

**APRIL, 1992 QUARTERLY GROUND
WATER SAMPLING REPORT
FOR
1970 SEMINARY AVENUE
OAKLAND, CALIFORNIA**

HOEXTER CONSULTING

734 Torrey Court
Palo Alto, California 94303

(415) 494-2505

92 JUL -01 AM 12:45

TRANSMITTAL

TO Alameda County - Department of
Environmental Health
80 Swan Way Room 200
Oakland CA 94621

DATE 5/29/92
VIA US Mail
FAH NO. _____

ATTENTION Mr. Larry Sato

PROJECT 1970 Seminary
Oakland, CA

JOB NO. E-10-1-019

DESCRIPTION May 29, 1992 Quarterly Report

Number of pages, including cover page, if FAH _____

COMMENTS _____

ACTION

- As requested
- For your use
- Please return when finished
- Please review and comment
- Other _____

COPY TO _____

BY D. F. Hoexter
David F. Hoexter

Geology / Engineering Geology / Environmental Studies

**HOEXTER CONSULTING
DAVID F. HOEXTER, C.E.G./R.E.A.
734 Torrey Court
Palo Alto, California 94303**

(415) 494-2505

May 29, 1992
E-10-1-019

Mr. Doyle Gruit
14366 Lark Street
San Leandro, California 94578

RE: APRIL, 1992 QUARTERLY
GROUND WATER SAMPLING
REPORT

Dear Mr. Gruit:

Enclosed is our April, 1992 quarterly ground water sampling report for the property located at 1970 Seminary Avenue, corner of Harmon, in Oakland, California. This sampling round is the second quarterly sampling performed by Hoexter Consulting at the site. The results of an initial sampling round by Kaldveer Associates, Inc, following well installation, and the previous Hoexter Consulting sampling, are included in the analytical results summary table.

The results of this investigation indicate that the water sample from the on-site well contains 500 parts per million (ppm) total petroleum hydrocarbons as gasoline. The water sample also contains the aromatic compounds benzene, toluene, xylenes, and ethylbenzene, at concentrations of 3.4, 6.4, 45, and 10 ppm respectively, and oil and grease at a concentration of 440 ppm. A field split of the water samples, analyzed by a second laboratory, contained 175 ppm gasoline, and 4.2, 4.4, 14.6, and 3.2 ppm benzene, toluene, xylenes, and ethylbenzene, respectively. Oil and grease were not tested for in the second sample.

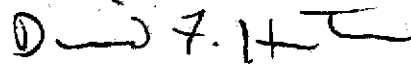
The test results are generally significantly lower than the January, 1992 sampling results.

We recommend that copies of this report be submitted to the California Regional Water Quality Control Board and the Alameda County Department of Environmental Health. The next round of sampling is scheduled for the week of July 27, 1992.

We appreciate the opportunity to provide services to you on this project and trust this report meets your needs at this time. If you have any questions, or require additional information, please do not hesitate to call.

Very truly yours,

HOEXTER CONSULTING, INC.



David F. Hoexter, CEG/REA
Principal

Copies: Addressee (2)
California Regional Water Quality Control Board (1)
Attention: Mr. Tom Callaghan
Alameda County, Department of Environmental Health (1)
Attention: Mr. Larry Seto

APRIL, 1992 QUARTERLY
GROUND WATER SAMPLING REPORT

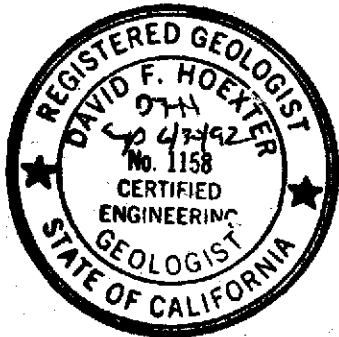
For

1970 Seminary Avenue
Oakland, California

To

Mr. Doyle Gruit
14366 Lark Street
San Leandro, California 94578

May, 1992



D. F. Hoexter

David F. Hoexter, C.E.G. / R.E.A.
Principal

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APRIL, 1992 QUARTERLY GROUND WATER
SAMPLING REPORT
FOR
1970 SEMINARY
OAKLAND, CALIFORNIA

I. INTRODUCTION

This report presents the results of the April, 1992 quarterly ground water sampling at 1970 Seminary, Oakland, California. The project location is shown on the Site Location Map, Figure 1. The scope of services provided during this investigation consisted of collecting and analyzing ground water samples from one on-site monitoring well. Ground water samples were analyzed for total petroleum hydrocarbons as gasoline, for purgeable aromatic compounds, and for oil and grease. Well locations are shown on the Well Location Map, Figure 2.

