



Atlantic Richfield Company
(a BP affiliated company)

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10:04 am, May 01, 2009

Alameda County
Environmental Health



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

30 April 2009

Re: First Quarter 2009 Ground-Water Monitoring Report
Atlantic Richfield Company Station #4931
731 West MacArthur Boulevard
Oakland, California
ACEH Case # RO000076

"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:

Paul Supple
Environmental Business Manager

Prepared for

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

Prepared by



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

30 April 2009

Project No. 06-08-624

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



30 April 2009

Project No. 06-08-624

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

Attn.: Mr. Paul Supple

Re: First Quarter 2009 Ground-Water Monitoring Report, Atlantic Richfield Company (a BP affiliated company) Station #4931, 731 West MacArthur Boulevard, Oakland, Alameda County, California; ACEH Case #RO0000076

Dear Mr. Supple:

Attached is the *First Quarter 2009 Ground-Water Monitoring Report* for Atlantic Richfield Company Station #4931 located at 731 West MacArthur Boulevard, Oakland, Alameda County, California (Site). This report presents results of ground-water monitoring conducted at the Site during the First Quarter of 2009.

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

Sincerely,

BROADBENT & ASSOCIATES, INC.

A handwritten signature in blue ink that reads "Thomas A. Venus".

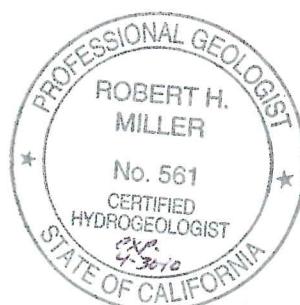
Thomas A. Venus, P.E.
Senior Engineer

A handwritten signature in blue ink that reads "Rob Miller".

Rob Miller, P.G., C.HG.
Principal Hydrogeologist

Enclosures

cc: Mr. Paresh Khatri, Alameda County Environmental Health (Submitted via ACEH ftp site)
Mr. Nick Goyal, Owner, electronic copy e-mailed (nick@vintnersdist.com)
Electronic copy uploaded to GeoTracker



STATION # 4931 QUARTERLY GROUND-WATER MONITORING REPORT

Facility: <u>#4931</u>	Address: <u>731 West MacArthur Boulevard, Oakland, California</u>
Environmental Business Manager:	<u>Mr. Paul Supple</u>
Consulting Co./Contact Persons:	<u>Broadbent & Associates, Inc.(BAI)/Rob Miller & Tom Venus</u> <u>(530) 566-1400</u>
Consultant Project No.:	<u>06-08-624</u>
Primary Agency/Regulatory ID No.:	<u>Alameda County Environmental Health (ACEH)</u> <u>ACEH Case #RO000076</u>
Facility Permits/Permitting Agency:	<u>NA</u>

WORK PERFORMED THIS QUARTER (First Quarter 2009):

1. Prepared and submitted *Fourth Quarter 2008 Ground-Water Monitoring Report* (BAI, 1/23/2009).
2. Conducted ground-water monitoring/sampling for First Quarter 2009. Work performed on 10 February 2009 by Stratus Environmental, Inc. (Stratus).

WORK PROPOSED FOR NEXT QUARTER (Second Quarter 2009):

1. Prepared and submitted this *First Quarter 2009 Ground-Water Monitoring Report* (contained herein).
2. Conduct ground-water monitoring/sampling for Second Quarter 2009.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	Ground-Water Monitoring/Sampling
Frequency of ground-water monitoring:	Quarterly: A-2, A-3, A-4, A-5, A-7, A-8, A-9, A-10, A-11, A-12, A-13, AR-1, AR-2, AR-3
Frequency of ground-water sampling:	Quarterly: Wells A-4, A-8 Semi Annually (1Q and 3Q): Wells A-3, A-5 Annually (3Q): Wells A-2, A-7, A-9, A-10, A-11, A-12
Is free product (FP) present on-site:	No
FP recovered this quarter:	0
Cumulative FP recovered:	0
Current remediation techniques:	NA
Depth to ground water (below TOC):	5.10 ft (AR-2) to 8.74 ft (A-10)
General ground-water flow direction:	West
Approximate hydraulic gradient:	0.02 ft/ft

DISCUSSION:

First quarter 2009 ground-water monitoring and sampling was conducted at Station #4931 on 10 February 2009 by Stratus. Water levels were gauged in each of the 14 wells at the Site. No irregularities were noted during water level gauging. Depth-to-water measurements ranged from 5.10 ft at well AR-2 to 8.74 ft at well A-10. Resulting ground-water surface elevations ranged from 54.08 ft above mean sea level in well AR-2 to 48.96 ft in down-gradient well A-12. Water level elevations were between historic minimum and maximum ranges for each well gauged, as summarized in Table 1. Water level elevations yielded a potentiometric ground-water flow direction and gradient to the west at approximately 0.02 ft/ft, generally consistent with historical data (see Table 3). Ground-water monitoring field data sheets are provided within Appendix A. Measured depths to ground water and respective

ground-water elevations are summarized in Table 1. Potentiometric ground-water elevation contours are presented in Drawing 1.

Consistent with the sampling schedule, ground-water samples were collected from wells A-3, A-4, A-5, and A-8 on 10 February 2009. No irregularities were reported during sampling. Samples were submitted under chain-of-custody protocol to Calscience Environmental Laboratories, Inc. (Garden Grove, California), for analysis of Gasoline Range Organics (GRO, C6-C12) by EPA Method 8015B; for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA Method 8260B; and tert-Amyl Methyl Ether (TAME), tert-Butyl Alcohol (TBA), Di-Isopropyl Ether(DIPE), 1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA), Ethanol, Ethyl tert-Butyl Ether (ETBE), and Methyl tert-Butyl Ether (MTBE) by EPA Method 8260B. No significant irregularities were noted during laboratory analysis of the samples. Ground-water sampling field data sheets and the laboratory analytical report, including chain-of-custody documentation, are provided in Appendix A.

Gasoline Range Organics (GRO) were detected above the laboratory reporting limit in two of the four samples collected at concentrations of 1,900 micrograms per liter ($\mu\text{g}/\text{L}$) in well A-4 and 3,600 $\mu\text{g}/\text{L}$ in well A-8. Benzene was detected above the laboratory reporting limit in two of the four wells sampled at concentrations of 33 $\mu\text{g}/\text{L}$ in well A-4 and 1,300 $\mu\text{g}/\text{L}$ in well A-8. Ethylbenzene was detected above the laboratory reporting limit in one of the four wells sampled at a concentration of 14 $\mu\text{g}/\text{L}$ in well A-4. TAME was detected above the laboratory reporting limit in three of the four wells at concentrations of 120 $\mu\text{g}/\text{L}$ in wells A-4 and A-8, and 0.6 $\mu\text{g}/\text{L}$ in well A-5. TBA was detected above the laboratory reporting limit in two of the four wells at concentrations of 2,300 $\mu\text{g}/\text{L}$ in well A-4 and 18 $\mu\text{g}/\text{L}$ in well A-5. MTBE was detected above the laboratory reporting limit in three of the four wells sampled at concentrations of 400 $\mu\text{g}/\text{L}$ in well A-4, 1.6 $\mu\text{g}/\text{L}$ in well A-5, and 320 $\mu\text{g}/\text{L}$ in well A-8. The remaining fuel additives and oxygenates were not detected above their laboratory reporting limits in the four wells sampled this quarter.

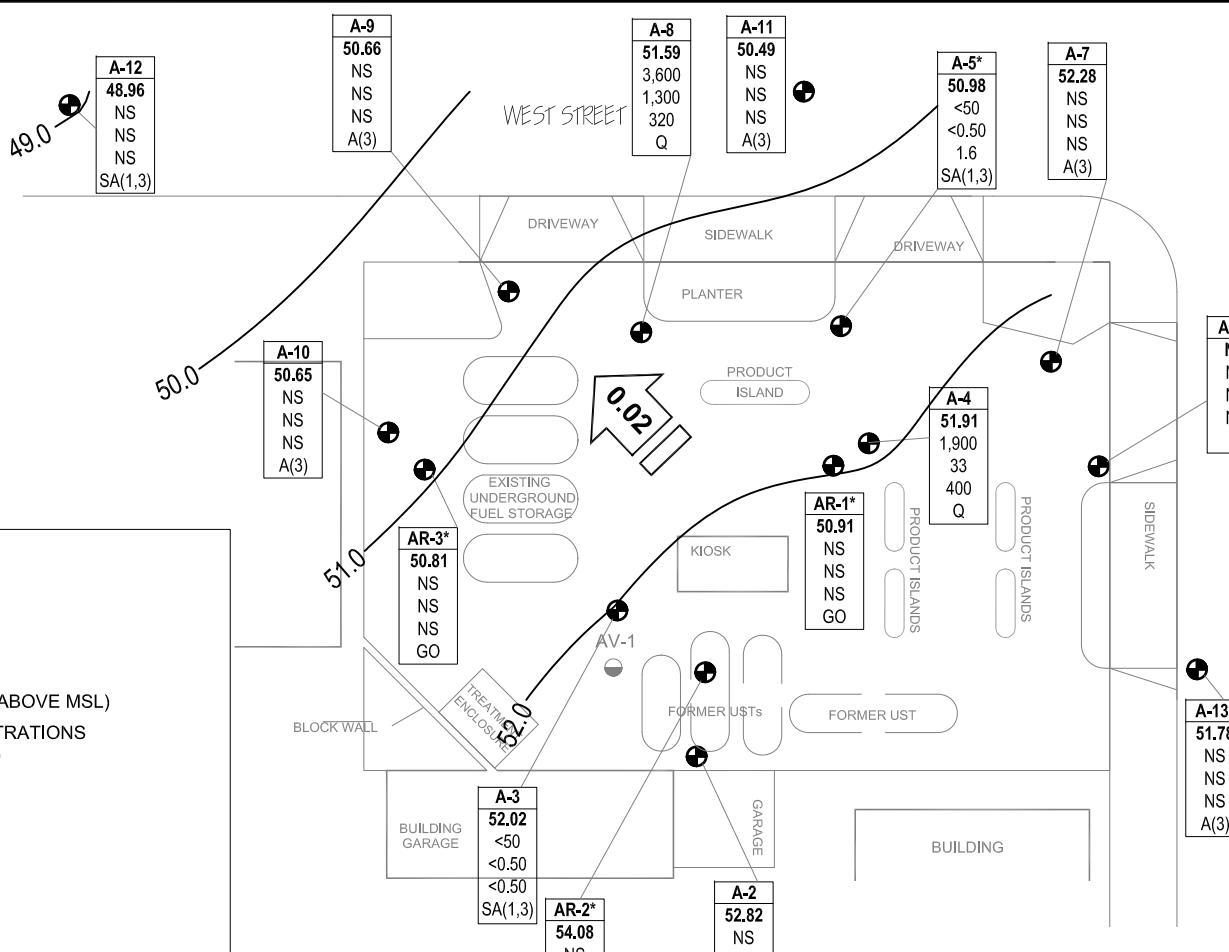
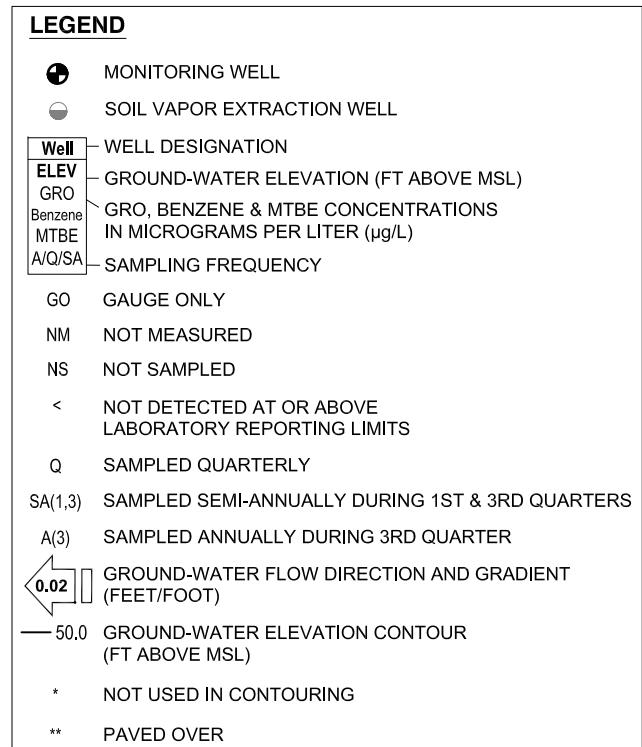
Detected analyte concentrations were within the historic minimum and maximum ranges recorded for each well, with the exception of a recorded historic minimum for MTBE in well A-3 (<0.50 $\mu\text{g}/\text{L}$). Historic laboratory analytical results are summarized in Table 1, Table 2, and Appendix B. The First Quarter 2009 GRO, Benzene, and MTBE concentrations are also presented in Drawing 1. A copy of the laboratory analytical report, including chain-of-custody documentation is provided in Appendix A. Ground-water monitoring data (GEO_WELL) and laboratory analytical results (EDF) were uploaded to the GeoTracker AB2886 database. Upload confirmation pages are provided in Appendix C.

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 Atlantic Richfield Company. It is possible that variations in soil or ground-water conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

ATTACHMENTS:

- Drawing 1. Ground-Water Elevation Contour and Analytical Summary Map, 10 February 2009,
Station #4931, 731 West MacArthur Boulevard, Oakland, California
- Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory
Analyses, Station #4931, 731 West MacArthur Blvd., Oakland, California
- Table 2. Summary of Fuel Additives Analytical Data, Station #4931, 731 West MacArthur Blvd.,
Oakland, California
- Table 3. Historical Ground-Water Flow Direction and Gradient Data, Station #4931, 731 West
MacArthur Blvd., Oakland, California
- Appendix A. Stratus Ground-Water Sampling Data Package (Includes Field Data Sheets, Laboratory
Analytical Report with Chain-of-Custody Documentation, and Field Procedures).
- Appendix B. Historical Ground-Water Data
- Appendix C. GeoTracker Upload Confirmation



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

0 40 80

SCALE (ft)

 **BROADBENT & ASSOCIATES, INC.**
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California 95926
Project No.: 06-88-624 Date: 3/18/09

Station #4931
731 West MacArthur Boulevard
Oakland, California

Ground-Water Elevation Contour
and Analytical Summary Map
10 February 2009

Drawing 1

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

Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-2															
6/21/2000	--		55.48	5.00	20.00	6.85	48.63	<50	<0.5	<0.5	<0.5	<1.0	<3.0	--	--
9/20/2000	--		55.48	5.00	20.00	10.45	45.03	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
12/26/2000	--		55.48	5.00	20.00	6.27	49.21	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
3/20/2001	--		55.48	5.00	20.00	4.57	50.91	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
6/12/2001	--		55.48	5.00	20.00	9.27	46.21	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
9/23/2001	--		55.48	5.00	20.00	10.75	44.73	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
12/31/2001	--		55.48	5.00	20.00	4.13	51.35	<50	<0.5	<0.5	1	3.2	<2.5	--	--
3/21/2002	--		55.48	5.00	20.00	3.26	52.22	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
4/17/2002	--		55.48	5.00	20.00	3.72	51.76	<50	<0.5	<0.5	<0.5	<0.5	3.1	--	--
8/12/2002	NP		55.48	5.00	20.00	9.95	45.53	<10	<0.10	<0.10	<0.10	<0.10	<0.50	3.1	7.7
12/6/2002	NP		55.48	5.00	20.00	10.01	45.47	<50	<0.50	<0.50	<0.50	<0.50	6	3.1	6.1
1/30/2003	NP		55.48	5.00	20.00	5.08	50.40	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.6	6.7
5/28/2003	--		55.48	5.00	20.00	4.82	50.66	<50	<0.50	<0.50	<0.50	<0.50	1.1	5.7	6.8
8/6/2003	--		55.48	5.00	20.00	9.73	45.75	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.3	7.7
11/14/2003	--		55.48	5.00	20.00	9.36	46.12	--	--	--	--	--	--	--	--
02/02/2004	--	g	60.65	5.00	20.00	4.45	56.20	--	--	--	--	--	--	--	--
05/04/2004	--		60.65	5.00	20.00	6.79	53.86	--	--	--	--	--	--	--	--
09/02/2004	NP		60.65	5.00	20.00	10.51	50.14	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.1	--
11/10/2004	--		60.65	5.00	20.00	6.10	54.55	--	--	--	--	--	--	--	--
02/02/2005	--		60.65	5.00	20.00	4.00	56.65	--	--	--	--	--	--	--	--
05/09/2005	--		60.65	5.00	20.00	4.35	56.30	--	--	--	--	--	--	--	--
08/11/2005	NP	h	60.65	5.00	20.00	9.08	51.57	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.2	6.9
11/18/2005	--		60.65	5.00	20.00	8.53	52.12	--	--	--	--	--	--	--	--
02/15/2006	--		60.65	5.00	20.00	3.89	56.76	--	--	--	--	--	--	--	--
5/30/2006	--		60.65	5.00	20.00	4.45	56.20	--	--	--	--	--	--	--	--
8/11/2006	NP		60.65	5.00	20.00	9.03	51.62	160	<0.50	<0.50	<0.50	<0.50	3.6	0.16	5.9
11/1/2006	--		60.65	5.00	20.00	9.98	50.67	--	--	--	--	--	--	--	--
2/7/2007	--		60.65	5.00	20.00	7.51	53.14	--	--	--	--	--	--	--	--
5/9/2007	--		60.65	5.00	20.00	4.57	56.08	--	--	--	--	--	--	--	--
8/7/2007	NP		60.65	5.00	20.00	9.67	50.98	<50	<0.50	<0.50	<0.50	<0.50	3.4	2.18	7.17
11/14/2007	--		60.65	5.00	20.00	7.84	52.81	--	--	--	--	--	--	--	--

