RO-494

Atlantic Richfield Company
(a BP affiliated company)

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

RE: Fourth Quarter 2003 Groundwater Monitoring Report
ARCO Service Station #2111
1156 Davis Street
San Leandro, CA
URS Project#38486321

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

Submitted by:

Paul Supple
Environmental Business Manager

URS

December 22, 2003

Ms. eva chu
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: Fourth Quarter 2003 Groundwater Monitoring Report
ARCO Service Station #2111
1156 Davis Street
San Leandro, California
URS Project #38486321

Dear Ms. chu:

On behalf of Atlantic Richfield Company (ARCO – an affiliated company of the Group Environmental Management Company), URS Corporation (URS) is submitting the *Fourth Quarter 2003 Groundwater Monitoring Report* for ARCO Service Station #2111, located at 1156 Davis Street, San Leandro, California.

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

Sincerely,

URS CORPORATION

Scott Robinson
Project Manager

James F. Durkin, C. Hg.
Senior Geologist

Enclosure: Fourth Quarter 2003 Groundwater Monitoring Report

cc: Mr. Paul Supple, ARCO, (electronic copy uploaded to ENFOS)

URS Corporation
500 12th Street, Suite 200
Oakland, CA 94607-4014
Tel: 510.893.3600
Fax: 510.874.3268

REPORT

FOURTH QUARTER 2003 GROUNDWATER MONITORING

ARCO SERVICE STATION #2111
1156 DAVIS STREET
SAN LEANDRO, CALIFORNIA

Prepared for
Atlantic Richfield Company

December 22, 2003

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

38486321

URS

Date: December 22, 2003
Quarter: 4Q 03

ATLANTIC RICHFIELD COMPANY QUARTERLY GROUNDWATER MONITORING REPORT

Former Facility No.:	2111	Address:	1156 Davis Street, San Leandro, California
Atlantic Richfield Co. Environmental Engineer:			Paul Supple
Consulting Co./Contact Person:			URS Corporation / Scott Robinson
Consultant Project No.:			38486321
Primary Agency:			Alameda County Health Care Services Agency (ACHCSA)

WORK PERFORMED THIS QUARTER (Fourth – 2003):

1. Performed fourth quarter 2003 groundwater monitoring event on October 1, 2003.
2. Checked well MW-2 monthly for free product. Additional analysis run on MW-1 for system design info.
3. Prepared and submitted fourth quarter 2003 groundwater monitoring report.
4. Submitted PG&E application for new gas and electric service.
5. Submitted groundwater discharge application to the City of San Leandro.
6. Continued preparing Dual Phase Extraction (DPE) system design.
7. Install new well (MW-8) for monitoring and DPE system on November 26, 2003.

WORK PROPOSED FOR NEXT QUARTER (First – 2004):

1. Perform first quarter 2004 groundwater monitoring event.
2. Prepare and submit first quarter 2004 groundwater monitoring report.
3. Check MW-2 monthly for free product.
4. Finalize DPE system design.
5. Secure new gas and electrical service from PG&E.
6. Secure discharge permit from the City of San Leandro for groundwater discharge.
7. Install DPE system.
8. Perform inital startup of DPE system.

Current Phase of Project:	GW monitoring/sampling
Frequency of Groundwater Sampling:	Quarterly: Wells MW-1 through MW-5 and MW-7 Annually (3rd Quarter): MW-6
Frequency of Groundwater Monitoring:	Quarterly
Is Free Product (FP) Present On-Site:	FP in MW-2 (see Table 4)
FP recovered this quarter (to 12/11/03):	0.447 gallons
Cumulative FP Recovered from 6/28/99 to 11/12/03 :	1.051 gallons
Current Remediation Techniques:	Bailing free product as needed
Approximate Depth to Groundwater:	15.37 (MW-6) to 18.20 (MW-1) feet
Groundwater Gradient (direction):	West
Groundwater Gradient (magnitude):	0.002 feet per foot

URS

DISCUSSION:

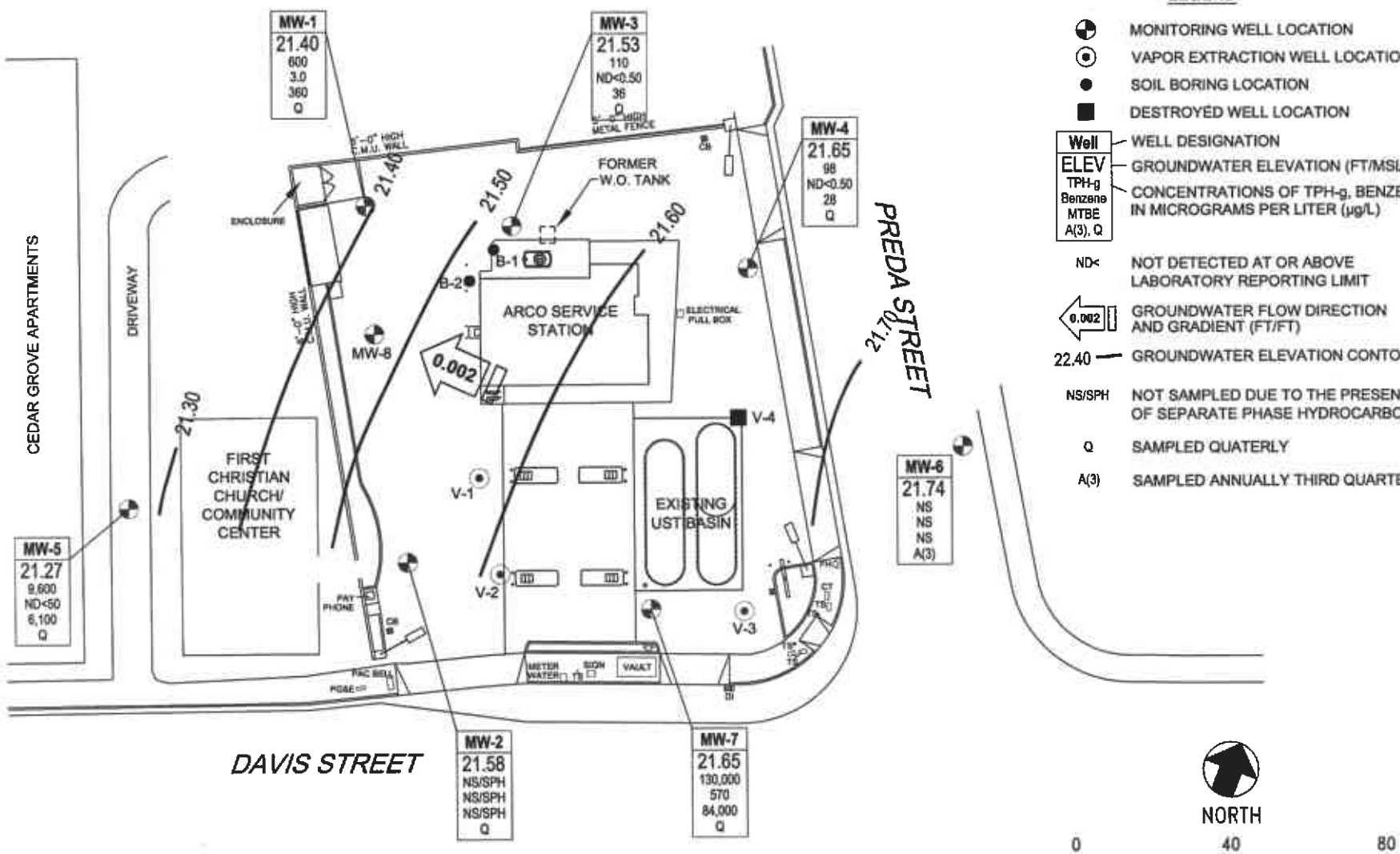
TPH-g was detected above the laboratory reporting limit in all wells sampled this quarter at concentrations ranging from 98 µg/L (MW-4) to 130,000 µg/L (MW-7). Benzene was detected above the laboratory reporting limit in two of the wells sampled this quarter at concentrations of 3.0 µg/L (MW-1) and 570 µg/L (MW-7). MTBE was detected above the laboratory reporting limit in all five wells at concentrations ranging from 28 µg/L (MW-4) to 84,000 µg/L (MW-7). Tert-Amyl methyl ether (TAME) was detected above the laboratory reporting limit in three wells at concentrations ranging from 2.6 µg/L (MW-3) to 9.3 µg/L (MW-1). Other than MTBE and TAME, no other fuel oxygenates were detected above the respective laboratory reporting limits (Table 3).

On November 26, 2003, MW-8 was installed to a depth of 38 feet below ground surface (bgs). The monitoring well is of 2" PVC diameter and is screened from 18 feet to 38 feet bgs. Surface completion of the well was made in the existing vault box to the east of the station building. The well will be developed, surveyed, and added to the quarter program.

ATTACHMENTS:

- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map – October 1, 2003
- Table 1 – Groundwater Elevation and Analytical Data
- Table 2 – Groundwater Flow Direction and Gradient
- Table 3 – Fuel Oxygenates Analytical Data
- Table 4 – Approximate Cumulative Floating Product Recovered (1999 – Present)
- Table 5 – Soil Analytical Data from MW-8 Well Installation
- Attachment A – Field Procedures and Field Data Sheets
- Attachment B – Laboratory Procedures, Certified Analytical Reports and Chain-of-Custody Records
- Attachment C – Historic Groundwater Data
- Attachment D – EDCC and EDF/Geowell Submittal Confirmation
- Attachment E – Field Notes and Well Log for MW-8

X:\x_env_waste\BP GEM\Sites\Scott Robinson\Paul Supple\2111\Monitoring\Qtr. 4, 2003\Drawings\GWEC-AS_10-1.dwg, 12/12/2003 01:39:42 PM, JKMT, URS



LEGEND

- MONITORING WELL LOCATION
- VAPOR EXTRACTION WELL LOCATION
- SOIL BORING LOCATION
- DESTROYED WELL LOCATION
- Well — WELL DESIGNATION
- ELEV — GROUNDWATER ELEVATION (FT/MSL)
- TPH-g, Benzene, MTBE, A(3), Q — CONCENTRATIONS OF TPH-g, BENZENE & MTBE IN MICROGRAMS PER LITER (µg/L)
- ND< — NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMIT
- 0.002 — GROUNDWATER FLOW DIRECTION AND GRADIENT (FT/FT)
- 22.40 — GROUNDWATER ELEVATION CONTOUR (FT/MSL)
- NS/SPH — NOT SAMPLED DUE TO THE PRESENCE OF SEPARATE PHASE HYDROCARBONS
- Q — SAMPLED QUATERLY
- A(3) — SAMPLED ANNUALLY THIRD QUARTER

NORTH

0 40 80

SCALE IN FEET

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

URS	Project No. 38486321 Arco Service Station #2111 1156 Davis Street San Leandro, California	GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP Fourth Quarter 2003 (October 1, 2003)	FIGURE 1

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #2111
1156 Davis Street
San Leandro, California

Well Number	Date Sampled	Purge/ Not Purged	Top of Riser Elevation (feet, MSL)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (8020) (µg/L)	MTBE (8260) (µg/L)	Dissolved Oxygen [o] (mg/L)	pH Level [o]
MW-1	06/26/00		39.60	16.46	23.14	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/20/00			16.89	22.71	360	110	<0.5	<0.5	2.7	2,100	NA	NA	NA
	09/19/00			17.62	21.98	290	76	<0.5	<0.5	2.3	1,500	NA	NA	NA
	12/21/00			17.39	22.21	257	64	2.89	1.31	4.57	1,080	1,060	NA	NA
	03/13/01			15.7	23.90	<500	52.5	<5.0	<5.0	<5.0	1,430	1,370	NA	NA
	09/18/01			18.24	21.36	<500	64	7.3	<5.0	52	810	1,100	NA	NA
	12/28/01			15.95	23.65	<500	<5.0	<5.0	5.00	22	1,200	1,100	NA	NA
	03/14/02			16.01	23.59	<50	<0.5	<0.5	<0.5	<0.5	34	40	NA	NA
	04/23/02			15.43	24.17	<50	<0.5	<0.5	<0.5	<0.5	30	NA	NA	NA
	07/17/02	NP		17.50	22.10	<50	1.2	<0.50	<0.50	<0.50	29	NA	1.6	6.9
	10/09/02			18.27	21.33	240[c]	4.9	<1.0	4.1	7.0	290	310	1.2	6.5
	01/13/03			15.37	24.23	760[c]	34	11	17	56	300	NA	1.0	6.8
	04/07/03[n]			16.61	22.99	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	22	1.5	6.8
	07/09/03	NP		17.27	22.33	ND<2,500	ND<25	ND<25	ND<25	ND<25	NA	690	1.9	6.7
	10/01/03	**NP**		**18.20**	**21.40**	**600**	**3.0**	**ND<2.5**	**ND<2.5**	**ND<2.5**	**NA**	**360**	**0.6**	**7.1**
MW-2	06/26/00		37.99	14.60	23.39[a]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/20/00			15.14	22.85	95,000	2,300	18,000	2,500	19,000	13,000	NA	NA	NA
	09/19/00			15.95	22.04	63,000	1,200	6,300	2,000	14,000	19,000	NA	NA	NA
	12/21/00			15.60	22.39	45,900		2,130	1,160	9,460	22,400	24,700	NA	NA
	12/21/00[b]			NM	NC	5,010	360	189	213	626	54,300	89,200	NA	NA
	03/13/01			13.77	23.9	3,650	98.1	<5.0	<5.0	6.42	3,590	3,260	NA	NA
	3/13/2001[b]			NM	NC	<20,000	525	466	408	1,460	91,700	76,000	NA	NA
	9/18/2001[a]			16.86	21.13	NS	NS	NS	NS	NS	NS	NS	NA	NA
	12/28/01			14.28	23.71	31,000	1,500	3,800	1,300	4,800	9,300	8,800	NA	NA
	03/14/02			14.15	23.84	1,800	25	43	43	270	990	960	NA	NA
	04/23/02			13.60	24.39	9,000	220	110	470	2,500	8,500	NA	NA	NA
	07/17/02	NP	SHEEN	15.75	22.24	74,000[c]	280	290	820	10,000	19,000	NA	0.4	6.8
	10/9/02[g]	NP		16.69	21.30	NS	NS	NS	NS	NS	NS	NS	NM	NM
	01/13/03[g]		FREE PRODUCT	13.59	24.61[h]	NS	NS	NS	NS	NS	NS	NA	NM	NM
	04/07/03[g]		FREE PRODUCT	14.70	23.69[h]	NS	NS	NS	NS	NS	NA	NS	NM	NM
	07/09/03[g]		FREE PRODUCT	15.48	22.57[h]	NS	NS	NS	NS	NS	NA	NS	NM	NM
	10/01/03[g]		**FREE PRODUCT**	**16.47**	**21.58[h]**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NS**	**NM**	**NM**

