R076

URS

October 22, 2004

Mr. Robert Schultz
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Third Quarter 2004 Groundwater Monitoring Report
ARCO Service Station #4931
731 West MacArthur Boulevard
Oakland, California
URS Project #38486722

Dear Mr. Schultz:

On behalf of Atlantic Richfield Company, a BP affiliated company, URS Corporation (URS) is submitting the *Third Quarter 2004 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

R. Horwath

Robert Horwath, R.G.
Portfolio Manager

REGISTERED GEOLOGIST
ROBERT M. HORWATH
NO. 5925
4/07
STATE OF CALIFORNIA

Enclosure: Third Quarter 2004 Groundwater Monitoring Report

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

REPORT

THIRD QUARTER 2004 GROUNDWATER MONITORING

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

Prepared for
RM

October 22, 2004

URS

URS Corporation
1333 Broadway, Suite 800
Oakland, California 94612

38486722

Date: October 22, 2004

Quarter: 3Q 04

RM QUARTERLY GROUNDWATER MONITORING REPORT

Facility No.:	4931	Address:	731 West MacArthur Boulevard, Oakland, California
RM Environmental Business Manager:			Paul Supple
Consulting Co./Contact Person:			URS Corporation / Scott Robinson
Consultant Project No.:			38486722
Primary Agency:			Alameda County Environmental Health (ACEH)

WORK PERFORMED THIS QUARTER (Third – 2004):

1. Performed third quarter 2004 groundwater monitoring event on September 2, 2004.

WORK PROPOSED FOR NEXT QUARTER (Fourth– 2004):

1. Prepare and submit this third quarter 2004 groundwater monitoring report.
2. Perform fourth quarter 2004 groundwater monitoring event.
3. Prepare and submit fourth quarter 2004 groundwater monitoring report.
4. Remove ORC socks from wells A-4, A-8, A-9, and AR-1.

Current Phase of Project:	Remediation/Groundwater monitoring/sampling
Frequency of Groundwater Sampling:	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:	No
Current Remediation Techniques:	Natural Attenuation
Approximate Depth to Groundwater:	5.65 (AR-2) to 10.55 (A-10) feet
Groundwater Gradient (direction):	West
Groundwater Gradient (magnitude):	0.023 feet per foot

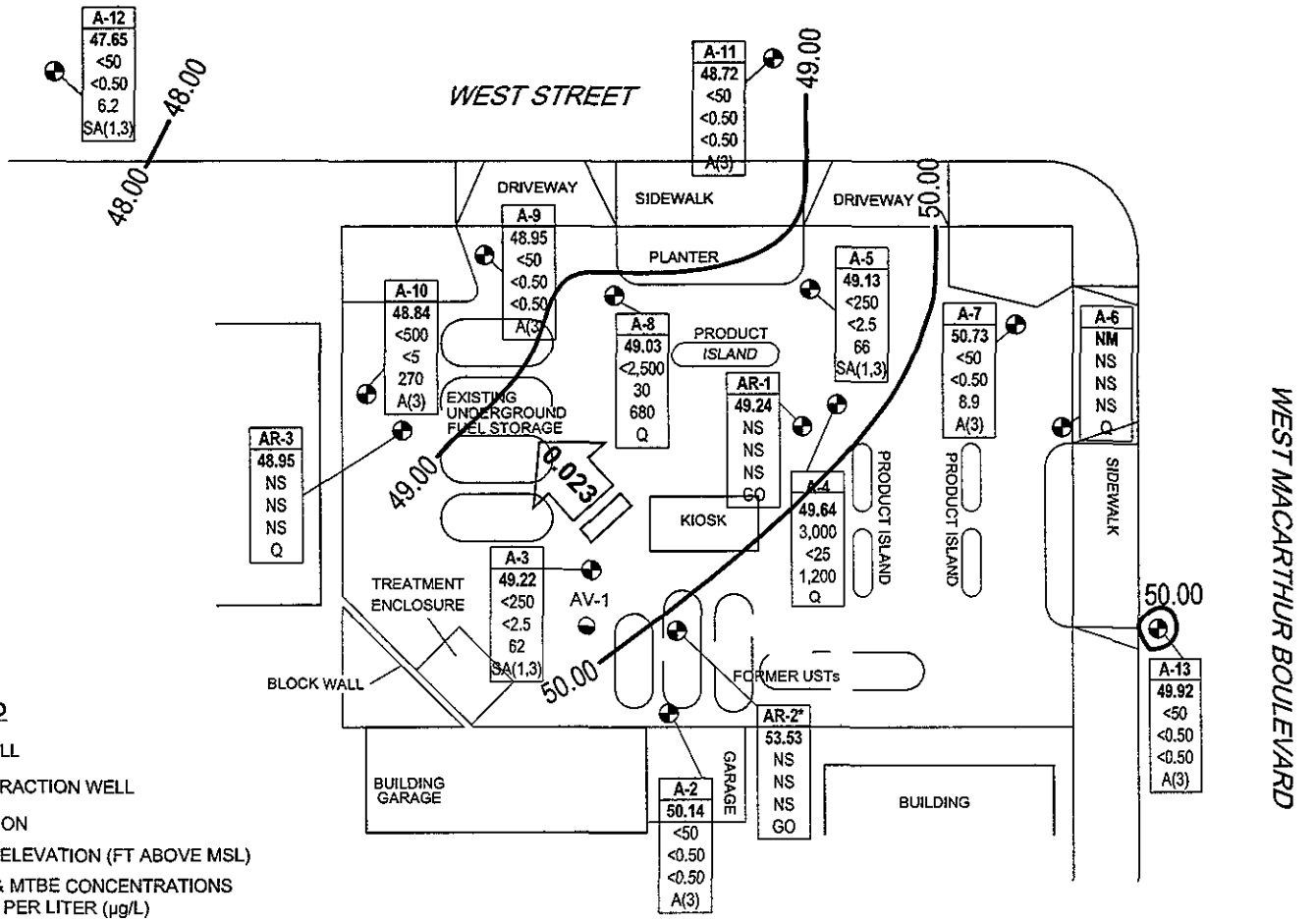
DISCUSSION:

Gasoline Range Organics (GRO) was detected above the laboratory reporting limit in well A-4 only at concentrations of 3,000 µg/L. Benzene was detected above the laboratory reporting limit in one well at a concentration 30 µg/L (A-8). Methyl tert-butyl ether (MTBE) was detected above the laboratory reporting limit in seven wells at concentrations ranging from 6.2 µg/L (A-12) to 1,200 µg/L (A-4). Tert-butyl alcohol (TBA) was detected above laboratory reporting limits in two wells at concentrations of 1,200 µg/L (A-4) and 150 µg/L (A-5). Tert-Amyl methyl ether (TAME) was detected above the laboratory reporting limit in seven wells at concentrations ranging from 1.7 µg/L (A-12) to 280 µg/L (A-4). No other fuel oxygenates were detected above laboratory reporting limits. The laboratory reporting limits were elevated due to the presence of other contaminants of concern in wells A-3, A-5, A-8 and A-10. Well A-6 was inaccessible for sampling as it appears to have been paved over.

ATTACHMENTS:

- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map – September 2, 2004
- 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

Oct 18, 2004 - 5:56pm
X:\x_env_waste\BP GEM\Sites\Scott Robinson\Paul Supple\4931\Monitoring\Qtr 3, 2004\Drawings\4931-3Q04-GW.dwg



LEGEND

- MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- Well — WELL DESIGNATION
- ELEV — GROUNDWATER ELEVATION (FT ABOVE MSL)
- GRO / Benzene / MTBE — GRO, BENZENE & MTBE CONCENTRATIONS IN MICROGRAMS PER LITER (µg/L)
- Q — Q, QUARTERLY, A, ANNUAL, SA(1,3), SEMI-ANNUAL (Qtrs 1,3)
- GO — GAGE ONLY
- NM — NOT MEASURED
- NS — NOT SAMPLED
- 0.033 — GROUNDWATER FLOW DIRECTION AND GRADIENT (FEET/FOOT)
- 45.00 — GROUNDWATER ELEVATION CONTOUR (FT ABOVE MSL)
- < — NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMITS

NORTH

0 40 80

SCALE IN FEET

URS

Project No. 38486722

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

GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP Third Quarter 2004 (September 2, 2004)

FIGURE 1

Table 1
Groundwater Elevation and Analytical Data

Atlantic Richfield Company
Service Station #4931
731 West Macarthur Boulevard
Oakland, California

