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URS

November 14, 2003

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

Re: Fourth Quarter 2003 Groundwater Monitoring Report
ARCO Service Station #2162
15135 Hesperian Boulevard
San Leandro, California
URS Project #38486326

Dear Ms. eva chu:

On behalf of Atlantic Richfield Company (ARCO – an affiliated company of the Group Environmental Management Company), URS Corporation (URS) is submitting the *Fourth Quarter 2003 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

Scott Robinson
Project Manager

James F. Durkin, C.Hg
Senior Geologist

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

Enclosure: Fourth Quarter 2003 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

REPORT

FOURTH QUARTER 2003 GROUNDWATER MONITORING

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

Prepared for
Atlantic Richfield Company

November 14, 2003

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

38486326

Date: November 14, 2003

Quarter: 4Q 03

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.:			38486326
Primary Agency:			Alameda County Health Care Services Agency (ACHCSA)

WORK PERFORMED THIS QUARTER (Fourth – 2003):

1. Performed fourth quarter groundwater monitoring event on October 8, 2003.
2. Prepared and submitted fourth quarter 2003 groundwater monitoring report.
3. Reduced the sampling frequency of MW-1 and MW-2 from quarterly to annually.
4. Monitoring well MW-1 repaired on September 17, 2003.

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.

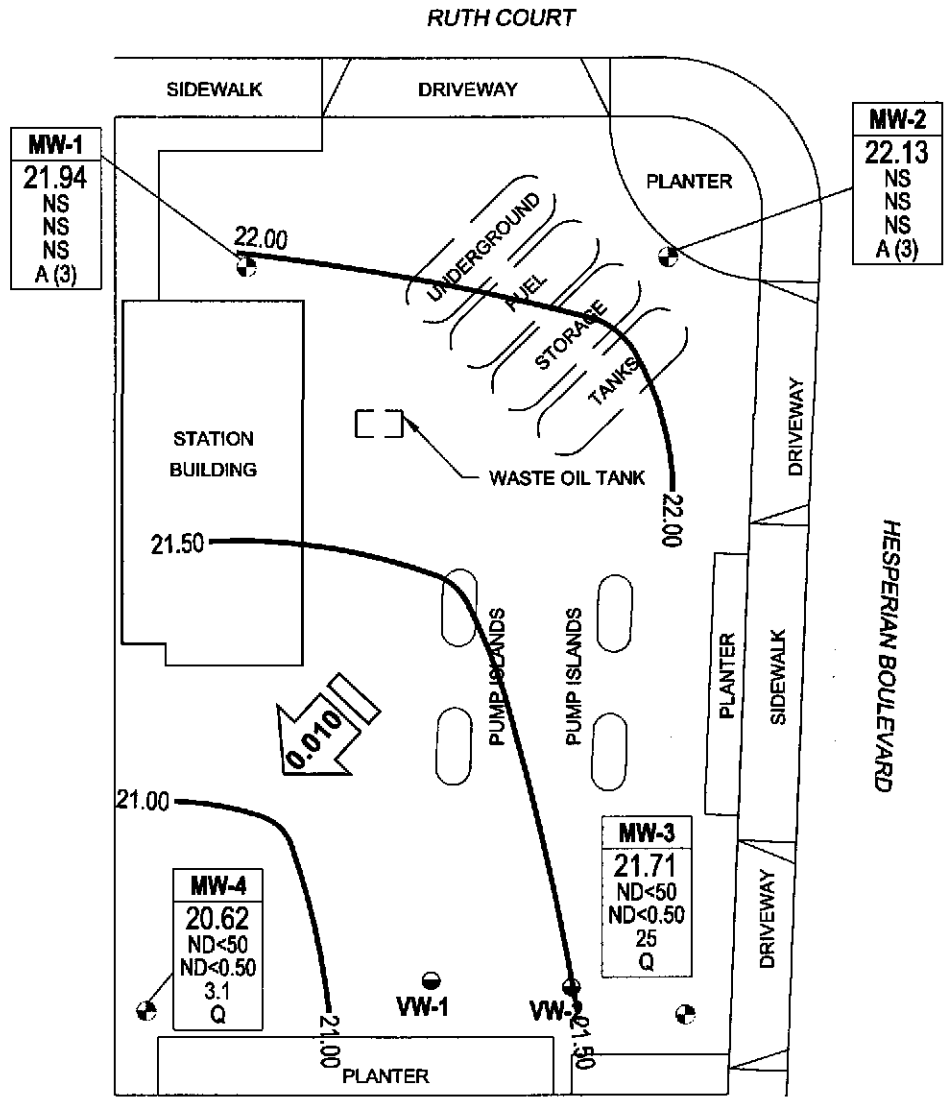
Current Phase of Project:	GW monitoring/sampling
Frequency of Groundwater Sampling:	Quarterly: MW-3, MW-4 Annually (3rd Quarter): MW-1, MW-2
Frequency of Groundwater Monitoring:	Quarterly
Is Free Product (FP) Present On-Site:	No
Current Remediation Techniques:	Natural Attenuation
Approximate Depth to Groundwater:	8.25 ft (MW-2) to 9.77 ft (MW-4) feet
Groundwater Gradient (direction):	Southwest
Groundwater Gradient (magnitude):	0.010 feet per foot

