

URS

70. 1309

February 14, 2003

Alameda County
FEB 28 2003
Environmental Health

Mr. Paul Supple
Atlantic Richfield Company
P.O. Box 6549
Moraga, CA 94570

Re: Fourth Quarter 2002 Groundwater Monitoring Report
ARCO Service Station #0601
712 Lewelling Boulevard
San Leandro, California
URS Project #38465882

Dear Mr. Supple:

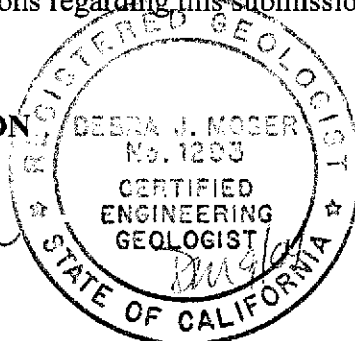
On behalf of Atlantic Richfield Company (ARCO-an affiliated company of the Group Environmental Management Company), URS Corporation (URS) is submitting the *Fourth Quarter 2002 Groundwater Monitoring Report* for the ARCO Service Station #0601, located at 712 Lewelling Boulevard, San Leandro, California.

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

Sincerely,

URS CORPORATION

Scott Robinson
Scott Robinson
Project Manager



Debra Moser
Debra Moser, R.G.
Project Geologist

Enclosure: Fourth Quarter 2002 Groundwater Monitoring Report

cc: Mr. Scott Seery, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, 2nd Floor Alameda, CA 94502
Mr. Mike Bakaldin - City of San Leandro, Environmental Services Division, 835 East 14th Street San Leandro, CA 94577

R E P O R T

Alameda County

FEB 28 2003

Environmental Health

**FOURTH QUARTER 2002
GROUNDWATER MONITORING**

**ARCO SERVICE STATION #0601
712 LEWELLING BOULEVARD,
SAN LEANDRO, CALIFORNIA**

Prepared for
Atlantic Richfield Company

February 14, 2003

URS

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

38465882

Date: February 14, 2003

Quarter: 4Q 02

ATLANTIC RICHFIELD COMPANY QUARTERLY GROUNDWATER MONITORING REPORT

Facility No.:	0601	Address:	712 Lewelling Boulevard, San Leandro, CA
Atlantic Richfield Co. Environmental Engineer:	Paul Supple		
Consulting Co./Contact Person:	URS Corporation/ Scott Robinson		
Consultant Project No.:	38465882		
Primary Agency:	ACHCSA		

WORK PERFORMED THIS QUARTER (Fourth – 2002):

1. Performed fourth quarter 2002 monitoring event on October 16, 2002.
2. Prepared third quarter 2002 groundwater monitoring report.

WORK PROPOSED FOR NEXT QUARTER (First – 2003):

1. Perform first quarter 2003 groundwater monitoring event.
2. Prepare and submit fourth quarter 2002 groundwater monitoring report.

Current Phase of Project	GW monitoring/sampling
Frequency of Groundwater Sampling:	Annual (1 st Quarter): MW-2, MW-11, MW-13 Semi-Annual (1 st /3 rd Quarter) MW-9, MW-15 Quarterly: MW-1, MW-3 through MW-8 MW-10, MW-14
Frequency of Groundwater Monitoring:	Quarterly
Is Free Product (FP) Present On-Site:	Sheen (MW-1)
FP Recovered this Quarter:	None
Cumulative FP Recovered to Date:	3.45 gallons, Well MW-1
Bulk Soil Removed This Quarter:	None
Bulk Soil Removed to Date:	1,565 cubic yards of TPH impacted soil
Current Remediation Techniques:	Natural Attenuation
Approximate Depth to Groundwater:	6.69 (MW-15) to 10.10 (MW-14) feet
Groundwater Gradient (direction)	East-Southeast
Groundwater Gradient (magnitude)	0.022 feet per foot

DISCUSSION:

TPH-g was detected in four of the seven wells sampled this quarter at concentrations ranging from 2,000 µg/L (MW-4) to 42,000 µg/L (MW-3). Benzene was detected in four wells at concentrations ranging from 220 µg/L (MW-4) to 2,100 µg/L (MW-1). MTBE was not detected in any of the wells. A hydrocarbon sheen was detected in well MW-1. Well MW-1 was analyzed for semi-volatile organic compounds 2-Methylnaphthalene and Naphthalene. The compounds were detected at concentrations of 490 µg/L and 1,500 µg/L, respectively. Wells MW-6 and MW-7 were dry and not sampled this quarter.

URS recommends reducing the sampling frequency in the following wells, due to consistently low or non-detectable hydrocarbon concentrations for the past two years: MW-9 change to annual, MW-10 change to semiannual, MW-14 change to semi-annual, MW-15 change to annual.

ATTACHMENTS:

- Table 1 – Groundwater Elevation and Analytical Data
- Table 2 – Groundwater Flow Direction and Gradient
- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map – October 16, 2002
- Attachment A – Field Procedures and Field Data Sheets
- Attachment B – Laboratory Procedures, Certified Analytical Reports, and Chain-of-Custody Records
- Attachment C – Historic Groundwater Data
- Attachment D – EDCC Report and EDF/Geowell Submittal Confirmation

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station # 601
712 Lewelling Boulevard
San Leandro, California

Well Number	Date Sampled	Top of Riser Elevation (feet)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet)	TPH as		Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Semi Volatiles (µg/L)
					Gasoline (µg/L)	Benzene (µg/L)					
MW-1	06/20/00	19.19	8.20	10.99	23,000	2,400	50	1,800	680	<200	NA
	09/29/00		8.55	10.64	23,600	2,880	<50	2,130	871	<250	430 ^a /1,100 ^b
	12/17/00		8.28	10.91	21,600	1,980	<50	1,610	664	<250	270 ^a /900 ^b
	03/28/01		8.13	11.06	19,800	2,310	<100	2,010	517	<500	11(c)
	06/20/01		8.60	10.59	17,000	2,200	23	1,800	320	100	NA
	09/22/01		9.03	10.16	20,000	2,900	<200	2,500	270	<1000	360 ^a , 980 ^b
	12/27/01		7.93	11.26	15,000	2,000	<50	1,700	140	290	370 ^a , 1,200 ^b
	03/15/02		7.89	11.30	12,000	1,800	<50	1,400	79	<250	220 ^a , 880 ^b
	04/18/02		7.05	12.14	16,000	3,000	180	2,600	320	<250	250 ^a , 880 ^b
	07/23/02	NP	8.7	10.49	14,000 ^c	3,200	<50	2,100	<50	<250	470 ^a , 1,100 ^b
	10/16/02	NP	9.12	10.07	14,000 ^d	2,100	<25	2,000	31	<120	490 ^a , 1,500 ^b
MW-2	06/20/00	21.12	7.12	14.00	NS	NS	NS	NS	NS	NS	NS
	09/29/00		7.60	13.52	NS	NS	NS	NS	NS	NS	NS
	12/17/00		7.42	13.70	NS	NS	NS	NS	NS	NS	NS
	03/28/01		6.84	14.28	838	18.1	<5.0	7.63	5.98	39.5	NA
	06/20/01		7.66	13.46	NS	NS	NS	NS	NS	NS	NS
	09/22/01		8.08	13.04	NS	NS	NS	NS	NS	NS	NA
	12/27/01		6.48	14.64	NS	NS	NS	NS	NS	NS	NS
	03/15/02		6.84	14.28	100	<0.5	<0.5	2.5	<0.5	75	NA
	04/18/02		6.19	14.93	NS	NS	NS	NS	NS	NS	NS
	07/23/02		7.73	13.39	NS	NS	NS	NS	NS	NS	NS
	10/16/02		8.10	13.02	NS	NS	NS	NS	NS	NS	NS

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Well Number	Date Sampled	Top of Riser Elevation (feet)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet)	TPH as		Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Semi Volatiles (µg/L)
					Gasoline (µg/L)	Benzene (µg/L)					
MW-3	06/20/00	22.99	6.22	16.77	45,000	670	990	2,400	12000	<500	NA
	09/29/00		7.20	15.79	51,000	860	1,120	2,720	12900	<250	NA
	12/17/00		NM	NM	NS	NS	NS	NS	NS	NS	NA
	03/28/01		6.10	16.89	43,500	804	<200	250	11,000	<1,000	NA
	06/20/01		6.14	16.85	62,000	1,000	850	2,800	13,000	<2,500	NA
	09/22/01		7.24	15.75	53,000	1,200	1,200	3,100	13,000	<1,000	NA
	12/27/01		7.00	15.99	44,000	860	840	2,300	10,000	<250	NA
	03/15/02		7.02	15.97	43,000	1,000	810	2,300	11,000	<250	NA
	04/18/02		NM	NM	NS	NS	NS	NS	NS	NS	NS
	07/23/02	P	7.22	15.77	45,000 ^d	750	570	2,100	10,000	<250	NA
	10/16/02	P	7.54	15.45	42,000 ^d	780	620	2,500	11,000	<250	NA
MW-4	06/20/00	22.38	6.46	15.92	2,700	210	20	94	520	46	NA
	09/29/00		DRY	DRY	NS	NS	NS	NS	NS	NS	NS
	12/17/00		DRY	DRY	NS	NS	NS	NS	NS	NS	NS
	03/28/01		7.49	14.89	DRY	DRY	DRY	DRY	DRY	DRY	NA
	06/20/01		7.21	15.17	13,000	690	170	330	1,400	110	NA
	09/22/01		7.43	14.95	6,700	650	110	410	1,800	100	NA
	12/27/01		7.32	15.06	1,200	47	15	46	250	15	NA
	03/15/02		7.43	14.95	490	34	7.4	26	110	12	NA
	04/18/02		7	15.38	<50	0.57	0.83	<0.5	1.1	3.7	NA
	07/23/02	NP	7.70	14.68	820 ^d	80	12	23	190	41	NA
	10/16/02	NP	7.75	14.63	2,000 ^d	220	25	140	570	<25	NA

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					Gasoline (µg/L)							
MW-5	06/20/00	22.45	6.78	15.67	10,000		3,000	650	260	700	<200	NA
	09/29/00		DRY	DRY	NS		NS	NS	NS	NS	NS	NS
	12/17/00		DRY	DRY	NS		NS	NS	NS	NS	NS	NS
	03/28/01		6.48	15.97	23,400		4,160	3,450	728	3,090	<250	NA
	06/20/01		7.26	15.19	120,000		1,200	49	190	540	<100	NA
	09/22/01		DRY	DRY	NS		NS	NS	NS	NS	NS	NA
	12/27/01		6.56	15.89	16,000		1,500	2,700	730	3,200	<250	NA
	03/15/02		6.9	15.55	20,000		2,600	3,300	1,000	4,000	<250	NA
	04/18/02		6.17	16.28	17,000		3,200	2,900	790	3,000	<250	NA
	07/23/02	NP	7.36	15.09	4,600 ^d		1,400	30	160	470	110	NA
	10/16/02	NP	7.66	14.79	5,400 ^d		1,300	<20	62	150	<100	NA
MW-6	06/20/00	22.77	DRY	DRY	NS		NS	NS	NS	NS	NS	NS
	09/29/00		DRY	DRY	NS		NS	NS	NS	NS	NS	NS
	12/17/00		DRY	DRY	NS		NS	NS	NS	NS	NS	NS
	03/28/01		7.57	15.2	DRY		DRY	DRY	DRY	DRY	DRY	NA
	06/20/01		DRY	DRY	DRY		DRY	DRY	DRY	DRY	DRY	DRY
	09/22/01		DRY	DRY	NS		NS	NS	NS	NS	NS	NA
	12/27/01		7.21	15.56	<50		3	1	1.1	2	<2.5	NA
	03/15/02		7.51	15.26	2,100		380	8.6	110	17	<25	NA
	04/18/02		6.89	15.88	2,200		440	12	96	14	52	NA
	07/23/02	NP	8.50	14.27	NS		NS	NS	NS	NS	NS	NS
	10/16/02		DRY	DRY	NS		NS	NS	NS	NS	NS	NS

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					as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Semi Volatiles (µg/L)
MW-7	06/20/00	22.89	DRY	DRY	NS	NS	NS	NS	NS	NS	NS
	09/29/00		DRY	DRY	NS	NS	NS	NS	NS	NS	NS
	12/17/00		8.93	13.96	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	03/28/01		8.35	14.54	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	06/20/01		DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	09/22/01		DRY	DRY	NS	NS	NS	NS	NS	NS	NA
	12/27/01		8.42	14.47	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	03/15/02		8.54	14.35	<50	1.3	2.6	1.1	5.4	<2.5	NA
	04/18/02		7.84	15.05	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	07/23/02		9.51	13.38	NS	NS	NS	NS	NS	NS	NS
	10/16/02	NP	DRY	DRY	NS	NS	NS	NS	NS	NS	NS
MW-8	06/20/00	20.89	7.23	13.66	150	<0.5	0.9	<0.5	<1.0	310	NA
	09/29/00		7.91	12.98	149	<0.5	<0.5	<0.5	<0.5	438	NA
	12/17/00		7.11	13.78	662	<5.0	<5.0	<5.0	<5.0	273	NA
	03/28/01		6.88	14.01	840	<5.0	<5.0	<5.0	<5.0	320	NA
	06/20/01		7.25	13.64	230	<0.5	<0.5	<0.5	0.65	330	NA
	09/22/01		8.14	12.75	<50	<0.5	<0.5	<0.5	<0.5	6.5	NA
	12/27/01		6.73	14.16	780	<0.5	<0.5	0.6	0.89	160	NA
	03/15/02		6.94	13.95	1,100	<10	<10	<10	<10	830	NA
	04/18/02		NM	NM	NS	NS	NS	NS	NS	NS	NS
	07/23/02	NP	7.89	13	<50	<0.50	<0.50	<0.50	<0.50	8.7	NA
	10/16/02	NP	8.13	12.76	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA

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Well Number	Date Sampled	Top of Riser Elevation (feet)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet)	TPH as						
					Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Semi Volatiles (µg/L)
MW-9	06/20/00	22.26	8.01	14.25	NS	NS	NS	NS	NS	NS	NS
	09/29/00		8.44	13.82	<50	<0.5	<0.5	<0.5	<0.5	3.44	NA
	12/17/00		7.84	14.42	NS	NS	NS	NS	NS	NS	NS
	03/28/01		7.58	14.68	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	06/20/01		7.75	14.51	NS	NS	NS	NS	NS	NS	NS
	9/22/2001		8.69	13.57	<50	<0.5	<0.5	<0.5	<0.5	7.8	NA
	12/27/2001		7.15	15.11	NS	NS	NS	NS	NS	NS	NS
	03/15/02		7.23	15.03	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	04/18/02		6.79	15.47	NS	NS	NS	NS	NS	NS	NS
	07/23/02		8.3	13.96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA
	10/16/02		8.64	13.62	NS	NS	NS	NS	NS	NS	NS
MW-10	06/20/00	21.33	7.99	13.34	<0.5	<0.5	<0.5	<0.5	<0.5	<3.0	NA
	09/29/00		8.40	12.93	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	12/17/00		7.91	13.42	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	03/28/01		7.47	13.86	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	06/20/01		8.11	13.22	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	09/22/01		8.77	12.56	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	12/27/01		6.94	14.39	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	03/15/02		7.48	13.85	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	04/18/02		6.77	14.56	<50	<0.5	<0.5	<0.5	<0.5	3.8	NA
	07/23/02		8.42	12.91	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA
	10/16/02		8.77	12.56	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA

