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Atlantic Richfield Company
(a BP affiliated company)



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

Re: Third Quarter 2006 Ground-Water Monitoring Report
Former BP Service Station # 11102
100 MacArthur Boulevard
Oakland, California
ACEH Case #RO0000456

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

Submitted by:

Paul Supple
Environmental Business Manager

Third Quarter 2006 Ground-Water Monitoring Report
Former BP Service Station #11102
100 MacArthur Boulevard
Oakland, California

Prepared for

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

Prepared by



1324 Mangrove Avenue, Suite 212
Chico, California 95926
(530) 566-1400
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27 October 2006

Project No. 06-08-643

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



17 October 2006

Project No. 06-08-643

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, Former BP Service Station
#11102, 100 MacArthur Boulevard, Alameda County, Oakland, California.
ACEH Case #RO0000456.

Dear Mr. Supple:

Attached is the *Third Quarter 2006 Ground-Water Monitoring Report* for Former BP Service Station #11102 (herein referred to as Station #11102) located at 100 MacArthur Boulevard, Oakland, Alameda County, California (Property). This report presents a summary of results from ground-water monitoring conducted during the Third Quarter of 2006.

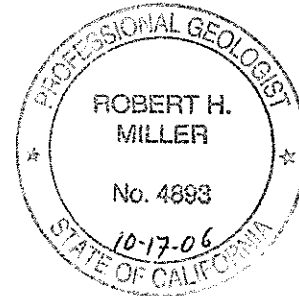
Should you have questions regarding the work performed or results obtained, please do not hesitate to contact us at (530) 566-1400.

Sincerely,

BROADBENT & ASSOCIATES, INC.

Thomas A. Venus
Senior Engineer, P.E.

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



Enclosures

cc: Mr. Steven Plunkett, Alameda County Environmental Health (Submitted via ACEH ftp site)
Ms. Shelby Lathrop, ConocoPhillips (submitted via WebXtender)
Mr. Chris Jimmerson, Reimbursement Processor, Delta Environmental Consulting Inc.,
(Submitted via ENFOS)

STATION #11102 QUARTERLY GROUND-WATER MONITORING REPORT

Facility: #11102	Address:	100 MacArthur Boulevard, Oakland, California
Environmental Business Manager:		Mr. Paul Supple
Consulting Co./Contact Persons:		Broadbent & Associates, Inc.(BAI)/Rob Miller & Tom Venus, (530) 566-1400
Consultant Project No.:		06-08-643
Primary Agency/Regulatory ID No.:		Alameda County Environmental Health (ACEH) ACEH Case #RO0000456

WORK PERFORMED THIS QUARTER (Third Quarter 2006):

1. Prepared and submitted Second Quarter 2006 Ground-Water Monitoring Report. Work performed by BAI.
2. Repaired MW-2 well vault and conducted ground-water monitoring/sampling for Third Quarter 2006. Work performed by URS.

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. Work to be completed by Stratus Environmental, Inc.

QUARTERLY RESULTS SUMMARY:

Current phase of project:	<u>Ground-water monitoring/sampling</u>
Frequency of ground-water sampling:	<u>Wells MW-1 through MW-3: Quarterly</u>
Frequency of ground-water monitoring:	<u>Wells MW-1 through MW-3: Quarterly</u>
Is free product (FP) present on-site:	<u>No</u>
Current remediation techniques:	<u>NA</u>
Depth to ground water (below TOC):	<u>8.57 (MW-1) to 10.47 (MW-2) feet on 26 July 2006</u>
General ground-water flow direction:	<u>Southwest</u>
Approximate hydraulic gradient:	<u>0.05 Feet per foot</u>

DISCUSSION:

Two sampling events were conducted during Third Quarter 2006. On 17 July 2006, URS conducted quarterly monitoring and sampling at the Site. However, well MW-2 was inaccessible due to bent bolts on the well vault. BAI became aware that this had been reported in the First and Second Quarters of 2006 but not repaired. Therefore, BAI instructed URS to discard the samples collected on 17 July 2006 (MW-1 and MW-3 only), repair MW-2's well head, and re-monitor/resample the three wells. Water levels measurements were collected from the three wells on 26 July 2006. Depths to water ranged from 8.57 ft (MW-1) to 10.47 ft (MW-2), within the historic minimum and maximum range at the Site, as summarized in Table 1. Water level elevations yielded a potentiometric ground-water flow direction and gradient on 26 July 2006 of 0.05 ft/ft to the southwest. Ground-water elevation contours are shown over a map of the Site in Drawing 1.

As mentioned above, samples were collected from MW-1 and MW-3 on 17 July 2006, and MW-1, MW-2, and MW-3 on 26 July 2006. No other irregularities were encountered during sampling. Samples were submitted under chain of custody documentation to Test America Analytical Testing

Corporation (Morgan Hill, California), for analysis of Gasoline Range Organics (GRO, C4-C12), fuel additives and oxygenates by EPA Method 8260B. Although BAI directed URS to discard the samples collected on 17 July 2006, the samples had already been submitted to and analyzed by the laboratory. No irregularities were encountered during analyses of the 17 July 2006 samples from MW-1 and MW-3, with the exception that the GRO concentration result for sample MW-3 was partly due to an individual peak(s) in the quantitation range. Similarly, no irregularities were encountered during analyses of the 26 July 2006 samples from the three wells, with the exception that the GRO concentration of MW-2 was partly due to an individual peak(s) in the quantitation range. These notes are called out in the laboratory analytical reports. Copies of the both laboratory analytical reports, including chain of custody documentation, are provided in Appendix A. Results of laboratory analyses from both sample sets are reported in Table 1 and Table 2.

For the 17 July 2006 sampling event, GRO were detected above the laboratory reporting limit in MW-3 only at a concentration of 910 $\mu\text{g/L}$. Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX) were not detected at or above the laboratory reporting limits in the two wells sampled. Methyl tert-butyl ether (MTBE) was detected above the laboratory reporting limit in the two wells sampled with concentrations of 5.5 $\mu\text{g/L}$ in MW-1 and 1,400 $\mu\text{g/L}$ in MW-3. Tert-Butyl alcohol (TBA) was detected at a concentration of 32 $\mu\text{g/L}$ in MW-1. Tert-Amyl methyl ether (TAME) was detected at a concentration of 15 $\mu\text{g/L}$ in MW-3. No other fuel oxygenates or additives were detected at or above their respective laboratory reporting limits in the two wells sampled.

For the 26 July 2006 sampling event, GRO were detected above the laboratory reporting limit in two of the three wells sampled: GRO was detected in wells MW-2 and MW-3 at concentrations of 2,700 micrograms per liter ($\mu\text{g/L}$) and 810 $\mu\text{g/L}$, respectively. BTEX constituents were not detected at or above the laboratory reporting limits in the three wells sampled. MTBE was detected above the laboratory reporting limit in the three wells sampled with concentrations of 4.4 $\mu\text{g/L}$ in MW-1, 2,900 $\mu\text{g/L}$ in MW-2, and 1,300 $\mu\text{g/L}$ in MW-3. TBA was detected at concentrations of 22 $\mu\text{g/L}$ in MW-1 and 4,500 $\mu\text{g/L}$ in MW-2. TAME was detected at a concentration of 18 $\mu\text{g/L}$ in MW-3. No other fuel oxygenates or additives were detected at or above their respective laboratory reporting limits in the three wells sampled.

CLOSURE:

The findings presented in this report are based upon: observations of URS 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, 26 July 2006, Former Station #11102, 100 MacArthur Boulevard, Oakland, California
- Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses, Station #11102, 100 MacArthur Blvd., Oakland, CA

- Table 2. Summary of Fuel Additives Analytical Data, Station #11102, 100 MacArthur Blvd., Oakland, 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

LEGEND

- Monitoring Well Location
- Well designation
- ELEV Ground-water elevation (ft MSL)
- GRO Concentration of GRO, Benzene and MTBE in ground water ($\mu\text{g/L}$)
- Benzene
- MTBE
- Q Sampling frequency
- < Not detected
- Q Sampled quarterly
- ← 0.05 Approximate ground-water flow direction and gradient (ft/ft)
- 80.00 Ground-water elevation contour (ft MSL)

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

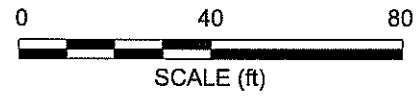
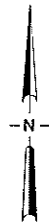
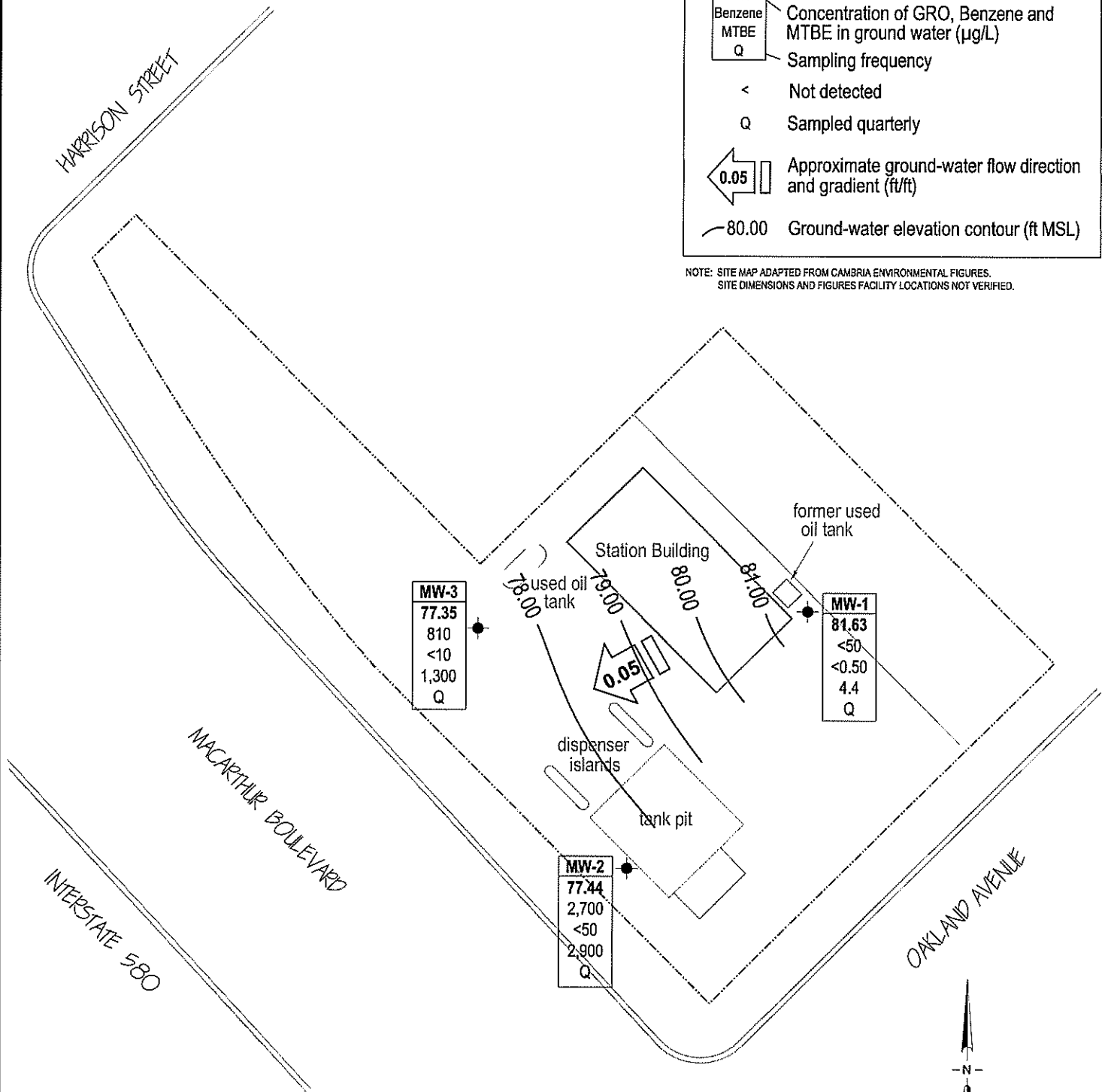


Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11102, 100 MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet msl)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)					DO (mg/L)	Lab	pH	DRO/TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)	
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes							MtBE
MW-1																		
11/4/1989	--		90.20	13.21	--	76.99	<500	3.4	0.6	<0.3	<0.3	--	--	SAL	--	<50	<5000	--
11/11/1989	--		90.20	13.32	--	76.88	--	--	--	--	--	--	--	--	--	--	--	--
4/3/1990	--		90.20	12.46	--	77.74	820	64	1.9	23	34	--	--	ANA	--	--	--	--
7/30/1990	--		90.20	12.92	--	77.28	190	11	<5.0	<5.0	<5.0	--	--	ANA	--	<50	<5000	--
11/20/1990	--		90.20	14.08	--	76.12	50	2.4	<0.3	<0.3	<0.3	--	--	SAL	--	79	<5000	--
3/1/1991	--		90.20	13.61	--	76.59	<100	0.9	<0.3	<0.3	0.3	--	--	SAL	--	<1000	14,000	--
8/19/1991	--		90.20	15.74	--	74.46	370	35	0.73	6.4	5.6	--	--	SEQ	--	<50	<5000	--
11/13/1991	--		90.20	14.08	--	76.12	60	0.68	<0.3	<0.3	<0.3	--	--	SEQ	--	<50	<5000	--
2/24/1992	--		90.20	12.52	--	77.68	140	3.9	0.66	1.2	3.8	--	--	SEQ	--	100	<5000	--
5/19/1992	--		90.20	11.8	--	78.4	4,200	440	21	250	37	--	--	SEQ	--	910	<5000	--
6/17/1992	--		90.20	12.01	--	78.19	4,000	350	14	150	17	--	--	SEQ	--	560	<5000	--
7/22/1992	--		90.20	12.42	--	77.78	4,000	<5.0	19	210	61	--	--	ANA	--	--	--	--
8/14/1992	--		90.20	12.75	--	77.45	2,400	330	20	150	47	--	--	SEQ	--	1,700	<5000	--
11/11/1992	--		90.20	13.69	--	76.51	260	30	3.4	7.6	6.8	--	--	ANA	--	92	<5000	--
6/7/1993	--	c	90.20	--	--	--	3,700	120	12	26	9.5	--	--	PACE	--	--	--	--
6/7/1993	--		90.20	10.93	--	79.27	3,400	98	11	21	7.6	--	--	PACE	--	440	--	--
12/2/1993	--		90.20	12.72	--	77.48	1,100	8.3	3.6	0.6	1.5	--	--	PACE	--	120	<5000	--
6/22/1994	--	c, d	90.20	--	--	--	2,100	30	3.2	2	15	2,000	--	PACE	--	--	--	--
6/22/1994	--	d	90.20	11.81	--	78.39	2,100	32	3.8	2.2	17	4,000	3.2	PACE	--	<50	<5000	--
1/10/1995	--		90.20	10.97	--	79.23	<500	120	<5	<5	<10	--	3.9	ATI	--	420	--	--
1/10/1995	--	c	90.20	--	--	--	<500	120	<5	5	<10	--	--	ATI	--	--	--	--
6/21/1995	--	c, e	90.20	--	--	--	3,600	<13	<5.0	<5.0	<10	--	--	ATI	--	--	--	--
6/21/1995	--		90.20	9.38	--	80.82	4,700	16	<5.0	<5.0	<10	--	6.7	ATI	--	1,300	2,900	0.6
12/27/1995	--		90.20	11.55	--	78.65	430	<2.5	<2.5	<2.5	<5.0	1,200	6.3	ATI	--	2,100	640	--
6/13/1996	--		90.20	9.28	--	80.92	3,200	51	<12	<12	<12	4,000	6.3	SPL	--	920	2,000	--
12/4/1996	--	f	90.20	11.91	--	78.29	1,400	6.2	<5	<5	<5	2,600	6.7	SPL	--	280	2,000	6
6/10/1997	--	c	90.20	--	--	--	7,700	14	<25	<25	<25	13,000	--	SPL	--	--	--	--
6/10/1997	--		90.20	8.97	--	81.23	7,900	12	<10	<10	<10	15,000	6	SPL	--	1,700	<5	ND
12/12/1997	--		90.20	11.37	--	78.83	440	8.8	<1.0	2.6	9.4	6,700	5.5	SPL	--	760	1,200	ND
6/18/1998	--		90.20	8.02	--	82.18	7,500	<2.5	<5.0	<5.0	<5.0	5,600	4.9	SPL	--	2,900	<5	ND
3/9/1999	--		90.20	9.8	--	80.4	32,000	100	16	72	110	49,000	--	SPL	--	--	--	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses
Station #11102, 100 MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet msl)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
MW-1 Cont.																		
9/28/1999	--		90.20	10.78	--	79.42	1,000	<5.0	<5.0	<5.0	<5.0	730	--	SPL	--	--	--	<1.0
10/14/1999	--		90.20	10.84	--	79.36	--	--	--	--	--	--	--	SPL	--	660	--	--
3/27/2000	--		90.20	9.83	--	80.37	4,300	160	19	37	43	28,000	--	PACE	--	--	--	--
9/28/2000	--		90.20	11.33	--	78.87	2,700	10	2.6	1.1	2.7	28,000	--	PACE	--	--	--	--
3/8/2001	--		90.20	10.96	--	79.24	8,200	23.5	6.09	5.23	8.97	11,600	--	PACE	--	--	--	--
9/21/2001	--		90.20	12.07	--	78.13	6,000	37.9	<0.5	<0.5	<1.5	7,370	--	PACE	--	--	--	--
2/28/2002	--		90.20	10.48	--	79.72	6,400	60.8	<5.0	6.43	<10	7,750	--	PACE	--	--	--	--
9/6/2002	--		90.20	11.2	--	79	1,400	<5.0	<5.0	<5.0	<5.0	6,000	--	SEQ	--	--	--	--
2/19/2003	--	h	90.20	11.29	--	78.91	<10000	<100	110	<100	<100	4,500	--	SEQ	--	--	--	--
7/14/2003	--		90.20	11.18	--	79.02	710	11	<10	<10	<10	940	--	SEQ	--	--	--	--
01/14/2004	--		90.20	11.74	--	78.46	<500	<5.0	<5.0	<5.0	<5.0	220	--	SEQM	6.6	--	--	--
04/23/2004	P	l	90.20	11.95	--	78.25	470	3.4	<2.5	<2.5	<2.5	150	--	SEQM	6.7	--	--	--
07/01/2004	P		90.20	11.52	--	78.68	360	<2.5	<2.5	<2.5	<2.5	96	--	SEQM	6.0	--	--	--
10/28/2004	P		90.20	12.56	--	77.64	390	0.94	<0.50	<0.50	<0.50	43	--	SEQM	6.2	--	--	--
01/10/2005	P		90.20	11.85	--	78.35	490	17	<2.5	5.8	5.4	85	--	SEQM	7.6	--	--	--
04/13/2005	P		90.20	10.00	--	80.20	1,000	27	<2.5	<2.5	25	48	--	SEQM	6.6	--	--	--
07/11/2005	P		90.20	9.27	--	80.93	180	<0.50	<0.50	<0.50	<0.50	36	--	SEQM	7.7	--	--	--
10/17/2005	P		90.20	10.96	--	79.24	140	<0.50	<0.50	<0.50	<0.50	20	--	SEQM	8.0	--	--	--
01/17/2006	P		90.20	10.81	--	79.39	120	0.64	<0.50	<0.50	0.56	38	--	SEQM	6.5	--	--	--
04/21/2006	P	m	90.20	9.28	--	80.92	410	1.4	1.0	<0.50	<0.50	17	--	SEQM	6.5	--	--	--
7/17/2006	--		90.20	9.25	--	80.95	<50	<0.50	<0.50	<0.50	<0.50	5.5	--	TAMC	7.7	--	--	--
7/26/2006	--		90.20	8.57	--	81.63	<50	<0.50	<0.50	<0.50	<0.50	4.4	--	TAMC	6.6	--	--	--
MW-2																		
11/4/1989	--		87.91	15.84	--	72.07	<500	6.5	<0.3	<0.3	<0.3	--	--	SAL	--	--	--	--
11/11/1989	--		87.91	14.75	--	73.16	--	--	--	--	--	--	--	--	--	--	--	--
4/3/1990	--		87.91	15.25	--	72.66	<500	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
7/30/1990	--		87.91	15.59	--	72.32	61	6.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
11/20/1990	--		87.91	17.81	--	70.1	<50	0.3	<0.3	<0.3	<0.3	--	--	SAL	--	--	--	--
3/1/1991	--		87.91	17.11	--	70.8	<100	0.4	<0.3	<0.3	<0.3	--	--	SAL	--	--	--	--
8/19/1991	--		87.91	17.97	--	69.94	<30	<0.3	<0.3	<0.3	<0.3	--	--	SEQ	--	--	--	--

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

Station #11102, 100 MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet msl)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)					DO (mg/L)	Lab	pH	DRO/TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)	
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes							MtBE
MW-2 Cont.																		
11/13/1991	--		87.91	16.76	--	71.15	38	0.32	<0.3	<0.3	<0.3	--	--	SEQ	--	--	--	--
2/24/1992	--		87.91	15.07	--	72.84	<50	<0.5	<0.5	<0.5	0.58	--	--	SEQ	--	--	--	--
5/19/1992	--		87.91	14.7	--	73.21	<50	0.55	<0.5	<0.5	<0.5	--	--	SEQ	--	--	--	--
7/22/1992	--		87.91	15.6	--	72.31	90	1.3	0.6	0.9	1.9	--	--	ANA	--	--	--	--
8/14/1992	--		87.91	15.88	--	72.03	--	--	--	--	--	--	--	--	--	--	--	--
11/11/1992	--		87.91	16.19	--	71.72	52	2.8	<0.5	<0.5	0.9	--	--	ANA	--	--	--	--
11/11/1992	--	c	87.91	--	--	--	65	3.2	<0.5	<0.5	1	--	--	ANA	--	--	--	--
6/7/1993	--		87.91	14.42	--	73.49	1,200	14	2.8	1.9	1.71	--	--	PACE	--	--	--	--
12/2/1993	--	c, d	87.91	--	--	--	2,100	32	3.8	2.2	17	3,700	--	PACE	--	--	--	--
12/2/1993	--	d	87.91	14.94	--	72.97	790	3.4	0.5	10	<0.5	3,700	--	PACE	--	--	--	--
6/22/1994	--	d	87.91	14.25	--	73.66	110	<0.5	<0.5	<0.5	<0.5	120	3.9	PACE	--	--	--	--
1/10/1995	--		87.91	13.64	--	74.27	<50	<0.5	<0.5	0.6	1	--	4.3	ATI	--	--	--	--
6/21/1995	--		87.91	11.66	--	76.25	4,700	<10	<10	<10	<20	--	7.8	ATI	--	--	--	--
12/27/1995	--		87.91	13.11	--	74.8	6,100	<25	<25	<25	<50	20,000	6.7	ATI	--	--	--	--
12/27/1995	--	c	87.91	--	--	--	6,300	<25	<25	<25	<50	19,000	--	ATI	--	--	--	--
6/13/1996	--		87.91	10.86	--	77.05	8,300	<2.5	<2.5	<2.5	<2.5	13,000	6.5	SPL	--	--	--	--
6/13/1996	--	c	87.91	--	--	--	8,700	<5	<5	<5	<5	13,000	--	SPL	--	--	--	--
12/4/1996	--		87.91	13.03	--	74.88	5,900	<2.5	<5	<5	<5	11,000	6.3	SPL	--	--	--	--
12/4/1996	--	c	87.91	--	--	--	5,900	<2.5	<5	<5	<5	11,000	--	SPL	--	--	--	--
6/10/1997	--		87.91	10.04	--	77.87	<50	<0.5	<1.0	<1.0	<1.0	<10	5.8	SPL	--	--	--	--
12/12/1997	--		87.91	12.44	--	75.47	<50	<0.5	<1.0	<1.0	<1.0	<10	5.7	SPL	--	--	--	--
6/18/1998	--	c	87.91	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	--	SPL	--	--	--	--
6/18/1998	--		87.91	8.89	--	79.02	50	<0.5	<1.0	<1.0	<1.0	<10	5.3	SPL	--	--	--	--
3/9/1999	--		87.91	10.2	--	77.71	15,000	<5.0	<5.0	<5.0	<5.0	23,000	--	SPL	--	--	--	--
9/28/1999	--		87.91	11.81	--	76.1	36,000	<5.0	12	7	26	35,000	--	SPL	--	--	--	<5.0
10/14/1999	--		87.91	10.27	--	77.64	--	--	--	--	--	--	--	SPL	--	100	--	--
3/27/2000	--		87.91	9.98	--	77.93	1,300	<0.5	<0.5	0.51	<0.5	5,800	--	PACE	--	--	--	--
9/28/2000	--		87.91	11.4	--	76.51	1,600	1.8	1.7	0.54	2.2	15,000	--	PACE	--	--	--	--
3/8/2001	--		87.91	11.16	--	76.75	20,000	<0.5	<0.5	<0.5	<0.5	29,100	--	PACE	--	--	--	--
9/21/2001	--		87.91	11.65	--	76.26	5,000	<0.5	<0.5	<0.5	<1.5	6,110	--	PACE	--	--	--	--
2/28/2002	--		87.91	9.86	--	78.05	3,200	35.1	<0.5	<0.5	<1.0	4,620	--	PACE	--	--	--	--

