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March 7, 2001

MAR 16 2001

ST ID 1259

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

Subject: *Quarterly Groundwater Monitoring Report, Fourth Quarter 2000*
ARCO Service Station No. 2162
15135 Hesperian Boulevard
San Leandro, California
Project No. D000-310

Dear Mr. Supple:

Delta Environmental Consultants, Inc. is submitting the attached report that presents the results of the fourth quarter 2000 groundwater monitoring program at ARCO Products Company Service Station No. 2162, located at 15135 Hesperian 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
Project Engineer

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

TLA (Lrp003.310.doc)
Enclosures

cc: Mr. Scott Seery – Alameda County Health Care Services Agency
Mr. John Jang – California Regional Water Quality Control Board, San Francisco Bay Region
Mr. Mike Makaldin – City of San Leandro Fire Department

Date: March 7, 2001

ARCO QUARTERLY GROUNDWATER MONITORING REPORT

Station No.: 2162 Address:	15135 Hesperian Boulevard, 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.:	D000-310
Primary Agency/Regulatory ID No.	Alameda County Health Care Services Agency

WORK PERFORMED THIS QUARTER

1. Performed quarterly groundwater monitoring for fourth quarter 2000.

WORK PROPOSED FOR NEXT QUARTER

1. Prepare and submit quarterly groundwater monitoring report for fourth quarter 2000.
2. Perform quarterly groundwater monitoring and sampling for first quarter 2001.

QUARTERLY MONITORING:

Current Phase of Project	Monitoring
Frequency of Groundwater Sampling:	Quarterly: MW-1, MW-2, MW-3, MW-4
Frequency of Groundwater Monitoring:	Quarterly
Is Free Product (FP) Present On–Site:	No
FP Recovered this Quarter:	N/A
Cumulative FP Recovered to Date:	None
Bulk Soil Removed This Quarter:	None
Bulk Soil Removed to Date:	None
Current Remediation Techniques:	Natural Attenuation
Approximate Depth to Groundwater:	8.42 feet
Groundwater Gradient:	0.010 ft/ft toward southwest

DISCUSSION:

- Ethylbenzene was detected in a sample collected from MW-2 at 0.659 µg/L.
- Total petroleum hydrocarbons as gasoline were detected in a sample collected from MW-2 at 175 µg/L.
- MTBE was detected in samples collected from MW-3 and MW-4 at 46.7 µg/L and 5.81 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 Sampling Data

TABLE 1

GROUNDWATER ANALYTICAL DATA

ARCO Service Station No. 2162
15135 Hesperian 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)
MW-1	6/20/00	31.19	8.33	22.86	<0.5	0.8	<0.5	<1.0	<50	<10
	9/29/00		9.07	22.12	<0.5	<0.5	<0.5	<0.5	<50	<2.5
	12/17/00		8.69	22.50	<0.5	<0.5	<0.5	<0.5	<50	<2.5
MW-2	6/20/00	30.38	7.38	23.00	NS	NS	NS	NS	NS	NS
	9/29/00		8.08	22.30	<0.5	<0.5	<0.5	<0.5	266	<2.5
	12/17/00		7.80	22.58	<0.5	<0.5	0.659	<0.5	175	<2.5
MW-3	6/20/00	30.30	7.75	22.55	NS	NS	NS	NS	NS	NS
	9/29/00		8.46	21.84	<0.5	<0.5	<0.5	<0.5	<50	128
	12/17/00		8.01	22.29	<0.5	<0.5	<0.5	<0.5	<50	46.7
MW-4	6/20/00	30.39	8.87	21.52	NS	NS	NS	NS	NS	NS
	9/29/00		9.61	20.78	1.02	<0.5	<0.5	<0.5	<50	12.2
	12/17/00		9.17	21.22	<0.5	<0.5	<0.5	<0.5	<50	5.81

