RO-190

URS

August 15, 2003

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

Re: Third 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 *Third 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

REGISTERED GEOLOGIST
JAMES F. DURKIN
No. 759
CERTIFIED HYDROGEOLOGIST
Exp. 2/29/05
STATE OF CALIFORNIA

Scott Robinson
Project Manager

James F. Durkin, C.Hg
Senior Geologist

Enclosure: Third 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
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Atlantic Richfield Company
(a BP affiliated company)

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

August 15, 2003

RE: Third Quarter 2003 Groundwater Monitoring Report
ARCO Service Station #2162
15135 Hesperian Boulevard
San Leandro, CA
URS Project#38486362

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

THIRD QUARTER 2003 GROUNDWATER MONITORING

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

Prepared for
Atlantic Richfield Company

August 15, 2003

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

38486326

Date: August 15, 2003
Quarter: 3Q 03

ATLANTIC RICHFIELD COMPANY QUARTERLY GROUNDWATER MONITORING REPORT

Facility No.:	2162	Address:	15135 Hesperian Boulevard, San Leandro, CA
Atlantic Richfield Co. Environmental Engineer:			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 (Third – 2003):

1. Performed third quarter groundwater monitoring event on July 9, 2003.
2. Prepared and submitted third quarter 2003 groundwater monitoring report.

WORK PROPOSED FOR NEXT QUARTER (Fourth – 2003):

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

Current Phase of Project:	GW monitoring/sampling
Frequency of Groundwater Sampling:	Quarterly: MW-1, MW-2, MW-3, MW-4
Frequency of Groundwater Monitoring:	Quarterly
Is Free Product (FP) Present On-Site:	No
Current Remediation Techniques:	Natural Attenuation
Approximate Depth to Groundwater:	7.71 ft (MW-2) to 9.14 ft (MW-4) feet
Groundwater Gradient (direction):	Southwest
Groundwater Gradient (magnitude):	0.010 feet per foot

DISCUSSION:

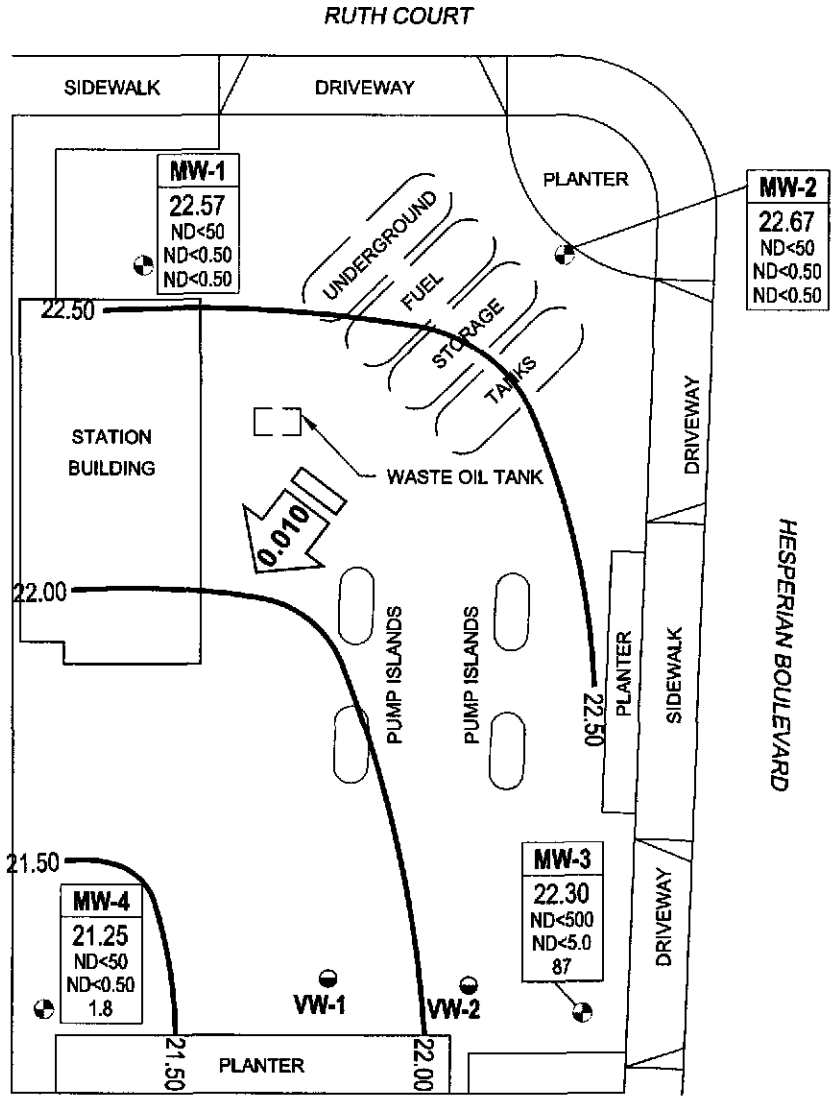
TPH-g was not detected in any of the four wells sampled this quarter. However, MW-3 had an elevated detection limit of 500 µg/L. Benzene was not detected in any of the four wells sampled. MTBE was detected in two wells at concentrations of 1.8 µg/L (MW-4) and 87 µg/L (MW-3). Fuel oxygenates TBA, DIPE, ETBE, TAME, 1,2-DCA and EDB were reported at non-detect levels in all wells sampled.

