RO-190

URS

October 27, 2004

Mr. Robert Schultz
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

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

Dear Mr. Schultz:

On behalf of Atlantic Richfield Company (RM), a BP affiliated company, URS Corporation (URS) is submitting the *Third 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

Scott Robinson
Project Manager

Robert Horwath, R.G.
Portfolio Manager

REGISTERED GEOLOGIST
ROBERT M. HORWATH
NO. 5925
4/05
STATE OF CALIFORNIA

Enclosure: Third Quarter 2004 Groundwater Monitoring Report

cc: Mr. Paul Supple, Atlantic Richfield Company (RM), 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
1333 Broadway, Suite 800
Oakland, CA 94612-1924
Tel: 510.893.3600
Fax: 510.874.3268

REPORT

THIRD QUARTER 2004 GROUNDWATER MONITORING

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

Prepared for
RM

October 27, 2004

URS Corporation
1333 Broadway, Suite 800
Oakland, CA 94612

38486718

Date: October 27, 2004

Quarter: 3Q 04

RM QUARTERLY GROUNDWATER MONITORING REPORT

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

WORK PERFORMED THIS QUARTER (Third – 2004):

1. Performed third quarter groundwater monitoring event on July 12, 2004.
2. Prepared and submitted second quarter 2004 groundwater monitoring report.
3. Submitted site closure request on June 4, 2004.

WORK PROPOSED FOR NEXT QUARTER (Fourth – 2004):

1. Perform fourth quarter 2004 groundwater monitoring event.
2. Prepare and submit this third quarter 2004 groundwater monitoring report
3. Prepare and submit fourth quarter 2004 groundwater monitoring report.

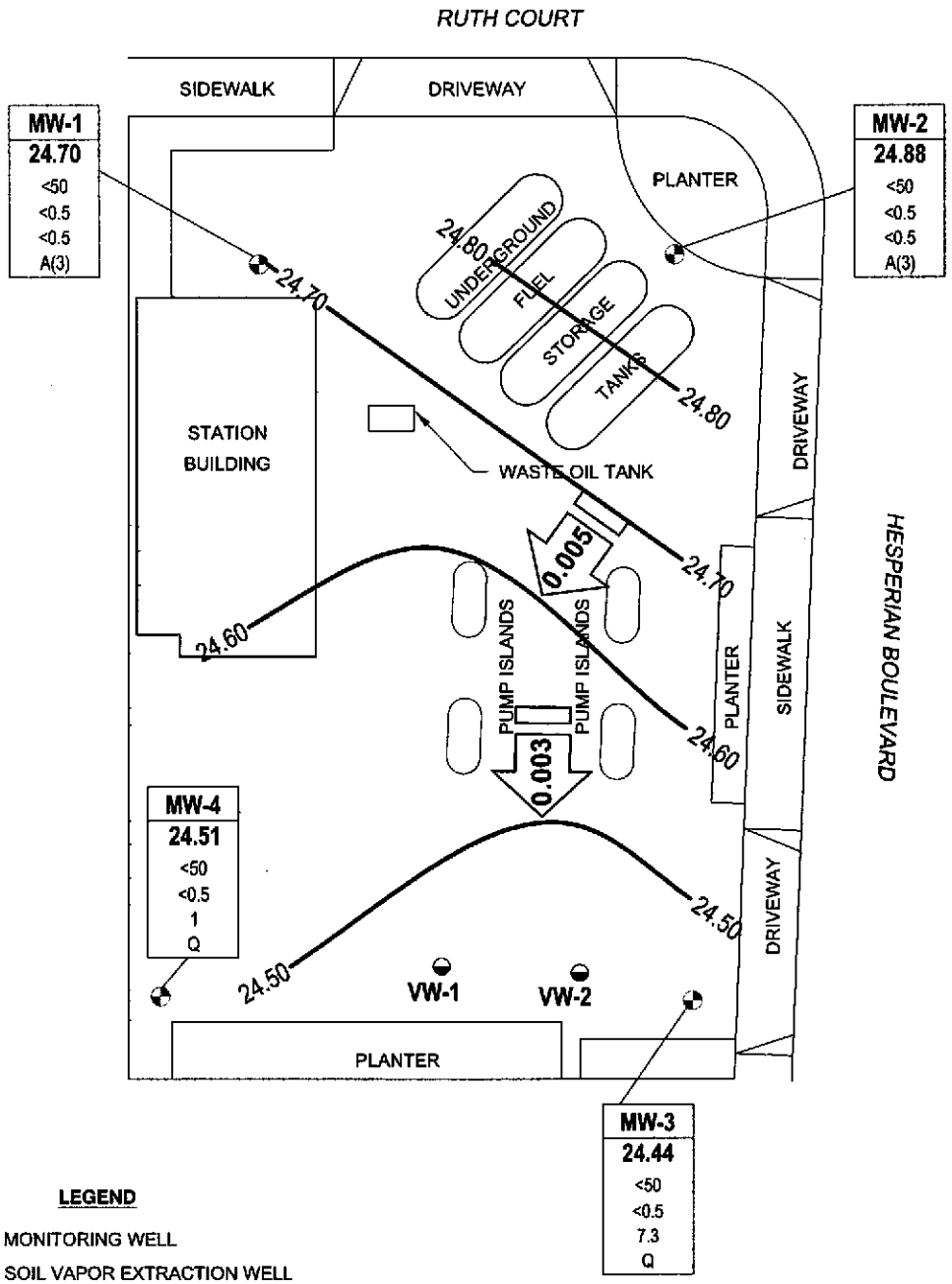
Current Phase of Project:	Groundwater monitoring/sampling
Frequency of Groundwater Sampling:	Quarterly: MW-3, MW-4 Annually (3rd Quarter): MW-1, MW-2
Frequency of Groundwater Monitoring:	Quarterly
Is Free Product (FP) Present On-Site:	No
Current Remediation Techniques:	Natural Attenuation
Approximate Depth to Groundwater:	8.09 ft (MW-2) to 9.46 ft (MW-4) feet
Groundwater Gradient (direction):	South and Southwest
Groundwater Gradient (magnitude):	0.003 feet per foot and 0.005 feet per foot

DISCUSSION:

Methyl tert-butyl ether (MTBE) was the only constituent of concern detected at or above the laboratory reporting limits this quarter. MTBE was detected at concentrations of 1.0 µg/L (MW-4) and 7.3 µg/L (MW-3). No other analytes were detected at or above the laboratory's reporting limits.

