APRIL, 1995 QUARTERLY GROUND WATER SAMPLING REPORT FOR STID 553 - GRIMIT AUTO AND REPAIR 1970 SEMINARY AVENUE OAKLAND, CALIFORNIA

May 29, 1995

Prepared by

HOEXTER CONSULTING, INC.
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95 JUN -1 PM 1:55
ENVIRONMENTAL PROTECTION

TRANSMITTAL

TO Alameda Co - Env. Health
1131 Harbor Bay Pkwy 2nd Flr
Alameda CA 94502

DATE 5/30/95
VIA US Mail
FAX NO. _____

ATTENTION Thomas Peacock

PROJECT 1970 Seminary
Oakland CA

JOB NO. E-10-01-019

DESCRIPTION 5/29/95 Quarterly Report

Number of pages, including cover page, if FAX _____

COMMENTS Proposal for next phase being prepared

ACTION

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

COPY TO _____

BY _____
David F. Hoexter

If enclosures are not as noted, kindly notify us at once

Rev. 7/6/93

Geology / Engineering Geology / Environmental Studies

HOEXTER CONSULTING, INC.
DAVID F. HOEXTER, RG/CEG/REA

734 Torreya Court
Palo Alto, California 94303

(415) 494-2505 (ph. & fax)

May 29, 1995

E-10-1-019
HCQuartEnvtRpts:Seminary1970/6

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

RE: APRIL, 1995 QUARTERLY
GROUND WATER SAMPLING REPORT
STID 553 - GRIMIT AUTO AND REPAIR
1970 SEMINARY AVENUE
OAKLAND, CALIFORNIA

Dear Mr. Grimit:

Enclosed is our April, 1995 quarterly ground water sampling report for the property located at 1970 Seminary Avenue, corner of Harmon, in Oakland, California This sampling round is the seventh 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 quarterly and sub-surface investigation sampling, are included in the analytical results summary table.

The results of this investigation indicate that the water samples from the three on-site wells contain very low to elevated levels of total petroleum hydrocarbons as gasoline (TPH-G), purgeable aromatic compounds (BTEX), and of oil (total recoverable petroleum hydrocarbons, TRPH). The analyses indicate that all analyzed compounds remain at levels of the same order-of-magnitude as the previous, December, 1994 results. TPH-G, BTEX and TRPH levels in well MW-1, which contains the highest levels of petroleum hydrocarbons of the three existing wells, decreased on the order of 20 per cent. The levels of petroleum hydrocarbons decreased slightly in MW-3, and increased slightly in MW-2.

A proposal for additional evaluation and remediation recommendations will be presented within approximately two weeks.

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 to be conducted in June/July, 1995, following installation of additional monitoring wells and additional site evaluation.

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, RG/CEG/REA
Principal

Copies: Addressee (2)
Alameda County Health Care Services Agency (1)
Attention: Mr. Thomas F. Peacock

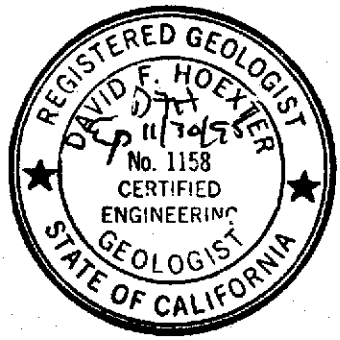
APRIL, 1995 QUARTERLY
GROUND WATER SAMPLING REPORT

For

STID 553 - Grimit Auto and Repair
1970 Seminary Avenue
Oakland, California

To

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



May 29, 1995

David F. Hoexter, RG/CEG/REA
Principal

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Letter of Transmittal

TITLE PAGE

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APRIL, 1995 QUARTERLY GROUND WATER SAMPLING REPORT FOR STID 553 - GRIMIT AUTO AND REPAIR 1970 SEMINARY OAKLAND, CALIFORNIA

I. INTRODUCTION

This report presents the results of the April, 1995 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 three on-site monitoring wells. Ground water samples were analyzed for total petroleum hydrocarbons as gasoline, for purgeable aromatic compounds, and for oil and grease as total recoverable petroleum hydrocarbons (TRPH). Well locations are shown on the Well Location Map, Figure 2.