II. FIELD INVESTIGATION

The ground water monitoring well was sampled by a representative of Sequoia Analytical on April 27, 1992. The entire well purging and sampling procedure was observed by David F. Hoexter, CEG/REA. Following an initial ground water level measurement (Table 1), five well-casing volumes of water were purged from the well using a teflon bailer. Following purging, samples were collected using the teflon bailer, placed in appropriate sample containers supplied by the analytical laboratory, labeled, and placed in refrigerated storage for transport to the laboratory under chain-of-custody control. A duplicate (split) sample from the same sample recovery bailer was obtained, and transported in a similar manner to a second, independent analytical laboratory. All sampling equipment was thoroughly cleaned with trisodium phosphate detergent and rinsed with distilled water prior to sampling the well. Monitoring well sampling logs and the chain of custody are attached to this report as a part of Appendix I. The laboratories are California Department of Health Services approved for the requested analyses.

III. ANALYTICAL RESULTS

A. Laboratory Procedures

The ground water sample was analyzed by Sequoia Analytical of Redwood City, California. The sample was analyzed for total petroleum hydrocarbons as gasoline using EPA Method 5030/8015; for purgeable aromatic compounds (BTEX) using EPA Method 8020; and for oil and grease (total recoverable petroleum oil) using Standard Method 5520 C&F (IR).

The second ground water sample was analyzed by Applied Remediation Environmental Laboratory of San Jose, California. The sample was also analyzed by methods 5030/8015/8020. The sample was not analyzed for oil and grease.

B. Analytical Results

The results of the chemical analyses are presented on Table 2 and are attached to this report as a part of Appendix I. Analytical results of all previous testing, including the August, 1990 sampling by Kaldveer Associates, Inc, following well installation, are also included.

The current analytical results indicate that hydrocarbons as gasoline were detected in the monitoring well at a concentration of 500 ppm. The purgeable aromatic compounds benzene, toluene, xylenes and ethylbenzene were detected at concentrations of 6.4, 45, and 10 ppm, respectively. Oil and grease was detected at a concentration of 440 ppm.

Testing of the second, split sample indicated the presence of 175 ppm gasoline, and 4.4, 14.6, and 3.2 ppm benzene, toluene, ethylbenzene and xylenes, respectively.

The test results are essentially consistent, although the second sample is significantly lower in gasoline content. Both sets of analyses are significantly lower for gasoline and purgeable aromatic compounds than the test results obtained in the January, 1992 sampling. The concentration of oil and grease apparently increased, although this may be due to a change in analysis method from gravimetric to infrared.

It should be noted that floating product was not observed in the initial sounding of the well, although a sheen (floating film) of oil was observed. This film was present in the bailer after purging five well volumes, and a sheen was visible in the sample containers.

IV. LIMITATIONS

This report has been prepared according to generally accepted geologic and environmental practices. No other warranty, either expressed or implied as to the methods, results, conclusions or professional advice provided is made. The analysis, conclusions and recommendations contained in this report are based on site conditions as they existed at the time of our investigation; review of previous reports relevant to the site conditions; and laboratory results from an outside analytical laboratory.

Changes in the information or data gained from any of these sources could result in changes in our conclusions or recommendations. If such changes do occur, we should be advised so that we can review our report in light of those changes.

TABLE 1

GROUND WATER ELEVATION DATA
(All Measurements in Feet)

<u>Well Number</u>	<u>Well Top Elevation</u>	<u>Depth to Water</u>	<u>Relative Ground Water Elevation</u>
MW-1 1/28/92	N/A	21.0	N/A
4/27/92	N/A	20.95	N/A

Notes:

