RO 309

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JUN 24 2002

June 14, 2002

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

JUN 24 2002

Subject: *Quarterly groundwater Monitoring Report, First Quarter 2002*
ARCO Service Station No. 601
712 Lewelling Boulevard
San Leandro, California
Delta Project No. D000-303

Dear Mr. Supple:

Delta Environmental Consultants, Inc. is submitting the attached report that presents the results of the first quarter 2002 groundwater monitoring program at ARCO Service Station No. 601, located at 712 Lewelling Boulevard, 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.

Trevor L. Atkinson, P.E.
Project Engineer

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

REGISTERED PROFESSIONAL ENGINEER
STEVEN WHITTEN MEEKS
C 057461
Exp. 12/31/05
CIVIL
STATE OF CALIFORNIA
6/14/02

TLA (Lrp007.303.doc)
Enclosures

cc: Mr. Scott Seery – Alameda County Health Care Services Agency
Mr. Mike Bakaldin – San Leandro Fire Department

Date: June 14, 2002

ARCO QUARTERLY GROUNDWATER MONITORING REPORT

Station No.: 601 Address:	712 Lewelling Boulevard, San Leandro, CA
Atlantic Richfield Company 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.:	D000-303
Primary Agency/Regulatory ID No.	Alameda County Health Care Services Agency

WORK PERFORMED THIS QUARTER

1. Performed quarterly groundwater monitoring for first quarter 2002.
2. Prepared and submitted quarterly groundwater monitoring report for fourth quarter 2001.

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WORK PROPOSED FOR NEXT QUARTER

1. Prepare and submit quarterly groundwater monitoring report for first quarter 2002.
2. Perform quarterly groundwater monitoring and sampling for second quarter 2002.
3. Perform groundwater sampling from utility lines (Investigation) during second quarter 2002.
4. Site will be transferred to new consultant (URS) during second quarter 2002.

QUARTERLY MONITORING:

Current Phase of Project	Monitoring/Remediation with ORC
Frequency of Groundwater Sampling:	Annual (1st Quarter): MW-2, MW-11, MW-13 Semi-Annual (1st/3rd Quarter) MW-9, MW-15 Quarterly: MW-1, MW-3 through MW-8, MW-10 MW-14
Frequency of Groundwater Monitoring:	Quarterly
Is Free Product (FP) Present On–Site:	No
FP Recovered this Quarter:	None
Cumulative FP Recovered to Date:	3.45 gallons, Well MW-1
Bulk Soil Removed This Quarter:	None
Bulk Soil Removed to Date:	1,565 cubic yards of TPH impacted soil
Current Remediation Techniques:	Natural Attenuation
Approximate Depth to Groundwater:	7.46 feet
Groundwater Gradient:	0.015 ft/ft toward East

DISCUSSION:

- Methyl tertiary butyl ether was reported in MW-2, MW-4 and MW-8 at concentrations of 75, 12, and 830 micrograms per liter (µg/L), respectively.
- Total petroleum hydrocarbons as gasoline was reported in MW-1 through MW-6 and MW-8 at concentrations of 12,000; 100; 43,000; 490; 20,000; 2,100 and 1,100 µg/L respectively.
- Benzene was reported in MW-1, and MW-3 through MW-7 at concentrations of 1,800; 1,000; 34; 2,600; 380 and 1.3 µg/L, respectively.

ATTACHMENTS:

- Table 1 Groundwater Elevation and Analytical Data
- Table 2 Groundwater Flow Direction and Gradient
- Figure 1 Groundwater Analytical Summary Map
- Figure 2 Groundwater Elevation Contour Map
- Appendix A Sampling and Analysis Procedures
- Appendix B Historical Data Tables (IT Corporation)
- Appendix C Certified Analytical Reports with Chain–of–Custody Documentation
- Appendix D Field Data Sheet

TABLE 1

GROUNDWATER ANALYTICAL DATA

ARCO Service Station No. 601
712 Lewelling Boulevard
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 (µg/L)	Semi Volatiles (µg/L)
MW-1	06/20/00	19.19	8.20	10.99	2,400	50	1,800	680	23,000	<200	NA
	09/29/00		8.55	10.64	2,880	<50	2,130	871	23,600	<250	430[a]/1,100[b]
	12/17/00		8.28	10.91	1,980	<50	1,610	664	21,600	<250	270[a]/900[b]
	03/28/01		8.13	11.06	2,310	<100	2,010	517	19,800	<500	11(c)
	06/20/01		8.60	10.59	2,200	23	1,800	320	17,000	100	NA
	09/22/01		9.03	10.16	2,900	<200	2,500	270	20,000	<1000	360[a], 980[b]
	12/27/01		7.93	11.26	2,000	<50	1,700	140	15,000	290	370[a],1,200[b]
	03/15/02		7.89	11.3	1,800	<50	1,400	79	12,000	<250	220[a]; 880[b]
MW-2	06/20/00	21.12	7.12	14.00	NS	NS	NS	NS	NS	NS	NS
	09/29/00		7.60	13.52	NS	NS	NS	NS	NS	NS	NS
	12/17/00		7.42	13.70	NS	NS	NS	NS	NS	NS	NS
	03/28/01		6.84	14.28	18.1	<5.0	7.63	5.98	838	39.5	NA
	06/20/01		7.66	13.46	NS	NS	NS	NS	NS	NS	NS
	09/22/01		8.08	13.04	NS	NS	NS	NS	NS	NS	NA
	12/27/01		6.48	14.64	NS	NS	NS	NS	NS	NS	NS
	03/15/02		6.84	14.28	<0.5	<0.5	2.5	<0.5	100	75	NA
MW-3	06/20/00	22.99	6.22	16.77	670	990	2,400	12000	45,000	<500	NA
	09/29/00		7.20	15.79	860	1,120	2,720	12900	51,000	<250	NA
	12/17/00		NM	NC	NS	NS	NS	NS	NS	NS	NA
	03/28/01		6.10	16.89	804	<200	250	11,000	43,500	<1,000	NA
	06/20/01		6.14	16.85	1,000	850	2,800	13,000	62,000	<2,500	NA
	09/22/01		7.24	15.75	1,200	1,200	3,100	13,000	53,000	<1,000	NA
	12/27/01		7.00	15.99	860	840	2,300	10,000	44,000	<250	NA
	03/15/02		7.02	15.97	1,000	810	2,300	11,000	43,000	<250	NA

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GROUNDWATER ANALYTICAL DATA

ARCO Service Station No. 601
712 Lewelling Boulevard
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 (µg/L)	Semi Volatiles (µg/L)
MW-4	06/20/00	22.38	6.46	15.92	210	20	94	520	2,700	46	NA
	09/29/00		DRY	DRY	NS	NS	NS	NS	NS	NS	NS
	12/17/00		DRY	DRY	NS	NS	NS	NS	NS	NS	NS
	03/28/01		7.49	14.89	DRY	DRY	DRY	DRY	DRY	DRY	NA
	06/20/01		7.21	15.17	690	170	330	1,400	13,000	110	NA
	09/22/01		7.43	14.95	650	110	410	1,800	6,700	100	NA
	12/27/01		7.32	15.06	47	15	46	250	1,200	15	NA
	03/15/02		7.43	14.95	34	7.4	26	110	490	12	NA
MW-5	06/20/00	22.45	6.78	15.67	3,000	650	260	700	10,000	<200	NA
	09/29/00		DRY	DRY	NS	NS	NS	NS	NS	NS	NS
	12/17/00		DRY	DRY	NS	NS	NS	NS	NS	NS	NS
	03/28/01		6.48	15.97	4,160	3,450	728	3,090	23,400	<250	NA
	06/20/01		7.26	15.19	1,200	49	190	540	120,000	<100	NA
	09/22/01		DRY	DRY	NS	NS	NS	NS	NS	NS	NA
	12/27/01		6.56	15.89	1,500	2,700	730	3,200	16,000	<250	NA
	03/15/02		6.9	15.55	2,600	3,300	1,000	4,000	20,000	<250	NA
MW-6	06/20/00	22.77	DRY	DRY	NS	NS	NS	NS	NS	NS	NS
	09/29/00		DRY	DRY	NS	NS	NS	NS	NS	NS	NS
	12/17/00		DRY	DRY	NS	NS	NS	NS	NS	NS	NS
	03/28/01		7.57	15.2	DRY	DRY	DRY	DRY	DRY	DRY	NA
	06/20/01		DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	09/22/01		DRY	DRY	NS	NS	NS	NS	NS	NS	NA
	12/27/01		7.21	15.56	3	1	1.1	2	<50	<2.5	NA
	03/15/02		7.51	15.26	380	8.6	110	17	2,100	<25	NA

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ARCO Service Station No. 601
712 Lewelling Boulevard
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 (µg/L)	Semi Volatiles (µg/L)
MW-7	06/20/00	22.89	DRY	DRY	NS	NS	NS	NS	NS	NS	NS
	09/29/00		DRY	DRY	NS	NS	NS	NS	NS	NS	NS
	12/17/00		8.93	13.96	<0.5	<0.5	<0.5	<0.5	<50	<2.5	NA
	03/28/01		8.35	14.54	<0.5	<0.5	<0.5	<0.5	<50	<2.5	NA
	06/20/01		DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	09/22/01		DRY	DRY	NS	NS	NS	NS	NS	NS	NA
	12/27/01		8.42	14.47	<0.5	<0.5	<0.5	<0.5	<50	<2.5	NA
	03/15/02		8.54	14.35	1.3	2.6	1.1	5.4	<50	<2.5	NA
MW-8	06/20/00	20.89	7.23	13.66	<0.5	0.9	<0.5	<1.0	150	310	NA
	09/29/00		7.91	12.98	< 0.5	<0.5	<0.5	<0.5	149	438	NA
	12/17/00		7.11	13.78	<5.0	<5.0	<5.0	<5.0	662	273	NA
	03/28/01		6.88	14.01	<5.0	<5.0	<5.0	<5.0	840	320	NA
	06/20/01		7.25	13.64	<0.5	<0.5	<0.5	0.65	230	330	NA
	09/22/01		8.14	12.75	<0.5	<0.5	<0.5	<0.5	<50	6.5	NA
	12/27/01		6.73	14.16	<0.5	<0.5	0.6	0.89	780	160	NA
	03/15/02		6.94	13.95	<10	<10	<10	<10	1,100	830	NA
MW-9	06/20/00	22.26	8.01	14.25	NS	NS	NS	NS	NS	NS	NS
	09/29/00		8.44	13.82	<0.5	<0.5	<0.5	<0.5	<50	3.44	NA
	12/17/00		7.84	14.42	NS	NS	NS	NS	NS	NS	NS
	03/28/01		7.58	14.68	<0.5	<0.5	<0.5	<0.5	<50	<2.5	NA
	06/20/01		7.75	14.51	NS	NS	NS	NS	NS	NS	NS
	9/22/2001		8.69	13.57	<0.5	<0.5	<0.5	<0.5	<50	7.8	NA
	12/27/2001		7.15	15.11	NS	NS	NS	NS	NS	NS	NS
	03/15/02		7.23	15.03	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.5	NA

