ARCADIS
Infrastructure, environment, buildings

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

Environmental

Re: Third Quarter 2009 Ground-Water Monitoring Report
Former BP Station # 4931
731 West MacArthur Boulevard
Oakland, California
ACEH Case # RO0000076

Date:
10/30/2009

"I declare that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct."

Submitted by:

Hollis E. Phillips, PG
Senior Geologist

Contact:
Hollis Phillips

Phone:
415.374.2744 x13

Email:
hollis.phillips@arcadis-us.com

Our ref:
GP09BPNA.0000

Third Quarter 2009 Ground-Water Monitoring Report
Atlantic Richfield Company Station #4931
731 West MacArthur Blvd, Oakland, California
ACEH Case #RO0000076

Prepared for

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

On behalf of

Atlantic Richfield Company
PO Box 1257
San Ramon, California 94583

Prepared by

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

1324 Mangrove Avenue, Suite 212
Chico, California 95926
(530) 566-1400
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30 October 2009

Project No. 06-88-624

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

30 October 2009

Project No. 06-88-624

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

Attn.: Ms. Hollis Phillips, PG

Re: Third Quarter 2009 Ground-Water Monitoring Report, Atlantic Richfield Company
Station #4931, 731 West MacArthur Boulevard, Oakland, Alameda County, California;
ACEH Case #RO0000076

Dear Ms. Phillips:

Attached is the *Third Quarter 2009 Ground-Water Monitoring Report* for Atlantic Richfield Company (a BP affiliated 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 2009.

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

Sincerely,

BROADBENT & ASSOCIATES, INC.

Thomas A. Venus, P.E.
Senior Engineer

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

Enclosures

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

STATION # 4931 GROUND-WATER MONITORING REPORT

Facility: #4931 Address:	731 West MacArthur Boulevard, Oakland, California
ARCADIS Project Manager:	Ms. Hollis Phillips, PG
Consulting Co./Contact Person:	Broadbent & Associates, Inc.(BAI)/Mr. Tom Venus, PE (530) 566-1400
Consultant Project No.:	06-88-624
Primary Agency/Regulatory ID No.:	Alameda County Environmental Health (ACEH) ACEH Case #RO000076
Facility Permits/Permitting Agency:	NA

WORK PERFORMED THIS QUARTER (Third Quarter 2009):

1. Prepared and submitted *Second Quarter 2009 Ground-Water Monitoring Report* (BAI, 7/7/2009).
2. Conducted ground-water monitoring/sampling for Third Quarter 2009. Work performed on 3 September 2009 by Stratus Environmental, Inc. (Stratus).

WORK PROPOSED FOR NEXT QUARTER (Fourth Quarter 2009):

1. Prepared and submitted this *Third Quarter 2009 Ground-Water Monitoring Report* (contained herein).
2. No ground-water monitoring/sampling is presently scheduled for Fourth Quarter 2009, as proposed.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	**Ground-Water Monitoring/Sampling**
Frequency of ground-water monitoring:*	**Quarterly: A-2, A-3, A-4, A-5, A-7, A-8, A-9, A-10, A-11, A-12, A-13, AR-1, AR-2, AR-3**
Frequency of ground-water sampling:*	**Quarterly: Wells A-4, A-8** **Semi Annually (1Q and 3Q): Wells A-3, A-5** **Annually (3Q): Wells A-2, A-7, A-9, A-10, A-11, A-12**
Is free product (FP) present on-site:	**No**
FP recovered this quarter:	**0**
Cumulative FP recovered:	**0**
Current remediation techniques:	**NA**
Depth to ground water (below TOC):	**5.99 ft (AR-2) to 10.19 ft (AR-1)**
General ground-water flow direction:	**West**
Approximate hydraulic gradient:	**0.01 ft/ft**

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

DISCUSSION:

Third Quarter 2009 ground-water monitoring and sampling was conducted at Station #4931 on 3 September 2009 by Stratus. Water levels were gauged in 13 of the 14 wells at the Site. Well A-10 was inaccessible due to a parked car. No other irregularities were noted during water level gauging. Depth-to-water measurements ranged from 5.99 ft at well AR-2 to 10.19 ft at well AR-1. Resulting ground-water surface elevations ranged from 53.19 ft above datum in well AR-2 to 47.66 ft in down-gradient well A-12. Water level elevations yielded a potentiometric ground-water flow direction and gradient to the west at approximately 0.01 ft/ft. 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. Current and historic ground-water flow directions and gradients are provided in Table 3. A Site Location Map is provided as Drawing 1. Potentiometric ground-water elevation contours are presented in Drawing 2.

Ground-water samples were collected from wells A-2 through A-5, A-7 through A-9, A-11, and A-12 on 3 September 2009. A sample could not be taken from well A-10 as access was blocked by a parked vehicle. No other irregularities were reported during sampling. Samples were submitted under chain-of-custody protocol to Calscience Environmental Laboratories, Inc. (Garden Grove, California), for analysis of Gasoline Range Organics (GRO, C6-C12) by EPA Method 8015B; for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA Method 8260B; and Methyl Tert-Butyl Ether (MTBE), Ethyl Tert-Butyl Ether (ETBE), Di-Isopropyl Ether(DIPE), Tert-Amyl Methyl Ether (TAME), Tert-Butyl Alcohol (TBA), 1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA), and Ethanol by EPA Method 8260B. The laboratory reported that one sample container collected from well A-2 and analyzed by EPA Method 8260B contained an air bubble greater than six millimeters in diameter. No other 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 nine wells sampled at concentrations of 3,800 micrograms per liter (µg/L) in well A-4 and 3,200 µg/L in well A-8. Benzene was detected above the laboratory reporting limit in two of the nine wells sampled at concentrations of 49 µg/L in well A-4 and 1,400 µg/L in well A-8. MTBE was detected above the laboratory reporting limit in five of the nine wells sampled at concentrations up to 360 µg/L in well A-4. TBA was detected above the laboratory reporting limit in one of the nine wells sampled at a concentration of 3,200 µg/L in well A-4. TAME was detected above the laboratory reporting limit in four of the nine wells sampled at concentrations up to 120 µg/L in well A-4. The remaining fuel constituents were not detected above their laboratory reporting limits in the nine wells sampled this quarter. Historic laboratory analytical results are summarized in Table 1, Table 2, and Appendix B. The Third Quarter 2009 GRO, Benzene, and MTBE concentrations are also presented in Drawing 2. 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 receipts are provided in Appendix C.

CONCLUSIONS AND RECOMMENDATIONS:

Water level elevations were between historic minimum and maximum ranges for each well gauged. The potentiometric ground-water flow direction and gradient to the west at approximately 0.01 ft/ft is generally consistent with historical data. Detected analyte concentrations were within the historic minimum and maximum ranges recorded for each well sampled this event. Concentrations of GRO, Benzene, MTBE, TBA and TAME are significantly above the Maximum Contaminant Levels allowed in Drinking Water, and the Environmental Screening Levels established by the San Francisco Regional Water Quality Control Board.

In accordance with the letter sent by Atlantic Richfield Company (a BP affiliated company) to ACEH dated 26 June 2009 in response to the California Water Resources Control Board Resolution #2009-0042, BAI recommends reduction of the ground-water monitoring/sampling frequency from quarterly to semi-annually. BAI recommends continued monitoring of ground-water levels from existing wells A-2 through A-5, A-7 through A-13, and AR-1 through AR-3, but specifically each first calendar quarter and third calendar quarter. Generally consistent with the existing monitoring schedule, BAI recommends first and third calendar quarter sampling from wells A-3 through A-5 and A-8. In addition,

BAI recommends sampling from monitoring wells A-7 and A-9 through A-12 each third calendar quarter. Quarterly status reports would continue to be prepared and submitted for the second and fourth calendar quarters. Unless directed otherwise by ACEH, the proposed monitoring and sampling schedule will be implemented beginning the Fourth Quarter of 2009. A quarterly status report will be submitted for the Fourth Quarter of 2009 with the next sampling event scheduled for the First Quarter of 2010.

CLOSURE:

The findings presented in this report are based upon: observations of Stratus field personnel (see Appendix A), the points investigated, and results of laboratory tests performed by Calscience Environmental Laboratories, Inc. (Garden Grove, California). Our services were performed in accordance with the generally accepted standard of practice at the time this report was written. No other warranty, expressed or implied was made. This report has been prepared for the exclusive use of ARCADIS-US, Inc. and Atlantic Richfield Company (a BP affiliated company). It is possible that variations in soil or ground-water conditions could exist beyond points explored in this investigation. Also, changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

ATTACHMENTS:

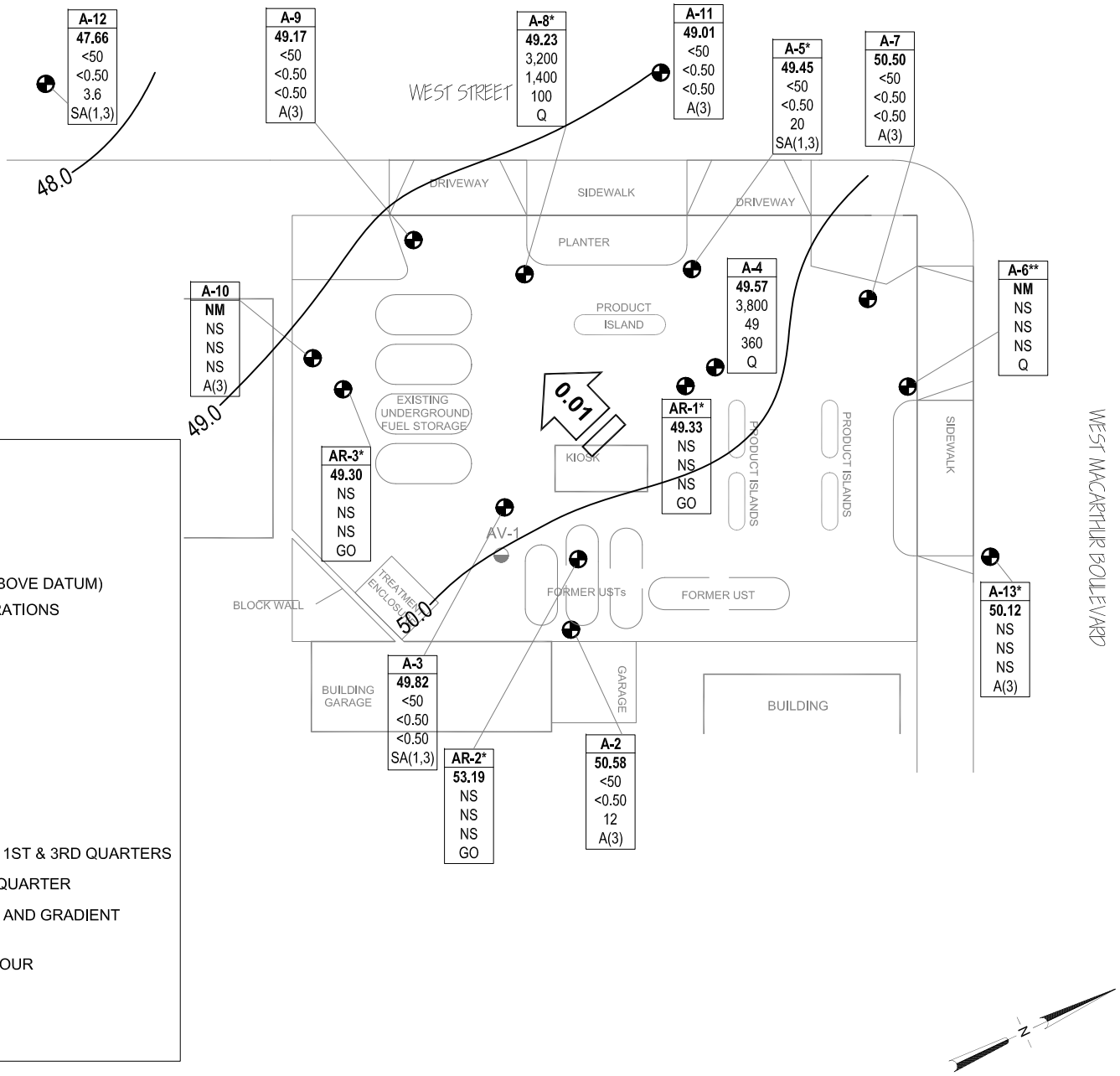
Drawing 1.	Site Location Map, Station #4931, 731 MacArthur Boulevard, Oakland, California
Drawing 2.	Ground-Water Elevation Contour and Analytical Summary Map, 3 September 2009, Station #4931, 731 West MacArthur Boulevard, Oakland, California
Table 1.	Summary of Ground-Water Monitoring Data: Relative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

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, CA 95926
Project No.: 06-88-624 Date: 10/1/09

Station #4931
731 West MacArthur Boulevard
Oakland, California

Site Location Map

Drawing
1



LEGEND

- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- Well / ELEV / GRO / Benzene / MTBE / A/Q/SA — WELL DESIGNATION; GROUND-WATER ELEVATION (FT ABOVE DATUM); GRO, BENZENE & MTBE CONCENTRATIONS IN MICROGRAMS PER LITER (µg/L); SAMPLING FREQUENCY
- GO — GAUGE ONLY
- NM — NOT MEASURED
- NS — NOT SAMPLED
- < — NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMITS
- Q — SAMPLED QUARTERLY
- SA(1,3) — SAMPLED SEMI-ANNUALLY DURING 1ST & 3RD QUARTERS
- A(3) — SAMPLED ANNUALLY DURING 3RD QUARTER
- 0.01 — GROUND-WATER FLOW DIRECTION AND GRADIENT (FEET/FOOT)
- 50.0 — GROUND-WATER ELEVATION CONTOUR (FT ABOVE DATUM)
- * — NOT USED IN CONTOURING
- ** — PAVED OVER

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

0 40 80
SCALE (ft)

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California 95926
Project No.: 06-88-624 Date: 10/1/09

Station #4931
731 West MacArthur Boulevard
Oakland, California

Ground-Water Elevation Contour and Analytical Summary Map
3 September 2009

Drawing
2

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

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

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-2 Cont.															
2/28/2008	--		60.65	5.00	20.00	3.30	57.35	--	--	--	--	--	--	--	--
5/23/2008	--		60.65	5.00	20.00	8.80	51.85	--	--	--	--	--	--	--	--
8/13/2008	NP		60.65	5.00	20.00	10.20	50.45	<50	<0.50	<0.50	<0.50	<0.50	19	0.87	9.29
11/19/2008	--		60.65	5.00	20.00	9.20	51.45	--	--	--	--	--	--	--	--
2/10/2009	--		60.65	5.00	20.00	7.83	52.82	--	--	--	--	--	--	--	--
5/7/2009	--		60.65	5.00	20.00	4.40	56.25	--	--	--	--	--	--	--	--
9/3/2009	**NP**	**k**	**60.65**	**5.00**	**20.00**	**10.07**	**50.58**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**12**	**1.03**	**6.86**
A-3															
6/21/2000	--		54.66	5.00	20.00	9.48	45.18	<50	<0.5	<0.5	<0.5	<1.0	46	--	--
9/20/2000	--		54.66	5.00	20.00	10.24	44.42	<50	<0.5	<0.5	<0.5	<0.5	89.6	--	--
12/26/2000	--		54.66	5.00	20.00	9.58	45.08	<50	<0.5	<0.5	<0.5	<0.5	7.11	--	--
3/20/2001	--		54.66	5.00	20.00	6.34	48.32	--	--	--	--	--	--	--	--
6/12/2001	--		54.66	5.00	20.00	9.76	44.90	<50	<0.5	<0.5	<0.5	<0.5	86	--	--
9/23/2001	--		54.66	5.00	20.00	10.55	44.11	--	--	--	--	--	--	--	--
12/31/2001	--		54.66	5.00	20.00	3.70	50.96	<50	<0.5	<0.5	<0.5	1	60	--	--
3/21/2002	--		54.66	5.00	20.00	5.75	48.91	--	--	--	--	--	--	--	--
4/17/2002	--		54.66	5.00	20.00	7.27	47.39	<50	<0.5	<0.5	<0.5	<0.5	45	--	--
8/12/2002	--		54.66	5.00	20.00	9.71	44.95	--	--	--	--	--	--	--	--
12/6/2002	P		54.66	5.00	20.00	9.55	45.11	<500	<5.0	<5.0	<5.0	<5.0	150	2.4	6.6
1/30/2003	--		54.66	5.00	20.00	6.05	48.61	--	--	--	--	--	--	--	--
1/30/2003	--		54.66	5.00	20.00	6.05	48.61	--	--	--	--	--	--	--	--
5/28/2003	--		54.66	5.00	20.00	8.06	46.60	74	<0.50	<0.50	<0.50	<0.50	43	1.5	6.9
8/6/2003	--		54.66	5.00	20.00	9.91	44.75	--	--	--	--	--	--	--	--
11/14/2003	--		54.66	5.00	20.00	9.52	45.14	--	--	--	--	--	--	--	--
02/02/2004	P	g	59.32	5.00	20.00	5.63	53.69	<50	<0.50	<0.50	<0.50	<0.50	13	1.2	7.1
05/04/2004	--		59.32	5.00	20.00	8.14	51.18	--	--	--	--	--	--	--	--
09/02/2004	P		59.32	5.00	20.00	10.10	49.22	<250	<2.5	<2.5	<2.5	<2.5	62	1.3	6.6
11/10/2004	--		59.32	5.00	20.00	7.89	51.43	--	--	--	--	--	--	--	--
02/02/2005	P		59.32	5.00	20.00	5.00	54.32	<50	<0.50	<0.50	<0.50	<0.50	6.8	1.9	6.9
05/09/2005	--		59.32	5.00	20.00	5.96	53.36	--	--	--	--	--	--	--	--

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)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-3 Cont.															
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	--	--	--	--	--	--	--	--
8/11/2006	P		59.32	5.00	20.00	9.27	50.05	<50	<0.50	<0.50	<0.50	<0.50	4.1	2.10	6.4
11/1/2006	--		59.32	5.00	20.00	9.52	49.80	--	--	--	--	--	--	--	--
2/7/2007	NP		59.32	5.00	20.00	7.90	51.42	<50	<0.50	<0.50	<0.50	<0.50	0.58	1.74	7.70
5/9/2007	--		59.32	5.00	20.00	6.55	52.77	--	--	--	--	--	--	--	--
8/7/2007	NP		59.32	5.00	20.00	9.57	49.75	<50	<0.50	<0.50	<0.50	<0.50	3.9	0.95	6.82
11/14/2007	--		59.32	5.00	20.00	8.00	51.32	--	--	--	--	--	--	--	--
2/28/2008	P		59.32	5.00	20.00	3.75	55.57	<50	<0.50	<0.50	<0.50	<0.50	0.58	6.16	6.92
5/23/2008	--		59.32	5.00	20.00	9.10	50.22	--	--	--	--	--	--	--	--
8/13/2008	NP		59.32	5.00	20.00	9.80	49.52	<50	<0.50	<0.50	<0.50	<0.50	0.55	0.69	8.63
11/19/2008	--		59.32	5.00	20.00	8.31	51.01	--	--	--	--	--	--	--	--
2/10/2009	NP		59.32	5.00	20.00	7.30	52.02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.90	7.14
5/7/2009	--		59.32	5.00	20.00	6.10	53.22	--	--	--	--	--	--	--	--
9/3/2009	**NP**		**59.32**	**5.00**	**20.00**	**9.50**	**49.82**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**1.01**	**6.95**
A-4															
6/21/2000	--		54.73	5.00	**20.00**	9.49	45.24	2,100	110	2.1	11	5.9	2,000	--	--
9/20/2000	--		54.73	5.00	**20.00**	10.33	44.40	1,540	127	<5.0	9.07	7.42	1,940	--	--
12/26/2000	--		54.73	5.00	**20.00**	9.34	45.39	1,550	42.7	<5.0	11	10.9	1,210	--	--
3/20/2001	--		54.73	5.00	**20.00**	7.56	47.17	913	40.9	<5.0	15.5	14.6	<25	--	--
6/12/2001	--		54.73	5.00	**20.00**	9.83	44.90	2,000	230	<20	21	<20	4,700	--	--
9/23/2001	--		54.73	5.00	**20.00**	10.54	44.19	1,600	35	<10	<10	<10	3,000	--	--
12/31/2001	--		54.73	5.00	**20.00**	5.42	49.31	<500	<5.0	<5.0	<5.0	<5.0	880	--	--
3/21/2002	--		54.73	5.00	**20.00**	6.18	48.55	<5,000	<50	<50	<50	<50	1,400	--	--
4/17/2002	--		54.73	5.00	**20.00**	7.34	47.39	1,300	79	31	17	55	2,200	--	--
8/12/2002	P	a	54.73	5.00	**20.00**	9.56	45.17	2,400	120	<5.0	<5.0	<5.0	2,100	2	7.2
12/6/2002	P		54.73	5.00	**20.00**	10.02	44.71	2,200	110	10	42	56	2,000	--	6.7
1/30/2003	P		54.73	5.00	**20.00**	7.55	47.18	6,000	180	<50	85	<50	2,100	1.8	6.8