TPH = Total Petroleum Hydrocarbons

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

µg/L = Micrograms per liter

NS = Not sampled

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

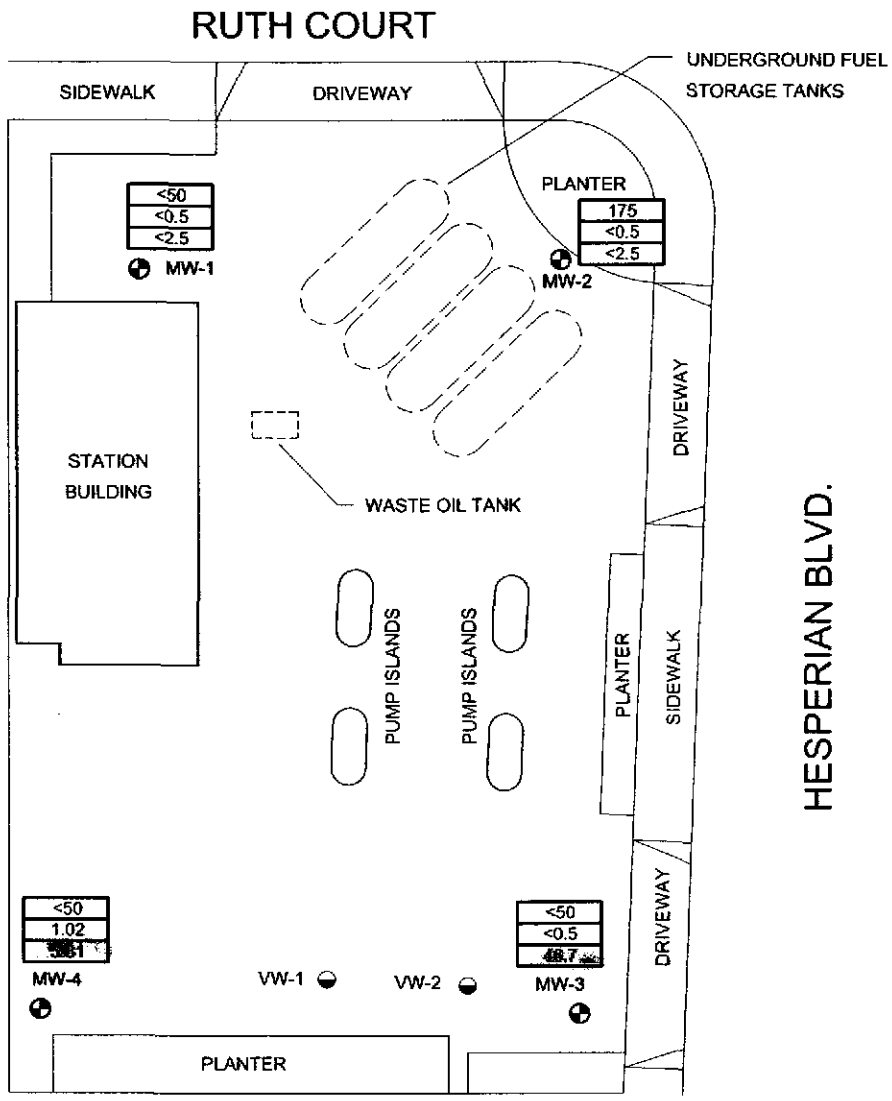
TABLE 2

GROUNDWATER FLOW DIRECTION AND GRADIENT

ARCO Service Station No. 2162
15135 Hesperian Boulevard
San Leandro, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
06/20/00	Southwest	0.010
09/29/00	Southwest	0.010
12/17/00	Southwest	0.010

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.

