ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

May 21, 2010

Robert Duggins
Shiloh Christian Fellowship
3295 School St.
Oakland, CA 94602

Subject: Subject: Fuel Leak Case, RO0000406, Shiloh Christian Fellowship, 3250 School St., Oakland, CA 94602

Dear Mr. Duggins:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- Residual pollution remaining in soil beneath the site includes TPH as gasoline at concentrations of up to 76 ppm and TPH as diesel at 160 ppm.
- Maximum concentrations of up to 110 ppb TPHg remain in groundwater beneath the site.

If you have any questions, please call Barbara Jakub at (510) 639-1287. Thank you.

Sincerely,

Donna L. Drogos, P.E.
Division Chief

Enclosures:
1. Remedial Action Completion Certificate
2. Case Closure Summary

cc:
Ms. Cherie McCaulou (w/enc)
SF- Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Closure Unit (w/enc)
State Water Resources Control Board
UST Cleanup Fund
P.O. Box 944212
Sacramento, CA 94244-2120

D. Drogos (w/o enc), file (w/orig enc)

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May 21, 2010

Robert Duggins
Shiloh Christian Fellowship
3295 School St.
Oakland, CA 94602

REMEDIAL ACTION COMPLETION CERTIFICATE

Subject: Subject: Fuel Leak Case, RO0000406, Shiloh Christian Fellowship, 3250 School St., Oakland, CA 94602

Dear Mr. Duggins:

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code.

Please contact our office if you have any questions regarding this matter.

Sincerely,

Ariu Levi
Director
Alameda County Environmental Health

Alameda County Environmental Health

CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM

I. AGENCY INFORMATION

Date: April 16, 2010

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 639-1287
Responsible Staff Person: Barbara Jakub	Title: Hazardous Materials Specialist

II. CASE INFORMATION

Site Facility Name: Shiloh Christian Fellowship		
Site Facility Address: 3250 School St., Oakland, CA		
RB Case No.: 01-2292	STID No.:4905	LOP Case No.: RO0000406
URF Filing Date: ---	Geotracker ID: T0600102108	APN: 028-0932-018-00

Responsible Parties	Addresses	Phone Numbers
Robert Duggins	3295 School St., Oakland, CA 94602	510-458-5381
---	---	---
---	---	---

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
A	750	Leaded Gasoline	Removed	5/24/1995
B	750	Leaded Gasoline	Removed	5/24/1995
C	250	Waste-oil	Removed	5/24/1995
---	---	---	---	---
Piping			Removed	5/24/1995

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown, USTs appeared intact upon removal.	
Site characterization complete? Yes	Date Approved By Oversight Agency: -----

Monitoring wells installed? No	Number: 0	Proper screened interval? NA
Highest GW Depth Below Ground Surface: 10 perched water. Water at sites within 2000 feet of site is encountered between 20 to 41 feet bgs. Non-perched groundwater not encountered in boring to 28 ft bgs	Lowest Depth: 12	Flow Direction: southwest., south/southeast*
Most Sensitive Current Use: Potential drinking water source.		

* Based on RO1, groundwater gradient expected to be to the southwest/ south/southeast and toward Peralta Creek

Summary of Production Wells in Vicinity: No production wells discovered within 2,500 feet of site. Several monitoring wells are located cross-gradient from the site at minimum distances of 1,300 feet to the east (RO14, 3201 35th Avenue) and RO271 (3035 35th Avenue). Due to their location and distance from the site, they are not expected to be receptors for the site.	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest SW Name: Peralta Creek ~500 feet south/SE of site
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health and City of Oakland Fire Department.

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	2-750 gallon, 1- 250 gallon tank	Disposal at Erickson, 255 Parr Blvd., Richmond, CA	5/24/1995
Piping	~ 40 feet	Disposal at Erickson, 255 Parr Blvd., Richmond, CA	Assumed disposed with USTs
Free Product	170 gallons sludge removed from waste-oil tank	Disposal at Erickson, 255 Parr Blvd., Richmond, CA	Not reported
Soil	~60 yd^3	Disposal at Vasco Rd., Sanitary Landfill, Livermore, CA	3/22/1996
Groundwater	----	----	----

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP
(Please see Attachments x – x for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	2,200	76	110	110
TPH (Diesel)	160	160	Not analyzed	Not analyzed
Oil and Grease	1,300	<50	Not analyzed	Not analyzed
Benzene	40	0.043	<0.5	<0.5
Toluene	190	0.280	<0.5	<0.5
Ethylbenzene	40	0.290	1.6	1.6
Xylenes	160	0.720	9.6	9.6
Heavy Metals (Cd, Cr, Pb, Ni, Zn)	*140	**140	Not analyzed	Not analyzed
MTBE	Not Analyzed^	^^<0.005	^^^<5.0	^^^<5.0
Other (8240/8270)	[a]0.430	[b]<0.330	[c]<10	[c]<10

* 1.5 ppm Cd, _50_ ppm Cr, _62_ ppm Pb, _100 ppm Ni, _140 ppm Zn

** 1.5 ppm Cd, _50_ ppm Cr, _62 ppm Pb, _100 ppm Ni, _140 ppm Zn

^ MTBE, TBA, TAME, ETBE; DIPE, EtOH, EDB; and EDC all not analyzed.

^^ <0.005 ppm MTBE. TBA, TAME, ETBE; DIPE, EtOH, EDB; and EDC all not analyzed.

^^^ <5.0 ppb MTBE. TBA, TAME, ETBE; DIPE, EtOH, EDB; and EDC all not analyzed.

a 0.430 ppm Naphthalene, 0.400 ppm methylnaphthalene. No other PAHs were detected above the various reporting limits.

b No other PAHs detected above the various reporting limits

c No PAHs detected above the reporting limit of 10 ppb.

Site History and Description of Corrective Actions:

The site is currently a paved lot used for parking for the Shiloh Christian Fellowship. An associated school is located further down the street and on the opposite side.