Well Number	Date Sampled	Purged/Not Purged (P/NP)	TOC Elevation (ft)	Top of Screen (ft. BGS)	Bottom of Casing (ft. BGS)	Depth to Groundwater (ft. BGS)	Groundwater Elevation (ft)	GRO/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-2	06/21/00		55.48	5.0	19.0	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	Sampled Annually during the 3rd Quarter							
	2/2/2004 [g]					4.45	-4.45	*Sampled Annually during the 3rd Quarter*							
	05/04/04					6.79	-6.79	Sampled Annually during the 3rd Quarter							
	09/02/04	**NP**	**60.65**	**5.0**		**10.51**	**50.14**	**ND<50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**3.1**	**5.3**
A-3	06/21/00		54.66	5.0	19.3	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
	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
	2/2/2004 [g]	P	59.32			5.63	53.69	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	13	1.2	7.1
	05/04/04					8.14	51.18	*Sampled Semi-annually During the 1st and 3rd Quarters*							
	09/02/04	**P**	**59.32**	**5.0**		**10.10**	**49.22**	**ND<250**	**ND<2.5**	**ND<2.5**	**ND<2.5**	**ND<2.5**	**62**	**1.3**	**6.6**

Table 1
Groundwater Elevation and Analytical Data

Atlantic Richfield Company
Service Station #4931
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Oakland, California

Well Number	Date Sampled	Purged/Not Purged (P/NP)	TOC Elevation (ft)	Top of Screen (ft. BGS)	Bottom of Casing (ft. BGS)	Depth to Groundwater (ft. BGS)	Groundwater Elevation (ft)	GRO/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-4	06/21/00		54.73	5.0	19.6	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[d]	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
	02/02/04[f,g]	P	59.59			6.70	52.89	3,600	46	ND<25	ND<25	ND<25	1,500	1.0	7.1
	05/04/04[f]	P				9.12	50.47	ND<5,000	ND<50	ND<50	ND<50	ND<50	2,300	6.4	6.8
	09/02/04	**P**	**59.59**	**5.0**		**9.95**	**49.64**	**3,000**	**ND<25**	**ND<25**	**ND<25**	**ND<25**	**1,200**	**9.1**	**6.8**
A-5	06/21/00		54.17	3.0	24.0	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*					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					9.58	44.59	NS	NS	NS	NS	NS	NS	NS	NS
	11/14/03	P				9.81	44.36	Sampled Semi-annually During the 1st and 3rd Quarters----------							
	02/02/04[g]	P	58.78			7.43	51.35	390	ND<2.5	9.2	ND<2.5	2.6	140	1.0	6.8
	05/04/04					9.98	48.80	Sampled Semi-annually During the 1st and 3rd Quarters----------							
	09/02/04	**P**	**58.78**	**3.0**		**9.65**	**49.13**	**ND<250**	**ND<2.5**	**ND<2.5**	**ND<2.5**	**ND<2.5**	**66**	**1.1**	**6.4**

Table 1
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Oakland, California

Well Number	Date Sampled	Purged/Not Purged (P/NP)	TOC Elevation (ft)	Top of Screen (ft. BGS)	Bottom of Casing (ft. BGS)	Depth to Groundwater (ft. BGS)	Groundwater Elevation (ft)	GRO/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	2.0	25.0	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	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									
	02/02/04[g]					Unable to Sample, Well Paved Over									
	05/04/04					Unable to Sample, Well Paved Over									
	09/02/04					**Unable to Sample, Well Paved Over**									
A-7	06/21/00		54.71	4.8	22.6	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	Sampled Annually During the 3rd Quarter							
	11/14/03					9.08	45.63	Sampled Annually During the 3rd Quarter							
	02/02/04[g]		59.75			5.96	53.79	Sampled Annually During the 3rd Quarter							
	05/04/04					8.21	51.54	Sampled Annually During the 3rd Quarter							
	09/02/04	**P**	**59.75**	**4.8**		**9.02**	**50.73**	**ND<50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**8.9**	**3**	**6.7**

Table 1
Groundwater Elevation and Analytical Data

Atlantic Richfield Company
Service Station #4931
731 West Macarthur Boulevard
Oakland, California

Well Number	Date Sampled	Purged/Not Purged (P/NP)	TOC Elevation (ft)	Top of Screen (ft. BGS)	Bottom of Casing (ft. BGS)	Depth to Groundwater (ft. BGS)	Groundwater Elevation (ft)	GRO/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-8	06/21/00		53.77	2.0	20.0	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
	02/02/04[f,g]	NP	58.70			7.10	51.60	3,900	300	ND<25	ND<25	ND<25	1,100	1.1	6.8
	05/04/04	NP				9.44	49.26	ND<5,000	490	ND<50	ND<50	ND<50	1,600	1.0	6.9
	09/02/04	**NP**	**58.70**	**2.0**		**9.67**	**49.03**	**ND<2,500**	**30**	**ND<25**	**ND<25**	**ND<25**	**680**	**1.0**	**6.2**
A-9	06/21/00		53.04	5.0	38.0	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	Sampled Annually During the 3rd Quarter							
	02/02/04[f,g]		57.73			7.10	50.63	Sampled Annually During the 3rd Quarter							
	05/04/04[f]					8.12	49.61	Sampled Annually During the 3rd Quarter							
	09/02/04	**P**	**57.73**	**5.0**		**8.78**	**48.95**	**ND<50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**6.6**	**6.5**

Table 1
Groundwater Elevation and Analytical Data

Atlantic Richfield Company
Service Station #4931
731 West Macarthur Boulevard
Oakland, California

Well Number	Date Sampled	Purged/Not Purged (P/NP)	TOC Elevation (ft)	Top of Screen (ft. BGS)	Bottom of Casing (ft. BGS)	Depth to Groundwater (ft. BGS)	Groundwater Elevation (ft)	GRO/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	NA	NA	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	Sampled Annually During the 3rd Quarter							
	02/02/04[g]		59.37			7.97	51.40	Sampled Annually During the 3rd Quarter							
	05/04/04					8.69	50.68	Sampled Annually During the 3rd Quarter							
	09/02/04	**P**	**59.39**			**10.55**	**48.84**	**ND<500**	**ND<5.0**	**ND<5.0**	**ND<5.0**	**ND<5.0**	**270**	**0.8**	**6.6**
A-11	06/21/00		53.74	5.0	28.0	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	Sampled Annually During the 3rd Quarter							
	02/02/04[g]		59.16			7.95	51.21	Sampled Annually During the 3rd Quarter							
	05/04/04					8.72	50.44	Sampled Annually During the 3rd Quarter							
	09/02/04	**P**	**59.16**	**5.0**		**10.44**	**48.72**	**ND<50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**2.6**	**6.6**

Table 1
Groundwater Elevation and Analytical Data

Atlantic Richfield Company
Service Station #4931
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Oakland, California

Well Number	Date Sampled	Purged/Not Purged (P/NP)	TOC Elevation (ft)	Top of Screen (ft. BGS)	Bottom of Casing (ft. BGS)	Depth to Groundwater (ft. BGS)	Groundwater Elevation (ft)	GRO/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-12	06/21/00		52.05	5.0	30.0	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	Sampled Semi-annually During the 1st and 3rd Quarters							
	02/02/04[g]		57.06			7.90	49.16	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.91	1.0	6.9
	05/04/04					8.74	*48.32*	*Sampled Semi-annually During the 1st and 3rd Quarters*							
	09/02/04	**P**	**57.06**	**5.0**		**9.41**	**47.65**	**ND<50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**6.2**	**1.1**	**6.5**
A-13	06/21/00		55.11	10.0	29.5	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	Sampled Annually During the 3rd Quarter							
	02/02/04[g]		60.26			7.92	52.34	Sampled Annually During the 3rd Quarter							
	05/04/04					10.06	50.20	Sampled Annually During the 3rd Quarter							
	09/02/04	**P**	**60.26**	**10.0**		**10.34**	**49.92**	**ND<50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**2.0**	**6.6**

Table 1
Groundwater Elevation and Analytical Data

Atlantic Richfield Company
Service Station #4931
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Oakland, California

