ARCADIS
Infrastructure, environment, buildings

ARCADIS
100 Montgomery Street
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Environmental

Re: Third Quarter 2009 Ground-Water Monitoring Report
Former BP Station # 6002
6235 Seminary Avenue
Oakland, California
ACEH Case # RO0000163

Date:
10/30/2009

"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 Atlantic Richfield Company Station #6002
6235 Seminary Avenue, Oakland, California
ACEH Case #RO0000163

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
Chico, California 95926
(530) 566-1400
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30 October 2009

Project No. 06-88-634

Broadbent & Associates, Inc.
1324 Mangrove Ave., Suite 212
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BROADBENT & ASSOCIATES, INC
ENVIRONMENTAL, WATER RESOURCES & ENGINEERING

30 October 2009

Project No. 06-88-634

ARCADIS-US, Inc.
100 Montgomery Street, Suite 300
San Francisco, California 94104
Submitted via email

Attn.: Hollis Phillips, PG – Senior Geologist

Re: Third Quarter 2009 Ground-Water Monitoring Report, Former Atlantic Richfield Company Station #6002, 6235 Seminary Avenue, Oakland, Alameda County, California; ACEH Case #RO0000163

Dear Ms. Phillips:

Attached is the *Third Quarter 2009 Ground-Water Monitoring Report* for Former Atlantic Richfield Company (a BP affiliated company) Station #6002 located at 6235 Seminary Avenue, Oakland, California (Site). This report presents a summary of results from 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

Enclosures

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

STATION # 6002 GROUND-WATER MONITORING REPORT

Facility: #6002 Address:	6235 Seminary Avenue, Oakland
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.:	06-88-634
Primary Agency/Regulatory ID No.:	Alameda County Environmental Health (ACEH) ACEH Case #RO0000163
Facility Permits/Permitting Agency:	NA

WORK PERFORMED THIS QUARTER (Third Quarter 2009):

1. Prepared and submitted the *Second Quarter 2009 Ground-Water Monitoring Report* (BAI, 7/30/2009).
2. Prepared and submitted the *Initial Site Conceptual Model with Soil & Ground-Water Investigation Work Plan* (BAI, 8/5/2009), as requested by ACEH in their letter dated 22 May 2009.
3. Conducted ground-water monitoring/sampling for Third Quarter 2009. Work performed by Stratus Environmental, Inc. (Stratus) on 23 September 2009.

WORK PROPOSED FOR NEXT QUARTER (Fourth Quarter 2009):

1. Prepared and submitted Third Quarter 2009 Ground-Water Monitoring Report (contained herein).
2. No ground-water monitoring/sampling is scheduled during Fourth Quarter 2009.
3. Prepare and submit Fourth Quarter 2009 Status Report.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	**Ground-Water Monitoring/Sampling**
Frequency of ground-water monitoring:	**Semi-Annually (1Q & 3Q): Wells MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, VW-1, VW-3, VW-4**
Frequency of ground-water sampling:	**Semi-Annually (1Q & 3Q): Wells MW-5, VW-1, VW-4** **Annually (3Q): Wells MW-3, MW-4, MW-6, MW-7, MW-8, VW-3**
Is free product (FP) present on-site:	**No**
Bulk Soil removed to Date:	**Approximately 370 cubic yards of TPH-impacted soil**
Current remediation techniques:	**NA**
Depth to ground water (below TOC):	**7.42 ft (MW-6) to 12.65 ft (MW-4)**
General ground-water flow direction:	**West**
Approximate hydraulic gradient:	**0.06 ft/ft**

DISCUSSION:

Third quarter 2009 ground-water monitoring and sampling was conducted at Former Atlantic Richfield Company Service Station #6002 on 23 September 2009 by Stratus personnel. Water levels were gauged in eight of the nine wells associated with Station #6002. Well MW-7 was dry and well MW-8 was inaccessible and therefore not gauged. No other significant irregularities were noted during water level gauging. Depth to water measurements ranged from 7.42 ft at well MW-6 to 12.65 ft. at well MW-4. Resulting ground-water surface elevations ranged from 250.52 ft in up-gradient well MW-6 to 235.97 ft in well MW-4. Water level elevations yielded a potentiometric ground-water flow direction and gradient to the west at approximately 0.06 ft/ft. Ground-water monitoring field data sheets are provided

within Appendix A. Measured depths to water and respective ground-water elevations are summarized in Table 1. Current and historic ground-water flow directions and gradients are provided in Table 3. A Site Location Map is provided as Drawing 1. Potentiometric ground-water elevation contours are presented in Drawing 2.

Consistent with the current ground-water sampling schedule, water samples were collected from wells MW-3 through MW-6, VW-1, VW-3, and VW-4. Well MW-7 was dry and well MW-8 was inaccessible and therefore neither was sampled. No other irregularities were noted 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; Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA Method 8260B; and Methyl Tert-Butyl Ether (MTBE), Ethyl Tert-Butyl Ether (ETBE), Di-Isopropyl Ether (DIPE), Tert-Amyl Methyl Ether (TAME), Tert-Butyl Alcohol (TBA), 1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA) and Ethanol by EPA Method 8260B. No significant irregularities were noted during analysis of the samples by the laboratory. Ground-water sampling field data sheets and the laboratory analytical report, including chain-of-custody documentation, are provided in Appendix A.

Gasoline Range Organics were detected above the laboratory reporting limit in two of the seven wells sampled this quarter at concentrations of 4,300 micrograms per liter (µg/L) in well MW-5 and 81 µg/L in well VW-4. Toluene, Ethylbenzene and Total Xylenes were detected above the laboratory reporting limits in well MW-5 at concentrations of 0.57 µg/L, 1.6 µg/L, and 1.3 µg/L, respectively. MTBE was detected above the laboratory reporting limit in three of the seven wells sampled at concentrations up to 6.3 µg/L in MW-3. TBA was detected above the laboratory reporting limit in two of the seven wells sampled at concentrations of 61 µg/L and 13 µg/L in wells VW-4 and MW-5, respectively. The remaining fuel constituents were not detected above their laboratory reporting limits in the seven wells sampled this quarter. Historic laboratory analytical results are summarized in Table 1 and Table 2. 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.

CONCLUSIONS AND RECOMMENDATIONS:

Water level elevations were between historic minimum and maximum values for each well gauged this quarter. The potentiometric ground-water flow direction and gradient of 0.06 ft/ft to the west is consistent with historical data. Detected concentrations of petroleum hydrocarbons were within the historic minimum and maximum ranges recorded for each well, with the exception of a recorded historic maximum for MTBE in well MW-3 at 6.3 µg/L. Concentrations of GRO, MTBE, and TBA are significant, justifying efforts to characterize the downgradient extents of the contaminated ground-water plume. The *Initial Site Conceptual Model with Soil & Ground-Water Investigation Work Plan* dated 5 August 2009 was approved by ACEH in their letter dated 21 August 2009. Soil and ground-water investigation activities should be implemented upon approval of the necessary permits and access agreements.

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 (a BP affiliated company). It is possible that variations in soil or ground-water conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

ATTACHMENTS:

Drawing 1. Site Location Map, Former ARCO Service Station #6002, 6235 Seminary Avenue, Oakland, California

Drawing 2. Ground-Water Elevation Contours and Analytical Summary Map, 23 September 2009, Former ARCO Service Station #6002, 6235 Seminary Avenue, Oakland, California

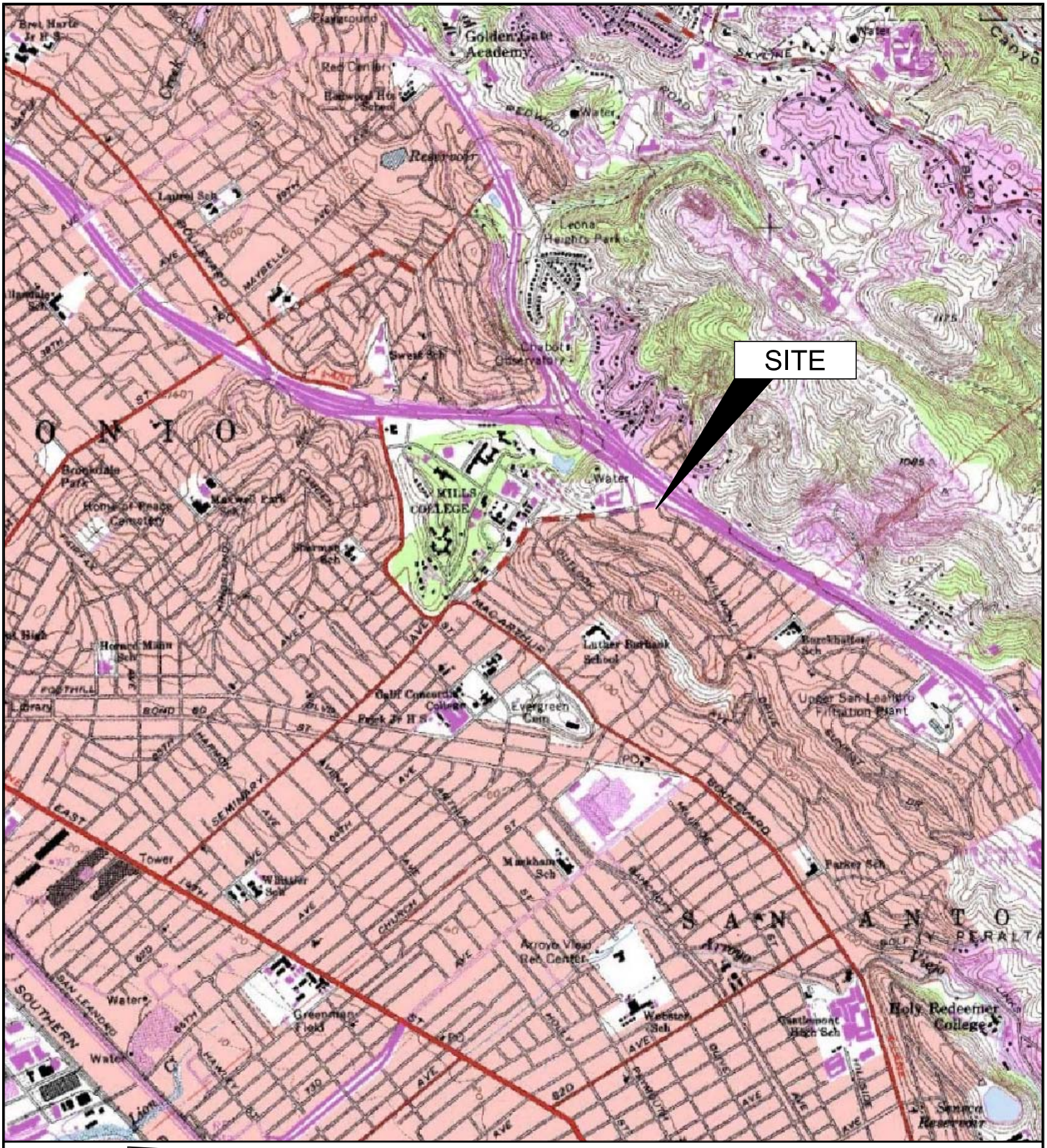
Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #6002, 6235 Seminary Ave., Oakland, California

Table 2. Summary of Fuel Additives Analytical Data, Station #6002, 6235 Seminary Ave., Oakland, California

Table 3. Historical Ground-Water Flow Direction and Gradient, Station #6002, 6235 Seminary Avenue, 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



N

0 2000 4000

APPROXIMATE SCALE (ft)

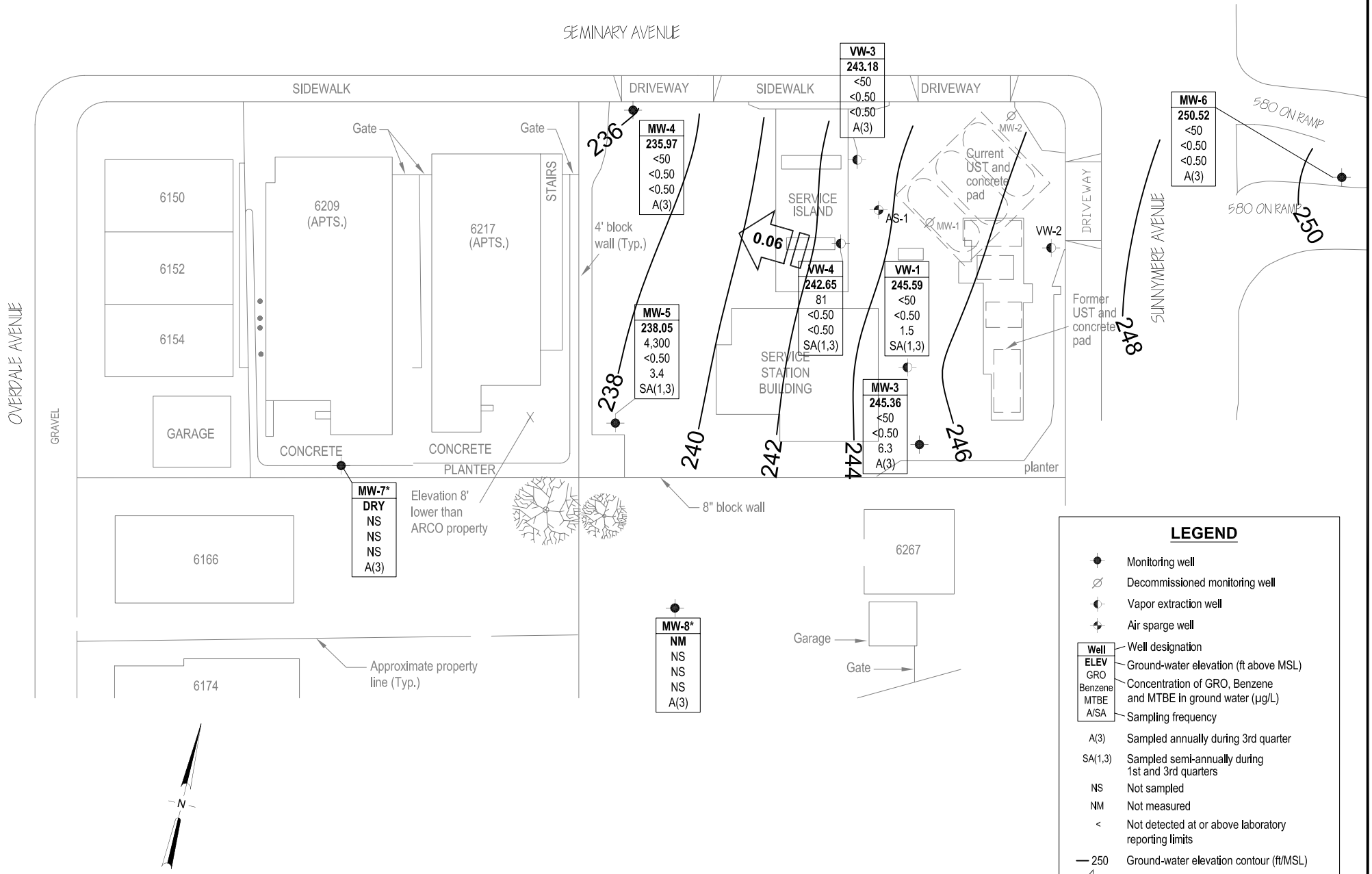
IMAGE SOURCE: USGS

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, CA 95926
Project No.: 06-88-634 Date: 07/22/09

Former ARCO Service Station #6002
6235 Seminary Avenue
Oakland, California

Site Location Map

Drawing
1



LEGEND

- Monitoring well
- Decommissioned monitoring well
- Vapor extraction well
- Air sparge well
- Well — Well designation
- ELEV — Ground-water elevation (ft above MSL)
- GRO, Benzene, MTBE — Concentration of GRO, Benzene and MTBE in ground water (µg/L)
- A/SA — Sampling frequency
- A(3) — Sampled annually during 3rd quarter
- SA(1,3) — Sampled semi-annually during 1st and 3rd quarters
- NS — Not sampled
- NM — Not measured
- < — Not detected at or above laboratory reporting limits
- 250 — Ground-water elevation contour (ft/MSL)
- 0.06 — Approximate ground-water flow direction and gradient (ft/ft)
- * — Not used in contouring

