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	--	--	--	2,900	1,200	25	37	210	--	--	ANA	--	e	
10/7/1992	--	38.11	26.55	--	11.56	4,700	1,500	41	47	300	--	--	ANA	--		
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	--	--	--	3,900	1,900	5.5	190	240	--	--	PACE	--	e	
9/9/1994	--	38.11	23.04	--	15.07	3,500	1,600	5	200	250	--	2.1	PACE	--	m	
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	20.04	--	18.07	60,000	18,000	2,000	4,300	11,000	--	7.9	ATI	--		
4/10/1995	--	38.11	--	--	--	56,000	17,000	2,000	3,900	10,000	--	--	ATI	--	e	
6/29/1995	--	38.11	--	--	--	86,000	12,000	8,400	4,800	18,000	--	--	ATI	--	e	
6/29/1995	--	38.11	20.60	--	17.51	72,000	10,000	7,300	4,200	15,000	--	6.2	ATI	--		
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

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	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

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						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		
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	--	--	--	--	--	--	--	--	--		
9/19/1995	--	36.83	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	4.5	ATI	--		
9/19/1995	--	36.83	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	e	
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	--		

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

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-2 Cont.																
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	--	--	--	--	--	--	--	--	--	--	
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	--	--	--	--	--	--	--	--	--	--	

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-2 Cont.																
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		
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	21.88	--	17.25	160	4.8	1.7	1.6	3.6	8.95	--	PACE	--	m	
10/21/1993	--	39.13	--	--	--	170	6.1	2	1.7	4.4	--	--	PACE	--	e	
1/27/1994	--	39.13	22.33	--	16.80	92	2.1	<0.5	<0.5	<0.5	7.37	--	PACE	--	m	
1/27/1994	--	39.13	--	--	--	90	2.9	0.5	<0.5	<0.5	--	--	PACE	--	e	
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	--		
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	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	e	
12/7/1995	--	39.13	19.27	--	19.86	<50	<0.50	<0.50	<0.50	<1.0	<5.0	3.4	ATI	--		
3/28/1996	--	39.13	13.85	--	25.28	<50	<0.5	<1	<1	<1	<10	4.1	SPL	--		
3/28/1996	--	39.13	--	--	--	<50	<0.5	<1	<1	<1	<10	--	SPL	--	e	
6/20/1996	--	39.13	--	--	--	<50	<0.5	<1	<1	<1	<10	--	SPL	--	e	
6/20/1996	--	39.13	14.47	--	24.66	<50	<0.5	<1	<1	<1	<10	4.2	SPL	--		

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

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-3 Cont.																
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	<1.0	1.6	<10	4.5	SPL	--		
4/10/1998	--	39.13	--	--	--	<50	<0.5	<1.0	1.4	1.7	<10	--	SPL	--	e	
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	--	--	--	--	--	--	--	--	--	--	
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		

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-3 Cont.																
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	--	--	--	--	--	--	--	--	--	--	
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	23.56	--	15.52	230,000	57,000	31,000	2,900	7,600	--	--	APP	--		
4/1/1992	--	39.08	--	--	--	210,000	55,000	23,000	2,900	7,000	--	--	APP	--	e	
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	
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	--		

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-4 Cont.																
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	--	--	--	<50	61	3.8	3.5	8.1	110	--	SPL	--	e	
1/2/1997	--	39.08	15.80	--	23.28	<50	<0.5	<1.0	<1.0	<1.0	22	6.4	SPL	--		
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	--		
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	

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

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-4 Cont.																
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		
AW-5																
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	--	--	--	1,300	68	8.3	64	99	<50	--	PACE	--	m, e	
7/15/1993	--	38.51	24.31	--	14.20	1,300	69	16	67	120	<50	--	PACE	--	m	
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	

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-5 Cont.																
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	--	--	--	--	--	--	--	--	--		
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	

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Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-5 Cont.																
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		
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	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	ATI	--	e	
1/30/1995	--	37.08	16.74	--	20.34	<50	<0.50	<0.50	<0.50	<1.0	--	2.2	ATI	--		
4/10/1995	--	37.08	16.01	--	21.07	<50	<0.50	<0.50	<0.50	<1.0	--	8.6	ATI	--		

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-6 Cont.																
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	--		
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	<50	63	2,500	--	SEQ	--	
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		

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-6 Cont.																
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		
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	--		

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

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-7 Cont.																
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	--		
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	

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

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-7																
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	
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	--	--	--	--	--	--	--	--	--	--	

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-8 Cont.																
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	--	--	--	--	--	--	--	--	--	--	
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	--	--	--	--	--	--	--	--	--	--	
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	--		

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
AW-9 Cont.																
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	--		
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	--	--	--	--	--	--	--	--	--	--	
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	--	--	--	--	--	--	--	--	--	--	
6/20/1996	--	34.46	11.29	--	23.17	--	--	--	--	--	--	--	--	--	--	

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
MW-1 Cont.																
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		
07/01/2004	--	34.46	13.20	--	21.26	18,000	<50	<50	210	300	<50	--	SEQM	--	u	

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
MW-1 Cont.																
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		
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	--		
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	--		

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
MW-2 Cont.																
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	--	--	--	--	--	--	--	--	--	--	
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	--	--	--	--	--	--	--	--	--	--	

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
MW-2 Cont.																
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	--	--	--	--	--	--	--	--	--	--	
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	
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	--		

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Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
MW-3 Cont.																
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	
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		

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

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
MW-3 Cont.																
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		
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	
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	--	--	--	--	--	--	--	--	--	--	

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

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

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
RW-1 Cont.																
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	27.97	--	9.76	110,000	13,000	22,000	2,000	12,500	1,100	7.0	SPL	--		
9/30/1997	--	37.73	--	--	--	140,000	17,000	29,000	2,500	15,900	1,200	--	SPL	--	e	
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	--	--	--	--	--	--	--	--	--	--	
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	--	--	--	--	--	--	--	--	--	--	

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 msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments	
						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
RW-1 Cont.																
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	
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		
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		

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
VEW-4 Cont.						--	--	--	--	--	--	--	--	--	--	v
10/21/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
1/6/2009	--	--	18.00	--	--	--	--	--	--	--	--	--	--	--	--	v
VEW-5						--	--	--	--	--	--	--	--	--	--	v
07/22/2005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
1/15/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
7/15/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
10/21/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
1/6/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
VEW-6						--	--	--	--	--	--	--	--	--	--	
1/15/2008	--	--	11.83	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2008	--	--	14.81	--	--	--	--	--	--	--	--	--	--	--	--	
10/21/2008	--	--	16.02	--	--	--	--	--	--	--	--	--	--	--	--	
1/6/2009	--	--	14.70	--	--	--	--	--	--	--	--	--	--	--	--	
VEW-7						--	--	--	--	--	--	--	--	--	--	
1/15/2008	--	--	13.24	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2008	--	--	15.91	--	--	--	--	--	--	--	--	--	--	--	--	
10/21/2008	--	--	16.89	--	--	--	--	--	--	--	--	--	--	--	--	
1/6/2009	--	--	16.00	--	--	--	--	--	--	--	--	--	--	--	--	
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
VEW-9						--	--	--	--	--	--	--	--	--	--	
1/15/2008	--	--	5.31	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
10/21/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v

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						GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE					
VEW-9 Cont.						--	--	--	--	--	--	--	--	--	--	
1/6/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	f
VW-1						--	--	--	--	--	--	--	--	--	--	
1/15/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
7/15/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
10/21/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
1/6/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	v
VW-2						--	--	--	--	--	--	--	--	--	--	
1/15/2008	--	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2008	--	--	0.65	--	--	--	--	--	--	--	--	--	--	--	--	
10/21/2008	--	--	0.68	--	--	--	--	--	--	--	--	--	--	--	--	
1/6/2009	--	--	0.45	--	--	--	--	--	--	--	--	--	--	--	--	
VW-3						--	--	--	--	--	--	--	--	--	--	
1/15/2008	--	--	2.08	--	--	--	--	--	--	--	--	--	--	--	--	
7/15/2008	--	--	4.10	--	--	--	--	--	--	--	--	--	--	--	--	
10/21/2008	--	--	4.95	--	--	--	--	--	--	--	--	--	--	--	--	
1/6/2009	--	--	5.40	--	--	--	--	--	--	--	--	--	--	--	--	

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:

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.

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

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	
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	
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	

Table 2. Summary of Fuel Additives Analytical Data

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-4 Cont.									
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	
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	
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	
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	--	

Table 2. Summary of Fuel Additives Analytical Data

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-6 Cont.									
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	
AW-7									
AW-8									
03/16/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
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	
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	

Table 2. Summary of Fuel Additives Analytical Data

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.									
07/22/2005	<100	<20	4.1	<0.50	<0.50	<0.50	<0.50	<0.50	
01/25/2006	<300	<20	3.0	<0.50	<0.50	<0.50	<0.50	<0.50	
7/6/2006	<300	<50	3.0	<0.50	<0.50	<0.50	<0.50	<0.50	
1/8/2007	<300	<20	3.2	<0.50	<0.50	<0.50	<0.50	--	
7/10/2007	<300	<20	2.8	<0.50	<0.50	<0.50	<0.50	<0.50	
1/15/2008	<300	<20	0.88	<0.50	<0.50	<0.50	<0.50	<0.50	
7/15/2008	<300	<10	1.3	<0.50	<0.50	<0.50	<0.50	<0.50	
10/21/2008	<300	<10	0.94	<0.50	<0.50	<0.50	<0.50	<0.50	
1/6/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
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	
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	
VEW-5									
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.

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

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

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
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	
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	
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	
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	
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	
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	

Table 4. Bio-Degradation Parameters
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
MW-1 Cont.												
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	
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	
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	
VEW-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	

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

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

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



3330 Cameron Park Drive, Ste 550
Cameron Park, California 95682
(530) 676-6004 ~ Fax: (530) 676-6005

January 28, 2009

Mr. Rob Miller
Broadbent & Associates, Inc.
2000 Kirman Avenue
Reno, NV 89502

Re: Groundwater Sampling Data Package, BP Service Station No. 11133, located at
2220 98th Avenue, Oakland, California

General Information

Data Submittal Prepared / Reviewed by: Carol Huff / Jay Johnson

Phone Number: (530) 676-6000

On-Site Supplier Representative: Jerry Gonzalez

Sampling Date: January 6, 2009

Arrival: 6:30 *Departure:* 14:20

Weather Conditions: Clear

Unusual Field Conditions: None noted.

