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Atlantic Richfield Company  
(a BP affiliated company)



P.O. Box 1257  
San Ramon, CA 94583  
Phone: (925) 275-3801  
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31 October 2006

Re: Third Quarter 2006 Ground-Water Monitoring Report  
Atlantic Richfield Company (a BP affiliated company) Station #2111  
1156 Davis Street  
San Leandro, California  
ACEH Case #RO0000494

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

Submitted by:

Paul Supple  
Environmental Business Manger

**Third Quarter 2006 Ground-Water Monitoring Report**  
Atlantic Richfield Company Station #2111  
1156 Davis Street  
San Leandro, California

Prepared for

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

Prepared by



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

31 October 2006

Project No. 06-08-615

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



31 October 2006

Project No. 06-08-615

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

Attn.: Mr. Paul Supple

Re: Third Quarter 2006 Ground-Water Monitoring Report, Atlantic Richfield Company (a BP affiliated company) Station #2111, 1156 Davis Street, San Leandro, California  
ACEH Case #RO0000494

Dear Mr. Supple:

Attached is the *Third Quarter 2006 Ground-Water Monitoring Report* for Atlantic Richfield Company Station #2111 (herein referred to as Station #2111) located at 1156 Davis Street, San Leandro, California (Property). This report presents results of ground-water monitoring conducted at Station #2111 during the Third Quarter 2006.

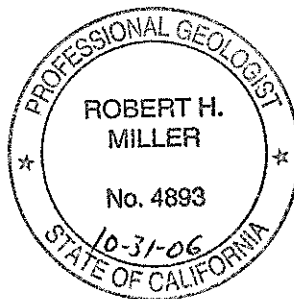
Should you have questions regarding the work performed or results obtained, please do not hesitate to contact us at (530) 566-1400.

Sincerely,

BROADBENT & ASSOCIATES, INC.

Thomas A. Venus, P.E.  
Senior Engineer

Robert H. Miller, P.G., C.H.G.  
Principal Hydrogeologist



Enclosures

cc: Mr. Steven Plunkett, Alameda County Environmental Health (Submitted via ACEH ftp site)  
Mr. Karl Busche, City of San Leandro Environmental Services Division, 835 East 14<sup>th</sup> Street,  
San Leandro, California 94577  
Electronic copy uploaded to GeoTracker

## STATION #2111 QUARTERLY GROUND-WATER MONITORING REPORT

Facility: #2111	Address:	1156 Davis Street, San Leandro, California
Environmental Business Manager:		Mr. Paul Supple
Consulting Co./Contact Persons:		Broadbent & Associates, Inc.(BAI)/Rob Miller & Tom Venus (530) 566-1400
Consultant Project No.:		06-08-615
Primary Agency/Regulatory ID No.:		Alameda County Environmental Health (ACEH) ACEH Case #RO0000494
Facility Permits/Permitting Agency:		City of San Leandro Special Discharge Permit SD-036; Bay Area Air Quality Management District Plant 16189

### WORK PERFORMED THIS QUARTER (Third Quarter 2006):

1. Prepared and submitted Second Quarter 2006 report. Work performed by BAI.
2. Conducted ground-water monitoring/sampling for Third Quarter 2006. Work performed on 19 July 2006 by Blaine Tech Services for URS.
3. Continued installation of Dual-Phase Extraction (DPE) treatment system and troubleshooting.

### WORK PROPOSED FOR NEXT QUARTER (Fourth Quarter 2006):

1. Prepared and submitted this Third Quarter 2006 Ground-Water Monitoring Report (contained herein).
2. Conduct quarterly ground-water monitoring/sampling for Fourth Quarter 2006.
3. Prepare and submit Fourth Quarter 2006 Report.
4. Complete construction and testing of DPE treatment system.
5. Prepare DPE system startup report.

### QUARTERLY RESULTS SUMMARY:

Current phase of project:	<b>Ground-water monitoring/sampling/interim remediation; DPE system construction and testing in progress.</b>
Frequency of ground-water monitoring:	<b>Quarterly = MW-1 through MW-8</b>
Frequency of ground-water sampling:	<b>Quarterly = MW-1 through MW-5, MW-7 and MW-8 Annually (3Q) = MW-6</b>
Is free product (FP) present on-site:	<b>No</b>
FP recovered this quarter:	<b>0 gallons</b>
Cumulative FP recovered:	<b>1.44 gallons</b>
Current remediation techniques:	<b>Bailing free product as needed from MW-2; DPE treatment system under construction.</b>
Depth to ground water (below TOC):	<b>12.92 ft (MW-6) to 15.86 ft (MW-1)</b>
General ground-water flow direction:	<b>Northwest to southwest</b>
Approximate hydraulic gradient:	<b>0.004 to 0.008 ft/ft</b>

### DISCUSSION:

Third quarter 2006 ground-water monitoring and sampling was conducted at Station #2111 on 19 July 2006 by Blaine Tech Services personnel for URS. Water levels were gauged in the eight wells at the Site. Several wells were gauged with treatment system tubing in the well (MW-1, MW-2, MW-3, and

MW-7). Well MW-2 also was gauged with a pump in the well. Well MW-8 had the tubing removed prior to water level gauging. Depth to water measurements ranged from 12.92 ft at MW-6 to 15.86 ft at MW-1. Resulting ground-water surface elevations ranged from 24.96 ft above mean sea level in well MW-7 to 23.34 ft at well MW-5. Water level elevations were between historic minimum and maximum ranges for each well, as summarized in Table 1. Water level elevations yielded a potentiometric ground-water flow direction and gradient to the northwest and southwest at approximately 0.004 to 0.008 ft/ft, approximately consistent with historical data (see Table 3). Ground-water monitoring field data sheets are provided within Appendix A. Measured depths to ground-water and respective ground-water elevations are summarized in Table 1. Potentiometric ground-water elevation contours are presented in Drawing 1.

Consistent with the current ground-water sampling schedule, water samples were collected from the eight wells. No irregularities were reported during sampling. Samples were submitted under chain of custody protocol to Test America Analytical Testing Corporation (Morgan Hill, California), for analysis of Gasoline Range Organics (GRO, C4-12) by the LUFT GCMS Method; for Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) by EPA Method 8260B; and tert-Amyl methyl ether (TAME), tert-Butyl alcohol (TBA), Di-isopropyl ether (DIPE), 1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA), Ethanol, Ethyl tert-butyl ether (ETBE), and Methyl tert-butyl ether (MTBE) by EPA Method 8260B. No significant irregularities were encountered during laboratory analysis of the samples. Ground-water sampling field data sheets and the laboratory analytical report, including chain of custody documentation, are provided in Appendix A.

Gasoline range organics (GRO) were detected above the laboratory reporting limits in three of the eight wells sampled at concentrations up to 4,900 micrograms per liter ( $\mu\text{g/L}$ ) in well MW-2. Benzene was detected above the laboratory reporting limit in two of the eight wells sampled at concentrations up to 31  $\mu\text{g/L}$  in well MW-2. Ethylbenzene was detected above the laboratory reporting limit in two of the eight wells sampled at concentrations up to 18  $\mu\text{g/L}$  in well MW-7. Total Xylenes were detected above the laboratory reporting limit in two of the eight wells sampled at concentrations up to 75  $\mu\text{g/L}$  in well MW-2. TAME was detected above the laboratory reporting limit in four of the eight wells sampled at concentrations up to 45  $\mu\text{g/L}$  in well MW-8. TBA was detected above the laboratory reporting limit in two of the eight wells sampled at concentrations up to 2,800  $\mu\text{g/L}$  in well MW-5. MTBE was detected above the laboratory reporting limit in seven of the eight wells sampled at concentrations up to 4,200  $\mu\text{g/L}$  in well MW-8. The remaining fuel additives and oxygenates were not detected above their laboratory reporting limits in the eight wells sampled this quarter. Detected analyte concentrations were within the historic minimum and maximum ranges recorded for each well, with the following exceptions: MW-2's Total Xylenes concentration of 75  $\mu\text{g/L}$  was the lowest on record; MTBE concentrations for MW-4 and MW-5 were the lowest on record for those two wells. Historic laboratory analytical results are summarized in Table 1 and Table 2. A copy of the Laboratory Analytical Report, including chain of custody documentation is provided in Appendix A.

## **CLOSURE:**

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

## ATTACHMENTS:

- Drawing 1. Ground-Water Elevation Contour and Analytical Summary Map, 19 July 2006, Station #2111, 1156 Davis Street, San Leandro, California
- Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #2111, 1156 Davis St., San Leandro, CA
- Table 2. Summary of Fuel Additives Analytical Data, Station #2111, 1156 Davis St., San Leandro, CA
- Table 3. Historical Ground-Water Flow Direction and Gradient, Station #2111, 1156 Davis St., San Leandro, CA
- Table 4. Approximate Cumulative Floating Product Recovered, Station #2111, 1156 Davis Street, San Leandro, CA
- Appendix A. URS Ground-water Sampling Data Package (Includes Laboratory Report and Chain of Custody Documentation, Field and Laboratory Procedures, and Field Data Sheets)
- Appendix B. GeoTracker Upload Confirmation



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

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
<b>MW-1</b>															
6/26/2000	--		39.6	12.50	26.00	16.46	23.14	--	--	--	--	--	--	--	--
7/20/2000	--		39.6	12.50	26.00	16.89	22.71	360	110	<0.5	<0.5	2.7	2,100	--	--
9/19/2000	--		39.6	12.50	26.00	17.62	21.98	290	76	<0.5	<0.5	2.3	1,500	--	--
12/21/2000	--		39.6	12.50	26.00	17.39	22.21	257	64	2.89	1.31	4.57	1,080/1,060	--	--
3/13/2001	--		39.6	12.50	26.00	15.7	23.9	<500	52.5	<5.0	<5.0	<5.0	1,430/1,370	--	--
9/18/2001	--		39.6	12.50	26.00	18.24	21.36	<500	64	7.3	<5.0	52	810/1,100	--	--
12/28/2001	--		39.6	12.50	26.00	15.95	23.65	<500	<5.0	<5.0	5	22	1,200/1,100	--	--
3/14/2002	--		39.6	12.50	26.00	16.01	23.59	<50	<0.5	<0.5	<0.5	<0.5	34/40	--	--
4/23/2002	--		39.6	12.50	26.00	15.43	24.17	<50	<0.5	<0.5	<0.5	<0.5	30	--	--
7/17/2002	NP		39.6	12.50	26.00	17.5	22.1	<50	1.2	<0.50	<0.50	<0.50	29	6.9	6.9
10/9/2002	--	c	39.6	12.50	26.00	18.27	21.33	240	4.9	<1.0	4.1	7.0	290	6.5	6.5
1/13/2003	--	c	39.6	12.50	26.00	15.37	24.23	760	34	11	17	56	300	6.8	6.8
04/07/03	--		39.6	12.50	26.00	16.61	22.99	<50	<0.50	<0.50	<0.50	<0.50	22	6.8	6.8
7/9/2003	--		39.6	12.50	26.00	17.27	22.33	<2,500	<25	<25	<25	<25	690	6.7	6.7
02/05/2004	NP	m	39.49	12.50	26.00	16.28	23.21	2,800	31	<25	<25	<25	1,100	0.9	6.5
04/05/2004	NP		39.49	12.50	26.00	16.25	23.24	5,800	46	<25	<25	<25	1,700	1.0	--
07/13/2004	NP		39.49	12.50	26.00	17.57	21.92	<1,000	<10	<10	<10	<10	730	0.5	6.6
11/04/2004	NP		39.49	12.50	26.00	17.78	21.71	560	<5.0	<5.0	<5.0	<5.0	380	0.8	6.5
01/20/2005	NP		39.49	12.50	26.00	15.50	23.99	670	<5.0	<5.0	<5.0	<5.0	570	0.6	6.0
04/11/2005	NP		39.49	12.50	26.00	14.82	24.67	<2,500	<25	<25	<25	25	1,100	0.9	6.9
08/01/2005	NP		39.49	12.50	26.00	16.77	22.72	2,200	33	<10	110	<10	1,400	1.27	7.3
10/21/2005	NP		39.49	12.50	26.00	17.71	21.78	<2,500	<25	<25	<25	<25	970	1.17	6.6
01/18/2006	NP	n	39.49	12.50	26.00	14.70	24.79	300	<2.5	<2.5	<2.5	<2.5	330	1.07	6.6
04/14/2006	NP		39.49	12.50	26.00	13.41	26.08	330	<2.5	<2.5	<2.5	<2.5	310	0.79	6.6
7/19/2006	NP	q	39.49	12.50	26.00	15.86	23.63	<250	<2.5	<2.5	<2.5	<2.5	180	1.2	6.7
<b>MW-2</b>															
6/26/2000	--	a	37.99	12.0	26.00	14.6	23.39	--	--	--	--	--	--	--	--
7/20/2000	--		37.99	12.0	26.00	15.14	22.85	95,000	2,300	18,000	2,500	19,000	13,000	--	--
9/19/2000	--		37.99	12.0	26.00	15.95	22.04	63,000	1,200	6,300	2,000	14,000	19,000	--	--
12/21/2000	--		37.99	12.0	26.00	15.6	22.39	45,900	--	2,130	1,160	9,460	22,400/24,700	--	--



