



January 12, 2004

Mr. Scott Seery
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Alameda County
JAN 28 2004
Environmental Health

**Re: Fourth Quarter 2003 Groundwater Monitoring Report
ARCO Service Station #6041
7249 Village Parkway
Dublin, California
URS Project #38486334**

Dear Mr. Seery:

On behalf of Atlantic Richfield Company (ARCO – a BP affiliated company), URS Corporation (URS) is submitting the *Fourth Quarter 2003 Groundwater Monitoring Report* for the ARCO Service Station #6041, located at 7249 Village Parkway, Dublin, California.

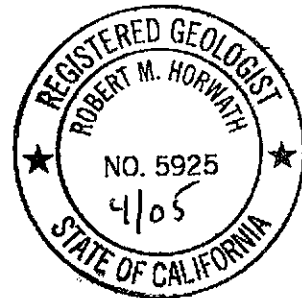
If you have any questions regarding this submission, please call (510) 874-3280.

Sincerely,

URS CORPORATION

Scott Robinson
Project Manager

Robert Horwath, R.G.
Portfolio Manager



Enclosure: Fourth Quarter 2003 Groundwater Monitoring Report

cc: Ms. Karen Petryna, Equiva Services, LLC, PO Box 7869, Burbank, CA 91510-7869
Mr. Paul Supple, ARCO, (electronic copy uploaded to ENFOS)



Atlantic Richfield Company
(a BP affiliated company)

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January 12, 2004

Fourth Quarter 2003 Groundwater Monitoring Report
ARCO Service Station #6041
7249 Village Parkway
Dublin, California
URS Project #38486334

Alameda County
JAN 25 2004
Environmental Health

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

Submitted by:

Paul Supple
Environmental Business Manager



R E P O R T

**FOURTH QUARTER 2003
GROUNDWATER MONITORING**

**ARCO SERVICE STATION #6041
7249 VILLAGE PARKWAY
DUBLIN, CALIFORNIA**

Prepared for
Atlantic Richfield Company

January 12, 2004



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

38486334



Date: January 12, 2004

Quarter: 4Q 03

ATLANTIC RICHFIELD COMPANY QUARTERLY GROUNDWATER MONITORING REPORT

Former Facility No.: 6041 Address: 7249 Village Parkway, Dublin, California
ARCO Environmental Business Manager: Paul Supple
Consulting Co./Contact Person: URS Corporation / Scott Robinson
Consultant Project No.: 38486334
Primary Agency: Alameda County Health Care Services Agency (ACHCSA)

WORK PERFORMED THIS QUARTER (Fourth – 2003):

1. Performed third quarter 2003 groundwater monitoring event on December 5, 2003.
2. Prepared and submitted third quarter 2003 groundwater monitoring report.
3. Prepared and submitted fourth quarter 2003 groundwater monitoring report.
4. Reduced the sampling frequency of well MW-6 from quarterly to annually

WORK PROPOSED FOR NEXT QUARTER (First – 2004):

1. Perform first quarter 2004 groundwater monitoring event.
2. Prepare and submit first quarter 2004 groundwater monitoring report.

Current Phase of Project: GW monitoring/sampling
Frequency of Groundwater Sampling: Quarterly: Wells MW-2 to MW-4 and MW-8
Annual (3rd Qtr.): MW-5 and MW-6
Frequency of Groundwater Monitoring: Quarterly
Is Free Product (FP) Present On-Site: No
Bulk Soil Removed to Date: 3,208 cubic yards
Current Remediation Techniques: Natural Attenuation
Approximate Depth to Groundwater: 5.61 (MW-4) to 9.11 (MW-5)
Groundwater Gradient (direction): West
Groundwater Gradient (magnitude): 0.009 feet per foot

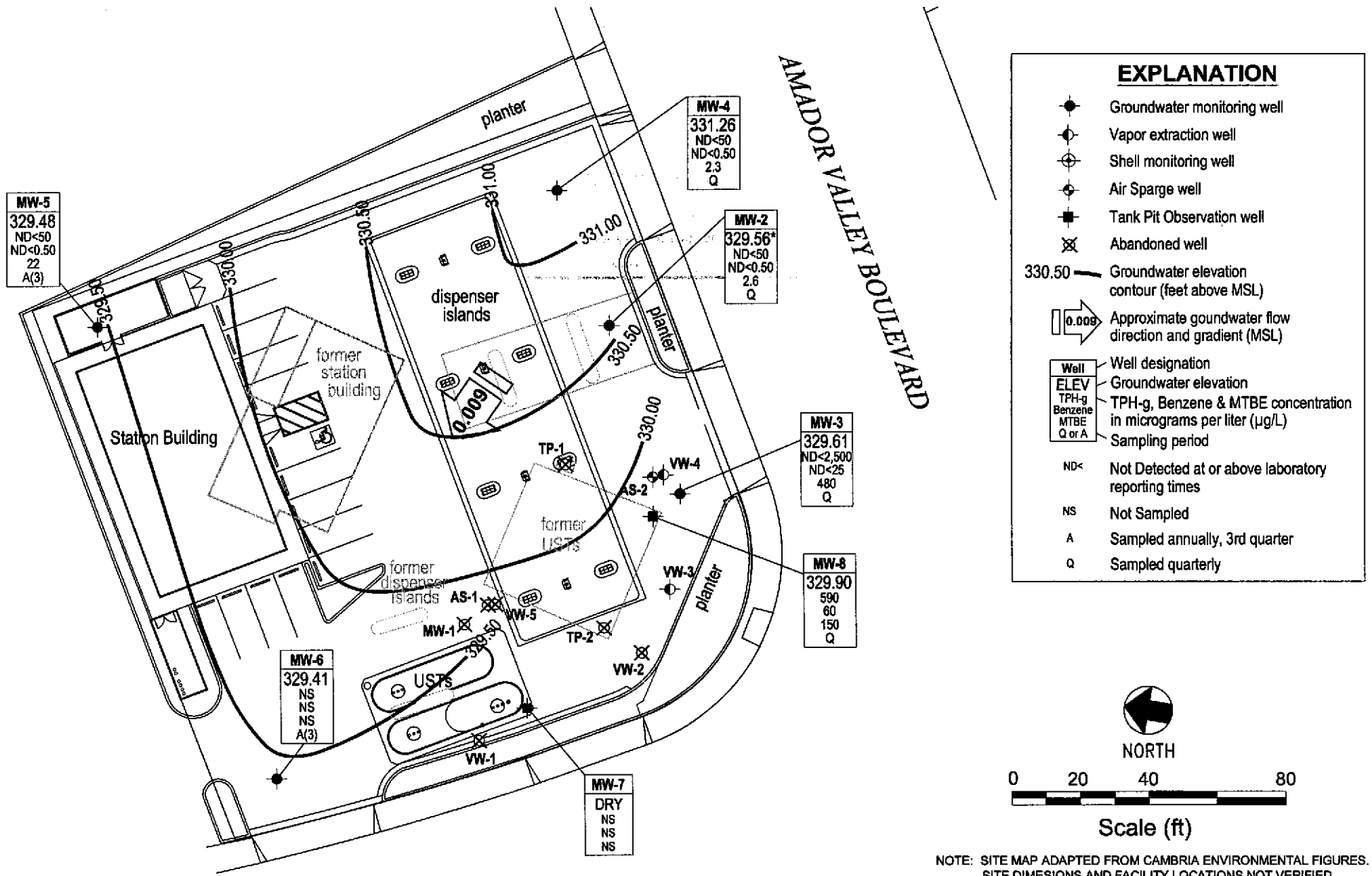
DISCUSSION:

All groundwater samples were analyzed by EPA Method 8260B for TPH-g, BTEX and fuel oxygenates. TPH-g was detected above the laboratory reporting limit in one of the five wells sampled at a concentration of 590 µg/L (MW-8). Benzene was detected above the laboratory reporting limit in one well at a concentration of 60 µg/L (MW-8). MTBE was detected above the laboratory reporting limit in all five wells at concentrations ranging from 2.3 µg/L (MW-4) to 480 µg/L (MW-3). TBA was detected above the laboratory reporting limit in three wells at concentrations ranging from 500 µg/L (MW-8) to 39,000 µg/L (MW-3). No other fuel oxygenates were detected above their respective reporting limits.