NOTE: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES.
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

0 40 80
SCALE (ft)

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California 95926
Project No.: 06-88-634 Date: 10/13/09

Former ARCO Service Station #6002
6235 Seminary Avenue
Oakland, California

Ground-Water Elevation Contours
and Analytical Summary Map
23 September 2009

Drawing
2

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

Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
AS-1																
6/29/1995	--		--	20.0	22.0	9.20	--	--	<50	1.6	<0.5	0.9	0.9	--	--	--
MW-1																
3/15/1995	--		247.06	4.5	24.5	7.37	--	239.69	13,000	1,200	44	770	1,100	--	--	--
5/30/1995	--		247.06	4.5	24.5	8.48	--	238.58	19,000	1,600	30	890	1,400	--	--	--
9/1/1995	--		247.06	4.5	24.5	9.47	--	237.59	14,000	1,300	28	480	780	24,000	--	--
11/13/1995	--	a, b	247.06	4.5	24.5	8.78	--	238.28	11,000	570	17	260	410	25,000	--	--
2/23/1996	--	d	247.06	4.5	24.5	--	--	--	--	--	--	--	--	--	--	--
MW-2																
3/15/1995	--		249.30	5.0	17.5	8.25	--	241.05	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
5/30/1995	--		249.30	5.0	17.5	9.93	--	239.37	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
9/1/1995	--		249.30	5.0	17.5	10.69	--	238.61	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/13/1995	--		249.30	5.0	17.5	10.32	--	238.98	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
2/23/1996	--	d	249.30	5.0	17.5	--	--	--	--	--	--	--	--	--	--	--
MW-3																
3/15/1995	--		248.35	5.0	24.5	6.76	--	241.59	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
5/30/1995	--		248.35	5.0	24.5	7.81	--	240.54	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
9/1/1995	--		248.35	5.0	24.5	8.65	--	239.70	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/13/1995	--		248.35	5.0	24.5	8.25	--	240.10	120	45	0.7	<0.5	6.2	--	--	--
2/23/1996	--		248.35	5.0	24.5	6.64	--	241.71	<50	<0.5	<0.5	0.6	1.9	<3	--	--
5/10/1996	--		248.35	5.0	24.5	7.95	--	240.40	--	--	--	--	--	--	--	--
8/9/1996	--		248.35	5.0	24.5	8.06	--	240.29	--	--	--	--	--	--	--	--
11/8/1996	--	e	248.35	5.0	24.5	--	--	--	--	--	--	--	--	--	--	--
3/21/1997	--		248.35	5.0	24.5	8.21	--	240.14	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/27/1997	--		248.35	5.0	24.5	8.25	--	240.10	--	--	--	--	--	--	--	--
8/5/1997	--		248.35	5.0	24.5	8.29	--	240.06	--	--	--	--	--	--	--	--
10/29/1997	--		248.35	5.0	24.5	8.58	--	239.77	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/25/1998	--		248.35	5.0	24.5	7.69	--	240.66	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/12/1998	--		248.35	5.0	24.5	8.20	--	240.15	--	--	--	--	--	--	--	--
7/28/1998	--		248.35	5.0	24.5	8.55	--	239.80	--	--	--	--	--	--	--	--

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

Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
MW-3 Cont.																
10/27/1998	--		248.35	5.0	24.5	8.30	--	240.05	--	--	--	--	--	--	--	--
2/8/1999	--		248.35	5.0	24.5	7.90	--	240.45	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
6/1/1999	--		248.35	5.0	24.5	8.40	--	239.95	--	--	--	--	--	--	--	--
8/25/1999	--		248.35	5.0	24.5	8.49	--	239.86	--	--	--	--	--	--	1.67	--
10/29/1999	--		248.35	5.0	24.5	8.52	--	239.83	--	--	--	--	--	--	6.9	--
2/16/2000	NP		248.35	5.0	24.5	8.03	--	240.32	<50	<0.5	0.8	<0.5	<1	<3	8.51	--
6/23/2000	--		248.35	5.0	24.5	7.55	--	240.80	--	--	--	--	--	--	2.1	--
8/17/2000	--		248.35	5.0	24.5	8.65	--	239.70	--	--	--	--	--	--	1.1	--
11/10/2000	--		248.35	5.0	24.5	7.19	--	241.16	--	--	--	--	--	--	--	--
2/12/2001	NP		248.35	5.0	24.5	8.60	--	239.75	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.81	--
4/13/2001	--		248.35	5.0	24.5	6.13	--	242.22	--	--	--	--	--	--	--	--
7/18/2001	--		248.35	5.0	24.5	6.47	--	241.88	--	--	--	--	--	--	--	--
10/1/2001	--		248.35	5.0	24.5	6.99	--	241.36	--	--	--	--	--	--	--	--
1/14/2002	NP		248.35	5.0	24.5	5.47	--	242.88	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
4/3/2002	--		248.35	5.0	24.5	6.95	--	241.40	--	--	--	--	--	--	--	--
8/8/2002	--		248.35	5.0	24.5	8.78	--	239.57	--	--	--	--	--	--	--	--
11/27/2002	--		248.35	5.0	24.5	8.52	--	239.83	--	--	--	--	--	--	--	--
2/10/2003	NP		248.35	5.0	24.5	8.40	--	239.95	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.7	6.4
6/3/2003	--		248.35	5.0	24.5	8.40	--	239.95	--	--	--	--	--	--	--	--
8/14/2003	--		248.35	5.0	24.5	8.60	--	239.75	--	--	--	--	--	--	--	--
11/13/2003	--		248.35	5.0	24.5	8.41	--	239.94	--	--	--	--	--	--	--	--
02/13/2004	--		253.88	5.0	24.5	8.40	--	245.48	--	--	--	--	--	--	--	--
05/05/2004	--		253.88	5.0	24.5	8.28	--	245.60	--	--	--	--	--	--	--	--
08/30/2004	NP		253.88	5.0	24.5	10.32	--	243.56	<50	<0.50	<0.50	<0.50	<0.50	0.72	1.4	6.4
11/08/2004	--		253.88	5.0	24.5	8.12	--	245.76	--	--	--	--	--	--	--	--
02/07/2005	--		253.88	5.0	24.5	8.20	--	245.68	--	--	--	--	--	--	--	--
05/09/2005	--		253.88	5.0	24.5	8.23	--	245.65	--	--	--	--	--	--	--	--
08/11/2005	NP		253.88	5.0	24.5	8.72	--	245.16	<50	<0.50	<0.50	<0.50	<0.50	0.73	1.6	6.1
12/02/2005	--		253.88	5.0	24.5	8.15	--	245.73	--	--	--	--	--	--	--	--
02/15/2006	--		253.88	5.0	24.5	8.23	--	245.65	--	--	--	--	--	--	--	--
5/19/2006	--		253.88	5.0	24.5	8.38	--	245.50	--	--	--	--	--	--	--	--

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

Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
MW-3 Cont.																
8/25/2006	P		253.88	5.0	24.5	8.59	--	245.29	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.15	6.2
11/2/2006	--		253.88	5.0	24.5	8.65	--	245.23	--	--	--	--	--	--	--	--
2/6/2007	--		253.88	5.0	24.5	8.38	--	245.50	--	--	--	--	--	--	--	--
5/9/2007	--		253.88	5.0	24.5	8.42	--	245.46	--	--	--	--	--	--	--	--
8/8/2007	NP		253.88	5.0	24.5	8.67	--	245.21	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.16	6.90
11/14/2007	--		253.88	5.0	24.5	8.48	--	245.40	--	--	--	--	--	--	--	--
2/28/2008	--		253.88	5.0	24.5	8.28	--	245.60	--	--	--	--	--	--	--	--
5/23/2008	--		253.88	5.0	24.5	8.42	--	245.46	--	--	--	--	--	--	--	--
8/21/2008	NP		253.88	5.0	24.5	8.52	--	245.36	<50	<0.50	<0.50	<0.50	<0.50	0.81	1.17	7.17
11/13/2008	--		253.88	5.0	24.5	8.52	--	245.36	--	--	--	--	--	--	--	--
2/23/2009	--		253.88	5.0	24.5	7.92	--	245.96	--	--	--	--	--	--	--	--
5/14/2009	--		253.88	5.0	24.5	8.37	--	245.51	--	--	--	--	--	--	--	--
9/23/2009	**NP**		**253.88**	**5.0**	**24.5**	**8.52**	**--**	**245.36**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**6.3**	**1.17**	**6.76**
MW-4																
3/15/1995	--		242.91	4.5	24.5	9.37	--	233.54	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
5/30/1995	--		242.91	4.5	24.5	11.47	--	231.44	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
9/1/1995	--		242.91	4.5	24.5	12.28	--	230.63	78	<0.5	0.7	<0.5	<0.5	<3	--	--
11/13/1995	--		242.91	4.5	24.5	11.75	--	231.16	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
2/23/1996	--		242.91	4.5	24.5	8.51	--	234.40	59	1.2	7.4	1.6	9.3	3	--	--
5/10/1996	--		242.91	4.5	24.5	11.35	--	231.56	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
8/9/1996	--		242.91	4.5	24.5	9.70	--	233.21	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/8/1996	--		242.91	4.5	24.5	11.79	--	231.12	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
3/21/1997	--		242.91	4.5	24.5	10.94	--	231.97	<50	<0.5	<0.5	<0.5	<0.5	81	--	--
5/27/1997	--		242.91	4.5	24.5	11.51	--	231.40	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
8/5/1997	--		242.91	4.5	24.5	11.90	--	231.01	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
10/29/1997	--		242.91	4.5	24.5	12.00	--	230.91	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/25/1998	--		242.91	4.5	24.5	8.34	--	234.57	<50	<0.5	0.9	<0.5	0.9	4	--	--
5/12/1998	--		242.91	4.5	24.5	10.93	--	231.98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
7/28/1998	--		242.91	4.5	24.5	12.08	--	230.83	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
10/27/1998	--		242.91	4.5	24.5	11.40	--	231.51	<5,000	<50	<50	160	64	6,400	--	--

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

Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
MW-4 Cont.																
2/8/1999	--		242.91	4.5	24.5	8.40	--	234.51	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
6/1/1999	NP		242.91	4.5	24.5	11.93	--	230.98	<50	<0.5	<0.5	<0.5	<0.5	<3	4	6.26
8/25/1999	NP		242.91	4.5	24.5	12.21	--	230.70	<50	<0.5	<0.5	<0.5	<0.5	<3	1.29	6.34
10/29/1999	NP		242.91	4.5	24.5	12.37	--	230.54	<50	<0.5	<0.5	<0.5	<1	<3	1.5	5.60
2/16/2000	NP		242.91	4.5	24.5	7.45	--	235.46	<50	<0.5	<0.5	<0.5	<1	<3	2.38	--
6/23/2000	NP		242.91	4.5	24.5	12.31	--	230.60	<50	<0.50	<0.50	<0.50	<0.50	<2.50	2.8	--
8/17/2000	--	f	242.91	4.5	24.5	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.50	--	--
8/17/2000	NP		242.91	4.5	24.5	11.92	--	230.99	<50	<0.50	<0.50	<0.50	<0.50	<2.50	2.38	--
11/10/2000	NP		242.91	4.5	24.5	10.80	--	232.11	<50	<0.50	<0.50	<0.50	<0.50	<2.50	1.55	--
2/12/2001	NP		242.91	4.5	24.5	11.65	--	231.26	<50	<0.50	<0.50	<0.50	<0.50	<2.50	1.12	--
4/13/2001	--	f	242.91	4.5	24.5	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.50	--	--
4/13/2001	NP		242.91	4.5	24.5	8.17	--	234.74	<50	<0.50	<0.50	<0.50	<0.50	<2.50	--	--
7/18/2001	NP		242.91	4.5	24.5	8.51	--	234.40	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
10/1/2001	NP		242.91	4.5	24.5	8.71	--	234.20	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
1/14/2002	--	f	242.91	4.5	24.5	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
1/14/2002	NP		242.91	4.5	24.5	7.13	--	235.78	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
4/3/2002	NP		242.91	4.5	24.5	10.10	--	232.81	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
8/8/2002	NP		242.91	4.5	24.5	12.64	--	230.27	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4	8.1
11/27/2002	NP		242.91	4.5	24.5	12.01	--	230.90	<50	<0.50	<0.50	<0.50	<0.50	4.7	2.5	6.5
2/10/2003	NP		242.91	4.5	24.5	11.22	--	231.69	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.8	6.6
6/3/2003	--		242.91	4.5	24.5	11.54	--	231.37	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.9	6
8/14/2003	--		242.91	4.5	24.5	12.41	--	230.50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.8	6.3
11/13/2003	--		242.91	4.5	24.5	11.64	--	231.27	--	--	--	--	--	--	--	--
02/13/2004	--		248.62	4.5	24.5	10.28	--	238.34	--	--	--	--	--	--	--	--
05/05/2004	--		248.62	4.5	24.5	12.04	--	236.58	--	--	--	--	--	--	--	--
08/30/2004	NP		248.62	4.5	24.5	12.98	--	235.64	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	5.8
11/08/2004	--		248.62	4.5	24.5	11.29	--	237.33	--	--	--	--	--	--	--	--
02/07/2005	--		248.62	4.5	24.5	10.03	--	238.59	--	--	--	--	--	--	--	--
05/09/2005	--		248.62	4.5	24.5	10.65	--	237.97	--	--	--	--	--	--	--	--
08/11/2005	NP		248.62	4.5	24.5	12.68	--	235.94	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.9	6.5
12/02/2005	--		248.62	4.5	24.5	10.35	--	238.27	--	--	--	--	--	--	--	--

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

Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
MW-4 Cont.																
02/15/2006	--		248.62	4.5	24.5	8.38	--	240.24	--	--	--	--	--	--	--	--
5/19/2006	--		248.62	4.5	24.5	11.24	--	237.38	--	--	--	--	--	--	--	--
8/25/2006	P		248.62	4.5	24.5	12.28	--	236.34	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.51	5.7
11/2/2006	--		248.62	4.5	24.5	12.64	--	235.98	--	--	--	--	--	--	--	--
2/6/2007	--		248.62	4.5	24.5	10.52	--	238.10	--	--	--	--	--	--	--	--
5/9/2007	--		248.62	4.5	24.5	10.97	--	237.65	--	--	--	--	--	--	--	--
8/8/2007	NP		248.62	4.5	24.5	12.95	--	235.67	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.70	7.11
11/14/2007	--		248.62	4.5	24.5	11.38	--	237.24	--	--	--	--	--	--	--	--
2/28/2008	--		248.62	4.5	24.5	9.01	--	239.61	--	--	--	--	--	--	--	--
5/23/2008	--		248.62	4.5	24.5	11.20	--	237.42	--	--	--	--	--	--	--	--
8/21/2008	NP		248.62	4.5	24.5	12.37	--	236.25	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.39	7.24
11/13/2008	--		248.62	4.5	24.5	12.08	--	236.54	--	--	--	--	--	--	--	--
2/23/2009	--		248.62	4.5	24.5	7.95	--	240.67	--	--	--	--	--	--	--	--
5/14/2009	--		248.62	4.5	24.5	10.77	--	237.85	--	--	--	--	--	--	--	--
9/23/2009	**NP**		**248.62**	**4.5**	**24.5**	**12.65**	**--**	**235.97**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**1.10**	**7.17**
MW-5																
3/15/1995	--		244.82	5.0	24.5	11.99	--	232.83	21,000	870	22	1,600	1,900	--	--	--
5/30/1995	--		244.82	5.0	24.5	12.97	--	231.85	17,000	2,100	250	1,000	520	--	--	--
9/1/1995	--		244.82	5.0	24.5	14.03	--	230.79	19,000	1,500	25	1,600	880	8,300	--	--
11/13/1995	--		244.82	5.0	24.5	13.65	--	231.17	21,000	1,300	22	1,400	630	--	--	--
2/23/1996	--		244.82	5.0	24.5	11.93	--	232.89	27,000	1,300	<50	1,600	1,500	730	--	--
5/10/1996	--		244.82	5.0	24.5	13.05	--	231.77	17,000	460	21	760	480	1,000	--	--
8/9/1996	--		244.82	5.0	24.5	13.22	--	231.60	16,000	420	14	870	390	1,500	--	--
11/8/1996	--	e	244.82	5.0	24.5	--	--	--	--	--	--	--	--	--	--	--
3/21/1997	--		244.82	5.0	24.5	13.24	--	231.58	18,000	110	<50	730	1,500	1,800	--	--
5/27/1997	--		244.82	5.0	24.5	13.10	--	231.72	21,000	86	<20	810	610	1,700	--	--
8/5/1997	--		244.82	5.0	24.5	13.14	--	231.68	340	2.2	<0.5	15	8.8	39	--	--
10/29/1997	--		244.82	5.0	24.5	13.03	--	231.79	19,000	130	<20	1,400	620	1,700	--	--
2/25/1998	--		244.82	5.0	24.5	11.33	--	233.49	8,500	19	13	190	100	170	--	--
5/12/1998	--		244.82	5.0	24.5	12.81	--	232.01	10,000	34	<10	390	220	610	--	--