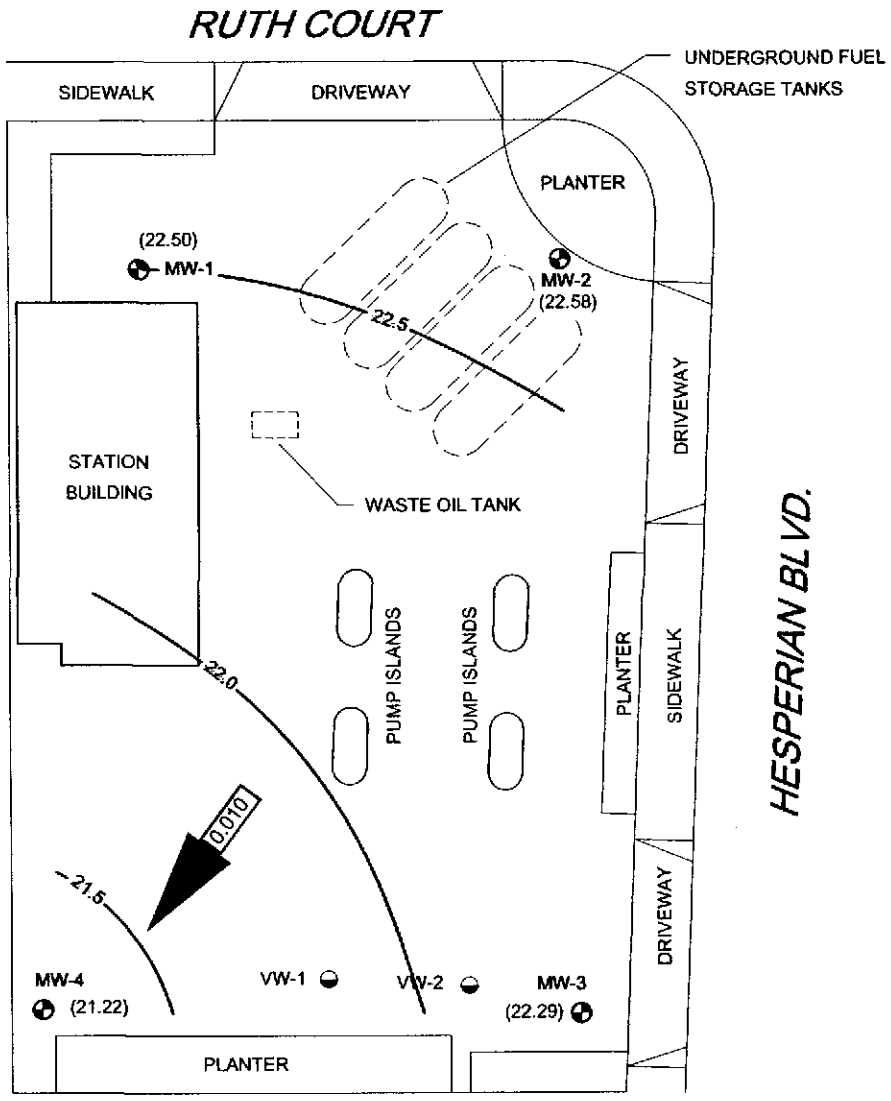
LEGEND:

MW-1	MONITORING WELL LOCATION
VW-1	SOIL VAPOR EXTRACTION WELL LOCATION
<50	TPH AS GASOLINE IN MICROGRAMS PER LITER
<0.5	BENZENE IN MICROGRAMS PER LITER
<10	MTBE IN MICROGRAMS PER LITER
NS	NOT SAMPLED

FIGURE 1
GROUND WATER ANALYTICAL SUMMARY
FOURTH QUARTER 2000 (12/17/00)
ARCO STATION NO. 2162
15135 HESPERIAN BOULEVARD
SAN LEANDRO, CALIFORNIA

PROJECT NO. D000-310	DRAWN BY TLA 2/2/01
FILE NO. 2162-1	PREPARED BY TLA
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.



North

0 30 FT

SCALE

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

LEGEND:

MW-1	MONITORING WELL LOCATION
VW-1	SOIL VAPOR EXTRACTION WELL LOCATION
(22.50)	GROUND WATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL)
22.0	WATER TABLE CONTOUR IN FEET ABOVE MSL
	GROUND WATER FLOW DIRECTION
0.010	APPROXIMATE GROUND WATER FLOW GRADIENT

FIGURE 2
GROUND WATER ELEVATION CONTOUR MAP
THIRD QUARTER 2000 (9/29/00)
ARCO STATION NO. 2162
15135 HESPERIAN BOULEVARD
SAN LEANDRO, CALIFORNIA

PROJECT NO. D000-310	DRAWN BY TLA 8/2/00
FILE NO. 2162-1	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, and MTBE)