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Well Number	Date Sampled	Top of Riser Elevation (feet)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet)	TPH				Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Semi Volatiles (µg/L.)
					as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)					
MW-11	06/20/00	20.97	8.18	12.79	NS	NS	NS		NS	NS	NS	NS
	09/29/00		8.60	12.37	NS	NS	NS		NS	NS	NS	NS
	12/17/00		8.48	12.49	NS	NS	NS		NS	NS	NS	NS
	03/28/01		7.88	13.09	<50	<0.5	<0.5	< 0.5	<0.5	<2.5		NA
	06/20/01		8.48	12.49	NS	NS	NS		NS	NS	NS	NS
	09/22/01		9.11	11.86	NS	NS	NS		NS	NS	NS	NS
	12/27/01		7.50	13.47	NS	NS	NS		NS	NS	NS	NS
	03/15/02		7.87	13.1	<50	< 0.5	< 0.5	< 0.5	<0.5	<2.5		NA
	04/18/02		7.22	13.75	NS	NS	NS		NS	NS	NS	NS
	07/23/02		8.76	12.21	NS	NS	NS		NS	NS	NS	NS
	10/16/02		9.15	11.82	NS	NS	NS		NS	NS	NS	NS
MW-12	06/20/00	20.11	8.55	11.56	NS	NS	NS		NS	NS	NS	NS
	09/29/00		8.98	11.13	NS	NS	NS		NS	NS	NS	NS
	12/17/00		8.76	11.35	NS	NS	NS		NS	NS	NS	NS
	03/28/01		8.31	11.8	<50	<0.5	<0.5	< 0.5	<0.5	<2.5		NA
	06/20/01		9.10	11.01	NS	NS	NS		NS	NS	NS	NS
	09/22/01		9.48	10.63	NS	NS	NS		NS	NS	NS	NS
	12/27/01		7.78	12.33	NS	NS	NS		NS	NS	NS	NS
	03/15/02		8.22	11.89	<50	< 0.5	< 0.5	< 0.5	<0.5	<2.5		NA
	04/18/02		7.65	12.46	NS	NS	NS		NS	NS	NS	NS
	07/23/02		9.18	10.93	NS	NS	NS		NS	NS	NS	NS
	10/16/02		9.51	10.60	NS	NS	NS		NS	NS	NS	NS

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Well Number	Date Sampled	Top of Riser Elevation (feet)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet)	TPH as			Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Semi Volatiles (µg/L)
					Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)				
MW-13	06/20/00	20.75	7.56	13.19	NS	NS	NS	NS	NS	NS	NS
	09/29/00		8.27	12.48	NS	NS	NS	NS	NS	NS	NS
	12/17/00		8.09	12.66	NS	NS	NS	NS	NS	NS	NS
	03/28/01		7.69	13.06	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	06/20/01		8.46	12.29	NS	NS	NS	NS	NS	NS	NS
	09/22/01		8.57	12.18	NS	NS	NS	NS	NS	NS	NS
	12/27/01		7.14	13.61	NS	NS	NS	NS	NS	NS	NS
	03/15/02		7.62	13.13	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	04/18/02		6.91	13.84	NS	NS	NS	NS	NS	NS	NS
	07/23/02		8.50	12.25	NS	NS	NS	NS	NS	NS	NS
	10/16/02		8.74	12.01	NS	NS	NS	NS	NS	NS	NS
MW-14	06/20/00	20.90	9.16	11.74	<50	<0.5	<0.5	<0.5	<1.0	<10	NA
	09/29/00		9.48	11.42	<50	<0.5	<0.5	<0.5	<0.5	<2.50	NA
	12/17/00		9.24	11.66	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	03/28/01		8.91	11.99	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	06/20/01		9.7	11.20	<50	<0.5	<0.5	<0.5	<0.5	3.1	NA
	09/22/01		10.04	10.86	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	12/27/01		8.33	12.57	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	03/15/02		8.75	12.15	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	04/18/02		8.21	12.69	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	07/23/02	NP	9.76	11.14	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA
	10/16/02	NP	10.10	10.80	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station # 601
712 Lewelling Boulevard
San Leandro, California

Well Number	Date Sampled	Top of Riser Elevation (feet)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet)	TPH as						
					Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Semi Volatiles (µg/L)
MW-15	06/20/00	22.08	5.98	16.10	NS	NS	NS	NS	NS	NS	NS
	09/29/00		6.50	15.58	<50	< 0.5	< 0.5	< 0.5	<0.5	<2.50	NA
	12/17/00		5.89	16.19	NS	NS	NS	NS	NS	NS	NS
	03/28/01		5.78	16.30	<50	< 0.5	< 0.5	< 0.5	<0.5	11.1	NA
	06/20/01		5.72	16.36	NS	NS	NS	NS	NS	NS	NS
	09/22/01		6.79	15.29	<50	<0.5	<0.5	<0.5	<0.5	13	NA
	12/27/01		5.49	16.59	NS	NS	NS	NS	NS	NS	NS
	03/15/02		5.68	16.40	<50	< 0.5	< 0.5	< 0.5	<0.5	<2.5	NA
	04/18/02		4.85	17.23	NS	NS	NS	NS	NS	NS	NS
	07/23/02		6.32	15.76	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA
	10/16/02		6.69	15.39	NS	NS	NS	NS	NS	NS	NS

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station # 601
712 Lewelling Boulevard
San Leandro, California

TPH	= Total Petroleum Hydrocarbons analyzed using EPA Method 8015B modified
BTEN	= Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B
MTBE	= Methyl tertiary butyl ether analyzed by EPA Method 8021B unless otherwise noted
Note	= Semi volatile organic compounds analyzed using EPA Method 8270C
µg/L	= Micrograms per liter
NA	= Not analyzed
NS	= Not sampled
TOC	= Top of casing
P	= Purge
NP	= No purge
<	= Not detected at or above specified laboratory method detection limit
a	= 2-methylnaphthalene
b	= Naphthalene
c	= Phenol
d	= Chromatogram Pattern: Gasoline C6-C10
e	= Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel

Source: The data within this table collected prior to July 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

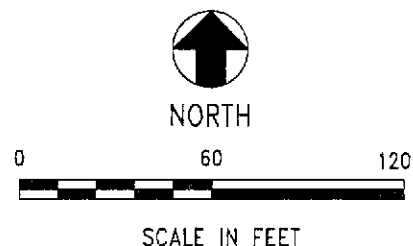
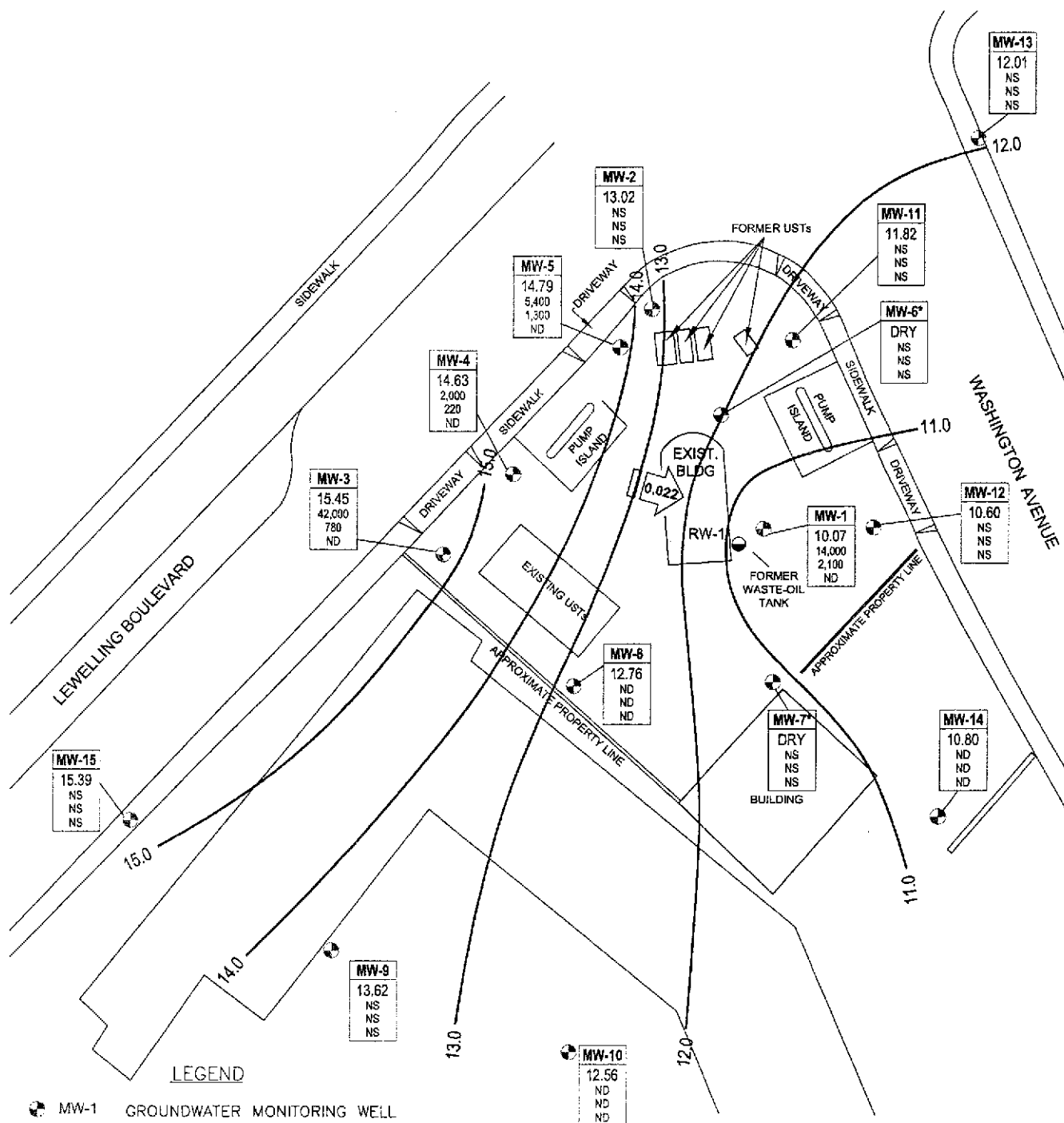
ARCO Service Station # 601

712 Lewelling Boulevard
San Leandro, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
06/20/00	East-Southeast	0.023
09/29/00	East-Southeast	0.023
12/17/00	East-Southeast	0.010
03/28/01	East-Southeast	0.014
06/20/01	East-Southeast	0.022
09/22/01	East-Southeast	0.025
12/27/01	East-Southeast	0.025
03/15/02	East	0.015
04/18/02	East	0.015
07/23/02	East-Southeast	0.025
10/16/02	East-Southeast	0.022

Source:

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



URS

Project No. 38486088
Arco Service Station 0601
712 Lewelling Boulevard
San Leandro, California

**GROUNDWATER ELEVATION CONTOUR
AND ANALYTICAL SUMMARY MAP**
Fourth Quarter 2002 (October 16, 2002)

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 TeflonTM 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 # 021016-1341 Date 10/16/02 Client Arco 601

Site 712 LEWELLING Blvd, SAN LEANDRO

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					9.12	11.05	TOC	NPE7'
MW-2	4					8.10 *	12.20		ORCS GUAGE
MW-3	4	Had to remove skimmer to gauge + sample				7.54	11.85		SKimmer w/ ORCS attached NPE8' Took out
MW-4	4					7.75	8.43		NP
MW-5	4					7.66 *	10.04		ORCS NP
MW-6	4	WELL DRY				—	8.54		NP
MW-7	4	WELL DRY				—	9.58 9.52		NP
MW-8	4					8.13 *	10.11		ORCS NP
MW-9	2					8.64	15.88		GUAGE
MW-10	2					8.77	18.67		NP
MW-11	4					9.15	11.80		GUAGE
MW-12	4					9.51	11.54		GUAGE
MW-13	2					8.74	12.92		GUAGE
MW-14	2					10.10	12.95		NPE7.5'
MW-15	2					6.69	10.03		GUAGE
* gauged w/ ORCS in well									

ARCO / BP WELL MONITORING DATA SHEET

3TS #: <u>021016-BA1</u>	Station # <u>001</u>
Sampler: <u>Brian Alford</u>	Date: <u>10/16/02</u>
Well I.D.: <u>NW-1</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth: <u>11.05</u>	Depth to Water: <u>9.12</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> Disposable Bailer Middleburg Electric Submersible Extraction Pump Other: _____	Sampling Method: <u>Bailer</u> <u>Disposable Bailer</u> Extraction Port 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.

<u>No Purge</u> 1 Case Volume (Gals.)	X	<u>3</u> Specified Volumes	=	_____ Gals. Calculated Volume
--	---	-------------------------------	---	----------------------------------

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u>)	Gals. Removed	Observations
1200	73.4	7.1	1776	—	cloudy - debris particles / brown sheen / odor

Note: Light sheen + small reaction to HCL

Did well dewater? Yes <u>(No)</u>	Gallons actually evacuated: <u>—</u>
Sampling Time: <u>1200</u>	Sampling Date: <u>10/16/02</u>
Sample I.D.: <u>NW-1</u>	Laboratory: Pace <u>(Sequoia)</u> Other: _____
Analyzed for: <u>TPH-G BTEX MTBE</u> TPH-D Other: <u>SVOC's by 8270</u>	
D.O. (if req'd):	Pre-purge: _____ mg/L Post-purge: <u>0.8</u> mg/L
D.R.P. (if req'd):	Pre-purge: _____ mV Post-purge: _____ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021016-BAL	Station # 601
Sampler: BRIAN ALCON	Date: 10/16/02
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8
Total Well Depth: 11.85	Depth to Water: 7.54
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	Sampling Method:	Bailer
	Disposable Bailer		Disposable Bailer
	Middleburg		Extraction Port
	Electric Submersible	Other:	
	Extraction Pump		
	Other:		

Top of Screen: 8' If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

2.8	X	3	=	8.4	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
1235	71.1	8.1	1136	2.75	clear
1239	70.8	7.9	1141	5.5	sheen/odor
1243	70.5	7.7	1136	8.25	"

Did well dewater? Yes (No)	Gallons actually evacuated: 8
Sampling Time: 1250	Sampling Date: 10/16/02
Sample I.D.: MW-3	Laboratory: Pace Sequoia Other
Analyzed for: TPH-G BTEX MTBE TPH-D Other:	

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021016-B41	Station # 601
Sampler: BRIAN ALLEN	Date: 10/16/02
Well I.D.: MW-4	Well Diameter: 2 3 4 6 8
Total Well Depth: 8.43	Depth to Water: 7.75
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	Sampling Method:	Bailer
	Disposable Bailer		Disposable Bailer
	Middleburg		Extraction Port
	Electric Submersible	Other:	
	Extraction Pump		
Other:			

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

No Purge	x	3	=	—	Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume	

Time	Temp (°F)	pH	Conductivity (mS or μ S)	Gals. Removed	Observations
1150	71.4	7.6	1251	—	clear/odor