(1) N/A = Not Applicable

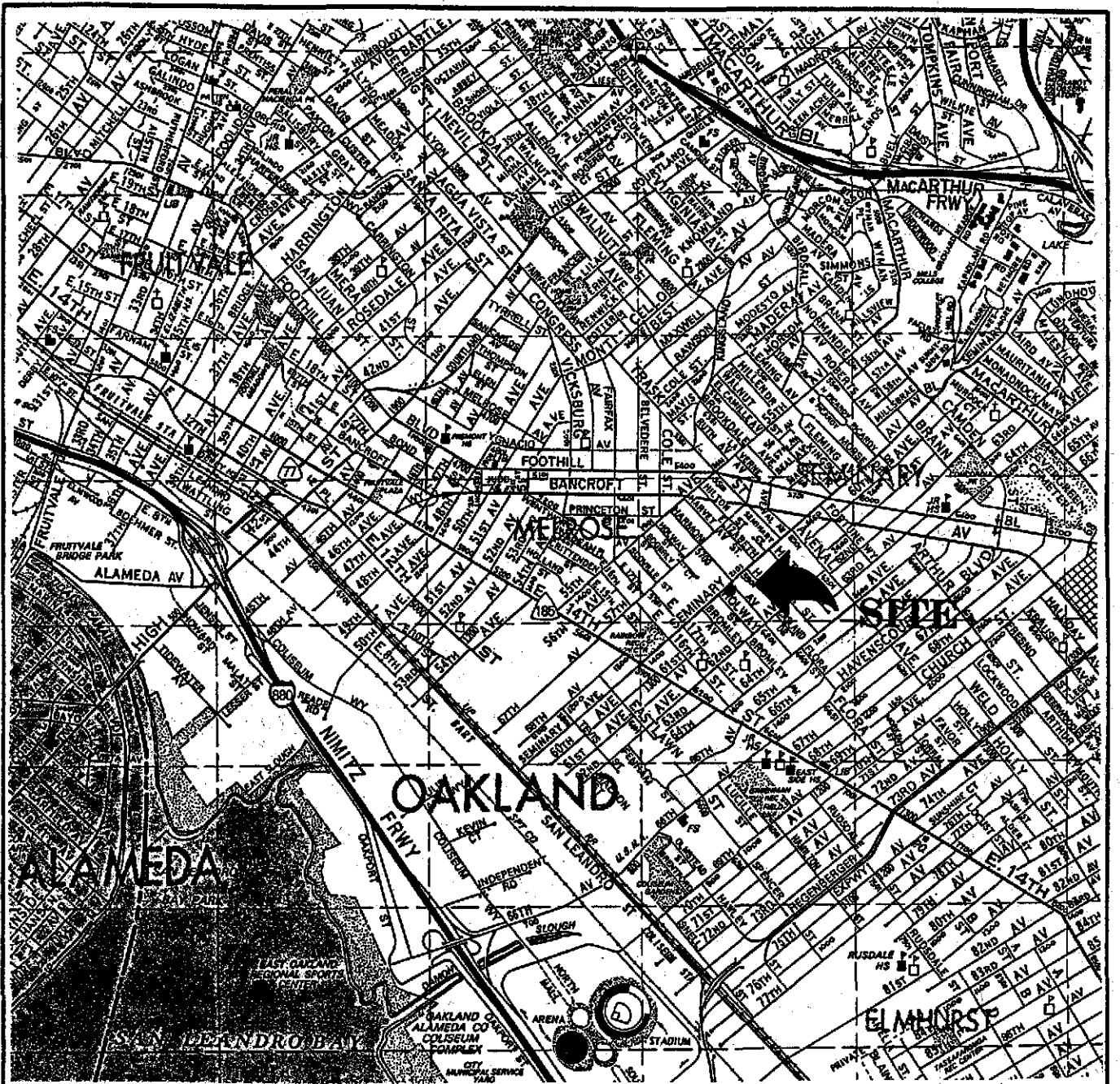
TABLE 2

SUMMARY OF GROUND WATER ANALYSES
(Results reported in parts per million, mg/l) (1)

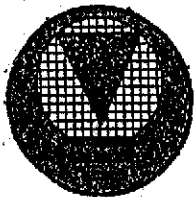
<u>Date</u>	<u>TPH Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl- benzene</u>	<u>Oil & Grease</u>
8/6/90 (2)	54	3.5	3.2	9.4	1.9	7.6
1/28/92 (3)	278	3.4	17.0	120.0	28.0	75 (5)
4/27/92 (3)	175	4.2	6.4	45.0	10.0	440 (6)
4/27/92 (4)	175	4.2	4.4	14.6	3.2	N/A

