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June 28, 2001

✓ STID 744

Mr. Paul Supple
ARCO Products Company
P.O. Box 6549
Moraga, CA 94570

Subject: *Quarterly Groundwater Monitoring Report, First Quarter 2001*
ARCO Service Station No. 2111
1156 Davis Street
San Leandro, California
Delta Project No. D000-306

Dear Mr. Supple:

Delta Environmental Consultants, Inc. is submitting the attached report that presents the results of the first quarter 2001 groundwater monitoring at ARCO Products Company Service Station No. 2111 located at 1156 Davis Street, San Leandro, California. The monitoring program complies with the Alameda County Health Care Services Agency requirements regarding underground tank investigations.

The interpretations contained in this report represent our professional opinions and are based, in part, on information supplied by the client. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeological and engineering practices at this time and location. Other than this, no warranty is implied or intended.

If you have any questions concerning this project, please contact Steven W. Meeks at (916) 536-2613.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

for Trevor L. Atkinson
Project Engineer

Steven W. Meeks, P.E.
Project Manager
California Registered Civil Engineer No. C057461

REGISTERED PROFESSIONAL ENGINEER
STEVEN WHITTEN MEEKS
C 057461
Exp. 12/31/01
CIVIL
STATE OF CALIFORNIA
6/28/01

TLA (LRP006.306.doc)
Enclosures

cc: Mr. Amir Gholami – Alameda County Health Care Services Agency
Mr. Mike Bakaldin, San Leandro Fire Department, Hazardous Materials Program

Date: June 28, 2001

ARCO QUARTERLY GROUNDWATER MONITORING REPORT

Station No.: 2111 Address:	1156 Davis Street, San Leandro, CA
ARCO Environmental Engineer/Phone No.:	Paul Supple 925-299-8891
Consulting Co./Contact Person	Delta Environmental Consultants, Inc. Steven W. Meeks, P.E.
Consultant Project No.:	D000-306
Primary Agency/Regulatory ID No.	Alameda County Health Care Services Agency

WORK PERFORMED THIS QUARTER

1. Performed quarterly groundwater monitoring and sampling for first quarter 2001
2. Performed quarterly pumping activities from monitoring well MW-2 and MW-7 as approved per ACHCSA letter dated October 12, 2000.

WORK PROPOSED FOR NEXT QUARTER

1. Perform quarterly groundwater monitoring and sampling for second quarter 2001.
2 Perform quarterly pumping activities from monitoring well MW-2 and MW-7 as approved per ACHCSA letter dated October 12, 2000.

QUARTERLY MONITORING:

Current Phase of Project	Quarterly groundwater monitoring
Frequency of Groundwater Sampling:	Quarterly: MW-2 through MW-7
Frequency of Groundwater Monitoring:	Quarterly (groundwater)
Is Free Product (FP) Present On–Site:	No
FP Recovered this Quarter:	None
Cumulative FP Recovered to Date:	0.381 gallons
Bulk Soil Removed This Quarter:	None
Bulk Soil Removed to Date:	Unknown
Current Remediation Techniques:	Bailing free product as needed
Approximate Depth to Groundwater:	14.10
Groundwater Gradient:	0.005 ft/ft West-Northwest

DISCUSSION:

- Free product was not present in the monitoring wells during the March 13, 2001 monitoring.
- Approximately 5000 gallons of ground water were pumped from MW-2 on March 13, 2001 (see Table 3). MW-7 was not pumped due to low recovery.

ATTACHMENTS:

- Table 1 Groundwater Elevation and Analytical Data
- Table 2 Groundwater Flow Direction and Gradient
- Table 3 LPH Remediation Ground Water Pumpout Recovery Analytical Data
- Figure 1 Groundwater Analytical Summary Map
- Figure 2 Groundwater Elevation Contour Map
- Appendix A Sampling and Analysis Procedures
- Appendix B Historical Groundwater Elevation Analytical Data Table
  Groundwater Flow Direction and Gradient Table
- Appendix C Certified Analytical Reports with Chain–of–Custody Documentation

TABLE 1

GROUNDWATER ANALYTICAL DATA

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

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	Benzene (µg/L)	Toluene (µg/L	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as Gasoline (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	110	<0.5	<0.5	2.7	360	2,100	NA
	09/19/00		17.62	21.98	76	<0.5	<0.5	2.3	290	1,500	NA
	12/21/00		17.39	22.21	64	2.89	1.31	4.57	257	1,080	1,060
	03/13/01		15.7	23.9	52.5	<5.0	<5.0	<5.0	<500	1,430	1,370
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	2,300	18,000	2,500	19,000	95,000	13,000	NA
	09/19/00		15.95	22.04	1,200	6,300	2,000	14,000	63,000	19,000	NA
	12/21/00		15.60	22.39	1,090	2,130	1,160	9,460	45,900	22,400	24,700
	12/21/00[b]		NM	NC	360	189	213	626	5,010	54,300	89,200
	03/13/01		13.77	23.9	98.1	<5.0	<5.0	6.42	3,650	3,590	3,260
	03/13/01		NM	NC	525	466	408	1,460	<20,000	91,700	76,000
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	<0.5	<0.5	<0.5	<1.0	<50	130	NA
	09/19/00		17.18	22.14	17	<0.5	1.4	2.4	190	160	NA
	12/21/00		16.97	22.35	17.8	<0.5	2.47	2.5	187	143	125
	03/13/01		15.17	24.15	2.83	<0.5	<0.5	<0.5	72.4	126	122
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	7.9	<0.5	<0.5	1.1	97	51	NA
	09/19/00		15.83	22.27	7.0	<0.5	<0.5	<1.0	110	60	NA
	12/21/00		15.59	22.51	5.6	<0.5	1.72	<0.5	120	46.3	48.6
	03/13/01		13.73	24.37	0.796	<0.5	<0.5	<0.5	76	53.7	50.0

TABLE 1

GROUNDWATER ANALYTICAL DATA

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

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	Benzene (µg/L)	Toluene (µg/L	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as Gasoline (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	<0.5	<0.5	<0.5	<1.0	55	14,000	NA
	09/19/00		15.36	21.85	<0.5	<0.5	<0.5	<1.0	54	13,000	NA
	12/21/00		15.15	22.06	2.51	<0.5	<0.5	0.961	72.9	19,200	21,200
	03/13/01		13.5	23.71	<5	<5	<5	<5	<500	15,900	20,000
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	<0.5	<0.5	<0.5	<1.0	<50	<3.0	NA
	09/19/00		14.41	22.70	<0.5	<0.5	<0.5	<1.0	<50	<3.0	NA
	12/21/00		14.53	22.58	<0.5	<0.5	<0.5	<0.5	<50	<2.5	NA
	03/13/01		12.67	24.44	<0.5	<0.5	<0.5	<0.5	<50	<2.5	NA
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	5.4	<0.5	2.8	5.9	14,000	71,000	NA
	09/19/00		15.70	22.98	420	38	470	220	8,400	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	154	63	46.3	127	<2,000	175,000	160,000

[a] Product sheen noted

[b] Well was sampled after batch extraction event.

