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Atlantic Richfield Company
(a BP affiliated company)

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Alameda County

FEB 21 2006

Environmental Health

January 31, 2006

**Re: Fourth Quarter 2005 Groundwater Monitoring Report
ARCO Service Station #4977
2770 Castro Valley Boulevard
Castro Valley, California
ACEH Case No. 01-0097**

"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



January 31, 2006

Alameda County

FEB 21 2006

Environmental Health

Mr. Don Hwang
Alameda County Environmental Health (ACEH)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

**Re: Fourth Quarter 2005 Groundwater Monitoring Report
ARCO Service Station #4977
2770 Castro Valley Blvd
Castro Valley, California
ACEH Case No. 01-0097**

Dear Mr. Hwang:

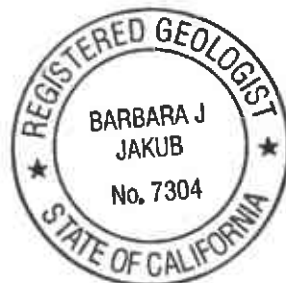
On behalf of Atlantic Richfield Company, a BP affiliated company, URS Corporation (URS) is submitting the *Fourth Quarter 2005 Groundwater Monitoring Report* for ARCO Service Station #4977, located at 2770 Castro Valley Boulevard, Castro Valley, California.

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

Sincerely,

URS CORPORATION

Barbara Jakub, P.G.
Project Manager



Enclosure: Fourth Quarter 2005 Groundwater Monitoring Report

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

REPORT

**FOURTH QUARTER 2005
GROUNDWATER MONITORING
REPORT**

ARCO SERVICE STATION #4977
2770 CASTRO VALLEY BLVD
CASTRO VALLEY, CALIFORNIA

Prepared for
RM

January 31, 2006

URS

URS Corporation
1333 Broadway, Suite 800
Oakland, California 94612

Date: January 31, 2006
Quarter: 4Q 05

FOURTH QUARTER 2005 GROUNDWATER MONITORING REPORT

Facility No.: 4977 Address: 2770 Castro Valley Blvd, Castro Valley, CA
RM Environmental Business Manager: Paul Supple
Consulting Co./Contact Person: URS Corporation / Barbara Jakub
Primary Agency: Alameda County Environmental Health (ACEH)
ACEH Case No.: 01-0097

WORK PERFORMED THIS QUARTER (Fourth – 2005):

1. Prepared and submitted the Third Quarter 2005 Groundwater Monitoring Report.
2. Performed the fourth quarter 2005 groundwater monitoring event on December 27, 2005.

WORK PROPOSED FOR NEXT QUARTER (First – 2006):

1. Prepared and submitted this Fourth Quarter 2005 Groundwater Monitoring Report.
2. Perform the first quarter 2006 groundwater monitoring event.

SITE SUMMARY:

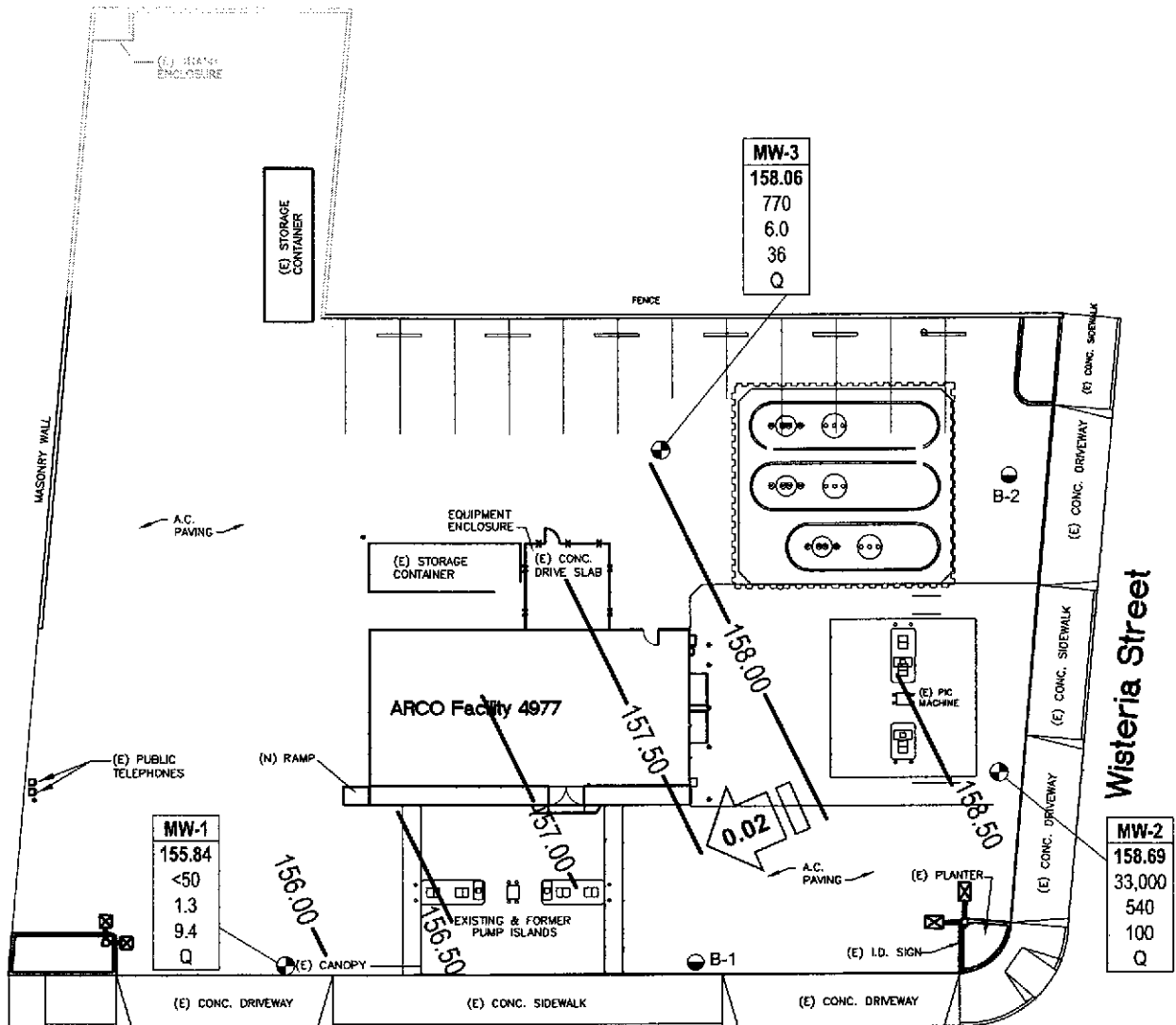
Current Phase of Project:	<u>Groundwater monitoring/sampling</u>
Frequency of Groundwater Sampling:	<u>Quarterly: Wells MW-1 through MW-3</u>
Frequency of Groundwater Monitoring:	<u>Quarterly</u>
Is Free Product (FP) Present On-Site:	<u>No</u>
Current Remediation Techniques:	<u>None</u>
Approximate Depth to Groundwater:	<u>5.60 ft (MW-2) to 7.60 ft (MW-1)</u>
Groundwater Gradient (direction):	<u>South/Southwest</u>
Groundwater Gradient (magnitude):	<u>0.02 feet per foot</u>