II. FIELD INVESTIGATION

The ground water monitoring wells were sampled by a representative of Hoexter Consulting, Inc. on April 13, 1995. Following an initial ground water level measurement (Table 1), each well was checked for free-product with the bailer, and then four well-casing volumes of water were purged from the well. A dedicated teflon bailer was employed for each well. Water levels were measured twice in each well; the second set of measurements verified the initial set of measurements. The initial depth to ground water in well MW-1 was 0.73 feet higher than the previous, December, 1994 reading. Well MW-2 rose 1.73 feet; well MW-3 rose 0.10 feet. Note that wells MW-1 and MW-2 are identically completed; MW-3 is completed to a shallower depth.

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. 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 laboratory is California Department of Health Services approved for the requested analyses.

Although three wells are present on the site, one of the wells (MW-3) is completed at a shallower depth than the other two wells. Thus, although ground water elevation data were obtained for this investigation and are presented in Table 1, the data are not plotted, as a true ground water flow direction cannot be determined from wells not similarly completed.

III. ANALYTICAL RESULTS

A. Laboratory Procedures

The ground water samples were analyzed by Sequoia Analytical of Redwood City, California. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) using EPA Method 5030/8015; for purgeable aromatic compounds (BTEX) using EPA Method 8020; and for oil and grease (total recoverable petroleum, TRPH) using SM 5520B/F, gravimetric with cleanup. Note that the more recent TRPH analyses were by the infrared method of analysis. According to the Sequoia Laboratory representative, the two analytical methods produce essentially the same results.

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 installation of well MW-1, are also included. The current analytical results indicate that TRPH, TPH-G, and BTEX compounds are present at elevated levels which are on the same order of magnitude as the most recent, previous analyses (December, 1994).

45,000 ppb

TPH-G was present in MW-1 at 45 ppm, the lowest recorded level. Similarly, the BTEX compounds declined to the lowest recorded levels, and TRPH to one of the lowest recorded levels. TPH-G and BTEX increased in MW-2, while TRPH was not detected. TPH-G was detected at a level of 1.3 ppm in MW-2. TPH-G and BTEX declined in MW-3, and TRPH was not detected. TPH-G was detected at 1.7 ppm in MW-3.

1,300 ppb 1,700 ppb

Free product was not observed in the initial sounding of the wells, although a sheen (floating film) of oil was observed in well MW-1. The purge water from well MW-1 contained globules of "oil", which were not present during the previous sampling round but which were observed in earlier sampling rounds.

IV. RECOMMENDATIONS

Notwithstanding the decline in MW-1 petroleum hydrocarbon detection, we recommend initiation of site remediation, as previously recommended. A program of supplemental subsurface investigation will be presented in approximately two weeks.

V. 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)

Well Number	Well Top Elevation (2)	Depth to Water	Relative Ground Water Elevation (2)
MW-1			
8/6/90	37.0	21.5	15.5
1/28/92		21.0	16.0
4/27/92		20.95	16.05
8/10/92		22.20	14.8
2/11/94		15.93 (3)	21.07
2/28/94		13.85 (4)	23.15
9/9/94		20.19	16.81
12/28/94		14.91	22.09
4/13/95		14.18	22.82
MW-2			
2/11/94	36.40	14.16 (3)	22.24
2/28/94		16.01 (4)	20.39
9/9/94		18.96	17.44
12/28/94		21.42	14.98
4/13/95		19.69	16.71
MW-3			
2/11/94	36.94	6.97 (3)	29.97
2/28/94		7.74 (4)	29.20
9/9/94		9.68	27.26
12/28/94		8.15	28.79
4/13/95		8.05	28.89

Notes:

(1) N/A = Not applicable
(2) City of Oakland datum
(3) Well under pressure when locking cap removed; water level may not have been stabilized
(4) Depth to water was measured over a 120 minute period; indicated depths are final, stabilized readings

