



Atlantic Richfield Company  
(a BP affiliated company)

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D/H

RO 163



July 3, 2003

Alameda County  
JUL 23 2003  
Environmental Health

Re: Second Quarter 2003 Monitoring Report  
Former ARCO Service Station #6002  
6235 Seminary Avenue  
Oakland, CA

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



July 3, 2003

Alameda County  
JUL 23 2003  
Environmental Health

Mr. Amir Gholami  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

**Re: Second Quarter 2003 Monitoring Report  
Former ARCO Service Station #6002  
6235 Seminary Avenue  
Oakland, California  
URS Project #38486162**

Dear Mr. Gholami:

On behalf of Atlantic Richfield Company (ARCO-an affiliated company of the Group Environmental Management Company), URS Corporation (URS) is submitting the *Second Quarter 2003 Groundwater Monitoring Report* for the Former ARCO Service Station # 6002, located at 6235 Seminary Avenue, Oakland, California.

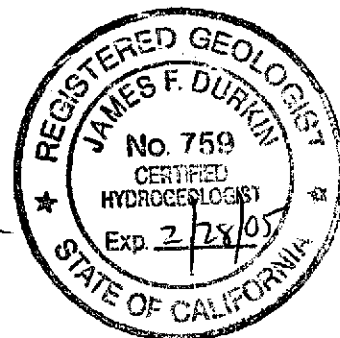
If you have any questions regarding this submission, please call (510) 874-3280.

Sincerely,

**URS CORPORATION**

Scott Robinson  
Project Manager

James Durkin, C.Hg.  
Senior Geologist



Enclosure: Second Quarter 2003 Groundwater Monitoring Report

cc: Mr. Paul Supple, ARCO, PO Box 6549 Moraga, CA 94570

**R E P O R T**

**SECOND QUARTER 2003  
GROUNDWATER MONITORING**

FORMER ARCO SERVICE STATION # 6002  
6235 SEMINARY AVENUE  
OAKLAND, CALIFORNIA

*Prepared for*  
Atlantic Richfield Company

July 3, 2003

**URS**

URS Corporation  
500 12th Street, Suite 200  
Oakland, California 94607

38486162

Date: July 3, 2003  
Quarter: 2Q 03

### ATLANTIC RICHFIELD COMPANY QUARTERLY GROUNDWATER MONITORING REPORT

Former Facility No.: 6002 Address: 6235 Seminary Avenue, Oakland, California  
Atlantic Richfield Co. Environmental Engineer: Paul Supple  
Consulting Co./Contact Person: URS Corporation / Scott Robinson  
Consultant Project No.: 38486162  
Primary Agency Alameda County Health Care Services Agency

#### WORK PERFORMED THIS QUARTER (Second – 2003):

1. Performed second quarter 2003 groundwater monitoring event on June 3, 2003.
2. Prepared and submitted first quarter 2003 groundwater monitoring report.
3. Prepared and submitted second quarter 2003 groundwater monitoring report.

#### WORK PROPOSED FOR NEXT QUARTER (Third – 2003):

1. Perform third quarter 2003 groundwater monitoring event.
2. Prepare and submit third quarter 2003 groundwater monitoring report.

Current Phase of Project:	<u>GW monitoring/sampling</u>
Frequency of Groundwater Sampling:	<u>Annual (1<sup>st</sup> quarter): MW-3, MW-6</u> <u>Quarterly: MW-4, MW-5, MW-7, MW-8, VW-1, VW-4</u>
Frequency of Groundwater Monitoring:	<u>Quarterly</u>
Is Free Product (FP) Present On-Site:	<u>No</u>
Bulk Soil Removed to Date :	<u>Approximately 370 cubic yards of TPH impacted soil</u>
Current Remediation Techniques:	<u>Natural Attenuation</u>
Approximate Depth to Groundwater:	<u>6.82 (MW-6) to 12.41 (MW-5) feet</u>
Groundwater Gradient (direction):	<u>West</u>
Groundwater Gradient (magnitude):	<u>0.069 feet per foot</u>

#### DISCUSSION:

TPH-g was detected in two of the six wells sampled this quarter at concentrations of 71 µg/L (VW-1) and 2,400 µg/L (MW-5). Benzene was not detected above its detection limit in any of the wells sampled this quarter. MTBE was detected in three wells at concentrations ranging from 13 µg/L (VW-1) to 440 µg/L (VW-4). TBA was detected in well VW-4 at a concentration of 4,100 µg/L.

**RECOMMENDATION:**

We recommend changing the sampling frequency of wells MW-4, MW-7 and MW-8 from quarterly to annual. MW-4 and MW-8 are cross gradient, while MW-7 is downgradient. All of these wells have consistently had low to no detections above the laboratory reporting limits for the constituents of concern.

**ATTACHMENTS:**

- Table 1 - Groundwater Elevation and Analytical Data
- Table 2 - Groundwater Flow Direction and Gradient
- Table 3 - Fuel Oxygenate Analytical Data
- Figure 1 - Groundwater Elevation Contour and Analytical Summary Map – June 3, 2003
- Attachment A - Field Procedures and Field Data Sheets
- Attachment B - Laboratory Procedures, Certified Analytical Reports and Chain-of-Custody Records
- Attachment C - EDCC and EDF/Geowell Submittal Confirmation

**Table 1**  
**Groundwater Elevation and Analytical Data**

Former ARCO Service Station #6002  
6235 Seminary Avenue, Oakland, California

Well Number	Date Sampled	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8260 (µg/L)	Dissolved Oxygen (mg/L)
MW-3	03/15/95	248.35	6.76	0.00	241.59	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	05/30/95		7.81	0.00	240.54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	09/01/95		8.65	0.00	239.70	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	11/13/95		8.25	0.00	240.10	120	45	0.7	ND<0.5	6.2	--	--	--
	02/23/96		6.64	0.00	241.71	ND<50	ND<0.5	ND<0.5	0.6	1.9	ND<3	--	--
	05/10/96		7.95	0.00	240.40	Not sampled: well sampled annually, during the first quarter							
	08/09/96		8.06	0.00	240.29	Not sampled: well sampled annually, during the first quarter							
	11/08/96		NR	NR	NR	Not sampled: inaccessible							
	03/21/97		8.21	0.00	240.14	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	05/27/97		8.25	0.00	240.10	Not sampled: well sampled annually, during the first quarter							
	08/05/97		8.29	0.00	240.06	Not sampled: well sampled annually, during the first quarter							
	10/29/97		8.58	0.00	239.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	02/25/98		7.69	0.00	240.66	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	05/12/98		8.20	0.00	240.15	Not sampled: well sampled annually, during the first quarter							
	07/28/98		8.55	0.00	239.80	Not sampled: well sampled annually, during the first quarter							
	10/27/98		8.30	0.00	240.05	Not sampled: well sampled annually, during the first quarter							
	02/08/99		7.90	0.00	240.45	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	06/01/99		8.40	0.00	239.95	Not sampled: well sampled annually, during the first quarter							
	08/25/99		8.49	0.00	239.86	Not sampled: well sampled annually, during the first quarter							
	10/29/99		8.52	0.00	239.83	Not sampled: well sampled annually, during the first quarter							
	02/16/00	NP	8.03	0.00	240.32	ND<50	ND<0.5	0.8	ND<0.5	ND<1	ND<3	--	8.51
	06/23/00		7.55	0.00	240.80	Not sampled: well sampled annually, during the first quarter							
	08/17/00		8.65	0.00	239.70	Not sampled: well sampled annually, during the first quarter							
	11/10/00		7.19	0.00	241.16	Not sampled: well sampled annually, during the first quarter							
	02/12/01	NP	8.60	0.00	239.75	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	0.81
	04/13/01		6.13	0.00	242.22	Not sampled: well sampled annually, during the first quarter							
	07/18/01		6.47	0.00	241.88	Not sampled: well sampled annually, during the first quarter							
	10/01/01		6.99	0.00	241.36	Not sampled: well sampled annually, during the first quarter							
	01/14/02	NP	5.47	0.00	242.88	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--
	04/03/02		6.95	0.00	241.40	Not sampled: well sampled annually, during the first quarter							
	08/08/02		8.78	0.00	239.57	Not sampled: well sampled annually, during the first quarter							
	11/27/02		8.52	0.00	239.83	Not sampled: well sampled annually, during the first quarter							
	02/10/03 <sup>1</sup>	NP	8.40	0.00	239.95	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	0.7
	06/03/03		8.40	0.00	239.95	Not sampled: well sampled annually, during the first quarter							

