aqua science engineers inc.

August 7, 2000

ENVIRONMENTAL PROTECTION
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QUARTERLY GROUNDWATER MONITORING REPORT
JULY 2000 GROUNDWATER SAMPLING
at
Lim Family Property
250 8th Street
Oakland, California

Submitted by:
AQUA SCIENCE ENGINEERS, INC.
208 W. El Pintado
Danville, CA 94526
(925) 820-9391

1.0 INTRODUCTION

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

2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On July 20, 2000, ASE associate geologist Ian Reed 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. No free-floating hydrocarbons or sheen was present on the surface of water in monitoring wells MW-1 and MW-4. Monitoring well MW-2 contained a hydrocarbon sheen. Monitoring well MW-3 contained 0.41-feet of free-floating hydrocarbons. Groundwater elevation data is presented in Table One.

A groundwater elevation (potentiometric surface) contour map is shown as Figure 2. The groundwater flow direction at the site is generally to the west at a gradient of 0.014 feet/foot.

3.0 MONITORING WELL SAMPLING

On July 20, 2000, ASE associate geologist Ian Reed collected groundwater samples from monitoring wells MW-1, MW-2, and MW-4 for analysis. Monitoring well MW-3 contained 0.41-feet of free-floating hydrocarbons and therefore was not sampled this quarter. Prior to sampling, the remaining wells were purged of four well casing volumes of groundwater using dedicated polyethylene bailers. The pH, temperature and conductivity of the purge water were monitored during evacuation, and samples were not collected until these parameters stabilized. Samples were collected from each well using dedicated polyethylene bailers. The groundwater samples analyzed for volatile compounds were decanted from the bailers into 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid, sealed without headspace, labeled, and placed in protective foam sleeves. The samples to be analyzed for extractable range hydrocarbons were contained in 1-liter amber glass bottles. All samples were stored on ice for transport to Chromalab, Inc. of Pleasanton, California under chain of custody. Well sampling purge water was contained in sealed and labeled 55-gallon steel drums and left on-site for temporary storage until off-site disposal can be arranged. See Appendix A for a copy of the well sampling field logs.

4.0 ANALYTICAL RESULTS FOR GROUNDWATER

All groundwater samples were analyzed by Chromalab for total petroleum hydrocarbons as gasoline (TPH-G) by modified EPA Method 5030/8015M, total petroleum hydrocarbons as diesel (TPH-D) by modified EPA Method 3510/8015M, benzene, toluene, ethyl benzene, and total xylenes (collectively known as BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8020. The groundwater samples collected from monitoring wells MW-2 and MW-4 were also analyzed for oil and grease (O&G) by Standard Method 5520. The groundwater samples collected from monitoring wells MW-1 and MW-2 were also analyzed for halogenated volatile organic compounds (HVOCs) by EPA Method 8010. The groundwater samples collected from monitoring well MW-4 were analyzed for volatile organic compounds (VOCs) by EPA Method 8260. The analytical results are tabulated in Tables Two and Three, and copies of the certified analytical report and chain of custody form are included in Appendix B.

5.0 CONCLUSIONS AND RECOMMENDATION

Overall, the hydrocarbon concentrations were similar to previous quarters sampling results. There are no obvious increasing or decreasing trends in hydrocarbon concentrations present either long or short term. The benzene concentration in groundwater samples collected from all four monitoring wells exceeded the Department of Health Services (DHS) maximum contaminant level (MCL) for drinking water. The BTEX concentrations in groundwater samples collected from monitoring wells MW-3 and MW-4 exceeded the DHS MCLs for drinking water.

Free-floating hydrocarbons in monitoring well MW-3 and injection well IW-5 will continue to be measured and bailed twice a month. ASE will also continue the injection of hydrogen peroxide in groundwater at the site. ASE will install additional groundwater monitoring wells for this project during the next quarter.