TABLE 2

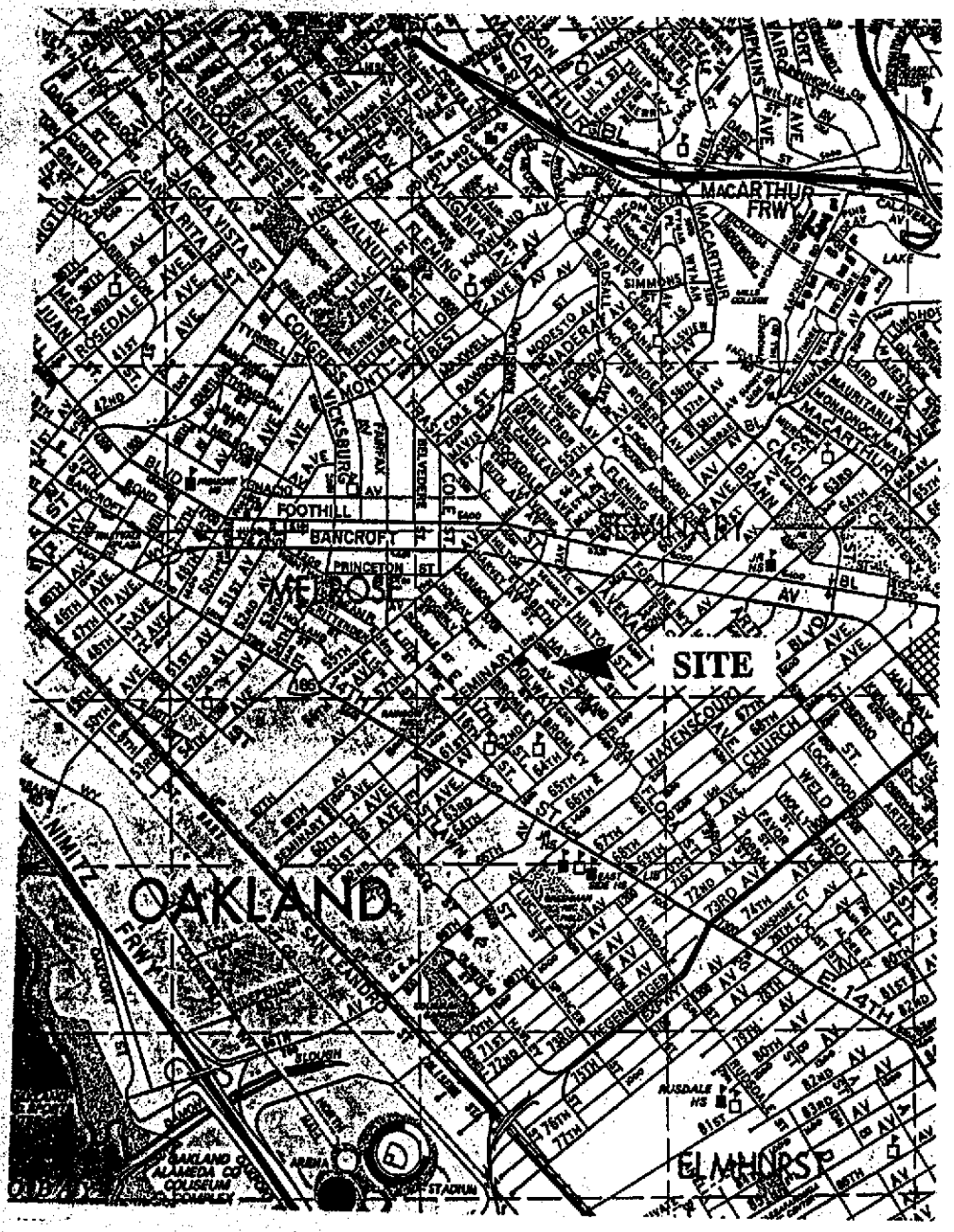
SUMMARY OF ANALYTICAL TEST RESULTS - GROUND WATER
(Results reported in parts [redacted])