DISCUSSION:

During purging prior to sampling, well MW-1 dewatered at 10 gallons, well MW-2 dewatered at 12 gallons, and well MW-3 dewatered at 6 gallons. Gasoline range organics were detected at or above laboratory reporting limit in two of the three wells sampled this quarter at concentrations of 770 micrograms per liter ($\mu\text{g/L}$) (MW-3) and 33,000 $\mu\text{g/L}$ (MW-2). Benzene was detected at or above laboratory reporting limit in all three wells at concentrations ranging from 1.3 $\mu\text{g/L}$ (MW-1) to 540 $\mu\text{g/L}$ (MW-2). Ethylbenzene was detected at or above the laboratory reporting limit in all three wells at concentrations ranging from 1.5 $\mu\text{g/L}$ (MW-1) to 1,300 $\mu\text{g/L}$ (MW-2). Xylenes were detected at or above the laboratory reporting limit in two wells at concentrations of 2.7 $\mu\text{g/L}$ (MW-3) and 2,700 $\mu\text{g/L}$ (MW-2). Methyl-tert-butyl ether was detected at or above laboratory reporting limit in all three wells at concentrations ranging from 9.4 $\mu\text{g/L}$ (MW-1) to 100 $\mu\text{g/L}$ (MW-2). Tert-butyl alcohol was detected at or above laboratory reporting limit in one well at a concentration of 150 $\mu\text{g/L}$ (MW-3). No other fuel components were detected at or above their respective laboratory reporting limits.

ATTACHMENTS:

- Figure 1 - Groundwater Elevation Contour and Analytical Summary Map – December 27, 2005
- Table 1 - Groundwater Elevation and Analytical Data
- Table 2 - Fuel Additives Analytical Data
- Table 3 - Groundwater Gradient Data
- Attachment A - Field Procedures and Field Data Sheets
- Attachment B - Laboratory Procedures, Certified Analytical Reports and Chain-of-Custody Records
- Attachment C -- Error Check Reports and EDF/Geowell Submittal Confirmations



Castro Valley Blvd.

Wisteria Street

LEGEND

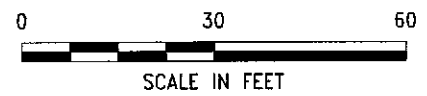
- MONITORING WELL
- SOIL BORING
- | |
|---------|
| Well |
| ELEV |
| GRO |
| Benzene |
| MTBE |
| Q |

 WELL DESIGNATION
- | |
|---------|
| ELEV |
| GRO |
| Benzene |
| MTBE |
| Q |

 GROUNDWATER ELEVATION (FT ABOVE MSL)
- | |
|---------|
| GRO |
| Benzene |
| MTBE |
| Q |

 CONCENTRATION OF GRO, BENZENE AND MTBE IN GROUNDWATER (µg/L)
- | |
|---|
| Q |
|---|

 SAMPLING FREQUENCY
- < NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMITS
- Q SAMPLING QUARTERLY
- 157.00 GROUNDWATER ELEVATION CONTOUR (FT ABOVE MSL)
- GROUNDWATER FLOW DIRECTION AND GRADIENT (FT/FT)



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

Jan 20, 2006 - 2:25pm X:\x_env_waste\3p\GEM_Sites\Scott_Robinson\Paul_Supple\4977\Monitoring\2005 Dtr. 4\Drawings\4977-4005-EV.dwg



Project No. 38487184
 Arco Service Station #4977
 2770 Castro Valley Boulevard
 Castro Valley, California

