

February 26, 2003

Ms. Susan Hugo
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

**Re: Fourth Quarter 2002 Groundwater Monitoring Report
ARCO Service Station # 4931
731 West MacArthur Boulevard
Oakland, California
URS Project #38465952**

Dear Ms. Hugo:

On behalf of Atlantic Richfield Company (ARCO-an affiliated company of the Group Environmental Management Company), URS Corporation (URS) is submitting the *Fourth Quarter 2002 Groundwater Monitoring Report* for the ARCO Service Station #4931, located at 731 West MacArthur Boulevard, Oakland, California.

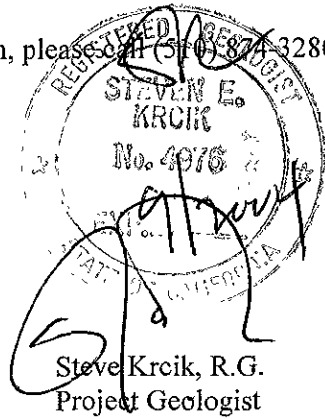
If you have any questions regarding this submission, please call (510) 874-3280.

Sincerely,

URS CORPORATION



Scott Robinson
Project Manager



STEVEN E.
KRCIK
No. 4976
STATE OF CALIFORNIA
Project Geologist

Enclosure: Fourth Quarter 2002 Groundwater Monitoring Report

cc: Mr. Paul Supple, ARCO, P.O. Box 6549, Moraga, CA 94570
Mr. Chuck Headlee, Regional Water Quality Control Board - San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, CA 94612



Atlantic Richfield Company
(a BP affiliated company)

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

February 27, 2003

Re: Fourth Quarter 2002 Groundwater Monitoring Report
ARCO Station #4931
731 W Macarthur Blvd
Oakland, CA

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

**FOURTH QUARTER 2002
GROUNDWATER MONITORING**

ARCO SERVICE STATION #4931
731 WEST MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

Prepared for
Atlantic Richfield Company

February 26, 2003

URS

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

38465952

Date: February 26, 2003
Quarter: 4Q 02

ATLANTIC RICHFIELD COMPANY QUARTERLY GROUNDWATER MONITORING REPORT

Former Facility No.: 4931 Address: 731 West MacArthur Boulevard, Oakland, California
Atlantic Richfield Co. Environmental Engineer: Paul Supple
Consulting Co./Contact Person: URS Corporation / Scott Robinson
Consultant Project No.: 38465952
Primary Agency: ACHCSA

WORK PERFORMED THIS QUARTER (Fourth – 2002):

1. Performed fourth quarter 2002 groundwater monitoring event on December 6, 2002.
2. Prepared third quarter 2002 groundwater monitoring report.
3. Product line upgrades were completed on 11/06/02.

WORK PROPOSED FOR NEXT QUARTER (First – 2003):

1. Perform first quarter 2002 groundwater monitoring event.
2. Prepare and submit fourth quarter 2002 groundwater monitoring report.

Current Phase of Project: Remediation/groundwater monitoring/sampling
Frequency of Groundwater Sampling: Annual (2nd Quarter): A-7, A-13
Semi-Annual (2nd/4th Quarter): A-3, A-5, A-11, A-12
Quarterly: A-2, A-4, A-6, A-8, A-9
Frequency of Groundwater Monitoring: Quarterly
Is Free Product (FP) Present On-Site: Sheen (A-4)
Current Remediation Techniques: Intrinsic Bioremediation Enhancement using ORC
Approximate Depth to Groundwater: 6.09 (AR-2) to 10.43 (A-11) feet
Groundwater Gradient (direction): West
Groundwater Gradient (magnitude): 0.015 feet per foot

DISCUSSION:

TPH-g was detected in three of the eight wells sampled this quarter at concentrations ranging from 310 micrograms per liter ($\mu\text{g/L}$) in well A-5 to 5,300 $\mu\text{g/L}$ in well A-8. Benzene was detected in two wells at concentrations of 110 $\mu\text{g/L}$ in well A-4 and 1,100 $\mu\text{g/L}$ in well A-8. MTBE was detected in six wells at concentrations ranging from 6.0 $\mu\text{g/L}$ in well A-2 to 2,200 $\mu\text{g/L}$ in well A-8. Well A-6 was not sampled this quarter because it was paved over. A product sheen was detected in well A-4.

ATTACHMENTS:

- Table 1 - Groundwater Elevation and Analytical Data
- Table 2 - Groundwater Flow Direction and Gradient
- Figure 1 - Groundwater Elevation Contour and Analytical Summary Map – December 6, 2002
- 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

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #4931
731 West Macarthur Boulevard
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH			Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	D.O. (mg/L)	
					as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)					
A-2	06/21/00	55.48	6.85	48.63	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<3.0	NA	
	09/20/00		10.45	45.03	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	12/26/00		6.27	49.21	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	03/20/01		4.57	50.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	06/12/01		9.27	46.21	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	09/23/01		10.75	44.73	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	12/31/01		4.13	51.35	ND<50	ND<0.5	ND<0.5	1	3.2	ND<2.5	NA	
	03/21/02		3.26	52.22	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	04/17/02		3.72	51.76	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.1	NA	
	08/12/02		NP	9.95	45.53	ND<10	ND<0.10	ND<0.10	ND<0.10	ND<0.10	ND<0.50	NA
	12/06/02		NP	10.01	45.47	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.0	3.1
A-3	06/21/00	54.66	9.48	45.18	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	46	NA	
	09/20/00		10.24	44.42	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	89.6	NA	
	12/26/00		9.58	45.08	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.11	NA	
	03/20/01		6.34	48.32	NS	NS	NS	NS	NS	NS	NA	
	06/12/01		9.76	44.90	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	86	NA	
	09/23/01		10.55	44.11	NS	NS	NS	NS	NS	NS	NA	
	12/31/01		3.70	50.96	ND<50	ND<0.5	ND<0.5	ND<0.5	1	60	NA	
	03/21/02		5.75	48.91	NS	NS	NS	NS	NS	NS	NA	
	04/17/02		7.27	47.39	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	45	NA	
	08/12/02		9.71	44.95	NS	NS	NS	NS	NS	NS	NA	
	12/06/02		P	9.55	45.11	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	150	2.4

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #4931
731 West Macarthur Boulevard
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH					D.O. (mg/L)		
					as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)		MTBE (µg/L)	
A-4	06/21/00	54.73	9.49	45.24	2,100	110	2.1	11	5.9	2,000	NA	
	09/20/00		10.33	44.40	1,540	127	ND<5.0	9.07	7.42	1,940	NA	
	12/26/00		9.34	45.39	1,550	42.7	ND<5.0	11	10.9	1,210	NA	
	03/20/01		7.56	47.17	913	40.9	ND<5.0	15.5	14.6	ND<25	NA	
	06/12/01		9.83	44.90	2,000	230	ND<20	21	ND<20	4,700	NA	
	09/23/01		10.54	44.19	1,600	35	ND<10	ND<10	ND<10	3,000	NA	
	12/31/01		5.42	49.31	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	880	NA	
	03/21/02		6.18	48.55	ND<5,000	ND<50	ND<50	ND<50	ND<50	1,400	NA	
	04/17/02		7.34	47.39	1,300	79	31	17	55	2,200	NA	
	08/12/02		P	9.56	45.17	2,400 ^a	120	ND<5.0	ND<5.0	ND<5.0	2,100	NA
	12/06/02		P	10.02	44.71	2,200	110	10	42	56	2,000	NA
A-5	06/21/00	54.17	9.29	44.88	980	ND<0.5	ND<0.5	ND<0.5	ND<1.0	2,000	NA	
	09/20/00		10.23	43.94	NS	NS	NS	NS	NS	NS	NA	
	12/26/00		9.65	44.52	525	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1,200	NA	
	03/20/01		8.05	46.12	NS	NS	NS	NS	NS	NS	NA	
	06/12/01		9.81	44.36	830	ND<5.0	ND<5.0	ND<5.0	ND<5.0	3,200	NA	
	09/23/01		10.42	43.75	NS	NS	NS	NS	NS	NS	NA	
	12/31/01		6.03	48.14	320	ND<0.5	ND<0.5	ND<0.5	ND<0.5	60	NA	
	03/21/02		6.71	47.46	NS	NS	NS	NS	NS	NS	NA	
	04/17/02		8.01	46.16	1,600	ND<10	ND<10	ND<10	ND<10	3,200	NA	
	08/12/02			9.87	44.30	NS	NS	NS	NS	NS	NS	NA
	12/06/02		P	9.66	44.51	310	ND<0.50	ND<0.50	ND<0.50	ND<0.50	330	1.9

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #4931
731 West Macarthur Boulevard
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH			Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	D.O. (mg/L)	
					as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)					
A-6	06/21/00	55.17	8.67	46.50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<3.0	NA	
	09/20/00		9.34	45.83	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	12/26/00		8.65	46.52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	03/20/01		6.84	48.33	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	06/12/01		8.93	46.24	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7	NA	
	09/23/01		9.74	45.43	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	12/31/01		4.81	50.36	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.2	NA	
	03/21/02		5.44	49.73	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	04/17/02		6.95	48.22	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.1	NA	
	08/12/02		NP	8.90	46.27	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	12/06/02			Unable to Sample, Well Paved Over								
A-7	06/21/00	54.71	8.58	46.13	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<3.0	NA	
	09/20/00		9.19	45.52	NS	NS	NS	NS	NS	NS	NA	
	12/26/00		8.50	46.21	NS	NS	NS	NS	NS	NS	NA	
	03/20/01		6.75	47.96	NS	NS	NS	NS	NS	NS	NA	
	06/12/01		8.80	45.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	09/23/01		9.59	45.12	NS	NS	NS	NS	NS	NS	NA	
	12/31/01		4.78	49.93	NS	NS	NS	NS	NS	NS	NA	
	03/21/02		5.35	49.36	NS	NS	NS	NS	NS	NS	NA	
	04/17/02		6.88	47.83	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.5	NA	
	08/12/02		8.77	45.94	NS	NS	NS	NS	NS	NS	NA	
	12/06/02		9.07	45.64	NS	NS	NS	NS	NS	NS	NA	