Did well dewater? Yes No	Gallons actually evacuated: —
Sampling Time: 1150	Sampling Date: 10/16/02
Sample I.D.: MW-4	Laboratory: Pace Sequoia Other
Analyzed for: TPH-G BTEX MTBE TPH-D Other:	
D.O. (if req'd):	Pre-purge: mg/L Post-purge: 1.8 mg/L
D.R.P. (if req'd):	Pre-purge: mV Post-purge: mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>021016-B41</u>	Station # <u>601</u>
Sampler: <u>Brian Alcorn</u>	Date: <u>10/16/02</u>
Well I.D.: <u>MW-5</u>	Well Diameter: 2 3 <u>(4)</u> 6 8
Total Well Depth: <u>10.04</u>	Depth to Water: <u>7.66</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

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

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

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

<u>No Purge</u> 1 Case Volume (Gals.)	X	<u>3</u> Specified Volumes	=	_____ Gals. Calculated Volume
--	---	-------------------------------	---	----------------------------------

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
1210	73.1	7.5	1753	—	clear / odor

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

Sampling Time: 1210 Sampling Date: 10/16/02

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

Analyzed for: NO₃-G BTEX MTBE TPH-D Other: _____

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>021016-B41</u>	Station # <u>601</u>
Sampler: <u>Brian Allard</u>	Date: <u>10/16/02</u>
Well I.D.: <u>MW-6</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: <u>8.54</u>	Depth to Water: <u>DRY</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

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

Purge Method:

Bailer
~~Disposable Bailer~~
~~Middleburg~~
~~Electric Submersible~~
~~Extraction Pump~~
 Other: _____

Sampling Method:

Bailer
~~Disposable Bailer~~
~~Extraction Port~~
 Other: _____

Top of Screen: _____

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

<u>No</u> <u>PURGE</u>	X	<u>3</u>	=	_____ Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

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

Did well dewater? Yes <u>No</u>	Gallons actually evacuated: _____
Sampling Time: _____	Sampling Date: <u>10/16/02</u>
Sample I.D.: _____	Laboratory: Pace <u>Sequoia</u> Other _____
Analyzed for: <u>TPH-G BTEX MTBE</u> TPH-D Other: _____	
D.O. (if req'd):	Pre-purge: _____ mg/L <u>Post-purge:</u> _____ mg/L
D.R.P. (if req'd):	Pre-purge: _____ mV Post-purge: _____ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>021016-BA1</u>	Station # <u>601</u>
Sampler: <u>Brian Allen</u>	Date: <u>10/16/02</u>
Well I.D.: <u>MW-7</u>	Well Diameter: 2 3 4 6 8 <u> </u>
Total Well Depth: <u>9.58</u>	Depth to Water: <u>DRY</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> <u>HACH</u>

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

Purge Method:

~~Bailer~~
~~Disposable Bailer~~
~~Middleburg~~
~~Electric Submersible~~
~~Extraction Pump~~
 Other:

Sampling Method:

~~Bailer~~
~~Disposable Bailer~~
~~Extraction Port~~
 Other:

Top of Screen:

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

<u>No</u> <u>Purge</u>	x	<u>3</u> Specified Volumes	=	<u> </u> Gals. Calculated Volume
1 Case Volume (Gals.)				

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

Did well dewater? Yes <u> </u> No <u> </u>	Gallons actually evacuated: <u> </u>
Sampling Time: <u> </u>	Sampling Date: <u>10/16/02</u>
Sample I.D.: <u> </u>	Laboratory: Pace <u>Sequoia</u> Other <u> </u>
Analyzed for: <u>TPH-G</u> <u>BTEX</u> <u>MTBE</u> TPH-D Other: <u> </u>	

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>021016-BA1</u>	Station # <u>601</u>
Sampler: <u>Brian Alcorn</u>	Date: <u>10/16/02</u>
Well I.D.: <u>MW-8</u>	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth: <u>10.11</u>	Depth to Water: <u>8.13</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

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

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

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

<u>No Purge</u> 1 Case Volume (Gals.)	X	<u>3</u> Specified Volumes	=	<u>—</u> Calculated Volume	Gals.
--	---	-------------------------------	---	-------------------------------	-------

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u>)	Gals. Removed	Observations
1120	70.5	7.5	1078	—	cloudy dark brown

Did well dewater? Yes ☐ No ☒ Gallons actually evacuated: —

Sampling Time: 1120 Sampling Date: 10/16/02

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

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

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: <u>021016-B3A1</u>	Station # <u>601</u>
Sampler: <u>Brian Allcorn</u>	Date: <u>10/16/02</u>
Well I.D.: <u>MW-10</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth: <u>18.67</u>	Depth to Water: <u>8.77</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> Disposable Bailer Middleburg Electric Submersible Extraction Pump Other: _____	Sampling Method: <u>Bailer</u> Disposable Bailer Extraction Port Other: _____
---	--

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

<u>No Purge</u> 1 Case Volume (Gals.)	X	<u>3</u> Specified Volumes	=	_____ Gals. Calculated Volume
--	---	-------------------------------	---	----------------------------------

Time	Temp (°F)	pH	Conductivity (mS or <u>µS</u>)	Gals. Removed	Observations
0930	68.8	6.4	1120	—	clear

Did well dewater? Yes <u>No</u>	Gallons actually evacuated: _____
Sampling Time: <u>0930</u>	Sampling Date: <u>10/16/02</u>
Sample I.D.: <u>MW-10</u>	Laboratory: Pace <u>Sequoia</u> Other _____
Analyzed for: <u>TPH-G</u> <u>BTEX</u> <u>MTBE</u> TPH-D Other: _____	
D.O. (if req'd):	Pre-purge: _____ mg/L Post-purge: <u>1.0</u> mg/L
D.R.P. (if req'd):	Pre-purge: _____ mV Post-purge: _____ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 021016-BA1	Station # 001
Sampler: Brian Allen	Date: 10/16/02
Well I.D.: MW-14	Well Diameter: (2) 3 4 6 8
Total Well Depth: 12.95	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~~
~~Middleburg~~
~~Electric Submersible~~
~~Extraction Pump~~
 Other: _____

Sampling Method: Bailer
 Disposable Bailer
 Extraction Port
 Other: _____

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

No Purge	X	3	=	_____ Gals.
1 Case Volume (Gals.)		Specified Volumes		Calculated Volume

Time	Temp (°F)	pH	Conductivity (mS or (μS))	Gals. Removed	Observations
1100	69.8	5.8	1507	—	clear

Did well dewater? Yes ☒ No ☐ Gallons actually evacuated: _____

Sampling Time: 1100 Sampling Date: 10/16/02

Sample I.D.: MW-14 Laboratory: Pace Sequoia Other: _____

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

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

WELLHEAD INSPECTION CHECKLIST AND REPAIR ORDER

Client Arco Inspection Date 10/16/02

Site Address 712 LEWELLYN BLVD, SAN LEANDRO Inspected By BRAD ALLEN

1. Lid on box?	6. Casing secure?	12. Water standing in wellbox?	15. Well cap functional?
2. Lid broken?	7. Casing cut level?	12a. Standing above the top of casing?	16. Can cap be pulled loose?
3. Lid bolts missing?	8. Debris in wellbox?	12b. Standing below the top of casing?	17. Can cap seal out water?
4. Lid bolts stripped?	9. Wellbox is too far above grade?	12c. Water even with the top of casing?	18. Padlock present?
5. Lid seal intact?	10. Wellbox is too far below grade?	13. Well cap present?	19. Padlock functional?
	11. Wellbox is crushed/damaged?	14. Well cap found secure?	

☐ Check box if no deficiencies were found. Note below deficiencies you were able to correct.

Well I.D.	Deficiency	Corrective Action Taken
MW-13	Bad cap/lock	Replaced 2" / #2357
MW-10	Bad Lock	Replaced #2357
MW-9	Bad Lock	Replaced #2357
MW-15	Bad Lock	Replaced #2357
MW-14	Bad cap/lock	Replaced 2" / #2357
MW-7	Bad cap/lock	Replaced 4" / #2357
MW-6	Bad cap/lock	Replaced 4" / #2357
MW-8	Bad lock	Replaced #2357
MW-3	Bad cap	Replaced 4"
	<u>Out of Locks</u>	

Note below all deficiencies that could not be corrected and still need to be corrected.

Well I.D.	Persisting Deficiency	BTS Office assigns or defers Correction to:	Date assigned	Date corrected
MW-9	Side of well box beginning to cave in	CONTACT BTS	10/16/02	
MW-11	Retap/Helicoil	repairs		
MW-8	Needs cap w/ loop for ORC so that well can be sealed correctly.			
	Retap/Helicoil			
	Bad Lock/Needs ORC cap to seal correctly			
MW-2	Retap/Helicoil			
	Rim broken + box sticks up above grade (possible trip hazard)			

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:

601

Station #

712 LEWELLING BLVD, SAN LEANDRO

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

8

added equip.

rinse water 2

any other

adjustments

TOTAL GALS.

RECOVERED 10

loaded onto

BTS vehicle # 14

BTS event #

time

date

021016-BA1

1300

10/16/02

signature

REC'D AT

time

date

unloaded by

signature

ATTACHMENT B

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

LABORATORY PROCEDURES

Laboratory Procedures

The groundwater samples were analyzed for the presence of the chemicals 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.



**Sequoia
Analytical**

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

4 November, 2002

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

RE: ARCO #601, San Leandro, Ca
Sequoia Report: MLJ0524

Enclosed are the results of analyses for samples received by the laboratory on 10/17/02 11:55. 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 #601, San Leandro, Ca
Project Number: ARCO #601, San Leandro, CA
Project Manager: Scott Robinson

Reported:
11/04/02 08:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MLJ0524-01	Water	10/16/02 12:00	10/17/02 11:55
MW-3	MLJ0524-02	Water	10/16/02 12:50	10/17/02 11:55
MW-4	MLJ0524-03	Water	10/16/02 11:50	10/17/02 11:55
MW-5	MLJ0524-04	Water	10/16/02 12:10	10/17/02 11:55
MW-8	MLJ0524-05	Water	10/16/02 11:20	10/17/02 11:55
MW-14	MLJ0524-06	Water	10/16/02 11:00	10/17/02 11:55
MW-10	MLJ0524-07	Water	10/16/02 09:30	10/17/02 11:55

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Latonya Pelt, Project Manager



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

Project: ARCO #601, San Leandro, Ca
Project Number: ARCO #601, San Leandro, CA
Project Manager: Scott Robinson

Reported:
11/04/02 08:23

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MLJ0524-01) Water Sampled: 10/16/02 12:00 Received: 10/17/02 11:55									
Gasoline Range Organics (C6-C10)	14000	2500	ug/l	50	2J28012	10/28/02	10/28/02	8015Bm/8021 B	HC-21
Benzene	2100	25	"	"	"	"	"	"	
Toluene	ND	25	"	"	"	"	"	"	
Ethylbenzene	2000	25	"	"	"	"	"	"	
Xylenes (total)	31	25	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	120	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		109 %	55-142		"	"	"	"	
MW-3 (MLJ0524-02) Water Sampled: 10/16/02 12:50 Received: 10/17/02 11:55									
Gasoline Range Organics (C6-C10)	42000	5000	ug/l	100	2J28012	10/28/02	10/28/02	8015Bm/8021 B	HC-21
Benzene	780	50	"	"	"	"	"	"	
Toluene	620	50	"	"	"	"	"	"	
Ethylbenzene	2500	50	"	"	"	"	"	"	
Xylenes (total)	11000	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		118 %	55-142		"	"	"	"	
MW-4 (MLJ0524-03) Water Sampled: 10/16/02 11:50 Received: 10/17/02 11:55									
Gasoline Range Organics (C6-C10)	2000	500	ug/l	10	2J28012	10/28/02	10/28/02	8015Bm/8021 B	HC-21
Benzene	220	5.0	"	"	"	"	"	"	
Toluene	25	5.0	"	"	"	"	"	"	
Ethylbenzene	140	5.0	"	"	"	"	"	"	
Xylenes (total)	570	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	25	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		105 %	55-142		"	"	"	"	



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

Project: ARCO #601, San Leandro, Ca
Project Number: ARCO #601, San Leandro, CA
Project Manager: Scott Robinson

Reported:
11/04/02 08:23

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (MLJ0524-04) Water Sampled: 10/16/02 12:10 Received: 10/17/02 11:55									
Gasoline Range Organics (C6-C10)	5400	2000	ug/l	40	2J28012	10/28/02	10/28/02	8015Bm/8021 B	HC-21
Benzene	1300	20	"	"	"	"	"	"	
Toluene	ND	20	"	"	"	"	"	"	
Ethylbenzene	62	20	"	"	"	"	"	"	
Xylenes (total)	150	20	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		109 %	55-142		"	"	"	"	
MW-8 (MLJ0524-05) Water Sampled: 10/16/02 11:20 Received: 10/17/02 11:55									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2J25003	10/25/02	10/25/02	8015Bm/8021 B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		86.2 %	55-142		"	"	"	"	
MW-14 (MLJ0524-06) Water Sampled: 10/16/02 11:00 Received: 10/17/02 11:55									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2J25003	10/25/02	10/25/02	8015Bm/8021 B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		96.1 %	55-142		"	"	"	"	



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Oakland CA, 94607

Project: ARCO #601, San Leandro, Ca
Project Number: ARCO #601, San Leandro, CA
Project Manager: Scott Robinson

Reported:
11/04/02 08:23

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-10 (MLJ0524-07) Water Sampled: 10/16/02 09:30 Received: 10/17/02 11:55									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2J25003	10/25/02	10/25/02	8015Bm/8021 B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		90.6 %	55-142		"	"	"	"	



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Reported:
11/04/02 08:23

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MLJ0524-01) Water Sampled: 10/16/02 12:00 Received: 10/17/02 11:55									
Benzo[a]pyrene	ND	24	ug/l	5	2J22026	10/22/02	10/29/02	EPA 8270C	
Acenaphthene	ND	24	"	"	"	"	"	"	
Acenaphthylene	ND	24	"	"	"	"	"	"	
Anthracene	ND	24	"	"	"	"	"	"	
Benzoic acid	ND	48	"	"	"	"	"	"	
Benzo (a) anthracene	ND	24	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	24	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	24	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	48	"	"	"	"	"	"	
Benzyl alcohol	ND	48	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	24	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	48	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	24	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	48	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	24	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	24	"	"	"	"	"	"	
4-Chloroaniline	ND	240	"	"	"	"	"	"	
2-Chloronaphthalene	ND	24	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	24	"	"	"	"	"	"	
2-Chlorophenol	ND	24	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	48	"	"	"	"	"	"	
Chrysene	ND	24	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	24	"	"	"	"	"	"	
Dibenzofuran	ND	24	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	24	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	48	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	48	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	48	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	240	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	24	"	"	"	"	"	"	
Diethyl phthalate	ND	24	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	48	"	"	"	"	"	"	
Dimethyl phthalate	ND	24	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	24	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	48	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	24	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	24	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	24	"	"	"	"	"	"	

Sequoia Analytical - Morgan Hill

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Project: ARCO #601, San Leandro, Ca
Project Number: ARCO #601, San Leandro, CA
Project Manager: Scott Robinson