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712 Lewelling Boulevard
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 (µg/L)	Semi Volatiles (µg/L)
MW-10	06/20/00	21.33	7.99	13.34	<0.5	<0.5	<0.5	<0.5	<0.5	<3.0	NA
	09/29/00		8.40	12.93	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.5	NA
	12/17/00		7.91	13.42	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.5	NA
	03/28/01		7.47	13.86	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.5	NA
	06/20/01		8.11	13.22	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.5	NA
	09/22/01		8.77	12.56	< 0.5	< 0.5	<0.5	<0.5	<50	<2.5	NA
	12/27/01		6.94	14.39	< 0.5	< 0.5	<0.5	<0.5	<50	<2.5	NA
	03/15/02		7.48	13.85	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.5	NA
MW-11	06/20/00	20.97	8.18	12.79	NS	NS	NS	NS	NS	NS	NS
	09/29/00		8.60	12.37	NS	NS	NS	NS	NS	NS	NS
	12/17/00		8.48	12.49	NS	NS	NS	NS	NS	NS	NS
	03/28/01		7.88	13.09	<0.5	<0.5	< 0.5	<0.5	<50	<2.5	NA
	06/20/01		8.48	12.49	NS	NS	NS	NS	NS	NS	NS
	09/22/01		9.11	11.86	NS	NS	NS	NS	NS	NS	NS
	12/27/01		7.50	13.47	NS	NS	NS	NS	NS	NS	NS
	03/15/02		7.87	13.1	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.5	NA
MW-12	06/20/00	20.11	8.55	11.56	NS	NS	NS	NS	NS	NS	NS
	09/29/00		8.98	11.13	NS	NS	NS	NS	NS	NS	NS
	12/17/00		8.76	11.35	NS	NS	NS	NS	NS	NS	NS
	03/28/01		8.31	11.8	<0.5	<0.5	< 0.5	<0.5	<50	<2.5	NA
	06/20/01		9.10	11.01	NS	NS	NS	NS	NS	NS	NS
	09/22/01		9.48	10.63	NS	NS	NS	NS	NS	NS	NS
	12/27/01		7.78	12.33	NS	NS	NS	NS	NS	NS	NS
	03/15/02		8.22	11.89	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.5	NA

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GROUNDWATER ANALYTICAL DATA

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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 (µg/L)	Semi Volatiles (µg/L)
MW-13	06/20/00	20.75	7.56	13.19	NS	NS	NS	NS	NS	NS	NS
	09/29/00		8.27	12.48	NS	NS	NS	NS	NS	NS	NS
	12/17/00		8.09	12.66	NS	NS	NS	NS	NS	NS	NS
	03/28/01		7.69	13.06	<0.5	<0.5	< 0.5	<0.5	<50	<2.5	NA
	06/20/01		8.46	12.29	NS	NS	NS	NS	NS	NS	NS
	09/22/01		8.57	12.18	NS	NS	NS	NS	NS	NS	NS
	12/27/01		7.14	13.61	NS	NS	NS	NS	NS	NS	NS
	03/15/02		7.62	13.13	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.5	NA
MW-14	06/20/00	20.90	9.16	11.74	<0.5	<0.5	<0.5	<1.0	<50	<10	NA
	09/29/00		9.48	11.42	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.50	NA
	12/17/00		9.24	11.66	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.5	NA
	03/28/01		8.91	11.99	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.5	NA
	06/20/01		9.7	11.2	< 0.5	< 0.5	< 0.5	<0.5	<50	3.1	NA
	09/22/01		10.04	10.86	<0.5	<0.5	<0.5	<0.5	<50	<2.5	NA
	12/27/01		8.33	12.57	<0.5	<0.5	<0.5	<0.5	<50	<2.5	NA
	03/15/02		8.75	12.15	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.5	NA

TABLE 1

GROUNDWATER ANALYTICAL DATA

ARCO Service Station No. 601
712 Lewelling Boulevard
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 (µg/L)	Semi Volatiles (µg/L)
MW-15	06/20/00	22.08	5.98	16.10	NS	NS	NS	NS	NS	NS	NS
	09/29/00		6.50	15.58	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.50	NA
	12/17/00		5.89	16.19	NS	NS	NS	NS	NS	NS	NS
	03/28/01		5.78	16.3	< 0.5	< 0.5	< 0.5	<0.5	<50	11.1	NA
	06/20/01		5.72	16.36	NS	NS	NS	NS	NS	NS	NS
	09/22/01		6.79	15.29	<0.5	<0.5	<0.5	<0.5	<50	13	NA
	12/27/01		5.49	16.59	NS	NS	NS	NS	NS	NS	NS
	03/15/02		5.68	16.4	< 0.5	< 0.5	< 0.5	<0.5	<50	<2.5	NA

[a] 2-methylnaphthalene

[b] Naphthalene

[c] Phenol

TPH = Total Petroleum Hydrocarbons

MTBE = Methyl tertiary butyl ether analyzed by EPA Method 8021B unless otherwise noted

µg/L = Micrograms per liter

NA = Not analyzed

NS = Not sampled

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

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TABLE 2

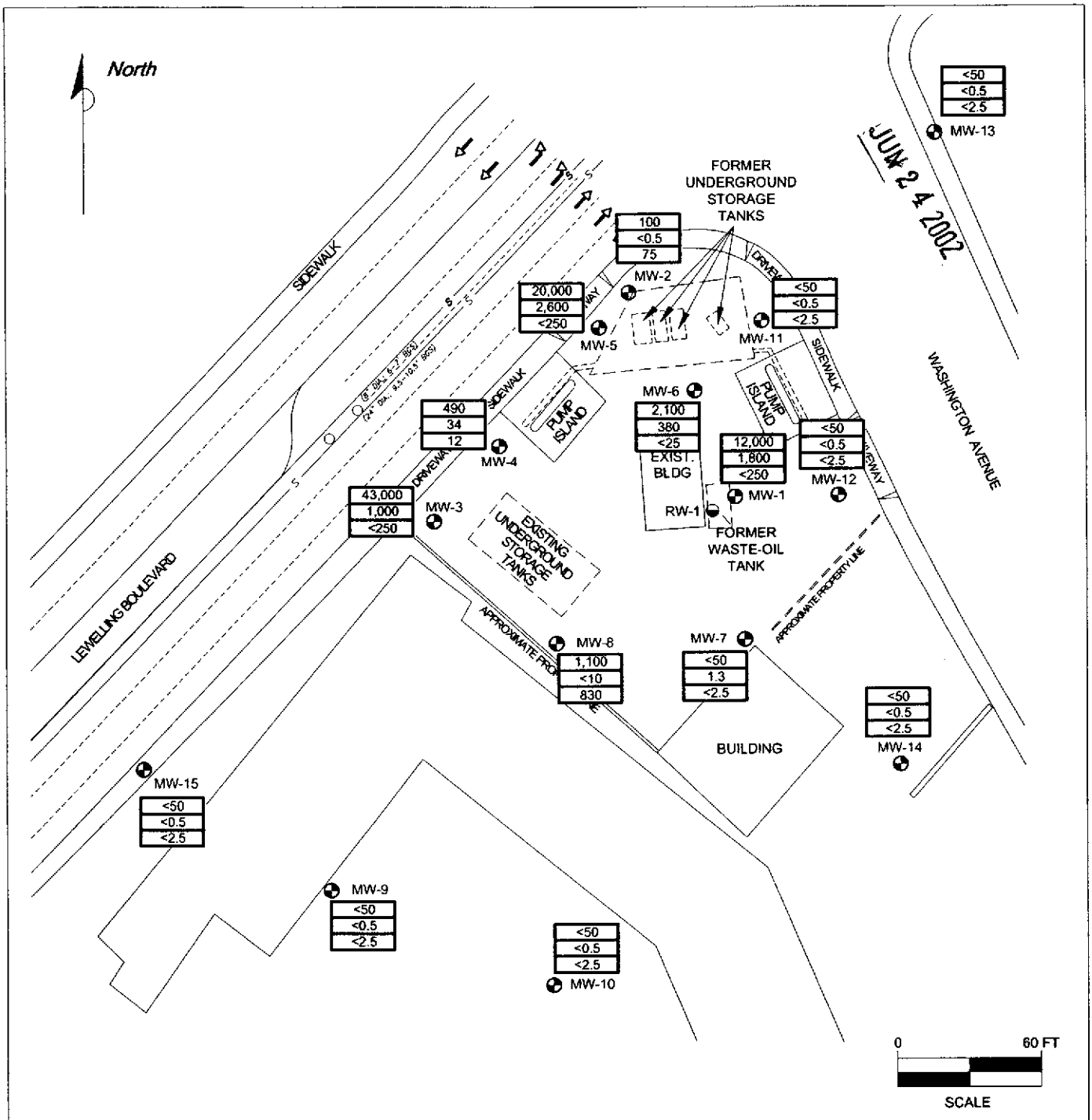
GROUNDWATER FLOW DIRECTION AND GRADIENT

ARCO Service Station 601

712 Lewelling Boulevard
San Leandro, California

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

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



NOTE: SITE MAP ADAPTED FROM IT CORPORATION FIGURES.
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

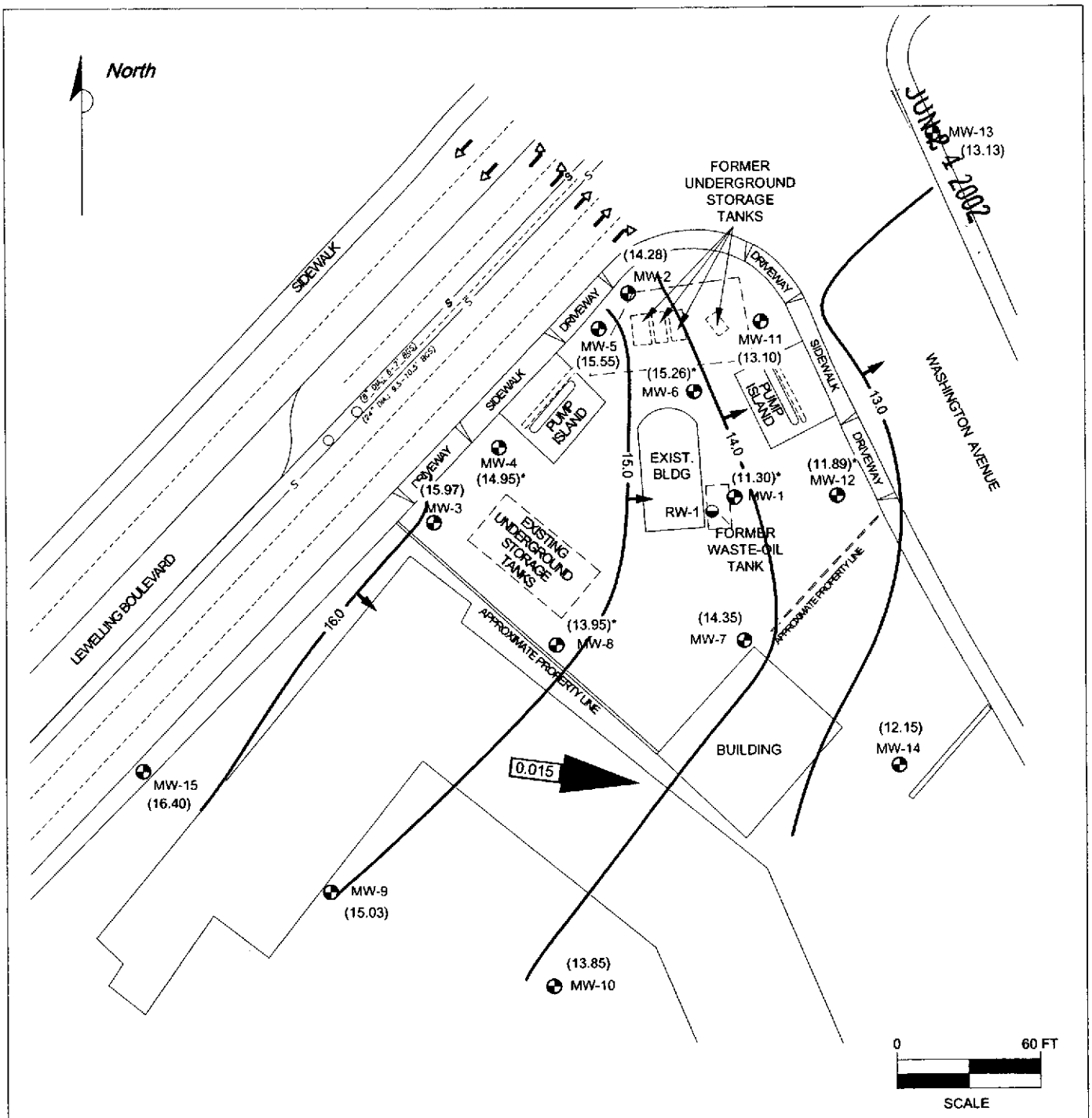
LEGEND:

MW-1	MONITORING WELL LOCATION
RW-1	SOIL VAPOR EXTRACTION WELL LOCATION
<50 / <0.5 / <2.5	TPH AS GASOLINE IN MICROGRAMS PER LITER BENZENE IN MICROGRAMS PER LITER MTBE IN MICROGRAMS PER LITER
NS	NOT SAMPLED

FIGURE 1
GROUND WATER ANALYTICAL SUMMARY
FIRST QUARTER 2002 (03/15/02)
ARCO STATION NO. 601
712 LEWELLING BOULEVARD
SAN LEANDRO, CALIFORNIA

PROJECT NO. D000-303	DRAWN BY TLA 5/23/02
FILE NO. 601-1	PREPARED BY TLA
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.



NOTE: SITE MAP ADAPTED FROM IT CORPORATION FIGURES.
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

LEGEND:

MW-1	MONITORING WELL LOCATION
RW-1	SOIL VAPOR EXTRACTION WELL LOCATION
(14.28)	GROUND WATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL)
13.0	WATER TABLE CONTOUR IN FEET ABOVE MSL
	GROUND WATER FLOW DIRECTION
0.015	APPROXIMATE GROUND WATER FLOW GRADIENT
*	NOT USED IN CONTOUR MAP CONSTRUCTION

FIGURE 2
GROUND WATER ELEVATION CONTOUR MAP
FIRST QUARTER 2002 (3/15/02)
ARCO STATION NO. 601
712 LEWELLING BOULEVARD
SAN LEANDRO, CALIFORNIA

PROJECT NO. D000-303	DRAWN BY TLA 5/23/02
FILE NO. 601-1	PREPARED BY TLA
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.

APPENDIX A

Sampling and Analysis Procedures

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
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, Total Oil and Grease, and MtBE)

ARCO Service Station 0362
29900 Mission Boulevard, Hayward, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	Total Oil and Grease (ppm)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-2	02/24/96	46.57	25.78	20.79	4,100	300	28	95	340	NA	NA	NA	
MW-2	05/24/96	46.57	24.35	22.22	6,300	540	57	320	1,100	NA	NA	NA	
MW-2	08/20/96	46.57	27.15	19.42	7,600	290	29	240	890	64	NA	NA	
MW-2	11/12/96	46.57	29.10	17.47	4,900	120	17	63	220	26	NA	NA	
MW-2	04/05/97	46.57	24.45	22.12	6,600	220	21	200	780	170	NA	NA	
MW-2	07/01/97	46.57	26.80	19.77	6,300	450	37	280	880	78	NA	NA	NP
MW-2	09/08/97	46.57	28.10	18.47	15,000	480	81	600	2,300	<120	NA	0.34	
MW-2	11/17/97	46.57	29.02	17.55	15,000	1,200	19	1,000	3,200	61	NA	0.6	NP
MW-2	03/18/98	46.57	21.11	25.46	9,400	320	34	410	1,100	<60	NA	0.5	P
MW-2	04/30/98	46.57	21.27	25.30	3,900	180	10	180	520	<30	NA	3	P
MW-2	08/14/98	46.57	27.05	19.52	18,000	1,100	80	1,100	2,800	90	NA	1	NP
MW-2	10/13/98	46.57	28.91	17.66	4,400	300	18	62	600	<30	NA	1.5	NP
MW-2	01/19/99	46.57	28.67	17.90	18,000	690	56	830	2,200	<60	NA	0.5	NP
MW-2	04/13/99	46.57	26.83	19.74	14,000	620	42	980	1,500	82	NA	0.82	NP
MW-2	08/11/99	46.57	28.40	18.17	11,000	410	43	740	1,500	74	NA	1.06	NP
MW-2	10/26/99	46.57	29.50	17.07	14,000	430	36	790	1,700	32	NA	0.96	NP
MW-2	02/14/00	46.57	28.10	18.47	12,000	300	37	650	1,200	43	NA	1.26	NP
MW-3	02/24/96	44.30	23.47	20.83	820	<5.0	<5.0	5.0	24	NA	<5.0	NA	
MW-3	05/24/96	44.30	22.22	22.08	2,000	38	30	92	210	NA	<5.0	NA	
MW-3	08/20/96	44.30	25.00	19.30	2,100	29	14	94	190	21	12	NA	
MW-3	11/12/96	44.30	26.85	17.45	3,800	21	11	81	210	<25	<5.0	NA	
MW-3	04/05/97	44.30	22.35	21.95	3,200	<10	<10	13	66	<50	<5.0	NA	
MW-3	07/01/97	44.30	24.62	19.68	150	<0.5	<0.5	0.62	4.5	14	<5.0	NA	NP
MW-3	09/08/97	44.30	25.97	18.33	420	<0.5	0.7	7.6	18	5.0	<0.5	0.41	
MW-3	11/17/97	44.30	26.65	17.65	470	<0.5	1.3	4.5	18	<2.5	<5.0	0.8	NP
MW-3	03/18/98	44.30	18.90	25.40	7,200	<10	25	270	670	<60	NA	0.5	P
MW-3	04/30/98	44.30	19.18	25.12	16,000	<10	23	410	1,000	<60	13	3	P
MW-3	08/14/98	44.30	25.20	19.10	<1,000	<10	<10	<10	<10	660	0.5	2	NP
MW-3	10/13/98	44.30	26.65	17.65	380	<0.5	<0.5	6.2	12	<3	NA	1.5	NP
MW-3	01/19/99	44.30	26.30	18.00	150	<0.5	0.6	0.6	3.3	<3	NA	0.5	NP
MW-3	04/13/99	44.30	25.02	19.28	<50	<0.5	<0.5	<0.5	<0.5	4	NA	0.86	NP

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

ARCO Service Station 0362
29900 Mission Boulevard, Hayward, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	Total Oil and Grease (ppm)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-3	08/11/99	44.30	26.15	18.15	53	<0.5	0.8	<0.5	1.9	11	NA	0.87	NP
MW-3	10/26/99	44.30	27.31	16.99	95	<0.5	<0.5	0.6	1.1	5	NA	0.80	NP
MW-3	02/14/00	44.30	25.72	18.58	85	<0.5	<0.5	<0.5	1.2	4	NA	1.22	NP
MW-4	02/24/96	47.62	27.03	20.59	<50	1.1	0.87	<0.5	0.83	NA	NA	NA	
MW-4	05/24/96	47.62	25.68	21.94	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
MW-4	08/20/96	47.62	28.45	19.17	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-4	11/12/96	47.62	30.35	17.27	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-4	04/05/97	47.62	25.88	21.74	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-4	07/01/97	47.62	28.08	19.54	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-4	09/08/97	47.62	29.55	18.07	<50	<0.5	<0.5	<0.5	<0.5	<3.0	NA	0.06	
MW-4	11/17/97	47.62	30.10	17.52	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	0.0	NP
MW-4	03/18/98	47.62	22.50	25.12	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	NA	P
MW-4	04/30/98	47.62	22.61	25.01	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.4	P
MW-4	08/14/98	47.62	28.21	19.41	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.0	P
MW-4	10/13/98	47.62	30.12	17.50	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.5	NP
MW-4	01/19/99	47.62	29.90	17.72	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.1	P
MW-4	04/13/99	47.62	28.02	19.60	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.64	P
MW-4	08/11/99	47.62	29.57	18.05	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.03	P
MW-4	10/26/99	47.62	30.72	16.90	<50	<0.5	<0.5	<0.5	<1	<3	NA	2.23	NP
MW-4	02/14/00	47.62	29.33	18.29	<50	<0.5	<0.5	<0.5	<1	<3	NA	1.11	P
MW-5	02/24/96	43.03	22.54	20.49	---------- Well Sampled Annually ----------								
MW-5	05/24/96	43.03	21.05	21.98	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
MW-5	08/20/96	43.03	23.60	19.43	---------- Well Sampled Annually ----------								
MW-5	11/12/96	43.03	25.56	17.47	---------- Well Sampled Annually ----------								
MW-5	04/05/97	43.03	21.02	22.01	---------- Well Sampled Annually ----------								
MW-5	07/01/97	43.03	23.24	19.79	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-5	09/08/97	43.03	24.63	18.40	---------- Well Sampled Annually ----------								
MW-5	11/17/97	43.03	25.45	17.58	---------- Well Sampled Annually ----------								
MW-5	03/18/98	43.03	17.60	25.43	---------- Well Sampled Annually ----------								
MW-5	04/30/98	43.03	17.81	25.22	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.5	P

Table 1
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Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, Total Oil and Grease, and MtBE)

