RO - 494

Atlantic Richfield Company
(a BP affiliated company)

P.O. Box 6549
Moraga, California 94570
Phone: (925) 299-8891
Fax: (925) 299-8872

February 11, 2003

Re: Third Quarter 2002 Groundwater Monitoring Report
ARCO Station # 2111
1156 Davis Street
San Leandro, CA

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

Submitted by:

Paul Supple
Environmental Business Manager

URS

February 11, 2003

Amir Gholami
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: Third Quarter 2002 Groundwater Monitoring Report
ARCO Service Station # 2111
1156 Davis Street
San Leandro, California
URS Project #38486093

Dear Mr. Gholami

On behalf of Atlantic Richfield Company (ARCO-an affiliated company of the Group Environmental Management Company), URS Corporation (URS) is submitting the *Third Quarter 2002 Groundwater Monitoring Report* for the 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

REGISTERED PROFESSIONAL ENGINEER
AMY P. BRECKENRIDGE
No. C057141
Exp. 12/31/05
CIVIL
STATE OF CALIFORNIA

Amy P. Breckenridge, P.E.
Portfolio Manager

Enclosure: Third Quarter 2002 Groundwater Monitoring Report

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

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

REPORT

THIRD QUARTER 2002 GROUNDWATER MONITORING

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

Prepared for
Atlantic Richfield Company

February 11, 2003

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

38486093

Date: February 11, 2003

Quarter: 3Q 02

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.:			38486093
Primary Agency:			ACHCSA

WORK PERFORMED THIS QUARTER (Third – 2002):

1. Performed third quarter 2002 groundwater monitoring event on July 17, 2002.
2. Prepared second quarter 2002 groundwater monitoring report.

WORK PROPOSED FOR NEXT QUARTER (Fourth – 2002):

1. Perform fourth quarter 2002 groundwater monitoring event.
2. Prepare third quarter 2002 groundwater monitoring report.

Current Phase of Project:	GW monitoring/sampling
Frequency of Groundwater Sampling:	Wells MW-1 through MW-7
Frequency of Groundwater Monitoring:	Quarterly
Is Free Product (FP) Present On-Site:	No
Cumulative FP Recovered to Date:	Approximately 1.98 gallons
Current Remediation Techniques:	Bailing free product as needed
Approximate Depth to Groundwater:	14.65 (MW-6) to 17.50 (MW-1) feet
Groundwater Gradient (direction):	West
Groundwater Gradient (magnitude):	0.003 feet per foot

DISCUSSION:

TPH-g was detected in three of the seven wells sampled this quarter at concentrations ranging from 7,900 µg/L (MW-5) to 74,000 µg/L (MW-2). Benzene was detected in three wells at concentrations ranging from 1.2 µg/L (MW-1) to 720 µg/L (MW-7). MTBE was detected in six wells at concentrations ranging from 16 µg/L (MW-4) to 120,000 µg/L (MW-7). Well MW-2 exhibited a heavy sheen at the time of sampling.

ATTACHMENTS:

- Table 1 - Groundwater Elevation and Analytical Data
- Table 2 - Groundwater Flow Direction and Gradient
- Figure 1 - Groundwater Elevation Contour and Analytical Summary Map – July 17, 2002
- Attachment A - Field Procedures and Field Data Sheets
- Attachment B - Laboratory Procedures, Certified Analytical Reports and Chain-of-Custody Records
- Attachment C - Historic Groundwater Data
- Attachment D - EDCC and EDF/Geowell Submittal Confirmation

Table 1
Groundwater Elevation and Analytical Data

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

Well Number	Date Sampled		Top of Riser Elevation (feet, MSL)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (8020) (µg/L)	MTBE (8260) (µg/L)
MW-1	06/26/00		39.60	16.46	23.14	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
	09/19/00			17.62	21.98	290	76	<0.5	<0.5	2.3	1,500	NA
	12/21/00			17.39	22.21	257	64	2.89	1.31	4.57	1,080	1,060
	03/13/01			15.7	23.90	<500	52.5	<5.0	<5.0	<5.0	1,430	1,370
	09/18/01			18.24	21.36	<500	64	7.3	<5.0	52	810	1,100
	12/28/01			15.95	23.65	<500	<5.0	<5.0	5.00	22	1,200	1,100
	03/14/02			16.01	23.59	<50	<0.5	<0.5	<0.5	<0.5	34	40
	04/23/02			15.43	24.17	<50	<0.5	<0.5	<0.5	<0.5	30	NA
	07/17/02	**NP**		**17.50**	**22.10**	**<50**	**1.2**	**<0.50**	**<0.50**	**<0.50**	**29**	**NA**
MW-2	06/26/00		37.99	14.60	23.39[a]	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
	09/19/00			15.95	22.04	63,000	1,200	6,300	2,000	14,000	19,000	NA
	12/21/00			15.60	22.39	45,900		2,130	1,160	9,460	22,400	24,700
	12/21/00[b]			NM	NC	5,010	360	189	213	626	54,300	89,200
	03/13/01			13.77	23.9	3,650	98.1	<5.0	<5.0	6.42	3,590	3,260
	3/13/2001[b]			NM	NC	<20,000	525	466	408	1,460	91,700	76,000
	9/18/2001[a]			16.86	21.13	NS	NS	NS	NS	NS	NS	NS
	12/28/01			14.28	23.71	31,000	1,500	3,800	1,300	4,800	9,300	8,800
	03/14/02			14.15	23.84	1,800	25	43	43	270	990	960
	04/23/02			13.60	24.39	9,000	220	110	470	2,500	8,500	NA
	07/17/02	**NP**		**15.75**	**22.24**	**74,000 [c]**	**280**	**290**	**820**	**10,000**	**19,000**	**NA**

Table 1
Groundwater Elevation and Analytical Data

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

Well Number	Date Sampled		Top of Riser Elevation (feet, MSL)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (8020) (µg/L)	MTBE (8260) (µg/L)
MW-3	06/26/00		39.32	15.96	23.36	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
	09/19/00			17.18	22.14	190	17	<0.5	1.4	2.4	160	NA
	12/21/00			16.97	22.35	187	17.8	<0.5	2.47	2.5	143	125
	03/13/01			15.17	24.15	72.4	2.83	<0.5	<0.5	<0.5	126	122
	09/18/01			17.81	21.51	140	6.4	<0.5	3.5	1.6	110	75
	12/28/01			15.44	23.88	130	5.9	<0.5	0.99	0.55	90	63
	03/14/02			15.50	23.82	<50	<0.5	<0.5	<0.5	<0.5	100	88
	04/23/02			14.96	24.36	<50	<0.5	<0.5	<0.5	<0.5	77	NA
	07/17/02	**NP**		**17.09**	**22.23**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**47**	**NA**
MW-4	06/26/00		38.10	14.59	23.51	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
	09/19/00			15.83	22.27	110	7.0	<0.5	<0.5	<1.0	60	NA
	12/21/00			15.59	22.51	120	5.6	<0.5	1.72	<0.5	46.3	48.6
	03/13/01			13.73	24.37	76	0.796	<0.5	<0.5	<0.5	53.7	50.0
	09/18/01			16.50	21.60	<50	<0.5	<0.5	<0.5	<0.5	25	26.0
	12/28/01			14.03	24.07	<50	<0.5	<0.5	<0.5	<0.5	15	11.0
	03/14/02			14.10	24.00	<50	<0.5	<0.5	<0.5	<0.5	31	28
	04/23/02			13.57	24.53	<50	3	<0.5	<0.5	<0.5	42	NA
	07/17/02	**NP**		**15.76**	**22.34**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**16**	**NA**

