EMCON
1921 Ringwood Avenue • San Jose, California 95131-1721 • (408) 453-7300 • Fax (408) 437-9526

September 25, 1996
Project 20805-127.003

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

Re: Second quarter 1996 laboratory analytical results, groundwater samples, First Christian Church, 1190 Davis Street, San Leandro, California

Dear Reverend Phoenix:

Enclosed please find copies of the laboratory analytical results for the groundwater sample collected from well MW-5 during the second quarter of 1996. This well is located at the First Christian Church, 1190 Davis Street, San Leandro, California. The groundwater samples were collected on May 24, 1996, during quarterly sampling of the ARCO Products Company service station 2111, 1156 Davis Street, San Leandro. The laboratory analytical results indicate that the groundwater sample concentrations were not detectable for total petroleum hydrocarbons as gasoline, and the gasoline constituents benzene, toluene, ethylbenzene, and total xylenes. Second quarter 1996 groundwater elevation data and analytical results for well MW-5 are illustrated on Figure 1.

Please call if you have questions.

Sincerely,

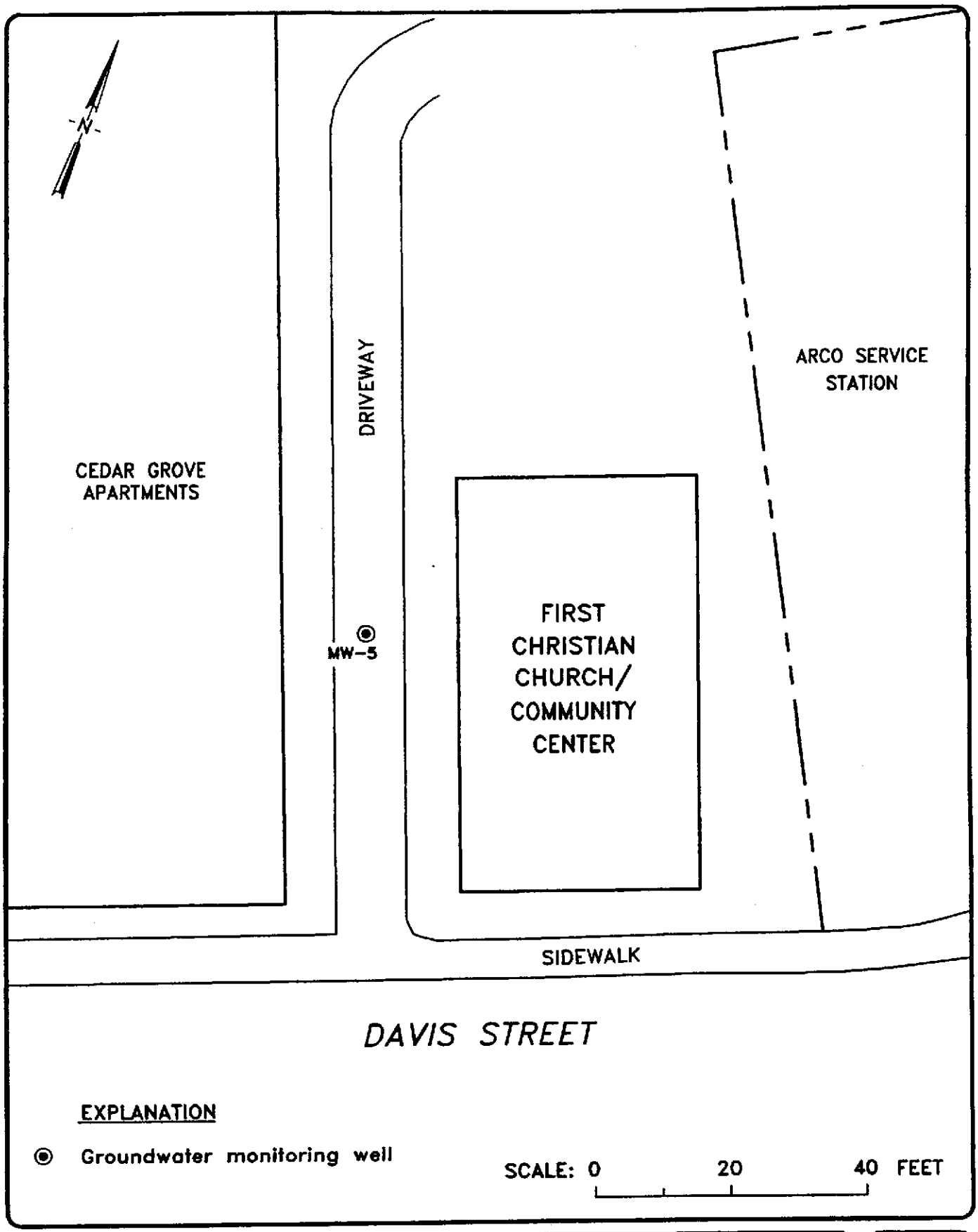
EMCON

John C. Young
Project Manager

Attachments: Figure 1 - Generalized Site Plan
Attachment A -Copy of Analytical Results and Chain-of-Custody Documentation, Well MW-5, Second Quarter 1996

cc: [redacted]
Kevin Graves, RWQCB - SFBR
Paul Supple, ARCO Products Company
File

esj/h:\2111\fccletter.doc:imi
20805-127.00J



EMCON

FIRST CHRISTIAN CHURCH
1190 DAVIS STREET
QUARTERLY GROUNDWATER MONITORING
SAN LEANDRO, CALIFORNIA

GENERALIZED SITE PLAN

FIGURE 1

PROJECT NO. 805-127.03

G:\805-127\SITE REV 0 08/05/96 15:14:54 DD DJ

ATTACHMENT A

COPY OF ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION, WELL MW-5, SECOND QUARTER 1996

Columbia Analytical Services inc.

July 30, 1996 Service Request No: S9600835

Mr. John Young
EMCON
1921 Ringwood Ave.
San Jose, CA 95131

Re: 2111 San Leandro / Project No. 20805-127.003/TO#19350.00

Dear Mr. Young:

The following pages contain analytical results for sample(s) received by the laboratory on May 24, 1996. Results of sample analyses are followed by Appendix A which contains sample custody documentation and quality assurance deliverables requested for this project. The work requested has been assigned the Service Request No. Listed above -- to help expedite our service please refer to this number when contacting the laboratory.

Analytical results were produced by procedures consistent with Columbia Analytical Services' (CAS) Quality Assurance Manual (with any deviations noted). Signature of this CAS Analytical Report below confirms that pages 2 through 7, following, have been thoroughly reviewed and approved for release in accord with CAS Standard Operating Procedure ADM-DatRev3.

If you have questions or further needs, please call me at (408) 428-1283.

Sincerely,

Steven L. Green
Project Chemist

Greg Anderson
Regional QA Coordinator

CVR/smh

COLUMBIA ANALYTICAL SERVICES, Inc.
Acronyms

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

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ARCO Products Company	**Service Request:**	S9600835
Project:	2111 SAN LEANDRO/20805-127.003/TO#19350.00	**Date Collected:**	5/24/96
Sample Matrix:	Water	**Date Received:**	5/24/96
		Date Extracted:	NA

BTEX, MTBE and TPH as Gasoline
EPA Methods 5030/8020/California DHS LUFT Method
Units: ug/L (ppb)

		Sample Name:	**MW-5(23)**	**Method Blank**
		Lab Code:	S9600835-004	S960604-WB
		Date Analyzed:	6/4/96	6/4/96
Analyte	**MRL**			
TPH as Gasoline	50		ND	ND
Benzene	0.5		ND	ND
Toluene	0.5		ND	ND
Ethylbenzene	0.5		ND	ND
Total Xylenes	0.5		ND	ND
Methyl *tert*-Butyl Ether	3		7	ND

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ARCO Products Company	**Service Request:**	S9600835
Project:	2111 SAN LEANDRO/20805-127.003/TO#19350.00	**Date Collected:**	5/24/96
Sample Matrix:	Water	**Date Received:**	5/24/96
		Date Extracted:	NA
		Date Analyzed:	6/4/96

Surrogate Recovery Summary
BTEX, MTBE and TPH as Gasoline
EPA Methods 5030/8020/California DHS LUFT Method

