

April 4, 1991

*1st Quarter*

Alameda County Health Agency  
Division of Hazardous Materials  
Department of Environmental Health  
80 Swan Way  
Room 200  
Oakland, CA 94621

RE: Monitoring Well Installation @  
2244 Santa Clara, Calif.

Gentlemen:

Enclosed please find the report which documents installation of three groundwater monitoring wells by S & G Drilling and Environmental Technical Services at:

FOWLER ANDERSON MORTUARY  
2244 SANTA CLARA STREET  
ALAMEDA, CALIF.

Zaccor Corporation has mailed one copy of this report to Fowler Anderson and have requested the Owner to mail one copy of this report to the Water Quality Control Board San Francisco Bay Region.

If I may be of further assistance to you, please do not hesitate to contact my office at (415) 363-2181.

Sincerely,  
ZACCOR CORPORATION

*Gary A. Zaccor*  
Gary A. Zaccor  
Project Manager

GAZ/lis

91 APR -5 AM 10:32

ZACCOR CORPORATION  
MONITORING WELL INSTALLATION at:

FOWLER - ANDERSON MORTUARY

2244 SANTA CLARA STEET

ALAMEDA CALIFORNIA

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Zaccor Corporation January 15, 1991

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Zaccor Corporation January 29, 1991

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March 20, 1991

Ian Weber  
1150 Ballena Boulevard  
Suite 211  
Alameda, California 94501

Attention: Mr. Weber

**MONITORING WELL INSTALLATION, DEVELOPMENT  
AND SAMPLING REPORT**

The following report documents the installation of three groundwater monitoring wells by S & G Drilling and Environmental Technical Services on February 2, 1991 at:

**FOWLER ANDERSON MORTUARY  
2244 SANTA CLARA STREET  
ALAMEDA, CALIFORNIA**

**BACKGROUND**

**Tank Removal**

On January 8, 1991, three underground storage tanks were removed from the above mentioned address. The tank sizes and contents were as follows; one 50-gallon fuel oil tank, one 350-gallon fuel oil tank, and one 50-gallon hydraulic reservoir underground tank.

Certified laboratory analysis revealed that soil samples collected from beneath the fuel oil tanks contained no detectable concentrations of petroleum hydrocarbons at their lower detection limit. Soil samples collected from beneath the 50-gallon hydraulic oil reservoir contained concentrations of total petroleum hydrocarbons as hydraulic oil at 1,400 ppm. For Tank Removal Report refer to Appendix B.

**Excavation of Contaminated Soil**

Contaminated soil was excavated from the 50-gallon hydraulic oil tank pit by the Zaccor Corporation on January 21, 1991. Confirmatory samples were collected from the sidewalls and floor of the excavation. Collected soil samples were analyzed for total petroleum hydrocarbons as hydraulic oil (EPA Method 3550) using a hydraulic oil standard. All soil samples were found to be without detectable concentrations of total petroleum hydrocarbons as hydraulic oil. For the Excavation of Contamination report refer to Appendix C.

## **SCOPE OF SERVICES**

The scope of services included the installation of three 2" groundwater monitoring wells. These wells were installed to determine the impact, if any, of contaminants upon the first encountered aquifer beneath the site. Soil samples were collected at 5' intervals within each soil boring. Soil was classified according to the Unified Soil Classification System. Upon completion of the monitoring well, groundwater gradient was surveyed. The well was developed and a water sample collected for analysis.

Construction, development and sampling of the wells was performed in accordance with guidelines set forth by the Regional Water Quality Control Board (RWQCB) San Francisco Bay Region and the Alameda County Department of Environmental Health Services.

The work was performed to comply with State and County Regulations in response to the presence of petroleum hydrocarbons discovered at the time of the Hydraulic oil reservoir tank removal.

## **WELL INSTALLATION**

Three soil borings were advanced using a truck mounted hydraulically driven drill rig equipped with 8" outside diameter augers and completed as two inch diameter monitoring wells.

Augers were decontaminated between borings using a high pressure wash heated to 248 degrees Fahrenheit.

For well locations, construction details and boring logs for each of the three wells, refer to Appendix D.

## **SOIL SAMPLE COLLECTION**

Soil samples were collected at five foot intervals using a California Modified Split Spoon Sampler driven by the drill rig. Immediately upon opening the sampler a brass sleeve was removed. Each end of the brass sleeve was covered with aluminum foil, fitted with plastic caps, sealed with duct tape, labeled, and placed on dry ice under chain of custody to be transported to a certified hazardous waste analytical laboratory. The sampler was decontaminated between samples using a tri-sodium phosphate wash and tap water rinse.

## SOIL SAMPLE LOCATION

### MW-1

Soil samples were collected at:

6' - 6.5'

12' - 12.5'

16' - 16.5'

21 - 21.5'

### MW-2

Soil samples were collected at:

6' - 6.5'

11' - 11.5'

15' - 15.5'

21' - 21.5'

### MW-3

Soil samples were collected at:

6' - 6.5'

11' - 11.5'

16' - 16.5'

21' - 21.5'

## SOIL SAMPLE ANALYSIS

### MW-1

Soil Sample #MW-1 6' - 6.5' was placed on hold and not analyzed.

Soil sample #MW-1 12' - 12.5' was analyzed for total petroleum hydrocarbons as hydraulic oil.

Soil sample #MW-1 16' - 16.5' was analyzed for total petroleum hydrocarbons as hydraulic oil.

Soil sample #MW-1 21' - 21.5' was placed on hold and not analyzed.

### MW-2

Soil Sample #MW-2 6' - 6.5' was placed on hold and not analyzed.

Soil sample #MW-2 11' - 11.5' was analyzed for total petroleum hydrocarbons as hydraulic oil.

Soil sample #MW-2 15' - 15.5' was analyzed for total petroleum hydrocarbons as hydraulic oil.

Soil sample #MW-1 20' - 20.5' was placed on hold and not analyzed.

### **MW-3**

Soil Sample #MW-3 6' - 6.5' was placed on hold and not analyzed.

Soil sample #MW-3 11' - 11.5' was analyzed for total petroleum hydrocarbons as hydraulic oil.

Soil sample #MW-3 16' - 16.5' was analyzed for total petroleum hydrocarbons as hydraulic oil.

Soil sample #MW-3 21' - 21.5' was placed on hold and not analyzed.

### **ANALYTICAL RESULTS**

All samples analyzed contained no detectable concentrations of total petroleum hydrocarbons as hydraulic oil at its lower detection limit.

### **WELL DEVELOPMENT**

Development and sampling of the wells was performed on February 28, 1991. All well effluent was contained in Department of Transportation approved 17-H 55 gallon drums pending analysis of water samples.

MW-1 was developed by evacuating water using a B & K Pump. Approximately 60 liters of water was evacuated during development.

MW-2 was developed by evacuating water using a stainless steel bailer. Approximately 40 liters of water was evacuated during development.

MW-3 was developed by evacuating water using a stainless steel bailer. Approximately 60 liters of water was evacuated during development.

### **WELL SAMPLING**

On February 28, 1991 each of the three wells was sampled immediately following development. Sampling was performed using a teflon bailer which was decontaminated between wells using a tri-sodium phosphate wash, tap water rinse followed by a de-ionized water rinse. At consistent intervals throughout the well purging pH, conductivity, and temperature was monitored to evaluate stabilization of the wells prior to sampling. Water was decanted into two one-liter amber bottles to a positive meniscus eliminating headspace.



MW-1 The total depth of MW-1 was 19.7 feet and depth to water was 9.88 feet. A volume of 60 liters of water was evacuated from the well prior to the collection of sample #MW-1.

MW-2 The total depth of MW-2 was 15.08 feet and depth to water was 9.86 feet. A volume of 40 liters of water was evacuated from the well prior to the collection of sample #MW-2.

MW-3 The total depth of MW-3 was 19.95 feet and depth to water was 9.56 feet. A volume of 60 liters of water was evacuated from the well prior to the collection of sample #MW-3.

#### ANALYTICAL RESULTS

Water sample were analyzed for total petroleum hydrocarbons as hydraulic oil (EPA Method 3550) using a hydraulic oil standard.

Water sample #MW-1, #MW-2, and #MW-3 contained no detectable concentrations of total petroleum hydrocarbons as hydraulic oil at its lower detection limit.

#### GROUNDWATER GRADIENT

TABLE 1. Depth and Elevation of Groundwater.

MW	TOC ELEV.(ft)	DATE	WATER DEPTH	WATER ELEV.
1	14.39	3/12/91	9.10	5.29
2	14.32	3/12/91	9.06	5.25
3	13.86	3/12/91	8.64	5.22

---

datum= surveyors level assumed to be 20'

#### RECOMMENDATIONS

As preceding reports indicate all soil contamination has been removed and groundwater appears to have not been impacted, no further soil/groundwater investigation or remediation is recommended at this time.

**REPORTAGE**

Copies of this report, chain of custody, and laboratory analytical reports should be submitted to the San Francisco Regional Water Quality Control Board, and the Alameda County Health Agency, Division of Environmental Health.

The following addresses have been included for your convenience:

Water Quality Control Board  
San Francisco Bay Region  
1800 Harrison Street  
Room 700  
Oakland, CA 994612

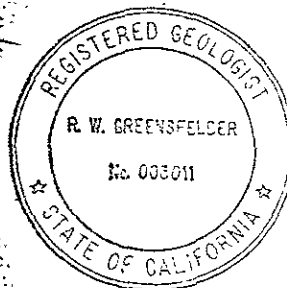
Alameda County Health Agency  
Division of Hazardous Materials Department of Environmental Health  
80 Swan Way, Rm 200  
Oakland CA 94621

It has been my pleasure working with you. If you have any questions or if I may be of further service, please call me at (415) 363-2181.