ATTACHMENTS:

- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map -- December 5, 2003
- Table 1 – Groundwater Elevation and Analytical Data
- Table 2 – Groundwater Flow Direction and Gradient
- Table 3 – Fuel Oxygenate Analytical Data
- 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



	Project No. 38486334 ARCO Service Station #6041 7249 Village Parkway Dublin, California	GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP Fourth Quarter 2003 (December 5, 2003)	FIGURE 1

**Table 1
Groundwater Elevation and Analytical Data**

ARCO Service Station #6041
7249 Village Parkway
Dublin, California

Well Number	Date of Sampling/ Monitoring	TOC Elevation (ft.-MSL)	Top of Screen (ft., MSL)	Bottom of Casing (ft., MSL)	Depth to Water (feet)	Groundwater Elevation (ft.-MSL)	TPH Gasoline (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 ⁹ (mg/L)	pH Level ⁹
MW-1	02/15/95	336.56	324.56	319.06	8.53	328.03	820	15	ND<1	5.2	1.4	--	--	--	--
	05/24/95				9.00	327.56	640	12	ND<1	7.3	ND<1	--	--	--	--
	08/25/95				10.30	326.26	780	2	ND<1	2	2	2,500	--	--	--
	11/28/95				11.01	325.55	570	2.2	ND<0.5	1.4	0.9	--	--	--	--
	02/26/96				7.35	329.21	1,100	28	ND<7	13	7	3,400	--	--	--
	05/23/96				8.73	327.83	560	8.5	ND<1	1.1	ND<1	3,900	--	--	--
	08/23/96				10.25	326.31	860	ND<1	ND<1	ND<4	2	5,600	--	--	--
	03/21/97				9.35	327.21	520	12	ND<0.5	2.7	1.5	6,200	--	--	--
	08/20/97				10.75	325.81	ND<5,000	ND<50	ND<50	ND<50	ND<50	7,400	--	--	--
	11/21/97				11.10	325.46	ND<5,000	ND<50	ND<50	ND<50	ND<50	8,500	--	--	--
	02/12/98	P				7.05	329.51	210	ND<0.5	ND<0.5	ND<0.5	8,900	--	1.71	--
	07/31/98	P				10.04	326.52	ND<20,000	ND<200	ND<200	ND<200	18,000	--	2.43	--
	02/17/99				8.50	328.06	ND<20,000	ND<200	ND<200	ND<200	ND<200	16,000	--	1.0	--
	08/24/99	P			10.40	326.16	190	ND<0.5	4.4	ND<0.5	1.1	15,000	--	--	--
	03/01/00	P			8.85	327.71	310	20	0.5	7.6	4	80,000	--	1.57	--
	08/18/00	P			9.35	327.21	ND<10,000	ND<100	ND<100	ND<100	ND<100	48,400	63,700	1.50	--
	12/27/00	P			10.81	325.75	ND<10,000	309	ND<100	ND<100	289	44,400	--	0.51	--
	02/09/01	P			10.65	325.91	2,820	368	ND<25.0	116	176	23,300	--	0.58	--
	DUP	02/09/01	NR			NR	NR	3,490	432	9.56	146	235	31,800	--	--
DUP	04/17/01	P			11.09	325.47	2,900	66.0	ND<10.0	33.2	25.1	46,500	--	0.63	--
DUP	04/17/01	NR			NR	NR	2,600	70.1	ND<20.0	32.7	30.6	45,400	--	--	--
	07/17/01	P			11.07	325.49	ND<10,000	ND<100	ND<100	130	520	42,000	--	0.69	--
	12/21/01	Well abandoned during station upgrade activities													

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Groundwater Elevation and Analytical Data**

ARCO Service Station #6041
7249 Village Parkway
Dublin, California

Well Number	Date of Sampling/ Monitoring	TOC Elevation (ft.-MSL)	Top of Screen (ft., MSL)	Bottom of Casing (ft., MSL)	Depth to Water (feet)	Groundwater Elevation (ft.-MSL)	TPH Gasoline (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 ⁹ (mg/L)	pH Level ⁹	
MW-2	02/15/95	334.80			6.75	328.05	730	110	1.7	25	66	--	--	--	--	
	05/24/95				6.88	327.92	370	110	ND<1	17	1.9	--	--	--	--	
	08/25/95				7.91	326.89	150	6	ND<1	ND<1	ND<1	2,700	--	--	--	
	11/28/95				9.06	325.74	ND<50	ND<0.5	ND<0.5	ND<0.5	0.8	--	--	--	--	
	02/26/96				6.65	328.15	350	66	ND<0.5	11	1.7	ND<3	--	--	--	
	05/23/96				6.90	327.90	540	140	ND<2.5	13	ND<2.5	4,600	--	--	--	
	08/23/96				8.45	326.35	180	0.8	2	0.7	2.6	4,000	--	--	--	
	03/21/97				7.28	327.52	410	90	ND<1	14	4	3,800	--	--	--	
	08/20/97				8.87	325.93	ND<5,000	ND<50	ND<50	ND<50	ND<50	3,100	--	--	--	
	11/21/97				9.28	325.52	ND<2,000	ND<20	ND<20	ND<20	ND<20	2,600	--	--	--	
	02/12/98	P				5.90	328.90	310	54	ND<0.5	6.2	1.1	3,800	--	3.76	--
	07/31/98	P				8.12	326.68	6,100	52	220	110	7,700	--	2.96	--	
	02/17/99	P				7.18	327.62	ND<5,000	ND<50	ND<50	ND<50	ND<50	4,200	--	1.0	--
	08/24/99	P				8.68	326.12	200	1.8	16	3.0	3,100	--	--	--	
	03/01/00	P				7.02	327.78	760	24	12	13	59	6,300	--	1.92	--
	08/18/00	P				7.75	327.05	ND<500	ND<5.00	ND<5.00	ND<5.00	ND<5.00	1,610	1,980	2.03	--
	12/27/00					8.85	325.95	Not Sampled: Well sampled during first and third quarters								
	02/09/01	P				8.50	326.30	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	9.11	--	0.53	--
	04/17/01					9.12	325.68	Not Sampled: Well sampled during first and third quarters								
	07/17/01	P				8.99	325.81	1,200	ND<10	ND<10	ND<10	ND<10	4,200	--	0.69	--
DUP	07/17/01	NR			NR	NR	3,500	ND<10	ND<10	ND<10	ND<10	3,500	--	--	--	
	12/21/01	NP			8.65	326.15	65	ND<0.50	1.2	0.61	6.7	11	6.5	0.48	--	
	03/06/02	NP			8.61	326.19	ND<50	ND<0.50	ND<0.50	ND<0.50	1.8	31	--	0.35	--	
	04/26/02	NP			8.20	326.60	92	ND<0.5	ND<0.50	ND<0.50	0.64	98	180	0.19	--	
	09/23/02	P			8.50 ⁴	326.30 ⁴	250 ¹	ND<1.2	ND<1.2	ND<1.2	ND<1.2	--	1,500	2.1	7.3	
	12/27/02	P			7.15 ⁴	327.65 ⁴	440 ¹	ND<2.5	ND<2.5	ND<2.5	ND<2.5	--	790	1.4	6.9	
	03/12/03 ⁷	P			7.33	NR ⁶	ND<50	1.6	ND<0.50	ND<0.50	1.2	--	11	2.7	7.0	
	06/28/03 ⁸	P	337.29	327.29	323.19	7.49	329.80	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	1.2	2.0	7.4
	09/30/03	P				8.20	329.09	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	5.2	2.2	7.0
	12/05/03	NP				7.73	329.56	ND<50	ND<0.50	ND<0.50	ND<0.50	--	2.6	4.3	7.3	

