

45TH STREET ARTISTS COOPERATIVE

Dennis Byrne
Alameda County Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, California 94621

9 November 1989

Dear Mr. Byrne

Enclosed please find copies of the fourth quarterly (final) sampling event report documents sent to me by Aqua Terra Technologies for 4250 Horton Street, Emeryville. This fourth, and hopefully final, sampling took place on 12 October 1989; we are very pleased to see no detectable levels of TPH as diesel, toluene, ethylbenzene, or xylenes, analyses done in accordance with our previously recorded agreement reached in July 1989.

As stated in the ATT report, "based on the data gathered to date, ATT finds no evidence to suggest that the site groundwater is being degraded due to the former underground fuel storage tank". The Co-op hopes this concludes your concern on this matter and that our site may be removed from the Regional Water Quality Control Board (RWQCB) list.

If there is anything else that you require, please let me know. I can be reached at the Artists Co-op offices on Tuesday and Thursday, or you may leave a message as to the best time to get back to you.

Yours truly,



A. Robin Orden
Executive Director

enclosures



November 3, 1989

Ms. A. Robin Orden
45th Street Artists Cooperative
1420 45th Street
Emeryville CA 94608

Subject: Results of Fourth Quarter Sampling
4250 Horton Street
Emeryville, CA

Dear Ms. Orden:

Aqua Terra Technologies, Inc. (ATT) is pleased to present a summary of quarterly groundwater monitoring activities at the subject property. This report provides a discussion of the project history, sample collection, analytical results, and conclusions.

Aqua Terra Technologies
Consulting Engineers
& Scientists

Project History

2950 Buskirk Avenue
Suite 120
Walnut Creek, CA
94596
415 934-4884

An underground fuel storage tank was excavated and removed from the subject property on November 2, 1988. Following tank removal ATT collected a soil sample from the bottom of the excavation. Laboratory analytical results indicated that total petroleum hydrocarbons (TPH) as oil were present in the site soils. Analysis of this sample for TPH as gasoline and TPH as diesel did not reveal detectable levels of these compounds. A copy of the November 9, 1988 ATT underground storage tank closure report summarizing the closure activities and analytical results is provided in Attachment A. ATT installed a groundwater monitoring well at the subject property on November 30, 1988. A soil sample collected during well construction was analyzed and found not to contain total oil and grease (TOG) compounds above analytical detection limits. The monitoring well was developed and sampled by ATT on December 5, 1988. Analytical results of this sampling event did not reveal detectable levels of TOG in groundwater at the site.

Based on results obtained from soil and groundwater sampling activities at the site, ATT proposed a quarterly groundwater monitoring schedule to the Alameda County Health Care Services Agency (ACHCSA) in a report dated January 12, 1989. The ACHCSA agreed with the ATT proposal in a letter dated January 26, 1989. A copy of the correspondence from the ACHCSA is provided in Attachment B. Quarterly groundwater monitoring was initiated by ATT on February 1, 1989.

Ms. A. Robin Orden
45th Street Artists Cooperative
November 3, 1989
Page 2

Quarterly Groundwater Monitoring Results

Following each quarterly groundwater monitoring event, ATT has prepared a brief letter report which presents copies of laboratory analytical results, chain of custody documentation, and sample collection records. Copies of laboratory analytical results for the four quarterly groundwater monitoring events are provided in Attachment C. These results are summarized in Table 1, Attachment C. Copies of the chain of custody documentation and sample collection records are provided in Attachment D.

Analysis of the October 12, 1989 groundwater sample reveal that no detectable levels TPH as diesel, and toluene, ethylbenzene, or xylenes were encountered. Detectable levels of benzene and TPH as gasoline were reported for this sampling event at levels of 27 ug/L and 0.4 mg/L, respectively. Analysis for benzene, toluene, ethylbenzene, and xylene (BTEX), TPH as diesel, and TPH as gasoline have been performed in lieu of TOG in accordance with the agreement reached with Mr. Dennis Byrne of the ACHCSA. This agreement was reached during the July 18, 1989 telephone conversations between Mr. Byrne, and representatives of the 45th Street Artists Cooperative.

Discussion

The primary use of the former underground fuel storage tank was to fire boilers that once occupied the site. The fuel commonly associated with this type of application was a heavy bunker variety and did not contain either gasoline or associated aromatic compounds. Analysis of soil and groundwater samples failed to reveal presence of diesel or gasoline constituents until the October 12, 1989 sampling event. Therefore, ATT does not find evidence that the detectable levels of TPH as gasoline or benzene encountered during the October 12, 1989 sampling event are associated with past or present site activities. These compounds may be originating from an off site source. Although ATT has not conducted a formal survey of the area surrounding the subject property, several sites in the vicinity are currently being evaluated by the ACHCSA and the San Francisco Bay Region of the Regional Water Quality Control Board (RWQCB) with respect to toxic and fuel spills.