ATTACHMENTS:

- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map – July 12, 2004
- Table 1 – Groundwater Elevation and Analytical Data
- Table 2 – Fuel Additive 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 – Historical Groundwater Data
- Attachment D – Error Check Reports and EDF/Geowell Submittal Confirmations



LEGEND

- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- 24.50 — WATER TABLE CONTOUR (FT ABOVE MSL)
- ???? — 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)
- A/Q — 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. 38486718 Arco Service Station 2162 15135 Hesperian Boulevard San Leandro, California	GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP Third Quarter 2004 (July 12, 2004)	FIGURE 1

Table 1

Groundwater Elevation and Analytical Data

ARCO Station #2162

15135 Hesperian Blvd., San Leandro, CA

Well No.	Date	P/ NP	Notes	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Product Thickness (feet)	GWE (feet)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
MW-1	6/20/2000	--		31.19	8.00	15.90	8.33	--	22.86	<50	<0.5	0.8	<0.5	<1.0	<10	---	---
	9/29/2000	--		31.19	8.00	15.90	9.07	--	22.12	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	12/17/2000	--		31.19	8.00	15.90	8.69	--	22.50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	3/23/2001	--		31.19	8.00	15.90	8.19	--	23.00	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	6/20/2001	--		31.19	8.00	15.90	8.97	--	22.22	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	9/22/2001	--		31.19	8.00	15.90	9.56	--	21.63	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	12/28/2001	--		31.19	8.00	15.90	8.40	--	22.79	<50	<0.5	<0.5	<0.5	0.63	<2.5	---	---
	3/14/2002	--		31.19	8.00	15.90	8.05	--	23.14	<50	<0.5	<0.5	<0.5	<0.5	170	---	--
	4/18/2002	--		31.19	8.00	15.90	8.27	--	22.92	<50	<0.5	<0.5	<0.5	<0.5	--	---	--
	7/19/2002	NP		31.19	8.00	15.90	8.88	--	22.31	<50	<0.5	<0.5	<0.5	<0.5	11	1.0	8.2
	10/09/02	NP	a	31.19	8.00	15.90	---	--	---	---	--	---	--	---	--	---	---
	03/28/03	NP	a, c	31.19	8.00	15.90	---	--	---	---	---	---	---	---	--	---	---
	4/7/2003	NP		31.19	8.00	15.90	8.28	--	22.91	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	6.9
	7/9/2003	NP		31.19	8.00	15.90	8.62	--	22.57	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	7.2
	10/08/2003	--	e	31.13	8.00	--	9.19	--	21.94	--	--	--	--	--	--	--	--
	01/13/2004	--		31.13	8.00	--	8.35	--	22.78	--	--	--	--	--	--	--	--
	04/05/2004	--		33.70	8.00	--	7.29	--	26.41	--	--	--	--	--	--	--	--
	07/12/2004	NP		33.70	8.00	--	9.00	--	24.70	--	--	--	--	--	--	0.8	7.0
	10/19/2004	--		**33.70**	**8.00**	--	**9.47**	--	**24.23**	--	--	--	--	--	--	--	--
MW-2	6/20/2000	--		30.38	8.00	15.90	7.38	--	23.00	---	---	---	---	---	--	---	---
	9/29/2000	--		30.38	8.00	15.90	8.08	--	22.30	266	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	12/17/2000	--		30.38	8.00	15.90	7.80	--	22.58	175	<0.5	<0.5	0.659	<0.5	<2.5	---	---
	3/23/2001	--		30.38	8.00	15.90	7.23	--	23.15	351	<0.5	<0.5	0.912	<0.5	<2.5	---	---
	6/20/2001	--		30.38	8.00	15.90	7.98	--	22.40	360	<0.5	<0.5	0.74	<0.5	<2.5	---	---
	9/22/2001	--		30.38	8.00	15.90	8.55	--	21.83	190	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	12/28/2001	--		30.38	8.00	15.90	7.53	--	22.85	130	<0.5	0.93	<0.5	0.51	<2.5	---	---
	3/14/2002	--		30.38	8.00	15.90	7.17	--	23.21	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	4/18/2002	--		30.38	8.00	15.90	7.31	--	23.07	74	<0.5	<0.5	<0.5	<0.5	--	---	---
	7/19/2002	P		30.38	8.00	15.90	7.93	--	22.45	<50	<0.5	<0.5	<0.5	<0.5	<2.5	1.1	7.6
	10/9/2002	P		30.38	8.00	15.90	8.55	--	21.83	<50	<0.5	<0.5	<0.5	<0.5	<2.5	0.7	7.3
	03/28/03	P	c	30.38	8.00	15.90	7.30	--	23.08	<50	<0.50	0.83	<0.50	<0.50	<0.50	1.48	7.7
	4/7/2003	P		30.38	8.00	15.90	7.36	--	23.02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.4	7.0
	7/9/2003	P		30.38	8.00	15.90	7.71	--	22.67	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.5	7.6

Table 1

Groundwater Elevation and Analytical Data

ARCO Station #2162

15135 Hesperian Blvd., San Leandro, CA

Well No.	Date	P/ NP	Notes	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Product Thickness (feet)	GWE (feet)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
MW-2	10/08/2003	--		30.38	8.00	--	8.25	--	22.13	--	--	--	--	--	--	--	--
	01/13/2004	--		30.38	8.00	--	7.55	--	22.83	--	--	--	--	--	--	--	--
	04/05/2004	--		32.97	8.00	--	7.29	--	25.68	--	--	--	--	--	--	--	--
	07/12/2004	NP		32.97	8.00	--	8.09	--	24.88	--	--	--	--	--	--	1.4	7.2
	10/19/2004	**--**		**32.97**	**8.00**	**--**	**8.29**	**--**	**24.68**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-3	6/20/2000	--		30.3	9.00	14.80	7.75	--	22.55	---	---	---	---	---	--	---	---
	9/29/2000	--		30.3	9.00	14.80	8.46	--	21.84	<50	<0.5	<0.5	<0.5	<0.5	128	---	---
	12/17/2000	--		30.3	9.00	14.80	8.01	--	22.29	<50	<0.5	<0.5	<0.5	<0.5	46.7	---	---
	3/23/2001	--		30.3	9.00	14.80	7.70	--	22.60	<50	<0.5	<0.5	<0.5	<0.5	26.8	---	---
	6/20/2001	--		30.3	9.00	14.80	8.23	--	22.07	<50	<0.5	<0.5	<0.5	<0.5	30	---	---
	9/22/2001	--		30.3	9.00	14.80	8.89	--	21.41	<50	<0.5	<0.5	<0.5	<0.5	12	---	---
	12/28/2001	--		30.3	9.00	14.80	7.83	--	22.47	<50	<0.5	<0.5	<0.5	<0.5	6.2	---	---
	3/14/2002	--		30.3	9.00	14.80	7.48	--	22.82	<50	<0.5	<0.5	<0.5	<0.5	47	---	---
	4/18/2002	--		30.3	9.00	14.80	7.62	--	22.68	<50	<0.5	<0.5	<0.5	<0.5	--	---	---
	7/19/2002	P	b (TPH-g)	30.3	9.00	14.80	8.23	--	22.07	100	<1.0	<1.0	<1.0	<1.0	330	0.9	7.6
	10/9/2002	P		30.3	9.00	14.80	8.83	--	21.47	<50	<0.5	<0.5	<0.5	<0.5	61	0.5	7.4
	03/28/03	P	c	30.3	9.00	14.80	7.85	--	22.45	52	<0.50	1.2	<0.50	<0.50	45	1.42	7.6
	4/7/2003	P		30.3	9.00	14.80	7.71	--	22.59	56	<0.50	<0.50	<0.50	<0.50	56	1.1	6.8
	7/9/2003	P		30.3	9.00	14.80	8.00	--	22.30	<500	<5.0	<5.0	<5.0	<5.0	87	1.6	7.4
	10/08/2003	P		30.30	9.00	--	8.59	--	21.71	--	--	--	--	--	--	0.9	--
	01/15/2004	P		30.30	9.00	--	7.90	--	22.40	--	--	--	--	--	--	2.9	7.3
	04/05/2004	P		32.89	9.00	--	7.61	--	25.28	--	--	--	--	--	--	1.5	7.0
	07/12/2004	P		32.89	9.00	--	8.45	--	24.44	--	--	--	--	--	--	1.6	6.9
	10/19/2004	**P**		**32.89**	**9.00**	**--**	**8.95**	**--**	**23.94**	**--**	**--**	**--**	**--**	**--**	**--**	**1.**	**7.1**
MW-4	6/20/2000	--		30.39	8.00	17.50	8.87	--	21.52	---	---	---	---	---	--	---	---
	9/29/2000	--		30.39	8.00	17.50	9.61	--	20.78	<50	1.02	<0.5	<0.5	<0.5	12.2	---	---
	12/17/2000	--		30.39	8.00	17.50	9.17	--	21.22	<50	<0.5	<0.5	<0.5	<0.5	5.81	---	---
	3/23/2001	--		30.39	8.00	17.50	8.70	--	21.69	<50	<0.5	<0.5	<0.5	<0.5	3.04	---	---
	6/20/2001	--		30.39	8.00	17.50	9.51	--	20.88	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	9/22/2001	--		30.39	8.00	17.50	10.06	--	20.33	<50	<0.5	<0.5	<0.5	<0.5	5.2	---	---
	12/28/2001	--		30.39	8.00	17.50	8.86	--	21.53	<50	<0.5	<0.5	<0.5	<0.5	4.3	---	---
	3/14/2002	--		30.39	8.00	17.50	8.52	--	21.87	<50	<0.5	<0.5	<0.5	<0.5	5.1	---	---
	4/18/2002	--		30.39	8.00	17.50	8.76	--	21.63	<50	<0.5	<0.5	<0.5	<0.5	--	---	---

