



Atlantic Richfield Company
(a BP affiliated company)

P.O. Box 6549
Moraga, California 94570
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RO 204



Alameda County
APR 30 2003
Environmental Health

April 25, 2003

Re: First Quarter 2003 Groundwater Monitoring Report
ARCO Station 4494
566 Hegenberger Rd.
Oakland, CA.

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

Submitted by:

Paul Supple
Environmental Business Manager



April 25, 2003

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

**Re: First Quarter 2003 Groundwater Monitoring Report
ARCO Service Station #4494
566 Hegenberger Road
Oakland, California
URS Project # 38486122**

Dear Mr. Chan:

On behalf of Atlantic Richfield Company (ARCO-an affiliated company of the Group Environmental Management Company), URS Corporation (URS) is submitting the *First Quarter 2003 Groundwater Monitoring Report* for ARCO Service Station #4494, located at 566 Hegenberger Road, Oakland, California.

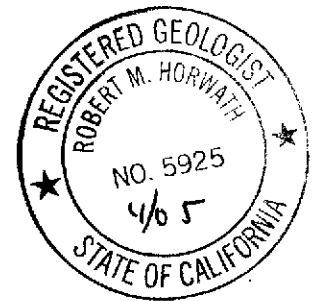
If you have any questions regarding this submission, please call me at (510) 874-3280.

Sincerely,

URS CORPORATION

Scott Robinson
Project Manager

Robert Horwath, R.G. 5925
Portfolio Manager



Enclosure: First Quarter 2003 Groundwater Monitoring Report

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

REPORT

**FIRST QUARTER 2003
GROUNDWATER MONITORING**

ARCO SERVICE STATION # 4494
566 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

Prepared for
Atlantic Richfield Company

April 25, 2003

URS

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

38486122

Date: April 25, 2003
Quarter: 1Q 03

ATLANTIC RICHFIELD COMPANY QUARTERLY GROUNDWATER MONITORING REPORT

Facility No.: 4494 Address: 566 Hegenberger Road, Oakland, California
ARCO Environmental Engineer: Paul Supple
Consulting Co./Contact Person: URS Corporation/Scott Robinson
Consultant Project No.: 38486122
Primary Agency/Regulatory ID No. Alameda County Health Services Agency
(ACHCSA)/STID #3854

WORK PERFORMED THIS QUARTER (First – 2003):

1. Performed first quarter 2003 monitoring event on March 20, 2003.
2. Prepared and submitted fourth quarter 2002 groundwater monitoring report.
3. Repair casing on well MW-7.

WORK PROPOSED FOR NEXT QUARTER (Second– 2003):

1. Perform second quarter 2003 groundwater monitoring event.
2. Prepare and submit first quarter 2003 groundwater monitoring report.
3. Re-survey wells MW-7 and MW-1.

Current Phase of Project	<u>GW monitoring/sampling</u>
Frequency of Groundwater Sampling:	<u>Wells MW-1, MW-3 to MW-7, RW-1 quarterly</u>
Frequency of Groundwater Monitoring:	<u>Quarterly</u>
Is Free Product (FP) Present On-Site:	<u>No</u>
FP Recovered this Quarter:	<u>None</u>
Cumulative FP Recovered to Date:	<u>volume not available</u>
Bulk Soil Removed This Quarter:	<u>None</u>
Bulk Soil Removed to Date:	<u>1,550 cubic yards</u>
Current Remediation Techniques:	<u>None</u>
Approximate Depth to Groundwater:	<u>6.18 (MW-6) to 9.40 (MW-3) feet</u>
Groundwater Gradient (direction)	<u>North-Northwest</u>
Groundwater Gradient (magnitude)	<u>0.016 feet per foot</u>

DISCUSSION:

Beginning this quarter, all groundwater samples were analyzed by EPA method 8260B for TPH-g, BTEX, and fuel oxygenates. TPH-g was detected in one of the seven wells sampled this quarter at concentrations of 1,100 µg/L (MW-1). Benzene was not detected in any of the wells. MTBE was detected in three wells at concentrations ranging from 6.1 µg/L (MW-3) to 780 µg/L (MW-1).

RECOMMENDATIONS:

Based on consistently low or non-detectable hydrocarbon concentrations for the past 2 years or more, URS recommends reducing the sampling frequency from quarterly to semi-annually in wells RW-1, MW-3, MW-4, MW-5 and MW-6.

ATTACHMENTS:

- Table 1 – Groundwater Elevation and Analytical Data
- Table 2 – Groundwater Flow Direction and Gradient
- Table 3 – Oxygenate Analytical Data
- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map – March 20, 2003
- 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 Report and EDF/Geowell Submittal Confirmation

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #4494
566 Hegenberger Road
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Dissolved Oxygen (mg/L)
MW-1	06/20/00	106.10	7.02	99.08	ND<1,000	ND<10	ND<10	ND<10	ND<20	14,000/15,000 ^a	NA
	09/28/00		7.07	99.03	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	13000/18,800 ^a	NA
	12/17/00		6.95	99.15	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	10,600	NA
	03/28/01		6.88	99.22	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	16,900	NA
	06/21/01		7.18	98.92	ND<1,000	ND<10	ND<10	ND<10	ND<10	3,400	NA
	09/23/01		7.11	98.99	ND<1,000	ND<10	ND<10	ND<10	ND<10	2200/1800 ^a	NA
	12/31/01		6.91	99.19	ND<5,000	ND<50	ND<50	ND<50	ND<50	14,000	NA
	03/14/02		6.85	99.25	ND<5,000	ND<50	ND<50	ND<50	ND<50	6,200	NA
	04/17/02		5.89	100.21	ND<5,000	ND<50	ND<50	ND<50	ND<50	4,500	NA
	08/08/02		7.19	98.91	230 ^b	ND<2.0	ND<2.0	ND<2.0	ND<2.0	660/440 ^a	4.5
	12/12/02		7.28	98.82	630 ^d	ND<5.0	ND<5.0	ND<5.0	ND<5.0	1300/830 ^a	1.9
	3/20/2003 ^e		6.91	99.19	1,100	ND<5.0	ND<5.0	ND<5.0	ND<5.0	780	2.2
MW-3	06/20/00	106.29	9.18	97.11	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	27/27 ^a	NA
	09/28/00		9.33	96.96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	4.3/ND<2.0 ^a	NA
	12/17/00		9.31	96.98	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	03/28/01		9.23	97.06	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.42	NA
	06/21/01		9.58	96.71	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	09/23/01		9.76	96.53	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	12/31/01		8.78	97.51	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	03/14/02		9.25	97.04	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4	NA
	04/17/02		8.44	97.85	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	08/08/02		9.63	96.66	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	2.6
	12/12/02		9.51	96.78	ND<50 ^d	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	3.0
	3/20/2003 ^e		9.40	96.89	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.1	1.2

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #4494
566 Hegenberger Road
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Dissolved Oxygen (mg/L)
MW-4	06/20/00	107.40	8.49	98.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10	NA
	09/28/00		8.70	98.70	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.5	NA
	12/17/00		8.53	98.87	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	03/28/01		8.59	98.81	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	06/21/01		8.79	98.61	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	09/23/01		8.67	98.73	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	12/31/01		8.03	99.37	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	03/14/02		8.48	98.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	04/17/02		7.79	99.61	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.6	NA
	08/08/02		8.90	98.50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	4.5
	12/12/02		9.07	98.33	ND<50 ^d	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	5.6
	3/20/2003 ^e		8.85	98.55	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.50	ND<0.50
MW-5	06/20/00	105.19	7.65	97.54	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10	NA
	09/28/00		6.82	98.37	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.5	NA
	12/17/00		6.50	98.69	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	03/28/01		6.34	98.85	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	06/21/01		7.88	97.31	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	09/23/01		6.98	98.21	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	12/31/01		5.01	100.18	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	03/14/02		5.93	99.26	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	04/17/02		5.37	99.82	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.5	NA
	08/08/02		6.85	98.34	ND<50 ^b	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	0.7
	12/12/02		6.53	98.66	ND<50 ^d	2.2	4.7	1.3	6.8	ND<2.5	1.3
	3/20/2003 ^e		6.40	98.79	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50

**Table 1
Groundwater Elevation and Analytical Data**

ARCO Service Station #4494
566 Hegenberger Road
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Dissolved Oxygen (mg/L)	
MW-6	06/20/00	105.07	6.24	98.83	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10	NA	
	09/28/00		6.45	98.62	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.5	NA	
	12/17/00		6.26	98.81	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	03/28/01		6.10	98.97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	06/21/01		7.68	97.39	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	09/23/01		6.72	98.35	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	12/23/01		4.68	100.39	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	03/14/02		5.55	99.52	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	
	04/17/02		4.96	100.11	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7	NA	
	08/08/02		6.46	98.61	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	0.7	
	12/12/02		6.18	98.89	65 ^d	3.3	8.4	2.7	14	ND<2.5	1.1	
	3/20/2003 ^e		6.18	98.89	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.2
MW-7	06/20/00	105.52	8.65	96.87	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	13/13 ^a	NA	
	09/28/00		8.75	96.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	136/261 ^a	NA	
	12/17/00		8.62	96.90	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	27.1	NA	
	03/28/01		8.66	96.86	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	51.5	NA	
	06/21/01		8.84	96.68	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	53	NA	
	09/23/01		8.75	96.77	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	35/21 ^a	NA	
	12/23/01		7.79	97.73	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	440	NA	
	03/14/02		8.30	97.22	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	18	NA	
	04/17/02		7.43	98.09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	67	NA	
	08/08/02		8.61	96.91	55 ^b	ND<0.5	ND<0.5	ND<0.5	ND<0.5	130/100 ^a	1.1	
	12/12/02		**	8.55	--	75 ^d	ND< 0.5	ND< 0.5	ND< 0.5	ND< 0.5	160/130 ^a	1.2
	3/20/2003 ^e		8.38	97.14	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	32	2.2