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #4931
731 West Macarthur Boulevard
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH					D.O. (mg/L)	
					as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)		MTBE (µg/L)
A-8	06/21/00	53.77	9.07	44.70	810	ND<0.5	ND<0.5	ND<0.5	810	1,500	NA
	09/20/00		9.72	44.05	10,800	2,680	46	439	370	4,410	NA
	12/26/00		9.20	44.57	7,700	1,440	ND<50	202	106	2,230	NA
	03/20/01		7.51	46.26	ND<5,000	1,280	ND<50	53.9	ND<50	2,880	NA
	06/12/01		9.53	44.24	5,600	1,700	ND<50	61	54	2,900	NA
	09/23/01		10.08	43.69	10,000	3,500	ND<50	110	64	6,500	NA
	12/31/01		4.34	49.43	4,300	610	ND<10	60	24	520	NA
	03/21/02		6.67	47.10	6,600	1400	ND<50	130	ND<50	2,700	NA
	04/17/02		7.72	46.05	3,800	540	ND<10	ND<10	12	3,100	NA
	08/12/02		NP	9.64	44.13	9,400	1,800	ND<20	35	28	4,200
12/06/02	NP	9.62	44.15	5,300	1,100	11	11	ND<10	2,200 ^b	1.4	
A-9	06/21/00	53.04	8.56	44.48	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	5.0	NA
	09/20/00		9.05	43.99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	12/26/00		8.49	44.55	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	03/20/01		6.95	46.09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	06/12/01		8.67	44.37	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.8	NA
	09/23/01		9.21	43.83	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	12/31/01		4.57	48.47	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	03/21/02		5.60	47.44	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	04/17/02		6.89	46.15	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	08/12/02		P	8.71	44.33	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5
12/06/02	P	8.77	44.27	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	1.1	

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #4931
731 West Macarthur Boulevard
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH			Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	D.O. (mg/L)	
					as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)					
A-10	06/21/00	54.26	10.47	43.79	NS	NS	NS	NS	NS	NS	NA	
	09/20/00		10.76	43.50	NS	NS	NS	NS	NS	NS	NA	
	12/26/00		NM	NC	NS	NS	NS	NS	NS	NS	NM	
	03/20/01		NM	NC	NS	NS	NS	NS	NS	NS	NM	
	09/23/01		NM	NC	NS	NS	NS	NS	NS	NS	NM	
	12/31/01		NM	NC	NS	NS	NS	NS	NS	NS	NM	
	03/21/02		NM	NC	NS	NS	NS	NS	NS	NS	NM	
	04/17/02		NM	NC	NS	NS	NS	NS	NS	NS	NM	
	08/12/02		NM	NC	NS	NS	NS	NS	NS	NS	NM	
	12/06/02		NM	NC	NS	NS	NS	NS	NS	NS	NS	NM
A-11	06/21/00	53.74	9.54	44.20	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	4.0	NA	
	09/20/00		10.62	43.12	NS	NS	NS	NS	NS	NS	NA	
	12/26/00		10.03	43.71	ND< 50	ND< 0.5	ND< 0.5	ND< 0.5	ND<0.5	ND<2.5	NA	
	03/20/01		8.49	45.25	NS	NS	NS	NS	NS	NS	NA	
	06/12/01		10.21	43.53	ND< 50	ND< 0.5	ND< 0.5	ND< 0.5	ND<0.5	ND<2.5	NA	
	09/23/01		10.77	42.97	NS	NS	NS	NS	NS	NS	NA	
	12/31/01		6.06	47.68	ND< 50	ND< 0.5	ND< 0.5	ND< 0.5	ND<0.5	ND<2.5	NA	
	03/21/02		7.14	46.60	NS	NS	NS	NS	NS	NS	NA	
	04/17/02		8.41	45.33	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	08/12/02		10.25	43.49	NS	NS	NS	NS	NS	NS	NA	
	12/06/02		P	10.43	43.31	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	2.4

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #4931
731 West Macarthur Boulevard
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH					D.O. (mg/L)		
					Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)		MTBE (µg/L)	
A-12	06/21/00	52.05	9.28	42.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	18	NA	
	09/20/00		9.55	42.50	NS	NS	NS	NS	NS	NS	NA	
	12/26/00		9.05	43.00	ND< 50	ND< 0.5	ND< 0.5	ND< 0.5	ND<0.5	17.3	NA	
	03/20/01		7.92	44.13	NS	NS	NS	NS	NS	NS	NA	
	06/12/01		9.26	42.79	ND< 50	ND< 0.5	ND< 0.5	ND< 0.5	ND<0.5	25	NA	
	09/23/01		9.68	42.37	NS	NS	NS	NS	NS	NS	NA	
	12/31/01		5.74	46.31	ND< 50	ND< 0.5	ND< 0.5	ND< 0.5	ND<0.5	9.5	NA	
	03/21/02		6.64	45.41	NS	NS	NS	NS	NS	NS	NA	
	04/17/02		7.68	44.37	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	29	NA	
	08/12/02		9.30	42.75	NS	NS	NS	NS	NS	NS	NA	
	12/06/02		P,C	9.38	42.67	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	13	2.3
	A-13		06/21/00	55.11	NM	NC	NS	NS	NS	NS	NS	NS
09/20/00		NM	NC		NS	NS	NS	NS	NS	NS	NM	
12/26/00		NM	NC		NS	NS	NS	NS	NS	NS	NM	
03/20/01		NM	NC		NS	NS	NS	NS	NS	NS	NM	
06/12/01		NM	NC		NS	NS	NS	NS	NS	NS	NM	
09/23/01		NM	NC		NS	NS	NS	NS	NS	NS	NM	
12/31/01		NM	NC		NS	NS	NS	NS	NS	NS	NM	
03/21/02		6.70	48.41		NS	NS	NS	NS	NS	NS	NA	
04/17/02		7.95	47.16		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
08/12/02		10.11	45.00		NS	NS	NS	NS	NS	NS	NA	
12/06/02		10.26	44.85		NS	NS	NS	NS	NS	NS	NA	

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #4931
731 West Macarthur Boulevard
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH			Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	D.O. (mg/L)
					as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)				
AR-1	06/21/00	54.72	NM	NC	NS	NS	NS	NS	NS	NS	NM
	09/20/00		NM	NC	NS	NS	NS	NS	NS	NS	NM
	12/26/00		9.95	44.77	NS	NS	NS	NS	NS	NS	NA
	03/20/01		8.34	46.38	NS	NS	NS	NS	NS	NS	NA
	06/12/01		10.17	44.55	NS	NS	NS	NS	NS	NS	NA
	09/23/01		10.72	44.00	NS	NS	NS	NS	NS	NS	NA
	12/31/01		5.91	48.81	NS	NS	NS	NS	NS	NS	NA
	03/21/02		7.00	47.72	NS	NS	NS	NS	NS	NS	NA
	04/17/02		8.33	46.39	NS	NS	NS	NS	NS	NS	NA
	08/12/02		10.18	44.54	NS	NS	NS	NS	NS	NS	NA
	12/06/02		10.21	44.51	NS	NS	NS	NS	NS	NS	NA
AR-2	06/21/00	54.77	NM	NC	NS	NS	NS	NS	NS	NS	NM
	09/20/00		NM	NC	NS	NS	NS	NS	NS	NS	NM
	12/26/00		NM	NC	NS	NS	NS	NS	NS	NS	NM
	03/20/01		3.13	51.64	NS	NS	NS	NS	NS	NS	NA
	06/12/01		4.51	50.26	NS	NS	NS	NS	NS	NS	NA
	09/23/01		6.05	48.72	NS	NS	NS	NS	NS	NS	NA
	12/31/01		2.79	51.98	NS	NS	NS	NS	NS	NS	NA
	03/21/02		7.75	47.02	NS	NS	NS	NS	NS	NS	NA
	04/17/02		2.24	52.53	NS	NS	NS	NS	NS	NS	NA
	08/12/02		4.93	49.84	NS	NS	NS	NS	NS	NS	NA
	12/06/02		6.09	48.68	NS	NS	NS	NS	NS	NS	NA

**Table 1
Groundwater Elevation and Analytical Data**

ARCO Service Station #4931
731 West Macarthur Boulevard
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH			Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	D.O. (mg/L)
					as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)				
AR-3	06/21/00	54.19	NM	NC	NS	NS	NS	NS	NS	NS	NM
	09/20/00		NM	NC	NS	NS	NS	NS	NS	NS	NM
	12/26/00		9.70	44.49	NS	NS	NS	NS	NS	NS	NA
	03/20/01		NM	NC	NS	NS	NS	NS	NS	NS	NM
	06/12/01		NM	NC	NS	NS	NS	NS	NS	NS	NM
	09/23/01		10.43	43.76	NS	NS	NS	NS	NS	NS	NA
	12/31/01		5.18	49.01	NS	NS	NS	NS	NS	NS	NA
	03/21/02		6.78	47.41	NS	NS	NS	NS	NS	NS	NA
	04/17/02		8.06	46.13	NS	NS	NS	NS	NS	NS	NA
	08/12/02		9.94	44.25	NS	NS	NS	NS	NS	NS	NA
12/06/02	9.99	44.20	NS	NS	NS	NS	NS	NS	NS	NA	