RECOMMENDATIONS:

We recommend changing the sampling frequency of wells MW-1 and MW-2 from quarterly to annually. The constituents of concern have consistently had low to non-detect values in these two wells for the past 2 years.

ATTACHMENTS:

- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map – July 9, 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)
- ND< — NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMITS

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 Third Quarter 2003 (July 9, 2003)	FIGURE 1

X:\x_env_waste\BP GEM\Sites\Scott Robinson\Paul Supple\2162\Monitoring\Qtr. 3, 2003\Drawings\GWEC-AS_7-9.dwg, 08/05/2003 03:54:27 PM, 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)
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
	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
	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
	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
	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
	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
	12/28/01			8.40	22.79	ND<50	ND<0.5	ND<0.5	ND<0.5	0.63	ND<2.5	NA
	03/14/02			8.05	23.14	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	170	NA
	04/18/02			8.27	22.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NS	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
	10/09/02[a]	NP		NM	NM	NS	NS	NS	NS	NS	NS	NS
	03/28/03[a,c]	NP		NM	NM	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
	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**
MW-2	06/20/00		30.38	7.38	23.00	NS	NS	NS	NS	NS	NS	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
	12/17/00			7.80	22.58	175	ND<0.5	ND<0.5	0.659	ND<0.5	ND<2.5	NA
	03/23/01			7.23	23.15	351	ND<0.5	ND<0.5	0.912	ND<0.5	ND<2.5	NA
	06/20/01			7.98	22.40	360	ND<0.5	ND<0.5	0.74	ND<0.5	ND<2.5	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
	12/28/01			7.53	22.85	130	ND<0.5	0.93	ND<0.5	0.51	ND<2.5	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
	04/18/02			7.31	23.07	74	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NS	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
	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
	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
	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
	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**

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)
MW-3	06/20/00		30.30	7.75	22.55	NS	NS	NS	NS	NS	NS	NA
	09/29/00			8.46	21.84	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	128	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
	03/23/01			7.70	22.60	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	26.8	NA
	06/20/01			8.23	22.07	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	30	NA
	09/22/01			8.89	21.41	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	12	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
	03/14/02			7.48	22.82	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	47	NA
	04/18/02			7.62	22.68	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NS	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
	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
	03/28/03[c]	P		7.85	22.45	52	ND<0.50	1.2	ND<0.50	ND<0.50	45	1.42
	04/07/03	P		7.71	22.59	56	ND<0.50	ND<0.50	ND<0.50	ND<0.50	56	1.1
	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**
MW-4	06/20/00		30.39	8.87	21.52	NS	NS	NS	NS	NS	NS	NA
	09/29/00			9.61	20.78	ND<50	1.02	ND<0.5	ND<0.5	ND<0.5	12.2	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
	03/23/01			8.70	21.69	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.04	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
	09/22/01			10.06	20.33	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.2	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
	03/14/02			8.52	21.87	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.1	NA
	04/18/02			8.76	21.63	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	NS	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
	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
	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
	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
	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**