Notes:

- (1) ND - non-detect; N/A - not applicable
- (2) Kaldveer Associates report, September, 1990
- (3) Sequoia Analytical Laboratory
- (4) Applied Remediation Laboratory
- (5) Gravimetric Method
- (6) Infrared Method



Base: Thomas Brothers Maps, 1991

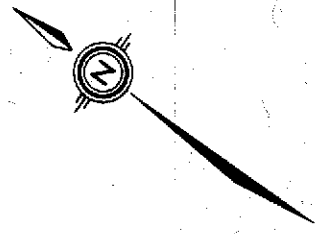
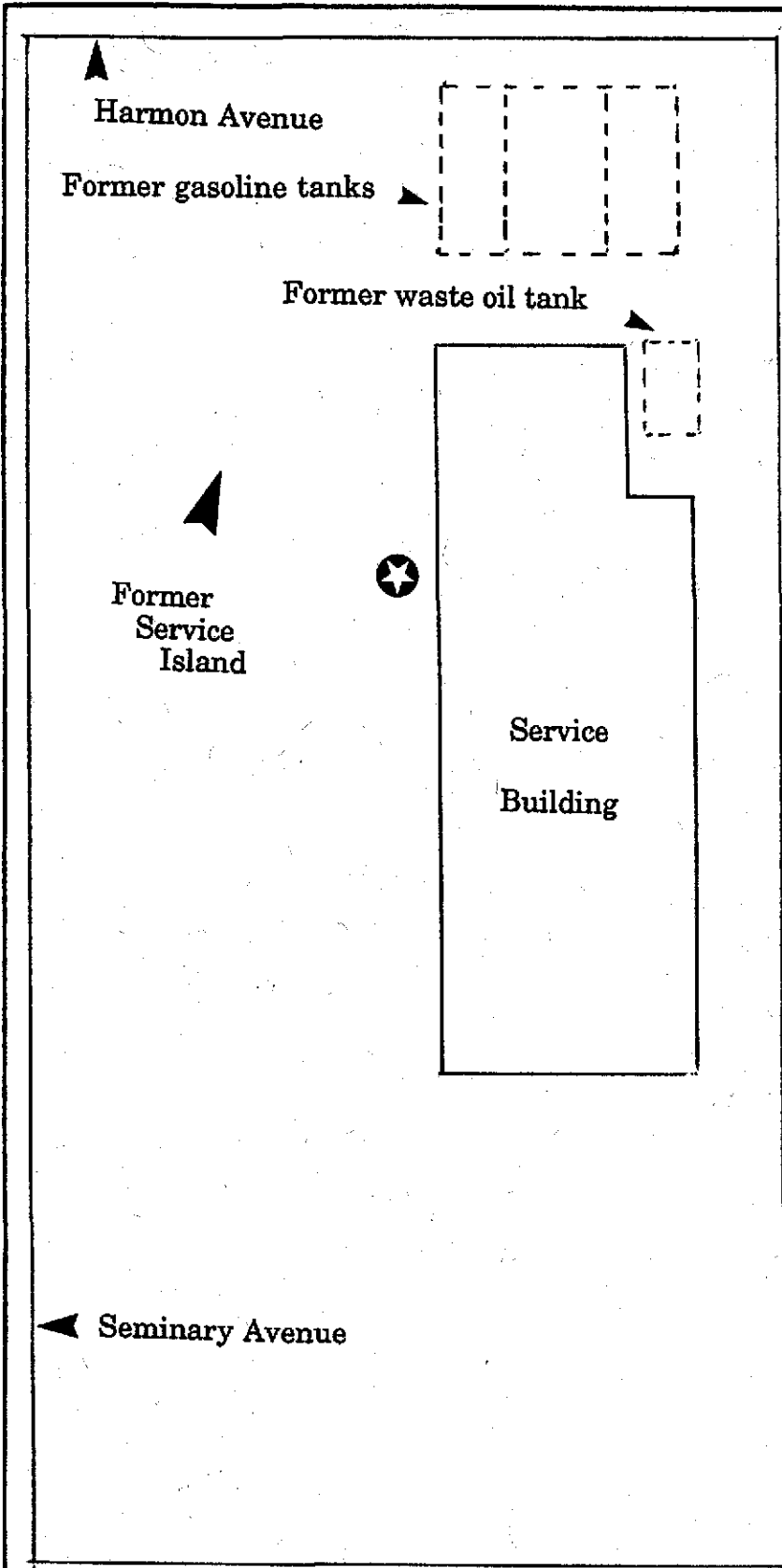