Table 1
Groundwater Elevation and Analytical Data

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

Well Number	Date Sampled		Top of Riser Elevation (feet, MSL)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (8020) (µg/L)	MTBE (8260) (µg/L)
MW-5	06/26/00		37.21	14.27	22.94	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
	09/19/00			15.36	21.85	54	<0.5	<0.5	<0.5	<1.0	13,000	NA
	12/21/00			15.15	22.06	72.9	2.51	<0.5	<0.5	0.961	19,200	21,200
	03/13/01			13.5	23.71	<500	<5	<5	<5	<5	15,900	20,000
	09/18/01			15.94	21.27	<10,000	<100	<100	<100	<1,000	22,000	20,000
	12/28/01			13.45	23.76	<10,000	<100	<100	<100	<100	10,000	10,000
	03/14/02			13.82	23.39	<5,000	<50	<50	<50	<50	7,100	7,700
	04/23/02			13.25	23.96	<5,000	<50	<50	<50	<50	8,900	NA
	07/17/02	**NP**		**15.27**	**21.94**	**7,900** [d]	**<50**	**<50**	**<50**	**<50**	**13,000**	**NA**
MW-6	06/26/00		37.11	13.46	23.65	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
	09/19/00			14.41	22.70	<50	<0.5	<0.5	<0.5	<1.0	<3.0	NA
	12/21/00			14.53	22.58	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	03/13/01			12.67	24.44	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	09/18/01			15.42	21.69	<50	<0.5	<0.5	<0.5	<0.5	<2.5	<2.0
	12/28/01			12.96	24.15	<50	<0.5	<0.5	<0.5	<0.5	12	<0.5
	03/14/02			12.98	24.13	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA
	04/23/02			12.44	24.67	<50	<0.5	<0.5	<0.5	<0.5	3	NA
	07/17/02	**NP**		**14.65**	**22.46**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**	**NA**

Table 1
Groundwater Elevation and Analytical Data

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

Well Number	Date Sampled		Top of Riser Elevation (feet, MSL)	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, MSL)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (8020) (µg/L)	MTBE (8260) (µg/L)
MW-7	06/26/00		38.68	14.34	24.34	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
	09/19/00			15.70	22.98	8,400	420	38	470	220	5,600	NA
	12/21/00			16.02	22.66	NS[a]	NS[a]	NS[a]	NS[a]	NS[a]	NS[a]	NS[a]
	03/13/01			14.18	24.50	<2,000	154	63	46.3	127	175,000	160,000
	09/18/01			17.02	21.66	<100,000	1,900	<1,000	<1,000	2,800	190,000	370,000
	12/28/01			14.81	23.87	<20,000	<200	<200	<200	<200	84,000	72,000
	03/14/02			14.60	24.08	<50,000	<500	<500	<500	<500	85,000	85,000
	04/23/02			13.94	24.74	<20,000	530	200	220	800	67,000	NA
	07/17/02	**NP**		**16.27**	**22.41**	**26,000 [d]**	**720**	**<250**	**<250**	**860**	**120,000**	**NA**

P = Purge
NP = No Purge
TPH = Total Petroleum Hydrocarbons
MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8021B unless otherwise noted
µg/L = Micrograms per liter
NM = Not measured
NC = Not calculated
MSL = Mean sea level
TOC = Top of casing
< = 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

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

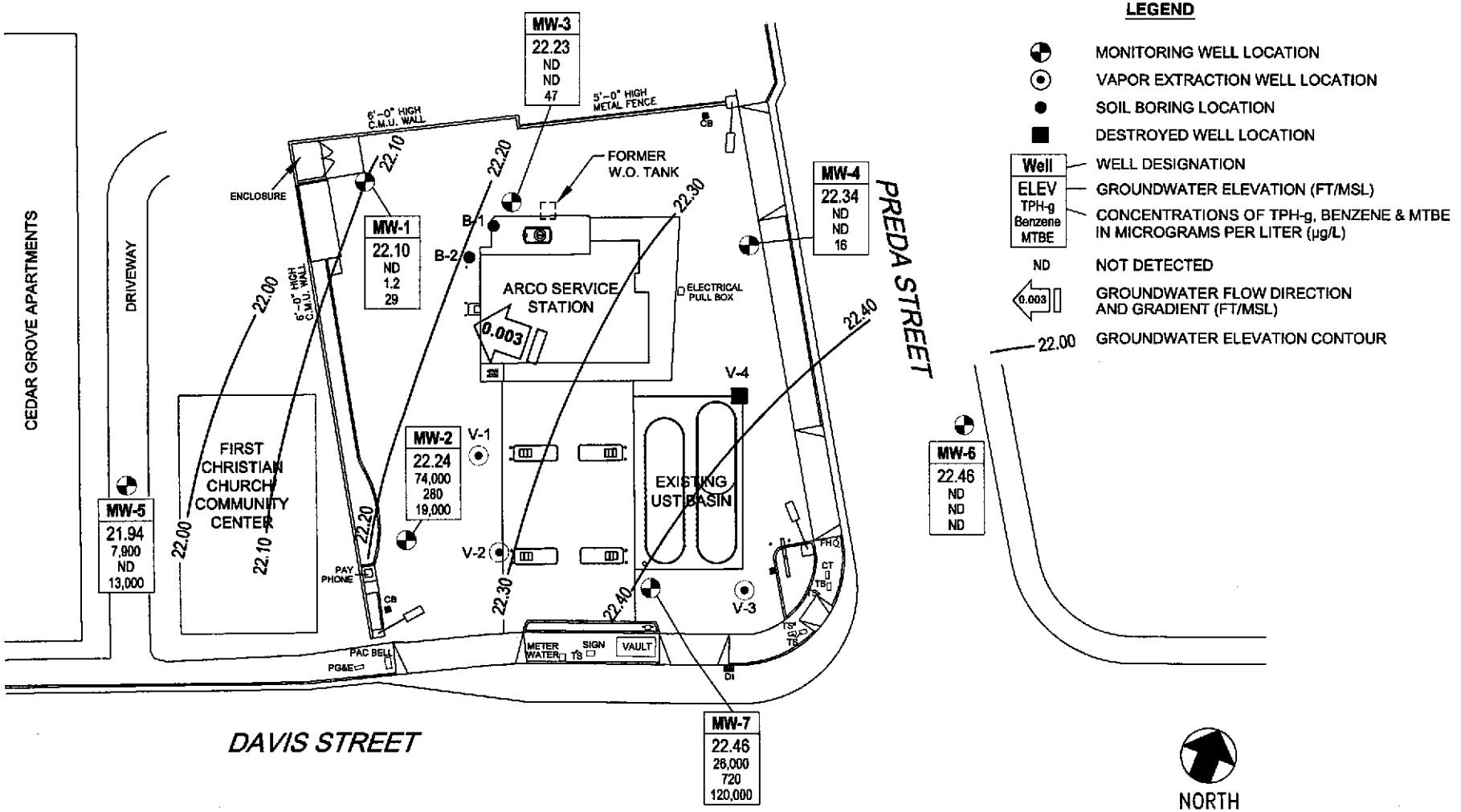
Groundwater Flow Direction and Gradient

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**

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.

X:\x_env\waste\BP GEM\Sites\Scott Robinson\Paul Supple\2111\Reports\Monitoring\Qtr. 3, 2002\Drawings\GWEC-AS_7-17.dwg



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 — CONCENTRATIONS OF TPH-g, BENZENE & MTBE IN MICROGRAMS PER LITER (µg/L)
- ND — NOT DETECTED
- 0.003 — GROUNDWATER FLOW DIRECTION AND GRADIENT (FT/MSL)
- 22.00 — GROUNDWATER ELEVATION CONTOUR

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. 38465919 Arco Service Station 2111 1156 Davis Street San Leandro, California	GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP Third Quarter 2002 (July 17, 2002)	FIGURE 1

ATTACHMENT A

FIELD PROCEDURES AND FIELD DATA SHEETS

FIELD PROCEDURES

Sampling Procedures

The sampling procedure for each well consists first of measuring the water level and depth to bottom, and checking for the presence of free phase petroleum product (free product), using either an electronic indicator and a clear 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 # 020717-BA3 Date 7/17/02 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	
4	MW-1	4					17.50	26.22	TOC	NPB 12.5'
7	MW-2	4	odor				15.75 ~~16.27~~	26.68 ~~27.18~~		NP@ 12'
3	MW-3	4					17.09	26.65		NP@ 11.9'
2	MW-4	4					15.76	21.63		NP@ 10'
5	MW-5	2					15.27	23.85		NP@ 9.4'
1	MW-6	2					14.65	24.82		NP@ 10'
6	MW-7	4					16.27	27.18		NP@ 12'

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 020717-BA3	Station # 2111
Sampler: Brian Allgeier	Date: 7/17/02
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 26.22	Depth to Water: 17.50
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) / Middleburg / Electric Submersible / Extraction Pump / Other: ____

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

Top of Screen: 12.5' If well is listed as a no-purge, confirm that water level is below the top of screen. Otherwise, the well must be purged.

