



Atlantic Richfield Company  
(a BP affiliated company)

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

15 October 2008

Re: Third Quarter 2008 Ground-Water Monitoring Report  
Atlantic Richfield Company Station #4931  
731 West MacArthur Boulevard  
Oakland, California  
ACEH Case # RO000076

**RECEIVED**

2:17 pm, Oct 23, 2008

Alameda County  
Environmental Health



“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 Manger

**Third Quarter 2008 Ground-Water Monitoring Report**  
Atlantic Richfield Company Station #4931  
731 West MacArthur Boulevard  
Oakland, California

Prepared for

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

Prepared by



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

15 October 2008

Project No. 06-08-624

15 October 2008

Project No. 06-08-624

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

Attn.: Mr. Paul Supple

Re: Third Quarter 2008 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 *Third Quarter 2008 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 Third Quarter of 2008.

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

Sincerely,

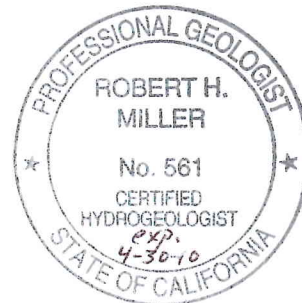
BROADBENT & ASSOCIATES, INC.



Thomas A. Venus, P.E.  
Senior Engineer



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

### WORK PERFORMED THIS QUARTER (Third Quarter 2008):

1. Prepared and submitted Second Quarter 2008 Ground-Water Monitoring Report.
2. Conducted ground-water monitoring/sampling for Third Quarter 2008. Work performed on 13 August 2008 by Stratus Environmental, Inc. (Stratus).

### WORK PROPOSED FOR NEXT QUARTER (Fourth Quarter 2008):

1. Prepared and submitted this Third Quarter 2008 Ground-Water Monitoring Report (contained herein).
2. Conduct ground-water monitoring/sampling for Fourth Quarter 2008.

### QUARTERLY RESULTS SUMMARY:

Current phase of project:	<b>Ground-Water Monitoring/Sampling</b>
Frequency of ground-water monitoring:	<b>Quarterly: A-2, A-3, A-4, A-5, A-7, A-8, A-9, A-10, A-11, A-12, AR-1, AR-2, AR-3</b>
Frequency of ground-water sampling:	<b>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</b>
Is free product (FP) present on-site:	<b>No</b>
FP recovered this quarter:	<b>0</b>
Cumulative FP recovered:	<b>0</b>
Current remediation techniques:	<b>NA</b>
Depth to ground water (below TOC):	<b>5.05 ft (AR-2) to 10.30 ft (A-10)</b>
General ground-water flow direction:	<b>West</b>
Approximate hydraulic gradient:	<b>0.01 ft/ft</b>

### DISCUSSION:

Third quarter 2008 ground-water monitoring and sampling was conducted at Station #4931 on 13 August 2008 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 5.05 ft at well AR-2 to 10.30 ft at well A-10. Resulting ground-water surface elevations ranged from 54.13 ft above mean sea level in well AR-2 to 47.68 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 0.01 ft/ft, 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-2 through A-5 and A-7 through A-12 on 13 August 2008. 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 ten samples collected at a concentration of 3,100 micrograms per liter ( $\mu\text{g/L}$ ) in wells A-4 and A-8. Benzene was detected above the laboratory reporting limit in two of the ten wells sampled at concentrations of 47  $\mu\text{g/L}$  in well A-4 and 970  $\mu\text{g/L}$  in well A-8. TAME was detected above the laboratory reporting limit in three of the ten wells at concentrations up to 190  $\mu\text{g/L}$  in well A-4. TBA was detected above the laboratory reporting limit in two of the ten wells at concentrations of 33  $\mu\text{g/L}$  in well A-5 and 3,200  $\mu\text{g/L}$  in well A-4. MTBE was detected above the laboratory reporting limit in six of the ten wells sampled at concentrations up to 530  $\mu\text{g/L}$  in well A-4. The remaining fuel additives and oxygenates were not detected above their laboratory reporting limits in the ten wells sampled this quarter.

Detected analyte concentrations were within the historic minimum and maximum ranges recorded for each well with the following exceptions: MTBE reached a historic maximum concentration of 19  $\mu\text{g/L}$  in well A-2 and historic minimum concentrations of 0.55  $\mu\text{g/L}$ , 0.69  $\mu\text{g/L}$ , and <0.50 in wells A-3, A-5, and A-7, respectively; and TBA reached a historic minimum concentration of 33  $\mu\text{g/L}$  in well A-5. Historic laboratory analytical results are summarized in Table 1, Table 2, and Appendix B. The Third Quarter 2008 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.

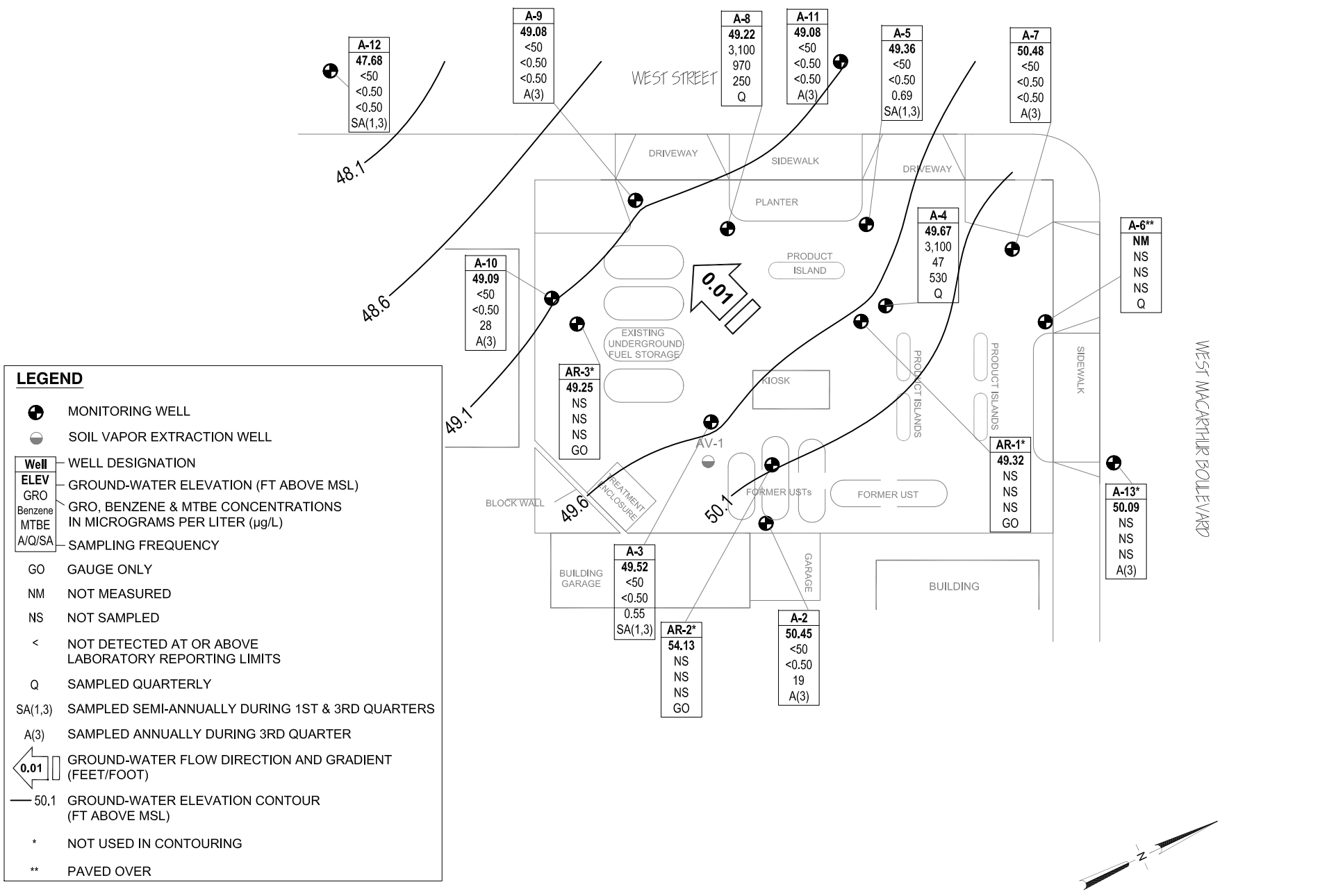
## **CLOSURE:**

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.

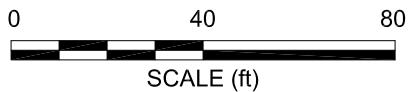
## **ATTACHMENTS:**

Drawing 1. Ground-Water Elevation Contour and Analytical Summary Map, 13 August 2008, 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.