6.0 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 CAL-EPA 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 (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

Ian Reed
Associate Geologist

Robert E. Kitay, R.G., R.E.A.
Senior Geologist

Attachments: Figures 1 and 2
Appendices A and B

TABLE ONE

Groundwater Elevation 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
	01/26/98		15.21		10.30
	07/23/98		15.38		10.13
	01/05/99		16.82		8.69
	07/13/99		15.89		9.62
	01/12/00		17.44		8.07
	04/24/00		16.37		9.14
	07/20/00		**16.30**		**9.21**
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
	01/26/98		14.10		9.89
	07/23/98		14.70		9.29
	01/05/99		16.01		7.98
	07/13/99		15.40		8.59
	01/12/00		16.76		7.23
	04/24/00		15.67		8.32
	07/20/00		**15.70**		**8.29**
MW-3	01/12/00	24.25	16.68	0.01	7.57
	04/24/00		15.58	0.15	8.55*
	07/20/00		**16.01**	**0.41**	**7.64***
MW-4	01/12/00	23.71	17.24		6.47
	04/24/00		16.18		7.53
	07/20/00		**16.18**		**7.53**
IW-1	07/13/99	24.05	14.75		9.30
IW-2	07/13/99	24.21	15.10		9.11

TABLE ONE
Groundwater Elevation Data

Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
IW-3	07/13/99	23.93	15.00		8.93
IW-4	07/13/99	23.83	Unknown		Unknown
IW-5	07/13/99	24.00	15.50	1.00	8.50*
	07/23/99		15.52	1.05	9.32*
	08/03/99		15.58	0.64	8.93*
	08/17/99		15.62	0.86	9.07*
	08/27/99		15.92	0.77	8.70*
	09/10/99		15.82	0.56	8.63*
	09/24/99		15.57	0.26	8.64*
	10/08/99		15.56	0.23	8.62*
	11/02/99		15.59	0.22	8.59*
	11/19/99		15.64	0.07	8.42*
	12/16/99		16.12	0.64	8.39*
	01/12/00		16.54	0.28	7.68*
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
	02/20/98		10.03	2.19	15.13*
	01/05/99		16.71	1.09	7.58*
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
	02/20/98		10.84		13.14
	01/05/99		16.51		7.47

Notes:

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

TABLE TWO

Summary of Chemical Analysis of Groundwater Samples
Petroleum Hydrocarbon Concentrations
All results are in parts per billion

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE
MW-1							
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	< 2.0
07/08/96	320	300	0.52	2.7	1.2	2.3	< 5.0
01/06/97	110	75	< 0.5	0.68	< 0.5	< 0.5	< 5.0
07/08/97	380	290	< 0.5	1.5	1.4	1.9	< 5.0
01/26/98	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
07/23/98	190	< 50	0.54	2.8	2	1.8	< 5.0
01/05/99	200	< 50	1.8	1.6	3.3	< 0.5	< 5.0
07/13/99	340	<50	<0.5	<0.5	2.6	<0.5	< 5.0
01/12/00	300	1,000	22	36	5.5	24	< 5.0
04/24/00	360	280*	< 0.5	< 0.5	< 0.5	2.1	< 5.0
07/20/00	**290**	**150***	**1.8**	**< 0.5**	**< 0.5**	**< 0.5**	**< 5.0**
MW-2							
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
01/26/98	50,000	11,000	12,000	12,000	1,600	6,700	< 250
07/23/98	50,000	8,100#	11,000	8,300	1,800	7,000	1,100
01/05/99	50,000	7,600#	12,000	12,000	2,300	9,600	1,300
07/13/99	73,000	8,500	11,000	13,000	2,200	9,800	< 500
01/12/00	63,000	11,000	10,000	12,000	1,800	7,800	< 500
04/24/00	76,000	23,000*	7,100	14,000	2,000	9,400	< 500
07/20/00	**68,000**	**5,300#**	**11,000**	**14,000**	**2,300**	**11,000**	**< 1,000**

TABLE TWO

Summary of Chemical Analysis of Groundwater Samples
Petroleum Hydrocarbon Concentrations
All results are in parts per billion