Scot Zaecor  
Scot Zaecor  
S & G Drilling  
Project Manager

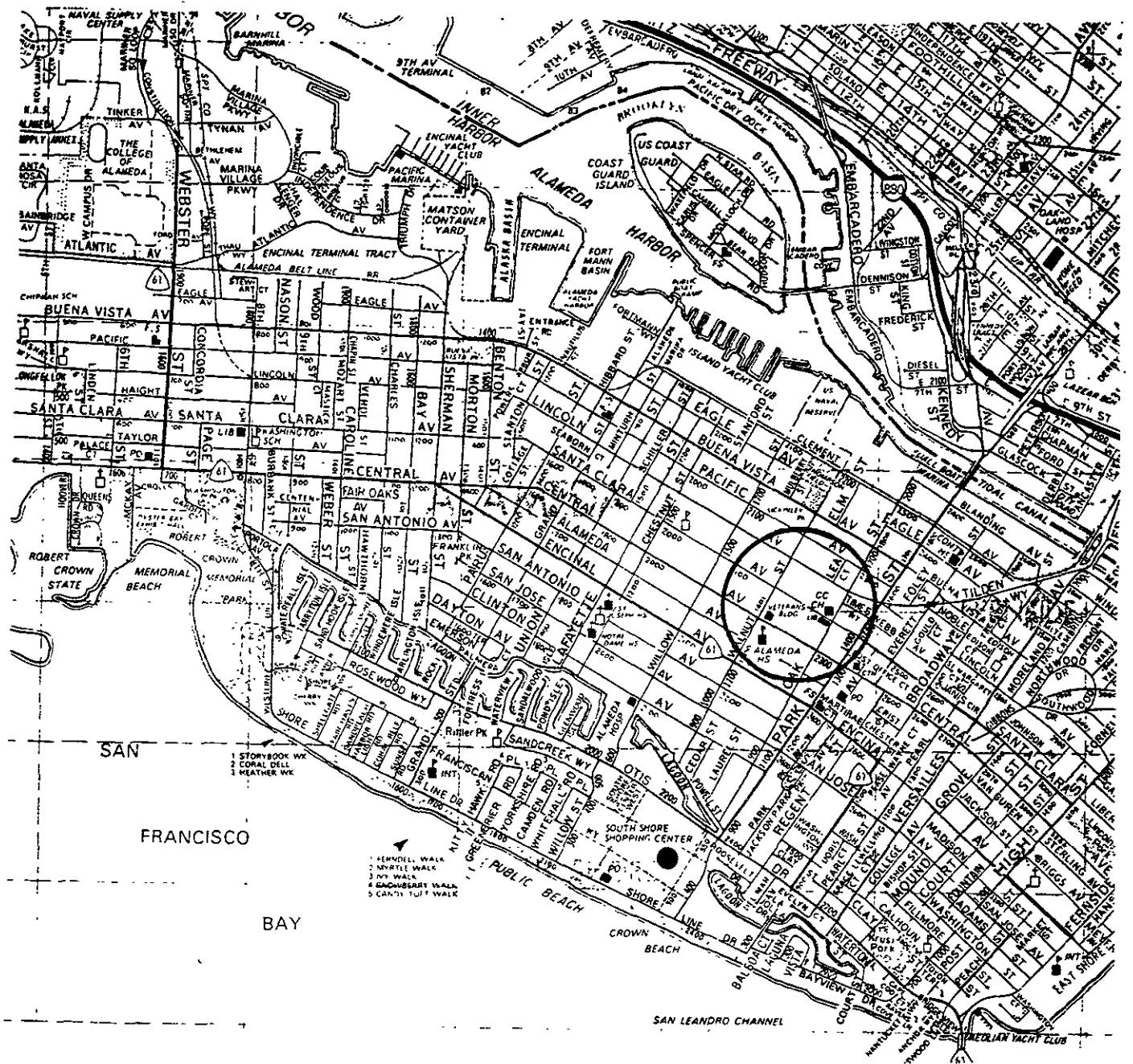
Helen Mawhinney  
Helen Mawhinney  
Environmental Technical Services

Roger Greensfelder  
Roger Greensfelder  
Registered Geologist #3011



**APPENDIX A**  
**MAPS**

FIGURE 1



FOWLER-ANDERSON MORTUARY  
2244 Santa Clara Street  
Alameda, California

sample #1 taken at a depth of 6'  
sample #2 taken at a depth of 2 1/2'  
sample #3 taken at a depth of 7'

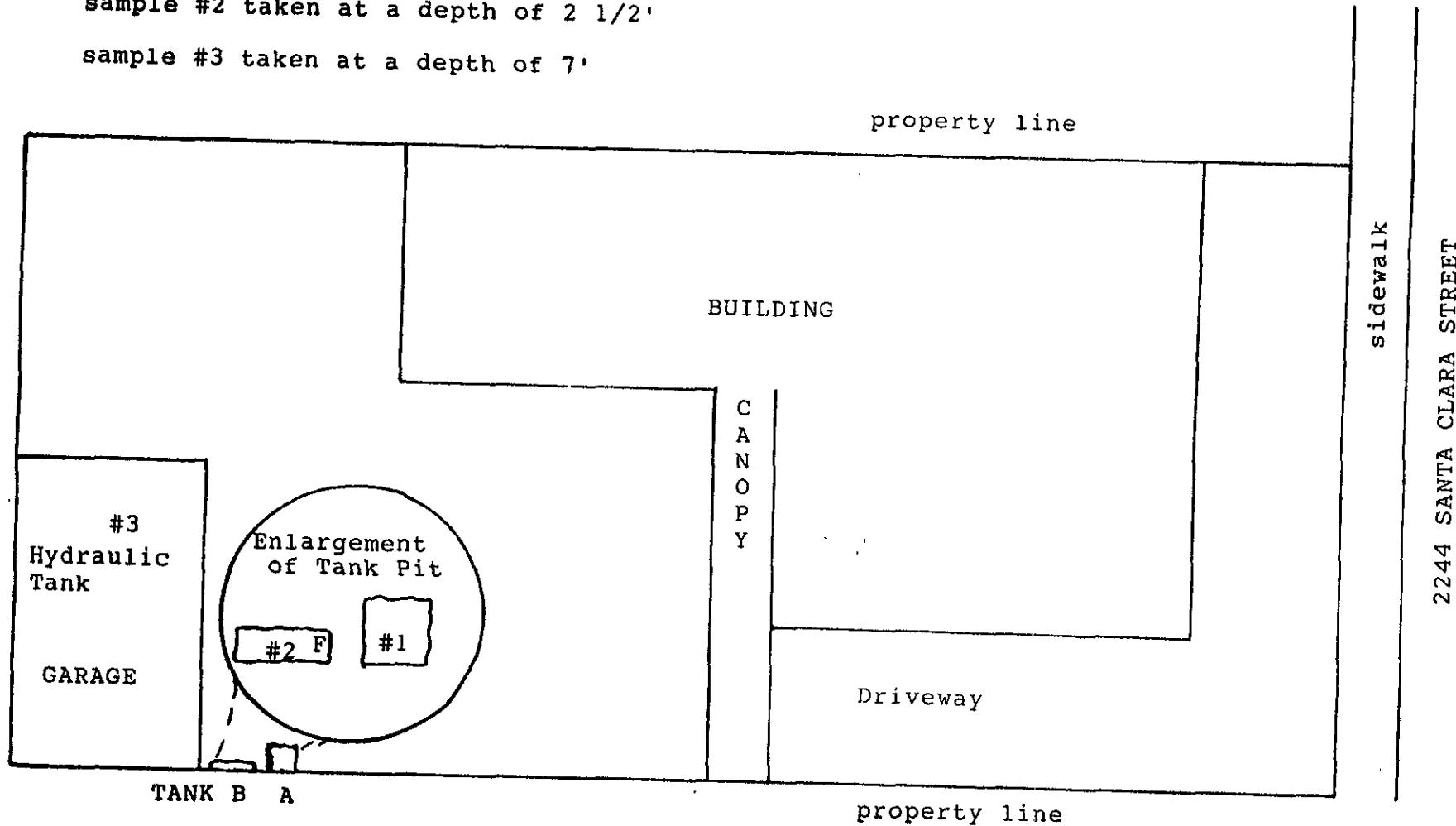
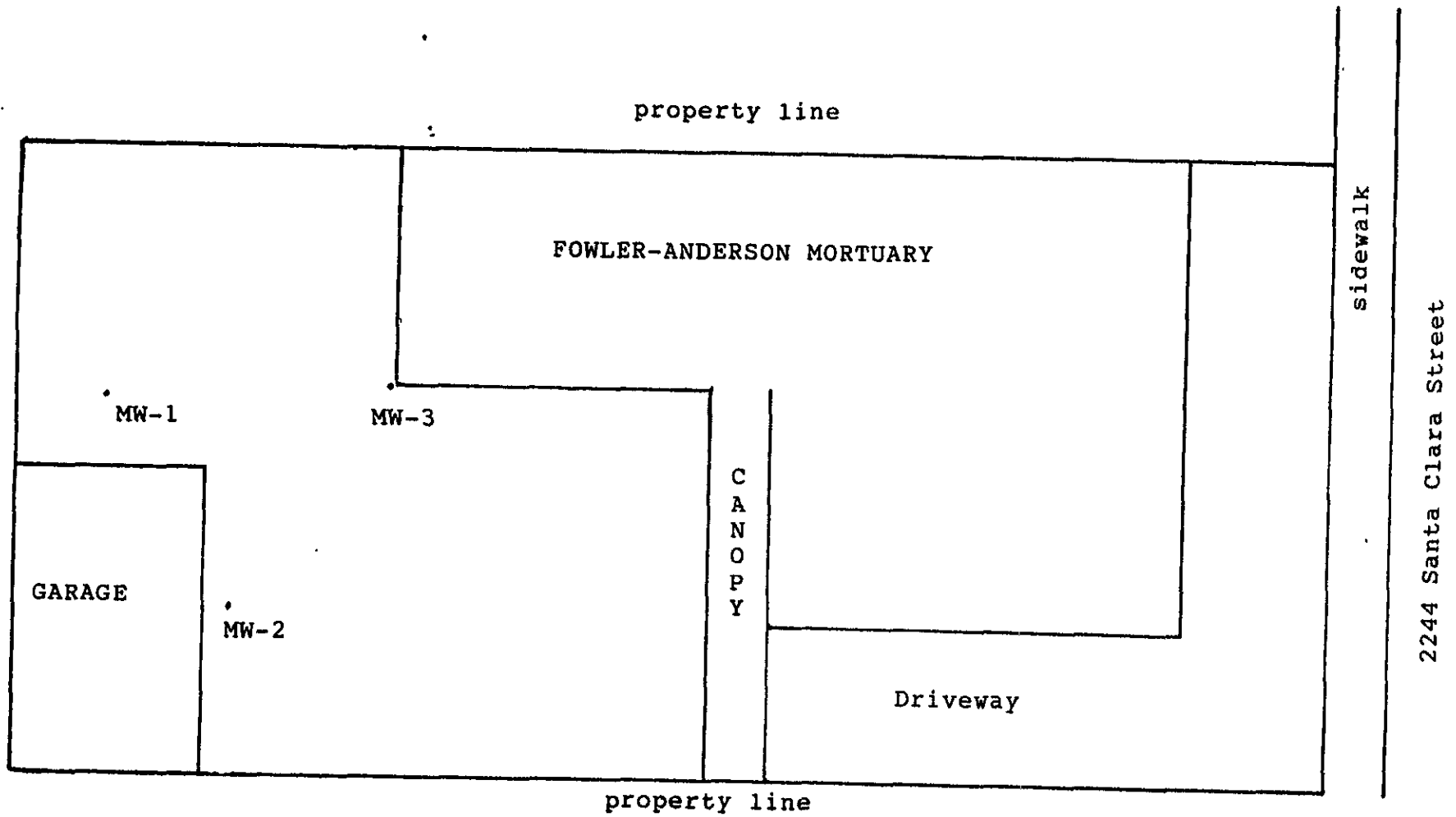