Ms. A. Robin Orden
45th Street Artists Cooperative
November 3, 1989
Page 3

Conclusions

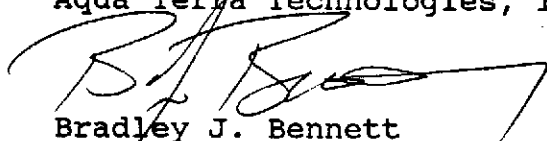
Based on the data gathered to date, ATT finds no evidence to suggest that the site groundwater is being degraded due to the former underground fuel storage tank. The data and discussion herein justify terminating the quarterly groundwater monitoring events. The soil and groundwater data collected relative to the tank closure and subsequent monitoring indicate that no further action is warranted.

A copy of this report should be forwarded to the ACHCSA for review and final case resolution.

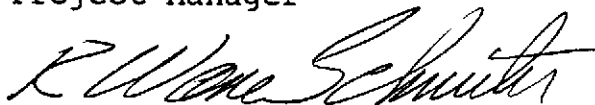
Please feel free to contact us at your earliest convenience if you have any questions regarding matters discussed herein.

Sincerely,

Aqua Terra Technologies, Inc.



Bradley J. Bennett
Project Manager



R. Wane Schneiter, Ph.D.
Civil Engineer No. 38735 (Expires 3/31/93)

BJB/RWS:pd
Attachments

ATTACHMENT A

Underground Storage Tank Closure Report

ATT

November 9, 1988

Ms. A. Robin Orden
45th Street Artists Cooperative
1420 45th Street
Emeryville, CA 94608

Subject: Closure Report for Underground Storage Tank
at 45th Street Artists Cooperative Property

Dear Ms. Orden:

This letter presents a discussion of activities conducted by Aqua Terra Technologies, Inc. (ATT) which consist of construction inspection and soil sampling services for the excavation of one existing underground fuel tank. These tasks were defined in our letter dated September 8, 1988.

Aqua Terra Technologies
Consulting Engineers
& Scientists

2950 Buskirk Avenue
Suite 120
Walnut Creek, CA
94596
415 934-4884

On November 2, 1988, ATT's staff engineer oversaw the removal of the underground storage tank and collected one soil sample from the excavated pit. Balch Petroleum performed the services of excavation and removal of the tank. The Alameda County Health Department (ACHD) and Emeryville Fire Department were also onsite to inspect and approve the removal of the tank. The sample from the excavation was collected from the native underlying soils below the tank. The sample was collected using a hand-driven sampler.

The sample was retained in a two-by-six inch brass liner. The brass liner was thoroughly cleaned before use. The sample was appropriately labeled, sealed, and immediately iced for transportation to the analytical laboratory. The sample was analyzed for gasoline, diesel, and total oil and grease according to standard EPA protocol.

In order to comply with guidelines established by the Regional Water Quality Control Board (RWQCB) for closure of underground fuel tanks, underlying materials must contain less than 100 mg/Kg of petroleum products. Analytical results (Attachment A) indicated that although gasoline and diesel are not present, the level of total oil and grease exceeds this criteria.

Because the soil sample contained oil and grease above 100 ppm, RWQCB guidelines state that a soil and/or groundwater investigation is required. The following actions are required by the RWQCB and ACHD in order to comply with "RWQCB Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks, June 1988."

Ms. A. Robin Orden
45th Street Artists Cooperative
November 9, 1988
Page 2

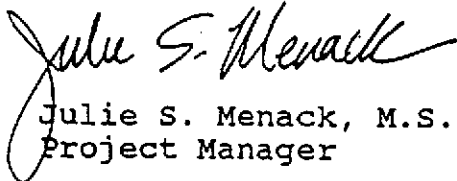
- o Identify the groundwater gradient from published or unpublished reports
- o Install one groundwater monitoring well on the downgradient side of the former underground tank, within 10 feet of the tank
- o Collect and analyze soil samples at five foot intervals from the well borehole and analyze for oil and grease
- o Collect groundwater samples from the well and analyze for total oil and grease on a quarterly basis and submit analytical results to the ACHD and RWQCB

The purpose of installing the monitoring well is to determine whether or not residual soil contamination observed in the tank excavation has impacted shallow groundwater. The site will be placed on the RWQCB list of confirmed petroleum releases. If oil and grease are not detected during the quarterly sampling, the site may then be removed from the RWQCB list.

If there are any questions regarding the closure and removal of the underground storage tank at the 45th Street Artists Cooperative, please do not hesitate to contact me.

Sincerely,

AQUA TERRA TECHNOLOGIES, INC.