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

Station #11102, 100 MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet msl)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)					DO (mg/L)	Lab	pH	DRO/TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes						
MW-2 Cont.																	
9/6/2002	--		87.91	12.32	--	75.59	1,900	<10	<10	<10	<10	15,000	--	SEQ	--	--	--
2/19/2003	--	h	87.91	11.63	--	76.28	45,000	<250	<250	<250	<250	32,000	--	SEQ	--	--	--
7/14/2003	--		87.91	12.07	--	75.84	9,300	<500	<500	<500	<500	24,000	--	SEQ	--	--	--
01/14/2004	P		87.91	11.45	--	76.46	<50,000	<500	<500	<500	<500	21,000	--	SEQM	6.9	--	--
04/23/2004	P	l	87.91	11.45	--	76.46	5,100	<250	<250	<250	<250	22,000	--	SEQM	6.8	--	--
07/01/2004	P		87.91	12.32	--	75.59	<5,000	<50	<50	<50	<50	5,200	--	SEQM	5.6	--	--
10/28/2004	P		87.91	13.02	--	74.89	8,500	<50	<50	<50	<50	6,800	--	SEQM	6.2	--	--
01/10/2005	P		87.91	14.38	--	73.53	<25,000	<250	<250	<250	<250	7,100	--	SEQM	7.6	--	--
04/13/2005	P		87.91	14.03	--	73.88	<5,000	<50	<50	<50	<50	5,300	--	SEQM	6.6	--	--
07/11/2005	P		87.91	11.25	--	76.66	<5,000	<50	<50	<50	<50	5,300	--	SEQM	7.5	--	--
10/17/2005	P		87.91	12.48	--	75.43	<5,000	<50	<50	<50	<50	2,500	--	SEQM	8.2	--	--
01/17/2006	P		87.91	10.70	--	77.21	<5,000	<50	<50	<50	<50	2,200	--	SEQM	7.0	--	--
04/21/2006	--	n	87.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/26/2006	--	k	87.91	10.47	--	77.44	2,700	<50	<50	<50	<50	2,900	--	TAMC	6.69	--	--
MW-3																	
11/4/1989	--		87.02	15.4	--	71.62	<500	<0.3	<0.3	<0.3	<0.3	--	--	SAL	--	--	--
11/11/1989	--		87.02	14.1	--	72.92	--	--	--	--	--	--	--	--	--	--	--
4/3/1990	--		87.02	13.9	--	73.12	<100	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--
7/30/1990	--		87.02	13.77	--	73.25	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	<5000
11/20/1990	--		87.02	14.67	--	72.35	<50	0.3	0.8	0.4	1.5	--	--	SAL	--	--	--
3/1/1991	--		87.02	15.22	--	71.8	<100	0.4	<0.3	<0.3	<0.3	--	--	SAL	--	--	--
8/19/1991	--		87.02	13.15	--	73.87	<30	<0.3	<0.3	<0.3	<0.3	--	--	SEQ	--	--	--
11/13/1991	--		87.02	15.66	--	71.36	<30	<0.3	<0.3	<0.3	<0.3	--	--	SEQ	--	--	--
2/24/1992	--		87.02	15.01	--	72.01	<50	0.65	1.4	0.66	4.4	--	--	SEQ	--	--	--
5/19/1992	--		87.02	15.52	--	71.5	<50	<0.5	<0.5	<0.5	<0.5	--	--	SEQ	--	--	--
7/22/1992	--		87.02	15.63	--	71.39	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	<50	<5000
8/14/1992	--		87.02	13.57	--	73.45	--	--	--	--	--	--	--	--	--	--	--
11/11/1992	--		87.02	14.13	--	72.89	<50	<0.5	0.7	<0.5	1.3	--	--	ANA	--	--	--
6/7/1993	--		87.02	12.13	--	74.89	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--
12/2/1993	--		87.02	13.29	--	73.73	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--

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

Station #11102, 100 MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet msl)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)					DO (mg/L)	Lab	pH	DRO/TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)	
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes							MtBE
MW-3 Cont.																		
6/22/1994	--		87.02	12.78	--	74.24	<50	<0.5	<0.5	<0.5	<0.5	--	2.9	PACE	--	--	--	--
1/10/1995	--		87.02	12.01	--	75.01	<50	<0.5	<0.5	<0.5	<1	--	3.8	ATI	--	--	--	--
6/21/1995	--		87.02	11.57	--	75.45	<50	<0.50	<0.50	<0.50	<1.0	--	7.4	ATI	--	--	--	--
12/27/1995	--		87.02	13.47	--	73.55	<50	<0.50	<0.50	<0.50	<1.0	5.7	7.3	ATI	--	--	--	--
6/13/1996	--		87.02	11.22	--	75.8	60	<0.5	<0.5	<0.5	<0.5	<10	6.8	SPL	--	--	--	--
12/4/1996	--		87.02	13.28	--	73.74	<50	<0.5	<1	<1	<1	<10	6.7	SPL	--	--	--	--
6/10/1997	--		87.02	10.22	--	76.8	<50	<0.5	<1.0	<1.0	<1.0	<10	6.1	SPL	--	--	--	--
12/12/1997	--	c	87.02	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	--	SPL	--	--	--	--
12/12/1997	--		87.02	12.61	--	74.41	<50	<0.5	<1.0	<1.0	<1.0	<10	5.6	SPL	--	--	--	--
6/18/1998	--		87.02	12.8	--	74.22	--	--	--	--	--	--	--	--	--	--	--	--
6/18/1998	--		87.02	9.07	--	77.95	50	<0.5	<1.0	<1.0	<1.0	<10	5.3	SPL	--	--	--	--
9/28/1999	--		87.02	13.76	--	73.26	--	--	--	--	--	--	--	--	--	--	--	--
3/27/2000	--		87.02	13.77	--	73.25	<50	<0.5	<0.5	<0.5	<0.5	1.6	--	PACE	--	--	--	--
9/28/2000	--		87.02	11.28	--	75.74	<50	<0.5	7.4	<0.5	1.3	2	--	PACE	--	--	--	--
3/8/2001	--		87.02	11.75	--	75.27	<50	<0.5	<0.5	<0.5	<0.5	60.4	--	PACE	--	--	--	--
9/21/2001	--		87.02	11.33	--	75.69	<50	<0.5	<0.5	<0.5	<1.5	8.18	--	PACE	--	--	--	--
2/28/2002	--		87.02	10.86	--	76.16	<50	<0.5	<0.5	<0.5	<1.0	25.5	--	PACE	--	--	--	--
9/6/2002	--		87.02	12.73	--	74.29	<50	1.2	<0.5	<0.5	1	16	--	SEQ	--	--	--	--
2/19/2003	--	h	87.02	11.72	--	75.3	<500	<5.0	<5.0	<5.0	<5.0	110	--	SEQ	--	--	--	--
7/14/2003	--		87.02	13.76	--	73.26	<50	<0.50	<0.50	<0.50	0.67	28	--	SEQ	--	--	--	--
01/14/2004	P		87.02	14.83	--	72.19	550	<5.0	<5.0	<5.0	<5.0	380	--	SEQM	8.1	--	--	--
04/23/2004	P	i	87.02	13.17	--	73.85	<200	<25	<25	<25	<25	560	--	SEQM	6.8	--	--	--
07/01/2004	P		87.02	15.19	--	71.83	<50	<0.50	<0.50	<0.50	0.50	48	--	SEQM	6.4	--	--	--
10/28/2004	P		87.02	15.50	--	71.52	<500	<5.0	<5.0	<5.0	<5.0	290	--	SEQM	6.3	--	--	--
01/10/2005	P		87.02	15.00	--	72.02	<50	<0.50	<0.50	<0.50	<0.50	18	--	SEQM	7.6	--	--	--
04/13/2005	P		87.02	14.34	--	72.68	<50	<0.50	<0.50	<0.50	<0.50	9.0	--	SEQM	7.1	--	--	--
07/11/2005	P	k	87.02	10.82	--	76.20	130	<1.0	<1.0	<1.0	<1.0	120	--	SEQM	7.8	--	--	--
10/17/2005	P		87.02	11.84	--	75.18	<250	<2.5	<2.5	<2.5	<2.5	260	--	SEQM	8.5	--	--	--
01/17/2006	P		87.02	11.59	--	75.43	800	<5.0	<5.0	<5.0	<5.0	980	--	SEQM	7.2	--	--	--
04/21/2006	P		87.02	10.00	--	77.02	<500	<5.0	<5.0	<5.0	<5.0	48	--	SEQM	6.7	--	--	--
7/17/2006	P	k	87.02	10.80	--	76.22	910	<5.0	<5.0	<5.0	<5.0	1,400	--	TAMC	7.7	--	--	--

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

Station #11102, 100 MacArthur Blvd., Oakland, CA

Well and Sample Date	P/NP	Footnote	TOC Elevation (feet msl)	DTW (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	DRO/TPHd (µg/L)	TOG (µg/L)	HVOC (µg/L)
							GRO/TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MtBE						
MW-3 Cont.																		
7/26/2006	P		87.02	9.67	--	77.35	810	<10	<10	<10	<10	1,300	--	TAMC	6.56	--	--	--
QC-2																		
11/11/1992	--	g	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	--	--	--
6/7/1993	--	g	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--	--
12/2/1993	--	g	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--	--
6/22/1994	--	g	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	--	--	--
1/10/1995	--	g	--	--	--	--	<50	<0.5	<0.5	<0.5	<1	--	--	ATI	--	--	--	--
6/21/1995	--	g	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	ATI	--	--	--	--
12/27/1995	--	g	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	--	--	--
6/13/1996	--	g	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<10	--	SPL	--	--	--	--

ABBREVIATIONS & SYMBOLS:

--/-- = Not analyzed/applicable/measured/available
< = Not detected at or above specified laboratory reporting limit
DO = Dissolved oxygen
DRO = Diesel range organics
DTW = Depth to water in ft bgs
ft bgs = feet below ground surface
ft MSL = feet above mean sea level
GRO = Gasoline range organics, range C4-C12
GWE = Groundwater elevation measured in ft MSL
HVOC = Halogenated volatile organic compounds
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 measured in ft MSL
TOG = Total oil and grease
TPH-d = Total petroleum hydrocarbons as diesel
TPH-g = Total petroleum hydrocarbons as gasoline
µg/L = Micrograms per liter
ANA = Anametrix, Inc.
PACE = Pace, Inc.
ATI = Analytical Technologies, Inc.
SAL = Superior Analytical Laboratory
SPL = Southern Petroleum Laboratories
SEQ/SEQM = Sequoia Analytical/Sequoia Analytical - Morgan Hill (Laboratories)

FOOTNOTES:

c = Blind duplicate.
d = A copy of the documentation for this data is included in Appendix C of Alisto report 10-076-06-002.
e = Tetrachloroethene
f = trans-1,2-Dichloroethene
g = Travel blank.
h = TPH-g, benzene, toluene, ethylbenzene, and total xylenes (BTEX), and MTBE analyzed by EPA Method 8260B beginning on 1st quarter sampling event (2/19/03).
k = The hydrocarbon result was partly due to individual peaks in the quantification range (GRO).
l = GRO analyzed by EPA Method 8015B.
m = Confirmatory analysis for total xylenes was past holding time.
n = Well inaccessible.