ARCO Service Station 0362
29900 Mission Boulevard, Hayward, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	Total Oil and Grease (ppm)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-5	08/14/98	43.03	23.60	19.43	---------- Well Sampled Annually ----------								
MW-5	10/13/98	43.03	25.28	17.75	---------- Well Sampled Annually ----------								
MW-5	01/19/99	43.03	24.84	18.19	---------- Well Sampled Annually ----------								
MW-5	04/13/99	43.03	23.23	19.80	---------- Well Sampled Annually ----------								
MW-5	08/11/99	43.03	24.80	18.23	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.05	NP
MW-5	10/26/99	43.03	25.97	17.06	---------- Well Sampled Annually ----------								
MW-5	02/14/00	43.03	24.24	18.79	---------- Well Sampled Annually ----------								
MW-6	02/24/96	42.30	21.77	20.53	---------- Well Sampled Annually ----------								
MW-6	05/24/96	42.30	20.63	21.67	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
MW-6	08/20/96	42.30	23.43	18.87	---------- Well Sampled Annually ----------								
MW-6	11/12/96	42.30	25.15	17.15	---------- Well Sampled Annually ----------								
MW-6	04/05/97	42.30	20.72	21.58	---------- Well Sampled Annually ----------								
MW-6	07/01/97	42.30	23.05	19.25	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-6	09/08/97	42.30	24.27	18.03	---------- Well Sampled Annually ----------								
MW-6	11/17/97	42.30	24.80	17.50	---------- Well Sampled Annually ----------								
MW-6	03/18/98	42.30	NM	NM	---------- Well Inaccessible ----------								
MW-6	04/30/98	42.30	17.70	24.60	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1	P
MW-6	08/14/98	42.30	NM	NM	---------- Well Inaccessible ----------								
MW-6	10/13/98	42.30	NM	NM	---------- Well Inaccessible ----------								
MW-6	01/19/99	42.30	NM	NM	---------- Well Inaccessible ----------								
MW-6	04/13/99	42.30	NM	NM	---------- Well Inaccessible ----------								
MW-6	08/11/99	42.30	NM	NM	---------- Well Inaccessible ----------								
MW-6	10/26/99	42.30	NM	NM	---------- Well Inaccessible ----------								
MW-6	02/14/00	42.30	NM	NM	---------- Well Inaccessible ----------								
MW-7	02/24/96	43.75	23.31	20.44	---------- Well Sampled Annually ----------								
MW-7	05/24/96	43.75	22.12	21.63	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
MW-7	08/20/96	43.75	24.85	18.90	---------- Well Sampled Annually ----------								
MW-7	11/12/96	43.75	26.62	17.13	---------- Well Sampled Annually ----------								
MW-7	04/05/97	43.75	22.28	21.47	---------- Well Sampled Annually ----------								
MW-7	07/01/97	43.75	24.35	19.40	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NP

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Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, Total Oil and Grease, and MtBE)

ARCO Service Station 0362
29900 Mission Boulevard, Hayward, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	Total Oil and Grease (ppm)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-7	09/08/97	43.75	25.73	18.02	---------- Well Sampled Annually ----------								
MW-7	11/17/97	43.75	26.22	17.53	---------- Well Sampled Annually ----------								
MW-7	03/18/98	43.75	18.95	24.80	---------- Well Sampled Annually ----------								
MW-7	04/30/98	43.75	19.22	24.53	<50	<0.5	<0.5	<0.5	<0.5	10	NA	1	P
MW-7	08/14/98	43.75	24.73	19.02	---------- Well Sampled Annually ----------								
MW-7	10/13/98	43.75	26.50	17.25	---------- Well Sampled Annually ----------								
MW-7	01/19/99	43.75	25.90	17.85	---------- Well Sampled Annually ----------								
MW-7	04/13/99	43.75	24.37	19.38	---------- Well Sampled Annually ----------								
MW-7	08/11/99	43.75	25.80	17.95	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.17	NP
MW-7	10/26/99	43.75	26.95	16.80	---------- Well Sampled Annually ----------								
MW-7	02/14/00	43.75	25.30	18.45	---------- Well Sampled Annually ----------								
MW-8	02/24/96	46.77	26.30	20.47	---------- Well Sampled Annually ----------								
MW-8	05/24/96	46.77	24.90	21.87	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
MW-8	08/20/96	46.77	27.65	19.12	---------- Well Sampled Annually ----------								
MW-8	11/12/96	46.77	29.55	17.22	---------- Well Sampled Annually ----------								
MW-8	04/05/97	46.77	25.12	21.65	---------- Well Sampled Annually ----------								
MW-8	07/01/97	46.77	27.29	19.48	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NP
MW-8	09/08/97	46.77	28.62	18.15	---------- Well Sampled Annually ----------								
MW-8	11/17/97	46.77	29.33	17.44	---------- Well Sampled Annually ----------								
MW-8	03/18/98	46.77	21.75	25.02	---------- Well Sampled Annually ----------								
MW-8	04/30/98	46.77	21.92	24.85	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1	P
MW-8	08/14/98	46.77	27.27	19.50	---------- Well Sampled Annually ----------								
MW-8	10/13/98	46.77	29.28	17.49	---------- Well Sampled Annually ----------								
MW-8	01/19/99	46.77	29.15	17.62	---------- Well Sampled Annually ----------								
MW-8	04/13/99	46.77	27.21	19.56	---------- Well Sampled Annually ----------								
MW-8	08/11/99	46.77	28.73	18.04	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.97	NP
MW-8	10/26/99	46.77	29.88	16.89	---------- Well Sampled Annually ----------								
MW-8	02/14/00	46.77	28.55	18.22	---------- Well Sampled Annually ----------								
MW-9	02/24/96	48.37	27.55	20.82	---------- Well Sampled Annually ----------								
MW-9	05/24/96	48.37	25.78	22.59	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	

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(TPPH as Gasoline, BTEX Compounds, Total Oil and Grease, and MtBE)

ARCO Service Station 0362
29900 Mission Boulevard, Hayward, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	Total Oil and Grease (ppm)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-9	08/20/96	48.37	28.67	19.70	---------- Well Sampled Annually ----------								
MW-9	11/12/96	48.37	30.75	17.62	---------- Well Sampled Annually ----------								
MW-9	04/05/97	48.37	25.90	22.47	---------- Well Sampled Annually ----------								
MW-9	07/01/97	48.37	28.30	20.07	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NP
MW-9	09/08/97	48.37	29.78	18.59	---------- Well Sampled Annually ----------								
MW-9	11/17/97	48.37	30.72	17.65	---------- Well Sampled Annually ----------								
MW-9	03/18/98	48.37	22.60	25.77	---------- Well Sampled Annually ----------								
MW-9	04/30/98	48.37	21.63	26.74	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	NA	P
MW-9	08/14/98	48.37	28.42	19.95	---------- Well Sampled Annually ----------								
MW-9	10/13/98	48.37	30.42	17.95	---------- Well Sampled Annually ----------								
MW-9	01/19/99	48.37	30.37	18.00	---------- Well Sampled Annually ----------								
MW-9	04/13/99	48.37	28.35	20.02	---------- Well Sampled Annually ----------								
MW-9	08/11/99	48.37	29.92	18.45	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.47	NP
MW-9	10/26/99	48.37	31.15	17.22	---------- Well Sampled Annually ----------								
MW-9	02/14/00	48.37	29.86	18.51	---------- Well Sampled Annually ----------								
MW-10	02/24/96	46.70	25.33	21.37	---------- Well Sampled Annually ----------								
MW-10	05/24/96	46.70	23.90	22.80	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
MW-10	08/20/96	46.70	26.85	19.85	---------- Well Sampled Annually ----------								
MW-10	11/12/96	46.70	28.93	17.77	---------- Well Sampled Annually ----------								
MW-10	04/05/97	46.70	24.18	22.52	---------- Well Sampled Annually ----------								
MW-10	07/01/97	46.70	26.54	20.16	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NP
MW-10	09/08/97	46.70	27.95	18.75	---------- Well Sampled Annually ----------								
MW-10	11/17/97	46.70	28.95	17.75	---------- Well Sampled Annually ----------								
MW-10	03/18/98	46.70	20.50	26.20	---------- Well Sampled Annually ----------								
MW-10	04/30/98	46.70	20.75	25.95	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.2	P
MW-10	08/14/98	46.70	26.71	19.99	---------- Well Sampled Annually ----------								
MW-10	10/13/98	46.70	28.59	18.11	---------- Well Sampled Annually ----------								
MW-10	01/19/99	46.70	28.43	18.27	---------- Well Sampled Annually ----------								
MW-10	04/13/99	46.70	26.43	20.27	---------- Well Sampled Annually ----------								
MW-10	08/11/99	46.70	28.18	18.52	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.13	NP
MW-10	10/26/99	46.70	29.38	17.32	---------- Well Sampled Annually ----------								

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(TPPH as Gasoline, BTEX Compounds, Total Oil and Grease, and MtBE)

ARCO Service Station 0362
29900 Mission Boulevard, Hayward, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	Total Oil and Grease (ppm)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-10	02/14/00	46.70	27.90	18.80	---------- Well Sampled Annually ----------								
MW-11	02/24/96	43.80	22.65	21.15	---------- Well Sampled Annually ----------								
MW-11	05/24/96	43.80	21.35	22.45	<50	<0.5	1.0	<0.5	1.1	NA	NA	NA	
MW-11	08/20/96	43.80	27.32	16.48	---------- Well Sampled Annually ----------								
MW-11	11/12/96	43.80	26.20	17.60	---------- Well Sampled Annually ----------								
MW-11	04/05/97	43.80	21.53	22.27	---------- Well Sampled Annually ----------								
MW-11	07/01/97	43.80	23.90	19.90	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NP
MW-11	09/08/97	43.80	25.29	18.51	---------- Well Sampled Annually ----------								
MW-11	11/17/97	43.80	26.15	17.65	---------- Well Sampled Annually ----------								
MW-11	03/18/98	43.80	18.05	25.75	---------- Well Sampled Annually ----------								
MW-11	04/30/98	43.80	16.36	27.44	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.6	P
MW-11	08/14/98	43.80	24.22	19.58	---------- Well Sampled Annually ----------								
MW-11	10/13/98	43.80	25.92	17.88	---------- Well Sampled Annually ----------								
MW-11	01/19/99	43.80	25.58	18.22	---------- Well Sampled Annually ----------								
MW-11	04/13/99	43.80	23.78	20.02	---------- Well Sampled Annually ----------								
MW-11	08/11/99	43.80	25.43	18.37	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	0.97	NP
MW-11	10/26/99	43.80	Dry	Dry	---------- Well Sampled Annually ----------								
MW-11	02/14/00	43.80	24.90	18.90	---------- Well Sampled Annually ----------								
EW-1	02/24/96	43.92	23.35	20.57	54	0.68	<0.5	<0.5	0.67	NA	NA	NA	
EW-1	05/24/96	43.92	21.80	22.12	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
EW-1	08/20/96	43.92	24.60	19.32	410	<0.5	<0.5	<0.5	<0.5	18	NA	NA	
EW-1	11/12/96	43.92	26.67	17.25	220	<0.5	0.69	<0.5	0.85	17	NA	NA	
EW-1	04/05/97	43.92	22.22	21.70	<50	0.83	<0.5	<0.5	<0.5	9.5	NA	NA	
EW-1	07/01/97	43.92	24.44	19.48	<50	<0.5	<0.5	<0.5	<0.5	61	NA	NA	NP
EW-1	09/08/97	43.92	25.70	18.22	<50	<0.5	<0.5	<0.5	<0.5	63	NA	0.88	
EW-1	11/17/97	43.92	26.45	17.47	<50	<0.5	<0.5	<0.5	<0.5	36	NA	1.0	NP
EW-1	03/18/98	43.92	18.80	25.12	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	NA	P
EW-1	04/30/98	43.92	19.06	24.86	<50	<0.5	<0.5	<0.5	<0.5	14	NA	2.0	P
EW-1	08/14/98	43.92	25.22	18.70	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.0	NP
EW-1	10/13/98	43.92	26.47	17.45	<50	<0.5	<0.5	<0.5	<0.5	16	NA	1.5	NP

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

ARCO Service Station 0362
29900 Mission Boulevard, Hayward, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	Total Oil and Grease (ppm)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
EW-1	01/19/99	43.92	26.07	17.85	<50	<0.5	<0.5	<0.5	<0.5	13	NA	0.5	NP
EW-1	04/13/99	43.92	25.08	18.84	<50	<0.5	<0.5	<0.5	<0.5	6	NA	0.62	NP
EW-1	08/11/99	43.92	25.90	18.02	<50	<0.5	<0.5	<0.5	<0.5	10	NA	1.29	NP
EW-1	10/26/99	43.92	27.08	16.84	<50	<0.5	<0.5	<0.5	<1	10	NA	1.93	NP
EW-1	02/14/00	43.92	25.52	18.40	<50	<0.5	<0.5	<0.5	<1	6	NA	1.03	NP

TPPH = Total purgeable petroleum hydrocarbons by modified EPA method 8015
BTEX = Benzene, toluene, ethylbenzene, total xylenes by EPA method 8021B. (EPA method 8020 prior to 10/26/99).
MTBE = Methyl tert-butyl ether by EPA method 8021B. (EPA method 8020 prior to 10/26/99).
MSL = Mean sea level
TOC = Top of casing
ppb = Parts per billion
ppm = Parts per million
NM = Not measured
NA = Not analyzed
< = Denotes concentration was not present above the laboratory detection limit stated to the right.