ARCO Service Station 2162
15135 Hesperian Boulevard, San Leandro, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-1	02/26/96	31.19	7.14	24.05	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
MW-1	05/23/96	31.19	7.70	23.49	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
MW-1	08/21/96	31.19	8.75	22.44	210	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-1	11/20/96	31.19	8.62	22.57	91	<0.5	<0.5	<0.5	<0.5	2.6	NA	NA	
MW-1	04/01/97	31.19	8.70	22.49	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NP
MW-1	06/10/97	31.19	8.45	22.74	94	<0.5	<0.5	0.68	0.56	6.4	NA	NA	NP
MW-1	09/17/97	31.19	9.20	21.99	<50	<0.5	<0.5	<0.5	<0.5	10	NA	1.0	NP
MW-1	12/12/97	31.19	8.00	23.19	<200	<2	<2	<2	<2	180	NA	2.0	NP
MW-1	03/25/98	31.19	7.00	24.19	<200	<2	<2	3	<2	180	NA	2.0	
MW-1	05/14/98	31.19	7.46	23.73	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.17	P
MW-1	07/31/98	31.19	8.10	23.09	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.0	NP
MW-1	10/12/98	31.19	8.60	22.59	<50	<0.5	<0.5	<0.5	<0.5	9	NA	2.5	NP
MW-1	02/11/99	31.19	7.32	23.87	<50	<0.5	<0.5	<0.5	<0.5	25	NA	1.0	P
MW-1	06/23/99	31.19	8.40	22.79	55	<0.5	<0.5	<0.5	<0.5	<3	NA	1.36	NP
MW-1	08/23/99	31.19	8.85	22.34	<50	<0.5	0.6	<0.5	<0.5	5	NA	1.42	NP
MW-1	10/27/99	31.19	8.50	22.69	<50	<0.5	<0.5	<0.5	<1	90	NA	0.83	NP
MW-1	02/09/00	31.19	8.11	23.08	<50	<0.5	<0.5	<0.5	<1	9	NA	0.77	NP
MW-2	02/26/96	30.38	6.41	23.97	770	<0.5	<0.5	45	28	NA	NA	NA	
MW-2	05/23/96	30.38	6.80	23.58	590	0.50	<0.5	35	18	NA	NA	NA	
MW-2	08/21/96	30.38	7.80	22.58	170	<0.5	<0.5	21	6.3	<2.5	NA	NA	
MW-2	11/20/96	30.38	7.73	22.65	88	<0.5	<0.5	7.9	1.1	<2.5	NA	NA	
MW-2	04/01/97	30.38	7.83	22.55	66	<0.5	<0.5	3.6	0.56	33	NA	NA	
MW-2	06/10/97	30.38	7.52	22.86	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NP
MW-2	09/17/97	30.38	8.24	22.14	<50	<0.5	<0.5	<0.5	<0.5	<3.0	NA	0.6	NP
MW-2	12/12/97	30.38	7.10	23.28	<50	<0.5	<0.5	<0.5	<0.5	<3.0	NA	1.2	NP
MW-2	03/25/98	30.38	6.27	24.11	<50	<0.5	<0.5	0.7	0.5	55	NA	1.0	
MW-2	05/14/98	30.38	6.54	23.84	210	<0.5	<0.5	3.3	<0.5	42	NA	1.47	P
MW-2	07/31/98	30.38	7.14	23.24	230	<0.5	<0.5	3.9	<0.5	6	NA	1.0	P