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)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-4 Cont.															
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
05/09/2005	P		59.59	5.00	20.00	7.21	52.38	<5,000	140	<50	62	<50	1,800	1.64	6.6
08/11/2005	P	f, h	59.59	5.00	20.00	9.71	49.88	1,700	51	<10	<10	<10	1,200	--	6.9
11/18/2005	P		59.59	5.00	20.00	9.45	50.14	1,300	23	<2.5	7.2	11	310	1.4	6.7
02/15/2006	P		59.59	5.00	20.00	7.12	52.47	2,200	46	<2.5	29	7.0	910	0.9	6.8
5/30/2006	P		59.59	5.00	20.00	7.95	51.64	3,300	95	<10	55	<10	1,200	1.76	6.5
8/11/2006	P		59.59	5.00	20.00	9.50	50.09	350	93	<10	<10	<10	1,200	1.4	6.6
11/1/2006	P		59.59	5.00	20.00	9.93	49.66	1,300	<10	<10	<10	<10	360	4.56	6.94
2/7/2007	NP		59.59	5.00	20.00	8.82	50.77	4,900	85	<10	40	<10	1,500	0.72	6.86
5/9/2007	NP		59.59	5.00	20.00	7.56	52.03	1,700	19	<10	<10	<10	340	3.00	7.03
8/7/2007	NP		59.59	5.00	20.00	9.80	49.79	2,700	69	<5.0	<5.0	<5.0	510	1.04	6.95
11/14/2007	NP		59.59	5.00	20.00	8.65	50.94	500	4.9	<0.50	<0.50	<0.50	280	1.27	6.94
2/28/2008	NP		59.59	5.00	20.00	6.15	53.44	850	17	<0.50	4.4	1.4	350	1.76	7.03
5/23/2008	NP		59.59	5.00	20.00	9.40	50.19	1,900	75	<20	<20	<20	1,000	1.28	6.58
8/13/2008	NP		59.59	5.00	20.00	9.92	49.67	3,100	47	<10	<10	<10	530	0.89	8.97
11/19/2008	NP		59.59	5.00	20.00	9.19	50.40	1,800	70	<10	21	<10	430	0.83	6.50
2/10/2009	NP		59.59	5.00	20.00	7.68	51.91	1,900	33	<10	14	<10	400	0.87	7.31
5/7/2009	NP		59.59	5.00	20.00	7.31	52.28	<50	<0.50	<0.50	<0.50	<0.50	9.9	2.40	7.10
9/3/2009	**NP**		**59.59**	**5.00**	**20.00**	**10.02**	**49.57**	**3,800**	**49**	**<10**	**<10**	**<10**	**360**	**0.79**	**6.75**
A-5															
6/21/2000	--		54.17	3.00	**24.00**	9.29	44.88	980	<0.5	<0.5	<0.5	<1.0	2,000	--	--
9/20/2000	--		54.17	3.00	**24.00**	10.23	43.94	--	--	--	--	--	--	--	--
12/26/2000	--		54.17	3.00	**24.00**	9.65	44.52	525	<0.5	<0.5	<0.5	<0.5	1,200	--	--

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)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-5 Cont.															
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	--	--	--	--	--	--	--	--
02/02/2004	P	g	58.78	3.00	24.00	7.43	51.35	390	<2.5	9.2	<2.5	2.6	140	1.0	6.8
05/04/2004	--		58.78	3.00	24.00	9.98	48.80	--	--	--	--	--	--	--	--
09/02/2004	P		58.78	3.00	24.00	9.65	49.13	<250	<2.5	<2.5	<2.5	<2.5	66	1.1	6.4
11/10/2004	--		58.78	3.00	24.00	8.48	50.30	--	--	--	--	--	--	--	--
02/02/2005	P		58.78	3.00	24.00	7.10	51.68	68	<0.50	<0.50	<0.50	<0.50	17	1.0	7.2
05/09/2005	--		58.78	3.00	24.00	7.20	51.58	--	--	--	--	--	--	--	--
08/11/2005	P	h	58.78	3.00	24.00	9.21	49.57	<50	<0.50	<0.50	<0.50	<0.50	6.8	1.3	6.2
11/18/2005	--		58.78	3.00	24.00	9.10	49.68	--	--	--	--	--	--	--	--
02/15/2006	P		58.78	3.00	24.00	7.16	51.62	<50	<0.50	<0.50	<0.50	<0.50	5.1	1.2	6.9
5/30/2006	--		58.78	3.00	24.00	7.87	50.91	--	--	--	--	--	--	--	--
8/11/2006	P		58.78	3.00	24.00	8.90	49.88	920	<0.50	<0.50	<0.50	<0.50	12	1.4	6.7
11/1/2006	--		58.78	3.00	24.00	9.30	49.48	--	--	--	--	--	--	--	--
2/7/2007	NP	i	58.78	3.00	24.00	8.50	50.28	60	<0.50	<0.50	<0.50	<0.50	1.5	0.73	7.14
5/9/2007	--		58.78	3.00	24.00	7.60	51.18	--	--	--	--	--	--	--	--
8/7/2007	NP		58.78	3.00	24.00	9.30	49.48	<50	<0.50	<0.50	<0.50	<0.50	0.81	0.41	7.18
11/14/2007	--		58.78	3.00	24.00	8.48	50.30	--	--	--	--	--	--	--	--
2/28/2008	NP		58.78	3.00	24.00	6.21	52.57	<50	<0.50	<0.50	<0.50	<0.50	0.97	2.24	7.40
5/23/2008	--		58.78	3.00	24.00	8.97	49.81	--	--	--	--	--	--	--	--
8/13/2008	NP		58.78	3.00	24.00	9.42	49.36	<50	<0.50	<0.50	<0.50	<0.50	0.69	0.62	8.96

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)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-5 Cont.															
11/19/2008	--		58.78	3.00	24.00	8.91	49.87	--	--	--	--	--	--	--	--
2/10/2009	NP		58.78	3.00	24.00	7.80	50.98	<50	<0.50	<0.50	<0.50	<0.50	1.6	0.85	7.52
5/7/2009	--		58.78	3.00	24.00	7.37	51.41	--	--	--	--	--	--	--	--
9/3/2009	**NP**		**58.78**	**3.00**	**24.00**	**9.33**	**49.45**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**20**	**0.91**	**6.68**
A-6															
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
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	--	--	--	--	--	--	--	--	--	--

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)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-6 Cont.															
8/11/2006	--	e	--	3.00	25.00	--	--	--	--	--	--	--	--	--	--
11/1/2006	--	e	--	3.00	25.00	--	--	--	--	--	--	--	--	--	--
A-7															
6/21/2000	--		54.71	3.00	22.00	8.58	46.13	<50	<0.5	<0.5	<0.5	<1.0	<3.0	--	--
9/20/2000	--		54.71	3.00	22.00	9.19	45.52	--	--	--	--	--	--	--	--
12/26/2000	--		54.71	3.00	22.00	8.50	46.21	--	--	--	--	--	--	--	--
3/20/2001	--		54.71	3.00	22.00	6.75	47.96	--	--	--	--	--	--	--	--
6/12/2001	--		54.71	3.00	22.00	8.80	45.91	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
9/23/2001	--		54.71	3.00	22.00	9.59	45.12	--	--	--	--	--	--	--	--
12/31/2001	--		54.71	3.00	22.00	4.78	49.93	--	--	--	--	--	--	--	--
3/21/2002	--		54.71	3.00	22.00	5.35	49.36	--	--	--	--	--	--	--	--
4/17/2002	--		54.71	3.00	22.00	6.88	47.83	<50	<0.5	<0.5	<0.5	<0.5	2.5	--	--
8/12/2002	--		54.71	3.00	22.00	8.77	45.94	--	--	--	--	--	--	--	--
12/6/2002	--		54.71	3.00	22.00	9.07	45.64	--	--	--	--	--	--	--	--
1/30/2003	--		54.71	3.00	22.00	6.65	48.06	--	--	--	--	--	--	--	--
5/28/2003	--		54.71	3.00	22.00	7.63	47.08	<50	<0.50	<0.50	<0.50	<0.50	3.8	2.3	6.7
8/6/2003	--		54.71	3.00	22.00	8.90	45.81	--	--	--	--	--	--	--	--
11/14/2003	--		54.71	3.00	22.00	9.08	45.63	--	--	--	--	--	--	--	--
02/02/2004	--	g	59.75	3.00	22.00	5.96	53.79	--	--	--	--	--	--	--	--
05/04/2004	--		59.75	3.00	22.00	8.21	51.54	--	--	--	--	--	--	--	--
09/02/2004	P		59.75	3.00	22.00	9.02	50.73	<50	<0.50	<0.50	<0.50	<0.50	8.9	3.0	6.7
11/10/2004	--		59.75	3.00	22.00	7.50	52.25	--	--	--	--	--	--	--	--
02/02/2005	--		59.75	3.00	22.00	6.10	53.65	--	--	--	--	--	--	--	--
05/09/2005	--		59.75	3.00	22.00	6.48	53.27	--	--	--	--	--	--	--	--
08/11/2005	P	h	59.75	3.00	22.00	8.45	51.30	<50	<0.50	<0.50	<0.50	<0.50	18	1.6	6.6
11/18/2005	--		59.75	3.00	22.00	8.65	51.10	--	--	--	--	--	--	--	--
02/15/2006	--		59.75	3.00	22.00	6.51	53.24	--	--	--	--	--	--	--	--
5/30/2006	--		59.75	3.00	22.00	7.13	52.62	--	--	--	--	--	--	--	--
8/11/2006	P		59.75	3.00	22.00	8.46	51.29	<50	<0.50	<0.50	<0.50	<0.50	3.6	1.7	6.7
11/1/2006	--		59.75	3.00	22.00	8.99	50.76	--	--	--	--	--	--	--	--

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)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-7 Cont.															
2/7/2007	--		59.75	3.00	22.00	8.12	51.63	--	--	--	--	--	--	--	--
5/9/2007	--		59.75	3.00	22.00	7.04	52.71	--	--	--	--	--	--	--	--
8/7/2007	NP		59.75	3.00	22.00	9.10	50.65	<50	<0.50	<0.50	<0.50	<0.50	2.7	1.34	7.09
11/14/2007	--		59.75	3.00	22.00	8.00	51.75	--	--	--	--	--	--	--	--
2/28/2008	--		59.75	3.00	22.00	5.81	53.94	--	--	--	--	--	--	--	--
5/23/2008	--		59.75	3.00	22.00	8.74	51.01	--	--	--	--	--	--	--	--
8/13/2008	NP		59.75	3.00	22.00	9.27	50.48	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.05	8.45
11/19/2008	--		59.75	3.00	22.00	8.67	51.08	--	--	--	--	--	--	--	--
2/10/2009	--		59.75	3.00	22.00	7.47	52.28	--	--	--	--	--	--	--	--
5/7/2009	--		59.75	3.00	22.00	6.88	52.87	--	--	--	--	--	--	--	--
9/3/2009	**NP**		**59.75**	**3.00**	**22.00**	**9.25**	**50.50**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**0.93**	**6.78**
A-8															
6/21/2000	--		53.77	3.00	**25.00**	9.07	44.70	810	<0.5	<0.5	<0.5	810	1,500	--	--
9/20/2000	--		53.77	3.00	**25.00**	9.72	44.05	10,800	2,680	46	439	370	4,410	--	--
12/26/2000	--		53.77	3.00	**25.00**	9.20	44.57	7,700	1,440	<50	202	106	2,230	--	--
3/20/2001	--		53.77	3.00	**25.00**	7.51	46.26	<5,000	1,280	<50	53.9	<50	2,880	--	--
6/12/2001	--		53.77	3.00	**25.00**	9.53	44.24	5,600	1,700	<50	61	54	2,900	--	--
9/23/2001	--		53.77	3.00	**25.00**	10.08	43.69	10,000	3,500	<50	110	64	6,500	--	--
12/31/2001	--		53.77	3.00	**25.00**	4.34	49.43	4,300	610	<10	60	24	520	--	--
3/21/2002	--		53.77	3.00	**25.00**	6.67	47.10	6,600	1,400	<50	130	<50	2,700	--	--
4/17/2002	--		53.77	3.00	**25.00**	7.72	46.05	3,800	540	<10	<10	12	3,100	--	--
8/12/2002	NP		53.77	3.00	**25.00**	9.64	44.13	9,400	1,800	<20	35	28	4,200	1	6.7
12/6/2002	NP	b	53.77	3.00	**25.00**	9.62	44.15	5,300	1,100	11	11	<10	2,200	1.4	6.7
1/30/2003	NP		53.77	3.00	**25.00**	7.49	46.28	<10,000	1,100	<100	<100	<100	2,200	1.5	6.9
5/28/2003	--		53.77	3.00	**25.00**	9.17	44.60	7,700	1,700	<50	<50	<50	2,100	1	6.8
8/6/2003	--		53.77	3.00	**25.00**	9.67	44.10	13,000	2,400	<50	<50	<50	3,000	0.9	6.5
11/14/2003	NP	d	53.77	3.00	25.00	9.80	43.97	3,100	570	<5.0	<5.0	<5.0	850	2.3	6.2
02/02/2004	NP	d, g	58.70	3.00	25.00	7.10	51.60	3,900	300	<25	<25	<25	1,100	1.1	6.8
05/04/2004	NP		58.70	3.00	25.00	9.44	49.26	<5,000	490	<50	<50	<50	1,600	1.0	6.9
09/02/2004	NP		58.70	3.00	25.00	9.67	49.03	<2,500	30	<25	<25	<25	680	1.0	6.2

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)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-8 Cont.															
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	--	--	--	--	--	--	--	--	--	--
8/13/2008	NP		58.70	3.00	25.00	9.48	49.22	3,100	970	<25	<25	<25	250	0.84	8.73
11/19/2008	NP		58.70	3.00	25.00	8.87	49.83	3,800	1,000	<20	<20	<20	230	0.89	6.87
2/10/2009	NP		58.70	3.00	25.00	7.11	51.59	3,600	1,300	<25	<25	<25	320	0.89	6.87
5/7/2009	NP		58.70	3.00	25.00	6.47	52.23	270	65	<1.0	<1.0	<1.0	12	0.97	6.56
9/3/2009	**NP**		**58.70**	**3.00**	**25.00**	**9.47**	**49.23**	**3,200**	**1,400**	**<25**	**<25**	**<25**	**100**	**0.87**	**6.51**
A-9															
6/21/2000	--		53.04	5.00	**40.00**	8.56	44.48	<50	<0.5	<0.5	<0.5	<1.0	5	--	--
9/20/2000	--		53.04	5.00	**40.00**	9.05	43.99	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
12/26/2000	--		53.04	5.00	**40.00**	8.49	44.55	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
3/20/2001	--		53.04	5.00	**40.00**	6.95	46.09	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
6/12/2001	--		53.04	5.00	**40.00**	8.67	44.37	<50	<0.5	<0.5	<0.5	<0.5	4.8	--	--
9/23/2001	--		53.04	5.00	**40.00**	9.21	43.83	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
12/31/2001	--		53.04	5.00	**40.00**	4.57	48.47	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
3/21/2002	--		53.04	5.00	**40.00**	5.60	47.44	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
4/17/2002	--		53.04	5.00	**40.00**	6.89	46.15	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--

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)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-9 Cont.															
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	--	--	--	--	--	--	--	--	--	--
8/13/2008	NP		57.73	5.00	40.00	8.65	49.08	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.55	9.04
11/19/2008	--		57.73	5.00	40.00	8.49	49.24	--	--	--	--	--	--	--	--
2/10/2009	--		57.73	5.00	40.00	7.07	50.66	--	--	--	--	--	--	--	--
5/7/2009	--		57.73	5.00	40.00	6.65	51.08	--	--	--	--	--	--	--	--
9/3/2009	**NP**		**57.73**	**5.00**	**40.00**	**8.56**	**49.17**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**0.89**	**6.86**
A-10															

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)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-10 Cont.															
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	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--

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)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-10 Cont.															
5/23/2008	--		59.39	5.00	30.00	9.94	49.45	--	--	--	--	--	--	--	--
8/13/2008	NP		59.39	5.00	30.00	10.30	49.09	<50	<0.50	<0.50	<0.50	<0.50	28	0.74	9.16
11/19/2008	--		59.39	5.00	30.00	9.90	49.49	--	--	--	--	--	--	--	--
2/10/2009	--		59.39	5.00	30.00	8.74	50.65	--	--	--	--	--	--	--	--
5/7/2009	--		49.39	5.00	30.00	8.23	41.16	--	--	--	--	--	--	--	--
9/3/2009	--	**j**	--	**5.00**	**30.00**	--	--	--	--	--	--	--	--	--	--
A-11															
6/21/2000	--		53.74	5.00	**30.00**	9.54	44.20	<50	<0.5	<0.5	<0.5	<1.0	4	--	--
9/20/2000	--		53.74	5.00	**30.00**	10.62	43.12	--	--	--	--	--	--	--	--
12/26/2000	--		53.74	5.00	**30.00**	10.03	43.71	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
3/20/2001	--		53.74	5.00	**30.00**	8.49	45.25	--	--	--	--	--	--	--	--
6/12/2001	--		53.74	5.00	**30.00**	10.21	43.53	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
9/23/2001	--		53.74	5.00	**30.00**	10.77	42.97	--	--	--	--	--	--	--	--
12/31/2001	--		53.74	5.00	**30.00**	6.06	47.68	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
3/21/2002	--		53.74	5.00	**30.00**	7.14	46.60	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--

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)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-11 Cont.															
02/15/2006	--		59.16	5.00	30.00	7.90	51.26	--	--	--	--	--	--	--	--
5/30/2006	--		59.16	5.00	30.00	8.78	50.38	--	--	--	--	--	--	--	--
8/11/2006	P		59.16	5.00	30.00	10.33	48.83	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.8	6.8
11/1/2006	--		59.16	5.00	30.00	10.10	49.06	--	--	--	--	--	--	--	--
2/7/2007	--		59.16	5.00	30.00	9.35	49.81	--	--	--	--	--	--	--	--
5/9/2007	--		59.16	5.00	30.00	8.48	50.68	--	--	--	--	--	--	--	--
8/7/2007	NP		59.16	5.00	30.00	10.10	49.06	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.67	7.07
11/14/2007	--		59.16	5.00	30.00	9.31	49.85	--	--	--	--	--	--	--	--
2/28/2008	--		59.16	5.00	30.00	7.12	52.04	--	--	--	--	--	--	--	--
5/23/2008	--		59.16	5.00	30.00	9.77	49.39	--	--	--	--	--	--	--	--
8/13/2008	NP		59.16	5.00	30.00	10.08	49.08	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.89	8.94
11/19/2008	--		59.16	5.00	30.00	9.75	49.41	--	--	--	--	--	--	--	--
2/10/2009	--		59.16	5.00	30.00	8.67	50.49	--	--	--	--	--	--	--	--
5/7/2009	--		59.16	5.00	30.00	8.20	50.96	--	--	--	--	--	--	--	--
9/3/2009	**NP**		**59.16**	**5.00**	**30.00**	**10.15**	**49.01**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**0.98**	**6.78**
A-12															
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	--	--	--	--	--	--	--	--