Table 2
Groundwater Flow Direction and Gradient

ARCO Service Station 0362
29900 Mission Boulevard, Hayward, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
02/24/96	West	0.004
05/24/96	Southwest	0.004
08/20/96	West	0.004
11/12/96	West	0.003
04/05/97	West	0.004
07/01/97	West	0.004
09/08/97	West-Southwest	0.003
11/17/97	West	0.0008
03/18/98	West	0.005
04/30/98	variable	variable
08/14/98	West-Southwest	0.004
10/13/98	West	0.03
01/19/99	Northwest	0.003
04/13/99	West	0.09
08/11/99	West	0.003
10/26/99	West-Southwest	0.003
02/14/00	**Northwest**	**0.004**

APPPENDIX C

Certified Analytical Reports
And
Chain-of-Custody Documentation

Sequoia Analytical

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2 April, 2002

Steven Meeks
Delta Environmental Consultants (Rancho Cordova)
3164 Gold Camp Drive Ste. 200
Rancho Cordova, CA 95670

RE: ARCO 601, San Leandro, CA
Sequoia Report: S203293

Enclosed are the results of analyses for samples received by the laboratory on 03/19/02 14:06. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ron Chew
Client Services Representative

Lito Diaz
Laboratory Director

CA ELAP Certificate #1624

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JUN 24 2002

Delta Environmental Consultants (Rancho Cordova
3164 Gold Camp Drive Ste. 200
Rancho Cordova CA, 95670

Project: ARCO 601, San Leandro, CA
Project Number: 601, San Leandro, CA
Project Manager: Steven Meeks

Reported:
04/02/02 15:31

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	S203293-01	Water	03/15/02 10:30	03/19/02 14:06
MW-2	S203293-02	Water	03/15/02 09:05	03/19/02 14:06
MW-3	S203293-03	Water	03/15/02 08:20	03/19/02 14:06
MW-4	S203293-04	Water	03/15/02 10:00	03/19/02 14:06
MW-5	S203293-05	Water	03/15/02 09:20	03/19/02 14:06
MW-6	S203293-06	Water	03/15/02 09:40	03/19/02 14:06
MW-7	S203293-07	Water	03/15/02 08:50	03/19/02 14:06
MW-8	S203293-08	Water	03/15/02 08:35	03/19/02 14:06
MW-11	S203293-09	Water	03/15/02 06:30	03/19/02 14:06
MW-12	S203293-10	Water	03/15/02 06:20	03/19/02 14:06
MW-13	S203293-11	Water	03/15/02 06:50	03/19/02 14:06
MW-14	S203293-12	Water	03/15/02 07:00	03/19/02 14:06
MW-15	S203293-13	Water	03/15/02 07:55	03/19/02 14:06
TB	S203293-14	Water	03/15/02 06:00	03/19/02 14:06

Sequoia Analytical - Sacramento

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.

Ron Chew, Client Services Representative

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Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	Reported:
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	04/02/02 15:31

Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (S203293-01) Water Sampled: 03/15/02 10:30 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	**12000**	5000	ug/l	100	2030345	03/25/02	03/25/02	DHS LUFT	
Benzene	**1800**	50	"	"	"	"	"	"	
Toluene	ND	50	"	"	"	"	"	"	
Ethylbenzene	**1400**	50	"	"	"	"	"	"	
Xylenes (total)	**79**	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*112 %*		*60-140*		"	"	"	
MW-2 (S203293-02) Water Sampled: 03/15/02 09:05 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	**100**	50	ug/l	1	2030345	03/25/02	03/25/02	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	**2.5**	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**75**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*105 %*		*60-140*		"	"	"	
MW-3 (S203293-03) Water Sampled: 03/15/02 08:20 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	**43000**	5000	ug/l	100	2030345	03/25/02	03/25/02	DHS LUFT	
Benzene	**1000**	50	"	"	"	"	"	"	
Toluene	**810**	50	"	"	"	"	"	"	
Ethylbenzene	**2300**	50	"	"	"	"	"	"	
Xylenes (total)	**11000**	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*110 %*		*60-140*		"	"	"	

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Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	Reported:
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	04/02/2002 15:31

JUN 2

Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (S203293-04) Water Sampled: 03/15/02 10:00 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	**490**	50	ug/l	1	2030345	03/25/02	03/25/02	DHS LUFT	
Benzene	**34**	0.50	"	"	"	"	"	"	
Toluene	**7.4**	0.50	"	"	"	"	"	"	
Ethylbenzene	**26**	0.50	"	"	"	"	"	"	
Xylenes (total)	**110**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**12**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*110 %*	*60-140*		"	"	"	"	
MW-5 (S203293-05) Water Sampled: 03/15/02 09:20 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	**20000**	5000	ug/l	100	2030373	03/27/02	03/27/02	DHS LUFT	
Benzene	**2600**	50	"	"	"	"	"	"	
Toluene	**3300**	50	"	"	"	"	"	"	
Ethylbenzene	**1000**	50	"	"	"	"	"	"	
Xylenes (total)	**4000**	50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*106 %*	*60-140*		"	"	"	"	
MW-6 (S203293-06) Water Sampled: 03/15/02 09:40 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	**2100**	500	ug/l	10	2030361	03/26/02	03/26/02	DHS LUFT	
Benzene	**380**	5.0	"	"	"	"	"	"	
Toluene	**8.6**	5.0	"	"	"	"	"	"	
Ethylbenzene	**110**	5.0	"	"	"	"	"	"	
Xylenes (total)	**17**	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	25	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*103 %*	*60-140*		"	"	"	"	

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Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	Reported: 04/02 15:31

Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (S203293-07) Water Sampled: 03/15/02 08:50 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	ND	50	ug/l	1	2030345	03/25/02	03/25/02	DHS LUFT	
Benzene	**1.3**	0.50	"	"	"	"	"	"	
Toluene	**2.6**	0.50	"	"	"	"	"	"	
Ethylbenzene	**1.1**	0.50	"	"	"	"	"	"	
Xylenes (total)	**5.4**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*89.5 %*		*60-140*	"	"	"	"	
MW-8 (S203293-08) Water Sampled: 03/15/02 08:35 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	**1100**	1000	ug/l	20	2030361	03/26/02	03/26/02	DHS LUFT	HC-12
Benzene	ND	10	"	"	"	"	"	"	
Toluene	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Methyl tert-butyl ether	**830**	50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*104 %*		*60-140*	"	"	"	"	
MW-11 (S203293-09) Water Sampled: 03/15/02 06:30 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	ND	50	ug/l	1	2030346	03/25/02	03/25/02	DHS LUFT	
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		*88.0 %*		*60-140*	"	"	"	"	

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Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	Reported:
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	04/02/02 15:31

Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-12 (S203293-10) Water Sampled: 03/15/02 06:20 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	ND	50	ug/l	1	2030346	03/25/02	03/25/02	DHS LUFT	
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		*89.3 %*		*60-140*		"	"	"	
MW-13 (S203293-11) Water Sampled: 03/15/02 06:50 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	ND	50	ug/l	1	2030346	03/25/02	03/25/02	DHS LUFT	
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		*87.3 %*		*60-140*		"	"	"	
MW-14 (S203293-12) Water Sampled: 03/15/02 07:00 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	ND	50	ug/l	1	2030346	03/25/02	03/25/02	DHS LUFT	
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		*85.0 %*		*60-140*		"	"	"	

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Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	Reported:
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	06/24/02 15:31

Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-15 (S203293-13) Water Sampled: 03/15/02 07:55 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	ND	50	ug/l	1	2030346	03/25/02	03/25/02	DHS LUFT	
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		*78.7 %*		*60-140*	"	"	"	"	
TB (S203293-14) Water Sampled: 03/15/02 06:00 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	ND	50	ug/l	1	2030346	03/25/02	03/25/02	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*86.9 %*		*60-140*	"	"	"	"	

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Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	Reported:
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	04/02/02 15:31

JUN 24 2002

Total Metals by EPA 200 Series Methods

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (S203293-01) Water Sampled: 03/15/02 10:30 Received: 03/19/02 14:06									
Cadmium	ND	0.0050	mg/l	1	2030311	03/25/02	03/27/02	EPA 200.7	
Chromium	ND	0.0050	"	"	"	"	"	"	
Nickel	ND	0.020	"	"	"	"	"	"	
Lead	ND	0.050	"	"	"	"	"	"	
Zinc	ND	0.020	"	"	"	"	"	"	

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Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	04/02/02 15:31

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (S203293-01) Water Sampled: 03/15/02 10:30 Received: 03/19/02 14:06									
Acenaphthene	ND	50	ug/l	10	2C22016	03/22/02	03/29/02	EPA 8270C	
Acenaphthylene	ND	50	"	"	"	"	"	"	
Aniline	ND	50	"	"	"	"	"	"	
Anthracene	ND	50	"	"	"	"	"	"	
Benzoic acid	ND	100	"	"	"	"	"	"	
Benzo (a) anthracene	ND	50	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	50	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	50	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	50	"	"	"	"	"	"	
Benzo[a]pyrene	ND	50	"	"	"	"	"	"	
Benzyl alcohol	ND	50	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	50	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	50	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	50	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	100	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	50	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	500	"	"	"	"	"	"	
4-Chloroaniline	ND	250	"	"	"	"	"	"	
2-Chloronaphthalene	ND	50	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	50	"	"	"	"	"	"	
2-Chlorophenol	ND	50	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	50	"	"	"	"	"	"	
Chrysene	ND	50	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	100	"	"	"	"	"	"	
Dibenzofuran	ND	50	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	100	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	50	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	100	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	100	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	50	"	"	"	"	"	"	
Diethyl phthalate	ND	50	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	50	"	"	"	"	"	"	
Dimethyl phthalate	ND	50	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	100	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	100	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	100	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	100	"	"	"	"	"	"	