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

Note: Please refer to Appendix B for Historical Groundwater Elevation and Analytical Data Tables developed by IT Corporation

TABLE 2

GROUNDWATER FLOW DIRECTION AND GRADIENT

ARCO Service Station No. 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

Note: Please refer to Appendix B for Historical Groundwater Elevation and Analytical Data Tables developed by IT Corporation

TABLE 3

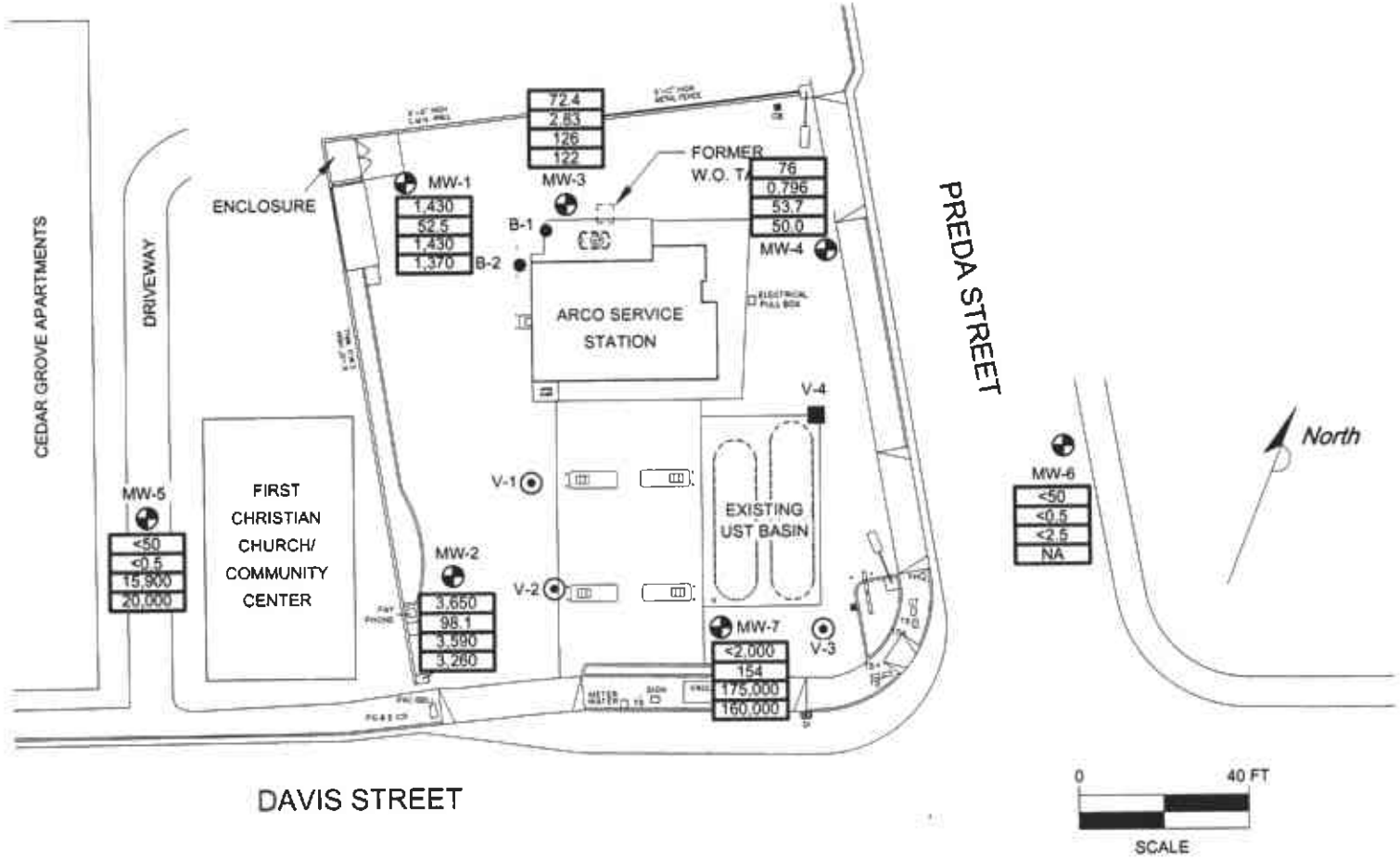
LPH REMEDIATION GROUNDWATER PUMPOUT RECOVERY ANALYTICAL DATA

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

Well Number	Date Sampled	Benzene (µg/L)	Toluene (µg/L	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as Gasoline (µg/L)	MTBE (8020) (µg/L)	MTBE (8260) (µg/L)	Gallons Pumped	Cummulative Gallons
MW-2	09/19/00	1,200	6,300	2,000	14,000	63,000	19,000	NA	2,500	2,500
	12/21/00	1,090	2,130	1,160	9,460	45,900	22,400	24,700	0	2,500
	12/21/00[a]	360	189	213	626	5,010	54,300	89,200	5,000	7,500
	03/13/01	98.1	<5.0	<5.0	6.42	3,650	3,590	3,260	0	7,500
	03/13/01	525	466	408	1,460	<20,000	91,700	76,00	5,000	12,500
MW-7	09/19/00	420	38	470	720	8,400	5,600	NA	100	100
	12/21/00	NS	NS	NS	NS	NS	NS	NS	0	100
	03/13/01	NS	NS	NS	NS	NS	NS	NS	0	100

[a] Sampled after purging

TPH = Total Petroleum Hydrocarbons
MTBE = Methyl tertiary butyl ether
µg/L = Micrograms per liter
NA = Not Analyzed



LEGEND:

MW-1	MONITORING WELL LOCATION
V-1	VAPOR EXTRACTION WELL LOCATION
B-1	SOIL BORING LOCATION
V-4	DESTROYED WELL LOCATION
<50 <0.5 <2.5 NA	TPH AS GASOLINE IN MICROGRAMS PER LITER BENZENE IN MICROGRAMS PER LITER MTBE IN MICROGRAMS PER LITER BY EPA METHOD 8020 MTBE IN MICROGRAMS PER LITER BY EPA METHOD 8260
NS	NOT SAMPLED
NA	NOT ANALYZED/ NOT APPLICABLE

FIGURE 1
GROUND WATER ANALYTICAL SUMMARY
FIRST QUARTER 2001 (3/13/01)
ARCO SERVICE STATION NO. 2111
1156 DAVIS STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO. D000-306	DRAWN BY TLA 5/22/01
FILE NO. 2111-1	PREPARED BY TLA
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.

