Rancho Cordova, CA 95670-6021

3164 Gold Camp Drive

Suite 200

U.S.A. 916 638-2085 FAX: 916 638-8385



June 25, 2002

Mr. Scott Seery Alameda County Health Care Services Agency Department of Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

Subject: Monitoring Well Installation Results Report

ARCO Station No. 4977 2770 Castro Valley Boulevard Castro Valley, California Delta Project No. D000-845

Mr. Seery:

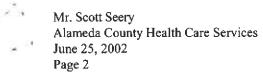
Delta Environmental Consultants, Inc. (Delta) has been authorized by Atlantic Richfield Company to conduct a preliminary hydrogeologic investigation at the subject site as shown on Figure 1. A site map illustrating on-site features is included as Figure 2. This investigation was intended to evaluate the distribution of dissolved petroleum hydrocarbons in groundwater and soil beneath the subject site. This report includes the results of drilling and well installation activities conducted on April 11 and 12, 2002. The work was conducted in accordance with Delta's Work Plan for Preliminary Hydrogeological Assessment dated October 26, 2001. This work was performed under Alameda County Public Works Agency (ACPWA) well installation permit numbers W01-0313 through W01-0316. Copies of the permits are included in Enclosure A.

Site Description

The site is located on the northwest corner of Castro Valley Boulevard and Wisteria Street at 2770 Castro Valley Boulevard in Castro Valley, California. The site is currently used as a retail gasoline service station consisting of a station building, two multi-pump fuel dispenser islands, and two underground storage tanks (USTs) that share a common tank basin near the north site boundary. The site vicinity is used by commercial retail businesses and residential homes. The site lies at an elevation of approximately 160 feet above mean sea level (msl) with the surrounding topography sloping towards the south.

Project Background

On March 15, 2001, Delta observed the removal of product distribution lines, product dispenser islands, and one 10,000-gallon and two 12,000-gallon USTs. As a result, approximately 750 cubic yards of soil and 11,200 gallons of groundwater were removed and disposed of at an ARCO approved facility. During the removal event, Delta collected twenty-two soil samples from the areas beneath the product distribution lines, product dispensers, and tank basin. The samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX); methyl tertiary butyl ether (MTBE)



and total petroleum hydrocarbons in the gasoline range (TPHg) using the California DHS LUFT Method, and total lead using EPA Method 6010. Concentrations of TPHg were detected in 19 of the samples. The highest TPHg concentration was detected in a soil sample collected from the southern dispenser island. Benzene was detected in 12 of the samples with concentrations ranging from 0.36 to 8.05 milligram per kilogram (mg/kg). Similar to TPHg, the highest benzene concentration was also detected in samples collected from the southern dispenser island. A grab groundwater sample (Tank 1-9) was also collected from the UST basin and analyzed for BTEX, TPHg, and MTBE. Benzene was not detected at or above the laboratory reporting limits. TPHg was reported at 40,500 micrograms per liter (µg/L) and MTBE was reported at 6,530 µg/L. The above data are presented in Delta's report entitled "Tank Basin, Product Line and Dispenser Island Sampling Results, and Installation of Future Remediation System Piping" dated June 20, 2001.

Regional Geology

The subject site is located on the eastern margin of the East Bay Plain at the southern edge of the San Leandro Hills, approximately 2 miles southeast of Lake Chabot. As mapped by Helley and others (1979), soil in the site vicinity consists of late Pleistocene alluvium consisting of weakly consolidated, slightly weathered, poorly sorted, irregular interbedded clay, silt, sand, and gravel (GR 1997). The nearest surface water body is an unnamed tributary of San Lorenzo Creek, which is located approximately 600 feet west of the site.

Soil Borings

On April 11 and 12, 2002, a Delta geologist observed Mitchell Drilling Environmental of Sacramento, California advance five borings, each to a depth of 15 feet bsg, using 8- to 10-inch diameter hollow-stem augers. Three of the borings were completed as groundwater monitoring wells MW-1 through MW-3. Field methods and procedures used by Delta during installation of these wells are summarized in Enclosure B.

Soil samples were collected at 5-foot intervals from each soil boring to 10-feet bsg and then at 0.5-foot intervals using a California-modified split spoon sampler to the total depth of each boring. The soil samples from each boring were logged using visual and manual methods then field-analyzed for the presence of organic vapors using a photoionization detector (PID). The boring logs are included in Enclosure C. Figure 2 presents the location of cross-section trace A-A'. Figure 3 presents an interpretation of subsurface conditions shown on geologic cross section A-A'.

Soil Sample Analytical Results

Eighteen soil samples were submitted to Sequoia Analytical Laboratory (Sequoia) in Sacramento, California for chemical analysis of BTEX and TPHg by DHS LUFT Methods, and MTBE by EPA Method 8260B. Benzene concentrations were detected in six soil samples at concentrations ranging from 0.15 mg/kg in B-1 to 3.2 mg/kg in MW-1. TPHg concentrations were detected in eight soil samples ranging from 12 mg/kg in MW-2 to 1,600 mg/kg in B-2. MTBE concentrations were detected in ten of the soil samples ranging from 0.016 mg/kg in MW-2 to 0.12 mg/kg in MW-3. Soil sample analytical results are presented in Table 1.

One composite soil sample SP-1,2,3,4 was collected from the stockpile and submitted to Sequoia for analyses of BTEX and TPHg by DHS LUFT Methods, and total lead by EPA 6000/7000 Series Methods. Concentrations of TPHg were detected in the stockpile sample at 0.91 mg/kg. Soil

Mr. Scott Seery Alameda County Health Care Services June 25, 2002 Page 3

stockpile sample analytical results are summarized in Table 1. Copies of the soil analytical reports are included in Enclosure D.

Monitoring Well Construction

Groundwater monitoring wells MW-1 through MW-3 were installed to assess the vertical and lateral extent of petroleum hydrocarbon beneath the site. The locations of the monitoring wells are shown on Figure 2. The monitoring wells were constructed with 15 feet of 4-inch diameter, flush-threaded, Schedule 40 PVC casing. The wells were screened with 10 feet of 0.020-inch machine-slotted well screen. The well annulus was backfilled with Lonestar No. 3 sand to approximately 0.5-feet above the well screen followed by a 0.5-foot thick bentonite transition seal. The upper portions of the well borings were backfilled with neat cement containing approximately five percent bentonite powder. The tops of the wells were completed with traffic-rated well boxes and set flush to grade in concrete.

Well Survey

On April 30, 2002, the monitoring wells were surveyed by Morrow Surveying of West Sacramento, California, relative to Alameda County benchmark L.C.R.-CHAP. In accordance with State Assembly Bill AB2886, longitude and latitude coordinates were recorded from GPS observations along with well box and top of casing elevations relative to mean seal level. The well survey is presented in Enclosure E.

Well Development, Groundwater Level Measurements and Sampling

On April 17, 2002, Delta developed the newly installed wells MW-1 through MW-3 using the methods described in Enclosure B. On April 17, 2002, depth to water in the wells ranged from 5.36 to 9.28 feet bsg. Based on the April 17, 2002 event, groundwater beneath the site flows toward the southwest at a gradient of 0.0038. After development, the wells were allowed to stabilize for over 24-hours before they were sampled on April 19, 20002. All groundwater samples from wells MW-1 through MW-3 were submitted to Sequoia for analyses of BTEX and TPHg using DHS LUFT Methods, and MTBE using EPA Method 8260B. Groundwater sampling field data sheets are included in Enclosure F. A groundwater contour map based on the April 17, 2002 water level data is included as Figure 4.

Groundwater Sample Analytical Results

Benzene was reported in wells MW-1 through MW-3 at concentrations ranging from $12 \mu g/L$ in MW-1 to 970 $\mu g/L$ in MW-2. Concentrations of TPHg were reported ranging from 660 $\mu g/L$ in MW-1 to 28,000 $\mu g/L$ in MW-3. Concentrations of MTBE were reported ranging from 38 $\mu g/L$ in MW-1 to 1,700 $\mu g/L$ in MW-3. Groundwater chemical analytical results are presented in Table 2. Copies of the groundwater analytical reports with chain-of-custody documentation are included in Enclosure G.

Disposal of Soil Stockpile

Approximately two cubic yards of drill cuttings was generated during the drilling activities. The cuttings were temporarily covered with visqueen and stockpiled on-site. The stockpile was removed on May 5, 2002, by Dillard Environmental Services and transported to Forward Landfill in Manteca, California for disposal. The soil completion letter is included in Enclosure H.

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Discussion

Laboratory analytical results for the soil samples collected during this investigation indicate that the highest petroleum hydrocarbon impact in the soil have occurred in the vicinity of B-2 between 6 and 10.5-feet bsg. Although, it appears the majority of impacted soil is confined to between 10 and 11-feet bsg. Soil between 12 to 14-feet bsg does not appear to be significantly impacted. Groundwater analytical results indicate that benzene, TPHg, and MTBE have impacted the groundwater at the site. The highest groundwater impact is located southeast of the existing UST basin in the vicinity of monitoring well MW-2.

Remarks/Signatures

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 hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

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

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Brett A. Bardsley Staff Geologist

Steven W. Meeks, P.L.

Project Manager

California Registered Civil Engineer No. C057461

BAB (LRP003.D000845 - 4977)

Enclosures

cc:

Mr. Paul Supple - Atlantic Richfield Company

TABLE 1
SOIL SAMPLE LABORATORY ANALYTICAL RESULTS

ARCO Service Station No. 4977 2770 Castro Valley Road Castro Valley, California

Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl- benzene (mg/kg)	Total Xylenes (mg/kg)	TPH as Gasoline (mg/kg)	MTBE (mg/kg)	Total Lead (mg/kg)
Dispenser Isla	nd Samples								
MW-1-5.50	04/11/02	5.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.50	< 0.0050	NA
MW-1-10.50		10.5	3.2	1.8	5.8	2.6	340	< 0.025	NA
MW-1-12.50		12.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.50	< 0.0050	NA
MW-1-14.00		14.0	< 0.0050	<0.0050	<0.0050	<0.0050	<0.50	<0.0050	NA
MW-2-6.00	04/11/02	6.0	< 0.050	< 0.050	< 0.050	< 0.050	12	< 0.025	NA
MW-2-10.00		10.0	0.59	0.10	1.7	6.9	60	0.064	NA
MW-2-12.00		12.0	< 0.0050	< 0.0050	<0.0050	< 0.0050	< 0.50	< 0.0050	NA
MW-2-13.50		13.5	< 0.0050	<0.0050	0.0061	0.019	<0.50	0.016	NA
MW-3-6.00	04/11/02	6.0	< 0.0050	< 0.0050	<0.0050	<0.0050	< 0.50	0.025	NA
MW-3-11.00		11.0	0.36	< 0.10	0.69	0.43	35	0.098	NA
MW-3-12.50		12.5	0.0067	< 0.0050	< 0.0050	< 0.0050	< 0.50	0.12	NA
MW-3-14.00		14.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.50	0.10	NĄ
B-1-6.00	04/12/02	6.0	0.15	< 0.050	0.8	0.87	95	< 0.025	NA
B-1-10.50		10.5	1.1	1.2	6.2	2.1	240×	< 0.025	NA
B-1-12.00		12.0	< 0.0050	<0.0050	< 0.0050	< 0.0050	< 0.50	0.0098	NA
B-2-6.00	04/11/02	6.0	<1.0	<1.0	25	150	1,600	0.037	NA
B-2-10.50		10.5	0.61	0.73	3.0	2.4	160	0.075	NA
B-2-12.50		12.5	< 0.0050	< 0.0050	<0.0050	< 0.0050	<0.50	0.023	NA
Soil Stockpile	Results								
SP-1,2,3,4	04/12/02	75	<0.0050	< 0.0050	0.0096	0.012	0.91	NA	<10

TPH = Total petroleum hydrocarbons.

MTBE = Methyl tertiary butyl ether (analyzed by DHS LUFT)

NA = Not analyzed

TABLE 2
GROUNDWATER SAMPLE ANALYTICAL RESULTS

ARCO Service Station No. 4977 2770 Castro Valley Road Castro Valley, California

Sample ID	Date	Top of Casing Elevation (ft amsl)	Depth to Groundwater (ft. btc)	Groundwater Elevation (ft amsl)	Benzene (μg/L)	Toluene (μg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	TPHg (µg/L)	MTBE (μg/L)
MW-1	04/19/02	161.11	11.21	149.90	12	1.3	4.3	0.80	660	38
MW-2	04/19/02	161.87	6.59	155.28	970	120	860	6,900	28,000	760
MW-3	04/19/02	162.14	6.94	155.20	29	1.1	43	62	1,200	1,700

amsl = above mean sea level

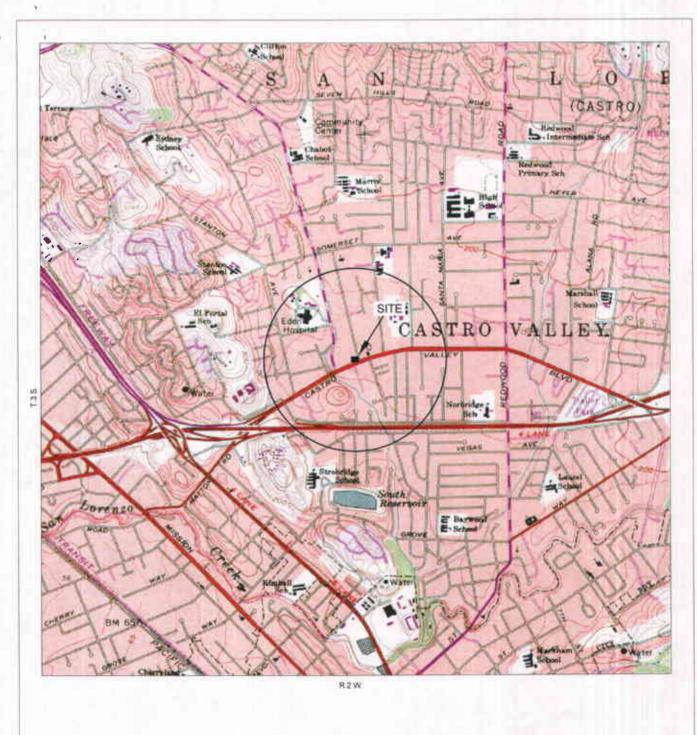
btc = below top of casing

TPHg = Total petroleum hydrocarbons in the gasoline range (C5-C9).

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

 $\mu g/L = micrograms per liter$

MTBE anlayzed by EPA Method 8260.