DISCUSSION:

TPH-g and benzene were not detected at or above laboratory reporting limits in the two wells sampled this quarter. MTBE was detected above laboratory reporting limits in the two wells at concentrations of 3.1 µg/L (MW-4) and 25 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 – October 8, 2003
- 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)
- 0.010 — APPROXIMATE GROUNDWATER FLOW GRADIENT AND DIRECTION (FT/FT)
- Well — WELL DESIGNATION
- ELEV — GROUNDWATER ELEVATION (FT ABOVE MSL)
- TPH-g, Benzene, MTBE — TPH-g, BENZENE AND MTBE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- Q or A — SAMPLING FREQUENCY
- ND< — NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMITS
- 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.

URS	Project No. 38486326 Arco Service Station 2162 15135 Hesperian Boulevard San Leandro, California	GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP Fourth Quarter 2003 (October 9, 2003)	FIGURE 1

X:\x_env_waste\BP GEM\Sites\Scott Robinson\Paul Supple\2162\Monitoring\Qtr. 4, 2003\Drawings\GWEC-AS_10-8.dwg, 11/13/2003 08:58:31 AM, JKMT, URS

Table 1
Groundwater Elevation and Analytical Data

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

Well Number	Date Sampled		Top of Riser Elevation (feet, MSL)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	TPH as Gasoline (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	8.33	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**							
MW-2	06/20/00		30.38	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**							

Table 1
Groundwater Elevation and Analytical Data

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

Well Number	Date Sampled		Top of Riser Elevation (feet, MSL)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	TPH as Gasoline (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	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**
MW-4	06/20/00		30.39	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**

Table 1
Groundwater Elevation and Analytical Data

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

TPH	= Total petroleum hydrocarbons
MTBE	= Methyl tertiary butyl ether
µg/L	= Micrograms per liter equivalent to parts per billion (ppb)
mg/L	= Milligrams per liter equivalent to parts per million (ppm)
ND<	= Not detected at or above specified laboratory method detection limit
MSL	= Mean sea level
TOC	= Top of casing
P	= Purge
NP	= No Purge
NS	= Not sampled
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

Source: The data within this table collected prior to July 2002 was provided to URS by Group Environmental Management 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**
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**

Notes:

All fuel oxygenate compounds analyzed using EPA Method 8260B

ND< = Not detected at or above specified laboratory method detection 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

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**

Source: The data within this table collected prior to July 2002 was provided to URS by Group Environmental Management 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 # 031008-PA1 Date 10/8/03 Client Arco 2162

Site 15135 Hesperian Blvd. San Leandro, CA

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					9.19	15.95	TOC.	
MW-2	4					8.25	15.96		
MW-3	4					9.59	14.86		Purge
* MW-4	4					9.47	17.70	↓	NP@8'
* Gauged w/ stinger in well									

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 031008-DA1	Station # Arco-2167
Sampler: P. Cornish	Date: 10/8/07
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 14.86	Depth to Water: 8.59
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.