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

Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
MW-5 Cont.																
7/28/1998	--		244.82	5.0	24.5	13.12	--	231.70	15,000	68	<10	690	620	1,000	--	--
10/27/1998	--		244.82	5.0	24.5	12.90	--	231.92	15,000	60	<10	770	400	890	--	--
2/8/1999	--		244.82	5.0	24.5	11.08	--	233.74	8,200	23	<10	290	120	<60	--	--
6/1/1999	NP		244.82	5.0	24.5	12.95	--	231.87	11,000	33	3.3	340	180	580	1	6.49
8/25/1999	NP		244.82	5.0	24.5	12.99	--	231.83	9,200	26	14	420	270	1,100	0.37	7.78
10/29/1999	NP		244.82	5.0	24.5	13.10	--	231.72	11,000	19	9.8	260	150	590	1.27	6.2
2/16/2000	NP		244.82	5.0	24.5	8.21	--	236.61	12,000	8.1	10	340	160	130	1.42	--
6/23/2000	NP		244.82	5.0	24.5	12.90	--	231.92	9,680	38	<20.0	212	114	930	1.4	--
8/17/2000	NP		244.82	5.0	24.5	13.00	--	231.82	10,500	15	7.98	223	118	430	0.68	--
11/10/2000	NP		244.82	5.0	24.5	12.50	--	232.32	7,030	19.7	<10.0	190	43.6	445	1.27	--
2/12/2001	NP		244.82	5.0	24.5	12.81	--	232.01	8,840	33.9	<10.0	186	56.4	352	0.4	--
4/13/2001	NP		244.82	5.0	24.5	11.31	--	233.51	9,020	54.2	43.3	137	96	297	--	--
7/18/2001	NP		244.82	5.0	24.5	11.59	--	233.23	13,000	19	10	110	49	230	--	--
10/1/2001	NP		244.82	5.0	24.5	11.84	--	232.98	8,500	6.9	<1.0	87	27	220	--	--
1/14/2002	NP		244.82	5.0	24.5	10.75	--	234.07	9,500	<20	<20	140	22	<200	--	--
4/3/2002	NP		244.82	5.0	24.5	12.50	--	232.32	2,400	21	<5.0	91	8.5	130	--	--
4/3/2002	NP	f	244.82	5.0	24.5	--	--	--	2,700	24	5.1	92	8.5	130	--	--
8/8/2002	NP		244.82	5.0	24.5	12.83	--	231.99	2,000	<20	<20	48	<20	520	0.8	6.9
11/27/2002	NP		244.82	5.0	24.5	12.79	--	232.03	2,200	<10	<10	33	<10	150	0.8	6.4
2/10/2003	NP		244.82	5.0	24.5	12.62	--	232.20	2,600	<2.5	<2.5	47	4.2	100	0.7	6.6
6/3/2003	--		244.82	5.0	24.5	12.41	--	232.41	2,400	<5.0	<5.0	26	<5.0	160	1.8	6.3
8/14/2003	--	e	244.82	5.0	24.5	--	--	--	--	--	--	--	--	--	--	--
11/13/2003	NP		244.82	5.0	24.5	12.49	--	232.33	1,900	<5.0	<5.0	13	<5.0	90	0.9	6.4
02/13/2004	NP		250.55	5.0	24.5	12.38	--	238.17	1,400	1.4	1.9	23	3.6	90	1.1	62.8
05/05/2004	NP		250.55	5.0	24.5	12.68	--	237.87	5,800	<2.5	<2.5	13	<2.5	130	1.1	6.3
08/30/2004	P		250.55	5.0	24.5	12.96	--	237.59	4,100	<2.5	<2.5	<2.5	<2.5	85	--	6.4
11/08/2004	NP		250.55	5.0	24.5	12.10	--	238.45	3,300	14	1.9	17	6.1	69	1.05	6.0
02/07/2005	NP		250.55	5.0	24.5	12.02	--	238.53	3,500	<1.0	1.1	16	2.6	15	0.95	6.5
05/09/2005	NP	j	250.55	5.0	24.5	11.94	--	238.61	3,400	<1.0	1.7	12	2.2	19	2.2	6.7
08/11/2005	NP		250.55	5.0	24.5	12.77	--	237.78	5,700	<2.5	<2.5	13	<2.5	51	0.7	6.0
12/02/2005	NP		250.55	5.0	24.5	11.83	--	238.72	3,900	<2.5	<2.5	15	8.3	13	1.41	6.9

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

Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
MW-5 Cont.																
02/15/2006	NP		250.55	5.0	24.5	10.77	--	239.78	790	<0.50	<0.50	1.2	<0.50	<0.50	1.2	6.9
5/19/2006	NP		250.55	5.0	24.5	12.29	--	238.26	4,100	0.97	1.3	3.9	1.8	15	0.98	6.5
8/25/2006	P		250.55	5.0	24.5	12.62	--	237.93	3,700	<2.5	<2.5	4.0	<2.5	17	1.15	6.2
11/2/2006	P		250.55	5.0	24.5	12.90	--	237.65	5,700	<1.0	1.5	4.3	1.7	18	1.86	6.67
2/6/2007	NP		250.55	5.0	24.5	12.37	--	238.18	4,800	<1.0	<1.0	5.2	1.3	13	0.96	6.99
5/9/2007	NP		250.55	5.0	24.5	12.50	--	238.05	4,400	<1.0	<1.0	4.9	1.5	31	1.42	6.89
8/8/2007	NP		250.55	5.0	24.5	12.88	--	237.67	4,100	<1.0	<1.0	4.1	1.3	11	1.16	6.44
11/14/2007	NP		250.55	5.0	24.5	12.30	--	238.25	4,700	<1.0	<1.0	7.3	1.8	11	1.22	6.77
2/28/2008	NP		250.55	5.0	24.5	11.37	--	239.18	4,100	<2.5	<2.5	<2.5	<2.5	<2.5	1.15	6.67
5/23/2008	NP		250.55	5.0	24.5	11.68	--	238.87	4,700	<0.50	0.87	5.6	1.2	17	1.28	6.57
8/21/2008	NP		250.55	5.0	24.5	12.42	--	238.13	4,700	<0.50	0.60	3.6	1.4	8.7	1.24	6.78
11/13/2008	NP		250.55	5.0	24.5	12.32	--	238.23	7,400	<0.50	0.63	6.3	1.4	5.6	1.18	6.67
2/23/2009	NP	l	250.55	5.0	24.5	10.50	--	240.05	4,100	<0.50	<0.50	1.9	1.1	3.2	1.30	6.17
5/14/2009	NP		250.55	5.0	24.5	12.08	--	238.47	4,200	<0.50	1.0	3.6	1.8	5.4	1.14	6.65
9/23/2009	**NP**		**250.55**	**5.0**	**24.5**	**12.50**	**--**	**238.05**	**4,300**	**<0.50**	**0.57**	**1.6**	**1.3**	**3.4**	**0.89**	**6.53**
MW-6																
6/29/1995	--		--	17.0	31.5	6.63	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
9/1/1995	--		--	17.0	31.5	--	--	--	--	--	--	--	--	--	--	--
11/13/1995	--		--	17.0	31.5	7.70	--	--	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/23/1996	--		--	17.0	31.5	9.82	--	--	<50	<0.5	0.8	<0.5	0.6	<3	--	--
5/10/1996	--		--	17.0	31.5	15.25	--	--	--	--	--	--	--	--	--	--
8/9/1996	--		252.20	17.0	31.5	11.11	--	241.09	--	--	--	--	--	--	--	--
11/8/1996	--		252.20	17.0	31.5	9.31	--	242.89	--	--	--	--	--	--	--	--
3/21/1997	--		252.20	17.0	31.5	9.40	--	242.80	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/27/1997	--		252.20	17.0	31.5	7.08	--	245.12	--	--	--	--	--	--	--	--
8/5/1997	--		252.20	17.0	31.5	7.12	--	245.08	--	--	--	--	--	--	--	--
10/29/1997	--		252.20	17.0	31.5	7.42	--	244.78	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/25/1998	--		252.20	17.0	31.5	10.35	--	241.85	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/12/1998	--		252.20	17.0	31.5	15.83	--	236.37	--	--	--	--	--	--	--	--
7/28/1998	--		252.20	17.0	31.5	11.84	--	240.36	--	--	--	--	--	--	--	--

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

Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
MW-6 Cont.																
10/27/1998	--		252.20	17.0	31.5	9.73	--	242.47	--	--	--	--	--	--	--	--
2/8/1999	--		252.20	17.0	31.5	8.10	--	244.10	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
6/1/1999	--		252.20	17.0	31.5	17.84	--	234.36	--	--	--	--	--	--	--	--
8/25/1999	--		252.20	17.0	31.5	11.00	--	241.20	--	--	--	--	--	--	0.77	--
10/29/1999	--		252.20	17.0	31.5	9.03	--	243.17	--	--	--	--	--	--	3.42	--
2/16/2000	P		252.20	17.0	31.5	7.71	--	244.49	<50	<0.5	<0.5	<0.5	<1	<3	2.42	--
6/23/2000	--		252.20	17.0	31.5	6.69	--	245.51	--	--	--	--	--	--	2.3	--
8/17/2000	--		252.20	17.0	31.5	6.95	--	245.25	--	--	--	--	--	--	2.51	--
11/10/2000	--		252.20	17.0	31.5	11.79	--	240.41	--	--	--	--	--	--	--	--
2/12/2001	P		252.20	17.0	31.5	7.35	--	244.85	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.66	7.77
2/12/2001	--	f	--	17.0	31.5	--	--	--	--	--	--	--	--	--	--	--
4/13/2001	--		252.20	17.0	31.5	10.52	--	241.68	--	--	--	--	--	--	--	--
7/18/2001	--		252.20	17.0	31.5	11.03	--	241.17	--	--	--	--	--	--	--	--
10/1/2001	--		252.20	17.0	31.5	11.31	--	240.89	--	--	--	--	--	--	--	--
1/14/2002	P		252.20	17.0	31.5	9.87	--	242.33	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
4/3/2002	--		252.20	17.0	31.5	12.19	--	240.01	--	--	--	--	--	--	--	--
8/8/2002	--		252.20	17.0	31.5	7.04	--	245.16	--	--	--	--	--	--	--	--
11/27/2002	--		252.20	17.0	31.5	6.85	--	245.35	--	--	--	--	--	--	--	--
2/10/2003	NP		252.20	17.0	31.5	6.74	--	245.46	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	7.4
6/3/2003	--		252.20	17.0	31.5	14.35	--	237.85	--	--	--	--	--	--	--	--
8/14/2003	--		252.20	17.0	31.5	10.74	--	241.46	--	--	--	--	--	--	--	--
11/13/2003	--		252.20	17.0	31.5	10.68	--	241.52	--	--	--	--	--	--	--	--
02/13/2004	--		257.94	17.0	31.5	7.38	--	250.56	--	--	--	--	--	--	--	--
05/05/2004	--		257.94	17.0	31.5	7.43	--	250.51	--	--	--	--	--	--	--	--
08/30/2004	P		257.94	17.0	31.5	7.39	--	250.55	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.5	7.0
11/08/2004	--		257.94	17.0	31.5	15.57	--	242.37	--	--	--	--	--	--	--	--
02/07/2005	--		257.94	17.0	31.5	15.26	--	242.68	--	--	--	--	--	--	--	--
05/09/2005	--		257.94	17.0	31.5	11.31	--	246.63	--	--	--	--	--	--	--	--
08/11/2005	P		257.94	17.0	31.5	9.80	--	248.14	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.4	7.1
12/02/2005	--		257.94	17.0	31.5	14.55	--	243.39	--	--	--	--	--	--	--	--
02/15/2006	--		257.94	17.0	31.5	10.33	--	247.61	--	--	--	--	--	--	--	--

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

Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
MW-6 Cont.																
5/19/2006	--		257.94	17.0	31.5	6.50	--	251.44	--	--	--	--	--	--	--	--
8/25/2006	P		257.94	17.0	31.5	6.75	--	251.19	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.90	6.6
11/2/2006	--		257.94	17.0	31.5	7.15	--	250.79	--	--	--	--	--	--	--	--
2/6/2007	--		257.94	17.0	31.5	6.93	--	251.01	--	--	--	--	--	--	--	--
5/9/2007	--		257.94	17.0	31.5	7.03	--	250.91	--	--	--	--	--	--	--	--
8/8/2007	P		257.94	17.0	31.5	7.01	--	250.93	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.64	7.12
11/14/2007	--		257.94	17.0	31.5	7.25	--	250.69	--	--	--	--	--	--	--	--
2/28/2008	--		257.94	17.0	31.5	6.85	--	251.09	--	--	--	--	--	--	--	--
5/23/2008	--		257.94	17.0	31.5	7.15	--	250.79	--	--	--	--	--	--	--	--
8/21/2008	P		257.94	17.0	31.5	7.17	--	250.77	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.38	7.27
11/13/2008	--		257.94	17.0	31.5	12.30	--	245.64	--	--	--	--	--	--	--	--
2/23/2009	--		257.94	17.0	31.5	7.61	--	250.33	--	--	--	--	--	--	--	--
5/14/2009	--		257.94	17.0	31.5	7.50	--	250.44	--	--	--	--	--	--	--	--
9/23/2009	**P**		**257.94**	**17.0**	**31.5**	**7.42**	**--**	**250.52**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**1.06**	**7.74**
MW-7																
8/9/1996	--	g	235.95	8.5	13.5	--	--	--	--	--	--	--	--	--	--	--
11/8/1996	--	g	235.95	8.5	13.5	--	--	--	--	--	--	--	--	--	--	--
1/27/1997	--		235.95	8.5	13.5	--	--	--	2,900	29	<5	<5	580	220	--	--
3/21/1997	--		235.95	8.5	13.5	7.13	--	228.82	590	3.5	<0.5	<0.5	1.3	90	--	--
5/27/1997	--		235.95	8.5	13.5	9.02	--	226.93	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
8/5/1997	--		235.95	8.5	13.5	12.33	--	223.62	110	0.5	<0.5	<0.5	0.8	81	--	--
10/29/1997	--	g	235.95	8.5	13.5	--	--	--	--	--	--	--	--	--	--	--
2/25/1998	--		235.95	8.5	13.5	8.04	--	227.91	<50	<0.5	0.6	<0.5	0.7	<3	--	--
5/12/1998	--		235.95	8.5	13.5	8.88	--	227.07	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
7/28/1998	--		235.95	8.5	13.5	10.50	--	225.45	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
10/27/1998	--		235.95	8.5	13.5	8.75	--	227.20	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/8/1999	--		235.95	8.5	13.5	9.35	--	226.60	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
6/1/1999	NP		235.95	8.5	13.5	9.85	--	226.10	250	<0.5	0.6	<0.5	1.6	18	1	6.43
8/25/1999	NP		235.95	8.5	13.5	11.31	--	224.64	119	<0.5	5.7	<0.5	<0.5	11	0.41	8.28
10/29/1999	NP		235.95	8.5	13.5	9.08	--	226.87	<50	<0.5	<0.5	<0.5	<1	<3	1.29	5.82