Julie S. Menack, M.S., R.G.
Project Manager

JSM/dbh
Attachments



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9222 • FAX (415) 364-9233

Aqua Terra Technologies
2950 Buskirk Ave., Suite 120
Walnut Creek, CA 94596
Attn: Julie Menack

Date Sampled: 11/02/88
Date Received: 11/03/88
Date Extracted: 11/04/88
Date Reported: 11/04/88
Project: 1420 45th St.,
Emeryville

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

<u>Sample Number</u>	<u>Sample Description</u> Soil	<u>Detection Limit</u> mg/kg	<u>Petroleum Oil</u> mg/kg
8110360	SS-1	1.0	470

Method of Analysis: EPA 418.1

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9222 • FAX (415) 364-9233

Aqua Terra Technologies
2950 Buskirk Ave., Suite 120
Walnut Creek, CA 94596
Attn: Julie Menack

Date Sampled: 11/02/88
Date Received: 11/03/88
Date Analyzed: 11/03/88
Date Reported: 11/04/88

Project: 1420 45th St.,
Emeryville

TOTAL PETROLEUM FUEL
HYDROCARBONS WITH BTEX DISTINCTION

Sample Number

8110360

Sample Description

Soil, SS-1

	<u>Detection</u> <u>Limit</u> ppm	<u>Sample</u> <u>Results</u> ppm
Low to Medium Boiling Point Hydrocarbons	1.0	N.D.
Benzene	0.05	N.D.
Toluene	0.1	N.D.
Ethyl Benzene	0.1	N.D.
Xylenes	0.1	N.D.

Method of Analysis: EPA 5030 or 3810/8015/8020

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director



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680 Chesapeake Drive · Redwood City, CA 94063
(415) 364-9222 · FAX (415) 364-9233

Aqua Terra Technologies
2950 Buskirk Ave., Suite 120
Walnut Creek, CA 94596
Attn: Julie Menack

Date Sampled: 11/02/88
Date Received: 11/03/88
Date Analyzed: 11/04/88
Date Reported: 11/04/88

Project: 1420 45th St.,
Emeryville

TOTAL PETROLEUM HYDROCARBONS

<u>Sample Number</u>	<u>Sample Description</u> Soil	<u>Detection Limit</u> ppm	<u>High Boiling Point Hydrocarbons</u> ppm
8110360	SS-1	1.0	N.D.

Method of Analysis: EPA 3550/8015

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director

ATTACHMENT B

**Alameda County Health Care Services
Agency Correspondence**

ALAMEDA COUNTY
HEALTH CARE SERVICES

DAVID J. KEARS, AGENCY
~~XXXXXXXXXX~~, Agency Director



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

Telephone Number:(415) 271-4320

26 January, 1989

Aqua Terra Technologies
2950 Buskirk Avenue
Suite 120
Walnut Creek, Ca. 94596
ATTN: Bradley Bennett

Subject: Report of the Ground Water Monitoring Well at 4250 Horton
St. Emeryville.

Dear Mr. Bennett:

Thank you for the analytical data and monitoring well installation report submitted to our office concerning the underground storage tank removal project conducted at 4250 Horton Street in Emeryville. Your suggested quarterly monitoring schedule is in accordance with guidelines established by the San Francisco Bay Regional Water Quality Control Board and is acceptable to our department.

If you have any questions concerning this matter, please contact, Dennis Byrne, Hazardous Materials Specialist, at (415)271-4320.

Sincerely,

Rafat A. Shahid, Chief,
Hazardous Materials Division

RAS:DB

cc: Lisa McCann, SFBRWQCB

ATTACHMENT C

**Table 1
Laboratory Analytical Data**

Table 1. Reported Analytical Value Groundwater Monitoring
4250 Horton Street, Emeryville, CA

Date Sampled	THH as Oil & Grease (mg/L)	THH as Diesel (mg/L)	THH as Gasoline (mg/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)
15/05/88	ND	NA	NA	NA	NA	NA	NA
02/01/89	88	NA	NA	NA	NA	NA	NA
04/25/89	ND	NA	NA	NA	NA	NA	NA
07/21/89	NA	NA	NA	ND	ND	ND	ND
10/12/89 5/25/91	NA ND	ND ND	.4 ND	27 ND	ND ND	ND ND	ND ND

NA = Not Analyzed
ND = Not Detected

ATT



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

Julie Menack
Aqua Terra Technology
2950 Buskirk Ave., Ste. 120
Walnut Creek, CA 94596

December 21, 1988
Work Order Number 8812036
Date Received 12/07/88
Project No. 883

Dear Mr. Menack:

Two water samples were received for analysis of total oil and grease by gravimetric analysis, using the following method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)
8812036-01	883 MW1	503E
-02	" CB	"

RESULTS

See enclosed data sheets, Pages 2 thru 3.