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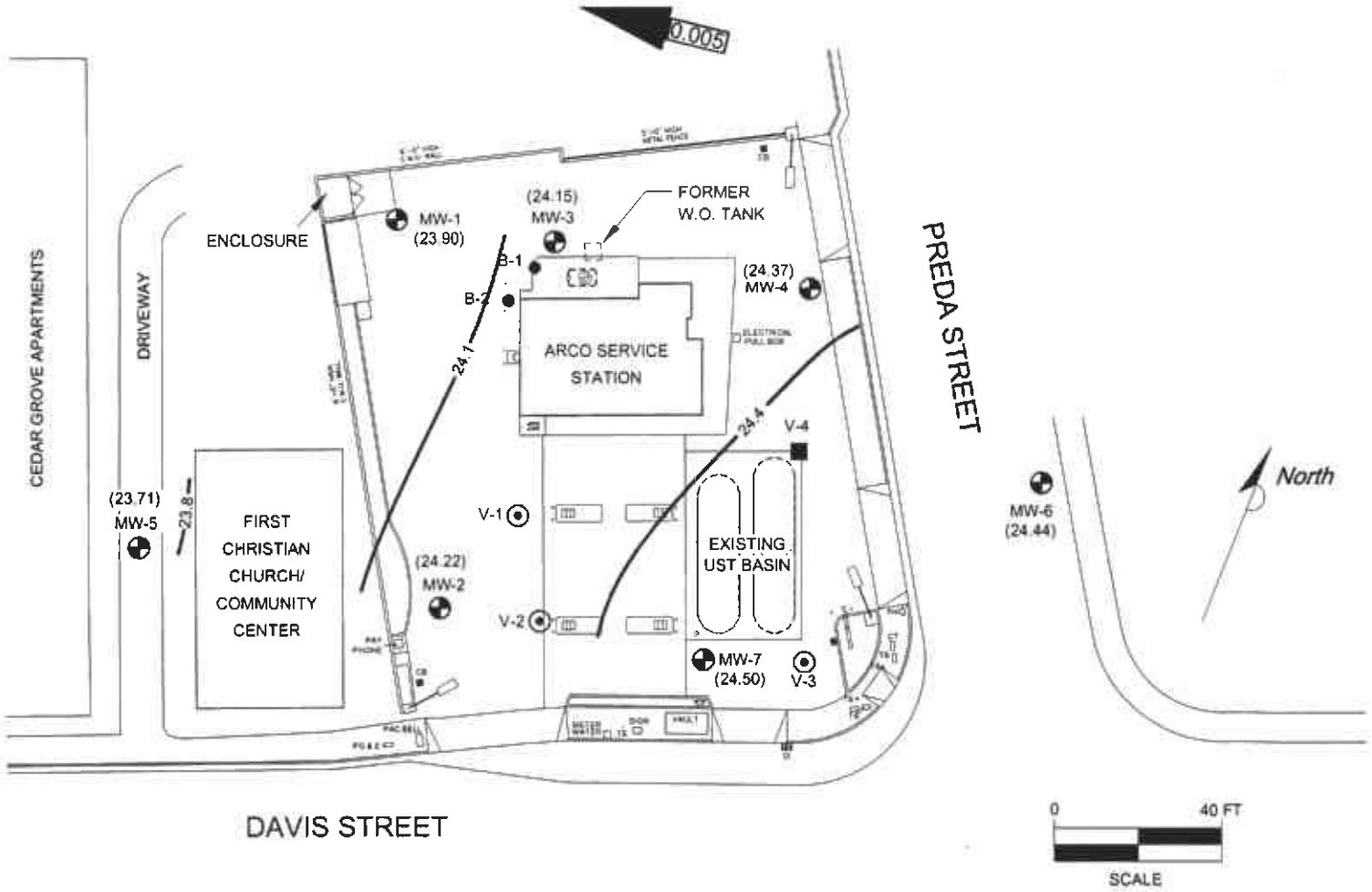

LEGEND:

MW-1	MONITORING WELL LOCATION
V-1	VAPOR EXTRACTION WELL LOCATION
B-1	SOIL BORING LOCATION
V-4	DESTROYED WELL LOCATION
(23.90)	GROUND WATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL)
24.1	WATER TABLE CONTOUR IN FEET ABOVE MSL
	GROUND WATER FLOW DIRECTION
0.005	APPROXIMATE GROUND WATER FLOW GRADIENT

FIGURE 2
GROUND WATER ELEVATION CONTOUR MAP
FIRST QUARTER 2001 (3/13/01)
ARCO SERVICE STATION NO. 2111
1156 DAVIS STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO. D000-306	DRAWN BY TLA 5/22/01
FILE NO. 2111-1	PREPARED BY TLA
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FIELD METHODS AND PROCEDURES

1.0 GROUND WATER AND LIQUID-PHASE HYDROCARBON DEPTH ASSESSMENT

A water/liquid-phase hydrocarbon (LPH) interface probe was used to assess the thickness of LPH, if present, and a water level indicator was used to measure ground water depth in monitoring wells that did not contain LPH. Depth to ground water was measured from the top of each monitoring well casing. The tip of the water level indicator was subjectively analyzed for LPH sheen. All measurements and physical observations were recorded in the field.

2.0 SUBJECTIVE ANALYSIS OF GROUND WATER

Prior to purging, a water sample was collected from the monitoring well for subjective analysis. The sample was retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer was then retrieved and the sample contained within the bailer was examined for LPH and the appearance of a LPH sheen.

3.0 MONITORING WELL PURGING AND SAMPLING

Monitoring wells were purged using a centrifugal pump or disposable bailers until pH, temperature, and conductivity of the purge water had stabilized and a minimum of three to four well volumes of water had been removed. Ground water removed from the wells was stored in 55-gallon barrels at the site. The barrels were labeled with corresponding monitoring well numbers and the date of purging. After purging, ground water levels were allowed to stabilize. A ground water sample was then removed from each of the wells using a dedicated disposable bailer. If the well was purged dry, it was allowed to sufficiently recharge and a sample was collected. Samples were collected in air-tight vials, appropriately labeled, and stored on ice from the time of collection through the time of delivery to the laboratory. A chain-of-custody form was completed to document possession of the samples. Ground water samples were transported to the laboratory and analyzed within the EPA-specified holding times for the requested analyses. Purge water will be collected from the storage barrels in a vacuum truck and transported to an appropriate facility for treatment and/or disposal.

If the depth to groundwater was above the top of screens of the monitoring wells, then the wells were purged. Before sampling occurred, a polyvinyl chloride (PVC) bailer, centrifugal pump, low–flow submersible pump, or Teflon bailer was used to purge standing water in the casing and gravel pack from the monitoring well. Monitoring wells were purged according to the protocol previously stated in the first paragraph of this sub-section. In most monitoring wells, the amount of water purged before sampling was greater than or equal to three casing volumes. Some monitoring wells were expected to be evacuated to dryness after removing fewer than three casing volumes. These low–yield monitoring wells were allowed to recharge for up to 24 hours. Samples were obtained as soon as the monitoring wells recharged to a level sufficient for sample collection. If insufficient water recharged after 24 hours, the monitoring well was recorded as dry for the sampling event.

APPENDIX B

Historical Data Tables
(IT Corporation)

Table 1
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 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	mg/L	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 1
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 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-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 1
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 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	mg/L	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 1
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 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	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 1
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	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 1
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		ft-MSL	feet	feet	ft-MSL		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	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

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
08-01-95	NR	NR
12-14-95	West	0.002
03-21-96	West-Southwest	0.005
05-24-96	West	0.003
08-09-96	West-Northwest	0.01
11-06-96	West-Northwest	0.007
03-24-97	West	0.005
05-27-97	North-Northwest	0.006
08-07-97	West	0.009
11-10-97	West	0.002
02-16-98	South-Southwest	0.013
04-15-98	West-Southwest	0.014
07-24-98	Northwest	0.01
10-19-98	West	0.008
01-28-99	Southwest	0.01
06-25-99	North-Northwest	0.017
08-25-99	West-Northwest	0.005
11-10-99	West-Southwest	0.002
02-09-00	**West-Northwest**	**0.015**

NR: not recorded

Delta Environmental Consultants, Inc.
3164 Gold Camp Drive, Suite 200
Rancho Cordova, California 95670
Direct: (916) 638-2085
Fax: (916) 638-8385

Arco Site Address: 1156 Davis Street
San Leandro, California

Arco Site Number: Arco 2111
Delta Project No.: D000-306
Arco Project Manager: Paul Supple
Delta Project PM: Steve Meeks
Site Contact & Phone Number:
Site Sampled By: Stratus (CH)
Date Sampled: 03/13/01

Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons	Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons	Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons
MW-1		15.8	6.30	673	NP												
MW-2		17.6	6.50	656													
MW-3		17.7	6.40	629	NP												
MW-4		17.8	6.20	727	NP												
MW-5		17.4	6.40	674	NP												
MW-6		16.7	6.40	773	NP												
MW-7		17.9	6.60	880	NP												

Notes: NP = NO PURGE

Original Copies of Field Sampling Sheets are Located in Project File

Delta Environmental Consultants, Inc.

