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June 13, 2003

Mr. ~~Barney Chan~~ **Don**  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

Alameda County  
JUN 18 2003  
Environmental Health

**Re: Second Quarter 2003 Status Report  
ARCO Service Station # 0276  
10600 MacArthur Boulevard  
Oakland, California  
URS Project #38486084**

Dear Mr. Chan:

On behalf of Atlantic Richfield Company (ARCO-an affiliated company of the Group Environmental Management Company), URS Corporation (URS) is submitting the *Second Quarter 2003 Status Report* for the ARCO Service Station #0276, located at 10600 MacArthur Boulevard, Oakland, California.

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

Sincerely,

**URS CORPORATION**

Scott Robinson  
Project Manager

Enclosure: Second Quarter 2003 Status Report

cc: Mr. Paul Supple, ARCO, PO Box 6549 Moraga, CA 94570

Date: June 13, 2003  
Quarter: 2Q 03

**ATLANTIC RICHFIELD COMPANY QUARTERLY STATUS REPORT**

Facility No.: 0276 Address: 10600 MacArthur Boulevard, California  
Atlantic Richfield Co. Environmental Engineer: Paul Supple  
Consulting Co./Contact Person: URS Corporation / Scott Robinson / (510) 874-3280  
Consultant Project No.: 38486084  
Primary Agency: Alameda County Health Care Services Agency

**WORK PERFORMED THIS QUARTER (Second – 2003):**

1. No environmental work was conducted at the site during the second quarter 2003.
2. Prepared and submitted second quarter 2003 status report.

**WORK PROPOSED FOR NEXT QUARTER (Third – 2003):**

1. No environmental work is expected for the site during the third quarter 2003.
2. Prepare and submit third quarter 2003 status report.



Alameda County

MAR 09 2004

Environmental Health

March 5, 2004

Mr. Don Hwang  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Second Floor, Suite 250  
Alameda, CA 94502

**Re: First Quarter 2004 Groundwater Monitoring Report  
ARCO Service Station #0276  
10600 MacArthur Boulevard  
Oakland, California  
URS Project #38486701**

Dear Mr. Hwang:

On behalf of Atlantic Richfield Company (ARCO – a BP affiliated company), URS Corporation (URS) is submitting the *First Quarter 2004 Groundwater Monitoring Report* for ARCO Service Station #0276, located at 10600 MacArthur Boulevard, Oakland, California.

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

Sincerely,

**URS CORPORATION**

Scott Robinson  
Project Manager

James F. Durkin, C.Hg.  
Senior Geologist



Enclosure: First Quarter 2004 Groundwater Monitoring Report

cc: Mr. Paul Supple, ARCO, (electronic copy uploaded to ENFOS)



Atlantic Richfield Company  
(a BP affiliated company)

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



Alameda County

MAR 08 2004

Environmental Health

March 5, 2004

RE: First Quarter 2004 Groundwater Monitoring Report  
ARCO Service Station #0276  
10600 MacArthur Boulevard  
Oakland, California  
URS Project #38486701

"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

**R E P O R T**

Alameda County

MAR 08 2004

Environmental Health

**FIRST QUARTER 2004  
GROUNDWATER MONITORING**

ARCO SERVICE STATION #0276  
10600 MACARTHUR BOULEVARD  
OAKLAND, CALIFORNIA

*Prepared for*  
Atlantic Richfield Company

March 5, 2004

**URS**

URS Corporation  
1333 Broadway, Suite 800  
Oakland, California 94612

38486701

**ATTACHMENTS:**

- Figure 1 - Groundwater Elevation Contour and Analytical Summary Map -- February 3, 2004
- Table 1 - Groundwater Elevation and Analytical Data
- Table 2 - Fuel Oxygenates 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

Date: March 5, 2004

Quarter: 1Q 04

### ATLANTIC RICHFIELD COMPANY ANNUAL GROUNDWATER MONITORING REPORT

Facility No.: 0276 Address: 10600 MacArthur Boulevard, Oakland, California  
ARCO Environmental Business Manager: Paul Supple  
Consulting Co./Contact Person: URS Corporation / Scott Robinson  
Consultant Project No.: 38486701  
Primary Agency: Alameda County Health Care Services Agency (ACHCSA)

#### WORK PERFORMED THIS QUARTER (First – 2004):

1. Performed first quarter 2004 groundwater monitoring event on February 3, 2004.
2. Prepared first quarter 2004 groundwater monitoring report.

#### WORK PROPOSED FOR NEXT QUARTER (First – 2004):

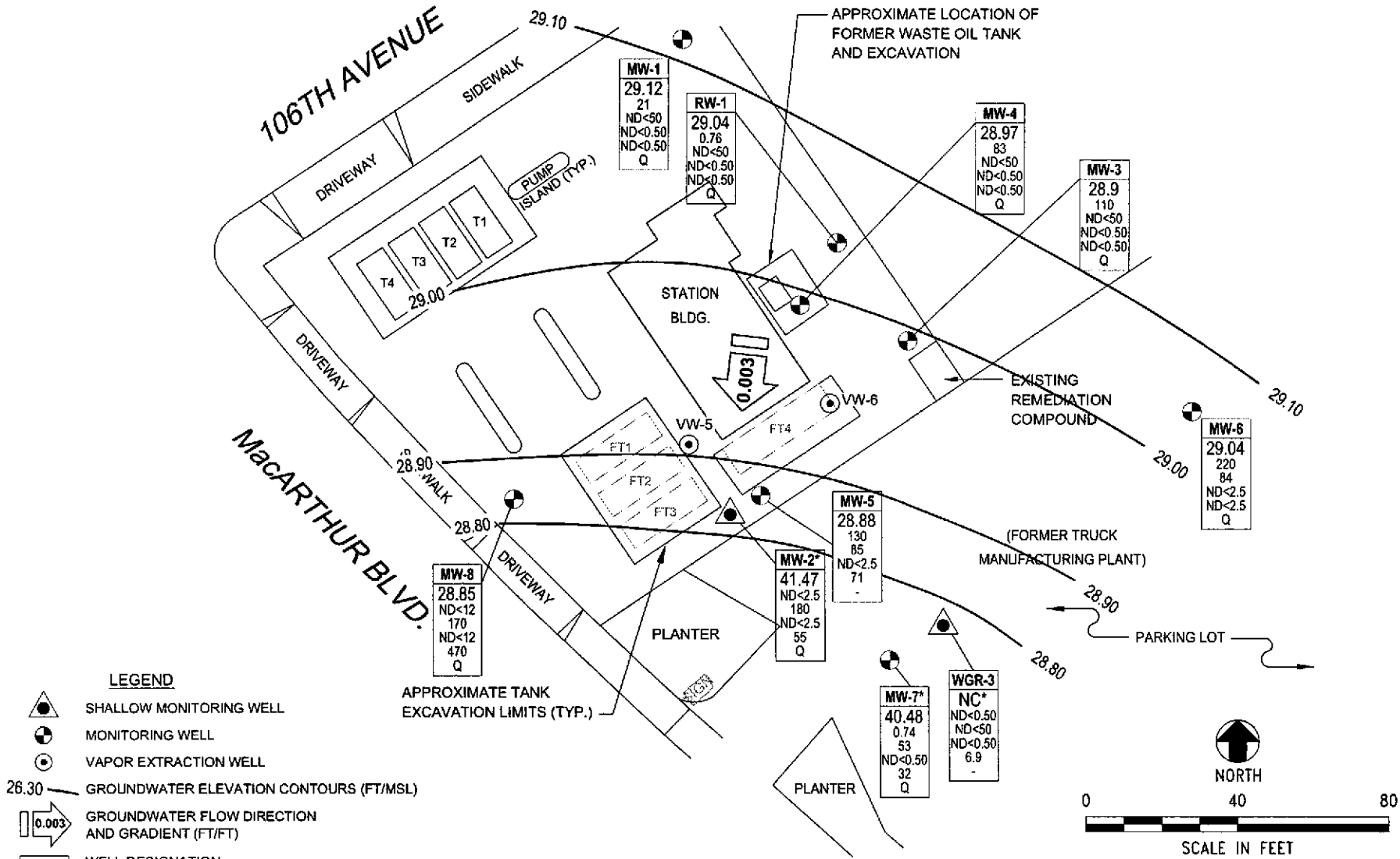
1. Perform second quarter 2004 groundwater monitoring event.
2. Prepare and submit second quarter 2004 groundwater monitoring report.

Current Phase of Project: GW monitoring/sampling  
Frequency of Groundwater Sampling: Quarterly: Wells MW-1 through MW-8, RW-1 and WGR-3.  
Frequency of Groundwater Monitoring: Quarterly (beginning 3Q03)  
Is Free Product (FP) Present On-Site: No  
Current Remediation Techniques: Natural Attenuation (ORC sock in MW-2)  
Approximate Depth to Groundwater: 13.63 (MW-2) to 32.17 (MW-6) feet  
Groundwater Gradient (direction): South-Southwest  
Groundwater Gradient (magnitude): 0.003 feet per foot

#### DISCUSSION:

Due to a recent new release discovered during line up-grade work, this Site is being monitored quarterly since September 2003 (3Q 2003) for GRO/TPH-g, BTEX, fuel oxygenates, 1,2-DCA, and EDB. This site was previously sampled on an annual basis for PCE only.

During this quarter, all groundwater samples were analyzed by EPA method 8015B for GRO and EPA method 8260B for BTEX, fuel oxygenates, ethanol, and PCE. GRO was detected above the laboratory reporting limit in five of the ten wells sampled at concentrations ranging from 53 µg/L (MW-7) to 180 µg/L (MW-2). MTBE was detected above laboratory reporting limits in five wells, at concentrations ranging from 7 µg/L (WGR-3) to 470 µg/L (MW-8). TAME was detected above the laboratory reporting limit in three wells, at concentrations ranging from 2 µg/L (WGR-3) to 16 µg/L (MW-2). PCE was detected in seven wells at concentrations ranging from 0.74 µg/L (MW-7) to 220 µg/L (MW-6).



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

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

	Project No. 38486701 ARCO Service Station 0276 10600 MacArthur Boulevard Oakland, California	<b>GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP</b> First Quarter 2004 (February 3, 2004)	FIGURE <b>1</b>
	URS		



**Table 1**  
**Groundwater Elevation and Analytical Data**

ARCO Service Station #0276  
10600 MacArthur Boulevard  
Oakland, California

Well Number	Date Sampled	Purged/Not Purged (P/NP)	TOC Elevation (ft. MSL)	Top of Screen (ft., bgs)	Bottom of Casing (ft. bgs)	Depth to Water (ft. TOC)	Groundwater Elevation (ft. MSL)	GRO/TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO <sup>d</sup> (mg/L)	pH <sup>d</sup>			
MW-1	12/17/00		55.92	19.00	38.80	29.16	26.76	5.09	ND	ND	ND	NA	NA	NA	NA			
	12/28/01					27.38	28.54	8.8	ND	ND	ND	NA	NA	NA	NA	NA	NA	
	11/27/02	NP				29.45	26.47	4.2	NA	NA	NA	NA	NA	NA	NA	2.3	6.7	
	07/22/03	NP				27.58	28.34	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.1	6.7
	11/07/03	NP				30.42	25.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.1	6.6
	02/03/04	NP				26.80	29.12	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.5	6.8
MW-2	12/17/00		55.10	15.00	27.60	15.72	39.38	NS	NS	NS	NS	NS	NS	NS	NS			
	12/28/01					27.38	27.72	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	11/27/02					16.35	38.75	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	07/22/03					16.20	38.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	11/07/03	P				18.22	36.88	990	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	110	110	110	1.8	6.7
	02/03/04	P				13.63	41.47	180	ND<2.5	ND<2.5	2.6	4.1	55	1.8	1.8	6.6		
MW-3	12/17/00		56.55	22.00	38.60	29.78	26.77	158	ND	ND	ND	NA	NA	NA	NA			
	12/28/01					27.95	28.60	310	20	1.5	13	NA	NA	NA	NA	NA		
	11/27/02	NP				30.10	26.45	110	NA	NA	NA	NA	NA	NA	NA	2.0	7.2	
	07/22/03	NP				28.32	28.23	120	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.2	5.9
	11/07/03	NP				30.86	25.69	70	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.8	6.5
	02/03/04	NP				27.65	28.90	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.1	6.7
MW-4	12/17/00		55.98	25.00	48.30	29.22	26.76	225	ND	ND	ND	NA	NA	NA	NA			
	12/28/01					27.37	28.61	160	1.2	ND	ND	NA	NA	NA	NA	NA		
	11/27/02	NP				29.55	26.43	95	NA	NA	NA	NA	NA	NA	NA	3.7	6.7	
	07/22/03	NP				27.73	28.25	130	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.9	6.6
	11/07/03	NP				30.41	25.57	59	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.6	6.5
	02/03/04	NP				27.01	28.97	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.2	7.1
MW-5	12/17/00		55.43	32.20	47.00	28.82	26.61	1,040	ND	ND	ND	NA	NA	NA	NA			
	12/28/01					26.91	28.52	3,200	190	36	140	1.9 <sup>a</sup> , 3.2 <sup>b</sup> , 2.0 <sup>c</sup>	NA	NA	NA	NA		
	11/27/02	P				29.15	26.28	110	NA	NA	NA	NA	NA	NA	NA	1.4	6.4	
	07/22/03	P				27.43	28.00	160	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	110	110	110	1.5	6.6
	11/07/03	P				29.99	25.44	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	120	120	120	0.6	6.2
	02/03/04	P				26.55	28.88	85	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	71	71	71	1.7	6.7
MW-6	12/17/00		61.21	37.00	54.10	34.61	26.60	NS	NS	NS	NS	NS	NS	NS	NS			
	12/28/01					32.80	28.41	NS	NS	NS	NS	NS	NS	NS	NS	NS		
	11/27/02					35.00	26.21	NS	NS	NS	NS	NS	NS	NS	NS	NS		
	07/22/03					33.17	28.04	NS	NS	NS	NS	NS	NS	NS	NS	NS		
	11/7/2003 <sup>e,f</sup>	P				35.70	25.51	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	2.7	6.9
	02/03/04	P				32.17	29.04	84	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	1.9	7.0