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)
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	03/28/03	NS	NS	NS	NS	NS	NS	NS	NS
	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**
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**

Notes:

All fuel oxygenate compounds analyzed using EPA Method 8260B

ND< = Not detected at or above specified laboratory method detection limit
NS = Not sampled
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**

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 # 030709-MM2 Date 7/9/03 Client Arco 2162

Site 15135 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	
1 MW-1	4					8.62	15.95	TOC	NP @ 8'
4 MW-2	4					7.71	15.96	↓	NP @ 8'
3 MW-3	4					8.00	14.86	↓	~~NP @ 8'~~
2 MW-4	4					9.14	17.70	↓	NP @ 8'

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 030709-MW2	Station # Arco 2162
Sampler: MM	Date: 7/9/03
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 8.62	Depth to Water: 8.62
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: ___ — yrb Sample

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

Top of Screen: NP @ 8' Grab

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

___ (1 Case Volume (Gals.)) X 3 (Specified Volumes) = ___ (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
	No purge @ 8'			→ DTW = 8.62	
1031	69.8	7.2	885	—	clear

Did well dewater? Yes No		Gallons actually evacuated:	
Sampling Time: 1030		Sampling Date: 7/9/03	
Sample I.D.: MW-1		Laboratory: Pace (Sequoia) Other ___	
Analyzed for: (TPH-G) (BTEX) MTBE TPH-D	Other: oxy's, Ethanol, 1,2 DCA + EDB (8260)		
D.O. (if req'd): Pre-purge:	mg/L	(Post-purge:)	1.1 mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 030709-MW2	Station # Arco 2162
Sampler: MM	Date: 7/9/03
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 15.96	Depth to Water: 7.71
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

9.28 = 90

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

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

Top of Screen: MP @ 8ft. DTW = 7.71

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

5.1 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 15.3 Gals. (Calculated Volume)

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
	No Purge (a)		8'	→ DTW = 7.71 ⇒ PURGE	
1133	71.1	7.5	839	5.1	clear, slight odor
1134	69.3	7.5	863	10.2	" "
	dewatered	@	10.5 gal's	DTW = 9.16	
1139	70.5	7.6	845	—	

Did well dewater? (Yes) No — Gallons actually evacuated: 10.6

Sampling Time: 1140 — Sampling Date: 7/9/03

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

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: OXYS, Ethanol, 1,2 DCA + EDB (8260)

D.O. (if req'd):	Pre-purge:	mg/L	(Post-purge:)	2.5	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 030709 - MW2	Station # Arco 2162
Sampler: MM	Date: 7/9/03
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 14.96	Depth to Water: 8.00
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	(3")	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

9.37 = 80%

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 (µS))	Gals. Removed	Observations
1110	73.3	7.3	727	4.5	clear, slight odor
	dewatered (9)	5.0	gal's		DTW = 8.97
1116	72.7	7.4	719	—	clear

Did well dewater? (Yes) No		Gallons actually evacuated: 5.0	
Sampling Time: 1115		Sampling Date: 7/9/03	
Sample I.D.: MW-3		Laboratory: Pace (Sequoia) Other ___	
Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxy's, Ethanol, 1,2 DCA + EDB (8260)			
D.O. (if req'd): Pre-purge:	mg/L	(Post-purge:)	1.6 mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 030709-MW2	Station # Arco 2162
Sampler: MM	Date: 7/9/03
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 17.70	Depth to Water: 9.14
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: ___ (grab sample)

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

Top of Screen: NP (a) 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.