**Table 1
Groundwater Elevation and Analytical Data**

ARCO Service Station #4494
566 Hegenberger Road
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Dissolved Oxygen (mg/L)
RW-1	06/20/00	NE	8.21	NC	ND<50	ND<0.5	1.1	ND<0.5	ND<1.0	ND<10	NA
	09/28/00		8.28	NC	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<2.5	NA
	12/17/00		8.29	NC	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	03/28/01		8.16	NC	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	06/21/01		9.37	NC	160	5.1	ND<0.5	1.1	3.2	ND<2.5	NA
	09/23/01		8.75	NC	57	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA
	12/31/01		6.80	NC	520	3.1	ND<0.5	6.4	4.7	ND<2.5	NA
	03/14/02		7.86	NC	240	3.7	ND<0.5	0.7	2.8	ND<2.5	NA
	04/17/02		7.13	NC	ND<50	ND<0.5	1.6	ND<0.5	0.72	ND<2.5	NA
	08/08/02		8.48	NC	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.7/ND<0.5 ^{a,c}	1.1
	12/12/02		8.63	NC	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	1.9
	3/20/2003 ^e		8.08	NC	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.9

- TPH = Total Petroleum Hydrocarbons
- MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8021B unless otherwise noted
- µg/L = Micrograms per liter
- NC = Not calculated
- NE = Not surveyed/No elevation
- ND< = Not detected at or above specified laboratory detection limit.
- a = Analyzed by EPA Method 8260
- b = Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
- c = This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose.
- d = Analyzed by EPA Method 8215B/8021B for Gasoline Range Organics
- e = TPH-g, BTEX, and MTBE analyzed by EPA method 8260B beginning on 2003 sampling event (03/20/03)
- ** = Top of casing was found shattered on December 12, 2002. Top of Casing (TOC) unknown.

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

Table 2
Groundwater Flow Direction and Gradient

ARCO Service Station #4494
566 Hegenberger Road
Oakland, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
06/20/00	North-Northeast	0.015
09/28/00	North	0.018
12/17/00	North-Northwest	0.013
03/28/01	Northwest	0.011
06/21/01	North	0.017
09/23/01	North	0.020
12/31/01	North-Northwest	0.023
03/14/02	North-Northwest	0.017
04/14/02	Northwest	0.007
08/08/02	North-Northwest	0.022
12/12/02	North-Northwest	0.017
03/20/03	North-Northwest	0.016

Note:

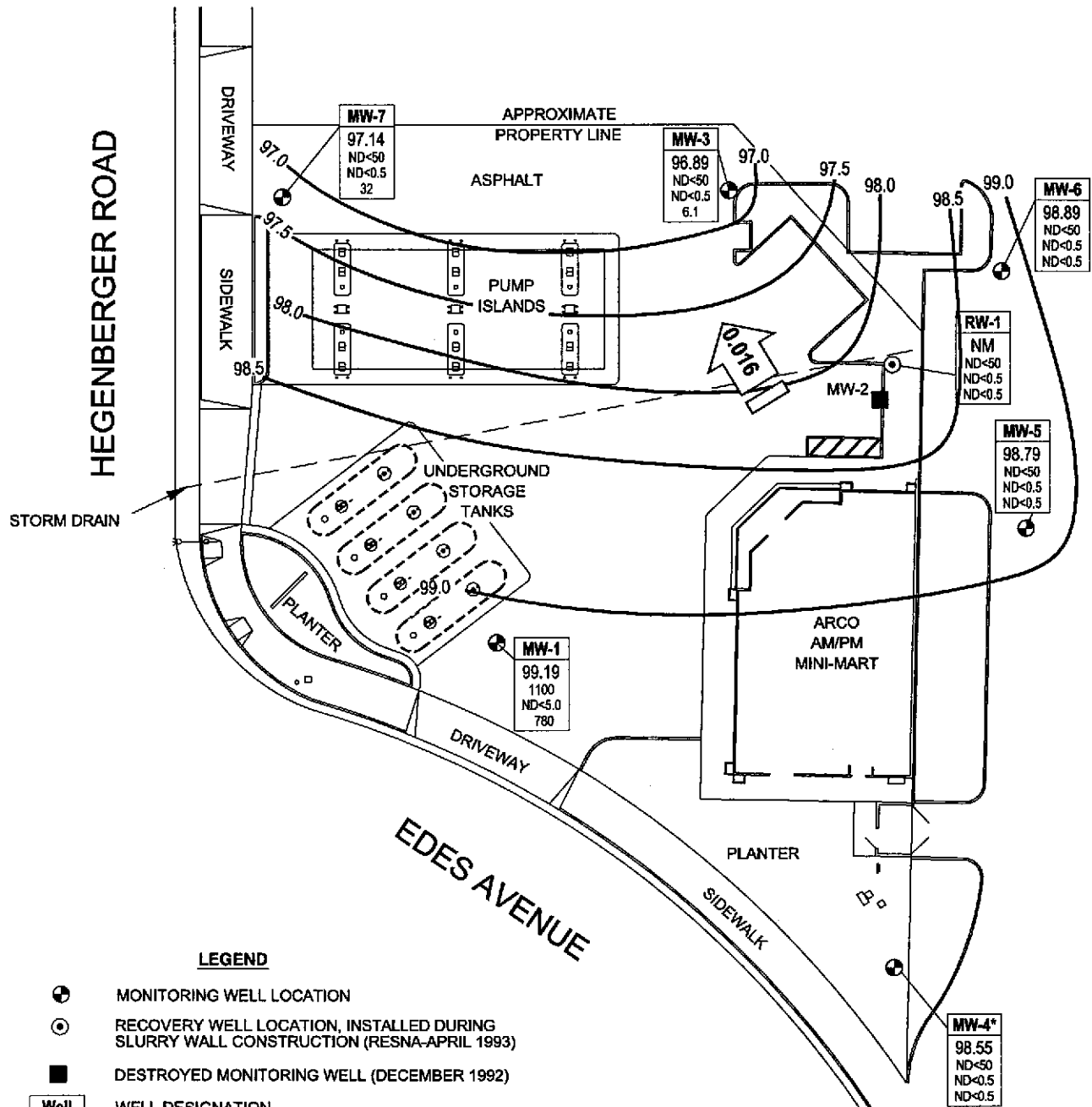
The data within this table collected prior to August 2002 was provided to URS by Group Environmental Management Company and their previous consultants. URS has not verified the accuracy of this information.

**Table 3
Oxygenate Analytical Data**

Service Station # 4494
566 Hagenberger Road
Oakland, California

Well Number	Date Sampled	Ethanol (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
MW-1	03/20/03	ND<1000	640	780	ND<5.0	ND<5.0	ND<5.0
MW-3	03/20/03	ND<100	ND<20	601	ND<0.50	ND<0.50	1.1
MW-4	03/20/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-5	03/20/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-6	03/20/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-7	03/20/03	ND<100	ND<20	32	ND<0.50	ND<0.50	0.62
RW-1	03/20/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50

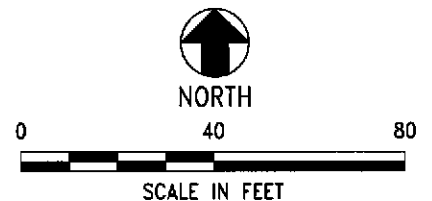
Note = All fuel oxygenate compounds analyzed using EPA Method 8260B
TBA = tert-Butyl alcohol
MTBE = Methyl tert-butyl ether
DIPE = Di-isopropyl ether
ETBE = Ethyl tert butyl ether
TAME = tert-Amyl methyl ether
µg/L = micrograms per liter
ND< = Less than laboratory reporting limit
NA = Data not available, not analyzed, or not applicable
NS = Not Sampled



LEGEND

- MONITORING WELL LOCATION
- RECOVERY WELL LOCATION, INSTALLED DURING SLURRY WALL CONSTRUCTION (RESNA-APRIL 1993)
- DESTROYED MONITORING WELL (DECEMBER 1992)
- Well** — WELL DESIGNATION
- ELEV** — GROUNDWATER ELEVATION CONTOUR (FT/MSL)
- TPH-g** — CONCENTRATION OF TPH-g, BENZENE, AND MTBE IN MICROGRAMS PER LITER (µg/L)
- Benzene**
- MTBE**
- *** — GROUNDWATER ELEVATION NOT USED IN CONTOUR
- ND<** — NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMITS
- NM** — NOT MEASURED
- 0.016** — GROUNDWATER FLOW AND GRADIENT (FT/FT)
- 98.0** — GROUNDWATER ELEVATION CONTOUR (FT/MSL)