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE
MW-3							
01/12/00	140,000	13,000*	22,000	19,000	2,400	11,000	< 500
04/24/00	240,000	700,000*	33,000/ 35,000	52,000/ 87,000	5,700/ 18,000	28,000/ 84,000	< 5,000
07/20/00	**NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS**						
MW-4							
01/12/00	99,000	7,900*	16,000	20,000	2,100	12,000	< 2,500
04/24/00	54,000	44,000*	3,400/ 4,500	13,000/ 20,000	1,800/ 2,800	8,800/ 14,000	< 1,300
07/20/00	**8,000**	**3,500**	**9,200/ 11,000**	**20,000 22,000**	**2,500 3,400**	**12,000/ 13,000**	**< 1,000**
DHS MCL	NE	NE	1	150	700	1,750	13
EPA METHOD	5030/ 8015M	3550/ 8015M	8020/ 8260	8020/ 8260	8020/ 8260	8020/ 8260	8020

Notes:

* = Hydrocarbon reported is in the early diesel range, and does not match the laboratory standard.

= Estimated concentration reported due to overlapping fuel patterns.

Non-detectable concentrations noted by the less than sign (<) followed by the detection limit. Most recent data in bold.

TABLE THREE

Groundwater Analytical Results

Oil & Grease and Volatile Organic Compounds

All results are in parts per billion

Date Sampled & Compound Analyzed	MW-1	MW-2	MW-3	MW-4
7/8/97				
Hydrocarbon Oil and Grease	---	< 1,000	-	-
Tetrachloroethane (PCE)	0.9	< 0.5	-	-
Other VOCs	< 0.5 - < 3	< 0.5 - < 3	-	-
1/26/98				
Hydrocarbon Oil and Grease	---	< 1,000	-	-
Trichloroethene	0.7	< 5.0	-	-
Tetrachloroethene	10	< 5.0	-	-
1,2-Dichloroethane	< 0.5	11	-	-
Other VOCs	< 0.5 - < 50	< 0.5 - < 50	-	-
7/23/98				
Hydrocarbon Oil and Grease	---	< 1,000	-	-
Tetrachloroethene	4	4.6	-	-
1,2-Dichloroethane	< 2	9.9	-	-
Other VOCs	< 2 - < 10	< 0.5 - < 5.0	-	-
1/5/99				
Hydrocarbon Oil and Grease	---	< 1,000	-	-
Tetrachloroethene	5.1	< 50	-	-
Trichloroethene	0.52	< 50	-	-
1,1,2,2-Tetrachloroethane	0.58	< 50	-	-
Chloroform	8.2	< 50	-	-
Other VOCs	< 0.5 - < 5	< 50 - < 500	-	-

TABLE THREE

Groundwater Analytical Results

Oil & Grease and Volatile Organic Compounds

All results are in parts per billion

Date Sampled & Compound Analyzed	MW-1	MW-2	MW-3	MW-4
7/13/99				
Hydrocarbon Oil and Grease	---	< 1,000	-	-
Tetrachloroethene	1.5	0.68	-	-
Trichloroethene	< 0.5	< 50	-	-
1,1,2,2-Tetrachloroethane	< 0.5	< 50	-	-
Chloroform	4.6	< 50	-	-
1,2-Dichloroethane	<0.50	7.7	-	-
Other VOCs	< 0.5 - < 5	< 0.5 - < 500	-	-
1/12/00				
Hydrocarbon Oil and Grease	---	< 1,000	< 1,000	< 1,000
Tetrachloroethene	0.8	< 1.0	< 100	< 50
Trichloroethene	<0.50	< 1.0	< 100	< 50
1,1,2,2 - Tetrachloroethane	<0.50	< 1.0	< 100	< 50
Chloroform	3.2	< 1.0	< 100	< 50
1,2-Dichloroethane	<0.50	8.8	120	140
Acetone	---	---	25,000	6,400
Naphthalene	---	---	550	540
Isopropylbenzene	---	---	120	89
Other VOCs	< 0.5 - < 5.0	< 1.0 - < 4.0	< 100 - < 10,000	< 50 - < 5,000