Reported:
11/04/02 08:23

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MLJ0524-01) Water Sampled: 10/16/02 12:00 Received: 10/17/02 11:55									
Fluoranthene	ND	24	ug/l	5	2122026	10/22/02	10/29/02	EPA 8270C	
Fluorene	ND	24	"	"	"	"	"	"	
Hexachlorobenzene	ND	24	"	"	"	"	"	"	
Hexachlorobutadiene	ND	48	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	48	"	"	"	"	"	"	
Hexachloroethane	ND	48	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	48	"	"	"	"	"	"	
Isophorone	ND	24	"	"	"	"	"	"	
2-Methylnaphthalene	490	24	"	"	"	"	"	"	
2-Methylphenol	ND	24	"	"	"	"	"	"	
4-Methylphenol	ND	24	"	"	"	"	"	"	
Naphthalene	1500	120	"	25	"	"	10/29/02	"	
2-Nitroaniline	ND	48	"	5	"	"	10/29/02	"	
3-Nitroaniline	ND	480	"	"	"	"	"	"	
4-Nitroaniline	ND	240	"	"	"	"	"	"	
Nitrobenzene	ND	24	"	"	"	"	"	"	
2-Nitrophenol	ND	24	"	"	"	"	"	"	
4-Nitrophenol	ND	48	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	48	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	24	"	"	"	"	"	"	
Pentachlorophenol	ND	48	"	"	"	"	"	"	
Phenanthrene	ND	24	"	"	"	"	"	"	
Phenol	ND	24	"	"	"	"	"	"	
Pyrene	ND	24	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	48	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	24	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	24	"	"	"	"	"	"	
<i>Surrogate: 2-Fluorophenol</i>		48.9 %	24-77		"	"	"	"	
<i>Surrogate: Phenol-d6</i>		30.0 %	11-55		"	"	"	"	
<i>Surrogate: Nitrobenzene-d5</i>		93.5 %	66-107		"	"	"	"	
<i>Surrogate: 2-Fluorobiphenyl</i>		84.0 %	61-121		"	"	"	"	
<i>Surrogate: 2,4,6-Tribromophenol</i>		102 %	46-147		"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>		93.5 %	59-138		"	"	"	"	



URS Corporation
500 12th Street, Suite 100
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Project: ARCO #601, San Leandro, Ca
Project Number: ARCO #601, San Leandro, CA
Project Manager: Scott Robinson

Reported:
11/04/02 08:23

**Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B - Quality Control
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 2J25003 - EPA 5030B [P/T]									
Blank (2J25003-BLK1)				Prepared & Analyzed: 10/25/02					
Gasoline Range Organics (C6-C10)	ND	50	ug/l						
Benzene	ND	0.50	"						
Toluene	ND	0.50	"						
Ethylbenzene	ND	0.50	"						
Xylenes (total)	ND	0.50	"						
Methyl tert-butyl ether	ND	2.5	"						
<i>Surrogate: a,a,a-Trifluorotoluene</i>	<i>10.2</i>		<i>"</i>	<i>10.0</i>		<i>102</i>	<i>55-142</i>		
LCS (2J25003-BS1)				Prepared & Analyzed: 10/25/02					
Benzene	10.3	0.50	ug/l	10.0		103	68-140		
Toluene	10.5	0.50	"	10.0		105	76-127		
Ethylbenzene	10.3	0.50	"	10.0		103	77-130		
Xylenes (total)	30.8	0.50	"	30.0		103	78-128		
<i>Surrogate: a,a,a-Trifluorotoluene</i>	<i>9.74</i>		<i>"</i>	<i>10.0</i>		<i>97.4</i>	<i>55-142</i>		
LCS (2J25003-BS2)				Prepared & Analyzed: 10/25/02					
Gasoline Range Organics (C6-C10)	215	50	ug/l	250		86.0	62-134		
<i>Surrogate: a,a,a-Trifluorotoluene</i>	<i>10.4</i>		<i>"</i>	<i>10.0</i>		<i>104</i>	<i>55-142</i>		
Matrix Spike (2J25003-MS1)				Source: MLJ0524-05	Prepared & Analyzed: 10/25/02				
Gasoline Range Organics (C6-C10)	447	50	ug/l	550	ND	81.3	62-134		
Benzene	9.01	0.50	"	6.60	ND	137	68-140		
Toluene	37.8	0.50	"	39.7	ND	95.0	76-127		
Ethylbenzene	9.23	0.50	"	9.20	ND	100	77-130		
Xylenes (total)	42.9	0.50	"	46.1	ND	92.7	78-128		
<i>Surrogate: a,a,a-Trifluorotoluene</i>	<i>10.9</i>		<i>"</i>	<i>10.0</i>		<i>109</i>	<i>55-142</i>		
Matrix Spike Dup (2J25003-MSD1)				Source: MLJ0524-05	Prepared & Analyzed: 10/25/02				
Gasoline Range Organics (C6-C10)	389	50	ug/l	550	ND	70.7	62-134	13.9	41
Benzene	8.91	0.50	"	6.60	ND	135	68-140	1.12	30
Toluene	39.8	0.50	"	39.7	ND	100	76-127	5.15	30
Ethylbenzene	8.49	0.50	"	9.20	ND	92.3	77-130	8.35	21
Xylenes (total)	44.3	0.50	"	46.1	ND	95.7	78-128	3.21	21
<i>Surrogate: a,a,a-Trifluorotoluene</i>	<i>12.3</i>		<i>"</i>	<i>10.0</i>		<i>123</i>	<i>55-142</i>		



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Project: ARCO #601, San Leandro, Ca
Project Number: ARCO #601, San Leandro, CA
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Reported:
11/04/02 08:23

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 2J28012 - EPA 5030B [P/T]									
Blank (2J28012-BLK1) Prepared & Analyzed: 10/28/02									
Gasoline Range Organics (C6-C10)	ND	50	ug/l						
Benzene	ND	0.50	"						
Toluene	ND	0.50	"						
Ethylbenzene	ND	0.50	"						
Xylenes (total)	ND	0.50	"						
Methyl tert-butyl ether	ND	2.5	"						
Surrogate: <i>a,a,a</i> -Trifluorotoluene	10.9		"	10.0		109	55-142		
LCS (2J28012-BS1) Prepared & Analyzed: 10/28/02									
Benzene	10.8	0.50	ug/l	10.0		108	68-140		
Toluene	10.5	0.50	"	10.0		105	76-127		
Ethylbenzene	11.2	0.50	"	10.0		112	77-130		
Xylenes (total)	32.4	0.50	"	30.0		108	78-128		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	11.0		"	10.0		110	55-142		
LCS (2J28012-BS2) Prepared & Analyzed: 10/28/02									
Gasoline Range Organics (C6-C10)	277	50	ug/l	250		111	62-134		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	11.2		"	10.0		112	55-142		
Matrix Spike (2J28012-MS1) Source: MLJ0623-03 Prepared & Analyzed: 10/28/02									
Gasoline Range Organics (C6-C10)	564	50	ug/l	550	ND	103	62-134		
Benzene	14.1	0.50	"	6.60	ND	214	68-140		QM-07
Toluene	48.1	0.50	"	39.7	ND	121	76-127		
Ethylbenzene	11.6	0.50	"	9.20	ND	126	77-130		
Xylenes (total)	53.5	0.50	"	46.1	ND	116	78-128		
Surrogate: <i>a,a,a</i> -Trifluorotoluene	12.6		"	10.0		126	55-142		
Matrix Spike Dup (2J28012-MSD1) Source: MLJ0623-03 Prepared & Analyzed: 10/28/02									
Gasoline Range Organics (C6-C10)	490	50	ug/l	550	ND	89.1	62-134	14.0	41
Benzene	12.4	0.50	"	6.60	ND	188	68-140	12.8	30 QM-07
Toluene	44.4	0.50	"	39.7	ND	112	76-127	8.00	30
Ethylbenzene	10.4	0.50	"	9.20	ND	113	77-130	10.9	21
Xylenes (total)	49.3	0.50	"	46.1	ND	107	78-128	8.17	21
Surrogate: <i>a,a,a</i> -Trifluorotoluene	10.6		"	10.0		106	55-142		



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

Project: ARCO #601, San Leandro, Ca
Project Number: ARCO #601, San Leandro, CA
Project Manager: Scott Robinson

Reported:
11/04/02 08:23

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Morgan Hill

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

Batch 2J22026 - EPA 3510C SepFunnel

Blank (2J22026-BLK1)

Prepared: 10/22/02 Analyzed: 10/29/02

Benzo[a]pyrene	ND	5.0	ug/l
Acenaphthene	ND	5.0	"
Acenaphthylene	ND	5.0	"
Anthracene	ND	5.0	"
Benzoic acid	ND	10	"
Benzo (a) anthracene	ND	5.0	"
Benzo (b) fluoranthene	ND	5.0	"
Benzo (k) fluoranthene	ND	5.0	"
Benzo (ghi) perylene	ND	10	"
Benzyl alcohol	ND	10	"
Bis(2-chloroethoxy)methane	ND	5.0	"
Bis(2-chloroethyl)ether	ND	10	"
Bis(2-chloroisopropyl)ether	ND	5.0	"
Bis(2-ethylhexyl)phthalate	ND	10	"
4-Bromophenyl phenyl ether	ND	5.0	"
Butyl benzyl phthalate	ND	5.0	"
4-Chloroaniline	ND	50	"
2-Chloronaphthalene	ND	5.0	"
4-Chloro-3-methylphenol	ND	5.0	"
2-Chlorophenol	ND	5.0	"
4-Chlorophenyl phenyl ether	ND	10	"
Chrysene	ND	5.0	"
Dibenz (a,h) anthracene	ND	5.0	"
Dibenzofuran	ND	5.0	"
Di-n-butyl phthalate	ND	5.0	"
1,2-Dichlorobenzene	ND	10	"
1,3-Dichlorobenzene	ND	10	"
1,4-Dichlorobenzene	ND	10	"
3,3'-Dichlorobenzidine	ND	50	"
2,4-Dichlorophenol	ND	5.0	"
Diethyl phthalate	ND	5.0	"
2,4-Dimethylphenol	ND	10	"
Dimethyl phthalate	ND	5.0	"
4,6-Dinitro-2-methylphenol	ND	5.0	"
2,4-Dinitrophenol	ND	10	"
2,4-Dinitrotoluene	ND	5.0	"

Sequoia Analytical - Morgan Hill

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11/04/02 08:23

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control
Sequoia Analytical - Morgan Hill

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

Batch 2J22026 - EPA 3510C SepFunnel

Blank (2J22026-BLK1)

Prepared: 10/22/02 Analyzed: 10/29/02

2,6-Dinitrotoluene	ND	5.0	ug/l
Di-n-octyl phthalate	ND	5.0	"
Fluoranthene	ND	5.0	"
Fluorene	ND	5.0	"
Hexachlorobenzene	ND	5.0	"
Hexachlorobutadiene	ND	10	"
Hexachlorocyclopentadiene	ND	10	"
Hexachloroethane	ND	10	"
Indeno (1,2,3-cd) pyrene	ND	10	"
Isophorone	ND	5.0	"
2-Methylnaphthalene	ND	5.0	"
2-Methylphenol	ND	5.0	"
4-Methylphenol	ND	5.0	"
Naphthalene	ND	5.0	"
2-Nitroaniline	ND	10	"
3-Nitroaniline	ND	100	"
4-Nitroaniline	ND	50	"
Nitrobenzene	ND	5.0	"
2-Nitrophenol	ND	5.0	"
4-Nitrophenol	ND	10	"
N-Nitrosodiphenylamine	ND	10	"
N-Nitrosodi-n-propylamine	ND	5.0	"
Pentachlorophenol	ND	10	"
Phenanthrene	ND	5.0	"
Phenol	ND	5.0	"
Pyrene	ND	5.0	"
1,2,4-Trichlorobenzene	ND	10	"
2,4,5-Trichlorophenol	ND	5.0	"
2,4,6-Trichlorophenol	ND	5.0	"

Surrogate: 2-Fluorophenol	29.2	"	50.0	58.4	24-77
Surrogate: Phenol-d6	18.2	"	50.0	36.4	11-55
Surrogate: Nitrobenzene-d5	44.6	"	50.0	89.2	66-107
Surrogate: 2-Fluorobiphenyl	42.0	"	50.0	84.0	61-121
Surrogate: 2,4,6-Tribromophenol	41.2	"	50.0	82.4	46-147
Surrogate: p-Terphenyl-d14	40.2	"	50.0	80.4	59-138



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

Project: ARCO #601, San Leandro, Ca
Project Number: ARCO #601, San Leandro, CA
Project Manager: Scott Robinson

Reported:
11/04/02 08:23

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Morgan Hill

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

Batch 2J22026 - EPA 3510C SepFunnel

LCS (2J22026-BS1)

Prepared: 10/22/02 Analyzed: 10/29/02

Acenaphthene	45.3	5.0	ug/l	50.0		90.6	78-101		
4-Chloro-3-methylphenol	50.6	5.0	"	50.0		101	83-120		
2-Chlorophenol	43.8	5.0	"	50.0		87.6	70-102		
1,4-Dichlorobenzene	38.9	10	"	50.0		77.8	60-91		
2,4-Dinitrotoluene	46.5	5.0	"	50.0		93.0	80-104		
4-Nitrophenol	18.4	10	"	50.0		36.8	19-52		
N-Nitrosodi-n-propylamine	49.3	5.0	"	50.0		98.6	53-122		
Pentachlorophenol	49.3	10	"	50.0		98.6	59-111		
Phenol	17.6	5.0	"	50.0		35.2	30-53		
Pyrene	42.8	5.0	"	50.0		85.6	78-115		
1,2,4-Trichlorobenzene	40.3	10	"	50.0		80.6	70-100		
Surrogate: 2-Fluorophenol	27.5		"	50.0		55.0	24-77		
Surrogate: Phenol-d6	18.2		"	50.0		36.4	11-55		
Surrogate: Nitrobenzene-d5	44.3		"	50.0		88.6	66-107		
Surrogate: 2-Fluorobiphenyl	41.3		"	50.0		82.6	61-121		
Surrogate: 2,4,6-Tribromophenol	48.2		"	50.0		96.4	46-147		
Surrogate: p-Terphenyl-d14	43.6		"	50.0		87.2	59-138		

LCS Dup (2J22026-BS1)

Prepared: 10/22/02 Analyzed: 10/29/02

Acenaphthene	45.8	5.0	ug/l	50.0		91.6	78-101	1.10	21
4-Chloro-3-methylphenol	50.3	5.0	"	50.0		101	83-120	0.595	19
2-Chlorophenol	43.6	5.0	"	50.0		87.2	70-102	0.458	17
1,4-Dichlorobenzene	38.5	10	"	50.0		77.0	60-91	1.03	21
2,4-Dinitrotoluene	47.4	5.0	"	50.0		94.8	80-104	1.92	17
4-Nitrophenol	18.5	10	"	50.0		37.0	19-52	0.542	30
N-Nitrosodi-n-propylamine	49.4	5.0	"	50.0		98.8	53-122	0.203	18
Pentachlorophenol	52.2	10	"	50.0		104	59-111	5.71	39
Phenol	17.8	5.0	"	50.0		35.6	30-53	1.13	18
Pyrene	43.0	5.0	"	50.0		86.0	78-115	0.466	15
1,2,4-Trichlorobenzene	41.6	10	"	50.0		83.2	70-100	3.17	21
Surrogate: 2-Fluorophenol	28.2		"	50.0		56.4	24-77		
Surrogate: Phenol-d6	17.8		"	50.0		35.6	11-55		
Surrogate: Nitrobenzene-d5	44.7		"	50.0		89.4	66-107		
Surrogate: 2-Fluorobiphenyl	41.6		"	50.0		83.2	61-121		
Surrogate: 2,4,6-Tribromophenol	50.7		"	50.0		101	46-147		
Surrogate: p-Terphenyl-d14	43.5		"	50.0		87.0	59-138		