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

Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-2 Cont.															
2/28/2008	--		60.65	5.00	20.00	3.30	57.35	--	--	--	--	--	--	--	--
5/23/2008	--		60.65	5.00	20.00	8.80	51.85	--	--	--	--	--	--	--	--
8/13/2008	NP		60.65	5.00	20.00	10.20	50.45	<50	<0.50	<0.50	<0.50	<0.50	19	0.87	9.29
11/19/2008	--		60.65	5.00	20.00	9.20	51.45	--	--	--	--	--	--	--	--
2/10/2009	--		60.65	5.00	20.00	7.83	52.82	--	--	--	--	--	--	--	--
A-3															
6/21/2000	--		54.66	5.00	20.00	9.48	45.18	<50	<0.5	<0.5	<0.5	<1.0	46	--	--
9/20/2000	--		54.66	5.00	20.00	10.24	44.42	<50	<0.5	<0.5	<0.5	<0.5	89.6	--	--
12/26/2000	--		54.66	5.00	20.00	9.58	45.08	<50	<0.5	<0.5	<0.5	<0.5	7.11	--	--
3/20/2001	--		54.66	5.00	20.00	6.34	48.32	--	--	--	--	--	--	--	--
6/12/2001	--		54.66	5.00	20.00	9.76	44.90	<50	<0.5	<0.5	<0.5	<0.5	86	--	--
9/23/2001	--		54.66	5.00	20.00	10.55	44.11	--	--	--	--	--	--	--	--
12/31/2001	--		54.66	5.00	20.00	3.70	50.96	<50	<0.5	<0.5	<0.5	1	60	--	--
3/21/2002	--		54.66	5.00	20.00	5.75	48.91	--	--	--	--	--	--	--	--
4/17/2002	--		54.66	5.00	20.00	7.27	47.39	<50	<0.5	<0.5	<0.5	<0.5	45	--	--
8/12/2002	--		54.66	5.00	20.00	9.71	44.95	--	--	--	--	--	--	--	--
12/6/2002	P		54.66	5.00	20.00	9.55	45.11	<500	<5.0	<5.0	<5.0	<5.0	150	2.4	6.6
1/30/2003	--		54.66	5.00	20.00	6.05	48.61	--	--	--	--	--	--	--	--
1/30/2003	--		54.66	5.00	20.00	6.05	48.61	--	--	--	--	--	--	--	--
5/28/2003	--		54.66	5.00	20.00	8.06	46.60	74	<0.50	<0.50	<0.50	<0.50	43	1.5	6.9
8/6/2003	--		54.66	5.00	20.00	9.91	44.75	--	--	--	--	--	--	--	--
11/14/2003	--		54.66	5.00	20.00	9.52	45.14	--	--	--	--	--	--	--	--
02/02/2004	P	g	59.32	5.00	20.00	5.63	53.69	<50	<0.50	<0.50	<0.50	<0.50	13	1.2	7.1
05/04/2004	--		59.32	5.00	20.00	8.14	51.18	--	--	--	--	--	--	--	--
09/02/2004	P		59.32	5.00	20.00	10.10	49.22	<250	<2.5	<2.5	<2.5	<2.5	62	1.3	6.6
11/10/2004	--		59.32	5.00	20.00	7.89	51.43	--	--	--	--	--	--	--	--
02/02/2005	P		59.32	5.00	20.00	5.00	54.32	<50	<0.50	<0.50	<0.50	<0.50	6.8	1.9	6.9
05/09/2005	--		59.32	5.00	20.00	5.96	53.36	--	--	--	--	--	--	--	--
08/11/2005	P	h	59.32	5.00	20.00	9.28	50.04	<50	<0.50	<0.50	<0.50	<0.50	39	1.8	5.5
11/18/2005	--		59.32	5.00	20.00	8.61	50.71	--	--	--	--	--	--	--	--

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

Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-3 Cont.															
02/15/2006	P		59.32	5.00	20.00	4.36	54.96	<50	<0.50	<0.50	<0.50	<0.50	2.2	3.6	7.2
5/30/2006	--		59.32	5.00	20.00	6.28	53.04	--	--	--	--	--	--	--	--
8/11/2006	P		59.32	5.00	20.00	9.27	50.05	<50	<0.50	<0.50	<0.50	<0.50	4.1	2.10	6.4
11/1/2006	--		59.32	5.00	20.00	9.52	49.80	--	--	--	--	--	--	--	--
2/7/2007	NP		59.32	5.00	20.00	7.90	51.42	<50	<0.50	<0.50	<0.50	<0.50	0.58	1.74	7.70
5/9/2007	--		59.32	5.00	20.00	6.55	52.77	--	--	--	--	--	--	--	--
8/7/2007	NP		59.32	5.00	20.00	9.57	49.75	<50	<0.50	<0.50	<0.50	<0.50	3.9	0.95	6.82
11/14/2007	--		59.32	5.00	20.00	8.00	51.32	--	--	--	--	--	--	--	--
2/28/2008	P		59.32	5.00	20.00	3.75	55.57	<50	<0.50	<0.50	<0.50	<0.50	0.58	6.16	6.92
5/23/2008	--		59.32	5.00	20.00	9.10	50.22	--	--	--	--	--	--	--	--
8/13/2008	NP		59.32	5.00	20.00	9.80	49.52	<50	<0.50	<0.50	<0.50	<0.50	0.55	0.69	8.63
11/19/2008	--		59.32	5.00	20.00	8.31	51.01	--	--	--	--	--	--	--	--
2/10/2009	NP		59.32	5.00	20.00	7.30	52.02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.90	7.14
A-4															
6/21/2000	--		54.73	5.00	20.00	9.49	45.24	2,100	110	2.1	11	5.9	2,000	--	--
9/20/2000	--		54.73	5.00	20.00	10.33	44.40	1,540	127	<5.0	9.07	7.42	1,940	--	--
12/26/2000	--		54.73	5.00	20.00	9.34	45.39	1,550	42.7	<5.0	11	10.9	1,210	--	--
3/20/2001	--		54.73	5.00	20.00	7.56	47.17	913	40.9	<5.0	15.5	14.6	<25	--	--
6/12/2001	--		54.73	5.00	20.00	9.83	44.90	2,000	230	<20	21	<20	4,700	--	--
9/23/2001	--		54.73	5.00	20.00	10.54	44.19	1,600	35	<10	<10	<10	3,000	--	--
12/31/2001	--		54.73	5.00	20.00	5.42	49.31	<500	<5.0	<5.0	<5.0	<5.0	880	--	--
3/21/2002	--		54.73	5.00	20.00	6.18	48.55	<5,000	<50	<50	<50	<50	1,400	--	--
4/17/2002	--		54.73	5.00	20.00	7.34	47.39	1,300	79	31	17	55	2,200	--	--
8/12/2002	P	a	54.73	5.00	20.00	9.56	45.17	2,400	120	<5.0	<5.0	<5.0	2,100	2	7.2
12/6/2002	P		54.73	5.00	20.00	10.02	44.71	2,200	110	10	42	56	2,000	--	6.7
1/30/2003	P		54.73	5.00	20.00	7.55	47.18	6,000	180	<50	85	<50	2,100	1.8	6.8
5/28/2003	--		54.73	5.00	20.00	8.94	45.79	6,000	120	<50	<50	<50	2,500	1.5	6.7
8/6/2003	--		54.73	5.00	20.00	10.03	44.70	5,800	100	<25	<25	33	2,500	1.5	6.7
11/14/2003	P	d, f	54.73	5.00	20.00	10.37	44.36	1,000	17	<5.0	<5.0	<5.0	310	1.6	6.8
02/02/2004	P	d, g	59.59	5.00	20.00	6.70	52.89	3,600	46	<25	<25	<25	1,500	1.0	7.1

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

Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-4 Cont.															
05/04/2004	P	d	59.59	5.00	20.00	9.12	50.47	<5,000	<50	<50	<50	<50	2,300	6.4	6.8
09/02/2004	P		59.59	5.00	20.00	9.95	49.64	3,000	<25	<25	<25	<25	1,200	9.1	6.8
11/10/2004	P		59.59	5.00	20.00	8.68	50.91	1,800	16	<10	<10	<10	1,100	2.0	7.2
02/02/2005	P		59.59	5.00	20.00	6.92	52.67	3,300	120	<10	66	11	1,700	1.5	6.5
05/09/2005	P		59.59	5.00	20.00	7.21	52.38	<5,000	140	<50	62	<50	1,800	1.64	6.6
08/11/2005	P	f, h	59.59	5.00	20.00	9.71	49.88	1,700	51	<10	<10	<10	1,200	--	6.9
11/18/2005	P		59.59	5.00	20.00	9.45	50.14	1,300	23	<2.5	7.2	11	310	1.4	6.7
02/15/2006	P		59.59	5.00	20.00	7.12	52.47	2,200	46	<2.5	29	7.0	910	0.9	6.8
5/30/2006	P		59.59	5.00	20.00	7.95	51.64	3,300	95	<10	55	<10	1,200	1.76	6.5
8/11/2006	P		59.59	5.00	20.00	9.50	50.09	350	93	<10	<10	<10	1,200	1.4	6.6
11/1/2006	P		59.59	5.00	20.00	9.93	49.66	1,300	<10	<10	<10	<10	360	4.56	6.94
2/7/2007	NP		59.59	5.00	20.00	8.82	50.77	4,900	85	<10	40	<10	1,500	0.72	6.86
5/9/2007	NP		59.59	5.00	20.00	7.56	52.03	1,700	19	<10	<10	<10	340	3.00	7.03
8/7/2007	NP		59.59	5.00	20.00	9.80	49.79	2,700	69	<5.0	<5.0	<5.0	510	1.04	6.95
11/14/2007	NP		59.59	5.00	20.00	8.65	50.94	500	4.9	<0.50	<0.50	<0.50	280	1.27	6.94
2/28/2008	NP		59.59	5.00	20.00	6.15	53.44	850	17	<0.50	4.4	1.4	350	1.76	7.03
5/23/2008	NP		59.59	5.00	20.00	9.40	50.19	1,900	75	<20	<20	<20	1,000	1.28	6.58
8/13/2008	NP		59.59	5.00	20.00	9.92	49.67	3,100	47	<10	<10	<10	530	0.89	8.97
11/19/2008	NP		59.59	5.00	20.00	9.19	50.40	1,800	70	<10	21	<10	430	0.83	6.50
2/10/2009	NP		59.59	5.00	20.00	7.68	51.91	1,900	33	<10	14	<10	400	0.87	7.31
A-5															
6/21/2000	--		54.17	3.00	24.00	9.29	44.88	980	<0.5	<0.5	<0.5	<1.0	2,000	--	--
9/20/2000	--		54.17	3.00	24.00	10.23	43.94	--	--	--	--	--	--	--	--
12/26/2000	--		54.17	3.00	24.00	9.65	44.52	525	<0.5	<0.5	<0.5	<0.5	1,200	--	--
3/20/2001	--		54.17	3.00	24.00	8.05	46.12	--	--	--	--	--	--	--	--
6/12/2001	--		54.17	3.00	24.00	9.81	44.36	830	<5.0	<5.0	<5.0	<5.0	3,200	--	--
9/23/2001	--		54.17	3.00	24.00	10.42	43.75	--	--	--	--	--	--	--	--
12/31/2001	--		54.17	3.00	24.00	6.03	48.14	320	<0.5	<0.5	<0.5	<0.5	60	--	--
3/21/2002	--		54.17	3.00	24.00	6.71	47.46	--	--	--	--	--	--	--	--
4/17/2002	--		54.17	3.00	24.00	8.01	46.16	1,600	<10	<10	<10	<10	3,200	--	--

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

Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH	
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
A-5 Cont.																
8/12/2002	--		54.17	3.00	24.00	9.87	44.30	--	--	--	--	--	--	--	--	
12/6/2002	P		54.17	3.00	24.00	9.66	44.51	310	<0.50	<0.50	<0.50	<0.50	330	1.9	6.6	
1/30/2003	--		54.17	3.00	24.00	7.67	46.50	--	--	--	--	--	--	--	--	
5/28/2003	--		54.17	3.00	24.00	8.56	45.61	<5,000	<50	<50	<50	<50	1,500	1.6	6.6	
8/6/2003	--		54.17	3.00	24.00	9.58	44.59	--	--	--	--	--	--	--	--	
11/14/2003	--		54.17	3.00	24.00	9.81	44.36	--	--	--	--	--	--	--	--	
02/02/2004	P	g	58.78	3.00	24.00	7.43	51.35	390	<2.5	9.2	<2.5	2.6	140	1.0	6.8	
05/04/2004	--		58.78	3.00	24.00	9.98	48.80	--	--	--	--	--	--	--	--	
09/02/2004	P		58.78	3.00	24.00	9.65	49.13	<250	<2.5	<2.5	<2.5	<2.5	66	1.1	6.4	
11/10/2004	--		58.78	3.00	24.00	8.48	50.30	--	--	--	--	--	--	--	--	
02/02/2005	P		58.78	3.00	24.00	7.10	51.68	68	<0.50	<0.50	<0.50	<0.50	17	1.0	7.2	
05/09/2005	--		58.78	3.00	24.00	7.20	51.58	--	--	--	--	--	--	--	--	
08/11/2005	P	h	58.78	3.00	24.00	9.21	49.57	<50	<0.50	<0.50	<0.50	<0.50	6.8	1.3	6.2	
11/18/2005	--		58.78	3.00	24.00	9.10	49.68	--	--	--	--	--	--	--	--	
02/15/2006	P		58.78	3.00	24.00	7.16	51.62	<50	<0.50	<0.50	<0.50	<0.50	5.1	1.2	6.9	
5/30/2006	--		58.78	3.00	24.00	7.87	50.91	--	--	--	--	--	--	--	--	
8/11/2006	P		58.78	3.00	24.00	8.90	49.88	920	<0.50	<0.50	<0.50	<0.50	12	1.4	6.7	
11/1/2006	--		58.78	3.00	24.00	9.30	49.48	--	--	--	--	--	--	--	--	
2/7/2007	NP	i	58.78	3.00	24.00	8.50	50.28	60	<0.50	<0.50	<0.50	<0.50	1.5	0.73	7.14	
5/9/2007	--		58.78	3.00	24.00	7.60	51.18	--	--	--	--	--	--	--	--	
8/7/2007	NP		58.78	3.00	24.00	9.30	49.48	<50	<0.50	<0.50	<0.50	<0.50	0.81	0.41	7.18	
11/14/2007	--		58.78	3.00	24.00	8.48	50.30	--	--	--	--	--	--	--	--	
2/28/2008	NP		58.78	3.00	24.00	6.21	52.57	<50	<0.50	<0.50	<0.50	<0.50	0.97	2.24	7.40	
5/23/2008	--		58.78	3.00	24.00	8.97	49.81	--	--	--	--	--	--	--	--	
8/13/2008	NP		58.78	3.00	24.00	9.42	49.36	<50	<0.50	<0.50	<0.50	<0.50	0.69	0.62	8.96	
11/19/2008	--		58.78	3.00	24.00	8.91	49.87	--	--	--	--	--	--	--	--	
2/10/2009	NP		58.78	3.00	24.00	7.80	50.98	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	0.85	7.52
A-6																
6/21/2000	--		55.17	3.00	25.00	8.67	46.50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	<3.0	--	--
9/20/2000	--		55.17	3.00	25.00	9.34	45.83	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	--	--

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

Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-6 Cont.															
12/26/2000	--		55.17	3.00	25.00	8.65	46.52	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
3/20/2001	--		55.17	3.00	25.00	6.84	48.33	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
6/12/2001	--		55.17	3.00	25.00	8.93	46.24	<50	<0.5	<0.5	<0.5	<0.5	7	--	--
9/23/2001	--		55.17	3.00	25.00	9.74	45.43	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
12/31/2001	--		55.17	3.00	25.00	4.81	50.36	<50	<0.5	<0.5	<0.5	<0.5	3.2	--	--
3/21/2002	--		55.17	3.00	25.00	5.44	49.73	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
4/17/2002	--		55.17	3.00	25.00	6.95	48.22	<50	<0.5	<0.5	<0.5	<0.5	3.1	--	--
8/12/2002	NP		55.17	3.00	25.00	8.90	46.27	<50	<0.5	<0.5	<0.5	<0.5	<2.5	4.3	7.9
12/6/2002	--	e	55.17	3.00	25.00	--	--	--	--	--	--	--	--	--	--
1/30/2003	--	e	55.17	3.00	25.00	--	--	--	--	--	--	--	--	--	--
5/28/2003	--	e	55.17	3.00	25.00	--	--	--	--	--	--	--	--	--	--
8/6/2003	--	e	55.17	3.00	25.00	--	--	--	--	--	--	--	--	--	--
11/14/2003	--	Well inaccessible e	55.17	3.00	25.00	--	--	--	--	--	--	--	--	--	--
02/02/2004	--	Well inaccessible e	55.17	3.00	25.00	--	--	--	--	--	--	--	--	--	--
05/04/2004	--	Well inaccessible e	55.17	3.00	25.00	--	--	--	--	--	--	--	--	--	--
09/02/2004	--	Well inaccessible e	55.17	3.00	25.00	--	--	--	--	--	--	--	--	--	--
11/10/2004	--	Well inaccessible e	55.17	3.00	25.00	--	--	--	--	--	--	--	--	--	--
02/02/2005	--	e	55.17	3.00	25.00	--	--	--	--	--	--	--	--	--	--
05/09/2005	--	e	55.17	3.00	25.00	--	--	--	--	--	--	--	--	--	--
08/11/2005	--	e	55.17	3.00	25.00	--	--	--	--	--	--	--	--	--	--
11/18/2005	--	e	55.17	3.00	25.00	--	--	--	--	--	--	--	--	--	--
2/15/2006	--	e	--	3.00	25.00	--	--	--	--	--	--	--	--	--	--
5/30/2006	--	e	--	3.00	25.00	--	--	--	--	--	--	--	--	--	--
8/11/2006	--	e	--	3.00	25.00	--	--	--	--	--	--	--	--	--	--
11/1/2006	--	e	--	3.00	25.00	--	--	--	--	--	--	--	--	--	--
A-7															
6/21/2000	--		54.71	3.00	22.00	8.58	46.13	<50	<0.5	<0.5	<0.5	<1.0	<3.0	--	--
9/20/2000	--		54.71	3.00	22.00	9.19	45.52	--	--	--	--	--	--	--	--
12/26/2000	--		54.71	3.00	22.00	8.50	46.21	--	--	--	--	--	--	--	--
3/20/2001	--		54.71	3.00	22.00	6.75	47.96	--	--	--	--	--	--	--	--

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

Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-7 Cont.															
6/12/2001	--		54.71	3.00	22.00	8.80	45.91	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
9/23/2001	--		54.71	3.00	22.00	9.59	45.12	--	--	--	--	--	--	--	--
12/31/2001	--		54.71	3.00	22.00	4.78	49.93	--	--	--	--	--	--	--	--
3/21/2002	--		54.71	3.00	22.00	5.35	49.36	--	--	--	--	--	--	--	--
4/17/2002	--		54.71	3.00	22.00	6.88	47.83	<50	<0.5	<0.5	<0.5	<0.5	2.5	--	--
8/12/2002	--		54.71	3.00	22.00	8.77	45.94	--	--	--	--	--	--	--	--
12/6/2002	--		54.71	3.00	22.00	9.07	45.64	--	--	--	--	--	--	--	--
1/30/2003	--		54.71	3.00	22.00	6.65	48.06	--	--	--	--	--	--	--	--
5/28/2003	--		54.71	3.00	22.00	7.63	47.08	<50	<0.50	<0.50	<0.50	<0.50	3.8	2.3	6.7
8/6/2003	--		54.71	3.00	22.00	8.90	45.81	--	--	--	--	--	--	--	--
11/14/2003	--		54.71	3.00	22.00	9.08	45.63	--	--	--	--	--	--	--	--
02/02/2004	--	g	59.75	3.00	22.00	5.96	53.79	--	--	--	--	--	--	--	--
05/04/2004	--		59.75	3.00	22.00	8.21	51.54	--	--	--	--	--	--	--	--
09/02/2004	P		59.75	3.00	22.00	9.02	50.73	<50	<0.50	<0.50	<0.50	<0.50	8.9	3.0	6.7
11/10/2004	--		59.75	3.00	22.00	7.50	52.25	--	--	--	--	--	--	--	--
02/02/2005	--		59.75	3.00	22.00	6.10	53.65	--	--	--	--	--	--	--	--
05/09/2005	--		59.75	3.00	22.00	6.48	53.27	--	--	--	--	--	--	--	--
08/11/2005	P	h	59.75	3.00	22.00	8.45	51.30	<50	<0.50	<0.50	<0.50	<0.50	18	1.6	6.6
11/18/2005	--		59.75	3.00	22.00	8.65	51.10	--	--	--	--	--	--	--	--
02/15/2006	--		59.75	3.00	22.00	6.51	53.24	--	--	--	--	--	--	--	--
5/30/2006	--		59.75	3.00	22.00	7.13	52.62	--	--	--	--	--	--	--	--
8/11/2006	P		59.75	3.00	22.00	8.46	51.29	<50	<0.50	<0.50	<0.50	<0.50	3.6	1.7	6.7
11/1/2006	--		59.75	3.00	22.00	8.99	50.76	--	--	--	--	--	--	--	--
2/7/2007	--		59.75	3.00	22.00	8.12	51.63	--	--	--	--	--	--	--	--
5/9/2007	--		59.75	3.00	22.00	7.04	52.71	--	--	--	--	--	--	--	--
8/7/2007	NP		59.75	3.00	22.00	9.10	50.65	<50	<0.50	<0.50	<0.50	<0.50	2.7	1.34	7.09
11/14/2007	--		59.75	3.00	22.00	8.00	51.75	--	--	--	--	--	--	--	--
2/28/2008	--		59.75	3.00	22.00	5.81	53.94	--	--	--	--	--	--	--	--
5/23/2008	--		59.75	3.00	22.00	8.74	51.01	--	--	--	--	--	--	--	--
8/13/2008	NP		59.75	3.00	22.00	9.27	50.48	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.05
11/19/2008	--		59.75	3.00	22.00	8.67	51.08	--	--	--	--	--	--	--	--