4.1 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 12.3 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
908	72.5	6.6	550	4.1	clear
910	73.4	6.8	552	8.2	"
911	73.4	7.0	542	12.3	"

Did well dewater? Yes (No) Gallons actually evacuated: 12.5

Sampling Time: 0915 Sampling Date: 10

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

Analyzed for: TPH-G BTEX MTBE TPH-D Other: see COC

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	0.9	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 031008-DA1	Station # 2162
Sampler: DA	Date: 10/8/03
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 17.70	Depth to Water: 9.77
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 / Middleburg / Electric Submersible / Extraction Pump / Other: _____

Sampling Method: Bailer / X Disposable Bailer / Extraction Port / Other: _____

Top of Screen: 8'

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	Specified Volumes	=	Calculated Volume
—	x	No Purge	=	— Gals.

Time	Temp (°F)	pH	Conductivity (mS or (uS))	Gals. Removed	Observations
0840	70.6	6.4	961	—	clear

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

Sampling Time: 0843 Sampling Date: 10/8/03

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

Analyzed for: TPH-G BTEX MTBE TPH-D Other: See COC

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	2.6 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

bp

WELLHEAD INSPECTION CHECKLIST
BP / GEM

Date 10/8/03

Site Address 15135 Hesperian Blvd. San Leandro, CA

Job Number 031008-DA1 Technician DA

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-1	X							
MW-2	X							
MW-3	X							
MW-4	X							

NOTES:

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:

2162

Station #

15135 Hesperian Blvd. San Leandro, CA

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

~~20~~ 12.5

added equip. rinse water 7.5

any other adjustments

TOTAL GALS. RECOVERED 20

loaded onto BTS vehicle # 49

BTS event #	time	date
031008-DA1	0925	10/8/03

signature David Allen

* *

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 Group Environmental Management 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

6 November, 2003

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

RE: ARCO #2162, San Leandro, CA
Work Order: MMJ0303

Enclosed are the results of analyses for samples received by the laboratory on 10/08/03 17:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Theresa Allen

Theresa Allen
Project Manager

CA ELAP Certificate #1210

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MMJ0303
500 12th Street, Suite 200	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	11/06/03 13:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB	MMJ0303-01	Water	10/08/03 00:00	10/08/03 17:20
MW-4	MMJ0303-02	Water	10/08/03 08:43	10/08/03 17:20
MW-3	MMJ0303-03	Water	10/08/03 09:15	10/08/03 17:20

There were custody seals received with this project.

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MMJ0303
500 12th Street, Suite 200	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	11/06/03 13:43

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (MMJ0303-02) Water Sampled: 10/08/03 08:43 Received: 10/08/03 17:20									
Ethanol	ND	100	ug/l	1	3J22020	10/22/03	10/22/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	**3.1**	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		*116 %*	*78-129*		"	"	"	"	
MW-3 (MMJ0303-03) Water Sampled: 10/08/03 09:15 Received: 10/08/03 17:20									
Ethanol	ND	100	ug/l	1	3J22020	10/22/03	10/22/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	**25**	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		*118 %*	*78-129*		"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MMJ0303
500 12th Street, Suite 200	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	11/06/03 13:43

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 3J22020 - EPA 5030B Modified										
Blank (3J22020-BLK1)				Prepared & Analyzed: 10/22/03						
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	"							
Surrogate: 1,2-Dichloroethane-d4	*4.84*		"	*5.00*		*96.8*	*78-129*			
Laboratory Control Sample (3J22020-BS1)				Prepared: 10/22/03 Analyzed: 10/23/03						
Methyl tert-butyl ether	9.57	0.50	ug/l	10.0		95.7	63-137			
Benzene	9.66	0.50	"	10.0		96.6	78-124			
Toluene	9.67	0.50	"	10.0		96.7	78-129			
Surrogate: 1,2-Dichloroethane-d4	*5.96*		"	*5.00*		*119*	*78-129*			
Laboratory Control Sample (3J22020-BS2)				Prepared: 10/22/03 Analyzed: 10/23/03						
Methyl tert-butyl ether	8.29	0.50	ug/l	10.1		82.1	63-137			
Benzene	5.23	0.50	"	6.48		80.7	78-124			
Toluene	31.4	0.50	"	29.7		106	78-129			
Gasoline Range Organics	444	50	"	440		101	70-113			
Surrogate: 1,2-Dichloroethane-d4	*5.95*		"	*5.00*		*119*	*78-129*			