May 24, 1995 two 750-gallon gasoline USTs, one 500- gallon waste-oil UST and associated product piping were removed. Initial soil samples contained maximum concentrations of 2,200 ppm TVH, 40 ppm benzene at seven ft bgs from beneath the gasoline USTs. Soil samples collected below the product piping were below the detection limit. Approximately 60 yd^3 of soil was removed from the site during the removal of the tanks. Overexcavation confirmation samples contained benzene at 0.0091 ppm and 0.043 ppm (AB-3 and AB-5, respectively) from 12 ft bgs. 76 ppm TVH max (AB-1 at 12').

Soil samples collected from beneath the waste-oil tank contained 21 ppm TVH, 160 ppm TEH, 1,300 TOG, 0.110 ppm benzene, 0.430 ppm naphthalene, 0.400 ppm methylnaphthalene. Overexcavation samples were below the detection limit for all constituents at 10 feet bgs.

June 22, 2001, one Geoprobe boring was advanced at the site to a depth of 28 feet to collect soil near soil sample AB-3. A groundwater sample was collected from first water from 12 feet bgs. Concentrations were 110 ppb TPHg, <0.5 ppb benzene, <5.0 MTBE. The boring terminated at 28 feet bgs where refusal was encountered. No deeper groundwater was encountered to this depth. Soil samples collected from 23.5 and 27.5 feet bgs were below the detection limits for all constituents. The first boring attempted near AB-5, hit refusal at 1.5 ft bgs and was terminated at that point.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.		
Site Management Requirements: None		
Should corrective action be reviewed if land use changes? No		
Was a deed restriction or deed notification filed? No		Date Recorded: --
Monitoring Wells Decommissioned: NA	Number Decommissioned: 0	Number Retained: 0
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: --		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances: None

Conclusion:

Alameda County Environmental Health staff believe that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment based upon the information available in our files to date. No further investigation or cleanup is necessary. ACEH staff recommend case closure for this site.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Barbara J. Jakub, P.G.	Title: Hazardous Materials Specialist
Signature: Barbara J Jakub	Date: 4/16/10
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature: Donna L Drogos	Date: 04/20/10

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

VII. REGIONAL BOARD NOTIFICATION

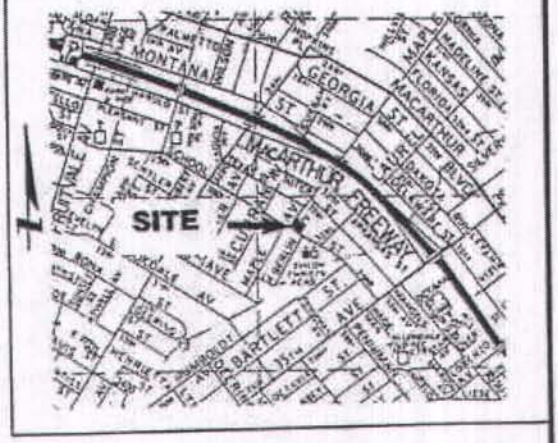
Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
Notification Date: 4/20/10	

VIII. MONITORING WELL DECOMMISSIONING

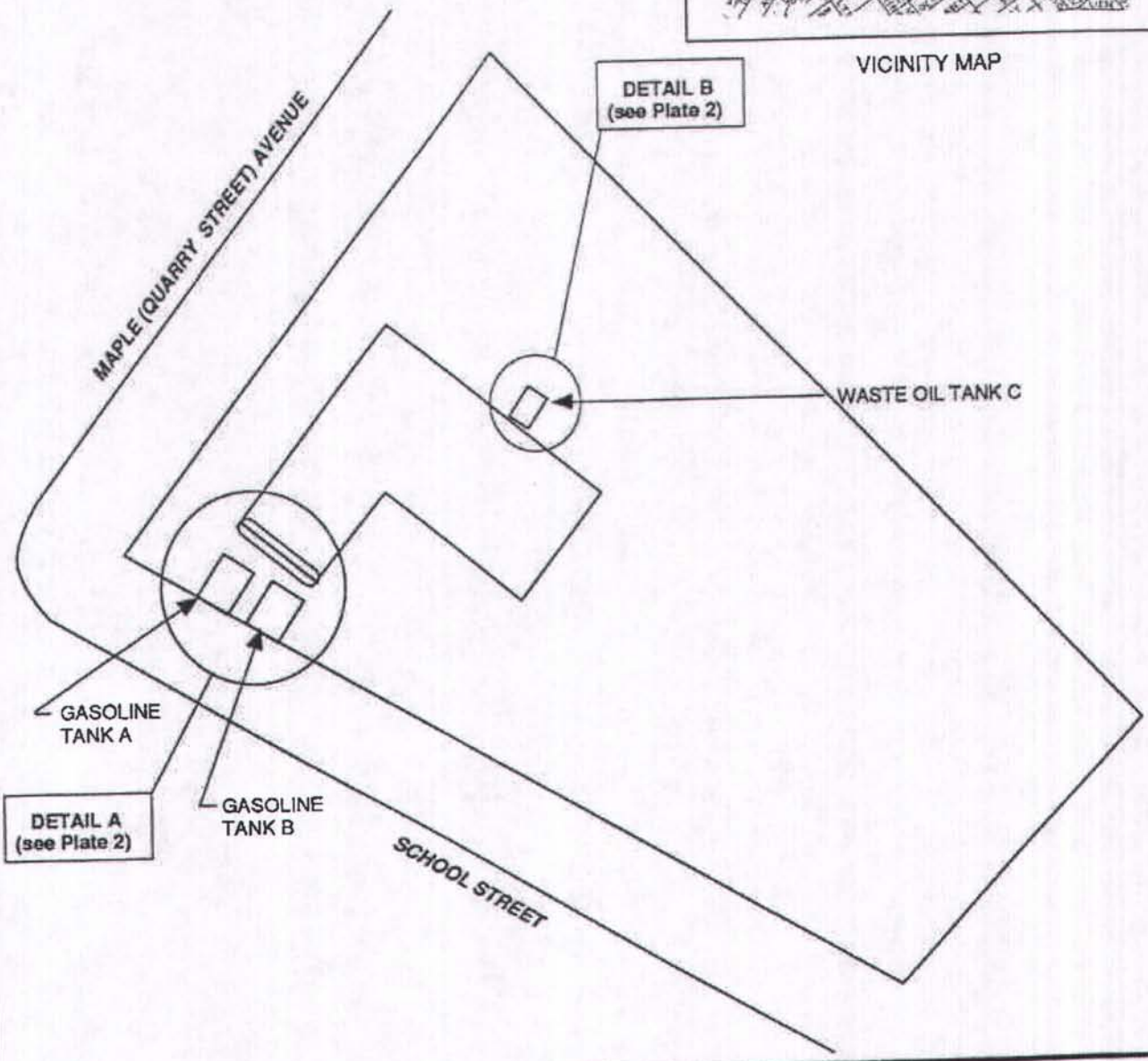
Date Requested by ACEH: NA	Date of Well Decommissioning Report: NA	
All Monitoring Wells Decommissioned: NA	Number Decommissioned: 0	Number Retained: 0
Reason Wells Retained: --		
Additional requirements for submittal of groundwater data from retained wells:--		
ACEH Concurrence - Signature: Barbara J Jakub		Date: 6/30/11