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

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
<b>MW-2 Cont.</b>															
12/21/00	--	b	37.99	12.0	26.00	--	--	5,010	360	189	213	626	54,300/89,200	--	--
3/13/2001	--	b	37.99	12.0	26.00	--	--	<20,000	525	466	408	1,460	91,700/76,000	--	--
3/13/2001	--		37.99	12.0	26.00	13.77	23.9	3,650	98.1	<5.0	<5.0	6.42	3,590/3,260	--	--
9/18/2001	--	a	37.99	12.0	26.00	16.86	21.13	--	--	--	--	--	--	--	--
12/28/2001	--		37.99	12.0	26.00	14.28	23.71	31,000	1,500	3,800	1,300	4,800	9,300/8,800	--	--
3/14/2002	--		37.99	12.0	26.00	14.15	23.84	1,800	25	43	43	270	990/960	--	--
4/23/2002	--		37.99	12.0	26.00	13.6	24.39	9,000	220	110	470	2,500	8,500	--	--
7/17/2002	NP	a, c	37.99	12.0	26.00	15.75	--	74,000	280	290	820	10,000	19,000/0.4	6.8	6.8
10/9/02	NP	g	37.99	12.0	26.00	16.69	--	--	--	--	--	--	--	--	--
1/13/03	--	g, h	37.99	12.0	26.00	13.59	24.61	--	--	--	--	--	--	--	--
04/07/03	--	g, h	37.99	12.0	26.00	14.7	23.69	--	--	--	--	--	--	--	--
07/09/03	--	g, h	37.99	12.0	26.00	15.48	22.57	--	--	--	--	--	--	--	--
02/05/2004	NP	g,m	37.86	12.0	26.00	14.43	23.53	--	--	--	--	--	--	--	--
04/05/2004	NP		37.86	12.0	26.00	14.35	23.51	2,300	33	<5.0	<5.0	200	750	0.6	--
07/13/2004	NP		37.86	12.0	26.00	15.79	22.07	59,000	380	<50	2,100	7,900	5,800	0.3	6.4
08/31/2004	--		37.86	12.0	26.00	15.89	21.97	--	--	--	--	--	--	--	--
11/04/2004	--	g, h	37.86	12.0	26.00	15.92	21.94	--	--	--	--	--	--	--	--
01/20/2005	NP	o	37.86	12.0	26.00	13.71	24.15	30,000	450	<50	1,300	3,300	7,000	0.7	6.2
04/11/2005	NP		37.86	12.0	26.00	12.70	25.16	11,000	170	<50	580	630	2,700	0.9	6.8
08/01/2005	NP		37.86	12.0	26.00	14.89	22.97	24,000	170	<50	1,100	2,700	2,700	0.64	6.9
10/21/2005	--	a	37.86	12.0	26.00	16.05	21.81	--	--	--	--	--	--	--	--
01/18/2006	NP	a	37.86	12.0	26.00	12.81	25.05	21,000	71	<50	470	1,400	1,600	1.18	6.6
04/14/2006	NP	a	37.86	12.0	26.00	12.24	25.62	7,800	78	<50	94	130	2,100	0.81	6.7
7/19/2006	NP	q	37.86	12.0	26.00	14.00	23.86	4,900	31	<10	98	75	930	1.1	6.5
<b>MW-3</b>															
6/26/2000	--		39.32	12.00	26.00	15.96	23.36	--	--	--	--	--	--	--	NA
7/20/2000	--		39.32	12.00	26.00	16.42	22.9	<50	<0.5	<0.5	<0.5	<1.0	130	--	--
9/19/2000	--		39.32	12.00	26.00	17.18	22.14	190	17	<0.5	1.4	2.4	160	--	--
12/21/2000	--		39.32	12.00	26.00	16.97	22.35	187	17.8	<0.5	2.47	2.5	143/125	--	--
3/13/2001	--		39.32	12.00	26.00	15.17	24.15	72.4	2.83	<0.5	<0.5	<0.5	126/122	--	--

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

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE		
<b>MW-3 Cont.</b>															
9/18/2001	--		39.32	12.00	26.00	17.81	21.51	140	6.4	<0.5	3.5	1.6	110/75	--	--
12/28/2001	--		39.32	12.00	26.00	15.44	23.88	130	5.9	<0.5	0.99	0.55	90/63	--	--
3/14/2002	--		39.32	12.00	26.00	15.5	23.82	<50	<0.5	<0.5	<0.5	<0.5	100/88	--	--
4/23/2002	--		39.32	12.00	26.00	14.96	24.36	<50	<0.5	<0.5	<0.5	<0.5	77	--	--
7/17/2002	NP		39.32	12.00	26.00	17.09	22.23	<50	<0.50	<0.50	<0.50	<0.50	47	7.2	7.2
10/9/2002	NP		39.32	12.00	26.00	17.87	21.45	<50	<0.50	<0.50	<0.50	<0.50	26/29	7.2	7.2
1/13/2003	NP	l	39.32	12.00	26.00	14.78	24.54	<50	<0.50	<0.50	<0.50	<0.50	59	6.8	6.8
04/07/03	NP		39.32	12.00	26.00	16.15	23.17	88	<0.50	<0.50	<0.50	<0.50	75	7.0	7.0
7/9/2003	--		39.32	12.00	26.00	16.79	22.53	100	<0.50	<0.50	<0.50	<0.50	52	6.5	6.5
02/05/2004	NP	m	39.19	12.00	26.00	15.66	23.53	240	<0.50	<0.50	<0.50	<0.50	37	0.5	--
04/05/2004	NP		39.19	12.00	26.00	15.78	23.41	140	<0.50	<0.50	<0.50	0.60	53	1.0	6.6
07/13/2004	NP		39.19	12.00	26.00	17.20	21.99	120	<0.50	<0.50	<0.50	<0.50	35	0.8	6.7
11/04/2004	NP		39.19	12.00	26.00	17.32	21.87	160	<0.50	<0.50	<0.50	<0.50	25	0.8	6.5
01/20/2005	NP		39.19	12.00	26.00	15.07	24.12	160	<0.50	<0.50	<0.50	<0.50	27	0.6	6.1
04/11/2005	NP		39.19	12.00	26.00	14.24	24.95	<50	<0.50	<0.50	<0.50	<0.50	21	0.6	6.1
08/01/2005	NP		39.19	12.00	26.00	16.29	22.90	<50	<0.50	<0.50	<0.50	<0.50	23	1.04	7.2
10/21/2005	NP		39.19	12.00	26.00	17.41	21.78	88	<0.50	<0.50	<0.50	<0.50	19	1.9	6.6
01/18/2006	NP		39.19	12.00	26.00	13.80	25.39	73	<0.50	<0.50	<0.50	<0.50	13	1.13	6.6
04/14/2006	NP		39.19	12.00	26.00	12.55	26.64	<50	<0.50	<0.50	<0.50	<0.50	6.7	0.71	6.6
7/19/2006	NP	q	39.19	12.00	26.00	15.04	24.15	<50	<0.50	<0.50	<0.50	<0.50	11	2.0	6.6
<b>MW-4</b>															
6/26/2000	--		38.1	10.0	24.00	14.59	23.51	--	--	--	--	--	--	--	NA
7/20/2000	--		38.1	10.0	24.00	15.04	23.06	97	7.9	<0.5	<0.5	1.1	51	--	--
9/19/2000	--		38.1	10.0	24.00	15.83	22.27	110	7	<0.5	<0.5	<1.0	60	--	--
12/21/2000	--		38.1	10.0	24.00	15.59	22.51	120	5.6	<0.5	1.72	<0.5	46.3/48.6	--	--
3/13/2001	--		38.1	10.0	24.00	13.73	24.37	76	0.796	<0.5	<0.5	<0.5	53.7/50	--	--
9/18/2001	--		38.1	10.0	24.00	16.5	21.6	<50	<0.5	<0.5	<0.5	<0.5	25/26	--	--
12/28/2001	--		38.1	10.0	24.00	14.03	24.07	<50	<0.5	<0.5	<0.5	<0.5	15/11	--	--
3/14/2002	--		38.1	10.0	24.00	14.1	24	<50	<0.5	<0.5	<0.5	<0.5	31/28	--	--
4/23/2002	--		38.1	10.0	24.00	13.57	24.53	<50	2.8	<0.5	<0.5	<0.5	42	--	--

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

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
<b>MW-4 Cont.</b>															
7/17/2002	NP		38.1	10.0	24.00	15.76	22.34	<50	<0.50	<0.50	<0.50	<0.50	16	7.1	7.1
10/9/2002	NP		38.1	10.0	24.00	16.59	21.51	<50	2.2	<0.50	<0.50	<0.50	20/23	7.1	7.1
1/13/2003	NP	d	38.1	10.0	24.00	13.43	24.67	52	<0.50	1.6	<0.50	<0.50	22	6.6	6.6
04/07/03	NP		38.1	10.0	24.00	14.74	23.36	65	<0.50	<0.50	<0.50	<0.50	24	6.6	6.6
7/9/2003	--		38.1	10.0	24.00	15.44	22.66	120	<0.50	<0.50	<0.50	<0.50	34	6.6	6.6
02/05/2004	NP	m	37.99	10.0	24.00	14.39	23.60	120	<0.50	<0.50	<0.50	<0.50	22	0.5	6.6
04/05/2004	NP		37.99	10.0	24.00	14.37	23.62	110	<0.50	<0.50	<0.50	<0.50	27	1.1	6.5
07/13/2004	NP		37.99	10.0	24.00	15.96	22.03	77	<0.50	<0.50	<0.50	<0.50	27	0.6	6.6
11/04/2004	NP		37.99	10.0	24.00	16.02	21.97	<50	<0.50	<0.50	<0.50	<0.50	19	1.2	6.7
01/20/2005	NP		37.99	10.0	24.00	13.72	24.27	65	<0.50	<0.50	<0.50	<0.50	18	0.6	6.1
04/11/2005	NP		37.99	10.0	24.00	12.80	25.19	51	<0.50	<0.50	<0.50	<0.50	14	0.7	6.2
08/01/2005	NP		37.99	10.0	24.00	14.88	23.11	<50	<0.50	<0.50	<0.50	<0.50	18	1.46	7.3
10/21/2005	NP		37.99	10.0	24.00	15.01	22.98	<50	<0.50	<0.50	<0.50	<0.50	15	1.24	7.6
01/18/2006	NP		37.99	10.0	24.00	12.92	25.07	<50	<0.50	<0.50	<0.50	<0.50	8.9	0.77	6.5
04/14/2006	NP		37.99	10.0	24.00	11.41	26.58	<50	<0.50	<0.50	<0.50	<0.50	4.2	0.84	6.6
7/19/2006	NP		37.99	10.0	24.00	13.86	24.13	<50	<0.50	<0.50	<0.50	<0.50	3.4	1.0	6.7
<b>MW-5</b>															
6/26/2000	--		37.21	9.50	23.50	14.27	22.94	--	--	--	--	--	--	--	--
7/20/2000	--		37.21	9.50	23.50	14.69	22.52	55	<0.5	<0.5	<0.5	<1.0	14,000	--	--
9/19/2000	--		37.21	9.50	23.50	15.36	21.85	54	<0.5	<0.5	<0.5	<1.0	13,000	--	--
12/21/2000	--		37.21	9.50	23.50	15.15	22.06	72.9	2.51	<0.5	<0.5	0.961	19,200/21,200	--	--
3/13/2001	--		37.21	9.50	23.50	13.5	23.71	<500	<5	<5	<5	<5	15,900/20,000	--	--
9/18/2001	--		37.21	9.50	23.50	15.94	21.27	<10,000	<100	<100	<100	<1,000	22,000/20,000	--	--
12/28/2001	--		37.21	9.50	23.50	13.45	23.76	<10,000	<100	<100	<100	<100	10,000/10,000	--	--
3/14/2002	--		37.21	9.50	23.50	13.82	23.39	<5,000	<50	<50	<50	<50	7,100/7,700	--	--
4/23/2002	--		37.21	9.50	23.50	13.25	23.96	<5,000	<50	<50	<50	<50	8,900	--	--
7/17/2002	NP	d	37.21	9.50	23.50	15.27	21.94	7,900	<50	<50	<50	<50	13,000	7.5	7.5
10/9/2002	NP	e	37.21	9.50	23.50	16.02	21.19	2,400	<20	<20	<20	<20	7,300/7,500	6.7	6.7
1/13/2003	NP	c, k, j	37.21	9.50	23.50	13.2	24.01	6,400	<50	<50	<50	<50	8,900	6.8	6.8
04/07/03	NP		37.21	9.50	23.50	14.42	22.79	<10,000	<100	<100	<100	<100	3,700	6.8	6.8