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

ARCO Service Station 2162
15135 Hesperian Boulevard, San Leandro, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-2	10/12/98	30.38	7.65	22.73	110	<0.5	<0.5	1.5	<0.5	<3	NA	1.0	P
MW-2	02/11/99	30.38	6.55	23.83	660	<0.5	<0.5	6.7	0.7	3	NA	1.0	P
MW-2	06/23/99	30.38	7.48	22.90	270	<0.5	<0.5	2.2	0.8	<3	NA	NM	P
MW-2	08/23/99	30.38	7.89	22.49	200	<0.5	0.9	1.8	<0.5	<3	NA	1.17	P
MW-2	10/27/99	30.38	8.30	22.08	2,100	1.0	2.5	14	3	3	NA	0.75	NP
MW-2	02/09/00	30.38	8.02	22.36	<50	<0.5	<0.5	<0.5	<1	5	NA	0.69	NP
MW-3	02/26/96	30.30	6.72	23.58	120	5.0	<0.5	<0.5	<0.5	NA	NA	NA	
MW-3	05/23/96	30.30	7.18	23.12	140	12	<0.5	<0.5	<0.5	NA	NA	NA	
MW-3	08/21/96	30.30	8.17	22.13	<50	1.1	<0.5	<0.5	<0.5	130	NA	NA	
MW-3	11/20/96	30.30	8.03	22.27	55	<0.5	<0.5	<0.5	<0.5	59	NA	NA	
MW-3	04/01/97	30.30	8.09	22.21	<50	<0.5	<0.5	<0.5	<0.5	180	NA	NA	NP
MW-3	06/10/97	30.30	7.97	22.33	<50	<0.5	<0.5	<0.5	<0.5	1,900	NA	NA	NP
MW-3	09/12/97	30.30	8.54	21.76	<5,000	<50	<50	<50	<50	1,100	860	2.2	NP
MW-3	12/12/97	30.30	7.50	22.80	560	<5.0	<5.0	<5.0	5.0	370	NA	1.4	NP
MW-3	03/25/98	30.30	6.60	23.70	<500	<5	<5	<5	<5	470	NA	1.0	
MW-3	05/14/98	30.30	7.13	23.17	750	<5	<5	<5	<5	630	NA	1.97	P
MW-3	07/31/98	30.30	7.58	22.72	<500	<5	<5	<5	<5	590	NA	1.0	P
MW-3	10/12/98	30.30	8.00	22.30	<500	<5	<5	<5	<5	600	NA	2.0	P
MW-3	02/11/99	30.30	6.90	23.40	<500	<5	<5	<5	<5	280	NA	1.0	P
MW-3	06/23/99	30.30	7.82	22.48	220	<0.5	3.2	<0.5	<0.5	740	NA	1.98	P
MW-3	08/23/99	30.30	8.28	22.02	<50	<0.5	1.1	<0.5	<0.5	230	NA	1.20	P
MW-3	10/27/99	30.30	9.27	21.03	<50	<0.5	<0.5	<0.5	<1	<3	NA	0.81	NP
MW-3	02/09/00	30.30	7.45	22.85	<50	<0.5	<0.5	<0.5	<1	80	NA	0.81	P
MW-4	02/26/96	30.39	7.59	22.80	110	9.9	<0.5	<0.5	<0.5	NA	NA	NA	
MW-4	05/23/96	30.39	8.22	22.17	69	8.0	<0.5	<0.5	<0.5	NA	NA	NA	
MW-4	08/21/96	30.39	9.28	21.11	<50	6.8	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-4	11/20/96	30.39	9.12	21.27	95	10	0.59	<0.5	0.52	3.8	NA	NA	

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

ARCO Service Station 2162
15135 Hesperian Boulevard, San Leandro, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-4	04/01/97	30.39	8.45	21.94	73	5.7	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-4	06/10/97	30.39	9.00	21.39	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NP
MW-4	09/17/97	30.39	9.76	20.63	<50	3.2	<0.5	<0.5	<0.5	8.0	NA	0.2	NP
MW-4	12/12/97	30.39	8.45	21.94	<50	2.9	<0.5	<0.5	<0.5	14	NA	1.0	NP
MW-4	03/25/98	30.39	7.52	22.87	58	2.8	<0.5	<0.5	<0.5	<3	NA	3.0	
MW-4	05/14/98	30.39	8.03	22.36	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	3.24	NP
MW-4	07/31/98	30.39	8.67	21.72	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.0	NP
MW-4	10/12/98	30.39	9.15	21.24	<50	<0.5	<0.5	<0.5	<0.5	4	NA	1.5	NP
MW-4	02/11/99	30.39	7.80	22.59	61	2.5	<0.5	<0.5	<0.5	6	NA	1.0	P
MW-4	06/23/99	30.39	9.00	21.39	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.42	NP
MW-4	08/23/99	30.39	9.31	21.08	<50	<0.5	<0.5	<0.5	<0.5	6	NA	1.53	NP
MW-4	10/27/99	30.39	9.80	20.59	<50	<0.5	<0.5	<0.5	<1	6	NA	0.98	NP
MW-4	02/09/00	30.39	8.63	21.76	<50	<0.5	<0.5	<0.5	<1	7	NA	0.74	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 10/27/99).
MTBE = Methyl tert -Butyl Ether
* = EPA method 8020 prior to 10/27/99
MSL = Mean sea level
TOC = Top of casing
ppb = Parts per billion
ppm = Parts per million
NA = Not analyzed
NM = Not measured
< = Denotes concentration not present above laboratory detection limited stated to the right