Well Number	Date Sampled	Purged/Not Purged (P/NP)	TOC Elevation (ft)	Top of Screen (ft. BGS)	Bottom of Casing (ft. BGS)	Depth to Groundwater (ft. BGS)	Groundwater Elevation (ft)	GRO/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[e]
AR-1	06/21/00		54.72	10.0	31.5	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
	02/02/04[f,g]		59.52			7.96	51.56	NS	NS	NS	NS	NS	NS	NS	NS
	05/04/04[f]					10.17	49.35	NS	NS	NS	NS	NS	NS	NS	NS
	09/02/04		**59.52**	**10.0**		**10.28**	**49.24**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**
AR-2	06/21/00		54.77	10.0	21.5	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
	02/02/04[g]		59.18			3.88	55.30	NS	NS	NS	NS	NS	NS	NS	NS
	05/04/04					6.01	53.17	NS	NS	NS	NS	NS	NS	NS	NS
	09/02/04		**59.18**	**10.0**		**5.65**	**53.53**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**

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Atlantic Richfield Company
Service Station #4931
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Oakland, California

Well Number	Date Sampled	Purged/Not Purged (P/NP)	TOC Elevation (ft)	Top of Screen (ft. BGS)	Bottom of Casing (ft. BGS)	Depth to Groundwater (ft. BGS)	Groundwater Elevation (ft)	GRO/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]
AR-3	06/21/00		54.19	10.0	27.0	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
	02/02/04[g]		59.10			6.90	52.20	NS	NS	NS	NS	NS	NS	NS	NS
	05/04/04					9.12	49.98	NS	NS	NS	NS	NS	NS	NS	NS
	09/02/04		**59.10**	**10.0**		**10.15**	**48.95**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**

Table 1
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Atlantic Richfield Company
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Note: Please note that beginning in the Fourth Quarter 2003, the laboratory modified the reported analyte list. Total Petroleum Hydrocarbons as Gasoline (TPH-g) has been changed to Gasoline Range Organics (GRO). The resulting data may be impacted by the potential inclusion of non-TPHg analytes within the requested fuel range resulting in a higher concentration being reported. Beginning in the Second Quarter 2004, the carbon range for GRO was changed from C6- C10 to C4- C12.

Samples taken 12/06/02 analyzed using DHS LUFT

BGS	= Below ground surface
DO	= Dissolved oxygen
ft	= feet
GRO	= Gasoline range organics (C4 - C12)
mg/L	= Milligrams per liter
MTBE	= Methyl tertiary butyl ether analyzed by EPA Method 8021B unless otherwise noted (before 1/30/03)
NA	= Not available
NC	= Not calculated
ND<	= Not detected at or above the specified laboratory reporting limit
NM	= Not measured
NP	= Not purged
NS	= Not sampled
P	= Purge
TOC	= Top of casing
TPH-g	= Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B modified (before 1/30/03)
µg/L	= Micrograms per liter
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
g	= Well surveyed to NAVD '88 datum on January 28, 2004
*	= Beginning in the Fourth Quarter 2003, 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 Atlantic Richfield Company and their previous consultants. URS has not verified the accuracy of this information.

Table 2
Groundwater Flow Direction and Gradient

Atlantic Richfield Company
Service Station #4931
731 West Macarthur Boulevard
Oakland, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient (feet per foot)
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
02/02/04	West	0.04
05/04/04	West to North	0.025 to 0.033
09/02/04	**West**	**0.033**

a = using wells AR-1 and A-9

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

Table 3
Fuel Oxygenate Analytical Data

Atlantic Richfield Company 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
	09/02/04	**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
	02/02/04	ND<100	ND<20	13	ND<0.50	ND<0.50	4.6	ND<0.50	ND<0.50
	09/02/04	**ND<500**	**ND<100**	**62**	**ND<2.5**	**ND<2.5**	**15**	**ND<2.5**	**ND<2.5**
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
	02/02/04	ND<5,000	ND<1,000	1,500	ND<25	ND<25	350	ND<25	ND<25
	05/04/04	ND<10,000	ND<2,000	2,300	ND<50	ND<50	510	ND<50	ND<50
	09/02/04	**ND<5,000**	**1,200**	**1,200**	**ND<25**	**ND<25**	**280**	**ND<25**	**ND<25**
A-5	05/28/03	ND<10,000	ND<2,000	1,500	ND<50	ND<50	620	NA	NA
	02/02/04	ND<500	170	140	ND<2.5	ND<2.5	54	ND<2.5	ND<2.5
	09/02/04	**ND<500**	**150**	**66**	**ND<2.5**	**ND<2.5**	**29**	**ND<2.5**	**ND<2.5**
A-7	05/28/03	ND<100	ND<20	3.8	ND<0.50	ND<0.50	0.94	NA	NA
	09/02/04	**ND<100**	**ND<20**	**8.9**	**ND<0.50**	**ND<0.50**	**3.0**	**ND<0.5**	**ND<0.5**
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
	02/02/04	ND<5,000	ND<1,000	1,100	ND<25	ND<25	380	ND<25	ND<25
	05/04/04	ND<10,000	ND<2,000	1,600	ND<50	ND<50	440	ND<50	ND<50
	09/02/04	**ND<5,000**	**ND<1,000**	**680**	**ND<25**	**ND<25**	**170**	**ND<25**	**ND<25**
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
	09/02/04	**ND<100**	**ND<20**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**

Table 3
Fuel Oxygenate Analytical Data

Atlantic Richfield Company 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-10	**09/02/04**	**ND<1,000**	**ND<200**	**270**	**ND<5.0**	**ND<5.0**	**44**	**ND<5.0**	**ND<5.0**
A-11	05/28/03	ND<100	ND<20	0.53	ND<0.50	ND<0.50	ND<0.50	NA	NA
	09/02/04	**ND<100**	**ND<20**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**
A-12	05/28/03	ND<100	ND<20	10	ND<0.50	ND<0.50	2.5	NA	NA
	02/02/04	ND<100	ND<20	0.91	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	09/02/04	**ND<100**	**ND<20**	**6.2**	**ND<0.50**	**ND<0.50**	**1.7**	**ND<0.50**	**ND<0.50**
A-13	05/28/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	NA
	09/02/04	**ND<100**	**ND<20**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**

Note = All fuel oxygenate compounds analyzed using EPA Method 8260B

1,2-DCA = 1,2-Dichloroethane
DIPE = Di-isopropyl ether
EDB = 1,2-Dibromoethane
ETBE = Ethyl tert butyl ether
MTBE = Methyl tert-butyl ether
NA = Not analyzed
ND< = Not detected at or above laboratory reporting limits
NS = Not sampled
TAME = tert-Amyl methyl ether
TBA = tert-Butyl alcohol
µg/L = micrograms per liter

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 # 040902-PC1 Date 9/2/04 Client Arco 4931

Site 731 W. Macarthur Blvd, Oakland

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or ~~TOB~~	NPH
A-2	4					10.51	19.43		5'
A-3	4					10.10	16.20		
A-4	4		No SPH detected			9.95	19.42		ORC Interface
A-5	2					9.65	24.54		
~~A-6~~									
A-6			well flooded over			-	-		2'
A-7	2					9.02	22.17		
A-8	2					9.67	13.97		2'
A-9	6					~~9.67~~ 8.78 fr	13.97		
A-10	3					10.55	29.68		
A-11	3					10.44	29.69		Tr.
A-12	2					9.41	29.75		Tr.
A-13	2					10.34	29.02		
AR-1	6					10.28	29.40		6.0
AR-2	6					5.65	26.31		6.0
AR-3	4					10.15	26.95		6.0

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 040902-PC	Station # 4931
Sampler: PC	Date: 9/1/04
Well I.D.: A-2	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 19.43	Depth to Water: 10.51
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

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

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

Top of Screen: 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.

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

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
840	70.4	5.3	741	-	clear

Did well dewater? Yes No Gallons actually evacuated:

Sampling Time: 840 Sampling Date: 9/2/04

Sample I.D.: A-2 Laboratory: Pace ~~Severn~~ Other____

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

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 #: 040902-PC	Station # Arco 4931
Sampler: PC	Date: 9/2/04
Well I.D.: A-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 16.20	Depth to Water: 10.10
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

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

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

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

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

4 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 12 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1100	77.4	6.4	776	4.0	cloudy gray
	Well Dewatered @ 6 gallons				
			80%	DTW- 11.32	
1158	73.7	6.6	832	site depart DTW- 13.50	cloudy

Did well dewater? (Yes) No		Gallons actually evacuated: 6	
Sampling Time: 1158		Sampling Date: 9/2/04	
Sample I.D.: A-3		Laboratory: Pace (Scaltronia) Other ___	
Analyzed for: (GRO) (BTEX) MTBE DRO		Other: see coc	
D.O. (if req'd):	Pre-purge: ___ mg/L	(Post-purge):	1.3 mg/L
O.R.P. (if req'd):	Pre-purge: ___ mV	Post-purge:	___ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 040902-PC1	Station # Arco 4931
Sampler: PC	Date: 9/2/04
Well I.D.: A-4	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 19.42	Depth to Water: 9.95
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / (X) 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.