**GROUNDWATER ELEVATION CONTOUR
 AND ANALYTICAL SUMMARY MAP**
 Fourth Quarter 2005 (December 27, 2005)

FIGURE

1

Table 1
Groundwater Elevation and Analytical Data
 ARCO Service Station #4977
 2770 Castro Valley Blvd., Castro Valley, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
MW-1	4/19/2002	--		161.11	5.00	15.00	11.21	149.90	660	12	1.3	4.3	0.8	38	--	--
	9/27/2002	--		161.11	5.00	15.00	9.29	151.82	130	7.7	0.87	5.4	0.79	39	1.7	6.9
	12/16/2002	--	a	161.11	5.00	15.00	8.55	152.56	77	1.8	<0.50	0.69	<1.0	42	1.6	6.9
	3/11/2003	--		161.11	5.00	15.00	8.07	153.04	140	9.8	<0.50	5.6	<0.50	20	1.4	7.4
	6/17/2003	--		161.11	5.00	15.00	8.31	152.80	510	60	1.4	81	<1.0	23	2.2	7
	9/18/2003	--	b	161.11	5.00	15.00	9.45	151.66	72	2.4	1.4	1.6	1.5	39	2.7	7
	12/11/2003	P		161.11	5.00	15.00	8.80	152.31	79	1.5	<0.50	1.5	4.4	48	2.1	7.0
	03/11/2004	P		163.44	5.00	15.00	7.61	155.83	<50	1.3	<0.50	0.77	1.3	17	1.4	6.8
	06/02/2004	P		163.44	5.00	15.00	8.95	154.49	53	1.4	<0.50	0.93	<0.50	39	2.3	7.1
	09/22/2004	P		163.44	5.00	15.00	9.42	154.02	70	<0.50	<0.50	<0.50	<0.50	48	1.7	6.8
	12/15/2004	P		163.44	5.00	15.00	7.88	155.56	63	<0.50	<0.50	<0.50	<0.50	45	1.8	6.9
	03/07/2005	P		163.44	5.00	15.00	7.02	156.42	<50	<0.50	<0.50	<0.50	<0.50	4.0	2.4	6.8
06/27/2005	P		163.44	5.00	15.00	7.53	155.91	52	2.0	<0.50	1.9	0.78	8.1	2.8	7.1	
09/16/2005	P		163.44	5.00	15.00	9.20	154.24	<50	<0.50	<0.50	<0.50	0.76	14	1.82	6.9	
12/27/2005	P		163.44	5.00	15.00	7.60	155.84	<50	1.3	<0.50	1.5	<0.50	9.4	2.02	7.87	
MW-2	4/19/2002	--		161.87	5.00	15.00	6.59	155.28	28,000	970	120	860	6,900	760	--	--
	9/27/2002	--		161.87	5.00	15.00	7.18	154.69	17,000	1,400	<50	1,200	3,700	1,400	1.5	6.8
	12/16/2002	--	a	161.87	5.00	15.00	7.31	154.56	17,000	1,000	<50	980	3,300	980	1.9	6.8
	3/11/2003	--		161.87	5.00	15.00	6.02	155.85	24,000	1,600	70	1,300	4,300	920	1.7	7.4
	6/17/2003	--		161.87	5.00	15.00	6.31	155.56	28,000	1,300	55	1,300	4,500	610	1.4	6.9
	9/18/2003	--		161.87	5.00	15.00	7.61	154.26	19,000	960	63	1,100	3,100	580	2.7	6.8
	12/11/2003	P		161.87	5.00	15.00	6.50	155.37	29,000	710	53	1,300	3,800	490	2.0	7.0
	03/11/2004	P		164.29	5.00	15.00	6.02	158.27	19,000	830	49	1,500	4,000	410	0.8	6.5
	06/02/2004	P		164.29	5.00	15.00	7.14	157.15	25,000	680	<50	1,300	3,900	240	4.3	7.1
	09/22/2004	--		164.29	5.00	15.00	7.63	156.66	15,000	980	<25	980	940	390	--	6.7
	12/15/2004	P	c	164.29	5.00	15.00	6.48	157.81	22,000	610	26	1,300	3,200	290	0.3	6.9
	03/07/2005	P		164.29	5.00	15.00	6.08	158.21	25,000	570	33	1,400	3,900	120	2.3	6.8
06/27/2005	P		164.29	5.00	15.00	6.90	157.39	24,000	630	32	1,200	2,900	86	2.5	7.2	
09/16/2005	P		164.29	5.00	15.00	7.66	156.63	25,000	550	<25	1,400	3,000	82	1.41	7.0	
12/27/2005	P		164.29	5.00	15.00	5.60	158.69	33,000	540	<25	1,300	2,700	100	2.26	7.19	
MW-3	4/19/2002	--		162.14	5.00	15.00	6.94	155.20	1,200	29	1.1	43	62	1,700	--	--
	9/27/2002	--		162.14	5.00	15.00	8.26	153.88	740	7.8	<2.5	6.8	4.4	1,100	1	6.7
	12/16/2002	--	a	162.14	5.00	15.00	6.76	155.38	1,200	13	<10	170	88	910	2.3	6.8

Table 1

Groundwater Elevation and Analytical Data
ARCO Service Station #4977
2770 Castro Valley Blvd., Castro Valley, CA

Well No.	Date	P/ NP	Footnotes/ Comments	TOC (ft MSL)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (ft bgs)	GWE (ft MSL)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
MW-3	3/11/2003	--		162.14	5.00	15.00	6.92	155.22	<2,500	<25	<25	<25	<25	470	1.7	7.5
	6/17/2003	--		162.14	5.00	15.00	7.44	154.70	<1,000	<10	<10	14	<10	530	1.9	7
	9/18/2003	--		162.14	5.00	15.00	8.43	153.71	470	4.8	<2.5	10	9.2	300	2.9	6.8
	12/11/2003	P		162.14	5.00	15.00	6.72	155.42	<500	<5.0	<5.0	7.0	13	180	1.9	6.9
	03/11/2004	P		164.53	5.00	15.00	6.09	158.44	360	1.9	<1.0	5.6	5.0	110	2.6	6.8
	06/02/2004	P		164.53	5.00	15.00	7.50	157.03	380	2.8	<0.50	8.0	2.1	43	3.6	7.3
	09/22/2004	P		164.53	5.00	15.00	8.00	156.53	270	<0.50	<0.50	0.54	<0.50	50	1.8	6.9
	12/15/2004	P		164.53	5.00	15.00	6.43	158.10	390	3.5	<0.50	20	3.7	49	1.1	6.9
	03/07/2005	P		164.53	5.00	15.00	6.12	158.41	1,900	13	<1.0	93	29	70	2.3	6.8
	06/27/2005	P		164.53	5.00	15.00	7.08	157.45	830	4.0	<0.50	13	2.8	33	3.3	7.3
	09/16/2005	P		164.53	5.00	15.00	7.28	157.25	320	2.1	<0.50	5.4	0.60	21	2.11	7.0
	12/27/2005	P		164.53	5.00	15.00	6.47	158.06	770	6.0	<0.50	33	2.7	36	2.96	7.42