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SITE LOCATION MAP

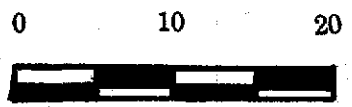
1770 Seminary Avenue
 Oakland, California

PROJECT NO.	DATE	Figure 1
E-10-1-019	February, 1992	



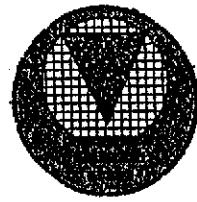
LEGEND

 Monitoring Well



Approximate Scale in Feet

Base: Kaldveer Associates, 1990



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WELL LOCATION MAP

1970 Seminary Avenue
 Oakland, California

PROJECT NO.	DATE
E-10-1-019	February, 1992

Figure 2

APPENDIX I
WATER SAMPLE LOG
CHAIN OF CUSTODY
ANALYTICAL TEST RESULTS



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Hoexter Consulting
734 Torreya Ct.
Palo Alto, CA 94303
Attention: David Hoexter

Well Number: MW-1
Sampled By: S. Butler, T. Olive
Report ID: 204-4995

Date Sampled: Apr 27, 1992
Time Sampled: 10:07-10:09 am
10:15 AM
Date Reported: May 11, 1992

WELL SAMPLING DATA

PURGE METHOD

 X Bailer
 "TRI-LOC"
 Purge Pump

SAMPLING METHOD

 X Bailer
 Pump
 Other

SAMPLE TYPE

 Composite
 X Grab

FREE PRODUCT

 Yes
 X No
 centimeters

WELL DATA

Well Depth, ft. 34.75
Water Level, ft. 20.95
Casing Diam., in. 2'
1 Casing Volume 2.26 gallons*

*Casing volume =
(Casing Diameter)² * 0.041 * (Well Depth - Water Level)

4 X 0.041 X (13.8)

Well Volumes	pH	Cond. (µS)	Temp (°C)
1. 2.3 gal	6.7	0800	18
2. 4.6 gal	6.7	0700	18
3. 6.9 gal	6.8	0800	18
4 9.2 gal.	6.7	0800	18
5. 15 gal	6.7	0500	18

Comments:

Gas Odor
Some floating film
Well was under pressure - released when lid was removed.
Continued to purge after 4 well volume at client's request.
Conductivity meter #4, Range 100- 19900 µS
pH Meter #2

SEQUOIA ANALYTICAL

Tod Granicher
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

SAMPLING

CHAIN OF CUSTODY REPORT

CLIENT: <u>Hoexter consulting</u>				REPORT TO: <u>David Hoexter</u>				TURNAROUND TIME:			
ADDRESS: <u>734 Torrey Court Palo Alto, CA 94303</u>				BILLING TO: <u>Same</u>				8 HR.			
PHONE: <u>(415) 494 2505</u>								24 HR.		48 HR.	
PROJECT NAME/SITE: <u>1970 Seminary Ave.</u>				POW/BILLING REFERENCE:				5 DAY		10 DAY	
SAMPLER: <u>Steve Butler & Todd Olive</u>				DATE: <u>4-27-92</u>				ANALYSIS REQUESTED			
SAMPLE ID#/STATION		SAMPLE DESCRIPTION	NUMBER OF CONT.	TYPE CONT.	SAMPLING TIME/DATE	REMARKS	SAMPLE NUMBER				
MW-1		Groundwater	1	O&G	10:15/4-27-92	X	2044995				
↓		↓	3	VOC	10:07/4-27-92	X					
					10:08						
					10:09						
RELINQUISHED BY: <u>Steve Butler</u>				DATE: <u>4-27-92</u>		TIME: <u>12:10</u>		RECEIVED BY:			
RELINQUISHED BY:				DATE:		TIME:		RECEIVED BY:			
RELINQUISHED BY:				DATE:		TIME:		RECEIVED IN LAB BY: <u>Shufan 4-27/1210</u>			
TRAVEL TIME: <u>1 hr</u>								ON SITE TIME: <u>1 hr 15 min</u>			
OTHER:								WERE SAMPLES:			
								PRESERVED 7		IN GOOD CONDITION?	
								YES		NO	