Attachments:
1. Site Plan with Vicinity Map (pp 1)
2. Sample location Maps (pp 2-3)
3. Soil Analytical Data (pp 4-19)
4. Groundwater Analytical Data (pp 20)
5. Boring Log (pp 21)

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.



VICINITY MAP



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APPROXIMATE SCALE IN FEET

0 20 40

SITE PLAN

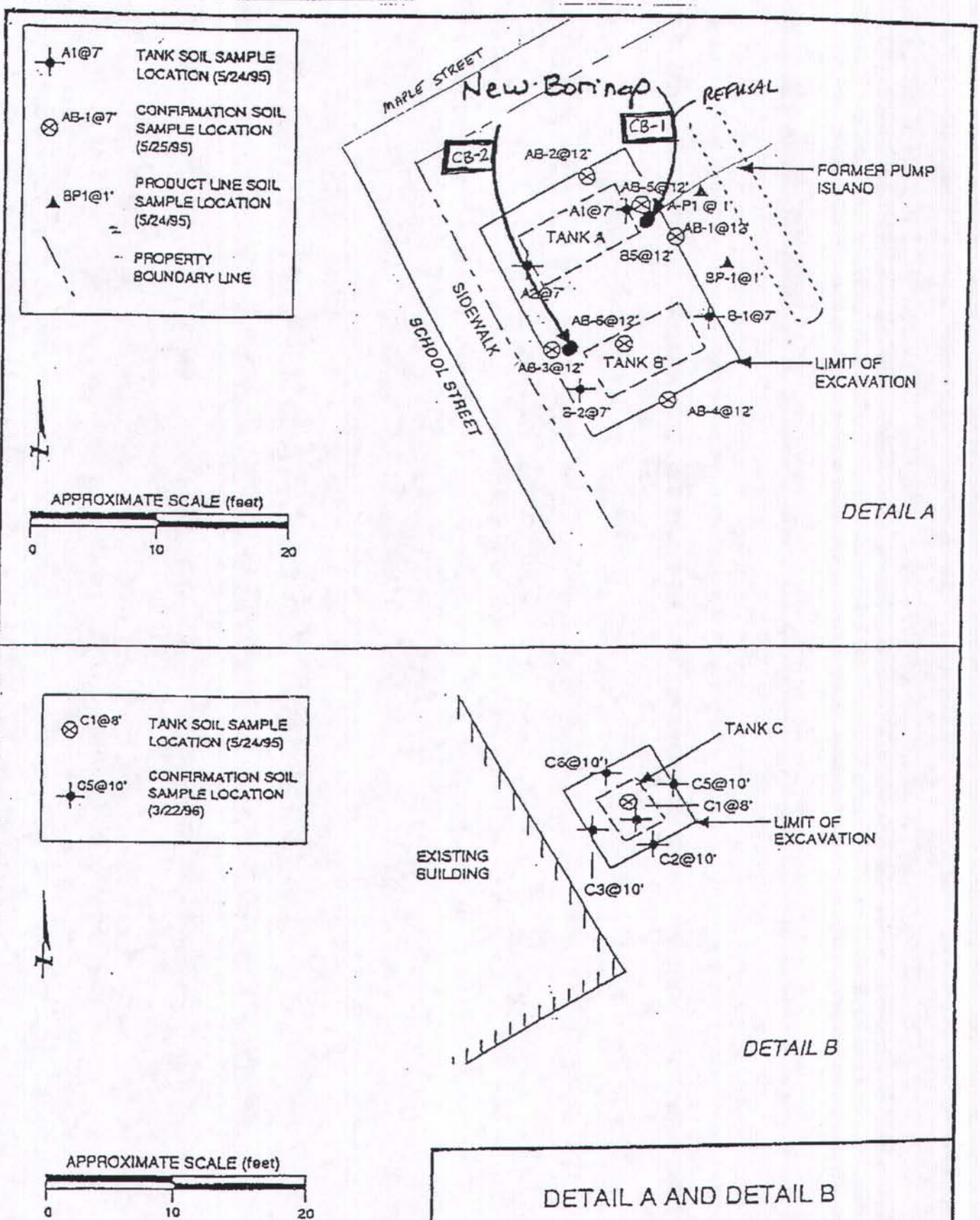
Subsurface Consultants

SHILOH CHRISTIAN FELLOWSHIP
OAKLAND, CA

APPROVED

PLATE