FIGURE 2

NORTH

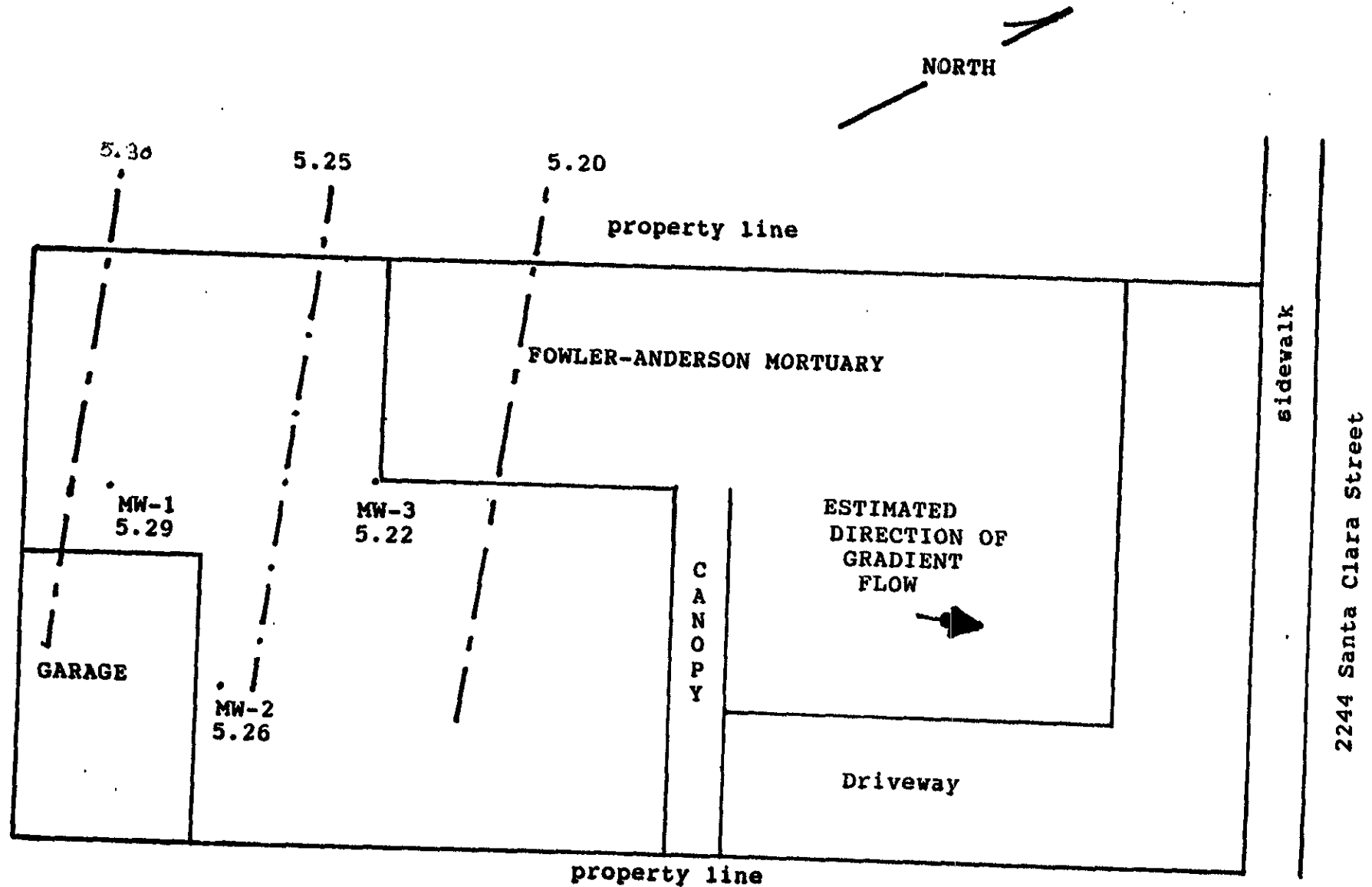


0 12.5 25 feet  
scale

FIGURE 3

ENVIRONMENTAL  
TECHNICAL  
SERVICES

For ZACCOR CORPORATION, at: 2244 Santa Clara Street, Alameda, California



0 12.5 25 feet  
scale

**APPENDIX B  
TANK REMOVAL REPORT**



January 15, 1991

Ian Weber  
1150 Ballena Boulevard  
Suite 211  
Alameda, CA 94501

Project: #Z010891M1

RE: The Removal of Underground Storage Tanks and the  
Subsequent Field Sampling at Fowler-Anderson  
Mortuary @ 2244 Santa Clara Street, Alameda, CA

Dear Mr. Weber:

Field Sampling was performed in accordance with state and local agency approved methodology, under the auspices of William Faulhaber of the Alameda County Department of Environmental Health, Hazardous Materials Division.

See accompanying site diagram for the location of tanks prior to removal, field sampling designations, and sampling depths.

#### TANK REMOVAL

On January 8, 1991, three (3) underground storage tanks were removed from the above mentioned address. The tank sizes and contents were as follows; one (1) 50 gallon fuel oil tank, one (1) 350 gallon fuel oil tank, and one (1) 50 gallon hydraulic reservoir underground tank.

Upon tank removal the following observations were noted; Tank A was a 350 gallon single wall fuel oil storage tank constructed with steel. Upon a visual inspection of the tank rust and pitting were observed though no holes were present. The fill material and native soil surrounding the tank were free of hydrocarbon odor.

Tank B was a 50 gallon single wall fuel oil storage tank constructed with steel. Pitting and rust were noted upon a visual inspection of the tank, though no holes were observed. Soil was slightly moist and discolored to a darker brown possibly caused by water runoff from a nearby down spout. The fill material and native soils surrounding the tank were free of hydrocarbon odor.

Tank C is a 50 gallon hydraulic reservoir tank used in conjunction with a hydraulic lift for the servicing of automobiles. The 5' long tank is buried vertically beneath the garage floor, the tank head being level with the garage floor and its foot lying 5' below the garage floor. The flaring of the tank bottom and limited access within the site garage prevented removal of the tank on this day. The tank was removed on January 9, 1991.

### Sampling

Soil sample #1 was collected at a depth of 12" to 18" below the fill material/native soil interface, beneath the center of Tank A at a depth of 6'. This was accomplished by the clearing of fill material and slough from the designated sample area. A soil sample was then removed from the pit in a backhoe bucket. The surface four inches of soil was removed from the backhoe bucket and a clean brass sleeve driven into the remaining soil. Soil was then packed tightly into the sleeve to eliminate headspace.

Sample #2 was obtained from beneath the center of Tank B at a depth of 2 1/2 '. This was accomplished by the clearing of fill material from the designated sample area. A clean brass sleeve was driven by hand into the native sands. Soil was packed tightly into the brass sleeve to eliminate head space.

Sample #3 was obtained from the native soil beneath the hydraulic tank at a depth of 7' below grade and three inches away from the tank. This was accomplished by excavating the soil surrounding the hydraulic oil tank to a depth of 5' below grade using a backhoe bucket. A soil boring was then hand augered within the excavation to a depth of 6 1/2' below grade. A clean brass sleeve placed within a hand driven sampler was driven 6" into the soil boring to a total depth of 7'.

Immediately upon retrieval of each soil sample the brass sleeve was covered with aluminum foil, fitted with plastic caps, sealed with duct tape, labeled, and placed on dry ice under chain of custody to be transported to a certified hazardous waste analytical laboratory.

### **Sample Analysis**

Sample #1 was analyzed for Total Petroleum Hydrocarbons as Diesel (TPH-D), Total Oil and Grease (TOG), benzene , toluene, total xylenes and ethylbenzene (BTX&E).

Sample #2 was analyzed for Total Petroleum Hydrocarbons as Diesel, Total Oil and Grease, benzene , toluene, total xylenes and ethylbenzene.

Sample #3 was analyzed as Hydraulic Oil using a Hydraulic Oil standard

### **Analytical Results**

The following analytical results are based on a faxed copy of preliminary results from Anametrix Laboratory. A hard copy of the analytical results will be included in the final copy of this report to be forwarded to the regulatory agencies over seeing this project.

Sample #1 contained no detectable concentrations of TPH-D, TPH-G and BTX&E, at the respective detection limits for each constituent.

Sample #2 contained no detectable concentrations of TPH-D, TPH-G and BTX&E, at the respective detection limits for each constituent.

Sample #3 contained Total Petroleum Hydrocarbons as Hydraulic Oil at a concentration of 1,400 ppm.

## Recommendations

The State Water Resources Control Board document, Leaking Under Ground Fuel Tank Field Manual (LUFT), defines appropriate action in treating contamination associated with an unauthorized fuel release from underground storage tanks.

The presence of Total Petroleum Hydrocarbons as Diesel beneath the Hydraulic Reservoir Tank would require further site characterization as to the lateral and vertical migration of contaminants in soil. In accordance with the LUFT manual site characterization would include an investigation of the contaminants impact, if any, on the first encountered aquifer and a determination of groundwater flow direction. The installation of one monitoring well would be required within ten feet of the former Hydraulic Reservoir Tank in a down gradient direction. Three reference points are necessary for the determination of groundwater gradient, therefore the installation of two additional wells may be required. It is acceptable to use a previously installed well on an adjacent property as a reference point providing it has been properly screened.