GRAB (1 Case Volume (Gals.)) X 3 (Specified Volumes) = ___ Gals. (Calculated Volume)

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
	ND	Purge (a) 8'		→ DTW = 9.14	
1049	69.2	7.4	904	—	clear

Did well dewater? Yes No — Gallons actually evacuated:

Sampling Time: 1050 — Sampling Date: 7/9/03

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 (8260)

D.O. (if req'd):	Pre-purge:	mg/L	(Post-purge:)	1.6	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

BP GEM OIL COMPANY TYPE **A** BILL OF LADING

SOURCE RECORD **BILL OF LADING** FOR NON-HAZARDOUS PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT BP GEM OIL COMPANY FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED BY DILLARD ENVIRONMENTAL TO THE ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY IN LIVERMORE, CALIFORNIA.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BTS), 1680 Rogers Avenue, San Jose, CA 95112 (phone [408] 573-0555). Blaine Tech Services, Inc. is authorized by BP GEM OIL COMPANY to recover, collect, apportion into loads the Non-Hazardous Well Purgewater that is drawn from wells at the BP GEM Oil Company facility indicated below and deliver that purgewater to BTS. Transport routing of the Non-Hazardous Well Purgewater may be direct from one BP GEM facility to the designated destination point; from one BP GEM facility to the designated destination point via another BP GEM facility; from a BP GEM facility to the designated destination point via the contractor's facility, or any combination thereof. The Non-Hazardous Well Purgewater is and remains the property of BP GEM Oil Company.

This **Source Record BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the BP GEM Oil Company facility described below:

Arco 2162

Station #

15135 Hesperian Blvd., San Leandro

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

15.5

added equip. rinse water 4.5

any other adjustments

TOTAL GALS. RECOVERED 20

loaded onto BTS vehicle # 12

BTS event # 030709-AM2

time 1215

date 7/9/03

signature

* *

REC'D AT BTS

time 1520

date 7/9/03

unloaded by signature

WELLHEAD INSPECTION CHECKLIST

Page ____ of ____

Client ~~Shell~~ ARCO 2162 Date 7/9/03

Site Address 15135 Hesperian Blvd, San Leandro

Job Number 030709 - MM2 Technician MM

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

NOTES: MW-3 - Bolts stripped, Tab missing
MW-2 Bolt ~~Stripped~~, Tab missing

Philip Meymand

07/21/2003 12:16 PM

To: Linda Pappas/Oakland/URSCorp@URSCORP
cc:
Subject: Re: REQUEST: Proposal Status Updates

Linda,

Path 15 geotech was lost to Kleinfelder, but the env dept may still have a chance to provide some services on that project (S. Leach). SCVWD was Bob Green's. I sent you a copy of a Kinder Morgan proposal last week which is active.

Philip J. Meymand, Ph.D., G.E.
Senior Project Engineer

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

(510) 874-1723; fax -3268
philip_meymand@urscorp.com

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) 766-9600
FAX (408) 782-6308
www.sequoialabs.com

28 July, 2003

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

RE: ARCO #2162, San Leandro, CA
Work Order: MMG0245

Enclosed are the results of analyses for samples received by the laboratory on 07/10/03 14:42. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tim Costello For Theresa Allen
Project Manager

CA ELAP Certificate #1210

Sequoia Analytical

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www.sequoialabs.com

URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MMG0245
500 12th Street, Suite 100	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	07/28/03 18:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MMG0245-01	Water	07/09/03 10:30	07/10/03 14:42
MW-2	MMG0245-02	Water	07/09/03 11:40	07/10/03 14:42
MW-3	MMG0245-03	Water	07/09/03 11:15	07/10/03 14:42
MW-4	MMG0245-04	Water	07/09/03 10:50	07/10/03 14:42

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

Sequoia Analytical

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MMG0245
500 12th Street, Suite 100	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	07/28/03 18:30

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MMG0245-01) Water Sampled: 07/09/03 10:30 Received: 07/10/03 14:42									
Ethanol	ND	100	ug/l	1	3G21005	07/21/03	07/22/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*107 %*	*78-129*		"	"	"	"	
MW-2 (MMG0245-02) Water Sampled: 07/09/03 11:40 Received: 07/10/03 14:42									
Ethanol	ND	100	ug/l	1	3G21005	07/21/03	07/22/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*109 %*	*78-129*		"	"	"	"	

Sequoia Analytical

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Morgan Hill, CA 95037
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FAX (408) 782-6308
www.sequoialabs.com

URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MMG0245
500 12th Street, Suite 100	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	07/28/03 18:30

