



Delta
Environmental
Consultants, Inc.

ENVIRONMENTAL
PROTECTION

00 OCT 12 PM 3:42

3164 Gold Camp Drive
Suite 200
Rancho Cordova, CA 95670-6021
U.S.A.
916/638-2085
FAX: 916/638-8385

October 6, 2000

Mr. John Sullivan
17760 Sweetbriar Place
Castro Valley, CA 94546

Subject: *Quarterly Groundwater Monitoring Report, Second Quarter 2000*
Chateau Manor Apartments
724 Lewelling Boulevard
San Leandro, California
Delta Project No. D000-303

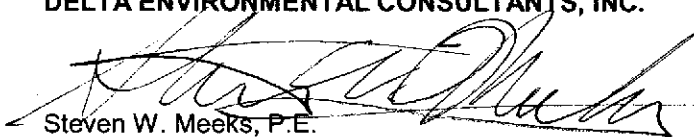
Dear Mr. Sullivan:

Delta Environmental Consultants, Inc. is submitting the attached copy of the laboratory analytical results (Enclosure A) for the groundwater sample collected from monitoring well MW-10 during the second quarter 2000. This well is located at the Chateau Manor Apartments, 724 Lewelling Boulevard, San Leandro, California. The groundwater sample was collected during quarterly sampling of the ARCO Products Company Service Station No. 0601, located at 712 Lewelling Boulevard, San Leandro, California. **Monitoring Well MW-9 is sampled semi-annually during the first and third quarters.**

If you have any questions regarding this letter, please call Steven Meeks at (916) 536-2613.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.


Steven W. Meeks, P.E.
Project Manager

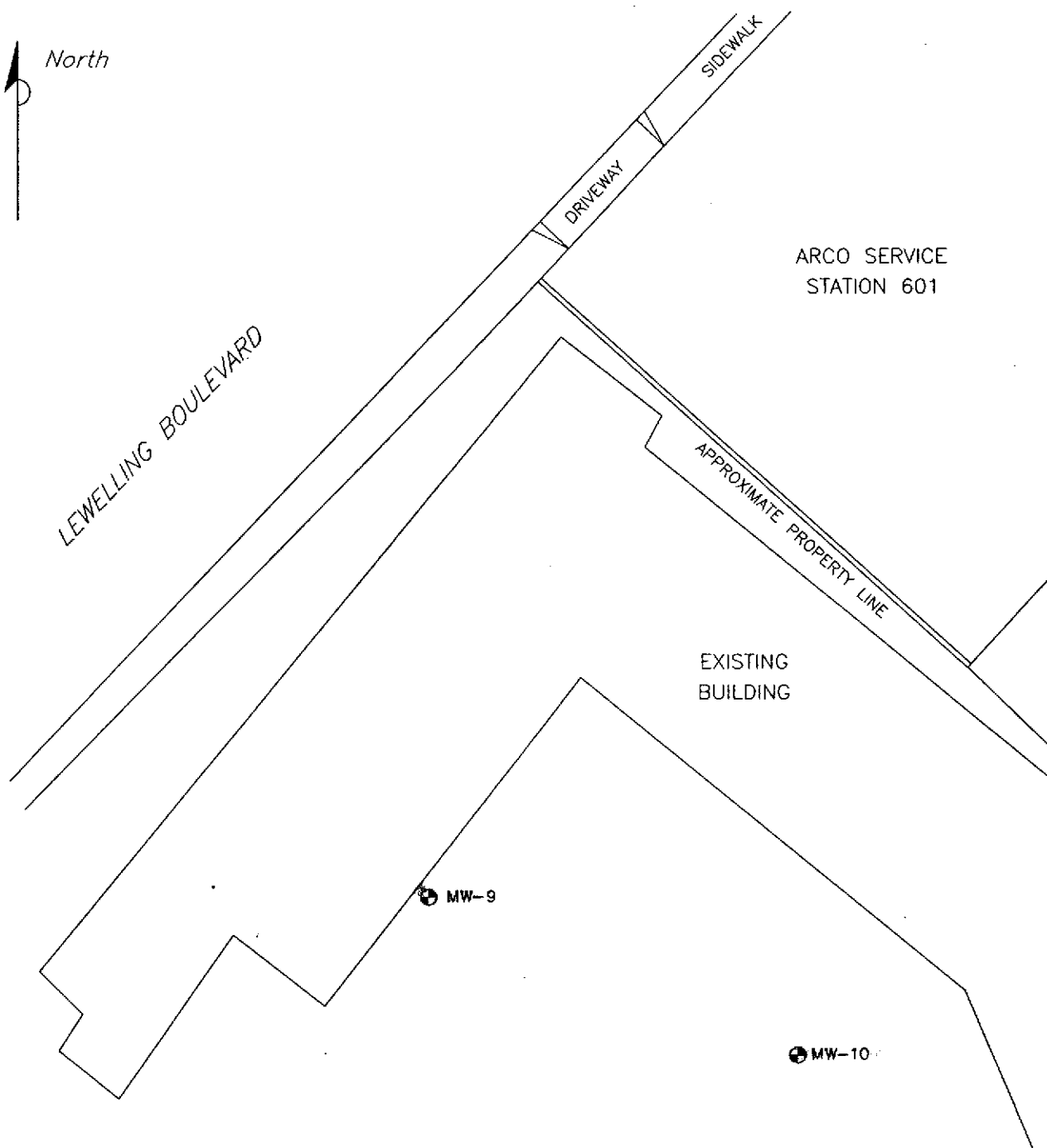
SWM (CL001.303.doc)

Enclosure

cc: Mr. Paul Supple – ARCO Products Company
Mr. Scott Seery – Alameda County Health Care Services



North



ARCO SERVICE
STATION 601

LEWELLING BOULEVARD

DRIVEWAY

SIDEWALK

APPROXIMATE PROPERTY LINE

EXISTING
BUILDING

MW-9

MW-10

LEGEND:

● MW-9 MONITORING WELL LOCATION



SCALE

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

FIGURE 1

SITE MAP

CHATEAU MANOR APARTMENTS
724 LEWELLING BOULEVARD
SAN LEANDRO, CALIFORNIA

PROJECT NO. D000-303	DRAWN BY TLA 9/28/00
FILE NO. CHATEAU-1	PREPARED BY TLA
REVISION NO. 1	REVIEWED BY



Delta
Environmental
Consultants, Inc.

ENCLOSURE A

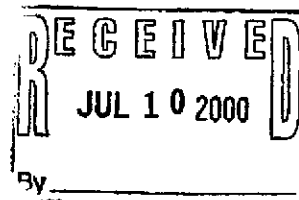
Copy of Certified Analytical Results for
Monitoring Well MW-10 and
Chain of Custody



July 6, 2000

Service Request No.: S2001823

Mr. Steve Meeks
Delta Environmental Consultants
3164 Gold Camp Dr. Suite 200
Rancho Cordova, CA 95670



RE: **TO#2599000/RAT#8/601 SAN LEANDRO**

Dear Mr. Meeks:

Enclosed are the results of the sample(s) submitted to our laboratory on June 22, 2000. All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply to the sample(s) analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Signature of this CAS Analytical Report confirms that pages 2 through 7, following, have been thoroughly reviewed and approved for release.

Columbia Analytical Services is certified for environmental analyses by the California Department of Health Services (certificate number: 2352, expiration: January 31, 2001).

If you have any questions, please call me at (408) 748-9700.

Respectfully submitted,

Columbia Analytical Services, Inc.

Bernadette Troncales
Project Chemist

Greg Jordan
Laboratory Manager

COLUMBIA ANALYTICAL SERVICES, Inc.

Acronyms

A2LA	American Association for Laboratory Accreditation
ASTM	American Society for Testing and Materials
BOD	Biochemical Oxygen Demand
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CAM	California Assessment Metals
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
COD	Chemical Oxygen Demand
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank sample
ICP	Inductively Coupled Plasma atomic emission spectrometry
ICV	Initial Calibration Verification sample
J	Estimated concentration. The value is less than the MRL, but greater than or equal to the MDL. If the value is equal to the MRL, the result is actually <MRL before rounding.
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified
MBAS	Methylene Blue Active Substances
MCL	Maximum Contaminant Level. The highest permissible concentration of a substance allowed in drinking water as established by the U. S. EPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl tert-Butyl Ether
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the paper industry for Air and Stream Improvement
ND	Not Detected at or above the method reporting/detection limit (MRL/MDL)
NIOSH	National Institute for Occupational Safety and Health
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
SM	Standard Methods for the Examination of Water and Wastewater, 18th Ed., 1992
STLC	Solubility Threshold Limit Concentration
SW	Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Ed., 1986 and as amended by Updates I, II, IIA, and IIB.
TCLP	Toxicity Characteristic Leaching Procedure
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
tr	Trace level. The concentration of an analyte that is less than the PQL but greater than or equal to the MDL. If the value is equal to the PQL, the result is actually <PQL before rounding.
TRPH	Total Recoverable Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLc	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: S2001823
Date Collected: 6/20/00
Date Received: 6/22/00

BTEX, MTBE and TPH as Gasoline

Sample Name: MW-107
Lab Code: S2001823-001
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
TPH as Gasoline	EPA 5030	CA/LUFT	50	1	NA	6/30/00	ND	
Benzene	EPA 5030	8021B	0.5	1	NA	6/30/00	ND	
Toluene	EPA 5030	8021B	0.5	1	NA	6/30/00	ND	
Ethylbenzene	EPA 5030	8021B	0.5	1	NA	6/30/00	ND	
Xylenes, Total	EPA 5030	8021B	1	1	NA	6/30/00	ND	
Methyl <i>tert</i> -Butyl Ether	EPA 5030	8021B	3	1	NA	6/30/00	ND	

Approved By: _____



Date: _____

07/06/00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: S2001823
Date Collected: NA
Date Received: NA

BTEX, MTBE and TPH as Gasoline

Sample Name: Method Blank
Lab Code: S200629-WB3
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
TPH as Gasoline	EPA 5030	CA/LUFT	50	1	NA	6/30/00	ND	
Benzene	EPA 5030	8021B	0.5	1	NA	6/30/00	ND	
Toluene	EPA 5030	8021B	0.5	1	NA	6/30/00	ND	
Ethylbenzene	EPA 5030	8021B	0.5	1	NA	6/30/00	ND	
Xylenes, Total	EPA 5030	8021B	1	1	NA	6/30/00	ND	
Methyl tert-Butyl Ether	EPA 5030	8021B	3	1	NA	6/30/00	ND	

Approved By: _____

Date: _____

1522/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: S2001823
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 6/29/00

**Matrix Spike Summary
 BTEX and TPH as Gasoline**

Sample Name: BATCH QC
Lab Code: S200629-001MS
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS	Result Notes
								Percent Recovery Acceptance Limits	
Benzene	EPA 5030	8021B	0.5	25	ND	25.5	102	75-135	
Toluene	EPA 5030	8021B	0.5	25	ND	24.7	99	73-136	
Ethylbenzene	EPA 5030	8021B	0.5	25	ND	24.2	97	69-142	
Gasoline	EPA 5030	CA/LUFT	50	500	ND	513	103	75-135	

Approved By: _____

[Signature]

Date: _____

07/06/00

MS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
LCS Matrix: Water

Service Request: S2001823
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 6/30/00

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
BTEX and TPH as Gasoline

Sample Name: Dup Lab Control Sample
Lab Code: S200629-LCS, S200629-DLCS
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	Percent Recovery								Relative Percent Difference	Result Notes
			True Value		Result		CAS Acceptance Limits					
			LCS	DLCS	LCS	DLCS	LCS	DLCS				
Benzene	EPA 5030	8021B	25	25	25.6	25.6	102	102	75-135	<1		
Toluene	EPA 5030	8021B	25	25	24.8	24.9	99	100	73-136	<1		
Ethylbenzene	EPA 5030	8021B	25	25	24.0	24.1	96	96	69-142	<1		
Gasoline	EPA 5030	CA/LUFT	500	500	500	522	100	104	75-135	4		

Approved By: _____

Date: _____

DLCS/020597p

QA/QC Report

Service Request: S2001823
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Units: PERCENT
Basis: NA

CAS Acceptance Limits: 70-130 70-130

SUR2020397D

[illegible]

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

7/7/00 RU/D3 R



Delta
Environmental
Consultants, Inc.

