ARCADIS
100 Montgomery Street
Suite 300
San Francisco
California 94104
Tel 415.374.2744
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Re: Third Quarter 2009 Ground-Water Monitoring Report
Former BP Station # 11132
3201 35th Avenue
Oakland, California
ACEH Case # RO0000014

Environmental

Date:
10/05/2009

"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:

Hollis E. Phillips, PG
Senior Geologist

Contact:
Hollis Phillips

Phone:
415.374.2744 x13

Email:
hollis.phillips@arcadis-us.com

Our ref:
GP09BPNA.0000

Third Quarter 2009 Ground-Water Monitoring Report
Former BP Station #11132
3201 35th Avenue, Oakland, California
ACEH Case #RO0000014

Prepared for

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

On behalf of

Atlantic Richfield Company
PO Box 1257
San Ramon, California 94583

Prepared by

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

1324 Mangrove Avenue, Suite 212
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(530) 566-1400
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5 October 2009

Project No. 06-88-655

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BROADBENT & ASSOCIATES, INC
ENVIRONMENTAL, WATER RESOURCES & ENGINEERING

5 October 2009

Project No. 06-88-655

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

Attn.: Ms. Hollis Phillips, PG – Senior Geologist

Re: Third Quarter 2009 Ground-Water Monitoring Report, Former BP Station #11132, 3201 35th Avenue, Oakland, Alameda County, California; ACEH Case #RO0000014

Dear Ms. Phillips:

Provided herein is the *Third Quarter 2009 Ground-Water Monitoring Report* for Former BP Station #11132 located at 3201 35th Avenue, Oakland, California (Site). This report presents results of the ground-water monitoring and sampling conducted at the Site during the Third Quarter of 2009.

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

Sincerely,

BROADBENT & ASSOCIATES, INC.

Thomas A. Venus, P.E.
Senior Engineer

REGISTERED PROFESSIONAL ENGINEER
THOMAS A. VENUS
No. 54698
Expires 12-31-09
CIVIL
STATE OF CALIFORNIA

Enclosures

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 #11132 GROUND-WATER MONITORING REPORT

Facility: #11132 Address:	3201 35th Avenue, Oakland, California
ARCADIS Project Manager:	Ms. Hollis Phillips, PG
Consulting Co./Contact Person:	Broadbent & Associates, Inc.(BAI)/Mr. Tom Venus, PE (530) 566-1400
Consultant Project No.:	06-88-655
Primary Agency/Regulatory ID No.:	Alameda County Environmental Health (ACEH) ACEH Case # RO0000014

WORK PERFORMED THIS QUARTER (Third Quarter 2009):

1. Prepared and submitted *Second Quarter 2009 Ground-Water Monitoring Report* (BAI, 7/30/2009).
2. Conducted ground-water monitoring/sampling for Third Quarter 2009. Work performed by Stratus Environmental, Inc. (Stratus) on 6 August 2009.
3. Performed monthly free product (FP) gauging and bailing on 22 July, 6 August, and 11 September 2009. Work performed by Stratus.
4. Prepared and submitted the *Vapor Intrusion Assessment and Dual-Phase Extraction Pilot Test Report* on 7 August 2009.

WORK PROPOSED FOR NEXT QUARTER (Fourth Quarter 2009):

1. Prepared and submitted this *Third Quarter 2009 Ground-Water Monitoring Report* (contained herein).
2. Perform monthly FP gauging and bailing.
3. Prepare and submit Fourth Quarter 2009 Status Report.
4. Respond to ACEH request for Enhanced Biodegradation Pilot Test Work Plan on or before due date of 19 October 2009.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	**Ground-Water Monitoring/Sampling/FP Bailing**
Frequency of ground-water monitoring:*	**Quarterly: MW-1 through MW-10 and RW-1**
Frequency of ground-water sampling:*	**Quarterly: MW-1, MW-2, MW-5, MW-8, MW-9, MW-10, and RW-1** **Annually (1Q): MW-3, MW-4, MW-6, and MW-7**
Is free product (FP) present on-site:	**Yes (MW-1, MW-2, MW-10, RW-1)**
FP recovered this quarter:	**33.0 gallons (FP/water mixture)**
Cumulative FP recovered since 1990:	**234.3 gallons (FP/water mixture)**
Current remediation techniques:	**Interim FP Bailing/DPE Feasibility Pilot Testing**
Depth to ground water (below TOC):	**18.33 ft (MW-6) to 22.46 ft (MW-4)**
General ground-water flow direction:	**South-Southwest**
Approximate hydraulic gradient:	**0.005 ft/ft**

* Current schedule through Third Quarter 2009. Proposed modifications discussed below.

DISCUSSION:

Third quarter ground-water monitoring was conducted at Former BP Station #11132 by Stratus on 6 August 2009. Water levels were gauged in 10 of the 11 wells at the Site. MW-8 was inaccessible due to a car parked over the well. Sheen was reported in wells MW-3 through MW-7, MW-9, and MW-10. Free Product (FP, or Separate Phase Hydrocarbons – SPH) was observed in wells MW-1,

MW-2, and RW-1. No other irregularities were noted during water level gauging. Depth to water measurements ranged from 18.33 ft at MW-6 to 22.46 ft at MW-4. Resulting ground-water surface elevations ranged from 147.90 ft at well MW-4 to 146.30 ft at MW-5. Water level elevations were within the historic minimum and maximum ranges for each well. Water level elevations yielded a potentiometric ground-water flow direction and gradient of approximately 0.005 ft/ft to the south-southwest, generally consistent with historical data (see Table 3). Current and historic FP measurements are summarized in Table 4. 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. A Site Location Map is provided as Drawing 1. Potentiometric ground-water elevation contours are presented in Drawing 2.

Ground-water samples were collected from wells MW-5, MW-9, and MW-10. Wells MW-1, MW-2, and RW-1 were not sampled due to the presence of Free Product. Well MW-8 was inaccessible due to a parked car. No other 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-C12) by 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. Specific bio-degradation parameters including Carbon Dioxide, Methane, Manganese, Nitrate, Sulfate, Total Alkalinity, Dissolved Sulfide, Ferrous Iron, Dissolved Oxygen, pH, and Conductivity were also monitored and analyzed for during this quarter. Dissolved Oxygen field monitoring results were questionable. In addition, the laboratory noted that each of the samples analyzed for Ferrous Iron were received after the holding time expired. A sample container for the analysis of Carbon Dioxide was not received by the laboratory for well MW-9. No other significant irregularities were encountered during laboratory analysis of the 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 each of the three wells sampled at concentrations up to 23,000 micrograms per liter (µg/L) in well MW-10. Benzene was detected above the laboratory reporting limit in two of the three wells sampled at concentrations of 19 µg/L in MW-9 and 850 µg/L in MW-10. Toluene was detected above the laboratory reporting limit in one of the three wells sampled at a concentration of 490 µg/L in MW-10. Ethylbenzene was detected above the laboratory reporting limit in two of the three wells sampled at concentrations of 120 µg/L in well MW-9 and 1,200 µg/L in well MW-10. Total Xylenes were detected above the laboratory reporting limit in two of the three wells sampled at concentrations of 250 µg/L in well MW-9 and 4,100 µg/L in well MW-10. TBA was detected above the laboratory reporting limit in MW-5 at a concentration of 340 µg/L. MTBE was detected above the laboratory reporting limit in two of the three wells sampled at concentrations of 18 µg/L in well MW-9 and 190 in well MW-5. The remaining fuel additives and oxygenates were not detected above their laboratory reporting limits in the three wells sampled this quarter. Bio-degradation parameters are summarized in Table 5. Further discussion about bio-degradation parameters will occur in future reports following analysis of the data for trends.

Detected analyte concentrations were within the historic minimum and maximum ranges for each well sampled this quarter. Historic laboratory analytical results for petroleum hydrocarbon contaminants and bio-degradation parameters are summarized in Table 1, Table 2, and Table 5. The most recent GRO, Benzene, and MTBE concentrations are also presented in Drawing 2. Ground-water monitoring data (GEO_WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 database. Upload confirmation receipts are provided in Appendix B.

Separate phase hydrocarbons (SPH, or Free Product – FP) were monitored and removed, if present, during July, August, and September 2009. During the FP gauging/bailing event on 22 July 2009, FP thickness was measured in wells MW-1 (0.01 ft), MW-10 (0.02 ft), and RW-1 (0.01 ft). No FP or sheen was recorded in wells MW-2, MW-8, and MW-9. Approximately eight gallons of FP/water mixture was removed from well MW-1, approximately 2.5 gallons of FP/water mixture was removed from well MW-10, and approximately 1.5 gallons of FP/water mixture was removed from well RW-1 during the 22 July visit. During the FP gauging/bailing event on 6 August 2009, FP thickness was measured in wells MW-1 (0.01 ft), MW-2 (0.01 ft), and RW-1 (0.01 ft). Sheen was observed in wells MW-9 and MW-10. Well MW-8 was inaccessible due to a parked car. Approximately 2.5 gallons of FP/water mixture was removed from well MW-1, approximately four gallons of FP/water mixture was removed from well MW-2, and approximately four gallons of FP/water mixture from well RW-1 during the 6 August 2009 visit. During the FP gauging/ bailing event on 11 September 2009, FP thickness was measured in wells MW-1 (0.01 ft), MW-10 (0.01 ft), and RW-1 (0.01 ft). No FP or sheen was recorded in wells MW-2 and MW-9. Well MW-8 was inaccessible due to a parked car. Approximately four gallons of FP/water mixture was removed from well MW-1, approximately 2.5 gallons of FP/water mixture was removed from well MW-10, and approximately four gallons of FP/water mixture were removed from well RW-1 during the September visit. Total FP/water mixture removed from wells this quarter was approximately 33.0 gallons. Total cumulative FP/water mixture removed to date at the Site is approximately 234.3 gallons, but this does not include the unknown volume removed within absorbent socks that have been installed and replaced as necessary since Second Quarter 2007. Table 4 contains a summary of FP removal data. Copies of the field data sheets for visits to the Site conducted this quarter are included within Appendix A.

CONCLUSIONS AND RECOMMENDATIONS:

Free Product continues to be measured and removed monthly in wells MW-1, MW-10, and RW-1. On and off-site concentrations of petroleum hydrocarbon contaminants are significantly elevated. Following conduct of vapor intrusion assessment performed on-site in May 2009, it was concluded that the vapor intrusion to indoor air migration pathway into the station building does not appear to be a valid and complete pathway. The dual-phase extraction pilot study conducted on-site in May 2009 resulted in limited vacuum influence and minimal contaminant removal rates. Based on these results, it was concluded that dual-phase extraction does not appear to be an optimal remedial technology for this Site. It is proposed to consider further evaluation of enhanced biodegradation and/or source area excavation as potentially viable remedial alternatives.

In accordance with the letter sent by Atlantic Richfield Company (a BP affiliated company) to ACEH dated 26 June 2009 in response to the California State Water Quality Control Board Resolution NO. 2009-0042, BAI recommends reduction of the ground-water monitoring/sampling frequency from quarterly to semi-annually. BAI recommends continued monitoring of ground-water levels from existing monitoring MW-1 through MW-10 and RW-1, but specifically each first calendar quarter and third calendar quarter. Generally consistent with the current sampling list, BAI recommends first and third calendar quarter sampling from wells MW-1, MW-2, MW-5, MW-8, MW-9, MW-10, and RW-1. In addition, BAI recommends sampling from monitoring wells MW-3, MW-4, MW-6, and MW-7 each first calendar quarter. Quarterly status reports including the results of monthly free product gauging/bailing would continue to be prepared and submitted for the second and fourth calendar quarters. Unless directed otherwise by ACEH, the proposed monitoring and sampling schedule will be implemented beginning during the Fourth Quarter 2009. A quarterly status report will be submitted for the Fourth Quarter 2009 and the next sampling event will be conducted during the First Quarter of 2010.

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 Environmental Laboratories, Inc. (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 ARCADIS-US, Inc. and 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. Site Location Map, Former BP Service Station #11132, 3201 35th Avenue, Oakland, California

Drawing 2. Ground-Water Elevation Contour and Analytical Summary Map, 6 August 2009, Former BP Service Station #11132, 3201 35th Avenue, Oakland, California

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #11132, 3201 35th Ave., Oakland, California

Table 2. Summary of Fuel Additives Analytical Data, Station #11132, 3201 35th Ave., Oakland, California

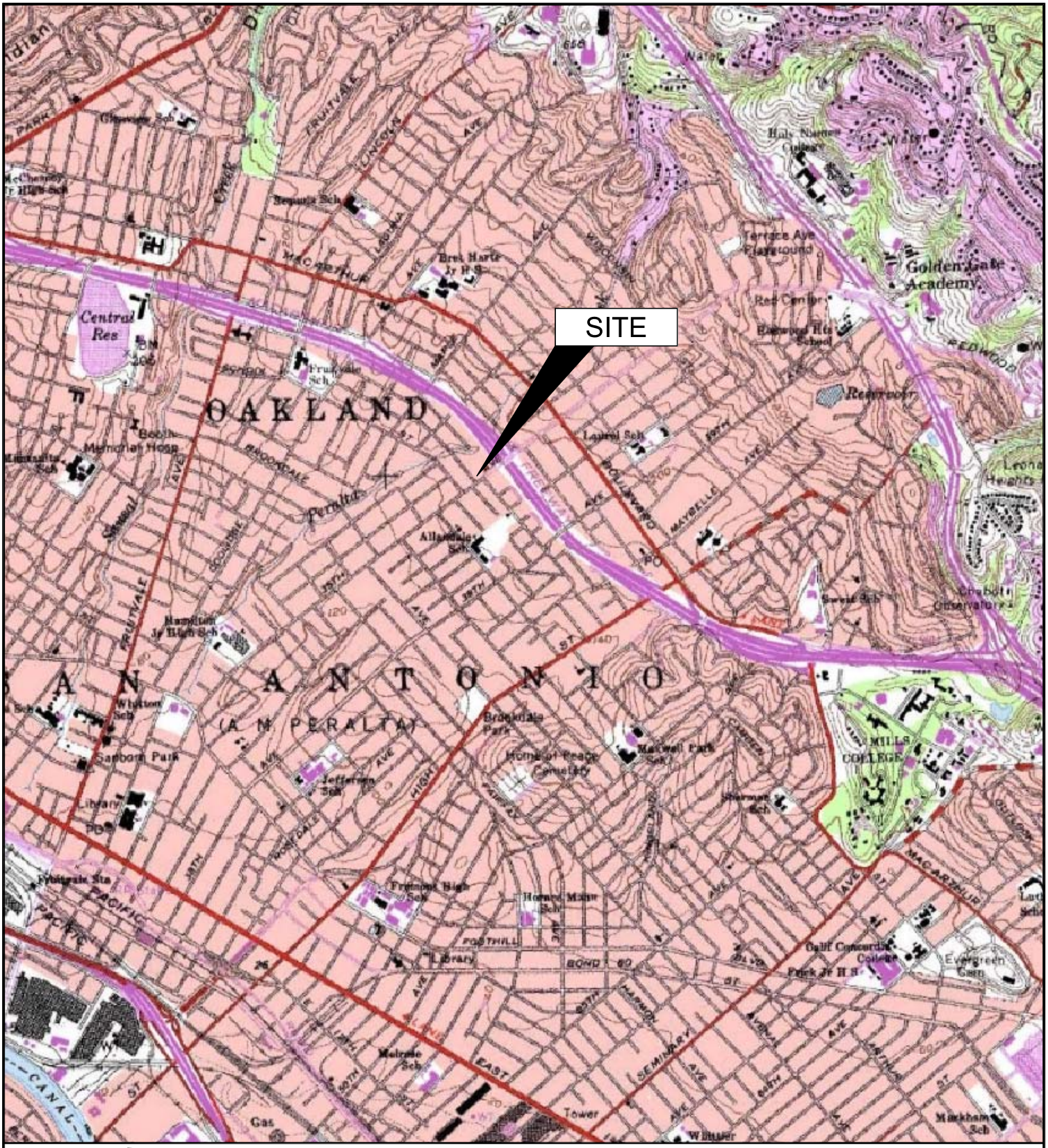
Table 3. Historical Ground-Water Flow Direction and Gradient, Station #11132, 3201 35th Ave., Oakland, California

Table 4. Free Product Removal, Former BP Service Station #11132, 3201 35th Avenue, Oakland, California

Table 5. Bio-Degradation Parameters, Station #11132, 3201 35th Ave., Oakland, California

Appendix A. Stratus Ground-Water Sampling Data Package (Includes Field Data Sheets, Laboratory Analytical Report with Chain-of-Custody Documentation, and Field Procedures)

Appendix B. GeoTracker Upload Confirmation Receipts

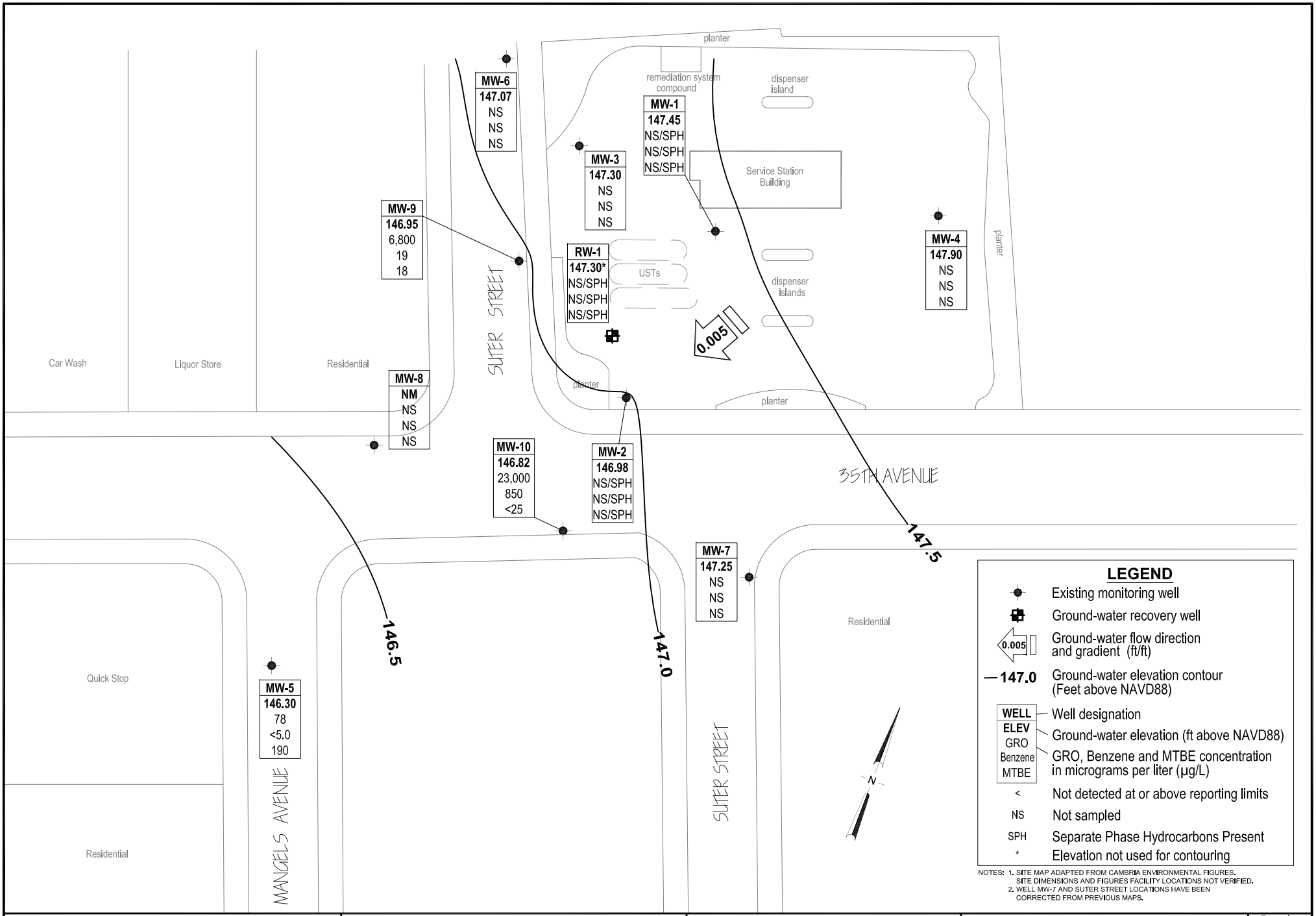


BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, CA 95926
Project No.: 06-88-655 Date: 07/24/09

Former BP Service Station #11132
3201 35th Avenue
Oakland, California

Site Location Map

Drawing
1



0 50 100

SCALE (ft)

BROADBENT & ASSOCIATES, INC.

ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

1324 Mangrove Ave. Suite 212, Chico, California 95926

Project No.: 06-88-655 Date: 9/15/09

Former BP Service Station #11132

3201 35th Avenue

Oakland, California

Ground-Water Elevation Contours and Analytical Summary Map

6 August 2009

Drawing

2

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE				
MW-1															
7/9/1990	--	169.75	--	0.22	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--	169.75	--	0.58	--	--	--	--	--	--	--	--	--	--	
3/7/1991	--	169.75	20.59	0	149.16	--	--	--	--	--	--	--	--	--	
4/1/1991	--	169.75	16.51	0.15	153.09	--	--	--	--	--	--	--	--	--	
6/27/1991	--	169.75	--	0.18	--	--	--	--	--	--	--	--	--	--	
9/27/1991	--	169.75	--	0.27	--	--	--	--	--	--	--	--	--	--	
12/18/1991	--	169.75	--	0.28	--	--	--	--	--	--	--	--	--	--	
7/3/1992	--	169.75	22.30	0.27	147.18	--	--	--	--	--	--	--	--	--	
10/5/1992	--	169.75	23.98	0.24	145.53	--	--	--	--	--	--	--	--	--	
1/13/1993	--	169.75	17.03	0.24	152.48	--	--	--	--	--	--	--	--	--	
4/23/1993	--	169.75	18.10	0.42	151.23	--	--	--	--	--	--	--	--	--	
7/12/1993	--	169.75	22.02	0.49	147.24	--	--	--	--	--	--	--	--	--	
10/21/1993	--	169.75	25.12	1.09	143.54	--	--	--	--	--	--	--	--	--	
1/21/1994	--	169.75	23.02	0.76	145.97	--	--	--	--	--	--	--	--	--	
4/20/1994	--	169.75	24.54	1.8	143.41	--	--	--	--	--	--	--	--	--	
8/1/1994	--	169.75	24.11	0.35	145.29	--	--	--	--	--	--	--	--	--	
12/23/1994	--	169.75	18.19	--	151.56	--	--	--	--	--	--	--	--	--	
1/26/1995	--	169.75	16.25	1.1	152.40	--	--	--	--	--	--	--	--	--	
6/8/1995	--	169.75	22.92	--	146.83	--	--	--	--	--	--	--	--	--	
6/8/95-6/28/95	--	169.75	--	1.25	145.63	--	--	--	--	--	--	--	--	--	
8/22/1995	--	169.75	24.45	0.85	144.45	--	--	--	--	--	--	--	--	--	
10/27/1995	--	169.75	25.41	--	143.65	--	--	--	--	--	--	--	--	--	
10/30/95-12/23/95	--	169.75	--	0.69	--	--	--	--	--	--	--	--	--	--	
1/25/96-2/16/96	--	169.75	--	1.40	150.15	--	--	--	--	--	--	--	--	--	
1/25/1996	--	169.75	18.20	--	151.55	--	--	--	--	--	--	--	--	--	
4/19/1996	--	169.75	19.06	1.22	149.47	--	--	--	--	--	--	--	--	--	
7/23/1996	--	169.75	22.98	0.89	145.88	--	--	--	--	--	--	--	--	--	
11/11/1996	--	169.75	23.99	0.89	144.78	--	--	--	--	--	--	--	--	--	
1/21/1997	--	169.75	16.80	0.9	152.05	--	--	--	--	--	--	--	--	--	
4/29/1997	--	169.75	21.90	0.85	147.00	--	--	--	--	--	--	--	--	--	
4/30/1997	--	169.75	--	--	--	92,000	3,500	8,100	4,400	23,800	6,900	--	--	--	c

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-1 Cont.															
4/30/1997	--	169.75	--	--	--	100,000	3,600	8,000	4,000	21,300	7,700	5.2	--	--	
8/21/1997	--	169.75	23.40	--	146.35	140,000	3,000	8,500	3,900	22,100	5,700	5.3	--	--	
8/21/1997	--	169.75	--	--	--	120,000	3,200	8,100	3,800	19,600	5,200	--	--	--	c
11/2/97-12/9/97	--	169.75	--	0.87	--	--	--	--	--	--	--	--	--	--	
11/5/1997	--	169.75	--	--	--	88,000	7,300	4,800	3,600	16,900	8,200	--	--	--	c
11/5/1997	--	169.75	23.70	--	145.51	68,000	6,200	4,400	3,300	14,300	8,000	4.7	--	--	
2/3/1998	--	169.75	13.63	0.32	155.80	--	--	--	--	--	--	--	--	--	
2/4/1998	--	169.75	--	--	--	160,000	2,300	8,400	5,000	29,400	<10000	--	--	--	c
2/4/1998	--	169.75	--	--	--	190,000	2,200	10,000	5,600	32,000	<10000	5.3	--	--	
5/28/1998	--	169.75	18.03	0.17	151.55	87,000	980	3,900	3,600	19,000	2,900	3.8	--	--	
12/30/1998	--	169.75	19.50	0.08	150.17	70,000	530	3,200	2,900	16,000	3,600	--	--	--	
2/2/1999	--	169.75	18.93	0.03	150.79	79,000	480	3,100	3,500	21,000	3,500	--	--	--	
5/10/1999	--	169.75	18.28	0.03	151.44	110,000	160	1,900	3,700	24,000	3,000	--	--	--	
8/24/1999	--	169.75	20.13	0.06	149.56	110,000	850	1,300	1,900	19,000	<50	--	--	--	
11/3/1999	--	169.75	22.27	0.36	147.12	65,000	6,300	1,100	3,300	9,500	8,900	--	--	--	
3/1/2000	--	169.75	14.79	0.23	154.73	--	--	--	--	--	--	--	--	--	h
4/21/2000	--	169.75	18.10	0.33	151.32	61,000	330	780	2,700	17,000	1,300	--	--	--	
7/31/2000	--	169.75	21.60	0.53	147.62	1,500,000	340	2,100	24,000	120,000	2,700	--	--	--	
11/20/2000	--	169.75	21.69	0.37	147.69	1,700,000	1,800	2,300	19,000	93,000	3,900	--	--	--	
2/18/2001	--	169.75	16.70	0.13	152.92	--	--	--	--	--	--	--	--	--	
2/26/2001	--	169.75	14.38	0.15	155.22	100,000	658	466	4,210	15,000	1,890	--	--	--	
6/7/2001	--	169.75	20.78	0	148.97	70,000	705	440	3,870	12,200	2,720	--	--	--	
9/5/2001	--	169.75	23.36	0.35	146.04	--	--	--	--	--	--	--	--	--	j
11/30/2001	--	169.75	20.85	0.41	148.49	--	--	--	--	--	--	--	--	--	k
12/6/2001	--	169.75	18.72	0.27	150.76	39,000	3,500	237	2,150	4,500	5,400	--	--	--	
2/20/2002	--	169.75	17.43	0.15	152.17	52,000	465	271	1,600	11,400	106	--	--	--	
6/20/2002	--	169.75	21.18	0.34	148.23	--	--	--	--	--	--	--	--	--	j
9/11/2002	--	169.75	22.86	0.4	146.49	--	--	--	--	--	--	--	--	--	j
11/12/2002	--	169.75	22.65	0.37	146.73	--	--	--	--	--	--	--	--	--	j
1/29/2003	--	169.75	18.15	0.3	151.30	--	--	--	--	--	--	--	--	--	j,n
5/22/2003	--	169.75	18.49	0.2	151.06	--	--	--	--	--	--	--	--	--	j

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-1 Cont.															
6/24/2003	--	169.75	21.44	0.35	147.96	--	--	--	--	--	--	--	--	--	o
7/28/2003	--	169.75	22.72	0.35	146.68	--	--	--	--	--	--	--	--	--	j
8/12/2003	--	169.75	22.64	0.23	146.88	--	--	--	--	--	--	--	--	--	o
9/12/2003	--	169.75	20.70	0.24	148.81	--	--	--	--	--	--	--	--	--	o
10/3/2003	--	169.75	--	0.23	--	--	--	--	--	--	--	--	--	--	
11/18/2003	NP	169.75	21.70	0.25	148.25	--	--	--	--	--	--	--	--	--	
12/31/2003	--	169.75	--	0.15	--	--	--	--	--	--	--	--	--	--	
2/2/2004	--	169.75	--	0.15	--	--	--	--	--	--	--	--	--	--	
02/23/2004	NP	169.75	16.34	0.09	153.48	--	--	--	--	--	--	--	--	--	
3/18/2004	--	169.75	--	0.09	--	--	--	--	--	--	--	--	--	--	
4/13/2004	--	169.75	--	0.24	--	--	--	--	--	--	--	--	--	--	
05/04/2004	NP	169.75	21.28	0.16	148.60	--	--	--	--	--	--	--	--	--	
6/2/2004	--	169.75	--	0.08	--	--	--	--	--	--	--	--	--	--	
7/2/2004	--	169.75	--	0.28	--	--	--	--	--	--	--	--	--	--	
08/04/2004	--	169.75	22.54	0.10	147.29	--	--	--	--	--	--	--	--	--	
09/22/2004	NP	169.75	22.76	0.20	147.15	--	--	--	--	--	--	--	--	--	
10/26/2004	--	169.75	--	0.12	--	--	--	--	--	--	--	--	--	--	
11/10/2004	--	169.75	20.19	0.14	149.67	--	--	--	--	--	--	--	--	--	
12/27/2004	--	169.75	--	0.08	--	--	--	--	--	--	--	--	--	--	
01/13/2005	--	169.75	14.58	0.03	155.19	--	--	--	--	--	--	--	--	--	
02/15/2005	--	169.75	16.13	0.04	153.65	--	--	--	--	--	--	--	--	--	
03/07/2005	--	169.75	13.31	0.01	156.45	--	--	--	--	--	--	--	--	--	
4/29/2005	--	169.75	--	0.01	--	--	--	--	--	--	--	--	--	--	
05/16/2005	--	169.75	15.74	0.02	154.03	--	--	--	--	--	--	--	--	--	j
6/21/2005	--	169.75	--	0.01	--	--	--	--	--	--	--	--	--	--	
7/7/2005	--	169.75	--	0.18	--	--	--	--	--	--	--	--	--	--	
08/17/2005	--	169.75	21.15	0.08	148.66	--	--	--	--	--	--	--	--	--	j
9/6/2005	--	169.75	--	0.02	--	--	--	--	--	--	--	--	--	--	
10/4/2005	--	169.75	--	0.12	--	--	--	--	--	--	--	--	--	--	
11/18/2005	--	169.75	20.15	--	149.60	--	--	--	--	--	--	--	--	--	j
12/30/2005	--	169.75	--	0.03	--	--	--	--	--	--	--	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE				
MW-1 Cont.															
1/24/2006	--	169.75	--	0.00	--	--	--	--	--	--	--	--	--	--	
02/07/2006	--	169.75	15.19	0.01	154.57	--	--	--	--	--	--	--	--	--	j
3/30/2006	--	169.75	--	0.00	--	--	--	--	--	--	--	--	--	--	
5/19/2006	P	169.75	17.42	--	152.33	44,000	73	510	3,300	5,300	86	--	SEQM	6.9	u, t
8/23/2006	--	169.75	22.01	0.14	147.74	--	--	--	--	--	--	--	--	--	b, j
11/15/2006	--	169.75	21.98	0.18	147.91	--	--	--	--	--	--	--	--	--	b, j
2/14/2007	--	169.75	17.12	0.17	152.76	--	--	--	--	--	--	--	--	--	b, j
5/22/2007	--	169.75	19.49	0.01	150.26	--	--	--	--	--	--	--	--	--	b, j
8/15/2007	--	169.75	22.24	0.01	147.52	--	--	--	--	--	--	--	--	--	b, j
11/8/2007	--	169.75	21.84	0.01	147.92	--	--	--	--	--	--	--	--	--	b, j
2/20/2008	--	169.75	16.52	0.02	153.25	--	--	--	--	--	--	--	--	--	b, j
5/7/2008	--	169.75	20.91	0.02	148.86	--	--	--	--	--	--	--	--	--	b, j
8/20/2008	--	169.75	22.77	0.02	147.00	--	--	--	--	--	--	--	--	--	b
11/17/2008	P	169.75	22.05	--	147.70	27,000	780	30	1,800	1,400	590	--	CEL	6.60	w
2/25/2009	--	169.75	15.28	0.02	154.49	--	--	--	--	--	--	--	--	--	b
4/8/2009	--	169.75	18.18	--	151.57	--	--	--	--	--	--	--	--	--	
5/28/2009	--	169.75	19.62	0.01	150.14	--	--	--	--	--	--	--	--	--	b
6/16/2009	--	169.75	20.94	0.01	148.82	--	--	--	--	--	--	--	--	--	
8/6/2009	**--**	**169.75**	**22.31**	**0.01**	**147.45**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**b, j**
MW-2															
7/9/1990	--	168.14	--	--	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--	168.14	--	--	--	--	--	--	--	--	--	--	--	--	
3/7/1991	--	168.14	19.18	--	148.96	--	--	--	--	--	--	--	--	--	
4/1/1991	--	168.14	15.21	--	152.93	--	--	--	--	--	--	--	--	--	
6/27/1991	--	168.14	--	--	--	--	--	--	--	--	--	--	--	--	
9/27/1991	--	168.14	--	--	--	--	--	--	--	--	--	--	--	--	
12/18/1991	--	168.14	--	--	--	--	--	--	--	--	--	--	--	--	
7/3/1992	--	168.14	20.93	--	147.21	--	--	--	--	--	--	--	--	--	
10/5/1992	--	168.14	22.74	--	145.40	--	--	--	--	--	--	--	--	--	
1/13/1993	--	168.14	15.55	--	152.59	--	--	--	--	--	--	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE				
MW-2 Cont.															
4/23/1993	--	168.14	16.54	--	151.60	--	--	--	--	--	--	--	--	--	
7/12/1993	--	168.14	20.46	--	147.68	--	--	--	--	--	--	--	--	--	
10/21/1993	--	168.14	24.91	--	143.23	--	--	--	--	--	--	--	--	--	
1/21/1994	--	168.14	21.20	--	146.94	--	--	--	--	--	--	--	--	--	
4/20/1994	--	168.14	22.44	--	145.70	1,800	140	370	54	290	24	1.7	--	--	i
8/1/1994	--	168.14	22.24	--	145.90	--	--	--	--	--	--	--	--	--	
12/23/1994	--	168.14	16.25	--	151.89	--	--	--	--	--	--	--	--	--	
1/26/1995	--	168.14	14.55	--	153.59	--	--	--	--	--	--	--	--	--	
6/8/1995	--	168.14	21.18	--	146.96	--	--	--	--	--	--	--	--	--	
8/22/1995	--	168.14	22.76	--	145.38	--	--	--	--	--	--	--	--	--	
10/27/1995	--	168.14	23.61	--	144.53	--	--	--	--	--	--	--	--	--	
1/25/1996	--	168.14	15.95	--	152.19	--	--	--	--	--	--	--	--	--	
4/19/1996	--	168.14	17.33	--	150.81	--	--	--	--	--	--	--	--	--	
7/23/1996	--	168.14	21.25	--	146.89	--	--	--	--	--	--	--	--	--	
11/11/1996	--	168.14	22.27	--	145.87	--	--	--	--	--	--	--	--	--	
1/21/1997	--	168.14	15.19	--	152.95	--	--	--	--	--	--	--	--	--	
4/29/1997	--	168.14	20.22	--	147.92	--	--	--	--	--	--	--	--	--	
4/30/1997	--	168.14	--	--	--	130,000	4,600	15,000	6,000	37,000	<5000	5	--	--	
8/21/1997	--	168.14	21.74	--	146.40	110,000	6,000	16,000	4,700	28,000	<500	4.6	--	--	
11/5/1997	--	168.14	21.61	--	146.53	120,000	7,800	18,000	4,900	28,100	<2500	4.6	--	--	
2/3/1998	--	168.14	11.51	--	156.63	75,000	590	1,500	1,800	12,800	<2500	4.5	--	--	
5/28/1998	--	168.14	16.51	--	151.63	79,000	3,900	3,100	3,100	18,000	900	4.3	--	--	
12/30/1998	--	168.14	17.70	--	150.44	95,000	4,700	3,500	3,700	21,000	<250	--	--	--	
2/2/1999	--	168.14	15.46	--	152.68	170,000	3,500	1,500	5,200	34,000	<500	--	--	--	
5/10/1999	--	168.14	16.52	--	151.62	84,000	3,200	3,200	3,700	20,000	75	--	--	--	
8/24/1999	--	168.14	20.73	--	147.41	130,000	9,100	9,200	4,700	27,000	<250	--	--	--	
11/3/1999	--	168.14	20.93	--	147.21	120,000	10,000	21,000	4,700	30,200	2,200	--	--	--	
3/1/2000	--	168.14	13.37	--	154.77	39,000	1,400	1,500	1,700	8,100	44	--	--	--	
4/21/2000	--	168.14	16.59	--	151.55	68,000	3,300	2,500	3,100	20,000	260	--	--	--	
7/31/2000	--	168.14	16.37	--	151.77	99,000	5,600	1,400	4,300	22,000	490	--	--	--	
11/20/2000	--	168.14	19.71	--	148.43	37,000	5,100	1,500	1,300	4,800	2,800	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-2 Cont.															
2/18/2001	--	168.14	15.29	--	152.85	54,000	5,020	3,880	2,850	15,400	1,010	--	--	--	
6/7/2001	--	168.14	19.43	--	148.71	110,000	7,240	4,380	4,160	22,100	567	--	--	--	
9/5/2001	--	168.14	22.44	--	145.70	69,000	5,750	5,790	2,770	14,200	1,510	--	--	--	
11/30/2001	--	168.14	19.58	--	148.56	120,000	7,270	6,540	4,590	23,000	794	--	--	--	
2/20/2002	--	168.14	16.39	--	151.75	56,000	2,410	2,270	2,910	14,300	160	--	--	--	
6/20/2002	--	168.14	19.77	--	148.37	86,000	7,310	6,490	3,080	14,600	659	--	--	--	
9/11/2002	--	168.14	21.60	--	146.54	130,000	7,600	13,000	5,400	30,000	<5000	--	--	--	
11/12/2002	--	168.14	21.34	--	146.80	46,000	4,100	4,300	1,900	10,000	1,900	--	--	--	t
1/29/2003	--	168.14	16.80	--	151.34	77,000	4,700	2,600	2,800	13,000	820	--	--	--	n,t
5/22/2003	--	168.14	17.15	--	150.99	52,000	6,400	2,600	1,800	7,400	1,000	--	--	--	t
7/28/2003	--	168.14	21.47	--	146.67	31,000	6,900	5,500	2,200	12,000	1,700	--	--	--	p
11/18/2003	P	168.14	20.50	--	147.64	23,000	3,300	800	500	2,000	500	--	SEQM	6.6	
02/23/2004	P	168.14	14.77	--	153.37	84,000	14,000	6,200	3,100	14,000	790	--	SEQM	6.6	t
05/04/2004	P	168.14	20.09	--	148.05	120,000	15,000	17,000	4,900	24,000	780	--	SEQM	6.6	t
08/04/2004	P	168.14	21.39	--	146.75	38,000	9,100	3,300	1,900	5,800	430	--	SEQM	6.69	t
11/10/2004	P	168.14	18.98	--	149.16	22,000	4,400	2,000	940	3,600	310	--	SEQM	7.5	
02/15/2005	P	168.14	15.62	--	152.52	67,000	11,000	4,200	3,000	11,000	690	--	SEQM	7.1	t
05/16/2005	P	168.14	14.71	--	153.43	94,000	11,000	7,600	4,100	17,000	560	--	SEQM	6.5	
08/17/2005	P	168.14	20.00	--	148.14	110,000	13,000	8,000	4,300	18,000	480	--	SEQM	6.6	
11/18/2005	P	168.14	20.89	--	147.25	37,000	11,000	2,400	1,500	4,600	340	--	SEQM	6.6	
02/07/2006	P	168.14	13.31	--	154.83	74,000	8,900	5,800	3,600	14,000	440	--	SEQM	6.7	
5/19/2006	P	168.14	16.30	--	151.84	78,000	11,000	3,700	4,500	14,000	430	--	SEQM	6.6	t
8/23/2006	P	168.14	20.83	--	147.31	100,000	12,000	9,100	5,800	25,000	480	--	TAMC	6.6	
11/15/2006	--	168.14	20.80	--	147.34	46,000	8,800	3,600	2,300	8,500	400	0.70	TAMC	6.73	
2/14/2007	P	168.14	15.96	SHEEN	152.18	100,000	13,000	3,600	6,200	26,000	810	1.43	TAMC	6.97	t
5/22/2007	P	168.14	18.20	--	149.94	91,000	15,000	8,700	4,700	20,000	1,000	0.08	TAMC	6.90	
8/15/2007	P	168.14	21.23	SHEEN	146.91	14,000	7,300	130	280	600	260	4.24	TAMC	6.78	
11/8/2007	P	168.14	20.32	--	147.82	22,000	7,400	420	640	1,700	240	1.21	TAMC	7.03	
2/20/2008	--	168.14	15.20	0.06	152.99	--	--	--	--	--	--	--	--	--	b, j
5/7/2008	--	168.14	19.80	0.04	148.37	--	--	--	--	--	--	--	--	--	b, j
8/20/2008	--	168.14	21.70	0.01	146.45	--	--	--	--	--	--	--	--	--	b

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE				
MW-2 Cont.															
11/17/2008	P	168.14	20.73	--	147.41	45,000	8,400	700	1,500	5,600	320	--	CEL	6.46	t, w
2/25/2009	P	168.14	14.15	--	153.99	18,000	5,200	<250	380	1,400	<250	2.11	CEL	6.50	
4/8/2009	--	168.14	17.00	--	151.14	--	--	--	--	--	--	--	--	--	
5/28/2009	P	168.14	18.43	SHEEN	149.71	37,000	5,300	1,600	1,400	5,600	510	0.16	CEL	6.59	t, x
6/16/2009	--	168.14	19.80	0.01	148.35	--	--	--	--	--	--	--	--	--	
8/6/2009	--	**168.14**	**21.17**	**0.01**	**146.98**	--	--	--	--	--	--	--	--	--	**b, j**
MW-3															
7/9/1990	--	167.17	--	--	--	140	5.3	4.6	2	3.8	--	--	--	--	
12/21/1990	--	167.17	--	--	--	0.19	100	6	0.9	27	--	--	--	--	
3/7/1991	--	167.17	17.40	--	149.77	0.4	69	22	6.1	57	--	--	--	--	
4/1/1991	--	167.17	13.69	--	153.48	--	--	--	--	--	--	--	--	--	
6/27/1991	--	167.17	--	--	--	380	28	26	13	46	--	--	--	--	
9/27/1991	--	167.17	--	--	--	0.07	7.9	--	0.4	1.1	--	--	--	--	
12/18/1991	--	167.17	--	--	--	0.26	34	24	0.8	28	--	--	--	--	
7/3/1992	--	167.17	19.59	--	147.58	71	9.4	0.9	5	13	--	--	--	--	
10/5/1992	--	167.17	--	--	--	<50	2.2	<0.5	1.5	2.8	--	--	--	--	c
10/5/1992	--	167.17	21.22	--	145.95	67	5.1	1.1	6.1	8.1	--	--	--	--	
1/13/1993	--	167.17	13.63	--	153.54	830	50	34	42	89	--	--	--	--	i
4/23/1993	--	167.17	15.02	--	152.15	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	i
4/23/1993	--	167.17	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	c,i
7/12/1993	--	167.17	19.16	--	148.01	250	12	4.2	12	16	<5.0	--	--	--	i
10/21/1993	--	167.17	--	--	--	65	7.4	1	6.9	4.2	--	--	--	--	c
10/21/1993	--	167.17	21.81	--	145.36	52	4.4	1.4	4.7	3.3	<5.0	--	--	--	i
1/21/1994	--	167.17	19.94	--	147.23	57	3	3.4	3.6	9	<5.0	--	--	--	i
4/20/1994	--	167.17	20.24	--	146.93	600	26	23	33	88	28.7	1.8	--	--	i
8/1/1994	--	167.17	20.74	--	146.43	99	6.2	1.1	4.5	5.2	<5.0	1.4	--	--	i
8/1/1994	--	167.17	--	--	--	120	7.7	1.6	5.9	6.7	5.43	--	--	--	c,i
12/23/1994	--	167.17	14.70	--	152.47	<50	<0.5	0.78	<0.5	<0.5	9.8	1.7	--	--	i
12/23/1994	--	167.17	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	c
1/26/1995	--	167.17	12.89	--	154.28	190	16	0.5	35	24	--	6.6	--	--	d

