ARCADIS
100 Montgomery Street
Suite 300
San Francisco
California 94104
Tel 415.374.2744
Fax 415.374.2745
www.arcadis-us.com

Environmental

Re: Third Quarter 2009 Ground-Water Monitoring Report
Former BP Station # 11109
4280 Foothill Boulevard
Oakland, California
ACEH Case # RO0000426

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 BP Station #11109
4280 Foothill Blvd., Oakland, California
ACEH Case #RO0000426

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
P.O. Box 1257
San Ramon, California 94583

Prepared by

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

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

30 October 2009

Project No. 09-88-646

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

BROADBENT & ASSOCIATES, INC
ENVIRONMENTAL, WATER RESOURCES & ENGINEERING

30 October 2009

Project No. 09-88-646

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

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

Re: Third Quarter 2009 Ground-Water Monitoring Report, Former BP Service Station #11109, 4280 Foothill Boulevard, Oakland, Alameda County, California; ACEH Case #RO0000426

Dear Ms. Phillips:

Provided herein is the *Third Quarter 2009 Ground-Water Monitoring Report* for Former BP Service Station #11109 located at 4280 Foothill Boulevard, Oakland, California (Site). This report presents a summary of results from ground-water monitoring 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

Enclosure

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

STATION #11109 GROUND-WATER MONITORING REPORT

Facility: #11109 Address:	4280 Foothill Boulevard, Oakland
ARCADIS Project Manager:	Ms. Hollis Phillips, PG
Consulting Co./Contact Person:	Broadbent & Associates, Inc.(BAI)/Mr. Tom Venus, PE (530) 566-1400
Primary Agency/Regulatory ID No.:	Alameda County Environmental Health (ACEH) ACEH Case #RO0000426
Consultant Project No.:	09-88-646

WORK PERFORMED THIS QUARTER (Third Quarter 2009):

1. Prepared and submitted *Second Quarter 2009 Status Report* (BAI, 7/30/2009).
2. Performed monthly free product gauging and bailing of wells MW-5 and MW-10. Work performed on 22 July, 6 August, and 30 September 2009 by Stratus.
3. Conducted semi-annual ground-water monitoring/sampling for Third Quarter 2009. Work performed on 30 September 2009 by Stratus Environmental, Inc. (Stratus).

WORK PROPOSED FOR NEXT QUARTER (Fourth Quarter 2009):

1. Prepare and submit this *Third Quarter 2009 Ground-Water Monitoring Report* (contained herein).
2. Perform monthly free product gauging and bailing of wells MW-5, MW-10 through MW-12.
3. Perform quarterly ground-water monitoring/sampling of wells MW-10 through MW-12 for Fourth Quarter 2009.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	**Ground-water monitoring/sampling/DPE IRM**
Frequency of ground-water monitoring:	**Monthly: MW-5, MW-10, MW-11, and MW-12 (Measure/ Bail FP if present)** **Semi-Annually (1Q & 3Q): MW-2 through MW-12**
Frequency of ground-water sampling:	**Quarterly: MW-10, MW-11, and MW-12 (one year)** **Semi-Annually (1Q & 3Q): MW-2, MW-3, MW-4, MW-6, and MW-7**
Current remediation techniques:	**Monthly Free Product Bailing**
Is Free Product (FP) present on-site:	**Yes (MW-5, MW-10, and MW-12)**
FP recovered this quarter:	**29 gallons (FP/water mixture)**
Depth to ground water (below TOC):	**9.69 ft (MW-10) to 16.83 ft (MW-6)**
General ground-water flow direction:	**Northwest**
Approximate hydraulic gradient:	**0.07 ft/ft**

DISCUSSION:

Third quarter 2009 semi-annual ground-water monitoring and sampling was conducted at Former BP Station #11109 on 30 September 2009 by Stratus. Water levels were gauged in the eleven wells at the Site. Separate phase hydrocarbons (SPH or Free Product-FP) were observed in wells MW-5, MW-10, and MW-12. In addition, Stratus reported that well MW-2 was Dry at a total depth of 12.76 ft, although the well was initially drilled to approximately 20 ft below ground surface. Stratus stated that the suspected root mass within the well casing could not be broken up. No other irregularities were noted during water level gauging. Depth to water measurements across the Site ranged from 9.68 ft at MW-10 to 16.83 ft at MW-6. Resulting ground-water surface elevations ranged from 30.10 ft in well MW-10 to

23.27 ft in well MW-8. Each well associated with the Site was surveyed on 13 April 2009 by Wood Rodgers. Water level elevations associated with Station #11109 yielded a potentiometric ground-water flow direction and gradient of approximately 0.07 ft/ft to the northwest. Ground-water monitoring field data sheets for Station #11109 are provided within Appendix A. Measured depths to ground water and respective ground-water elevations are summarized in Table 1. Current and historic ground-water flow directions and gradients are provided in Table 3. A Site Location Map is provided as Drawing 1. Potentiometric ground-water elevation contours for Station #11109 are presented in Drawing 2. Chevron Station #9-0076 co-operative ground-water monitoring data was not available at the time of this reports completion due to late scheduled sampling during the Third Quarter 2009.

Ground-water samples were collected from wells MW-3, MW-4, MW-6, MW-7, and MW-11. Well MW-2 was not sampled as the well was reported as "dry" (suspected blockage by root mass). Wells MW-5, MW-10, and MW-12 were not sampled as FP was present (See discussion below). Wells MW-3, MW-4, MW-6, MW-7, and MW-11 purged dry before three casing volumes were removed but recovered sufficiently prior to sampling. No other irregularities were reported during sampling. Samples were submitted under chain-of-custody documentation to Calscience Environmental Laboratories, Inc. (Garden Grove, California) to be analyzed for Gasoline Range Organics (GRO, C6-C12) by EPA Method 8015B; Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX) by EPA Method 8260B; and Methyl Tert-Butyl Ether (MTBE), Ethyl Tert-Butyl Ether (ETBE), Tert-Amyl Methyl Ether (TAME), Di-Isopropyl Ether (DIPE), 1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA), Tert-Butyl Alcohol (TBA), and Ethanol by EPA Method 8260B. No significant irregularities were encountered during laboratory analysis of the samples. Ground-water sampling field data sheets and the laboratory analytical report, including chain-of-custody documentation, are provided in Appendix A.

Gasoline Range Organics (GRO) were detected above laboratory reporting limits in three of the five wells sampled up to a concentration of 30,000 micrograms per liter (µg/L) in MW-11. Benzene was detected above the laboratory reporting limit in wells MW-7 and MW-11 at concentrations of 44 µg/L and 850 µg/L, respectively. Toluene was detected above the laboratory reporting limit in wells MW-7 and MW-11 at concentrations of 1.0 µg/L and 1,400 µg/L, respectively. Ethylbenzene was detected above the laboratory reporting limit in wells MW-7 and MW-11 at concentrations of 0.74 µg/L and 1,000 µg/L, respectively. Total Xylenes were detected above the laboratory reporting limit in wells MW-7 and MW-11 at concentrations of 0.79 µg/L and 3,700 µg/L, respectively. MTBE was detected above the laboratory reporting limit in each of the five wells sampled at concentrations up to 140 µg/L in MW-4. The remaining fuel constituents were not detected above their laboratory reporting limits in the six wells sampled this quarter. Historic laboratory analytical results for Former BP Station #11109 are summarized in Table 1 and Table 2. Drawing 2 provides Third Quarter 2009 laboratory analytical results for GRO, Benzene, and MTBE constituents. Ground-water monitoring data (GEO_WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 database. Upload confirmation receipts are provided in Appendix B.

Separate phase hydrocarbons (SPH, or Free Product – FP) in wells MW-5 and MW-10 were monitored and removed during each month of the Third Quarter 2009. Monthly gauging of SPH/FP (and removal if present) from new wells MW-11 and MW-12 was not performed by Stratus due to a communication breakdown. On 22 July 2009, FP was measured in well MW-5 at 0.12 feet and in well MW-10 at 0.01 feet. Approximately six gallons of FP/water mixture was bailed from MW-5 and approximately three gallons from MW-10 during this visit. On 6 August 2009, FP thickness was measured in well MW-5 at 0.01 feet. Approximately five gallons of FP/water mixture was bailed from well MW-5 during this visit. On 30 September 2009 (during the scheduled semi-annual site sampling/monitoring event), FP thickness was measured in well MW-5 at 0.06 feet, in well MW-10 at 0.01 feet, and in well MW-12 at 0.02 feet. Approximately eight gallons of FP/water mixture was bailed

from well MW-5, approximately three gallons from well MW-10, and approximately four gallons from well MW-12 during this visit. Table 4 contains a summary of FP removal data.

CONCLUSIONS AND RECOMMENDATIONS:

Water level elevations were between historic minimum and maximum ranges for each well gauged this quarter, with the exception of recently installed wells MW-10, MW-11, and MW-12. The potentiometric ground-water flow direction and gradient of 0.07 ft/ft to the northwest is somewhat inconsistent with historical data and might possibly be a result from the change in top of casing elevations following the recent well survey. Future gauged ground-water elevations and resultant flow directions/ gradients should be scrutinized for this potential change. Detected concentrations of petroleum hydrocarbons were within the historic minimum and maximum ranges recorded for each well. Concentrations of GRO, BTEX, and MTBE are significant, justifying efforts to determine the viability of potential remediation technologies for the Site. In the letter dated 13 August 2009, the ACEH requested the preparation and submittal of a Feasibility Study and/or Corrective Action Plan. In a correspondence dated 12 October 2009 ARCADIS-US, Inc. requested an extension for the submittal of the Feasibility Study and/or Corrective Action Plan that was approved by ACEH in a reply dated 20 October 2009.

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:

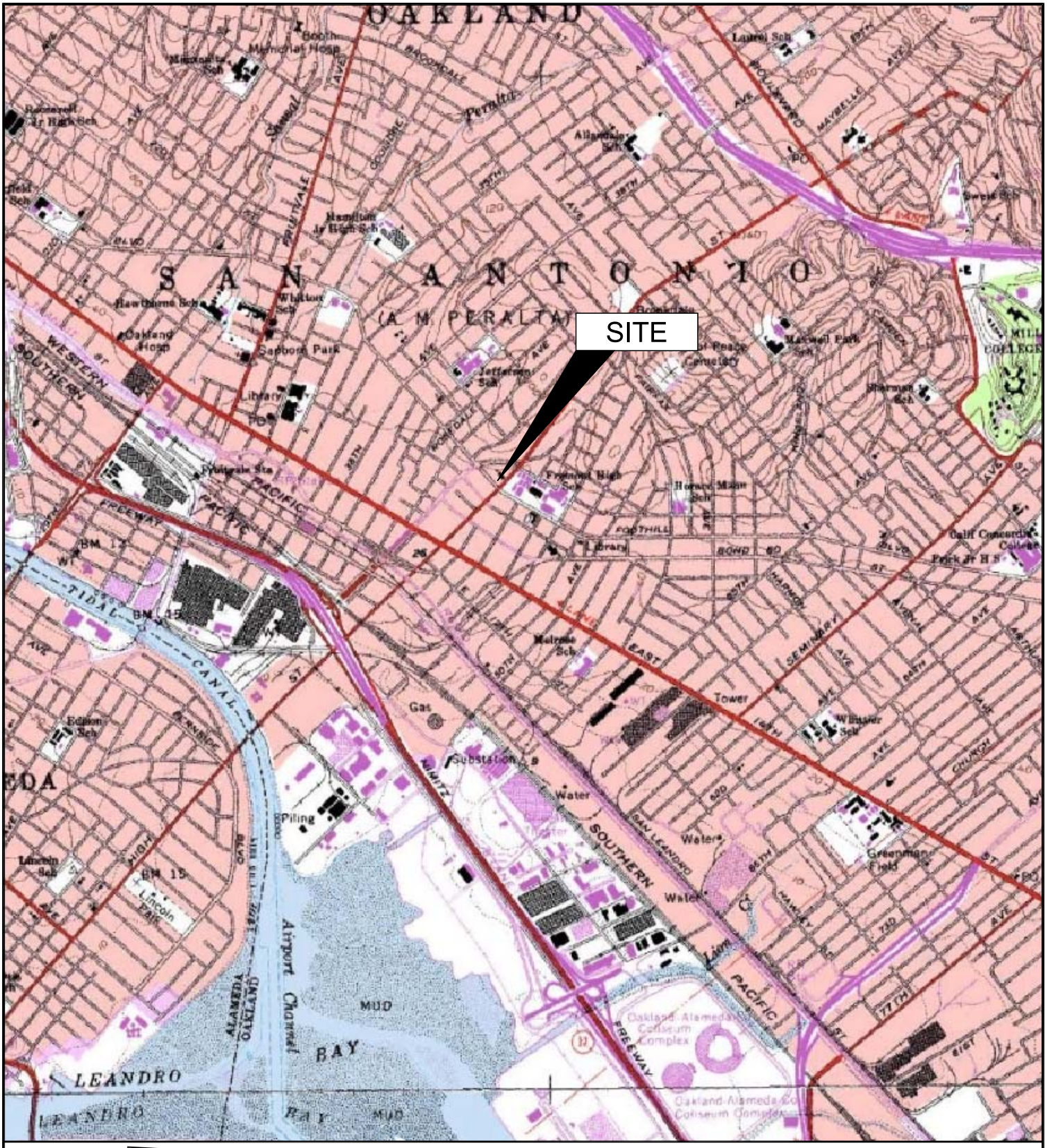
Drawing 1. Site Location Map, Former BP Station #11109, 4280 Foothill Boulevard, Oakland, California

Drawing 2. Ground-Water Elevation Contours and Analytical Summary Map, 30 September 2009, Former BP Station #11109, 4280 Foothill Boulevard, Oakland, California

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #11109, 4280 Foothill Blvd., Oakland, California

Table 2. Summary of Fuel Additives Analytical Data, Station #11109, 4280 Foothill Blvd., Oakland, California

Table 3. Historical Ground-Water Flow Direction and Gradient, Station #11109, 4280 Foothill Blvd., Oakland, California



N

0 2000 4000

APPROXIMATE SCALE (ft)

IMAGE SOURCE: USGS

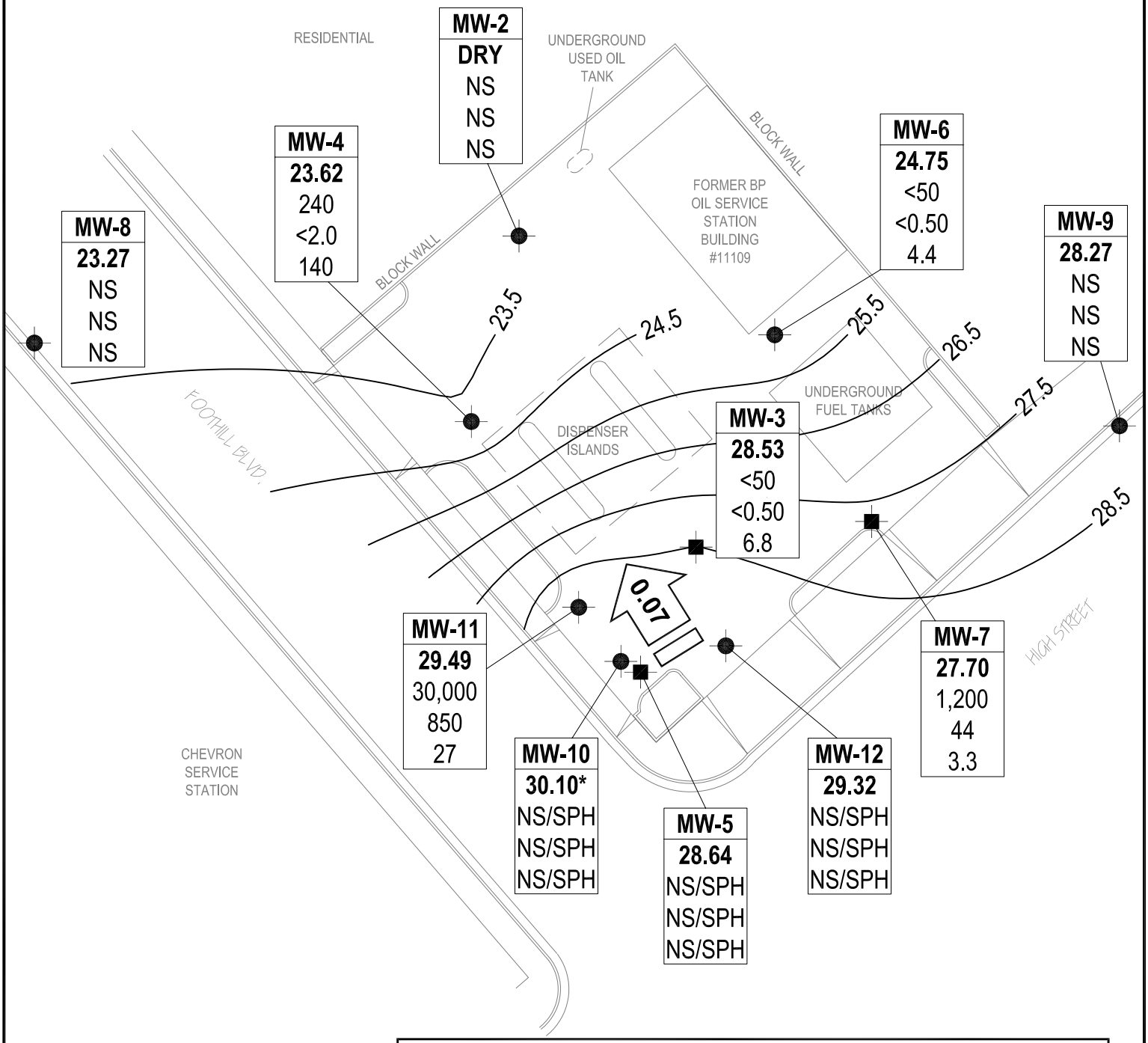
BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, CA 95926