GENERAL NOTES: BASE MAP FROM U.S.G.S. HAYWARD, CA 7.5 MINUTE TOPOGRAPHIC PHOTOREVISED 1980





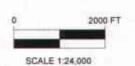
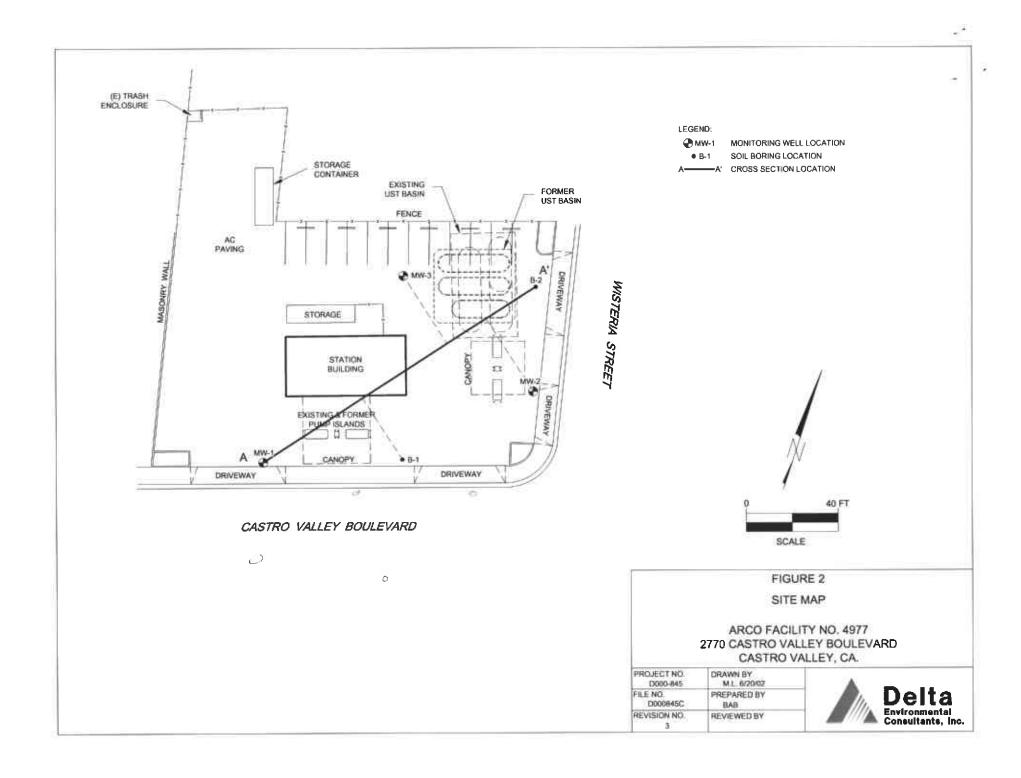


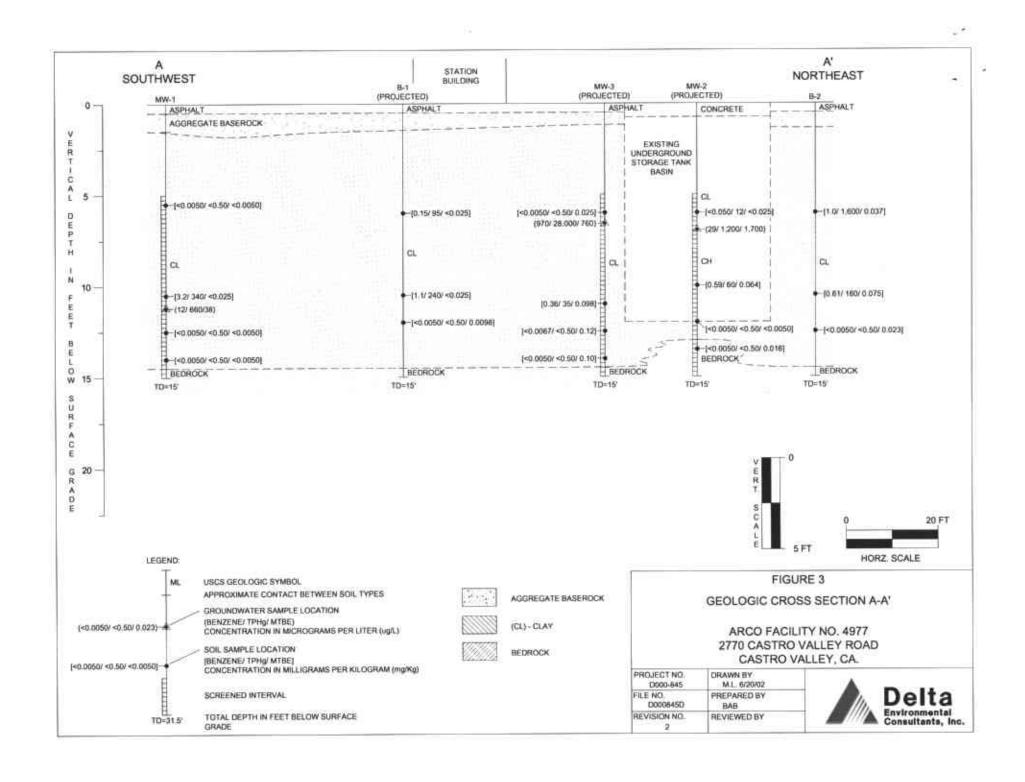
FIGURE 1

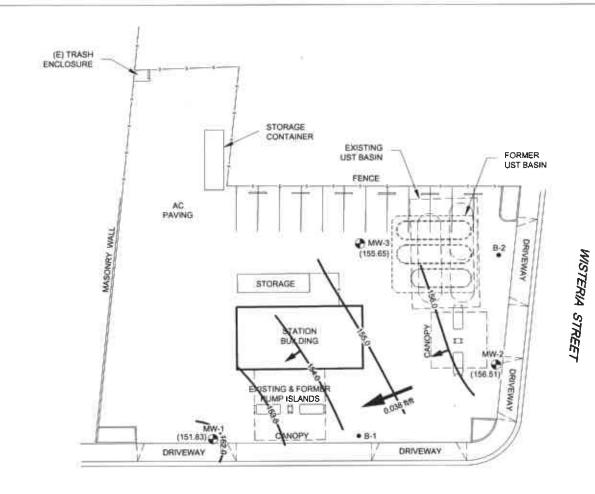
SITE TOPOGRAPHIC MAP ARCO STATION NO. 4977 2770 CASTRO VALLEY ROAD CASTRO VALLEY, CA

PROJECT NO. D000-845	TLA 4/13/01		
FILE NO. 4977-1A	PREPARED BY		
REVISION NO.	REVIEWED BY		









CASTRO VALLEY BOULEVARD

LEGEND:

♠ MW-1 MONITORING WELL LOCATION

B-1 SOIL BORING LOCATION

(151.83) GROUNDWATER ELEVATION IN FEET RELATIVE

TO AN ASSUMED BENCH MARK

152.0 INFERRED WATER TABLE CONTOUR IN FEET RELATIVE

TO AN ASSUMED BENCH MARK

→ INFERRED GROUNDWATER FLOW DIRECTION

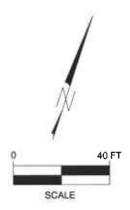


FIGURE 4 GROUNDWATER ELEVATION CONTOUR MAP 4/17/02

ARCO FACILITY NO. 4977 2770 CASTRO VALLEY BOULEVARD CASTRO VALLEY, CA.

PROJECT NO.	DRAWN BY
D000-845	M.L. 6/20/02
FILE NO.	PREPARED BY
D000845C	BAB
REVISION NO.	REVIEWED BY





WATER RESOURCES SECTION 399 ELMHURST ST, HAYWARD CA. 94544-1395 PHONE (510) 670-5554 FAX (510)782-1939

DRILLING PE	RMIT APPLICATION
FOR APPLICANT TO COMPLETE	Pou or an in-
LOCATION OF PROJECT	FOR OFFICE USE
ARCO STATION No. 4977	PERMIT NUMBER WUL- US/ 3
2770 CASTO Valley Road	WELL NUMBER
Castro Unitey, California	APN
CLIENT	PERMIT CONDITIONS Circled Pennit Requirements Apply
Name Aftentic Richfield Company	A. GENERAL
Address 4 Center points Drive Phone	
City La Palma, CA Zip 40623-1064	l. A permit application should be submitted so as to
APPLICANT	proposed starting date.
	2. Submit to ACPWA within 60 days after completion of
Name Detra Environmental Consultants, IACI	permitted original Department of Water Resources-
Address \$164 Fold Camp Dr. suite 39 Flore 414 - 638 - 4185	Well Completion Report.
Tily Reache Cordova Zip 45670	3. Permit is void if project not begun within 90 days of
2p_95670	abbiox31 G319
	D. WATER SUPPLY WELLS
TYPE OF PROJECT	1. Minimum surface soal thickness is two inches of
Well Construction Geotechnical Investigation	coment grout placed by tremic
canddic tipiation . Garage	2. Minimum seal depth is 50 feet for municipal and
Water Supply Contamination	Industrial wells or 20 feet for domestic and irrigation
Monitoring Well Destruction	WEIIS UNICES & IGSSET through it managed to a process and the second
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ROPOSED WAYER SUPPLY WELL USE	INCLUDING PIEZOMETERS
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Industrial . Other	2. Minimum seal depth for manitoring wells is the
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RILLING METHOD:	D. GEOTECHNICAL
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RILLER'S NAME MITCHELL Drilling	or with compacted cuttings. , E. CATHODIC
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RILLER'S LICENSENO. CST # 672617	Fill hole anode rone with concrete placed by tremie. F. WELL BESTRUCTION
	Send a map of work site. A separate permit is required
ell projects	for wells desper than 43 feet. C. SPECIAL CONDITIONS
Phillippin follows:	A SENCIAL CORDITIONS
	NOTE: Our application and the same of the
Surface Seal Depth	NOTE: One application must be submitted for each well or well destruction. Multiple berings on one application are acceptable
EOTECHNICAL PROJECTOR BATING	for geotechnical and contamination investigations.
Hole Diameter 4 in. Depth 20 ft.	/.
	(III)
TIMATED COMPLETION DATE 4 1/1/03	APPROVED DATE 3-14-02
	APPROVED
ereby agree to comply with all requirements of this permit and Alameds County	Ordinance No 73-68.
PLICANT'S SIGNATURE 1570M (BONDELLY DATE	3/13/02
EASEPRINT NAME BOOT BOOLS.	Em 5.13.00



WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (\$10) 670-\$554 FAX (510)782-1939

DRILLING PER	MIT APPLICATION
FOR APPLICANT TO COMPLETE LOCATION OF PROJECT	FOR OFFICE USE PERMIT NUMBER W02-05/4
ARGO STATION No. 4977	PERMIT NUMBER WOL-05/4
2770 Castro Valley Road	WELL NUMBER
energy valley, california	APN
100	
CLIENT Name Atlantic Richfield Company	PERMIT CONDITIONS Circled Parait Requirements Apply
Address & contension Drive Phone	A. GENERAL
	1. A permit application should be submitted so as to
City LA Palma, CA Zip 1064	arrive at the ACPWA office five days prior to
APPLICANT	OfDIOSCO Starting date
Name DETTA EnvironMental CONSULTANTS, INC.	2. Submit to ACPWA within 60 days after completion of
TAC.	penmitted original Department of Water Resources
Address 2164 Fold camp Drive Suite & Plant 916/638-2164 Prone	Well Completion Report.
City Rancha Cocaleta Zip 45470	3. Permit is vold if project not begon within 90 days of
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	B. WATER SUPPLY WELLS
TYPE OF PROJECT	I. Minimum surface seal thickness is two inches of
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Cathodia Bernardi	2. Minimum seal depth is 50 feet for municipal and
hrs	Industrial wells or 20 feet for domestic and irrigation
- countillities();	wells unless a lesser depth is specially approved.
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PROPOSED WATER SUPPLY WELL USE	INCLUDING PIEZOMETERS
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MILLER'S NAME MITCHELL Drilling	
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'ELL PROJECTS	G. SPECIAL CONDITIONS
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TIMATED COMPLETION DATE 4 1/13/02	APPROVED ATTO
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J	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
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WATER RESOURCES SECTION 399 ELMHURST ST. HAYWARD CA. 94544-1395 PLIONE (\$10) 670-5554 FAX (\$10)782-1939

DRILLING PER	UMIT APPLICATION
FOR APPLICANT TO COMPLETE	FOR OFFICE USE
LOCATION OF PROJECT	1 MM MO1/2
ARCO STETION No. 4977	PERMIT NUMBER WOJ- 0315
2770 COSTTO Valley Road	WELL NUMBER
Castro Valley , California	WIN
CLIENT Name ATMATic Richfield Company	PERMIT CONDITIONS Circled Permit Requirements Apply
Address 4 centerpoints Drive Phone	A. GENERAL
- Though	1. A permit application should be submitted to no so
	MAYO ME THE ACPWA DIFFIE Five days and a to
APPLICANT	Proposed starting date.
Name Delta Environmental Consultants, Inc.	2. Jubmit to ACPWA within 60 days after completion of
Address 3144 0-14 (5-4-8385	permitted original Department of Water Resources- Well Completion Report.
Address 3164 Gald Camp Drive Sala zaphone 316-638-2164 ily Anacho Cordova Zio 9543	L Permit is vold if project and
HARCHO Cordova Zip 45170	J. Permit is void if project not begun within 90 days of approval date
	D. WATER SUPPLY WELLS
TYPE OF PROJECT	1. Minimum surface spal thickness is two inches of
Well Construction Geotechnical Investigation	compile from placed by tramic.
Chaight (lotting)	2. Minimum seal depth is 50 fact for municipal and
Water Supply Contamination	Industrial wells or 20 feet for domestic and irrigation
Manitoring Well Destruction	wells unless a lesser depth is specially approved.
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ROPOSED WATER SUPPLY WELL USE New Domestic G Real-sequent Domestic	1. Minimum surface scal thickness is two inches of
	country Etons bjaced ph ricinie.
ersePetion	2. Minimum seal depth for monitoring wells is the
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Mud Rotory (1)	Backfill bore hale by tremic with coment grout or coment
Cable ! Other Auger	Sing and Mixture Upder two-three free replaced in the c
	or with compacted cuttings.
RILLER'S NAME MITCHELL DEINING	E. CATHORIC
	Fill hole anode rone with concrete placed by tremie.
RILLER'S LICENSE NO. 257 = 672617	"FET DESTRUCTION
	Send a map of work site. A separate permit is required for wells deeper than 45 foet.
ell projects	G. SPECIAL CONDITIONS
Drill Hole Dianieter 16 in Mariana	
Casing Districtor	NOTE: One application must be submitted for each well or well
Surface Seal Depth 5 A. Owner's Well Number MU-2	
	for geolechnical and contamination investigations.
Number of Borings Maximum	
Hole Ditmote.	,
·	1-10
TIMATED STARTING DATE 41/11/03	
TIMATED COMPLETION DATE # 3/12/62	101 N N - (-140L
ereby agree to comply with all requirements of this permit and Alameda County (APPROVED DATE DATE
PLICANT'S SIGNATURE ISTELL BOARDELLY DATE	3/13/03
EASETRINT NAME BIET BAGASIA	24;5-13-00