## Reportage

Copies of this report, chain of custody, and laboratory analytical report should be submitted to the San Francisco Regional Water Quality Control Board, and the Alameda County Health Agency, Division of Environmental Health.

It has been my pleasure working with you. If you have any questions or if I may be of further service, please call me at (415) 363-2181.

The following addresses have been included for your convenience:

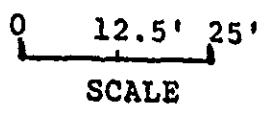
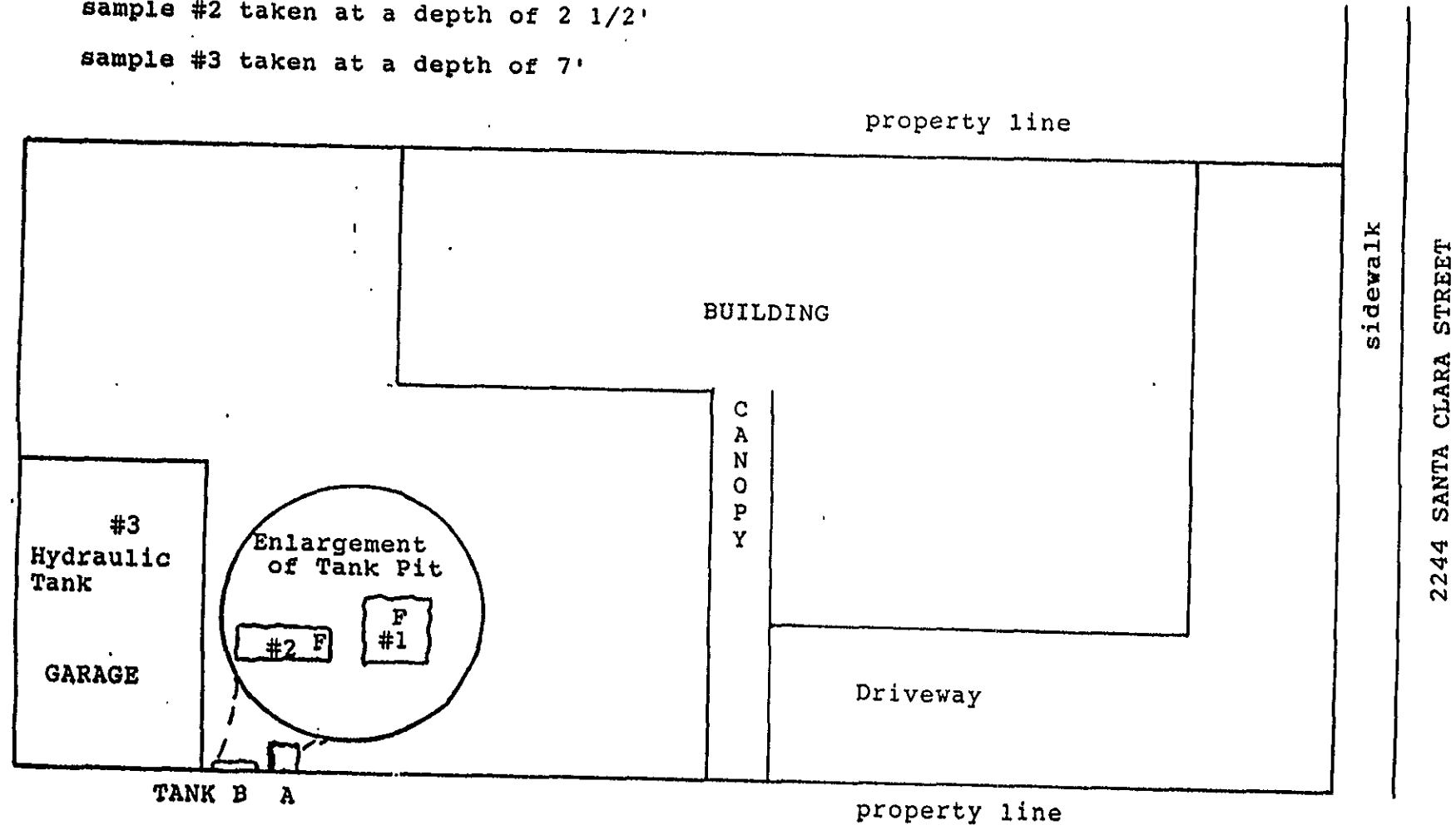
Water Quality Control Board  
San Francisco Bay Region  
1800 Harrison Street  
Room 700  
Oakland, CA 994612

Alameda County Health Agency  
Division of Hazardous Materials Department of Environmental Health  
80 Swan Way, Rm 200  
Oakland CA 94621

Sincerely,  
ZACCOR CORPORATION

Gary Zaccor  
Project Manager

sample #1 taken at a depth of 6'  
sample #2 taken at a depth of 2 1/2'  
sample #3 taken at a depth of 7'



CLIENT CHAIN - OF - CUSTODY RECORD

PROJECT NUMBER <b>2244 Santa Clara Ave Alameda, CA</b>		PROJECT NAME <b>2244 Santa Cruz Ave Alameda, CA</b>						Type of Analysis		Condition of Samples	Initial
Send Report Attention of: <b>ZACCOR CORP</b>		Report Due <b>1 1</b>		Verbal Due <b>11/10/90</b>		Number of Cntnrs		Type of Containers			
Sample Number	Date	Time	Comp	Grab	Station Location			TPH-D	TOG	BTEX	Hydraulic Oil
#1	1/8/90			✓	350 gal tank center	1	BRASS SLEEVE	✓	✓	✓	
#2	1/8/90			✓	50 gal tank center	1	" "	✓	✓	✓	
#3	1/8/90			✓	Hydraulic Lift	1	" "	<del>✓</del>	<del>✓</del>	<del>✓</del>	✓
Relinquished by: (Signature) <i>Helen M...</i>		Date/Time <b>1/21/90</b>		Received by: (Signature) <i>[Signature]</i>		Date/Time <b>1/21/90</b>		Remarks: <b>48</b> <del>HR</del> <b>RUSH</b>			
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time					
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		COMPANY: ADDRESS: PHONE : FAX :			

**ANAMETRIX INC**

Environmental & Analytical Chemistry  
 1961 Concourse Drive, Suite E, San Jose, CA 95131  
 (408) 432-8192 • Fax (408) 432-8198

**REPORT**

MR. GARY ZACCOR  
 ZACCOR CORP.  
 791 HAMILTON AVE.  
 MENLO PARK, CA 94025

Workorder # : 9101055  
 Date Received : 01/08/91  
 Project ID : 2244 SANTA CLARA  
 Purchase Order: N/A

The following samples were received at Anamatrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9101055- 1	#1
9101055- 2	#2
9101055- 3	#3

This report consists of 8 pages not including the cover letter, and is organized in sections according to the specific Anamatrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anamatrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anamatrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anamatrix.

*Burt Sutherland*

\_\_\_\_\_  
 Burt Sutherland  
 Laboratory Director

1-14-91

\_\_\_\_\_  
 Date



REPORT SUMMARY  
ANAMETRIX, INC. (408)432-8192

MR. GARY ZACCOR  
ZACCOR CORP.  
791 HAMILTON AVE.  
MENLO PARK, CA 94025

Workorder # : 9101055  
Date Received : 01/08/91  
Project ID : 2244 SANTA CLARA  
Purchase Order: N/A  
Department : GC  
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9101055- 1	#1	SOIL	01/08/91	BTEX
9101055- 2	#2	SOIL	01/08/91	BTEX
9101055- 1	#1	SOIL	01/08/91	TPHD
9101055- 2	#2	SOIL	01/08/91	TPHD
9101055- 3	#3	SOIL	01/08/91	TPHD

REPORT SUMMARY  
ANAMETRIX, INC. (408)432-8192

MR. GARY ZACCOR  
ZACCOR CORP.  
791 HAMILTON AVE.  
MENLO PARK, CA 94025

Workorder # : 9101055  
Date Received : 01/08/91  
Project ID : 2244 SANTA CLARA  
Purchase Order: N/A  
Department : GC  
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

Cheryl Balma 1/11/91  
Department Supervisor Date

Trina Shor 1/11/91  
Chemist Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS  
 (GASOLINE WITH BTEX)  
 ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9101055  
 Matrix : SOIL  
 Date Sampled : 01/08/91

Project Number : 2244  
 Santa Clara  
 Date Released : 01/11/91

COMPOUNDS	Reporting Limit (mg/Kg)	Sample I.D.# #1	Sample I.D.# #2	Sample I.D.# 21B0109B
Benzene	0.005	ND	ND	ND
Toluene	0.005	ND	ND	ND
Ethylbenzene	0.005	ND	ND	ND
Total Xylenes	0.005	ND	ND	ND
% Surrogate Recovery		124%	77%	101%
Instrument I.D.		HP21	HP21	HP21
Date Analyzed		01/09/91	01/09/91	01/09/91
RLMF		1	1	1

- ND - Not detected at or above the practical quantitation limit for the method.  
 TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.  
 BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.  
 RLMF - Reporting Limit Multiplication Factor.  
 Anametrix control limits for surrogate recovery are 50-150%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Ivna Shor 1/8/91  
 Analyst Date

Cheryl Balmer 1/11/91  
 Supervisor Date

**ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL  
ANAMETRIX, INC. (408) 432-8192**

Anametrix W.O.: 9101055  
 Matrix : SOIL  
 Date Sampled : 01/08/91  
 Date Extracted: 01/09/91

Project Number : 2244 Santa Clara  
 Date released : 01/11/91  
 Instrument I.D.: HP19

<u>Anametrix I.D.</u>	<u>Client I.D.</u>	<u>Date Analyzed</u>	<u>Reporting Limit (mg/Kg)</u>	<u>Amount Found (mg/Kg)</u>
9101055-01	#1	01/09/91	10	ND
9101055-02	#2	01/09/91	10	ND
DSBL010991	Method Blank	01/09/91	10	ND

ND - Not detected at or above the practical quantitation limit for the method.  
 TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following sample extraction by EPA Method 3550.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

