RO-190

URS

February 27, 2003

Ms. eva chu
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: First Quarter 2004 Groundwater Monitoring Report
ARCO Service Station #2162
15135 Hesperian Boulevard
San Leandro, California
URS Project #38486718

Dear Ms. eva chu:

On behalf of Atlantic Richfield Company (ARCO – a BP affiliated company), URS Corporation (URS) is submitting the *First Quarter 2004 Groundwater Monitoring Report* for the ARCO Service Station #2162, located at 15135 Hesperian Boulevard, San Leandro, California.

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

Sincerely,

URS CORPORATION

REGISTERED GEOLOGIST
JAMES F. DURKIN
No. 759
CERTIFIED HYDROGEOLOGIST
Exp. 2/28/05
STATE OF CALIFORNIA

Scott Robinson
Project Manager

James F. Durkin, C.Hg
Senior Geologist

Enclosure: First Quarter 2004 Groundwater Monitoring Report

cc: Mr. Paul Supple, ARCO, (electronic copy uploaded to ENFOS)
Mr. Mike Bakaldin, City of San Leandro Environmental Services Division, 835 East 14th St., San Leandro, CA 94577
Mr. John Jang, RWQCB, S.F. Bay Region, 1515 Clay St., Ste. 1400, Oakland, CA 94612

URS Corporation
500 12th Street, Suite 200
Oakland, CA 94607-4014
Tel: 510.893.3600
Fax: 510.874.3268

Atlantic Richfield Company
(a BP affiliated company)

P.O. Box 6549
Moraga, California 94570
Phone: (925) 299-8891
Fax: (925) 299-8872

First Quarter 2004 Groundwater Monitoring Report
ARCO Service Station #2162
15135 Hesperian Boulevard
San Leandro, California
URS Project #38486718

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

REPORT

FIRST QUARTER 2004 GROUNDWATER MONITORING

ARCO SERVICE STATION #2162
15135 HESPERIAN BOULEVARD
SAN LEANDRO, CALIFORNIA

Prepared for
Atlantic Richfield Company

February 27, 2003

URS Corporation
1333 Broadway, Suite 800
Oakland, CA 94612

38486718

Date: February 27, 2004

Quarter: 1Q 04

ATLANTIC RICHFIELD COMPANY QUARTERLY GROUNDWATER MONITORING REPORT

Facility No.:	2162	Address:	15135 Hesperian Boulevard, San Leandro, CA
ARCO Environmental Business Manager:			Paul Supple
Consulting Co./Contact Person:			URS Corporation / Scott Robinson
Consultant Project No.:			38486718
Primary Agency:			Alameda County Health Care Services Agency (ACHCSA)

WORK PERFORMED THIS QUARTER (First – 2004):

1. Performed first quarter groundwater monitoring event on January 15, 2004.
2. Prepared and submitted first quarter 2004 groundwater monitoring report.

WORK PROPOSED FOR NEXT QUARTER (Second – 2004):

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

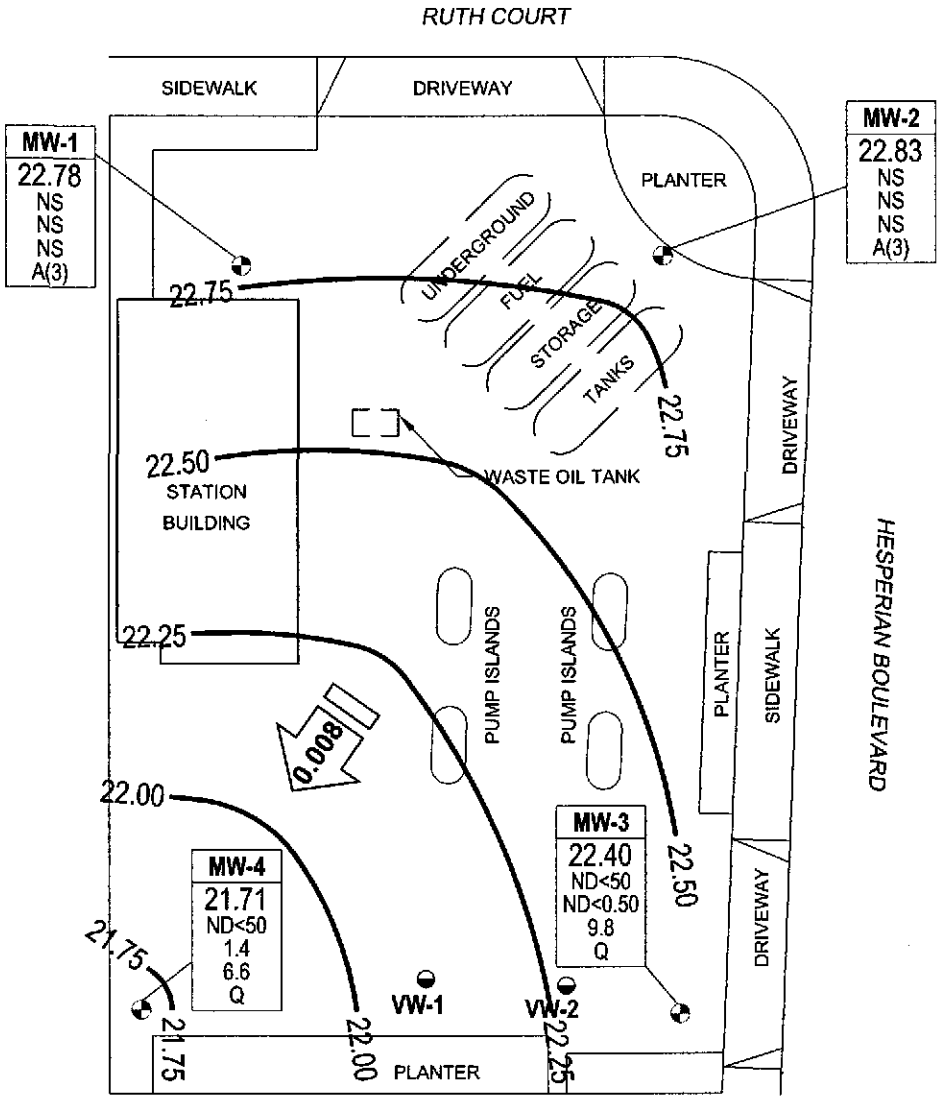
Current Phase of Project:	GW monitoring/sampling
Frequency of Groundwater Sampling:	Quarterly: MW-3, MW-4 Annually (3rd Quarter): MW-1, MW-2
Frequency of Groundwater Monitoring:	Quarterly
Is Free Product (FP) Present On-Site:	No
Current Remediation Techniques:	Natural Attenuation
Approximate Depth to Groundwater:	7.55 ft (MW-2) to 8.68 ft (MW-4) feet
Groundwater Gradient (direction):	Southwest
Groundwater Gradient (magnitude):	0.008 feet per foot

