



Site # 1585

August 12, 1997

ALACO ENVIRONMENTAL HEALTH

8-13-97

JE

QUARTERLY GROUNDWATER MONITORING REPORT
JULY 8, 1997 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



David M. Schultz

1.0 INTRODUCTION

This report outlines the methods and findings of Aqua Science Engineer's, Inc. (ASE) semi-annual 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.

Since April 1995, the site has been on a groundwater monitoring program. Analytical results for these sampling periods are presented in Tables Two and Three.

3.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On July 8, 1997, ASE environmental specialist Scott Ferriman measured the depth to water in each site well using an electric water level sounder. The surface of the groundwater was also checked for the presence of free-floating hydrocarbons or sheen. A sheen was present on the surface of the

groundwater in monitoring well MW-2. No free-floating hydrocarbons or sheen was present on the surface of water in monitoring well MW-1. Depth to groundwater measurements for the wells on the LUM property were measured by All Environmental on July 8, 1997. These measurements are utilized along with the data from the Lim property measurements to determine the groundwater flow direction and gradient beneath the site. This data is presented below in Table One.

TABLE ONE
Summary of Groundwater Well Survey Data

Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-1	01-30-95	25.51	16.21		9.30
	04-12-95		15.71		9.80
	07-14-95		16.71		8.80
	10-17-95		17.72		7.79
	01-12-96		18.03		7.48
	07-25-96		16.82		8.69
	01-06-97		15.60		9.91
	07-08-97		17.31		8.20
MW-2	01-30-95	23.99	15.02		8.97
	04-12-95		14.75		9.24
	07-14-95		16.02		7.97
	10-17-95		16.94		7.05
	01-12-96		17.05		6.94
	07-25-96		16.02		7.97
	01-06-97		14.34		9.65
	07-08-97		16.52		7.47
LUM-1	07-14-95	23.42	Unknown		Unknown
	10-17-95		18.21	1.53	6.43*
	01-12-96		18.15	1.35	6.35*
	07-25-96		18.08	2.36	7.23*
	01-06-97		Unknown		Unknown
	07-08-97		Unknown		Unknown
LUM-2	07-14-95	23.98	17.21		6.77
	10-17-95		17.67		6.31
	01-12-96		17.89	0.01	6.10*
	07-25-96		16.94		7.04
	01-06-97		14.35		9.63
	07-08-97		17.32		6.66

* = Adjusted for the presence of free-floating oil by the equation: Adjusted Groundwater Elevation = Top of Casing Elevation - Depth to Groundwater + (0.8 x Floating Hydrocarbon Thickness)

Groundwater elevation contours are presented on Figure 2. On July 8, 1997, groundwater flowed to the south beneath the site at a gradient of 0.0099-feet/foot, which is consistent with previous findings.

4.0 MONITORING WELL SAMPLING

On July 8, 1997, 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 each well recovered to at least 80% of the water level measured prior to purging water from the well, groundwater samples were collected from the wells with dedicated polyethylene bailers. The groundwater samples from each well were decanted from the bailer into 40-ml volatile organic analysis (VOA) vials and 1-liter amber glass bottles. All of the samples were properly preserved, labeled, placed in protective foam sleeves, and stored on ice for transport to Chromalab of Pleasanton, California (ELAP #1094) under chain of custody. There was a slight hydrocarbon odor present in groundwater from monitoring well MW-1 and a strong hydrocarbon odor was present in groundwater from 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.

5.0 ANALYTICAL RESULTS FOR GROUNDWATER

The groundwater samples were analyzed for TPH-G by EPA Method 5030/8015M, TPH-D by EPA Method 3510/8015M, and benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8020, MTBE by EPA Method 8020 and halogenated volatile organic compounds (HVOCs) by EPA Method 8010. The groundwater sampled from monitoring well MW-2 was also analyzed for oil and grease (O&G) by Standard Method 5520BF. The analytical results are tabulated below in Tables Two and Three, and the certified analytical report and chain of custody record are included in Appendix B.