3164 Gold Camp Drive, Suite 200
Rancho Cordova, California 95670
Direct: (916) 638-2085
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Arco Site Address: **1156 Davis Street**, **San Leandro, California**
Arco Site Number: **Arco 2111**
Delta Project No.: **D000-306**
Arco Project Manager: **Paul Supple**
Delta Project PM: **Steve Meeks**
Site Sampled By: **Stratus (CH)**
Date Sampled: **03/13/01**
Site Contact & Phone Number:

Water Level Data						Purge Volume Calculations					Sampling Analytes					Sample Record		
Well ID	Time	Depth to Water (feet)	Top of Screen Interval (feet)	Total Depth of Well (feet)	Check if Purge Not Required	Casing Water Column (A)	Well Diameter (inches)	Multiplier Value (B)	Three Casing Volumes (gallons)	Actual Water Purged (gallons)	BTEX (8020) VOA	TPH-g (8015M) VOA	MTBE (8020) VOA	Confirm MTBE (8260) VOA	Dissolved Oxygen (mg/L)	Sample Freqency (A, S, Q)	Sample I.D.	Sample Time
MW-1	5:14	15.70	12.5	26.0	☑	10.30	4 inch	2.0	20.6	NP	☑	☑	☑	☑	0.80	Q/2,5,8,11	MW-1	5:21
MW-2	6:17	13.77	12.0	26.3	☐	12.53	4 inch	2.0	25.1	5,000	☑	☑	☑	☑	1.00	Q/2,5,8,11	MW-2	6:30
MW-3	5:41	15.17	11.9	26.5	☑	11.33	4 inch	2.0	22.7	NP	☑	☑	☑	☑	0.80	Q/2,5,8,11	MW-3	5:47
MW-4	5:52	13.73	10.0	21.6	☑	7.87	4 inch	2.0	15.7	NP	☑	☑	☑	☑	0.70	Q/2,5,8,11	MW-4	5:57
MW-5	5:27	13.50	9.4	23.6	☑	10.10	2 inch	0.5	5.1	NP	☑	☑	☑	☑	1.70	Q/2,5,8,11	MW-5	5:33
MW-6	8:27	12.67	10.0	24.8	☑	12.13	2 inch	0.5	6.1	NP	☑	☑	☑	☑	0.70	Q/2,5,8,11	MW-6	8:29
MW-7	6:03	14.18	12.0	26.9	☑	12.72	4 inch	2.0	25.4	NP	☑	☑	☑	☑	0.70	Q/2,5,8,11	MW-7	6:09
VW-1	7:00	14.75	NM	NM	☐	Overpurge Well				N/A	☐	☐	☐	☐	NM	NS		
VW-2	7:01	14.04	NM	NM	☐	Overpurge Well				N/A	☐	☐	☐	☐	NM	NS		
MW-2	Second Sample after Purge				☐	Overpurge well and Re-sample				5,000	☑	☑	☑	☑	NM	Q/2,5,8,11	MW-2	13:20
					☐						☐	☐	☐	☐				
*Use Separate COC for Sample from MW-5					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				

(A)-Casing Water Column: Depth to Bottom - Depth to Water **(B)-Multiplier Values:** (2" Well: 0.5) (4" Well: 2.0) (6" Well: 4.4) **Sampling Sequence: Quarterly:** MW-6, MW-5, MW-4, MW-3, MW-1, MW-7, MW-2

Sampling Notes: List depth of Sample on C.O.C. [i.e. MW-1(30)]. Make Sure to Note on C.O.C. "Provide Lowest Reporting Limit Available." Original Copies of Field Sampling Sheets are Located in Project File
If the water level is below the top of the screen, take a grab sample and check box for NO PURGE (NP). If the water level is above the screen, purge as normal.

APPENDIX D

Certified Analytical Reports
And
Chain-of-Custody Documentation

Sequoia Analytical

819 Striker Avenue, Suite 8
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March 29 , 2001

Steven Meeks
Delta Environmental Consultants(Rancho Cordova
3164 Gold Camp Drive Ste. 200
Rancho Cordova, CA 95670
RE: ARCO 2111, San Leandro, CA / S103230

Enclosed are the results of analyses for samples received by the laboratory on 03/13/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ron Chew
Client Services Representative

For
Lito Diaz
Laboratory Director

CA ELAP Certificate Number 1624

Sequoia Analytical

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1-15'	S103230-01	Water	03/13/01 05:21	03/13/01 15:52
MW-2-13'	S103230-02	Water	03/13/01 06:30	03/13/01 15:52
MW-3-15'	S103230-03	Water	03/13/01 05:47	03/13/01 15:52
MW-4-13'	S103230-04	Water	03/13/01 05:57	03/13/01 15:52
MW-7-14'	S103230-05	Water	03/13/01 06:09	03/13/01 15:52
MW-6-12'	S103230-06	Water	03/13/01 08:29	03/13/01 15:52
MW-2-15'	S103230-07	Water	03/13/01 13:20	03/13/01 15:52

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:32

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1-15' (S103230-01) Water Sampled: 03/13/01 05:21 Received: 03/13/01 15:52									
Purgeable Hydrocarbons	ND	500	ug/l	10	1030291	03/21/01	03/21/01	DHS LUFT	R-05
Benzene	**52.5**	5.00	"	"	"	"	"	"	
Toluene	ND	5.00	"	"	"	"	"	"	R-05
Ethylbenzene	ND	5.00	"	"	"	"	"	"	R-05
Xylenes (total)	ND	5.00	"	"	"	"	"	"	R-05
Methyl tert-butyl ether	**1430**	25.0	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*88.1 %*	*60-140*		"	"	"	"	
MW-2-13' (S103230-02) Water Sampled: 03/13/01 06:30 Received: 03/13/01 15:52									
Purgeable Hydrocarbons	**3650**	500	ug/l	10	1030291	03/21/01	03/21/01	DHS LUFT	P-02
Benzene	**98.1**	5.00	"	"	"	"	"	"	
Toluene	ND	5.00	"	"	"	"	"	"	
Ethylbenzene	ND	5.00	"	"	"	"	"	"	
Xylenes (total)	**6.42**	5.00	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*104 %*	*60-140*		"	"	"	"	
MW-2-13' (S103230-02RE1) Water Sampled: 03/13/01 06:30 Received: 03/13/01 15:52									
Methyl tert-butyl ether	**3590**	250	ug/l	100	1030292	03/20/01	03/20/01	DHS LUFT	
Surrogate: a,a,a-Trifluorotoluene		*105 %*	*60-140*		"	"	"	"	
MW-3-15' (S103230-03) Water Sampled: 03/13/01 05:47 Received: 03/13/01 15:52									
Purgeable Hydrocarbons	**72.4**	50.0	ug/l	1	1030272	03/19/01	03/19/01	DHS LUFT	P-02
Benzene	**2.83**	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	**126**	2.50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*99.1 %*	*60-140*		"	"	"	"	