Table 1

Groundwater Elevation and Analytical Data

ARCO Station #2162

15135 Hesperian Blvd., San Leandro, CA

Well No.	Date	P/ NP	Notes	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Product Thickness (feet)	GWE (feet)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
MW-4	7/19/2002	NP		30.39	8.00	17.50	9.39	--	21.00	<50	<0.5	<0.5	<0.5	<0.5	30	1.8	7.8
	10/9/2002	NP		30.39	8.00	17.50	10.08	--	20.31	<50	<0.5	<0.5	<0.5	<0.5	28	1.0	8.0
	03/28/03	NP	c	30.39	8.00	17.50	8.88	--	21.51	<50	<0.50	1.3	<0.50	<0.50	4.4	0.98	7.2
	4/7/2003	NP		30.39	8.00	17.50	8.78	--	21.61	<50	<0.50	<0.50	<0.50	<0.50	14	1.1	7.0
	7/9/2003	NP		30.39	8.00	17.50	9.14	--	21.25	<50	<0.50	<0.50	<0.50	<0.50	1.8	1.6	7.4
	10/08/2003	NP		30.39	8.00	--	9.77	--	20.62	--	--	--	--	--	--	2.6	6.4
	01/15/2004	P		30.39	8.00	--	8.68	--	21.71	--	--	--	--	--	--	2.9	7.1
	04/05/2004	NP		33.97	--	--	8.77	--	25.20	--	--	--	--	--	--	1.2	7.0
	07/12/2004	NP		33.97	--	--	9.46	--	24.51	--	--	--	--	--	--	2.5	6.6
	10/19/2004	**NP**		**33.97**	--	--	**9.91**	--	**24.06**	--	--	--	--	--	--	**1.21**	**7.9**

Table 1

Groundwater Elevation and Analytical Data

ARCO Station #2162
15135 Hesperian Blvd., San Leandro, CA

ABBREVIATIONS:
GWE = Groundwater elevation
DTW = Depth to water
TPH = Total petroleum hydrocarbons
GRO = Gasoline range organics
MTBE = Methyl tertiary butyl ether
ug/L = Micrograms per liter equivalent to parts per billion (ppb)
mg/L = Milligrams per liter equivalent to parts per million (ppm)
< = Not detected at or above specified laboratory method reporting limit
MSL = Mean sea level
TOC = Top of casing
P = Purge
NP = No Purge
--- = 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 9/17/2003

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

Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. Total petroleum hydrocarbons as gasoline (TPHg) has been changed to gasoline range organics (GRO). The resulting data may be impacted by the potential of non-TPHg analytes within the requested fuel range resulting in a higher concentration being reported.

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

Well were surveyed to NAVD'88 datum by URS Corporation on February 23, 2004.