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (MMG0245-03) Water Sampled: 07/09/03 11:15 Received: 07/10/03 14:42									
Ethanol	ND	1000	ug/l	10	3G21005	07/21/03	07/22/03	EPA 8260B	
tert-Butyl alcohol	ND	200	"	"	"	"	"	"	
Methyl tert-butyl ether	**87**	5.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	5.0	"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	ND	500	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*108 %*		*78-129*	"	"	"	"	
MW-4 (MMG0245-04) Water Sampled: 07/09/03 10:50 Received: 07/10/03 14:42									
Ethanol	ND	100	ug/l	1	3G21005	07/21/03	07/22/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	**1.8**	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	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*112 %*		*78-129*	"	"	"	"	

Sequoia Analytical

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Morgan Hill, CA 95037
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FAX (408) 782-6308
www.sequoialabs.com

URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MMG0245
500 12th Street, Suite 100	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	07/28/03 18:30

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 3G21005 - EPA 5030B P/T										
Blank (3G21005-BLK1)				Prepared & Analyzed: 07/21/03						
Ethanol	ND	100	ug/l							
tert-Butyl alcohol	ND	20	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C6-C10)	ND	50	"							
Surrogate: 1,2-Dichloroethane-d4	*5.26*		"	*5.00*		*105*	*78-129*			
Laboratory Control Sample (3G21005-BS1)				Prepared & Analyzed: 07/21/03						
Methyl tert-butyl ether	10.3	0.50	ug/l	10.0		103	63-137			
Benzene	10.2	0.50	"	10.0		102	78-124			
Toluene	10.6	0.50	"	10.0		106	78-129			
Surrogate: 1,2-Dichloroethane-d4	*5.22*		"	*5.00*		*104*	*78-129*			
Laboratory Control Sample (3G21005-BS2)				Prepared & Analyzed: 07/21/03						
Methyl tert-butyl ether	4.63	0.50	ug/l	4.96		93.3	63-137			
Benzene	2.84	0.50	"	3.20		88.8	78-124			
Toluene	17.4	0.50	"	14.8		118	78-129			
Gasoline Range Organics (C6-C10)	211	50	"	220		95.9	70-113			
Surrogate: 1,2-Dichloroethane-d4	*5.22*		"	*5.00*		*104*	*78-129*			

Sequoia Analytical

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MMG0245
500 12th Street, Suite 100	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	07/28/03 18:30

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 3G21005 - EPA 5030B P/T										
Laboratory Control Sample Dup (3G21005-BSD1)				Prepared & Analyzed: 07/21/03						
Methyl tert-butyl ether	10.5	0.50	ug/l	10.0		105	63-137	1.92	13	
Benzene	10.6	0.50	"	10.0		106	78-124	3.85	12	
Toluene	11.1	0.50	"	10.0		111	78-129	4.61	10	
Surrogate: 1,2-Dichloroethane-d4	*5.38*		"	*5.00*		*108*	*78-129*			
Matrix Spike (3G21005-MS1)	**Source: MMG0245-03**			Prepared: 07/21/03		Analyzed: 07/22/03				
Methyl tert-butyl ether	174	5.0	ug/l	99.2	87	87.7	63-137			
Benzene	55.9	5.0	"	64.0	ND	87.3	78-124			
Toluene	337	5.0	"	297	ND	113	78-129			
Gasoline Range Organics (C6-C10)	4110	500	"	4400	190	89.1	70-113			
Surrogate: 1,2-Dichloroethane-d4	*5.29*		"	*5.00*		*106*	*78-129*			
Matrix Spike Dup (3G21005-MSD1)	**Source: MMG0245-03**			Prepared: 07/21/03		Analyzed: 07/22/03				
Methyl tert-butyl ether	177	5.0	ug/l	99.2	87	90.7	63-137	1.71	13	
Benzene	59.2	5.0	"	64.0	ND	92.5	78-124	5.73	12	
Toluene	359	5.0	"	297	ND	121	78-129	6.32	10	
Gasoline Range Organics (C6-C10)	4380	500	"	4400	190	95.2	70-113	6.36	9	
Surrogate: 1,2-Dichloroethane-d4	*5.41*		"	*5.00*		*108*	*78-129*			

