



December 22, 2003

Mr. Don Hwang
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Alameda County
DEC 31 2003
Environmental Health

**Re: Fourth Quarter 2003 Groundwater Monitoring Report
ARCO Service Station #4931
731 West MacArthur Boulevard
Oakland, California
URS Project #38486330**

Dear Mr. Hwang:

On behalf of Atlantic Richfield Company (ARCO – a BP affiliated company), URS Corporation (URS) is submitting the *Fourth Quarter 2003 Groundwater Monitoring Report* for ARCO Service Station #4931, located at 731 West MacArthur Boulevard, Oakland, California.

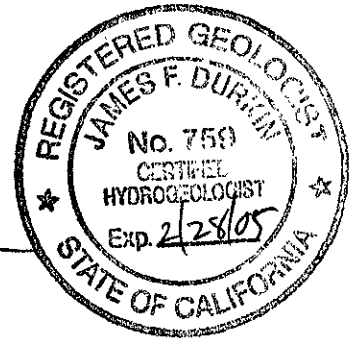
If you have any questions regarding this submission, please call (510) 874-3280.

Sincerely,

URS CORPORATION

Scott Robinson
Project Manager

James F. Durkin, C.Hg.
Senior Geologist



Enclosure: Fourth Quarter 2003 Groundwater Monitoring Report

cc: Mr. Paul Supple, ARCO (electronic copy uploaded to ENFOS)
Mr. Chuck Headlee, Regional Water Quality Control Board - San Francisco Bay Region, 1515
Clay Street, Suite 1400, Oakland, CA 94612

URS Corporation
500 12th Street, Suite 200
Oakland, CA 94607-4014
Tel: 510.893.3600
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Atlantic Richfield Company
(a BP affiliated company)

P.O. Box 6549
Moraga, California 94570
Phone: (925) 299-8891
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December 22, 2003

RE: Fourth Quarter 2003 Groundwater Monitoring Report
ARCO Service Station #4931
731 West MacArthur Blvd.
Oakland, CA
URS Project #38486330



Alameda County
DEC 31 2003
Environmental Health

I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct.

Submitted by:

Paul Supple
Environmental Business Manager

REPORT

**FOURTH QUARTER 2003
GROUNDWATER MONITORING**

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

Alameda County
DEC 31 2003
Environmental Health

Prepared for
Atlantic Richfield Company

December 22, 2003

URS

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

38486330



Date: December 22, 2003
Quarter: 4Q 03

ATLANTIC RICHFIELD COMPANY QUARTERLY GROUNDWATER MONITORING REPORT

Facility No.: 4931 Address: 731 West MacArthur Boulevard, Oakland, California
ARCO Environmental Business Manager: Paul Supple
Consulting Co./Contact Person: URS Corporation / Scott Robinson
Consultant Project No.: 38486330
Primary Agency: Alameda County Health Care Services Agency (ACHCSA)

WORK PERFORMED THIS QUARTER (Fourth – 2003):

1. Performed fourth quarter 2003 groundwater monitoring event on November 14, 2003.
2. Prepared and submitted fourth quarter 2003 groundwater monitoring report.
3. Replaced ORC socks in wells A-4, A-8, A-9 and AR-1 on December 2, 2003.

WORK PROPOSED FOR NEXT QUARTER (First – 2004):

1. Perform first quarter 2004 groundwater monitoring event.
2. Prepare and submit first quarter 2004 groundwater monitoring report.
3. Work to have well A-6 uncovered.

Current Phase of Project: Remediation/GW monitoring/sampling
Frequency of Groundwater Sampling: Beginning this quarter:
Annual (3rd Quarter): A-2, A-7, A-9, A-10, A-11, A-13
Semi-Annual (1st/3rd Quarter): A-3, A-5, A-12
Quarterly: A-4, A-6, A-8
Frequency of Groundwater Monitoring: Quarterly
Free Product (FP) Present On-Site: Sheen in A-4
Current Remediation Techniques: Intrinsic Bioremediation Enhancement using ORC in A-4, A-8, A-9,
and AR-1
Approximate Depth to Groundwater: 6.01 (AR-2) to 10.40 (AR-1 and A-11) feet
Groundwater Gradient (direction): West
Groundwater Gradient (magnitude): 0.02 feet per foot

DISCUSSION:

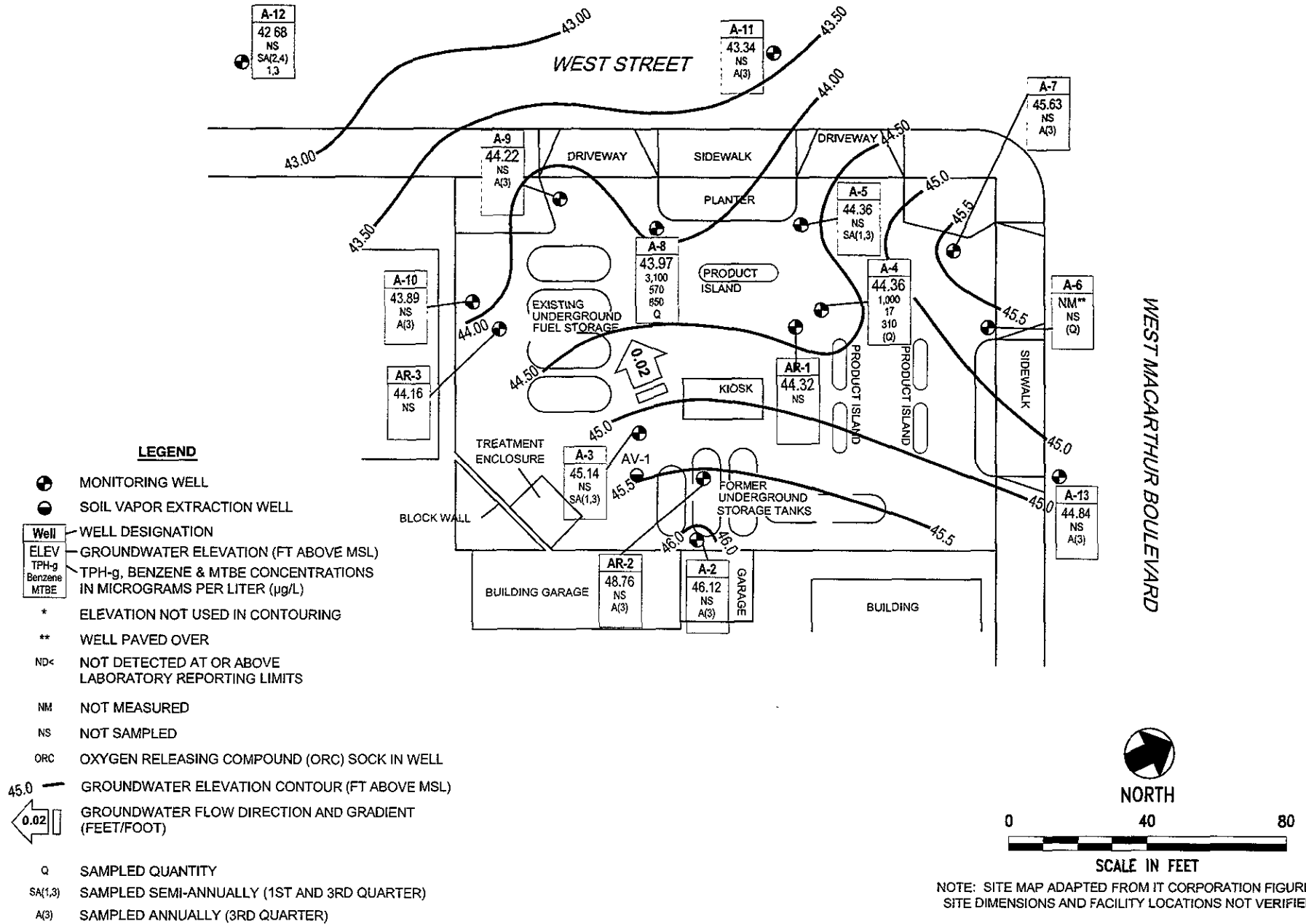
TPH-g was detected above the laboratory reporting limit in both of the wells sampled this quarter at concentrations of 1,000 µg/L (A-4) and 3,100 µg/L (A-8). Benzene was detected above the laboratory reporting limit in both wells at concentrations of 17 µg/L (A-4) and 570 µg/L (A-8). MTBE was detected above the laboratory reporting limit in both wells at concentrations of 310 µg/L (A-4) and 850 µg/L (A-8). TAME was detected above the laboratory reporting limit in both wells at concentrations of 76 µg/L (A-4) and 320 µg/L (A-8). Well A-6 was inaccessible for sampling as it appears to have been paved over.