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-12 Cont.															
11/14/2003	--		52.05	5.00	30.00	9.37	42.68	--	--	--	--	--	--	--	--
02/02/2004	P	g	57.06	5.00	30.00	7.90	49.16	<50	<0.50	<0.50	<0.50	<0.50	0.91	1.0	6.9
05/04/2004	--		57.06	5.00	30.00	8.74	48.32	--	--	--	--	--	--	--	--
09/02/2004	P		57.06	5.00	30.00	9.41	47.65	<50	<0.50	<0.50	<0.50	<0.50	6.2	1.1	6.5
11/10/2004	--		57.06	5.00	30.00	8.32	48.74	--	--	--	--	--	--	--	--
02/02/2005	P		57.06	5.00	30.00	7.45	49.61	<50	<0.50	<0.50	<0.50	<0.50	8.3	1.4	7.1
05/09/2005	--		57.06	5.00	30.00	7.57	49.49	--	--	--	--	--	--	--	--
08/11/2005	P	h	57.06	5.00	30.00	9.05	48.01	<50	<0.50	<0.50	<0.50	<0.50	5.4	0.9	6.4
11/18/2005	--		57.06	5.00	30.00	8.90	48.16	--	--	--	--	--	--	--	--
02/15/2006	--		57.06	5.00	30.00	7.47	49.59	--	--	--	--	--	--	--	--
5/30/2006	--		57.06	5.00	30.00	8.21	48.85	--	--	--	--	--	--	--	--
8/11/2006	P		57.06	5.00	30.00	8.85	48.21	<50	<0.50	<0.50	<0.50	<0.50	7.4	1.8	6.9
11/1/2006	--		57.06	5.00	30.00	9.17	47.89	--	--	--	--	--	--	--	--
2/7/2007	--		57.06	5.00	30.00	8.58	48.48	--	--	--	--	--	--	--	--
5/9/2007	--		57.06	5.00	30.00	7.93	49.13	--	--	--	--	--	--	--	--
8/7/2007	NP		57.06	5.00	30.00	9.20	47.86	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.49	7.34
11/14/2007	--		57.06	5.00	30.00	8.52	48.54	--	--	--	--	--	--	--	--
2/28/2008	--		57.06	5.00	30.00	7.04	50.02	--	--	--	--	--	--	--	--
5/23/2008	--		57.06	5.00	30.00	9.00	48.06	--	--	--	--	--	--	--	--
8/13/2008	NP		57.06	5.00	30.00	9.38	47.68	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.03	8.39
11/19/2008	--		57.06	5.00	30.00	9.01	48.05	--	--	--	--	--	--	--	--
2/10/2009	--		57.06	5.00	30.00	8.10	48.96	--	--	--	--	--	--	--	--
5/7/2009	--		57.06	5.00	30.00	7.80	49.26	--	--	--	--	--	--	--	--
9/3/2009	**NP**		**57.06**	**5.00**	**30.00**	**9.40**	**47.66**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**3.6**	**0.98**	**7.14**
A-13															
6/21/2000	--		55.11	10.00	**10.00**	--	--	--	--	--	--	--	--	--	--
9/20/2000	--		55.11	10.00	**10.00**	--	--	--	--	--	--	--	--	--	--
12/26/2000	--		55.11	10.00	**10.00**	--	--	--	--	--	--	--	--	--	--
3/20/2001	--		55.11	10.00	**10.00**	--	--	--	--	--	--	--	--	--	--
6/12/2001	--		55.11	10.00	**10.00**	--	--	--	--	--	--	--	--	--	--

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

Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-13 Cont.															
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	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--
8/13/2008	--		60.26	10.00	10.00	10.17	50.09	--	--	--	--	--	--	--	--
11/19/2008	--		60.26	10.00	10.00	9.63	50.63	--	--	--	--	--	--	--	--
2/10/2009	--		60.26	10.00	10.00	8.48	51.78	--	--	--	--	--	--	--	--

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Well and Sample Date	P/NP	Comments	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
A-13 Cont.															
5/7/2009	--		60.26	10.00	10.00	7.97	52.29	--	--	--	--	--	--	--	--
9/3/2009	--		**60.26**	**10.00**	**10.00**	**10.14**	**50.12**	--	--	--	--	--	--	--	--
AR-1															
6/21/2000	--		54.72	10.00	30.00	--	--	--	--	--	--	--	--	--	--
9/20/2000	--		54.72	10.00	30.00	--	--	--	--	--	--	--	--	--	--
12/26/2000	--		54.72	10.00	30.00	9.95	44.77	--	--	--	--	--	--	--	--
3/20/2001	--		54.72	10.00	30.00	8.34	46.38	--	--	--	--	--	--	--	--
6/12/2001	--		54.72	10.00	30.00	10.17	44.55	--	--	--	--	--	--	--	--
9/23/2001	--		54.72	10.00	30.00	10.72	44.00	--	--	--	--	--	--	--	--
12/31/2001	--		54.72	10.00	30.00	5.91	48.81	--	--	--	--	--	--	--	--
3/21/2002	--		54.72	10.00	30.00	7.00	47.72	--	--	--	--	--	--	--	--
4/17/2002	--		54.72	10.00	30.00	8.33	46.39	--	--	--	--	--	--	--	--
8/12/2002	--		54.72	10.00	30.00	10.18	44.54	--	--	--	--	--	--	--	--
12/6/2002	--		54.72	10.00	30.00	10.21	44.51	--	--	--	--	--	--	--	--
1/30/2003	--		54.72	10.00	30.00	8.22	46.50	--	--	--	--	--	--	--	--
5/28/2003	--		54.72	10.00	30.00	9.62	45.10	--	--	--	--	--	--	--	--
8/6/2003	--		54.72	10.00	30.00	10.47	44.25	--	--	--	--	--	--	--	--
11/14/2003	--	d	54.72	10.00	30.00	10.40	44.32	--	--	--	--	--	--	--	--
02/02/2004	--	d, g	59.52	10.00	30.00	7.96	51.56	--	--	--	--	--	--	--	--
05/04/2004	--	d	59.52	10.00	30.00	10.17	49.35	--	--	--	--	--	--	--	--
09/02/2004	--		59.52	10.00	30.00	10.28	49.24	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--

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								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
AR-1 Cont.															
2/7/2007	--		59.52	10.00	30.00	9.33	50.19	--	--	--	--	--	--	--	--
5/9/2007	--		59.52	10.00	30.00	8.45	51.07	--	--	--	--	--	--	--	--
8/7/2007	--		59.52	10.00	30.00	10.12	49.40	--	--	--	--	--	--	--	--
11/14/2007	--		59.52	10.00	30.00	9.31	50.21	--	--	--	--	--	--	--	--
2/28/2008	--		59.52	10.00	30.00	7.05	52.47	--	--	--	--	--	--	--	--
5/23/2008	--	j	59.52	10.00	30.00	--	--	--	--	--	--	--	--	--	--
8/13/2008	--		59.52	10.00	30.00	10.20	49.32	--	--	--	--	--	--	--	--
11/19/2008	--		59.52	10.00	30.00	9.73	49.79	--	--	--	--	--	--	--	--
2/10/2009	--		59.52	10.00	30.00	8.61	50.91	--	--	--	--	--	--	--	--
5/7/2009	--		59.52	10.00	30.00	8.17	51.35	--	--	--	--	--	--	--	--
9/3/2009	**--**		**59.52**	**10.00**	**30.00**	**10.19**	**49.33**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
AR-2															
6/21/2000	--		54.77	8.00	28.00	--	--	--	--	--	--	--	--	--	--
9/20/2000	--		54.77	8.00	28.00	--	--	--	--	--	--	--	--	--	--
12/26/2000	--		54.77	8.00	28.00	--	--	--	--	--	--	--	--	--	--
3/20/2001	--		54.77	8.00	28.00	3.13	51.64	--	--	--	--	--	--	--	--
6/12/2001	--		54.77	8.00	28.00	4.51	50.26	--	--	--	--	--	--	--	--
9/23/2001	--		54.77	8.00	28.00	6.05	48.72	--	--	--	--	--	--	--	--
12/31/2001	--		54.77	8.00	28.00	2.79	51.98	--	--	--	--	--	--	--	--
3/21/2002	--		54.77	8.00	28.00	7.75	47.02	--	--	--	--	--	--	--	--
4/17/2002	--		54.77	8.00	28.00	2.24	52.53	--	--	--	--	--	--	--	--
8/12/2002	--		54.77	8.00	28.00	4.93	49.84	--	--	--	--	--	--	--	--
12/6/2002	--		54.77	8.00	28.00	6.09	48.68	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--

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)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
AR-2 Cont.															
11/10/2004	--		59.18	8.00	28.00	5.48	53.70	--	--	--	--	--	--	--	--
02/02/2005	--		59.18	8.00	28.00	2.62	56.56	--	--	--	--	--	--	--	--
05/09/2005	--		59.18	8.00	28.00	2.84	56.34	--	--	--	--	--	--	--	--
08/11/2005	--		59.18	8.00	28.00	4.33	54.85	--	--	--	--	--	--	--	--
11/18/2005	--		59.18	8.00	28.00	5.34	53.84	--	--	--	--	--	--	--	--
02/15/2006	--		59.18	8.00	28.00	2.49	56.69	--	--	--	--	--	--	--	--
5/30/2006	--		59.18	8.00	28.00	3.02	56.16	--	--	--	--	--	--	--	--
8/11/2006	--		59.18	8.00	28.00	4.32	54.86	--	--	--	--	--	--	--	--
11/1/2006	--		59.18	8.00	28.00	5.25	53.93	--	--	--	--	--	--	--	--
2/7/2007	--		59.18	8.00	28.00	4.64	54.54	--	--	--	--	--	--	--	--
5/9/2007	--		59.18	8.00	28.00	3.15	56.03	--	--	--	--	--	--	--	--
8/7/2007	--		59.18	8.00	28.00	4.55	54.63	--	--	--	--	--	--	--	--
11/14/2007	--		59.18	8.00	28.00	5.03	54.15	--	--	--	--	--	--	--	--
2/28/2008	--		59.18	8.00	28.00	1.82	57.36	--	--	--	--	--	--	--	--
5/23/2008	--	j	59.18	8.00	28.00	--	--	--	--	--	--	--	--	--	--
8/13/2008	--		59.18	8.00	28.00	5.05	54.13	--	--	--	--	--	--	--	--
11/19/2008	--		59.18	8.00	28.00	5.49	53.69	--	--	--	--	--	--	--	--
2/10/2009	--		59.18	8.00	28.00	5.10	54.08	--	--	--	--	--	--	--	--
5/7/2009	--		59.18	8.00	28.00	2.90	56.28	--	--	--	--	--	--	--	--
9/3/2009	--		**59.18**	**8.00**	**28.00**	**5.99**	**53.19**	--	--	--	--	--	--	--	--
AR-3															
6/21/2000	--		54.19	10.00	**30.00**	--	--	--	--	--	--	--	--	--	--
9/20/2000	--		54.19	10.00	**30.00**	--	--	--	--	--	--	--	--	--	--
12/26/2000	--		54.19	10.00	**30.00**	9.70	44.49	--	--	--	--	--	--	--	--
3/20/2001	--		54.19	10.00	**30.00**	--	--	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--

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)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
AR-3 Cont.															
8/12/2002	--		54.19	10.00	30.00	9.94	44.25	--	--	--	--	--	--	--	--
12/6/2002	--		54.19	10.00	30.00	9.99	44.20	--	--	--	--	--	--	--	--
1/30/2003	--		54.19	10.00	30.00	7.96	46.23	--	--	--	--	--	--	--	--
5/28/2003	--		54.19	10.00	30.00	8.94	45.25	--	--	--	--	--	--	--	--
8/6/2003	--		54.19	10.00	30.00	9.94	44.25	--	--	--	--	--	--	--	--
11/14/2003	--		54.19	10.00	30.00	10.03	44.16	--	--	--	--	--	--	--	--
02/02/2004	--	g	59.10	10.00	30.00	6.90	52.20	--	--	--	--	--	--	--	--
05/04/2004	--		59.10	10.00	30.00	9.12	49.98	--	--	--	--	--	--	--	--
09/02/2004	--		59.10	10.00	30.00	10.15	48.95	--	--	--	--	--	--	--	--
11/10/2004	--		59.10	10.00	30.00	8.79	50.31	--	--	--	--	--	--	--	--
02/02/2005	--		59.10	10.00	30.00	7.30	51.80	--	--	--	--	--	--	--	--
05/09/2005	--		59.10	10.00	30.00	7.71	51.39	--	--	--	--	--	--	--	--
08/11/2005	--		59.10	10.00	30.00	9.54	49.56	--	--	--	--	--	--	--	--
11/18/2005	--		59.10	10.00	30.00	9.43	49.67	--	--	--	--	--	--	--	--
02/15/2006	--		59.10	10.00	30.00	7.50	51.60	--	--	--	--	--	--	--	--
5/30/2006	--		59.10	10.00	30.00	8.82	50.28	--	--	--	--	--	--	--	--
8/11/2006	--		59.10	10.00	30.00	9.38	49.72	--	--	--	--	--	--	--	--
11/1/2006	--		59.10	10.00	30.00	9.75	49.35	--	--	--	--	--	--	--	--
2/7/2007	--		59.10	10.00	30.00	9.00	50.10	--	--	--	--	--	--	--	--
5/9/2007	--		59.10	10.00	30.00	8.12	50.98	--	--	--	--	--	--	--	--
8/7/2007	--		59.10	10.00	30.00	9.75	49.35	--	--	--	--	--	--	--	--
11/14/2007	--		59.10	10.00	30.00	8.91	50.19	--	--	--	--	--	--	--	--
2/28/2008	--		59.10	10.00	30.00	6.73	52.37	--	--	--	--	--	--	--	--
5/23/2008	--	j	59.10	10.00	30.00	--	--	--	--	--	--	--	--	--	--
8/13/2008	--		59.10	10.00	30.00	9.85	49.25	--	--	--	--	--	--	--	--
11/19/2008	--		59.10	10.00	30.00	9.35	49.75	--	--	--	--	--	--	--	--
2/10/2009	--		59.10	10.00	30.00	8.29	50.81	--	--	--	--	--	--	--	--
5/7/2009	--		59.10	10.00	30.00	7.83	51.27	--	--	--	--	--	--	--	--
9/3/2009	--		**59.10**	**10.00**	**30.00**	**9.80**	**49.30**	--	--	--	--	--	--	--	--

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
GRO = Gasoline range organics
GWE = Groundwater elevation measured in ft
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
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.
k = Sample taken from VOA vial with air bubble > 6mm diameter.

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

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

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

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

Values for DO and pH were obtained through field measurements.

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

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

Table 2. Summary of Fuel Additives Analytical Data

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
A-2									
1/30/2003	<40	<20	--	<0.50	<0.50	<0.50	--	--	a
5/28/2003	<100	<20	1.1	<0.50	<0.50	<0.50	--	--	
8/6/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/02/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/11/2006	<300	<20	3.6	<0.50	<0.50	<0.50	<0.50	<0.50	
8/7/2007	<300	<20	3.4	<0.50	<0.50	<0.50	<0.50	<0.50	b
8/13/2008	<300	<10	19	<0.50	<0.50	<0.50	<0.50	<0.50	
9/3/2009	**<300**	**<10**	**12**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**d**
A-3									
5/28/2003	<100	<20	43	<0.50	<0.50	24	--	--	
02/02/2004	<100	<20	13	<0.50	<0.50	4.6	<0.50	<0.50	
09/02/2004	<500	<100	62	<2.5	<2.5	15	<2.5	<2.5	
02/02/2005	<100	<20	6.8	<0.50	<0.50	2.4	<0.50	<0.50	b
08/11/2005	<100	<20	39	<0.50	<0.50	4.2	<0.50	<0.50	
02/15/2006	<300	<20	2.2	<0.50	<0.50	0.58	<0.50	<0.50	
8/11/2006	<300	<20	4.1	<0.50	<0.50	<0.50	<0.50	<0.50	
2/7/2007	<300	<20	0.58	<0.50	<0.50	<0.50	<0.50	<0.50	
8/7/2007	<300	<20	3.9	<0.50	<0.50	<0.50	<0.50	<0.50	b
2/28/2008	<300	<10	0.58	<0.50	<0.50	<0.50	<0.50	<0.50	
8/13/2008	<300	<10	0.55	<0.50	<0.50	<0.50	<0.50	<0.50	
2/10/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/3/2009	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
A-4									
1/30/2003	<4,000	<2,000	2,100	<50	<50	530	--	--	a
5/28/2003	<10,000	<2,000	2,500	<50	<50	590	--	--	
8/6/2003	<5,000	<1,000	2,500	<25	<25	560	<25	<25	
11/14/2003	<1,000	320	310	<5.0	<5.0	76	--	--	
02/02/2004	<5,000	<1,000	1,500	<25	<25	350	<25	<25	
05/04/2004	<10,000	<2,000	2,300	<50	<50	510	<50	<50	

Table 2. Summary of Fuel Additives Analytical Data

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
A-4 Cont.									
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
05/09/2005	<10,000	2,000	1,800	<50	<50	460	<50	<50	
08/11/2005	<2,000	2,400	1,200	<10	<10	310	<10	<10	
11/18/2005	<500	1,400	310	<2.5	<2.5	98	<2.5	<2.5	b
02/15/2006	<1,500	2,700	910	<2.5	<2.5	270	<2.5	<2.5	
5/30/2006	<6,000	3,000	1,200	<10	<10	340	<10	<10	
8/11/2006	<6,000	3,200	1,200	<10	<10	350	<10	<10	
11/1/2006	<6,000	1,700	360	<10	<10	95	<10	--	b
2/7/2007	<6,000	3,000	1,500	<10	<10	460	<10	<10	
5/9/2007	<6,000	2,200	340	<10	<10	91	<10	<10	
8/7/2007	<3,000	1,800	510	<5.0	<5.0	140	<5.0	<5.0	b
11/14/2007	<300	600	280	<0.50	<0.50	90	<0.50	<0.50	
2/28/2008	<300	1,600	350	<0.50	<0.50	73	<0.50	<0.50	
5/23/2008	<12,000	2,500	1,000	<20	<20	270	<20	<20	
8/13/2008	<6,000	3,200	530	<10	<10	190	<10	<10	
11/19/2008	<6,000	2,000	430	<10	<10	140	<10	<10	
2/10/2009	<6,000	2,300	400	<10	<10	120	<10	<10	
5/7/2009	<300	11	9.9	<0.50	<0.50	2.0	<0.50	<0.50	
9/3/2009	**<6,000**	**3,200**	**360**	**<10**	**<10**	**120**	**<10**	**<10**	
A-5									
5/28/2003	<10,000	<2,000	1,500	<50	<50	620	--	--	
02/02/2004	<500	170	140	<2.5	<2.5	54	<2.5	<2.5	
09/02/2004	<500	150	66	<2.5	<2.5	29	<2.5	<2.5	
02/02/2005	<100	840	17	<0.50	<0.50	7.6	<0.50	<0.50	
08/11/2005	<100	530	6.8	<0.50	<0.50	7.1	<0.50	<0.50	
02/15/2006	<300	460	5.1	<0.50	<0.50	4.2	<0.50	<0.50	
8/11/2006	<300	1,100	12	<0.50	<0.50	5.0	<0.50	<0.50	
2/7/2007	<300	600	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	
8/7/2007	<300	79	0.81	<0.50	<0.50	<0.50	<0.50	<0.50	b

Table 2. Summary of Fuel Additives Analytical Data

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
A-5 Cont.									
2/28/2008	<300	230	0.97	<0.50	<0.50	<0.50	<0.50	<0.50	
8/13/2008	<300	33	0.69	<0.50	<0.50	<0.50	<0.50	<0.50	
2/10/2009	<300	18	1.6	<0.50	<0.50	0.59	<0.50	<0.50	
9/3/2009	**<300**	**<10**	**20**	**<0.50**	**<0.50**	**9.1**	**<0.50**	**<0.50**	
A-6									
11/14/2003	--	--	--	--	--	--	--	--	Well inaccessible
02/02/2004	--	--	--	--	--	--	--	--	Well inaccessible
05/04/2004	--	--	--	--	--	--	--	--	Well inaccessible
09/02/2004	--	--	--	--	--	--	--	--	Well inaccessible
11/10/2004	--	--	--	--	--	--	--	--	Well inaccessible
8/11/2005	--	--	--	--	--	--	--	--	Well inaccessible
8/11/2006	--	--	--	--	--	--	--	--	Well inaccessible
A-7									
5/28/2003	<100	<20	3.8	<0.50	<0.50	0.94	--	--	
09/02/2004	<100	<20	8.9	<0.50	<0.50	3.0	<0.50	<0.50	
08/11/2005	<100	<20	18	<0.50	<0.50	4.4	<0.50	<0.50	
8/11/2006	<300	<20	3.6	<0.50	<0.50	0.91	0.54	<0.50	
8/7/2007	<300	<20	2.7	<0.50	<0.50	<0.50	<0.50	<0.50	b
8/13/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/3/2009	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
A-8									
1/30/2003	<8,000	<4,000	2,200	<100	<100	900	--	--	a
5/28/2003	<10,000	<2,000	2,100	<50	<50	1,100	--	--	
8/6/2003	<10,000	<2,000	3,000	<50	<50	1,200	<50	<50	
11/14/2003	<1,000	<200	850	<5.0	<5.0	320	--	--	
02/02/2004	<5,000	<1,000	1,100	<25	<25	380	<25	<25	
05/04/2004	<10,000	<2,000	1,600	<50	<50	440	<50	<50	
09/02/2004	<5,000	<1,000	680	<25	<25	170	<25	<25	
11/10/2004	<500	<100	290	<2.5	<2.5	66	<2.5	<2.5	
02/02/2005	<5,000	<1,000	1,900	<25	<25	510	<25	<25	b