Table 2
Groundwater Flow Direction and Gradient

ARCO Service Station 2162
15135 Hesperian Boulevard, San Leandro, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
02/26/96	Southwest	0.009
05/23/96	South-Southwest	0.010
08/21/96	South-Southwest	0.01
11/20/96	South-Southwest	0.011
04/01/97	South-Southwest	0.004
06/10/97	South-Southwest	0.010
09/17/97	South-Southwest	0.01
12/12/97	Southwest	0.01
03/25/98	South-Southwest	0.008
05/14/98	Southwest	0.01
07/31/98	Southwest	0.01
10/12/98	Southwest	0.01
02/11/99	Southwest	0.008
06/23/99	Southwest	0.02
08/23/99	Southwest	0.013
10/27/99	South-Southwest	0.02
02/09/00	**Southwest**	**0.01**

APPPENDIX C

Certified Analytical Reports
And
Chain-of-Custody Documentation

Sequoia Analytical

819 Striker Avenue, Suite 8
Sacramento, CA 95834
(916) 921-9600
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www.sequoialabs.com

December 29 , 2000

Steven Meeks
Delta Environmental Consultants(Rancho Cordova
3164 Gold Camp Drive Ste. 200
Rancho Cordova, CA 95670
RE: ARCO 2162, San Leandro, CA / S012244

Enclosed are the results of analyses for samples received by the laboratory on 12/19/00. If you have any questions concerning this report, please feel free to contact me.

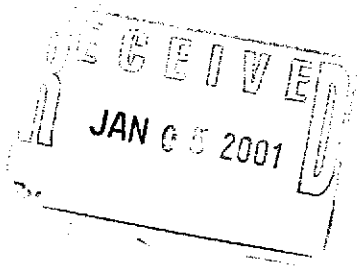
Sincerely,

Sandra R Hanson

Sandra R. Hanson
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 2162, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	12/29/00 15:53

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1-8	S012244-01	Water	12/17/00 06:25	12/19/00 07:30
MW-2-7	S012244-02	Water	12/17/00 07:02	12/19/00 07:30
MW-3-8	S012244-03	Water	12/17/00 06:37	12/19/00 07:30
MW-4-9	S012244-04	Water	12/17/00 06:46	12/19/00 07:30
TB	S012244-05	Water	12/17/00 06:00	12/19/00 07:30

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Delta Environmental Consultants(Rancho Cordova	Project: ARCO 2162, San Leandro, CA	
3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: *Steven Meeks*	12/29/00 15:53

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-1-8 (S012244-01) Water Sampled: 12/17/00 06:25 Received: 12/19/00 07:30									
Purgeable Hydrocarbons	ND	50.0	ug/l	1	0120300	12/27/00	12/27/00	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		*106 %*		*60-140*	"	"	"	"	
MW-2-7 (S012244-02) Water Sampled: 12/17/00 07:02 Received: 12/19/00 07:30									
Purgeable Hydrocarbons	**175**	50.0	ug/l	1	0120300	12/27/00	12/27/00	DHS LUFT	P-02
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	**0.659**	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*104 %*		*60-140*	"	"	"	"	
MW-3-8 (S012244-03) Water Sampled: 12/17/00 06:37 Received: 12/19/00 07:30									
Purgeable Hydrocarbons	ND	50.0	ug/l	1	0120306	12/27/00	12/27/00	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	**46.7**	2.50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*92.3 %*		*60-140*	"	"	"	"	

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3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	12/29/00 15:53

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-4-9 (S012244-04) Water Sampled: 12/17/00 06:46 Received: 12/19/00 07:30									
Purgeable Hydrocarbons	ND	50.0	ug/l	1	0120306	12/27/00	12/27/00	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	**5.81**	2.50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*99.2 %*	*60-140*		"	"	"	"	
TB (S012244-05) Water Sampled: 12/17/00 06:00 Received: 12/19/00 07:30									
Purgeable Hydrocarbons	ND	50.0	ug/l	1	0120306	12/27/00	12/27/00	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	**0.606**	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.50	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*93.9 %*	*60-140*		"	"	"	"	