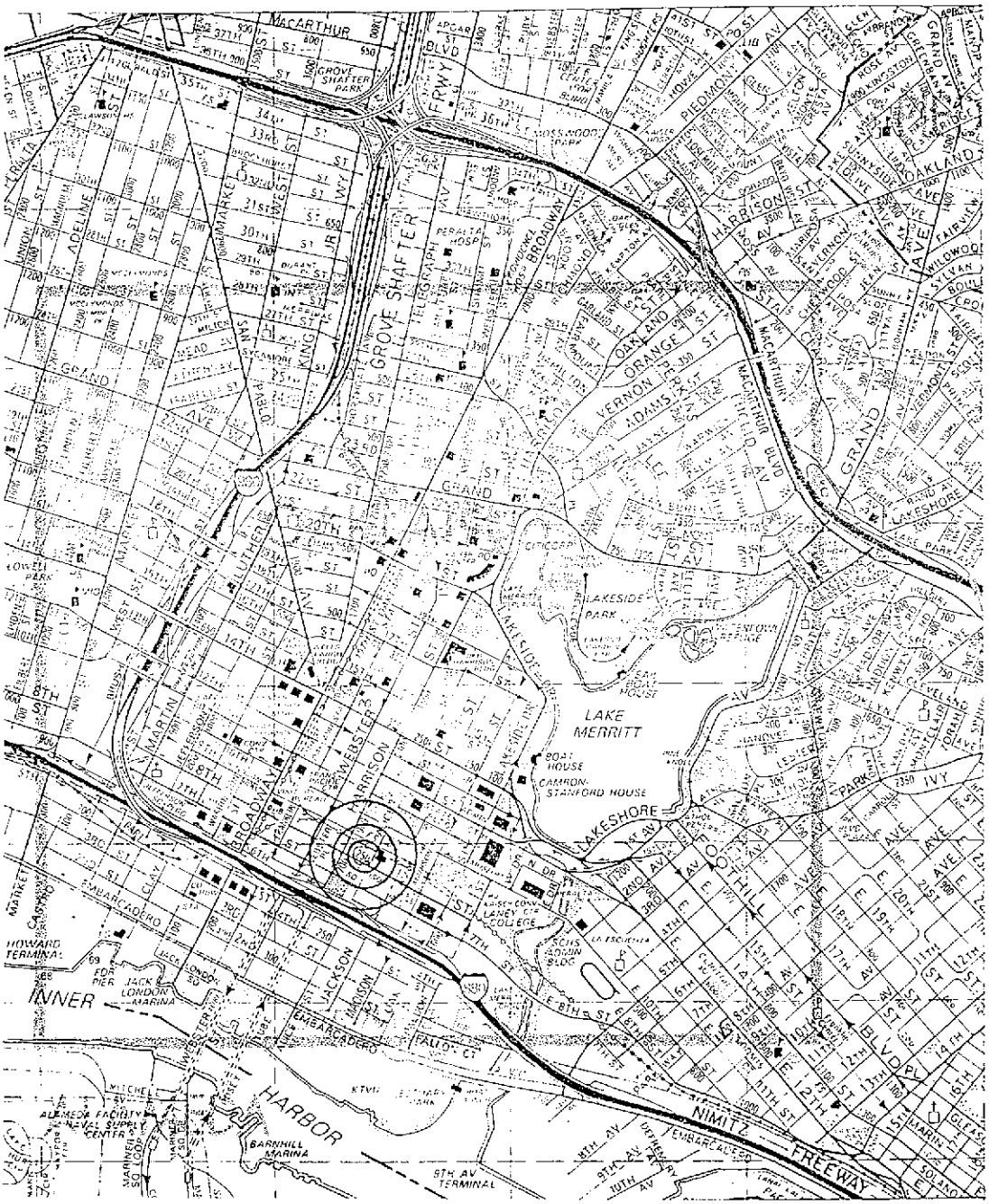
TABLE THREE

Groundwater Analytical Results

Oil & Grease and Volatile Organic Compounds

All results are in parts per billion

Date Sampled & Compound Analyzed	MW-1	MW-2	MW-3	MW-4
4/24/00				
Hydrocarbon Oil and Grease	---	< 1.0	4.1	< 1.0
Tetrachloroethene	< 0.5	< 5.0	< 1,000	< 250
Trichloroethene	< 0.5	< 5.0	< 1,000	< 250
1,1,2,2 - Tetrachloroethane	< 0.5	< 5.0	< 1,000	< 250
Chloroform	< 0.5	< 5.0	< 1,000	< 250
1,2-Dichloroethane	< 0.5	5.9	< 1,000	< 250
Acetone	---	---	< 100,000	< 25,000
Naphthalene	---	---	3,800	590
Isopropylbenzene	---	---	1,200	< 250
Other VOCs	< 0.5 - < 5.0	< 5.0 - < 20	< 1,000 - < 100,00	< 250 - < 25,000
7/20/00				
Hydrocarbon Oil and Grease	**---**	**< 1.0**		**< 1.0**
Tetrachloroethene	**0.59**	**< 5.0**		**< 200**
Trichloroethene	**< 0.5**	**< 5.0**	**FREE**	**< 200**
1,1,2,2 - Tetrachloroethane	**< 0.5**	**< 5.0**	**PRODUCT**	**< 200**
Chloroform	**2.1**	**< 5.0**	**---**	**< 200**
1,2-Dichloroethane	**< 0.5**	**6.7**	**NOT**	**< 200**
Acetone	**---**	**---**	**SAMPLED**	**< 20,000**
Naphthalene	**---**	**---**		**730**
Isopropylbenzene	**---**	**---**		**< 200**
Other VOCs	**< 0.5 - < 20**	**< 5.0 - < 20**		**< 250 - < 20,000**