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



Project No. 38486122
Arco Service Station 4494
566 Hegenberger Road
Oakland, California

GROUNDWATER ELEVATION CONTOUR
AND ANALYTICAL SUMMARY MAP
First Quarter 2003 (March 20, 2003)

FIGURE
1

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 # 030320-MT2 Date 03-20-03 Client 4494

Site 566 Hagenburger Rd., Oakland

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-1	4					6.91	23.04		
MW-3	4					9.40	17.85		
MW-4	4					8.85	16.62		
MW-5	2					6.40	16.32		
MW-6	2					6.18	18.07		
RW-1	2					8.08	11.30		I
MW-7	4					8.38	13.49		

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>D30320-MTZ</u>	Station # <u>4494</u>
Sampler: <u>M. TOU</u>	Date: <u>03-20-03</u>
Well I.D.: <u>MW-1</u>	Well Diameter: 2 3 <input checked="" type="radio"/> 6 8 _____
Total Well Depth: <u>23.04</u>	Depth to Water: <u>6.91</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> PVC _____ Grade	D.O. Meter (if req'd): <input checked="" type="radio"/> 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: _____	Sampling Method: _____
<input type="radio"/> Bailer <input type="radio"/> Disposable Bailer <input type="radio"/> Middleburg <input checked="" type="radio"/> Electric Submersible <input type="radio"/> Extraction Pump Other: _____	<input type="radio"/> Bailer <input checked="" type="radio"/> Disposable Bailer <input type="radio"/> Extraction Port Other: _____

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

<u>10.5</u>	x	<u>3</u>	=	<u>31.5</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
1320	68.6	9.0	6429	10.5	
	Dewatered		C	13	
1330	67.3	8.5	6321	—	DTW = 17.97

Did well dewater? <input checked="" type="radio"/> Yes <input type="radio"/> No	Gallons actually evacuated: <u>13</u>
Sampling Time: <u>1330</u>	Sampling Date: <u>03-20-03</u>
Sample I.D.: <u>MW-1</u>	Laboratory: Pace <input checked="" type="radio"/> Sequoia _____ Other _____

Analyzed for: <input checked="" type="radio"/> TPH-G <input checked="" type="radio"/> BTEX _____ MTBE _____ TPH-D _____ Other: <u>Oxy. & Ethanol by 8260</u>	
D.O. (if req'd):	Pre-purge: _____ mg/L <input checked="" type="radio"/> Post-purge: <u>2.2</u> mg/L
O.R.P. (if req'd):	Pre-purge: _____ mV <input type="radio"/> Post-purge: _____ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>D30320-MT2</u>	Station # <u>4494</u>
Sampler: <u>M. TOLL</u>	Date: <u>03-20-03</u>
Well I.D.: <u>W-3</u>	Well Diameter: 2 3 <u>4</u> 6 8 _____
Total Well Depth: <u>17.85</u>	Depth to Water: <u>9.40</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

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

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

Top of Screen: 7' If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

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

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
1225	65.6	7.0	1360	-	dry

Did well dewater? Yes <u>No</u>	Gallons actually evacuated: <u> </u>
Sampling Time: <u>1225</u>	Sampling Date: <u>03-20-03</u>
Sample I.D.: <u>W-3</u>	Laboratory: Pace <u>Sequoia</u> Other _____
Analyzed for: <u>TPH-G</u> <u>ORBTEX</u> MTBE TPH-D Other: <u>Oxy. & Ethanol by 8260</u>	
D.O. (if req'd):	Pre-purge: _____ mg/L
	Post-purge: <u>1.2</u> mg/L
O.R.P. (if req'd):	Pre-purge: _____ mV
	Post-purge: _____ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>030320-MTZ</u>	Station # <u>A494</u>
Sampler: <u>M. TOU</u>	Date: <u>03-20-03</u>
Well I.D.: <u>MW-4</u>	Well Diameter: 2 3 <u>4</u> 6 8 <u> </u>
Total Well Depth: <u>10.02</u>	Depth to Water: <u>8.85</u>
Depth to Free Product: <u> </u>	Thickness of Free Product (feet): <u> </u>
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

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

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

Top of Screen: 7' If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

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

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
<u>1125</u>	<u>64.4</u>	<u>7.8</u>	<u>1760</u>	<u> </u>	<u> </u>

Did well dewater? Yes <u>No</u>	Gallons actually evacuated: <u> </u>
Sampling Time: <u>1125</u>	Sampling Date: <u>03-20-03</u>
Sample I.D.: <u>MW-4</u>	Laboratory: Pace <u>Sequoia</u> Other <u> </u>
Analyzed for: <u>TPH-G QBTX</u> MTBE TPH-D Other: <u>Oxy. & Ethanol by 8260</u>	
D.O. (if req'd):	Pre-purge: <u> </u> ^{mg/L} Post-purge: <u>4.8</u> ^{mg/L}
O.R.P. (if req'd):	Pre-purge: <u> </u> mV Post-purge: <u> </u> mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>030320-MTZ</u>	Station # <u>4494</u>
Sampler: <u>M. TOU</u>	Date: <u>03-20-03</u>
Well I.D.: <u>MW-5</u>	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth: <u>16.82</u>	Depth to Water: <u>6.40</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

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

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

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

<u>1.7</u>	x	<u>3</u>	=	<u>5.1</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (µS or µS)	Gals. Removed	Observations
1132	65.6	7.1	13.73	1.7	Sulphur odor
1135	65.5	7.1	12.99	3.4	"
1138	65.6	7.1	12.12	5.1	"

Did well dewater? Yes No Gallons actually evacuated: 5.1

Sampling Time: 1145 Sampling Date: 03-20-03

Sample I.D.: MW-5 Laboratory: Pace Sequoia Other _____

Analyzed for: TPH-G ORTEX MTBE TPH-D Other: Oxy. & Ethanol by 8260

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	2.7	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>030320-MTZ</u>	Station # <u>A494</u>
Sampler: <u>M. TOLL</u>	Date: <u>03-20-03</u>
Well I.D.: <u>W-6</u>	Well Diameter: <u>2</u> 3 4 6 8 _____
Total Well Depth: <u>18.07</u>	Depth to Water: <u>6.18</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

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

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

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

<u>1.9</u>	x	<u>3</u>	=	<u>5.7</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
1151	67.4	7.1	6233	1.9	
1154	68.0	7.0	6133	3.8	
1157	68.2	7.0	6119	5.7	

Did well dewater? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>5.7</u>
Sampling Time: <u>1205</u>	Sampling Date: <u>03-20-03</u>
Sample I.D.: <u>W-6</u>	Laboratory: Pace <u>Sequoia</u> Other _____
Analyzed for: <u>TPH-G & BTEX</u> MTBE TPH-D Other: <u>Oxy. & Ethanol by 8260</u>	
D.O. (if req'd):	Pre-purge: _____ ^{mg/L} Post-purge: <u>2.2</u> ^{mg/L}
O.R.P. (if req'd):	Pre-purge: _____ mV Post-purge: _____ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>030320-MTZ</u>	Station # <u>4494</u>
Sampler: <u>M. TOU</u>	Date: <u>03-20-03</u>
Well I.D.: <u>MW-7</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: <u>13.49</u>	Depth to Water: <u>8.38</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

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

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

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

<u>3.3</u>	x	<u>3</u>	=	<u>9.9</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
1234	68.7	7.2	6471	3.3	Brownish Yellow
1236	67.3	7.3	5866	6.6	" "
1237	67.1	7.2	6000	9.9	" "

Did well dewater? Yes <u>No</u>	Gallons actually evacuated: <u>9.9</u>
Sampling Time: <u>1245</u>	Sampling Date: <u>03-20-03</u>
Sample I.D.: <u>MW-7</u>	Laboratory: Pace <u>Sequoia</u> Other _____

Analyzed for: <u>TPH-G</u> <u>QBTEX</u> MTBE TPH-D Other: <u>Oxy. & Ethanol by 8260</u>				
D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>D30320-MT2</u>	Station # <u>4494</u>
Sampler: <u>M. TOU</u>	Date: <u>03-20-03</u>
Well I.D.: <u>RW-1</u>	Well Diameter: <u>3</u> 4 6 8
Total Well Depth: <u>11.30</u>	Depth to Water: <u>8.08</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

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

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

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

<u>0.5</u>	x	<u>3</u>	=	<u>1.5</u>	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
1300	63.0	7.3	20.80	0.5	
1301	61.4	7.3	16.84	1.0	
1302	61.3	7.3	16.00	1.5	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>1.5</u>
Sampling Time: <u>1305</u>	Sampling Date: <u>03-20-03</u>
Sample I.D.: <u>RW-1</u>	Laboratory: Pace <u>Sequoia</u> Other _____
Analyzed for: <u>TPH-G</u> <u>CBTEX</u> MTBE TPH-D Other: <u>Oxy. & Ethanol by 8260</u>	
D.O. (if req'd):	Pre-purge: _____ mg/L
	Post-purge: <u>1.9</u> mg/L
O.R.P. (if req'd):	Pre-purge: _____ mV
	Post-purge: _____ mV