6.2 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 18.6 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (US))	Gals. Removed	Observations
1150	(74.6)	6.8	1,346	6.5	cloudy · gray, odor
	Well Dewatered @ 6.5				
1155	75.7	6.8	1,355	6.5	" "

Did well dewater? (Yes) No Gallons actually evacuated: 6.5

Sampling Time: 1155 (c departure) Sampling Date: 9/2/04

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

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	9.1	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 040902-PC	Station # Arco 4931
Sampler: PC	Date: 9/2/04
Well I.D.: A-5	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 24.54	Depth to Water: 9.65
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

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

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

Top of Screen: ___

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

5.5 (1 Case Volume (Gals.)) X 3 (Specified Volumes) = 16.5 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1130	72.9	6.4	937	5.5	cloudy gray, odor
1132	72.3	6.5	819	11.0	" "
1134	71.8	6.4	842	16.5	" "

Did well dewater? Yes (No) Gallons actually evacuated: 16.5

Sampling Time: 1140 Sampling Date: 9/2/04

Sample I.D.: A-5 Laboratory: Pace ~~Sequoia~~ Other ___

Analyzed for: (~~GRO~~ BTEX) MTBE DRO Other: see COC

D.O. (if req'd):	Pre-purge:	mg/L	~~Post-purge~~:	1.1 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 040902-PC1	Station # Arco 4931
Sampler: PC	Date: 9/2/04
Well I.D.: A-6	Well Diameter: 2 3 4 6 8 ____
Total Well Depth:	Depth to Water:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

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

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

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

Top of Screen: ____

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

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

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
		well	flaved over		

Did well dewater? Yes No		Gallons actually evacuated:	
Sampling Time:		Sampling Date:	
Sample I.D.:		Laboratory: Pace Sequoia Other____	
Analyzed for: GRO BTEX MTBE DRO		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 #: 040902-PC1	Station # Arco 4931
Sampler: PC	Date: 9/2/04
Well I.D.: A-7	Well Diameter: 2 (3) 4 6 8 ____
Total Well Depth: 22.17	Depth to Water: 9.02
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

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

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

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

4.9 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 14.7 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1034	74.2	6.7	699	5.0	cloudy gray
1039	72.5	6.5	634	10.0	"
1044	72.5	6.7	646	15.0	"

Did well dewater? Yes (No) Gallons actually evacuated: 15.0

Sampling Time: 1050 Sampling Date: 9/2/04

Sample I.D.: A-7 Laboratory: Pace (Sequoia) Other ____

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	3.0 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 040902-PC1	Station # 4931
Sampler: Brian Aleem	Date: 9/2/04
Well I.D.: A-8	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 13.97	Depth to Water: 9.67
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

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

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

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

No Purge @ 2'

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

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1000	71.8	6.2	1,256	—	clear, Strong odor

Did well dewater? Yes No		Gallons actually evacuated: —	
Sampling Time: 1000		Sampling Date: 9/2/04	
Sample I.D.: A-8		Laboratory: Pace (Sequoia) Other ___	
Analyzed for: GRO BTEX MTBE DRO		Other:	
D.O. (if req'd):	Pre-purge: ___ mg/L	Post-purge:	1.0 mg/L
O.R.P. (if req'd):	Pre-purge: ___ mV	Post-purge:	___ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 040902-PC1	Station # Arco 4931
Sampler: PC	Date: 9/2/04
Well I.D.: A-9	Well Diameter: 2 3 4 (6) 8 ____
Total Well Depth: 13.97	Depth to Water: 8.78
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Purge Method:
- Bailer
- Disposable Bailer
- Positive Air Displacement
- (Electric Submersible)
- Extraction Pump
- Other: _____

Sampling Method:
- Bailer
- (Disposable Bailer)
- Extraction Port
- Other: _____

Top of Screen: _____

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

7.6 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 22.8 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1110	72.6	6.6	605	8.0	cloudy gray,
1112	70.4	6.5	603	16.0	"
1114	69.8	6.5	604	24.0	"

Did well dewater? Yes (No)

Gallons actually evacuated: 24.0

Sampling Time: 1120

Sampling Date: 9/2/04

Sample I.D.: A-9

Laboratory: Pace (Sequoia) Other _____

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

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	6.6 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 040902-PC	Station # Arco 4935
Sampler: PC	Date: 9/2/04
Well I.D.: A-10	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 29.68	Depth to Water: 10.55
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

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

Sampling Method: Bailer / (X) 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.

7.1 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 21.3 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (uS))	Gals. Removed	Observations
1128	68.5	6.6	607	7.1	black
1134	68.8	6.6	604	14.2	clear
1140	68.5	6.6	604	21.3	↓

Did well dewater? Yes (No) Gallons actually evacuated: 21.5

Sampling Time: 1150 Sampling Date: 9/2/04

Sample I.D.: A-10 Laboratory: Pace (Sequoia) Other ___

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

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 040902-RC	Station # Arco 4931
Sampler: RC	Date: 9/2/04
Well I.D.: MW-11	Well Diameter: 2 (3) 4 6 8 ____
Total Well Depth: 29.69	Depth to Water: 10.44
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

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

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

Top of Screen: ____

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

7.1 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 21.3 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1010	67.3	6.5	616	7.1	clear
1020	67.6	6.5	612	14.2	↓
1030	68.7	6.6	610	21.3	

Did well dewater? Yes (No) Gallons actually evacuated: 21.5

Sampling Time: 1038 Sampling Date: 9/2/04

Sample I.D.: MW11 Laboratory: Pace (Sequoia) Other ____

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

D.O. (if req'd):	Pre-purge:		mg/L	Post-purge:	2.6 mg/L
O.R.P. (if req'd):	Pre-purge:		mV	Post-purge:	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 040902-PC	Station # 4931 / ARCO
Sampler: PC	Date: 9/2/04
Well I.D.: MW-12	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 29.75	Depth to Water: 9.41
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

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

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

Top of Screen: ___

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

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
928	67.7	6.3	668	7.5	cloudy
936	67.4	6.5	624	15	↓
946	67.2	6.5	622	22.5	↓

Did well dewater? Yes (NO) Gallons actually evacuated: 22.5

Sampling Time: 955 Sampling Date: 9/2/04

Sample I.D.: MW-12 (DUP-A-12) Laboratory: Pace (Sequoia) Other ___

Analyzed for: (TPH-GRO) BTEX MTBE TPH-DRO Other: see COC

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.1 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

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

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20 September, 2004

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

RE: ARCO #4931, Oakland, CA
Work Order: MNI0192

Enclosed are the results of analyses for samples received by the laboratory on 09/03/04 15:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race
Senior Project Manager

CA ELAP Certificate #1210

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URS Corporation [Arco]	Project: ARCO #4931, Oakland, CA	MNI0192
1333 Broadway, Suite 800	Project Number: N/P	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
A-2	MNI0192-01	Water	09/02/04 08:40	09/03/04 15:00
A-3	MNI0192-02	Water	09/02/04 11:58	09/03/04 15:00
A-4	MNI0192-03	Water	09/02/04 11:55	09/03/04 15:00
A-5	MNI0192-04	Water	09/02/04 11:40	09/03/04 15:00
A-7	MNI0192-05	Water	09/02/04 10:50	09/03/04 15:00
A-8	MNI0192-06	Water	09/02/04 10:00	09/03/04 15:00
A-9	MNI0192-07	Water	09/02/04 11:20	09/03/04 15:00
A-10	MNI0192-08	Water	09/02/04 11:50	09/03/04 15:00
A-11	MNI0192-09	Water	09/02/04 10:38	09/03/04 15:00
A-12	MNI0192-10	Water	09/02/04 09:55	09/03/04 15:00
A-13	MNI0192-11	Water	09/02/04 11:20	09/03/04 15:00
TB-493109022004	MNI0192-12	Water	09/02/04 00:00	09/03/04 15:00

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

These samples were received with no custody seals.