Scope of Work Performed: Quarterly monitoring and sampling.

Variations from Work Scope: Well VEW-4 is dry. Well AW-7 could not be located to be gauged this event.

This submittal presents the data collected in association with routine groundwater monitoring. The attachments include field data sheets, non-hazardous waste data form, chain of custody documentation, and certified analytical results. The information is being provided to BP-ARCO's Scoping Supplier for use in preparing a report for regulatory submittal. This submittal is limited to presentation of collected data and does not include data interpretation or conclusions or recommendations.

Mr. Rob Miller, Broadbent & Associates, Inc.
Groundwater Sampling Data Package
BP No. 11133, Oakland, CA
Page 2

January 28, 2009

Any questions concerning this submittal should be addressed to the Preparer/Reviewer identified above.

Sincerely,

JRJ
STRATUS ENVIRONMENTAL, INC.

Jay R. Johnson, P.G.
Project Manager



Attachments:

- Field Data Sheets
- Non-Hazardous Waste Data Form
- Chain of Custody Documentation
- Certified Analytical Results
- Field Procedures for Groundwater Sampling

CC: Mr. Paul Supple, BP/ARCO

BP Alameda Portfolio

HYDROLOGIC DATA SHEET

AK 63°

DP 14 20

Gauge Date: 1-6-9

Project Name: Oakland - 2220 98th Avenue

Field Technician: Jerry

Project Number: 11133

TOC = Top of Well Casing Elevation
 TOS = Depth to Top of Screen
 DTW = Depth to Groundwater Below TOC
 DTB = Depth to Bottom of Well Casing Below TOC

DIA = Well Casing Diameter
 ELEV = Groundwater Elevation
 DUP = Duplicate

WELL OR LOCATION	TIME	MEASUREMENT					PURGE & SAMPLE	SHEEN CONFIRMATION (w/baller)	COMMENTS
		TOC	TOS	DTW	DTB	DIA			
MW-1	7:25			1367	2818				
MW-2	7:21			1100	3120				
MW-3	7:28			1545	3408				
AW-1	7:55			1913	3840				
AW-2	6:51			1845	3479				
AW-3	7:00			1835	3550				
AW-4	7:13			1945	3267				
AW-5	7:59			2028	4290				
AW-6	8:08			1837	3400				
AW-7									
AW-8	7:08			2020	3638				
AW-9	6:45			2100	2690				
RW-1	8:18			1750	3710				
VW-1	7:33			DRY	1017				
VW-2	7:35			0.45	3.58				
VW-3	8:11			540	5.20				
VEW-4	7:49			18.00	18.60				considered dry
VEW-5	8:08			DRY	1629				
VEW-6	8:15			1470	1921				
VEW-7	7:39			1600	1744				
VEW-8	7:45			DRY	1689				
VEW-9	7:16								car parked on well

FW - Arturo Heimlich

Calibration Date

pH/Conductivity/temperature Meter - YSI Model 63

pH 1-6-09

DO Meter - YSI 55 Series (DO is always measured before purge)

Conductivity 1-6-09

Please refer to groundwater sampling field procedures

DO 1-6-09

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 11133PURGED BY: SJSWELL I.D.: RW-1

CLIENT NAME: _____

SAMPLED BY: JGSAMPLE I.D.: RW-1LOCATION: Oakland - 2220 98th Avenue

QA SAMPLES: _____

DATE PURGED 1-6-09START (2400hr) 1142END (2400hr) 1147DATE SAMPLED 1-6-09SAMPLE TIME (2400hr) 11:53SAMPLE TYPE: Groundwater Surface Water Treatment Effluent Other CASING DIAMETER: 2"(0.17)3"(0.38)4"(0.67)5"(1.02)6"(1.50)8"(2.60)Other

Casing Volume: (gallons per foot)

(0.17)

WELLHEAD OBSERVATION FORM

Site Name/Number: 11133

Date: 1-6-09

Technician: Jerry

Well I.D.	Box in Good Condition?	Lock Missing?	Water in Wellbox?	Water Level Relative to Cap?	Well Cap?	Bolts Missing?	Bolts Stripped?	Bolt Holes Stripped?	Cracked or Broken Lid?	Cracked or Broken Box?	Grout Level more than 1ft below TOC?	Additional Comments <small>(such as missing lid, concrete needs replacement, or other - explain)</small>
	X = Yes Blank = No	X = Yes (replaced) Blank = No	X = Yes Blank = No	A = Above cap B = Below cap L = Level w/cap	I = Inset M = Missing or Composited (replaced)	X = Yes Blank = No	X = Yes Blank = No	X = Yes Blank = No	X = Yes Blank = No	X = Yes Blank = No	X = Yes Blank = No	
MW-1	X				I	NA						
MW-2	X				I	NA						No BolTS Type LID
MW-3	X				I	NA						/
AW-1	X				I							
AW-2	X				I							
AW-3	X				I	NA						No BolTS Type LID
AW-4	X				I	NA						No BolTS Type LID
AW-5	X				I							
AW-6	X				I							
AW-7												
AW-8	X				I							
AW-9	X				I							
RW-1	X				I	X						Large LID
VW-1	X				I	X						Large LID
VW-2	X				I	X						Large LID
VW-3	X				I	X						Large LID

DRUM INVENTORY

Drums on site? Yes No (circle)
 Type and # Steel: _____ Plastic: _____

Note whether drums are full or empty, solids or liquids:

Drum label info (description, date, contact info):

GENERAL SITE CONDITIONS

Make notes on housekeeping conditions (such as trash around remediation system enclosure/compound, bent or missing bollards, signs missing from compound fences, graffiti on compound, etc.)

NO. 672317

NON-HAZARDOUS WASTE DATA FORM

SITE:

EPA
I.D.
NO.NAME BP WEST COAST PRODUCTS LLC ARCO # 11133ADDRESS P.O. BOX 80249
RANCHO SANTA MARGARITAPROFILE
NO.CITY, STATE, ZIP CA 92688

PHONE NO. ()

CONTAINERS: No.

VOLUME

27.5 gals

WEIGHT

TYPE: TANK DUMP TRUCK DRUMS CARTONS OTHERWASTE DESCRIPTION NON-HAZARDOUS WATER
COMPONENTS OF WASTE

PPM %

GENERATING PROCESS WELL PURGING/DECON WATER
COMPONENTS OF WASTE

PPM %

1. WATER 99-100%

5. _____

2. TPH <1%

6. _____

3. _____

7. BEST#

4. _____

8. _____

PROPERTIES: 7-10 SOLID LIQUID SLUDGE SLURRY OTHERHANDLING INSTRUCTIONS: WEAR ALL APPROPRIATE PROTECTIVE CLOTHINGTHE GENERATOR CERTIFIES THAT THE
WASTE AS DESCRIBED IS 100%
NON-HAZARDOUS.

Larry Moodhart BEST for BP

TYPED OR PRINTED FULL NAME & SIGNATURE

DATE

TRANSPORTER #1
NAME STRATUS ENVIRONMENTAL

TRANSPORTER #2

EPA
I.D.
NO.ADDRESS 3330 CAMERON PARK DR

SERVICE ORDER NO.

CITY, STATE, ZIP CAMERON PARK, CA 95682

PICK UP DATE

PHONE NO. 530-576-2031

TRUCK, UNIT, I.D. NO.

TYPED OR PRINTED FULL NAME & SIGNATURE

DATE

NAME INSTRAT, INCEPA
I.D.
NO.

DISPOSAL METHOD

ADDRESS 1105 AIRPORT RD #C LANDFILL OTHERCITY, STATE, ZIP RIO VISTA, CA 94571PHONE NO. 530-753-1829

TYPED OR PRINTED FULL NAME & SIGNATURE

DATE

GEN	OLD/NEW	L	A	TONS
TRANS		S	B	
C/O		RT/CD	HWDF	
			NONE	DISCREPANCY



Chain of Custody Record

Project Name: ARCO 11133

BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > Alameda > 11

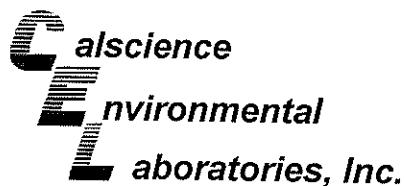
State or Lead Regulatory Agency:

Requested Due Date (mm/dd/yy):

Page 1 of 41

On-site Time: 6:30	Temp: 49
Off-site Time: 1420	Temp 58
Sky Conditions: Clear	
Meteorological Events: NONE	
Wind Speed: 6	Direction: <input type="text"/>