DISCUSSION:

Please note that beginning in the Fourth Quarter 2003, the laboratory modified the reported analyte list. Total Petroleum Hydrocarbons as Gasoline (TPH-g) has been changed to Gasoline Range Organics (GRO). The resulting data may be affected by the potential inclusion of non-TPH-g analytes within the requested fuel range, resulting in a higher concentration being reported. GRO were not detected at or above the laboratory reporting limit in the two wells sampled this quarter. Benzene was detected above the laboratory reporting limits in well MW-4 at a concentration of 1.4 µg/L. MTBE was detected above the laboratory reporting limits in the two wells at concentrations of 6.6 µg/L (MW-4) and 9.8 µg/L (MW-3). Fuel oxygenates TBA, DIPE, ETBE, TAME, 1,2-DCA and EDB were not detected above laboratory reporting limits in the two wells sampled.

ATTACHMENTS:

- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map – January 15, 2004
- Table 1 – Groundwater Elevation and Analytical Data
- Table 2 – Fuel Oxygenate Analytical Data
- Table 3 – Groundwater Flow Direction and Gradient
- Attachment A – Field Procedures and Field Data Sheets
- Attachment B – Laboratory Procedures, Certified Analytical Reports and Chain-of-Custody Records
- Attachment C – Historic Groundwater Data
- Attachment D – EDCC and EDF/Geowell Submittal Confirmation



LEGEND

- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- 22.00 — WATER TABLE CONTOUR (FT ABOVE MSL)
- 0.008 — APPROXIMATE GROUNDWATER FLOW GRADIENT AND DIRECTION (FT/FT)
- Well — WELL DESIGNATION
- ELEV — GROUNDWATER ELEVATION (FT ABOVE MSL)
- GRO / Benzene / MTBE — GRO, BENZENE AND MTBE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- Q or A — SAMPLING FREQUENCY
- ND< — NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMITS
- NS — NOT SAMPLED
- Q — SAMPLED QUARTERLY
- A(3) — ANNUAL SAMPLING DURING 3RD QUARTER

North

0 30 FT

SCALE

NOTE: SITE MAP ADAPTED FROM IT CORPORATION FIGURES.
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

"Please note that beginning in the Fourth Quarter 2003, the laboratory modified the reported analyte list. Total Petroleum Hydrocarbons as Gasoline (TPHg) has been changed to Gasoline Range Organics (GRO). The resulting data may be impacted by the potential inclusion of non-TPHg analytes within the requested fuel range resulting in a higher concentration being reported."

URS	Project No. 38486718 Arco Service Station 2162 15135 Hesperian Boulevard San Leandro, California	GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP First Quarter 2004 (January 15, 2004)	FIGURE 1

X:\x_env_waste\BP GEMSites\Scott Robinson\Paul Supple\2162Monitoring\Qtr. 1, 2004\Drawings\GWEC-AS_1-15.dwg, 02/26/2004 09:49:16 AM, jktingi0

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #2162
15135 Hesperian Boulevard
San Leandro, California