Table 2. Summary of Fuel Additives Analytical Data

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
A-8 Cont.									
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	
8/7/2007	<1,500	140	430	<2.5	<2.5	160	<2.5	<2.5	b
11/14/2007	<300	28	100	<0.50	<0.50	44	<0.50	<0.50	
2/28/2008	<3,000	230	220	<5.0	<5.0	72	<5.0	<5.0	
5/23/2008	--	--	--	--	--	--	--	--	c
8/13/2008	<15,000	<500	250	<25	<25	86	<25	<25	
11/19/2008	<12,000	<400	230	<20	<20	100	<20	<20	
2/10/2009	<15,000	<500	320	<25	<25	120	<25	<25	
5/7/2009	<600	20	12	<1.0	<1.0	3.3	<1.0	<1.0	
9/3/2009	**<15,000**	**<500**	**100**	**<25**	**<25**	**52**	**<25**	**<25**	
A-9									
1/30/2003	<40	<20	1.1	<0.50	<0.50	<0.50	--	--	
5/28/2003	<100	<20	0.74	<0.50	<0.50	<0.50	--	--	
8/6/2003	<100	<20	1.8	<0.50	<0.50	<0.50	<0.50	<0.50	
09/02/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	<20	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	
8/11/2006	<300	<20	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	
8/7/2007	<300	<20	0.64	<0.50	<0.50	<0.50	<0.50	<0.50	b
8/13/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/3/2009	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
A-10									
09/02/2004	<1,000	<200	270	<5.0	<5.0	44	<5.0	<5.0	

Table 2. Summary of Fuel Additives Analytical Data

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

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
A-10 Cont.									
08/11/2005	<100	<20	97	<0.50	<0.50	14	<0.50	<0.50	
8/11/2006	<300	<20	46	<0.50	<0.50	7.3	<0.50	<0.50	
8/7/2007	<300	<20	8.9	<0.50	<0.50	<0.50	<0.50	<0.50	b
8/13/2008	<300	<10	28	<0.50	<0.50	6.9	<0.50	<0.50	
A-11									
5/28/2003	<100	<20	0.53	<0.50	<0.50	<0.50	--	--	
09/02/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/11/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/11/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
8/7/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
8/13/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/3/2009	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
A-12									
5/28/2003	<100	<20	10	<0.50	<0.50	2.5	--	--	
02/02/2004	<100	<20	0.91	<0.50	<0.50	<0.50	<0.50	<0.50	
09/02/2004	<100	<20	6.2	<0.50	<0.50	1.7	<0.50	<0.50	
02/02/2005	<100	<20	8.3	<0.50	<0.50	2.2	<0.50	<0.50	b
08/11/2005	<100	<20	5.4	<0.50	<0.50	1.1	<0.50	<0.50	
8/11/2006	<300	<20	7.4	<0.50	<0.50	2.5	<0.50	<0.50	
8/7/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
8/13/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/3/2009	**<300**	**<10**	**3.6**	**<0.50**	**<0.50**	**1.0**	**<0.50**	**<0.50**	
A-13									
5/28/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
09/02/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
AR-1									
AR-2									
AR-3									

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

FOOTNOTES:
a = The result for TBA was reported with a possible high bias due to the continuing calibration verification falling outside acceptance criteria.
b = The calibration verification for ethanol was within the method limits but outside the contract limits.
c = Well Inaccessible.
d = Sample taken from VOA vial with air bubble > 6mm diameter.

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

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

Table 3. Historical Ground-Water Flow Direction and Gradient

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

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

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)

STRATUS
ENVIRONMENTAL, INC.

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

September 21, 2009

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

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

General Information

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

Sampling Date: September 3, 2009

Unusual Field Conditions: None noted.

Scope of Work Performed: Quarterly monitoring and sampling.

Variations from Work Scope: A car was parked over well A-10, therefore unable to sample.

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

September 21, 2009

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

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Jay R. Johnson, P.G.
Project Manager

PROFESSIONAL GEOLOGIST
Jay R. Johnson
No. 5867
STATE OF CALIFORNIA

Attachments:

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

CC: Mr. Chuck Carmel, BP/ARCO

BP Alameda Portfolio

HYDROLOGIC DATA SHEET

AR-530 - DF 1020

Gauge Date: 9/3/09 **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	7:17			10.07	19.33			Y		
A-3	7:12			9.50	16.09			Y		
A-4	7:31			10.02	17.53			Y		
A-5	6:30			9.33	24.30			Y		
A-7	6:17			9.25	22.32			Y		
A-8	6:42			9.47	17.73			Y		
A-9	6:51			8.56	37.08			Y		
A-10	4:00			[redacted]				N	car parked on well box access	
A-11	5:53			10.15	29.68			Y		
A-12	5:45			9.40	29.72			Y		
A-13	6:05			10.14	28.90			N		
AR-1	7:05			10.19	22.67			N		
AR-2	7:22			5.98	26.17			N		
AR-3	7:05			9.80	28.72			N		

Fire water / Buddy System = Edgar Olinek

pH/Conductivity/temperature Meter - YSI Model 63

DO Meter - YSI 55 Series

Please refer to groundwater sampling field procedures

Calibration Date

pH 9/3/09

Conductivity 9/3/09

DO 9/3/09

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 4931 PURGED BY: JS WELL I.D.: A-2

CLIENT NAME: SAMPLED BY: JS SAMPLE I.D.: A-2

LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES:

DATE PURGED 9/3/09 START (2400hr) 952 END (2400hr) 956

DATE SAMPLED 9/3/09 SAMPLE TIME (2400hr) 955

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

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

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

DEPTH TO BOTTOM (feet) = 19.33 CASING VOLUME (gal) = 6.2

DEPTH TO WATER (feet) = 10.07 CALCULATED PURGE (gal) = 18.6

WATER COLUMN HEIGHT (feet) = 9.2 ACTUAL PURGE (gal) = DNP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/3/09	956	6	21.6	3990	6.86	clear	
			ND	Purge			

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 10.07 SAMPLE TURBIDITY: Clear

80% RECHARGE: X YES ___ NO ANALYSES: SWO

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

PURGING EQUIPMENT

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

SAMPLING EQUIPMENT

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

WELL INTEGRITY: Good LOCK#: MUSTY

REMARKS: DO. 1.03

SIGNATURE: Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 4931 PURGED BY: JS WELL I.D.: A-3

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

LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES:

DATE PURGED 9/3/09 START (2400hr) 931 END (2400hr) 936

DATE SAMPLED 9/3/09 SAMPLE TIME (2400hr) 935

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

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

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

DEPTH TO BOTTOM (feet) = 16.04 CASING VOLUME (gal) = 4.3

DEPTH TO WATER (feet) = 9.50 CALCULATED PURGE (gal) = 13.1

WATER COLUMN HEIGHT (feet) = 6.5 ACTUAL PURGE (gal) = 0 N.P

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/3/09	936	0	22.4	517	6.95	clear	
/							
/							
			10	purge			

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 9.51 SAMPLE TURBIDITY: Clear

80% RECHARGE: X YES ___ NO ANALYSES: 5 VOC

ODOR: no SAMPLE VESSEL / PRESERVATIVE: 6 Voa-HCl

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

WELL INTEGRITY: good LOCK#: MK96

REMARKS: DO - 1.01

SIGNATURE: Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 4931 PURGED BY: JS WELL I.D.: A-4

CLIENT NAME: _____ SAMPLED BY: JS SAMPLE I.D.: A-4

LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES: _____

DATE PURGED 9/3/09 START (2400hr) 9:13 END (2400hr) 9:16

DATE SAMPLED 9/3/09 SAMPLE TIME (2400hr) 9:15

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

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

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

DEPTH TO BOTTOM (feet) = 19.53 CASING VOLUME (gal) = 3.6

DEPTH TO WATER (feet) = 10.02 CALCULATED PURGE (gal) = 10.8

WATER COLUMN HEIGHT (feet) = 9.5 ACTUAL PURGE (gal) = 0 NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/3/09	9:16	0	21.4	1066	6.75	clear	

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 10.02 SAMPLE TURBIDITY: clear

80% RECHARGE: X YES ___ NO ANALYSES: 5 VOC

ODOR: yes SAMPLE VESSEL / PRESERVATIVE: 6 Voa - HCL

PURGING EQUIPMENT

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

SAMPLING EQUIPMENT

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

WELL INTEGRITY: Good LOCK#: Master

REMARKS: DO 0.79

SIGNATURE: _____ Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 4931 PURGED BY: JS WELL I.D.: A-5

CLIENT NAME: _____ SAMPLED BY: JS SAMPLE I.D.: A-5

LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES: _____

DATE PURGED 9/3/09 START (2400hr) 818 END (2400hr) _____

DATE SAMPLED 9/3/09 SAMPLE TIME (2400hr) 820

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

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

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

DEPTH TO BOTTOM (feet) = 24.30 CASING VOLUME (gal) = 5.6

DEPTH TO WATER (feet) = 9.33 CALCULATED PURGE (gal) = 170

WATER COLUMN HEIGHT (feet) = 14.9 ACTUAL PURGE (gal) = 0 NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/3/09	821	0	21.0	803	6.68	clear	
			20	purge			

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 9.33 SAMPLE TURBIDITY: clear

80% RECHARGE: X YES ___ NO ANALYSES: 8260

ODOR: no SAMPLE VESSEL / PRESERVATIVE: 6 Voa HCl

PURGING EQUIPMENT

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

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

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

Other: _____

WELL INTEGRITY: good LOCK#: Master

REMARKS: DC 091

SIGNATURE: _____ Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 4931 PURGED BY: JS WELL I.D.: A-7

CLIENT NAME: SAMPLED BY: JS SAMPLE I.D.: A-7

LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES:

DATE PURGED 9/3/09 START (2400hr) 8:00 END (2400hr) 8:02

DATE SAMPLED 9/3/09 SAMPLE TIME (2400hr) 801

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

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

DEPTH TO BOTTOM (feet) = 22.32 CASING VOLUME (gal) = 4.9

DEPTH TO WATER (feet) = 9.25 CALCULATED PURGE (gal) = 14.8

WATER COLUMN HEIGHT (feet) = 13.0 ACTUAL PURGE (gal) = ONP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/3/09	802	0	21.4	572	6.78	clear	
			NO	Purge			

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 9.25 SAMPLE TURBIDITY: Clear

80% RECHARGE: X YES ___ NO ANALYSES: SWO

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

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

WELL INTEGRITY: good LOCK#: Master

REMARKS: PD 0.93

SIGNATURE: Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 4931 | PURGED BY: JS | WELL I.D.: A-8

CLIENT NAME: | SAMPLED BY: JS | SAMPLE I.D.: A-8

LOCATION: Oakland, 731 W. MacArthur Blvd. | QA SAMPLES:

DATE PURGED 9/3/09 | START (2400hr) 857 | END (2400hr) 901

DATE SAMPLED 9/3/09 | SAMPLE TIME (2400hr) 900

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

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

Casing Volume: (gallons per foot)

DEPTH TO BOTTOM (feet) = 17.93 | CASING VOLUME (gal) = 3.1

DEPTH TO WATER (feet) = 9.47 | CALCULATED PURGE (gal) = 9.9

WATER COLUMN HEIGHT (feet) = 8.2 | ACTUAL PURGE (gal) = 0 NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/3/09	901	0	21.7	836	6.51	clear	
"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"
"	"	"	Purge	"	"	"	"
"	"	NO	"	"	"	"	"
"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 9.47 | SAMPLE TURBIDITY: C/E

80% RECHARGE: X YES ___ NO | ANALYSES: 8260

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

PURGING EQUIPMENT

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

Other: ___

Pump Depth: ___

SAMPLING EQUIPMENT

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

Other: ___

WELL INTEGRITY: good | LOCK#: MA

REMARKS: D 0987

SIGNATURE: [signature] | Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 4931 PURGED BY: JP WELL I.D.: A-9

CLIENT NAME: SAMPLED BY: JS SAMPLE I.D.: A-9

LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES:

DATE PURGED 9/3/09 START (2400hr) 8:33 END (2400hr) 8:41

DATE SAMPLED 9/3/09 SAMPLE TIME (2400hr) 8:40

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

CASING DIAMETER: 2" ____ 3" X 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) = 37.08 CASING VOLUME (gal) = 10.8

DEPTH TO WATER (feet) = 8.56 CALCULATED PURGE (gal) = 32.5

WATER COLUMN HEIGHT (feet) = 28.5 ACTUAL PURGE (gal) = 0 NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/3/09	841	0	21.6	569	6.86	clear	
		10 purged					

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 8.56 SAMPLE TURBIDITY: Clear

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

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

PURGING EQUIPMENT

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

SAMPLING EQUIPMENT

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

WELL INTEGRITY: Good LOCK#: Master

REMARKS: DO 0.89

SIGNATURE: Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 4931 PURGED BY: JS WELL I.D.: A-11

CLIENT NAME: _____ SAMPLED BY: JS SAMPLE I.D.: A-11

LOCATION: Oakland, 731 W. MacArthur Blvd. QA SAMPLES: _____

DATE PURGED 9/3/09 START (2400hr) 7:49 END (2400hr) 7:51

DATE SAMPLED 9/3/09 SAMPLE TIME (2400hr) 7:50

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

CASING DIAMETER: 2" ~~X~~ (0.17) 3" X (0.38) 4" ____ (0.67) 5" ____ (1.02) 6" ____ (1.50) 8" ____ (2.60) Other ____ ( )

Casing Volume: (gallons per foot)

DEPTH TO BOTTOM (feet) = 29.68 CASING VOLUME (gal) = 7.4

DEPTH TO WATER (feet) = 10.15 CALCULATED PURGE (gal) = 22.2

WATER COLUMN HEIGHT (feet) = 19.5 ACTUAL PURGE (gal) = 0 NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/3/09	751	0	21.0	599	6.78	clear	
/							
			NO	Purge			

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 10.15 SAMPLE TURBIDITY: Clear

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

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

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

WELL INTEGRITY: DO.098 LOCK#: Master

REMARKS: Good

SIGNATURE: _____ Page ___ of ___

BP ALAMEDA PORTFOLIO

WATER SAMPLE FIELD DATA SHEET

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

DATE PURGED 9/3/09 | START (2400hr) 939 | END (2400hr)
DATE SAMPLED 9/3/09 | SAMPLE TIME (2400hr) 941
SAMPLE TYPE: Groundwater x | Surface Water | Treatment Effluent | Other

CASING DIAMETER: 2" | 3" X | 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) = 7.7
DEPTH TO WATER (feet) = 9.40 | CALCULATED PURGE (gal) = 23.1
WATER COLUMN HEIGHT (feet) = 20.3 | ACTUAL PURGE (gal) = 0 NP

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP (degrees C)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (NTU)
9/3/09	941	0	21.8	555	7.14	clear	
			NO	Purge			

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 9.40 | SAMPLE TURBIDITY: clear
80% RECHARGE: X YES ___ NO | ANALYSES: 5 WO
ODOR: no | SAMPLE VESSEL / PRESERVATIVE: 6 Vox HCL

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

WELL INTEGRITY: good | LOCK#: Master
REMARKS: DO. 0.98

SIGNATURE: | Page ___ of ___

WELLHEAD OBSERVATION FORM

Site Name/Number: 4931 *Date:* 9/3/09 *Technican:* Jerr

Well I.D.	Box in Good Condition X = Yes Blank = No	Well lid secure? X=Yes If not call PM prior to departure	Lock Missing? X = Yes (replaced) Blank = No	Water in Wellbox? X = Yes Blank = No	Water Level Relative to Cap? A = Above cap B = Below cap L = Level w/cap	Well Cap? I = Intact M = Missing or Compromised (replaced)	Bolts Missing? # of missing/ Total # *	Bolts Stripped? # of stripped/ Total # *	Bolt Holes Stripped? # of stripped/ Total # *	Cracked or Broken Lid? X = Yes Blank = No *	Cracked or Broken Box? X = Yes Blank = No *	Grout Level more than 1ft below TOC? X = Yes Blank = No *	Additional Comments (such as missing lid, concrete needs replacement, or others - explain)
A-2	X					I							SLIP ON LID
A-3	X					I							SLIP ON LID
A-4	X					I							SLIP ON LID
A-5	X					I	X						BOLTS BROKEN
A-7	X					I							
A-8	X					I							BOLTS BROKEN
A-9	X					I							BOLTS BROKEN
A-10	X					I							
A-11	X					I							SLIP ON LID
A-12	X					I							SLIP ON LID
A-13	X					I							SLIP ON LID
AR-1	X					I	X						
A-R-2	X					I	X						
A-R-3	X					I	X						

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

DRUM INVENTORY

Drums on site? Yes (No) (circle)

Type and : Steel: _____ Plastic: _____

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

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

GENERAL SITE CONDITIONS

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

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: BP 4931 | Req Due Date (mm/dd/yy): 14 Day TAT | Rush TAT: Yes ____ No X

BP/ARC Facility No: 4931 | Lab Work Order Number:

Lab Name: CalScience	BP/ARC Facility Address: 731 W. MacArthur Blvd.	Consultant/Contractor: Stratus Environmental Inc.
Lab Address: 7440 Lincoln Way, Garden Grove, CA 92841	City, State, ZIP Code: Oakland, CA	Consultant/Contractor Project No:
Lab PM: Richard Villafania	Lead Regulatory Agency: Alameda	Address: 3330 Cameron Park Drive, #550, Cameron Park, CA 95682
Lab Phone: 714-895-5494 Fax: 714-895-7501	California Global ID No.: T0600100110	Consultant/Contractor PM: Jay Johnson
Lab Shipping Accnt:	Enfos Proposal No: 000QP-0002	Phone: 530-676-6000 Fax: 530-676-6005
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ____ OOC-RM ____	Email EDD To: chuff@stratusinc.net
Other Info:	Stage: Operate Activity: Monitor	Invoice To: BP/ARC X Contractor ____

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

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix:	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol		Requested Analyses: GRO by 8015M	BTEX/5 FO* by 8260B	Ethanol by 8260B	EDB by 8260B	1,2-DCA by 8260B					
	A-2	9/3/09	955		X			6				X			X	X	X	X	X					
	A-3		935		X			6				X			X	X	X	X	X					
	A-4		915		X			6				X			X	X	X	X	X					
	A-5		820		X			6				X			X	X	X	X	X					
	A-7		801		X			6				X			X	X	X	X	X					
	A-8		900		X			6				X			X	X	X	X	X					
	A-9		840		X			6				X			X	X	X	X	X					
	A-10 59				X			6				X			X	X	X	X	X					
	A-11		750		X			6				X			X	X	X	X	X					
	A-12		742		X			6				X			X	X	X	X	X					

Report Type & QC Level: Standard X | Full Data Package ____

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

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

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

Special Instructions: TB Sample ON HOLD! Cc results to bpalameda@secor.com

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

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: BP 4931 **Req Due Date (mm/dd/yy):** 14 Day TAT **Rush TAT:** Yes ____ No X

BP/ARC Facility No: 4931 **Lab Work Order Number:**

Lab Name:	CalScience	BP/ARC Facility Address:	731 W. MacArthur Blvd.	Consultant/Contractor:	Stratus Environmental Inc.
Lab Address:	7440 Lincoln Way, Garden Grove, CA 92841	City, State, ZIP Code:	Oakland, CA	Consultant/Contractor Project No:	
Lab PM:	Richard Villafania	Lead Regulatory Agency:	Alameda	Address:	3330 Cameron Park Drive, #550, Cameron Park, CA 95682
Lab Phone:	714-895-5494 Fax: 714-895-7501	California Global ID No.:	T0600100110	Consultant/Contractor PM:	Jay Johnson
Lab Shipping Accnt:		Enfos Proposal No:	000QP-0002	Phone:	530-676-6000 Fax: 530-676-6005
Lab Bottle Order No:		Accounting Mode:	Provision X OOC-BU ____ OOC-RM ____	Email EDD To:	chuff@stratusinc.net
Other Info:		Stage: Operate	Activity: Monitor	Invoice To:	BP/ARC X Contractor ____

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

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix:	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol		Requested Analyses: GRO by 8015M	BTEX/5 FO* by 8260B	Ethanol by 8260B	EDB by 8260B	1,2-DCA by 8260B						Report Type & QC Level
	TB-4931-090320009	9/3/09	500		X			2				X													ON HOLD

Standard X
Full Data Package ____

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

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

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

Special Instructions: TB Sample ON HOLD! Cc results to bpalameda@secor.com

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

Calscience
Environmental
Laboratories, Inc.