Beginning this quarter, the following changes in sampling frequency were made due to consistently low or non-detectable concentrations of the constituents of concern: 1) well A-11 from semi-annual to annual, and 2) wells A-2 and A-9 from quarterly to annually. Well A-10 was recommended to be added to the annual sampling event.

ATTACHMENTS:

- Figure 1 -- Groundwater Elevation Contour and Analytical Summary Map -- November 14, 2003
- Table 1 -- Groundwater Elevation and Analytical Data
- Table 2 -- Groundwater Flow Direction and Gradient
- Table 3 -- Oxygenate Analytical Data
- 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



URS	Project No. 38486330	GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP Fourth Quarter 2003 (November 14, 2003)	FIGURE 1
	Arco Service Station #4931 731 West MacArthur Boulevard Oakland, California		

Table 1
Groundwater Elevation and Analytical Data

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

Well Number	Date Sampled	P/NP	TOC Elevation (ft)	Top of Screen Elevation (ft)	Total Well Depth (ft, BGS)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO ^c (mg/L)	pH ^c
A-2	06/21/00		55.48	50.48	19.00	6.85	48.63	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<3.0	NA	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	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	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	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	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	NA
	12/31/01					4.13	51.35	ND<50	ND<0.5	ND<0.5	1	3.2	ND<2.5	NA	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	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	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	3.1	7.7
	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	6.1
	01/30/03*	NP				5.08	50.40	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.6	6.7
	05/28/03	NP				4.82	50.66	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.1	5.7	6.8
	08/06/03	NP				9.73	45.75	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.3	7.7
	11/14/03					9.36	46.12	NS	NS	NS	NS	NS	NS	NS	NS
A-3	06/21/00		54.66	49.66	19.30	9.48	45.18	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	46	NA	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	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	NA
	03/20/01					6.34	48.32	NS	NS	NS	NS	NS	NS	NS	NS
	06/12/01					9.76	44.90	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	86	NA	NA
	09/23/01					10.55	44.11	NS	NS	NS	NS	NS	NS	NS	NS
	12/31/01					3.70	50.96	ND<50	ND<0.5	ND<0.5	ND<0.5	1	60	NA	NA
	03/21/02					5.75	48.91	NS	NS	NS	NS	NS	NS	NS	NS
	04/17/02					7.27	47.39	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	45	NA	NA
	08/12/02					9.71	44.95	NS	NS	NS	NS	NS	NS	NS	NS
	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	6.6
	01/30/03*					6.05	48.61	NS	NS	NS	NS	NS	NS	NS	NS
	05/28/03	P				8.06	46.60	74	ND<0.50	ND<0.50	ND<0.50	ND<0.50	43	1.5	6.9
	08/06/03					9.91	44.75	NS	NS	NS	NS	NS	NS	NS	NS
	11/14/03					9.52	45.14	NS	NS	NS	NS	NS	NS	NS	NS