Sequoia Analytical

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MMG0245
500 12th Street, Suite 100	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	07/28/03 18:30

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Chain of Custody Record

bp

Project Name 030709 - MW2

BP BU/GEM CO Portfolio:

BP Laboratory Contract Number:

Date: 7/9/03

Requested Due Date (mm/dd/yy) MHG0145

On-site Time:	Temp:
Off-site Time:	Temp:
Sky Conditions:	
Meteorological Events:	
Wind Speed:	Direction:

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

BP/GEM Facility No.:	
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:	
Tele/Fax:	

Consultant/Contractor:	URS
Address:	500 12th St., Ste. 200 Oakland, CA 94609-4014
e-mail EDD:	syed_rehan@urscorp.com
Consultant/Contractor Project No.:	35-00002162.01 00427
Consultant Tele/Fax:	510-874-1735/510-874-3268
Consultant/Contractor PM:	Scott Robinson
Invoice to:	Consultant/Contractor or (BP/GEM) (circle one)
BP/GEM Work Release No:	INTRIM -50319

Lab Bottle Order No:

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	Requested Analysis: TPH-G / BTEX (8260)	Requested Analysis: TPH-D (8015)	Requested Analysis: MTBE (8021)	Requested Analysis: MTBE, TAME, BTBE, DIPE, TBA (8260)	Requested Analysis: 1,2-DCA & EDB (8260)	Requested Analysis: Ethanol (8260)	Sample Point Lat/Long and Comments
1	MW-1	1030	X				01	3				X	X			X	X		
2	MW-2	1140	X				02	3				X	X			X	X		
3	MW-3	1115	X				03	3				X	X			X	X		
4	MW-4	1050	X				04	3				X	X			X	X		
5																			
6																			
7																			
8																			
9																			
10																			

Sampler's Name:	Mike McNamara	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company:	Blaine Tech Service		7/9/03	1127		7/10/03	1127
Shipment Date:			7/10/03	1442		7/10/03	1442
Shipment Method:							
Shipment Tracking No:							

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

Custody Seals In Place Yes ___ No ___ Temperature Blank Yes ___ No ___ Cooler Temperature on Receipt 2 °F/C Trip Blank Yes ___ No ___

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

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: URS
REC. BY (PRINT): T.
WORKORDER: MMG6245

DATE RECD AT LAB: 7/10/03
TIME RECD AT LAB: 1442
DATE LOGGED IN: 7-11-03

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

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.
1. Custody Seal(s)	Present / (Absent) Intact / Broken*	01		MW-1	(3) Vom	HCl	L	7/9/03	
2. Chain-of-Custody	(Present) / Absent*	02		MW-2					
3. Traffic Reports or Packing List:	Present / (Absent)	03		MW-3					
4. Airbill:	Airbill / Sticker Present / (Absent)	04		MW-4					
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: 2°C Is temp 4 +/-2°C?	(Yes) / No**								

(Acceptance range for samples requiring thermal pres.)

**Exception (if any): Metals / DFF (Direct From Field) or Problem COC

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

7/10 03

Sample Receipt Log
Revision 3 (03/18/03)
Replaces Revision 2.3 (12/24/02)

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

07/30/03

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:	MMG0245
Global ID:	T0600100084
Lab Report Number:	MMG0245072820031830