Table 1
Groundwater Elevation and Analytical Data
ARCO Service Station #4977
2770 Castro Valley Blvd., Castro Valley, CA

SYMBOLS AND ABBREVIATIONS:

< = Not detected at or above laboratory reporting limits

--- = Not measured, sampled, analyzed, applicable

BTEX = Benzene, toluene, ethylbenzene and xylenes

ft bgs = Feet below ground surface

DO = Dissolved oxygen

DTW = Depth to water in ft bgs

GRO/TPH-g = Gasoline range organics (changed from C6-C10 to C4-C12 2Q2004)/total petroleum hydrocarbons in the gasoline range (C5-C9)

GWE = Groundwater elevation in ft MSL

mg/L = Milligrams per liter

ft MSL = Feet above mean sea level

MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8021B unless otherwise noted (before 12/16/02)

P/NP = Well was purged/not purged prior to sampling

TOC = Top of casing measured in ft MSL

µg/L = Micrograms per liter

FOOTNOTES:

a = TPH, BTEX, and MTBE analyzed by EPA Method 8260B beginning on 4th quarter sampling event (12/16/02).

b = This sample was originally analyzed within the EPA recommended hold time. Re-analysis for confirmation or dilution was performed past the recommended hold time. The results may still be used for their intended purpose.

c = Sheen in well

NOTES:

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

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

Wells were re-surveyed on 3/23/2004.

Values for DO and pH were field measurements.

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

Table 2

Fuel Additives Analytical Data

ARCO Service Station #4977
2770 Castro Valley Blvd., Castro Valley, CA

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)	Footnotes/ Comments
MW-1	12/16/2002	<50	<5.0	42	<0.50	<0.50	<0.50	<0.50	<0.50	
	3/11/2003	<100	<20	20	<0.50	<0.50	<0.50	<0.50	<0.50	
	6/17/2003	<200	<40	23	<1.0	<1.0	<1.0	<1.0	<1.0	
	9/18/2003	<100	<20	39	<0.50	<0.50	<0.50	<0.50	<0.50	a
	12/11/2003	<100	<20	48	<0.50	<0.50	<0.50	<0.50	<0.50	
	03/11/2004	<100	<20	17	<0.50	<0.50	<0.50	<0.50	<0.50	
	06/02/2004	<100	<20	39	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/22/2004	<100	<20	48	<0.50	<0.50	<0.50	<0.50	<0.50	
	12/15/2004	<100	<20	45	<0.50	<0.50	<0.50	<0.50	<0.50	a
	03/07/2005	<100	<20	4.0	<0.50	<0.50	<0.50	<0.50	<0.50	
	06/27/2005	<100	<20	8.1	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/16/2005	<100	<20	14	<0.50	<0.50	<0.50	<0.50	<0.50	
	12/27/2005	<100	<20	9.4	<0.50	<0.50	<0.50	<0.50	<0.50	b
MW-2	12/16/2002	<5,000	<500	980	<50	<50	<50	<50	<50	
	3/11/2003	<10,000	<2,000	920	<50	<50	<50	<50	<50	
	6/17/2003	<10,000	<2,000	610	<50	<50	<50	<50	<50	
	9/18/2003	<5,000	<1,000	580	<25	<25	<25	<25	<25	
	12/11/2003	<5,000	<1,000	490	<25	<25	<25	<25	<25	
	03/11/2004	<2,000	<400	410	<10	<10	<10	<10	<10	
	06/02/2004	<10,000	<2,000	240	<50	<50	<50	<50	<50	
	09/22/2004	<5,000	<1,000	390	<25	<25	<25	<25	<25	
	12/15/2004	<2,000	<400	290	<10	<10	<10	<10	<10	a
	03/07/2005	<5,000	<1,000	120	<25	<25	<25	<25	<25	
	06/27/2005	<5,000	<1,000	86	<25	<25	<25	<25	<25	
	09/16/2005	<5,000	<1,000	82	<25	<25	<25	<25	<25	
12/27/2005	<5,000	<1,000	100	<25	<25	<25	<25	<25	b	
MW-3	12/16/2002	<1,000	<100	910	<10	<10	12	<10	<10	
	3/11/2003	<5,000	<1,000	470	<25	<25	<25	<25	<25	
	6/17/2003	<2,000	<400	530	<10	<10	<10	<10	<10	
	9/18/2003	<500	<100	300	<2.5	<2.5	3.2	<2.5	<2.5	
	12/11/2003	<1,000	<200	180	<5.0	<5.0	<5.0	<5.0	<5.0	
	03/11/2004	<200	570	110	<1.0	<1.0	<1.0	<1.0	<1.0	
06/02/2004	<100	130	43	<0.50	<0.50	0.56	<0.50	<0.50		

Table 2

Fuel Additives Analytical Data
ARCO Service Station #4977
2770 Castro Valley Blvd., Castro Valley, CA

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)	Footnotes/ Comments
MW-3	09/22/2004	<100	28	50	<0.50	<0.50	0.51	<0.50	<0.50	
	12/15/2004	<100	110	49	<0.50	0.52	0.61	<0.50	<0.50	a
	03/07/2005	<200	190	70	<1.0	<1.0	<1.0	<1.0	<1.0	
	06/27/2005	<100	130	33	<0.50	<0.50	<0.50	<0.50	<0.50	
	09/16/2005	<100	44	21	<0.50	<0.50	<0.50	<0.50	<0.50	
	12/27/2005	<100	150	36	<0.50	<0.50	<0.50	<0.50	<0.50	b

Table 2

Fuel Additives Analytical Data ARCO Service Station #4977 2770 Castro Valley Blvd., Castro Valley, CA

SYMBOLS AND ABBREVIATIONS:

< = Not detected at or above laboratory reporting limit

— = Not sampled, analyzed

1,2-DCA = 1,2-Dichloroethane

DIPE = Di-isopropyl ether

EDB = 1, 2 Dibromoethane

ETBE = Ethyl tert butyl ether

MTBE = Methyl tert-butyl ether

TAME = Tert-amyl methyl ether

TBA = Tert-butyl alcohol

µg/L = Micrograms per liter

FOOTNOTES:

a = This sample was originally analyzed within the EPA recommended hold time. Re-analysis for confirmation or dilution was performed past the recommended hold time. The results may still be used for their intended purpose.

b = Calibration verification for ethanol was within method limits but outside contract limits.