NOTE: Amounts reported are net values, i.e. corrected for method blank contamination.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,

Sarah Schoen, Ph.D.
GC Manager

SRS/lm

Sample I.D. : 883 MW1
 Matrix : WATER
 Date sampled : 12-07-88
 Date anl.TPHg: NA
 Date ext.TPHd: NA
 Date anl.TPHd: NA

Anamatrix I.D. : 8812036-01
 Analyst : A.S.
 Supervisor : DPG
 Date released : 12-21-88
 Date ext. TOG : 12-15-88
 Date anl. TOG : 12-20-88

CAS #	Compound Name	Detection Limit (ug/l)	Amount Found (ug/l)
	Total Oil & Grease	10000	ND

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.

TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.

TOG - Total Oil & Grease is determined by Standard Method 503E.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

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

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 883 CB
 Matrix : WATER
 Date sampled : 12-07-88
 Date anl.TPHg: NA
 Date ext.TPHd: NA
 Date anl.TPHd: NA

Anamatrix I.D. : 8812036-02
 Analyst : A.S.
 Supervisor : DCC
 Date released : 12-21-88
 Date ext. TOG : 12-15-88
 Date anl. TOG : 12-20-88

CAS #	Compound Name	Detection Limit (ug/l)	Amount Found (ug/l)
	Total Oil & Grease	10000	ND

- 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.
- TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following either EPA Method 3510 or 3550.
- TOG - Total Oil & Grease is determined by Standard Method 503E.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

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

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES

3440 Vincent Road Pleasant Hill, CA 94523 • (415) 930-9090 • FAX# (415) 930-0256

LABORATORY ANALYSIS REPORT

AQUA TERRA TECHNOLOGIES
2950 BUSKIRK AVENUE
SUITE 120
WALNUT CREEK, CA 94596

REPORT DATE: 02/13/89

DATE SAMPLED: 02/01/89

DATE RECEIVED: 02/02/89

DATE EXTRACTED: 02/07/89

ATTN: BRAD BENNETT

DATE ANALYZED: 02/07/89

CLIENT PROJECT NO: 883


MED-TOX JOB NO: 8902010

ANALYSIS OF: ONE WATER SAMPLE FOR TOTAL OIL & GREASE

METHOD: EPA 9070

Sample Identification		Oil & Grease
Client Id.	Lab No.	(mg/L)
MW1	01A	88
CB	03A	ND
Detection Limit		1

ND = Not detected at or above indicated
method detection limit


Michael Lynch, Manager
Organic Laboratory

Results FAXed to Brad Bennett 02/08/89

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES

3440 Vincent Road Pleasant Hill, CA 94523 • (415) 930-9090 • FAX# (415) 930-0256

LABORATORY ANALYSIS REPORT

AQUA TERRA TECHNOLOGIES
2950 BUSKIRK AVENUE
SUITE 120
WALNUT CREEK, CA 94596

ATTN: BRAD BENNETT

CLIENT PROJECT NO: 883.1

REPORT DATE: 05/15/89

DATE SAMPLED: 04/25/89

DATE RECEIVED: 04/25/89

DATE ANALYZED: 04/28/89

MED-TOX JOB NO: 8904147

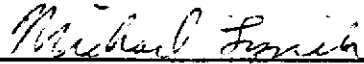
ANALYSIS OF: ONE WATER SAMPLE FOR TOTAL OIL & GREASE, AND TOTAL
PETROLEUM HYDROCARBONS

METHOD: SM 503D/E

Sample Identification		Oil & Grease	Total Petroleum
Client Id.	Lab No.	(mg/L)	Hydrocarbons (mg/L)
MWI (45th St)	01A	ND	NA
T.B.	02A	ND	NA
Detection Limit		1	1

ND = Not detected at or above indicated method detection limit

NA = Not applicable


Michael Lynch, Manager
Organic Laboratory

Results FAXed to Brad Bennett 05/04/89

ANAMETRIX INC

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



REPORT

Brad Bennett
Aqua Terra Technologies
2950 Buskirk Avenue
Suite 120
Walnut Creek, CA 94596

July 28, 1989
Anamatrix W.O.#: 8907157
Date Received : 07/21/89
Purchase Order#: N/A

Dear Mr. Bennett:

Your sample has been received for analysis. The REPORT SUMMARY lists your sample identifications and the analytical methods you requested. The following sections are included in this report: RESULTS.

NOTE: Amounts reported are net values, i.e. corrected for method blank contamination.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,

ANAMETRIX, INC.

A handwritten signature in cursive script, appearing to read "Terry Cooke".