1

ATTACHMENT 1



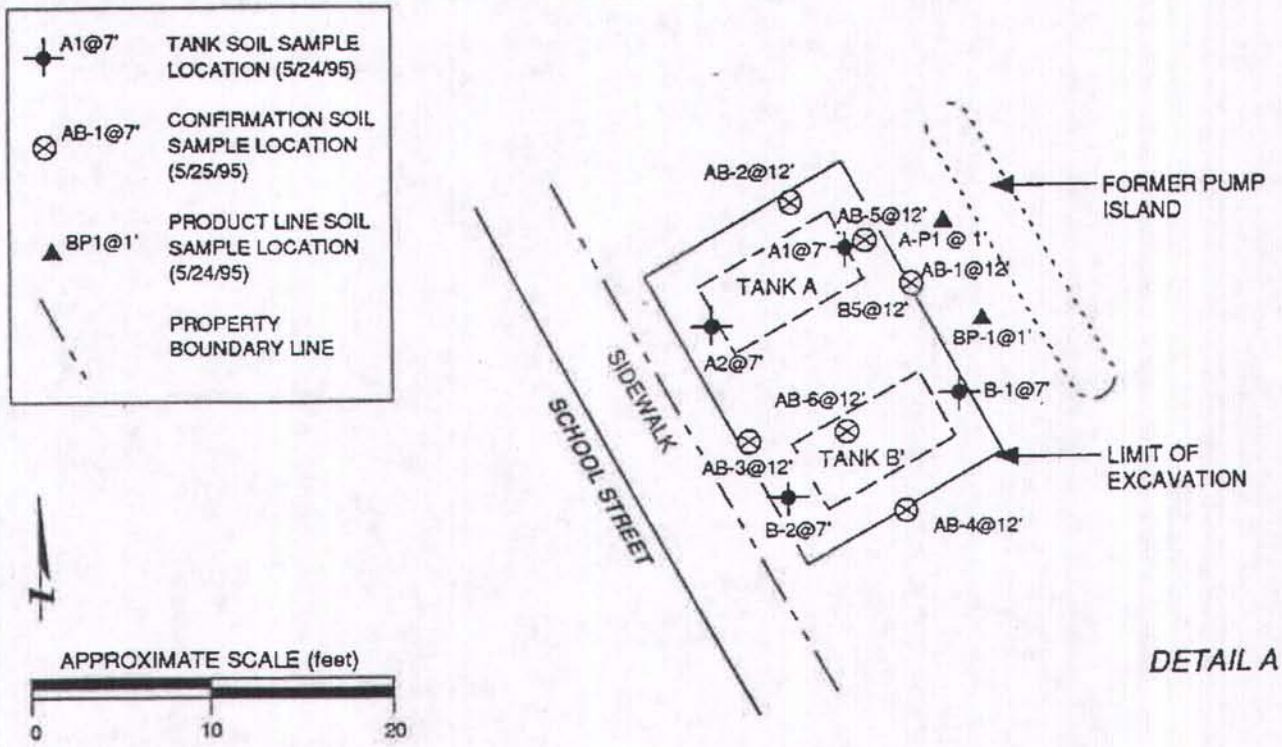
DETAIL A AND DETAIL B

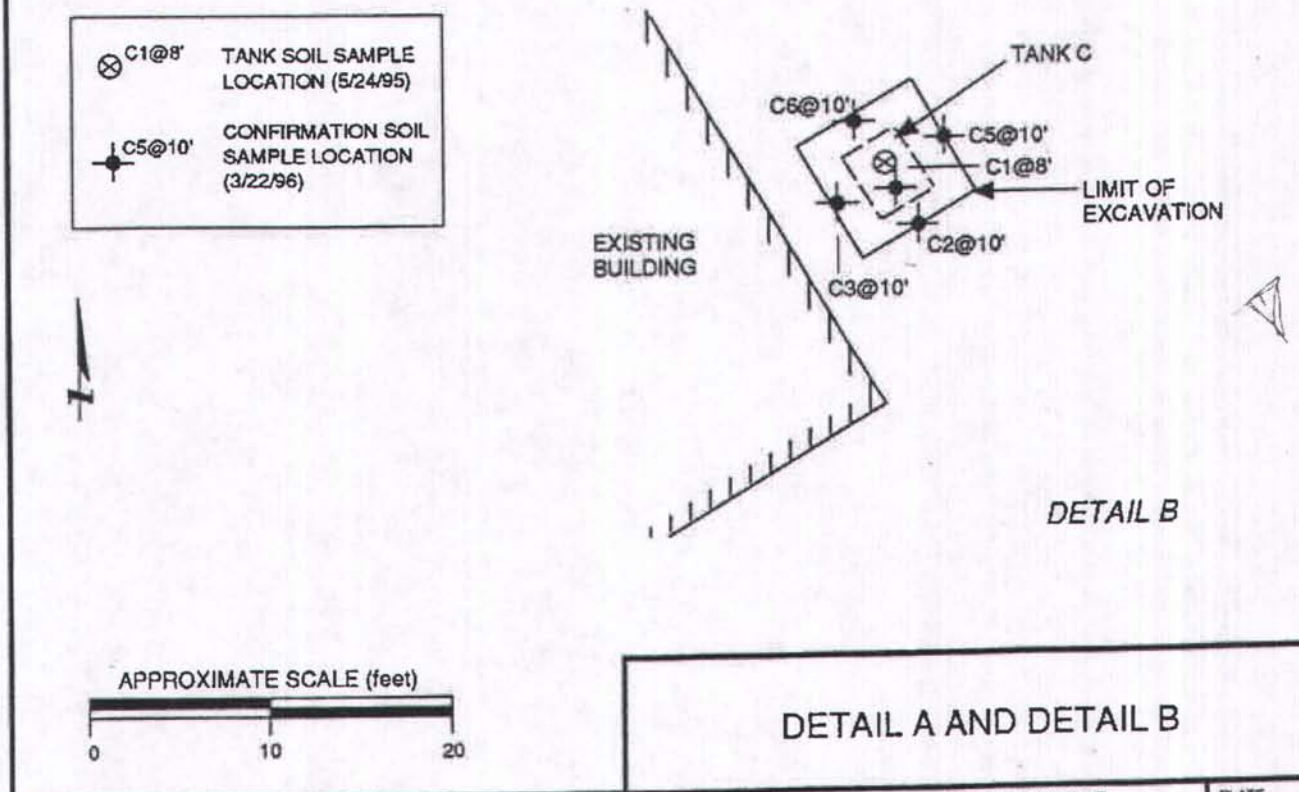
SHILOH CHRISTIAN FELLOWSHIP
OAKLAND, CA

FIGURE 1

Subsurface Cons

ATTACHMENT 2





DETAIL A AND DETAIL B

Subsurface Consultants

SHILOH CHRISTIAN FELLOWSHIP
OAKLAND, CA

JOB NUMBER	DATE	APPROVED
971.001	5/7/96	

PLATE 2

Table 1
Hydrocarbon, BTXE and Lead Concentrations
in Soil From Gasoline Tank Area
3295 School Street, Oakland, California

