



May 1, 1995

QUARTERLY GROUNDWATER MONITORING REPORT
APRIL 12, 1995 GROUNDWATER SAMPLING

at

Lim Family Property
250 8th Street
Oakland, California

Submitted by:
AQUA SCIENCE ENGINEERS, INC.
2411 Old Crow Canyon Road, #4
San Ramon, CA 94583
(510) 820-9391



81:1 wd 8-17W56
ENVIRONMENTAL PROTECTION

1.0 INTRODUCTION

This report outlines the methods and findings of Aqua Science Engineer's, Inc. (ASE) quarterly groundwater monitoring at the property located at 250 8th Street in Oakland, California (*Figures 1 and 2*).

2.0 SITE HISTORY

A gasoline service station previously occupied the site. In May 1992, ASE removed ten underground fuel storage tanks from the site. The tanks consisted of one (1) 10,000-gallon gasoline tank, one (1) 5,000-gallon diesel tank, three (3) 2,000-gallon gasoline tanks, one (1) 2,000-gallon diesel tank, three (3) 500-gallon gasoline tanks and one (1) 250-gallon waste oil tank. Up to 10,000 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPH-G) and 5,900 ppm total petroleum hydrocarbons as diesel (TPH-D) were detected in soil samples collected during the tank removal.

Between December 1992 and March 1993, All Environmental of San Ramon, California overexcavated 1,762 cubic yards of soil from the site and off-hauled the soil to the BFI Landfill in Livermore, California. Analytical results show that all on-site soil with hydrocarbon concentrations greater than 10 ppm was removed from the site with the exception of soil along the 8th Street shoring. Up to 1,800 ppm TPH-G and 120 ppm TPH-D were detected in soil samples collected along the shoring indicating that contamination likely extends below 8th Street. This contamination left in place may still be a source for groundwater contamination.

In January 1995, ASE installed monitoring wells MW-1 and MW-2 at the site. High hydrocarbon concentrations were detected in monitoring well MW-2, downgradient of the site. Moderate hydrocarbon concentrations were detected in on-site monitoring well MW-1.

3.0 MONITORING WELL SAMPLING

On April 12, 1995, ASE sampled monitoring wells MW-1 and MW-2 at the site. Prior to sampling, four well casing volumes of water were removed from each well. The pH, temperature and conductivity were monitored during the purging, and samples were not collected until these parameters stabilized. After the water level in the well recovered to over 80% of the water level measured prior to purging water from the well, groundwater samples were collected from the well with dedicated polyethylene bailers. The groundwater samples from each well were decanted from the bailer

into four (4) 40-ml volatile organic analysis (VOA) vials, three (3) 1-liter amber glass bottles and one (1) 500-ml poly container. All of the samples were preserved with hydrochloric acid (except for the sample to be analyzed for dissolved lead which was filtered and preserved by the analytical laboratory upon their receipt), labeled, placed in protective foam sleeves, and stored on ice for transport to American Environmental Network (AEN) of Pleasant Hill, California (DOHS #1172) under chain of custody. A slight hydrocarbon odor was present in groundwater from monitoring well MW-1 during the purging, and a strong hydrocarbon odor was present in groundwater from monitoring well MW-2 at the time of the sampling. A hydrocarbon sheen was present on the surface of the groundwater in monitoring well MW-2.

Well sampling purge water was contained in a DOT 17H drum and stored on-site for handling by the client at a later date. See Appendix A for a copy of the well sampling field logs.

4.0 ANALYTICAL RESULTS FOR GROUNDWATER

The groundwater samples were analyzed by AEN for TPH-G by modified EPA Method 5030/8015, TPH-D by modified EPA Method 3510/8015, benzene, toluene, ethylbenzene and total xylenes (BTEX) by EPA Method 8020, volatile organic compounds (VOCs) by EPA Method 8010, oil and grease (O&G) by Standard Method 5520 C&F and dissolved lead by EPA Method 3010/6010. The analytical results are tabulated below in Tables One and Two, and the certified analytical report and chain of custody record are included in Appendix B.