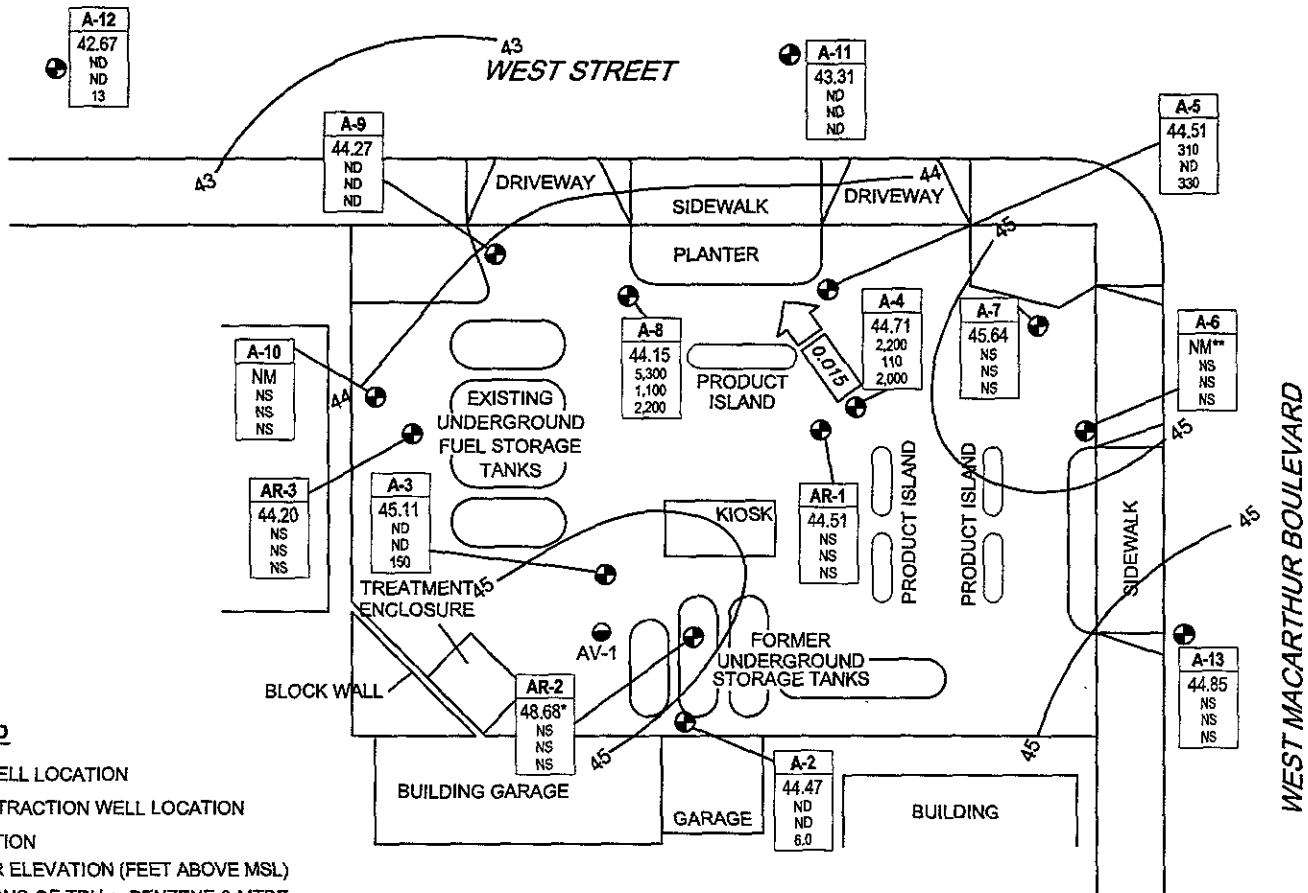
TPH = Total Petroleum Hydrocarbons analyzed using EPA Method 8015B modified
 MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8021B unless otherwise noted
 note = Samples taken 12/06/02 analyzed using DHS LUFT
 µg/L = Micrograms per liter
 NM = Not measured
 NC = Not calculated
 NS = Not sampled
 NA = Not available
 ND< = Not detected at or above the specified laboratory detection limit
 P = Purge
 NP = Not purged
 a = Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
 b = The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.
 c = This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose.
 Source: The data within this table collected prior to August 2002 was provided to URS by Group Environmental Management Company and their previous consultants. URS has not verified the accuracy of this information.

Table 2
Groundwater Flow Direction and Gradient

ARCO Service Station #4931
731 West Macarthur Boulevard
Oakland, California

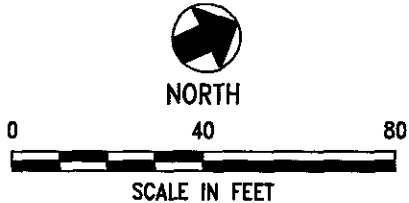
Date Measured	Average Flow Direction	Average Hydraulic Gradient
06/21/00	West-Southwest	0.031
09/20/00	Southwest	0.013
12/26/00	West	0.028
03/20/01	West	0.046
06/12/01	West	0.014
09/23/01	West	0.012
12/31/01	West	0.024
03/21/02	West	0.047
04/17/02	West	0.03
08/12/02	West	0.016
12/06/02	West	0.015

Source The data within this table collected prior to August 2002 was provided to URS by Group Environmental Management Company and their previous consultants URS has not verified the accuracy of this information



LEGEND

- A-2 MONITORING WELL LOCATION
 - AV-1 SOIL VAPOR EXTRACTION WELL LOCATION
- | | |
|---------|---|
| Well | WELL DESIGNATION |
| ELEV | GROUNDWATER ELEVATION (FEET ABOVE MSL) |
| TPH-g | CONCENTRATIONS OF TPH-g, BENZENE & MTBE |
| Benzene | IN MICROGRAMS PER LITER (µg/L) |
| MTBE | |
- * ELEVATION NOT USED IN CONTOURING
 - ** WELL PAVED OVER
 - ND NOT DETECTED
 - NM NOT MEASURED
 - NS NOT SAMPLED
- 46 — GROUNDWATER ELEVATION CONTOUR (FEET ABOVE MSL)
- ← 0.015 — GROUNDWATER FLOW DIRECTION AND GRADIENT



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

URS	Project No. 38465952	GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP	FIGURE 1
	Arco Service Station 4931 731 West MacArthur Boulevard Oakland, California		

ATTACHMENT A
FIELD PROCEDURES AND FIELD DATA SHEETS

FIELD PROCEDURES

Sampling Procedures

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

WELL GAUGING DATA

Project # 021206-RH1 Date 12/6/02 Client BP/Arco 4931

Site 731 W. McArthur 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 TOC	
A-2	4					10.01	19.38		NPE 5'
A-3	4					9.55	16.15		
A-4	4	odor and sheen	gauged w/ ORC in well			10.02	19.45		
A-5	3					9.66	24.82		
A-6	3		Well has been paved over looked for well but couldnt find it			9.66	24.82		NPE 2'
A-7	3					9.07	22.14		G
A-8	3		gauged w/ ORC in well			9.62	19.25		NPE 2'
A-9	6		gauged w/ ORC in well			8.77	37.76		
A-11	3					10.43	29.75		
A-12	3					9.38	29.77		
A-13	3		gauged w/ ORC in well			10.26	29.04		G
AR-1	6					10.21	28.00		G
AR-2	6					6.09	26.30		G
AR-3	4					9.99	29.00	G	

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

* took ORC out to purge and sample

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>021206-RH1</u>	Station # <u>4931</u>
Sampler: <u>Ryan Hanstedt</u>	Date: <u>12/6/02</u>
Well I.D.: <u>A-2</u>	Well Diameter: 2 3 <u>4</u> 6 8 _____
Total Well Depth: <u>19.38</u>	Depth to Water: <u>10.01</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 ² + 0.163

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

Top of Screen: NPE 5' 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>0</u>	x	<u>3</u>	=	<u>0</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

3 VOLS

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
1124	65.4	6.1	672	<u>0</u>	clear

Did well dewater? Yes ~~(No)~~ Gallons actually evacuated: 0

Sampling Time: 1130 Sampling Date: 12/6/02

Sample I.D.: A-2 Laboratory: Pace Sequoia Other _____

Analyzed for: <u>PPH-G</u> <u>BTEX</u> <u>MTBE</u> TPH-D Other:					
D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	3.1	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021206-RH1	Station # 4931
Sampler: Ryan Hanstedt	Date: 12/6/02
Well I.D.: A-4	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: 19.45	Depth to Water: 10.02
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 ² * 0.163

Purge Method: Bailer Sampling Method: Bailer

Disposable Bailer Disposable Bailer

Middleburg 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>6</u>	x	<u>3</u>	=	<u>18.0</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

3 vols

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
1255	68.0	6.6	1381	6.0	cloudy
1259	Well dewatered @ 8.0 gal				OTW = 17.57
1302	67.9	6.7	1455	8.0	blackish, sheen, odor

Did well dewater? Yes No Gallons actually evacuated: 8.0

Sampling Time: 1302 Sampling Date: 12/6/02

Sample I.D.: A-4 Laboratory: Pace Sequoia Other _____

Analyzed for: TPH-G STEX MTBE TPH-D Other:

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021206-RH1	Station # 4931
Sampler: Ryan Hanstedt	Date: 12/6/02
Well I.D.: A-6	Well Diameter: 2 <input checked="" type="radio"/> 4 <input type="radio"/> 6 <input type="radio"/> 8 <input type="radio"/>
Total Well Depth: 211	Depth to Water:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> PVC <input type="radio"/> Grade	D.O. Meter (if req'd): <input checked="" type="radio"/> YSI <input type="radio"/> HACH

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

Purge Method: Bailer Disposable Bailer Middleburg Electric Submersible Extraction Pump Other: _____

Sampling Method: Bailer 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.

1 Case Volume (Gals.)	X	3	=	0	Gals.
		Specified Volumes		Calculated Volume	

3 Vols

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
Could not find well.					

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Time: _____ Sampling Date: 12/6/02

Sample I.D.: _____ Laboratory: Pace Sequoia Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: _____

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>021206-RH1</u>	Station # <u>4931</u>
Sampler: <u>Ryan Hanstedt</u>	Date: <u>12/6/02</u>
Well I.D.: <u>A-8</u>	Well Diameter: 2 <u>(3)</u> 4 6 8 _____
Total Well Depth: <u>19.25</u>	Depth to Water: <u>9.62</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 ² * 0.163

Purge Method: <u>Bailer</u>	Sampling Method: <u>Bailer</u>
<u>Disposable Bailer</u>	<u>Disposable Bailer</u>
<u>Middleburg</u>	<u>Extraction Port</u>
<u>Electric Submersible</u>	Other: _____
<u>Extraction Pump</u>	
Other: _____	

Top of Screen: NP@2' If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

1 Case Volume (Gals.)	X	<u>3</u>	=	<u>0</u>	Gals.
		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or <u>(µS)</u>)	Gals. Removed	Observations
<u>1220</u>	<u>63.8</u>	<u>6.7</u>	<u>1063</u>	<u>0</u>	<u>black particles</u>

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>0</u>
Sampling Time: <u>1220</u>	Sampling Date: <u>12/6/02</u>
Sample I.D.: <u>A-8</u>	Laboratory: Pace <u>Sequoia</u> Other _____
Analyzed for: <u>TPH-G</u> <u>BTEX</u> <u>MTBE</u> TPH-D Other:	
D.O. (if req'd):	Pre-purge: _____ mg/L
	Post-purge: <u>1.4</u> mg/L
O.R.P. (if req'd):	Pre-purge: _____ mV
	Post-purge: _____ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021206-RH1	Station # 4931
Sampler: Ryan Harstedt	Date: 12/6/02
Well I.D.: A-12	Well Diameter: 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 6 <input type="radio"/> 8 <input type="radio"/>
Total Well Depth: 29.77	Depth to Water: 9.38
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> PVC <input type="radio"/> Grade	D.O. Meter (if req'd): <input checked="" type="radio"/> YSI <input type="radio"/> HACH

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

Purge Method: <input type="radio"/> Bailer <input type="radio"/> Disposable Bailer <input checked="" type="radio"/> Middleburg <input type="radio"/> Electric Submersible <input type="radio"/> Extraction Pump Other: _____	Sampling Method: <input type="radio"/> Bailer <input checked="" type="radio"/> Disposable Bailer <input type="radio"/> 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.