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San Leandro, California

Well Number	Date Sampled	Purge/ Not Purged	Top of Riser Elevation (feet, MSL)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (8020) (µg/L)	MTBE (8260) (µg/L)	Dissolved Oxygen [c] (mg/L)	pH Level [c]
MW-3	06/26/00		39.32	15.96	23.36	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/20/00			16.42	22.90	<50	<0.5	<0.5	<0.5	<1.0	130	NA	NA	NA
	09/19/00			17.18	22.14	190	17	<0.5	1.4	2.4	160	NA	NA	NA
	12/21/00			16.97	22.35	187	17.8	<0.5	2.47	2.5	143	125	NA	NA
	03/13/01			15.17	24.15	72.4	2.83	<0.5	<0.5	<0.5	126	122	NA	NA
	09/18/01			17.81	21.51	140	6.4	<0.5	3.5	1.6	110	75	NA	NA
	12/28/01			15.44	23.88	130	5.9	<0.5	0.99	0.55	90	63	NA	NA
	03/14/02			15.50	23.82	<50	<0.5	<0.5	<0.5	<0.5	100	88	NA	NA
	04/23/02			14.96	24.36	<50	<0.5	<0.5	<0.5	<0.5	77	NA	NA	NA
	07/17/02	NP		17.09	22.23	<50	<0.50	<0.50	<0.50	<0.50	47	NA	0.8	7.2
	10/09/02	NP		17.87	21.45	<50	<0.50	<0.50	<0.50	<0.50	26	29	1.3	7.2
	01/13/03	NP		14.78	24.54	ND<50	ND<0.50	ND<0.50 [l]	ND<0.50	ND<0.50	591	NA	0.8	6.8
	04/07/03 [n]	NP		16.15	23.17	88	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	75	1.1	7.0
	07/09/03	NP		16.79	22.53	100	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	52	1.1	6.5
	10/01/03	**NP**		**17.79**	**21.53**	**110**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**NA**	**36**	**0.7**	**6.8**
MW-4	06/26/00		38.10	14.59	23.51	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/20/00			15.04	23.06	97	7.9	<0.5	<0.5	1.1	51	NA	NA	NA
	09/19/00			15.83	22.27	110	7.0	<0.5	<0.5	<1.0	60	NA	NA	NA
	12/21/00			15.59	22.51	120	5.6	<0.5	1.72	<0.5	46.3	48.6	NA	NA
	03/13/01			13.73	24.37	76	0.796	<0.5	<0.5	<0.5	53.7	50.0	NA	NA
	09/18/01			16.50	21.60	<50	<0.5	<0.5	<0.5	<0.5	25	26.0	NA	NA
	12/28/01			14.03	24.07	<50	<0.5	<0.5	<0.5	<0.5	15	11.0	NA	NA
	03/14/02			14.10	24.00	<50	<0.5	<0.5	<0.5	<0.5	31	28	NA	NA
	04/23/02			13.57	24.53	<50	3	<0.5	<0.5	<0.5	42	NA	NA	NA
	07/17/02	NP		15.76	22.34	<50	<0.50	<0.50	<0.50	<0.50	16	NA	1.2	7.1
	10/09/02	NP		16.59	21.51	<50	2.2	<0.50	<0.50	<0.50	20	23	0.8	7.1
	01/13/03	NP		13.43	24.67	52 [d]	ND<0.50	1.6	ND<0.50	ND<0.50	22	NA	0.6	6.6
	04/07/03 [n]	NP		14.74	23.36	65	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	24	0.7	6.6
	07/09/03	NP		15.44	22.66	120	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	34	1.4	6.6
	10/01/03	**NP**		**16.45**	**21.65**	**98**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**NA**	**28**	**0.8**	**6.5**

Table 1
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San Leandro, California

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MW-5	06/26/00		37.21	14.27	22.94	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/20/00			14.69	22.52	55	<0.5	<0.5	<0.5	<1.0	14,000	NA	NA	NA
	09/19/00			15.36	21.85	54	<0.5	<0.5	<0.5	<1.0	13,000	NA	NA	NA
	12/21/00			15.15	22.06	72.9	2.51	<0.5	<0.5	0.961	19,200	21,200	NA	NA
	03/13/01			13.5	23.71	<500	<5	<5	<5	<5	15,900	20,000	NA	NA
	09/18/01			15.94	21.27	<10,000	<100	<100	<100	<1,000	22,000	20,000	NA	NA
	12/28/01			13.45	23.76	<10,000	<100	<100	<100	<100	10,000	10,000	NA	NA
	03/14/02			13.82	23.39	<5,000	<50	<50	<50	<50	7,100	7,700	NA	NA
	04/23/02			13.25	23.96	<5,000	<50	<50	<50	<50	8,900	NA	NA	NA
	07/17/02	NP		15.27	21.94	7,900 [d]	<50	<50	<50	<50	13,000	NA	1.1	7.5
	10/09/02	NP		16.02	21.19	2,400[e]	<20	<20	<20	<20	7,300	7,500	1.2	6.7
	01/13/03	NP		13.20	24.01	6,400 [e]	ND<50 [j]	ND<50	ND<50	ND<50 [j]	8,900 [k]	NA	1.3	6.8
	04/07/03 [a]	NP		14.42	22.79	ND<10,000	ND<100	ND<100	ND<100	ND<100	NA	3,700	0.9	6.8
	07/09/03	NP		15.01	22.20	11,000	ND<50	ND<50	ND<50	ND<50	NA	6,500	2.4	6.9
	10/01/03	**NP**		**15.94**	**21.27**	**9,600**	**ND<50**	**ND<50**	**ND<50**	**ND<50**	**NA**	**6,100**	**1.0**	**7.4**
MW-6	06/26/00		37.11	13.46	23.65	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/20/00			13.94	23.17	<50	<0.5	<0.5	<0.5	<1.0	<3.0	NA	NA	NA
	09/19/00			14.41	22.70	<50	<0.5	<0.5	<0.5	<1.0	<3.0	NA	NA	NA
	12/21/00			14.53	22.58	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA
	03/13/01			12.67	24.44	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA
	09/18/01			15.42	21.69	<50	<0.5	<0.5	<0.5	<0.5	<2.5	<2.0	NA	NA
	12/28/01			12.96	24.15	<50	<0.5	<0.5	<0.5	<0.5	12	<0.5	NA	NA
	03/14/02			12.98	24.13	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA
	04/23/02			12.44	24.67	<50	<0.5	<0.5	<0.5	<0.5	3	NA	NA	NA
	07/17/02	NP		14.65	22.46	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	1.3	7.3
	10/09/02	NP		15.51	21.60	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	1.3	7.1
	01/13/03	NP		12.27	24.84	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	NA	1.1	6.8
	04/07/03 [a]	NP		13.61	23.50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	ND<0.50	2.0	6.6
	07/09/03	NP		14.34	22.77	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	ND<0.50	1.6	7.0
	10/01/03	**NP**		**15.37**	**21.74**	---------- **Sampled Annually (Third Quarter)** ----------								

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #2111
1156 Davis Street
San Leandro, California

Well Number	Date Sampled	Purge/ Not Purged	Top of Riser Elevation (feet, MSL)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (8020) (µg/L)	MTBE (8260) (µg/L)	Dissolved Oxygen [c] (mg/L)	pH Level [c]
MW-7	06/26/00		38.68	14.34	24.34	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/20/00			15.26	23.42	14,000	5.4	<0.5	2.8	5.9	71,000	NA	NA	NA
	09/19/00			15.70	22.98	8,400	420	38	470	220	5,600	NA	NA	NA
	12/21/00			16.02	22.66	NS[a]	NS[a]	NS[a]	NS[a]	NS[a]	NS[a]	NS[a]	NA	NA
	03/13/01			14.18	24.50	<2,000	154	63	46.3	127	175,000	160,000	NA	NA
	09/18/01			17.02	21.66	<100,000	1,900	<1,000	<1,000	2,800	190,000	370,000	NA	NA
	12/28/01			14.81	23.87	<20,000	<200	<200	<200	<200	84,000	72,000	NA	NA
	03/14/02			14.60	24.08	<50,000	<500	<500	<500	<500	85,000	85,000	NA	NA
	04/23/02			13.94	24.74	<20,000	530	200	220	800	67,000	NA	NA	NA
	07/17/02	NP		16.27	22.41	26,000 [d]	720	<250	<250	860	120,000	NA	1.0	6.9
	10/09/02	NP		17.16	21.52	110,000[d]	1,500	4,400	820	5,400	97,000	120,000	0.9	6.8
	01/13/03	NP		13.82	24.86	ND<50,000 [f]	ND<500 [f]	ND<500 [f]	ND<500 [f]	2,200 [f]	33,000 [f]	NA	0.8	6.6
	04/07/03 [n]	NP		14.52	24.16	ND<2,500	30	ND<25	ND<25	ND<25	NA	710	1.0	7.0
	07/09/03	NP		15.97	22.71	66,000	ND<500	ND<500	ND<500	ND<500	NA	36,000	1.6	6.7
	10/01/03	**NP**		**17.03**	**21.65**	**130,000**	**570**	**ND<500**	**ND<500**	**ND<500**	**NA**	**84,000**	**0.7**	**6.6**

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #2111
1156 Davis Street
San Leandro, California

Well Number	Date Sampled	Purge/ Not Purged	Top of Riser Elevation (feet, MSL)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (8020) (µg/L)	MTBE (8260) (µg/L)	Dissolved Oxygen [a] (mg/L)	pH Level [c]

Notes:

TPH = Total Petroleum Hydrocarbons analyzed by EPA method 8260B. (Prior to 04/07/03, analyzed by EPA method 8015 modified.)

BTEX = Benzene, Toluene, Ethyl-benzene, and Total Xylenes analyzed by EPA method 8260B. (Prior to 04/07/03, analyzed by EPA method 8021B.)

MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8260B. (Prior to 04/07/03, analyzed by EPA method 8021B unless otherwise noted.)

µg/L = Micrograms per liter

mg/L = Milligrams per liter

NA = Not available

NM = Not measured

NC = Not calculated

NP = Well not purged before sampling

MSL = Mean sea level

TOC = Top of casing

ND< = Not detected at or above specified laboratory method detection limit

a = Product sheen noted

b = Well was sampled after batch extraction event.

c = Chromatogram Pattern: Gasoline C6-C10

d = Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel

e = Discrete peak @C6-C7

f = This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose.

g = Well not sampled due to the detection of free product.

h = Groundwater elevation adjusted for free product: (thickness of free product x 0.8) + measured groundwater elevation

j = The closing calibration was outside acceptance limits by 1%. This should be considered in evaluating the result. The average % difference for all analytes met the 15% requirement and the QC suggests that calibration linearity is not a factor.

k = The closing calibration was outside acceptance limits by 6%. This should be considered in evaluating the result. The average % difference for all analytes met the 15% requirement and the QC suggests that calibration linearity is not a factor.

l = This analyse was not confirmed using a secondary column in accordance to client contract.

m = This analyze was not confirmed using a secondary column in accordance to client contract.

n = TPH-g, BTEX, and MTBE analyzed by EPA method 8260B beginning on the second quarter 2003 sampling event (04/07/03).

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 #2111
1156 Davis Street
San Leandro, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
07/20/00	West-Northwest	0.006
09/19/00	West-Northwest	0.004
12/21/00	West-Northwest	0.004
03/13/01	West-Northwest	0.005
05/30/01	West-Northwest	0.004
09/18/01	West-Northwest	0.003
12/28/01	West-Northwest	0.003
03/14/02	West	0.004
04/23/02	West	0.006
07/17/02	West	0.003
10/09/02	West	0.002
01/13/03	Southwest	0.004
04/07/03	West-Northwest	0.009-0.011
07/09/03	West-Northwest	0.004
10/01/03	**West**	**0.002**

Note: 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 3
Oxygenate Analytical Data

ARCO Service Station #2111
1156 Davis Street
San Leandro, California

Well Number	Date Sampled	Ethanol (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
MW-1	04/07/03	ND<100	ND<20	22	ND<0.50	ND<0.50	ND<0.50
	07/09/03	ND<5,000	ND<1,000	690	ND<25	ND<25	ND<25
	10/01/03	**ND<500**	**ND<100**	**360**	**ND<2.5**	**ND<2.5**	**9.3**
MW-3	04/07/03	ND<100	ND<20	75	ND<0.50	ND<0.50	6.5
	07/09/03	ND<100	ND<20	52	ND<0.50	ND<0.50	4.2
	10/01/03	**ND<100**	**ND<20**	**36**	**ND<0.50**	**ND<0.50**	**2.6**
MW-4	04/07/03	ND<100	ND<20	24	ND<0.50	ND<0.50	7.3
	07/09/03	ND<100	ND<20	34	ND<0.50	ND<0.50	9.8
	10/01/03	**ND<100**	**ND<20**	**28**	**ND<0.50**	**ND<0.50**	**7.0**
MW-5	04/07/03	ND<20,000	ND<4,000	3,700	ND<100	ND<100	ND<100
	07/09/03	ND<10,000	ND<2,000	6,500	ND<50	ND<50	ND<50
	10/01/03	**ND<10,000**	**ND<2,000**	**6,100**	**ND<50**	**ND<50**	**ND<50**
MW-6	04/07/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	07/09/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-7	04/07/03	ND<5,000	ND<1,000	710	ND<25	ND<25	ND<25
	07/09/03	ND<100,000	ND<20,000	36,000	ND<500	ND<500	ND<500
	10/01/03	**ND<100,000**	**ND<20,000**	**84,000**	**ND<500**	**ND<500**	**ND<500**

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

Table 4
Approximate Cumulative Floating Product Recovered
1999 - present

ARCO Service Station 2153
2800 Homestead Road, Santa Clara, California

Well Designation	Product Recovery Field Date	Floating Product Thickness (feet)	Floating Product Recovered (gallons)
MW-2	06/28/99	0.45	0.300
MW-2	06/30/99	0.015	0.010
MW-2	07/07/99	0.06	0.040
MW-2	07/23/99	0.008	0.005
MW-2	08/25/99	0.02	0.013
MW-2	09/21/99	0.01	0.013
MW-2	11/10/99	ND	0.000
MW-2	02/09/00	ND	0.000
MW-2	04/23/02	ND	0.000
MW-2	07/17/02	Sheen	0.000
MW-2	10/9/2002*	NA	0.000
MW-2	01/13/03	0.26	0.132
MW-2	02/14/03	ND	0.000
MW-2	03/24/03	ND	0.000
MW-2	04/07/03	0.05	0.003
MW-2	05/23/03	ND	0.000
MW-2	06/24/03	0.03	0.012
MW-2	07/09/03	0.07	0.028
MW-2	07/31/03	0.05	0.034
MW-2	09/04/03	0.02	0.013
MW-2	**10/01/03**	**0.07**	**0.021**
MW-2	**11/12/03**	**0.59**	**0.360**
MW-2	**12/11/03**	**0.05**	**0.066**
Approximate Cumulative Floating Product:			**1.051**

* = Free product encountered, but unable to gauge.