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

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE		
<b>MW-5 Cont.</b>															
7/9/2003	--		37.21	9.50	23.50	15.01	22.2	11,000	<50	<50	<50	<50	6,500	6.9	6.9
02/05/2004	NP	m	37.12	9.50	23.50	14.10	23.02	8,100	<50	<50	<50	<50	7,900	1.5	--
04/05/2004	NP		37.12	9.50	23.50	14.14	22.98	4,000	<25	<25	<25	<25	2,000	1.0	6.6
07/13/2004	NP		37.12	9.50	23.50	15.37	21.75	<5,000	<50	<50	<50	<50	4,000	0.8	6.7
11/04/2004	NP		37.12	9.50	23.50	15.53	21.59	7,400	<50	<50	<50	<50	6,300	3.5	6.7
01/20/2005	NP	n	37.12	9.50	23.50	13.51	23.61	6,500	<50	<50	<50	<50	6,900	0.7	6.5
04/11/2005	NP		37.12	9.50	23.50	12.75	24.37	<5,000	<50	<50	<50	<50	2,600	0.5	7.0
08/01/2005	NP		37.12	9.50	23.50	14.59	22.53	110	<1.0	<1.0	<1.0	<1.0	130	1.36	7.5
10/21/2005	NP		37.12	9.50	23.50	15.57	21.55	<250	<2.5	<2.5	<2.5	<2.5	86	1.53	6.8
01/18/2006	NP		37.12	9.50	23.50	12.60	24.52	<250	<2.5	<2.5	<2.5	<2.5	100	1.2	6.7
04/14/2006	NP		37.12	9.50	23.50	11.74	25.38	310	<2.5	<2.5	<2.5	<2.5	240	0.93	6.6
7/19/2006	NP		37.12	9.50	23.50	13.78	23.34	<50	<2.5	<2.5	<2.5	<2.5	84	1.2	6.6
<b>MW-6</b>															
6/26/2000	--		37.11	10.00	25.00	13.46	23.65	--	--	--	--	--	--	--	NA
7/20/2000	--		37.11	10.00	25.00	13.94	23.17	<50	<0.5	<0.5	<0.5	<1.0	<3.0	--	--
9/19/2000	--		37.11	10.00	25.00	14.41	22.7	<50	<0.5	<0.5	<0.5	<1.0	<3.0	--	--
12/21/2000	--		37.11	10.00	25.00	14.53	22.58	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
3/13/2001	--		37.11	10.00	25.00	12.67	24.44	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
9/18/2001	--		37.11	10.00	25.00	15.42	21.69	<50	<0.5	<0.5	<0.5	<0.5	<2.5/<2.0	--	--
12/28/2001	--		37.11	10.00	25.00	12.96	24.15	<50	<0.5	<0.5	<0.5	<0.5	12/<0.5	--	--
3/14/2002	--		37.11	10.00	25.00	12.98	24.13	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--
4/23/2002	--		37.11	10.00	25.00	12.44	24.67	<50	<0.5	<0.5	<0.5	<0.5	3.1	--	--
7/17/2002	NP		37.11	10.00	25.00	14.65	22.46	<50	<0.50	<0.50	<0.50	<0.50	<2.5	7.3	7.3
10/9/2002	NP		37.11	10.00	25.00	15.51	21.6	<50	<0.50	<0.50	<0.50	<0.50	<2.5	7.1	7.1
1/13/2003	NP		37.11	10.00	25.00	12.27	24.84	<50	<0.50	<0.50	<0.50	<0.50	<2.5	6.8	6.8
04/07/03	NP		37.11	10.00	25.00	13.61	23.5	<50	<0.50	<0.50	<0.50	<0.50	<0.50	6.6	6.6
7/9/2003	--		37.11	10.00	25.00	14.34	22.77	<50	<0.50	<0.50	<0.50	<0.50	<0.50	7	7.0
02/05/2004	--	m	37.11	10.00	25.00	13.38	23.73	--	--	--	--	--	--	--	--
04/05/2004	--		37.11	10.00	25.00	13.31	23.80	--	--	--	--	--	--	--	--
07/13/2004	NP		37.11	10.00	25.00	14.65	22.46	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.7	6.8

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

Station #2111, 1156 Davis St, San Leandro, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE		
<b>MW-6 Cont.</b>															
11/04/2004	--		37.11	10.00	25.00	14.95	22.16	--	--	--	--	--	--	--	--
01/20/2005	--		37.11	10.00	25.00	12.57	24.54	--	--	--	--	--	--	--	--
04/11/2005	--		37.11	10.00	25.00	12.05	25.06	--	--	--	--	--	--	--	--
08/01/2005	NP		37.11	10.00	25.00	13.79	23.32	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.15	7.6
10/21/2005	--		37.11	10.00	25.00	14.60	22.51	--	--	--	--	--	--	--	--
01/18/2006	--		37.11	10.00	25.00	11.80	25.31	--	--	--	--	--	--	--	--
04/14/2006	--		37.11	10.00	25.00	10.92	26.19	--	--	--	--	--	--	--	--
7/19/2006	NP		37.11	10.00	25.00	12.92	24.19	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	6.9
<b>MW-7</b>															
6/26/2000	--		38.68	12.0	27.00	14.34	24.34	--	--	--	--	--	--	--	--
7/20/2000	--		38.68	12.0	27.00	15.26	23.42	14,000	5.4	<0.5	2.8	5.9	71,000	--	--
9/19/2000	--		38.68	12.0	27.00	15.7	22.98	8,400	420	38	470	220	5,600	--	--
12/21/2000	--		38.68	12.0	27.00	16.02	22.66	--	--	--	--	--	--	--	--
3/13/2001	--		38.68	12.0	27.00	14.18	24.5	<2,000	154	63	46.3	127	75,000/160,000	--	--
9/18/2001	--		38.68	12.0	27.00	17.02	21.66	<100,000	1,900	<1,000	<1,000	2,800	90,000/370,000	--	--
12/28/2001	--		38.68	12.0	27.00	14.81	23.87	<20,000	<200	<200	<200	<200	84,000/72,000	--	--
3/14/2002	--		38.68	12.0	27.00	14.6	24.08	<50,000	<500	<500	<500	<500	85,000/85,000	--	--
4/23/2002	--		38.68	12.0	27.00	13.94	24.74	<20,000	530	200	220	800	67,000	--	--
7/17/2002	NP	d	38.68	12.0	27.00	16.27	22.41	26,000	720	<250	<250	860	120,000	6.9	6.9
10/9/2002	NP	d	38.68	12.0	27.00	17.16	21.52	110,000	1,500	4,400	820	5,400	97,000/120,000	6.8	6.8
1/13/2003	NP	f	38.68	12.0	27.00	13.82	24.86	<50,000	<500	<500	<500	2,200	33,000	6.6	6.6
04/07/03	NP		38.68	12.0	27.00	14.52	24.16	<2,500	30	<25	<25	<25	710	7.0	7.0
7/9/2003	--		38.68	12.0	27.00	15.97	22.71	66,000	<500	<500	<500	<500	36,000	6.7	6.7
02/05/2004	NP	m	38.54	12.0	27.00	14.75	23.79	55,000	300	<250	<250	<250	34,000	1.0	6.7
04/05/2004	NP		38.54	12.0	27.00	14.63	23.91	62,000	520	<250	<250	380	37,000	1.0	6.7
07/13/2004	NP		38.54	12.0	27.00	16.31	22.23	<100,000	<1,000	<1,000	<1,000	<1,000	56,000	0.7	6.7
11/04/2004	--		38.54	12.0	27.00	16.46	22.08	70,000	<500	<500	<500	<500	71,000	2.0	6.6
01/20/2005	NP	n	38.54	12.0	27.00	14.05	24.49	34,000	<250	<250	<250	<250	36,000	0.6	6.3
04/11/2005	NP		38.54	12.0	27.00	12.55	25.99	<2,500	46	<25	<25	<25	1,200	0.7	6.8
08/01/2005	NP		38.54	12.0	27.00	15.11	23.43	<25,000	<250	<250	<250	<250	4,800	1.78	7.3

**Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses**  
**Station #2111, 1156 Davis St, San Leandro, CA**

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
<b>MW-7 Cont.</b>															
10/21/2005	NP	p	38.54	12.0	27.00	15.65	22.89	14,000	350	<100	<100	110	12,000	1.41	6.6
01/18/2006	NP		38.54	12.0	27.00	12.60	25.94	16,000	310	<100	<100	110	13,000	0.87	6.7
04/14/2006	NP		38.54	12.0	27.00	12.09	26.45	<10,000	<100	<100	<100	<100	4,700	0.88	6.9
7/19/2006	NP	q	38.54	12.0	27.00	13.58	24.96	1,300	23	<10	18	26	1,600	1.1	6.8
<b>MW-8</b>															
02/05/2004	P	m	38.91	--	--	15.61	23.30	3,600	<25	<25	<25	<25	1,900	6.9	6.8
04/05/2004	P		38.91	--	--	15.64	23.27	1,900	<10	<10	<10	<10	1,200	3.2	6.7
07/13/2004	P		38.91	--	--	17.22	21.69	<1,000	<10	<10	<10	<10	760	1.6	6.7
11/04/2004	P		38.91	--	--	17.19	21.72	960	<5.0	<5.0	<5.0	<5.0	820	1.8	6.7
01/20/2005	P		38.91	--	--	15.25	23.66	<2,500	<25	<25	<25	<25	1,400	1.5	6.4
04/11/2005	P		38.91	--	--	14.17	24.74	700	<5.0	<5.0	<5.0	<5.0	610	1.1	7.1
08/01/2005	P		38.91	--	--	16.10	22.81	<1,000	<10	<10	<10	<10	900	2.58	7.7
10/21/2005	P	n	38.91	--	--	17.18	21.73	530	<5.0	<5.0	<5.0	<5.0	490	1.4	6.7
01/18/2006	P		38.91	--	--	13.60	25.31	<500	<5.0	<5.0	<5.0	<5.0	500	2.28	6.6
04/14/2006	P		38.91	--	--	12.36	26.55	<500	<5.0	<5.0	<5.0	<5.0	300	1.97	6.6
7/19/2006	P		38.91	--	--	14.75	24.16	4,500	<25	<25	<25	<25	4,200	1.2	6.6

ABBREVIATIONS:

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

FOOTNOTES:

a = Product sheen noted.  
b = Well was sampled after batch extraction event.  
c = Chromatogram Pattern: Gasoline C6-C10 for GRO/TPH-g.  
d = Hydrocarbon pattern was present in the requested fuel quantitation range but did not resemble the pattern of the requested fuel for GRO/TPH-g.  
e = Discrete peak @C6-C7 for GRO/TPH-g.  
f = This sample was analyzed beyond the EPA recommended holding time for TPH-g, benzene, toluene, ethylbenzene, and total xylenes (BTEX), and MTBE. The results may still be useful for their intended purpose.  
g = Well not sampled due to the detection of free product (FP).  
h = GWE adjusted for FP: (thickness of FP x 0.8) + measured GWE.  
j = The closing calibration for benzene and total xylenes was outside acceptance limits by 1%. This should be considered in evaluating the result. The average % difference for all analytes met the 15% requirement and the QC suggested that calibration linearity was not a factor.  
k = The closing calibration was outside acceptance limits by 6%. This should be considered in evaluating the result. The average % difference for all analytes met the 15% requirement and the QC suggested that calibration linearity was not a factor.  
l = Toluene and MTBE were not confirmed using a secondary column in accordance to client contract.  
m = TOC elevations re-surveyed to NAVD '88 on February 23, 2004.  
n = Hydrocarbon result for GRO partly due to indiv. peak(s) in quantitative range.  
o = Light to moderate sheen.  
p = Result for MTBE partly due to individual peak(s) in quant. range.  
q = Gauged with tubing in well.  
r = Calib. verif. is within method limits but outside contract limits.

NOTES:

Beginning with the second quarter 2003 sampling event (04/07/03), TPH-g, BTEX, and MTBE analyzed by EPA method 8260B. Prior to 04/07/03, TPH-g was analyzed by EPA method 8015 modified and MTBE was analyzed by EPA methods 8020/ 8260B.

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

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

Values for DO and pH were obtained through field measurements.