NOTES:

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 pH and DO 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 #11102, 100 MacArthur Blvd., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-1									
7/14/2003	<2000	2,700	940	<20	<20	<20	--	--	
01/14/2004	<1,000	2,500	220	<5.0	<5.0	<5.0	<5.0	<5.0	
04/23/2004	<500	2,500	150	<2.5	<2.5	<2.5	<2.5	<2.5	
07/01/2004	<500	2,000	96	<2.5	<2.5	<2.5	<2.5	<2.5	
10/28/2004	<5.0	1,500	43	<0.50	<0.50	0.58	<0.50	<0.50	
01/10/2005	<500	1,900	85	<2.5	<2.5	<2.5	<2.5	<2.5	
04/13/2005	<500	1,400	48	<2.5	<2.5	<2.5	<2.5	<2.5	
07/11/2005	<100	550	36	<0.50	<0.50	<0.50	<0.50	<0.50	
10/17/2005	<100	450	20	<0.50	<0.50	<0.50	<0.50	<0.50	a
01/17/2006	<300	260	38	<0.50	<0.50	0.54	<0.50	<0.50	
04/21/2006	<300	320	17	<0.50	<0.50	<0.50	<0.50	<0.50	
7/17/2006	<300	32	5.5	<0.50	<0.50	<0.50	<0.50	<0.50	
7/26/2006	<300	22	4.4	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-2									
7/14/2003	<100000	<20000	24,000	<1000	<1000	<1000	--	--	
01/14/2004	<100,000	<20,000	21,000	<500	<500	<500	<500	<500	
04/23/2004	<50,000	11,000	22,000	<250	<250	420	<250	<250	
07/01/2004	<10,000	2,900	5,200	<50	<50	110	<50	<50	
10/28/2004	<5.0	6,700	6,800	<50	<50	120	<50	<50	
01/10/2005	<50,000	<10,000	7,100	<250	<250	<250	<250	<250	
04/13/2005	<10,000	5,300	5,300	<50	<50	95	<50	<50	
07/11/2005	<10,000	9,000	5,300	<50	<50	99	<50	<50	
10/17/2005	<10,000	5,200	2,500	<50	<50	<50	<50	<50	a
01/17/2006	<30,000	8,400	2,200	<50	<50	<50	<50	<50	
04/21/2006	--	--	--	--	--	--	--	--	Well inaccessible
7/26/2006	<30,000	4,500	2,900	<50	<50	<50	<50	<50	
MW-3									
7/14/2003	<100	<20	28	<1.0	<1.0	<1.0	--	--	
01/14/2004	<1,000	<200	380	<5.0	<5.0	<5.0	<5.0	<5.0	
04/23/2004	<5,000	<1,000	560	<25	<25	<25	<25	<25	

**Table 2. Summary of Fuel Additives Analytical Data
Station #11102, 100 MacArthur Blvd., Oakland, CA**

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-3 Cont.									
07/01/2004	<100	<20	48	<0.50	<0.50	0.52	<0.50	<0.50	
10/28/2004	<5.0	<200	290	<5.0	<5.0	<5.0	<5.0	<5.0	
01/10/2005	<100	<20	18	<0.50	<0.50	<0.50	<0.50	<0.50	
04/13/2005	<100	<20	9.0	<0.50	<0.50	<0.50	<0.50	<0.50	
07/11/2005	<200	<40	120	<1.0	<1.0	1.4	<1.0	<1.0	a
10/17/2005	<500	<100	260	<2.5	<2.5	4.2	<2.5	<2.5	a
01/17/2006	<3,000	200	980	<5.0	<5.0	13	<5.0	<5.0	
04/21/2006	<3,000	<200	48	<5.0	<5.0	<5.0	<5.0	<5.0	
7/17/2006	<3,000	<200	1,400	<5.0	<5.0	15	<5.0	<5.0	
7/26/2006	<6,000	<400	1,400	<10	<10	18	<10	<10	

SYMBOLS & 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 calibration verification for ethanol was within the method limits but outside the contract limits.

NOTES:

All volatile organic compounds were 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.

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 18, 2006

Mr. Rob Miller
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2000 Kirman Avenue
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Groundwater Sampling Data Package
Former BP Service Station #11102
100 MacArthur Boulevard
Oakland, CA
Field Work Performed: 07/17/06 & 07/26/06

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 2006 protocols as identified in the Quarterly Monitoring Program Table in the Field and Laboratory Procedures Attachment.

Variations from Work Scope: The technician could not open well box of well MW-2 on 07/17/06. Therefore, this well was not gauged or sampled.

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 Manager



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

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.

2 August, 2006

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

RE: BP Heritage #11102, Oakland, CA
Work Order: MPG0564

Enclosed are the results of analyses for samples received by the laboratory on 07/18/06 16:40. 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: BP Heritage #11102, Oakland, CA
Project Number: G07T9-0027
Project Manager: Alok Kolekar

MPG0564
Reported:
08/02/06 13:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MPG0564-01	Water	07/17/06 14:45	07/18/06 16:40
MW-3	MPG0564-02	Water	07/17/06 15:10	07/18/06 16:40
TB-11102-07172006	MPG0564-03	Water	07/17/06 00:00	07/18/06 16:40

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 no custody seals.

URS Corporation [Arco]
1333 Broadway, Suite 800
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Project: BP Heritage #11102, Oakland, CA
Project Number: G07T9-0027
Project Manager: Alok Kolekar

MPG0564
Reported:
08/02/06 13:30

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MPG0564-01) Water Sampled: 07/17/06 14:45 Received: 07/18/06 16:40									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	6G21002	07/21/06	07/21/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		102 %	60-145		"	"	"	"	
MW-3 (MPG0564-02) Water Sampled: 07/17/06 15:10 Received: 07/18/06 16:40									
Gasoline Range Organics (C4-C12)	910	500	ug/l	10	6G21002	07/21/06	07/21/06	LUFT GCMS	PV
Surrogate: 1,2-Dichloroethane-d4		103 %	60-145		"	"	"	"	

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Project: BP Heritage #11102, Oakland, CA
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Project Manager: Alok Kolekar

MPG0564
Reported:
08/02/06 13:30

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MPG0564-01) Water Sampled: 07/17/06 14:45 Received: 07/18/06 16:40									
tert-Amyl methyl ether	ND	0.50	ug/l	1	6G21002	07/21/06	07/21/06	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	32	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	5.5	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		<i>102 %</i>	<i>60-145</i>						
<i>Surrogate: 4-Bromofluorobenzene</i>		<i>94 %</i>	<i>60-115</i>						
<i>Surrogate: Dibromofluoromethane</i>		<i>100 %</i>	<i>75-130</i>						
<i>Surrogate: Toluene-d8</i>		<i>93 %</i>	<i>70-130</i>						
MW-3 (MPG0564-02) Water Sampled: 07/17/06 15:10 Received: 07/18/06 16:40									
tert-Amyl methyl ether	15	5.0	ug/l	10	6G21002	07/21/06	07/21/06	EPA 8260B	
Benzene	ND	5.0	"	"	"	"	"	"	
tert-Butyl alcohol	ND	200	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Ethanol	ND	3000	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		<i>103 %</i>	<i>60-145</i>						
<i>Surrogate: 4-Bromofluorobenzene</i>		<i>91 %</i>	<i>60-115</i>						
<i>Surrogate: Dibromofluoromethane</i>		<i>100 %</i>	<i>75-130</i>						
<i>Surrogate: Toluene-d8</i>		<i>87 %</i>	<i>70-130</i>						

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Reported:
08/02/06 13:30

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (MPG0564-02RE1) Water Sampled: 07/17/06 15:10 Received: 07/18/06 16:40									
Methyl tert-butyl ether	1400	25	ug/l	50	6G25002	07/25/06	07/26/06	EPA 8260B	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		<i>103 %</i>		<i>60-145</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>		<i>82 %</i>		<i>60-115</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	
<i>Surrogate: Dibromofluoromethane</i>		<i>97 %</i>		<i>75-130</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	
<i>Surrogate: Toluene-d8</i>		<i>90 %</i>		<i>70-130</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	

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Reported:
08/02/06 13:30

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
Batch 6G21002 - EPA 5030B P/T / LUFT GCMS										
Blank (6G21002-BLK1)					Prepared & Analyzed: 07/21/06					
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	2.51		"	2.50		100	60-145			
Laboratory Control Sample (6G21002-BS1)					Prepared & Analyzed: 07/21/06					
Gasoline Range Organics (C4-C12)	816	50	ug/l	700		117	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.41		"	2.50		96	60-145			
Laboratory Control Sample (6G21002-BS2)					Prepared & Analyzed: 07/21/06					
Gasoline Range Organics (C4-C12)	453	50	ug/l	440		103	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.36		"	2.50		94	60-145			
Matrix Spike (6G21002-MS1)					Prepared & Analyzed: 07/21/06					
Gasoline Range Organics (C4-C12)	8560	500	ug/l	7000	910	109	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.51		"	2.50		100	60-145			
Matrix Spike Dup (6G21002-MSD1)					Prepared & Analyzed: 07/21/06					
Gasoline Range Organics (C4-C12)	8500	500	ug/l	7000	910	108	75-140	0.7	20	
Surrogate: 1,2-Dichloroethane-d4	2.47		"	2.50		99	60-145			

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Reported:
08/02/06 13:30

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 6G21002 - EPA 5030B P/T / EPA 8260B

Blank (6G21002-BLK1)

Prepared & Analyzed: 07/21/06

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>	2.51		"	2.50		100	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.48		"	2.50		99	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.52		"	2.50		101	75-130			
<i>Surrogate: Toluene-d8</i>	2.42		"	2.50		97	70-130			

Laboratory Control Sample (6G21002-BS1)

Prepared & Analyzed: 07/21/06

tert-Amyl methyl ether	10.4	0.50	ug/l	10.0		104	65-135			
Benzene	9.34	0.50	"	10.0		93	70-125			
tert-Butyl alcohol	218	20	"	200		109	60-135			
Di-isopropyl ether	11.1	0.50	"	10.0		111	70-130			
1,2-Dibromoethane (EDB)	10.9	0.50	"	10.0		109	85-125			
1,2-Dichloroethane	10.3	0.50	"	10.0		103	75-125			
Ethanol	217	300	"	200		108	15-150			
Ethyl tert-butyl ether	10.8	0.50	"	10.0		108	65-130			
Ethylbenzene	9.30	0.50	"	10.0		93	80-130			
Methyl tert-butyl ether	10.7	0.50	"	10.0		107	50-140			
Toluene	9.68	0.50	"	10.0		97	70-120			
Xylenes (total)	28.0	0.50	"	30.0		93	85-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.41		"	2.50		96	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.54		"	2.50		102	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.44		"	2.50		98	75-130			
<i>Surrogate: Toluene-d8</i>	2.57		"	2.50		103	70-130			