**BROADBENT & ASSOCIATES, INC.**  
 ENGINEERING, WATER RESOURCES & ENVIRONMENTAL  
 1324 Mangrove Ave. Suite 212, Chico, California 95926  
 Project No.: 06-08-624 Date: 9/5/08

Station #4931  
 731 West MacArthur Boulevard  
 Oakland, California

Ground-Water Elevation Contour  
 and Analytical Summary Map  
 13 August 2008

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		
<b>A-2</b>															
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		
<b>A-2 Cont.</b>															
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	--	--	--	--	--	--	--	--
<b>8/13/2008</b>	<b>NP</b>		<b>60.65</b>	<b>5.00</b>	<b>20.00</b>	<b>10.20</b>	<b>50.45</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>19</b>	<b>0.87</b>	<b>9.29</b>
<b>A-3</b>															
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	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--

**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
<b>A-3 Cont.</b>															
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	--	--	--	--	--	--	--	--
<b>8/13/2008</b>	<b>NP</b>		<b>59.32</b>	<b>5.00</b>	<b>20.00</b>	<b>9.80</b>	<b>49.52</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>0.55</b>	<b>0.69</b>	<b>8.63</b>
<b>A-4</b>															
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
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

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		
<b>A-4 Cont.</b>															
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
<b>8/13/2008</b>	<b>NP</b>		<b>59.59</b>	<b>5.00</b>	<b>20.00</b>	<b>9.92</b>	<b>49.67</b>	<b>3,100</b>	<b>47</b>	<b>&lt;10</b>	<b>&lt;10</b>	<b>&lt;10</b>	<b>530</b>	<b>0.89</b>	<b>8.97</b>
<b>A-5</b>															
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	--	--
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	--	--	--	--	--	--	--	--

**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
<b>A-5 Cont.</b>															
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	--	--	--	--	--	--	--	--
<b>8/13/2008</b>	<b>NP</b>		<b>58.78</b>	<b>3.00</b>	<b>24.00</b>	<b>9.42</b>	<b>49.36</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>0.69</b>	<b>0.62</b>	<b>8.96</b>
<b>A-6</b>															
6/21/2000	--		55.17	3.00	25.00	8.67	46.50	<50	<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	<2.5	--	--
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

**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		
<b>A-6 Cont.</b>															
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	--	--	--	--	--	--	--	--	--	--
<b>A-7</b>															
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	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--

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		
<b>A-7 Cont.</b>															
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	--	--	--	--	--	--	--	--
<b>8/13/2008</b>	<b>NP</b>		<b>59.75</b>	<b>3.00</b>	<b>22.00</b>	<b>9.27</b>	<b>50.48</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>1.05</b>	<b>8.45</b>
<b>A-8</b>															
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	--	--

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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		
<b>A-8 Cont.</b>															
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
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	--	--	--	--	--	--	--	--	--	--
<b>8/13/2008</b>	<b>NP</b>		<b>58.70</b>	<b>3.00</b>	<b>25.00</b>	<b>9.48</b>	<b>49.22</b>	<b>3,100</b>	<b>970</b>	<b>&lt;25</b>	<b>&lt;25</b>	<b>&lt;25</b>	<b>250</b>	<b>0.84</b>	<b>8.73</b>
<b>A-9</b>															
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	--	--

**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		
<b>A-9 Cont.</b>															
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	6.6	6.5
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	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--	--	--



**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		
<b>A-9 Cont.</b>															
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
<b>A-10</b>															
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	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--

**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		
<b>A-10 Cont.</b>															
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	--	--	--	--	--	--	--	--
<b>8/13/2008</b>	<b>NP</b>		<b>59.39</b>	<b>5.00</b>	<b>30.00</b>	<b>10.30</b>	<b>49.09</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>28</b>	<b>0.74</b>	<b>9.16</b>
<b>A-11</b>															
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	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--

**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		
<b>A-11 Cont.</b>															
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	--	--	--	--	--	--	--	--
<b>8/13/2008</b>	<b>NP</b>		<b>59.16</b>	<b>5.00</b>	<b>30.00</b>	<b>10.08</b>	<b>49.08</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>0.89</b>	<b>8.94</b>
<b>A-12</b>															
6/21/2000	--		52.05	5.00	30.00	9.28	42.77	<50	<0.5	<0.5	<0.5	<1.0	18	--	--
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	--	--	--	--	--	--	--	--

**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		
<b>A-12 Cont.</b>															
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	--	--	--	--	--	--	--	--
5/23/2008	--		57.06	5.00	30.00	9.00	48.06	--	--	--	--	--	--	--	--
<b>8/13/2008</b>	<b>NP</b>		<b>57.06</b>	<b>5.00</b>	<b>30.00</b>	<b>9.38</b>	<b>47.68</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>1.03</b>	<b>8.39</b>
<b>A-13</b>															
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	<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	--	--	--	--	--	--	--	--

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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		
<b>A-13 Cont.</b>															
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	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--
<b>8/13/2008</b>	--		<b>60.26</b>	<b>10.00</b>	<b>10.00</b>	<b>10.17</b>	<b>50.09</b>	--	--	--	--	--	--	--	--
<b>AR-1</b>															
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	--	--	--	--	--	--	--	--

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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
<b>AR-1 Cont.</b>															
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	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--	--	--
<b>8/13/2008</b>	<b>--</b>		<b>59.52</b>	<b>10.00</b>	<b>30.00</b>	<b>10.20</b>	<b>49.32</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>AR-2</b>															
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	--	--	--	--	--	--	--	--

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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		
<b>AR-2 Cont.</b>															
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	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--	--	--
<b>8/13/2008</b>	--		<b>59.18</b>	<b>8.00</b>	<b>28.00</b>	<b>5.05</b>	<b>54.13</b>	--	--	--	--	--	--	--	--

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								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes			MTBE
<b>AR-3</b>															
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	--	--	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--



**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		
<b>AR-3 Cont.</b>															
2/28/2008	--		59.10	10.00	30.00	6.73	52.37	--	--	--	--	--	--	--	--
5/23/2008	--	j	59.10	10.00	30.00	--	--	--	--	--	--	--	--	--	--
<b>8/13/2008</b>	--		<b>59.10</b>	<b>10.00</b>	<b>30.00</b>	<b>9.85</b>	<b>49.25</b>	--	--	--	--	--	--	--	--

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.

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	
<b>A-2</b>									
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
<b>8/13/2008</b>	<b>&lt;300</b>	<b>&lt;10</b>	<b>19</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	
<b>A-3</b>									
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	
<b>8/13/2008</b>	<b>&lt;300</b>	<b>&lt;10</b>	<b>0.55</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	
<b>A-4</b>									
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	
02/02/2005	<2,000	2,100	1,700	<10	<10	430	<10	<10	b

**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	
<b>A-4 Cont.</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	
<b>8/13/2008</b>	<b>&lt;6,000</b>	<b>3,200</b>	<b>530</b>	<b>&lt;10</b>	<b>&lt;10</b>	<b>190</b>	<b>&lt;10</b>	<b>&lt;10</b>	
<b>A-5</b>									
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	
<b>8/13/2008</b>	<b>&lt;300</b>	<b>33</b>	<b>0.69</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	
<b>A-6</b>									
11/14/2003	--	--	--	--	--	--	--	--	Well inaccessible
02/02/2004	--	--	--	--	--	--	--	--	Well inaccessible
05/04/2004	--	--	--	--	--	--	--	--	Well inaccessible

**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	
<b>A-6 Cont.</b>									
09/02/2004	--	--	--	--	--	--	--	--	Well inaccessible
11/10/2004	--	--	--	--	--	--	--	--	Well inaccessible
8/11/2005	--	--	--	--	--	--	--	--	Well inaccessible
8/11/2006	--	--	--	--	--	--	--	--	Well inaccessible
<b>A-7</b>									
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
<b>8/13/2008</b>	<b>&lt;300</b>	<b>&lt;10</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	
<b>A-8</b>									
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	
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	

**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	
<b>A-8 Cont.</b>									
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
<b>8/13/2008</b>	<b>&lt;15,000</b>	<b>&lt;500</b>	<b>250</b>	<b>&lt;25</b>	<b>&lt;25</b>	<b>86</b>	<b>&lt;25</b>	<b>&lt;25</b>	
<b>A-9</b>									
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
<b>8/13/2008</b>	<b>&lt;300</b>	<b>&lt;10</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	
<b>A-10</b>									
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
<b>8/13/2008</b>	<b>&lt;300</b>	<b>&lt;10</b>	<b>28</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>6.9</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	
<b>A-11</b>									
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	
8/7/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
<b>8/13/2008</b>	<b>&lt;300</b>	<b>&lt;10</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	
<b>A-12</b>									
5/28/2003	<100	<20	10	<0.50	<0.50	2.5	--	--	

**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	
<b>A-12 Cont.</b>									
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
<b>8/13/2008</b>	<b>&lt;300</b>	<b>&lt;10</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	
<b>A-13</b>									
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	
<b>AR-1</b>									
<b>AR-2</b>									
<b>AR-3</b>									

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**

<b>Date Sampled</b>	<b>Approximate Flow Direction</b>	<b>Approximate Hydraulic Gradient</b>
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
<b>8/13/2008</b>	<b>West</b>	<b>0.01</b>

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

September 2, 2008

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:* Becky Carroll / Jay Johnson  
*Phone Number:* (530) 676-6000  
*On-Site Supplier Representative:* Jerry Gonzales

*Sampling Date:* August 13, 2008  
*Arrival:* 9:20      *Departure:* 13:00

*Weather Conditions:* Clear

*Unusual Field Conditions:* None noted.

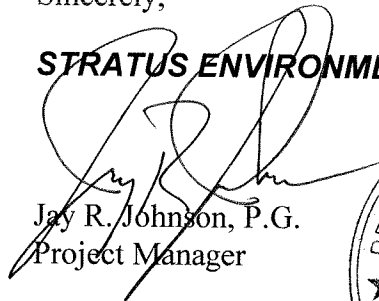
*Scope of Work Performed:* Quarterly monitoring and sampling.

*Variations from Work Scope:* None noted.