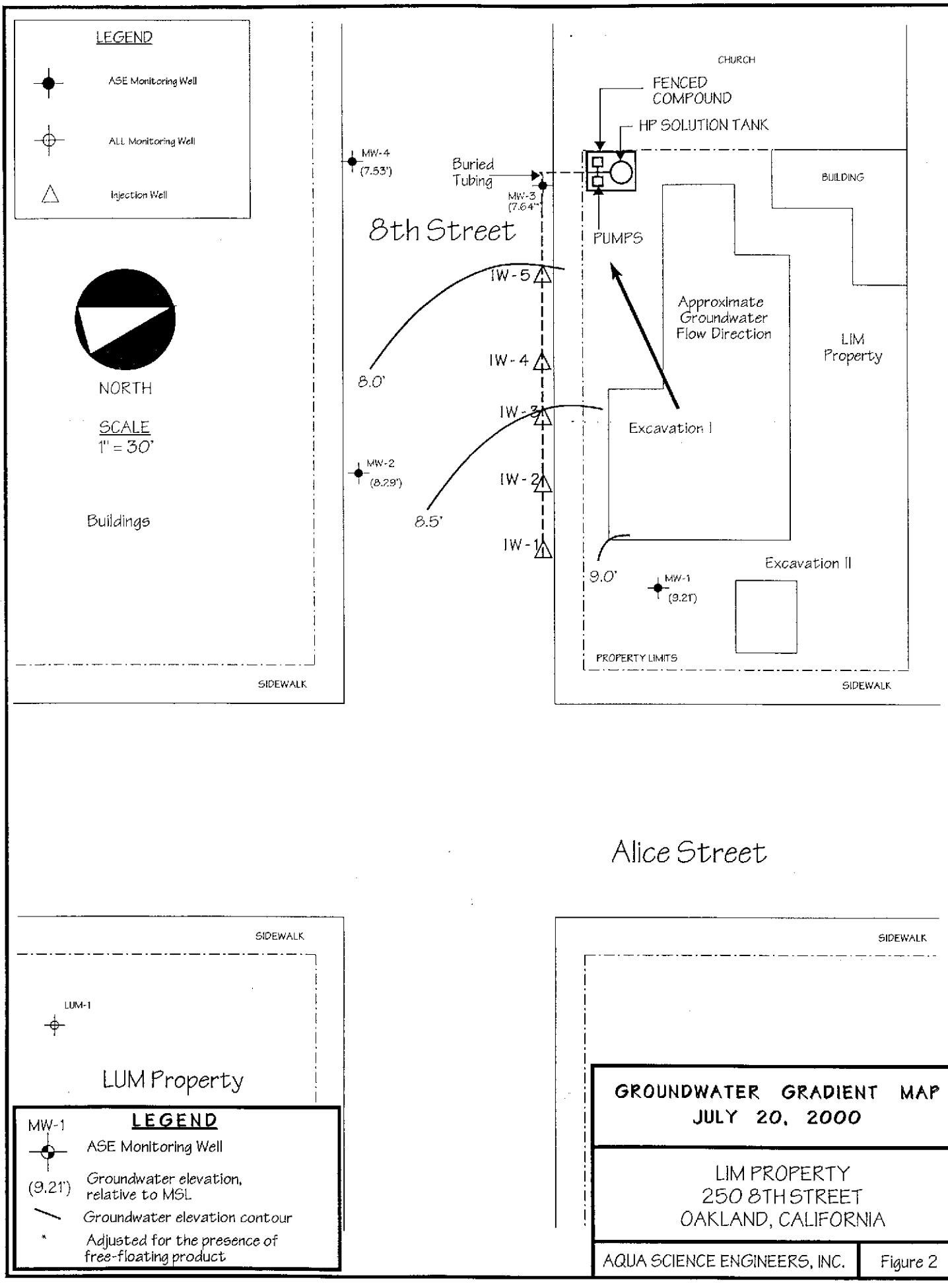


SITE LOCATION MAP

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



GROUNDWATER GRADIENT MAP
JULY 20, 2000

LIM PROPERTY
250 8TH STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | Figure 2

APPENDIX A

Well Sampling Field Log

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: LIM
Job #: 2608 Date of sampling: 7/20/00
Well Name: MW-1 Sampled by: TTR
Total depth of well (feet): 27.99 Well diameter (inches): 2"
Depth to water before sampling (feet): 16.30'
Thickness of floating product if any: —
Depth of well casing in water (feet): 11.69
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: disp. bailer
Time Evacuation Began: 1050 Time Evacuation Finished: 1105
Approximate volume of groundwater purged: 8
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1110
Depth to water at time of sampling: 17.01
Percent recovery at time of sampling: 91%
Samples collected with: disp. bailer
Sample color: gray Odor: HC odor
Description of sediment in sample: fine

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	71.0	7.41	810
2	71.1	7.31	810
3	70.9	7.30	870
4	71.0	7.32	810

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-1	3	40ml VOA	✓	✓	
	2	1-liter Amb		✓	

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WELL SAMPLING FIELD LOG

Project Name and Address: LIM
Job #: 203 Date of sampling: 7/20/00
Well Name: MW-2 Sampled by: TT
Total depth of well (feet): 26.78 Well diameter (inches): 2"
Depth to water before sampling (feet): 15.72
Thickness of floating product if any: —
Depth of well casing in water (feet): 11.06