Address: 7440 Lincoln Way Garden Grove, CA 92841				BP/AR Facility No.: 11133 BP/AR Facility Address: 2220 98th Avenue, Oakland Site Lat/Long:				Consultant/Contractor: Stratus Environmental, Inc. Address: 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682																	
Lab PM: Linda Scharpenberg Tele/Fax: 714-895-5494 714-895-7501(fax)				California Global ID No.: T0600100210 Enfos Project No.: G07TT-0042				Consultant/Contractor Project No.: Consultant/Contractor PM: Jay Johnson																	
BP/AR PM Contact: Paul Supple Address: 2010 Crow Canyon Place, Suite 150 San Ramon, CA Tele/Fax: 925-275-3506				Provision or OOC (circle one) Provision Phase/WBS: 04-Monitoring Sub Phase/Task: 03-Analytical Cost Element: 01-Contractor labor				Tele/Fax: (530) 676-6000 / (530) 676-6005 Report Type & QC Level: Level 1 with EDF E-mail EDD To: bcarrol@stratusinc.net Invoice to: Atlantic Richfield Co.																	
Lab Bottle Order No: Matrix				Preservative				Requested Analysis																	
Item No.	Sample Description	Date	Time	Soil/Solid	Water/Liquid	Air	Laboratory No.	No. of Containers	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	BTEx/Oxy* by 8260	GRO by 8015M	1,2-DCA by 8260	Ethanol by 8260	EDB by 8260	Nitrate and Sulfate (EPA 300)	Manganese (EPA 2007)	Dissolved Sulfide (EPA 376.2)	Methane and Carbon Dioxide (RS Kerr 175)	Alkalinity (EPA 310.1)		
Sample Point Lat/Long and Comments Oxy* = MTBE, TAME, ETBE, DIPE, TBA																									
Field filtered samples for Manganese																									
1	MW-1	1030	1/6/2009	X				11	X	X	X			X	X	X	X	X	X	X	X	X	X	X	
2	MW-3	1115	1/6/2009	X				11	X	X	X			X	X	X	X	X	X	X	X	X	X	X	
3	AW-1	1353	1/6/2009	X				11	X	X	X			X	X	X	X	X	X	X	X	X	X	X	
4	AW-2	948	1/6/2009	X				11	X	X	X			X	X	X	X	X	X	X	X	X	X	X	
5	AW-4	845	1/6/2009	X				11	X	X	X			X	X	X	X	X	X	X	X	X	X	X	
6	AW-5	1225	1/6/2009	X				11	X	X	X			X	X	X	X	X	X	X	X	X	X	X	
7	AW-6	1300	1/6/2009	X				11	X	X	X			X	X	X	X	X	X	X	X	X	X	X	
8	RW-1	1153	1/6/2009	X				11	X	X	X			X	X	X	X	X	X	X	X	X	X	X	
9	TB-11133	500	1/6/2009	X				2						X	X	X	X								HOLD
Sampler's Name: Jerry Gonzales				Relinquished By / Affiliation				Date	Time	Accepted By / Affiliation				Date	Time										
Sampler's Company: Dow 103				<i>Jerry Gonzales</i>																					
Shipment Date:																									
Shipment Method:																									
Shipment Tracking No:																									
Special Instructions: Please cc results to rmiller@broadbentinc.com																									
Custody Seals In Place: Yes / No				Temp Blank: Yes / No				Cooler Temp on Receipt: °F/C				Trip Blank: Yes / No				MS/MSD Sample Submitted: Yes / No									



January 21, 2009

Jay Johnson
Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Subject: **Calscience Work Order No.: 09-01-0315**
Client Reference: **ARCO 11133**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 1/7/2009 and analyzed in accordance with the attached chain-of-custody.

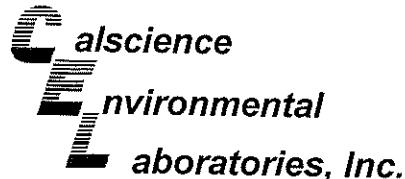
Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in black ink that reads "Richard Villafania".

Calscience Environmental
Laboratories, Inc.
Richard Villafania
Project Manager



Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: N/A
Method: RSK-175M

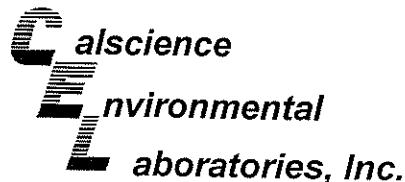
Project: ARCO 11133

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	09-01-0315-1-G	01/06/09 10:30	Aqueous	GC 14	N/A	01/08/09 00:00	090108L01
Parameter	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>		
Carbon Dioxide	21300	17.0	10		ug/L		
MW-3	09-01-0315-2-G	01/06/09 11:15	Aqueous	GC 14	N/A	01/08/09 00:00	090108L01
Parameter	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>		
Carbon Dioxide	14000	17.0	10		ug/L		
AW-1	09-01-0315-3-G	01/06/09 13:53	Aqueous	GC 14	N/A	01/08/09 00:00	090108L01
Parameter	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>		
Carbon Dioxide	190000	170	100		ug/L		
AW-2	09-01-0315-4-G	01/06/09 09:48	Aqueous	GC 14	N/A	01/08/09 00:00	090108L01
Parameter	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>		
Carbon Dioxide	28100	17.0	10		ug/L		
AW-4	09-01-0315-5-G	01/06/09 08:45	Aqueous	GC 14	N/A	01/08/09 00:00	090108L01
Parameter	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>		
Carbon Dioxide	76400	17.0	10		ug/L		
AW-5	09-01-0315-6-G	01/06/09 12:25	Aqueous	GC 14	N/A	01/08/09 00:00	090108L01
Parameter	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>		
Carbon Dioxide	52400	17.0	10		ug/L		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: N/A
Method: RSK-175M

Project: ARCO 11133

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
AW-6	09-01-0315-7-G	01/06/09 13:00	Aqueous	GC 14	N/A	01/08/09 00:00	090108L01

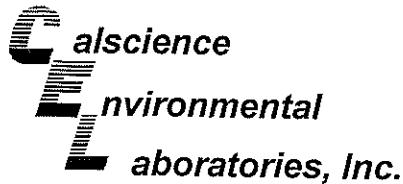
Parameter	Result	RL	DF	Qual	Units		
Carbon Dioxide	37500	17.0	10		ug/L		
RW-1	09-01-0315-8-G	01/06/09 11:53	Aqueous	GC 14	N/A	01/08/09 00:00	090108L01

Parameter	Result	RL	DF	Qual	Units			
Carbon Dioxide	64700	17.0	10		ug/L			
Method Blank	099-12-659-42		N/A	Aqueous	GC 14	N/A	01/08/09 00:00	090108L01

Parameter	Result	RL	DF	Qual	Units
Carbon Dioxide	ND	1.70	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: N/A
Method: RSK-175M

Project: ARCO 11133

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	09-01-0315-1-A	01/06/09 10:30	Aqueous	GC 33	N/A	01/09/09 00:00	090109L01

Parameter	Result	RL	DF	Qual	Units
Methane	277	1.00	1		ug/L

MW-3	09-01-0315-2-A	01/06/09 11:15	Aqueous	GC 33	N/A	01/09/09 00:00	090109L01
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Parameter	Result	RL	DF	Qual	Units
Methane	ND	1.00	1		ug/L

AW-1	09-01-0315-3-A	01/06/09 13:53	Aqueous	GC 33	N/A	01/09/09 00:00	090109L01
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Parameter	Result	RL	DF	Qual	Units
Methane	593	8.00	8		ug/L

AW-2	09-01-0315-4-A	01/06/09 09:48	Aqueous	GC 33	N/A	01/09/09 00:00	090109L01
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Parameter	Result	RL	DF	Qual	Units
Methane	50.4	1.00	1		ug/L

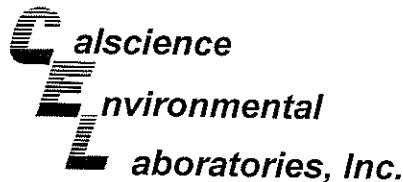
AW-4	09-01-0315-5-A	01/06/09 08:45	Aqueous	GC 33	N/A	01/09/09 00:00	090109L01
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Parameter	Result	RL	DF	Qual	Units
Methane	148	1.00	1		ug/L

AW-5	09-01-0315-6-A	01/06/09 12:25	Aqueous	GC 33	N/A	01/09/09 00:00	090109L01
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Parameter	Result	RL	DF	Qual	Units
Methane	106	1.00	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report

The ARCO logo consists of the letters 'ARCO' in a bold, blocky font, with horizontal lines extending from the top and bottom of the letters.

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: N/A
Method: RSK-175M

Project: ARCO 11133

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
AW-6	09-01-0315-7-A	01/06/09 13:00	Aqueous	GC 33	N/A	01/09/09 00:00	090109L01

Parameter	Result	RL	DF	Qual	Units
Methane	69.1	1.00	1		ug/L

RW-1	09-01-0315-8-A	01/06/09 11:53	Aqueous	GC 33	N/A	01/09/09 00:00	090109L01
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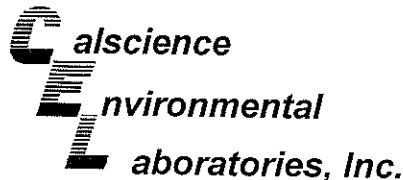
Parameter	Result	RL	DF	Qual	Units
Methane	279	1.00	1		ug/L

Method Blank	099-12-663-432-A	N/A	Aqueous	GC 33	N/A	01/09/09 00:00	090109L01
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Parameter	Result	RL	DF	Qual	Units
Methane	ND	1.00	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: EPA 3010A Total
Method: EPA 200.7

Project: ARCO 11133

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	09-01-0315-1-J	01/06/09 10:30	Aqueous	ICP 5300	01/13/09	01/14/09 17:36	090113LA6

Parameter	Result	RL	DF	Qual	Units
Manganese	10100	5.00	1		ug/L

MW-3	09-01-0315-2-J	01/06/09 11:15	Aqueous	ICP 5300	01/13/09	01/14/09 17:57	090113LA6
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Parameter	Result	RL	DF	Qual	Units
Manganese	25.5	5.00	1		ug/L

AW-1	09-01-0315-3-J	01/06/09 13:53	Aqueous	ICP 5300	01/13/09	01/14/09 17:59	090113LA6
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Parameter	Result	RL	DF	Qual	Units
Manganese	7810	5.00	1		ug/L

AW-2	09-01-0315-4-J	01/06/09 09:48	Aqueous	ICP 5300	01/13/09	01/14/09 18:02	090113LA6
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Parameter	Result	RL	DF	Qual	Units
Manganese	996	5.00	1		ug/L

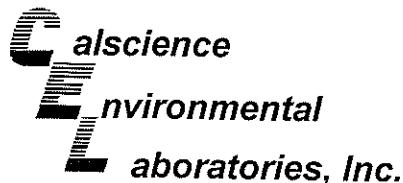
AW-4	09-01-0315-5-J	01/06/09 08:45	Aqueous	ICP 5300	01/13/09	01/14/09 18:05	090113LA6
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Parameter	Result	RL	DF	Qual	Units
Manganese	6330	5.00	1		ug/L

AW-5	09-01-0315-6-J	01/06/09 12:25	Aqueous	ICP 5300	01/13/09	01/14/09 18:07	090113LA6
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Parameter	Result	RL	DF	Qual	Units
Manganese	2920	5.00	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: EPA 3010A Total
Method: EPA 200.7