Table 1

Groundwater Elevation and Analytical Data

ARCO Station #2162

15135 Hesperian Blvd., San Leandro, CA

Well No.	Date	P/ NP	Notes	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Product Thickness (feet)	GWE (feet)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
MW-2	01/13/2004	--		30.38	8.00	--	7.55	--	22.83	--	--	--	--	--	--	--	--
	04/05/2004	--		32.97	8.00	--	7.29	--	25.68	--	--	--	--	--	--	--	--
	07/12/2004	**NP**		**32.97**	**8.00**	**--**	**8.09**	**--**	**24.88**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**1.4**	**7.2**
MW-3	6/20/2000	--		30.3	9.00	14.80	7.75	--	22.55	---	---	---	---	---	--	---	---
	9/29/2000	--		30.3	9.00	14.80	8.46	--	21.84	<50	<0.5	<0.5	<0.5	<0.5	128	---	---
	12/17/2000	--		30.3	9.00	14.80	8.01	--	22.29	<50	<0.5	<0.5	<0.5	<0.5	46.7	---	---
	3/23/2001	--		30.3	9.00	14.80	7.70	--	22.60	<50	<0.5	<0.5	<0.5	<0.5	26.8	---	---
	6/20/2001	--		30.3	9.00	14.80	8.23	--	22.07	<50	<0.5	<0.5	<0.5	<0.5	30	---	---
	9/22/2001	--		30.3	9.00	14.80	8.89	--	21.41	<50	<0.5	<0.5	<0.5	<0.5	12	---	---
	12/28/2001	--		30.3	9.00	14.80	7.83	--	22.47	<50	<0.5	<0.5	<0.5	<0.5	6.2	---	---
	3/14/2002	--		30.3	9.00	14.80	7.48	--	22.82	<50	<0.5	<0.5	<0.5	<0.5	47	---	---
	4/18/2002	--		30.3	9.00	14.80	7.62	--	22.68	<50	<0.5	<0.5	<0.5	<0.5	--	---	---
	7/19/2002	P	b (TPH-g)	30.3	9.00	14.80	8.23	--	22.07	100	<1.0	<1.0	<1.0	<1.0	330	0.9	7.6
	10/9/2002	P		30.3	9.00	14.80	8.83	--	21.47	<50	<0.5	<0.5	<0.5	<0.5	61	0.5	7.4
	03/28/03	P	c	30.3	9.00	14.80	7.85	--	22.45	52	<0.50	1.2	<0.50	<0.50	45	1.42	7.6
	4/7/2003	P		30.3	9.00	14.80	7.71	--	22.59	56	<0.50	<0.50	<0.50	<0.50	56	1.1	6.8
	7/9/2003	P		30.3	9.00	14.80	8.00	--	22.30	<500	<5.0	<5.0	<5.0	<5.0	87	1.6	7.4
	10/08/2003	P		30.30	9.00	--	8.59	--	21.71	<50	<0.50	<0.50	<0.50	<0.50	25	0.9	--
	01/15/2004	P		30.30	9.00	--	7.90	--	22.40	<50	<0.50	<0.50	<0.50	<0.50	9.8	2.9	7.3
	04/05/2004	P		32.89	9.00	--	7.61	--	25.28	<50	<0.50	<0.50	<0.50	<0.50	15	1.5	7.0
	07/12/2004	**P**		**32.89**	**9.00**	**--**	**8.45**	**--**	**24.44**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**7.3**	**1.6**	**6.9**
MW-4	6/20/2000	--		30.39	8.00	17.50	8.87	--	21.52	---	---	---	---	---	--	---	---
	9/29/2000	--		30.39	8.00	17.50	9.61	--	20.78	<50	1.02	<0.5	<0.5	<0.5	12.2	---	---
	12/17/2000	--		30.39	8.00	17.50	9.17	--	21.22	<50	<0.5	<0.5	<0.5	<0.5	5.81	---	---
	3/23/2001	--		30.39	8.00	17.50	8.70	--	21.69	<50	<0.5	<0.5	<0.5	<0.5	3.04	---	---
	6/20/2001	--		30.39	8.00	17.50	9.51	--	20.88	<50	<0.5	<0.5	<0.5	<0.5	<2.5	---	---
	9/22/2001	--		30.39	8.00	17.50	10.06	--	20.33	<50	<0.5	<0.5	<0.5	<0.5	5.2	---	---
	12/28/2001	--		30.39	8.00	17.50	8.86	--	21.53	<50	<0.5	<0.5	<0.5	<0.5	4.3	---	---
	3/14/2002	--		30.39	8.00	17.50	8.52	--	21.87	<50	<0.5	<0.5	<0.5	<0.5	5.1	---	---
	4/18/2002	--		30.39	8.00	17.50	8.76	--	21.63	<50	<0.5	<0.5	<0.5	<0.5	--	---	---
	7/19/2002	NP		30.39	8.00	17.50	9.39	--	21.00	<50	<0.5	<0.5	<0.5	<0.5	30	1.8	7.8
	10/9/2002	NP		30.39	8.00	17.50	10.08	--	20.31	<50	<0.5	<0.5	<0.5	<0.5	28	1.0	8.0
	03/28/03	NP	c	30.39	8.00	17.50	8.88	--	21.51	<50	<0.50	1.3	<0.50	<0.50	4.4	0.98	7.2

Table 1

Groundwater Elevation and Analytical Data

ARCO Station #2162

15135 Hesperian Blvd., San Leandro, CA

Well No.	Date	P/ NP	Notes	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Product Thickness (feet)	GWE (feet)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	pH
MW-4	4/7/2003	NP		30.39	8.00	17.50	8.78	–	21.61	<50	<0.50	<0.50	<0.50	<0.50	14	1.1	7.0
	7/9/2003	NP		30.39	8.00	17.50	9.14	–	21.25	<50	<0.50	<0.50	<0.50	<0.50	1.8	1.6	7.4
	10/08/2003	NP		30.39	8.00	--	9.77	–	20.62	<50	<0.50	<0.50	<0.50	<0.50	3.1	2.6	6.4
	01/15/2004	P		30.39	8.00	--	8.68	–	21.71	<50	1.4	0.84	<0.50	1.5	6.6	2.9	7.1
	04/05/2004	NP		33.97	--	--	8.77	–	25.20	<50	<0.50	<0.50	<0.50	<0.50	1.3	1.2	7.0
	07/12/2004	**NP**		**33.97**	--	--	**9.46**	--	**24.51**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**1.0**	**2.5**	**6.6**

Table 1

Groundwater Elevation and Analytical Data

ARCO Station #2162
15135 Hesperian Blvd., San Leandro, CA

ABBREVIATIONS:
GWE = Groundwater elevation
DTW = Depth to water
TPH = Total petroleum hydrocarbons
GRO = Gasoline range organics
MTBE = Methyl tertiary butyl ether
ug/L = Micrograms per liter equivalent to parts per billion (ppb)
mg/L = Milligrams per liter equivalent to parts per million (ppm)
< = Not detected at or above specified laboratory method reporting limit
MSL = Mean sea level
TOC = Top of casing
P = Purge
NP = No Purge
— = 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 9/17/2003

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

Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. Total petroleum hydrocarbons as gasoline (TPHg) has been changed to gasoline range organics (GRO). The resulting data may be impacted by the potential of non-TPHg analytes within the requested fuel range resulting in a higher concentration being reported.

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

Well were surveyed to NAVD'88 datum by URS Corporation on February 23, 2004.

Table 2

Fuel Additives Analytical Data

ARCO Station #2162

15135 Hesperian Blvd., San Leandro, CA

Well Number	Date Sampled	Ethanol (µg/L)	TBA (µg/L)	MtBE (µg/L)	DIPE (µg/L)	EtBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Comments
MW-1	3/28/2003	NS	NS	--	NS	NS	NS	NS	NS	
	4/7/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	7/9/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	07/12/2004	**<100**	**<20**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-2	3/28/2003	<100	<20	--	<0.50	<0.50	<0.50	<0.50	<0.50	
	4/7/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	7/9/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	07/12/2004	**<100**	**<20**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-3	3/28/2003	<100	<20	--	<0.50	<0.50	0.73	<0.50	<0.50	
	4/7/2003	<100	<20	56	<0.50	<0.50	0.72	<0.50	<0.50	
	7/9/2003	<1,000	<200	87	<5.0	<5.0	<5.0	<5.0	<5.0	
	10/08/2003	<100	<20	25	<0.50	<0.50	<0.50	<0.50	<0.50	
	01/15/2004	<100	<20	9.8	<0.50	<0.50	<0.50	<0.50	<0.50	
	04/05/2004	<100	<20	15	<0.50	<0.50	<0.50	<0.50	<0.50	
	07/12/2004	**<100**	**<20**	**7.3**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-4	3/28/2003	<100	<20	--	<0.50	<0.50	<0.50	<0.50	<0.50	
	4/7/2003	<100	<20	14	<0.50	<0.50	<0.50	<0.50	<0.50	
	7/9/2003	<100	<20	1.8	<0.50	<0.50	<0.50	<0.50	<0.50	
	10/08/2003	<100	<20	3.1	<0.50	<0.50	<0.50	<0.50	<0.50	
	01/15/2004	<100	<20	6.6	<0.50	<0.50	<0.50	<0.50	<0.50	
	04/05/2004	<100	<20	1.3	<0.50	<0.50	<0.50	<0.50	<0.50	
	07/12/2004	**<100**	**<20**	**1.0**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	