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URS Corporation [Arco]	Project: ARCO #4931, Oakland, CA	MNI0192
1333 Broadway, Suite 800	Project Number: N/P	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-2 (MNI0192-01) Water Sampled: 09/02/04 08:40 Received: 09/03/04 15:00									
tert-Amyl methyl ether	ND	0.50	ug/l	1	4I15011	09/15/04	09/16/04	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*84 %*	*78-129*		"	"	"	"	
A-3 (MNI0192-02) Water Sampled: 09/02/04 11:58 Received: 09/03/04 15:00									
tert-Amyl methyl ether	**15**	2.5	ug/l	5	4I15011	09/15/04	09/16/04	EPA 8260B	
Benzene	ND	2.5	"	"	"	"	"	"	
tert-Butyl alcohol	ND	100	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.5	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	"	"	
Ethanol	ND	500	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
Methyl tert-butyl ether	**62**	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Xylenes (total)	ND	2.5	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	250	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*84 %*	*78-129*		"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #4931, Oakland, CA	MNI0192
1333 Broadway, Suite 800	Project Number: N/P	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-4 (MNI0192-03) Water Sampled: 09/02/04 11:55 Received: 09/03/04 15:00									
tert-Amyl methyl ether	**280**	25	ug/l	50	4I15011	09/15/04	09/16/04	EPA 8260B	
Benzene	ND	25	"	"	"	"	"	"	
tert-Butyl alcohol	**1200**	1000	"	"	"	"	"	"	
Di-isopropyl ether	ND	25	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	25	"	"	"	"	"	"	
1,2-Dichloroethane	ND	25	"	"	"	"	"	"	
Ethanol	ND	5000	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	25	"	"	"	"	"	"	
Ethylbenzene	ND	25	"	"	"	"	"	"	
Methyl tert-butyl ether	**1200**	25	"	"	"	"	"	"	
Toluene	ND	25	"	"	"	"	"	"	
Xylenes (total)	ND	25	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	**3000**	2500	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*85 %*	*78-129*		"	"	"	"	
A-5 (MNI0192-04) Water Sampled: 09/02/04 11:40 Received: 09/03/04 15:00									
tert-Amyl methyl ether	**29**	2.5	ug/l	5	4I15011	09/15/04	09/16/04	EPA 8260B	
Benzene	ND	2.5	"	"	"	"	"	"	
tert-Butyl alcohol	**150**	100	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.5	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	"	"	
Ethanol	ND	500	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
Methyl tert-butyl ether	**66**	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Xylenes (total)	ND	2.5	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	250	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*83 %*	*78-129*		"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #4931, Oakland, CA	MNI0192
1333 Broadway, Suite 800	Project Number: N/P	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-7 (MNI0192-05) Water Sampled: 09/02/04 10:50 Received: 09/03/04 15:00									
tert-Amyl methyl ether	**3.0**	0.50	ug/l	1	4I15011	09/15/04	09/16/04	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**8.9**	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*84 %*	*78-129*		"	"	"	"	
A-8 (MNI0192-06) Water Sampled: 09/02/04 10:00 Received: 09/03/04 15:00									
tert-Amyl methyl ether	**170**	25	ug/l	50	4I16028	09/16/04	09/16/04	EPA 8260B	
Benzene	**30**	25	"	"	"	"	"	"	
tert-Butyl alcohol	ND	1000	"	"	"	"	"	"	
Di-isopropyl ether	ND	25	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	25	"	"	"	"	"	"	
1,2-Dichloroethane	ND	25	"	"	"	"	"	"	
Ethanol	ND	5000	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	25	"	"	"	"	"	"	
Ethylbenzene	ND	25	"	"	"	"	"	"	
Methyl tert-butyl ether	**680**	25	"	"	"	"	"	"	
Toluene	ND	25	"	"	"	"	"	"	
Xylenes (total)	ND	25	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	2500	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*85 %*	*78-129*		"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #4931, Oakland, CA	MNI0192
1333 Broadway, Suite 800	Project Number: N/P	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-9 (MNI0192-07) Water Sampled: 09/02/04 11:20 Received: 09/03/04 15:00									
tert-Amyl methyl ether	ND	0.50	ug/l	1	4I15011	09/15/04	09/16/04	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*85 %*	*78-129*		"	"	"	"	
A-10 (MNI0192-08) Water Sampled: 09/02/04 11:50 Received: 09/03/04 15:00									
tert-Amyl methyl ether	**44**	5.0	ug/l	10	4I16028	09/16/04	09/16/04	EPA 8260B	
Benzene	ND	5.0	"	"	"	"	"	"	
tert-Butyl alcohol	ND	200	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Ethanol	ND	1000	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	**270**	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	5.0	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	500	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*91 %*	*78-129*		"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #4931, Oakland, CA	MNI0192
1333 Broadway, Suite 800	Project Number: N/P	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-11 (MNI0192-09) Water Sampled: 09/02/04 10:38 Received: 09/03/04 15:00									
tert-Amyl methyl ether	ND	0.50	ug/l	1	4I15011	09/15/04	09/16/04	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*84 %*	*78-129*		"	"	"	"	
A-12 (MNI0192-10) Water Sampled: 09/02/04 09:55 Received: 09/03/04 15:00									
tert-Amyl methyl ether	**1.7**	0.50	ug/l	1	4I15011	09/15/04	09/16/04	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**6.2**	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*86 %*	*78-129*		"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #4931, Oakland, CA	MNI0192
1333 Broadway, Suite 800	Project Number: N/P	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-13 (MNI0192-11) Water Sampled: 09/02/04 11:20 Received: 09/03/04 15:00									
tert-Amyl methyl ether	ND	0.50	ug/l	1	4I16003	09/16/04	09/16/04	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
Ethanol	ND	100	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C4-C12)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*89 %*	*78-129*		"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #4931, Oakland, CA	MNI0192
1333 Broadway, Suite 800	Project Number: N/P	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4I15011 - EPA 5030B P/T										
Blank (4I15011-BLK1)				Prepared & Analyzed: 09/15/04						
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	"							
tert-Butyl alcohol	ND	20	"							
Di-isopropyl ether	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	100	"							
Ethyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C4-C12)	ND	50	"							
Surrogate: 1,2-Dichloroethane-d4	*4.34*		"	*5.00*		*87*	*78-129*			
Laboratory Control Sample (4I15011-BS1)				Prepared & Analyzed: 09/15/04						
tert-Amyl methyl ether	8.12	0.50	ug/l	10.0		81	82-140			HM
Benzene	8.54	0.50	"	10.0		85	69-124			
tert-Butyl alcohol	46.6	20	"	50.0		93	56-131			
Di-isopropyl ether	7.65	0.50	"	10.0		76	76-130			
1,2-Dibromoethane (EDB)	9.25	0.50	"	10.0		92	77-132			
1,2-Dichloroethane	8.69	0.50	"	10.0		87	77-136			
Ethanol	114	100	"	200		57	31-143			
Ethyl tert-butyl ether	7.97	0.50	"	10.0		80	81-121			HM
Ethylbenzene	8.46	0.50	"	10.0		85	84-132			
Methyl tert-butyl ether	8.02	0.50	"	10.0		80	63-137			
Toluene	9.01	0.50	"	10.0		90	78-129			
Xylenes (total)	25.3	0.50	"	30.0		84	83-137			
Surrogate: 1,2-Dichloroethane-d4	*4.01*		"	*5.00*		*80*	*78-129*			