WATER RESOURCES SECTION 399 ELMHURST ST. HAYWARD CA. 94544-1395 PHONE (510) 670-5554 FAX (510)782-1939

DRILLING PER	MIT APPLICATION
FOR APPLICANT TO COMPLETE	FOR OFFICE USE
LOCATION OF PROJECT	1 MO AT /
ARCO STOTION No. 4477	PERMITNUMBER WOLF (15/16)
477A COSTTO MARKET	WELL NUMBER
Castro Valley callfornia	APN
White the state of	HEPASSY CITAL AND
CLIENT	PERMIT CONDITIONS Circled Pertait Requirements Apply
Name Arlantic Alchtield Company	A A A A A A A A A A A A A A A A A A A
	A. GENERAL
City La Palma, CA Zip 90623-1066	1. A permit application should be submitted so as to
4 DOCTOTAL PR	arrive at the ACPWA office five days prior to
Name De ITA Environmental Consultante, Inc. Address Mee Gold Came Dr. Suite Tax 916-638-8385	proposed starting date. 2) Submit to ACPWA within 60 days after completion of
For all miles	Permitted Different and Marian Description of the property of
Address the Gold Comp on Suite 200 Plone 916-638-8385 City Rancha Cordova	weil Completion Report.
City Rancho Cordova Zip 45670	J. Permit is void if project not become within an diverse
	approval gare
TYPE OF PROJECT	B. WATER SUPPLY WELLS
Wall Classes and	 Minimum surface seal thickness is two inches of coment grout placed by tremic.
Cathodic Protection Cathodic Protection Canceral	2. Minimum seal dopth is 50 feet for municipal and
Water Supply Contamination	Industrial wells or 20 feet for demostic and irrigation
Monitoring Well Destruction	/ WEILS UNICSS & lesses derest in manalation and a
	I SHOULDWATER MONITORING SUFFILE
PROPOSED WATER SUPPLY WELL USE New Dornastic G Replacement Dornastic	I INCLUDING PIEZOMETERS
	1. Minimum surface scal thickness is two inches of
****Editor	rement grout placed by tremie.
OMET - Secretary	2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
DRILLING METITOD:	D. GEOTECHNICAL
Mod Roberty Air Robert Auger t	Rickfill bore hole by tremic with convert army accounts
Cable Other	Brundania mixire. Upper byn-three first sont-seel in Link
IBB CEOIC MARKET AND CO. I. I. M. M. C.	of will compacted cuttings .
IRILLER'S NAME MITCHELL Drining	E. CATTODIC
MILLER'S LICENSE NO. C 57 # 672617	Fill hole anode zone with concrete placed by tremic, F. WELL DESTRUCTION
	Send a map of work site. A senarate permit is reactived
.TCf 6 mm A for any	FOR MENTS (ICATION INTO AC FAME
Drill Hole Diameter 10 in Maximum	G. SPECIAL CONDITIONS
Orill Hote Diameter to in Maximum Casing Diameter in Doub 30 6	NOTE: One tendication must be subsided to
Casing Diamotor in. Depth 36 ft. Surface Seal Depth 5 ft. Owner's Well Number MW-3	NOTE: One application must be submitted for such well or well destruction. Multiple begings on one application are acceptable for contention in the content of the content
Towns Arithmet Mr. 2	for grotechnical and contamination investigations.
EOTECHNICAL PROJECTS	* '''
Number of Borings Maximum Hole Diameter its Depth for	
	1 1/2
ITIMATED STARTING DATE 48/11/02	
TIMATED COMPLETION DATE 41/12/02	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	AFPROVED DATE
ereby agree to comply with all requirements of this permit and Alameda County C	milipance No. 73-68.
- ID1 7/14 \$ M990	3/13/02
FASE PRINT NAME BIET BATH SIEN	1 102
Re Re	v:5-13-00

1.0 FIELD METHODS AND PROCEDURES

1.1 Health and Safety Plan

Field work performed by Delta and Delta's subcontractors at the site is conducted according to guidelines established in a Site Health and Safety Plan (SHSP). The SHSP is a document which describes the hazards that may be encountered in the field and specifies protective equipment, work procedures, and emergency information. A copy of the SHSP is at the site and available for reference by appropriate parties during work at the site.

1.2 Locating Underground Utilities

Prior to commencement of work on-site, Delta researches the location of underground utilities with the assistance of Underground Service Alert (USA). USA contacts the owners of the various utilities in the vicinity of the site to have the utility owners mark the locations of their underground utilities. Work associated with the boring and monitoring well installation is preceded by manual hand augering to a minimum depth of 5 feet below surface grade (bsg) to avoid contact with underground utilities.

1.3 Soil Sampling and Contamination Reduction

Soil borings and soil sampling are performed under the direction of a Delta geologist. Soil borings are advanced using a truck-mounted hollow-stem auger drill rig.

To reduce the chances of cross-contamination between boreholes, all downhole drilling equipment is steam-cleaned between each boring. To reduce cross-contamination between samples, the split-barrel sampler is washed in a soap solution and double-rinsed between each sampling event.

Soil sampling beyond 5 feet bsg is conducted in accordance with ASTM 1586-84. Using this procedure, a 2-inch outside-diameter split-barrel sampler or a 2-inch inside-diameter California-type sampler is driven into the soil by a 140-pound weight falling 30-inches. After an initial set of 6-inches, the number of blows required to drive the sampler an additional 12-inches (known as penetration resistance or the "N" value) is recorded. The N value is used as an empirical measure of the relative density of cohesionless soils and the consistency of cohesive soils.

Upon recovery, a portion of the soil sample is placed into a plastic bag and sealed for later screening with a photoionization detector (PID). Another portion of the soil sample is used for classification and description. That part of the soil sample collected in the leading brass tube within the California-type sampler is stored at approximately 4°C for transport to the laboratory.

1.4 Soil Classification

As the samples are obtained in the field, they are classified by the geologist in accordance with the Unified Soil Classification System (USCS). Representative portions of the samples are then retained for further examination and for verification of the field classification. Logs of the borings indicating the depth and identification of the various strata, the N value, and pertinent information regarding the method of maintaining and advancing the borehole are made.

1.5 Soil Sample Screening/hNu Portable Photoionization Detector Method

After the soil sample plastic bags are brought to ambient temperature, the headspace vapors of the soil sample in the bag are screened with a PID equipped with a 10.2 eV lamp. The sample corner of the bag is opened and the detector probe immediately placed within the headspace. The highest observed reading is recorded.

1.6 Monitoring Well Gravel Pack and Slot Size Selection

The gravel pack is selected such that it will permit the development of a zone of higher hydraulic conductivity adjacent to the well screen but will reduce piping of the finer-grained formation materials into the well. The slot size of the well screen is selected such that it will retain a minimum of 95 percent of the gravel pack material.

1.7 Monitoring Well Development

After monitoring wells are installed, each monitoring well is developed with a surge block and bailer (or pump) until the water produced is relatively sediment-free and until the conductivity, pH, and temperature stabilize. If the well is pumped dry during the development process, recharge rates are recorded. No water or chemicals are introduced into the monitoring wells during well development. All development water is placed in drums on-site for later disposal.

1.8 Groundwater Sampling

At least three wetted casing volumes of liquid are removed from each well by bailing with a clean disposable bailer. A liquid sample is collected from each well with a clean disposable bailer and transferred into a laboratory supplied sampling container. Each sample is appropriately labeled and stored on ice from the time of collection through the time of delivery to the laboratory. Groundwater samples are transported to the laboratory and analyzed within the EPA-specified holding times for the requested analyses.

1.9 Liquid-Phase Petroleum Hydrocarbons

If liquid-phase petroleum hydrocarbons are present in a well, the thickness of the petroleum layer is measured by collecting a sample in a transparent disposable bailer with a check valve at the bottom, or by measurement using appropriate fluid-level sounding equipment.

2.0 ANALYTICAL PROCEDURES

Selected soil samples submitted to the laboratory are analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX), MTBE, and TPHg using DHS LUFT.

3.0 QUALITY ASSURANCE PLAN

This section describes the field and analytical procedures to be followed throughout the investigation.

3.1 General Sample Collection and Handling Procedures

Proper collection and handling are essential to ensure the quality of a sample. Each sample is collected in a suitable container, preserved correctly for the intended analysis, and stored prior to analysis for no longer than the maximum allowable holding time. Details on the procedures for collection and handling of soil samples used on this project can be found in Section 1.0 (Methods).

3.2 Sample Identification and Chain-of-Custody Procedures

Sample identification and chain-of-custody procedures ensure sample integrity and document sample possession from the time of collection to its ultimate disposal. Each sample container submitted for analysis has a label affixed to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations, are recorded on the borehole log or in the field records. Samples are analyzed by a California-certified laboratory.

A chain-of-custody form is used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them relinquish as the samples by signing the chain-of-custody form and noting the time. The sample-control officer at the laboratory verifies sample integrity and confirm that it was collected in the proper container, preserved correctly, and that there is an adequate volume for analysis.

If these conditions are met, the sample is assigned a unique log number for identification throughout analysis and reporting. The log number is recorded on the chain-of-custody form and in the legally-required log book maintained by the laboratory in the laboratory. The sample description, date received, client's name, and other relevant information is also be recorded.

ENCLOSURE C

Soil Boring Logs and Well Construction Details



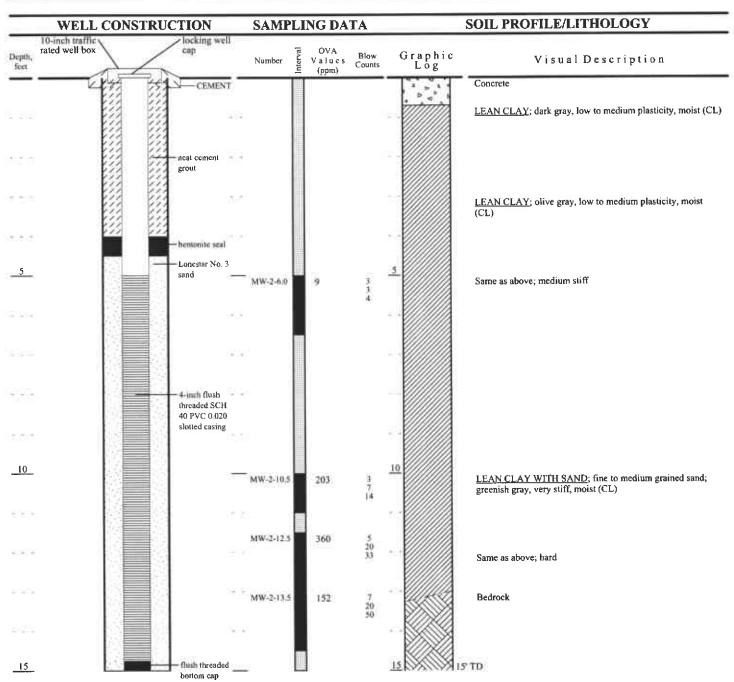
Street Address	Project ID			
2770 Castro Valley Road	ARCO Station No. 4977			
City & State	Surface Elev.	Well / Boring ID		
Castro Valley, California	161.63'	MW-1		
Delta Project #	Casing Elev.	Total Depth		
D000-845	161.11'	15'		

	BACKFILL DETAIL	SAMPL	ING DA	TA		SOIL PROFILE/LITHOLOGY
Depth, feet	10-inch traffic rated well box cap	Number [OVA Values (ppm)	Blew Counts	Graphic Log	Visual Description
_	CEMENT				996698	Asphalı Aggregate Baserock
83.5						LEAN CLAY; dark gray, low to medium plasticity, moist (CL)
200	neat cursent grout	84				ELANGELLI, data gray, tow to incutain plasacity, most (CL)
-		95				LEAN CLAY; olive gray, low to medium plasticity, moist (CL)
834 E	bentonite scal Lonestar No. 3	() ±.				
5	sand sand	MW-1-5.5	22	4 7	5	Same as above; stiff
es s				7		
4.4.0		0.00			- 1	
24.5	4-inch flush threaded SCH	X2				
63.5	40 PVC 0.020 slotted casing	25				
<u>10</u>			50	6 9 17	10	<u>LEAN CLAY</u> ; dark gray, low to medium plasticity, very stiff, moist (CL)
00.5		925. 92.000.27.52-5-	5511			
		MW-1-12.5	51	9 16 19		LEAN CLAY; medium to coarse grained sand, dark gray, low to medium plasticity, hard, moist (CL)
		MW-1-14.0	3	8 17 30		<u>LEAN CLAY</u> ; yellowish orange to light brown, low to medium plasticity, hard, moist (CL)
3650		27			: :	
15	flush threaded bottom cap	[15	5' TD

Dates and Times	Logger Brett A. Bardsley	Sampling Method & Diameter	Permitting Agency Alameda County Public Works Agency
COLUMN TO THE PARTY OF THE PART	- Control of the Cont	2-inch split spoon	The state of the s
Start	Drilling Company & Driller	Bore Hole Diameter	Permit #
4/11/02 1145	Mitchell Drilling Environmental, Eddie Mitchell	10-inches	W02-0314
Total Depth	Drillers C-57#	The second second second	
4/11/02 1311	672617	4-inch SCH 40 PVC/0.020 slot	
Completion or backfill	Drilling Equipment and method		
4/12/02 1115	CME-75, hollow stem auger	l i	Page 1 of 1



	Street Address	Project ID			
	2770 Castro Valley Road	ARCO Station No. 4977			
1	City & State	Surface Elev.	Well / Boring ID		
	Castro Valley, California	162.15'	MW-2		
	Delta Project #	Casing Elev.	Total Depth		
	D000-845	161.87'	15'		



Dates and Times	Loggur Brett A. Bardsley	Sampling Method & Diameter 2-inch split spoon	Permitting Agency Alameda County Public Works Agency
Start	Drilling Company & Driller Mitchell Drilling Environmental, Eddie Mitchell	Bore Hole Diameter	Permit #
4/11/02 1407		18-inches	W02-0315
Total Depth	Drillers C-57#	Diameter, Type & Slot Size of Casing	
4/11/02 1458	672617	4-inch SCH 40 PVC/0.020 slot	
Completion or backfill 4/11/02 1800	Drilling Equipment and method CME-75, hollow stem auger		Page 1 of 1



Street Address	Project ID		
2770 Castro Valley Road	ARCO Sta	tion No. 4977	
City & State	Surface Elev.	Well / Boring ID	
Castro Valley, California	162.60'	MW-3	
Delta Project #	Casing Elev.	Total Depth	
D000-845	162.14'	15'	

	WELL CONS	TRUCTION	SAMPL	ING DA	TA		SOIL PROFILE/LITHOLOGY
Depth. feet	10-inch traffic rated well box	locking well	Number	OVA Values (ppm)	Blow Counts	Graphic Log	Visual Description
		CEMENT					Asphalt <u>LEAN CLAY</u> ; dark gray, low to medium plasticity, moist (CL)
1. 1. 7.		nest coment					
2000							
555	88	-bentonite seal					
5		Lonestar No. 3	MW-3-6,0	31	4	5	LEAN CLAY; olive gray, low to medium plasticity, stiff, mois (CL)
172					5		(00)
		4-inch flush threaded SCH 40 PVC 0 020					
1.5.5		slotted casing					
10		_	MW-3-11.0	247	6 10 13	10	LEAN CLAY; greenish gray to olive gray, low to medium plasticity, very stiff, moist (CL)
101							Same as above; very stiff, saturated
. 100	GROUND WATER LEVEL		MW-3-12.5	115	5 7 12		
			MW-3-14.0	158	8 15		
1 50					33		
15		flush threaded	. [12	5 TD