Project: ARCO 11133

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
AW-6	09-01-0315-7-J	01/06/09 13:00	Aqueous	ICP 5300	01/13/09	01/14/09 18:10	090113LA6

Parameter	Result	RL	DF	Qual	Units
Manganese	1360	5.00	1		ug/L

RW-1	09-01-0315-8-J	01/06/09 11:53	Aqueous	ICP 5300	01/13/09	01/14/09 18:13	090113LA6
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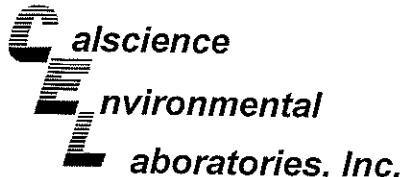
Parameter	Result	RL	DF	Qual	Units
Manganese	6410	5.00	1		ug/L

Method Blank	097-01-012-3,676	N/A	Aqueous	ICP 5300	01/13/09	01/14/09 17:25	090113LA6
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Parameter	Result	RL	DF	Qual	Units
Manganese	ND	5.00	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Analytical Report

RESC

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

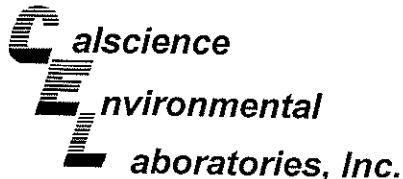
Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: N/A
Method: EPA 300.0
Units: ug/L

Project: ARCO 11133

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID		
MW-1	09-01-0315-1-K	01/06/09 10:30	Aqueous	IC 7	N/A	01/08/09 06:43	090107L03		
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Nitrate (as N)	ND	100	1		Sulfate	59000	20000	20	
MW-3	09-01-0315-2-K	01/06/09 11:15	Aqueous	IC 7	N/A	01/08/09 07:00	090107L03		
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Nitrate (as N)	420	100	1		Sulfate	38000	5000	5	
AW-1	09-01-0315-3-K	01/06/09 13:53	Aqueous	IC 7	N/A	01/08/09 07:18	090107L03		
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Nitrate (as N)	ND	100	1		Sulfate	1400	1000	1	
AW-2	09-01-0315-4-K	01/06/09 09:48	Aqueous	IC 7	N/A	01/08/09 07:35	090107L03		
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Nitrate (as N)	390	100	1		Sulfate	22000	5000	5	
AW-4	09-01-0315-5-K	01/06/09 08:45	Aqueous	IC 7	N/A	01/08/09 07:52	090107L03		
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Nitrate (as N)	ND	100	1		Sulfate	78000	20000	20	
AW-5	09-01-0315-6-K	01/06/09 12:25	Aqueous	IC 7	N/A	01/08/09 08:10	090107L03		
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Nitrate (as N)	ND	100	1		Sulfate	13000	2000	2	
AW-6	09-01-0315-7-K	01/06/09 13:00	Aqueous	IC 7	N/A	01/08/09 08:28	090107L03		
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Nitrate (as N)	ND	100	1		Sulfate	21000	5000	5	
RW-1	09-01-0315-8-K	01/06/09 11:53	Aqueous	IC 7	N/A	01/08/09 08:46	090107L03		
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Nitrate (as N)	ND	100	1		Sulfate	13000	2000	2	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report

A handwritten signature is placed over a decorative background consisting of concentric circles and a grid pattern.

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: N/A
Method: EPA 300.0
Units: ug/L

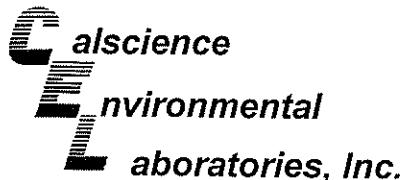
Project: ARCO 11133

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-05-118-4,994	N/A	Aqueous	IC 7	N/A	01/08/09 05:17	090107L03

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Nitrate (as N)	ND	100	1		Sulfate	ND	1000	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: N/A
Method: SM 2320B

Project: ARCO 11133

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	09-01-0315-1-K	01/06/09 10:30	Aqueous	N/A	N/A	01/19/09 19:10	90119ALKB1

Parameter	Result	RL	DF	Qual	Units
Alkalinity, Total (as CaCO3)	368000	100	1		ug/L

MW-3	09-01-0315-2-K	01/06/09 11:15	Aqueous	N/A	N/A	01/19/09 19:10	90119ALKB1
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Parameter	Result	RL	DF	Qual	Units
Alkalinity, Total (as CaCO3)	94000	100	1		ug/L

AW-1	09-01-0315-3-K	01/06/09 13:53	Aqueous	N/A	N/A	01/19/09 19:10	90119ALKB1
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Parameter	Result	RL	DF	Qual	Units
Alkalinity, Total (as CaCO3)	446000	100	1		ug/L

AW-2	09-01-0315-4-K	01/06/09 09:48	Aqueous	N/A	N/A	01/19/09 19:10	90119ALKB1
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Parameter	Result	RL	DF	Qual	Units
Alkalinity, Total (as CaCO3)	168000	100	1		ug/L

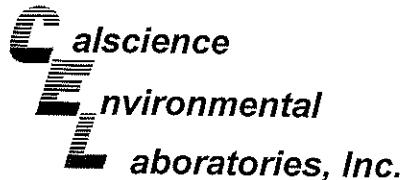
AW-4	09-01-0315-5-K	01/06/09 08:45	Aqueous	N/A	N/A	01/19/09 19:10	90119ALKB1
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Parameter	Result	RL	DF	Qual	Units
Alkalinity, Total (as CaCO3)	400000	100	1		ug/L

AW-5	09-01-0315-6-K	01/06/09 12:25	Aqueous	N/A	N/A	01/19/09 19:10	90119ALKB1
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Parameter	Result	RL	DF	Qual	Units
Alkalinity, Total (as CaCO3)	224000	100	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report

The seal of the City of Los Angeles, featuring a central figure and the city's name around the border.

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: N/A
Method: SM 2320B

Project: ARCO 11133

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
AW-6	09-01-0315-7-K	01/06/09 13:00	Aqueous	N/A	N/A	01/19/09 19:10	90119ALKB1

Parameter	Result	RL	DF	Qual	Units
Alkalinity, Total (as CaCO3)	156000	100	1		ug/L

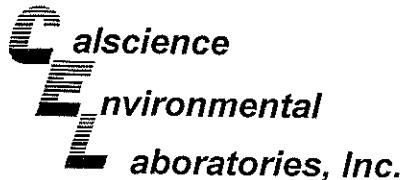
RW-1	09-01-0315-8-K	01/06/09 11:53	Aqueous	N/A	N/A	01/19/09 19:10	90119ALKB1
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Parameter	Result	RL	DF	Qual	Units
Alkalinity, Total (as CaCO3)	322000	100	1		ug/L

Method Blank	099-12-223-1,928	N/A	Aqueous	N/A	N/A	01/19/09 19:10	90119ALKB1
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Parameter	Result	RL	DF	Qual	Units
Alkalinity, Total (as CaCO3)	ND	1.0	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: N/A
Method: SM 4500 S2 - D

Project: ARCO 11133

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	09-01-0315-1-K	01/06/09 10:30	Aqueous	N/A	01/07/09	01/07/09 10:25	90107DSB1

Parameter	Result	RL	DF	Qual	Units		
Sulfide, Dissolved	ND	50	1		ug/L		
MW-3	09-01-0315-2-K	01/06/09 11:15	Aqueous	N/A	01/07/09	01/07/09 10:25	90107DSB1

Parameter	Result	RL	DF	Qual	Units		
Sulfide, Dissolved	ND	50	1		ug/L		
AW-1	09-01-0315-3-K	01/06/09 13:53	Aqueous	N/A	01/07/09	01/07/09 10:25	90107DSB1

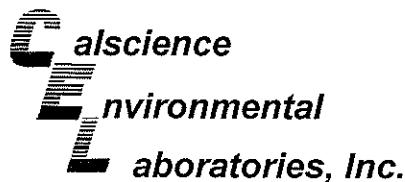
Parameter	Result	RL	DF	Qual	Units		
Sulfide, Dissolved	ND	50	1		ug/L		
AW-2	09-01-0315-4-K	01/06/09 09:48	Aqueous	N/A	01/07/09	01/07/09 10:25	90107DSB1

Parameter	Result	RL	DF	Qual	Units		
Sulfide, Dissolved	ND	50	1		ug/L		
AW-4	09-01-0315-5-K	01/06/09 08:45	Aqueous	N/A	01/07/09	01/07/09 10:25	90107DSB1

Parameter	Result	RL	DF	Qual	Units		
Sulfide, Dissolved	ND	50	1		ug/L		
AW-5	09-01-0315-6-K	01/06/09 12:25	Aqueous	N/A	01/07/09	01/07/09 10:25	90107DSB1

Parameter	Result	RL	DF	Qual	Units
Sulfide, Dissolved	ND	50	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: N/A
Method: SM 4500 S2 - D

Project: ARCO 11133

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
AW-6	09-01-0315-7-K	01/06/09 13:00	Aqueous	N/A	01/07/09	01/07/09 10:25	90107DSB1

Parameter	Result	RL	DF	Qual	Units
Sulfide, Dissolved	ND	50	1		ug/L

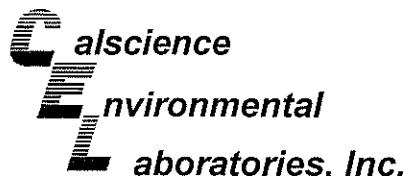
RW-1	09-01-0315-8-K	01/06/09 11:53	Aqueous	N/A	01/07/09	01/07/09 10:25	90107DSB1
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Parameter	Result	RL	DF	Qual	Units
Sulfide, Dissolved	ND	50	1		ug/L

Method Blank	099-05-088-2,473	N/A	Aqueous	N/A	01/07/09	01/07/09 10:25	90107DSB1
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Parameter	Result	RL	DF	Qual	Units
Sulfide, Dissolved	ND	50	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: ARCO 11133

