

June 20, 2002

JUN 24 2002

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

Nemo 2

Reverend Sura D. Phoenix First Christian Church 1190 Davis Street San Leandro, CA 94577

Subject: Quarterly Groundwater Monitoring Report, First Quarter 2002

First Christian Church 1190 Davis Street San Leandro, California Delta Project No. D000-306

Dear Reverend Phoenix:

Delta Environmental Consultants, Inc. is submitting the attached copy of the laboratory analytical results (Enclosure A) for the groundwater sample collected from monitoring well MW-5 during the first quarter 2002. This well is located at the First Christian Church, 1190 Davis Street, San Leandro, California. The groundwater sample was collected during quarterly sampling of the ARCO Service Station No. 2111, located at 1156 Davis Street, San Leandro, California.

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

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Steven W. Meeks, P.E.

Project Manager

SWM (CL013.306.doc)

Enclosure

Cc: Amir Gholami - ACHCSA

Paul Supple - Atlantic Richfield Company

JUN 2 4 2002

ENCLOSURE A

Copy of Certified Analytical Results for Monitoring Well MW-5 And Chain of Custody





20 June, 2002

Steven Meeks Delta Environmental Consultants (Rancho Cordova) 3164 Gold Camp Drive Ste. 200 Rancho Cordova, CA 95670 YUN 2 K TOOS

RE: ARCO 2111, San Leandro, CA Sequoia Report: S203292

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

Sincerely,

•___

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 2111, San Leandro, CA

Project Number: 2111, San Leandro, CA

Project Manager: Steven Meeks

Reported:

06/20/02 08:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laberatory ID	Matrix	Date Sampled	Date Received		
MW-5	S203292-05	Water	03/14/02 14:10	03/19/02 14:06		

JUNY 2 A DOO

Sequoia Analytical - Sacramento

Ron Chew, Client Services Representative

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





3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 2111, San Leandro, CA

Project Number: 2111, San Leandro, CA

Project Manager: Steven Meeks

Reported:

06/20/02 08:40

Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (S203292-05) Water	Sampled: 03/14/02 14:10	Received: 0	3/19/02	14:06					
Purgeable Hydrocarbons	ND	5000	ug/l	100	2030356	03/26/02	03/26/02	DHS LUFT	
Benzene	ND	50		"	**	ıı	U	H	
Toluene	ND	50	**	11	"	"	"	•	
Ethylbenzene	ND	50	**	п	π	H	n	"	
Xylenes (total)	ND	50	**	ır	"	"	**	•	
Methyl tert-butyl ether	7199	250			n	<u>"</u>	*	"	
Surrogate: a,a,a-Trifluorotoli	uene	97 %	66	0-140	*	•	"	Ħ	







3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 2111, San Leandro, CA

Project Number: 2111, San Leandro, CA

Project Manager: Steven Meeks

Reported:

06/20/02 08:40

MTBE Confirmation by EPA Method 8260B Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (S203292-05) Water	Sampled: 03/14/02 14:10	Received: 0	3/19/02 1	14:06			-		
Methyl tert-butyl ether	7700	50	ug/l	100	2030328	03/26/02	03/26/02	EPA 8260B	
Surrogate: 1,2-DCA-d4		125 %	60-	140	"	"	**	н	





3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 2111, San Leandro, CA

Project Number: 2111, San Leandro, CA

Project Manager: Steven Meeks

Reported: 06/20/02 08:40

Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT - Quality Control Sequoia Analytical - Sacramento

	D Iv	Reporting	l luiss	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Analyte	Result	Limit	Units	Level	Kesuit	70NEC	Luma	Ki D	tour.	7.0.00	
Batch 2030356 - EPA 5030B (P/T)											
ank (2030356-BLK1) Prepared & Analyzed: 03/26/02											
Purgeable Hydrocarbons	ND	50	ug/l								
Benzene	ND	0.50	tt					رف			
Foluene	ND	0.50	**					٠ ک	t		
Ethylbenzene	ND	0.50	1+					•	ှ ာ		
Xylenes (total)	ND	0,50	**						\$₹		
Methyl tert-butyl ether	ND	2.5	"			<u></u>			1807 * 280°		
Surrogate: a,a,a-Trifluorotoluene	9.65		H	10.0		96	60-140		4		
LCS (2030356-BS1)				Prepared	& Analyz	ed: 03/26/	02				
Benzene	8.46	0.50	ug/l	10.0		85	70-130				
Toluene	9.16	0.50	**	10.0		92	70-130				
Ethylbenzene	9.52	0.50	**	10.0		95	70-130				
Xylenes (total)	29.6	0.50	"	30.0		99	70-130				
Methyl tert-butyl ether	9.63	2.5	H	10.0		96	70-130				
Surrogate: a,a,a-Trifluorotoluene	10.4		н	10.0		104	60-140				
Matrix Spike (2030356-MS1)	Son	arce: S20339	98-09	Prepared	& Analyz	ed: 03/26/	02				
Benzene	8.25	0.50	ug/l	10.0	ND	82	60-140				
Toluene	8.82	0.50	"	10.0	ND	86	60-140				
Ethylbenzene	9.22	0.50	**	10.0	ND	92	60-140				
Xylenes (total)	28.7	0.50	11	30.0	ND	96	60-140				
Methyl tert-butyl ether	31.3	2.5	Ħ	10.0	22	93	60-140				
Surrogate: a,a,a-Trifluorotoluene	9.85		н	10.0		98	60-140				
Matrix Spike Dup (2030356-MSD1)	So	urce: S203 <u>3</u> 5	98-09	Prepared	& Analyz	ed: 03/26	/02				
Benzene	9.11	0.50	ug/l	10.0	ND	91	60-140	10	25		
Toluene	9.68	0.50	,,	10.0	ND	95	60-140	9	25		
Ethylbenzene	10.1	0.50	п	10.0	ND	101	60-140	9	25		
Xylenes (total)	31.1	0.50	н	30.0	ND	104	60-140	8	25		
Methyl tert-butyl ether	32.1	2.5	**	10.0	22	101	60-140	3	25		
Surrogate: a.a.a-Trifluorotoluene	10.1		"	10.0		101	60-140	-			