Terry Cooke
TPH Supervisor

TC/dag

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

Client	: Aqua Terra Technologies	Anamatrix W.O.#:	: 8907157
Address	: 2950 Buskirk Avenue	Date Received	: 07/21/89
	Suite 120	Purchase Order#:	N/A
City	: Walnut Creek, CA 94596	Project No.	: 883.1
Attn.	: Brad Bennett	Date Released	: 07/28/89

Anamatrix I.D.	Sample I.D.	Matrix	Date Sampled	Method	Date Extract	Date Analyzed	Inst I.D.
RESULTS							
8907157-01	MW1	WATER	07/19/89	BTEX		07/24/89	N/A

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 883.1 MW1
 Matrix : WATER
 Date sampled : 07/19/89
 Date anl.BTEX: 07/24/89
 Date ext.TPHd: N/A
 Date anl.TPHd: N/A

Anamatrix I.D. : 8907157-01
 Analyst : RK
 Supervisor : TC
 Date released : 07/28/89
 Date ext. TOG : N/A
 Date anl. TOG : N/A

CAS #	Compound Name	Reporting Limit (ug/l)	Amount Found (ug/l)
71-43-2	Benzene	0.5	ND
108-88-3	Toluene	0.5	ND
100-41-4	Ethylbenzene	0.5	ND
1330-20-7	Total Xylenes	1	ND

ND - Below reporting limit.

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

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

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES

3440 Vincent Road Pleasant Hill, CA 94523 • (415) 930-9090 • FAX# (415) 930-0256

LABORATORY ANALYSIS REPORT

AQUA TERRA TECHNOLOGIES
2950 BUSKIRK AVENUE
SUITE 120
WALNUT CREEK, CA 94596

ATTN: BRAD BENNETT

CLIENT PROJECT NO: 883.1

REPORT DATE: 10/31/89

DATE SAMPLED: 10/12/89

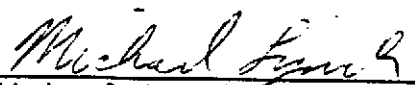
DATE RECEIVED: 10/13/89
DATE EXTRACTED: 10/20/89
DATE ANALYZED: 10/20/89

MED-TOX JOB NO: 8910102

ANALYSIS OF: ONE WATER SAMPLE FOR TOTAL PETROLEUM HYDROCARBONS;
ONE WATER SAMPLE FOR BTXE AND TOTAL PETROLEUM
HYDROCARBONS

METHOD: 8015 (EXTRACTION)

Sample Identification		Total Petroleum Hydrocarbons as Diesel (mg/L)
Client Id.	Lab No.	
MW1	01C	ND
Detection limit		0.3


Michael Lynch, Manager
Organic Laboratory

Results FAXed to Brad Bennett 10/27/89

AQUA TERRA TECHNOLOGIES

CLIENT ID: MW1
CLIENT JOB NO: 883.1
DATE SAMPLED: 10/12/89
DATE RECEIVED: 10/13/89
REPORT DATE: 10/31/89

MED-TOX LAB NO: 8910102-01A
MED-TOX JOB NO: 8910102
DATE ANALYZED: 10/23-25/89
INSTRUMENT: 9

BTXE AND TOTAL PETROLEUM HYDROCARBONS

METHOD: EPA 8020, 8015 (PURGE & TRAP)

	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	27	0.5
Toluene	ND	0.5
Ethylbenzene.	ND	0.5
Xylenes	ND	2
TOTAL PETROLEUM HYDROCARBONS AS:		
Gasoline	0.4 mg/L	0.1 mg/L

ND = Not Detected

AQUA TERRA TECHNOLOGIES

CLIENT ID: BTB
CLIENT JOB NO: 883.1
DATE SAMPLED: 10/12/89
DATE RECEIVED: 10/13/89
REPORT DATE: 10/31/89

MED-TOX LAB NO: 8910102-02A
MED-TOX JOB NO: 8910102
DATE ANALYZED: 10/23/89
INSTRUMENT: 9

BTXE AND TOTAL PETROLEUM HYDROCARBONS

METHOD: EPA 8020, 8015 (PURGE & TRAP)

	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
Xylenes	ND	2

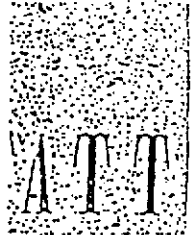
TOTAL PETROLEUM HYDROCARBONS AS:

Gasoline ND mg/L 0.1 mg/L

ND = Not Detected

ATTACHMENT D

**Chain of Custody Documentation
Sample Collection Records**



Ancmetrix 8812036

CHAIN OF SAMPLE CUSTODY RECORD

Collector: AQUA TERRA TECH Date Sampled: 12/7/88 Time: 0900
Location of Sampling: EMERVILLE

Project Number: 883 Survey Number:
Sample Type: GROUND WATER
Container Type and Condition: 1 L AMBER
Contract Laboratory Record/Name: ANAMETRIX

Sample ID	Field Information
MW1	(1) 1 L AMBER
MW1 DUP	(1) 1 L AMBER
CB	(1) 1 L AMBER

Analysis Requested: TOTAL OIL AND GREASE (503E)
EPA METHOD

Results Needed By: 2 WEEK TURNAROUND

Contact and results to be sent to: JULIE MENACK

Travel Blank: Yes No Travel Blank to be Analyzed Separately: Yes No

Duplicate Samples: Yes No Duplicates to be Analyzed Separately: Yes No

Cleaning Blank: Yes No Cleaning Blank to be Analyzed Separately: Yes No

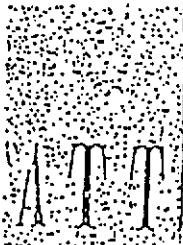
Background Soil Sample: Yes No Background Soil Sample to be Analyzed Separately: Yes No