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URS Corporation [Arco]	Project: ARCO #4931, Oakland, CA	MNI0192
1333 Broadway, Suite 800	Project Number: N/P	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4I15011 - EPA 5030B P/T										
Laboratory Control Sample (4I15011-BS2)				Prepared & Analyzed: 09/15/04						
Benzene	5.42	0.50	ug/l	6.40		85	69-124			
Ethylbenzene	7.42	0.50	"	7.52		99	84-132			
Methyl tert-butyl ether	7.80	0.50	"	9.92		79	63-137			
Toluene	33.6	0.50	"	31.9		105	78-129			
Xylenes (total)	37.1	0.50	"	36.6		101	83-137			
Gasoline Range Organics (C4-C12)	362	50	"	440		82	70-124			
Surrogate: 1,2-Dichloroethane-d4	*4.41*		"	*5.00*		*88*	*78-129*			
Laboratory Control Sample Dup (4I15011-BSD1)				Prepared: 09/15/04 Analyzed: 09/16/04						
tert-Amyl methyl ether	8.60	0.50	ug/l	10.0		86	82-140	6	20	
Benzene	9.31	0.50	"	10.0		93	69-124	9	20	
tert-Butyl alcohol	47.5	20	"	50.0		95	56-131	2	20	
Di-isopropyl ether	8.02	0.50	"	10.0		80	76-130	5	20	
1,2-Dibromoethane (EDB)	9.96	0.50	"	10.0		100	77-132	7	20	
1,2-Dichloroethane	9.05	0.50	"	10.0		90	77-136	4	20	
Ethanol	175	100	"	200		88	31-143	42	20	RB
Ethyl tert-butyl ether	8.40	0.50	"	10.0		84	81-121	5	20	
Ethylbenzene	8.80	0.50	"	10.0		88	84-132	4	20	
Methyl tert-butyl ether	8.42	0.50	"	10.0		84	63-137	5	20	
Toluene	9.24	0.50	"	10.0		92	78-129	3	20	
Xylenes (total)	26.0	0.50	"	30.0		87	83-137	3	20	
Surrogate: 1,2-Dichloroethane-d4	*4.19*		"	*5.00*		*84*	*78-129*			
Matrix Spike (4I15011-MS1)	**Source: MNI0191-05**			Prepared: 09/15/04 Analyzed: 09/16/04						
Benzene	34.7	2.5	ug/l	32.0	6.0	90	69-124			
Ethylbenzene	51.4	2.5	"	37.6	12	105	84-132			
Methyl tert-butyl ether	39.8	2.5	"	49.6	ND	80	63-137			
Toluene	172	2.5	"	160	0.75	107	78-129			
Xylenes (total)	183	2.5	"	183	ND	100	83-137			
Gasoline Range Organics (C4-C12)	2680	250	"	2200	760	87	70-124			
Surrogate: 1,2-Dichloroethane-d4	*4.33*		"	*5.00*		*87*	*78-129*			

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Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4I15011 - EPA 5030B P/T										
Matrix Spike Dup (4I15011-MSD1)	**Source: MNI0191-05**			Prepared: 09/15/04 Analyzed: 09/16/04						
Benzene	33.2	2.5	ug/l	32.0	6.0	85	69-124	4	20	
Ethylbenzene	49.9	2.5	"	37.6	12	101	84-132	3	20	
Methyl tert-butyl ether	39.2	2.5	"	49.6	ND	79	63-137	2	20	
Toluene	164	2.5	"	160	0.75	102	78-129	5	20	
Xylenes (total)	178	2.5	"	183	ND	97	83-137	3	20	
Gasoline Range Organics (C4-C12)	2490	250	"	2200	760	79	70-124	7	20	
Surrogate: 1,2-Dichloroethane-d4	*4.33*		"	*5.00*		*87*	*78-129*			
Batch 4I16003 - EPA 5030B P/T										
Blank (4I16003-BLK1)				Prepared & Analyzed: 09/16/04						
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	"							
tert-Butyl alcohol	ND	20	"							
Di-isopropyl ether	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	100	"							
Ethyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C4-C12)	ND	50	"							
Surrogate: 1,2-Dichloroethane-d4	*2.19*		"	*2.50*		*88*	*78-129*			
Laboratory Control Sample (4I16003-BS1)				Prepared & Analyzed: 09/16/04						
tert-Amyl methyl ether	10.1	0.50	ug/l	10.0		101	82-140			
Benzene	10.5	0.50	"	10.0		105	69-124			
tert-Butyl alcohol	45.4	20	"	50.0		91	56-131			
Di-isopropyl ether	9.90	0.50	"	10.0		99	76-130			
1,2-Dibromoethane (EDB)	11.0	0.50	"	10.0		110	77-132			
1,2-Dichloroethane	10.2	0.50	"	10.0		102	77-136			
Ethanol	195	100	"	200		98	31-143			
Ethyl tert-butyl ether	10.4	0.50	"	10.0		104	81-121			
Ethylbenzene	10.8	0.50	"	10.0		108	84-132			
Methyl tert-butyl ether	9.58	0.50	"	10.0		96	63-137			

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Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4I16003 - EPA 5030B P/T										
Laboratory Control Sample (4I16003-BS1)				Prepared & Analyzed: 09/16/04						
Toluene	9.84	0.50	ug/l	10.0		98	78-129			
Xylenes (total)	32.7	0.50	"	30.0		109	83-137			
Surrogate: 1,2-Dichloroethane-d4	*2.19*		"	*2.50*		*88*	*78-129*			
Laboratory Control Sample (4I16003-BS2)				Prepared & Analyzed: 09/16/04						
Benzene	5.70	0.50	ug/l	6.40		89	69-124			
Ethylbenzene	8.27	0.50	"	7.52		110	84-132			
Methyl tert-butyl ether	8.71	0.50	"	9.92		88	63-137			
Toluene	32.2	0.50	"	31.9		101	78-129			
Xylenes (total)	40.9	0.50	"	36.6		112	83-137			
Gasoline Range Organics (C4-C12)	415	50	"	440		94	70-124			
Surrogate: 1,2-Dichloroethane-d4	*1.95*		"	*2.50*		*78*	*78-129*			
Laboratory Control Sample Dup (4I16003-BSD1)				Prepared & Analyzed: 09/16/04						
tert-Amyl methyl ether	10.3	0.50	ug/l	10.0		103	82-140	2	20	
Benzene	10.4	0.50	"	10.0		104	69-124	1	20	
tert-Butyl alcohol	49.2	20	"	50.0		98	56-131	8	20	
Di-isopropyl ether	10.1	0.50	"	10.0		101	76-130	2	20	
1,2-Dibromoethane (EDB)	11.0	0.50	"	10.0		110	77-132	0	20	
1,2-Dichloroethane	10.7	0.50	"	10.0		107	77-136	5	20	
Ethanol	208	100	"	200		104	31-143	6	20	
Ethyl tert-butyl ether	10.8	0.50	"	10.0		108	81-121	4	20	
Ethylbenzene	10.8	0.50	"	10.0		108	84-132	0	20	
Methyl tert-butyl ether	9.84	0.50	"	10.0		98	63-137	3	20	
Toluene	10.0	0.50	"	10.0		100	78-129	2	20	
Xylenes (total)	32.4	0.50	"	30.0		108	83-137	0.9	20	
Surrogate: 1,2-Dichloroethane-d4	*2.21*		"	*2.50*		*88*	*78-129*			

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1333 Broadway, Suite 800	Project Number: N/P	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4I16003 - EPA 5030B P/T										
Laboratory Control Sample Dup (4I16003-BSD2)				Prepared & Analyzed: 09/16/04						
Benzene	5.93	0.50	ug/l	6.40		93	69-124	4	20	
Ethylbenzene	8.52	0.50	"	7.52		113	84-132	3	20	
Methyl tert-butyl ether	9.17	0.50	"	9.92		92	63-137	5	20	
Toluene	32.9	0.50	"	31.9		103	78-129	2	20	
Xylenes (total)	42.2	0.50	"	36.6		115	83-137	3	20	
Gasoline Range Organics (C4-C12)	415	50	"	440		94	70-124	0	20	
Surrogate: 1,2-Dichloroethane-d4	*2.07*		*"*	*2.50*		*83*	*78-129*			
Matrix Spike (4I16003-MS1)	**Source: MNI0328-02**			Prepared & Analyzed: 09/16/04						
tert-Amyl methyl ether	508	25	ug/l	500	ND	102	82-140			
Benzene	525	25	"	500	ND	105	69-124			
tert-Butyl alcohol	2650	1000	"	2500	ND	106	56-131			
Di-isopropyl ether	502	25	"	500	ND	100	76-130			
1,2-Dibromoethane (EDB)	548	25	"	500	ND	110	77-132			
1,2-Dichloroethane	529	25	"	500	ND	106	77-136			
Ethanol	9510	5000	"	10000	ND	95	31-143			
Ethyl tert-butyl ether	532	25	"	500	ND	106	81-121			
Ethylbenzene	546	25	"	500	ND	109	84-132			
Methyl tert-butyl ether	2110	25	"	500	1700	82	63-137			
Toluene	502	25	"	500	ND	100	78-129			
Xylenes (total)	1640	25	"	1500	ND	109	83-137			
Surrogate: 1,2-Dichloroethane-d4	*2.19*		*"*	*2.50*		*88*	*78-129*			
Matrix Spike Dup (4I16003-MSD1)	**Source: MNI0328-02**			Prepared & Analyzed: 09/16/04						
tert-Amyl methyl ether	512	25	ug/l	500	ND	102	82-140	0.8	20	
Benzene	536	25	"	500	ND	107	69-124	2	20	
tert-Butyl alcohol	2810	1000	"	2500	ND	112	56-131	6	20	
Di-isopropyl ether	511	25	"	500	ND	102	76-130	2	20	
1,2-Dibromoethane (EDB)	567	25	"	500	ND	113	77-132	3	20	
1,2-Dichloroethane	538	25	"	500	ND	108	77-136	2	20	
Ethanol	9740	5000	"	10000	ND	97	31-143	2	20	
Ethyl tert-butyl ether	545	25	"	500	ND	109	81-121	2	20	
Ethylbenzene	557	25	"	500	ND	111	84-132	2	20	
Methyl tert-butyl ether	2090	25	"	500	1700	78	63-137	1	20	
Toluene	520	25	"	500	ND	104	78-129	4	20	
Xylenes (total)	1700	25	"	1500	ND	113	83-137	4	20	