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Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
MW-7 Cont.																
2/25/2000	NP		235.95	8.5	13.5	8.02	--	227.93	<50	<0.5	<0.5	<0.5	<1	38	2.1	--
6/23/2000	NP		235.95	8.5	13.5	10.68	--	225.27	<50	<0.50	<0.50	<0.50	<0.50	14.4	1.6	--
8/17/2000	NP		235.95	8.5	13.5	11.85	--	224.10	70	<0.500	0.678	<0.500	1.07	14.2	1.59	--
11/10/2000	NP		235.95	8.5	13.5	9.62	--	226.33	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.09	--
2/12/2001	NP		235.95	8.5	13.5	12.10	--	223.85	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.84	--
4/13/2001	P		235.95	8.5	13.5	7.95	--	228.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
7/18/2001	P		235.95	8.5	13.5	8.20	--	227.75	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
10/1/2001	NP		235.95	8.5	13.5	8.59	--	227.36	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
1/14/2002	P		235.95	8.5	13.5	6.93	--	229.02	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
4/3/2002	P		235.95	8.5	13.5	8.31	--	227.64	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
8/8/2002	P	h	235.95	8.5	13.5	12.11	--	223.84	--	--	--	--	--	--	--	--
11/27/2002	NP	h	235.95	8.5	13.5	13.01	--	222.94	--	--	--	--	--	--	--	--
2/10/2003	NP		235.95	8.5	13.5	10.02	--	225.93	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.5	6.7
6/3/2003	NP		235.95	8.5	13.5	6.82	--	229.13	<50	<0.50	<0.50	<0.50	<0.50	<0.50	8.1	6.8
8/14/2003	P		235.95	8.5	13.5	8.16	--	227.79	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.8	6.7
11/13/2003	--		235.95	8.5	13.5	8.07	--	227.88	--	--	--	--	--	--	--	--
02/13/2004	--		241.64	8.5	13.5	7.62	--	234.02	--	--	--	--	--	--	--	--
05/05/2004	--		241.64	8.5	13.5	11.01	--	230.63	--	--	--	--	--	--	--	--
08/30/2004	--	h	241.64	8.5	13.5	13.27	--	228.37	--	--	--	--	--	--	--	--
11/08/2004	--		241.64	8.5	13.5	13.22	--	228.42	--	--	--	--	--	--	--	--
02/07/2005	--		241.64	8.5	13.5	13.07	--	228.57	--	--	--	--	--	--	--	--
05/09/2005	--		241.64	8.5	13.5	7.57	--	234.07	--	--	--	--	--	--	--	--
08/11/2005	NP		241.64	8.5	13.5	11.55	--	230.09	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	6.7
12/02/2005	--		241.64	8.5	13.5	13.12	--	228.52	--	--	--	--	--	--	--	--
02/15/2006	--		241.64	8.5	13.5	7.27	--	234.37	--	--	--	--	--	--	--	--
5/19/2006	--		241.64	8.5	13.5	7.84	--	233.80	--	--	--	--	--	--	--	--
8/25/2006	P		241.64	8.5	13.5	12.19	--	229.45	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.33	6.2
11/2/2006	--		241.64	8.5	13.5	13.15	--	228.49	--	--	--	--	--	--	--	--
2/6/2007	--		241.64	8.5	13.5	11.12	--	230.52	--	--	--	--	--	--	--	--
5/9/2007	--		241.64	8.5	13.5	11.60	--	230.04	--	--	--	--	--	--	--	--
8/8/2007	--	g	241.64	8.5	13.5	--	--	--	--	--	--	--	--	--	--	--

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Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
MW-7 Cont.																
11/14/2007	--	g	241.64	8.5	13.5	--	--	--	--	--	--	--	--	--	--	--
2/28/2008	--		241.64	8.5	13.5	7.70	--	233.94	--	--	--	--	--	--	--	--
5/23/2008	--		241.64	8.5	13.5	5.15	--	236.49	--	--	--	--	--	--	--	--
8/21/2008	--	g	241.64	8.5	13.5	--	--	--	--	--	--	--	--	--	--	--
11/13/2008	--		241.64	8.5	13.5	12.98	--	228.66	--	--	--	--	--	--	--	--
2/23/2009	--		241.64	8.5	13.5	7.03	--	234.61	--	--	--	--	--	--	--	--
5/14/2009	--		241.64	8.5	13.5	11.80	--	229.84	--	--	--	--	--	--	--	--
9/23/2009	--	**g**	**241.64**	**8.5**	**13.5**	--	--	--	--	--	--	--	--	--	--	--
MW-8																
8/9/1996	--		240.37	5.5	**14.0**	9.41	--	230.96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
11/8/1996	--		240.37	5.5	**14.0**	9.19	--	231.18	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
3/21/1997	--		240.37	5.5	**14.0**	8.55	--	231.82	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/27/1997	--		240.37	5.5	**14.0**	11.06	--	229.31	91	0.6	<0.5	<0.5	0.6	66	--	--
8/5/1997	--		240.37	5.5	**14.0**	9.32	--	231.05	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
10/29/1997	--		240.37	5.5	**14.0**	9.35	--	231.02	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/25/1998	--		240.37	5.5	**14.0**	7.08	--	233.29	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
5/12/1998	--		240.37	5.5	**14.0**	8.61	--	231.76	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
7/28/1998	--		240.37	5.5	**14.0**	9.63	--	230.74	<50	<0.5	<0.5	<0.5	<0.5	4	--	--
10/27/1998	--		240.37	5.5	**14.0**	9.30	--	231.07	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/8/1999	--		240.37	5.5	**14.0**	5.56	--	234.81	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
6/1/1999	--	e	240.37	5.5	**14.0**	--	--	--	--	--	--	--	--	--	--	--
8/25/1999	--	e	240.37	5.5	**14.0**	--	--	--	--	--	--	--	--	--	--	--
10/29/1999	--	e	240.37	5.5	**14.0**	--	--	--	--	--	--	--	--	--	--	--
2/16/2000	--	e	240.37	5.5	**14.0**	--	--	--	--	--	--	--	--	--	--	--
6/23/2000	NP		240.37	5.5	**14.0**	9.45	--	230.92	<50	<0.50	<0.50	<0.500	<0.50	<2.5	1.9	--
8/17/2000	NP		240.37	5.5	**14.0**	6.40	--	233.97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.56	--
11/10/2000	--	f	240.37	5.5	**14.0**	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
11/10/2000	NP		240.37	5.5	**14.0**	6.25	--	234.12	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.93	--
2/12/2001	NP		240.37	5.5	**14.0**	8.11	--	232.26	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.65	--
4/13/2001	P		240.37	5.5	**14.0**	5.19	--	235.18	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--

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Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
MW-8 Cont.																
7/18/2001	NP		240.37	5.5	**14.0**	5.55	--	234.82	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
10/1/2001	NP		240.37	5.5	**14.0**	6.41	--	233.96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
1/14/2002	P		240.37	5.5	**14.0**	5.07	--	235.30	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
4/3/2002	P		240.37	5.5	**14.0**	8.60	--	231.77	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
8/8/2002	P		240.37	5.5	**14.0**	9.58	--	230.79	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.7	7
11/27/2002	P		240.37	5.5	**14.0**	9.15	--	231.22	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.1	6.7
2/10/2003	P		240.37	5.5	**14.0**	8.55	--	231.82	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	6.6
6/3/2003	--		240.37	5.5	**14.0**	8.72	--	231.65	<50	<0.50	<0.50	<0.50	<0.50	<0.50	9.1	6.3
8/14/2003	--		240.37	5.5	**14.0**	9.52	--	230.85	<50	<0.50	<0.50	<0.50	<0.50	<0.50	5.5	6.4
11/13/2003	--		240.37	5.5	14.0	9.45	--	230.92	--	--	--	--	--	--	--	--
02/13/2004	--		246.09	5.5	14.0	8.38	--	237.71	--	--	--	--	--	--	--	--
05/05/2004	--		246.09	5.5	14.0	9.30	--	236.79	--	--	--	--	--	--	--	--
08/30/2004	P		246.09	5.5	14.0	9.69	--	236.40	<50	<0.50	<0.50	<0.50	0.75	<0.50	5.1	6.5
11/08/2004	--		246.09	5.5	14.0	8.34	--	237.75	--	--	--	--	--	--	--	--
02/07/2005	--		246.09	5.5	14.0	8.23	--	237.86	--	--	--	--	--	--	--	--
05/09/2005	--		246.09	5.5	14.0	7.07	--	239.02	--	--	--	--	--	--	--	--
08/11/2005	--	e	246.09	5.5	14.0	--	--	--	--	--	--	--	--	--	--	--
12/02/2005	--		246.09	5.5	14.0	8.15	--	237.94	--	--	--	--	--	--	--	--
02/15/2006	--	e	246.09	5.5	14.0	--	--	--	--	--	--	--	--	--	--	--
5/19/2006	--		246.09	5.5	14.0	8.48	--	237.61	--	--	--	--	--	--	--	--
8/25/2006	P		246.09	5.5	14.0	9.45	--	236.64	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.27	6.0
11/2/2006	--		--	5.5	14.0	--	--	--	--	--	--	--	--	--	--	--
2/6/2007	--		246.09	5.5	14.0	--	--	--	--	--	--	--	--	--	--	--
5/9/2007	--	e	246.09	5.5	14.0	--	--	--	--	--	--	--	--	--	--	--
8/8/2007	--	e	246.09	5.5	14.0	--	--	--	--	--	--	--	--	--	--	--
11/14/2007	--		246.09	5.5	14.0	8.78	--	237.31	--	--	--	--	--	--	--	--
2/28/2008	--		246.09	5.5	14.0	7.77	--	238.32	--	--	--	--	--	--	--	--
5/23/2008	--		246.09	5.5	14.0	8.30	--	237.79	--	--	--	--	--	--	--	--
8/21/2008	--	e	246.09	5.5	14.0	--	--	--	--	--	--	--	--	--	--	--
11/13/2008	--	e	246.09	5.5	14.0	--	--	--	--	--	--	--	--	--	--	--
2/23/2009	--	e	246.09	5.5	14.0	--	--	--	--	--	--	--	--	--	--	--

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

Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
MW-8 Cont.																
5/14/2009	--	e	246.09	5.5	14.0	--	--	--	--	--	--	--	--	--	--	--
9/23/2009	--	**e**	**246.09**	**5.5**	**14.0**	--	--	--	--	--	--	--	--	--	--	--
VW-1																
2/23/1996	--		--	6.0	**14.0**	5.29	--	--	21,000	490	57	520	1,500	240	--	--
5/10/1996	--		--	6.0	**14.0**	6.80	--	--	3,700	61	<5	100	50	200	--	--
8/9/1996	--		--	6.0	**14.0**	7.03	--	--	970	2.7	<2.5	2.7	3.7	180	--	--
11/8/1996	--	e	--	6.0	**14.0**	--	--	--	--	--	--	--	--	--	--	--
3/21/1997	--		--	6.0	**14.0**	7.51	--	--	640	<4	<1	1	3	194	--	--
5/27/1997	--		--	6.0	**14.0**	7.51	--	--	--	--	--	--	--	--	--	--
8/5/1997	--		--	6.0	**14.0**	7.51	--	--	630	<1	<1	3	2	120	--	--
10/29/1997	--		--	6.0	**14.0**	7.53	--	--	600	<0.5	<0.5	<0.5	1.6	84	--	--
2/25/1998	--		--	6.0	**14.0**	6.77	--	--	230	<4	<0.7	1.2	0.5	27	--	--
5/12/1998	--		--	6.0	**14.0**	7.43	--	--	340	<0.5	0.5	2.3	0.8	29	--	--
7/28/1998	--		--	6.0	**14.0**	7.00	--	--	240	<0.5	<0.5	<0.5	1.1	54	--	--
10/27/1998	--		--	6.0	**14.0**	7.52	--	--	230	<0.5	<0.5	<0.5	<0.5	65	--	--
2/8/1999	--	c	--	6.0	**14.0**	7.05	--	--	<50	<0.5	<0.5	<0.5	<0.5	<3/36	--	--
6/1/1999	NP		--	6.0	**14.0**	7.55	--	--	180	<0.5	<0.5	<0.5	<0.5	23	1	6.36
8/25/1999	NP		--	6.0	**14.0**	7.66	--	--	130	<0.5	5.6	<0.5	<0.5	40	0.39	7.5
10/29/1999	NP		--	6.0	**14.0**	7.59	--	--	200	1	<0.5	0.6	1.6	36	0.89	5.65
2/16/2000	NP		--	6.0	**14.0**	7.03	--	--	210	<0.5	0.9	2.2	1.9	11	1.41	--
6/23/2000	NP		--	6.0	**14.0**	7.71	--	--	175	1.04	<0.500	<0.500	<0.500	14.4	1.9	--
8/17/2000	NP		--	6.0	**14.0**	7.75	--	--	180	<0.500	<0.500	0.622	0.76	23.7	0.63	--
11/10/2000	NP		--	6.0	**14.0**	6.83	--	--	157	0.955	<0.500	0.973	<0.500	32.5	1.03	--
2/12/2001	NP		--	6.0	**14.0**	7.85	--	--	273	0.627	<0.500	<0.500	0.507	9.19	0.47	--
4/13/2001	P		--	6.0	**14.0**	5.11	--	--	213	<0.500	<0.500	<0.500	<0.500	6.38	--	--
7/18/2001	P		--	6.0	**14.0**	5.39	--	--	270	<0.50	<0.50	<0.50	<0.50	20	--	--
10/1/2001	NP		--	6.0	**14.0**	6.50	--	--	200	<0.50	<0.50	<0.50	0.81	14	--	--
1/14/2002	P		--	6.0	**14.0**	5.04	--	--	110	<0.50	<0.50	<0.50	<0.50	6.4	--	--
4/3/2002	P		--	6.0	**14.0**	7.51	--	--	91	0.72	<0.50	<0.50	<0.50	12	--	--
8/8/2002	P		--	6.0	**14.0**	9.58	--	--	<50	<0.50	<0.50	<0.50	<0.50	33	0.6	6.3