**Table 1**  
**Groundwater Elevation and Analytical Data**

Former ARCO Service Station #6002  
6235 Seminary Avenue, Oakland, California

Well Number	Date Sampled	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8260 (µg/L)	Dissolved Oxygen (mg/L)
MW-4	03/15/95	242.91	9.37	0.00	233.54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	05/30/95		11.47	0.00	231.44	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	09/01/95		12.28	0.00	230.63	78	ND<0.5	0.7	ND<0.5	ND<0.5	ND<3	--	--
	11/13/95		11.75	0.00	231.16	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	02/23/96		8.51	0.00	234.40	59	1.2	7.4	1.6	9.3	3	--	--
	05/10/96		11.35	0.00	231.56	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	08/09/96		9.70	0.00	233.21	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	11/08/96		11.79	0.00	231.12	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	03/21/97		10.94	0.00	231.97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	81	--	--
	05/27/97		11.51	0.00	231.40	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	08/05/97		11.90	0.00	231.01	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	10/29/97		12.00	0.00	230.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	02/25/98		8.34	0.00	234.57	ND<50	ND<0.5	0.9	ND<0.5	0.9	4	--	--
	05/12/98		10.93	0.00	231.98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	07/28/98		12.08	0.00	230.83	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	10/27/98		11.40	0.00	231.51	ND<5,000	ND<50	ND<50	160	64	6,400	--	--
	02/08/99		8.40	0.00	234.51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	06/01/99	NP	11.93	0.00	230.98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	4.0
	08/25/99	NP	12.21	0.00	230.70	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	1.29
	10/29/99	NP	12.37	0.00	230.54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	1.50
	02/16/00	NP	7.45	0.00	235.46	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<3	--	2.38
	06/23/00	NP	12.31	0.00	230.60	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	2.80
DUP	08/17/00		--	--	--	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	--
	08/17/00	NP	11.92	0.00	230.99	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	2.38
	11/10/00	NP	10.80	0.00	232.11	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	1.55
	02/12/01	NP	11.65	0.00	231.26	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	1.12
	04/13/01	NP	8.17	0.00	234.74	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	--
DUP	04/13/01		--	--	--	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	--
	07/18/01	NP	8.51	0.00	234.40	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	--
	10/01/01	NP	8.71	0.00	234.20	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	--
	01/14/02	NP	7.13	0.00	235.78	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--
DUP	01/14/02		--	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--
	04/03/02	NP	10.1	0.00	232.81	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	--
	08/08/02	NP	12.64	0.00	230.27	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	2.4
	11/27/02	NP	12.01	0.00	230.90	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	4.7	2.5
	02/10/03 <sup>1</sup>	NP	11.22	0.00	231.69	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	0.8
	06/03/03	NP	11.54	0.00	231.37	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	3.9

**Table 1**  
**Groundwater Elevation and Analytical Data**

Former ARCO Service Station #6002  
6235 Seminary Avenue, Oakland, California

Well Number	Date Sampled	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8260 (µg/L)	Dissolved Oxygen (mg/L)	
MW-5	03/15/95	244.82	11.99	0.00	232.83	21,000	870	22	1,600	1,900	--	--	--	
	05/30/95		12.97	0.00	231.85	17,000	2,100	250	1,000	520	--	--	--	
	09/01/95		14.03	0.00	230.79	19,000	1,500	25	1,600	880	8,300	--	--	
	11/13/95		13.65	0.00	231.17	21,000	1,300	22	1,400	630	--	--	--	
	02/23/96		11.93	0.00	232.89	27,000	1,300	ND<50	1,600	1,500	730	--	--	
	05/10/96		13.05	0.00	231.77	17,000	460	21	760	480	1,000	--	--	
	08/09/96		13.22	0.00	231.60	16,000	420	14	870	390	1,500	--	--	
	11/08/96			NR	NR	NR	Not sampled: well inaccessible							
	03/21/97			13.24	0.00	231.58	18,000	110	ND<50	730	1,500	1,800	--	--
	05/27/97			13.10	0.00	231.72	21,000	86	ND<20	810	610	1,700	--	--
	08/05/97			13.14	0.00	231.68	340	2.2	ND<0.5	15	8.8	39	--	--
	10/29/97			13.03	0.00	231.79	19,000	130	ND<20	1,400	620	1,700	--	--
	02/25/98			11.33	0.00	233.49	8,500	19	13	190	100	170	--	--
	05/12/98			12.81	0.00	232.01	10,000	34	ND<10	390	220	610	--	--
	07/28/98			13.12	0.00	231.70	15,000	68	ND<10	690	620	1,000	--	--
	10/27/98			12.90	0.00	231.92	15,000	60	ND<10	770	400	890	--	--
	02/08/99			11.08	0.00	233.74	8,200	23	ND<10	290	120	ND<60	--	--
	06/01/99	NP		12.95	0.00	231.87	11,000	33	3.3	340	180	580	--	1.0
	08/25/99	NP		12.99	0.00	231.83	9,200	26	14	420	270	1,100	--	0.37
	10/29/99	NP		13.10	0.00	231.72	11,000	19	9.8	260	150	590	--	1.27
	02/16/00	NP		8.21	0.00	236.61	12,000	8.1	10	340	160	130	--	1.42
	06/23/00	NP		12.90	0.00	231.92	9,680	38.0	ND<20.0	212	114	930	--	1.40
	08/17/00	NP		13.00	0.00	231.82	10,500	15.0	7.98	223	118	430	--	0.68
	11/10/00	NP		12.50	0.00	232.32	7,030	19.7	ND<10.0	190	43.6	445	--	1.27
	02/12/01	NP		12.81	0.00	232.01	8,840	33.9	ND<10.0	186	56.4	352	--	0.40
	04/13/01	NP		11.31	0.00	233.51	9,020	54.2	43.3	137	96.0	297	--	--
	07/18/01	NP		11.59	0.00	233.23	13,000	19	10	110	49	230	--	--
10/01/01	NP		11.84	0.00	232.98	8,500	6.9	ND<1.0	87	27	220	--	--	
01/14/02	NP		10.75	0.00	234.07	9,500	ND<20	ND<20	140	22	ND<200	--	--	
04/03/02	NP		12.50	0.00	232.32	2,400	21	ND<5.0	91	8.5	130	--	--	
DUP	04/03/02	NP	--	--	--	2,700	24.0	5.1	92	8.5	130	--	--	
	08/08/02	NP	12.83	0.00	231.99	2,000	ND<20	ND<20	48	ND<20	520	--	0.8	
	11/27/02	NP	12.79	0.00	232.03	2,200	ND<10	ND<10	33	ND<10	--	150	0.8	
	02/10/03 <sup>4</sup>	NP	12.62	0.00	232.20	2,600	ND<2.5	ND<2.5	47	4.2	--	100	0.7	
	06/03/03	NP	12.41	0.00	232.41	2,400	ND<5.0	ND<5.0	26	ND<5.0	--	160	1.8	



**Table 1**  
**Groundwater Elevation and Analytical Data**

Former ARCO Service Station #6002  
6235 Seminary Avenue, Oakland, California

Well Number	Date Sampled	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8260 (µg/L)	Dissolved Oxygen (mg/L)
MW-6	06/29/95	NR	6.63	0.00	NR	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	09/01/95	NR	NR	NR	NR	Not sampled							
	11/13/95	NR	7.70	0.00	NR	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	02/23/96	NR	9.82	0.00	NR	ND<50	ND<0.5	0.8	ND<0.5	0.6	ND<3	--	--
	05/10/96	NR	15.25	0.00	NR	Not sampled: well sampled annually, during the first quarter							
	08/09/96	252.20	11.11	0.00	241.09	Not sampled: well sampled annually, during the first quarter							
	11/08/96		9.31	0.00	242.89	Not sampled: well sampled annually, during the first quarter							
	03/21/97		9.40	0.00	242.80	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	05/27/97		7.08	0.00	245.12	Not sampled: well sampled annually, during the first quarter							
	08/05/97		7.12	0.00	245.08	Not sampled: well sampled annually, during the first quarter							
	10/29/97		7.42	0.00	244.78	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	02/25/98		10.35	0.00	241.85	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	05/12/98		15.83	0.00	236.37	Not sampled: well sampled annually, during the first quarter							
	07/28/98		11.84	0.00	240.36	Not sampled: well sampled annually, during the first quarter							
	10/27/98		9.73	0.00	242.47	Not sampled: well sampled annually, during the first quarter							
	02/08/99		8.10	0.00	244.10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	06/01/99		17.84	0.00	234.36	Not sampled: well sampled annually, during the first quarter							
	08/25/99		11.00	0.00	241.20	Not sampled: well sampled annually, during the first quarter							
	10/29/99		9.03	0.00	243.17	Not sampled: well sampled annually, during the first quarter							
	02/16/00	P		7.71	0.00	244.49	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<3	--
06/23/00			6.69	0.00	245.51	Not sampled: well sampled annually, during the first quarter							
08/17/00			6.95	0.00	245.25	Not sampled: well sampled annually, during the first quarter							
11/10/00			11.79	0.00	240.41	Not sampled: well sampled annually, during the first quarter							
02/12/01	P		7.35	0.00	244.85	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	1.66
02/12/01			--	--	--	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	--
04/13/01			10.52	0.00	241.68	Not sampled: well sampled annually, during the first quarter							
07/18/01			11.03	0.00	241.17	Not sampled: well sampled annually, during the first quarter							
10/01/01			11.31	0.00	240.89	Not sampled: well sampled annually, during the first quarter							
01/14/02	P		9.87	0.00	242.33	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--
04/03/02			12.19	0.00	240.01	Not sampled: well sampled annually, during the first quarter							
08/08/02			7.04	0.00	245.16	Not sampled: well sampled annually, during the first quarter							
11/27/02			6.85	0.00	245.35	Not sampled: well sampled annually, during the first quarter							
02/10/03 <sup>1</sup>	NP		6.74	0.00	245.46	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	1.1
06/03/03			14.35	0.00	237.85	Not sampled: well sampled annually, during the first quarter							