Chain of Custody Record

Project Name 5-20 030320-MTZ
 BP BU/GEM CO Portfolio: _____
 BP Laboratory Contract Number: _____
 Date: 5-20-03 Requested Due Date (mm/dd/yy) _____

On-site Time: <u>1015</u>	Temp: <u>68°</u>
Off-site Time: <u>1400</u>	Temp: <u>70°</u>
Sky Conditions: <u>Clear</u>	
Meteorological Events:	
Wind Speed:	Direction:

Send To:	BP/GEM Facility No.:	Consultant/Contractor: URS
Lab Name: SEQUOIA	BP/GEM Facility Address: 566 HEGENBERGER, OAKLAND, CA	Address: 500 12th St., Ste. 200
Lab Address: 885 Jarvis Dr. Morgan Hill, CA 95037	Site ID No. ARCO 4494	Oakland, CA 94609-4014
	Site Lat/Long:	e-mail EDD: syed_rehan@urscorp.com
	California Global ID #: T0600100104	Consultant/Contractor Project No.: J5-00004494.01 00427
Lab PM: Latonya Pelt	BP/GEM PM Contact: PAUL SUPPLE	Consultant Tele/Fax: 510-874-1735/510-874-3268
Tele/Fax: 408-776-9600 / 408-782-6308	Address:	Consultant/Contractor PM: Scott Robinson
Report Type & QC Level: Send EDF Reports		Invoice to: Consultant/Contractor or (BP/GEM (circle one))
BP/GEM Account No.:	Tele/Fax:	BP/GEM Work Release No: INTRIM -50443

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives			Requested Analysis					Sample Point Lat/Long and Comments
			Soil/Solid	Water/Liquid	Sediments	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	TPH-G/BTEX (4041+4061) (8260)	TPH-D (8015)	MTBE (8021)	MTBE, TAME, ETBE DIPE, TBA (8260)	
1	MW-1	1330	X				3					X			X		
2	MW-3	1225	X				3					X			X		
3	MW-4	1125	X				3					X			X		
4	MW-5	1145	X				3					X			X		
5	MW-6	1205	X				3					X			X		
6	MW-7	1245	X				3					X			X		
7	RW-1	1305	X				3					X			X		
8																	
9																	
10																	

Sampler's Name: <u>Michael Toll</u>	Relinquished By / Affiliation: <u>Michael Toll / BTS</u>	Date: <u>3/21/03</u>	Time: <u>1009</u>	Accepted By / Affiliation: <u>[Signature]</u>	Date: <u>3/21/03</u>	Time: <u>1009</u>
Sampler's Company: <u>BTS</u>						
Deployment Date:						
Deployment Method:						
Deployment Tracking No.:						

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

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

BP GEM OIL COMPANY TYPE A BILL OF LADING

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

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

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

Station #

4494

Station Address

566 Hegenburger Rd., Oakland

Total Gallons Collected From Groundwater Monitoring Wells:

35.5

added equip. 4.5
rinse water

any other adjustments

TOTAL GALS. RECOVERED 40

loaded onto BTS vehicle # 51

BTS event #

030320-MTE

time date

03/20/03

signature [Signature]

REC'D AT

time date

BTS

03/20/03

unloaded by signature [Signature]

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

LABORATORY PROCEDURES

Laboratory Procedures

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



7 April, 2003

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

RE: ARCO #4494, Oakland, Ca
Sequoia Work Order: MMC0742

Enclosed are the results of analyses for samples received by the laboratory on 03/21/03 10:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya Pelt
Project Manager

CA ELAP Certificate #1210



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

Project: ARCO #4494, Oakland, Ca
Project Number: ARCO #4494, Oakland, CA
Project Manager: Scott Robinson

MMC0742
Reported:
04/07/03 16:12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MMC0742-01	Water	03/20/03 13:30	03/21/03 10:40
MW-3	MMC0742-02	Water	03/20/03 12:25	03/21/03 10:40
MW-4	MMC0742-03	Water	03/20/03 11:25	03/21/03 10:40
MW-5	MMC0742-04	Water	03/20/03 11:45	03/21/03 10:40
MW-6	MMC0742-05	Water	03/20/03 12:05	03/21/03 10:40
MW-7	MMC0742-06	Water	03/20/03 12:45	03/21/03 10:40
RW-1	MMC0742-07	Water	03/20/03 13:05	03/21/03 10:40

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



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

Project: ARCO #4494, Oakland, Ca
Project Number: ARCO #4494, Oakland, CA
Project Manager: Scott Robinson

MMC0742
Reported:
04/07/03 16:12

Total Purgeable Hydrocarbons (C6-C10) and Volatile Organic Compounds by EPA method 8260B
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MMC0742-01) Water Sampled: 03/20/03 13:30 Received: 03/21/03 10:40									
Benzene	ND	5.0	ug/l	10	3D02035	04/02/03	04/03/03	EPA 8260B	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	5.0	"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	1100	500	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		<i>94.8 %</i>	<i>78-129</i>		"	"	"	"	
MW-3 (MMC0742-02) Water Sampled: 03/20/03 12:25 Received: 03/21/03 10:40									
Benzene	ND	0.50	ug/l	1	3D02036	04/02/03	04/03/03	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	ND	50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		<i>106 %</i>	<i>78-129</i>		"	"	"	"	
MW-4 (MMC0742-03) Water Sampled: 03/20/03 11:25 Received: 03/21/03 10:40									
Benzene	ND	0.50	ug/l	1	3D02036	04/02/03	04/03/03	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	0.50	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	ND	50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		<i>109 %</i>	<i>78-129</i>		"	"	"	"	
MW-5 (MMC0742-04) Water Sampled: 03/20/03 11:45 Received: 03/21/03 10:40									
Benzene	ND	0.50	ug/l	1	3D02036	04/02/03	04/03/03	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	ND	50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		<i>119 %</i>	<i>78-129</i>		"	"	"	"	

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 Project Number: ARCO #4494, Oakland, CA
 Project Manager: Scott Robinson

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 04/07/03 16:12

Total Purgeable Hydrocarbons (C6-C10) and Volatile Organic Compounds by EPA method 8260B
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (MMC0742-05) Water Sampled: 03/20/03 12:05 Received: 03/21/03 10:40									
Benzene	ND	0.50	ug/l	1	3D02036	04/02/03	04/03/03	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	ND	50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		113 %	78-129		"	"	"	"	
MW-7 (MMC0742-06) Water Sampled: 03/20/03 12:45 Received: 03/21/03 10:40									
Benzene	ND	0.50	ug/l	1	3D03007	04/03/03	04/03/03	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	ND	50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		96.8 %	78-129		"	"	"	"	
RW-1 (MMC0742-07) Water Sampled: 03/20/03 13:05 Received: 03/21/03 10:40									
Benzene	ND	0.50	ug/l	1	3D02036	04/02/03	04/03/03	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	ND	50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %	78-129		"	"	"	"	

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MMC0742-01) Water Sampled: 03/20/03 13:30 Received: 03/21/03 10:40									
Ethanol	ND	1000	ug/l	10	3D02035	04/02/03	04/03/03	EPA 8260B	
tert-Butyl alcohol	640	200	"	"	"	"	"	"	
Methyl tert-butyl ether	780	5.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.8 %	78-129	"	"	"	"	"	
MW-3 (MMC0742-02) Water Sampled: 03/20/03 12:25 Received: 03/21/03 10:40									
Ethanol	ND	100	ug/l	1	3D02036	04/02/03	04/03/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	6.1	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	1.1	0.50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		106 %	78-129	"	"	"	"	"	
MW-4 (MMC0742-03) Water Sampled: 03/20/03 11:25 Received: 03/21/03 10:40									
Ethanol	ND	100	ug/l	1	3D02036	04/02/03	04/03/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		109 %	78-129	"	"	"	"	"	



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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (MMC0742-04) Water Sampled: 03/20/03 11:45 Received: 03/21/03 10:40									
Ethanol	ND	100	ug/l	1	3D02036	04/02/03	04/03/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		119 %		78-129	"	"	"	"	
MW-6 (MMC0742-05) Water Sampled: 03/20/03 12:05 Received: 03/21/03 10:40									
Ethanol	ND	100	ug/l	1	3D02036	04/02/03	04/03/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		113 %		78-129	"	"	"	"	
MW-7 (MMC0742-06) Water Sampled: 03/20/03 12:45 Received: 03/21/03 10:40									
Ethanol	ND	100	ug/l	1	3D03007	04/03/03	04/03/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	32	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	0.62	0.50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		96.8 %		78-129	"	"	"	"	



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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
RW-1 (MMC0742-07) Water Sampled: 03/20/03 13:05 Received: 03/21/03 10:40									
Ethanol	ND	100	ug/l	1	3D02036	04/02/03	04/03/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %		78-129	"	"	"	"	

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total Purgeable Hydrocarbons (C6-C10) and Volatile Organic Compounds by EPA method 8260B - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3D02035 - EPA 5030B P/T
Blank (3D02035-BLK1)

Prepared & Analyzed: 04/02/03

Benzene	ND	0.50	ug/l							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C6-C10)	ND	50	"							