	TVH mg/kg	Benzene ug/kg	Toluene ug/kg	Ethyl-benzene ug/kg	Total Xylenes ug/kg	Total Lead mg/kg
Removal 5/24/95						
A1 @ 7'	2,000	40,000	190,000	40,000	160,000	41.0
A2 @ 7'	210	<25	<25	2,900	490	2.4
B-1 @ 7'	2,200	<300	<300	24,000	21,000	5.6
B-2 @ 7'	15	<5	<5	180	93	1.8
Pipeline 5/24/95						
A-P1 @ 1'	<1.0	<5	<5	<5	<5	3.3
BP-1 @ 1'	<1.0	<5	<5	<5	<5	2.0
Overexcavation 5/25/95						
AB-1 @ 12'	76	<5	<5	290	68	3.0
AB-2 @ 12'	6.2	<5	<5	<5	23	2.9
AB-3 @ 12'	12	9.1	<5	110	41	2.8
AB-4 @ 12'	13	<5	64	120	320	2.0
AB-5 @ 12'	13	43	280	150	720	4.0
AB-6 @ 12'	18	<5	<5	130	110	3.2
Stockpile 5/30/95						
COMP-SP-(5,6,7,8)	19	<5	<5	<5	240	21

TVH = Total volatile hydrocarbons
mg/kg = milligrams per kilogram
ug/kg = micrograms per kilogram
<25 = Analyte not present at a concentration above the reporting limit shown

AB-3
AB-5

ATTACHMENT 3

Table 2
Hydrocarbon, Volatile and Semi-Volatile Compound Concentrations in Soil From Waste Oil Tank Area
3295 School Street, Oakland, California

	TVH mg/kg	TEH mg/kg	TOG mg/kg	Benzene ug/kg	Toluene ug/kg	Ethyl-benzene ug/kg	Total Xylene ug/kg	Acetone ug/kg	PCE ug/kg	Other 8240	Naphthalene ug/kg	2-Methyl-naphthalene ug/kg	Other 8270
Removal 5/24/95													
C-1 @ 8'	21	160	1,300	110	570	960	2,900	200	16	ND	430	400	ND
Overexcavation 3/22/96													
C2 @ 10'	--	--	<50	<5	<5	<5	<5	<20	<5	ND	<330	<330	ND
C3 @ 10'	--	--	<50	<5	<5	<5	<5	<20	<5	ND	<330	<330	ND
C4 @ 10'	--	--	<50	<5	<5	<5	<5	<20	<5	ND	<330	<330	ND
C5 @ 10'	--	--	<50	<5	<5	<5	<5	<20	<5	ND	<330	<330	ND
C6 @ 10'	--	--	<50	<5	<5	<5	<5	<20	<5	ND	<330	<330	ND
Stockpile 5/30/95													
COMP-SP-(1,2,3,4)	270	530	2,300	<250	2,400	3,100	25,000	<1,000	250	ND	3,300	4,100	ND

TVH = Total volatile hydrocarbons
TEH = Total extractable hydrocarbons
TOG = Total oil and grease
PCE = Tetrachloroethene
ND = Not detected above reporting limit
<50 = Analyte not detected above reporting limit
Pyrene detected at 210 ~~mg~~ µg/kg), below the reporting limit of 330 ~~mg~~ µg/kg
Sample chromatogram does not resemble diesel standard. Oil range components contribute to diesel result

Table 3
Metal Concentrations in Soil From
Waste Oil Tank Area
3295 School Street, Oakland, California
May 24, 1995

	Result mg/kg
C-1 @ 8'	
Antimony	<5.9
Arsenic	3.2
Barium	100
Beryllium	0.72
Cadmium	1.5
Chromium (total)	50
Cobalt	14
Copper	45
Lead	62
Mercury	<0.10
Molybdenum	<0.98
Nickel	100
Selenium	<0.25
Silver	<0.49
Thallium	<0.25
Vanadium	72
Zinc	140
Comp 1,2,3,4	
STLC Chromium	<0.5

<0.10 = Analyte not present at a concentration above the reporting limit shown.

Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 121162-013
CLIENT: SUBSURFACE CONSULTANTS
PROJECT ID: 971.001
LOCATION: SHILOH CHRISTIAN FELLOWSHIP
SAMPLE ID: C-1 @ 8'

DATE SAMPLED: 05/24/95
DATE RECEIVED: 05/25/95
DATE EXTRACTED: 05/26/95
DATE ANALYZED: 05/27/95
DATE REPORTED: 06/03/95
BATCH NO: 20859

EPA 8270: Base/Neutral and Acid Extractables in Soils & Wastes
Extraction Method: EPA 3550 Sonication

ACID COMPOUNDS	RESULT ug/Kg	REPORTING LIMIT ug/Kg
Phenol	ND	330
2-Chlorophenol	ND	330
Benzyl Alcohol	ND	330
2-Methylphenol	ND	330
4-Methylphenol	ND	330
2-Nitrophenol	ND	1,700
2,4-Dimethylphenol	ND	330
Benzoic Acid	ND	1,700
2,4-Dichlorophenol	ND	1,700
4-Chloro-3-methylphenol	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	1,700
2,4-Dinitrophenol	ND	1,700
4-Nitrophenol	ND	1,700
4,6-Dinitro-2-methylphenol	ND	1,700
Pentachlorophenol	ND	1,700
BASE/NEUTRAL COMPOUNDS		
N-Nitrosodimethylamine	ND	330
Aniline	ND	330
Bis(2-chloroethyl)ether	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
Bis(2-chloroisopropyl)ether	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
Bis(2-chloroethoxy)methane	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	430	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
2-Methylnaphthalene	400	330
Hexachlorocyclopentadiene	ND	330
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	1,700

Curtis & Tompkins, Ltd.

