

December 15, 1989

DEC 19 1989

ATT

Mr. Harvey Rifkin
Rifkin Realty Partners
81 Lansing Street, Suite 106
San Francisco, CA 94105-2611

Subject: Final Quarterly Sampling Report
4549 Horton Street
Emeryville, CA
(Project No. 8107)

Dear Mr. Rifkin:

Aqua Terra Technologies, Inc (ATT) is pleased to present a summary of the quarterly groundwater monitoring activities at the subject property. The following report provides a discussion of the project history, sample collection, analytical results, and conclusions. This report represents the completion of the scope of work presented in the December 28, 1988 ATT proposal, and satisfies the Alameda County Health Care Services Agency (ACHCSA) monitoring requirements for 1989.

Project History

~~Two underground fuel storage tanks were removed from the subject property in July and September of 1988.~~ Safety Specialists installed a monitoring well at the site in November 1988 following tank removal. Analytical results of a groundwater sample collected by Safety Specialists indicated the presence of TPH as gasoline and diesel, and benzene, toluene, ethylbenzene, and xylenes (BTEX). The ACHCSA required that quarterly groundwater monitoring be conducted at the site. ATT began monitoring groundwater at the subject property in February 1989 in accordance with the ACHCSA requirements.

Sample Collection

ATT performed four groundwater monitoring events at the subject property during 1989. Groundwater samples were collected at the subject property on February 1, April 25, July 20, and November 22, 1989. The groundwater samples were collected in accordance with the protocol presented in Attachment A. These four monitoring events were conducted in response to ACHCSA requirements, and satisfy the ACHCSA requirements for quarterly monitoring at the site.

Aqua Terra Technologies
Consulting Engineers
& Scientists

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

Mr. Harvey Rifkin
Rifkin Realty Partners
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TPH as gasoline, and BTEX were selected for analysis based on historical analytical results at the site, and since these compounds are generally considered to possess a greater health risk than TPH as diesel or oil and grease compounds.

Analytical Results

Results of the four monitoring events conducted by ATT at the subject property are summarized in Table 1, Attachment B. Laboratory analytical reports, chain of custody documentation, and sample collection records are provided in Attachment B. The analytical results for the four monitoring events indicate that the groundwater at the site contains TPH as gasoline, and BTEX. The levels of these compounds in the site groundwater appear to have reached a static condition (Table 1). Data obtained from the monitoring events has revealed very little variation in the concentrations of TPH as gasoline and BTEX in site groundwater over the ~~past~~ four monitoring events.

Discussion

The analytical results of the four groundwater monitoring events conducted in 1989 indicate the presence of TPH as gasoline and BTEX in the site groundwater. The occurrence of these compounds appears to have reached a static condition. The analytical results indicate that a slight decrease in levels of BTEX has occurred during the past four monitoring events. The analytical data suggest that the soils have been remediated to remove the source area associated with the former underground fuel storage tanks.

ATT conducted a Preliminary Environmental Site Assessment (Attachment C) at the subject property in June 1989. A survey of the historical land use within a one half mile radius of the subject property indicates that this vicinity has been characterized by heavy industry and manufacturing for at least the past 100 years. ATT encountered evidence that at least 12 cases of unauthorized releases from underground fuel storage tanks exist within a one half mile radius of the subject property. In addition, at least 15 toxic sites exist within a one half mile radius of the subject property. The information available to ATT at the time of preparation of the June report indicated that the

Mr. Harvey Rifkin
Rifkin Realty Partners
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majority of these sites were conducting monitoring activities and did not require further remedial action.

Conclusions

The occurrence of organic and inorganic compounds in soils and groundwater in the vicinity of the subject property does not appear to be an uncommon phenomenon. Land use in this area does not appear to have changed dramatically over the past 100 years. The results of the 1989 quarterly groundwater monitoring activities indicated that the levels of TPH and BTEX have reached a static condition at the site.

ATT recommends that quarterly groundwater monitoring be discontinued and that an annual groundwater monitoring schedule be implemented. The analytical results obtained from the four 1989 groundwater monitoring events, and the location of the subject property justify this reduction in monitoring activities. ATT further recommends that a copy of this report be forwarded to the ACHCSA and the San Francisco Bay Region of the Regional Water Quality Control Board for review and 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 Schreiner, Ph.D.
Civil Engineer No. 38735 (Expires 3/31/93)

BJB/RWS:pd
Attachments

ATTACHMENT A

SOIL & GROUNDWATER SAMPLE
COLLECTION & HANDLING PROTOCOL

INTRODUCTION & PURPOSE

Because reliable and representative test results must be generated from soil and groundwater samples, it is essential to establish a sampling procedure which assures that all samples are:

- Collected by approved and repeatable methods
- Representative of the materials(s) at the desired location and depth
- Uncontaminated by container and sampling equipment

The following sampling protocol was designed to be a guide to the sampling and handling procedures for soil and groundwater samples. Based on conditions which may be encountered in the field, some modifications to this protocol may be required to fit the needs of an individual site.