Well Number	Date Sampled	Purge /No Purge	Top of Riser Elevation (ft., MSL)	Top of Screen (ft., bgs)	Bottom of Casing (ft., bgs)	Depth to Groundwater (ft., TOC)	Groundwater Elevation (ft., MSL)	GRO/TPH-g(µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Dissolved Oxygen (mg/L)	pH
MW-1	06/20/00		31.19	8.0	15.9	8.33	22.86	ND<50	ND<0.5	0.8	ND<0.5	ND<1.0	ND<10	NA	NA
	09/29/00					9.07	22.12	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA
	12/17/00					8.69	22.50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA
	03/23/01					8.19	23.00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA
	06/20/01					8.97	22.22	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA
	09/22/01					9.56	21.63	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA
	12/28/01					8.40	22.79	ND<50	ND<0.5	ND<0.5	ND<0.5	0.63	ND<2.5	NA	NA
	03/14/02					8.05	23.14	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	170	NA	NA
	04/18/02					8.27	22.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NS	NA	NA
	07/19/02	NP				8.88	22.31	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11	1.0	8.2
	10/09/02[a]					NM	NM	NS	NS	NS	NS	NS	NS	NS	NS
	03/28/03[a,c]					NM	NM	NS	NS	NS	NS	NS	NS	NS	NS
	04/07/03	NP				8.28	22.91	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.6	6.9
	07/09/03	NP				8.62	22.57	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.1	7.2
	10/08/03		31.13 [e]			9.19 [d]	21.94	Sampled Annually During the 3rd Quarter----------							
	1/15/2004[f]					**8.35**	**22.78**	**Sampled Annually During the 3rd Quarter**----------							
MW-2	06/20/00		30.38	8.0	15.9	7.38	23.00	NS	NS	NS	NS	NS	NS	NA	NA
	09/29/00					8.08	22.30	266	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA
	12/17/00					7.80	22.58	175	ND<0.5	ND<0.5	0.659	ND<0.5	ND<2.5	NA	NA
	03/23/01					7.23	23.15	351	ND<0.5	ND<0.5	0.912	ND<0.5	ND<2.5	NA	NA
	06/20/01					7.98	22.40	360	ND<0.5	ND<0.5	0.74	ND<0.5	ND<2.5	NA	NA
	09/22/01					8.55	21.83	190	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA
	12/28/01					7.53	22.85	130	ND<0.5	0.93	ND<0.5	0.51	ND<2.5	NA	NA
	03/14/02					7.17	23.21	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA
	04/18/02					7.31	23.07	74	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NS	NA	NA
	07/19/02	P				7.93	22.45	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	1.1	7.6
	10/09/02	P				8.55	21.83	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	0.7	7.3
	03/28/03[c]	P				7.30	23.08	ND<50	ND<0.50	0.83	ND<0.50	ND<0.50	ND<0.50	1.48	7.7
	04/07/03	P				7.36	23.02	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.4	7.0
	07/09/03	P				7.71	22.67	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.5	7.6
	10/08/03					8.25	22.13	Sampled Annually During the 3rd Quarter----------							
	1/15/2004[f]					**7.55**	**22.83**	**Sampled Annually During the 3rd Quarter**----------							

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #2162
15135 Hesperian Boulevard
San Leandro, California

Well Number	Date Sampled	Purge /No Purge	Top of Riser Elevation (ft., MSL)	Top of Screen (ft., bgs)	Bottom of Casing (ft., bgs)	Depth to Groundwater (ft., TOC)	Groundwater Elevation (ft., MSL)	GRO/TPH-g(µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Dissolved Oxygen (mg/L)	pH
MW-3	06/20/00		30.30	9.0	14.8	7.75	22.55	NS	NS	NS	NS	NS	NS	NA	NA
	09/29/00					8.46	21.84	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	128	NA	NA
	12/17/00					8.01	22.29	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	46.7	NA	NA
	03/23/01					7.70	22.60	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	26.8	NA	NA
	06/20/01					8.23	22.07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	30	NA	NA
	09/22/01					8.89	21.41	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	12	NA	NA
	12/28/01					7.83	22.47	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.2	NA	NA
	03/14/02					7.48	22.82	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	47	NA	NA
	04/18/02					7.62	22.68	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NS	NA	NA
	07/19/02	P				8.23	22.07	100 [b]	ND<1.0	ND<1.0	ND<1.0	ND<1.0	330	0.9	7.6
	10/09/02	P				8.83	21.47	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	61	0.5	7.4
	03/28/03[c]	P				7.85	22.45	52	ND<0.50	1.2	ND<0.50	ND<0.50	45	1.42	7.6
	04/07/03	P				7.71	22.59	56	ND<0.50	ND<0.50	ND<0.50	ND<0.50	56	1.1	6.8
	07/09/03	P				8.00	22.30	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	87	1.6	7.4
	10/08/03	P				8.59	21.71	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	25	0.9	7.0
	1/15/2004[f]	**P**				**7.90**	**22.40**	**ND<50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**9.8**	**2.9**	**7.3**
MW-4	06/20/00		30.39	8.0	17.5	8.87	21.52	NS	NS	NS	NS	NS	NS	NA	NA
	09/29/00					9.61	20.78	ND<50	1.02	ND<0.5	ND<0.5	ND<0.5	12.2	NA	NA
	12/17/00					9.17	21.22	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.81	NA	NA
	03/23/01					8.70	21.69	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.04	NA	NA
	06/20/01					9.51	20.88	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA
	09/22/01					10.06	20.33	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.2	NA	NA
	12/28/01					8.86	21.53	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.3	NA	NA
	03/14/02					8.52	21.87	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.1	NA	NA
	04/18/02					8.76	21.63	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NS	NA	NA
	07/19/02	NP				9.39	21.00	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	30	1.8	7.8
	10/09/02	NP				10.08	20.31	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	28	1.0	8.0
	03/28/03[c]	NP				8.88	21.51	ND<50	ND<0.50	1.3	ND<0.50	ND<0.50	4.4	0.98	7.2
	04/07/03	NP				8.78	21.61	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	14	1.1	7.0
	07/09/03	NP				9.14	21.25	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.8	1.6	7.4
	10/08/03	NP				9.77 [d]	20.62	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.1	2.6	6.4
	1/15/2004[f]	**P**				**8.68**	**21.71**	**ND<50**	**1.4**	**0.84**	**ND<0.50**	**1.5**	**6.6**	**2.9**	**7.1**