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3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	12/29/00 15:53

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 0120300 - EPA 5030B (P/T)										
Blank (0120300-BLK1)				Prepared & Analyzed: 12/27/00						
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	*11.0*		"	*10.0*		*110*	*60-140*			
LCS (0120300-BS1)				Prepared & Analyzed: 12/27/00						
Benzene	10.5	0.500	ug/l	10.0		105	70-130			
Toluene	10.9	0.500	"	10.0		109	70-130			
Ethylbenzene	11.3	0.500	"	10.0		113	70-130			
Xylenes (total)	29.7	0.500	"	30.0		99.0	70-130			
Methyl tert-butyl ether	11.0	2.50	"	10.0		110	70-130			
Surrogate: a,a,a-Trifluorotoluene	*11.0*		"	*10.0*		*110*	*60-140*			
Matrix Spike (0120300-MS1)		**Source: S012243-02**		Prepared & Analyzed: 12/27/00						
Benzene	10.3	0.500	ug/l	10.0	ND	103	60-140			
Toluene	10.7	0.500	"	10.0	ND	107	60-140			
Ethylbenzene	10.9	0.500	"	10.0	ND	109	60-140			
Xylenes (total)	28.8	0.500	"	30.0	ND	96.0	60-140			
Methyl tert-butyl ether	11.6	2.50	"	10.0	ND	116	60-140			
Surrogate: a,a,a-Trifluorotoluene	*9.63*		"	*10.0*		*96.3*	*60-140*			
Matrix Spike Dup (0120300-MSD1)		**Source: S012243-02**		Prepared & Analyzed: 12/27/00						
Benzene	10.7	0.500	ug/l	10.0	ND	107	60-140	3.81	25	
Toluene	11.0	0.500	"	10.0	ND	110	60-140	2.76	25	
Ethylbenzene	11.3	0.500	"	10.0	ND	113	60-140	3.60	25	
Xylenes (total)	29.6	0.500	"	30.0	ND	98.7	60-140	2.74	25	
Methyl tert-butyl ether	11.9	2.50	"	10.0	ND	119	60-140	2.55	25	
Surrogate: a,a,a-Trifluorotoluene	*11.4*		"	*10.0*		*114*	*60-140*			

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3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	12/29/00 15:53

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 0120306 - EPA 5030B (P/T)										
Blank (0120306-BLK1)				Prepared & Analyzed: 12/27/00						
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 (0120306-BS1)				Prepared & Analyzed: 12/27/00						
Benzene	10.2	0.500	ug/l	10.0		102	70-130			
Toluene	10.2	0.500	"	10.0		102	70-130			
Ethylbenzene	9.99	0.500	"	10.0		99.9	70-130			
Xylenes (total)	30.8	0.500	"	30.0		103	70-130			
Methyl tert-butyl ether	9.07	2.50	"	10.0		90.7	70-130			
Surrogate: a,a,a-Trifluorotoluene	*9.41*		"	*10.0*		*94.1*	*60-140*			
Matrix Spike (0120306-MS1)		**Source: S012240-03**		Prepared & Analyzed: 12/27/00						
Benzene	10.3	0.500	ug/l	10.0	ND	103	60-140			
Toluene	10.4	0.500	"	10.0	ND	104	60-140			
Ethylbenzene	10.5	0.500	"	10.0	ND	105	60-140			
Xylenes (total)	32.4	0.500	"	30.0	ND	108	60-140			
Methyl tert-butyl ether	11.3	2.50	"	10.0	ND	113	60-140			
Surrogate: a,a,a-Trifluorotoluene	*9.59*		"	*10.0*		*95.9*	*60-140*			
Matrix Spike Dup (0120306-MSD1)		**Source: S012240-03**		Prepared & Analyzed: 12/27/00						
Benzene	10.4	0.500	ug/l	10.0	ND	104	60-140	0.966	25	
Toluene	10.5	0.500	"	10.0	ND	105	60-140	0.957	25	
Ethylbenzene	10.5	0.500	"	10.0	ND	105	60-140	0	25	
Xylenes (total)	32.5	0.500	"	30.0	ND	108	60-140	0.308	25	
Methyl tert-butyl ether	11.5	2.50	"	10.0	ND	115	60-140	1.75	25	
Surrogate: a,a,a-Trifluorotoluene	*9.68*		"	*10.0*		*96.8*	*60-140*			