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

Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-7 Cont.															
2/10/2009	--		59.75	3.00	22.00	7.47	52.28	--	--	--	--	--	--	--	--
A-8															
6/21/2000	--		53.77	3.00	25.00	9.07	44.70	810	<0.5	<0.5	<0.5	810	1,500	--	--
9/20/2000	--		53.77	3.00	25.00	9.72	44.05	10,800	2,680	46	439	370	4,410	--	--
12/26/2000	--		53.77	3.00	25.00	9.20	44.57	7,700	1,440	<50	202	106	2,230	--	--
3/20/2001	--		53.77	3.00	25.00	7.51	46.26	<5,000	1,280	<50	53.9	<50	2,880	--	--
6/12/2001	--		53.77	3.00	25.00	9.53	44.24	5,600	1,700	<50	61	54	2,900	--	--
9/23/2001	--		53.77	3.00	25.00	10.08	43.69	10,000	3,500	<50	110	64	6,500	--	--
12/31/2001	--		53.77	3.00	25.00	4.34	49.43	4,300	610	<10	60	24	520	--	--
3/21/2002	--		53.77	3.00	25.00	6.67	47.10	6,600	1,400	<50	130	<50	2,700	--	--
4/17/2002	--		53.77	3.00	25.00	7.72	46.05	3,800	540	<10	<10	12	3,100	--	--
8/12/2002	NP		53.77	3.00	25.00	9.64	44.13	9,400	1,800	<20	35	28	4,200	1	6.7
12/6/2002	NP	b	53.77	3.00	25.00	9.62	44.15	5,300	1,100	11	11	<10	2,200	1.4	6.7
1/30/2003	NP		53.77	3.00	25.00	7.49	46.28	<10,000	1,100	<100	<100	<100	2,200	1.5	6.9
5/28/2003	--		53.77	3.00	25.00	9.17	44.60	7,700	1,700	<50	<50	<50	2,100	1	6.8
8/6/2003	--		53.77	3.00	25.00	9.67	44.10	13,000	2,400	<50	<50	<50	3,000	0.9	6.5
11/14/2003	NP	d	53.77	3.00	25.00	9.80	43.97	3,100	570	<5.0	<5.0	<5.0	850	2.3	6.2
02/02/2004	NP	d, g	58.70	3.00	25.00	7.10	51.60	3,900	300	<25	<25	<25	1,100	1.1	6.8
05/04/2004	NP		58.70	3.00	25.00	9.44	49.26	<5,000	490	<50	<50	<50	1,600	1.0	6.9
09/02/2004	NP		58.70	3.00	25.00	9.67	49.03	<2,500	30	<25	<25	<25	680	1.0	6.2
11/10/2004	NP		58.70	3.00	25.00	8.15	50.55	580	61	<2.5	<2.5	<2.5	290	1.5	6.4
02/02/2005	NP		58.70	3.00	25.00	6.53	52.17	5,000	890	<25	<25	<25	1,900	1.0	7.4
05/09/2005	NP		58.70	3.00	25.00	6.31	52.39	69	0.90	<0.50	<0.50	<0.50	66	4.1	7.2
08/11/2005	NP	h	58.70	3.00	25.00	9.15	49.55	1,400	1,300	<12	<12	<12	1,100	0.7	6.4
11/18/2005	NP		58.70	3.00	25.00	8.89	49.81	1,200	420	<5.0	<5.0	<5.0	340	0.7	7.0
02/15/2006	NP		58.70	3.00	25.00	6.34	52.36	3,200	970	<10	<10	<10	1,100	0.9	6.1
5/30/2006	NP		58.70	3.00	25.00	7.53	51.17	510	210	<2.5	<2.5	<2.5	140	2.6	6.7
8/11/2006	P	i	58.70	3.00	25.00	8.90	49.80	1,300	500	<5.0	<5.0	<5.0	290	0.7	7.0
11/1/2006	P		58.70	3.00	25.00	9.15	49.55	4,800	790	6.6	<5.0	<5.0	910	1.72	7.11
2/7/2007	NP		58.70	3.00	25.00	8.48	50.22	7,600	2,300	<25	<25	<25	1,200	1.25	7.11

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

Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-8 Cont.															
5/9/2007	NP		58.70	3.00	25.00	7.25	51.45	750	180	<2.5	<2.5	<2.5	55	1.75	7.14
8/7/2007	NP		58.70	3.00	25.00	9.17	49.53	2,100	700	4.0	<2.5	<2.5	430	0.77	6.95
11/14/2007	NP		58.70	3.00	25.00	7.77	50.93	990	300	2.5	0.68	0.96	100	1.01	6.73
2/28/2008	NP		58.70	3.00	25.00	5.14	53.56	2,100	670	<5.0	<5.0	<5.0	220	1.67	7.09
5/23/2008	--	j	58.70	3.00	25.00	--	--	--	--	--	--	--	--	--	--
8/13/2008	NP		58.70	3.00	25.00	9.48	49.22	3,100	970	<25	<25	<25	250	0.84	8.73
11/19/2008	NP		58.70	3.00	25.00	8.87	49.83	3,800	1,000	<20	<20	<20	230	0.89	6.87
2/10/2009	NP		58.70	3.00	25.00	7.11	51.59	3,600	1,300	<25	<25	<25	320	0.89	6.87
A-9															
6/21/2000	--		53.04	5.00	40.00	8.56	44.48	<50	<0.5	<0.5	<0.5	<1.0	5	--	--
9/20/2000	--		53.04	5.00	40.00	9.05	43.99	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
12/26/2000	--		53.04	5.00	40.00	8.49	44.55	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
3/20/2001	--		53.04	5.00	40.00	6.95	46.09	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
6/12/2001	--		53.04	5.00	40.00	8.67	44.37	<50	<0.5	<0.5	<0.5	<0.5	4.8	--	--
9/23/2001	--		53.04	5.00	40.00	9.21	43.83	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
12/31/2001	--		53.04	5.00	40.00	4.57	48.47	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
3/21/2002	--		53.04	5.00	40.00	5.60	47.44	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
4/17/2002	--		53.04	5.00	40.00	6.89	46.15	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
8/12/2002	P		53.04	5.00	40.00	8.71	44.33	<50	<0.50	<0.50	<0.50	<0.50	<2.5	4	7.6
12/6/2002	P		53.04	5.00	40.00	8.77	44.27	<50	<0.50	<0.50	<0.50	<0.50	<2.0	1.1	6.7
1/30/2003	P		53.04	5.00	40.00	6.88	46.16	<50	<0.50	<0.50	<0.50	<0.50	1.1	0.9	6.8
5/28/2003	--		53.04	5.00	40.00	9.75	43.29	<50	<0.50	<0.50	<0.50	<0.50	0.74	1.9	6.8
8/6/2003	--		53.04	5.00	40.00	9.00	44.04	<50	<0.50	<0.50	<0.50	<0.50	1.8	2.2	6.7
11/14/2003	--	d	53.04	5.00	40.00	8.82	44.22	--	--	--	--	--	--	--	--
02/02/2004	--	d, g	57.73	5.00	40.00	7.10	50.63	--	--	--	--	--	--	--	--
05/04/2004	--		57.73	5.00	40.00	8.12	49.61	--	--	--	--	--	--	--	--
09/02/2004	P		57.73	5.00	40.00	8.78	48.95	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	6.6
11/10/2004	--		57.73	5.00	40.00	7.88	49.85	--	--	--	--	--	--	--	--
02/02/2005	--		57.73	5.00	40.00	6.40	51.33	--	--	--	--	--	--	--	--
05/09/2005	--		57.73	5.00	40.00	6.82	50.91	--	--	--	--	--	--	--	--

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

Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-9 Cont.															
08/11/2005	P		57.73	5.00	40.00	8.37	49.36	<50	<0.50	<0.50	<0.50	<0.50	1.5	1.8	6.7
11/18/2005	--		57.73	5.00	40.00	8.24	49.49	--	--	--	--	--	--	--	--
02/15/2006	--		57.73	5.00	40.00	6.38	51.35	--	--	--	--	--	--	--	--
5/30/2006	--		57.73	5.00	40.00	7.17	50.56	--	--	--	--	--	--	--	--
8/11/2006	P		57.73	5.00	40.00	8.20	49.53	<50	<0.50	<0.50	<0.50	<0.50	1.6	1.02	6.6
11/1/2006	--		57.73	5.00	40.00	8.90	48.83	--	--	--	--	--	--	--	--
2/7/2007	--		57.73	5.00	40.00	7.83	49.90	--	--	--	--	--	--	--	--
5/9/2007	--		57.73	5.00	40.00	6.92	50.81	--	--	--	--	--	--	--	--
8/7/2007	NP		57.73	5.00	40.00	8.58	49.15	<50	<0.50	<0.50	<0.50	<0.50	0.64	1.81	6.90
11/14/2007	--		57.73	5.00	40.00	7.77	49.96	--	--	--	--	--	--	--	--
2/28/2008	--		57.73	5.00	40.00	5.61	52.12	--	--	--	--	--	--	--	--
5/23/2008	--	j	57.73	5.00	40.00	--	--	--	--	--	--	--	--	--	--
8/13/2008	NP		57.73	5.00	40.00	8.65	49.08	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.55	9.04
11/19/2008	--		57.73	5.00	40.00	8.49	49.24	--	--	--	--	--	--	--	--
2/10/2009	--		57.73	5.00	40.00	7.07	50.66	--	--	--	--	--	--	--	--
A-10															
6/21/2000	--		54.26	5.00	30.00	10.47	43.79	--	--	--	--	--	--	--	--
9/20/2000	--		54.26	5.00	30.00	10.76	43.50	--	--	--	--	--	--	--	--
12/26/2000	--		54.26	5.00	30.00	--	--	--	--	--	--	--	--	--	--
3/20/2001	--		54.26	5.00	30.00	--	--	--	--	--	--	--	--	--	--
9/23/2001	--		54.26	5.00	30.00	--	--	--	--	--	--	--	--	--	--
12/31/2001	--		54.26	5.00	30.00	--	--	--	--	--	--	--	--	--	--
3/21/2002	--		54.26	5.00	30.00	--	--	--	--	--	--	--	--	--	--
4/17/2002	--		54.26	5.00	30.00	--	--	--	--	--	--	--	--	--	--
8/12/2002	--		54.26	5.00	30.00	--	--	--	--	--	--	--	--	--	--
12/6/2002	--		54.26	5.00	30.00	--	--	--	--	--	--	--	--	--	--
1/30/2003	--		54.26	5.00	30.00	--	--	--	--	--	--	--	--	--	--
5/28/2003	--		54.26	5.00	30.00	--	--	--	--	--	--	--	--	--	--
8/6/2003	--		54.26	5.00	30.00	--	--	--	--	--	--	--	--	--	--
11/14/2003	--		54.26	5.00	30.00	10.37	43.89	--	--	--	--	--	--	--	--

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Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-10 Cont.															
02/02/2004	--	g	59.39	5.00	30.00	7.97	51.42	--	--	--	--	--	--	--	--
05/04/2004	--		59.39	5.00	30.00	8.69	50.70	--	--	--	--	--	--	--	--
09/02/2004	P		59.39	5.00	30.00	10.55	48.84	<500	<5.0	<5.0	<5.0	<5.0	270	0.8	6.6
11/10/2004	--		59.39	5.00	30.00	9.16	50.23	--	--	--	--	--	--	--	--
02/02/2005	--		59.39	5.00	30.00	7.90	51.49	--	--	--	--	--	--	--	--
05/09/2005	--		59.39	5.00	30.00	8.21	51.18	--	--	--	--	--	--	--	--
08/11/2005	P	h, i	59.39	5.00	30.00	10.02	49.37	69	<0.50	<0.50	<0.50	<0.50	97	0.9	6.6
11/18/2005	--		59.39	5.00	30.00	9.86	49.53	--	--	--	--	--	--	--	--
02/15/2006	--		59.39	5.00	30.00	7.53	51.86	--	--	--	--	--	--	--	--
5/30/2006	--		59.39	5.00	30.00	8.82	50.57	--	--	--	--	--	--	--	--
8/11/2006	P		59.39	5.00	30.00	9.88	49.51	<50	<0.50	<0.50	<0.50	<0.50	46	1.3	6.8
11/1/2006	--		59.39	5.00	30.00	10.28	49.11	--	--	--	--	--	--	--	--
2/7/2007	--		59.39	5.00	30.00	9.50	49.89	--	--	--	--	--	--	--	--
5/9/2007	--		59.39	5.00	30.00	8.67	50.72	--	--	--	--	--	--	--	--
8/7/2007	NP		59.39	5.00	30.00	10.25	49.14	<50	<0.50	<0.50	<0.50	<0.50	8.9	0.59	6.89
11/14/2007	--		59.39	5.00	30.00	9.48	49.91	--	--	--	--	--	--	--	--
2/28/2008	--		59.39	5.00	30.00	7.23	52.16	--	--	--	--	--	--	--	--
5/23/2008	--		59.39	5.00	30.00	9.94	49.45	--	--	--	--	--	--	--	--
8/13/2008	NP		59.39	5.00	30.00	10.30	49.09	<50	<0.50	<0.50	<0.50	<0.50	28	0.74	9.16
11/19/2008	--		59.39	5.00	30.00	9.90	49.49	--	--	--	--	--	--	--	--
2/10/2009	--		59.39	5.00	30.00	8.74	50.65	--	--	--	--	--	--	--	--
A-11															
6/21/2000	--		53.74	5.00	30.00	9.54	44.20	<50	<0.5	<0.5	<0.5	<1.0	4	--	--
9/20/2000	--		53.74	5.00	30.00	10.62	43.12	--	--	--	--	--	--	--	--
12/26/2000	--		53.74	5.00	30.00	10.03	43.71	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
3/20/2001	--		53.74	5.00	30.00	8.49	45.25	--	--	--	--	--	--	--	--
6/12/2001	--		53.74	5.00	30.00	10.21	43.53	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
9/23/2001	--		53.74	5.00	30.00	10.77	42.97	--	--	--	--	--	--	--	--
12/31/2001	--		53.74	5.00	30.00	6.06	47.68	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
3/21/2002	--		53.74	5.00	30.00	7.14	46.60	--	--	--	--	--	--	--	--

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Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-11 Cont.															
4/17/2002	--		53.74	5.00	30.00	8.41	45.33	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
8/12/2002	--		53.74	5.00	30.00	10.25	43.49	--	--	--	--	--	--	--	--
12/6/2002	P		53.74	5.00	30.00	10.43	43.31	<50	<0.50	<0.50	<0.50	<0.50	<2.0	2.4	6.7
1/30/2003	--		53.74	5.00	30.00	8.42	45.32	--	--	--	--	--	--	--	--
5/28/2003	--		53.74	5.00	30.00	9.30	44.44	<50	<0.50	<0.50	<0.50	<0.50	0.53	1.8	7
8/6/2003	--		53.74	5.00	30.00	10.28	43.46	--	--	--	--	--	--	--	--
11/14/2003	--		53.74	5.00	30.00	10.40	43.34	--	--	--	--	--	--	--	--
02/02/2004	--	g	59.16	5.00	30.00	7.95	51.21	--	--	--	--	--	--	--	--
05/04/2004	--		59.16	5.00	30.00	8.72	50.44	--	--	--	--	--	--	--	--
09/02/2004	P		59.16	5.00	30.00	10.44	48.72	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.6	6.6
11/10/2004	--		59.16	5.00	30.00	9.20	49.96	--	--	--	--	--	--	--	--
02/02/2005	--		59.16	5.00	30.00	7.95	51.21	--	--	--	--	--	--	--	--
05/09/2005	--		59.16	5.00	30.00	8.07	51.09	--	--	--	--	--	--	--	--
08/11/2005	P	h	59.16	5.00	30.00	9.87	49.29	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.8	6.7
11/18/2005	--		59.16	5.00	30.00	8.88	50.28	--	--	--	--	--	--	--	--
02/15/2006	--		59.16	5.00	30.00	7.90	51.26	--	--	--	--	--	--	--	--
5/30/2006	--		59.16	5.00	30.00	8.78	50.38	--	--	--	--	--	--	--	--
8/11/2006	P		59.16	5.00	30.00	10.33	48.83	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.8	6.8
11/1/2006	--		59.16	5.00	30.00	10.10	49.06	--	--	--	--	--	--	--	--
2/7/2007	--		59.16	5.00	30.00	9.35	49.81	--	--	--	--	--	--	--	--
5/9/2007	--		59.16	5.00	30.00	8.48	50.68	--	--	--	--	--	--	--	--
8/7/2007	NP		59.16	5.00	30.00	10.10	49.06	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.67	7.07
11/14/2007	--		59.16	5.00	30.00	9.31	49.85	--	--	--	--	--	--	--	--
2/28/2008	--		59.16	5.00	30.00	7.12	52.04	--	--	--	--	--	--	--	--
5/23/2008	--		59.16	5.00	30.00	9.77	49.39	--	--	--	--	--	--	--	--
8/13/2008	NP		59.16	5.00	30.00	10.08	49.08	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.89
11/19/2008	--		59.16	5.00	30.00	9.75	49.41	--	--	--	--	--	--	--	--
2/10/2009	--		59.16	5.00	30.00	8.67	50.49	--	--	--	--	--	--	--	--
A-12															
6/21/2000	--		52.05	5.00	30.00	9.28	42.77	<50	<0.5	<0.5	<0.5	<0.5	<1.0	18	--