3164 Gold Camp Drive
Suite 200
Rancho Cordova, CA 95670-6021
U.S.A.
916/638-2085
FAX: 916/638-8385

RECEIVED
PROTECTION
00 SEP 25 AM 9:22

September 19, 2000

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

Subject: *Quarterly groundwater Monitoring Report, Second Quarter 2000*
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 second quarter 2000 groundwater monitoring program at ARCO Products Company 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
Project Engineer


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



TLA (Lrp001.303.doc)
Enclosures

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

Date: September 19, 2000

ARCO QUARTERLY GROUNDWATER MONITORING REPORT

Station No.: 601	Address: 712 Lewelling 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.:	D000-303
Primary Agency/Regulatory ID No.	Alameda County Health Care Services Agency

WORK PERFORMED THIS QUARTER

1. Performed quarterly groundwater monitoring for second quarter 2000.

WORK PROPOSED FOR NEXT QUARTER

1. Prepare and submit quarterly groundwater monitoring report for second quarter 2000.
2. Perform quarterly groundwater monitoring and sampling for third quarter 2000

QUARTERLY MONITORING:

Current Phase of Project	Monitoring/Remediation
Frequency of Groundwater Sampling:	Annual (1 st Quarter): MW-2, MW-11, MW-13 Semi-Annual (1 st /3 rd 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:	7.5 feet
Groundwater Gradient:	0.023 ft/ft toward east southeast

DISCUSSION:

- MTBE was reported in MW-4 and MW-8 at concentrations ranging from 46 (MW-4) to 310 (MW-8) micrograms per liter.
- TPHg was reported in MW-1, MW-3, MW-4, MW-5 and MW-8 at concentrations ranging from 150 (MW-8) to 45,000 (MW-3) micrograms per liter.
- Benzene was reported in MW-1, MW-3, MW-4 and MW-5 at concentrations ranging from 210 (MW-4) to 3,000 (MW-5) micrograms per liter.

ARCO QUARTERLY GROUNDWATER MONITORING REPORT (continued)

ARCO Service Station No. 601

August 25, 2000

Page 2

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 Groundwater Elevation Analytical Data Table – Petroleum Hydrocarbons and Their Constituents Table
Groundwater Flow Direction and Gradient Table
Groundwater Analytical Data – Metals Table
Groundwater Analytical Data – Volatile and Semi-volatile Organic Compounds Table
Approximate Cumulative Floating Product Recovered Table
- 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)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TPH as Gasoline (µg/L)	MTBE (µg/L)
MW-1	6/20/00	19.19	8.20	10.99	2,400	50	1,800	680	23,000	<200
MW-2	6/20/00	21.12	7.12	14.00	NS	NS	NS	NS	NS	NS
MW-3	6/20/00	22.99	6.22	16.77	670	990	2,400	12,000	45,000	<500
MW-4	6/20/00	22.38	6.46	15.92	210	20	94	520	2,700	46
MW-5	6/20/00	22.45	6.78	15.67	3,000	650	260	700	10,000	<200
MW-6	6/20/00	22.77	Dry	Dry	NS	NS	NS	NS	NS	NS
MW-7	6/20/00	22.89	Dry	Dry	NS	NS	NS	NS	NS	NS
MW-8	6/20/00	20.89	7.23	13.66	<0.5	0.9	<0.5	<1.0	150	310
MW-9	6/20/00	22.26	8.01	14.25	NS	NS	NS	NS	NS	NS
MW-10	6/20/00	21.33	7.99	13.34	<0.5	<0.5	<0.5	<0.5	<0.5	<3.0

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)
MW-11	6/20/00	20.97	8.18	12.79	NS	NS	NS	NS	NS	NS
MW-12	6/20/00	20.11	8.55	11.56	NS	NS	NS	NS	NS	NS
MW-13	6/20/00	20.75	7.56	13.19	NS	NS	NS	NS	NS	NS
MW-14	6/20/00	20.90	9.16	11.74	<0.5	<0.5	<0.5	<1.0	<50	<10
MW-15	6/20/00	22.08	5.98	16.10	NS	NS	NS	NS	NS	NS

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 2147

40055 Blacow Road
Fremont, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
6/20/00	East-Southeast	0.02

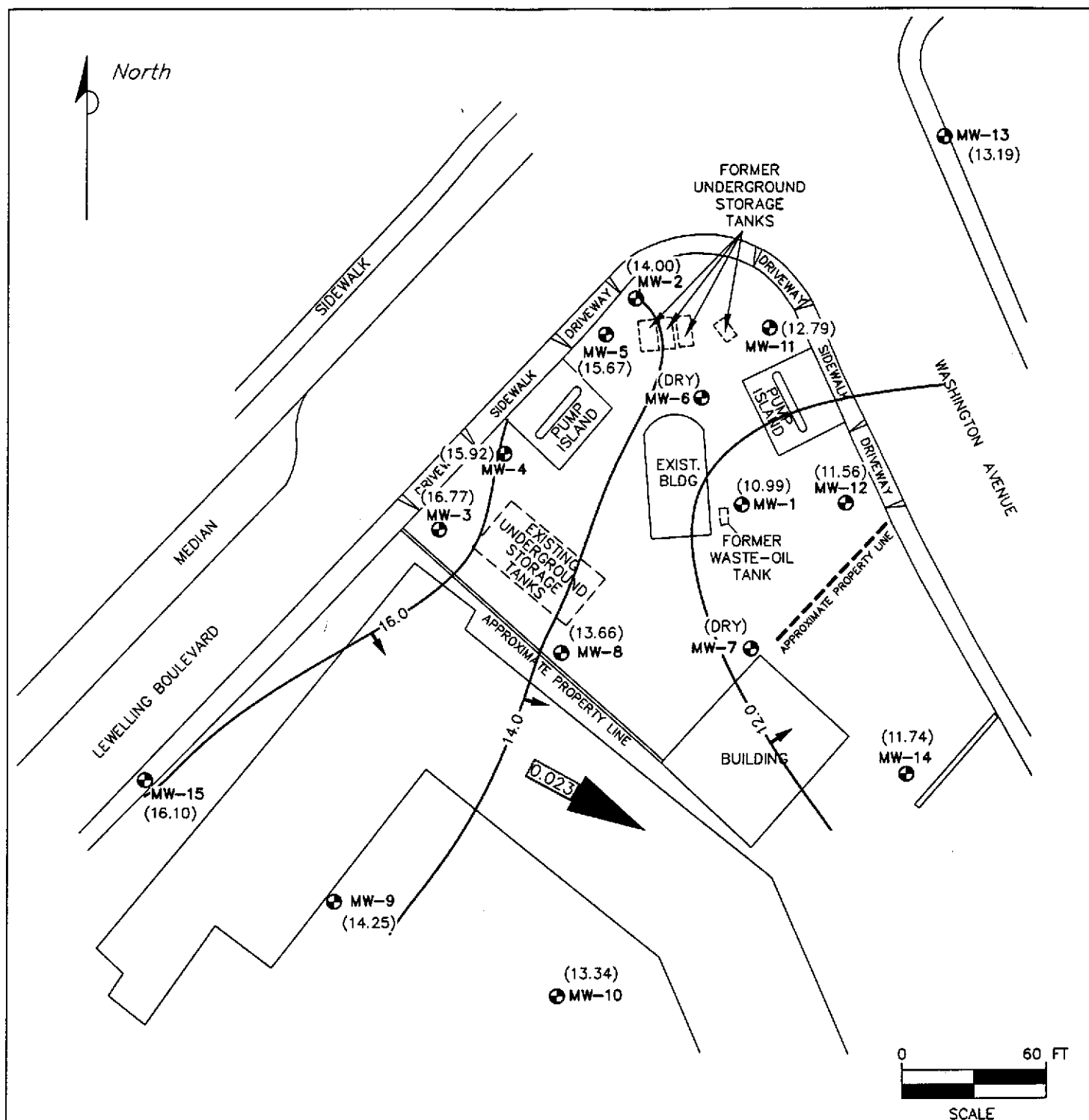
Note: Please refer to Appendix B for Historical Groundwater Elevation and Analytical Data
Tables developed by IT Corporation



NS NOT SAMPLED

PROJECT NO. D000-303	DRAWN BY TLA 8/4/00
FILE NO. 601-1	PREPARED BY TLA
REVISION NO. 1	REVIEWED BY





LEGEND:

⊕ MW-1 MONITORING WELL LOCATION

(14.00) GROUND WATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (MSL)

- 14.0 - WATER TABLE CONTOUR IN FEET ABOVE MSL

→ GROUND WATER FLOW DIRECTION

0.023 → APPROXIMATE GROUND WATER FLOW GRADIENT

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

FIGURE 2
GROUND WATER ELEVATION CONTOUR MAP
SECOND QUARTER 2000
ARCO STATION NO. 601
712 LEWELLING BOULEVARD
SAN LEANDRO, CALIFORNIA

PROJECT NO. D000-303	DRAWN BY TLA 8/2/00
FILE NO. 601-1	PREPARED BY TLA
REVISION NO. 1	REVIEWED BY



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 Groundwater Elevation and Analytical Data

Petroleum Hydrocarbons and Their Constituents Table

Groundwater Flow Direction and Gradient Table

Groundwater Analytical Data – Metals Table

Groundwater Analytical Data – Volatile and Semi-Volatile Organic Compounds Table

Approximate Cumulative Floating Product Recovered Table

Table 1
Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents
1995 - Present***

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Floating Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8240 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-1	03-17-95	22.26	6.57	ND	15.69	03-17-95	120,000	5,300	370	1,500	13,000	--	--	48,000	6,200[1]		
MW-1	06-01-95	22.26	7.87	ND	14.39	06-01-95	250,000	7,100	950	3,500	21,000	--	--	38,000	190,000[1]		
MW-1	08-31-95	22.26	8.12	0.01	** 14.15	08-31-95	Not sampled: well contained floating product										
MW-1	11-27-95	22.26	8.42	Sheen	13.84	11-27-95	310,000	4,600	770	5,700	21,000	--	--	--	--		
MW-1	02-22-96	22.26	6.01	0.01	** 16.26	03-14-96	100,000	6,200	320	2,500	12,000	<1,000[1]	--	--	--		
MW-1	05-20-96	22.26	7.03	ND	15.23	05-21-96	340,000	6,600	240	4,500	22,000	<1,000	--	150	<2,500[1]		
MW-1	08-26-96	22.26	8.16	ND	14.10	08-26-96	210,000	7,900	320	3,400	15,000	<1,000	--	--	--		
MW-1	11-20-96	22.26	7.84	ND	14.42	11-20-96	62,000	5,900	77	2,000	7,700	<300	--	--	--		
MW-1	03-24-97	19.19	8.05	ND	11.14	03-24-97	170,000	6,500	<200	2,400	9,900	<1,000	--	--	--		
MW-1	05-23-97	19.19	8.42	ND	10.77	05-23-97	83,000	6,200	84	2,500	9,000	<300	--	--	--		
MW-1	08-19-97	19.19	8.65	ND	10.54	08-19-97	83,000	4,500	<100	2,200	8,100	<600	--	--	--		
MW-1	11-19-97	19.19	8.54	ND	10.65	11-19-97	250,000	4,400	<500	3,800	9,900	<3,000	--	--	--		
MW-1	02-19-98	19.19	5.57	ND	13.62	02-19-98	74,000	2,500	120	2,200	4,100	<300	--	--	--		
MW-1	04-23-98	19.19	6.92	ND	12.27	04-24-98	210,000	2,700	<500	4,200	8,300	<3,000	--	--	--	1.5	P
MW-1	07-27-98	19.19	8.14	ND	11.05	07-27-98	73,000	2,100	88	2,600	4,600	<300	--	--	--	1.0	P
MW-1	10-14-98	19.19	8.58	ND	10.61	10-14-98	47,000	2,900	<50	2,300	3,900	<300	--	--	--	1.5	P
MW-1	01-21-99	19.19	7.84	ND	11.35	01-22-99	45,000	1,400	64	2,100	2,400	<300	--	--	--	1.0	P
MW-1	05-06-99	19.19	8.00	ND	11.19	05-06-99	41,000	1,900	<20	2,800	3,400	<120	--	--	--	0.85	P
MW-1	08-23-99	19.19	8.56	ND	10.63	08-24-99	26,000	1,700	52	1,600	1,500	<75	--	--	--	0.72	P
MW-1	10-28-99	19.19	8.92	ND	10.27	10-28-99	38,000	2,500	35	2,400	2,500	<200	--	--	--	0.70	P
MW-1	02-04-00	19.19	8.48	Sheen	10.71	02-04-00	19,000	960	13	1,200	860	<60	--	--	--	2.11	P