Well and Date	TPH Gasoline	Benzene	Toluene	Xylenes	Ethyl-benzene	Oil & Grease
MW-1						
8/6/90 (2)	54	3.5	3.2	9.4	1.9	7.6
1/28/92 (3)	2,000	7.4	17.0	120.0	28.0	75 (5)
4/27/92 (3)	500	3.4	6.4	45.0	10.0	440 (6)
4/27/92 (4)	175	4.2	4.4	14.6	3.2	N/A
8/10/92 (3)	170	4.2	4.2	15.0	3.3	120 (6)
2/11/94 (3)	1,800	ND	5.1	23.0	5.2	16 (6)
9/9/94 (3)	23,000	56	61	137	9.1	880 (6)
12/28/94 (3)	55	3.7	5.3	5.8	1.4	83 (6)
4/13/95 (3)	45	2.8	3.4	5.1	1.2	50 (5)
MW-2						
2/11/94 (3)	0.130	0.022	0.0011	0.0073	0.0052	ND (6)
9/9/94 (3)	1.0	0.089	ND	0.00069	ND	ND (6)
12/28/94 (3)	0.330	0.100	0.0038	0.0047	0.0054	5.1 (6)
4/13/95 (3)	1.3	0.28	0.0069	0.023	0.033	ND (5)
MW-3						
2/11/94 (3)	ND	ND	ND	ND	ND	ND (6)
9/9/94 (3)	0.710	0.010	ND	0.0035	ND	ND (6)
12/28/94 (3)	2.300	0.0078	ND	0.073	0.130	ND (6)
4/13/95 (3)	1.700	0.0029	ND	0.024	0.061	ND (5)

all around MW-1

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



ALAMEDA COUNTY

1991 *Thomas Guide.*

0 ⅛ ¼ ½ 1 MILES
0 .1 .2 .5 1 KILOMETERS

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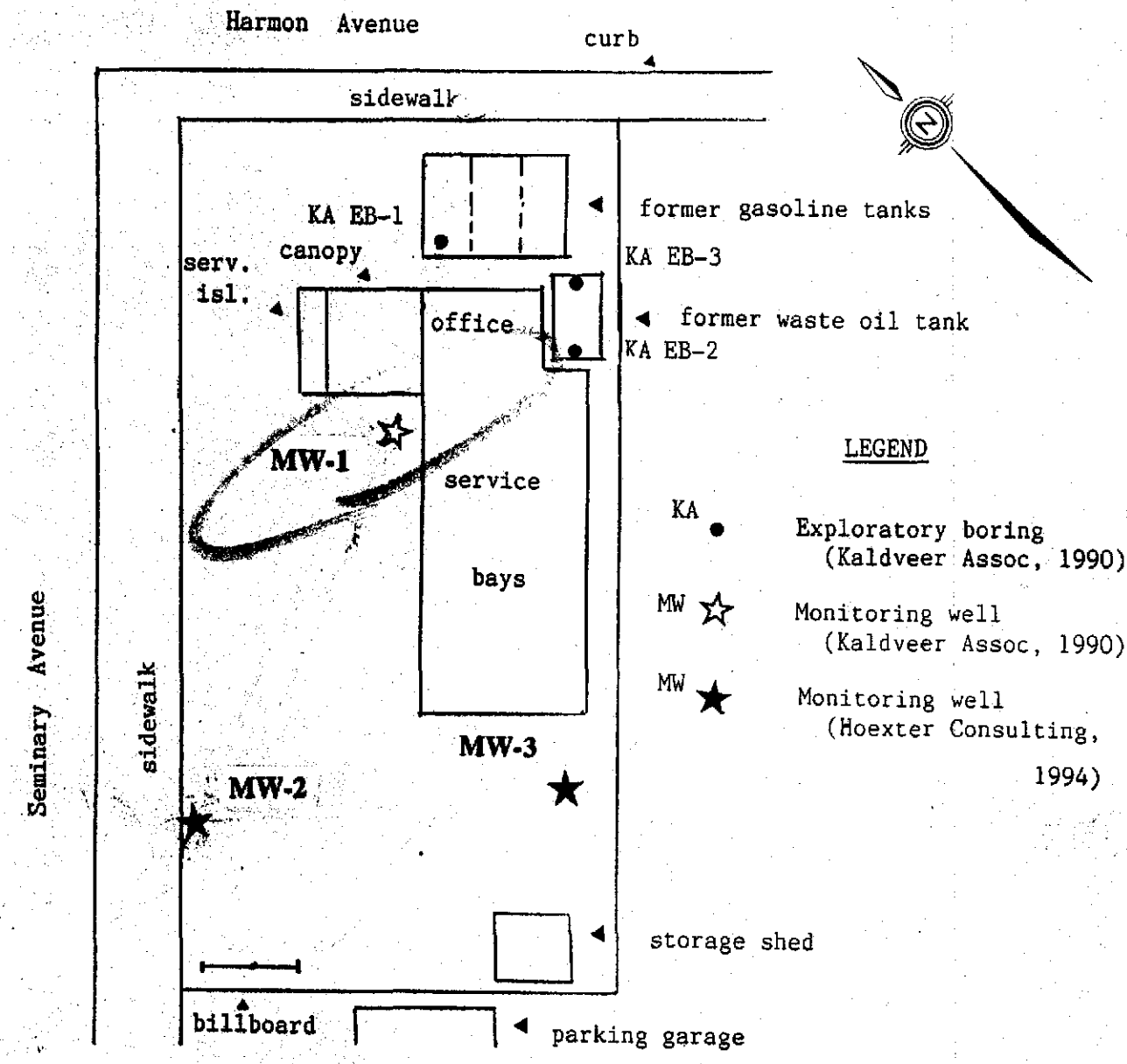
LOCATION MAP