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Project Manager: Alok Kolekar

MPG0564
Reported:
08/02/06 13:30

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 6G21002 - EPA 5030B P/T / EPA 8260B

Matrix Spike (6G21002-MS1)	Source: MPG0564-02			Prepared & Analyzed: 07/21/06						
tert-Amyl methyl ether	132	5.0	ug/l	100	15	117	65-135			
Benzene	93.6	5.0	"	100	ND	94	70-125			
tert-Butyl alcohol	2230	200	"	2000	45	109	60-135			
Di-isopropyl ether	112	5.0	"	100	ND	112	70-130			
1,2-Dibromoethane (EDB)	112	5.0	"	100	ND	112	85-125			
1,2-Dichloroethane	109	5.0	"	100	ND	109	75-125			
Ethanol	3520	3000	"	2000	ND	176	15-150			LM
Ethyl tert-butyl ether	110	5.0	"	100	ND	110	65-130			
Ethylbenzene	99.5	5.0	"	100	ND	100	80-130			
Methyl tert-butyl ether	1440	5.0	"	100	1300	140	50-140			
Toluene	93.9	5.0	"	100	ND	94	70-120			
Xylenes (total)	288	5.0	"	300	ND	96	85-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>2.51</i>		<i>"</i>	<i>2.50</i>		<i>100</i>	<i>60-145</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>2.48</i>		<i>"</i>	<i>2.50</i>		<i>99</i>	<i>60-115</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>2.48</i>		<i>"</i>	<i>2.50</i>		<i>99</i>	<i>75-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>2.42</i>		<i>"</i>	<i>2.50</i>		<i>97</i>	<i>70-130</i>			

Matrix Spike Dup (6G21002-MSD1)	Source: MPG0564-02			Prepared & Analyzed: 07/21/06						
tert-Amyl methyl ether	131	5.0	ug/l	100	15	116	65-135	0.8	25	
Benzene	92.6	5.0	"	100	ND	93	70-125	1	15	
tert-Butyl alcohol	2260	200	"	2000	45	111	60-135	1	35	
Di-isopropyl ether	111	5.0	"	100	ND	111	70-130	0.9	35	
1,2-Dibromoethane (EDB)	110	5.0	"	100	ND	110	85-125	2	15	
1,2-Dichloroethane	107	5.0	"	100	ND	107	75-125	2	10	
Ethanol	3630	3000	"	2000	ND	182	15-150	3	35	LM
Ethyl tert-butyl ether	108	5.0	"	100	ND	108	65-130	2	35	
Ethylbenzene	98.7	5.0	"	100	ND	99	80-130	0.8	15	
Methyl tert-butyl ether	1420	5.0	"	100	1300	120	50-140	1	25	
Toluene	91.7	5.0	"	100	ND	92	70-120	2	15	
Xylenes (total)	285	5.0	"	300	ND	95	85-125	1	15	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>2.47</i>		<i>"</i>	<i>2.50</i>		<i>99</i>	<i>60-145</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>2.44</i>		<i>"</i>	<i>2.50</i>		<i>98</i>	<i>60-115</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>2.48</i>		<i>"</i>	<i>2.50</i>		<i>99</i>	<i>75-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>2.45</i>		<i>"</i>	<i>2.50</i>		<i>98</i>	<i>70-130</i>			

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Project Number: G07T9-0027
Project Manager: Alok Kolekar

MPG0564
Reported:
08/02/06 13:30

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 6G25002 - EPA 5030B P/T / EPA 8260B

Blank (6G25002-BLK1)				Prepared: 07/25/06 Analyzed: 07/26/06						
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>	2.53		"	2.50		101	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.15		"	2.50		86	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.37		"	2.50		95	75-130			
<i>Surrogate: Toluene-d8</i>	2.30		"	2.50		92	70-130			

Laboratory Control Sample (6G25002-BS1)				Prepared: 07/25/06 Analyzed: 07/26/06						
tert-Amyl methyl ether	9.37	0.50	ug/l	7.52		125	65-135			
Benzene	2.88	0.50	"	2.58		112	70-125			
tert-Butyl alcohol	84.1	20	"	71.6		117	60-135			
Di-isopropyl ether	9.15	0.50	"	7.56		121	70-130			
1,2-Dibromoethane (EDB)	8.85	0.50	"	7.44		119	85-125			
1,2-Dichloroethane	9.18	0.50	"	7.36		125	75-125			
Ethanol	103	300	"	70.8		145	15-150			
Ethyl tert-butyl ether	8.86	0.50	"	7.52		118	65-130			
Ethylbenzene	3.93	0.50	"	3.77		104	80-130			
Methyl tert-butyl ether	4.29	0.50	"	3.51		122	50-140			
Toluene	19.5	0.50	"	18.6		105	70-120			
Xylenes (total)	22.8	0.50	"	20.6		111	85-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.52		"	2.50		101	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.31		"	2.50		92	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.48		"	2.50		99	75-130			
<i>Surrogate: Toluene-d8</i>	2.42		"	2.50		97	70-130			

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08/02/06 13:30

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 6G25002 - EPA 5030B P/T / EPA 8260B

Matrix Spike (6G25002-MS1)	Source: MPG0642-17			Prepared: 07/25/06		Analyzed: 07/26/06				
tert-Amyl methyl ether	8.88	0.50	ug/l	7.52	ND	118	65-135			
Benzene	2.86	0.50	"	2.58	ND	111	70-125			
tert-Butyl alcohol	103	20	"	71.6	22	113	60-135			
Di-isopropyl ether	9.19	0.50	"	7.56	ND	122	70-130			
1,2-Dibromoethane (EDB)	8.38	0.50	"	7.44	ND	113	85-125			
1,2-Dichloroethane	13.6	0.50	"	7.36	5.0	117	75-125			
Ethanol	190	300	"	70.8	ND	268	15-150			LM
Ethyl tert-butyl ether	8.60	0.50	"	7.52	ND	114	65-130			
Ethylbenzene	3.84	0.50	"	3.77	ND	102	80-130			
Methyl tert-butyl ether	8.19	0.50	"	3.51	4.6	102	50-140			
Toluene	19.0	0.50	"	18.6	ND	102	70-120			
Xylenes (total)	22.1	0.50	"	20.6	ND	107	85-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>2.60</i>		<i>"</i>	<i>2.50</i>		<i>104</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>2.42</i>		<i>"</i>	<i>2.50</i>		<i>97</i>	<i>75-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>2.41</i>		<i>"</i>	<i>2.50</i>		<i>96</i>	<i>70-130</i>			

Matrix Spike Dup (6G25002-MSD1)	Source: MPG0642-17			Prepared: 07/25/06		Analyzed: 07/26/06				
tert-Amyl methyl ether	10.2	0.50	ug/l	7.52	ND	136	65-135	14	25	LM
Benzene	3.09	0.50	"	2.58	ND	120	70-125	8	15	
tert-Butyl alcohol	109	20	"	71.6	22	122	60-135	6	35	
Di-isopropyl ether	10.2	0.50	"	7.56	ND	135	70-130	10	35	LM
1,2-Dibromoethane (EDB)	9.81	0.50	"	7.44	ND	132	85-125	16	15	LM, IL
1,2-Dichloroethane	15.6	0.50	"	7.36	5.0	144	75-125	14	10	LM, IL
Ethanol	166	300	"	70.8	ND	234	15-150	13	35	LM
Ethyl tert-butyl ether	9.76	0.50	"	7.52	ND	130	65-130	13	35	
Ethylbenzene	3.99	0.50	"	3.77	ND	106	80-130	4	15	
Methyl tert-butyl ether	9.65	0.50	"	3.51	4.6	144	50-140	16	25	LM
Toluene	20.3	0.50	"	18.6	ND	109	70-120	7	15	
Xylenes (total)	23.0	0.50	"	20.6	ND	112	85-125	4	15	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>2.75</i>		<i>"</i>	<i>2.50</i>		<i>110</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>2.42</i>		<i>"</i>	<i>2.50</i>		<i>97</i>	<i>75-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>2.41</i>		<i>"</i>	<i>2.50</i>		<i>96</i>	<i>70-130</i>			

TestAmerica - Morgan Hill, CA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.

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

Project: BP Heritage #11102, Oakland, CA
Project Number: G07T9-0027
Project Manager: Alok Kolekar

MPG0564
Reported:
08/02/06 13:30

Notes and Definitions

PV Hydrocarbon result partly due to individ. peak(s) in quant. range
LM MS and/or MSD above acceptance limits. See Blank Spike(LCS).
IL RPD exceeds laboratory control limit
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



Chain of Custody Record

Project Name: Analytical for QMR sampling
 BP BU/AR Region/Enfos Segment: BP > Americas > West Coast > Retail > WCBU > CA > Central > 11102 > Historical/BL
 State or Lead Regulatory Agency: California Regional Water Quality Control Board - San Francisco
 Requested Due Date (mm/dd/yy): 10 Day TAT
BTJ#06077-52

On-site Time: <u>1405</u>	Temp: <u>75.0</u>
Off-site Time: <u>1540</u>	Temp: <u>80.0</u>
Sky Conditions: <u>Clear</u>	
Meteorological Events:	
Wind Speed:	Direction:

Lab Name: <u>Sequoia</u>	BP/AR Facility No.: <u>11102</u>	Consultant/Contractor: <u>URS</u>
Address: <u>885 Jarvis Drive</u> <u>Morgan Hill, CA 95037</u>	BP/AR Facility Address: <u>100 MacArthur Blvd., Oakland, CA 94610</u>	Address: <u>1333 Broadway, Suite 800</u> <u>Oakland, CA 94612</u>
Lab PM: <u>Lisa Race / Katt Min</u>	Site Lat/Long: <u>37.819113 / -122.253</u>	Consultant/Contractor Project No.: <u>38487119</u>
Tele/Fax: <u>408.782.8156 / 408.782.6308</u>	California Global ID No.: <u>T0600100908</u>	Consultant/Contractor PM: <u>Alok Kolekar</u>
BP/AR PM Contact: <u>Paul Supple</u>	Enfos Project No.: <u>G07T9-0027</u>	Tele/Fax: <u>510.874.3152 / 510.874.3268</u>
Address: <u>P.O. Box 6549</u> <u>Moraga, CA 94570</u>	Provision or RCOP: <u>Provision</u>	Report Type & QC Level: <u>Level 1 with EDF</u>
Tele/Fax: <u>925-299-8891</u>	Phase/WBS: <u>04 - Mon/Remed by Natural Attenuation</u>	E-mail EDD To: <u>jane.field@urscorp.com</u>
	Sub Phase/Task: <u>03 - Analytical</u>	Invoice to: <u>Atlantic Richfield Company</u>
	Cost Element: <u>05 - Subcontracted Costs</u>	