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Hoexter Consulting	Client Project ID: 1970 Seminary Ave.	Sampled: Apr 27, 1992
734 Torrey Ct.	Matrix Descript: Water	Received: Apr 27, 1992
Palo Alto, CA 94303	Analysis Method: EPA 5030/8015/8020	Analyzed: May 1, 1992
Attention: David Hoexter	First Sample #: 204-4995	Reported: May 11, 1992

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons	Benzene	Toluene	Ethyl Benzene	Xylenes
		$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)
204-4995	MW-1	500,000	3,400	6,400	10,000	45,000

Detection Limits:	60,000	600	600	600	600
--------------------------	--------	-----	-----	-----	-----

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard. Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL


Tod Granicher
Project Manager

2044995.HHH <1>



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Hoexter Consulting
734 Torrey Ct.
Palo Alto, CA 94303
Attention: David Hoexter

Client Project ID: 1970 Seminary Ave.
Matrix Descript: Water
Analysis Method: SM 5520 C&F (IR)
First Sample #: 204-4995

Sampled: Apr 27, 1992
Received: Apr 27, 1992
Analyzed: Apr 30, 1992
Reported: May 11, 1992

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/L (ppm)
204-4995	MW-1	440

Detection Limits:

100

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

SEQUOIA ANALYTICAL

Tod Granicher
Project Manager

Please Note:

This page modified 5/26/92.

2044995.HHH <2>



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Hoexter Consulting
734 Torrey Ct.
Palo Alto, CA 94303
Attention: David Hoexter

Client Project ID: 1970 Seminary Ave.

QC Sample Group: 204-4995

Reported: May 11, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Oil & Grease
---------	---------	---------	---------------	---------	--------------

Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	SM55220C&F
Analyst:	M.Nipp	M.Nipp	M.Nipp	M.Nipp	M.Fazzio
Reporting Units:	µg/L	µg/L	µg/L	µg/L	mg/L
Date Analyzed:	May 1, 1992	May 1, 1992	May 1, 1992	May 1, 1992	Apr 30, 1992
QC Sample #:	GBLK050192	GBLK050192	GBLK050192	GBLK050192	DI H20

Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30	40
Conc. Matrix Spike:	9.6	9.9	9.6	30	43
Matrix Spike % Recovery:	96	99	96	100	108
Conc. Matrix Spike Dup.:	9.6	9.7	9.6	30	44
Matrix Spike Duplicate % Recovery:	96	97	96	100	110
Relative % Difference:	0.0	2.0	0.0	0.0	2.3

SEQUOIA ANALYTICAL


Tod Granicher
Project Manager

% Recovery:	$\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$
Relative % Difference:	$\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$



Applied Remediation Environmental Laboratory

Certification No.: 1602

E-10-1-019
1970 Seminar
5 Days Turnaround

REPORT

April 30, 1992

734 Torrey Court
Palo Alto, CA 94303

RECEIVED MAY 06 1992

Attention: David F. Hoexter

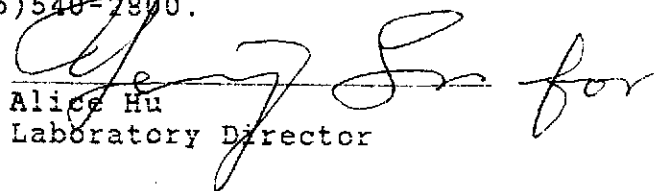
Subject: Analysis of one water sample, Received 04/28/92.

The water sample was analyzed for Total Petroleum Hydrocarbons as Gasoline using guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This method is also known as the modified 8015 method. The sample was also analyzed for BTEX using purge and trap technique (EPA SW846-5030) and gas chromatography/PID method (EPA 846-8020).

If you should have any technical questions, please contact the undersigned at (408)453-0188.

Applied Remediation Environmental Laboratory is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1602. 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.