Table 3
Groundwater Gradient Data
 ARCO Service Station #4977
 2770 Castro Valley Blvd., Castro Valley, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
4/19/2002	Southwest	0.038
9/27/2002	Southwest	0.021
12/16/2002	Southeast	0.029
3/11/2003	South	0.024
6/17/2003	South-Southwest	0.022
9/18/2003	South-Southwest	0.022
3/11/2004	South-Southwest	0.024
6/2/2004	South	0.025
9/22/2004	South	0.025
12/15/2004	South	0.020
3/7/2005	South	0.02
6/27/2005	South	0.01
9/16/2005	Southeast	0.03
12/27/2005	South-Southeast	0.02

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

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 # 0512 27 -AT Date 12/27/05 Client Arco 4977

Site 2770 Castro Valley Blvd., Castro Valley

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 <u>TOC</u>
MW-1	4					7.60	15.10	↓
MW-2	4					5.60	14.69	
MW-3	4					6.47	15.02	

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>651227 - MT</u>	Station # <u>4977</u>
Sampler: <u>MT, DR, JD</u>	Date: <u>12/27/05</u>
Well I.D.: <u>MW-1</u>	Well Diameter: 2 3 <u>4</u> 6 8 _____
Total Well Depth: <u>15.10</u>	Depth to Water: <u>7.60</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
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
 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>4.9</u>	X	<u>3</u>	=	<u>14.7</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
<u>1417</u>	<u>63.6</u>	<u>7.90</u>	177.9 <u>200.3</u>	<u>4.9</u>	
<u>1418</u>	<u>62.4</u>	<u>7.91</u>	<u>200.3</u>	<u>9.8</u>	<u>Dewatered @ 10 Gals</u>
1419				14.7	
<u>1440</u>	<u>63.0</u>	<u>7.87</u>	<u>200.0</u>	<u>—</u>	<u>DTW = 11.73</u>

Did well dewater? Yes No Gallons actually evacuated: 10

Sampling Time: 1440 Sampling Date: 12/27/05

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

Analyzed for: GRO MTBE MTBE DRO Oil 1,2-DCP EDP Ethanol Other: _____

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	<u>2.02</u>	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>051227-MT</u>	Station # <u>4977</u>
Sampler: <u>MT, DA, JD</u>	Date: <u>12/27/05</u>
Well I.D.: <u>MW-2</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: <u>14.69</u>	Depth to Water: <u>5.60</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
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>5.9</u>	x	<u>3</u>	=	<u>17.8</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
<u>1433</u>	<u>68.8</u>	<u>7.10</u>	<u>886</u>	<u>5.9</u>	<u>dry</u>
<u>1434</u>	<u>69.5</u>	<u>7.26</u>	<u>898</u>	<u>11.8</u>	<u>" Dewatered @ 12</u>
<u>1500</u>	<u>70.0</u>	<u>7.19</u>	<u>894</u>	<u>-</u>	<u>DTW = 9.50</u>

Did well dewater? Yes No Gallons actually evacuated: 12

Sampling Time: 1500 Sampling Date: 12/27/05

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

Analyzed for: GRE BTEX MTBE DRO Ony 1,2-DC BDB Ethanol Other: _____

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>OS 12 27 - MT</u>	Station # <u>4977</u>
Sampler: <u>MT, DR, JD</u>	Date: <u>12/27/05</u>
Well I.D.: <u>MW-3</u>	Well Diameter: 2 3 <u>6</u> 8 _____
Total Well Depth: <u>15.02</u>	Depth to Water: <u>6.47</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade _____	D.O. Meter (if req'd): <u>VSI</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius 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>5.6</u>	x	<u>3</u>	=	<u>16.8</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
<u>1426</u>	<u>VA.D</u>	<u>7.41</u>	<u>745</u>	<u>5.6</u>	
<u>1427</u>				<u>11.2</u>	<u>Dewatered @ 6 gal</u>
<u>1450</u>	<u>VA.7</u>	<u>7.42</u>	<u>784</u>	<u>16.8</u>	<u>DFW = 9.21</u>

Did well dewater? Yes No Gallons actually evacuated: 6

Sampling Time: 1450 Sampling Date: 12/27/05

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

Analyzed for: GRD MTBE MTBE DRO Onyx LDCA EDP Other Other: _____

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

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:

4977

Station # _____

Station Address 2270 Castro Valley, Castro Valley

Total Gallons Collected From Groundwater Monitoring Wells:
28

added equip. _____ any other adjustments _____
rinse water 2

TOTAL GALS. RECOVERED 30 loaded onto BTS vehicle # 63

BTS event # 051223-1013 time 1505 date 12/22/05

signature [Signature]

REC'D AT _____ time _____ date 1/1

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 RM have been reviewed and verified by that laboratory.