Sequoia Analytical - Morgan Hill

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

Project: ARCO #601, San Leandro, Ca
Project Number: ARCO #601, San Leandro, CA
Project Manager: Scott Robinson

Reported:
11/04/02 08:23

Notes and Definitions

HC-21 Chromatogram Pattern: Gasoline C6-C10

QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

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

Page 1 of 2

Project Name

BP BU/GEM CO Portfolio:

BP Laboratory Contract Number:

Date: 10/16/02

Requested Due Date (mm/dd/yy) Standard

On-site Time: Temp:

Off-site Time: Temp:

Sky Conditions:

Meteorological Events:

Wind Speed: Direction:

Send To:
 Lab Name: SEQUOIA
 Lab Address: 885 Jarvis Dr.
 Morgan Hill, CA 95037

BP/GEM Facility No.:
 BP/GEM Facility Address: 712 Lewelling Blvd, San Leandro, CA
 Site ID No. ARCO 801
 Site Lat/Long:

Consultant/Contractor: URS
 Address: 500, 12th St., Ste. 200
 Oakland, CA 94609-4014

Lab PM: Latonya Pelt
 Tele/Fax: 408-776-9800 / 408-782-6308

California Global ID #: T0600100108
 BP/GEM PM Contact: PAUL SUPPLE

e-mail EDD: syed.rehan@urscorp.com
 Consultant/Contractor Project No.: JS-00000601.01.00427

Report Type & QC Level: Send EDF Reports

Consultant Tele/Fax: 510-874-1735/510-874-3268

BP/GEM Account No.:

Address:

Consultant/Contractor PM: Scott Robinson

Tele/Fax:

Invoice to: Consultant/Contractor or BP/GEM (circle one)

BP/GEM Work Release No: INTRIM-50677

Lab Bottle Order No:

Matrix

Preservatives

Requested Analysis

Item No.	Sample Description	Time	Soil/Solid	Water/Liquid	Sediments	Air	Laboratory No.	No. of containers	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	THG/RTX (8015/8021)	TPH-D (8015)	MTHH (8021)	MTDE, TAME, ETHB DPE, THA (8260)	1,2-DCA & DDD (8260)	Site's 8270	Sample Point Lat/Long and Comments
1	MW-1	1200	X				01	5	2			3	X	X	X				
2	MW-3	1250	X				02	3				X	X	X					
3	MW-4	1150	X				03	3				X	X	X					
4	MW-5	1210	X				04	3				X	X	X					
5	MW-8	1120	X				05	3				X	X	X					
6	MW-14	1100	X				06	3				X	X	X					
7																			
8																			
9																			
10																			

Sampler's Name: Brian Allen

Relinquished By / Affiliation

Date

Time

Accepted By / Affiliation

Date

Time

Sampler's Company: Blaine Tree Service

Shipment Date:

Shipment Method:

Shipment Tracking No:

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

In Place Yes No

Temperature Blank Yes No

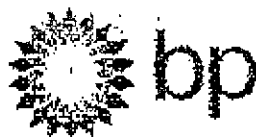
Cooler Temperature on Receipt

°F/C

Trip Blank Yes No

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

BP CQC Rev. 1 2/8/02



Chain of Custody Record

ML30524

Page 2 of 2

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

Date: 10/16/02

Requested Due Date (mm/dd/yy) Standard

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

Send To:
Lab Name: SEQUOIA
Lab Address: 885 Jarvis Dr.
Morgan Hill, CA 95037

BP/GEM Facility No.:
BP/GEM Facility Address: 712 Lowelling Blvd, San Leandro, CA
Site ID No. ARCO 601
Site Lat/Long:

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-00000601.01 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-50677

Lab PM: Latonya Pelt
Tele/Fax: 408-776-9600 / 408-782-8308

California Global ID #: T0800100108
BP/GEM PM Contact: PAUL SUPPLE

Report Type & QC Level: Send EDF Reports

BP/GEM Account No.:

Address:

Tele/Fax:

Lab Bottle Order No:

Matrix

Preservatives

Requested Analysis

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/D (8015)	TPH-D (8015)	MTBB (8021)	MTBB, TAME, HITE	DIPR, TDA (8269)	1,2-DCA & ROU (8260)			
1	MW-10	0930		X				3				X	X								
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Sampler's Name: Brian Alford

Relinquished By / Affiliation:

Date

Time

Accepted By / Affiliation:

Date

Time

Sampler's Company: BLANK TECH SERVICES

Signature Date

Signature Method:

Signature Tracking No:

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

Is in Place Yes No

Temperature Blank Yes No

Cooler Temperature on Receipt: °F/C

Trip Blank Yes No

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

BP COC Rev. 1 2/5/02

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: URS
 REC. BY (PRINT) TT
 WORKORDER: ML30524

DATE Received at Lab: 10/17/02
 TIME Received at Lab: 1155
 LOG IN DATE: 10-18-02

Drinking water for
 regulatory purposes: YES ☒ NO ☐
 Wastewater for
 regulatory purposes: YES ☒ NO ☐

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	#	CLIENT ID	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / ☒ Absent Intact / Broken*	01		MW-1	(2) 1L Amber	2	10/16/02	Lot B 2149040
2. Chain-of-Custody	☒ Present / Absent*	02		MW-2	(3) Vials HA			
3. Traffic Reports or Packing List:	Present / ☒ Absent	03		MW-4				
4. Airbill:	Airbill / Sticker Present / ☒ Absent	04		MW-5				
5. Airbill #:		05		MW-8				
6. Sample Labels:	☒ Present / Absent	06		MW-14				
7. Sample IDs:	Listed / Not Listed on Chain-of-Custody	07		MW-10				
8. Sample Condition:	Intact / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample labels agree?	☒ Yes / No*							
10. Sample received within hold time:	☒ Yes / No*							
11. Proper Preservatives used:	☒ Yes / No*							
12. Temp Rec. at Lab: (Acceptance range for samples requiring thermal pres.: 4+/-2°C)	<u>52</u> ☒ Yes / No**							

**Exception (if any):

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

ATTACHMENT C
HISTORIC GROUNDWATER DATA

Table 1
Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents
1995 - Present***

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Floating Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8240 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-1	03-17-95	22.26	6.57	ND	15.69	03-17-95	120,000	5,300	370	1,500	13,000	--	--	48,000	6,200[1]		
MW-1	06-01-95	22.26	7.87	ND	14.39	06-01-95	250,000	7,100	950	3,500	21,000	--	--	38,000	190,000[1]		
MW-1	08-31-95	22.26	8.12	0.01	** 14.15	08-31-95	Not sampled; well contained floating product										
MW-1	11-27-95	22.26	8.42	Sheen	13.84	11-27-95	310,000	4,600	770	5,700	21,000	--	--	--	--		
MW-1	02-22-96	22.26	6.01	0.01	** 16.26	03-14-96	100,000	6,200	320	2,500	12,000	<1,000[1]	--	--	--		
MW-1	05-20-96	22.26	7.03	ND	15.23	05-21-96	340,000	6,600	240	4,500	22,000	<1,000	--	150	<2,500[1]		
MW-1	08-26-96	22.26	8.16	ND	14.10	08-26-96	210,000	7,900	320	3,400	15,000	<1,000	--	--	--		
MW-1	11-20-96	22.26	7.84	ND	14.42	11-20-96	62,000	5,900	77	2,000	7,700	<300	--	--	--		
MW-1	03-24-97	19.19	8.05	ND	11.14	03-24-97	170,000	6,500	<200	2,400	9,900	<1,000	--	--	--		
MW-1	05-23-97	19.19	8.42	ND	10.77	05-23-97	83,000	6,200	84	2,500	9,000	<300	--	--	--		
MW-1	08-19-97	19.19	8.65	ND	10.54	08-19-97	83,000	4,500	<100	2,200	8,100	<600	--	--	--		
MW-1	11-19-97	19.19	8.54	ND	10.65	11-19-97	250,000	4,400	<500	3,800	9,900	<3,000	--	--	--		
MW-1	02-19-98	19.19	5.57	ND	13.62	02-19-98	74,000	2,500	120	2,200	4,100	<300	--	--	--		
MW-1	04-23-98	19.19	6.92	ND	12.27	04-24-98	210,000	2,700	<500	4,200	8,300	<3,000	--	--	--	1.5	P
MW-1	07-27-98	19.19	8.14	ND	11.05	07-27-98	73,000	2,100	88	2,600	4,600	<300	--	--	--	1.0	P
MW-1	10-14-98	19.19	8.58	ND	10.61	10-14-98	47,000	2,900	<50	2,300	3,900	<300	--	--	--	1.5	P
MW-1	01-21-99	19.19	7.84	ND	11.35	01-22-99	45,000	1,400	64	2,100	2,400	<300	--	--	--	1.0	P
MW-1	05-06-99	19.19	8.00	ND	11.19	05-06-99	41,000	1,900	<20	2,800	3,400	<120	--	--	--	0.85	P
MW-1	08-23-99	19.19	8.56	ND	10.63	08-24-99	26,000	1,700	52	1,600	1,500	<75	--	--	--	0.72	P
MW-1	10-28-99	19.19	8.92	ND	10.27	10-28-99	38,000	2,500	35	2,400	2,500	<200	--	--	--	0.70	P
MW-2	03-17-95	21.33	6.12	ND	15.21	03-17-95	10,000	460	77	260	550	--	--	--	--		
MW-2	06-01-95	21.33	6.56	ND	14.77	06-01-95	13,000	400	78	210	410	--	--	--	--		

Table 1
Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents
1995 - Present***

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Floating Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8240 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-2	08-31-95	21.33	7.18	ND	14.15	08-31-95	5,000	280	18	120	140	<50	--	--	--		
MW-2	11-27-95	21.33	7.39	ND	13.94	11-27-95	3,200	230	12	77	90	--	--	--	--		
MW-2	02-22-96	21.33	5.78	ND	15.55	03-14-96	11,000	290	67	190	330	<50	--	--	--		
MW-2	05-20-96	21.33	6.27	ND	15.06	05-21-96	Not sampled: well sampled annually, during the first quarter										
MW-2	08-26-96	21.33	7.30	ND	14.03	08-26-96	Not sampled: well sampled annually, during the first quarter										
MW-2	11-20-96	21.33	7.28	ND	14.05	11-20-96	Not sampled: well sampled annually, during the first quarter										
MW-2	03-24-97	21.12	7.11	ND	14.01	03-24-97	4,800	570	6	71	32	67	--	--	--		
MW-2	05-23-97	21.12	7.44	ND	13.68	05-23-97	Not sampled: well sampled annually, during the first quarter										
MW-2	08-19-97	21.12	7.64	ND	13.48	08-19-97	Not sampled: well sampled annually, during the first quarter										
MW-2	11-19-97	21.12	7.70	ND	13.42	11-19-97	Not sampled: well sampled annually, during the first quarter										
MW-2	02-19-98	21.12	5.22	ND	15.90	02-19-98	2,000	160	50	66	230	25	--	--	--		
MW-2	04-23-98	21.12	6.24	ND	14.88	04-23-98	Not sampled: well sampled annually, during the first quarter										
MW-2	07-27-98	21.12	7.02	ND	14.10	07-27-98	Not sampled: well sampled annually, during the first quarter										
MW-2	10-14-98	21.12	7.54	ND	13.58	10-14-98	Not sampled: well sampled annually, during the first quarter										
MW-2	01-21-99	21.12	7.15	ND	13.97	01-22-99	1,700	84	4	31	10	13	--	--	--	0.5	P
MW-2	05-06-99	21.12	6.95	ND	14.17	05-06-99	Not sampled: well sampled annually, during the first quarter										
MW-2	08-23-99	21.12	7.49	ND	13.63	08-24-99	Not sampled: well sampled annually, during the first quarter										0.68
MW-2	10-28-99	21.12	7.92	ND	13.20	10-28-99	Not sampled: well sampled annually, during the first quarter										
MW-3	03-17-95	20.11	5.46	ND	14.65	03-17-95	370,000	4,800	12,000	5,800	34,000	--	--	--	--		
MW-3	06-01-95	20.11	6.34	ND	13.77	06-01-95	270,000	6,000	11,000	5,200	28,000	--	--	--	--		
MW-3	08-31-95	20.11	6.60	0.02	** 13.52	08-31-95	Not sampled: well contained floating product										
MW-3	11-27-95	20.11	6.76	0.01	** 13.36	11-27-95	150,000	5,100	8,800	3,900	21,000	--	--	--	--		

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ARCO Service Station 601
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Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Floating Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8240 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-3	02-22-96	20.11	5.14	0.01	** 14.98	03-14-96	150,000	4,400	7,600	4,100	22,000	<3,000	--	--	--		
MW-3	05-20-96	20.11	5.17	ND	14.94	05-21-96	410,000	4,700	8,000	6,300	36,000	<3,000	--	--	--		
MW-3	08-26-96	20.11	7.04	ND	13.07	08-26-96	260,000	4,000	6,100	4,200	24,000	<2,000	--	--	--		
MW-3	11-20-96	20.11	6.26	ND	13.85	11-20-96	190,000	3,200	5,800	3,300	20,000	<1,000	--	--	--		
MW-3	03-24-97	22.99	6.94	ND	16.05	03-24-97	430,000	2,700	7,600	7,000	39,000	<5,000	--	--	--		
MW-3	05-23-97	22.99	6.98	ND	16.01	05-23-97	130,000	2,100	4,300	3,500	19,000	<700	--	--	--		
MW-3	08-19-97	22.99	7.25	ND	15.74	08-19-97	100,000	2,000	3,200	<100	19,000	<600	--	--	--		
MW-3	11-19-97	22.99	7.25	ND	15.74	11-19-97	93,000	1,700	2,400	2,800	16,000	<600	--	--	--		
MW-3	02-19-98	22.99	5.24	ND	17.75	02-19-98	80,000	620	1,200	2,500	13,000	<600	--	--	--		
MW-3	04-23-98	22.99	6.60	ND	16.39	04-24-98	130,000	1,500	2,400	3,500	18,000	<600	--	--	--	3.5	P
MW-3	07-27-98	22.99	7.00	ND	15.99	07-27-98	140,000	920	1,500	2,400	13,000	<600	--	--	--	1.0	P
MW-3	10-14-98	22.99	7.04	ND	15.95	10-14-98	300,000	1,200	2,400	5,700	32,000	970	--	--	--	1.0	P
MW-3	01-21-99	22.99	6.50	ND	16.49	01-22-99	120,000	860	1,500	2,600	14,000	<600	--	--	--	0.5	P
MW-3	05-06-99	22.99	6.90	ND	16.09	05-06-99	49,000	670	1,400	2,500	11,000	170	--	--	--	1.03	NP
MW-3	08-23-99	22.99	6.53	ND	16.46	08-24-99	51,000	440	930	2,200	9,200	<150	--	--	--	0.67	NP
MW-3	10-28-99	22.99	7.50	ND	15.49	10-28-99	1,400,000	830	4,100	15,000	78,000	<5,000	--	--	--	0.77	P
MW-4	03-17-95	20.75	6.65	ND	14.10	03-17-95	16,000	1,800	970	310	2,500	--	--	--	--		
MW-4	06-01-95	20.75	7.25	ND	13.50	06-01-95	16,000	2,800	870	380	2,700	--	--	--	--		
MW-4	08-31-95	20.75	7.75	ND	13.00	08-31-95	9,000	2,000	270	270	1,400	<100	--	--	--		
MW-4	11-27-95	20.75	7.87	ND	12.88	11-27-95	3,800	890	130	130	550	--	--	--	--		
MW-4	02-22-96	20.75	7.29	ND	13.46	03-14-96	940	150	82	19	130	<20	--	--	--		
MW-4	05-20-96	20.75	7.30	ND	13.45	05-21-96	6,700	1,100	330	120	1,100	<100	--	--	--		