**Table 1**  
**Groundwater Elevation and Analytical Data**

ARCO Service Station #0276  
10600 MacArthur Boulevard  
Oakland, California

Well Number	Date Sampled	Purged/Not Purged (P/NP)	TOC Elevation (ft, MSL)	Top of Screen (ft, bgs)	Bottom of Casing (ft, bgs)	Depth to Water (ft, TOC)	Groundwater Elevation (ft, MSL)	GRO/TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO <sup>d</sup> (mg/L)	pH <sup>d</sup>		
MW-7	12/17/00		58.22	17.50	55.00	19.94	38.28	NS	NS	NS	NS	NS	NS	NS	NS		
	12/28/01					17.29	40.93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/27/02					21.30	36.92	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	07/22/03					21.36	36.86	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/7/2003 <sup>c</sup>	P				23.76	34.46	3200	15	ND<2.5	130	11	53	2.2	6.8		
	02/03/04	P				17.74	40.48	53	ND<0.50	ND<0.50	ND<0.50	0.54	32	1.9	6.4		
MW-8	12/17/00		53.65	29.00	47.70	27.02	26.63	NS	NS	NS	NS	NS	NS	NS	NS		
	12/28/01					24.99	28.66	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	11/27/02					27.45	26.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	07/22/03					25.74	27.91	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	11/07/03	P				28.27	25.38	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	440	2.6	6.5		
	02/03/04	P				24.8	28.85	170 <sup>e</sup>	ND<12	ND<12	ND<12	ND<12	470	3.0	6.7		
RW-1	12/17/00		56.32	NR	48.90	29.57	26.75	NS	NS	NS	NS	NS	NS	NS	NS		
	12/28/01					27.64	28.68	NS	NS	NS	NS	NS	NS	NS	NS		
	11/27/02					29.93	26.39	NS	NS	NS	NS	NS	NS	NS	NS		
	07/22/03					28.09	28.23	NS	NS	NS	NS	NS	NS	NS	NS		
	11/07/03	P				30.64	25.68	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.1	7.0	
	02/03/04	P				27.28	29.04	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.7	7.1	
WGR-3	12/17/00		NR	22.00	27.50	19.21	NR	NS	NS	NS	NS	NS	NS	NS	NS		
	12/28/01					DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY		
	11/27/02					NR	NR	NS	NS	NS	NS	NS	NS	NS	NS		
	07/22/03					NR	NR	NS	NS	NS	NS	NS	NS	NS	NS		
	11/07/03	P				NR	NR	53	ND<0.50	ND<0.50	ND<0.50	ND<0.50	45	0.9	6.4		
	02/03/04	P				NR	NR	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.9	2.6	6.6		

**Table 1  
Groundwater Elevation and Analytical Data**

ARCO Service Station #0276  
10600 MacArthur Boulevard  
Oakland, California

Well Number	Date Sampled	Purged/Not Purged (P/NP)	TOC Elevation (ft, MSL)	Top of Screen (ft, bgs)	Bottom of Casing (ft, bgs)	Depth to Water (ft, TOC)	Groundwater Elevation (ft, MSL)	GRO/TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO <sup>d</sup> (mg/L)	pH <sup>d</sup>
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Note Groundwater samples were analyzed by EPA method 8015B for GRO and EPA method 8260B for BTEX, fuel oxygenates, ethanol, and PCE

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

- bgs = below ground surface
- DIPE = Di-isopropyl ether
- DO = Dissolved Oxygen
- ETBE = Ethyl tert-butyl ether
- ft. = feet
- GRO = Gasoline Range Organics
- mg/L = Milligrams per liter
- MSL = relative to mean sea level
- MTBE = Methyl tert-butyl ether
- ND< = None detected
- NP = Not purged
- NR = Not reported; data not available or not measurable
- NS = Not sampled
- P = Purged
- TAME = Tert-amyl methyl ether
- TBA = Tert-butyl alcohol
- TOC = Top of Casing
- TPG = Total Petroleum Hydrocarbons
- µg/L = Micrograms per liter
- a = 1,1 DCE
- b = 1,2 DCA
- c = Chlorobenzene
- d = pH and DO levels are field measurements
- e = sample was originally analyzed within the EPA recommended hold time. Re-analysis for confirmation or dilution was performed past the recommended hold time. Results may still be used for intended purpose.
- f = The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits
- g = Discrete peak @ C5

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

Table 2  
Fuel Oxygenates Analytical Data

ARCO Service Station #0276  
10600 MacArthur Boulevard  
Oakland, California

Well Number	Date Sampled	Ethanol (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	PCE (µg/L)	TCE (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	trans-1,2-DCE (µg/L)	cis-1,2-DCE (µg/L)	VOCs (µg/L)
MW-1	12/17/00	NA	NA	NA	NA	NA	NA	5.09	ND	NA	NA	ND	ND	NA
	12/28/01	NA	NA	NA	NA	NA	NA	8.8	ND	NA	NA	ND	ND	NA
	11/27/02	NA	NA	NA	NA	NA	NA	4.2	NA	NA	NA	NA	NA	NA
	07/22/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.0	NA	ND<0.50	ND<0.50	NA	NA	NA
	11/07/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.0	NA	NA	NA	NA	NA	NA
	02/03/04	ND<100	ND<20	ND<0.50	ND<1.0	ND<1.0	ND<1.0	21	NA	ND<0.50	ND<0.50	NA	NA	NA
MW-2	11/07/03	ND<1000	ND<200	110	ND<5.0	ND<5.0	28	ND<5.0	NA	NA	NA	NA	NA	NA
	02/03/04	ND<500	ND<100	55	ND<5.0	ND<5.0	16	ND<2.5	NA	ND<2.5	ND<2.5	NA	NA	NA
MW-3	12/17/00	NA	NA	NA	NA	NA	NA	158	ND	NA	NA	ND	ND	NA
	12/28/01	NA	NA	NA	NA	NA	NA	310	20	NA	NA	1.5	13	NA
	11/27/02	NA	NA	NA	NA	NA	NA	110	NA	NA	NA	NA	NA	NA
	07/22/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	80	NA	ND<0.50	ND<0.50	NA	NA	NA
	11/07/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	80	NA	NA	NA	NA	NA	NA
	02/03/04	ND<100	ND<20	ND<0.50	ND<1.0	ND<1.0	ND<1.0	110	NA	ND<0.50	ND<0.50	NA	NA	NA
MW-4	12/17/00	NA	NA	NA	NA	NA	NA	225	ND	NA	NA	ND	ND	NA
	12/28/01	NA	NA	NA	NA	NA	NA	160	1.2	NA	NA	ND	ND	NA
	11/27/02	NA	NA	NA	NA	NA	NA	95	NA	NA	NA	NA	NA	NA
	07/22/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	94	NA	ND<0.50	ND<0.50	NA	NA	NA
	11/07/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	68	NA	NA	NA	NA	NA	NA
	02/03/04	ND<100	ND<20	ND<0.50	ND<1.0	ND<1.0	ND<1.0	83	NA	ND<0.50	ND<0.50	NA	NA	NA
MW-5	12/17/00	NA	NA	NA	NA	NA	NA	1,040	ND	NA	NA	ND	ND	NA
	12/28/01	NA	NA	NA	NA	NA	NA	3,200	190	NA	NA	36	140	1.9 <sup>a</sup> , 3.2 <sup>b</sup> , 2.0 <sup>c</sup>
	11/27/02	NA	NA	NA	NA	NA	NA	110	NA	NA	NA	NA	NA	NA
	07/22/03	ND<200	ND<40	110	1.4	ND<1.0	3.2	55	NA	12	ND<1.0	NA	NA	NA
	11/07/03	ND<500	ND<100	120	ND<2.5	ND<2.5	6.6	42	NA	NA	NA	NA	NA	NA
	02/03/04	ND<500	ND<100	71	ND<5.0	ND<5.0	ND<5.0	130	NA	12	ND<2.5	NA	NA	NA
MW-6	11/07/03	ND<1000	ND<200	ND<5.0	ND<5.0	ND<5.0	ND<5.0	560	NA	NA	NA	NA	NA	NA
	02/03/04	ND<500	ND<100	ND<2.5	ND<5.0	ND<5.0	ND<5.0	220	NA	ND<2.5	ND<2.5	NA	NA	NA
MW-7	11/07/03	ND<500	ND<100	53	ND<2.5	ND<2.5	13	ND<2.5	NA	NA	NA	NA	NA	NA
	02/03/04	ND<100	ND<20	32	ND<1.0	ND<1.0	7.4	0.74	NA	ND<0.50	ND<0.50	NA	NA	NA
MW-8	11/07/03	ND<1000	ND<200	440	ND<5.0	ND<5.0	18	ND<5.0	NA	NA	NA	NA	NA	NA
	02/03/04	ND<2,500	ND<500	470	ND<25	ND<25	ND<25	ND<12	NA	ND<12	ND<12	NA	NA	NA

**Table 2**  
**Fuel Oxygenates Analytical Data**

ARCO Service Station #0276  
10600 MacArthur Boulevard  
Oakland, California

Well Number	Date Sampled	Ethanol (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	PCE (µg/L)	TCE (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	trans-1,2-DCE (µg/L)	cis-1,2-DCE (µg/L)	VOCs (µg/L)
RW-1	11/07/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.1	NA	NA	NA	NA	NA	NA
	02/03/04	ND<100	ND<20	ND<0.50	ND<1.0	ND<1.0	ND<1.0	0.76	NA	ND<0.5	ND<0.50	NA	NA	NA
WGR-3	11/07/03	ND<100	ND<20	45	ND<0.50	ND<0.50	10	ND<0.50	NA	NA	NA	NA	NA	NA
	02/03/04	ND<100	ND<20	6.9	ND<1.0	ND<1.0	1.6	ND<0.50	NA	ND<0.50	ND<0.50	NA	NA	NA

Note: Tetrachloroethene analyzed using EPA Method 8260B. Samples were analyzed by EPA method 8015B for GRO and EPA method 8260B for BTEX, fuel oxygenates, ethanol, and PCE

- 1,2-DCA = 1,2-Dichloroethane
- cis-1,2-DCE = cis-1,2-Dichloroethene
- EDB = 1,2-Dibromoethane
- NA = Not analyzed
- ND< = Not detected at or above laboratory reporting limit
- PCE = Tetra chloroethene
- TCE = Trichloroethene
- trans-1,2-DCE = trans 1,2-Dichloroethene
- µg/L = Micrograms per liter
- VOC = Volatile Organic Compounds
- a = 1,1 DCE
- b = 1,2 DCA
- c = Chlorobenzene

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

**Table 3**  
**Groundwater Flow Direction and Gradient**

ARCO Service Station #0276  
10600 MacArthur Boulevard,  
Oakland, California

<b>Date Measured</b>	<b>Average Flow Direction</b>	<b>Average Hydraulic Gradient</b>
12/17/00	South-Southeast	0.003
12/28/01	Southeast	0.002
11/27/02	South-Southeast	0.003
07/22/03	South	0.007
11/07/03	Southwest	0.004
<b>02/03/04</b>	<b>South-Southwest</b>	<b>0.002</b>

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

**ATTACHMENT A**  
**FIELD PROCEDURES AND FIELD DATA SHEETS**

## FIELD PROCEDURES

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### 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 # DA0203-ACI Date 2/3/04 Client 276

Site 10600 MacArthur Blvd. Oakland

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 <del>POS</del>	NPO
MW-1	2					26.80	38.80	TOC	19'
* MW-2	4					13.63	27.60		
MW-3	2					27.65	38.60		22'
MW-4	2					27.01	48.30		25'
MW-5	4					26.55	47.00		
MW-6	2					32.17	54.10		
MW-7	2					17.74	55.00		
MW-8	4					24.80	47.70		
RW-1	6					27.28	48.90		
WGR-3	4					16.60	27.50	↓	
* gauged w/ ORC's in well									

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>040203-AC1</u>	Station # <u>276</u>
Sampler: <u>Ac</u>	Date: <u>2/3/04</u>
Well I.D.: <u>MW-1</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth: <u>38.80</u>	Depth to Water: <u>26.80</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): <u>(YSI)</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 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: 19' If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

<u>grab sample</u>	X	_____	=	_____	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or $\mu$ S)	Gals. Removed	Observations
<u>1205</u>	<u>62.5</u>	<u>6.8</u>	<u>1806</u>	<u>—</u>	<u>clear</u>

Did well dewater? Yes  No  Gallons actually evacuated: \_\_\_\_\_

Sampling Time: 1205 Sampling Date: 2/3/04

Sample I.D.: MW-1 Laboratory: Pace (Sequoia) Other \_\_\_\_\_

Analyzed for: (TPH-C) (BTEX) MTBE TPH-D Other: Oxy's, Ethanol, PCE, 1,2-DCE, EDB

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	<u>1.5</u>	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>CA0203-AC1</u>	Station # <u>276</u>
Sampler: <u>AC</u>	Date: <u>2/3/04</u>
Well I.D.: <u>MW-2</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth: <u>27.60</u>	Depth to Water: <u>13.63</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): <u>(YSI)</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	-0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method: Bailer      Sampling Method: Bailer

Disposable Bailer       Disposable Bailer  
 Positive Air Displacement       Extraction Port  
 Electric Submersible      Other: \_\_\_\_\_  
 Extraction Pump

Other: \_\_\_\_\_

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

<u>9.5</u>	X	<u>3</u>	=	<u>28.5</u> Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Conductivity (mS or <u>(S)</u> )	Gals. Removed	Observations
1022	59.0	6.7	439	9.5	clear/odor
1024	62.9	6.6	440	19	"
1026	64.0	6.5	442	28.5	"

Did well dewater? Yes  (No)      Gallons actually evacuated: 28.5

Sampling Time: 1035      Sampling Date: 2/3/04

Sample I.D.: MW-2      Laboratory: Pace (Sequidia) Other \_\_\_\_\_

Analyzed for: (TPH-C) (BTEX) MTBE TPH-D Other: Oxy's, Ethanol & PCE, 1-2DCA, EDB

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	<u>1.8</u> mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>0A0203-AC1</u>	Station # <u>276</u>
Sampler: <u>AC</u>	Date: <u>2/3/04</u>
Well I.D.: <u>MW-3</u>	Well Diameter: <u>2</u> 3 4 6 8 <u>    </u>
Total Well Depth: <u>38.60</u>	Depth to Water: <u>27.65</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 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: 22' If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

<u>grab sample</u>	X	_____	=	_____	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or <del>µS</del> )	Gals. Removed	Observations
<u>1245</u>	<u>60.2</u>	<u>6.7</u>	<u>908</u>	—	<u>clear</u>

Did well dewater? Yes  No  Gallons actually evacuated: \_\_\_\_\_

Sampling Time: 1245 Sampling Date: 2/3/04

Sample I.D.: MW-3 Laboratory: Pace Sequonia Other \_\_\_\_\_

Analyzed for: TPH-O BTEX MTBE TPH-D Other: Oxy's, Ethanol, PCE, 1,2-DCA, EDR

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	2.1	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>040203-AC1</u>	Station # <u>276</u>
Sampler: <u>AC</u>	Date: <u>2/3/04</u>
Well I.D.: <u>MW-4</u>	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth: <u>48.30</u>	Depth to Water: <u>27.01</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grde	D.O. Meter (if req'd): <u>YSI</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 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: 25' If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