Table 1
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ARCO Service Station 601
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Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Floating Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8240 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-2	03-17-95	21.33	6.12	ND	15.21	03-17-95	10,000	460	77	260	550	--	--	--	--		
MW-2	06-01-95	21.33	6.56	ND	14.77	06-01-95	13,000	400	78	210	410	--	--	--	--		
MW-2	08-31-95	21.33	7.18	ND	14.15	08-31-95	5,000	280	18	120	140	<50	--	--	--		
MW-2	11-27-95	21.33	7.39	ND	13.94	11-27-95	3,200	230	12	77	90	--	--	--	--		
MW-2	02-22-96	21.33	5.78	ND	15.55	03-14-96	11,000	290	67	190	330	<50	--	--	--		
MW-2	05-20-96	21.33	6.27	ND	15.06	05-21-96	Not sampled: well sampled annually, during the first quarter										
MW-2	08-26-96	21.33	7.30	ND	14.03	08-26-96	Not sampled: well sampled annually, during the first quarter										
MW-2	11-20-96	21.33	7.28	ND	14.05	11-20-96	Not sampled: well sampled annually, during the first quarter										
MW-2	03-24-97	21.12	7.11	ND	14.01	03-24-97	4,800	570	6	71	32	67	--	--	--		
MW-2	05-23-97	21.12	7.44	ND	13.68	05-23-97	Not sampled: well sampled annually, during the first quarter										
MW-2	08-19-97	21.12	7.64	ND	13.48	08-19-97	Not sampled: well sampled annually, during the first quarter										
MW-2	11-19-97	21.12	7.70	ND	13.42	11-19-97	Not sampled: well sampled annually, during the first quarter										
MW-2	02-19-98	21.12	5.22	ND	15.90	02-19-98	2,000	160	50	66	230	25	--	--	--		
MW-2	04-23-98	21.12	6.24	ND	14.88	04-23-98	Not sampled: well sampled annually, during the first quarter										
MW-2	07-27-98	21.12	7.02	ND	14.10	07-27-98	Not sampled: well sampled annually, during the first quarter										
MW-2	10-14-98	21.12	7.54	ND	13.58	10-14-98	Not sampled: well sampled annually, during the first quarter										
MW-2	01-21-99	21.12	7.15	ND	13.97	01-22-99	1,700	84	4	31	10	13	--	--	--	0.5	P
MW-2	05-06-99	21.12	6.95	ND	14.17	05-06-99	Not sampled: well sampled annually, during the first quarter										
MW-2	08-23-99	21.12	7.49	ND	13.63	08-24-99	Not sampled: well sampled annually, during the first quarter										0.68
MW-2	10-28-99	21.12	7.92	ND	13.20	10-28-99	Not sampled: well sampled annually, during the first quarter										
MW-2	02-04-00	21.12	6.61	ND	14.51	02-05-00	Not sampled: well inaccessible										

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MW-3	03-17-95	20.11	5.46	ND	14.65	03-17-95	370,000	4,800	12,000	5,800	34,000	--	--	--	--		
MW-3	06-01-95	20.11	6.34	ND	13.77	06-01-95	270,000	6,000	11,000	5,200	28,000	--	--	--	--		
MW-3	08-31-95	20.11	6.60	0.02	** 13.52	08-31-95	Not sampled: well contained floating product										
MW-3	11-27-95	20.11	6.76	0.01	** 13.36	11-27-95	150,000	5,100	8,800	3,900	21,000	--	--	--	--		
MW-3	02-22-96	20.11	5.14	0.01	** 14.98	03-14-96	150,000	4,400	7,600	4,100	22,000	<3,000	--	--	--		
MW-3	05-20-96	20.11	5.17	ND	14.94	05-21-96	410,000	4,700	8,000	6,300	36,000	<3,000	--	--	--		
MW-3	08-26-96	20.11	7.04	ND	13.07	08-26-96	260,000	4,000	6,100	4,200	24,000	<2,000	--	--	--		
MW-3	11-20-96	20.11	6.26	ND	13.85	11-20-96	190,000	3,200	5,800	3,300	20,000	<1,000	--	--	--		
MW-3	03-24-97	22.99	6.94	ND	16.05	03-24-97	430,000	2,700	7,600	7,000	39,000	<5,000	--	--	--		
MW-3	05-23-97	22.99	6.98	ND	16.01	05-23-97	130,000	2,100	4,300	3,500	19,000	<700	--	--	--		
MW-3	08-19-97	22.99	7.25	ND	15.74	08-19-97	100,000	2,000	3,200	<100	19,000	<600	--	--	--		
MW-3	11-19-97	22.99	7.25	ND	15.74	11-19-97	93,000	1,700	2,400	2,800	16,000	<600	--	--	--		
MW-3	02-19-98	22.99	5.24	ND	17.75	02-19-98	80,000	620	1,200	2,500	13,000	<600	--	--	--		
MW-3	04-23-98	22.99	6.60	ND	16.39	04-24-98	130,000	1,500	2,400	3,500	18,000	<600	--	--	--	3.5	P
MW-3	07-27-98	22.99	7.00	ND	15.99	07-27-98	140,000	920	1,500	2,400	13,000	<600	--	--	--	1.0	P
MW-3	10-14-98	22.99	7.04	ND	15.95	10-14-98	300,000	1,200	2,400	5,700	32,000	970	--	--	--	1.0	P
MW-3	01-21-99	22.99	6.50	ND	16.49	01-22-99	120,000	860	1,500	2,600	14,000	<600	--	--	--	0.5	P
MW-3	05-06-99	22.99	6.90	ND	16.09	05-06-99	49,000	670	1,400	2,500	11,000	170	--	--	--	1.03	NP
MW-3	08-23-99	22.99	6.53	ND	16.46	08-24-99	51,000	440	930	2,200	9,200	<150	--	--	--	0.67	NP
MW-3	10-28-99	22.99	7.50	ND	15.49	10-28-99	1,400,000	830	4,100	15,000	78,000	<5,000	--	--	--	0.77	P
MW-3	02-04-00	22.99	6.21	ND	16.78	02-04-00	<50	<0.5	<0.5	<0.5	<1	650	--	--	--	1.61	P

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MW-4	03-17-95	20.75	6.65	ND	14.10	03-17-95	16,000	1,800	970	310	2,500	--	--	--	--		
MW-4	06-01-95	20.75	7.25	ND	13.50	06-01-95	16,000	2,800	870	380	2,700	--	--	--	--		
MW-4	08-31-95	20.75	7.75	ND	13.00	08-31-95	9,000	2,000	270	270	1,400	<100	--	--	--		
MW-4	11-27-95	20.75	7.87	ND	12.88	11-27-95	3,800	890	130	130	550	--	--	--	--		
MW-4	02-22-96	20.75	7.29	ND	13.46	03-14-96	940	150	82	19	130	<20	--	--	--		
MW-4	05-20-96	20.75	7.30	ND	13.45	05-21-96	6,700	1,100	330	120	1,100	<100	--	--	--		
MW-4	08-26-96	20.75	7.57	ND	13.18	08-26-96	14,000	2,400	510	350	2,100	<100	--	--	--		
MW-4	11-20-96	20.75	7.89	ND	12.86	11-20-96	420	55	17	11	62	<3	--	--	--		
MW-4	03-24-97	22.38	6.90	ND	15.48	03-24-97	6,800	620	150	81	1,300	<50	--	--	--		
MW-4	05-23-97	22.38	7.80	ND	14.58	05-23-97	9,000	1,300	240	200	1,600	<60	--	--	--		
MW-4	08-19-97	22.38	DRY	ND	N/A	08-19-97	Not sampled: well is dry										
MW-4	11-19-97	22.38	DRY	ND	N/A	11-19-97	3,700[1]	600	93	120	710	<60	--	--	--		
MW-4	02-19-98	22.38	6.78	ND	15.60	02-19-98	1,800	93	51	29	420	110	--	--	--		
MW-4	04-23-98	22.38	6.47	ND	15.91	04-23-98	6,500	700	110	180	1,300	93	--	--	--	0.5	P
MW-4	07-27-98	22.38	7.22	ND	15.16	07-27-98	10,000	1,400	140	290	1,900	<120	--	--	--	1.5	P
MW-4	10-14-98	22.38	7.60	ND	14.78	10-14-98	6,500	900	63	200	1,200	63	--	--	--	1.0	P
MW-4	01-21-99	22.38	7.43	ND	14.95	01-22-99	1,700	140	22	56	320	13	--	--	--	0.5	P
MW-4	05-06-99	22.38	6.55	ND	15.83	05-06-99	3,300	250	36	73	890	41	--	--	--	1.28	P
MW-4	08-23-99	22.38	7.16	ND	15.22	08-24-99	7,400	500	73	230	1,700	57	--	--	--	0.89	P
MW-4	10-28-99	22.38	8.28	ND	14.10	10-28-99	370	41	5.7	14	52	16	--	--	--	0.92	NP
MW-4	02-04-00	22.38	8.23	ND	14.15	02-04-00	310	33	7.5	11	65	8	--	--	--	2.43	P

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MW-5	03-17-95	20.90	5.51	ND	15.39	03-17-95	48,000	6,400	2,000	740	5,100	--	--	--	--		
MW-5	06-01-95	20.90	6.55	ND	14.35	06-01-95	76,000	11,000	5,400	1,400	7,700	--	--	--	--		
MW-5	08-31-95	20.90	6.80	ND	14.10	08-31-95	53,000	12,000	1,600	1,000	6,000	<500	--	--	--		
MW-5	11-27-95	20.90	7.13	ND	13.77	11-27-95	43,000	7,900	3,300	950	4,900	--	--	--	--		
MW-5	02-22-96	20.90	5.12	ND	15.78	03-14-96	52,000	9,100	3,300	940	5,000	<500	--	--	--		
MW-5	05-20-96	20.90	5.87	ND	15.03	05-21-96	55,000	9,300	3,800	1,100	5,400	<500	--	--	--		
MW-5	08-26-96	20.90	7.15	ND	13.75	08-26-96	47,000	5,300	2,100	780	3,200	<300	--	--	--		
MW-5	11-20-96	20.90	6.88	ND	14.02	11-20-96	53,000	8,700	5,700	920	4,400	<500	--	--	--		
MW-5	03-24-97	22.45	7.13	ND	15.32	03-24-97	39,000	8,200	3,200	720	3,100	<500	--	--	--		
MW-5	05-23-97	22.45	7.42	ND	15.03	05-23-97	29,000	6,600	1,700	400	1,500	<600	--	--	--		
MW-5	08-19-97	22.45	7.58	ND	14.87	08-19-97	16,000	4,600	790	<50	1,300	<300	--	--	--		
MW-5	11-19-97	22.45	7.58	ND	14.87	11-19-97	22,000	5,800	1,300	380	1,300	<300	--	--	--		
MW-5	02-19-98	22.45	4.65	ND	17.80	02-19-98	40,000	5,100	3,800	620	2,900	<300	--	--	--		
MW-5	04-23-98	22.45	6.25	ND	16.20	04-23-98	45,000	8,000	4,000	970	4,200	<600	--	--	--	1.5	P
MW-5	07-27-98	22.45	6.71	ND	15.74	07-27-98	30,000	8,000	2,000	590	1,900	<600	--	--	--	1.5	P
MW-5	10-14-98	22.45	7.19	ND	15.26	10-14-98	33,000	7,400	1,900	550	1,700	<300	--	--	--	1.5	P
MW-5	01-21-99	22.45	7.03	ND	15.42	01-22-99	34,000	6,200	2,600	630	2,300	<600	--	--	--	2.5	P
MW-5	05-06-99	22.45	7.02	ND	15.43	05-06-99	7,900	2,400	200	240	580	12	--	--	--	1.07	NP
MW-5	08-23-99	22.45	7.04	ND	15.41	08-24-99	25,000	5,800	2,300	570	2,000	67	--	--	--	1.04	P
MW-5	10-28-99	22.45	7.90	ND	14.55	10-28-99	20,000	5,900	1,100	450	1,100	<250	--	--	--	0.87	P
MW-5	02-04-00	22.45	6.71	ND	15.74	02-04-00	32,000	2,500	3,800	770	4,200	<75	--	--	--	2.33	P

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MW-6	03-17-95	22.08	6.66	ND	15.42	03-17-95	45,000	9,300	<100	1,900	3,600	--	--	--	--		
MW-6	06-01-95	22.08	7.60	ND	14.48	06-01-95	23,000	5,600	<50	1,300	1,900	--	--	--	--		
MW-6	08-31-95	22.08	7.92	ND	14.16	08-31-95	26,000	8,000	<100	1,900	900	<500	--	--	--		
MW-6	11-27-95	22.08	8.21	ND	13.87	11-27-95	6,700	1,800	<20	480	230	--	--	--	--		
MW-6	02-22-96	22.08	6.21	ND	15.87	03-14-96	17,000	3,100	69	810	1,500	<300	--	--	--		
MW-6	05-20-96	22.08	7.07	ND	15.01	05-21-96	16,000	3,700	<50	1,100	1,100	<300	--	--	--		
MW-6	08-26-96	22.08	7.93	ND	14.15	08-26-96	23,000	5,800	<50	2,000	560	<300	--	--	--		
MW-6	11-20-96	22.08	8.02	ND	14.06	11-20-96	11,000	3,300	<50[1]	480	370	<300	--	--	--		
MW-6	03-24-97	22.77	7.95	ND	14.82	03-24-97	9,700	1,900	<20	800	270	<100	--	--	--		
MW-6	05-23-97	22.77	8.17	ND	14.60	05-23-97	16,000	4,300	<50	1,400	180	<300	--	--	--		
MW-6	08-19-97	22.77	-	ND	NA	08-19-97	Not sampled: well is dry										
MW-6	11-19-97	22.77	-	ND	NA	11-19-97	Not sampled: well is dry										
MW-6	02-19-98	22.77	5.78	ND	16.99	02-19-98	2,600	540	8	90	88	<30	--	--	--		
MW-6	04-23-98	22.77	6.83	ND	15.94	04-24-98	7,600	1,300	13	520	190	<60	--	--	--	0.5	P
MW-6	07-27-98	22.77	7.80	ND	14.97	07-27-98	15,000	3,600	<25	1,100	230	<150	--	--	--	1.0	P
MW-6	10-14-98	22.77	8.31	ND	14.46	10-14-98	8,700	2,400	<20	220	36	<120	--	--	--	2.0	P
MW-6	01-21-99	22.77	7.90	ND	14.87	01-22-99	4,800	1,100	<25	340	79	<150	--	--	--	2.0	P
MW-6	05-06-99	22.77	7.70	ND	15.07	05-06-99	1,300	240	2.3	85	19	5	--	--	--	1.18	P
MW-6	08-23-99	22.77	8.24	ND	14.53	08-24-99	4,200	970	12	110	29	<15	--	--	--	0.90	P
MW-6	10-28-99	22.77	-	ND	NA	10-28-99	Not sampled: well is dry										
MW-6	02-04-00	22.77	7.31	ND	15.46	02-04-00	110	<0.5	0.6	1.5	1.9	11	--	--	--	1.10	P