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MMJ0303
500 12th Street, Suite 200	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	11/06/03 13:43

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 3J22020 - EPA 5030B Modified										
Laboratory Control Sample Dup (3J22020-BSD1)				Prepared: 10/22/03		Analyzed: 10/23/03				
Methyl tert-butyl ether	9.90	0.50	ug/l	10.0		99.0	63-137	3.39	13	
Benzene	9.92	0.50	"	10.0		99.2	78-124	2.66	12	
Toluene	9.40	0.50	"	10.0		94.0	78-129	2.83	10	
Surrogate: 1,2-Dichloroethane-d4	*6.15*		"	*5.00*		*123*	*78-129*			
Laboratory Control Sample Dup (3J22020-BSD2)				Prepared: 10/22/03		Analyzed: 10/23/03				
Methyl tert-butyl ether	8.27	0.50	ug/l	10.1		81.9	63-137	0.242	13	
Benzene	5.25	0.50	"	6.48		81.0	78-124	0.382	12	
Toluene	31.0	0.50	"	29.7		104	78-129	1.28	10	
Gasoline Range Organics	431	50	"	440		98.0	70-113	2.97	9	
Surrogate: 1,2-Dichloroethane-d4	*5.84*		"	*5.00*		*117*	*78-129*			
Matrix Spike (3J22020-MS1)	**Source: MMJ0401-02**			Prepared: 10/22/03		Analyzed: 10/23/03				
Methyl tert-butyl ether	29.7	0.50	ug/l	10.1	21	86.1	63-137			
Benzene	5.53	0.50	"	6.48	0.11	83.6	78-124			
Toluene	34.1	0.50	"	29.7	1.2	111	78-129			
Gasoline Range Organics	457	50	"	440	34	96.1	70-113			
Surrogate: 1,2-Dichloroethane-d4	*5.85*		"	*5.00*		*117*	*78-129*			
Matrix Spike Dup (3J22020-MSD1)	**Source: MMJ0401-02**			Prepared: 10/22/03		Analyzed: 10/23/03				
Methyl tert-butyl ether	28.4	0.50	ug/l	10.1	21	73.3	63-137	4.48	13	
Benzene	5.27	0.50	"	6.48	0.11	79.6	78-124	4.81	12	
Toluene	31.2	0.50	"	29.7	1.2	101	78-129	8.88	10	
Gasoline Range Organics	425	50	"	440	34	88.9	70-113	7.26	9	
Surrogate: 1,2-Dichloroethane-d4	*5.90*		"	*5.00*		*118*	*78-129*			

Sequoia Analytical

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MMJ0303
500 12th Street, Suite 200	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	11/06/03 13:43

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

bp

Chain of Custody Record

MM30303

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

Page 1 of 1

Date: 10/8/03

On-site Time: 0900 Temp: 67.8
Off-site Time: 0900 Temp: 67.9
Sky Conditions: Clear
Meteorological Events: none
Wind Speed: 5mph Direction: S

Send To:
Lab Name: SEQUOIA
Lab Address: 885 Jarvis Dr.
Morgan Hill, CA 95037
Lab PM: Theresa Allen
Tele/Fax: 408-776-9600 / 408-782-6308
Report Type & QC Level: I Send EDF Reports
BP/GEM Account No.:
Lab Bottle Order No:

BP/GEM Facility No.: ARCO 2162
BP/GEM Facility Address: 15135 HESPERIAN BLVD, San Leandro, CA
Site ID No. ARCO 2162
Site Lat/Long:
California Global ID #: T0600100084
BP/GEM PM Contact: PAUL SUPPLE
Address: P.O. Box 6549
Moraga, CA 94570
Tele/Fax: 925-299-8891/925-299-8872

Consultant/Contractor: URS
Address: 500 12th St., Ste. 200
Oakland, CA 94609-4014
e-mail EDD: donna_cosper@URSCorp.com
Consultant/Contractor Project No.: 75-00002162.01 00427
Consultant Tele/Fax: 510-893-3600/510-874-3268
Consultant/Contractor PM: Scott Robinson
Invoice to: Consultant/Contractor or BP/GEM (Circle one)
BP/GEM Work Release No: INTRIM-50319