This submittal presents the tabulation of 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. 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 970 DP 1208

Gauge Date: 8-13-08

Project Name: 731 MacArthur Blvd, Oakland

Field Technician: Jerry

Project Number: 4931

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

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

WELL OR LOCATION	TIME	MEASUREMENT						PURGE & SAMPLE	SHEEN CONFIRMATION (w/bailer)	COMMENTS
		TOC	TOS	DTW	DTB	DIA	ELEV			
A-2	10:27			10.20	19.33					
A-3	10:27			9.80	16.04					
A-4	10:37			9.92	19.53					
A-5	9:51			9.42	24.30					
A-7	9:45			9.27	22.32					
A-8	10:00			9.48	17.73					
A-9	10:10			8.65	27.08					
A-10	10:17			10.30	29.58					
A-11	9:37			10.08	29.68					
A-12	9:30			9.38	29.72					
A-13	9:43			10.97	28.90					
AR-1	10:34			10.20	22.67					
AR-2	10:30			5.05	26.19					
AR-3	10:20			9.85	28.72					

FW: Arturo Heimlich

Calibration Date

pH/Conductivity/temperature Meter - YSI Model 63

pH 8-13-08

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

Conductivity 8-13-08

Please refer to groundwater sampling field procedures

DO 8-13-08

**BP ALAMEDA PORTFOLIO**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 4931 PURGED BY: NP WELL I.D.: A-2  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: JK SAMPLE I.D.: A-2  
 LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED: NP START (2400hr) 11:59 END (2400hr) 12:06  
 DATE SAMPLED: 8-13-08 SAMPLE TIME (2400hr) 12:00  
 SAMPLE TYPE: Groundwater  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) = 19.33 CASING VOLUME (gal) = 6.1  
 DEPTH TO WATER (feet) = 10.20 CALCULATED PURGE (gal) = 18.3  
 WATER COLUMN HEIGHT (feet) = 9.13 ACTUAL PURGE (gal) = NP

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>8-13-08</u>	<u>12:01</u>	<u>8</u>	<u>21.7</u>	<u>3671</u>	<u>9.28</u>	<u>clear</u>	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

SAMPLE DEPTH TO WATER: 10.20 SAMPLE INFORMATION SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: SW-0  
 ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 6 Vol-Hic

**PURGING EQUIPMENT**

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer (PVC)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 \_\_\_\_\_ Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: 8

**SAMPLING EQUIPMENT**

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

WELL INTEGRITY: good LOCK#: M4574

REMARKS: DO 087

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

## BP ALAMEDA PORTFOLIO

### WATER SAMPLE FIELD DATA SHEET

PROJECT #: 4931 PURGED BY: NP WELL I.D.: A-3  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: [Signature] SAMPLE I.D.: A-3  
 LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED: NP START (2400hr): 12:14 END (2400hr): 12:16  
 DATE SAMPLED: 8-13-06 SAMPLE TIME (2400hr): 12:15  
 SAMPLE TYPE: Groundwater  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) = 16.09 CASING VOLUME (gal) = 4.1  
 DEPTH TO WATER (feet) = 9.80 CALCULATED PURGE (gal) = 17.3  
 WATER COLUMN HEIGHT (feet) = 6.2 ACTUAL PURGE (gal) = NP

#### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>8-13-06</u>	<u>12:16</u>	<u>8</u>	<u>23.2</u>	<u>558</u>	<u>7.5</u>	<u>clear</u>	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

SAMPLE DEPTH TO WATER: 9.80 SAMPLE INFORMATION SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: SWO  
 ODOR: no SAMPLE VESSEL / PRESERVATIVE: 6 Vol - HCL

#### PURGING EQUIPMENT

#### SAMPLING EQUIPMENT

Bladder Pump       Bailer (Teflon)  
 Centrifugal Pump     Bailer (PVC)  
 Submersible Pump     Bailer (Stainless Steel)  
 Peristaltic Pump      Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: 0

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

WELL INTEGRITY: good LOCK#: Master

REMARKS: DO 0.69

SIGNATURE: [Signature] Page \_\_\_\_\_ of \_\_\_\_\_

**BP ALAMEDA PORTFOLIO**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 4931 PURGED BY: NP WELL I.D.: A-4  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: JS SAMPLE I.D.: A4  
 LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED: NP START (2400hr): 12:39 END (2400hr): 1241  
 DATE SAMPLED: 8/13/06 SAMPLE TIME (2400hr): 12:40  
 SAMPLE TYPE: Groundwater  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) (2.50) ( )

DEPTH TO BOTTOM (feet) = 19.53 CASING VOLUME (gal) = 64  
 DEPTH TO WATER (feet) = 9.92 CALCULATED PURGE (gal) = 18.3  
 WATER COLUMN HEIGHT (feet) = 9.61 ACTUAL PURGE (gal) = NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>8/13/06</u>	<u>1241</u>	<u>64</u>	<u>22.2</u>	<u>1264</u>	<u>8.97</u>	<u>clear</u>	

SAMPLE DEPTH TO WATER: 9.92 SAMPLE INFORMATION SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: SWD  
 ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 6 Vol. HCl

PURGING EQUIPMENT

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

SAMPLING EQUIPMENT

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

WELL INTEGRITY: good LOCK#: MAS-10

REMARKS: DO 0.89

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_



**BP ALAMEDA PORTFOLIO**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 4931 PURGED BY: NP WELL I.D.: A-5  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: J SAMPLE I.D.: A-5  
 LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED: NP START (2400hr): 11:10 END (2400hr): 11:12  
 DATE SAMPLED: 8-13-08 SAMPLE TIME (2400hr): 11:11  
 SAMPLE TYPE: Groundwater  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) = 21.30 CASING VOLUME (gal) = 5.6  
 DEPTH TO WATER (feet) = 9.42 CALCULATED PURGE (gal) = 16.9  
 WATER COLUMN HEIGHT (feet) = 14.9 ACTUAL PURGE (gal) = NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>8-13-08</u>	<u>11:12</u>	<u>2</u>	<u>71.5</u>	<u>248</u>	<u>8.96</u>	<u>clear</u>	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 9.42 SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: \_\_\_\_\_

ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 2000 HCL

PURGING EQUIPMENT

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

Other: \_\_\_\_\_

Pump Depth: 9

SAMPLING EQUIPMENT

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump  Bailer ( \_\_\_\_\_ PVC or  disposable)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 \_\_\_\_\_ Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_

Other: \_\_\_\_\_

WELL INTEGRITY: good LOCK#: MASTER

REMARKS: Do 0.63

SIGNATURE: \_\_\_\_\_

**BP ALAMEDA PORTFOLIO**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 4931 PURGED BY: NP WELL I.D.: A-7  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: [Signature] SAMPLE I.D.: A-7  
 LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED: NP START (2400hr): 10:55 END (2400hr): 10:59  
 DATE SAMPLED: 8/13/08 SAMPLE TIME (2400hr): 10:56  
 SAMPLE TYPE: Groundwater  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) = 77.27 CASING VOLUME (gal) = 4.9  
 DEPTH TO WATER (feet) = 9.27 CALCULATED PURGE (gal) = 14.8  
 WATER COLUMN HEIGHT (feet) = 130 ACTUAL PURGE (gal) = NP 0

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>8/13/08</u>	<u>10:57</u>	<u>0</u>	<u>77.3</u>	<u>642</u>	<u>8.48</u>	<u>cl</u>	

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 9.27 SAMPLE TURBIDITY: cl

80% RECHARGE:  YES  NO ANALYSES: SWO

ODOR: no SAMPLE VESSEL / PRESERVATIVE: 6 Vol-HCL

PURGING EQUIPMENT

- Bladder Pump
- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Bailer (Teflon)
- Bailer (PVC)
- Bailer (Stainless Steel)
- Dedicated \_\_\_\_\_

Other: \_\_\_\_\_

Pump Depth: 0

SAMPLING EQUIPMENT

- Bladder Pump
- Centrifugal Pump
- Submersible Pump
- Peristaltic Pump
- Bailer (Teflon)
- Bailer ( \_\_\_\_\_ PVC or  disposable)
- Bailer (Stainless Steel)
- Dedicated \_\_\_\_\_

Other: \_\_\_\_\_

WELL INTEGRITY: good LOCK#: [Signature]

REMARKS: DO 1.05

SIGNATURE: [Signature]

**BP ALAMEDA PORTFOLIO**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 4931 PURGED BY: NP WELL I.D.: A-8  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: JC SAMPLE I.D.: A-8  
 LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED: NP START (2400hr): 12:29 END (2400hr): 12:31  
 DATE SAMPLED: 8-13-08 SAMPLE TIME (2400hr): 12:30  
 SAMPLE TYPE: Groundwater  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) = 12.73 CASING VOLUME (gal) = 3.1  
 DEPTH TO WATER (feet) = 9.48 CALCULATED PURGE (gal) = 9.3  
 WATER COLUMN HEIGHT (feet) = 8.25 ACTUAL PURGE (gal) = NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>8-13-08</u>	<u>12:31</u>	<u>0</u>	<u>73.1</u>	<u>1090</u>	<u>8.73</u>	<u>clear</u>	

SAMPLE DEPTH TO WATER: 9.48 SAMPLE INFORMATION SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: SWD  
 ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 6 Vol-HCl

**PURGING EQUIPMENT**  
 Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer (PVC)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth:  

**SAMPLING EQUIPMENT**  
 Bladder Pump  Bailer (Teflon)  
 Centrifugal Pump  Bailer (PVC or disposable)  
 Submersible Pump  Bailer (Stainless Steel)  
 Peristaltic Pump  Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

WELL INTEGRITY: GOOD LOCK#: NP

REMARKS: DO - 0.84

**BP ALAMEDA PORTFOLIO**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 4931 PURGED BY: NP WELL I.D.: A-9  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: JC SAMPLE I.D.: A-9  
 LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED: NP START (2400hr): 11:39 END (2400hr): 11:36  
 DATE SAMPLED: 8-13-08 SAMPLE TIME (2400hr): 11:35  
 SAMPLE TYPE: Groundwater  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) = 3708 CASING VOLUME (gal) = 43.5  
 DEPTH TO WATER (feet) = 8.65 CALCULATED PURGE (gal) = 130.5  
 WATER COLUMN HEIGHT (feet) = 29.0 ACTUAL PURGE (gal) = NP

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>8-13-08</u>	<u>11:36</u>	<u>0</u>	<u>231</u>	<u>578</u>	<u>7.04</u>	<u>clear</u>	