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								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-12 Cont.															
9/20/2000	--		52.05	5.00	30.00	9.55	42.50	--	--	--	--	--	--	--	--
12/26/2000	--		52.05	5.00	30.00	9.05	43.00	<50	<0.5	<0.5	<0.5	<0.5	17.3	--	--
3/20/2001	--		52.05	5.00	30.00	7.92	44.13	--	--	--	--	--	--	--	--
6/12/2001	--		52.05	5.00	30.00	9.26	42.79	<50	<0.5	<0.5	<0.5	<0.5	25	--	--
9/23/2001	--		52.05	5.00	30.00	9.68	42.37	--	--	--	--	--	--	--	--
12/31/2001	--		52.05	5.00	30.00	5.74	46.31	<50	<0.5	<0.5	<0.5	<0.5	9.5	--	--
3/21/2002	--		52.05	5.00	30.00	6.64	45.41	--	--	--	--	--	--	--	--
4/17/2002	--		52.05	5.00	30.00	7.68	44.37	<50	<0.5	<0.5	<0.5	<0.5	29	--	--
8/12/2002	--		52.05	5.00	30.00	9.30	42.75	--	--	--	--	--	--	--	--
12/06/02	P	c	52.05	5.00	30.00	9.38	42.67	<50	<0.50	<0.50	<0.50	<0.50	13	2.3	6.5
1/30/2003	--		52.05	5.00	30.00	7.87	44.18	--	--	--	--	--	--	--	--
5/28/2003	--		52.05	5.00	30.00	8.51	43.54	50	<0.50	<0.50	<0.50	<0.50	10	1.4	7
8/6/2003	--		52.05	5.00	30.00	9.28	42.77	--	--	--	--	--	--	--	--
11/14/2003	--		52.05	5.00	30.00	9.37	42.68	--	--	--	--	--	--	--	--
02/02/2004	P	g	57.06	5.00	30.00	7.90	49.16	<50	<0.50	<0.50	<0.50	<0.50	0.91	1.0	6.9
05/04/2004	--		57.06	5.00	30.00	8.74	48.32	--	--	--	--	--	--	--	--
09/02/2004	P		57.06	5.00	30.00	9.41	47.65	<50	<0.50	<0.50	<0.50	<0.50	6.2	1.1	6.5
11/10/2004	--		57.06	5.00	30.00	8.32	48.74	--	--	--	--	--	--	--	--
02/02/2005	P		57.06	5.00	30.00	7.45	49.61	<50	<0.50	<0.50	<0.50	<0.50	8.3	1.4	7.1
05/09/2005	--		57.06	5.00	30.00	7.57	49.49	--	--	--	--	--	--	--	--
08/11/2005	P	h	57.06	5.00	30.00	9.05	48.01	<50	<0.50	<0.50	<0.50	<0.50	5.4	0.9	6.4
11/18/2005	--		57.06	5.00	30.00	8.90	48.16	--	--	--	--	--	--	--	--
02/15/2006	--		57.06	5.00	30.00	7.47	49.59	--	--	--	--	--	--	--	--
5/30/2006	--		57.06	5.00	30.00	8.21	48.85	--	--	--	--	--	--	--	--
8/11/2006	P		57.06	5.00	30.00	8.85	48.21	<50	<0.50	<0.50	<0.50	<0.50	7.4	1.8	6.9
11/1/2006	--		57.06	5.00	30.00	9.17	47.89	--	--	--	--	--	--	--	--
2/7/2007	--		57.06	5.00	30.00	8.58	48.48	--	--	--	--	--	--	--	--
5/9/2007	--		57.06	5.00	30.00	7.93	49.13	--	--	--	--	--	--	--	--
8/7/2007	NP		57.06	5.00	30.00	9.20	47.86	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.49	7.34
11/14/2007	--		57.06	5.00	30.00	8.52	48.54	--	--	--	--	--	--	--	--
2/28/2008	--		57.06	5.00	30.00	7.04	50.02	--	--	--	--	--	--	--	--

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

Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-12 Cont.								--	--	--	--	--	--	--	--
5/23/2008	--		57.06	5.00	30.00	9.00	48.06	--	--	--	--	--	--	--	--
8/13/2008	NP		57.06	5.00	30.00	9.38	47.68	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.03	8.39
11/19/2008	--		57.06	5.00	30.00	9.01	48.05	--	--	--	--	--	--	--	--
2/10/2009	--		57.06	5.00	30.00	8.10	48.96	--	--	--	--	--	--	--	--
A-13															
6/21/2000	--		55.11	10.00	10.00	--	--	--	--	--	--	--	--	--	--
9/20/2000	--		55.11	10.00	10.00	--	--	--	--	--	--	--	--	--	--
12/26/2000	--		55.11	10.00	10.00	--	--	--	--	--	--	--	--	--	--
3/20/2001	--		55.11	10.00	10.00	--	--	--	--	--	--	--	--	--	--
6/12/2001	--		55.11	10.00	10.00	--	--	--	--	--	--	--	--	--	--
9/23/2001	--		55.11	10.00	10.00	--	--	--	--	--	--	--	--	--	--
12/31/2001	--		55.11	10.00	10.00	--	--	--	--	--	--	--	--	--	--
3/21/2002	--		55.11	10.00	10.00	6.70	48.41	--	--	--	--	--	--	--	--
4/17/2002	--		55.11	10.00	10.00	7.95	47.16	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	--
8/12/2002	--		55.11	10.00	10.00	10.11	45.00	--	--	--	--	--	--	--	--
12/6/2002	--		55.11	10.00	10.00	10.26	44.85	--	--	--	--	--	--	--	--
1/30/2003	--		55.11	10.00	10.00	7.81	47.30	--	--	--	--	--	--	--	--
5/28/2003	--		55.11	10.00	10.00	9.06	46.05	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.9	6.5
8/6/2003	--		55.11	10.00	10.00	10.22	44.89	--	--	--	--	--	--	--	--
11/14/2003	--		55.11	10.00	10.00	10.27	44.84	--	--	--	--	--	--	--	--
02/02/2004	--	g	60.26	10.00	10.00	7.92	52.34	--	--	--	--	--	--	--	--
05/04/2004	--		60.26	10.00	10.00	10.06	50.20	--	--	--	--	--	--	--	--
09/02/2004	P		60.26	10.00	10.00	10.34	49.92	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.0	6.6
11/10/2004	--		60.26	10.00	10.00	8.95	51.31	--	--	--	--	--	--	--	--
02/02/2005	--		60.26	10.00	10.00	7.28	52.98	--	--	--	--	--	--	--	--
05/09/2005	--		60.26	10.00	10.00	7.85	52.41	--	--	--	--	--	--	--	--
08/11/2005	--		60.26	10.00	10.00	9.70	50.56	--	--	--	--	--	--	--	--
11/18/2005	--		60.26	10.00	10.00	9.27	50.99	--	--	--	--	--	--	--	--
02/15/2006	--		60.26	10.00	10.00	7.24	53.02	--	--	--	--	--	--	--	--
5/30/2006	--		60.26	10.00	10.00	8.38	51.88	--	--	--	--	--	--	--	--

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

Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-13 Cont.								--	--	--	--	--	--	--	--
8/11/2006	--		60.26	10.00	10.00	9.55	50.71	--	--	--	--	--	--	--	--
11/1/2006	--		60.26	10.00	10.00	9.98	50.28	--	--	--	--	--	--	--	--
2/7/2007	--		60.26	10.00	10.00	9.07	51.19	--	--	--	--	--	--	--	--
5/9/2007	--		60.26	10.00	10.00	8.15	52.11	--	--	--	--	--	--	--	--
8/7/2007	--		60.26	10.00	10.00	10.05	50.21	--	--	--	--	--	--	--	--
11/14/2007	--		60.26	10.00	10.00	9.20	51.06	--	--	--	--	--	--	--	--
2/28/2008	--		60.26	10.00	10.00	6.82	53.44	--	--	--	--	--	--	--	--
5/23/2008	--		60.26	10.00	10.00	9.67	50.59	--	--	--	--	--	--	--	--
8/13/2008	--		60.26	10.00	10.00	10.17	50.09	--	--	--	--	--	--	--	--
11/19/2008	--		60.26	10.00	10.00	9.63	50.63	--	--	--	--	--	--	--	--
2/10/2009	--		60.26	10.00	10.00	8.48	51.78	--	--	--	--	--	--	--	--
AR-1															
6/21/2000	--		54.72	10.00	30.00	--	--	--	--	--	--	--	--	--	--
9/20/2000	--		54.72	10.00	30.00	--	--	--	--	--	--	--	--	--	--
12/26/2000	--		54.72	10.00	30.00	9.95	44.77	--	--	--	--	--	--	--	--
3/20/2001	--		54.72	10.00	30.00	8.34	46.38	--	--	--	--	--	--	--	--
6/12/2001	--		54.72	10.00	30.00	10.17	44.55	--	--	--	--	--	--	--	--
9/23/2001	--		54.72	10.00	30.00	10.72	44.00	--	--	--	--	--	--	--	--
12/31/2001	--		54.72	10.00	30.00	5.91	48.81	--	--	--	--	--	--	--	--
3/21/2002	--		54.72	10.00	30.00	7.00	47.72	--	--	--	--	--	--	--	--
4/17/2002	--		54.72	10.00	30.00	8.33	46.39	--	--	--	--	--	--	--	--
8/12/2002	--		54.72	10.00	30.00	10.18	44.54	--	--	--	--	--	--	--	--
12/6/2002	--		54.72	10.00	30.00	10.21	44.51	--	--	--	--	--	--	--	--
1/30/2003	--		54.72	10.00	30.00	8.22	46.50	--	--	--	--	--	--	--	--
5/28/2003	--		54.72	10.00	30.00	9.62	45.10	--	--	--	--	--	--	--	--
8/6/2003	--		54.72	10.00	30.00	10.47	44.25	--	--	--	--	--	--	--	--
11/14/2003	--	d	54.72	10.00	30.00	10.40	44.32	--	--	--	--	--	--	--	--
02/02/2004	--	d, g	59.52	10.00	30.00	7.96	51.56	--	--	--	--	--	--	--	--
05/04/2004	--	d	59.52	10.00	30.00	10.17	49.35	--	--	--	--	--	--	--	--
09/02/2004	--		59.52	10.00	30.00	10.28	49.24	--	--	--	--	--	--	--	--

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Station #4931, 731 West MacArthur Blvd., Oakland, CA

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								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
AR-1 Cont.															
11/10/2004	--		59.52	10.00	30.00	9.15	50.37	--	--	--	--	--	--	--	--
02/02/2005	--		59.52	10.00	30.00	7.80	51.72	--	--	--	--	--	--	--	--
05/09/2005	--		59.52	10.00	30.00	7.03	52.49	--	--	--	--	--	--	--	--
08/11/2005	--		59.52	10.00	30.00	9.82	49.70	--	--	--	--	--	--	--	--
11/18/2005	--		59.52	10.00	30.00	9.83	49.69	--	--	--	--	--	--	--	--
02/15/2006	--		59.52	10.00	30.00	7.78	51.74	--	--	--	--	--	--	--	--
5/30/2006	--		59.52	10.00	30.00	8.65	50.87	--	--	--	--	--	--	--	--
8/11/2006	--		59.52	10.00	30.00	9.69	49.83	--	--	--	--	--	--	--	--
11/1/2006	--		59.52	10.00	30.00	10.07	49.45	--	--	--	--	--	--	--	--
2/7/2007	--		59.52	10.00	30.00	9.33	50.19	--	--	--	--	--	--	--	--
5/9/2007	--		59.52	10.00	30.00	8.45	51.07	--	--	--	--	--	--	--	--
8/7/2007	--		59.52	10.00	30.00	10.12	49.40	--	--	--	--	--	--	--	--
11/14/2007	--		59.52	10.00	30.00	9.31	50.21	--	--	--	--	--	--	--	--
2/28/2008	--		59.52	10.00	30.00	7.05	52.47	--	--	--	--	--	--	--	--
5/23/2008	--	j	59.52	10.00	30.00	--	--	--	--	--	--	--	--	--	--
8/13/2008	--		59.52	10.00	30.00	10.20	49.32	--	--	--	--	--	--	--	--
11/19/2008	--		59.52	10.00	30.00	9.73	49.79	--	--	--	--	--	--	--	--
2/10/2009	--		59.52	10.00	30.00	8.61	50.91	--	--	--	--	--	--	--	--
AR-2															
6/21/2000	--		54.77	8.00	28.00	--	--	--	--	--	--	--	--	--	--
9/20/2000	--		54.77	8.00	28.00	--	--	--	--	--	--	--	--	--	--
12/26/2000	--		54.77	8.00	28.00	--	--	--	--	--	--	--	--	--	--
3/20/2001	--		54.77	8.00	28.00	3.13	51.64	--	--	--	--	--	--	--	--
6/12/2001	--		54.77	8.00	28.00	4.51	50.26	--	--	--	--	--	--	--	--
9/23/2001	--		54.77	8.00	28.00	6.05	48.72	--	--	--	--	--	--	--	--
12/31/2001	--		54.77	8.00	28.00	2.79	51.98	--	--	--	--	--	--	--	--
3/21/2002	--		54.77	8.00	28.00	7.75	47.02	--	--	--	--	--	--	--	--
4/17/2002	--		54.77	8.00	28.00	2.24	52.53	--	--	--	--	--	--	--	--
8/12/2002	--		54.77	8.00	28.00	4.93	49.84	--	--	--	--	--	--	--	--
12/6/2002	--		54.77	8.00	28.00	6.09	48.68	--	--	--	--	--	--	--	--

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								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
AR-2 Cont.															
1/30/2003	--		54.77	8.00	28.00	3.89	50.88	--	--	--	--	--	--	--	--
5/28/2003	--		54.77	8.00	28.00	3.33	51.44	--	--	--	--	--	--	--	--
8/6/2003	--		54.77	8.00	28.00	5.05	49.72	--	--	--	--	--	--	--	--
11/14/2003	--		54.77	8.00	28.00	6.01	48.76	--	--	--	--	--	--	--	--
02/02/2004	--	g	59.18	8.00	28.00	3.88	55.30	--	--	--	--	--	--	--	--
05/04/2004	--		59.18	8.00	28.00	6.01	53.17	--	--	--	--	--	--	--	--
09/02/2004	--		59.18	8.00	28.00	5.65	53.53	--	--	--	--	--	--	--	--
11/10/2004	--		59.18	8.00	28.00	5.48	53.70	--	--	--	--	--	--	--	--
02/02/2005	--		59.18	8.00	28.00	2.62	56.56	--	--	--	--	--	--	--	--
05/09/2005	--		59.18	8.00	28.00	2.84	56.34	--	--	--	--	--	--	--	--
08/11/2005	--		59.18	8.00	28.00	4.33	54.85	--	--	--	--	--	--	--	--
11/18/2005	--		59.18	8.00	28.00	5.34	53.84	--	--	--	--	--	--	--	--
02/15/2006	--		59.18	8.00	28.00	2.49	56.69	--	--	--	--	--	--	--	--
5/30/2006	--		59.18	8.00	28.00	3.02	56.16	--	--	--	--	--	--	--	--
8/11/2006	--		59.18	8.00	28.00	4.32	54.86	--	--	--	--	--	--	--	--
11/1/2006	--		59.18	8.00	28.00	5.25	53.93	--	--	--	--	--	--	--	--
2/7/2007	--		59.18	8.00	28.00	4.64	54.54	--	--	--	--	--	--	--	--
5/9/2007	--		59.18	8.00	28.00	3.15	56.03	--	--	--	--	--	--	--	--
8/7/2007	--		59.18	8.00	28.00	4.55	54.63	--	--	--	--	--	--	--	--
11/14/2007	--		59.18	8.00	28.00	5.03	54.15	--	--	--	--	--	--	--	--
2/28/2008	--		59.18	8.00	28.00	1.82	57.36	--	--	--	--	--	--	--	--
5/23/2008	--	j	59.18	8.00	28.00	--	--	--	--	--	--	--	--	--	--
8/13/2008	--		59.18	8.00	28.00	5.05	54.13	--	--	--	--	--	--	--	--
11/19/2008	--		59.18	8.00	28.00	5.49	53.69	--	--	--	--	--	--	--	--
2/10/2009	--		59.18	8.00	28.00	5.10	54.08	--	--	--	--	--	--	--	--
AR-3															
6/21/2000	--		54.19	10.00	30.00	--	--	--	--	--	--	--	--	--	--
9/20/2000	--		54.19	10.00	30.00	--	--	--	--	--	--	--	--	--	--
12/26/2000	--		54.19	10.00	30.00	9.70	44.49	--	--	--	--	--	--	--	--
3/20/2001	--		54.19	10.00	30.00	--	--	--	--	--	--	--	--	--	--

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Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
AR-3 Cont.															
6/12/2001	--		54.19	10.00	30.00	--	--	--	--	--	--	--	--	--	--
9/23/2001	--		54.19	10.00	30.00	10.43	43.76	--	--	--	--	--	--	--	--
12/31/2001	--		54.19	10.00	30.00	5.18	49.01	--	--	--	--	--	--	--	--
3/21/2002	--		54.19	10.00	30.00	6.78	47.41	--	--	--	--	--	--	--	--
4/17/2002	--		54.19	10.00	30.00	8.06	46.13	--	--	--	--	--	--	--	--
8/12/2002	--		54.19	10.00	30.00	9.94	44.25	--	--	--	--	--	--	--	--
12/6/2002	--		54.19	10.00	30.00	9.99	44.20	--	--	--	--	--	--	--	--
1/30/2003	--		54.19	10.00	30.00	7.96	46.23	--	--	--	--	--	--	--	--
5/28/2003	--		54.19	10.00	30.00	8.94	45.25	--	--	--	--	--	--	--	--
8/6/2003	--		54.19	10.00	30.00	9.94	44.25	--	--	--	--	--	--	--	--
11/14/2003	--		54.19	10.00	30.00	10.03	44.16	--	--	--	--	--	--	--	--
02/02/2004	--	g	59.10	10.00	30.00	6.90	52.20	--	--	--	--	--	--	--	--
05/04/2004	--		59.10	10.00	30.00	9.12	49.98	--	--	--	--	--	--	--	--
09/02/2004	--		59.10	10.00	30.00	10.15	48.95	--	--	--	--	--	--	--	--
11/10/2004	--		59.10	10.00	30.00	8.79	50.31	--	--	--	--	--	--	--	--
02/02/2005	--		59.10	10.00	30.00	7.30	51.80	--	--	--	--	--	--	--	--
05/09/2005	--		59.10	10.00	30.00	7.71	51.39	--	--	--	--	--	--	--	--
08/11/2005	--		59.10	10.00	30.00	9.54	49.56	--	--	--	--	--	--	--	--
11/18/2005	--		59.10	10.00	30.00	9.43	49.67	--	--	--	--	--	--	--	--
02/15/2006	--		59.10	10.00	30.00	7.50	51.60	--	--	--	--	--	--	--	--
5/30/2006	--		59.10	10.00	30.00	8.82	50.28	--	--	--	--	--	--	--	--
8/11/2006	--		59.10	10.00	30.00	9.38	49.72	--	--	--	--	--	--	--	--
11/1/2006	--		59.10	10.00	30.00	9.75	49.35	--	--	--	--	--	--	--	--
2/7/2007	--		59.10	10.00	30.00	9.00	50.10	--	--	--	--	--	--	--	--
5/9/2007	--		59.10	10.00	30.00	8.12	50.98	--	--	--	--	--	--	--	--
8/7/2007	--		59.10	10.00	30.00	9.75	49.35	--	--	--	--	--	--	--	--
11/14/2007	--		59.10	10.00	30.00	8.91	50.19	--	--	--	--	--	--	--	--
2/28/2008	--		59.10	10.00	30.00	6.73	52.37	--	--	--	--	--	--	--	--
5/23/2008	--	j	59.10	10.00	30.00	--	--	--	--	--	--	--	--	--	--
8/13/2008	--		59.10	10.00	30.00	9.85	49.25	--	--	--	--	--	--	--	--
11/19/2008	--		59.10	10.00	30.00	9.35	49.75	--	--	--	--	--	--	--	--

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

Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
AR-3 Cont.	--							--	--	--	--	--	--	--	--
2/10/2009	--		59.10	10.00	30.00	8.29	50.81	--	--	--	--	--	--	--	--

SYMBOLS AND ABBREVIATIONS:

-- = Not analyzed/applicable/measured/available
< = Not detected at or above laboratory reporting limit
DO = Dissolved oxygen
DTW = Depth to water in ft bgs
ft bgs = feet below ground surface
ft MSL = feet above mean sea level
GRO = Gasoline range organics
GWE = Groundwater elevation measured in ft MSL
mg/L = Milligrams per liter
MTBE = Methyl tert butyl ether
NP = Not purged prior to sampling
P = Purged prior to sampling
TOC = Top of casing measured in ft MSL
TPH-g = Total petroleum hydrocarbons as gasoline
µg/L = Micrograms per liter
BTEX = Benzene, toluene, ethylbenzene and xylenes

FOOTNOTES:

a = Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel for GRO/TPH-g.
b = The concentration indicated for this analyte (MTBE) was an estimated value above the calibration range of the instrument.
c = This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose.
d = ORC sock in well.
e = Well inaccessible; well paved over.
f = Sheen in well.
g = Well surveyed to NAVD '88 datum on January 28, 2004.
h = Possible low bias due to CCV falling outside acceptance criteria for GRO.
i = Hydrocarbon result partly due to individual peak(s) in quantitative range for GRO.
j = Well inaccessible.