September 17, 2009

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

Subject: **Calscience Work Order No.: 09-09-0353**
Client Reference: BP 4931

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/4/2009 and analyzed in accordance with the attached chain-of-custody.

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

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

Sincerely,

Calscience Environmental
Laboratories, Inc.
Richard Villafania
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	09/04/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-09-0353
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: BP 4931

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-2	**09-09-0353-1-E**	**09/03/09 09:55**	**Aqueous**	**GC 4**	**09/04/09**	**09/04/09 21:07**	**090904B01**

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-3	**09-09-0353-2-E**	**09/03/09 09:35**	**Aqueous**	**GC 4**	**09/04/09**	**09/04/09 22:12**	**090904B01**

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-4	**09-09-0353-3-E**	**09/03/09 09:15**	**Aqueous**	**GC 4**	**09/04/09**	**09/04/09 22:45**	**090904B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	3800	100	2		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	91	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-5	**09-09-0353-4-E**	**09/03/09 08:20**	**Aqueous**	**GC 4**	**09/04/09**	**09/04/09 23:18**	**090904B01**

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	09/04/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-09-0353
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8015B (M)

Project: BP 4931

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-7	**09-09-0353-5-E**	**09/03/09 08:01**	**Aqueous**	**GC 4**	**09/04/09**	**09/04/09 23:51**	**090904B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	73	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-8	**09-09-0353-6-E**	**09/03/09 09:00**	**Aqueous**	**GC 4**	**09/04/09**	**09/05/09 00:24**	**090904B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	3200	100	2		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	98	38-134			

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-9	**09-09-0353-7-E**	**09/03/09 08:40**	**Aqueous**	**GC 4**	**09/04/09**	**09/05/09 00:57**	**090904B01**

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-11	**09-09-0353-8-E**	**09/03/09 07:50**	**Aqueous**	**GC 4**	**09/04/09**	**09/05/09 01:30**	**090904B01**

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

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	09/04/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-09-0353
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: BP 4931

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-12	**09-09-0353-9-E**	**09/03/09 07:41**	**Aqueous**	**GC 4**	**09/04/09**	**09/05/09 02:03**	**090904B01**

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-695-655**	**N/A**	**Aqueous**	**GC 4**	**09/04/09**	**09/04/09 12:52**	**090904B01**

Parameter	Result	RL	DF	Qual	Units
Gasoline Range Organics (C6-C12)	ND	50	1		ug/L
Surrogates:	**REC (%)**	**Control Limits**		**Qual**	
1,4-Bromofluorobenzene	61	38-134			

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	09/04/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-09-0353
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L
Project: BP 4931		Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-2	09-09-0353-1-C	09/03/09 09:55	Aqueous	GC/MS BB	09/08/09	09/08/09 14:16	090908L01

Comment(s): -PC = Sample taken from VOA vial with air bubble > 6mm diameter.

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	12	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	102	80-128			Dibromofluoromethane	103	80-127		
Toluene-d8	97	80-120			1,4-Bromofluorobenzene	80	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-3	09-09-0353-2-B	09/03/09 09:35	Aqueous	GC/MS BB	09/08/09	09/08/09 13:47	090908L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	98	80-128			Dibromofluoromethane	98	80-127		
Toluene-d8	98	80-120			1,4-Bromofluorobenzene	85	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-4	09-09-0353-3-B	09/03/09 09:15	Aqueous	GC/MS BB	09/08/09	09/08/09 16:43	090908L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	49	10	20		Methyl-t-Butyl Ether (MTBE)	360	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)	120	10	20	
Xylenes (total)	ND	10	20		Ethanol	ND	6000	20	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	108	80-128			Dibromofluoromethane	105	80-127		
Toluene-d8	98	80-120			1,4-Bromofluorobenzene	79	68-120		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	09/04/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-09-0353
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: BP 4931			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-5	**09-09-0353-4-B**	**09/03/09 08:20**	**Aqueous**	**GC/MS BB**	**09/08/09**	**09/08/09 17:12**	**090908L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	20	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)	9.1	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	101	80-128			Dibromofluoromethane	104	80-127		
Toluene-d8	99	80-120			1,4-Bromofluorobenzene	76	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-7	**09-09-0353-5-B**	**09/03/09 08:01**	**Aqueous**	**GC/MS BB**	**09/08/09**	**09/08/09 17:41**	**090908L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	104	80-128			Dibromofluoromethane	101	80-127		
Toluene-d8	97	80-120			1,4-Bromofluorobenzene	75	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-8	**09-09-0353-6-B**	**09/03/09 09:00**	**Aqueous**	**GC/MS BB**	**09/08/09**	**09/08/09 18:10**	**090908L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	1400	25	50		Methyl-t-Butyl Ether (MTBE)	100	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)	52	25	50	
Xylenes (total)	ND	25	50		Ethanol	ND	15000	50	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	108	80-128			Dibromofluoromethane	102	80-127		
Toluene-d8	99	80-120			1,4-Bromofluorobenzene	74	68-120		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.		Date Received:	09/04/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-09-0353
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B
		Units:	ug/L
Project: BP 4931			Page 3 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-9	**09-09-0353-7-B**	**09/03/09 08:40**	**Aqueous**	**GC/MS BB**	**09/08/09**	**09/08/09 18:38**	**090908L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	105	80-128			Dibromofluoromethane	100	80-127		
Toluene-d8	98	80-120			1,4-Bromofluorobenzene	89	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-11	**09-09-0353-8-B**	**09/03/09 07:50**	**Aqueous**	**GC/MS BB**	**09/08/09**	**09/08/09 19:07**	**090908L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	106	80-128			Dibromofluoromethane	99	80-127		
Toluene-d8	99	80-120			1,4-Bromofluorobenzene	72	68-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
A-12	**09-09-0353-9-B**	**09/03/09 07:41**	**Aqueous**	**GC/MS BB**	**09/08/09**	**09/08/09 19:36**	**090908L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	3.6	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)	1.0	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	108	80-128			Dibromofluoromethane	103	80-127		
Toluene-d8	98	80-120			1,4-Bromofluorobenzene	76	68-120		

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

Calscience Environmental Laboratories, Inc.

Analytical Report

Stratus Environmental, inc.	Date Received:	09/04/09
3330 Cameron Park Drive, Suite 550	Work Order No:	09-09-0353
Cameron Park, CA 95682-8861	Preparation:	EPA 5030B
	Method:	EPA 8260B
	Units:	ug/L
Project: BP 4931		Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-703-1,071**	**N/A**	**Aqueous**	**GC/MS BB**	**09/08/09**	**09/08/09 13:18**	**090908L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1		Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	
1,2-Dibromoethane	ND	0.50	1		Tert-Butyl Alcohol (TBA)	ND	10	1	
1,2-Dichloroethane	ND	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	
Ethylbenzene	ND	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	
Toluene	ND	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	
Xylenes (total)	ND	0.50	1		Ethanol	ND	300	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
1,2-Dichloroethane-d4	104	80-128			Dibromofluoromethane	101	80-127		
Toluene-d8	97	80-120			1,4-Bromofluorobenzene	87	68-120		

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	09/04/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-09-0353
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project BP 4931

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-09-0263-3	**Aqueous**	**GC 4**	**09/04/09**	**09/04/09**	**090904S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	91	85	38-134	7	0-25	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Stratus Environmental, inc.		Date Received:	09/04/09
3330 Cameron Park Drive, Suite 550		Work Order No:	09-09-0353
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project BP 4931

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
A-3	**Aqueous**	**GC/MS BB**	**09/08/09**	**09/08/09**	**090908S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	97	96	76-124	1	0-20	
Carbon Tetrachloride	101	101	74-134	0	0-20	
Chlorobenzene	97	94	80-120	3	0-20	
1,2-Dibromoethane	93	106	80-120	12	0-20	
1,2-Dichlorobenzene	96	97	80-120	1	0-20	
1,1-Dichloroethene	90	94	73-127	4	0-20	
Ethylbenzene	96	94	78-126	2	0-20	
Toluene	88	91	80-120	4	0-20	
Trichloroethene	94	94	77-120	0	0-20	
Vinyl Chloride	84	87	72-126	4	0-20	
Methyl-t-Butyl Ether (MTBE)	96	93	67-121	3	0-49	
Tert-Butyl Alcohol (TBA)	115	106	36-162	8	0-30	
Diisopropyl Ether (DIPE)	93	90	60-138	4	0-45	
Ethyl-t-Butyl Ether (ETBE)	93	92	69-123	1	0-30	
Tert-Amyl-Methyl Ether (TAME)	90	93	65-120	3	0-20	
Ethanol	118	117	30-180	0	0-72	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.		Date Received:	N/A
3330 Cameron Park Drive, Suite 550		Work Order No:	09-09-0353
Cameron Park, CA 95682-8861		Preparation:	EPA 5030B
		Method:	EPA 8015B (M)

Project: BP 4931

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-695-655	Aqueous	GC 4	09/04/09	09/04/09	090904B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Gasoline Range Organics (C6-C12)	84	88	78-120	4	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Stratus Environmental, inc.	Date Received: N/A
3330 Cameron Park Drive, Suite 550	Work Order No: 09-09-0353
Cameron Park, CA 95682-8861	Preparation: EPA 5030B
	Method: EPA 8260B

Project: BP 4931

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-703-1,071	Aqueous	GC/MS BB	09/08/09	09/08/09	090908L01

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Benzene	96	93	80-120	73-127	3	0-20	
Carbon Tetrachloride	106	102	74-134	64-144	3	0-20	
Chlorobenzene	92	95	80-120	73-127	4	0-20	
1,2-Dibromoethane	98	106	79-121	72-128	7	0-20	
1,2-Dichlorobenzene	95	94	80-120	73-127	1	0-20	
1,1-Dichloroethene	97	94	78-126	70-134	4	0-28	
Ethylbenzene	88	95	80-120	73-127	8	0-20	
Toluene	90	90	80-120	73-127	0	0-20	
Trichloroethene	97	95	79-127	71-135	2	0-20	
Vinyl Chloride	82	89	72-132	62-142	8	0-20	
Methyl-t-Butyl Ether (MTBE)	88	89	69-123	60-132	1	0-20	
Tert-Butyl Alcohol (TBA)	104	113	63-123	53-133	8	0-20	
Diisopropyl Ether (DIPE)	89	88	59-137	46-150	0	0-37	
Ethyl-t-Butyl Ether (ETBE)	89	90	69-123	60-132	0	0-20	
Tert-Amyl-Methyl Ether (TAME)	89	92	70-120	62-128	3	0-20	
Ethanol	100	104	28-160	6-182	4	0-57	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 09-09-0353

Qualifier	Definition
AX	Sample too dilute to quantify surrogate.
BA	Relative percent difference out of control.
BA,AY	BA = Relative percent difference out of control. AY = Matrix interference suspected.
BB	Sample > 4x spike concentration.
BF	Reporting limits raised due to high hydrocarbon background.
BH	Reporting limits raised due to high level of non-target analytes.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
BY	Sample received at improper temperature.
BZ	Sample preserved improperly.
CL	Initial analysis within holding time but required dilution.
CQ	Analyte concentration greater than 10 times the blank concentration.
CU	Surrogate concentration diluted to not detectable during analysis.
DF	Reporting limits elevated due to matrix interferences.
DU	Insufficient sample quantity for matrix spike/dup matrix spike.
ET	Sample was extracted past end of recommended max. holding time.
EY	Result exceeds normal dynamic range; reported as a min est.
GR	Internal standard recovery is outside method recovery limit.
IB	CCV recovery abovelimit; analyte not detected.
IH	Calibrtn. verif. recov. below method CL for this analyte.
IJ	Calibrtn. verif. recov. above method CL for this analyte.
J,DX	J=EPA Flag -Estimated value; DX= Value < lowest standard (MQL), but > than MDL.
LA	Confirmatory analysis was past holding time.
LG,AY	LG= Surrogate recovery below the acceptance limit. AY= Matrix interference suspected.
LH,AY	LH= Surrogate recovery above the acceptance limit. AY= Matrix interference suspected.
LM,AY	LM= MS and/or MSD above acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LN,AY	LN= MS and/or MSD below acceptance limits. See Blank Spike (LCS). AY= Matrix interference suspected.
LQ	LCS recovery above method control limits.

Work Order Number: 09-09-0353

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

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

0353

BP/ARC Project Name: BP 4931
BP/ARC Facility No: 4931
Req Due Date (mm/dd/yy): 14 Day TAT
Rush TAT: Yes ___ No X
Lab Work Order Number:

Lab Name: CalScience	BP/ARC Facility Address: 731 W. MacArthur Blvd.	Consultant/Contractor: Stratus Environmental Inc.
Lab Address: 7440 Lincoln Way, Garden Grove, CA 92841	City, State, ZIP Code: Oakland, CA	Consultant/Contractor Project No:
Lab PM: Richard Villafania	Lead Regulatory Agency: Alameda	Address: 3330 Cameron Park Drive, #550, Cameron Park, CA 95682
Lab Phone: 714-895-5494 Fax: 714-895-7501	California Global ID No.: T0600100110	Consultant/Contractor PM: Jay Johnson
Lab Shipping Accnt:	Enfos Proposal No: 000QP-0002	Phone: 530-676-6000 Fax: 530-676-6005
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ___ OOC-RM ___	Email EDD To: chuff@stratusinc.net
Other Info:	Stage: Operate Activity: Monitor	Invoice To: BP/ARC X Contractor ___
BP/ARC EBM: Paul Supple		
EBM Phone: (925) 275-3801		
EBM Email: paul.supple@bp.com		

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Water / Liquid	Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol	Requested Analyses: GRO by 8015M	BTEX/5 FO* by 8260B	Ethanol by 8260B	EDB by 8260B	1,2-DCA by 8260B
1	A-2	9/3/09	955		X		6				X		X	X	X	X	X
2	A-3		935		X		6				X		X	X	X	X	X
3	A-4		915		X		6				X		X	X	X	X	X
4	A-5		820		X		6				X		X	X	X	X	X
5	A-7		801		X		6				X		X	X	X	X	X
6	A-8		900		X		6				X		X	X	X	X	X
7	A-9		840		X		6				X		X	X	X	X	X
	A-10 (DG)				X		6				X		X	X	X	X	X
8	A-11		750		X		6				X		X	X	X	X	X
9	A-12		740		X		6				X		X	X	X	X	X

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

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

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

Sampler's Name: Jerry Gonzales / Doulos Env.	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation / Date / Time
Sampler's Company: Stratus Environmental Inc.				
Shipment Method: GSO Ship Date:				
Shipment Tracking No: 105723959				Webatch CEL 9/4/09 0830

Special Instructions: TB Sample ON HOLD! Cc results to bpalameda@secor.com

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

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

0353

BP/ARC Project Name: BP 4931 **Req Due Date (mm/dd/yy):** 14 Day TAT **Rush TAT:** Yes ___ No X

BP/ARC Facility No: 4931 **Lab Work Order Number:**

Lab Name: CalScience	BP/ARC Facility Address: 731 W. MacArthur Blvd.	Consultant/Contractor: Stratus Environmental Inc.
Lab Address: 7440 Lincoln Way, Garden Grove, CA 92841	City, State, ZIP Code: Oakland, CA	Consultant/Contractor Project No:
Lab PM: Richard Villafania	Lead Regulatory Agency: Alameda	Address: 3330 Cameron Park Drive, #550, Cameron Park, CA 95682
Lab Phone: 714-895-5494 Fax: 714-895-7501	California Global ID No.: T0600100110	Consultant/Contractor PM: Jay Johnson
Lab Shipping Accnt:	Enfos Proposal No: 000QP-0002	Phone: 530-676-6000 Fax: 530-676-6005
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ___ OOC-RM ___	Email EDD To: chuff@stratusinc.net
Other Info:	Stage: Operate Activity: Monitor	Invoice To: BP/ARC X Contractor ___
BP/ARC EBM: Paul Supple		
EBM Phone: (925) 275-3801		
EBM Email: paul.supple@bp.com		

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix:	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol		Requested Analyses: GRO by 8015M	BTEX/5 FO* by 8260B	Ethanol by 8260B	EDB by 8260B	1,2-DCA by 8260B							Report Type & QC Level
10	TB-4931-09032009	9/3/09	500		X			2				X														ON HOLD

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

Standard X

Full Data Package ___

Comments

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

Sampler's Name: Jerry Gonda/JG / Doulos Env.	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stratus Environmental Inc.						
Shipment Method: GSO Ship Date:						
Shipment Tracking No: 105723959				W Dahm CEL	9/4/09	0830

Special Instructions: TB Sample ON HOLD! Cc results to bpalameda@secor.com

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

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-09-0353

SAMPLE RECEIPT FORM

Cooler 1 **of** 1

CLIENT: STRATUS ENV'L.

DATE: 9/4/09

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

Temperature 2.6 °C - 0.2 °C (CF) = 2.4 °C ☑ **Blank** ☐ **Sample**

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** WB

CUSTODY SEALS INTACT:

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

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

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

CONTAINER TYPE:

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

Water: ☑VOA (F-9/4/09) ☑VOAh (6) ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☐500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐500PB ☐500PB**na**

☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

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

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

Preservative: **h:** HCL **n:** HNO3 **na$_2$:** $Na_2S_2O_3$ **Na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** _____

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

0353

BP/ARC Project Name: BP 4931
BP/ARC Facility No: 4931
Req Due Date (mm/dd/yy): 14 Day TAT **Rush TAT:** Yes ___ No X
Lab Work Order Number:

Lab Name: CalScience	BP/ARC Facility Address: 731 W. MacArthur Blvd.	Consultant/Contractor: Stratus Environmental Inc.
Lab Address: 7440 Lincoln Way, Garden Grove, CA 92841	City, State, ZIP Code: Oakland, CA	Consultant/Contractor Project No:
Lab PM: Richard Villafania	Lead Regulatory Agency: Alameda	Address: 3330 Cameron Park Drive, #550, Cameron Park, CA 95682
Lab Phone: 714-895-5494 Fax: 714-895-7501	California Global ID No.: T0600100110	Consultant/Contractor PM: Jay Johnson
Lab Shipping Accnt:	Enfos Proposal No: 000QP-0002	Phone: 530-676-6000 Fax: 530-676-6005
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ___ OOC-RM ___	Email EDD To: chuff@stratusinc.net
Other Info:	Stage: Operate Activity: Monitor	Invoice To: BP/ARC X Contractor ___
BP/ARC EBM: Paul Supple		
EBM Phone: (925) 275-3801		
EBM Email: paul.supple@bp.com		

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol	Requested Analyses: GRO by 8015M	BTEX/5 FO* by 8260B	Ethanol by 8260B	EDB by 8260B	1,2-DCA by 8260B
1	A-2	9/3/09	955		X		6				X		X	X	X	X	X
2	A-3		935		X		6				X		X	X	X	X	X
3	A-4		915		X		6				X		X	X	X	X	X
4	A-5		820		X		6				X		X	X	X	X	X
5	A-7		801		X		6				X		X	X	X	X	X
6	A-8		900		X		6				X		X	X	X	X	X
7	A-9		840		X		6				X		X	X	X	X	X
	A-10 (JG)				X		6				X		X	X	X	X	X
8	A-11		750		X		6				X		X	X	X	X	X
9	A-12		742		X		6				X		X	X	X	X	X

Report Type & QC Level
Standard X
Full Data Package ___

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

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

Sampler's Name: Jerry Gonzales / Doulos Env.
Sampler's Company: Stratus Environmental Inc.
Shipment Method: CSD Ship Date:
Shipment Tracking No: 105723959

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
			Webatrack CEL	9/4/09	0830

Special Instructions: TB Sample ON HOLD! Cc results to bpalameda@secor.com

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

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

(0353)

BP/ARC Project Name: BP 4931 **Req Due Date (mm/dd/yy):** 14 Day TAT **Rush TAT:** Yes ___ No X

BP/ARC Facility No: 4931 **Lab Work Order Number:**

Lab Name: CalScience	BP/ARC Facility Address: 731 W. MacArthur Blvd.	Consultant/Contractor: Stratus Environmental Inc.
Lab Address: 7440 Lincoln Way, Garden Grove, CA 92841	City, State, ZIP Code: Oakland, CA	Consultant/Contractor Project No:
Lab PM: Richard Villafania	Lead Regulatory Agency: Alameda	Address: 3330 Cameron Park Drive, #550, Cameron Park, CA 95682
Lab Phone: 714-895-5494 Fax: 714-895-7501	California Global ID No.: T0600100110	Consultant/Contractor PM: Jay Johnson
Lab Shipping Accnt:	Enfos Proposal No: 000QP-0002	Phone: 530-676-6000 Fax: 530-676-6005
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU ___ OOC-RM ___	Email EDD To: chuff@stratusinc.net
Other Info:	Stage: Operate Activity: Monitor	Invoice To: BP/ARC X Contractor ___
BP/ARC EBM: Paul Supple		
EBM Phone: (925) 275-3801		
EBM Email: paul.supple@bp.com		

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix:	No. Containers / Preservative: Total Number of Containers	Unpreserved	H_2SO_4	HNO_3	HCl	Methanol		Requested Analyses: GRO by 8015M	BTEX/5 FO* by 8260B	Ethanol by 8260B	EDB by 8260B	1,2-DCA by 8260B						
10	TB-4931-09032009	9/3/09	500		X			2				X													

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

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

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

ON HOLD

Sampler's Name: Jerry Gonella / Doulos Env.	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Stratus Environmental Inc.						
Shipment Method: GSO Ship Date:						
Shipment Tracking No: 105723959				Wdeath CEL	9/4/09	0830

Special Instructions: TB Sample ON HOLD! Cc results to bpalameda@secor.com

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

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-09-0353

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: STRATUS ENV'L.