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Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	04/02/02 15:31

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (S203293-01) Water Sampled: 03/15/02 10:30 Received: 03/19/02 14:06									
Di-n-octyl phthalate	ND	100	ug/l	10	2C22016	03/22/02	03/29/02	EPA 8270C	
Fluoranthene	ND	50	"	"	"	"	"	"	
Fluorene	ND	50	"	"	"	"	"	"	
Hexachlorobenzene	ND	100	"	"	"	"	"	"	
Hexachlorobutadiene	ND	100	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	100	"	"	"	"	"	"	
Hexachloroethane	ND	50	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	100	"	"	"	"	"	"	
Isophorone	ND	50	"	"	"	"	"	"	
2-Methylnaphthalene	**220**	50	"	"	"	"	"	"	
2-Methylphenol	ND	50	"	"	"	"	"	"	
4-Methylphenol	ND	50	"	"	"	"	"	"	
Naphthalene	**880**	50	"	"	"	"	"	"	
2-Nitroaniline	ND	100	"	"	"	"	"	"	
3-Nitroaniline	ND	100	"	"	"	"	"	"	
4-Nitroaniline	ND	200	"	"	"	"	"	"	
Nitrobenzene	ND	50	"	"	"	"	"	"	
2-Nitrophenol	ND	50	"	"	"	"	"	"	
4-Nitrophenol	ND	100	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	50	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	50	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	50	"	"	"	"	"	"	
Pentachlorophenol	ND	100	"	"	"	"	"	"	
Phenanthrene	ND	50	"	"	"	"	"	"	
Phenol	ND	50	"	"	"	"	"	"	
Pyrene	ND	50	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	50	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	100	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	100	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		*37 %*		*21-110*	"	"	"	"	
Surrogate: Phenol-d6		*23 %*		*10-110*	"	"	"	"	
Surrogate: Nitrobenzene-d5		*86 %*		*35-114*	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		*73 %*		*43-116*	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		*96 %*		*10-123*	"	"	"	"	
Surrogate: p-Terphenyl-d14		*30 %*		*33-141*	"	"	"	"	*S-BN*

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Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	04/02/02 15:31

Total Purgeable Hydrocarbon, 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 2030345 - EPA 5030B (P/T)										
Blank (2030345-BLK1)				Prepared & Analyzed: 03/25/02						
Purgeable Hydrocarbons	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	*11.1*		"	*10.0*		*111*	*60-140*			
LCS (2030345-BS1)				Prepared & Analyzed: 03/25/02						
Benzene	9.31	0.50	ug/l	10.0		93.1	70-130			
Toluene	10.1	0.50	"	10.0		101	70-130			
Ethylbenzene	10.7	0.50	"	10.0		107	70-130			
Xylenes (total)	30.8	0.50	"	30.0		103	70-130			
Methyl tert-butyl ether	10.9	2.5	"	10.0		109	70-130			
Surrogate: a,a,a-Trifluorotoluene	*12.1*		"	*10.0*		*121*	*60-140*			
LCS Dup (2030345-BSD1)				Prepared & Analyzed: 03/25/02						
Benzene	9.57	0.50	ug/l	10.0		95.7	70-130	2.75	25	
Toluene	10.4	0.50	"	10.0		104	70-130	2.93	25	
Ethylbenzene	10.9	0.50	"	10.0		109	70-130	1.85	25	
Xylenes (total)	31.8	0.50	"	30.0		106	70-130	3.19	25	
Methyl tert-butyl ether	12.5	2.5	"	10.0		125	70-130	13.7	25	
Surrogate: a,a,a-Trifluorotoluene	*11.0*		"	*10.0*		*110*	*60-140*			
Batch 2030346 - EPA 5030B (P/T)										
Blank (2030346-BLK1)				Prepared & Analyzed: 03/25/02						
Purgeable Hydrocarbons	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	*8.88*		"	*10.0*		*88.8*	*60-140*			

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Delta Environmental Consultants (Rancho Cordova	Project:	ARCO 601, San Leandro, CA
3164 Gold Camp Drive Ste. 200	Project Number:	601, San Leandro, CA
Rancho Cordova CA, 95670	Project Manager:	Steven Meeks

Reported: 04/02/02 15:31

Total Purgeable Hydrocarbon, 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 2030346 - EPA 5030B (P/T)										
LCS (2030346-BS1)				Prepared & Analyzed: 03/25/02						
Benzene	7.79	0.50	ug/l	10.0		77.9	70-130			
Toluene	7.91	0.50	"	10.0		79.1	70-130			
Ethylbenzene	8.55	0.50	"	10.0		85.5	70-130			
Xylenes (total)	24.8	0.50	"	30.0		82.7	70-130			
Methyl tert-butyl ether	8.16	2.5	"	10.0		81.6	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.09*		"	*10.0*		*90.9*	*60-140*			
Matrix Spike (2030346-MS1)		**Source: S203291-03**		Prepared & Analyzed: 03/25/02						
Benzene	8.43	0.50	ug/l	10.0	ND	84.3	60-140			
Toluene	8.33	0.50	"	10.0	ND	83.3	60-140			
Ethylbenzene	9.11	0.50	"	10.0	ND	91.1	60-140			
Xylenes (total)	26.5	0.50	"	30.0	ND	88.3	60-140			
Methyl tert-butyl ether	9.44	2.5	"	10.0	ND	87.5	60-140			
Surrogate: a,a,a-Trifluorotoluene	*8.94*		"	*10.0*		*89.4*	*60-140*			
Matrix Spike Dup (2030346-MSD1)		**Source: S203291-03**		Prepared & Analyzed: 03/25/02						
Benzene	8.57	0.50	ug/l	10.0	ND	85.7	60-140	1.65	25	
Toluene	8.61	0.50	"	10.0	ND	86.1	60-140	3.31	25	
Ethylbenzene	9.44	0.50	"	10.0	ND	94.4	60-140	3.56	25	
Xylenes (total)	27.3	0.50	"	30.0	ND	91.0	60-140	2.97	25	
Methyl tert-butyl ether	9.53	2.5	"	10.0	ND	88.4	60-140	0.949	25	
Surrogate: a,a,a-Trifluorotoluene	*9.51*		"	*10.0*		*95.1*	*60-140*			
Batch 2030361 - EPA 5030B (P/T)										
Blank (2030361-BLK1)				Prepared & Analyzed: 03/26/02						
Purgeable Hydrocarbons	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	*10.1*		"	*10.0*		*101*	*60-140*			

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Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	Reported:
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	04/02/02 15:31
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	

Total Purgeable Hydrocarbon, 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 2030361 - EPA 5030B (P/T)										
LCS (2030361-BS1)				Prepared & Analyzed: 03/26/02						
Benzene	8.54	0.50	ug/l	10.0		85.4	70-130			
Toluene	9.50	0.50	"	10.0		95.0	70-130			
Ethylbenzene	10.2	0.50	"	10.0		102	70-130			
Xylenes (total)	29.9	0.50	"	30.0		99.7	70-130			
Methyl tert-butyl ether	10.5	2.5	"	10.0		105	70-130			
Surrogate: a,a,a-Trifluorotoluene	*11.1*		"	*10.0*		*111*	*60-140*			
LCS Dup (2030361-BSD1)				Prepared & Analyzed: 03/26/02						
Benzene	8.79	0.50	ug/l	10.0		87.9	70-130	2.89	25	
Toluene	9.74	0.50	"	10.0		97.4	70-130	2.49	25	
Ethylbenzene	10.4	0.50	"	10.0		104	70-130	1.94	25	
Xylenes (total)	30.9	0.50	"	30.0		103	70-130	3.29	25	
Methyl tert-butyl ether	10.4	2.5	"	10.0		104	70-130	0.957	25	
Surrogate: a,a,a-Trifluorotoluene	*10.2*		"	*10.0*		*102*	*60-140*			
Batch 2030373 - EPA 5030B (P/T)										
Blank (2030373-BLK1)				Prepared & Analyzed: 03/27/02						
Purgeable Hydrocarbons	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	*10.6*		"	*10.0*		*106*	*60-140*			
LCS (2030373-BS1)				Prepared & Analyzed: 03/27/02						
Benzene	9.05	0.50	ug/l	10.0		90.5	70-130			
Toluene	10.2	0.50	"	10.0		102	70-130			
Ethylbenzene	11.0	0.50	"	10.0		110	70-130			
Xylenes (total)	31.9	0.50	"	30.0		106	70-130			
Methyl tert-butyl ether	11.4	2.5	"	10.0		114	70-130			
Surrogate: a,a,a-Trifluorotoluene	*11.6*		"	*10.0*		*116*	*60-140*			

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Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	04/02/02 15:31

Total Purgeable Hydrocarbon, 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 2030373 - EPA 5030B (P/T)										
Matrix Spike (2030373-MS1)	**Source: S203338-01**			Prepared & Analyzed: 03/27/02						
Benzene	8.82	0.50	ug/l	10.0	ND	88.2	60-140			
Toluene	9.98	0.50	"	10.0	ND	99.8	60-140			
Ethylbenzene	10.9	0.50	"	10.0	ND	109	60-140			
Xylenes (total)	32.0	0.50	"	30.0	ND	107	60-140			
Methyl tert-butyl ether	8.72	2.5	"	10.0	ND	87.2	60-140			
Surrogate: a,a,a-Trifluorotoluene	*10.2*		"	*10.0*		*102*	*60-140*			
Matrix Spike Dup (2030373-MSD1)	**Source: S203338-01**			Prepared & Analyzed: 03/27/02						
Benzene	9.24	0.50	ug/l	10.0	ND	92.4	60-140	4.65	25	
Toluene	10.4	0.50	"	10.0	ND	104	60-140	4.12	25	
Ethylbenzene	11.2	0.50	"	10.0	ND	112	60-140	2.71	25	
Xylenes (total)	32.9	0.50	"	30.0	ND	110	60-140	2.77	25	
Methyl tert-butyl ether	10.7	2.5	"	10.0	ND	107	60-140	20.4	25	
Surrogate: a,a,a-Trifluorotoluene	*11.2*		"	*10.0*		*112*	*60-140*			

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Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	04/02/02 15:31