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Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Floating Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8240 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-4	08-26-96	20.75	7.57	ND	13.18	08-26-96	14,000	2,400	510	350	2,100	<100	--	--	--		
MW-4	11-20-96	20.75	7.89	ND	12.86	11-20-96	420	55	17	11	62	<3	--	--	--		
MW-4	03-24-97	22.38	6.90	ND	15.48	03-24-97	6,800	620	150	81	1,300	<50	--	--	--		
MW-4	05-23-97	22.38	7.80	ND	14.58	05-23-97	9,000	1,300	240	200	1,600	<60	--	--	--		
MW-4	08-19-97	22.38	DRY	ND	N/A	08-19-97	Not sampled: well is dry										
MW-4	11-19-97	22.38	DRY	ND	N/A	11-19-97	3,700[1]	600	93	120	710	<60	--	--	--		
MW-4	02-19-98	22.38	6.78	ND	15.60	02-19-98	1,800	93	51	29	420	110	--	--	--		
MW-4	04-23-98	22.38	6.47	ND	15.91	04-23-98	6,500	700	110	180	1,300	93	--	--	--	0.5	P
MW-4	07-27-98	22.38	7.22	ND	15.16	07-27-98	10,000	1,400	140	290	1,900	<120	--	--	--	1.5	P
MW-4	10-14-98	22.38	7.60	ND	14.78	10-14-98	6,500	900	63	200	1,200	63	--	--	--	1.0	P
MW-4	01-21-99	22.38	7.43	ND	14.95	01-22-99	1,700	140	22	56	320	13	--	--	--	0.5	P
MW-4	05-06-99	22.38	6.55	ND	15.83	05-06-99	3,300	250	36	73	890	41	--	--	--	1.28	P
MW-4	08-23-99	22.38	7.16	ND	15.22	08-24-99	7,400	500	73	230	1,700	57	--	--	--	0.89	P
MW-4	10-28-99	22.38	8.28	ND	14.10	10-28-99	370	41	5.7	14	52	16	--	--	--	0.92	NP
MW-5	03-17-95	20.90	5.51	ND	15.39	03-17-95	48,000	6,400	2,000	740	5,100	--	--	--	--		
MW-5	06-01-95	20.90	6.55	ND	14.35	06-01-95	76,000	11,000	5,400	1,400	7,700	--	--	--	--		
MW-5	08-31-95	20.90	6.80	ND	14.10	08-31-95	53,000	12,000	1,600	1,000	6,000	<500	--	--	--		
MW-5	11-27-95	20.90	7.13	ND	13.77	11-27-95	43,000	7,900	3,300	950	4,900	--	--	--	--		
MW-5	02-22-96	20.90	5.12	ND	15.78	03-14-96	52,000	9,100	3,300	940	5,000	<500	--	--	--		
MW-5	05-20-96	20.90	5.87	ND	15.03	05-21-96	55,000	9,300	3,800	1,100	5,400	<500	--	--	--		
MW-5	08-26-96	20.90	7.15	ND	13.75	08-26-96	47,000	5,300	2,100	780	3,200	<300	--	--	--		
MW-5	11-20-96	20.90	6.88	ND	14.02	11-20-96	53,000	8,700	5,700	920	4,400	<500	--	--	--		

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ARCO Service Station 601
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Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Floating Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8240 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-5	03-24-97	22.45	7.13	ND	15.32	03-24-97	39,000	8,200	3,200	720	3,100	<500	--	--	--		
MW-5	05-23-97	22.45	7.42	ND	15.03	05-23-97	29,000	6,600	1,700	400	1,500	<600	--	--	--		
MW-5	08-19-97	22.45	7.58	ND	14.87	08-19-97	16,000	4,600	790	<50	1,300	<300	--	--	--		
MW-5	11-19-97	22.45	7.58	ND	14.87	11-19-97	22,000	5,800	1,300	380	1,300	<300	--	--	--		
MW-5	02-19-98	22.45	4.65	ND	17.80	02-19-98	40,000	5,100	3,800	620	2,900	<300	--	--	--		
MW-5	04-23-98	22.45	6.25	ND	16.20	04-23-98	45,000	8,000	4,000	970	4,200	<600	--	--	--	1.5	P
MW-5	07-27-98	22.45	6.71	ND	15.74	07-27-98	30,000	8,000	2,000	590	1,900	<600	--	--	--	1.5	P
MW-5	10-14-98	22.45	7.19	ND	15.26	10-14-98	33,000	7,400	1,900	550	1,700	<300	--	--	--	1.5	P
MW-5	01-21-99	22.45	7.03	ND	15.42	01-22-99	34,000	6,200	2,600	630	2,300	<600	--	--	--	2.5	P
MW-5	05-06-99	22.45	7.02	ND	15.43	05-06-99	7,900	2,400	200	240	580	12	--	--	--	1.07	NP
MW-5	08-23-99	22.45	7.04	ND	15.41	08-24-99	25,000	5,800	2,300	570	2,000	67	--	--	--	1.04	P
MW-5	10-28-99	22.45	7.90	ND	14.55	10-28-99	20,000	5,900	1,100	450	1,100	<250	--	--	--	0.87	P
MW-6	03-17-95	22.08	6.66	ND	15.42	03-17-95	45,000	9,300	<100	1,900	3,600	--	--	--	--		
MW-6	06-01-95	22.08	7.60	ND	14.48	06-01-95	23,000	5,600	<50	1,300	1,900	--	--	--	--		
MW-6	08-31-95	22.08	7.92	ND	14.16	08-31-95	26,000	8,000	<100	1,900	900	<500	--	--	--		
MW-6	11-27-95	22.08	8.21	ND	13.87	11-27-95	6,700	1,800	<20	480	230	--	--	--	--		
MW-6	02-22-96	22.08	6.21	ND	15.87	03-14-96	17,000	3,100	69	810	1,500	<300	--	--	--		
MW-6	05-20-96	22.08	7.07	ND	15.01	05-21-96	16,000	3,700	<50	1,100	1,100	<300	--	--	--		
MW-6	08-26-96	22.08	7.93	ND	14.15	08-26-96	23,000	5,800	<50	2,000	560	<300	--	--	--		
MW-6	11-20-96	22.08	8.02	ND	14.06	11-20-96	11,000	3,300	<50[1]	480	370	<300	--	--	--		
MW-6	03-24-97	22.77	7.95	ND	14.82	03-24-97	9,700	1,900	<20	800	270	<100	--	--	--		
MW-6	05-23-97	22.77	8.17	ND	14.60	05-23-97	16,000	4,300	<50	1,400	180	<300	--	--	--		

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MW-6	08-19-97	22.77	-	ND	NA	08-19-97	Not sampled: well is dry										
MW-6	11-19-97	22.77	-	ND	NA	11-19-97	Not sampled: well is dry										
MW-6	02-19-98	22.77	5.78	ND	16.99	02-19-98	2,600	540	8	90	88	<30	--	--	--		
MW-6	04-23-98	22.77	6.83	ND	15.94	04-24-98	7,600	1,300	13	520	190	<60	--	--	--	0.5	P
MW-6	07-27-98	22.77	7.80	ND	14.97	07-27-98	15,000	3,600	<25	1,100	230	<150	--	--	--	1.0	P
MW-6	10-14-98	22.77	8.31	ND	14.46	10-14-98	8,700	2,400	<20	220	36	<120	--	--	--	2.0	P
MW-6	01-21-99	22.77	7.90	ND	14.87	01-22-99	4,800	1,100	<25	340	79	<150	--	--	--	2.0	P
MW-6	05-06-99	22.77	7.70	ND	15.07	05-06-99	1,300	240	2.3	85	19	5	--	--	--	1.18	P
MW-6	08-23-99	22.77	8.24	ND	14.53	08-24-99	4,200	970	12	110	29	<15	--	--	--	0.90	P
MW-6	10-28-99	22.77	-	ND	NA	10-28-99	Not sampled: well is dry										
MW-7	03-17-95	22.89	7.68	ND	15.21	03-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-7	06-01-95	22.89	8.40	ND	14.49	06-01-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-7	08-31-95	22.89	9.09	ND	13.80	08-31-95	<50	<0.5	<0.5	0.6	<0.5	<3	--	--	--		
MW-7	11-27-95	22.89	9.15	ND	13.74	11-27-95	<50	<0.5	<0.5	0.9	<0.5	--	--	--	--		
MW-7	02-22-96	22.89	7.44	ND	15.45	03-14-96	110	1.4	<0.5	3.8	3.0	<3	--	--	--		
MW-7	05-20-96	22.89	8.47	ND	14.42	05-21-96	Not sampled: well sampled annually, during the first quarter										
MW-7	08-26-96	22.89	8.81	ND	14.08	08-26-96	Not sampled: well sampled annually, during the first quarter										
MW-7	11-20-96	22.89	9.17	ND	13.72	11-20-96	Not sampled: well sampled annually, during the first quarter										
MW-7	03-24-97	22.89	8.31	ND	14.58	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-7	05-23-97	22.89	9.26	ND	13.63	05-23-97	Not sampled: well sampled annually, during the first quarter										
MW-7	08-19-97	22.89	-	ND	NA	08-19-97	Not sampled: well is dry										
MW-7	11-19-97	22.89	-	ND	NA	11-19-97	Not sampled: well is dry										

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MW-7	02-19-98	22.89	6.13	ND	16.76	02-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-7	04-23-98	22.89	7.44	ND	15.45	04-23-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.5	P
MW-7	07-27-98	22.89	8.75	ND	14.14	07-27-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.5	P
MW-7	10-14-98	22.89	9.22	ND	13.67	10-14-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.5	P
MW-7	01-21-99	22.89	9.07	ND	13.82	01-22-99	52	<0.5	<0.5	<0.5	0.27	<3	--	--	--	3.0	P
MW-7	05-06-99	22.89	8.32	ND	14.57	05-06-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.83	P
MW-7	08-23-99	22.89	9.25	ND	13.64	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.42	P
MW-7	10-28-99	22.89	-	ND	NA	10-28-99	Not sampled: well is dry										
MW-8	03-17-95	20.97	6.14	ND	14.83	03-17-95	5,400	<5	<5	35	<5	--	--	--	--		
MW-8	06-01-95	20.97	6.50	ND	14.47	06-01-95	2,600	<2.5	<2.5	15	<2.5	--	--	--	--		
MW-8	08-31-95	20.97	7.35	ND	13.62	08-31-95	1,400	<3	<3	5	<3	520	--	900	--		
MW-8	11-27-95	20.97	7.60	ND	13.37	11-27-95	620	<0.5	<0.5	<0.5	0.5	--	560	900	510[1]		
MW-8	02-22-96	20.97	5.35	ND	15.62	03-14-96	5,800	<5	<5	28	<5	110	--	1,900	6,800[1]		
MW-8	05-20-96	20.97	5.92	ND	15.05	05-21-96	6,100	<5	<5	26	<5	240	--	--	--		
MW-8	08-26-96	20.97	7.08	ND	13.89	08-26-96	970	<1	<1	3	<1	710	--	--	--		
MW-8	11-20-96	20.97	7.01	ND	13.96	11-20-96	3,900	<2.5	<2.5	12	<2.5	930	--	--	--		
MW-8	03-24-97	20.89	7.33	ND	13.56	03-24-97	1,400	<10	<10	<10	12	1,300	--	--	--		
MW-8	05-23-97	20.89	7.55	ND	13.34	05-23-97	730	<5	<5	<5	<5	630	--	--	--		
MW-8	08-19-97	20.89	7.87	ND	13.02	08-19-97	<500	<5	<5	<5	<5	290	--	--	--		
MW-8	11-19-97	20.89	7.87	ND	13.02	11-19-97	<200	<2	<2	<2	<2	260	--	--	--		
MW-8	02-19-98	20.89	4.46	ND	16.43	02-19-98	2,000	<2	<2	9	<2	140	--	--	--		
MW-8	04-23-98	20.89	6.35	ND	14.54	04-24-98	4,500	<5	<5	<5	11	590	--	--	--	0.5	P

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MW-8	07-27-98	20.89	7.43	ND	13.46	07-27-98	Not sampled										
MW-8	10-14-98	20.89	7.79	ND	13.10	10-14-98	Not sampled										
MW-8	01-21-99	20.89	6.54	ND	14.35	01-22-99	2,000	<2	<2	3	<2	320	--	--	--	2.5	P
MW-8	05-06-99	20.89	7.30	ND	13.59	05-06-99	<50	<0.5	<0.5	<0.5	<0.5	160	--	--	--	12.76	NP
MW-8	08-23-99	20.89	7.45	ND	13.44	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	5	--	--	--	7.85	NP
MW-8	10-28-99	20.89	8.22	ND	12.67	10-28-99	160	<0.5	<0.5	<0.5	<1	45	--	--	--	0.84	P
MW-9	03-17-95	20.89	6.94	ND	13.95	03-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-9	06-01-95	20.89	8.15	ND	12.74	06-01-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-9	08-31-95	20.89	8.10	ND	12.79	08-31-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-9	11-27-95	20.89	8.38	ND	12.51	11-27-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-9	02-22-96	20.89	7.36	ND	13.53	03-14-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-9	05-20-96	20.89	7.81	ND	13.08	05-21-96	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-9	08-26-96	20.89	8.00	ND	12.89	08-26-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-9	11-20-96	20.89	7.06	ND	13.83	11-20-96	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-9	03-24-97	22.26	7.74	ND	14.52	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-9	05-23-97	22.26	8.28	ND	13.98	05-23-97	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-9	08-19-97	22.26	8.32	ND	13.94	08-19-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-9	11-19-97	22.26	8.32	ND	13.94	11-19-97	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-9	02-19-98	22.26	7.11	ND	15.15	02-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-9	04-23-98	22.26	8.18	ND	14.08	04-23-98	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-9	07-27-98	22.26	7.97	ND	14.29	07-27-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	3.6	P
MW-9	10-14-98	22.26	8.29	ND	13.97	10-14-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	2.5	P