12 January, 2006

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

RE: ARCO #4977, Castro Valley, CA
Work Order: MOL1040

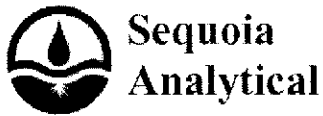
Enclosed are the results of analyses for samples received by the laboratory on 12/28/05 19:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race
Senior Project Manager

CA ELAP Certificate #1210

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



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

Project: ARCO #4977, Castro Valley, CA
Project Number: G0C2H-0004
Project Manager: Scott Robinson

MOL1040
Reported:
01/12/06 14:27

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MOL1040-01	Water	12/27/05 14:40	12/28/05 19:10
MW-2	MOL1040-02	Water	12/27/05 15:00	12/28/05 19:10
MW-3	MOL1040-03	Water	12/27/05 14:50	12/28/05 19:10
TB-4977-12272005	MOL1040-04	Water	12/27/05 00:00	12/28/05 19:10

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies. These samples were received with no custody seals.

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

 Project: ARCO #4977, Castro Valley, CA
 Project Number: G0C2H-0004
 Project Manager: Scott Robinson

 MOL1040
 Reported:
 01/12/06 14:27

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MOL1040-01) Water Sampled: 12/27/05 14:40 Received: 12/28/05 19:10									
tert-Amyl methyl ether	ND	0.50	ug/l	1	6A05014	01/05/06	01/06/06	EPA 8260B	
Benzene	1.3	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	IC
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	1.5	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	9.4	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		96 %	60-135	"	"	"	"	"	
MW-2 (MOL1040-02) Water Sampled: 12/27/05 15:00 Received: 12/28/05 19:10									
tert-Amyl methyl ether	ND	25	ug/l	50	6A05014	01/05/06	01/06/06	EPA 8260B	
Benzene	540	25	"	"	"	"	"	"	
tert-Butyl alcohol	ND	1000	"	"	"	"	"	"	
Di-isopropyl ether	ND	25	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	25	"	"	"	"	"	"	
1,2-Dichloroethane	ND	25	"	"	"	"	"	"	
Ethanol	ND	5000	"	"	"	"	"	"	IC
Ethyl tert-butyl ether	ND	25	"	"	"	"	"	"	
Ethylbenzene	1300	25	"	"	"	"	"	"	
Methyl tert-butyl ether	100	25	"	"	"	"	"	"	
Toluene	ND	25	"	"	"	"	"	"	
Xylenes (total)	2700	25	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	33000	2500	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		90 %	60-135	"	"	"	"	"	



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

Project: ARCO #4977, Castro Valley, CA
 Project Number: G0C2H-0004
 Project Manager: Scott Robinson

MOL1040
 Reported:
 01/12/06 14:27

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (MOL1040-03) Water Sampled: 12/27/05 14:50 Received: 12/28/05 19:10									
tert-Amyl methyl ether	ND	0.50	ug/l	1	6A05014	01/05/06	01/06/06	EPA 8260B	
Benzene	6.0	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	150	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	IC
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	33	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	36	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	2.7	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	770	50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		92 %		60-135	"	"	"	"	

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

Project: ARCO #4977, Castro Valley, CA
Project Number: G0C2H-0004
Project Manager: Scott Robinson

MOL1040
Reported:
01/12/06 14:27

**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 6A05014 - EPA 5030B P/T / EPA 8260B

Prepared & Analyzed: 01/05/06

Blank (6A05014-BLK1)

tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	"							
tert-Butyl alcohol	ND	5.0	"							
Di-isopropyl ether	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	100	"							IC
Ethyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C4-C12)	ND	50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.41		"	2.50		96	60-135			

Laboratory Control Sample (6A05014-BS1)

Prepared & Analyzed: 01/05/06

tert-Amyl methyl ether	14.6	0.50	ug/l	15.0		97	80-115			
Benzene	4.86	0.50	"	5.16		94	65-115			
tert-Butyl alcohol	202	5.0	"	143		141	75-150			
Di-isopropyl ether	15.3	0.50	"	15.1		101	75-125			
1,2-Dibromoethane (EDB)	15.9	0.50	"	14.9		107	85-120			
1,2-Dichloroethane	15.1	0.50	"	14.7		103	85-130			
Ethanol	340	100	"	142		239	70-135			HL, IC
Ethyl tert-butyl ether	14.1	0.50	"	15.0		94	75-130			
Ethylbenzene	6.48	0.50	"	7.54		86	75-135			
Methyl tert-butyl ether	6.10	0.50	"	7.02		87	65-125			
Toluene	36.1	0.50	"	37.2		97	85-120			
Xylenes (total)	42.5	0.50	"	41.2		103	85-125			
Gasoline Range Organics (C4-C12)	423	50	"	440		96	60-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	2.23		"	2.50		89	60-135			

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

 Project: ARCO #4977, Castro Valley, CA
 Project Number: G0C2H-0004
 Project Manager: Scott Robinson

 MOL1040
 Reported:
 01/12/06 14:27

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 6A05014 - EPA 5030B P/T / EPA 8260B

Matrix Spike (6A05014-MS1)	Source: MPA0024-03			Prepared & Analyzed: 01/05/06						
tert-Amyl methyl ether	79.4	2.5	ug/l	75.2	ND	106	80-115			
Benzene	26.0	2.5	"	25.8	0.85	97	65-115			
tert-Butyl alcohol	4690	25	"	716	3300	194	75-120			BB,LM
Di-isopropyl ether	79.6	2.5	"	75.6	0.60	104	75-125			
1,2-Dibromoethane (EDB)	82.4	2.5	"	74.4	ND	111	85-120			
1,2-Dichloroethane	80.2	2.5	"	73.6	1.2	107	85-130			
Ethanol	1290	500	"	708	ND	182	70-135			HL, IC
Ethyl tert-butyl ether	74.8	2.5	"	75.2	1.0	98	75-130			
Ethylbenzene	33.8	2.5	"	37.7	1.1	87	75-135			
Methyl tert-butyl ether	48.1	2.5	"	35.1	15	94	65-125			
Toluene	186	2.5	"	186	1.7	99	85-120			
Xylenes (total)	222	2.5	"	206	ND	108	85-125			
Gasoline Range Organics (C4-C12)	2610	250	"	2200	420	100	60-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>2.23</i>		<i>"</i>	<i>2.50</i>		<i>89</i>	<i>60-135</i>			