7.5	x	3	=	22.5	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

3 Vols

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
1008	69.2	6.5	668	7.5	blackish
1014	65.7	6.1	649	15.0	cleared up
1020	65.7	6.5	693	22.5	clear

Did well dewater? Yes <input checked="" type="radio"/> NO <input type="radio"/>	Gallons actually evacuated: 22.5
Sampling Time: 1025	Sampling Date: 12/6/02
Sample I.D.: 12/6/02 A-12	Laboratory: Pace <input checked="" type="radio"/> Sequoia <input type="radio"/> Other _____
Analyzed for: <input checked="" type="radio"/> TPH-C <input checked="" type="radio"/> BTEX <input checked="" type="radio"/> MTBE <input type="radio"/> TPH-D Other: _____	
D.O. (if req'd):	Pre-purge: _____ mg/L <input checked="" type="radio"/> Post-purge: 2.3 mg/L
O.R.P. (if req'd):	Pre-purge: _____ mV <input type="radio"/> Post-purge: _____ mV



Chain of Custody Record

Project Name _____
 BP BU/GEM CO Portfolio: _____
 BP Laboratory Contract Number: _____

Date: 12/6/02 Requested Due Date (mm/dd/yy) _____

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

Client Name: SEQUOIA	BP/GEM Facility No.:	Consultant/Contractor: URS
Address: 885 Jarvis Dr. Morgan Hill, CA 95037	BP/GEM Facility Address: 731 W. MACARTHUR BLVD, OAKLAND, CA	Address: 500 12th St, Ste. 200 Oakland, CA 94609-4014
PM: Latonya Pelt	Site ID No. ARCO 4931	e-mail EDD: syed_rehan@urscorp.com
Phone/Fax: 408-776-9600 / 408-782-6308	Site Lat/Long:	Consultant/Contractor Project No.: J5-00004931.01 00427
Report Type & QC Level: Send EDF Reports	California Global ID #: T0600100107	Consultant Tele/Fax: 510-874-1735/510-874-3268
BP/GEM Account No.:	BP/GEM PM Contact: PAUL SUPPLE	Consultant/Contractor PM: Scott Robinson
	Address:	Invoice to: Consultant/Contractor or <u>BP/GEM</u> (Circle one)
	Tele/Fax:	BP/GEM Work Release No:

Bottle Order 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 ₂ SO ₄	HNO ₃	HCl	TPH-G/BTEX (8015/8021)	TPH-D (8015)	MTBE (8021)	MTBE, TAME, ETBE, DIBP, TBA (8260)	1,2-DCA & EDB (8260)				
1	A-2	1130	X				3				X			X							
2	A-3	1203	X									X			X						
3	A-4	1302	X									X			X						
4	A-5	1137	X									X			X						
5	A-8	1220	X									X			X						
6	A-9	1245	X									X			X						
7	A-11	1105	X									X			X						
8	A-12	1025	X									X			X						
9																					
10																					

Sampler's Name: <u>Ryan Hansjodt</u>	Relinquished By / Affiliation: <u>[Signature] / BTS</u>	Date:	Time:	Accepted By / Affiliation:	Date:	Time:
Sampler's Company: <u>Blaine Tech</u>						
Release Date:						
Release Method:						
Release Tracking No.:						

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

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:

4931

Station #

731 W. MacArthur Blvd

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

200

added equip.

rinse water

~~200~~ 4

any other adjustments

TOTAL GALS.

RECOVERED 204

loaded onto

BTS vehicle #

15

BTS event #

time

date

021206-241

1315

12/6/02

signature

[Handwritten Signature]

RECD AT

time

date

unloaded by

signature

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

LABORATORY PROCEDURES

Laboratory Procedures

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



31 December, 2002

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

RE: ARCO #4931, Oakland, Ca
Sequoia Work Order: MLL0292

Enclosed are the results of analyses for samples received by the laboratory on 12/09/02 16:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya Pelt
Project Manager
CA ELAP Certificate #1210

URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #4931, Oakland, Ca
Project Number: ARCO #4931, Oakland, CA
Project Manager: Scott Robinson

MLL0292
Reported:
12/31/02 10:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
A-2	MLL0292-01	Water	12/06/02 11:30	12/09/02 16:05
A-3	MLL0292-02	Water	12/06/02 12:03	12/09/02 16:05
A-4	MLL0292-03	Water	12/06/02 13:02	12/09/02 16:05
A-5	MLL0292-04	Water	12/06/02 11:37	12/09/02 16:05
A-8	MLL0292-05	Water	12/06/02 12:20	12/09/02 16:05
A-9	MLL0292-06	Water	12/06/02 12:45	12/09/02 16:05
A-11	MLL0292-07	Water	12/06/02 11:05	12/09/02 16:05
A-12	MLL0292-08	Water	12/06/02 10:25	12/09/02 16:05

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

URS Corporation
 500 12th Street, Suite 100
 Oakland CA, 94607

 Project: ARCO #4931, Oakland, Ca
 Project Number: ARCO #4931, Oakland, CA
 Project Manager: Scott Robinson

 MLL0292
Reported:
 12/31/02 10:54

**Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT
Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-2 (MLL0292-01) Water Sampled: 12/06/02 11:30 Received: 12/09/02 16:05									
Purgeable Hydrocarbons	ND	50	ug/l	1	2120331	12/20/02	12/20/02	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	6.0	2.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		80 %	60-140		"	"	"	"	
A-3 (MLL0292-02) Water Sampled: 12/06/02 12:03 Received: 12/09/02 16:05									
Purgeable Hydrocarbons	ND	500	ug/l	10	2120331	12/20/02	12/20/02	DHS LUFT	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	150	20	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		79 %	60-140		"	"	"	"	
A-4 (MLL0292-03) Water Sampled: 12/06/02 13:02 Received: 12/09/02 16:05									
Purgeable Hydrocarbons	2200	50	ug/l	1	2120331	12/20/02	12/20/02	DHS LUFT	
Benzene	110	0.50	"	"	"	"	"	"	
Toluene	10	0.50	"	"	"	"	"	"	
Ethylbenzene	42	0.50	"	"	"	"	"	"	
Xylenes (total)	56	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	2000	200	"	100	"	"	12/21/02	"	HT-RS
<i>Surrogate: a,a,a-Trifluorotoluene</i>		113 %	60-140		"	"	12/20/02	"	



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

URS Corporation
 500 12th Street, Suite 100
 Oakland CA, 94607

Project: ARCO #4931, Oakland, Ca
 Project Number: ARCO #4931, Oakland, CA
 Project Manager: Scott Robinson

MLL0292
 Reported:
 12/31/02 10:54

**Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT
 Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-5 (MLL0292-04) Water Sampled: 12/06/02 11:37 Received: 12/09/02 16:05									
Purgeable Hydrocarbons	310	50	ug/l	1	2120331	12/20/02	12/20/02	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	330	40	"	20	"	"	12/20/02	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		104 %	60-140	"	"	"	12/20/02	"	
A-8 (MLL0292-05) Water Sampled: 12/06/02 12:20 Received: 12/09/02 16:05									
Purgeable Hydrocarbons	5300	1000	ug/l	20	2120331	12/20/02	12/20/02	DHS LUFT	
Benzene	1100	10	"	"	"	"	"	"	
Toluene	11	10	"	"	"	"	"	"	
Ethylbenzene	11	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Methyl tert-butyl ether	2200	40	"	"	"	"	"	"	E
<i>Surrogate: a,a,a-Trifluorotoluene</i>		65 %	60-140	"	"	"	"	"	
A-9 (MLL0292-06) Water Sampled: 12/06/02 12:45 Received: 12/09/02 16:05									
Purgeable Hydrocarbons	ND	50	ug/l	1	2120331	12/20/02	12/20/02	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		100 %	60-140	"	"	"	"	"	

URS Corporation 500 12th Street, Suite 100 Oakland CA, 94607	Project: ARCO #4931, Oakland, Ca Project Number: ARCO #4931, Oakland, CA Project Manager: Scott Robinson	MLL0292 Reported: 12/31/02 10:54
--	--	---

Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-11 (MLL0292-07) Water Sampled: 12/06/02 11:05 Received: 12/09/02 16:05									
Purgeable Hydrocarbons	ND	50	ug/l	1	2120331	12/20/02	12/20/02	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		105 %	60-140		"	"	"	"	
A-12 (MLL0292-08) Water Sampled: 12/06/02 10:25 Received: 12/09/02 16:05 HT-04									
Purgeable Hydrocarbons	ND	50	ug/l	1	2120360	12/21/02	12/22/02	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	13	2.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		90 %	60-140		"	"	"	"	



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

URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #4931, Oakland, Ca
Project Number: ARCO #4931, Oakland, CA
Project Manager: Scott Robinson

MLL0292
Reported:
12/31/02 10:54

Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT - Quality Control
Sequoia Analytical - Sacramento

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

Batch 2120331 - EPA 5030B (P/T)

Blank (2120331-BLK3) Prepared & Analyzed: 12/20/02										
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.0	"							
Surrogate: a,a,a-Trifluorotoluene	8.97		"	10.0		90	60-140			

Laboratory Control Sample (2120331-BS3) Prepared & Analyzed: 12/20/02										
Benzene	9.00	0.50	ug/l	10.0		90	70-130			
Toluene	9.69	0.50	"	10.0		97	70-130			
Ethylbenzene	9.51	0.50	"	10.0		95	70-130			
Xylenes (total)	27.9	0.50	"	30.0		93	70-130			
Methyl tert-butyl ether	9.84	2.0	"	10.0		98	70-130			
Surrogate: a,a,a-Trifluorotoluene	10.1		"	10.0		101	60-140			

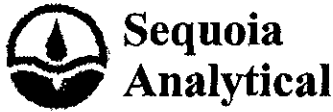
Duplicate (2120331-DUP1) Source: S212260-05 Prepared & Analyzed: 12/21/02										
Benzene	ND	0.50	ug/l		ND				50	
Toluene	ND	0.50	"		ND				50	
Ethylbenzene	ND	0.50	"		ND				50	
Xylenes (total)	ND	0.50	"		ND				50	
Methyl tert-butyl ether	ND	2.0	"		ND				50	
Surrogate: a,a,a-Trifluorotoluene	11.8		"	10.0		118	60-140			

Batch 2120360 - EPA 5030B (P/T)

Blank (2120360-BLK2) Prepared & Analyzed: 12/21/02										
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							

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.