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run	Sub
MMG02450728200 31830	MW-1	MMG024501	W	CS	8260FAB	SW5030B	07/09/03	07/21/03	07/22/03	3G21005	1	
MMG02450728200 31830	MW-2	MMG024502	W	CS	8260FAB	SW5030B	07/09/03	07/21/03	07/22/03	3G21005	1	
MMG02450728200 31830	MW-3	MMG024503	W	CS	8260FAB	SW5030B	07/09/03	07/21/03	07/22/03	3G21005	1	
MMG02450728200 31830	MW-4	MMG024504	W	CS	8260FAB	SW5030B	07/09/03	07/21/03	07/22/03	3G21005	1	
		3G21005BSD1	WQ	BD1	8260FAB	SW5030B	/ /	07/21/03	07/21/03	3G21005	1	
		3G21005BS1	WQ	BS1	8260FAB	SW5030B	/ /	07/21/03	07/21/03	3G21005	1	
		3G21005BS2	WQ	BS2	8260FAB	SW5030B	/ /	07/21/03	07/21/03	3G21005	1	
		3G21005BLK1	WQ	LB1	8260FAB	SW5030B	/ /	07/21/03	07/21/03	3G21005	1	
		3G21005MS1	W	MS1	8260FAB	SW5030B	/ /	07/21/03	07/22/03	3G21005	1	
		3G21005MSD1	W	SD1	8260FAB	SW5030B	/ /	07/21/03	07/22/03	3G21005	1	

EDFSAMP: Error Summary Log

07/30/03

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

EDFTEST: Error Summary Log

07/30/03

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

EDFRES: Error Summary Log

07/30/03

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	3G21005MS1	MS1	W	8260FAB	PR	07/22/03	1	DCA12D4
Warning: extra parameter	3G21005MS1	MS1	W	8260FAB	PR	07/22/03	1	GROC6C10
Warning: extra parameter	3G21005MSD1	SD1	W	8260FAB	PR	07/22/03	1	DCA12D4
Warning: extra parameter	3G21005MSD1	SD1	W	8260FAB	PR	07/22/03	1	GROC6C10
Warning: extra parameter	MMG024501	CS	W	8260FAB	PR	07/22/03	1	DCA12D4
Warning: extra parameter	MMG024501	CS	W	8260FAB	PR	07/22/03	1	GROC6C10
Warning: extra parameter	MMG024502	CS	W	8260FAB	PR	07/22/03	1	DCA12D4
Warning: extra parameter	MMG024502	CS	W	8260FAB	PR	07/22/03	1	GROC6C10
Warning: extra parameter	MMG024503	CS	W	8260FAB	PR	07/22/03	1	DCA12D4
Warning: extra parameter	MMG024503	CS	W	8260FAB	PR	07/22/03	1	GROC6C10
Warning: extra parameter	MMG024504	CS	W	8260FAB	PR	07/22/03	1	DCA12D4
Warning: extra parameter	MMG024504	CS	W	8260FAB	PR	07/22/03	1	GROC6C10
Warning: extra parameter	3G21005BLK1	LB1	WQ	8260FAB	PR	07/21/03	1	DCA12D4
Warning: extra parameter	3G21005BLK1	LB1	WQ	8260FAB	PR	07/21/03	1	GROC6C10
Warning: extra parameter	3G21005BS1	BS1	WQ	8260FAB	PR	07/21/03	1	DCA12D4
Warning: extra parameter	3G21005BS2	BS2	WQ	8260FAB	PR	07/21/03	1	DCA12D4
Warning: extra parameter	3G21005BS2	BS2	WQ	8260FAB	PR	07/21/03	1	GROC6C10
Warning: extra parameter	3G21005BSD1	BD1	WQ	8260FAB	PR	07/21/03	1	DCA12D4

EDFQC: Error Summary Log

07/30/03

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

EDFCL: Error Summary Log

07/30/03

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

AB2886 Electronic Delivery

Main Menu | View/Add Facilities | Upload EDD | Check EDD

Your EDF file has been succcessfully uploaded!

Confirmation Number: 5928431928
Date/Time of Submittal: 7/30/2003 2:06:28 PM
Facility Global ID: T0600100084
Facility Name: ARCO # 02162
***Submittal* Title:** 3rd Qtr 2003 Monitoring Report
Submittal Type: GW Monitoring Report

Logged in as URSCORP-OAKLAND (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.

AB2886 Electronic Delivery

Main Menu | View/Add Facilities | Upload EDD | Check EDD

UPLOADING A GEO_WELL FILE

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

Submittal Title:	**3rd Qtr 2003 Geowell for #2162**
Submittal Date/Time:	**7/30/2003 2:07:53 PM**
Confirmation Number:	**1801655411**

Back to Main Menu

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CONTACT SITE ADMINISTRATOR.