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #2162
15135 Hesperian Boulevard
San Leandro, California

bgs	= below ground surface
ft.	= feet
P	= Purge
mg/L	= Milligrams per liter equivalent to parts per million (ppm)
MSL	= Mean sea level
MTBE	= Methyl tertiary butyl ether
ND<	= Not detected at or above specified laboratory reporting limit
NP	= No Purge
NS	= Not sampled
TPH	= Total petroleum hydrocarbons
TOC	= Top of casing
µg/L	= Micrograms per liter equivalent to parts per billion (ppb)
a	= Well not accessable - car parked over.
b	= Hydrocarbon pattern is present in the requested fuel quantitation range but does not represent the pattern of the requested fuel
c	=TPH-g, BTEX and MTBE analyzed by EPA method 8260 beginning on 1st Quarter 2003 sampling event (3/28/03)
d	= Guaged with stinger in well
e	= Well casing lowered 0.06 feet during well repairs on 9/17/03
f	= Please note that beginning in the Fourth Quarter 2003, the laboratory modified the reported analyte list. Total Petroleum Hydrocarbons as Gasoline (TPH-g) has been changed to Gasoline Range Organics (GRO). The resulting sata may be impacted by the potential inclusion of non-TPH-g analytes within requested fuel range resulting in a higher concentration being reported.

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

Table 2
Fuel Oxygenate Analytical Data

ARCO Service Station #2162
15135 Hesperian Boulevard
San Leandro, 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-1	04/07/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	07/09/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-2	03/28/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	04/07/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	07/09/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-3	03/28/03	ND<100	ND<20	45	ND<0.50	ND<0.50	0.73	ND<0.50	ND<0.50
	04/07/03	ND<100	ND<20	56	ND<0.50	ND<0.50	0.72	ND<0.50	ND<0.50
	07/09/03	ND<1,000	ND<200	87	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	10/08/03	ND<100	ND<20	25	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	01/15/04	**ND<100**	**ND<20 [a]**	**9.8**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50 [a]**
MW-4	03/28/03	ND<100	ND<20	4.4	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	04/07/03	ND<100	ND<20	14	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	07/09/03	ND<100	ND<20	1.8	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/08/03	ND<100	ND<20	3.1	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	01/15/04	**ND<100**	**ND<20 [a]**	**6.6**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50 [a]**

Notes:

All fuel oxygenate compounds analyzed using EPA Method 8260B

ND< = Not detected at or above specified laboratory reporting limit

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

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.

Table 3
Groundwater Flow Direction and Gradient

ARCO Service Station #2162
15135 Hesperian Boulevard
San Leandro, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
06/20/00	Southwest	0.010
09/29/00	Southwest	0.010
12/17/00	Southwest	0.010
03/23/01	Southwest	0.011
06/20/01	Southwest	0.013
09/22/01	Southwest	0.012
12/28/01	Southwest	0.010
03/14/02	Southwest	0.011
04/18/02	Southwest	0.012
07/19/02	Southwest	0.012
10/09/02	Southwest	0.013
03/28/03	Southwest	0.013
04/07/03	Southwest	0.011
07/09/03	Southwest	0.010
10/08/03	Southwest	0.010
01/15/04	**Southwest**	**0.008**

Source: The data within this table collected prior to July 2002 was provided to URS by Atlantic Richfield Company 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 # 040115-JP2 Date 1/15/04 Client ARCO 2162

Site 15155 Hesperian Blvd, San Leandro

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-1	4					8.35	15.95	TOC	GW ~~NAPL~~
MW-2	4					7.55	15.96		GW ~~NAPL~~
MW-3	4					7.90	14.86		
MW-4	4					8.68	17.70		NAPL

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 040115-JP2	Station # 2162
Sampler: M. Pyrch	Date: 1/15/04
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 14.86	Depth to Water: 7.90
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	radius² * 0.163

Purge Method: Bailer / Disposable Bailer / Middleburg / (Electric Submersible) Extraction Pump / Other: ____

Sampling Method: Bailer / (Disposable Bailer) / Extraction Port / Other: ____

Top of Screen: ____

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

4.5 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 13.5 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (uS))	Gals. Removed	Observations
1601	64.3	7.6	756	4.5	clear
1602	67.3	7.3	666	9	"
1603	67.5	7.3	640	13.5	"

Did well dewater? Yes (No) Gallons actually evacuated: 13.5

Sampling Time: 1610 Sampling Date: 1/15/04

Sample I.D.: MW-3 Laboratory: Pace (Sequoia) Other ____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: oxy's, ethanol, 1,2-DCA, EDB

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 #: 040115-JP2	Station # 2162
Sampler: M. Pyrch	Date: 1/15/04
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 17.70	Depth to Water: 8.68
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	radius² * 0.163

Purge Method: Bailer / Disposable Bailer / Middleburg / (Electric Submersible) Extraction Pump / Other: ___

Sampling Method: Bailer / (Disposable Bailer) / Extraction Port / Other: ___

Top of Screen: ___

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

5.8 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 17.4 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1545	64.8	7.3	826	6	clear
1546	66.1	7.1	852	12	"
1547	66.6	7.1	872	17.5	"

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

Sampling Time: 1550 Sampling Date: 1/15/04

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

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: oxy's, ethanol, 1,2-DCA, EDB

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

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 PLAINE 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:

2162

Station #

15135 Hesperian Blvd, San Leandro

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

31

added equip. rinse water 4

any other adjustments

TOTAL GALS. RECOVERED 35

loaded onto BTS vehicle # 11

BTS event # 040115-JP2

time 1630

date 1/15/04

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.