Project No.: 06-88-646 Date: 07/23/09

Former BP Station #11109
4280 Foothill Boulevard
Oakland, California

Site Location Map

Drawing
1



Monitor Well
Recovery Well
28.5 Ground-Water Elevation Contour (ft)
MW-7 Well Designation
27.70 Ground-Water Elevation (ft)
1,200 GRO Concentration (µg/L)
44 Benzene Concentration (µg/L)
3.3 MTBE Concentration (µg/L)

NA Not Applicable
NM Not Monitored
NS Not Sampled
SPH Separate Phase Hydrocarbons
* Elevation Not Used for Contouring
< Not Detected at or Above Laboratory Reporting Limits
0.07 Groundwater Elevation Flow Direction and Gradient (ft/ft)

N

0 40 80
SCALE (ft)

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California 95926
Project No.: 06-88-646 Date: 10/26/2009

Former BP Station #11109
4280 Foothill Boulevard
Oakland, California

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

Drawing
2

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MtBE						
MW-1																		
1/31/1990	--		38.19	15.41	--	22.78	--	--	--	--	--	--	--	--	--	--	--	--
2/5/1990	--	c	38.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2																		
2/5/1990	--		41.22	21.90	--	19.32	1,300	14	<0.1	9	13	--	--	SUP	--	--	--	--
2/14/1991	--	d	41.22	21.16	--	20.06	<50	<0.3	<0.3	<0.3	<0.3	--	--	SUP	--	<10000	<5000	51
5/13/1991	--	e	41.22	21.32	--	19.90	<50	<0.3	<0.3	<0.3	<0.3	--	--	SUP	--	<50	6,000	0.5
7/24/1991	--		41.22	22.92	--	18.30	--	--	--	--	--	--	--	--	--	--	--	--
10/3/1991	--	e	41.22	24.90	--	16.32	<50	<0.3	0.8	<0.3	<0.3	--	--	SUP	--	<50	<5000	0.7
10/15/1991	--		41.22	24.10	--	17.12	--	--	--	--	--	--	--	--	--	--	--	--
12/4/1991	--	f	41.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/16/1991	--		41.22	23.95	--	17.27	--	--	--	--	--	--	--	--	--	--	--	--
1/6/1992	--		41.22	23.30	--	17.92	<50	<0.3	<0.3	<0.3	<0.3	--	--	ANA	--	<50	<5000	--
1/22/1992	--		41.22	23.14	--	18.08	--	--	--	--	--	--	--	--	--	--	--	--
1/28/1992	--		41.22	22.99	--	18.23	--	--	--	--	--	--	--	--	--	--	--	--
2/5/1992	--		41.22	22.63	--	18.59	--	--	--	--	--	--	--	--	--	--	--	--
2/12/1992	--		41.22	22.04	--	19.18	--	--	--	--	--	--	--	--	--	--	--	--
2/17/1992	--		41.22	20.84	--	20.38	--	--	--	--	--	--	--	--	--	--	--	--
4/3/1992	--		41.22	18.29	--	22.93	--	--	--	--	--	--	--	--	--	--	--	--
4/8/1992	--		41.22	18.86	--	22.36	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	63	<5000	--
4/14/1992	--		41.22	19.45	--	21.77	--	--	--	--	--	--	--	--	--	--	--	--
4/29/1992	--		41.22	20.35	--	20.87	--	--	--	--	--	--	--	--	--	--	--	--
5/7/1992	--		41.22	20.84	--	20.38	--	--	--	--	--	--	--	--	--	--	--	--
7/3/1992	--		41.22	22.34	--	18.88	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
10/8/1992	--		41.22	23.73	--	17.49	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
12/31/1992	--		41.22	21.12	--	20.10	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
4/21/1993	--	g, n	41.22	17.68	--	23.54	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	<50	<5000	--
7/7/1993	--	e, n	41.22	20.30	--	20.92	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--	1.0
9/21/1993	--	n	41.22	21.93	--	19.29	<50	0.9	0.7	0.7	2.6	21.54	--	PACE	--	--	--	--
12/17/1993	--		41.22	21.48	--	19.74	--	--	--	--	--	--	--	--	--	--	--	--
12/23/1993	--	n	41.22	--	--	--	<50	<0.5	<0.5	<0.5	0.7	--	--	PACE	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
MW-2 Cont.																		
4/7/1994	--	n	41.22	20.25	--	20.97	<50	<0.5	<0.5	<0.5	<0.5	12.2	5.9	PACE	--	--	--	--
7/6/1994	--	n	41.22	20.59	--	20.63	<50	<0.5	<0.5	<0.5	<0.5	--	3.1	PACE	--	--	--	--
10/7/1994	--	n	41.22	22.04	--	19.18	<50	<0.5	<0.5	<0.5	<0.5	15.2	2.8	PACE	--	--	--	--
1/27/1995	--		41.22	26.12	--	15.10	<50	<0.5	<0.5	<0.5	<1	--	4.8	ATI	--	440	<5000	--
3/30/1995	--		41.22	12.34	--	28.88	<50	<0.50	<0.50	<0.50	<1.0	--	7.2	ATI	--	--	--	--
6/20/1995	--		41.22	16.42	--	24.80	<50	<0.50	<0.50	<0.50	<1.0	--	6.0	ATI	--	--	--	--
10/3/1995	--		41.22	20.06	--	21.16	<50	<0.50	<0.50	<0.50	<1.0	<5.0	5.7	ATI	--	--	--	--
12/6/1995	--		41.22	21.31	--	19.91	<50	<0.50	<0.50	<0.50	<1.0	46	5.4	ATI	--	--	--	--
3/21/1996	--		41.22	12.28	--	28.94	<50	<0.5	<1.0	<1.0	<1.0	<1.0	7.4	SPL	--	--	--	--
6/21/1996	--		41.22	13.28	--	27.94	<50	<0.5	<1	<1	<1	<10	7.3	SPL	--	--	--	--
9/6/1996	--		41.22	13.94	--	27.28	--	--	--	--	--	--	--	--	--	--	--	--
9/9/1996	--		41.22	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	7.4	SPL	--	--	--	--
12/19/1996	--		41.22	12.19	--	29.03	<50	<0.5	<1.0	<1.0	<1.0	<10	7.9	SPL	--	--	--	--
3/17/1997	--		41.22	11.59	--	29.63	--	--	--	--	--	--	--	--	--	--	--	--
8/12/1997	--		41.22	13.21	--	28.01	--	--	--	--	--	--	--	--	--	--	--	--
12/10/1997	--		41.22	12.34	--	28.88	--	--	--	--	--	--	--	--	--	--	--	--
3/12/1998	--		41.22	11.04	--	30.18	--	--	--	--	--	--	--	--	--	--	--	--
6/23/1998	--		41.22	11.77	--	29.45	--	--	--	--	--	--	--	--	--	--	--	--
3/31/1999	--		41.22	12.38	--	28.84	--	--	--	--	--	--	--	--	--	--	--	--
8/25/1999	--		41.22	17.72	--	23.50	--	--	--	--	--	--	--	--	--	--	--	--
3/9/2000	--		41.22	11.94	--	29.28	--	--	--	--	--	--	--	--	--	--	--	--
3/8/2001	--		41.22	10.31	--	30.91	--	--	--	--	--	--	--	--	--	--	--	--
3/8/2002	--		41.22	14.35	--	26.87	--	--	--	--	--	--	--	--	--	--	--	--
3/18/2002	--		41.22	13.11	--	28.11	--	--	--	--	--	--	--	--	--	--	--	--
3/11/2003	--		41.22	13.24	--	27.98	--	--	--	--	--	--	--	--	--	--	--	--
12/09/2003	P	q	41.22	18.58	--	22.64	350	<0.50	<0.50	0.56	2.8	24	--	SEQM	6.2	--	--	--
03/09/2004	P		41.22	12.52	--	28.70	74	<0.50	<0.50	0.83	4.7	27	--	SEQM	6.5	--	--	--
09/17/2004	P		41.22	18.05	--	23.17	59	<0.50	<0.50	<0.50	<0.50	21	--	SEQM	6.3	--	--	--
03/07/2005	--	p	41.22	2.32	--	38.90	--	--	--	--	--	--	--	--	--	--	--	--
09/06/2005	--	r	41.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/06/2006	--	p	41.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MtBE						
MW-2 Cont.																		
9/5/2006	--	p	41.22	10.46	--	30.76	79	<0.50	5.1	<0.50	0.73	<0.50	--	TAMC	6.4	--	--	--
3/5/2007	--	p	41.22	12.25	--	28.97	--	--	--	--	--	--	--	--	--	--	--	--
9/7/2007	--	r	41.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3/6/2008	--	w	41.22	12.33	--	28.89	--	--	--	--	--	--	--	--	--	--	--	--
9/3/2008	--	r	41.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3/4/2009	--	r	41.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/30/2009	--	**r, x**	**41.22**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3																		
2/5/1990	--		40.74	17.45	--	23.29	1,400	15	<2.5	11	8	--	--	SUP	--	--	--	--
2/14/1991	--		40.74	18.52	--	22.22	320	8	<0.3	8	1	--	--	SUP	--	--	--	--
5/13/1991	--		40.74	19.32	--	21.42	640	13	<0.3	18	1	--	--	SUP	--	--	--	--
7/24/1991	--		40.74	20.69	--	20.05	--	--	--	--	--	--	--	--	--	--	--	--
10/3/1991	--		40.74	19.47	--	21.27	940	21	<0.3	23	2.1	--	--	SUP	--	--	--	--
10/15/1991	--		40.74	20.46	--	20.28	--	--	--	--	--	--	--	--	--	--	--	--
12/4/1991	--		40.74	18.29	--	22.45	--	--	--	--	--	--	--	--	--	--	--	--
12/16/1991	--		40.74	18.34	--	22.40	--	--	--	--	--	--	--	--	--	--	--	--
1/6/1992	--		40.74	18.50	--	22.24	580	6.1	1	6.1	7.1	--	--	ANA	--	--	--	--
1/22/1992	--		40.74	17.86	--	22.88	--	--	--	--	--	--	--	--	--	--	--	--
1/28/1992	--		40.74	15.84	--	24.90	--	--	--	--	--	--	--	--	--	--	--	--
2/5/1992	--		40.74	17.53	--	23.21	--	--	--	--	--	--	--	--	--	--	--	--
2/12/1992	--		40.74	17.15	--	23.59	--	--	--	--	--	--	--	--	--	--	--	--
2/17/1992	--		40.74	16.18	--	24.56	--	--	--	--	--	--	--	--	--	--	--	--
4/3/1992	--		40.74	14.80	--	25.94	--	--	--	--	--	--	--	--	--	--	--	--
4/8/1992	--		40.74	17.06	--	23.68	1,100	30	4.6	32	11	--	--	ANA	--	--	--	--
4/14/1992	--		40.74	15.22	--	25.52	--	--	--	--	--	--	--	--	--	--	--	--
4/29/1992	--		40.74	15.90	--	24.84	--	--	--	--	--	--	--	--	--	--	--	--
5/7/1992	--		40.74	16.35	--	24.39	--	--	--	--	--	--	--	--	--	--	--	--
7/3/1992	--		40.74	17.74	--	23.00	1,200	38	<2.5	24	<2.5	--	--	ANA	--	--	--	--
10/8/1992	--		40.74	19.06	--	21.68	1,400	31	<0.5	25	13	--	--	ANA	--	--	--	--
12/31/1992	--	h	40.74	--	--	--	960	11	3.6	10	3.8	--	--	ANA	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
MW-3 Cont.																		
12/31/1992	--		40.74	16.61	--	24.13	820	12	4.1	13	5.9	--	--	ANA	--	--	--	--
4/21/1993	--	n	40.74	14.24	--	26.50	420	5.6	<0.5	3.9	1.4	--	--	PACE	--	--	--	--
4/21/1993	--	h, n	40.74	--	--	--	390	5	<0.5	3.7	1.5	--	--	PACE	--	--	--	--
7/7/1993	--	i, n	40.13	15.19	--	24.94	54	0.6	0.6	<0.5	<0.5	12.68	--	PACE	--	--	--	--
9/21/1993	--	n	40.13	16.58	--	23.55	540	7.9	0.9	4.7	2.4	--	--	PACE	--	--	--	--
12/17/1993	--		40.13	15.82	--	24.31	--	--	--	--	--	--	--	--	--	--	--	--
12/23/1993	--	n	40.13	--	--	--	500	9.8	1.5	3.3	2.1	--	--	PACE	--	--	--	--
12/23/1993	--	h	40.13	--	--	--	480	9.2	<0.5	5.4	5.3	--	--	PACE	--	--	--	--
4/7/1994	--	n	40.13	28.50	--	11.63	460	20	7.4	8.9	11	18.2	--	PACE	--	--	--	--
4/7/1994	--	h	40.13	--	--	--	460	20	7.7	9	11	--	--	PACE	--	--	--	--
7/6/1994	--	n	40.13	--	--	--	300	10	0.6	1.7	6.4	5.54	4.8	PACE	--	--	--	--
10/7/1994	--	n	40.13	27.65	--	12.48	620	28	<0.5	2.2	12	31.4	4.4	PACE	--	--	31	--
1/27/1995	--	j	40.13	27.65	--	12.48	--	--	--	--	--	--	--	--	--	--	--	--
3/30/1995	--		40.13	26.05	--	14.08	300	10	6	3.4	18	--	7.6	ATI	--	--	--	--
6/20/1995	--		40.13	19.49	--	20.64	170	7.2	3.4	0.85	15	--	--	ATI	--	--	--	--
10/3/1995	--		40.13	24.93	--	15.20	170	2.1	<0.50	0.81	8	6.7	--	ATI	--	--	--	--
12/6/1995	--	h	40.13	--	--	--	1,400	6.1	3	1.7	190	53	--	ATI	--	--	--	--
12/6/1995	--		40.13	25.14	--	14.99	1,700	6.7	3.1	2.8	210	64	--	ATI	--	--	--	--
3/21/1996	--		40.13	9.48	--	30.65	<50	0.5	<1	<1	1	<10	7.3	SPL	--	--	--	--
6/21/1996	--		40.13	11.60	--	28.53	<50	13	<1	<1	<1	12	7.6	SPL	--	--	--	--
9/6/1996	--		40.13	12.23	--	27.90	--	--	--	--	--	--	--	--	--	--	--	--
9/9/1996	--		40.13	--	--	--	<250	6.5	<5.0	<5.0	<5.0	<50	7.6	SPL	--	--	--	--
12/19/1996	--		40.13	10.46	--	29.67	<50	4.1	<1.0	<1.0	<1.0	<10	8.4	SPL	--	--	--	--
3/17/1997	--		40.13	9.86	--	30.27	50	<5	<1.0	<1.0	<1.0	<10	7.4	SPL	--	--	--	--
8/12/1997	--		40.13	12.11	--	28.02	<50	0.79	<1.0	<1.0	<1.0	10	6.1	SPL	--	--	--	--
12/10/1997	--		40.13	10.90	--	29.23	<50	<0.5	<1.0	<1.0	<1.0	<10	3.2	SPL	--	--	--	--
3/12/1998	--		40.13	10.20	--	29.93	<50	<0.5	<1.0	<1.0	<1.0	<10	6.3	SPL	--	--	--	--
3/12/1998	--	h	40.13	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	--	SPL	--	--	--	--
6/23/1998	--		40.13	10.17	--	29.96	50	<0.5	<1.0	<1.0	<1.0	<10	3.4	SPL	--	--	--	--
3/31/1999	--		40.13	11.45	--	28.68	60	<1.0	<1.0	<1.0	<1.0	6.2	--	SPL	--	--	--	--
8/25/1999	--		40.13	12.52	--	27.61	<50	<1.0	<1.0	<1.0	<1.0	7.7	--	SPL	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MtBE						
MW-3 Cont.																		
3/9/2000	--		40.13	12.39	--	27.74	<50	<0.5	0.54	<0.5	1.7	6.3	--	PACE	--	--	--	--
3/8/2001	--		40.13	10.41	--	29.72	<50	<0.5	<0.5	<0.5	0.59	7.7	--	PACE	--	--	--	--
3/8/2002	--		40.13	9.83	--	30.30	62	<0.5	<0.5	<0.5	<1.0	11.6	--	PACE	--	--	--	--
3/18/2002	--		40.13	9.20	--	30.93	--	--	--	--	--	--	--	--	--	--	--	--
3/11/2003	--		40.13	10.54	--	29.59	<50	<0.50	<0.50	<0.50	<0.50	6.7	--	SEQ	--	--	--	--
12/09/2003	P		40.13	12.88	--	27.25	<50	<0.50	<0.50	<0.50	<0.50	6.4	--	SEQM	6.3	--	--	--
03/09/2004	P		40.13	9.49	--	30.64	<50	<0.50	<0.50	<0.50	0.63	6.9	--	SEQM	6.1	--	--	--
09/17/2004	--		40.13	12.76	--	27.37	--	--	--	--	--	--	--	--	--	--	--	--