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-3 Cont.															
6/8/1995	--	167.17	19.95	--	147.22	330	21	4	34	32	--	7	--	--	
8/22/1995	--	167.17	21.41	--	145.76	150	14	<0.50	<0.50	1.6	<5.0	6.6	--	--	d
10/27/1995	--	167.17	22.43	--	144.74	--	--	--	--	--	--	--	--	--	
10/30/1995	--	167.17	--	--	--	51	2.4	<0.50	<0.50	<1.0	<5.0	6.9	--	--	
1/25/1996	--	167.17	14.03	--	153.14	<50	<0.50	<0.50	<0.50	<1.0	5.1	--	--	--	
4/19/1996	--	167.17	15.26	--	151.91	460	55	4	33	63	<10	9.4	--	--	
7/23/1996	--	167.17	19.19	--	147.98	<50	<0.5	<0.5	<0.5	<0.5	<10	9.2	--	--	
11/11/1996	--	167.17	20.24	--	146.93	<250	<2.5	<5.0	<5.0	<5.0	<50	8.4	--	--	
1/21/1997	--	167.17	13.09	--	154.08	<50	<0.5	<1.0	<1.0	<1.0	<10	5.4	--	--	
4/29/1997	--	167.17	18.14	--	149.03	<50	<0.5	<1.0	<1.0	<1.0	<10	4.3	--	--	
8/21/1997	--	167.17	19.64	--	147.53	<50	<0.5	<1.0	<1.0	<1.0	<10	4.9	--	--	
11/5/1997	--	167.17	19.95	--	147.22	<250	<2.5	<5.0	<5.0	<5.0	<50	4.5	--	--	
2/3/1998	--	167.17	10.57	--	156.60	<50	<0.50	<1.0	<1.0	<1.0	<10	4.7	--	--	
5/28/1998	--	167.17	14.65	--	152.52	330	<2.5	<5.0	<5.0	<5.0	<50	4.2	--	--	
12/30/1998	--	167.17	16.63	--	150.54	--	--	--	--	--	--	--	--	--	
2/2/1999	--	167.17	13.12	--	154.05	<250	<5.0	<5.0	<5.0	<5.0	<5.0	--	--	--	
5/10/1999	--	167.17	14.21	--	152.96	--	--	--	--	--	--	--	--	--	
8/24/1999	--	167.17	14.36	--	152.81	--	--	--	--	--	--	--	--	--	
11/3/1999	--	167.17	19.21	--	147.96	--	--	--	--	--	--	--	--	--	
3/1/2000	--	167.17	15.17	--	152.00	<50	<0.5	0.57	<0.5	0.62	<0.5	--	--	--	
4/21/2000	--	167.17	14.88	--	152.29	--	--	--	--	--	--	--	--	--	
7/31/2000	--	167.17	15.29	--	151.88	--	--	--	--	--	--	--	--	--	
11/20/2000	--	167.17	17.31	--	149.86	--	--	--	--	--	--	--	--	--	
2/18/2001	--	167.17	12.85	--	154.32	160	1.95	1.31	10.2	9.09	1	--	--	--	
6/7/2001	--	167.17	18.00	--	149.17	--	--	--	--	--	--	--	--	--	
9/5/2001	--	167.17	20.32	--	146.85	--	--	--	--	--	--	--	--	--	
11/30/2001	--	167.17	16.94	--	150.23	--	--	--	--	--	--	--	--	--	
2/20/2002	--	167.17	14.84	--	152.33	86	<0.5	0.845	6.58	5.75	<0.5	--	--	--	
6/20/2002	--	167.17	18.40	--	148.77	--	--	--	--	--	--	--	--	--	
9/11/2002	--	167.17	20.06	--	147.11	--	--	--	--	--	--	--	--	--	
11/12/2002	--	167.17	19.84	--	147.33	--	--	--	--	--	--	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-3 Cont.															
1/27/2003	--	167.17	14.83	--	152.34	850	20	9.7	24	45	0.76	--	--	--	n
5/22/2003	--	167.17	15.60	--	151.57	--	--	--	--	--	--	--	--	--	
7/28/2003	--	167.17	20.12	--	147.05	--	--	--	--	--	--	--	--	--	p
11/18/2003	--	167.17	19.15	--	148.02	--	--	--	--	--	--	--	--	--	
02/23/2004	--	167.17	13.53	--	153.64	160	<0.50	1.1	9.6	12	<0.50	--	SEQM	6.7	
05/04/2004	--	167.17	18.61	--	148.56	--	--	--	--	--	--	--	--	--	
08/04/2004	--	167.17	19.21	--	147.96	--	--	--	--	--	--	--	--	--	
11/10/2004	--	167.17	17.48	--	149.69	--	--	--	--	--	--	--	--	--	
02/15/2005	P	167.17	14.31	--	152.86	500	7.8	1.8	9.2	9.6	1.7	--	SEQM	7.5	
05/16/2005	--	167.17	13.11	--	154.06	--	--	--	--	--	--	--	--	--	
08/17/2005	--	167.17	18.53	--	148.64	--	--	--	--	--	--	--	--	--	
11/18/2005	--	167.17	19.34	--	147.83	--	--	--	--	--	--	--	--	--	
02/07/2006	P	167.17	11.64	--	155.53	65	<0.50	<0.50	1.4	2.3	<0.50	--	SEQM	7.1	
5/19/2006	--	167.17	14.88	--	152.29	--	--	--	--	--	--	--	--	--	
8/23/2006	--	167.17	19.43	--	147.74	--	--	--	--	--	--	--	--	--	
11/15/2006	--	167.17	19.22	--	147.95	--	--	--	--	--	--	--	--	--	
2/14/2007	P	167.17	13.80	--	153.37	200	1.1	<0.50	5.9	3.2	3.8	0.68	TAMC	7.52	
5/22/2007	--	167.17	16.80	--	150.37	--	--	--	--	--	--	--	--	--	
8/15/2007	--	167.17	19.87	--	147.30	--	--	--	--	--	--	--	--	--	
11/8/2007	--	167.17	19.27	--	147.90	--	--	--	--	--	--	--	--	--	
2/20/2008	P	167.17	13.58	--	153.59	240	1.1	<0.50	0.99	0.79	2.3	2.58	CEL	7.06	
5/7/2008	--	167.17	18.32	--	148.85	--	--	--	--	--	--	--	--	--	
8/20/2008	--	167.17	20.29	--	146.88	--	--	--	--	--	--	--	--	--	
11/17/2008	--	167.17	19.35	--	147.82	--	--	--	--	--	--	--	--	--	
2/25/2009	P	167.17	11.77	--	155.40	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.45	CEL	7.09	
5/28/2009	--	167.17	17.02	--	150.15	--	--	--	--	--	--	--	--	--	
8/6/2009	--	**167.17**	**19.87**	--	**147.30**	--	--	--	--	--	--	--	--	--	
MW-4															
7/9/1990	--	170.36	--	--	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--	170.36	--	--	--	--	--	--	--	0.8	--	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE				
MW-4 Cont.															
3/7/1991	--	170.36	20.72	--	149.64	--	2.2	3.8	1.5	2.8	--	--	--	--	
4/1/1991	--	170.36	17.49	--	152.87	--	--	--	--	--	--	--	--	--	
6/27/1991	--	170.36	--	--	--	--	6.3	1.8	0.4	1	--	--	--	--	
9/27/1991	--	170.36	--	--	--	--	--	--	--	--	--	--	--	--	
12/18/1991	--	170.36	--	--	--	--	--	--	--	--	--	--	--	--	
7/3/1992	--	170.36	22.16	--	148.20	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
10/5/1992	--	170.36	23.38	--	146.98	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
1/13/1993	--	170.36	17.58	--	152.78	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	i
4/23/1993	--	170.36	15.72	--	154.64	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	i
7/12/1993	--	170.36	21.74	--	148.62	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	i
10/21/1993	--	170.36	23.84	--	146.52	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	i
1/21/1994	--	170.36	22.42	--	147.94	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	i
4/20/1994	--	170.36	22.66	--	147.70	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.2	--	--	i
8/1/1994	--	170.36	23.01	--	147.35	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.9	--	--	i
12/23/1994	--	170.36	17.03	--	153.33	--	--	--	--	--	--	--	--	--	
1/26/1995	--	170.36	17.42	--	152.94	<50	<0.5	<0.5	<0.5	<1	--	7.5	--	--	
6/8/1995	--	170.36	21.55	--	148.81	--	--	--	--	--	--	--	--	--	
8/22/1995	--	170.36	23.47	--	146.89	<50	<0.50	<0.50	<0.50	<1.0	<5.0	6.4	--	--	d
10/27/1995	--	170.36	24.50	--	145.86	--	--	--	--	--	--	--	--	--	
1/25/1996	--	170.36	18.74	--	151.62	<50	<0.50	<0.50	<0.50	<1.0	58	--	--	--	
4/19/1996	--	170.36	18.63	--	151.73	--	--	--	--	--	--	--	--	--	
7/23/1996	--	170.36	22.56	--	147.80	--	--	--	--	--	--	--	--	--	
11/11/1996	--	170.36	23.63	--	146.73	<50	<1.0	<1.0	<1.0	<1.0	34	8.2	--	--	
1/21/1997	--	170.36	16.59	--	153.77	--	--	--	--	--	--	--	--	--	
4/29/1997	--	170.36	21.43	--	148.93	<50	<0.5	<1.0	<1.0	<1.0	<10	4.7	--	--	
8/21/1997	--	170.36	22.91	--	147.45	--	--	--	--	--	--	--	--	--	
11/5/1997	--	170.36	22.34	--	148.02	60	<0.5	<1.0	<1.0	<1.0	76	4.9	--	--	
2/3/1998	--	170.36	12.26	--	158.10	--	--	--	--	--	--	--	--	--	
5/28/1998	--	170.36	18.50	--	151.86	70	<0.5	<1.0	<1.0	<1.0	160	4.2	--	--	
12/30/1998	--	170.36	19.69	--	150.67	--	--	--	--	--	--	--	--	--	
2/2/1999	--	170.36	18.26	--	152.10	70	<1.0	<1.0	<1.0	<1.0	130	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE				
MW-4 Cont.															
5/10/1999	--	170.36	17.86	--	152.50	--	--	--	--	--	--	--	--	--	
8/24/1999	--	170.36	17.93	--	152.43	--	--	--	--	--	--	--	--	--	
11/3/1999	--	170.36	22.78	--	147.58	--	--	--	--	--	--	--	--	--	
3/1/2000	--	170.36	18.04	--	152.32	<50	<0.5	0.67	<0.5	0.7	110	--	--	--	
4/21/2000	--	170.36	17.36	--	153.00	--	--	--	--	--	--	--	--	--	
7/31/2000	--	170.36	17.83	--	152.53	--	--	--	--	--	--	--	--	--	
11/20/2000	--	170.36	18.91	--	151.45	--	--	--	--	--	--	--	--	--	
2/18/2001	--	170.36	17.72	--	152.64	88	<0.5	<0.5	<0.5	<0.5	97.3	--	--	--	
6/7/2001	--	170.36	20.23	--	150.13	--	--	--	--	--	--	--	--	--	
9/5/2001	--	170.36	22.76	--	147.60	--	--	--	--	--	--	--	--	--	
11/30/2001	--	170.36	21.30	--	149.06	--	--	--	--	--	--	--	--	--	
2/20/2002	--	170.36	19.32	--	151.04	76	<0.5	<0.5	<0.5	<1.0	81	--	--	--	
6/20/2002	--	170.36	20.71	--	149.65	--	--	--	--	--	--	--	--	--	
9/11/2002	--	170.36	22.22	--	148.14	--	--	--	--	--	--	--	--	--	
11/12/2002	--	170.36	22.22	--	148.14	--	--	--	--	--	--	--	--	--	
1/29/2003	--	170.36	19.80	--	150.56	100	<0.5	<0.5	<0.5	<0.5	66	--	--	--	n
5/22/2003	--	170.36	19.35	--	151.01	--	--	--	--	--	--	--	--	--	
7/28/2003	--	170.36	22.18	--	148.18	--	--	--	--	--	--	--	--	--	p
11/18/2003	--	170.36	21.65	--	148.71	--	--	--	--	--	--	--	--	--	
02/23/2004	P	170.36	17.53	--	152.83	75	<0.50	<0.50	<0.50	<0.50	65	--	SEQM	6.8	
05/04/2004	--	170.36	20.62	--	149.74	--	--	--	--	--	--	--	--	--	
08/04/2004	--	170.36	21.30	--	149.06	--	--	--	--	--	--	--	--	--	
11/10/2004	--	170.36	20.65	--	149.71	--	--	--	--	--	--	--	--	--	
02/15/2005	P	170.36	18.91	--	151.45	<50	<0.50	<0.50	<0.50	<0.50	62	--	SEQM	7.6	
05/16/2005	--	170.36	17.34	--	153.02	--	--	--	--	--	--	--	--	--	
08/17/2005	--	170.36	21.31	--	149.05	--	--	--	--	--	--	--	--	--	
11/18/2005	--	170.36	21.67	--	148.69	--	--	--	--	--	--	--	--	--	
02/07/2006	P	170.36	16.74	--	153.62	100	<0.50	<0.50	1.0	3.0	29	--	SEQM	6.8	
5/19/2006	--	170.36	18.22	--	152.14	--	--	--	--	--	--	--	--	--	
8/23/2006	--	170.36	20.95	--	149.41	--	--	--	--	--	--	--	--	--	
11/15/2006	--	170.36	22.21	--	148.15	--	--	--	--	--	--	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-4 Cont.															
2/14/2007	P	170.36	18.25	--	152.11	<50	<0.50	<0.50	<0.50	<0.50	61	0.95	TAMC	7.34	
5/22/2007	--	170.36	20.16	--	150.20	--	--	--	--	--	--	--	--	--	
8/15/2007	--	170.36	22.34	--	148.02	--	--	--	--	--	--	--	--	--	
11/8/2007	--	170.36	21.86	--	148.50	--	--	--	--	--	--	--	--	--	
2/20/2008	P	170.36	17.74	--	152.62	<50	<0.50	<0.50	<0.50	<0.50	36	2.13	CEL	6.93	
5/7/2008	--	170.36	21.38	--	148.98	--	--	--	--	--	--	--	--	--	
8/20/2008	--	170.36	22.44	--	147.92	--	--	--	--	--	--	--	--	--	
11/17/2008	--	170.36	22.20	--	148.16	--	--	--	--	--	--	--	--	--	
2/25/2009	P	170.36	16.81	--	153.55	<50	<0.50	<0.50	<0.50	<0.50	26	2.80	CEL	6.83	
5/28/2009	--	170.36	20.37	--	149.99	--	--	--	--	--	--	--	--	--	
8/6/2009	--	**170.36**	**22.46**	--	**147.90**	--	--	--	--	--	--	--	--	--	
MW-5															
7/9/1990	--	165.14	--	--	--	280	200	210	46	290	--	--	--	--	
12/21/1990	--	165.14	--	--	--	0.69	300	34	8.4	39	--	--	--	--	
3/7/1991	--	165.14	16.60	--	148.54	--	17	0.9	0.7	1.6	--	--	--	--	
4/1/1991	--	165.14	11.99	--	153.15	800	250	54	11	60	--	--	--	--	
6/27/1991	--	165.14	--	--	--	330	120	10	12	8	--	--	--	--	
9/27/1991	--	165.14	--	--	--	0.73	230	16	20	22	--	--	--	--	
12/18/1991	--	165.14	--	--	--	--	--	--	--	--	--	--	--	--	
7/3/1992	--	165.14	18.65	--	146.49	150	36	<0.5	<0.5	1.1	--	--	--	--	
10/5/1992	--	165.14	20.32	--	144.82	270	79	4	1.7	2.9	--	--	--	--	
1/13/1993	--	165.14	13.03	--	152.11	180	59	6	1.8	7.6	--	--	--	--	i
4/23/1993	--	165.14	13.51	--	151.63	8,700	440	96	35	136	--	--	--	--	i
7/12/1993	--	165.14	18.06	--	147.08	250	57	2.9	2.1	6	<5.0	--	--	--	i
10/21/1993	--	165.14	20.41	--	144.73	210	82	1.5	<0.5	1.4	--	--	--	--	i
1/21/1994	--	165.14	18.86	--	146.28	110	36	1.2	<0.5	0.7	<5.0	--	--	--	i
4/20/1994	--	165.14	17.30	--	147.84	690	230	4.5	1.6	11	21.2	1.3	--	--	i
8/1/1994	--	165.14	17.53	--	147.61	170	44	1.6	0.9	2.7	<5.0	0.9	--	--	i
12/23/1994	--	165.14	11.63	--	153.51	630	180	1.9	0.66	1.9	7.81	1.4	--	--	i
1/26/1995	--	165.14	11.25	--	153.89	160	68	<0.5	<0.5	22	--	5.9	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-5 Cont.															
6/8/1995	--	165.14	--	--	--	1,700	560	51	55	170	--	--	--	--	c
6/8/1995	--	165.14	16.80	--	148.34	2,000	630	58	61	180	--	6.5	--	--	
8/22/1995	--	165.14	19.02	--	146.12	3,700	1,100	18	27	59	<130	7.3	--	--	d
10/27/1995	--	165.14	20.94	--	144.20	--	--	--	--	--	--	--	--	--	
10/30/1995	--	165.14	--	--	--	6,500	2,200	55	180	270	<250	7.5	--	--	
1/25/1996	--	165.14	--	--	--	540	37	0.66	<0.50	<1.0	<5.0	--	--	--	c
1/25/1996	--	165.14	13.30	--	151.84	590	37	0.7	<0.50	<1.0	<5.0	--	--	--	
4/19/1996	--	165.14	13.63	--	151.51	1,500	470	38	49	210	<50	8.1	--	--	
7/23/1996	--	165.14	17.61	--	147.53	140	4.6	<0.5	<0.5	<0.5	<10	8	--	--	
11/11/1996	--	165.14	18.70	--	146.44	140	40	<1.0	<1.0	<1.0	<10	7.9	--	--	
1/21/1997	--	165.14	11.63	--	153.51	730	300	<5.0	7.8	26	<50	5	--	--	
4/29/1997	--	165.14	16.74	--	148.40	340	530	<5.0	<5.0	<5.0	<50	4.8	--	--	
8/21/1997	--	165.14	18.26	--	146.88	<50	<0.5	<1.0	<1.0	<1.0	<10	4.9	--	--	
11/5/1997	--	165.14	18.84	--	146.30	120	13	<1.0	<1.0	<1.0	<10	4.4	--	--	
2/3/1998	--	165.14	9.49	--	155.65	<50	<0.50	<1.0	<1.0	<1.0	<10	4.3	--	--	
5/28/1998	--	165.14	13.57	--	151.57	4,900	1,500	34	180	311	<10	4.1	--	--	
12/30/1998	--	165.14	14.65	--	150.49	--	--	--	--	--	--	--	--	--	
2/2/1999	--	165.14	12.56	--	152.58	100	<1.0	<1.0	<1.0	<1.0	9.1	--	--	--	
5/10/1999	--	165.14	13.36	--	151.78	--	--	--	--	--	--	--	--	--	
8/24/1999	--	165.14	13.50	--	151.64	--	--	--	--	--	--	--	--	--	
11/3/1999	--	165.14	18.48	--	146.66	--	--	--	--	--	--	--	--	--	
3/1/2000	--	165.14	9.59	--	155.55	<50	<0.5	0.58	<0.5	0.54	2.9	--	--	--	
4/21/2000	--	165.14	13.52	--	151.62	--	--	--	--	--	--	--	--	--	
7/31/2000	--	165.14	14.04	--	151.10	--	--	--	--	--	--	--	--	--	
11/20/2000	--	165.14	15.89	--	149.25	--	--	--	--	--	--	--	--	--	
2/18/2001	--	165.14	11.88	--	153.26	560	161	2.38	6.11	13	5.67	--	--	--	
6/7/2001	--	165.14	15.30	--	149.84	--	--	--	--	--	--	--	--	--	
9/5/2001	--	165.14	19.32	--	145.82	--	--	--	--	--	--	--	--	--	
11/30/2001	--	165.14	17.44	--	147.70	--	--	--	--	--	--	--	--	--	
2/20/2002	--	165.14	13.88	--	151.26	4,200	940	18.7	98.2	176	55.6	--	--	--	
6/20/2002	--	165.14	16.20	--	148.94	--	--	--	--	--	--	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-5 Cont.															
9/11/2002	--	165.14	19.15	--	145.99	--	--	--	--	--	--	--	--	--	
11/12/2002	--	165.14	19.01	--	146.13	390	55	0.89	3.4	3.5	210	--	--	--	
1/29/2003	--	165.14	16.33	--	148.81	7,900	1,400	34	220	350	82	--	--	--	n
5/22/2003	--	165.14	14.35	--	150.79	9,900	2,300	91	400	690	<50	--	--	--	
7/28/2003	--	165.14	18.90	--	146.24	3,200	690	14	81	100	120	--	--	--	p
11/18/2003	--	165.14	--	--	--	--	--	--	--	--	--	--	--	--	Well inaccessible e, q
02/23/2004	P	165.14	12.21	--	152.93	7,500	1,500	100	190	350	100	--	SEQM	6.7	
05/04/2004	P	165.14	17.12	--	148.02	5,900	1,500	57	200	280	42	--	SEQM	6.6	
08/04/2004	P	165.14	19.05	--	146.09	<2,500	<25	<25	<25	<25	390	--	SEQM	6.69	
11/10/2004	P	165.14	16.95	--	148.19	870	80	<5.0	<5.0	<5.0	530	--	SEQM	7.5	
02/15/2005	P	165.14	12.75	--	152.39	1,600	330	8.0	37	67	260	--	SEQM	7.2	
05/16/2005	P	165.14	15.46	--	149.68	<500	<5.0	<5.0	<5.0	<5.0	370	--	SEQM	6.7	
08/17/2005	P	165.14	17.00	--	148.14	7,000	1,000	17	110	130	51	--	SEQM	6.6	
11/18/2005	P	165.14	18.33	--	146.81	1,900	91	<5.0	33	29	340	--	SEQM	7.3	
02/07/2006	P	165.14	10.27	--	154.87	2,100	590	9.6	86	110	200	--	SEQM	6.7	
5/19/2006	P	165.14	13.08	--	152.06	3,200	720	9.7	150	170	44	--	SEQM	6.8	
8/23/2006	P	165.14	17.02	--	148.12	1,400	69	<5.0	20	24	230	--	TAMC	7.11	
11/15/2006	P	165.14	18.30	--	146.84	1,100	24	<2.5	10	8.6	490	0.85	TAMC	6.82	
2/14/2007	P	165.14	13.16	--	151.98	680	110	<2.5	16	11	420	2.54	TAMC	7.24	
5/22/2007	P	165.14	15.42	--	149.72	2,800	660	8.8	74	100	26	1.41	TAMC	7.03	
8/15/2007	P	165.14	18.80	--	146.34	2,800	50	<10	26	29	280	3.81	TAMC	7.14	
11/8/2007	P	165.14	18.55	SHEEN	146.59	3,800	77	<2.5	46	35	270	1.08	TAMC	7.23	t
2/20/2008	P	165.14	12.21	--	152.93	2,500	530	<5.0	75	62	43	2.01	CEL	6.84	
5/7/2008	P	165.14	16.91	--	148.23	6,700	1,800	29	270	360	30	2.45	CEL	6.87	t
8/20/2008	P	165.14	19.45	--	145.69	300	22	<2.0	8.5	5.3	260	5.57	CEL	6.86	
11/17/2008	--	165.14	--	--	--	--	--	--	--	--	--	--	--	--	e
2/25/2009	P	165.14	11.12	--	154.02	140	6.4	<0.50	2.4	3.1	68	4.38	CEL	6.65	
5/28/2009	P	165.14	15.70	--	149.44	3,800	790	9.5	140	110	11	0.04	CEL	6.82	x
8/6/2009	**P**	**165.14**	**18.84**	**SHEEN**	**146.30**	**78**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**190**	**0.06**	**CEL**	**7.27**	**x**
MW-6															