**Table 1**  
**Groundwater Elevation and Analytical Data**

Former ARCO Service Station #6002  
6235 Seminary Avenue, Oakland, California

Well Number	Date Sampled	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8260 (µg/L)	Dissolved Oxygen (mg/L)
MW-7	08/09/96	235.95	NR	NR	NR	Not sampled: well was dry							
	11/08/96		NR	NR	NR	Not sampled: well was dry							
	01/27/97		NR	NR	NR	2,900	29	ND<5	ND<5	580	220	--	--
	03/21/97		7.13	0.00	228.82	590	3.5	ND<0.5	ND<0.5	1.3	90	--	--
	05/27/97		9.02	0.00	226.93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	08/05/97		12.33	0.00	223.62	110	0.5	ND<0.5	ND<0.5	0.8	81	--	--
	10/29/97		NR	NR	NR	Not sampled: well was dry							
	02/25/98		8.04	0.00	227.91	ND<50	ND<0.5	0.6	ND<0.5	0.7	ND<3	--	--
	05/12/98		8.88	0.00	227.07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	07/28/98		10.50	0.00	225.45	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	10/27/98		8.75	0.00	227.20	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	02/08/99		9.35	0.00	226.60	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	06/01/99	NP	9.85	0.00	226.10	250	ND<0.5	0.6	ND<0.5	1.6	18	--	1.0
	08/25/99	NP	11.31	0.00	224.64	119	ND<0.5	5.7	ND<0.5	ND<0.5	11	--	0.41
	10/29/99	NP	9.08	0.00	226.87	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<3	--	1.29
	02/25/00	NP	8.02	0.00	227.93	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	38	--	2.10
	06/23/00	NP	10.68	0.00	225.27	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	14.4	--	1.60
	08/17/00	NP	11.85	0.00	224.10	70.0	ND<0.500	0.678	ND<0.500	1.07	14.2	--	1.59
	11/10/00	NP	9.62	0.00	226.33	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	1.09
	02/12/01	NP	12.10	0.00	223.85	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	0.84
	04/13/01	P	7.95	0.00	228.00	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	--
	07/18/01	P	8.20	0.00	227.75	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	--
	10/01/01	NP	8.59	0.00	227.36	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	--
	01/14/02	P	6.93	0.00	229.02	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--
	04/03/02	P	8.31	0.00	227.64	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	--
	08/08/02	P	12.11	0.00	223.84	Not sampled: insufficient water/recharge for purge/sample							
	11/27/02	NP	13.01	0.00	222.94	Not sampled: insufficient water							
	02/10/03 <sup>1</sup>	NP	10.02	0.00	225.93	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	1.5
	06/03/03	NP	6.82	0.00	229.13	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	8.1

**Table 1**  
**Groundwater Elevation and Analytical Data**

Former ARCO Service Station #6002  
6235 Seminary Avenue, Oakland, California

Well Number	Date Sampled	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8260 (µg/L)	Dissolved Oxygen (mg/L)
MW-8	08/09/96	240.37	9.41	0.00	230.96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	11/08/96		9.19	0.00	231.18	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	03/21/97		8.55	0.00	231.82	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	05/27/97		11.06	0.00	229.31	91	0.6	ND<0.5	ND<0.5	0.6	66	--	--
	08/05/97		9.32	0.00	231.05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	10/29/97		9.35	0.00	231.02	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	02/25/98		7.08	0.00	233.29	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	05/12/98		8.61	0.00	231.76	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	07/28/98		9.63	0.00	230.74	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4	--	--
	10/27/98		9.30	0.00	231.07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	02/08/99		5.56	0.00	234.81	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	06/01/99			NR	NR	NR	Not sampled: well inaccessible						
	08/25/99			NR	NR	NR	Not sampled: well inaccessible						
	10/29/99			NR	NR	NR	Not sampled: well inaccessible						
02/16/00			NR	NR	NR	Not sampled: well inaccessible							
06/23/00	NP		9.45	0.00	230.92	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	1.90
08/17/00	NP		6.40	0.00	233.97	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	2.56
11/10/00	NP		6.25	0.00	234.12	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	1.93
DUP 11/10/00			--	--	--	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	--
02/12/01	NP		8.11	0.00	232.26	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	1.65
04/13/01	P		5.19	0.00	235.18	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	--
07/18/01	NP		5.55	0.00	234.82	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	--
10/01/01	NP		6.41	0.00	233.96	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	--
01/14/02	P		5.07	0.00	235.30	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--
04/03/02	P		8.60	0.00	231.77	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	--
08/08/02	P		9.58	0.00	230.79	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	1.7
11/27/02	P		9.15	0.00	231.22	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	3.1
02/10/03 <sup>4</sup>	P		8.55	0.00	231.82	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	1.3
06/03/03	P		8.72	0.00	231.65	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	9.1

**Table 1**  
**Groundwater Elevation and Analytical Data**

Former ARCO Service Station #6002  
6235 Seminary Avenue, Oakland, California

Well Number	Date Sampled	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8260 (µg/L)	Dissolved Oxygen (mg/L)	
VW-1	02/23/96	NR	5.29	0.00	NR	21,000	490	57	520	1,500	240	--	--	
	05/10/96	NR	6.80	0.00	NR	3,700	61	ND<5	100	50	200	--	--	
	08/09/96	NR	7.03	0.00	NR	970	2.7	ND<2.5	2.7	3.7	180	--	--	
	11/08/96	NR	NR	NR	NR	Not sampled: well inaccessible								
	03/21/97	NR	7.51	0.00	NR	640	ND<4	ND<1	1	3	194	--	--	
	05/27/97	NR	7.51	0.00	NR	Not sampled: well sampled semi-annually, during the first and third quarters								
	08/05/97	NR	7.51	0.00	NR	630	ND<1	ND<1	3	2	120	--	--	
	10/29/97	NR	7.53	0.00	NR	600	ND<0.5	ND<0.5	ND<0.5	1.6	84	--	--	
	02/25/98	NR	6.77	0.00	NR	230	ND<4	ND<0.7	1.2	0.5	27	--	--	
	05/12/98	NR	7.43	0.00	NR	340	ND<0.5	0.5	2.3	0.8	29	--	--	
	07/28/98	NR	7.00	0.00	NR	240	ND<0.5	ND<0.5	ND<0.5	1.1	54	--	--	
	10/27/98	NR	7.52	0.00	NR	230	ND<0.5	ND<0.5	ND<0.5	ND<0.5	65	--	--	
	02/08/99	NR	7.05	0.00	NR	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	36[3]	--	
	06/01/99	NP	NR	7.55	0.00	NR	180	ND<0.5	ND<0.5	ND<0.5	ND<0.5	23	--	1.0
	08/25/99	NP	NR	7.66	0.00	NR	130	ND<0.5	5.6	ND<0.5	ND<0.5	40	--	0.39
	10/29/99	NP	NR	7.59	0.00	NR	200	1.0	ND<0.5	0.6	1.6	36	--	0.89
	02/16/00	NP	NR	7.03	0.00	NR	210	ND<0.5	0.9	2.2	1.9	11	--	1.41
	06/23/00	NP	NR	7.71	0.00	NR	175	1.04	ND<0.500	ND<0.500	ND<0.500	14.4	--	1.90
	08/17/00	NP	NR	7.75	0.00	NR	180	ND<0.500	ND<0.500	0.622	0.760	23.7	--	0.63
	11/10/00	NP	NR	6.83	0.00	NR	157	0.955	ND<0.500	0.973	ND<0.500	32.5	--	1.03
02/12/01	NP	NR	7.85	0.00	NR	273	0.627	ND<0.500	ND<0.500	0.507	9.19	--	0.47	
04/13/01	P	NR	5.11	0.00	NR	213	ND<0.500	ND<0.500	ND<0.500	ND<0.500	6.38	--	--	
07/18/01	P	NR	5.39	0.00	NR	270	ND<0.50	ND<0.50	ND<0.50	ND<0.50	20	--	--	
10/01/01	NP	NR	6.50	0.00	NR	200	ND<0.50	ND<0.50	ND<0.50	0.81	14	--	--	
01/14/02	P	NR	5.04	0.00	NR	110	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.4	--	--	
04/03/02	P	NR	7.51	0.00	NR	91	0.72	ND<0.50	ND<0.50	ND<0.50	12.0	--	--	
08/08/02	P	NR	9.58	0.00	NR	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	33.0	--	0.6	
11/17/02	P	NR	7.42	0.00	NR	52	0.72	0.78	ND<0.50	ND<0.50	--	21	1.0	
02/10/03 <sup>4</sup>	NP	NR	7.38	0.00	NR	52	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	11	1.7	
06/03/03	P	NR	7.30	0.00	NR	71	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	13	3.3	
VW-3	08/08/02	NR	8.85	0.00	NR	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.5	--	0.7	
	11/27/02	NR	8.80	0.00	NR	Not sampled: well not part of sampling program								
	02/10/03 <sup>4</sup>	NR	8.41	0.00	NR	Not sampled: well not part of sampling program								
	06/03/03	NR	8.71	0.00	NR	Not sampled: well not part of sampling program								