<u>Grab Sample</u>	x	_____	=	_____	Gals.
Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u> )	Gals. Removed	Observations
<u>1235</u>	<u>61.7</u>	<u>7.1</u>	<u>676</u>	—	<u>clear</u>

Did well dewater? Yes  No

Gallons actually evacuated: \_\_\_\_\_

Sampling Time: 1235 Sampling Date: 2/3/04

Sample I.D.: MW-4 Laboratory: Pace Sequoia Other \_\_\_\_\_

Analyzed for: TPH-C BTEX MTBE TPH-D Other: Oxy's, Ethanol, PCE, 1-2DCA, EDR

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	<u>4.2</u>	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>040203-ACL</u>	Station # <u>276</u>
Sampler: <u>AC</u>	Date: <u>2/3/04</u>
Well I.D.: <u>MW-5</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth: <u>47.00</u>	Depth to Water: <u>26.55</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method: Bailer      Sampling Method: Bailer  
    Disposable Bailer      Disposable Bailer  
    Positive Air Displacement      Extraction Port  
    Electric Submersible      Other: \_\_\_\_\_  
    Extraction Pump  
    Other: \_\_\_\_\_

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

<u>13.5</u>	x	<u>3</u>	=	<u>40.5</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or <del>µS</del> )	Gals. Removed	Observations
<u>1043</u>	<u>63.8</u>	<u>6.6</u>	<u>936</u>	<u>13.5</u>	<u>clear/odor</u>
<u>1046</u>	<u>65.1</u>	<u>6.6</u>	<u>1018</u>	<u>27</u>	<u>"</u>
<u>1049</u>	<u>66.1</u>	<u>6.7</u>	<u>1046</u>	<u>40.5</u>	<u>"</u>

Did well dewater? Yes  No       Gallons actually evacuated: 40.5

Sampling Time: 1055      Sampling Date: 2/3/04

Sample I.D.: MW-5      Laboratory: Pace Sequóia Other \_\_\_\_\_

Analyzed for: TPH-C BTEX MTBE TPH-D Other: Oxy's, Ethanol, PCE, 1-2DCA, EDR

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	<u>1.7</u>	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>040203-AC1</u>	Station # <u>276</u>
Sampler: <u>AC</u>	Date: <u>2/3/04</u>
Well I.D.: <u>MW-6</u>	Well Diameter: <u>(2)</u> 3 4 6 8 _____
Total Well Depth: <u>54.10</u>	Depth to Water: <u>32.17</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method: <u>Bailer</u> <u>Disposable Bailer</u> <u>Positive Air Displacement</u> Electric Submersible Extraction Pump Other: _____	Sampling Method: <u>Bailer</u> <u>Disposable Bailer</u> Extraction Port Other: _____
--	---

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

<u>3.5</u>	x	<u>3</u>	=	<u>10.5</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or $\mu$ S)	Gals. Removed	Observations
0851	61.2	7.2	1718	3.5	slightly cloudy
0856	61.3	7.0	1709	7	clear
0902	61.0	7.0	1694	10.5	"

Did well dewater? Yes  No  Gallons actually evacuated: 10.5

Sampling Time: 0910 Sampling Date: 2/3/04

Sample I.D.: MW-6 Laboratory: Pace Sequóia Other \_\_\_\_\_

Analyzed for: TPH-C BTEX MTBE TPH-D Other: Oxy's, Ethanol, PCE, 1-2 DCA, EDB

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.9	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>040203-AC1</u>	Station # <u>276</u>
Sampler: <u>AC</u>	Date: <u>2/3/04</u>
Well I.D.: <u>MW-7</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth: <u>55.00</u>	Depth to Water: <u>17.74</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): <u>(YSI)</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method: <u>Bailer</u>	Sampling Method: <u>Bailer</u>
<u>Disposable Bailer</u>	<u>(Disposable Bailer)</u>
<u>(Positive Air Displacement)</u>	Extraction Port
<u>Electric Submersible</u>	Other: _____
<u>Extraction Pump</u>	
Other: _____	

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

<u>6</u>	x	<u>3</u>	=	<u>18</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u> )	Gals. Removed	Observations
<u>0947</u>	<u>59.2</u>	<u>6.4</u>	<u>478</u>	<u>6</u>	<u>clear/odor</u>
<u>0957</u>	<u>61.6</u>	<u>6.5</u>	<u>469</u>	<u>12</u>	<u>"</u>
<u>1007</u>	<u>62.9</u>	<u>6.4</u>	<u>470</u>	<u>18</u>	<u>"</u>

Did well dewater? Yes  No  Gallons actually evacuated: 18

Sampling Time: 1010 Sampling Date: 2/3/04

Sample I.D.: MW-7 Laboratory: Pace (Sequoia) Other \_\_\_\_\_

Analyzed for: (TPH-C) (BTEX) MTBE TPH-D Other: Oxy's, Ethanol, PCE, 1,2-DCA, EDB

D.O. (if req'd): Pre-purge: \_\_\_\_\_ mg/L Post-purge: 1.9 mg/L

O.R.P. (if req'd): Pre-purge: \_\_\_\_\_ mV Post-purge: \_\_\_\_\_ mV





## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>040203-AC1</u>	Station # <u>276</u>
Sampler: <u>AC</u>	Date: <u>2/3/04</u>
Well I.D.: <u>RW-1</u>	Well Diameter: 2 3 4 <u>(6)</u> 8
Total Well Depth: <u>48.90</u>	Depth to Water: <u>27.28</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
Electric Submersible  
 Extraction Pump  
 Other: \_\_\_\_\_

Sampling Method: Bailer  
Disposable Bailer  
 Extraction Port  
 Other: \_\_\_\_\_

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

<u>32</u>	x	<u>3</u>	=	<u>96</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or $\mu$ S)	Gals. Removed	Observations
1234	58.0	7.2	1083	32	clear
1241	60.0	7.0	865	64	"
1248	59.3	7.1	1073	96	"

Did well dewater? Yes  No  Gallons actually evacuated: 96

Sampling Time: 1255 Sampling Date: 2/3/04

Sample I.D.: RW-1 Laboratory: Pace Sequonia Other \_\_\_\_\_

Analyzed for: TPH-D BTEX MTBE TPH-D Other: Oxy's, Ethanol, PCE, 1,2-DCA, EDR

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	<u>4.4</u> <u>6.7</u> mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

## ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>040203-ACL</u>	Station # <u>276</u>
Sampler: <u>AC</u>	Date: <u>2/3/04</u>
Well I.D.: <u>WGR-3</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth: <u>27.50</u>	Depth to Water: <u>16.60</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Purge Method: Bailer      Sampling Method: Bailer

Disposable Bailer       Disposable Bailer  
 Positive Air Displacement       Extraction Port  
 Electric Submersible  
 Extraction Pump  
 Other: \_\_\_\_\_

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

<u>7.5</u>	X	<u>3</u>	=	<u>22.5</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or $\mu$ S)	Gals. Removed	Observations
0917	61.3	7.0	549	7.5	clear
0919	64.5	6.6	503	15	"
0921	65.2	6.6	506	22.5	"

Did well dewater? Yes  No       Gallons actually evacuated: 22.5

Sampling Time: 0930      Sampling Date: 2/3/04

Sample I.D.: WGR-3      Laboratory: Pace Sequonia Other \_\_\_\_\_

Analyzed for: TPH-D BTEX MTBE TPH-D Other: Oxy's, Ethanol, PCE, 1,2-DCA, EDB

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L	<u>2.6</u>
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:

276

Station # \_\_\_\_\_

10600 MacArthur Blvd. Oakland

Station Address \_\_\_\_\_

Total Gallons Collected From Groundwater Monitoring Wells:

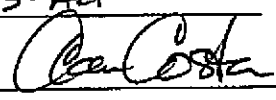
225

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added equip. \_\_\_\_\_ any other \_\_\_\_\_  
 rinse water 10 adjustments \_\_\_\_\_

TOTAL GALS. \_\_\_\_\_ loaded onto \_\_\_\_\_  
 RECOVERED 235 BTS vehicle # 52

BTS event # \_\_\_\_\_ time \_\_\_\_\_ date \_\_\_\_\_  
040203-Ac1 1330 2/3/04

signature 

\*\*\*\*\*

REC'D AT \_\_\_\_\_ time \_\_\_\_\_ date \_\_\_\_\_  
 \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

unloaded by \_\_\_\_\_  
 signature \_\_\_\_\_

**ATTACHMENT B**

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

## **LABORATORY PROCEDURES**

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### **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 ARCO have been reviewed and verified by that laboratory.



19 February, 2004

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

RE: ARCO #0276, Oakland, CA  
Work Order: MNB0148

Enclosed are the results of analyses for samples received by the laboratory on 02/04/04 17:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race  
Senior Project Manager

CA ELAP Certificate #1210



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

Project: ARCO #0276, Oakland, CA  
Project Number: INTRIM-50353  
Project Manager: Scott Robinson

MNB0148  
Reported:  
02/19/04 09:35

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MNB0148-01	Water	02/03/04 12:05	02/04/04 17:20
MW-2	MNB0148-02	Water	02/03/04 10:35	02/04/04 17:20
MW-3	MNB0148-03	Water	02/03/04 12:45	02/04/04 17:20
MW-4	MNB0148-04	Water	02/03/04 12:35	02/04/04 17:20
MW-5	MNB0148-05	Water	02/03/04 10:55	02/04/04 17:20
MW-6	MNB0148-06	Water	02/03/04 09:10	02/04/04 17:20
MW-7	MNB0148-07	Water	02/03/04 10:10	02/04/04 17:20
MW-8	MNB0148-08	Water	02/03/04 11:25	02/04/04 17:20
RW-1	MNB0148-09	Water	02/03/04 12:55	02/04/04 17:20
WGR-3	MNB0148-10	Water	02/03/04 09:30	02/04/04 17:20
TB/276/02032004	MNB0148-11	Water	02/03/04 00:00	02/04/04 17:20

These samples were received with intact custody seals.



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

 Project: ARCO #0276, Oakland, CA  
 Project Number: INTRIM-50353  
 Project Manager: Scott Robinson

 MNB0148  
 Reported:  
 02/19/04 09:35

**Purgeable Hydrocarbons by EPA 8015B**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (MNB0148-01) Water</b> Sampled: 02/03/04 12:05 Received: 02/04/04 17:20									
Gasoline Range Organics	ND	50	ug/l	1	4020203	02/09/04	02/09/04	EPA 8015B-VOA	
<i>Surrogate: 4-Bromofluorobenzene</i>		98 %	65-135		"	"	"	"	
<b>MW-2 (MNB0148-02) Water</b> Sampled: 02/03/04 10:35 Received: 02/04/04 17:20									
Gasoline Range Organics	180	100	ug/l	2	4020203	02/09/04	02/09/04	EPA 8015B-VOA	
<i>Surrogate: 4-Bromofluorobenzene</i>		97 %	65-135		"	"	"	"	
<b>MW-3 (MNB0148-03) Water</b> Sampled: 02/03/04 12:45 Received: 02/04/04 17:20									
Gasoline Range Organics	ND	50	ug/l	1	4020203	02/09/04	02/09/04	EPA 8015B-VOA	
<i>Surrogate: 4-Bromofluorobenzene</i>		103 %	65-135		"	"	"	"	
<b>MW-4 (MNB0148-04) Water</b> Sampled: 02/03/04 12:35 Received: 02/04/04 17:20									
Gasoline Range Organics	ND	50	ug/l	1	4020203	02/09/04	02/09/04	EPA 8015B-VOA	
<i>Surrogate: 4-Bromofluorobenzene</i>		100 %	65-135		"	"	"	"	
<b>MW-5 (MNB0148-05) Water</b> Sampled: 02/03/04 10:55 Received: 02/04/04 17:20									
Gasoline Range Organics	85	50	ug/l	1	4020203	02/09/04	02/09/04	EPA 8015B-VOA	
<i>Surrogate: 4-Bromofluorobenzene</i>		98 %	65-135		"	"	"	"	
<b>MW-6 (MNB0148-06) Water</b> Sampled: 02/03/04 09:10 Received: 02/04/04 17:20									
Gasoline Range Organics	84	50	ug/l	1	4020212	02/09/04	02/09/04	EPA 8015B-VOA	
<i>Surrogate: 4-Bromofluorobenzene</i>		89 %	65-135		"	"	"	"	
<b>MW-7 (MNB0148-07) Water</b> Sampled: 02/03/04 10:10 Received: 02/04/04 17:20									
Gasoline Range Organics	53	50	ug/l	1	4020212	02/09/04	02/09/04	EPA 8015B-VOA	
<i>Surrogate: 4-Bromofluorobenzene</i>		93 %	65-135		"	"	"	"	

URS Corporation [Arco]  
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 Project Number: INTRIM-50353  
 Project Manager: Scott Robinson

 MNB0148  
 Reported:  
 02/19/04 09:35

**Purgeable Hydrocarbons by EPA 8015B**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-8 (MNB0148-08) Water</b> Sampled: 02/03/04 11:25 Received: 02/04/04 17:20									
Gasoline Range Organics	170	50	ug/l	1	4020212	02/09/04	02/09/04	EPA 8015B-VOA	HC-19
Surrogate: 4-Bromofluorobenzene		94 %	65-135		"	"	"	"	
<b>RW-1 (MNB0148-09) Water</b> Sampled: 02/03/04 12:55 Received: 02/04/04 17:20									
Gasoline Range Organics	ND	50	ug/l	1	4020212	02/09/04	02/09/04	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		93 %	65-135		"	"	"	"	
<b>WGR-3 (MNB0148-10) Water</b> Sampled: 02/03/04 09:30 Received: 02/04/04 17:20									
Gasoline Range Organics	ND	50	ug/l	1	4020212	02/09/04	02/09/04	EPA 8015B-VOA	
Surrogate: 4-Bromofluorobenzene		91 %	65-135		"	"	"	"	

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 Reported:  
 02/19/04 09:35