Dates and Times	Logger Brett A. Bardsley	Sampling Method & Diameter 2-inch split speen	Fermitting Agency Alameda County Public Works Agency
Start	Drilling Company & Driller Mitchell Drilling Environmental, Eddie Mitchell	Bore Hole Diameter	Permit #
4/11/02 0930		10-inches	W02-0316
Total Depth	Drillers C-57#	Diameter, Type & Slot Size of Casing	
4/11/02 1041	672617	4-inch SCH 40 PVC/0.020 slot	
Completion or backfill 4/11/92 1730	Orilling Equipment and method CME-75, hollow stem auger		Page 1 of 1



Street Address	Project ID	
2770 Castro Valley Road	ARCO Sta	tion No. 4977
City & State	Surface Elev.	Well / Boring ID
Castro Valley, California		B-1
Delta Project #	Casing Elev.	Total Depth
D000-845		15'

BACK	FILL DETAIL	SAM	PLI	NG DA	TA		SOIL PROFILE/LITHOLOGY
Depth., feet		Number	Interval	OVA Values (ppm)	Blow Counts	Graphic Log	Visual Description
NE S							Asphalt <u>LEAN CLAY</u> ; dark gray, low to medium plasticity, moist (CL)
(226)				35		-	JUL 1 6 2002
10(0)0	grout centers						LEAN CLAY; olive gray, low to medium plasticity, moist (CL)
(40424)				200			
5	-	B-1-6.0	ı	234	4 4 4	5	LEAN CLAY; medium to coarse grained sand; dark gray, low to medium plasticity, medium stiff, moist (CL)
180000							
B 4-4							
1.1		S					
1500.0		3					
_10	-	B-1-11.0		1319	6 15 20	10	LEAN CLAY; greenish gray to yellowish orange, hard, moist (CL)
GROUND WATER LEVEL							
5.404		B-1+12.0		379	7 19 33		LEAN CLAY WITH GRAVEL; fine grained gravel; dark to greenish gray, low to medium plasticity, hard, saturated (CL)
2.00		6		26	18 50 50		
Marine B		i.					
15						15	Bedrock 15' TD

Dates and Times	Loggor Brett A. Bardsley	Sampling Method & Diameter 2-inch split spoon	Permitting Ageocy Alameda County Public Works Agency
Start 4/12/02 0900	Drilling Company & Driller Mitchell Drilling Environmental, Eddie Mitchell	Bore Hole Diameter 8.25-inches	Permit # W02-0313
Tetal Depth 4/12/02 0934	Drillers C-578 672617		
Completion or backfull 4/12/02 1015	Drilling Equipment and method CME-75, hollow stem auger		Page 1 of 1



Street Address Project ID			
2770 Castro Valley Road	ARCO Sta	tion No. 4977	
City & State	Surface Elev.	Well / Boring ID	
Castro Valley, California		B-2	
Delta Project #	Casing Elev.	Total Depth	
D000-845		15'	

BA	CKFILL DETAIL	SAMPI	LING DATA		SOIL PROFILE/LITHOLOGY
Depth,	CALIE DETAIL		OVA Blow (ppm) Counts	Graphic Log	Visual Description
				<i></i>	Asphalt <u>LEAN CLAY</u> ; dark gray, low to medium plasticity, moist (CL)
200000					
2.4.4	noat cement -	2			<u>LEAN CLAY</u> ; olive gray, low to medium plasticity, moist (CL)
1505050					
5		B-2-6.0	330 6 6 5	5	Same as above; stiff
***		··	1.30		
150505		85			
(4),40,40					
* * *					
10	-	— _{В-2-10.5}	1043 9 14 21	10	<u>LEAN CLAY</u> ; fine gravel; medium to coarse grained sand; greenish gray, low to medium plasticity, hard, moist (CL)
GROUND WATER LEV	-	.	II.		greenish gray, row to medium plasticity, hard, moist (CL)
WATER LEV		B-2-12.5	19 17 18 20		LEAN CLAY WITH GRAVEL; fine grained gravel; greenish gray, low to medium plasticity, hard, saturated (CL)
			27 50		gray, row to meetium plasticity, narti, saturated (CL)
. 674		==	27 50 32 50		
15		_		15 1	5' TD Bedrock

Dates and Times	Logger Brett A. Bardsley	Sampling Method & Diameter 2-inch split spoon	Permitting Agency Alameda County Public Works Agency
Start	Drilling Company & Driller	Bore Hole Diameter	Permit #
4/11/02 1545	Mitchell Drilling Environmental, Eddie Mitchell	8.25-inches	W02-0313
Total Depth	Drillers C-57#	WANT PRODUCTION OF THE PROPERTY OF THE PROPERT	
4/11/02 1630	672617		
Completion or backfill	Drilling Equipment and method		1,000,000,000,000,000
4/11/02 1645	CME-75, hollow stem auger		Page 1 of 1

ENCLOSURE D

Soil Sample Laboratory Analytical Reports



26 April, 2002

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

RE: ARCO 4977, Castro Valley, CA Sequoia Report: S204254

Enclosed are the results of analyses for samples received by the laboratory on 04/12/02 14:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lito Diaz Laboratory Director

CA ELAP Certificate #1624





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

Rancho Cordova CA, 95670

Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/26/02 14:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1-5.50-020412	S204254-01	Soil	04/12/02 09:24	04/12/02 14:00
B-1-6.00-020412	S204254-02	Soil	04/12/02 09:24	04/12/02 14:00
B-1-10.50-020412	\$204254-03	Soil	04/12/02 09:27	04/12/02 14:00
B-1-11.00-020412	S204254-04	Soil	04/12/02 09:27	04/12/02 14:00
B-1-12.00-020412	\$204254-05	Soil	04/12/02 09:29	04/12/02 14:00
B-1-11.50-020412	S204254-06	Soil	04/12/02 09:29	04/12/02 14:00
MW-1-5.00-020411	S204254-07	Soil	04/11/02 13:00	04/12/02 14:00
MW-1-5.50-020411	S204254-08	Soil	04/11/02 13:00	04/12/02 14:00
MW-1-10.50-020411	S204254-09	Soil	04/11/02 13:05	04/12/02 14:00
MW-1-11.00-020411	S204254-10	Soil	04/11/02 13:05	04/12/02 14:00
MW-1-12.00-020411	S204254-11	Soil	04/11/02 13:06	04/12/02 14:00
MW-1-12.50-020411	S204254-12	Soil	04/11/02 13:06	04/12/02 14:00
MW-1-13.50-020411	S204254-13	Soil	04/11/02 13:11	04/12/02 14:00
MW-1-14.00-020411	S204254-14	Soil	04/11/02 13:11	04/12/02 14:00
B-2-5.50-020411	S204254-15	Soil	04/11/02 16:05	04/12/02 14:00
B-2-6.00-020411	S204254-16	Soil	04/11/02 16:05	04/12/02 14:00
B-2-10.00-020411	S204254-17	Soil	04/11/02 16:10	04/12/02 14:00
B-2-10.50-020411	S204254-18	Soil	04/11/02 16:10	04/12/02 14:00
B-2-12.0-020411	S204254-19	Soil	04/11/02 16:18	04/12/02 14:00
B-2-12.5-020411	S204254-20	Soil	04/11/02 16:18	04/12/02 14:00
MW-2-5.50-020411	S204254-21	Soil	04/11/02 14:40	04/12/02 14:00
MW-2-6.00-020411	S204254-22	Soil	04/11/02 14:40	04/12/02 14:00
MW-2-10.00-020411	S204254-23	Soil	04/11/02 14:47	04/12/02 14:00
MW-2-10.50-020411	S204254-24	Soil	04/11/02 14:47	04/12/02 14:00
MW-2-12.00-020411	S204254-25	Soil	04/11/02 14:53	04/12/02 14:00
MW-2-12.50-020411	S204254-26	Soil	04/11/02 14:53	04/12/02 14:00
MW-2-13.00-020411	S204254-27	Soil	04/11/02 14:58	04/12/02 14:00
MW-2-13.50-020411	S204254-28	Soil	04/11/02 14:58	04/12/02 14:00
MW-3-5.50-020411	S204254-29	Soil	04/11/02 10:15	04/12/02 14:00
MW-3-6.00-020411	S204254-30	Soil	04/11/02 10:15	04/12/02 14:00
MW-3-10.50-020411	S204254-31	Soil	04/11/02 10:33	04/12/02 14:00

Sequoia Analytical - Sacramento

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





3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported:

04/26/02 14:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-3-11.0-020411	S204254-32	Soil	04/11/02 10:33	04/12/02 14:00
MW-3-12.0-020411	S204254-33	Soil	04/11/02 10:37	04/12/02 14:00
MW-3-12.5-020411	S204254-34	Soil	04/11/02 10:37	04/12/02 14:00
MW-3-13.5-020411	S204254-35	Soil	04/11/02 10:41	04/12/02 14:00
MW-3-14.0-020411	S204254-36	Soil	04/11/02 10:41	04/12/02 14:00



3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported:

04/26/02 14:40

Total Purgeable Hydrocarbons and BTEX by DHS LUFT Sequoia Analytical - Sacramento

		luuta Aite							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1-6.00-020412 (S204254-02) Soil	Sampled: 04/12/02	09:24 Rec	eived: 04	/12/02 14:0	00		, "		
Purgeable Hydrocarbons	95	5.0	mg/kg	1	2040291	04/22/02	04/22/02	DHS LUFT	HC-12
Benzene	0.15	0.050	**	H	11	ч	"	n	
Toluene	ND	0.050	"	"	u	a	**	II .	
Ethylbenzene	0.80	0.050	**	н	II	u	11	11	
Xylenes (total)	0.87	0.050	**	n	u	ч	"		
Surrogate: a,a,a-Trifluorotoluene		115 %	60-	140	"	"	"	"	
B-1-10.50-020412 (S204254-03) Soil	Sampled: 04/12/0	2 09:27 Re	ceived: 0	4/12/02 14	:00				
Purgeable Hydrocarbons	240	10	mg/kg	2	2040310	04/24/02	04/25/02	DHS LUFT	HC-12
Benzene	1.1	0.10	*	**	п	" .	*	n	
Toluene	1.2	0.10	"	**	u	10	*	II .	
Ethylbenzene	6.2	0.10	**	**	11	11	**	п	
Xylenes (total)	2.1	0.10	11	***	"	16	**	п	
Surrogate: a,a,a-Trifluorotoluene		142 %	60-	140	,,	n	"	,,	S-02
B-1-12.00-020412 (S204254-05) Soil	Sampled: 04/12/0	12 09:29 Re	ceived: 0	4/12/02 14	:00				
Purgeable Hydrocarbons	ND	0.50	mg/kg	1	2040303	04/24/02	04/24/02	DHS LUFT	
Benzene	ND	0.0050	17	**	н	**	"	n .	
Toluene	ND	0.0050	11	**	u	**	"	ш	
Ethylbenzene	ND	0.0050	II .	**	tt	#	n	II	
Xylenes (total)	ND	0.0050	**	**	н	**	n		
Surrogate: a,a,a-Trifluorotoluene		105 %	60-	140	11	rr	"	"	
MW-1-5.50-020411 (S204254-08) Sc	oil Sampled: 04/11	/02 13:00 F	Received:	04/12/02	14:00			,	
Purgeable Hydrocarbons	ND	0.50	mg/kg	1	2040253	04/18/02	04/18/02	DHS LUFT	
Benzene	ND	0.0050	Ħ	11	**	n	n	II	
Toluene	ND	0.0050	**	**	**	n	n	ti	
Ethylbenzene	ND	0.0050	**	77	**	H	"	n .	
Xylenes (total)	ND	0.0050	**	н		11	n	et	
Surrogate: a,a,a-Trifluorotoluene		99.0 %	60-	140	rr .	n n	n	n	



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

Rancho Cordova CA, 95670

Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/26/02 14:40

Total Purgeable Hydrocarbons and BTEX by DHS LUFT Sequoia Analytical - Sacramento

	1uoia / kii	J	Duciu					
Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sampled: 04/1	1/02 13:05	Received	: 04/12/02	14:00				
340	10	mg/kg	2	2040310	04/24/02	04/25/02	DHS LUFT	HC-12
3.2	0.10	II .	"	н	ų	11	II	
1.8	0.10	n	**	Ħ	ч	II .	II .	
5.8	0.10	"	"	"	"	11	и	
2.6	0.10	11	11	**	q	II	11	
	70.1 %	60-	140	"	"	"	"	
Sampled: 04/1	1/02 13:06	Received	: 04/12/02	14:00				
ND	0.50	mg/kg	1	2040303	04/24/02	04/24/02	DHS LUFT	
ND	0.0050	II	n	**	Ħ	n	tt	
ND	0.0050	u	n	**	**	II .	п	
ND	0.0050	II .	п	"	Ħ	н	H	
ND	0.0050	II .	n	**	H	Ц	u	
	106 %	60-	140	"	'n	"	n	
Sampled: 04/1	1/02 13:11	Received	: 04/12/02	14:00				
ND	0.50	mg/kg	1	2040303	04/24/02	04/24/02	DHS LUFT	
ND	0.0050	н	U	**	H	II .	**	
ND	0.0050	u	11	**	n	11	**	
ND	0.0050	11	11	"	н	tt	**	
ND	0.0050	**	II .	11	n	н	++	
	93.0 %	60-	140	"	н	n	п	
mpled: 04/11/02	2 16:05 Rec	eived: 04	/12/02 14:0	00				
1600	100	mg/kg	20	2040224	04/17/02	04/17/02	DHS LUFT	
ND	1.0	**	II	ш	II	**	n	
ND	1.0	**	а	п	п	"	tt	
25	1.0	"	н	II.	п	"	**	
150	1.0	11	н	п	IJ	**	· ·	
	123 %	60-	140	"	"	н	"	
	Result 340 3.2 1.8 5.8 2.6 Sampled: 04/1 ND	Result Limit Sampled: 04/11/02 13:05 340	Result	Result Limit Units Dilution	Result Limit Units Dilution Batch Sampled: 04/11/02 13:05 Received: 04/12/02 14:00 340 10 mg/kg 2 2040310 3.2 0.10 " " " 1.8 0.10 " " " 5.8 0.10 " " " 2.6 0.10 " " " 70.1 % 60-140 " " Sampled: 04/11/02 13:06 Received: 04/12/02 14:00 " ND 0.50 mg/kg 1 2040303 ND 0.0050 " " " Sampled: 04/11/02 13:11 Received: 04/12/02 14:00 " ND 0.0050 " " " ND 0.0050 " " " <	Result	Result	Result



3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/26/02 14:40

Total Purgeable Hydrocarbons and BTEX by DHS LUFT Sequoia Analytical - Sacramento

