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

November 17, 1995

Prepared by

HOEXTER CONSULTING, INC. 734 Torreya Court Palo Alto, California 94303

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PROTECTION

TRANSMITTAL

TO Alamode Co. Health Rept 1131 Harbor Bay Parkay Sean Alamoda CA 94502 ATTENTION	HezMa DATE 11/27/95 LFGr VIA US/Yail FAX NO.
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PROJECT 1970 Seminary Oalcled CA	:
DESCRIPTION 11/17/55 \\Q	cotterly" Report
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Number of pages, including cover page, i	f FAX
ACTION As requested For your use Please return when finished Please review and comment Other	
COPY TO D. Grimt BY	David F. Hoexter

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

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)

November 17, 1995

E-10-1-019 HCQuartEnvtRpts:Seminary1970/7

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

RE:

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

Dear Mr. Grimit:

Enclosed is our November, 1995 ground water sampling report for the property located at 1970 Seminary Avenue, corner of Harmon, in Oakland, California This sampling round is the eighth 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 range from 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, April, 1995 results. TPH-G, BTEX and TRPH levels in the near-source well, MW-1, which contains the highest levels of petroleum hydrocarbons of the three existing wells, were essentially unchanged from the previous sampling event. The levels of petroleum hydrocarbons decreased in both downgradient wells, MW-2 and MW-3.

Additional subsurface investigation of the site will be initiated during December, 1995.

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 conjunction with the planned 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.

カンマ. サー

David F. Hoexter, RG/CEG/REA-Principal

Copies: Addressee (2)

Alameda County Health Care Services Agency (1)

Attention: Mr. Dale Klettke, Hazardous Materials Specialist

NOVEMBER, 1995 "QUARTERLY" GROUND WATER SAMPLING REPORT

For

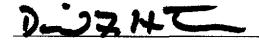
STID 553 - Grimit Auto and Repair 1970 Seminary Avenue Oakland, California

To

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



November 17, 1995



David F. Hoexter, RG/CEG/REA Principal Geologist

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NOVEMBER, 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 November, 1995 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 November 1, 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 polyethylene bailer was employed for each well. Water levels were measured at least twice in each well; the final set of measurements was conducted at least 1.5 hours after the initial readings, and are thought to be essentially representative of stabilized ground water levels in the wells. The depth to ground water in well MW-1 was more than six feet lower than the previous, April, 1995 reading. Well MW-2 dropped approximately 1.3 feet; well MW-3 dropped approximately 0.2 feet. Note that wells MW-1 and MW-2 are identically completed; MW-3 is completed to a shallower depth. We have no explanation for the notable difference in ground water trends between MW-1 and MW-2.

Following purging, samples were collected using the polyethylene 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 some of the previous 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 (April, 1995).

TPH-G was present in MW-1 at 44 ppm, the lowest recorded level. The BTEX compounds and TRPH were present at essentially the same levels as most recently detected (April, 1995). TPH-G and BTEX generally declined in wells MW-2 and MW-3. Detected levels in these two wells are generally one to two orders of magnitude less than in MW-1. TRPH was not detected in wells MW-2 and MW-3.

Free product was not observed in the initial sounding of the wells, although as previously observed, 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 observed in earlier sampling rounds.

IV. RECOMMENDATIONS

We recommend proceeding with the scheduled subsurface investigation.

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 1/28/92 4/27/92 8/10/92 2/11/94 2/28/94 9/9/94 12/28/94 4/13/95 11/1/95 MW-2	37.0	21.5 21.0 20.95 22.20 15.93 (3) 13.85 (4) 20.19 14.91 14.18 20.90	15.5 16.0 16.05 14.8 21.07 23.15 16.81 22.09 22.82 16.10
2/11/94 2/28/94 9/9/94 12/28/94 4/13/95 11/1/95 MW-3	36.40	14.16 (3) 16.01 (4) 18.96 21.42 19.69 21.91	22.24 20.39 17.44 14.98 16.71 14.49
2/11/94 2/28/94 9/9/94 12/28/94 4/13/95 11/1/95	36.94	6.97 (3) 7.74 (4) 9.68 8.15 8.05 7.82	29.97 29.20 27.26 28.79 28.89 29.12