Chain of Custody:

1. [Signature] Field Personnel 12/7/88 Date

2. _____ Courier _____ Date

3. [Signature] Lab 12-7-88 Date 10:15



934-4887

8902010

CHAIN OF SAMPLE CUSTODY RECORD

Collector: AQUA TERRA TECH Date Sampled: 2/1/89 Time: 0800
Location of Sampling: EMERYVILLE ARTIST-COOP

Project Number: 883 Survey Number: _____
Sample Type: GROUNDWATER
Container Type and Condition: 1 L AMBER / COLD
Contract Laboratory Record/Name: MED TOX

Sample ID	Field Information
<u>MW1</u>	<u>2-1 L AMBERS</u> <u>1 A, B</u>
<u>TB</u>	<u>1-1 L AMBER</u> <u>2 A 2</u>
<u>CB</u>	<u>1-1 L AMBER</u> <u>3 A 3</u>

Analysis Requested: TOG

Results Needed By: TWO WEEK TURNAROUND

Contact and results to be sent to: BRAD BENNETT

Travel Blank: Yes No Travel Blank to be Analyzed Separately: Yes No

Duplicate Samples: Yes No Duplicates to be Analyzed Separately: Yes No

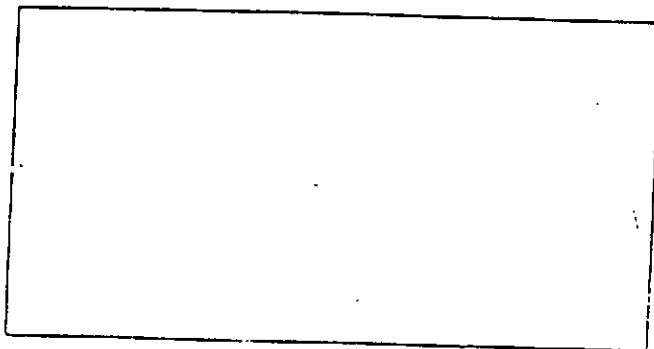
Cleaning Blank: Yes No Cleaning Blank to be Analyzed Separately: Yes No

Background Soil Sample: Yes No Background Soil Sample to be Analyzed Separately: Yes No

Chain of Custody:

1. <u>[Signature]</u>	<u>2/2/89</u>
Field Personnel	Date
2. <u>[Signature]</u>	<u>2/2/89</u>
Courier	Date
3. <u>[Signature]</u>	<u>2-2-89</u>
Lab	Date <u>1430</u>

ENVIRONMENTAL SAMPLE COLLECTION RECORD



Site Plan:

Date: 2/1/89 Time: 0800 Job No: 883

Sample ID: MW1 Location: ARTIST CO-OP

Sampling Procedure: 3 TIMES STANDING VOLUME WAS PURGED FROM WELL USING A TEFLON BAILER AND NYLON ROPE. A SAMPLE WAS THEN COLLECTED USING THE SAME EQUIPMENT.

Water Level: 8.05 pH: 7.18

Depth to bottom of well: 24.35 Salinity: E 719

Well Purge Volume: 10 GAL Turbidity: TC 17

Purge Water Fate: GROUND Organic Vapor: _____

Sampling Equipment: TEFLON BAILER, TEFLON AND STAINLESS STEEL B.E.D., NYLON ROPE

Equipment Cleaning Procedures: EQUIPMENT WAS WASHED IN A TSP SOLN THEN RINSED TWICE IN DISTILLED WATER

Sampling Handling/Storage: SAMPLES KEPT COLD UNTIL REACHING LAB

Sample Collected By: TODD MILLER

Signature: Ted Mill Title: STAFF ENGINEER

R-1
3-A

Michael Deschenes CHAIN OF SAMPLE CUSTODY RECORD

Collector: Bruce Berman Date Sampled: 4-25-89 Time: _____
Location of Sampling: 45th Street @ Horton Street, Emeryville
45th St → Horton St.
Project Number: 883.1/8107 Survey Number: _____
Sample Type: water
Container Type and Condition: 1 L amber glass, 1 L plastic, 40 ml. VOA's, pre-cleaned
Contract Laboratory Record/Name: Med Tox

Sample ID	Field Information
<u>Ritkin</u>	<u>2 one L plastic & 40 ml. VOA's</u>
<u>MWI (45th St)</u>	<u>3 one L amber glass @ A, B, C O+G</u>
<u>T.B.</u>	<u>one 1 L amber, one 1 L plastic, two 40 ml. VOA's @ 2 A, B, C</u>