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

URS Corporation
 500 12th Street, Suite 100
 Oakland CA, 94607

Project: ARCO #4931, Oakland, Ca
 Project Number: ARCO #4931, Oakland, CA
 Project Manager: Scott Robinson

MLL0292
 Reported:
 12/31/02 10:54

**Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT - Quality Control
 Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2120360 - EPA 5030B (P/T)										
Blank (2120360-BLK2) Prepared & Analyzed: 12/21/02										
Methyl tert-butyl ether	ND	2.0	ug/l							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.54		"	10.0		95	60-140			
Laboratory Control Sample (2120360-BS2) Prepared & Analyzed: 12/21/02										
Benzene	9.04	0.50	ug/l	10.0		90	70-130			
Toluene	8.82	0.50	"	10.0		88	70-130			
Ethylbenzene	9.08	0.50	"	10.0		91	70-130			
Xylenes (total)	26.2	0.50	"	30.0		87	70-130			
Methyl tert-butyl ether	9.96	2.0	"	10.0		100	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.38		"	10.0		94	60-140			
Duplicate (2120360-DUP1) Source: S212340-03 Prepared: 12/21/02 Analyzed: 12/22/02										
Benzene	ND	0.50	ug/l		ND				50	
Toluene	ND	0.50	"		ND				50	
Ethylbenzene	ND	0.50	"		ND				50	
Xylenes (total)	ND	0.50	"		ND				50	
Methyl tert-butyl ether	ND	2.0	"		ND				50	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	8.94		"	10.0		89	60-140			



URS Corporation
500 12th Street, Suite 100
Oakland CA, 94607

Project: ARCO #4931, Oakland, Ca
Project Number: ARCO #4931, Oakland, CA
Project Manager: Scott Robinson

MLL0292
Reported:
12/31/02 10:54

Notes and Definitions

- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.
- HT-04 This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose.
- HT-RS This sample was originally analyzed within the EPA recommended hold time. Re-analysis for confirmation or dilution was performed past the recommended hold time. The results may still be useful for their intended purpose.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



Chain of Custody Record

Project Name _____
 BP BU/GEM CO Portfolio: _____
 BP Laboratory Contract Number: _____

Date: 12/6/02

Requested Due Date (mm/dd/yy) MLL0292

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

Send To:	BP/GEM Facility No.:	Consultant/Contractor: URS
Lab Name: SEQUOIA	BP/GEM Facility Address: 731 W. MACARTHUR BLVD, OAKLAND, CA	Address: 500 12th St, Ste. 200
Lab Address: 886 Jarvis Dr. Morgan Hill, CA 95037	Site ID No. ARCO 4931	Oakland, CA 94609-4014
	Site Lat/Long:	e-mail EDD: syed_rehan@urscorp.com
	California Global ID #: T0600100107	Consultant/Contractor Project No.: JS-00004931.01 00427
Lab PM: Latonya Pelt	BP/GEM PM Contact: PAUL SUPPLE	Consultant Tele/Fax: 510-874-7355/510-874-3288
Tele/Fax: 408-776-9600 / 408-782-6308	Address:	Consultant/Contractor PM: Scott Robinson
Report Type & QC Level: Send EDF Reports	Tele/Fax:	Invoice to: Consultant/Contractor or BP/GEM (circle one)
BP/GEM Account No.:		BP/GEM Work Release No:

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 ₂ SO ₄	HNO ₃	HCl	TPH-G/BTEX (8015/8011)	TPH-L (8015)	MTBE (8021)	MTBE, TAME, ETBE	DIPE, TBA (8260)	1,2-DCA & RDB (8260)		
1	A-2	1130	X				01	3				X								
2	A-3	1203	X				02	1				X								
3	A-4	1302	X				03	1				X								
4	A-5	1133	X				04	1				X								
5	A-8	1220	X				05	1				X								
6	A-9	1245	X				06	1				X								
7	A-11	1105	X				07	1				X								
8	A-12	1025	X				08	1				X								
9																				
10																				

Sampler's Name:	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Ryan Hanstedt	[Signature] / BTS	12/6/02	1135	[Signature]	12/9/02	1135
Blaine Tech	[Signature]	12/6/02	1605	Andrew Jensen	12/9/02	1605

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

Seals in Place Yes No X Temperature Blank Yes No X Cooler Temperature on Receipt 5.4 °C Trip Blank Yes No X

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: <u>URS</u>	DATE Received at Lab: <u>12-9-02</u>	Drinking water for regulatory purposes: YES/NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
REC. BY (PRINT) <u>AS</u>	TIME Received at Lab: <u>1605</u>	Wastewater for regulatory purposes: YES/NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
WORKORDER: <u>HL10292</u>	LOG IN DATE: <u>12-10-02</u>	

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	#	CLIENT ID	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present <input checked="" type="checkbox"/> Absent <input type="checkbox"/> Intact / Broken*	1		A-2	(3) 400 mL HU	L	12/9/02	Lot B 2218030
2. Chain-of-Custody Present <input checked="" type="checkbox"/> Absent <input type="checkbox"/>	2		A-3				
3. Traffic Reports or Packing List: Present <input checked="" type="checkbox"/> Absent <input type="checkbox"/>	3		A-4				
4. Airbill: Airbill / Sticker Present <input checked="" type="checkbox"/> Absent <input type="checkbox"/>	4		A-5				
	5		A-8				
	6		A-9				
	7		A-11				
	8		A-12				
5. Airbill #:							
6. Sample Labels: Present <input checked="" type="checkbox"/> Absent <input type="checkbox"/>							
7. Sample IDs: Listed <input checked="" type="checkbox"/> Not Listed <input type="checkbox"/> on Chain-of-Custody							
8. Sample Condition: Intact / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample labels agree? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
10. Sample received within hold time: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
11. Proper Preservatives used: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
12. Temp Rec. at Lab: <u>5°C</u> (Acceptance range for samples requiring thermal pres.: +1/-2°C) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
**Exception (if any):							

*If Circled, contact Project Manager and attach record of resolution.

ATTACHMENT C

HISTORIC GROUNDWATER DATA

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

ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
A-2	03/26/96	55.48	5.37	50.11	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	
A-2	05/22/96	55.48	5.25	50.23	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	
A-2	08/22/96	55.48	10.45	45.03	<50	1.1	1.8	<0.5	1.3	<2.5	NA	NM	
A-2	12/19/96	55.48	5.53	49.95	<50	<0.5	<0.5	<0.5	<0.5	2.7	NA	NM	
A-2	04/01/97	55.48	8.77	46.71	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NM	
A-2	05/27/97	55.48	9.87	45.61	<50	<0.5	<0.5	<0.5	<0.5	4.6	NA	NM	
A-2	08/12/97	55.48	11.11	44.37	<50	<0.5	<0.5	<0.5	<0.5	5.6	NA	NM	
A-2	11/14/97	55.48	10.63	44.85	<50	0.9	2.8	<0.5	2.4	27	NA	2.6	
A-2	03/18/98	55.48	3.58	51.90	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	NM	
A-2	05/19/98	55.48	4.82	50.66	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.30	P
A-2	07/29/98	55.48	8.94	46.54	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.2	NP
A-2	10/09/98	55.48	10.82	44.66	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.5	NP
A-2	02/19/99	55.48	4.46	51.02	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	3.0	P
A-2	06/02/99	55.48	5.59	49.89	<50	<0.5	0.6	<0.5	<0.5	<3	NA	5.35	NP
A-2	08/26/99	55.48	10.67	44.81	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.79	NP
A-2	10/26/99	55.48	4.61	50.87	<50	<0.5	<0.5	<0.5	<1	<3	NA	2.14	P
A-2	02/25/00	55.48	3.10	52.38	<50	<0.5	<0.5	<0.5	<1	<3	NA	4.21	NP
A-3	03/26/96	54.66	7.20	47.46	Not Sampled: Well Sampled Semiannually								
A-3	05/22/96	54.66	7.70	46.96	<50	1.2	1.9	0.7	1.3	NA	NA	NM	
A-3	08/22/96	54.66	10.88	43.78	Not Sampled: Well Sampled Semiannually								
A-3	12/19/96	54.66	7.70	46.96	5,900	<25	<25	<25	<25	NA	5,300	NM	
A-3	04/01/97	54.66	9.78	44.88	Not Sampled: Well Sampled Semiannually								
A-3	05/27/97	54.66	10.55	44.11	2,300	<20	<20	<20	<20	3,800	NA	NM	
A-3	08/12/97	54.66	11.12	43.54	Not Sampled: Well Sampled Semiannually								
A-3	11/14/97	54.66	8.24	46.42	<1,000	<10	<10	<10	<10	1,500	NA	3.8	
A-3	03/18/98	54.66	5.05	49.61	Not Sampled: Well Sampled Semiannually								
A-3	05/19/98	54.66	9.00	45.66	<250	<2.5	<2.5	<2.5	<2.5	220	NA	4.60	P
A-3	07/29/98	54.66	9.86	44.80	Not Sampled: Well Sampled Semiannually								
A-3	10/09/98	54.66	11.36	43.30	<250	<2.5	<2.5	<2.5	<2.5	260	NA	1.0	NP
A-3	02/19/99	54.66	6.19	48.47	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.5	NP
A-3	06/02/99	54.66	10.82	43.84	120	<1	<1	<1	<1	160	NA	2.78	NP