SAMPLING PROCEDURES

Groundwater Sampling

Prior to collecting groundwater samples, monitoring wells were purged by bailing until pH, conductivity, and temperature levels stabilize. Wells were purged and groundwater samples were obtained using a Teflon bailer and nylon rope. New nylon rope is used for each well.

The appropriate number of sample containers and type were used for each sample collected, in accordance with the analytical laboratory requirements and EPA protocol. The bottles were filled using the bailer. All sample bottles were pre-cleaned by the supplier according to EPA protocols.

To prevent cross contamination of groundwater samples by the sampling equipment, all equipment used in sampling was washed with a trisodium phosphate solution, triple rinsed with distilled water, and allowed to air dry prior to each use. A sample of the distilled water used

in the final rinse was retained for analysis as part of sample quality assurance.

Soil Sampling

After the soil sampler is driven to the desired depth and the samples are retrieved, each end of the ring containing the soil sample is retained for laboratory analysis was sealed with Teflon sheeting, covered with plastic end caps, and sealed with PVC tape. All sample containers (tubes and end caps) were steamed cleaned and air dried prior to use. The soil sample recovered in the ring just above the sample retained for chemical analysis was examined in the field for visual and olfactory indications of chemical contamination and used for lithologic description.

The Unified Soil Classification System (USCS) was used to log and describe the soil by the on-site geologist. These logs also include details of the sampling process such as depth, apparent odors, discoloration, and any other factors which may be required to evaluate the presence of contamination at the site.

POST SAMPLING PROCEDURES

One field/travel blank consisting of one sample bottle filled with distilled water accompanied soil and groundwater sample containers at all times, including during transport to and from the site. Distilled water field/travel blanks were analyzed according to the appropriate EPA Methods corresponding to the soil/groundwater sample analyses.

Sample containers were labeled with sample number, project number, date, and the initials of the person collecting the sample. A separate sample collection record was maintained for each groundwater sample collected.

Soil and groundwater samples collected were analyzed by an analytical laboratory certified by the California Department of Health Services (DHS) for complete chemical analysis of hazardous waste as well as drinking water samples. Quality assurance documentation accompanied all analytical reports generated by the laboratory.

The samples were placed in an ice cooler immediately following collection, and remained in the ice cooler until refrigerated at the analytical laboratory. The samples were delivered to the laboratory direct by

Table 1. Analytical Results
Groundwater Monitoring
4549 Horton Street
Emeryville, CA

Date Sampled	TPH as Gasoline (mg/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)
2/01/89	1.9	160	12	16	74
4/25/89	2.3	120	11	10	10
7/20/89	2.1	35	ND	ND	11
11/22/89	2.1	98	7	9	16

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES

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

LABORATORY ANALYSIS REPORT


AQUA TERRA TECHNOLOGIES
CONSULTING ENGINEERS & SCIENTISTS
2950 BUSKIRK AVE., STE 120
WALNUT CREEK, CA 94596
ATTN: Brad Bennett

REPORT DATE: 02/22/89
DATE SAMPLED: 02/01/89
DATE RECEIVED: 02/02/89
MED-TOX JOB NO: 8902009

CLIENT PROJECT ID: 8107

ANALYSIS OF: ONE WATER SAMPLE FOR BENZENE, TOLUENE,
ETHYLBENZENE, XYLENES, AND TOTAL PETROLEUM
HYDROCARBONS

See attached for results


Michael Lynch, Manager
Organic Laboratory

Results FAXed to Brad Bennett 02/14/89

AQUA TERRA TECHNOLOGIES

CLIENT ID: MW1
CLIENT JOB NO: 8107

MED-TOX LAB NO: 8902009-01A
MED-TOX JOB NO: 8902009

DATE SAMPLED: 02/01/89
DATE RECEIVED: 02/02/89

DATE ANALYZED: 02/02-03/89
REPORT DATE: 02/22/89

TOTAL PETROLEUM HYDROCARBONS WITH PURGEABLE AROMATICS

METHOD: EPA 602, 8015 (PURGE & TRAP)