*[Signature]* 1/14/91  
 Analyst Date

*Cheryl Balmer* 1/14/91  
 Supervisor Date

**ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS HYDRAULIC OIL  
ANAMETRIX, INC. (408) 432-8192**

Anamatrix W.O.: 9101055  
 Matrix : SOIL  
 Date Sampled : 01/08/91  
 Date Extracted: 01/09/91

Project Number : 2244 Santa Clara  
 Date released : 01/11/91  
 Instrument I.D.: HP9

<u>Anamatrix I.D.</u>	<u>Client I.D.</u>	<u>Date Analyzed</u>	<u>Reporting Limit (mg/Kg)</u>	<u>Amount Found (mg/Kg)</u>
9101055-03 DSBL010991	#3 Method Blank	01/10/91 01/10/91	10 10	1400 ND

ND - Not detected at or above the practical quantitation limit for the method.  
 TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following sample extraction by EPA Method 3550.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

*[Signature]* 1/14/91  
 Analyst Date

*Cheryl Balmer* 1/11/91  
 Supervisor Date

REPORT SUMMARY  
ANAMETRIX, INC. (408)432-8192

MR. GARY ZACCOR  
ZACCOR CORP.  
791 HAMILTON AVE.  
MENLO PARK, CA 94025

Workorder # : 9101055  
Date Received : 01/08/91  
Project ID : 2244 SANTA CLARA  
Purchase Order: N/A  
Department : PREP  
Sub-Department: PREP

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9101055- 1	#1	SOIL	01/08/91	5520EF
9101055- 2	#2	SOIL	01/08/91	5520EF

REPORT SUMMARY  
ANAMETRIX, INC. (408)432-8192

MR. GARY ZACCOR  
ZACCOR CORP.  
791 HAMILTON AVE.  
MENLO PARK, CA 94025

Workorder # : 9101055  
Date Received : 01/08/91  
Project ID : 2244 SANTA CLARA  
Purchase Order: N/A  
Department : PREP  
Sub-Department: PREP

QA/QC SUMMARY :


- No QA/QC problems encountered for samples.

Bob Patel January, 14<sup>th</sup> 1991.  
Department Supervisor Date

Reggie Danton 1-14-91  
Chemist Date

ANALYSIS DATA SHEET - TOTAL OIL AND GREASE  
ANAMETRIX, INC. (408) 432-8192

Project # : 2244 Santa Clara  
 Matrix : SOIL  
 Date sampled : 01/8/91  
 Date ext. TOG: 01/09/91  
 Date anl. TOG: 01/09/91

Anamatrix I.D. : 9101055  
 Analyst :  
 Supervisor :   
 Date released : 01/11/91

Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9101055-01	#1	30	ND
9101055-02	#2	30	ND
GSB1010991	METHOD BLANK	30	ND

ND - Not detected at or above the practical quantitation limit for the method.  
 TOG - Total Oil & Grease is determined by Standard Method 5520E&F.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.



NS  
1440

CLIENT CHAIN - OF - CUSTODY RECORD

9/10/95

10/2

PROJECT NUMBER		PROJECT NAME				Number of Cntrs	Type of Containers	Type of Analysis				Condition of Samples	Initials
2244 Santa Clara Ave Alameda, CA		2244 Santa Cruz Ave Alameda, CA						TPH-D	TOG	BTEX	Hydro Oil		
Send Report Attention of:			Report Due		Verbal Due								
ZACCOR CORP			1 1		1 1								
Sample Number	Date	Time	Comp	Grab	Station Location								
1	1/8/90			✓	350 gal tank center	1	BRASS SLEEVE	✓	✓	✓			
2	1/8/90			✓	50 gal tank center	1	" "	✓	✓	✓			Red, proper Containers, acc head Sp. MS
3	1/8/90			✓	Hydraulic Lift	1	" "	✓	✓	✓			
Relinquished by: (Signature)			Date/Time		Received by: (Signature)		Date/Time		Remarks: 48 HR RUSH				
Teresa M... ..			1/8/90		D. ... ..		1/8/90						
Relinquished by: (Signature)			Date/Time		Received by: (Signature)		Date/Time						
Relinquished by: (Signature)			Date/Time		Received by: (Signature)		Date/Time		COMPANY: ADDRESS: PHONE : FAX :				

1  
2  
3

Please print or type. (Form designed for use on elite (12-pitch typewriter).)

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8602; WITHIN CALIFORNIA CALL 1-800-852-7550

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address				A. State Manifest Document Number	89891343	
4. Generator's Phone ( )				B. State Generator's ID		
5. Transporter 1 Company Name		6. US EPA ID Number		C. State Transporter's ID	700977	
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone	(415) 235-2122	
9. Designated Facility Name and Site Address				E. State Transporter's ID		
Erickson, Inc. 255 Parr Blvd. Richmond, Ca. 94801				F. Transporter's Phone		
10. US EPA ID Number				G. State Facility's ID		
CAD009466392				H. Facility's Phone	(415) 235-1393	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)			12. Containers	13. Total Quantity	14. Unit	L. Waste No.
a. Waste Empty Storage Tank			No.	Type	Wt/Vol	State 512
NON-RCRA Hazardous waste Solid.				I F	F	EPA/Other NONE
b.						State
c.						EPA/Other
d.						State
e.						EPA/Other
J. Additional Descriptions for Materials Listed Above				K. Handling Codes for Wastes Listed Above		
Qty. 1 Empty Storage Tank (s) # 2001, 35, Tank (s) have been inerted with 15 lbs. Dry Ice per 1000 Gal. Capacity.				a.	b.	
15. Special Handling Instructions and Additional Information				c.		
Keep away from sources of ignition. Always wear hardhats when working around U.S.T.'s 24 Hr. Contact Name & Phone				d.		
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name			Signature		Month Day Year	
17. Transporter 1 Acknowledgement of Receipt of Materials						
Printed/Typed Name			Signature		Month Day Year	
18. Transporter 2 Acknowledgement of Receipt of Materials						
Printed/Typed Name			Signature		Month Day Year	
19. Discrepancy Indication Space						
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name			Signature		Month Day Year	

GENERATOR

TRANSPORTER

FACILITY

Do Not Write Below This Line

Please print or type. (Form designed for use on elite (12-pitch typewriter).)

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.		2. Page 1 of		Information in the shaded areas is not required by Federal law.					
3. Generator's Name and Mailing Address						A. State Manifest Document Number <b>90239087</b>							
4. Generator's Phone ( )						B. State Generator's ID							
5. Transporter 1 Company Name			6. US EPA ID Number			C. State Transporter's ID							
7. Transporter 2 Company Name			8. US EPA ID Number			D. Transporter's Phone (415) 432-0333							
9. Designated Facility Name and Site Address			10. US EPA ID Number			E. State Transporter's ID							
						F. Transporter's Phone							
						G. State Facility's ID							
						H. Facility's Phone (916) 474-4444							
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers		13. Total Quantity		14. Unit		1. Waste No.	
						No. Type		Quantity		Wt/Vol			
a.										State 221		EPA/Other	
b.										State		EPA/Other	
c.										State		EPA/Other	
d.										State		EPA/Other	
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above							
1.1						a		b					
1.2						c		d					
15. Special Handling Instructions and Additional Information													
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.  If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.													
Printed/Typed Name						Signature			Month Day Year				
17. Transporter 1 Acknowledgement of Receipt of Materials													
Printed/Typed Name						Signature			Month Day Year				
18. Transporter 2 Acknowledgement of Receipt of Materials													
Printed/Typed Name						Signature			Month Day Year				
19. Discrepancy Indication Space													
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19													
Printed/Typed Name						Signature			Month Day Year				

GENERATOR

TRANSPORTER

FACILITY

Do Not Write Below This Line

**APPENDIX C**  
**EXCAVATION OF CONTAMINATION**

January 29, 1991

Mr. Ian Weber  
1150 Ballena Blvd.  
Alameda, CA 94501

RE: Fowler Anderson Mortuary  
2244 Santa Clara Street  
Alameda, CA

Mr. Ian Weber

RE: The Excavation of Contaminated Soil and Subsequent Third Party  
Confirmatory Sampling at: 2244 Santa Clara Street, Alameda,  
California.

#### SITE OVERVIEW

The subject property is located in the City of Alameda, County of Alameda, California. A site location map is included in Figure 1. The site is operated as a mortuary which performs funeral services, body preparation and administrative functions. The property is presently owned by Fowler-Anderson Mortuary.

Mr. Ian Weber, Real Estate Agent for Pacific Financial Corp., who represents Fowler-Anderson Mortuary, contracted Zaccor Corporation to remove three (3) underground storage tanks located on site. Environmental Technical Services was retained to perform Third Party Confirmatory Sampling. Tank removal and subsequent soil sampling was performed in accordance with local and regional guidelines, under the auspices of the Alameda County Department of Environmental Health, and the Alameda Fire Prevention Bureau.

On January 8, 1991, three (3) underground storage tanks (UST's) were removed, including; one (1) 350 gallon motor oil tank, one (1) 50 gallon motor oil tank, and one (1) 50 gallon hydraulic oil reservoir tank (as diagramed in Figure 2). One soil interface sample was obtained from beneath the center of each tank.

No contamination was detected beneath the 350 gallon motor oil tank or the 50 gallon motor oil tank. Total Petroleum Hydrocarbons as Hydraulic Oil was detected at a concentration of 1,400 ppm beneath the hydraulic oil reservoir tank.

### EXCAVATION OF CONTAMINATED SOILS

On January 24, 1991, Zaccor Corporation proceeded to excavate soils contaminated with Total Petroleum Hydrocarbons as Hydraulic Oil, within the site garage. Anametrix Incorporated, retained by Zaccor Corporation performed third party confirmatory sampling upon completion of soil excavation.

Throughout the excavation of contaminated soil from the hydraulic oil tank pit, soil samples were acquired from the sidewalls and floor of the excavation with a backhoe bucket. The first 3 to 4 inches of soil was removed from the backhoe bucket and a clean brass sleeve (1.92 inches in diameter by 6.0 inches in length) was driven into the remaining soil most representative of the sample location desired. The sample tube was withdrawn, the ends wrapped with aluminum foil, covered with plastic caps, sealed with duct tape, labeled, placed on dry ice, and transported to a Certified Hazardous Waste Analytical Laboratory (Anametrix Laboratory, Inc.) under chain of custody. Soil samples were analyzed for Total Petroleum Hydrocarbons as Hydraulic Oil using a Hydraulic Oil standard.