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7249 Village Parkway
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Well Number	Date of Sampling/ Monitoring	TOC Elevation (ft-MSL)	Top of Screen (ft., MSL)	Bottom of Casing (ft., MSL)	Depth to Water (feet)	Groundwater Elevation (ft-MSL)	TPH Gasoline (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 ⁹ (mg/L)	pH Level ⁹	
MW-3	02/15/95	335.53			8.55	326.98	100	14	ND<0.5	6.3	ND<0.5	--	--	--	--	
	05/24/95				8.17	327.36	110	8	ND<0.5	2.7	ND<0.5	--	--	--	--	
	08/25/95				9.27	326.26	210	3.6	ND<0.5	2.9	0.6	20,000	--	--	--	
	11/28/95				9.91	325.62	81	1.5	ND<0.5	1.4	ND<0.5	--	15,000	--	--	
	02/26/96				8.42	327.11	16,000	1,600	1,200	300	2,000	9,500	--	--	--	
	05/23/96				7.70	327.83	6,500	690	ND<10	120	14	8,600	--	--	--	
	08/23/96				9.25	326.28	1,700	85	2	61	5.3	11,000	--	--	--	
	03/21/97				8.72	326.81	100	2	ND<1	1	ND<1	6,600	--	--	--	
	08/20/97				9.73	325.80	ND<5,000	ND<50	ND<50	ND<50	ND<50	7,700	--	--	--	
	11/21/97				10.10	325.43	ND<5,000	ND<50	ND<50	ND<50	ND<50	9,700	--	--	--	
	02/12/98		P			6.68	328.85	110	11	ND<0.5	ND<0.5	1.9	10,000	--	1.02	--
	07/31/98		P			7.98	327.55	ND<10,000	ND<100	ND<100	ND<100	ND<100	13,000	--	2.59	--
	02/17/99		P			8.40	327.13	ND<20,000	ND<200	ND<200	ND<200	ND<200	23,000	--	1.0	--
	08/24/99		P			9.45	326.08	200	0.6	5.6	0.6	1.7	22,000	--	--	--
03/01/00	P			8.32	327.21	320	32	1.0	6.1	4	58,000	--	2.42	--		
08/18/00	P			8.35	327.18	ND<10,000	ND<100	ND<100	ND<100	ND<100	46,200	55,600	1.59	--		
DUP	08/18/00	NR			NR	NR	ND<10,000	ND<100	ND<100	ND<100	45,500	51,700	--	--		
	12/27/00	P			9.75	325.78	29,700	1,620	1,730	ND<250	6,230	62,600	--	1.59	--	
	02/09/01	P			9.61	325.92	29,300	2,590	3,530	440	7,080	85,500	--	0.51	--	
	04/17/01	P			9.94	325.59	16,400	1,680	ND<25.0	310	2,290	48,700	--	0.41	--	
	07/17/01	P			9.93	325.60	21,000	1,500	ND<100	1,100	690	82,000	--	0.51	--	
	12/21/01	P			9.40	326.13	ND<5,000	ND<50	ND<50	ND<50	ND<50	4,300	3,800	0.40	--	
DUP	12/21/01	NR			NR	NR	ND<5,000	ND<50	ND<50	ND<50	ND<50	4,500	3,500	--	--	
	03/06/02	P			9.33	326.20	ND<50	1.2	ND<0.50	1.1	13	880	--	0.43	--	
	04/26/02	P			9.19	326.34	260	3.7	ND<1.0	1.1	1.80	460	940	0.2	--	
	09/23/02	P			9.30 ⁴	326.23 ⁴	1,500 ²	41	2.4	9.8	14	--	980	1.5	7.6	
	12/27/02	P			7.30 ⁴	328.23 ⁴	1,500 ³	300	100	21	66	NA	1,100	2.2	8.6	
	3/12/03 ⁷	P			8.06	NR ⁶	ND<1,000	ND<10	ND<10	ND<10	ND<10	NA	45	1.6	7.4	
	06/28/03 ⁸	P	338.18	327.18	323.48	8.60	329.58	1,500	20	27	45	--	140	1.7	7.6	
	09/30/03	P			9.04	329.14	ND<2,500	ND<25	ND<25	ND<25	ND<25	--	650	0.9	7.4	
	12/05/03	P			8.57	329.61	ND<2,500	ND<25	ND<25	ND<25	ND<25	--	480	1.3	-- ¹⁰	

**Table 1
Groundwater Elevation and Analytical Data**

ARCO Service Station #6041
7249 Village Parkway
Dublin, California

Well Number	Date of Sampling/ Monitoring	TOC Elevation (ft.-MSL)	Top of Screen (ft., MSL)	Bottom of Casing (ft., MSL)	Depth to Water (feet)	Groundwater Elevation (ft.-MSL)	TPH				Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8260 (µg/L)	Dissolved Oxygen ⁹ (mg/L)	pH Level ⁹
							Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)					
MW-4	02/15/95	334.22			7.85	326.37	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--
	05/24/95				6.68	327.54	Not sampled: well sampled semi-annually, during the first and third quarters								
	08/25/95				6.93	327.29	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--	--
	11/28/95				8.21	326.01	Not sampled: well sampled semi-annually, during the first and third quarters								
	02/26/96				6.65	327.57	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--	--
	05/23/96				6.47	327.75	Not sampled: well sampled semi-annually, during the first and third quarters								
	08/23/96				7.66	326.56	Not sampled: well not part of sampling program								
	03/21/97				6.84	327.38	Not sampled: well not part of sampling program								
	08/20/97				8.32	325.90	Not sampled: well not part of sampling program								
	11/21/97				8.65	325.57	Not sampled: well not part of sampling program								
	02/12/98				6.35	327.87	Not sampled: well not part of sampling program								
	07/31/98				6.84	327.38	Not sampled: well not part of sampling program								
	02/17/99				7.50	326.72	Not sampled: well not part of sampling program								
	08/24/99				9.50	324.72	Not sampled: well not part of sampling program								
	03/01/00				6.93	327.29	Not sampled: well not part of sampling program								
	08/18/00				7.03	327.19	Not sampled: well not part of sampling program								
	12/27/00				8.10	326.12	Not sampled: well not part of sampling program								
	02/09/01				7.97	326.25	Not sampled: well not part of sampling program								
	04/17/01				8.90	325.32	Not sampled: well not part of sampling program								
	07/17/01				8.59	325.63	Not sampled: well not part of sampling program								
	12/21/01	NP			8.31	325.91	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.1	2.0	0.68	--
	03/06/02	P			8.27	325.95	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	0.37	--
	04/26/02	P			8.05	326.17	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.6	--	0.3	--
	09/23/02	P			7.94	326.28	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	2.9	4.1	7.3
	12/27/02	P			7.56	326.66	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	2.6	2.1	6.9
	3/12/2003 ⁷	P			7.67	326.55	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	1.6	2.8	6.8
	06/28/03 ⁸	P	336.87	322.37	7.60	329.27	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	2.1	--	5.6
	09/30/03	P			7.66	329.21	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	1.4	2.2	6.9
	12/05/03	P			5.61	331.26	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	2.3	3.0	7.0

**Table 1
Groundwater Elevation and Analytical Data**

ARCO Service Station #6041
7249 Village Parkway
Dublin, California

Well Number	Date of Sampling/ Monitoring	TOC Elevation (ft-MSL)	Top of Screen (ft., MSL)	Bottom of Casing (ft., MSL)	Depth to Water (feet)	Groundwater Elevation (ft-MSL)	TPH Gasoline (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 ⁹ (mg/L)	pH Level ⁹		
MW-5	02/15/95	335.87			7.80	328.07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--		
	05/24/95				8.10	327.77	Not sampled: well sampled annually, during the first quarter										
	08/25/95				9.43	326.44	Not sampled: well sampled annually, during the first quarter										
	11/28/95				10.12	325.75	Not sampled: well sampled annually, during the first quarter										
	02/26/96				6.73	329.14	03-13-96	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--	--	
	05/23/96				7.87	328.00	Not sampled: well sampled annually, during the first quarter										
	08/23/96				9.46	326.41	Not sampled: well not part of sampling program										
	03/21/97				8.23	327.64	Not sampled: well not part of sampling program										
	08/20/97				9.92	325.95	Not sampled: well not part of sampling program										
	11/21/97				10.18	325.69	Not sampled: well not part of sampling program										
	02/12/98				6.45	329.42	Not sampled: well not part of sampling program										
	07/31/98				8.98	326.89	Not sampled: well not part of sampling program										
	02/17/99				7.65	328.22	Not sampled: well not part of sampling program										
	08/24/99				8.10	327.77	Not sampled: well not part of sampling program										
	03/01/00				7.31	328.56	Not sampled: well not part of sampling program										
	08/18/00				8.65	327.22	Not sampled: well not part of sampling program										
	12/27/00				9.80	326.07	Not sampled: well not part of sampling program										
	02/09/01				9.65	326.22	Not sampled: well not part of sampling program										
	04/17/01				9.92	325.95	Not sampled: well not part of sampling program										
	07/17/01				9.95	325.92	Not sampled: well not part of sampling program										
	12/21/01						Well inaccessible										
	03/06/02						Well inaccessible										
	04/26/02						Well inaccessible										
09/23/02				7.94	327.93	Not sampled: well not part of sampling program											
12/27/02	P			7.57	328.30	ND<50	ND<0.50	ND<0.50	ND<0.50	0.76	--	15	0.7	6.9			
3/12/2003 ⁷				8.32	327.55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
06/28/03 ⁸		338.59		321.09	8.58	330.01	NS	NS	NS	NS	NS	NS	NS	NS	NS		
09/30/03					9.28	329.31	NS	NS	NS	NS	NS	NS	NS	NS	NS		
12/05/03	P				9.11	329.48	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	22	2.9	7.1		