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

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1425	67.8	6.9	745	Ø	clear

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

Sampling Time: 1425 Sampling Date: 7/17/02

Sample I.D.: MW-1 Laboratory: Pace (Sequoia) Other____

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

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

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 020717-BA3	Station # 2111
Sampler: Brian Aleaga	Date: 7/17/02
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 26.68	Depth to Water: 15.75
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

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

Purge Method: Bailer / Disposable Bailer / Middleburg / Electric Submersible / Extraction Pump / Other: ____

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

Top of Screen: 12'

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
Ø	x 3	= Ø Gals.

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
1435	69.2	6.8	668	Ø	strong odor / yellow free heavy sheen / some product

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

Sampling Time: 1435 Sampling Date: 7/17/02

Sample I.D.: MW-2 Laboratory: Pace (Sequoia) Other____

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

D.O. (if req'd):	Pre-purge:	mg/L	(Post-purge:	0.4	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 020717-BA3	Station # 2111
Sampler: Brian Aleden	Date: 7/17/02
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 26.65	Depth to Water: 17.09
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) / Middleburg / Electric Submersible / Extraction Pump / Other: ____

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

Top of Screen: 11.9'

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

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

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1355	68.6	7.2	670	Ø	clear

Did well dewater? Yes (No)		Gallons actually evacuated: Ø	
Sampling Time: 1355		Sampling Date: 7/17/02	
Sample I.D.: MW-3		Laboratory: Pace (Sequoia) Other____	
Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Other:			
D.O. (if req'd):	Pre-purge: ____ mg/L	(Post-purge:)	0.8 mg/L
O.R.P. (if req'd):	Pre-purge: ____ mV	Post-purge:	____ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 020717-BA3	Station # 2111
Sampler: Brian Aleman	Date: 7/17/02
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth: 21.63	Depth to Water: 15.76
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

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

Purge Method: Bailer, Disposable Bailer, Middleburg, Electric Submersible, Extraction Pump, Other: ____

Sampling Method: Bailer, (Disposable Bailer), ~~Extraction Port~~, Other: ____

Top of Screen: 10'

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
∅	3	∅ Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1345	68.9	7.1	730	∅	clear

Did well dewater? Yes (No)		Gallons actually evacuated: ∅	
Sampling Time: 1345		Sampling Date: 7/17/02	
Sample I.D.: MW-4		Laboratory: Pace (Sequoia) Other____	
Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D	Other:		
D.O. (if req'd):	Pre-purge: ____ mg/L	(Post-purge:)	1.2 mg/L
O.R.P. (if req'd):	Pre-purge: ____ mV	Post-purge:	____ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 020717-BA3	Station # 2111
Sampler: Brian Allgeier	Date: 7/17/02
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 23.85	Depth to Water: 15.27
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 / Middleburg / Electric Submersible / Extraction Pump / Other: ____

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

Top of Screen: 9.4'

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
Ø	X	3	=	Ø Gals.

Time	Temp (°F)	pH	Conductivity (mS or µS)	Gals. Removed	Observations
1415	69.3	7.5	678	Ø	clear

Did well dewater? Yes (No)		Gallons actually evacuated: Ø	
Sampling Time: 1415		Sampling Date: 7/17/02	
Sample I.D.: MW-5		Laboratory: Pace (Sequoia) Other____	
Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D		Other:	
D.O. (if req'd):	Pre-purge: ____ mg/L	Post-purge: 1.1	mg/L
O.R.P. (if req'd):	Pre-purge: ____ mV	Post-purge:	mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 020717-BA3	Station # 2111
Sampler: Blaine Alcorn	Date: 7/17/02
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 24.82	Depth to Water: 14.65
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

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

Purge Method: Bailer, (Disposable Bailer), Middleburg, Electric Submersible, Extraction Pump, Other: ___

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

Top of Screen: 10'

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
Ø	x 3	= Ø Gals.

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1245	69.4	7.3	688	Ø	clear

Did well dewater? Yes (No)		Gallons actually evacuated: Ø	
Sampling Time: 1245		Sampling Date: 7/17/02	
Sample I.D.: MW-6		Laboratory: Pace (Sequoia) Other ___	
Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D		Other:	
D.O. (if req'd):	Pre-purge: ___ mg/L	Post-purge:	1.3 mg/L
O.R.P. (if req'd):	Pre-purge: ___ mV	Post-purge:	___ mV

ARCO / BP WELL MONITORING DATA SHEET

BTS #: 020717-BA3	Station # 2111
Sampler: Brian Alcorn	Date: 7/17/02
Well I.D.: MW-7	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 27.18	Depth to Water: 16.27
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) / Middleburg / Electric Submersible / Extraction Pump / Other: ___

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

Top of Screen: 12'

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

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

Time	Temp (°F)	pH	Conductivity (mS or (µS))	Gals. Removed	Observations
1405	69.4	6.9	1076	Ø	clear mild odor

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

Sampling Time: Sampling Date: 7/17/02

Sample I.D.: MW-7 Laboratory: Pace (Sequoia) Other ___

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

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

WELLHEAD INSPECTION CHECKLIST AND REPAIR ORDER

Client ARCO 2111 Inspection Date 7/17/02

Site Address 1156 ~~[illegible]~~ DAVIS ST, SAN LEANDRO Inspected By BRIAN ALLORN

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

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

Well I.D.	Deficiency	Corrective Action Taken

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

Well I.D.	Persisting Deficiency	BTS Office assigns or defers Correction to:	Date assigned	Date corrected
MW-6	(3)	BTS can make repairs if requested		
MW-2	(15) (18) Needs cap + lock (current lid not tight) (3)			
MW-7	(3)			

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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1 August, 2002

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

RE: ARCO #2111, San Leandro, Ca
Sequoia Report: MLG0379

Enclosed are the results of analyses for samples received by the laboratory on 07/18/02 11:15. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya K. Pelt

Latonya Pelt
Project Manager

CA ELAP Certificate #1210

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URS Corporation	Project: ARCO #2111, San Leandro, Ca	
500 12th Street, Suite 100	Project Number: Arco #2111, San Leandro, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	08/01/02 08:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MLG0379-01	Water	07/17/02 14:25	07/18/02 11:15
MW-2	MLG0379-02	Water	07/17/02 14:35	07/18/02 11:15
MW-3	MLG0379-03	Water	07/17/02 13:55	07/18/02 11:15
MW-4	MLG0379-04	Water	07/17/02 13:45	07/18/02 11:15
MW-6	MLG0379-05	Water	07/17/02 12:45	07/18/02 11:15
MW-7	MLG0379-06	Water	07/17/02 14:05	07/18/02 11:15
MW-5	MLG0379-07	Water	07/17/02 14:15	07/18/02 11:15

Sequoia Analytical - Morgan Hill

Latonya K. Pelt

Latonya Pelt, Project Manager

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

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URS Corporation	Project: ARCO #2111, San Leandro, Ca	
500 12th Street, Suite 100	Project Number: Arco #2111, San Leandro, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	08/01/02 08:08