TABLE ONE
 Summary of Chemical Analysis of GROUNDWATER Samples
 TPH-G, TPH-D and BTEX
 All results are in parts per billion

Boring	Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl Benzene	Total Xylenes
MW-1	1-30-95	740 ✓	200 ✓	3 ✓	5	1	4
	4-12-95	400 ✓	500 ✓	<0.5 ✓	<0.5	3	<2
MW-2	1-30-95	88,000	800 ✓	19,000 ✓	18,000	2,400	10,000
	4-12-95	110,000 ✓	990 ✓	21,000 ✓	28,000	2,800	14,000
EPA METHOD		5030/ 8015	3550/ 8015	8020	8020	8020	8020

TABLE TWO
Summary of Chemical Analysis of GROUNDWATER Samples
Lead, Oil & Grease and Volatile Organic Compounds
All results are in parts per billion

<u>Compound</u>	<u>MW-1</u>	<u>MW-2</u>
<u>1-30-95</u>		
Dissolved Lead	<0.04	<0.04
Total Oil and Grease	<500	19,000
Hydrocarbon Oil and Grease	<500	17,000
Chloroform	0.5	<30
Tetrachloroethene (PCE)	8	<30
Other VOCs	<0.5-2	<30-100
<u>4-12-95</u>		
Dissolved Lead	<0.04	<0.04
Hydrocarbon Oil and Grease (5520P)	<500 ✓	22,000 ✓
Tetrachloroethene (PCE)	6 ✓	0.9 ✓
1,2-Dichloroethane	ND	<0.5 43
Other VOCs	<0.5-2	<30-100

5.0 CONCLUSIONS AND RECOMMENDATION

Very high hydrocarbon concentrations were detected in monitoring well MW-2, downgradient of the site. Only low hydrocarbon concentrations were detected in on-site monitoring well MW-1.

Further assessment of the extent of contamination as well as soil and groundwater remediation will be required at the site in the future. ASE recommends at this time that groundwater monitoring be continued at the site on a quarterly basis. ASE recommends that groundwater sampling for dissolved lead be discontinued during future groundwater sampling periods.

6.0 REPORT LIMITATIONS

The results of this investigation represent conditions at the time of the groundwater sampling, at the specific locations at which the samples were collected, and for the specific parameters analyzed for by the laboratory.

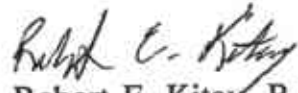
It does not fully characterize the site for contamination resulting from unknown sources, or for parameters not analyzed for by the laboratory. All of the laboratory work cited in this report was prepared under the

direction of an independent CSDHS certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

Aqua Science Engineers appreciates the opportunity to assist you with your environmental needs. Should you have any questions or comments, please feel free to call us at (510) 820-9391.