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Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
VW-1 Cont.																
11/27/2002	P		--	6.0	**14.0**	7.42	--	--	52	0.72	0.78	<0.50	<0.50	21	1	6.1
2/10/2003	NP		--	6.0	**14.0**	7.38	--	--	52	<0.50	<0.50	<0.50	<0.50	11	1.7	6.5
6/3/2003	--		--	6.0	**14.0**	7.30	--	--	71	<0.50	<0.50	<0.50	<0.50	13	3.3	6.3
8/14/2003	--		--	6.0	**14.0**	7.59	--	--	<50	<0.50	<0.50	<0.50	<0.50	18	0.3	6.1
11/13/2003	P		--	6.0	14.0	7.43	--	--	<50	<0.50	<0.50	<0.50	<0.50	13	0.6	6.1
02/13/2004	P		253.19	6.0	14.0	7.35	--	245.84	59	<0.50	<0.50	<0.50	0.56	8.0	1.0	6.0
05/05/2004	P		253.19	6.0	14.0	7.30	--	245.89	<50	0.71	<0.50	<0.50	0.60	11	0.1	6.4
08/30/2004	P		253.19	6.0	14.0	8.50	--	244.69	<50	<0.50	<0.50	<0.50	<0.50	24	0.2	6.2
11/08/2004	P		253.19	6.0	14.0	7.22	--	245.97	230	<0.50	<0.50	<0.50	0.75	27	0.65	5.1
02/07/2005	P		253.19	6.0	14.0	7.25	--	245.94	<50	<0.50	<0.50	<0.50	<0.50	5.1	1.57	5.9
05/09/2005	P		253.19	6.0	14.0	7.10	--	246.09	64	<0.50	<0.50	<0.50	<0.50	6.9	3.5	--
08/11/2005	P		253.19	6.0	14.0	7.89	--	245.30	<50	<0.50	<0.50	<0.50	<0.50	10	0.04	6.3
12/02/2005	P		253.19	6.0	14.0	7.32	--	245.87	130	<0.50	<0.50	<0.50	0.57	9.0	1.85	6.6
02/15/2006	P		253.19	6.0	14.0	7.16	--	246.03	<50	<0.50	<0.50	<0.50	<0.50	2.8	0.9	6.2
5/19/2006	P		253.19	6.0	14.0	7.24	--	245.95	<50	0.71	<0.50	0.65	1.4	3.7	0.85	6.2
8/25/2006	P		253.19	6.0	14.0	7.48	--	245.71	50	<0.50	<0.50	<0.50	<0.50	8.3	0.49	6.2
11/2/2006	P		253.19	6.0	14.0	7.77	--	245.42	57	<0.50	<0.50	<0.50	<0.50	11	1.84	6.88
2/6/2007	NP		253.19	6.0	14.0	7.35	--	245.84	64	<0.50	<0.50	<0.50	<0.50	2.3	0.70	6.92
5/9/2007	NP		253.19	6.0	14.0	7.40	--	245.79	<50	<0.50	<0.50	<0.50	<0.50	3.2	1.16	6.72
8/8/2007	NP		253.19	6.0	14.0	7.85	--	245.34	87	<0.50	<0.50	<0.50	<0.50	1.9	1.46	7.07
11/14/2007	NP		253.19	6.0	14.0	7.52	--	245.67	79	<0.50	<0.50	<0.50	<0.50	3.7	1.49	6.47
2/28/2008	NP		253.19	6.0	14.0	7.22	--	245.97	88	<0.50	<0.50	<0.50	<0.50	0.86	1.36	6.51
5/23/2008	NP		253.19	6.0	14.0	7.40	--	245.79	<50	<0.50	<0.50	<0.50	<0.50	0.91	1.05	6.92
8/21/2008	NP		253.19	6.0	14.0	7.52	--	245.67	<50	<0.50	<0.50	<0.50	<0.50	1.4	1.09	6.99
11/13/2008	NP		253.19	6.0	14.0	7.52	--	245.67	<50	<0.50	<0.50	<0.50	<0.50	1.5	1.12	6.80
2/23/2009	NP		253.19	6.0	14.0	6.85	--	246.34	<50	<0.50	<0.50	<0.50	<0.50	0.84	1.11	5.56
5/14/2009	NP		253.19	6.0	14.0	7.35	--	245.84	<50	<0.50	<0.50	<0.50	<0.50	1.5	1.05	6.15
9/23/2009	**NP**		**253.19**	**6.0**	**14.0**	**7.60**	**--**	**245.59**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**1.5**	**0.84**	**6.71**
VW-2																
2/23/1996	--	i	--	--	--	6.92	--	--	--	--	--	--	--	--	--	--

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Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
VW-2 Cont.																
8/8/2002	--	i	--	--	--	10.51	--	--	--	--	--	--	--	--	--	--
VW-3																
8/8/2002	--		--	5.5	14.5	8.85	--	--	<50	<0.50	<0.50	<0.50	<0.50	2.5	0.7	6.1
11/27/2002	--	i	--	5.5	14.5	8.80	--	--	--	--	--	--	--	--	--	--
2/10/2003	--	i	--	5.5	14.5	8.41	--	--	--	--	--	--	--	--	--	--
6/3/2003	--	i	--	5.5	14.5	8.71	--	--	--	--	--	--	--	--	--	--
8/14/2003	--	i	--	5.5	14.5	8.81	--	--	--	--	--	--	--	--	--	--
11/13/2003	--		--	5.5	14.5	8.75	--	--	--	--	--	--	--	--	--	--
02/13/2004	--		252.26	5.5	14.5	8.48	--	243.78	--	--	--	--	--	--	--	--
05/05/2004	--		252.26	5.5	14.5	8.85	--	243.41	--	--	--	--	--	--	--	--
08/30/2004	--		252.26	5.5	14.5	9.07	--	243.19	--	--	--	--	--	--	--	--
11/08/2004	--		252.26	5.5	14.5	8.32	--	243.94	--	--	--	--	--	--	--	--
02/07/2005	--		252.26	5.5	14.5	8.28	--	243.98	--	--	--	--	--	--	--	--
05/09/2005	--		252.26	5.5	14.5	8.44	--	243.82	--	--	--	--	--	--	--	--
08/11/2005	--		252.26	5.5	14.5	8.96	--	243.30	--	--	--	--	--	--	--	--
12/02/2005	--		252.26	5.5	14.5	8.26	--	244.00	--	--	--	--	--	--	--	--
02/15/2006	--		252.26	5.5	14.5	7.61	--	244.65	--	--	--	--	--	--	--	--
5/19/2006	--		252.26	5.5	14.5	8.83	--	243.43	--	--	--	--	--	--	--	--
8/25/2006	--		252.26	5.5	14.5	8.95	--	243.31	--	--	--	--	--	--	--	--
11/2/2006	--		252.26	5.5	14.5	9.08	--	243.18	--	--	--	--	--	--	--	--
2/6/2007	--		252.26	5.5	14.5	8.61	--	243.65	--	--	--	--	--	--	--	--
5/9/2007	--		252.26	5.5	14.5	8.79	--	243.47	--	--	--	--	--	--	--	--
8/8/2007	--		252.26	5.5	14.5	9.10	--	243.16	--	--	--	--	--	--	--	--
11/14/2007	--		252.26	5.5	14.5	8.52	--	243.74	--	--	--	--	--	--	--	--
2/28/2008	--		252.26	5.5	14.5	8.27	--	243.99	--	--	--	--	--	--	--	--
5/23/2008	--		252.26	5.5	14.5	8.95	--	243.31	--	--	--	--	--	--	--	--
8/21/2008	--		252.26	5.5	14.5	9.06	--	243.20	--	--	--	--	--	--	--	--
11/13/2008	--		252.26	5.5	14.5	8.80	--	243.46	--	--	--	--	--	--	--	--
2/23/2009	--		252.26	5.5	14.5	6.60	--	245.66	--	--	--	--	--	--	--	--
5/14/2009	--		252.26	5.5	14.5	8.70	--	243.56	--	--	--	--	--	--	--	--

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Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
VW-3 Cont.																
9/23/2009	**NP**		**252.26**	**5.5**	**14.5**	**9.08**	**--**	**243.18**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**0.84**	**6.80**
VW-4																
5/10/1996	--		--	5.5	14.5	8.58	--	--	13,000	2,500	41	420	660	43,000	--	--
8/9/1996	--		--	5.5	14.5	11.70	--	--	<50	<0.5	<0.5	<0.5	<0.5	6,200	--	--
11/8/1996	--		--	5.5	14.5	9.38	--	--	7,800	510	7	180	370	21,000	--	--
3/21/1997	--		--	5.5	14.5	9.11	--	--	10,000	290	10	270	230	8,900	--	--
5/27/1997	--		--	5.5	14.5	9.34	--	--	--	--	--	--	--	--	--	--
8/5/1997	--		--	5.5	14.5	9.47	--	--	<10,000	180	<100	<100	110	12,000	--	--
10/29/1997	--		--	5.5	14.5	9.35	--	--	9,800	200	69	260	360	4,900	--	--
2/25/1998	--		--	5.5	14.5	7.08	--	--	<50	2.5	<0.5	<0.5	0.7	<3	--	--
5/12/1998	--		--	5.5	14.5	9.17	--	--	3,200	<20	22	29	52	2,100	--	--
7/28/1998	--		--	5.5	14.5	9.55	--	--	<10,000	<100	<100	<100	<100	5,100	--	--
10/27/1998	--		--	5.5	14.5	9.92	--	--	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--
2/8/1999	--	c	--	5.5	14.5	7.50	--	--	<2,500	<25	<25	28	<25	2,400/3,100	--	--
6/1/1999	NP		--	5.5	14.5	9.87	--	--	2,100	2.5	1.1	2.5	15	3,300	2	6.69
8/25/1999	NP		--	5.5	14.5	9.78	--	--	1,300	4.4	4.9	1.7	2.9	4,600	0.36	7.94
10/29/1999	NP		--	5.5	14.5	9.93	--	--	1,400	<0.5	1.8	1.6	3	4,200	1.18	6.64
2/16/2000	NP		--	5.5	14.5	7.45	--	--	1,800	<0.5	2.9	15	10	3,400	1.01	--
6/23/2000	NP		--	5.5	14.5	9.74	--	--	1,360	<2.00	2.26	<2.00	2.25	4,900	1.5	--
6/23/2000	--	f	--	5.5	14.5	--	--	--	1,260	<2.00	<2.00	<2.00	2.73	2,720	--	--
8/17/2000	NP		--	5.5	14.5	9.95	--	--	2,230	<10.0	<10.0	<10.0	<10.0	5,310	1.13	--
11/10/2000	NP		--	5.5	14.5	9.22	--	--	1,390	18.5	<5.00	<5.00	<5.00	8,840	1.25	--
2/12/2001	NP		--	5.5	14.5	8.99	--	--	1,400	9.42	<2.00	17.8	16.1	3,570	0.91	--
4/13/2001	NP		--	5.5	14.5	7.80	--	--	556	3.82	<1.25	<1.25	<1.25	2,450	--	--
7/18/2001	NP		--	5.5	14.5	7.73	--	--	2,100	9.2	<2.0	<2.0	<2.0	3,700	--	--
7/18/2001	--	f	--	5.5	14.5	--	--	--	2,000	8.7	2.2	<2.0	<2.0	3,400	--	--
10/1/2001	--	f	--	5.5	14.5	--	--	--	1,800	<10	<10	<10	<10	5,800	--	--
10/1/2001	NP		--	5.5	14.5	6.69	--	--	2,000	<10	<10	<10	13	5,900	--	--
1/14/2002	P		--	5.5	14.5	5.93	--	--	580	<2.0	<2.0	<2.0	<2.0	2,700	--	--
4/3/2002	NP		--	5.5	14.5	9.60	--	--	1,400	5.2	16	<5.0	9.6	2,200	--	--

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

Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
									GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE		
VW-4 Cont.																
8/8/2002	--	i	--	5.5	14.5	10.01	--	--	--	--	--	--	--	--	--	--
11/27/2002	P		--	5.5	14.5	10.30	--	--	<10,000	<100	<100	<100	<100	3,800	1.7	6.7
2/10/2003	NP		--	5.5	14.5	10.06	--	--	<5,000	<50	<50	<50	<50	2,500	1	6.8
6/3/2003	--		--	5.5	14.5	10.04	--	--	<1,000	<10	<10	<10	<10	440	1.9	6.6
8/14/2003	--		--	5.5	14.5	9.66	--	--	<500	<5.0	<5.0	<5.0	<5.0	170	0.8	6.7
11/13/2003	P		--	5.5	14.5	10.01	--	--	<500	<5.0	<5.0	<5.0	<5.0	130	1.7	6.4
02/13/2004	P		252.69	5.5	14.5	9.34	--	243.35	330	<2.5	<2.5	<2.5	3.0	210	2.0	6.6
05/05/2004	P		252.69	5.5	14.5	10.07	--	242.62	130	<1.0	<1.0	<1.0	<1.0	66	1.2	6.8
08/30/2004	P		252.69	5.5	14.5	10.32	--	242.37	<500	<5.0	<5.0	<5.0	<5.0	220	1.1	6.6
11/08/2004	P		252.69	5.5	14.5	9.35	--	243.34	480	<2.5	<2.5	<2.5	<2.5	140	1.1	6.0
02/07/2005	P		252.69	5.5	14.5	9.22	--	243.47	180	<0.50	<0.50	<0.50	<0.50	47	1.83	6.5
05/09/2005	P		252.69	5.5	14.5	9.78	--	242.91	120	0.63	<0.50	<0.50	<0.50	37	--	--
08/11/2005	P		252.69	5.5	14.5	10.11	--	242.58	74	<0.50	<0.50	<0.50	<0.50	15	0.7	6.7
12/02/2005	P		252.69	5.5	14.5	9.59	--	243.10	160	<1.0	<1.0	<1.0	<1.0	28	0.75	6.9
02/15/2006	P		252.69	5.5	14.5	8.56	--	244.13	64	<0.50	<0.50	<0.50	<0.50	11	0.9	6.9
5/19/2006	P		252.69	5.5	14.5	9.95	--	242.74	150	<0.50	<0.50	<0.50	1.2	16	0.76	6.7
8/25/2006	P		252.69	5.5	14.5	10.03	--	242.66	140	<0.50	<0.50	<0.50	<0.50	17	1.14	6.7
11/2/2006	P		252.69	5.5	14.5	10.13	--	242.56	120	<0.50	<0.50	<0.50	<0.50	20	1.76	6.49
2/6/2007	NP		252.69	5.5	14.5	9.57	--	243.12	<50	<0.50	<0.50	<0.50	<0.50	1.6	0.98	6.89
5/9/2007	NP		252.69	5.5	14.5	9.75	--	242.94	110	<0.50	<0.50	<0.50	<0.50	21	0.76	6.94
8/8/2007	NP		252.69	5.5	14.5	10.13	--	242.56	140	<0.50	<0.50	<0.50	<0.50	5.4	0.88	6.81
11/14/2007	NP		252.69	5.5	14.5	9.81	--	242.88	150	<0.50	<0.50	<0.50	<0.50	6.4	1.17	6.67
2/28/2008	NP		252.69	5.5	14.5	9.00	--	243.69	<50	<0.50	<0.50	<0.50	<0.50	8.4	0.92	6.55
5/23/2008	NP		252.69	5.5	14.5	9.73	--	242.96	68	<1.0	<1.0	<1.0	<1.0	6.4	1.40	6.92
8/21/2008	NP		252.69	5.5	14.5	10.04	--	242.65	74	<2.5	<2.5	<2.5	<2.5	3.2	1.29	6.89
11/13/2008	NP		252.69	5.5	14.5	9.95	--	242.74	89	<2.0	<2.0	<2.0	<2.0	2.7	1.23	6.93
2/23/2009	NP	l	252.69	5.5	14.5	7.35	--	245.34	290	0.97	<0.50	<0.50	<0.50	27	1.27	5.66
5/14/2009	NP		252.69	5.5	14.5	9.60	--	243.09	<50	0.54	<0.50	<0.50	<0.50	10	1.08	7.3
9/23/2009	**NP**		**252.69**	**5.5**	**14.5**	**10.04**	**--**	**242.65**	**81**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**1.29**	**6.56**

SYMBOLS AND ABBREVIATIONS:
-- = Not analyzed/applicable/measured/available
< = Not detected at or above laboratory reporting limit
BTEX = Benzene, toluene, ethylbenzene and xylenes
DO = Dissolved oxygen
DTW = Depth to water in ft bgs
ft bgs = feet below ground surface
GRO = Gasoline range organics
GWE = Groundwater elevation measured in ft
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
TPH-g = Total petroleum hydrocarbons as gasoline
µg/L = Micrograms per liter

FOOTNOTES:
a = SPH detected and GWE corrected: Corrected elevation (Z') = Z + (h * 0.73) where: Z: measured elevation, h: floating product thickness, 0.73: density ratio of oil to water.
b = MTBE analyzed by EPA method 8240.
c = MTBE, sample also analyzed for fuel oxygenates.
d = Well was decommissioned on 2/12/1996.
e = Well inaccessible.
f = Duplicate
g = Well was dry.
h = Insufficient water to sample.
i = Well is not part of the sampling program and therefore was not sampled.
j = Sheen in well.
k = Could not locate well.
l = Quantitation of unknown hydrocarbon(s) in sample based on gasoline.

NOTES:
Wells surveyed to NAVD'88 datum on 1/27/2004.

Beginning on the first quarter 2003 sampling event (2/10/2003), TPH-g, BTEX and MTBE analyzed by EPA method 8260. Prior to 2/10/2003, BTEX by EPA method 8021B from 10/29/99 to 2/10/03, and 8020 prior to 10/29/99.