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

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MLG0379-01) Water Sampled: 07/17/02 14:25 Received: 07/18/02 11:15									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2G23002	07/23/02	07/23/02	8015Bm/8021 B	
Benzene	**1.2**	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**29**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*103 %*	*70-130*		"	"	"	"	
MW-2 (MLG0379-02) Water Sampled: 07/17/02 14:35 Received: 07/18/02 11:15									
Gasoline Range Organics (C6-C10)	**74000**	10000	ug/l	200	2G23003	07/23/02	07/23/02	8015Bm/8021 B	HC-21
Benzene	**280**	100	"	"	"	"	"	"	
Toluene	**290**	100	"	"	"	"	"	"	
Ethylbenzene	**820**	100	"	"	"	"	"	"	
Xylenes (total)	**10000**	100	"	"	"	"	"	"	
Methyl tert-butyl ether	**19000**	500	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*96.3 %*	*70-130*		"	"	"	"	
MW-3 (MLG0379-03) Water Sampled: 07/17/02 13:55 Received: 07/18/02 11:15									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2G23002	07/23/02	07/23/02	8015Bm/8021 B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**47**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*92.9 %*	*70-130*		"	"	"	"	

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URS Corporation	Project: ARCO #2111, San Leandro, Ca	
500 12th Street, Suite 100	Project Number: Arco #2111, San Leandro, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	08/01/02 08:08

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

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (MLG0379-04) Water Sampled: 07/17/02 13:45 Received: 07/18/02 11:15									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2G23002	07/23/02	07/23/02	8015Bm/8021 B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**16**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*100 %*	*70-130*		"	"	"	"	
MW-6 (MLG0379-05) Water Sampled: 07/17/02 12:45 Received: 07/18/02 11:15									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2G23003	07/23/02	07/23/02	8015Bm/8021 B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*92.2 %*	*70-130*		"	"	"	"	
MW-7 (MLG0379-06) Water Sampled: 07/17/02 14:05 Received: 07/18/02 11:15									
Gasoline Range Organics (C6-C10)	**26000**	25000	ug/l	500	2G24004	07/24/02	07/25/02	8015Bm/8021 B	HC-12
Benzene	**720**	250	"	"	"	"	"	"	
Toluene	ND	250	"	"	"	"	"	"	
Ethylbenzene	ND	250	"	"	"	"	"	"	
Xylenes (total)	**860**	250	"	"	"	"	"	"	
Methyl tert-butyl ether	**120000**	1200	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*107 %*	*70-130*		"	"	"	"	

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500 12th Street, Suite 100	Project Number: Arco #2111, San Leandro, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	08/01/02 08:08

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

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (MLG0379-07) Water Sampled: 07/17/02 14:15 Received: 07/18/02 11:15									
Gasoline Range Organics (C6-C10)	**7900**	5000	ug/l	100	2G23003	07/23/02	07/23/02	8015Bm/8021B	HC-12
Benzene	ND	50	"	"	"	"	"	"	
Toluene	ND	50	"	"	"	"	"	"	
Ethylbenzene	ND	50	"	"	"	"	"	"	
Xylenes (total)	ND	50	"	"	"	"	"	"	
Methyl tert-butyl ether	**13000**	250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*86.7 %*		*70-130*		"	"	"	

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500 12th Street, Suite 100	Project Number: Arco #2111, San Leandro, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	08/01/02 08:08

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

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2G23002 - EPA 5030B [P/T]										
Blank (2G23002-BLK1)				Prepared & Analyzed: 07/23/02						
Gasoline Range Organics (C6-C10)	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
Surrogate: a,a,a-Trifluorotoluene	*10.3*		"	*10.0*		*103*	*70-130*			
LCS (2G23002-BS1)				Prepared & Analyzed: 07/23/02						
Benzene	9.79	0.50	ug/l	10.0		97.9	70-130			
Toluene	9.97	0.50	"	10.0		99.7	70-130			
Ethylbenzene	9.61	0.50	"	10.0		96.1	70-130			
Xylenes (total)	29.8	0.50	"	30.0		99.3	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.6*		"	*10.0*		*106*	*70-130*			
LCS (2G23002-BS2)				Prepared & Analyzed: 07/23/02						
Gasoline Range Organics (C6-C10)	261	50	ug/l	250		104	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.57*		"	*10.0*		*95.7*	*70-130*			
LCS Dup (2G23002-BSD1)				Prepared & Analyzed: 07/23/02						
Benzene	9.65	0.50	ug/l	10.0		96.5	70-130	1.44	25	
Toluene	9.79	0.50	"	10.0		97.9	70-130	1.82	25	
Ethylbenzene	9.46	0.50	"	10.0		94.6	70-130	1.57	25	
Xylenes (total)	29.4	0.50	"	30.0		98.0	70-130	1.35	25	
Surrogate: a,a,a-Trifluorotoluene	*10.3*		"	*10.0*		*103*	*70-130*			
LCS Dup (2G23002-BSD2)				Prepared & Analyzed: 07/23/02						
Gasoline Range Organics (C6-C10)	260	50	ug/l	250		104	70-130	0.384	25	
Surrogate: a,a,a-Trifluorotoluene	*9.38*		"	*10.0*		*93.8*	*70-130*			

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500 12th Street, Suite 100	Project Number: Arco #2111, San Leandro, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	08/01/02 08:08

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

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2G23003 - EPA 5030B [P/T]										
Blank (2G23003-BLK1)				Prepared & Analyzed: 07/23/02						
Gasoline Range Organics (C6-C10)	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
Surrogate: a,a,a-Trifluorotoluene	*9.85*		"	*10.0*		*98.5*	*70-130*			
LCS (2G23003-BS1)				Prepared & Analyzed: 07/23/02						
Benzene	8.96	0.50	ug/l	10.0		89.6	70-130			
Toluene	9.13	0.50	"	10.0		91.3	70-130			
Ethylbenzene	9.62	0.50	"	10.0		96.2	70-130			
Xylenes (total)	29.1	0.50	"	30.0		97.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.72*		"	*10.0*		*97.2*	*70-130*			
LCS (2G23003-BS2)				Prepared & Analyzed: 07/23/02						
Gasoline Range Organics (C6-C10)	297	50	ug/l	250		119	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.2*		"	*10.0*		*102*	*70-130*			
LCS Dup (2G23003-BSD1)				Prepared & Analyzed: 07/23/02						
Benzene	9.51	0.50	ug/l	10.0		95.1	70-130	5.96	25	
Toluene	9.53	0.50	"	10.0		95.3	70-130	4.29	25	
Ethylbenzene	9.76	0.50	"	10.0		97.6	70-130	1.44	25	
Xylenes (total)	30.0	0.50	"	30.0		100	70-130	3.05	25	
Surrogate: a,a,a-Trifluorotoluene	*8.67*		"	*10.0*		*86.7*	*70-130*			
LCS Dup (2G23003-BSD2)				Prepared & Analyzed: 07/23/02						
Gasoline Range Organics (C6-C10)	307	50	ug/l	250		123	70-130	3.31	25	
Surrogate: a,a,a-Trifluorotoluene	*9.64*		"	*10.0*		*96.4*	*70-130*			

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500 12th Street, Suite 100	Project Number: Arco #2111, San Leandro, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	08/01/02 08:08

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

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2G24004 - EPA 5030B [P/T]										
Blank (2G24004-BLK1)				Prepared & Analyzed: 07/24/02						
Gasoline Range Organics (C6-C10)	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.5	"							
Surrogate: a,a,a-Trifluorotoluene	*10.0*		"	*10.0*		*100*	*70-130*			
LCS (2G24004-BS1)				Prepared & Analyzed: 07/24/02						
Benzene	11.9	0.50	ug/l	10.0		119	70-130			
Toluene	11.1	0.50	"	10.0		111	70-130			
Ethylbenzene	10.6	0.50	"	10.0		106	70-130			
Xylenes (total)	32.1	0.50	"	30.0		107	70-130			
Surrogate: a,a,a-Trifluorotoluene	*11.3*		"	*10.0*		*113*	*70-130*			
LCS (2G24004-BS2)				Prepared & Analyzed: 07/24/02						
Gasoline Range Organics (C6-C10)	292	50	ug/l	250		117	70-130			
Surrogate: a,a,a-Trifluorotoluene	*17.9*		"	*10.0*		*179*	*70-130*			*S-02*
Matrix Spike (2G24004-MS1)		**Source: MLG0437-03**		Prepared & Analyzed: 07/24/02						
Gasoline Range Organics (C6-C10)	530	50	ug/l	550	ND	96.4	60-140			
Benzene	8.50	0.50	"	6.60	ND	129	60-140			
Toluene	45.0	0.50	"	39.7	ND	113	60-140			
Ethylbenzene	10.3	0.50	"	9.20	ND	112	60-140			
Xylenes (total)	49.5	0.50	"	46.1	ND	107	60-140			
Surrogate: a,a,a-Trifluorotoluene	*18.7*		"	*10.0*		*187*	*70-130*			*QM-07*
Matrix Spike Dup (2G24004-MSD1)		**Source: MLG0437-03**		Prepared & Analyzed: 07/24/02						
Gasoline Range Organics (C6-C10)	552	50	ug/l	550	ND	100	60-140	4.07	25	
Benzene	8.21	0.50	"	6.60	ND	124	60-140	3.47	25	
Toluene	42.4	0.50	"	39.7	ND	107	60-140	5.95	25	
Ethylbenzene	10.1	0.50	"	9.20	ND	110	60-140	1.96	25	
Xylenes (total)	48.9	0.50	"	46.1	ND	106	60-140	1.22	25	
Surrogate: a,a,a-Trifluorotoluene	*18.0*		"	*10.0*		*180*	*70-130*			*QM-07*