SAMPLE DEPTH TO WATER: 8.65 SAMPLE INFORMATION SAMPLE TURBIDITY: clear

80% RECHARGE: YES \_\_\_\_\_ NO \_\_\_\_\_ ANALYSES: SWD  
 ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 6 VOA-HCC

**PURGING EQUIPMENT**

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

**SAMPLING EQUIPMENT**

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

WELL INTEGRITY: GOOD LOCK#: NA

REMARKS: DO 0.55

SIGNATURE: [Signature] Page \_\_\_\_\_ of \_\_\_\_\_

## BP ALAMEDA PORTFOLIO

### WATER SAMPLE FIELD DATA SHEET

PROJECT #: 4931 PURGED BY: NP WELL I.D.: A-10  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: js SAMPLE I.D.: A10  
 LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED: NP START (2400hr): 11:50 END (2400hr): 11:52  
 DATE SAMPLED: 8-13-04 SAMPLE TIME (2400hr): 11:51  
 SAMPLE TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

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

DEPTH TO BOTTOM (feet) = 29.58 CASING VOLUME (gal) = 7.3  
 DEPTH TO WATER (feet) = 10.30 CALCULATED PURGE (gal) = 219  
 WATER COLUMN HEIGHT (feet) = 19.2 ACTUAL PURGE (gal) = NP-0

#### FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>8-13-04</u>	<u>11:52</u>	<u>5</u>	<u>71.2</u>	<u>4605</u>	<u>9.16</u>	<u>cl</u>	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 10.30 SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: SWO  
 ODOR: NO SAMPLE VESSEL / PRESERVATIVE: 6 Vol-Hal

#### PURGING EQUIPMENT

Bladder Pump                       Bailer (Teflon)  
 Centrifugal Pump                   Bailer (PVC)  
 Submersible Pump                   Bailer (Stainless Steel)  
 Peristaltic Pump                    Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_

Pump Depth: 0

#### SAMPLING EQUIPMENT

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

WELL INTEGRITY: good LOCK#: NP

REMARKS: DO 0.94

**BP ALAMEDA PORTFOLIO**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 4931 PURGED BY: NP WELL I.D.: A-11  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: JG SAMPLE I.D.: A-11  
 LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED: NP START (2400hr): 11:22 END (2400hr): 11:24  
 DATE SAMPLED: 8-13-08 SAMPLE TIME (2400hr): 11:23  
 SAMPLE TYPE: Groundwater  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) = 29.68 CASING VOLUME (gal) = 5.4  
 DEPTH TO WATER (feet) = 10.08 CALCULATED PURGE (gal) = 22.3  
 WATER COLUMN HEIGHT (feet) = 19.6 ACTUAL PURGE (gal) = NP

**FIELD MEASUREMENTS**

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>8-13-08</u>	<u>11:24</u>	<u>0</u>	<u>21.9</u>	<u>621</u>	<u>8.94</u>	<u>7</u>	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**SAMPLE INFORMATION**

SAMPLE DEPTH TO WATER: 10.08 SAMPLE TURBIDITY: clear  
 80% RECHARGE:  YES  NO ANALYSES: SWU  
 ODOR: no SAMPLE VESSEL / PRESERVATIVE: 6 Vol-Ha

**PURGING EQUIPMENT**

\_\_\_\_\_ Bladder Pump \_\_\_\_\_ Bailer (Teflon)  
 \_\_\_\_\_ Centrifugal Pump \_\_\_\_\_ Bailer (PVC)  
 \_\_\_\_\_ Submersible Pump \_\_\_\_\_ Bailer (Stainless Steel)  
 \_\_\_\_\_ Peristaltic Pump \_\_\_\_\_ Dedicated \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Pump Depth: 0

**SAMPLING EQUIPMENT**

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

WELL INTEGRITY: good LOCK#: NP  
 REMARKS: DO 0.89

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

**BP ALAMEDA PORTFOLIO**  
**WATER SAMPLE FIELD DATA SHEET**

PROJECT #: 4931 PURGED BY: NP WELL I.D.: A-12  
 CLIENT NAME: \_\_\_\_\_ SAMPLED BY: SC SAMPLE I.D.: A-12  
 LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES: \_\_\_\_\_

DATE PURGED: NP START (2400hr): 12:10 END (2400hr): 10:42  
 DATE SAMPLED: 8-13-08 SAMPLE TIME (2400hr): 10:41  
 SAMPLE TYPE: Groundwater  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) = 29.72 CASING VOLUME (gal) = 3.4  
 DEPTH TO WATER (feet) = 9.38 CALCULATED PURGE (gal) = 10.2  
 WATER COLUMN HEIGHT (feet) = 20.3 ACTUAL PURGE (gal) = NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
<u>8/13/08</u>	<u>10:42</u>	<u>0</u>	<u>71.7</u>	<u>3819</u>	<u>8.39</u>	<u>clear</u>	

SAMPLE DEPTH TO WATER: 9.38 SAMPLE INFORMATION SAMPLE TURBIDITY: clear

80% RECHARGE:  YES  NO ANALYSES: SWO  
 ODOR: no SAMPLE VESSEL / PRESERVATIVE: 6 Vol-Hcc

PURGING EQUIPMENT

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

SAMPLING EQUIPMENT

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

WELL INTEGRITY: good LOCK#: NP  
 REMARKS: DO 10.3

SIGNATURE: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

# WELLHEAD OBSERVATION FORM



Site Name/Number: 4931

Date: 8-13-08

Technician: Jerry

Well ID.	Box in Good Condition? <small>X = Yes Blank = No</small>	Lock Missing? <small>X = Yes (replaced) Blank = No</small>	Water in Wellbox? <small>X = Yes Blank = No</small>	Water Level Relative to Cap? <small>A = Above cap B = Below cap I = Level w/cap</small>	Well Cap? <small>I = Intact M = Missing or Compromised (replaced)</small>	Bolts Missing? <small>X = Yes Blank = No</small>	Bolts Stripped? <small>X = Yes Blank = No</small>	Bolt Holes Stripped? <small>X = Yes Blank = No</small>	Cracked or Broken Lid? <small>X = Yes Blank = No</small>	Cracked or Broken Box? <small>X = Yes Blank = No</small>	Grout Level more than 1ft below TOC? <small>X = Yes Blank = No</small>	Additional Comments <small>(such as missing lid, concrete used, replacement, or other - explain)</small>
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		X	A	I							
A-11	X				I							
A-12	X				I							
A-13	X				I							
AR-1	X				I	X		✓				
AR-2	X				I	X		✓				
AR-3	X				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):

\_\_\_\_\_

(updated 3-28-08, 55)

### 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.)

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_





bp  
A BP affiliated company

### Chain of Custody Record

Project Name: BP 4931  
 BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > CA > Alameda-4931  
 State or Lead Regulatory Agency: \_\_\_\_\_  
 Requested Due Date (mm/dd/yy): \_\_\_\_\_

On-site Time: <u>9:20</u>	Temp: <u>73</u>
Off-site Time: <u>1300</u>	Temp: <u>81</u>
Sky Conditions: <u>Clear</u>	
Meteorological Events: <u>None</u>	
Wind Speed: <u>0</u>	Direction: <u>-</u>

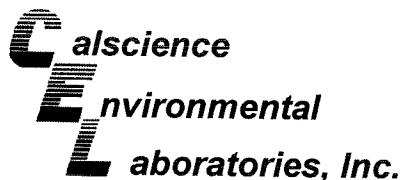
Lab Name: <u>Calscience</u>	BP/AR Facility No.: <u>4931</u>	Consultant/Contractor: <u>Stratus Environmental, Inc.</u>
Address: <u>7440 Lincoln Way</u> <u>Garden Grove, CA 92841</u>	BP/AR Facility Address: <u>731 W. MacArthur Blvd., Oakland</u>	Address: <u>3330 Cameron Park Drive, Suite 550</u> <u>Cameron Park, CA 95682</u>
Lab PM: <u>Linda Scharpenberg</u>	Site Lat/Long: _____	Consultant/Contractor Project No.: _____
Tele/Fax: <u>714-895-5494</u> <u>714-895-7501(fax)</u>	California Global ID #: <u>T0600100110</u>	Consultant/Contractor PM: <u>Jay Johnson</u>
BP/AR PM Contact: <u>Paul Supple</u>	Enfos Project No.: <u>G0C8C-0018</u>	Tele/Fax: <u>(530) 676-6000 / (530) 676-6005</u>
Address: <u>2010 Crow Canyon Place, Suite 150</u> <u>San Ramon, CA</u>	Provision or RCOP (circle one) <u>Provision</u>	Report Type & QC Level: <u>Level 1 with EDF</u>
Tele/Fax: <u>925-275-3506</u>	Phase/WBS: <u>04-Monitoring</u>	E-mail EDD To: <u>bcarroll@stratusinc.net</u>
	Sub Phase/Task: <u>03-Analytical</u>	Invoice to: <u>Atlantic Richfield Co</u>
	Cost Element: <u>01-Contractor labor</u>	

Lab Bottle Order No:				Matrix			Laboratory No.	No. of Containers	Preservative				Requested Analysis						Sample Point Lat/Long and Comments *Oxy = MTBD, TAME, ETBE, DIPE, TBA					
Item No.	Sample Description	Time	Date	Solid	Liquid	Air			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	Methanol	BYEX-Oxy* by 8260B	L2 DCA	Ethanol by 8260	EDB	CHO by 8015M						
1	A-2	1200	8/18	X			6			X		X	X	X	X	X								
2	A-3	1215		X						X		X	X	X	X	X								
3	A-4	1240		X						X		X	X	X	X	X								
4	A-5	11:11		X						X		X	X	X	X	X								
5	A-7	1056		X						X		X	X	X	X	X								
6	A-8	1230		X						X		X	X	X	X	X								
7	A-9	1135		X						X		X	X	X	X	X								
8	A-10	1151		X						X		X	X	X	X	X								
9	A-11	1123		X						X		X	X	X	X	X								
10	A-12	1041		X						X		X	X	X	X	X								

Sampler's Name: <u>Jerry Gonzalez</u>	Retinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: <u>Douglas ENV</u>	<u>[Signature]</u>					
Shipment Date:						
Shipment Method:						
Shipment Tracking No:						
Special Instructions: <u>Please cc results to: miller@broadbentinc.com</u>						

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





August 29, 2008

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

Subject: **Calscience Work Order No.: 08-08-1393**  
Client Reference: **BP 4931**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 8/15/2008 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.