NOTES:

Top and bottom of screen measurements for wells A-2 through A-5 were estimated from the EMCON sampling sheet.

Beginning in the first quarter 2003 (1/30/2003), groundwater samples were analyzed by EPA method 8260B for TPH-g, BTEX, and fuel oxygenates. Prior to 1/30/03, TPH-g was analyzed using EPA Method 8015B modified and MTBE by 8021B unless otherwise noted.

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

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

Values for DO and pH were obtained through field measurements.

GRO analysis was completed by EPA method 8260B (C4-C12) for samples collected from the time period April 2006 through February 4, 2008. The analysis for GRO was changed to EPA method 8015B (C6-C12) for samples collected from the time period February 5, 2008 through the present.

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

Table 2. Summary of Fuel Additives Analytical Data
Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
A-2									
1/30/2003	<40	<20	--	<0.50	<0.50	<0.50	--	--	a
5/28/2003	<100	<20	1.1	<0.50	<0.50	<0.50	--	--	
8/6/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/02/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/11/2006	<300	<20	3.6	<0.50	<0.50	<0.50	<0.50	<0.50	
8/7/2007	<300	<20	3.4	<0.50	<0.50	<0.50	<0.50	<0.50	b
8/13/2008	<300	<10	19	<0.50	<0.50	<0.50	<0.50	<0.50	
A-3									
5/28/2003	<100	<20	43	<0.50	<0.50	24	--	--	
02/02/2004	<100	<20	13	<0.50	<0.50	4.6	<0.50	<0.50	
09/02/2004	<500	<100	62	<2.5	<2.5	15	<2.5	<2.5	
02/02/2005	<100	<20	6.8	<0.50	<0.50	2.4	<0.50	<0.50	b
08/11/2005	<100	<20	39	<0.50	<0.50	4.2	<0.50	<0.50	
02/15/2006	<300	<20	2.2	<0.50	<0.50	0.58	<0.50	<0.50	
8/11/2006	<300	<20	4.1	<0.50	<0.50	<0.50	<0.50	<0.50	
2/7/2007	<300	<20	0.58	<0.50	<0.50	<0.50	<0.50	<0.50	
8/7/2007	<300	<20	3.9	<0.50	<0.50	<0.50	<0.50	<0.50	b
2/28/2008	<300	<10	0.58	<0.50	<0.50	<0.50	<0.50	<0.50	
8/13/2008	<300	<10	0.55	<0.50	<0.50	<0.50	<0.50	<0.50	
2/10/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
A-4									
1/30/2003	<4,000	<2,000	2,100	<50	<50	530	--	--	a
5/28/2003	<10,000	<2,000	2,500	<50	<50	590	--	--	
8/6/2003	<5,000	<1,000	2,500	<25	<25	560	<25	<25	
11/14/2003	<1,000	320	310	<5.0	<5.0	76	--	--	
02/02/2004	<5,000	<1,000	1,500	<25	<25	350	<25	<25	
05/04/2004	<10,000	<2,000	2,300	<50	<50	510	<50	<50	
09/02/2004	<5,000	1,200	1,200	<25	<25	280	<25	<25	
11/10/2004	<2,000	910	1,100	<10	<10	270	<10	<10	

Table 2. Summary of Fuel Additives Analytical Data
Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
A-4 Cont.									
02/02/2005	<2,000	2,100	1,700	<10	<10	430	<10	<10	b
05/09/2005	<10,000	2,000	1,800	<50	<50	460	<50	<50	
08/11/2005	<2,000	2,400	1,200	<10	<10	310	<10	<10	
11/18/2005	<500	1,400	310	<2.5	<2.5	98	<2.5	<2.5	b
02/15/2006	<1,500	2,700	910	<2.5	<2.5	270	<2.5	<2.5	
5/30/2006	<6,000	3,000	1,200	<10	<10	340	<10	<10	
8/11/2006	<6,000	3,200	1,200	<10	<10	350	<10	<10	
11/1/2006	<6,000	1,700	360	<10	<10	95	<10	--	b
2/7/2007	<6,000	3,000	1,500	<10	<10	460	<10	<10	
5/9/2007	<6,000	2,200	340	<10	<10	91	<10	<10	
8/7/2007	<3,000	1,800	510	<5.0	<5.0	140	<5.0	<5.0	b
11/14/2007	<300	600	280	<0.50	<0.50	90	<0.50	<0.50	
2/28/2008	<300	1,600	350	<0.50	<0.50	73	<0.50	<0.50	
5/23/2008	<12,000	2,500	1,000	<20	<20	270	<20	<20	
8/13/2008	<6,000	3,200	530	<10	<10	190	<10	<10	
11/19/2008	<6,000	2,000	430	<10	<10	140	<10	<10	
2/10/2009	<6,000	2,300	400	<10	<10	120	<10	<10	
A-5									
5/28/2003	<10,000	<2,000	1,500	<50	<50	620	--	--	
02/02/2004	<500	170	140	<2.5	<2.5	54	<2.5	<2.5	
09/02/2004	<500	150	66	<2.5	<2.5	29	<2.5	<2.5	
02/02/2005	<100	840	17	<0.50	<0.50	7.6	<0.50	<0.50	
08/11/2005	<100	530	6.8	<0.50	<0.50	7.1	<0.50	<0.50	
02/15/2006	<300	460	5.1	<0.50	<0.50	4.2	<0.50	<0.50	
8/11/2006	<300	1,100	12	<0.50	<0.50	5.0	<0.50	<0.50	
2/7/2007	<300	600	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	
8/7/2007	<300	79	0.81	<0.50	<0.50	<0.50	<0.50	<0.50	b
2/28/2008	<300	230	0.97	<0.50	<0.50	<0.50	<0.50	<0.50	
8/13/2008	<300	33	0.69	<0.50	<0.50	<0.50	<0.50	<0.50	
2/10/2009	<300	18	1.6	<0.50	<0.50	0.59	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data
Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
A-6									
11/14/2003	--	--	--	--	--	--	--	--	Well inaccessible
02/02/2004	--	--	--	--	--	--	--	--	Well inaccessible
05/04/2004	--	--	--	--	--	--	--	--	Well inaccessible
09/02/2004	--	--	--	--	--	--	--	--	Well inaccessible
11/10/2004	--	--	--	--	--	--	--	--	Well inaccessible
8/11/2005	--	--	--	--	--	--	--	--	Well inaccessible
8/11/2006	--	--	--	--	--	--	--	--	Well inaccessible
A-7									
5/28/2003	<100	<20	3.8	<0.50	<0.50	0.94	--	--	
09/02/2004	<100	<20	8.9	<0.50	<0.50	3.0	<0.50	<0.50	
08/11/2005	<100	<20	18	<0.50	<0.50	4.4	<0.50	<0.50	
8/11/2006	<300	<20	3.6	<0.50	<0.50	0.91	0.54	<0.50	
8/7/2007	<300	<20	2.7	<0.50	<0.50	<0.50	<0.50	<0.50	b
8/13/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
A-8									
1/30/2003	<8,000	<4,000	2,200	<100	<100	900	--	--	a
5/28/2003	<10,000	<2,000	2,100	<50	<50	1,100	--	--	
8/6/2003	<10,000	<2,000	3,000	<50	<50	1,200	<50	<50	
11/14/2003	<1,000	<200	850	<5.0	<5.0	320	--	--	
02/02/2004	<5,000	<1,000	1,100	<25	<25	380	<25	<25	
05/04/2004	<10,000	<2,000	1,600	<50	<50	440	<50	<50	
09/02/2004	<5,000	<1,000	680	<25	<25	170	<25	<25	
11/10/2004	<500	<100	290	<2.5	<2.5	66	<2.5	<2.5	
02/02/2005	<5,000	<1,000	1,900	<25	<25	510	<25	<25	b
05/09/2005	<100	<20	66	<0.50	<0.50	2.9	<0.50	<0.50	
08/11/2005	<2,500	<500	1,100	<12	<12	310	<12	<12	
11/18/2005	<1,000	<200	340	<5.0	<5.0	120	<5.0	<5.0	b
02/15/2006	<6,000	880	1,100	<10	<10	330	<10	<10	
5/30/2006	<1,500	<100	140	<2.5	<2.5	43	<2.5	<2.5	
8/11/2006	<3,000	<200	290	<5.0	<5.0	92	<5.0	<5.0	

Table 2. Summary of Fuel Additives Analytical Data
Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
A-8 Cont.									
11/1/2006	<3,000	1,200	910	<5.0	<5.0	250	<5.0	<5.0	
2/7/2007	<15,000	<1,000	1,200	<25	<25	330	<25	<25	
5/9/2007	<1,500	<100	55	<2.5	<2.5	16	<2.5	<2.5	
8/7/2007	<1,500	140	430	<2.5	<2.5	160	<2.5	<2.5	b
11/14/2007	<300	28	100	<0.50	<0.50	44	<0.50	<0.50	
2/28/2008	<3,000	230	220	<5.0	<5.0	72	<5.0	<5.0	
5/23/2008	--	--	--	--	--	--	--	--	c
8/13/2008	<15,000	<500	250	<25	<25	86	<25	<25	
11/19/2008	<12,000	<400	230	<20	<20	100	<20	<20	
2/10/2009	<15,000	<500	320	<25	<25	120	<25	<25	
A-9									
1/30/2003	<40	<20	1.1	<0.50	<0.50	<0.50	--	--	
5/28/2003	<100	<20	0.74	<0.50	<0.50	<0.50	--	--	
8/6/2003	<100	<20	1.8	<0.50	<0.50	<0.50	<0.50	<0.50	
09/02/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	<20	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	
8/11/2006	<300	<20	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	
8/7/2007	<300	<20	0.64	<0.50	<0.50	<0.50	<0.50	<0.50	b
8/13/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
A-10									
09/02/2004	<1,000	<200	270	<5.0	<5.0	44	<5.0	<5.0	
08/11/2005	<100	<20	97	<0.50	<0.50	14	<0.50	<0.50	
8/11/2006	<300	<20	46	<0.50	<0.50	7.3	<0.50	<0.50	
8/7/2007	<300	<20	8.9	<0.50	<0.50	<0.50	<0.50	<0.50	b
8/13/2008	<300	<10	28	<0.50	<0.50	6.9	<0.50	<0.50	
A-11									
5/28/2003	<100	<20	0.53	<0.50	<0.50	<0.50	--	--	
09/02/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/11/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data
Station #4931, 731 West MacArthur Blvd., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
A-11 Cont.									
8/7/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
8/13/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
A-12									
5/28/2003	<100	<20	10	<0.50	<0.50	2.5	--	--	
02/02/2004	<100	<20	0.91	<0.50	<0.50	<0.50	<0.50	<0.50	
09/02/2004	<100	<20	6.2	<0.50	<0.50	1.7	<0.50	<0.50	
02/02/2005	<100	<20	8.3	<0.50	<0.50	2.2	<0.50	<0.50	b
08/11/2005	<100	<20	5.4	<0.50	<0.50	1.1	<0.50	<0.50	
8/11/2006	<300	<20	7.4	<0.50	<0.50	2.5	<0.50	<0.50	
8/7/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
8/13/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
A-13									
5/28/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
09/02/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
AR-1									
AR-2									
AR-3									

ABBREVIATIONS:

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

FOOTNOTES:

a = The result for TBA was reported with a possible high bias due to the continuing calibration verification falling outside acceptance criteria.

b = The calibration verification for ethanol was within the method limits but outside the contract limits.

c = Well Inaccessible.

NOTES:

All volatile organic compounds analyzed using EPA Method 8260B.

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

Table 3. Historical Ground-Water Flow Direction and Gradient

Station #4931, 731 West MacArthur Blvd., Oakland, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
6/21/2000	West-Southwest	0.031
9/20/2000	Southwest	0.013
12/26/2000	West	0.028
3/20/2001	West	0.046
6/12/2001	West	0.014
9/23/2001	West	0.012
12/31/2001	West	0.024
3/21/2002	West	0.047
4/17/2002	West	0.03
8/12/2002	West	0.016
12/6/2002	West	0.015
1/30/2003	West	Variable
5/28/2003	West	0.022 a
8/6/2003	West-Southwest	0.018
11/14/2003	West	0.02
2/2/2004	West	0.04
5/4/2004	West to North	0.025 to 0.033
9/2/2004	West	0.033
11/10/2004	West	0.031
2/2/2005	West-Southwest	0.04
5/9/2005	Northwest-Southwest	0.04
8/11/2005	West	0.02
11/18/2005	West	0.03
2/15/2006	Southwest	0.04
5/30/2006	West	0.05
8/11/2006	West	0.01
11/1/2006	West	0.01
2/7/2007	West	0.02
5/9/2007	West	0.05
8/7/2007	West	0.02
11/14/2007	West	0.02
2/28/2008	West	0.05
5/23/2008	West	0.03
8/13/2008	West	0.01
11/19/2008	West-Southwest	0.02
2/10/2009	West	0.02

FOOTNOTES:

a = Using wells AR-1 and A-9

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

APPENDIX A

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



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

February 24, 2009

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

Re: Groundwater Sampling Data Package, ARCO Service Station No. 4931, located at
731 W. MacArthur Boulevard, Oakland, California.

General Information

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

Phone Number: (530) 676-6000

On-Site Supplier Representative: Roberto Heimlich and Arturo Heimlich

Sampling Date: February 10, 2009

Unusual Field Conditions: None noted.

Scope of Work Performed: Quarterly monitoring and sampling.

Variations from Work Scope: None noted.

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

Mr. Rob Miller, Broadbent & Associates, Inc.
Groundwater Sampling Data Package
ARCO Service Station No. 4931, Oakland, CA
Page 2

February 24, 2009

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

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Jay R. Johnson, P.G.
Project Manager



Attachments:

- Field Data Sheets
- Chain of Custody Documentation
- Certified Analytical Results
- Field Procedures for Groundwater Sampling

CC: Mr. Paul Supple, BP/ARCO

BP Alameda Portfolio

HYDROLOGIC DATA SHEET

AR-915

Gauge Date: 2/10/09

Project Name: 731 MacArthur Blvd, Oakland

Field Technician: ROBERTO

Project Number: 4931

TOC = Top of Well Casing Elevation

DIA = Well Casing Diameter

TOS = Depth to Top of Screen

ELEV = Groundwater Elevation

DTW = Depth to Groundwater Below TOC

DUP = Duplicate

DTB = Depth to Bottom of Well Casing Below TOC

WELL OR LOCATION	TIME	MEASUREMENT					SAMPLE	SHEEN CONFIRMATION (w/baller)	COMMENTS
		TOC	TOS	DTW	DTB	DIA			
A-2	10:05			7.83	19.33				
A-3	10:10			7.30	16.04	4"		YES	
A-4	11:01			7.68	19.53	4"		YES	
A-5	10:43			7.80	24.30			YES	
A-7	10:49			7.47	22.32				
A-8	10:37			7.11	17.73	3"		YES	
A-9	10:32			7.07	37.08				
A-10	10:26			8.74	29.58				
A-11	9:54			8.67	29.68				
A-12	10:00			8.10	29.72				
A-13	9:39			8.48	28.90	4"			
AR-1	10:55			8.61	22.67	6"			
AR-2	10:15			5.10	26.17				
AR-3	10:21			8.29	28.72				

FW- Arturo Heimlich

Calibration Date

pH/Conductivity/temperature Meter - YSI Model 63

pH 2/10/09

DO Meter - YSI 55 Series

Conductivity 2/10/09

Please refer to groundwater sampling field procedures

DO 2/10/09

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 4931 PURGED BY: R4 WELL I.D.: A-3
 CLIENT NAME: SAMPLED BY: R4 SAMPLE I.D.: A-3
 LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES:

DATE PURGED 2/10/09 START (2400hr) 12:52 END (2400hr) 13:02
 DATE SAMPLED 2/10/09 SAMPLE TIME (2400hr) 12:59

SAMPLE TYPE: Groundwater x Surface Water Treatment Effluent Other

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

DEPTH TO BOTTOM (feet) = 16.04 Casing VOLUME (gal) =
 DEPTH TO WATER (feet) = 7.30 CALCULATED PURGE (gal) = NP
 WATER COLUMN HEIGHT (feet) = 8.7 ACTUAL PURGE (gal) =

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>2/10/09</u>	<u>12:56</u>	<u>NP</u>	<u>18.3</u>	<u>530</u>	<u>7.14</u>	<u>clear</u>	

NO PURGE

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 7.30 SAMPLE TURBIDITY: clear

80% RECHARGE: ✓ YES NO ANALYSES: SWO

ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 610A5/HCL

PURGING EQUIPMENT

- Bladder Pump
- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Other: _____

Pump Depth: NA

SAMPLING EQUIPMENT

- Bladder Pump
- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Other: _____

Bailer (Teflon)
 Bailer (PVC or disposable)
 Bailer (Stainless Steel)
 Dedicated _____