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 #2111, 1156 Davis St, San Leandro, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>MW-1</b>									
4/7/2003	<100	<20	1,100	<0.50	<0.50	<0.50	--	--	
7/9/2003	<5,000	<1,000	690	<25	<25	<25	--	--	
02/05/2004	<5,000	<1,000	1,100	<25	<25	32	<25	<25	
04/05/2004	<5,000	<1,000	1,700	<25	<25	38	<25	<25	a
07/13/2004	<2,000	780	730	<10	<10	19	<10	<10	a
11/04/2004	<1,000	<200	380	<5.0	<5.0	12	<5.0	<5.0	
01/20/2005	<1,000	<200	570	<5.0	<5.0	17	<5.0	<5.0	a
04/11/2005	<5,000	<1,000	1,100	<25	<25	34	<25	<25	
08/01/2005	<2,000	<400	1,400	<10	<10	40	<10	<10	
10/21/2005	<5,000	<1,000	970	<25	<25	<25	<25	<25	
01/18/2006	<1,500	<100	330	<2.5	<2.5	9.7	<2.5	<2.5	
04/14/2006	<1,500	<100	310	<2.5	<2.5	9.3	<2.5	<2.5	
7/19/2006	<1,500	<100	180	<2.5	<2.5	3.2	<2.5	<2.5	
<b>MW-2</b>									
02/05/2004	--	--	--	--	--	--	--	--	
04/05/2004	<1,000	<200	750	<5.0	<5.0	<5.0	<5.0	<5.0	
07/13/2004	<10,000	12,000	5,800	<50	<50	<50	<50	<50	a
08/31/2004	--	--	--	--	--	--	--	--	a
11/04/2004	--	--	--	--	--	--	--	--	
01/20/2005	<10,000	<2,000	7,000	<50	<50	<50	<50	<50	a
04/11/2005	<10,000	<2,000	2,700	<50	<50	<50	<50	<50	
08/01/2005	<10,000	<2,000	2,700	<50	<50	<50	<50	<50	
10/21/2005	--	--	--	--	--	--	--	--	
01/18/2006	<30,000	<2,000	1,600	<50	<50	<50	<50	<50	
04/14/2006	<30,000	<2,000	2,100	<50	<50	<50	<50	<50	
7/19/2006	<6,000	<400	930	<10	<10	<10	<10	<10	
<b>MW-3</b>									
4/7/2003	<100	<20	75	<0.50	<0.50	6.5	--	--	
7/9/2003	<100	<20	52	<0.50	<0.50	4.2	--	--	
02/05/2004	<100	<20	37	<0.50	<0.50	3.1	<0.50	<0.50	



**Table 2. Summary of Fuel Additives Analytical Data**  
**Station #2111, 1156 Davis St, San Leandro, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>MW-3 Cont.</b>									
04/05/2004	<100	<20	53	<0.50	<0.50	3.7	<0.50	<0.50	a
07/13/2004	<100	44	35	<0.50	<0.50	3.2	<0.50	<0.50	
11/04/2004	<100	<20	25	<0.50	<0.50	2.2	<0.50	<0.50	
01/20/2005	<100	<20	27	<0.50	<0.50	2.6	<0.50	<0.50	
04/11/2005	<100	<20	21	<0.50	<0.50	2.0	<0.50	<0.50	
08/01/2005	<100	<20	23	<0.50	<0.50	1.9	<0.50	<0.50	
10/21/2005	<100	<20	19	<0.50	<0.50	2.0	<0.50	<0.50	
01/18/2006	<300	<20	13	<0.50	<0.50	1.3	<0.50	<0.50	
04/14/2006	<300	<20	6.7	<0.50	<0.50	0.61	<0.50	<0.50	
7/19/2006	<300	<20	11	<0.50	<0.50	0.72	<0.50	<0.50	r
<b>MW-4</b>									
4/7/2003	<100	<20	24	<0.50	<0.50	7.3	--	--	
7/9/2003	<100	<20	34	<0.50	<0.50	9.8	--	--	
02/05/2004	<100	<20	22	<0.50	<0.50	6.2	<0.50	<0.50	
04/05/2004	<100	<20	27	<0.50	<0.50	7.2	<0.50	<0.50	a
07/13/2004	<100	26	27	<0.50	<0.50	7.4	<0.50	<0.50	a
11/04/2004	<100	<20	19	<0.50	<0.50	5.1	<0.50	<0.50	
01/20/2005	<100	<20	18	<0.50	<0.50	5.2	<0.50	<0.50	
04/11/2005	<100	<20	14	<0.50	<0.50	4.0	<0.50	<0.50	
08/01/2005	<100	<20	18	<0.50	<0.50	3.9	<0.50	<0.50	
10/21/2005	<100	<20	15	<0.50	<0.50	4.6	<0.50	<0.50	
01/18/2006	<300	<20	8.9	<0.50	<0.50	2.5	<0.50	<0.50	
04/14/2006	<300	<20	4.2	<0.50	<0.50	1.3	<0.50	<0.50	
7/19/2006	<300	<20	3.4	<0.50	<0.50	0.69	<0.50	<0.50	r
<b>MW-5</b>									
4/7/2003	<20,000	<4,000	3,700	<100	<100	<100	--	--	
7/9/2003	<10,000	<2,000	6,500	<50	<50	<50	--	--	
02/05/2004	<10,000	<2,000	7,900	<50	<50	<50	<50	<50	a
04/05/2004	<5,000	<1,000	2,000	<25	<25	<25	<25	<25	a
07/13/2004	<10,000	3,200	4,000	<50	<50	<50	<50	<50	a

**Table 2. Summary of Fuel Additives Analytical Data**  
**Station #2111, 1156 Davis St, San Leandro, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>MW-5 Cont.</b>									
11/04/2004	<10,000	<2,000	6,300	<50	<50	<50	<50	<50	
01/20/2005	<10,000	<2,000	6,900	<50	<50	<50	<50	<50	a
04/11/2005	<10,000	3,600	2,600	<50	<50	<50	<50	<50	
08/01/2005	<200	1,600	130	<1.0	<1.0	<1.0	<1.0	<1.0	
10/21/2005	<500	1,400	86	<2.5	<2.5	<2.5	<2.5	<2.5	
01/18/2006	<1,500	2,200	100	<2.5	<2.5	<2.5	<2.5	<2.5	
04/14/2006	<1,500	2,100	240	<2.5	<2.5	<2.5	<2.5	<2.5	
7/19/2006	<1,500	2,800	84	<2.5	<2.5	<2.5	<2.5	<2.5	r
<b>MW-6</b>									
4/7/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
7/9/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
02/05/2004	--	--	--	--	--	--	--	--	
04/05/2004	--	--	--	--	--	--	--	--	
07/13/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
11/04/2004	--	--	--	--	--	--	--	--	
01/20/2005	--	--	--	--	--	--	--	--	
04/11/2005	--	--	--	--	--	--	--	--	
08/01/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
10/21/2005	--	--	--	--	--	--	--	--	
01/18/2006	--	--	--	--	--	--	--	--	
04/14/2006	--	--	--	--	--	--	--	--	
7/19/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	r
<b>MW-7</b>									
4/7/2003	<5,000	<1,000	710	<25	<25	<25	--	--	
7/9/2003	<100,000	<20,000	36,000	<500	<500	<500	--	--	
02/05/2004	<50,000	<10,000	34,000	<250	<250	<250	<250	<250	
04/05/2004	<50,000	<10,000	37,000	<250	<250	<250	<250	<250	
07/13/2004	<200,000	<40,000	56,000	<1,000	<1,000	1,300	<1,000	<1,000	
11/04/2004	<100,000	<20,000	71,000	<500	<500	<500	<500	<500	
01/20/2005	<50,000	<10,000	36,000	<250	<250	<250	<250	<250	a

**Table 2. Summary of Fuel Additives Analytical Data**  
**Station #2111, 1156 Davis St, San Leandro, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
<b>MW-7 Cont.</b>									
04/11/2005	<5,000	<1,000	1,200	<25	<25	<25	<25	<25	
08/01/2005	<50,000	<10,000	4,800	<250	<250	<250	<250	<250	
10/21/2005	<20,000	24,000	12,000	<100	<100	<100	<100	<100	
01/18/2006	<60,000	15,000	13,000	<100	<100	<100	<100	<100	
04/14/2006	<60,000	<4,000	4,700	<100	<100	<100	<100	<100	
7/19/2006	<6,000	720	1,600	<10	<10	<10	<10	<10	
<b>MW-8</b>									
02/05/2004	<5,000	<1,000	1,900	<25	<25	<25	<25	<25	
04/05/2004	<2,000	<400	1,200	<10	<10	12	<10	<10	a
07/13/2004	<2,000	770	760	<10	<10	<10	<10	<10	a
11/04/2004	<1,000	<200	820	<5.0	<5.0	9.6	<5.0	<5.0	
01/20/2005	<5,000	<1,000	1,400	<25	<25	<25	<25	<25	a
04/11/2005	<1,000	<200	610	<5.0	<5.0	8.1	<5.0	<5.0	
08/01/2005	<2,000	<400	900	<10	<10	<10	<10	<10	
10/21/2005	<1,000	<200	490	<5.0	<5.0	<5.0	<5.0	<5.0	
01/18/2006	<3,000	<200	500	<5.0	<5.0	5.2	<5.0	<5.0	
04/14/2006	<3,000	<200	300	<5.0	<5.0	<5.0	<5.0	<5.0	
7/19/2006	<15,000	<1,000	4,200	<25	<25	45	<25	<25	

ABBREVIATIONS:

-- = Not analyzed/applicable/measured/available

< = Not detected at or above specified 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 continuing calibration verification for ethanol was outside of client contractual acceptance limits. However, it was within method acceptance limits. The data should still be considered useful for its intended purpose.

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 #2111, 1156 Davis St, San Leandro, CA**

<b>Date Sampled</b>	<b>Approximate Flow Direction</b>	<b>Approximate Hydraulic Gradient</b>
7/20/2000	West-Northwest	0.006
9/19/2000	West-Northwest	0.004
12/21/2000	West-Northwest	0.004
3/13/2001	West-Northwest	0.005
5/30/2001	West-Northwest	0.004
9/18/2001	West-Northwest	0.003
12/28/2001	West-Northwest	0.003
3/14/2002	West	0.004
4/23/2002	West	0.006
7/17/2002	West	0.003
10/9/2002	West	0.002
1/13/2003	Southwest	0.0043
4/7/2003	West-Northwest	0.009 to 0.011
7/9/2003	West-Northwest	0.004
10/1/2003	West	0.002
2/5/2004	West	0.004
4/5/2004	West-Southwest	0.004
7/13/2004	West-Southwest	0.003
11/4/2004	West	0.003
1/20/2005	West	0.009
4/11/2005	North to West	0.009 to 0.01
8/1/2005	West to Northwest	0.006 to 0.004
10/21/2005	West	0.008
1/18/2006	North and West	0.01
4/14/2006	South	0.008
7/19/2006	Northwest to Southwest	0.004 to 0.008

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

**Table 4. Approximate Cumulative Floating Product Recovered  
Station #2111, 1156 Davis Street, San Leandro, CA**

<b>Well Designation</b>	<b>Product Recovery Field Date</b>	<b>Floating Product Thickness (feet)</b>	<b>Floating Product Recovered (gallons)</b>
MW-2	06/28/99	0.45	0.30
MW-2	06/30/99	0.015	0.01
MW-2	07/07/99	0.06	0.04
MW-2	07/23/99	0.008	0.01
MW-2	08/25/99	0.02	0.01
MW-2	09/21/99	0.01	0.01
MW-2	11/10/99	ND	0.00
MW-2	02/09/00	ND	0.00
MW-2	04/23/02	ND	0.00
MW-2	07/17/02	Sheen	0.00
MW-2	10/9/2002 (1)	NA	0.00
MW-2	01/13/03	0.26	0.13
MW-2	02/14/03	ND	0.00
MW-2	03/24/03	ND	0.00
MW-2	04/07/03	0.05	0.00
MW-2	05/23/03	ND	0.00
MW-2	06/24/03	0.03	0.01
MW-2	07/09/03	0.07	0.03
MW-2	07/31/03	0.05	0.03
MW-2	09/04/03	0.02	0.01
MW-2	10/01/03	0.07	0.02
MW-2	11/12/03	0.59	0.36
MW-2	12/11/03	0.05	0.07
MW-2	02/05/04	0.13	0.02
MW-2	02/16/04	0.02	0.01
MW-2	03/11/04	ND	0.00
MW-2	03/30/04	ND	0.00
MW-2	04/05/04	ND	0.00
MW-2	07/13/04	ND	0.00
MW-2	08/31/04	ND	0.00
MW-2	09/07/04	ND	0.00
MW-2	11/04/04	0.22	0.14
MW-2	11/29/04	0.02	0.05
MW-2	12/15/04	0.24	0.16
MW-2	01/20/05	ND	0.00
MW-2	02/04/05	Sheen	0.00
MW-2	03/23/05	Sheen	0.00
MW-2	04/11/05	ND	0.00
MW-2	05/12/05	ND	0.00
MW-2	06/20/05	ND	0.00
MW-2	08/01/05	ND	0.00
MW-2	08/24/05	ND	0.00
MW-2	09/16/05	ND	0.00
MW-2	10/21/05	Sheen	0.00
MW-2	01/18/06	Sheen	0.00
MW-2	04/14/06	Sheen	0.00
MW-2	07/19/06	ND	0.00
<b>Approximate Cumulative Floating Product Recovered (gallons):</b>			<b>1.44</b>

**FOOTNOTES:**

(1) Free product encountered, but unable to gauge.