**Table 1**  
**Groundwater Elevation and Analytical Data**

Former ARCO Service Station #6002  
6235 Seminary Avenue, Oakland, California

Well Number	Date Sampled	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	FPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8260 (µg/L)	Dissolved Oxygen (mg/L)	
VW-4	05/10/96	NR	8.58	0.00	NR	13,000	2,500	41	420	660	43,000	--	--	
	08/09/96	NR	11.70	0.00	NR	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6,200	--	--	
	11/08/96	NR	9.38	0.00	NR	7,800	510	7	180	370	21,000	--	--	
	03/21/97	NR	9.11	0.00	NR	10,000	290	10	270	230	8,900	--	--	
	05/27/97	NR	9.34	0.00	NR	Not sampled: well sampled semi-annually, during the first and third quarters								
	08/05/97	NR	9.47	0.00	NR	ND<10,000	180	ND<100	ND<100	110	12,000	--	--	
	10/29/97	NR	9.35	0.00	NR	9,800	200	69	260	360	4,900	--	--	
	02/25/98	NR	7.08	0.00	NR	ND<50	2.5	ND<0.5	ND<0.5	0.7	ND<3	--	--	
	05/12/98	NR	9.17	0.00	NR	3,200	ND<20	22	29	52	2,100	--	--	
	07/28/98	NR	9.55	0.00	NR	ND<10,000	ND<100	ND<100	ND<100	ND<100	5,100	--	--	
	10/27/98	NR	9.92	0.00	NR	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--	
	02/08/99	NR	7.50	0.00	NR	ND<2,500	ND<25	ND<25	28	ND<25	2,400	3,100[3]	--	
	06/01/99	NP	NR	9.87	0.00	NR	2,100	2.5	1.1	2.5	15	3,300	--	2.0
	08/25/99	NP	NR	9.78	0.00	NR	1,300	4.4	4.9	1.7	2.9	4,600	--	0.36
	10/29/99	NP	NR	9.93	0.00	NR	1,400	ND<0.5	1.8	1.6	3.0	4,200	--	1.18
	02/16/00	NP	NR	7.45	0.00	NR	1,800	ND<0.5	2.9	15	10	3,400	--	1.01
DUP 1	06/23/00	--	--	--	--	1,260	ND<2.00	ND<2.00	ND<2.00	2.73	2,720	--	--	
	06/23/00	NP	NR	9.74	0.00	NR	1,360	ND<2.00	2.26	ND<2.00	2.25	4,900	--	1.50
	08/17/00	NP	NR	9.95	0.00	NR	2,230	ND<10.0	ND<10.0	ND<10.0	5,310	--	1.13	
	11/10/00	NP	NR	9.22	0.00	NR	1,390	18.5	ND<5.00	ND<5.00	8,840	--	1.25	
	02/12/01	NP	NR	8.99	0.00	NR	1,400	9.42	ND<2.00	17.8	16.1	3,570	--	0.91
	04/13/01	NP	NR	7.80	0.00	NR	556	3.82	ND<1.25	ND<1.25	2,450	--	--	
DUP 1	07/18/01	NP	NR	7.73	0.00	NR	2,100	9.2	ND<2.0	ND<2.0	3,700	--	--	
	07/18/01	--	--	--	--	2,000	8.7	2.2	ND<2.0	ND<2.0	3,400	--	--	
DUP	10/01/01	NP	NR	6.69	0.00	NR	2,000	ND<10	ND<10	ND<10	13	5,900	--	--
	10/01/01	--	--	--	--	1,800	ND<10	ND<10	ND<10	ND<10	5,800	--	--	
	01/14/02	P	NR	5.93	0.00	NR	580	ND<2.0	ND<2.0	ND<2.0	2,700	--	--	
	04/03/02	NP	NR	9.6	0.00	NR	1,400	5.2	16.0	ND<5.0	9.6	2,200	--	--
	08/08/02	NR	10.01	0.00	NR	NS	NS	NS	NS	NS	NS	NS	NS	
	11/27/02	P	NR	10.30	0.00	NR	ND<10,000	ND<100	ND<100	ND<100	ND<100	--	3,800	1.7
	02/10/03 <sup>4</sup>	NP	NR	10.06	0.00	NR	ND<5,000	ND<50	ND<50	ND<50	ND<50	--	2,500	1.0
	06/03/03	P	NR	10.04	0.00	NR	ND<1,000	ND<10	ND<10	ND<10	ND<10	--	440	1.9

**Table 1**  
**Groundwater Elevation and Analytical Data**

Former ARCO Service Station #6002  
6235 Seminary Avenue, Oakland, California

Well Number	Date Sampled	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation (ft-MSL)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8260 (µg/L)	Dissolved Oxygen (mg/L)
MW-1	03/15/95	247.06	7.37	0.00	239.69	13,000	1,200	44	770	1,100	--	--	--
	05/30/95	247.06	8.48	0.00	238.58	19,000	1,600	30	890	1,400	--	--	--
	09/01/95	247.06	9.47	0.00	237.59	14,000	1,300	28	480	780	24,000	--	--
	11/13/95	247.06	8.78	0.01	238.29[1]	11,000	570	17	260	410	--	25,000[2]	--
	02/23/96	247.06	Well was decommissioned on 2-12-96										
MW-2	03/15/95	249.30	8.25	0.00	241.05	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	05/30/95	249.30	9.93	0.00	239.37	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	09/01/95	249.30	10.69	0.00	238.61	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--
	11/13/95	249.30	10.32	0.00	238.98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	02/23/96	249.30	Well was decommissioned on 2-12-96										
VW-2	02/23/96	NR	6.92	0.00	NR	Not sampled: well not part of sampling program							
	08/08/02	NR	10.51	0.00	NR	Not sampled: well not part of sampling program							
AS-1	06/29/95	NR	9.20	0.00	NR	ND<50	1.6	ND<0.5	0.9	0.9	--	--	--

**Table 1**  
**Groundwater Elevation and Analytical Data**

Former ARCO Service Station #6002  
6235 Seminary Avenue, Oakland, California

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Abbreviation

TPH-g	= Total petroleum hydrocarbons as gasoline by modified EPA method 8260B (EPA Method 8015M prior to 2/10/03).
BTEX	= Benzene, toluene, ethylbenzene, xylenes by EPA method 8260B (EPA method 8021B from 10/29/99 to 2/10/03, and 8020 prior to 10/29/99).
MTBE	= Methyl tertiary butyl ether
*	= EPA method 8020 prior to 10/29/99
TOC	= Top of Casing
ft-MSL	= elevation in feet, relative to mean sea level
µg/L	= micrograms per liter
mg/L	= milligrams per liter
NR	= not reported; data not available or not measurable
--	= not analyzed, not available, or not applicable
ND<	= not detected at or above the laboratory detection limit.
1	= [corrected elevation (Z')] = Z + (h * 0.73) where: Z: measured elevation, h: floating product thickness, 0.73: density ratio of oil to water
2	= analyzed by EPA method 8240
3	= also analyzed for fuel oxygenates
4	=TPH-g, BTEX and MTBE analyzed by EPA method 8260B beginning on 1st quarter 2003 sampling event
**	= For previous historical groundwater elevation data please refer to Fourth Quarter 1995 Groundwater Monitoring Program Results, ARCO Service Station 6002, Oakland, California, (EMCON, February 23, 1996)
DUP	= duplicate

Source: The data within this table collected prior to April 2002 was provided to URS by Group Environmental Management Company and their previous consultants. URS has not verified the accuracy of this information.

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**Table 2**  
**Groundwater Flow Direction and Gradient**

Former ARCO Service Station 6002  
6235 Seminary Avenue, Oakland, California

<b>Date Measured</b>	<b>Average Flow Direction</b>	<b>Average Hydraulic Gradient</b>
03/15/95	West-Southwest	0.08
05/30/95	West-Southwest	0.08
09/01/95	West-Southwest	0.09
11/13/95	West-Southwest	0.08
02/23/96	West-Southwest	0.08
05/10/96	West-Southwest	0.08
08/09/96	Southwest	0.08
11/08/96	Southwest	0.055
03/21/97	West-Southwest	0.051
05/27/97	West-Southwest	0.069
08/05/97	West	0.076
10/29/97	West-Southwest	0.036
02/25/98	West-Southwest	0.052
05/12/98	West	0.07
07/28/98	West	0.07
10/27/98	West-Southwest	0.06
02/08/99	West-Southwest	0.07
06/01/99	West-Northwest	0.07
08/25/99	West-Southwest	0.07
10/29/99	West	0.07
02/16/00	Southwest	0.05
06/23/00	West	0.042
08/17/00	West	0.087
11/10/00	West-Southwest	0.080
02/12/01	West-Southwest	0.074
04/13/01	West	0.085
07/18/01	West	0.075
10/01/01	West-Southwest	0.083
01/14/02	West-Southwest	0.072
04/03/02	West-Southwest	0.084
08/08/02	West-Southwest	0.088
11/27/02	West-Southwest	0.075
02/10/03	Southwest	0.062
<b>06/03/03</b>	<b>West</b>	<b>0.069</b>

Source:

The data within this table collected prior to April 2002 was provided to URS by Group Environmental Management Company and their previous consultants. URS has not verified the accuracy of this information.



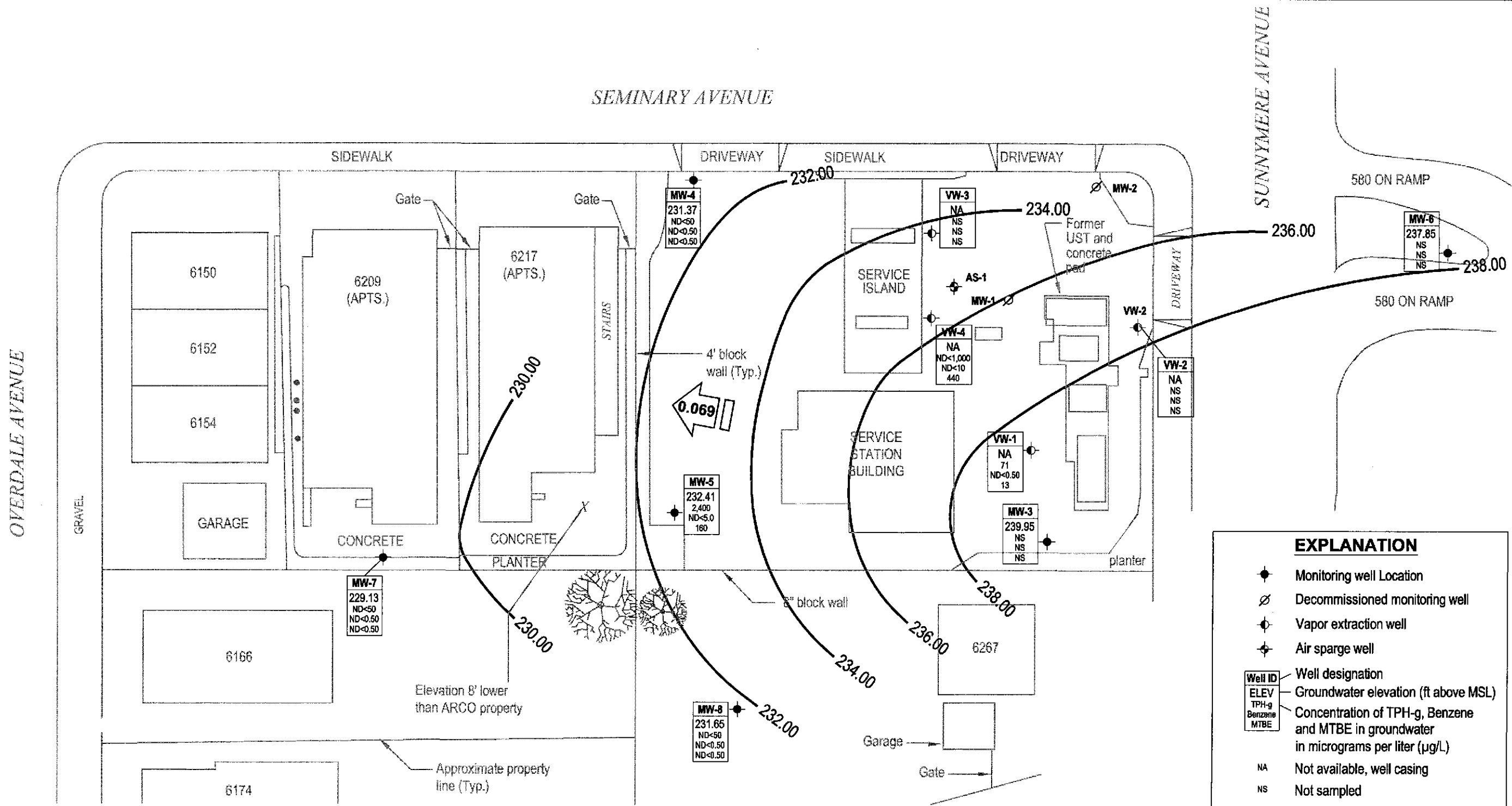
**Table 3**  
**Fuel Oxygenate Analytical Data**