1970 Seminary Avenue
Oakland, California

Project No.	Date	Figure
E-10-1-019	May, 1995	1



Base: Field sketch, 10/25/93

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Environmental Studies

SITE PLAN

1970 Seminary Avenue
Oakland, California

Project No.	Date	Figure
E-10-1-019	May, 1995	2

APPENDIX I

WATER SAMPLE LOG
CHAIN OF CUSTODY
ANALYTICAL TEST RESULTS

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: E-10-1-019 Seminary
Client: D. Grimit
Project Manager: D.F. Hoexter
Sampler: J. Forsythe
Casing Diameter: 2 inch X 3 inch ____ 4 inch ____ 6 inch ____ Other: ____

Lab I.D.: 9504989-01
Date: 4/13/95
Sample Location/I.D.: MW-1
Start Time: 11:52 (gw level)

Depth of Well (feet): 35
Depth to Water (feet): 14.18
Sample Depth (feet): ____

Calculated Purged Volume: 13.6 gal
Actual Purged Volume 14 gal

35 - 14.18 = 20.82' wtr
→ 3.4 gal/vol
→ 3.5 gal/vol

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
14:35	initial extract.		5.59	777	64.1	clear	
14:51	3.5	3.5	5.58	823	64.4	cloudy	
15:05	7.0	3.5	5.45	796	63.9		
15:22	10.5	3.5	5.41	793	63.1		
15:37	14.0	3.5	5.66	840	65.1		

Purge Method

____ 2" Bladder Pump X Bailer ____ Well Wizard X Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump X Bailer ____ Well Wizard X Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: OK
Remarks: Strong product odor, surface sheen, globules on initial extraction. Sampled well 16:50

Signature: J. Forsythe (by DFH for report copy)

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Mulitply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: E10-1-019 Seminary
Client: D. Grimit
Project Manager: D.F. Hoexter
Sampler: J. Forsythe
Casing Diameter: 2 inch X 3 inch ____ 4 inch ____ 6 inch ____ Other: ____

Lab I.D.: 9504989-02
Date: 4/13/95
Sample Location/I.D.: MW-2
Start Time: 11:46 (gw level)

Depth of Well (feet): 35
Depth to Water (feet): 19.69
Sample Depth (feet): ____

Calculated Purged Volume: 10.0 gal
Actual Purged Volume 10.0 gal

35 - 19.69 = 15.31' wtr → 2.5 gal/vol.

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
13:25	initial extract		5.61	727	68.8	clear	
13:35	2.5	2.5	5.56	753	66.6	sl. cloudy	
13:46	5.0	2.5	5.72	628	67.8	↓	
13:55	7.5	2.5	5.66	713	65.0		
14:04	10.0	2.5	5.79	741	66.3		

Purge Method

____ 2" Bladder Pump X Bailer ____ Well Wizard X Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump X Bailer ____ Well Wizard X Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: Good
Remarks: No sheen, slight odor on initial extraction. Sampled well 16:20

Signature: J. Forsythe (by DFH for report copy)

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Mulitply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No.: E-10-1-019 Seminary
Client: D. Grimit
Project Manager: D. F. Hoexter
Sampler: J. Forsythe
Casing Diameter: 2 inch X 3 inch ____ 4 inch ____ 6 inch ____ Other: ____

Lab I.D.: 9504989-03
Date: 4/13/95
Sample Location/I.D.: MW-3
Start Time: 11:40 (gw level)