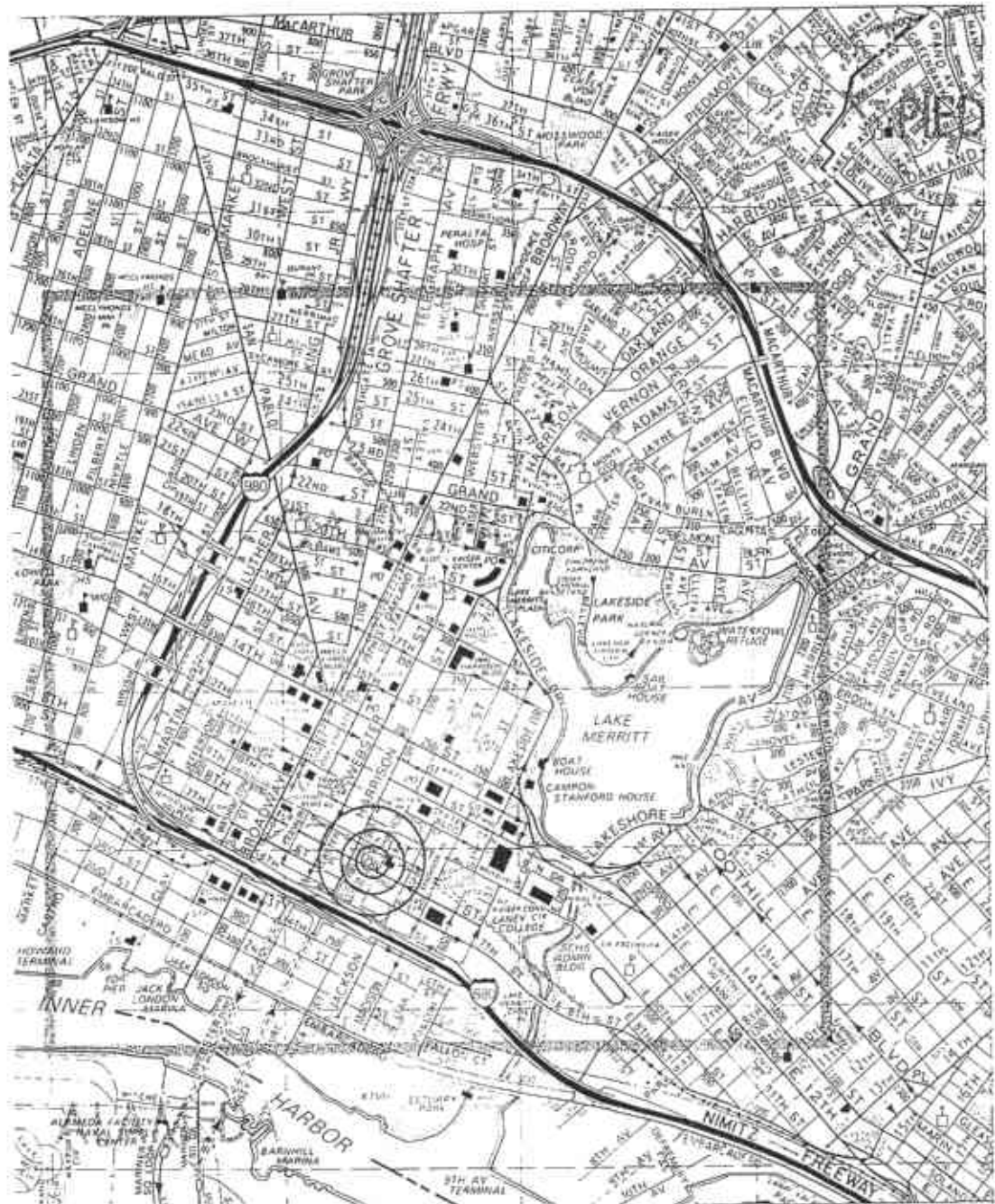
Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.