Former ARCO Service Station # 6002  
6235 Seminary Avenue  
Oakland, California

Well Number	Date Sampled	Ethanol (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
MW-3	02/10/03	ND<40	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	06/03/03	NS	NS	NS	NS	NS	NS
MW-4	02/10/03	ND<40	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	06/03/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-5	02/10/03	ND<200	ND<100	100	ND<0.50	ND<0.50	ND<0.50
	06/03/03	ND<1,000	ND<200	160	ND<5.0	ND<5.0	ND<5.0
MW-6	02/10/03	ND<40	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	06/03/03	NS	NS	NS	NS	NS	NS
MW-7	02/10/03	ND<40	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	06/03/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-8	02/10/03	ND<40	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	06/03/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50
VW-1	02/10/03	ND<40	ND<20	11	ND<0.50	ND<0.50	ND<0.50
	06/03/03	ND<100	ND<20	13	ND<0.50	ND<0.50	ND<0.50
VW-4	02/10/03	ND<4,000	ND<2,000	2,500	ND<0.50	ND<0.50	ND<0.50
	06/03/03	ND<2,000	4,100	440	ND<10	ND<10	ND<10

Note = All fuel oxygenate compounds analyzed using EPA Method 8260B  
TBA = tert-Butyl alcohol  
MTBE = Methyl tert-butyl ether  
DIPE = Di-isopropyl ether  
ETBE = Ethyl tert butyl ether  
TAME = tert-Amyl methyl ether  
µg/L = micrograms per liter  
ND< = Not detected at or above the laboratory reporting limit  
NS = Not sampled

X:\x\_env\wast\BP\_GEM\Sites\Scott\_Robinson\Paul\_Suppel\6002\Reports\Monitoring\02\_2003\Drawings\GWEC-AS\_6-3.dwg



**EXPLANATION**

- ◆ Monitoring well Location
- ⊘ Decommissioned monitoring well
- ⊙ Vapor extraction well
- ⊕ Air sparge well

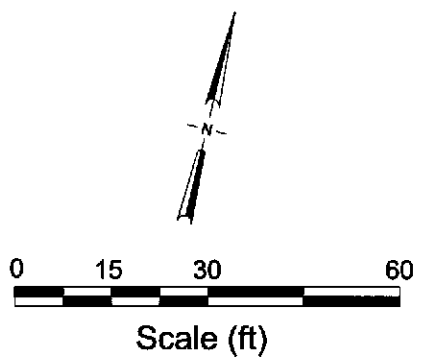
Well ID	Well designation
ELEV	Groundwater elevation (ft above MSL)
TPH-g	Concentration of TPH-g, Benzene and MTBE in groundwater in micrograms per liter (µg/L)
Benzene	
MTBE	

- NA Not available, well casing
- NS Not sampled
- ND< Not detected at or above laboratory reporting limits

230.00 — Groundwater elevation contour (ft above MSL)

← 0.069 — Approximate groundwater flow direction and gradient (ft/ft)

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



<b>URS</b>	Project No. 38486162	<b>GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP</b>	FIGURE
	Arco Service Station #6002 6235 Seminary Avenue Oakland, California		
			<b>1</b>

**ATTACHMENT A**  
**FIELD PROCEDURES AND FIELD DATA SHEETS**

## FIELD 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.

# WELL GAUGING DATA

Project # 030603-AM1

Date 6/3/03

Client ARCO 6002

Site 6235 SEMINARY AVE, GARLAND

5  
4  
1  
1  
3  
2  
6  
7  
5

Well ID	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-3	4					8.40	24.55	TDC	MD @ Gauge only
MW-4	4					11.54	24.04		4.5'
MW-5	4					12.41	24.40		5'
MW-6	2					14.35	31.95		Gauge only <del>PURGE</del>
MW-7	2					6.82	13.11		10'
MW-8	2					8.72	13.92		PURGE
VW-1	4					7.30	13.90		PURGE
VW-3	4					8.71	14.03		Gauge only
VW-4	4					10.24	14.70		PURGE

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>D30603-MM1</u>	Station # <u>6002</u>
Sampler: <u>MM</u>	Date: <u>6/3/2003</u>
Well I.D.: <u>MW-4</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth: <u>24.04</u>	Depth to Water: <u>11.54</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

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

Purge Method: Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible  
 Extraction Pump  
 Other: No purge @ 4.5'

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>NO PURGE</u>	x	<u>3</u>	=	_____ Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Conductivity (mS or μS)	Gals. Removed	Observations
943	66.3	6.0	396	—	clear
<u>NO PURGE</u>					

Did well dewater? Yes  No  Gallons actually evacuated: \_\_\_\_\_

Sampling Time: 945 Sampling Date: 6/3/03

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

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxy's AND ETHANOL (ALL BY 8260)

D.O. (if req'd):	Pre-purge: _____ mg/L	Post-purge: <u>3.9</u> mg/L
O.R.P. (if req'd):	Pre-purge: _____ mV	Post-purge: _____ mV



## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>D30603-MM1</u>	Station # <u>6002</u>
Sampler: <u>MM</u>	Date: <u>6/3/2003</u>
Well I.D.: <u>MW-7</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth: <u>13.11</u>	Depth to Water: <u>6.82</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

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

Purge Method:

Bailer  
 Disposable Bailer  
 Middleburg

Sampling Method:

Bailer  
 Disposable Bailer  
 Extraction Port

Electric Submersible

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

Extraction Pump

Other: No Purge @ 10'

'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>1.0</u>	X	<u>3</u>	=	<u>3.0</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
910	64.1	5.2	372	1.0	cloudy
912	63.4	6.2	345	2.0	
	dewatered @		2.0 gals		DTW = 12.89
1200	67.9	6.8	339		DTW = 12.10 site departure

Did well dewater?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Gallons actually evacuated: <u>2.0</u>
Sampling Time: <u>1205</u>	Sampling Date: <u>6/3/03</u>	
Sample I.D.: <u>MW-7 site departure</u>	Laboratory: Pace <u>Sequoia</u> Other _____	
Analyzed for: <u>TPH-G</u> <u>BTEX</u> MTBE TPH-D Other: <u>OXY'S AND ETHANOL (ALL BY 8260)</u>		
D.O. (if req'd):	Pre-purge: _____ mg/L	Post-purge: <u>0.1</u> mg/L
O.R.P. (if req'd):	Pre-purge: _____ mV	Post-purge: _____ mV



## ARCO / BP WELL MONITORING DATA SHEET

BTS #: D30603-MM1	Station # 6002
Sampler: MM	Date: 6/3/2003
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8
Total Well Depth: 13.92	Depth to Water: 8.72
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) 2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method:  Bailer  Disposable Bailer  Middleburg  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.

.8	x	3	=	2.4	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μS)	Gals. Removed	Observations
821	62.0	5.6	409	0.8	clear
823	61.4	6.1	366	1.6	cloudy
825	61.3	6.3	361	2.4	
					DTW = 9.14

Did well dewater? Yes  No  Gallons actually evacuated: 2.4

Sampling Time: 830 Sampling Date: 6/3/03

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

Analyzed for:  TPH-G  BTEX  MTBE  TPH-D Other:  DXY'S AND ETHANOL (ALL BY 8260)

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	9.1	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>D30603-MMI</u>	Station # <u>6002</u>
Sampler: <u>MM</u>	Date: <u>6/3/2003</u>
Well I.D.: <u>VW-1</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth: <u>13.90</u>	Depth to Water: <u>7.30</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

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

Purge Method: Bailer      Sampling Method: Bailer  
Disposable Bailer      Disposable Bailer  
Middleburg      Extraction Port  
Electric Submersible      Other: \_\_\_\_\_  
Extraction Pump

8.62  
= 90%

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>4.3</u>	x	<u>3</u>	=	<u>12.9</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or <u>μS</u> )	Gals. Removed	Observations
1118	67.7	7.2	671	4.5	clear
1120	66.8	6.4	706	9.0	
	dewatered		(a) 10 gal's		DTW = 11.40 site departure
1126	66.4	6.3	728		

Did well dewater? (Yes) No      Gallons actually evacuated: 9.0

Sampling Time: VW-1      Sampling Date: 6/3/03

Sample I.D.: 1125 site departure      Laboratory: Pace Sequoia Other: \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other: OXY'S AND ETHANOL (ALL BY 8260)

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	3.3	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:

**ARCO**  
**6002**

---

Station #  
**6235 SEMINARY AVE., OAKLAND**

---

Station Address

---

Total Gallons Collected From Groundwater Monitoring Wells:  
**16.4**

---

added equip. <b>6</b>	any other adjustments _____
rinse water _____	_____

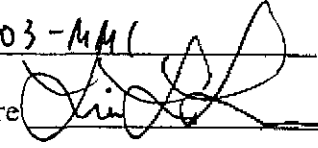
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TOTAL GALS. <b>22.4</b>	loaded onto
RECOVERED _____	BTS vehicle # <b>12</b>

---

BTS event #	time	date
<b>030603-MM1</b>	<b>1230</b>	<b>6/3/03</b>

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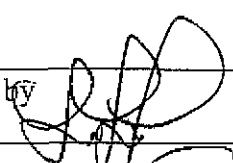
signature 

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\*\*\*\*\*

REC'D AT	time	date
<b>BTS</b>	<b>1345</b>	<b>6/3/03</b>

---

unloaded by 

signature \_\_\_\_\_

**ATTACHMENT B**

**LABORATORY PROCEDURES,  
CERTIFIED ANALYTICAL REPORTS,  
AND CHAIN-OF-CUSTODY RECORDS**

## **LABORATORY PROCEDURES**

---

### **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 Group Environmental Management Company have been reviewed and verified by that laboratory.