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-6 Cont.															
7/9/1990	--	165.40	--	--	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--	165.40	--	--	--	0.17	2.6	7	4.9	26	--	--	--	--	
3/7/1991	--	165.40	--	--	--	--	--	--	--	--	--	--	--	--	e
4/1/1991	--	165.40	11.79	--	153.61	--	--	--	--	--	--	--	--	--	
6/27/1991	--	165.40	--	--	--	--	--	--	--	--	--	--	--	--	e
9/27/1991	--	165.40	--	--	--	--	--	--	--	--	--	--	--	--	e
12/18/1991	--	165.40	--	--	--	--	1.3	22	--	2.7	--	--	--	--	
7/3/1992	--	165.40	17.77	--	147.63	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
10/5/1992	--	165.40	19.46	--	145.94	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
1/13/1993	--	165.40	11.34	--	154.06	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	i
4/23/1993	--	165.40	12.92	--	152.48	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	i
7/12/1993	--	165.40	17.36	--	148.04	<50	<0.5	<0.5	<0.5	0.7	<5.0	--	--	--	i
10/21/1993	--	165.40	19.98	--	145.42	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	i
1/21/1994	--	165.40	18.10	--	147.30	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	i
4/20/1994	--	165.40	18.68	--	146.72	<50	<0.5	<0.5	<0.5	<0.5	17.4	2	--	--	i
8/1/1994	--	165.40	18.90	--	146.50	<50	<0.5	<0.5	<0.5	<0.5	8.66	1.5	--	--	i
12/23/1994	--	165.40	12.94	--	152.46	--	--	--	--	--	--	--	--	--	
1/26/1995	--	165.40	10.46	--	154.94	<50	<0.5	<0.5	<0.5	<1	--	7.3	--	--	
6/8/1995	--	165.40	16.84	--	148.56	--	--	--	--	--	--	--	--	--	
8/22/1995	--	165.40	19.48	--	145.92	<50	<0.50	<0.50	<0.50	<1.0	<5.0	6.7	--	--	d
10/27/1995	--	165.40	20.39	--	145.01	--	--	--	--	--	--	--	--	--	
1/25/1996	--	165.40	12.24	--	153.16	<50	<0.50	<0.50	<0.50	<1.0	9.9	--	--	--	
4/19/1996	--	165.40	13.90	--	151.50	--	--	--	--	--	--	--	--	--	
7/23/1996	--	165.40	17.83	--	147.57	--	--	--	--	--	--	--	--	--	
11/11/1996	--	165.40	18.90	--	146.50	<50	<0.5	<1.0	<1.0	<1.0	<10	7.7	--	--	
1/21/1997	--	165.40	11.97	--	153.43	--	--	--	--	--	--	--	--	--	
4/29/1997	--	165.40	17.04	--	148.36	<50	<0.5	<1.0	<1.0	<1.0	<10	4.5	--	--	
8/21/1997	--	165.40	18.58	--	146.82	--	--	--	--	--	--	--	--	--	
11/5/1997	--	165.40	19.17	--	146.23	70	<0.5	<1.0	<1.0	<1.0	85	4.3	--	--	
2/3/1998	--	165.40	9.87	--	155.53	--	--	--	--	--	--	--	--	--	
5/28/1998	--	165.40	13.38	--	152.02	<50	<0.5	<1.0	<1.0	<1.0	<10	3.7	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE				
MW-6 Cont.															
12/30/1998	--	165.40	14.45	--	150.95	--	--	--	--	--	--	--	--	--	
2/2/1999	--	165.40	18.29	--	147.11	--	--	--	--	--	--	--	--	--	
5/10/1999	--	165.40	17.49	--	147.91	--	--	--	--	--	--	--	--	--	
8/24/1999	--	165.40	17.61	--	147.79	--	--	--	--	--	--	--	--	--	
11/3/1999	--	165.40	16.26	--	149.14	--	--	--	--	--	--	--	--	--	
3/1/2000	--	165.40	17.43	--	147.97	--	--	--	--	--	--	--	--	--	
4/21/2000	--	165.40	13.32	--	152.08	--	--	--	--	--	--	--	--	--	
7/31/2000	--	165.40	13.46	--	151.94	--	--	--	--	--	--	--	--	--	
11/20/2000	--	165.40	14.78	--	150.62	--	--	--	--	--	--	--	--	--	
2/18/2001	--	165.40	11.33	--	154.07	--	--	--	--	--	--	--	--	--	
6/7/2001	--	165.40	16.36	--	149.04	--	--	--	--	--	--	--	--	--	
9/5/2001	--	165.40	18.61	--	146.79	--	--	--	--	--	--	--	--	--	
11/30/2001	--	165.40	15.20	--	150.20	--	--	--	--	--	--	--	--	--	
2/20/2002	--	165.40	12.74	--	152.66	--	--	--	--	--	--	--	--	--	
6/20/2002	--	165.40	16.68	--	148.72	--	--	--	--	--	--	--	--	--	
9/11/2002	--	165.40	18.38	--	147.02	--	--	--	--	--	--	--	--	--	
11/12/2002	--	165.40	18.78	--	146.62	--	--	--	--	--	--	--	--	--	
1/29/2003	--	165.40	14.45	--	150.95	--	--	--	--	--	--	--	--	--	n
5/22/2003	--	165.40	14.36	--	151.04	--	--	--	--	--	--	--	--	--	
7/28/2003	--	165.40	18.43	--	146.97	--	--	--	--	--	--	--	--	--	p
11/18/2003	--	165.40	17.48	--	147.92	--	--	--	--	--	--	--	--	--	
02/23/2004	--	165.40	11.54	--	153.86	--	--	--	--	--	--	--	--	--	
05/04/2004	--	165.40	16.58	--	148.82	--	--	--	--	--	--	--	--	--	
08/04/2004	--	165.40	18.12	--	147.28	--	--	--	--	--	--	--	--	--	
11/10/2004	--	165.40	15.75	--	149.65	--	--	--	--	--	--	--	--	--	
02/15/2005	--	165.40	12.50	--	152.90	--	--	--	--	--	--	--	--	--	
05/16/2005	P	165.40	11.51	--	153.89	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.0	
08/17/2005	--	165.40	16.85	--	148.55	--	--	--	--	--	--	--	--	--	
11/18/2005	--	165.40	--	--	--	--	--	--	--	--	--	--	--	--	e
02/07/2006	P	165.40	9.93	--	155.47	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.1	
5/19/2006	--	165.40	--	--	--	--	--	--	--	--	--	--	--	--	e

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE				
MW-6 Cont.															
8/23/2006	--	165.40	16.35	--	149.05	--	--	--	--	--	--	--	--	--	
11/15/2006	--	165.40	17.42	--	147.98	--	--	--	--	--	--	--	--	--	
2/14/2007	P	165.40	12.03	--	153.37	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.07	TAMC	7.73	
5/22/2007	--	165.40	15.11	--	150.29	--	--	--	--	--	--	--	--	--	
8/15/2007	--	165.40	18.08	--	147.32	--	--	--	--	--	--	--	--	--	
11/8/2007	--	165.40	17.79	--	147.61	--	--	--	--	--	--	--	--	--	
2/20/2008	P	165.40	11.81	--	153.59	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.29	CEL	7.10	
5/7/2008	--	165.40	16.75	--	148.65	--	--	--	--	--	--	--	--	--	
8/20/2008	--	165.40	--	--	--	--	--	--	--	--	--	--	--	--	e
11/17/2008	--	165.40	--	--	--	--	--	--	--	--	--	--	--	--	e
2/25/2009	P	165.40	9.99	--	155.41	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.39	CEL	7.09	
5/28/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	e
8/6/2009	--	**165.40**	**18.33**	--	**147.07**	--	--	--	--	--	--	--	--	--	
MW-7															
7/9/1990	--	167.61	--	--	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--	167.61	--	--	--	--	--	--	--	--	--	--	--	--	
3/7/1991	--	167.61	19.04	--	148.57	--	--	0.4	0.3	2.4	--	--	--	--	
4/1/1991	--	167.61	15.18	--	152.43	--	--	--	--	--	--	--	--	--	
6/27/1991	--	167.61	--	--	--	70	17	4	0.8	2.2	--	--	--	--	
9/27/1991	--	167.61	--	--	--	--	0.4	--	--	0.4	--	--	--	--	
12/18/1991	--	167.61	--	--	--	--	0.7	2.9	0.8	3.3	--	--	--	--	
7/3/1992	--	167.61	20.28	--	147.33	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	
10/5/1992	--	167.61	21.56	--	146.05	<50	<0.5	<0.5	<0.5	1.5	--	--	--	--	
1/13/1993	--	167.61	15.41	--	152.20	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	i
4/23/1993	--	167.61	15.84	--	151.77	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	i
7/12/1993	--	167.61	19.84	--	147.77	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	i
10/21/1993	--	167.61	21.61	--	146.00	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	i
1/21/1994	--	167.61	20.49	--	147.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	--	--	i
1/21/1994	--	167.61	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	c
4/20/1994	--	167.61	20.54	--	147.07	<50	<0.5	<0.5	<0.5	<0.5	<5.0	1.5	--	--	i

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Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-7 Cont.															
8/1/1994	--	167.61	20.99	--	146.62	<50	0.7	<0.5	<0.5	<0.5	<5.0	1.9	--	--	i
12/23/1994	--	167.61	15.00	--	152.61	--	--	--	--	--	--	--	--	--	
1/26/1995	--	167.61	14.69	--	152.92	<50	<0.5	<0.5	<0.5	<1	--	7	--	--	
6/8/1995	--	167.61	19.87	--	147.74	--	--	--	--	--	--	--	--	--	
8/22/1995	--	167.61	21.49	--	146.12	<50	<0.50	<0.50	<0.50	<1.0	<5.0	6.4	--	--	d
10/27/1995	--	167.61	22.53	--	145.08	--	--	--	--	--	--	--	--	--	
1/25/1996	--	167.61	17.21	--	150.40	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	
4/19/1996	--	167.61	17.09	--	150.52	--	--	--	--	--	--	--	--	--	
7/23/1996	--	167.61	21.02	--	146.59	--	--	--	--	--	--	--	--	--	
11/11/1996	--	167.61	22.03	--	145.58	<50	<0.5	<1.0	<1.0	<1.0	<10	7.8	--	--	
1/21/1997	--	167.61	15.06	--	152.55	--	--	--	--	--	--	--	--	--	
4/29/1997	--	167.61	20.11	--	147.50	<50	<0.5	<1.0	<1.0	<1.0	<10	4.4	--	--	
8/21/1997	--	167.61	21.59	--	146.02	--	--	--	--	--	--	--	--	--	
11/5/1997	--	167.61	20.05	--	147.56	<50	<0.5	<1.0	<1.0	<1.0	<10	4.4	--	--	
2/3/1998	--	167.61	9.97	--	157.64	--	--	--	--	--	--	--	--	--	
5/28/1998	--	167.61	13.52	--	154.09	<50	<0.5	<1.0	<1.0	<1.0	<10	4.3	--	--	
12/30/1998	--	167.61	18.33	--	149.28	--	--	--	--	--	--	--	--	--	
2/2/1999	--	167.61	12.33	--	155.28	--	--	--	--	--	--	--	--	--	
5/10/1999	--	167.61	13.52	--	154.09	--	--	--	--	--	--	--	--	--	
8/24/1999	--	167.61	14.01	--	153.60	--	--	--	--	--	--	--	--	--	
11/3/1999	--	167.61	19.91	--	147.70	--	--	--	--	--	--	--	--	--	
3/1/2000	--	167.61	19.89	--	147.72	--	--	--	--	--	--	--	--	--	
4/21/2000	--	167.61	17.94	--	149.67	--	--	--	--	--	--	--	--	--	
7/31/2000	--	167.61	17.33	--	150.28	--	--	--	--	--	--	--	--	--	
11/20/2000	--	167.61	18.41	--	149.20	--	--	--	--	--	--	--	--	--	
2/18/2001	--	167.61	15.13	--	152.48	--	--	--	--	--	--	--	--	--	
6/7/2001	--	167.61	18.75	--	148.86	--	--	--	--	--	--	--	--	--	
9/5/2001	--	167.61	20.48	--	147.13	--	--	--	--	--	--	--	--	--	
11/30/2001	--	167.61	20.11	--	147.50	--	--	--	--	--	--	--	--	--	
2/20/2002	--	167.61	18.40	--	149.21	--	--	--	--	--	--	--	--	--	
6/20/2002	--	167.61	18.62	--	148.99	--	--	--	--	--	--	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE				
MW-7 Cont.															
9/11/2002	--	167.61	20.05	--	147.56	--	--	--	--	--	--	--	--	--	
11/12/2002	--	167.61	21.13	--	146.48	--	--	--	--	--	--	--	--	--	n
1/29/2003	--	167.61	19.10	--	148.51	--	--	--	--	--	--	--	--	--	
5/22/2003	--	167.61	18.83	--	148.78	--	--	--	--	--	--	--	--	--	
7/28/2003	--	167.61	19.88	--	147.73	--	--	--	--	--	--	--	--	--	p
11/18/2003	--	167.61	20.50	--	147.11	--	--	--	--	--	--	--	--	--	s
11/18/2003	--	168.08	20.50	--	147.58	--	--	--	--	--	--	--	--	--	
02/23/2004	--	168.08	15.92	--	152.16	--	--	--	--	--	--	--	--	--	
05/04/2004	--	168.08	18.86	--	149.22	--	--	--	--	--	--	--	--	--	
08/04/2004	--	168.08	19.10	--	148.98	--	--	--	--	--	--	--	--	--	
11/10/2004	--	168.08	20.25	--	147.83	--	--	--	--	--	--	--	--	--	
02/15/2005	--	168.08	16.37	--	151.71	--	--	--	--	--	--	--	--	--	
05/16/2005	--	168.08	--	--	--	--	--	--	--	--	--	--	--	--	e
08/17/2005	--	168.08	19.74	--	148.34	--	--	--	--	--	--	--	--	--	
11/18/2005	--	168.08	20.82	--	147.26	--	--	--	--	--	--	--	--	--	
02/07/2006	P	168.08	14.26	--	153.82	<500	<5.0	<5.0	<5.0	<5.0	270	--	SEQM	7.3	
5/19/2006	--	168.08	16.51	--	151.57	--	--	--	--	--	--	--	--	--	
8/23/2006	--	168.08	20.30	--	147.78	--	--	--	--	--	--	--	--	--	
11/15/2006	--	168.08	20.85	--	147.23	--	--	--	--	--	--	--	--	--	
2/14/2007	P	168.08	16.57	--	151.51	520	<5.0	<5.0	<5.0	<5.0	740	3.08	TAMC	7.30	v
5/22/2007	--	168.08	18.40	--	149.68	--	--	--	--	--	--	--	--	--	
8/15/2007	--	168.08	20.85	--	147.23	--	--	--	--	--	--	--	--	--	
11/8/2007	--	168.08	20.41	--	147.67	--	--	--	--	--	--	--	--	--	
2/20/2008	P	168.08	15.90	--	152.18	<50	<0.50	<0.50	<0.50	<0.50	700	4.34	CEL	7.09	
5/7/2008	--	168.08	19.41	--	148.67	--	--	--	--	--	--	--	--	--	
8/20/2008	--	168.08	21.34	--	146.74	--	--	--	--	--	--	--	--	--	
11/17/2008	--	168.08	20.54	--	147.54	--	--	--	--	--	--	--	--	--	
2/25/2009	P	168.08	14.89	--	153.19	130	<20	<20	<20	<20	540	4.28	CEL	6.87	
5/28/2009	--	168.08	18.57	--	149.51	--	--	--	--	--	--	--	--	--	
8/6/2009	--	**168.08**	**20.83**	--	**147.25**	--	--	--	--	--	--	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE				
MW-8															
3/7/1991	--	165.74	16.72	--	149.02	2.7	780	450	64	310	--	--	--	--	
4/1/1991	--	165.74	12.54	--	153.20	15,000	3,600	2,600	410	1,900	--	--	--	--	
6/27/1991	--	165.74	--	--	--	12,000	3,400	1,100	240	750	--	--	--	--	
9/27/1991	--	165.74	--	--	--	41	5,700	5,200	1,100	4,300	--	--	--	--	
12/18/1991	--	165.74	--	--	--	3.2	990	150	120	250	--	--	--	--	
7/3/1992	--	165.74	18.78	--	146.96	72,000	19,000	32,000	3,000	15,000	--	--	--	--	
10/5/1992	--	165.74	20.48	--	145.26	--	--	--	--	--	--	--	--	--	
1/13/1993	--	165.74	12.87	--	152.87	--	--	--	--	--	--	--	--	--	
4/23/1993	--	165.74	13.90	--	151.84	--	--	--	--	--	--	--	--	--	t
7/12/1993	--	165.74	18.30	--	147.44	--	--	--	--	--	--	--	--	--	t
10/21/1993	--	165.74	21.91	--	142.88	--	--	--	--	--	--	--	--	--	
10/2/93-12/9/98	--	165.74	--	0.12	--	--	--	--	--	--	--	--	--	--	
1/21/1994	--	165.74	19.12	--	146.62	--	--	--	--	--	--	--	--	--	
4/20/1994	--	165.74	19.28	--	146.46	26,000	1,700	4,100	960	4,000	632	1.1	--	--	i
8/1/1994	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	
12/23/1994	--	165.74	13.81	--	151.93	--	--	--	--	--	--	--	--	--	
1/26/1995	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	
6/8/1995	--	165.74	17.82	--	147.92	--	--	--	--	--	--	--	--	--	
8/22/1995	--	165.74	19.41	--	146.33	--	--	--	--	--	--	--	--	--	
10/27/1995	--	165.74	20.47	--	145.27	--	--	--	--	--	--	--	--	--	
1/25/1996	--	165.74	13.35	--	152.39	--	--	--	--	--	--	--	--	--	
4/19/1996	--	165.74	14.40	--	151.34	--	--	--	--	--	--	--	--	--	
7/23/1996	--	165.74	18.35	--	147.39	--	--	--	--	--	--	--	--	--	
11/11/1996	--	165.74	19.41	--	146.33	--	--	--	--	--	--	--	--	--	
1/21/1997	--	165.74	12.29	--	153.45	--	--	--	--	--	--	--	--	--	
4/29/1997	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	e
8/21/1997	--	165.74	19.61	--	146.13	240,000	1,100	9,300	4,100	31,100	<1000	5.2	--	--	
11/5/1997	--	165.74	19.45	--	146.29	57,000	790	2,700	2,300	15,200	<1000	5	--	--	
2/3/1998	--	165.74	9.33	--	156.41	--	--	--	--	--	--	--	--	--	
2/4/1998	--	165.74	--	--	--	94,000	570	1,500	2,100	15,200	<2500	5.5	--	--	
5/28/1998	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	e

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-8 Cont.															
12/30/1998	--	165.74	15.48	--	150.26	120,000	460	2,300	2,200	15,000	150	--	--	--	
2/2/1999	--	165.74	18.29	--	147.45	82,000	450	2,200	3,700	26,000	<500	--	--	--	
5/10/1999	--	165.74	15.62	--	150.12	28,000	740	1,800	1,100	5,800	<25	--	--	--	
8/24/1999	--	165.74	18.41	--	147.33	75,000	530	1,400	3,300	21,000	150	--	--	--	
11/3/1999	--	165.74	18.71	--	147.03	70,000	600	1,300	3,600	20,500	750	--	--	--	
3/1/2000	--	165.74	19.37	--	146.37	27,000	1,600	1,200	2,600	6,600	120	--	--	--	
4/21/2000	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	e
7/31/2000	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	e
11/20/2000	--	165.74	17.42	--	148.32	1,300,000	1,400	1,700	20,000	16,000	5,700	--	--	--	
2/18/2001	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	e
6/7/2001	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	e
9/5/2001	--	165.74	21.45	0.04	144.25	--	--	--	--	--	--	--	--	--	j
11/30/2001	--	165.74	18.31	--	147.43	--	--	--	--	--	--	--	--	--	h
12/6/2001	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	e
2/20/2002	--	165.74	14.02	--	151.72	20,000	163	114	403	3,810	80.4	--	--	--	
6/20/2002	--	165.74	17.56	--	148.18	28,000	466	141	962	5,850	2,520	--	--	--	
9/11/2002	--	165.74	19.45	--	146.29	190,000	1,500	670	4,500	23,000	1,200	--	--	--	
11/12/2002	--	165.74	19.15	--	146.59	420	6.4	2.9	16	110	31	--	--	--	t
1/29/2003	--	165.74	15.02	--	150.72	200,000	810	<500	2,000	11,000	<500	--	--	--	n
5/22/2003	--	165.74	15.07	--	150.67	--	--	--	--	--	--	--	--	--	t
6/24/2003	--	165.74	17.95	--	147.79	43,000	860	300	2,100	9,600	46	--	--	--	
7/28/2003	--	165.74	19.45	--	146.29	62,000	690	230	1,800	15,000	2,100	--	--	--	
8/12/2003	--	165.74	19.40	<0.01	146.34	--	--	--	--	--	--	--	--	--	o,t
9/12/2003	--	165.74	19.34	--	146.40	--	--	--	--	--	--	--	--	--	o
10/3/2003	--	165.74	--	<0.01	--	--	--	--	--	--	--	--	--	--	
11/18/2003	P	165.74	18.80	<0.01	146.94	8,800	500	37	530	930	1,700	--	SEQM	--	o,p
12/31/2003	--	165.74	--	<0.01	--	--	--	--	--	--	--	--	--	--	
2/2/2004	--	165.74	--	<0.01	--	--	--	--	--	--	--	--	--	--	
02/23/2004	P	165.74	12.82	<0.01	152.92	32,000	840	360	1,000	7,100	110	--	SEQM	6.6	t
3/18/2004	--	165.74	--	<0.01	--	--	--	--	--	--	--	--	--	--	
4/13/2004	--	165.74	--	<0.01	--	--	--	--	--	--	--	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-8 Cont.															
05/04/2004	P	165.74	18.87	<0.01	146.87	42,000	570	230	1,700	8,400	2,000	--	SEQM	7.0	t
6/2/2004	--	165.74	--	<0.01	--	--	--	--	--	--	--	--	--	--	
08/04/2004	--	165.74	19.37	0.05	146.41	--	--	--	--	--	--	--	--	--	
09/22/2004	NP	165.74	19.60	--	146.14	--	--	--	--	--	--	--	--	--	
11/10/2004	P	165.74	16.58	--	149.16	11,000	790	61	1,000	830	74	--	SEQM	7.3	t
02/15/2005	P	165.74	12.85	--	152.89	38,000	1,300	390	2,300	7,900	<50	--	SEQM	7.2	
05/16/2005	P	165.74	12.22	--	153.52	31,000	1,000	360	2,500	7,500	<50	--	SEQM	6.5	
08/17/2005	P	165.74	17.80	--	147.94	60,000	540	240	2,500	8,600	<50	--	SEQM	6.7	
11/18/2005	P	165.74	21.02	--	144.72	33,000	340	120	1,400	4,900	140	--	SEQM	6.9	
02/07/2006	P	165.74	10.73	--	155.01	5,700	94	27	260	820	7.5	--	SEQM	6.6	
5/19/2006	P	165.74	13.89	--	151.85	40,000	1,100	320	2,900	6,000	<25	--	SEQM	6.6	t
8/23/2006	P	165.74	18.85	--	146.89	21,000	520	150	1,800	6,300	82	--	TAMC	7.35	
11/15/2006	P	165.74	18.75	--	146.99	3,300	81	<25	130	430	110	0.81	TAMC	6.91	
2/14/2007	P	165.74	13.45	SHEEN	152.29	9,300	320	<25	360	710	82	1.89	TAMC	7.13	t
5/22/2007	P	165.74	15.92	SHEEN	149.82	17,000	370	51	760	1,600	11	1.05	TAMC	6.99	t
8/15/2007	P	165.74	19.11	SHEEN	146.63	17,000	170	44	1,000	2,700	28	3.93	TAMC	7.08	
11/8/2007	P	165.74	18.46	SHEEN	147.28	24,000	150	43	1,100	3,200	27	1.29	TAMC	7.14	t
2/20/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	e
5/7/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	e
8/20/2008	--	165.74	19.66	0.01	146.09	--	--	--	--	--	--	--	--	--	b
11/17/2008	--	165.74	--	--	--	--	--	--	--	--	--	--	--	--	e
2/25/2009	P	165.74	11.50	SHEEN	154.24	3,400	160	11	88	65	35	2.18	CEL	6.98	t
4/8/2009	--	165.74	14.55	--	151.19	--	--	--	--	--	--	--	--	--	
5/28/2009	P	165.74	16.12	SHEEN	149.62	8,300	410	54	660	800	<2.5	0.06	CEL	6.78	t, x
6/16/2009	--	165.74	17.63	--	148.11	--	--	--	--	--	--	--	--	--	
8/6/2009	--	**165.74**	--	--	--	--	--	--	--	--	--	--	--	--	**e**
MW-9															
3/7/1991	--	166.20	16.79	--	149.41	7.1	220	4	2.4	2,400	--	--	--	--	
4/1/1991	--	166.20	12.89	--	153.31	12,000	2,000	2,600	360	1,600	--	--	--	--	
6/27/1991	--	166.20	--	--	--	3,600	520	400	85	310	--	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE				
MW-9 Cont.															
9/27/1991	--	166.20	--	--	--	3.2	720	150	50	180	--	--	--	--	
12/18/1991	--	166.20	--	--	--	--	2.5	1.1	0.3	5.8	--	--	--	--	
7/3/1992	--	166.20	18.89	--	147.31	5,700	17,000	840	230	800	--	--	--	--	
10/5/1992	--	166.20	20.52	--	145.68	1,400	440	17	14	100	--	--	--	--	
1/13/1993	--	166.20	12.92	--	153.28	11,000	1,200	1,700	340	1,400	--	--	--	--	i
1/13/1993	--	166.20	--	--	--	11,000	1,200	1,600	330	1,300	--	--	--	--	c,i
4/23/1993	--	166.20	14.08	--	152.12	24,000	2,800	4,500	730	3,400	--	--	--	--	i
7/12/1993	--	166.20	18.44	--	147.76	13,000	1,400	1,100	360	1,400	20.8	--	--	--	i
7/12/1993	--	166.20	--	--	--	10,000	1,200	900	310	1,200	--	--	--	--	c
10/21/1993	--	166.20	21.81	--	143.50	--	--	--	--	--	--	--	--	--	
11/2/93-4/29/97	--	166.20	--	0.10	--	--	--	--	--	--	--	--	--	--	
1/21/1994	--	166.20	19.28	--	146.92	--	--	--	--	--	--	--	--	--	
4/20/1994	--	166.20	--	--	--	45,000	2,700	6,800	1,200	8,200	740	--	--	--	c,d
4/20/1994	--	166.20	19.72	--	146.48	43,000	2,800	6,800	1,300	7,900	768	1.7	--	--	i
8/1/1994	--	166.20	20.18	--	146.02	--	--	--	--	--	--	--	--	--	
12/23/1994	--	166.20	14.22	--	151.98	--	--	--	--	--	--	--	--	--	
1/26/1995	--	166.20	11.85	--	154.35	--	--	--	--	--	--	--	--	--	
6/8/1995	--	166.20	18.33	--	147.87	--	--	--	--	--	--	--	--	--	
8/22/1995	--	166.20	19.95	--	146.25	--	--	--	--	--	--	--	--	--	
10/27/1995	--	166.20	20.88	--	145.32	--	--	--	--	--	--	--	--	--	
1/25/1996	--	166.20	13.84	--	152.36	--	--	--	--	--	--	--	--	--	
4/19/1996	--	166.20	--	--	--	--	--	--	--	--	--	--	--	--	e
7/23/1996	--	166.20	18.84	--	147.36	--	--	--	--	--	--	--	--	--	
11/11/1996	--	166.20	19.91	--	146.29	--	--	--	--	--	--	--	--	--	
1/21/1997	--	166.20	12.93	--	153.27	--	--	--	--	--	--	--	--	--	
4/29/1997	--	166.20	18.03	0.1	148.17	--	--	--	--	--	--	--	--	--	t
4/30/1997	--	166.20	--	--	--	78,000	1,900	3,600	3,100	20,600	<5000	5.5	--	--	
8/21/1997	--	166.20	19.56	--	146.64	110,000	2,100	3,400	2,300	18,800	<500	5.1	--	--	
11/5/1997	--	166.20	20.59	0.01	145.60	59,000	1,400	1,700	2,200	17,000	<500	4.5	--	--	
2/3/1998	--	166.20	10.56	--	155.64	55,000	490	1,200	1,400	10,200	<1000	4.9	--	--	
5/28/1998	--	166.20	14.21	--	151.99	41,000	250	1,200	1,500	11,400	<250	3.8	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-9 Cont.															
5/28/1998	--	166.20	--	--	--	53,000	290	830	1,400	10,500	<500	--	--	--	c
12/30/1998	--	166.20	15.61	--	150.59	83,000	860	1,300	2,400	21,000	180	--	--	--	
2/2/1999	--	166.20	12.33	--	153.87	75,000	530	960	1,900	17,000	<50	--	--	--	
5/10/1999	--	166.20	15.67	--	150.53	22,000	600	1,500	1,100	4,400	72	--	--	--	
8/24/1999	--	166.20	19.10	--	147.10	85,000	850	1,300	1,700	20,000	<250	--	--	--	
11/3/1999	--	166.20	19.58	--	146.62	72,000	700	780	1,900	19,000	<5.0	--	--	--	
3/1/2000	--	166.20	13.19	--	153.01	34,000	78	490	1,100	8,200	63	--	--	--	
4/21/2000	--	166.20	14.29	--	151.91	55,000	260	920	1,500	16,000	<5.0	--	--	--	
7/31/2000	--	166.20	15.01	--	151.19	1,200,000	1,500	6,300	15,000	120,000	1,600	--	--	--	
11/20/2000	--	166.20	18.23	--	147.97	320,000	3,500	19,000	5,000	40,000	3,900	--	--	--	
2/18/2001	--	166.20	13.14	--	153.06	32,000	290	417	1,180	10,400	121	--	--	--	
6/7/2001	--	166.20	17.41	--	148.79	96,000	421	704	2,330	17,300	223	--	--	--	
9/5/2001	--	166.20	20.56	--	145.64	39,000	445	323	1,240	8,940	310	--	--	--	
11/30/2001	--	166.20	17.42	--	148.78	60,000	310	586	1,890	14,200	285	--	--	--	
2/20/2002	--	166.20	13.87	--	152.33	14,000	64	122	897	2,650	293	--	--	--	
6/20/2002	--	166.20	18.22	--	147.98	29,000	307	168	1,100	5,670	208	--	--	--	
9/11/2002	--	166.20	20.27	--	145.93	230,000	1,400	680	3,600	23,000	<2500	--	--	--	
11/12/2002	--	166.20	19.40	--	146.80	840	5.8	3.6	28	160	21	--	--	--	t
1/29/2003	--	166.20	14.30	0.1	151.80	--	--	--	--	--	--	--	--	--	j,n
5/22/2003	--	166.20	15.16	--	151.04	23,000	260	<50	1,000	2,900	<50	--	--	--	t
6/24/2003	--	166.20	--	--	--	--	--	--	--	--	--	--	--	--	e
7/28/2003	--	166.20	19.55	<0.01	146.65	1,500,000	<500	<500	9,800	79,000	<500	--	--	--	
8/12/2003	--	166.20	19.60	<0.01	146.60	--	--	--	--	--	--	--	--	--	o,t
9/12/2003	--	166.20	19.60	<0.01	146.60	--	--	--	--	--	--	--	--	--	o,t
11/18/2003	P	166.20	18.98	<0.01	147.22	19,000	250	18	690	2,400	45	--	SEQM	6.8	o,p
12/31/2003	--	166.20	--	<0.01	--	--	--	--	--	--	--	--	--	--	
2/2/2004	--	166.20	--	<0.01	--	--	--	--	--	--	--	--	--	--	
02/23/2004	P	166.20	13.91	<0.01	152.29	91,000	<250	440	2,200	13,000	<250	--	SEQM	6.8	t
3/18/2004	--	166.20	--	<0.01	--	--	--	--	--	--	--	--	--	--	
4/13/2004	--	166.20	--	<0.01	--	--	--	--	--	--	--	--	--	--	
05/04/2004	P	166.20	18.11	<0.01	148.09	39,000	230	44	1,100	4,200	<25	--	SEQM	6.9	t