	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Analyte	Result	Limit	Onics	Ditulion	Batch	riepared	Allalyzed	Wethod	
B-2-10.50-020411 (S204254-18) Soit S	Sampled: 04/11/0	2 16:10 Re	ceived: 0	4/12/02 14	:00				
Purgeable Hydrocarbons	160	10	mg/kg	2	2040310	04/24/02	04/25/02	DHS LUFT	HC-12
Benzene	0.61	0.10	II	11	**	**	п	11	
Toluene	0.73	0.10	11	11	**	11	"	11	
Ethylbenzene	3.0	0.10	ıı	n	++	D	"	17	
Xylenes (total)	2.4	0.10	11	11		n	"	Ħ	
Surrogate: a,a,a-Trifluorotoluene		124 %	60-	140	"	"	"	tr	
B-2-12.5-020411 (S204254-20) Soil Sa	ampled: 04/11/02	16:18 Rec	eived: 04/	/12/02 14:0	00				
Purgeable Hydrocarbons	ND	0.50	mg/kg	1	2040303	04/24/02	04/24/02	DHS LUFT	
Benzene	ND	0.0050	п	п	n	II .	**	et	
Toluene	ND	0.0050	u	11	n	ıı	"	**	
Ethylbenzene	ND	0.0050	п	п	11	n	**	**	
Xylenes (total)	ND	0.0050	н	11	11	"	n	**	
Surrogate: a,a,a-Trifluorotoluene	•	104 %	60-	140	"	"	n	11	
MW-2-6.00-020411 (S204254-22) Soil	Sampled: 04/11	/02 14:40 I	Received:	04/12/02 1	14:00				
Purgeable Hydrocarbons	12	5.0	mg/kg	1	2040224	04/17/02	04/17/02	DHS LUFT	HC-12
Benzene	ND	0.050	*	W.	II.	u	"	1)	
Toluene	ND	0.050	*	ti	11	н	*	11	
Ethylbenzene	ND	0.050	"	**	11	Ħ	**	n	
Xylenes (total)	ND	0.050	"	**	H	*1	"	1)	
Surrogate: a,a,a-Trifluorotoluene		107 %	60-	140	n	U	#	"	
MW-2-10.00-020411 (S204254-23) Soil	Sampled: 04/1	1/02 14:47	Received	: 04/12/02	14:00				
Purgeable Hydrocarbons	60	10	mg/kg	2	2040310	04/24/02	04/25/02	DHS LUFT	
Benzene	0.59	0.10	**	11	**	11	n	n	
Toluene	0.10	0.10	**	н	**	н	II	н	
Ethylbenzene	1.7	0.10	*	H	n	•	II	н	
Xylenes (total)	6.9	0.10	"	**	н	**	11		
Surrogate: a,a,a-Trifluorotoluene		110 %	60-	140	"	н	,,	н	



3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/26/02 14:40

Total Purgeable Hydrocarbons and BTEX by DHS LUFT Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2-12.00-020411 (S204254-25) Soil	Sampled: 04/1	1/02 14:53	Received	: 04/12/02	14:00				
Purgeable Hydrocarbons	ND	0.50	mg/kg	1	2040303	04/24/02	04/24/02	DHS LUFT	
Benzene	ND	0.0050	"	11	**	**	**	п	
Toluene	ND	0.0050	**	ш	**	"	n	n	
Ethylbenzene	ND	0.0050	"	u u	**	**	**	п	
Xylenes (total)	ND	0.0050	**	ŋ	**	**	"	11	
Surrogate: a,a,a-Trifluorotoluene		93.5 %	60-	140	n	п	"	"	
MW-2-13.50-020411 (S204254-28) Soil	Sampled: 04/1	1/02 14:58	Received	: 04/12/02	14:00			<u>_</u>	
Purgeable Hydrocarbons	ND	0.50	mg/kg	1	2040303	04/24/02	04/24/02	DHS LUFT	
Benzene	ND	0.0050	11	**	Ħ	n	11	п	
Toluene	ND	0.0050	n	**	н	н	II	п	
Ethylbenzene	0.0061	0.0050	11	**	Ħ	н	11	u	
Xylenes (total)	0.019	0.0050	п	"	H	п			
Surrogate: a,a,a-Trifluorotoluene		100 %	60-	140	**	"	"	"	
MW-3-6.00-020411 (S204254-30) Soil	Sampled: 04/11	/02 10:15	Received:	04/12/02 1	14:00				
Purgeable Hydrocarbons	ND	0.50	mg/kg	1	2040253	04/18/02	04/18/02	DHS LUFT	
Benzene	ND	0.0050	II .	n	**	**	II	"	
Toluene	ND	0.0050	u		"	"	u	**	
Ethylbenzene	ND	0.0050	п	n	"	**	II	***	
Xylenes (total)	ND	0.0050	н	11	n	"	#	**	
Surrogate: a,a,a-Trifluorotoluene		112 %	60-	140	"	"	н	"	
MW-3-11.0-020411 (S204254-32) Soil	Sampled: 04/11	/02 10:33	Received:	04/12/02 1	14:00				
Purgeable Hydrocarbons	35	10	mg/kg	2	2040310	04/24/02	04/25/02	DHS LUFT	
Benzene	0.36	0.10	**	11	п	п	**	**	
Toluene	ND	0.10	19	н	п	II	11	**	
Ethylbenzene	0.69	0.10	"	**	II	II	17	**	
Xylenes (total)	0.43	0.10	Ħ	**		u	н	**	
Surrogate: a,a,a-Trifluorotoluene		115 %	60-	140	#	"	"	"	



3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/26/02 14:40

Total Purgeable Hydrocarbons and BTEX by DHS LUFT Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3-12.5-020411 (S204254-34) Soil	Sampled: 04/11	/02 10:37 F	Received:	04/12/02 1	4:00				
Purgeable Hydrocarbons	ND	0,50	mg/kg	1	2040303	04/24/02	04/24/02	DHS LUFT	
Benzene	0.0067	0.0050	II .	II	H	ij	#	**	
Toluene	ND	0.0050	"	11	U	II	n	**	
Ethylbenzene	ND	0.0050	"	п	11	II .	**	**	
Xylenes (total)	ND	0.0050	"	n	11	II	"	**	
Surrogate: a,a,a-Trifluorotoluene		100 %	60-	140	"	"	"	"	
MW-3-14.0-020411 (S204254-36) Soil	Sampled: 04/11	/02 10:41 F	Received:	04/12/02 1	4:00	· · · ·		··	
Purgeable Hydrocarbons	ND	0.50	mg/kg	1	2040303	04/24/02	04/24/02	DHS LUFT	
Benzene	ND	0.0050	Ħ	п	п	u	н	**	
Toluene	ND	0.0050	"	u	п	u	"	**	
Ethylbenzene	ND	0.0050	**	п	п	"	**	11	
Xylenes (total)	ND	0.0050	#	H	II	ч		11	
Surrogate: a,a,a-Trifluorotoluene		106 %	60-	140	"	IJ	"	"	



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

Rancho Cordova CA, 95670

Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/26/02 14:40

MTBE by EPA Method 8260B Sequoia Analytical - Sacramento

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1-6.00-020412 (S204254-02) Soil S	ampled: 04/12/02	09:24 Rec	eived: 04/1	12/02 14:0)0				R-05a
Methyl tert-butyl ether	ND	0.025	mg/kg	5	2040215	04/18/02	04/18/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		93.2 %	60-1	40	rr	п	"	n	
B-1-12.00-020412 (S204254-05) Soil	Sampled: 04/12/0	2 09:29 Re	ceived: 04	/12/02 14	:00				
Methyl tert-butyl ether	0.0098	0.0050	mg/kg	1	2040287	04/24/02	04/24/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		87.6 %	60-1	40	"	"	"	n	
MW-1-5.50-020411 (S204254-08) Soil	Sampled: 04/11	/02 13:00 F	Received: (04/12/02 1	4:00				
Methyl tert-butyl ether	ND	0.0050	mg/kg	1	2040215	04/18/02	04/18/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		97.4 %	60-I	40	"	"	n	"	
MW-1-12.50-020411 (S204254-12) Soi	l Sampled: 04/1	1/02 13:06	Received:	04/12/02	14:00				
Methyl tert-butyl ether	ND	0.0050	mg/kg	1	2040287	04/24/02	04/24/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		85.4 %	60-1	40	n	"	"	"	
MW-1-14.00-020411 (S204254-14) Soi	l Sampled: 04/1	1/02 13:11	Received:	04/12/02	14:00				
Methyl tert-butyl ether	ND	0.0050	mg/kg	1	2040287	04/24/02	04/24/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		85.2 %	60-1	40	"	"	"	rr	
B-2-6.00-020411 (S204254-16) Soil S	ampled: 04/11/02	16:05 Rec	eived: 04/1	12/02 14:	00				R-05a
Methyl tert-butyl ether	0.037	0.025	mg/kg	5	2040215	04/18/02	04/18/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		85.6 %	60-1	40	"	"	n	"	
B-2-12.5-020411 (S204254-20) Soil S	ampled: 04/11/02	16:18 Rec	eived: 04/1	12/02 14:	00				
Methyl tert-butyl ether	0.023	0.0050	mg/kg	1	2040287	04/24/02	04/24/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		86.0 %	60-1	40	H	n	"	"	



3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/26/02 14:40

MTBE by EPA Method 8260B Sequoia Analytical - Sacramento

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2-6.00-020411 (\$204254-22) Soil	Sampled: 04/11/	02 14:40 I	Received:	04/12/02_1	14:00				R-05
Methyl tert-butyl ether	ND	0.025	mg/kg	5	2040215	04/18/02	04/18/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		91.6 %	60-	140	"	n	u	"	
MW-2-12.00-020411 (S204254-25) Soil	Sampled: 04/11	/02 14:53	Received	: 04/12/02	14:00				
Methyl tert-butyl ether	ND	0.0050	mg/kg	1	2040287	04/24/02	04/24/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		66.4 %	60-	140	n	u	"	u	
MW-2-13.50-020411 (S204254-28) Soil	Sampled: 04/11	/02 14:58	Received	: 04/12/02	14:00				
Methyl tert-butyl ether	0.016	0.0050	mg/kg	1	2040287	04/24/02	04/24/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		90,4 %	60-140		"	11	"	"	
MW-3-6.00-020411 (S204254-30) Soil	Sampled: 04/11/	02 10:15 I	Received:	04/12/02 1	14:00				
Methyl tert-butyl ether	0.025	0.0050	mg/kg	1	2040215	04/18/02	04/18/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		108 %	60-	140	n	Ħ	"	"	
MW-3-12.5-020411 (\$204254-34) Soil	Sampled: 04/11/	02 10:37	Received:	04/12/02	14:00			***	
Methyl tert-butyl ether	0.12	0.0050	mg/kg	1	2040287	04/24/02	04/24/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		86.8 %	60-	140	u	n	"	"	
MW-3-14.0-020411 (S204254-36) Soil	Sampled: 04/11/	02 10:41 l	Received:	04/12/02	14:00				
Methyl tert-butyl ether	0.10	0.0050	mg/kg	1	2040287	04/24/02	04/24/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		93.4 %	60-	140	11	п	"	н	



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

Rancho Cordova CA, 95670

Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/26/02 14:40

MTBE by EPA Method 8260B Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-1-10.50-020412 (S204254-03) Soil S	Sampled: 04/12/0	2 09:27 Re	ceived: 04	1/12/02 14	:00				R-05
Methyl tert-butyl ether	ND	0.025	mg/kg	5	2040062	04/25/02	04/25/02	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		88.6 %	70-	130	"	n	n	"	
MW-1-10.50-020411 (S204254-09) Soil	Sampled: 04/1	1/02 13:05	Received	: 04/12/02	14:00				R-05
Methyl tert-butyl ether	ND	0.025	mg/kg	5	2040062	04/25/02	04/25/02	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		90.0 %	70-	130	п	n	n	n	
B-2-10.50-020411 (S204254-18) Soil S	Sampled: 04/11/0	2 16:10 Re	ceived: 04	1/12/02 14	:00				
Methyl tert-butyl ether	0.075	0.025	mg/kg	5	2040062	04/25/02	04/25/02	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4	- .	92.0 %	70-	130	"	u	"	n	
MW-2-10.00-020411 (S204254-23) Soil	Sampled: 04/1	1/02 14:47	Received	: 04/12/02	14:00				
Methyl tert-butyl ether	0.064	0.025	mg/kg	5	2040062	04/25/02	04/25/02	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		91.0 %	70-	130	"	"	"	n	
MW-3-11.0-020411 (S204254-32) Soil	Sampled: 04/11	/02 10:33 I	Received:	04/12/02 1	14:00				
Methyl tert-butyl ether	0.098	0.025	mg/kg	5	2040062	04/25/02	04/25/02	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		90.0 %	70-2	130	"	"	#	н	



3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/26/02 14:40

Total Purgeable Hydrocarbons and BTEX by DHS LUFT - Quality Control Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	RESULT	Limit	Units	Level	Result	70KEC	Limits	KLD	THIRE	140162
Batch 2040224 - EPA 5030B (MeOH)										
Blank (2040224-BLK1)				Prepared	& Analyze	ed: 04/17/	02			
Purgeable Hydrocarbons	ND	5.0	mg/kg							
Benzene	ND	0.050	"							
Toluene	ND	0.050	п							
Ethylbenzene	ND	0.050	"							
Xylenes (total)	ND	0.050	ч							
Surrogate: a,a,a-Trifluorotoluene	1.16		"	1.00		116	60-140			
LCS (2040224-BS1)				Prepared	& Analyze	ed: 04/17/0	02			
Benzene	1.09	0.050	mg/kg	1.00		109	70-130			
Toluene	1.16	0.050	н	1.00		116	70-130			
Ethylbenzene	1.20	0.050	н	1.00		120	70-130			
Xylenes (total)	3.51	0.050	Ħ	3.00		117	70-130			
Surrogate: a,a,a-Trifluorotoluene	1.15		n	1.00		115	60-140			
LCS Dup (2040224-BSD1)				Prepared	& Analyze	ed: 04/17/	02			
Benzene	1.07	0.050	mg/kg	1.00		107	70-130	1.85	25	
Toluene	1.11	0.050	"	1.00		111	70-130	4.41	25	
Ethylbenzene	1.15	0.050	"	1.00		115	70-130	4.26	25	
Xylenes (total)	3.43	0.050	11	3,00		114	70-130	2.31	25	
Surrogate: a,a,a-Trifluorotoluene	1.14		"	1.00		114	60-140			
Batch 2040253 - EPA 5030B (P/T)										
Blank (2040253-BLK1)				Prepared	& Analyze	ed: 04/18/	02			
Purgeable Hydrocarbons	ND	0.50	mg/kg							
Benzene	ND	0.0050	79							
Toluene	ND	0.0050	**							
Ethylbenzene	ND	0.0050	n							
Xylenes (total)	ND	0.0050	н							
Surrogate: a,a,a-Trifluorotoluene	0.0234		n	0.0200		117	60-140			