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MW-7	03-17-95	22.89	7.68	ND	15.21	03-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-7	06-01-95	22.89	8.40	ND	14.49	06-01-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-7	08-31-95	22.89	9.09	ND	13.80	08-31-95	<50	<0.5	<0.5	0.6	<0.5	<3	--	--	--		
MW-7	11-27-95	22.89	9.15	ND	13.74	11-27-95	<50	<0.5	<0.5	0.9	<0.5	--	--	--	--		
MW-7	02-22-96	22.89	7.44	ND	15.45	03-14-96	110	1.4	<0.5	3.8	3.0	<3	--	--	--		
MW-7	05-20-96	22.89	8.47	ND	14.42	05-21-96	Not sampled: well sampled annually, during the first quarter										
MW-7	08-26-96	22.89	8.81	ND	14.08	08-26-96	Not sampled: well sampled annually, during the first quarter										
MW-7	11-20-96	22.89	9.17	ND	13.72	11-20-96	Not sampled: well sampled annually, during the first quarter										
MW-7	03-24-97	22.89	8.31	ND	14.58	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-7	05-23-97	22.89	9.26	ND	13.63	05-23-97	Not sampled: well sampled annually, during the first quarter										
MW-7	08-19-97	22.89	-	ND	NA	08-19-97	Not sampled: well is dry										
MW-7	11-19-97	22.89	-	ND	NA	11-19-97	Not sampled: well is dry										
MW-7	02-19-98	22.89	6.13	ND	16.76	02-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-7	04-23-98	22.89	7.44	ND	15.45	04-23-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.5	P
MW-7	07-27-98	22.89	8.75	ND	14.14	07-27-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.5	P
MW-7	10-14-98	22.89	9.22	ND	13.67	10-14-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.5	P
MW-7	01-21-99	22.89	9.07	ND	13.82	01-22-99	52	<0.5	<0.5	<0.5	0.27	<3	--	--	--	3.0	P
MW-7	05-06-99	22.89	8.32	ND	14.57	05-06-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.83	P
MW-7	08-23-99	22.89	9.25	ND	13.64	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.42	P
MW-7	10-28-99	22.89	Not surveyed			10-28-99	Not sampled: well is dry										
MW-7	02-04-00	22.89	8.79	ND	14.10	02-04-00	<50	<0.5	<0.5	<0.5	<1	<3	--	--	--	4.46	P

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MW-8	03-17-95	20.97	6.14	ND	14.83	03-17-95	5,400	<5	<5	35	<5	--	--	--	--		
MW-8	06-01-95	20.97	6.50	ND	14.47	06-01-95	2,600	<2.5	<2.5	15	<2.5	--	--	--	--		
MW-8	08-31-95	20.97	7.35	ND	13.62	08-31-95	1,400	<3	<3	5	<3	520	--	900	--		
MW-8	11-27-95	20.97	7.60	ND	13.37	11-27-95	620	<0.5	<0.5	<0.5	0.5	--	560	900	510[1]		
MW-8	02-22-96	20.97	5.35	ND	15.62	03-14-96	5,800	<5	<5	28	<5	110	--	1,900	6,800[1]		
MW-8	05-20-96	20.97	5.92	ND	15.05	05-21-96	6,100	<5	<5	26	<5	240	--	--	--		
MW-8	08-26-96	20.97	7.08	ND	13.89	08-26-96	970	<1	<1	3	<1	710	--	--	--		
MW-8	11-20-96	20.97	7.01	ND	13.96	11-20-96	3,900	<2.5	<2.5	12	<2.5	930	--	--	--		
MW-8	03-24-97	20.89	7.33	ND	13.56	03-24-97	1,400	<10	<10	<10	12	1,300	--	--	--		
MW-8	05-23-97	20.89	7.55	ND	13.34	05-23-97	730	<5	<5	<5	<5	630	--	--	--		
MW-8	08-19-97	20.89	7.87	ND	13.02	08-19-97	<500	<5	<5	<5	<5	290	--	--	--		
MW-8	11-19-97	20.89	7.87	ND	13.02	11-19-97	<200	<2	<2	<2	<2	260	--	--	--		
MW-8	02-19-98	20.89	4.46	ND	16.43	02-19-98	2,000	<2	<2	9	<2	140	--	--	--		
MW-8	04-23-98	20.89	6.35	ND	14.54	04-24-98	4,500	<5	<5	<5	11	590	--	--	--	0.5	P
MW-8	07-27-98	20.89	7.43	ND	13.46	07-27-98	Not sampled										
MW-8	10-14-98	20.89	7.79	ND	13.10	10-14-98	Not sampled										
MW-8	01-21-99	20.89	6.54	ND	14.35	01-22-99	2,000	<2	<2	3	<2	320	--	--	--	2.5	P
MW-8	05-06-99	20.89	7.30	ND	13.59	05-06-99	<50	<0.5	<0.5	<0.5	<0.5	160	--	--	--	12.76	NP
MW-8	08-23-99	20.89	7.45	ND	13.44	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	5	--	--	--	7.85	NP
MW-8	10-28-99	20.89	8.22	ND	12.67	10-28-99	160	<0.5	<0.5	<0.5	<1	45	--	--	--	0.84	P
MW-8	02-04-00	20.89	8.47	ND	12.42	02-04-00	<50	<0.5	<0.5	<0.5	<1	<3	--	--	--	1.92	P

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MW-9	03-17-95	20.89	6.94	ND	13.95	03-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-9	06-01-95	20.89	8.15	ND	12.74	06-01-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-9	08-31-95	20.89	8.10	ND	12.79	08-31-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-9	11-27-95	20.89	8.38	ND	12.51	11-27-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-9	02-22-96	20.89	7.36	ND	13.53	03-14-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-9	05-20-96	20.89	7.81	ND	13.08	05-21-96	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-9	08-26-96	20.89	8.00	ND	12.89	08-26-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-9	11-20-96	20.89	7.06	ND	13.83	11-20-96	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-9	03-24-97	22.26	7.74	ND	14.52	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-9	05-23-97	22.26	8.28	ND	13.98	05-23-97	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-9	08-19-97	22.26	8.32	ND	13.94	08-19-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-9	11-19-97	22.26	8.32	ND	13.94	11-19-97	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-9	02-19-98	22.26	7.11	ND	15.15	02-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-9	04-23-98	22.26	8.18	ND	14.08	04-23-98	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-9	07-27-98	22.26	7.97	ND	14.29	07-27-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	3.6	P
MW-9	10-14-98	22.26	8.29	ND	13.97	10-14-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	2.5	P
MW-9	01-21-99	22.26	7.63	ND	14.63	01-22-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.5	P
MW-9	05-06-99	22.26	7.27	ND	14.99	05-06-99	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-9	08-23-99	22.26	8.24	ND	14.02	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.93	P
MW-9	10-28-99	22.26	8.63	ND	13.63	10-28-99	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-9	02-04-00	22.26	8.01	ND	14.25	02-05-00	<50	<0.5	1.6	<0.5	<1	<3	--	--	--	1.47	P

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MW-10	03-17-95	21.12	6.26	ND	14.86	03-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-10	06-01-95	21.12	7.63	ND	13.49	06-01-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-10	08-31-95	21.12	8.17	ND	12.95	08-31-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-10	11-27-95	21.12	8.38	ND	12.74	11-27-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-10	02-22-96	21.12	5.41	ND	15.71	03-14-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-10	05-20-96	21.12	6.78	ND	14.34	05-21-96	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-10	08-26-96	21.12	8.00	ND	13.12	08-26-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-10	11-20-96	21.12	7.81	ND	13.31	11-20-96	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-10	03-24-97	21.33	7.87	ND	13.46	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-10	05-23-97	21.33	8.33	ND	13.00	05-23-97	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-10	08-19-97	21.33	8.39	ND	12.94	08-19-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-10	11-19-97	21.33	8.39	ND	12.94	11-19-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-10	02-19-98	21.33	4.65	ND	16.68	02-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-10	04-23-98	21.33	6.28	ND	15.05	04-23-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.5	P
MW-10	07-27-98	21.33	7.97	ND	13.36	07-27-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	3.3	P
MW-10	10-14-98	21.33	8.41	ND	12.92	10-14-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.0	P
MW-10	01-21-99	21.33	6.65	ND	14.68	01-22-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.5	P
MW-10	05-06-99	21.33	7.74	ND	13.59	05-06-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.76	P
MW-10	08-23-99	21.33	8.37	ND	12.96	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.21	P
MW-10	10-28-99	21.33	8.73	ND	12.60	10-28-99	<50	<0.5	<0.5	<0.5	<1	<3	--	--	--	1.12	P
MW-10	02-04-00	21.33	8.78	ND	12.55	02-05-00	<50	<0.5	1.0	<0.5	<1	<3	--	--	--	2.84	P

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MW-11	03-17-95	22.38	6.94	ND	15.44	03-17-95	100	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-11	06-01-95	22.38	7.90	ND	14.48	06-01-95	210	<0.5	<0.5	0.9	0.7	--	--	--	--		
MW-11	08-31-95	22.38	8.18	ND	14.20	08-31-95	680	<0.5	<0.5	4	1.8	<3	--	--	--		
MW-11	11-27-95	22.38	8.48	ND	13.90	11-27-95	340	<0.5	<0.5	2.2	1.6	--	--	--	--		
MW-11	02-22-96	22.38	6.63	ND	15.75	03-14-96	150	<0.5	<0.5	<0.8	0.8	<3	--	--	--		
MW-11	05-20-96	22.38	7.25	ND	15.13	05-21-96	Not sampled: well sampled annually, during the first quarter										
MW-11	08-26-96	22.38	8.22	ND	14.16	08-26-96	Not sampled: well sampled annually, during the first quarter										
MW-11	11-20-96	22.38	8.37	ND	14.01	11-20-96	Not sampled: well sampled annually, during the first quarter										
MW-11	03-24-97	20.97	8.15	ND	12.82	03-24-97	63	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-11	05-23-97	20.97	8.48	ND	12.49	05-23-97	Not sampled: well sampled annually, during the first quarter										
MW-11	08-19-97	20.97	8.67	ND	12.30	08-19-97	Not sampled: well sampled annually, during the first quarter										
MW-11	11-19-97	20.97	8.67	ND	12.30	11-19-97	Not sampled: well sampled annually, during the first quarter										
MW-11	02-19-98	20.97	6.25	ND	14.72	02-19-98	<50	<0.5	1.6	<0.5	1.8	7	--	--	--		
MW-11	04-23-98	20.97	7.23	ND	13.74	04-23-98	Not sampled: well sampled annually, during the first quarter										
MW-11	07-27-98	20.97	8.05	ND	12.92	07-27-98	Not sampled: well sampled annually, during the first quarter										
MW-11	10-14-98	20.97	8.58	ND	12.39	10-14-98	Not sampled: well sampled annually, during the first quarter										
MW-11	01-21-99	20.97	8.25	ND	12.72	01-22-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.5	P
MW-11	05-06-99	20.97	7.95	ND	13.02	05-06-99	Not sampled: well sampled annually, during the first quarter										
MW-11	08-23-99	20.97	8.51	ND	12.46	08-24-99	Not sampled: well sampled annually, during the first quarter										0.86
MW-11	10-28-99	20.97	8.95	ND	12.02	10-28-99	Not sampled: well sampled annually, during the first quarter										
MW-11	02-04-00	20.97	7.88	ND	13.09	02-04-00	<50	<0.5	<0.5	<0.5	<1	<3	--	--	--	3.29	P

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MW-12	03-17-95	22.77	7.09	ND	15.68	03-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-12	06-01-95	22.77	8.40	ND	14.37	06-01-95	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-12	08-31-95	22.77	8.55	ND	14.22	08-31-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-12	11-27-95	22.77	8.95	ND	13.82	11-27-95	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-12	02-22-96	22.77	6.81	ND	15.96	03-14-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-12	05-20-96	22.77	7.56	ND	15.21	05-21-96	Not sampled: well sampled annually, during the first quarter										
MW-12	08-26-96	22.77	8.63	ND	14.14	08-26-96	Not sampled: well sampled annually, during the first quarter										
MW-12	11-20-96	22.77	8.38	ND	14.39	11-20-96	Not sampled: well sampled annually, during the first quarter										
MW-12	03-24-97	20.11	8.75	ND	11.36	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-12	05-23-97	20.11	8.92	ND	11.19	05-23-97	Not sampled: well sampled annually, during the first quarter										
MW-12	08-19-97	20.11	9.20	ND	10.91	08-19-97	Not sampled: well sampled annually, during the first quarter										
MW-12	11-19-97	20.11	9.20	ND	10.91	11-19-97	Not sampled: well sampled annually, during the first quarter										
MW-12	02-19-98	20.11	6.28	ND	13.83	02-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-12	04-23-98	20.11	7.52	ND	12.59	04-23-98	Not sampled: well sampled annually, during the first quarter										
MW-12	07-27-98	20.11	8.52	ND	11.59	07-27-98	Not sampled: well sampled annually, during the first quarter										
MW-12	10-14-98	20.11	9.06	ND	11.05	10-14-98	Not sampled: well sampled annually, during the first quarter										
MW-12	01-21-99	20.11	8.20	ND	11.91	01-22-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.5	P
MW-12	05-06-99	20.11	8.47	ND	11.64	05-06-99	Not sampled: well sampled annually, during the first quarter										
MW-12	08-23-99	20.11	9.04	ND	11.07	08-24-99	Not sampled: well sampled annually, during the first quarter										0.85
MW-12	10-28-99	20.11	9.40	ND	10.71	10-28-99	Not sampled: well sampled annually, during the first quarter										
MW-12	02-04-00	20.11	8.38	ND	11.73	02-04-00	<50	<0.5	<0.5	<0.5	<1	<3	--	--	--	3.34	P