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #6041
7249 Village Parkway
Dublin, California

Well Number	Date of Sampling/ Monitoring	TOC Elevation (ft.-MSL)	Top of Screen (ft., MSL)	Bottom of Casing (ft., MSL)	Depth to Water (feet)	Groundwater Elevation (ft.-MSL)	TPH Gasoline (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 ^p (mg/L)	pH Level ^p
MW-6	02/15/95	335.84			7.81	328.03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--	--
	05/24/95				8.35	327.49	Not sampled: well sampled annually, during the first quarter								
	08/25/95				9.71	326.13	Not sampled: well sampled annually, during the first quarter								
	11/28/95				10.28	325.56	Not sampled: well sampled annually, during the first quarter								
	02/26/96				6.60	329.24	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3	--	--	--
	05/23/96				8.05	327.79	Not sampled: well sampled annually, during the first quarter								
	08/23/96				9.58	326.26	Not sampled: well not part of sampling program								
	03/21/97				8.39	327.45	Not sampled: well not part of sampling program								
	08/20/97				9.98	325.86	Not sampled: well not part of sampling program								
	11/21/97				10.31	325.53	Not sampled: well not part of sampling program								
	02/12/98			3.15	332.69	Not sampled: well not part of sampling program									
	07/31/98			9.29	326.55	Not sampled: well not part of sampling program									
	02/17/99			7.72	328.12	Not sampled: well not part of sampling program									
	08/24/99			9.65	326.19	Not sampled: well not part of sampling program									
	03/01/00			7.35	328.49	Not sampled: well not part of sampling program									
	08/18/00			8.65	327.19	Not sampled: well not part of sampling program									
	12/27/00			9.83	326.01	Not sampled: well not part of sampling program									
	02/09/01			9.62	326.22	Not sampled: well not part of sampling program									
	04/17/01			10.03	325.81	Not sampled: well not part of sampling program									
	07/17/01			9.95	325.89	Not sampled: well not part of sampling program									
	12/21/01	NP			9.47	326.37	ND<50	ND<0.50	ND<0.50	ND<0.50	0.57	ND<2.5	--	0.55	--
	03/06/02	P			9.31	326.53	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	0.33	--
	04/26/02	P			9.09	326.75	ND<50	ND<0.50	ND<0.50	ND<0.50	0.7	ND<2.5	--	0.31	--
09/23/02	P			9.14	326.70	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	2.1	7.4	
12/27/02	P			7.26	328.58	ND<50	ND<0.50	ND<0.50	ND<0.50	0.63	NA	0.91	0.8	7.0	
3/12/2003 ⁷	P			8.41	327.43	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	0.64	1.3	7.2	
06/28/03 ⁸	P	338.37		322.57	8.56	329.81	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	0.62	1.6	6.8
09/30/03	P			9.32	329.05	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<2.5	--	3.9	0.8	7.0	
12/05/03				8.96	329.41	NS	NS	NS	NS	NS	NS	NS	NS	NS	

**Table 1
Groundwater Elevation and Analytical Data**

ARCO Service Station #6041
7249 Village Parkway
Dublin, California

Well Number	Date of Sampling/ Monitoring	TOC Elevation (ft.-MSL)	Top of Screen (ft., MSL)	Bottom of Casing (ft., MSL)	Depth to Water (feet)	Groundwater Elevation (ft.-MSL)	TPH Gasoline (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 ⁹ (mg/L)	pH Level ⁹
MW-7	12/21/01	NR			NR	NR	Not sampled: well dry								
	03/06/02	NR			NR	NR	Not sampled: well dry								
	04/26/02	NR			NR	NR	Not sampled: well dry								
	09/23/02	NR			NR	NR	Not sampled: well dry								
	12/27/02	P ⁵	NR		7.74	NR	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	4.7	2.7	7.0
	3/12/2003 ⁷		NR		DRY	NR	Not sampled: well dry								
	06/28/03 ⁸		338.62		DRY	NR	Not sampled: well dry								
	09/30/03				DRY	NR	Not sampled: well dry								
	12/05/03				DRY	NR	Not sampled: well dry								
MW-8	12/21/01	NP	NR		8.70	NR	ND<5,000	67	ND<50	ND<50	ND<50	2,400	1,300	0.60	--
	03/06/02	P	NR		8.63	NR	210	41	0.64	0.79	2.0	940	--	0.25	--
	DUP		NR		NR	NR	170	37	0.67	0.70	1.9	740	--	--	--
	04/26/02	P	NR		8.15	NR	680	95	ND<1.0	14	2.5	490	--	0.31	--
	DUP		NR		NR	NR	480	74	3.5	11.00	ND<1.0	640	--	--	--
	09/30/02	P	NR		9.37	NR	1,100 ³	120	ND<5.0	57	8.7	NA	1,100	1.3	6.9
	12/27/02	P	NR		7.55	NR	350 ²	13	ND<0.50	2.4	2.2	NA	73	0.8	6.9
	3/12/2003 ⁷	P	NR		8.25	NR	ND<2,500	89	ND<25	ND<25	ND<25	NA	740	1.4	6.9
	06/28/03 ⁸	P	338.27		8.38	329.89	7,000	680	ND<25	110	180	--	2,900	1.9	4.8
	09/30/03	P			9.09	329.18	1,500	240	18	45	150	--	180	1.0	6.8
12/05/03	P			8.37	329.90	590	60	ND<2.5	15	4.2	--	150	1.5	7.1	
VW-2	03/21/97		NR		8.22	NR	150	8.9	ND<0.5	ND<0.5	0.6	270	--	--	--
	08/20/97		NR		9.16	NR	Not sampled: well not part of sampling program								
	11/21/97		NR		8.27	NR	ND<200	3	ND<2	ND<2	ND<2	180	--	--	--
	02/12/98		NR		6.65	NR	200	19	ND<0.5	0.6	ND<0.5	2,200	--	--	--
	07/31/98		NR		7.01	NR	Not sampled: well not part of sampling program								
	02/17/99		NR		8.47	NR	Not sampled: well not part of sampling program								
	08/24/99		NR		8.20	NR	Not sampled: well not part of sampling program								
	03/01/00		NR		8.72	NR	Not sampled: well not part of sampling program								
	08/18/00	NP	NR		8.40	NR	ND<250	ND<2.50	ND<2.50	ND<2.50	ND<2.50	537	--	1.59	--
	12/27/00		NR		8.95	NR	Not sampled: Well Dry								
	02/09/01		NR		8.87	NR	Not sampled: Well Dry								
	04/17/01		NR		9.00	NR	Not sampled: Well Dry								
	07/17/01		NR		8.97	NR	Not sampled: Well Dry								
12/21/01		Well abandoned during station upgrade activities													