TABLE 5

SOIL ANALYTICAL RESULTS

ARCO Service Station No. 2111
1156 Davis Street
San Leandro California

Sample ID	Sample Depth (feet bgs)	Sample Date	TPH-g (µg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl-benzene (µg/kg)	Total (µg/kg)	MTBE (8260) (µg/kg)	TBA (8260) (µg/kg)	DIPE (8260) (µg/kg)	ETBE (8260) (µg/kg)	TAME (8260) (µg/kg)
MW-8-5	5	11/26/2003	<1,000	<5	<5	<5	<5	<5	<10	<10	<5	<5
MW-8-10	10	11/26/2003	<1,000	<5	<5	<5	<5	<5	<10	<10	<5	<5
MW-8-15	15	11/26/2003	**2,100**	<5	<5	<5	<5	**32**	**17**	<10	<5	<5
MW-8-16.5	16.5	11/26/2003	**150,000**	<500	<500	**600**	**840**	<500	<2,500	<1,000	<500	<500
MW-8-23	23	11/26/2003	<5,000	<25	<25	<25	<25	**1,400**	<50	<50	<25	25
MW-8-28	28	11/26/2003	<1,000	<5	<5	<5	<5	**120**	<10	<10	<5	<5
MW-8-33	33	11/26/2003	<1,000	<5	<5	<5	<5	**37**	<10	<10	<5	<5
MW-8-38	38	11/26/2003	<1,000	<5	<5	<5	<5	**27**	<10	<10	<5	<5

Notes:

Bold -	Detections above laboratory reporting limit
TPHg-	Total Petroleum Hydrocarbon as gasoline
TBA -	tert-Butyl alchohl
MTBE -	Methyl tert-butyl ethe
DIPE -	Di-isopropyl Ether
ETBE -	Ethyl tert-butyl ether
TAME -	tert-Amyl methyl ether
bgs -	below ground surface

ATTACHMENT A

FIELD PROCEDURES AND FIELD DATA SHEETS

FIELD PROCEDURES

Sampling Procedures

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

WELL GAUGING DATA

Project # 031001-MD1 Date 10/1/03 Client Arco 2111

Site 1156 Davis St., 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	NPE
MW-1	4					18.20	26.22		12.5
MW-2	4		16.40	.07	80ml	16.47	26.68		12
MW-3	4					17.79	26.65		11.9
MW-4	4					16.45	21.63		10
MW-5	2					15.94	23.85		9.4
MW-6	2					15.37	24.82		10
MW-7	4					17.03	27.18		12

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 031001-MD1	Station # Arco 2111
Sampler: John DeJong	Date: 10/1/03
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 26.22	Depth to Water: 18.20
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

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

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

Sampling Method: Bailer / ~~Disposable Bailer~~ / Extraction Port / Other: _____

Top of Screen: _____

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

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

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
	No Purge @		12.5' ↔	DTW=	18.20
1045	64.2	7.1	820	—	clear

Did well dewater? Yes No — Gallons actually evacuated: ___

Sampling Time: 1045 — Sampling Date: 10/1/03

Sample I.D.: MW-1 — Laboratory: Pace (Sequoia) Other _____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: OXY's, Ethanol

D.O. (if req'd):	Pre-purge:		mg/L	Post-purge:	0.6 mg/L
O.R.P. (if req'd):	Pre-purge:		mV	Post-purge:	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 031001-MD1	Station # Arco 2111
Sampler: John DeJong	Date: 10/1/03
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 26.68	Depth to Water: 16.47
Depth to Free Product: 16.40	Thickness of Free Product (feet): 0.07
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

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

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

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

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

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

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
	Bailed 5 PV 80ml x water 15gal				

Did well dewater? Yes / ~~No~~ Gallons actually evacuated:

Sampling Time: Sampling Date: 10/1/03

Sample I.D.: Laboratory: Pace (Sequoia) Other_____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: OXY's, Ethanol

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 031001-MD1	Station # Arco 2111
Sampler: John DeJong	Date: 10/1/03
Well I.D.: MW-7	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 26.65	Depth to Water: 17.79
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

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

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

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

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

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

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
	No purge @		11.9' → DTW = 17.79		
1070	66.0	6.58	690	-	clear, No odor

Did well dewater? Yes No Gallons actually evacuated: —

Sampling Time: 1030 Sampling Date: 10/1/03

Sample I.D.: MW-3 Laboratory: Pace (Sequoia) Other ___

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: OXY's, Ethanol

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	0.7	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 031001-MD1	Station # Arco 2111
Sampler: John DeJong	Date: 10/1/03
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 21.63	Depth to Water: 16.45
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

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

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

Sampling Method: Bailer / ~~Disposable Bailer~~ / Extraction Port / Other: _____

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

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

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
	No purge	101	DTW = 16.45		
1010	66.5	6.5	751	—	clear

Did well dewater? Yes / No			Gallons actually evacuated: —		
Sampling Time: 1010			Sampling Date: 10/1/03		
Sample I.D.: MW-4			Laboratory: Pace (Sequoia) Other_____		
Analyzed for: (TPH-G) (BTEX) MTBE TPH-D			Other: OXY's, Ethanol		
D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	0.8	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 031001-MD1	Station # Arco 2111
Sampler: John DeJong	Date: 10/1/03
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 23.85	Depth to Water: 15.94
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

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

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

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

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

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

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
	No purge @		9.41 →	DTW= 15.94	
1205	66.5	7.4	699	—	clear, gas odor

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

Sampling Time: 1205 — Sampling Date: 10/1/03

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

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D — Other: oxy's, Ethanol

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	1.0 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 031001-MD1	Station # Arco 2111
Sampler: John DeJong	Date: 10/1/03
Well I.D.: MW-7	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 27.18	Depth to Water: 17.03
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

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

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

Sampling Method: Bailer / ~~Disposable Bailer~~ / Extraction Port / Other: _____

Top of Screen: _____

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

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

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
	No purge @ 12' → DTW = 17.03				
1110	67.1	6.6	1197	—	clear, strong gas odor

Did well dewater? Yes No		Gallons actually evacuated: —	
Sampling Time: 11:10		Sampling Date: 10/1/03	
Sample I.D.: MW-7		Laboratory: Pace (Sequoia) Other_____	
Analyzed for: (TPH-G) (BTEX) MTBE TPH-D		Other: OXY's, Ethanol	
D.O. (if req'd):	Pre-purge:	mg/L	Post-purge: 0.7 mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge: mV

WELLHEAD INSPECTION CHECKLIST
BP / GEM

Date 10/1/03

Site Address 1156 Davis St San Leandro

Job Number 031001-MD1 Technician John DeJong

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-1				X		X		
MW-2	✓							
MW-3	✓							
MW-4	✓							
MW-5	✓							
MW-6	✓							
MW-7	✓							

NOTES:

WELL GAUGING DATA

Project # 031112-DA3 Date 11/12/03 Client 2M

Site 1156 Davis St. San Leandro, CA

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-2	4	O/S	16.29	0.59	1378	16.88	—	TOC	

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 031112-DA3	Station # 2111
Sampler: DA	Date: 11/12/03
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: —	Depth to Water: 16.58
Depth to Free Product: 16.29	Thickness of Free Product (feet): 0.59
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

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

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

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

Top of Screen: —

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

____ (1 Case Volume (Gals.)) x Bail SPH (Specified Volumes) = ____ Gals. (Calculated Volume)

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
	Bailed 137	8	ml SPH + 4g. H_2O		

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

Sampling Time: Sampling Date:

Sample I.D.: Laboratory: Pace Sequoia Other____

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

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

bp

WELLHEAD INSPECTION CHECKLIST
BP / GEM

Date 11/12/03

Site Address 1156 Davis St. San Leandro, CA

Job Number 031112-DA3 Technician DA

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-2	X							

NOTES:

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 031211-MT3	Station # 2111
Sampler: MTOII	Date: 12-11-03
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: ~	Depth to Water: 16.90
Depth to Free Product: 16.85	Thickness of Free Product (feet): 0.05
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

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

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

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

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

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

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
	REMOVED		250 ml.	of SPH	

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

WELL GAUGING DATA

Project # 031211-MT3 Date 12-11-03 Client 2111

Site 1156 Davis St., San Leandro, CA

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-2	4	SPH	16.85	0.05	250	16.90	-	TOC	

ATTACHMENT B

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

LABORATORY PROCEDURES

Laboratory Procedures

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

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21 October, 2003

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

RE: ARCO #2111, San Leandro, CA
Work Order: MMJ0173

Enclosed are the results of analyses for samples received by the laboratory on 10/02/03 17:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Theresa Allen

Theresa Allen
Project Manager

CA ELAP Certificate #1210

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27 October, 2003

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

RE: ARCO #2111, San Leandro, CA
Work Order: MMJ0423

Enclosed are the results of analyses for samples received by the laboratory on 10/02/03 17:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Theresa Allen

Theresa Allen
Project Manager

CA ELAP Certificate #1210

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0423
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MMJ0423-01	Water	10/01/03 10:45	10/02/03 17:05
MW-3	MMJ0423-02	Water	10/01/03 10:30	10/02/03 17:05
MW-4	MMJ0423-03	Water	10/01/03 10:10	10/02/03 17:05
MW-7	MMJ0423-04	Water	10/01/03 11:10	10/02/03 17:05
Trip Blank	MMJ0423-05	Water	10/01/03 00:00	10/02/03 17:05

There were custody seals received with this project.

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0423
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

Total Metals by EPA 200 Series Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MMJ0423-01) Water	**Sampled: 10/01/03 10:45**	**Received: 10/02/03 17:05**							
Hardness	**290**	1.0	mg/l	1	3J17010	10/17/03	10/21/03	EPA 200.7	
Calcium	**63**	0.50	"	"	"	"	"	"	
Copper	ND	0.010	"	"	"	"	"	"	
Iron	**0.44**	0.10	"	"	"	"	"	"	
Magnesium	**32**	0.10	"	"	"	"	"	"	
Manganese	**1.5**	0.010	"	"	"	"	"	"	
Potassium	ND	1.0	"	"	"	"	"	"	
Sodium	**41**	0.50	"	"	"	"	"	"	
Zinc	ND	0.050	"	"	"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0423
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MMJ0423-01) Water Sampled: 10/01/03 10:45 Received: 10/02/03 17:05									
Gasoline Range Organics (C6-C10)	**600**	250	ug/l	5	3J15005	10/15/03	10/15/03	EPA 8260B	
Ethanol	ND	500	"	"	"	"	"	"	
tert-Butyl alcohol	ND	100	"	"	"	"	"	"	
Methyl tert-butyl ether	**360**	2.5	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.5	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
tert-Amyl methyl ether	**9.3**	2.5	"	"	"	"	"	"	
Benzene	**3.0**	2.5	"	"	"	"	"	"	
Toluene	ND	2.5	"	"	"	"	"	"	
Ethylbenzene	ND	2.5	"	"	"	"	"	"	
Xylenes (total)	ND	2.5	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*111 %*	*78-129*		"	"	"	"	
MW-3 (MMJ0423-02) Water Sampled: 10/01/03 10:30 Received: 10/02/03 17:05									
Gasoline Range Organics (C6-C10)	**110**	50	ug/l	1	3J15005	10/15/03	10/15/03	EPA 8260B	
Ethanol	ND	100	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	**36**	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	**2.6**	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*105 %*	*78-129*		"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0423
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (MMJ0423-03) Water Sampled: 10/01/03 10:10 Received: 10/02/03 17:05									
Gasoline Range Organics (C6-C10)	**98**	50	ug/l	1	3J15005	10/15/03	10/15/03	EPA 8260B	
Ethanol	ND	100	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	**28**	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Amyl methyl ether	**7.0**	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*78-129*		"	"	"	"	
MW-7 (MMJ0423-04) Water Sampled: 10/01/03 11:10 Received: 10/02/03 17:05									
Gasoline Range Organics (C6-C10)	**130000**	50000	ug/l	1000	3J15005	10/15/03	10/15/03	EPA 8260B	
Ethanol	ND	100000	"	"	"	"	"	"	
tert-Butyl alcohol	ND	20000	"	"	"	"	"	"	
Methyl tert-butyl ether	**84000**	500	"	"	"	"	"	"	
Di-isopropyl ether	ND	500	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	500	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	500	"	"	"	"	"	"	
Benzene	**570**	500	"	"	"	"	"	"	
Toluene	ND	500	"	"	"	"	"	"	
Ethylbenzene	ND	500	"	"	"	"	"	"	
Xylenes (total)	ND	500	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*108 %*	*78-129*		"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0423
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