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Oakland, California

Well Number	Date Sampled	P/NP	TOC Elevation (ft)	Top of Screen Elevation (ft)	Total Well Depth (ft., BGS)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO ^e (mg/L)	pH ^f
A-4	06/21/00		54.73	49.73	19.60	9.49	45.24	2,100	110	2.1	11	5.9	2,000	NA	NA
	09/20/00					10.33	44.40	1,540	127	ND<5.0	9.07	7.42	1,940	NA	NA
	12/26/00					9.34	45.39	1,550	42.7	ND<5.0	11	10.9	1,210	NA	NA
	03/20/01					7.56	47.17	913	40.9	ND<5.0	15.5	14.6	ND<25	NA	NA
	06/12/01					9.83	44.90	2,000	230	ND<20	21	ND<20	4,700	NA	NA
	09/23/01					10.54	44.19	1,600	35	ND<10	ND<10	ND<10	3,000	NA	NA
	12/31/01					5.42	49.31	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	880	NA	NA
	03/21/02					6.18	48.55	ND<5,000	ND<50	ND<50	ND<50	ND<50	1,400	NA	NA
	04/17/02					7.34	47.39	1,300	79	31	17	55	2,200	NA	NA
	08/12/02	P				9.56	45.17	2,400 ^a	120	ND<5.0	ND<5.0	ND<5.0	2,100	2.0	7.2
	12/06/02	P				10.02	44.71	2,200	110	10	42	56	2,000	NA	6.7
	01/30/03*	P				7.55	47.18	6,000	180	ND<50	85	ND<50	2,100	1.8	6.8
	05/28/03	P				8.94	45.79	6,000	120	ND<50	ND<50	ND<50	2,500	1.5	6.7
	08/06/03	P				10.03	44.70	5,800	100	ND<25	ND<25	33	2,500	1.5	6.7
11/14/03 ^f	P			SHEEN	10.37	44.36	1,000	17	ND<5.0	ND<5.0	ND<5.0	310	1.6	6.8	
A-5	06/21/00		54.17	51.17	24.00	9.29	44.88	980	ND<0.5	ND<0.5	ND<0.5	ND<1.0	2,000	NA	NA
	09/20/00					10.23	43.94	NS	NS	NS	NS	NS	NS	NS	NS
	12/26/00					9.65	44.52	525	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1,200	NA	NA
	03/20/01					8.05	46.12	NS	NS	NS	NS	NS	NS	NS	NS
	06/12/01					9.81	44.36	830	ND<5.0	ND<5.0	ND<5.0	ND<5.0	3,200	NA	NA
	09/23/01					10.42	43.75	NS	NS	NS	NS	NS	NS	NS	NS
	12/31/01					6.03	48.14	320	ND<0.5	ND<0.5	ND<0.5	ND<0.5	60	NA	NA
	03/21/02					6.71	47.46	NS	NS	NS	NS	NS	NS	NS	NS
	04/17/02					8.01	46.16	1,600	ND<10	ND<10	ND<10	ND<10	3,200	NA	NA
	08/12/02					9.87	44.30	NS	NS	NS	NS	NS	NS	NS	NS
	12/06/02	P				9.66	44.51	310	ND<0.50	ND<0.50	ND<0.50	ND<0.50	330	1.9	6.6
	01/30/03*	P				7.67	46.50	NS	NS	NS	NS	NS	NS	NS	NS
	05/28/03	P				8.56	45.61	ND<5,000	ND<50	ND<50	ND<50	ND<50	1,500	1.6	6.6
	08/06/03	P				9.58	44.59	NS	NS	NS	NS	NS	NS	NS	NS
11/14/03	P				9.81	44.36	NS	NS	NS	NS	NS	NS	NS	NS	

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Groundwater Elevation and Analytical Data**

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

Well Number	Date Sampled	P/NP	TOC Elevation (ft)	Top of Screen Elevation (ft)	Total Well Depth (ft., BGS)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO ^c (mg/L)	pH ^c	
A-6	06/21/00		55.17	53.17	25.00	8.67	46.50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<3.0	NA	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	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	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	NA	
	06/12/01					8.93	46.24	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7	NA	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	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	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	NA	
	04/17/02					6.95	48.22	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.1	NA	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	4.3	7.9	
	12/06/02					Unable to Sample, Well Paved Over										
	01/30/03*					Unable to Sample, Well Paved Over										
	05/28/03					Unable to Sample, Well Paved Over										
	08/06/03					Unable to Sample, Well Paved Over										
	11/14/03					Unable to Sample, Well Paved Over										
A-7	06/21/00		54.71	49.93	22.60	8.58	46.13	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<3.0	NA	NA	
	09/20/00					9.19	45.52	NS	NS	NS	NS	NS	NS	NS	NS	
	12/26/00					8.50	46.21	NS	NS	NS	NS	NS	NS	NS	NS	
	03/20/01					6.75	47.96	NS	NS	NS	NS	NS	NS	NS	NS	
	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	NA	
	09/23/01					9.59	45.12	NS	NS	NS	NS	NS	NS	NS	NS	
	12/31/01					4.78	49.93	NS	NS	NS	NS	NS	NS	NS	NS	
	03/21/02					5.35	49.36	NS	NS	NS	NS	NS	NS	NS	NS	
	04/17/02					6.88	47.83	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.5	NA	NA	
	08/12/02					8.77	45.94	NS	NS	NS	NS	NS	NS	NS	NS	
	12/06/02					9.07	45.64	NS	NS	NS	NS	NS	NS	NS	NS	
	01/30/03*					6.65	48.06	NS	NS	NS	NS	NS	NS	NS	NS	
	05/28/03	P				7.63	47.08	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.8	2.3	6.7	
	08/06/03					8.90	45.81	NS	NS	NS	NS	NS	NS	NS	NS	
	11/14/03					9.08	45.63	NS	NS	NS	NS	NS	NS	NS	NS	

**Table 1
Groundwater Elevation and Analytical Data**

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731 West Macarthur Boulevard
Oakland, California

Well Number	Date Sampled	P/NP	TOC Elevation (ft)	Top of Screen Elevation (ft)	Total Well Depth (ft., BGS)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO ^c (mg/L)	pH ^f
A-8	06/21/00		53.77	51.77	20.00	9.07	44.70	810	ND<0.5	ND<0.5	ND<0.5	810	1,500	NA	NA
	09/20/00					9.72	44.05	10,800	2,680	46	439	370	4,410	NA	NA
	12/26/00					9.20	44.57	7,700	1,440	ND<50	202	106	2,230	NA	NA
	03/20/01					7.51	46.26	ND<5,000	1,280	ND<50	53.9	ND<50	2,880	NA	NA
	06/12/01					9.53	44.24	5,600	1,700	ND<50	61	54	2,900	NA	NA
	09/23/01					10.08	43.69	10,000	3,500	ND<50	110	64	6,500	NA	NA
	12/31/01					4.34	49.43	4,300	610	ND<10	60	24	520	NA	NA
	03/21/02					6.67	47.10	6,600	1400	ND<50	130	ND<50	2,700	NA	NA
	04/17/02					7.72	46.05	3,800	540	ND<10	ND<10	12	3,100	NA	NA
	08/12/02	NP				9.64	44.13	9,400	1,800	ND<20	35	28	4,200	1.0	6.7
	12/06/02	NP				9.62	44.15	5,300	1,100	11	11	ND<10	2,200 ^b	1.4	6.7
	01/30/03*	NP				7.49	46.28	ND<10,000	1,100	ND<100	ND<100	ND<100	2,200	1.5	6.9
	05/28/03	NP				9.17	44.60	7,700	1,700	ND<50	ND<50	ND<50	2,100	1.0	6.8
	08/06/03	NP				9.67	44.10	13,000	2,400	ND<50	ND<50	ND<50	3,000	0.9	6.5
11/14/03 ^f	NP				9.80	43.97	3,100	570	ND<5.0	ND<5.0	ND<5.0	850	2.3	6.2	
A-9	06/21/00		53.04	48.04	38.00	8.56	44.48	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	5.0	NA	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	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	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	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	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	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	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	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	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	4.0	7.6
	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	6.7
	01/30/03*	P				6.88	46.16	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.1	0.9	6.8
	05/28/03	P				9.75	43.29	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.74	1.9	6.8
	08/06/03	P				9.00	44.04	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.8	2.2	6.7
11/14/03 ^f					8.82	44.22	NS	NS	NS	NS	NS	NS	NS	NS	