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

30 January, 2004

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

RE: ARCO #2162, San Leandro, CA
Work Order: MNA0554

Enclosed are the results of analyses for samples received by the laboratory on 01/16/04 17:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

James Hartley For Lisa Race
Senior Project Manager

CA ELAP Certificate #1210

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MNA0554
500 12th Street, Suite 200	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/30/04 17:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-3	MNA0554-01	Water	01/15/04 16:10	01/16/04 17:50
MW-4	MNA0554-02	Water	01/15/04 15:50	01/16/04 17:50

There was no custody seals present.

Sequoia Analytical

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MNA0554
500 12th Street, Suite 200	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/30/04 17:30

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (MNA0554-01) Water Sampled: 01/15/04 16:10 Received: 01/16/04 17:50									
Ethanol	ND	100	ug/l	1	4A28003	01/28/04	01/29/04	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	O-09
Methyl tert-butyl ether	**9.8**	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	"	"	"	"	"	"	O-09
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		*105 %*		*78-129*	"	"	"	"	
MW-4 (MNA0554-02) Water Sampled: 01/15/04 15:50 Received: 01/16/04 17:50									
Ethanol	ND	100	ug/l	1	4A28003	01/28/04	01/29/04	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	O-09
Methyl tert-butyl ether	**6.6**	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	"	"	"	"	"	"	O-09
Benzene	**1.4**	0.50	"	"	"	"	"	"	
Toluene	**0.84**	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	**1.5**	0.50	"	"	"	"	"	"	
Gasoline Range Organics	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*108 %*		*78-129*	"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MNA0554
500 12th Street, Suite 200	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/30/04 17:30

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
Batch 4A28003 - EPA 5030B P/T										
Blank (4A28003-BLK1)				Prepared & Analyzed: 01/28/04						
Ethanol	ND	100	ug/l							
tert-Butyl alcohol	ND	20	"							O-09
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	"							
Surrogate: 1,2-Dichloroethane-d4	*5.39*		"	*5.00*		*108*	*78-129*			
Laboratory Control Sample (4A28003-BS1)				Prepared & Analyzed: 01/28/04						
Ethanol	159	100	ug/l	200		79.5	31-143			
tert-Butyl alcohol	54.4	20	"	50.0		109	56-131			O-09
Methyl tert-butyl ether	10.4	0.50	"	10.0		104	63-137			
Di-isopropyl ether	10.6	0.50	"	10.0		106	76-130			
Ethyl tert-butyl ether	11.1	0.50	"	10.0		111	81-121			
tert-Amyl methyl ether	10.3	0.50	"	10.0		103	82-140			
1,2-Dichloroethane	11.4	0.50	"	10.0		114	77-136			
1,2-Dibromoethane (EDB)	11.4	0.50	"	10.0		114	77-132			
Benzene	10.4	0.50	"	10.0		104	78-124			
Toluene	10.3	0.50	"	10.0		103	78-129			
Ethylbenzene	10.3	0.50	"	10.0		103	84-117			
Xylenes (total)	31.8	0.50	"	30.0		106	83-125			
Surrogate: 1,2-Dichloroethane-d4	*5.35*		"	*5.00*		*107*	*78-129*			

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MNA0554
500 12th Street, Suite 200	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/30/04 17:30

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
Batch 4A28003 - EPA 5030B P/T										
Laboratory Control Sample (4A28003-BS2)				Prepared & Analyzed: 01/28/04						
Methyl tert-butyl ether	8.40	0.50	ug/l	9.92		84.7	63-137			
Toluene	31.4	0.50	"	29.7		106	78-129			
Xylenes (total)	41.2	0.50	"	33.7		122	83-125			
Gasoline Range Organics	386	50	"	440		87.7	70-113			
Surrogate: 1,2-Dichloroethane-d4	*5.11*		"	*5.00*		*102*	*78-129*			
Laboratory Control Sample Dup (4A28003-BSD1)				Prepared & Analyzed: 01/28/04						
Ethanol	187	100	ug/l	200		93.5	31-143	16.2	20	
tert-Butyl alcohol	56.0	20	"	50.0		112	56-131	2.90	20	O-09
Methyl tert-butyl ether	11.1	0.50	"	10.0		111	63-137	6.51	13	
Di-isopropyl ether	11.0	0.50	"	10.0		110	76-130	3.70	9	
Ethyl tert-butyl ether	11.5	0.50	"	10.0		115	81-121	3.54	9	
tert-Amyl methyl ether	10.7	0.50	"	10.0		107	82-140	3.81	12	
1,2-Dichloroethane	11.6	0.50	"	10.0		116	77-136	1.74	13	
1,2-Dibromoethane (EDB)	12.1	0.50	"	10.0		121	77-132	5.96	9	O-09
Benzene	10.8	0.50	"	10.0		108	78-124	3.77	12	
Toluene	10.9	0.50	"	10.0		109	78-129	5.66	10	
Ethylbenzene	11.4	0.50	"	10.0		114	84-117	10.1	10	QR-07
Xylenes (total)	34.2	0.50	"	30.0		114	83-125	7.27	11	
Surrogate: 1,2-Dichloroethane-d4	*5.15*		"	*5.00*		*103*	*78-129*			
Laboratory Control Sample Dup (4A28003-BSD2)				Prepared & Analyzed: 01/28/04						
Methyl tert-butyl ether	9.06	0.50	ug/l	9.92		91.3	63-137	7.56	13	
Toluene	34.4	0.50	"	29.7		116	78-129	9.12	10	
Gasoline Range Organics	412	50	"	440		93.6	70-113	6.52	9	
Surrogate: 1,2-Dichloroethane-d4	*5.38*		"	*5.00*		*108*	*78-129*			