Table 2

Fuel Additives Analytical Data

ARCO Station #2162
15135 Hesperian Blvd., San Leandro, CA

Notes:
All fuel oxygenate compounds analyzed using EPA Method 8260B
< = Not detected at or above specified laboratory reporting limit
--- = 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
ug/L = Micrograms per liter

Table 3

Groundwater Gradient Data

ARCO Station #2162
15135 Hesperian Blvd., San Leandro, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
3/23/2001	Southwest	0.011
6/20/2001	Southwest	0.013
9/22/2001	Southwest	0.012
12/28/2001	Southwest	0.01
3/14/2002	Southwest	0.011
4/18/2002	Southwest	0.012
7/19/2002	Southwest	0.012
10/9/2002	Southwest	0.013
3/28/2003	Southwest	0.013
4/7/2003	Southwest	0.011
7/9/2003	Southwest	0.01
10/8/2003	Southwest	0.010
1/15/2004	Southwest	0.008
4/5/2004	South-Southwest	0.004
7/12/2004	**South and Southwest**	**0.003 and 0.005**

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

ATTACHMENT A

FIELD PROCEDURES AND FIELD DATA SHEETS

FIELD PROCEDURES

Sampling Procedures

The sampling procedure for each well consists first of measuring the water level and depth to bottom, and checking for the presence of free phase petroleum product (free product), using either an electronic indicator and a clear Teflon™ bailer or an oil-water interface probe. Wells not containing free product are purged approximately three casing volumes of water (or until dewatered) using a centrifugal pump, gas displacement pump, or bailer. Equipment and purging method used for the current sampling event is noted on the attached field data sheets. During purging, temperature, pH, and electrical conductivity are monitored to document that these parameters are stable prior to collecting samples. After purging, water levels are allowed to partially (approximately 80%) recover. Groundwater samples (both purge and no purge) are collected using a Teflon bailer, placed into appropriate Environmental Protection Agency- (EPA) approved containers, labeled, logged onto chain-of-custody records, and transported on ice to a California State-certified laboratory. Wells with free product are not sampled and free product is removed according to California Code of Regulation, Title 23, Div. 3, Chap. 16, Section 2655, UST Regulations.

WELL GAUGING DATA

Project # 040712-PC1 Date 7/12/04 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	NPD
MW-1	4					9.00	15.88		8
MW-2	4					8.09	15.97		8
MW-3	4					8.45	14.98		
MW-4	4					9.46	17.72	↓	8

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 040712-PC1	Station # ARCO2162
Sampler: RC	Date: 7/12/04
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 15.00	Depth to Water: 9.00
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	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Extraction Pump / Other: ____

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

Top of Screen: 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 No Purge (Specified Volumes) = ____ Gals. (Calculated Volume)

Time	Temp (°F)	pH	Conductivity (mS or (uS))	Gals. Removed	Observations
845	67.7	7.0	851		clear

Did well dewater? Yes No Gallons actually evacuated:

Sampling Time: 845 Sampling Date: 7/12/04

Sample I.D.: MW-1 Laboratory: Pace (Sequoia) Other____

Analyzed for: (GRO) (BTEX) MTBE DRO Other: See COC

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	0.8 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 040712-PC1	Station # ARCO 2162
Sampler: PC	Date: 7/12/04
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 15.97	Depth to Water: 8.09
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 / Positive Air Displacement / Electric Submersible / Extraction Pump / Other: ____

Sampling Method: Bailer / 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 NO Purge (Specified Volumes) = ____ Gals. (Calculated Volume)

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
855	68.4	7.2	699		clear

Did well dewater? Yes No		Gallons actually evacuated:	
Sampling Time: 855		Sampling Date: 7/12/04	
Sample I.D.: MW-2		Laboratory: Pace (Sequoia) Other ____	
Analyzed for: (GRO) (BTEX) MTBE DRO		Other: EDB COC	
D.O. (if req'd):	Pre-purge: ____ mg/L	Post-purge:	1.4 mg/L
O.R.P. (if req'd):	Pre-purge: ____ mV	Post-purge:	____ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 040712-PC1	Station # Arco 2162
Sampler: AC	Date: 7/12/04
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 14.98	Depth to Water: 8.45
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / (Electric Submersible) / Extraction Pump / Other: ____

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

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

4.2 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 12.6 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
826	71.2	6.8	772	4.2	clear
827	70.7	6.9	762	8.4	↓
829	70.6	6.9	763	12.6	↓

Did well dewater? Yes (No) Gallons actually evacuated: 12.6

Sampling Time: 838 Sampling Date: 7/12/04

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

Analyzed for: (TPH) BTEX MTBE DRO Other: See COC

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 #: 040712-SC1	Station # Arco 2162
Sampler: PC	Date: 7/12/04
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 17.72	Depth to Water: 9.46
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Purge Method: Bailer / Disposable Bailer / ~~Positive Air Displacement~~ / Electric Submersible / Extraction Pump / Other: ____

Sampling Method: Bailer / (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 (µS))	Gals. Removed	Observations
815	69.4	6.6	974		clear

Did well dewater? Yes No		Gallons actually evacuated:	
Sampling Time: 815		Sampling Date: 7/12/04	
Sample I.D.: MW-4		Laboratory: Pace (Sequoia) Other____	
Analyzed for: (GRO) ~~BTEX~~ MTBE DRO		Other: See COC	
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

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 #

15735 Hesperian Blvd, San Leandro
Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

12.6

added equip. rinse water 6

any other adjustments

TOTAL GALS. RECOVERED 18.6

loaded onto BTS vehicle # 52

BTS event # 040712-PC1

time 900

date 7/12/04

signature

* *

REC'D AT BTS

time 1400

date 7/12/04

unloaded by signature

ATTACHMENT B

LABORATORY PROCEDURES, CERTIFIED ANALYTICAL REPORTS, AND CHAIN-OF-CUSTODY RECORDS

LABORATORY PROCEDURES

Laboratory Procedures

The groundwater samples were analyzed for the presence of the chemicals mentioned in the chain of custody using standard EPA methods. The methods of analysis for the groundwater samples are documented in the certified analytical report. The certified analytical reports and chain-of-custody record are presented in this attachment. The analytical data provided by the laboratory approved by RM have been reviewed and verified by that laboratory.

Sequoia
Analytical

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

3 August, 2004

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

RE: ARCO #2162, San Leandro, CA
Work Order: MNG0284

Enclosed are the results of analyses for samples received by the laboratory on 07/13/04 15:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race
Senior Project Manager

CA ELAP Certificate #1210

Sequoia Analytical

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

URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MNG0284
1333 Broadway, Suite 800	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	08/03/04 15:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MNG0284-01	Water	07/12/04 08:45	07/13/04 15:00
MW-2	MNG0284-02	Water	07/12/04 08:55	07/13/04 15:00
MW-3	MNG0284-03	Water	07/12/04 08:38	07/13/04 15:00
MW-4	MNG0284-04	Water	07/12/04 08:15	07/13/04 15:00
TB-2162-07122004	MNG0284-05	Water	07/12/04 00:00	07/13/04 15:00

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies.