Table 1
Groundwater Elevation and Analytical Data

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

Well Number	Date Sampled	P/NP	TOC Elevation (ft)	Top of Screen Elevation (ft)	Total Well Depth (ft., BGS)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO ^c (mg/L)	pH ^c
A-10	06/21/00		54.26			10.47	43.79	NS	NS	NS	NS	NS	NS	NS	NS
	09/20/00					10.76	43.50	NS	NS	NS	NS	NS	NS	NS	NS
	12/26/00					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	03/20/01					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	09/23/01					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	12/31/01					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	03/21/02					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	04/17/02					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	08/12/02					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	12/06/02					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	01/30/03*					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	05/28/03					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/03					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
11/14/03						10.37	43.89	NS	NS	NS	NS	NS	NS	NS	NS
A-11	06/21/00		53.74	48.74	28.00	9.54	44.20	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	4.0	NA	NA
	09/20/00					10.62	43.12	NS	NS	NS	NS	NS	NS	NS	NS
	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	NA
	03/20/01					8.49	45.25	NS	NS	NS	NS	NS	NS	NS	NS
	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	NA
	09/23/01					10.77	42.97	NS	NS	NS	NS	NS	NS	NS	NS
	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	NA
	03/21/02					7.14	46.60	NS	NS	NS	NS	NS	NS	NS	NS
	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	NA
	08/12/02					10.25	43.49	NS	NS	NS	NS	NS	NS	NS	NS
	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	6.7
	01/30/03*					8.42	45.32	NS	NS	NS	NS	NS	NS	NS	NS
	05/28/03	P				9.30	44.44	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.53	1.8	7.0
08/06/03					10.28	43.46	NS	NS	NS	NS	NS	NS	NS	NS	
11/14/03					10.40	43.34	NS	NS	NS	NS	NS	NS	NS	NS	

**Table 1
Groundwater Elevation and Analytical Data**

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

Well Number	Date Sampled	P/NP	TOC Elevation (ft)	Top of Screen Elevation (ft)	Total Well Depth (ft., BGS)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO ^e (mg/L)	pH ^f
A-12	06/21/00		52.05	47.05	30.00	9.28	42.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	18	NA	NA
	09/20/00					9.55	42.50	NS	NS	NS	NS	NS	NS	NS	NS
	12/26/00					9.05	43.00	ND< 50	ND< 0.5	ND< 0.5	ND< 0.5	ND<0.5	17.3	NA	NA
	03/20/01					7.92	44.13	NS	NS	NS	NS	NS	NS	NS	NS
	06/12/01					9.26	42.79	ND< 50	ND< 0.5	ND< 0.5	ND< 0.5	ND<0.5	25	NA	NA
	09/23/01					9.68	42.37	NS	NS	NS	NS	NS	NS	NS	NS
	12/31/01					5.74	46.31	ND< 50	ND< 0.5	ND< 0.5	ND< 0.5	ND<0.5	9.5	NA	NA
	03/21/02					6.64	45.41	NS	NS	NS	NS	NS	NS	NS	NS
	04/17/02					7.68	44.37	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	29	NA	NA
	08/12/02					9.30	42.75	NS	NS	NS	NS	NS	NS	NS	NS
	12/06/02 ^c	P				9.38	42.67	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	13	2.3	6.5
	01/30/03*					7.87	44.18	NS	NS	NS	NS	NS	NS	NS	NS
	05/28/03	P				8.51	43.54	50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10	1.4	7.0
	08/06/03					9.28	42.77	NS	NS	NS	NS	NS	NS	NS	NS
	11/14/03					9.37	42.68	NS	NS	NS	NS	NS	NS	NS	NS
A-13	06/21/00		55.11	45.11	29.50	NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	09/20/00					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	12/26/00					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	03/20/01					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	06/12/01					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	09/23/01					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	12/31/01					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	03/21/02					6.70	48.41	NS	NS	NS	NS	NS	NS	NS	NS
	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	NA
	08/12/02					10.11	45.00	NS	NS	NS	NS	NS	NS	NS	NS
	12/06/02					10.26	44.85	NS	NS	NS	NS	NS	NS	NS	NS
	01/30/03*					7.81	47.30	NS	NS	NS	NS	NS	NS	NS	NS
	05/28/03	P				9.06	46.05	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.9	6.5
	08/06/03					10.22	44.89	NS	NS	NS	NS	NS	NS	NS	NS
	11/14/03					10.27	44.84	NS	NS	NS	NS	NS	NS	NS	NS

**Table 1
Groundwater Elevation and Analytical Data**

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

Well Number	Date Sampled	P/NP	TOC Elevation (ft)	Top of Screen Elevation (ft)	Total Well Depth (ft., BGS)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO ^c (mg/L)	pH ^f
AR-1	06/21/00		54.72	44.72	31.50	NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	09/20/00					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	12/26/00					9.95	44.77	NS	NS	NS	NS	NS	NS	NS	NS
	03/20/01					8.34	46.38	NS	NS	NS	NS	NS	NS	NS	NS
	06/12/01					10.17	44.55	NS	NS	NS	NS	NS	NS	NS	NS
	09/23/01					10.72	44.00	NS	NS	NS	NS	NS	NS	NS	NS
	12/31/01					5.91	48.81	NS	NS	NS	NS	NS	NS	NS	NS
	03/21/02					7.00	47.72	NS	NS	NS	NS	NS	NS	NS	NS
	04/17/02					8.33	46.39	NS	NS	NS	NS	NS	NS	NS	NS
	08/12/02					10.18	44.54	NS	NS	NS	NS	NS	NS	NS	NS
	12/06/02					10.21	44.51	NS	NS	NS	NS	NS	NS	NS	NS
	01/30/03*					8.22	46.50	NS	NS	NS	NS	NS	NS	NS	NS
	05/28/03					9.62	45.10	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/03					10.47	44.25	NS	NS	NS	NS	NS	NS	NS	NS
11/14/03 ^f					10.40	44.32	NS	NS	NS	NS	NS	NS	NS	NS	
AR-2	06/21/00		54.77	44.77	27.50	NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	09/20/00					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	12/26/00					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	03/20/01					3.13	51.64	NS	NS	NS	NS	NS	NS	NS	NS
	06/12/01					4.51	50.26	NS	NS	NS	NS	NS	NS	NS	NS
	09/23/01					6.05	48.72	NS	NS	NS	NS	NS	NS	NS	NS
	12/31/01					2.79	51.98	NS	NS	NS	NS	NS	NS	NS	NS
	03/21/02					7.75	47.02	NS	NS	NS	NS	NS	NS	NS	NS
	04/17/02					2.24	52.53	NS	NS	NS	NS	NS	NS	NS	NS
	08/12/02					4.93	49.84	NS	NS	NS	NS	NS	NS	NS	NS
	12/06/02					6.09	48.68	NS	NS	NS	NS	NS	NS	NS	NS
	01/30/03*					3.89	50.88	NS	NS	NS	NS	NS	NS	NS	NS
	05/28/03					3.33	51.44	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/03					5.05	49.72	NS	NS	NS	NS	NS	NS	NS	NS
11/14/03					6.01	48.76	NS	NS	NS	NS	NS	NS	NS	NS	