EPA 8270

LABORATORY NUMBER: 121162-013
SAMPLE ID: C-1 @ 8'

BASE/NEUTRAL COMPOUNDS	RESULT ug/Kg	REPORTING LIMIT ug/Kg
Dimethylphthalate	ND	330
Acenaphthylene	ND	330
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	1,700
Acenaphthene	ND	330
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
4-Chlorophenyl-phenylether	ND	330
Fluorene	ND	330
4-Nitroaniline	ND	1,700
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Fluoranthene	ND	330
Pyrene	Detected(210)	330
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	1,700
Benzo(a)anthracene	ND	330
Chrysene	ND	330
Bis(2-ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenzo(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

ND = Not detected at or above reporting limit.

SURROGATE RECOVERIES

2-Fluorophenol	59	Nitrobenzene-d5	56
Phenol-d5	67	2-Fluorobiphenyl	72
2,4,6-Tribromophenol	42	Terphenyl-d14	95
2-Chlorophenol-d4	54	1,2-Dichlorobenzene-d4	52

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 971.001
Location: Shiloh Christian Fellow

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: C-2
Lab ID: 124933-001
Matrix: Soil
Batch#: 26611
Units: ug/Kg
Diln Fac: 1

Sampled: 03/22/96
Received: 03/25/96
Extracted: 03/25/96
Analyzed: 03/29/96

Analyte	Result	Reporting Limit
Phenol	ND	330
2-Chlorophenol	ND	330
Benzyl alcohol	ND	330
2-Methylphenol	ND	330
4-Methylphenol	ND	330
2-Nitrophenol	ND	1700
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1700
2,4-Dichlorophenol	ND	330
4-Chloro-3-methylphenol	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	1700
2,4-Dinitrophenol	ND	1700
4-Nitrophenol	ND	1700
4,6-Dinitro-2-methylphenol	ND	1700
Pentachlorophenol	ND	1700
N-Nitrosodimethylamine	ND	330
Aniline	ND	330
bis(2-Chloroethyl)ether	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
bis(2-Chloroisopropyl) ether	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
bis(2-Chloroethoxy)methane	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2-Chloronaphthalene	ND	1700
2-Nitroaniline	ND	330
Dimethylphthalate	ND	330
Acenaphthylene	ND	

Semivolatile Organics by GC/MS

Field ID: C-2
Lab ID: 124933-001
Matrix: Soil
Batch#: 26611
Units: ug/Kg
Diln Fac: 1

Sampled: 03/22/96
Received: 03/25/96
Extracted: 03/25/96
Analyzed: 03/29/96

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	1700
Acenaphthene	ND	330
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
4-Chlorophenyl-phenylether	ND	330
Fluorene	ND	330
4-Nitroaniline	ND	1700
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Fluoranthene	ND	330
Benzidine	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	1700
Benzo(a)anthracene	ND	330
Chrysene	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	58	25-121
Phenol-d5	67	24-113
2,4,6-Tribromophenol	44	19-122
Nitrobenzene-d5	72	23-120
2-Fluorobiphenyl	78	30-115
Terphenyl-d14	86	18-137

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 971.001
Location: Shiloh Christian Fellow

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: C-3
Lab ID: 124933-002
Matrix: Soil
Batch#: 26611
Units: ug/Kg
Diln Fac: 1

Sampled: 03/22/96
Received: 03/25/96
Extracted: 03/25/96
Analyzed: 03/29/96

Analyte	Result	Reporting Limit
Phenol	ND	330
2-Chlorophenol	ND	330
Benzyl alcohol	ND	330
2-Methylphenol	ND	330
4-Methylphenol	ND	330
2-Nitrophenol	ND	1700
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1700
2,4-Dichlorophenol	ND	330
4-Chloro-3-methylphenol	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	1700
2,4-Dinitrophenol	ND	1700
4-Nitrophenol	ND	1700
4,6-Dinitro-2-methylphenol	ND	1700
Pentachlorophenol	ND	1700
N-Nitrosodimethylamine	ND	330
Aniline	ND	330
bis(2-Chloroethyl)ether	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
bis(2-Chloroisopropyl) ether	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
bis(2-Chloroethoxy)methane	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2-Chloronaphthalene	ND	1700
2-Nitroaniline	ND	330
Dimethylphthalate	ND	330
Acenaphthylene	ND	

Semivolatile Organics by GC/MS

Field ID: C-3
Lab ID: 124933-002
Matrix: Soil
Batch#: 26611
Units: ug/Kg
Diln Fac: 1

Sampled: 03/22/96
Received: 03/25/96
Extracted: 03/25/96
Analyzed: 03/29/96

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	1700
Acenaphthene	ND	330
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
4-Chlorophenyl-phenylether	ND	330
Fluorene	ND	330
4-Nitroaniline	ND	1700
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Fluoranthene	ND	330
Benzidine	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	1700
Benzo(a)anthracene	ND	330
Chrysene	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	63	25-121
Phenol-d5	66	24-113
2,4,6-Tribromophenol	42	19-122
Nitrobenzene-d5	72	23-120
2-Fluorobiphenyl	79	30-115
Terphenyl-d14	86	18-137

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 971.001
Location: Shiloh Christian Fellow

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: C-4
Lab ID: 124933-003
Matrix: Soil
Batch#: 26611
Units: ug/Kg
Diln Fac: 1

Sampled: 03/22/96
Received: 03/25/96
Extracted: 03/25/96
Analyzed: 03/29/96

Analyte	Result	Reporting Limit
Phenol	ND	330
2-Chlorophenol	ND	330
Benzyl alcohol	ND	330
2-Methylphenol	ND	330
4-Methylphenol	ND	330
2-Nitrophenol	ND	1700
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1700
2,4-Dichlorophenol	ND	330
4-Chloro-3-methylphenol	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	1700
2,4-Dinitrophenol	ND	1700
4-Nitrophenol	ND	1700
4,6-Dinitro-2-methylphenol	ND	1700
Pentachlorophenol	ND	1700
N-Nitrosodimethylamine	ND	330
Aniline	ND	330
bis(2-Chloroethyl)ether	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
bis(2-Chloroisopropyl) ether	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
bis(2-Chloroethoxy)methane	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	1700
Dimethylphthalate	ND	330
Acenaphthylene	ND	330