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

ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH				Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
					Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)					
A-3	08/26/99	54.66	10.73	43.93	Not Sampled: Well Sampled Semiannually							0.95	
A-3	10/26/99	54.66	6.58	48.08	<50	<0.5	<0.5	<0.5	<1	32	NA	2.06	NP
A-3	02/25/00	54.66	5.41	49.25	Not Sampled: Well Sampled Semiannually								
A-4	03/26/96	54.73	7.95	46.78	8,900	1,200	21	200	220	NA	NA	NM	
A-4	05/22/96	54.73	8.35	46.38	5,300	700	<10	170	130	NA	NA	NM	
A-4	08/22/96	54.73	11.03	43.70	3,000	480	<5.0	75	26	150	NA	NM	
A-4	12/19/96	54.73	8.67	46.06	<2,000	<20	<20	<20	<20	NA	15,000	NM	
A-4	04/01/97	54.73	11.95	42.78	8,900	1,700	22	310	260	6,900	NA	NM	
A-4	05/27/97	54.73	10.80	43.93	7,100	960	<20	150	74	7,900	NA	NM	
A-4	08/12/97	54.73	11.38	43.35	4,300	670	12	51	27	2,800	NA	NM	
A-4	11/14/97	54.73	7.74	46.99	<20,000	300	500	<200	<200	27,000	NA	2.2	
A-4	03/18/98	54.73	6.80	47.93	4,700	600	<20	99	94	1,200	NA	1.0	
A-4	05/19/98	54.73	9.06	45.67	<2000	<20	<20	<20	720	2,000	NA	1.28	P
A-4	07/29/98	54.73	10.05	44.68	8,400	1,300	<20	290	130	1,800	NA	0.7	NP
A-4	10/09/98	54.73	11.20	43.53	3,500	400	<20	54	<20	1,700	NA	1.0	NP
A-4	02/19/99	54.73	6.85	47.88	<1,000	<10	<10	<10	12	650	NA	0.1	NP
A-4	06/02/99	54.73	11.00	43.73	6,100	760	16	260	89	2,300	NA	1.12	NP
A-4	08/26/99	54.73	10.80	43.93	1,100	68	5	8	4	1,400	NA	1.15	NP
A-4	10/26/99	54.73	10.11	44.62	1,500	39	2.3	9.0	5	1,700	NA	10.12	NP
A-4	02/25/00	54.73	5.90	48.83	870	53	1.1	4.6	20	600	NA	1.72	NP
A-5	03/26/96	54.17	7.93	46.24	Not Sampled: Well Sampled Semiannually								
A-5	05/22/96	54.17	8.20	45.97	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	
A-5	08/22/96	54.17	10.70	43.47	Not Sampled: Well Sampled Semiannually								
A-5	12/19/96	54.17	8.39	45.78	9,900	1,100	330	230	700	NA	24	NM	
A-5	04/01/97	54.17	10.83	43.34	Not Sampled: Well Sampled Semiannually								
A-5	05/27/97	54.17	10.65	43.52	100	<0.5	<0.5	<0.5	<0.5	120	NA	NM	
A-5	08/12/97	54.17	11.05	43.12	Not Sampled: Well Sampled Semiannually								
A-5	11/14/97	54.17	10.51	43.66	<50	<0.5	<0.5	<0.5	<0.5	41	NA	4.8	
A-5	03/18/98	54.17	8.10	46.07	Not Sampled: Well Sampled Semiannually								
A-5	05/19/98	54.17	9.31	44.86	590	<5	<5	<5	<5	710	NA	2.48	P

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

ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)	
A-5	07/29/98	54.17	9.89	44.28	Not Sampled: Well Sampled Semiannually									
A-5	10/09/98	54.17	11.02	43.15	690	<5	<5	<5	<5	710	NA	1.0	NP	
A-5	02/19/99	54.17	6.82	47.35	<2,000	<20	<20	<20	<20	2,300	NA	0.6	NP	
A-5	06/02/99	54.17	10.82	43.35	1,500	<0.5	2.3	<0.5	<0.5	2,400	NA	2.81	NP	
A-5	08/26/99	54.17	10.65	43.52	Not Sampled: Well Sampled Semiannually									
A-5	10/26/99	54.17	10.35	43.82	380	<0.5	<0.5	<0.5	<1	440	NA	0.49		
A-5	02/25/00	54.17	6.89	47.28	Not Sampled: Well Sampled Semiannually									1.55
A-6	03/26/96	55.17	7.15	48.02	52	2.7	<0.5	1.1	2.0	NA	NA	NM		
A-6	05/22/96	55.17	7.35	47.82	<50	2.4	<0.5	0.88	1.7	NA	NA	NM		
A-6	08/22/96	55.17	10.12	45.05	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NM		
A-6	12/19/96	55.17	7.43	47.74	<50	1.7	<0.5	0.78	1.5	<2.5	NA	NM		
A-6	04/01/97	55.17	9.97	45.20	<50	4.7	<0.5	1.9	3.2	<2.5	NA	NM		
A-6	05/27/97	55.17	9.66	45.51	<50	0.69	<0.5	<0.5	<0.5	<2.5	NA	NM		
A-6	08/12/97	55.17	10.43	44.74	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NM		
A-6	11/14/97	55.17	9.76	45.41	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	<1.0		
A-6	03/18/98	55.17	7.00	48.17	<50	6.2	0.5	2.3	2.6	<3	NA	3.0		
A-6	05/19/98	55.17	8.27	46.90	<50	<0.5	<0.5	1.3	4.7	<3	NA	2.16	P	
A-6	07/29/98	55.17	8.96	46.21	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.8	NP	
A-6	10/09/98	55.17	10.23	44.94	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.0	NP	
A-6	02/19/99	55.17	5.79	49.38	<50	<0.5	<0.5	<0.5	<0.5	5	NA	0.4	NP	
A-6	06/02/99	55.17	9.71	45.46	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.00	NP	
A-6	08/26/99	55.17	9.79	45.38	<50	<0.5	<0.5	<0.5	0.7	<3	NA	0.66	NP	
A-6	10/26/99	55.17	9.70	45.47	<50	<0.5	<0.5	<0.5	<1	<3	NA	1.66	NP	
A-6	02/25/00	55.17	5.68	49.49	<50	<0.5	<0.5	<0.5	<1	<3	NA	1.22	NP	
A-7	03/26/96	54.71	6.90	47.81	Not Sampled: Well Sampled Semiannually									
A-7	05/22/96	54.71	8.27	46.44	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM		
A-7	08/22/96	54.71	9.80	44.91	Not Sampled: Well Sampled Semiannually									
A-7	12/19/96	54.71	7.19	47.52	Not Sampled: Well Sampled Annually									
A-7	04/01/97	54.71	9.63	45.08	Not Sampled: Well Sampled Annually									
A-7	05/27/97	54.71	9.34	45.37	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NM		

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

ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH				Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
					Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)					
A-7	08/12/97	54.71	10.10	44.61	Not Sampled: Well Sampled Annually								
A-7	11/14/97	54.71	9.35	45.36	Not Sampled: Well Sampled Annually								
A-7	03/18/98	54.71	6.75	47.96	Not Sampled: Well Sampled Annually								
A-7	05/19/98	54.71	8.85	45.86	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.82	P
A-7	07/29/98	54.71	8.84	45.87	Not Sampled: Well Sampled Annually								
A-7	10/09/98	54.71	10.05	44.66	Not Sampled: Well Sampled Annually								
A-7	02/19/99	54.71	5.57	49.14	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	4.7	NP
A-7	06/02/99	54.71	9.56	45.15	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.17	NP
A-7	08/26/99	54.71	9.66	45.05	Not Sampled: Well Sampled Annually							0.49	
A-7	10/26/99	54.71	9.54	45.17	Not Sampled: Well Sampled Annually							1.26	
A-7	02/25/00	54.71	5.60	49.11	Not Sampled: Well Sampled Annually								
A-8	03/26/96	53.77	7.10	46.67	48,000	2,600	<100	650	1,100	NA	NA	NM	
A-8	05/22/96	53.77	7.20	46.57	14,000	2,800	160	320	190	NA	NA	NM	
A-8	08/22/96	53.77	11.57	42.20	8,000	1,000	76	150	96	4,300	NA	NM	
A-8	12/19/96	53.77	8.04	45.73	12,000	450	110	210	230	<500	NA	NM	
A-8	04/01/97	53.77	9.98	43.79	Not Sampled: Well Sampled Semiannually								
A-8	05/27/97	53.77	11.45	42.32	11,000	1,600	100	220	210	2,300	NA	NM	
A-8	08/12/97	53.77	11.59	42.18	Not Sampled: Well Sampled Semiannually								
A-8	11/14/97	53.77	9.85	43.92	26,000	2,300	<200	400	400	4,100	NA	2.2	
A-8	03/18/98	53.77	7.80	45.97	Not Sampled: Well Sampled Semiannually								
A-8	05/19/98	53.77	8.78	44.99	88,000	4,200	150	640	600	6,700	NA	1.36	P
A-8	07/29/98	53.77	9.59	44.18	46,000	4,900	160	620	580	13,000	NA	0.5	NP
A-8	10/09/98	53.77	11.23	42.54	130,000	3,700	110	500	770	7,300	NA	1.0	NP
A-8	02/19/99	53.77	6.51	47.26	<1,000	39	<10	<10	<10	840	NA	0.2	NP
A-8	06/02/99	53.77	10.68	43.09	8,500	1,300	32	180	110	6,700	NA	1.31	NP
A-8	08/26/99	53.77	10.43	43.34	6,200	870	17	64	60	3,700	NA	0.69	NP
A-8	10/26/99	53.77	10.23	43.54	15,000	2,800	140	370	360	480	NA	0.62	NP
A-8	02/25/00	53.77	5.93	47.84	2,600	330	6.6	18	26	1,100	NA	1.43	NP
A-9	03/26/96	53.04	7.05	45.99	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	
A-9	05/22/96	53.04	7.20	45.84	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	