03/07/2005	P		40.13	7.30	--	32.83	<50	<0.50	<0.50	<0.50	0.52	5.1	--	SEQM	7.0	--	--	--
09/06/2005	--		42.92	10.81	--	32.11	--	--	--	--	--	--	--	--	--	--	--	--
03/06/2006	P	u	42.92	8.85	--	34.07	<50	<0.50	<0.50	<0.50	<0.50	6.9	--	SEQM	6.8	--	--	--
9/5/2006	--		42.92	9.86	--	33.06	--	--	--	--	--	--	--	--	--	--	--	--
3/5/2007	P		42.92	8.33	--	34.59	<50	<0.50	<0.50	<0.50	<0.50	5.4	2.31	TAMC	6.95	--	--	--
9/7/2007	--		42.92	11.10	--	31.82	--	--	--	--	--	--	--	--	--	--	--	--
3/6/2008	P		42.92	8.92	--	34.00	<50	<0.50	<0.50	<0.50	<0.50	4.2	2.5	CEL	6.86	--	--	--
9/3/2008	--		42.92	12.19	--	30.73	--	--	--	--	--	--	--	--	--	--	--	--
3/4/2009	P		42.92	8.28	--	34.64	<50	<0.50	<0.50	<0.50	<0.50	4.9	1.19	CEL	6.71	--	--	--
9/30/2009	**P**	**x**	**40.13**	**11.60**	**--**	**28.53**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**6.8**	**--**	**CEL**	**7.12**	**--**	**--**	**--**
MW-4																		
2/5/1990	--		40.11	20.75	--	19.36	620	<0.5	9	<0.5	10	--	--	SUP	--	--	--	--
2/14/1991	--		40.11	21.73	--	18.38	180	<0.3	<0.3	0.4	2	--	--	SUP	--	--	--	--
5/13/1991	--		40.11	18.55	--	21.56	72	0.7	<0.3	<0.3	<0.3	--	--	SUP	--	--	--	--
7/24/1991	--		40.11	21.31	--	18.80	--	--	--	--	--	--	--	--	--	--	--	--
10/3/1991	--		40.11	22.57	--	17.54	57	<0.3	<0.3	<0.3	<0.3	--	--	SUP	--	--	--	--
10/15/1991	--		40.11	22.88	--	17.23	--	--	--	--	--	--	--	--	--	--	--	--
12/4/1991	--		40.11	22.54	--	17.57	--	--	--	--	--	--	--	--	--	--	--	--
12/16/1991	--		40.11	22.59	--	17.52	--	--	--	--	--	--	--	--	--	--	--	--
1/6/1992	--		40.11	22.00	--	18.11	480	0.8	3.2	1.9	7.7	--	--	ANA	--	--	--	--
1/22/1992	--		40.11	21.58	--	18.53	--	--	--	--	--	--	--	--	--	--	--	--
1/28/1992	--		40.11	21.42	--	18.69	--	--	--	--	--	--	--	--	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
MW-4 Cont.																		
2/5/1992	--		40.11	21.10	--	19.01	--	--	--	--	--	--	--	--	--	--	--	--
2/12/1992	--		40.11	20.74	--	19.37	--	--	--	--	--	--	--	--	--	--	--	--
2/17/1992	--		40.11	19.78	--	20.33	--	--	--	--	--	--	--	--	--	--	--	--
4/3/1992	--		40.11	16.80	--	23.31	--	--	--	--	--	--	--	--	--	--	--	--
4/8/1992	--		40.11	17.13	--	22.98	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
4/14/1992	--		40.11	17.74	--	22.37	--	--	--	--	--	--	--	--	--	--	--	--
4/29/1992	--		40.11	18.56	--	21.55	--	--	--	--	--	--	--	--	--	--	--	--
5/7/1992	--		40.11	19.10	--	21.01	--	--	--	--	--	--	--	--	--	--	--	--
7/3/1992	--		40.11	20.71	--	19.40	<50	0.6	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
10/8/1992	--		40.11	22.43	--	17.68	270	<0.5	2.1	2.5	3.2	--	--	ANA	--	--	--	--
12/31/1992	--		40.11	19.58	--	20.53	150	<0.5	<0.5	<0.5	1.3	--	--	ANA	--	--	--	--
4/21/1993	--	n	40.11	17.79	--	22.32	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--	--
7/7/1993	--	n	40.11	18.44	--	21.67	160	1.2	5.4	3.8	19	5.51	--	PACE	--	--	--	--
9/21/1993	--	n	40.11	20.14	--	19.97	71	<0.5	1.9	<0.5	2.1	--	--	PACE	--	--	--	--
12/17/1993	--		40.11	19.80	--	20.31	--	--	--	--	--	--	--	--	--	--	--	--
12/23/1993	--	n	40.11	--	--	--	<50	3.1	1.6	0.8	3.8	5.7	--	PACE	--	--	--	--
4/7/1994	--	n	40.11	19.12	--	20.99	<50	<0.5	<0.5	<0.5	<0.5	11.7	6.6	PACE	--	--	--	--
7/6/1994	--	n	40.11	19.90	--	20.21	62	<0.5	<0.5	<0.5	<0.5	--	4.1	PACE	--	--	--	--
10/7/1994	--	n	40.11	20.07	--	20.04	<50	<0.5	<0.5	<0.5	<0.5	7.38	3.6	PACE	--	--	--	--
1/27/1995	--		40.11	13.72	--	26.39	<50	<0.5	<0.5	<0.5	<1	--	2.7	ATI	--	--	--	--
3/30/1995	--		40.11	11.46	--	28.65	<50	<0.50	<0.50	<0.50	<1.0	--	8.3	ATI	--	--	--	--
6/20/1995	--		40.11	14.78	--	25.33	<50	<0.50	<0.50	<0.50	<1.0	--	--	ATI	--	--	--	--
10/3/1995	--		40.11	19.62	--	20.49	<50	<0.50	<0.50	<0.50	<1.0	5	5.8	ATI	--	--	--	--
12/6/1995	--		40.11	19.91	--	20.20	<50	<0.50	<0.50	<0.50	<1.0	47	5.7	ATI	--	--	--	--
3/21/1996	--		40.11	11.12	--	28.99	<50	<0.5	<1	<1	<1	<10	7.8	SPL	--	--	--	--
6/21/1996	--		40.11	12.21	--	27.90	<50	<0.5	<1	<1	<1	<10	7.9	SPL	--	--	--	--
9/6/1996	--		40.11	12.89	--	27.22	--	--	--	--	--	--	--	--	--	--	--	--
9/9/1996	--		40.11	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	7.2	SPL	--	--	--	--
12/19/1996	--		40.11	11.01	--	29.10	<50	<0.5	<1.0	<1.0	<1.0	<10	8.4	SPL	--	--	--	--
3/17/1997	--		40.11	10.42	--	29.69	--	--	--	--	--	--	--	--	--	--	--	--
8/12/1997	--		40.11	12.77	--	27.34	--	--	--	--	--	--	--	--	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
MW-4 Cont.																		
12/10/1997	--		40.11	11.22	--	28.89	--	--	--	--	--	--	--	--	--	--	--	--
3/12/1998	--		40.11	10.81	--	29.30	--	--	--	--	--	--	--	--	--	--	--	--
6/23/1998	--		40.11	10.61	--	29.50	--	--	--	--	--	--	--	--	--	--	--	--
3/31/1999	--		40.11	11.46	--	28.65	--	--	--	--	--	--	--	--	--	--	--	--
8/25/1999	--		40.11	16.16	--	23.95	--	--	--	--	--	--	--	--	--	--	--	--
3/9/2000	--		40.11	12.23	--	27.88	--	--	--	--	--	--	--	--	--	--	--	--
3/8/2001	--		40.11	11.04	--	29.07	--	--	--	--	--	--	--	--	--	--	--	--
3/8/2002	--		40.11	12.73	--	27.38	--	--	--	--	--	--	--	--	--	--	--	--
3/18/2002	--		40.11	11.62	--	28.49	--	--	--	--	--	--	--	--	--	--	--	--
3/11/2003	--		40.11	13.44	--	26.67	--	--	--	--	--	--	--	--	--	--	--	--
12/09/2003	P		40.11	15.03	--	25.08	<250	<2.5	<2.5	<2.5	<2.5	130	--	SEQM	6.1	--	--	--
03/09/2004	P		40.11	11.04	--	29.07	<50	<0.50	<0.50	<0.50	<0.50	35	--	SEQM	5.5	--	--	--
09/17/2004	P		40.11	16.75	--	23.36	<250	<2.5	<2.5	<2.5	<2.5	140	--	SEQM	6.5	--	--	--
03/07/2005	P		40.11	11.02	--	29.09	67	<0.50	<0.50	<0.50	<0.50	42	--	SEQM	6.6	--	--	--
09/06/2005	P	s, t	42.88	14.64	--	28.24	81	<0.50	<0.50	<0.50	<1.5	180	--	SEQM	6.7	--	--	--
03/06/2006	P		42.88	12.42	--	30.46	<100	<1.0	<1.0	<1.0	<1.0	110	--	SEQM	6.4	--	--	--
9/5/2006	--		42.88	13.81	--	29.07	130	<1.0	<1.0	<1.0	<1.0	190	--	TAMC	6.5	--	--	--
3/5/2007	P		42.88	10.63	--	32.25	<50	<0.50	<0.50	<0.50	<0.50	13	3.34	TAMC	7.11	--	--	--
9/7/2007	P	s, v (MTBE)	42.88	14.77	--	28.11	90	<0.50	<0.50	<0.50	<0.50	130	1.14	TAMC	6.68	--	--	--
3/6/2008	P		42.88	11.30	--	31.58	<50	<0.50	<0.50	<0.50	<0.50	170	1.76	CEL	6.62	--	--	--
9/3/2008	P		42.88	16.11	--	26.77	<50	<5.0	<5.0	<5.0	<5.0	150	1.97	CEL	6.33	--	--	--
3/4/2009	P		42.88	10.78	--	32.10	140	<5.0	<5.0	<5.0	<5.0	110	1.31	CEL	6.47	--	--	--
9/30/2009	**P**	**x, y (GRO)**	**40.10**	**16.48**	**--**	**23.62**	**240**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**140**	**0.08**	**CEL**	**6.88**	**--**	**--**	**--**
MW-5																		
10/3/1991	--		39.55	18.08	--	21.47	79,000	13,000	7,400	1,400	6,200	--	--	SUP	--	--	--	--
10/15/1991	--		39.55	18.55	--	21.00	--	--	--	--	--	--	--	--	--	--	--	--
12/4/1991	--	a	39.55	18.44	0.13	20.98	--	--	--	--	--	--	--	--	--	--	--	--
12/16/1991	--	a	39.55	18.66	0.01	20.88	--	--	--	--	--	--	--	--	--	--	--	--
1/6/1992	--	a	39.55	19.12	0.11	20.32	--	--	--	--	--	--	--	--	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
MW-5 Cont.																		
1/22/1992	--		39.55	14.59	--	24.96	--	--	--	--	--	--	--	--	--	--	--	--
1/28/1992	--		39.55	15.25	--	24.30	--	--	--	--	--	--	--	--	--	--	--	--
2/5/1992	--	q	39.55	15.58	--	23.97	--	--	--	--	--	--	--	--	--	--	--	--
2/12/1992	--	a	39.55	15.54	0.01	24.00	--	--	--	--	--	--	--	--	--	--	--	--
2/17/1992	--	q	39.55	13.98	--	25.57	--	--	--	--	--	--	--	--	--	--	--	--
4/3/1992	--	a	39.55	13.63	0.04	25.88	--	--	--	--	--	--	--	--	--	--	--	--
4/8/1992	--	a	39.55	13.17	0.01	26.37	--	--	--	--	--	--	--	--	--	--	--	--
4/14/1992	--	a	39.55	13.45	0.01	26.09	--	--	--	--	--	--	--	--	--	--	--	--
4/29/1992	--	a	39.55	13.75	0.07	25.73	--	--	--	--	--	--	--	--	--	--	--	--
5/7/1992	--	a	39.55	16.15	0.04	23.36	--	--	--	--	--	--	--	--	--	--	--	--
7/3/1992	--	a	39.55	17.67	0.08	21.80	--	--	--	--	--	--	--	--	--	--	--	--
9/1/1992	--	a	39.55	17.83	0.50	21.22	--	--	--	--	--	--	--	--	--	--	--	--
10/8/1992	--	a	39.55	17.86	0.92	20.77	--	--	--	--	--	--	--	--	--	--	--	--
12/31/1992	--	q	39.55	15.20	--	24.35	--	--	--	--	--	--	--	--	--	--	--	--
4/21/1993	--	a	39.55	12.64	0.02	26.89	--	--	--	--	--	--	--	--	--	--	--	--
7/7/1993	--	a, i	39.14	12.68	0.82	25.64	--	--	--	--	--	--	--	--	--	--	--	--
9/21/1993	--	q	39.14	14.35	--	24.79	--	--	--	--	--	--	--	--	--	--	--	--
12/17/1993	--	a	39.14	12.61	0.41	26.12	--	--	--	--	--	--	--	--	--	--	--	--
4/7/1994	--	n	39.14	30.00	--	9.14	66,000	3,000	1,700	250	6,800	2,002	--	PACE	--	--	--	--
7/6/1994	--	n	39.14	--	--	--	29,000	1,900	330	63	2,700	1,141	--	PACE	--	--	--	--
10/7/1994	--	h	39.14	--	--	--	45,000	2,900	540	260	2,600	--	--	PACE	--	--	--	--
10/7/1994	--	n	39.14	28.70	--	10.44	250,000	2,600	660	830	5,200	37.7	4.2	PACE	--	--	--	--
1/27/1995	--		39.14	28.70	--	10.44	--	--	--	--	--	--	--	--	--	--	--	--
3/30/1995	--	h	39.14	--	--	--	43,000	7,900	2,500	440	6,200	--	--	ATI	--	--	--	--
3/30/1995	--		39.14	28.95	--	10.19	50,000	7,900	2,600	520	6,400	--	5.5	ATI	--	--	--	--
6/20/1995	--	h	39.14	--	--	--	26,000	3,500	290	<25	3,300	--	--	ATI	--	--	--	--
6/20/1995	--		39.14	22.54	--	16.60	34,000	5,100	1,900	300	3,700	--	--	ATI	--	--	--	--
10/3/1995	--	h	39.14	--	--	--	12,000	46	39	10	1,600	320	--	ATI	--	--	--	--
10/3/1995	--		39.14	18.84	--	20.30	12,000	68	42	11	1,600	330	--	ATI	--	--	--	--
12/6/1995	--		39.14	19.07	--	20.07	16,000	1,200	93	51	700	600	--	ATI	--	--	--	--
3/21/1996	--	h	39.14	--	--	--	1,900	92	30	7	270	<10	--	SPL	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
MW-5 Cont.																		
3/21/1996	--		39.14	7.43	--	31.71	1,500	89	28	6	250	<10	7.2	SPL	--	--	--	--
6/21/1996	--		39.14	9.87	--	29.27	3,500	740	150	19	400	<100	7.1	SPL	--	--	--	--
6/21/1996	--	h	39.14	--	--	--	2,700	680	140	20	400	<50	--	SPL	--	--	--	--
9/6/1996	--		39.14	10.52	--	28.62	--	--	--	--	--	--	--	--	--	--	--	--
9/9/1996	--		39.14	--	--	--	82,000	3,100	1,700	850	9,100	<2500	7.5	SPL	--	--	--	--
9/9/1996	--	h	39.14	--	--	--	90,000	2,900	1,600	670	6,900	<2500	--	SPL	--	--	--	--
12/19/1996	--		39.14	8.62	--	30.52	41,000	790	820	120	2,040	<500	7.7	SPL	--	--	--	--
12/19/1996	--	h	39.14	--	--	--	26,000	490	430	63	1,140	<500	--	SPL	--	--	--	--
3/17/1997	--		39.14	8.22	--	30.92	5,500	1.9	2.4	<1.0	<1.0	29	6.4	SPL	--	--	--	--
3/17/1997	--	h	39.14	--	--	--	6,600	2.5	2.7	<1.0	<1.0	28	--	SPL	--	--	--	--
8/12/1997	--	h	39.14	--	--	--	36,000	6,100	2,500	720	4,500	<500	--	SPL	--	--	--	--
8/12/1997	--	a	39.14	12.18	0.22	26.74	33,000	6,400	2,400	680	4,400	<1000	6.8	SPL	--	--	--	--
12/10/1997	--	h	39.14	--	--	--	37,000	2,900	2,500	440	4,800	--	--	SPL	--	--	--	--
12/10/1997	--	a	39.14	10.78	0.06	28.30	31,000	3,000	2,500	560	5,100	500	1.8	SPL	--	--	--	--
3/12/1998	--	a	39.14	10.11	0.22	28.81	100,000	1,600	870	250	2,600	<250	6.1	SPL	--	--	--	--
6/23/1998	--	h	39.14	--	--	--	27,000	2,600	840	400	2,950	<500	--	SPL	--	--	--	--
6/23/1998	--	a	39.14	10.20	0.02	28.92	27,000	2,500	840	370	2,900	<250	2.1	SPL	--	--	--	--
3/31/1999	--	f	39.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8/25/1999	--	a	39.14	14.69	0.38	24.07	180,000	2,700	400	830	2,800	26	--	SPL	--	--	--	--
3/9/2000	--	a	39.14	14.83	0.60	23.71	53,000	12,000	2,600	1,900	9,100	<5.0	--	PACE	--	--	--	--
3/8/2001	--	f	39.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3/8/2002	--	a	39.14	11.45	1.50	26.19	33,000	8,240	1,080	1,010	2,900	34.3	--	PACE	--	--	--	--
3/18/2002	--		39.14	8.03	--	31.11	--	--	--	--	--	--	--	--	--	--	--	--
3/11/2003	--	a	39.14	9.60	0.45	29.09	--	--	--	--	--	--	--	--	--	--	--	--
12/09/2003	--	a	39.14	11.44	0.03	27.72	--	--	--	--	--	--	--	--	--	--	--	--