Robert E. Kitay, R.E.A.
Project Geologist



Attachments: Figures 1 and 2
Appendices A and B



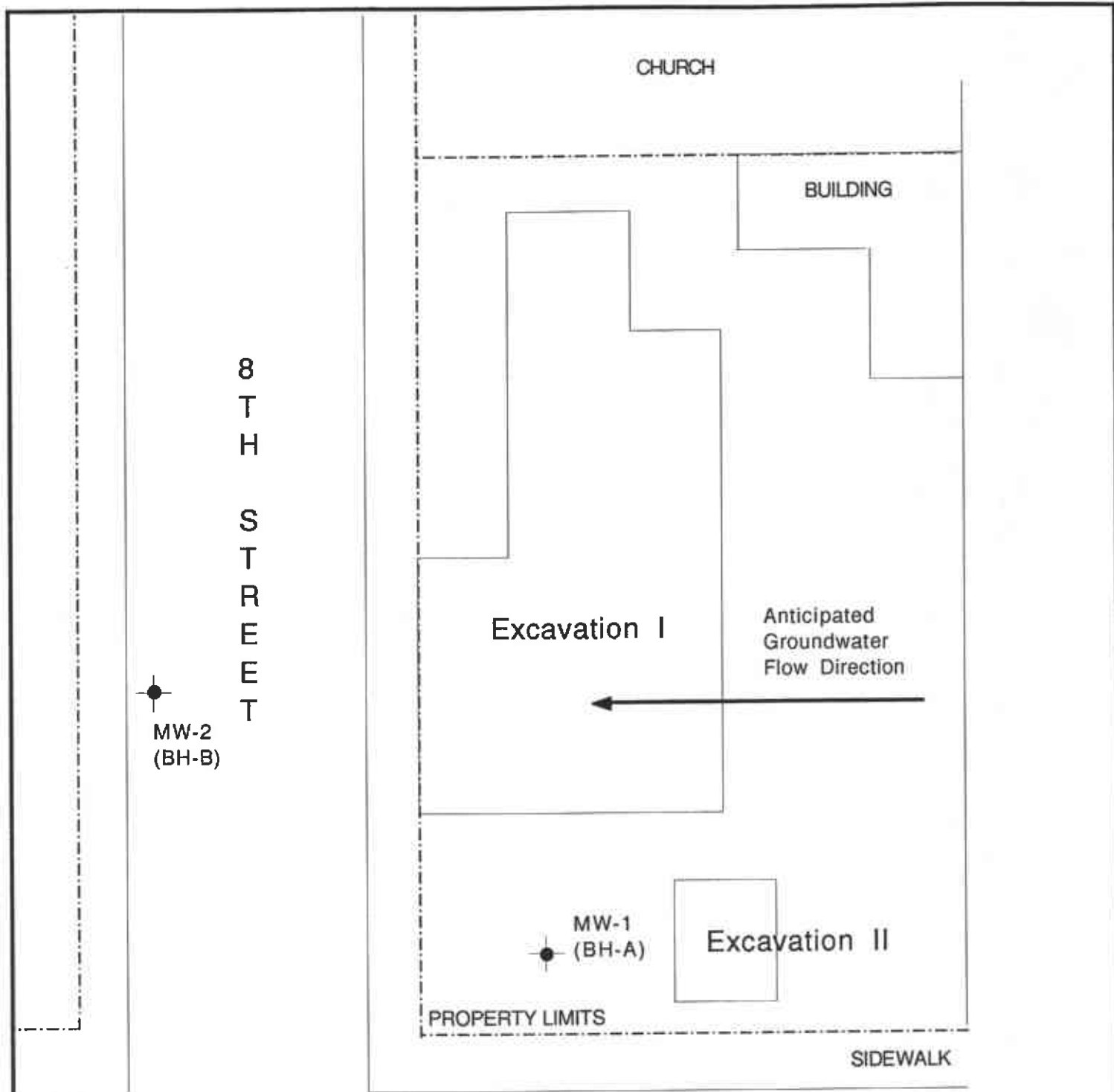
SITE LOCATION MAP

Lim Property
250 8th Street
Oakland, California

Aqua Science Engineers

Figure 1

BASE: The Thomas Guide, Alameda and Contra Costa
Counties Street Guide & Directory, 1990



LEGEND


 Monitoring Well Location
 With Boring I.D.


 NORTH

SCALE
 1" = 30'

SITE PLAN

LIM PROPERTY
 250 8th Street
 Oakland, California

AQUA SCIENCE ENGINEERS, INC. | Figure 2

APPENDIX A

Well Sampling Field Log



WELL SAMPLING FIELD LOG

Project Name and Address: Lim Family Property, 250.8th Street, Oakland, CA
 Job #: _____ Date of sampling: 4-12-95
 Well Name: MW-1 Sampled by: PK
 Total depth of well (feet): 27.96 Well diameter (inches): 2
 Depth to water before sampling (feet): 15.71
 Thickness of floating product if any: None
 Depth of well casing in water (feet): 12.25
 Number of gallons per well casing volume (gallons): 2.0
 Number of well casing volumes to be removed: 4
 Req'd volume of groundwater to be purged before sampling (gallons): 8
 Equipment used to purge the well: Dedicated polyethylene bailer
 Time Evacuation Began: 15:30 Time Evacuation Finished: 16:40
 Approximate volume of groundwater purged: 8 gallons
 Did the well go dry?: No After how many gallons: ✓
 Time samples were collected: 17:00
 Depth to water at time of sampling: —
 Percent recovery at time of sampling: —
 Samples collected with: Dedicated polyethylene bailer
 Sample color: None Odor: slight hc
 Description of sediment in sample: small amount of fine olive silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>Initial</u>	<u>66.0</u>	<u>6.90</u>	<u>957</u>
<u>2.0 gal</u>	<u>65.2</u>	<u>7.02</u>	<u>790</u>
<u>4.0 gal</u>	<u>65.0</u>	<u>7.14</u>	<u>732</u>
<u>6.0 gal</u>	<u>64.9</u>	<u>7.14</u>	<u>721</u>
<u>8.0 gal</u>	<u>65.0</u>	<u>7.13</u>	<u>730</u>