As such time as the boundaries of excavation were defined, clean imported fill material was placed within the tank pit excavation.

Excavated contaminated soil was placed on visqueen and covered with visqueen. A composite soil sample will be acquired to be analyzed for Total Petroleum Hydrocarbons as Hydraulic Oil. A comprehensive work plan will then be developed for the remediation or disposal of contaminated soil.

### SAMPLE LOCATIONS

Sample #A-1 was collected from the East wall at a depth of 7'

Sample #A-2 was collected from the excavation floor at a depth of 11'

Sample #A-3 was collected from the excavation floor at a depth of 10.5'

Sample #A-4 was collected from the North wall at a depth of 7'

Sample #A-5 was collected from the West wall at a depth of 7'

Sample #A-6 was collected from the South wall at a depth of 6.5'

Sample #A-7 was collected from the South wall at a depth of 7'

Sample #A-8 was collected from the South wall at a depth of 7'

Sample #A-9 was collected from the excavation floor at a depth of 10.5'

### ANALYTICAL RESULTS

Each sample was analyzed for Total Petroleum Hydrocarbons as Hydraulic Oil using a Hydraulic Oil Standard. All of the above samples were found to be non-detected at the respective detection limit, indicating all contaminated soil has been removed.

Copies of this report, chain of custody, and laboratory analytical report should be submitted to the San Francisco Regional Water Quality Control Board and the Alameda County Health Agency, Division of Environmental Health.

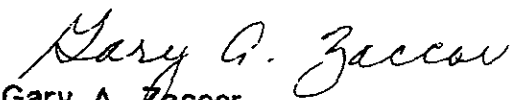
It has been a pleasure working with you. If you have any questions or if I may be of further assistance please do not hesitate to contact me at (415) 363-2181.

The following addresses have been included for your convenience:

Water Quality Control Board  
San Francisco Bay Region  
1800 Harrison Street  
Room 700  
Oakland, CA 94612

Alameda County Health Agency  
Division of Hazardous Materials  
Department of Environmental Health  
80 Swan Way  
Room 200  
Oakland, CA 94621  
Attn: William Faulhaber

Sincerely,  
ZACCOR CORPORATION

  
Gary A. Zaccor  
Project Manager

GAZ/lis



**ANAMETRIX INC**

Environmental & Analytical Chemistry  
 1961 Concourse Drive, Suite E, San Jose, CA 95131  
 (408) 432-8192 - Fax (408) 432-8198

**REPORT**

MR. GARY ZACCOR  
 ZACCOR CORP.  
 791 HAMILTON AVE.  
 MENLO PARK, CA 94025

Workorder # : 9101244  
 Date Received : 01/24/91  
 Project ID : 910124  
 Purchase Order: N/A

The following samples were received at Anamatrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9101244- 1	A-1
9101244- 2	A-2
9101244- 3	A-3
9101244- 4	A-4
9101244- 5	A-5
9101244- 6	A-6
9101244- 7	A-7
9101244- 8	A-8
9101244- 9	A-9

This report consists of 6 pages not including the cover letter, and is organized in sections according to the specific Anamatrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anamatrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anamatrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anamatrix.

*Burt Sutherland*  
 Burt Sutherland  
 Laboratory Director

1-30-91  
 Date

REPORT SUMMARY  
ANAMETRIX, INC. (408)432-8192

MR. GARY ZACCOR  
ZACCOR CORP.  
791 HAMILTON AVE.  
MENLO PARK, CA 94025

Workorder # : 9101244  
Date Received : 01/24/91  
Project ID : 910124  
Purchase Order: N/A  
Department : GC  
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9101244- 1	A-1	SOIL	01/24/91	TPHd
9101244- 2	A-2	SOIL	01/24/91	TPHd
9101244- 3	A-3	SOIL	01/24/91	TPHd
9101244- 4	A-4	SOIL	01/24/91	TPHd
9101244- 5	A-5	SOIL	01/24/91	TPHd
9101244- 6	A-6	SOIL	01/24/91	TPHd
9101244- 7	A-7	SOIL	01/24/91	TPHd
9101244- 8	A-8	SOIL	01/24/91	TPHd
9101244- 9	A-9	SOIL	01/24/91	TPHd

REPORT SUMMARY  
ANAMETRIX, INC. (408)432-8192

MR. GARY ZACCOR  
ZACCOR CORP.  
791 HAMILTON AVE.  
MENLO PARK, CA 94025

Workorder # : 9101244  
Date Received : 01/24/91  
Project ID : 910124  
Purchase Order: N/A  
Department : GC  
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

Cheryl Balmer 1/29/91  
Department Supervisor Date

Hart, Vogt 1/30/91  
Chemist Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS HYDRAULIC OIL  
 ANAMETRIX, INC. (408) 432-8192

Anamatrix W.O.: 9101244  
 Matrix : SOIL  
 Date Sampled : 01/24/91  
 Date Extracted: 01/24/91

Project Number : 910124  
 Date released : 01/29/91  
 Instrument I.D.: HP9

Anamatrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9101244-01	A-1	01/28/91	10	ND
9101244-02	A-2	01/28/91	10	ND
9101244-03	A-3	01/28/91	10	ND
9101244-04	A-4	01/28/91	10	ND
9101244-05	A-5	01/28/91	10	ND
9101244-06	A-6	01/28/91	10	ND
9101244-07	A-7	01/28/91	10	ND
9101244-08	A-8	01/28/91	10	ND
9101244-09	A-9	01/28/91	10	ND
DSBL012491	METHOD BLANK	01/28/91	10	ND

Note : Reporting limit is obtained by multiplying the dilution factor times 10mg/Kg.  
 ND - Not detected at or above the practical quantitation limit for the method.  
 TPHd - Total Petroleum Hydrocarbons as hydraulic oil is determined by GCFID following sample extraction by EPA Method 3550.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

David Vogt 1/30/91  
 Analyst Date

Cheryl Balmer 1/29/91  
 Supervisor Date

**TOTAL FUEL HYDROCARBON REPORT**

TPH as ~~Diesel~~ HYDRAULIC OIL

Workorder # 9102239 Hydraulic oil Client ZAC  
 Date Extracted 02-22-91 Project # 2244 Santa Clara St.  
 Matrix SOIL Instrument ID # 9

ANAMETRIX ID#	CLIENT ID#	DATE ANALYZED	DILUTION	AMOUNT FOUND
9102239-02	MW-1 12-12.5	02-22-91	1:1	< 10 mg / Kg
-03	MW-1 16-16.5	02-22-91	1:1	< 10 mg / Kg
-06	MW-2 11-11.5	02-22-91	1:1	< 10 mg / Kg
-07	MW2 15-15.5	02-22-91	1:1	< 10 mg / Kg
-10	MW3 11-11.5	02-22-91	1:1	< 10 mg / Kg
-11	MW3 16-16.5	02-22-91	1:1	< 10 mg / Kg
ASBL022291	Method Blank	02-22-91	1:1	< 10 mg / Kg

Date: 02-25-91

Date: 2-25-91

Analyst: IY

Reviewer: CB

METHODS DONE ARE THOSE SPECIFIED BY CRWQCB.

REPORT SUMMARY  
ANAMETRIX, INC. (408)432-8192

MR. GARY ZACCOR  
ZACCOR CORP.  
791 HAMILTON AVE.  
MENLO PARK, CA 94025

Workorder # : 9101244  
Date Received : 01/24/91  
Project ID : 910124  
Purchase Order: N/A  
Department : PREP  
Sub-Department: PREP

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9101244- 1	A-1	SOIL	01/24/91	418.1
9101244- 2	A-2	SOIL	01/24/91	418.1
9101244- 3	A-3	SOIL	01/24/91	418.1
9101244- 4	A-4	SOIL	01/24/91	418.1
9101244- 5	A-5	SOIL	01/24/91	418.1
9101244- 6	A-6	SOIL	01/24/91	418.1
9101244- 7	A-7	SOIL	01/24/91	418.1
9101244- 8	A-8	SOIL	01/24/91	418.1
9101244- 9	A-9	SOIL	01/24/91	418.1

REPORT SUMMARY  
ANAMETRIX, INC. (408)432-8192

MR. GARY ZACCOR  
ZACCOR CORP.  
791 HAMILTON AVE.  
MENLO PARK, CA 94025

Workorder # : 9101244  
Date Received : 01/24/91  
Project ID : 910124  
Purchase Order: N/A  
Department : PREP  
Sub-Department: PREP

QA/QC SUMMARY :


- No QA/QC problems encountered for samples.

*[Signature]* January, 30<sup>th</sup> 1991.  
Department Supervisor Date

*Reggie Davison* 1-30-91  
Chemist Date

ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS  
 EPA METHOD 418.1  
 ANAMETRIX, INC. (408) 432-8192

Project # : 910124  
 Matrix : SOIL  
 Date sampled : 01/24/91  
 Date ext. : 01/24/91  
 Date analyzed: 01/24/91

Anamatrix I.D. : 9101244  
 Analyst : RD  
 Supervisor :   
 Date released : 01/29/91

Workorder #	Sample I.D.	Reporting Limit (mg/Kg)	Amount Found (mg/Kg)
9101244-01	A-1	1	1.2
9101244-02	A-2	1	1.7
9101244-03	A-3	1	2.7
9101244-04	A-4	1	1.8
9101244-05	A-5	1	2.0
9101244-06	A-6	1	ND
9101244-07	A-7	1	3.3
9101244-08	A-8	1	2.0
9101244-09	A-9	1	2.0
GSBL012491	METHOD BLANK	1	ND

ND - Not detected at or above the practical quantitation limit for the method.

Reference - Methods for Chemical Analysis of Water and Wastes, 3rd edition US EPA-600/4-79-020, March 1983.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.