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MW-9	01-21-99	22.26	7.63	ND	14.63	01-22-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.5	P
MW-9	05-06-99	22.26	7.27	ND	14.99	05-06-99	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-9	08-23-99	22.26	8.24	ND	14.02	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.93	P
MW-9	10-28-99	22.26	8.63	ND	13.63	10-28-99	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-10	03-17-95	21.12	6.26	ND	14.86	03-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-10	06-01-95	21.12	7.63	ND	13.49	06-01-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-10	08-31-95	21.12	8.17	ND	12.95	08-31-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-10	11-27-95	21.12	8.38	ND	12.74	11-27-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-10	02-22-96	21.12	5.41	ND	15.71	03-14-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-10	05-20-96	21.12	6.78	ND	14.34	05-21-96	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-10	08-26-96	21.12	8.00	ND	13.12	08-26-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-10	11-20-96	21.12	7.81	ND	13.31	11-20-96	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-10	03-24-97	21.33	7.87	ND	13.46	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-10	05-23-97	21.33	8.33	ND	13.00	05-23-97	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-10	08-19-97	21.33	8.39	ND	12.94	08-19-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-10	11-19-97	21.33	8.39	ND	12.94	11-19-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-10	02-19-98	21.33	4.65	ND	16.68	02-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-10	04-23-98	21.33	6.28	ND	15.05	04-23-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.5	P
MW-10	07-27-98	21.33	7.97	ND	13.36	07-27-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	3.3	P
MW-10	10-14-98	21.33	8.41	ND	12.92	10-14-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.0	P
MW-10	01-21-99	21.33	6.65	ND	14.68	01-22-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.5	P
MW-10	05-06-99	21.33	7.74	ND	13.59	05-06-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.76	P

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MW-10	08-23-99	21.33	8.37	ND	12.96	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.21	P
MW-10	10-28-99	21.33	8.73	ND	12.60	10-28-99	<50	<0.5	<0.5	<0.5	<1	<3	--	--	--	1.12	P
MW-11	03-17-95	22.38	6.94	ND	15.44	03-17-95	100	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-11	06-01-95	22.38	7.90	ND	14.48	06-01-95	210	<0.5	<0.5	0.9	0.7	--	--	--	--		
MW-11	08-31-95	22.38	8.18	ND	14.20	08-31-95	680	<0.5	<0.5	4	1.8	<3	--	--	--		
MW-11	11-27-95	22.38	8.48	ND	13.90	11-27-95	340	<0.5	<0.5	2.2	1.6	--	--	--	--		
MW-11	02-22-96	22.38	6.63	ND	15.75	03-14-96	150	<0.5	<0.5	<0.8	0.8	<3	--	--	--		
MW-11	05-20-96	22.38	7.25	ND	15.13	05-21-96	Not sampled: well sampled annually, during the first quarter										
MW-11	08-26-96	22.38	8.22	ND	14.16	08-26-96	Not sampled: well sampled annually, during the first quarter										
MW-11	11-20-96	22.38	8.37	ND	14.01	11-20-96	Not sampled: well sampled annually, during the first quarter										
MW-11	03-24-97	20.97	8.15	ND	12.82	03-24-97	63	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-11	05-23-97	20.97	8.48	ND	12.49	05-23-97	Not sampled: well sampled annually, during the first quarter										
MW-11	08-19-97	20.97	8.67	ND	12.30	08-19-97	Not sampled: well sampled annually, during the first quarter										
MW-11	11-19-97	20.97	8.67	ND	12.30	11-19-97	Not sampled: well sampled annually, during the first quarter										
MW-11	02-19-98	20.97	6.25	ND	14.72	02-19-98	<50	<0.5	1.6	<0.5	1.8	7	--	--	--		
MW-11	04-23-98	20.97	7.23	ND	13.74	04-23-98	Not sampled: well sampled annually, during the first quarter										
MW-11	07-27-98	20.97	8.05	ND	12.92	07-27-98	Not sampled: well sampled annually, during the first quarter										
MW-11	10-14-98	20.97	8.58	ND	12.39	10-14-98	Not sampled: well sampled annually, during the first quarter										
MW-11	01-21-99	20.97	8.25	ND	12.72	01-22-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.5	P
MW-11	05-06-99	20.97	7.95	ND	13.02	05-06-99	Not sampled: well sampled annually, during the first quarter										
MW-11	08-23-99	20.97	8.51	ND	12.46	08-24-99	Not sampled: well sampled annually, during the first quarter										
MW-11	10-28-99	20.97	8.95	ND	12.02	10-28-99	Not sampled: well sampled annually, during the first quarter										

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MW-12	03-17-95	22.77	7.09	ND	15.68	03-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-12	06-01-95	22.77	8.40	ND	14.37	06-01-95	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-12	08-31-95	22.77	8.55	ND	14.22	08-31-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-12	11-27-95	22.77	8.95	ND	13.82	11-27-95	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-12	02-22-96	22.77	6.81	ND	15.96	03-14-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-12	05-20-96	22.77	7.56	ND	15.21	05-21-96	Not sampled: well sampled annually, during the first quarter										
MW-12	08-26-96	22.77	8.63	ND	14.14	08-26-96	Not sampled: well sampled annually, during the first quarter										
MW-12	11-20-96	22.77	8.38	ND	14.39	11-20-96	Not sampled: well sampled annually, during the first quarter										
MW-12	03-24-97	20.11	8.75	ND	11.36	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-12	05-23-97	20.11	8.92	ND	11.19	05-23-97	Not sampled: well sampled annually, during the first quarter										
MW-12	08-19-97	20.11	9.20	ND	10.91	08-19-97	Not sampled: well sampled annually, during the first quarter										
MW-12	11-19-97	20.11	9.20	ND	10.91	11-19-97	Not sampled: well sampled annually, during the first quarter										
MW-12	02-19-98	20.11	6.28	ND	13.83	02-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-12	04-23-98	20.11	7.52	ND	12.59	04-23-98	Not sampled: well sampled annually, during the first quarter										
MW-12	07-27-98	20.11	8.52	ND	11.59	07-27-98	Not sampled: well sampled annually, during the first quarter										
MW-12	10-14-98	20.11	9.06	ND	11.05	10-14-98	Not sampled: well sampled annually, during the first quarter										
MW-12	01-21-99	20.11	8.20	ND	11.91	01-22-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.5	P
MW-12	05-06-99	20.11	8.47	ND	11.64	05-06-99	Not sampled: well sampled annually, during the first quarter										
MW-12	08-23-99	20.11	9.04	ND	11.07	08-24-99	Not sampled: well sampled annually, during the first quarter										0.85
MW-12	10-28-99	20.11	9.40	ND	10.71	10-28-99	Not sampled: well sampled annually, during the first quarter										
MW-13	03-17-95	22.45	6.91	ND	15.54	03-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-13	06-01-95	22.45	7.72	ND	14.73	06-01-95	Not sampled: well sampled annually, during the first quarter										

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MW-13	08-31-95	22.45	7.58	ND	14.87	08-31-95	Not sampled: well sampled annually, during the first quarter										
MW-13	11-27-95	22.45	7.98	ND	14.47	11-27-95	Not sampled: well sampled annually, during the first quarter										
MW-13	02-22-96	22.45	6.71	ND	15.74	03-14-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-13	05-20-96	22.45	6.98	ND	15.47	05-21-96	Not sampled: well sampled annually, during the first quarter										
MW-13	08-26-96	22.45	7.85	ND	14.60	08-26-96	Not sampled: well sampled annually, during the first quarter										
MW-13	11-20-96	22.45	7.76	ND	14.69	11-20-96	Not sampled: well sampled annually, during the first quarter										
MW-13	03-24-97	20.75	7.85	ND	12.90	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-13	05-23-97	20.75	8.16	ND	12.59	05-23-97	Not sampled: well sampled annually, during the first quarter										
MW-13	08-19-97	20.75	8.40	ND	12.35	08-19-97	Not sampled: well sampled annually, during the first quarter										
MW-13	11-19-97	20.75	8.40	ND	12.35	11-19-97	Not sampled: well sampled annually, during the first quarter										
MW-13	02-19-98	20.75	6.44	ND	14.31	02-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-13	04-23-98	20.75	6.80	ND	13.95	04-23-98	Not sampled: well sampled annually, during the first quarter										
MW-13	07-27-98	20.75	7.52	ND	13.23	07-27-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.5	P
MW-13	10-14-98	20.75	8.15	ND	12.60	10-14-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	2.0	P
MW-13	01-21-99	20.75	7.85	ND	12.90	01-22-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.5	P
MW-13	05-06-99	20.75	7.82	ND	12.93	05-06-99	Not sampled: well sampled annually, during the first quarter										
MW-13	08-23-99	20.75	8.29	ND	12.46	08-24-99	Not sampled: well sampled annually, during the first quarter									0.94	
MW-13	10-28-99	20.75	8.55	ND	12.20	10-28-99	Not sampled: well sampled annually, during the first quarter										
MW-14	03-17-95	22.99	8.17	ND	14.82	03-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-14	06-01-95	22.99	8.57	ND	14.42	06-01-95	Not sampled: well sampled annually, during the first quarter										
MW-14	08-31-95	22.99	9.05	ND	13.94	08-31-95	Not sampled: well sampled annually, during the first quarter										
MW-14	11-27-95	22.99	9.19	ND	13.80	11-27-95	Not sampled: well sampled annually, during the first quarter										

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MW-14	02-22-96	22.99	6.52	ND	16.47	03-14-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-14	05-20-96	22.99	7.88	ND	15.11	05-21-96	Not sampled: well sampled annually, during the first quarter										
MW-14	08-26-96	22.99	8.83	ND	14.16	08-26-96	Not sampled: well sampled annually, during the first quarter										
MW-14	11-20-96	22.99	8.95	ND	14.04	11-20-96	Not sampled: well sampled annually, during the first quarter										
MW-14	03-24-97	20.90	8.98	ND	11.92	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-14	05-23-97	20.90	9.61	ND	11.29	05-23-97	Not sampled: well sampled annually, during the first quarter										
MW-14	08-19-97	20.90	9.80	ND	11.10	08-19-97	Not sampled: well sampled annually, during the first quarter										
MW-14	11-19-97	20.90	9.80	ND	11.10	11-19-97	<50	1.7	<0.5	0.6	3	<3					
MW-14	02-19-98	20.90	6.27	ND	14.63	02-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-14	04-23-98	20.90	7.75	ND	13.15	04-23-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.5	P
MW-14	07-27-98	20.90	9.24	ND	11.66	07-27-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.0	P
MW-14	10-14-98	20.90	9.73	ND	11.17	10-14-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.0	P
MW-14	01-21-99	20.90	8.90	ND	12.00	01-22-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.5	P
MW-14	05-06-99	20.90	8.98	ND	11.92	05-06-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.73	P
MW-14	08-23-99	20.90	9.68	ND	11.22	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.91	P
MW-14	10-28-99	20.90	10.00	ND	10.90	10-28-99	<50	<0.5	<0.5	<0.5	<1	<10	--	--	--	1.06	P
MW-15	03-17-95	19.19	5.21	ND	13.98	03-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-15	06-01-95	19.19	5.84	ND	13.35	06-01-95	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	08-31-95	19.19	6.18	ND	13.01	08-31-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-15	11-27-95	19.19	6.42	ND	12.77	11-27-95	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	02-22-96	19.19	4.84	ND	14.35	03-14-96	<50	<0.5	<0.5	<0.5	<0.5	12	--	--	--		
MW-15	05-20-96	19.19	5.31	ND	13.88	05-21-96	Not sampled: well sampled semi-annually, during the first and third quarters										

Table 1
Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents
1995 - Present***

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Floating Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8240 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-15	08-26-96	19.19	6.05	ND	13.14	08-26-96	<50	<0.5	<0.5	<0.5	<0.5	8	--	--	--		
MW-15	11-20-96	19.19	5.46	ND	13.73	11-20-96	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	03-24-97	22.08	6.00	ND	16.08	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	15	--	--	--		
MW-15	05-23-97	22.08	6.25	ND	15.83	05-23-97	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	08-19-97	22.08	6.34	ND	15.74	08-19-97	99[1]	<0.5	<0.5	<0.5	0.7	6	--	--	--		
MW-15	11-19-97	22.08	6.34	ND	15.74	11-19-97	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	02-19-98	22.08	4.66	ND	17.42	02-19-98	<50	<0.5	<0.5	<0.5	<0.5	48	--	--	--		
MW-15	04-23-98	22.08	5.18	ND	16.90	04-23-98	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	07-27-98	22.08	6.02	ND	16.06	07-27-98	<50	<0.5	<0.5	<0.5	<0.5	50	--	--	--	1.0	P
MW-15	10-14-98	22.08	6.26	ND	15.82	10-14-98	<50	<0.5	<0.5	<0.5	<0.5	27	--	--	--	1.5	P
MW-15	01-21-99	22.08	5.33	ND	16.75	01-22-99	<50	<0.5	<0.5	<0.5	<0.5	6	--	--	--	1.0	P
MW-15	05-06-99	22.08	5.82	ND	16.26	05-06-99	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	08-23-99	22.08	6.24	ND	15.84	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	21	--	--	--	1.14	P
MW-15	10-28-99	22.08	6.60	ND	15.48	10-28-99	Not sampled: well sampled semi-annually, during the first and third quarters										

Table 1
Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents
1995 - Present***

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Floating Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8240 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
ft-MSL: elevation in feet, relative to mean sea level TPHG: total petroleum hydrocarbons as gasoline, California DHS LUFT Method MTBE: Methyl tert-butyl ether TRPH: total recoverable petroleum hydrocarbons TPHD: total petroleum hydrocarbons as diesel, California DHS LUFT Method µg/L: micrograms per liter mg/L: milligrams per liter ND: none detected DRY: dry well; groundwater was not detected --: not analyzed [1]: Sample contains a higher boiling point hydrocarbon mixture quantitated as gasoline. The chromatogram did not match the typical gasoline fingerprint. *: EPA method 8020 prior to 10/28/99 ** : [corrected elevation (Z')] = Z + (h * 0.73) where: Z = measured elevation, h = floating product thickness, 0.73 = density ratio of oil to water ***: For previous historical groundwater elevation and analytical data please refer to <i>Fourth Quarter 1995 Groundwater Monitoring Program Results, ARCO Service Station 601, San Leandro, California</i>, (EMCON, March 14, 1996).																	