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ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Floating Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8240 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-13	03-17-95	22.45	6.91	ND	15.54	03-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-13	06-01-95	22.45	7.72	ND	14.73	06-01-95	Not sampled: well sampled annually, during the first quarter										
MW-13	08-31-95	22.45	7.58	ND	14.87	08-31-95	Not sampled: well sampled annually, during the first quarter										
MW-13	11-27-95	22.45	7.98	ND	14.47	11-27-95	Not sampled: well sampled annually, during the first quarter										
MW-13	02-22-96	22.45	6.71	ND	15.74	03-14-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-13	05-20-96	22.45	6.98	ND	15.47	05-21-96	Not sampled: well sampled annually, during the first quarter										
MW-13	08-26-96	22.45	7.85	ND	14.60	08-26-96	Not sampled: well sampled annually, during the first quarter										
MW-13	11-20-96	22.45	7.76	ND	14.69	11-20-96	Not sampled: well sampled annually, during the first quarter										
MW-13	03-24-97	20.75	7.85	ND	12.90	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-13	05-23-97	20.75	8.16	ND	12.59	05-23-97	Not sampled: well sampled annually, during the first quarter										
MW-13	08-19-97	20.75	8.40	ND	12.35	08-19-97	Not sampled: well sampled annually, during the first quarter										
MW-13	11-19-97	20.75	8.40	ND	12.35	11-19-97	Not sampled: well sampled annually, during the first quarter										
MW-13	02-19-98	20.75	6.44	ND	14.31	02-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-13	04-23-98	20.75	6.80	ND	13.95	04-23-98	Not sampled: well sampled annually, during the first quarter										
MW-13	07-27-98	20.75	7.52	ND	13.23	07-27-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.5	P
MW-13	10-14-98	20.75	8.15	ND	12.60	10-14-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	2.0	P
MW-13	01-21-99	20.75	7.85	ND	12.90	01-22-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.5	P
MW-13	05-06-99	20.75	7.82	ND	12.93	05-06-99	Not sampled: well sampled annually, during the first quarter										
MW-13	08-23-99	20.75	8.29	ND	12.46	08-24-99	Not sampled: well sampled annually, during the first quarter										0.94
MW-13	10-28-99	20.75	8.55	ND	12.20	10-28-99	Not sampled: well sampled annually, during the first quarter										
MW-13	02-04-00	20.75	8.11	ND	12.64	02-05-00	<50	<0.5	0.6	<0.5	<1	<3	--	--	--	1.27	P

Table 1
Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents
1995 - Present***

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Floating Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8240 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-14	03-17-95	22.99	8.17	ND	14.82	03-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-14	06-01-95	22.99	8.57	ND	14.42	06-01-95	Not sampled: well sampled annually, during the first quarter										
MW-14	08-31-95	22.99	9.05	ND	13.94	08-31-95	Not sampled: well sampled annually, during the first quarter										
MW-14	11-27-95	22.99	9.19	ND	13.80	11-27-95	Not sampled: well sampled annually, during the first quarter										
MW-14	02-22-96	22.99	6.52	ND	16.47	03-14-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-14	05-20-96	22.99	7.88	ND	15.11	05-21-96	Not sampled: well sampled annually, during the first quarter										
MW-14	08-26-96	22.99	8.83	ND	14.16	08-26-96	Not sampled: well sampled annually, during the first quarter										
MW-14	11-20-96	22.99	8.95	ND	14.04	11-20-96	Not sampled: well sampled annually, during the first quarter										
MW-14	03-24-97	20.90	8.98	ND	11.92	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-14	05-23-97	20.90	9.61	ND	11.29	05-23-97	Not sampled: well sampled annually, during the first quarter										
MW-14	08-19-97	20.90	9.80	ND	11.10	08-19-97	Not sampled: well sampled annually, during the first quarter										
MW-14	11-19-97	20.90	9.80	ND	11.10	11-19-97	<50	1.7	<0.5	0.6	3	<3					
MW-14	02-19-98	20.90	6.27	ND	14.63	02-19-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-14	04-23-98	20.90	7.75	ND	13.15	04-23-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.5	P
MW-14	07-27-98	20.90	9.24	ND	11.66	07-27-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.0	P
MW-14	10-14-98	20.90	9.73	ND	11.17	10-14-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.0	P
MW-14	01-21-99	20.90	8.90	ND	12.00	01-22-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	1.5	P
MW-14	05-06-99	20.90	8.98	ND	11.92	05-06-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.73	P
MW-14	08-23-99	20.90	9.68	ND	11.22	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	0.91	P
MW-14	10-28-99	20.90	10.00	ND	10.90	10-28-99	<50	<0.5	<0.5	<0.5	<1	<10	--	--	--	1.06	P
MW-14	02-04-00	20.90	8.19	ND	12.71	02-05-00	<50	<0.5	0.5	<0.5	<1	<3	--	--	--	1.21	P

Table 1
Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents
1995 - Present***

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Floating Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8240 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
MW-15	03-17-95	19.19	5.21	ND	13.98	03-17-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--		
MW-15	06-01-95	19.19	5.84	ND	13.35	06-01-95	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	08-31-95	19.19	6.18	ND	13.01	08-31-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--		
MW-15	11-27-95	19.19	6.42	ND	12.77	11-27-95	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	02-22-96	19.19	4.84	ND	14.35	03-14-96	<50	<0.5	<0.5	<0.5	<0.5	12	--	--	--		
MW-15	05-20-96	19.19	5.31	ND	13.88	05-21-96	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	08-26-96	19.19	6.05	ND	13.14	08-26-96	<50	<0.5	<0.5	<0.5	<0.5	8	--	--	--		
MW-15	11-20-96	19.19	5.46	ND	13.73	11-20-96	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	03-24-97	22.08	6.00	ND	16.08	03-24-97	<50	<0.5	<0.5	<0.5	<0.5	15	--	--	--		
MW-15	05-23-97	22.08	6.25	ND	15.83	05-23-97	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	08-19-97	22.08	6.34	ND	15.74	08-19-97	99[1]	<0.5	<0.5	<0.5	0.7	6	--	--	--		
MW-15	11-19-97	22.08	6.34	ND	15.74	11-19-97	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	02-19-98	22.08	4.66	ND	17.42	02-19-98	<50	<0.5	<0.5	<0.5	<0.5	48	--	--	--		
MW-15	04-23-98	22.08	5.18	ND	16.90	04-23-98	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	07-27-98	22.08	6.02	ND	16.06	07-27-98	<50	<0.5	<0.5	<0.5	<0.5	50	--	--	--	1.0	P
MW-15	10-14-98	22.08	6.26	ND	15.82	10-14-98	<50	<0.5	<0.5	<0.5	<0.5	27	--	--	--	1.5	P
MW-15	01-21-99	22.08	5.33	ND	16.75	01-22-99	<50	<0.5	<0.5	<0.5	<0.5	6	--	--	--	1.0	P
MW-15	05-06-99	22.08	5.82	ND	16.26	05-06-99	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	08-23-99	22.08	6.24	ND	15.84	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	21	--	--	--	1.14	P
MW-15	10-28-99	22.08	6.60	ND	15.48	10-28-99	Not sampled: well sampled semi-annually, during the first and third quarters										
MW-15	02-04-00	22.08	7.02	ND	15.06	02-04-00	<50	<0.5	<0.5	<0.5	<1	<3	--	--	--	1.09	P

Table 1
Groundwater Elevation and Analytical Data
Petroleum Hydrocarbons and Their Constituents
1995 - Present***

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation	Water Level Field Date	Top of Casing Elevation ft-MSL	Depth to Water feet	Floating Product Thickness feet	Groundwater Elevation ft-MSL	Water Sample Field Date	TPHG LUFT Method µg/L	Benzene EPA 8021B* µg/L	Toluene EPA 8021B* µg/L	Ethylbenzene EPA 8021B* µg/L	Total Xylenes EPA 8021B* µg/L	MTBE EPA 8021B* µg/L	MTBE EPA 8240 µg/L	TRPH EPA 418.1 µg/L	TPHD LUFT Method µg/L	Dissolved Oxygen mg/L	Purged/ Not Purged P/NP
ft-MSL: elevation in feet, relative to mean sea level TPHG: total petroleum hydrocarbons as gasoline, California DHS LUFT Method MTBE: Methyl tert-butyl ether TRPH: total recoverable petroleum hydrocarbons TPHD: total petroleum hydrocarbons as diesel, California DHS LUFT Method µg/L: micrograms per liter mg/L: milligrams per liter ND: none detected DRY: dry well; groundwater was not detected - - : not analyzed [1]: Sample contains a higher boiling point hydrocarbon mixture quantitated as gasoline. The chromatogram did not match the typical gasoline fingerprint. *: EPA method 8020 prior to 10/28/99 **: [corrected elevation (Z')] = Z + (h * 0.73) where: Z = measured elevation, h = floating product thickness, 0.73 = density ratio of oil to water ***: For previous historical groundwater elevation and analytical data please refer to <i>Fourth Quarter 1995 Groundwater Monitoring Program Results, ARCO Service Station 601, San Leandro, California</i>, (EMCON, March 14, 1996).																	

Table 2
Groundwater Flow Direction and Gradient

ARCO Service Station No. 601
712 Lewelling Boulevard, San Leandro, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
03/17/95	West-Southwest	0.006
06/01/95	Southwest	0.003
08/31/95	South-Southwest	0.005
11/27/95	South-Southwest	0.004
02/22/96	Northwest	0.007
05/20/96	Southwest	0.007
08/26/96	South-Southwest	0.004
11/20/96	South-Southeast	0.004
03/24/97	Southeast	0.013
05/23/97	Southeast	0.014
08/19/97	Southeast	0.04
11/19/97	Southeast	0.016
02/19/98	East	Variable
04/23/98	Variable	Variable
07/27/98	Southeast	0.05
10/14/98	Southeast	0.02
01/21/99	East	0.04
05/06/99	Southeast	0.05
08/23/99	Southeast	0.02
10/28/99	Southeast	0.04
02/04/00	East-Southeast	0.053

Table 3
Historical Groundwater Analytical Data
Metals*
1995 - Present**

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation	Water Sample Field Date	Cadmium EPA 6010 µg/L	Chromium EPA 6010 µg/L	Lead EPA 7421 µg/L	Nickel EPA 6010 µg/L	Zinc EPA 6010 µg/L
MW-1	03-17-95	<5	20	20	<40	60
MW-1	06-01-95	<5	20	22	70	100
MW-1	08-31-95	Not sampled: well contained floating product				
MW-1	11-27-95	Not sampled: well contained floating product				
MW-1	03-14-96	Not sampled: well contained floating product				
MW-1	05-21-96	0.006	<0.01	<0.005	<0.02	<0.02
MW-1	08-26-96	--	--	--	--	--
MW-1	11-20-96	--	--	--	--	--
MW-1	03-24-97	--	--	--	--	--
MW-1	05-23-97	Not analyzed: well MW-8 was sampled for additional parameters in lieu of well MW-1				
MW-1	08-19-97	--	--	--	--	--
MW-1	11-19-97	--	--	--	--	--
MW-1	02-19-98	<0.01	<0.01	<0.05	<0.02	<0.02
MW-1	04-23-98	--	--	--	--	--
MW-1	07-27-98	--	--	--	--	--
MW-1	10-14-98	--	--	--	--	--
MW-1	01-22-99	<0.005	<0.01	<0.05	<0.02	<0.02
MW-1	05-06-99	--	--	--	--	--
MW-1	08-24-99	--	--	--	--	--
MW-1	10-28-99	--	--	--	--	--
MW-1	02-04-00	Not analyzed for metals				
MW-8	08-31-95	<5	40	16	50	90
MW-8	11-27-95	<5	130	77	170	280
MW-8	03-14-96	<5	30	7	40	60
MW-8	05-23-97	<0.005	<0.01	<0.005	<0.02	<0.02

EPA: United States Environmental Protection Agency
mg/L: micrograms per liter
-- : not analyzed
*: Historically samples were analyzed for total metals. Since March 14, 1996, the samples were filtered and analyzed for dissolved metals
**: For previous historical analytical data please refer to *Fourth Quarter 1995 Groundwater Monitoring Program Results, ARCO Service Station 601, San Leandro, California*, (EMCON, March 14, 1996).