Sequoia Analytical

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MNA0554
500 12th Street, Suite 200	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	01/30/04 17:30

Notes and Definitions

O-09	The result was reported with a possible high bias due to the continuing calibration verification falling outside acceptance criteria.
QR-07	The RPD was outside control limits. The results may still be useful for their intended purpose.
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

bp

Project Name 2162 GWM
BP BU/GEM CO Portfolio Retail
BP Laboratory Contract Number: Atlantic Richfield Company (MNA0554)
Requested Due Date (mm/dd/yy) 14 day TAT

Date: 1/15/04

On-site Time: 1445 Temp: 64°
Off-site Time: 1630 Temp: 63°
Sky Conditions: clear
Meteorological Events: -
Wind Speed: NA Direction: NA

Send To:	BP/GEM Facility No.: ARCO 2162	Consultant/Contractor: URS
Name: SEQUOIA	BP/GEM Facility Address: 15135 HESPERIAN BLVD, San Leandro, CA	Address: 500 12th St., Ste. 200
Address: 885 Jarvis Dr.	Site ID No. ARCO 2162	Oakland, CA 94609-4014
Morgan Hill, CA 95037	Site Lat/Long:	e-mail EDD: donna_cosper@URSCorp.com
	California Global ID #: T0600100084	Consultant/Contractor Project No.: 15-00002162.01 00427
PM Theresa Allen	BP/GEM PM Contact: PAUL SUPPLE	Consultant Tele/Fax: 510-893-3600/510-874-3268
Tele/Fax: 408-776-9600 / 408-782-8308	Address: P.O. Box 6549	Consultant/Contractor PM: Scott Robinson
Report Type & QC Level: 1 Send BDF Reports	Moraga, CA 94570	Invoice to: Consultant/Contractor or BP/GEM (Circle one)
BP/GEM Account No.:	Tele/Fax: 925-299-8891/925-299-8872	BP/GEM Work Release No: INTRM -50319

Bottle Order No:

Item No.	Sample Description	Time	Matrix: Soil/Solid	Water/Liquid	Sediment	Air	Laboratory No.	No. of containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	Requested Analysis: TPH-G / BTEX (8015/8021 or 8260)	TPH-D (8015)	MTBE (8021)	MTBE (8260)	MTBE, TAME, ETBE, DIPE, TBA (8260)	1,2-DCA & EDB (8260)	Ethanol (8260)	Sample Point Lat/Long and Comments
1	MW-3	1610		X			01	3				X	X				X	X	X	
2	MW-4	1550		X			02	3				X	X				X	X	X	
3	TB-01/15/2004			X			03	2												On Hold
4																				
5																				
6																				
7																				
8																				
9																				
10																				

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Matthew Lyon	Matthew Lyon					
Sampler's Company: Blaine Tech Services	Seq M.H.	1/16	1715		1/16/04	11:35
Shipment Date:						175
Shipment Method:						
Shipment Tracking No:						

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

Ice in Place Yes X No ✓ Temperature Blank Yes ✓ No ___ Cooler Temperature on Receipt 5 °F/C Trip Blank Yes ✓ No ___

White Copy - Laboratory / Yellow Copy - BP/GEM / Pink Copy - Consultant/Contractor

BP COC Rev. 1 2/5/02

1/16/04

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: BP
REC.-BY (PRINT) [illegible]
WORKORDER: 1MA0554

DATE REC'D AT LAB: 1/16/04
TIME REC'D AT LAB: 1750
DATE LOGGED IN: 1-17-04

DRINKING WATER for regulatory purposes: YES / (NO)
WASTE WATER 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 / (Absent) Intact / Broken*			MW-3	(3) VOA	HCl	W	1/16/04	
				-4					
2. Chain-of-Custody	(Present) / Absent*			TB	(2)				
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. Temp Rec. at Lab: 5°C Is temp 4 +/-2°C?	(Yes) / No**								

(Acceptance range for samples requiring thermal pres.)

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

1/16/04 P

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

SRL rv 4.xls
Revision 4 (11/10/03)
...places Revision 3 (03/18/03)
...ve 11/10/03