	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	160	0.5
Toluene	12	0.5
Ethylbenzene.	16	0.5
Xylenes	74	2
Total Petroleum Hydrocarbons as:		
Gasoline	1.9 mg/L	0.1 mg/L

ND = Not detected at or above indicated method detection limit

AQUA TERRA TECHNOLOGIES

CLIENT ID: CB
CLIENT JOB NO: 8107

MED-TOX LAB NO: 8902009-02A
MED-TOX JOB NO: 8902009

DATE SAMPLED: 02/01/89
DATE RECEIVED: 02/02/89

DATE ANALYZED: 02/02/89
REPORT DATE: 02/22/89

TOTAL PETROLEUM HYDROCARBONS WITH PURGEABLE AROMATICS

METHOD: EPA 602, 8015 (PURGE & TRAP)

	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	ND	0.5
Toluene	1	0.5
Ethylbenzene.	ND	0.5
Xylenes	ND	2

Total Petroleum Hydrocarbons as:

Gasoline ND mg/L 0.1 mg/L

ND = Not detected at or above indicated method detection limit

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES

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LABORATORY ANALYSIS REPORT

AQUA TERRA TECHNOLOGIES
2950 BUSKIRK AVE., STE. 120
WALNUT CREEK, CA 94596

ATTN: BRAD BENNETT

CLIENT PROJECT NO: 8107

REPORT DATE: 05/13/89

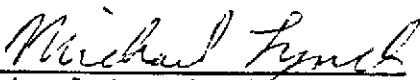
DATE SAMPLED: 04/25/89

DATE RECEIVED: 04/25/89

MED-TOX JOB NO: 8904146

ANALYSIS OF: ONE WATER SAMPLE FOR TOTAL DISSOLVED SOLIDS,
BTXE AND TOTAL PETROLEUM HYDROCARBONS

Sample Identification		Total Dissolved Solids (mg/L)
Client Id.	Lab No.	
Rifkin	01A	1,300
T.B.	02A	ND
Detection Limit		10
Method		SM209B


Michael Lynch, Manager
Organic Laboratory

Results FAXed to Bruce Berman 05/10/89

AQUA TERRA TECHNOLOGIES

CLIENT ID: Rifkin
CLIENT JOB NO: 8107

MED-TOX LAB NO: 8904146-01C
MED-TOX JOB NO: 8904146

DATE SAMPLED: 04/25/89
DATE RECEIVED: 04/25/89

DATE ANALYZED: 05/07-08/89
REPORT DATE: 05/13/89

BTXE AND TOTAL PETROLEUM HYDROCARBONS

METHOD: EPA 602, 8015 (PURGE & TRAP)

	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	120	0.5
Toluene	11	0.5
Ethylbenzene.	10	0.5
Xylenes	10	2

TOTAL PETROLEUM HYDROCARBONS AS:

Gasoline 2.3 mg/L 0.1 mg/L

ND = Not detected at or above indicated method detection limit

AQUA TERRA TECHNOLOGIES

CLIENT ID: Rifkin
CLIENT JOB NO: 8107

MED-TOX LAB NO: 8904146-02B
MED-TOX JOB NO: 8904146

DATE SAMPLED: 04/25/89
DATE RECEIVED: 04/25/89

DATE ANALYZED: 05/08/89
REPORT DATE: 05/13/89

BTXE AND TOTAL PETROLEUM HYDROCARBONS

METHOD: EPA 602, 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 at or above indicated method detection limit

ANAMETRIX INC

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



REPORT

Bruce Berman
Aqua Terra Technologies
2950 Buskirk Avenue
Suite 120
Walnut Creek, CA 94596

July 28, 1989
Anamatrix W.O.#: 8907158
Date Received : 07/21/89
Purchase Order#: N/A

Dear Mr. Berman:

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 that reads "Terry Cooke".