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:32

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4-13' (S103230-04) Water Sampled: 03/13/01 05:57 Received: 03/13/01 15:52									
Purgeable Hydrocarbons	**76.0**	50.0	ug/l	1	1030272	03/19/01	03/19/01	DHS LUFT	P-02
Benzene	**0.796**	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	**53.7**	2.50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*95.3 %*	*60-140*		"	"	"	"	
MW-7-14' (S103230-05) Water Sampled: 03/13/01 06:09 Received: 03/13/01 15:52									
Purgeable Hydrocarbons	ND	2000	ug/l	40	1030272	03/19/01	03/19/01	DHS LUFT	R-05
Benzene	**154**	20.0	"	"	"	"	"	"	R-05
Toluene	**63.0**	20.0	"	"	"	"	"	"	R-05
Ethylbenzene	**46.3**	20.0	"	"	"	"	"	"	R-05
Xylenes (total)	**127**	20.0	"	"	"	"	"	"	R-05
Surrogate: a,a,a-Trifluorotoluene		*92.0 %*	*60-140*		"	"	"	"	
MW-7-14' (S103230-05RE1) Water Sampled: 03/13/01 06:09 Received: 03/13/01 15:52									
Methyl tert-butyl ether	**175000**	5000	ug/l	2000	1030292	03/20/01	03/20/01	DHS LUFT	
Surrogate: a,a,a-Trifluorotoluene		*102 %*	*60-140*		"	"	"	"	
MW-6-12' (S103230-06) Water Sampled: 03/13/01 08:29 Received: 03/13/01 15:52									
Purgeable Hydrocarbons	ND	50.0	ug/l	1	1030264	03/16/01	03/16/01	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*104 %*	*60-140*		"	"	"	"	

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:32

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2-15' (S103230-07) Water	**Sampled: 03/13/01 13:20**	**Received: 03/13/01 15:52**							
Purgeable Hydrocarbons	ND	20000	ug/l	400	1030264	03/16/01	03/16/01	DHS LUFT	R-05
Benzene	**525**	200	"	"	"	"	"	"	
Toluene	**466**	200	"	"	"	"	"	"	
Ethylbenzene	**408**	200	"	"	"	"	"	"	
Xylenes (total)	**1460**	200	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*99.9 %*	*60-140*		"	"	"	"	
MW-2-15' (S103230-07RE1) Water	**Sampled: 03/13/01 13:20**	**Received: 03/13/01 15:52**							
Methyl tert-butyl ether	**91700**	2500	ug/l	1000	1030292	03/20/01	03/20/01	DHS LUFT	
Surrogate: a,a,a-Trifluorotoluene		*103 %*	*60-140*		"	"	"	"	

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:32

MTBE Confirmation by EPA Method 8260A

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1-15' (S103230-01) Water	**Sampled: 03/13/01 05:21**	**Received: 03/13/01 15:52**							
Methyl tert-butyl ether	**1370**	20.0	ug/l	10	1030340	03/26/01	03/26/01	EPA 8260A	
Surrogate: 1,2-DCA-d4		*92.8 %*	*60-140*		"	"	"	"	
MW-2-13' (S103230-02) Water	**Sampled: 03/13/01 06:30**	**Received: 03/13/01 15:52**							
Methyl tert-butyl ether	**3260**	40.0	ug/l	20	1030340	03/26/01	03/26/01	EPA 8260A	
Surrogate: 1,2-DCA-d4		*94.2 %*	*60-140*		"	"	"	"	
MW-3-15' (S103230-03) Water	**Sampled: 03/13/01 05:47**	**Received: 03/13/01 15:52**							
Methyl tert-butyl ether	**122**	2.00	ug/l	1	1030340	03/26/01	03/26/01	EPA 8260A	
Surrogate: 1,2-DCA-d4		*92.6 %*	*60-140*		"	"	"	"	
MW-4-13' (S103230-04) Water	**Sampled: 03/13/01 05:57**	**Received: 03/13/01 15:52**							
Methyl tert-butyl ether	**50.0**	2.00	ug/l	1	1030340	03/26/01	03/26/01	EPA 8260A	
Surrogate: 1,2-DCA-d4		*89.6 %*	*60-140*		"	"	"	"	

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:32

MTBE Confirmation by EPA Method 8260B

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7-14' (S103230-05) Water	**Sampled: 03/13/01 06:09**	**Received: 03/13/01 15:52**							**A-03**
Methyl tert-butyl ether	**160000**	1000	ug/l	500	1C27018	03/27/01	03/28/01	EPA 8260B	
Surrogate: Dibromofluoromethane		*112 %*	*50-150*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*94.0 %*	*50-150*		"	"	"	"	
MW-2-15' (S103230-07) Water	**Sampled: 03/13/01 13:20**	**Received: 03/13/01 15:52**							**A-03**
Methyl tert-butyl ether	**76000**	2000	ug/l	1000	1C27018	03/27/01	03/28/01	EPA 8260B	
Surrogate: Dibromofluoromethane		*106 %*	*50-150*		"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*98.0 %*	*50-150*		"	"	"	"	

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:32

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1030264 - EPA 5030B (P/T)										
Blank (1030264-BLK1)				Prepared & Analyzed: 03/16/01						
Purgeable Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	2.50	"							
Surrogate: a,a,a-Trifluorotoluene	*10.7*		"	*10.0*		*107*	*60-140*			
LCS (1030264-BS1)				Prepared & Analyzed: 03/16/01						
Benzene	9.72	0.500	ug/l	10.0		97.2	70-130			
Toluene	9.90	0.500	"	10.0		99.0	70-130			
Ethylbenzene	10.2	0.500	"	10.0		102	70-130			
Xylenes (total)	31.0	0.500	"	30.0		103	70-130			
Methyl tert-butyl ether	8.79	2.50	"	10.0		87.9	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.5*		"	*10.0*		*105*	*60-140*			
Matrix Spike (1030264-MS1)		**Source: S103206-15**		Prepared & Analyzed: 03/16/01						
Benzene	9.98	0.500	ug/l	10.0	ND	99.8	60-140			
Toluene	10.2	0.500	"	10.0	ND	102	60-140			
Ethylbenzene	10.5	0.500	"	10.0	ND	105	60-140			
Xylenes (total)	32.5	0.500	"	30.0	ND	108	60-140			
Methyl tert-butyl ether	23.9	2.50	"	10.0	14.4	95.0	60-140			
Surrogate: a,a,a-Trifluorotoluene	*10.6*		"	*10.0*		*106*	*60-140*			
Matrix Spike Dup (1030264-MSD1)		**Source: S103206-15**		Prepared & Analyzed: 03/16/01						
Benzene	9.78	0.500	ug/l	10.0	ND	97.8	60-140	2.02	25	
Toluene	10.0	0.500	"	10.0	ND	100	60-140	1.98	25	
Ethylbenzene	10.2	0.500	"	10.0	ND	102	60-140	2.90	25	
Xylenes (total)	31.5	0.500	"	30.0	ND	105	60-140	3.13	25	
Methyl tert-butyl ether	23.9	2.50	"	10.0	14.4	95.0	60-140	0	25	
Surrogate: a,a,a-Trifluorotoluene	*10.5*		"	*10.0*		*105*	*60-140*			