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1333 Broadway, Suite 800	Project Number: N/P	**Reported:**
Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4I16003 - EPA 5030B P/T										
Matrix Spike Dup (4I16003-MSD1)	**Source: MNI0328-02**			Prepared & Analyzed: 09/16/04						
Surrogate: 1,2-Dichloroethane-d4	*2.13*		*ug/l*	*2.50*		*85*	*78-129*			
Batch 4I16028 - EPA 5030B P/T										
Blank (4I16028-BLK1)				Prepared & Analyzed: 09/16/04						
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	"							
tert-Butyl alcohol	ND	20	"							
Di-isopropyl ether	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
Ethanol	ND	100	"							
Ethyl tert-butyl ether	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C4-C12)	ND	50	"							
Surrogate: 1,2-Dichloroethane-d4	*2.01*		"	*2.50*		*80*	*78-129*			
Laboratory Control Sample (4I16028-BS1)				Prepared & Analyzed: 09/16/04						
tert-Amyl methyl ether	9.98	0.50	ug/l	10.0		100	82-140			
Benzene	10.6	0.50	"	10.0		106	69-124			
tert-Butyl alcohol	52.8	20	"	50.0		106	56-131			
Di-isopropyl ether	10.1	0.50	"	10.0		101	76-130			
1,2-Dibromoethane (EDB)	11.1	0.50	"	10.0		111	77-132			
1,2-Dichloroethane	10.9	0.50	"	10.0		109	77-136			
Ethanol	187	100	"	200		94	31-143			
Ethyl tert-butyl ether	10.5	0.50	"	10.0		105	81-121			
Ethylbenzene	10.9	0.50	"	10.0		109	84-132			
Methyl tert-butyl ether	9.66	0.50	"	10.0		97	63-137			
Toluene	9.99	0.50	"	10.0		100	78-129			
Xylenes (total)	33.2	0.50	"	30.0		111	83-137			
Surrogate: 1,2-Dichloroethane-d4	*2.10*		"	*2.50*		*84*	*78-129*			

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Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4I16028 - EPA 5030B P/T										
Laboratory Control Sample (4I16028-BS2)				Prepared: 09/16/04 Analyzed: 09/17/04						
Benzene	6.14	0.50	ug/l	6.40		96	69-124			
Ethylbenzene	9.12	0.50	"	7.52		121	84-132			
Methyl tert-butyl ether	9.45	0.50	"	9.92		95	63-137			
Toluene	35.2	0.50	"	31.9		110	78-129			
Xylenes (total)	44.7	0.50	"	36.6		122	83-137			
Gasoline Range Organics (C4-C12)	436	50	"	440		99	70-124			
Surrogate: 1,2-Dichloroethane-d4	*2.04*		"	*2.50*		*82*	*78-129*			
Laboratory Control Sample Dup (4I16028-BSD1)				Prepared: 09/16/04 Analyzed: 09/17/04						
tert-Amyl methyl ether	10.7	0.50	ug/l	10.0		107	82-140	7	20	
Benzene	11.1	0.50	"	10.0		111	69-124	5	20	
tert-Butyl alcohol	54.3	20	"	50.0		109	56-131	3	20	
Di-isopropyl ether	10.4	0.50	"	10.0		104	76-130	3	20	
1,2-Dibromoethane (EDB)	11.5	0.50	"	10.0		115	77-132	4	20	
1,2-Dichloroethane	11.2	0.50	"	10.0		112	77-136	3	20	
Ethanol	217	100	"	200		108	31-143	15	20	
Ethyl tert-butyl ether	11.2	0.50	"	10.0		112	81-121	6	20	
Ethylbenzene	11.4	0.50	"	10.0		114	84-132	4	20	
Methyl tert-butyl ether	9.91	0.50	"	10.0		99	63-137	3	20	
Toluene	10.4	0.50	"	10.0		104	78-129	4	20	
Xylenes (total)	34.6	0.50	"	30.0		115	83-137	4	20	
Surrogate: 1,2-Dichloroethane-d4	*2.06*		"	*2.50*		*82*	*78-129*			
Matrix Spike (4I16028-MS1)	**Source: MNI0192-06**			Prepared: 09/16/04 Analyzed: 09/17/04						
Benzene	340	25	ug/l	320	30	97	69-124			
Ethylbenzene	441	25	"	376	ND	117	84-132			
Methyl tert-butyl ether	1150	25	"	496	680	95	63-137			
Toluene	1690	25	"	1600	ND	106	78-129			
Xylenes (total)	2160	25	"	1830	ND	118	83-137			
Gasoline Range Organics (C4-C12)	22200	2500	"	22000	1200	95	70-124			
Surrogate: 1,2-Dichloroethane-d4	*2.06*		"	*2.50*		*82*	*78-129*			

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Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4I16028 - EPA 5030B P/T										
Matrix Spike Dup (4I16028-MSD1)	**Source: MNI0192-06**			Prepared: 09/16/04		Analyzed: 09/17/04				
Benzene	341	25	ug/l	320	30	97	69-124	0.3	20	
Ethylbenzene	454	25	"	376	ND	121	84-132	3	20	
Methyl tert-butyl ether	1120	25	"	496	680	89	63-137	3	20	
Toluene	1730	25	"	1600	ND	108	78-129	2	20	
Xylenes (total)	2230	25	"	1830	ND	122	83-137	3	20	
Gasoline Range Organics (C4-C12)	23500	2500	"	22000	1200	101	70-124	6	20	
Surrogate: 1,2-Dichloroethane-d4	*2.12*		"	*2.50*		*85*	*78-129*			

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Oakland CA, 94612	Project Manager: Scott Robinson	09/20/04 18:59

Notes and Definitions

RB	RPD exceeded method control limit; % recoveries within limits.
HM	Analyte recovery below established limit
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Chain of Custody Record

bp

Project Name 4931 GWM
BP BU/GEM CO Portfolio Retail MNT0192
BP Laboratory Contract Number: Atlantic Richfield Company
Date: 9/2/09 Requested Due Date (mm/dd/yy) 14 day TAT

On-site Time: 825	Temp: 70°F
Off-site Time: 1210	Temp:
Sky Conditions: clear	
Meteorological Events: none	
Wind Speed:	Direction:

Send To:	BP/GEM Facility No.: ARCO 4931	Consultant/Contractor: URS
Lab Name: SEQUOIA	BP/GEM Facility Address: 731 W. MACARTHUR BLVD, OAKLAND, CA	Address: 1333 Broadway, Suite 800
Lab Address: 885 Jarvis Dr.	Site ID No. ARCO 4931	Oakland, CA 94612
Morgan Hill, CA 95037	Site Lat/Long:	e-mail EDD: donna_cosper@URSCorp.com
	California Global ID #: T0600100107	Consultant/Contractor Project No.: 35-00004931.01 00427
Lab PM Lisa Race	BP/GEM PM Contact: PAUL SUPPLE	Consultant Tele/Fax: 510-893-3600/510-874-3268
Tele/Fax: 408-776-9600 / 408-782-6308	Address: P.O. Box 6549	Consultant/Contractor PM: Scott Robinson
Report Type & QC Level: 1 Send EDF Reports	Moraga, CA 94570	Invoice to: Consultant/Contractor or BP/GEM (Circle one)
BP/GEM Account No.:	Tele/Fax: 925-299-8891/925-299-8872	BP/GEM Work Release No:

Lab Bottle Order No:

Item No.	Sample Description	Time	Matrix: Soil/Solid	Water/Liquid	Sediments	Air	Laboratory No. MNT0192	No. of containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	Requested Analysis: GRO / BTEX (8015/8021)/8260	DRO w/SGC (8015)	MTBE (8021)	MTBE (8260)	MTBE, TAME, ETBE DIPE, TBA (8260)	1,2-DCA & EDB (8260)	Ethanol (8260)	Sample Point Lat/Long and Comments
1	A-2	840		A			-1	3				K	A				A	A	A	
2	A-3	1158		A			-2	3				K	A				K	K	K	
3	A-4	1155		A			-3	3				K	K				K	K	K	
4	A-5	1140		A			-4	3				K	K				K	K	K	
5	A-7	1050		K			-5	6				K	K				K	K	K	
6	A-8	1000		K			-6	3				K	K				K	K	K	
7	A-9	1120		K			-7	3				K	K				K	K	K	
8	A-10	1150		K			-8	3				K	K				K	K	K	
9	A-11	1028		A			-9	3				K	K				K	K	K	
10	A-12	955		K			-10	3				K	K				K	K	K	

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: P. Lovell						
Sampler's Company: Blaine Tech	PJH-BTI			Maurice	9/3/09	1110
Shipment Date:	Maurice	9/3/09	1510	Kel Ali (AM)	9/3/09	1510
Shipment Method:						
Shipment Tracking No:						

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

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

Chain of Custody Record

Project Name 4931 GWM
BP BU/GEM CO Portfolio Retail
BP Laboratory Contract Number: Atlantic Richfield Company
Date: 9/2/04 Requested Due Date (mm/dd/yy) 14 day TAT

On-site Time: 825	Temp: 70°F
Off-site Time: 1210	Temp:
Sky Conditions: clear	
Meteorological Events: none	
Wind Speed:	Direction:

Send To:	BP/GEM Facility No.: ARCO 4931	Consultant/Contractor: URS
Lab Name: SEQUOIA	BP/GEM Facility Address: 731 W. MACARTHUR BLVD, OAKLAND, CA	Address: 1333 Broadway, Suite 800
Lab Address: 885 Jarvis Dr.	Site ID No. ARCO 4931	Oakland, CA 94612
Morgan Hill, CA 95037	Site Lat/Long:	e-mail EDD: donna.cosper@URSCorp.com
	California Global ID #: T0600100107	Consultant/Contractor Project No.: 35-00004931.01 00427
Lab PM Lisa Race	BP/GEM PM Contact: PAUL SUPPLE	Consultant Tele/Fax: 510-893-3600/510-874-3268
Tele/Fax: 408-776-9600 / 408-782-6308	Address: P.O. Box 6549	Consultant/Contractor PM: Scott Robinson
Report Type & QC Level: 1 Send EDF Reports	Moraga, CA 94570	Invoice to: Consultant/Contractor or BP/GEM (Circle one)
BP/GEM Account No.:	Tele/Fax: 925-299-8891/925-299-8872	BP/GEM Work Release No:

Lab Bottle Order No:

Item No.	Sample Description	Time	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Sediments	Matrix: Air	Laboratory No.	No. of containers	Preservatives: Unpreserved	Preservatives: H_2SO_4	Preservatives: HNO_3	Preservatives: HCl	GRO / BTEX (8015/8021 or 8260)	DRO w/SGC (8015)	MTBE (8021)	MTBE (8260)	MTBE, TAME, ETBE, DIPE, TBA (8260)	1,2-DCA & EDB (8260)	Ethanol (8260)	Sample Point Lat/Long and Comments
1	A-13	1120		X			-11	3				X	X				X	X	X	
2	TB-4931090222004			X			-12	2												on hold
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: B. Cornish						
Sampler's Company: BlaineTech	[signature]	9/3/04	1510	[signature]	9/3/04	1110
Shipment Date:	[signature]			[signature]	9/3/04	1510
Shipment Method:						
Shipment Tracking No:						

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

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

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

BP COC Rev. 1 2/5/02

ATTACHMENT C

HISTORIC GROUNDWATER DATA

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

ARCO Service Station 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 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-3	08/26/99	54.66	10.73	43.93	Not Sampled: Well Sampled Semiannually								
A-3	10/26/99	54.66	6.58	48.08	<50	<0.5	<0.5	<0.5	<1	32	NA	0.95	
A-3	02/25/00	54.66	5.41	49.25	Not Sampled: Well Sampled Semiannually							2.06	NP
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	780	<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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Recreated from electronic data provided by 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-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	<2.5	NA	NM	
A-6	03/18/98	55.17	7.00	48.17	<50	6.2	0.5	2.3	2.6	<3	NA	<1.0	
A-6	05/19/98	55.17	8.27	46.90	<50	<0.5	<0.5	1.3	4.7	<3	NA	3.0	
A-6	07/29/98	55.17	8.96	46.21	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.16	P
A-6	10/09/98	55.17	10.23	44.94	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.8	NP
A-6	02/19/99	55.17	5.79	49.38	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.0	NP
A-6	06/02/99	55.17	9.71	45.46	<50	<0.5	<0.5	<0.5	<0.5	5	NA	0.4	NP
A-6	08/26/99	55.17	9.79	45.38	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.00	NP
A-6	10/26/99	55.17	9.70	45.47	<50	<0.5	<0.5	<0.5	0.7	<3	NA	0.66	NP
A-6	02/25/00	55.17	5.68	49.49	<50	<0.5	<0.5	<0.5	<1	<3	NA	1.66	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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Recreated from electronic data provided by 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-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	

OAK\G\ARCO4931\QTRLY\4931q100.xls\tab1

Recreated from electronic data provided by 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-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	

OAK\C\ARCO493I\QTRLY\4931q100.xls\sht1
Recreated from electronic data provided by 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-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	
A-11	02/25/00	53.74	6.70	47.04	Not Sampled: Well Sampled Semiannually							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	<1	12	NA	0.51	
A-12	02/25/00	52.05	6.97	45.08	Not Sampled: Well Sampled Semiannually							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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ARCO Service Station 4931
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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		Well Inaccessible									
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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Groundwater Elevation and Analytical Data
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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							0.44	
AR-2	02/25/00	54.77	2.33	52.44	Not Sampled: Well Removed from Sampling Program							1.79	
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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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 CONFIRMATIO

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ARCO
731 MACARTHUR BLVD
W
OAKLAND, CA 94609

Regional Board - Case #: 01-0118
SAN FRANCISCO BAY RWQCB (REGION 2) - **(BG)**
Local Agency (lead agency) - Case #: 3874
ALAMEDA COUNTY LOP - **(UNK)**

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	11
# FIELD POINTS WITH DETECTIONS	7
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	4
SAMPLE MATRIX TYPES	WATER

METHOD QA/QC REPORT

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

QA/QC FOR 8021/8260 SERIES SAMPLES

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

- BLANK SPIKE	Y
- SURROGATE SPIKE	Y

WATER SAMPLES FOR 8021/8260 SERIES

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

SOIL SAMPLES FOR 8021/8260 SERIES

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

FIELD QC SAMPLES

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

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Facility Global ID: T0600100110
Facility Name: ARCO
Submittal Title: Third Quarter 2004. Site #4931
Submittal Type: GW Monitoring Report

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ARCO 731 MACARTHUR BLVD W OAKLAND, CA 94609	**Regional Board - Case #: 01-0118** SAN FRANCISCO BAY RWQCB (REGION 2) - **(BG)** **Local Agency (lead agency) - Case #: 3874** ALAMEDA COUNTY LOP - **(UNK)**

CONF #	TITLE	QUARTER
5804978430	Third Quarter 2004. Site #4931	Q3 2004

SUBMITTED BY	SUBMIT DATE	STATUS
Srijesh Thapa	10/6/2004	PENDING REVIEW

SAMPLE DETECTIONS REPORT

# FIELD POINTS SAMPLED	11
# FIELD POINTS WITH DETECTIONS	7
# FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL	4
SAMPLE MATRIX TYPES	WATER

METHOD QA/QC REPORT

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

QA/QC FOR 8021/8260 SERIES SAMPLES

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

WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135%	Y

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

SOIL SAMPLES FOR 8021/8260 SERIES

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

FIELD QC SAMPLES

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

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