WELL INTEGRITY: GOOD

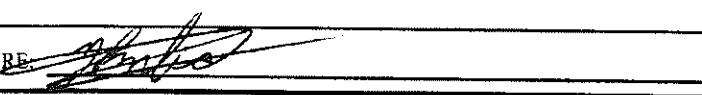
LOCK #: MASTER

REMARKS: DO 0.90

SIGNATURE: John

BP ALAMEDA PORTFOLIO

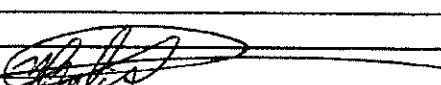
WATER SAMPLE FIELD DATA SHEET

PROJECT #:	4931	PURGED BY:	R.H.	WELL I.D.:	A-4		
CLIENT NAME:		SAMPLED BY:	RH	SAMPLE I.D.:	A-4		
LOCATION:	Oakland, 731 W. MacArthur Blvd.				QA SAMPLES:		
DATE PURGED	2/10/09 NP	START (2400hr)	11:23	END (2400hr)	11:31		
DATE SAMPLED	2/10/09	SAMPLE TIME (2400hr)	11:29				
SAMPLE TYPE:	Groundwater <input checked="" type="checkbox"/>	Surface Water		Treatment Effluent			
CASING DIAMETER:	2"	3"	4" <input checked="" type="checkbox"/>	5"	6"	8"	Other _____
Casing Volume: (gallons per foot)	(0.17)	(0.38)	(0.67)	(1.02)	(1.50)	(2.60)	()
DEPTH TO BOTTOM (feet) =	19.53		CASING VOLUME (gal) =				
DEPTH TO WATER (feet) =	7.68		CALCULATED PURGE (gal) =			NP	
WATER COLUMN HEIGHT (feet) =	11.8		ACTUAL PURGE (gal) =				
FIELD MEASUREMENTS							
DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
2/10/09	11:26	NP	15.4	627	7.31	clear	
SAMPLE INFORMATION							
SAMPLE DEPTH TO WATER:	7.68		SAMPLE TURBIDITY:			clear	
80% RECHARGE:	<input checked="" type="checkbox"/> YES	NO	ANALYSES:			SIVD	
ODOR:	no		SAMPLE VESSEL / PRESERVATIVE:			6VOAS /VCL	
PURGING EQUIPMENT				SAMPLING EQUIPMENT			
Bladder Pump	Bailer (Teflon)	Bladder Pump	Bailer (Teflon)				
Centrifugal Pump	Bailer (PVC)	Centrifugal Pump	Bailer (PVC or <input checked="" type="checkbox"/> disposable)				
Submersible Pump	Bailer (Stainless Steel)	Submersible Pump	Bailer (Stainless Steel)				
Peristaltic Pump	Dedicated	Peristaltic Pump	Dedicated				
Other:		Other:					
Pump Depth:	NA						
WELL INTEGRITY:	GOOD		LOCK#:			MASTER	
REMARKS:	DO 0.87						
SIGNATURE:							
	Page _____ of _____						

BP ALAMEDA PORTFOLIO
WATER SAMPLE FIELD DATA SHEET

PROJECT #:	4931	PURGED BY:	RH	WELL I.D.:	A-5			
CLIENT NAME:		SAMPLED BY:	RH	SAMPLE I.D.:	A-5			
LOCATION:	Oakland, 731 W. MacArthur Blvd.							
DATE PURGED	2/10/09	NP	START (2400hr)	11:08	END (2400hr)	11:18		
DATE SAMPLED	2/10/09		SAMPLE TIME (2400hr)	11:16				
SAMPLE TYPE:	Groundwater <input checked="" type="checkbox"/>	Surface Water <input type="checkbox"/>	Treatment Effluent <input type="checkbox"/>	Other <input type="checkbox"/>				
CASING DIAMETER:	2"	3"	4"	5"	6"	8"	Other ()	
Casing Volume: (gallons per foot)	(0.17)	(0.38)	(0.67)	(1.02)	(1.50)	(2.60)		
DEPTH TO BOTTOM (feet) =	24.80		CASING VOLUME (gal) =					
DEPTH TO WATER (feet) =	7.80		CALCULATED PURGE (gal) =					
WATER COLUMN HEIGHT (feet) =	16.5		ACTUAL PURGE (gal) = <i>NP</i>					
FIELD MEASUREMENTS								
DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)	
2/10/09	11:11	NP	16.2	587	7.52	clear		
<i>NO PURGE</i>								
SAMPLE INFORMATION								
SAMPLE DEPTH TO WATER:	7.80		SAMPLE TURBIDITY: <i>clear</i>					
80% RECHARGE:	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	ANALYSES: SWO					
ODOR:	<i>NO</i>		SAMPLE VESSEL / PRESERVATIVE: 6VOAS/HCl					
PURGING EQUIPMENT				SAMPLING EQUIPMENT				
<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Bailer (Teflon)	<input checked="" type="checkbox"/> Bladder Pump	<input checked="" type="checkbox"/> Bailer (Teflon)					
<input type="checkbox"/> Centrifugal Pump	<input type="checkbox"/> Bailer (PVC)	<input type="checkbox"/> Centrifugal Pump	<input type="checkbox"/> Bailer (PVC or <input checked="" type="checkbox"/> disposable)					
<input type="checkbox"/> Submersible Pump	<input type="checkbox"/> Bailer (Stainless Steel)	<input type="checkbox"/> Submersible Pump	<input type="checkbox"/> Bailer (Stainless Steel)					
<input type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Dedicated	<input type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Dedicated					
Other:								
Pump Depth:	<i>NA</i>							
WELL INTEGRITY:	GOOD		LOCK#:					<i>MASTER</i>
REMARKS:	DO 0.85							
SIGNATURE:	<i>[Signature]</i>							
Page _____ of _____								

BP ALAMEDA PORTFOLIO
WATER SAMPLE FIELD DATA SHEET

PROJECT #:	4931	PURGED BY:	RH	WELL I.D.:	A-8		
CLIENT NAME:		SAMPLED BY:	RH	SAMPLE I.D.:	A-8		
LOCATION:	Oakland, 731 W. MacArthur Blvd.			QA SAMPLES:			
DATE PURGED	2/10/09 NP	START (2400hr)	11:37	END (2400hr)	11:46		
DATE SAMPLED	2/10/09	SAMPLE TIME (2400hr)	11:43				
SAMPLE TYPE:	Groundwater <input checked="" type="checkbox"/>	Surface Water		Treatment Effluent			
CASING DIAMETER:	2"	3"	4" <input checked="" type="checkbox"/>	5"	6"	8"	Other
Casing Volume: (gallons per foot)	(0.17)	(0.38)	(0.67)	(1.02)	(1.50)	(2.60)	()
DEPTH TO BOTTOM (feet) =	17.73			CASING VOLUME (gal) =			
DEPTH TO WATER (feet) =	7.11			CALCULATED PURGE (gal) =	NP		
WATER COLUMN HEIGHT (feet) =	10.6			ACTUAL PURGE (gal) =			
FIELD MEASUREMENTS							
DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
2/10/09	11:40	NP	17.9	985	6.87	clear	
SAMPLE INFORMATION							
SAMPLE DEPTH TO WATER:	7.11			SAMPLE TURBIDITY:	clear		
80% RECHARGE:	<input checked="" type="checkbox"/> YES	NO	ANALYSES:	SWC			
ODOR:	no			SAMPLE VESSEL / PRESERVATIVE:	6 VOAS/HCl		
PURGING EQUIPMENT				SAMPLING EQUIPMENT			
<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Bailer (Teflon)	<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Bailer (Teflon)				
<input type="checkbox"/> Centrifugal Pump	<input type="checkbox"/> Bailer (PVC)	<input type="checkbox"/> Centrifugal Pump	<input checked="" type="checkbox"/> Bailer (PVC or disposable)				
<input type="checkbox"/> Submersible Pump	<input type="checkbox"/> Bailer (Stainless Steel)	<input type="checkbox"/> Submersible Pump	<input type="checkbox"/> Bailer (Stainless Steel)				
<input type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Dedicated	<input type="checkbox"/> Peristaltic Pump	<input type="checkbox"/> Dedicated				
Other:		Other:					
Pump Depth:	NP						
WELL INTEGRITY:	GOOD			LOCK#:	MASTER		
REMARKS:	DO 0.89						
SIGNATURE:				Page			of

WELLHEAD OBSERVATION FORM

Site Name/Number: 4931-Oakland

Date: 2/10/09 Technician: ROBERTO



Well I.D.	Box in Good Condition?	Lock Missing?	Water in Wellbox?	Water Level Relative to Cap?	Well Cap?	Bolts Missing?	Bolts Stripped?	Bolt Holes Stripped?	Cracked or Broken Lid?	Cracked or Broken Box?	Grout Level more than 1ft below TOC?	Additional Comments (such as missing lid, concrete needs replacement, or other - explain)
	X = Yes Blank = No	X = Yes (replaced) Blank = No	X = Yes Blank = No	A = Above cap B = Below cap L = Level w/cap	I = Intact M = Missing or Compromised (replaced)	X = Yes Blank = No	X = Yes Blank = No	X = Yes Blank = No	X = Yes Blank = No	X = Yes Blank = No	X = Yes Blank = No	
A-2	X	—	—	—	I	—	—	—	—	—	—	
A-3	X	—	—	—	I	—	—	—	—	—	—	
A-4	X	—	—	—	I	—	—	—	—	—	—	
A-5	X	—	—	—	I	X	—	—	—	—	—	
A-7	X	—	—	—	I	—	—	—	—	—	—	
A-8	X	—	—	—	I	X	—	—	—	—	—	
A-9	X	—	—	—	I	X	—	—	—	—	—	
A-10	X	—	—	—	I	—	—	—	—	—	—	
A-11	X	—	—	—	I	—	—	—	—	—	—	
A-12	X	—	—	—	I	—	—	—	—	—	—	
A-13	X	—	—	—	I	—	—	—	—	—	—	
AR-1	X	NA	—	—	I	X	—	—	—	—	—	
AR-2	X	NA	—	—	I	X	—	—	—	—	—	
AR-3	X	NA	—	—	I	X	—	—	—	—	—	

DRUM INVENTORY

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

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

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

GENERAL SITE CONDITIONS

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



Laboratory Management Program LaMP Chain of Custody Record

Page 1 of 1

BP/ARC Project Name: BP 4931

Req Due Date (mm/dd/yy): 14 Day TAT

Rush TAT: Yes No

BP/ARC Facility No:

4931

Lab Work Order Number:

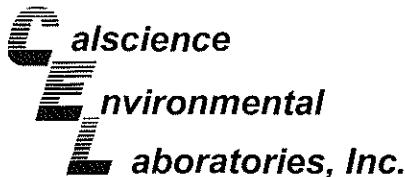
Lab Name: CalScience	BP/ARC Facility Address: 731 W. MacArthur Blvd.	Consultant/Contractor: Stratus Environmental Inc.
Lab Address: 7440 Lincoln Way, Garden Grove, CA 92841	City, State, ZIP Code: Oakland, CA	Consultant/Contractor Project No:
Lab PM: Richard Villafania	Lead Regulatory Agency: Alameda	Address: 3330 Cameron Park Drive, #550, Cameron Park, CA 95682
Lab Phone: 714-895-5494 Fax: 714-895-7501	California Global ID No.: T0600100110	Consultant/Contractor PM: Jay Johnson
Lab Shipping Acnt:	Envos Proposal No:	Phone: 530-676-6000 Fax: 530-676-6005
Lab Bottle Order No:	Accounting Mode: Provision <input checked="" type="checkbox"/> OOC-BU <input type="checkbox"/> OOC-RM <input type="checkbox"/>	Email EDD To: Chuff 1@stratusinc.net
Other Info:	Stage: BP/ARC WBS Stage Activity: BP/ARC WBS Activity	Invoice To: BP/ARC <input checked="" type="checkbox"/> Contractor <input type="checkbox"/>

Lab No.	Sample Description	Date	Time	Matrix		No. Containers / Preservative						Requested Analyses						Report Type & QC Level	
				Soil / Solid	Water / Liquid	Air / Vapor	Total Number of Containers	Unpressured	H ₂ SO ₄	HNO ₃	HCl	Methanol	GRO by 8015M	BTEX/5 FO* by 8260B	Ethanol by 8260B	EDB by 8260B	1,2-DCA by 8260B		Standard <input checked="" type="checkbox"/>
				Full Data Package <input type="checkbox"/>															
A-3	2/10/09	12:59	X				6				X	X	X	X	X				
A-4		11:29	X				6				X	X	X	X	X				
A-5		11:16	X				6				X	X	X	X	X				
A-8		11:43	X				6				X	X	X	X	X				
TB-4931	2/10/09 - 500	5:00	X				2				X							ON HOLD	

Sampler's Name: ROBERTO HEIMLICH	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stratus Environmental Inc.						
Shipment Method: Ship Date:						
Shipment Tracking No:						

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



February 24, 2009

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

Subject: **Calscience Work Order No.: 09-02-1060**
Client Reference: BP 4931

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 2/11/2009 and analyzed in accordance with the attached chain-of-custody.

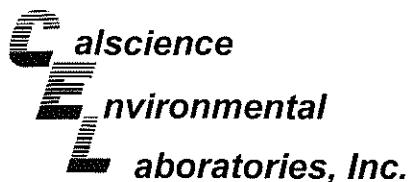
Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows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

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

Sincerely,

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

Calscience Environmental
Laboratories, Inc.
Richard Villafania
Project Manager



Analytical Report

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

Date Received: 02/11/09
Work Order No: 09-02-1060
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: BP 4931

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-3	09-02-1060-1-D	02/10/09 12:59	Aqueous	GC 4	02/16/09	02/17/09 10:01	090217B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>					
1,4-Bromofluorobenzene	100	38-134			

A-4	09-02-1060-2-D	02/10/09 11:29	Aqueous	GC 4	02/16/09	02/17/09 10:34	090217B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	1900	50	1		ug/L
<u>Surrogates:</u>					
1,4-Bromofluorobenzene	104	38-134			

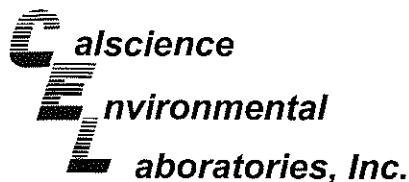
A-5	09-02-1060-3-D	02/10/09 11:16	Aqueous	GC 4	02/16/09	02/17/09 11:07	090217B01
-----	----------------	----------------	---------	------	----------	----------------	-----------

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>					
1,4-Bromofluorobenzene	95	38-134			

A-8	09-02-1060-4-D	02/10/09 11:43	Aqueous	GC 4	02/16/09	02/17/09 11:40	090217B01
-----	----------------	----------------	---------	------	----------	----------------	-----------

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	3600	100	2		ug/L
<u>Surrogates:</u>					
1,4-Bromofluorobenzene	110	38-134			

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



Analytical Report

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

Date Received: 02/11/09
Work Order No: 09-02-1060
Preparation: EPA 5030B
Method: EPA 8015B (M)

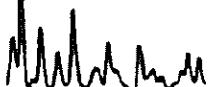
Project: BP 4931

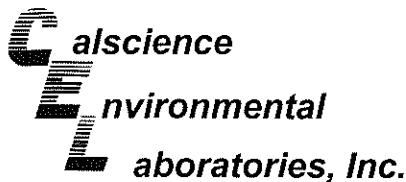
Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-695-441	N/A	Aqueous	GC 4	02/16/09	02/17/09 05:37	090217B01

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

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





Analytical Report

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

Date Received: 02/11/09
Work Order No: 09-02-1060
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BP 4931

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-3	09-02-1060-1-A	02/10/09 12:59	Aqueous	GC/MS L	02/21/09	02/21/09 19:44	090221L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	REC (%)	Control		Qual
		Limits					Limits		
1,2-Dichloroethane-d4	101	73-157			Dibromofluoromethane	103	82-142		
Toluene-d8	90	82-112			1,4-Bromofluorobenzene	86	75-105		

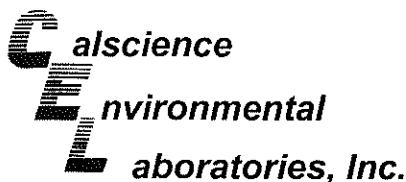
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-4	09-02-1060-2-A	02/10/09 11:29	Aqueous	GC/MS L	02/21/09	02/21/09 20:14	090221L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	33	10	20		Methyl-t-Butyl Ether (MTBE)	400	10	20	
1,2-Dibromoethane	ND	10	20		Tert-Butyl Alcohol (TBA)	2300	200	20	
1,2-Dichloroethane	ND	10	20		Diisopropyl Ether (DIPE)	ND	10	20	
Ethylbenzene	14	10	20		Ethyl-t-Butyl Ether (ETBE)	ND	10	20	
Toluene	ND	10	20		Tert-Amyl-Methyl Ether (TAME)	120	10	20	
Xylenes (total)	ND	10	20		Ethanol	ND	6000	20	
Surrogates:	REC (%)	Control		Qual	Surrogates:	REC (%)	Control		Qual
		Limits					Limits		
1,2-Dichloroethane-d4	106	73-157			Dibromofluoromethane	107	82-142		
Toluene-d8	99	82-112			1,4-Bromofluorobenzene	91	75-105		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-5	09-02-1060-3-A	02/10/09 11:16	Aqueous	GC/MS L	02/21/09	02/21/09 20:43	090221L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	1.6	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	18	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	0.59	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	REC (%)	Control		Qual
		Limits					Limits		
1,2-Dichloroethane-d4	102	73-157			Dibromofluoromethane	106	82-142		
Toluene-d8	91	82-112			1,4-Bromofluorobenzene	89	75-105		

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



Analytical Report

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

Date Received: 02/11/09
Work Order No: 09-02-1060
Preparation: EPA 5030B
Method: EPA 8260B
Units: ug/L

Project: BP 4931

Page 2 of 2

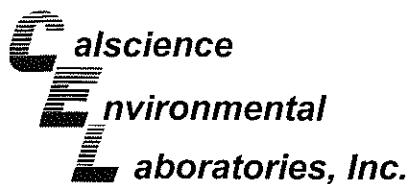
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-8	09-02-1060-4-A	02/10/09 11:43	Aqueous	GC/MS L	02/21/09	02/21/09 21:12	090221L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	1300	25	50		Methyl-t-Butyl Ether (MTBE)	320	25	50	
1,2-Dibromoethane	ND	25	50		Tert-Butyl Alcohol (TBA)	ND	500	50	
1,2-Dichloroethane	ND	25	50		Diisopropyl Ether (DIPE)	ND	25	50	
Ethylbenzene	ND	25	50		Ethyl-t-Butyl Ether (ETBE)	ND	25	50	
Toluene	ND	25	50		Tert-Amyl-Methyl Ether (TAME)	120	25	50	
Xylenes (total)	ND	25	50		Ethanol	ND	15000	50	
Surrogates:	REC (%)	Control		Qual	Surrogates:	REC (%)	Control		Qual
		Limits					Limits		
1,2-Dichloroethane-d4	103	73-157			Dibromofluoromethane	105	82-142		
Toluene-d8	98	82-112			1,4-Bromofluorobenzene	89	75-105		