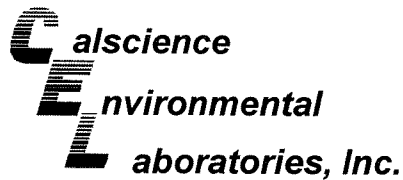
If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in cursive script that reads "Philip Samelle for".

Calscience Environmental  
Laboratories, Inc.  
Linda Scharpenberg  
Project Manager

A handwritten signature in cursive script, likely belonging to Linda Scharpenberg, located at the bottom left of the page.



## Analytical Report



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

Date Received: 08/15/08  
Work Order No: 08-08-1393  
Preparation: EPA 5030B  
Method: EPA 8015B (M)

Project: BP 4931

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-2	08-08-1393-1-E	08/13/08 12:00	Aqueous	GC 30	08/19/08	08/19/08 19:22	080819B01

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

A-3	08-08-1393-2-E	08/13/08 12:15	Aqueous	GC 30	08/19/08	08/19/08 14:20	080819B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	81	38-134			

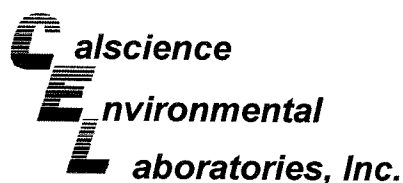
A-4	08-08-1393-3-E	08/13/08 12:40	Aqueous	GC 30	08/19/08	08/19/08 21:03	080819B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	3100	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	136	38-134		LH	

A-5	08-08-1393-4-E	08/13/08 11:11	Aqueous	GC 30	08/19/08	08/19/08 21:37	080819B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	67	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: 08/15/08  
Work Order No: 08-08-1393  
Preparation: EPA 5030B  
Method: EPA 8015B (M)

Project: BP 4931

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-7	08-08-1393-5-E	08/13/08 10:56	Aqueous	GC 30	08/19/08	08/19/08 22:11	080819B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	79	38-134			

A-8	08-08-1393-6-E	08/13/08 12:00	Aqueous	GC 30	08/19/08	08/19/08 22:45	080819B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	3100	100	2		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	107	38-134			

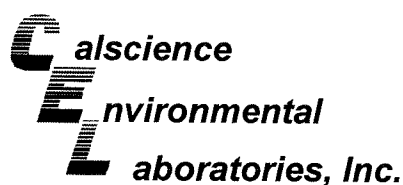
A-9	08-08-1393-7-E	08/13/08 11:35	Aqueous	GC 30	08/19/08	08/19/08 23:18	080819B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	65	38-134			

A-10	08-08-1393-8-E	08/13/08 11:51	Aqueous	GC 30	08/19/08	08/19/08 23:52	080819B01
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Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	79	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: 08/15/08  
Work Order No: 08-08-1393  
Preparation: EPA 5030B  
Method: EPA 8015B (M)

Project: BP 4931

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-11	08-08-1393-9-E	08/13/08 11:23	Aqueous	GC 30	08/19/08	08/20/08 00:26	080819B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	66	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-12	08-08-1393-10-E	08/13/08 10:41	Aqueous	GC 30	08/19/08	08/20/08 01:00	080819B01

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-695-237	N/A	Aqueous	GC 30	08/19/08	08/19/08 11:31	080819B01

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	
1,4-Bromofluorobenzene	83	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: 08/15/08  
Work Order No: 08-08-1393  
Preparation: EPA 5030B  
Method: EPA 8260B  
Units: ug/L

Project: BP 4931

Page 1 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-2	08-08-1393-1-B	08/13/08 12:00	Aqueous	GC/MS U	08/21/08	08/21/08 22:35	080821L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	19	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	98	73-157			Dibromofluoromethane	104	82-142		
Toluene-d8	105	82-112			1,4-Bromofluorobenzene	89	75-105		

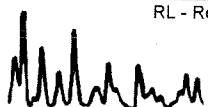
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-3	08-08-1393-2-B	08/13/08 12:15	Aqueous	GC/MS U	08/21/08	08/21/08 23:06	080821L01

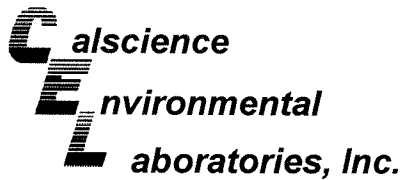
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	0.55	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	100	73-157			Dibromofluoromethane	98	82-142		
Toluene-d8	105	82-112			1,4-Bromofluorobenzene	92	75-105		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-4	08-08-1393-3-B	08/13/08 12:40	Aqueous	GC/MS U	08/19/08	08/20/08 05:42	080819L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	47	10	20		Methyl-t-Butyl Ether (MTBE)	530	10	20	
1,2-Dibromoethane	ND	10	20		Tert-Butyl Alcohol (TBA)	3200	200	20	
1,2-Dichloroethane	ND	10	20		Diisopropyl Ether (DIPE)	ND	10	20	
Ethylbenzene	ND	10	20		Ethyl-t-Butyl Ether (ETBE)	ND	10	20	
Toluene	ND	10	20		Tert-Amyl-Methyl Ether (TAME)	190	10	20	
Xylenes (total)	ND	10	20		Ethanol	ND	6000	20	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	103	73-157			Dibromofluoromethane	112	82-142		
Toluene-d8	104	82-112			1,4-Bromofluorobenzene	86	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: 08/15/08  
Work Order No: 08-08-1393  
Preparation: EPA 5030B  
Method: EPA 8260B  
Units: ug/L

Project: BP 4931

Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-5	08-08-1393-4-B	08/13/08 11:11	Aqueous	GC/MS U	08/21/08	08/21/08 23:36	080821L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	0.69	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	33	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	
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>	<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>
1,2-Dichloroethane-d4	105	73-157			Dibromofluoromethane	106	82-142		
Toluene-d8	104	82-112			1,4-Bromofluorobenzene	95	75-105		

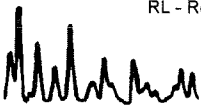
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-7	08-08-1393-5-B	08/13/08 10:56	Aqueous	GC/MS U	08/21/08	08/22/08 05:45	080821L02

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	
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>	<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>
1,2-Dichloroethane-d4	101	73-157			Dibromofluoromethane	104	82-142		
Toluene-d8	103	82-112			1,4-Bromofluorobenzene	90	75-105		

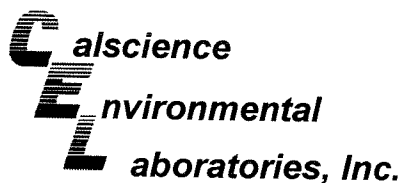
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-8	08-08-1393-6-A	08/13/08 12:00	Aqueous	GC/MS U	08/19/08	08/20/08 06:43	080819L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	970	25	50		Methyl-t-Butyl Ether (MTBE)	250	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)	86	25	50	
Xylenes (total)	ND	25	50		Ethanol	ND	15000	50	
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>	<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>
1,2-Dichloroethane-d4	107	73-157			Dibromofluoromethane	115	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	79	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: 08/15/08  
Work Order No: 08-08-1393  
Preparation: EPA 5030B  
Method: EPA 8260B  
Units: ug/L

Project: BP 4931

Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-9	08-08-1393-7-B	08/13/08 11:35	Aqueous	GC/MS U	08/21/08	08/22/08 00:07	080821L01

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	
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>	<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>
1,2-Dichloroethane-d4	110	73-157			Dibromofluoromethane	109	82-142		
Toluene-d8	103	82-112			1,4-Bromofluorobenzene	90	75-105		

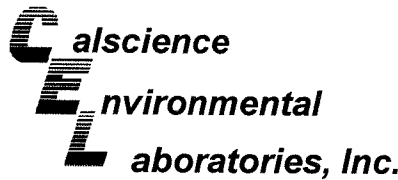
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-10	08-08-1393-8-C	08/13/08 11:51	Aqueous	GC/MS U	08/21/08	08/22/08 00:38	080821L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	28	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)	6.9	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>	<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>
1,2-Dichloroethane-d4	104	73-157			Dibromofluoromethane	108	82-142		
Toluene-d8	103	82-112			1,4-Bromofluorobenzene	89	75-105		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-11	08-08-1393-9-B	08/13/08 11:23	Aqueous	GC/MS U	08/21/08	08/22/08 04:44	080821L02

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	
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>	<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>
1,2-Dichloroethane-d4	98	73-157			Dibromofluoromethane	101	82-142		
Toluene-d8	106	82-112			1,4-Bromofluorobenzene	91	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: 08/15/08  
Work Order No: 08-08-1393  
Preparation: EPA 5030B  
Method: EPA 8260B  
Units: ug/L

Project: BP 4931

Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-12	08-08-1393-10-B	08/13/08 10:41	Aqueous	GC/MS U	08/21/08	08/22/08 05:15	080821L02

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	
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>	<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>
1,2-Dichloroethane-d4	102	73-157			Dibromofluoromethane	105	82-142		
Toluene-d8	102	82-112			1,4-Bromofluorobenzene	89	75-105		