Notes:

- N/A = Not applicable
 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 per million, mg/l) (1)

Well and Date	TPH Gasoline	Benzene	Toluene	Xylenes	Ethyl- benzene	Oil & Grease
MW-1 8/6/90 (2) 1/28/92 (3) 4/27/92 (3) 4/27/92 (4) 8/10/92 (3) 2/11/94 (3) 9/9/94 (3) 12/28/94 (4/13/95 (3) 11/1/95 (3)	2,000 500 175 170 1,800 23,000 3) 55 45	3.5 7.4 3.4 4.2 4.2 ND 56 3.7 2.8 2.6	3.2 17.0 6.4 4.4 4.2 5.1 61 5.3 3.4 3.4	9.4 120.0 45.0 14.6 15.0 23.0 137 5.8 5.1 5.9	1.9 28.0 10.0 3.2 3.3 5.2 9.1 1.4 1.2 1.4	7.6 75 (5) 440 (6) N/A 120 (6) 16 (6) 880 (6) 83 (6) 50 (5) 52 (5)
MW-2 2/11/94 (3) 9/9/94 (3) 12/28/94 (3) 4/13/95 (3) 11/1/95	0.130 1.0 0.330	0.022 0.089 0.100 0.28 0.0099	0.0011 ND 0.0038 0.0069 ND	0.0073 0.00069 0.0047 0.023 ND	0.0052 ND 0.0054 0.033 ND	ND (6) ND (6) 5.1 (6) ND (5) ND (5)
MW-3 2/11/94 (3) 9/9/94 (3) 12/28/94 (3 4/13/95 (3) 11/1/95	0.710 2.300	ND 0.010 0.0078 0.0029 0.0044	ND ND ND ND ND	ND 0.0035 0.073 0.024 0.022	ND ND 0.130 0.061 0.027	ND (6) ND (6) ND (6) ND (5) ND (5)

Notes:

(1) ND - non-detect; N/A - not applicable

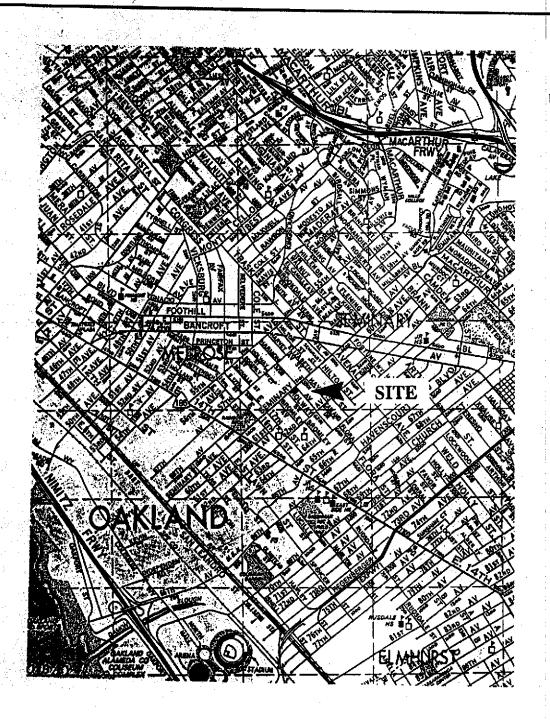
(2) Kaldveer Associates report, September, 1990

(3) Sequoia Analytical Laboratory

(4) Applied Remediation Laboratory

(5) Gravimetric Method

(6) Infrared Method





1991 Thomas Guide.





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Geology Engineering Geology Environmental Studies