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

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
<u>MW-1</u>							
01-30-95	740	200	3	5	1	4	--
04-12-95	400	500	<0.5	<0.5	3	<2	--
07-14-95	520	400	1	<0.5	2	3	--
10-17-95	400	200	0.5	1	3	<2	--
01-12-96	120	890	<0.5	<0.5	<0.5	<1.0	<2
07-08-96	320	300	0.52	2.7	1.2	2.3	<5
01-06-97	110	75	<0.5	0.68	<0.5	<0.5	<5
07-08-97	380	290	<0.5	1.5	1.4	1.9	<5
<u>MW-2</u>							
01-30-95	88,000	800	19,000	18,000	2,400	10,000	--
04-12-95	110,000	990	21,000	28,000	2,800	14,000	--
07-14-95	120,000	5,000	20,000	25,000	3,200	15,000	--
10-17-95	190,000	4,000	15,000	26,000	4,900	23,000	--
01-12-96	32,000	2,600	10,000	8,000	1,100	4,800	<2
07-08-96	110,000	2,500	20,000	18,000	2,500	12,000	<500
01-06-97	230,000	37,000	11,000	19,000	4,300	20,000	<1,200
07-08-97	91,000	35,000	16,000	20,000	2,700	13,000	<1,000
EPA METHOD	5030/ 8015M	3550/ 8015M	8020	8020	8020	8020	8020

TABLE THREE
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	< 500	22,000
Tetrachloroethene (PCE)	6	0.9
1,2-Dichloroethane	< 0.5	43
Other VOCs	< 0.5-2	< 30-100
<u>7-14-95</u>		
Total Oil and Grease	< 500	25,000
Hydrocarbon Oil and Grease	< 500	23,000
1,2-Dichloroethane	< 0.5	35
Tetrachloroethene (PCE)	4	< 5
Other VOCs	< 0.5-2	< 5-20
<u>10-17-95</u>		
Total Oil and Grease	< 1,000	15,000
Hydrocarbon Oil and Grease	< 1,000	13,000
Tetrachloroethene (PCE)	5	< 0.5
Trichloroethene (TCE)	< 0.5	5
<u>01-12-96</u>		
Hydrocarbon Oil and Grease	< 5,000	< 5,000

TABLE THREE (Continued)
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>07-08-96</u>		
Hydrocarbon Oil and Grease	---	< 1,000
Chloroform	0.8	< 0.5
Tetrachloroethane (PCE)	6.4	< 0.5
Other VOC's	< 0.5-3	< 0.5-3
<u>01-06-97</u>		
Hydrocarbon Oil and Grease	---	4,100
<u>07-08-97</u>		
Hydrocarbon Oil and Grease	---	< 1,000
Tetrachloroethane (PCE)	0.9	< 0.5
Other VOC's	< 0.5-3	< 0.5-3

6.0 CONCLUSIONS AND RECOMMENDATION

Very high hydrocarbon concentrations were detected in groundwater samples collected from monitoring well MW-2, downgradient of the site. The benzene, ethylbenzene and total xylenes concentrations in these samples exceeded the California Department of Toxic Substances (DTSC) maximum contaminant levels (MCLs) for drinking water. In addition, the toluene concentration in these samples exceeded the DTSC recommended action level (RAL) for drinking water. Only low hydrocarbon and PCE concentrations, below DTSC MCLs and RALs were detected in groundwater samples collected from monitoring well MW-1.

The groundwater remediation project outlined in the ASE's workplan dated June 5, 1997 is expected to proceed during the next quarter. The next semi-annual groundwater sampling is scheduled for early January 1998.

7.0 REPORT LIMITATIONS

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

It does not fully characterize the site for contamination resulting from unknown sources, or for parameters not analyzed by the laboratory. All of

the laboratory work cited in this report was prepared under the direction of an independent CA-DHS 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 The Lim Family with their environmental needs. Should you have any questions or comments, please feel free to call us at (510) 820-9391.