**Volatile Organic Compounds by EPA Method 8260B**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (MNB0148-01) Water    Sampled: 02/03/04 12:05    Received: 02/04/04 17:20</b>									
Tetrachloroethene	21	0.50	ug/l	1	4020282	02/12/04	02/12/04	EPA 8260B	
Tert-amyl methyl ether	ND	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		99 %	84-122		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		102 %	74-135		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		97 %	84-119		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		108 %	86-119		"	"	"	"	
<b>MW-2 (MNB0148-02) Water    Sampled: 02/03/04 10:35    Received: 02/04/04 17:20</b>									
Tetrachloroethene	ND	2.5	ug/l	5	4020334	02/13/04	02/13/04	EPA 8260B	
Tert-amyl methyl ether	16	5.0	"	"	"	"	"	"	
Benzene	ND	2.5	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	"	"	
Ethanol	ND	500	"	"	"	"	"	"	
Ethylbenzene	2.6	2.5	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	55	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Xylenes (total)	4.1	2.5	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		101 %	84-122		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %	74-135		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		87 %	84-119		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		108 %	86-119		"	"	"	"	

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 MNB0148  
 Reported:  
 02/19/04 09:35

**Volatile Organic Compounds by EPA Method 8260B**
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-3 (MNB0148-03) Water    Sampled: 02/03/04 12:45    Received: 02/04/04 17:20</b>									
Tert-amyl methyl ether	ND	1.0	ug/l	1	4020282	02/12/04	02/12/04	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		105 %		84-122	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		106 %		74-135	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		90 %		84-119	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		105 %		86-119	"	"	"	"	
<b>MW-3 (MNB0148-03RE1) Water    Sampled: 02/03/04 12:45    Received: 02/04/04 17:20</b>									
<b>Tetrachloroethene</b>	<b>110</b>	<b>5.0</b>	<b>ug/l</b>	<b>10</b>	<b>4020334</b>	<b>02/13/04</b>	<b>02/13/04</b>	<b>EPA 8260B</b>	
<i>Surrogate: Dibromofluoromethane</i>		98 %		84-122	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %		74-135	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		89 %		84-119	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		107 %		86-119	"	"	"	"	
<b>MW-4 (MNB0148-04) Water    Sampled: 02/03/04 12:35    Received: 02/04/04 17:20</b>									
Tert-amyl methyl ether	ND	1.0	ug/l	1	4020282	02/12/04	02/12/04	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	

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

 Project: ARCO #0276, Oakland, CA  
 Project Number: INTRIM-50353  
 Project Manager: Scott Robinson

 MNB0148  
 Reported:  
 02/19/04 09:35

**Volatile Organic Compounds by EPA Method 8260B**
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-4 (MNB0148-04) Water</b> Sampled: 02/03/04 12:35 Received: 02/04/04 17:20									
Surrogate: Dibromofluoromethane		101 %	84-122		4020282	02/12/04	02/12/04	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		122 %	74-135		"	"	"	"	
Surrogate: Toluene-d8		99 %	84-119		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		118 %	86-119		"	"	"	"	
<b>MW-4 (MNB0148-04RE1) Water</b> Sampled: 02/03/04 12:35 Received: 02/04/04 17:20									
<b>Tetrachloroethene</b>	<b>83</b>	5.0	ug/l	10	4020334	02/13/04	02/13/04	EPA 8260B	
Surrogate: Dibromofluoromethane		96 %	84-122		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		112 %	74-135		"	"	"	"	
Surrogate: Toluene-d8		92 %	84-119		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		113 %	86-119		"	"	"	"	
<b>MW-5 (MNB0148-05) Water</b> Sampled: 02/03/04 10:55 Received: 02/04/04 17:20									
<b>Tetrachloroethene</b>	<b>130</b>	2.5	ug/l	5	4020282	02/12/04	02/12/04	EPA 8260B	
Tert-amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Benzene	ND	2.5	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
<b>1,2-Dichloroethane</b>	<b>12</b>	2.5	"	"	"	"	"	"	
Ethanol	ND	500	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>71</b>	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Xylenes (total)	ND	2.5	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane		118 %	84-122		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		114 %	74-135		"	"	"	"	
Surrogate: Toluene-d8		99 %	84-119		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		112 %	86-119		"	"	"	"	

URS Corporation [Arco]  
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 MNB0148  
 Reported:  
 02/19/04 09:35

**Volatile Organic Compounds by EPA Method 8260B**
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-6 (MNB0148-06) Water</b> <b>Sampled: 02/03/04 09:10</b> <b>Received: 02/04/04 17:20</b>									
Tetrachloroethene	220	2.5	ug/l	5	4020282	02/12/04	02/12/04	EPA 8260B	
Tert-amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Benzene	ND	2.5	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	"	"	
Ethanol	ND	500	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Xylenes (total)	ND	2.5	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		114 %	84-122		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		113 %	74-135		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		95 %	84-119		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		106 %	86-119		"	"	"	"	
<b>MW-7 (MNB0148-07) Water</b> <b>Sampled: 02/03/04 10:10</b> <b>Received: 02/04/04 17:20</b>									
Tetrachloroethene	0.74	0.50	ug/l	1	4020282	02/12/04	02/12/04	EPA 8260B	
Tert-amyl methyl ether	7.4	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>32</b>	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>0.54</b>	0.50	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		120 %	84-122		"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		111 %	74-135		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		98 %	84-119		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		117 %	86-119		"	"	"	"	

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 Project Number: INTRIM-50353  
 Project Manager: Scott Robinson

 MNB0148  
 Reported:  
 02/19/04 09:35

**Volatile Organic Compounds by EPA Method 8260B**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-8 (MNB0148-08) Water    Sampled: 02/03/04 11:25    Received: 02/04/04 17:20</b>									
Tetrachloroethene	ND	12	ug/l	25	4020282	02/12/04	02/12/04	EPA 8260B	
Tert-amyl methyl ether	ND	25	"	"	"	"	"	"	
Benzene	ND	12	"	"	"	"	"	"	
Tert-butyl alcohol	ND	500	"	"	"	"	"	"	
Di-isopropyl ether	ND	25	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	12	"	"	"	"	"	"	
1,2-Dichloroethane	ND	12	"	"	"	"	"	"	
Ethanol	ND	2500	"	"	"	"	"	"	
Ethylbenzene	ND	12	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	25	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>470</b>	12	"	"	"	"	"	"	
Toluene	ND	12	"	"	"	"	"	"	
Xylenes (total)	ND	12	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		110 %	84-122	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %	74-135	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		85 %	84-119	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		107 %	86-119	"	"	"	"	"	
<b>RW-1 (MNB0148-09) Water    Sampled: 02/03/04 12:55    Received: 02/04/04 17:20</b>									
<b>Tetrachloroethene</b>	<b>0.76</b>	0.50	ug/l	1	4020282	02/12/04	02/12/04	EPA 8260B	
Tert-amyl methyl ether	ND	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		98 %	84-122	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		108 %	74-135	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		93 %	84-119	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		110 %	86-119	"	"	"	"	"	

URS Corporation [Arco]  
 1333 Broadway, Suite 800  
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 Project Number: INTRIM-50353  
 Project Manager: Scott Robinson

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 Reported:  
 02/19/04 09:35

**Volatile Organic Compounds by EPA Method 8260B**
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>WGR-3 (MNB0148-10) Water    Sampled: 02/03/04 09:30    Received: 02/04/04 17:20</b>									
Tetrachloroethene	ND	0.50	ug/l	1	4020309	02/12/04	02/12/04	EPA 8260B	
<b>Tert-amyl methyl ether</b>	<b>1.6</b>	1.0	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Tert-butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>6.9</b>	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		104 %		84-122	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		103 %		74-135	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		92 %		84-119	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		99 %		86-119	"	"	"	"	



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**Purgeable Hydrocarbons by EPA 8015B - Quality Control**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4020203 - EPA 5030B, waters**
**Blank (4020203-BLK1)**

Prepared &amp; Analyzed: 02/09/04

Gasoline Range Organics	ND	50	ug/l						
Surrogate: 4-Bromofluorobenzene	286		"	300		95 65-135			

**Laboratory Control Sample (4020203-BS1)**

Prepared &amp; Analyzed: 02/09/04

Gasoline Range Organics	2720	50	ug/l	2750		99 65-135			
Surrogate: 4-Bromofluorobenzene	309		"	300		103 65-135			

**Matrix Spike (4020203-MS1)**

Source: P402070-04

Prepared &amp; Analyzed: 02/09/04

Gasoline Range Organics	31100	500	ug/l	27500	4400	97 65-135			
Surrogate: 4-Bromofluorobenzene	307		"	300		102 65-135			

**Matrix Spike Dup (4020203-MSD1)**

Source: P402070-04

Prepared &amp; Analyzed: 02/09/04

Gasoline Range Organics	30200	500	ug/l	27500	4400	94 65-135	3	20	
Surrogate: 4-Bromofluorobenzene	313		"	300		104 65-135			

**Batch 4020212 - EPA 5030B, waters**
**Blank (4020212-BLK1)**

Prepared &amp; Analyzed: 02/09/04

Gasoline Range Organics	ND	50	ug/l						
Surrogate: 4-Bromofluorobenzene	293		"	300		98 65-135			

**Laboratory Control Sample (4020212-BS1)**

Prepared &amp; Analyzed: 02/09/04

Gasoline Range Organics	2530	50	ug/l	2750		92 65-135			
Surrogate: 4-Bromofluorobenzene	310		"	300		103 65-135			

**Matrix Spike (4020212-MS1)**

Source: MNB0148-06

Prepared &amp; Analyzed: 02/09/04

Gasoline Range Organics	2540	50	ug/l	2750	84	89 65-135			
Surrogate: 4-Bromofluorobenzene	298		"	300		99 65-135			



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**Purgeable Hydrocarbons by EPA 8015B - Quality Control  
Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4020212 - EPA 5030B, waters**

**Matrix Spike Dup (4020212-MSD1)**      **Source: MNB0148-06**      **Prepared & Analyzed: 02/09/04**

Gasoline Range Organics	2480	50	ug/l	2750	84	87	65-135	2	20	
Surrogate: 4-Bromofluorobenzene	300		"	300		100	65-135			

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**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4020282 - EPA 5030B waters**
**Blank (4020282-BLK1)**

Prepared &amp; Analyzed: 02/12/04

Tetrachloroethene	ND	0.50	ug/l							
Tert-amyl methyl ether	ND	1.0	"							
Benzene	ND	0.50	"							
Tert-butyl alcohol	ND	20	"							
Di-isopropyl ether	ND	1.0	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	100	"							
Ethylbenzene	ND	0.50	"							
Ethyl tert-butyl ether	ND	1.0	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
<i>Surrogate: Dibromofluoromethane</i>	5.39		"	5.00		108	84-122			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.41		"	5.00		108	74-135			
<i>Surrogate: Toluene-d8</i>	4.87		"	5.00		97	84-119			
<i>Surrogate: 4-Bromofluorobenzene</i>	5.66		"	5.00		113	86-119			

**Laboratory Control Sample (4020282-BS1)**

Prepared &amp; Analyzed: 02/12/04

Tert-amyl methyl ether	4.57	1.0	ug/l	5.00		91	78-117			
Benzene	4.56	0.50	"	5.00		91	81-118			
Tert-butyl alcohol	106	20	"	100		106	60-147			
Di-isopropyl ether	5.26	1.0	"	5.00		105	70-125			
1,2-Dibromoethane (EDB)	4.35	0.50	"	5.00		87	85-125			
1,2-Dichloroethane	4.75	0.50	"	5.00		95	77-126			
Ethanol	146	100	"	100		146	55-200			
Ethylbenzene	4.66	0.50	"	5.00		93	89-122			
Ethyl tert-butyl ether	4.65	1.0	"	5.00		93	71-120			
Methyl tert-butyl ether	4.95	0.50	"	5.00		99	70-122			
Toluene	4.60	0.50	"	5.00		92	84-119			
Xylenes (total)	13.5	0.50	"	15.0		90	86-132			
<i>Surrogate: Dibromofluoromethane</i>	5.01		"	5.00		100	84-122			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.03		"	5.00		101	74-135			
<i>Surrogate: Toluene-d8</i>	4.77		"	5.00		95	84-119			
<i>Surrogate: 4-Bromofluorobenzene</i>	5.04		"	5.00		101	86-119			

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**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4020282 - EPA 5030B waters**

<b>Matrix Spike (4020282-MS1)</b>	<b>Source: MNB0148-08</b>			<b>Prepared &amp; Analyzed: 02/12/04</b>						
Tert-amyl methyl ether	142	25	ug/l	125	17	100	78-117			
Benzene	127	12	"	125	ND	102	81-118			
Tert-butyl alcohol	2550	500	"	2500	ND	102	60-147			
Di-isopropyl ether	151	25	"	125	ND	121	70-125			
1,2-Dibromoethane (EDB)	132	12	"	125	ND	106	85-125			
1,2-Dichloroethane	123	12	"	125	ND	98	77-126			
Ethanol	2440	2500	"	2500	ND	98	55-200			
Ethylbenzene	115	12	"	125	ND	92	89-122			
Ethyl tert-butyl ether	132	25	"	125	ND	106	71-120			
Methyl tert-butyl ether	654	12	"	125	470	147	70-122			Q-LIM
Toluene	122	12	"	125	ND	98	84-119			
Xylenes (total)	379	12	"	375	ND	101	86-132			
<i>Surrogate: Dibromofluoromethane</i>	<i>5.46</i>		<i>"</i>	<i>5.00</i>		<i>109</i>	<i>84-122</i>			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.22</i>		<i>"</i>	<i>5.00</i>		<i>104</i>	<i>74-135</i>			
<i>Surrogate: Toluene-d8</i>	<i>5.01</i>		<i>"</i>	<i>5.00</i>		<i>100</i>	<i>84-119</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>4.65</i>		<i>"</i>	<i>5.00</i>		<i>93</i>	<i>86-119</i>			

<b>Matrix Spike Dup (4020282-MSD1)</b>	<b>Source: MNB0148-08</b>			<b>Prepared &amp; Analyzed: 02/12/04</b>						
Tert-amyl methyl ether	140	25	ug/l	125	17	98	78-117	1	20	
Benzene	120	12	"	125	ND	96	81-118	6	20	
Tert-butyl alcohol	2140	500	"	2500	ND	86	60-147	17	20	
Di-isopropyl ether	142	25	"	125	ND	114	70-125	6	20	
1,2-Dibromoethane (EDB)	131	12	"	125	ND	105	85-125	0.8	20	
1,2-Dichloroethane	116	12	"	125	ND	93	77-126	6	20	
Ethanol	3010	2500	"	2500	ND	120	55-200	21	20	QR-02
Ethylbenzene	102	12	"	125	ND	82	89-122	12	20	Q-LIM
Ethyl tert-butyl ether	124	25	"	125	ND	99	71-120	6	20	
Methyl tert-butyl ether	554	12	"	125	470	67	70-122	17	20	Q-LIM
Toluene	108	12	"	125	ND	86	84-119	12	20	
Xylenes (total)	357	12	"	375	ND	95	86-132	6	20	
<i>Surrogate: Dibromofluoromethane</i>	<i>5.28</i>		<i>"</i>	<i>5.00</i>		<i>106</i>	<i>84-122</i>			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.00</i>		<i>"</i>	<i>5.00</i>		<i>100</i>	<i>74-135</i>			
<i>Surrogate: Toluene-d8</i>	<i>4.50</i>		<i>"</i>	<i>5.00</i>		<i>90</i>	<i>84-119</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>4.65</i>		<i>"</i>	<i>5.00</i>		<i>93</i>	<i>86-119</i>			