03/09/2004	P		39.14	7.91	--	31.23	31,000	3,900	1,100	780	3,600	<50	--	SEQM	6.6	--	--	--
09/17/2004	--	a	39.14	12.13	0.15	27.13	--	--	--	--	--	--	--	--	--	--	--	--
03/07/2005	--	a	39.14	8.62	0.02	27.13	--	--	--	--	--	--	--	--	--	--	--	--
09/06/2005	--	a	41.98	11.16	0.18	30.96	--	--	--	--	--	--	--	--	--	--	--	--
03/06/2006	P	a, q	41.98	8.60	SHEEN	33.38	32,000	7,500	810	1,200	2,300	<50	--	SEQM	6.4	--	--	--
9/5/2006	--	a	41.98	6.16	0.03	35.82	--	--	--	--	--	--	--	--	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
MW-5 Cont.																		
3/5/2007	P	q	41.98	8.34	SHEEN	33.64	90,000	10,000	4,200	1,900	7,900	<50	1.30	TAMC	6.91	--	--	--
9/7/2007	--	a	41.98	15.15	0.15	26.94	--	--	--	--	--	--	--	--	--	--	--	--
1/14/2008	--	a	41.98	10.30	0.49	32.05	--	--	--	--	--	--	--	--	--	--	--	--
2/27/2008	--	a	41.98	13.22	0.12	28.85	--	--	--	--	--	--	--	--	--	--	--	--
3/6/2008	--	a	41.98	12.90	0.14	29.19	--	--	--	--	--	--	--	--	--	--	--	--
9/3/2008	--	a	41.98	12.90	0.99	29.82	--	--	--	--	--	--	--	--	--	--	--	--
3/4/2009	--	a	41.98	8.45	0.16	33.65	--	--	--	--	--	--	--	--	--	--	--	--
4/8/2009	--	x	39.14	9.05	0.67	30.59	--	--	--	--	--	--	--	--	--	--	--	--
5/11/2009	--		39.14	9.10	0.32	30.28	--	--	--	--	--	--	--	--	--	--	--	--
6/16/2009	--		39.14	9.15	0.02	30.01	--	--	--	--	--	--	--	--	--	--	--	--
7/22/2009	**--**		**39.14**	**9.33**	**0.12**	**29.90**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
8/6/2009	**--**		**39.14**	**10.05**	**0.01**	**29.10**	--	--	--	--	--	--	--	--	--	--	--	--
9/30/2009	**--**		**39.14**	**10.55**	**0.06**	**28.64**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-6																		
10/3/1991	--		41.59	20.73	--	20.86	<50	0.7	0.8	<0.3	1.3	--	--	SUP	--	--	--	--
10/15/1991	--		41.59	21.20	--	20.39	--	--	--	--	--	--	--	--	--	--	--	--
12/4/1991	--		41.59	21.26	--	20.33	--	--	--	--	--	--	--	--	--	--	--	--
12/16/1991	--		41.59	21.12	--	20.47	--	--	--	--	--	--	--	--	--	--	--	--
1/6/1992	--		41.59	20.29	--	21.30	<50	<0.5	<0.5	<0.5	1.6	--	--	ANA	--	--	--	--
1/22/1992	--		41.59	20.12	--	21.47	--	--	--	--	--	--	--	--	--	--	--	--
1/28/1992	--		41.59	20.20	--	21.39	--	--	--	--	--	--	--	--	--	--	--	--
2/5/1992	--		41.59	20.09	--	21.50	--	--	--	--	--	--	--	--	--	--	--	--
2/12/1992	--		41.59	19.15	--	22.44	--	--	--	--	--	--	--	--	--	--	--	--
2/17/1992	--		41.59	18.02	--	23.57	--	--	--	--	--	--	--	--	--	--	--	--
4/3/1992	--		41.59	16.62	--	24.97	--	--	--	--	--	--	--	--	--	--	--	--
4/8/1992	--		41.59	17.06	--	24.53	<50	0.6	<0.5	0.8	<0.5	--	--	ANA	--	--	--	--
4/14/1992	--		41.59	17.23	--	24.36	--	--	--	--	--	--	--	--	--	--	--	--
4/29/1992	--		41.59	18.12	--	23.47	--	--	--	--	--	--	--	--	--	--	--	--
5/7/1992	--		41.59	18.52	--	23.07	--	--	--	--	--	--	--	--	--	--	--	--
7/3/1992	--		41.59	19.71	--	21.88	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
MW-6 Cont.																		
10/8/1992	--		41.59	21.22	--	20.37	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
10/8/1992	--	h	41.59	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
12/31/1992	--		41.59	21.33	--	20.26	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
4/21/1993	--	n	41.59	16.45	--	25.14	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--	--
7/7/1993	--	j, n	41.59	18.68	--	22.91	<50	<0.5	<0.5	<0.5	<0.5	28.96	--	PACE	--	--	29	--
9/21/1993	--	n	41.59	19.64	--	21.95	<50	<0.5	<0.5	<0.5	1.6	--	--	PACE	--	--	--	--
12/17/1993	--		41.59	21.08	--	20.51	--	--	--	--	--	--	--	--	--	--	--	--
12/23/1993	--	n	41.59	--	--	--	<50	<0.5	0.5	<0.5	0.6	13.95	--	PACE	--	--	--	--
4/7/1994	--	n	41.59	21.27	--	20.32	<50	<0.5	<0.5	<0.5	<0.5	35.1	6.1	PACE	--	--	--	--
7/6/1994	--	n	41.59	19.81	--	21.78	<50	<0.5	<0.5	<0.5	<0.5	--	4.0	PACE	--	--	--	--
7/6/1994	--	h	41.59	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--	--
10/7/1994	--	j, n	41.59	21.25	--	20.34	<50	<0.5	<0.5	<0.5	<0.5	24.3	3.5	PACE	--	--	24	--
1/27/1995	--		41.59	12.39	--	29.20	<50	<0.5	<0.5	<0.5	<1	--	4.2	ATI	--	--	--	--
3/30/1995	--		41.59	11.34	--	30.25	<50	<0.50	<0.50	<0.50	<1.0	--	6.1	ATI	--	--	--	--
6/20/1995	--		41.59	15.12	--	26.47	<50	<0.50	<0.50	<0.50	<1.0	--	--	ATI	--	--	--	--
10/3/1995	--		41.59	20.68	--	20.91	<50	<0.50	<0.50	<0.50	<1.0	66	6.4	ATI	--	--	--	--
12/6/1995	--		41.59	23.77	--	17.82	<50	<0.50	<0.50	<0.50	<1.0	45	5.7	ATI	--	--	--	--
3/21/1996	--		41.59	11.55	--	30.04	<50	<0.5	<1	<1	<1	41	9.1	SPL	--	--	--	--
6/21/1996	--		41.59	12.60	--	28.99	<50	<0.5	<1	<1	<1	<10	8.6	SPL	--	--	--	--
9/6/1996	--		41.59	13.25	--	28.34	--	--	--	--	--	--	--	--	--	--	--	--
9/9/1996	--	k	41.59	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	22/22	7.9	SPL	--	--	--	--
12/19/1996	--		41.59	11.45	--	30.14	<50	<0.5	<1.0	<1.0	<1.0	<10	7.7	SPL	--	--	--	--
3/17/1997	--		41.59	10.80	--	30.79	--	--	--	--	--	--	--	--	--	--	--	--
8/12/1997	--		41.59	13.11	--	28.48	--	--	--	--	--	--	--	--	--	--	--	--
12/10/1997	--		41.59	13.84	--	27.75	--	--	--	--	--	--	--	--	--	--	--	--
3/12/1998	--		41.59	11.17	--	30.42	--	--	--	--	--	--	--	--	--	--	--	--
6/23/1998	--		41.59	13.27	--	28.32	--	--	--	--	--	--	--	--	--	--	--	--
3/31/1999	--		41.59	12.91	--	28.68	--	--	--	--	--	--	--	--	--	--	--	--
8/25/1999	--		41.59	15.93	--	25.66	--	--	--	--	--	--	--	--	--	--	--	--
3/9/2000	--		41.59	11.49	--	30.10	--	--	--	--	--	--	--	--	--	--	--	--
3/8/2001	--		41.59	10.81	--	30.78	--	--	--	--	--	--	--	--	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
MW-6 Cont.																		
3/8/2002	--		41.59	14.28	--	27.31	--	--	--	--	--	--	--	--	--	--	--	--
3/18/2002	--		41.59	13.10	--	28.49	--	--	--	--	--	--	--	--	--	--	--	--
3/11/2003	--		41.59	13.63	--	27.96	--	--	--	--	--	--	--	--	--	--	--	--
12/09/2003	P		41.59	14.26	--	27.33	<50	<0.50	<0.50	<0.50	<0.50	12	--	SEQM	6.4	--	--	--
03/09/2004	NP		41.59	11.87	--	29.72	<50	<0.50	<0.50	<0.50	<0.50	10	--	SEQM	7.1	--	--	--
09/17/2004	--		41.59	16.45	--	25.14	--	--	--	--	--	--	--	--	--	--	--	--
03/07/2005	P		41.59	13.65	--	27.94	<50	<0.50	<0.50	<0.50	<0.50	5.8	--	SEQM	6.7	--	--	--
09/06/2005	--		44.37	14.23	--	30.14	--	--	--	--	--	--	--	--	--	--	--	--
03/06/2006	P	u	44.37	12.89	--	31.48	<50	<0.50	<0.50	<0.50	<0.50	8.1	--	SEQM	6.8	--	--	--
9/5/2006	--		44.37	14.10	--	30.27	--	--	--	--	--	--	--	--	--	--	--	--
3/5/2007	P		44.37	11.43	--	32.94	<50	<0.50	<0.50	<0.50	<0.50	5.6	2.57	TAMC	7.70	--	--	--
9/7/2007	--		44.37	16.00	--	28.37	--	--	--	--	--	--	--	--	--	--	--	--
3/6/2008	P		44.37	11.84	--	32.53	<50	<0.50	<0.50	<0.50	<0.50	1.9	2.34	CEL	6.81	--	--	--
9/3/2008	--		44.37	16.24	--	28.13	--	--	--	--	--	--	--	--	--	--	--	--
3/4/2009	P		44.37	11.68	--	32.69	<50	<0.50	<0.50	<0.50	<0.50	2.8	4.66	CEL	6.82	--	--	--
9/30/2009	**P**	**x**	**41.58**	**16.83**	**--**	**24.75**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**4.4**	**0.10**	**CEL**	**7.00**	**--**	**--**	**--**
MW-7																		
10/3/1991	--		40.64	14.93	--	25.71	360	62	13	3.4	20	--	--	SUP	--	--	--	--
10/15/1991	--		40.64	15.16	--	25.48	--	--	--	--	--	--	--	--	--	--	--	--
12/4/1991	--		40.64	15.41	--	25.23	--	--	--	--	--	--	--	--	--	--	--	--
12/16/1991	--		40.64	15.21	--	25.43	--	--	--	--	--	--	--	--	--	--	--	--
1/6/1992	--		40.64	14.56	--	26.08	1,100	170	<0.5	24	23	--	--	ANA	--	--	--	--
1/22/1992	--		40.64	14.63	--	26.01	--	--	--	--	--	--	--	--	--	--	--	--
1/28/1992	--		40.64	14.73	--	25.91	--	--	--	--	--	--	--	--	--	--	--	--
2/5/1992	--		40.64	14.58	--	26.06	--	--	--	--	--	--	--	--	--	--	--	--
2/12/1992	--		40.64	13.94	--	26.70	--	--	--	--	--	--	--	--	--	--	--	--
2/17/1992	--		40.64	13.10	--	27.54	--	--	--	--	--	--	--	--	--	--	--	--
4/3/1992	--		40.64	12.66	--	27.98	--	--	--	--	--	--	--	--	--	--	--	--
4/8/1992	--		40.64	12.77	--	27.87	750	150	<0.5	23	9.9	--	--	ANA	--	--	--	--
4/14/1992	--		40.64	13.02	--	27.62	--	--	--	--	--	--	--	--	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
MW-7 Cont.																		
4/29/1992	--		40.64	13.59	--	27.05	--	--	--	--	--	--	--	--	--	--	--	--
5/7/1992	--		40.64	13.95	--	26.69	--	--	--	--	--	--	--	--	--	--	--	--
7/3/1992	--		40.64	14.73	--	25.91	660	210	<2.5	33	8	--	--	ANA	--	--	--	--
10/8/1992	--		40.64	15.75	--	24.89	320	49	1.4	13	6.2	--	--	ANA	--	--	--	--
12/31/1992	--		40.64	13.57	--	27.07	900	100	<2.5	28	4.3	--	--	ANA	--	--	--	--
4/21/1993	--	n	40.64	14.56	--	26.08	510	83	1.2	10	5.8	--	--	PACE	--	--	--	--
7/7/1993	--	h, n	40.32	--	--	--	1,100	170	1.9	29	2.84	9.84	--	PACE	--	--	--	--
7/7/1993	--	i, n	40.32	13.40	--	26.92	1,100	160	2	27	4	10.84	--	PACE	--	--	--	--
9/21/1993	--	h, n	40.32	--	--	--	640	140	1.7	23	2.4	--	--	PACE	--	--	--	--
9/21/1993	--	n	40.32	14.40	--	25.92	690	150	3.1	26	5.7	--	--	PACE	--	--	--	--
12/17/1993	--		40.32	13.65	--	26.67	--	--	--	--	--	--	--	--	--	--	--	--
12/23/1993	--	n	40.32	--	--	--	250	64	1.2	9	1.8	7.81	--	PACE	--	--	--	--
4/7/1994	--	n	40.32	30.62	--	9.70	140	32	1.4	<0.5	<0.5	6.32	--	PACE	--	--	--	--
7/6/1994	--	n	40.32	16.88	--	23.44	410	94	1.3	10	3.5	<5.0	4.4	PACE	--	--	--	--
10/7/1994	--	n	40.32	25.59	--	14.73	<50	9.2	<0.5	<0.5	<0.5	<5.0	4.9	PACE	--	--	--	--
1/27/1995	--		40.32	9.82	--	30.50	810	570	3	60	17	--	0.0	ATI	--	--	--	--
1/27/1995	--	h	40.32	--	--	--	930	620	4	77	21	--	--	ATI	--	--	--	--
3/30/1995	--		40.32	9.15	--	31.17	180	65	0.53	2	<1.0	--	7.8	ATI	--	--	--	--
6/20/1995	--		40.32	11.38	--	28.94	2,800	980	<5.0	<5.0	43	--	--	ATI	--	--	--	--
10/3/1995	--		40.32	29.95	--	10.37	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	--	--	--
12/6/1995	--		40.32	29.85	--	10.47	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	--	--	--
3/21/1996	--		40.32	9.76	--	30.56	1,000	390	2	40	13	<10	7.4	SPL	--	--	--	--
6/21/1996	--		40.32	11.01	--	29.31	<250	40	<5	<5	<5	<50	7.4	SPL	--	--	--	--
9/6/1996	--		40.32	11.68	--	28.64	--	--	--	--	--	--	--	--	--	--	--	--
9/9/1996	--		40.32	--	--	--	<250	13	<5.0	<5.0	<5.0	<50	7.2	SPL	--	--	--	--
12/19/1996	--		40.32	10.78	--	29.54	70	1.2	<1.0	1	<1.0	<10	8.3	SPL	--	--	--	--
3/17/1997	--		40.32	9.96	--	30.36	--	--	--	--	--	--	--	--	--	--	--	--
8/12/1997	--		40.32	11.44	--	28.88	--	--	--	--	--	--	--	--	--	--	--	--
12/10/1997	--		40.32	10.42	--	29.90	--	--	--	--	--	--	--	--	--	--	--	--
3/12/1998	--		40.32	9.51	--	30.81	--	--	--	--	--	--	--	--	--	--	--	--
6/23/1998	--		40.32	9.98	--	30.34	--	--	--	--	--	--	--	--	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
MW-7 Cont.																		
3/31/1999	--		40.32	10.38	--	29.94	--	--	--	--	--	--	--	--	--	--	--	--
8/25/1999	--		40.32	12.38	--	27.94	--	--	--	--	--	--	--	--	--	--	--	--
3/9/2000	--		40.32	8.48	--	31.84	--	--	--	--	--	--	--	--	--	--	--	--
3/8/2001	--		40.32	8.37	--	31.95	--	--	--	--	--	--	--	--	--	--	--	--
3/8/2002	--	f	40.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3/18/2002	--		40.32	9.94	--	30.38	--	--	--	--	--	--	--	--	--	--	--	--
3/11/2003	--		40.32	11.26	--	29.06	--	--	--	--	--	--	--	--	--	--	--	--
12/09/2003	P		40.32	12.76	--	27.56	270	26	<0.50	<0.50	<0.50	8.7	--	SEQM	6.1	--	--	--
03/09/2004	P		40.32	10.91	--	29.41	320	49	0.73	1.8	0.59	6.9	--	SEQM	6.2	--	--	--
09/17/2004	P		40.32	13.20	--	27.12	330	17	<0.50	<0.50	<0.50	7.0	--	SEQM	6.6	--	--	--
03/07/2005	P		40.32	8.18	--	32.14	340	41	0.79	0.79	0.73	7.2	--	SEQM	6.9	--	--	--
09/06/2005	P		43.10	11.80	--	31.30	1,100	130	1.2	1.8	<1.5	16	--	SEQM	6.7	--	--	--
03/06/2006	P		43.10	8.39	--	34.71	440	31	0.78	0.74	0.81	8.3	--	SEQM	7.1	--	--	--