Table 4
Historical Groundwater Analytical Data
Volatile and Semivolatile Organic Compounds
1995 - Present*

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation Water Sample Field Date	Volatile Organic Compounds by EPA Method 601/8010 or 624/8240							Semivolatile Organic Compounds by EPA Method 3520/8270				
	Methylene Chloride µg/L	1,2-Dichloro- ethane µg/L	1,1-Dichloro- ethane µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	Naphthalene µg/L	2-Methyl- naphthalene µg/L	Bis (2-ethylhexyl)- Phthalate µg/L	Phenol µg/L	2,4-Di-methyl- phenol µg/L
MW-1 03-17-95	--	--	--	--	--	--	--	1300	730	<50	ND	150
MW-1 06-01-95	--	--	--	--	--	--	--	2200	1700	<100	240	<100
MW-1 08-31-95	Not sampled: well contained floating product											
MW-1 11-27-95	Not sampled: well contained floating product											
MW-1 03-14-96	Not sampled: well contained floating product											
MW-1 05-21-96	--	--	--	--	--	--	--	1200	860	<50	<50	<50
MW-1 08-26-96	--	--	--	--	--	--	--	2300	1800	<500	<500	<1000
MW-1 11-20-96	--	--	--	--	--	--	--	590	250	91	<50	<100
MW-1 03-24-97	--	--	--	--	--	--	--	730	610	<50	<50	<100
MW-1 05-23-97	Not analyzed: well MW-8 was sampled for additional parameters in lieu of well MW-1											
MW-1 08-19-97	--	--	--	--	--	--	--	1,300	790	<50	<50	<100
MW-1 11-19-97	--	--	--	--	--	--	--	<5	<5	5	<5	<10
MW-1 02-19-98	--	--	--	--	--	--	--	870	330	<50	<50	<100
MW-1 04-23-98	Not analyzed											
MW-1 07-27-98	Not analyzed											
MW-1 10-14-98	Not analyzed											
MW-1 01-28-99**	--	--	--	--	--	--	--	950	580	<50	<50	<100
MW-1 05-06-99	Not analyzed											
MW-1 08-24-99	--	--	--	--	--	--	--	1,200	400	<50	<50	<100
MW-1 10-28-99	--	--	--	--	--	--	--	1,100	320	<50	<50	<100
MW-1 02-04-00	--	--	--	--	--	--	--	780	330	<50	<50	<100

Table 4
Historical Groundwater Analytical Data
Volatile and Semivolatile Organic Compounds
1995 - Present*

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Designation Water Sample Field Date	Volatile Organic Compounds by EPA Method 601/8010 or 624/8240							Semivolatile Organic Compounds by EPA Method 3520/8270				
	Methylene Chloride µg/L	1,2-Dichloro- ethane µg/L	1,1-Dichloro- ethane µg/L	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Total Xylenes µg/L	Naphthalene µg/L	2-Methyl- naphthalene µg/L	Bis (2-ethylhexyl) Phthalate µg/L	Phenol µg/L	2,4-Di-methyl- phenol µg/L
MW-8 08-31-95	--	--	--	--	--	--	--	62	8	<5	<5	<5
MW-8 11-27-95	--	--	--	--	--	--	--	15	<5	<5	<5	<5
MW-8 03-14-96	--	--	--	--	--	--	--	400	55	<50	<50	<50
MW-8 05-23-97	--	--	--	--	--	--	--	26	<5	<5	<5	<10
EPA: United States Environmental Protection Agency µg/L: micrograms per liter -- : not analyzed < = less than the laboratory detection limit stated to the right *: For previous historical analytical data please refer to <i>Fourth Quarter 1995 Groundwater Monitoring Program Results, ARCO Service Station 601, San Leandro, California</i> , (EMCON, March 14, 1996). **: Sampling date is different from Groundwater Monitoring Field Date												

Table 5
Approximate Cumulative Floating Product Recovered

ARCO Service Station 601
712 Lewelling Boulevard, San Leandro, California

Well Desig- nation	Date	Floating Product Recovered gallons
MW-1	1991	3.43
MW-1	1992	0.02
MW-1	1993	0.00
MW-1	1994	0.00
MW-1	1995	0.00
MW-1	1996	0.00
MW-1	1997	0.00
MW-1	1998	0.00
MW-1	1999	0.00
MW-1	2000	0.00
1991 to 2000 Total:		3.45

APPENDIX C

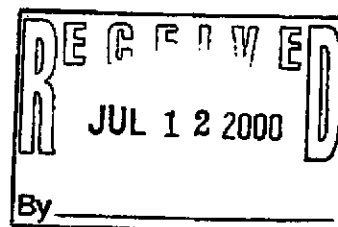
Certified Analytical Reports
And
Chain-of-Custody Documentation



July 10, 2000

Service Request No.: S2001822

Mr. Steve Meeks
Delta Environmental Consultants
3164 Gold Camp Dr. Suite 200
Rancho Cordova, CA 95670



RE: TO#2599000/RAT#8/601 SAN LEANDRO

Dear Mr. Meeks:

Enclosed are the results of the sample(s) submitted to our laboratory on June 22, 2000. All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply to the sample(s) analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Signature of this CAS Analytical Report confirms that pages 2 through 16, following, have been thoroughly reviewed and approved for release.

Columbia Analytical Services is certified for environmental analyses by the California Department of Health Services (certificate number: 2352, expiration: January 31, 2001).

If you have any questions, please call me at (408) 748-9700.

Respectfully submitted,

Columbia Analytical Services, Inc.

Bernadette Troncales
Project Chemist

Greg Jordan
Laboratory Director

COLUMBIA ANALYTICAL SERVICES, Inc.

Acronyms

A2LA	American Association for Laboratory Accreditation
ASTM	American Society for Testing and Materials
BOD	Biochemical Oxygen Demand
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CAM	California Assessment Metals
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
COD	Chemical Oxygen Demand
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank sample
ICP	Inductively Coupled Plasma atomic emission spectrometry
ICV	Initial Calibration Verification sample
J	Estimated concentration. The value is less than the MRL, but greater than or equal to the MDL. If the value is equal to the MRL, the result is actually <MRL before rounding.
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified
MBAS	Methylene Blue Active Substances
MCL	Maximum Contaminant Level. The highest permissible concentration of a substance allowed in drinking water as established by the U. S. EPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl tert-Butyl Ether
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the paper industry for Air and Stream Improvement
ND	Not Detected at or above the method reporting/detection limit (MRL/MDL)
NIOSH	National Institute for Occupational Safety and Health
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
SM	Standard Methods for the Examination of Water and Wastewater, 18th Ed., 1992
STLC	Solubility Threshold Limit Concentration
SW	Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Ed., 1986 and as amended by Updates I, II, IIA, and IIB.
TCLP	Toxicity Characteristic Leaching Procedure
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
tr	Trace level. The concentration of an analyte that is less than the PQL but greater than or equal to the MDL. If the value is equal to the PQL, the result is actually <PQL before rounding.
TRPH	Total Recoverable Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLc	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: L2002174
Date Collected: 6/20/00
Date Received: 6/22/00

MTBE, BTEX and TPH as Gasoline

Sample Name: MW-1-8
Lab Code: L2002174-001
Test Notes: † / C2A

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	EPA 5030	8021B	0.5	20	NA	7/4/00	2400	
Toluene	EPA 5030	8021B	0.5	20	NA	7/4/00	50	
Ethylbenzene	EPA 5030	8021B	0.5	20	NA	7/4/00	1800	
Xylenes, Total	EPA 5030	8021B	1.0	20	NA	7/4/00	680	
TPH as Gasoline	EPA 5030	8015M	50	20	NA	7/4/00	23000	
Methyl <i>tert</i> -Butyl Ether	EPA 5030	8021B	10	20	NA	7/4/00	<200	

†
C2A

TPH as Gasoline does not include MTBE.
MRL is elevated because of matrix interferences and because the sample required diluting.

Approved By: _____

Date: _____

1522/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: L2002174
Date Collected: 6/20/00
Date Received: 6/22/00

MTBE, BTEX and TPH as Gasoline

Sample Name: MW-3-6
Lab Code: L2002174-002
Test Notes: † / C2A

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	EPA 5030	8021B	0.5	50	NA	7/4/00	670	
Toluene	EPA 5030	8021B	0.5	50	NA	7/4/00	990	
Ethylbenzene	EPA 5030	8021B	0.5	50	NA	7/4/00	2400	
Xylenes, Total	EPA 5030	8021B	1.0	50	NA	7/4/00	12000	
TPH as Gasoline	EPA 5030	8015M	50	50	NA	7/4/00	45000	
Methyl <i>tert</i> -Butyl Ether	EPA 5030	8021B	10	50	NA	7/4/00	<500	

†
C2A

TPH as Gasoline does not include MTBE.
MRL is elevated because of matrix interferences and because the sample required diluting.

Approved By: _____

1S22020597p

Date: 07/10/00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: L2002174
Date Collected: 6/20/00
Date Received: 6/22/00

MTBE, BTEX and TPH as Gasoline

Sample Name: MW-4-6
Lab Code: L2002174-003
Test Notes: †

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	EPA 5030	8021B	0.5	1	NA	7/4/00	210	
Toluene	EPA 5030	8021B	0.5	1	NA	7/4/00	20	
Ethylbenzene	EPA 5030	8021B	0.5	1	NA	7/4/00	94	
Xylenes, Total	EPA 5030	8021B	1.0	1	NA	7/4/00	520	
TPH as Gasoline	EPA 5030	8015M	50	1	NA	7/4/00	2700	
Methyl tert -Butyl Ether	EPA 5030	8021B	10	1	NA	7/4/00	46	

† TPH as Gasoline does not include MTBE.

Approved By: _____



Date: _____

07/10/00

1522/020397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: L2002174
Date Collected: 6/20/00
Date Received: 6/22/00

MTBE, BTEX and TPH as Gasoline

Sample Name: MW-5-6
Lab Code: L2002174-004
Test Notes: † / C2A

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	EPA 5030	8021B	0.5	20	NA	7/4/00	3000	
Toluene	EPA 5030	8021B	0.5	20	NA	7/4/00	650	
Ethylbenzene	EPA 5030	8021B	0.5	20	NA	7/4/00	260	
Xylenes, Total	EPA 5030	8021B	1.0	20	NA	7/4/00	700	
TPH as Gasoline	EPA 5030	8015M	50	20	NA	7/4/00	10000	
Methyl tert -Butyl Ether	EPA 5030	8021B	10	20	NA	7/4/00	<200	

†
C2A

TPH as Gasoline does not include MTBE.
MRL is elevated because of matrix interferences and because the sample required diluting.

Approved By: _____

Date: 6/7/10/00

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: L2002174
Date Collected: 6/20/00
Date Received: 6/22/00

MTBE, BTEX and TPH as Gasoline

Sample Name: MW-8-7
Lab Code: L2002174-005
Test Notes: †

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	EPA 5030	8021B	0.5	1	NA	7/4/00	ND	
Toluene	EPA 5030	8021B	0.5	1	NA	7/4/00	0.9	
Ethylbenzene	EPA 5030	8021B	0.5	1	NA	7/4/00	ND	
Xylenes, Total	EPA 5030	8021B	1.0	1	NA	7/4/00	ND	
TPH as Gasoline	EPA 5030	8015M	50	1	NA	7/4/00	150	
Methyl tert-Butyl Ether	EPA 5030	8021B	10	1	NA	7/4/00	310	

† TPH as Gasoline does not include MTBE.

Approved By: _____

Date: 07/10/00

1522/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: L2002174
Date Collected: 6/20/00
Date Received: 6/22/00

MTBE, BTEX and TPH as Gasoline

Sample Name: MW-14-9
Lab Code: L2002174-006
Test Notes: †

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	EPA 5030	8021B	0.5	1	NA	7/4/00	ND	
Toluene	EPA 5030	8021B	0.5	1	NA	7/4/00	ND	
Ethylbenzene	EPA 5030	8021B	0.5	1	NA	7/4/00	ND	
Xylenes, Total	EPA 5030	8021B	1.0	1	NA	7/4/00	ND	
TPH as Gasoline	EPA 5030	8015M	50	1	NA	7/4/00	ND	
Methyl <i>tert</i> -Butyl Ether	EPA 5030	8021B	10	1	NA	7/4/00	ND	

† TPH as Gasoline does not include MTBE.

Approved By: _____

Date: _____

07/10/00

1522/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: L2002174
Date Collected: 6/19/00
Date Received: 6/22/00

MTBE, BTEX and TPH as Gasoline

Sample Name: TB
Lab Code: L2002174-007
Test Notes: †

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	EPA 5030	8021B	0.5	1	NA	7/3/00	ND	
Toluene	EPA 5030	8021B	0.5	1	NA	7/3/00	ND	
Ethylbenzene	EPA 5030	8021B	0.5	1	NA	7/3/00	ND	
Xylenes, Total	EPA 5030	8021B	1.0	1	NA	7/3/00	ND	
TPH as Gasoline	EPA 5030	8015M	50	1	NA	7/3/00	ND	
Methyl <i>tert</i> -Butyl Ether	EPA 5030	8021B	10	1	NA	7/3/00	ND	

†

TPH as Gasoline does not include MTBE.