Item No.	Sample Description	Time	Date	Matrix			Laboratory No.	No. of Containers	Preservative					Requested Analysis					Sample Point Lat/Long and Comments
				Soil/Solid	Water/Liquid	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	GRO / BTEX (8260)	MTBE, TAME, ETBE	DEP, TBA (8260)	EDB, 1,2-DCA (8260)	Ethanol (8260)	
1	MW-1	MYS	07/01/00	X			01	3				X			X	X	X	X	MPG 0564
2	MW-3	1510		X			02	3				X			X	X	X		
3	76-1402-0717206			X			03	2				X							
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Sampler's Name: <u>S. Carmack</u>	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: <u>Blaise Tech Services</u>	<u>[Signature]</u>	<u>07/01/00</u>	<u>1240</u>	<u>[Signature]</u>	<u>7/17/00</u>	<u>1240</u>
Shipment Date:	<u>[Signature]</u>	<u>7/18/00</u>	<u>1558</u>	<u>[Signature]</u>	<u>7/18/00</u>	<u>1640</u>
Shipment Method:	<u>[Signature]</u>	<u>7/18/00</u>	<u>1640</u>	<u>[Signature]</u>	<u>7/18/00</u>	<u>1640</u>
Shipment Tracking No:						

Instructions: CC to bpedf@broadbentinc.com

Place Yes No Temp Blank Yes No Cooler Temperature on Receipt 4.0°C Trip Blank Yes No

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: BP / ARCO 11102
 REC. BY (PRINT) FELW
 WORKORDER: HPG6524

DATE REC'D AT LAB: JULY 18, 2006
 TIME REC'D AT LAB: 1640
 DATE LOGGED IN: 7-19-06

For Regulatory Purposes?
 DRINKING WATER YES/NO YES NO
 WASTE WATER YES/NO 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 / <input checked="" type="checkbox"/> Absent Intact / Broken*	01	A-C	MW-1	3 VOAS	HCL	-	liquid	7/17/06	7/18/06 SET O O C
	02	L	MW-3	3 VOAS	HCL	-	liquid	7/17/06	
2. Chain-of-Custody Present / <input checked="" type="checkbox"/> Absent*	03	A,3	SP-11102-0712006	2 VOAS	HCL	-	liquid	7/17/06	
3. Traffic Reports or Packing List: Present / <input checked="" type="checkbox"/> Absent									
4. Airbill: Airbill / Sticker Present / <input checked="" type="checkbox"/> Absent									
5. Airbill #:									
6. Sample Labels: Present / <input checked="" type="checkbox"/> Absent									
7. Sample IDs: Listed / <input checked="" type="checkbox"/> Not Listed on Chain-of-Custody									
8. Sample Condition: Intact / <input checked="" type="checkbox"/> Broken* / Leaking*									
9. Does information on chain-of-custody, traffic reports and sample labels agree? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No*									
10. Sample received within hold time? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No*									
11. Adequate sample volume received? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No*									
12. Proper preservatives used? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No*									
13. Trip Blank / Temp Blank Received? (circle which, if yes) <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No*									
14. Read Temp: <u>3.0°C</u> Corrected Temp: <u>3.0°C</u> Is corrected temp 4 +/-2°C? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No**									
(Acceptance range for samples requiring thermal-pres) **Exception (if any): METALS / <input checked="" type="checkbox"/> OFF ON ICE or Problem COC									

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

16 August, 2006

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

RE: BP Heritage #11102, Oakland, CA
Work Order: MPG1174

Enclosed are the results of analyses for samples received by the laboratory on 07/27/06 17:40. 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: BP Heritage #11102, Oakland, CA Project Number: G07T9-0027 Project Manager: Alok Kolekar	MPG1174 Reported: 08/16/06 10:54
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ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MPG1174-01	Water	07/26/06 12:40	07/27/06 17:40
MW-2	MPG1174-02	Water	07/26/06 13:25	07/27/06 17:40
MW-3	MPG1174-03	Water	07/26/06 13:00	07/27/06 17:40
TB-11102-072606	MPG1174-04	Water	07/26/06 00:00	07/27/06 17:40

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 no custody seals.

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

Project: BP Heritage #11102, Oakland, CA
Project Number: G07T9-0027
Project Manager: Alok Kolekar

MPG1174
Reported:
08/16/06 10:54

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MPG1174-01) Water Sampled: 07/26/06 12:40 Received: 07/27/06 17:40									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	6H06004	08/06/06	08/07/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		90 %	60-145		"	"	"	"	
MW-2 (MPG1174-02) Water Sampled: 07/26/06 13:25 Received: 07/27/06 17:40									
Gasoline Range Organics (C4-C12)	2700	1000	ug/l	20	6H07011	08/07/06	08/08/06	LUFT GCMS	PV
Surrogate: 1,2-Dichloroethane-d4		98 %	60-145		"	"	"	"	
MW-3 (MPG1174-03) Water Sampled: 07/26/06 13:00 Received: 07/27/06 17:40									
Gasoline Range Organics (C4-C12)	810	250	ug/l	5	6H09005	08/09/06	08/09/06	LUFT GCMS	
Surrogate: 1,2-Dichloroethane-d4		89 %	60-145		"	"	"	"	

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

Project: BP Heritage #11102, Oakland, CA
Project Number: G07T9-0027
Project Manager: Alok Kolekar

MPG1174
Reported:
08/16/06 10:54

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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MW-1 (MPG1174-01) Water Sampled: 07/26/06 12:40 Received: 07/27/06 17:40

tert-Amyl methyl ether	ND	0.50	ug/l	1	6H06004	08/06/06	08/07/06	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	22	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	4.4	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4

90 % 60-145

Surrogate: 4-Bromofluorobenzene

94 % 60-115

Surrogate: Dibromofluoromethane

98 % 75-130

Surrogate: Toluene-d8

98 % 70-130

MW-2 (MPG1174-02) Water Sampled: 07/26/06 13:25 Received: 07/27/06 17:40

tert-Amyl methyl ether	ND	50	ug/l	100	6H06004	08/06/06	08/07/06	EPA 8260B	
Benzene	ND	50	"	"	"	"	"	"	
tert-Butyl alcohol	4500	2000	"	"	"	"	"	"	
Di-isopropyl ether	ND	50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	50	"	"	"	"	"	"	
Ethanol	ND	30000	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	50	"	"	"	"	"	"	
Ethylbenzene	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	2900	50	"	"	"	"	"	"	
Toluene	ND	50	"	"	"	"	"	"	
Xylenes (total)	ND	50	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4

94 % 60-145

Surrogate: 4-Bromofluorobenzene

89 % 60-115

Surrogate: Dibromofluoromethane

101 % 75-130

Surrogate: Toluene-d8

90 % 70-130

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

Project: BP Heritage #11102, Oakland, CA
Project Number: G07T9-0027
Project Manager: Alok Kolekar

MPG1174
Reported:
08/16/06 10:54

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

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
MW-3 (MPG1174-03) Water Sampled: 07/26/06 13:00 Received: 07/27/06 17:40										
tert-Amyl methyl ether	18	10		ug/l	20	6H06007	08/06/06	08/07/06	EPA 8260B	
Benzene	ND	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	ND	10		"	"	"	"	"	"	
Methyl tert-butyl ether	1300	10		"	"	"	"	"	"	
Toluene	ND	10		"	"	"	"	"	"	
Xylenes (total)	ND	10		"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		106 %			60-145	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		94 %			60-115	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		98 %			75-130	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		96 %			70-130	"	"	"	"	

URS Corporation [Arco] 1333 Broadway, Suite 800 Oakland CA, 94612	Project: BP Heritage #11102, Oakland, CA Project Number: G07T9-0027 Project Manager: Alok Kolekar	MPG1174 Reported: 08/16/06 10:54
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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 6H06004 - EPA 5030B P/T / LUFT GCMS

Blank (6H06004-BLK1)		Prepared: 08/06/06 Analyzed: 08/07/06								
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	2.18		"	2.50		87	60-145			
Laboratory Control Sample (6H06004-BS1)		Prepared & Analyzed: 08/06/06								
Gasoline Range Organics (C4-C12)	463	50	ug/l	440		105	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.06		"	2.50		82	60-145			
Matrix Spike (6H06004-MS1)		Source: MPG1173-03		Prepared & Analyzed: 08/06/06						
Gasoline Range Organics (C4-C12)	10700	500	ug/l	4400	6000	107	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.06		"	2.50		82	60-145			
Matrix Spike Dup (6H06004-MSD1)		Source: MPG1173-03		Prepared & Analyzed: 08/06/06						
Gasoline Range Organics (C4-C12)	10700	500	ug/l	4400	6000	107	75-140	0	20	
Surrogate: 1,2-Dichloroethane-d4	2.04		"	2.50		82	60-145			

Batch 6H07011 - EPA 5030B P/T / LUFT GCMS

Blank (6H07011-BLK1)		Prepared: 08/07/06 Analyzed: 08/08/06								
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	2.41		"	2.50		96	60-145			
Laboratory Control Sample (6H07011-BS1)		Prepared & Analyzed: 08/07/06								
Gasoline Range Organics (C4-C12)	465	50	ug/l	440		106	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.11		"	2.50		84	60-145			
Matrix Spike (6H07011-MS1)		Source: MPG1178-03		Prepared & Analyzed: 08/07/06						
Gasoline Range Organics (C4-C12)	455	50	ug/l	440	ND	103	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.08		"	2.50		83	60-145			

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

Project: BP Heritage #11102, Oakland, CA
Project Number: G07T9-0027
Project Manager: Alok Kolekar

MPG1174
Reported:
08/16/06 10:54

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 6H07011 - EPA 5030B P/T / LUFT GCMS

Matrix Spike Dup (6H07011-MSD1)		Source: MPG1178-03		Prepared & Analyzed: 08/07/06						
Gasoline Range Organics (C4-C12)	440	50	ug/l	440	ND	100	75-140	3	20	
Surrogate: 1,2-Dichloroethane-d4	2.04		"	2.50		82	60-145			

Batch 6H09005 - EPA 5030B P/T / LUFT GCMS

Blank (6H09005-BLK1)		Prepared & Analyzed: 08/09/06								
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Surrogate: 1,2-Dichloroethane-d4	2.53		"	2.50		101	60-145			

Laboratory Control Sample (6H09005-BS2)		Prepared & Analyzed: 08/09/06								
Gasoline Range Organics (C4-C12)	510	50	ug/l	440		116	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.17		"	2.50		87	60-145			

Matrix Spike (6H09005-MS1)		Source: MPG1174-03		Prepared & Analyzed: 08/09/06						
Gasoline Range Organics (C4-C12)	2800	250	ug/l	2200	810	90	75-140			
Surrogate: 1,2-Dichloroethane-d4	2.05		"	2.50		82	60-145			

Matrix Spike Dup (6H09005-MSD1)		Source: MPG1174-03		Prepared & Analyzed: 08/09/06						
Gasoline Range Organics (C4-C12)	2850	250	ug/l	2200	810	93	75-140	2	20	
Surrogate: 1,2-Dichloroethane-d4	2.05		"	2.50		82	60-145			

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

Project: BP Heritage #11102, Oakland, CA
Project Number: G07T9-0027
Project Manager: Alok Kolekar

MPG1174
Reported:
08/16/06 10:54

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 6H06004 - EPA 5030B P/T / EPA 8260B

Blank (6H06004-BLK1)

Prepared: 08/06/06 Analyzed: 08/07/06

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>	2.18		"	2.50		87	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.34		"	2.50		94	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.46		"	2.50		98	75-130			
<i>Surrogate: Toluene-d8</i>	2.35		"	2.50		94	70-130			

Laboratory Control Sample (6H06004-BS1)

Prepared & Analyzed: 08/06/06

tert-Amyl methyl ether	14.8	0.50	ug/l	15.0		99	65-135			
Benzene	5.36	0.50	"	5.16		104	70-125			
tert-Butyl alcohol	137	20	"	143		96	60-135			
Di-isopropyl ether	14.6	0.50	"	15.1		97	70-130			
1,2-Dibromoethane (EDB)	14.8	0.50	"	14.9		99	85-125			
1,2-Dichloroethane	13.4	0.50	"	14.7		91	75-125			
Ethanol	101	300	"	142		71	15-150			
Ethyl tert-butyl ether	14.4	0.50	"	15.0		96	65-130			
Ethylbenzene	7.08	0.50	"	7.54		94	80-130			
Methyl tert-butyl ether	7.23	0.50	"	7.02		103	50-140			
Toluene	37.8	0.50	"	37.2		102	70-120			
Xylenes (total)	39.6	0.50	"	41.2		96	85-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.06		"	2.50		82	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.70		"	2.50		108	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.29		"	2.50		92	75-130			
<i>Surrogate: Toluene-d8</i>	2.59		"	2.50		104	70-130			