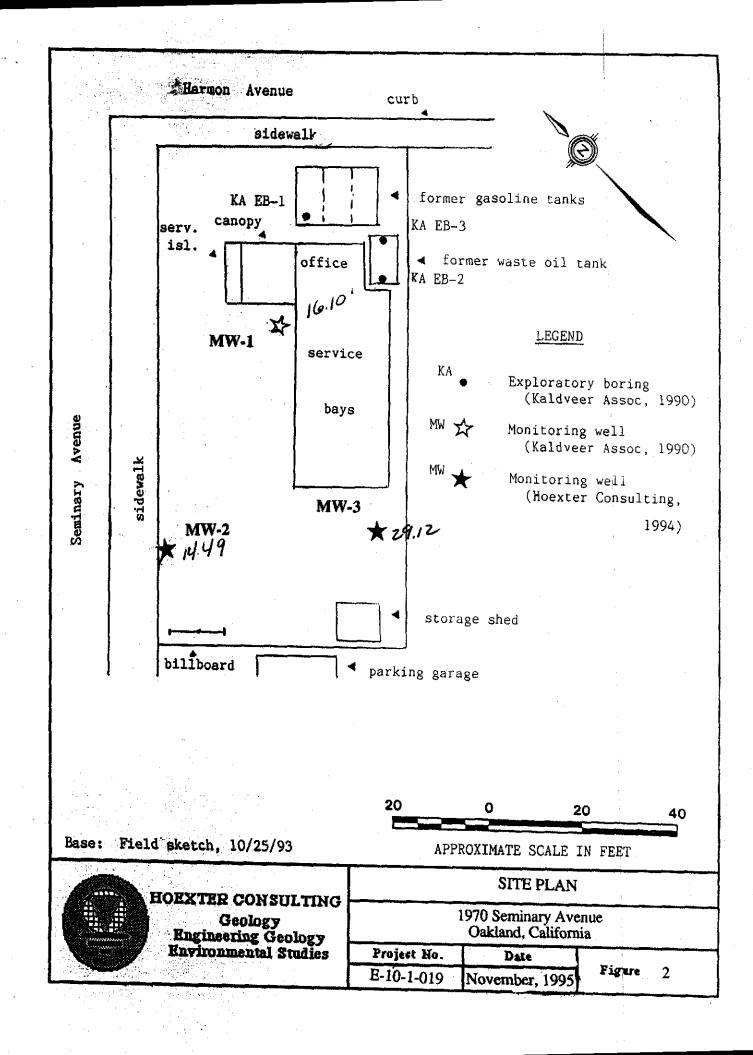
LOCATION MAP

1970 Seminary Avenue Oakland, California

Project No.	Date
E-10-1-019	November, 1995

Figure

1



APPENDIX I

WATER SAMPLE LOG CHAIN OF CUSTODY ANALYTICAL TEST RESULTS

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project Name/ No: E-10-1A-163A/ 1970 Source	Lab I.D.: 9511273-01
Client: D- Grimit	Date: 11/1/95
Project Manager: D-F-1-bexter	Sample Location/I.D.: Mw-/
Sampler: J. Forsythe	Start Time:
Casing Diameter: 2 inch \nearrow 3 inch 4 inc	ch6 inchOther:
Depth of Well (feet): 35 Depth to Water (feet): 20.90 (21.40 min) Sample Depth (feet):	Calculated Purged Volume: $\frac{9.25 \text{ el}}{10 \text{ gel}}$ Actual Purged Volume $\frac{10 \text{ gel}}{10.1632} = 2.305 \text{ el/vol}$
Field Measurem	<u>ents</u>
	Cemperature Color Other Degrees F (visual)
1242 0 0 5.55 850	65.9 cleer
1255 2.5 2.5 5.67 915	65.0 clardy
1303 5 5.68 872	64.4 514
1311 7.5 5.68 856	64.9
1325 10 V 5.62 860	64.8 V
Purge Method	
2" Bladder Pump Bailer Submersible Pump Cenetrifugal Pu Pneumatic Displacement Pump	Well Wizard Dedicated Other polystylen
Sample Method	
2" Bladder Pump Bailer Dipper Well Integrity:	Well Wizard Dedicated Fultz Pump Other
Remarks: No pressure on well cap re work	il, Slight adop + shear in
initial bail : oil globules + incr	· odor as well purged . Well
Sampled 15:35 July J. Forsy	the
Volumes Per Unit Length Selected Well Casing Diameters Volume Per Unit Length	Conversion Factors
Well Casing Cubic	To Convert Into Mulitply
LD. (finches) Gal/ft Ft/ft L/M L/Pt 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	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
0.0 1.4690 0.1963 18.240 5.5600	Inches Centimeters 2.5400