3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/26/02 14:40

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040253 - EPA 5030B (P/T)										
LCS (2040253-BS1)				Prepared &	& Analyze	d: 04/18/	02		•	
Benzene	0.0227	0.0050	mg/kg	0.0200		114	70-130			
Toluene	0.0212	0.0050	и	0.0200		106	70-130			
Ethylbenzene	0.0222	0.0050	n	0.0200		111	70-130			
Xylenes (total)	0.0640	0.0050	п	0.0600		107	70-130			
Surrogate: a,a,a-Trifluorotoluene	0.0238		n	0.0200		119	60-140			
Matrix Spike (2040253-MS1)	Sec	urce: S20429	0-02	Prepared of	& Analyze	ed: 04/18/	02			
Benzene	0.0215	0.0050	mg/kg	0.0200	ND	108	60-140			
Toluene	0.0201	0.0050	II	0.0200	ND	100	60-140			
Ethylbenzene	0.0209	0.0050	п	0.0200	ND	104	60-140			
Xylenes (total)	0.0607	0.0050	u	0.0600	ND	101	60-140			
Surrogate: a,a,a-Trifluorotoluene	0.0214		n	0.0200		107	60-140			
Matrix Spike Dup (2040253-MSD1)	So	urce: S20429	00-02	Prepared a	& Analyze	ed: 04/18/	02			
Benzene	0.0227	0.0050	mg/kg	0.0200	ND	114	60-140	5.43	25	
Toluene	0.0209	0.0050	**	0.0200	ND	104	60-140	3.90	25	
Ethylbenzene	0.0216	0.0050		0.0200	ND	108	60-140	3.29	25	
Xylenes (total)	0.0625	0.0050	"	0.0600	ND	104	60-140	2.92	25	
Surrogate: a,a,a-Trifluorotoluene	0.0232		"	0.0200		116	60-140			
Batch 2040291 - EPA 5030B (MeOH)										
Blank (2040291-BLK1)				Prepared a	& Analyz	ed: 04/22/	02			
Purgeable Hydrocarbons	ND	5.0	mg/kg							
Benzene	ND	0.050	**							
Toluene	ND	0.050	**							
Ethylbenzene	ND	0.050	11							
Xylenes (total)	ND	0.050	"							
Surrogate: a,a,a-Trifluorotoluene	1.10			1.00		110	60-140			



3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported:

04/26/02 14:40

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040291 - EPA 5030B (MeOH)		_								
LCS (2040291-BS1)				Prepared	& Analyze	ed: 04/22/	02	_		
Benzene	1.12	0.050	mg/kg	1.00		112	70-130			
Toluene	1.08	0.050	п	1.00		108	70-130			
Ethylbenzene	1.15	0.050	II .	1.00		115	70-130			
Xylenes (total)	3.33	0.050	п	3.00		111	70-130			
Surrogate: a,a,a-Trifluorotoluene	1.08		"	1.00		108	60-140			
LCS Dup (2040291-BSD1)				Prepared	& Analyze	d: 04/22/	02			
Benzene	1.16	0.050	mg/kg	1.00		116	70-130	3.51	25	
Toluene	1.17	0.050	**	1.00		117	70-130	8.00	25	
Ethylbenzene	1,24	0.050	"	1.00		124	70-130	7.53	25	
Xylenes (total)	3.66	0.050	**	3.00		122	70-130	9.44	25	
Surrogate: a,a,a-Trifluorotoluene	1.10		п	1.00		110	60-140			
Batch 2040303 - EPA 5030B (P/T)										
Blank (2040303-BLK1)				Prepared	& Analyze	ed: 04/24/	02		_	
Purgeable Hydrocarbons	ND	0.50	mg/kg				_			
Benzene	ND	0.0050	**							
Toluene	ND	0.0050	**							
Ethylbenzene	ND	0.0050	**							
Xylenes (total)	ND	0.0050	11							
Surrogate: a,a,a-Trifluorotoluene	0.0230		"	0.0200		115	60-140			
LCS (2040303-BS1)				Prepared	& Analyzo	ed: 04/24/	02			
Benzene	0.0215	0.0050	mg/kg	0.0200		108	70-130			
Toluene	0.0196	0.0050	"	0.0200		98.0	70-130			
Ethylbenzene	0.0204	0.0050	п	0.0200		102	70-130			
Xylenes (total)	0.0594	0.0050	ıı	0.0600		99.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	0.0213		"	0.0200		106	60-140			



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

Rancho Cordova CA, 95670

Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/26/02 14:40

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040303 - EPA 5030B (P/T)										
Matrix Spike (2040303-MS1)	Sot	rce: S20425	4-28	Prepared	& Analyze	ed: 04/24/	02			
Benzene	0.0208	0.0050	mg/kg	0.0200	ND	104	60-140			
Toluene	0.0170	0.0050	"	0.0200	ND	85.0	60-140			
Ethylbenzene	0.0224	0.0050	D	0.0200	0.0061	81.5	60-140			
Xylenes (total)	0.0668	0.0050	"	0.0600	0.019	79.7	60-140			
Surrogate: a,a,a-Trifluorotoluene	0.0176		"	0.0200		88.0	60-140			
Matrix Spike Dup (2040303-MSD1)	Sor	rce: S20425	4-28	Prepared	& Analyze	ed: 04/24/	02			
Benzene	0.0231	0.0050	mg/kg	0.0200	ND	116	60-140	10.5	25	
Toluene	0.0198	0.0050	ıı .	0.0200	ND	99.0	60-140	15.2	25	
Ethylbenzene	0.0241	0.0050	н	0.0200	0.0061	90.0	60-140	7.31	25	
Xylenes (total)	0.0730	0.0050	**	0.0600	0.019	90.0	60-140	8.87	25	
Surrogate: a,a,a-Trifluorotoluene	0.0200		n	0.0200		100	60-140		·	
Batch 2040310 - EPA 5030B (MeOH)									· •	
Blank (2040310-BLK1)				Prepared	& Analyze	d: 04/24/	02			
Purgeable Hydrocarbons	ND	5.0	mg/kg		-					
Benzene	ND	0.050	"							
Toluene	ND	0.050	н							
Ethylbenzene	ND	0.050	***							
Xylenes (total)	ND	0.050	"							
Surrogate: a,a,a-Trifluorotoluene	0.962		"	1.00		96.2	60-140			•
LCS (2040310-BS1)				Prepared .	& Analyze	ed: 04/24/	02			
Benzene	1.09	0.050	mg/kg	1.00		109	70-130			
Toluene	1.07	0.050	п	1.00		107	70-130			
Ethylbenzene	1.13	0.050	п	1.00		113	70-130			
Xylenes (total)	3,28	0.050	II	3.00		109	70-130			
Surrogate: a,a,a-Trifluorotoluene	0.992		"	1.00		99.2	60-140			A



3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/26/02 14:40

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040310 - EPA 5030B (MeOH)										
LCS Dup (2040310-BSD1)				Prepared:	04/24/02	Analyzed	: 04/25/02			
Benzene	1.06	0.050	mg/kg	1,00		106	70-130	2.79	25	
Toluene	1.04	0.050	**	1.00		104	70-130	2.84	25	
Ethylbenzene	1.10	0.050	**	1.00		110	70-130	2.69	25	
Xylenes (total)	3.21	0.050	**	3.00		107	70-130	2.16	25	
Surrogate: a,a,a-Trifluorotoluene	0.978		"	1.00		97.8	60-140			



Rancho Cordova CA, 95670

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

Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/26/02 14:40

MTBE by EPA Method 8260B - Quality Control Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040287 - EPA 5030B [P/T]										
Blank (2040287-BLK1)				Prepared &	& Analyz	ed: 04/24/	02			
Methyl tert-butyl ether	ND	0.0050	mg/kg							
Surrogate: 1,2-DCA-d4	0.0422		"	0.0500		84.4	60-140			
LCS (2040287-BS1)				Prepared &	& Analyz	ed: 04/24/	02			
Methyl tert-butyl ether	0.0483	0.0050	mg/kg	0.0500		96.6	70-130			
Surrogate: 1,2-DCA-d4	0.0422		ıı	0.0500		84.4	60-140			
Matrix Spike (2040287-MS1)	Sou	irce: S20429	2-02	Prepared &	& Analyz	ed: 04/24/	02			
Methyl tert-butyl ether	0.0464	0.0050	mg/kg	0.0500	ND	92.8	60-140			
Surrogate: 1,2-DCA-d4	0.0414		#	0.0500		82.8	60-140			
Matrix Spike Dup (2040287-MSD1)	Sou	ırce: S20429	2-02	Prepared &	& Analyz	ed: 04/24/	02			
Methyl tert-butyl ether	0.0466	0.0050	mg/kg	0.0500	ND	93.2	60-140	0.430	25	
Surrogate: 1,2-DCA-d4	0.0433		"	0.0500		86.6	60-140			



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

Rancho Cordova CA, 95670

Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported:

04/26/02 14:40

MTBE by EPA Method 8260B - Quality Control Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040062 - EPA 5030B [P/T]										
Blank (2040062-BLK1)				Prepared &	& Analyz	ed: 04/18/	02			
Methyl tert-butyl ether	ND	0.0050	mg/kg							
Surrogate: 1,2-Dichloroethane-d4	0.0499		"	0.0500		99.8	70-130			
Blank (2040062-BLK2)				Prepared &	& Analyz	ed: 04/25/	02			
Methyl tert-butyl ether	ND	0.0050	mg/kg							
Surrogate: 1,2-Dichloroethane-d4	0.0501		n	0.0500		100	70-130			
LCS (2040062-BS1)				Prepared a	& Analyz	ed: 04/18/	02			
Methyl tert-butyl ether	0.0416	0.0050	mg/kg	0.0500		83.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0478		n	0.0500		95.6	70-130			
LCS (2040062-BS2)				Prepared o	& Analyz	ed: 04/25/	02			
Methyl tert-butyl ether	0.0483	0.0050	mg/kg	0.0500	-	96.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0489		"	0.0500		97.8	70-130			
Matrix Spike (2040062-MS1)	Sou	arce: L20407	77-01	Prepared of	& Analyz	ed: 04/18/	02			
Methyl tert-butyl ether	0.0483	0.0050	mg/kg	0.0500	ND	96.6	60-140			
Surrogate: 1,2-Dichloroethane-d4	0.0536		#	0.0500		107	70-130			
Matrix Spike Dup (2040062-MSD1)	Sou	arce: L20407	77-01	Prepared a	& Analyz	ed: 04/18/	02			
Methyl tert-butyl ether	0.0474	0.0050	mg/kg	0.0500	ND	94.8	60-140	1.88	25	
Surrogate: 1,2-Dichloroethane-d4	0.0523		"	0.0500		105	70-130			





Rancho Cordova CA, 95670

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

Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

04/26/02 14:40

Reported:

Project Manager: Steven Meeks

Notes and Definitions

A-01 TFT was not spiked into this QC sample. BFB surrogate recovery reported in place of TFT.

HC-12 Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

R-05 The reporting limit(s) for this sample have been raised due to high levels of non-target interferents.

R-05a The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.

S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds

present in the sample extract.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



Chain of Custody Record

Project Name ARGO gration No. 4977

BP BU/GEM CO Portfolio:

BP Laboratory Contract Number:

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

Page_ ___of _

Date: 4/12/02 Requested Due Date (mm/dd/yy) STandard TAT Consultant/Contractor: Delta Environmental Consultants Send To: BP/GEM Facility No.: ARCO STATION NO. 4977 Address: \$164 Sold Comp Drive, Chite 200 BP/GEM Facility Address: 2770 CASTO Valley Road, Chilley Lab Name: Sequeia Analytical Rancho curdova, CA 45670-6021 Site ID No. Lab Address: e-mail EOD: Site Lat/Long: Consultant/Contractor Project No.: Docd - 945 California Global ID #: Consultant/Contractor Tele/Fax: 416-536-A613/438-3385 BP/GEM PM Contact: Poul Supple lab I'M: Consultant/Contractor PM: STave MeaKS Address: ARCO Products Company, 9.0. Box 6949 Tele/Fax: Invoice to: Consultant/Contractor or BP/GEM (Circle one) Moraga, 64 94570 Report Type & QC Level: BP/GEM Work Release No. Tele/Fax: BI/GEM Account No.: Requested Analysis Preservatives Lab Bottle Order No: Matrix 5030/405 BTEX Solofer Water/Liquid Sediments Air Unpreserved Sample Point Lat'Long and BTEXTPH **EPA 8270 ETEX 8021** EPA 8260 [{eni Soil/Solid Time Lahoratory No. Sample Description Comments No. H,SO, 멅 |\$204254-01 ||B-1-5-50-620412| 0924 ወዓጉ4 B-1-6.00-020412 ||B-1-10,50-020412||0927 8-1-11:00-020412 0927 B-1-12100-020412 *0*9አዓ ||B-|-||50-0204|2||0929 MW-1-5+00-020411 1300 mw-1-5,50-020411 1300 MW-1-10,50-026411 1305 mw-1-11,00-020411 1305 Accepted By / Affiliation T(me Sampler's Name: ਨਿਆ ਨਿਆਰੀਆਂ ਪਾ Refinguished By / Affiliation Mate lime Menica Golden Segrega Histor 1400 BUT BOURDALLY / DEUTO 4/12/43 1400 Sampler's Company: Octo Environmental Constact Shipment Date: Shipment Method: Shipment Tracking No: Special Instructions: OWC. Cooler Temperature on Receipt Trip Blank Yes No Temperature Blank Yes. Na Custody Seals In Place Yes



Chain of Custody Record

Project Name ARCO STATION No. 4977

BP BU/GEM CO Portfolio:

BP Laboratory Contract Number:

Requested Due Date (mm/dd/yy) \$Tandard TAT

	 	
On-site Time:	Tenip:	
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Sky Conditions:		
Meteorological Events:		
Wind Speed:	Direction;	

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Date:

Chain of Custody Record

Requested Due Date (min/dd/yy) Standard TAT

Project Name AREO Grafion No. 4977

BP BU/GEM CO Portfolio;

BP Laboratory Contract Number;

On-site Time:	Temp:	
Off- site Time:	Temp:	
Sky Conditions:		
Meteorological Events:		
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Page____ of ______.