Semivolatile Organics by GC/MS

Field ID: C-4
Lab ID: 124933-003
Matrix: Soil
Batch#: 26611
Units: ug/Kg
Diln Fac: 1

Sampled: 03/22/96
Received: 03/25/96
Extracted: 03/25/96
Analyzed: 03/29/96

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	1700
Acenaphthene	ND	330
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
4-Chlorophenyl-phenylether	ND	330
Fluorene	ND	330
4-Nitroaniline	ND	1700
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Fluoranthene	ND	330
Benzidine	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	1700
Benzo(a)anthracene	ND	330
Chrysene	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	61	25-121
Phenol-d5	65	24-113
2,4,6-Tribromophenol	47	19-122
Nitrobenzene-d5	72	23-120
2-Fluorobiphenyl	79	30-115
Terphenyl-d14	91	18-137

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 971.001
Location: Shiloh Christian Fellow

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: C-5
Lab ID: 124933-004
Matrix: Soil
Batch#: 26611
Units: ug/Kg
Diln Fac: 1

Sampled: 03/22/96
Received: 03/25/96
Extracted: 03/25/96
Analyzed: 03/29/96

Analyte	Result	Reporting Limit
Phenol	ND	330
2-Chlorophenol	ND	330
Benzyl alcohol	ND	330
2-Methylphenol	ND	330
4-Methylphenol	ND	330
2-Nitrophenol	ND	1700
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1700
2,4-Dichlorophenol	ND	330
4-Chloro-3-methylphenol	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	1700
2,4-Dinitrophenol	ND	1700
4-Nitrophenol	ND	1700
4,6-Dinitro-2-methylphenol	ND	1700
Pentachlorophenol	ND	1700
N-Nitrosodimethylamine	ND	330
Aniline	ND	330
bis(2-Chloroethyl)ether	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
bis(2-Chloroisopropyl) ether	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
bis(2-Chloroethoxy)methane	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2-Chloronaphthalene	ND	330
2-Nitroaniline	ND	1700
Dimethylphthalate	ND	330
Acenaphthylene	ND	330

Semivolatile Organics by GC/MS

Field ID: C-5
Lab ID: 124933-004
Matrix: Soil
Batch#: 26611
Units: ug/Kg
Diln Fac: 1

Sampled: 03/22/96
Received: 03/25/96
Extracted: 03/25/96
Analyzed: 03/29/96

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	1700
Acenaphthene	ND	330
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
4-Chlorophenyl-phenylether	ND	330
Fluorene	ND	330
4-Nitroaniline	ND	1700
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Fluoranthene	ND	330
Benzidine	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	1700
Benzo(a)anthracene	ND	330
Chrysene	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	60	25-121
Phenol-d5	68	24-113
2,4,6-Tribromophenol	51	19-122
Nitrobenzene-d5	75	23-120
2-Fluorobiphenyl	80	30-115
Terphenyl-d14	85	18-137

Semivolatile Organics by GC/MS

Client: Subsurface Consultants
Project#: 971.001
Location: Shiloh Christian Fellow

Analysis Method: EPA 8270
Prep Method: EPA 3550

Field ID: C-6
Lab ID: 124933-005
Matrix: Soil
Batch#: 26611
Units: ug/Kg
Diln Fac: 1

Sampled: 03/22/96
Received: 03/25/96
Extracted: 03/25/96
Analyzed: 03/29/96

Analyte	Result	Reporting Limit
Phenol	ND	330
2-Chlorophenol	ND	330
Benzyl alcohol	ND	330
2-Methylphenol	ND	330
4-Methylphenol	ND	330
2-Nitrophenol	ND	1700
2,4-Dimethylphenol	ND	330
Benzoic acid	ND	1700
2,4-Dichlorophenol	ND	330
4-Chloro-3-methylphenol	ND	330
2,4,6-Trichlorophenol	ND	330
2,4,5-Trichlorophenol	ND	1700
2,4-Dinitrophenol	ND	1700
4-Nitrophenol	ND	1700
4,6-Dinitro-2-methylphenol	ND	1700
Pentachlorophenol	ND	1700
N-Nitrosodimethylamine	ND	330
Aniline	ND	330
bis(2-Chloroethyl)ether	ND	330
1,3-Dichlorobenzene	ND	330
1,4-Dichlorobenzene	ND	330
1,2-Dichlorobenzene	ND	330
bis(2-Chloroisopropyl) ether	ND	330
N-Nitroso-di-n-propylamine	ND	330
Hexachloroethane	ND	330
Nitrobenzene	ND	330
Isophorone	ND	330
bis(2-Chloroethoxy)methane	ND	330
1,2,4-Trichlorobenzene	ND	330
Naphthalene	ND	330
4-Chloroaniline	ND	330
Hexachlorobutadiene	ND	330
2-Methylnaphthalene	ND	330
Hexachlorocyclopentadiene	ND	330
2-Chloronaphthalene	ND	1700
2-Nitroaniline	ND	330
Dimethylphthalate	ND	330
Acenaphthylene	ND	

Semivolatile Organics by GC/MS

Field ID:	C-6	Sampled:	03/22/96
Lab ID:	124933-005	Received:	03/25/96
Matrix:	Soil	Extracted:	03/25/96
Batch#:	26611	Analyzed:	03/29/96
Units:	ug/Kg		
Diln Fac:	1		