These samples were received with intact custody seals.

Sequoia Analytical

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

URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MNG0284
1333 Broadway, Suite 800	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	08/03/04 15:23

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MNG0284-01) Water Sampled: 07/12/04 08:45 Received: 07/13/04 15:00									
tert-Amyl methyl ether	ND	0.50	ug/l	1	4G21001	07/21/04	07/21/04	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	IC
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*88 %*	*78-129*		"	"	"	"	
MW-2 (MNG0284-02) Water Sampled: 07/12/04 08:55 Received: 07/13/04 15:00									
tert-Amyl methyl ether	ND	0.50	ug/l	1	4G21001	07/21/04	07/21/04	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	IC
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*90 %*	*78-129*		"	"	"	"	

Sequoia Analytical

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MNG0284
1333 Broadway, Suite 800	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	08/03/04 15:23

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (MNG0284-03) Water Sampled: 07/12/04 08:38 Received: 07/13/04 15:00									
tert-Amyl methyl ether	ND	0.50	ug/l	1	4G21001	07/21/04	07/21/04	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	IC
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**7.3**	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*92 %*	*78-129*		"	"	"	"	
MW-4 (MNG0284-04) Water Sampled: 07/12/04 08:15 Received: 07/13/04 15:00									
tert-Amyl methyl ether	ND	0.50	ug/l	1	4G21001	07/21/04	07/21/04	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	IC
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**1.0**	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*96 %*	*78-129*		"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MNG0284
1333 Broadway, Suite 800	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	08/03/04 15:23

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 4G21001 - EPA 5030B P/T										
Blank (4G21001-BLK1)				Prepared & Analyzed: 07/21/04						
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	"							
tert-Butyl alcohol	ND	20	"							
Di-isopropyl ether	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	100	"							IC
Ethyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C4-C12)	ND	50	"							
Surrogate: 1,2-Dichloroethane-d4	*2.26*		"	*2.50*		*90*	*78-129*			
Laboratory Control Sample (4G21001-BS1)				Prepared & Analyzed: 07/21/04						
tert-Amyl methyl ether	9.92	0.50	ug/l	10.0		99	56-140			
Benzene	9.84	0.50	"	10.0		98	78-124			
tert-Butyl alcohol	81.7	20	"	50.0		163	0-206			
Di-isopropyl ether	9.94	0.50	"	10.0		99	76-130			
1,2-Dibromoethane (EDB)	10.2	0.50	"	10.0		102	77-132			
1,2-Dichloroethane	10.2	0.50	"	10.0		102	77-136			
Ethanol	339	100	"	200		170	31-186			IC
Ethyl tert-butyl ether	9.90	0.50	"	10.0		99	61-141			
Ethylbenzene	10.1	0.50	"	10.0		101	84-117			
Methyl tert-butyl ether	8.82	0.50	"	10.0		88	63-137			
Toluene	9.73	0.50	"	10.0		97	78-129			
Xylenes (total)	31.3	0.50	"	30.0		104	83-125			
Surrogate: 1,2-Dichloroethane-d4	*2.23*		"	*2.50*		*89*	*78-129*			

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MNG0284
1333 Broadway, Suite 800	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	08/03/04 15:23

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 4G21001 - EPA 5030B P/T										
Laboratory Control Sample (4G21001-BS2)				Prepared & Analyzed: 07/21/04						
Benzene	5.22	0.50	ug/l	6.40		82	78-124			
Ethylbenzene	7.60	0.50	"	6.96		109	84-117			
Methyl tert-butyl ether	7.12	0.50	"	9.92		72	63-137			
Toluene	30.7	0.50	"	29.7		103	78-129			
Xylenes (total)	37.7	0.50	"	33.7		112	83-125			
Gasoline Range Organics (C4-C12)	414	50	"	440		94	70-124			
Surrogate: 1,2-Dichloroethane-d4	*2.26*		"	*2.50*		*90*	*78-129*			
Laboratory Control Sample Dup (4G21001-BSD1)				Prepared & Analyzed: 07/21/04						
tert-Amyl methyl ether	9.96	0.50	ug/l	10.0		100	56-140	0.4	12	
Benzene	9.78	0.50	"	10.0		98	78-124	0.6	12	
tert-Butyl alcohol	78.4	20	"	50.0		157	0-206	4	22	
Di-isopropyl ether	9.86	0.50	"	10.0		99	76-130	0.8	9	
1,2-Dibromoethane (EDB)	9.88	0.50	"	10.0		99	77-132	3	9	
1,2-Dichloroethane	10.3	0.50	"	10.0		103	77-136	1	13	
Ethanol	335	100	"	200		168	31-186	1	37	IC
Ethyl tert-butyl ether	9.92	0.50	"	10.0		99	61-141	0.2	9	
Ethylbenzene	9.89	0.50	"	10.0		99	84-117	2	10	
Methyl tert-butyl ether	8.90	0.50	"	10.0		89	63-137	0.9	13	
Toluene	9.45	0.50	"	10.0		94	78-129	3	10	
Xylenes (total)	30.3	0.50	"	30.0		101	83-125	3	11	
Surrogate: 1,2-Dichloroethane-d4	*2.32*		"	*2.50*		*93*	*78-129*			
Matrix Spike (4G21001-MS1)	**Source: MNG0320-04**			Prepared & Analyzed: 07/21/04						
Benzene	1110	50	ug/l	640	590	81	78-124			
Ethylbenzene	1860	50	"	696	1100	109	84-117			
Methyl tert-butyl ether	728	50	"	992	ND	73	63-137			
Toluene	4090	50	"	2970	880	108	78-129			
Xylenes (total)	7750	50	"	3370	3900	114	83-125			
Gasoline Range Organics (C4-C12)	70400	5000	"	44000	31000	90	70-124			LM
Surrogate: 1,2-Dichloroethane-d4	*2.44*		"	*2.50*		*98*	*78-129*			

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MNG0284
1333 Broadway, Suite 800	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	08/03/04 15:23

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 4G21001 - EPA 5030B P/T										
Matrix Spike Dup (4G21001-MSD1)	**Source: MNG0320-04**			Prepared & Analyzed: 07/21/04						
Benzene	1080	50	ug/l	640	590	77	78-124	3	12	LN
Ethylbenzene	1770	50	"	696	1100	96	84-117	5	10	
Methyl tert-butyl ether	733	50	"	992	ND	74	63-137	0.7	13	
Toluene	3840	50	"	2970	880	100	78-129	6	10	
Xylenes (total)	7350	50	"	3370	3900	102	83-125	5	11	
Gasoline Range Organics (C4-C12)	67000	5000	"	44000	31000	82	70-124	5	20	LM
Surrogate: 1,2-Dichloroethane-d4	*2.22*		"	*2.50*		*89*	*78-129*			

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URS Corporation [Arco]	Project: ARCO #2162, San Leandro, CA	MNG0284
1333 Broadway, Suite 800	Project Number: INTRIM-50319	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	08/03/04 15:23