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: disp. bailer
Time Evacuation Began: 1200 Time Evacuation Finished: 1215
Approximate volume of groundwater purged: 7.6
Did the well go dry?: no After how many gallons: —
Time samples were collected: 1220
Depth to water at time of sampling: 16.08
Percent recovery at time of sampling: 97%
Samples collected with: disp. bailer
Sample color: clear Odor: no odor
Description of sediment in sample: fine

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	70.1	6.81	510
2	70.3	6.82	500
3	71.4	6.80	520
4	71.6	6.82	520

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-2	3	40ml VOA	✓	✓	
	2	1-liter Amb		✓	

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WELL SAMPLING FIELD LOG

Project Name and Address: LIM
Job #: 2400 Date of sampling: 7/24/00
Well Name: MW-3 Sampled by: TTR
Total depth of well (feet): 20.50 Well diameter (inches): 2"
Depth to water before sampling (feet): 16.01'
Thickness of floating product if any: 0.41'
Depth of well casing in water (feet):
Number of gallons per well casing volume (gallons):
Number of well casing volumes to be removed:
Req'd volume of groundwater to be purged before sampling (gallons):
Equipment used to purge the well:
Time Evacuation Began: Time Evacuation Finished:
Approximate volume of groundwater purged:
Did the well go dry?: After how many gallons:
Time samples were collected:
Depth to water at time of sampling:
Percent recovery at time of sampling:
Samples collected with: Teflon Bailer
Sample color: Odor:
Description of sediment in sample: Not Sampled Product