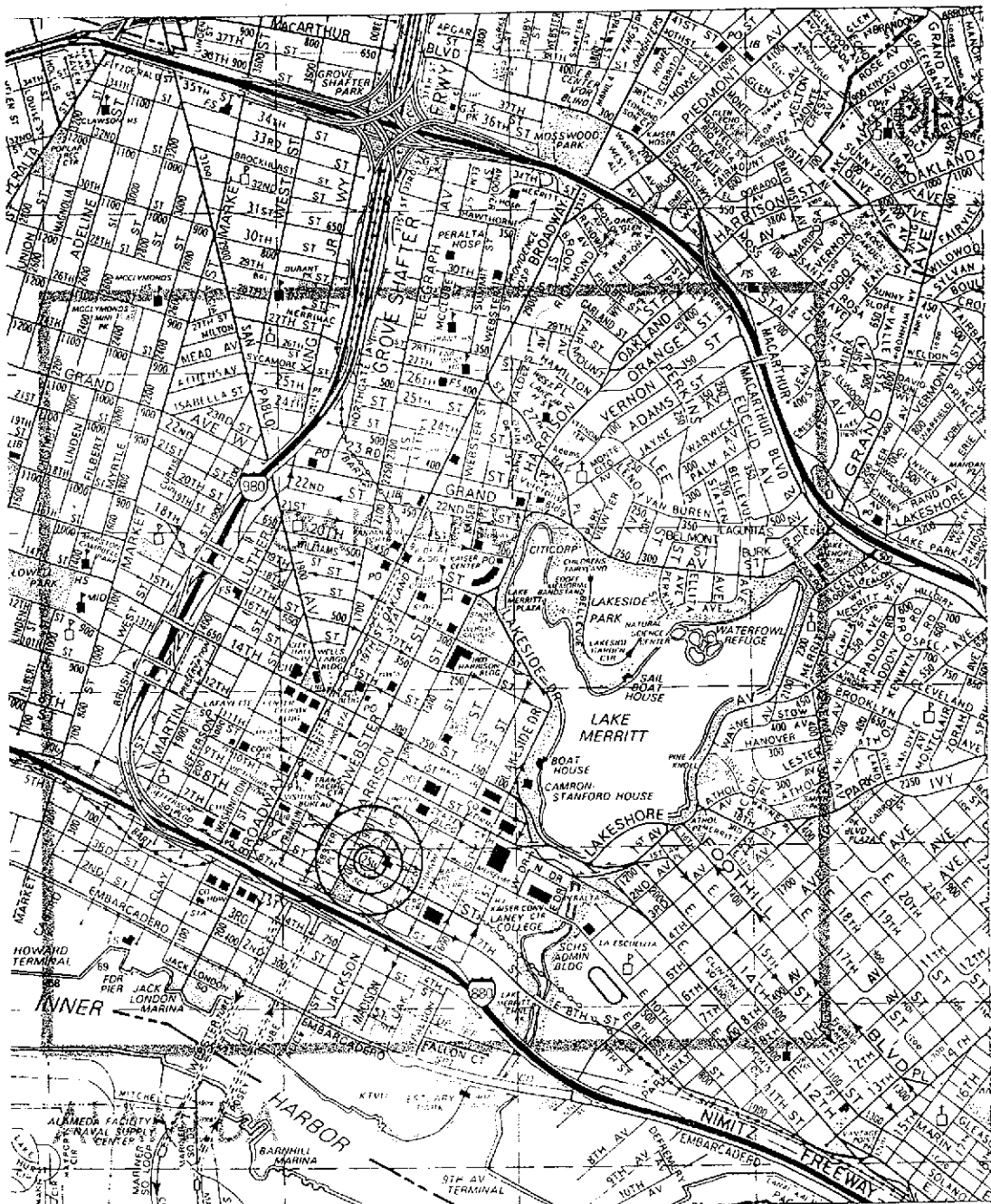
Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.



Scott T. Ferriman
Environmental Specialist

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

-  LIM Monitoring Well
-  LUM Monitoring Well
-  (7.47') Groundwater elevation
-  Groundwater elevation contour



NORTH

SCALE

1" = 30'

8th Street

MW-2
(7.47')

Groundwater
Flow Direction

7.5'

CHURCH

PROPERTY LIMITS

BUILDING

LIM
Property

Excavation I

MW-1
(8.20')

Excavation II

SIDEWALK

8.0'

Alice Street

Buildings

SIDEWALK

SIDEWALK

LUM-1
(Unknown)

7.0'

LUM Property

LUM-2
(6.66')