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 #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-3									
2/10/2003	<40	<20	<0.50	<0.50	<0.50	<0.50	--	--	
08/30/2004	<100	<20	0.72	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	<20	0.73	<0.50	<0.50	<0.50	<0.50	<0.50	
8/25/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/8/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/21/2008	<300	<10	0.81	<0.50	<0.50	<0.50	<0.50	<0.50	
9/23/2009	**<300**	**<10**	**6.3**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-4									
2/10/2003	<40	<20	<0.50	<0.50	<0.50	<0.50	--	--	
6/3/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
8/14/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/30/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/25/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/8/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/21/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/23/2009	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-5									
2/10/2003	<200	<100	100	<0.50	<0.50	<0.50	--	--	
6/3/2003	<1,000	<200	160	<5.0	<5.0	<5.0	--	--	
11/13/2003	<1,000	<200	90	<5.0	<5.0	<5.0	--	--	
02/13/2004	<200	41	90	<1.0	<1.0	<1.0	<1.0	<1.0	
05/05/2004	<500	<100	130	<2.5	<2.5	<2.5	<2.5	<2.5	
08/30/2004	<500	100	85	<2.5	<2.5	<2.5	<2.5	<2.5	
11/08/2004	<200	43	69	<1.0	<1.0	<1.0	<1.0	<1.0	
02/07/2005	<200	<40	15	<1.0	<1.0	<1.0	<1.0	<1.0	
05/09/2005	<200	<40	19	<1.0	<1.0	<1.0	<1.0	<1.0	a
08/11/2005	<500	<100	51	<2.5	<2.5	<2.5	<2.5	<2.5	
12/02/2005	<500	<100	13	<2.5	<2.5	<2.5	<2.5	<2.5	
02/15/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data

Station #6002, 6235 Seminary 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.									
5/19/2006	<300	25	15	<0.50	<0.50	<0.50	<0.50	<0.50	a, c
8/25/2006	<1,500	<100	17	<2.5	<2.5	<2.5	<2.5	<2.5	
11/2/2006	<600	70	18	<1.0	<1.0	<1.0	<1.0	<1.0	a
2/6/2007	<600	45	13	<1.0	<1.0	<1.0	<1.0	<1.0	
5/9/2007	<600	69	31	<1.0	<1.0	<1.0	<1.0	<1.0	
8/8/2007	<600	<40	11	<1.0	<1.0	<1.0	<1.0	<1.0	
11/14/2007	<600	46	11	<1.0	<1.0	<1.0	<1.0	<1.0	
2/28/2008	<1,500	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
5/23/2008	<300	52	17	<0.50	<0.50	<0.50	<0.50	<0.50	
8/21/2008	<300	40	8.7	<0.50	<0.50	<0.50	<0.50	<0.50	
11/13/2008	<300	27	5.6	<0.50	<0.50	<0.50	<0.50	<0.50	
2/23/2009	<300	14	3.2	<0.50	<0.50	<0.50	<0.50	0.61	
5/14/2009	<300	31	5.4	<0.50	<0.50	<0.50	<0.50	<0.50	
9/23/2009	**<300**	**13**	**3.4**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-6									
2/10/2003	<40	<20	<0.50	<0.50	<0.50	<0.50	--	--	
08/30/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/25/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/8/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/21/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/23/2009	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-7									
2/10/2003	<40	<20	<0.50	<0.50	<0.50	<0.50	--	--	
6/3/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
8/14/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/25/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-8									
2/10/2003	<40	<20	<0.50	<0.50	<0.50	<0.50	--	--	

Table 2. Summary of Fuel Additives Analytical Data

Station #6002, 6235 Seminary 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.									
6/3/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
8/14/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/30/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
02/15/2006	--	--	--	--	--	--	--	--	Well inaccessible
8/25/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
VW-1									
2/10/2003	<40	<20	11	<0.50	<0.50	<0.50	--	--	
6/3/2003	<100	<20	13	<0.50	<0.50	<0.50	--	--	
8/14/2003	<100	<20	18	<0.50	<0.50	<0.50	<0.50	<0.50	
11/13/2003	<100	<20	13	<0.50	<0.50	<0.50	--	--	
02/13/2004	<100	<20	8.0	<0.50	<0.50	<0.50	<0.50	<0.50	
05/05/2004	<100	<20	11	<0.50	<0.50	<0.50	<0.50	<0.50	
08/30/2004	<100	<20	24	<0.50	<0.50	<0.50	<0.50	<0.50	
11/08/2004	<100	<20	27	<0.50	<0.50	<0.50	<0.50	<0.50	
02/07/2005	<100	<20	5.1	<0.50	<0.50	<0.50	<0.50	<0.50	
05/09/2005	<100	<20	6.9	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	<20	10	<0.50	<0.50	<0.50	<0.50	<0.50	
12/02/2005	<100	<20	9.0	<0.50	<0.50	<0.50	<0.50	<0.50	a
02/15/2006	<300	<20	2.8	<0.50	<0.50	<0.50	<0.50	<0.50	
5/19/2006	<300	<20	3.7	<0.50	<0.50	<0.50	<0.50	<0.50	a, c
8/25/2006	<300	<20	8.3	<0.50	<0.50	<0.50	<0.50	<0.50	
11/2/2006	<300	<20	11	<0.50	<0.50	<0.50	<0.50	<0.50	a
2/6/2007	<300	<20	2.3	<0.50	<0.50	<0.50	<0.50	<0.50	
5/9/2007	<300	<20	3.2	<0.50	<0.50	<0.50	<0.50	<0.50	
8/8/2007	<300	<20	1.9	<0.50	<0.50	<0.50	<0.50	<0.50	
11/14/2007	<300	<20	3.7	<0.50	<0.50	<0.50	<0.50	<0.50	
2/28/2008	<300	<10	0.86	<0.50	<0.50	<0.50	<0.50	<0.50	
5/23/2008	<300	<10	0.91	<0.50	<0.50	<0.50	<0.50	<0.50	
8/21/2008	<300	<10	1.4	<0.50	<0.50	<0.50	<0.50	<0.50	
11/13/2008	<300	<10	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	
2/23/2009	<300	<10	0.84	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data

Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
VW-1 Cont.									
5/14/2009	<300	<10	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	
9/23/2009	**<300**	**<10**	**1.5**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
VW-3									
9/23/2009	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
VW-4									
2/10/2003	<4,000	<2,000	2500	<0.50	<0.50	<0.50	--	--	
6/3/2003	<2,000	4,100	440	<10	<10	<10	--	--	
8/14/2003	<1,000	3,200	170	<5.0	<5.0	<5.0	<5.0	<5.0	
11/13/2003	<1,000	3,300	130	<5.0	<5.0	<5.0	--	--	
02/13/2004	<500	1,300	210	<2.5	<2.5	<2.5	<2.5	<2.5	
05/05/2004	<200	1,500	66	<1.0	1.3	<1.0	<1.0	<1.0	
08/30/2004	<1,000	5,400	220	<5.0	5.4	<5.0	<5.0	<5.0	
11/08/2004	<500	2,700	140	<2.5	<2.5	<2.5	<2.5	<2.5	
02/07/2005	<100	1,000	47	<0.50	0.89	<0.50	<0.50	<0.50	
05/09/2005	<100	1,200	37	<0.50	0.92	<0.50	<0.50	<0.50	
08/11/2005	<100	2,000	15	<0.50	1.8	<0.50	<0.50	<0.50	b
12/02/2005	<200	2,400	28	<1.0	2.2	<1.0	<1.0	<1.0	
02/15/2006	<300	230	11	<0.50	<0.50	<0.50	<0.50	<0.50	
5/19/2006	<300	580	16	<0.50	<0.50	<0.50	<0.50	<0.50	a
8/25/2006	<300	1,900	17	<0.50	1.9	<0.50	<0.50	<0.50	
11/2/2006	<300	2,400	20	<0.50	2.3	<0.50	<0.50	<0.50	a
2/6/2007	<300	<20	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	
5/9/2007	<300	410	21	<0.50	<0.50	<0.50	<0.50	<0.50	
8/8/2007	<300	1,300	5.4	<0.50	1.2	<0.50	<0.50	<0.50	
11/14/2007	<300	1,700	6.4	<0.50	1.7	<0.50	<0.50	<0.50	
2/28/2008	<300	59	8.4	<0.50	<0.50	<0.50	<0.50	<0.50	
5/23/2008	<600	280	6.4	<1.0	<1.0	<1.0	<1.0	<1.0	
8/21/2008	<1,500	720	3.2	<2.5	<2.5	<2.5	<2.5	<2.5	
11/13/2008	<1,200	940	2.7	<2.0	<2.0	<2.0	<2.0	<2.0	
2/23/2009	<300	99	27	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data

Station #6002, 6235 Seminary Ave., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
VW-4 Cont.									
5/14/2009	<300	100	10	<0.50	<0.50	<0.50	<0.50	<0.50	
9/23/2009	**<300**	**61**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	

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

FOOTNOTES:
a = Calibration verification for ethanol was within the method limits but outside the contract limits.
b = The initial analysis for TBA was within holding time but required dilution.

NOTES:
All volatile organic compounds analyzed using EPA Method 8260B.

The data within this table collected prior to August 2002 was provided to URS by RM and their previous consultants. URS has not verified the accuracy of this information.

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 #6002, 6235 Seminary Ave., Oakland, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
3/15/1995	West-Southwest	0.08
5/30/1995	West-Southwest	0.08
9/1/1995	West-Southwest	0.09
11/13/1995	West-Southwest	0.08
2/23/1996	West-Southwest	0.08
5/10/1996	West-Southwest	0.08
8/9/1996	Southwest	0.08
11/8/1996	Southwest	0.06
3/21/1997	West-Southwest	0.05
5/27/1997	West-Southwest	0.07
8/5/1997	West	0.08
10/29/1997	West-Southwest	0.04
2/25/1998	West-Southwest	0.05
5/12/1998	West	0.07
7/28/1998	West	0.07
10/27/1998	West-Southwest	0.06
2/8/1999	West-Southwest	0.07
6/1/1999	West-Northwest	0.07
8/25/1999	West-Southwest	0.07
10/29/1999	West	0.07
2/16/2000	Southwest	0.05
6/23/2000	West	0.04
8/17/2000	West	0.09
11/10/2000	West-Southwest	0.08
2/12/2001	West-Southwest	0.07
4/13/2001	West	0.09
7/18/2001	West	0.08
10/1/2001	West-Southwest	0.08
1/14/2002	West-Southwest	0.07
4/3/2002	West-Southwest	0.08
8/8/2002	West-Southwest	0.09
11/27/2002	West-Southwest	0.08
2/10/2003	Southwest	0.06
6/3/2003	West	0.07
8/14/2003	West-Southwest	0.07
11/13/2003	West-Southwest	0.07
2/13/2004	Southwest	0.05
5/4/2004	Southwest	0.06
8/30/2004	Southwest	0.07
11/8/2004	Southwest	0.10
2/7/2005	Southwest	0.1
5/9/2005	Southwest	0.07

Table 3. Historical Ground-Water Flow Direction and Gradient

Station #6002, 6235 Seminary Ave., Oakland, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
8/11/2005	West	0.07
12/2/2005	Southwest	0.10
2/15/2006	Southwest	0.07
4/28/2006	West	0.07
8/25/2006	West	0.07
11/2/2006	West	0.09
2/6/2007	West	0.05
5/9/2007	West	0.05
8/8/2007	West	0.05
11/14/2007	West	0.06
2/28/2008	West-Southwest	0.06
5/23/2008	West-Southwest	0.06
8/21/2008	West-Southwest	0.07
11/13/2008	West	0.08
2/23/2009	West	0.05
5/14/2009	West-Southwest	0.06
9/23/2009	**West**	**0.06**

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

APPENDIX A

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

STRATUS
ENVIRONMENTAL INC.

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

October 7, 2009

Mr. Hollis Phillips, P.G.
ARCADIS U.S., Inc.
100 Montgomery Street, Suite 100
San Francisco, CA 94104

Re: Groundwater Sampling Data Package, ARCO Service Station No. 6002, located at 6235 Seminary Avenue, Oakland, California.

General Information

Data Submittal Prepared / Reviewed by: Carol Huff / Jay Johnson
Phone Number: (530) 676-6000
On-Site Supplier Representative: Jerry Gonzales and Arturo Heimlich

Sampling Date: September 23, 2009

Unusual Field Conditions: None noted.

Scope of Work Performed: Quarterly monitoring and sampling.

Variations from Work Scope: Well MW-8 is located in a residential backyard. No one was home to grant access to the gate, which was locked. Well MW-7 was dry.

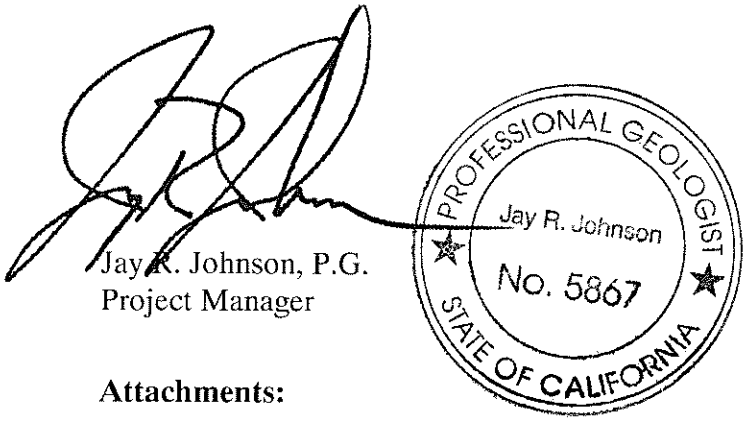
This submittal presents the data collected in association with routine groundwater monitoring. The attachments include field sheets, non-hazardous waste data form, chain of custody documentation, certified analytical results, and field procedures for groundwater sampling documentation. The information is being provided 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.

October 7, 2009

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

BP Alameda Portfolio

HYDROLOGIC DATA SHEET

AK-905 DP 12:20

Gauge Date: 9/23/09 **Project Name:** 6235 Seminary Ave., Oakland

Field Technician: Jerry **Project Number:** 6002

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

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

WELL OR LOCATION	TIME	MEASUREMENT						PURGE & SAMPLE	SHEEN CONFIRMATION (w/bailer)	COMMENTS
		TOC	TOS	DTW	DTB	DIA	ELEV			
MW-3	9:35			8.52	24.30					
MW-4	9:46			12.65	24.05					
MW-5	10:01			12.50	24.90					
MW-6	9:25			7.42	32.90					
MW-7	9:19			Dry	13.18					
MW-8	9:30	~~~								No Access To well Gate Locked Not Home
VW-1	9:39			7.60	13.12					
VW-3	9:52			9.08	14.10					
VW-4	9:56			10.04	14.21					

RW/Buddy System = Arturo Heimlich

pH/Conductivity/temperature Meter - YSI Model 63

DO Meter - YSI 55 Series

Please refer to groundwater sampling field procedures

Calibration Date

pH 9/23/09

Conductivity 9/23/09

DO 9/23/09

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 6002 | PURGED BY: JS | WELL I.D.: MW-3
CLIENT NAME: | SAMPLED BY: JS | SAMPLE I.D.: MW-3
LOCATION: Oakland - 6235 Seminary Ave. | QA SAMPLES:

DATE PURGED 9/23/09 | START (2400hr) 1104 | END (2400hr) 1107
DATE SAMPLED 9/23/09 | SAMPLE TIME (2400hr) 1105
SAMPLE TYPE: Groundwater x | Surface Water ___ | Treatment Effluent ___ | Other ___

CASING DIAMETER: Casing Volume: (gallons per foot)

2"	3"	4"	5"	6"	8"	Other
(0.17)	(0.38)	X (0.67)	(1.02)	(1.50)	(2.60)	( )

DEPTH TO BOTTOM (feet) = 24.30 | CASING VOLUME (gal) = 10.5
DEPTH TO WATER (feet) = 8.52 | CALCULATED PURGE (gal) = 31.7
WATER COLUMN HEIGHT (feet) = 15.7 | ACTUAL PURGE (gal) = 0 NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/23/09	1106	0	22.6	524	6.76	clr	
			ND	Purge			

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 8.52 | SAMPLE TURBIDITY: Clear
80% RECHARGE: X YES ___ NO | ANALYSES: 5W0
ODOR: NO | SAMPLE VESSEL / PRESERVATIVE: 6 Voa. HCl