Depth of Well (feet): 20
Depth to Water (feet): 8.05
Sample Depth (feet): ____

Calculated Purged Volume: 7.85 gal
Actual Purged Volume 8 gal

20 - 8.05 = 11.95' wtr
→ 1.95 gal/vol
→ 2.0 gal/vol

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F	Color (visual)	Other
12:26	initial extract.		6.68	611	62.3	clear	
12:34	2.0	2.0	6.20	622	62.5	cloudy	
12:42	4.0	2.0	6.02	611	63.2	↓	
12:49	6.0	2.0	6.72	622	62.7	↓	
12:58	8.0	2.0	6.01	631	63.5	↓	

Purge Method

____ 2" Bladder Pump ____ Bailer ____ Well Wizard ____ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump ____ Bailer ____ Well Wizard ____ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: OK
Remarks: No sheen or odor on initial extraction, Well evacuated during final purge; well allowed to recover, sampled 16:00

Signature: J. Forsythe (by DFH for report copy)

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft.
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Mulitply
Ft. of Water	Lbs/sq.in. 0.4335	
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

CHAIN-OF-CUSTODY RECORD

Project Number	Project Name
E-10-1-019	SEMINARY

Sampler's Name (printed): J. FORSYTHE

Boring Number	Date	Time	Soil	Water	Sample Location or Depth	Sample Number	Number/Type of Containers	Analytical Tests: TPH-G/BTEX *	Analytical Tests: TRPH SM 5520 E&F *	Remarks
MW-1	4/13/95	16:50					3-40ml	X		
							1-1000ml		X	
MW-2		16:20					3-40ml	X		
							1-1000ml		X	
MW-3		16:00					3-40ml	X		
							1-1000ml		X	

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
X J. Forsythe	4/13/95 18:40	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
		4/13/95 1840

Ship To: SEQUOIA ANALYTICAL
680 CHESAPEAKE DR.
REDWOOD CITY, CA 94063

Attention: RECEIVING
Phone No: 415-364-9600

Requested Turnaround Time: NORMAL

Contact: DAVID E. HOEXTER

Phone 415-494-2505 PH/FAX

Remarks: * ANALYZE PER RWQCB LUFT GUIDELINES

STANDARD TAT

Hoexter Consulting
Engineering Geology
734 Torreya Court
Palo Alto, CA 94303

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Hoexter Consulting Eng'g Geo
734 Torreya Court
Palo Alto, CA 94303

Attention: David F. Hoexter

Client Proj. ID: E-10-1-019, Seminary

Lab Proj. ID: 9504989

Sampled: 04/13/95
Received: 04/13/95
Analyzed: see below

Reported: 04/27/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9504989-01 Sample Desc : **LIQUID,MW-1**				
TRPH (SM 5520 B&F)	**mg/L**	**04/25/95**	**5.0**	**50**
Lab No: 9504989-02 Sample Desc : **LIQUID,MW-2**				
TRPH (SM 5520 B&F)	mg/L	04/25/95	5.0	N.D.
Lab No: 9504989-03 Sample Desc : **LIQUID,MW-3**				
TRPH (SM 5520 B&F)	mg/L	04/25/95	5.0	N.D.

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

SEQUOIA ANALYTICAL - ELAP #1210

Suzanne Chin
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Hoexter Consulting Eng'g Geo
734 Torreya Court
Palo Alto, CA 94303

Attention: David F. Hoexter

Client Proj. ID: E-10-1-019, Seminary
Sample Descript: MW-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9504989-01

Sampled: 04/13/95
Received: 04/13/95

Analyzed: 04/25/95
Reported: 04/27/95

QC Batch Number: GC042595BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10000	45000
Benzene	100	2800
Toluene	100	3400
Ethyl Benzene	100	1200
Xylenes (Total)	100	5100
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	94

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

SEQUOIA ANALYTICAL - ELAP #1210

Suzanne Chin
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
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Hoexter Consulting Eng'g Geo
734 Torreya Court
Palo Alto, CA 94303

Attention: David F. Hoexter

Client Proj. ID: E-10-1-019, Seminary
Sample Descript: MW-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9504989-02

Sampled: 04/13/95
Received: 04/13/95

Analyzed: 04/25/95
Reported: 04/27/95

QC Batch Number: GC042595BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	1300
Benzene	5.0	280
Toluene	5.0	6.9
Ethyl Benzene	5.0	33
Xylenes (Total)	5.0	23
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