SIDEWALK

GROUNDWATER ELEVATION
CONTOUR MAP - 7/08/97

LIM Property
250 8th Street
Oakland, California

AQUA SCIENCE ENGINEERS

Figure 2

APPENDIX A

Well Sampling Field Log



WELL SAMPLING FIELD LOG

Project Name and Address: Lim Property, 250 8th Street Oakland, CA
 Job #: 2808 Date of sampling: 7-8-97
 Well Name: MW-1 Sampled by: SK
 Total depth of well (feet): 27.96 Well diameter (inches): 2"
 Depth to water before sampling (feet): 17.31
 Thickness of floating product if any: none
 Depth of well casing in water (feet): 10.65
 Number of gallons per well casing volume (gallons): 1.8
 Number of well casing volumes to be removed: 4
 Req'd volume of groundwater to be purged before sampling (gallons): 7
 Equipment used to purge the well: Dedicated Poly Bailer
 Time Evacuation Began: 15:15 Time Evacuation Finished: 15:40
 Approximate volume of groundwater purged: 7
 Did the well go dry?: no After how many gallons: -
 Time samples were collected: 15:45
 Depth to water at time of sampling: 17.42
 Percent recovery at time of sampling: 99%
 Samples collected with: Dedicated Poly Bailer
 Sample color: cloudy Odor: Slight HC odor
 Description of sediment in sample: none

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>1</u>	<u>65.6</u>	<u>8.63</u>	<u>408</u>
<u>2</u>	<u>64.2</u>	<u>8.42</u>	<u>442</u>
<u>3</u>	<u>63.8</u>	<u>8.38</u>	<u>468</u>
<u>4</u>	<u>63.7</u>	<u>8.55</u>	<u>472</u>

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
<u>MW-1</u>	<u>3</u>	<u>40 ml VOA's</u>	<u>HCl</u>	<u>Yes</u>	<u>T PH₂ / BTEX / MTBE</u>
<u>↓</u>	<u>1</u>	<u>12 Amber</u>	<u>HCl</u>	<u>↓</u>	<u>TPAD</u>



WELL SAMPLING FIELD LOG

Project Name and Address: Lim Property, 250 8th street, Oakland, CA
 Job #: 2808 Date of sampling: 7-8-97
 Well Name: MW-2 Sampled by: SM
 Total depth of well (feet): 25.82 Well diameter (inches): 2"
 Depth to water before sampling (feet): 16.52
 Thickness of floating product if any: ~~0~~ Sheen
 Depth of well casing in water (feet): 9.30
 Number of gallons per well casing volume (gallons): 1.6
 Number of well casing volumes to be removed: 4
 Req'd volume of groundwater to be purged before sampling (gallons): 6
 Equipment used to purge the well: Dedicated Poly Bag
 Time Evacuation Began: 14:25 Time Evacuation Finished: 14:55
 Approximate volume of groundwater purged: 6
 Did the well go dry?: ~~NO~~ NO After how many gallons: ~~6~~
 Time samples were collected: 15:00
 Depth to water at time of sampling: 16.58
 Percent recovery at time of sampling: 9.9%
 Samples collected with: Dedicated Poly Bag
 Sample color: Cloudy Odor: Strong H₂S odor
 Description of sediment in sample: Black Sediment

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-2	2	40 ml VOA's	HEI	Yes	TPH ₅ /BTEX/MTBE
↓	2	40 ml VOA's	HEI	↓	8010
↓	1	12 Amber	HEI	↓	TPH ₀
↓	1	12 Amber	HEI	↓	CPBF

APPENDIX B

Analytical Report and Chain of Custody Forms
For Groundwater Samples

CHROMALAB, INC.

Environmental Services (SDB)

July 11, 1997

Submission #: 9707123

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

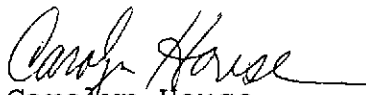
Project: LIM PROPERTY
Received: July 9, 1997

Project#: 2808

re: 1 sample for Oil and Grease analysis.
Method: 5520 B&F

Sampled: July 8, 1997 Matrix: WATER Extracted: July 11, 1997
Run#: 7726 Analyzed: July 11, 1997