Terry Cooke
TPH Supervisor

TC/dag

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

Client : Aqua Terra Technologies
 Address : 2950 Buskirk Avenue
 Suite 120
 City : Walnut Creek, CA 94596
 Attn. : Bruce Berman

Anamatrix W.O.#: 8907158
 Date Received : 07/21/89
 Purchase Order#: N/A
 Project No. : 8107
 Date Released : 07/28/89

Anamatrix I.D.	Sample I.D.	Matrix	Date Sampled	Method	Date Extract	Date Analyzed	Inst I.D.
RESULTS							
8907158-01	8107	WATER	07/20/89	TPHg		07/25/89	N/A

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

Sample I.D. : 8107
 Matrix : WATER
 Date sampled : 07/20/89
 Date anl.TPHg: 07/25/89
 Date ext.TPHd: N/A
 Date anl.TPHd: N/A

Anamatrix I.D. : 8907158-01
 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	5	35
108-88-3	Toluene	5	ND
100-41-4	Ethylbenzene	5	ND
1330-20-7	Total Xylenes	10	11
	TPH as Gasoline	500	2100

- ND - Below reporting limit.
 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.

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

ATTN: BRAD BENNETT

CLIENT ID: 8107

REPORT DATE: 12/12/89


DATE SAMPLED: 11/22/89

DATE RECEIVED: 11/22/89

MED-TOX JOB NO: 8911149

ANALYSIS OF: ONE WATER SAMPLE FOR BTXE & PURGEABLE
HYDROCARBONS

See attached for results


Michael Lynch, Manager
Organic Laboratory

Results FAXed to Brad Bennett 12/08/89

AQUA TERRA TECHNOLOGIES

CLIENT ID: MW1
CLIENT JOB NO: 8107
DATE SAMPLED: 11/22/89
DATE RECEIVED: 11/22/89
REPORT DATE: 12/12/89

MED-TOX LAB NO: 8911149-02A
MED-TOX JOB NO: 8911149
DATE ANALYZED: 12/04-07/89
INSTRUMENT: 9

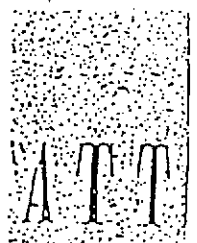
BTXE AND HYDROCARBONS

METHOD: EPA 8020, 8015

	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	98	0.5
Toluene	7	0.5
Ethylbenzene.	9	0.5
Xylenes	16	2

PURGEABLE HYDROCARBONS AS:

Gasoline 2.1 mg/L 0.1 mg/L



CHAIN OF SAMPLE CUSTODY RECORD

8902009

Collector: AQUA TERRA TECH Date Sampled: 2/1/89 Time: 0730
Location of Sampling: EMERYVILLE - RIFKIN

Project Number: 8107 Survey Number: _____

Sample Type: GROUNDWATER

Container Type and Condition: 40 ml VOA / COOL

Contract Laboratory Record/Name: MEDTOX

Sample ID	Field Information
MW 1	2 - 40 ml VOA
CB	"
TB	"
	1 A, B
	2 A, B
	3 A, B

Analysis Requested: TPH GAS, BTX

PLEASE HOLD TB - DO NOT ANALYZE WITHOUT VERBAL CONSENT

Results Needed By: 2 WEEK TURN AROUND

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. [Signature] Field Personnel 2/2/89 Date
2. [Signature] Courier 2/2/89 Date
3. [Signature] Lab 2-2-89 Date 1430

R-1 S-A
R-3 S-1

8107
8904/46

2950 Buskirk Ave., Suite 120
Walnut Creek, CA 94596
(415) 934-4884

Michael Deschenes CHAIN OF SAMPLE CUSTODY RECORD

Collector: Bruce Berman Date Sampled: 4-25-89 Time: _____
 Location of Sampling: 45th Street & Horton Street, Emeryville
 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; 2 one L plastic & 1 L amber glass</u>	<u>40 ml. VOA's: TDS THBTW</u>
<u>MWI (45th St); 3 one L amber glass</u>	<u>OIA, B TDS</u>
<u>T.B.; one 1 L amber, one 1 L plastic, two 40 ml. VOA's</u>	<u>ORR, D, E, F THBTW</u>

Analysis Requested: Ritkin; Total Dissolved Solids, TPH Gas & BTEX
MWI (45th St); Total Oil & Grease EPA 503E
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:

1. <u>Bruce Berman</u>	<u>Michael Deschenes</u>	<u>4-25-89</u>	<u>8:00</u>
Field Personnel		Date	
2. <u>Bruce Berman</u>	<u>Michael Deschenes</u>	<u>4-25-89</u>	<u>2:20 pm</u>
Courier		Date	
3. <u>Robin Byars</u>	<u>MED-TOX</u>	<u>4-25-89</u>	<u>14:22</u>
Lab		Date	

Anamatrix 8907158 CHAIN OF CUSTODY RECORD

PROJ. NO. 8107	PROJECT NAME Ritkin Realty Horton St, Emeryville				NO OF CON-TAINERS	REMARKS
SAMPLERS: Signature Send report attention to;						
STA NO	DATE	TIME	COMP.	GRAB	STATION LOCATION	
8107	7-20				Horton St, Emeryville	4

STEX
TPH-Gas

extra containers collected.