DATE: 9/4/09

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

Temperature 2.6 °C - 0.2 °C (CF) = 2.4 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only Initial: LLB

CUSTODY SEALS INTACT:

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

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: [illegible]

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

CONTAINER TYPE:

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

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

Air: ☐Tedlar® ☐Summa® ☐_____ **Other:** ☐_____ **Checked/Labeled by:** [illegible]

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

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

ATTACHMENT

FIELD PROCEDURES FOR GROUNDWATER SAMPLING

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

Groundwater and Liquid-Phase Petroleum Hydrocarbon Depth Assessment

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

Subjective Analysis of Groundwater

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

Monitoring Well Sampling

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

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

A Teflon bailer, electric submersible or bladder pump will be the only equipment used for well sampling. When samples for volatile organic analysis are being collected, the pump flow will be regulated at approximately 100 milliliters per minute to minimize pump effluent turbulence and aeration. Glass bottles of at least 40-milliliters volume and fitted with Teflon-lined septa will be used in sampling for volatile organics. These

bottles will be filled completely to prevent air accumulation in the bottle. A positive meniscus forms when the bottle is completely full. A convex Teflon septum will be placed over the positive meniscus to eliminate air. After the bottle is capped, it is inverted and tapped to verify that it contains no air bubbles. The sample containers for other parameters will be filled, filtered as required, and capped. Glass and plastic bottles used by Stratus to collect groundwater samples are supplied by the laboratory.

Groundwater Sample Labeling and Preservation

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

Sample Identification and Chain-of-Custody Procedures

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

A chain-of-custody form is used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them relinquishes the samples by signing the chain-of-custody form and noting the time. The sample-control officer at the laboratory verifies sample integrity and confirms that the samples are collected in the proper containers, preserved correctly, and contain adequate volumes for analysis. These conditions are noted on a Laboratory Sample Receipt Checklist that becomes part of the laboratory report upon request.

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

Equipment Cleaning

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

APPENDIX B

HISTORICAL GROUND-WATER DATA

Table 2
Liquid Surface Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Depth to Water (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
A-2	03/20/89	55.38	3.45	3.45	0.00	51.93
	05/24/89		6.80	6.80	0.00	48.58
	08/18/89		10.82	10.82	0.00	44.56
	10/27/89		8.25	8.25	0.00	47.13
	01/15/90		4.87	4.87	0.00	50.51
	04/04/90		7.03	7.03	0.00	48.35
	07/30/90		10.01	10.01	0.00	45.37
	10/29/90		11.60	11.60	0.00	43.78
	01/16/91		9.43	9.43	0.00	45.95
	04/12/91		3.65	3.65	0.00	51.73
	07/10/91		9.57	9.57	0.00	45.81
	10/21/91		11.54	11.54	0.00	43.84
	02/01/92		11.20	11.20	0.00	44.18
	04/29/92		7.18	7.18	0.00	48.20
	07/29/92	55.48	11.81	11.81	0.00	43.67
	10/29/92		11.91	11.91	0.00	43.57
	01/26/93		5.06	5.06	0.00	50.42
	04/01/93		5.15	5.15	0.00	50.33
	08/06/93		15.33	15.33	0.00	40.15
	10/14/93		15.74	15.74	0.00	39.74
	11/16/93		14.61	14.61	0.00	40.87
	12/16/93		5.80	5.80	0.00	49.68
	02/10/94		4.88	4.88	0.00	50.60
	03/21/94		4.94	4.94	0.00	50.54
	05/06/94		---------- Well Inaccessible ----------			
	08/09/94		12.51	12.51	0.00	42.97
	11/17/94		5.24	5.24	0.00	50.24
	02/09/95		6.55	6.55	0.00	48.93
	05/08/95		6.08	6.08	0.00	49.40
	08/08/95		11.50	11.50	0.00	43.98
	11/03/95		10.92	10.92	0.00	44.56
A-3	03/20/89	54.48	7.51	7.51	0.00	46.97
	05/24/89		10.29	10.29	0.00	44.19
	08/18/89		11.60	11.60	0.00	42.88
	10/27/89		10.16	10.16	0.00	44.32
	01/15/90		8.55	8.55	0.00	45.93
	04/04/90		10.66	10.66	0.00	43.82
	07/30/90		11.26	11.26	0.00	43.22
	10/29/90		11.86	11.86	0.00	42.62
	01/16/91		11.46	11.46	0.00	43.02
	04/12/91		9.28	9.28	0.00	45.20
	07/10/91		11.29	11.29	0.00	43.19
	10/21/91		11.51	11.51	0.00	42.97
	02/02/92		---------- Well Inaccessible ----------			
	04/29/92		---------- Well Inaccessible ----------			
	07/29/92	54.66	11.59	11.59	0.00	43.07
	10/28/92		12.00	12.00	0.00	42.66
	01/26/93		9.82	9.82	0.00	44.84
	04/01/93		10.61	10.61	0.00	44.05
	08/06/93		14.90	14.90	0.00	39.76
	10/14/93		15.11	15.11	0.00	39.55
	11/16/93		14.72	14.72	0.00	39.94
	12/16/93		13.37	13.37	0.00	41.29
	02/10/94		9.20	9.20	0.00	45.46
	05/06/94		10.34	10.34	0.00	44.32
	08/09/94		12.09	12.09	0.00	42.57
	11/17/94		5.85	5.85	0.00	48.81
	02/09/95		9.93	9.93	0.00	44.73

Table 2 (continued)
Liquid Surface Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Depth to Water (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
A-3	05/08/95		11.32	11.32	0.00	43.34
(cont.)	08/08/95		9.80	9.80	0.00	44.86
	11/03/95		10.26	10.26	0.00	44.40
A-4	03/21/86	54.62	NM	NM	3.50	NM
	01/07/88		NM	NM	0.02	NM
	03/20/89		8.13	8.13	0.00	46.49
	05/24/89		11.40	11.40	0.00	43.22
	08/18/89		11.90	11.91	0.01	42.72
	10/27/89		11.36	11.37	0.01	43.26
	01/15/90		9.73	9.74	0.01	44.89
	04/04/90		11.19	11.19	0.00	43.43
	07/30/90		11.70	11.71	0.01	42.92
	10/29/90		12.18	12.21	0.03	42.44
	01/16/91		11.88	11.89	0.01	42.74
	04/12/91		9.54	9.54	0.00	45.08
	07/10/91		11.55	11.55	0.00	43.07
	09/20/91		12.12	12.12	0.00	42.50
	10/21/91		11.73	11.76	0.03	42.89
	02/02/92		11.16	11.18	0.02	43.46
	04/29/92		10.76	10.78	0.02	43.86
	07/29/92	54.73	11.70	11.74	0.04	43.03
	10/28/92		11.90	11.93	0.03	42.83
	01/26/93		10.55	10.59	0.04	44.18
	04/01/93		10.15	10.17	0.02	44.58
	08/06/93		15.09	15.12	0.03	39.64
	10/14/93		15.37	15.37	0.00	39.36
	11/16/93		14.86	14.86	0.00	39.87
	12/16/93		13.41	13.41	0.00	41.32
	02/10/94		9.30	9.30	0.00	45.43
	05/06/94		10.02	10.02	0.00	44.71
	08/09/94		12.28	12.28	0.00	42.45
	11/17/94		9.44	9.44	0.00	45.29
	02/09/95		10.95	10.95	0.00	43.78
	05/08/95		11.29	11.29	0.00	43.44
	08/08/95		9.81	9.81	0.00	44.92
	11/03/95		10.42	10.42	0.00	44.31
A-5	03/20/89	54.15	8.09	8.09	0.00	46.06
	05/24/89		11.13	11.13	0.00	43.02
	08/18/89		11.58	11.58	0.00	42.57
	10/27/89		10.68	10.68	0.00	43.47
	01/15/90		9.24	9.24	0.00	44.91
	04/04/90		10.93	10.93	0.00	43.22
	07/30/90		11.48	11.48	0.00	42.67
	10/29/90		11.77	11.77	0.00	42.38
	01/16/91		11.36	11.36	0.00	42.79
	04/12/91		9.64	9.64	0.00	44.51
	07/10/91		11.30	11.30	0.00	42.85
	10/21/91		11.48	11.48	0.00	42.67
	02/02/92		10.73	10.73	0.00	43.42
	04/29/92		10.58	10.58	0.00	43.57
	07/29/92	54.17	11.46	11.46	0.00	42.71
	10/28/92		11.55	11.55	0.00	42.62
	01/26/93		10.32	10.32	0.00	43.85
	04/01/93		10.36	10.36	0.00	43.81
	08/06/93		14.82	14.82	0.00	39.35
	10/14/93		14.99	14.99	0.00	39.18
	11/16/93		14.47	14.47	0.00	39.70
	12/16/93		12.94	12.94	0.00	41.23
	02/10/94		8.94	8.94	0.00	45.23

Table 2 (continued)
Liquid Surface Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Depth to Water (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
A-5	05/06/94		10.48	10.48	0.00	43.69
(cont.)	08/09/94		11.86	11.86	0.00	42.31
	11/17/94		9.49	9.49	0.00	44.68
	02/09/95		10.50	10.50	0.00	43.67
	05/08/95		11.15	11.15	0.00	43.02
	08/08/95		9.39	9.39	0.00	44.78
	11/03/95		10.00	10.00	0.00	44.17
A-6	03/20/89	55.13	6.43	6.43	0.00	48.70
	05/24/89		9.43	9.43	0.00	45.70
	08/18/89		10.10	10.10	0.00	45.03
	10/27/89		9.16	9.16	0.00	45.97
	01/15/90		8.02	8.02	0.00	47.11
	04/04/90		9.29	9.29	0.00	45.84
	07/30/90		9.93	9.93	0.00	45.20
	10/29/90		10.42	10.42	0.00	44.71
	01/16/91		10.15	10.15	0.00	44.98
	04/12/91		8.05	8.05	0.00	47.08
	07/10/91		10.03	10.03	0.00	45.10
	10/21/91		10.30	10.30	0.00	44.83
	02/02/92		9.81	9.81	0.00	45.32
	04/29/92		---------- Well Inaccessible ----------			
	07/29/92	55.17	10.40	10.40	0.00	44.77
	10/28/92		10.55	10.55	0.00	44.62
	01/26/93		7.50	7.50	0.00	47.67
	04/01/93		7.59	7.59	0.00	47.58
	08/06/93		12.32	12.32	0.00	42.85
	10/14/93		12.82	12.82	0.00	42.35
	11/16/93		12.34	12.34	0.00	42.83
	12/16/93		10.40	10.40	0.00	44.77
	02/10/94		7.53	7.53	0.00	47.64
	05/06/94		8.71	8.71	0.00	46.46
	08/09/94		10.57	10.57	0.00	44.60
	11/17/94		7.91	7.91	0.00	47.26
	02/09/95		8.13	8.13	0.00	47.04
	05/08/95		8.85	8.85	0.00	46.32
	08/08/95		8.98	8.98	0.00	46.19
	11/03/95		9.64	9.64	0.00	45.53
A-7	03/20/89	54.67	6.29	6.29	0.00	48.38
	05/24/89		9.26	9.26	0.00	45.41
	08/18/89		9.97	9.97	0.00	44.70
	10/27/89		9.02	9.02	0.00	45.65
	01/15/90		7.90	7.90	0.00	46.77
	04/04/90		9.15	9.15	0.00	45.52
	07/30/90		9.80	9.80	0.00	44.87
	10/29/90		10.30	10.30	0.00	44.37
	01/16/91		11.35	11.35	0.00	43.32
	04/12/91		7.90	7.90	0.00	46.77
	07/10/91		9.82	9.82	0.00	44.85
	10/21/91		10.12	10.12	0.00	44.55
	02/02/92		9.28	9.28	0.00	45.39
	04/29/92		8.85	8.85	0.00	45.82
	07/29/92	54.71	10.09	10.09	0.00	44.62
	10/28/92		10.31	10.31	0.00	44.40
	01/26/93		7.33	7.33	0.00	47.38
	04/01/93		7.35	7.35	0.00	47.36
	08/06/93		12.67	12.67	0.00	42.04
	10/14/93		12.52	12.52	0.00	42.19
	11/16/93		12.13	12.13	0.00	42.58
	12/16/93		10.18	10.18	0.00	44.53

Table 2 (continued)
Liquid Surface Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Depth to Water (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
A-7	02/10/94		7.40	7.40	0.00	47.31
(cont.)	05/06/94		8.41	8.41	0.00	46.30
	08/09/94		10.57	10.57	0.00	44.14
	11/17/94		7.91	7.91	0.00	46.80
	02/09/95		7.85	7.85	0.00	46.86
	05/08/95		8.36	8.36	0.00	46.35
	08/08/95		8.66	8.66	0.00	46.05
	11/03/95		9.25	9.25	0.00	45.46
A-8	03/21/86	53.61	---------- Well Inaccessible ----------			
	01/07/88		---------- Well Inaccessible ----------			
	03/20/89		7.55	8.21	0.66	46.06
	05/24/89		10.21	11.41	1.20	43.40
	08/18/89		10.11	10.88	0.77	43.50
	10/27/89		10.35	11.66	1.31	43.26
	01/15/90		8.97	9.84	0.87	44.64
	04/04/90		11.10	11.35	0.25	42.51
	07/30/90		8.73	10.48	1.75	44.88
	10/29/90		11.29	11.39	0.10	42.32
	01/16/91		11.10	11.11	0.01	42.51
	04/12/91		9.15	9.16	0.01	44.46
	07/10/91		10.72	10.73	0.01	42.89
	10/21/91		10.87	10.98	0.11	42.74
	02/02/92		9.40	10.80	1.40	44.21
	04/29/92		9.85	11.15	1.30	43.76
	07/29/92	53.77	11.27	11.33	0.06	42.50
	10/28/92		---------- Well Dry ----------			
	01/26/93		---------- Well Dry ----------			
	04/01/93		9.38	9.38	0.00	44.39
	08/06/93		---------- Well Dry ----------			
	10/14/93		13.10	13.10	0.00	40.67
	11/16/93		---------- Well Dry ----------			
	12/16/93		13.40	13.40	0.00	40.37
	02/10/94		8.93	8.94	0.01	44.84
	05/06/94		8.38	8.80	0.42	45.39
	08/09/94		10.13	10.46	0.33	43.64
	11/17/94		9.09	9.41	0.32	44.68
	02/09/95		9.07	9.07	0.00	44.70
	05/08/95		10.60	10.60	<0.01	43.17
	08/08/95		8.87	8.87	0.00	44.90
	11/03/95		9.59	9.60	0.01	44.18
A-9	03/20/89	52.96	6.28	6.28	0.00	46.68
	05/24/89		10.12	10.12	0.00	42.84
	08/18/89		9.51	9.51	0.00	43.45
	10/27/89		8.56	8.56	0.00	44.40
	01/15/90		7.20	7.20	0.00	45.76
	04/04/90		8.78	8.78	0.00	44.18
	07/30/90		10.16	10.16	0.00	42.80
	10/29/90		10.71	10.71	0.00	42.25
	01/16/91		10.44	10.44	0.00	42.52
	04/12/91		8.69	8.69	0.00	44.27
	07/10/91		10.23	10.23	0.00	42.73
	09/20/91		10.47	10.47	0.00	42.49
	10/21/91		10.39	10.39	0.00	42.57
	02/02/92		9.05	9.05	0.00	43.91
	04/29/92		9.56	9.56	0.00	43.40
	07/29/92	53.04	10.43	10.43	0.00	42.61
	10/28/92		---------- Well Inaccessible ----------			
	01/26/93		---------- Well Inaccessible ----------			
	04/01/93		---------- Well Inaccessible ----------			

Table 2 (continued)
Liquid Surface Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Depth to Water (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
A-9	08/06/93		Well Inaccessible			
(cont.)	10/14/93		Well Inaccessible			
	11/16/93		Well Inaccessible			
	12/16/93		12.10	12.10	0.00	40.94
	02/10/94		8.00	8.00	0.00	45.04
	03/21/94		9.62	9.62	0.00	43.42
	05/06/94		9.41	9.41	0.00	43.63
	08/09/94		10.81	10.81	0.00	42.23
	11/17/94		9.89	9.89	0.00	43.15
	02/09/95		9.97	9.97	0.00	43.07
	05/08/95		10.28	10.28	0.00	42.76
	08/08/95		8.33	8.33	0.00	44.71
	11/03/95		9.00	9.00	0.00	44.04
A-10	03/20/89	54.16	8.52	8.52	0.00	45.64
	05/24/89		11.31	11.31	0.00	42.85
	08/18/89		11.82	11.82	0.00	42.34
	10/27/89		10.94	10.94	0.00	43.22
	01/15/90		9.58	9.58	0.00	44.58
	04/04/90		Well Inaccessible			
	07/30/90		11.57	11.57	0.00	42.59
	10/29/90		12.11	12.11	0.00	42.05
	01/16/91		11.60	11.60	0.00	42.56
	04/12/91		10.04	10.04	0.00	44.12
	07/10/91		11.55	11.55	0.00	42.61
	10/21/91		11.79	11.79	0.00	42.37
	02/02/92		Well Inaccessible			
	04/29/92		10.85	10.85	0.00	43.31
	07/29/92	54.26	11.84	11.84	0.00	42.42
	10/28/92		11.89	11.89	0.00	42.37
	01/26/93		10.81	10.81	0.00	43.45
	04/01/93		10.85	10.85	0.00	43.41
	08/06/93		15.06	15.06	0.00	39.20
	10/14/93		15.22	15.22	0.00	39.04
	11/16/93		14.70	14.70	0.00	39.56
	12/16/93		13.22	13.22	0.00	41.04
	02/10/94		9.61	9.61	0.00	44.65
	05/06/94		10.81	10.81	0.00	43.45
	08/09/94		12.24	12.24	0.00	42.02
	11/17/94		9.89	9.89	0.00	44.37
	02/09/95		11.00	11.00	0.00	43.26
	05/08/95		11.60	11.60	0.00	42.66
	08/08/95		9.65	9.65	0.00	44.61
	11/03/95		10.28	10.28	0.00	43.98
A-11	03/20/89	53.75	8.11	8.11	0.00	45.64
	05/24/89		10.92	10.92	0.00	42.83
	08/18/89		11.52	11.52	0.00	42.23
	10/27/89		10.63	10.63	0.00	43.12
	01/15/90		9.22	9.22	0.00	44.53
	04/04/90		10.85	10.85	0.00	42.90
	07/30/90		11.29	11.29	0.00	42.46
	10/29/90		11.66	11.66	0.00	42.09
	01/16/91		11.31	11.31	0.00	42.44
	04/12/91		9.55	9.55	0.00	44.20
	07/10/91		11.18	11.18	0.00	42.57
	10/21/91		11.24	11.24	0.00	42.51
	02/02/92		10.70	10.70	0.00	43.05
	04/29/92		10.57	10.57	0.00	43.18
	07/29/92	53.74	11.33	11.33	0.00	42.41
	10/28/92		11.54	11.54	0.00	42.20