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

Project: BP Heritage #11102, Oakland, CA
Project Number: G07T9-0027
Project Manager: Alok Kolekar

MPG1174
Reported:
08/16/06 10:54

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 6H06004 - EPA 5030B P/T / EPA 8260B

Matrix Spike (6H06004-MS1)	Source: MPG1173-03			Prepared & Analyzed: 08/06/06						
tert-Amyl methyl ether	145	5.0	ug/l	150	ND	97	65-135			
Benzene	193	5.0	"	51.6	140	103	70-125			
tert-Butyl alcohol	1620	200	"	1430	270	94	60-135			
Di-isopropyl ether	313	5.0	"	151	160	101	70-130			
1,2-Dibromoethane (EDB)	144	5.0	"	149	ND	97	85-125			
1,2-Dichloroethane	133	5.0	"	147	ND	90	75-125			
Ethanol	1420	3000	"	1420	ND	100	15-150			
Ethyl tert-butyl ether	142	5.0	"	150	ND	95	65-130			
Ethylbenzene	185	5.0	"	75.4	110	99	80-130			
Methyl tert-butyl ether	301	5.0	"	70.2	220	115	50-140			
Toluene	874	5.0	"	372	510	98	70-120			
Xylenes (total)	967	5.0	"	412	580	94	85-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>2.06</i>		<i>"</i>	<i>2.50</i>		<i>82</i>	<i>60-145</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>2.65</i>		<i>"</i>	<i>2.50</i>		<i>106</i>	<i>60-115</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>2.23</i>		<i>"</i>	<i>2.50</i>		<i>89</i>	<i>75-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>2.63</i>		<i>"</i>	<i>2.50</i>		<i>105</i>	<i>70-130</i>			

Matrix Spike Dup (6H06004-MSD1)	Source: MPG1173-03			Prepared & Analyzed: 08/06/06						
tert-Amyl methyl ether	146	5.0	ug/l	150	ND	97	65-135	0.7	25	
Benzene	193	5.0	"	51.6	140	103	70-125	0	15	
tert-Butyl alcohol	1620	200	"	1430	270	94	60-135	0	35	
Di-isopropyl ether	307	5.0	"	151	160	97	70-130	2	35	
1,2-Dibromoethane (EDB)	144	5.0	"	149	ND	97	85-125	0	15	
1,2-Dichloroethane	129	5.0	"	147	ND	88	75-125	3	10	
Ethanol	1550	3000	"	1420	ND	109	15-150	9	35	
Ethyl tert-butyl ether	140	5.0	"	150	ND	93	65-130	1	35	
Ethylbenzene	181	5.0	"	75.4	110	94	80-130	2	15	
Methyl tert-butyl ether	306	5.0	"	70.2	220	123	50-140	2	25	
Toluene	865	5.0	"	372	510	95	70-120	1	15	
Xylenes (total)	953	5.0	"	412	580	91	85-125	1	15	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>2.04</i>		<i>"</i>	<i>2.50</i>		<i>82</i>	<i>60-145</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>2.67</i>		<i>"</i>	<i>2.50</i>		<i>107</i>	<i>60-115</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>2.26</i>		<i>"</i>	<i>2.50</i>		<i>90</i>	<i>75-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>2.66</i>		<i>"</i>	<i>2.50</i>		<i>106</i>	<i>70-130</i>			

URS Corporation [Arco] 1333 Broadway, Suite 800 Oakland CA, 94612	Project: BP Heritage #11102, Oakland, CA Project Number: G07T9-0027 Project Manager: Alok Kolekar	MPG1174 Reported: 08/16/06 10:54
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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 6H06007 - EPA 5030B P/T / EPA 8260B

Blank (6H06007-BLK1)

Prepared: 08/06/06 Analyzed: 08/07/06

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>	2.80		"	2.50		112	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.35		"	2.50		94	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.47		"	2.50		99	75-130			
<i>Surrogate: Toluene-d8</i>	2.42		"	2.50		97	70-130			

Laboratory Control Sample (6H06007-BS1)

Prepared: 08/06/06 Analyzed: 08/07/06

tert-Amyl methyl ether	15.2	0.50	ug/l	15.0		101	65-135			
Benzene	5.38	0.50	"	5.16		104	70-125			
tert-Butyl alcohol	166	20	"	143		116	60-135			
Di-isopropyl ether	15.0	0.50	"	15.1		99	70-130			
1,2-Dibromoethane (EDB)	16.4	0.50	"	14.9		110	80-125			
1,2-Dichloroethane	15.4	0.50	"	14.7		105	75-125			
Ethanol	149	300	"	142		105	15-150			
Ethyl tert-butyl ether	15.7	0.50	"	15.0		105	65-130			
Ethylbenzene	7.48	0.50	"	7.54		99	70-130			
Methyl tert-butyl ether	7.60	0.50	"	7.02		108	50-140			
Toluene	34.8	0.50	"	37.2		94	70-120			
Xylenes (total)	42.4	0.50	"	41.2		103	80-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.37		"	2.50		95	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.41		"	2.50		96	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.47		"	2.50		99	75-130			
<i>Surrogate: Toluene-d8</i>	2.57		"	2.50		103	70-130			

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

Project: BP Heritage #11102, Oakland, CA
Project Number: G07T9-0027
Project Manager: Alok Kolekar

MPG1174
Reported:
08/16/06 10:54

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 6H06007 - EPA 5030B P/T / EPA 8260B

Matrix Spike (6H06007-MS1)	Source: MPG1175-01			Prepared: 08/06/06 Analyzed: 08/07/06						
tert-Amyl methyl ether	16.9	0.50	ug/l	15.0	0.71	108	65-135			
Benzene	5.65	0.50	"	5.16	0.15	107	70-125			
tert-Butyl alcohol	171	20	"	143	ND	120	60-135			
Di-isopropyl ether	16.8	0.50	"	15.1	ND	111	70-130			
1,2-Dibromoethane (EDB)	18.3	0.50	"	14.9	ND	123	80-125			
1,2-Dichloroethane	17.4	0.50	"	14.7	ND	118	75-125			
Ethanol	144	300	"	142	ND	101	15-150			
Ethyl tert-butyl ether	17.5	0.50	"	15.0	ND	117	65-130			
Ethylbenzene	7.69	0.50	"	7.54	ND	102	70-130			
Methyl tert-butyl ether	9.08	0.50	"	7.02	0.36	124	50-140			
Toluene	36.3	0.50	"	37.2	ND	98	70-120			
Xylenes (total)	43.1	0.50	"	41.2	ND	105	80-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.59		"	2.50		104	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.46		"	2.50		98	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.47		"	2.50		99	75-130			
<i>Surrogate: Toluene-d8</i>	2.59		"	2.50		104	70-130			

Matrix Spike Dup (6H06007-MSD1)	Source: MPG1175-01			Prepared: 08/06/06 Analyzed: 08/07/06						
tert-Amyl methyl ether	18.0	0.50	ug/l	15.0	0.71	115	65-135	6	25	
Benzene	5.94	0.50	"	5.16	0.15	112	70-125	5	15	
tert-Butyl alcohol	179	20	"	143	ND	125	60-135	5	35	
Di-isopropyl ether	19.1	0.50	"	15.1	ND	126	70-130	13	35	
1,2-Dibromoethane (EDB)	18.7	0.50	"	14.9	ND	126	80-125	2	15	LM
1,2-Dichloroethane	18.9	0.50	"	14.7	ND	129	75-125	8	10	LM
Ethanol	162	300	"	142	ND	114	15-150	12	35	
Ethyl tert-butyl ether	19.3	0.50	"	15.0	ND	129	65-130	10	35	
Ethylbenzene	8.13	0.50	"	7.54	ND	108	70-130	6	15	
Methyl tert-butyl ether	9.75	0.50	"	7.02	0.36	134	50-140	7	25	
Toluene	36.9	0.50	"	37.2	ND	99	70-120	2	15	
Xylenes (total)	44.6	0.50	"	41.2	ND	108	80-125	3	15	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.71		"	2.50		108	60-145			
<i>Surrogate: 4-Bromofluorobenzene</i>	2.54		"	2.50		102	60-115			
<i>Surrogate: Dibromofluoromethane</i>	2.48		"	2.50		99	75-130			
<i>Surrogate: Toluene-d8</i>	2.55		"	2.50		102	70-130			

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

Project: BP Heritage #11102, Oakland, CA
Project Number: G07T9-0027
Project Manager: Alok Kolekar

MPG1174
Reported:
08/16/06 10:54

Notes and Definitions

PV Hydrocarbon result partly due to individ. peak(s) in quant. range
LM MS and/or MSD above acceptance limits. See Blank Spike(LCS).
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



Chain of Custody Record

Project Name: Analytical for QMR sampling
 BP BU/AR Region/Enfos Segment: BP > Americas > West Coast > Retail > WCBU > CA > Central > 11102 > Historical/BL
 State or Lead Regulatory Agency: California Regional Water Quality Control Board - San Fran
 Requested Due Date (mm/dd/yy): 10 Day TAT

On-site Time: <u>1145</u>	Temp: <u>65</u>
Off-site Time: <u>1345</u>	Temp: <u>80</u>
Sky Conditions: <u>SUN</u>	
Meteorological Events:	
Wind Speed:	Direction:

Lab Name: <u>Sequoia</u>	BP/AR Facility No.: <u>11102</u>	Consultant/Contractor: <u>URS</u>
Address: <u>885 Jarvis Drive</u> <u>Morgan Hill, CA 95037</u>	BP/AR Facility Address: <u>100 MacArthur Blvd., Oakland, CA 94610</u>	Address: <u>1333 Broadway, Suite 800</u> <u>Oakland, CA 94612</u>
Lab PM: <u>Lisa Race / Katt Min</u>	California Global ID No.: <u>T0600100908</u>	Consultant/Contractor Project No.: <u>38487119</u>
Tele/Fax: <u>408.782.8156 / 408.782.6308</u>	Enfos Project No.: <u>G07T9-0027</u>	Consultant/Contractor PM: <u>Alok Kolekar</u>
BP/AR PM Contact: <u>Paul Supple</u>	Provision or RCOP: <u>Provision</u>	Tele/Fax: <u>510.874.3152 / 510.874.3268</u>
Address: <u>P.O. Box 6549</u> <u>Moraga, CA 94570</u>	Phase/WBS: <u>04 - Mon/Remed by Natural Attenuation</u>	Report Type & QC Level: <u>Level 1 with EDF</u>
Tele/Fax: <u>925-299-8891</u>	Sub Phase/Task: <u>03 - Analytical</u>	E-mail BDD To: <u>jane.field@urscorp.com</u>
	Cost Element: <u>05 - Subcontracted Costs</u>	Invoice to: <u>Atlantic Richfield Company</u>

Lab Bottle Order No: 11102				Matrix			Laboratory No.	No. of Containers	Preservative					Requested Analysis					Sample Point Lat/Long and Comments		
Item No.	Sample Description	Time	Date	Soil/Solid	Water/Liquid	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	GR0 / BTEX (\$260)	MIBB, TAME, ETBE DPE, TEA (\$260)	EDB, 1,2-DCA (\$260)	Elutanol (\$260)				
1	MW-1	1240	7/24/06	X			MPG1174	3					X	X	X	X					
2	MW-2	1305		X				3					X	X	X	X					
3	MW-3	1300		X				3					X	X	X	X					
4	TB-11102-072606			X				2													On Hold
5																					
6																					
7																					
8																					
9																					
10																					