Total Metals by EPA 200 Series Methods - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2030311 - EPA 3010A										
Blank (2030311-BLK1)				Prepared: 03/25/02 Analyzed: 03/27/02						
Cadmium	ND	0.0050	mg/l							
Chromium	ND	0.0050	"							
Lead	ND	0.050	"							
Nickel	ND	0.020	"							
Zinc	ND	0.020	"							
LCS (2030311-BS1)				Prepared: 03/25/02 Analyzed: 03/27/02						
Cadmium	0.510	0.0050	mg/l	0.500		102	80-120			
Chromium	0.502	0.0050	"	0.500		100	80-120			
Lead	0.503	0.050	"	0.500		101	80-120			
Nickel	0.522	0.020	"	0.500		104	80-120			
Zinc	0.515	0.020	"	0.500		103	80-120			
Matrix Spike (2030311-MS1)		**Source: S203326-01**		Prepared: 03/25/02 Analyzed: 03/27/02						
Cadmium	0.486	0.0050	mg/l	0.500	ND	97.2	80-120			
Chromium	0.480	0.0050	"	0.500	0.0053	94.9	80-120			
Lead	0.473	0.050	"	0.500	ND	94.6	80-120			
Nickel	0.505	0.020	"	0.500	ND	99.4	80-120			
Zinc	0.508	0.020	"	0.500	ND	102	80-120			
Matrix Spike Dup (2030311-MSD1)		**Source: S203326-01**		Prepared: 03/25/02 Analyzed: 03/27/02						
Cadmium	0.518	0.0050	mg/l	0.500	ND	104	80-120	6.37	20	
Chromium	0.510	0.0050	"	0.500	0.0053	101	80-120	6.06	20	
Lead	0.503	0.050	"	0.500	ND	101	80-120	6.15	20	
Nickel	0.531	0.020	"	0.500	ND	105	80-120	5.02	20	
Zinc	0.535	0.020	"	0.500	ND	107	80-120	5.18	20	

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Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	Reported:
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	04/02/02 15:31

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2C22016 - EPA 3520B Liq Liquid										
Blank (2C22016-BLK1)				Prepared: 03/22/02 Analyzed: 03/28/02						
Acenaphthene	ND	5.0	ug/l							
Acenaphthylene	ND	5.0	"							
Aniline	ND	5.0	"							
Anthracene	ND	5.0	"							
Benzoic acid	ND	10	"							
Benzo (a) anthracene	ND	5.0	"							
Benzo (b) fluoranthene	ND	5.0	"							
Benzo (k) fluoranthene	ND	5.0	"							
Benzo (ghi) perylene	ND	5.0	"							
Benzo[a]pyrene	ND	5.0	"							
Benzyl alcohol	ND	5.0	"							
Bis(2-chloroethoxy)methane	ND	5.0	"							
Bis(2-chloroethyl)ether	ND	5.0	"							
Bis(2-chloroisopropyl)ether	ND	5.0	"							
Bis(2-ethylhexyl)phthalate	ND	10	"							
4-Bromophenyl phenyl ether	ND	5.0	"							
Butyl benzyl phthalate	ND	50	"							
4-Chloroaniline	ND	25	"							
2-Chloronaphthalene	ND	5.0	"							
4-Chloro-3-methylphenol	ND	5.0	"							
2-Chlorophenol	ND	5.0	"							
4-Chlorophenyl phenyl ether	ND	5.0	"							
Chrysene	ND	5.0	"							
Dibenz (a,h) anthracene	ND	10	"							
Dibenzofuran	ND	5.0	"							
Di-n-butyl phthalate	ND	10	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	10	"							
3,3'-Dichlorobenzidine	ND	10	"							
2,4-Dichlorophenol	ND	5.0	"							
Diethyl phthalate	ND	5.0	"							
2,4-Dimethylphenol	ND	5.0	"							
Dimethyl phthalate	ND	5.0	"							
4,6-Dinitro-2-methylphenol	ND	10	"							
2,4-Dinitrophenol	ND	10	"							

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Sacramento, CA 95834
(916) 921-9600
FAX (916) 921-0100
www.sequoialabs.com

Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	04/02/02 15:31

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2C22016 - EPA 3520B Liq Liquid										
Blank (2C22016-BLK1)				Prepared: 03/22/02 Analyzed: 03/28/02						
2,4-Dinitrotoluene	ND	10	ug/l							
2,6-Dinitrotoluene	ND	10	"							
Di-n-octyl phthalate	ND	10	"							
Fluoranthene	ND	5.0	"							
Fluorene	ND	5.0	"							
Hexachlorobenzene	ND	10	"							
Hexachlorobutadiene	ND	10	"							
Hexachlorocyclopentadiene	ND	10	"							
Hexachloroethane	ND	5.0	"							
Indeno (1,2,3-cd) pyrene	ND	10	"							
Isophorone	ND	5.0	"							
2-Methylnaphthalene	ND	5.0	"							
2-Methylphenol	ND	5.0	"							
4-Methylphenol	ND	5.0	"							
Naphthalene	ND	5.0	"							
2-Nitroaniline	ND	10	"							
3-Nitroaniline	ND	10	"							
4-Nitroaniline	ND	20	"							
Nitrobenzene	ND	5.0	"							
2-Nitrophenol	ND	5.0	"							
4-Nitrophenol	ND	10	"							
N-Nitrosodimethylamine	ND	5.0	"							
N-Nitrosodiphenylamine	ND	5.0	"							
N-Nitrosodi-n-propylamine	ND	5.0	"							
Pentachlorophenol	ND	10	"							
Phenanthrene	ND	5.0	"							
Phenol	ND	5.0	"							
Pyrene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
2,4,5-Trichlorophenol	ND	10	"							
2,4,6-Trichlorophenol	ND	10	"							
Surrogate: 2-Fluorophenol	*28.1*		"	*150*		*19*	*21-110*			*S-AC*
Surrogate: Phenol-d6	*21.8*		"	*150*		*15*	*10-110*			
Surrogate: Nitrobenzene-d5	*38.3*		"	*100*		*38*	*35-114*			
Surrogate: 2-Fluorobiphenyl	*35.2*		"	*100*		*35*	*43-116*			*S-LIM*
Surrogate: 2,4,6-Tribromophenol	*35.8*		"	*150*		*24*	*10-123*			

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3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	Reported:
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	04/02/02 15:31

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2C22016 - EPA 3520B Liq Liquid										
Blank (2C22016-BLK1)				Prepared: 03/22/02 Analyzed: 03/28/02						
Surrogate: p-Terphenyl-d14	*23.5*		*ug/l*	*100*		*24*	*33-141*			*S-LIM*
LCS (2C22016-BS1)				Prepared: 03/22/02 Analyzed: 03/28/02						
Acenaphthene	62.4	5.0	ug/l	100		62	46-118			
4-Chloro-3-methylphenol	40.1	5.0	"	150		27	23-97			
2-Chlorophenol	43.0	5.0	"	150		29	27-123			
1,4-Dichlorobenzene	56.2	10	"	100		56	36-97			
2,4-Dinitrotoluene	63.3	10	"	100		63	24-96			
4-Nitrophenol	17.2	10	"	150		11	10-80			
N-Nitrosodi-n-propylamine	66.6	5.0	"	100		67	41-116			
Pentachlorophenol	41.6	10	"	150		28	9-103			
Phenol	25.3	5.0	"	150		17	12-110			
Pyrene	54.3	5.0	"	100		54	26-127			
1,2,4-Trichlorobenzene	56.4	5.0	"	100		56	39-98			
Surrogate: 2-Fluorophenol	*30.6*		*"*	*150*		*20*	*21-110*			*S-AC*
Surrogate: Phenol-d6	*25.2*		*"*	*150*		*17*	*10-110*			
Surrogate: Nitrobenzene-d5	*67.8*		*"*	*100*		*68*	*35-114*			
Surrogate: 2-Fluorobiphenyl	*66.9*		*"*	*100*		*67*	*43-116*			
Surrogate: 2,4,6-Tribromophenol	*48.1*		*"*	*150*		*32*	*10-123*			
Surrogate: p-Terphenyl-d14	*51.5*		*"*	*100*		*52*	*33-141*			
LCS Dup (2C22016-BSD1)				Prepared: 03/22/02 Analyzed: 03/28/02						
Acenaphthene	70.6	5.0	ug/l	100		71	46-118	12	30	
4-Chloro-3-methylphenol	87.6	5.0	"	150		58	23-97	74	30	QR-02
2-Chlorophenol	87.7	5.0	"	150		58	27-123	68	30	QR-02
1,4-Dichlorobenzene	60.1	10	"	100		60	36-97	7	30	
2,4-Dinitrotoluene	73.2	10	"	100		73	24-96	15	30	
4-Nitrophenol	28.3	10	"	150		19	10-80	49	30	QR-02
N-Nitrosodi-n-propylamine	69.9	5.0	"	100		70	41-116	5	30	
Pentachlorophenol	102	10	"	150		68	9-103	84	30	QR-02
Phenol	33.9	5.0	"	150		23	12-110	29	30	
Pyrene	63.4	5.0	"	100		63	26-127	15	30	
1,2,4-Trichlorobenzene	61.8	5.0	"	100		62	39-98	9	30	
Surrogate: 2-Fluorophenol	*48.1*		*"*	*150*		*32*	*21-110*			
Surrogate: Phenol-d6	*32.5*		*"*	*150*		*22*	*10-110*			
Surrogate: Nitrobenzene-d5	*68.2*		*"*	*100*		*68*	*35-114*			
Surrogate: 2-Fluorobiphenyl	*72.4*		*"*	*100*		*72*	*43-116*			

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Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	Reported:
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	04/02/02 15:31

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2C22016 - EPA 3520B Liq Liquid										
LCS Dup (2C22016-BSD1)				Prepared: 03/22/02 Analyzed: 03/28/02						
Surrogate: 2,4,6-Tribromophenol	*112*		*ug/l*	*150*		*75*	*10-123*			
Surrogate: p-Terphenyl-d14	*56.9*		*"*	*100*		*57*	*33-141*			

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3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	04/02/02 15:31

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.
QR-02	The RPD result exceeded the control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
S-AC	Acid surrogate recovery outside control limits. The data was accepted based on valid recovery of remaining two acid surrogates.
S-BN	Base/Neutral surrogate recovery outside control limits. The data was accepted based on valid recovery of remaining two base/neutral surrogates.
S-LIM	The surrogate recovery was outside control limits. The result may still be useful for its intended purpose.
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

Sequoia
Analytical

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28 March, 2002

Steven Meeks
Delta Environmental Consultants (Rancho Cordova)
3164 Gold Camp Drive Ste. 200
Rancho Cordova, CA 95670

RE: ARCO 601, San Leandro, CA
Sequoia Report: S203294

Enclosed are the results of analyses for samples received by the laboratory on 03/19/02 14:06. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ron Chew
Client Services Representative

Lito Diaz
Laboratory Director

CA ELAP Certificate #1624

Sequoia Analytical

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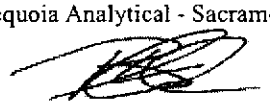
Delta Environmental Consultants (Rancho Cordova	Project: ARCO 601, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/28/02 13:50

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-9	S203294-01	Water	03/15/02 07:40	03/19/02 14:06
MW-10	S203294-02	Water	03/15/02 07:17	03/19/02 14:06

Sequoia Analytical - Sacramento



Ron Chew, Client Services Representative

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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3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/28/02 13:50

Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-9 (S203294-01) Water Sampled: 03/15/02 07:40 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	ND	50	ug/l	1	2030346	03/25/02	03/26/02	DHS LUFT	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*90.2 %*		*60-140*	"	"	"	"	
MW-10 (S203294-02) Water Sampled: 03/15/02 07:17 Received: 03/19/02 14:06									
Purgeable Hydrocarbons	ND	50	ug/l	1	2030346	03/25/02	03/26/02	DHS LUFT	
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		*81.1 %*		*60-140*	"	"	"	"	