Sample Name	Lab Code	PID Detector Percent Recovery 4-Bromofluorobenzene	FID Detector Percent Recovery α,α,α-Trifluorotoluene
MW-5(23)	S9600835-004	106	102
Method Blank	S960604-WB	107	100
CAS Acceptance Limits:		69-116	69-116

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ARCO Products Company	**Service Request:**	S9600835
Project:	2111 SAN LEANDRO/20805-127.003/TO#19350.00	**Date Collected:**	5/24/96
Sample Matrix:	Water	**Date Received:**	5/24/96
		Date Extracted:	NA
		Date Analyzed:	6/4/96

Matrix Spike/Duplicate Matrix Spike Summary
TPH as Gasoline
EPA Methods 5030/California DHS LUFT Method
Units: ug/L (ppb)

Sample Name: Batch QC
Lab Code: S9600835-001

	Spike Level		Sample	Spike Result		Percent Recovery		CAS Acceptance	Relative Percent
Analyte	MS	DMS	**Result**	MS	DMS	MS	DMS	Limits	**Difference**
Gasoline	250	250	ND	250	250	100	100	67-121	<1

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ARCO Products Company	**Service Request:**	S9600835
Project:	2111 SAN LEANDRO/20805-127.003/TO#19350.00	**Date Analyzed:**	6/4/96

Initial Calibration Verification (ICV) Summary
BTEX, MTBE and TPH as Gasoline
EPA Methods 5030/8020/California DHS LUFT Method
Units: ppb

Analyte	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits
Benzene	25	26.7	107	85-115
Toluene	25	26.8	107	85-115
Ethylbenzene	25	27.0	108	85-115
Xylenes, Total	75	83.3	111	85-115
Gasoline	250	261	104	90-110
Methyl *tert*-Butyl Ether	50	44	88	85-115

ARCO Products Company
Division of AtlanticRichfieldCompany

Chain of Custody

Task Order No. 19350.00

ARCO Facility no. 2111	City (Facility) San Leandro	Project manager (Consultant) John Young	Laboratory name CAS
ARCO engineer Mike Whelan	Telephone no. (ARCO)	Telephone no. (Consultant) (408) 453-7300	Fax no. (Consultant) (408) 453-0452
Consultant name EMCON	Address (Consultant) 1921 Ringwood Ave, San Jose, CA 95131		Contract number

Sample I.D.	Lab no.	Container no.	Matrix: Soil	Matrix: Water	Matrix: Other	Preservation: Ice	Preservation: Acid	Sampling date	Sampling time	BTEX 602/EPA 8020	BTEX/TPH incl. MTBE EPA M602/8020/8015	TPH Modified 8015 Gas ☐ Diesel ☒	Oil and Grease 413.1 ☐ 413.2 ☐	TPH EPA 418.1/SM503E	EPA 601/8010	EPA 624/8240	EPA 625/8270	TCLP Metals ☐ Semi VOA ☐ VOA ☐	CAM Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead EPA 7420/7421 ☐		
MW-1(26)	1	2		X		X	HCL	5/24/96	1210		X											
MW-4(21)	2	2		X		X	HCL		1122		X											
MW-3(26)	3	6		X		X	HCL		1140		X	X		X								
MW-5(23)	4	2		X		X	HCL		1255		X											
MW-6(24)	5	2		X		X	HCL		1100		X											
MW-2(26)	6	2		X		X	HCL		1315		X											
MW-7(26)	7	2		X		X	HCL	↓	1340		X											

Method of shipment: Sampler will deliver

Special detection Limit/reporting: Lowest Possible

Special QA/QC: As Normal

Remarks:
2-40ml HCL VOAs (All Wells)
MW-3 add:
2-1 liter HCL
2-1 liter NP
#70805-127.CC3

Lab number: 9600835

Turnaround time

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

Condition of sample:

Temperature received:

Relinquished by sampler	Date 5/24/96	Time 1430	Received by
Relinquished by	Date	Time	Received by
Relinquished by	Date	Time	Received by laboratory: Kurt Kolby CAS

Date: 5-24-96 Time: 1430

Distribution: White copy — Laboratory, Canary copy — ARCO Environmental Engineering, Pink copy — Consultant

APC-3292 (2-91)