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Date: 4/12/02

Chain of Custody Record

Project Name ARLO STATION No. 4977

BP BU/GEM CO Portfolio:

BP Laboratory Contract Number:

Requested Due Date (mm/dd/yy) Standard Two Around

On-site Tinte:	Temp:	
Off-site Time:	Temp:	
Sky Conditions:		i
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5	MW-3-13,5-020411	1041	17	\sqcap		П	-25	ı															1		ļ			
6	MW-3-1410-020411	1041	17				-36	ı	Γ.													/			ļ			
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	er's Company: Dolra Ba		d Dec	'nΤ≤					7 0	UIT2	4		h/12	1/02	140	٥	Ϋ́	<u> ነ</u>	CA	Ĵγ.	954	۸IS	56.Y	OKO.	141Jk	9	1400	
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	ent Method:																								.[_		— ∤
Shipm	ent Tracking No:													·								_			<u> </u>			
Special	Instructions:																											<u> </u>
Custoc	ly Seals In Place Yes	No			Te:	syra	rature Blank Yes_		Νo			Coc	ler 7	[em]	perat	ute o	m Re	ceip	l		P/C		Trip	Blan	k Yes_	N	[D	



16 April, 2002

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

RE: ARCO 4977, Castro Valley, CA Sequoia Report: S204214

Enclosed are the results of analyses for samples received by the laboratory on 04/12/02 14:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ron Chew

Client Services Representative

Lito Diaz

Laboratory Director

CA ELAP Certificate #1624



819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100 www.sequoialabs.com

Delta Environmental Consultants (Rancho Cordova

3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670

Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/16/02 15:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP-1,2,3,4-020412 (Composite)	S204214-01	Soil	04/12/02 11:30	04/12/02 14:00

Sequoia Analytical - Sacramento

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





3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/16/02 15:23

Total Purgeable Hydrocarbons and BTEX by DHS LUFT

Sequoia Analytical - Sacramento

		<u> </u>							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-1,2,3,4-020412 (Composite) (S2042	14-01) Soil San	npled: 04/12	/02 11:30	Receive	d: 04/12/0	2 14:00			
Purgeable Hydrocarbons	0.91	0.50	mg/kg	1	2040160	04/12/02	04/12/02	DHS LUFT	HC-12
Benzene	ND	0.0050	**	**	Ħ	11	"	**	
Toluene	ND	0.0050	11	77	##	11	#	**	
Ethylbenzene	0.0096	0.0050	"	**	**	**	"	***	
Xylenes (total)	0.012	0.0050	n	11	**	11	"	••	
Surrogate: a,a,a-Trifluorotoluene		114 %	60-1	40	"	"	n	"	



819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100 www.sequoialabs.com

Delta Environmental Consultants (Rancho Cordova

3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager. Steven Meeks

Reported: 04/16/02 15:23

Total Metals by EPA 6000/7000 Series Methods

Sequoia Analytical - Sacramento

Analyte	R Result	eporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-1,2,3,4-020412 (Composite)	(S204214-01) Soil Sample	d: 04/12	/02 11:30	Receive	d: 04/12/0	2 14:00			
Lead	ND	10	mg/kg	4	2040164	04/15/02	04/16/02	EPA 6010B	R-01



3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/16/02 15:23

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2040160 - EPA 5030B (P/T)	110001	2								
Blank (2040160-BLK1)				Prepared &	& Analyze	ed: 04/12/0	02			
Purgeable Hydrocarbons	ND	0.50	mg/kg							
Benzene	ND	0.0050	n							
Toluene	ND	0.0050	n							
Ethylbenzene	ND	0.0050	II							
Xylenes (total)	ND	0.0050	II .							
Surrogate: a,a,a-Trifluorotoluene	0.0220		n,	0.0200		110	60-140			
LCS (2040160-BS1)				Prepared &	& Analyze	ed: 04/12/0	02			
Велгепе	0.0153	0.0050	mg/kg	0.0200		76.5	70-130			
Toluene	0.0176	0.0050	**	0.0200		88.0	70-130			
Ethylbenzene	0.0218	0.0050	Ħ	0.0200		109	70-130			
Xylenes (total)	0.0633	0.0050	"	0.0600		106	70-130			
Surrogate: a,a,a-Trifluorotoluene	0.0229		"	0.0200		114	60-140			
Matrix Spike (2040160-MS1)	Sou	ırce: S20414	47-11	Prepared d	& Analyze	ed: 04/12/	02			
Benzene	0.0141	0.0050	mg/kg	0.0200	ND	70.5	60-140			
Toluene	0.0164	0.0050	Ħ	0.0200	ND	82.0	60-140			
Ethylbenzene	0.0200	0.0050	**	0.0200	ND	100	60-140			
Xylenes (total)	0.0591	0.0050	"	0.0600	ND	98.5	60-140			
Surrogate: a,a,a-Trifluorotoluene	0.0189		"	0.0200	-	94.5	60-140			
Matrix Spike Dup (2040160-MSD1)	Sou	urce: S20414	47-11	Prepared a	& Analyze	ed: 04/1 <u>2/</u>	02			
Benzene	0.0142	0.0050	mg/kg	0.0200	ND	71.0	60-140	0.707	25	
Toluene	0.0168	0.0050		0.0200	ND	84.0	60-140	2.41	25	
Ethylbenzene	0.0203	0.0050	п	0.0200	ND	102	60-140	1.49	25	
Xylenes (total)	0.0591	0.0050	п	0.0600	ND	98.5	60-140	0.00	25	
Surrogate: a,a,a-Trifluorotoluene	0.0202		"	0.0200		101	60-140			



3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/16/02 15:23

Total Metals by EPA 6000/7000 Series Methods - Quality Control Sequoia Analytical - Sacramento

A 1	D14	Reporting	5 Iia-	Spike	Source	0/DEC	%REC	RPD	RPD Limit	Notes
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	KPD	Limi	Notes
Batch 2040164 - EPA 3050B										
Blank (2040164-BLK1)				Prepared:	04/15/02	Analyzed	: 04/16/02			
Lead	ND	2.5	mg/kg							
LCS (2040164-BS1)				Prepared:	04/15/02	Analyzed	: 04/16/02			
Lead	49.2	2.5	mg/kg	50.0		98.4	80-120			
Matrix Spike (2040164-MS1)	Sou	irce: S2042	14-01	Prepared:	04/15/02	Analyzed	: 04/16/02			
Lead	51.6	10	mg/kg	50.0	ND	86.8	80-120			
Matrix Spike Dup (2040164-MSD1)	Sou	ırce: S2042	14-01	Prepared:	04/15/02	Analyzed	: 04/16/02			
Lead	52.6	10	mg/kg	50.0	ND	88.8	80-120	1.92	20	



819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100 www.sequoialabs.com

Delta Environmental Consultants (Rancho Cordova

3164 Gold Camp Drive Ste. 200

Rancho Cordova CA, 95670

Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/16/02 15:23

Notes and Definitions

HC-12 Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

R-01 The Reporting Limit for this analyte has been raised to account for matrix interference.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

Pag¢	οГ



Date: 4/13/03

Chain of Custody Record

Requested Due Date (mm/dd/yy) Two day TAT

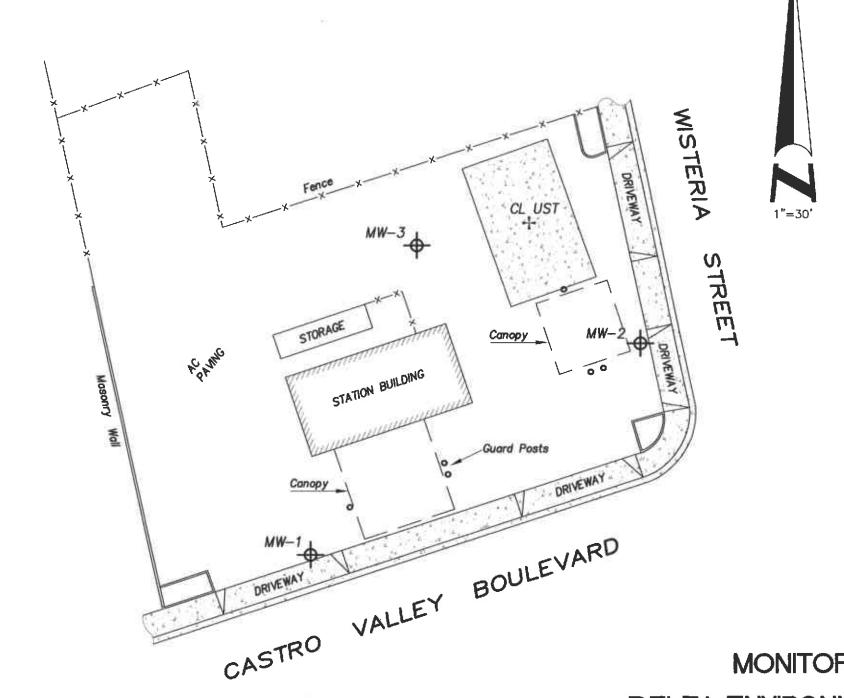
Project Name ARGO STOTION NO. 4977

BP BU/GEM CO Portfolio:

BP Laboratory Contract Number:

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

Send To: BP/GEM Facility No.: ARCO STATION No. 4977 Consultant/Contractor: Desta Environmental Consultants, E. Lab Namo; 56 quoia Analytical BP/GEM Facility Address: 2770 Casto Valley Road, Address: 3164 Gold Camp Orive, suite 200 Lab Address: Site ID No. Rancho Cordova, OA 45470 - 6021 Site Lat/Long: -mail EDD: California Global 1D #: Consultant/Contractor Project No.: Dono- 345 DP/GRM PM Contact: Paul Supple Lab PM: Consultant/Contractor Tele/Fax:416-534-a413/639-9395 Address: P.O. Box 6949, Morago, CA 94570 Tele/l'ax: Consultant/Contractor PM: STeve MeeKS Report Type & QC Level: Invoice to: Consultant/Contractor or BP/GEM (Circle one) BP/GPM Account No.: Tele/Fax: BPOEM Work Release No: Lab Bottle Order No: Matrix Preservatives Requested Analysis EPA 8270 TPris 5030/3015 Soil/Solid Water/Liquid Sediments втехстри Ifem Unpreserved BTEX 8021 EPA 8260 Sample Point Lai/Long and . Sample Description Time Laboratory No. | No. Comments H,SO, 띭 32 HaH-01 5P-1, 3,3,4-04/1 1130 Composite 4:1 2 3 4 5 6 7 8 9 10 Sampler's Name: Brett Bardsley Relinquished By / Affiliation Accepted By / Affiliation Dale Time Time Sampler's Company: Deita Environmental Con. M Druca Gregor Seguas ASPELLY BOOKERLY DELTA 4/4/00 1400 411202 1460 Shipment Date: Shipment Method: Shipment Tracking No: Speciai Instructions: OH/C Custody Seals In Place Yes No Temperature Blank Yes Nο Cooler Temperature on Receipt Trip Blank Yes No



DESCRIPTION	N NORTHING	EASTING	ELEV (PVC)	ELEV (BOX)
MW-1 MW-2 MW-3 CL UST	2079338.4 2079404.4 2079435.0 2079442.1	6102984.1 6103086.8 6103017.3 6103052.2	161.11 161.87 162.14	161.63 162.15 162.60

LATITUDE LONGITUDE

MW-1 37.6947960 -122.0853834

MW-2 37.6949820 -122.0850324

MW-3 37.6950629 -122.0852745

CL UST 37.6950838 -122.0851543

BASIS OF COORDINATES AND ELEVATIONS:

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 3 COORDINATES FROM GPS OBSERVATIONS USING UNIVERSITY OF CALIFORNIA BAY AREA DEFORMATION CORS STATION OBSERVATION FILES AND BASED ON THE CALIFORNIA SPATIAL REFERENCE CENTER DATUM, REFERENCE EPOCH 2000.35.

COORDINATE DATUM IS NAD 83(1986).

DATUM ELLIPSOID IS GRS80.

REFERENCE GEOID IS NGS99.

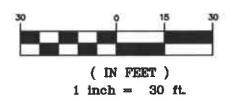
CORS STATIONS USED WERE CNDR AND PTRB.

ELEVATIONS ARE BASED ON ALAMEDA COUNTY BENCHMARK "L.C.R.-CHAP", BRASS DISC TOP OF CURB, 1' NORTHERLY OF NORTH EDGE OF DRIVEWAY INTO "CHAPEL OF THE VALLEY MORTUARY" AND ACROSS LAKE CHABOT ROAD FROM EDEN MEDICAL BUILDING & ROXALL DRUGS. ELEVATION = 164.63'

MONITORING WELL EXHIBIT

Prepared for:

DELTA ENVIRONMENTAL CONSULTANTS, INC.



ARCO FACILITY NO. 4977
2770 Castro Valley Boulevard
Hayward
Alameda County
California



1450 Harbor Blvd. Ste. D West Sacramento California 95691 (916) 372-8124 tom@morrowsurveying.com Date: April 30, 2002 Scale: 1" = 30' Sheet 1 of 1 Revised: Field Book: MW-7 Dwg. No. 1275-048

SJP

ENCLOSURE F

Groundwater Sampling Field Data Sheets



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

Site Address:	2770 Castro Valley Road	Site Name:	ARCO 4977
,	Castro Valley, California	Delta Project No.:	D000-845
Sampled By:	Delta	Date:	04/17/02

	Wat	er Level [Data			Purge Vo	lume Cal	culations			Samp	ling Ana	alytes		Sample	Record
Well ID	4/17/02 - Time	Depth to Water (feet)	Depth to Bottom (feet)	D.O. (mg/L)	Casing Water Column*	Well Diameter (inches)	Multiplier Value (**)	Ten Casing Volumes (gallons)	Actual Water Purged (gallons)	BTEX (8021) VOA	TPH-g (8015M) VOA	MTBE (8260) VOA		Other	Sample I.D.	04/17/02 Sample Time
MW-1	1035	9.28	15.0		5.72	4 inch	0.65	37.0	9							
MW-2	1043	5.36	15.0		8.51	4 inch	0.65	62.0	20							
MW-3	1039	6.49	15.0		9.64	4 inch	0.65	55.0	42							
	-															
-																
	-			_												
						ļ										

Purge Method:	Pump	Bailer	Sample Port	*Casing Water Column: Depth to Bottom - Depth to Water	**Multiplier Values: (2" Well: 0.16) (4" Well: 0.65)	(6" Well: 1.47)
Sampling Notes	:	s (gra		**************************************	Original Copies of Field Sampling Sheets are Located i	in Project File



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

Site Address:	2770 Castro Valley Road	Site Name:	ARCO #4977 *
`	Castro Valley, California	Delta Project No.:	D000-845
Sampled By:	Delta	Date:	04/19/02

	Wat	er Level I	Data			Purge Vo	lume Cal	culations			Samp	ling Ana	alytes		Sample	Record
Well ID	4/ 19/02 - Time	Depth to Water (feet)	Depth to Bottom (feet)	D.O. (mg/L)	Casing Water Column*	Well Diameter (inches)	Multiplier Value (**)	Three Casing Volumes (gallons)	Actual Water Purged (gallons)	BTEX (8021) VOA	TPH-g (8015M) VOA	MTBE (8260) VOA		Other	Sample I.D.	04/19/02 Sample Time
MW-1	0802	11.21	15.0		3.79	4 inch	2.0	7.58	7	V	7	7			MW-1	0913
MW-2	0804	6.59	15.0		8.41	4 inch	2.0	16.82	16	হ	\ \	7			MW-2	0845
MW-3	0759	6.94	15.0	·	8.06	4 inch	2.0	16.12	16	7	7	V			MW-3	0839
	-															
								:								
·																
		•														
:																
					•											
Purns I	Method:	Pump	✓ Bailer	Sample	Port	*Casing W	ater Column	ı: Depth to E	ottom - Dept	h to Water	**M	ultiplier Va	lues: (2"	Well: 0.5)	(4" Well: 2.0)	(6" Well: 4.4)