<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.77		"	5.00		95.4	78-129			
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Laboratory Control Sample (3D02035-BS1)

Prepared & Analyzed: 04/02/03

Benzene	10.4	0.50	ug/l	10.0		104	78-124			
Toluene	10.0	0.50	"	10.0		100	78-129			

<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.55		"	5.00		91.0	78-129			
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Laboratory Control Sample (3D02035-BS2)

Prepared & Analyzed: 04/02/03

Benzene	5.71	0.50	ug/l	5.44		105	78-124			
Toluene	33.6	0.50	"	32.8		102	78-129			
Gasoline Range Organics (C6-C10)	373	50	"	440		84.8	70-113			

<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.61		"	5.00		92.2	78-129			
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Matrix Spike (3D02035-MS1)

Source: MMC0739-11

Prepared: 04/02/03

Analyzed: 04/03/03

Benzene	326	25	ug/l	272	58	98.5	78-124			
Toluene	1620	25	"	1640	ND	98.8	78-129			
Gasoline Range Organics (C6-C10)	19100	2500	"	22000	1600	79.5	70-113			

<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.60		"	5.00		92.0	78-129			
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Matrix Spike Dup (3D02035-MSD1)

Source: MMC0739-11

Prepared: 04/02/03

Analyzed: 04/03/03

Benzene	350	25	ug/l	272	58	107	78-124	7.10	12	
Toluene	1720	25	"	1640	ND	105	78-129	5.99	10	
Gasoline Range Organics (C6-C10)	20000	2500	"	22000	1600	83.6	70-113	4.60	9	

<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.56		"	5.00		91.2	78-129			
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Project Number: ARCO #4494, Oakland, CA
Project Manager: Scott Robinson

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04/07/03 16:12

Total Purgeable Hydrocarbons (C6-C10) and Volatile Organic Compounds by EPA method 8260B - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits RPD	RPD Limit	Notes
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Batch 3D02035 - EPA 5030B P/T

Matrix Spike Dup (3D02035-MSD1) Source: MMC0739-11 Prepared: 04/02/03 Analyzed: 04/03/03

Batch 3D02036 - EPA 5035

Blank (3D02036-BLK1) Prepared & Analyzed: 04/02/03

Benzene	ND	0.50	ug/l						
Toluene	ND	0.50	"						
Ethylbenzene	ND	0.50	"						
Xylenes (total)	ND	0.50	"						
Gasoline Range Organics (C6-C10)	ND	50	"						

Surrogate: 1,2-Dichloroethane-d4 5.39 " 5.00 108 78-129

Laboratory Control Sample (3D02036-BS1) Prepared & Analyzed: 04/02/03

Benzene	9.52	0.50	ug/l	10.0	95.2	78-124			
Toluene	9.30	0.50	"	10.0	93.0	78-129			

Surrogate: 1,2-Dichloroethane-d4 4.75 " 5.00 95.0 78-129

Laboratory Control Sample (3D02036-BS2) Prepared & Analyzed: 04/02/03

Benzene	5.07	0.50	ug/l	5.44	93.2	78-124			
Toluene	26.1	0.50	"	32.8	79.6	78-129			
Gasoline Range Organics (C6-C10)	423	50	"	440	96.1	70-113			

Surrogate: 1,2-Dichloroethane-d4 5.08 " 5.00 102 78-129

Laboratory Control Sample Dup (3D02036-BSD1) Prepared & Analyzed: 04/02/03

Benzene	9.70	0.50	ug/l	10.0	97.0	78-124	1.87	12	
Toluene	8.64	0.50	"	10.0	86.4	78-129	7.36	10	

Surrogate: 1,2-Dichloroethane-d4 5.11 " 5.00 102 78-129



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Total Purgeable Hydrocarbons (C6-C10) and Volatile Organic Compounds by EPA method 8260B - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3D02036 - EPA 5035

Matrix Spike (3D02036-MS1)

Source: MMC0742-02 Prepared: 04/02/03 Analyzed: 04/03/03

Benzene	5.03	0.50	ug/l	5.44	ND	92.5	78-124			
Toluene	26.3	0.50	"	32.8	0.24	79.5	78-129			
Gasoline Range Organics (C6-C10)	418	50	"	440	19	90.7	70-113			

Surrogate: 1,2-Dichloroethane-d4 5.28 " 5.00 106 78-129

Matrix Spike Dup (3D02036-MSD1)

Source: MMC0742-02 Prepared: 04/02/03 Analyzed: 04/03/03

Benzene	4.72	0.50	ug/l	5.44	ND	86.8	78-124	6.36	12	
Toluene	22.3	0.50	"	32.8	0.24	67.3	78-129	16.5	10	QM-07
Gasoline Range Organics (C6-C10)	343	50	"	440	19	73.6	70-113	19.7	9	QR-02

Surrogate: 1,2-Dichloroethane-d4 6.08 " 5.00 122 78-129

Batch 3D03007 - EPA 5030B P/T

Blank (3D03007-BLK1)

Prepared & Analyzed: 04/03/03

Benzene	ND	0.50	ug/l							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C6-C10)	ND	50	"							

Surrogate: 1,2-Dichloroethane-d4 4.75 " 5.00 95.0 78-129

Laboratory Control Sample (3D03007-BS1)

Prepared & Analyzed: 04/03/03

Benzene	9.29	0.50	ug/l	10.0		92.9	78-124			
Toluene	8.88	0.50	"	10.0		88.8	78-129			

Surrogate: 1,2-Dichloroethane-d4 4.72 " 5.00 94.4 78-129

Laboratory Control Sample (3D03007-BS2)

Prepared & Analyzed: 04/03/03

Benzene	4.99	0.50	ug/l	5.44		91.7	78-124			
Toluene	30.0	0.50	"	32.8		91.5	78-129			
Gasoline Range Organics (C6-C10)	322	50	"	440		73.2	70-113			

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Total Purgeable Hydrocarbons (C6-C10) and Volatile Organic Compounds by EPA method 8260B - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3D03007 - EPA 5030B P/T

Laboratory Control Sample (3D03007-BS2)

Prepared & Analyzed: 04/03/03

<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.51		ug/l	5.00		90.2	78-129			
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Matrix Spike (3D03007-MS1)

Source: MMC0869-03

Prepared & Analyzed: 04/03/03

Benzene	2640	5.0	ug/l	54.4	3700	NR	78-124			E, QM-4X
Toluene	323	5.0	"	328	14	94.2	78-129			
Gasoline Range Organics (C6-C10)	10500	500	"	4400	10000	11.4	70-113			QM-07

<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.57		"	5.00		91.4	78-129			
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Matrix Spike Dup (3D03007-MSD1)

Source: MMC0869-03

Prepared & Analyzed: 04/03/03

Benzene	2540	5.0	ug/l	54.4	3700	NR	78-124	3.86	12	E, QM-4X
Toluene	328	5.0	"	328	14	95.7	78-129	1.54	10	
Gasoline Range Organics (C6-C10)	10300	500	"	4400	10000	6.82	70-113	1.92	9	QM-07

<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.44		"	5.00		88.8	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
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Batch 3D02035 - EPA 5030B P/T

Blank (3D02035-BLK1)

Prepared & Analyzed: 04/02/03

Ethanol	ND	100	ug/l							
tert-Butyl alcohol	ND	20	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							

Surrogate: 1,2-Dichloroethane-d4 4.77 " 5.00 95.4 78-129

Laboratory Control Sample (3D02035-BS1)

Prepared & Analyzed: 04/02/03

Methyl tert-butyl ether	9.41	0.50	ug/l	10.0		94.1	63-137			
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Surrogate: 1,2-Dichloroethane-d4 4.55 " 5.00 91.0 78-129

Laboratory Control Sample (3D02035-BS2)

Prepared & Analyzed: 04/02/03

Methyl tert-butyl ether	8.34	0.50	ug/l	9.04		92.3	63-137			
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Surrogate: 1,2-Dichloroethane-d4 4.61 " 5.00 92.2 78-129

Matrix Spike (3D02035-MS1)

Source: MMC0739-11 Prepared: 04/02/03 Analyzed: 04/03/03

Methyl tert-butyl ether	1360	25	ug/l	452	1000	79.6	63-137			
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Surrogate: 1,2-Dichloroethane-d4 4.60 " 5.00 92.0 78-129

Matrix Spike Dup (3D02035-MSD1)

Source: MMC0739-11 Prepared: 04/02/03 Analyzed: 04/03/03

Methyl tert-butyl ether	1390	25	ug/l	452	1000	86.3	63-137	2.18	13	
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Surrogate: 1,2-Dichloroethane-d4 4.56 " 5.00 91.2 78-129

Batch 3D02036 - EPA 5035

Blank (3D02036-BLK1)

Prepared & Analyzed: 04/02/03

Ethanol	ND	100	ug/l							
tert-Butyl alcohol	ND	20	"							
Methyl tert-butyl ether	ND	0.50	"							

Sequoia Analytical - Morgan Hill

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



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

Project: ARCO #4494, Oakland, Ca
Project Number: ARCO #4494, Oakland, CA
Project Manager: Scott Robinson