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE				
MW-9 Cont.															
6/2/2004	--	166.20	--	<0.01	--	--	--	--	--	--	--	--	--	--	
08/04/2004	--	166.20	18.90	0.03	147.32	--	--	--	--	--	--	--	--	--	
09/22/2004	NP	166.20	19.69	--	146.51	--	--	--	--	--	--	--	--	--	
11/10/2004	NP	166.20	16.95	--	149.25	31,000	300	<50	1,100	3,800	<50	--	SEQM	7.3	t
02/15/2005	P	166.20	12.95	--	153.25	19,000	200	<50	720	2,000	<50	--	SEQM	7.3	t
05/16/2005	P	166.20	12.53	--	153.67	17,000	99	15	770	2,500	<10	--	SEQM	6.7	
08/17/2005	P	166.20	18.03	--	148.17	28,000	160	26	1,000	2,700	<12	--	SEQM	6.8	
11/18/2005	P	166.20	19.04	--	147.16	12,000	98	<5.0	410	510	19	--	SEQM	7.1	
02/07/2006	P	166.20	10.95	SHEEN	155.25	18,000	110	8.7	770	1,500	<5.0	--	SEQM	6.9	t
5/19/2006	--	166.20	--	--	--	--	--	--	--	--	--	--	--	--	e
8/23/2006	P	166.20	18.91	--	147.29	28,000	84	<50	1,600	6,200	<50	--	TAMC	7.3	
11/15/2006	P	166.20	18.60	--	147.60	8,200	44	<25	190	370	26	0.92	TAMC	6.88	
2/14/2007	P	166.20	13.30	--	152.90	20,000	64	<25	720	2,000	<25	0.87	TAMC	7.17	t
5/22/2007	P	166.20	16.14	SHEEN	150.06	16,000	80	<25	460	1,200	<25	0.81	TAMC	7.08	t
8/15/2007	P	166.20	19.31	SHEEN	146.89	5,900	27	<2.5	59	170	27	2.57	TAMC	6.98	
11/8/2007	P	166.20	18.70	--	147.50	6,100	29	<5.0	98	250	52	1.24	TAMC	7.47	
2/20/2008	--	166.20	12.79	0.03	153.43	--	--	--	--	--	--	--	--	--	b, j
5/7/2008	--	166.20	17.68	0.03	148.54	--	--	--	--	--	--	--	--	--	b, j
8/20/2008	--	166.20	19.75	0.01	146.46	--	--	--	--	--	--	--	--	--	b
11/17/2008	P	166.20	18.73	--	147.47	10,000	24	<2.5	160	140	33	--	CEL	6.64	w
2/25/2009	P	166.20	11.23	SHEEN	154.97	14,000	60	<10	550	140	<10	2.27	CEL	6.69	t
4/8/2009	--	166.20	14.21	--	151.99	--	--	--	--	--	--	--	--	--	
5/28/2009	P	166.20	16.33	SHEEN	149.87	15,000	49	<10	790	1,500	<10	0.07	CEL	6.83	t, x
6/16/2009	--	166.20	17.82	0.01	148.39	--	--	--	--	--	--	--	--	--	
8/6/2009	**P**	**166.20**	**19.25**	**SHEEN**	**146.95**	**6,800**	**19**	**<2.0**	**120**	**250**	**18**	**0.00**	**CEL**	**7.26**	**x**
MW-10															
3/7/1991	--	167.01	18.09	--	148.92	1.6	120	190	32	230	--	--	--	--	
4/1/1991	--	167.01	13.92	--	153.09	--	--	--	--	--	--	--	--	--	
6/27/1991	--	167.01	--	--	--	12,000	7,300	500	150	300	--	--	--	--	
9/27/1991	--	167.01	--	--	--	57	12,000	7,200	1,400	4,600	--	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-10 Cont.															
12/18/1991	--	167.01	--	--	--	5.3	2,500	120	36	79	--	--	--	--	
7/3/1992	--	167.01	19.92	--	147.09	8,600	5,100	1,300	180	690	--	--	--	--	
10/5/1992	--	167.01	21.92	--	145.09	--	--	--	--	--	--	--	--	--	
1/13/1993	--	167.01	14.43	--	152.58	--	--	--	--	--	--	--	--	--	
4/23/1993	--	167.01	15.26	--	151.75	--	--	--	--	--	--	--	--	--	
7/12/1993	--	167.01	19.78	--	147.23	--	--	--	--	--	--	--	--	--	
10/21/1993	--	167.01	22.90	--	144.11	--	--	--	--	--	--	--	--	--	
1/21/1994	--	167.01	20.25	--	146.76	--	--	--	--	--	--	--	--	--	
4/20/1994	--	167.01	20.74	--	146.27	100,000	12,000	24,000	2,400	14,000	1,577	1	--	--	d,i
8/1/1994	--	167.01	22.00	--	145.01	--	--	--	--	--	--	--	--	--	
12/23/1994	--	167.01	16.08	--	150.93	--	--	--	--	--	--	--	--	--	
1/26/1995	--	167.01	13.68	--	153.33	--	--	--	--	--	--	--	--	--	
6/8/1995	--	167.01	19.08	--	147.93	--	--	--	--	--	--	--	--	--	
8/22/1995	--	167.01	20.73	--	146.28	--	--	--	--	--	--	--	--	--	
10/27/1995	--	167.01	21.69	--	145.32	--	--	--	--	--	--	--	--	--	
1/25/1996	--	167.01	15.05	--	151.96	--	--	--	--	--	--	--	--	--	
4/19/1996	--	167.01	16.26	--	150.75	--	--	--	--	--	--	--	--	--	
7/23/1996	--	167.01	20.18	--	146.83	--	--	--	--	--	--	--	--	--	
9/4/1996	--	167.01	--	0.76	--	--	--	--	--	--	--	--	--	--	
11/11/1996	--	167.01	21.20	--	145.81	--	--	--	--	--	--	--	--	--	
1/21/1997	--	167.01	13.66	--	153.35	--	--	--	--	--	--	--	--	--	
4/29/1997	--	167.01	18.71	--	148.30	--	--	--	--	--	--	--	--	--	
4/30/1997	--	167.01	--	--	--	170,000	9,700	38,000	4,700	30,500	<5000	5.6	--	--	
8/21/1997	--	167.01	20.19	--	146.82	170,000	9,500	35,000	4,300	27,100	<5000	5.3	--	--	
11/5/1997	--	167.01	20.52	--	146.49	80,000	3,800	12,000	2,700	15,700	<500	4.4	--	--	
12/2/1997	--	167.01	--	0.03	--	--	--	--	--	--	--	--	--	--	
2/3/1998	--	167.01	10.62	--	156.39	--	--	--	--	--	--	--	--	--	
2/4/1998	--	167.01	--	--	--	72,000	500	1,300	1,700	12,000	<1000	5.1	--	--	
5/28/1998	--	167.01	15.46	--	151.55	220,000	3,200	24,000	5,200	43,000	<1000	4.8	--	--	
12/30/1998	--	167.01	16.65	--	150.36	110,000	3,500	14,000	5,800	50,000	<50	--	--	--	
2/2/1999	--	167.01	14.58	--	152.43	74,000	1,000	2,800	1,000	26,000	860	--	--	--	

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Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-10 Cont.															
5/10/1999	--	167.01	15.72	--	151.29	81,000	2,800	2,800	3,000	17,000	220	--	--	--	
8/24/1999	--	167.01	19.85	--	147.16	54,000	3,500	3,800	1,500	9,100	<250	--	--	--	
11/3/1999	--	167.01	20.00	--	147.01	30,000	3,000	3,500	1,200	5,000	31	--	--	--	
3/1/2000	--	167.01	14.62	--	152.39	62,000	320	1,200	1,100	26,000	4,400	--	--	--	
4/21/2000	--	167.01	15.46	--	151.55	88,000	2,700	7,400	3,700	35,000	2,400	--	--	--	
7/31/2000	--	167.01	--	--	--	--	--	--	--	--	--	--	--	--	e
11/20/2000	--	167.01	18.74	--	148.27	78,000	3,800	5,500	2,800	13,000	450	--	--	--	
2/18/2001	--	167.01	14.10	--	152.91	39,000	1,050	1,160	1,550	14,700	4,180	--	--	--	
6/7/2001	--	167.01	18.78	--	148.23	76,000	2,460	2,840	3,330	20,700	635	--	--	--	
9/5/2001	--	167.01	21.40	0.01	145.60	25,000	2,510	2,070	1,090	4,540	189	--	--	--	
11/30/2001	--	167.01	18.50	--	148.51	100,000	2,480	5,720	3,890	22,800	325	--	--	--	
2/20/2002	--	167.01	14.39	--	152.62	49,000	2,170	3,070	1,960	12,300	1,090	--	--	--	
6/20/2002	--	167.01	18.80	--	148.21	44,000	2,040	3,050	1,690	8,430	224	--	--	--	
9/11/2002	--	167.01	20.52	--	146.49	28,000	1,200	2,700	1,400	6,800	<250	--	--	--	
11/12/2002	--	167.01	20.37	0.07	146.57	--	--	--	--	--	--	--	--	--	j
1/29/2003	--	167.01	16.33	0.03	150.65	--	--	--	--	--	--	--	--	--	j,n
5/22/2003	--	167.01	16.32	--	150.69	13,000	2,100	850	630	1,600	300	--	--	--	t
6/24/2003	--	167.01	18.73	0.04	148.24	--	--	--	--	--	--	--	--	--	o
7/28/2003	--	167.01	20.39	0.04	146.58	--	--	--	--	--	--	--	--	--	j
8/12/2003	--	167.01	20.43	<0.01	146.58	--	--	--	--	--	--	--	--	--	o,t
9/12/2003	--	167.01	20.41	--	146.60	--	--	--	--	--	--	--	--	--	o
10/3/2003	--	167.01	--	<0.01	--	--	--	--	--	--	--	--	--	--	
11/18/2003	P	167.01	19.55	<0.01	147.46	9,900	2,200	530	320	860	<50	--	SEQM	6.8	o,p
12/31/2003	--	167.01	--	<0.01	--	--	--	--	--	--	--	--	--	--	
2/2/2004	--	167.01	--	<0.01	--	--	--	--	--	--	--	--	--	--	
02/23/2004	P	167.01	15.45	<0.01	151.56	46,000	1,900	2,000	1,800	9,000	180	--	SEQM	6.7	t
3/18/2004	--	167.01	--	<0.01	--	--	--	--	--	--	--	--	--	--	
4/13/2004	--	167.01	--	<0.01	--	--	--	--	--	--	--	--	--	--	
05/04/2004	P	167.01	18.81	<0.01	148.20	35,000	3,100	3,600	1,400	5,600	<25	--	SEQM	7.1	t
6/2/2004	--	167.01	--	<0.01	--	--	--	--	--	--	--	--	--	--	
7/2/2004	--	167.01	--	<0.01	--	--	--	--	--	--	--	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-10 Cont.															
08/04/2004	--	167.01	18.90	--	148.11	--	--	--	--	--	--	--	--	--	
09/22/2004	NP	167.01	20.60	--	146.41	--	--	--	--	--	--	--	--	--	
11/10/2004	P	167.01	17.95	--	149.06	9,800	470	91	450	1,700	230	--	SEQM	7.3	t
01/13/2005	--	167.01	12.21	--	154.80	--	--	--	--	--	--	--	--	--	
02/15/2005	P	167.01	14.19	--	152.82	30,000	510	330	1,800	7,200	77	--	SEQM	7.2	
05/16/2005	P	167.01	13.85	--	153.16	37,000	540	730	2,100	9,200	<50	--	SEQM	6.7	
08/17/2005	P	167.01	19.01	--	148.00	15,000	1,100	420	1,200	4,100	<50	--	SEQM	6.7	
11/18/2005	P	167.01	19.95	--	147.06	12,000	1,200	240	550	1,300	16	--	SEQM	6.8	
02/07/2006	P	167.01	12.28	SHEEN	154.73	22,000	340	580	1,300	4,500	73	--	SEQM	6.8	t
5/19/2006	P	167.01	15.12	--	151.89	40,000	690	430	2,600	4,900	<25	--	SEQM	6.9	t
8/23/2006	P	167.01	20.00	--	147.01	13,000	1,500	540	1,200	3,000	<10	--	TAMC	6.97	
11/15/2006	P	167.01	19.84	--	147.17	3,800	700	22	67	160	54	0.65	TAMC	6.78	
2/14/2007	P	167.01	14.94	SHEEN	152.07	37,000	350	120	2,400	8,100	120	2.12	TAMC	7.05	t
5/22/2007	P	167.01	17.17	SHEEN	149.84	13,000	810	130	750	2,200	15	0.06	TAMC	7.10	t
8/15/2007	P	167.01	20.30	SHEEN	146.71	4,400	550	38	160	310	<10	3.09	TAMC	7.09	
11/8/2007	P	167.01	19.58	SHEEN	147.43	13,000	970	130	480	1,600	6.0	1.47	TAMC	7.95	t
2/20/2008	--	167.01	14.27	0.05	152.78	--	--	--	--	--	--	--	--	--	b, j
5/7/2008	P	167.01	18.61	--	148.40	16,000	970	150	770	2,000	<20	2.18	CEL	6.98	t
8/20/2008	--	167.01	20.71	0.01	146.31	--	--	--	--	--	--	--	--	--	b
11/17/2008	P	167.01	19.71	--	147.30	10,000	960	57	270	720	23	--	CEL	6.54	t, w
2/25/2009	P	167.01	13.10	--	153.91	2,900	53	14	69	160	170	4.06	CEL	6.68	
4/8/2009	--	167.01	15.91	--	151.10	--	--	--	--	--	--	--	--	--	
5/28/2009	P	167.01	17.37	SHEEN	149.64	15,000	640	280	790	2,500	65	0.03	CEL	6.69	t, x
6/16/2009	--	167.01	18.79	0.01	148.23	--	--	--	--	--	--	--	--	--	
8/6/2009	**P**	**167.01**	**20.19**	**SHEEN**	**146.82**	**23,000**	**850**	**490**	**1,200**	**4,100**	**<25**	**0.06**	**CEL**	**7.23**	**x**
QC-2															
10/5/1992	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	f
1/13/1993	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	f,i
4/23/1993	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	f,i
7/12/1993	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	f

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
QC-2 Cont.															
10/21/1993	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	f
1/21/1994	--	168.01	--	--	--	<50	<0.5	2.1	<0.5	2.1	--	--	--	--	f
4/20/1994	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	f
12/23/1994	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	f
1/26/1995	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	f
6/8/1995	--	168.01	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	--	--	f
8/22/1995	--	168.01	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	d,f
10/30/1995	--	168.01	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	f
1/25/1996	--	168.01	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	--	--	f
4/19/1996	--	168.01	--	--	--	<50	<0.5	<1	<1	<1	<10	--	--	--	f
RW-1															
7/9/1990	--	168.01	--	--	--	--	--	--	--	--	--	--	--	--	
12/21/1990	--	168.01	--	--	--	--	--	--	--	--	--	--	--	--	
3/7/1991	--	168.01	17.62	--	150.39	--	--	--	--	--	--	--	--	--	t
4/1/1991	--	168.01	14.40	--	153.61	--	--	--	--	--	--	--	--	--	
6/27/1991	--	168.01	--	--	--	--	--	--	--	--	--	--	--	--	
9/27/1991	--	168.01	--	--	--	--	--	--	--	--	--	--	--	--	
12/18/1991	--	168.01	--	--	--	--	--	--	--	--	--	--	--	--	
7/3/1992	--	168.01	20.66	--	147.35	--	--	--	--	--	--	--	--	--	t
10/5/1992	--	168.01	23.34	--	144.67	--	--	--	--	--	--	--	--	--	
1/13/1993	--	168.01	16.59	--	151.42	--	--	--	--	--	--	--	--	--	
4/23/1993	--	168.01	16.17	--	151.84	--	--	--	--	--	--	--	--	--	
7/12/1993	--	168.01	20.18	--	147.83	--	--	--	--	--	--	--	--	--	
10/21/1993	--	168.01	25.70	--	142.31	--	--	--	--	--	--	--	--	--	
1/21/1994	--	168.01	21.24	--	146.77	--	--	--	--	--	--	--	--	--	
4/20/1994	--	168.01	32.20	--	135.81	--	--	--	--	--	--	--	--	--	
8/1/1994	--	168.01	21.70	--	146.31	29,000	580	950	300	7,800	1,200	1.1	--	--	d
12/23/1994	--	168.01	16.02	--	151.99	1,300	25	8.6	1.4	69	616	1.8	--	--	i
1/26/1995	--	168.01	13.78	--	154.23	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	
1/26/1995	--	168.01	--	--	--	<50	<0.5	<0.5	<0.5	<1	--	--	--	--	c