Purge Method:	Pump	✓ Bailer	Sample Port	*Casing Water Column: Depth to Bottom - Depth to Water	**Multiplier Values: (2" Well: 0.5) (4" Well: 2.0)	(6" Well: 4.4)
Sampling Notes:				c	Original Copies of Field Sampling Sheets are Located	in Project File



3164 Gold Camp Drive, Suite 200 Rancho Cordova, California 95670 Direct: (916) 638-2085 Fax: (916) 638-8385 Site Address: 2770 Castro Valley Road

Site Name:

Date:

ARCO #4977 D000-845

Castro Valley, California

Delta

Delta Project No.:

04/19/02

Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons	Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons	Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gailons
MW-1	0900	19.0	7.07	1113	3									<u> </u>	<u> </u>		
													• "				
	-																
Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons	Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons	Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons
MW-2	0820	18.8	6.38	760	5												
	0835	17.6	6.84	820	10												
[0840	18.7	6.26	791	12												
Well ID	Time	Temp °C		Sp. Cond.	Gallons	Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons	Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons
MW-3	0816	19.1	6.42	780	5												
i	0825	17.6	6.74	797	10												
	0833	18.1	6.65	795	16												
											0.11			T = " 00			
Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons	Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons	Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons
													,	 			
144 11 15	40.	T. 90		0- 0	0-8	M(-II (D)	**	T 90	-1111-14-	Co Cood	Callana	Well ID	Time	Tama °C	all limita	Sp. Cond.	Gallons
Well ID	Time	1emp C	pH Units	Sp. Cond.	Gallons	Well ID	Time	Temp C	pH Units	Sp. Cond.	Gallons	wellib	Time	Temp C	pH Units	Sp. Cona.	Gallons
}							-								<u> </u>		
														<u> </u>	<u> </u>	·	<u> </u>
Well ID	Time	Temp °C	nH I Inite	Sp. Cond.	Gallons	Well ID	Time	Temp °C	pH Units	Sp. Cond	Gallons	Well ID	Time	Temp °C	nH Units	Sp. Cond.	Gallons
WEILID	Tille	Temp C	pri Onits	ap. cond.	Galloris	VVÇII ID	111116	Terrip C	prionits	op. cond.	Callons	110110	711110	Tomp o	prionits	ор. сола.	Calloria
																	<u>i</u>
															 	-	
															 		
WellID	Time	Temp °C	pH Units	Sp. Cond.	Gallons	Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons	Well ID	Time	Temp °C	pH Units	Sp. Cond.	Gallons
			F		3				1	· e					1	F::	
}																 	
}																	
									l								
L		<u> </u>								L					<u>' </u>		

Sampled By:

ENCLOSURE G

Groundwater Sample Laboratory Analytical Results With Chain-of-Custody Documentation



30 April, 2002

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

RE: ARCO 4977, Castro Valley, CA Sequoia Report: S204366

Enclosed are the results of analyses for samples received by the laboratory on 04/19/02 17:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lito Diaz Laboratory Director

CA ELAP Certificate #1624



819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100 www.sequoialabs.com

Delta Environmental Consultants (Rancho Cordova

3164 Gold Camp Drive Ste. 200

Rancho Cordova CA, 95670

Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported:

04/30/02 17:47

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	S204366-01	Water	04/19/02 09:13	04/19/02 17:20
MW-2	S204366-02	Water	04/19/02 08:45	04/19/02 17:20
MW-3	S204366-03	Water	04/19/02 08:39	04/19/02 17:20

Sequoia Analytical - Sacramento

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





3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported:

04/30/02 17:47

Total Purgeable Hydrocarbons and BTEX by DHS LUFT Sequoia Analytical - Sacramento

		-							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1 (S204366-01) Water	Sampled: 04/19/02 09:13	Received: 0	4/19/02	17:20					
Purgeable Hydrocarbons	660	50	ug/l	1	2040362	04/29/02	04/29/02	DHS LUFT	
Benzene	12	0.50	11	**	(1	**	II	II .	
Toluene	1.3	0.50	**	**	II	11	(I	11	
Ethylbenzene	4.3	0.50	**	**	п	**	u	11	
Xylenes (total)	0.80	0.50	"	**	11	**	II .	п	
Surrogate: a,a,a-Trifluorotoli	iene	106 %	60-	140	n	"	n n	n	
MW-2 (S204366-02) Water	Sampled: 04/19/02 08:45	Received: 0	4/19/02	17:20					
Purgeable Hydrocarbons	28000	5000	ug/l	100	2040362	04/29/02	04/29/02	DHS LUFT	
Benzene	970	50	"	n	**	H	**	II .	
Toluene	120	50	#	н	**	"	"	u	
Ethylbenzene	860	50	IF	11	"	n	**	u	
Xylenes (total)	6900	50	н	n.	11		**	н	
Surrogate: a,a,a-Trifluorotoli	iene	94.5 %	60-	140	n	"	"	11	
MW-3 (S204366-03) Water	Sampled: 04/19/02 08:39	Received: 0	4/19/02	17:20	. <u></u>				
Purgeable Hydrocarbons	1200	50	ug/l	1	2040362	04/29/02	04/29/02	DHS LUFT	
Benzene	29	0.50	**	п	17	II.	"	**	
Toluene	1.1	0.50	**	п	"	II .		**	
Ethylbenzene	43	0.50	**	11	11	11	ш	**	
Xylenes (total)	62	0.50	"	0	н	11	tt	"	<u>-</u>
Surrogate: a,a,a-Trifluorotoli	iene	111 %	60-	-140	"	u	"	"	





3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported: 04/30/02 17:47

MTBE by EPA Method 8260B

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (S204366-01) Water	Sampled: 04/19/02 09:13								
Methyl tert-butyl ether	38	0.50	ug/l	1	2040274	04/24/02	04/24/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		103 %	60-	140	n	"	"	п	
MW-2 (S204366-02) Water	Sampled: 04/19/02 08:45	Received: 0	4/19/02 1	17:20					A-01a
Methyl tert-butyl ether	760	5.0	ug/l	10	2040274	04/24/02	04/24/02	EPA 8260B	
Surrogate: 1,2-DCA-d4	•	98.0 %	60-	140	"	"	"	"	
MW-3 (S204366-03) Water	Sampled: 04/19/02 08:39	Received: 0	4/19/02 1	17:20					A-01
Methyl tert-butyl ether	1700	25	ug/l	50	2040334	04/26/02	04/27/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		101 %	60-	-140	#	"	т	n	



3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported:

04/30/02 17:47

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2040362 - EPA 5030B (P/T)										
Blank (2040362-BLK1)				Prepared	& Analyz	ed: 04/29/	02			
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	**							
Toluene	ND	0.50	**							
Ethylbenzene	ND	0.50	**							
Xylenes (total)	ND	0.50	"							
Surrogate: a,a,a-Trifluorotoluene	9.89		"	10.0		98.9	60-140			
LCS (2040362-BS1)				Prepared	& Analyz	ed: 04/29/	02			
Benzene	10.9	0.50	ug/l	10.0		109	70-130			
Toluene	10.8	0.50	н	10.0		108	70-130			
Ethylbenzene	10.6	0.50	н	10.0		106	70-130			
Xylenes (total)	32.3	0.50	Ħ	30.0		108	70-130			
Surrogate: a,a,a-Trifluorotoluene	10.5		n	10.0		105	60-140	,		
Matrix Spike (2040362-MS1)	Sou	ırce: S20436	6-03	Prepared	& Analyz	ed: 04/29/	02			
Benzene	38.6	0.50	ug/l	10.0	29	96.0	60-140			
Toluene	12.6	0.50	**	10.0	1.1	115	60-140			
Ethylbenzene	49.1	0.50	**	10.0	43	61.0	60-140			
Xylenes (total)	99.2	0.50	*	30.0	62	124	60-140			
Surrogate: a,a,a-Trifluorotoluene	11.0		"	10.0		110	60-140			
Matrix Spike Dup (2040362-MSD1)	Son	urce: S20436	6-03	Prepared	& Analyz	ed: 04/29/	02			
Benzene	39.9	0.50	ug/l	10.0	29	109	60-140	3.31	25	
Toluene	13.1	0.50	п	10.0	1.1	120	60-140	3.89	25	
Ethylbenzene	48.8	0.50	"	10.0	43	58.0	60-140	0.613	25	QM-0
Xylenes (total)	99.2	0.50	11	30.0	62	124	60-140	0.00	25	
Surrogate: a,a,a-Trifluorotoluene	10.5	-	"	10.0		105	60-140			





3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported:

04/30/02 17:47

MTBE by EPA Method 8260B - Quality Control Sequoia Analytical - Sacramento

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2040274 - EPA 5030B [P/T]										
Blank (2040274-BLK1)				Prepared	& Analyz	ed: 04/24/	02			
Methyl tert-butyl ether	ND	0.50	ug/l							
Surrogate: 1,2-DCA-d4	26.5		"	25.0		106	60-140			
LCS (2040274-BS1)				Prepared	& Analyz	ed: 04/24/	02			
Methyl tert-butyl ether	21.6	0.50	ug/l	25.0		86.4	70-130			
Surrogate: 1,2-DCA-d4	25.1		"	25.0		100	60-140			
Matrix Spike (2040274-MS1)	Sou	ırce: S20428	6-03RE1	Prepared	& Analyz	ed: 04/24/	02			
Methyl tert-butyl ether	22.4	0.50	ug/i	25.0	ND	89.6	60-140			
Surrogate: 1,2-DCA-d4	25.5		"	25.0		102	60-140			
Matrix Spike Dup (2040274-MSD1)	Sou	ırce: S20428	6-03RE1	Prepared	& Analyz	ed: 04/24/	02			
Methyl tert-butyl ether	22.2	0.50	ug/l	25.0	ND	88.8	60-140	0.897	25	
Surrogate: 1,2-DCA-d4	26.6		н	25.0		106	60-140			
Batch 2040334 - EPA 5030B [P/T]										
Blank (2040334-BLK1)				Prepared	& Analyz	ed: 04/26/	02			
Methyl tert-butyl ether	ND	0.50	ug/l							
Surrogate: 1,2-DCA-d4	26.8		н	25.0		107	60-140			
LCS (2040334-BS1)				Prepared	& Analyz	ed: 04/26/	02			
Methyl tert-butyl ether	23.9	0.50	ug/l	25.0		95.6	70-130			
Surrogate: 1,2-DCA-d4	26.2		"	25.0		105	60-140			
Matrix Spike (2040334-MS1)	Sou	arce: S20437	7-01	Prepared	& Analyz	ed: 04/26/	02			
Methyl tert-butyl ether	26.8	0.50	ug/l	25.0	4.1	90.8	60-140			
Surrogate: 1,2-DCA-d4	26.1		"	25.0		104	60-140			





3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported:

04/30/02 17:47

MTBE by EPA Method 8260B - Quality Control Sequoia Analytical - Sacramento

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
							,			

Batch 2040334 - EPA 5030B [P/T]

Matrix Spike Dup (2040334-MSD1)	Sour	ce: S20437	7-01	Prepared 4	& Analyz	ed: 04/26	02			
Methyl tert-butyl ether	27.9	0.50	ug/l	25.0	4.1	95.2	60-140	4.02	25	
Surrogate: 1,2-DCA-d4	25.8		"	25.0	-	103	60-140			





3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 4977, Castro Valley, CA

Project Number: 4977, Castro Valley, CA

Project Manager: Steven Meeks

Reported:

04/30/02 17:47

Notes and Definitions

A-01 The sample was diluted due to the presence of high levels of target analytes resulting in elevated reporting limits.

A-01a The sample was diluted due to the presence of high levels of target analytes resulting in elevated repoting limits.

QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

	bp
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Date: 4/19/02

Chain of Custody Record

Project Name ARGO STATION NO. 4877

BP BU/GEM CO Portfolio:

BP Laboratory Contract Number:

Requested Due Date (mm/dd/yy) Standard TAT

y, <u>., .,</u>		
On-site Time;	Temp:	
Off- site Time:	Телір:	
Sky Conditions:		
Meteorological Events:		
Wind Speed:	Direction:	

Page____

Send Ta:							BP/GEM Facility No.: ARCO Station No. 4477											Co	Consultant/Contractor: De ITA Environmental Consultant												
Lab Name: Sequota Analytical							BP/GEM Facility Address: 2770 CARTO Walley Road , Contro										A.i	Address: 3164 Fold camp Dive, Suite 200													
Lab Address:							Site ID No.										الـــ	Rancho Cordova, CA 45670-6021													
							Site Lat/Long:												e-mail EDD:												
							Catifornia Global ID #:											Consultant/Contractor Project No.: Dou o - 84 \$													
Lab PM:						RP/GEM PM Contact: Paul Supple												Consultant/Contractor Tele/Fax:916-936-2613/638-9395													
Tclc/Fax:						Address: P.O. Box 6599, Moraga, CA 94570											Consultant/Contractor PM: Steve Meek S														
Report Type & QC Level:																	Invoice to: Consultent/Contractor or BP/GEM (Circle one)														
BP/GEM Account No.:					Tele/Fax:											BP/GEM Work Release No:															
Lab Bo	ttle Order No:			112	trix			\mathbf{F}	Ī	rese	rvati	ves							lequested Analysis												
Item No.	Sample Description	Time	Soil/Solid	Water/Liquid	Sediments	Air	Laboratory No.	No, of containers	Unpreserved	H-SO ₂	HNO	HCI			BTEX 8021	PULKTPHS 15M	TPA SOKO Jerge	Tallet com to the	EFA 82/9							Sam	•	'olat fa Corana	at/E.ong a p15	ınd	
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Sampler's Name: Brett Baldsle & Both Bald Be						Reli	linguished By / Affiliation Date								Tin	1e											Date Time				
Sampler's Company: Oc Ko						SZIM BORDALLY/DESTA						4/						3/01/	nice Otsern/Sequer							163	17	20			
Sampler's Company: Ocha Shipment Date:					The state of the s													Tri Strate Market							-						
Shimment Method:																															
Shipment Method: Shipment Tracking No:					-											T															
Special	Instructions:															,,															
Custoc	ly Seals in Place Yes	Na			Ter	nne	rature Blank Yes		No	1		Cor	oler	Tem	рета	iture	on l	Rec	eipt(_e	Q°C	PE/(3	Т	որ i	3)ani	k Yes		No_			

DILLARD TRUCKING, INC. dba DILLARD ENVIRONMENTAL SERVICES P. O. Box 579

Byron, CA 94514 Phone (925) 634-6850 Fax (925) 634-0874

Via email: bbardsley@deltaenv.com

May 13, 2002

Attn: Brett Bardsley Delta Environmental

RE: ARCO #4977

2770 Castro Valley Blvd. Castro Valley, CA

Dear Mr. Bardsley:

Non-hazardous soil was transported and disposed of at Forward Landfill, Manteca, as follows:

05/01/02

3.15 tons

Should you have any questions, please do not hesitate to call.

Sincerely,

Dillard Trucking, Inc. dba,

DILLARD ENVIRONMENTAL SERVICES

Patty Dillard

Patty Dillard

President