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	09-01-0315-1-D	01/06/09 10:30	Aqueous	GC 30	01/07/09	01/07/09 21:33	090107B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	2600	250	5		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	120	38-134			

MW-3	09-01-0315-2-D	01/06/09 11:15	Aqueous	GC 30	01/07/09	01/07/09 19:19	090107B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	97	38-134			

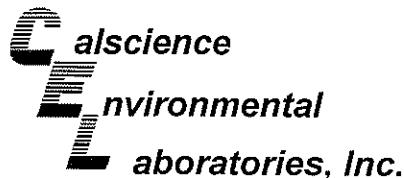
AW-1	09-01-0315-3-D	01/06/09 13:53	Aqueous	GC 30	01/07/09	01/07/09 22:06	090107B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	5000	250	5		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	146	38-134		LH,AY	

AW-2	09-01-0315-4-D	01/06/09 09:48	Aqueous	GC 30	01/07/09	01/07/09 22:40	090107B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	2100	500	10		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	104	38-134			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: ARCO 11133

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
AW-4	09-01-0315-5-D	01/06/09 08:45	Aqueous	GC 30	01/07/09	01/07/09 23:13	090107B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	230	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	101	38-134			

AW-5	09-01-0315-6-D	01/06/09 12:25	Aqueous	GC 30	01/07/09	01/07/09 23:46	090107B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	150	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	99	38-134			

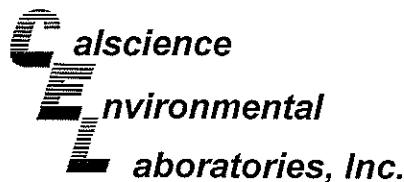
AW-6	09-01-0315-7-D	01/06/09 13:00	Aqueous	GC 30	01/07/09	01/08/09 00:20	090107B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	76	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	99	38-134			

RW-1	09-01-0315-8-D	01/06/09 11:53	Aqueous	GC 30	01/07/09	01/08/09 00:53	090107B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	1300	100	2		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	105	38-134			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report

A faint, large watermark-like stamp in the background that reads "Analytical Services" in a stylized, overlapping font.

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: EPA 5030B
Method: EPA 8015B (M)

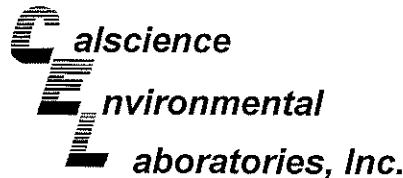
Project: ARCO 11133

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-695-389	N/A	Aqueous	GC 30	01/07/09	01/07/09 17:05	090107B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	99	38-134			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report

Stratus Environmental, Inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: ARCO 11133

Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-1	09-01-0315-1-B	01/06/09 10:30	Aqueous	GC/MS BB	01/13/09	01/13/09 16:47	090113L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	15	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	13	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	1.8	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	3.4	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>
1,2-Dichloroethane-d4	91	73-157			Dibromofluoromethane	99	82-142		
Toluene-d8	96	82-112			1,4-Bromofluorobenzene	90	75-105		

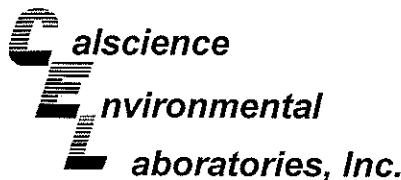
MW-3	09-01-0315-2-B	01/06/09 11:15	Aqueous	GC/MS BB	01/13/09	01/13/09 17:17	090113L01
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>
1,2-Dichloroethane-d4	86	73-157			Dibromofluoromethane	98	82-142		
Toluene-d8	94	82-112			1,4-Bromofluorobenzene	92	75-105		

AW-1	09-01-0315-3-B	01/06/09 13:53	Aqueous	GC/MS BB	01/13/09	01/13/09 17:47	090113L01
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Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	670	20	40		Methyl-t-Butyl Ether (MTBE)	170	5.0	10	
1,2-Dibromoethane	ND	5.0	10		Tert-Butyl Alcohol (TBA)	190	100	10	
1,2-Dichloroethane	ND	5.0	10		Diisopropyl Ether (DIPE)	ND	5.0	10	
Ethylbenzene	84	5.0	10		Ethyl-t-Butyl Ether (ETBE)	ND	5.0	10	
Toluene	ND	5.0	10		Tert-Amyl-Methyl Ether (TAME)	28	5.0	10	
Xylenes (total)	ND	5.0	10		Ethanol	ND	3000	10	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>
1,2-Dichloroethane-d4	101	73-157			Dibromofluoromethane	106	82-142		
Toluene-d8	95	82-112			1,4-Bromofluorobenzene	96	75-105		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: ARCO 11133

Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
AW-2	09-01-0315-4-B	01/06/09 09:48	Aqueous	GC/MS BB	01/13/09	01/13/09 18:17	090113L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	440	10	20		Methyl-t-Butyl Ether (MTBE)	11	10	20	
1,2-Dibromoethane	ND	10	20		Tert-Butyl Alcohol (TBA)	ND	200	20	
1,2-Dichloroethane	ND	10	20		Diisopropyl Ether (DIPE)	ND	10	20	
Ethylbenzene	67	10	20		Ethyl-t-Butyl Ether (ETBE)	ND	10	20	
Toluene	54	10	20		Tert-Amyl-Methyl Ether (TAME)	ND	10	20	
Xylenes (total)	110	10	20		Ethanol	ND	6000	20	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>
1,2-Dichloroethane-d4	104	73-157			Dibromofluoromethane	107	82-142		
Toluene-d8	96	82-112			1,4-Bromofluorobenzene	98	75-105		

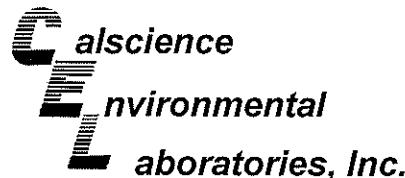
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
AW-4	09-01-0315-5-B	01/06/09 08:45	Aqueous	GC/MS BB	01/13/09	01/13/09 18:48	090113L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.88	0.50	1		Methyl-t-Butyl Ether (MTBE)	8.3	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	0.81	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>
1,2-Dichloroethane-d4	104	73-157			Dibromofluoromethane	107	82-142		
Toluene-d8	96	82-112			1,4-Bromofluorobenzene	94	75-105		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
AW-5	09-01-0315-6-B	01/06/09 12:25	Aqueous	GC/MS BB	01/13/09	01/13/09 19:18	090113L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.0	2		Methyl-t-Butyl Ether (MTBE)	26	1.0	2	
1,2-Dibromoethane	ND	1.0	2		Tert-Butyl Alcohol (TBA)	150	20	2	
1,2-Dichloroethane	ND	1.0	2		Diisopropyl Ether (DIPE)	ND	1.0	2	
Ethylbenzene	ND	1.0	2		Ethyl-t-Butyl Ether (ETBE)	ND	1.0	2	
Toluene	ND	1.0	2		Tert-Amyl-Methyl Ether (TAME)	5.0	1.0	2	
Xylenes (total)	ND	1.0	2		Ethanol	ND	600	2	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control</u>		<u>Qual</u>
1,2-Dichloroethane-d4	117	73-157			Dibromofluoromethane	117	82-142		
Toluene-d8	95	82-112			1,4-Bromofluorobenzene	101	75-105		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: ARCO 11133

Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
AW-6	09-01-0315-7-C	01/06/09 13:00	Aqueous	GC/MS BB	01/13/09	01/13/09 19:48	090113L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	5.0	10		Methyl-t-Butyl Ether (MTBE)	97	5.0	10	
1,2-Dibromoethane	ND	5.0	10		Tert-Butyl Alcohol (TBA)	ND	100	10	
1,2-Dichloroethane	ND	5.0	10		Diisopropyl Ether (DIPE)	ND	5.0	10	
Ethylbenzene	ND	5.0	10		Ethyl-t-Butyl Ether (ETBE)	ND	5.0	10	
Toluene	ND	5.0	10		Tert-Amyl-Methyl Ether (TAME)	23	5.0	10	
Xylenes (total)	ND	5.0	10		Ethanol	ND	3000	10	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	101	73-157			Dibromofluoromethane	107	82-142		
Toluene-d8	95	82-112			1,4-Bromofluorobenzene	95	75-105		

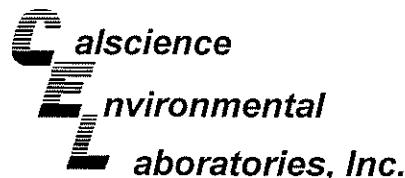
RW-1	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
	09-01-0315-8-B	01/06/09 11:53	Aqueous	GC/MS BB	01/13/09	01/13/09 20:18	090113L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	7.0	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	14	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	1.6	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	0.63	0.50	1	
Xylenes (total)	2.7	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	94	73-157			Dibromofluoromethane	103	82-142		
Toluene-d8	96	82-112			1,4-Bromofluorobenzene	91	75-105		

Method Blank	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
	099-12-703-649	N/A	Aqueous	GC/MS BB	01/13/09	01/13/09 14:15	090113L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	103	73-157			Dibromofluoromethane	105	82-142		
Toluene-d8	93	82-112			1,4-Bromofluorobenzene	105	75-105		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report

Project ARCO
Date: 01/14/09

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

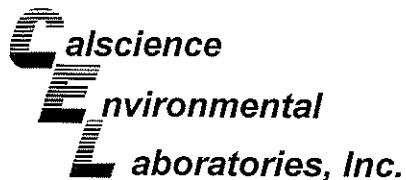
Project: ARCO 11133

Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-703-651	N/A	Aqueous	GC/MS BB	01/14/09	01/14/09 14:03	090114L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	REC (%)	Control		Qual
1,2-Dichloroethane-d4	103	73-157			Dibromofluoromethane	107	82-142		
Toluene-d8	95	82-112			1,4-Bromofluorobenzene	99	75-105		

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Duplicate

Stratus Environmental, inc.
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Cameron Park, CA 95682-8861

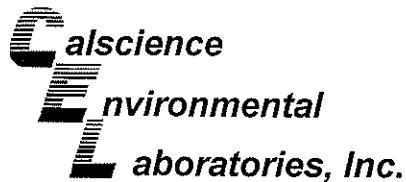
Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: N/A
Method: RSK-175M