Table 1
Groundwater Elevation and Analytical Data

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

Well Number	Date Sampled	P/NP	TOC Elevation (ft)	Top of Screen Elevation (ft)	Total Well Depth (ft, BGS)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO ^e (mg/L)	pH ^f
AR-3	06/21/00		54.19	44.19	27.00	NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	09/20/00					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	12/26/00					9.70	44.49	NS	NS	NS	NS	NS	NS	NS	NS
	03/20/01					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	06/12/01					NM	NC	NS	NS	NS	NS	NS	NS	NS	NS
	09/23/01					10.43	43.76	NS	NS	NS	NS	NS	NS	NS	NS
	12/31/01					5.18	49.01	NS	NS	NS	NS	NS	NS	NS	NS
	03/21/02					6.78	47.41	NS	NS	NS	NS	NS	NS	NS	NS
	04/17/02					8.06	46.13	NS	NS	NS	NS	NS	NS	NS	NS
	08/12/02					9.94	44.25	NS	NS	NS	NS	NS	NS	NS	NS
	12/06/02					9.99	44.20	NS	NS	NS	NS	NS	NS	NS	NS
	01/30/03*					7.96	46.23	NS	NS	NS	NS	NS	NS	NS	NS
	05/28/03					8.94	45.25	NS	NS	NS	NS	NS	NS	NS	NS
	08/06/03					9.94	44.25	NS	NS	NS	NS	NS	NS	NS	NS
	11/14/03					10.03	44.16	NS	NS	NS	NS	NS	NS	NS	NS

Table 1
Groundwater Elevation and Analytical Data

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

TPH-g	= Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B modified (before 1/30/03)
MTBE	= Methyl tertiary butyl ether analyzed by EPA Method 8021B unless otherwise noted (before 1/30/03)
note	= Samples taken 12/06/02 analyzed using DHS LUFT
µg/L	= Micrograms per liter
mg/L	= Milligrams per liter
TOC	= Top of casing
BGS	= Below ground surface
DO	= Dissolved oxygen
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.
d	= The result was reported with a possible high bias due to the continuing calibration verification falling outside acceptance criteria
e	= DO and pH are field measurements
f	= ORC sock in well
*	= Beginning this quarter, groundwater samples were analyzed by EPA method 8260B for TPH-g, BTEX, and fuel oxygenates.

Source: The data within this table collected prior to August 2002 was provided to URS by ARCO 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
01/30/03	West	Variable
05/28/03	Westward	0.022 ^a
08/06/03	West-Southwest	0.018
11/14/03	West	0.02

a = using wells AR-1 and A-9

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

Table 3
Fuel Oxygenate Analytical Data

ARCO Service Station #4931
731 West 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)	1,2-DCA (µg/L)	EDB (µg/L)
A-2	01/30/03	ND<40	ND<20 ^a	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	NA
	05/28/03	ND<100	ND<20	1.1	ND<0.50	ND<0.50	ND<0.50	NA	NA
	08/06/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
A-3	05/28/03	ND<100	ND<20	43	ND<0.50	ND<0.50	24	NA	NA
A-4	01/30/03	ND<4,000	ND<2,000 ^a	2,100	ND<50	ND<50	530	NA	NA
	05/28/03	ND<10,000	ND<2,000	2,500	ND<50	ND<50	590	NA	NA
	08/06/03	ND<5,000	ND<1,000	2,500	ND<25	ND<25	560	ND<25	ND<25
	11/14/03	ND<1,000	320	310	ND<5.0	ND<5.0	76	NA	NA
A-5	05/28/03	ND<10,000	ND<2,000	1,500	ND<50	ND<50	620	NA	NA
A-7	05/28/03	ND<100	ND<20	3.8	ND<0.50	ND<0.50	0.94	NA	NA
A-8	01/30/03	ND<8,000	ND<4,000 ^a	2,200	ND<100	ND<100	900	NA	NA
	05/28/03	ND<10,000	ND<2,000	2,100	ND<50	ND<50	1,100	NA	NA
	08/06/03	ND<10,000	ND<2,000	3,000	ND<50	ND<50	1,200	ND<50	ND<50
	11/14/03	ND<1,000	ND<200	850	ND<5.0	ND<5.0	320	NA	NA
A-9	01/30/03	ND<40	ND<20	1.1	ND<0.50	ND<0.50	ND<0.50	NA	NA
	05/28/03	ND<100	ND<20	0.74	ND<0.50	ND<0.50	ND<0.50	NA	NA
	08/06/03	ND<100	ND<20	1.8	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
A-11	05/28/03	ND<100	ND<20	0.53	ND<0.50	ND<0.50	ND<0.50	NA	NA
A-12	05/28/03	ND<100	ND<20	10	ND<0.50	ND<0.50	2.5	NA	NA
A-13	05/28/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	NA

Table 3
Fuel Oxygenate Analytical Data

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

Note	= All fuel oxygenate compounds analyzed using EPA Method 8260B
TBA	= tert-Butyl alcohol
MTBE	= Methyl tert-butyl ether
DIPE	= Di-isopropyl ether
ETBE	= Ethyl tert butyl ether
TAME	= tert-Amyl methyl ether
1,2-DCA	= 1,2-Dichloroethane
EDB	= 1,2-Dibromoethane
NA	= Not analyzed
µg/L	= micrograms per liter
ND<	= Not detected at or above laboratory reporting limits
NS	= Not sampled
a	= The result was reported with a possible high bias due to the continuing calibration verification falling outside acceptance criteria.