HOEXTER CONSULTING

Groundwater Sampling Field Log

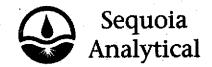
Project Name/ No: E-10-14-1634/1970 Samuraje	1 Lab I.D.: 9511273-02
Client: D. Grimet 1	Date:
Project Manager: D.F. Hoe wer	Sample Location/I.D.: MW-Z
Sampler: J. Forsy the	Start Time:
Sampler: 5 Forsy the Casing Diameter: 2 inch 2 3 inch 4 inch	6 inch Other:
Depth of Well (feet): 35 Depth to Water (feet): 21.91 (1 hr 54 min) Sample Depth (feet): Field Measuremen	(35-2191)(0.1632) =
Volume pH E.C. Ter	managatuwa Cala- Od
Time Cum (gal.) (units) (umhos/cm) D	mperature Color Other egrees F (visual)
	(1344)
	27.3 cles
1137 2.5 2.5 5.69 646	66.7 dad
	66./
1153 7.5 5.71 640	66.0
1207 10 V 5.66 629 A	65.8
Purge Method	
	· 6
2" Bladder Pump Bailer	Well Wizard Dedicated
Submersible Pump Cenetrifugal Pum Pneumatic Displacement Pump	ip Other
	- for only uno
Sample Method	
2" Bladder Pump Bailer	White is No. 1
Surface Sampler Dipper	Well Wizard Dedicated Fultz Pump Other
Dipper	Fultz Pump Other
Well Integrity:	
Remarks: Moderale pressure release on well	cop removal. No oder
Show or product on initial bai	La Very Slow recovery fellowing
Signorura Di) 1 st	th 3+ff wtr. in will.
Signature. Very Jock Porgt	he
Volumes Per Unit Length Selected Well Casing Diameters	Conversion Factors
Volume Per Unit Length Well Casing Cubic	To Convert Into Mulitply
LD. (inches) Gal/ft Ft/ft L/M L/Ft	Ft. of Water Lbs/sq.in. 0.4335
2.0 0.1632 0.0218 2.027 0.6178	Lbs/Sq. inch Ft. of Water 2.3070 Cubic feet Gallons 7.4800
3.0 0.3672 0.0491 4.560 1.3900 4.0 0.6528 0.0873 8.107 2.4710	Gallons Liters 3.7850
6.0 1.4690 0.1963 18.240 5.5600	Feet Meters 0.30048 Inches Centimeters 2.5400

HOEXTER CONSULTING

Groundwater Sampling Field Log

Project	Name/1	No: E-10-	IA -163	A/1970 Sem		ab I.D.: 551	
		Grimit	1 (Date:	
Sample	st	Form	toek te	<u>r</u>		Sample Location	
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·	Depth to	Well (feet): Water (feet): Depth (feet):		(1 hr 25 min) Field Measure	(2	Actual Purged Vo. 0 -7. 52) (0.	Volume: 7.9550 lume 8501 1632) 50-[vol-
,			÷ .				
Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees F		Other
1028	0	0	6.6/	484	67.8	Clear	:
1035	2_	_2_	6.27	535	66.0	Sl. chr.l)
1041	4	2	6.05	555	65.4	dudy	
100	6	2	5.97	5 70	64.9	<u> </u>	
<u>1021</u> p	<u> </u>	2	5.92	577	c4.4	, V	
				Purge Metho	₫	4	
	Subr	ladder Pump nersible Pun ımatic Displ	ър	Cenetrifugal l	\ Pump D	Well Wizard	Dedicated Other
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Remar	ntegrity:	515-1- 1)aa	Telega co			
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I.D. (inch	લ્ડ) (Cubic Gal/ft Ft/ft		<u>L/Pt</u>	Ft. of Water	Lbs/sq.in. 0.4	
1.5 2.0		0.0918 0.0123 0.1632 0.0218	1.140	0.3475 0.6178	Lbs/Sq. inch	Ft. of Water	2.3070
3.0	(0.3672 0.0491	4.560	1.3900	Cubic feet Gallons	Gallons Liters	7.4800 3.78 5 0
4.0 6.0		0.6528 0.0873 1.4690 0.1963		2.4710 5.5600	Feet Inches	Meters Centimeters	0.30048