**Table 1
Groundwater Elevation and Analytical Data**

ARCO Service Station #6041
7249 Village Parkway
Dublin, California

Well Number	Date of Sampling/ Monitoring	TOC Elevation (ft.-MSL)	Top of Screen (ft., MSL)	Bottom of Casing (ft., MSL)	Depth to Water (feet)	Groundwater Elevation (ft.-MSL)	TPH Gasoline (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 ⁹ (mg/L)	pH Level ⁹
Shell MW-6 DUP	12/27/00	P	NR		9.13	NR	74.7	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	1.30	--
	12/27/00		NR		NR	NR	79.3	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	--	--
	02/09/01	P	NR		9.05	NR	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	1.29	--
	04/17/01	P	NR		10.17	NR	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	0.95	--
	07/17/01	P	NR		9.50	NR	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.2	--	1.03	--
	12/21/01	P	NR		9.98	NR	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	0.97	--
	03/06/02	P	NR		9.90	NR	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	0.97	--
	04/26/02	P	NR		9.47	NR	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	0.97	--
	09/27/02		Well destroyed												
Shell MW-7	12/27/00	P	NR		6.45	NR	ND<50.0	ND<0.500	0.696	ND<0.500	0.795	ND<2.50	--	1.33	--
	02/09/01	P	NR		6.39	NR	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	1.13	--
	04/17/01	P	NR		7.22	NR	ND<50.0	ND<0.500	ND<0.500	ND<0.500	ND<0.500	ND<2.50	--	1.12	--
	07/17/01	P	NR		6.93	NR	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	1.05	--
	12/21/01	P	NR		7.15	NR	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	--	--
	03/06/02	P	NR		7.03	NR	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	0.95	--
	04/26/02	P	NR		7.15	NR	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	0.95	--
	09/27/02		Well destroyed												

- Notes:
- TOC = Top of casing
 - ft.-MSL = Elevation in feet, relative to mean sea level
 - TPH = Total Petroleum Hydrocarbons analyzed using EPA Method 8015B modified
 - BTEX = Benzene, toluene, ethylbenzene, total xylenes by EPA method 8021B. (EPA method 8020 prior to 03/01/00).
 - MTBE = Methyl tert-butyl ether analyzed using EPA Method 8260B
 - EPA = United States Environmental Protection Agency
 - * = EPA method 8020 prior to 03/01/00
 - µg/L = Micrograms per liter
 - mg/L = Milligrams per liter
 - NR = Not reported; data not available or not measurable
 - = Not analyzed or not applicable
 - ND< = Not detected at or above the laboratory reporting limit.
 - P = Purge Sample
 - ** = For previous historical groundwater elevation and analytical data please refer to Fourth Quarter 1995 Groundwater Monitoring Program Results, ARCO Service Station 6041, Dublin, California, (EMCON, February 26, 1996).
- DUP = Duplicate
- 1 = Discrete peak at C6-C7.
 - 2 = Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
 - 3 = Chromatogram Pattern: C6-C10
 - 4 = Well casing broken, TOC unknown.
 - 5 = Well mistakenly sampled this quarter
 - 6 = Well casing was repaired and needs to be resurveyed.
 - 7 = Beginning the 1st quarter of 2003, TPH-g, BTEX and MTBE were analyzed by EPA Method 8260B.
 - 8 = Elevations resurveyed on 7/21/2003.
 - 9 = Dissolved oxygen and pH levels are field measurements.
 - 10 = pH measurements ranged from 7.2 to 11.25. Equipment needs to be re-calibrated.

Source The data within this table collected prior to September 2002 was provided to URS by Atlantic Richfield Company and their previous consultants. URS has not verified the accuracy of this information.

Table 2
Groundwater Flow Direction and Gradient

ARCO Service Station #6041
7249 Village Parkway
Dublin, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
02/15/95	NR	NR
05/24/95	East-Southeast	0.002
08/25/95	Northwest	0.006
11/28/95	North	0.006
02/26/96	East	0.012
05/23/96	Flat Gradient	Flat Gradient
08/23/96	Flat Gradient	Flat Gradient
03/21/97	South-Southeast	0.005
08/20/97	South-Southwest	0.001
11/21/97	South-Southwest	0.002
02/12/98	East	0.024
07/31/98	Northwest	0.01
02/17/99	Southeast	0.007
08/24/99	South-Southwest	0.013
03/01/00	South-Southeast	0.005
09/26/00	South-Southeast	0.002
12/27/00	West-Southwest	0.003
02/09/01	West-Southwest	0.003
04/17/01	South-Southwest	0.015
07/17/01	South-Southwest	0.003
12/21/01	East	0.002
03/06/02	East	0.003
04/26/02	Southeast	0.003
09/27/02	South	0.013
12/27/02	Southeast	0.011
03/12/03	South-Southeast	0.008
06/28/03	South	0.001
09/30/03	Southwest	0.002
12/05/03	West	0.009

Source:

The data within this table collected prior to September 2002 was provided to URS by Atlantic Richfield Company and their previous consultants. URS has not verified the accuracy of this information.

**Table 3
Fuel Oxygenate Analytical Data**

ARCO Service Station #6041
7249 Village Parkway
Dublin, California

Well Number	Date Sampled	Ethanol (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-2	12/27/02	ND<20,000	ND<10,000	790	ND<250	ND<250	ND<250	ND<250	ND<250
	03/12/03	ND<100	540	11	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	06/28/03	ND<100	ND<20	1.2	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	09/30/03	ND<100	290	5.2	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	12/05/03	ND<100	730	2.6	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-3	12/27/02	ND<40,000	ND<20,000	1,100	ND<500	ND<500	ND<500	ND<500	ND<500
	03/12/03	ND<2,000	6,100	45	ND<10	ND<10	ND<10	ND<10	ND<10
	06/28/03	ND<2,000	29,000	140	ND<10	ND<10	ND<10	ND<10	ND<10
	09/30/03	ND<5,000	39,000	650	ND<25	ND<25	ND<25	ND<25	ND<25
	12/05/03	ND<5,000	39,000	480	ND<25	ND<25	ND<25	ND<25	ND<25
MW-4	12/27/02	ND<40	ND<20	2.6	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	03/12/03	ND<100	ND<20	1.6	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	06/28/03	ND<100	ND<20	2.1	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	09/30/03	ND<100	ND<20	1.4	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	12/05/03	ND<100	ND<20	2.3	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-5	12/27/2002	ND<40	ND<20	15	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	12/05/03	ND<100	ND<20	22	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-6	12/27/02	ND<40	ND<20	0.91	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	03/12/03	ND<100	ND<20	0.64	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	06/28/03	ND<100	ND<20	0.62	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	09/30/03	ND<500	ND<100	3.9	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5
MW-7	12/27/02	ND<40	ND<20	4.7	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-8	12/27/02	ND<400	260	73	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	03/12/03	ND<5,000	2,200	740	ND<25	ND<25	ND<25	ND<25	ND<25
	06/28/03	ND<5,000	12,000	2,900	ND<25	ND<25	ND<25	ND<25	ND<25
	09/30/03	ND<2,000	28,000 ^a	180	ND<10	ND<10	ND<10	ND<10	ND<10
	12/05/03	ND<500	500	150	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5

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
1,2-DCA = 1,2-Dichloroethane
EDB = 1,2-Dibromoethane
ND< = Not detected at or above the laboratory reporting limit.
µg/L = micrograms per liter
a = The result was reported with a possible high bias due to the continuing calibration verification falling outside acceptance criteria.

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.

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 03/205-JPI	Station # 6041
Sampler: M. Pynch	Date: 12/5/03
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8
Total Well Depth: 9.53	Depth to Water: 7.73
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: ~~JP~~ 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.

1 Case Volume (Gals.)	X	3 JP No Purge	Gals.
		Specified Volumes	Calculated Volume

Time	Temp (°F)	pH	Conductivity (mS or μS)	Gals. Removed	Observations
1008	69.3	7.3	3811	-	slightly cloudy

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Time: 1010 Sampling Date: 12/5/03

Sample I.D.: MW-2 Laboratory: Pace (Sequoia) Other _____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxy's; Ethanol; 1,2-DCA; EOB

D.O. (if req'd): Pre-purge: _____ mg/L Post-purge: (4.3) mg/L

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 03/205-JPI	Station # 6041
Sampler: M. Pynch	Date: 12/5/03
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8
Total Well Depth: 13.95	Depth to Water: 8.57
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.

<u>3.5</u>	x	<u>3</u>	=	<u>10.5</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
1019	64.5	7.2	4990	3.5	clear
1020	68.2	10.6	477	7.0	slightly cloudy
1024	69.1	11.25	821	10.5	"

Did well dewater? Yes No Gallons actually evacuated: 10.5

Sampling Time: 1025 Sampling Date: 12/5/03

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

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Oxy's; Ethanol; 1,2-DCA; EOB

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 03/205-JP1	Station # 6041
Sampler: M. Pynch	Date: 12/5/03
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8
Total Well Depth: 14.50	Depth to Water: 5.61
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.