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis

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WELL SAMPLING FIELD LOG

Project Name and Address: LIM
Job #: 2806 Date of sampling: 7/20/00
Well Name: MW-4 Sampled by: MZ
Total depth of well (feet): 26.60 Well diameter (inches): 2"
Depth to water before sampling (feet): 16.16
Thickness of floating product if any: 10.42
Depth of well casing in water (feet): —
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): 7.2
Equipment used to purge the well: disp. bailer
Time Evacuation Began: 1130 Time Evacuation Finished: 1145
Approximate volume of groundwater purged: 7.5
Did the well go dry?: no After how many gallons: —
Time samples were collected: 1150
Depth to water at time of sampling: 16.99
Percent recovery at time of sampling: 90%
Samples collected with: disp. bailer
Sample color: gray Odor: HC odor
Description of sediment in sample: [illegible]

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	66.6	7.70	700
2	69.6	7.70	710
3	69.0	7.71	700
4	69.8	7.71	710

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-4	3	40ml VOA	✓	✓	
	2	1-liter amber		✓	

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APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation

CHROMALAB, INC.
Environmental Services (SDB)

Submission #: 2000-07-0352
Date: August 1, 2000

Aqua Science Engineers, Inc.
208 West El Pintado Road
Danville, CA 94526

Attn.: Mr. Ian T. Reed

Project: 2808
LIM Property

Site: 250 8th Street
Oakland, CA

Dear Mr. Reed,

Attached is our report for your samples received on Friday July 21, 2000
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after August 20, 2000 unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: vvancil@chromalab.com

Sincerely,

Vincent Vancil

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

Volatile Organic Compounds

Aqua Science Engineers, Inc.	208 West El Pintado Road Danville, CA 94526
Attn: Ian T. Reed	Phone: (925) 820-9391 Fax: (925) 837-4853
Project #: 2808	Project: LIM Property
Site: 250 8th Street Oakland, CA	

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-4	Water	07/20/2000 11:50	3

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: **Aqua Science Engineers, Inc.**
Attn.: Ian T. Reed

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds

Sample ID:	MW-4	Lab Sample ID:	2000-07-0352-003
Project:	2808 LIM Property	Received:	07/21/2000 15:40
Site:	250 8th Street Oakland, CA	Extracted:	07/31/2000 18:11
Sampled:	07/20/2000 11:50	QC-Batch:	2000/07/31-01.39
Matrix:	Water		

Sample/Analysis Flag o (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	20000	ug/L	400.00	07/31/2000 18:11	
Benzene	11000	200	ug/L	400.00	07/31/2000 18:11	
Bromodichloromethane	ND	200	ug/L	400.00	07/31/2000 18:11	
Bromoform	ND	200	ug/L	400.00	07/31/2000 18:11	
Bromomethane	ND	400	ug/L	400.00	07/31/2000 18:11	
Carbon tetrachloride	ND	200	ug/L	400.00	07/31/2000 18:11	
Chlorobenzene	ND	200	ug/L	400.00	07/31/2000 18:11	
Chloroethane	ND	400	ug/L	400.00	07/31/2000 18:11	
2-Butanone(MEK)	ND	20000	ug/L	400.00	07/31/2000 18:11	
2-Chloroethylvinyl ether	ND	200	ug/L	400.00	07/31/2000 18:11	
Chloroform	ND	200	ug/L	400.00	07/31/2000 18:11	
Chloromethane	ND	400	ug/L	400.00	07/31/2000 18:11	
Dibromochloromethane	ND	200	ug/L	400.00	07/31/2000 18:11	
1,2-Dichlorobenzene	ND	200	ug/L	400.00	07/31/2000 18:11	
1,3-Dichlorobenzene	ND	200	ug/L	400.00	07/31/2000 18:11	
1,4-Dichlorobenzene	ND	200	ug/L	400.00	07/31/2000 18:11	
1,2-Dibromo-3-chloropropane	ND	2000	ug/L	400.00	07/31/2000 18:11	
1,2-Dibromoethane	ND	200	ug/L	400.00	07/31/2000 18:11	
Dibromomethane	ND	200	ug/L	400.00	07/31/2000 18:11	
Dichlorodifluoromethane	ND	200	ug/L	400.00	07/31/2000 18:11	
1,1-Dichloroethane	ND	200	ug/L	400.00	07/31/2000 18:11	
1,2-Dichloroethane	ND	200	ug/L	400.00	07/31/2000 18:11	
1,1-Dichloroethene	ND	200	ug/L	400.00	07/31/2000 18:11	
cis-1,2-Dichloroethene	ND	200	ug/L	400.00	07/31/2000 18:11	
trans-1,2-Dichloroethene	ND	200	ug/L	400.00	07/31/2000 18:11	
1,2-Dichloropropane	ND	200	ug/L	400.00	07/31/2000 18:11	
cis-1,3-Dichloropropene	ND	200	ug/L	400.00	07/31/2000 18:11	
trans-1,3-Dichloropropene	ND	200	ug/L	400.00	07/31/2000 18:11	
Ethylbenzene	3400	200	ug/L	400.00	07/31/2000 18:11	
2-Hexanone	ND	20000	ug/L	400.00	07/31/2000 18:11	
Methylene chloride	ND	2000	ug/L	400.00	07/31/2000 18:11	
4-Methyl-2-pentanone (MIBK)	ND	20000	ug/L	400.00	07/31/2000 18:11	
Naphthalene	730	400	ug/L	400.00	07/31/2000 18:11	