Notes and Definitions

LN	MS and/or MSD below acceptance limits. See Blank Spike(LCS).
LM	MS and/or MSD above acceptance limits. See Blank Spike(LCS).
IC	Calib. verif. is within method limits but outside contract limits
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Chain of Custody Record

Project Name 2162 GWM
BP BU/GEM CO Portfolio Retail
BP Laboratory Contract Number: Atlantic Richfield Company 46000
MNC0289

Date: 7/2/04
Requested Due Date (mm/dd/yy) 14 day TAT

On-site Time: 745	Temp: 60°F
Off- site Time: 915	Temp: 60°F
Sky Conditions: cloudy	
Meteorological Events: none	
Wind Speed:	Direction:

Send To:	
Lab Name: SEQUOIA	
Lab Address: 885 Jarvis Dr.	
Morgan Hill, CA 95037	
Lab PM Lisa Race	
Tele/Fax: 408-776-9600 / 408-782-6308	
Report Type & QC Level: 1 Send EDF Reports	
BP/GEM Account 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:	1333 Broadway, Suite 800
	Oakland, CA 94612
e-mail EDD:	donna_cosper@URSCorp.com
Consultant/Contractor Project No.:	35-00002162.01 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

Lab Bottle Order No:

Item No.	Sample Description	Time	Matrix: Soil/Solid	Water/Liquid	Sediments	Air	Laboratory No.	No. of containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	GRO / BTEX (8015/8021 b/8260	DRO w/SGC (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-1	845		X			01	3				X	X				X	X	X	
2	MW-2	855		X			02	3				X	X				X	X	X	
3	MW-3	838		X			03	3				X	X				X	X	X	
4	MW-4	815		X			04	3				X	X				X	X	X	
5	TB-2162-07122004			X			05	2												on hold
6																				
7																				
8																				
9																				
10																				

Sampler's Name:	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: BlaineTech		7/1/04	9:15		7/1/04	9:15
Shipment Date:		7/1/04	15:00	Lawrence	7/1/04	15:00
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 X No Cooler Temperature on Receipt 6 °F/C Trip Blank Yes X No

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

BP COC Rev. 1 2/5/03

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: URS
REC. BY (PRINT) Lawanya
WORKORDER: MDG0284

DATE REC'D AT LAB: 07/13/04
TIME REC'D AT LAB: 15:00
DATE LOGGED IN: 7-14-04

For Regulatory Purposes?
DRINKING WATER YES / (NO)
WASTE WATER YES / (NO)
(For clients requiring preservation checks at receipt, document here ↓)

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERV ATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
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 chain-of-custody, traffic reports and sample labels agree? (Yes) / No*									
10. Sample received within hold time? (Yes) / No*									
11. Adequate sample volume received? (Yes) / No*									
12. Proper Preservatives used? (Yes) / No*									
13. (Trip Blank) / (Temp Blank Received)? (circle which, if yes) (Yes) / No*									
14. Temp Rec. at Lab: 6°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

07/13/04
A-L

*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

ERROR CHECK REPORTS AND EDF/GEOWELL SUBMITTAL CONFIRMATIONS

Error Summary Log

08/26/04

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:	MNG0284
Global ID:	T0600100084
Lab Report Number:	MNG0284080320041523

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run Sub
MNG0284080320041523	MW-1	MNG028401	W	CS	8260FA	SW5030B	07/12/04	07/21/04	07/21/04	4G21001	1
MNG0284080320041523	MW-2	MNG028402	W	CS	8260FA	SW5030B	07/12/04	07/21/04	07/21/04	4G21001	1
MNG0284080320041523	MW-3	MNG028403	W	CS	8260FA	SW5030B	07/12/04	07/21/04	07/21/04	4G21001	1
MNG0284080320041523	MW-4	MNG028404	W	CS	8260FA	SW5030B	07/12/04	07/21/04	07/21/04	4G21001	1
		MNG032004	W	NC	8260FA	SW5030B	/ /	07/21/04	07/21/04	4G21001	1
		4G21001BSD1	WQ	BD1	8260FA	SW5030B	/ /	07/21/04	07/21/04	4G21001	1
		4G21001BS1	WQ	BS1	8260FA	SW5030B	/ /	07/21/04	07/21/04	4G21001	1
		4G21001BS2	WQ	BS2	8260FA	SW5030B	/ /	07/21/04	07/21/04	4G21001	1
		4G21001BLK1	WQ	LB1	8260FA	SW5030B	/ /	07/21/04	07/21/04	4G21001	1
		4G21001MS1	W	MS1	8260FA	SW5030B	/ /	07/21/04	07/21/04	4G21001	1
		4G21001MSD1	W	SD1	8260FA	SW5030B	/ /	07/21/04	07/21/04	4G21001	1

EDFSAMP: Error Summary Log

08/26/04

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

EDFTEST: Error Summary Log

08/26/04

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

EDFRES: Error Summary Log

08/26/04

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	4G21001MS1	MS1	W	8260FA	PR	07/21/04	1	BZ
Warning: extra parameter	4G21001MS1	MS1	W	8260FA	PR	07/21/04	1	BZME
Warning: extra parameter	4G21001MS1	MS1	W	8260FA	PR	07/21/04	1	DCA12D4
Warning: extra parameter	4G21001MS1	MS1	W	8260FA	PR	07/21/04	1	EBZ
Warning: extra parameter	4G21001MS1	MS1	W	8260FA	PR	07/21/04	1	GROC4C12
Warning: extra parameter	4G21001MS1	MS1	W	8260FA	PR	07/21/04	1	XYLENES
Warning: extra parameter	4G21001MSD1	SD1	W	8260FA	PR	07/21/04	1	BZ
Warning: extra parameter	4G21001MSD1	SD1	W	8260FA	PR	07/21/04	1	BZME
Warning: extra parameter	4G21001MSD1	SD1	W	8260FA	PR	07/21/04	1	DCA12D4
Warning: extra parameter	4G21001MSD1	SD1	W	8260FA	PR	07/21/04	1	EBZ
Warning: extra parameter	4G21001MSD1	SD1	W	8260FA	PR	07/21/04	1	GROC4C12
Warning: extra parameter	4G21001MSD1	SD1	W	8260FA	PR	07/21/04	1	XYLENES
Warning: extra parameter	MNG028401	CS	W	8260FA	PR	07/21/04	1	BZ
Warning: extra parameter	MNG028401	CS	W	8260FA	PR	07/21/04	1	BZME
Warning: extra parameter	MNG028401	CS	W	8260FA	PR	07/21/04	1	DCA12D4
Warning: extra parameter	MNG028401	CS	W	8260FA	PR	07/21/04	1	EBZ
Warning: extra parameter	MNG028401	CS	W	8260FA	PR	07/21/04	1	GROC4C12
Warning: extra parameter	MNG028401	CS	W	8260FA	PR	07/21/04	1	XYLENES
Warning: extra parameter	MNG028402	CS	W	8260FA	PR	07/21/04	1	BZ
Warning: extra parameter	MNG028402	CS	W	8260FA	PR	07/21/04	1	BZME
Warning: extra parameter	MNG028402	CS	W	8260FA	PR	07/21/04	1	DCA12D4
Warning: extra parameter	MNG028402	CS	W	8260FA	PR	07/21/04	1	EBZ
Warning: extra parameter	MNG028402	CS	W	8260FA	PR	07/21/04	1	GROC4C12
Warning: extra parameter	MNG028402	CS	W	8260FA	PR	07/21/04	1	XYLENES
Warning: extra parameter	MNG028403	CS	W	8260FA	PR	07/21/04	1	BZ