<u>5.7</u>	x	<u>3</u>	=	<u>17.1</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
947	64.2	7.3	5130	6.0	clear
948	68.2	7.1	5222	11.5	"
949	68.2	7.0	5303	17.5	"

Did well dewater? Yes (No) Gallons actually evacuated: 17.5

Sampling Time: 955 Sampling Date: 12/5/03

Sample I.D.: MW-4 Laboratory: Pace (Sequoia) Other _____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxy's; Ethanol; 1,2-OC4; EOB

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	3.0	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 03/205-JPI	Station # 6041
Sampler: M. Pynch	Date: 12/5/03
Well I.D.: MW-5	Well Diameter: 2 3 (4) 6 8
Total Well Depth: 17.45	Depth to Water: 9.11
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 Sampling Method: Bailer
 Disposable Bailer Disposable Bailer
 Positive Air Displacement Extraction Port
 Electric Submersible Other: _____
 Extraction Pump

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.

5.4	x	3	=	16.2	Gals.
I Cnse Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
0857	64.0	6.8	3616	5.5	gas odor, clear
0902	65.0	7.0	3889	11	clear
0903	65.4	7.1	3967	16.5	"

Did well dewater? Yes No Gallons actually evacuated: 16.5

Sampling Time: 0915 Sampling Date: 12/5/03

Sample I.D.: MW-5 Laboratory: Pace Sequoia Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Oxy's; Ethanol; 1,2-DCA; EOB

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	2.9	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 03/205-JPI	Station # 6041
Sampler: M. Pynch	Date: 12/5/03
Well I.D.: MW-8	Well Diameter: 2 3 (4) 6 8
Total Well Depth: 12.75	Depth to Water: 8.37
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.

<u>2.8</u>	x	<u>3</u>	=	<u>8.4</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
1038	67.5	9.4	584	3.0	slightly cloudy, odor
1039	70.0	7.4	1114	6.0	gray, odor
1040	70.8	7.1	1187	8.5	"

Did well dewater? Yes No Gallons actually evacuated: 85

Sampling Time: 1045 Sampling Date: 12/5/03

Sample I.D.: MW-8 Laboratory: Pace (Sequoia) Other _____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxy's; Ethanol; 1,2-DCI; EOB

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.5	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:

6041

Station #

7249 Village Parkway, Dublin

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

50

added equip. _____ any other adjustments _____

rinse water 5

TOTAL GALS. RECOVERED 55

loaded onto BTS vehicle # _____

BTS event # _____ time _____ date _____

031205-UP1 1115 12/5/03

signature *[Signature]*

REC'D AT _____ time _____ date _____

_____ / /

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 Atlantic Richfield Company have been reviewed and verified by that laboratory.



18 December, 2003

Scott Robinson
URS Corporation [Arco]
500 12th Street, Suite 200
Oakland, CA 94607

RE: ARCO #6041, Dublin, CA
Work Order: MML0229

Enclosed are the results of analyses for samples received by the laboratory on 12/08/03 16:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Theresa Allen
Project Manager

CA ELAP Certificate #1210

URS Corporation [Arco]
500 12th Street, Suite 200
Oakland CA, 94607

Project: ARCO #6041, Dublin, CA
Project Number: INTRIM-50691
Project Manager: Scott Robinson

MML0229
Reported:
12/18/03 14:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2	MML0229-01	Water	12/05/03 10:10	12/08/03 16:20
MW-3	MML0229-02	Water	12/05/03 10:25	12/08/03 16:20
MW-4	MML0229-03	Water	12/05/03 09:55	12/08/03 16:20
MW-5	MML0229-04	Water	12/05/03 09:15	12/08/03 16:20
MW-8	MML0229-05	Water	12/05/03 10:45	12/08/03 16:20

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



URS Corporation [Arco]
500 12th Street, Suite 200
Oakland CA, 94607

Project: ARCO #6041, Dublin, CA
Project Number: INTRIM-50691
Project Manager: Scott Robinson

MML0229
Reported:
12/18/03 14:30

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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MW-2 (MML0229-01) Water Sampled: 12/05/03 10:10 Received: 12/08/03 16:20

Ethanol	ND	100	ug/l	1	3L15001	12/13/03	12/13/03	EPA 8260B	
tert-Butyl alcohol	730	20	"	"	"	"	"	"	
Methyl tert-butyl ether	2.6	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	ND	50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		108 %		78-129	"	"	"	"	

MW-3 (MML0229-02) Water Sampled: 12/05/03 10:25 Received: 12/08/03 16:20

Ethanol	ND	5000	ug/l	50	3L15002	12/15/03	12/15/03	EPA 8260B	
tert-Butyl alcohol	39000	1000	"	"	"	"	"	"	
Methyl tert-butyl ether	480	25	"	"	"	"	"	"	
Di-isopropyl ether	ND	25	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	25	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	25	"	"	"	"	"	"	
1,2-Dichloroethane	ND	25	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	25	"	"	"	"	"	"	
Benzene	ND	25	"	"	"	"	"	"	
Toluene	ND	25	"	"	"	"	"	"	
Ethylbenzene	ND	25	"	"	"	"	"	"	
Xylenes (total)	ND	25	"	"	"	"	"	"	
Gasoline Range Organics	ND	2500	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		112 %		78-129	"	"	"	"	

URS Corporation [Arco]
 500 12th Street, Suite 200
 Oakland CA, 94607

 Project: ARCO #6041, Dublin, CA
 Project Number: INTRIM-50691
 Project Manager: Scott Robinson

 MML0229
Reported:
 12/18/03 14:30

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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MW-4 (MML0229-03) Water Sampled: 12/05/03 09:55 Received: 12/08/03 16:20

Ethanol	ND	100	ug/l	1	3L15002	12/15/03	12/15/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	2.3	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	ND	50	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4

113 % 78-129

MW-5 (MML0229-04) Water Sampled: 12/05/03 09:15 Received: 12/08/03 16:20

Ethanol	ND	100	ug/l	1	3L15001	12/13/03	12/13/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	22	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	ND	50	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4

111 % 78-129

URS Corporation [Arco]
 500 12th Street, Suite 200
 Oakland CA, 94607

 Project: ARCO #6041, Dublin, CA
 Project Number: INTRIM-50691
 Project Manager: Scott Robinson

 MML0229
 Reported:
 12/18/03 14:30

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 (MML0229-05) Water Sampled: 12/05/03 10:45 Received: 12/08/03 16:20									
Ethanol	ND	500	ug/l	5	3L15001	12/13/03	12/13/03	EPA 8260B	
tert-Butyl alcohol	500	100	"	"	"	"	"	"	
Methyl tert-butyl ether	150	2.5	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.5	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	2.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
Benzene	60	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Ethylbenzene	15	2.5	"	"	"	"	"	"	
Xylenes (total)	4.2	2.5	"	"	"	"	"	"	
Gasoline Range Organics	590	250	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		108 %		78-129	"	"	"	"	

URS Corporation [Arco]
 500 12th Street, Suite 200
 Oakland CA, 94607

 Project: ARCO #6041, Dublin, CA
 Project Number: INTRIM-50691
 Project Manager: Scott Robinson

 MML0229
 Reported:
 12/18/03 14:30

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 3L15001 - EPA 5030B P/T
Blank (3L15001-BLK1)

Prepared & Analyzed: 12/13/03

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	ND	50	"							

<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.43		"	5.00		109	78-129			
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Laboratory Control Sample (3L15001-BS1)

Prepared & Analyzed: 12/13/03

Ethanol	189	100	ug/l	200		94.5	31-186			
tert-Butyl alcohol	45.9	20	"	50.0		91.8	0-206			
Methyl tert-butyl ether	9.74	0.50	"	10.0		97.4	63-137			
Di-isopropyl ether	9.08	0.50	"	10.0		90.8	76-130			
Ethyl tert-butyl ether	9.36	0.50	"	10.0		93.6	61-141			
tert-Amyl methyl ether	9.26	0.50	"	10.0		92.6	56-140			
1,2-Dichloroethane	10.5	0.50	"	10.0		105	77-136			
1,2-Dibromoethane (EDB)	9.41	0.50	"	10.0		94.1	77-132			
Benzene	9.84	0.50	"	10.0		98.4	78-124			
Toluene	9.24	0.50	"	10.0		92.4	78-129			
Ethylbenzene	8.88	0.50	"	10.0		88.8	84-117			
Xylenes (total)	25.4	0.50	"	30.0		84.7	83-125			