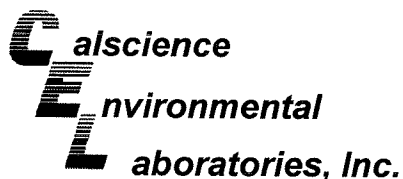
Method Blank	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
	099-12-703-398	N/A	Aqueous	GC/MS U	08/19/08	08/20/08 03:39	080819L02

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	
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>	<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>
1,2-Dichloroethane-d4	114	73-157			Dibromofluoromethane	117	82-142		
Toluene-d8	100	82-112			1,4-Bromofluorobenzene	75	75-105		

Method Blank	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
	099-12-703-403	N/A	Aqueous	GC/MS U	08/21/08	08/21/08 18:27	080821L01

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	
<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>	<b>Surrogates:</b>	<b>REC (%)</b>	<b>Control Limits</b>		<b>Qual</b>
1,2-Dichloroethane-d4	92	73-157			Dibromofluoromethane	90	82-142		
Toluene-d8	106	82-112			1,4-Bromofluorobenzene	94	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: 08/15/08  
Work Order No: 08-08-1393  
Preparation: EPA 5030B  
Method: EPA 8260B  
Units: ug/L

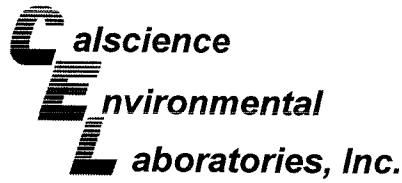
Project: BP 4931

Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-703-404	N/A	Aqueous	GC/MS U	08/21/08	08/22/08 04:13	080821L02

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>	<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>		<u>Qual</u>
1,2-Dichloroethane-d4	94	73-157			Dibromofluoromethane	93	82-142		
Toluene-d8	105	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

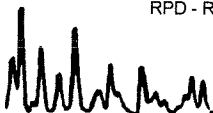
Date Received: 08/15/08  
 Work Order No: 08-08-1393  
 Preparation: EPA 5030B  
 Method: EPA 8015B (M)

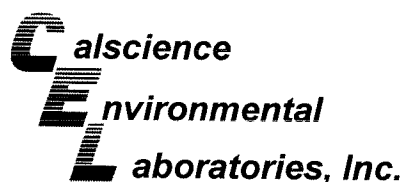
Project BP 4931

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A-3	Aqueous	GC 30	08/19/08	08/19/08	080819S01

<u>Parameter</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Gasoline Range Organics (C6-C12)	95	102	38-134	8	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

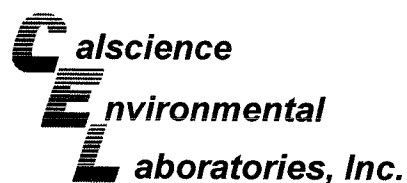
Date Received: 08/15/08  
Work Order No: 08-08-1393  
Preparation: EPA 5030B  
Method: EPA 8260B

Project BP 4931

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-08-1389-1	Aqueous	GC/MS U	08/19/08	08/19/08	080819S02

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	102	105	86-122	3	0-8	
Carbon Tetrachloride	109	111	78-138	2	0-9	
Chlorobenzene	96	100	90-120	4	0-9	
1,2-Dibromoethane	98	98	70-130	1	0-30	
1,2-Dichlorobenzene	98	100	89-119	2	0-10	
1,1-Dichloroethene	89	89	52-142	1	0-23	
Ethylbenzene	100	103	70-130	3	0-30	
Toluene	100	103	85-127	3	0-12	
Trichloroethene	95	97	78-126	3	0-10	
Vinyl Chloride	90	87	56-140	3	0-21	
Methyl-t-Butyl Ether (MTBE)	88	63	64-136	12	0-28	LN,AY
Tert-Butyl Alcohol (TBA)	119	112	27-183	6	0-60	
Diisopropyl Ether (DIPE)	101	102	78-126	1	0-16	
Ethyl-t-Butyl Ether (ETBE)	91	91	67-133	0	0-21	
Tert-Amyl-Methyl Ether (TAME)	96	98	63-141	1	0-21	
Ethanol	158	130	11-167	20	0-64	

RPD - Relative Percent Difference , CL - Control Limit



## Quality Control - Spike/Spike Duplicate



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

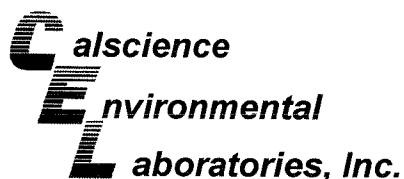
Date Received: 08/15/08  
Work Order No: 08-08-1393  
Preparation: EPA 5030B  
Method: EPA 8260B

Project BP 4931

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
08-08-1622-6	Aqueous	GC/MS U	08/21/08	08/21/08	080821S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	96	86-122	1	0-8	
Carbon Tetrachloride	95	98	78-138	3	0-9	
Chlorobenzene	97	98	90-120	0	0-9	
1,2-Dibromoethane	97	99	70-130	2	0-30	
1,2-Dichlorobenzene	94	97	89-119	3	0-10	
1,1-Dichloroethene	100	104	52-142	4	0-23	
Ethylbenzene	96	96	70-130	0	0-30	
Toluene	98	95	85-127	3	0-12	
Trichloroethene	95	95	78-126	0	0-10	
Vinyl Chloride	95	105	56-140	10	0-21	
Methyl-t-Butyl Ether (MTBE)	87	96	64-136	7	0-28	
Tert-Butyl Alcohol (TBA)	96	93	27-183	3	0-60	
Diisopropyl Ether (DIPE)	97	103	78-126	6	0-16	
Ethyl-t-Butyl Ether (ETBE)	94	100	67-133	7	0-21	
Tert-Amyl-Methyl Ether (TAME)	93	94	63-141	1	0-21	
Ethanol	69	64	11-167	7	0-64	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



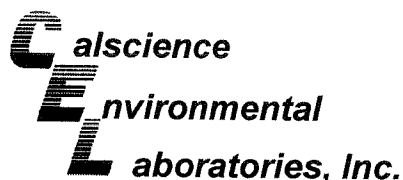
Stratus Environmental, inc. 3330 Cameron Park Drive, Suite 550 Cameron Park, CA 95682-8861	Date Received: N/A Work Order No: 08-08-1393 Preparation: EPA 5030B Method: EPA 8015B (M)
--	--

Project: BP 4931

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-237	Aqueous	GC 30	08/19/08	08/19/08	080819B01

<u>Parameter</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Gasoline Range Organics (C6-C12)	90	95	78-120	5	0-20	

RPD - Relative Percent Difference , CL - Control Limit



## Quality Control - LCS/LCS Duplicate



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

Date Received: N/A  
Work Order No: 08-08-1393  
Preparation: EPA 5030B  
Method: EPA 8260B

Project: BP 4931

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
<b>099-12-703-398</b>	<b>Aqueous</b>	<b>GC/MS U</b>	<b>08/19/08</b>	<b>08/20/08</b>	<b>080819L02</b>		
Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	102	106	87-117	82-122	4	0-7	
Carbon Tetrachloride	117	120	78-132	69-141	2	0-8	
Chlorobenzene	98	102	88-118	83-123	3	0-8	
1,2-Dibromoethane	105	108	80-120	73-127	3	0-20	
1,2-Dichlorobenzene	99	101	88-118	83-123	2	0-8	
1,1-Dichloroethene	92	94	71-131	61-141	2	0-14	
Ethylbenzene	100	102	80-120	73-127	2	0-20	
Toluene	98	99	85-127	78-134	2	0-7	
Trichloroethene	104	104	85-121	79-127	0	0-11	
Vinyl Chloride	84	88	64-136	52-148	4	0-10	
Methyl-t-Butyl Ether (MTBE)	91	103	67-133	56-144	12	0-16	
Tert-Butyl Alcohol (TBA)	99	97	34-154	14-174	2	0-19	
Diisopropyl Ether (DIPE)	110	115	80-122	73-129	4	0-8	
Ethyl-t-Butyl Ether (ETBE)	98	103	73-127	64-136	5	0-11	
Tert-Amyl-Methyl Ether (TAME)	98	104	69-135	58-146	5	0-12	
Ethanol	112	95	34-124	19-139	16	0-44	

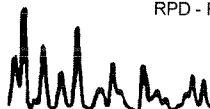
Total number of LCS compounds : 16

Total number of ME compounds : 0

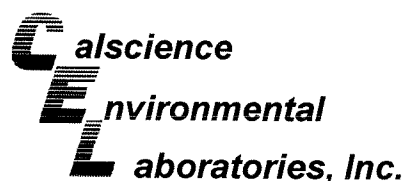
Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit







## Quality Control - LCS/LCS Duplicate



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

Date Received: N/A  
Work Order No: 08-08-1393  
Preparation: EPA 5030B  
Method: EPA 8260B

Project: BP 4931

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
<b>099-12-703-403</b>	<b>Aqueous</b>	<b>GC/MS U</b>	<b>08/21/08</b>	<b>08/21/08</b>	<b>080821L01</b>		
Parameter	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	97	96	87-117	82-122	2	0-7	
Carbon Tetrachloride	97	96	78-132	69-141	2	0-8	
Chlorobenzene	98	97	88-118	83-123	1	0-8	
1,2-Dibromoethane	93	94	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	93	94	88-118	83-123	1	0-8	
1,1-Dichloroethene	100	98	71-131	61-141	2	0-14	
Ethylbenzene	99	96	80-120	73-127	3	0-20	
Toluene	98	98	85-127	78-134	1	0-7	
Trichloroethene	97	96	85-121	79-127	1	0-11	
Vinyl Chloride	110	100	64-136	52-148	10	0-10	
Methyl-t-Butyl Ether (MTBE)	92	89	67-133	56-144	3	0-16	
Tert-Butyl Alcohol (TBA)	90	92	34-154	14-174	2	0-19	
Diisopropyl Ether (DIPE)	94	93	80-122	73-129	2	0-8	
Ethyl-t-Butyl Ether (ETBE)	93	92	73-127	64-136	1	0-11	
Tert-Amyl-Methyl Ether (TAME)	93	93	69-135	58-146	0	0-12	
Ethanol	94	76	34-124	19-139	21	0-44	