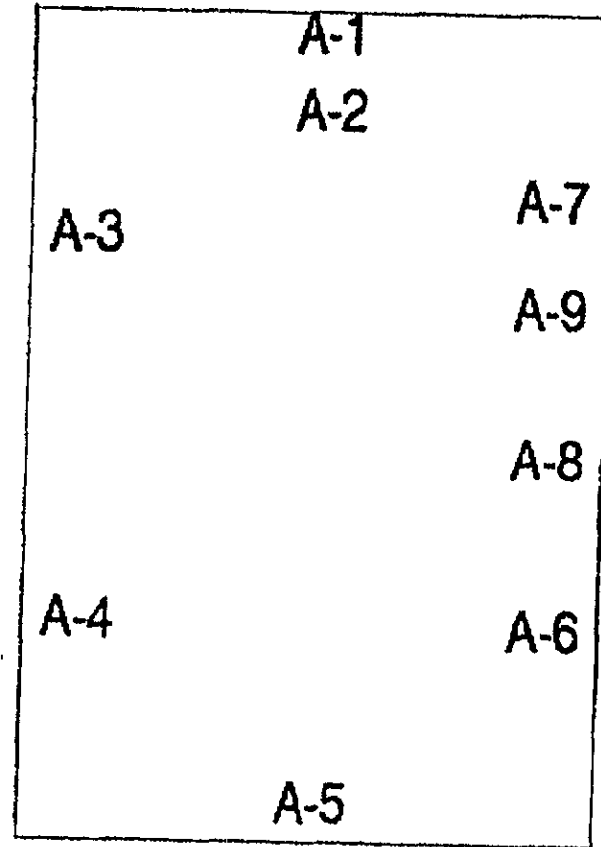
910-1244

PROJECT NUMBER		PROJECT NAME				Number of Cntnrs	Type of Containers	Type of Analysis										Condition of Samples	Initial
910124		2240 SANTA CLARA AV.						418.1 (TPH)											
Send Report Attention of:			Report Due		Verbal Due														
GARY ZACCOR			1 1		125191														
Sample Number	Date	Time	Comp	Grab	Station Location														
-01	A-1	1-24-91			Front wall at 7'	1	BL	X										Cold, No Heads of pipe	
-02	A-2	"			" " 11'	"	"	X											
-03	A-3	"			Left wall 10.5'	"	"	X											
-04	A-4	"			" " 7.0	"	"	X											
-05	A-5	"			back wall 7.0'	"	"	X											
-06	A-6	"			Right wall 6.5'	"	"	X											
-07	A-7	"			" " 7.0'	"	"	X											
-08	A-8	"			" " 8.0'	"	"	X											
-09	A-9	"			capillary line at 10.5'	"	"	X											
Relinquished by: (Signature)			Date/Time		Received by: (Signature)			Date/Time		Remarks:									
Jaghi Memarzal			1/24/91 10:05		M. H. S. S. S.			1/24/91 11:00											
Relinquished by: (Signature)			Date/Time		Received by: (Signature)			Date/Time											
Relinquished by: (Signature)			Date/Time		Received by: (Signature)			Date/Time		COMPANY: ZACCOR ADDRESS: 781 HAMILTON AVE. Menlo Park, CA 94025 PHONE: (415) 363-2181 FAX: (415) 326-7753									

A-1 7'	A-6 6.5'
A-2 11'	A-7 7'
A-3 10.5'	A-8 7'
A-4 7'	A-9 10.5'
A-5 7'	

FRONT 13.00'

LEFT  
18.5'



RIGHT  
18.5'

SITE LOCATION  
2240 SANTA CLARA AVE.  
ALAMEDA, CA.  
SAMPLING DATE 1/24/91

BACK 10.00'

710-1244

P.2

- JAN 29 '91 10:23 ANAMETRIX INC 408 432-8196

PROJECT NUMBER		PROJECT NAME				Number of Cntrs	Type of Containers	Type of Analysis										Condition of Samples	Inte		
910124		2240 SANTA CLARA AV.						Send Report Attention of:		Report Due		Verbal Due									
GARY ZACCOR		1 1		1 25 91																	
Sample Number	Date	Time	Comp	Grab	Station Location																
-01	A-1	1-24-91			front wall at 7'	1	BL	X											Cold, No Heads present		
-02	A-2	"			" " 11'	"	"	X													
-03	A-3	"			left wall 10.5'	"	"	X													
-04	A-4	"			" " 7.0'	"	"	X													
-05	A-5	"			back wall 7.0'	"	"	X													
	A-6	"			Right wall 6.5'	"	"	X													
	A-7	"			" " 7.0'	"	"	X													
	A-8	"			" " 8.0'	"	"	X													
	A-9	"			capillary line, at 10.5'	"	"	X													
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		Remarks:													
Jaghi Memarwal		1/24/91 16:05		M. S. Shetty		1/24/91 16:05															
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time															
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		COMPANY: ZACCOR ADDRESS: 781 HAMILTON AVE. Menlo Park, CA 94025 PHONE: (415) 363-2181 FAX: (415) 326-7253													

**APPENDIX D  
BORING LOGS**

MONITORING WELL BORING LOGS

ENVIRONMENTAL TECHNICAL SERVICES  
for: ZACCOR CORPORATION

AT: FOWLER, ANDERSON  
MORTUARY  
2244 Santa Clara St  
Alameda, California

MW-1

R.G. Roger Greensfelder PHD #3011

Drilling Method : Augers

Sample Method : Spoon Split Method : Spoon

Project Manager: Gary Zaccor

2/21/91

DEPTH	SAMPLE COLLECTED: INT. SAMPLE#	Soil Description	USCS	LOG	BLOW COUNTS 6" INCRE	WELL CONSTRUCTION	
5'	MW-1 6'-6.5'	MEDIUM - FINE GRAIN SANDS WITH CLAY 10%, medium-brown or tan, damp.	SC		8, 8, 12	LOCKED CAP BLANK CASING	CHRISTY BOX GROUT BENTONITE SEAL
10'	MW-1 12-12.5	MEDIUM - FINE GRAIN SANDS WITH CLAY 10%, medium - brown or tan, saturated.	SC		17, 22, 27	PVC SCREEN 0.010" SLOT 4'-20'	LONESTAR #3 SAND FILTER PACK
15'	MW-1 16-16.5	MEDIUM - FINE GRAIN SANDS WITH VERY LITTLE CLAY, tan, saturated.	SC		7, 14, 22		
20'	MW-1 21-21.5	MEDIUM - FINE GRAIN SANDS WITH VERY LITTLE CLAY, tan, saturated.	SC		6, 12, 20	BOTTOM PLUG	
25'						PVC CASING 2" ID SCHED 40	
30'							

MONITORING WELL BORING LOGS

ENVIRONMENTAL TECHNICAL SERVICES  
for: ZACCOR CORPORATION

AT: FOWLER, ANDERSON  
MORTUARY  
2244 Santa Clara St  
Alameda, California

MW-2

R.G. Roger Greensfelder PHD #3011

Drilling Method : Augers

Sample Method : Spoon Split Method : Spoon

Project Manager: Gary Zaccor

2/21/91

DEPTH	SAMPLE COLLECTED: INT. SAMPLE#	Soil Description	USCS	LOG	BLOW COUNTS	WELL CONSTRUCTION	
						LOCKED CAP	CHRISTY BOX
5'	MW-2 6'-6.5'	FINE - MEDIUM GRAIN SAND WITH LITTLE CLAY 10%, tan, moist, no odor.	SC		6, 9, 9	BLANK CASING	GROUT
10'	MW-2 11'-11.5'	FINE - MEDIUM GRAIN SAND WITH LITTLE CLAY 10%, tan mottled with dark brown sand, moist, no odor.	SC		17, 18, 20	PVC SCREEN 0.010" SLOT	BENTONITE SEAL
15'	MW-2 15'-15.5'	FINE - MEDIUM GRAIN SAND WITH A LITTLE MORE CLAY tan, no odor.	SC		22, 31, X	BOTTOM PLUG	LONESTAR #3 SAND FILTER PACK
20'	MW-2 20.5'-21'	FINE - MEDIUM GRAIN SAND WITH LITTLE CLAY 2%, saturated, no odor.	SC			PVC CASING 2" ID SCHD 40	
25'							
30'							

MONITORING WELL BORING LOGS

ENVIRONMENTAL TECHNICAL SERVICES  
for: ZACCOR CORPORATION

AT: FOWLER, ANDERSON  
MORTUARY

2244 Santa Clara St  
Alameda, California

MW-3

R.G. Roger Greensfelder PHD #3011

Drilling Method : Augers

Sample Method : Spoon Split Method

Project Manager: Gary Zaccor

2/21/91

DEPTH	SAMPLE COLLECTED: INT. SAMPLE#	Soil Description	USCS	LOG	BLOW COUNTS	WELL CONSTRUCTION	
						WELL CONSTRUCTION	WELL CONSTRUCTION
5'	MW-3 6'-6.5'	FINE - MEDIUM GRAIN SANDS WITH VERY LITTLE CLAY 2%, AND SMALL DARK PEBBLES tan mottled with darker sand, moist, no odor.	SP		5,6,	LOCKED CAP BLANK CASING	CHRISTY BOX GROUT BENTONITE SEAL
10'	MW-3 11'-11.5'	FINE - MEDIUM GRAIN SAND, NO PEBBLES, tan mottled with orange, almost saturated, no odor.	SC		17,23,X	PVC SCREEN 0.010" SLOT	LONESTAR #3 SAND FILTER PACK
15'	MW-3 16'-16.5'	FINE - MEDIUM GRAIN SAND, WITH VERY LITTLE CLAY, tan, saturated, no odor.	SC		14,15,S		
20'	MW-3 21'-21.5'	FINE - MEDIUM GRAIN SAND WITH VERY LITTLE CLAY, saturated, no odor.	SC		12,25	BOTTOM CAP	
25'						PVC CASING 2" I.D SCHED.	
30'							

**APPENDIX E**  
**GROUNDWATER DEVELOPMENT**



FIELD LOGBOOK ENTRY

DATE: 2/28/91

SITE : 2244 Santa Clara TOTAL DEPTH : 19.7'  
 WELL I.D. : MW-1 WATER DEPTH : 9.88' TIME: 12:30  
 CODE NO. : \_\_\_\_\_ WELL DIAMETER : 2"  
 EQUIPMENT NO.: R-1 PURGE VOLUME : (10 x) = 60 liters  
 SAMPLER : Taghi PUMPING RATE : \_\_\_\_\_  
 PUMPING TIME : \_\_\_\_\_  
 BAILER CAPACITY: 1 liter  
 NO. OF BAILS : \_\_\_\_\_  
 WELL YIELD : Low  
 SAMPLE TIME : 13:55

TIME	VOLUME	TURBIDITY	pH	E.C.	T°C
12:45	1	>200	8.4	7430	17°
12:50	2	>200	7.9	6090	16°
12:57	3	>200	8.0	5850	16°
13:05	4	>200	8.0	4870	16°
13:10	5	>200	7.9	4870	16°
13:15	6	>200	7.9	343.5	16°
13:20	7	>200	7.8	328.9	16°
13:24	8	>200	8.0	328.9	16°
13:30	9	>200	7.9	280.1	16°
13:45	10	>200	7.9	255.8	16°

PURGE PROCEDURE : B & K Pump PUMP PLACEMENT: \_\_\_\_\_

SAMPLE PROCEDURE: Teflon Bailer

PARAMETER:	CONTAINER (TYPE/NUMBER):	PRESERVATIVE:
2 X 1 liter	TPHd	Cool

FIELD OBSERVATIONS: Water was muddy, silty and very turbid.  
Toward end of developement it was almost clear.