Item No.	Sample Description	Time	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Sediments	Matrix: Air	Laboratory No.	No. of containers	Preservatives: Unpreserved	Preservatives: H_2SO_4	Preservatives: HNO_3	Preservatives: HCl	TPH-G / BTEX 8015M/8021 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
✓	TB																					
2	~~MW-3~~ MW-4	843		X			MM30303-01	2														
3	MW-3	915		X			-02	3				X										
4				X			-03	3				X										
5												X	X			X	X	X	X			on hold
6													X			X	X	X	X			
7																						
8																						
9																						
10																						

Sampler's Name: Pete Corvitsky
Sampler's Company: Blaine Tech
Shipment Date:
Shipment Method:
Tracking No:
Special Instructions: Address Invoice to BP/GEM but send to URS for approval

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
[signature] / BTS	10/8/03	1627	[signature]	10/8/03	1627
[signature]	10/8/03	1720	[signature]	10/8/03	1720

Custody Seals In Place Yes No
Temperature Blank Yes X No
White Copy / Yellow Copy ... Cooler Temp ...

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: 4RS
REC. BY (PRINT) EB
WORKORDER: MMJ0303

DATE REC'D AT LAB: 10-8-03
TIME REC'D AT LAB: 1720
DATE LOGGED IN: 10-13-03

Drinking water for regulatory purposes: YES / NO (circled NO)
Wastewater for regulatory purposes: YES / NO (circled NO)

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s): Present / Absent — Intact / Broken*
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 custody reports, traffic reports and sample labels agree? Yes / No*
10. Sample received within hold time: Yes / No*
11. Proper Preservatives used: Yes / No*
12. Temp Rec. at Lab: 4°C
Is temp 4 +/-2°C? Yes / No**
(Acceptance range for samples requiring thermal pres.)
**Exception (if any): Metals / DFF (Direct From Field) ...lem COC

LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
01	-	TB	2 VOAs	HCL	L	10-8-03	324 80C0
02	-	MW-4	3 VOAs	↓	↓	↓	
03		MW-3	↓				

10-8-03 EB

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

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

11/06/03

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:	MMJ0303
Global ID:	T0600100084
Lab Report Number:	MMJ0303110620031343

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run	Sub
MMJ03031106200 31343	MW-3	MMJ030303	W	CS	8260TPH	SW5030B	10/08/03	10/22/03	10/22/03	3J22020	1	
MMJ03031106200 31343	MW-4	MMJ030302	W	CS	8260TPH	SW5030B	10/08/03	10/22/03	10/22/03	3J22020	1	
		MMJ040102	W	NC	8260TPH	SW5030B	/ /	10/22/03	10/23/03	3J22020	1	
		3J22020BSD1	WQ	BD1	8260TPH	SW5030B	/ /	10/22/03	10/23/03	3J22020	1	
		3J22020BSD2	WQ	BD2	8260TPH	SW5030B	/ /	10/22/03	10/23/03	3J22020	1	
		3J22020BS1	WQ	BS1	8260TPH	SW5030B	/ /	10/22/03	10/23/03	3J22020	1	
		3J22020BS2	WQ	BS2	8260TPH	SW5030B	/ /	10/22/03	10/23/03	3J22020	1	
		3J22020BLK1	WQ	LB1	8260TPH	SW5030B	/ /	10/22/03	10/22/03	3J22020	1	
		3J22020MS1	W	MS1	8260TPH	SW5030B	/ /	10/22/03	10/23/03	3J22020	1	
		3J22020MSD1	W	SD1	8260TPH	SW5030B	/ /	10/22/03	10/23/03	3J22020	1	

EDFSAMP: Error Summary Log

11/06/03

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

EDFTEST: Error Summary Log

11/06/03

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

EDFRES: Error Summary Log

11/06/03

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

EDFQC: Error Summary Log

11/06/03

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

EDFCL: Error Summary Log

11/06/03

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

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Confirmation Number: 6941517293
Date/Time of Submittal: 11/6/2003 5:00:12 PM
Facility Global ID: T0600100084
Facility Name: ARCO # 02162
Submittal Title: 4th Qtr 2003 Monitoring Report
Submittal Type: GW Monitoring Report

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Submittal Date/Time:	**11/6/2003 5:03:46 PM**
Confirmation Number:	**6396804630**

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