**APPENDIX A**

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



August 10, 2006

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

**Groundwater Sampling Data Package**  
ARCO Service Station #2111  
1156 Davis Street  
San Leandro, CA  
Field Work Performed: 07/19/06

**General Information**

*Data Submittal Prepared/Reviewed by:* Alok Kolekar

*Phone Number:* 510-874-3152

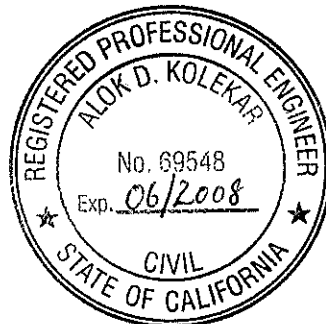
*On-Site Supplier Representative:* Blaine Tech

*Scope of Work Performed:* Groundwater Monitoring in accordance with 3rd Quarter protocols as identified in the Quarterly Monitoring Program Table in the Field and Laboratory Procedures Attachment.

*Variations from Work Scope:* None

This submittal presents the tabulation of data collected in association with routine groundwater monitoring. The attachments include, at a minimum, sampling procedures, field data collected, laboratory results, chain of custody documentation, and waste management activities. The information is being provided to BP-ARCO's Scoping Supplier for use in preparing a report for regulatory submittal. This submittal is limited to presentation of collected data and does not include data interpretation or conclusions or recommendations. Any questions concerning this submittal should be addressed to the Preparer/Reviewer identified above.

Alok D. Kolekar, P.E.  
Project Manger



cc: Paul Supple, Atlantic Richfield Company (RM), electronic copy uploaded to ENFOS





## **Attachments**

Field and Laboratory Procedures

Laboratory Report

Chain of Custody Documentation

Field Data Sheets

Well Gauging Data

Well Monitoring Data Sheets

## **FIELD & LABORATORY PROCEDURES**

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### **Sampling Procedures**

The sampling procedure for each well consists first of measuring the water level and depth to bottom, and checking for the presence of free phase petroleum product (free product), using either an electronic indicator and a clear Teflon™ bailer or an oil-water interface probe. Wells not containing free product are purged approximately three casing volumes of water (or until dewatered) using a centrifugal pump, gas displacement pump, or bailer. Equipment and purging method used for the current sampling event is noted on the attached field data sheets. During purging, temperature, pH, and electrical conductivity are monitored to document that these parameters are stable prior to collecting samples. After purging, water levels are allowed to partially (approximately 80%) recover. Groundwater samples (both purge and no purge) are collected using a Teflon bailer, placed into appropriate Environmental Protection Agency- (EPA) approved containers, labeled, logged onto chain-of-custody records, and transported on ice to a California State-certified laboratory. Wells with free product are not sampled and free product is removed according to California Code of Regulation, Title 23, Div. 3, Chap. 16, Section 2655, UST Regulations.

### **Laboratory Procedures**

The groundwater samples were analyzed for the presence of the chemicals mentioned in the chain of custody using standard EPA methods. The methods of analysis for the groundwater samples are documented in the certified analytical report. The certified analytical reports and chain-of-custody record are presented in this attachment. The analytical data provided by the laboratory approved by RM have been reviewed and verified by that laboratory.

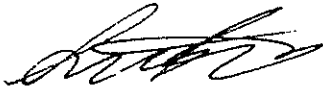
7 August, 2006

Alok Kolekar  
URS Corporation [Arco]  
1333 Broadway, Suite 800  
Oakland, CA 94612

RE: ARCO #2111, San Leandro, CA  
Work Order: MPG0697

Enclosed are the results of analyses for samples received by the laboratory on 07/20/06 15:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Lisa Race  
Senior Project Manager

CA ELAP Certificate # 1210

The results in this laboratory report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPGCLN Technical Specifications, applicable Federal, State, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPGCLN. This entire report was reviewed and approved for release.

URS Corporation [Arco] 1333 Broadway, Suite 800 Oakland CA, 94612	Project: ARCO #2111, San Leandro, CA Project Number: G0C28-0015 Project Manager: Alok Kolekar	MPG0697 Reported: 08/07/06 11:15
-------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------	----------------------------------------

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MPG0697-01	Water	07/19/06 13:55	07/20/06 15:00
MW-2	MPG0697-02	Water	07/19/06 14:36	07/20/06 15:00
MW-3	MPG0697-03	Water	07/19/06 13:40	07/20/06 15:00
MW-4	MPG0697-04	Water	07/19/06 13:25	07/20/06 15:00
MW-5	MPG0697-05	Water	07/19/06 14:15	07/20/06 15:00
MW-6	MPG0697-06	Water	07/19/06 13:15	07/20/06 15:00
MW-7	MPG0697-07	Water	07/19/06 14:55	07/20/06 15:00
MW-8	MPG0697-08	Water	07/19/06 15:27	07/20/06 15:00
TB-2111-071906	MPG0697-09	Water	07/19/06 00:00	07/20/06 15:00

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies.

These samples were received with intact custody seals.

URS Corporation [Arco]  
1333 Broadway, Suite 800  
Oakland CA, 94612

Project: ARCO #2111, San Leandro, CA  
Project Number: G0C28-0015  
Project Manager: Alok Kolekar

MPG0697  
Reported:  
08/07/06 11:15

**Total Purgeable Hydrocarbons by GC/MS (CA LUFT)**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (MPG0697-01) Water</b> Sampled: 07/19/06 13:55 Received: 07/20/06 15:00									
Gasoline Range Organics (C4-C12)	ND	250	ug/l	5	6G27011	07/27/06	07/27/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		97 %	60-145		"	"	"	"	
<b>MW-2 (MPG0697-02) Water</b> Sampled: 07/19/06 14:36 Received: 07/20/06 15:00									
Gasoline Range Organics (C4-C12)	4900	1000	ug/l	20	6G29003	07/29/06	07/29/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		92 %	60-145		"	"	"	"	
<b>MW-3 (MPG0697-03) Water</b> Sampled: 07/19/06 13:40 Received: 07/20/06 15:00									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	6G27026	07/27/06	07/28/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		83 %	60-145		"	"	"	"	
<b>MW-4 (MPG0697-04) Water</b> Sampled: 07/19/06 13:25 Received: 07/20/06 15:00									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	6G27026	07/27/06	07/28/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		85 %	60-145		"	"	"	"	
<b>MW-5 (MPG0697-05RE1) Water</b> Sampled: 07/19/06 14:15 Received: 07/20/06 15:00									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	6G28011	07/28/06	07/28/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		85 %	60-145		"	"	"	"	
<b>MW-6 (MPG0697-06) Water</b> Sampled: 07/19/06 13:15 Received: 07/20/06 15:00									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	6G27026	07/27/06	07/28/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		87 %	60-145		"	"	"	"	
<b>MW-7 (MPG0697-07) Water</b> Sampled: 07/19/06 14:55 Received: 07/20/06 15:00									
Gasoline Range Organics (C4-C12)	1300	1000	ug/l	20	6G29003	07/29/06	07/29/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		92 %	60-145		"	"	"	"	

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**Total Purgeable Hydrocarbons by GC/MS (CA LUFT)**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-8 (MPG0697-08) Water</b> <b>Sampled: 07/19/06 15:27</b> <b>Received: 07/20/06 15:00</b>									
<b>Gasoline Range Organics (C4-C12)</b>	<b>4500</b>	<b>2500</b>	<b>ug/l</b>	<b>50</b>	<b>6G29003</b>	<b>07/29/06</b>	<b>07/29/06</b>	<b>LUFT GCMS</b>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		<i>94 %</i>	<i>60-145</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	

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**Volatile Organic Compounds by EPA Method 8260B**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (MPG0697-01) Water</b> Sampled: 07/19/06 13:55 Received: 07/20/06 15:00									
tert-Amyl methyl ether	3.2	2.5	ug/l	5	6G27011	07/27/06	07/27/06	EPA 8260B	
Benzene	ND	2.5	"	"	"	"	"	"	
tert-Butyl alcohol	ND	100	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.5	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	"	"	
Ethanol	ND	1500	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
Methyl tert-butyl ether	180	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Xylenes (total)	ND	2.5	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		97 %	60-145	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		75 %	60-115	"	"	"	"	"	
Surrogate: Dibromofluoromethane		104 %	75-130	"	"	"	"	"	
Surrogate: Toluene-d8		81 %	70-130	"	"	"	"	"	
<b>MW-2 (MPG0697-02) Water</b> Sampled: 07/19/06 14:36 Received: 07/20/06 15:00									
tert-Amyl methyl ether	ND	10	ug/l	20	6G29003	07/29/06	07/29/06	EPA 8260B	
Benzene	31	10	"	"	"	"	"	"	
tert-Butyl alcohol	ND	400	"	"	"	"	"	"	
Di-isopropyl ether	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	10	"	"	"	"	"	"	
Ethanol	ND	6000	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	10	"	"	"	"	"	"	
Ethylbenzene	98	10	"	"	"	"	"	"	
Methyl tert-butyl ether	930	10	"	"	"	"	"	"	
Toluene	ND	10	"	"	"	"	"	"	
Xylenes (total)	75	10	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		92 %	60-145	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98 %	60-115	"	"	"	"	"	
Surrogate: Dibromofluoromethane		91 %	75-130	"	"	"	"	"	
Surrogate: Toluene-d8		100 %	70-130	"	"	"	"	"	

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**Volatile Organic Compounds by EPA Method 8260B**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-3 (MPG0697-03) Water</b> <b>Sampled: 07/19/06 13:40</b> <b>Received: 07/20/06 15:00</b>									
tert-Amyl methyl ether	0.72	0.50	ug/l	1	6G27026	07/27/06	07/28/06	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	300	"	"	"	"	"	"	IC
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	11	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		83 %	60-145	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		84 %	60-115	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		92 %	75-130	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		85 %	70-130	"	"	"	"	"	
<b>MW-4 (MPG0697-04) Water</b> <b>Sampled: 07/19/06 13:25</b> <b>Received: 07/20/06 15:00</b>									
tert-Amyl methyl ether	0.69	0.50	ug/l	1	6G27026	07/27/06	07/28/06	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	300	"	"	"	"	"	"	IC
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	3.4	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		85 %	60-145	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		78 %	60-115	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		96 %	75-130	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		82 %	70-130	"	"	"	"	"	



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**Volatile Organic Compounds by EPA Method 8260B**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-5 (MPG0697-05) Water</b> <b>Sampled: 07/19/06 14:15</b> <b>Received: 07/20/06 15:00</b>									
tert-Amyl methyl ether	ND	2.5	ug/l	5	6G27026	07/27/06	07/28/06	EPA 8260B	
Benzene	ND	2.5	"	"	"	"	"	"	
tert-Butyl alcohol	2800	100	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.5	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	"	"	
Ethanol	ND	1500	"	"	"	"	"	"	IC
Ethyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
Methyl tert-butyl ether	84	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Xylenes (total)	ND	2.5	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		88 %	60-145	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		80 %	60-115	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		95 %	75-130	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		80 %	70-130	"	"	"	"	"	
<b>MW-6 (MPG0697-06) Water</b> <b>Sampled: 07/19/06 13:15</b> <b>Received: 07/20/06 15:00</b>									
tert-Amyl methyl ether	ND	0.50	ug/l	1	6G27026	07/27/06	07/28/06	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	300	"	"	"	"	"	"	IC
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		87 %	60-145	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		83 %	60-115	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		95 %	75-130	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		86 %	70-130	"	"	"	"	"	