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
RW-1 Cont.															
6/8/1995	--	168.01	20.05	--	147.96	1,300	130	<1.0	<1.0	36	--	--	--	--	
8/22/1995	--	168.01	21.74	--	146.27	3,300	230	13	4.9	280	<25	6.6	--	--	d
8/22/1995	--	168.01	--	--	--	2,800	210	9.3	4.3	250	<25	--	--	--	c
10/27/1995	--	168.01	32.00	--	136.01	--	--	--	--	--	--	--	--	--	
10/30/1995	--	168.01	--	--	--	230	1.4	<1.0	<1.0	<2.0	650	6.9	--	--	
10/30/1995	--	168.01	--	--	--	240	1.6	<1.0	<1.0	<2.0	630	--	--	--	c
1/25/1996	--	168.01	15.41	--	152.60	15,000	3,400	930	330	2,500	5,300	--	--	--	
4/19/1996	--	168.01	16.83	--	151.18	35,000	5,500	3,300	1,700	9,400	14,000	7.6	--	--	
4/19/1996	--	168.01	--	--	--	33,000	5,600	3,200	1,700	8,800	15,000	--	--	--	c
7/23/1996	--	168.01	--	--	--	47,000	3,700	2,500	930	5,300	35,000	--	--	--	c
7/23/1996	--	168.01	20.76	--	147.25	46,000	3,600	2,300	900	5,100	36,000	7.4	--	--	
11/11/1996	--	168.01	--	--	--	31,000	2,900	1,000	860	4,600	22,000	--	--	--	c
11/11/1996	--	168.01	21.73	--	146.28	34,000	3,000	1,200	880	4,600	22,000	8.3	--	--	
1/21/1997	--	168.01	--	--	--	270	42	17	2.7	36	1,500	--	--	--	c
1/21/1997	--	168.01	14.20	--	153.81	260	40	16	2.7	34	1,500	6.1	--	--	
4/29/1997	--	168.01	19.15	--	148.86	32,000	3,100	590	1,300	6,000	46,000	5.3	--	--	
8/21/1997	--	168.01	20.67	--	147.34	7,600	730	58	370	1,780	9,500	4.7	--	--	
11/5/1997	--	168.01	21.01	--	147.00	39,000	2,300	86	1,300	3,840	56,000	4.5	--	--	
2/3/1998	--	168.01	10.68	--	157.33	3,400	31	11	29	161	3,200	5.1	--	--	
5/28/1998	--	168.01	15.55	--	152.46	2,000	90	15	60	305	2,700	4.3	--	--	
12/30/1998	--	168.01	17.35	--	150.66	--	--	--	--	--	--	--	--	--	
2/2/1999	--	168.01	14.58	--	153.43	82,000	2,300	120	2,000	3,200	51000/78000	--	--	--	g
5/10/1999	--	168.01	16.00	--	152.01	15,000	620	88	340	660	61,000	--	--	--	
8/24/1999	--	168.01	20.00	--	148.01	52,000	1,400	170	2,200	2,900	37,000	--	--	--	
11/3/1999	--	168.01	20.39	--	147.62	17,000	2,500	86	1,500	970	54,000	--	--	--	
3/1/2000	--	168.01	12.97	--	155.04	17,000	580	78	790	1,100	13,000	--	--	--	
4/21/2000	--	168.01	16.02	--	151.99	31,000	2,100	100	1,400	1,100	39,000	--	--	--	
7/31/2000	--	168.01	21.89	--	146.12	47,000	1,300	170	2,700	2,300	30,000	--	--	--	
11/20/2000	--	168.01	19.15	--	148.86	--	--	--	--	--	--	--	--	--	h
2/18/2001	--	168.01	15.35	--	152.66	14,000	589	89	600	712	13,000	--	--	--	
6/7/2001	--	168.01	19.09	--	148.92	28,000	1,140	68.2	504	530	19,100	--	--	--	

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
RW-1 Cont.															
9/5/2001	--	168.01	22.06	0.02	145.93	--	--	--	--	--	--	--	--	--	j
11/30/2001	--	168.01	19.53	--	148.48	20,000	405	39.4	545	740	8,260	--	--	--	
2/20/2002	--	168.01	15.99	--	152.02	13,000	469	29	434	655	7,240	--	--	--	
6/20/2002	--	168.01	19.31	--	148.70	--	--	--	--	--	--	--	--	--	j,l
9/11/2002	--	168.01	21.07	0.03	146.91	--	--	--	--	--	--	--	--	--	j
11/12/2002	--	168.01	20.92	0.02	147.07	--	--	--	--	--	--	--	--	--	j
1/29/2003	--	168.01	16.31	0.04	151.66	--	--	--	--	--	--	--	--	--	j,n
5/22/2003	--	168.01	16.68	--	151.33	--	--	--	--	--	--	--	--	--	j,t
6/24/2003	--	168.01	19.76	0.07	148.18	--	--	--	--	--	--	--	--	--	o
7/28/2003	--	168.01	21.04	0.04	146.93	--	--	--	--	--	--	--	--	--	j
8/12/2003	--	168.01	21.41	<0.01	146.60	--	--	--	--	--	--	--	--	--	o,t
9/12/2003	--	168.01	21.10	0.07	146.84	--	--	--	--	--	--	--	--	--	o
10/3/2003	--	168.01	--	0.03	--	--	--	--	--	--	--	--	--	--	
11/18/2003	P	168.01	20.10	<0.01	147.91	12,000	770	<50	320	250	6,100	--	SEQM	6.6	o,p
12/31/2003	--	168.01	--	<0.01	--	--	--	--	--	--	--	--	--	--	
02/23/2004	--	168.01	14.35	0.01	153.67	--	--	--	--	--	--	--	--	--	
3/18/2004	--	168.01	--	0.09	--	--	--	--	--	--	--	--	--	--	
4/13/2004	--	168.01	--	0.02	--	--	--	--	--	--	--	--	--	--	
05/04/2004	--	168.01	19.58	0.02	148.45	--	--	--	--	--	--	--	--	--	
6/2/2004	--	168.01	--	0.05	--	--	--	--	--	--	--	--	--	--	
7/2/2004	--	168.01	--	0.11	--	--	--	--	--	--	--	--	--	--	
08/04/2004	--	168.01	22.05	0.05	146.00	--	--	--	--	--	--	--	--	--	
09/22/2004	NP	168.01	21.28	0.06	146.78	--	--	--	--	--	--	--	--	--	
10/26/2004	--	168.01	--	0.01	--	--	--	--	--	--	--	--	--	--	
11/10/2004	--	168.01	18.56	0.02	149.47	--	--	--	--	--	--	--	--	--	
12/27/2004	--	168.01	--	0.03	--	--	--	--	--	--	--	--	--	--	
01/13/2005	--	168.01	12.51	0.01	155.51	--	--	--	--	--	--	--	--	--	
02/15/2005	--	168.01	15.24	0.03	152.79	--	--	--	--	--	--	--	--	--	
03/07/2005	--	168.01	11.90	0.02	156.13	--	--	--	--	--	--	--	--	--	
4/29/2005	--	168.01	--	0.03	--	--	--	--	--	--	--	--	--	--	
05/16/2005	--	168.01	14.39	0.02	153.64	--	--	--	--	--	--	--	--	--	j

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

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE				
RW-1 Cont.															
6/21/2005	--	168.01	--	0.03	--	--	--	--	--	--	--	--	--	--	
7/7/2005	--	168.01	--	0.06	--	--	--	--	--	--	--	--	--	--	
08/17/2005	--	168.01	19.91	0.03	148.12	--	--	--	--	--	--	--	--	--	j
9/6/2005	--	168.01	--	0.03	--	--	--	--	--	--	--	--	--	--	
10/4/2005	--	168.01	--	0.07	--	--	--	--	--	--	--	--	--	--	
11/18/2005	--	168.01	20.36	0.07	147.71	--	--	--	--	--	--	--	--	--	b, j
12/30/2005	--	168.01	--	0.04	--	--	--	--	--	--	--	--	--	--	
1/24/2006	--	168.01	--	0.01	--	--	--	--	--	--	--	--	--	--	
02/07/2006	--	168.01	12.87	0.01	155.15	--	--	--	--	--	--	--	--	--	j
3/30/2006	--	168.01	--	0.02	--	--	--	--	--	--	--	--	--	--	
5/19/2006	--	168.01	15.87	0.04	152.17	--	--	--	--	--	--	--	--	--	b
8/23/2006	--	168.01	20.50	0.07	147.56	--	--	--	--	--	--	--	--	--	b, j
11/15/2006	--	168.01	20.52	0.07	147.54	--	--	--	--	--	--	--	--	--	b, j
2/14/2007	--	168.01	15.44	0.04	152.60	--	--	--	--	--	--	--	--	--	b, j
5/22/2007	--	168.01	17.78	SHEEN	150.23	--	--	--	--	--	--	--	--	--	j, l
8/15/2007	--	168.01	20.80	0.02	147.23	--	--	--	--	--	--	--	--	--	b, j
11/8/2007	--	168.01	20.32	0.01	147.70	--	--	--	--	--	--	--	--	--	b, j
2/20/2008	--	168.01	14.55	0.02	153.48	--	--	--	--	--	--	--	--	--	b, j
5/7/2008	--	168.01	--	--	--	--	--	--	--	--	--	--	--	--	e
8/20/2008	--	168.01	21.34	0.02	146.69	--	--	--	--	--	--	--	--	--	b
11/17/2008	P	168.01	20.41	--	147.60	13,000	120	<20	590	320	120	--	CEL	6.47	w
2/25/2009	--	168.01	13.40	0.02	154.63	--	--	--	--	--	--	--	--	--	b
4/8/2009	--	168.01	16.45	--	151.56	--	--	--	--	--	--	--	--	--	
5/28/2009	--	168.01	17.88	0.01	150.14	--	--	--	--	--	--	--	--	--	b
6/16/2009	--	168.01	19.30	0.01	148.72	--	--	--	--	--	--	--	--	--	
8/6/2009	--	**168.01**	**20.72**	**0.01**	**147.30**	--	--	--	--	--	--	--	--	--	**b, j**

SYMBOLS AND ABBREVIATIONS:
-- = Not analyzed/applicable/measured/available
< = Not detected at or above specified laboratory reporting limit
DO = Dissolved oxygen
DTW = Depth to water in ft bgs
ft bgs = Feet below ground surface
ft MSL = Feet above mean sea level
GRO = Gasoline range organics
GWE = Groundwater elevation measured 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 measured in ft MSL
TPH-g = Total petroleum hydrocarbons as gasoline
µg/L = Micrograms per liter
SEQ/SEQM= Sequoia Analytical/Sequoia Analytical Morgan Hill (Laboratories)
SPH = Separate phase hydrocarbons
CEL = Calscience Environmental Laboratories

FOOTNOTES:
a = Casing elevations surveyed to the nearest 0.01 ft MSL.
b = GWE adjusted assuming a specific gravity of 0.75 for free product (FP).
c = Blind duplicate.
d = A copy of the documentation for this data is included in Appendix C of Alisto report 10-024-10-001.
e = Well inaccessible.
f = Travel blank.
g = EPA Methods 8020/8260 used.
h = Unable to sample.
i = A copy of the documentation for this data can be found in Blaine Tech Services report 010607-M-3. MTBE data for the January 13, 1993 and April 23, 1993 sampling events has been destroyed. No chromatograms could be located for MTBE data from wells MW-5, MW-6, and MW-7, sampled on October 21, 1993.
j = Well not sampled due to presence of SPH and nature of the product.
k = Could not purge and sample; waste drum full.
l = Value represents the depth to product. Unable to determine depth to water, product disabled the interface probe.
m = Discrete p[ak @ C6-7.
n = TPH-g, BTEX, and MTBE analyzed by EPA method 8260 B beginning on 1st quarter 2003 aampling event (1/29/03).
o = Groundwater samples are not collected during FP bailing event.
p = Well not included in the monthly FP bailing program.
q = Well not sampled in November 2003 due to the presence of a pile of gravel dumped over the well box.
r = This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose.
s = MW-7 TOC elevation raised +0.47 ft during well repair on January 20, 2004.
t = Sheen in well.
u = Calib. verif. is within method limits but outside contract limits.
v = GRO result partly due to individual peak(s) in quantitation range.
w = DO meter not working at time of measurement.
x = DO measurement suspect.

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

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

Values for DO and pH were obtained through field measurements.

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 #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-1									
5/19/2006	<6,000	<400	86	<10	<10	<10	<10	<10	
11/17/2008	<6,000	350	590	<10	<10	27	<10	<10	
MW-2									
1/29/2003	<4000	<2000	820	<50	<50	<50	<50	<50	
5/22/2003	<10000	<2000	1,000	<50	<50	<50	--	--	
7/28/2003	<20000	<4000	1,700	<100	<100	<100	<100	<100	a
11/18/2003	<5,000	<1,000	500	<25	<25	<25	--	--	
02/23/2004	<25,000	<5,000	790	<120	<120	<120	<120	<120	
05/04/2004	<50,000	<10,000	780	<250	<250	<250	<250	<250	
08/04/2004	<50,000	<10,000	430	<250	<250	<250	<250	<250	
11/10/2004	<5,000	<1,000	310	<25	<25	<25	<25	<25	
02/15/2005	<20,000	<4,000	690	<100	<100	<100	<100	<100	
05/16/2005	<50,000	<10,000	560	<250	<250	<250	<250	<250	
08/17/2005	<20,000	<4,000	480	<100	<100	<100	<100	<100	
11/18/2005	<20,000	<4,000	340	<100	<100	<100	<100	<100	b
02/07/2006	<60,000	<4,000	440	<100	<100	<100	160	<100	
5/19/2006	<60,000	<4,000	430	<100	<100	<100	<100	<100	b
8/23/2006	<60,000	<4,000	480	<100	<100	<100	<100	<100	
11/15/2006	<60,000	<4,000	400	<100	<100	<100	<100	<100	
2/14/2007	<60,000	<4,000	810	<100	<100	<100	<100	<100	
5/22/2007	<150,000	<10,000	1,000	<250	<250	<250	<250	<250	
8/15/2007	<30,000	2,400	260	<50	<50	<50	<50	<50	b
11/8/2007	<30,000	2,800	240	<50	<50	<50	<50	<50	
11/17/2008	<6,000	1,800	320	<10	<10	<10	<10	<10	
2/25/2009	<150,000	<5,000	<250	<250	<250	<250	<250	<250	
5/28/2009	<75,000	<2,500	510	<120	<120	<120	<120	<120	
MW-3									
1/29/2003	<40	<20	0.76	<50	<50	<50	<50	<50	
02/23/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
02/15/2005	<100	<20	1.7	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data

Station #11132, 3201 35th 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.									
02/07/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
2/14/2007	<300	<20	3.8	<0.50	<0.50	<0.50	<0.50	<0.50	u
2/20/2008	<100	<10	2.3	<0.50	<0.50	<0.50	<0.50	<0.50	
2/25/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-4									
1/29/2003	<40	<20	66	<0.50	<0.50	<0.50	<0.50	<0.50	
02/23/2004	<100	<20	65	<0.50	<0.50	<0.50	<0.50	<0.50	
02/15/2005	<100	<20	62	<0.50	<0.50	<0.50	<0.50	<0.50	
02/07/2006	<300	<20	29	<0.50	<0.50	<0.50	<0.50	<0.50	
2/14/2007	<300	<20	61	<0.50	<0.50	<0.50	<0.50	<0.50	
2/20/2008	<100	<10	36	<0.50	<0.50	<0.50	<0.50	<0.50	
2/25/2009	<300	<10	26	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-5									
1/29/2003	<400	<200	82	<5.0	<5.0	<5.0	<5.0	<5.0	
5/22/2003	<10000	<2000	<50	<50	<50	<50	--	--	
7/28/2003	<2000	<400	120	<10	<10	<10	<10	<10	
11/18/2003	--	--	--	--	--	--	--	--	Well inaccessible
02/23/2004	<5,000	<1,000	100	<25	<25	<25	38	<25	
05/04/2004	<5,000	<1,000	42	<25	<25	<25	<25	<25	
08/04/2004	<5,000	<1,000	390	<25	<25	<25	<25	<25	
11/10/2004	<1,000	<200	530	<5.0	<5.0	5.5	<5.0	<5.0	
02/15/2005	<1,000	<200	260	<5.0	<5.0	<5.0	<5.0	<5.0	
05/16/2005	<1,000	<200	370	<5.0	<5.0	<5.0	<5.0	<5.0	
08/17/2005	<1,000	<200	51	<5.0	<5.0	<5.0	<5.0	<5.0	
11/18/2005	<1,000	<200	340	<5.0	<5.0	<5.0	<5.0	<5.0	b
02/07/2006	<3,000	<200	200	<5.0	<5.0	<5.0	<5.0	<5.0	
5/19/2006	<3,000	<200	44	<5.0	<5.0	<5.0	<5.0	<5.0	b
8/23/2006	<3,000	<200	230	<5.0	<5.0	<5.0	<5.0	<5.0	
11/15/2006	<1,500	<100	490	<2.5	<2.5	4.2	<2.5	<2.5	
2/14/2007	<1,500	<100	420	<2.5	<2.5	3.6	<2.5	<2.5	

Table 2. Summary of Fuel Additives Analytical Data

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-5 Cont.									
5/22/2007	<1,500	<100	26	<2.5	<2.5	<2.5	<2.5	<2.5	
8/15/2007	<6,000	<400	280	<10	<10	<10	<10	<10	
11/8/2007	<1,500	310	270	<2.5	<2.5	<2.5	<2.5	<2.5	
2/20/2008	<1,000	<100	43	<5.0	<5.0	<5.0	<5.0	<5.0	
5/7/2008	<6,000	<200	30	<10	<10	<10	<10	<10	
8/20/2008	<1,200	270	260	<2.0	<2.0	3.0	<2.0	<2.0	
2/25/2009	<300	110	68	<0.50	<0.50	0.62	<0.50	<0.50	
5/28/2009	<600	<20	11	<1.0	<1.0	<1.0	<1.0	<1.0	
8/6/2009	**<3,000**	**340**	**190**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	
MW-6									
05/16/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
02/07/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
2/14/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
2/20/2008	<100	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
2/25/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-7									
02/07/2006	<3,000	<200	270	<5.0	<5.0	<5.0	<5.0	<5.0	
2/14/2007	<3,000	<200	740	<5.0	<5.0	9.6	<5.0	<5.0	
2/20/2008	<100	13	700	<0.50	<0.50	12	0.60	<0.50	
2/25/2009	<12,000	<400	540	<20	<20	<20	<20	<20	
MW-8									
1/29/2003	<4000	<2000	<500	<50	<50	<50	<50	<50	
5/22/2003	<5000	<1000	--	<25	<25	<25	--	--	
7/28/2003	<20000	<4000	2,100	<100	<100	<100	<100	<100	
11/18/2003	<2,000	<400	1,700	<10	<10	20	--	--	a,b
02/23/2004	<10,000	<2,000	110	<50	<50	<50	<50	<50	
05/04/2004	<5,000	<1,000	2,000	<25	<25	33	<25	<25	
11/10/2004	<5,000	<1,000	74	<25	<25	<25	<25	<25	
02/15/2005	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
05/16/2005	<10,000	<2,000	<50	<50	<50	<50	<50	<50	

Table 2. Summary of Fuel Additives Analytical Data

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-8 Cont.									
08/17/2005	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
11/18/2005	<10,000	<2,000	140	<50	<50	<50	<50	<50	b
02/07/2006	<3,000	<200	7.5	<5.0	<5.0	<5.0	<5.0	<5.0	
5/19/2006	<15,000	<1,000	<25	<25	<25	<25	<25	<25	b
8/23/2006	<15,000	<1,000	82	<25	<25	<25	<25	<25	
11/15/2006	<15,000	<1,000	110	<25	<25	<25	<25	<25	
2/14/2007	<15,000	<1,000	82	<25	<25	<25	<25	<25	
5/22/2007	<6,000	<400	11	<10	<10	<10	<10	<10	
8/15/2007	<6,000	<400	28	<10	<10	<10	<10	<10	
11/8/2007	<15,000	<1,000	27	<25	<25	<25	<25	<25	
2/25/2009	<6,000	<200	35	<10	<10	<10	<10	<10	
5/28/2009	<1,500	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
MW-9									
5/22/2003	<10000	<2000	<50	<50	<50	<50	--	--	
7/28/2003	<100000	<20000	<500	<500	<500	<500	<500	<500	
11/18/2003	<2,000	<400	45	<10	<10	<10	--	--	a,b
02/23/2004	<50,000	<10,000	<250	<250	<250	<250	<250	<250	
05/04/2004	<5,000	<1,000	<25	<25	<25	<25	<25	<25	
11/10/2004	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
02/15/2005	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
05/16/2005	<2,000	<400	<10	<10	<10	<10	<10	<10	
08/17/2005	<2,500	<500	<12	<12	<12	<12	<12	<12	
11/18/2005	<1,000	<200	19	<5.0	<5.0	<5.0	<5.0	<5.0	b
02/07/2006	<3,000	<200	<5.0	<5.0	<5.0	5.4	<5.0	<5.0	
8/23/2006	<30,000	<2,000	<50	<50	<50	<50	<50	<50	
11/15/2006	<15,000	<1,000	26	<25	<25	<25	<25	<25	
2/14/2007	<15,000	<1,000	<25	<25	<25	<25	<25	<25	
5/22/2007	<15,000	<1,000	<25	<25	<25	<25	<25	<25	
8/15/2007	<1,500	<100	27	<2.5	<2.5	<2.5	<2.5	<2.5	b
11/8/2007	<3,000	<200	52	<5.0	<5.0	<5.0	<5.0	<5.0	
11/17/2008	<1,500	<50	33	<2.5	<2.5	<2.5	<2.5	<2.5	

Table 2. Summary of Fuel Additives Analytical Data

Station #11132, 3201 35th Ave, Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-9 Cont.									
2/25/2009	<6,000	<200	<10	<10	<10	<10	<10	<10	
5/28/2009	<6,000	<200	<10	<10	<10	<10	<10	<10	
8/6/2009	**<1,200**	**<40**	**18**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	
MW-10									
5/22/2003	<10000	<2000	300	<50	<50	<50	--	--	
11/18/2003	<10,000	<2,000	<50	<50	<50	<50	--	--	b
02/23/2004	<20,000	<4,000	180	<100	<100	<100	<100	<100	
05/04/2004	<5,000	<1,000	<25	<25	<25	<25	<25	<25	
11/10/2004	<5,000	<1,000	230	<25	<25	<25	<25	<25	b
02/15/2005	<10,000	<2,000	77	<50	<50	<50	<50	<50	
05/16/2005	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
08/17/2005	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
11/18/2005	<2,500	<500	16	<12	<12	<12	<12	<12	b
02/07/2006	<15,000	<1,000	73	<25	<25	<25	<25	<25	
5/19/2006	<15,000	<1,000	<25	<25	<25	<25	<25	<25	b
8/23/2006	<6,000	<400	<10	<10	<10	<10	<10	<10	
11/15/2006	<6,000	<400	54	<10	<10	<10	<10	<10	
2/14/2007	<6,000	<400	120	<10	<10	<10	<10	<25	
5/22/2007	<6,000	<400	15	<10	<10	<10	<10	<10	
8/15/2007	<6,000	<400	<10	<10	<10	<10	<10	<10	
11/8/2007	<3,000	<200	6.0	<5.0	<5.0	<5.0	<5.0	<5.0	
5/7/2008	<12,000	<400	<20	<20	<20	<20	<20	<20	
11/17/2008	<12,000	<400	23	<20	<20	<20	<20	<20	
2/25/2009	<6,000	280	170	<10	<10	<10	<10	<10	
5/28/2009	<1,500	110	65	<2.5	<2.5	<2.5	<2.5	<2.5	
8/6/2009	**<15,000**	**<500**	**<25**	**<25**	**<25**	**<25**	**<25**	**<25**	
RW-1									
11/18/2003	<10,000	11,000	6,100	<50	<50	160	--	--	a,b
11/17/2008	<12,000	<400	120	<20	<20	<20	<20	<20	

SYMBOLS AND ABBREVIATIONS:
-- = Not analyzed/applicable/measured/available
< = Not detected at or above specified laboratory reporting limit
1,2-DCA = 1,2-Dichloroethane
DIPE = Di-isopropyl ether
EDB = 1,2-Dibromoethane
ETBE = Ethyl tert-butyl ether
MTBE = Methyl tert-butyl ether
TAME = tert-Amyl methyl ether
TBA = tert-Butyl alcohol
µg/L = Micrograms per Liter

FOOTNOTES:
a = The result for TBA was reported with a possible high bias due to the continuing calibration verification falling outside acceptance criteria
b = The continuing calibration verification for ethanol was outside of client contractual acceptance limits. However, it was within method acceptance limits. The data should still be useful for its intended purpose.