Method Blank	099-12-703-726	N/A	Aqueous	GC/MS L	02/21/09	02/21/09	090221L01
					13:54		

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	REC (%)	Control		Qual
		Limits					Limits		
1,2-Dichloroethane-d4	103	73-157			Dibromofluoromethane	108	82-142		
Toluene-d8	90	82-112			1,4-Bromofluorobenzene	89	75-105		

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



Quality Control - Spike/Spike Duplicate



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

Date Received: 02/11/09
Work Order No: 09-02-1060
Preparation: EPA 5030B
Method: EPA 8015B (M)

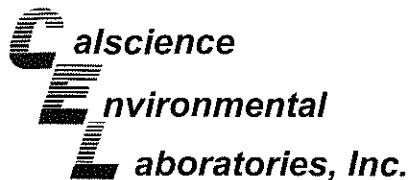
Project BP 4931

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-02-0954-9	Aqueous	GC 4	02/16/09	02/17/09	090217S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	85	84	38-134	2	0-25	

RPD - Relative Percent Difference , CL - Control Limit





Quality Control - Spike/Spike Duplicate

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

Date Received: 02/11/09
Work Order No: 09-02-1060
Preparation: EPA 5030B
Method: EPA 8260B

Project BP 4931

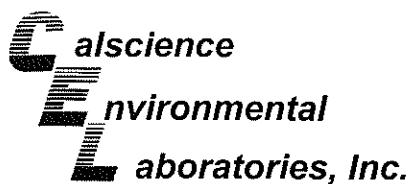
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-02-1194-1	Aqueous	GC/MS L	02/21/09	02/21/09	090221S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	100	86-122	4	0-8	
Carbon Tetrachloride	106	106	78-138	1	0-9	
Chlorobenzene	101	102	90-120	2	0-9	
1,2-Dibromoethane	102	101	70-130	1	0-30	
1,2-Dichlorobenzene	101	99	89-119	2	0-10	
1,1-Dichloroethene	96	99	52-142	3	0-23	
Ethylbenzene	103	107	70-130	3	0-30	
Toluene	101	107	85-127	5	0-12	
Trichloroethene	104	107	78-126	3	0-10	
Vinyl Chloride	107	113	56-140	5	0-21	
Methyl-t-Butyl Ether (MTBE)	106	93	64-136	12	0-28	
Tert-Butyl Alcohol (TBA)	105	96	27-183	9	0-60	
Diisopropyl Ether (DIPE)	111	114	78-126	2	0-16	
Ethyl-t-Butyl Ether (ETBE)	100	103	67-133	2	0-21	
Tert-Amyl-Methyl Ether (TAME)	96	93	63-141	3	0-21	
Ethanol	114	115	11-167	1	0-64	

RPD - Relative Percent Difference , CL - Control Limit



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Quality Control - LCS/LCS Duplicate

DRAFT

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

Date Received: N/A
Work Order No: 09-02-1060
Preparation: EPA 5030B
Method: EPA 8015B (M)

Project: BP 4931

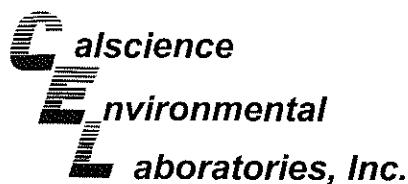
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-441	Aqueous	GC 4	02/16/09	02/17/09	090217B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	95	98	78-120	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit



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Quality Control - LCS/LCS Duplicate

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

Date Received: N/A
Work Order No: 09-02-1060
Preparation: EPA 5030B
Method: EPA 8260B

Project: BP 4931

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
099-12-703-726	Aqueous	GC/MS L	02/21/09	02/21/09	090221L01		
Parameter	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	102	101	87-117	82-122	1	0-7	
Carbon Tetrachloride	103	104	78-132	69-141	2	0-8	
Chlorobenzene	100	104	88-118	83-123	5	0-8	
1,2-Dibromoethane	101	101	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	102	101	88-118	83-123	1	0-8	
1,1-Dichloroethene	97	96	71-131	61-141	1	0-14	
Ethylbenzene	102	108	80-120	73-127	6	0-20	
Toluene	99	105	85-127	78-134	5	0-7	
Trichloroethene	102	105	85-121	79-127	3	0-11	
Vinyl Chloride	104	108	64-136	52-148	4	0-10	
Methyl-t-Butyl Ether (MTBE)	100	92	67-133	56-144	9	0-16	
Tert-Butyl Alcohol (TBA)	92	95	34-154	14-174	3	0-19	
Diisopropyl Ether (DIPE)	116	86	80-122	73-129	30	0-8	RB
Ethyl-t-Butyl Ether (ETBE)	108	102	73-127	64-136	6	0-11	
Tert-Amyl-Methyl Ether (TAME)	103	97	69-135	58-146	6	0-12	
Ethanol	118	133	34-124	19-139	12	0-44	LQ

Total number of LCS compounds : 16

Total number of ME compounds : 1

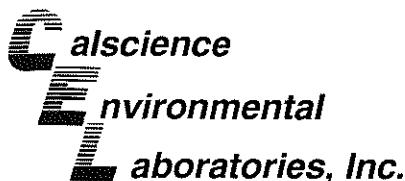
Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit



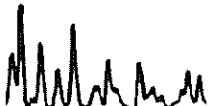
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Glossary of Terms and Qualifiers

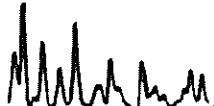
Work Order Number: 09-02-1060

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



Work Order Number: 09-02-1060

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



Laboratory Management Program LaMP Chain of Custody Record

Page 1 of 1

BP/ARC Project Name: BP 4931

Req Due Date (mm/dd/yy): 14 Day TAT

Rush TAT: Yes No X

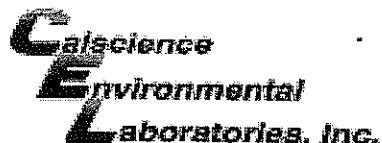
1060

BP/ARC Facility No: 4931

Lab Work Order Number:

Lab Name: CalScience				BP/ARC Facility Address: 731 W. MacArthur Blvd.								Consultant/Contractor: Stratus Environmental Inc.										
Lab Address: 7440 Lincoln Way, Garden Grove, CA 92841				City, State, ZIP Code: Oakland, CA								Consultant/Contractor Project No:										
Lab PM: Richard Villafania				Lead Regulatory Agency: Alameda								Address: 3330 Cameron Park Drive, #550, Cameron Park, CA 95682										
Lab Phone: 714-895-5494 Fax: 714-895-7501				California Global ID No.: T0600100110								Consultant/Contractor PM: Jay Johnson										
Lab Shipping Acct:				Envos Proposal No:								Phone: 530-676-6000 Fax: 530-676-6005										
Lab Bottle Order No:				Accounting Mode: Provision <u>X</u> OOC-BU <u> </u> OOC-RM <u> </u>								Email EDD To: Chuff <u> </u> @stratusinc.net										
Other Info:				Stage: BP/ARC WBS Stage								Activity: BP/ARC WBS Activity										
BP/ARC EBM: Paul Supple				Matrix		No. Containers / Preservative						Requested Analyses						Report Type & QC Level				
EBM Phone: (925) 275-3801				Soil / Solid	Water / Liquid	Air / Vapor	Total Number of Containers	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	GRO by 8015M	BTEX/5 FO* by 8260B	Ethanol by 8260B	EDB by 8260B	1,2-DCA by 8260B					Standard <u>X</u>
EBM Email: paul.supple@bp.com																						
Lab No.	Sample Description	Date	Time																	Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.		
1	A-3	2/10/09	12:59	X			6			X		X	X	X	X						Comments	
2	A-4		11:29	X			6			X		X	X	X	X							
3	A-5		11:16	X			6			X		X	X	X	X							
4	A-8		11:43	X			6			X		X	X	X	X							
5	TB-4931 2/10/09 - 500		5:00	X			2			X												
																			ON HOLD			
Sampler's Name: ROBERTO HEIMLICH				Relinquished By / Affiliation								Date	Time	Accepted By / Affiliation				Date	Time			
Sampler's Company: Stratus Environmental Inc.				<i>Heimlich</i>																		
Shipment Method: Ship Date:																						
Shipment Tracking No: 106279825														<i>J. Parks</i>				2/11/09	0930			
Special Instructions: To sample ON HOLD. CC results to Bpdata@secor.com; bppbayarea@secor.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

WORK ORDER #: 09- 0 2 - 1 0 6 0**SAMPLE RECEIPT FORM**Cooler 1 of 1CLIENT: StratusDATE: 02/11/09**TEMPERATURE:** (Criteria: 0.0 °C – 6.0 °C, not frozen)Temperature 2.1 °C - 0.2 °C (CF) = 1.9 °C Blank Sample

- Sample(s) outside temperature criteria (PM/APM contacted by: _____).
- Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.
- Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter Metals Only PCBs OnlyInitial: jj**CUSTODY SEALS INTACT:**

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

SAMPLE CONDITION:

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

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

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

Preservative: H:HCL N:HNO₃ Na₂:Na₂S₂O₃ Na:NaOH Po₄:H₃PO₄ S:H₂SO₄ Znna:ZnAc₂+NaOH

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

HISTORICAL GROUND-WATER DATA

Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH			Ethyl-benzene	Total Xylenes	MTBE 8021B*	MTBE 8260	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
					Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	(ppb)	(ppb)	(ppb)	(ppb)		
A-2	03/26/96	55.48	5.37	50.11	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	
A-2	05/22/96	55.48	5.25	50.23	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	
A-2	08/22/96	55.48	10.45	45.03	<50	1.1	1.8	<0.5	1.3	<2.5	NA	NM	
A-2	12/19/96	55.48	5.53	49.95	<50	<0.5	<0.5	<0.5	<0.5	2.7	NA	NM	
A-2	04/01/97	55.48	8.77	46.71	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NM	
A-2	05/27/97	55.48	9.87	45.61	<50	<0.5	<0.5	<0.5	<0.5	4.6	NA	NM	
A-2	08/12/97	55.48	11.11	44.37	<50	<0.5	<0.5	<0.5	<0.5	5.6	NA	NM	
A-2	11/14/97	55.48	10.63	44.85	<50	0.9	2.8	<0.5	2.4	27	NA	2.6	
A-2	03/18/98	55.48	3.58	51.90	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	NM	
A-2	05/19/98	55.48	4.82	50.66	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.30	P
A-2	07/29/98	55.48	8.94	46.54	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.2	NP
A-2	10/09/98	55.48	10.82	44.66	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.5	NP
A-2	02/19/99	55.48	4.46	51.02	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	3.0	P
A-2	06/02/99	55.48	5.59	49.89	<50	<0.5	0.6	<0.5	<0.5	<3	NA	5.35	NP
A-2	08/26/99	55.48	10.67	44.81	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.79	NP
A-2	10/26/99	55.48	4.61	50.87	<50	<0.5	<0.5	<0.5	<1	<3	NA	2.14	P
A-2	02/25/00	55.48	3.10	52.38	<50	<0.5	<0.5	<0.5	<1	<3	NA	4.21	NP
A-3	03/26/96	54.66	7.20	47.46	Not Sampled: Well Sampled Semiannually								
A-3	05/22/96	54.66	7.70	46.96	<50	1.2	1.9	0.7	1.3	NA	NA	NM	
A-3	08/22/96	54.66	10.88	43.78	Not Sampled: Well Sampled Semiannually								
A-3	12/19/96	54.66	7.70	46.96	5,900	<25	<25	<25	<25	NA	5,300	NM	
A-3	04/01/97	54.66	9.78	44.88	Not Sampled: Well Sampled Semiannually								
A-3	05/27/97	54.66	10.55	44.11	2,300	<20	<20	<20	<20	3,800	NA	NM	
A-3	08/12/97	54.66	11.12	43.54	Not Sampled: Well Sampled Semiannually								
A-3	11/14/97	54.66	8.24	46.42	<1,000	<10	<10	<10	<10	1,500	NA	3.8	
A-3	03/18/98	54.66	5.05	49.61	Not Sampled: Well Sampled Semiannually								
A-3	05/19/98	54.66	9.00	45.66	<250	<2.5	<2.5	<2.5	<2.5	220	NA	4.60	P
A-3	07/29/98	54.66	9.86	44.80	Not Sampled: Well Sampled Semiannually								
A-3	10/09/98	54.66	11.36	43.30	<250	<2.5	<2.5	<2.5	<2.5	260	NA	1.0	NP
A-3	02/19/99	54.66	6.19	48.47	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.5	NP
A-3	06/02/99	54.66	10.82	43.84	120	<1	<1	<1	<1	160	NA	2.78	NP

Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH Gasoline (ppb)	Ethyl-Benzene (ppb)	Total Toluene benzene (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
A-3	08/26/99	54.66	10.73	43.93	Not Sampled: Well Sampled Semiannually					0.95	
A-3	10/26/99	54.66	6.58	48.08	<50	<0.5	<0.5	<0.5	32	NA	2.06
A-3	02/25/00	54.66	5.41	49.25	Not Sampled: Well Sampled Semiannually						NP
A-4	03/26/96	54.73	7.95	46.78	8,900	1,200	21	200	220	NA	NA
A-4	05/22/96	54.73	8.35	46.38	5,300	700	<10	170	130	NA	NA
A-4	08/22/96	54.73	11.03	43.70	3,000	480	<5.0	75	26	150	NA
A-4	12/19/96	54.73	8.67	46.06	<2,000	<20	<20	<20	NA	15,000	NM
A-4	04/01/97	54.73	11.95	42.78	8,900	1,700	22	310	260	6,900	NA
A-4	05/27/97	54.73	10.80	43.93	7,100	960	<20	150	74	7,900	NA
A-4	08/12/97	54.73	11.38	43.35	4,300	670	12	51	27	2,800	NA
A-4	11/14/97	54.73	7.74	46.99	<20,000	300	500	<200	<200	27,000	NA
A-4	03/18/98	54.73	6.80	47.93	4,700	600	<20	99	94	1,200	NA
A-4	05/19/98	54.73	9.06	45.67	<2000	<20	<20	<20	720	2,000	NA
A-4	07/29/98	54.73	10.05	44.68	8,400	1,300	<20	290	130	1,800	NA
A-4	10/09/98	54.73	11.20	43.53	3,500	400	<20	54	<20	1,700	NA
A-4	02/19/99	54.73	6.85	47.88	<1,000	<10	<10	<10	12	650	NA
A-4	06/02/99	54.73	11.00	43.73	6,100	760	16	260	89	2,300	NA
A-4	08/26/99	54.73	10.80	43.93	1,100	68	5	8	4	1,400	NA
A-4	10/26/99	54.73	10.11	44.62	1,500	39	2.3	9.0	5	1,700	NA
A-4	02/25/00	54.73	5.90	48.83	870	53	1.1	4.6	20	600	NA
A-5	03/26/96	54.17	7.93	46.24	Not Sampled: Well Sampled Semiannually						
A-5	05/22/96	54.17	8.20	45.97	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
A-5	08/22/96	54.17	10.70	43.47	Not Sampled: Well Sampled Semiannually						NM
A-5	12/19/96	54.17	8.39	45.78	9,900	1,100	330	230	700	NA	24
A-5	04/01/97	54.17	10.83	43.34	Not Sampled: Well Sampled Semiannually						NM
A-5	05/27/97	54.17	10.65	43.52	100	<0.5	<0.5	<0.5	<0.5	120	NA
A-5	08/12/97	54.17	11.05	43.12	Not Sampled: Well Sampled Semiannually						NM
A-5	11/14/97	54.17	10.51	43.66	<50	<0.5	<0.5	<0.5	<0.5	41	NA
A-5	03/18/98	54.17	8.10	46.07	Not Sampled: Well Sampled Semiannually						4.8
A-5	05/19/98	54.17	9.31	44.86	590	<5	<5	<5	<5	710	NA
										2.48	P

Table 1
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Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Total Xylenes (ppb)	8021B* (ppb)	MTBE 8260 (ppb)	MTBE (ppb)	Dissolved Oxygen (ppm)	Purged/Not Purged (P/NP)
A-5	07/29/98	54.17	9.89	44.28	Not Sampled: Well Sampled Semiannually									
A-5	10/09/98	54.17	11.02	43.15	690 <5	<5	<5	<5	<5	710	NA	NA	1.0	NP
A-5	02/19/99	54.17	6.82	47.35	<2,000	<20	<20	<20	<20	2,300	NA	NA	0.6	NP
A-5	06/02/99	54.17	10.82	43.35	1,500 <0.5	2.3	<0.5	<0.5	<0.5	2,400	NA	NA	2.81	NP
A-5	08/26/99	54.17	10.65	43.52	Not Sampled: Well Sampled Semiannually									0.49
A-5	10/26/99	54.17	10.35	43.82	380 <0.5	<0.5	<0.5	<0.5	<1	440	NA	NA	1.55	NP
A-5	02/25/00	54.17	6.89	47.28	Not Sampled: Well Sampled Semiannually									
A-6	03/26/96	55.17	7.15	48.02	52 <0.5	2.7	1.1	2.0	2.0	NA	NA	NA	NM	
A-6	05/22/96	55.17	7.35	47.82	<50	2.4	<0.5	0.88	1.7	NA	NA	NA	NM	
A-6	08/22/96	55.17	10.12	45.05	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NM	
A-6	12/19/96	55.17	7.43	47.74	<50	1.7	<0.5	0.78	1.5	<2.5	NA	NA	NM	
A-6	04/01/97	55.17	9.97	45.20	<50	4.7	<0.5	1.9	3.2	<2.5	NA	NA	NM	
A-6	05/27/97	55.17	9.66	45.51	<50	0.69	<0.5	<0.5	<0.5	<2.5	NA	NA	NM	
A-6	08/12/97	55.17	10.43	44.74	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NM	
A-6	11/14/97	55.17	9.76	45.41	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	NA	<1.0	
A-6	03/18/98	55.17	7.00	48.17	<50	6.2	0.5	2.3	2.6	<3	NA	NA	3.0	
A-6	05/19/98	55.17	8.27	46.90	<50	<0.5	<0.5	1.3	4.7	<3	NA	NA	2.16	P
A-6	07/29/98	55.17	8.96	46.21	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	NA	0.8	NP
A-6	10/09/98	55.17	10.23	44.94	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	NA	1.0	NP
A-6	02/19/99	55.17	5.79	49.38	<50	<0.5	<0.5	<0.5	<0.5	5	NA	NA	0.4	NP
A-6	06/02/99	55.17	9.71	45.46	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	NA	2.00	NP
A-6	08/26/99	55.17	9.79	45.38	<50	<0.5	<0.5	<0.5	0.7	<3	NA	NA	0.66	NP
A-6	10/26/99	55.17	9.70	45.47	<50	<0.5	<0.5	<0.5	<1	<3	NA	NA	1.66	NP
A-6	02/25/00	55.17	5.68	49.49	<50	<0.5	<0.5	<0.5	<1	<3	NA	NA	1.22	NP
A-7	03/26/96	54.71	6.90	47.81	Not Sampled: Well Sampled Semiannually									
A-7	05/22/96	54.71	8.27	46.44	<50 <0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NM	
A-7	08/22/96	54.71	9.80	44.91	Not Sampled: Well Sampled Semiannually									
A-7	12/19/96	54.71	7.19	47.52	Not Sampled: Well Sampled Annually									
A-7	04/01/97	54.71	9.63	45.08	Not Sampled: Well Sampled Annually									
A-7	05/27/97	54.71	9.34	45.37	<50 <0.5	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NM	