9/5/2006	--		43.10	11.45	--	31.65	2,000	260	3.1	5.9	<2.5	12	--	TAMC	6.6	--	--	--
3/5/2007	P		43.10	9.31	--	33.79	2,200	110	2.2	4.0	1.8	7.6	1.06	TAMC	7.26	--	--	--
9/7/2007	P		43.10	12.18	--	30.92	220	8.4	<0.50	<0.50	<0.50	1.2	0.98	TAMC	6.89	--	--	--
3/6/2008	P		43.10	10.05	--	33.05	1,800	54	1.2	1.1	<1.0	<1.0	--	CEL	7.02	--	--	--
9/3/2008	P		43.10	13.17	--	29.93	540	13	0.69	<0.50	<0.50	5.5	4.77	CEL	6.88	--	--	--
3/4/2009	P		43.10	8.25	--	34.85	720	15	0.59	0.53	<0.50	3.4	1.29	CEL	6.93	--	--	--
9/30/2009	**P**	**x**	**40.40**	**12.70**	**--**	**27.70**	**1,200**	**44**	**1.0**	**0.74**	**0.79**	**3.3**	**0.11**	**CEL**	**6.94**	**--**	**--**	**--**
MW-8																		
10/3/1991	--		38.18	22.37	--	15.81	<50	<0.3	0.6	<0.3	0.9	--	--	SUP	--	--	--	--
10/15/1991	--		38.18	22.70	--	15.48	--	--	--	--	--	--	--	--	--	--	--	--
12/4/1991	--		38.18	22.44	--	15.74	--	--	--	--	--	--	--	--	--	--	--	--
12/16/1991	--		38.18	22.47	--	15.71	--	--	--	--	--	--	--	--	--	--	--	--
1/6/1992	--		38.18	21.94	--	16.24	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
1/22/1992	--		38.18	21.44	--	16.74	--	--	--	--	--	--	--	--	--	--	--	--
1/28/1992	--		38.18	21.20	--	16.98	--	--	--	--	--	--	--	--	--	--	--	--
2/5/1992	--		38.18	20.88	--	17.30	--	--	--	--	--	--	--	--	--	--	--	--
2/12/1992	--		38.18	20.54	--	17.64	--	--	--	--	--	--	--	--	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MtBE						
MW-8 Cont.																		
2/17/1992	--		38.18	19.99	--	18.19	--	--	--	--	--	--	--	--	--	--	--	--
4/3/1992	--		38.18	16.75	--	21.43	--	--	--	--	--	--	--	--	--	--	--	--
4/8/1992	--		38.18	16.57	--	21.61	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
4/14/1992	--	f	38.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/29/1992	--		38.18	18.61	--	19.57	--	--	--	--	--	--	--	--	--	--	--	--
5/7/1992	--		38.18	18.41	--	19.77	--	--	--	--	--	--	--	--	--	--	--	--
7/3/1992	--		38.18	20.35	--	17.83	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
10/8/1992	--	f	38.18	21.74	--	16.44	--	--	--	--	--	--	--	--	--	--	--	--
12/31/1992	--		38.18	19.09	--	19.09	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
4/21/1993	--	n	38.18	18.92	--	19.26	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--	--
7/7/1993	--	n	38.18	17.76	--	20.42	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	PACE	--	--	--	--
9/21/1993	--	n	38.18	19.71	--	18.47	<50	2.9	2.2	2.2	7.1	--	--	PACE	--	--	--	--
12/17/1993	--		38.18	21.33	--	16.85	--	--	--	--	--	--	--	--	--	--	--	--
12/23/1993	--	n	38.18	--	--	--	<50	<0.5	<0.5	<0.5	0.6	<5.0	--	PACE	--	--	--	--
4/7/1994	--	n	38.18	21.51	--	16.67	<50	<0.5	<0.5	<0.5	<0.5	<5.0	6.6	PACE	--	--	--	--
7/6/1994	--	n	38.18	17.41	--	20.77	<50	<0.5	<0.5	<0.5	<0.5	<5.0	4.4	PACE	--	--	--	--
10/7/1994	--	n	38.18	19.20	--	18.98	<50	<0.5	<0.5	<0.5	<0.5	<5.0	3.7	PACE	--	--	--	--
1/27/1995	--		38.18	12.25	--	25.93	<50	<0.5	<0.5	<0.5	<1	--	2.9	ATI	--	--	--	--
3/30/1995	--		38.18	10.35	--	27.83	<50	<0.50	<0.50	<0.50	<1.0	--	8.3	ATI	--	--	--	--
6/20/1995	--		38.18	13.37	--	24.81	<50	<0.50	<0.50	<0.50	<1.0	--	6.9	ATI	--	--	--	--
10/3/1995	--	f	38.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/6/1995	--		38.18	18.42	--	19.76	<50	<0.50	<0.50	<0.50	<1.0	47	5.3	ATI	--	--	--	--
3/21/1996	--	f	38.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6/21/1996	--		38.18	13.03	--	25.15	<50	<0.5	<1	<1	<1	<10	7.0	SPL	--	--	--	--
9/6/1996	--		38.18	13.70	--	24.48	--	--	--	--	--	--	--	--	--	--	--	--
9/9/1996	--		38.18	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	7.0	SPL	--	--	--	--
12/19/1996	--		38.18	11.93	--	26.25	<50	<0.5	<1.0	<1.0	<1.0	<10	7.6	SPL	--	--	--	--
3/17/1997	--		38.18	11.29	--	26.89	--	--	--	--	--	--	--	--	--	--	--	--
8/12/1997	--		38.18	13.73	--	24.45	--	--	--	--	--	--	--	--	--	--	--	--
12/10/1997	--		38.18	11.88	--	26.30	--	--	--	--	--	--	--	--	--	--	--	--
3/12/1998	--		38.18	11.89	--	26.29	--	--	--	--	--	--	--	--	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MtBE						
MW-8 Cont.																		
6/23/1998	--		38.18	11.33	--	26.85	--	--	--	--	--	--	--	--	--	--	--	--
3/31/1999	--		38.18	12.68	--	25.50	--	--	--	--	--	--	--	--	--	--	--	--
8/25/1999	--		38.18	14.93	--	23.25	--	--	--	--	--	--	--	--	--	--	--	--
3/9/2000	--		38.18	9.14	--	29.04	--	--	--	--	--	--	--	--	--	--	--	--
3/8/2001	--		38.18	8.41	--	29.77	--	--	--	--	--	--	--	--	--	--	--	--
3/8/2002	--		38.18	11.18	--	27.00	--	--	--	--	--	--	--	--	--	--	--	--
3/18/2002	--		38.18	10.72	--	27.46	--	--	--	--	--	--	--	--	--	--	--	--
3/11/2003	--		38.18	10.46	--	27.72	--	--	--	--	--	--	--	--	--	--	--	--
03/09/2004	P		38.18	9.79	--	28.39	<50	<0.50	<0.50	<0.50	<0.50	0.50	--	SEQM	7.2	--	--	--
09/17/2004	--		38.18	15.35	--	22.83	--	--	--	--	--	--	--	--	--	--	--	--
03/07/2005	P		38.18	7.94	--	30.24	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	6.7	--	--	--
09/06/2005	--		40.95	13.06	--	27.89	--	--	--	--	--	--	--	--	--	--	--	--
03/06/2006	P	u	40.95	9.26	--	31.69	<50	<0.50	<0.50	<0.50	<0.50	0.59	--	SEQM	7.2	--	--	--
9/5/2006	--		40.95	12.61	--	28.34	--	--	--	--	--	--	--	--	--	--	--	--
3/5/2007	P		40.95	9.12	--	31.83	<50	<0.50	<0.50	<0.50	0.53	<0.50	6.79	TAMC	7.17	--	--	--
9/7/2007	--		40.95	13.56	--	27.39	--	--	--	--	--	--	--	--	--	--	--	--
3/6/2008	P		40.95	9.80	--	31.15	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.14	CEL	6.86	--	--	--
9/3/2008	--		40.95	14.20	--	26.75	--	--	--	--	--	--	--	--	--	--	--	--
3/4/2009	P		40.95	9.51	--	31.44	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.62	CEL	6.96	--	--	--
9/30/2009	--	x	**38.19**	**14.92**	--	**23.27**	--	--	--	--	--	--	--	--	--	--	--	--
MW-9																		
10/3/1991	--		41.25	14.12	--	27.13	<50	<0.3	0.4	<0.3	<0.3	--	--	SUP	--	--	--	--
10/15/1991	--		41.25	14.27	--	26.98	--	--	--	--	--	--	--	--	--	--	--	--
12/4/1991	--		41.25	13.84	--	27.41	--	--	--	--	--	--	--	--	--	--	--	--
12/16/1991	--		41.25	14.18	--	27.07	--	--	--	--	--	--	--	--	--	--	--	--
1/6/1992	--		41.25	13.42	--	27.83	<50	<0.5	<0.5	<0.5	0.9	--	--	ANA	--	--	--	--
1/22/1992	--		41.25	13.75	--	27.50	--	--	--	--	--	--	--	--	--	--	--	--
1/28/1992	--		41.25	14.76	--	26.49	--	--	--	--	--	--	--	--	--	--	--	--
2/5/1992	--		41.25	13.38	--	27.87	--	--	--	--	--	--	--	--	--	--	--	--
2/12/1992	--		41.25	11.86	--	29.39	--	--	--	--	--	--	--	--	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MtBE						
MW-9 Cont.																		
2/17/1992	--		41.25	10.78	--	30.47	--	--	--	--	--	--	--	--	--	--	--	--
4/3/1992	--		41.25	11.63	--	29.62	--	--	--	--	--	--	--	--	--	--	--	--
4/8/1992	--		41.25	12.25	--	29.00	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
4/14/1992	--		41.25	12.32	--	28.93	--	--	--	--	--	--	--	--	--	--	--	--
4/29/1992	--		41.25	13.07	--	28.18	--	--	--	--	--	--	--	--	--	--	--	--
5/7/1992	--		41.25	14.43	--	26.82	--	--	--	--	--	--	--	--	--	--	--	--
7/3/1992	--		41.25	13.85	--	27.40	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
10/8/1992	--		41.25	14.89	--	26.36	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
12/31/1992	--		41.25	11.90	--	29.35	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
4/21/1993	--	n	41.25	13.68	--	27.57	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--	--
7/7/1993	--	n	41.25	13.12	--	28.13	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	PACE	--	--	--	--
9/21/1993	--	n	41.25	14.00	--	27.25	<50	<0.5	<0.5	<0.5	0.9	--	--	PACE	--	--	--	--
12/17/1993	--		41.25	12.98	--	28.27	--	--	--	--	--	--	--	--	--	--	--	--
12/23/1993	--	n	41.25	--	--	--	<50	<0.5	<0.5	<0.5	0.9	<5.0	--	PACE	--	--	--	--
4/7/1994	--	n	41.25	13.24	--	28.01	<50	<0.5	<0.5	<0.5	<0.5	<5.0	4.7	PACE	--	--	--	--
7/6/1994	--	n	41.25	13.77	--	27.48	<50	<0.5	<0.5	<0.5	<0.5	--	3.9	PACE	--	--	--	--
10/7/1994	--	n	41.25	14.60	--	26.65	<50	<0.5	<0.5	<0.5	<0.5	<5.0	3.0	PACE	--	--	--	--
1/27/1995	--		41.25	8.47	--	32.78	<50	<0.5	<0.5	<0.5	<1	--	2.5	ATI	--	--	--	--
3/30/1995	--		41.25	8.19	--	33.06	<50	<0.50	<0.50	<0.50	<1.0	--	8.4	ATI	--	--	--	--
6/20/1995	--		41.25	11.25	--	30.00	<50	<0.50	<0.50	<0.50	<1.0	--	8.1	ATI	--	--	--	--
10/3/1995	--		41.25	14.68	--	26.57	<50	<0.50	<0.50	<0.50	<1.0	<5.0	6.0	ATI	--	--	--	--
12/6/1995	--		41.25	16.07	--	25.18	<50	<0.50	<0.50	<0.50	<1.0	46	5.4	ATI	--	--	--	--
3/21/1996	--		41.25	9.60	--	31.65	<50	<0.5	<1	<1	<1	<10	8.0	SPL	--	--	--	--
6/21/1996	--		41.25	10.86	--	30.39	<50	<0.5	<1	<1	<1	<10	7.8	SPL	--	--	--	--
9/6/1996	--		41.25	11.52	--	29.73	--	--	--	--	--	--	--	--	--	--	--	--
9/9/1996	--	k	41.25	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	20/21	7.3	SPL	--	--	--	--
12/19/1996	--		41.25	10.43	--	30.82	<50	<0.5	<1.0	<1.0	<1.0	<10	7.3	SPL	--	--	--	--
3/17/1997	--		41.25	9.87	--	31.38	--	--	--	--	--	--	--	--	--	--	--	--
8/12/1997	--		41.25	11.44	--	29.81	--	--	--	--	--	--	--	--	--	--	--	--
12/10/1997	--		41.25	10.44	--	30.81	--	--	--	--	--	--	--	--	--	--	--	--
3/12/1998	--		41.25	9.50	--	31.75	--	--	--	--	--	--	--	--	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
MW-9 Cont.																		
6/23/1998	--		41.25	10.06	--	31.19	--	--	--	--	--	--	--	--	--	--	--	--
3/31/1999	--		41.25	9.06	--	32.19	--	--	--	--	--	--	--	--	--	--	--	--
8/25/1999	--		41.25	12.00	--	29.25	--	--	--	--	--	--	--	--	--	--	--	--
3/9/2000	--		41.25	10.57	--	30.68	--	--	--	--	--	--	--	--	--	--	--	--
3/8/2001	--		41.25	9.73	--	31.52	--	--	--	--	--	--	--	--	--	--	--	--
3/8/2002	--		41.25	11.89	--	29.36	--	--	--	--	--	--	--	--	--	--	--	--
3/18/2002	--		41.25	9.68	--	31.57	--	--	--	--	--	--	--	--	--	--	--	--
3/11/2003	--		41.25	9.21	--	32.04	--	--	--	--	--	--	--	--	--	--	--	--
03/09/2004	--		41.25	10.99	--	30.26	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	6.6	--	--	--
09/17/2004	--		41.25	13.35	--	27.90	--	--	--	--	--	--	--	--	--	--	--	--
03/07/2005	P		41.25	8.94	--	32.31	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	6.9	--	--	--
09/06/2005	--		44.06	11.99	--	32.07	--	--	--	--	--	--	--	--	--	--	--	--
03/06/2006	P	u	44.06	8.26	--	35.80	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	6.9	--	--	--
9/5/2006	--		44.06	11.63	--	32.43	--	--	--	--	--	--	--	--	--	--	--	--
3/5/2007	P		44.06	9.33	--	34.73	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.22	TAMC	7.03	--	--	--
9/7/2007	--		44.06	12.28	--	31.78	--	--	--	--	--	--	--	--	--	--	--	--
3/6/2008	P		44.06	10.11	--	33.95	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.72	CEL	6.90	--	--	--
9/3/2008	--		44.06	13.49	--	30.57	--	--	--	--	--	--	--	--	--	--	--	--
3/4/2009	P		44.06	8.15	--	35.91	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.03	CEL	6.84	--	--	--
9/30/2009	--	**x**	**41.25**	**12.98**	--	**28.27**	--	--	--	--	--	--	--	--	--	--	--	--
MW-10																		
6/16/2009	--	x	39.78	8.60	0.01	31.19	--	--	--	--	--	--	--	--	--	--	--	--
7/22/2009	--		**39.78**	**9.68**	**0.01**	**30.11**	--	--	--	--	--	--	--	--	--	--	--	--
8/6/2009	--		**39.78**	**9.48**	--	**30.30**	--	--	--	--	--	--	--	--	--	--	--	--
9/30/2009	--		**39.78**	**9.69**	**0.01**	**30.10**	--	--	--	--	--	--	--	--	--	--	--	--
MW-11																		
9/30/2009	**P**	**x**	**40.04**	**10.55**	--	**29.49**	**30,000**	**850**	**1,400**	**1,000**	**3,700**	**27**	--	**CEL**	**7.09**	--	--	--
MW-12																		
9/30/2009	--	**x**	**40.32**	**11.02**	**0.02**	**29.32**	--	--	--	--	--	--	--	--	--	--	--	--