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**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 4020309 - EPA 5030B waters</b>										
<b>Blank (4020309-BLK1)</b> <span style="float:right">Prepared &amp; Analyzed: 02/12/04</span>										
Tetrachloroethene	ND	0.50	ug/l							
Tert-amyl methyl ether	ND	1.0	"							
Benzene	ND	0.50	"							
Tert-butyl alcohol	ND	20	"							
Di-isopropyl ether	ND	1.0	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	100	"							
Ethylbenzene	ND	0.50	"							
Ethyl tert-butyl ether	ND	1.0	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
<i>Surrogate: Dibromofluoromethane</i>	5.17		"	5.00		103	84-122			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.28		"	5.00		106	74-135			
<i>Surrogate: Toluene-d8</i>	4.61		"	5.00		92	84-119			
<i>Surrogate: 4-Bromofluorobenzene</i>	4.85		"	5.00		97	86-119			
<b>Laboratory Control Sample (4020309-BS1)</b> <span style="float:right">Prepared &amp; Analyzed: 02/12/04</span>										
Tert-amyl methyl ether	4.94	1.0	ug/l	5.00		99	78-117			
Benzene	5.42	0.50	"	5.00		108	81-118			
Tert-butyl alcohol	106	20	"	100		106	60-147			
Di-isopropyl ether	5.34	1.0	"	5.00		107	70-125			
1,2-Dibromoethane (EDB)	5.34	0.50	"	5.00		107	85-125			
1,2-Dichloroethane	5.16	0.50	"	5.00		103	77-126			
Ethanol	116	100	"	100		116	55-200			
Ethylbenzene	5.58	0.50	"	5.00		112	89-122			
Ethyl tert-butyl ether	4.99	1.0	"	5.00		100	71-120			
Methyl tert-butyl ether	5.56	0.50	"	5.00		111	70-122			
Toluene	5.50	0.50	"	5.00		110	84-119			
Xylenes (total)	16.7	0.50	"	15.0		111	86-132			
<i>Surrogate: Dibromofluoromethane</i>	5.06		"	5.00		101	84-122			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.90		"	5.00		98	74-135			
<i>Surrogate: Toluene-d8</i>	4.72		"	5.00		94	84-119			
<i>Surrogate: 4-Bromofluorobenzene</i>	5.14		"	5.00		103	86-119			

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**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4020309 - EPA 5030B waters**
**Laboratory Control Sample Dup (4020309-BSD1)**

Prepared &amp; Analyzed: 02/12/04

Tert-amyl methyl ether	5.15	1.0	ug/l	5.00		103	78-117	4	20	
Benzene	5.41	0.50	"	5.00		108	81-118	0.2	20	
Tert-butyl alcohol	104	20	"	100		104	60-147	2	20	
Di-isopropyl ether	5.24	1.0	"	5.00		105	70-125	2	20	
1,2-Dibromoethane (EDB)	5.58	0.50	"	5.00		112	85-125	4	20	
1,2-Dichloroethane	5.27	0.50	"	5.00		105	77-126	2	20	
Ethanol	99.8	100	"	100		100	55-200	15	20	
Ethylbenzene	5.56	0.50	"	5.00		111	89-122	0.4	20	
Ethyl tert-butyl ether	4.95	1.0	"	5.00		99	71-120	0.8	20	
Methyl tert-butyl ether	5.11	0.50	"	5.00		102	70-122	8	20	
Toluene	5.29	0.50	"	5.00		106	84-119	4	20	
Xylenes (total)	16.2	0.50	"	15.0		108	86-132	3	20	
<i>Surrogate: Dibromofluoromethane</i>	<i>4.86</i>		"	<i>5.00</i>		<i>97</i>	<i>84-122</i>			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>4.83</i>		"	<i>5.00</i>		<i>97</i>	<i>74-135</i>			
<i>Surrogate: Toluene-d8</i>	<i>4.60</i>		"	<i>5.00</i>		<i>92</i>	<i>84-119</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>4.89</i>		"	<i>5.00</i>		<i>98</i>	<i>86-119</i>			

**Batch 4020334 - EPA 5030B waters**
**Blank (4020334-BLK1)**

Prepared &amp; Analyzed: 02/13/04

Tetrachloroethene	ND	0.50	ug/l							
Tert-amyl methyl ether	ND	1.0	"							
Benzene	ND	0.50	"							
Tert-butyl alcohol	ND	20	"							
Di-isopropyl ether	ND	1.0	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	100	"							
Ethylbenzene	ND	0.50	"							
Ethyl tert-butyl ether	ND	1.0	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
<i>Surrogate: Dibromofluoromethane</i>	<i>4.86</i>		"	<i>5.00</i>		<i>97</i>	<i>84-122</i>			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.46</i>		"	<i>5.00</i>		<i>109</i>	<i>74-135</i>			
<i>Surrogate: Toluene-d8</i>	<i>4.84</i>		"	<i>5.00</i>		<i>97</i>	<i>84-119</i>			

Sequoia Analytical - Morgan Hill

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.*

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

 Project: ARCO #0276, Oakland, CA  
 Project Number: INTRIM-50353  
 Project Manager: Scott Robinson

 MNB0148  
 Reported:  
 02/19/04 09:35

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4020334 - EPA 5030B waters**
**Blank (4020334-BLK1)**

Prepared &amp; Analyzed: 02/13/04

<i>Surrogate: 4-Bromofluorobenzene</i>	5.80		ug/l	5.00		116	86-119			
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**Laboratory Control Sample (4020334-BS1)**

Prepared &amp; Analyzed: 02/13/04

Tert-amyl methyl ether	5.26	1.0	ug/l	5.00		105	78-117			
Benzene	5.24	0.50	"	5.00		105	81-118			
Tert-butyl alcohol	131	20	"	100		131	60-147			
Di-isopropyl ether	5.16	1.0	"	5.00		103	70-125			
1,2-Dibromoethane (EDB)	5.82	0.50	"	5.00		116	85-125			
1,2-Dichloroethane	5.19	0.50	"	5.00		104	77-126			
Ethanol	156	100	"	100		156	55-200			
Ethylbenzene	5.18	0.50	"	5.00		104	89-122			
Ethyl tert-butyl ether	4.85	1.0	"	5.00		97	71-120			
Methyl tert-butyl ether	5.55	0.50	"	5.00		111	70-122			
Toluene	5.22	0.50	"	5.00		104	84-119			
Xylenes (total)	15.7	0.50	"	15.0		105	86-132			
<i>Surrogate: Dibromofluoromethane</i>	4.41		"	5.00		88	84-122			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.85		"	5.00		97	74-135			
<i>Surrogate: Toluene-d8</i>	4.50		"	5.00		90	84-119			
<i>Surrogate: 4-Bromofluorobenzene</i>	4.23		"	5.00		85	86-119			S-LIM

**Matrix Spike (4020334-MS1)**

Source: P402181-09

Prepared &amp; Analyzed: 02/13/04

Tert-amyl methyl ether	109	20	ug/l	100	ND	109	78-117			
Benzene	219	10	"	100	93	126	81-118			Q-LIM
Tert-butyl alcohol	1960	400	"	2000	ND	98	60-147			
Di-isopropyl ether	110	20	"	100	ND	110	70-125			
1,2-Dibromoethane (EDB)	118	10	"	100	ND	118	85-125			
1,2-Dichloroethane	112	10	"	100	ND	112	77-126			
Ethanol	1890	2000	"	2000	ND	94	55-200			
Ethylbenzene	177	10	"	100	59	118	89-122			
Ethyl tert-butyl ether	103	20	"	100	ND	103	71-120			
Methyl tert-butyl ether	121	10	"	100	3.7	117	70-122			
Toluene	116	10	"	100	6.2	110	84-119			
Xylenes (total)	399	10	"	300	77	107	86-132			
<i>Surrogate: Dibromofluoromethane</i>	5.30		"	5.00		106	84-122			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.34		"	5.00		107	74-135			
<i>Surrogate: Toluene-d8</i>	4.98		"	5.00		100	84-119			
<i>Surrogate: 4-Bromofluorobenzene</i>	4.87		"	5.00		97	86-119			

Sequoia Analytical - Morgan Hill

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.*

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

 Project: ARCO #0276, Oakland, CA  
 Project Number: INTRIM-50353  
 Project Manager: Scott Robinson

 MNB0148  
 Reported:  
 02/19/04 09:35

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Petaluma**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch 4020334 - EPA 5030B waters**
**Matrix Spike (4020334-MS1)**
**Source: P402181-09**
**Prepared & Analyzed: 02/13/04**
**Matrix Spike Dup (4020334-MSD1)**
**Source: P402181-09**
**Prepared: 02/13/04 Analyzed: 02/14/04**

Tert-amyl methyl ether	97.8	20	ug/l	100	ND	98	78-117	11	20	
Benzene	202	10	"	100	93	109	81-118	8	20	
Tert-butyl alcohol	1850	400	"	2000	ND	92	60-147	6	20	
Di-isopropyl ether	103	20	"	100	ND	103	70-125	7	20	
1,2-Dibromoethane (EDB)	115	10	"	100	ND	115	85-125	3	20	
1,2-Dichloroethane	102	10	"	100	ND	102	77-126	9	20	
Ethanol	1860	2000	"	2000	ND	93	55-200	2	20	
Ethylbenzene	171	10	"	100	59	112	89-122	3	20	
Ethyl tert-butyl ether	93.9	20	"	100	ND	94	71-120	9	20	
Methyl tert-butyl ether	110	10	"	100	3.7	106	70-122	10	20	
Toluene	104	10	"	100	6.2	98	84-119	11	20	
Xylenes (total)	396	10	"	300	77	106	86-132	0.8	20	
<i>Surrogate: Dibromofluoromethane</i>	<i>4.68</i>		<i>"</i>	<i>5.00</i>		<i>94</i>	<i>84-122</i>			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>4.72</i>		<i>"</i>	<i>5.00</i>		<i>94</i>	<i>74-135</i>			
<i>Surrogate: Toluene-d8</i>	<i>4.38</i>		<i>"</i>	<i>5.00</i>		<i>88</i>	<i>84-119</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>4.46</i>		<i>"</i>	<i>5.00</i>		<i>89</i>	<i>86-119</i>			



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

Project: ARCO #0276, Oakland, CA  
Project Number: INTRIM-50353  
Project Manager: Scott Robinson

MNB0148  
Reported:  
02/19/04 09:35

### Notes and Definitions

HC-19 Discrete peak @ C5.

Q-LIM The percent recovery was outside of the control limits. The samples results may still be useful for their intended purpose.

QR-02 The RPD result exceeded the control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

S-LIM The surrogate recovery was outside control limits. The result may still be useful for its intended purpose.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



### Chain of Custody Record

Project Name 276 GWM  
 BP BU/GEM CO Portfolio Retail  
 BP Laboratory Contract Number: Atlantic Richfield Company  
 Requested Due Date (mm/dd/yy) 14 day TAT

MNBO148

Date: 2/3/04

On-site Time: <u>0830</u>	Temp: <u>600</u>
Off-site Time: <u>1345</u>	Temp: <u>600</u>
Sky Conditions: <u>Cloudy</u>	
Meteorological Events:	
Wind Speed: <u>10mph</u>	Direction: <u>SE</u>

Send To:	BP/GEM Facility No.: <u>ARCO 276</u>	Consultant/Contractor: <u>URS</u>
Lab Name: <u>SEQUOIA</u>	BP/GEM Facility Address: <u>10600 MacArthur Blvd, OAKLAND, CA</u>	Address: <u>500 12th St., Ste. 200</u>
Lab Address: <u>885 Jarvis Dr.</u>	Site ID No. <u>ARCO 276</u>	<u>Oakland, CA 94609-4014</u>
<u>Morgan Hill, CA 95037</u>	Site Lab/Long:	e-mail EDD: <u>donna.casper@URSCorp.com</u>
Lab PM <u>Theresa Allen</u>	California Global ID #: <u>T0600100082</u>	Consultant/Contractor Project No.: <u>JS-00000276.01 00427</u>
Tele/Fax: <u>408-776-9600 / 408-782-6308</u>	BP/GEM PM Contact: <u>PAUL SUPPLE</u>	Consultant Tele/Fax: <u>510-893-3600/510-874-3268</u>
Report Type & QC Level: <u>1 Send EDF Reports</u>	Address: <u>P.O. Box 6549</u>	Consultant/Contractor PM: <u>Scott Robinson</u>
BP/GEM Account No.:	<u>Moraga, CA 94570</u>	Invoice to: Consultant/Contractor of <u>BP/GEM</u> (Circle one)
Lab Bottle Order No.:	Tele/Fax: <u>925-299-8891/925-299-8872</u>	BP/GEM Work Release No: <u>INTRIM -50353</u>

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives			Requested Analysis							Sample Point Lat/Long and Comments
			Soil/Solid	Water/Liquid	Sediments	Air			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	TPH-G / BTEX (8015/8021/8260)	TPH-D (8015)	MTBE (8021)	MTBE (8260)	MTBE, TAME, ETBE (8015/8021/8260)	1,2-DCA & EDB (8260)	
1	MW-1	1205	X				01				X			X	X	X	X		
2	MW-2	1035	X				02				X			X	X	X	X		
3	MW-3	1245	X				03				X			X	X	X	X		
4	MW-4	1235	X				04				X			X	X	X	X		
5	MW-5	1055	X				05				X			X	X	X	X		
6	MW-6	0910	X				06				X			X	X	X	X		
7	MW-7	1010	X				07				X			X	X	X	X		
8	MW-8	1125	X				08				X			X	X	X	X		
9	RW-1	1255	X				09				X			X	X	X	X		
10	WGR-3	0930	X				10				X			X	X	X	X		