Approved by:


Alice Hu
Laboratory Director

CHAIN-OF-CUSTODY RECORD

Project Number E-10-1-019		Project Name 1970 Seminary					Analytical Tests Method 8015 - TPH as Gasoline Method 8015 - TPH as Diesel Method 8240 - Volatile Organics Method 8270 - Semi-Volatile Organics Method 8010 - Organics Method 8080 - Halogenated Volatile Organics Waste Oil - Organochlorine Pesticides & PCB's Metals -	BTEX	Remarks
Location Oakland, CA		Sampler's Name (printed) TODD OLIVE							
Sample I.D. Number	Lab Sample I.D. Number	Date	Soil	Water	Number/Type of Container				
MW-1		4/27/92		X	40 ML VOA	X			2 vials

Relinquished by: (Signature) <i>Todd Olive</i>	Date/Time 4/27/92 10:15	Received by: (Signature) <i>David L...</i>
Relinquished by: (Signature) <i>[Signature]</i>	Date/Time 4/28/92 1:35	Received by: (Signature) <i>[Signature]</i>
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature) AREL

Ship To: **HOEXTER CONSULTING**
734 Torrey Court
Palo Alto CA 94303
 Attention: **DAVID HOEXTER**
 Phone No: **415-494-2506**

Applied Remediation Laboratory

Requested Turnaround Time: **Normal**

Requester Assoc. Contact:

Please address correspondence and return cooler # _____ to:

Remarks: **Note - there is oil in sample also (do not test for oil)**



ORGANIC ANALYSIS DATA SHEET
EPA METHOD 3540/8015 modified/5030/8020
DHS GASOLINE METHOD
GASOLINE/BTEX Report

Site Name: Oakland, CA
Project Number: AR3000.32
Date Sampled: 04/27/92
Matrix: Water

Analytical Batch: W9204-01
Analyst: *[Signature]*
Instrument ID: OLGC
Date Analyzed: 04/28/92
Date Reported: 04/30/92

Sample ID	TPH-g (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)	Surr.Rec (%)	DF
MW-1	175.0	4.2	4.4	3.2	14.6	94.0	400
PQL	20.0	0.2	0.2	0.2	0.6		

LEGEND:

TPH-g=Total Petroleum Hydrocarbons as Gasoline

PQL=Practical Quantification Limit

Surr. Rec.=Surrogate standard Recovery

DF=Dilution Factor

ND=Not Detected at above the practical quantification limit for the method
mg/l=ppm

BTEX method: EPASW846-5030/8020

Gasoline method: EPASW846-5030 and DHS gasoline method (modified 8015)

ORGANIC ANALYSIS QA SHEET

Matrix: Water
 Analytical Batch: W9204-01

Analyst: *[Signature]*
 Instrument ID: HNU-6C
 Date reported: 04/30/92

LC Report

Compound Name	True Value (ug/l)	Concentration Found	%REC	%REC Limits
Gasoline	200	191.5	96	70-130
Benzene	10	10.1	101	70-130
Toluene	10	9.5	95	70-130
Ethylbenzene	10	9.5	95	70-130
Total Xylenes	30	27.9	93	70-130

MS/MSD Report Spiked Sample ID: MW-2 (AR123)

Compound name	Spike Added (ug/l)	Sample Conc.	MS Conc.	MS %REC	%REC Limits
Gasoline	200	ND	187.8	94	70-130
Xylenes	30	ND	27.9	93	70-130
Benzene	10	ND	9.3	93	70-130
Toluene	10	ND	9.1	91	70-130
Ethylbenzene	10	ND	9.1	91	70-130

Compound name	Spike Added	MSD Conc.	MSD %REC	%RPD	RPD Limits
Gasoline	200	180.6	90	4.5	15
Xylenes	30	29.0	97	4.2	15
Benzene	10	9.8	98	5.2	15
Toluene	10	9.8	98	7.4	15
Ethylbenzene	10	9.8	98	7.4	15

Blank Report

Compound Name	Reporting Limit(ug/l)	Concentration Found (MB)	Conc. (SB)	Conc. (TB)
Gasoline	50	ND	ND	ND
Benzene	0.5	ND	ND	ND
Toluene	0.5	ND	ND	ND
Ethylbenzene	0.5	ND	ND	ND
Total Xylenes	1.5	ND	ND	ND

LEGEND:

- LC=Lab Check
- MS/MSD=Matrix Spike and Matrix Spike Duplicates
- MB=Method Blank
- SB=Storage Blank
- TB=Trip Blank
- RPD=Relative percent difference