3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 2111, San Leandro, CA

Project Number: 2111, San Leandro, CA

Project Manager: Steven Meeks

Reported: 06/20/02 08:40

MTBE Confirmation 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 2030328 - EPA 5030B [P/T]										
Blank (2030328-BLK1)				Prepared	& Analyz	ed: 03/26/	02			
Methyl tert-butyl ether	ND	0.50	ug/l							
Surrogate: 1,2-DCA-d4	31.0		н	25.0		124	60-140			
LCS (2030328-BS1)				Prepared	& Analyz	ed: 03/26/	02			
Methyl tert-butyl ether	31.8	0.50	ug/l	25.0		127	70-130			
Surrogate: 1,2-DCA-d4	28.8		μ	25.0	-	115	60-140	-		
Matrix Spike (2030328-MS1)	So	urce: S20337	9-01	Prepared	& Analyz	ed: 03/26/	02			
Methyl tert-butyl ether	30,5	0.50	ug/l	25.0	ND	122	60-140			
Surrogate: 1,2-DCA-d4	28.6		"	25.0		114	60-140			
Matrix Spike Dup (2030328-MSD1)	Source: S203379-01 Prepared & Analyzed: 03/26/02									
Methyl tert-butyl ether	32.9	0.50	ug/l	25.0	ND	132	60-140	8	25	
Surrogate: 1,2-DCA-d4	29.8		"	25.0		119	60-140			







3164 Gold Camp Drive Ste. 200 Rancho Cordova CA, 95670 Project: ARCO 2111, San Leandro, CA

Project Number: 2111, San Leandro, CA

Project Manager: Steven Meeks

Reported:

06/20/02 08:40

Notes and Definitions

QM-4X The spike recovery was outside of control limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference



ARCO		_		,				Work A	uthorizat	lon l	Vo. á	3.5	99.	300)							C	hain of Custody	
ARCO Fecility	No.2	111		Ci (Fi	ly scility) <u>S</u>	an Le	MNALY	0 - 61	4	Projec (Const	i Mana ultant)	ger 5	70	ven	, ,	me	ĸĸ	5					Laboratory name	
ARCO angino Company na (Consultant)			Telephone no. (Consultant) 638 2085 Fax no. (Consultant) 638 8385 Address (Consultant) Burcho Cordova												Contract number									
(Consumanty		PEI		Malrix		Preser	ration	[[COSIBON	and by	<u>u</u> ju u	35		7	اس		g	E G	0/7/ED0					Method of shipment	
Sample 1,D,	Lab no.	Containor no,	Soil	Water	Other	ke	Acid	Sampling data	Sempling time		STEVTPK №7 EPA (4602/8021/	TPH Madi'llod 8015 Gas D Diesol D	Oll and Srease 413,1 C 413,2 C	TPH EPA <18, VSIASO3	BTEX + MTBE EPH 8260	BTEX + Stantax Oxygonatos EP\$ 8250	TCLP Se Metalic C YOAC W	CAN MESIS EN CO. TYLCO STLCO	Land Oct. OHS CO Land SPA TX2074271 CO				Special detection Limit/teporting	
MW-1		4		×		Х	×	3-14.02	15:15		×			34	Ø3	29	2-0	1						
MW-2			<u> </u>	- -	i		1-	 	15:50 15:05		-						<u>-U</u>	<u>}</u>					Special QA/QC	
MW-4				- -					14:20						<u> </u>		-01 -01	ر <u>ا</u>						
MW-5		1			·				14:10								ـُــــ	<u> </u>			· ·			
MW-6		-	<u> </u>		<u> </u>			<u> </u>	14:00							1	<u>()</u>	2					Remarks Considere MTDE by 8260	
7.8 T.B		2_					_/_		600		1						08	<u> </u>		- -			by 8260	
															1								Type or Werk Dispenser Work Line Job Routine Sampling Site Acquisitions Ci Site Assessment UST Removal UST Replacement Ci Other	
		<u> </u>	<u> </u>		-				,,,,											<u></u> -	7.8	W.	tab aumber	
																			3	10 c				
						<u> </u>	<u> </u>			ļ		<u> </u>	L.,										Priority Rush 1 Business Day	
Salinordshed by sampler Cate Time						Temperature received: 78 Proceived by Procei						11.0	<u>ل</u>	Rush 2 Business Days 🔲										
Relinquiana	day .	Buy	W.				Oate	700	1406 Time	Rece	J VC	W	<u> </u>	- (3 1	(<u></u>			યાવા	<i>₩</i>	<u>14 '</u>		Expodited 6 Susiness Days	
Relinquisive	d by	<u></u>	-				Date		Time	Rece	hed by	iaborav	ory				Date			Time			Standard 10 Business Days	