19 June, 2003

Scott Robinson  
URS Corporation [Arco]  
500 12th Street, Suite 100  
Oakland, CA 94607

RE: ARCO #6002, Oakland, CA  
Sequoia Work Order: MMF0095

Enclosed are the results of analyses for samples received by the laboratory on 06/04/03 14:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya Pelt  
Project Manager

CA ELAP Certificate #1210





URS Corporation [Arco]  
500 12th Street, Suite 100  
Oakland CA, 94607

Project: ARCO #6002, Oakland, CA  
Project Number: INTRIM-50675  
Project Manager: Scott Robinson

MMF0095  
**Reported:**  
06/19/03 10:47

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-4	MMF0095-01	Water	06/03/03 09:45	06/04/03 14:40
MW-5	MMF0095-02	Water	06/03/03 11:45	06/04/03 14:40
MW-7	MMF0095-03	Water	06/03/03 12:05	06/04/03 14:40
MW-8	MMF0095-04	Water	06/03/03 08:30	06/04/03 14:40
VW-1	MMF0095-05	Water	06/03/03 11:25	06/04/03 14:40
VW-4	MMF0095-06	Water	06/03/03 10:50	06/04/03 14:40

There were no custody seals that were received with this project.



URS Corporation [Arco]  
500 12th Street, Suite 100  
Oakland CA, 94607

Project: ARCO #6002, Oakland, CA  
Project Number: INTRIM-50675  
Project Manager: Scott Robinson

MMF0095  
Reported:  
06/19/03 10:47

**Volatile Organic Compounds by EPA Method 8260B**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-4 (MMF0095-01) Water Sampled: 06/03/03 09:45 Received: 06/04/03 14:40</b>									
Ethanol	ND	100	ug/l	1	3F17006	06/17/03	06/17/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	"
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	"
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	"
Benzene	ND	0.50	"	"	"	"	"	"	"
Toluene	ND	0.50	"	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"	"
Xylenes (total)	ND	0.50	"	"	"	"	"	"	"
Gasoline Range Organics (C6-C10)	ND	50	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.0 %		78-129	"	"	"	"	"
<b>MW-5 (MMF0095-02) Water Sampled: 06/03/03 11:45 Received: 06/04/03 14:40</b>									
Ethanol	ND	1000	ug/l	10	3F17006	06/17/03	06/17/03	EPA 8260B	
tert-Butyl alcohol	ND	200	"	"	"	"	"	"	"
<b>Methyl tert-butyl ether</b>	<b>160</b>	5.0	"	"	"	"	"	"	"
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	"
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	"
Benzene	ND	5.0	"	"	"	"	"	"	"
Toluene	ND	5.0	"	"	"	"	"	"	"
<b>Ethylbenzene</b>	<b>26</b>	5.0	"	"	"	"	"	"	"
Xylenes (total)	ND	5.0	"	"	"	"	"	"	"
<b>Gasoline Range Organics (C6-C10)</b>	<b>2400</b>	500	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		109 %		78-129	"	"	"	"	"



URS Corporation [Arco]  
500 12th Street, Suite 100  
Oakland CA, 94607

Project: ARCO #6002, Oakland, CA  
Project Number: INTRIM-50675  
Project Manager: Scott Robinson

MMF0095  
Reported:  
06/19/03 10:47

**Volatile Organic Compounds by EPA Method 8260B**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-7 (MMF0095-03) Water Sampled: 06/03/03 12:05 Received: 06/04/03 14:40</b>									
Ethanol	ND	100	ug/l	1	3F17006	06/17/03	06/17/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	"
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	"
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	"
Benzene	ND	0.50	"	"	"	"	"	"	"
Toluene	ND	0.50	"	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"	"
Xylenes (total)	ND	0.50	"	"	"	"	"	"	"
Gasoline Range Organics (C6-C10)	ND	50	"	"	"	"	"	"	"

*Surrogate: 1,2-Dichloroethane-d4*

102 % 78-129

**MW-8 (MMF0095-04) Water Sampled: 06/03/03 08:30 Received: 06/04/03 14:40**

Ethanol	ND	100	ug/l	1	3F17006	06/17/03	06/17/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	"
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	"
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	"
Benzene	ND	0.50	"	"	"	"	"	"	"
Toluene	ND	0.50	"	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"	"
Xylenes (total)	ND	0.50	"	"	"	"	"	"	"
Gasoline Range Organics (C6-C10)	ND	50	"	"	"	"	"	"	"

*Surrogate: 1,2-Dichloroethane-d4*

108 % 78-129



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MMF0095  
**Reported:**  
06/19/03 10:47

**Volatile Organic Compounds by EPA Method 8260B**

**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>VW-1 (MMF0095-05) Water</b> <b>Sampled: 06/03/03 11:25</b> <b>Received: 06/04/03 14:40</b>									
Ethanol	ND	100	ug/l	1	3F17006	06/17/03	06/17/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	"
<b>Methyl tert-butyl ether</b>	<b>13</b>	0.50	"	"	"	"	"	"	"
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	"
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	"
Benzene	ND	0.50	"	"	"	"	"	"	"
Toluene	ND	0.50	"	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"	"
Xylenes (total)	ND	0.50	"	"	"	"	"	"	"
<b>Gasoline Range Organics (C6-C10)</b>	<b>71</b>	50	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %	78-129	"	"	"	"	"	"
<b>VW-4 (MMF0095-06) Water</b> <b>Sampled: 06/03/03 10:50</b> <b>Received: 06/04/03 14:40</b>									
Ethanol	ND	2000	ug/l	20	3F13018	06/13/03	06/13/03	EPA 8260B	
<b>tert-Butyl alcohol</b>	<b>4100</b>	400	"	"	"	"	"	"	"
<b>Methyl tert-butyl ether</b>	<b>440</b>	10	"	"	"	"	"	"	"
Di-isopropyl ether	ND	10	"	"	"	"	"	"	"
Ethyl tert-butyl ether	ND	10	"	"	"	"	"	"	"
tert-Amyl methyl ether	ND	10	"	"	"	"	"	"	"
Benzene	ND	10	"	"	"	"	"	"	"
Toluene	ND	10	"	"	"	"	"	"	"
Ethylbenzene	ND	10	"	"	"	"	"	"	"
Xylenes (total)	ND	10	"	"	"	"	"	"	"
<b>Gasoline Range Organics (C6-C10)</b>	<b>ND</b>	1000	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		95.0 %	78-129	"	"	"	"	"	"



URS Corporation [Arco]  
500 12th Street, Suite 100  
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MMF0095  
Reported:  
06/19/03 10:47

**Volatile Organic Compounds by EPA Method 8260B - Quality Control  
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3F13018 - EPA 5030B P/T**

**Blank (3F13018-BLK1)**

Prepared & Analyzed: 06/13/03

Ethanol	ND	100	ug/l							
tert-Butyl alcohol	ND	20	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C6-C10)	ND	50	"							

*Surrogate: 1,2-Dichloroethane-d4*      4.85      "      5.00      97.0      78-129

**Laboratory Control Sample (3F13018-BS1)**

Prepared & Analyzed: 06/13/03

Methyl tert-butyl ether	9.11	0.50	ug/l	10.0		91.1	63-137			
Benzene	10.6	0.50	"	10.0		106	78-124			
Toluene	10.7	0.50	"	10.0		107	78-129			

*Surrogate: 1,2-Dichloroethane-d4*      4.88      "      5.00      97.6      78-129

**Laboratory Control Sample (3F13018-BS2)**

Prepared & Analyzed: 06/13/03

Methyl tert-butyl ether	9.11	0.50	ug/l	9.92		91.8	63-137			
Benzene	5.76	0.50	"	6.40		90.0	78-124			
Toluene	33.3	0.50	"	29.7		112	78-129			
Gasoline Range Organics (C6-C10)	509	50	"	440		116	70-113			Q-LIM

*Surrogate: 1,2-Dichloroethane-d4*      5.09      "      5.00      102      78-129

Sequoia Analytical - Morgan Hill

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Project Manager: Scott Robinson

MMF0095  
Reported:  
06/19/03 10:47

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3F13018 - EPA 5030B P/T**

<b>Matrix Spike (3F13018-MS1)</b>		<b>Source: MMF0033-01</b>			<b>Prepared &amp; Analyzed: 06/13/03</b>					
Methyl tert-butyl ether	654	25	ug/l	496	210	89.5	63-137			
Benzene	1740	25	"	320	1500	75.0	78-124			QM-07
Toluene	1750	25	"	1480	68	114	78-129			
Gasoline Range Organics (C6-C10)	31600	2500	"	22000	4500	123	70-113			Q-LIM
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>4.93</i>		<i>"</i>	<i>5.00</i>		<i>98.6</i>	<i>78-129</i>			