Conventional Chemistry Parameters by APHA/EPA Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MMJ0423-01) Water	**Sampled: 10/01/03 10:45**	**Received: 10/02/03 17:05**							
Bicarbonate Alkalinity	**270**	25	mg/l	5	3J21014	10/21/03	10/21/03	SM 2320B	HT-04
Carbonate Alkalinity	ND	25	"	"	"	"	"	"	HT-04
Hydroxide Alkalinity	ND	25	"	"	"	"	"	"	HT-04
Total Alkalinity	**270**	25	"	"	"	"	"	"	HT-04
Specific Conductivity @ 25 C	**620**	1.0	umhos/cm	1	3J02031	10/02/03	10/02/03	SM 2510B	
Methylene Blue Active Substances	ND	0.050	mg/l	"	3J08018	10/03/03	10/03/03	SM 5540C	HT-04
pH	**6.57**	2.00	pH Units	"	3J16016	10/02/03	10/02/03	EPA 150.1	HT-04
Total Dissolved Solids	**450**	10	mg/l	"	3J21020	10/20/03	10/21/03	SM 2540C	HT-04

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500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

Anions by EPA Method 300.0

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MMJ0423-01) Water	**Sampled: 10/01/03 10:45**	**Received: 10/02/03 17:05**							
Chloride	**25**	10	mg/l	10	3J20018	10/17/03	10/17/03	EPA 300.0	
Sulfate as SO4	**41**	5.0	"	"	"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0423
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

Total Metals by EPA 200 Series Methods - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J17010 - EPA 200.7/3005A										
Blank (3J17010-BLK1)				Prepared: 10/17/03 Analyzed: 10/21/03						
Hardness	ND	1.0	mg/l							
Calcium	ND	0.50	"							
Copper	ND	0.010	"							
Iron	ND	0.10	"							
Magnesium	ND	0.10	"							
Manganese	ND	0.010	"							
Potassium	ND	1.0	"							
Sodium	ND	0.50	"							
Zinc	ND	0.050	"							
Laboratory Control Sample (3J17010-BS1)				Prepared: 10/17/03 Analyzed: 10/21/03						
Hardness	70.7	1.0	mg/l	66.1		107	80-120			
Calcium	10.7	0.50	"	10.0		107	91-121			
Copper	1.05	0.010	"	1.00		105	88-117			
Iron	1.06	0.10	"	1.00		106	91-116			
Magnesium	10.6	0.10	"	10.0		106	90-118			
Manganese	1.06	0.010	"	1.00		106	90-118			
Potassium	10.1	1.0	"	10.0		101	84-129			
Sodium	10.4	0.50	"	10.0		104	87-118			
Zinc	1.08	0.050	"	1.00		108	91-120			
Matrix Spike (3J17010-MS1)	**Source: MMJ0423-01**			Prepared: 10/17/03 Analyzed: 10/21/03						
Hardness	348	1.0	mg/l	66.1	290	87.7	80-120			
Calcium	70.7	0.50	"	10.0	63	77.0	70-130			
Copper	1.03	0.010	"	1.00	ND	103	70-130			
Iron	1.46	0.10	"	1.00	0.44	102	70-130			
Magnesium	41.7	0.10	"	10.0	32	97.0	70-130			
Manganese	2.58	0.010	"	1.00	1.5	108	70-130			
Potassium	11.1	1.0	"	10.0	0.70	104	70-130			
Sodium	49.4	0.50	"	10.0	41	84.0	70-130			
Zinc	1.05	0.050	"	1.00	0.012	104	70-130			

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0423
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

Total Metals by EPA 200 Series Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J17010 - EPA 200.7/3005A										
Matrix Spike Dup (3J17010-MSD1)	**Source: MMJ0423-01**			Prepared: 10/17/03		Analyzed: 10/21/03				
Hardness	358	1.0	mg/l	66.1	290	103	80-120	2.83	20	
Calcium	72.8	0.50	"	10.0	63	98.0	70-130	2.93	20	
Copper	1.05	0.010	"	1.00	ND	105	70-130	1.92	20	
Iron	1.48	0.10	"	1.00	0.44	104	70-130	1.36	20	
Magnesium	42.8	0.10	"	10.0	32	108	70-130	2.60	20	
Manganese	2.54	0.010	"	1.00	1.5	104	70-130	1.56	20	
Potassium	11.2	1.0	"	10.0	0.70	105	70-130	0.897	20	
Sodium	50.6	0.50	"	10.0	41	96.0	70-130	2.40	20	
Zinc	1.08	0.050	"	1.00	0.012	107	70-130	2.82	20	

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0423
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J15005 - EPA 5030B P/T										
Blank (3J15005-BLK1)				Prepared & Analyzed: 10/15/03						
Gasoline Range Organics (C6-C10)	ND	50	ug/l							
Ethanol	ND	100	"							
tert-Butyl alcohol	ND	20	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	*5.46*		"	*5.00*		*109*	*78-129*			
Laboratory Control Sample (3J15005-BS1)				Prepared & Analyzed: 10/15/03						
Ethanol	187	100	ug/l	200		93.5	31-186			
tert-Butyl alcohol	53.2	20	"	50.0		106	0-206			
Methyl tert-butyl ether	8.24	0.50	"	10.0		82.4	63-137			
Di-isopropyl ether	8.41	0.50	"	10.0		84.1	76-130			
Ethyl tert-butyl ether	8.22	0.50	"	10.0		82.2	61-141			
tert-Amyl methyl ether	8.45	0.50	"	10.0		84.5	56-140			
1,2-Dichloroethane	9.95	0.50	"	10.0		99.5	77-136			
1,2-Dibromoethane (EDB)	10.8	0.50	"	10.0		108	77-132			
Benzene	8.78	0.50	"	10.0		87.8	78-124			
Toluene	9.27	0.50	"	10.0		92.7	78-129			
Ethylbenzene	9.66	0.50	"	10.0		96.6	84-117			
Xylenes (total)	31.6	0.50	"	30.0		105	83-125			
Surrogate: 1,2-Dichloroethane-d4	*5.14*		"	*5.00*		*103*	*78-129*			

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0423
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J15005 - EPA 5030B P/T										
Laboratory Control Sample (3J15005-BS2)				Prepared & Analyzed: 10/15/03						
Gasoline Range Organics (C6-C10)	411	50	ug/l	440		93.4	70-113			
Methyl tert-butyl ether	8.18	0.50	"	10.1		81.0	63-137			
Benzene	5.51	0.50	"	6.48		85.0	78-124			
Toluene	33.3	0.50	"	29.7		112	78-129			
Ethylbenzene	7.08	0.50	"	7.20		98.3	84-117			
Xylenes (total)	39.0	0.50	"	33.7		116	83-125			
Surrogate: 1,2-Dichloroethane-d4	*5.19*		"	*5.00*		*104*	*78-129*			
Laboratory Control Sample Dup (3J15005-BSD1)				Prepared & Analyzed: 10/15/03						
Ethanol	193	100	ug/l	200		96.5	31-186	3.16	37	
tert-Butyl alcohol	52.4	20	"	50.0		105	0-206	1.52	22	
Methyl tert-butyl ether	7.70	0.50	"	10.0		77.0	63-137	6.78	13	
Di-isopropyl ether	8.00	0.50	"	10.0		80.0	76-130	5.00	9	
Ethyl tert-butyl ether	7.80	0.50	"	10.0		78.0	61-141	5.24	9	
tert-Amyl methyl ether	7.80	0.50	"	10.0		78.0	56-140	8.00	12	
1,2-Dichloroethane	9.59	0.50	"	10.0		95.9	77-136	3.68	13	
1,2-Dibromoethane (EDB)	10.2	0.50	"	10.0		102	77-132	5.71	9	
Benzene	8.14	0.50	"	10.0		81.4	78-124	7.57	12	
Toluene	8.61	0.50	"	10.0		86.1	78-129	7.38	10	
Ethylbenzene	9.07	0.50	"	10.0		90.7	84-117	6.30	10	
Xylenes (total)	29.7	0.50	"	30.0		99.0	83-125	6.20	11	
Surrogate: 1,2-Dichloroethane-d4	*5.23*		"	*5.00*		*105*	*78-129*			
Laboratory Control Sample Dup (3J15005-BSD2)				Prepared: 10/15/03 Analyzed: 10/16/03						
Gasoline Range Organics (C6-C10)	391	50	ug/l	440		88.9	70-113	4.99	9	
Methyl tert-butyl ether	7.84	0.50	"	10.1		77.6	63-137	4.24	13	
Benzene	5.30	0.50	"	6.48		81.8	78-124	3.89	12	
Toluene	32.4	0.50	"	29.7		109	78-129	2.74	10	
Ethylbenzene	6.78	0.50	"	7.20		94.2	84-117	4.33	10	
Xylenes (total)	37.3	0.50	"	33.7		111	83-125	4.46	11	
Surrogate: 1,2-Dichloroethane-d4	*5.35*		"	*5.00*		*107*	*78-129*			

Sequoia Analytical

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0423
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J15005 - EPA 5030B P/T										
Matrix Spike (3J15005-MS1)	**Source: MMJ0091-05**			Prepared & Analyzed: 10/15/03						
Ethanol	104000	50000	ug/l	100000	ND	104	31-186			
tert-Butyl alcohol	35800	10000	"	25000	6900	116	0-206			
Methyl tert-butyl ether	49100	250	"	5000	49000	2.00	63-137			QM-4X
Di-isopropyl ether	4070	250	"	5000	ND	81.4	76-130			
Ethyl tert-butyl ether	3980	250	"	5000	ND	79.6	61-141			
tert-Amyl methyl ether	4160	250	"	5000	ND	83.2	56-140			
1,2-Dichloroethane	5160	250	"	5000	ND	103	77-126			
1,2-Dibromoethane (EDB)	5430	250	"	5000	ND	109	77-132			
Benzene	4280	250	"	5000	ND	85.6	78-124			
Toluene	4500	250	"	5000	ND	90.0	78-129			
Ethylbenzene	4840	250	"	5000	ND	96.8	84-117			
Xylenes (total)	15900	250	"	15000	ND	106	83-125			
Surrogate: 1,2-Dichloroethane-d4	*5.21*		*"*	*5.00*		*104*	*78-129*			
Matrix Spike Dup (3J15005-MSD1)	**Source: MMJ0091-05**			Prepared & Analyzed: 10/15/03						
Ethanol	96000	50000	ug/l	100000	ND	96.0	31-186	8.00	37	
tert-Butyl alcohol	34100	10000	"	25000	6900	109	0-206	4.86	22	
Methyl tert-butyl ether	47700	250	"	5000	49000	NR	63-137	2.89	13	QM-4X
Di-isopropyl ether	4050	250	"	5000	ND	81.0	76-130	0.493	9	
Ethyl tert-butyl ether	3900	250	"	5000	ND	78.0	61-141	2.03	9	
tert-Amyl methyl ether	3990	250	"	5000	ND	79.8	56-140	4.17	12	
1,2-Dichloroethane	4990	250	"	5000	ND	99.8	77-126	3.35	13	
1,2-Dibromoethane (EDB)	5300	250	"	5000	ND	106	77-132	2.42	9	
Benzene	4280	250	"	5000	ND	85.6	78-124	0.00	12	
Toluene	4510	250	"	5000	ND	90.2	78-129	0.222	10	
Ethylbenzene	4840	250	"	5000	ND	96.8	84-117	0.00	10	
Xylenes (total)	16000	250	"	15000	ND	107	83-125	0.627	11	
Surrogate: 1,2-Dichloroethane-d4	*5.22*		*"*	*5.00*		*104*	*78-129*			

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0423
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J02031 - General Preparation										
Laboratory Control Sample (3J02031-BS1)				Prepared & Analyzed: 10/02/03						
Specific Conductivity @ 25 C	1430	1.0	umhos/cm	1410		101	94-105			
Matrix Spike (3J02031-MS1)	**Source: MMJ0052-02**			Prepared & Analyzed: 10/02/03						
Specific Conductivity @ 25 C	5190	2.0	umhos/cm	1410	3800	98.6	94-105			
Matrix Spike Dup (3J02031-MSD1)	**Source: MMJ0052-02**			Prepared & Analyzed: 10/02/03						
Specific Conductivity @ 25 C	5140	2.0	umhos/cm	1410	3800	95.0	94-105	0.968	9	
Batch 3J08018 - General Preparation										
Blank (3J08018-BLK1)				Prepared & Analyzed: 10/03/03						
Methylene Blue Active Substances	ND	0.050	mg/l							
Laboratory Control Sample (3J08018-BS1)				Prepared & Analyzed: 10/03/03						
Methylene Blue Active Substances	0.705	0.20	mg/l	0.700		101	78-112			
Matrix Spike (3J08018-MS1)	**Source: MMJ0423-01**			Prepared & Analyzed: 10/03/03						
Methylene Blue Active Substances	0.679	0.20	mg/l	0.700	ND	97.0	78-112			
Matrix Spike Dup (3J08018-MSD1)	**Source: MMJ0423-01**			Prepared & Analyzed: 10/03/03						
Methylene Blue Active Substances	0.689	0.20	mg/l	0.700	ND	98.4	78-112	1.46	10	
Batch 3J16016 - General Preparation										
Duplicate (3J16016-DUP1)	**Source: MMJ0118-01**			Prepared & Analyzed: 10/02/03						
pH	7.53	2.00	pH Units		7.52			0.133	20	

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0423
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J21014 - General Preparation										
Blank (3J21014-BLK1)				Prepared & Analyzed: 10/21/03						
Bicarbonate Alkalinity	ND	5.0	mg/l							
Carbonate Alkalinity	ND	5.0	"							
Hydroxide Alkalinity	ND	5.0	"							
Total Alkalinity	ND	5.0	"							
Laboratory Control Sample (3J21014-BS1)				Prepared & Analyzed: 10/21/03						
Total Alkalinity	99.8	5.0	mg/l	100		99.8	80-120			
Matrix Spike (3J21014-MS1)	**Source: MMJ0558-01**			Prepared & Analyzed: 10/21/03						
Total Alkalinity	345	5.0	mg/l	100	250	95.0	75-125			
Matrix Spike Dup (3J21014-MSD1)	**Source: MMJ0558-01**			Prepared & Analyzed: 10/21/03						
Total Alkalinity	347	5.0	mg/l	100	250	97.0	75-125	0.578	20	
Batch 3J21020 - General Preparation										
Blank (3J21020-BLK1)				Prepared: 10/20/03 Analyzed: 10/21/03						
Total Dissolved Solids	ND	10	mg/l							
Laboratory Control Sample (3J21020-BS1)				Prepared: 10/20/03 Analyzed: 10/21/03						
Total Dissolved Solids	512	10	mg/l	500		102	96-106			
Matrix Spike (3J21020-MS1)	**Source: MMJ0564-01**			Prepared: 10/20/03 Analyzed: 10/21/03						
Total Dissolved Solids	2460	20	mg/l	500	1900	112	80-120			
Matrix Spike Dup (3J21020-MSD1)	**Source: MMJ0564-01**			Prepared: 10/20/03 Analyzed: 10/21/03						
Total Dissolved Solids	2340	20	mg/l	500	1900	88.0	80-120	5.00	20	