Sampler's Name: <u>Aaron Costa</u>	Relinquished By / Affiliation: <u>[Signature] Blaine Tech</u>	Date: <u>2/4/04</u>	Time: <u>1402</u>	Accepted By / Affiliation: <u>[Signature]</u>	Date: <u>2/4/04</u>	Time: <u>1700</u>
Sampler's Company: <u>Blaine Tech</u>						
Shipment Date:						
Shipment Method:						
Shipment Tracking No.:						

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

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

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



# Chain of Custody Record

Project Name 276 GWM  
 BP BU/GEM CO Portfolio Retail  
 BP Laboratory Contract Number: Atlantic Richfield Company

MNB0142

Date: 2/3/04

Requested Due Date (mm/dd/yy) 14 day TAT

On-site Time: 0830 Temp: 60°  
 Off-site Time: 1345 Temp: 60°  
 Sky Conditions: Cloudy  
 Meteorological Events:  
 Wind Speed: 10mph Direction: SE

Send To:	BP/GEM Facility No.: <u>ARCO 276</u>	Consultant/Contractor: <u>URS</u>
Lab Name: <u>SEQUOIA</u>	BP/GEM Facility Address: <u>10600 MacArthur Blvd, OAKLAND, CA</u>	Address: <u>500 12th St, Ste. 200</u>
Lab Address: <u>885 Jarvis Dr.</u>	Site ID No. <u>ARCO 276</u>	<u>Oakland, CA 94609-4014</u>
<u>Morgan Hill, CA 95037</u>	Site Lat/Long:	e-mail EDD: <u>donna.cosper@URSCorp.com</u>
Lab PM <u>Theresa Allen</u>	California Global ID #: <u>T0600100082</u>	Consultant/Contractor Project No.: <u>J5-00000276.01 00427</u>
Tele/Fax: <u>408-776-9600 / 408-782-6308</u>	BP/GEM PM Contact: <u>PAUL SUPPLE</u>	Consultant Tele/Fax: <u>510-893-3600/510-874-3268</u>
Report Type & QC Level: <u>1 Send EDF Reports</u>	Address: <u>P.O. Box 6549</u>	Consultant/Contractor PM: <u>Scott Robinson</u>
BP/GEM Account No.:	<u>Moraga, CA 94570</u>	Invoice to: <u>Consultant/Contractor or BP/GEM (Circle one)</u>
Lab Bottle Order No.:	Tele/Fax: <u>925-299-8891/925-299-8872</u>	BP/GEM Work Release No: <u>INTRIM -50353</u>

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives			Requested Analysis							Sample Point Lat/Long and Comments	
			Soil/Solid	Water/Liquid	Sediments	Air			Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	TPH-G / BTEX (8015/8021) (8260)	TPH-D (8015)	MTBE (8021)	MTBE (8260)	MTBE, TAME, ETBE DPE, TBA (8260)	1,2-DCA & EDB (8260)		Ethanol (8260)
1	<u>TB/276/01032004</u>			X			<u>11</u>	<u>2</u>				X								<u>ON HOLD</u>
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

Sampler's Name: <u>Aaron Costa</u>	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: <u>BTS</u>	<u>Aaron Costa / BTS</u>	<u>2/3/04</u>	<u>1402</u>	<u>[Signature]</u>	<u>2/4/04</u>	<u>1402</u>
Shipment Date:		<u>2/4/04</u>	<u>1700</u>	<u>[Signature]</u>	<u>2/4/04</u>	<u>1700</u>
Shipment Method:						
Shipment Tracking No.:						

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

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: BP  
 REC. BY (PRINT): TV  
 WORKORDER: MNB0148

DATE REC'D AT LAB: 2/4/04  
 TIME REC'D AT LAB: 1700  
 DATE LOGGED IN: 2-6-04

DRINKING WATER for  
 regulatory purposes: YES  NO   
 WASTE WATER for  
 regulatory purposes: YES  NO

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) <input checked="" type="checkbox"/> Present / <input type="checkbox"/> Absent <i>Bag</i> <input checked="" type="checkbox"/> Intact / <input type="checkbox"/> Broken*			MW-1	(6) Vials	HA	L	2/3/04	33/6070
2. Chain-of-Custody <input checked="" type="checkbox"/> Present / <input type="checkbox"/> Absent*			-2	S	S	S	S	S
3. Traffic Reports or Packing List: <input checked="" type="checkbox"/> Present / <input type="checkbox"/> Absent			-3					
4. Airbill: <input checked="" type="checkbox"/> Airbill / <input type="checkbox"/> Sticker			-4					
<input checked="" type="checkbox"/> Present / <input type="checkbox"/> Absent			-5					
5. Airbill #:			-6					
6. Sample Labels: <input checked="" type="checkbox"/> Present / <input type="checkbox"/> Absent			-7					
7. Sample IDs: <input checked="" type="checkbox"/> Listed / <input type="checkbox"/> Not Listed on Chain-of-Custody			-8					
8. Sample Condition: <input checked="" type="checkbox"/> Intact / <input type="checkbox"/> Broken* / <input type="checkbox"/> Leaking*			RW-1					
9. Does information on chain-of-custody, traffic reports and sample labels agree? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No*			WR-3					
10. Sample received within hold time: <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No*			RS	(2)				
11. Adequate sample volume received? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No*								
12. Proper Preservatives used: <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No*								
13. Temp Rec. at Lab: <u>2°C</u> Is temp 4 +/- 2°C? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No**								

(Acceptance range for samples requiring thermal pres.)  
 \*\*Exception (if any): METALS / DFF ON ICE or Problem COC

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

**ATTACHMENT C**

**HISTORIC GROUNDWATER DATA**

**Table 1**  
**Historical Groundwater Elevation and Analytical Data**  
**Halogenated Volatile Organic Compounds (EPA method 8010 or 8240)**  
**1995-Present\*\***

**ARCO Service Station 276**  
**10600 MacArthur Boulevard, Oakland, California**

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (ft-MSL)	Groundwater Elevation (ft-MSL)	Date Sampled	Tetra-chloro-ethene (PCE) µg/L	Tetra-chloro-ethene (TCE) µg/L	trans-1,2-Dichloro-ethene µg/L	cis-1,2-Dichloro-ethene µg/L	Freon 12 µg/L	Dissolved Oxygen (mg/l)	Purged Not Purged (P/NP)
MW-1	03-10-95	55.92	26.26	ND	29.66	03-10-95	170	<1	--	<1	--	--	(P/NP)
MW-1	06-05-95	55.92	25.71	ND	30.21	06-05-95	210	<5	--	<5	--	--	
MW-1	08-29-95	55.92	28.44	ND	27.48	08-29-95	130	<1	--	<1	--	--	
MW-1	11-16-95	55.92	30.85	ND	25.07	11-16-95	45	<1	--	<1	--	--	
MW-1	02-28-96	55.92	24.99	ND	30.93	02-28-96	97	<1	<1	<1	<1	--	
MW-1	05-28-96	55.92	24.92	ND	31.00	05-28-96	160	<5	<5	<5	--	--	
MW-1	08-19-96	55.92	28.04	ND	27.88	08-19-96	77	<1	<1	<1	--	--	
MW-1	11-21-96	55.92	30.19	ND	25.73	11-21-96	30	<1	<1	<1	--	--	
MW-1	03-26-97	55.92	24.90	ND	31.02	03-26-97	66	<1	<1	<1	--	--	
MW-1	05-20-97	55.92	26.99	ND	28.93	05-20-97	36	<0.5	<0.5	<0.5	--	--	
MW-1	08-18-97	55.92	29.98	ND	25.94	08-18-97	11	<0.5	<0.5	<0.5	--	--	
MW-1	11-17-97	55.92	31.72	ND	24.20	11-17-97	Not analyzed for Halogenated Volatile Organic Compounds						
MW-1	12-02-99	55.92	Not surveyed			12-02-99	Not surveyed: well was inaccessible						
MW-2	03-10-95	55.10	13.98	ND	41.12	03-11-95	<1	<1	--	<1	--	--	
MW-2	06-05-95	55.10	15.65	ND	39.45	06-05-95	<1	<1	--	<1	--	--	
MW-2	08-29-95	55.10	17.14	ND	37.96	08-29-95	<5	<5	--	<5	--	--	
MW-2	11-16-95	55.10	Not surveyed			11-16-95	Not surveyed: well was inaccessible						
MW-2	02-28-96	55.10	12.46	ND	42.64	02-28-96	<1	<1	<1	<1	--	--	
MW-2	05-28-96	55.10	15.23	ND	39.87	05-28-96	<1	<1	<1	<1	--	--	
MW-2	08-19-96	55.10	16.84	ND	38.26	08-21-96	<1	<1	<1	<1	--	--	
MW-2	11-21-96	55.10	15.44	ND	39.66	11-21-96	<1	<1	<1	<1	--	--	
MW-2	03-26-97	55.10	15.73	ND	39.37	03-26-97	<10^	<10^	<10^	<10^	--	--	
MW-2	05-20-97	55.10	16.07	ND	39.03	05-20-97	<1^	<1^	<1^	<1^	--	--	
MW-2	08-18-97	55.10	17.28	ND	37.82	08-18-97	<5^	<5^	<5^	<5^	--	--	
MW-2	11-17-97	55.10	16.75	ND	38.35	11-17-97	Not analyzed for Halogenated Volatile Organic Compounds						
MW-2	12-02-99	55.10	Not surveyed			12-02-99	Not sampled: not on sampling schedule						

OAKS:\ARCO\0276\QTRLY\0276q498.xls\uh:1  
 Recreated from electronic data provided by Pinnacle

Pinnacle

**Table 1**  
**Historical Groundwater Elevation and Analytical Data**  
**Halogenated Volatile Organic Compounds (EPA method 8010 or 8240)**  
**1995-Present\*\***

**ARCO Service Station 276**  
**10600 MacArthur Boulevard, Oakland, California**

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (ft-MSL)	Groundwater Elevation (ft-MSL)	Date Sampled	Tetra-chloro-ethene (PCE) µg/L	Tetra-chloro-ethene (TCE) µg/L	trans-1,2-Dichloro-ethene µg/L	cis-1,2-Dichloro-ethene µg/L	Freon 12 µg/L	Dissolved Oxygen (mg/l)	Purged Not Purged (P/NP)
MW-3	03-10-95	56.55	26.74	ND	29.81	03-11-95	1700	<10	--	<10	--		
MW-3	06-05-95	56.55	26.34	ND	30.21	06-05-95	2500	<20	--	<20	--		
MW-3	08-29-95	56.55	29.15	ND	27.40	08-29-95	1600	<20	--	<20	--		
MW-3	11-16-95	56.55	31.50	ND	25.05	11-16-95	1100	<20	--	<20	--		
MW-3	02-28-96	56.55	25.32	ND	31.23	02-28-96	1100	<10	<10	<10	<20		
MW-3	05-28-96	56.55	25.46	ND	31.09	05-28-96	1700	<20	<20	<20	--		
MW-3	08-19-96	56.55	28.71	ND	27.84	08-19-96	1200	<20	<20	<20	--		
MW-3	11-21-96	56.55	30.85	ND	25.70	11-21-96	710	<20^	<20^	<20^	--		
MW-3	03-26-97	56.55	25.36	ND	31.19	03-26-97	710	<40^	<40^	<40^	--		
MW-3	05-20-97	56.55	27.61	ND	28.94	05-20-97	800	<25^	<25^	<25^	--		
MW-3	08-18-97	56.55	30.62	ND	25.93	08-18-97	420	<5^	<5^	<5^	--		
MW-3	11-17-97	56.55	32.40	ND	24.15	11-17-97	Not analyzed for Halogenated Volatile Organic Compounds						
MW-3	12-02-99	56.55	30.75	ND	25.80	12-02-99	210*	<0.5*	<0.5*	<0.5*	--	0.47	NP
MW-4	03-10-95	55.98	26.22	ND	29.76	03-11-95	2600	<20	--	<20	--		
MW-4	06-05-95	55.98	25.79	ND	30.19	06-05-95	3100	<20	--	<20	--		
MW-4	08-29-95	55.98	28.56	ND	27.42	08-29-95	2900	<20	--	<20	--		
MW-4	11-16-95	55.98	31.00	ND	24.98	11-16-95	2100	<20	--	<20	--		
MW-4	02-28-96	55.98	24.77	ND	31.21	02-28-96	2400	<20	<20	<20	<20		
MW-4	05-28-96	55.98	24.91	ND	31.07	05-28-96	2700	<20	<20	<20	--		
MW-4	08-19-96	55.98	28.17	ND	27.81	08-19-96	2600	<20	<20	<20	--		
MW-4	11-21-96	55.98	30.30	ND	25.68	11-21-96	1100	<20^	<20^	<20^	--		
MW-4	03-26-97	55.98	24.80	ND	31.18	03-26-97	1900	<40^	<40^	<40^	--		
MW-4	05-20-97	55.98	27.03	ND	28.95	05-20-97	1600	<50^	<50^	<50^	--		
MW-4	08-18-97	55.98	30.10	ND	25.88	08-18-97	600	<125^	<125^	--	--		
MW-4	11-17-97	55.98	31.84	ND	24.14	11-17-97	Not analyzed for Halogenated Volatile Organic Compounds						
MW-4	12-02-99	55.98	30.20	ND	25.78	12-02-99	320*	<0.5*	<0.5*	<0.5*	--	1.03	NP

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**Table 1**  
**Historical Groundwater Elevation and Analytical Data**  
**Halogenated Volatile Organic Compounds (EPA method 8010 or 8240)**  
**1995-Present\*\***