MMC0742
Reported:
04/07/03 16:12

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	Limit	RPD	RPD Limit	Notes
Batch 3D02036 - EPA 5035										
Blank (3D02036-BLK1) Prepared & Analyzed: 04/02/03										
Di-isopropyl ether	ND	0.50	ug/l							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.39		"	5.00		108	78-129			
Laboratory Control Sample (3D02036-BS1) Prepared & Analyzed: 04/02/03										
Methyl tert-butyl ether	8.86	0.50	ug/l	10.0		88.6	63-137			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.75		"	5.00		95.0	78-129			
Laboratory Control Sample (3D02036-BS2) Prepared & Analyzed: 04/02/03										
Methyl tert-butyl ether	8.09	0.50	ug/l	9.04		89.5	63-137			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.08		"	5.00		102	78-129			
Laboratory Control Sample Dup (3D02036-BSD1) Prepared & Analyzed: 04/02/03										
Methyl tert-butyl ether	10.1	0.50	ug/l	10.0		101	63-137	13.1	13	QR-02
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.11		"	5.00		102	78-129			
Matrix Spike (3D02036-MS1) Source: MMC0742-02 Prepared: 04/02/03 Analyzed: 04/03/03										
Methyl tert-butyl ether	13.7	0.50	ug/l	9.04	6.1	84.1	63-137			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.28		"	5.00		106	78-129			
Matrix Spike Dup (3D02036-MSD1) Source: MMC0742-02 Prepared: 04/02/03 Analyzed: 04/03/03										
Methyl tert-butyl ether	17.2	0.50	ug/l	9.04	6.1	123	63-137	22.7	13	QR-02
<i>Surrogate: 1,2-Dichloroethane-d4</i>	6.08		"	5.00		122	78-129			
Batch 3D03007 - EPA 5030B P/T										
Blank (3D03007-BLK1) Prepared & Analyzed: 04/03/03										

Sequoia Analytical - Morgan Hill

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

Project: ARCO #4494, Oakland, Ca
Project Number: ARCO #4494, Oakland, CA
Project Manager: Scott Robinson

MMC0742
Reported:
04/07/03 16:12

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 3D03007 - EPA 5030B P/T										
Blank (3D03007-BLK1)					Prepared & Analyzed: 04/03/03					
Ethanol	ND	100	ug/l							
tert-Butyl alcohol	ND	20	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
<hr/>										
<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.75		"	5.00		95.0	78-129			
Laboratory Control Sample (3D03007-BS1)					Prepared & Analyzed: 04/03/03					
Methyl tert-butyl ether	8.27	0.50	ug/l	10.0		82.7	63-137			
<hr/>										
<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.72		"	5.00		94.4	78-129			
Laboratory Control Sample (3D03007-BS2)					Prepared & Analyzed: 04/03/03					
Methyl tert-butyl ether	7.12	0.50	ug/l	9.04		78.8	63-137			
<hr/>										
<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.51		"	5.00		90.2	78-129			
Matrix Spike (3D03007-MS1)					Source: MMC0869-03 Prepared & Analyzed: 04/03/03					
Methyl tert-butyl ether	396	5.0	ug/l	90.4	300	106	63-137			
<hr/>										
<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.57		"	5.00		91.4	78-129			
Matrix Spike Dup (3D03007-MSD1)					Source: MMC0869-03 Prepared & Analyzed: 04/03/03					
Methyl tert-butyl ether	400	5.0	ug/l	90.4	300	111	63-137	1.01	13	
<hr/>										
<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.44		"	5.00		88.8	78-129			



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

Project: ARCO #4494, Oakland, Ca
Project Number: ARCO #4494, Oakland, CA
Project Manager: Scott Robinson

MMC0742
Reported:
04/07/03 16:12

Notes and Definitions

- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.
- QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- QM-4X The spike recovery was outside of control limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
- QR-02 The RPD result exceeded the control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



Chain of Custody Record

Project Name: BTS-20 030320-MTZ
 BP BU/GEM CO Portfolio: _____
 BP Laboratory Contract Number: _____

On-site Time: 1015 Temp: 68°
 Off-site Time: 1410 Temp: 70°
 Sky Conditions: Clear
 Meteorological Events: _____
 Wind Speed: _____ Direction: _____

Date: 3-20-03 Requested Due Date (mm/dd/yy): _____

Send To:	BP/GEM Facility No.:	Consultant/Contractor: URS
Lab Name: SEQUOIA	BP/GEM Facility Address: 588 HEGENBERGER, OAKLAND, CA	Address: 600 12th St, Ste. 200
Lab Address: 885 Jarvis Dr. Morgan Hill, CA 95037	Site ID No. ARCO 4494	Oakland, CA 94609-4014
	Site Lat/Long:	e-mail EDD: syed_rehan@urscorp.com
	California Global ID #: T0600100104	Consultant/Contractor Project No.: 15-00004494.01 00427
Lab PM: Lalonya Pell	BP/GEM PM Contact: PAUL SUPPLE	Consultant Tele/Fax: 510-874-1735/510-874-3268
Tele/Fax: 408-778-9600 / 408-782-8308	Address:	Consultant/Contractor PM: Scott Robinson
Report Type & QC Level: Send BDF Reports	Tele/Fax:	Invoice to: Consultant/Contractor or BP/GEM (Circle one)
BP/GEM Account No.:		BP/GEM Work Release No: INTRIM -50443

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives				Requested Analysis					Sample Point Lat/Long and Comments			
			Soil/Solid	Water/Liquids	Sediments	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	TPH-G / BTEX (2004-2001) (3260)	TPH-D (8015)	MEBE (3021)	MTBE, TAME, ETBE DIBP, TBA (3260)	1,2-DCA & EDB (3260)		Etanol (3000)		
1	MW-1	1330	Y				MML0712	01	3				Y				Y	X	X		
2	MW-3	1225	Y					02	3				Y				Y	X	X		
3	MW-4	1125	Y					03	3				Y				Y	X	X		
4	MW-5	1145	Y					04	3				Y				Y	X	X		
5	MW-6	1205	Y					05	3				Y				Y	X	X		
6	MW-7	1245	Y					06	3				Y				Y	X	X		
7	RW-1	1305	Y					07	3				Y				Y	X	X		
8																					
9																					
10																					

Sampler's Name: <u>Michael Toll</u>	Relinquished By / Affiliation: <u>[Signature] / BTS</u>	Date: <u>3/21/03</u>	Time: <u>1009</u>	Accepted By / Affiliation: <u>[Signature]</u>	Date: <u>3/21/03</u>	Time: <u>1009</u>
Shipment Date: _____	Shipment Method: _____	Shipment Tracking No: _____	Special Instructions: <u>Address Invoice to BP/GEM but send to URS for approval</u>			

Seals in Place Yes No Temperature Blank Yes No Cooler Temperature on Receipt 5 °F Trip Blank Yes No

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: BP
 REC. BY (PRINT): [Signature]
 WORKORDER: RAMC0742

DATE REC'D AT LAB: 3/21/03
 TIME REC'D AT LAB: 10:20
 DATE LOGGED IN: 3-23-03

Drinking water for regulatory purposes: YES/NO YES NO
 Wastewater for regulatory purposes: YES/NO YES NO

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / <input checked="" type="radio"/> Absent Intact / Broken*	1		MW-1	(3) VOCS	HCL	L	3/21/03	<div style="font-size: 2em; font-weight: bold; transform: rotate(-45deg); display: inline-block;"> Stamped 3/21/03 </div>
2. Chain-of-Custody <input checked="" type="radio"/> Present <input type="radio"/> Absent*	2		-3	same				
3. Traffic Reports or Packing List: Present / <input checked="" type="radio"/> Absent	3		-4					
4. Airbill: Airbill / Sticker Present / <input checked="" type="radio"/> Absent	4		-5					
5. Airbill #:	5		-6					
6. Sample Labels: <input checked="" type="radio"/> Present <input type="radio"/> Absent	6		-7					
7. Sample IDs: <input checked="" type="radio"/> Listed <input type="radio"/> Not Listed on Chain-of-Custody	7		RW-1					
8. Sample Condition: <input checked="" type="radio"/> Intact <input type="radio"/> Broken* / Leaking*								
9. Does information on custody reports, traffic reports and sample labels agree? <input checked="" type="radio"/> Yes <input type="radio"/> No*								
10. Sample received within hold time: <input checked="" type="radio"/> Yes <input type="radio"/> No*								
11. Proper Preservatives used: <input checked="" type="radio"/> Yes <input type="radio"/> No*								
12. Temp Rec. at Lab: Is temp 4 +/- 2°C? <input checked="" type="radio"/> Yes <input type="radio"/> No** <small>(Acceptance range for samples requiring thermal pres.)</small>								

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



**Sequoia
Analytical**

Invoice To: Atlantic Richfield Company Attn: Robin Kirby Environmental Remediation P.O. Box 5077 Buena Park, CA 90622-5077		Agreement No. GEM-6-21890	Invoice Number: M3A0365
Invoice Date: 01/11/03		COC Work Auth#: Intrim- 50443	Remit Payment To: Accounts Receivable Sequoia Analytical 885 Jarvis Drive Morgan Hill, CA 950376 For Billing Inquiries please contact: 408-776-9600
Lab Work Order: MLL0548		Arco Site: ARCO #4494, Oakland, CA	
Contact: Latonya Pelt		GEM Engineer: Paul Supple	
		Consultant: URS Corporation	
		Consultant Contact: Scott Robinson	Terms: NET 30 Days Payment due: 02/10/03 Date Reported: 01/11/03

Quantity	Item	Analysis/Description	Matrix	Rush TAT	Rush Charge	Unit Cost	Extended Cost
1	n/a	EDF	Water	NA	None	\$ 20.00	\$ 20.00
2	8-190	Confirm All MTBE	Water	NA	None	\$ 45.00	\$ 90.00
7	8-50	TPH-G/B/M2	Water	NA	None	\$ 30.00	\$ 210.00

Invoice Total: \$ 320.00

Automatic invoice created for MLL0548 by Latonya Pelt on 01/11/03

Please pay from this invoice - no statement will be rendered unless requested.