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0423
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

Anions by EPA Method 300.0 - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J20018 - General Preparation										
Blank (3J20018-BLK1)				Prepared & Analyzed: 10/17/03						
Chloride	ND	1.0	mg/l							
Sulfate as SO4	ND	0.50	"							
Laboratory Control Sample (3J20018-BS1)				Prepared & Analyzed: 10/17/03						
Chloride	9.78	1.0	mg/l	10.0		97.8	93-110			
Sulfate as SO4	9.35	0.50	"	10.0		93.5	90-110			
Matrix Spike (3J20018-MS1)	**Source: MMJ0202-01**			Prepared & Analyzed: 10/17/03						
Chloride	100	10	mg/l	100	4.5	95.5	73-143			
Sulfate as SO4	91.4	5.0	"	100	4.6	86.8	72-140			
Matrix Spike Dup (3J20018-MSD1)	**Source: MMJ0202-01**			Prepared & Analyzed: 10/17/03						
Chloride	103	10	mg/l	100	4.5	98.5	73-143	2.96	10	
Sulfate as SO4	94.4	5.0	"	100	4.6	89.8	72-140	3.23	10	

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0423
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/27/03 17:02

Notes and Definitions

HT-04	This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose.
QM-4X	The spike recovery was outside of control limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Chain of Custody Record

Project Name: 2111 GWM
BP BU/GEM CO Portfolio: Retail
BP Laboratory Contract Number: Atlantic Richfield Company
Requested Due Date (mm/dd/yy): 14 day TAT
Date: 10/1/03

MMJ0423

On-site Time: 930 Temp: 57
Off-site Time: 1230 Temp: 65
Sky Conditions: Overcast
Meteorological Events:
Wind Speed: Direction:

Send To:	
Lab Name:	SEQUOIA
Lab Address:	885 Jarvis Dr.
	Morgan Hill, CA 95037
Lab PM:	Theresa Allen
Tele/Fax:	408-776-9600 / 408-782-6308
Report Type & QC Level:	1 Send EDF Reports
BP/GEM Account No.:	

BP/GEM Facility No.:	ARCO 2111
BP/GEM Facility Address:	1156 DAVIS ST, San Leandro, CA
Site ID No.:	ARCO 2111
Site Lat/Long:	
California Global ID #:	T0600101764
BP/GEM PM Contact:	PAUL SUPPLE
Address:	P.O. Box 6549
	Moraga, CA 94570
Tele/Fax:	925-299-8891/925-299-8872

Consultant/Contractor:	URS
Address:	500 12th St., Ste. 200
	Oakland, CA 94609-4014
e-mail EDD:	donna_cosper@URSCorp.com
Consultant/Contractor Project No.:	35-00002111.01-00427
Consultant Tele/Fax:	510-893-3600/510-874-3268
Consultant/Contractor PM:	Scott Robinson
Invoice to:	Consultant/Contractor or BP/GEM (Circle one)
BP/GEM Work Release No:	INTRIM -50277

Lab Bottle Order No:

Item No.	Sample Description	Time	Matrix: Soil/Solid	Water/Liquid	Sediments	Air	Laboratory No.	No. of containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	Requested Analysis: TPH-G / BTEX (8015/8021)	TPH-D (8015)	MTBE (8021)	MTBE (8260)	MTBE, TAME, ETHE DIPE, TBA (8260)	1,2-DCA & EDB (8260)	Ethanol (8260)	General Minerals	Sample Point Lat/Long and Comments
1	MW-1	1045		✓				6	✓			✓	✓				✓		✓	✓	
2	MW-3	1030		✓				7				✓	✓				✓		✓		
3	MW-4	1010		✓				3				✓	✓				✓		✓		
4	~~MW-6~~ MW	945		✓				3				✓	✓				✓		✓		
5	MW-7	1110		✓				3				✓	✓				✓		✓		
6	Trip Blank	930		✓				2				✓	✓				✓		✓		"ON HOLD"
7																					
8																					
9																					
10																					

Sampler's Name:	John DeJong	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company:	Blaine Tech Services		10/1/03	1240		10/1/03	1240
Shipment Date:			10/2/03	1705		10/2/03	1705
Shipment Method:							
Shipment Tracking No:							

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

Ice Chest Present Yes ✓ No ___ Temperature Blank Yes ✓ No ___ Cooler Temperature on Receipt 4.0 °F/C Trip Blank Yes ✓ No ___

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

BP COC Rev. 1 3/502

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: URS
REC. BY (PRINT): AS
WORKORDER: 3110423

DATE REC'D AT LAB: 10-2-03
TIME REC'D AT LAB: 1705
DATE LOGGED IN: 10-15-03

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

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / Absent; Intact / Broken*			MW-1	(3) VOAs	HCl	L	10-1-03	HA 3237090
2. Chain-of-Custody Present / Absent*			↓	(2) L Poly	~~HNO3~~			
3. Traffic Reports or Packing List: Present / Absent				(1) L Poly	HNO3			
4. Airbill: Airbill / Sticker Present / Absent			MW-3	(3) VOAs	HCl			
5. Airbill #:			MW-4	↓	↓	↓	↓	
6. Sample Labels: Present / Absent			MW-7					
7. Sample IDs: Listed / Not Listed on Chain-of-Custody			trip blank	(2) VOAs				
8. Sample Condition: Intact / Broken* / Leaking*								
9. Does information on custody reports, traffic reports and sample labels agree? Yes / No* — received HNO3 not HNO3 bottle per MW-1								
10. Sample received within hold time: Yes / No* — AT								
11. Proper Preservatives used: Yes / No*								
12. Temp Rec. at Lab: 4.6 °C; Is temp 4 +/-2°C? Yes / No**								

10-2-03

(Acceptance range for samples requiring thermal pres.)

**Exception (if any): Metals / DFF (Direct From Field) or Problem COC

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

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0173
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/21/03 15:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-5	MMJ0173-01	Water	10/01/03 12:05	10/02/03 17:05

There were custody seals received with this project.

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0173
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/21/03 15:08

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (MMJ0173-01) Water Sampled: 10/01/03 12:05 Received: 10/02/03 17:05									
Gasoline Range Organics (C6-C10)	**9600**	5000	ug/l	100	3J14001	10/14/03	10/15/03	EPA 8260B	HC-19
Ethanol	ND	10000	"	"	"	"	"	"	
tert-Butyl alcohol	ND	2000	"	"	"	"	"	"	O-09
Methyl tert-butyl ether	**6100**	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	50	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	50	"	"	"	"	"	"	
Benzene	ND	50	"	"	"	"	"	"	
Toluene	ND	50	"	"	"	"	"	"	
Ethylbenzene	ND	50	"	"	"	"	"	"	
Xylenes (total)	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*109 %*	*78-129*		"	"	"	"	

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0173
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/21/03 15:08

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J14001 - EPA 5030B P/T										
Blank (3J14001-BLK1)				Prepared & Analyzed: 10/14/03						
Gasoline Range Organics (C6-C10)	ND	50	ug/l							
Ethanol	ND	100	"							
tert-Butyl alcohol	ND	20	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	*4.96*		"	*5.00*		*99.2*	*78-129*			
Laboratory Control Sample (3J14001-BS1)				Prepared & Analyzed: 10/14/03						
Ethanol	173	100	ug/l	200		86.5	31-186			
tert-Butyl alcohol	56.6	20	"	50.0		113	0-206			
Methyl tert-butyl ether	8.70	0.50	"	10.0		87.0	63-137			
Di-isopropyl ether	9.04	0.50	"	10.0		90.4	76-130			
Ethyl tert-butyl ether	8.64	0.50	"	10.0		86.4	61-141			
tert-Amyl methyl ether	8.70	0.50	"	10.0		87.0	56-140			
1,2-Dichloroethane	9.59	0.50	"	10.0		95.9	77-136			
1,2-Dibromoethane (EDB)	10.7	0.50	"	10.0		107	77-132			
Benzene	9.03	0.50	"	10.0		90.3	78-124			
Toluene	9.57	0.50	"	10.0		95.7	78-129			
Ethylbenzene	9.97	0.50	"	10.0		99.7	84-117			
Xylenes (total)	32.1	0.50	"	30.0		107	83-125			
Surrogate: 1,2-Dichloroethane-d4	*4.87*		"	*5.00*		*97.4*	*78-129*			

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0173
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/21/03 15:08

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J14001 - EPA 5030B P/T										
Laboratory Control Sample (3J14001-BS2)				Prepared & Analyzed: 10/14/03						
Gasoline Range Organics (C6-C10)	389	50	ug/l	440		88.4	70-113			
Surrogate: 1,2-Dichloroethane-d4	*4.93*		"	*5.00*		*98.6*	*78-129*			
Laboratory Control Sample Dup (3J14001-BSD1)				Prepared: 10/14/03 Analyzed: 10/15/03						
Ethanol	183	100	ug/l	200		91.5	31-186	5.62	37	
tert-Butyl alcohol	51.4	20	"	50.0		103	0-206	9.63	22	O-09
Methyl tert-butyl ether	8.29	0.50	"	10.0		82.9	63-137	4.83	13	
Di-isopropyl ether	8.33	0.50	"	10.0		83.3	76-130	8.18	9	
Ethyl tert-butyl ether	8.36	0.50	"	10.0		83.6	61-141	3.29	9	
tert-Amyl methyl ether	8.30	0.50	"	10.0		83.0	56-140	4.71	12	
1,2-Dichloroethane	10.1	0.50	"	10.0		101	77-136	5.18	13	
1,2-Dibromoethane (EDB)	10.7	0.50	"	10.0		107	77-132	0.00	9	
Benzene	8.98	0.50	"	10.0		89.8	78-124	0.555	12	
Toluene	9.37	0.50	"	10.0		93.7	78-129	2.11	10	
Ethylbenzene	9.79	0.50	"	10.0		97.9	84-117	1.82	10	
Xylenes (total)	32.2	0.50	"	30.0		107	83-125	0.311	11	
Surrogate: 1,2-Dichloroethane-d4	*5.18*		"	*5.00*		*104*	*78-129*			
Laboratory Control Sample Dup (3J14001-BSD2)				Prepared: 10/14/03 Analyzed: 10/15/03						
Gasoline Range Organics (C6-C10)	410	50	ug/l	440		93.2	70-113	5.26	9	
Surrogate: 1,2-Dichloroethane-d4	*5.13*		"	*5.00*		*103*	*78-129*			
Matrix Spike (3J14001-MS1)	**Source: MMJ0086-01**			Prepared & Analyzed: 10/14/03						
Gasoline Range Organics (C6-C10)	20100	2500	ug/l	22000	ND	91.4	70-113			
Methyl tert-butyl ether	397	25	"	504	ND	78.8	63-137			
Benzene	261	25	"	324	ND	80.6	78-124			
Toluene	1650	25	"	1480	ND	111	78-129			
Ethylbenzene	372	25	"	360	ND	103	84-117			
Xylenes (total)	1990	25	"	1680	ND	118	83-125			
Surrogate: 1,2-Dichloroethane-d4	*5.20*		"	*5.00*		*104*	*78-129*			

Sequoia Analytical

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

URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0173
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/21/03 15:08

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3J14001 - EPA 5030B P/T										
Matrix Spike Dup (3J14001-MSD1)	**Source: MMJ0086-01**			Prepared & Analyzed: 10/14/03						
Gasoline Range Organics (C6-C10)	20500	2500	ug/l	22000	ND	93.2	70-113	1.97	9	
Methyl tert-butyl ether	400	25	"	504	ND	79.4	63-137	0.753	13	
Benzene	260	25	"	324	ND	80.2	78-124	0.384	12	
Toluene	1690	25	"	1480	ND	114	78-129	2.40	10	
Ethylbenzene	386	25	"	360	ND	107	84-117	3.69	10	
Xylenes (total)	2070	25	"	1680	ND	123	83-125	3.94	11	
Surrogate: 1,2-Dichloroethane-d4	*5.00*		"	*5.00*		*100*	*78-129*			

Sequoia Analytical

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URS Corporation [Arco]	Project: ARCO #2111, San Leandro, CA	MMJ0173
500 12th Street, Suite 200	Project Number: INTRIM-50277	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	10/21/03 15:08

Notes and Definitions

HC-19	Discrete peak @ C6-C7.
O-09	The result was reported with a possible high bias due to the continuing calibration verification falling outside acceptance criteria.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Chain of Custody Record

Project Name: 2111 GWM
BP BU/GEM CO Portfolio: Retail
BP Laboratory Contract Number: Atlantic Richfield Company
Requested Due Date (mm/dd/yy): 14 day TAT
Date: 10/1/03

MN30173

On-site Time:	930 Temp: 57
Off-site Time:	1230 Temp: 65
Sky Conditions:	overcast
Meteorological Events:	
Wind Speed:	Direction:

Send To:	BP/GEM Facility No.: ARCO 2111	Consultant/Contractor: URS
Lab Name: SEQUOIA	BP/GEM Facility Address: 1156 DAVIS ST, San Leandro, CA	Address: 500 12th St., Ste. 200
Lab Address: 885 Jarvis Dr.	Site ID No. ARCO 2111	Oakland, CA 94609-4014
Morgan Hill, CA 95037	Site Lat/Long:	e-mail EDD: donna_cosper@URSCorp.com
	California Global ID #: T0600101764	Consultant/Contractor Project No.: 15-00002111.01 00127
Lab PM: Theresa Allen	BP/GEM PM Contact: PAUL SUPPLE	Consultant Tele/Fax: 510-893-3600/510-874-3268
Tele/Fax: 408-776-9600 / 408-782-6308	Address: P.O. Box 6549	Consultant/Contractor PM: Scott Robinson
Report Type & QC Level: 1 Send EDF Reports	Moraga, CA 94570	Invoice to: Consultant/Contractor or BP/GEM (Circle one)
BP/GEM Account No.:	Tele/Fax: 925-299-8891/925-299-8872	BP/GEM Work Release No: INTRIM -50277