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	iced?	Analysis
<u>MW-1</u>	<u>2</u>	<u>40-ml VOA vials</u>	<u>HCl</u>	<u>Yes</u>	<u>TPH-G/BTEX</u>
↓	<u>2</u>	↓	↓	↓	<u>EPA 8010</u>
↓	<u>2</u>	<u>1-liter amber glass</u>	↓	↓	<u>TPH-D</u>
↓	<u>1</u>	↓	↓	↓	<u>O&G</u>
↓	<u>1</u>	<u>500-ml poly</u>	<u>none</u>	↓	<u>Dissolved Pb</u>

WELL SAMPLING FIELD LOG

Project Name and Address: Lim Property, 250-8th Street, Oakland
 Job #: _____ Date of sampling: 4-12-95
 Well Name: MW-2 Sampled by: RR
 Total depth of well (feet): 25.82 Well diameter (inches): 2
 Depth to water before sampling (feet): 14.75
 Thickness of floating product if any: Shells
 Depth of well casing in water (feet): 11.07
 Number of gallons per well casing volume (gallons): 1.9
 Number of well casing volumes to be removed: 4
 Req'd volume of groundwater to be purged before sampling (gallons): 7.6
 Equipment used to purge the well: 12 volt PVC pump
 Time Evacuation Began: 14:40 Time Evacuation Finished: 15:00
 Approximate volume of groundwater purged: 8 gallons
 Did the well go dry?: No After how many gallons: _____
 Time samples were collected: 15:05
 Depth to water at time of sampling: ✓
 Percent recovery at time of sampling: ✓
 Samples collected with: Dedicated polyethylene trailer
 Sample color: None Odor: strong no odor
 Description of sediment in sample: small amount of fine olive silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>Initial</u>	<u>69.7</u>	<u>7.89</u>	<u>3440</u>
<u>2 gal</u>	<u>67.5</u>	<u>7.83</u>	<u>943</u>
<u>4 gal</u>	<u>66.8</u>	<u>7.46</u>	<u>744</u>
<u>6 gal</u>	<u>66.5</u>	<u>7.31</u>	<u>717</u>
<u>8 gal</u>	<u>66.8</u>	<u>7.30</u>	<u>725</u>

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
<u>MW-2</u>	<u>2</u>	<u>40-ml VOA vial</u>	<u>HCl</u>	<u>Yes</u>	<u>TPH-G/BTEX</u>
<u>↓</u>	<u>2</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>EPA 8010</u>
<u>↓</u>	<u>2</u>	<u>1.1-liter amber glass</u>	<u>↓</u>	<u>↓</u>	<u>TPH-D</u>
<u>↓</u>	<u>1</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>O & G</u>
<u>↓</u>	<u>1</u>	<u>500-ml poly</u>	<u>None</u>	<u>✓</u>	<u>Dissolved Pb</u>

APPENDIX B

**Analytical Report and Chain of Custody Forms
For Groundwater Samples**

American Environmental Network

Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

PAGE 1

AQUA SCIENCE ENGINEERS, INC
2411 OLD CROW CANYON RD. #4
SAN RAMON, CA 94583

ATTN: ROBERT KITAY
CLIENT PROJ. ID: LIM PROPERTY

REPORT DATE: 04/26/95

DATE(S) SAMPLED: 04/12/95

DATE RECEIVED: 04/13/95

AEN WORK ORDER: 9504166

PROJECT SUMMARY:

On April 13, 1995, this laboratory received 2 water sample(s).