Sampler's Name: <u>Shawn Lane</u>	Relinquished By / Affiliation: <u>[Signature]</u>	Date: <u>7/26/06</u>	Time: <u>1730</u>	Accepted By / Affiliation: <u>[Signature]</u>	Date: <u>7/26/06</u>	Time: <u>1730</u>
Sampler's Company: <u>BIS</u>		Date: <u>7/26/06</u>	Time: <u>1645</u>		Date: <u>7/27/06</u>	Time: <u>1525</u>
Shipment Date:		Date: <u>7-27-06</u>	Time: <u>1740</u>		Date: <u>7/27/06</u>	Time: <u>1710</u>
Shipment Method:						
Shipment Tracking No:						

Special Instructions: CC to bpedf@broadbentinc.com

Custody Seals In Place Yes No Temp Blank Yes No Cooler Temperature on Receipt 38 °C Trip Blank Yes No

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: BP
 REC. BY (PRINT): EA
 WORKORDER: MPG1174

DATE REC'D AT LAB: 7/27/06
 TIME REC'D AT LAB: 17:40
 DATE LOGGED IN: 7/30/06

For Regulatory Purposes?
 DRINKING WATER YES/NO YES NO
 WASTE WATER YES/NO 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 / <input checked="" type="radio"/> Absent Intact / Broken*									
2. Chain-of-Custody	<input checked="" type="radio"/> Present / Absent*									
3. Traffic Reports or Packing List:	Present / <input checked="" type="radio"/> Absent									
4. Airbill:	Airbill / Sticker Present / <input checked="" type="radio"/> Absent									
5. Airbill #:										
6. Sample Labels:	<input checked="" type="radio"/> Present / Absent									
7. Sample IDs:	<input checked="" type="radio"/> Listed / Not Listed on Chain-of-Custody									
8. Sample Condition:	<input checked="" type="radio"/> Intact / Broken* / Leaking*									
9. Does information on chain-of-custody, traffic reports and sample labels agree?	<input checked="" type="radio"/> Yes / No*									
10. Sample received within hold time?	<input checked="" type="radio"/> Yes / No*									
11. Adequate sample volume received?	<input checked="" type="radio"/> Yes / No*									
12. Proper preservatives used?	<input checked="" type="radio"/> Yes / No*									
13. Trip Blank / Temp Blank Received? (circle which, if yes)	<input checked="" type="radio"/> Yes / No*									
14. Read Temp: <u>3.8°C</u> Corrected Temp: <u>3.8°C</u> Is corrected temp 4 ± 2°C? <input checked="" type="radio"/> Yes / No**										

~~SEE COC~~

~~7/27/06 EA~~

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

WELL GAUGING DATA

Project # 060777-SR2 Date 07/17/06 Client BP 11102

Site 100 McArthur Blvd, Oakland, CA

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	1415	4					9.25	32.00		
MW-2	1415	Could Not Accu; Could not open well' bod - bent back								
MW-3	1420	4					10.80	32.44		

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 060717-502	Station # BP BP11102
Sampler: S. Carmack	Date: 07/17/06
Well I.D.: MW-1	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: 3200	Depth to Water: 9.25
Depth to Free Product: <u> </u>	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH

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

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

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>14.8</u>	x	<u>3</u>	=	<u>44.4</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u>)	Gals. Removed	Observations
1430	69.8	8.0	768	14.8	clear very slight odor
1433	69.6	7.9	757	29.6	cc cc cc cc
1436	69.0	7.7	739	44.4	cc cc cc cc

Did well dewater? Yes No Gallons actually evacuated: 44.4

Sampling Time: 1445 Sampling Date: 07/17/06

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

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

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 060717-5c2	Station # BP1102
Sampler: S. Carmona	Date: 07/17/06
Well I.D.: MW-2	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: _____	Depth to Water: _____
Depth to Free Product: _____	Thickness of Free Product (feet): _____
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 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: _____ 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 µS)	Gals. Removed	Observations
* Could Not Access / Could not open well					

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Time: _____ Sampling Date: _____

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 2607170522	Station # 88-11102
Sampler: G-Cor mark	Date: 07/17/06
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8
Total Well Depth: 32.44	Depth to Water: 10.80
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 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: _____ If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

14.1	x	3	=	42.3	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μS)	Gals. Removed	Observations
1450	68.9	7.9	746	14.1	clear / odor
1453	68.7	7.7	752	28.2	"
1455	68.5	7.7	768	42.3	

Did well dewater? Yes No Gallons actually evacuated: 42.3

Sampling Time: 1510 Sampling Date: 07/17/06

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

Analyzed for:	GRO BTEX MTBE DRO Oxy's 1,2-DCA EDB Ethanol	Other: 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
D.O. (if req'd):	Pre-purge: _____ mg/L	Post-purge: _____ 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:

BP 11/07

Station #

100 Mag Arthur Blvd. Oakland CA

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

86.9

added equip.
rinse water

5

any other
adjustments

91.9

**TOTAL GALS.
RECOVERED**

92

loaded onto
BTS vehicle #

22

BTS event #

0707-502

time date

75 50 07 + 17 06

signature

[Signature]

REC'D AT

time

date

unloaded by
signature

1 1



WELLHEAD INSPECTION CHECKLIST
BP / GEM

Date 2/7/17/06

Site Address 100 MacArthur Blvd. Oakland, CA

Job Number 060717 @ 502

Technician S. Gormack

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-1	X							
MW-2		Keuld not open well box						
MW-3	X (SC)						X	

NOTES: MW-3 => both tabs stripped

Repair Data Sheet

Client Arco / Bp Date 7-25-06
 Site Address 100 Macarthur Blvd, Oakland
 Job Number 060725AA1 Technician Andrew Adinolfi

Check Indicates deficiency

Inspection Point (Well ID or description of location)	Well Inspected, Cleaned, Labeled - No Further Corrective Action Required	Replaced Cap	Replaced Lock	Replaced Lid Seal	Casing	Annular Seal	Tabs / Bolts	Box Structure	Apron	Trip Hazard	Below Grade	Not Securable by Design (12" diameter or less)	Lid not marked with words "MONITORING WELL"	Other Deficiency	Not Securable by Design (greater than 12" diameter)	Well Not Inspected (explain in notes)	Deficiency Logged on Repair Order	Deficiency Remains Uncorrected/Logged on Site Inspection Checklist	Partial Repair Completed/Outstanding Deficiency Logged on Repair Order	All Repairs Completed
MW-2							X													X
Notes: Bolt bent removed and retap added new bolts																				
MW-3							X													X
Notes: 2 of 2 stripped tabs retap/heli																				
Notes:																				
Notes:																				
Notes:																				

WELL GAUGING DATA

Project # 06072642 Date 7/26/06 Client Arco

Site 100 ^{ED} MacC McAthur Blvd Oak (7th)

Well ID	Time	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	Notes
MW-1	1200	4					8.57	32.02	↓	
MW-2	1210	4				10.47	32.40			
MW-3	1205	4				9.67	32.50			

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>060726-SLZ</u>	Station # <u>11102</u>
Sampler: <u>SL</u>	Date: <u>7/26/06</u>
Well I.D.: <u>MW-1</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: <u>3202</u>	Depth to Water: <u>8.57</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 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: _____ 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>15.4</u>	X	<u>3</u>	=	<u>46.2</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
<u>1228</u>	<u>69.9</u>	<u>6.69</u>	<u>542</u>	<u>15.4</u>	<u>clear</u>
<u>1231</u>	<u>69.6</u>	<u>6.62</u>	<u>636</u>	<u>30.8</u>	
<u>1234</u>	<u>68.6</u>	<u>6.63</u>	<u>664</u>	<u>46.2</u>	

Did well dewater? Yes No Gallons actually evacuated: 46.2

Sampling Time: 1240 Sampling Date: 7/26/06

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

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>060726-9LZ</u>	Station # <u>11102</u>
Sampler: <u>SL</u>	Date: <u>7/26/06</u>
Well I.D.: <u>MW-2</u>	Well Diameter: 2 3 <u>4</u> 6 8 _____
Total Well Depth: <u>32.40</u>	Depth to Water: <u>10.47</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade.	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 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: _____ 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>14.3</u>	x	<u>3</u>	=	<u>42.9</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u>)	Gals. Removed	Observations
<u>1313</u>	<u>70.7</u>	<u>6.52</u>	<u>987</u>	<u>14.3</u>	
<u>1316</u>	<u>71.3</u>	<u>6.77</u>	<u>639</u>	<u>28.6</u>	
<u>1319</u>	<u>70.8</u>	<u>6.69</u>	<u>679</u>	<u>42.9</u>	

Did well dewater? Yes No Gallons actually evacuated: 42.9

Sampling Time: 1325 Sampling Date: 7/26/06

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

Analyzed for: GRO BTEX MTBE DRO Oxy's 2-DCP EDP Ethanol Other: _____

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>060726-9L2</u>	Station # <u>11102</u>
Sampler: <u>SL</u>	Date: <u>7/26/06</u>
Well I.D.: <u>MW-3</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: <u>32.50</u>	Depth to Water: <u>9.67</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade.	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius ² * 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: _____ 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>14.8</u>	X	<u>3</u>	=	<u>44.4</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u>)	Gals. Removed	Observations
<u>1252</u>	<u>70.4</u>	<u>6.69</u>	<u>625</u>	<u>14.8</u>	<u>clear</u>
<u>1255</u>	<u>70.9</u>	<u>6.55</u>	<u>607</u>	<u>29.6</u>	
<u>1258</u>	<u>71.2</u>	<u>6.56</u>	<u>612</u>	<u>44.4</u>	

Did well dewater? Yes No Gallons actually evacuated: 44.4

Sampling Time: 1300 Sampling Date: 7/26/07

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

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

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:

11102

Station #

100 MacArthur Blvd Oakland

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

added equip. _____
rinse water 10

any other adjustments _____

TOTAL GALS. RECOVERED 143.5

loaded onto BTS vehicle # _____

BTS event # 060726-SL3

time 1720 date 7/26/06

signature SL

REC'D AT _____

time _____ date 7/26/06

unloaded by signature _____



WELLHEAD INSPECTION CHECKLIST

BP / GEM

Date 7/26/06
 Site Address 100 McArthur Blvd Oakland
 Job Number 060726-512 Technician SL

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-1	X							
MW-2	X							
MW-3	X							

NOTES: _____

APPENDIX B

GEOTRACKER UPLOAD CONFIRMATION

#11102

Electronic Submittal Information

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UPLOADING A GEO_WELL FILE

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

<u>Submittal Title:</u>	3Q 06 GEO_WELL
<u>Submittal Date/Time:</u>	10/19/2006 4:52:54 PM
<u>Confirmation Number:</u>	6908140420

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Electronic Submittal Information

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Your EDF file has been successfully uploaded!

Confirmation Number: 4370432198
Date/Time of Submittal: 10/19/2006 4:54:03 PM
Facility Global ID: T0600100908
Facility Name: BP #1102
Submittal Title: 3Q 06 GW Monitoring
Submittal Type: GW Monitoring Report

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

BP 100 MACARTHUR BLVD OAKLAND, CA 94610	Regional Board - Case #: 01-0985 SAN FRANCISCO BAY RWQCB (REGION 2) Local Agency (lead agency) - Case #: 1108 ALAMEDA COUNTY LOP - (SP)
--	--

CONF #	TITLE	QUARTER
4370432198	3Q 06 GW Monitoring	Q3 2006
SUBMITTED BY	SUBMIT DATE	STATUS
Broadbent & Associates, Inc.	10/19/2006	PENDING REVIEW

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	3
# FIELD POINTS WITH DETECTIONS	3
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	2
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 > REPD</u>
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

Logged in as BROADBENT-C (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.