Spl#	CLIENT SPL ID	OIL & GREASE (mg/L)	REPORTING LIMIT (mg/L)	BLANK RESULT (mg/L)	BLANK SPIKE (%)	DILUTION FACTOR
139041	MW-2	N.D.	1.0	N.D.	94.5	1


Carolyn House
Extractions Supervisor


Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

July 15, 1997

Submission #: 9707123

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

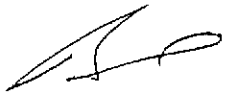
Project: LIM PROPERTY
Received: July 9, 1997


Project#: 2808

re: 2 samples for TPH - Diesel analysis.
Method: EPA 8015M

Sampled: July 8, 1997 Matrix: WATER Extracted: July 10, 1997
Run#: 7706 Analyzed: July 11, 1997

Spl#	CLIENT SPL ID	DIESEL (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
139040	MW-1	290	50	N.D.	93.5	1
<i>Note: Hydrocarbon reported does not match the pattern of our Diesel standard.</i>						
139041	MW-2	35000	1000	N.D.	93.5	20
<i>Note: Estimated concentration due to overlapping fuel patterns.</i>						


Bruce Havlik
Chemist


Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

July 24, 1997

Submission #: 9707123

AQUA SCIENCE ENGINEERS INC

Revised from July 16, 1997

Atten: Scott Ferriman.

Project: LIM PROPERTY
Received: July 9, 1997

Project#: 2808

re: One sample for Gasoline BTEX MTBE analysis.
Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-1

Spl#: 139040

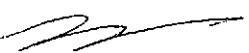
Matrix: WATER

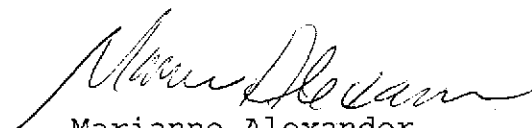
Sampled: July 8, 1997

Run#: 7773

Analyzed: July 15, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	380	50	N.D.	77	1
MTBE	N.D.	5.0	N.D.	111	1
BENZENE	N.D.	0.50	N.D.	101	1
TOLUENE	1.5	0.50	N.D.	96	1
ETHYL BENZENE	1.4	0.50	N.D.	97	1
XYLENES	1.9	0.50	N.D.	95	1


Kayvan Kimyai
Chemist


Marianne Alexander
Gas/BTEX Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

July 24, 1997

Submission #: 9707123

Revised from July 16, 1997

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: LIM PROPERTY

Project#: 2808

Received: July 9, 1997

re: One sample for Gasoline BTEX MTBE analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-2

Spl#: 139041


Matrix: WATER

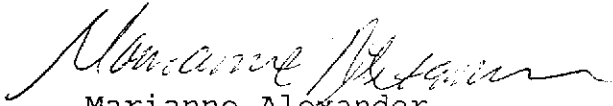
Sampled: July 8, 1997

Run#: 7773

Analyzed: July 15, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	91000	10000	N.D.	77	200
MTBE	N.D.	1000	N.D.	111	200
BENZENE	16000	100	N.D.	101	200
TOLUENE	20000	100	N.D.	96	200
ETHYL BENZENE	2700	100	N.D.	97	200
XYLENES	13000	100	N.D.	95	200


Kayvan Kimyai
Chemist


Marianne Alexander
Gas/BTEX Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

August 6, 1997

Submission #: 9707392

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: LIM PROPERTY
Received: July 30, 1997

Project#: 2808

re: One sample for Volatile Halogenated Organics analysis.
Method: SW846 Method 8010A July 1992

Client Sample ID: MW-1
Spl#: 141887
Sampled: July 29, 1997

Matrix: WATER
Run#: 8069

Analyzed: August 4, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
VINYL CHLORIDE	N.D.	0.50	N.D.	--	1
CHLOROETHANE	N.D.	0.50	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	0.50	N.D.	106	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	0.50	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	0.50	N.D.	--	1
CHLOROFORM	N.D.	3.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	0.50	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	0.50	N.D.	--	1
TRICHLOROETHENE	N.D.	0.50	N.D.	113	1
1,2-DICHLOROPROPANE	N.D.	0.50	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	0.50	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	0.50	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
TETRACHLOROETHENE	0.90	0.50	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	0.50	N.D.	--	1
CHLOROBENZENE	N.D.	0.50	N.D.	106	1
BROMOFORM	N.D.	2.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	0.50	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	0.50	N.D.	--	1
CHLOROMETHANE	N.D.	1.0	N.D.	--	1
BROMOMETHANE	N.D.	1.0	N.D.	--	1