Client requested sample(s) be analyzed for inorganic and organic parameters. Results of analysis are summarized on the following page(s). Please see quality control report for a summary of QC data pertaining to this project.

Samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Samples may be archived by prior arrangement.

If you have any questions, please contact Client Services at (510) 930-9090.


Larry Klein
Laboratory Director

AQUA SCIENCE ENGINEERS, INC.

AEN JOB NO: 9504166
 DATE SAMPLED: 04/12/95 ✓
 DATE RECEIVED: 04/13/95
 CLIENT PROJ. ID: LIM PROPERTY

O + G

Client Sample Id	AEN Lab Id	Purgeable Hydrocarbons as Gasoline (ug/L)	Extractable Hydrocarbons as Diesel (ug/L)	Hydrocarbons (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)
MW-1	01	400 ✓	500 ✓	ND ✓	ND ✓	ND	3	ND
MW-2	02	110,000 (5,000)* ✓	990 ✓	22,000 ✓	21,000 (100)* ✓	28,000 (100)*	2,800 (100)*	14,000 (400)*
Reporting Limit		50	50	500	0.5	0.5	0.5	2
EPA Method:		5030 GCFID	3510 GCFID	5520F	8020	8020	8020	8020
Date Extracted:		NA	04/18/95	04/20/95	NA	NA	NA	NA
Date Analyzed:		04/18/95	04/23/95	04/24/95	04/18/95	04/18/95	04/18/95	04/18/95

NA = Not Applicable
 ND = Not Detected

* Reporting limits elevated for sample MW-2 for gas/BTEX due to high levels of target compounds. Sample run at dilution.

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: MW-1
 AEN LAB NO: 9504166-01
 AEN WORK ORDER: 9504166
 CLIENT PROJ. ID: LIM PROPERTY

DATE SAMPLED: 04/12/95
 DATE RECEIVED: 04/13/95
 REPORT DATE: 04/26/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	04/13/95
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	04/17/95
Lead	EPA 6010	ND	0.04	mg/L	04/19/95
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	04/17/95
Bromoform	75-25-2	ND	0.5	ug/L	04/17/95
Bromomethane	74-83-9	ND	2	ug/L	04/17/95
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	04/17/95
Chlorobenzene	108-90-7	ND	0.5	ug/L	04/17/95
Chloroethane	75-00-3	ND	2	ug/L	04/17/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	04/17/95
Chloroform	67-66-3	ND	0.5	ug/L	04/17/95
Chloromethane	74-87-3	ND	2	ug/L	04/17/95
Dibromochloromethane	124-48-1	ND	0.5	ug/L	04/17/95
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	04/17/95
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	04/17/95
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	04/17/95
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	04/17/95
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	04/17/95
1,2-Dichloroethane	107-06-2	ND	0.5	ug/L	04/17/95
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	04/17/95
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	04/17/95
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	04/17/95
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	04/17/95
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	04/17/95
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	04/17/95
Methylene Chloride	75-09-2	ND	2	ug/L	04/17/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	04/17/95
Tetrachloroethene	127-18-4	6 *	0.5	ug/L	04/17/95
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	04/17/95
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	04/17/95
Trichloroethene	79-01-6	ND	0.5	ug/L	04/17/95
Trichlorofluoromethane	75-69-4	ND	2	ug/L	04/17/95
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	04/17/95
Vinyl Chloride	75-01-4	ND	2	ug/L	04/17/95