Relinquished by:Signature <i>[Signature]</i>	Date/Time 7-21-89 10:35	Received by:Signature <i>[Signature]</i>	Date/Time 7/21/89 10:35
Relinquished by:Signature	Date/Time	Received by:Signature	Date/Time
Relinquished by:Signature	Date/Time	Received by:Signature	Date/Time

REMARKS: normal turnaround time

Company Name: Aqua Terra Technologies
Address 2950 Baskin Ave, Suite 120
Walnut Creek, CA. 94596
(415) 934-4884

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

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

Sampled By: Layne Williams

Date Sampled: 11 / 22 / 89

Signature: Layne Williams

Job Number: 8109^{LU} 8107

Results To Be Sent To: Brad Bennet

Laboratory Name: Med-Tox

Results Needed By: 12/18/89

Contact: _____

Sampling Location: _____

Phone #: _____

Sample Identification						Analysis/EPA Method No.									
Sample Collection			Number of Containers	Preserved	Containers					Remarks					
Sample ID	Time (24 hr)	Matrix			40ml	100ml	100ml	100ml	100ml		100ml				
B TB	13:15	Water	2 *	2						X	X				See Notes
MW1	13:40	Water	4 *	4						X	X				
	:														
	:														
	:														
	:														
	:														
	:														
	:														
	:														

OIA
 2A
 B
 C
 D

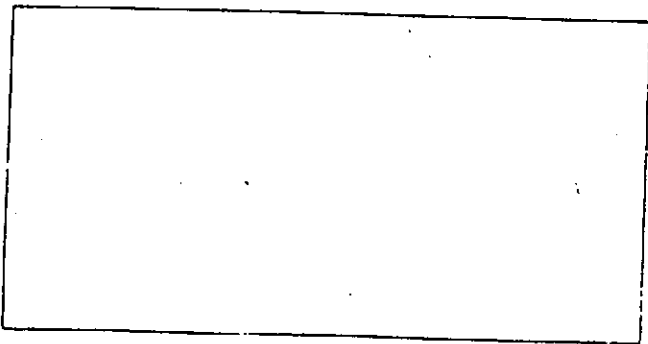
Notes: * on ice. Normal Turnaround
TB denotes a Travel Blank.

Relinquished By	Date	Time
<u>Layne Williams</u>	<u>11/22/89</u>	<u>15:36</u>
		:
		:

Received By	Date	Time
<u>Kay Gueford</u>	<u>11/22/89</u>	<u>15:36</u>
		:
		:

ENVIRONMENTAL SAMPLE COLLECTION RECORD

AT



Site Plan:

Date: 2/1/89 Time: 0730 Job No: 810

Sample ID: MW 1 Location: RIFKIN

Sampling Procedure: 3 TIMES THE STANDING VOLUME WAS
PURGED AND THEN A SAMPLE WAS COLLECTED, BOTH USING
A TEFLON BAILER AND NYLON ROPE. TB + CB ALSO
COLLECTED

Water Level: 9.51 pH: 6.12

Depth to bottom of well: 22.22 Salinity: 1920

Well Purge Volume: 8 GAL Turbidity: 17

Purge Water Fate: GROUND Organic Vapor: _____

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

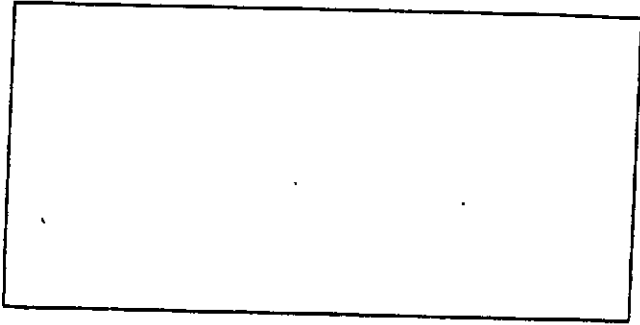
Equipment Cleaning Procedures: EQUIPMENT WAS WASHED
WITH A TSP SOLUTION AND RINSED TWICE IN DISTILLED
WATER