Matrix Spike Dup (6A05014-MSD1)	Source: MPA0024-03			Prepared: 01/05/06 Analyzed: 01/06/06						
tert-Amyl methyl ether	82.4	2.5	ug/l	75.2	ND	110	80-115	4	15	
Benzene	26.2	2.5	"	25.8	0.85	98	65-115	0.8	20	
tert-Butyl alcohol	4070	25	"	716	3300	108	75-120	14	25	
Di-isopropyl ether	81.7	2.5	"	75.6	0.60	107	75-125	3	15	
1,2-Dibromoethane (EDB)	80.6	2.5	"	74.4	ND	108	85-120	2	15	
1,2-Dichloroethane	82.4	2.5	"	73.6	1.2	110	85-130	3	20	
Ethanol	1170	500	"	708	ND	165	70-135	10	35	HL, IC
Ethyl tert-butyl ether	76.2	2.5	"	75.2	1.0	100	75-130	2	25	
Ethylbenzene	33.6	2.5	"	37.7	1.1	86	75-135	0.6	15	
Methyl tert-butyl ether	50.0	2.5	"	35.1	15	100	65-125	4	20	
Toluene	184	2.5	"	186	1.7	98	85-120	1	20	
Xylenes (total)	216	2.5	"	206	ND	105	85-125	3	20	
Gasoline Range Organics (C4-C12)	2640	250	"	2200	420	101	60-140	1	25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>2.25</i>		<i>"</i>	<i>2.50</i>		<i>90</i>	<i>60-135</i>			

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

Project:ARCO #4977, Castro Valley, CA
Project Number:G0C2H-0004
Project Manager:Scott Robinson

MOL1040
Reported:
01/12/06 14:27

Notes and Definitions

IC Calib. verif. is within method limits but outside contract limits

HL Analyte recovery above established limit

BB,LM Sample > 4x spike concentration. MS and/or MSD above acceptance limits. See Blank Spike(LCS).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Chain of Custody Record

Project Name: Analytical for QMR sampling
 BP BU/AR Region/Enfos Segment: BP > Americas > West Coast > Retail > WCBU > CA > Central > 4977 > Historical/BL
 State or Lead Regulatory Agency: California Regional Water Quality Control Board - San Francisco
 Requested Due Date (mm/dd/yy): 10 Day TAT

On-site Time: 1400 Temp: 61°
 Off-site Time: _____ Temp: _____
 Sky Conditions: Cloudy
 Meteorological Events: NONE
 Wind Speed: 0 Direction: 0

Lab Name: <u>Sequoia</u>	BP/AR Facility No.: <u>4977</u>	Consultant/Contractor: <u>URS</u>
Address: <u>885 Jarvis Drive</u> <u>Morgan Hill, CA 95037</u>	BP/AR Facility Address: <u>2770 Castro Valley Blvd., Castro Valley, CA</u>	Address: <u>1333 Broadway, Suite 800</u> <u>Oakland, CA 94612</u>
Lab PM: <u>Lisa Race / Sophia Min</u>	Site Lat/Long: <u>37.694794 / -122.084</u>	Consultant/Contractor Project No.: <u>38487034</u>
Tele/Fax: <u>408.782.8156 / 408.782.6308</u>	California Global ID No.: <u>T0600100089</u>	Consultant/Contractor PM: <u>Scott Robinson</u>
BP/AR PM Contact: <u>Paul Supple</u>	Enfos Project No.: <u>G0C2H-0004</u>	Tele/Fax: <u>510.874.3280 / 510.874.3268</u>
Address: <u>P.O. Box 6549</u> <u>Moraga, CA 94570</u>	Provision or RCOP: <u>Provision</u>	Report Type & QC Level: <u>Level 1 with BDF</u>
Tele/Fax: <u>925.299.8891 / 925.299.8872</u>	Phase/WBS: <u>04 - Mon/Remed by Natural Attenuation</u>	E-mail BDD To: <u>Donna.Cosper@urscorp.com</u>
	Sub Phase/Task: <u>03 - Analytical</u>	Invoice to: <u>Atlantic Richfield Company</u>
	Cost Element: <u>05 - Subcontracted Costs</u>	

Item No.	Sample Description	Time	Date	Matrix			Laboratory No.	No. of Containers	Preservative					Requested Analysis					Sample Point Lat/Long and Comments		
				Soil/Solid	Water/Liquid	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	Methanol	GRO / BTEX (8260)	MIBB, TAME, ETBB DIPE, TEA (8260)	EDB, 1,2-DCA (8260)	Etanol (8260)				
1	MW-1	1440	12/28/05	X			M0L1040-01	3						X	X	X	X				
2	MW-2	1507	↓	X			M0L1040-02	3						X	X	X	X				
3	MW-3	1450	↓	X			M0L1040-03	3						X	X	X	X				
4	TB-4977-12282005		↓	X			M0L1040-04	2						X	X	X	X				On hold
5																					
6																					
7																					
8																					
9																					
10																					

Sampler's Name:	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
<u>Mike Bell</u>	<u>[Signature]</u> BCS	<u>4/21/05</u>	<u>1717</u>	<u>[Signature]</u> (Sample Custodian)	<u>12/27</u>	<u>1717</u>
Shipment Date:	<u>[Signature]</u> SAMPLE CUSTODIAN	<u>12/28/05</u>	<u>116</u>	<u>[Signature]</u>	<u>12/28/05</u>	<u>116</u>
Shipment Method:	<u>[Signature]</u>	<u>12/28</u>	<u>1910</u>	<u>[Signature]</u>	<u>12/28</u>	<u>1910</u>
Shipment Tracking No:						