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

ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH				Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
					Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)					
A-9	08/22/96	53.04	9.68	43.36	<50	<0.5	<0.5	<0.5	<0.5	8.5	NA	NM	
A-9	12/19/96	53.04	7.43	45.61	<50	<0.5	<0.5	<0.5	<0.5	2.6	NA	NM	
A-9	04/01/97	53.04	9.95	43.09	Not Sampled: Well Sampled Semiannually								
A-9	05/27/97	53.04	9.56	43.48	<50	2.3	<0.5	<0.5	<0.5	45	NA	NM	
A-9	08/12/97	53.04	10.15	42.89	Not Sampled: Well Sampled Semiannually								
A-9	11/14/97	53.04	8.64	44.40	<200	<2.0	<2.0	<2.0	<2.0	190	NA	9.6	
A-9	03/18/98	53.04	6.45	46.59	Not Sampled: Well Sampled Semiannually								
A-9	05/19/98	53.04	8.35	44.69	<50	<0.5	<0.5	<0.5	<0.5	7	NA	1.27	P
A-9	07/29/98	53.04	8.74	44.30	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.99	NP
A-9	10/09/98	53.04	10.05	42.99	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.0	NP
A-9	02/19/99	53.04	6.91	46.13	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.0	NP
A-9	06/02/99	53.04	9.72	43.32	<50	<0.5	<0.5	<0.5	<0.5	16	NA	2.32	NP
A-9	08/26/99	53.04	9.48	43.56	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.71	NP
A-9	10/26/99	53.04	9.17	43.87	1,500	6.2	0.7	78	11	91	NA	2.15	NP
A-9	02/25/00	53.04	5.84	47.20	<50	<0.5	<0.5	<0.5	<1	<3	NA	1.55	NP
A-10	03/26/96	54.26	8.28	45.98	Not Sampled: Well Removed from Sampling Program								
A-10	05/22/96	54.26	8.60	45.66	Not Sampled: Well Removed from Sampling Program								
A-10	08/22/96	54.26	10.98	43.28	Not Sampled: Well Removed from Sampling Program								
A-10	12/19/96	54.26	8.80	45.46	Not Sampled: Well Removed from Sampling Program								
A-10	04/01/97	54.26	11.15	43.11	Not Sampled: Well Removed from Sampling Program								
A-10	05/27/97	54.26	10.90	43.36	Not Sampled: Well Removed from Sampling Program								
A-10	08/12/97	54.26	11.30	42.96	Not Sampled: Well Removed from Sampling Program								
A-10	11/14/97	54.26	10.80	43.46	Not Sampled: Well Removed from Sampling Program								
A-10	03/18/98				Well Removed from Survey Program								
A-11	03/26/96	53.74	8.10	45.64	Not Sampled: Well Sampled Semiannually								
A-11	05/22/96	53.74	8.25	45.49	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	
A-11	08/22/96	53.74	10.58	43.16	Not Sampled: Well Sampled Semiannually								
A-11	12/19/96	53.74	8.37	45.37	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NM	
A-11	04/01/97	53.74	10.95	42.79	Not Sampled: Well Sampled Semiannually								
A-11	05/27/97	53.74	10.60	43.14	<50	<0.5	<0.5	<0.5	<0.5	3.1	NA	NM	

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

ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
A-11	08/12/97	53.74	11.07	42.67	Not Sampled: Well Sampled Semiannually								
A-11	11/14/97	53.74	10.58	43.16	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.6	
A-11	03/18/98	53.74	8.14	45.60	Not Sampled: Well Sampled Semiannually								
A-11	05/19/98	53.74	9.40	44.34	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.13	P
A-11	07/29/98	53.74	10.32	43.42	Not Sampled: Well Sampled Semiannually								
A-11	10/09/98	53.74	10.91	42.83	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.0	NP
A-11	02/19/99	53.74	6.77	46.97	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.8	NP
A-11	06/02/99	53.74	10.95	42.79	<50	<0.5	<0.5	<0.5	<0.5	6	NA	1.38	NP
A-11	08/26/99	53.74	11.05	42.69	Not Sampled: Well Sampled Semiannually								
A-11	10/26/99	53.74	10.81	42.93	<50	<0.5	<0.5	<0.5	<1	4	NA	0.49	NP
A-11	02/25/00	53.74	6.70	47.04	Not Sampled: Well Sampled Semiannually								
A-12	03/26/96	52.05	7.83	44.22	Not Sampled: Well Sampled Semiannually								
A-12	05/22/96	52.05	7.80	44.25	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	
A-12	08/22/96	52.05	9.97	42.08	Not Sampled: Well Sampled Semiannually								
A-12	12/19/96	52.05	8.18	43.87	85	<0.5	<0.5	<0.5	<0.5	170	NA	NM	
A-12	04/01/97	52.05	10.30	41.75	Not Sampled: Well Sampled Semiannually								
A-12	05/27/97	52.05	10.05	42.00	50	12	<0.5	<0.5	<0.5	96	NA	NM	
A-12	08/12/97	52.05	10.46	41.59	Not Sampled: Well Sampled Semiannually								
A-12	11/14/97	52.05	9.70	42.35	<50	<0.5	<0.5	<0.5	<0.5	75	NA	7.0	
A-12	03/18/98	52.05	8.15	43.90	Not Sampled: Well Sampled Semiannually								
A-12	05/19/98	52.05	9.15	42.90	<50	<0.5	<0.5	<0.5	<0.5	29	NA	1.47	P
A-12	07/29/98	52.05	9.38	42.67	Not Sampled: Well Sampled Semiannually								
A-12	10/09/98	52.05	10.21	41.84	<50	<0.5	<0.5	<0.5	<0.5	7	NA	2.0	NP
A-12	02/19/99	52.05	6.96	45.09	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	5.2	NP
A-12	06/02/99	52.05	10.25	41.80	<50	<0.5	<0.5	<0.5	<0.5	7	NA	1.38	NP
A-12	08/26/99	52.05	9.91	42.14	Not Sampled: Well Sampled Semiannually								
A-12	10/26/99	52.05	9.73	42.32	<50	<0.5	<0.5	<0.5	<1	12	NA	0.51	NP
A-12	02/25/00	52.05	6.97	45.08	Not Sampled: Well Sampled Semiannually								
A-13	03/26/96	55.11			Well Inaccessible								
A-13	05/22/96	55.11			Well Inaccessible								

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

ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
A-13	08/22/96	55.11											
A-13	12/19/96	55.11											
A-13	04/01/97	55.11											
A-13	05/27/97	55.11											
A-13	08/12/97	55.11											
A-13	11/14/97	55.11											
A-13	03/18/98	55.11											
A-13	05/19/98	55.11											
A-13	07/29/98	55.11											
A-13	10/09/98	55.11											
A-13	02/19/99	55.11											
A-13	06/02/99	55.11											
A-13	08/26/99	55.11											
A-13	10/26/99	55.11											
A-13	02/25/00	55.11											
AR-1	03/26/96	54.72	8.13	46.59	6,200	110	64	38	520	NA	NA	NM	
AR-1	05/22/96	54.72	8.57	46.15	NS	NS	NS	NS	NS	NS	NS	NM	
AR-1	08/22/96	54.72	10.97	43.75	5,600	100	28	29	310	960	NA	NM	
AR-1	12/19/96	54.72	8.93	45.79	Not Sampled: Well Removed from Sampling Program								
AR-1	04/01/97	54.72	11.78	42.94	Not Sampled: Well Removed from Sampling Program								
AR-1	05/27/97	54.72	10.76	43.96	Not Sampled: Well Removed from Sampling Program								
AR-1	08/12/97	54.72	11.40	43.32	Not Sampled: Well Removed from Sampling Program								
AR-1	11/14/97	54.72	10.80	43.92	Not Sampled: Well Removed from Sampling Program								
AR-1	03/18/98	54.72	NM	NM	Not Sampled: Well Removed from Sampling Program								
AR-1	05/19/98	54.72	NM	NM	Not Sampled: Well Removed from Sampling Program								
AR-1	07/29/98	54.72	10.17	44.55	Not Sampled: Well Removed from Sampling Program								
AR-1	10/09/98	54.72	11.25	43.47	Not Sampled: Well Removed from Sampling Program								
AR-1	02/19/99	54.72	7.02	47.70	Not Sampled: Well Removed from Sampling Program								
AR-1	06/02/99	54.72	11.00	43.72	Not Sampled: Well Removed from Sampling Program								
AR-1	08/26/99	54.72	10.96	43.76	Not Sampled: Well Removed from Sampling Program								0.39
AR-1	10/26/99	54.72	10.68	44.04	Not Sampled: Well Removed from Sampling Program								1.39

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

ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
AR-1	02/25/00	54.72	7.15	47.57	Not Sampled: Well Removed from Sampling Program								
AR-2	03/26/96	54.77	4.93	49.84	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	
AR-2	05/22/96	54.77	5.65	49.12	NS	NS	NS	NS	NS	NS	NS	NM	
AR-2	08/22/96	54.77	7.27	47.50	<50	<0.5	<0.5	<0.5	<0.5	200	NA	NM	
AR-2	12/19/96	54.77	7.78	46.99	Not Sampled: Well Removed from Sampling Program								
AR-2	04/01/97	54.77	6.80	47.97	Not Sampled: Well Removed from Sampling Program								
AR-2	05/27/97	54.77	6.32	48.45	Not Sampled: Well Removed from Sampling Program								
AR-2	08/12/97	54.77	7.43	47.34	Not Sampled: Well Removed from Sampling Program								
AR-2	11/14/97	54.77	8.95	45.82	Not Sampled: Well Removed from Sampling Program								
AR-2	03/18/98	54.77	NM	NM	Not Sampled: Well Removed from Sampling Program								
AR-2	05/19/98	54.77	NM	NM	Not Sampled: Well Removed from Sampling Program								
AR-2	07/29/98	54.77	4.47	50.30	Not Sampled: Well Removed from Sampling Program								
AR-2	10/09/98	54.77	6.90	47.87	Not Sampled: Well Removed from Sampling Program								
AR-2	02/19/99	54.77	3.80	50.97	Not Sampled: Well Removed from Sampling Program								
AR-2	06/02/99	54.77	4.61	50.16	Not Sampled: Well Removed from Sampling Program								
AR-2	08/26/99	54.77	5.22	49.55	Not Sampled: Well Removed from Sampling Program								
AR-2	10/26/99	54.77	3.20	51.57	Not Sampled: Well Removed from Sampling Program								
AR-2	02/25/00	54.77	2.33	52.44	Not Sampled: Well Removed from Sampling Program								
AR-3	03/26/96	54.19	7.95	46.24	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	
AR-3	05/22/96	54.19	8.30	45.89	NS	NS	NS	NS	NS	NS	NS	NM	
AR-3	08/22/96	54.19	10.84	43.35	Not Sampled: Well Removed from Sampling Program								
AR-3	12/19/96	54.19	8.56	45.63	Not Sampled: Well Removed from Sampling Program								
AR-3	04/01/97	54.19	11.24	42.95	Not Sampled: Well Removed from Sampling Program								
AR-3	05/27/97	54.19	10.67	43.52	Not Sampled: Well Removed from Sampling Program								
AR-3	08/12/97	54.19	11.10	43.09	Not Sampled: Well Removed from Sampling Program								
AR-3	11/14/97	54.19	10.60	43.59	Not Sampled: Well Removed from Sampling Program								
AR-3	03/18/98	54.19	NM	NM	Not Sampled: Well Removed from Sampling Program								
AR-3	05/19/98	54.19	NM	NM	Not Sampled: Well Removed from Sampling Program								
AR-3	07/29/98	54.19	9.95	44.24	Not Sampled: Well Removed from Sampling Program								
AR-3	10/09/98	54.19	11.20	42.99	Not Sampled: Well Removed from Sampling Program								