<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.37		"	5.00		107	78-129			
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URS Corporation [Arco]
 500 12th Street, Suite 200
 Oakland CA, 94607

 Project: ARCO #6041, Dublin, CA
 Project Number: INTRIM-50691
 Project Manager: Scott Robinson

 MML0229
 Reported:
 12/18/03 14:30

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 3L15001 - EPA 5030B P/T
Laboratory Control Sample (3L15001-BS2)

Prepared & Analyzed: 12/13/03

Methyl tert-butyl ether	8.51	0.50	ug/l	9.92		85.8	63-137			
Benzene	5.63	0.50	"	6.40		88.0	78-124			
Toluene	30.3	0.50	"	29.7		102	78-129			
Ethylbenzene	6.98	0.50	"	6.96		100	84-117			
Xylenes (total)	33.2	0.50	"	33.7		98.5	83-125			
Gasoline Range Organics	424	50	"	440		96.4	70-113			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.25		"	5.00		105	78-129			

Laboratory Control Sample Dup (3L15001-BSD1)

Prepared & Analyzed: 12/13/03

Ethanol	208	100	ug/l	200		104	31-186	9.57	37	
tert-Butyl alcohol	44.1	20	"	50.0		88.2	0-206	4.00	22	
Methyl tert-butyl ether	9.88	0.50	"	10.0		98.8	63-137	1.43	13	
Di-isopropyl ether	9.29	0.50	"	10.0		92.9	76-130	2.29	9	
Ethyl tert-butyl ether	9.47	0.50	"	10.0		94.7	61-141	1.17	9	
tert-Amyl methyl ether	9.68	0.50	"	10.0		96.8	56-140	4.44	12	
1,2-Dichloroethane	11.1	0.50	"	10.0		111	77-136	5.56	13	
1,2-Dibromoethane (EDB)	9.56	0.50	"	10.0		95.6	77-132	1.58	9	
Benzene	10.1	0.50	"	10.0		101	78-124	2.61	12	
Toluene	9.34	0.50	"	10.0		93.4	78-129	1.08	10	
Ethylbenzene	9.27	0.50	"	10.0		92.7	84-117	4.30	10	
Xylenes (total)	26.7	0.50	"	30.0		89.0	83-125	4.99	11	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.30		"	5.00		106	78-129			

Laboratory Control Sample Dup (3L15001-BSD2)

Prepared & Analyzed: 12/13/03

Methyl tert-butyl ether	8.46	0.50	ug/l	9.92		85.3	63-137	0.589	13	
Benzene	5.62	0.50	"	6.40		87.8	78-124	0.178	12	
Toluene	30.4	0.50	"	29.7		102	78-129	0.329	10	
Ethylbenzene	7.34	0.50	"	6.96		105	84-117	5.03	10	
Xylenes (total)	33.4	0.50	"	33.7		99.1	83-125	0.601	11	
Gasoline Range Organics	405	50	"	440		92.0	70-113	4.58	9	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.48		"	5.00		110	78-129			

Sequoia Analytical - Morgan Hill

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]
 500 12th Street, Suite 200
 Oakland CA, 94607

 Project: ARCO #6041, Dublin, CA
 Project Number: INTRIM-50691
 Project Manager: Scott Robinson

 MML0229
 Reported:
 12/18/03 14:30

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 3L15002 - EPA 5030B P/T
Blank (3L15002-BLK1)

Prepared & Analyzed: 12/15/03

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	ND	50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.48		"	5.00		110	78-129			

Laboratory Control Sample (3L15002-BS1)

Prepared & Analyzed: 12/15/03

Ethanol	203	100	ug/l	200		102	31-186			
tert-Butyl alcohol	41.6	20	"	50.0		83.2	0-206			
Methyl tert-butyl ether	9.80	0.50	"	10.0		98.0	63-137			
Di-isopropyl ether	9.16	0.50	"	10.0		91.6	76-130			
Ethyl tert-butyl ether	9.51	0.50	"	10.0		95.1	61-141			
tert-Amyl methyl ether	9.43	0.50	"	10.0		94.3	56-140			
1,2-Dichloroethane	11.2	0.50	"	10.0		112	77-136			
1,2-Dibromoethane (EDB)	9.30	0.50	"	10.0		93.0	77-132			
Benzene	9.94	0.50	"	10.0		99.4	78-124			
Toluene	9.53	0.50	"	10.0		95.3	78-129			
Ethylbenzene	9.13	0.50	"	10.0		91.3	84-117			
Xylenes (total)	26.0	0.50	"	30.0		86.7	83-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.42		"	5.00		108	78-129			

URS Corporation [Arco]
 500 12th Street, Suite 200
 Oakland CA, 94607

 Project: ARCO #6041, Dublin, CA
 Project Number: INTRIM-50691
 Project Manager: Scott Robinson

 MML0229
 Reported:
 12/18/03 14:30

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 3L15002 - EPA 5030B P/T
Laboratory Control Sample (3L15002-BS2)

Prepared & Analyzed: 12/15/03

Methyl tert-butyl ether	8.01	0.50	ug/l	9.92		80.7	63-137			
Benzene	5.38	0.50	"	6.40		84.1	78-124			
Toluene	29.0	0.50	"	29.7		97.6	78-129			
Ethylbenzene	6.84	0.50	"	6.96		98.3	84-117			
Xylenes (total)	32.1	0.50	"	33.7		95.3	83-125			
Gasoline Range Organics	408	50	"	440		92.7	70-113			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.58		"	5.00		112	78-129			

Laboratory Control Sample Dup (3L15002-BSD1)

Prepared: 12/15/03 Analyzed: 12/16/03

Ethanol	186	100	ug/l	200		93.0	31-186	8.74	37	
tert-Butyl alcohol	41.5	20	"	50.0		83.0	0-206	0.241	22	
Methyl tert-butyl ether	9.78	0.50	"	10.0		97.8	63-137	0.204	13	
Di-isopropyl ether	8.93	0.50	"	10.0		89.3	76-130	2.54	9	
Ethyl tert-butyl ether	9.55	0.50	"	10.0		95.5	61-141	0.420	9	
tert-Amyl methyl ether	9.64	0.50	"	10.0		96.4	56-140	2.20	12	
1,2-Dichloroethane	10.9	0.50	"	10.0		109	77-136	2.71	13	
1,2-Dibromoethane (EDB)	9.41	0.50	"	10.0		94.1	77-132	1.18	9	
Benzene	10.1	0.50	"	10.0		101	78-124	1.60	12	
Toluene	9.16	0.50	"	10.0		91.6	78-129	3.96	10	
Ethylbenzene	9.24	0.50	"	10.0		92.4	84-117	1.20	10	
Xylenes (total)	25.9	0.50	"	30.0		86.3	83-125	0.385	11	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.46		"	5.00		109	78-129			

Laboratory Control Sample Dup (3L15002-BSD2)

Prepared: 12/15/03 Analyzed: 12/16/03

Methyl tert-butyl ether	8.15	0.50	ug/l	9.92		82.2	63-137	1.73	13	
Benzene	5.24	0.50	"	6.40		81.9	78-124	2.64	12	
Toluene	29.0	0.50	"	29.7		97.6	78-129	0.00	10	
Ethylbenzene	6.59	0.50	"	6.96		94.7	84-117	3.72	10	
Xylenes (total)	30.9	0.50	"	33.7		91.7	83-125	3.81	11	
Gasoline Range Organics	379	50	"	440		86.1	70-113	7.37	9	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.57		"	5.00		111	78-129			

Sequoia Analytical - Morgan Hill

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]
500 12th Street, Suite 200
Oakland CA, 94607

Project: ARCO #6041, Dublin, CA
Project Number: INTRIM-50691
Project Manager: Scott Robinson

MML0229
Reported:
12/18/03 14:30

Notes and Definitions

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 6041 GWM
 BP BU/GEM CO Portfolio Retail
 BP Laboratory Contract Number: Atlantic Richfield Company
 Requested Due Date (mo/dd/yy) 14 day TAT