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:32

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1030272 - EPA 5030B (P/T)										
Blank (1030272-BLK1)				Prepared & Analyzed: 03/19/01						
Purgeable Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	2.50	"							
Surrogate: a,a,a-Trifluorotoluene	*10.2*		"	*10.0*		*102*	*60-140*			
LCS (1030272-BS1)				Prepared & Analyzed: 03/19/01						
Benzene	9.49	0.500	ug/l	10.0		94.9	70-130			
Toluene	9.62	0.500	"	10.0		96.2	70-130			
Ethylbenzene	9.65	0.500	"	10.0		96.5	70-130			
Xylenes (total)	29.4	0.500	"	30.0		98.0	70-130			
Methyl tert-butyl ether	9.04	2.50	"	10.0		90.4	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.93*		"	*10.0*		*99.3*	*60-140*			
Matrix Spike (1030272-MS1)		**Source: S103246-01**		Prepared & Analyzed: 03/19/01						
Benzene	8.84	0.500	ug/l	10.0		88.4	60-140			
Toluene	8.97	0.500	"	10.0		89.7	60-140			
Ethylbenzene	9.04	0.500	"	10.0		90.4	60-140			
Xylenes (total)	27.8	0.500	"	30.0		92.7	60-140			
Methyl tert-butyl ether	11.5	2.50	"	10.0		115	60-140			
Surrogate: a,a,a-Trifluorotoluene	*9.04*		"	*10.0*		*90.4*	*60-140*			
Matrix Spike Dup (1030272-MSD1)		**Source: S103246-01**		Prepared & Analyzed: 03/19/01						
Benzene	9.39	0.500	ug/l	10.0		93.9	60-140	6.03	25	
Toluene	9.61	0.500	"	10.0		96.1	60-140	6.89	25	
Ethylbenzene	9.96	0.500	"	10.0		99.6	60-140	9.68	25	
Xylenes (total)	30.5	0.500	"	30.0		102	60-140	9.26	25	
Methyl tert-butyl ether	11.4	2.50	"	10.0		114	60-140	0.873	25	
Surrogate: a,a,a-Trifluorotoluene	*9.77*		"	*10.0*		*97.7*	*60-140*			

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:32

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1030291 - EPA 5030B (P/T)										
Blank (1030291-BLK1)				Prepared & Analyzed: 03/21/01						
Purgeable Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	2.50	"							
Surrogate: a,a,a-Trifluorotoluene	*9.63*		"	*10.0*		*96.3*	*60-140*			
LCS (1030291-BS1)				Prepared & Analyzed: 03/21/01						
Benzene	8.49	0.500	ug/l	10.0		84.9	70-130			
Toluene	9.09	0.500	"	10.0		90.9	70-130			
Ethylbenzene	9.53	0.500	"	10.0		95.3	70-130			
Xylenes (total)	28.3	0.500	"	30.0		94.3	70-130			
Methyl tert-butyl ether	8.72	2.50	"	10.0		87.2	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.21*		"	*10.0*		*92.1*	*60-140*			
Matrix Spike (1030291-MS1)	**Source: S103318-04**			Prepared & Analyzed: 03/21/01						
Benzene	6.93	0.500	ug/l	10.0	ND	69.3	60-140			
Toluene	7.60	0.500	"	10.0	ND	76.0	60-140			
Ethylbenzene	8.69	0.500	"	10.0	ND	86.9	60-140			
Xylenes (total)	25.7	0.500	"	30.0	ND	85.7	60-140			
Methyl tert-butyl ether	ND	2.50	"	10.0	ND		60-140			Q-03
Surrogate: a,a,a-Trifluorotoluene	*8.59*		"	*10.0*		*85.9*	*60-140*			
Matrix Spike Dup (1030291-MSD1)	**Source: S103318-04**			Prepared & Analyzed: 03/21/01						
Benzene	4.98	0.500	ug/l	10.0	ND	49.8	60-140	32.7	25	Q-02
Toluene	5.63	0.500	"	10.0	ND	56.3	60-140	29.8	25	Q-02
Ethylbenzene	6.21	0.500	"	10.0	ND	62.1	60-140	33.3	25	Q-02
Xylenes (total)	18.4	0.500	"	30.0	ND	61.3	60-140	33.1	25	Q-02
Methyl tert-butyl ether	ND	2.50	"	10.0	ND		60-140		25	Q-03
Surrogate: a,a,a-Trifluorotoluene	*5.87*		"	*10.0*		*58.7*	*60-140*			*S-04*

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:32

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1030292 - EPA 5030B (P/T)										
Blank (1030292-BLK1)				Prepared & Analyzed: 03/20/01						
Purgeable Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	2.50	"							
Surrogate: a,a,a-Trifluorotoluene	*9.89*		"	*10.0*		*98.9*	*60-140*			
LCS (1030292-BS1)				Prepared & Analyzed: 03/20/01						
Benzene	9.69	0.500	ug/l	10.0		96.9	70-130			
Toluene	10.0	0.500	"	10.0		100	70-130			
Ethylbenzene	10.3	0.500	"	10.0		103	70-130			
Xylenes (total)	31.7	0.500	"	30.0		106	70-130			
Methyl tert-butyl ether	8.95	2.50	"	10.0		89.5	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.66*		"	*10.0*		*96.6*	*60-140*			
Matrix Spike (1030292-MS1)	**Source: S103206-13**			Prepared & Analyzed: 03/20/01						
Benzene	8.50	0.500	ug/l	10.0	ND	85.0	60-140			
Toluene	9.20	0.500	"	10.0	ND	92.0	60-140			
Ethylbenzene	9.51	0.500	"	10.0	ND	95.1	60-140			
Xylenes (total)	29.4	0.500	"	30.0	ND	98.0	60-140			
Methyl tert-butyl ether	ND	2.50	"	10.0	ND		60-140			Q-03
Surrogate: a,a,a-Trifluorotoluene	*10.3*		"	*10.0*		*103*	*60-140*			
Matrix Spike Dup (1030292-MSD1)	**Source: S103206-13**			Prepared & Analyzed: 03/20/01						
Benzene	8.55	0.500	ug/l	10.0	ND	85.5	60-140	0.587	25	
Toluene	9.23	0.500	"	10.0	ND	92.3	60-140	0.326	25	
Ethylbenzene	9.56	0.500	"	10.0	ND	95.6	60-140	0.524	25	
Xylenes (total)	29.5	0.500	"	30.0	ND	98.3	60-140	0.340	25	
Methyl tert-butyl ether	ND	2.50	"	10.0	ND		60-140		25	Q-03
Surrogate: a,a,a-Trifluorotoluene	*10.1*		"	*10.0*		*101*	*60-140*			

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:32

MTBE Confirmation by EPA Method 8260A - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1030340 - EPA 5030B [P/T]										
Blank (1030340-BLK1)				Prepared & Analyzed: 03/26/01						
Methyl tert-butyl ether	ND	2.00	ug/l							
Surrogate: 1,2-DCA-d4	*46.7*		"	*50.0*		*93.4*	*60-140*			
LCS (1030340-BS1)				Prepared & Analyzed: 03/26/01						
Methyl tert-butyl ether	51.4	2.00	ug/l	50.0		103	70-130			
Surrogate: 1,2-DCA-d4	*46.7*		"	*50.0*		*93.4*	*60-140*			
Matrix Spike (1030340-MS1)		**Source: S103432-09**		Prepared & Analyzed: 03/26/01						
Methyl tert-butyl ether	48.9	2.00	ug/l	50.0	ND	97.8	60-140			
Surrogate: 1,2-DCA-d4	*43.2*		"	*50.0*		*86.4*	*60-140*			
Matrix Spike Dup (1030340-MSD1)		**Source: S103432-09**		Prepared & Analyzed: 03/26/01						
Methyl tert-butyl ether	49.9	2.00	ug/l	50.0	ND	99.8	60-140	2.02	25	
Surrogate: 1,2-DCA-d4	*44.9*		"	*50.0*		*89.8*	*60-140*			