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	MNG028403	CS	W	8260FA	PR	07/21/04	1	BZME
Warning: extra parameter	MNG028403	CS	W	8260FA	PR	07/21/04	1	DCA12D4
Warning: extra parameter	MNG028403	CS	W	8260FA	PR	07/21/04	1	EBZ
Warning: extra parameter	MNG028403	CS	W	8260FA	PR	07/21/04	1	GROC4C12
Warning: extra parameter	MNG028403	CS	W	8260FA	PR	07/21/04	1	XYLENES
Warning: extra parameter	MNG028404	CS	W	8260FA	PR	07/21/04	1	BZ
Warning: extra parameter	MNG028404	CS	W	8260FA	PR	07/21/04	1	BZME
Warning: extra parameter	MNG028404	CS	W	8260FA	PR	07/21/04	1	DCA12D4
Warning: extra parameter	MNG028404	CS	W	8260FA	PR	07/21/04	1	EBZ
Warning: extra parameter	MNG028404	CS	W	8260FA	PR	07/21/04	1	GROC4C12
Warning: extra parameter	MNG028404	CS	W	8260FA	PR	07/21/04	1	XYLENES
Warning: extra parameter	MNG032004	NC	W	8260FA	PR	07/21/04	1	BZ
Warning: extra parameter	MNG032004	NC	W	8260FA	PR	07/21/04	1	BZME
Warning: extra parameter	MNG032004	NC	W	8260FA	PR	07/21/04	1	DCA12D4
Warning: extra parameter	MNG032004	NC	W	8260FA	PR	07/21/04	1	EBZ
Warning: extra parameter	MNG032004	NC	W	8260FA	PR	07/21/04	1	GROC4C12
Warning: extra parameter	MNG032004	NC	W	8260FA	PR	07/21/04	1	XYLENES
Warning: extra parameter	4G21001BLK1	LB1	WQ	8260FA	PR	07/21/04	1	BZ
Warning: extra parameter	4G21001BLK1	LB1	WQ	8260FA	PR	07/21/04	1	BZME
Warning: extra parameter	4G21001BLK1	LB1	WQ	8260FA	PR	07/21/04	1	DCA12D4
Warning: extra parameter	4G21001BLK1	LB1	WQ	8260FA	PR	07/21/04	1	EBZ
Warning: extra parameter	4G21001BLK1	LB1	WQ	8260FA	PR	07/21/04	1	GROC4C12
Warning: extra parameter	4G21001BLK1	LB1	WQ	8260FA	PR	07/21/04	1	XYLENES
Warning: extra parameter	4G21001BS1	BS1	WQ	8260FA	PR	07/21/04	1	BZ
Warning: extra parameter	4G21001BS1	BS1	WQ	8260FA	PR	07/21/04	1	BZME
Warning: extra parameter	4G21001BS1	BS1	WQ	8260FA	PR	07/21/04	1	DCA12D4
Warning: extra parameter	4G21001BS1	BS1	WQ	8260FA	PR	07/21/04	1	EBZ
Warning: extra parameter	4G21001BS1	BS1	WQ	8260FA	PR	07/21/04	1	XYLENES
Warning: extra parameter	4G21001BS2	BS2	WQ	8260FA	PR	07/21/04	1	BZ

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	4G21001BS2	BS2	WQ	8260FA	PR	07/21/04	1	BZME
Warning: extra parameter	4G21001BS2	BS2	WQ	8260FA	PR	07/21/04	1	DCA12D4
Warning: extra parameter	4G21001BS2	BS2	WQ	8260FA	PR	07/21/04	1	EBZ
Warning: extra parameter	4G21001BS2	BS2	WQ	8260FA	PR	07/21/04	1	GROC4C12
Warning: extra parameter	4G21001BS2	BS2	WQ	8260FA	PR	07/21/04	1	XYLENES
Warning: extra parameter	4G21001BSD1	BD1	WQ	8260FA	PR	07/21/04	1	BZ
Warning: extra parameter	4G21001BSD1	BD1	WQ	8260FA	PR	07/21/04	1	BZME
Warning: extra parameter	4G21001BSD1	BD1	WQ	8260FA	PR	07/21/04	1	DCA12D4
Warning: extra parameter	4G21001BSD1	BD1	WQ	8260FA	PR	07/21/04	1	EBZ
Warning: extra parameter	4G21001BSD1	BD1	WQ	8260FA	PR	07/21/04	1	XYLENES
Error: LNOTE has an invalid note	4G21001MS1	MS1	W	8260FA	PR	07/21/04	1	GROC4C12
Error: LNOTE has an invalid note	4G21001MSD1	SD1	W	8260FA	PR	07/21/04	1	BZ
Error: LNOTE has an invalid note	4G21001MSD1	SD1	W	8260FA	PR	07/21/04	1	GROC4C12

EDFQC: Error Summary Log

08/26/04

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

EDFCL: Error Summary Log

08/26/04

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

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Confirmation Number: 2658168971
Date/Time of Submittal: 8/26/2004 1:49:56 PM
Facility Global ID: T0600100084
Facility Name: ARCO # 02162
Submittal Title: 3Q04 GW Data for Site #2162
Submittal Type: GW Monitoring Report

Click here to view the detections report for this upload.

ARCO # 02162
15135 HESPERIAN BLVD
SAN LEANDRO, CA 94578

Regional Board - Case #: 01-0091
SAN FRANCISCO BAY RWQCB (REGION 2) - **(RDB)**
Local Agency (lead agency) - Case #: 1259
ALAMEDA COUNTY LOP - **(RWS)**

CONF #	TITLE	QUARTER
2658168971	3Q04 GW Data for Site #2162	Q3 2004

SUBMITTED BY	SUBMIT DATE	STATUS
Srijesh Thapa	8/26/2004	PENDING REVIEW

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	4
# FIELD POINTS WITH DETECTIONS	2
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	0
SAMPLE MATRIX TYPES	WATER

METHOD QA/QC REPORT

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

QA/QC FOR 8021/8260 SERIES SAMPLES

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

WATER SAMPLES FOR 8021/8260 SERIES

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

SOIL SAMPLES FOR 8021/8260 SERIES

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

FIELD QC SAMPLES

SAMPLE	COLLECTED	DETECTIONS > REPDL
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	0

Logged in as URSCORP-OAKLAND (CONTRACTOR) CONTACT SITE ADMINISTRATOR.

Electronic Submittal Information

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UPLOADING A GEO_WELL FILE

Processing is complete. No errors were found!
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Submittal Title:	**3rd Quarter 2004 Geowell Data for Site #2162**
Submittal Date/Time:	**8/26/2004 1:51:04 PM**
Confirmation Number:	**6658024430**

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