Analyte	Result	Reporting Limit
2,6-Dinitrotoluene	ND	330
3-Nitroaniline	ND	1700
Acenaphthene	ND	330
Dibenzofuran	ND	330
2,4-Dinitrotoluene	ND	330
Diethylphthalate	ND	330
4-Chlorophenyl-phenylether	ND	330
Fluorene	ND	330
4-Nitroaniline	ND	1700
N-Nitrosodiphenylamine	ND	330
Azobenzene	ND	330
4-Bromophenyl-phenylether	ND	330
Hexachlorobenzene	ND	330
Phenanthrene	ND	330
Anthracene	ND	330
Di-n-butylphthalate	ND	330
Fluoranthene	ND	330
Benzidine	ND	330
Pyrene	ND	330
Butylbenzylphthalate	ND	330
3,3'-Dichlorobenzidine	ND	1700
Benzo(a)anthracene	ND	330
Chrysene	ND	330
bis(2-Ethylhexyl)phthalate	ND	330
Di-n-octylphthalate	ND	330
Benzo(b)fluoranthene	ND	330
Benzo(k)fluoranthene	ND	330
Benzo(a)pyrene	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Dibenz(a,h)anthracene	ND	330
Benzo(g,h,i)perylene	ND	330

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	62	25-121
Phenol-d5	66	24-113
2,4,6-Tribromophenol	47	19-122
Nitrobenzene-d5	71	23-120
2-Fluorobiphenyl	77	30-115
Terphenyl-d14	94	18-137

CAMBRIA

Table 1. **Soil Analytical Data** - Shiloh Christian Fellowship
3295 School Street, Oakland, California

Borehole	Sample ID	Date Sampled	TPHg mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl-benzene mg/kg	Xylenes mg/kg	MTBE mg/kg
		EPA Method:	**8015m**	**8020**	**8020**	**8020**	**8020**	**8020**
CB-2	CB-2-11.5	6/22/01	**41 a**	<0.005	**0.005**	**0.091**	<0.005	<0.05
	CB-2-15.5	6/22/01	**10 a**	**0.007**	<0.005	**0.014**	<0.005	<0.05
	CB-2-19.5	6/22/01	**6.2 a**	<0.005	<0.005	<0.005	<0.005	<0.05
	CB-2-23.5	6/22/01	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05
	CB-2-27.5	6/22/01	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline
MTBE = Methyl tert-butyl ether
mg/kg = Milligrams per kilogram
a = no recognizeable pattern

CAMBRIA

Table 2. **Groundwater Analytical Data** - Shiloh Christian Fellowship
3295 School Street, Oakland, California

Borehole	Sample ID	Date Sampled	TPHg (µg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl-benzene (µg/kg)	Xylenes (µg/kg)	MTBE (µg/kg)	PNAs (µg/kg)
		EPA Method:	8015m	8020	8020	8020	8020	8020	8270
CB-2	CB-2-10W	6/22/01	**110 a,b**	<0.5	<0.5	**1.6**	**9.6**	<5.0	<10

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline
MTBE = Methyl tert-butyl ether
PNAs = Poly nuclear aromatics
ug/L = micrograms per liter
a = unmodified or weakly modified gasoline is significant
b = liquid sample that contains greater than ~5 vol. % sediment

ATTACHMENT 4

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Shiloh Christian Fellowship	**BORING/WELL NAME**	CB-2
JOB/SITE NAME	Shiloh Oakland	**DRILLING STARTED**	22-Jun-01
LOCATION	3295 School Street	**DRILLING COMPLETED**	22-Jun-01
PROJECT NUMBER	474-1693	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Precision	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hydraulic push	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	2"	**SCREENED INTERVAL**	NA
LOGGED BY	S. Dwight	**DEPTH TO WATER (First Encountered)**	12.0 ft (22-Jun-01)
REVIEWED BY	R. Clark-Riddell, PE# 49629	**DEPTH TO WATER (Static)**	NA
REMARKS	Hand augered to 5 feet bgs.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
				5			Gravelly SAND (SPG); brown; dry to damp; 55% fine to coarse grained sand, 45% gravel; low plasticity; high estimated permeability.		
							very soft; low recovery	7.0	
				10			Gravelly SAND (SPG); brown; damp to moist; 10% silt, 50% fine to coarse grained sand, 40% gravel; low plasticity; high estimated permeability.	10.0	
127		CB-2-11.5			SM		Silty SAND (SM); light brown; dry; 5% clay, 30% silt, 60% fine to medium grained sand, 5% gravel; low plasticity; high estimated permeability; occasional gravel up to 1" in diameter; oxidation; hydrocarbon odor.	12.0	
303					SM		Silty SAND (SM); light brown mottled with grey; dry; 5% clay, 30% silt; 60% fine to medium grained sand; 5% gravel; low plasticity; moderate estimated permeability; medium stiff; hydrocarbon staining and odor.		
78				15	SM		Silty SAND (SM); light brown; dry; 30% silt, 70% fine to medium grained sand; low plasticity; moderate estimated permeability; very stiff.	15.0	
		CB-2-15.5			SM		Silty SAND (SM); brown mottled with grey; dry; 25% silt, 65% medium to coarse grained sand, 10% fine gravel; low plasticity; high estimated permeability; oxidation; hydrocarbon odor.	16.0	
219					SM		Silty SAND (SM); brown; dry to damp; 5% clay, 25% silt, 65% medium grained sand, 5% gravel; medium plasticity; moderate estimated permeability; hydrocarbon staining and odor.	18.0	
		CB-2-19.5		20	SM		Silty SAND (SM); greyish brown; damp; 5% clay, 30% silt, 60% fine to medium grained sand, 5% gravel; medium plasticity; moderate estimated permeability; hard.	20.0	
5					SM		Gravelly SAND (SPG); greyish brown mottled with red, black, and white; dry; 10% silt, 50% medium to coarse grained sand, 40% gravel; low plasticity; high estimated permeability.	21.0	
		CB-2-23.5			SM		Silty SAND (SM); reddish brown; dry; 20% silt; 70% medium to coarse grained sand, 10% gravel up to 1" in diameter; low plasticity; high estimated permeability; hard.	22.0	
3				25	SM		Silty SAND (SM); light brown; dry; 15% silt, 70% fine to coarse grained sand, 15% gravel; low plasticity; high estimated permeability; hard.	24.0	
		CB-2-27.5						28.0	Bottom of Boring @ 28 ft

WELL LOG (PID) H:\SB-200-1\SHILOH\SHILOH.GPJ DEFAULT.GDT 7/17/01

ATTACHMENT 5