Table 2 (continued)
Liquid Surface Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Depth to Water (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
A-11	01/26/93		9.90	9.90	0.00	43.84
(cont.)	04/01/93		10.11	10.11	0.00	43.63
	08/06/93		14.43	14.43	0.00	39.31
	10/14/93		14.72	14.72	0.00	39.02
	11/16/93		NM	NM	NM	NM
	12/16/93		NM	NM	NM	NM
	02/10/94		9.30	9.30	0.00	44.44
	05/06/94		9.94	9.94	0.00	43.80
	08/09/94		11.67	11.67	0.00	42.07
	11/17/94		9.32	9.32	0.00	44.42
	02/09/95		10.20	10.20	0.00	43.54
	05/08/95		10.88	10.88	0.00	42.86
	08/08/95		9.37	9.37	0.00	44.37
	11/03/95		10.10	10.10	0.00	43.64
A-12	03/20/89	52.05	8.00	8.00	0.00	44.05
	05/24/89		10.35	10.35	0.00	41.70
	08/18/89		10.75	10.75	0.00	41.30
	10/27/89		10.06	10.06	0.00	41.99
	01/15/90		8.88	8.88	0.00	43.17
	04/04/90		10.30	10.30	0.00	41.75
	07/30/90		10.66	10.66	0.00	41.39
	10/29/90		10.90	10.90	0.00	41.15
	01/16/91		10.60	10.60	0.00	41.45
	04/12/91		9.45	9.45	0.00	42.60
	07/10/91		10.56	10.56	0.00	41.49
	10/21/91		10.62	10.62	0.00	41.43
	02/02/92		10.10	10.10	0.00	41.95
	04/29/92		10.19	10.19	0.00	41.86
	07/29/92		10.81	10.81	0.00	41.24
	10/28/92		10.81	10.81	0.00	41.24
	01/26/93		9.48	9.48	0.00	42.57
	04/01/93		10.67	10.67	0.00	41.38
	08/06/93		12.95	12.95	0.00	39.10
	10/14/93		13.28	13.28	0.00	38.77
	11/16/93		NM	NM	NM	NM
	12/16/93		NM	NM	NM	NM
	02/10/94		8.66	8.66	0.00	43.39
	05/06/94		9.89	9.89	0.00	42.16
	08/09/94		11.07	11.07	0.00	40.98
	11/17/94		9.17	9.17	0.00	42.88
	02/09/95		9.90	9.90	0.00	42.15
	05/08/95		10.27	10.27	0.00	41.78
	08/08/95		8.47	8.47	0.00	43.58
	11/03/95		9.10	9.10	0.00	42.95
A-13	07/01/92	55.11	9.93	9.93	0.00	45.18
	07/29/92		11.12	11.12	0.00	43.99
	10/28/92		10.84	10.84	0.00	44.27
	01/26/93		8.99	8.99	0.00	46.12
	04/01/93		9.18	9.18	0.00	45.93
	08/06/93		13.70	13.70	0.00	41.41
	10/14/93		14.02	14.02	0.00	41.09
	11/16/93		NM	NM	NM	NM
	12/16/93		NM	NM	NM	NM
	02/10/94		9.64	9.64	0.00	45.47
	05/06/94		10.29	10.29	0.00	44.82
	08/09/94		11.45	11.45	0.00	43.66
	11/17/94		9.67	9.67	0.00	45.44
	02/09/95		9.38	9.38	0.00	45.73
	05/08/95		10.32	10.32	0.00	44.79

Table 2 (continued)
Liquid Surface Elevation Data

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

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	Depth to Water (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
A-13	08/08/95		----------	Well Inaccessible	----------	
(cont.)	11/03/95		----------	Well Inaccessible	----------	
AR-1	07/01/92	54.72	10.27	10.27	0.00	44.45
	07/29/92		11.32	11.32	0.00	43.40
	10/28/92		----------	Well Inaccessible	----------	
	01/26/93		----------	Well Inaccessible	----------	
	04/01/93		----------	Well Inaccessible	----------	
	08/06/93		17.42	17.42	0.00	37.30
	10/14/93		----------	Well Inaccessible	----------	
	11/16/93		13.76	13.76	0.00	40.96
	12/16/93		19.44	19.44	0.00	35.28
	02/10/94		9.00	9.00	0.00	45.72
	03/21/94		9.99	10.00	0.01	44.73
	05/06/94		19.61	19.61	0.00	35.11
	08/09/94		17.51	17.59	0.08	37.21
	11/17/94		17.39	17.39	sheen	37.33
	02/09/95		18.83	18.83	0.00	35.89
	05/08/95		10.96	10.96	0.00	43.76
	08/08/95		9.70	9.70	0.00	45.02
	11/03/95		10.32	10.32	0.00	44.40
AR-2	07/01/92	54.77	11.33	11.33	0.00	43.44
	07/29/92		11.90	11.90	0.00	42.87
	10/28/92		----------	Well Inaccessible	----------	
	01/26/93		----------	Well Inaccessible	----------	
	04/01/93		----------	Well Inaccessible	----------	
	08/06/93		17.16	17.16	0.00	37.61
	10/14/93		18.11	18.11	0.00	36.66
	11/16/93		17.92	17.92	0.00	36.85
	12/16/93		18.02	18.02	0.00	36.75
	02/10/94		9.32	9.32	0.00	45.45
	03/21/94		10.36	10.36	0.00	44.41
	05/06/94		15.14	15.14	0.00	39.63
	08/09/94		18.25	18.25	0.00	36.52
	11/17/94		18.10	18.10	0.00	36.67
	02/09/95		17.10	17.10	0.00	37.67
	05/08/95		18.25	18.25	0.00	36.52
	08/08/95		10.20	10.20	0.00	44.57
	11/03/95		10.27	10.27	0.00	44.50
AR-3	07/01/92	54.19	10.11	10.11	0.00	44.08
	07/29/92		11.55	11.55	0.00	42.64
	10/28/92		----------	Well Inaccessible	----------	
	01/26/93		----------	Well Inaccessible	----------	
	04/01/93		----------	Well Inaccessible	----------	
	08/06/93		16.12	16.12	0.00	38.07
	10/14/93		----------	Well Inaccessible	----------	
	11/16/93		16.38	16.38	0.00	37.81
	12/16/93		----------	Well Inaccessible	----------	
	02/10/94		9.20	9.20	0.00	44.99
	03/21/94		10.80	10.80	0.00	43.39
	05/06/94		10.54	10.54	0.00	43.65
	08/09/94		11.92	11.92	0.00	42.27
	11/17/94		9.62	9.62	0.00	44.57
	02/09/95		15.90	15.90	0.00	38.29
	05/08/95		17.75	17.75	0.00	36.44
	08/08/95		9.47	9.47	0.00	44.72
	11/03/95		10.05	10.05	0.00	44.14

MSL = Mean sea level
TOB = Top of box
NM = Not measured

Table 3
Groundwater Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
A-2	03/21/86	31,000	NA	NA	NA	NA
	01/07/88	12,000	920	1,500	---	4,000
	03/20/89	22,000	1,200	1,800	1,200	7,700
	05/24/89	9,000	460	260	250	2,400
	08/18/89	14,000	900	200	<200	1,300
	10/27/89	16,000	1,200	340	90	3,100
	01/15/90	9,900	1,100	460	150	2,900
	04/04/90	16,000	1,100	400	380	3,900
	07/30/90	16,000	1,400	340	290	3,600
	07/30/90	16,000	1,400	340	290	3,600
	10/29/90	14,000	1,100	210	66	2,700
	01/16/91	15,000	1,200	800	190	4,600
	04/12/91	16,000	640	290	280	2,600
	10/21/91	26,000	1,100	560	81	3,900
	02/02/92	11,000	150	13	91	94
	04/29/92	5,400	120	16	129	19
	07/30/92	590	10	<2.0	<2.0	9
	10/29/92	77	0.56	<0.50	<0.50	0.51
	01/26/93	390	0.87	<0.50	<0.50	4.3
	04/01/93	16,000	<10	<10	<10	<10
	08/06/93	Well Dry				
	10/14/93	350	<0.5	<0.5	<0.5	<0.5
	02/10/94	Well Dry				
	03/21/94	66	<0.5	<0.5	<0.5	<0.5
	05/06/94	Well Inaccessible				
	08/09/94	<50	1.1	<0.5	<0.5	<0.5
	11/17/94	<50	<0.5	<0.5	<0.5	<0.5
	02/09/95	50	1.7	2.0	<0.5	1.6
	05/08/95	<50	1.4	1.4	<0.50	0.50
	08/08/95	<50	<0.50	<0.50	<0.50	<0.50
	11/03/95	<50	<0.50	<0.50	<0.50	<0.50
A-3	03/21/86	1,000	NA	NA	NA	NA
	01/07/88	250	2.3	8	NA	21
	03/20/89	230	1.6	<1	3	3
	05/24/89	170	0.9	2	1	<3
	08/18/89	180	0.7	1	<1	<3
	10/27/89	120	<0.5	<0.5	<0.5	<1
	01/15/90	<50	<0.5	<0.5	<0.5	<1
	04/04/90	88	1.2	2.0	0.8	4
	07/30/90	120	8.3	2.9	2.3	12
	10/29/90	780	10	27	18	85
	01/16/91	69	2.0	3.5	<0.5	9.6
	04/12/91	<30	<0.30	<0.30	<0.30	<0.30
	07/10/91	59	<0.30	<0.30	0.60	0.51
	10/21/91	56	0.44	0.77	0.41	1.3
	02/01/92	Well Inaccessible				
	04/29/92	Well Inaccessible				
	07/30/92	<50	<0.50	<0.50	<0.50	<0.50
	10/28/92	<50	<0.50	<0.50	<0.50	<0.50
	01/26/93	<50	<0.50	<0.50	<0.50	<0.50
	04/01/93	<50	<0.50	<0.50	<0.50	<0.50
	08/06/93	<50	<0.5	<0.5	<0.5	<0.5
	10/14/93	<50	<0.5	<0.5	<0.5	<0.5
	02/10/94	<50	<0.5	<0.5	<0.5	<0.5
	05/06/94	<50	<0.5	<0.5	<0.5	<0.5
	08/09/94	<50	<0.5	<0.5	<0.5	<0.5

Table 3 (continued)
Groundwater Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
A-3	11/17/94	<50	<0.5	<0.5	<0.5	<0.5
(cont.)	02/09/95	90	0.9	<0.5	0.7	1.3
	05/08/95	<50	<0.50	<0.50	<0.50	<0.50
	08/08/95	NS	NS	NS	NS	NS
	11/03/95	<50	<0.50	<0.50	<0.50	<0.50
A-4	03/21/86	——— 3.50 feet of Separate-Phase Hydrocarbons ———				
	01/07/88	——— 0.02 foot of Separate-Phase Hydrocarbons ———				
	03/20/89	360,000	1,500	3,700	6,500	35,000
	05/24/89	1,500,000	1,000	2,000	6,000	23,000
	08/18/89	--------- 0.01 foot of Separate-Phase Hydrocarbons ---------				
	10/27/89	——— 0.01 foot of Separate-Phase Hydrocarbons ———				
	01/15/90	--------- 0.01 foot of Separate-Phase Hydrocarbons ---------				
	04/04/90	40,000	680	320	1,400	4,900
	07/30/90	--------- 0.01 foot of Separate-Phase Hydrocarbons ---------				
	10/29/90	——— 0.03 foot of Separate-Phase Hydrocarbons ———				
	01/16/91	--------- 0.01 foot of Separate-Phase Hydrocarbons ---------				
	04/12/91	1,800	<60	90	650	1,700
	07/10/91	61,000	2,700	8,500	1,700	8,200
	09/20/91	NA	1,200	5,300	1,500	11,000
	02/01/92	--------- 0.02 foot of Separate-Phase Hydrocarbons ---------				
	04/29/92	——— 0.02 foot of Separate-Phase Hydrocarbons ———				
	07/29/92	--------- 0.04 foot of Separate-Phase Hydrocarbons ---------				
	10/28/92	——— 0.03 foot of Separate-Phase Hydrocarbons ———				
	01/26/93	——— 0.04 foot of Separate-Phase Hydrocarbons ———				
	04/01/93	--------- 0.02 foot of Separate-Phase Hydrocarbons ---------				
	08/06/93	--------- 0.03 foot of Separate-Phase Hydrocarbons ---------				
	10/14/93	160,000	1,200	<250	4,100	950
	02/10/94	56,000	220	68	790	700
	05/06/94	18,000	210	<30	200	101
	08/09/94	20,000	800	<20	200	270
	11/17/94	3,900	420	11	38	92
	02/09/95	14,000	2,900	7.5	420	440
	05/08/95	5,100	700	<10 b	79	160
	08/08/95	4,200	240	17	88	110
	11/03/95	1,200	22	<0.50	6.4	3.7
A-5	03/21/86	88	NA	NA	NA	NA
	01/07/88	<50	0.5	1	NA	4
	03/20/89	60	0.5	1	2	10
	05/24/89	<50	0.5	<1	<1	<3
	08/18/89	<50	<0.5	<1	<1	<3
	10/27/89	<50	<0.50	<0.50	<0.50	<1
	01/15/90	<50	<0.5	<0.5	<0.5	<1
	04/04/90	<50	<0.5	<0.5	<0.5	<1
	07/30/90	<50	<0.5	<0.5	<0.5	<0.5
	10/29/90	280	<0.5	<0.5	<0.5	<0.5
	01/16/91	<50	<0.5	<0.5	<0.5	<0.5
	04/12/91	<30	<0.30	<0.30	<0.30	0.84
	07/10/91	<30	<0.30	<0.30	<0.30	<0.30
	10/21/91	<30	<0.30	<0.30	<0.30	<0.30
	02/01/92	<30	1.7	<0.30	<0.30	<0.30
	04/29/92	<30	<0.30	<0.30	<0.30	<0.30
	07/30/92	<50	<0.50	<0.50	<0.50	<0.50
	10/28/92	<50	<0.50	<0.50	<0.50	<0.50
	01/26/93	<50	<0.50	<0.50	<0.50	<0.50
	04/01/93	<50	<0.50	<0.50	<0.50	<0.50
	08/06/93	<50	<0.5	<0.5	<0.5	<0.5
	10/14/93	<50	<0.5	<0.5	<0.5	<0.5

Table 3 (continued)
Groundwater Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
A-5 (cont.)	02/10/94	<50	<0.5	<0.5	<0.5	<0.5
	05/06/94	<50	<0.5	<0.5	<0.5	<0.5
	08/09/94	<50	<0.5	<0.5	<0.5	<0.5
	11/17/94	<50	<0.5	<0.5	<0.5	<0.5
	02/09/95	<50	<0.5	<0.5	<0.5	<0.5
	05/08/95	<50	<0.50	<0.50	<0.50	<0.50
	08/08/95	NS	NS	NS	NS	NS
	11/03/95	<50	<0.50	<0.50	<0.50	<0.50
A-6	03/21/86	<10	NA	NA	NA	NA
	01/07/88	390	54	89	NA	110
	03/20/89	220	33	21	9	39
	05/24/89	110	13	6	3	13
	08/18/89	<50	2.1	1	<1	<3
	10/27/89	55	3.8	1.6	1.7	6
	01/15/90	100	12	2.5	5.5	18
	04/04/90	100	17	7.1	5.5	18
	07/30/90	<50	2.6	<0.5	<0.5	1.2
	10/29/90	<50	0.7	<0.5	<0.5	<0.5
	01/16/91	<50	<0.5	<0.5	<0.5	<0.5
	04/12/91	430	24	5.1	9.4	32
	07/10/91	<30	1.4	0.39	0.47	1.5
	10/21/91	<30	<0.30	<0.30	<0.30	<0.30
	02/01/92	<30	2.0	0.40	0.58	1.7
	04/29/92	---------- Well Inaccessible ----------				
	07/30/92	<50	0.64	<0.50	<0.50	<0.50
	10/28/92	<50	<0.50	<0.50	<0.50	<0.50
	01/26/93	1,600	4.8	1.2	14	46
	04/01/93	310	4.8	0.74	3.3	8.7
	08/06/93	<50	<0.5	<0.5	<0.5	<0.5
	10/14/93	<50	<0.5	<0.5	<0.5	<0.5
	02/10/94	140	2.8	<0.5	2.4	5.6
	05/06/94	61	1.7	<0.5	0.6	1.4
	08/09/94	<50	<0.5	<0.5	<0.5	<0.5
	11/17/94	53	<0.5	<0.5	<0.5	<0.5
	02/09/95	90	17	0.8	1.2	6.0
	05/08/95	100	7.9	<0.50	4.1	8.6
	08/08/95	<50	<0.50	<0.50	<0.50	<0.50
	11/03/95	<50	<0.50	<0.50	<0.50	<0.50
A-7	01/07/88	<50	<0.5	1	NA	4
	03/20/89	<50	0.9	<1	<1	<3
	05/24/89	<50	<0.5	<1	<1	<3
	08/18/89	<50	<0.5	<1	<1	<3
	10/27/89	<50	<0.5	<0.5	<0.5	<1
	01/15/90	<50	<0.5	<0.5	<0.5	<1
	04/04/90	<50	<0.5	<0.5	<0.5	<1
	07/30/90	<50	<0.5	<0.5	<0.5	<0.5
	10/29/90	<50	2.7	7.6	1.1	3.0
	01/16/91	<50	<0.5	<0.5	<0.5	<0.5
	04/12/91	<30	<0.30	<0.30	<0.30	0.48
	07/10/91	<30	<0.30	0.49	<0.30	1.2
	10/21/91	<30	<0.30	<0.30	<0.30	<0.30
	02/01/92	<30	<0.30	<0.30	<0.30	<0.30
	04/29/92	<30	<0.30	<0.30	<0.30	<0.30
	07/29/92	<50	<0.50	<0.50	<0.50	<0.50
	10/28/92	<50	<0.50	<0.50	<0.50	<0.50
	01/26/93	<50	<0.50	<0.50	<0.50	<0.50
	04/01/93	<50	<0.50	<0.50	<0.50	<0.50