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:32

MTBE Confirmation by EPA Method 8260B - Quality Control
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1C27018 - EPA 5030B (P/T)										
Blank (1C27018-BLK1)				Prepared & Analyzed: 03/27/01						
Methyl tert-butyl ether	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	*50.0*		"	*50.0*		*100*	*50-150*			
Surrogate: 1,2-Dichloroethane-d4	*45.0*		"	*50.0*		*90.0*	*50-150*			
Blank (1C27018-BLK2)				Prepared & Analyzed: 03/28/01						
Methyl tert-butyl ether	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	*56.0*		"	*50.0*		*112*	*50-150*			
Surrogate: 1,2-Dichloroethane-d4	*51.0*		"	*50.0*		*102*	*50-150*			
LCS (1C27018-BS1)				Prepared & Analyzed: 03/27/01						
Methyl tert-butyl ether	49.8	2.0	ug/l	50.0		99.6	70-130			
Surrogate: Dibromofluoromethane	*50.0*		"	*50.0*		*100*	*50-150*			
Surrogate: 1,2-Dichloroethane-d4	*45.0*		"	*50.0*		*90.0*	*50-150*			
LCS (1C27018-BS2)				Prepared & Analyzed: 03/28/01						
Methyl tert-butyl ether	44.6	2.0	ug/l	50.0		89.2	70-130			
Surrogate: Dibromofluoromethane	*52.0*		"	*50.0*		*104*	*50-150*			
Surrogate: 1,2-Dichloroethane-d4	*45.0*		"	*50.0*		*90.0*	*50-150*			
LCS Dup (1C27018-BSD1)				Prepared & Analyzed: 03/28/01						
Methyl tert-butyl ether	57.2	2.0	ug/l	50.0		114	70-130	13.8	25	
Surrogate: Dibromofluoromethane	*57.0*		"	*50.0*		*114*	*50-150*			
Surrogate: 1,2-Dichloroethane-d4	*50.0*		"	*50.0*		*100*	*50-150*			

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:32

Notes and Definitions

A-03	This sample was originally analyzed within holding time. Re-analysis for confirmation or dilution was performed past the recommended holding time.
P-02	Chromatogram Pattern: Weathered Gasoline C6-C12
Q-02	The RPD and/or spike recovery for this QC sample is outside of established control limits due to sample matrix interference.
Q-03	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte already present in the sample.
R-05	The reporting limit(s) for this sample have been raised due to high levels of non-target interferents.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

ARCO Products Company
Division of Atlantic-Richfield Company

Task Order No. QM

Chain of Custody

ARCO Facility no. 7111	City (Facility) SAN Lemandro	Project manager (Consultant) Steve Meeks	Laboratory name Severn
ARCO engineer	Telephone no. (ARCO)	Telephone no. (Consultant) 916-536-2613	Fax no. (Consultant) 916-635-2005
Consultant name Delta	Address (Consultant) 3164 Gold CHAMP DR Rancho Cordova		Contract number

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas / Diesel	Oil and Grease 413.1 / 413.2	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals / VOA / VOA	CAM METALS EPA 6010/7000 TTLC / STLC	Lead Org./DHS / Lead EPA 7420/7421	MTBE 8020
MW1-15'		6		X		X	X	3-13-01	0521	X		X			610	624	625	-01			X
MW-2-13'		6		X		X	X		0630	X		X						-02			X
MW3-15'		6		X		X	X		0547	X		X						-03			X
MW4-13'		6		X		X	X		0557	X		X						-04			X
MW5-14'		6		X		X	X	3-13-01	0609	X		X						-05			X
MW6-12'		6		X		X	X	3-13-01	0829	X		X						-06			X
MW2-15'		6		X		X	X	3-13-01	1320	X		X						-07			X

Special detection Limit/reporting

Special QA/QC

Remarks: Confirm MTBE By 8260

Lab number

Turnaround time

Priority Rush 1 Business Day [ ]

Rush 2 Business Days [ ]

Expedited 5 Business Days [ ]

Standard 10 Business Days [X]

Method of shipment

Condition of sample:

Temperature received: 9°C

	Date	Time		Date	Time
Relinquished by sampler	3-13-01	1552	Received by		
Relinquished by			Received by		
Relinquished by			Received by		

Distribution: White copy — Laboratory; Canary copy — ARCO Environmental Engineering; Pink copy — Consultant

APC-3292 (2-91)

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March 29 , 2001

Steven Meeks
Delta Environmental Consultants(Rancho Cordova
3164 Gold Camp Drive Ste. 200
Rancho Cordova, CA 95670
RE: ARCO 2111, San Leandro, CA / S103231

Enclosed are the results of analyses for samples received by the laboratory on 03/13/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ron Chew
Client Services Representative

For
Lito Diaz
Laboratory Director

CA ELAP Certificate Number 1624

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-5-13'	S103231-01	Water	03/13/01 05:33	03/13/01 15:52

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	Reported:
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:22

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5-13' (S103231-01) Water Sampled: 03/13/01 05:33 Received: 03/13/01 15:52									
Purgeable Hydrocarbons	ND	500	ug/l	10	1030292	03/20/01	03/20/01	DHS LUFT	
Benzene	ND	5.00	"	"	"	"	"	"	
Toluene	ND	5.00	"	"	"	"	"	"	
Ethylbenzene	ND	5.00	"	"	"	"	"	"	
Xylenes (total)	ND	5.00	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*95.6 %*		*60-140*		"	"	"	
MW-5-13' (S103231-01RE1) Water Sampled: 03/13/01 05:33 Received: 03/13/01 15:52									
Methyl tert-butyl ether	**15900**	500	ug/l	200	1030264	03/16/01	03/21/01	DHS LUFT	
Surrogate: a,a,a-Trifluorotoluene		*99.6 %*		*60-140*		"	"	"	

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	**Reported:**
3164 Gold Camp Drive Ste. 200	Project Number: N/A	03/29/01 11:22
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	

MTBE Confirmation by EPA Method 8260B

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5-13' (S103231-01) Water	**Sampled: 03/13/01 05:33 Received: 03/13/01 15:52**								**A-03**
Methyl tert-butyl ether	**20000**	5000	ug/l	2500	1C27018	03/27/01	03/28/01	EPA 8260B	
Surrogate: Dibromofluoromethane		*108 %*		*50-150*	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*100 %*		*50-150*	"	"	"	"	