<b>Matrix Spike Dup (3F13018-MSD1)</b>		<b>Source: MMF0033-01</b>			<b>Prepared &amp; Analyzed: 06/13/03</b>					
Methyl tert-butyl ether	672	25	ug/l	496	210	93.1	63-137	2.71	13	
Benzene	1750	25	"	320	1500	78.1	78-124	0.573	12	
Toluene	1760	25	"	1480	68	114	78-129	0.570	10	
Gasoline Range Organics (C6-C10)	32400	2500	"	22000	4500	127	70-113	2.50	9	Q-LIM
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.09</i>		<i>"</i>	<i>5.00</i>		<i>102</i>	<i>78-129</i>			

**Batch 3F17006 - EPA 5035**

<b>Blank (3F17006-BLK1)</b>		<b>Prepared &amp; Analyzed: 06/17/03</b>								
Ethanol	ND	100	ug/l							
tert-Butyl alcohol	ND	20	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C6-C10)	ND	50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.11</i>		<i>"</i>	<i>5.00</i>		<i>102</i>	<i>78-129</i>			

Sequoia Analytical - Morgan Hill

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 Oakland CA, 94607

 Project: ARCO #6002, Oakland, CA  
 Project Number: INTRIM-50675  
 Project Manager: Scott Robinson

 MMF0095  
 Reported:  
 06/19/03 10:47

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 3F17006 - EPA 5035</b>										
<b>Laboratory Control Sample (3F17006-BS1)</b>				Prepared & Analyzed: 06/17/03						
Methyl tert-butyl ether	9.59	0.50	ug/l	10.0		95.9	63-137			
Benzene	9.12	0.50	"	10.0		91.2	78-124			
Toluene	10.2	0.50	"	10.0		102	78-129			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>4.90</i>		<i>"</i>	<i>5.00</i>		<i>98.0</i>	<i>78-129</i>			
<b>Laboratory Control Sample (3F17006-BS2)</b>				Prepared & Analyzed: 06/17/03						
Methyl tert-butyl ether	9.29	0.50	ug/l	9.92		93.6	63-137			
Benzene	5.09	0.50	"	6.40		79.5	78-124			
Toluene	33.6	0.50	"	29.7		113	78-129			
Gasoline Range Organics (C6-C10)	472	50	"	440		107	70-113			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.34</i>		<i>"</i>	<i>5.00</i>		<i>107</i>	<i>78-129</i>			
<b>Laboratory Control Sample Dup (3F17006-BSD1)</b>				Prepared: 06/17/03 Analyzed: 06/18/03						
Methyl tert-butyl ether	10.6	0.50	ug/l	10.0		106	63-137	10.0	13	
Benzene	9.31	0.50	"	10.0		93.1	78-124	2.06	12	
Toluene	9.68	0.50	"	10.0		96.8	78-129	5.23	10	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.26</i>		<i>"</i>	<i>5.00</i>		<i>105</i>	<i>78-129</i>			
<b>Laboratory Control Sample Dup (3F17006-BSD2)</b>				Prepared: 06/17/03 Analyzed: 06/18/03						
Methyl tert-butyl ether	9.32	0.50	ug/l	9.92		94.0	63-137	0.322	13	
Benzene	4.99	0.50	"	6.40		78.0	78-124	1.98	12	
Toluene	30.3	0.50	"	29.7		102	78-129	10.3	10	QR-02
Gasoline Range Organics (C6-C10)	428	50	"	440		97.3	70-113	9.78	9	QR-02
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.48</i>		<i>"</i>	<i>5.00</i>		<i>110</i>	<i>78-129</i>			
<b>Matrix Spike (3F17006-MS1)</b>				Source: MMF0095-01 Prepared & Analyzed: 06/17/03						
Methyl tert-butyl ether	9.76	0.50	ug/l	9.92	ND	98.4	63-137			
Benzene	5.24	0.50	"	6.40	ND	81.9	78-124			
Toluene	31.7	0.50	"	29.7	ND	107	78-129			
Gasoline Range Organics (C6-C10)	436	50	"	440	29	92.5	70-113			

Sequoia Analytical - Morgan Hill

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Project Manager: Scott Robinson

MMF0095  
Reported:  
06/19/03 10:47

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3F17006 - EPA 5035**

**Matrix Spike (3F17006-MS1)** Source: MMF0095-01 Prepared & Analyzed: 06/17/03

Surrogate: 1,2-Dichloroethane-d4 5.57 ug/l 5.00 111 78-129

**Matrix Spike (3F17006-MS2)** Source: MMF0143-01 Prepared: 06/17/03 Analyzed: 06/18/03

Methyl tert-butyl ether	13.1	0.50	ug/l	9.92	3.8	93.8	63-137			
Benzene	4.99	0.50	"	6.40	ND	78.0	78-124			
Toluene	30.5	0.50	"	29.7	ND	103	78-129			
Gasoline Range Organics (C6-C10)	417	50	"	440	32	87.5	70-113			

Surrogate: 1,2-Dichloroethane-d4 5.15 " 5.00 103 78-129

**Matrix Spike Dup (3F17006-MSD1)** Source: MMF0095-01 Prepared & Analyzed: 06/17/03

Methyl tert-butyl ether	9.13	0.50	ug/l	9.92	ND	92.0	63-137	6.67	13	
Benzene	5.02	0.50	"	6.40	ND	78.4	78-124	4.29	12	
Toluene	33.1	0.50	"	29.7	ND	111	78-129	4.32	10	
Gasoline Range Organics (C6-C10)	456	50	"	440	29	97.0	70-113	4.48	9	

Surrogate: 1,2-Dichloroethane-d4 5.27 " 5.00 105 78-129

**Matrix Spike Dup (3F17006-MSD2)** Source: MMF0143-01 Prepared: 06/17/03 Analyzed: 06/18/03

Methyl tert-butyl ether	13.3	0.50	ug/l	9.92	3.8	95.8	63-137	1.52	13	
Benzene	5.07	0.50	"	6.40	ND	79.2	78-124	1.59	12	
Toluene	31.5	0.50	"	29.7	ND	106	78-129	3.23	10	
Gasoline Range Organics (C6-C10)	420	50	"	440	32	88.2	70-113	0.717	9	

Surrogate: 1,2-Dichloroethane-d4 5.30 " 5.00 106 78-129

Sequoia Analytical - Morgan Hill

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Oakland CA, 94607

Project: ARCO #6002, Oakland, CA  
Project Number: INTRIM-50675  
Project Manager: Scott Robinson

MMF0095  
**Reported:**  
06/19/03 10:47

### Notes and Definitions

- Q-LIM The percent recovery was outside of the control limits. The samples results may still be useful for their intended purpose.
- QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- QR-02 The RPD result exceeded the control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



### Chain of Custody Record

Project Name D36603-MM1  
 BP BU/GEM CO Portfolio: \_\_\_\_\_  
 BP Laboratory Contract Number: \_\_\_\_\_  
 Date: 6/3/02 Requested Due Date (mm/dd/yy): \_\_\_\_\_

On-site Time: 700 Temp: 70  
 Off-site Time: 1245 Temp: 85  
 Sky Conditions: Blue skies  
 Meteorological Events: \_\_\_\_\_  
 Wind Speed: \_\_\_\_\_ Direction: \_\_\_\_\_

MMF0095

Send To:  
 Lab Name: SEQUOIA  
 Lab Address: 885 Jarvis Dr.  
Morgan Hill, CA 95037  
 Lab PM: Latonya Pelt  
 Tele/Fax: 408-776-9600 / 408-782-6308  
 Report Type & QC Level: Send BDP Reports  
 BP/GLM Account No.: \_\_\_\_\_

BP/GEM Facility No.: \_\_\_\_\_  
 BP/GEM Facility Address: 6235 Seminary Ave, OAKLAND, CA  
 Site ID No. ARCO 6002  
 Site Lat/Long: \_\_\_\_\_  
 California Global ID #: T0600100105  
 BP/GEM PM Contact: PAUL SUPPLE  
 Address: \_\_\_\_\_  
 Tele/Fax: \_\_\_\_\_

Consultant/Contractor: URS  
 Address: 500 12th St, Ste. 200  
Oakland, CA 94609-4014  
 e-mail EDD: syed\_rehan@urscorp.com  
 Consultant/Contractor Project No.: J5-00006002.01 00427  
 Consultant Tele/Fax: 510-874-1735/510-874-3268  
 Consultant/Contractor PM: Scott Robinson  
 Invoice to: Consultant/Contractor or BP/GEM (circle one)  
 BP/GEM Work Release No: INTRIM -50675

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives				Requested Analysis				Sample Point Lat/Long and Comments	
			Soil/Solid	Water/Liquid	Sediments	Air			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	TPH-G/BTEX (2015, 2021, 2040)	TPH-D (2015)	MTBE (2021)	MTBE, TAMS, ETBE (2015, 2021, 2040)		1,2-DCA & EDB (2020)
1	MW-4	945	X				01	3					X					
2	MW-5	1145	X				02	3					X					
3	MW-7	1205	X				03	3					X					
4	MW-8	830	X				09	3					X					
5	VW-1	1135	X				05	3					X					
6	VW-4	1050	X				04	3					X					
7																		
8																		
9																		
10																		

Sampler's Name: MIKE MCNULTY Relinquished By / Affiliation: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Sampler's Company: BLAINETECH SERVICES Date: 6/4/03 Time: 1132  
 Shipment Date: \_\_\_\_\_ Date: 6/4/03 Time: 1440  
 Shipment Method: \_\_\_\_\_  
 Shipment Tracking No: \_\_\_\_\_