Total number of LCS compounds : 16

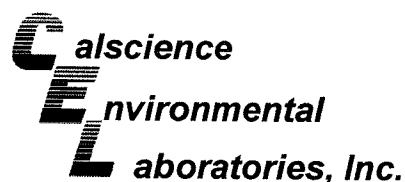
Total number of ME compounds : 0

Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit





## Quality Control - LCS/LCS Duplicate



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

Date Received: N/A  
Work Order No: 08-08-1393  
Preparation: EPA 5030B  
Method: EPA 8260B

Project: BP 4931

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
<b>099-12-703-404</b>	<b>Aqueous</b>	<b>GC/MS U</b>	<b>08/21/08</b>	<b>08/22/08</b>	<b>080821L02</b>		
Parameter	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	99	101	87-117	82-122	2	0-7	
Carbon Tetrachloride	95	103	78-132	69-141	8	0-8	
Chlorobenzene	100	102	88-118	83-123	2	0-8	
1,2-Dibromoethane	96	97	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	99	97	88-118	83-123	2	0-8	
1,1-Dichloroethene	98	108	71-131	61-141	9	0-14	
Ethylbenzene	97	99	80-120	73-127	2	0-20	
Toluene	101	100	85-127	78-134	1	0-7	
Trichloroethene	103	106	85-121	79-127	3	0-11	
Vinyl Chloride	109	112	64-136	52-148	2	0-10	
Methyl-t-Butyl Ether (MTBE)	90	99	67-133	56-144	10	0-16	
Tert-Butyl Alcohol (TBA)	92	93	34-154	14-174	1	0-19	
Diisopropyl Ether (DIPE)	97	103	80-122	73-129	6	0-8	
Ethyl-t-Butyl Ether (ETBE)	93	97	73-127	64-136	5	0-11	
Tert-Amyl-Methyl Ether (TAME)	94	95	69-135	58-146	0	0-12	
Ethanol	74	67	34-124	19-139	11	0-44	

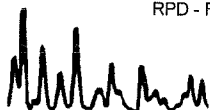
Total number of LCS compounds : 16

Total number of ME compounds : 0

Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit



Work Order Number: 08-08-1393

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<u>Qualifier</u>	<u>Definition</u>
AX	Sample too dilute to quantify surrogate.
AY	Matrix interference suspected.
BA	Relative percent difference out of control.
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.
GN	Surrogate recovery is outside of control limits.
GS	Internal standard recovery is outside method recovery limit.
IB	CCV recovery abovelimit; analyte not detected.
IH	Calibrtn. verif. recov. below method CL for this analyte.
IJ	Calibrtn. verif. recov. above method CL for this analyte.
J,DX	J=EPA Flag -Estimated value; DX= Value < lowest standard (MQL), but > than MDL.
LA	Confirmatory analysis was past holding time.
LG	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.



Work Order Number: 08-08-1393

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<u>Qualifier</u>	<u>Definition</u>
LR	LCS recovery below method control limits.
MB	Analyte present in the method blank.
MG	Analyte is a suspected lab contaminate.
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.





bp  
A BP affiliated company

### Chain of Custody Record

Project Name: BP 4931  
 BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > CA > Alameda > 4931  
 State or Lead Regulatory Agency: \_\_\_\_\_  
 Requested Due Date (mm/dd/yy): \_\_\_\_\_

1393

On-site Time: <u>9:20</u>	Temp: <u>73</u>
Off-site Time: <u>1:30</u>	Temp: <u>81</u>
Sky Conditions: <u>clear</u>	
Meteorological Events: <u>none</u>	
Wind Speed: <u>0</u>	Direction: <u>-</u>

Lab Name: <u>Calscience</u>	BP/AR Facility No.: <u>4931</u>	Consultant/Contractor: <u>Stratus Environmental, Inc.</u>
Address: <u>7440 Lincoln Way</u> <u>Garden Grove, CA 92841</u>	BP/AR Facility Address: <u>731 W. MacArthur Blvd., Oakland</u>	Address: <u>3330 Cameron Park Drive, Suite 550</u> <u>Cameron Park, CA 95682</u>
Lab PM: <u>Linda Scharpenberg</u>	Site Lat/Long: _____	Consultant/Contractor Project No.: _____
Tele/Fax: <u>714-895-5494 714-895-7501(fax)</u>	California Global ID #: <u>T0600100110</u>	Consultant/Contractor PM: <u>Jay Johnson</u>
BP/AR PM Contact: <u>Paul Supple</u>	Enfos Project No.: <u>G0C8C-0018</u>	Tele/Fax: <u>(530) 676-6000 / (530) 676-6005</u>
Address: <u>2010 Crow Canyon Place, Suite 150</u> <u>San Ramon, CA</u>	Provision or RCOP (circle one) <u>Provision</u>	Report Type & QC Level: <u>Level 1 with EDF</u>
Tele/Fax: <u>925-275-3506</u>	Phase/WBS: <u>04-Monitoring</u>	E-mail EDD To: <u>bcarroll@stratusinc.net</u>
	Sub Phase/Task: <u>03-Analytical</u>	Invoice to: <u>Atlantic Richfield Co.</u>
	Cost Element: <u>01-Contractor labor</u>	

Item No.	Sample Description	Time	Date	Matrix			Laboratory No.	No. of Containers	Preservative					Requested Analysis					Sample Point Lat/Long and Comments *Oxy = MTBD, TAME, ETBE, DIPE, TBA					
				Soil/Solid	Water/Liquid	Air			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	Methanol	BTEX/Oxy* by 8260B	1,2 DCA	Ethanol <u>8260</u>	EDB	GRO by 8015M						
1	A-2	1200	8/13/08	X				1						X	X	X	X	X						
2	A-3	1215		X				1						X	X	X	X	X						
3	A-4	1240		X				1						X	X	X	X	X						
4	A-5	11:11		X				1						X	X	X	X	X						
5	A-7	1056		X				1						X	X	X	X	X						
6	A-8	1230		X				1						X	X	X	X	X						
7	A-9	1135		X				1						X	X	X	X	X						
8	A-10	1151		X				1						X	X	X	X	X						
9	A-11	1123		X				1						X	X	X	X	X						
10	A-12	1041		X				1						X	X	X	X	X						

Sampler's Name: <u>Jerry Gonzalez</u>	Relinquished By / Affiliation: _____	Date: _____	Time: _____	Accepted By / Affiliation: _____	Date: _____	Time: _____
Sampler's Company: <u>Douglas ENV</u>	Signature: _____					
Shipment Date: _____						
Shipment Method: _____						
Shipment Tracking No: <u>(650) 105596837</u>						
Special Instructions: <u>Please cc results to: miller@broadbentinc.com</u>						

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
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## Chain of Custody Record

Project Name: BP 4931  
 BP BU/AR Region/Enfos Segment: BP > Americas > West > Retail > CA > Alameda > 4931  
 State or Lead Regulatory Agency: \_\_\_\_\_  
 Requested Due Date (mm/dd/yy): \_\_\_\_\_

1393

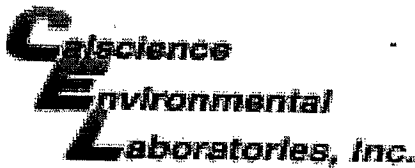
On-site Time: <u>9:20</u>	Temp: <u>73</u>
Off-site Time: <u>1300</u>	Temp: <u>81</u>
Sky Conditions:	
Meteorological Events: <u>none</u>	
Wind Speed: <u>0</u>	Direction: <u>E</u>

Lab Name: <u>Calscience</u>	BP/AR Facility No.: <u>4931</u>	Consultant/Contractor: <u>Stratus Environmental, Inc.</u>
Address: <u>7440 Lincoln Way</u>	BP/AR Facility Address: <u>731 W. MacArthur Blvd., Oakland</u>	Address: <u>3330 Cameron Park Drive, Suite 550</u>
<u>Garden Grove, CA 92841</u>	Site Lat/Long:	<u>Cameron Park, CA 95682</u>
Lab PM: <u>Linda Scharpenberg</u>	California Global ID #: <u>T0600100110</u>	Consultant/Contractor Project No.:
Tele/Fax: <u>714-895-5494 714-895-7501(fax)</u>	Enfos Project No.: <u>G0C8C-0018</u>	Consultant/Contractor PM: <u>Jay Johnson</u>
BP/AR PM Contact: <u>Paul Supple</u>	Provision or RCOP (circle one) <u>Provision</u>	Tele/Fax: <u>(530) 676-6000 / (530) 676-6005</u>
Address: <u>2010 Crow Canyon Place, Suite 150</u>	Phase/WBS: <u>04-Monitoring</u>	Report Type & QC Level: <u>Level 1 with EDF</u>
<u>San Ramon, CA</u>	Sub Phase/Task: <u>03-Analytical</u>	E-mail EDD To: <u>bcarroll@stratusinc.net</u>
Tele/Fax: <u>925-275-3506</u>	Cost Element: <u>01-Contractor labor</u>	Invoice to: <u>Atlantic Richfield Co.</u>

Item No.	Sample Description	Time	Date	Matrix			Laboratory No.	No. of Containers	Preservative					Requested Analysis					Sample Point Lat/Long and Comments *Oxy = MTBD, TAME, ETBE, DIPE, TBA			
				Soil/Solid	Water/Liquid	Air			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	Methanol	BTEX/Oxy*	1,2-DCA	Ethanol <u>4826</u>	EDB	GRO by 8015				
11	TB 4931	<u>600</u>	<u>8/12/08</u>	X				2						X	X	X	X	X			HOLD	
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Sampler's Name: <u>Jerry Gonzalez</u>	Relinquished By / Affiliation: <u>[Signature]</u>	Date:	Time:	Accepted By / Affiliation: <u>[Signature]</u>	Date: <u>8/15/08</u>	Time: <u>1000</u>
Sampler's Company: <u>Doulos ENV</u>						
Shipment Date:						
Shipment Method:						
Shipment Tracking No: <u>1650 105596837</u>						
Special Instructions: <u>Please cc results to: rmiller@broadbentinc.com</u>						

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 #: 08 - 08 - 1393

Cooler 1 of 1

### SAMPLE RECEIPT FORM

CLIENT: Stratus

DATE: 8/15/08

**TEMPERATURE – SAMPLES RECEIVED BY:**

**CALSCIENCE COURIER:**

- Chilled, cooler with temperature blank provided.
- Chilled, cooler without temperature blank.
- Chilled and placed in cooler with wet ice.
- Ambient and placed in cooler with wet ice.
- Ambient temperature (For Air & Filter Only).
- °C Temperature blank.