Table 2
Groundwater Flow Direction and Gradient

ARCO Service Station No. 601
712 Lewelling Boulevard, San Leandro, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
03/17/95	West-Southwest	0.006
06/01/95	Southwest	0.003
08/31/95	South-Southwest	0.005
11/27/95	South-Southwest	0.004
02/22/96	Northwest	0.007
05/20/96	Southwest	0.007
08/26/96	South-Southwest	0.004
11/20/96	South-Southeast	0.004
03/24/97	Southeast	0.013
05/23/97	Southeast	0.014
08/19/97	Southeast	0.04
11/19/97	Southeast	0.016
02/19/98	East	Variable
04/23/98	Variable	Variable
07/27/98	Southeast	0.05
10/14/98	Southeast	0.02
01/21/99	East	0.04
05/06/99	Southeast	0.05
08/23/99	Southeast	0.02
10/28/99	Southeast	0.04

Table 3
Historical Groundwater Analytical Data
Metals*
1995 - Present**

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation	Water Sample Field Date	Cadmium EPA 6010 µg/L	Chromium EPA 6010 µg/L	Lead EPA 7421 µg/L	Nickel EPA 6010 µg/L	Zinc EPA 6010 µg/L
MW-1	03-17-95	<5	20	20	<40	60
MW-1	06-01-95	<5	20	22	70	100
MW-1	08-31-95	Not sampled: well contained floating product				
MW-1	11-27-95	Not sampled: well contained floating product				
MW-1	03-14-96	Not sampled: well contained floating product				
MW-1	05-21-96	0.006	<0.01	<0.005	<0.02	<0.02
MW-1	08-26-96	--	--	--	--	--
MW-1	11-20-96	--	--	--	--	--
MW-1	03-24-97	--	--	--	--	--
MW-1	05-23-97	Not analyzed: well MW-8 was sampled for additional parameters in lieu of well MW-1				
MW-1	08-19-97	--	--	--	--	--
MW-1	11-19-97	--	--	--	--	--
MW-1	02-19-98	<0.01	<0.01	<0.05	<0.02	<0.02
MW-1	04-23-98	--	--	--	--	--
MW-1	07-27-98	--	--	--	--	--
MW-1	10-14-98	--	--	--	--	--
MW-1	01-22-99	<0.005	<0.01	<0.05	<0.02	<0.02
MW-1	05-06-99	--	--	--	--	--
MW-1	08-24-99	--	--	--	--	--
MW-1	10-28-99	--	--	--	--	--
MW-8	08-31-95	<5	40	16	50	90
MW-8	11-27-95	<5	130	77	170	280
MW-8	03-14-96	<5	30	7	40	60
MW-8	05-23-97	<0.005	<0.01	<0.005	<0.02	<0.02

EPA: United States Environmental Protection Agency
µg/L: micrograms per liter
-- : not analyzed
*: Historically samples were analyzed for total metals. Since March 14, 1996, the samples were filtered and analyzed for dissolved metals
**: For previous historical analytical data please refer to *Fourth Quarter 1995 Groundwater Monitoring Program Results, ARCO Service Station 601, San Leandro, California*, (EMCON, March 14, 1996).

Table 4
Historical Groundwater Analytical Data
Volatile and Semivolatile Organic Compounds
1995 - Present*

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation Water Sample Field Date	Volatile Organic Compounds by EPA Method 601/8010 or 624/8240							Semivolatile Organic Compounds by EPA Method 3520/8270				
	Methylene Chloride µg/L	1,2-Dichloro- ethane µg/L	1,1-Dichloro- ethane µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	Naphthalene µg/L	2-Methyl- naphthalene µg/L	Bis (2-ethylhexyl) Phthalate µg/L	Phenol µg/L	2,4-Di-methyl- phenol µg/L
MW-1 03-17-95	--	--	--	--	--	--	--	1300	730	<50	ND	150
MW-1 06-01-95	--	--	--	--	--	--	--	2200	1700	<100	240	<100
MW-1 08-31-95	Not sampled: well contained floating product											
MW-1 11-27-95	Not sampled: well contained floating product											
MW-1 03-14-96	Not sampled: well contained floating product											
MW-1 05-21-96	--	--	--	--	--	--	--	1200	860	<50	<50	<50
MW-1 08-26-96	--	--	--	--	--	--	--	2300	1800	<500	<500	<1000
MW-1 11-20-96	--	--	--	--	--	--	--	590	250	91	<50	<100
MW-1 03-24-97	--	--	--	--	--	--	--	730	610	<50	<50	<100
MW-1 05-23-97	Not analyzed: well MW-8 was sampled for additional parameters in lieu of well MW-1											
MW-1 08-19-97	--	--	--	--	--	--	--	1,300	790	<50	<50	<100
MW-1 11-19-97	--	--	--	--	--	--	--	<5	<5	5	<5	<10
MW-1 02-19-98	--	--	--	--	--	--	--	870	330	<50	<50	<100
MW-1 04-23-98	Not analyzed											
MW-1 07-27-98	Not analyzed											
MW-1 10-14-98	Not analyzed											
MW-1 01-28-99**	--	--	--	--	--	--	--	950	580	<50	<50	<100
MW-1 05-06-99	Not analyzed											
MW-1 08-24-99	--	--	--	--	--	--	--	1,200	400	<50	<50	<100
MW-1 10-28-99	--	--	--	--	--	--	--	1,100	320	<50	<50	<100

Table 4
Historical Groundwater Analytical Data
Volatile and Semivolatile Organic Compounds
1995 - Present*

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation Water Sample Field Date	Volatile Organic Compounds by EPA Method 601/8010 or 624/8240							Semivolatile Organic Compounds by EPA Method 3520/8270				
	Methylene Chloride µg/L	1,2-Dichloro- ethane µg/L	1,1-Dichloro- ethane µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	Naphthalene µg/L	2-Methyl- naphthalene µg/L	Bis (2-ethylhexyl) Phthalate µg/L	Phenol µg/L	2,4-Di-methyl- phenol µg/L
MW-8 08-31-95	--	--	--	--	--	--	--	62	8	<5	<5	<5
MW-8 11-27-95	--	--	--	--	--	--	--	15	<5	<5	<5	<5
MW-8 03-14-96	--	--	--	--	--	--	--	400	55	<50	<50	<50
MW-8 05-23-97	--	--	--	--	--	--	--	26	<5	<5	<5	<10
EPA: United States Environmental Protection Agency µg/L: micrograms per liter -- : not analyzed < = less than the laboratory detection limit stated to the right *: For previous historical analytical data please refer to <i>Fourth Quarter 1995 Groundwater Monitoring Program Results, ARCO Service Station 601, San Leandro, California</i> , (EMCON, March 14, 1996). **: Sampling date is different from Groundwater Monitoring Field Date												

Table 5
Approximate Cumulative Floating Product Recovered

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Desig- nation	Date	Floating Product Recovered gallons
MW-1	1991	3.43
MW-1	1992	0.02
MW-1	1993	0.00
MW-1	1994	0.00
MW-1	1995	0.00
MW-1	1996	0.00
MW-1	1997	0.00
MW-1	1998	0.00
MW-1	1999	0.00
MW-1	2000	0.00
1991 to 2000 Total:		3.45

ATTACHMENT D

EDCC REPORT AND EDF/GEOWELL SUBMITTAL CONFIRMATION

Error Summary Log

12/31/02

EDF 1.2i All files present in deliverable.

Laboratory:	Sequoia Analytical Laboratories, Inc., Morgan Hill, CA
Project Name:	ARCO #601, San Leandro, C
Work Order Number:	MLJ0524
Global ID:	T0600100108
Lab Report Number:	MLJ0524110420020823

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdat	Anadate	Lablotctl	Run Sub
MLJ052411042002 MW-1 0823		MLJ052401	W	CS	8270SIM	3510ARO	10/16/02	10/22/02	10/29/02	2J22026	1
MLJ052411042002 MW-1 0823		MLJ052401	W	CS	SW8020F	SW5030B	10/16/02	10/28/02	10/28/02	2J28012	1
MLJ052411042002 MW-10 0823		MLJ052407	W	CS	SW8020F	SW5030B	10/16/02	10/25/02	10/25/02	2J25003	1
MLJ052411042002 MW-14 0823		MLJ052406	W	CS	SW8020F	SW5030B	10/16/02	10/25/02	10/25/02	2J25003	1
MLJ052411042002 MW-3 0823		MLJ052402	W	CS	SW8020F	SW5030B	10/16/02	10/28/02	10/28/02	2J28012	1
MLJ052411042002 MW-4 0823		MLJ052403	W	CS	SW8020F	SW5030B	10/16/02	10/28/02	10/28/02	2J28012	1
MLJ052411042002 MW-5 0823		MLJ052404	W	CS	SW8020F	SW5030B	10/16/02	10/28/02	10/28/02	2J28012	1
MLJ052411042002 MW-8 0823		MLJ052405	W	CS	SW8020F	SW5030B	10/16/02	10/25/02	10/25/02	2J25003	1
		MLJ062303	W	NC	SW8020F	SW5030B	//	10/28/02	10/28/02	2J28012	1
		2J22026BSD1	WQ	BD1	8270SIM	3510ARO	//	10/22/02	10/29/02	2J22026	1
		2J22026BS1	WQ	BS1	8270SIM	3510ARO	//	10/22/02	10/29/02	2J22026	1
		2J22026BLK1	WQ	LB1	8270SIM	3510ARO	//	10/22/02	10/29/02	2J22026	1
		2J25003BS1	WQ	BS1	SW8020F	SW5030B	//	10/25/02	10/25/02	2J25003	1
		2J25003BS2	WQ	BS2	SW8020F	SW5030B	//	10/25/02	10/25/02	2J25003	1
		2J25003BLK1	WQ	LB1	SW8020F	SW5030B	//	10/25/02	10/25/02	2J25003	1
		2J25003MS1	W	MS1	SW8020F	SW5030B	//	10/25/02	10/25/02	2J25003	1
		2J25003MSD1	W	SD1	SW8020F	SW5030B	//	10/25/02	10/25/02	2J25003	1
		2J28012BS1	WQ	BS1	SW8020F	SW5030B	//	10/28/02	10/28/02	2J28012	1
		2J28012BS2	WQ	BS2	SW8020F	SW5030B	//	10/28/02	10/28/02	2J28012	1
		2J28012BLK1	WQ	LB1	SW8020F	SW5030B	//	10/28/02	10/28/02	2J28012	1
		2J28012MS1	W	MS1	SW8020F	SW5030B	//	10/28/02	10/28/02	2J28012	1
		2J28012MSD1	W	SD1	SW8020F	SW5030B	//	10/28/02	10/28/02	2J28012	1

EDFSAMP: Error Summary Log

12/31/02

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

EDFTEST: Error Summary Log

12/31/02

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

EDFRES: Error Summary Log

12/31/02

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	2J25003MS1	MS1	W	SW8020F	PR	10/25/02	1	AAATFBZME
Warning: extra parameter	2J25003MS1	MS1	W	SW8020F	PR	10/25/02	1	GROC6C10
Warning: extra parameter	2J25003MSD1	SD1	W	SW8020F	PR	10/25/02	1	AAATFBZME
Warning: extra parameter	2J25003MSD1	SD1	W	SW8020F	PR	10/25/02	1	GROC6C10
Warning: extra parameter	2J28012MS1	MS1	W	SW8020F	PR	10/28/02	1	AAATFBZME
Warning: extra parameter	2J28012MS1	MS1	W	SW8020F	PR	10/28/02	1	GROC6C10
Warning: extra parameter	2J28012MSD1	SD1	W	SW8020F	PR	10/28/02	1	AAATFBZME
Warning: extra parameter	2J28012MSD1	SD1	W	SW8020F	PR	10/28/02	1	GROC6C10
Warning: extra parameter	MLJ052401	CS	W	SW8020F	PR	10/28/02	1	AAATFBZME
Warning: extra parameter	MLJ052401	CS	W	SW8020F	PR	10/28/02	1	GROC6C10
Warning: extra parameter	MLJ052401	CS	W	SW8020F	PR	10/28/02	1	MTBE
Warning: extra parameter	MLJ052402	CS	W	SW8020F	PR	10/28/02	1	AAATFBZME
Warning: extra parameter	MLJ052402	CS	W	SW8020F	PR	10/28/02	1	GROC6C10
Warning: extra parameter	MLJ052402	CS	W	SW8020F	PR	10/28/02	1	MTBE
Warning: extra parameter	MLJ052403	CS	W	SW8020F	PR	10/28/02	1	AAATFBZME
Warning: extra parameter	MLJ052403	CS	W	SW8020F	PR	10/28/02	1	GROC6C10
Warning: extra parameter	MLJ052403	CS	W	SW8020F	PR	10/28/02	1	MTBE
Warning: extra parameter	MLJ052404	CS	W	SW8020F	PR	10/28/02	1	AAATFBZME
Warning: extra parameter	MLJ052404	CS	W	SW8020F	PR	10/28/02	1	GROC6C10
Warning: extra parameter	MLJ052404	CS	W	SW8020F	PR	10/28/02	1	MTBE
Warning: extra parameter	MLJ052405	CS	W	SW8020F	PR	10/25/02	1	AAATFBZME
Warning: extra parameter	MLJ052405	CS	W	SW8020F	PR	10/25/02	1	GROC6C10
Warning: extra parameter	MLJ052405	CS	W	SW8020F	PR	10/25/02	1	MTBE
Warning: extra parameter	MLJ052406	CS	W	SW8020F	PR	10/25/02	1	AAATFBZME
Warning: extra parameter	MLJ052406	CS	W	SW8020F	PR	10/25/02	1	GROC6C10

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	MLJ052406	CS	W	SW8020F	PR	10/25/02	1	MTBE
Warning: extra parameter	MLJ052407	CS	W	SW8020F	PR	10/25/02	1	AAATFBZME
Warning: extra parameter	MLJ052407	CS	W	SW8020F	PR	10/25/02	1	GROC6C10
Warning: extra parameter	MLJ052407	CS	W	SW8020F	PR	10/25/02	1	MTBE
Warning: extra parameter	MLJ062303	NC	W	SW8020F	PR	10/28/02	1	AAATFBZME
Warning: extra parameter	MLJ062303	NC	W	SW8020F	PR	10/28/02	1	GROC6C10
Warning: extra parameter	2J25003BLK1	LB1	WQ	SW8020F	PR	10/25/02	1	AAATFBZME
Warning: extra parameter	2J25003BLK1	LB1	WQ	SW8020F	PR	10/25/02	1	GROC6C10
Warning: extra parameter	2J25003BLK1	LB1	WQ	SW8020F	PR	10/25/02	1	MTBE
Warning: extra parameter	2J25003BS1	BS1	WQ	SW8020F	PR	10/25/02	1	AAATFBZME
Warning: extra parameter	2J25003BS2	BS2	WQ	SW8020F	PR	10/25/02	1	AAATFBZME
Warning: extra parameter	2J25003BS2	BS2	WQ	SW8020F	PR	10/25/02	1	GROC6C10
Warning: extra parameter	2J28012BLK1	LB1	WQ	SW8020F	PR	10/28/02	1	AAATFBZME
Warning: extra parameter	2J28012BLK1	LB1	WQ	SW8020F	PR	10/28/02	1	GROC6C10
Warning: extra parameter	2J28012BLK1	LB1	WQ	SW8020F	PR	10/28/02	1	MTBE
Warning: extra parameter	2J28012BS1	BS1	WQ	SW8020F	PR	10/28/02	1	AAATFBZME
Warning: extra parameter	2J28012BS2	BS2	WQ	SW8020F	PR	10/28/02	1	AAATFBZME
Warning: extra parameter	2J28012BS2	BS2	WQ	SW8020F	PR	10/28/02	1	GROC6C10

EDFQC: Error Summary Log

12/31/02

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

EDFCL: Error Summary Log

12/31/02

Error type	Cirevdate	Anmcode	Exmcode	Parlabel	Cicode
There are no errors in this data file	11				

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Confirmation Number: 1479309141

Date/Time of Submittal: 1/24/2003 4:51:41 PM

Facility Global ID: T0600100108

Facility Name: ARCO

Submittal Title: 4th Qtr 2002 Monitoring Report for # 0601

Submittal Type: GW Monitoring Report

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