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 # 031114-MD1 Date 11/14/03 Client Arco 4931

Site F31 w. Mac Arthur 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 TOB	<i>N/A</i>	
A-2	4					9.36	19.40	}		
A-3	4					9.52	16.20			
A-4	4		No SPH detected ORC in well			10.37	19.42			
A-5	3					9.81	24.59			
A-6	3		paved over			—	—			2'
A-7	3					9.08	22.24			
A-8	3		ORC in well			9.80	16.80			2'
A-9	6		ORC in well			8.82	37.81			
A-10	3					10.37	29.73			
A-4	3					10.40	29.71			
A-12	3					9.37	29.79			
① A-13	3					10.27	29.05			
AR-1	6		ORC in well			10.40	29.39			
AR-2	6					6.01	26.28			
AR-3	4					10.03	28.95			
			① gauged w/ stringer in well							

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>03114-MD1</u>	Station # <u>Arco 4931</u>
Sampler: <u>John De Jong</u>	Date: <u>11/14/03</u>
Well I.D.: <u>A-4</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: <u>19.42</u>	Depth to Water: <u>10.37</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
 Positive Air Displacement
~~Electric Submersible~~
 Extraction Pump
 Other: _____

Sampling Method: Bailer
~~Disposable Bailer~~
~~Extractor 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>5.9</u>	x	<u>3</u>	=	<u>17.7</u> Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u>)	Gals. Removed	Observations
<u>1028</u>	<u>66.4</u>	<u>6.9</u>	<u>696</u>	<u>6</u>	<u>grey gas odor</u>
		<u>well</u>	<u>dewatered @ 6.5</u>		<u>DW = 16.62</u>
<u>1035</u>	<u>65.9</u>	<u>6.8</u>	<u>770</u>	<u>-</u>	<u>gas odor, screen</u>
					<u>DW = 16.62 site depth</u>

Did well dewater? Yes No Gallons actually evacuated: 6.5

Sampling Time: 1035 Sampling Date: 11/14/03

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

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Oxy's, Ethanol (all by 8260)

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>031114-MD1</u>	Station # <u>Arco 4931</u>
Sampler: <u>John De Jong</u>	Date: <u>11/14/03</u>
Well I.D.: <u>A-6</u>	Well Diameter: 2 3 4 6 8 <u> </u>
Total Well Depth: <u> </u>	Depth to Water: <u> </u>
Depth to Free Product: <u> </u>	Thickness of Free Product (feet): <u> </u>
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~~
~~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.

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

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
					<u>well is unlocatable (paved over)</u>

Did well dewater? Yes No Gallons actually evacuated:

Sampling Time: Sampling Date:

Sample I.D.: Laboratory: Pace Sequoia Other

Analyzed for: TPH-G BTEX MTBE TPH-D Other: CO₂'s, Ethanol (all by 8260)

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 #: 031114-M01	Station # Arco 4931
Sampler: John De Jong	Date: 11/14/03
Well I.D.: A-8	Well Diameter: 2 <u>3</u> 4 6 8
Total Well Depth: 16.80	Depth to Water: 980
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
- 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>No purge @ 2^l</u>			
1 Case Volume (Gals.)	Specified Volumes	=	Calculated Volume Gals.

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
935	67.4	6.2	1045	—	clear, gas odor

Did well dewater? Yes No Gallons actually evacuated: _____

Sampling Time: 935 Sampling Date: 11/14/03

Sample I.D.: A-8 Laboratory: Pace Sequoia Other _____

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Oxy's, Ethanol (all by 82605)

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	2.3	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

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

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

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

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

~~731~~ Arco 4931

Station #

731 Cal. MacArthur Blvd., Oakland

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

7

added equip. _____
rinse water _____

any other adjustments _____

TOTAL GALS. RECOVERED 7

loaded onto BTS vehicle # _____

BTS event # 03114-MD1 time 1115 date 11/14/03

signature John De Jong

REC'D AT Blaine Tech Services time 1200 date 11/14/03

unloaded by signature John De Jong

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 noted on 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 Atlantic Richfield Company have been reviewed and verified by that laboratory.



3 December, 2003

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

RE: ARCO #4931, Oakland, CA
Work Order: MMK0619

Enclosed are the results of analyses for samples received by the laboratory on 11/17/03 15:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

James Hartley For Theresa Allen
Project Manager

CA ELAP Certificate #1210



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

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

MMK0619
Reported:
12/03/03 10:07

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
A-8	MMK0619-01	Water	11/14/03 09:35	11/17/03 15:50
A-4	MMK0619-02	Water	11/14/03 10:35	11/17/03 15:50

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

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

 MMK0619
 Reported:
 12/03/03 10:07

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-8 (MMK0619-01) Water Sampled: 11/14/03 09:35 Received: 11/17/03 15:50									
Ethanol	ND	1000	ug/l	10	3K25005	11/25/03	11/26/03	EPA 8260B	
tert-Butyl alcohol	ND	200	"	"	"	"	"	"	
Methyl tert-butyl ether	850	5.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	320	5.0	"	"	"	"	"	"	
Benzene	570	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	5.0	"	"	"	"	"	"	
Gasoline Range Organics	3100	500	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		78-129	"	"	"	"	
A-4 (MMK0619-02) Water Sampled: 11/14/03 10:35 Received: 11/17/03 15:50									
Ethanol	ND	1000	ug/l	10	3K25005	11/25/03	11/26/03	EPA 8260B	
tert-Butyl alcohol	320	200	"	"	"	"	"	"	
Methyl tert-butyl ether	310	5.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	76	5.0	"	"	"	"	"	"	
Benzene	17	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	5.0	"	"	"	"	"	"	
Gasoline Range Organics	1000	500	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		100 %		78-129	"	"	"	"	

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

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

MMK0619
Reported:
12/03/03 10:07

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3K25005 - EPA 5030B P/T

Blank (3K25005-BLK1)

Prepared & Analyzed: 11/25/03

Ethanol	ND	100	ug/l							
tert-Butyl alcohol	ND	20	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics	ND	50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.33		"	5.00		107	78-129			

Laboratory Control Sample (3K25005-BS1)

Prepared & Analyzed: 11/25/03

Ethanol	174	100	ug/l	200		87.0	31-186			
tert-Butyl alcohol	37.9	20	"	50.0		75.8	0-206			
Methyl tert-butyl ether	9.25	0.50	"	10.0		92.5	63-137			
Di-isopropyl ether	10.1	0.50	"	10.0		101	76-130			
Ethyl tert-butyl ether	9.75	0.50	"	10.0		97.5	61-141			
tert-Amyl methyl ether	9.51	0.50	"	10.0		95.1	56-140			
1,2-Dichloroethane	10.0	0.50	"	10.0		100	77-136			
1,2-Dibromoethane (EDB)	8.93	0.50	"	10.0		89.3	77-132			
Benzene	10.5	0.50	"	10.0		105	78-124			
Toluene	9.47	0.50	"	10.0		94.7	78-129			
Ethylbenzene	9.25	0.50	"	10.0		92.5	84-117			
Xylenes (total)	27.1	0.50	"	30.0		90.3	83-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.14		"	5.00		103	78-129			