306

ATTACHMENT C

HISTORIC GROUNDWATER DATA

Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 2162
15135 Hesperian Boulevard, San Leandro, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-1	02/26/96	31.19	7.14	24.05	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
MW-1	05/23/96	31.19	7.70	23.49	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
MW-1	08/21/96	31.19	8.75	22.44	210	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-1	11/20/96	31.19	8.62	22.57	91	<0.5	<0.5	<0.5	<0.5	2.6	NA	NA	
MW-1	04/01/97	31.19	8.70	22.49	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NP
MW-1	06/10/97	31.19	8.45	22.74	94	<0.5	<0.5	0.68	0.56	6.4	NA	NA	NP
MW-1	09/17/97	31.19	9.20	21.99	<50	<0.5	<0.5	<0.5	<0.5	10	NA	1.0	NP
MW-1	12/12/97	31.19	8.00	23.19	<200	<2	<2	<2	<2	180	NA	2.0	NP
MW-1	03/25/98	31.19	7.00	24.19	<200	<2	<2	3	<2	180	NA	2.0	
MW-1	05/14/98	31.19	7.46	23.73	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.17	P
MW-1	07/31/98	31.19	8.10	23.09	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.0	NP
MW-1	10/12/98	31.19	8.60	22.59	<50	<0.5	<0.5	<0.5	<0.5	9	NA	2.5	NP
MW-1	02/11/99	31.19	7.32	23.87	<50	<0.5	<0.5	<0.5	<0.5	25	NA	1.0	P
MW-1	06/23/99	31.19	8.40	22.79	55	<0.5	<0.5	<0.5	<0.5	<3	NA	1.36	NP
MW-1	08/23/99	31.19	8.85	22.34	<50	<0.5	0.6	<0.5	<0.5	5	NA	1.42	NP
MW-1	10/27/99	31.19	8.50	22.69	<50	<0.5	<0.5	<0.5	<1	90	NA	0.83	NP
MW-1	02/09/00	31.19	8.11	23.08	<50	<0.5	<0.5	<0.5	<1	9	NA	0.77	NP
MW-2	02/26/96	30.38	6.41	23.97	770	<0.5	<0.5	45	28	NA	NA	NA	
MW-2	05/23/96	30.38	6.80	23.58	590	0.50	<0.5	35	18	NA	NA	NA	
MW-2	08/21/96	30.38	7.80	22.58	170	<0.5	<0.5	21	6.3	<2.5	NA	NA	
MW-2	11/20/96	30.38	7.73	22.65	88	<0.5	<0.5	7.9	1.1	<2.5	NA	NA	
MW-2	04/01/97	30.38	7.83	22.55	66	<0.5	<0.5	3.6	0.56	33	NA	NA	
MW-2	06/10/97	30.38	7.52	22.86	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NP
MW-2	09/17/97	30.38	8.24	22.14	<50	<0.5	<0.5	<0.5	<0.5	<3.0	NA	0.6	NP
MW-2	12/12/97	30.38	7.10	23.28	<50	<0.5	<0.5	<0.5	<0.5	<3.0	NA	1.2	NP
MW-2	03/25/98	30.38	6.27	24.11	<50	<0.5	<0.5	0.7	0.5	55	NA	1.0	
MW-2	05/14/98	30.38	6.54	23.84	210	<0.5	<0.5	3.3	<0.5	42	NA	1.47	P
MW-2	07/31/98	30.38	7.14	23.24	230	<0.5	<0.5	3.9	<0.5	6	NA	1.0	P

Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 2162
15135 Hesperian Boulevard, San Leandro, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-2	10/12/98	30.38	7.65	22.73	110	<0.5	<0.5	1.5	<0.5	<3	NA	1.0	P
MW-2	02/11/99	30.38	6.55	23.83	660	<0.5	<0.5	6.7	0.7	3	NA	1.0	P
MW-2	06/23/99	30.38	7.48	22.90	270	<0.5	<0.5	2.2	0.8	<3	NA	NM	P
MW-2	08/23/99	30.38	7.89	22.49	200	<0.5	0.9	1.8	<0.5	<3	NA	1.17	P
MW-2	10/27/99	30.38	8.30	22.08	2,100	1.0	2.5	14	3	3	NA	0.75	NP
MW-2	02/09/00	30.38	8.02	22.36	<50	<0.5	<0.5	<0.5	<1	5	NA	0.69	NP
MW-3	02/26/96	30.30	6.72	23.58	120	5.0	<0.5	<0.5	<0.5	NA	NA	NA	
MW-3	05/23/96	30.30	7.18	23.12	140	12	<0.5	<0.5	<0.5	NA	NA	NA	
MW-3	08/21/96	30.30	8.17	22.13	<50	1.1	<0.5	<0.5	<0.5	130	NA	NA	
MW-3	11/20/96	30.30	8.03	22.27	55	<0.5	<0.5	<0.5	<0.5	59	NA	NA	
MW-3	04/01/97	30.30	8.09	22.21	<50	<0.5	<0.5	<0.5	<0.5	180	NA	NA	NP
MW-3	06/10/97	30.30	7.97	22.33	<50	<0.5	<0.5	<0.5	<0.5	1,900	NA	NA	NP
MW-3	09/17/97	30.30	8.54	21.76	<5,000	<50	<50	<50	<50	1,100	860	2.2	NP
MW-3	12/12/97	30.30	7.50	22.80	560	<5.0	<5.0	<5.0	5.0	370	NA	1.4	NP
MW-3	03/25/98	30.30	6.60	23.70	<500	<5	<5	<5	<5	470	NA	1.0	
MW-3	05/14/98	30.30	7.13	23.17	750	<5	<5	<5	<5	630	NA	1.97	P
MW-3	07/31/98	30.30	7.58	22.72	<500	<5	<5	<5	<5	590	NA	1.0	P
MW-3	10/12/98	30.30	8.00	22.30	<500	<5	<5	<5	<5	600	NA	2.0	P
MW-3	02/11/99	30.30	6.90	23.40	<500	<5	<5	<5	<5	280	NA	1.0	P
MW-3	06/23/99	30.30	7.82	22.48	220	<0.5	3.2	<0.5	<0.5	740	NA	1.98	P
MW-3	08/23/99	30.30	8.28	22.02	<50	<0.5	1.1	<0.5	<0.5	230	NA	1.20	P
MW-3	10/27/99	30.30	9.27	21.03	<50	<0.5	<0.5	<0.5	<1	<3	NA	0.81	NP
MW-3	02/09/00	30.30	7.45	22.85	<50	<0.5	<0.5	<0.5	<1	80	NA	0.81	P
MW-4	02/26/96	30.39	7.59	22.80	110	9.9	<0.5	<0.5	<0.5	NA	NA	NA	
MW-4	05/23/96	30.39	8.22	22.17	69	8.0	<0.5	<0.5	<0.5	NA	NA	NA	
MW-4	08/21/96	30.39	9.28	21.11	<50	6.8	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-4	11/20/96	30.39	9.12	21.27	95	10	0.59	<0.5	0.52	3.8	NA	NA	

Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 2162
15135 Hesperian Boulevard, San Leandro, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-4	04/01/97	30.39	8.45	21.94	73	5.7	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-4	06/10/97	30.39	9.00	21.39	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NP
MW-4	09/17/97	30.39	9.76	20.63	<50	3.2	<0.5	<0.5	<0.5	8.0	NA	0.2	NP
MW-4	12/12/97	30.39	8.45	21.94	<50	2.9	<0.5	<0.5	<0.5	14	NA	1.0	NP
MW-4	03/25/98	30.39	7.52	22.87	58	2.8	<0.5	<0.5	<0.5	<3	NA	3.0	
MW-4	05/14/98	30.39	8.03	22.36	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	3.24	NP
MW-4	07/31/98	30.39	8.67	21.72	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.0	NP
MW-4	10/12/98	30.39	9.15	21.24	<50	<0.5	<0.5	<0.5	<0.5	4	NA	1.5	NP
MW-4	02/11/99	30.39	7.80	22.59	61	2.5	<0.5	<0.5	<0.5	6	NA	1.0	P
MW-4	06/23/99	30.39	9.00	21.39	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.42	NP
MW-4	08/23/99	30.39	9.31	21.08	<50	<0.5	<0.5	<0.5	<0.5	6	NA	1.53	NP
MW-4	10/27/99	30.39	9.80	20.59	<50	<0.5	<0.5	<0.5	<1	6	NA	0.98	NP
MW-4	02/09/00	30.39	8.63	21.76	<50	<0.5	<0.5	<0.5	<1	7	NA	0.74	NP

TPPH = Total purgeable petroleum hydrocarbons by modified EPA method 8015.
BTEX = Benzene, toluene, ethylbenzene, total xylenes by EPA method 8021B. (EPA method 8020 prior to 10/27/99).
MTBE = Methyl tert -Butyl Ether
* = EPA method 8020 prior to 10/27/99
MSL = Mean sea level
TOC = Top of casing
ppb = Parts per billion
ppm = Parts per million
NA = Not analyzed
NM = Not measured
< = Denotes concentration not present above laboratory detection limited stated to the right

ATTACHMENT D

EDCC REPORT AND EDF/GEOWELL SUBMITTAL CONFIRMATION

Error Summary Log

02/16/04

EDF 1.2i All files present in deliverable.

Laboratory:	Sequoia Analytical Laboratories, Inc., Morgan Hill, CA
Project Name:	ARCO #2162, San Leandro,
Work Order Number:	MNA0554
Global ID:	T0600100084
Lab Report Number:	MNA0554013020041730

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run Sub
MNA05540130200 41730	MW-3	MNA055401	W	CS	8260TPH	SW5030B	01/15/04	01/28/04	01/29/04	4A28003	1
MNA05540130200 41730	MW-4	MNA055402	W	CS	8260TPH	SW5030B	01/15/04	01/28/04	01/29/04	4A28003	1
		4A28003BSD1	WQ	BD1	8260TPH	SW5030B	/ /	01/28/04	01/28/04	4A28003	1
		4A28003BSD2	WQ	BD2	8260TPH	SW5030B	/ /	01/28/04	01/28/04	4A28003	1
		4A28003BS1	WQ	BS1	8260TPH	SW5030B	/ /	01/28/04	01/28/04	4A28003	1
		4A28003BS2	WQ	BS2	8260TPH	SW5030B	/ /	01/28/04	01/28/04	4A28003	1
		4A28003BLK1	WQ	LB1	8260TPH	SW5030B	/ /	01/28/04	01/28/04	4A28003	1

EDFSAMP: Error Summary Log

02/16/04

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

EDFTEST: Error Summary Log

02/16/04

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

EDFRES: Error Summary Log

02/16/04

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

EDFQC: Error Summary Log

02/16/04

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

EDFCL: Error Summary Log

02/16/04

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

AB2886 Electronic Delivery

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Confirmation Number: 4504417121
Date/Time of Submittal: 2/16/2004 11:29:01 AM
Facility Global ID: T0600100084
Facility Name: ARCO # 02162
Submittal Title: First Quarter 2004 Groundwater Monitoring Report for ARCO Site #2162
Submittal Type: GW Monitoring Report

Logged in as URSCORP-OAKLAND (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.

AB2886 Electronic Delivery

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

Submittal Title:	**First Quarter 2004 Geowell Submittal for ARCO #2162**
Submittal Date/Time:	**2/16/2004 11:31:07 AM**
Confirmation Number:	**7908131241**

Back to Main Menu

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