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3164 Gold Camp Drive Ste. 200	Project Number: N/A	**Reported:**
Rancho Cordova CA, 95670	Project Manager: Steven Meeks	12/29/00 15:53

Notes and Definitions

P-02	Chromatogram Pattern: Weathered Gasoline C6-C12
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 AtlanticRichfieldCompany

Task Order No. 2599700

Chain of Custody

ARCO Facility no. 2162 | City (Facility) San Leandro | Project manager (Consultant) Steve Meeks | Laboratory name Sequoia

ARCO engineer Paul Supple | Telephone no. (ARCO) | Telephone no. (Consultant) 638 2085 | Fax no. (Consultant) 638 6385 | Contract number

Consultant name 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 8020	BTEX/TPH + MTBE 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 ☐ Semi VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐		
MW-1-8		2		X		X	X	12-17-00	625		X					S012244-01						
MW-2-7		↓		↓		↓	↓	↓	702		↓								-02			
MW-3-8		↓		↓		↓	↓	↓	637		↓								-03			
MW-4-9		↓		↓		↓	↓	↓	646		↓								-04			
TB		↓		↓		↓	↓	↓	800		↓								-05			

Special detection Limit/reporting

Special QA/QC

Remarks

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: 11°C

Relinquished by sampler	Date	Time	Received by
Wyl Hansen	12-19-00	700	Josh Yowell

Relinquished by	Date	Time	Received by
Josh Yowell	12-19-00	0730	Monica Gegben 12/19/00 0730

Relinquished by	Date	Time	Received by laboratory	Date	Time

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

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: **15135 Hesperian Blvd**
San Leandro, California
Arco Project Manager: **Paul Supple**
Site Sampled By: **Doulos**

Arco Site Number: **Arco 2162**
Delta Project No.: **D000-310**
Delta Project PM: **Steve Meeks**
Date Sampled: **12/17/00**

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	Other ______ ______ ______	Dissolved Oxygen (mg/L)	Sample Freqency (A, S, Q)	Sample I.D.	Sample Time
MW-1	6:07	**8.69**	**8.0**	**15.9**	☑	7.16	**4 inch**	**2.0**	14.3	NP	☑	☑	☑	☐	1.15	Q/2,5,8,11	**MW-1**	6:25
MW-2	6:12	**7.80**	**8.0**	**15.9**	☐	8.10	**4 inch**	**2.0**	16.2	16.2	☑	☑	☑	☐	1.31	Q/2,5,8,11	**MW-2**	7:02
MW-3	6:00	**8.01**	**9.0**	**14.8**	☑	6.75	**4 inch**	**2.0**	13.5	NP	☑	☑	☑	☐	0.46	Q/2,5,8,11	**MW-3**	6:37
MW-4	6:03	**9.17**	**8.0**	**17.5**	☑	8.28	**4 inch**	**2.0**	16.6	NP	☑	☑	☑	☐	0.55	Q/2,5,8,11	**MW-4**	6:46
					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
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					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				
					☐						☐	☐	☐	☐				

(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-3, MW-4, MW-1, 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.

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Arco Site Address: **15135 Hesperian Blvd**
San Leandro, California
Arco Project Manager: **Paul Supple**
Site Sampled By: **Doulos**

Arco Site Number: **Arco 2162**
Delta Project No.: **D000-310**
Delta Project PM: **Steve Meeks**
Date Sampled: **12/17/00**

Site Contact & Phone Number:

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	**No Purge**																
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-2	6:51	70.0	7.91	366	5												
	6:53	68.4	7.84	320	10												
	6:57	68.3	7.85	314	15												
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-3	**No Purge**																
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-4	**No Purge**																
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
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
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

Notes: NP = NO PURGE

Original Copies of Field Sampling Sheets are Located in Project File