Sequoia Analytical

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

URS Corporation	Project: ARCO #2111, San Leandro, Ca	
500 12th Street, Suite 100	Project Number: Arco #2111, San Leandro, CA	**Reported:**
Oakland CA, 94607	Project Manager: Scott Robinson	08/01/02 08:08

Notes and Definitions

HC-12	Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
HC-21	Chromatogram Pattern: Gasoline C6-C10
QM-07	The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample.
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

STANDARD TURNAROUND TIME

bp

Chain of Custody Record

MLG 0379

Project Name

BP BU/GEM CO Portfolio:

BP Laboratory Contract Number:

Date: 7/17/02 Requested Due Date (mm/dd/yy)

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

Send To:	BP/GEM Facility No.:	Consultant/Contractor: URS
Lab Name: SEQUOIA	BP/GEM Facility Address: 1156 DAVIS ST, San Leandro, CA	Address: 529 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: syed_rehan@urscorp.com
	California Global ID #: T0600101784	Consultant/Contractor Project No.: JS-00002111.01 00427
Lab PM: Latonya Pelt	BP/GEM PM Contact: PAUL SUPPLE	Consultant Tele/Fax: 510-874-3280/510-874-3268
Tele/Fax: 408-776-9600 / 408-782-6308	Address:	Consultant/Contractor PM: Scott Robinson
Report Type & QC Level: Send EDF Reports		Invoice to: Consultant/Contractor or BP/GEM (Circle one)
BP/GEM Account No.:	Tele/Fax:	BP/GEM Work Release No:

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 (8015 / 8021)	Requested Analysis: TPH – D (8015)	Requested Analysis: MTBE (8021)	Requested Analysis: MTBE, TAME, ETBE DIPE, TBA (8260)	Requested Analysis: 1,2-DCA & EDB (8260)	Sample Point Lat/Long and Comments
1	MW-1	1425		X			01	3				X	X		X			
2	MW-2	1435		X			02	3				X	X		X			
3	MW-3	1355		X			03	3				X	X		X			
4	MW-4	1315		X			04	3				X	X		X			
5	MW-6	1245		X			05	3				X	X		X			
6	MW-7	1405		X			06	3				X	X		X			
7																		
8																		
9																		
10																		

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Brian Record						
Sampler's Company: BLAINE TECH		7/18/02	1015		7/18/02	1015
Shipment Date:		7/18/02	1403	Caroline Gatti	7-18-02	11:15
Shipment Method:						
Shipment Tracking No:						

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

Custody Seals In Place Yes ___ No X Temperature Blank Yes ___ No X Cooler Temperature on Receipt 4.0 °F/C Trip Blank Yes ___ No X

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

BP COC Rev. 1 2/5/02

STANDARD TURNAROUND TIME

020717-BAS

Page 1 of 1

Chain of Custody Record

Project Name

BP BU/GEM CO Portfolio:

BP Laboratory Contract Number:

Date: 7/17/02

Requested Due Date (mm/dd/yy)

M160379

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

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

BP/GEM Facility No.:	
BP/GEM Facility Address:	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:	
Tele/Fax:	

Consultant/Contractor:	URS
Address:	529 12th St., Ste. 200 Oakland, CA 94609-4014
e-mail EDD:	syed_rehan@urscorp.com
Consultant/Contractor Project No.:	25-00002111.01 00427
Consultant Tele/Fax:	510-874-3280/510-874-3268
Consultant/Contractor PM:	Scott Robinson
Invoice to:	Consultant/Contractor or BP/GEM (circle one)
BP/GEM Work Release No:	

Lab Bottle Order No:

Item No.	Sample Description	Time	Matrix: Soil/Solid	Matrix: Water/Liquid	Matrix: Sediments	Matrix: Air	Laboratory No.	No. of containers	Preservatives: Unpreserved	Preservatives: H_2SO_4	Preservatives: HNO_3	Preservatives: HCl	Requested Analysis: TPH-G/BTEX (8015/8021)	Requested Analysis: TPH-D (8015)	Requested Analysis: MTBE (8021)	Requested Analysis: MTBE, TAME, ETBE, DIPE, TBA (8260)	Requested Analysis: 1,2-DCA & EDB (8260)	Sample Point Lat/Long and Comments
1	MW-5	1415		X				3				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: Brian Allen						
Sampler's Company: Blaine Tech		7/18/02	1015		7/18/02	1015
Shipment Date:		7/18/02	1103	Cecilia Ortiz	7-18-02	11:15
Shipment Method:						
Shipment Tracking No:						

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

Custody Seals In Place Yes ___ No X Temperature Blank Yes ___ No X Cooler Temperature on Receipt 4.0 °F/C Trip Blank Yes ___ No X

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

BP COC Rev.: 2/5/02

ATTACHMENT C

HISTORIC GROUNDWATER DATA

Table 2
Historical Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents

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

Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Free Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8260 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-1	08-01-95	39.60	17.45	ND	22.15	08-01-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-1	12-14-95	39.60	17.09	ND	22.51	12-14-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-1	03-21-96	39.60	14.72	ND	24.88	03-21-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-1	05-24-96	39.60	15.94	ND	23.66	05-24-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-1	08-09-96	39.60	17.89	ND	21.71	08-09-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-1	11-06-96	39.60	18.66	ND	20.94	11-06-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-1	03-24-97	39.60	16.13	ND	23.47	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-1	05-27-97	39.60	17.23	ND	22.37	05-28-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-1	08-07-97	39.60	18.68	ND	20.92	08-07-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-1	11-10-97	39.60	19.19	ND	20.41	11-10-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-1	02-16-98	39.60	12.61	ND	26.99	02-16-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-1	04-15-98	39.60	14.30	ND	25.30	04-15-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-1	07-24-98	39.60	16.40	ND	23.20	07-24-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-1	10-19-98	39.60	17.90	ND	21.70	10-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-1	01-28-99	39.60	16.85	ND	22.75	01-28-99	<20,000	580	<200	<200	320	14,000	--	--	--		
MW-1	06-25-99	39.60	17.35	ND	22.25	06-25-99	730	140	5	3	2	7,700	--	--	--	0.79	NP
MW-1	08-25-99	39.60	18.20	ND	21.40	08-25-99	390	66	8.5	<2.5	8.6	3,700	--	--	--	1.56	NP
MW-1	11-10-99	39.60	17.77	ND	21.83	11-10-99	360	70	13	2.2	13	980	--	--	--	0.30	NP
MW-1	02-09-00	39.60	16.25	ND	23.35	02-09-00	190	4.5	0.9	<0.5	12	3,500	--	--	--	0.53	NP
MW-2	08-01-95	37.99	15.67	ND	22.32	08-01-95	23,000	1,300	310	500	3,500	--	--	--	--		
MW-2	12-14-95	37.99	15.36	ND	22.63	12-14-95	7,300	900	25	180	1,000	<200	--	--	--		
MW-2	03-21-96	37.99	12.84	ND	25.15	03-21-96	9,600	850	30	280	1,400	250	--	--	--		
MW-2	05-24-96	37.99	14.03	ND	23.96	05-24-96	2,300	300	<5	73	310	<25	--	--	--		
MW-2	08-09-96	37.99	16.10	ND	21.89	08-09-96	2,800	290	6	75	320	50	--	--	--		