Chain of Custody Record

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

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

Date: 12/12/02

Requested Due Date (mm/dd/yy) Standard **MLL0548**

Send To:
 Lab Name: SEQUOIA
 Lab Address: 685 Jarvis Dr.
Morgan Hill, CA 95037
 Lab PM: Latonya Pelt
 Tele/Fax: 408-776-9600 / 408-782-6308
 Report Type & QC Level: Send EDF Reports
 BP/GEM Account No.: _____

BP/GEM Facility No.: _____
 BP/GEM Facility Address: 566 HEGENBERGER, OAKLAND, CA
 Site ID No. ARCO 4494
 Site Lat/Long: _____
 California Global ID #: T0600100104
 BP/GEM PM Contact: PAUL SUPPLE
 Address: _____
 Tele/Fax: _____

Consultant/Contractor: URS
 Address: 500 12th St., Ste. 200
Oakland, CA 94609-4014
 e-mail EDD: syed_rehan@urscorp.com
 Consultant/Contractor Project No.: JS-00004494.01 00427
 Consultant Tele/Fax: 510-874-1735/510-874-3268
 Consultant/Contractor PM: Scott Robinson
 Invoice to: Consultant/Contractor or (BP/GEM) (circle one)
 BP/GEM Work Release No: INTRIM -50443

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives				Requested Analysis						Sample Point Lat/Long and Comments	
			Soil/Solid	Water/Liquid	Sediments	Air			Unpreserved	H ₂ SO ₄	HNO ₃	DCI	TPH/G/BTEX (8015/8021)	TPH D (8015)	MTBE (8021)	MTBE, TAMS, ETBE DRE, TBA (8260)	1,2-DCA & HDH (8260)			
1	MW-1 ✓	1545	X				01	6					X	X						
2	MW-3 ✓	1315	X				02	6					X	X						
3	MW-4 ✓	1245	X				03	6					X	X						
4	MW-5 ✓	1435	X				04	6					X	X						
5	MW-6 ✓	1500	X				05	6					X	X						
6	MW-7 ✓	1400	X				06	6					X	X						
7	RW-1 ✓	1525	X				07	6					X	X						
8																				
9																				
10																				

Sampler's Name:	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
<u>Brian Adams</u>	<u>[Signature]</u>	<u>12/13/02</u>	<u>1012</u>	<u>[Signature]</u>	<u>12/13/02</u>	<u>1012</u>
<u>Shipment Date:</u>	<u>[Signature]</u>	<u>12/13/02</u>		<u>[Signature]</u>	<u>12/13/02</u>	<u>1440</u>
<u>Shipment Method:</u>						
<u>Shipment Tracking No:</u>						

Special Instructions: Address Invoice to BP/GEM but send to URS for approval CONFIRM ALL MTBE K103 BY 8260

Seals in Place Yes No ✓ Temperature Blank Yes No ✓ Cooler Temperature on Receipt: 3 °F/C Trip Blank Yes No ✓

ATTACHMENT C
HISTORIC GROUNDWATER DATA

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

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

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

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

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

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

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

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

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

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		

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

Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
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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				Total Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
					Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)					
A-11	08/12/97	53.74	11.07	42.67	Not Sampled: Well Sampled Semiannually								
A-11	11/14/97	53.74	10.58	43.16	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.6	
A-11	03/18/98	53.74	8.14	45.60	Not Sampled: Well Sampled Semiannually								
A-11	05/19/98	53.74	9.40	44.34	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.13	P
A-11	07/29/98	53.74	10.32	43.42	Not Sampled: Well Sampled Semiannually								
A-11	10/09/98	53.74	10.91	42.83	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.0	NP
A-11	02/19/99	53.74	6.77	46.97	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.8	NP
A-11	06/02/99	53.74	10.95	42.79	<50	<0.5	<0.5	<0.5	<0.5	6	NA	1.38	NP
A-11	08/26/99	53.74	11.05	42.69	Not Sampled: Well Sampled Semiannually							0.49	
A-11	10/26/99	53.74	10.81	42.93	<50	<0.5	<0.5	<0.5	<1	4	NA	1.27	NP
A-11	02/25/00	53.74	6.70	47.04	Not Sampled: Well Sampled Semiannually								
A-12	03/26/96	52.05	7.83	44.22	Not Sampled: Well Sampled Semiannually								
A-12	05/22/96	52.05	7.80	44.25	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	
A-12	08/22/96	52.05	9.97	42.08	Not Sampled: Well Sampled Semiannually								
A-12	12/19/96	52.05	8.18	43.87	85	<0.5	<0.5	<0.5	<0.5	170	NA	NM	
A-12	04/01/97	52.05	10.30	41.75	Not Sampled: Well Sampled Semiannually								
A-12	05/27/97	52.05	10.05	42.00	50	12	<0.5	<0.5	<0.5	96	NA	NM	
A-12	08/12/97	52.05	10.46	41.59	Not Sampled: Well Sampled Semiannually								
A-12	11/14/97	52.05	9.70	42.35	<50	<0.5	<0.5	<0.5	<0.5	75	NA	7.0	
A-12	03/18/98	52.05	8.15	43.90	Not Sampled: Well Sampled Semiannually								
A-12	05/19/98	52.05	9.15	42.90	<50	<0.5	<0.5	<0.5	<0.5	29	NA	1.47	P
A-12	07/29/98	52.05	9.38	42.67	Not Sampled: Well Sampled Semiannually								
A-12	10/09/98	52.05	10.21	41.84	<50	<0.5	<0.5	<0.5	<0.5	7	NA	2.0	NP
A-12	02/19/99	52.05	6.96	45.09	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	5.2	NP
A-12	06/02/99	52.05	10.25	41.80	<50	<0.5	<0.5	<0.5	<0.5	7	NA	1.38	NP
A-12	08/26/99	52.05	9.91	42.14	Not Sampled: Well Sampled Semiannually							0.51	
A-12	10/26/99	52.05	9.73	42.32	<50	<0.5	<0.5	<0.5	<1	12	NA	1.09	NP
A-12	02/25/00	52.05	6.97	45.08	Not Sampled: Well Sampled Semiannually								
A-13	03/26/96	55.11			----- Well Inaccessible -----								
A-13	05/22/96	55.11			----- Well Inaccessible -----								

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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)
A-13	08/22/96	55.11											
A-13	12/19/96	55.11											
A-13	04/01/97	55.11											
A-13	05/27/97	55.11											
A-13	08/12/97	55.11											
A-13	11/14/97	55.11											
A-13	03/18/98	55.11											
A-13	05/19/98	55.11											
A-13	07/29/98	55.11											
A-13	10/09/98	55.11											
A-13	02/19/99	55.11											
A-13	06/02/99	55.11											
A-13	08/26/99	55.11											
A-13	10/26/99	55.11											
A-13	02/25/00	55.11											
AR-1	03/26/96	54.72	8.13	46.59	6,200	110	64	38	520	NA	NA	NM	
AR-1	05/22/96	54.72	8.57	46.15	NS	NS	NS	NS	NS	NS	NS	NM	
AR-1	08/22/96	54.72	10.97	43.75	5,600	100	28	29	310	960	NA	NM	
AR-1	12/19/96	54.72	8.93	45.79	Not Sampled: Well Removed from Sampling Program								
AR-1	04/01/97	54.72	11.78	42.94	Not Sampled: Well Removed from Sampling Program								
AR-1	05/27/97	54.72	10.76	43.96	Not Sampled: Well Removed from Sampling Program								
AR-1	08/12/97	54.72	11.40	43.32	Not Sampled: Well Removed from Sampling Program								
AR-1	11/14/97	54.72	10.80	43.92	Not Sampled: Well Removed from Sampling Program								
AR-1	03/18/98	54.72	NM	NM	Not Sampled: Well Removed from Sampling Program								
AR-1	05/19/98	54.72	NM	NM	Not Sampled: Well Removed from Sampling Program								
AR-1	07/29/98	54.72	10.17	44.55	Not Sampled: Well Removed from Sampling Program								
AR-1	10/09/98	54.72	11.25	43.47	Not Sampled: Well Removed from Sampling Program								
AR-1	02/19/99	54.72	7.02	47.70	Not Sampled: Well Removed from Sampling Program								
AR-1	06/02/99	54.72	11.00	43.72	Not Sampled: Well Removed from Sampling Program								
AR-1	08/26/99	54.72	10.96	43.76	Not Sampled: Well Removed from Sampling Program								0.39
AR-1	10/26/99	54.72	10.68	44.04	Not Sampled: Well Removed from Sampling Program								1.39