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

SEQUOIA ANALYTICAL - ELAP #1210

Suzanne Chin
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Hoexter Consulting Eng'g Geo	Client Proj. ID: E-10-1-019, Seminary	Sampled: 04/13/95
734 Torreya Court	Sample Descript: MW-3	Received: 04/13/95
Palo Alto, CA 94303	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 04/25/95
Attention: David F. Hoexter	Lab Number: 9504989-03	Reported: 04/27/95

QC Batch Number: GC042595BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**125**	**1700**
Benzene	**1.2**	**2.9**
Toluene	1.2	N.D.
Ethyl Benzene	**1.2**	**61**
Xylenes (Total)	**1.2**	**24**
Chromatogram Pattern:		
Weathered Gas		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	99

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

SEQUOIA ANALYTICAL - ELAP #1210

Suzanne Chin
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Hoexter Consulting Engrg. Geol.	Client Project ID:	E-10-1-019, Seminary	
734 Torreya Court	Matrix:	Liquid	
Palo Alto, CA 94303			
Attention: David F. Hoexter	Work Order #:	9504989 -01-03	Reported: Apr 27, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Total Recoverable Petroleum Hydrocarbons
QC Batch#:	GC041595055520EXA
Analy. Method:	SM 5520 B&F
Prep. Method:	EPA 3510

Analyst:	C. Garde
MS/MSD #:	BLK041595
Sample Conc.:	N.D.
Prepared Date:	4/15/95
Analyzed Date:	4/17/95
Instrument I.D.#:	MANUAL
Conc. Spiked:	30 mg/L
Result:	29
MS % Recovery:	97
Dup. Result:	28
MSD % Recov.:	93
RPD:	2.3
RPD Limit:	0-50

LCS #:	
Prepared Date:	
Analyzed Date:	
Instrument I.D.#:	
Conc. Spiked:	
LCS Result:	
LCS % Recov.:	

MS/MSD LCS Control Limits	70-110

SEQUOIA ANALYTICAL

Suzanne Chin
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

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Hoexter Consulting Engrg. Geol.	Client Project ID:	E-10-1-019, Seminary	
734 Torreya Court	Matrix:	Liquid	
Palo Alto, CA 94303			
Attention: David F. Hoexter	Work Order #:	9504989-01-03	Reported: Apr 27, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC042595BTEX06A	GC042595BTEX06A	GC042595BTEX06A	GC042595BTEX06A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	G. Garcia	G. Garcia	G. Garcia	G. Garcia
MS/MSD #:	950493606	950493606	950493606	950493606
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/25/95	4/25/95	4/25/95	4/25/95
Analyzed Date:	4/25/95	4/25/95	4/25/95	4/25/95
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.2	9.1	9.2	27
MS % Recovery:	92	91	92	90
Dup. Result:	9.9	9.3	9.6	28
MSD % Recov.:	99	93	96	93
RPD:	8.8	2.2	4.3	3.6
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL

Suzanne Chin
Project Manager

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** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

CHAIN-OF-CUSTODY RECORD

Project Number	Project Name
E-10-1-019	SEMINARY

Sampler's Name (printed): J. FORSYTHE

Boring Number	Date	Time	Soil	Water	Sample Location or Depth	Sample Number	Number/Type of Containers	Analytical Tests: TPH-G/BTEX *	TRPH SM 5520 BF *	Remarks: 9504989
MW-1	4/13/95	16:50				1	3-40ml	X		
							1-1000ml		X	
MW-2		16:20				2	3-40ml	X		
							1-1000ml		X	
MW-3		16:00				3	3-40ml	X		
							1-1000ml		X	

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
X J. Forsythe	4/13/95 18:40	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)
		4/13/95 1840

Ship To: SEQUOIA ANALYTICAL
680 CHESAPEAKE DR.
REDWOOD CITY, CA 94063

Attention: RECEIVING
Phone No: 415-364-9600

Requested Turnaround Time: NORMAL

Contact: DAVID F. HOEXTER

Phone: 415-494-2505 PH/FAX

Remarks: * ANALYZE PER RWQCB LUFT GUIDELINES

STANDARD TAT

Hoexter Consulting
Engineering Geology
734 Torreya Court
Palo Alto, CA 94303