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:22

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1030264 - EPA 5030B (P/T)										
Blank (1030264-BLK1)				Prepared & Analyzed: 03/16/01						
Purgeable Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	2.50	"							
Surrogate: a,a,a-Trifluorotoluene	*10.7*		"	*10.0*		*107*	*60-140*			
LCS (1030264-BS1)				Prepared & Analyzed: 03/16/01						
Benzene	9.72	0.500	ug/l	10.0		97.2	70-130			
Toluene	9.90	0.500	"	10.0		99.0	70-130			
Ethylbenzene	10.2	0.500	"	10.0		102	70-130			
Xylenes (total)	31.0	0.500	"	30.0		103	70-130			
Methyl tert-butyl ether	8.79	2.50	"	10.0		87.9	70-130			
Surrogate: a,a,a-Trifluorotoluene	*10.5*		"	*10.0*		*105*	*60-140*			
Matrix Spike (1030264-MS1)		**Source: S103206-15**		Prepared & Analyzed: 03/16/01						
Benzene	9.98	0.500	ug/l	10.0	ND	99.8	60-140			
Toluene	10.2	0.500	"	10.0	ND	102	60-140			
Ethylbenzene	10.5	0.500	"	10.0	ND	105	60-140			
Xylenes (total)	32.5	0.500	"	30.0	ND	108	60-140			
Methyl tert-butyl ether	23.9	2.50	"	10.0	14.4	95.0	60-140			
Surrogate: a,a,a-Trifluorotoluene	*10.6*		"	*10.0*		*106*	*60-140*			
Matrix Spike Dup (1030264-MSD1)		**Source: S103206-15**		Prepared & Analyzed: 03/16/01						
Benzene	9.78	0.500	ug/l	10.0	ND	97.8	60-140	2.02	25	
Toluene	10.0	0.500	"	10.0	ND	100	60-140	1.98	25	
Ethylbenzene	10.2	0.500	"	10.0	ND	102	60-140	2.90	25	
Xylenes (total)	31.5	0.500	"	30.0	ND	105	60-140	3.13	25	
Methyl tert-butyl ether	23.9	2.50	"	10.0	14.4	95.0	60-140	0	25	
Surrogate: a,a,a-Trifluorotoluene	*10.5*		"	*10.0*		*105*	*60-140*			

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	Reported:
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/29/01 11:22

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1030292 - EPA 5030B (P/T)										
Blank (1030292-BLK1)				Prepared & Analyzed: 03/20/01						
Purgeable Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	2.50	"							
Surrogate: a,a,a-Trifluorotoluene	*9.89*		"	*10.0*		*98.9*	*60-140*			
LCS (1030292-BS1)				Prepared & Analyzed: 03/20/01						
Benzene	9.69	0.500	ug/l	10.0		96.9	70-130			
Toluene	10.0	0.500	"	10.0		100	70-130			
Ethylbenzene	10.3	0.500	"	10.0		103	70-130			
Xylenes (total)	31.7	0.500	"	30.0		106	70-130			
Methyl tert-butyl ether	8.95	2.50	"	10.0		89.5	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.66*		"	*10.0*		*96.6*	*60-140*			
Matrix Spike (1030292-MS1)	**Source: S103206-13**			Prepared & Analyzed: 03/20/01						
Benzene	8.50	0.500	ug/l	10.0	ND	85.0	60-140			
Toluene	9.20	0.500	"	10.0	ND	92.0	60-140			
Ethylbenzene	9.51	0.500	"	10.0	ND	95.1	60-140			
Xylenes (total)	29.4	0.500	"	30.0	ND	98.0	60-140			
Methyl tert-butyl ether	ND	2.50	"	10.0	ND		60-140			Q-03
Surrogate: a,a,a-Trifluorotoluene	*10.3*		"	*10.0*		*103*	*60-140*			
Matrix Spike Dup (1030292-MSD1)	**Source: S103206-13**			Prepared & Analyzed: 03/20/01						
Benzene	8.55	0.500	ug/l	10.0	ND	85.5	60-140	0.587	25	
Toluene	9.23	0.500	"	10.0	ND	92.3	60-140	0.326	25	
Ethylbenzene	9.56	0.500	"	10.0	ND	95.6	60-140	0.524	25	
Xylenes (total)	29.5	0.500	"	30.0	ND	98.3	60-140	0.340	25	
Methyl tert-butyl ether	ND	2.50	"	10.0	ND		60-140		25	Q-03
Surrogate: a,a,a-Trifluorotoluene	*10.1*		"	*10.0*		*101*	*60-140*			

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	**Reported:**
3164 Gold Camp Drive Ste. 200	Project Number: N/A	03/29/01 11:22
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	

MTBE Confirmation by EPA Method 8260B - Quality Control
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1C27018 - EPA 5030B (P/T)										
Blank (1C27018-BLK1)				Prepared & Analyzed: 03/27/01						
Methyl tert-butyl ether	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	*50.0*		"	*50.0*		*100*	*50-150*			
Surrogate: 1,2-Dichloroethane-d4	*45.0*		"	*50.0*		*90.0*	*50-150*			
Blank (1C27018-BLK2)				Prepared & Analyzed: 03/28/01						
Methyl tert-butyl ether	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	*56.0*		"	*50.0*		*112*	*50-150*			
Surrogate: 1,2-Dichloroethane-d4	*51.0*		"	*50.0*		*102*	*50-150*			
LCS (1C27018-BS1)				Prepared & Analyzed: 03/27/01						
Methyl tert-butyl ether	49.8	2.0	ug/l	50.0		99.6	70-130			
Surrogate: Dibromofluoromethane	*50.0*		"	*50.0*		*100*	*50-150*			
Surrogate: 1,2-Dichloroethane-d4	*45.0*		"	*50.0*		*90.0*	*50-150*			
LCS (1C27018-BS2)				Prepared & Analyzed: 03/28/01						
Methyl tert-butyl ether	44.6	2.0	ug/l	50.0		89.2	70-130			
Surrogate: Dibromofluoromethane	*52.0*		"	*50.0*		*104*	*50-150*			
Surrogate: 1,2-Dichloroethane-d4	*45.0*		"	*50.0*		*90.0*	*50-150*			
LCS Dup (1C27018-BSD1)				Prepared & Analyzed: 03/28/01						
Methyl tert-butyl ether	57.2	2.0	ug/l	50.0		114	70-130	13.8	25	
Surrogate: Dibromofluoromethane	*57.0*		"	*50.0*		*114*	*50-150*			
Surrogate: 1,2-Dichloroethane-d4	*50.0*		"	*50.0*		*100*	*50-150*			

Sequoia Analytical

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2111, San Leandro, CA	**Reported:**
3164 Gold Camp Drive Ste. 200	Project Number: N/A	03/29/01 11:22
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	

Notes and Definitions

A-03	This sample was originally analyzed within holding time. Re-analysis for confirmation or dilution was performed past the recommended holding time.
Q-03	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte already 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

ARCO Products Company
Division of Atlantic-Richfield Company

Task Order No. QM

Chain of Custody

ARCO Facility no. 2111	City (Facility) SAN Leandro	Project manager (Consultant) Steve Meeks	Laboratory name Sequoia
ARCO engineer	Telephone no. (ARCO)	Telephone no. (Consultant) 916-536 2613	Fax no. (Consultant) 916 635 2055
Consultant name Delta	Address (Consultant) 3164 Gold Chip DR Rancho Cordova		Contract number

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH EPA M602/8020/8015	TPH Modified 8015 Gas ☒ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Semi Metals ☐ VOA ☐ VOA ☐	CAM METALS EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐	MTBE 8260	
MW5-13'		6		X		X	X	3-13-01	0533	X		X			5103231-01						X	

Remarks
Conform MTBE By 8260

Special detection Limit/reporting

Special QA/QC

Method of shipment

Lab number

Turnaround time
- Priority Rush 1 Business Day ☐
- Rush 2 Business Days ☐
- Expedited 5 Business Days ☐
- Standard 10 Business Days ☒

Condition of sample:

Temperature received: 9°

	Date	Time	Received by	Date	Time
Relinquished by sampler	3-13-01	1552	Monica Gregson	3/13/01	1552
Relinquished by			Received by		
Relinquished by			Received by		

Distribution: White copy — Laboratory; Canary copy — ARCO Environmental Engineering; Pink copy — Consultant
APC-3292 (2-91)