Project: ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
AW-2	Aqueous	GC 14	N/A	01/08/09	090108D01

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Carbon Dioxide	28100	27400	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Duplicate

Stratus Environmental, inc.
 3330 Cameron Park Drive, Suite 550
 Cameron Park, CA 95682-8861

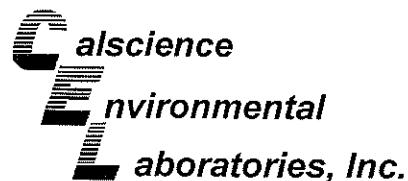
Date Received: 01/07/09
 Work Order No: 09-01-0315
 Preparation: N/A
 Method: RSK-175M

Project: ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
AW-2	Aqueous	GC 33	N/A	01/09/09	090109D01

<u>Parameter</u>	<u>Sample Conc</u>	<u>DUP Conc</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Methane	50.4	59.0	16	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate

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Cameron Park, CA 95682-8861

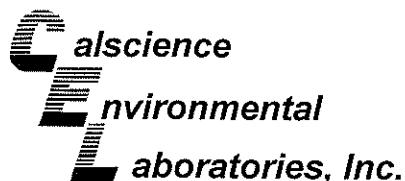
Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: EPA 3010A Total
Method: EPA 200.7

Project ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-1	Aqueous	ICP 5300	01/13/09	01/14/09	090113SA6

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Manganese	4X	4X	80-120	4X	0-20	BB

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - PDS / PDSD

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received 01/07/09
Work Order No: 09-01-0315
Preparation: EPA 3010A Total
Method: EPA 200.7

Project: ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
MW-1	Aqueous	ICP 5300	01/13/09	01/14/09	090113SA6

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Manganese	4X	4X	75-125	4X	0-20	BB

RPD - Relative Percent Difference , CL - Control Limit

Calscience**E nvironmental
L aboratories, Inc.****Quality Control - Spike/Spike Duplicate**

Stratus Environmental, inc.
 3330 Cameron Park Drive, Suite 550
 Cameron Park, CA 95682-8861

Date Received: 01/07/09
 Work Order No: 09-01-0315
 Preparation: N/A
 Method: EPA 300.0

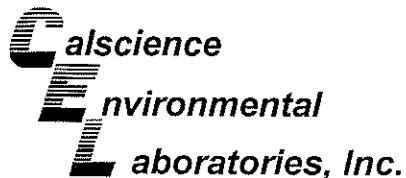
Project ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-1	Aqueous	IC 7	N/A	01/08/09	090107S03

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	96	95	58-142	1	0-6	
Sulfate	116	116	49-133	0	0-3	

RPD - Relative Percent Difference , CL - Control Limit

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Quality Control - Duplicate

Stratus Environmental, inc.
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Cameron Park, CA 95682-8861

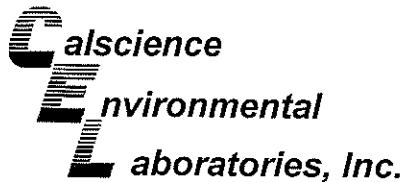
Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: N/A
Method: SM 2320B

Project: ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
09-01-0969-2	Aqueous	N/A	N/A	01/19/09	90119ALKD1

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO ₃)	358000	360000	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Duplicate

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Cameron Park, CA 95682-8861

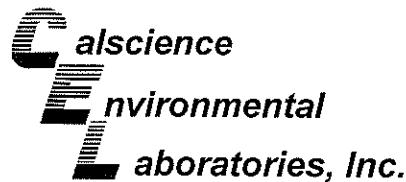
Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: N/A
Method: SM 4500 S2 - D

Project: ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
MW-1	Aqueous	N/A	01/07/09	01/07/09	90107DSD1

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Sulfide, Dissolved	ND	ND	NA	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.
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Cameron Park, CA 95682-8861

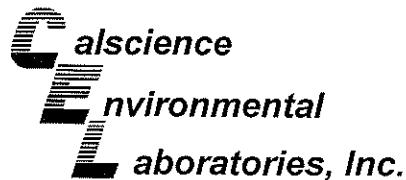
Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-3	Aqueous	GC 30	01/07/09	01/07/09	090107S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	95	97	38-134	2	0-25	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

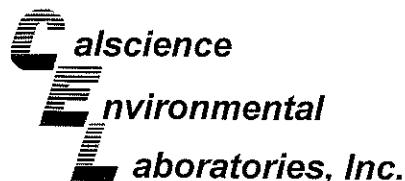
Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: EPA 5030B
Method: EPA 8260B

Project ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-01-0599-3	Aqueous	GC/MS BB	01/13/09	01/13/09	090113S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	96	97	86-122	1	0-8	
Carbon Tetrachloride	89	94	78-138	5	0-9	
Chlorobenzene	101	102	90-120	1	0-9	
1,2-Dibromoethane	83	77	70-130	8	0-30	
1,2-Dichlorobenzene	99	99	89-119	1	0-10	
1,1-Dichloroethene	98	98	52-142	0	0-23	
Ethylbenzene	79	82	70-130	4	0-30	
Toluene	92	94	85-127	2	0-12	
Trichloroethene	93	94	78-126	1	0-10	
Vinyl Chloride	87	89	56-140	2	0-21	
Methyl-t-Butyl Ether (MTBE)	87	85	64-136	2	0-28	
Tert-Butyl Alcohol (TBA)	109	107	27-183	2	0-60	
Diisopropyl Ether (DIPE)	91	92	78-126	1	0-16	
Ethyl-t-Butyl Ether (ETBE)	87	84	67-133	3	0-21	
Tert-Amyl-Methyl Ether (TAME)	84	82	63-141	3	0-21	
Ethanol	105	104	11-167	1	0-64	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

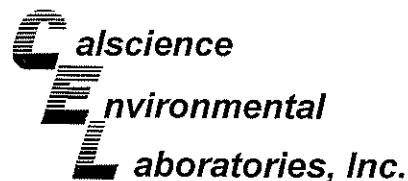
Date Received: 01/07/09
Work Order No: 09-01-0315
Preparation: EPA 5030B
Method: EPA 8260B

Project ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-01-1009-1	Aqueous	GC/MS BB	01/14/09	01/14/09	090114S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	98	96	86-122	2	0-8	
Carbon Tetrachloride	94	92	78-138	2	0-9	
Chlorobenzene	105	101	90-120	4	0-9	
1,2-Dibromoethane	78	82	70-130	6	0-30	
1,2-Dichlorobenzene	98	100	89-119	2	0-10	
1,1-Dichloroethene	105	95	52-142	10	0-23	
Ethylbenzene	82	78	70-130	4	0-30	
Toluene	92	90	85-127	3	0-12	
Trichloroethene	95	91	78-126	4	0-10	
Vinyl Chloride	91	92	56-140	1	0-21	
Methyl-t-Butyl Ether (MTBE)	82	90	64-136	9	0-28	
Tert-Butyl Alcohol (TBA)	113	109	27-183	4	0-60	
Diisopropyl Ether (DIPE)	91	93	78-126	2	0-16	
Ethyl-t-Butyl Ether (ETBE)	81	83	67-133	3	0-21	
Tert-Amyl-Methyl Ether (TAME)	74	78	63-141	6	0-21	
Ethanol	99	101	11-167	2	0-64	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate

The Thermo logo consists of the word "thermo" in a lowercase, italicized, sans-serif font.

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

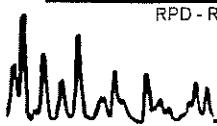
Date Received: N/A
Work Order No: 09-01-0315
Preparation: N/A
Method: RSK-175M

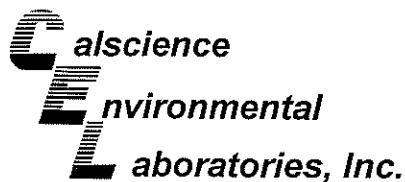
Project: ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-659-42	Aqueous	GC 14	N/A	01/08/09	090108L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	96	96	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

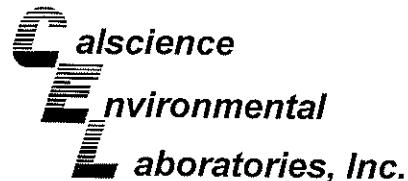
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Work Order No: 09-01-0315
Preparation: N/A
Method: RSK-175M

Project: ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-663-432	Aqueous	GC 33	N/A	01/09/09	090109L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	101	101	79-109	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

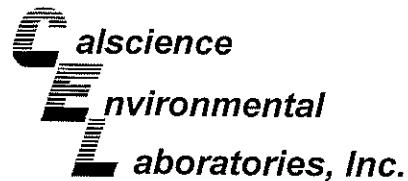
Date Received: N/A
Work Order No: 09-01-0315
Preparation: EPA 3010A Total
Method: EPA 200.7

Project: ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-012-3,676	Aqueous	ICP 5300	01/13/09	01/14/09	090113LA6

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Manganese	109	109	85-115	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate

A handwritten signature or stamp is present over the "Quality Control" section, appearing to read "Quality Control".