RECOVERY RATE: \_\_\_\_\_ RECOVERY PERCENTAGE: \_\_\_\_\_ % AT \_\_\_\_\_ HRS

CLIMATIC CONDITIONS: Rainy and cool.

FIELD LOGBOOK ENTRY

DATE: 2/28/91

SITE : 2244 Santa Clara TOTAL DEPTH : 15.08'  
 WELL I.D. : MW-2 WATER DEPTH : 9.86' TIME: 13:55  
 CODE NO. : \_\_\_\_\_ WELL DIAMETER : 2"  
 EQUIPMENT NO.: R-2 PURGE VOLUME : (10x) = 40  
 SAMPLER : Taghi PUMPING RATE : \_\_\_\_\_  
 PUMPING TIME : \_\_\_\_\_  
 BAILER CAPACITY: 1 liter  
 NO. OF BAILS : Vary  
 WELL YIELD : Low  
 SAMPLE TIME : 15:00

TIME	VOLUME	TURBIDITY	pH	E.C.	T°C
14:05	1	>200	7.7	284.8	15°
14:10	2	>200	7.7	262.5	15°
14:15	3	>200	7.5	284.8	15°
14:20	4	>200	7.6	262.5	15°
14:25	5	>200	7.5	235.4	15°
14:30	6	>200	7.5	235.4	15°
14:35	7	>200	7.4	211.9	15°
14:40	8	>200	7.4	211.9	15°
14:45	9	>200	7.4	190.7	15°
14:50	10	>200	7.4	190.7	15°

PURGE PROCEDURE : Bailer PUMP PLACEMENT: \_\_\_\_\_

SAMPLE PROCEDURE: Teflon Bailer

PARAMETER:	CONTAINER (TYPE/NUMBER):	PRESERVATIVE:
TPHd	2 X 1 liter	Cool

FIELD OBSERVATIONS: Water was muddy, silty toward end of the development turned almost clear.

RECOVERY RATE: \_\_\_\_\_ RECOVERY PERCENTAGE: \_\_\_\_\_ % AT \_\_\_\_\_ HRS

CLIMATIC CONDITIONS: Rainy, cool.

FIELD LOGBOOK ENTRY

DATE: 2/28/91

SITE : 2244 Santa Clara TOTAL DEPTH : 19.95'  
 WELL I.D. : MW-3 WATER DEPTH : 9.56' TIME: 15:15  
 CODE NO. : \_\_\_\_\_ WELL DIAMETER : 2"  
 EQUIPMENT NO.: R-3 PURGE VOLUME : (10x) = 60 liters  
 SAMPLER : Taghi PUMPING RATE : \_\_\_\_\_  
 PUMPING TIME : \_\_\_\_\_  
 BAILER CAPACITY: 1 liter  
 NO. OF BAILS : 60  
 WELL YIELD : High  
 SAMPLE TIME : 16:15

TIME	VOLUME	TURBIDITY	pH	E.C.	T°C
15:20	1	>200	7.9	698	18°
15:25	2	>200	7.8	584	18°
15:30	3	>200	7.8	488	18°
15:35	4	>200	7.9	431	18°
15:40	5	>200	7.8	388	18°
15:45	6	>200	7.8	388	18°
15:49	7	>200	7.8	351	18°
15:53	8	>200	7.7	328	18°
15:59	9	>200	7.7	314	18°
16:05	10	>200	7.7	314	18°

PURGE PROCEDURE : Bailer PUMP PLACEMENT: \_\_\_\_\_

SAMPLE PROCEDURE: Teflon Bailer

PARAMETER:	CONTAINER (TYPE/NUMBER):	PRESERVATIVE:
TPHd	2 X 1 liter	Cool

FIELD OBSERVATIONS: Water was muddy, silty, it turned clear at end of development of the well.

RECOVERY RATE: \_\_\_\_\_ RECOVERY PERCENTAGE: \_\_\_\_\_ % AT \_\_\_\_\_ HRS

CLIMATIC CONDITIONS: Rainy, cool.

**APPENDIX F**  
**ANALYTICAL RESULTS**

**ANAMETRIX INC**

Environmental & Analytical Chemistry  
 1961 Concourse Drive, Suite E, San Jose, CA 95131  
 (408) 432-8192 • Fax (408) 432-8198

**REPORT**

MR. GARY ZACCOR  
 ZACCOR CORP.  
 791 HAMILTON AVE.  
 MENLO PARK, CA 94025

Workorder # : 9102316  
 Date Received : 02/28/91  
 Project ID : 2240 SANTA CLARA  
 Purchase Order: N/A

The following samples were received at Anamatrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9102316- 1	MW-1
9102316- 2	MW-2
9102316- 3	MW-3

This report consists of 3 pages not including the cover letter, and is organized in sections according to the specific Anamatrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anamatrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anamatrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anamatrix.

Burt Sutherland  
 Laboratory Director

3-11-91

Date

10/19

PROJECT NUMBER 910228		PROJECT NAME 2240 Santa Clara Ave				Number of Cntnrs	Type of Containers	Type of Analysis										Condition of Samples	Initial																	
Send Report Attention of: GARY ZACCOR		Report Due 03/14/91		Verbal Due / /				<table border="1"> <tr><td>TPHd *</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>												TPHd *																
TPHd *																																				
Sample Number	Date	Time	Comp	Grab	Station Location																															
MW-1	02/28/91	13:55				2	Lites																													
MW-2	"	1500				2	"																													
MW-3	"	1615				2	"																													
Relinquished by: (Signature) <i>J. W. Mandyuk</i>		Date/Time 02-28-91 17:10		Received by: (Signature) <i>L. Kent</i>		Date/Time 2-28-91 17:10		Remarks: TPHd AS Hydraulic oil.																												
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		COMPANY: ZACCOR																												
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		ADDRESS:																												
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Date/Time		PHONE :										FAX :																		

REPORT SUMMARY  
ANAMETRIX, INC. (408)432-8192

MR. GARY ZACCOR  
ZACCOR CORP.  
791 HAMILTON AVE.  
MENLO PARK, CA 94025

Workorder # : 9102316  
Date Received : 02/28/91  
Project ID : 2240 SANTA CLARA  
Purchase Order: N/A  
Department : GC  
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9102316- 1	MW-1	WATER	02/28/91	TPHd
9102316- 2	MW-2	WATER	02/28/91	TPHd
9102316- 3	MW-3	WATER	02/28/91	TPHd

REPORT SUMMARY  
ANAMETRIX, INC. (408)432-8192

MR. GARY ZACCOR  
ZACCOR CORP.  
791 HAMILTON AVE.  
MENLO PARK, CA 94025

Workorder # : 9102316  
Date Received : 02/28/91  
Project ID : 2240 SANTA CLARA  
Purchase Order: N/A  
Department : GC  
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

Cheryl Baerman 3/11/91  
Department Supervisor Date

Ci Fan 3/11/91  
Chemist Date



ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS HYDRAULIC OIL  
ANAMETRIX, INC. (408) 432-8192

Anamatrix W.O.: 9102316  
Matrix : WATER  
Date Sampled : 02/28/91  
Date Extracted: 03/04/91

Project Number : 2240 SANTA CLARA  
Date released : 03/08/91  
Instrument I.D.: HP9

Anamatrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)
9102316-01	MW-1	03/07/91	50	ND
9102316-02	MW-2	03/07/91	50	ND
9102316-03	MW-3	03/07/91	50	ND
DWBLO30491	METHOD BLANK	03/07/91	50	ND

Note : Reporting limit is obtained by multiplying the dilution factor times 50ug/L.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as hydraulic oil is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

C. F. 3/11/91  
Analyst Date

Cheryl Balmer 3/11/91  
Supervisor Date

CLIENT CHAIN-OF-CUSTODY RECORD

PROJECT NUMBER		PROJECT NAME <del>2-81-31</del> 2244 Santa Clara St. Alameda				Number of Cntrs	Type of Containers	Type of Analysis				Condition of Samples	Initial
Send Report Attention of: ZACCOR CORP (ETS Proj.) Gary Zaccor		Report Due 1 1		Verbal Due 2 25, 91	TPH as Hydrocarbon			TPH as Hydraulic Oil					
Sample Number	Date	Time	Comp	Grab	Station Location								
mw-1 6-6 1/2	2/21/91			/		1	BRASS	✓				no head space, cold proper container	NS
mw-1 12-12 1/2	"			/		"		✓					
mw-1 16-16 1/2	"			/		"		HOLD					
mw-1 21-21 1/2	"			/		"		✓					
mw-2 6-6 1/2	"			/		"		HOLD				head space, cold proper container	
mw-2 11-11 1/2	"			/		"		✓				no head space, cold proper container	
mw-2 15-15 1/2	"			/		"		✓					
mw-2 20-20 1/2	"			/		"		HOLD					
mw-3 6-6 1/2	"			/		"						head space, cold, proper container	
mw-3 11-11 1/2	"			/		"						no head space, cold proper container	
mw-3 16-16 1/2	"			/		"							
mw-3 21-21 1/2	"			/		"							
Relinquished by: (Signature) <i>[Signature]</i>		Date/Time 2/21/91	Received by: (Signature) <i>[Signature]</i>		Date/Time 2/21/91 0915	Remarks: 24 hr. Rush							
Relinquished by: (Signature)		Date/Time	Received by: (Signature)		Date/Time	COMPANY: ADDRESS: PHONE : FAX :							
Relinquished by: (Signature)		Date/Time	Received by: (Signature)		Date/Time	2066							