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

ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPH Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
AR-3	02/19/99	54.19	6.98	47.21	Not Sampled: Well Removed from Sampling Program								
AR-3	06/02/99	54.19	10.80	43.39	Not Sampled: Well Removed from Sampling Program								
AR-3	08/26/99	54.19	10.69	43.50	Not Sampled: Well Removed from Sampling Program								
AR-3	10/26/99	54.19	NM	NM	Not Sampled: Well Removed from Sampling Program								0.40
AR-3	02/25/00	54.19	7.21	46.98	Not Sampled: Well Removed from Sampling Program								

TPH = Total petroleum hydrocarbons by modified EPA method 8015
 BTEX = Benzene, toluene, ethylbenzene, total xylenes by EPA method 8021B. (EPA method 8020 prior to 10/26/99).
 MTBE = Methyl tert-butyl ether
 * = EPA method 8020 prior to 10/26/99
 MSL = Mean sea level
 TOB = Top of box
 ppb = Parts per billion
 ppm = Parts per million
 < = Less than laboratory detection limit stated to the right
 NA = Not analyzed
 NM = Not measured
 NS = Not sampled

**Table 2
Groundwater Flow Direction and Gradient**

**ARCO Service Station 4931
731 West MacArthur Boulevard, Oakland, California**

Date Measured	Average Flow Direction	Average Hydraulic Gradient
03/26/96	Southwest	0.03
05/22/96	Southwest	0.04
08/22/96	Southwest	0.02
12/19/96	Southwest	0.03
04/01/97	Southwest	0.03
05/27/97	Southwest	0.04
08/12/97	Southwest	0.02
11/14/97	Southwest	0.02
03/18/98	West	0.03
05/19/98	West-Southwest	0.02
07/29/98	West-Southwest	0.02
10/09/98	Southwest	0.007
02/19/99	Southwest	0.04
06/02/99	West	0.04
08/26/99	West-Southwest	0.02
10/26/99	West-Northwest	0.13
02/25/00	West-Southwest	0.05

ATTACHMENT D

EDCC REPORT AND EDF/GEOWELL SUBMITTAL CONFIRMATION

Error Summary Log

02/13/03

EDF 1.2i All files present in deliverable.

Laboratory:	Sequoia Analytical Laboratories, Inc., Morgan Hill, CA
Project Name:	ARCO #4931, Oakland, Ca
Work Order Number:	MLL0292
Global ID:	T0600100107
Lab Report Number:	MLL0292123120021054

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotct1	Run	Sub
MLL02921231200 21054	A-11	MLL029207	W	CS	SW8020F	SW5030	12/06/02	12/20/02	12/20/02	2120331	1	SEQS
MLL02921231200 21054	A-12	MLL029208	W	CS	SW8020F	SW5030	12/06/02	12/21/02	12/22/02	2120360	1	SEQS
MLL02921231200 21054	A-2	MLL029201	W	CS	SW8020F	SW5030	12/06/02	12/20/02	12/20/02	2120331	1	SEQS
MLL02921231200 21054	A-3	MLL029202	W	CS	SW8020F	SW5030	12/06/02	12/20/02	12/20/02	2120331	1	SEQS
MLL02921231200 21054	A-4	MLL029203	W	CS	SW8020F	SW5030	12/06/02	12/20/02	12/20/02	2120331	1	SEQS
MLL02921231200 21054	A-4	MLL029203	W	CS	SW8020F	SW5030	12/06/02	12/20/02	12/21/02	2120331	2	SEQS
MLL02921231200 21054	A-5	MLL029204	W	CS	SW8020F	SW5030	12/06/02	12/20/02	12/20/02	2120331	1	SEQS
MLL02921231200 21054	A-8	MLL029205	W	CS	SW8020F	SW5030	12/06/02	12/20/02	12/20/02	2120331	1	SEQS
MLL02921231200 21054	A-9	MLL029206	W	CS	SW8020F	SW5030	12/06/02	12/20/02	12/20/02	2120331	1	SEQS
		S21226005	W	NC	SW8020F	SW5030	//	12/21/02	12/21/02	2120331	1	SEQS
		S21234003	W	NC	SW8020F	SW5030	//	12/21/02	12/22/02	2120360	1	SEQS
		2120331BS3	WQ	BS3	SW8020F	SW5030	//	12/20/02	12/20/02	2120331	1	SEQS
		2120331BLK3	WQ	LB3	SW8020F	SW5030	//	12/20/02	12/20/02	2120331	1	SEQS
		2120331DUP1	W	LR1	SW8020F	SW5030	//	12/21/02	12/21/02	2120331	1	SEQS
		2120360BS2	WQ	BS2	SW8020F	SW5030	//	12/21/02	12/21/02	2120360	1	SEQS
		2120360BLK2	WQ	LB2	SW8020F	SW5030	//	12/21/02	12/21/02	2120360	1	SEQS
		2120360DUP1	W	LR1	SW8020F	SW5030	//	12/21/02	12/22/02	2120360	1	SEQS

EDFSAMP: Error Summary Log

02/13/03

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

EDFTEST: Error Summary Log

02/13/03

Error type	Labsampid	Qccode	Anmcode	Exmcode	Anadate	Run number
There are no errors in this data file					11	0

EDFRES: Error Summary Log

02/13/03

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	2120331DUP1	LR1	W	SW8020F	PR	12/21/02	1	AAATFBZME
Warning: extra parameter	2120331DUP1	LR1	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	2120360DUP1	LR1	W	SW8020F	PR	12/22/02	1	AAATFBZME
Warning: extra parameter	2120360DUP1	LR1	W	SW8020F	PR	12/22/02	1	MTBE
Warning: extra parameter	MLL029201	CS	W	SW8020F	PR	12/20/02	1	AAATFBZME
Warning: extra parameter	MLL029201	CS	W	SW8020F	PR	12/20/02	1	MTBE
Warning: extra parameter	MLL029202	CS	W	SW8020F	PR	12/20/02	1	AAATFBZME
Warning: extra parameter	MLL029202	CS	W	SW8020F	PR	12/20/02	1	MTBE
Warning: extra parameter	MLL029203	CS	W	SW8020F	PR	12/20/02	1	AAATFBZME
Warning: extra parameter	MLL029203	CS	W	SW8020F	PR	12/21/02	2	MTBE
Warning: extra parameter	MLL029204	CS	W	SW8020F	PR	12/20/02	1	AAATFBZME
Warning: extra parameter	MLL029204	CS	W	SW8020F	PR	12/20/02	1	MTBE
Warning: extra parameter	MLL029205	CS	W	SW8020F	PR	12/20/02	1	AAATFBZME
Warning: extra parameter	MLL029205	CS	W	SW8020F	PR	12/20/02	1	MTBE
Warning: extra parameter	MLL029206	CS	W	SW8020F	PR	12/20/02	1	AAATFBZME
Warning: extra parameter	MLL029206	CS	W	SW8020F	PR	12/20/02	1	MTBE
Warning: extra parameter	MLL029207	CS	W	SW8020F	PR	12/20/02	1	AAATFBZME
Warning: extra parameter	MLL029207	CS	W	SW8020F	PR	12/20/02	1	MTBE
Warning: extra parameter	MLL029208	CS	W	SW8020F	PR	12/22/02	1	AAATFBZME
Warning: extra parameter	MLL029208	CS	W	SW8020F	PR	12/22/02	1	MTBE
Warning: extra parameter	S21226005	NC	W	SW8020F	PR	12/21/02	1	AAATFBZME
Warning: extra parameter	S21226005	NC	W	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	S21234003	NC	W	SW8020F	PR	12/22/02	1	AAATFBZME
Warning: extra parameter	S21234003	NC	W	SW8020F	PR	12/22/02	1	MTBE
Warning: extra parameter	2120331BLK3	LB3	WQ	SW8020F	PR	12/20/02	1	AAATFBZME

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	2120331BLK3	LB3	WQ	SW8020F	PR	12/20/02	1	MTBE
Warning: extra parameter	2120331BS3	BS3	WQ	SW8020F	PR	12/20/02	1	AAATFBZME
Warning: extra parameter	2120331BS3	BS3	WQ	SW8020F	PR	12/20/02	1	MTBE
Warning: extra parameter	2120360BLK2	LB2	WQ	SW8020F	PR	12/21/02	1	AAATFBZME
Warning: extra parameter	2120360BLK2	LB2	WQ	SW8020F	PR	12/21/02	1	MTBE
Warning: extra parameter	2120360BS2	BS2	WQ	SW8020F	PR	12/21/02	1	AAATFBZME
Warning: extra parameter	2120360BS2	BS2	WQ	SW8020F	PR	12/21/02	1	MTBE

EDFQC: Error Summary Log

02/13/03

Error type	Labiocct	Anmcode	Pariabel	Qccode	Labqid
There are no errors in this data files					

EDFCL: Error Summary Log

02/13/03

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

AB2886 Electronic Delivery

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

Your EDF file has been successfully uploaded!

Confirmation Number: 3753653407

Date/Time of Submittal: 2/14/2003 9:25:11 AM

Facility Global ID: T0600100110

Facility Name: ARCO

Submittal Title: 4th Qtr Monitoring Report for #4931

Submittal Type: GW Monitoring Report

Logged in as URSCORP-OAKLAND
(CONTRACTOR)

[CONTACT SITE ADMINISTRATOR](#)

AB2886 Electronic Delivery

[Main Menu](#) | [View/Add Facilities](#) | [Upload EDD](#) | [Check EDD](#)

UPLOADING A GEO_WELL FILE

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

Submittal Title: 4th Qtr 2002 Monitoring Report for
#4931

Submittal Date/Time: 2/14/2003 9:26:16 AM

**Confirmation
Number:** 9401310563

[Back to Main Menu](#)

Logged in as URSCORP-OAKLAND
(CONTRACTOR)

CONTACT SITE [ADMINISTRATOR](#).