Table 2
Historical Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents

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

Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Free Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8260 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-2	11-06-96	37.99	16.98	ND	21.01	11-06-96	750	76	<1	15	51	110	--	--	--		
MW-2	03-24-97	37.99	14.22	ND	23.77	03-24-97	790	18	<1	2	6	280	--	--	--		
MW-2	05-27-97	37.99	15.42	ND	22.57	05-28-97	750	14	<1	<1	10	150	--	--	--		
MW-2	08-07-97	37.99	16.92	ND	21.07	08-07-97	360	31	<2.5	<2.5	15	260	--	--	--		
MW-2	11-10-97	37.99	17.52	ND	20.47	11-10-97	1,300	82	<5	14	49	550	--	--	--		
MW-2	02-16-98	37.99	12.04	ND	25.95	02-16-98	<2,500	<25	<25	<25	<25	4,200	--	--	--		
MW-2	04-15-98	37.99	12.34	ND	25.65	04-15-98	<10,000	<100	<100	<100	<100	7,300	--	--	--		
MW-2	07-24-98	37.99	14.45	ND	23.54	07-24-98	<2,500	<25	<25	<25	<25	1,500	--	--	--		
MW-2	10-19-98	37.99	16.08	ND	21.91	10-19-98	<1,000	18	<10	<10	<10	1,100	--	--	--		
MW-2	01-28-99	37.99	15.59	0.02	22.41 [1]	01-28-99	160,000	3,000	24,000	4,400	31,000	23,000	--	--	--		
MW-2	06-25-99	37.99	19.20	3.73[4]	21.51 [1]	06-25-99	120,000	6,900	21,000	2,600	19,000	18,000	17,000[3]	--	--	0.49	NP
MW-2	08-25-99	37.99	16.49	0.02	21.51 [1]	08-25-99	92,000	2,200	16,000	3,200	19,000	11,000	9,400[3]	--	--	0.84	NP
MW-2	11-10-99	37.99	16.08	ND	21.91	11-10-99	56,000	2,400	5,900	1,500	10,000	17,000	21,000[3]	--	--	0.41	NP
MW-2	02-09-00	37.99	14.85	ND	23.14	02-09-00	1,700	270	14	17	21	70,000	55,000[3]	--	--	0.97	NP
MW-3	08-01-95	39.32	17.00	ND	22.32	08-01-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	600	76[2]		
MW-3	12-14-95	39.32	16.70	ND	22.62	12-14-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--	<500	<50		
MW-3	03-21-96	39.32	14.17	ND	25.15	03-21-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	<500	<50		
MW-3	05-24-96	39.32	15.30	ND	24.02	05-24-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	<500	<50		
MW-3	08-09-96	39.32	17.58	ND	21.74	08-09-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	<500	--		
MW-3	11-06-96	39.32	18.33	ND	20.99	11-06-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-3	03-24-97	39.32	15.44	ND	23.88	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-3	05-27-97	39.32	16.75	ND	22.57	05-28-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-3	08-07-97	39.32	18.35	ND	20.97	08-07-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-3	11-10-97	39.32	18.83	ND	20.49	11-10-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		

Table 2
Historical Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents

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

Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Free Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8260 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-3	02-16-98	39.32	11.99	ND	27.33	02-16-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-3	04-15-98	39.32	13.75	ND	25.57	04-15-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-3	07-24-98	39.32	15.90	ND	23.42	07-24-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-3	10-19-98	39.32	17.45	ND	21.87	10-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-3	01-28-99	39.32	16.40	ND	22.92	01-28-99	<100	14	4	<1	6	100	--	--	--		
MW-3	06-25-99	39.32	17.92	ND	21.40	06-25-99	83	9.0	1.4	<0.5	2.5	220	--	--	--	1.11	NP
MW-3	08-25-99	39.32	17.79	ND	21.53	08-25-99	240	41	12	3.7	9.9	160	--	--	--	1.13	NP
MW-3	11-10-99	39.32	17.37	ND	21.95	11-10-99	620	100	9.7	4.1	21	150	--	--	--	0.24	NP
MW-3	02-09-00	39.32	15.77	ND	23.55	02-09-00	<50	<0.5	0.7	<0.5	<1	180	--	--	--	0.62	NP
MW-4	08-01-95	38.10	15.65	ND	22.45	08-01-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-4	12-14-95	38.10	15.35	ND	22.75	12-14-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-4	03-21-96	38.10	12.74	ND	25.36	03-21-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-4	05-24-96	38.10	14.03	ND	24.07	05-24-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-4	08-09-96	38.10	16.10	ND	22.00	08-09-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-4	11-06-96	38.10	17.00	ND	21.10	11-06-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-4	03-24-97	38.10	14.21	ND	23.89	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-4	05-27-97	38.10	15.38	ND	22.72	05-28-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-4	08-07-97	38.10	16.95	ND	21.15	08-07-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-4	11-10-97	38.10	17.53	ND	20.57	11-10-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-4	02-16-98	38.10	10.65	ND	27.45	02-16-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-4	04-15-98	38.10	12.20	ND	25.90	04-15-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-4	07-24-98	38.10	14.47	ND	23.63	07-24-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-4	10-19-98	38.10	16.20	ND	21.90	10-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-4	01-28-99	38.10	15.02	ND	23.08	01-28-99	340	52	5.5	<0.5	74	31	--	--	--		

Table 2
Historical Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents

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

Well Designation	Water Level Field Date	Top of Casing Elevation	Depth to Water	Free Product Thickness	Groundwater Elevation	Water Sample Field Date	TPHG LUFT Method	Benzene EPA 8021B*	Toluene EPA 8021B*	Ethylbenzene EPA 8021B*	Total Xylenes EPA 8021B*	MTBE EPA 8021B*	MTBE EPA 8260	TRPH EPA 418.1	TPHD LUFT Method	Dissolved Oxygen	Purged/ Not Purged
		ft-MSL	feet	feet	ft-MSL		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	P/NP
MW-4	06-25-99	38.10	15.57	ND	22.53	06-25-99	510	78	4.1	0.5	18	94	--	--	--	0.90	NP
MW-4	08-25-99	38.10	16.43	ND	21.67	08-25-99	660	130	21	6.4	39	110	--	--	--	1.01	NP
MW-4	11-10-99	38.10	16.02	ND	22.08	11-10-99	510	98	5.1	3.1	15	69	--	--	--	0.28	NP
MW-4	02-09-00	38.10	14.30	ND	23.80	02-09-00	<50	<0.5	0.9	<0.5	<1	55	--	--	--	0.67	NP
MW-5	03-21-96	37.21	12.60	ND	24.61	03-22-96	<50	<0.5	<0.5	<0.5	<0.5	82	--	--	--		
MW-5	05-24-96	37.21	13.71	ND	23.50	05-24-96	<50	<0.5	<0.5	<0.5	<0.5	7	--	--	--		
MW-5	08-09-96	37.21	15.60	ND	21.61	08-09-96	<50	<0.5	<0.5	<0.5	<0.5	8	--	--	--		
MW-5	11-06-96	37.21	16.36	ND	20.85	11-06-96	<50	<0.5	<0.5	<0.5	<0.5	100	--	--	--		
MW-5	03-24-97	37.21	13.87	ND	23.34	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	460	--	--	--		
MW-5	05-27-97	37.21	14.71	ND	22.50	05-28-97	<100	<1	<1	<1	<1	120	--	--	--		
MW-5	08-07-97	37.21	16.90	ND	20.31	08-07-97	<250	<2.5	<2.5	<2.5	<2.5	250	--	--	--		
MW-5	11-10-97	37.21	16.88	ND	20.33	11-10-97	<1,000	<10	<10	<10	<10	770	--	--	--		
MW-5	02-16-98	37.21	10.56	ND	26.65	02-16-98	<200	<2	<2	<2	<2	230	--	--	--		
MW-5	04-15-98	37.21	12.20	ND	25.01	04-15-98	<500	<5	<5	<5	<5	900	--	--	--		
MW-5	07-24-98	37.21	14.20	ND	23.01	07-24-98	<500	<5	<5	<5	<5	570	--	--	--		
MW-5	10-19-98	37.21	15.74	ND	21.47	10-19-98	<250	<2.5	<2.5	<2.5	<2.5	300	--	--	--		
MW-5	01-28-99	37.21	14.60	ND	22.61	01-28-99	<500	8	<5	<5	<5	290	--	--	--		
MW-5	06-25-99	37.21	15.10	ND	22.11	06-25-99	<50	<0.5	<0.5	<0.5	<0.5	1,300	--	--	--	0.76	NP
MW-5	08-25-99	37.21	15.91	ND	21.30	08-25-99	<50	<0.5	<0.5	<0.5	<0.5	6,700	--	--	--	0.98	NP
MW-5	11-10-99	37.21	15.52	ND	21.69	11-10-99	130	2.0	7.0	1.3	21	5,000	--	--	--	0.21	NP
MW-5	02-09-00	37.21	14.03	ND	23.18	02-09-00	92	<0.5	0.8	<0.5	1.0	7,900	--	--	--	0.51	NP
MW-6	03-21-96	37.11	11.55	ND	25.56	03-22-96	<50	<0.5	1.9	<0.5	<0.5	<3	--	--	--		
MW-6	05-24-96	37.11	12.80	ND	24.31	05-24-96	<50	<0.5	<0.5	<0.5	<0.5	6	--	--	--		