**ARCO Service Station 276**  
**10600 MacArthur Boulevard, Oakland, California**

Well	Date	TOC Elevation	Depth to Water	FP Thickness	Groundwater Elevation	Date	Tetra- chloro- ethene (PCE)	Tetra- chloro- ethene (TCE)	trans- 1,2- Dichloro- ethene	cis-1,2- Dichloro- ethene	Freon 12	Dissolved Oxygen	Purged/ Not Purged
Number	Gauged	(ft-MSL)	(feet)	(ft-MSL)	(ft-MSL)	Sampled	µg/L	µg/L	µg/L	µg/L	µg/L	(mg/l)	(P/NP)
MW-5	03-10-95	55.43	25.62	ND	29.81	03-10-95	270	<5	--	<5	--	--	--
MW-5	06-05-95	55.43	25.30	ND	30.13	06-05-95	310	<5	--	<5	--	--	--
MW-5	08-29-95	55.43	28.21	ND	27.22	08-29-95	240	<5	--	<5	--	--	--
MW-5	11-16-95	55.43	30.63	ND	24.80	11-16-95	940	<5	--	<5	--	--	--
MW-5	02-28-96	55.43	24.07	ND	31.36	02-28-96	1100	<10	<10	<10	--	--	--
MW-5	05-28-96	55.43	24.42	ND	31.01	05-28-96	360	<5	<5	<5	--	--	--
MW-5	08-19-96	55.43	27.82	ND	27.61	08-21-96	150	<1	<1	2	--	--	--
MW-5	11-21-96	55.43	29.92	ND	25.51	11-21-96	1900	<20^	<20^	<20^	--	--	--
MW-5	03-26-97	55.43	24.22	ND	31.21	03-26-97	270	<10^	<10^	<10^	--	--	--
MW-5	05-20-97	55.43	26.60	ND	28.83	05-20-97	290	<5^	<5^	<5^	--	--	--
MW-5	08-18-97	55.43	NR	ND	NR	08-18-97	--	--	--	--	--	--	--
MW-5	11-17-97	55.43	Not surveyed			11-17-97	Not analyzed for Halogenated Volatile Organic Compounds						
MW-5	12-02-99	55.43	29.84	ND	25.59	12-02-99	46*	<0.5*	<0.5*	<0.5*	--	0.53	P
MW-6	03-10-95	61.21	31.54	ND	29.67	03-11-95	1300	<20	--	<20	--	--	--
MW-6	06-05-95	61.21	31.15	ND	30.06	06-05-95	2000	<20	--	<20	--	--	--
MW-6	08-29-95	61.21	34.03	ND	27.18	08-29-95	1300	<20	--	<20	--	--	--
MW-6	11-16-95	61.21	36.40	ND	24.81	11-16-95	1300	<20	--	<20	--	--	--
MW-6	02-28-96	61.21	30.18	ND	31.03	02-28-96	960	<20	<20	<20	<20	--	--
MW-6	05-28-96	61.21	30.29	ND	30.92	05-28-96	970	<20	<20	<20	--	--	--
MW-6	08-19-96	61.21	33.54	ND	27.67	08-19-96	820	<20	<20	<20	--	--	--
MW-6	11-21-96	61.21	35.70	ND	25.51	11-21-96	680	<20^	<20^	<20^	--	--	--
MW-6	03-26-97	61.21	30.15	ND	31.06	03-26-97	830	<40^	<40^	<40^	--	--	--
MW-6	05-20-97	61.21	32.40	ND	28.81	05-20-97	270	<5^	<5^	<5^	--	--	--
MW-6	08-18-97	61.21	35.47	ND	25.74	08-18-97	420	<62.5^	<62.5^	--	--	--	--
MW-6	11-17-97	61.21	37.25	ND	23.96	11-17-97	Not analyzed for Halogenated Volatile Organic Compounds						
MW-6	12-02-99	61.21	35.55	ND	25.66	12-02-99	Not sampled: not on sampling schedule						

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**Table 1**  
**Historical Groundwater Elevation and Analytical Data**  
**Halogenated Volatile Organic Compounds (EPA method 8010 or 8240)**  
**1995-Present\*\***

**ARCO Service Station 276**  
**10600 MacArthur Boulevard, Oakland, California**

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (ft-MSL)	Groundwater Elevation (ft-MSL)	Date Sampled	Tetra-chloro-ethene (PCE) µg/L	Tetra-chloro-ethene (TCE) µg/L	trans-1,2-Dichloro-ethene µg/L	cis-1,2-Dichloro-ethene µg/L	Freon 12 µg/L	Dissolved Oxygen (mg/l)	Purged/Not Purge (P/NP)
MW-7	03-10-95	58.22	17.69	ND^^	40.53	03-11-95	Not sampled: floating product entered the well during purging						
MW-7	06-05-95	58.22	19.68	ND	38.54	06-05-95	<10	<10	--	<10	--	--	--
MW-7	08-29-95	58.22	21.70	ND	36.52	08-29-95	<10	<10	--	<10	--	--	--
MW-7	11-16-95	58.22	23.02	ND	35.20	11-16-95	<20	<20	--	<20	<20	--	--
MW-7	02-28-96	58.22	16.54	ND	41.68	02-28-96	<10	<10	<10	<10	--	--	--
MW-7	05-28-96	58.22	19.29	ND	38.93	05-28-96	<10	<10	<10	<10	--	--	--
MW-7	08-19-96	58.22	21.84	ND	36.38	08-21-96	<1	<1	<1	<1	--	--	--
MW-7	11-21-96	58.22	19.58	ND	38.64	11-21-96	<10^	<10^	<10^	<10^	--	--	--
MW-7	03-26-97	58.22	19.67	ND	38.55	03-26-97	<20^	<20^	<20^	<20^	--	--	--
MW-7	05-20-97	58.22	20.18	ND	38.04	05-20-97	<10^	<10^	<10^	<10^	--	--	--
MW-7	08-18-97	58.22	22.21	ND	36.01	08-18-97	<10^	<10^	<10^	<10^	--	--	--
MW-7	11-17-97	58.22	20.85	ND	37.37	11-17-97	<10^	<10^	<10^	<10^	--	--	--
MW-7	12-02-99	58.22	20.92	ND	37.30	12-02-99	Not analyzed for Halogenated Volatile Organic Compounds Not sampled: not on sampling schedule						
MW-8	03-10-95	53.65	23.60	ND	30.05	03-10-95	<1	<1	--	<1	--	--	--
MW-8	06-05-95	53.65	23.48	ND	30.17	06-05-95	<1	<1	--	<1	--	--	--
MW-8	08-29-95	53.65	26.44	ND	27.21	08-29-95	<1	<1	--	<1	--	--	--
MW-8	11-16-95	53.65	28.90	ND	24.75	11-16-95	<1	<1	--	<1	--	--	--
MW-8	02-28-96	53.65	22.16	ND	31.49	02-28-96	3	<1	<1	<1	<1	--	--
MW-8	05-28-96	53.65	22.62	ND	31.03	05-28-96	<1	<1	<1	<1	--	--	--
MW-8	08-19-96	53.65	26.70	ND	26.95	08-21-96	<1	<1	<1	<1	--	--	--
MW-8	11-21-96	53.65	28.16	ND	25.49	11-21-96	7	<1	<1	<1	--	--	--
MW-8	03-26-97	53.65	22.42	ND	31.23	03-26-97	<1	<1	<1	<1	--	--	--
MW-8	05-20-97	53.65	24.84	ND	28.81	05-20-97	<0.5	<0.5	<0.5	<0.5	--	--	--
MW-8	08-18-97	53.65	28.03	ND	25.62	08-18-97	<5	<5	<5	<5	--	--	--
MW-8	11-17-97	53.65	29.16	ND	24.49	11-17-97	Not analyzed for Halogenated Volatile Organic Compounds						
MW-8	12-02-99	53.65	28.07	ND	25.58	12-02-99	Not sampled: not on sampling schedule						

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 Recreated from electronic data provided by Pinnacle

Pinnacle

**Table 1**  
**Historical Groundwater Elevation and Analytical Data**  
**Halogenated Volatile Organic Compounds (EPA method 8010 or 8240)**  
**1995-Present\*\***

**ARCO Service Station 276**  
**10600 MacArthur Boulevard, Oakland, California**

Well	Date	TOC Elevation	Depth to Water	FP Thickness	Groundwater Elevation	Date	Tetra- chloro- ethene (PCE)	Tetra- chloro- ethene (TCE)	trans- 1,2- Dichloro- ethene	cis-1,2- Dichloro- ethene	Freon 12	Dissolved Oxygen	Purged/ Not Purged
Number	Gauged	(ft-MSL)	(feet)	(ft-MSL)	(ft-MSL)	Sampled	µg/L	µg/L	µg/L	µg/L	µg/L	(mg/l)	(P/NP)
RW-1	03-10-95	56.32	26.48	Sheen	29.84	03-10-95	260	<5	--	<5	--		
RW-1	06-05-95	56.32	26.20	ND	30.12	06-05-95	59	<1	--	<1	--		
RW-1	08-29-95	56.32	28.98	ND	27.34	08-29-95	570	<5	--	<5	--		
RW-1	11-16-95	56.32	31.34	ND	24.98	11-16-95	140	<1	--	<1	<1		
RW-1	02-28-96	56.32	25.12	ND	31.20	02-28-96	6	<1	<1	<1	--		
RW-1	05-28-96	56.32	25.26	ND	31.06	05-28-96	12	<1	<1	<1	--		
RW-1	08-19-96	56.32	28.51	ND	27.81	08-21-96	100	<1	<1	<1	--		
RW-1	11-21-96	56.32	30.65	ND	25.67	11-21-96	190	1	<1	<1	--		
RW-1	03-26-97	56.32	25.15	ND	31.17	03-26-97	6	<1	<1	<1	--		
RW-1	05-20-97	56.32	27.44	ND	28.88	05-20-97	5.3	<0.5	<0.5	<0.5	--		
RW-1	08-18-97	56.32	30.46	ND	25.86	08-18-97	46	<5	<5	--	--		
RW-1	11-17-97	56.32	32.16	ND	24.16	11-17-97	Not analyzed for Halogenated Volatile Organic Compounds						
RW-1	12-02-99	56.32	30.54	ND	25.78	12-02-99	Not sampled: not on sampling schedule						
WGR-3	03-10-95	NR	15.20	ND	NR	03-11-95	<1	<1	--	<1	--		
WGR-3	06-05-95	NR	19.25	ND	NR	06-05-95	<1	<1	--	<1	--		
WGR-3	08-29-95	NR	21.41	ND	NR	08-29-95	<1	<1	--	<1	--		
WGR-3	11-16-95	NR	22.50	ND	NR	11-16-95	<1	<1	--	<1	<1		
WGR-3	02-28-96	NR	14.90	ND	NR	02-28-96	<1	<1	<1	<1	--		
WGR-3	05-28-96	NR	18.33	ND	NR	05-28-96	<1	<1	<1	<1	--		
WGR-3	08-19-96	NR	21.38	ND	NR	08-19-96	<1	<1	<1	<1	--		
WGR-3	11-21-96	NR	18.70	ND	NR	11-21-96	<1	<1	<1	<1	--		
WGR-3	03-26-97	NR	18.98	ND	NR	03-26-97	<1	<1	<1	<1	--		
WGR-3	05-20-97	NR	19.70	ND	NR	05-20-97	<0.5	<0.5	<0.5	<0.5	--		

**Table 1**  
**Historical Groundwater Elevation and Analytical Data**  
**Halogenated Volatile Organic Compounds (EPA method 8010 or 8240)**  
**1995-Present\*\***

**ARCO Service Station 276**  
**10600 MacArthur Boulevard, Oakland, California**

Well	Date	TOC Elevation	Depth to Water	FP Thickness	Groundwater Elevation	Date	Tetra- chloro- ethene (PCE)	Tetra- chloro- ethene (TCE)	trans- 1,2- Dichloro- ethene	cis-1,2- Dichloro- ethene	Freon 12	Dissolved Oxygen	Purged/ Not Purged
Number	Gauged	(ft-MSL)	(feet)	(ft-MSL)	(ft-MSL)	Sampled	µg/L	µg/L	µg/L	µg/L	µg/L	(mg/l)	(P/NP)
WGR-3	08-18-97	NR	21.81	ND	NR	08-18-97	<5	<5	<5	--	--		
WGR-3	11-17-97	NR	20.42	ND	NR	11-17-97	Not analyzed for Halogenated Volatile Organic Compounds						
WGR-3	12-02-99	NR	20.58	ND	NR	12-02-99	Not sampled: not on sampling schedule						

TOC: Top of Casing

ft-MSL: elevation in feet, relative to mean sea level

µg/L: micrograms per liter

ND: none detected

NR: not reported; data not available or not measurable

--: not analyzed or not applicable

\*: analyzed by EPA method 8021B

^: method reporting limit was raised due to: (1) high analyte concentration requiring sample dilution, or (2) matrix interference

^^: floating product entered the well during purging

\*\*: For previous historical groundwater elevation and analytical data please refer to *Fourth Quarter 1995 Groundwater Monitoring Results and Remediation System Performance Evaluation Report, Retail Service Station 10600 and 10700 MacArthur Boulevard, Oakland, California, (EMCON, March 22, 1996).*

**ATTACHMENT D**

**EDCC REPORT AND EDF/GEOWELL SUBMITTAL CONFIRMATION**

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## Error Summary Log

02/20/04

EDF 1.2i All files present in deliverable.

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Laboratory:	Sequoia Analytical Laboratories, Inc., Morgan Hill, CA
Project Name:	ARCO #0276, Oakland, CA
Work Order Number:	MNB0148
Global ID:	T0600100082
Lab Report Number:	MNB0148021920040935

## Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run	Sub
MNB01480219200 MW-1 40935		MNB014801	W	CS	8260FAB	SW5030	02/03/04	02/12/04	02/12/04	4020282	1	SEQP
MNB01480219200 MW-1 40935		MNB014801	W	CS	SW8015B	SW5030	02/03/04	02/09/04	02/09/04	4020203	1	SEQP
MNB01480219200 MW-2 40935		MNB014802	W	CS	8260FAB	SW5030	02/03/04	02/13/04	02/13/04	4020334	1	SEQP
MNB01480219200 MW-2 40935		MNB014802	W	CS	SW8015B	SW5030	02/03/04	02/09/04	02/09/04	4020203	1	SEQP
MNB01480219200 MW-3 40935		MNB014803	W	CS	8260FAB	SW5030	02/03/04	02/12/04	02/12/04	4020282	1	SEQP
MNB01480219200 MW-3 40935		MNB014803	W	CS	SW8015B	SW5030	02/03/04	02/09/04	02/09/04	4020203	1	SEQP
MNB01480219200 MW-3 40935		MNB014803R1	W	CS	8260FAB	SW5030	02/03/04	02/13/04	02/13/04	4020334	1	SEQP
MNB01480219200 MW-4 40935		MNB014804	W	CS	8260FAB	SW5030	02/03/04	02/12/04	02/12/04	4020282	1	SEQP
MNB01480219200 MW-4 40935		MNB014804	W	CS	SW8015B	SW5030	02/03/04	02/09/04	02/09/04	4020203	1	SEQP
MNB01480219200 MW-4 40935		MNB014804R1	W	CS	8260FAB	SW5030	02/03/04	02/13/04	02/13/04	4020334	1	SEQP
MNB01480219200 MW-5 40935		MNB014805	W	CS	8260FAB	SW5030	02/03/04	02/12/04	02/12/04	4020282	1	SEQP
MNB01480219200 MW-5 40935		MNB014805	W	CS	SW8015B	SW5030	02/03/04	02/09/04	02/09/04	4020203	1	SEQP
MNB01480219200 MW-6 40935		MNB014806	W	CS	8260FAB	SW5030	02/03/04	02/12/04	02/12/04	4020282	1	SEQP
MNB01480219200 MW-6 40935		MNB014806	W	CS	SW8015B	SW5030	02/03/04	02/09/04	02/09/04	4020212	1	SEQP
MNB01480219200 MW-7 40935		MNB014807	W	CS	8260FAB	SW5030	02/03/04	02/12/04	02/12/04	4020282	1	SEQP
MNB01480219200 MW-7 40935		MNB014807	W	CS	SW8015B	SW5030	02/03/04	02/09/04	02/09/04	4020212	1	SEQP
MNB01480219200 MW-8 40935		MNB014808	W	CS	8260FAB	SW5030	02/03/04	02/12/04	02/12/04	4020282	1	SEQP
MNB01480219200 MW-8 40935		MNB014808	W	CS	SW8015B	SW5030	02/03/04	02/09/04	02/09/04	4020212	1	SEQP
MNB01480219200 RW-1 40935		MNB014809	W	CS	8260FAB	SW5030	02/03/04	02/12/04	02/12/04	4020282	1	SEQP
MNB01480219200 RW-1 40935		MNB014809	W	CS	SW8015B	SW5030	02/03/04	02/09/04	02/09/04	4020212	1	SEQP
MNB01480219200 WGR-3		MNB014810	W	CS	8260FAB	SW5030	02/03/04	02/12/04	02/12/04	4020309	1	SEQP

## Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extrdate	Anadate	Lablotctl	Run	Sub
40935												
MNB01480219200	WGR-3	MNB014810	W	CS	SW8015B	SW5030	02/03/04	02/09/04	02/09/04	4020212	1	SEQP
40935												
		P40207004	W	NC	SW8015B	SW5030	//	02/09/04	02/09/04	4020203	1	SEQP
		P40218109	W	NC	8260FAB	SW5030	//	02/13/04	02/13/04	4020334	1	SEQP
		4020203BS1	WQ	BS1	SW8015B	SW5030	//	02/09/04	02/09/04	4020203	1	SEQP
		4020203BLK1	WQ	LB1	SW8015B	SW5030	//	02/09/04	02/09/04	4020203	1	SEQP
		4020203MS1	W	MS1	SW8015B	SW5030	//	02/09/04	02/09/04	4020203	1	SEQP
		4020203MSD1	W	SD1	SW8015B	SW5030	//	02/09/04	02/09/04	4020203	1	SEQP
		4020212BS1	WQ	BS1	SW8015B	SW5030	//	02/09/04	02/09/04	4020212	1	SEQP
		4020212BLK1	WQ	LB1	SW8015B	SW5030	//	02/09/04	02/09/04	4020212	1	SEQP
		4020212MS1	W	MS1	SW8015B	SW5030	//	02/09/04	02/09/04	4020212	1	SEQP
		4020212MSD1	W	SD1	SW8015B	SW5030	//	02/09/04	02/09/04	4020212	1	SEQP
		4020282BS1	WQ	BS1	8260FAB	SW5030	//	02/12/04	02/12/04	4020282	1	SEQP
		4020282BLK1	WQ	LB1	8260FAB	SW5030	//	02/12/04	02/12/04	4020282	1	SEQP
		4020282MS1	W	MS1	8260FAB	SW5030	//	02/12/04	02/12/04	4020282	1	SEQP
		4020282MSD1	W	SD1	8260FAB	SW5030	//	02/12/04	02/12/04	4020282	1	SEQP
		4020309BSD1	WQ	BD1	8260FAB	SW5030	//	02/12/04	02/12/04	4020309	1	SEQP
		4020309BS1	WQ	BS1	8260FAB	SW5030	//	02/12/04	02/12/04	4020309	1	SEQP
		4020309BLK1	WQ	LB1	8260FAB	SW5030	//	02/12/04	02/12/04	4020309	1	SEQP
		4020334BS1	WQ	BS1	8260FAB	SW5030	//	02/13/04	02/13/04	4020334	1	SEQP
		4020334BLK1	WQ	LB1	8260FAB	SW5030	//	02/13/04	02/13/04	4020334	1	SEQP
		4020334MS1	W	MS1	8260FAB	SW5030	//	02/13/04	02/13/04	4020334	1	SEQP
		4020334MSD1	W	SD1	8260FAB	SW5030	//	02/13/04	02/14/04	4020334	1	SEQP

# EDFSAMP: Error Summary Log

02/20/04

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



## EDFTEST: Error Summary Log

02/20/04

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

# EDFRES: Error Summary Log

02/20/04

Error type	Labsampid	Qcocode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	4020203MS1	MS1	W	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	4020203MS1	MS1	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	4020203MSD1	SD1	W	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	4020203MSD1	SD1	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	4020212MS1	MS1	W	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	4020212MS1	MS1	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	4020212MSD1	SD1	W	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	4020212MSD1	SD1	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	4020282MS1	MS1	W	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	4020282MS1	MS1	W	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	4020282MS1	MS1	W	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	4020282MS1	MS1	W	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	4020282MSD1	SD1	W	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	4020282MSD1	SD1	W	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	4020282MSD1	SD1	W	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	4020282MSD1	SD1	W	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	4020334MS1	MS1	W	8260FAB	PR	02/13/04	1	BR4FBZ
Warning: extra parameter	4020334MS1	MS1	W	8260FAB	PR	02/13/04	1	BZMED8
Warning: extra parameter	4020334MS1	MS1	W	8260FAB	PR	02/13/04	1	DBFM
Warning: extra parameter	4020334MS1	MS1	W	8260FAB	PR	02/13/04	1	DCA12D4
Warning: extra parameter	4020334MSD1	SD1	W	8260FAB	PR	02/14/04	1	BR4FBZ
Warning: extra parameter	4020334MSD1	SD1	W	8260FAB	PR	02/14/04	1	BZMED8
Warning: extra parameter	4020334MSD1	SD1	W	8260FAB	PR	02/14/04	1	DBFM
Warning: extra parameter	4020334MSD1	SD1	W	8260FAB	PR	02/14/04	1	DCA12D4
Warning: extra parameter	MNB014801	CS	W	8260FAB	PR	02/12/04	1	BR4FBZ

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	MNB014801	CS	W	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	MNB014801	CS	W	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	MNB014801	CS	W	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	MNB014801	CS	W	8260FAB	PR	02/12/04	1	PCE
Warning: extra parameter	MNB014801	CS	W	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	MNB014801	CS	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	MNB014802	CS	W	8260FAB	PR	02/13/04	1	BR4FBZ
Warning: extra parameter	MNB014802	CS	W	8260FAB	PR	02/13/04	1	BZMED8
Warning: extra parameter	MNB014802	CS	W	8260FAB	PR	02/13/04	1	DBFM
Warning: extra parameter	MNB014802	CS	W	8260FAB	PR	02/13/04	1	DCA12D4
Warning: extra parameter	MNB014802	CS	W	8260FAB	PR	02/13/04	1	PCE
Warning: extra parameter	MNB014802	CS	W	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	MNB014802	CS	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	MNB014803	CS	W	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	MNB014803	CS	W	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	MNB014803	CS	W	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	MNB014803	CS	W	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	MNB014803	CS	W	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	MNB014803	CS	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	MNB014803R1	CS	W	8260FAB	PR	02/13/04	1	BR4FBZ
Warning: extra parameter	MNB014803R1	CS	W	8260FAB	PR	02/13/04	1	BZMED8
Warning: extra parameter	MNB014803R1	CS	W	8260FAB	PR	02/13/04	1	DBFM
Warning: extra parameter	MNB014803R1	CS	W	8260FAB	PR	02/13/04	1	DCA12D4
Warning: extra parameter	MNB014803R1	CS	W	8260FAB	PR	02/13/04	1	PCE
Warning: extra parameter	MNB014804	CS	W	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	MNB014804	CS	W	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	MNB014804	CS	W	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	MNB014804	CS	W	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	MNB014804	CS	W	SW8015B	PR	02/09/04	1	BR4FBZ

Error type	Labsampid	Qcocode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	MNB014804	CS	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	MNB014804R1	CS	W	8260FAB	PR	02/13/04	1	BR4FBZ
Warning: extra parameter	MNB014804R1	CS	W	8260FAB	PR	02/13/04	1	BZMED8
Warning: extra parameter	MNB014804R1	CS	W	8260FAB	PR	02/13/04	1	DBFM
Warning: extra parameter	MNB014804R1	CS	W	8260FAB	PR	02/13/04	1	DCA12D4
Warning: extra parameter	MNB014804R1	CS	W	8260FAB	PR	02/13/04	1	PCE
Warning: extra parameter	MNB014805	CS	W	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	MNB014805	CS	W	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	MNB014805	CS	W	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	MNB014805	CS	W	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	MNB014805	CS	W	8260FAB	PR	02/12/04	1	PCE
Warning: extra parameter	MNB014805	CS	W	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	MNB014805	CS	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	MNB014806	CS	W	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	MNB014806	CS	W	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	MNB014806	CS	W	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	MNB014806	CS	W	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	MNB014806	CS	W	8260FAB	PR	02/12/04	1	PCE
Warning: extra parameter	MNB014806	CS	W	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	MNB014806	CS	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	MNB014807	CS	W	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	MNB014807	CS	W	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	MNB014807	CS	W	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	MNB014807	CS	W	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	MNB014807	CS	W	8260FAB	PR	02/12/04	1	PCE
Warning: extra parameter	MNB014807	CS	W	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	MNB014807	CS	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	MNB014808	CS	W	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	MNB014808	CS	W	8260FAB	PR	02/12/04	1	BZMED8

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	MNB014808	CS	W	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	MNB014808	CS	W	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	MNB014808	CS	W	8260FAB	PR	02/12/04	1	PCE
Warning: extra parameter	MNB014808	CS	W	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	MNB014808	CS	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	MNB014809	CS	W	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	MNB014809	CS	W	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	MNB014809	CS	W	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	MNB014809	CS	W	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	MNB014809	CS	W	8260FAB	PR	02/12/04	1	PCE
Warning: extra parameter	MNB014809	CS	W	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	MNB014809	CS	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	MNB014810	CS	W	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	MNB014810	CS	W	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	MNB014810	CS	W	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	MNB014810	CS	W	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	MNB014810	CS	W	8260FAB	PR	02/12/04	1	PCE
Warning: extra parameter	MNB014810	CS	W	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	MNB014810	CS	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	P40207004	NC	W	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	P40207004	NC	W	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	P40218109	NC	W	8260FAB	PR	02/13/04	1	BR4FBZ
Warning: extra parameter	P40218109	NC	W	8260FAB	PR	02/13/04	1	BZMED8
Warning: extra parameter	P40218109	NC	W	8260FAB	PR	02/13/04	1	DBFM
Warning: extra parameter	P40218109	NC	W	8260FAB	PR	02/13/04	1	DCA12D4
Warning: extra parameter	4020203BLK1	LB1	WQ	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	4020203BLK1	LB1	WQ	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	4020203BS1	BS1	WQ	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	4020203BS1	BS1	WQ	SW8015B	PR	02/09/04	1	GRO

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	4020212BLK1	LB1	WQ	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	4020212BLK1	LB1	WQ	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	4020212BS1	BS1	WQ	SW8015B	PR	02/09/04	1	BR4FBZ
Warning: extra parameter	4020212BS1	BS1	WQ	SW8015B	PR	02/09/04	1	GRO
Warning: extra parameter	4020282BLK1	LB1	WQ	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	4020282BLK1	LB1	WQ	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	4020282BLK1	LB1	WQ	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	4020282BLK1	LB1	WQ	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	4020282BLK1	LB1	WQ	8260FAB	PR	02/12/04	1	PCE
Warning: extra parameter	4020282BS1	BS1	WQ	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	4020282BS1	BS1	WQ	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	4020282BS1	BS1	WQ	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	4020282BS1	BS1	WQ	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	4020309BLK1	LB1	WQ	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	4020309BLK1	LB1	WQ	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	4020309BLK1	LB1	WQ	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	4020309BLK1	LB1	WQ	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	4020309BLK1	LB1	WQ	8260FAB	PR	02/12/04	1	PCE
Warning: extra parameter	4020309BS1	BS1	WQ	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	4020309BS1	BS1	WQ	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	4020309BS1	BS1	WQ	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	4020309BS1	BS1	WQ	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	4020309BSD1	BD1	WQ	8260FAB	PR	02/12/04	1	BR4FBZ
Warning: extra parameter	4020309BSD1	BD1	WQ	8260FAB	PR	02/12/04	1	BZMED8
Warning: extra parameter	4020309BSD1	BD1	WQ	8260FAB	PR	02/12/04	1	DBFM
Warning: extra parameter	4020309BSD1	BD1	WQ	8260FAB	PR	02/12/04	1	DCA12D4
Warning: extra parameter	4020334BLK1	LB1	WQ	8260FAB	PR	02/13/04	1	BR4FBZ
Warning: extra parameter	4020334BLK1	LB1	WQ	8260FAB	PR	02/13/04	1	BZMED8
Warning: extra parameter	4020334BLK1	LB1	WQ	8260FAB	PR	02/13/04	1	DBFM

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	4020334BLK1	LB1	WQ	8260FAB	PR	02/13/04	1	DCA12D4
Warning: extra parameter	4020334BLK1	LB1	WQ	8260FAB	PR	02/13/04	1	PCE
Warning: extra parameter	4020334BS1	BS1	WQ	8260FAB	PR	02/13/04	1	BR4FBZ
Warning: extra parameter	4020334BS1	BS1	WQ	8260FAB	PR	02/13/04	1	BZMED8
Warning: extra parameter	4020334BS1	BS1	WQ	8260FAB	PR	02/13/04	1	DBFM
Warning: extra parameter	4020334BS1	BS1	WQ	8260FAB	PR	02/13/04	1	DCA12D4

# EDFQC: Error Summary Log

02/20/04

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



# EDFCL: Error Summary Log

02/20/04

Error type	Clevdate	Anmcode	Exmcode	Parlabel	Cicode
There are no errors in this data file	//				

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**Confirmation Number:** 9525853574

**Date/Time of Submittal:** 2/19/2004 4:44:39 PM

**Facility Global ID:** T0600100082

**Facility Name:** ARCO

**Submittal Title:** 1Q04-monitoring well data for site0276

**Submittal Type:** GW Monitoring Report

Logged in as URSCORP-OAKLAND  
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CONTACT SITE [ADMINISTRATOR](#).

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### UPLOADING A GEO\_WELL FILE

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

**Submittal Title:** 1Q04-geowell data for site0276

**Submittal Date/Time:** 2/19/2004 4:30:40 PM

**Confirmation Number:** 4329746842

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