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**Volatile Organic Compounds by EPA Method 8260B**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-7 (MPG0697-07) Water</b> <b>Sampled: 07/19/06 14:55</b> <b>Received: 07/20/06 15:00</b>									
tert-Amyl methyl ether	ND	10	ug/l	20	6G29003	07/29/06	07/29/06	EPA 8260B	
<b>Benzene</b>	<b>23</b>	10	"	"	"	"	"	"	
tert-Butyl alcohol	720	400	"	"	"	"	"	"	
Di-isopropyl ether	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	10	"	"	"	"	"	"	
1,2-Dichloroethane	ND	10	"	"	"	"	"	"	
Ethanol	ND	6000	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	10	"	"	"	"	"	"	
Ethylbenzene	18	10	"	"	"	"	"	"	
Methyl tert-butyl ether	1600	10	"	"	"	"	"	"	
Toluene	ND	10	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>26</b>	10	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		92 %	60-145	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		93 %	60-115	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		94 %	75-130	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		92 %	70-130	"	"	"	"	"	
<b>MW-8 (MPG0697-08) Water</b> <b>Sampled: 07/19/06 15:27</b> <b>Received: 07/20/06 15:00</b>									
tert-Amyl methyl ether	45	25	ug/l	50	6G29003	07/29/06	07/29/06	EPA 8260B	
Benzene	ND	25	"	"	"	"	"	"	
tert-Butyl alcohol	ND	1000	"	"	"	"	"	"	
Di-isopropyl ether	ND	25	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	25	"	"	"	"	"	"	
1,2-Dichloroethane	ND	25	"	"	"	"	"	"	
Ethanol	ND	15000	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	25	"	"	"	"	"	"	
Ethylbenzene	ND	25	"	"	"	"	"	"	
Methyl tert-butyl ether	4200	25	"	"	"	"	"	"	
Toluene	ND	25	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>ND</b>	25	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94 %	60-145	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		100 %	60-115	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		97 %	75-130	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		90 %	70-130	"	"	"	"	"	

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**Total Purgeable Hydrocarbons by GC/MS (CA LUFT) - Quality Control**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 6G27011 - EPA 5030B P/T / LUFT GCMS**

<b>Blank (6G27011-BLK1)</b>				Prepared & Analyzed: 07/27/06						
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	2.51		"	2.50		100	60-145			
<b>Laboratory Control Sample (6G27011-BS1)</b>				Prepared & Analyzed: 07/27/06						
Gasoline Range Organics (C4-C12)	709	50	ug/l	700		101	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.19		"	2.50		88	60-145			
<b>Laboratory Control Sample (6G27011-BS2)</b>				Prepared & Analyzed: 07/27/06						
Gasoline Range Organics (C4-C12)	449	50	ug/l	440		102	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.30		"	2.50		92	60-145			
<b>Matrix Spike (6G27011-MS1)</b>				Source: MPG0648-11		Prepared & Analyzed: 07/27/06				
Gasoline Range Organics (C4-C12)	3800	250	ug/l	3500	230	102	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.43		"	2.50		97	60-145			
<b>Matrix Spike Dup (6G27011-MSD1)</b>				Source: MPG0648-11		Prepared & Analyzed: 07/27/06				
Gasoline Range Organics (C4-C12)	3820	250	ug/l	3500	230	103	75-140	0.5	20	
Surrogate: 1,2-Dichloroethane-d4	2.39		"	2.50		96	60-145			

**Batch 6G27026 - EPA 5030B P/T / LUFT GCMS**

<b>Blank (6G27026-BLK1)</b>				Prepared: 07/27/06 Analyzed: 07/28/06						
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	2.02		"	2.50		81	60-145			
<b>Laboratory Control Sample (6G27026-BS1)</b>				Prepared: 07/27/06 Analyzed: 07/28/06						
Gasoline Range Organics (C4-C12)	386	50	ug/l	440		88	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.12		"	2.50		85	60-145			

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**Total Purgeable Hydrocarbons by GC/MS (CA LUFT) - Quality Control**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 6G27026 - EPA 5030B P/T / LUFT GCMS**

<b>Matrix Spike (6G27026-MS1)</b>	<b>Source: MPG0697-05</b>			<b>Prepared: 07/27/06</b>		<b>Analyzed: 07/28/06</b>				
Gasoline Range Organics (C4-C12)	2110	250	ug/l	2200	ND	96	75-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.17		"	2.50		87	60-145			
<b>Matrix Spike Dup (6G27026-MSD1)</b>	<b>Source: MPG0697-05</b>			<b>Prepared: 07/27/06</b>		<b>Analyzed: 07/28/06</b>				
Gasoline Range Organics (C4-C12)	2070	250	ug/l	2200	ND	94	75-140	2	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.11		"	2.50		84	60-145			

**Batch 6G28011 - EPA 5030B P/T / LUFT GCMS**

<b>Blank (6G28011-BLK1)</b>				<b>Prepared &amp; Analyzed: 07/28/06</b>						
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.41		"	2.50		96	60-145			
<b>Laboratory Control Sample (6G28011-BS1)</b>				<b>Prepared &amp; Analyzed: 07/28/06</b>						
Gasoline Range Organics (C4-C12)	697	50	ug/l	700		100	75-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.17		"	2.50		87	60-145			
<b>Laboratory Control Sample (6G28011-BS2)</b>				<b>Prepared &amp; Analyzed: 07/28/06</b>						
Gasoline Range Organics (C4-C12)	415	50	ug/l	440		94	75-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.14		"	2.50		86	60-145			
<b>Matrix Spike (6G28011-MS1)</b>	<b>Source: MPG0692-02</b>			<b>Prepared &amp; Analyzed: 07/28/06</b>						
Gasoline Range Organics (C4-C12)	7300	250	ug/l	3500	3800	100	75-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.09		"	2.50		84	60-145			
<b>Matrix Spike Dup (6G28011-MSD1)</b>	<b>Source: MPG0692-02</b>			<b>Prepared &amp; Analyzed: 07/28/06</b>						
Gasoline Range Organics (C4-C12)	6790	250	ug/l	3500	3800	85	75-140	7	20	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	1.93		"	2.50		77	60-145			

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**Total Purgeable Hydrocarbons by GC/MS (CA LUFT) - Quality Control**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 6G29003 - EPA 5030B P/T / LUFT GCMS**

<b>Blank (6G29003-BLK1)</b>		<b>Prepared &amp; Analyzed: 07/29/06</b>								
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	2.41		"	2.50		96	60-145			
<b>Laboratory Control Sample (6G29003-BS1)</b>		<b>Prepared &amp; Analyzed: 07/29/06</b>								
Gasoline Range Organics (C4-C12)	474	50	ug/l	440		108	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.11		"	2.50		84	60-145			
<b>Matrix Spike (6G29003-MS1)</b>		<b>Source: MPG0698-10</b>		<b>Prepared &amp; Analyzed: 07/29/06</b>						
Gasoline Range Organics (C4-C12)	51600	5000	ug/l	44000	ND	117	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.17		"	2.50		87	60-145			
<b>Matrix Spike Dup (6G29003-MSD1)</b>		<b>Source: MPG0698-10</b>		<b>Prepared &amp; Analyzed: 07/29/06</b>						
Gasoline Range Organics (C4-C12)	51400	5000	ug/l	44000	ND	117	75-140	0.4	20	
Surrogate: 1,2-Dichloroethane-d4	2.13		"	2.50		85	60-145			

URS Corporation [Arco]  
1333 Broadway, Suite 800  
Oakland CA, 94612

Project: ARCO #2111, San Leandro, CA  
Project Number: G0C28-0015  
Project Manager: Alok Kolekar

MPG0697  
Reported:  
08/07/06 11:15

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 6G27011 - EPA 5030B P/T / EPA 8260B**

**Blank (6G27011-BLK1)**

Prepared & Analyzed: 07/27/06

tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	"							
tert-Butyl alcohol	ND	5.0	"							
Di-isopropyl ether	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	300	"							
Ethyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.51		"	2.50		100	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	1.98		"	2.50		79	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.52		"	2.50		101	75-130			
<i>Surrogate: Toluene-d8</i>	2.22		"	2.50		89	70-130			

**Laboratory Control Sample (6G27011-BS1)**

Prepared & Analyzed: 07/27/06

tert-Amyl methyl ether	8.35	0.50	ug/l	10.0		84	65-135			
Benzene	9.49	0.50	"	10.0		95	70-125			
tert-Butyl alcohol	182	5.0	"	200		91	60-135			
Di-isopropyl ether	9.29	0.50	"	10.0		93	70-130			
1,2-Dibromoethane (EDB)	9.22	0.50	"	10.0		92	85-125			
1,2-Dichloroethane	8.46	0.50	"	10.0		85	75-125			
Ethanol	253	300	"	200		126	15-150			
Ethyl tert-butyl ether	8.08	0.50	"	10.0		81	65-130			
Ethylbenzene	10.6	0.50	"	10.0		106	80-130			
Methyl tert-butyl ether	8.51	0.50	"	10.0		85	50-140			
Toluene	9.88	0.50	"	10.0		99	70-120			
Xylenes (total)	32.4	0.50	"	30.0		108	85-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.19		"	2.50		88	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.34		"	2.50		94	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.39		"	2.50		96	75-130			
<i>Surrogate: Toluene-d8</i>	2.57		"	2.50		103	70-130			

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**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 6G27011 - EPA 5030B P/T / EPA 8260B**

Matrix Spike (6G27011-MS1)	Source: MPG0648-11			Prepared & Analyzed: 07/27/06						
tert-Amyl methyl ether	42.3	2.5	ug/l	50.0	ND	85	65-135			
Benzene	47.1	2.5	"	50.0	ND	94	70-125			
tert-Butyl alcohol	909	25	"	1000	ND	91	60-135			
Di-isopropyl ether	45.6	2.5	"	50.0	ND	91	70-130			
1,2-Dibromoethane (EDB)	48.8	2.5	"	50.0	ND	98	85-125			
1,2-Dichloroethane	46.1	2.5	"	50.0	ND	92	75-125			
Ethanol	1280	1500	"	1000	ND	128	15-150			
Ethyl tert-butyl ether	39.8	2.5	"	50.0	ND	80	65-130			
Ethylbenzene	54.6	2.5	"	50.0	ND	109	80-130			
Methyl tert-butyl ether	252	2.5	"	50.0	230	44	50-140			BB,LN
Toluene	50.2	2.5	"	50.0	ND	100	70-120			
Xylenes (total)	166	2.5	"	150	ND	111	85-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>2.43</i>		<i>"</i>	<i>2.50</i>		<i>97</i>	<i>60-145</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>2.35</i>		<i>"</i>	<i>2.50</i>		<i>94</i>	<i>60-115</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>2.62</i>		<i>"</i>	<i>2.50</i>		<i>105</i>	<i>75-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>2.69</i>		<i>"</i>	<i>2.50</i>		<i>108</i>	<i>70-130</i>			

Matrix Spike Dup (6G27011-MSD1)	Source: MPG0648-11			Prepared & Analyzed: 07/27/06						
tert-Amyl methyl ether	42.8	2.5	ug/l	50.0	ND	86	65-135	1	25	
Benzene	48.4	2.5	"	50.0	ND	97	70-125	3	15	
tert-Butyl alcohol	930	25	"	1000	ND	93	60-135	2	35	
Di-isopropyl ether	46.1	2.5	"	50.0	ND	92	70-130	1	35	
1,2-Dibromoethane (EDB)	47.8	2.5	"	50.0	ND	96	85-125	2	15	
1,2-Dichloroethane	45.6	2.5	"	50.0	ND	91	75-125	1	10	
Ethanol	1350	1500	"	1000	ND	135	15-150	5	35	
Ethyl tert-butyl ether	40.0	2.5	"	50.0	ND	80	65-130	0.5	35	
Ethylbenzene	55.8	2.5	"	50.0	ND	112	80-130	2	15	
Methyl tert-butyl ether	251	2.5	"	50.0	230	42	50-140	0.4	25	BB,LN
Toluene	50.6	2.5	"	50.0	ND	101	70-120	0.8	15	
Xylenes (total)	168	2.5	"	150	ND	112	85-125	1	15	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>2.39</i>		<i>"</i>	<i>2.50</i>		<i>96</i>	<i>60-145</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>2.32</i>		<i>"</i>	<i>2.50</i>		<i>93</i>	<i>60-115</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>2.56</i>		<i>"</i>	<i>2.50</i>		<i>102</i>	<i>75-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>2.68</i>		<i>"</i>	<i>2.50</i>		<i>107</i>	<i>70-130</i>			

TestAmerica - Morgan Hill, CA

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1333 Broadway, Suite 800  
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Project Number: G0C28-0015  
Project Manager: Alok Kolekar

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Reported:  
08/07/06 11:15

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 6G27026 - EPA 5030B P/T / EPA 8260B**

**Blank (6G27026-BLK1)**

Prepared: 07/27/06 Analyzed: 07/28/06

tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	"							
tert-Butyl alcohol	ND	20	"							
Di-isopropyl ether	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	300	"							IC
Ethyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.02		"	2.50		81	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.13		"	2.50		85	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.30		"	2.50		92	75-130			
<i>Surrogate: Toluene-d8</i>	2.20		"	2.50		88	70-130			