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 #11132, 3201 35th Ave, Oakland, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
5/19/2006	South	0.003 to 0.005
8/23/2006	Southwest	0.01
11/15/2006	South	0.004
2/14/2007	Southeast	0.01
5/22/2007	South	0.005
8/15/2007	South-Southwest	0.008
11/8/2007	Southwest	0.006
2/20/2008	Southeast	0.008
5/7/2008	South-Southwest	0.003
8/20/2008	South-Southwest	0.007
11/17/2008	South-Southwest	0.005
2/25/2009	Southeast	0.01
5/28/2009	South	0.004
8/6/2009	**South-Southwest**	**0.005**

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 5. Bio-Degradation Parameters

Station #11132, 3201 35th 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												
11/17/2008	6.60	126	426,000	--	<100	<1,000	<50	65,000	4,830	2,750	3400.0	DO meter not working
MW-2												
11/17/2008	6.46	111	838,000	--	<100	1,100	<50	98,500	5,350	6,380	7300.0	DO meter not working
2/25/2009	6.50	-8	846,000	2.11	<100	5,100	<50	294,000	3,480	5,380	8600.0	
5/28/2009	6.59	-75	782,000	0.16	<100	8,700	<50	209,000	1,160	5,340	2400.0	BV (S2-, FE); DO measurement suspect
MW-3												
2/25/2009	7.09	78	146,000	3.45	1,600	29,000	<50	17,400	<1.0	18.5	<100	
MW-4												
2/25/2009	6.83	-23	244,000	2.80	3,800	42,000	<50	44,100	<1.0	<5.0	<100	
MW-5												
8/20/2008	6.86	170	698,000	5.57	110	12,000	<50	1,660,000	35.5	6,310	<0.10	BV (S2-, FE)
2/25/2009	6.65	23	352,000	4.38	220	7,700	<50	17,600	1.33	2,930	<100	BV (S2-, FE)
5/28/2009	6.82	-89	898,000	0.04	<100	2,900	<50	145,000	128	4,450	840.0	BV (S2-, FE); DO measurement suspect
8/6/2009	**7.27**	--	**694,000**	**0.06**	**<100**	**10,000**	**<50**	**139,000**	**3.12**	**5,820**	**<100**	**DO measurement suspect**
MW-6												
2/25/2009	7.09	16	196,000	2.39	2,200	55,000	<50	23,400	<1.0	17.6	<100	
MW-7												
2/25/2009	6.87	90	280,000	4.28	1,200	16,000	<50	36,000	<1.0	16.7	<100	BV (S2-, FE)
MW-8												
2/25/2009	6.98	19	702,000	2.18	100	4,700	<50	198,000	1,890	4,140	3000.0	
5/28/2009	6.78	-41	664,000	0.06	<100	2,200	<50	186,000	1,750	3,040	1500.0	BV (S2-, FE); DO measurement suspect
MW-9												
11/17/2008	6.64	139	480,000	--	180	12,000	<50	19,500	1,290	3,190	3400.0	DO meter not working
2/25/2009	6.69	-23	554,000	2.27	<100	1,900	<50	156,000	1,960	3,060	1900.0	
5/28/2009	6.83	-73	522,000	0.07	<100	3,800	<50	169,000	826	2,730	900.0	BV (S2-, FE); DO measurement suspect
8/6/2009	**7.26**	--	**478,000**	**0.00**	**390**	**15,000**	**<50**	--	**573**	**2,680**	**2500.0**	**DO measurement suspect**

Table 5. Bio-Degradation Parameters

Station #11132, 3201 35th 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-10												
11/17/2008	6.54	160	686,000	--	<100	1,700	<50	283,000	1,720	4,890	4700.0	DO meter not working
2/25/2009	6.68	-33	572,000	4.06	290	13,000	<50	182,000	117	4,530	3700.0	BV (S2-, FE)
5/28/2009	6.69	-40	634,000	0.03	<100	6,900	<50	657,000	618	4,380	4000.0	BV (S2-, FE); DO measurement suspect
8/6/2009	**7.23**	--	**728,000**	**0.06**	**<100**	**1,700**	**<50**	**81,400**	**587**	**4,770**	**130.0**	**DO measurement suspect**
RW-1												
11/17/2008	6.47	108	94,000	--	<100	<1,000	<50	35,800	3,780	581	990.0	DO meter not working

ABBREVIATIONS AND SYMBOLS:

< = Not detected at or above specified laboratory reporting limit
ORP = Oxygen reduction potential
DO = Dissolved oxygen
CO2 = Carbon dioxide
S2- = Soluble Sulfide
mV = Millivolts
µg/L = Micrograms per liter
mg/L = Milligrams per liter

BV = Sample received after holding time expired.

APPENDIX A

STRATUS GROUND-WATER SAMPLING DATA PACKAGE
(INCLUDES FIELD DATA SHEETS, LABORATORY ANALYTICAL REPORT WITH CHAIN-OF-CUSTODY DOCUMENTATION, AND FIELD PROCEDURES)

STRATUS
ENVIRONMENTAL, INC.

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

August 14, 2009

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

Re: Groundwater Sampling and Monthly Gauging Data Package, BP Service Station No. 11132, located at 3201 35th Avenue, Oakland, California.

General Information

Data Submittal Prepared / Reviewed by: Carol Huff / Jay Johnson
Phone Number: (530) 676-6000

On-Site Supplier Representative: Vince Zalutka
Monthly Gauging Date: July 22, 2009
Unusual Field Conditions: None noted.
Scope of Work Performed: Monthly Gauging and LPH Removal. All wells were gauged and LPH was removed and put in the hazardous waste drum located onsite.
Variations from Work Scope: No measurable product noted during this visit.

On-Site Supplier Representative: Tony Hill and Vince Zalutka
Monthly Gauging Date: August 6, 2009
Unusual Field Conditions: None noted.
Scope of Work Performed: Quarterly monitoring and sampling and monthly gauging and LPH removal. LPH was removed and put in the hazardous waste drum located on-site. Approximately 2.5-gallons of free product and groundwater mixture was bailed from well MW-1. Approximately 4-gallons of free product and groundwater mixture was bailed from well RW-1. A sheen was noted in all wells.
Variations from Work Scope: Well MW-6 had a car parked over it during this event, therefore it was not gauged.

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, certified analytical results, and field procedures for groundwater sampling. 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.

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

Sincerely,
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

STRATUS ENVIRONMENTAL, INC.

Site Address 3201 35th
City Oakland, CA
Sampled by: Vince Z
Signature Vince Zoluth

Site Number 1132
Project Number
Project PM
DATE 7-22-09

0530-0745

Water Level Data					Purge Volume Calculations					Purge Method				Sample Record			Field Data
Well ID	Time	Depth to Product (feet)	Depth to Water (feet)	Total Depth (feet)	Water column (feet)	Diameter (inches)	Multiplier	3 casing volumes (gallons)	Actual water purged (gallons)	No Purge	Bailer	Pump	other	DTW at sample time (feet)	Sample I.D	Sample Time	DO (mg/L)
RW-1	0635	20.45	20.46			6			1.5		X		PROD. MIX				
MW-1	0707	22.08	22.09			2			8		X		PROD MIX				
MW-2	0628	N/A	20.91														
MW-8	0601	N/A	18.81														
MW-9	0700	N/A	18.98														
MW-10	0607	19.88	19.90			2			2.5		X		PROD. MIX				
			mw-1		Had a lot of grease/water												
			on Site		1 Drum			4/5	Full								
				2	Drums	Empty											

Multiplier
2" = 0.5 3" = 1.0 4" = 2.0 6" = 4.4

Please refer to groundwater sampling field procedures
pH/Conductivity/temperature Meter - Oakton Model PC-10
DO Meter - Oakton 300 Series (DO is always measured before purge)

CALIBRATION DATE
pH
Conductivity
DO

STRATUS ENVIRONMENTAL, INC.

Site Address 3201 35th Ave
City Oakland
Sampled by: Vince Z
Signature Vince Zalotta

Site Number 11132
Project Number
Project PM
DATE 08-06-09

Water Level Data					Purge Volume Calculations					Purge Method				Sample Record			Field Data
Well ID	Time	Depth to Product (feet)	Depth to Water (feet)	Total Depth (feet)	Water column (feet)	Diameter (inches)	Multiplier	3 casing volumes (gallons)	Actual water purged (gallons)	No Purge	Bailer	Pump	other	DTW at sample time (feet)	Sample I.D	Sample Time	DO (mg/L)
RW-1		20.71	20.72			6"		4	mix								
MW-1		22.30	22.31			2"		2.5	3								
MW-2	21:16	21:16	21.17			2"		4	3								
MW-8																	
MW-9		N/A	19.25														
MW-10		N/A	20.19														
					1	Drum	Full										
					2	Drums	Empty										

Multiplier
2" = 0.5 3" = 1.0 4" = 2.0 6" = 4.4

Please refer to groundwater sampling field procedures
pH/Conductivity/temperature Meter - Oakton Model PC-10
DO Meter - Oakton 300 Series (DO is always measured before purge)

CALIBRATION DATE
pH
Conductivity
DO

T:\Forms

STRATUS ENVIRONMENTAL, INC.

Site Address 3201 35th Ave
City OAKLAND
Sampled by: Vince Z
Signature Vince Zabetian

Site Number 11132
Project Number
Project PM
DATE 9-11-09

Water Level Data					Purge Volume Calculations					Purge Method				Sample Record			Field Data
Well ID	Time	Depth to Product (feet)	Depth to Water (feet)	Total Depth (feet)	Water column (feet)	Diameter (inches)	Multiplier	3 casing volumes (gallons)	Actual water purged (gallons)	No Purge	Bailer	Pump	other	DTW at sample time (feet)	Sample I.D	Sample Time	DO (mg/L.)
RW-1	0625	21.17	21.18			6		4 gal	MIX		X						
MW-1	0723	22.79	22.80			2		4 gal	Mix		X						
MW-2	0616	[illegible]	21.61			2		N/A		X							
MW-8						2		car parked		over	well						
MW-9	0717	N/A	19.73			2		N/A		X							
MW-10	0651	20.61	20.62			2		2.5 gal	mix		X						
					2	Empty	Drums										

Multiplier
2" = 0.5 3" = 1.0 4" = 2.0 6" = 4.4

Please refer to groundwater sampling field procedures
pH/Conductivity/temperature Meter - Oakton Model PC-10
DO Meter - Oakton 300 Series (DO is always measured before purge)

CALIBRATION DATE
pH
Conductivity
DO

STRATUS ENVIRONMENTAL, INC.

Site Address 3201 35th Ave
City Oakland, CA
Sampled by: TH/VL
Signature

Site Number Arco 11132
Project Number E11132-01
Project PM Jay Johnson
DATE 8/6/09

W

Water Level Data					Purge Volume Calculations					Purge Method				Sample Record			Field Data	
Well ID	Time	Depth to Product (feet)	Depth to Water (feet)	Total Depth (feet)	Water column (feet)	Diameter (inches)	Multiplier	3 casing volumes (gallons)	Actual water purged (gallons)	No Purge	Bailer	Pump	other	DTW at sample time (feet)	Sample I.D	Sample Time	DO (mg/L)	
SPH MW-1	0955	22.30	22.31	41.41	SPH	2	.5	SPH	2.5 SPH		X			—	MW-1	—	—	
2	0645	21.16	21.17	31.70	10.53	2	.5	5.27	4 SPH		X			—	2	—	—	
5	0630		18.84	31.97	13.13	2	.5	6.57	2.5			X		19.84	5	0905	.06	.05
SPH 8	Car on well		—	—	—	2	5	—	—	X				—	8	—	—	
9	0626		19.25	27.73	8.48	2	.5	4.24	8			X		19.78	9	0755	Ø	.05
MW-10	0634		20.19	34.20	14.01	2	.5	7.00	2.5			X		20.62	MW-10	0830	.06	.06
SPH RW-1	0647	20.71	20.72	39.00	SPH	6	4.4	SPH	4 SPH		X			—	RW-1	—	—	
MW-3	0651		19.87	33.10	13.23													
4	0700		22.46	39.87	17.41													
6	0622		18.33	34.49	16.16													
MW-7	0634		20.83	34.87	14.04													

Multiplier Sheen visible on all wells
2" = 0.5 3" = 1.0 4" = 2.0 6" = 4.4

Please refer to groundwater sampling field procedures
pH/Conductivity/temperature Meter - Oakton Model PC-10
DO Meter - Oakton 300 Series (DO is always measured before purge)

CALIBRATION DATE
pH 8/6/09
Conductivity
DO

T:\Forms

STRATUS ENVIRONMENTAL, INC.

Site Address 3201 35th ave
City Oakland, CA
Site Sampled by TH/VZ

Site Number Arco 11132
Project No. E 11132-01
Project PM Jay Johnson
Date Sampled 8/6/09

Well ID MW-9 0755
purge start time 0732 Sheen odor

	Temp C	pH	cond	gallons
time	20.0	7.21	855	Ø
time	20.3	7.27	827	1
time	20.8 20.9	7.32 7.26	825 825	1.5 2
time				

purge stop time 0745

Well ID MW-10 0830
purge start time 0806 (sheen) odor

	Temp C	pH	cond	gallons
time	19.8	7.25	1013	Ø
time	19.8	7.30	1014	1
time	19.9	7.23	1016	2.5
time				

pugre stop time

Well ID MW-5
purge start time 0840 Sheen odor

	Temp C	pH	cond	gallons
time	20.5	7.27	996	Ø
time	21.0	7.28	998	1
time	21.2	7.27	1002	2.5
time				

purge stop time

Well ID
purge start time

	Temp C	pH	cond	gallons
time				
time				
time				
time				

purge stop time

Well ID
purge start time

	Temp C	pH	cond	gallons
time				
time				
time				
time				

purge stop time

Well ID
purge start time

	Temp C	pH	cond	gallons
time				
time				
time				
time				

purge stop time

Well ID
purge start time

	Temp C	pH	cond	gallons
time				
time				
time				
time				

purge stop time

Well ID
purge start time

	Temp C	pH	cond	gallons
time				
time				
time				
time				

purge stop time

WELLHEAD OBSERVATION FORM

STRATUS ENVIRONMENTAL, INC.

Site Name/Number: Arco 11132 *Date:* 8/6/09 *Technican:* AH / VZ

Well I.D.	Box in Good Condition? X = Yes Blank = No	Well lid secure? X=Yes If not call PM prior to departure	Lock Missing? X = Yes (replaced) Blank = No	Water in Wellbox? X = Yes Blank = No	Water Level Relative to Cap? A = Above cap B = Below cap L = Level w/cap	Well Cap? I = Intact M = Missing or Compromised (replaced)	Bolts Missing? # of missing/ Total # *	Bolts Stripped? # of stripped/ Total # *	Bolt Holes Stripped? # of stripped/ Total # *	Cracked or Broken Lid? X = Yes Blank = No *	Cracked or Broken Box? X = Yes Blank = No *	Grout Level more than 1ft below TOC? X = Yes Blank = No *	Additional Comments (such as missing lid, concrete needs replacement, or other - explain)
MW-1	X												
2	X												
3	X												
4	X												
5	X												
6	X												
7	X												
8	Clw	on well											
9	X												
MW-10	X												
RW-1	X												

* Explain corrective action taken (replaced bolt/tapped bolt hole etc…) or if a safety issue, please call PM

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, grafitti on compound, etc.)

(updated 3-28-08, SS)

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

Page 1 of 1

BP/ARC Project Name: ARCO 11132 | Req Due Date (mm/dd/yy): STD - TAT | Rush TAT: Yes ___ No X

BP/ARC Facility No: 11132 | Lab Work Order Number:

Lab Name:	Cal Science	BP/ARC Facility Address:	3201 35th Avenue	Consultant/Contractor:	Stratus Environmental
Lab Address:	7440 Lincoln Way,	City, State, ZIP Code:	Oakland, CA	Consultant/Contractor Project No:	E11132-QM/O&M
Lab PM:	Richard Villafania	Lead Regulatory Agency:	Alameda County	Address:	3330 Cameron Park Dr., Cameron Park, CA 95682
Lab Phone:	714-895-5494 / 714-895-7501 (fax)	California Global ID No.:	T0600100213	Consultant/Contractor PM:	Jay Johnson
Lab Shipping Accnt:		Enfos Proposal No:	000MT-0003	Phone:	530-676-6000 / 530-676-6005 (fax)
Lab Bottle Order No:		Accounting Mode:	Provision X OOC-BU ___ OOC-RM ___	Email EDD To:	chuff@stratusinc.net
Other Info:		Stage: Select	Activity: Monitor	Invoice To:	BP/ARC ___ Contractor ___
BP/ARC EBM:	Paul Supple				
EBM Phone:	925-275-3506				
EBM Email:	paul.supple@bp.com				

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol	Requested Analyses: GRO by 8015	BTEX by 8260	5 OXY's	1,2DCA	EDB / Ethanol	Nitrate / Sulfate (EPA 300)	Ferrous Iron / Manganese (EPA 6000 7)	Dissolved Sulfide (EPA 376.2)	Methane Carbon Dioxide (RSKSOP175)	Alkalinity (EPA 310.1)
	MW-5	8/6/2009	0905		X		13	2		1	10		X	X	X	X	X	X	X	X	X	X
	MW-9	8/6	0755		X		13	2		1	10		X	X	X	X	X	X	X	X	X	X
	MW-10	8/6	0830		X		13	2		1	10		X	X	X	X	X	X	X	X	X	X
	TB-11132-080620609						2															

Report Type & QC Level: Standard X; Full Data Package ___

Comments: Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

*Run even if past hold time

On Hold

Sampler's Name:	A Hill	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company:	Stratus		8/6/09	1020			
Shipment Method:	8/6/09	Ship Date: 8/6/09					
Shipment Tracking No:							

Special Instructions: Please cc results to bpedf@broadbentinc.com

THIS LINE - LAB USE ONLY: 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

Calscience
Environmental
Laboratories, Inc.

August 20, 2009

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

Subject: **Calscience Work Order No.: 09-08-0616**
Client Reference: ARCO 11132

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 8/7/2009 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,

for

Calscience Environmental
Laboratories, Inc.
Richard Villafania
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	08/07/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-08-0616
Cameron Park, CA 95682-8861	Preparation:	N/A
	Method:	RSK-175M

Project: ARCO 11132

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	**09-08-0616-1-G**	**08/06/09 09:05**	**Aqueous**	**GC 14**	**N/A**	**08/11/09 00:00**	**090811L01**

Parameter	Result	RL	DF	Qual	Units
Carbon Dioxide	139000	170	100		ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-10	**09-08-0616-3-F**	**08/06/09 08:30**	**Aqueous**	**GC 14**	**N/A**	**08/11/09 00:00**	**090811L01**

Parameter	Result	RL	DF	Qual	Units
Carbon Dioxide	81400	17.0	10		ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-659-68**	**N/A**	**Aqueous**	**GC 14**	**N/A**	**08/11/09 00:00**	**090811L01**

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	08/07/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-08-0616
Cameron Park, CA 95682-8861	Preparation:	N/A
	Method:	RSK-175M

Project: ARCO 11132

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	**09-08-0616-1-H**	**08/06/09 09:05**	**Aqueous**	**GC 52**	**N/A**	**08/10/09 00:00**	**090810L01**

Parameter	Result	RL	DF	Qual	Units
Methane	3.12	1.00	1		ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-9	**09-08-0616-2-H**	**08/06/09 07:55**	**Aqueous**	**GC 52**	**N/A**	**08/10/09 00:00**	**090810L01**

Parameter	Result	RL	DF	Qual	Units
Methane	573	8.00	8		ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-10	**09-08-0616-3-H**	**08/06/09 08:30**	**Aqueous**	**GC 52**	**N/A**	**08/10/09 00:00**	**090810L01**

Parameter	Result	RL	DF	Qual	Units
Methane	587	8.00	8		ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-663-687**	**N/A**	**Aqueous**	**GC 52**	**N/A**	**08/10/09 00:00**	**090810L01**

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	08/07/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-08-0616
Cameron Park, CA 95682-8861	Preparation:	N/A
	Method:	EPA 200.7

Project: ARCO 11132

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	**09-08-0616-1-L**	**08/06/09 09:05**	**Aqueous**	**ICP 5300**	**08/14/09**	**08/17/09 12:06**	**090814LA6**

Parameter	Result	RL	DF	Qual	Units
Manganese	5820	5.00	1		ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-9	**09-08-0616-2-L**	**08/06/09 07:55**	**Aqueous**	**ICP 5300**	**08/14/09**	**08/17/09 12:26**	**090814LA6**

Parameter	Result	RL	DF	Qual	Units
Manganese	2680	5.00	1		ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-10	**09-08-0616-3-L**	**08/06/09 08:30**	**Aqueous**	**ICP 5300**	**08/14/09**	**08/17/09 12:28**	**090814LA6**

Parameter	Result	RL	DF	Qual	Units
Manganese	4770	5.00	1		ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-012-3,913**	**N/A**	**Aqueous**	**ICP 5300**	**08/14/09**	**08/17/09 11:59**	**090814LA6**

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	08/07/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-08-0616
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: ARCO 11132

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	**09-08-0616-1-E**	**08/06/09 09:05**	**Aqueous**	**GC 29**	**08/11/09**	**08/11/09 09:05**	**090810B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	78	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	92	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-9	**09-08-0616-2-E**	**08/06/09 07:55**	**Aqueous**	**GC 29**	**08/11/09**	**08/11/09 09:38**	**090810B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	6800	500	10		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	107	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-10	**09-08-0616-3-E**	**08/06/09 08:30**	**Aqueous**	**GC 29**	**08/11/09**	**08/11/09 10:11**	**090810B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	23000	500	10		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	112	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-636**	**N/A**	**Aqueous**	**GC 29**	**08/10/09**	**08/11/09 02:18**	**090810B02**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	88	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	08/07/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-08-0616
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: ARCO 11132			Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	**09-08-0616-1-D**	**08/06/09 09:05**	**Aqueous**	**GC/MS BB**	**08/15/09**	**08/15/09 19:30**	**090815L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	5.0	10		Methyl-t-Butyl Ether (MTBE)	190	5.0	10	
1,2-Dibromoethane	ND	5.0	10		Tert-Butyl Alcohol (TBA)	340	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)	ND	5.0	10	
Xylenes (total)	ND	5.0	10		Ethanol	ND	3000	10	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	104	80-128			Dibromofluoromethane	104	80-127		
Toluene-d8	101	80-120			1,4-Bromofluorobenzene	79	68-120		

MW-9	**09-08-0616-2-D**	**08/06/09 07:55**	**Aqueous**	**GC/MS BB**	**08/15/09**	**08/15/09 19:58**	**090815L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	19	2.0	4		Methyl-t-Butyl Ether (MTBE)	18	2.0	4	
1,2-Dibromoethane	ND	2.0	4		Tert-Butyl Alcohol (TBA)	ND	40	4	
1,2-Dichloroethane	ND	2.0	4		Diisopropyl Ether (DIPE)	ND	2.0	4	
Ethylbenzene	120	2.0	4		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	4	
Toluene	ND	2.0	4		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	4	
Xylenes (total)	250	2.0	4		Ethanol	ND	1200	4	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	103	80-128			Dibromofluoromethane	107	80-127		
Toluene-d8	101	80-120			1,4-Bromofluorobenzene	102	68-120		

MW-10	**09-08-0616-3-A**	**08/06/09 08:30**	**Aqueous**	**GC/MS Z**	**08/13/09**	**08/13/09 17:11**	**090813L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	850	25	50		Methyl-t-Butyl Ether (MTBE)	ND	25	50	
1,2-Dibromoethane	ND	25	50		Tert-Butyl Alcohol (TBA)	ND	500	50	
1,2-Dichloroethane	ND	25	50		Diisopropyl Ether (DIPE)	ND	25	50	
Ethylbenzene	1200	25	50		Ethyl-t-Butyl Ether (ETBE)	ND	25	50	
Toluene	490	25	50		Tert-Amyl-Methyl Ether (TAME)	ND	25	50	
Xylenes (total)	4100	25	50		Ethanol	ND	15000	50	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	102	80-128			Dibromofluoromethane	101	80-127		
Toluene-d8	101	80-120			1,4-Bromofluorobenzene	99	68-120		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	08/07/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-08-0616
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L
Project: ARCO 11132		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	**099-12-703-1,038**	**N/A**	**Aqueous**	**GC/MS Z**	**08/13/09**	**08/13/09 12:05**	**090813L01**

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 Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	80	80-128			Dibromofluoromethane	93	80-127		
Toluene-d8	97	80-120			1,4-Bromofluorobenzene	92	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-1,042**	**N/A**	**Aqueous**	**GC/MS BB**	**08/15/09**	**08/15/09 16:37**	**090815L01**

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 Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	109	80-128			Dibromofluoromethane	97	80-127		
Toluene-d8	103	80-120			1,4-Bromofluorobenzene	89	68-120		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 08/07/09
Work Order No: 09-08-0616

Project: ARCO 11132

Client Sample Number	Lab Sample Number	Date Collected	Matrix
MW-5	**09-08-0616-1**	**08/06/09**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	ND	100	1		ug/L	N/A	08/07/09	EPA 300.0
Sulfate	10000	1000	1		ug/L	N/A	08/07/09	EPA 300.0
Alkalinity, Total (as CaCO3)	694000	100	1		ug/L	N/A	08/14/09	SM 2320B
Iron (II)	ND	100	1	BV	ug/L	08/07/09	08/07/09	SM 3500-FeB
Sulfide, Dissolved	ND	50	1		ug/L	08/07/09	08/07/09	SM 4500 S2 - D

MW-9	**09-08-0616-2**	**08/06/09**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	390	100	1		ug/L	N/A	08/07/09	EPA 300.0
Sulfate	15000	1000	1		ug/L	N/A	08/07/09	EPA 300.0
Alkalinity, Total (as CaCO3)	478000	100	1		ug/L	N/A	08/14/09	SM 2320B
Iron (II)	2500	100	1	BV	ug/L	08/07/09	08/07/09	SM 3500-FeB
Sulfide, Dissolved	ND	50	1		ug/L	08/07/09	08/07/09	SM 4500 S2 - D

MW-10	**09-08-0616-3**	**08/06/09**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	ND	100	1		ug/L	N/A	08/07/09	EPA 300.0
Sulfate	1700	1000	1		ug/L	N/A	08/07/09	EPA 300.0
Alkalinity, Total (as CaCO3)	728000	100	1		ug/L	N/A	08/14/09	SM 2320B
Iron (II)	130	100	1	BV	ug/L	08/07/09	08/07/09	SM 3500-FeB
Sulfide, Dissolved	ND	50	1		ug/L	08/07/09	08/07/09	SM 4500 S2 - D

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

Calscience Environmental Laboratories, Inc.