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(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH Gasoline (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
A-7	08/12/97	54.71	10.10	44.61	Not Sampled: Well Sampled Annually						
A-7	11/14/97	54.71	9.35	45.36	Not Sampled: Well Sampled Annually						
A-7	03/18/98	54.71	6.75	47.96	Not Sampled: Well Sampled Annually						
A-7	05/19/98	54.71	8.85	45.86	<50	<0.5	<0.5	<0.5	<3	NA	1.82 P
A-7	07/29/98	54.71	8.84	45.87	Not Sampled: Well Sampled Annually						
A-7	10/09/98	54.71	10.05	44.66	Not Sampled: Well Sampled Annually						
A-7	02/19/99	54.71	5.57	49.14	<50	<0.5	<0.5	<0.5	<3	NA	4.7 NP
A-7	06/02/99	54.71	9.56	45.15	<50	<0.5	<0.5	<0.5	<3	NA	2.17 NP
A-7	08/26/99	54.71	9.66	45.05	Not Sampled: Well Sampled Annually						0.49
A-7	10/26/99	54.71	9.54	45.17	Not Sampled: Well Sampled Annually						1.26
A-7	02/25/00	54.71	5.60	49.11	Not Sampled: Well Sampled Annually						
A-8	03/26/96	53.77	7.10	46.67	48,000	2,600	<100	650	1,100	NA	NA NM
A-8	05/22/96	53.77	7.20	46.57	14,000	2,800	160	320	190	NA	NA NM
A-8	08/22/96	53.77	11.57	42.20	8,000	1,000	76	150	96	4,300	NA NM
A-8	12/19/96	53.77	8.04	45.73	12,000	450	110	210	230	<500	NA NM
A-8	04/01/97	53.77	9.98	43.79	Not Sampled: Well Sampled Semiannually						
A-8	05/27/97	53.77	11.45	42.32	11,000	1,600	100	220	210	2,300	NA NM
A-8	08/12/97	53.77	11.59	42.18	Not Sampled: Well Sampled Semiannually						
A-8	11/14/97	53.77	9.85	43.92	26,000	2,300	<200	400	400	4,100	NA 2.2
A-8	03/18/98	53.77	7.80	45.97	Not Sampled: Well Sampled Semiannually						
A-8	05/19/98	53.77	8.78	44.99	88,000	4,200	150	640	600	6,700	NA 1.36 P
A-8	07/29/98	53.77	9.59	44.18	46,000	4,900	160	620	580	13,000	NA 0.5 NP
A-8	10/09/98	53.77	11.23	42.54	130,000	3,700	110	500	770	7,300	NA 1.0 NP
A-8	02/19/99	53.77	6.51	47.26	<1,000	39	<10	<10	<10	840	NA 0.2 NP
A-8	06/02/99	53.77	10.68	43.09	8,500	1,300	32	180	110	6,700	NA 1.31 NP
A-8	08/26/99	53.77	10.43	43.34	6,200	870	17	64	60	3,700	NA 0.69 NP
A-8	10/26/99	53.77	10.23	43.54	15,000	2,800	140	370	360	480	NA 0.62 NP
A-8	02/25/00	53.77	5.93	47.84	2,600	330	6.6	18	26	1,100	NA 1.43 NP
A-9	03/26/96	53.04	7.05	45.99	<50	<0.5	<0.5	<0.5	<0.5	NA	NA NM
A-9	05/22/96	53.04	7.20	45.84	<50	<0.5	<0.5	<0.5	<0.5	NA	NA NM

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ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH			Ethylbenzene	Total Xylenes	MTBE 8021B*	MTBE 8260	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
					Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	(ppb)	(ppb)	(ppb)	(ppb)		
A-9	08/22/96	53.04	9.68	43.36	<50	<0.5	<0.5	<0.5	<0.5	8.5	NA	NM	
A-9	12/19/96	53.04	7.43	45.61	<50	<0.5	<0.5	<0.5	<0.5	2.6	NA	NM	
A-9	04/01/97	53.04	9.95	43.09	Not Sampled: Well Sampled Semiannually								
A-9	05/27/97	53.04	9.56	43.48	<50	2.3	<0.5	<0.5	<0.5	45	NA	NM	
A-9	08/12/97	53.04	10.15	42.89	Not Sampled: Well Sampled Semiannually								
A-9	11/14/97	53.04	8.64	44.40	<200	<2.0	<2.0	<2.0	<2.0	190	NA	9.6	
A-9	03/18/98	53.04	6.45	46.59	Not Sampled: Well Sampled Semiannually								
A-9	05/19/98	53.04	8.35	44.69	<50	<0.5	<0.5	<0.5	<0.5	7	NA	1.27	P
A-9	07/29/98	53.04	8.74	44.30	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.99	NP
A-9	10/09/98	53.04	10.05	42.99	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.0	NP
A-9	02/19/99	53.04	6.91	46.13	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.0	NP
A-9	06/02/99	53.04	9.72	43.32	<50	<0.5	<0.5	<0.5	<0.5	16	NA	2.32	NP
A-9	08/26/99	53.04	9.48	43.56	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.71	NP
A-9	10/26/99	53.04	9.17	43.87	1,500	6.2	0.7	78	11	91	NA	2.15	NP
A-9	02/25/00	53.04	5.84	47.20	<50	<0.5	<0.5	<0.5	<1	<3	NA	1.55	NP
A-10	03/26/96	54.26	8.28	45.98	Not Sampled: Well Removed from Sampling Program								
A-10	05/22/96	54.26	8.60	45.66	Not Sampled: Well Removed from Sampling Program								
A-10	08/22/96	54.26	10.98	43.28	Not Sampled: Well Removed from Sampling Program								
A-10	12/19/96	54.26	8.80	45.46	Not Sampled: Well Removed from Sampling Program								
A-10	04/01/97	54.26	11.15	43.11	Not Sampled: Well Removed from Sampling Program								
A-10	05/27/97	54.26	10.90	43.36	Not Sampled: Well Removed from Sampling Program								
A-10	08/12/97	54.26	11.30	42.96	Not Sampled: Well Removed from Sampling Program								
A-10	11/14/97	54.26	10.80	43.46	Not Sampled: Well Removed from Sampling Program								
A-10	03/18/98				----- Well Removed from Survey Program -----								
A-11	03/26/96	53.74	8.10	45.64	Not Sampled: Well Sampled Semiannually								
A-11	05/22/96	53.74	8.25	45.49	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	
A-11	08/22/96	53.74	10.58	43.16	Not Sampled: Well Sampled Semiannually								
A-11	12/19/96	53.74	8.37	45.37	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NM	
A-11	04/01/97	53.74	10.95	42.79	Not Sampled: Well Sampled Semiannually								
A-11	05/27/97	53.74	10.60	43.14	<50	<0.5	<0.5	<0.5	<0.5	3.1	NA	NM	

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Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH Gasoline (ppb)	Ethyl-Benzene (ppb)	Total benzene (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
A-11	08/12/97	53.74	11.07	42.67	Not Sampled: Well Sampled Semiannually						
A-11	11/14/97	53.74	10.58	43.16	<50	<0.5	<0.5	<0.5	<3	NA	1.6
A-11	03/18/98	53.74	8.14	45.60	Not Sampled: Well Sampled Semiannually						
A-11	05/19/98	53.74	9.40	44.34	<50	<0.5	<0.5	<0.5	<3	NA	1.13 P
A-11	07/29/98	53.74	10.32	43.42	Not Sampled: Well Sampled Semiannually						
A-11	10/09/98	53.74	10.91	42.83	<50	<0.5	<0.5	<0.5	<3	NA	2.0 NP
A-11	02/19/99	53.74	6.77	46.97	<50	<0.5	<0.5	<0.5	<3	NA	1.8 NP
A-11	06/02/99	53.74	10.95	42.79	<50	<0.5	<0.5	<0.5	<3	NA	1.38 NP
A-11	08/26/99	53.74	11.05	42.69	Not Sampled: Well Sampled Semiannually				6	NA	0.49
A-11	10/26/99	53.74	10.81	42.93	<50	<0.5	<0.5	<0.5	<1	4	NA 1.27 NP
A-11	02/25/00	53.74	6.70	47.04	Not Sampled: Well Sampled Semiannually						
A-12	03/26/96	52.05	7.83	44.22	Not Sampled: Well Sampled Semiannually						
A-12	05/22/96	52.05	7.80	44.25	<50	<0.5	<0.5	<0.5	<0.5	NA	NM
A-12	08/22/96	52.05	9.97	42.08	Not Sampled: Well Sampled Semiannually						
A-12	12/19/96	52.05	8.18	43.87	85	<0.5	<0.5	<0.5	<0.5	170	NM
A-12	04/01/97	52.05	10.30	41.75	Not Sampled: Well Sampled Semiannually						
A-12	05/27/97	52.05	10.05	42.00	50	12	<0.5	<0.5	<0.5	96	NM
A-12	08/12/97	52.05	10.46	41.59	Not Sampled: Well Sampled Semiannually						
A-12	11/14/97	52.05	9.70	42.35	<50	<0.5	<0.5	<0.5	<0.5	75	NA 7.0
A-12	03/18/98	52.05	8.15	43.90	Not Sampled: Well Sampled Semiannually						
A-12	05/19/98	52.05	9.15	42.90	<50	<0.5	<0.5	<0.5	<0.5	29	NA 1.47 P
A-12	07/29/98	52.05	9.38	42.67	Not Sampled: Well Sampled Semiannually						
A-12	10/09/98	52.05	10.21	41.84	<50	<0.5	<0.5	<0.5	<0.5	7	NA 2.0 NP
A-12	02/19/99	52.05	6.96	45.09	<50	<0.5	<0.5	<0.5	<0.5	<3	NA 5.2 NP
A-12	06/02/99	52.05	10.25	41.80	<50	<0.5	<0.5	<0.5	<0.5	7	NA 1.38 NP
A-12	08/26/99	52.05	9.91	42.14	Not Sampled: Well Sampled Semiannually						0.51
A-12	10/26/99	52.05	9.73	42.32	<50	<0.5	<0.5	<0.5	<1	12	NA 1.09 NP
A-12	02/25/00	52.05	6.97	45.08	Not Sampled: Well Sampled Semiannually						
A-13	03/26/96	55.11			-----	Well Inaccessible	-----				
A-13	05/22/96	55.11			-----	Well Inaccessible	-----				

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Total Purgeable Petroleum Hydrocarbons
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ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH Gasoline (ppb)	Ethyl-Benzene (ppb)	Total benzene (ppb)	MTBE Xylenes 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/Not Purged (P/NP)	
A-13	08/22/96	55.11						Well Inaccessible				
A-13	12/19/96	55.11						Well Inaccessible				
A-13	04/01/97	55.11						Well Inaccessible				
A-13	05/27/97	55.11						Well Inaccessible				
A-13	08/12/97	55.11						Well Inaccessible				
A-13	11/14/97	55.11						Well Inaccessible				
A-13	03/18/98	55.11						Well Inaccessible				
A-13	05/19/98	55.11						Well Inaccessible				
A-13	07/29/98	55.11						Well Inaccessible				
A-13	10/09/98	55.11						Well Inaccessible				
A-13	02/19/99	55.11						Well Inaccessible				
A-13	06/02/99	55.11						Well Inaccessible				
A-13	08/26/99	55.11						Well Inaccessible				
A-13	10/26/99	55.11						Well Inaccessible				
A-13	02/25/00	55.11						Well Inaccessible				
AR-1	03/26/96	54.72	8.13	46.59	6,200	110	64	38 520	NA NA	NA NM		
AR-1	05/22/96	54.72	8.57	46.15	NS	NS	NS	NS NS	NS NS	NS NM		
AR-1	08/22/96	54.72	10.97	43.75	5,600	100	28	29 310	960 NA	NA NM		
AR-1	12/19/96	54.72	8.93	45.79	Not Sampled: Well Removed from Sampling Program							
AR-1	04/01/97	54.72	11.78	42.94	Not Sampled: Well Removed from Sampling Program							
AR-1	05/27/97	54.72	10.76	43.96	Not Sampled: Well Removed from Sampling Program							
AR-1	08/12/97	54.72	11.40	43.32	Not Sampled: Well Removed from Sampling Program							
AR-1	11/14/97	54.72	10.80	43.92	Not Sampled: Well Removed from Sampling Program							
AR-1	03/18/98	54.72	NM	NM	Not Sampled: Well Removed from Sampling Program							
AR-1	05/19/98	54.72	NM	NM	Not Sampled: Well Removed from Sampling Program							
AR-1	07/29/98	54.72	10.17	44.55	Not Sampled: Well Removed from Sampling Program							
AR-1	10/09/98	54.72	11.25	43.47	Not Sampled: Well Removed from Sampling Program							
AR-1	02/19/99	54.72	7.02	47.70	Not Sampled: Well Removed from Sampling Program							
AR-1	06/02/99	54.72	11.00	43.72	Not Sampled: Well Removed from Sampling Program							
AR-1	08/26/99	54.72	10.96	43.76	Not Sampled: Well Removed from Sampling Program							
AR-1	10/26/99	54.72	10.68	44.04	Not Sampled: Well Removed from Sampling Program							

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ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH Gasoline (ppb)	Ethyl-Benzene (ppb)	Total Benzene (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/Not Purged (P/NP)
AR-1	02/25/00	54.72	7.15	47.57	Not Sampled: Well Removed from Sampling Program						
AR-2	03/26/96	54.77	4.93	49.84	<50	<0.5	<0.5	<0.5	NA	NA	NM
AR-2	05/22/96	54.77	5.65	49.12	NS	NS	NS	NS	NS	NS	NM
AR-2	08/22/96	54.77	7.27	47.50	<50	<0.5	<0.5	<0.5	200	NA	NM
AR-2	12/19/96	54.77	7.78	46.99	Not Sampled: Well Removed from Sampling Program						
AR-2	04/01/97	54.77	6.80	47.97	Not Sampled: Well Removed from Sampling Program						
AR-2	05/27/97	54.77	6.32	48.45	Not Sampled: Well Removed from Sampling Program						
AR-2	08/12/97	54.77	7.43	47.34	Not Sampled: Well Removed from Sampling Program						
AR-2	11/14/97	54.77	8.95	45.82	Not Sampled: Well Removed from Sampling Program						
AR-2	03/18/98	54.77	NM	NM	Not Sampled: Well Removed from Sampling Program						
AR-2	05/19/98	54.77	NM	NM	Not Sampled: Well Removed from Sampling Program						
AR-2	07/29/98	54.77	4.47	50.30	Not Sampled: Well Removed from Sampling Program						
AR-2	10/09/98	54.77	6.90	47.87	Not Sampled: Well Removed from Sampling Program						
AR-2	02/19/99	54.77	3.80	50.97	Not Sampled: Well Removed from Sampling Program						
AR-2	06/02/99	54.77	4.61	50.16	Not Sampled: Well Removed from Sampling Program						
AR-2	08/26/99	54.77	5.22	49.55	Not Sampled: Well Removed from Sampling Program						
AR-2	10/26/99	54.77	3.20	51.57	Not Sampled: Well Removed from Sampling Program						
AR-2	02/25/00	54.77	2.33	52.44	Not Sampled: Well Removed from Sampling Program						
AR-3	03/26/96	54.19	7.95	46.24	<50	<0.5	<0.5	<0.5	NA	NA	NM
AR-3	05/22/96	54.19	8.30	45.89	NS	NS	NS	NS	NS	NS	NM
AR-3	08/22/96	54.19	10.84	43.35	Not Sampled: Well Removed from Sampling Program						
AR-3	12/19/96	54.19	8.56	45.63	Not Sampled: Well Removed from Sampling Program						
AR-3	04/01/97	54.19	11.24	42.95	Not Sampled: Well Removed from Sampling Program						
AR-3	05/27/97	54.19	10.67	43.52	Not Sampled: Well Removed from Sampling Program						
AR-3	08/12/97	54.19	11.10	43.09	Not Sampled: Well Removed from Sampling Program						
AR-3	11/14/97	54.19	10.60	43.59	Not Sampled: Well Removed from Sampling Program						
AR-3	03/18/98	54.19	NM	NM	Not Sampled: Well Removed from Sampling Program						
AR-3	05/19/98	54.19	NM	NM	Not Sampled: Well Removed from Sampling Program						
AR-3	07/29/98	54.19	9.95	44.24	Not Sampled: Well Removed from Sampling Program						
AR-3	10/09/98	54.19	11.20	42.99	Not Sampled: Well Removed from Sampling Program						

Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

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731 West MacArthur Boulevard, Oakland, California

Well Number	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH Gasoline (ppb)	Ethyl-Benzene (ppb)	Total benzene (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/Not Purged (P/NP)
AR-3	02/19/99	54.19	6.98	47.21	Not Sampled: Well Removed from Sampling Program						
AR-3	06/02/99	54.19	10.80	43.39	Not Sampled: Well Removed from Sampling Program						
AR-3	08/26/99	54.19	10.69	43.50	Not Sampled: Well Removed from Sampling Program						0.40
AR-3	10/26/99	54.19	NM	NM	Not Sampled: Well Removed from Sampling Program						
AR-3	02/25/00	54.19	7.21	46.98	Not Sampled: Well Removed from Sampling Program						

TPH = Total petroleum hydrocarbons by modified EPA method 801
 BTEX = Benzene, toluene, ethylbenzene, total xylenes by EPA method 8021B. (EPA method 8020 prior to 10/26/99)
 MTBE = Methyl tert-butyl ether
 * = EPA method 8020 prior to 10/26/99
 MSL = Mean sea level
 TOB = Top of box
 ppb = Parts per billion
 ppm = Parts per million
 < = Less than laboratory detection limit stated to the right
 NA = Not analyzed
 NM = Not measured
 NS = Not sampled

APPENDIX C

GEOTRACKER UPLOAD CONFIRMATION

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_WELL FILE

SUCCESS

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

<u>Submittal Type:</u>	GEO_WELL
<u>Submittal Title:</u>	1Q09 GEO_WELL 4931
<u>Facility Global ID:</u>	T0600100110
<u>Facility Name:</u>	ARCO #04931
<u>File Name:</u>	GEO_WELL.zip
<u>Organization Name:</u>	Broadbent & Associates, Inc.
<u>Username:</u>	BROADBENT-C
<u>IP Address:</u>	67.118.40.90
<u>Submittal Date/Time:</u>	4/8/2009 1:31:55 PM
<u>Confirmation Number:</u>	7135509669

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STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

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

Submittal Type: EDF - Monitoring Report - Quarterly
Submittal Title: 1Q09 GW Monitoring
Facility Global ID: T0600100110
Facility Name: ARCO #04931
File Name: 09021060.zip
Organization Name: Broadbent & Associates, Inc.
Username: BROADBENT-C
IP Address: 67.118.40.90
Submittal Date/Time: 4/8/2009 1:34:19 PM
Confirmation Number: **4840615391**

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