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

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/ TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
QC-2																		
10/8/1992	--	l	41.25	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
12/31/1992	--	l	41.25	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
4/21/1993	--	l, n	41.25	--	--	--	--	--	--	--	--	--	--	PACE	--	--	--	--
7/7/1993	--	l, n	41.25	--	--	--	<50	<0.5	<0.5	<0.5	0.6	--	--	PACE	--	--	--	--
9/21/1993	--	l, n	41.25	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--	--
12/23/1993	--	l	41.25	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--	--
4/7/1994	--	l	41.25	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--	--
7/6/1994	--	l	41.25	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--	--
10/7/1994	--	l	41.25	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--	--
1/27/1995	--	l	41.25	--	--	--	<50	<0.5	0.5	<0.5	<1	--	--	ATI	--	--	--	--
3/30/1995	--	l	41.25	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	ATI	--	--	--	--
6/20/1995	--	l	41.25	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	ATI	--	--	--	--
10/3/1995	--	l	41.25	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	--	--	--
12/6/1995	--	l	41.25	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	--	--	--
3/21/1996	--	l	41.25	--	--	--	<50	<0.5	<1	<1	<1	<10	--	SPL	--	--	--	--
6/21/1996	--	l	41.25	--	--	--	<50	<0.5	<1	<1	<1	<10	--	SPL	--	--	--	--

ABBREVIATIONS & SYMBOLS:
--/--- = Not analyzed/applicable/measured/available
< = Not detected at or above specified laboratory reporting limit
DO = Dissolved oxygen
DTW = Depth to water in ft bgs
ft bgs = Feet below ground surface
GRO = Gasoline range organics, range C4-C12
GWE = Groundwater elevation in ft
mg/L = Milligrams per liter
MTBE = Methyl tert-butyl ether
ND = Not detected
NP = Well not purged prior to sampling
P = Well purged prior to sampling
TOC = Top of casing elevation in ft
TPH-g = Total petroleum hydrocarbons as gasoline
µg/L = Micrograms per liter
ANA = Anametrix, Inc.
PACE = Pace, Inc.
ATI = Analytical Technologies, Inc.
CEI = Ceimic Corporation
SPL = Southern Petroleum Laboratories
SEQ/SEQM= Sequoia Analytical/Sequoia Analytical - Morgan Hill (Laboratories)
SUP = Superior Analytical Laboratory

FOOTNOTES:
(a) Free product in well.
(c) Well destroyed during tank removal in November 1990.
(d) Methylene chloride.
(e) 1,2-Dichloroethane.
(f) Well inaccessible.
(g) Sample collected from MW-2 for TPH-d analysis received in laboratory 7 days after collection; sample exceeded EPA recommended holding time for TPH-d on a water matrix.
(h) Blind duplicate.
(i) TOC lowered.
(j) A copy of the documentation for this data is included in Appendix C of Alisto report 10-014-07-001.
(k) EPA Methods 8020/8260 used.
(l) Travel blank.
(n) A copy of the documentation for this data is included in the Blaine Tech Services, Inc. report 020308-DW-2. The data for samples taken on April 21, 1993, have been destroyed. No chromatograms could be located for the samples taken on: July 7, 1993, for well MW-2 and TB; September 21, 1993, for all wells MW-3, MW-4, MW-6, MW-7, MW-8, MW-9, the DUP and TB; December 23, 1993, for wells MW-2 and MW-3; and July 6, 1994, for wells MW-2, MW-4, MW-6, and MW-9.
(p) Well not sampled due to damage during site construction.
(q) Sheen in well.
(r) Well dry.
(s) The hydrocarbon result for GRO was partly due to individual peaks in the quantification range.
(t) MS and/or MSD were below the acceptance limits for MTBE. Matrix interference was suspected.
(u) Possible high bias for benzene due to CCV falling outside acceptance criteria.
(v) The sample concentration is greater than four times the spike concentration.
(w) Insufficient water to sample.
(x) Well surveyed 4/13/2009.
(y) Quantitation of unknown hydrocarbon(s) in sample based on gasoline.

NOTES:
GWE adjusted assuming a specific gravity of 0.75 for free product.
Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. TPH-g has been changed to GRO. The resulting data may be impacted by the potential inclusion of non-TPHg analytes within the requested fuel range resulting in a higher concentration being reported.

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 #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-2									
12/09/2003	<100	<20	24	<0.50	<0.50	<0.50	--	--	
03/09/2004	<100	<20	27	<0.50	<0.50	<0.50	<0.50	<0.50	
09/17/2004	<100	<20	21	<0.50	<0.50	<0.50	<0.50	<0.50	
9/5/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-3									
12/09/2003	<100	<20	6.4	<0.50	<0.50	<0.50	--	--	
03/09/2004	<100	<20	6.9	<0.50	<0.50	<0.50	<0.50	<0.50	
03/07/2005	<100	<20	5.1	<0.50	<0.50	<0.50	<0.50	<0.50	
03/06/2006	<300	<20	6.9	<0.50	<0.50	<0.50	<0.50	<0.50	
3/5/2007	<300	<20	5.4	<0.50	<0.50	<0.50	<0.50	<0.50	
3/6/2008	<300	<10	4.2	<0.50	<0.50	<0.50	<0.50	<0.50	
3/4/2009	<300	<10	4.9	<0.50	<0.50	<0.50	<0.50	<0.50	
9/30/2009	**<300**	**<10**	**6.8**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-4									
12/09/2003	<500	<100	130	<2.5	<2.5	2.7	--	--	
03/09/2004	<100	<20	35	<0.50	<0.50	<0.50	<0.50	<0.50	
09/17/2004	<500	<100	140	<2.5	<2.5	2.6	<2.5	<2.5	
03/07/2005	<100	<20	42	<0.50	<0.50	0.56	<0.50	<0.50	
09/06/2005	<150	<10	180	<0.50	<0.50	2.8	<0.50	<0.50	a
03/06/2006	<600	<40	110	<1.0	<1.0	1.4	<1.0	<1.0	
9/5/2006	<600	<40	190	<1.0	<1.0	1.7	<1.0	<1.0	
3/5/2007	<300	<20	13	<0.50	<0.50	<0.50	<0.50	<0.50	
9/7/2007	<300	<20	130	<0.50	<0.50	1.7	<0.50	<0.50	b (MTBE)
3/6/2008	<300	14	170	<0.50	<0.50	2.1	<0.50	<0.50	
9/3/2008	<3,000	<100	150	<5.0	<5.0	<5.0	<5.0	<5.0	
3/4/2009	<3,000	<100	110	<5.0	<5.0	<5.0	<5.0	<5.0	
9/30/2009	**<1,200**	**<40**	**140**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	
MW-5									
03/09/2004	<10,000	<2,000	<50	<50	<50	<50	96	<50	
03/06/2006	<30,000	<2,000	<50	60	<50	<50	<50	<50	

Table 2. Summary of Fuel Additives Analytical Data

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-5 Cont.									
3/5/2007	<30,000	<2,000	<50	57	<50	<50	<50	<50	
MW-6									
12/09/2003	<100	<20	12	<0.50	<0.50	<0.50	--	--	
03/09/2004	<100	<20	10	<0.50	<0.50	<0.50	0.58	<0.50	
03/07/2005	<100	<20	5.8	<0.50	<0.50	<0.50	<0.50	<0.50	
03/06/2006	<300	<20	8.1	<0.50	<0.50	<0.50	<0.50	<0.50	
3/5/2007	<300	<20	5.6	<0.50	<0.50	<0.50	<0.50	<0.50	
3/6/2008	<300	<10	1.9	<0.50	<0.50	<0.50	<0.50	<0.50	
3/4/2009	<300	<10	2.8	<0.50	<0.50	<0.50	<0.50	<0.50	
9/30/2009	**<300**	**<10**	**4.4**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-7									
12/09/2003	<100	<20	8.7	<0.50	<0.50	<0.50	--	--	
03/09/2004	<100	<20	6.9	<0.50	<0.50	<0.50	1.2	<0.50	
09/17/2004	<100	<20	7.0	<0.50	<0.50	<0.50	<0.50	<0.50	
03/07/2005	<100	<20	7.2	<0.50	<0.50	<0.50	<0.50	<0.50	
09/06/2005	<150	30	16	0.60	<0.50	<0.50	<0.50	<0.50	
03/06/2006	<300	<20	8.3	<0.50	<0.50	<0.50	<0.50	<0.50	
9/5/2006	<1,500	<100	12	<2.5	<2.5	<2.5	<2.5	<2.5	
3/5/2007	<600	<40	7.6	<1.0	<1.0	<1.0	<1.0	<1.0	
9/7/2007	<300	<20	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	
3/6/2008	<600	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
9/3/2008	<300	17	5.5	<0.50	<0.50	<0.50	<0.50	<0.50	
3/4/2009	<300	12	3.4	<0.50	<0.50	<0.50	<0.50	<0.50	
9/30/2009	**<300**	**<10**	**3.3**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-8									
03/09/2004	<100	<20	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/07/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/06/2006	<300	<20	0.59	<0.50	<0.50	<0.50	<0.50	<0.50	
3/5/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
3/6/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data

Station #11109, 4280 Foothill Blvd., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-8 Cont.									
3/4/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-9									
03/09/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/07/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/06/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
3/5/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
3/6/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
3/4/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-11									
9/30/2009	**<6,000**	**<200**	**27**	**<10**	**<10**	**<10**	**<10**	**<10**	

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

FOOTNOTES:
(a) MS and/or MSD below acceptance limits for MTBE. Matrix interference suspected.
(b) The sample concentration is greater than four times the spike concentration.

NOTES:
All fuel oxygenate compounds analyzed using EPA Method 8260B.

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

Table 3. Historical Ground-Water Flow Direction and Gradient

Station #11109, 4280 Foothill Blvd., Oakland, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
3/6/2006	Southwest	0.05
9/5/2006	Southwest	0.05
2/21/2007	Southwest	0.02
9/7/2007	Southwest	0.03
3/6/2008	Southwest	0.01
9/3/2008	Southwest	0.006
3/4/2009	Southwest	0.02
9/30/2009	**Northwest**	**0.07**

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

Table 4
Summary of Free Product Removal
Former BP Service Station #11109
4280 Foothill Boulevard, Oakland, California

Well ID	Date of Removal Event	DTW (feet)	Product Thickness (feet)	Product Removed (gallons)	Cumulative Product Removed (gallons)
MW-5	11/5/1992	--	--	0.200	0.200
MW-5	2/25/1993	--	--	0.100	0.300
MW-5	3/18/1993	--	--	0.100	0.400
MW-5	4/13/1993	--	--	0.100	0.500
MW-5	4/23/1993	--	--	13.0*	13.500
MW-5	5/24/1993	--	--	0.100	13.600
MW-5	10/14/1993	--	--	0.300	13.900
MW-5	11/10/1993	--	--	0.400	14.300
MW-5	12/23/1993	--	--	0.400	14.700
MW-5	8/12/1997	12.18	0.22	--	14.700
MW-5	12/10/1997	10.78	0.06	--	14.700
MW-5	3/12/1998	10.11	0.22	0.200	14.900
MW-5	6/23/1998	10.20	0.02	<0.050	14.900
MW-5	9/11/1998	11.61	0.04	0.100	15.000
MW-5	8/25/1999	14.69	0.38	0.070	15.070
MW-5	3/9/2000	14.83	0.60	0.400	15.470
MW-5	7/14/2003	12.72	0.03	0.019	15.489
MW-5	8/25/2003	14.04	0.00	0.000	15.489
MW-5	9/25/2003	14.38	0.08	0.052	15.542
MW-5	10/3/2003	12.15	0.06	0.040	15.582
MW-5	11/12/2003	12.74	0.19	0.120	15.702
MW-5	12/9/2003	11.44	0.03	0.040	15.742
MW-5	2/2/2004	6.47	0.04	0.030	15.772
MW-5	2/9/2004	10.61	0.04	0.030	15.802
MW-5	3/9/2004	7.91	--	--	15.802
MW-5	4/13/2004	9.68	0.28	0.200	16.002
MW-5	5/5/2004	11.93	Sheen	--	16.002
MW-5	6/3/2004	12.60	Sheen	--	16.002
MW-5	7/2/2004	11.11	0.10	0.060	16.062
MW-5	8/31/2004	12.80	0.05	0.132	16.194
MW-5	9/17/2004	12.13	0.15	--	16.194
MW-5	10/25/2004	10.66	0.26	0.170	16.364
MW-5	11/8/2004	9.98	0.02	0.020	16.384
MW-5	12/15/2004	8.76	0.01	0.010	16.394
MW-5	1/13/2005	7.12	--	--	16.394
MW-5	2/1/2005	8.10	0.01	0.007	16.400
MW-5	3/7/2005	8.62	0.02	0.013	16.413
MW-5	4/29/2005	9.39	--	--	16.413
MW-5	5/12/2005	7.51	0.01	0.007	16.420
MW-5	6/23/2005	7.70	--	--	16.420
MW-5	7/2/2005	10.81	--	--	16.420
MW-5	8/24/2005	10.53	--	--	16.420
MW-5	9/6/2005	11.16	0.18	0.119	16.539
MW-5	1/27/2006	9.02	0.02	0.013	16.433
MW-5	2/15/2006	8.38	0.02	0.013	16.446
MW-5	3/6/2006	8.60	Sheen	--	16.446

Table 4
Summary of Free Product Removal
Former BP Service Station #11109
4280 Foothill Boulevard, Oakland, California