PURGING EQUIPMENT

___ Bladder Pump
___ Centrifugal Pump
___ Submersible Pump
___ Peristaltic Pump
___ Bailer (Teflon)
___ Bailer (PVC)
___ Bailer (Stainless Steel)
___ Dedicated ___
Other: ___
Pump Depth: ~

SAMPLING EQUIPMENT

___ Bladder Pump
___ Centrifugal Pump
___ Submersible Pump
___ Peristaltic Pump
X Bailer (Teflon)
___ Bailer (___ PVC or X disposable)
___ Bailer (Stainless Steel)
___ Dedicated ___
Other: ___

WELL INTEGRITY: DO 1.17 | LOCK#: Master

REMARKS:

SIGNATURE: | Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 6002 | PURGED BY: JS | WELL I.D.: MW-4

CLIENT NAME: | SAMPLED BY: JS | SAMPLE I.D.: MW-4

LOCATION: Oakland - 6235 Seminary Ave. | QA SAMPLES:

DATE PURGED: 9/23/09 | START (2400hr): 1048 | END (2400hr): 1051

DATE SAMPLED: 9/23/09 | SAMPLE TIME (2400hr): 1050

SAMPLE TYPE: Groundwater x | Surface Water | Treatment Effluent | Other

CASING DIAMETER: 2" | 3" | 4" X | 5" | 6" | 8" | Other

Casing Volume: (gallons per foot) (0.17) | (0.38) | (0.67) | (1.02) | (1.50) | (2.60) | ( )

DEPTH TO BOTTOM (feet) = 24.05' | CASING VOLUME (gal) = 9.6

DEPTH TO WATER (feet) = 12.65 | CALCULATED PURGE (gal) = 22.9

WATER COLUMN HEIGHT (feet) = 11.4 | ACTUAL PURGE (gal) = 0 NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/23/09	1049	0	22.7	3838	7.17	Clear	
			Pump off				
		NO					

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 12.65 | SAMPLE TURBIDITY: Clear

80% RECHARGE: X YES ___ NO | ANALYSES: 5W0

ODOR: NO | SAMPLE VESSEL / PRESERVATIVE: 6 VOA - HCL

PURGING EQUIPMENT

___ Bladder Pump
___ Centrifugal Pump
___ Submersible Pump
___ Peristaltic Pump
___ Bailer (Teflon)
___ Bailer (PVC)
___ Bailer (Stainless Steel)
___ Dedicated

Other:

Pump Depth: ~

SAMPLING EQUIPMENT

___ Bladder Pump
___ Centrifugal Pump
___ Submersible Pump
___ Peristaltic Pump
___ Bailer (Teflon)
X Bailer (___ PVC or X disposable)
___ Bailer (Stainless Steel)
___ Dedicated

Other:

WELL INTEGRITY: Good | LOCK#: None

REMARKS: DO 1.10

SIGNATURE: | Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 6002 | PURGED BY: [illegible] | WELL I.D.: MW-5

CLIENT NAME: | SAMPLED BY: [illegible] | SAMPLE I.D.: MW5

LOCATION: Oakland - 6235 Seminary Ave. | QA SAMPLES:

DATE PURGED 9/23/09 | START (2400hr) 1158 | END (2400hr) 1202

DATE SAMPLED 9/23/09 | SAMPLE TIME (2400hr) 1200

SAMPLE TYPE: Groundwater x | Surface Water ___ | Treatment Effluent ___ | Other ___

CASING DIAMETER: 2" ___ (0.17) | 3" ___ (0.38) | 4" x (0.67) | 5" ___ (1.02) | 6" ___ (1.50) | 8" ___ (2.60) | Other ___ ( )

Casing Volume: (gallons per foot)

DEPTH TO BOTTOM (feet) = 24.90 | CASING VOLUME (gal) = 8.3

DEPTH TO WATER (feet) = 12.50 | CALCULATED PURGE (gal) = 24.9

WATER COLUMN HEIGHT (feet) = 12.4 | ACTUAL PURGE (gal) = 0 NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/23/09	1201	0	21.3	622	6.53	clear	
			NO	purge			

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 1250 | SAMPLE TURBIDITY: Clear

80% RECHARGE: X YES ___ NO | ANALYSES: SVOC

ODOR: Yes | SAMPLE VESSEL / PRESERVATIVE: 6 VOA-HCL

PURGING EQUIPMENT

___ Bladder Pump | ___ Bailer (Teflon)

___ Centrifugal Pump | ___ Bailer (PVC)

___ Submersible Pump | ___ Bailer (Stainless Steel)

___ Peristaltic Pump | ___ Dedicated ___

Other: ___

Pump Depth: ___

SAMPLING EQUIPMENT

___ Bladder Pump | ___ Bailer (Teflon)

___ Centrifugal Pump | ✓ Bailer (___ PVC or X disposable)

___ Submersible Pump | ___ Bailer (Stainless Steel)

___ Peristaltic Pump | ___ Dedicated ___

Other: ___

WELL INTEGRITY: Good | LOCK#: MASTER

REMARKS: DO. 0.89

SIGNATURE: [signature] | Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 6002 | PURGED BY: JS | WELL I.D.: MW-6

CLIENT NAME: | SAMPLED BY: JS | SAMPLE I.D.: MW-6

LOCATION: Oakland - 6235 Seminary Ave. | QA SAMPLES:

DATE PURGED: 9/23/09 | START (2400hr): 10:12 | END (2400hr): 10:15

DATE SAMPLED: 9/23/09 | SAMPLE TIME (2400hr): 1020

SAMPLE TYPE: Groundwater x | Surface Water | Treatment Effluent | Other

CASING DIAMETER: 2" X | 3" | 4" | 5" | 6" | 8" | Other

Casing Volume: (gallons per foot) (0.17) | (0.38) | (0.67) | (1.02) | (1.50) | (2.60) | ( )

DEPTH TO BOTTOM (feet) = 32.90 | CASING VOLUME (gal) = 1.3

DEPTH TO WATER (feet) = 7.18 | CALCULATED PURGE (gal) = 12.9

WATER COLUMN HEIGHT (feet) = 25.4 | ACTUAL PURGE (gal) = 13.0

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/23/09	10:13	4.5	21.6	399.4	8.25	Cloudy	
	10:14	9.0	22.1	397.2	7.90	Clear	
	10:15	13.0	21.7	363.1	7.74	Clear	

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 7.51 | SAMPLE TURBIDITY: Clear

80% RECHARGE: X YES ___ NO | ANALYSES: 5 WO

ODOR: NO | SAMPLE VESSEL / PRESERVATIVE: 6 Voa HCl

PURGING EQUIPMENT

___ Bladder Pump | ___ Bailer (Teflon)

X Centrifugal Pump | ___ Bailer (PVC)

___ Submersible Pump | ___ Bailer (Stainless Steel)

___ Peristalic Pump | ___ Dedicated

Other:

Pump Depth: 20

SAMPLING EQUIPMENT

___ Bladder Pump | ___ Bailer (Teflon)

___ Centrifugal Pump | X Bailer (___ PVC or X disposable)

___ Submersible Pump | ___ Bailer (Stainless Steel)

___ Peristalic Pump | ___ Dedicated

Other:

WELL INTEGRITY: Good | LOCK#: Master

REMARKS: DO 1.06

SIGNATURE:

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 6002 PURGED BY: JS WELL I.D.: VW-1

CLIENT NAME: SAMPLED BY: JS SAMPLE I.D.: VW-1

LOCATION: Oakland - 6235 Seminary Ave. QA SAMPLES:

DATE PURGED 9/23/09 START (2400hr) 1144 END (2400hr) 1149

DATE SAMPLED 9/23/09 SAMPLE TIME (2400hr) 1145

SAMPLE TYPE: Groundwater x Surface Water ___ Treatment Effluent ___ Other ___

CASING DIAMETER: 2" ___ 3" ___ 4" X 5" ___ 6" ___ 8" ___ Other ___

Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ( )

DEPTH TO BOTTOM (feet) = 13.12 CASING VOLUME (gal) = 3.6

DEPTH TO WATER (feet) = 7.60 CALCULATED PURGE (gal) = 11.0

WATER COLUMN HEIGHT (feet) = 5.5 ACTUAL PURGE (gal) = 0 NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/23/09	1146	0	24.0	450.4	6.71	Clear	
			ND Purge				

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 7.60 SAMPLE TURBIDITY: Clear

80% RECHARGE: X YES ___ NO ANALYSES: 5-W-O

ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 6-Voa-HCC

PURGING EQUIPMENT

___ Bladder Pump ___ Bailer (Teflon)
___ Centrifugal Pump ___ Bailer (PVC)
___ Submersible Pump ___ Bailer (Stainless Steel)
___ Peristalic Pump ___ Dedicated ___

Other: ___

Pump Depth: —

SAMPLING EQUIPMENT

___ Bladder Pump ___ Bailer (Teflon)
___ Centrifugal Pump X Bailer (___ PVC or X disposable)
___ Submersible Pump ___ Bailer (Stainless Steel)
___ Peristalic Pump ___ Dedicated ___

Other: ___

WELL INTEGRITY: good LOCK#: Master

REMARKS: DO-0.84

SIGNATURE: [signature] Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 6002 | PURGED BY: JS | WELL I.D.: VW-3

CLIENT NAME: | SAMPLED BY: JS | SAMPLE I.D.: VW-3

LOCATION: Oakland - 6235 Seminary Ave. | QA SAMPLES:

DATE PURGED 9/23/09 | START (2400hr) 1118 | END (2400hr) 1121

DATE SAMPLED 9/23/09 | SAMPLE TIME (2400hr) 1119

SAMPLE TYPE: Groundwater x | Surface Water ___ | Treatment Effluent ___ | Other ___

CASING DIAMETER / Casing Volume: (gallons per foot)	2" (0.17)	3" (0.38)	4" (0.67)	5" (1.02)	6" (1.50)	8" (2.60)	Other ( )
			X				

DEPTH TO BOTTOM (feet) = 14.10 | CASING VOLUME (gal) = 3.3

DEPTH TO WATER (feet) = 9.08 | CALCULATED PURGE (gal) = 10.0

WATER COLUMN HEIGHT (feet) = 5.0 | ACTUAL PURGE (gal) = 0 NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/23/09	1120	0	23.3	337.5	6.80	Clear	
			NO	Purge			

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 9.08 | SAMPLE TURBIDITY: Clear

80% RECHARGE: X YES ___ NO | ANALYSES: 5260

ODOR: NO | SAMPLE VESSEL / PRESERVATIVE: 6 Voa - HCl

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
___ Bladder Pump	___ Bailer (Teflon)	___ Bladder Pump	___ Bailer (Teflon)
___ Centrifugal Pump	___ Bailer (PVC)	___ Centrifugal Pump	X Bailer (___ PVC or X disposable)
___ Submersible Pump	___ Bailer (Stainless Steel)	___ Submersible Pump	___ Bailer (Stainless Steel)
___ Peristaltic Pump	___ Dedicated ___	___ Peristaltic Pump	___ Dedicated ___
Other: ___		Other: ___	
Pump Depth: ___			

WELL INTEGRITY: good | LOCK#: MASTER

REMARKS: D.O. 0.84

SIGNATURE: | Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 6002 | PURGED BY: JS | WELL I.D.: VW-4

CLIENT NAME: | SAMPLED BY: JS | SAMPLE I.D.: VW-4

LOCATION: Oakland - 6235 Seminary Ave. | QA SAMPLES:

DATE PURGED 9/23/09 | START (2400hr) 1130 | END (2400hr) 1133

DATE SAMPLED 9/23/09 | SAMPLE TIME (2400hr) 1131

SAMPLE TYPE: Groundwater x | Surface Water ___ | Treatment Effluent ___ | Other ___

CASING DIAMETER: 2" ___ | 3" ___ | 4" X | 5" ___ | 6" ___ | 8" ___ | Other ___ ( )

Casing Volume: (gallons per foot) (0.17) | (0.38) | (0.67) | (1.02) | (1.50) | (2.60)

DEPTH TO BOTTOM (feet) = 14.21 | CASING VOLUME (gal) = 7.8

DEPTH TO WATER (feet) = 10.02 | CALCULATED PURGE (gal) = 8.4

WATER COLUMN HEIGHT (feet) = 4.1 | ACTUAL PURGE (gal) = 0 NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/23/09	1132	0	23.2	5365	6.86	clear	
			NO PURGE				

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 10.02 | SAMPLE TURBIDITY: clear

80% RECHARGE: X YES ___ NO | ANALYSES: SWO

ODOR: NO | SAMPLE VESSEL / PRESERVATIVE: 6 Voa - HCL

PURGING EQUIPMENT

___ Bladder Pump | ___ Bailer (Teflon)

___ Centrifugal Pump | ___ Bailer (PVC)

___ Submersible Pump | ___ Bailer (Stainless Steel)

___ Peristalic Pump | ___ Dedicated ___

Other: ___

Pump Depth: ___

SAMPLING EQUIPMENT

___ Bladder Pump | ___ Bailer (Teflon)

___ Centrifugal Pump | X Bailer (___ PVC or X disposable)

___ Submersible Pump | ___ Bailer (Stainless Steel)

___ Peristalic Pump | ___ Dedicated ___

Other: ___

WELL INTEGRITY: Good | LOCK#: MASTER

REMARKS: DO. 1.29

SIGNATURE: ___ | Page ___ of ___

WELLHEAD OBSERVATION FORM

Site Name/Number: 6002-Oakland *Date:* 9/23/09 *Technican:* JRM

STRATUS ENVIRONMENTAL, INC.

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, etc.) explain:
MW-3	X	X				1							
MW-4	X	X		X	B	1							
MW-5	X	X		X	A	1							
MW-6	X	X				1							
MW-7	X	X				1							
MW-8													
VW-1	X	X				1							
VW-3	X	X				1							
VW-4	X	X				1							

* 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.)

NO. 855658

NON-HAZARDOUS WASTE DATA FORM

1. BES #

GENERATOR

2. Generator's Name and Mailing Address
EP WEST COAST PRODUCTS, LLC
P.O. BOX 80249
RANCHO SANTA MARGARITA, CA 92688

Generator's Site Address (if different than mailing address)
7-Eleven
6235 Stockton Blvd
Sacramento

Generator's Phone: (949) 480-6200 | 24-HOUR EMERGENCY PHONE: (949) 680-3705

3. Transporter 1 Company Name: Stratus Environmental, Inc. | Phone #: (530) 676-6000

4. Transporter 2 Company Name: Gomes Excavating | Phone #: (707) 374-2881

5. Designated Facility Name and Site Address
INTRAT, INC.
1105 AIRPORT RD #C
RIO VISTA, CA 94571
Phone #: (530) 793-1529

6. Waste Shipping Name and Description	7. Containers No.	7. Containers Type	8. Total Quantity	9. Unit Wt/Vol	10. Profile No.
A. NON-HAZARDOUS WATER	1	TT	10 Gal	G	
B.					
C.					
D.					