Table 2
Historical Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents

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

Well Designation	Water Level Field Date	Top of Casing Elevation	Depth to Water	Free Product Thickness	Groundwater Elevation	Water Sample Field Date	TPHG LUFT Method	Benzene EPA 8021B*	Toluene EPA 8021B*	Ethylbenzene EPA 8021B*	Total Xylenes EPA 8021B*	MTBE EPA 8021B*	MTBE EPA 8260	TRPH EPA 418.1	TPHD LUFT Method	Dissolved Oxygen	Purged/ Not Purged
		ft-MSL	feet	feet	ft-MSL		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	P/NP
MW-6	08-09-96	37.11	Not surveyed			08-09-96	Not sampled: Car parked on well										
MW-6	11-06-96	37.11	Not surveyed			11-06-96	Not sampled: Car parked on well										
MW-6	03-24-97	37.11	13.06	ND	24.05	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-6	05-27-97	37.11	14.30	ND	22.81	05-28-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-6	08-07-97	37.11	16.40	ND	20.71	08-07-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-6	11-10-97	37.11	16.53	ND	20.58	11-10-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-6	02-16-98	37.11	Not surveyed			02-16-98	Not sampled: Car parked on well										
MW-6	04-15-98	37.11	10.95	ND	26.16	04-15-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-6	07-24-98	37.11	13.30	ND	23.81	07-24-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-6	10-19-98	37.11	Not surveyed			10-19-98	Not sampled: Car parked on well										
MW-6	01-28-99	37.11	13.92	ND	23.19	01-28-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-6	06-25-99	37.11	15.47	ND	21.64	06-25-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.74	NP
MW-6	08-25-99	37.11	15.39	ND	21.72	08-25-99	<50	<0.5	3.4	0.6	3.7	<3	--	--	--	0.92	NP
MW-6	11-10-99	37.11	14.92	ND	22.19	11-10-99	<50	<0.5	<0.5	<0.5	<1	<3	--	--	--	0.31	NP
MW-6	02-09-00	37.11	13.30	ND	23.81	02-09-00	<50	<0.5	0.9	<0.5	1.3	<3	--	--	--	0.79	NP
MW-7	03-21-96	38.68	13.32	ND	25.36	03-22-96	32,000	870	450	970	4,900	280	--	--	--		
MW-7	05-24-96	38.68	14.58	ND	24.10	05-24-96	22,000	570	40	42	1,900	<200[2]	--	--	--		
MW-7	08-09-96	38.68	15.33	ND	23.35	08-09-96	14,000	390	<10	180	470	<200[2]	--	--	--		
MW-7	11-06-96	38.68	16.95	ND	21.73	11-06-96	9,500	440	<10	210	150	<100[2]	--	--	--		
MW-7	03-24-97	38.68	14.65	ND	24.03	03-24-97	6,400	420	<10	260	13	480	--	--	--		
MW-7	05-27-97	38.68	15.58	ND	23.10	05-28-97	5,000	420	<5	230	10	460	--	--	--		
MW-7	08-07-97	38.68	17.10	ND	21.58	08-07-97	3,900	350	<5	200	10	330	--	--	--		
MW-7	11-10-97	38.68	18.05	ND	20.63	11-10-97	5,600	590	10	370	43	540	--	--	--		
MW-7	02-16-98	38.68	12.03	ND	26.65	02-16-98	<5,000	390	<50	<50	61	4,300	--	--	--		

Table 2
Historical Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents

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

Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Free Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8260 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-7	04-15-98	38.68	13.02	ND	25.66	04-15-98	<10,000	<100	<100	<100	<100	8,900	--	--	--		
MW-7	07-24-98	38.68	14.18	ND	24.50	07-24-98	5,800	180	<50	74	<50	4,200	--	--	--		
MW-7	10-19-98	38.68	15.99	ND	22.69	10-19-98	<2,500	54	<25	72	<25	3,000	--	--	--		
MW-7	01-28-99	38.68	15.69	ND	22.99	01-28-99	4,500	560	250	<50	94	6,200	--	--	--		
MW-7	06-25-99	38.68	15.36	ND	23.32	06-25-99	3,900	520	160	46	100	45,000	63,000[3]	--	--	0.56	NP
MW-7	08-25-99	38.68	16.71	ND	21.97	08-25-99	3,400	730	77	51	110	62,000	76,000[3]	--	--	0.90	NP
MW-7	11-10-99	38.68	16.76	ND	21.92	11-10-99	15,000	340	19	13	20	55,000	91,000[3]	--	--	0.37	NP
MW-7	02-09-00	38.68	14.45	0.03	24.25 [1]	02-09-00	Not sampled: free product present										

ft-MSL: elevation in feet, relative to mean sea level
TPHG: total petroleum hydrocarbons as gasoline, California DHS LUFT Method
MTBE: Methyl tert-butyl ether
TRPH: total recoverable petroleum hydrocarbons
TPHD: total petroleum hydrocarbons as diesel, California DHS LUFT Method
*: EPA method 8020 prior to 11/10/99
EPA: United States Environmental Protection Agency
µg/L: micrograms per liter
mg/L: milligrams per liter
ND: none detected
-- : not available or not analyzed
<: less than laboratory detection limit stated to the right
[1]: (corrected elevation (Z')) = Z + (h * 0.73) where: Z = measured elevation, h = floating product thickness, 0.73 = density ratio of oil to water
[2]: chromatogram fingerprint is not characteristic of diesel
[3]: also analyzed for fuel oxygenates
[4]: this value is suspected to be erroneous based on subsequent check by bailer (following day). See discussion

ATTACHMENT D

EDCC REPORT AND EDF/GEOWELL SUBMITTAL CONFIRMATION

Error Summary Log

01/23/03

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:	MLG0379
Global ID:	T0600101764
Lab Report Number:	MLG0379080120020847