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
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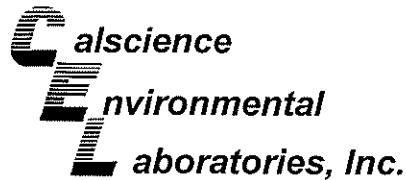
Date Received: N/A
Work Order No: 09-01-0315
Preparation: N/A
Method: EPA 300.0

Project: ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-118-4,994	Aqueous	IC 7	N/A	01/08/09	090107L03

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	97	97	87-111	0	0-12	
Sulfate	106	103	89-107	3	0-13	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

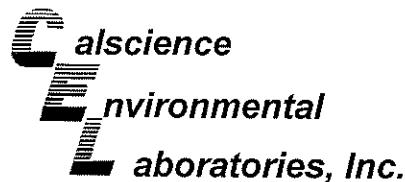
Date Received: N/A
Work Order No: 09-01-0315
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-389	Aqueous	GC 30	01/07/09	01/07/09	090107B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	103	102	78-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: N/A
Work Order No: 09-01-0315
Preparation: EPA 5030B
Method: EPA 8260B

Project: ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
099-12-703-649	Aqueous	GC/MS BB	01/13/09	01/13/09	090113L01		
Parameter	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	96	100	87-117	82-122	4	0-7	
Carbon Tetrachloride	89	95	78-132	69-141	7	0-8	
Chlorobenzene	102	102	88-118	83-123	0	0-8	
1,2-Dibromoethane	83	85	80-120	73-127	2	0-20	
1,2-Dichlorobenzene	101	105	88-118	83-123	4	0-8	
1,1-Dichloroethene	101	103	71-131	61-141	2	0-14	
Ethylbenzene	88	86	80-120	73-127	2	0-20	
Toluene	92	97	85-127	78-134	5	0-7	
Trichloroethene	94	96	85-121	79-127	2	0-11	
Vinyl Chloride	96	94	64-136	52-148	1	0-10	
Methyl-t-Butyl Ether (MTBE)	89	94	67-133	56-144	6	0-16	
Tert-Butyl Alcohol (TBA)	105	101	34-154	14-174	5	0-19	
Diisopropyl Ether (DIPE)	93	96	80-122	73-129	4	0-8	
Ethyl-t-Butyl Ether (ETBE)	86	91	73-127	64-136	6	0-11	
Tert-Amyl-Methyl Ether (TAME)	83	90	69-135	58-146	8	0-12	
Ethanol	100	90	34-124	19-139	11	0-44	

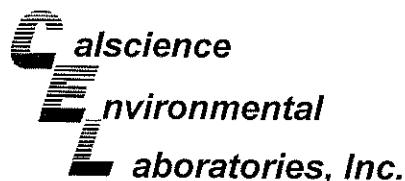
Total number of LCS compounds : 16

Total number of ME compounds : 0

Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: N/A
Work Order No: 09-01-0315
Preparation: EPA 5030B
Method: EPA 8260B

Project: ARCO 11133

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed		LCS/LCSD Batch Number
099-12-703-651	Aqueous	GC/MS BB	01/14/09	01/14/09		090114L01
<u>Parameter</u>						
	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL
Benzene	97	95	87-117	82-122	2	0-7
Carbon Tetrachloride	92	89	78-132	69-141	3	0-8
Chlorobenzene	102	101	88-118	83-123	1	0-8
1,2-Dibromoethane	85	82	80-120	73-127	3	0-20
1,2-Dichlorobenzene	99	100	88-118	83-123	1	0-8
1,1-Dichloroethene	103	102	71-131	61-141	1	0-14
Ethylbenzene	84	83	80-120	73-127	2	0-20
Toluene	94	92	85-127	78-134	2	0-7
Trichloroethene	95	93	85-121	79-127	2	0-11
Vinyl Chloride	92	91	64-136	52-148	1	0-10
Methyl-t-Butyl Ether (MTBE)	91	91	67-133	56-144	1	0-16
Tert-Butyl Alcohol (TBA)	107	108	34-154	14-174	1	0-19
Diisopropyl Ether (DIPE)	92	91	80-122	73-129	1	0-8
Ethyl-t-Butyl Ether (ETBE)	85	84	73-127	64-136	1	0-11
Tert-Amyl-Methyl Ether (TAME)	81	80	69-135	58-146	1	0-12
Ethanol	93	99	34-124	19-139	6	0-44

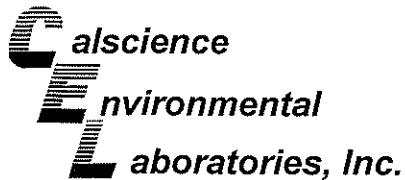
Total number of LCS compounds : 16

Total number of ME compounds : 0

Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit



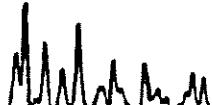
Glossary of Terms and Qualifiers

Work Order Number: 09-01-0315

<u>Qualifier</u>	<u>Definition</u>
AX	Sample too dilute to quantify surrogate.
BA	There was no MS/MSD analyzed with this batch due to insufficient sample volume (NR = not reported). See Blank Spike/Blank Spike Duplicate.
BA,AY	Relative percent difference out of control, matrix interference suspected.
BB	Sample > 4x spike concentration.
BF	Reporting limits raised due to high hydrocarbon background.
BH	Reporting limits raised due to high level of non-target analytes.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
BY	Sample received at improper temperature.
CL	Initial analysis within holding time but required dilution.
CQ	Analyte concentration greater than 10 times the blank concentration.
CU	Surrogate concentration diluted to not detectable during analysis.
DF	Reporting limits elevated due to matrix interferences.
ET	Sample was extracted past end of recommended max. holding time.
EY	Result exceeds normal dynamic range; reported as a min est.
GS	Internal standard recovery is outside method recovery limit.
IB	CCV recovery above limit; analyte not detected.
IH	Calibrtn. verif. recov. below method CL for this analyte.
IJ	Calibrtn. verif. recov. above method CL for this analyte.
J,DX	J=EPA Flag -Estimated value; DX= Value < lowest standard (MQL), but > than MDL.
LA	Confirmatory analysis was past holding time.
LG	Surrogate recovery below the acceptance limit.
LH	Surrogate recovery above the acceptance limit.
LM,AY	MS and/or MSD above acceptance limits. See Blank Spike (LCS). Matrix interference suspected.
LN,AY	MS and/or MSD below acceptance limits. See Blank Spike (LCS). Matrix interference suspected.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.

Work Order Number: 09-01-0315

<u>Qualifier</u>	<u>Definition</u>
MB	Analyte present in the method blank.
MG	Analyte is a suspected lab contaminant.
PC	Sample taken from VOA vial with air bubble > 6mm diameter.
PI	Primary and confirm results varied by > than 40% RPD.
RB	RPD exceeded method control limit; % recoveries within limits.





Chain of Custody Record

Project Name: ARCO 11133

BP BU/AR Region/Enfos Segment:

BP > Americas > West > Retail > Alameda > 11

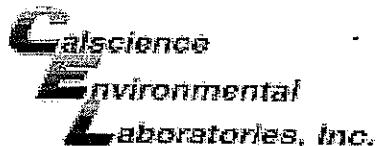
State or Lead Regulatory Agency:

Requested Due Date (mm/dd/yy):

Page 1 of 41
0315

On-site Time:	6:30	Temp:	49
Off-site Time:	14:20	Temp:	58
Sky Conditions:	CLEAR		
Meteorological Events:	NONE		
Wind Speed:	6	Direction:	

Address: 7440 Lincoln Way Garden Grove, CA 92841				BP/AR Facility No.: 11133				Consultant/Contractor: Stratus Environmental, Inc.								
Lab PM: Linda Scharpenberg				BP/AR Facility Address: 2220 98th Avenue, Oakland				Address: 3330 Cameron Park Drive, Suite 550								
Tele/Fax: 714-895-5494 714-895-7501(fax)				Site Lat/Long:				Cameron Park, CA 95682								
BP/AR PM Contact: Paul Supple				California Global ID No.: T0600100210				Consultant/Contractor Project No.:								
Address: 2010 Crow Canyon Place, Suite 150 San Ramon, CA				Enfos Project No.: G07TT-0042				Consultant/Contractor PM: Jay Johnson								
Tele/Fax: 925-275-3506				Provision or OOC (circle one) Provision				Tele/Fax: (530) 676-6000 / (530) 676-6005								
Lab Bottle Order No:				Phase/WBS: 04-Monitoring				Report Type & QC Level: Level 1 with EDF								
				Sub Phase/Task: 03-Analytical				E-mail EDD To: bcarrol@stratusinc.net								
				Cost Element: 01-Contractor labor				Invoice to: Atlantic Richfield Co.								
Item No.	Sample Description	Time	Date	Matrix	Laboratory No.	Preservative				Requested Analysis						
						No. of Containers	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	BTEX/Oxy* by 8260	GRO by 8015M	1,2-DCA by 8260	Ethane by 8260	Nitrate and Sulfate (EPA 300)
1	MW-1	1030	1/6/2009	X		11	X X X			X X X X X X X X X X X X						
2	MW-3	1115	1/6/2009	X		11	X X X			X X X X X X X X X X X X						
3	AW-1	1353	1/6/2009	X		11	X X X			X X X X X X X X X X X X						
4	AW-2	948	1/6/2009	X		11	X X X			X X X X X X X X X X X X						
5	AW-4	845	1/6/2009	X		11	X X X			X X X X X X X X X X X X						
6	AW-5	1225	1/6/2009	X		11	X X X			X X X X X X X X X X X X						
7	AW-6	1300	1/6/2009	X		11	X X X			X X X X X X X X X X X X						
8	RW-1	1153	1/6/2009	X		11	X X X			X X X X X X X X X X X X						
9	TB-11133	500	1/6/2009	X		2		X		X X X X X X X X X X X X					HOLD	
Sampler's Name: Jerry Gonzales					Relinquished By / Affiliation				Date	Time	Accepted By / Affiliation				Date	Time
Sampler's Company: Dowlos					<i>Jerry Gonzales</i>											
Shipment Date:																
Shipment Method: 106193100																
Shipment Tracking No:																
Special Instructions: Please cc results to rmiller@broadbentinc.com																
Custody Seals In Place: Yes / No			Temp Blank: Yes / No			Cooler Temp on Receipt: °F/C			Trip Blank: Yes / No			MS/MSD Sample Submitted: Yes / No				



WORK ORDER #: 09-01-0313

SAMPLE RECEIPT FORMCooler 2 of 2CLIENT: StratusDATE: 01/07/09

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.1 °C - 0.2 °C (CF) = 2.9 °C Blank Sample Sample(s) outside temperature criteria (PM/APM contacted by: _____). Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling. Received at ambient temperature, placed on ice for transport by Courier.Ambient Temperature: Air Filter Metals Only PCBs OnlyInitial: JL**CUSTODY SEALS INTACT:**

<input type="checkbox"/> Cooler	<input type="checkbox"/> _____	<input type="checkbox"/> No (Not Intact)	<input checked="" type="checkbox"/> Not Present	<input type="checkbox"/> N/A	Initial: <u>JL</u>
<input type="checkbox"/> Sample	<input type="checkbox"/> _____	<input type="checkbox"/> No (Not Intact)	<input checked="" type="checkbox"/> Not Present	<input type="checkbox"/>	Initial: <u>YL</u>