Special Instructions: _____

Custody Seals In Place Yes No Temp Blank Yes No Cooler Temperature on Receipt 5.0 FAC Trip Blank Yes No

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: URS-4977
 REC. BY (PRINT) E. Fallon
 WORKORDER: MOL/040

DATE REC'D AT LAB: 12/28/05
 TIME REC'D AT LAB: 1910
 DATE LOGGED IN: 12-30-05

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

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	PH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / Absent Intact / Broken*									DFF 12/28/05 SEE COC
2. Chain-of-Custody Present / Absent *									
3. Traffic Reports or Packing List: Present / Absent									
4. Airbill: Airbill / Sticker Present / Absent									
5. Airbill #:									
6. Sample Labels: Present / Absent									
7. Sample IDs: Listed / Not Listed on Chain-of-Custody									
8. Sample Condition: Intact / Broken* / Leaking*									
9. Does information on chain-of-custody, traffic reports and sample labels agree? Yes / No *									
10. Sample received within hold time? Yes / No *									
11. Adequate sample volume received? Yes / No *									
12. Proper preservatives used? Yes / No *									
13. Trip Blank / Tamp Blank Received? (circle which, if yes) Yes / No *									
14. Read Temp: <u>5.1 °C</u> Corrected Temp: <u>5.1 °C</u> Is corrected temp 4 ±2°C? Yes / No ** <small>(Acceptance range for samples requiring thermal pres.)</small>									

**Exception (if any): METALS / DFF ON ICE
 or Problem COC

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

ATTACHMENT C

**ERROR CHECK REPORTS AND EDF/GEOWELL
SUBMITTAL CONFIRMATIONS**

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SUCCESSFUL GEO_WELL CHECK - NO ERRORS

<u>ORGANIZATION NAME:</u>	URS Corporation-Oakland Office
<u>USER NAME:</u>	URSCORP-OAKLAND
<u>DATE CHECKED:</u>	1/30/2006 4:59:03 PM

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UPLOADING A GEO_WELL FILE

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Your file has been successfully submitted!

Submittal Title: 4Q 2005 BP/ARCO 4977
GEOWELL

Submittal Date/Time: 1/30/2006 4:59:41 PM

**Confirmation
Number:** 8820525944

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SUCCESSFUL EDF CHECK - NO ERRORS

<u>ORGANIZATION NAME:</u>	URS Corporation-Oakland Office
<u>USER NAME:</u>	URSCORP-OAKLAND
<u>DATE CHECKED:</u>	1/30/2006 5:01:03 PM
<u>GLOBAL ID:</u>	T0600100089
<u>FILE UPLOADED:</u>	ARCO#4977-EDF-MOL1040.zip

No errors were found in your EDF upload file.

If you want to submit this file to the SWRCB, choose the "Upload EDD" option in the above menu and follow the instructions.

When you complete the submittal process, you will be given a confirmation number for your submittal.

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

ARCO 2770 CASTRO VALLEY BLVD CASTRO VALLEY, CA 94546	<u>Regional Board - Case #: 01-0097</u> SAN FRANCISCO BAY RWQCB (REGION 2) - (RDB) <u>Local Agency (lead agency) - Case #: 01-0097</u> ALAMEDA COUNTY LOP - (RWS)
---	---

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	3
# FIELD POINTS WITH DETECTIONS	3
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	2
SAMPLE MATRIX TYPES	WATER

METHOD QA/QC REPORT

METHODS USED	8260FA
TESTED FOR REQUIRED ANALYTES?	N
MISSING PARAMETERS NOT TESTED:	
- 8260FA REQUIRES DBFM TO BE TESTED	
- 8260FA REQUIRES BR4FBZ TO BE TESTED	
- 8260FA REQUIRES BZMED8 TO BE TESTED	
LAB NOTE DATA QUALIFIERS	Y

QA/QC FOR 8021/8260 SERIES SAMPLES

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

WATER SAMPLES FOR 8021/8260 SERIES

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

SOIL SAMPLES FOR 8021/8260 SERIES

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

FIELD QC SAMPLES

<u>SAMPLE</u>	<u>COLLECTED</u>	<u>DETECTIONS > REPDL</u>
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

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Confirmation Number: 8152517497
Date/Time of Submittal: 1/30/2006 5:01:49 PM
Facility Global ID: T0600100089
Facility Name: ARCO
Submittal Title: 4Q 2005 BP/ARCO 4977 EDF
Submittal Type: GW Monitoring Report

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

ARCO 2770 CASTRO VALLEY BLVD CASTRO VALLEY, CA 94546	Regional Board - Case #: 01-0097 SAN FRANCISCO BAY RWQCB (REGION 2) - (RDB) Local Agency (lead agency) - Case #: 01-0097 ALAMEDA COUNTY LOP - (RWS)
---	--

CONF #	TITLE	QUARTER
8152517497	4Q 2005 BP/ARCO 4977 EDF	Q4 2005
SUBMITTED BY	SUBMIT DATE	STATUS
Srijesh Thapa	1/30/2006	PENDING REVIEW

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	3
# FIELD POINTS WITH DETECTIONS	3
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	2
SAMPLE MATRIX TYPES	WATER

METHOD QA/QC REPORT

METHODS USED	8260FA
TESTED FOR REQUIRED ANALYTES?	N
MISSING PARAMETERS NOT TESTED:	
- 8260FA REQUIRES DBFM TO BE TESTED	
- 8260FA REQUIRES BR4FBZ TO BE TESTED	
- 8260FA REQUIRES BZMED8 TO BE TESTED	
LAB NOTE DATA QUALIFIERS	Y

QA/QC FOR 8021/8260 SERIES SAMPLES

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

WATER SAMPLES FOR 8021/8260 SERIES

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

SOIL SAMPLES FOR 8021/8260 SERIES

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

FIELD QC SAMPLES

<u>SAMPLE</u>	<u>COLLECTED</u>	<u>DETECTIONS > REPD L</u>
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

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