Instructions: Address Invoice to BP/GEM but send to URS for approval

Labels In Place Yes No X Temperature Blank Yes No X Cooler Temperature on Receipt 5 °F (C) Trip Blank Yes No X

## SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: BP  
 REC. BY (PRINT) [Signature]  
 WORKORDER: HWF 6095

DATE REC'D AT LAB: 6/4/03  
 TIME REC'D AT LAB: 14:40  
 DATE LOGGED IN: 6-9-03

Drinking water for regulatory purposes: YES/NO  YES  NO  
 Wastewater for regulatory purposes: YES/NO  YES  NO

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / <input checked="" type="radio"/> Absent Intact / Broken*	01	82	MW-4	(3) vials	HCL	L	6/3/03	<del>                     [Large diagonal line across the table with handwritten "6/4/03" and a signature]                 </del>
2. Chain-of-Custody <input checked="" type="radio"/> Present / <input type="radio"/> Absent*	02	↓	↓ 5	↓	↓	↓	↓	
3. Traffic Reports or Packing List: Present / <input checked="" type="radio"/> Absent	03	↓	↓ 7	↓	↓	↓	↓	
4. Airbill: Airbill / Sticker Present / <input checked="" type="radio"/> Absent	04	↓	↓ 8	↓	↓	↓	↓	
5. Airbill #:	05	↓	VW-1	↓	↓	↓	↓	
6. Sample Labels: <input checked="" type="radio"/> Present / <input type="radio"/> Absent	06	↓	↓ 4	↓	↓	↓	↓	
7. Sample IDs: <input checked="" type="radio"/> Listed / <input type="radio"/> Not Listed on Chain-of-Custody								
8. Sample Condition: <input checked="" type="radio"/> Intact / Broken* / Leaking*								
9. Does information on custody reports, traffic reports and sample labels agree? <input checked="" type="radio"/> Yes / <input type="radio"/> No*								
10. Sample received within hold time: <input checked="" type="radio"/> Yes / <input type="radio"/> No*								
11. Proper Preservatives used: <input checked="" type="radio"/> Yes / <input type="radio"/> No*								
12. Temp Rec. at Lab: Is temp 4 +/- 2°C? <input checked="" type="radio"/> Yes / <input type="radio"/> No** <small>(Acceptance range for samples requiring thermal pres.)</small>								

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

**ATTACHMENT C**

**EDCC REPORT AND EDF/GEOWELL SUBMITTAL CONFIRMATION**

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## Error Summary Log

06/19/03

EDF 1.2i All files present in deliverable.

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Laboratory:	Sequoia Analytical Laboratories, Inc., Morgan Hill, CA
Project Name:	ARCO #6002, Oakland, CA
Work Order Number:	MMF0095
Global ID:	T0600100105
Lab Report Number:	MMF0095061920031047

## Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run	Sub
MMF00950619200	MW-4 31047	MMF009501	W	CS	8260+OX	SW5035	06/03/03	06/17/03	06/17/03	3F17006	1	
MMF00950619200	MW-5 31047	MMF009502	W	CS	8260+OX	SW5035	06/03/03	06/17/03	06/17/03	3F17006	1	
MMF00950619200	MW-7 31047	MMF009503	W	CS	8260+OX	SW5035	06/03/03	06/17/03	06/17/03	3F17006	1	
MMF00950619200	MW-8 31047	MMF009504	W	CS	8260+OX	SW5035	06/03/03	06/17/03	06/17/03	3F17006	1	
MMF00950619200	VW-1 31047	MMF009505	W	CS	8260+OX	SW5035	06/03/03	06/17/03	06/17/03	3F17006	1	
MMF00950619200	VW-4 31047	MMF009506	W	CS	8260+OX	SW5030B	06/03/03	06/13/03	06/13/03	3F13018	1	
		MMF003301	W	NC	8260+OX	SW5030B	//	06/13/03	06/13/03	3F13018	1	
		MMF014301	W	NC	8260+OX	SW5035	//	06/17/03	06/18/03	3F17006	1	
		3F13018BS1	WQ	BS1	8260+OX	SW5030B	//	06/13/03	06/13/03	3F13018	1	
		3F13018BS2	WQ	BS2	8260+OX	SW5030B	//	06/13/03	06/13/03	3F13018	1	
		3F13018BLK1	WQ	LB1	8260+OX	SW5030B	//	06/13/03	06/13/03	3F13018	1	
		3F13018MS1	W	MS1	8260+OX	SW5030B	//	06/13/03	06/13/03	3F13018	1	
		3F13018MSD1	W	SD1	8260+OX	SW5030B	//	06/13/03	06/13/03	3F13018	1	
		3F17006BSD1	WQ	BD1	8260+OX	SW5035	//	06/17/03	06/18/03	3F17006	1	
		3F17006BSD2	WQ	BD2	8260+OX	SW5035	//	06/17/03	06/18/03	3F17006	1	
		3F17006BS1	WQ	BS1	8260+OX	SW5035	//	06/17/03	06/17/03	3F17006	1	
		3F17006BS2	WQ	BS2	8260+OX	SW5035	//	06/17/03	06/17/03	3F17006	1	
		3F17006BLK1	WQ	LB1	8260+OX	SW5035	//	06/17/03	06/17/03	3F17006	1	
		3F17006MS1	W	MS1	8260+OX	SW5035	//	06/17/03	06/17/03	3F17006	1	
		3F17006MS2	W	MS2	8260+OX	SW5035	//	06/17/03	06/18/03	3F17006	1	
		3F17006MSD1	W	SD1	8260+OX	SW5035	//	06/17/03	06/17/03	3F17006	1	
		3F17006MSD2	W	SD2	8260+OX	SW5035	//	06/17/03	06/18/03	3F17006	1	

# EDFSAMP: Error Summary Log

06/19/03

Error type	Logcode	Projname	Npdlwo	Sampid	Matrix
There are no errors in this data file					

# EDFTEST: Error Summary Log

06/19/03

Error type	Labsampid	Qccode	Anmcode	Exmcode	Anadate	Run number
There are no errors in this data file					11	0



# EDFRES: Error Summary Log

06/19/03

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	3F13018MS1	MS1	W	8260+OX	PR	06/13/03	1	GROC6C10
Warning: extra parameter	3F13018MSD1	SD1	W	8260+OX	PR	06/13/03	1	GROC6C10
Warning: extra parameter	3F17006MS1	MS1	W	8260+OX	PR	06/17/03	1	GROC6C10
Warning: extra parameter	3F17006MS2	MS2	W	8260+OX	PR	06/18/03	1	GROC6C10
Warning: extra parameter	3F17006MSD1	SD1	W	8260+OX	PR	06/17/03	1	GROC6C10
Warning: extra parameter	3F17006MSD2	SD2	W	8260+OX	PR	06/18/03	1	GROC6C10
Warning: extra parameter	MMF003301	NC	W	8260+OX	PR	06/13/03	1	GROC6C10
Warning: extra parameter	MMF009501	CS	W	8260+OX	PR	06/17/03	1	GROC6C10
Warning: extra parameter	MMF009501	CS	W	8260+OX	PR	06/17/03	1	XYLENES
Warning: extra parameter	MMF009502	CS	W	8260+OX	PR	06/17/03	1	GROC6C10
Warning: extra parameter	MMF009502	CS	W	8260+OX	PR	06/17/03	1	XYLENES
Warning: extra parameter	MMF009503	CS	W	8260+OX	PR	06/17/03	1	GROC6C10
Warning: extra parameter	MMF009503	CS	W	8260+OX	PR	06/17/03	1	XYLENES
Warning: extra parameter	MMF009504	CS	W	8260+OX	PR	06/17/03	1	GROC6C10
Warning: extra parameter	MMF009504	CS	W	8260+OX	PR	06/17/03	1	XYLENES
Warning: extra parameter	MMF009505	CS	W	8260+OX	PR	06/17/03	1	GROC6C10
Warning: extra parameter	MMF009505	CS	W	8260+OX	PR	06/17/03	1	XYLENES
Warning: extra parameter	MMF009506	CS	W	8260+OX	PR	06/13/03	1	GROC6C10
Warning: extra parameter	MMF009506	CS	W	8260+OX	PR	06/13/03	1	XYLENES
Warning: extra parameter	MMF014301	NC	W	8260+OX	PR	06/18/03	1	GROC6C10
Warning: extra parameter	3F13018BLK1	LB1	WQ	8260+OX	PR	06/13/03	1	GROC6C10
Warning: extra parameter	3F13018BLK1	LB1	WQ	8260+OX	PR	06/13/03	1	XYLENES
Warning: extra parameter	3F13018BS2	BS2	WQ	8260+OX	PR	06/13/03	1	GROC6C10
Warning: extra parameter	3F17006BLK1	LB1	WQ	8260+OX	PR	06/17/03	1	GROC6C10
Warning: extra parameter	3F17006BLK1	LB1	WQ	8260+OX	PR	06/17/03	1	XYLENES

# EDFQC: Error Summary Log

06/19/03

Error type	Lablotctl	Anmcode	Parlabel	Qccode	Labqid
There are no errors in this data files					

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## EDFCL: Error Summary Log

06/19/03

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Error type	Crevdate	Anmcode	Exmcode	Parlabel	Cicode
There are no errors in this data file	//				

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**Confirmation Number:** 4180585443

**Date/Time of Submittal:** 6/19/2003 5:20:57 PM

**Facility Global ID:** T0600100105

**Facility Name:** ARCO

**Submittal Title:** 2nd Qtr 2003 Monitoring Report for #6002

**Submittal Type:** GW Monitoring Report

Logged in as URSCORP-OAKLAND (CONTRACTOR)

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### UPLOADING A GEO\_WELL FILE

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Your file has been successfully submitted!**

**Submittal Title: 2nd Qtr 2003 Geowell for #6002**

**Submittal Date/Time: 6/19/2003 5:23:34 PM**

**Confirmation Number: 2562850773**

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