Well ID	Date of Removal Event	DTW (feet)	Product Thickness (feet)	Product Removed (gallons)	Cumulative Product Removed (gallons)
MW-5	4/21/2006	8.02	0.27	0.251	16.697
MW-5	5/30/2006	9.13	0.07	0.045	16.742
MW-5	6/27/2006	9.49	0.09	0.058	16.801
MW-5	7/31/2006	10.08	0.08	0.052	16.853
MW-5	8/28/2006	10.75	0.09	0.059	16.911
MW-5	9/5/2006	6.16	0.03	0.020	16.931
MW-5	10/1/2006	--	--	--	16.931
MW-5	11/1/2006	--	--	--	16.931
MW-5	12/1/2006	--	--	--	16.931
MW-5	1/1/2007	--	--	--	16.931
MW-5	2/1/2007	--	--	--	16.931
MW-5	3/5/2007	8.34	Sheen	--	16.931
MW-5	4/1/2007	--	--	--	16.931
MW-5	5/1/2007	--	--	--	16.931
MW-5	6/1/2007	--	--	--	16.931
MW-5	7/1/2007	--	--	--	16.931
MW-5	8/1/2007	--	--	--	16.931
MW-5	9/7/2007	15.15	0.15	--	16.931
MW-5	9/18/2007	15.42	0.02	4.00*	20.931
MW-5	10/17/2007	12.50	0.35	5.5*	26.431
MW-5	11/8/2007	13.20	0.40	5.0*	31.431
MW-5	12/12/2007	12.25	0.52	3.5*	34.931
MW-5	1/14/2008	10.30	0.49	5.0*	39.931
MW-5	2/27/2008	13.22	0.12	4.0*	43.931
MW-5	3/6/2008	12.90	0.14	3.0*	46.931
MW-5	4/1/2008	9.52	0.07	4.0*	50.931
MW-5	5/20/2008	8.68	0.07	7.0*	57.931
MW-5	6/18/2008	10.46	0.18	0.00	57.931
MW-5	7/16/2008	11.25	0.00	0.0375	57.968
MW-5	8/13/2008	--	--	2.125*	60.093
MW-5	9/3/2008	12.90	0.99	3.0*	63.093
MW-5	9/15/2008	12.75	0.15	4.0*	67.093
MW-5	10/15/2008	13.43	0.50	5.0*	72.093
MW-5	11/20/2008	13.55	0.63	2.625*	74.718
MW-5	12/18/2008	12.62	0.37	3.625*	78.343
MW-5	1/14/2009	12.43	0.11	4.0*	82.343
MW-5	2/17/2009	8.80	0.33	4.0*	86.343
MW-5	3/4/2009	8.45	0.16	4.0*	90.343
MW-5	4/8/2009	9.05	0.22	6.0*	96.343
MW-5	5/11/2009	9.10	0.32	8.0*	104.343
MW-5	6/16/2009	9.15	0.02	5.5*	109.843
MW-10	6/16/2009	8.60	0.01	2.5*	112.343
MW-5	**7/22/2009**	**9.33**	**0.12**	**6.0***	**118.343**
MW-10	**7/22/2009**	**9.68**	**0.01**	**3.0***	**121.343**
MW-5	**8/6/2009**	**10.05**	**0.01**	**5.0***	**126.343**
MW-5	**9/30/2009**	**10.55**	**0.06**	**8.0***	**134.343**

Table 4
Summary of Free Product Removal
Former BP Service Station #11109
4280 Foothill Boulevard, Oakland, California

Well ID	Date of Removal Event	DTW (feet)	Product Thickness (feet)	Product Removed (gallons)	Cumulative Product Removed (gallons)
MW-10	**9/30/2009**	**9.69**	**0.01**	**3.0***	**137.343**
MW-12	**9/30/2009**	**11.01**	**0.02**	**4.0***	**141.343**
				FP Removed this Quarter:	**29.00***

ABBREVIATIONS & SYMBOLS:
-- = Not available/applicable/measured/calculated
* = FP/water mixture

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

APPENDIX A

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

STRATUS
ENVIRONMENTAL, INC.

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

October 15, 2009

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

Re: Monthly Gauging and Groundwater Sampling Data Package, Former BP Service Station No. 11109, located at 4280 Foothill, Oakland, California.

General Information

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

Sampling Date: July 22, 2009

On-Site Supplier Representative: Vince Zalutka

Unusual Field Conditions: None noted.

Scope of Work Performed: Monthly gauging and free product bailing (MW-5 and MW-10). Approximately 9-gallons of free product and groundwater mixture was bailed and stored in a DOT approved 55-gallon drums.

Variations from Work Scope: None noted.

Sampling Date: August 6, 2009

On-Site Supplier Representative: Vince Zalutka

Unusual Field Conditions: None noted.

Scope of Work Performed: Monthly gauging and free product bailing (MW-5). Approximately 5-gallons of free product and groundwater mixture was bailed and stored in a DOT approved 55-gallon drums.

Variations from Work Scope: None noted.

Sampling Date: September 30, 2009

On-Site Supplier Representative: Tony Hill

Unusual Field Conditions: None noted.

Scope of Work Performed: Groundwater sampling

Variations from Work Scope: Well MW-2 was dry. Wells MW-3, MW-4, MW-6, MW-7, and MW-11 purged dry before three casing volumes were removed. Approximately 15-gallons of free product and groundwater mixture was bailed from wells MW-5, MW-10, and MW-12 and stored in a DOT approved 55-gallon drums.

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

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

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Jay R. Johnson, P.G.
Project Manager

Attachments:

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

cc: Mr. Charles Carmel, BP/ARCO

STRATUS ENVIRONMENTAL, INC.

Site Address 4280 Foothill
City Oakland
Sampled by: Vince Z
Signature Vince Zalutka

Site Number 1109
Project Number
Project PM
DATE 7-22-09

0755 - 0925

Water Level Data					Purge Volume Calculations					Purge Method				Sample Record			Field Data
Well ID	Time	Depth to Product (feet)	Depth to Water (feet)	Total Depth (feet)	Water column (feet)	Diameter (inches)	Multiplier	3 casing volumes (gallons)	Actual water purged (gallons)	No Purge	Bailer	Pump	other	DTW at sample time (feet)	Sample I.D	Sample Time	DO (mg/L)
MW-5	0845	9.21	9.33			4		~~6~~	6		X		PRO MIX				
MW-10	0820	9.67	9.68			4		~~3~~	3		X						
				1-	Drum @ SITE				(3/4 Full)								

1580 - 676 - 6005

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

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

CALIBRATION DATE
pH
Conductivity
DO

10-02-2009 16:18 ZALUTKA 19163721441

PAGE1

STRATUS ENVIRONMENTAL, INC.

Site Address: Foothill
City: OAKLAND
Sampled by: Vince Zalutka
Signature: V. Zalutka

Site Number: 11109
Project Number:
Project PM:
DATE: 8-06-09

Water Level Data					Purge Volume Calculations					Purge Method				Sample Record			Field Data
Well ID	Time	Depth to Product (feet)	Depth to Water (feet)	Total Depth (feet)	Water column (feet)	Diameter (inches)	Multiplier	3 casing volumes (gallons)	Actual water purged (gallons)	No Purge	Bailer	Pump	other	CTW at sample time (feet)	Sample I.D.	Sample Time	DO (mg/L)
mw-5		10.04	10.05				5 gal mix				X						
mw-10		N/A	9.48	—	—	—	—	—	—					—			
							*										
				Drum is 5/6 Full													
				* need new drum													

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

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

CALIBRATION DATE:
pH
Conductivity
DO

STRATUS ENVIRONMENTAL, INC.

Site Address 4280 Foothill Blvd
City Oakland, CA
Sampled by: AK
Signature

Site Number Arco 11109
Project Number E-11109-04
Project PM J. Johnson
DATE 9/30/09

Water Level Data					Purge Volume Calculations					Purge Method				Sample Record			Field Data
Well ID	Time	Depth to Product (feet)	Depth to Water (feet)	Total Depth (feet)	Water column (feet)	Diameter (inches)	Multiplier	3 casing volumes (gallons)	Actual water purged (gallons)	No Purge	Bailer	Pump	other	DTW at sample time (feet)	Sample I.D	Sample Time	DO (mg/L)
MW-2	0625		DRY	12.76	–	2	.5	–	–	X				–	MW-2	–	–
3	0620		11.60	31.30	19.70	4	2	39.40	84	Dry @ 24		X		25.08	3	1015	
4	0607		16.48	26.63	10.15	4	2	20.30	10	Dry @ 10		X		17.62	4	0915	.08
5	0608	10.49	~~10.55~~	~~30.08~~	~~19.53~~	4	2	~~39.06~~	8 SPH		X	X		–	5	–	–
6	0613		16.83	34.35	17.52	4	2	35.04	18	Dry @ 18		X		27.62	6	0930	.10
7	0610		12.70	33.20	21.50	6	4.4	94.6	31	Dry @ 31		X		19.78	7	0910	.11
10	0612	9.68	9.69	–	–	4	2	–	3 SPH					–	10	–	–
11	0616		10.55	30.08	19.53	4	2	39.06	25	Dry @ 25		X		14.30	11	0925	
MW-12	0600	11.00	11.02		–	4	2	–	4 SPH					–	MW-12	–	–
MW-8	0605		14.92	29.35													
MW-9	0555		12.98	29.34													

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

2
21.5
4.4
80.0
8600
94.60

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

1 Drum 15gal
2 Locks

CALIBRATION DATE
pH AH 9/30/09
Conductivity
DO

T:\Forms

STRATUS ENVIRONMENTAL, INC.

Site Address 4280 Foothill Blvd.
City Oakland, CA
Site Sampled by TH

Site Number Arco 11109
Project No. E 11109-04
Project PM J Johnson
Date Sampled 9/30/09

Well ID MW-7
purge start time 0645 odor

	Temp C	pH	cond	gallons
time	18.5	7.44	519	Ø
time	21.8	7.32	517	20
time	DRY @ 31			
time	20.0	6.94	508	31

purge stop time 0707

Well ID MW-6
purge start time 0710 odor

	Temp C	pH	cond	gallons
time	19.6	7.20	499	Ø
time	20.5	7.09	481	10
time	DRY @ 18			
time	19.4	7.00	508	18

pugre stop time 0728

Well ID MW-4 0815
purge start time 0730 odor

	Temp C	pH	cond	gallons
time	21.1	6.81	512	Ø
time	Dry @ 10			
time	19.7	6.82	522	10
time				

purge stop time 0737

Well ID MW-11
purge start time 0740 odor

	Temp C	pH	cond	gallons
time	20.3	6.88	788	Ø
time	22.0	7.07	783	19
time	Dry @ 25			
time	20.1	7.09	800	25

purge stop time 0755

Well ID MW-3 1015
purge start time 0757 odor

	Temp C	pH	cond	gallons
time	22.7	7.14	607	Ø
time	22.5	7.12	597	20
time	DRY @ 24			
time	20.6	7.12	629	24

purge stop time 0815

Well ID
purge start time

	Temp C	pH	cond	gallons
time				
time				
time				
time				

purge stop time

Well ID
purge start time

	Temp C	pH	cond	gallons
time				
time				
time				
time				

purge stop time

Well ID
purge start time

	Temp C	pH	cond	gallons
time				
time				
time				
time				

purge stop time

WELLHEAD OBSERVATION FORM

STRATUS ENVIRONMENTAL, INC.

Site Name/Number: Arco 11109 *Date:* 9/30/09 *Technican:* A.H.

Well I.D.	Box in Good Condition? X = Yes Blank = No	Well lid secure? X=Yes If not call PM prior to departure	Lock Missing? X = Yes (replaced) Blank = No	Water in Wellbox? X = Yes Blank = No	Water Level Relative to Cap? A = Above cap B = Below cap L = Level w/cap	Well Cap? I = Intact M = Missing or Compromised (replaced)	Bolts Missing? # of missing/ Total # *	Bolts Stripped? # of stripped/ Total # *	Bolt Holes Stripped? # of stripped/ Total # *	Cracked or Broken Lid? X = Yes Blank = No *	Cracked or Broken Box? X = Yes Blank = No *	Grout Level more than 1ft below TOC? X = Yes Blank = No *	Additional Comments (such as missing lid, concrete needs replacement, or other - explain)
MW-4									2/2				bolts broke in bolt holes, Locks Replaced
MW-11			X-1										
MW-10			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: 1 Plastic: _____

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

15 gal LPH (Haz Waste)

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

Stratus 09/30

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.)

- All other wells in good shape

(updated 7-09-09, CH)

NO. [illegible]

NON-HAZARDOUS WASTE DATA FORM

1. BEST #

GENERATOR

2. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Generator's Phone:

3. Transporter 1 Company Name

Phone #

4. Transporter 2 Company Name

Phone #

5. Designated Facility Name and Site Address

Phone #

6. Waste Shipping Name and Description	7. Containers No.	7. Containers Type	8. Total Quantity	9. Unit Wt/Vol	10. Profile No.
A.			108		
B.					
C.					
D.					

11. Special Handling Instructions and Additional Information

12. GENERATOR'S CERTIFICATION: I certify the materials described above on this data form are non-hazardous.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

TRANSPORTER

13. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | 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

GENERATOR

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

Page 1 of 1

BP/ARC Project Name: ARCO 11109

BP/ARC Facility No: 11109

Req Due Date (mm/dd/yy): STD-TAT

Rush TAT: Yes ___ No X

Lab Work Order Number:

Lab Name:	Cal Science
Lab Address:	7440 Lincoln Way
Lab PM:	Richard Villafania
Lab Phone:	714-895-5494 / 714-895-7501 (fax)
Lab Shipping Accnt:	
Lab Bottle Order No:	
Other Info:	
BP/ARC EBM:	Paul Supple
EBM Phone:	925-275-3506
EBM Email:	paul.supple@bp.com

BP/ARC Facility Address:	4280 Foothill
City, State, ZIP Code:	Oakland, CA
Lead Regulatory Agency:	Alameda County
California Global ID No.:	T0600100217
Enfos Proposal No:	000GK-0004
Accounting Mode:	Provision X OOC-BU ___ OOC-RM ___
Stage: Select	Activity: Monitor

Consultant/Contractor:	Stratus Environmental
Consultant/Contractor Project No:	E11109-QM/O&M
Address:	3330 Cameron Park Dr., Cameron Park, CA 95682
Consultant/Contractor PM:	Jay Johnson
Phone:	530-676-6000 / 530-676-6005 (fax)
Email EDD To:	chuff@stratusinc.net
Invoice To:	BP/ARC ___ Contractor ___

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

Lab No.	Sample Description	Date	Time	Soil / Solid	Water / Liquid	Air / Vapor		Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol		GRO by 8015	BTEX/5oxy*	EDB/1,2-DCA*	Ethanol*	Comments
	MW-3	9/30/09	1015		X			6				X			X	X	X	X	*by 8260
	MW-4	9/30/09	0815		X			6				X			X	X	X	X	
	MW-6	9/30/09	0730		X			6				X			X	X	X	X	
	MW-7	9/30/09	0710		X			6				X			X	X	X	X	
	MW-11	9/30/09	0925		X			6				X			X	X	X	X	
	TB-11109-09302009							2											ON Hold

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

Sampler's Name: A. Hill

Sampler's Company: Stratus

Shipment Method: GSO Ship Date: 9/30/09

Shipment Tracking No:

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
[signature]	9/30/09	1500			

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

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: ____°F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Calscience
Environmental
Laboratories, Inc.

October 14, 2009

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

Subject: **Calscience Work Order No.: 09-10-0029**
Client Reference: ARCO 11109

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 10/1/2009 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.
3330 Cameron Park Drive, Suite 550
Cameron Park, CA 95682-8861

Date Received: 10/01/09
Work Order No: 09-10-0029
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: ARCO 11109

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-3	**09-10-0029-1-D**	**09/30/09 10:15**	**Aqueous**	**GC 1**	**10/02/09**	**10/02/09 20:09**	**091002B01**

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			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4	**09-10-0029-2-D**	**09/30/09 08:15**	**Aqueous**	**GC 1**	**10/02/09**	**10/02/09 21:13**	**091002B01**

Comment(s): -LW = Quantitation of unknown hydrocarbon(s) in sample based on gasoline.