Lab Bottle Order No:

Item No.	Sample Description	Time	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Sediments	Matrix: Air	Laboratory No.	No. of containers	Preservatives: Unpreserved	Preservatives: H_2SO_4	Preservatives: HNO_3	Preservatives: HCl	Requested Analysis: TPH-G / BTEX (8260)	Requested Analysis: TPH-D (8015)	Requested Analysis: MTBE (8021)	Requested Analysis: MTBE (8260)	Requested Analysis: MTBE, TAME, ETBE, DIPE, TBA (8260)	Requested Analysis: 1,2-DCA & EDB (8260)	Requested Analysis: Ethanol (8260)	Sample Point Lat/Long and Comments
1	MW-5	1205		X			01	3				X	X				X		X	
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: John DeJong						
Sampler's Company: Blaine Tech Services	[signature] BTS	10/2/03	1240	[signature]	10/2/03	1240
Shipment Date:	[signature]	10/2/03	1705	[signature]	10/2/03	1705
Shipment Method:						
Shipment Tracking No:						

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

Ice Chests In Place Yes ✓ No ___ Temperature Blank Yes ✓ No ___ Cooler Temperature on Receipt 4.6 °F/C Trip Blank Yes ✓ No ___

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

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: URS
REC. BY (PRINT): AJS
WORKORDER: MMJ0173

DATE REC'D AT LAB: 10-2-03
TIME REC'D AT LAB: 1705
DATE LOGGED IN: 10-7-03

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

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s): (Present) / Absent; (Intact) / Broken*			MW-5	(3) VOAs	HCl	L	10-1-03	lot# HA 323700
2. Chain-of-Custody: (Present) / Absent*								
3. Traffic Reports or Packing List: Present / (Absent)								
4. Airbill: Airbill / Sticker Present / (Absent)								
5. Airbill #:								
6. Sample Labels: (Present) / Absent								
7. Sample IDs: (Listed) / Not Listed on Chain-of-Custody								
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: 4.6°C; Is temp 4 +/-2°C? (Yes) / No**								

(Acceptance range for samples requiring thermal pres.)

**Exception (if any): Metals / DFF (Direct From Field) or Problem COC

10-2-03

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

SEVERN TRENT STL

Submission#: 2003-11-0916

URS-Oakland, CA

December 05, 2003

500 12th Street, Suite 200
Oakland, CA 94607-4014

Attn.: Scott Robinson
Project: BP/GEM Facility No.: Station 2111
Site: 1156 Davis St., San Leandro, CA

Attached is our report for your samples received on 11/26/2003 15:15
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 01/10/2004 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.
You can also contact me via email. My email address is: asalimpour@stl-inc.com

Sincerely,

Afsaneh Salimpour
Project Manager

SEVERN TRENT STL

Submission #: 2003-11-0916

Fuel Oxygenates by 8260B

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-8-5	11/26/2003 09:00	Soil	1
MW-8-10	11/26/2003 09:10	Soil	2
MW-8-15	11/26/2003 09:20	Soil	3
MW-8-23	11/26/2003 09:40	Soil	5
MW-8-28	11/26/2003 09:50	Soil	6
MW-8-33	11/26/2003 10:00	Soil	7
MW-8-38	11/26/2003 10:10	Soil	8

Fuel Oxygenates by 8260B

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-8-5**	Lab ID:	2003-11-0916 - 1
Sampled:	11/26/2003 09:00	Extracted:	11/29/2003 14:55
Matrix:	Soil	QC Batch#:	2003/11/29-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	1.00	11/29/2003 14:55	
tert-Butyl alcohol (TBA)	ND	10	ug/Kg	1.00	11/29/2003 14:55	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	11/29/2003 14:55	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	11/29/2003 14:55	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	11/29/2003 14:55	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	11/29/2003 14:55	
Benzene	ND	5.0	ug/Kg	1.00	11/29/2003 14:55	
Toluene	ND	5.0	ug/Kg	1.00	11/29/2003 14:55	
Ethyl benzene	ND	5.0	ug/Kg	1.00	11/29/2003 14:55	
Total xylenes	ND	5.0	ug/Kg	1.00	11/29/2003 14:55	
Surrogate(s)						
1,2-Dichloroethane-d4	88.7	70	%	1.00	11/29/2003 14:55	
Toluene-d8	101.6	81	%	1.00	11/29/2003 14:55	

Fuel Oxygenates by 8260B

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-8-10**	Lab ID:	2003-11-0916 - 2
Sampled:	11/26/2003 09:10	Extracted:	11/29/2003 15:14
Matrix:	Soil	QC Batch#:	2003/11/29-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	1.00	11/29/2003 15:14	
tert-Butyl alcohol (TBA)	ND	10	ug/Kg	1.00	11/29/2003 15:14	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	11/29/2003 15:14	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	11/29/2003 15:14	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	11/29/2003 15:14	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	11/29/2003 15:14	
Benzene	ND	5.0	ug/Kg	1.00	11/29/2003 15:14	
Toluene	ND	5.0	ug/Kg	1.00	11/29/2003 15:14	
Ethyl benzene	ND	5.0	ug/Kg	1.00	11/29/2003 15:14	
Total xylenes	ND	5.0	ug/Kg	1.00	11/29/2003 15:14	
Surrogate(s)						
1,2-Dichloroethane-d4	89.1	70	%	1.00	11/29/2003 15:14	
Toluene-d8	93.7	81	%	1.00	11/29/2003 15:14	

Fuel Oxygenates by 8260B

URS-Oakland, CA

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Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-8-15**	Lab ID:	2003-11-0916 - 3
Sampled:	11/26/2003 09:20	Extracted:	12/2/2003 11:51
Matrix:	Soil	QC Batch#:	2003/12/02-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	2100	1000	ug/Kg	1.00	12/02/2003 11:51	g
tert-Butyl alcohol (TBA)	17	10	ug/Kg	1.00	12/02/2003 11:51	
Methyl tert-butyl ether (MTBE)	32	5.0	ug/Kg	1.00	12/02/2003 11:51	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	12/02/2003 11:51	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	12/02/2003 11:51	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	12/02/2003 11:51	
Benzene	ND	5.0	ug/Kg	1.00	12/02/2003 11:51	
Toluene	ND	5.0	ug/Kg	1.00	12/02/2003 11:51	
Ethyl benzene	18	5.0	ug/Kg	1.00	12/02/2003 11:51	
Total xylenes	ND	5.0	ug/Kg	1.00	12/02/2003 11:51	
Surrogate(s)						
1,2-Dichloroethane-d4	83.9	70	%	1.00	12/02/2003 11:51	
Toluene-d8	105.4	81	%	1.00	12/02/2003 11:51	

Fuel Oxygenates by 8260B

URS-Oakland, CA

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500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-8-23**	Lab ID:	2003-11-0916 - 5
Sampled:	11/26/2003 09:40	Extracted:	12/2/2003 12:10
Matrix:	Soil	QC Batch#:	2003/12/02-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	5000	ug/Kg	5.00	12/02/2003 12:10	
tert-Butyl alcohol (TBA)	ND	50	ug/Kg	5.00	12/02/2003 12:10	
Methyl tert-butyl ether (MTBE)	1400	25	ug/Kg	5.00	12/02/2003 12:10	
Di-isopropyl Ether (DIPE)	ND	50	ug/Kg	5.00	12/02/2003 12:10	
Ethyl tert-butyl ether (ETBE)	ND	25	ug/Kg	5.00	12/02/2003 12:10	
tert-Amyl methyl ether (TAME)	25	25	ug/Kg	5.00	12/02/2003 12:10	
Benzene	ND	25	ug/Kg	5.00	12/02/2003 12:10	
Toluene	ND	25	ug/Kg	5.00	12/02/2003 12:10	
Ethyl benzene	ND	25	ug/Kg	5.00	12/02/2003 12:10	
Total xylenes	ND	25	ug/Kg	5.00	12/02/2003 12:10	
Surrogate(s)						
1,2-Dichloroethane-d4	83.0	70	%	5.00	12/02/2003 12:10	
Toluene-d8	92.7	81	%	5.00	12/02/2003 12:10	

Fuel Oxygenates by 8260B

URS-Oakland, CA

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Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-8-28**	Lab ID:	2003-11-0916 - 6
Sampled:	11/26/2003 09:50	Extracted:	12/2/2003 12:28
Matrix:	Soil	QC Batch#:	2003/12/02-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	1.00	12/02/2003 12:28	
tert-Butyl alcohol (TBA)	ND	10	ug/Kg	1.00	12/02/2003 12:28	
Methyl tert-butyl ether (MTBE)	120	5.0	ug/Kg	1.00	12/02/2003 12:28	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	12/02/2003 12:28	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	12/02/2003 12:28	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	12/02/2003 12:28	
Benzene	ND	5.0	ug/Kg	1.00	12/02/2003 12:28	
Toluene	ND	5.0	ug/Kg	1.00	12/02/2003 12:28	
Ethyl benzene	ND	5.0	ug/Kg	1.00	12/02/2003 12:28	
Total xylenes	ND	5.0	ug/Kg	1.00	12/02/2003 12:28	
Surrogate(s)						
1,2-Dichloroethane-d4	85.3	70	%	1.00	12/02/2003 12:28	
Toluene-d8	95.1	81	%	1.00	12/02/2003 12:28	

Fuel Oxygenates by 8260B

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-8-33**	Lab ID:	2003-11-0916 - 7
Sampled:	11/26/2003 10:00	Extracted:	12/2/2003 12:47
Matrix:	Soil	QC Batch#:	2003/12/02-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	1.00	12/02/2003 12:47	
tert-Butyl alcohol (TBA)	ND	10	ug/Kg	1.00	12/02/2003 12:47	
Methyl tert-butyl ether (MTBE)	37	5.0	ug/Kg	1.00	12/02/2003 12:47	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	12/02/2003 12:47	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	12/02/2003 12:47	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	12/02/2003 12:47	
Benzene	ND	5.0	ug/Kg	1.00	12/02/2003 12:47	
Toluene	ND	5.0	ug/Kg	1.00	12/02/2003 12:47	
Ethyl benzene	ND	5.0	ug/Kg	1.00	12/02/2003 12:47	
Total xylenes	ND	5.0	ug/Kg	1.00	12/02/2003 12:47	
Surrogate(s)						
1,2-Dichloroethane-d4	86.8	70	%	1.00	12/02/2003 12:47	
Toluene-d8	89.2	81	%	1.00	12/02/2003 12:47	

Fuel Oxygenates by 8260B

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-8-38**	Lab ID:	2003-11-0916 - 8
Sampled:	11/26/2003 10:10	Extracted:	11/29/2003 16:47
Matrix:	Soil	QC Batch#:	2003/11/29-1A.69

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	1.00	11/29/2003 16:47	
tert-Butyl alcohol (TBA)	ND	10	ug/Kg	1.00	11/29/2003 16:47	
Methyl tert-butyl ether (MTBE)	27	5.0	ug/Kg	1.00	11/29/2003 16:47	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	11/29/2003 16:47	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	11/29/2003 16:47	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	11/29/2003 16:47	
Benzene	ND	5.0	ug/Kg	1.00	11/29/2003 16:47	
Toluene	ND	5.0	ug/Kg	1.00	11/29/2003 16:47	
Ethyl benzene	ND	5.0	ug/Kg	1.00	11/29/2003 16:47	
Total xylenes	ND	5.0	ug/Kg	1.00	11/29/2003 16:47	
Surrogate(s)						
1,2-Dichloroethane-d4	90.5	70	%	1.00	11/29/2003 16:47	
Toluene-d8	86.2	81	%	1.00	11/29/2003 16:47	

Fuel Oxygenates by 8260B

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

Soil

QC Batch # 2003/11/29-1A.69

MB: 2003/11/29-1A.69-018

Date Extracted: 11/29/2003 12:18

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	11/29/2003 12:18	
Benzene	ND	5.0	ug/Kg	11/29/2003 12:18	
Toluene	ND	5.0	ug/Kg	11/29/2003 12:18	
Ethyl benzene	ND	5.0	ug/Kg	11/29/2003 12:18	
Total xylenes	ND	5.0	ug/Kg	11/29/2003 12:18	
tert-Butyl alcohol (TBA)	ND	10.0	ug/Kg	11/29/2003 12:18	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	11/29/2003 12:18	
Di-isopropyl Ether (DIPE)	ND	10.0	ug/Kg	11/29/2003 12:18	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	11/29/2003 12:18	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	11/29/2003 12:18	
Surrogates(s)					
1,2-Dichloroethane-d4	84.8	70-121	%	11/29/2003 12:18	
Toluene-d8	93.5	81-117	%	11/29/2003 12:18	

Fuel Oxygenates by 8260B

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — **Soil** — **QC Batch # 2003/12/02-1A.69**

MB: 2003/12/02-1A.69-028 — Date Extracted: 12/02/2003 10:28

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	1000	ug/Kg	12/02/2003 10:28	
Benzene	ND	5.0	ug/Kg	12/02/2003 10:28	
Toluene	ND	5.0	ug/Kg	12/02/2003 10:28	
Ethyl benzene	ND	5.0	ug/Kg	12/02/2003 10:28	
Total xylenes	ND	5.0	ug/Kg	12/02/2003 10:28	
tert-Butyl alcohol (TBA)	ND	10.0	ug/Kg	12/02/2003 10:28	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	12/02/2003 10:28	
Di-isopropyl Ether (DIPE)	ND	10.0	ug/Kg	12/02/2003 10:28	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	12/02/2003 10:28	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	12/02/2003 10:28	
Surrogates(s)					
1,2-Dichloroethane-d4	92.2	70-121	%	12/02/2003 10:28	
Toluene-d8	98.7	81-117	%	12/02/2003 10:28	

Fuel Oxygenates by 8260B

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike | **Soil** | **QC Batch # 2003/11/29-1A.69**