Oleg Nemtsov
Chemist

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

July 17, 1997

Submission #: 9707123

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: LIM PROPERTY
Received: July 9, 1997

Project#: 2808

re: One sample for Volatile Halogenated Organics analysis.
Method: SW846 Method 8010A July 1992


Client Sample ID: MW-2
Spl#: 139041
Sampled: July 8, 1997


Matrix: WATER
Run#: 7788

Analyzed: July 16, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
VINYL CHLORIDE	N.D.	0.50	N.D.	--	1
CHLOROETHANE	N.D.	0.50	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	0.50	N.D.	103	1
METHYLENE CHLORIDE	N.D.	5.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	0.50	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	0.50	N.D.	--	1
CHLOROFORM	N.D.	3.0	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	0.50	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	20	N.D.	--	1
TRICHLOROETHENE	N.D.	2.00	N.D.	112	1
1,2-DICHLOROPROPANE	N.D.	0.50	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	0.50	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	0.50	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
TETRACHLOROETHENE	N.D.	1.00	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	0.50	N.D.	--	1
CHLOROBENZENE	N.D.	0.50	N.D.	106	1
BROMOFORM	N.D.	2.0	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	0.50	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	0.50	N.D.	--	1
CHLOROMETHANE	N.D.	1.0	N.D.	--	1
BROMOMETHANE	N.D.	1.0	N.D.	--	1

Note: SURROGATE RECOVERY WAS OUTSIDE OF QA/QC LIMITS DUE TO MATRIX INTERFERENCE. DETECTION LIMITS FOR TCE PCE AND 1,2-DCA WERE RAISED.


Oleg Nemtsov
Chemist


Chip Boalinelli
Operations Manager

372 / 111321

34877

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

Chain of Custody

DATE 7-29-97 PAGE 1 OF 1

SAMPLERS (SIGNATURE) <i>Scott T. L...</i>	(PHONE NO.) 510 820 9391	PROJECT NAME <u>Lim Property</u>	NO. <u>2808</u>
ADDRESS <u>729 8th street, Oakland</u>			

ANALYSIS REQUEST					TPH- GASOLINE (EPA 5030/8015)	TPH- GASOLINE/BTEX (EPA 5030/8015-8020)	TPH- DIESEL (EPA 3510/8015)	PURGABLE AROMATICS (EPA 602/8020)	PURGABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240)	BASE/NEUTRALS, ACIDS (EPA 625/8270)	OIL & GREASE (EPA 5520 E&F or B&F)	LOFT METALS (5) (EPA 6010+7000)	TITLE 22 (CAM 17) (EPA 6010+7000)	TCLP (EPA 1311/1310)	STLC- CAM WET (EPA 1311/1310)	REACTIVITY CORROSIVITY IGNITABILITY							
SPECIAL INSTRUCTIONS: <u>5-Day</u>	SAMPLE ID.	DATE	TIME	MATRIX																				NO. OF SAMPLES
	Mw-1	7-27-97	13:20	soil	3				X															
					SUBM #: 9707392 REP: MV CLIENT: ASE DUE: 08/06/97 REF #: 34877																			

RELINQUISHED BY: <i>Scott T. L...</i>	RECEIVED BY: <i>Ramon Talley</i>	RELINQUISHED BY: <i>Ramon Talley</i>	RECEIVED BY LABORATORY: <i>[Signature]</i>	COMMENTS:
(signature) (time) <u>15:00</u>	(signature) (time) <u>15:40</u>	(signature) (time) <u>17:00</u>	(signature) (time)	
(printed name) (date) <u>Scott T. Ferriman 7-30-97</u>	(printed name) (date) <u>Ramon Talley 7/30/97</u>	(printed name) (date) <u>Ramon Talley 7/30/97</u>	(printed name) (date) <u>Mile Narayo 7-30-97</u>	
Company- <u>ASE, Inc.</u>	Company- <u>Chromalab</u>	Company- <u>Chromalab</u>	Company-	