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David F. Hoexter

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8

Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600

FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

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

Attention:

Client Proj. ID:

E-10-1A-163A/1970 Seminary

Sampled: 11/01/95 Received: 11/01/95 Analyzed: see below

Lab Proj. ID: 9511273

Reported: 11/15/95

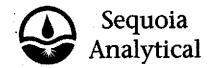
LABORATORY ANALYSIS

Anaiyte		Units	Date Analyzed	Detection Limit	Sample Results			
Lab No: 9511273-01 Sample Desc : LIQUID,MW-1								
	TRPH (SM 5520 B&F Mod)	mg/L	11/14/95	5.0	52			
Lab No: Sample D	9511273-02 Pesc : LIQUID,MW-2							
	TRPH (SM 5520 B&F Mod)	mg/L	11/14/95	5.0	N.D.			
Lab No: Sample D	9511273-03 Pesc : LIQUID,MW-3							
	TRPH (SM 5520 B&F Mod)	mg/L	11/14/95	5.0	. N.D.			

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner Project Manager



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Sacramento, CA 95834

Redwood City, CA 94063 Walnut Creek, CA 94598

(415) 364-9600 (510) 988-9600 (916) 921-9600

FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Hoexter Consulting Eng'g Geo

Attention: David F. Hoexter

734 Torreya Court Palo Alto, CA 94303 Client Proj. ID: E-10-1A-163A/1970 Seminary

Sample Descript: MW-1 Matrix: LIQUID

Analysis Method: 8015Mod/8020 Lab Number: 9511273-01

Sampled: 11/01/95 Received: 11/01/95

Analyzed: 11/07/95

Reported: 11/15/95

QC Batch Number: 5G110795BTEX03A

Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection l ug/L	Sample Results ug/L	
TPPH as Gas Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	10006 100 100 100 100		
Surrogates Trifluorotoluene	Control Lim 70	nit s % 130	% Recovery 120

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

SEQUOIA ANALYTICAL ELAP #1210

Peggy Penner Project Manager

Page:



680 Chesapeake Drive 404 N. Wiget Lane

Redwood City, CA 94063 Walnut Creek, CA 94598 819 Striker Avenue, Suite 8 Sacramento, CA 95834

E-10-1A-163A/1970 Seminary

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Hoexter Consulting Eng'g Geo

Client Proj. ID: E-10-1/ Sample Descript: MW-2

Sampled: 11/01/95

734 Torreya Court Palo Alto, CA 94303

Matrix: LIQUID

Received: 11/01/95

Attention: David F. Hoexter

Analysis Method: 8015Mod/8020 Lab Number: 9511273-02

Analyzed: 11/07/95 Reported: 11/15/95

QC Batch Number: 5G110795BTEX03A

Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte		ction Limit ug/L	Sample Results ug/L
TPPH as Gas Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:	,	50 0.50 0.50 0.50 0.50	N.D. N.D. N.D.
Unidentified HC	***************************************	*********	
Surrogates Trifluorotoluene	Contr 70	ol Limits % 130	% Recovery 91

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

SEQUOIA ANALYTICAL -**ELAP #1210**

Peggy Penner Project Manager

Page:



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8

Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

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Hoexter Consulting Eng'g Geo

Client Proj. ID:

E-10-1A-163A/1970 Seminary

Sampled: 11/01/95

734 Torreya Court Palo Alto, CA 94303

Sample Descript: MW-3 Matrix: LIQUID

Received: 11/01/95

Attention: David F. Hoexter

Analysis Method: 8015Mod/8020 Lab Number: 9511273-03

Analyzed: 11/07/95 Reported: 11/15/95 QC Batch Number: 5G110795BTEX03A

Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	De		Sample Results ug/L		
TPPH as Gas Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:		50 0.50 0.50 0.50 0.50		4.4 N.D. 27 22	
Surrogates Trifluorotoluene	Co 70	ntrol Limits %	130	% Recovery 126	

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

SEQUOIA ANALYTICAL - ELAP #1210

Peggy Penner

Project Manager

Page:



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Hoexter Consulting Engrg. Geol. 734 Torreya Court

Attention: David F. Hoexter

Client Project ID:

E-10-1A-163A/1970 Seminary

Liquid

Palo Alto, CA 94303

Work Order #:

Matrix:

9511273 -01-03

Reported:

Nov 15, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl	Xylenes	Total Recoverable		
00 5-4-5 #-			Benzene		Petroleum Hydrocarb		
	GC110795BTEX03A	GC110795BTEX03A	GC110795BTEX03A	GC110795BTEX03A	OP1110955520EXB		
Analy. Method:		EPA 8020	EPA 8020	EPA 8020	SM 5520 BF-MOD		
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	SPE		
Analyst:	J. Woo	J. Woo	J. Woo	J. Woo	C. Garde		
MS/MSD #:	9510L3207	9510L3207	9510L3207	9510L3207	BLK111095		
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.		
Prepared Date:	11/7/95	11/7/95	11/7/95	11/7/95	11/10/95		
Analyzed Date:		11/7/95	11/7/95	11/7/95	11/10/95		
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	Manual		
Conc. Spiked:	10 μg/L	10 μg/L	10 μg/L	30 μg/L	10 mg/L		
Result:	9.7	9.7	9.6	29	7.4		
MS % Recovery:	97	97	96	97	74		
Dup. Result:	11	11	11	32	7.6		
MSD % Recov.:	110	110	110	107	7.6		
RPD:	13	13	14	9.8	2.7		
RPD Limit:	0-50	0-50	0-50	0-50	0-50		
LCS #:	BLK102795	BLK102795	BLK102795	BLK102795	- ·		
Prepared Date:	11/7/95	11/7/95	11/7/95	11/7/95	_ :		
Analyzed Date:	11/7/95	11/7/95	11/7/95	11/7/95			
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	<u> </u>		
Conc. Spiked:	10 μg/L	10 μg/L	10 μg/L	30 μg/L	•		
LCS Result:	10	10	10	31	!		
LCS % Recov.:	100	100	100	103	•		
		:					
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120	70-110		

SEQUOIA ANALYTICAL

Peggy Fenner 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

9511273.HHH <1>

<u></u>		CHAIN-OF-CUSTODY RECORD													-i		
	Project Number Project Name E-10-1A-163A 1970 Semi				Semi	ninery, Dalded			Number / Type of Containers								
Samplor's Name (printed) 5. Forsy the					9511273		umber /Type Containers	\\ \\ \\					Remarks				
	Boring Number	Date	Time	Soil	Water	Sample 1	ocation or De	Sample Number	r	<u> </u>	/ 5) \$/29	//	//				
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-	MW-Z		14:55			•		02	3-40ml	K	 	_					1
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	Requested Turnaround Time:	$\frac{1}{}$	brw.	ol T			Contact:	David	F. Hoox delives	de,-	— P	hone	4(5-	494-2505 ph/fore	Hoexte Enginee	Consulting	
	valuer va: A	HN	×77	e pe	r (2)	ω <i>ι</i> χς	乃 LoF	T. Gu	delives						734 To	rreya Court b, CA 94303	