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

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

MMK0619
Reported:
12/03/03 10:07

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3K25005 - EPA 5030B P/T

Laboratory Control Sample (3K25005-BS2)

Prepared & Analyzed: 11/25/03

Methyl tert-butyl ether	8.06	0.50	ug/l	9.92		81.2	63-137			
Benzene	5.40	0.50	"	6.40		84.4	78-124			
Toluene	28.9	0.50	"	29.7		97.3	78-129			
Ethylbenzene	6.81	0.50	"	6.96		97.8	84-117			
Xylenes (total)	33.8	0.50	"	33.7		100	83-125			
Gasoline Range Organics	402	50	"	440		91.4	70-113			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.22		"	5.00		104	78-129			

Laboratory Control Sample Dup (3K25005-BSD1)

Prepared & Analyzed: 11/25/03

Ethanol	199	100	ug/l	200		99.5	31-186	13.4	37	
tert-Butyl alcohol	44.6	20	"	50.0		89.2	0-206	16.2	22	
Methyl tert-butyl ether	9.71	0.50	"	10.0		97.1	63-137	4.85	13	
Di-isopropyl ether	9.72	0.50	"	10.0		97.2	76-130	3.83	9	
Ethyl tert-butyl ether	9.73	0.50	"	10.0		97.3	61-141	0.205	9	
tert-Amyl methyl ether	9.68	0.50	"	10.0		96.8	56-140	1.77	12	
1,2-Dichloroethane	10.2	0.50	"	10.0		102	77-136	1.98	13	
1,2-Dibromoethane (EDB)	9.21	0.50	"	10.0		92.1	77-132	3.09	9	
Benzene	10.1	0.50	"	10.0		101	78-124	3.88	12	
Toluene	9.15	0.50	"	10.0		91.5	78-129	3.44	10	
Ethylbenzene	9.10	0.50	"	10.0		91.0	84-117	1.63	10	
Xylenes (total)	26.9	0.50	"	30.0		89.7	83-125	0.741	11	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.12		"	5.00		102	78-129			

Laboratory Control Sample Dup (3K25005-BSD2)

Prepared & Analyzed: 11/25/03

Methyl tert-butyl ether	8.38	0.50	ug/l	9.92		84.5	63-137	3.89	13	
Benzene	5.63	0.50	"	6.40		88.0	78-124	4.17	12	
Toluene	30.1	0.50	"	29.7		101	78-129	4.07	10	
Ethylbenzene	7.32	0.50	"	6.96		105	84-117	7.22	10	
Xylenes (total)	34.4	0.50	"	33.7		102	83-125	1.76	11	
Gasoline Range Organics	412	50	"	440		93.6	70-113	2.46	9	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.09		"	5.00		102	78-129			

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

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

MMK0619
Reported:
12/03/03 10:07

Notes and Definitions

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



Chain of Custody Record

Project Name 493/GWM
 BP BUGEM CO Portfolio Retail
 BP Laboratory Contract Number: Atlantic Richfield Company
 Requested Due Date (mm/dd/yy) 14 day TAT

Date: 11/14/03

On-site Time: 8:45 Temp: 58
 Off-site Time: 11:15 Temp: 61
 Sky Conditions: cloudy, rainy
 Meteorological Events:
 Wind Speed: Direction:

Send To: Lab Name: <u>SEQUOIA</u> Lab Address: <u>885 Jarvis Dr.</u> <u>Morgan Hill, CA 95037</u>	BP/GEM Facility No.: <u>ARCO 4931</u> BP/GEM Facility Address: <u>731 W. MACARTHUR BLVD, OAKLAND, CA</u> Site ID No.: <u>ARCO 4931</u> Site Lat/Long: California Global ID #: <u>T0600100107</u>	Consultant/Contractor: <u>URS</u> Address: <u>500 12th St., Ste. 200</u> <u>Oakland, CA 94609-4014</u> e-mail EDI: <u>donna.casper@URSCorp.com</u> Consultant/Contractor Project No.: <u>J5-00004931.01 00427</u> Consultant Tele/Fax: <u>510-893-3600/510-874-3288</u> Consultant/Contractor PM: <u>Scott Robinson</u> Invoice to: Consultant/Contractor (Circle one) <u>BP/GEM</u> BP/GEM Work Release No:
Lab PM: <u>Theresa Allen</u> Tele/Fax: <u>408-776-9600 / 408-782-6308</u>	BP/GEM PM Contact: <u>PAUL SUPPLE</u> Address: <u>P.O. Box 6549</u> <u>Moraga, CA 94570</u>	
Report Type & QC Level: <u>1 Send EDF Reports</u>	Tele/Fax: <u>925-299-8891/925-299-8872</u>	
BP/GEM Account 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 (801,8021,8260)	TPH-D (8015)	MTBE (8021)	MTBE (8260)	MTBE, TAME, ETBE DIPN, TSA (8260)	LA-DCA & EDB (8260)		Ethanol (8260)
1	A-8	935		✓			MMK0619	01	3											
2	A-4	1035		✓			02	12	3											
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

Sampler's Name: <u>John DeLong</u>	Relinquished By / Affiliation: <u>[Signature] / BTS</u>	Date: <u>11/13/03</u>	Time: <u>1510</u>	Accepted By / Affiliation: <u>[Signature]</u>	Date: <u>11/17/03</u>	Time: <u>1550</u>
Sampler's Company: <u>Pacific Tech Services</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 2 °F/C Trip Blank Yes No

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: BP
 REC-BY (PRINT): RL
 WORKORDER: MMK0019