Table 3 (continued)
Groundwater Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
A-7	08/06/93	<50	<0.5	<0.5	<0.5	<0.5
(cont.)	10/14/93	<50	<0.5	<0.5	<0.5	<0.5
	02/10/94	<50	<0.5	<0.5	<0.5	<0.5
	05/06/94	<50	<0.5	<0.5	<0.5	<0.5
	08/09/94	<50	<0.5	<0.5	<0.5	<0.5
	11/17/94	<50	<0.5	<0.5	<0.5	<0.5
	02/09/95	<50	3.7	<0.5	<0.5	<0.5
	05/08/95	<50	<0.50	<0.50	<0.50	<0.50
	08/08/95	NS	NS	NS	NS	NS
	11/03/95	Well Sampled Annually				
A-8	03/21/86	Well Inaccessible				
	01/07/88	Well Inaccessible				
	03/20/89	0.66 foot of Separate-Phase Hydrocarbons				
	05/24/89	1.20 feet of Separate-Phase Hydrocarbons				
	08/18/89	0.77 foot of Separate-Phase Hydrocarbons				
	10/27/89	1.31 feet of Separate-Phase Hydrocarbons				
	01/15/90	0.87 foot of Separate-Phase Hydrocarbons				
	04/04/90	0.25 foot of Separate-Phase Hydrocarbons				
	07/30/90	1.75 feet of Separate-Phase Hydrocarbons				
	10/29/90	0.10 foot of Separate-Phase Hydrocarbons				
	01/16/91	0.01 foot of Separate-Phase Hydrocarbons				
	04/12/91	0.01 foot of Separate-Phase Hydrocarbons				
	07/10/91	0.01 foot of Separate-Phase Hydrocarbons				
	10/21/91	0.11 foot of Separate-Phase Hydrocarbons				
	02/01/92	1.40 feet of Separate-Phase Hydrocarbons				
	04/29/92	1.30 feet of Separate-Phase Hydrocarbons				
	07/29/92	0.06 foot of Separate-Phase Hydrocarbons				
	10/28/92	Well Dry				
	01/26/93	Well Dry				
	04/01/93	Well Inaccessible				
	08/06/93	Well Dry				
	10/14/93	Well Inaccessible				
	12/10/93	29,000,000	16,000	12,000	19,000	99,000
	02/10/94	NS	NS	NS	NS	NS
	05/06/94	NS	NS	NS	NS	NS
	08/09/94	0.33 foot of Separate-Phase Hydrocarbons				
	11/17/94	0.32 foot of Separate-Phase Hydrocarbons				
	02/09/95	68,000	2,400	500	960	5,000
	05/08/95	23,000	3,600	560	520	2,100
	08/08/95	20,000	2,700	140	730	1,600
	11/03/95	0.01 foot of Separate-Phase Hydrocarbons				
A-9	01/07/88	300	45	14	NA	43
	03/21/89	50	2.8	1	1	3
	05/24/89	120	26	12	4	79
	08/18/89	14,000	400	800	400	2,000
	10/27/89	1,700	150	36	30	110
	01/15/90	860	140	58	38	140
	04/04/90	620	36	13	9.4	32
	07/30/90	180	77	1.6	2.1	4.2
	10/29/90	110	30	3.7	4.1	8.3
	01/16/91	<50	15	<0.5	<0.5	0.6
	04/12/91	130	52	0.83	5.3	6.0
	07/10/91	<30	7.8	<0.30	<0.30	<0.30
	09/20/91	NA	21	<2.0	<2.0	<0.20
	10/21/91	240	63	0.65	5.1	1.6
	02/01/92	320	77	0.95	11	6.5
	04/29/92	170	52	<0.30	5.6	1.4

Table 3 (continued)
Groundwater Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
A-9	07/30/92	<50	14	<0.50	1.7	6.0
(cont.)	10/28/92	Well Inaccessible				
	01/26/93	Well Inaccessible				
	04/01/93	Well Inaccessible				
	08/06/93	Well Inaccessible				
	10/14/93	Well Inaccessible				
	12/10/93	<50	<0.5	<0.5	<0.5	<0.5
	02/10/94	Well Inaccessible				
	03/21/94	<50	<0.5	<0.5	<0.5	<0.5
	05/06/94	<50	<0.5	<0.5	<0.5	<0.5
	08/09/94	<50	<0.5	<0.5	<0.5	<0.5
	11/17/94	<50	2.5	<0.5	0.9	3.3
	02/09/95	<50	<0.5	<0.5	<0.5	<0.5
	05/08/95	<50	<0.50	<0.50	<0.50	<0.50
	08/08/95	80	2.6	<0.50	<0.50	<0.50
	11/03/95	NS	NS	NS	NS	NS
A-10	01/07/88	<50	0.6	11	NA	4
	03/20/89	<50	<0.5	<1	<1	<3
	05/24/89	<50	<0.5	<1	<1	<3
	08/18/89	<50	<0.5	<1	<1	<3
	10/27/89	<50	<0.5	<0.5	<0.5	<1
	01/15/90	<50	<0.5	<0.5	<0.5	<1
	04/04/90	Well Inaccessible				
	07/30/90	<50	<0.5	<0.5	<0.5	<0.5
	10/29/90	<50	2.3	6.9	1.2	3.0
	01/16/91	<50	<0.5	<0.5	<0.5	<0.5
	04/12/91	<30	0.67	0.55	<0.30	0.90
	07/10/91	<30	<0.30	<0.30	<0.30	<0.30
	10/21/91	<30	<0.30	<0.30	<0.30	<0.30
	02/02/92	Well Inaccessible				
	04/29/92	<30	<0.30	<0.30	<0.30	<0.30
	07/29/92	<50	25	<0.50	<0.50	1.8
	10/28/92	<50	<0.50	<0.50	<05.0	<0.50
	01/26/93	<50	<0.50	<0.50	<0.50	<0.50
	04/01/93	<50	<0.50	<0.50	<0.50	<0.50
	08/06/93	<50	<0.5	<0.5	<0.5	<0.5
	10/14/93	<50	<0.5	<0.5	<0.5	<0.5
	02/10/94	<50	<0.5	<0.5	<0.5	<0.5
	05/06/94	<50	<0.5	<0.5	<0.5	<0.5
	08/09/94	<50	<0.5	<0.5	<0.5	<0.5
	11/17/94	<50	<0.5	<0.5	<0.5	<0.5
	02/09/95	60	<0.5	<0.5	<0.5	<0.5
	05/08/95	<50	<0.50	<0.50	<0.50	<0.50
	08/08/95	Well Removed from Sampling Program				
A-11	01/07/88	<50	1.1	2	NA	5
	03/20/89	<50	<0.5	<1	<1	<3
	05/24/89	<50	<0.5	<1	<1	<3
	08/18/89	<50	<0.5	<1	<1	<3
	10/27/89	<50	<0.5	<0.5	<0.5	<1
	01/15/90	<50	<0.5	<0.5	<0.5	<1
	04/04/90	<50	<0.5	<0.5	<0.5	<1
	07/30/90	<50	<0.5	0.6	<0.5	0.5
	10/29/90	<50	0.6	2.4	0.6	1.5
	01/16/91	<50	<0.5	<0.5	<0.5	<0.5
	04/12/91	<30	<0.30	0.37	<0.30	<0.30
	07/10/91	<30	0.61	0.46	<0.30	1.0

Table 3 (continued)
Groundwater Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
A-11	10/21/91	<30	<0.30	<0.30	<0.30	<0.30
(cont.)	02/01/92	<30	<0.30	<0.30	<0.30	<0.30
	04/29/92	<30	<0.30	<0.30	<0.30	<0.30
	07/30/92	<50	<0.50	<0.50	<0.50	<0.50
	10/28/92	<50	<0.50	<0.50	<0.50	<0.50
	01/26/93	<50	<0.50	<0.50	<0.50	<0.50
	01/04/93	<50	<0.50	<0.50	<0.50	<0.50
	08/06/93	<50	<0.5	<0.5	<0.5	<0.5
	10/14/93	<50	<0.5	<0.5	<0.5	<0.5
	02/10/94	<50	<0.5	<0.5	<0.5	<0.5
	05/06/94	<50	<0.5	<0.5	<0.5	<0.5
	08/09/94	<50	<0.5	<0.5	<0.5	<0.5
	11/17/94	<50	<0.5	<0.5	<0.5	<0.5
	02/09/95	<50	<0.5	<0.5	<0.5	<0.5
	05/08/95	<50	<0.50	<0.50	<0.50	<0.50
	08/08/95	NS	NS	NS	NS	NS
	11/03/95	<50	<0.50	<0.50	<0.50	<0.50
A-12	01/07/88	<50	<0.5	2	NA	<4
	03/20/89	<50	<0.5	<1	<1	<3
	05/24/89	<50	<0.5	<1	<1	<3
	08/18/89	<50	<0.5	<1	<1	<3
	10/27/89	<50	<0.5	<0.5	<0.5	<1
	01/15/90	<50	<0.5	<0.5	<0.5	<1
	04/04/90	<50	<0.5	<0.5	<0.5	<1
	07/30/90	<50	<0.5	<0.5	<0.5	<0.5
	10/29/90	<50	<0.5	<0.5	<0.5	<0.5
	01/16/91	<50	<0.5	<0.5	<0.5	<0.5
	04/12/91	<30	<0.30	<0.30	<0.30	<0.30
	07/10/91	<30	<0.30	<0.30	<0.30	<0.30
	10/21/91	<30	<0.30	<0.30	<0.30	<0.30
	02/01/92	<30	<0.30	<0.30	<0.30	<0.30
	04/29/92	<30	<0.30	<0.30	<0.30	<0.30
	07/30/92	<50	<0.50	<0.50	<0.50	<0.50
	10/28/92	<50	<0.50	<0.50	<0.50	<0.50
	01/26/93	<50	<0.50	<0.50	<0.50	<0.50
	04/01/93	<50	<0.50	<0.50	<0.50	<0.50
	08/06/93	<50	<0.5	<0.5	<0.5	<0.5
	10/14/93	<50	<0.5	<0.5	<0.5	<0.5
	02/10/94	<50	<0.5	<0.5	<0.5	<0.5
	05/06/94	<50	<0.5	<0.5	<0.5	<0.5
	08/09/94	<50	<0.5	<0.5	<0.5	<0.5
	11/17/94	<50	<0.5	<0.5	<0.5	<0.5
	02/09/95	<50	<0.5	<0.5	<0.5	<0.5
	05/08/95	<50	<0.50	<0.50	<0.50	<0.50
	08/08/95	NS	NS	NS	NS	NS
	11/03/95	<50	<0.50	<0.50	<0.50	<0.50
A-13	07/01/92	<50	<0.50	<0.50	<0.50	<0.50
	07/30/92	<50	<0.50	<0.50	<0.50	<0.50
	10/28/92	<50	<0.50	<0.50	<0.50	<0.50
	01/26/93	<50	<0.50	<0.50	<0.50	<0.50
	04/01/93	<50	<0.50	<0.50	<0.50	<0.50
	08/06/93	<50	<0.5	<0.5	<0.5	<0.5
	10/14/93	<50	<0.5	<0.5	<0.5	<0.5
	02/10/94	<50	<0.5	<0.5	<0.5	<0.5
	05/06/94	<50	<0.5	<0.5	<0.5	<0.5
	08/09/94	<50	<0.5	<0.5	<0.5	<0.5
	11/17/94	<50	<0.5	<0.5	<0.5	<0.5

Table 3 (continued)
Groundwater Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
A-13	02/09/95	<50	<0.5	<0.5	<0.5	<0.5
(cont.)	05/08/95	<50	<0.50	<0.50	<0.50	<0.50
	08/08/95	Well Inaccessible				
	11/03/95	Well Inaccessible				
AR-1	07/01/92	2,300	260	150	38	470
	07/29/92	1,600	340	180	52	320
	10/28/92	Well Inaccessible				
	01/26/93	Well Inaccessible				
	04/01/93	Well Inaccessible				
	08/06/93	Well Inaccessible				
	10/14/93	Well Inaccessible				
	12/10/93	3,400	<25	<25	<25	250
	02/10/94	Well Inaccessible				
	03/21/94	NS	NS	NS	NS	NS
	05/06/94	NS	NS	NS	NS	NS
	08/09/94	0.08 foot of Separate-Phase Hydrocarbons				
	11/17/94	Sheen of Separate-Phase Hydrocarbons				
	02/09/95	670	1.5	1.0	0.7	33
	05/08/95	3,700	19	<2.5 b	5.7	47
	08/08/95	12,000	560	180	82	1,000
	11/03/95	7,400	130	41	18	370
AR-2	07/01/92	<50	<0.50	<0.50	<0.50	<0.50
	07/29/92	350	130	8.5	<10	<10
	10/28/92	Well Inaccessible				
	01/26/93	Well Inaccessible				
	04/01/93	Well Inaccessible				
	08/06/93	Well Inaccessible				
	10/14/93	Well Inaccessible				
	12/10/93	<50	<0.5	<0.5	<0.5	<0.5
	02/10/94	Well Inaccessible				
	03/21/94	<50	<0.5	<0.5	<0.5	<0.5
	05/06/94	<50	<0.5	<0.5	<0.5	<0.5
	08/09/94	<50	<0.5	<0.5	<0.5	<0.5
	11/17/94	<50	<0.5	<0.5	<0.5	<0.5
	02/09/95	60	<0.5	<0.5	<0.5	<0.5
	05/08/95	<50	<0.50	<0.50	<0.50	<0.50
	08/08/95	<50	<0.50	<0.50	<0.50	<0.50
	11/03/95	<50	<0.50	<0.50	<0.50	<0.50
AR-3	07/01/92	<50	1.8	0.86	<0.50	2.2
	07/29/92	<50	1.6	<0.50	<0.50	<0.50
	10/28/92	Well Inaccessible				
	01/26/93	Well Inaccessible				
	04/01/93	Well Inaccessible				
	08/06/93	Well Inaccessible				
	10/14/93	Well Inaccessible				
	12/10/93	<50	<0.5	<0.50	<0.50	<0.50
	02/10/94	Well Inaccessible				
	03/21/94	<50	<0.5	<0.5	<0.5	<0.5
	05/06/94	<50	<0.5	<0.5	<0.5	<0.5
	08/09/94	<50	<0.5	<0.5	<0.5	<0.5
	11/17/94	<50	<1.3 a	<0.5	<0.5	<0.5
	02/09/95	50	<0.5	<0.5	<0.5	<0.5
	05/08/95	<50	<0.50	<0.50	<0.50	<0.50

Table 3 (continued)
Groundwater Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

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

Well Number	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
AR-3	08/08/95	<50	<0.50	<0.50	<0.50	<0.50
(cont.)	11/03/95	<50	<0.50	<0.50	<0.50	<0.50

ppb = Parts per billion
NA = Not analyzed
NS = Not sampled
a. = Laboratory raised MRL due to matrix interference
b. = Laboratory raised MRL due to high analyte concentration requiring sample dilution.
Prior to June 1995, TPPH as gasoline was reported as TPH as gasoline.

Table 4
Groundwater Analytical Data
Total Methyl t-Butyl Ether

ARCO Service Station 4931
731 West MacArtur Boulevard at West Street
Oakland, California

Well I.D.	Date Sampled	Methyl t-Butyl Ether (ppb)
A-2	08/08/95	<2.5
	11/03/95	NS
A-3	08/08/95	NS
	11/03/95	<2.5
A-4	08/08/95	210
	11/03/95	NS
A-5	08/08/95	NS
	11/03/95	<2.5
A-6	08/08/95	<2.5
	11/03/95	NS
A-7	08/08/95	NS
	11/03/95	NS
A-8	08/08/95	1,200
	11/03/95	NS
A-9	08/08/95	17
	11/03/95	NS
A-10	08/08/95	NS
	11/03/95	NS
A-11	08/08/95	NS
	11/03/95	<2.5
A-12	08/08/95	NS
	11/03/95	<2.5
A-13	08/08/95	NS
	11/03/95	NS
AR-1	08/08/95	220
	11/03/95	NS
AR-2	08/08/95	<2.5
	11/03/95	NS
AR-3	08/08/95	<2.5
	11/03/95	NS

ppb = Parts per billion
NS = Not sampled

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

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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
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(TPPH as Gasoline, BTEX Compounds, and MTBE)

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

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

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ARCO Service Station 4931
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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-9	08/22/96	53.04	9.68	43.36	<50	<0.5	<0.5	<0.5	<0.5	8.5	NA	NM	
A-9	12/19/96	53.04	7.43	45.61	<50	<0.5	<0.5	<0.5	<0.5	2.6	NA	NM	
A-9	04/01/97	53.04	9.95	43.09	Not Sampled: Well Sampled Semiannually								
A-9	05/27/97	53.04	9.56	43.48	<50	2.3	<0.5	<0.5	<0.5	45	NA	NM	
A-9	08/12/97	53.04	10.15	42.89	Not Sampled: Well Sampled Semiannually								
A-9	11/14/97	53.04	8.64	44.40	<200	<2.0	<2.0	<2.0	<2.0	190	NA	9.6	
A-9	03/18/98	53.04	6.45	46.59	Not Sampled: Well Sampled Semiannually								
A-9	05/19/98	53.04	8.35	44.69	<50	<0.5	<0.5	<0.5	<0.5	7	NA	1.27	P
A-9	07/29/98	53.04	8.74	44.30	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.99	NP
A-9	10/09/98	53.04	10.05	42.99	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.0	NP
A-9	02/19/99	53.04	6.91	46.13	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.0	NP
A-9	06/02/99	53.04	9.72	43.32	<50	<0.5	<0.5	<0.5	<0.5	16	NA	2.32	NP
A-9	08/26/99	53.04	9.48	43.56	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.71	NP
A-9	10/26/99	53.04	9.17	43.87	1,500	6.2	0.7	78	11	91	NA	2.15	NP
A-9	02/25/00	53.04	5.84	47.20	<50	<0.5	<0.5	<0.5	<1	<3	NA	1.55	NP
A-10	03/26/96	54.26	8.28	45.98	Not Sampled: Well Removed from Sampling Program								
A-10	05/22/96	54.26	8.60	45.66	Not Sampled: Well Removed from Sampling Program								
A-10	08/22/96	54.26	10.98	43.28	Not Sampled: Well Removed from Sampling Program								
A-10	12/19/96	54.26	8.80	45.46	Not Sampled: Well Removed from Sampling Program								
A-10	04/01/97	54.26	11.15	43.11	Not Sampled: Well Removed from Sampling Program								
A-10	05/27/97	54.26	10.90	43.36	Not Sampled: Well Removed from Sampling Program								
A-10	08/12/97	54.26	11.30	42.96	Not Sampled: Well Removed from Sampling Program								
A-10	11/14/97	54.26	10.80	43.46	Not Sampled: Well Removed from Sampling Program								
A-10	03/18/98		----------		Well Removed from Survey Program ----------								
A-11	03/26/96	53.74	8.10	45.64	Not Sampled: Well Sampled Semiannually								
A-11	05/22/96	53.74	8.25	45.49	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	
A-11	08/22/96	53.74	10.58	43.16	Not Sampled: Well Sampled Semiannually								
A-11	12/19/96	53.74	8.37	45.37	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NM	
A-11	04/01/97	53.74	10.95	42.79	Not Sampled: Well Sampled Semiannually								
A-11	05/27/97	53.74	10.60	43.14	<50	<0.5	<0.5	<0.5	<0.5	3.1	NA	NM	

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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							0.49	
A-11	10/26/99	53.74	10.81	42.93	<50	<0.5	<0.5	<0.5	<1	4	NA	1.27	NP
A-11	02/25/00	53.74	6.70	47.04	Not Sampled: Well Sampled Semiannually								
A-12	03/26/96	52.05	7.83	44.22	Not Sampled: Well Sampled Semiannually								
A-12	05/22/96	52.05	7.80	44.25	<50	<0.5	<0.5	<0.5	<0.5	NA	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							0.51	
A-12	10/26/99	52.05	9.73	42.32	<50	<0.5	<0.5	<0.5	<1	12	NA	1.09	NP
A-12	02/25/00	52.05	6.97	45.08	Not Sampled: Well Sampled Semiannually								
A-13	03/26/96	55.11		---------- Well Inaccessible ----------									
A-13	05/22/96	55.11		---------- Well Inaccessible ----------									

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Recreated from electronic data provided by IT Corporation.

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Total Purgeable Petroleum Hydrocarbons
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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	

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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)
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								

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AR-3	02/19/99	54.19	6.98	47.21	Not Sampled: Well Removed from Sampling Program								
AR-3	06/02/99	54.19	10.80	43.39	Not Sampled: Well Removed from Sampling Program								
AR-3	08/26/99	54.19	10.69	43.50	Not Sampled: Well Removed from Sampling Program							0.40	
AR-3	10/26/99	54.19	NM	NM	Not Sampled: Well Removed from Sampling Program								
AR-3	02/25/00	54.19	7.21	46.98	Not Sampled: Well Removed from Sampling Program								

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

APPENDIX C

GEOTRACKER UPLOAD CONFIRMATION RECEIPTS

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A GEO_WELL FILE

SUCCESS

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

Submittal Type:	**GEO_WELL**
Submittal Title:	**3Q09 GEO_WELL 4931**
Facility Global ID:	**T0600100110**
Facility Name:	**ARCO #04931**
File Name:	**GEO_WELL.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**9/28/2009 12:29:14 PM**
Confirmation Number:	**2746674895**

STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER ESI

UPLOADING A EDF FILE

SUCCESS

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

Submittal Type:	**EDF - Monitoring Report - Quarterly**
Submittal Title:	**3Q09 GW Monitoring**
Facility Global ID:	**T0600100110**
Facility Name:	**ARCO #04931**
File Name:	**09090353.zip**
Organization Name:	**Broadbent & Associates, Inc.**
Username:	**BROADBENT-C**
IP Address:	**67.118.40.90**
Submittal Date/Time:	**9/28/2009 12:32:26 PM**
Confirmation Number:	**8574831306**

VIEW QC REPORT

VIEW DETECTIONS REPORT