Sampling Handling/Storage: SAMPLES KEPT COLD UNTIL
REACHING LAB

Sample Collected By: LODD MILLER

Signature: Lodd Mill Title: STAFF ENGINEER

ENVIRONMENTAL SAMPLE COLLECTION RECORD



Site Plan:

Date: 4-25-89 Time: 12:10 pm Job No: 8107
 Sample ID: RIPKIN Location: 4543 Horton St. Emeryville
 Sampling Procedure: Purge three standing well volumes, collect sample

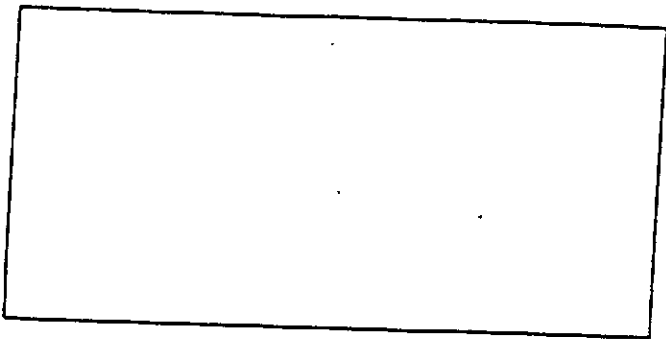
Water Level: 8.23' pH: 6.18
 Depth to bottom of well: ~22' temp: 18°C
 Well Purge Volume: 7 gal. salinity: 1960 uS
 Purge Water Fate: 55 gal. drum Turbidity: slight, light brown/gray sediment
 Sampling Equipment: disposable bailer, nylon cord, surgical gloves Organic Vapor: odor

Equipment Cleaning Procedures: bailer, cord, & gloves discarded after collecting sample, 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

ENVIRONMENTAL SAMPLE COLLECTION RECORD



Site Plan:

Date: 7/20/89 Time: Job No: 8071

Sample ID: Location: RICKIN

Sampling Procedure: Purged 3 times the standing volume. Samples were taken using disposable bailer and 4-40ml VOA'S. ALSO TWO TB'S WERE TAKEN

Water Level: 8.25 pH: 5.50

Depth to bottom of well: 22' COND 1680

Well Purge Volume: 7 gals Turbidity: MEDIAN

Purge Water Fate: Organic Vapor: HEAVY

Sampling Equipment: DISPOSABLE BAILER, NYLON ROPE, 40 ml VOAS

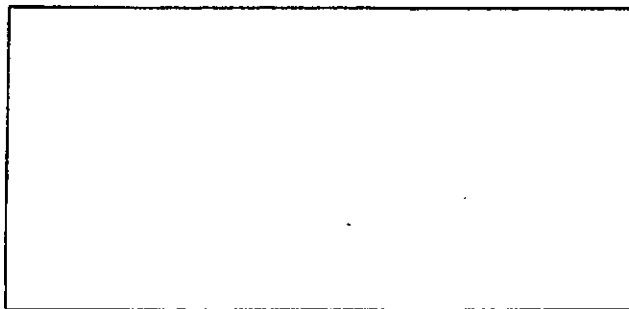
Equipment Cleaning Procedures: N/A

Sampling Handling/Storage: SAMPLES WERE PUT ON BLUE ICE & BROUGHT TO ATT TO BE SENT TO LAB

Sample Collected By: KEITH OTTO

Signature: [Signature] Title: STAFF SCIENTIST

ENVIRONMENTAL SAMPLE COLLECTION RECORD



Site Plan:

Date: 11/22/89 Time: 1340 Job No: 8107

Sample ID: MW1 Location: Ritkin Realty
4543 Barton St.

Sampling Procedure: REMOVED 4 STANDING WELL VOLUMES OF
WATER FROM WELL BEFORE COLLECTING SAMPLES.
SAMPLES WERE COLLECTED WITH A PRE CLEANED TEFLON
BAILER

Water Level: 8.08' pH: 5.75

Depth to bottom of well: ~ 22' Conductivity: 1420

Well Purge Volume: 9 gal Temp: 18° Turbidity: Med.

Purge Water Fate: 55 GAL. DRUM Color: greenish-brown Organic Vapor: yes

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

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

Sampling Handling/Storage: SAMPLES ARE KEPT IN A
COOLER WITH BLUE ICE UNTIL REACHING THE LAB

Sample Collected By: RICHARD BRUSH

Signature: *Richard Brush* Title: STAFF TECHNICIAN