Approved By: _____

Date: _____

07/10/00

1522/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: L2002174
Date Collected: NA
Date Received: NA

MTBE, BTEX and TPH as Gasoline

Sample Name: Method Blank
Lab Code: L200704-MB
Test Notes: †

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	EPA 5030	8021B	0.5	1	NA	7/4/00	ND	
Toluene	EPA 5030	8021B	0.5	1	NA	7/4/00	ND	
Ethylbenzene	EPA 5030	8021B	0.5	1	NA	7/4/00	ND	
Xylenes, Total	EPA 5030	8021B	1.0	1	NA	7/4/00	ND	
TPH as Gasoline	EPA 5030	8015M	50	1	NA	7/4/00	ND	
Methyl tert-Butyl Ether	EPA 5030	8021B	10	1	NA	7/4/00	ND	

†

TPH as Gasoline does not include MTBE.

Approved By: _____

BT

Date: _____

07/10/00

1522/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: L2002174
Date Collected: NA
Date Received: NA

MTBE, BTEX and TPH as Gasoline

Sample Name: Method Blank
Lab Code: L200703-MB
Test Notes: †

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Benzene	EPA 5030	8021B	0.5	1	NA	7/3/00	ND	
Toluene	EPA 5030	8021B	0.5	1	NA	7/3/00	ND	
Ethylbenzene	EPA 5030	8021B	0.5	1	NA	7/3/00	ND	
Xylenes, Total	EPA 5030	8021B	1.0	1	NA	7/3/00	ND	
TPH as Gasoline	EPA 5030	8015M	50	1	NA	7/3/00	ND	
Methyl tert -Butyl Ether	EPA 5030	8021B	10	1	NA	7/3/00	ND	

† TPH as Gasoline does not include MTBE.

Approved By: _____

Date: _____

1522/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: L2002174
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 7/4/00

Matrix Spike/Duplicate Matrix Spike Summary
MTBE, BTEX and TPH as Gasoline

Sample Name: MW-14-9
Lab Code: L2002174-006MS, L2002174-006DMS
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery				CAS Acceptance Limits	Relative Percent Difference	Resul Notes
									MS		DMS				
				MS	DMS		MS	DMS	MS	DMS	MS	DMS			
Benzene	EPA 5030	8021B	0.5	12.7	12.7	ND	16.4	15.0	129	118	39-150	9			
Toluene	EPA 5030	8021B	0.5	140	140	ND	125	126	89	90	46-148	<1			
Ethylbenzene	EPA 5030	8021B	0.5	35.2	35.2	ND	31.7	31.7	90	90	32-160	<1			
TPH as Gasoline	EPA 5030	8015M	50	2000	2000	ND	1620	1640	81	82	70-140	2			

Approved By: _____

Date: _____

DMS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: L2002174
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 7/3/00

Matrix Spike/Duplicate Matrix Spike Summary
MTBE, BTEX and TPH as Gasoline

Sample Name: Batch QC
Lab Code: L2002173-002MS, L2002173-002DMS
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Spike Level		Sample Result	Spike Result		Percent Recovery		CAS Acceptance Limits	Relative Percent Difference	Resu Note
				MS	DMS		MS	DMS	MS	DMS			
Benzene	EPA 5030	8021B	0.5	12.7	12.7	ND	16.0	16.4	126	129	39-150	2	
Toluene	EPA 5030	8021B	0.5	140	140	ND	125	128	89	91	46-148	2	
Ethylbenzene	EPA 5030	8021B	0.5	35.2	35.2	ND	31.3	32.2	89	91	32-160	2	
TPH as Gasoline	EPA 5030	8015M	50	2000	2000	ND	1650	1720	82	86	70-140	5	

Approved By: _____

Date: _____

DMS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
LCS Matrix: Water

Service Request: L2002174
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 7/4/00

Laboratory Control Sample Summary
MTBE, BTEX and TPH as Gasoline

Sample Name: Lab Control Sample
Lab Code: L200704-LCS
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Benzene	EPA 5030	8021B	50.0	49.2	98	39-150	
Toluene	EPA 5030	8021B	50.0	49.9	100	46-148	
Ethylbenzene	EPA 5030	8021B	50.0	52.0	104	32-160	
TPH as Gasoline	EPA 5030	8015M	2000	1750	88	70-140	

Approved By: _____

Date: _____

LCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
LCS Matrix: Water

Service Request: L2002174
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 7/3/00

Laboratory Control Sample Summary
MTBE, BTEX and TPH as Gasoline

Sample Name: Lab Control Sample
Lab Code: L200703-LCS
Test Notes:

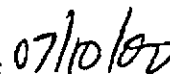
Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Benzene	EPA 5030	8021B	50.0	51.4	103	39-150	
Toluene	EPA 5030	8021B	50.0	52.2	104	46-148	
Ethylbenzene	EPA 5030	8021B	50.0	55.1	110	32-160	
TPH as Gasoline	EPA 5030	8015M	2000	1790	90	70-140	

Approved By: _____



Date: _____



LCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: L2002174
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
MTBE, BTEX and TPH as Gasoline

Prep Method: EPA 5030
Analysis Method: 8021B/8015M

Units: PERCENT
Basis: NA

Sample Name	Lab Code	Test Notes	Percent Recovery	
			4-Bromofluorobenzene	4-Bromofluorobenzene
MW-1-8	L2002174-001		89	78
MW-3-6	L2002174-002		93	81
MW-4-6	L2002174-003		101	86
MW-5-6	L2002174-004		90	78
MW-8-7	L2002174-005		88	78
MW-14-9	L2002174-006		86	75
TB	L2002174-007		84	74
Method Blank	L200703-MB		79	68
Method Blank	L200704-MB		87	77
MW-14-9	L2002174-006MS		96	84
MW-14-9	L2002174-006DMS		92	81
Batch QC	L2002173-002MS		91	83
Batch QC	L2002173-002DMS		93	84
Lab Control Sample	L200703-LCS		105	88
Lab Control Sample	L200704-LCS		95	84

CAS Acceptance Limits:

60-130

60-140

Approved By: _____

Date: _____

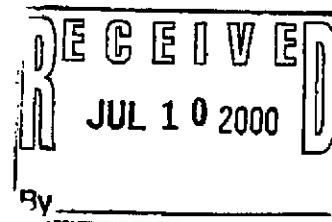
SUR2/061197p



July 6, 2000

Service Request No.: S2001823

Mr. Steve Meeks
Delta Environmental Consultants
3164 Gold Camp Dr. Suite 200
Rancho Cordova, CA 95670



RE: TO#2599000/RAT#8/601 SAN LEANDRO

Dear Mr. Meeks:

Enclosed are the results of the sample(s) submitted to our laboratory on June 22, 2000. All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply to the sample(s) analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Signature of this CAS Analytical Report confirms that pages 2 through 7, following, have been thoroughly reviewed and approved for release.

Columbia Analytical Services is certified for environmental analyses by the California Department of Health Services (certificate number: 2352, expiration: January 31, 2001).

If you have any questions, please call me at (408) 748-9700.

Respectfully submitted,

Columbia Analytical Services, Inc.

Bernadette Troncales
Project Chemist

Greg Jordan
Laboratory Manager

COLUMBIA ANALYTICAL SERVICES, Inc.

Acronyms

A2LA	American Association for Laboratory Accreditation
ASTM	American Society for Testing and Materials
BOD	Biochemical Oxygen Demand
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CAM	California Assessment Metals
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
COD	Chemical Oxygen Demand
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank sample
ICP	Inductively Coupled Plasma atomic emission spectrometry
ICV	Initial Calibration Verification sample
J	Estimated concentration. The value is less than the MRL, but greater than or equal to the MDL. If the value is equal to the MRL, the result is actually <MRL before rounding.
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified
MBAS	Methylene Blue Active Substances
MCL	Maximum Contaminant Level. The highest permissible concentration of a substance allowed in drinking water as established by the U. S. EPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl tert-Butyl Ether
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the paper industry for Air and Stream Improvement
ND	Not Detected at or above the method reporting/detection limit (MRL/MDL)
NIOSH	National Institute for Occupational Safety and Health
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
SM	Standard Methods for the Examination of Water and Wastewater, 18th Ed., 1992
STLC	Solubility Threshold Limit Concentration
SW	Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Ed., 1986 and as amended by Updates I, II, IIA, and IIB.
TCLP	Toxicity Characteristic Leaching Procedure
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
tr	Trace level. The concentration of an analyte that is less than the PQL but greater than or equal to the MDL. If the value is equal to the PQL, the result is actually <PQL before rounding.
TRPH	Total Recoverable Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLC	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: S2001823
Date Collected: 6/20/00
Date Received: 6/22/00

BTEX, MTBE and TPH as Gasoline

Sample Name: MW-107
Lab Code: S2001823-001
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
TPH as Gasoline	EPA 5030	CA/LUFT	50	1	NA	6/30/00	ND	
Benzene	EPA 5030	8021B	0.5	1	NA	6/30/00	ND	
Toluene	EPA 5030	8021B	0.5	1	NA	6/30/00	ND	
Ethylbenzene	EPA 5030	8021B	0.5	1	NA	6/30/00	ND	
Xylenes, Total	EPA 5030	8021B	1	1	NA	6/30/00	ND	
Methyl <i>tert</i> -Butyl Ether	EPA 5030	8021B	3	1	NA	6/30/00	ND	

Approved By: _____

Date: _____

07/06/00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: S2001823
Date Collected: NA
Date Received: NA

BTEX, MTBE and TPH as Gasoline

Sample Name: Method Blank
Lab Code: S200629-WB3
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
TPH as Gasoline	EPA 5030	CA/LUFT	50	1	NA	6/30/00	ND	
Benzene	EPA 5030	8021B	0.5	1	NA	6/30/00	ND	
Toluene	EPA 5030	8021B	0.5	1	NA	6/30/00	ND	
Ethylbenzene	EPA 5030	8021B	0.5	1	NA	6/30/00	ND	
Xylenes, Total	EPA 5030	8021B	1	1	NA	6/30/00	ND	
Methyl tert -Butyl Ether	EPA 5030	8021B	3	1	NA	6/30/00	ND	

Approved By: _____

Date: _____

1S22/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: S2001823
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 6/29/00

Matrix Spike Summary
BTEX and TPH as Gasoline

Sample Name: BATCH QC
Lab Code: S200629-001MS
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery	Result Notes
								Acceptance Limits	
Benzene	EPA 5030	8021B	0.5	25	ND	25.5	102	75-135	
Toluene	EPA 5030	8021B	0.5	25	ND	24.7	99	73-136	
Ethylbenzene	EPA 5030	8021B	0.5	25	ND	24.2	97	69-142	
Gasoline	EPA 5030	CA/LUFT	50	500	ND	513	103	75-135	

Approved By: _____

Date: 07/06/00

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
LCS Matrix: Water

Service Request: S2001823
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 6/30/00

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
BTEX and TPH as Gasoline

Sample Name: Dup Lab Control Sample
Lab Code: S200629-LCS, S200629-DLCS
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	True Value		Result		Percent Recovery		CAS Acceptance Limits	Relative Percent Difference	Result Notes
							LCS	DLCS			
Benzene	EPA 5030	8021B	25	25	25.6	25.6	102	102	75-135	<1	
Toluene	EPA 5030	8021B	25	25	24.8	24.9	99	100	73-136	<1	
Ethylbenzene	EPA 5030	8021B	25	25	24.0	24.1	96	96	69-142	<1	
Gasoline	EPA 5030	CA/LUFT	500	500	500	522	100	104	75-135	4	

Approved By: _____



Date: _____



DLCS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ARCO Products Company
Project: TO#2599000/RAT#8/601 SAN LEANDRO
Sample Matrix: Water

Service Request: S2001823
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
BTEX, MTBE and TPH as Gasoline

Prep Method: EPA 5030
Analysis Method: 8021B CA/LUFT

Units: PERCENT
Basis: NA

Sample Name	Lab Code	Test Notes	Percent Recovery	
			a,a,a-Trifluorotoluene	a,a,a-Trifluorotoluene
MW-107	S2001823-001		106	103
Method Blank	S200629-WB3		107	104
BATCH QC	S200629-001MS		101	115
Lab Control Sample	S200629-LCS		103	118
Dup Lab Control Sample	S200629-DLCS		96	118

CAS Acceptance Limits:

70-130

70-130

Approved By: _____



Date: _____

07/06/00

SLR2/020397p

DOULOS ENVIRONMENTAL COMPANY
GROUNDWATER/LIQUID LEVEL DATA
(measurements in feet)