DATE REC'D AT LAB: 11/17/03
 TIME REC'D AT LAB: 1:50
 DATE LOGGED IN: 11/19/03

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) <u>Present</u> / Absent Intact / Broken*	01		A-8	2) V ₂₀₀₀	H ₂ O	L	11/14/03	11/17/03 RL
2. Chain-of-Custody <u>Present</u> / Absent*	02		A-4	L	L	L	L	
3. Traffic Reports or Packing List: <u>Present</u> / Absent								
4. Airbill: <u>Present</u> / Absent								
5. Airbill #:								
6. Sample Labels: <u>Present</u> / Absent								
7. Sample IDs: <u>Listed</u> / Not Listed on Chain-of-Custody								
8. Sample Condition: <u>Intact</u> / Broken* / Leaking*								
9. Does information on chain-of-custody, traffic reports and sample labels agree? <u>Yes</u> / No*								
10. Sample received within hold time: <u>Yes</u> / No*								
11. Adequate sample volume received? <u>Yes</u> / No*								
12. Proper Preservatives used: <u>Yes</u> / No*								
13. Temp Rec. at Lab: <u>2°C</u> Is temp 4 ±1-2°C? <u>Yes</u> / 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
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	<2.5	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	<2.5	NA	NM	
A-2	08/12/97	55.48	11.11	44.37	<50	<0.5	<0.5	<0.5	<0.5	4.6	NA	NM	
A-2	11/14/97	55.48	10.63	44.85	<50	0.9	2.8	<0.5	<0.5	5.6	NA	NM	
A-2	03/18/98	55.48	3.58	51.90	<50	<0.5	<0.5	<0.5	2.4	27	NA	2.6	
A-2	05/19/98	55.48	4.82	50.66	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	NM	
A-2	07/29/98	55.48	8.94	46.54	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.30	P
A-2	10/09/98	55.48	10.82	44.66	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.2	NP
A-2	02/19/99	55.48	4.46	51.02	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.5	NP
A-2	06/02/99	55.48	5.59	49.89	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	3.0	P
A-2	08/26/99	55.48	10.67	44.81	<50	<0.5	0.6	<0.5	<0.5	<3	NA	5.35	NP
A-2	10/26/99	55.48	4.61	50.87	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.79	NP
A-2	02/25/00	55.48	3.10	52.38	<50	<0.5	<0.5	<0.5	<1	<3	NA	2.14	P
A-3	03/26/96	54.66	7.20	47.46	Not Sampled: Well Sampled Semiannually				<1	<3	NA	4.21	NP
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				1.3	NA	NA	NM	
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				<25	NA	5,300	NM	
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				<10	1,500	NA	3.8	
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				<250	220	NA	4.60	P
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				<2.5	260	NA	1.0	NP
A-3	10/09/98	54.66	11.36	43.30	<250	<2.5	<2.5	<2.5	<2.5	260	NA	2.5	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

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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

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(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-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							0.49	
A-5	10/26/99	54.17	10.35	43.82	380	<0.5	<0.5	<0.5	<1	440	NA	1.55	NP
A-5	02/25/00	54.17	6.89	47.28	Not Sampled: Well Sampled Semiannually								
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	

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(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	

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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				<0.5	2.6	NA	NM	
A-9	05/27/97	53.04	9.56	43.48	<50	23	<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				<0.5	45	NA	NM	
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				<2.0	190	NA	9.6	
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	<3	NA	2.32	NP
A-9	08/26/99	53.04	9.48	43.56	<50	<0.5	<0.5	<0.5	<0.5	16	NA	0.71	NP
A-9	10/26/99	53.04	9.17	43.87	1,500	6.2	0.7	78	<0.5	<3	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	

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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-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	<3	NA	1.38	NP
A-11	08/26/99	53.74	11.05	42.69	Not Sampled: Well Sampled Semiannually					6	NA	1.38	NP
A-11	10/26/99	53.74	10.81	42.93	<50	<0.5	<0.5	<0.5	<0.5	6	NA	0.49	
A-11	02/25/00	53.74	6.70	47.04	Not Sampled: Well Sampled Semiannually				<1	4	NA	1.27	NP
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	<0.5	7	NA	0.51	
A-12	02/25/00	52.05	6.97	45.08	Not Sampled: Well Sampled Semiannually				<1	12	NA	1.09	NP
A-13	03/26/96	55.11			Well Inaccessible								
A-13	05/22/96	55.11			Well Inaccessible								

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IT CORPORATION

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											Well Inaccessible
A-13	04/01/97	55.11											Well Inaccessible
A-13	05/27/97	55.11											Well Inaccessible
A-13	08/12/97	55.11											Well Inaccessible
A-13	11/14/97	55.11											Well Inaccessible
A-13	03/18/98	55.11											Well Inaccessible
A-13	05/19/98	55.11											Well Inaccessible
A-13	07/29/98	55.11											Well Inaccessible
A-13	10/09/98	55.11											Well Inaccessible
A-13	02/19/99	55.11											Well Inaccessible
A-13	06/02/99	55.11											Well Inaccessible
A-13	08/26/99	55.11											Well Inaccessible
A-13	10/26/99	55.11											Well Inaccessible
A-13	02/25/00	55.11											Well Inaccessible
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								
AR-1	10/26/99	54.72	10.68	44.04	Not Sampled: Well Removed from Sampling Program								0.39
													1.39

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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								

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 Received from electronic data provided by IT Corporation.

IT CORPORATION

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

12/16/03

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:	MMK0619
Global ID:	T0600100107
Lab Report Number:	MMK0619120320031027

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotcif	Run Sub
MMK0619120320 031027	A-4	MMK061902	W	CS	8260TPH	SW5030B	11/14/03	11/25/03	11/26/03	3K25005	1
MMK0619120320 031027	A-8	MMK061901	W	CS	8260TPH	SW5030B	11/14/03	11/25/03	11/26/03	3K25005	1
		3K25005BSD1	WQ	BD1	8260TPH	SW5030B	//	11/25/03	11/25/03	3K25005	1
		3K25005BSD2	WQ	BD2	8260TPH	SW5030B	//	11/25/03	11/25/03	3K25005	1
		3K25005BS1	WQ	BS1	8260TPH	SW5030B	//	11/25/03	11/25/03	3K25005	1
		3K25005BS2	WQ	BS2	8260TPH	SW5030B	//	11/25/03	11/25/03	3K25005	1
		3K25005BLK1	WQ	LB1	8260TPH	SW5030B	//	11/25/03	11/25/03	3K25005	1

EDFSAMP: Error Summary Log

12/16/03

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

EDFTEST: Error Summary Log

12/16/03

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

EDFRES: Error Summary Log

12/16/03

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

EDFQC: Error Summary Log

12/16/03

Error type	Labiocfl	Anmcode	Parlabel	Qccode	Labqid
There are no errors in this data files					

EDFCL: Error Summary Log

12/16/03

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

AB2886 Electronic Delivery

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Your EDF file has been successfully uploaded!

**Confirmation
Number:** 3881278812

**Date/Time of
Submittal:** 12/12/2003 3:00:35 PM

Facility Global ID: T0600100110

Facility Name: ARCO

Submittal Title: Fourth Quarter 2003 Groundwater Monitoring
Report

Submittal Type: GW Monitoring Report

Logged in as URSCORP-OAKLAND
(CONTRACTOR)

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UPLOADING A GEO_WELL FILE

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

<u>Submittal Title:</u>	Fourth Quarter 2003 Geowell for Site #4931
<u>Submittal Date/Time:</u>	12/16/2003 10:18:40 AM
<u>Confirmation Number:</u>	1993131875

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