**Laboratory Control Sample (6G27026-BS1)**

Prepared: 07/27/06 Analyzed: 07/28/06

tert-Amyl methyl ether	13.6	0.50	ug/l	15.0		91	65-135			
Benzene	4.64	0.50	"	5.16		90	70-125			
tert-Butyl alcohol	169	20	"	143		118	60-135			
Di-isopropyl ether	14.5	0.50	"	15.1		96	70-130			
1,2-Dibromoethane (EDB)	13.5	0.50	"	14.9		91	85-125			
1,2-Dichloroethane	12.0	0.50	"	14.7		82	75-125			
Ethanol	238	300	"	142		168	15-150			HL
Ethyl tert-butyl ether	13.2	0.50	"	15.0		88	65-130			
Ethylbenzene	7.03	0.50	"	7.54		93	80-130			
Methyl tert-butyl ether	7.32	0.50	"	7.02		104	50-140			
Toluene	32.9	0.50	"	37.2		88	70-120			
Xylenes (total)	40.9	0.50	"	41.2		99	85-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.12		"	2.50		85	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.32		"	2.50		93	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.30		"	2.50		92	75-130			
<i>Surrogate: Toluene-d8</i>	2.31		"	2.50		92	70-130			



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**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 6G27026 - EPA 5030B P/T / EPA 8260B**

Matrix Spike (6G27026-MS1)	Source: MPG0697-05			Prepared: 07/27/06			Analyzed: 07/28/06			
tert-Amyl methyl ether	72.0	2.5	ug/l	75.2	ND	96	65-135			
Benzene	24.4	2.5	"	25.8	ND	95	70-125			
tert-Butyl alcohol	3930	100	"	716	2800	158	60-135			LM
Di-isopropyl ether	74.9	2.5	"	75.6	ND	99	70-130			
1,2-Dibromoethane (EDB)	73.8	2.5	"	74.4	ND	99	85-125			
1,2-Dichloroethane	66.2	2.5	"	73.6	ND	90	75-125			
Ethanol	929	1500	"	708	ND	131	15-150			
Ethyl tert-butyl ether	69.8	2.5	"	75.2	ND	93	65-130			
Ethylbenzene	36.4	2.5	"	37.7	ND	97	80-130			
Methyl tert-butyl ether	119	2.5	"	35.1	84	100	50-140			
Toluene	175	2.5	"	186	ND	94	70-120			
Xylenes (total)	213	2.5	"	206	ND	103	85-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>2.17</i>		<i>"</i>	<i>2.50</i>		<i>87</i>	<i>60-145</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>2.31</i>		<i>"</i>	<i>2.50</i>		<i>92</i>	<i>60-115</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>2.39</i>		<i>"</i>	<i>2.50</i>		<i>96</i>	<i>75-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>2.26</i>		<i>"</i>	<i>2.50</i>		<i>90</i>	<i>70-130</i>			

Matrix Spike Dup (6G27026-MSD1)	Source: MPG0697-05			Prepared: 07/27/06			Analyzed: 07/28/06			
tert-Amyl methyl ether	69.6	2.5	ug/l	75.2	ND	93	65-135	3	25	
Benzene	24.0	2.5	"	25.8	ND	93	70-125	2	15	
tert-Butyl alcohol	3590	100	"	716	2800	110	60-135	9	35	
Di-isopropyl ether	73.8	2.5	"	75.6	ND	98	70-130	1	35	
1,2-Dibromoethane (EDB)	70.6	2.5	"	74.4	ND	95	85-125	4	15	
1,2-Dichloroethane	64.9	2.5	"	73.6	ND	88	75-125	2	10	
Ethanol	767	1500	"	708	ND	108	15-150	19	35	
Ethyl tert-butyl ether	69.1	2.5	"	75.2	ND	92	65-130	1	35	
Ethylbenzene	35.7	2.5	"	37.7	ND	95	80-130	2	15	
Methyl tert-butyl ether	119	2.5	"	35.1	84	100	50-140	0	25	
Toluene	168	2.5	"	186	ND	90	70-120	4	15	
Xylenes (total)	209	2.5	"	206	ND	101	85-125	2	15	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>2.11</i>		<i>"</i>	<i>2.50</i>		<i>84</i>	<i>60-145</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>2.32</i>		<i>"</i>	<i>2.50</i>		<i>93</i>	<i>60-115</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>2.37</i>		<i>"</i>	<i>2.50</i>		<i>95</i>	<i>75-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>2.26</i>		<i>"</i>	<i>2.50</i>		<i>90</i>	<i>70-130</i>			

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**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 6G29003 - EPA 5030B P/T / EPA 8260B**

**Blank (6G29003-BLK1)**

Prepared & Analyzed: 07/29/06

tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	"							
tert-Butyl alcohol	ND	20	"							
Di-isopropyl ether	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	300	"							
Ethyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.41		"	2.50		96	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.21		"	2.50		88	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.46		"	2.50		98	75-130			
<i>Surrogate: Toluene-d8</i>	2.31		"	2.50		92	70-130			

**Laboratory Control Sample (6G29003-BS1)**

Prepared & Analyzed: 07/29/06

tert-Amyl methyl ether	15.1	0.50	ug/l	15.0		101	65-135			
Benzene	5.31	0.50	"	5.16		103	70-125			
tert-Butyl alcohol	144	20	"	143		101	60-135			
Di-isopropyl ether	14.9	0.50	"	15.1		99	70-130			
1,2-Dibromoethane (EDB)	14.3	0.50	"	14.9		96	85-125			
1,2-Dichloroethane	14.1	0.50	"	14.7		96	75-125			
Ethanol	105	300	"	142		74	15-150			
Ethyl tert-butyl ether	14.9	0.50	"	15.0		99	65-130			
Ethylbenzene	7.07	0.50	"	7.54		94	80-130			
Methyl tert-butyl ether	7.27	0.50	"	7.02		104	50-140			
Toluene	38.2	0.50	"	37.2		103	70-120			
Xylenes (total)	40.6	0.50	"	41.2		99	85-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.11		"	2.50		84	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.62		"	2.50		105	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.23		"	2.50		89	75-130			
<i>Surrogate: Toluene-d8</i>	2.51		"	2.50		100	70-130			

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**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**TestAmerica - Morgan Hill, CA**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 6G29003 - EPA 5030B P/T / EPA 8260B**

<b>Matrix Spike (6G29003-MS1)</b>		<b>Source: MPG0698-10</b>			<b>Prepared &amp; Analyzed: 07/29/06</b>					
tert-Amyl methyl ether	1630	50	ug/l	1500	ND	109	65-135			
Benzene	577	50	"	516	ND	112	70-125			
tert-Butyl alcohol	14500	2000	"	14300	420	98	60-135			
Di-isopropyl ether	1640	50	"	1510	ND	109	70-130			
1,2-Dibromoethane (EDB)	1590	50	"	1490	ND	107	85-125			
1,2-Dichloroethane	1590	50	"	1470	ND	108	75-125			
Ethanol	10200	30000	"	14200	ND	72	15-150			
Ethyl tert-butyl ether	1640	50	"	1500	ND	109	65-130			
Ethylbenzene	788	50	"	754	ND	105	80-130			
Methyl tert-butyl ether	789	50	"	702	55	105	50-140			
Toluene	4150	50	"	3720	ND	112	70-120			
Xylenes (total)	4470	50	"	4120	ND	108	85-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.17		"	2.50		87	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.64		"	2.50		106	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.25		"	2.50		90	75-130			
<i>Surrogate: Toluene-d8</i>	2.53		"	2.50		101	70-130			
<b>Matrix Spike Dup (6G29003-MSD1)</b>		<b>Source: MPG0698-10</b>			<b>Prepared &amp; Analyzed: 07/29/06</b>					
tert-Amyl methyl ether	1650	50	ug/l	1500	ND	110	65-135	1	25	
Benzene	593	50	"	516	ND	115	70-125	3	15	
tert-Butyl alcohol	15900	2000	"	14300	420	108	60-135	9	35	
Di-isopropyl ether	1630	50	"	1510	ND	108	70-130	0.6	35	
1,2-Dibromoethane (EDB)	1600	50	"	1490	ND	107	85-125	0.6	15	
1,2-Dichloroethane	1540	50	"	1470	ND	105	75-125	3	10	
Ethanol	11800	30000	"	14200	ND	83	15-150	15	35	
Ethyl tert-butyl ether	1620	50	"	1500	ND	108	65-130	1	35	
Ethylbenzene	789	50	"	754	ND	105	80-130	0.1	15	
Methyl tert-butyl ether	798	50	"	702	55	106	50-140	1	25	
Toluene	4190	50	"	3720	ND	113	70-120	1	15	
Xylenes (total)	4420	50	"	4120	ND	107	85-125	1	15	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.13		"	2.50		85	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.66		"	2.50		106	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.22		"	2.50		89	75-130			
<i>Surrogate: Toluene-d8</i>	2.52		"	2.50		101	70-130			

URS Corporation [Arco]  
1333 Broadway, Suite 800  
Oakland CA, 94612

Project: ARCO #2111, San Leandro, CA  
Project Number: G0C28-0015  
Project Manager: Alok Kolekar

MPG0697  
Reported:  
08/07/06 11:15

**Notes and Definitions**

LM MS and/or MSD above acceptance limits. See Blank Spike(LCS).  
IC Calib. verif. is within method limits but outside contract limits  
HL Analyte recovery above established limit  
BB, LN Sample > 4x spike concentration.  
DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference



## SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: Bp / Arvo  
 REC. BY (PRINT) JMIE  
 WORKORDER: MPG6697

DATE REC'D AT LAB: 7/20/06  
 TIME REC'D AT LAB: 1500  
 DATE LOGGED IN: 7-21-06

For Regulatory Purposes?  
 DRINKING WATER YES  NO   
 WASTE WATER YES  NO

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / Absent <input checked="" type="checkbox"/> Intact / <input checked="" type="checkbox"/> Broken*									<div style="transform: rotate(-45deg); font-size: 2em; font-weight: bold;">                     JMIE 7/25/06                      See COC                 </div>
2. Chain-of-Custody Present / Absent*									
3. Traffic Reports or Packing List: Present / Absent									
4. Airbill: Airbill / Sticker Present / Absent									
5. Airbill #:									
6. Sample Labels: Present / Absent									
7. Sample IDs: Listed / Not Listed on Chain-of-Custody									
8. Sample Condition: Intact / Broken* / Leaking*									
9. Does information on chain-of-custody, traffic reports and sample labels agree? Yes / No*									
10. Sample received within hold time? Yes / No*									
11. Adequate sample volume received? Yes / No*									
12. Proper preservatives used? Yes / No*									
13. Trip Blank / Temp Blank Received? (circle which, if yes) Yes / No*									
14. Read Temp: <u>3.6 °C</u> Corrected Temp: <u>3.6 °C</u> Is corrected temp 4 +/- 2°C? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No** <small>(acceptance range for samples requiring thermal pres.)</small> Note (if any): METALS / DFF ON ICE COC									

\*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.