Analysis Requested: Ritkin; Total Dissolved Solids, TPH Gas & BTEX
MWI (45th St); Total Oil & Grease EPA SD3E
T.B.; contact Brad Bennett for confirmation on analysis*

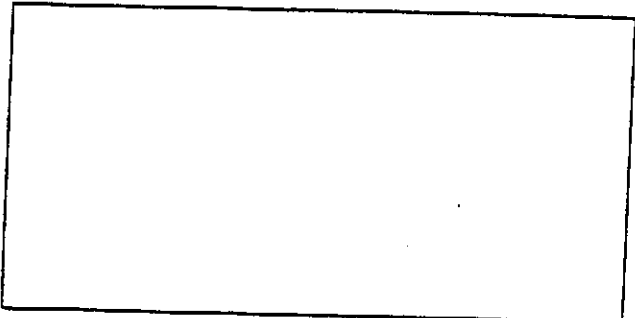
Results Needed By: 5-10-89
Contact and results to be sent to: Brad Bennett
Travel Blank: Yes No Travel Blank to be Analyzed Separately: Yes No
Duplicate Samples: Yes No Duplicates to be Analyzed Separately: Yes No
Cleaning Blank: Yes No Cleaning Blank to be Analyzed Separately: Yes No
Background Soil Sample: Yes No Background Soil Sample to be Analyzed Separately: Yes No

Chain of Custody:
Bruce Berman Michael Deschenes 4-25-89
Field Personnel
Bruce Berman Michael Deschenes 4-25-89 Date 2:20 pm
Courier
Robin Byars MED-TOX 4-25-89 Date 14:22
Lab _____ Date _____

ATT

AT

ENVIRONMENTAL SAMPLE COLLECTION RECORD



Site Plan:

Date: 4-25-89 Time: 1:05 pm. Job No: 883.1

Sample ID: MW1 Location: 45th St. Emeryville

Sampling Procedure: Purge three standing well volumes collect samples

Water Level: 7.14' pH: 6.93

Depth to bottom of well: ~24' temp: 18°C

Well Purge Volume: 8.5 gal. Salinity: cond: 1290 uS

Purge Water Fate: 55 gal. drum Turbidity: slight, light brown/gray sediment

Sampling Equipment: disposable bailers, nylon cord, surgical gloves Organic Vapor:

Equipment Cleaning Procedures: bailer, cord, & gloves discarded after use, bailer pre-cleaned by supplier.

Sampling Handling/Storage: samples placed in a cooler with ice immediately after collection.

Sample Collected By: Bruce Berman / MICHAEL DESCHENES

Signature: Bruce Berman Title: Staff Scientist
Michael Deschenes.

Anamatrix 8907157

CHAIN OF CUSTODY RECORD

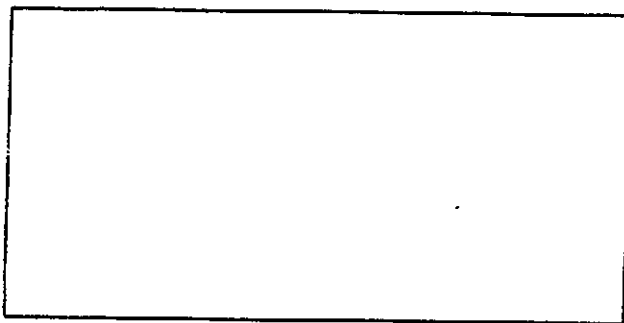
PROJ. NO. 883.1		PROJECT NAME Artists Co-op, 45th Street, Emeryville				NO OF CON- TAINERS	REMARKS				
SAMPLERS: Signature <i>Bruce Berman</i> Keith Otto		Send report attention to; Brad Bennett/ Bruce Berman									
STA NO	DATE	TIME	COMP.	GRAB	STATION LOCATION						
MW1	7-19				45th St., Emeryville	4	X			extra containers collected.	
Relinquished by: Signature <i>Bruce Berman</i>		Date/Time 7-21-89 10:35	Received by: Signature <i>T. H. Meyer</i>		Date/Time 7-21-89 10:35	REMARKS: normal temperature time					
Relinquished by: Signature		Date/Time	Received by: Signature		Date/Time	Company Name: Aqua Terra Technologies Address: 2950 Burkirk Ave., Suite 120 Walnut Creek, CA. 94596					
Relinquished by: Signature		Date/Time	Received by: Signature		Date/Time						

Anamatrix, Inc.
Analytical & Environmental Chemistry
1961 Concordo Drive, Suite E
San Jose, CA 95131

ATT

ATT

ENVIRONMENTAL SAMPLE COLLECTION RECORD



Site Plan:

Date: 7-19-89 Time: 1:40 pm Job No: 883.1Sample ID: MW1 Location: 45th Street, Emeryville.Sampling Procedure: Purge three standing well volumes, collect sampleWater Level: 6.84' pH: 6.25Depth to bottom of well: 724' Cond. = 0860 uSWell Purge Volume: 9 gal. Salinity: temp. = 19°CPurge Water Fate: 55 gal. down Turbidity: very slight, almost clear (gray sediment)Sampling Equipment: polyethylene disposable bailer, nylon cord, surgical gloves Organic Vapor: PEquipment Cleaning Procedures: cord, gloves, and bailer discarded after each use, bailer pre-cleaned by supplier.Sampling Handling/Storage: Samples placed in a cooler with ice immediately after collection.Sample Collected By: Bruce BermanSignature: Bruce Berman Title: Staff Scientist

Aqua Terra Technologies

• 2950 Buskirk Avenue Ste. 120
 Walnut Creek, CA 94596
 Tel. (415) 934-4884
 • Fax. (415) 934-0418

ATT

CHAIN OF SAMPLE CUSTODY RECORD
 (original document, please return)

Page 1 of 1

Sampled By: RICHARD BAUSH

Date Sampled: 10/12/89

Signature: *Richard Baush*

Job Number: 883.1

Results To Be Sent To: BRAD BENNETT

Laboratory Name: MED-TOX

Results Needed By: 10/27/89

Contact: _____

Sampling Location: _____

Phone #: _____

Sample Identification						Analysis/EPA Method No.							
Sample Collection			Number of Containers	Preserved	Containers				TPH GAS	TPH DIESEL			Remarks
Sample ID	Time (24 hr)	Matrix			50% LT	1 LT							
MW1	12:00	WATER	4	NO	2				X	X			
BTB	11:40	"	2	NO	2				X				
:	:	:	:	:	:	:	:	:	:	:	:	:	:
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Notes:

Relinquished By	Date	Time
		:
		:
		:

Received By	Date	Time
		:
		:
		:



ENVIRONMENTAL SAMPLE COLLECTION RECORD



Site Plan:

TRAVEL/BATTLER BLANK

Date: 10/12/84 Time: 11:40 Job No: 883.1

Sample ID: BTB Location: ARTIST CO-OP

Sampling Procedure: 4 STANDING VOLUMES WERE REMOVED FROM WELLS USING A PERFL BATTLE THE SAME BATTLE WAS THEN USED TO COLLECT THE SAMPLES

Water Level: pH:

Depth to bottom of well: Salinity:

Well Purge Volume: Turbidity:

Purge Water Fate: 55 GAL DOWN Organic Vapor:

Sampling Equipment: WELL SOUNDER, PH METER THERMOMETER RUBBER GLOVES, TEFLON BATTLE, NYLON CORD

Equipment Cleaning Procedures: THE EQUIPMENT WAS WASHED IN TSP AND RINSED IN DISTILLED WATER TWO TIMES

Sampling Handling/Storage: SAMPLES KEPT IN A COOLER UNTIL REACHING THE LAB

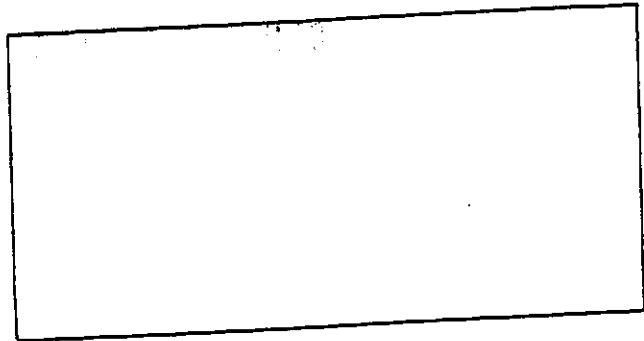
Sample Collected By: RICHARD BRUSH

Signature: [Signature] Title: FIELD TECH

ATT

ATT

ENVIRONMENTAL SAMPLE COLLECTION RECORD



Site Plan:

Date: 10/12/89 Time: 12:00 Job No: 883.1

Sample ID: MW1 Location: ARTIST CO-OP

Sampling Procedure: 4 STANDING VOLUMES WERE RETRIEVED FROM WELLS USING A PERLO BAITER THE SAME BAITER WAS THEN USED TO COLLECT THE SAMPLES

Water Level: 6.51 pH: 6.48

Depth to bottom of well: 24' Salinity: 770
CONC.

Well Purge Volume: 11 Turbidity: VERY LIGHT
COLOR: TAN

Purge Water Fate: 55 GAL DOWN Organic Vapor: NONE

Sampling Equipment: WEL SOUNDER, PH METER THERMOMETER RUBBER GLOVES, TEFLON BAITER, NYLON CORD

Equipment Cleaning Procedures: THE EQUIPMENT WAS WASHED IN TSP AND RINSED IN DISTILLED WATER TWO TIMES

Sampling Handling/Storage: SAMPLES KEPT IN A COOLER UNTIL REACHING THE LAB

Sample Collected By: RICHARD BRUSH

Signature: [Signature] Title: FIELD TECH