ND = Not detected at or above the reporting limit

* = Value at or above reporting limit

AQUA SCIENCE ENGINEERS, INC

SAMPLE ID: MW-2
 AEN LAB NO: 9504166-02
 AEN WORK ORDER: 9504166
 CLIENT PROJ. ID: LIM PROPERTY

DATE SAMPLED: 04/12/95
 DATE RECEIVED: 04/13/95
 REPORT DATE: 04/26/95

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	04/13/95
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	04/17/95
Lead	EPA 6010	ND	0.04	mg/L	04/19/95
EPA 8010 - Water matrix	EPA 8010				
Bromodichloromethane	75-27-4	ND	0.5	ug/L	04/17/95
Bromoform	75-25-2	ND	0.5	ug/L	04/17/95
Bromomethane	74-83-9	ND	2	ug/L	04/17/95
Carbon Tetrachloride	56-23-5	ND	0.5	ug/L	04/17/95
Chlorobenzene	108-90-7	ND	0.5	ug/L	04/17/95
Chloroethane	75-00-3	ND	2	ug/L	04/17/95
2-Chloroethyl Vinyl Ether	110-75-8	ND	0.5	ug/L	04/17/95
Chloroform	67-66-3	ND	0.5	ug/L	04/17/95
Chloromethane	74-87-3	ND	2	ug/L	04/17/95
Dibromochloromethane	124-48-1	ND	0.5	ug/L	04/17/95
1,2-Dichlorobenzene	95-50-1	ND	0.5	ug/L	04/17/95
1,3-Dichlorobenzene	541-73-1	ND	0.5	ug/L	04/17/95
1,4-Dichlorobenzene	106-46-7	ND	0.5	ug/L	04/17/95
Dichlorodifluoromethane	75-71-8	ND	2	ug/L	04/17/95
1,1-Dichloroethane	75-34-3	ND	0.5	ug/L	04/17/95
1,2-Dichloroethane	107-06-2	43 *	0.5	ug/L	04/17/95
1,1-Dichloroethene	75-35-4	ND	0.5	ug/L	04/17/95
cis-1,2-Dichloroethene	156-59-2	ND	0.5	ug/L	04/17/95
trans-1,2-Dichloroethene	156-60-5	ND	0.5	ug/L	04/17/95
1,2-Dichloropropane	78-87-5	ND	0.5	ug/L	04/17/95
cis-1,3-Dichloropropene	10061-01-5	ND	0.5	ug/L	04/17/95
trans-1,3-Dichloropropene	10061-02-6	ND	0.5	ug/L	04/17/95
Methylene Chloride	75-09-2	ND	2	ug/L	04/17/95
1,1,2,2-Tetrachloroethane	79-34-5	ND	0.5	ug/L	04/17/95
Tetrachloroethene	127-18-4	0.9 *	0.5	ug/L	04/17/95
1,1,1-Trichloroethane	71-55-6	ND	0.5	ug/L	04/17/95
1,1,2-Trichloroethane	79-00-5	ND	0.5	ug/L	04/17/95
Trichloroethene	79-01-6	ND	0.5	ug/L	04/17/95
Trichlorofluoromethane	75-69-4	ND	2	ug/L	04/17/95
1,1,2Trichlorotrifluoroethane	76-13-1	ND	0.5	ug/L	04/17/95
Vinyl Chloride	75-01-4	ND	2	ug/L	04/17/95

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9504166

CLIENT PROJECT ID: LIM PROPERTY

Quality Control and Project Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analysis.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behavior, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrumental performance.

D: Surrogates diluted out.

#: Indicates result outside of established laboratory QC limits.

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9504166
 DATE(S) EXTRACTED: 04/18/95
 INSTRUMENT: C
 MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery	
			n-Pentacosane	
04/23/95	MW-1	01	79	
04/23/95	MW-2	02	102	
QC Limits:			73-129	

DATE EXTRACTED: 04/18/95
 DATE ANALYZED: 04/20/95
 SAMPLE SPIKED: DI WATER
 INSTRUMENT: C

Method Spike Recovery Summary

Analyte	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Diesel	1.94	94	3	65-103	12

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

METHOD: SM 5520

AEN JOB NO: 9504166
DATE EXTRACTED: 04/17/95
DATE ANALYZED: 04/18/95
SAMPLE SPIKED: DI WATER
INSTRUMENT: IR
MATRIX: WATER

Method Spike Recovery Summary

Analyte	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Oil	7.5	88	<1	80-109	5