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run	Sub
MLG037908012002084	MW-1	MLG037901	W	CS	SW8020F	SW5030B	07/17/02	07/23/02	07/23/02	2G23002	1	
MLG037908012002084	MW-2	MLG037902	W	CS	SW8020F	SW5030B	07/17/02	07/23/02	07/23/02	2G23003	1	
MLG037908012002084	MW-3	MLG037903	W	CS	SW8020F	SW5030B	07/17/02	07/23/02	07/23/02	2G23002	1	
MLG037908012002084	MW-4	MLG037904	W	CS	SW8020F	SW5030B	07/17/02	07/23/02	07/23/02	2G23002	1	
MLG037908012002084	MW-5	MLG037907	W	CS	SW8020F	SW5030B	07/17/02	07/23/02	07/23/02	2G23003	1	
MLG037908012002084	MW-6	MLG037905	W	CS	SW8020F	SW5030B	07/17/02	07/23/02	07/23/02	2G23003	1	
MLG037908012002084	MW-7	MLG037906	W	CS	SW8020F	SW5030B	07/17/02	07/24/02	07/25/02	2G24004	1	
		MLG043703	W	NC	SW8020F	SW5030B	/ /	07/24/02	07/24/02	2G24004	1	
		2G23002BSD1	WQ	BD1	SW8020F	SW5030B	/ /	07/23/02	07/23/02	2G23002	1	
		2G23002BSD2	WQ	BD2	SW8020F	SW5030B	/ /	07/23/02	07/23/02	2G23002	1	
		2G23002BS1	WQ	BS1	SW8020F	SW5030B	/ /	07/23/02	07/23/02	2G23002	1	
		2G23002BS2	WQ	BS2	SW8020F	SW5030B	/ /	07/23/02	07/23/02	2G23002	1	
		2G23002BLK1	WQ	LB1	SW8020F	SW5030B	/ /	07/23/02	07/23/02	2G23002	1	
		2G23003BSD1	WQ	BD1	SW8020F	SW5030B	/ /	07/23/02	07/23/02	2G23003	1	
		2G23003BSD2	WQ	BD2	SW8020F	SW5030B	/ /	07/23/02	07/23/02	2G23003	1	
		2G23003BS1	WQ	BS1	SW8020F	SW5030B	/ /	07/23/02	07/23/02	2G23003	1	
		2G23003BS2	WQ	BS2	SW8020F	SW5030B	/ /	07/23/02	07/23/02	2G23003	1	
		2G23003BLK1	WQ	LB1	SW8020F	SW5030B	/ /	07/23/02	07/23/02	2G23003	1	
		2G24004BS1	WQ	BS1	SW8020F	SW5030B	/ /	07/24/02	07/24/02	2G24004	1	
		2G24004BS2	WQ	BS2	SW8020F	SW5030B	/ /	07/24/02	07/24/02	2G24004	1	
		2G24004BLK1	WQ	LB1	SW8020F	SW5030B	/ /	07/24/02	07/24/02	2G24004	1	
		2G24004MS1	W	MS1	SW8020F	SW5030B	/ /	07/24/02	07/24/02	2G24004	1	
		2G24004MSD1	W	SD1	SW8020F	SW5030B	/ /	07/24/02	07/24/02	2G24004	1	

EDFSAMP: Error Summary Log

01/23/03

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

EDFTEST: Error Summary Log

01/23/03

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

EDFRES: Error Summary Log

01/23/03

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	2G24004MS1	MS1	W	SW8020F	PR	07/24/02	1	AAATFBZME
Warning: extra parameter	2G24004MS1	MS1	W	SW8020F	PR	07/24/02	1	GROC6C10
Warning: extra parameter	2G24004MSD1	SD1	W	SW8020F	PR	07/24/02	1	AAATFBZME
Warning: extra parameter	2G24004MSD1	SD1	W	SW8020F	PR	07/24/02	1	GROC6C10
Warning: extra parameter	MLG037901	CS	W	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	MLG037901	CS	W	SW8020F	PR	07/23/02	1	GROC6C10
Warning: extra parameter	MLG037901	CS	W	SW8020F	PR	07/23/02	1	MTBE
Warning: extra parameter	MLG037902	CS	W	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	MLG037902	CS	W	SW8020F	PR	07/23/02	1	GROC6C10
Warning: extra parameter	MLG037902	CS	W	SW8020F	PR	07/23/02	1	MTBE
Warning: extra parameter	MLG037903	CS	W	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	MLG037903	CS	W	SW8020F	PR	07/23/02	1	GROC6C10
Warning: extra parameter	MLG037903	CS	W	SW8020F	PR	07/23/02	1	MTBE
Warning: extra parameter	MLG037904	CS	W	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	MLG037904	CS	W	SW8020F	PR	07/23/02	1	GROC6C10
Warning: extra parameter	MLG037904	CS	W	SW8020F	PR	07/23/02	1	MTBE
Warning: extra parameter	MLG037905	CS	W	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	MLG037905	CS	W	SW8020F	PR	07/23/02	1	GROC6C10
Warning: extra parameter	MLG037905	CS	W	SW8020F	PR	07/23/02	1	MTBE
Warning: extra parameter	MLG037906	CS	W	SW8020F	PR	07/25/02	1	AAATFBZME
Warning: extra parameter	MLG037906	CS	W	SW8020F	PR	07/25/02	1	GROC6C10
Warning: extra parameter	MLG037906	CS	W	SW8020F	PR	07/25/02	1	MTBE
Warning: extra parameter	MLG037907	CS	W	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	MLG037907	CS	W	SW8020F	PR	07/23/02	1	GROC6C10
Warning: extra parameter	MLG037907	CS	W	SW8020F	PR	07/23/02	1	MTBE

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
Warning: extra parameter	MLG043703	NC	W	SW8020F	PR	07/24/02	1	AAATFBZME
Warning: extra parameter	MLG043703	NC	W	SW8020F	PR	07/24/02	1	GROC6C10
Warning: extra parameter	2G23002BLK1	LB1	WQ	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	2G23002BLK1	LB1	WQ	SW8020F	PR	07/23/02	1	GROC6C10
Warning: extra parameter	2G23002BLK1	LB1	WQ	SW8020F	PR	07/23/02	1	MTBE
Warning: extra parameter	2G23002BS1	BS1	WQ	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	2G23002BS2	BS2	WQ	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	2G23002BS2	BS2	WQ	SW8020F	PR	07/23/02	1	GROC6C10
Warning: extra parameter	2G23002BSD1	BD1	WQ	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	2G23002BSD2	BD2	WQ	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	2G23002BSD2	BD2	WQ	SW8020F	PR	07/23/02	1	GROC6C10
Warning: extra parameter	2G23003BLK1	LB1	WQ	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	2G23003BLK1	LB1	WQ	SW8020F	PR	07/23/02	1	GROC6C10
Warning: extra parameter	2G23003BLK1	LB1	WQ	SW8020F	PR	07/23/02	1	MTBE
Warning: extra parameter	2G23003BS1	BS1	WQ	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	2G23003BS2	BS2	WQ	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	2G23003BS2	BS2	WQ	SW8020F	PR	07/23/02	1	GROC6C10
Warning: extra parameter	2G23003BSD1	BD1	WQ	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	2G23003BSD2	BD2	WQ	SW8020F	PR	07/23/02	1	AAATFBZME
Warning: extra parameter	2G23003BSD2	BD2	WQ	SW8020F	PR	07/23/02	1	GROC6C10
Warning: extra parameter	2G24004BLK1	LB1	WQ	SW8020F	PR	07/24/02	1	AAATFBZME
Warning: extra parameter	2G24004BLK1	LB1	WQ	SW8020F	PR	07/24/02	1	GROC6C10
Warning: extra parameter	2G24004BLK1	LB1	WQ	SW8020F	PR	07/24/02	1	MTBE
Warning: extra parameter	2G24004BS1	BS1	WQ	SW8020F	PR	07/24/02	1	AAATFBZME
Warning: extra parameter	2G24004BS2	BS2	WQ	SW8020F	PR	07/24/02	1	AAATFBZME
Warning: extra parameter	2G24004BS2	BS2	WQ	SW8020F	PR	07/24/02	1	GROC6C10

EDFQC: Error Summary Log

01/23/03

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

EDFCL: Error Summary Log

01/23/03

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

AB2886 Electronic Delivery

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Confirmation Number: 3010618209
Date/Time of Submittal: 1/23/2003 10:28:10 AM
Facility Global ID: T0600101764
Facility Name: ARCO
Submittal Title: 3rd Qtr 2002 Monitoring Report for # 2111
Submittal Type: GW Monitoring Report

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

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