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	240	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	82	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-6	**09-10-0029-3-D**	**09/30/09 09:30**	**Aqueous**	**GC 1**	**10/02/09**	**10/02/09 21:45**	**091002B01**

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			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-7	**09-10-0029-4-D**	**09/30/09 09:10**	**Aqueous**	**GC 1**	**10/02/09**	**10/02/09 22:16**	**091002B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	1200	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	98	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	10/01/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-10-0029
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: ARCO 11109

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-11	**09-10-0029-5-D**	**09/30/09 09:25**	**Aqueous**	**GC 1**	**10/02/09**	**10/02/09 23:20**	**091002B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	30000	1000	20		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	93	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-673**	**N/A**	**Aqueous**	**GC 1**	**10/02/09**	**10/02/09 16:26**	**091002B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	REC (%)	Control Limits		Qual	
1,4-Bromofluorobenzene	77	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	10/01/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-10-0029
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: ARCO 11109			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-3	**09-10-0029-1-A**	**09/30/09 10:15**	**Aqueous**	**GC/MS BB**	**10/09/09**	**10/10/09 06:42**	**091009L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	6.8	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	98	80-127		
Toluene-d8	105	80-120			1,4-Bromofluorobenzene	94	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-4	**09-10-0029-2-A**	**09/30/09 08:15**	**Aqueous**	**GC/MS BB**	**10/09/09**	**10/10/09 07:11**	**091009L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	2.0	4		Methyl-t-Butyl Ether (MTBE)	140	2.0	4	
1,2-Dibromoethane	ND	2.0	4		Tert-Butyl Alcohol (TBA)	ND	40	4	
1,2-Dichloroethane	ND	2.0	4		Diisopropyl Ether (DIPE)	ND	2.0	4	
Ethylbenzene	ND	2.0	4		Ethyl-t-Butyl Ether (ETBE)	ND	2.0	4	
Toluene	ND	2.0	4		Tert-Amyl-Methyl Ether (TAME)	ND	2.0	4	
Xylenes (total)	ND	2.0	4		Ethanol	ND	1200	4	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	112	80-128			Dibromofluoromethane	102	80-127		
Toluene-d8	105	80-120			1,4-Bromofluorobenzene	93	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-6	**09-10-0029-3-B**	**09/30/09 09:30**	**Aqueous**	**GC/MS BB**	**10/09/09**	**10/10/09 07:39**	**091009L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	4.4	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	108	80-128			Dibromofluoromethane	100	80-127		
Toluene-d8	105	80-120			1,4-Bromofluorobenzene	92	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: 10/01/09
Work Order No: 09-10-0029
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: ARCO 11109

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-7	**09-10-0029-4-A**	**09/30/09 09:10**	**Aqueous**	**GC/MS BB**	**10/09/09**	**10/10/09 08:08**	**091009L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	44	2.0	4		Methyl-t-Butyl Ether (MTBE)	3.3	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	0.74	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	1.0	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	0.79	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	110	80-128			Dibromofluoromethane	101	80-127		
Toluene-d8	107	80-120			1,4-Bromofluorobenzene	92	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW-11	**09-10-0029-5-B**	**09/30/09 09:25**	**Aqueous**	**GC/MS BB**	**10/10/09**	**10/10/09 18:02**	**091010L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	850	50	100		Methyl-t-Butyl Ether (MTBE)	27	10	20	
1,2-Dibromoethane	ND	10	20		Tert-Butyl Alcohol (TBA)	ND	200	20	
1,2-Dichloroethane	ND	10	20		Diisopropyl Ether (DIPE)	ND	10	20	
Ethylbenzene	1000	50	100		Ethyl-t-Butyl Ether (ETBE)	ND	10	20	
Toluene	1400	50	100		Tert-Amyl-Methyl Ether (TAME)	ND	10	20	
Xylenes (total)	3700	50	100		Ethanol	ND	6000	20	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	100	80-128			Dibromofluoromethane	99	80-127		
Toluene-d8	105	80-120			1,4-Bromofluorobenzene	92	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-1,104**	**N/A**	**Aqueous**	**GC/MS BB**	**10/09/09**	**10/09/09 23:31**	**091009L02**

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	114	80-128			Dibromofluoromethane	100	80-127		
Toluene-d8	107	80-120			1,4-Bromofluorobenzene	90	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: 10/01/09
Work Order No: 09-10-0029
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: ARCO 11109

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-1,105**	**N/A**	**Aqueous**	**GC/MS BB**	**10/10/09**	**10/10/09 12:17**	**091010L01**

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	107	80-120			1,4-Bromofluorobenzene	90	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-1,106**	**N/A**	**Aqueous**	**GC/MS BB**	**10/12/09**	**10/12/09 11:46**	**091012L01**

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	112	80-128			Dibromofluoromethane	101	80-127		
Toluene-d8	106	80-120			1,4-Bromofluorobenzene	89	68-120		

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.	Date Received: 10/01/09
3330 Cameron Park Drive, Suite 550	Work Order No: 09-10-0029
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8015B (M)

Project ARCO 11109

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-10-0129-7	**Aqueous**	**GC 1**	**10/02/09**	**10/02/09**	**091002S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	101	105	38-134	4	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 10/01/09
Work Order No: 09-10-0029
Preparation: EPA 5030B
Method: EPA 8260B

Project ARCO 11109

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-10-0726-3	Aqueous	GC/MS BB	10/09/09	10/10/09	091009S02

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	104	76-124	0	0-20	
Carbon Tetrachloride	102	105	74-134	2	0-20	
Chlorobenzene	95	95	80-120	0	0-20	
1,2-Dibromoethane	88	91	80-120	3	0-20	
1,2-Dichlorobenzene	94	96	80-120	2	0-20	
1,1-Dichloroethene	82	86	73-127	5	0-20	
Ethylbenzene	92	90	78-126	1	0-20	
Toluene	102	101	80-120	1	0-20	
Trichloroethene	94	94	77-120	0	0-20	
Vinyl Chloride	118	117	72-126	1	0-20	
Methyl-t-Butyl Ether (MTBE)	102	107	67-121	4	0-49	
Tert-Butyl Alcohol (TBA)	123	123	36-162	0	0-30	
Diisopropyl Ether (DIPE)	103	105	60-138	2	0-45	
Ethyl-t-Butyl Ether (ETBE)	93	96	69-123	3	0-30	
Tert-Amyl-Methyl Ether (TAME)	95	97	65-120	2	0-20	
Ethanol	113	110	30-180	3	0-72	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	10/01/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-10-0029
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project ARCO 11109

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-10-0726-2	**Aqueous**	**GC/MS BB**	**10/10/09**	**10/10/09**	**091010S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	99	100	76-124	0	0-20	
Carbon Tetrachloride	98	101	74-134	3	0-20	
Chlorobenzene	91	91	80-120	0	0-20	
1,2-Dibromoethane	86	85	80-120	1	0-20	
1,2-Dichlorobenzene	92	91	80-120	1	0-20	
1,1-Dichloroethene	83	85	73-127	2	0-20	
Ethylbenzene	91	91	78-126	0	0-20	
Toluene	99	99	80-120	0	0-20	
Trichloroethene	92	91	77-120	1	0-20	
Vinyl Chloride	108	109	72-126	1	0-20	
Methyl-t-Butyl Ether (MTBE)	123	114	67-121	3	0-49	LM,AY
Tert-Butyl Alcohol (TBA)	120	111	36-162	3	0-30	
Diisopropyl Ether (DIPE)	96	96	60-138	1	0-45	
Ethyl-t-Butyl Ether (ETBE)	88	87	69-123	1	0-30	
Tert-Amyl-Methyl Ether (TAME)	92	90	65-120	2	0-20	
Ethanol	109	99	30-180	9	0-72	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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

Date Received: 10/01/09
Work Order No: 09-10-0029
Preparation: EPA 5030B
Method: EPA 8260B

Project ARCO 11109

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-10-0865-4	**Aqueous**	**GC/MS BB**	**10/12/09**	**10/12/09**	**091012S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	95	97	76-124	1	0-20	
Toluene	94	96	80-120	2	0-20	
Ethylbenzene	89	88	78-126	1	0-20	
Methyl-t-Butyl Ether (MTBE)	171	199	67-121	5	0-49	LM,AY
Tert-Butyl Alcohol (TBA)	111	102	36-162	8	0-30	
Diisopropyl Ether (DIPE)	92	92	60-138	0	0-45	
Ethyl-t-Butyl Ether (ETBE)	85	85	69-123	0	0-30	
Tert-Amyl-Methyl Ether (TAME)	91	91	65-120	0	0-20	
Ethanol	89	91	30-180	2	0-72	
1,1-Dichloroethene	73	76	73-127	4	0-20	
1,2-Dibromoethane	85	85	80-120	1	0-20	
1,2-Dichlorobenzene	90	90	80-120	0	0-20	
Carbon Tetrachloride	94	99	74-134	5	0-20	
Chlorobenzene	90	90	80-120	0	0-20	
Trichloroethene	87	89	77-120	2	0-20	
Vinyl Chloride	101	101	72-126	0	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:	09-10-0029
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: ARCO 11109

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-673	Aqueous	GC 1	10/02/09	10/02/09	091002B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	104	102	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: 09-10-0029
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8260B

Project: ARCO 11109

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-1,104	Aqueous	GC/MS BB	10/09/09	10/09/09	091009L02

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	111	105	80-120	73-127	5	0-20	
Carbon Tetrachloride	109	106	74-134	64-144	2	0-20	
Chlorobenzene	100	99	80-120	73-127	1	0-20	
1,2-Dibromoethane	99	98	79-121	72-128	1	0-20	
1,2-Dichlorobenzene	100	97	80-120	73-127	2	0-20	
1,1-Dichloroethene	95	91	78-126	70-134	4	0-28	
Ethylbenzene	100	98	80-120	73-127	2	0-20	
Toluene	111	105	80-120	73-127	5	0-20	
Trichloroethene	109	105	79-127	71-135	4	0-20	
Vinyl Chloride	130	121	72-132	62-142	7	0-20	
Methyl-t-Butyl Ether (MTBE)	113	106	69-123	60-132	6	0-20	
Tert-Butyl Alcohol (TBA)	100	99	63-123	53-133	1	0-20	
Diisopropyl Ether (DIPE)	108	101	59-137	46-150	6	0-37	
Ethyl-t-Butyl Ether (ETBE)	100	94	69-123	60-132	6	0-20	
Tert-Amyl-Methyl Ether (TAME)	107	100	70-120	62-128	7	0-20	
Ethanol	86	95	28-160	6-182	10	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: 09-10-0029
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8260B

Project: ARCO 11109

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-1,105	Aqueous	GC/MS BB	10/10/09	10/10/09	091010L01

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	98	98	80-120	73-127	1	0-20	
Carbon Tetrachloride	96	97	74-134	64-144	2	0-20	
Chlorobenzene	93	91	80-120	73-127	2	0-20	
1,2-Dibromoethane	84	87	79-121	72-128	4	0-20	
1,2-Dichlorobenzene	92	91	80-120	73-127	1	0-20	
1,1-Dichloroethene	82	82	78-126	70-134	1	0-28	
Ethylbenzene	94	91	80-120	73-127	3	0-20	
Toluene	101	99	80-120	73-127	1	0-20	
Trichloroethene	92	90	79-127	71-135	3	0-20	
Vinyl Chloride	106	106	72-132	62-142	1	0-20	
Methyl-t-Butyl Ether (MTBE)	96	101	69-123	60-132	6	0-20	
Tert-Butyl Alcohol (TBA)	101	100	63-123	53-133	1	0-20	
Diisopropyl Ether (DIPE)	96	96	59-137	46-150	0	0-37	
Ethyl-t-Butyl Ether (ETBE)	88	91	69-123	60-132	4	0-20	
Tert-Amyl-Methyl Ether (TAME)	93	96	70-120	62-128	3	0-20	
Ethanol	88	90	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.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.	Date Received: N/A
3330 Cameron Park Drive, Suite 550	Work Order No: 09-10-0029
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8260B

Project: ARCO 11109

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-1,106	**Aqueous**	**GC/MS BB**	**10/12/09**	**10/12/09**	**091012L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	106	111	80-120	73-127	4	0-20	
Carbon Tetrachloride	115	121	74-134	64-144	5	0-20	
Chlorobenzene	97	102	80-120	73-127	4	0-20	
1,2-Dibromoethane	94	103	79-121	72-128	8	0-20	
1,2-Dichlorobenzene	96	101	80-120	73-127	5	0-20	
1,1-Dichloroethene	90	96	78-126	70-134	5	0-28	
Ethylbenzene	96	100	80-120	73-127	4	0-20	
Toluene	106	111	80-120	73-127	5	0-20	
Trichloroethene	99	104	79-127	71-135	5	0-20	
Vinyl Chloride	118	122	72-132	62-142	3	0-20	
Methyl-t-Butyl Ether (MTBE)	99	111	69-123	60-132	12	0-20	
Tert-Butyl Alcohol (TBA)	108	106	63-123	53-133	2	0-20	
Diisopropyl Ether (DIPE)	98	104	59-137	46-150	7	0-37	
Ethyl-t-Butyl Ether (ETBE)	88	97	69-123	60-132	9	0-20	
Tert-Amyl-Methyl Ether (TAME)	95	103	70-120	62-128	8	0-20	
Ethanol	101	100	28-160	6-182	1	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: 09-10-0029

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: 09-10-0029

Qualifier	Definition
LR	LCS recovery below method control limits.
LW	Quantitation of unknown hydrocarbon(s) in sample based on gasoline.
LX	Quantitation of unknown hydrocarbon(s) in sample based on diesel.
MB	Analyte present in the method blank.
PC	Sample taken from VOA vial with air bubble > 6mm diameter.
PI	Primary and confirm results varied by > than 40% RPD.
RB	RPD exceeded method control limit; % recoveries within limits.
SG	A silica gel cleanup procedure was performed.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: ARCO 11109
BP/ARC Facility No: 11109
Req Due Date (mm/dd/yy): STD-TAT
Rush TAT: Yes ___ No X
Lab Work Order Number: 09-10-0029

Lab Name: Cal Science	BP/ARC Facility Address: 4280 Foothill	Consultant/Contractor: Stratus Environmental
Lab Address: 7440 Lincoln Way	City, State, ZIP Code: Oakland, CA	Consultant/Contractor Project No: E11109-QM/O&M
Lab PM: Richard Villafania	Lead Regulatory Agency: Alameda County	Address: 3330 Cameron Park Dr., Cameron Park, CA 95682
Lab Phone: 714-895-5494 / 714-895-7501 (fax)	California Global ID No.: T0600100217	Consultant/Contractor PM: Jay Johnson
Lab Shipping Accnt:	Enfos Proposal No: 000GK-0004	Phone: 530-676-6000 / 530-676-6005 (fax)
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ___ OOC-RM ___	Email EDD To: chuff@stratusinc.net
Other Info:	Stage: Select Activity: Monitor	Invoice To: BP/ARC ___ Contractor ___
BP/ARC EBM: Paul Supple		
EBM Phone: 925-275-3506		
EBM Email: paul.supple@bp.com		

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol	Requested Analyses: GRO by 8015	BTEX / 8260*	EDB / 1,2 DIA*	Ethanol	Report Type & QC Level
		9/30															Standard X
1	MW-3	9/30/09	1615		X		6				X		X	X	X	X	Full Data Package ___
2	4		0815														
3	6		0930														Comments
4	7		0910														Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.
5	MW-11		0925														*Oxy 8260
6	TB-11109-09[illegible]2009						2										on Hold

Sampler's Name: A. Hill	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stratus		9/30/09	1500			
Shipment Method: GSO Ship Date: 9/30/09						
Shipment Tracking No: 925516234 7					10/8/09	1030

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

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No	Temp Blank: Yes / No	Cooler Temp on Receipt: ___ °F/C	Trip Blank: Yes / No	MS/MSD Sample Submitted: Yes / No

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-10-0029

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Stratus

DATE: 10/01/09

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

Temperature 3.7 °C - 0.2 °C (CF) = 3.5 °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: HP

CUSTODY SEALS INTACT:

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

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

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 ☑VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na** ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:** 090915B **Checked by:** WSC

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

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:**

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

Page 1 of 1

BP/ARC Project Name: ARCO 11109
BP/ARC Facility No: 11109
Req Due Date (mm/dd/yy): STD-TAT
Rush TAT: Yes ___ No X
Lab Work Order Number: 09-10-0029

Lab Name: Cal Science	BP/ARC Facility Address: 4280 Foothill	Consultant/Contractor: Stratus Environmental
Lab Address: 7440 Lincoln Way	City, State, ZIP Code: Oakland, CA	Consultant/Contractor Project No: E11109-QM/O&M
Lab PM: Richard Villafania	Lead Regulatory Agency: Alameda County	Address: 3330 Cameron Park Dr., Cameron Park, CA 95682
Lab Phone: 714-895-5494 / 714-895-7501 (fax)	California Global ID No.: T0600100217	Consultant/Contractor PM: Jay Johnson
Lab Shipping Accnt:	Enfos Proposal No: 000GK-0004	Phone: 530-676-6000 / 530-676-6005 (fax)
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ___ OOC-RM ___	Email EDD To: chuff@stratusinc.net
Other Info:	Stage: Select Activity: Monitor	Invoice To: BP/ARC ___ Contractor ___
BP/ARC EBM: Paul Supple		
EBM Phone: 925-275-3506		
EBM Email: paul.supple@bp.com		

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol	Requested Analyses: GRO by 8015	BTEX / 8260	EDB / 1,2 DIA *	Ethanol *	Report Type & QC Level
		9/30															Standard X
1	MW-3	9/30/09	1615		X		6				X		X	X	X	X	Full Data Package ___
2	4		0815														
3	6		0930														Comments
4	7		0910														Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.
5	MW-11		0925														*Oxy 8260
6	TB-11109-09[illegible]2009						2										on Hold

Sampler's Name: D. Hill	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stratus		9/30/09	1500			
Shipment Method: GSO Ship Date: 9/30/09						
Shipment Tracking No: 925516234 7					10/8/09	1030

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

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: ___ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-10-0029

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Stratus

DATE: 10/01/09

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

Temperature 3.7 °C - 0.2 °C (CF) = 3.5 °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: HP

CUSTODY SEALS INTACT:

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

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

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 ☑VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s** ☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na** ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® **Other:** ☐_____ **Trip Blank Lot#:** 090915B **Checked by:** WSC

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

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:** WSC

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 11109**
Facility Global ID:	**T0600100217**
Facility Name:	**BP #11109**
File Name:	**GEO_WELL.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**10/21/2009 1:28:56 PM**
Confirmation Number:	**7361428380**

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:	**T0600100217**
Facility Name:	**BP #11109**
File Name:	**09100029.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**10/21/2009 1:32:01 PM**
Confirmation Number:	**1279138028**

VIEW QC REPORT

VIEW DETECTIONS REPORT