11. Special Handling Instructions and Additional Information
WEAR ALL APPROPRIATE PROTECTIVE CLOTHING
WELL PURGING / DECON WATER

12. GENERATOR'S CERTIFICATION: I certify the materials described above on this data form are non-hazardous.
Generator's/Offeror's Printed/Typed Name: Jerry Gomes | Signature | Month | Day | Year

TRANSPORTER

13. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Jerry Gomes | Signature | Month | Day | Year
Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

FACILITY

14. Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.
Printed/Typed Name | Signature | Month | Day | Year

TRANSPORTER #1

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: BP-6002 | Req Due Date (mm/dd/yy): 14 Day TAT | Rush TAT: Yes ___ No X

BP/ARC Facility No: 6002 | Lab Work Order Number:

Lab Name: CalScience	BP/ARC Facility Address: 6235 Seminary Ave	Consultant/Contractor: Stratus Environmental Inc.
Lab Address: 7440 Lincoln Way, Garden Grove, CA 92841	City, State, ZIP Code: Oakland	Consultant/Contractor Project No:
Lab PM: Richard Villafania	Lead Regulatory Agency: Alameda	Address: 3330 Cameron Park Drive, #550, Cameron Park, CA 95682
Lab Phone: 714-895-5494 Fax: 714-895-7501	California Global ID No.: T0600100105	Consultant/Contractor PM: Jay Johnson
Lab Shipping Accnt:	Enfos Proposal No.: 000RY-0002	Phone: 530-676-6000 Fax: 530-676-6005
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ___ OOC-RM ___	Email EDD To: chuff@stratisinc.net
Other Info:	Stage: Operate Activity: Monitor	Invoice To: BP/ARC X Contractor ___
BP/ARC EBM: Paul Supple		
EBM Phone: (925) 275-3801 FAX (925) 275-3815		
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 8015M	BTEX/5 FO* by 8260B	Ethanol by 8260B	EDB by 8260B	1,2-DCA by 8260B	Report Type & QC Level
	MW-3	9/23/09	1105		X		6				X		X	X	X	X	X	
	MW-4		1050		X		6				X		X	X	X	X	X	
	MW-5		1200		X		6				X		X	X	X	X	X	
	MW-6		1020		X		6				X		X	X	X	X	X	
	~~MW-7~~				X		6				X		X	X	X	X	X	JS 9/23
	~~MW-8~~				X		6				X		X	X	X	X	X	JS 9/23
	VW-1		1145		X		6				X		X	X	X	X	X	
	VW-3		1119		X		6				X		X	X	X	X	X	
	VW-4		1131		X		6				X		X	X	X	X	X	
	TB-6002-092320 09		600		X		2				X							ON HOLD

Standard X

Full Data Package ___

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

Comments

*Oxy = MTBE, TAME, ETBE, DIPE, TBA

Sampler's Name: Jerry Gonzales / Doulos Env.	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stratus Environmental Inc	/ Doulos Env	9/23/09	1500			
Shipment Method: Ship Date						
Shipment Tracking No:						

Special Instructions: TB Sample ON HOLD! Cc results to Bpdata@secor.com; rmiller@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.

October 06, 2009

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

Subject: **Calscience Work Order No.:** **09-09-1801**
Client Reference: **BP 6002**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/24/2009 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,

Calscience Environmental
Laboratories, Inc.
Richard Villafania
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	09/24/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-09-1801
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: BP 6002

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-3	**09-09-1801-1-D**	**09/23/09 11:05**	**Aqueous**	**GC 1**	**09/24/09**	**09/24/09 20:43**	**090924B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	85	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4	**09-09-1801-2-D**	**09/23/09 10:50**	**Aqueous**	**GC 1**	**09/24/09**	**09/24/09 22:50**	**090924B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	85	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-5	**09-09-1801-3-D**	**09/23/09 12:00**	**Aqueous**	**GC 1**	**09/24/09**	**09/24/09 23:22**	**090924B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	4300	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	220	38-134		LH,AY	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-6	**09-09-1801-4-D**	**09/23/09 10:20**	**Aqueous**	**GC 1**	**09/24/09**	**09/24/09 23:54**	**090924B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	84	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	09/24/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-09-1801
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: BP 6002

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW-1	**09-09-1801-5-D**	**09/23/09 11:45**	**Aqueous**	**GC 1**	**09/24/09**	**09/25/09 00:26**	**090924B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	84	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW-3	**09-09-1801-6-D**	**09/23/09 11:19**	**Aqueous**	**GC 1**	**09/24/09**	**09/25/09 00:57**	**090924B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	83	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW-4	**09-09-1801-7-D**	**09/23/09 11:31**	**Aqueous**	**GC 1**	**09/24/09**	**09/25/09 01:29**	**090924B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	81	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	83	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-669**	**N/A**	**Aqueous**	**GC 1**	**09/24/09**	**09/24/09 15:46**	**090924B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	81	38-134			

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: 09/24/09
Work Order No: 09-09-1801
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BP 6002

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-3	**09-09-1801-1-A**	**09/23/09 11:05**	**Aqueous**	**GC/MS BB**	**09/29/09**	**09/29/09 23:25**	**090929L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	6.3	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	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	106	80-128			Dibromofluoromethane	106	80-127		
Toluene-d8	102	80-120			1,4-Bromofluorobenzene	73	68-120		

MW-4	09-09-1801-2-B	09/23/09 10:50	Aqueous	GC/MS BB	09/30/09	09/30/09 12:54	090930L01

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	104	80-128			Dibromofluoromethane	100	80-127		
Toluene-d8	100	80-120			1,4-Bromofluorobenzene	77	68-120		

MW-5	09-09-1801-3-A	09/23/09 12:00	Aqueous	GC/MS BB	09/29/09	09/30/09 06:07	090929L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	3.4	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	13	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	1.6	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	0.57	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	1.3	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	101	80-128			Dibromofluoromethane	101	80-127		
Toluene-d8	112	80-120			1,4-Bromofluorobenzene	120	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: 09/24/09
Work Order No: 09-09-1801
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BP 6002

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-6	**09-09-1801-4-A**	**09/23/09 10:20**	**Aqueous**	**GC/MS BB**	**09/29/09**	**09/30/09 06:36**	**090929L02**

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	89	80-128			Dibromofluoromethane	95	80-127		
Toluene-d8	99	80-120			1,4-Bromofluorobenzene	99	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW-1	**09-09-1801-5-A**	**09/23/09 11:45**	**Aqueous**	**GC/MS BB**	**09/29/09**	**09/30/09 07:05**	**090929L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	1.5	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	94	80-128			Dibromofluoromethane	94	80-127		
Toluene-d8	99	80-120			1,4-Bromofluorobenzene	89	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW-3	**09-09-1801-6-A**	**09/23/09 11:19**	**Aqueous**	**GC/MS BB**	**09/29/09**	**09/30/09 07:34**	**090929L02**

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	98	80-128			Dibromofluoromethane	100	80-127		
Toluene-d8	99	80-120			1,4-Bromofluorobenzene	98	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: 09/24/09
Work Order No: 09-09-1801
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BP 6002

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW-4	**09-09-1801-7-A**	**09/23/09 11:31**	**Aqueous**	**GC/MS BB**	**09/29/09**	**09/30/09 08:03**	**090929L02**

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)	61	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	112	80-128			Dibromofluoromethane	108	80-127		
Toluene-d8	101	80-120			1,4-Bromofluorobenzene	95	68-120		

Method Blank	**099-12-703-1,095**	**N/A**	**Aqueous**	**GC/MS BB**	**09/29/09**	**09/29/09 22:57**	**090929L02**

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	103	80-127		
Toluene-d8	101	80-120			1,4-Bromofluorobenzene	95	68-120		

Method Blank	**099-12-703-1,096**	**N/A**	**Aqueous**	**GC/MS BB**	**09/30/09**	**09/30/09 12:25**	**090930L01**

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	107	80-128			Dibromofluoromethane	102	80-127		
Toluene-d8	102	80-120			1,4-Bromofluorobenzene	92	68-120		

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.	Date Received: 09/24/09
3330 Cameron Park Drive, Suite 550	Work Order No: 09-09-1801
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8015B (M)

Project BP 6002

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-3	**Aqueous**	**GC 1**	**09/24/09**	**09/24/09**	**090924S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	105	98	38-134	8	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	09/24/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-09-1801
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project BP 6002

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-3	**Aqueous**	**GC/MS BB**	**09/29/09**	**09/29/09**	**090929S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	102	76-124	2	0-20	
Carbon Tetrachloride	108	105	74-134	3	0-20	
Chlorobenzene	103	100	80-120	2	0-20	
1,2-Dibromoethane	92	101	80-120	9	0-20	
1,2-Dichlorobenzene	104	104	80-120	0	0-20	
1,1-Dichloroethene	107	109	73-127	2	0-20	
Ethylbenzene	107	104	78-126	3	0-20	
Toluene	106	101	80-120	5	0-20	
Trichloroethene	101	99	77-120	3	0-20	
Vinyl Chloride	88	89	72-126	1	0-20	
Methyl-t-Butyl Ether (MTBE)	99	108	67-121	6	0-49	
Tert-Butyl Alcohol (TBA)	118	114	36-162	3	0-30	
Diisopropyl Ether (DIPE)	103	108	60-138	5	0-45	
Ethyl-t-Butyl Ether (ETBE)	99	104	69-123	5	0-30	
Tert-Amyl-Methyl Ether (TAME)	97	100	65-120	3	0-20	
Ethanol	125	106	30-180	16	0-72	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	09/24/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-09-1801
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project BP 6002

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-4	**Aqueous**	**GC/MS BB**	**09/30/09**	**09/30/09**	**090930S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	101	76-124	0	0-20	
Carbon Tetrachloride	101	102	74-134	1	0-20	
Chlorobenzene	100	97	80-120	2	0-20	
1,2-Dibromoethane	90	90	80-120	0	0-20	
1,2-Dichlorobenzene	99	101	80-120	3	0-20	
1,1-Dichloroethene	94	99	73-127	5	0-20	
Ethylbenzene	102	101	78-126	2	0-20	
Toluene	103	102	80-120	1	0-20	
Trichloroethene	96	96	77-120	1	0-20	
Vinyl Chloride	93	96	72-126	3	0-20	
Methyl-t-Butyl Ether (MTBE)	89	94	67-121	6	0-49	
Tert-Butyl Alcohol (TBA)	109	107	36-162	2	0-30	
Diisopropyl Ether (DIPE)	95	98	60-138	2	0-45	
Ethyl-t-Butyl Ether (ETBE)	92	94	69-123	2	0-30	
Tert-Amyl-Methyl Ether (TAME)	95	94	65-120	1	0-20	
Ethanol	104	102	30-180	2	0-72	

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:	09-09-1801
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: BP 6002

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-669	Aqueous	GC 1	09/24/09	09/24/09	090924B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	103	105	78-120	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: 09-09-1801
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8260B

Project: BP 6002

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-1,095	Aqueous	GC/MS BB	09/29/09	09/29/09	090929L02

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	108	109	80-120	73-127	1	0-20	
Carbon Tetrachloride	106	107	74-134	64-144	0	0-20	
Chlorobenzene	108	108	80-120	73-127	0	0-20	
1,2-Dibromoethane	103	113	79-121	72-128	9	0-20	
1,2-Dichlorobenzene	114	115	80-120	73-127	0	0-20	
1,1-Dichloroethene	111	114	78-126	70-134	3	0-28	
Ethylbenzene	115	113	80-120	73-127	2	0-20	
Toluene	112	109	80-120	73-127	3	0-20	
Trichloroethene	107	110	79-127	71-135	3	0-20	
Vinyl Chloride	90	82	72-132	62-142	9	0-20	
Methyl-t-Butyl Ether (MTBE)	110	121	69-123	60-132	9	0-20	
Tert-Butyl Alcohol (TBA)	117	118	63-123	53-133	1	0-20	
Diisopropyl Ether (DIPE)	114	119	59-137	46-150	5	0-37	
Ethyl-t-Butyl Ether (ETBE)	114	120	69-123	60-132	5	0-20	
Tert-Amyl-Methyl Ether (TAME)	112	116	70-120	62-128	4	0-20	
Ethanol	107	114	28-160	6-182	6	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: 09-09-1801
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8260B

Project: BP 6002

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-1,096	**Aqueous**	**GC/MS BB**	**09/30/09**	**09/30/09**	**090930L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	99	103	80-120	73-127	3	0-20	
Carbon Tetrachloride	102	103	74-134	64-144	1	0-20	
Chlorobenzene	99	101	80-120	73-127	1	0-20	
1,2-Dibromoethane	97	101	79-121	72-128	5	0-20	
1,2-Dichlorobenzene	103	103	80-120	73-127	1	0-20	
1,1-Dichloroethene	104	105	78-126	70-134	2	0-28	
Ethylbenzene	103	104	80-120	73-127	1	0-20	
Toluene	101	103	80-120	73-127	2	0-20	
Trichloroethene	97	100	79-127	71-135	3	0-20	
Vinyl Chloride	102	99	72-132	62-142	3	0-20	
Methyl-t-Butyl Ether (MTBE)	98	101	69-123	60-132	3	0-20	
Tert-Butyl Alcohol (TBA)	110	107	63-123	53-133	2	0-20	
Diisopropyl Ether (DIPE)	101	100	59-137	46-150	1	0-37	
Ethyl-t-Butyl Ether (ETBE)	98	99	69-123	60-132	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	98	102	70-120	62-128	4	0-20	
Ethanol	101	99	28-160	6-182	2	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.

Glossary of Terms and Qualifiers

Work Order Number: 09-09-1801

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: 09-09-1801

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.

tlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

(1801)

BP/ARC Project Name: BP-6002 **Req Due Date (mm/dd/yy):** 14 Day TAT **Rush TAT:** Yes ___ No X

BP/ARC Facility No: 6002 **Lab Work Order Number:**

Lab Name: CalScience	BP/ARC Facility Address: 6235 Seminary Ave	Consultant/Contractor: Stratus Environmental Inc.
Lab Address: 7440 Lincoln Way, Garden Grove, CA 92841	City, State, ZIP Code: Oakland	Consultant/Contractor Project No:
Lab PM: Richard Villafania	Lead Regulatory Agency: Alameda	Address: 3330 Cameron Park Drive, #550, Cameron Park, CA 95682
Lab Phone: 714-895-5494 Fax: 714-895-7501	California Global ID No.: T0600100105	Consultant/Contractor PM: Jay Johnson
Lab Shipping Accnt:	Enfos Proposal No: 000RY-0002	Phone: 530-676-6000 Fax: 530-676-6005
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ___ OOC-RM ___	Email EDD To: chuff@stratisinc.net
Other Info:	Stage: Operate Activity: Monitor	Invoice To: BP/ARC X Contractor ___

BP/ARC EBM: Paul Supple
EBM Phone: (925) 275-3801 FAX (925) 275-3815
EBM Email: paul.supple@bp.com

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix:	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol		Requested Analyses: GRO by 8015M	BTEX/5 FO* by 8260B	Ethanol by 8260B	EDB by 8260B	1,2-DCA by 8260B						Report Type & QC Level
1	MW-3	9/23/09	1105		X			6				X			X	X	X	X	X						
2	MW-4		1050		X			6				X			X	X	X	X	X						
3	MW-5		1200		X			6				X			X	X	X	X	X						
4	MW-6		1020		X			6				X			X	X	X	X	X						
	~~MW-7~~				~~X~~			~~6~~				~~X~~			~~X~~	~~X~~	~~X~~	~~X~~	~~X~~						JS 9/23
	~~MW-8~~				~~X~~			~~6~~				~~X~~			~~X~~	~~X~~	~~X~~	~~X~~	~~X~~						JS 9/23
5	VW-1		1145		X			6				X			X	X	X	X	X						
6	VW-3		1119		X			6				X			X	X	X	X	X						
7	VW-4		1131		X			6				X			X	X	X	X	X						
8	TB-6002- 09232-009		600		X			2				X													ON HOLD

Comments: *Oxy = MTBE, TAME, ETBE, DIPE, TBA

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

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Jerry Gonzales / Doulos Env.						
Sampler's Company: Stratus Environmental Inc.	/ Doulos Env	9/23/09	15:00	Wbath CCL	9/24/09	1030
Shipment Method: GSO Ship Date:						
Shipment Tracking No: 106462436						

Special Instructions: TB Sample ON HOLD. [illegible]@secor.com; rmiller@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 #: 09-09-1801

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: STRATUS ENV'L.

DATE: 9/24/09

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

Temperature 2.6 °C - 0.2 °C (CF) = 2.4 °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: WS

CUSTODY SEALS INTACT:

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

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

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	☑	☐	☐
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 ☐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: PS

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

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: PS

CEL # 0908 11C

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-09-1801

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- ☐ **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:** _____

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
8	B	2						

Comments: VER #090811C

*Transferred at Client's request.

Initial / Date PS 9/24/09

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 6002**
Facility Global ID:	**T0600100105**
Facility Name:	**ARCO #6002**
File Name:	**GEO_WELL.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**10/15/2009 4:03:54 PM**
Confirmation Number:	**2862463712**

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:	**T0600100105**
Facility Name:	**ARCO #6002**
File Name:	**09091801.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**10/15/2009 4:06:54 PM**
Confirmation Number:	**3006298243**

VIEW QC REPORT

VIEW DETECTIONS REPORT