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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								
AR-2	02/25/00	54.77	2.33	52.44	Not Sampled: Well Removed from Sampling Program								
AR-3	03/26/96	54.19	7.95	46.24	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NM	
AR-3	05/22/96	54.19	8.30	45.89	NS	NS	NS	NS	NS	NS	NS	NM	
AR-3	08/22/96	54.19	10.84	43.35	Not Sampled: Well Removed from Sampling Program								
AR-3	12/19/96	54.19	8.56	45.63	Not Sampled: Well Removed from Sampling Program								
AR-3	04/01/97	54.19	11.24	42.95	Not Sampled: Well Removed from Sampling Program								
AR-3	05/27/97	54.19	10.67	43.52	Not Sampled: Well Removed from Sampling Program								
AR-3	08/12/97	54.19	11.10	43.09	Not Sampled: Well Removed from Sampling Program								
AR-3	11/14/97	54.19	10.60	43.59	Not Sampled: Well Removed from Sampling Program								
AR-3	03/18/98	54.19	NM	NM	Not Sampled: Well Removed from Sampling Program								
AR-3	05/19/98	54.19	NM	NM	Not Sampled: Well Removed from Sampling Program								
AR-3	07/29/98	54.19	9.95	44.24	Not Sampled: Well Removed from Sampling Program								
AR-3	10/09/98	54.19	11.20	42.99	Not Sampled: Well Removed from Sampling Program								

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

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

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

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

**Table 2
Groundwater Flow Direction and Gradient**

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

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

ATTACHMENT D

EDCC REPORT AND EDF/GEOWELL SUBMITTAL CONFIRMATION

Error Summary Log

04/09/03

EDF 1.2i All files present in deliverable.

Laboratory:	Sequoia Analytical Laboratories, Inc., Morgan Hill, CA
Project Name:	ARCO #4494, Oakland, Ca
Work Order Number:	MMC0742
Global ID:	T0600100104
Lab Report Number:	MMC0742040720031612

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotcti	Run	Sub
MMC07420407200 MW-1 31612		MMC074201	W	CS	8260+OX	SW5030B	03/20/03	04/02/03	04/03/03	3D02035	1	
MMC07420407200 MW-1 31612		MMC074201	W	CS	8260TPH	SW5030B	03/20/03	04/02/03	04/03/03	3D02035	1	
MMC07420407200 MW-3 31612		MMC074202	W	CS	8260+OX	SW5035	03/20/03	04/02/03	04/03/03	3D02036	1	
MMC07420407200 MW-3 31612		MMC074202	W	CS	8260TPH	SW5035	03/20/03	04/02/03	04/03/03	3D02036	1	
MMC07420407200 MW-4 31612		MMC074203	W	CS	8260+OX	SW5035	03/20/03	04/02/03	04/03/03	3D02036	1	
MMC07420407200 MW-4 31612		MMC074203	W	CS	8260TPH	SW5035	03/20/03	04/02/03	04/03/03	3D02036	1	
MMC07420407200 MW-5 31612		MMC074204	W	CS	8260+OX	SW5035	03/20/03	04/02/03	04/03/03	3D02036	1	
MMC07420407200 MW-5 31612		MMC074204	W	CS	8260TPH	SW5035	03/20/03	04/02/03	04/03/03	3D02036	1	
MMC07420407200 MW-6 31612		MMC074205	W	CS	8260+OX	SW5035	03/20/03	04/02/03	04/03/03	3D02036	1	
MMC07420407200 MW-6 31612		MMC074205	W	CS	8260TPH	SW5035	03/20/03	04/02/03	04/03/03	3D02036	1	
MMC07420407200 MW-7 31612		MMC074206	W	CS	8260+OX	SW5030B	03/20/03	04/03/03	04/03/03	3D03007	1	
MMC07420407200 MW-7 31612		MMC074206	W	CS	8260TPH	SW5030B	03/20/03	04/03/03	04/03/03	3D03007	1	
MMC07420407200 RW-1 31612		MMC074207	W	CS	8260+OX	SW5035	03/20/03	04/02/03	04/03/03	3D02036	1	
MMC07420407200 RW-1 31612		MMC074207	W	CS	8260TPH	SW5035	03/20/03	04/02/03	04/03/03	3D02036	1	
		MMC073911	W	NC	8260+OX	SW5030B	//	04/02/03	04/03/03	3D02035	1	
		MMC073911	W	NC	8260TPH	SW5030B	//	04/02/03	04/03/03	3D02035	1	
		MMC086903	W	NC	8260+OX	SW5030B	//	04/03/03	04/03/03	3D03007	1	
		MMC086903	W	NC	8260TPH	SW5030B	//	04/03/03	04/03/03	3D03007	1	
		3D02035BS1	WQ	BS1	8260+OX	SW5030B	//	04/02/03	04/02/03	3D02035	1	
		3D02035BS1	WQ	BS1	8260TPH	SW5030B	//	04/02/03	04/02/03	3D02035	1	
		3D02035BS2	WQ	BS2	8260+OX	SW5030B	//	04/02/03	04/02/03	3D02035	1	
		3D02035BS2	WQ	BS2	8260TPH	SW5030B	//	04/02/03	04/02/03	3D02035	1	
		3D02035BLK1	WQ	LB1	8260+OX	SW5030B	//	04/02/03	04/02/03	3D02035	1	
		3D02035BLK1	WQ	LB1	8260TPH	SW5030B	//	04/02/03	04/02/03	3D02035	1	
		3D02035MS1	W	MS1	8260+OX	SW5030B	//	04/02/03	04/03/03	3D02035	1	
		3D02035MS1	W	MS1	8260TPH	SW5030B	//	04/02/03	04/03/03	3D02035	1	

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run Sub
		3D02035MSD1	W	SD1	8260+OX	SW5030B	//	04/02/03	04/03/03	3D02035	1
		3D02035MSD1	W	SD1	8260TPH	SW5030B	//	04/02/03	04/03/03	3D02035	1
		3D02036BSD1	WQ	BD1	8260+OX	SW5035	//	04/02/03	04/02/03	3D02036	1
		3D02036BSD1	WQ	BD1	8260TPH	SW5035	//	04/02/03	04/02/03	3D02036	1
		3D02036BS1	WQ	BS1	8260+OX	SW5035	//	04/02/03	04/02/03	3D02036	1
		3D02036BS1	WQ	BS1	8260TPH	SW5035	//	04/02/03	04/02/03	3D02036	1
		3D02036BS2	WQ	BS2	8260+OX	SW5035	//	04/02/03	04/02/03	3D02036	1
		3D02036BS2	WQ	BS2	8260TPH	SW5035	//	04/02/03	04/02/03	3D02036	1
		3D02036BLK1	WQ	LB1	8260+OX	SW5035	//	04/02/03	04/02/03	3D02036	1
		3D02036BLK1	WQ	LB1	8260TPH	SW5035	//	04/02/03	04/02/03	3D02036	1
		3D02036MS1	W	MS1	8260+OX	SW5035	//	04/02/03	04/03/03	3D02036	1
		3D02036MS1	W	MS1	8260TPH	SW5035	//	04/02/03	04/03/03	3D02036	1
		3D02036MSD1	W	SD1	8260+OX	SW5035	//	04/02/03	04/03/03	3D02036	1
		3D02036MSD1	W	SD1	8260TPH	SW5035	//	04/02/03	04/03/03	3D02036	1
		3D03007BS1	WQ	BS1	8260+OX	SW5030B	//	04/03/03	04/03/03	3D03007	1
		3D03007BS1	WQ	BS1	8260TPH	SW5030B	//	04/03/03	04/03/03	3D03007	1
		3D03007BS2	WQ	BS2	8260+OX	SW5030B	//	04/03/03	04/03/03	3D03007	1
		3D03007BS2	WQ	BS2	8260TPH	SW5030B	//	04/03/03	04/03/03	3D03007	1
		3D03007BLK1	WQ	LB1	8260+OX	SW5030B	//	04/03/03	04/03/03	3D03007	1
		3D03007BLK1	WQ	LB1	8260TPH	SW5030B	//	04/03/03	04/03/03	3D03007	1
		3D03007MS1	W	MS1	8260+OX	SW5030B	//	04/03/03	04/03/03	3D03007	1
		3D03007MS1	W	MS1	8260TPH	SW5030B	//	04/03/03	04/03/03	3D03007	1
		3D03007MSD1	W	SD1	8260+OX	SW5030B	//	04/03/03	04/03/03	3D03007	1
		3D03007MSD1	W	SD1	8260TPH	SW5030B	//	04/03/03	04/03/03	3D03007	1

EDFSAMP: Error Summary Log

04/18/03

Error type	Logcode	Projname	Npdiwo	Sampleid	Matrix
There are no errors in this data file					

EDFTEST: Error Summary Log

04/18/03

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

EDFRES: Error Summary Log

04/18/03

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

EDFQC: Error Summary Log

04/18/03

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

EDFCL: Error Summary Log

04/18/03

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

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Facility Name: ARCO

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