MNL0229

On-site Time: <u>0745</u>	Temp: <u>60°F</u>
Off-site Time: <u>1125</u>	Temp: <u>65°F</u>
Sky Conditions: <u>Moving Rain + clouds</u>	
Meteorological Events: <u>Rain</u>	
Wind Speed: <u>NW</u>	Direction: <u>NW</u>

Date: 12/5/03

Send To:	BP/GEM Facility No.: <u>ARCO 6041</u>	Consultant/Contractor: <u>URS</u>
Lab Name: <u>SEQUOIA</u>	BP/GEM Facility Address: <u>7249 Village PKWY, DUBLIN, CA</u>	Address: <u>500 12th St., Ste. 200</u>
Lab Address: <u>885 Jarvis Dr.</u>	Site ID No. <u>ARCO 8041</u>	<u>Oakland, CA 94609-4014</u>
<u>Morgan Hill, CA 95037</u>	Site Lat/Long:	e-mail EDD: <u>donna.casper@URSCorp.com</u>
	California Global ID #:	Consultant/Contractor Project No.: <u>J5-0006041.01 00427</u>
Lab PM Theresa Allen	BP/GEM PM Contact: <u>PAUL SUPPLE</u>	Consultant Tele/Fax: <u>510-893-3600/510-874-3268</u>
Tele/Fax: <u>408-776-9800 / 408-782-6308</u>	Address: <u>P.O. Box 6649</u>	Consultant/Contractor PM: <u>Scott Robinson</u>
Report Type & QC Level: <u>1 Send RDP Reports</u>	<u>Moraga, CA 94570</u>	Invoice to: Consultant/Contractor of <u>BP/GEM</u> (Circle one)
BP/GEM Account No.:	Tele/Fax: <u>925-299-8891/925-299-8872</u>	BP/GEM Work Release No: <u>INTRIM -50691</u>

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 ₂ SO ₄	HNO ₃	HCl	TPH-G/BTEX 58015/8021-98260	TPH-D (8015)	MTBE (8021)	MTBE (8260)	MTBE, TAME, ETBE DPE, TEA (8260)	
1	MW-2	1010		X			3				X			X	X	X		
2	MW-3	1025		X			3				X			X	X	X		
3	MW-4	955		X			3				X			X	X	X		
4	MW-5	915		X			3				X			X	X	X		
5	MW-8	1045		X			3				X			X	X	X		
6																		
7																		
8																		
9																		
10																		

Sampler's Name: <u>Matt Purch</u>	Relinquished By / Affiliation: <u>[Signature]</u>	Date: <u>12/5/03</u>	Time: <u>15:19</u>	Accepted By / Affiliation: <u>[Signature]</u>	Date: <u>12/5/03</u>	Time: <u>1519</u>
Sampler's Company: <u>Bluine Tech Services</u>						
Shipment Date:						
Shipment Method:						
Shipment Tracking No:						
Special Instructions: <u>Address Invoice to BP/GEM but send to URS for approval</u>						

Body Seals In Place Yes No Temperature Blank Yes No Cooler Temperature on Receipt 4.6°C Trip Blank Yes No

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: URS
 REC. BY (PRINT): AS
 WORKORDER: MW20229

DATE REC'D AT LAB: 12/8/03
 TIME REC'D AT LAB: 1620
 DATE LOGGED IN: 12-9-03

Drinking water for regulatory purposes: YES NO
 Wastewater for regulatory purposes: 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="checkbox"/> Absent Intact / Broken*			MW-2	3-VOCs	HCl	L	12-5-03	105 HA 3205010
2. Chain-of-Custody <input checked="" type="checkbox"/> Present / Absent*			MW-3	↓	↓	↓	↓	
3. Traffic Reports or Packing List Present / <input checked="" type="checkbox"/> Absent			MW-4	↓	↓	↓	↓	
4. Airbill: Airbill / Sticker Present / Absent			MW-5	↓	↓	↓	↓	
5. Airbill #:			MW-8					
6. Sample Labels: <input checked="" type="checkbox"/> Present / Absent								
7. Sample IDs: <input checked="" type="checkbox"/> Listed / Not Listed <input checked="" type="checkbox"/> on Chain-of-Custody								
8. Sample Condition: <input checked="" type="checkbox"/> Intact / Broken* / Leaking*								
9. Does information on custody reports, traffic reports and sample labels agree? <input checked="" type="checkbox"/> Yes / No*								
10. Sample received within hold time: <input checked="" type="checkbox"/> Yes / No*								
11. Proper Preservatives used: <input checked="" type="checkbox"/> Yes / No*								
12. Temp Rec. at Lab: Is temp 4 ± 2°C? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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

Error Summary Log

12/22/03

EDF 1.2i All files present in deliverable.

Laboratory:	Sequoia Analytical Laboratories, Inc., Morgan Hill, CA
Project Name:	ARCO #6041, Dublin, CA
Work Order Number:	MML0229
Global ID:	NA
Lab Report Number:	MML0229121820031430

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run Sub
MML02291218200 MW-2 31430		MML022901	W	CS	8260TPH	SW5030B	12/05/03	12/13/03	12/13/03	3L15001	1
MML02291218200 MW-3 31430		MML022902	W	CS	8260TPH	SW5030B	12/05/03	12/15/03	12/15/03	3L15002	1
MML02291218200 MW-4 31430		MML022903	W	CS	8260TPH	SW5030B	12/05/03	12/15/03	12/15/03	3L15002	1
MML02291218200 MW-5 31430		MML022904	W	CS	8260TPH	SW5030B	12/05/03	12/13/03	12/13/03	3L15001	1
MML02291218200 MW-8 31430		MML022905	W	CS	8260TPH	SW5030B	12/05/03	12/13/03	12/13/03	3L15001	1
		3L15001BSD1	WQ	BD1	8260TPH	SW5030B	//	12/13/03	12/13/03	3L15001	1
		3L15001BSD2	WQ	BD2	8260TPH	SW5030B	//	12/13/03	12/13/03	3L15001	1
		3L15001BS1	WQ	BS1	8260TPH	SW5030B	//	12/13/03	12/13/03	3L15001	1
		3L15001BS2	WQ	BS2	8260TPH	SW5030B	//	12/13/03	12/13/03	3L15001	1
		3L15001BLK1	WQ	LB1	8260TPH	SW5030B	//	12/13/03	12/13/03	3L15001	1
		3L15002BSD1	WQ	BD1	8260TPH	SW5030B	//	12/15/03	12/16/03	3L15002	1
		3L15002BSD2	WQ	BD2	8260TPH	SW5030B	//	12/15/03	12/16/03	3L15002	1
		3L15002BS1	WQ	BS1	8260TPH	SW5030B	//	12/15/03	12/15/03	3L15002	1
		3L15002BS2	WQ	BS2	8260TPH	SW5030B	//	12/15/03	12/15/03	3L15002	1
		3L15002BLK1	WQ	LB1	8260TPH	SW5030B	//	12/15/03	12/15/03	3L15002	1

EDFSAMP: Error Summary Log

12/22/03

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

EDFTEST: Error Summary Log

12/22/03

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

EDFRES: Error Summary Log

12/22/03

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
There are no errors in this data file						//	0	

EDFQC: Error Summary Log

12/22/03

Error type	Lablotctf	Anmcode	Parlabel	Qccode	Labqcid
There are no errors in this data files					

EDFCL: Error Summary Log

12/22/03

Error type	Clredate	Anmcode	Exmcode	Parlabel	Clcode
There are no errors in this data file	//				

AB2886 Electronic Delivery

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UPLOADING A GEO_WELL FILE

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

Submittal Title: Fourth Quarter 2003 Geowell for Site #6041

Submittal Date/Time: 12/21/2003 2:52:51 PM

Confirmation Number: 3585423111

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(CONTRACTOR)

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Confirmation Number: 9875864684

Date/Time of Submittal: 12/21/2003 2:51:53 PM

Facility Global ID: T0600100109

Facility Name: ARCO

Submittal Title: Fourth Quarter 2003 Groundwater Monitoring Report for Site #6041

Submittal Type: GW Monitoring Report

Logged in as URSCORP-OAKLAND (CONTRACTOR)

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