**LABORATORY (Other than Calscience Courier):**

- 3.9 °C Temperature blank.
- °C IR Thermometer.
- Ambient temperature (For Air & Filter Only).

Initial: JP

**CUSTODY SEAL INTACT:**

Sample(s):      Cooler:  No (Not Intact):      Not Present:     

Initial: JP

**SAMPLE CONDITION:**

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples.....	<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 custody papers.....	<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"/>
Proper preservation noted on sample label(s).....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VOA vial(s) free of headspace.....	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Initial: JP

**COMMENTS:**

(3) A-4 one of six vials with headspace.  
 (4) A-5 one of six vials with headspace.  
 (8) A-10 one of six vials with headspace.  
 (9) A-11 two of six vials with headspace.  
 (10) A-12 one of six vials with headspace.  
 M.M. 08/15/2008

## ATTACHMENT

### FIELD PROCEDURES FOR GROUNDWATER SAMPLING

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

#### Equipment Calibration

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

#### Groundwater and Liquid-Phase Petroleum Hydrocarbon Depth Assessment

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

#### Subjective Analysis of Groundwater

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

#### Monitoring Well Sampling

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



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

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

#### Groundwater Sample Labeling and Preservation

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

#### Sample Identification and Chain-of-Custody Procedures

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

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

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

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

#### Equipment Cleaning

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

**APPENDIX B**

**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 Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
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)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (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	<1	32	NA	2.06	NP	
A-3	02/25/00	54.66	5.41	49.25	Not Sampled: Well Sampled Semiannually									
A-4	03/26/96	54.73	7.95	46.78	8,900	1,200	21	200	220	NA	NA	NM		
A-4	05/22/96	54.73	8.35	46.38	5,300	700	<10	170	130	NA	NA	NM		
A-4	08/22/96	54.73	11.03	43.70	3,000	480	<5.0	75	26	150	NA	NM		
A-4	12/19/96	54.73	8.67	46.06	<2,000	<20	<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	NM		
A-4	05/27/97	54.73	10.80	43.93	7,100	960	<20	150	74	7,900	NA	NM		
A-4	08/12/97	54.73	11.38	43.35	4,300	670	12	51	27	2,800	NA	NM		
A-4	11/14/97	54.73	7.74	46.99	<20,000	300	500	<200	<200	27,000	NA	2.2		
A-4	03/18/98	54.73	6.80	47.93	4,700	600	<20	99	94	1,200	NA	1.0		
A-4	05/19/98	54.73	9.06	45.67	<2000	<20	<20	<20	720	2,000	NA	1.28	P	
A-4	07/29/98	54.73	10.05	44.68	8,400	1,300	<20	290	130	1,800	NA	0.7	NP	
A-4	10/09/98	54.73	11.20	43.53	3,500	400	<20	54	<20	1,700	NA	1.0	NP	
A-4	02/19/99	54.73	6.85	47.88	<1,000	<10	<10	<10	12	650	NA	0.1	NP	
A-4	06/02/99	54.73	11.00	43.73	6,100	760	16	260	89	2,300	NA	1.12	NP	
A-4	08/26/99	54.73	10.80	43.93	1,100	68	5	8	4	1,400	NA	1.15	NP	
A-4	10/26/99	54.73	10.11	44.62	1,500	39	2.3	9.0	5	1,700	NA	10.12	NP	
A-4	02/25/00	54.73	5.90	48.83	870	53	1.1	4.6	20	600	NA	1.72	NP	
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	NM		
A-5	08/22/96	54.17	10.70	43.47	Not Sampled: Well Sampled Semiannually									
A-5	12/19/96	54.17	8.39	45.78	9,900	1,100	330	230	700	NA	24	NM		
A-5	04/01/97	54.17	10.83	43.34	Not Sampled: Well Sampled Semiannually									
A-5	05/27/97	54.17	10.65	43.52	100	<0.5	<0.5	<0.5	<0.5	120	NA	NM		
A-5	08/12/97	54.17	11.05	43.12	Not Sampled: Well Sampled Semiannually									
A-5	11/14/97	54.17	10.51	43.66	<50	<0.5	<0.5	<0.5	<0.5	41	NA	4.8		
A-5	03/18/98	54.17	8.10	46.07	Not Sampled: Well Sampled Semiannually									
A-5	05/19/98	54.17	9.31	44.86	590	<5	<5	<5	<5	710	NA	2.48	P	

**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)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (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	710	NA	1.0	NP
A-5	02/19/99	54.17	6.82	47.35	<2,000	<20	<20	<20	<20	2,300	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	2,400	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	<1	440	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	2.7	<0.5	1.1	2.0	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	NM	
A-6	08/22/96	55.17	10.12	45.05	<50	<0.5	<0.5	<0.5	<0.5	<2.5	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	NM	
A-6	04/01/97	55.17	9.97	45.20	<50	4.7	<0.5	1.9	3.2	<2.5	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	NM	
A-6	08/12/97	55.17	10.43	44.74	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NM	
A-6	11/14/97	55.17	9.76	45.41	<50	<0.5	<0.5	<0.5	<0.5	<3	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	3.0	
A-6	05/19/98	55.17	8.27	46.90	<50	<0.5	<0.5	1.3	4.7	<3	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	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	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	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	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	0.66	NP
A-6	10/26/99	55.17	9.70	45.47	<50	<0.5	<0.5	<0.5	<1	<3	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	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	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	<2.5	NA	NM	

**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)	Benzene (ppb)	Toluene (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	<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	<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	<0.5	<3	NA	2.17	NP
A-7	08/26/99	54.71	9.66	45.05	Not Sampled: Well Sampled Annually								
A-7	10/26/99	54.71	9.54	45.17	Not Sampled: Well Sampled Annually								
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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**Groundwater Elevation and Analytical Data**  
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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				Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
					Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (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	



**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)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (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	<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	<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	<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	<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	<0.5	6	NA	1.38	NP
A-11	08/26/99	53.74	11.05	42.69	Not Sampled: Well Sampled Semiannually								
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	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	NA	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	NA	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								
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 -----								

**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)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE 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	NM	
AR-1	05/22/96	54.72	8.57	46.15	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	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								0.39
AR-1	10/26/99	54.72	10.68	44.04	Not Sampled: Well Removed from Sampling Program								1.39

**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				Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)	
					Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)						
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	<0.5	NA	NA	NM		
AR-2	05/22/96	54.77	5.65	49.12	NS	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	<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									0.44
AR-2	10/26/99	54.77	3.20	51.57	Not Sampled: Well Removed from Sampling Program									1.79
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	<0.5	NA	NA	NM		
AR-3	05/22/96	54.19	8.30	45.89	NS	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)**

**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 Benzene Toluene	Ethyl- benzene Xylenes	Total MTBE 8021B*	MTBE 8260	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					
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**

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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!

<b><u>Submittal Type:</u></b>	<b>GEO_WELL</b>
<b><u>Submittal Title:</u></b>	<b>3Q08 GEO_WELL 4931</b>
<b><u>Facility Global ID:</u></b>	<b>T0600100110</b>
<b><u>Facility Name:</u></b>	<b>ARCO #04931</b>
<b><u>File Name:</u></b>	<b>GEO_WELL.zip</b>
<b><u>Organization Name:</u></b>	<b>Broadbent &amp; Associates, Inc.</b>
<b><u>Username:</u></b>	<b>BROADBENT-C</b>
<b><u>IP Address:</u></b>	<b>67.118.40.90</b>
<b><u>Submittal Date/Time:</u></b>	<b>9/11/2008 1:49:17 PM</b>
<b><u>Confirmation Number:</u></b>	<b>4618809580</b>

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!

<b><u>Submittal Type:</u></b>	<b>GWM_R</b>
<b><u>Submittal Title:</u></b>	<b>3Q08 GW Monitoring</b>
<b><u>Facility Global ID:</u></b>	<b>T0600100110</b>
<b><u>Facility Name:</u></b>	<b>ARCO #04931</b>
<b><u>File Name:</u></b>	<b>08081393.zip</b>
<b><u>Organization Name:</u></b>	<b>Broadbent &amp; Associates, Inc.</b>
<b><u>Username:</u></b>	<b>BROADBENT-C</b>
<b><u>IP Address:</u></b>	<b>67.118.40.90</b>
<b><u>Submittal Date/Time:</u></b>	<b>9/11/2008 1:51:41 PM</b>
<b><u>Confirmation Number:</u></b>	<b>8110134303</b>

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