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

METHOD: EPA 8010

AEN JOB NO: 9504166
 INSTRUMENT: G
 MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery	
			Bromochloro-methane	1-Bromo-3-chloro-propane
04/17/95	MW-1	01	96	106
04/17/95	MW-2	02	96	90
QC Limits:			70-130	70-130

DATE ANALYZED: 04/17/95
 SAMPLE SPIKED: 9504179-01
 INSTRUMENT: G

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
1,1-Dichloroethene	50	82	1	37-156	20
Trichloroethene	50	89	<1	54-122	20
Chlorobenzene	50	81	2	54-141	20

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9504166
 INSTRUMENT: H
 MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery	
			Fluorobenzene	
04/18/95	MW-1	01	96	
04/18/95	MW-2	02	100	
QC Limits:			92-109	

DATE ANALYZED: 04/18/95
 SAMPLE SPIKED: 9504162-01
 INSTRUMENT: H

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Benzene	36.3	105	1	85-109	17
Toluene	103.0	106	<1	87-111	16
Hydrocarbons as Gasoline	1000	104	3	66-117	19

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

AEN JOB NO: 9504166
DATE(S) ANALYZED: 04/19/95
MATRIX: WATER

Method Spike Recovery Summary

Analyte	Inst./ Method	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits	
					Percent Recovery	RPD
Pb, Lead	ICP/6010	0.5	99	2	94-115	6

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

*** END OF REPORT ***

Aqua Science Engineers, Inc.
 2411 Old Crow Canyon Road, #4,
 San Ramon, CA 94583
 (510) 820-9391 - FAX (510) 837-4853

Chain of Custody

R-3.3.1
 R-5.1 J-W

9504166

DATE 4-12-95 PAGE 1 OF 1

SAMPLERS (SIGNATURE)

(PHONE NO.)

PROJECT NAME

Lim Property

NO. _____

ADDRESS 250-8th Street, Oakland, CA

Robert C. Kitay

(510) 820-9391

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

Filter and preserve Pb
 sample upon receipt

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH- GASOLINE (EPA 5030/8015)	TPH- GASOLINE/BTEX (EPA 5030/8015-8020)	TPH- DIESEL (EPA 3510/8015)	PURGEABLE AROMATICS (EPA 602/6020)	PURGEABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240)	BASE/NEUTRALS, ACIDS (EPA 625/8270)	OTL & GREASE <u>5520CF</u> (EPA 5520 EXP. OF <u>PAET</u>)	LUFT METALS (S) (EPA 6010-7000)	TITLE 22 (CAM 17) (EPA 6010-7000)	TCLP (EPA 1311/1310)	STLC- CAM WET (EPA 1311/1310)	REACTIVITY CORROSIVITY IGNITABILITY	P. 350 lead Pb
					<u>7-11</u> MW-1	<u>4/12</u>	<u>17:00</u>	<u>Water</u>	<u>8</u>		<u>X</u>	<u>X</u>		<u>X</u>			<u>X</u>	
<u>7-11</u> MW-2	<u>4/12</u>	<u>15:05</u>	<u>Water</u>	<u>8</u>		<u>X</u>	<u>X</u>		<u>X</u>			<u>X</u>						<u>X</u>

RELINQUISHED BY:

Robert C. Kitay 14:20
 (signature) (time)

Robert E. Kitay 4-13-95
 (printed name) (date)

Company- ASE

RECEIVED BY:

Neil Hervey 14:40
 (signature) (time)

NEIL HERVEY 4-13-95
 (printed name) (date)

Company- AEN

RELINQUISHED BY:

Neil Hervey 15:05
 (signature) (time)

NEIL HERVEY 4-13-95
 (printed name) (date)

Company- _____

RECEIVED BY LABORATORY:

Lori L. Pruitt 1505
 (signature) (time)

LORI L. PRUITT 4-13-95
 (printed name) (date)

Company- AEN

COMMENTS:

4-13-95 Confirmed
026 = 5520CF 1R pm
Robert Kitay
RB