**ARCO / BP WELL MONITORING DATA SHEET**

BTS #: <u>060719-DW-2</u>	Station # <u>2111</u>
Sampler: <u>DW</u>	Date: <u>7-19-06</u>
Well I.D.: <u>MW-1</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: <u>26.27</u>	Depth to Water: <u>15.86</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YS</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method: <del>Bailer</del> <del>Disposable Bailer</del> <del>Positive Air Displacement</del> <del>Electric Submersible</del> <del>Extraction Pump</del> Other: _____	Sampling Method: <del>Bailer</del> <del>Disposable Bailer</del> <del>Extraction Port</del> Other: _____
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------

Top of Screen: 12.5'      If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

_____	X	_____	=	_____ Gals. *
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Conductivity (mS or $\mu$ S)	Gals. Removed	Observations
<u>1355</u>	<u>70.1</u>	<u>6.7</u>	<u>773</u>	—	

Did well dewater?    Yes      No      Gallons actually evacuated: —

Sampling Time: 1355      Sampling Date: 7-19-06

Sample I.D.: MW-1      Laboratory:    Pace Sequoia    Other \_\_\_\_\_

Analyzed for:    GRO BTEX    MTBE    DRO    Oxy's    1,2-DCA    EDP    Ethanol    Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	<u>1.2</u> mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV



## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>060719-DW-2</u>	Station # <u>2111</u>
Sampler: <u>DW</u>	Date: <u>7-19-06</u>
Well I.D.: <u>MW-2</u>	Well Diameter: <input checked="" type="radio"/> 3 <input checked="" type="radio"/> 6 <input type="radio"/> 8 _____
Total Well Depth:	Depth to Water: <u>14.80</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> PVC _____ Grade	D.O. Meter (if req'd): <input checked="" type="radio"/> YS _____ HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method:  Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible  
 Extraction Pump  
 Other: \_\_\_\_\_

Sampling Method:  Bailer  
 Disposable Bailer  
 Extraction Port  
 Other: \_\_\_\_\_

Top of Screen: 12'      If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

_____	X	_____	=	_____	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or <input checked="" type="radio"/> $\mu$ S)	Gals. Removed	Observations
<u>1436</u>	<u>71.4</u>	<u>6.5</u>	<u>657</u>	—	

Did well dewater?    Yes    No      Gallons actually evacuated: —

Sampling Time: 1436      Sampling Date: 7-19-06

Sample I.D.: MW-2      Laboratory:    Pace  Sequoia    Other \_\_\_\_\_

Analyzed for:     GRO     BTEX    MTBE    DRO     Oxy's     1,2-DC     EDP     Ethanol    Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.1 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

**ARCO / BP WELL MONITORING DATA SHEET**

BTS #: <u>060719-0W-2</u>	Station # <u>2111</u>
Sampler: <u>DW</u>	Date: <u>7-19-06</u>
Well I.D.: <u>MW-3</u>	Well Diameter: 2 3 <u>(4)</u> 6 8 _____
Total Well Depth: <u>26.40</u>	Depth to Water: <u>15.04</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): <u>(YS)</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible Extraction Pump  
 Other: \_\_\_\_\_

Sampling Method: Bailer  
X Disposable Bailer  
 Extraction Port  
 Other: \_\_\_\_\_

Top of Screen: 11.9' If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

_____	X	_____	=	_____ Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u> )	Gals. Removed	Observations
<u>1340</u>	<u>72.9</u>	<u>6.6</u>	<u>847</u>	—	

Did well dewater? Yes  No  Gallons actually evacuated: —

Sampling Time: 1340 Sampling Date: 7-19-06

Sample I.D.: MW-3 Laboratory: Pace Sequoia Other \_\_\_\_\_

Analyzed for: (GR) (BTEX) MTBE DRO (Oxy) (1,2-DC) (BDF) (Ethanol) Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge: <u>(2.0)</u>	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

**ARCO / BP WELL MONITORING DATA SHEET**

BTS #: <u>060719-DW-2</u>	Station # <u>2111</u>
Sampler: <u>DW</u>	Date: <u>7-19-06</u>
Well I.D.: <u>MW-4</u>	Well Diameter: 2 3 <u>4</u> 6 8 _____
Total Well Depth: <u>21.67</u>	Depth to Water: <u>13.86</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YS</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method: ~~Bailer~~  
                   ~~Disposable Bailer~~  
                   ~~Positive Air Displacement~~  
                   ~~Electric Submersible~~  
                   ~~Extraction Pump~~  
 Other: \_\_\_\_\_

Sampling Method: Bailer  
                           ~~X Disposable Bailer~~  
                           Extraction Port  
 Other: \_\_\_\_\_

Top of Screen: 10'      If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

_____	X	_____	=	_____ Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u> )	Gals. Removed	Observations
<u>1325</u>	<u>72.2</u>	<u>6.7</u>	<u>1350</u>	-	

Did well dewater?    Yes      No      Gallons actually evacuated:   -  

Sampling Time: 1325      Sampling Date: 7-19-06

Sample I.D.: MW-4      Laboratory: Pace Sequoia Other \_\_\_\_\_

Analyzed for: GRO BTEX MTBE DRO Oxy's 1,2-DCA EDF Ethanol Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	<u>1.0</u> mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>060719-DW-2</u>	Station # <u>2111</u>
Sampler: <u>DW</u>	Date: <u>7-19-06</u>
Well I.D.: <u>MW-5</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth: <u>13.80</u>	Depth to Water: <u>13.78</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): <u>(YS)</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method:  Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible Extraction Pump  
 Other: \_\_\_\_\_

Sampling Method:  Bailer  
 Disposable Bailer  
 Extraction Port  
 Other: \_\_\_\_\_

Top of Screen: 9.4'      If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

_____	X	_____	=	_____ Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Conductivity (mS or <u>(µS)</u> )	Gals. Removed	Observations
<u>1415</u>	<u>71.1</u>	<u>6.6</u>	<u>711</u>	—	

Did well dewater?    Yes      No      Gallons actually evacuated: —

Sampling Time: 1415      Sampling Date: 7-19-06

Sample I.D.: MW-5      Laboratory: Pace (Sequoia) Other \_\_\_\_\_

Analyzed for: (GRO) (BTEX) MTBE DRO (Oxy's) (1,2-DCA) (EDP) (Ethanol) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
			<u>(1.2)</u>	
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>060719-DW-2</u>	Station # <u>2111</u>
Sampler: <u>DW</u>	Date: <u>7-19-06</u>
Well I.D.: <u>MW-6</u>	Well Diameter: <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 6 <input type="radio"/> 8 <input type="checkbox"/> _____
Total Well Depth: <u>20.48</u>	Depth to Water: <u>12.90</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> PVC    Grade	D.O. Meter (if req'd): <input checked="" type="radio"/> YS    HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method:  Bailer    Sampling Method:  Bailer  
 Disposable Bailer     Disposable Bailer  
 Positive Air Displacement     Extraction Port  
 Electric Submersible    Other: \_\_\_\_\_  
 Extraction Pump

Top of Screen: 10'    If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

_____	X	_____	=	_____ Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u> )	Gals. Removed	Observations
1315	71.2	6.9	1595	-	

Did well dewater?    Yes    No    Gallons actually evacuated: -

Sampling Time: 1315    Sampling Date: 7-19-06

Sample I.D.: MW-6    Laboratory: Pace  Sequoia    Other \_\_\_\_\_

Analyzed for:  GRO     BTEX    MTBE    DRO     Oxy's     1,2-DCA     EDB     Ethanol    Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.3	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>060719-0W-2</u>	Station # <u>2111</u>
Sampler: <u>DW</u>	Date: <u>7-19-06</u>
Well I.D.: <u>MW-7</u>	Well Diameter: 2 3 <u>4</u> 6 8 _____
Total Well Depth: <u>26.44</u>	Depth to Water: <u>13.58</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YS</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method: ~~Bailer~~  
                   Disposable Bailer  
                   Positive Air Displacement  
                   Electric Submersible  
                   Extraction Pump  
                   Other: \_\_\_\_\_

Sampling Method: Bailer  
                       X Disposable Bailer  
                       Extraction Port  
                       Other: \_\_\_\_\_

Top of Screen: 121      If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

_____	X	_____	=	_____	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u> )	Gals. Removed	Observations
<u>1455</u>	<u>72.1</u>	<u>6.8</u>	<u>678</u>	—	<u>odor</u>

Did well dewater?    Yes      No      Gallons actually evacuated: —

Sampling Time: 1455      Sampling Date: 7-19-06

Sample I.D.: MW-7      Laboratory: Pace Sequoia Other \_\_\_\_\_

Analyzed for: GRU BTEX MTBE DRO OxyS 1,2-DC EDP Ethanol Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
			<u>1.1</u>	
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

**ARCO / BP WELL MONITORING DATA SHEET**

BTS #: <u>060719-0W-2</u>	Station # <u>2111</u>
Sampler: <u>DW</u>	Date: <u>7-19-06</u>
Well I.D.: <u>MW-8</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth: <u>39.20</u>	Depth to Water: <u>14.75</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): <u>(YS)</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method: <u>Bailer</u> <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Positive Air Displacement <input type="checkbox"/> Electric Submersible <input type="checkbox"/> Extraction Pump Other: _____	Sampling Method: <u>Bailer</u> <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port Other: _____
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------

Top of Screen: \_\_\_\_\_ If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

<u>3.9</u>	x	<u>3</u>	=	<u>11.7</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or $\mu$ S)	Gals. Removed	Observations
<u>1510</u>	<u>69.3</u>	<u>6.6</u>	<u>660</u>	<u>4</u>	
<u>1516</u>	<u>67.6</u>	<u>6.6</u>	<u>656</u>	<u>8</u>	
<u>1522</u>	<u>67.5</u>	<u>6.6</u>	<u>655</u>	<u>12</u>	

Did well dewater? Yes   No      Gallons actually evacuated: 12

Sampling Time: 1527      Sampling Date: 7-19-06

Sample I.D.: MW-8      Laboratory: Pace Sequoia Other \_\_\_\_\_

Analyzed for:  GRO  BTEX  MTBE  DRO  Oxy's  1,2-DCa  BDB  Ethanol      Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	<u>(Post-purge):</u>	1.2	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

**BP GEM OIL COMPANY TYPE A BILL OF LADING**

**SOURCE RECORD BILL OF LADING FOR NON-HAZARDOUS PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT BP GEM OIL COMPANY FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED BY DILLARD ENVIRONMENTAL TO THE ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY IN LIVERMORE, CALIFORNIA.**

The contractor performing this work is BLAINE TECH SERVICES, INC. (BTS), 1680 Rogers Avenue, San Jose, CA 95112 (phone [408] 573-0555). Blaine Tech Services, Inc. is authorized by BP GEM OIL COMPANY to recover, collect, apportion into loads the Non-Hazardous Well Purgewater that is drawn from wells at the BP GEM Oil Company facility indicated below and deliver that purgewater to BTS. Transport routing of the Non-Hazardous Well Purgewater may be direct from one BP GEM facility to the designated destination point; from one BP GEM facility to the designated destination point via another BP GEM facility; from a BP GEM facility to the designated destination point via the contractor's facility, or any combination thereof. The Non-Hazardous Well Purgewater is and remains the property of BP GEM Oil Company.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the BP GEM Oil Company facility described below:

2111

Station #

1156 Davis St. San Leandro

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

12

added equip.

rinse water 1

any other

adjustments \_\_\_\_\_

**TOTAL GALS.**

**RECOVERED** 13

loaded onto

BTS vehicle # 63

BTS event #

060719-DW-2

time

1545

date

7/19/06

signature

*David C. Walt*

\*\*\*\*\*

REC'D AT

time

date

unloaded by

signature \_\_\_\_\_





**APPENDIX B**

**GEOTRACKER UPLOAD CONFIRMATION**

## Electronic Submittal Information

[Main Menu](#) | 
 [View/Add Facilities](#) | 
 [Upload EDD](#) | 
 [Check EDD](#)

Your EDF file has been successfully uploaded!

**Confirmation Number:** 2218334436  
**Date/Time of Submittal:** 10/23/2006 5:14:16 PM  
**Facility Global ID:** T0600101764  
**Facility Name:** ARCO #2111  
**Submittal Title:** 3Q 06 GW Monitoring  
**Submittal Type:** GW Monitoring Report

[Click here](#) to view the detections report for this upload.

<b>ARCO #2111</b> 1156 DAVIS SAN LEANDRO, CA 94577	<b>Regional Board - Case #: 01-1903</b> SAN FRANCISCO BAY RWQCB (REGION 2) <b>Local Agency (lead agency) - Case #: RO0000494</b> ALAMEDA COUNTY LOP - (SP)
----------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------

CONF #	TITLE	QUARTER
2218334436	3Q 06 GW Monitoring	Q3 2006
SUBMITTED BY	SUBMIT DATE	STATUS
Broadbent & Associates, Inc.	10/23/2006	PENDING REVIEW

### SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	8
# FIELD POINTS WITH DETECTIONS	7
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	5
SAMPLE MATRIX TYPES	WATER

### METHOD QA/QC REPORT

METHODS USED	8260FA,8260TPH
TESTED FOR REQUIRED ANALYTES?	Y
LAB NOTE DATA QUALIFIERS	Y

### QA/QC FOR 8021/8260 SERIES SAMPLES

TECHNICAL HOLDING TIME VIOLATIONS	0
METHOD HOLDING TIME VIOLATIONS	0
LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT	0
LAB BLANK DETECTIONS	0
DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?	
- LAB METHOD BLANK	Y
- MATRIX SPIKE	Y
- MATRIX SPIKE DUPLICATE	Y
- BLANK SPIKE	Y
- SURROGATE SPIKE	Y

### WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	Y
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30%	Y
SURROGATE SPIKES % RECOVERY BETWEEN 85-115%	Y
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%	Y

**SOIL SAMPLES FOR 8021/8260 SERIES**

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% n/a  
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% n/a  
SURROGATE SPIKES % RECOVERY BETWEEN 70-125% n/a  
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% n/a

**FIELD QC SAMPLES**

<u>SAMPLE</u>	<u>COLLECTED</u>	<u>DETECTIONS &gt; REPD</u>
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

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#2111

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Your file has been successfully submitted!**

**Submittal Title:** 3Q 06 GEO\_WELL  
**Submittal Date/Time:** 10/23/2006 4:51:38 PM  
**Confirmation Number:** 4905566155

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