Project Address: Arcob 601, 712 Sewelling Blvd. Date: 6-20-00

San Leandro, Ca

Project No.: _____

Recorded by: Hal Hansen

Well No	Time	Well Elev. TOC	Depth to Gr. Water	Measured Total Depth	Gr. Water Elevation	Depth to Product	Product Thickness	Comments
MW-1	907		8.20	10.78				DO 0.92
MW-2	925		7.12	12.14				
MW-3	910		6.22	11.81				DO 2.31
MW-4	857		6.46	8.26				DO 1.41
MW-5	905		6.78	7.97				DO 1.46
MW-6	900		dry	8.12				
MW-7	849		dry	9.37				
MW-8	853		7.23	10.10				DO 4.68
MW-9	858		8.01	15.99				
MW-10	841		7.99	11.92				D.O. 4.45
MW-11	929		8.18	11.68				
MW-12	924		8.55	11.14				
MW-13	915		7.86	12.68				
MW-14	845		9.16	12.61				D.O. 1.77
MW-15	920		5.98	9.84				

Notes:

client: ArcoSampling Date: 6-20-00site: Arco #601

Project No.: _____

712 Leaveling BlvdWell Designation: MW-1SAN Leandro

Is setup of traffic control devices required? ☒ NO YES time: _____ hours
 Is there standing water in well box? ☒ YES Above TOC Below TOC
 Is top of casing cut level? ☒ NO YES If no, see remarks
 Is well cap sealed and locked? ☒ NO YES If no, see remarks
 Height of well casing riser (in inches): 4
 Well cover type: 8" UV _____ 12" UV _____ 12" EMCO _____ 8" BK _____
 12" BK _____ 12" DWP _____ 12" CNI _____ 36" CNI _____ Other _____
 General condition of wellhead assembly: Excellent ☒ Good Fair Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
 _____ 2" PVC bailer _____ Dedicated bailer
 _____ 4" PVC bailer ☒ Centrifugal pump

Sampled with: Disposable bailer: ☒ Teflon bailer: _____Well Diameter: 2" _____ 4" ☒ 6" _____ 8" _____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement

Recharge Measurement

Time: 407 Time: NA Calculated purge: NADepth of well: 10.78 Depth to water: NA Actual purge: NADepth to water: 8.20Start purge: NASampling time: 1159

Time	Temp.	E.C.	pH	Turbidity	Volume

Sample appearance: clearLock: data

Equipment replaced: (Check all that apply) Note condition of replaced item
 2" Locking Cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
 4" Locking Cap: _____ Lock-Dolphin: _____ 9/16 Bolt: _____
 6" Locking Cap: _____ Pinned Allenhead (DWP): _____

Remarks: _____

Ant. 10/1

Client: ArcoSampling Date: 6-20-00Site: Arco #601

Project No.: _____

712 Lewelling BlvdWell Designation: MW-3San Leandro

Is setup of traffic control devices required? ☒ NO ☐ YES time: _____ hours
 Is there standing water in well box? ☒ NO ☐ YES Above TOC Below TOC
 Is top of casing cut level? ☒ NO ☐ YES If no, see remarks
 Is well cap sealed and locked? ☒ NO ☐ YES If no, see remarks
 Height of well casing riser (in inches): _____
 Well cover type: 8" UV _____ 12" UV _____ 12" EMCO _____ 8" BK _____
 12" BK _____ 12" DWP _____ 12" CNI _____ 36" CNI _____ other _____
 General condition of wellhead assembly: Excellent ☒ Good Fair Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
 _____ 2" PVC bailer _____ Dedicated bailer
 _____ 4" PVC bailer ☒ Centrifugal pump

Sampled with: Disposable bailer: ☒ Teflon bailer: _____Well Diameter: 2" _____ 4" ☒ 6" _____ 8" _____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement

Recharge Measurement

Time: 9:10Time: 11:30Calculated purge: 20.9 galDepth of well: 11.81Depth to water: 8.62Actual purge: 10.9 galDepth to water: 8.22Start purge: 10:51Sampling time: 11:21

Time	Temp.	E.C.	pH	Turbidity	Volume
10:52	23.1	1341	7.52	—	1
10:54	22.2	1320	7.44	—	2
10:56	22.1	1321	7.46	—	3

Sample appearance: clearLock: max

Equipment replaced: (Check all that apply) Note condition of replaced item

2" Locking Cap: _____ Lock #3753: _____ 7/32 Allenhead: _____

4" Locking Cap: _____ Lock-Dolphin: _____ 9/16 Bolt: _____

6" Locking Cap: _____ Pinned Allenhead (DWP): _____

Remarks: _____

Signature: [Signature]

Client: ArcoSampling Date: 6-20-00Site: Arco #601

Project No.: _____

712 Lewelling BlvdWell Designation: MW-4SAN Leandro

Is setup of traffic control devices required? ☒ NO YES time: _____ hours
 Is there standing water in well box? ☒ NO YES Above TOC Below TOC
 Is top of casing cut level? ☒ NO YES If no, see remarks
 Is well cap sealed and locked? ☒ NO YES If no, see remarks
 Height of well casing riser (in inches): 4
 Well cover type: 8" UV _____ 12" UV _____ 12" EMCO ☒ 8" BK _____
 12" BK _____ 12" DWP _____ 12" CNI _____ 36" CNI _____ Other _____
 General condition of wellhead assembly: Excellent ☒ Good Fair Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
 _____ 2" PVC bailer _____ Dedicated bailer
 _____ 4" PVC bailer ☒ Centrifugal pump

Sampled with: Disposable bailer: ☒ Teflon bailer: _____Well Diameter: 2" _____ 4" ☒ 6" _____ 8" _____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement

Recharge Measurement

Time: 857Time: 1221Calculated purge: 3.5 galDepth of well: 826Depth to water: 797Actual purge: 277Depth to water: 846Start purge: 1124Sampling time: 1222

Time	Temp.	E.C.	pH	Turbidity	Volume
1125	24.1	1138	744	—	1
1126	24.2	1120	737	—	2
1129	24.3	1128	738	—	3

D. and M.

Sample appearance: clearLock: dash

Equipment replaced: (Check all that apply) Note condition of replaced item
 2" Locking Cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
 4" Locking Cap: _____ Lock-Dolphin: _____ 9/16 Bolt: _____
 6" Locking Cap: _____ Pinned Allenhead (DWP): _____

Remarks: _____

Signature: Hal Ho

client: ArcoSampling Date: 6-20-00site: Arco #601

Project No.: _____

712 Lowelling BlvdWell Designation: MW-5SAN Leandro

Is setup of traffic control devices required? ☒ NO ☐ YES time: _____ hours
 Is there standing water in well box? ☒ NO ☐ YES Above TOC Below TOC
 Is top of casing cut level? ☒ NO ☐ YES If no, see remarks
 Is well cap sealed and locked? ☒ NO ☐ YES If no, see remarks
 Height of well casing riser (in inches): _____
 Well cover type: 8" UV _____ 12" UV _____ 12" EMCO ✓ 8" BK _____
 12" BK _____ 12" DWP _____ 12" CNI _____ 36" CNI _____ Other _____
 General condition of wellhead assembly: Excellent Good Fair Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
 _____ 2" PVC bailer _____ Dedicated bailer
 _____ 4" PVC bailer ✓ Centrifugal pump

Sampled with: Disposable bailer: ✓ Teflon bailer: _____Well Diameter: 2" _____ 4" ✓ 6" _____ 8" _____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement

Recharge Measurement

Time: 105Time: 1214Calculated purge: 2.3 galDepth of well: 797Depth to water: 686Actual purge: 1.5Depth to water: 6.78Start purge: 1134Sampling time: 1215

Time	Temp.	E.C.	pH	Turbidity	Volume
1135	21.0	1543	792	—	1
1136	21.5	1537	780	—	2
1139	21.3	1534	783	—	3

Sample appearance: cleanLock: Dolphin

Equipment replaced: (Check all that apply) Note condition of replaced item
 2" Locking Cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
 4" Locking Cap: _____ Lock-Dolphin: _____ 9/16 Bolt: _____
 6" Locking Cap: _____ Pinned Allenhead (DWP): _____

Remarks: _____

Signature: [Signature]

client: ArcoSampling Date: 6-20-00site: Arco #601

Project No.: _____

712 Leveilling BlvdWell Designation: MW-8SAN LEANDRO

Is setup of traffic control devices required? ☒ NO YES time: _____ hours
 Is there standing water in well box? ☒ NO YES Above TOC Below TOC
 Is top of casing cut level? ☒ NO YES If no, see remarks
 Is well cap sealed and locked? ☒ NO YES If no, see remarks
 Height of well casing riser (in inches): 4
 Well cover type: 8" UV _____ 12" UV _____ 12" EMCO ☒ 8" BK _____
 12" BK _____ 12" DWP _____ 12" CNI _____ 36" CNI _____ Other _____
 General condition of wellhead assembly: Excellent ☒ Good Fair Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
 _____ 2" PVC bailer _____ Dedicated bailer
 _____ 4" PVC bailer ☒ Centrifugal pump

Sampled with: Disposable bailer: ☒ Teflon bailer: _____Well Diameter: 2" _____ 4" ☒ 6" _____ 8" _____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement

Recharge Measurement

Time: 853Time: 1046Calculated purge: 5.6 galDepth of well: 1010Depth to water: 746Actual purge: 6.6 galDepth to water: 723Start purge: 1012Sampling time: 1047

Time	Temp.	E.C.	pH	Turbidity	Volume
1014	23.0	744	7.84	_____	1
1017	23.0	681	7.92	_____	3
1020	23.1	676	7.97	_____	3

purging
purging

Sample appearance: clearLock: don't

Equipment replaced: (Check all that apply) Note condition of replaced item
 2" Locking Cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
 4" Locking Cap: _____ Lock-Dolphin: _____ 9/16 Bolt: _____
 6" Locking Cap: _____ Pinned Allenhead (DWP): _____

Remarks: _____

Signature: [Signature]

Client: ArcoSampling Date: 6-20-00Site: Arco #601

Project No.: _____

712 Lowelling BlvdWell Designation: MW-10San Leandro

Is setup of traffic control devices required? ☒ NO ☐ YES time: _____ hours
 Is there standing water in well box? ☐ NO ☒ YES Above TOC Below TOC
 Is top of casing cut level? ☐ NO ☒ YES If no, see remarks
 Is well cap sealed and locked? ☐ NO ☒ YES If no, see remarks
 Height of well casing riser (in inches): 4
 Well cover type: 8" UV _____ 12" UV _____ 12" EMCO ☒ 8" BK _____
 12" BK _____ 12" DWP _____ 12" CNI _____ 36" CNI _____ Other _____
 General condition of wellhead assembly: Excellent ☒ Good ☐ Fair ☐ Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
 _____ 2" PVC bailer _____ Dedicated bailer
 _____ 4" PVC bailer ☒ Centrifugal pump

Sampled with: Disposable bailer: ☒ Teflon bailer: _____Well Diameter: 2" ☒ 4" _____ 6" _____ 8" _____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement Recharge Measurement

Time: 841 Time: 940 Calculated purge: 1.7 gal
 Depth of well: 11.92 Depth to water: 8.20 Actual purge: 1.7 gal
 Depth to water: 7.77 7.8

Start purge: 935 Sampling time: 941

Time	Temp.	E.C.	pH	Turbidity	Volume
936	21.5	1120	746	—	1
937	21.7	1112	741	—	2
938	22.0	1102	736	—	3

Sample appearance: clear Lock: none

Equipment replaced: (Check all that apply) Note condition of replaced item
 2" Locking Cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
 4" Locking Cap: _____ Lock-Dolphin: _____ 9/16 Bolt: _____
 6" Locking Cap: _____ Pinned Allenhead (DWP): _____

Remarks: _____

Signature: [Signature]

Client: ArcoSampling Date: 6-20-00Site: Arco #601

Project No.: _____

712 Lewelling BlvdWell Designation: MW-14San Leandro

Is setup of traffic control devices required? ☒ NO ☐ YES time: _____ hours
 Is there standing water in well box? ☒ NO ☐ YES Above TOC Below TOC
 Is top of casing cut level? ☒ NO ☐ YES If no, see remarks
 Is well cap sealed and locked? ☒ NO ☐ YES If no, see remarks
 Height of well casing riser (in inches): 5
 Well cover type: 8" UV _____ 12" UV _____ 12" EMCO ☒ 8" BK _____
 12" BK _____ 12" DWP _____ 12" CNI _____ 36" CNI _____ Other _____
 General condition of wellhead assembly: Excellent Good Fair Poor

Purging Equipment: ☒ 2" disposable bailer _____ Submersible pump
 _____ 2" PVC bailer _____ Dedicated bailer
 _____ 4" PVC bailer _____ Centrifugal pump

Sampled with: Disposable bailer: ☒ Teflon bailer: _____

Well Diameter: 2" ☒ 4" _____ 6" _____ 8" _____

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement

Recharge Measurement

Time: 9:45Time: N/ACalculated purge: N/ADepth of well: 12.61Depth to water: N/AActual purge: N/ADepth to water: 9.16Start purge: 1000Sampling time: 10 05

Time	Temp.	E.C.	pH	Turbidity	Volume
1001					1
1002		<u>No Purge</u>			2
1003					3

Sample appearance: clearLock: none

Equipment replaced: (Check all that apply) Note condition of replaced item
 2" Locking Cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
 4" Locking Cap: _____ Lock-Dolphin: _____ 9/16 Bolt: _____
 6" Locking Cap: _____ Pinned Allenhead (DWP): _____

Remarks: _____

Signature: Walt