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3164 Gold Camp Drive Ste. 200	Project Number: 601, San Leandro, CA	Reported:
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/28/02 13:50

Total Purgeable Hydrocarbon, 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 2030346 - EPA 5030B (P/T)										
Blank (2030346-BLK1)				Prepared & Analyzed: 03/25/02						
Purgeable Hydrocarbons	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	*8.88*		"	*10.0*		*88.8*	*60-140*			
LCS (2030346-BS1)				Prepared & Analyzed: 03/25/02						
Benzene	7.79	0.50	ug/l	10.0		77.9	70-130			
Toluene	7.91	0.50	"	10.0		79.1	70-130			
Ethylbenzene	8.55	0.50	"	10.0		85.5	70-130			
Xylenes (total)	24.8	0.50	"	30.0		82.7	70-130			
Methyl tert-butyl ether	8.16	2.5	"	10.0		81.6	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.09*		"	*10.0*		*90.9*	*60-140*			
Matrix Spike (2030346-MS1)		**Source: S203291-03**		Prepared & Analyzed: 03/25/02						
Benzene	8.43	0.50	ug/l	10.0	ND	84.3	60-140			
Toluene	8.33	0.50	"	10.0	ND	83.3	60-140			
Ethylbenzene	9.11	0.50	"	10.0	ND	91.1	60-140			
Xylenes (total)	26.5	0.50	"	30.0	ND	88.3	60-140			
Methyl tert-butyl ether	9.44	2.5	"	10.0	ND	87.5	60-140			
Surrogate: a,a,a-Trifluorotoluene	*8.94*		"	*10.0*		*89.4*	*60-140*			
Matrix Spike Dup (2030346-MSD1)		**Source: S203291-03**		Prepared & Analyzed: 03/25/02						
Benzene	8.57	0.50	ug/l	10.0	ND	85.7	60-140	1.65	25	
Toluene	8.61	0.50	"	10.0	ND	86.1	60-140	3.31	25	
Ethylbenzene	9.44	0.50	"	10.0	ND	94.4	60-140	3.56	25	
Xylenes (total)	27.3	0.50	"	30.0	ND	91.0	60-140	2.97	25	
Methyl tert-butyl ether	9.53	2.5	"	10.0	ND	88.4	60-140	0.949	25	
Surrogate: a,a,a-Trifluorotoluene	*9.51*		"	*10.0*		*95.1*	*60-140*			

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Rancho Cordova CA, 95670	Project Manager: Steven Meeks	03/28/02 13:50

JUN 24 2002

Notes and Definitions

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

Work Authorization No. 2599000

Chain of Custody

ARCO Facility No. 601	City (Facility) SAN Leandro CA	Project Manager (Consultant) STeven Meeks		Laboratory name Sequoia
ARCO engineer Paul supple	Telephone no. (ARCO)	Telephone no. (Consultant) 6382085	Fax no. (Consultant) 6388385	Contract number
Company name (Consultant) Delta	Address (Consultant) Rancho Cordova			

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8021	BTEX/TPH MTBE EPA M602/8021/8015	TPH Modified 8015 Gas ☐ Diesel ☐	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	BTEX + MTBE EPA 8260	BTEX + Standard Oxygenates EPA 8260	TCLP Metals☐ VOA☐ Semi VOA☐	CAM Metals EPA 6010/7000 TTLC☐ STLC☐	Lead Org/DHS ☐ Lead EPA 7420/7421 ☐	SVOC 8270	Metals Pb, Zn, Cd, Cr, Ni	
MW-1		7		X		X	X	3-15-02	10:30		X			S203293				-01		X	X	
MW-2		2							9:05									-02				
MW-3									8:20									-03				
MW-4									10:00									-04				
MW-5									9:20									-05				
MW-6									9:40									-06				
MW-7									8:50									-07				
MW-8									8:35									-08				
~~MW-9~~									~~7:40~~									~~-09~~				
~~MW-10~~									~~7:17~~									-				
MW-11									6:30									-09				
MW-12									6:20									-10				
MW-13									6:50									-11				
MW-14									7:00									-12				
MW-15									7:55									-13				
TB		2							600									-14				

Condition of sample:			Temperature received: 7°C		
Relinquished by sampler [signature]	Date 3-19-02	Time 1406	Received by Monica Gregsen	3/19/02	1406
Relinquished by	Date	Time	Received by		
Relinquished by	Date	Time	Received by laboratory	Date	Time

Method of shipment

Special detection Limit/reporting

Special QA/QC

Remarks

Type of Work
- ☐ Dispenser Work
- ☐ Line Job
- ☐ Routine Sampling
- ☐ Site Acquisitions
- ☐ Site Assessment
- ☐ UST Removal
- ☐ UST Replacement
- ☐ Other ______

Lab number

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

JUN 2 4 2002

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APC-3292 (2-01)

Delta Environmental Consultants, Inc.
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Rancho Cordova, California 95670
Direct: (916) 638-2085
Fax: (916) 638-8385

Arco Site Address: 712 Lewelling Blvd. San Leandro, CA
Arco Site Number: 601
Delta Project No.: D000-303
Arco Project Manager: Paul Supple
Delta Project PM: Steven W. Meeks
Site Contact & Phone Number:
Site Sampled By: Doulos
Date Sampled: 03/15/02

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	SVOCs (8270) VOA	Dissolved Oxygen (mg/L)	Sample Frequency (A, S, Q)	Sample I.D.	Sample Time
MW-1	5:40	7.89	7.0	10.8	☑	2.89	4 inch	2.0	5.8	NP	☑	☑	☑	☑	NM	Q/2,5,8,11	MW-1	10:30
MW-2	5:43	6.84	8.0	12.1	☐	5.30	4 inch	2.0	10.6	10.5	☑	☑	☑	☐	NM	A/2	MW-2	9:05
MW-3	5:46	7.02	8.0	11.8	☐	4.79	4 inch	2.0	9.6	9.66	☑	☑	☑	☐	NM	Q/2,5,8,11	MW-3	8:20
MW-4	5:48	7.43	NM	8.3	☐	0.83	4 inch	2.0	1.7	1.74	☑	☑	☑	☐	NM	Q/2,5,8,11	MW-4	10:00
MW-5	5:50	6.90	NM	8.0	☐	1.07	4 inch	2.0	2.1	2.2	☑	☑	☑	☐	NM	Q/2,5,8,11	MW-5	9:20
MW-6	5:53	7.51	NM	8.4	☐	0.91	4 inch	2.0	1.8	19.8	☑	☑	☑	☐	NM	Q/2,5,8,11	MW-6	9:40
MW-7	5:56	8.54	NM	9.4	☐	0.83	4 inch	2.0	1.7	1.7	☑	☑	☑	☐	NM	Q/2,5,8,11	MW-7	8:50
MW-8	5:58	6.94	NM	10.1	☐	3.16	4 inch	2.0	6.3	6.1	☑	☑	☑	☐	NM	Q/2,5,8,11	MW-8	9:35
MW-9	5:35	7.23	NM	15.9	☐	8.71	2 inch	0.5	4.4	4.3	☑	☑	☑	☐	NM	S/2,8	MW-9	7:40
MW-10	5:33	7.48	NM	11.9	☐	4.44	2 inch	0.5	2.2	2.2	☑	☑	☑	☐	NM	Q/2,5,8,11	MW-10	7:17
MW-11	6:00	7.87	7.0	11.6	☑	3.71	4 inch	2.0	7.4	NP	☑	☑	☑	☐	NM	A/2	MW-11	6:30
MW-12	6:05	8.22	7.5	11.1	☑	2.92	4 inch	2.0	5.8	NP	☑	☑	☑	☐	NM	A/2	MW-12	6:20
MW-13	6:13	7.62	NM	12.7	☐	5.06	2 inch	0.5	2.5	2.5	☑	☑	☑	☐	NM	A/2	MW-13	6:50
MW-14	6:15	8.75	7.5	12.6	☑	3.86	2 inch	0.5	1.9	NP	☑	☑	☑	☐	NM	Q/2,5,8,11	MW-14	7:00
MW-15	6:03	5.68	NM	9.8	☐	4.13	2 inch	0.5	2.1	2.6	☑	☑	☑	☐	NM	S/2,8	MW-15	7:55
					☐						☐	☐	☐	☐				
					☐	**Note: Use Separate COC for Samples collected from wells MW-9 and MW-10**					☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
					☐	**Note: Sample well MW-1 for Metals Annually in February (Cd, Cr, Pb, Ni & Zn)**					☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				

(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: **Annual:** MW-11, MW-12, MW-13, MW-2; **Semi-Annual:** MW-9, MW-15
Quarterly: MW-10,MW-14,MW-7,MW-8,MW-4,MW-6,MW-5,MW-1,MW-3

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. ***Sample MW-1 for Metals Annually in February.**

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

Site Contact & Phone Number: ____________________

Arco Site Address:	712 Lewelling Blvd.
	San Leandro, CA
Arco Project Manager:	Paul Supple
Site Sampled By:	Doulos
Arco Site Number:	601
Delta Project No.:	D000-303
Delta Project PM:	Steven W. Meeks
Date Sampled:	3/15/02

Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons
MW-1	No Purge Required				
MW-2	8:52	16.8	7.00	774	4
	8:53	17.7	7.90	847	7
	8:54	18.3	7.74	864	11
MW-3	8:05	15.3	7.45	573	3.2
	8:06	17.0	7.21	575	6.4
	8:07	17.2	7.06	630	9.6
MW-4	9:46	12.8	7.15	847	0.58
	9:48	17.3	7.09	853	0.87
	9:50	17.5	7.06	857	1.74
MW-5	9:07	20.0	7.38	936	0.7
	9:08	19.8	7.34	1,040	1.1
	9:09	19.4	7.30	1,011	2.2
MW-6	9:25	15.9	7.31	992	0.5
	9:26	14.0	7.28	1,003	1.0
	9:27	14.0	7.21	1,014	1.7
MW-7	8:40	16.4	7.24	778	0.5
	8:41	16.8	7.18	755	1.0
	14:42	17.0	7.12	739	1.7

Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons
MW-8	8:24	15.5	7.24	603	2
	8:26	16.8	7.16	609	4
	8:28	16.7	7.08	572	6
MW-9	7:25	17.7	7.06	752	1.4
	7:26	17.9	7.04	750	2.8
	7:27	18.7	7.03	745	4.3
MW-10	7:06	16.4	6.98	761	0.7
	7:07	16.7	6.99	784	1.6
	7:08	17.3	7.06	821	2.2
MW-11	No Purge Required				
MW-12	No Purge Required				
MW-13	6:35	16.5	7.25	755	0.8
	6:36	16.4	7.15	762	1.6
	6:37	16.5	7.08	787	2.5
MW-14	No Purge Required				

Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons
MW-15	7:45	14.8	7.06	598	0.6
	7:46	15.4	7.04	539	1.6
	7:47	16.7	7.03	472	2.6

Notes: NP = NO PURGE

Original Copies of Field Sampling Sheets are Located in Project File