LCS 2003/11/29-1A.69-060 Extracted: 11/29/2003 Analyzed: 11/29/2003 11:41

LCSD 2003/11/29-1A.69-059 Extracted: 11/29/2003 Analyzed: 11/29/2003 11:59

Compound	Conc. ug/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	48.6	47.2	50	97.2	96.7	0.5	69-129	20		
Toluene	52.4	48.5	50	104.8	99.4	5.3	70-130	20		
Methyl tert-butyl ether (MTBE)	47.2	45.2	50	94.4	92.6	1.9	65-165	20		
Surrogates(s)										
1,2-Dichloroethane-d4	432	413	500	86.4	82.6		70-121			
Toluene-d8	482	448	500	96.4	89.6		81-117			

Fuel Oxygenates by 8260B

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike | **Soil** | **QC Batch # 2003/12/02-1A.69**

LCS 2003/12/02-1A.69-050 Extracted: 12/02/2003 Analyzed: 12/02/2003 09:50

LCSD 2003/12/02-1A.69-008 Extracted: 12/02/2003 Analyzed: 12/02/2003 10:08

Compound	Conc. ug/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	44.0	44.9	50	88.0	89.8	2.0	69-129	20		
Toluene	45.0	50.7	50	90.0	101.4	11.9	70-130	20		
Methyl tert-butyl ether (MTBE)	39.0	38.9	50	78.0	77.8	0.3	65-165	20		
Surrogates(s)										
1,2-Dichloroethane-d4	455	445	500	91.0	89.0		70-121			
Toluene-d8	445	521	500	89.0	104.2		81-117			

Fuel Oxygenates by 8260B

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Legend and Notes

Result Flag

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

Gas/BTEXFuel Oxygenates by 8260B (High Level)

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-8-16.5	11/26/2003 09:30	Soil	4

Gas/BTEXFuel Oxygenates by 8260B (High Level)

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-8-16.5**	Lab ID:	2003-11-0916 - 4
Sampled:	11/26/2003 09:30	Extracted:	12/1/2003 11:30
Matrix:	Soil	QC Batch#:	2003/12/01-03.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	150000	50000	ug/Kg	1.00	12/04/2003 11:19	g
Benzene	ND	500	ug/Kg	1.00	12/04/2003 11:19	
Toluene	ND	500	ug/Kg	1.00	12/04/2003 11:19	
Ethyl benzene	600	500	ug/Kg	1.00	12/04/2003 11:19	
Total xylenes	840	500	ug/Kg	1.00	12/04/2003 11:19	
tert-Butyl alcohol (TBA)	ND	2500	ug/Kg	1.00	12/04/2003 11:19	
Methyl tert-butyl ether (MTBE)	ND	500	ug/Kg	1.00	12/04/2003 11:19	
Di-isopropyl Ether (DIPE)	ND	1000	ug/Kg	1.00	12/04/2003 11:19	
Ethyl tert-butyl ether (ETBE)	ND	500	ug/Kg	1.00	12/04/2003 11:19	
tert-Amyl methyl ether (TAME)	ND	500	ug/Kg	1.00	12/04/2003 11:19	
Surrogate(s)						
1,2-Dichloroethane-d4	84.2	70-121	%	1.00	12/04/2003 11:19	
Toluene-d8	91.5	81-117	%	1.00	12/04/2003 11:19	

Gas/BTEXFuel Oxygenates by 8260B (High Level)

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — **Soil** — **QC Batch # 2003/12/01-03.66**

MB: 2003/12/01-03.66-036 — Date Extracted: 12/01/2003 13:36

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	mg/Kg	12/01/2003 13:36	
Benzene	ND	0.50	mg/Kg	12/01/2003 13:36	
Toluene	ND	0.50	mg/Kg	12/01/2003 13:36	
Ethyl benzene	ND	0.50	mg/Kg	12/01/2003 13:36	
Total xylenes	ND	0.50	mg/Kg	12/01/2003 13:36	
tert-Butyl alcohol (TBA)	ND	2.5	mg/Kg	12/01/2003 13:36	
Methyl tert-butyl ether (MTBE)	ND	0.50	mg/Kg	12/01/2003 13:36	
Di-isopropyl Ether (DIPE)	ND	1.0	mg/Kg	12/01/2003 13:36	
Ethyl tert-butyl ether (ETBE)	ND	0.50	mg/Kg	12/01/2003 13:36	
tert-Amyl methyl ether (TAME)	ND	0.50	mg/Kg	12/01/2003 13:36	
Surrogates(s)					
1,2-Dichloroethane-d4	98.0	76-130	%	12/01/2003 13:36	
Toluene-d8	94.8	78-115	%	12/01/2003 13:36	

Gas/BTEXFuel Oxygenates by 8260B (High Level)

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike | **Soil** | **QC Batch # 2003/12/01-03.66**

LCS 2003/12/01-03.66-048 Extracted: 12/01/2003 Analyzed: 12/01/2003 12:48

LCSD 2003/12/01-03.66-012 Extracted: 12/01/2003 Analyzed: 12/01/2003 13:12

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	9360	9530	10000	93.6	95.3	1.8	69-129	20		
Toluene	9460	9610	10000	94.6	96.1	1.6	70-130	20		
Methyl tert-butyl ether (MTBE)	9120	9140	10000	91.2	91.4	0.2	65-165	20		
Surrogates(s)										
1,2-Dichloroethane-d4	244	251	250	97.6	100.4		76-130			
Toluene-d8	231	243	250	92.4	97.2		78-115			

Gas/BTEXFuel Oxygenates by 8260B (High Level)

URS-Oakland, CA

Attn.: Scott Robinson

500 12th Street, Suite 200
Oakland, CA 94607-4014
Phone: (510) 893-3600 Fax: (510) 874-3268

Project: BP/GEM Facility No.: Station 2111

Received: 11/26/2003 15:15

Site: 1156 Davis St., San Leandro, CA

Legend and Notes

Result Flag

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

SEVERN TRENT STL

STL San Francisco

Sample Receipt Checklist

Submission #:2003- 11 - 0916

Checklist completed by: (initials) DSH Date: 11/29/03

Courier name: ☒ STL San Francisco ☐ Client _____

Custody seals intact on shipping container/samples	Yes ___ No ___	Not Present ✓
Chain of custody present?	Yes ✓ No ___	
Chain of custody signed when relinquished and received?	Yes ✓ No ___	
Chain of custody agrees with sample labels?	Yes ✓ No ___	
Samples in proper container/bottle?	Yes ✓ No ___	
Sample containers intact?	Yes ✓ No ___	
Sufficient sample volume for indicated test?	Yes ✓ No ___	
All samples received within holding time?	Yes ✓ No ___	
Container/Temp Blank temperature in compliance (4^{o} C ± 2)?	Temp: 3.0 °C Yes ✓ No ___	
	Ice Present Yes ✓ No ___	
Water - VOA vials have zero headspace?	No VOA vials submitted ✓ Yes ___ No ___	

(If bubble is present, refer to approximate bubble size and itemize in comments as S (small ~O), M (medium ~ O) or L (large ~ O)

Water - pH acceptable upon receipt? ☐ Yes ☐ No soil

☐ pH adjusted– Preservative used: ☐ HNO_3 ☐ HCl ☐ H_2SO_4 ☐ NaOH ☐ ZnOAc –Lot #(s): _____

For any item check-listed "No", provided detail of discrepancy in comment section below:

Comments:

Project Management [Routing for instruction of indicated discrepancy(ies)]

Project Manager: (Initials) _____ Date: ____/____/03

Client contacted: ☐ Yes ☐ No

Summary of discussion:

Corrective Action (per PM/Client):

80642

2003-11-0916

Chain of Custody Record

bp

Project Name Station 2111 -1156 Davis St., San Leandro, CA
Business Unit Atlantic Richfield Company/Northern CA Portfolio
BP Laboratory Contract Number: 4 6 1 0 0 0
Requested Due Date: 12/10/03
(mm/dd/yy - 2 weeks from sampling date)

Date: 11/26/03

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

Send To:		
Lab Name: STL Chromalab	BP/GEM Facility No.: Station 2111	Consultant: URS Oakland
Lab Address: 1220 Quarry Lane Pleasanton, CA 94566	BP/GEM Facility Address: 1156 Davis St., San Leandro, CA	Address: 500 12th Street, #200 Oakland, CA 94607
	Site ID No. Station 2111	e-mail EDD: Scott_Robinson@URSCorp.com
	California Global ID #:T0600101665	Consultant Project No.:
Lab PM: Afsaneh Salimpour	BP/GEM PM Contact: Paul Supple	Consultant Tele/Fax: 510-874-3280/510-874-3268
Tele/Fax:925.484.1919	Address: P.O. Box 6549, Moraga, CA 94570	Consultant PM: Scott Robinson
Report Type & QC Level: Normal	Tele/Fax: 925-299-8891/925-299-8872	Invoice to: Atlantic Richfield Company
BP/GEM Account No.:		BP/GEM Work Release No:
Lab Bottle Order No:		

Item No.	Field Point ID	Sample ID	Time	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Sediments	Matrix: Air	Laboratory No.	No. of containers	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl			Requested Analysis: TPH-g (8260)	BTEX (8260)	MTBE (8260)	(all 5 fuel-oxys)						Sample Point Lat/Long and Comments
1	MW-8	MW-8-5	0900	X					1	X						X	X	X							Pls copy Lucy Lee 415.[illegible]86.
2	↓	MW-8-10	0910	X					1	↓						X	X	X							
3		MW-8-15	0920	X					1							X	X	X							
4		MW-8-16.5	0930	X					1							X	X	X							
5		MW-8-23	0940	X					1							X	X	X							
6		MW-8-28	0950	X					1							X	X	X							
7		MW-8-33	1000	X					1							X	X	X							
8	↓	MW-8-38	1010	X					1	↓						X	X	X							
9																									3.0°C
10																									

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Chris Sheridan	[signature]	11/26/03	11:55	[signature] STL-SF	11/26/03	11:55
Sampler's Company: URS Oakland	[signature]	11/26/03	15:15			
Shipment Date:						
Shipment Method:				Denise Harrington	11/26/03	1515
Shipment Tracking No:						

Special Instructions:

Custody Seals In Place Yes____ No____ Temperature Blank Yes__ No__ Cooler Temperature on Receipt ____°F/C Trip Blank Yes____ No_x_

BP COC Rev. 1 2/5/02

X:\X_ENV_WASTE\BP GEM\O FOLDER\CHAIN OF CUSTODY FORMS\SCOTT'S SITES.XLS\07/11/2002

ATTACHMENT C

HISTORIC GROUNDWATER DATA

ATTACHMENT D

EDCC REPORT AND EDF/GEOWELL SUBMITTAL CONFIRMATION

Error Summary Log

11/17/03

EDF 1.2i All files present in deliverable.

Laboratory:	Sequoia Analytical Laboratories, Inc., Morgan Hill, CA
Project Name:	ARCO #2111, San Leandro,
Work Order Number:	MMJ0423
Global ID:	T0600101764
Lab Report Number:	MMJ0423102720031702

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run	Sub
MMJ04231027200 31702	MW-1	MMJ042301	W	CS	8260TPH	SW5030B	10/01/03	10/15/03	10/15/03	3J15005	1	
MMJ04231027200 31702	MW-1	MMJ042301	W	CS	A2320B	METHOD	10/01/03	10/21/03	10/21/03	3J21014	1	
MMJ04231027200 31702	MW-1	MMJ042301	W	CS	A2510B	METHOD	10/01/03	10/02/03	10/02/03	3J02031	1	
MMJ04231027200 31702	MW-1	MMJ042301	W	CS	A2540C	METHOD	10/01/03	10/20/03	10/21/03	3J21020	1	
MMJ04231027200 31702	MW-1	MMJ042301	W	CS	A5540C	METHOD	10/01/03	10/03/03	10/03/03	3J08018	1	
MMJ04231027200 31702	MW-1	MMJ042301	W	CS	E150.1	METHOD	10/01/03	10/02/03	10/02/03	3J16016	1	
MMJ04231027200 31702	MW-1	MMJ042301	W	CS	E200.7	E200.7	10/01/03	10/17/03	10/21/03	3J17010	1	
MMJ04231027200 31702	MW-1	MMJ042301	W	CS	E300.0	METHOD	10/01/03	10/17/03	10/17/03	3J20018	1	
MMJ04231027200 31702	MW-3	MMJ042302	W	CS	8260TPH	SW5030B	10/01/03	10/15/03	10/15/03	3J15005	1	
MMJ04231027200 31702	MW-4	MMJ042303	W	CS	8260TPH	SW5030B	10/01/03	10/15/03	10/15/03	3J15005	1	
MMJ04231027200 31702	MW-7	MMJ042304	W	CS	8260TPH	SW5030B	10/01/03	10/15/03	10/15/03	3J15005	1	
		MMJ005202	W	NC	A2510B	METHOD	/ /	10/02/03	10/02/03	3J02031	1	
		MMJ009105	W	NC	8260TPH	SW5030B	/ /	10/15/03	10/15/03	3J15005	1	
		MMJ011801	W	NC	E150.1	METHOD	/ /	10/02/03	10/02/03	3J16016	1	
		MMJ020201	W	NC	E300.0	METHOD	/ /	10/17/03	10/17/03	3J20018	1	
		MMJ055801	W	NC	A2320B	METHOD	/ /	10/21/03	10/21/03	3J21014	1	
		MMJ056401	W	NC	A2540C	METHOD	/ /	10/20/03	10/21/03	3J21020	1	
		3J02031BS1	WQ	BS1	A2510B	METHOD	/ /	10/02/03	10/02/03	3J02031	1	
		3J02031MS1	W	MS1	A2510B	METHOD	/ /	10/02/03	10/02/03	3J02031	1	
		3J02031MSD1	W	SD1	A2510B	METHOD	/ /	10/02/03	10/02/03	3J02031	1	
		3J08018BS1	WQ	BS1	A5540C	METHOD	/ /	10/03/03	10/03/03	3J08018	1	
		3J08018BLK1	WQ	LB1	A5540C	METHOD	/ /	10/03/03	10/03/03	3J08018	1	
		3J08018MS1	W	MS1	A5540C	METHOD	/ /	10/03/03	10/03/03	3J08018	1	
		3J08018MSD1	W	SD1	A5540C	METHOD	/ /	10/03/03	10/03/03	3J08018	1	
		3J15005BSD1	WQ	BD1	8260TPH	SW5030B	/ /	10/15/03	10/15/03	3J15005	1	
		3J15005BSD2	WQ	BD2	8260TPH	SW5030B	/ /	10/15/03	10/16/03	3J15005	1	
		3J15005BS1	WQ	BS1	8260TPH	SW5030B	/ /	10/15/03	10/15/03	3J15005	1	
		3J15005BS2	WQ	BS2	8260TPH	SW5030B	/ /	10/15/03	10/15/03	3J15005	1	