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct containers and volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve EnCores® TerraCores® _____Water: VOA VOAh VOAna₂ 125AGB 125AGBh 125AGBpo₄ 1AGB 1AGBna₂ 1AGBs 500AGB 500AGBs 250CGB 250CGBs 1PB 500PB 500PBna 250PB 250PBn 125PB 125PBznna 100PBsterile 100PBna₂ _____ _____ _____Air: Tedlar® Summa® _____Checked/Labeled by: YL

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Reviewed by: WSCPreservative: h:HCl n:HNO₃ na₂:Na₂S₂O₃ na:NaOH po₄:H₃PO₄ s:H₂SO₄ znna:ZnAc₂+NaOHScanned by: YL

SAMPLE RECEIPT FORMCooler 1 of 2CLIENT: StratusDATE: 01/07/09

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature -2.1 °C - 0.2 °C (CF) = -1.9 °C Blank Sample Sample(s) outside temperature criteria (PM/APM contacted by: _____). Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling. Received at ambient temperature, placed on ice for transport by Courier.Ambient Temperature: Air Filter Metals Only PCBs OnlyInitial: JL**CUSTODY SEALS INTACT:**

<input type="checkbox"/> Cooler	<input type="checkbox"/> _____	<input type="checkbox"/> No (Not Intact)	<input checked="" type="checkbox"/> Not Present	<input type="checkbox"/> N/A	Initial: <u>JL</u>
<input type="checkbox"/> Sample	<input type="checkbox"/> _____	<input type="checkbox"/> No (Not Intact)	<input checked="" type="checkbox"/> Not Present	<input type="checkbox"/>	Initial: <u>JL</u>

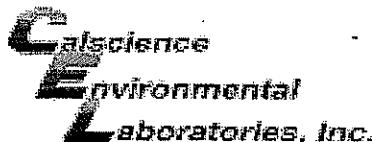
SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct containers and volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve EnCores® TerraCores® _____Water: VOA VOA_h VOAna₂ 125AGB 125AGBh 125AGBpo₄ 1AGB 1AGBna₂
 1AGBs 500AGB 500AGBs 250CGB 250CGBs PB 500PB 500PBna 250PB
 250PBn 125PB 125PBznna 100PBsterile 100PBna₂ _____ _____ _____Air: Tedlar® Summa® _____Checked/Labeled by: JL

Container: C:Clear A:Amber P:Poly/Plastic G:Glass J:Jar B:Bottle

Reviewed by: WGCPreservative: H:HCl N:HNO₃ Na₂:Na₂S₂O₃ Na:NaOH Po₄:H₃PO₄ S:H₂SO₄ Znna:ZnAc₂+NaOHScanned by: JL



WORK ORDER #: 0 9 - 0 1 - 0 3 1 5

SAMPLE ANOMALY FORM**CHAIN OF CUSTODY (COC):**

- Not relinquished by client – no signature
- No date/time relinquished
- COC not received with samples – notify PM
- Incomplete information regarding samples, tests, etc.

Comments:

SAMPLES - CONTAINERS & LABELS:

- Samples NOT RECEIVED but listed on COC
- Samples received but NOT LISTED on COC
- Holding time expired – list sample ID(s) and test
- Insufficient quantities for analysis – list test
- Improper container(s) used – list test
- No preservative noted on label – list test and notify lab
- Sample labels illegible – note test/container type
- Sample labels do not match COC – Note in comments
 - Sample ID
 - Date and Time Collected
 - Project Information
 - # of containers
- Sample containers compromised – Note in comments
 - Leaking
 - Broken
 - Without Labels
- Other: _____

Comments:

Methane RSK test
received none preservation
125AGB X 2

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of RSK or CO ₂ or DO or Organic Lead Received
						1~8	G,H	2

Comments: _____

Initial / Date YL 1/6/09

Richard Villafania

From: Doulos [doulosenv@comcast.net]
Sent: Wednesday, January 14, 2009 4:16 PM
To: Richard Villafania
Subject: BP Site 11133 Oakland

Hi Richard,

BP Site 11133 Oakland was sampled on Tuesday, January 6th. Cal Science should have received them on Wednesday, January 7th. Alkalinity was not marked on the chain of custody, but it should have been. Would it be possible to go ahead and analyze the samples for alkalinity?

Thank you for your help.

Stacie Getman
DOULOS ENVIRONMENTAL, INC.
P.O. Box 2559
Orangevale, CA 95662
(916) 990-0333
FAX: (916) 990-0332
doulosenv@comcast.net

ATTACHMENT

FIELD PROCEDURES FOR GROUNDWATER SAMPLING

The sampling procedures for groundwater monitoring events are contained in this appendix.

Equipment Calibration

Standard groundwater sampling equipment – pH/Conductivity/Temperature meter, and dissolved oxygen (DO) meters are calibrated prior to all field work. All calibration is conducted in accordance with equipment manufacturer's recommended procedure and buffer solutions. MSDS for all buffer solutions are maintained in Stratus vehicles. Calibration is completed everyday prior to field work and also once a week. The pH probe is calibrated for a pH of 7.0 daily and for 4.0, 7.0 and 10.0 weekly. The conductivity probe is calibrated for 1413 μs daily and 1413 μs and 447 μs weekly. The temperature probe is calibrated weekly with a NIST-traceable thermometer. The DO probe is calibrated for 100% oxygen daily and 0% and 100% oxygen weekly. All calibration logs are maintained in the Stratus office.

Groundwater and Liquid-Phase Petroleum Hydrocarbon Depth Assessment

Prior to measuring the depth to liquid in the well, the well caps are removed and the liquid level allowed to stabilize. A water/hydrocarbon interface probe is used to assess the liquid-phase petroleum hydrocarbon (LPH) thickness, if present, and a water level indicator is used to measure the groundwater depth in monitoring wells that do not contain LPH. Depth to groundwater or LPH is measured from a datum point at the top of each monitoring well casing. The datum point is typically a notch cut in the north side of the casing edge. If a water level indicator is used, the tip is subjectively analyzed for hydrocarbon sheen.

Subjective Analysis of Groundwater

Prior to purging, a water sample is collected from the monitoring well for subjective assessment. The sample is retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer is then retrieved, and the sample contained within the bailer is examined for floating LPH and the appearance of a LPH sheen.

Monitoring Well Sampling

In many cases, determining whether to purge or not to purge wells prior to sample collection is made in the field and is often based on depth to water relative to the screen interval of the well. Site-specific field data sheets present details associated with the purge method and equipment used.

Monitoring wells, when purged, use a pump or bailer until pH, temperature, and conductivity of the purge water has stabilized and a minimum of three well volumes of water has been removed. Field measuring equipment is calibrated and maintained according to the manufacturer's instructions. If three well volumes cannot be removed in one half hour's time the well is allowed to recharge to 80% of original level. After recharging, a groundwater sample is then collected from each of the wells using disposable bailers.

A Teflon bailer, electric submersible or bladder pump will be the only equipment used for well sampling. When samples for volatile organic analysis are being collected, the pump flow will be regulated at approximately 100 milliliters per minute to minimize pump effluent turbulence and aeration. Glass bottles of at least 40-milliliters volume and fitted with Teflon-lined septa will be used in sampling for volatile organics. These bottles will be filled completely to prevent air accumulation in the bottle. A positive meniscus forms when the bottle is completely full. A convex Teflon septum will be placed over the positive meniscus to eliminate air. After the bottle is capped, it is inverted and tapped to verify that it contains no air bubbles. The sample containers for other parameters will be filled, filtered as required, and capped. Glass and plastic bottles used by Stratus to collect groundwater samples are supplied by the laboratory.

Groundwater Sample Labeling and Preservation

Samples are collected in appropriate containers supplied by the laboratory. All required chemical preservation is added to the bottles prior to delivery to Stratus. Sample label information includes a unique sample identification number, job identification number, date, and time. After labeling, all groundwater samples are placed in a Ziploc® type bag and placed in an ice chest cooled to approximately 4° Celsius. Upon arriving at Stratus' office the samples are transferred to a locked refrigerator cooled to approximately 4° Celsius. Chemical preservation is controlled by the required analysis and is noted on the chain-of-custody form. Trip and temperature blanks supplied by the laboratory accompany the groundwater sample containers and groundwater samples.

Sample Identification and Chain-of-Custody Procedures

Sample identification and chain-of-custody procedures document sample possession from the time of collection to ultimate disposal. Each sample container submitted for analysis has a label affixed to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations, is recorded in the field records. The samples are analyzed by a California-certified laboratory.

A chain-of-custody form is used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them relinquishes the samples by signing the chain-of-custody form and noting the time. The sample-control officer at the laboratory verifies sample integrity and confirms that the samples are collected in the proper containers, preserved correctly, and

contain adequate volumes for analysis. These conditions are noted on a Laboratory Sample Receipt Checklist that becomes part of the laboratory report upon request.

If these conditions are met, each sample is assigned a unique log number for identification throughout analysis and reporting. The log number is recorded on the chain-of-custody form and in the legally-required log book maintained by the laboratory. The sample description, date received, client's name, and other relevant information is also recorded.

Equipment Cleaning

All reusable sampling equipments are cleaned using phosphate-free detergents and rinsed with de-ionized water.

APPENDIX B

GEOTRACKER UPLOAD CONFIRMATION

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>	1Q09 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>	3/17/2009 2:10:30 PM
<u>Confirmation Number:</u>	9600567042

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STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

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

Submittal Type: EDF - Monitoring Report - Quarterly
Submittal Title: 1Q09 GW Monitoring
Facility Global ID: T0600100210
Facility Name: BP #11133
File Name: 09010315.zip
Organization Name: Broadbent & Associates, Inc.
Username: BROADBENT-C
IP Address: 67.118.40.90
Submittal Date/Time: 3/17/2009 2:12:06 PM
Confirmation Number: **5789959132**

[VIEW QC REPORT](#)

[VIEW DETECTIONS REPORT](#)

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