Analytical Report

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

Date Received: 08/07/09
Work Order No: 09-08-0616

Project: ARCO 11132

Client Sample Number	Lab Sample Number	Date Collected	Matrix
Method Blank		**N/A**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Nitrate (as N)	ND	100	1		ug/L	N/A	08/07/09	EPA 300.0
Sulfate	ND	1000	1		ug/L	N/A	08/07/09	EPA 300.0
Alkalinity, Total (as CaCO3)	ND	1.0	1		ug/L	N/A	08/14/09	SM 2320B
Iron (II)	ND	100	1		ug/L	08/07/09	08/07/09	SM 3500-FeB
Sulfide, Dissolved	ND	50	1		ug/L	08/07/09	08/07/09	SM 4500 S2 - D

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

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Stratus Environmental, inc.	Date Received:	08/07/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-08-0616
Cameron Park, CA 95682-8861	Preparation:	N/A
	Method:	RSK-175M

Project: ARCO 11132

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
MW-5	**Aqueous**	**GC 14**	**N/A**	**08/11/09**	**090811D01**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Carbon Dioxide	139000	168000	19	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

Stratus Environmental, inc.	Date Received:	08/07/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-08-0616
Cameron Park, CA 95682-8861	Preparation:	N/A
	Method:	RSK-175M

Project: ARCO 11132

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
MW-10	**Aqueous**	**GC 52**	**N/A**	**08/10/09**	**090810D01**

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Methane	587	587	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	08/07/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-08-0616
Cameron Park, CA 95682-8861		Preparation:	N/A
		Method:	EPA 200.7

Project ARCO 11132

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-5	**Aqueous**	**ICP 5300**	**08/14/09**	**08/17/09**	**090814SA6**

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

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

Stratus Environmental, inc.		Date Received	08/07/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-08-0616
Cameron Park, CA 95682-8861		Preparation:	N/A
		Method:	EPA 200.7

Project: ARCO 11132

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
MW-5	**Aqueous**	**ICP 5300**	**08/14/09**	**08/17/09**	**090814SA6**

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 Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	08/07/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-08-0616
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project ARCO 11132

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-08-0450-7	**Aqueous**	**GC 29**	**08/10/09**	**08/11/09**	**090810S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	87	85	38-134	1	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	08/07/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-08-0616
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project ARCO 11132

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-08-0428-4	**Aqueous**	**GC/MS Z**	**08/13/09**	**08/13/09**	**090813S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	102	76-124	2	0-20	
Carbon Tetrachloride	117	119	74-134	2	0-20	
Chlorobenzene	102	101	80-120	2	0-20	
1,2-Dibromoethane	92	103	80-120	11	0-20	
1,2-Dichlorobenzene	98	98	80-120	1	0-20	
1,1-Dichloroethene	111	110	73-127	1	0-20	
Ethylbenzene	106	103	78-126	2	0-20	
Toluene	99	101	80-120	2	0-20	
Trichloroethene	98	98	77-120	1	0-20	
Vinyl Chloride	110	111	72-126	1	0-20	
Methyl-t-Butyl Ether (MTBE)	87	100	67-121	14	0-49	
Tert-Butyl Alcohol (TBA)	101	98	36-162	3	0-30	
Diisopropyl Ether (DIPE)	94	102	60-138	8	0-45	
Ethyl-t-Butyl Ether (ETBE)	94	105	69-123	11	0-30	
Tert-Amyl-Methyl Ether (TAME)	88	101	65-120	14	0-20	
Ethanol	110	96	30-180	14	0-72	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	08/07/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-08-0616
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project ARCO 11132

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-08-1132-2	**Aqueous**	**GC/MS BB**	**08/15/09**	**08/15/09**	**090815S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	102	101	76-124	1	0-20	
Carbon Tetrachloride	103	103	74-134	0	0-20	
Chlorobenzene	100	96	80-120	5	0-20	
1,2-Dibromoethane	101	107	80-120	5	0-20	
1,2-Dichlorobenzene	100	100	80-120	0	0-20	
1,1-Dichloroethene	103	108	73-127	5	0-20	
Ethylbenzene	101	95	78-126	5	0-20	
Toluene	98	99	80-120	1	0-20	
Trichloroethene	101	99	77-120	2	0-20	
Vinyl Chloride	90	90	72-126	0	0-20	
Methyl-t-Butyl Ether (MTBE)	100	103	67-121	3	0-49	
Tert-Butyl Alcohol (TBA)	99	111	36-162	11	0-30	
Diisopropyl Ether (DIPE)	107	108	60-138	1	0-45	
Ethyl-t-Butyl Ether (ETBE)	100	103	69-123	3	0-30	
Tert-Amyl-Methyl Ether (TAME)	100	103	65-120	2	0-20	
Ethanol	99	110	30-180	10	0-72	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: N/A
Work Order No: 09-08-0616

Project: ARCO 11132

Matrix: Aqueous or Solid

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate (as N)	EPA 300.0	09-08-0595-1	08/07/09	N/A	88	89	80-120	0	0-20	
Sulfate	EPA 300.0	09-08-0595-1	08/07/09	N/A	89	89	80-120	0	0-20	
Iron (II)	SM 3500-FeB	MW-10	08/07/09	8/7/09	96	96	70-130	0	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

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

Date Received: N/A
Work Order No: 09-08-0616

Project: ARCO 11132

Matrix: Aqueous or Solid

Parameter	Method	QC Sample ID	Date Analyzed	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	SM 2320B	09-08-0613-1	08/14/09	166000	168000	1	0-25	
Bicarbonate (as CaCO3)	SM 2320B	09-08-0613-1	08/14/09	166000	168000	1	0-25	
Carbonate (as CaCO3)	SM 2320B	09-08-0613-1	08/14/09	ND	ND	NA	0-25	
Hydroxide (as CaCO3)	SM 2320B	09-08-0613-1	08/14/09	ND	ND	NA	0-25	
Sulfide, Dissolved	SM 4500 S2 - D	MW-5	08/07/09	ND	ND	NA	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	09-08-0616
Cameron Park, CA 95682-8861		Preparation:	N/A
		Method:	RSK-175M

Project: ARCO 11132

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-659-68	Aqueous	GC 14	N/A	08/11/09	090811L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	93	94	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	09-08-0616
Cameron Park, CA 95682-8861		Preparation:	N/A
		Method:	RSK-175M

Project: ARCO 11132

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-663-687	Aqueous	GC 52	N/A	08/10/09	090810L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	89	87	79-109	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	09-08-0616
Cameron Park, CA 95682-8861		Preparation:	N/A
		Method:	EPA 200.7

Project: ARCO 11132

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-012-3,913	**Aqueous**	**ICP 5300**	**08/14/09**	**08/17/09**	**090814LA6**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Manganese	101	103	85-115	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	09-08-0616
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: ARCO 11132

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-636	Aqueous	GC 29	08/10/09	08/11/09	090810B02

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	87	88	78-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

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: 09-08-0616
Preparation: EPA 5030B
Method: EPA 8260B

Project: ARCO 11132

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-1,038	Aqueous	GC/MS Z	08/13/09	08/13/09	090813L01

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	102	102	80-120	73-127	0	0-20	
Carbon Tetrachloride	116	117	74-134	64-144	1	0-20	
Chlorobenzene	103	100	80-120	73-127	3	0-20	
1,2-Dibromoethane	91	93	79-121	72-128	2	0-20	
1,2-Dichlorobenzene	98	100	80-120	73-127	2	0-20	
1,1-Dichloroethene	111	107	78-126	70-134	3	0-28	
Ethylbenzene	109	105	80-120	73-127	4	0-20	
Toluene	101	100	80-120	73-127	0	0-20	
Trichloroethene	101	99	79-127	71-135	1	0-20	
Vinyl Chloride	109	106	72-132	62-142	4	0-20	
Methyl-t-Butyl Ether (MTBE)	83	95	69-123	60-132	13	0-20	
Tert-Butyl Alcohol (TBA)	97	93	63-123	53-133	3	0-20	
Diisopropyl Ether (DIPE)	92	98	59-137	46-150	6	0-37	
Ethyl-t-Butyl Ether (ETBE)	93	100	69-123	60-132	7	0-20	
Tert-Amyl-Methyl Ether (TAME)	91	97	70-120	62-128	7	0-20	
Ethanol	120	96	28-160	6-182	22	0-57	

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

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	09-08-0616
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: ARCO 11132

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-1,042	Aqueous	GC/MS BB	08/15/09	08/15/09	090815L01

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	102	102	80-120	73-127	0	0-20	
Carbon Tetrachloride	106	106	74-134	64-144	0	0-20	
Chlorobenzene	102	101	80-120	73-127	2	0-20	
1,2-Dibromoethane	105	104	79-121	72-128	1	0-20	
1,2-Dichlorobenzene	101	101	80-120	73-127	1	0-20	
1,1-Dichloroethene	107	106	78-126	70-134	1	0-28	
Ethylbenzene	101	100	80-120	73-127	1	0-20	
Toluene	101	99	80-120	73-127	2	0-20	
Trichloroethene	110	115	79-127	71-135	5	0-20	
Vinyl Chloride	97	98	72-132	62-142	1	0-20	
Methyl-t-Butyl Ether (MTBE)	104	105	69-123	60-132	1	0-20	
Tert-Butyl Alcohol (TBA)	105	104	63-123	53-133	1	0-20	
Diisopropyl Ether (DIPE)	109	101	59-137	46-150	8	0-37	
Ethyl-t-Butyl Ether (ETBE)	104	98	69-123	60-132	6	0-20	
Tert-Amyl-Methyl Ether (TAME)	103	104	70-120	62-128	1	0-20	
Ethanol	112	97	28-160	6-182	14	0-57	

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

Calscience Environmental Laboratories, Inc.

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: 09-08-0616

Project: ARCO 11132

Matrix: Aqueous or Solid

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Nitrate (as N)	EPA 300.0	099-12-906-390	N/A	08/07/09	99	98	90-110	0	0-15	
Sulfate	EPA 300.0	099-12-906-390	N/A	08/07/09	99	99	90-110	0	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	09-08-0616
Cameron Park, CA 95682-8861			

Project: ARCO 11132

Matrix: Aqueous or Solid

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers
Iron (II)	SM 3500-FeB	099-05-111-3,443	08/07/09	08/07/09	1.00	0.971	97	80-120	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 09-08-0616

Qualifier	Definition
AX	Sample too dilute to quantify surrogate.
BA	Relative percent difference out of control.
BA,AY	BA = Relative percent difference out of control. AY = 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.
BZ	Sample preserved improperly.
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.
DU	Insufficient sample quantity for matrix spike/dup matrix spike.
ET	Sample was extracted past end of recommended max. holding time.
EY	Result exceeds normal dynamic range; reported as a min est.
GR	Internal standard recovery is outside method recovery limit.
IB	CCV recovery abovelimit; 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,AY	LG= Surrogate recovery below the acceptance limit. AY= Matrix interference suspected.
LH,AY	LH= Surrogate recovery above the acceptance limit. AY= Matrix interference suspected.
LM,AY	LM= MS and/or MSD above acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LN,AY	LN= MS and/or MSD below acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LQ	LCS recovery above method control limits.

Work Order Number: 09-08-0616

Qualifier	Definition
LR	LCS recovery below method control limits.
LW	Quantitation of unknown hydrocarbon(s) in sample based on gasoline.
LX	Quantitation of unknown hydrocarbon(s) in sample based on diesel.
MB	Analyte present in the method blank.
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.
SG	A silica gel cleanup procedure was performed.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

0616

Page 1 of 1

BP/ARC Project Name: ARCO 11132
BP/ARC Facility No: 11132
Req Due Date (mm/dd/yy): STD - TAT
Rush TAT: Yes ___ No X
Lab Work Order Number:

Lab Name: Cal Science	BP/ARC Facility Address: 3201 35th Avenue	Consultant/Contractor: Stratus Environmental
Lab Address: 7440 Lincoln Way	City, State, ZIP Code: Oakland, CA	Consultant/Contractor Project No: E11132-QM/O&M
Lab PM: Richard Villafania	Lead Regulatory Agency: Alameda County	Address: 3330 Cameron Park Dr., Cameron Park, CA 95682
Lab Phone: 714-895-5494 / 714-895-7501 (fax)	California Global ID No.: T0600100213	Consultant/Contractor PM: Jay Johnson
Lab Shipping Accnt:	Enfos Proposal No: 000MT-0003	Phone: 530-676-6000 / 530-676-6005 (fax)
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ___ OOC-RM ___	Email EDD To: chuff@stratusinc.net
Other Info:	Stage: Select Activity: Monitor	Invoice To: BP/ARC ___ Contractor ___
BP/ARC EBM: Paul Supple		
EBM Phone: 925-275-3506		
EBM Email: paul.supple@bp.com		

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol	Requested Analyses: GRO by 8015	BTEX + 5 OXY's by 8260	1,2DCA	EDB	Ethanol	Nitrate (EPA 300)	Sulfate (EPA 300)	Dissolved Manganese (EPA 6010)	Dissolved Sulfide (EPA 376.1)	Methane (RSK 175)	Carbon Dioxide (RSK 175)	Alkalinity (EPA 310.1)
1	MW-5	8/6/2009	0905		X		13	2		1	10		X	X	X	X	X	X	X	X	X	X	X	X
2	MW-9	8/6	0755		X		13	2		1	10		X	X	X	X	X	X	X	X	X	X	X	X
3	MW-10	8/6	0830		X		13	2		1	10		X	X	X	X	X	X	X	X	X	X	X	X
4	TB-11132-08062009						2																	

Report Type & QC Level: Standard X; Full Data Package ___

Comments
Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

No CO2 container recv'd.

*Run even if past hold time

On Hold

Sampler's Name: A Hill
Sampler's Company: Stratus
Shipment Method: 8/6/09 Ship Date: 8/6/09
Shipment Tracking No: 925556229

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
	8/6/09	1030			
				8/7/09	1030

Special Instructions: Please cc results to bpedf@broadbentinc.com

THIS LINE - LAB USE ONLY: 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

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-08-0616

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Stratus

DATE: 08/07/09

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

Temperature 2.8 °C - 0.2 °C (CF) = 2.6 °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 Only Initial: JH

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: JH

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: BF

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ COC not relinquished. ☐ No date relinquished. ☐ No time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Correct containers and volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑ RN 8-7-9	☑	☐
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh (10) ☐VOAna_2 ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGBna_2 ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☑500PB ☐500PB**na** ☑250PB ☑250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____ **Other:** ☐_____ **Checked/Labeled by:** BF

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelop **Reviewed by:** RN

Preservative: h: HCL n: HNO3 na_2: $Na_2S_2O_3$ Na: NaOH p: H_3PO_4 s: H_2SO_4 znna: $ZnAc_2$+NaOH f: Field-filtered **Scanned by:** RN

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-08-0616

SAMPLE ANOMALY FORM

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)/preservative used** – list test
- ☐ **No preservative noted on COC or label** – list test & notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample labels do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and/or Time Collected**
  - ☐ **Project Information**
  - ☐ **# of Containers**
  - ☐ **Analysis**
- ☐ **Sample containers compromised** – Note in comments
  - ☐ **Leaking**
  - ☐ **Broken**
  - ☐ **Without Labels**
- ☐ **Air sample containers compromised** – Note in comments
  - ☐ **Flat**
  - ☐ **Very low in volume**
  - ☐ **Leaking (transferred into Calscience Tedlar® Bag*)**
  - ☐ **Leaking (transferred into Client's Tedlar® Bag*)**
- ☐ **Other:** _____

Comments:

(-1) to (-3): Ferrous Iron expired

(-2) No container received for CO_2 test

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 Received

Comments: _____

*Transferred at Client's request.

Initial / Date RN/8-7-09

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

(0616)

Page 1 of 1

BP/ARC Project Name: ARCO 11132
BP/ARC Facility No: 11132
Req Due Date (mm/dd/yy): STD - TAT
Rush TAT: Yes ___ No X
Lab Work Order Number:

Lab Name: Cal Science	BP/ARC Facility Address: 3201 35th Avenue	Consultant/Contractor: Stratus Environmental
Lab Address: 7440 Lincoln Way	City, State, ZIP Code: Oakland, CA	Consultant/Contractor Project No: E11132-QM/O&M
Lab PM: Richard Villafania	Lead Regulatory Agency: Alameda County	Address: 3330 Cameron Park Dr., Cameron Park, CA 95682
Lab Phone: 714-895-5494 / 714-895-7501 (fax)	California Global ID No.: T0600100213	Consultant/Contractor PM: Jay Johnson
Lab Shipping Accnt:	Enfos Proposal No: 000MT-0003	Phone: 530-676-6000 / 530-676-6005 (fax)
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ___ OOC-RM ___	Email EDD To: chuff@stratusinc.net
Other Info:	Stage: Select Activity: Monitor	Invoice To: BP/ARC ___ Contractor ___
BP/ARC EBM: Paul Supple		
EBM Phone: 925-275-3506		
EBM Email: paul.supple@bp.com		

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol	Requested Analyses: GRO by 8015	BTEX / 5 OXY's by 8260	TAME / Ethanol	EDB / Ethanol	Nitrate / Sulfate (EPA 300)	Ferrous Iron / Manganese (SM 3500)	Dissolved Sulfide (EPA 376.2)	Methane Carbon Dioxide (RSK 175)	Alkalinity (EPA 310.1)
1	MW-5	8/6/2009	0905		X		13	2		1	10		X	X	X	X	X	X	X	X	X
2	MW-9	8/6	0755		X		13	2		1	10		X	X	X	X	X	X	X	X	X
3	MW-10	8/6	0830		X		13	2		1	10		X	X	X	X	X	X	X	X	X
4	TB-11132-080620009						2														

Report Type & QC Level: Standard X; Full Data Package ___

Comments
Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

No CO2 container recv'd.

*Run even if past hold time
On Hold

Sampler's Name: A Hill	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stratus		8/6/09	1030			
Shipment Method: 8/6/09 Ship Date: 8/6/09						
Shipment Tracking No: 925556229 8					8/7/09	1030

Special Instructions: Please cc results to bpedf@broadbentinc.com

THIS LINE - LAB USE ONLY: 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

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-08-0616

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Stratus

DATE: 08/07/09

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

Temperature 2.8 °C - 0.2 °C (CF) = 2.6 °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 Only Initial: JH

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A Initial: JH

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: BC

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ COC not relinquished. ☐ No date relinquished. ☐ No time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Correct containers and volume for analyses requested	☑	☐	☐
Analyses received within holding time	~~☑~~ RN 8-7-9	☑	☐
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOAh (10) ☐VOAna_2 ☐125AGB ☐125AGBh ☐125AGBp ☐1AGB ☐1AGBna_2 ☐1AGBs ☐500AGB ☐500AGJ ☐500AGJs ☐250AGB ☐250CGB ☐250CGBs ☐1PB ☑500PB ☐500PBna ☑250PB ☑250PBn ☐125PB ☐125PBznna ☐100PJ ☐100PJna_2 ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____ **Other:** ☐_____ **Checked/Labeled by:** BC

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelop **Reviewed by:** RN

Preservative: h: HCL n: HNO3 na_2: $Na_2S_2O_3$ Na: NaOH p: H_3PO_4 s: H_2SO_4 znna: $ZnAc_2$+NaOH f: Field-filtered **Scanned by:** RN

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-08-0616

SAMPLE ANOMALY FORM

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)/preservative used** – list test
- ☐ **No preservative noted on COC or label** – list test & notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample labels do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and/or Time Collected**
  - ☐ **Project Information**
  - ☐ **# of Containers**
  - ☐ **Analysis**
- ☐ **Sample containers compromised** – Note in comments
  - ☐ **Leaking**
  - ☐ **Broken**
  - ☐ **Without Labels**
- ☐ **Air sample containers compromised** – Note in comments
  - ☐ **Flat**
  - ☐ **Very low in volume**
  - ☐ **Leaking (transferred into Calscience Tedlar® Bag*)**
  - ☐ **Leaking (transferred into Client's Tedlar® Bag*)**
- ☐ **Other:** _____

Comments:

(-1) to (-3): Ferrous Iron expired

(-2) No container received for CO_2 test

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 Received

Comments: _____

*Transferred at Client's request.

Initial / Date RN/8-7-09

ATTACHMENT

FIELD PROCEDURES FOR GROUNDWATER SAMPLING

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

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 RECEIPTS

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!

Submittal Type:	**GEO_WELL**
Submittal Title:	**3Q09 GEO_WELL 11132**
Facility Global ID:	**T0600100213**
Facility Name:	**BP #11132**
File Name:	**GEO_WELL.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**9/17/2009 3:52:34 PM**
Confirmation Number:	**2607580900**

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:	**3Q09 GW Monitoring**
Facility Global ID:	**T0600100213**
Facility Name:	**BP #11132**
File Name:	**09080616.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**9/16/2009 11:21:05 AM**
Confirmation Number:	**8214590787**

VIEW QC REPORT

VIEW DETECTIONS REPORT