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run	Sub
		3J15005BLK1	WQ	LB1	8260TPH	SW5030B	/ /	10/15/03	10/15/03	3J15005	1	
		3J15005MS1	W	MS1	8260TPH	SW5030B	/ /	10/15/03	10/15/03	3J15005	1	
		3J15005MSD1	W	SD1	8260TPH	SW5030B	/ /	10/15/03	10/15/03	3J15005	1	
		3J16016DUP1	W	LR1	E150.1	METHOD	/ /	10/02/03	10/02/03	3J16016	1	
		3J17010BS1	WQ	BS1	E200.7	E200.7	/ /	10/17/03	10/21/03	3J17010	1	
		3J17010BLK1	WQ	LB1	E200.7	E200.7	/ /	10/17/03	10/21/03	3J17010	1	
		3J17010MS1	W	MS1	E200.7	E200.7	/ /	10/17/03	10/21/03	3J17010	1	
		3J17010MSD1	W	SD1	E200.7	E200.7	/ /	10/17/03	10/21/03	3J17010	1	
		3J20018BS1	WQ	BS1	E300.0	METHOD	/ /	10/17/03	10/17/03	3J20018	1	
		3J20018BLK1	WQ	LB1	E300.0	METHOD	/ /	10/17/03	10/17/03	3J20018	1	
		3J20018MS1	W	MS1	E300.0	METHOD	/ /	10/17/03	10/17/03	3J20018	1	
		3J20018MSD1	W	SD1	E300.0	METHOD	/ /	10/17/03	10/17/03	3J20018	1	
		3J21014BS1	WQ	BS1	A2320B	METHOD	/ /	10/21/03	10/21/03	3J21014	1	
		3J21014BLK1	WQ	LB1	A2320B	METHOD	/ /	10/21/03	10/21/03	3J21014	1	
		3J21014MS1	W	MS1	A2320B	METHOD	/ /	10/21/03	10/21/03	3J21014	1	
		3J21014MSD1	W	SD1	A2320B	METHOD	/ /	10/21/03	10/21/03	3J21014	1	
		3J21020BS1	WQ	BS1	A2540C	METHOD	/ /	10/20/03	10/21/03	3J21020	1	
		3J21020BLK1	WQ	LB1	A2540C	METHOD	/ /	10/20/03	10/21/03	3J21020	1	
		3J21020MS1	W	MS1	A2540C	METHOD	/ /	10/20/03	10/21/03	3J21020	1	
		3J21020MSD1	W	SD1	A2540C	METHOD	/ /	10/20/03	10/21/03	3J21020	1	

EDFSAMP: Error Summary Log

11/17/03

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

EDFTEST: Error Summary Log

11/17/03

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

EDFRES: Error Summary Log

11/17/03

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	3J17010MS1	MS1	W	E200.7	PR	10/21/03	1	HARD
Warning: extra parameter	3J17010MSD1	SD1	W	E200.7	PR	10/21/03	1	HARD
Warning: extra parameter	MMJ042301	CS	W	A2320B	PR	10/21/03	1	ALKB
Warning: extra parameter	MMJ042301	CS	W	A2320B	PR	10/21/03	1	ALKC
Warning: extra parameter	MMJ042301	CS	W	A2320B	PR	10/21/03	1	ALKH
Warning: extra parameter	MMJ042301	CS	W	E200.7	PR	10/21/03	1	HARD
Warning: extra parameter	3J17010BLK1	LB1	WQ	E200.7	PR	10/21/03	1	HARD
Warning: extra parameter	3J17010BS1	BS1	WQ	E200.7	PR	10/21/03	1	HARD
Warning: extra parameter	3J21014BLK1	LB1	WQ	A2320B	PR	10/21/03	1	ALKB
Warning: extra parameter	3J21014BLK1	LB1	WQ	A2320B	PR	10/21/03	1	ALKC
Warning: extra parameter	3J21014BLK1	LB1	WQ	A2320B	PR	10/21/03	1	ALKH

EDFQC: Error Summary Log

11/17/03

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

EDFCL: Error Summary Log

11/17/03

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

AB2886 Electronic Delivery

Main Menu | View/Add Facilities | Upload EDD | Check EDD

Your EDF file has been succcessfully uploaded!

Confirmation Number: 3926184892
Date/Time of Submittal: 11/17/2003 2:54:41 PM
Facility Global ID: T0600101764
Facility Name: ARCO # 02111
Submittal Title: Fourth Quarter 03 Ground Water Monitoring site #2111 pt. 2
Submittal Type: GW Monitoring Report

Logged in as URSCORP-OAKLAND (CONTRACTOR) CONTACT SITE ADMINISTRATOR.

Error Summary Log

10/21/03

EDF 1.2i All files present in deliverable.

Laboratory:	Sequoia Analytical Laboratories, Inc., Morgan Hill, CA
Project Name:	ARCO #2111, San Leandro,
Work Order Number:	MMJ0173
Global ID:	T0600101764
Lab Report Number:	MMJ0173102120031508

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run	Sub
MMJ01731021200	MW-5	MMJ017301	W	CS	8260TPH	SW5030B	10/01/03	10/14/03	10/15/03	3J14001	1	
31508												
		MMJ008601	W	NC	8260TPH	SW5030B	/ /	10/14/03	10/14/03	3J14001	1	
		3J14001BSD1	WQ	BD1	8260TPH	SW5030B	/ /	10/14/03	10/15/03	3J14001	1	
		3J14001BSD2	WQ	BD2	8260TPH	SW5030B	/ /	10/14/03	10/15/03	3J14001	1	
		3J14001BS1	WQ	BS1	8260TPH	SW5030B	/ /	10/14/03	10/14/03	3J14001	1	
		3J14001BS2	WQ	BS2	8260TPH	SW5030B	/ /	10/14/03	10/14/03	3J14001	1	
		3J14001BLK1	WQ	LB1	8260TPH	SW5030B	/ /	10/14/03	10/14/03	3J14001	1	
		3J14001MS1	W	MS1	8260TPH	SW5030B	/ /	10/14/03	10/14/03	3J14001	1	
		3J14001MSD1	W	SD1	8260TPH	SW5030B	/ /	10/14/03	10/14/03	3J14001	1	

EDFSAMP: Error Summary Log

10/21/03

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

EDFTEST: Error Summary Log

10/21/03

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

EDFRES: Error Summary Log

10/21/03

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

EDFQC: Error Summary Log

10/21/03

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

EDFCL: Error Summary Log

10/21/03

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

AB2886 Electronic Delivery

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Your EDF file has been succcessfully uploaded!

Confirmation Number: 3926184892
Date/Time of Submittal: 11/17/2003 2:54:41 PM
Facility Global ID: T0600101764
Facility Name: ARCO # 02111
Submittal Title: Fourth Quarter 03 Ground Water Monitoring site #2111 pt. 2
Submittal Type: GW Monitoring Report

Logged in as URSCORP-OAKLAND (CONTRACTOR) CONTACT SITE ADMINISTRATOR.

AB2886 Electronic Delivery

Main Menu | View/Add Facilities | Upload EDD | Check EDD

Your EDF file has been succcessfully uploaded!

Confirmation Number: 1207990288
Date/Time of Submittal: 10/21/2003 4:50:09 PM
Facility Global ID: T0600101764
Facility Name: ARCO # 02111
Submittal Title: Fourth Quarter 03 Ground Water Monitoring site #2111
Submittal Type: GW Monitoring Report

Logged in as URSCORP-OAKLAND
(CONTRACTOR)

CONTACT SITE ADMINISTRATOR.

AB2886 Electronic Delivery

Main Menu | View/Add Facilities | Upload EDD | Check EDD

UPLOADING A GEO_WELL FILE

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

Submittal Title:	**Fourth Quarter 03 Geowell for site #2111**
Submittal Date/Time:	**10/21/2003 4:52:04 PM**
Confirmation Number:	**8110534489**

Back to Main Menu

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CONTACT SITE ADMINISTRATOR.

ATTACHMENT E

FIELD NOTES AND WELL LOG FOR MW-8

URS

DATE 11/26/03

PROJECT NO.

PAGE NO. 1 OF 1 BY Chris Sheridan

ARCO Stn # 2111 - 1156 Davis St., San Leandro, CA

0800 CS arrive onsite. Trevor & Eric (Gregg) already onsite.
0815 Tailgate safety meeting → BP policy, PPE, hazards, etc.
0840 Hand auger to 5' @ location MW-8.
0900 Begin hollow-stem auger

1120 Set MW-8 : TD: 38'
Screen : 18-38' Slotted : 0.020
Sand : 16-38' Sand : 2/12
Seal : 14-16'
Grout : 0-14'

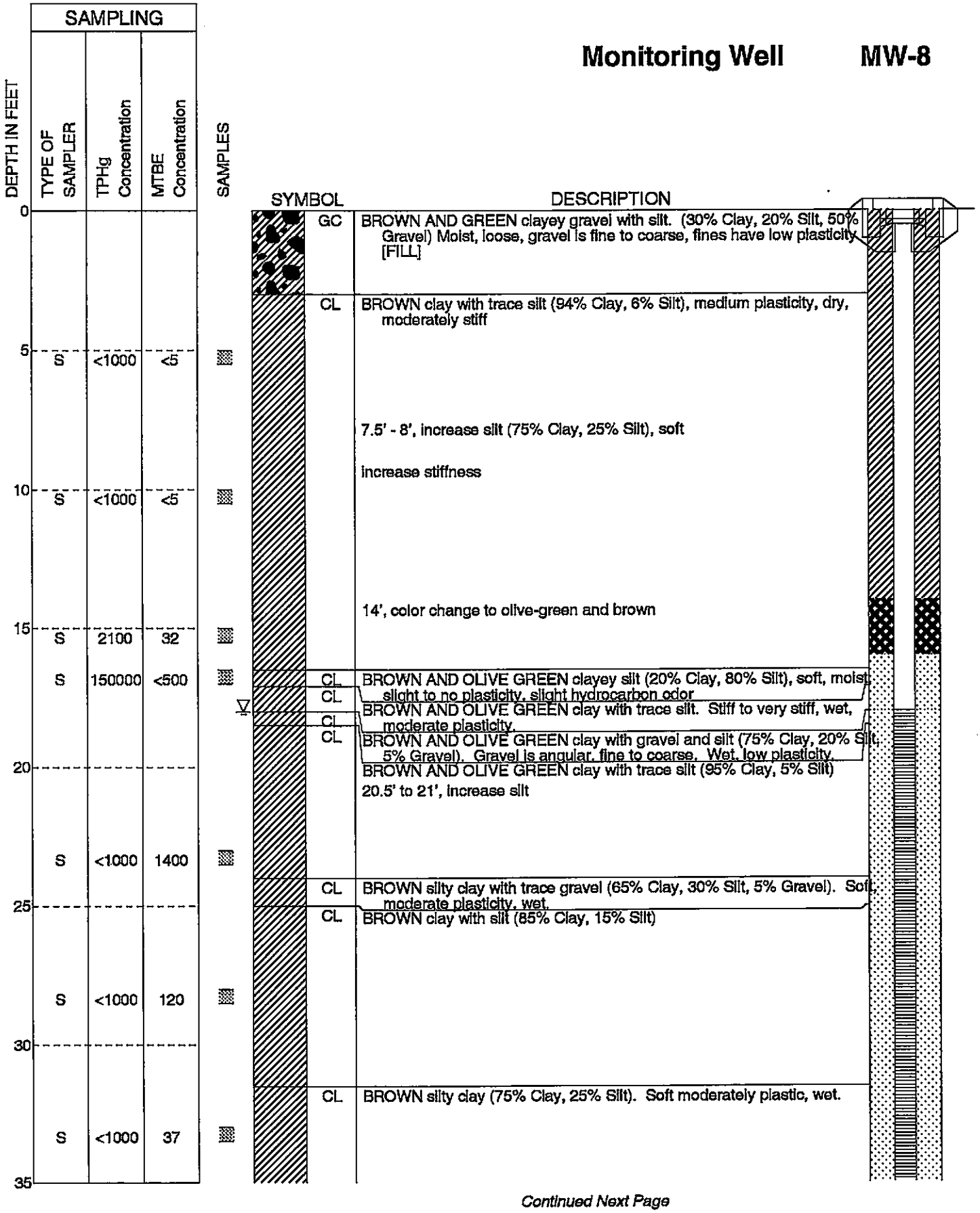
Well is set inside existing vault box.

1130 Clean-up

1400 Drillers, CS leave site

1420 CS return to take some measurements.

Monitoring Well MW-8



Continued Next Page

Job No: 38486093 Serial No.:	URS	**Log of Boring**
Date Completed: 11/26/03 Boring Depth: 38.0 ft.	Surface Elev: Coordinates:	Location: San Leandro, CA
Top of Casing Elev: ft. Casing Depth: 38.0 ft.	Casing Type: PVC Casing Diam: 2.0 in.	Screened Interval: 18-38 ft. Effective Interval: 16-38 ft.	Slot Size: 0.020 in. Sand Pack: 2/12 Lonestar

Monitoring Well MW-8

DEPTH IN FEET	SAMPLING: TYPE OF SAMPLER	SAMPLING: TPHg Concentration	SAMPLING: MTBE Concentration	SAMPLES
35	S	<1000	27	
40				
45				
50				
55				
60				
65				
70				

SYMBOL		DESCRIPTION
	CL	BROWN clay with little silt (93% Clay, 7% Silt)

End of Boring at 38'

Note: Well was installed inside existing vault box, adjacent to existing 1" and 2" wells.