To: **Aqua Science Engineers, Inc.**
Attn.: Ian T. Reed

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds

Sample ID:	**MW-4**	Lab Sample ID:	**2000-07-0352-003**
Project:	2808 LIM Property	Received:	07/21/2000 15:40
Site:	250 8th Street Oakland, CA	Extracted:	07/31/2000 18:11
Sampled:	07/20/2000 11:50	QC-Batch:	2000/07/31-01.39
Matrix:	Water		

Sample/Analysis Flag o (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Styrene	ND	200	ug/L	400.00	07/31/2000 18:11	
1,1,2,2-Tetrachloroethane	ND	200	ug/L	400.00	07/31/2000 18:11	
Tetrachloroethene	ND	200	ug/L	400.00	07/31/2000 18:11	
Toluene	22000	200	ug/L	400.00	07/31/2000 18:11	
1,1,1-Trichloroethane	ND	200	ug/L	400.00	07/31/2000 18:11	
1,1,2-Trichloroethane	ND	200	ug/L	400.00	07/31/2000 18:11	
Trichloroethene	ND	200	ug/L	400.00	07/31/2000 18:11	
1,1,1,2-Tetrachloroethane	ND	200	ug/L	400.00	07/31/2000 18:11	
Vinyl acetate	ND	2000	ug/L	400.00	07/31/2000 18:11	
Vinyl chloride	ND	200	ug/L	400.00	07/31/2000 18:11	
Total xylenes	13000	400	ug/L	400.00	07/31/2000 18:11	
Trichlorotrifluoroethane	ND	200	ug/L	400.00	07/31/2000 18:11	
Carbon disulfide	ND	400	ug/L	400.00	07/31/2000 18:11	
Isopropylbenzene	ND	200	ug/L	400.00	07/31/2000 18:11	
Bromobenzene	ND	200	ug/L	400.00	07/31/2000 18:11	
Bromochloromethane	ND	400	ug/L	400.00	07/31/2000 18:11	
Trichlorofluoromethane	ND	800	ug/L	400.00	07/31/2000 18:11	
Surrogate(s)						
4-Bromofluorobenzene	100.9	86-115	%	1.00	07/31/2000 18:11	
1,2-Dichloroethane-d4	107.0	76-114	%	1.00	07/31/2000 18:11	
Toluene-d8	108.4	88-110	%	1.00	07/31/2000 18:11	

To: Aqua Science Engineers, Inc.
Attn.: Ian T. Reed

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Volatile Organic Compounds

Method Blank | Water | QC Batch # 2000/07/31-01.39

MB: 2000/07/31-01.39-001 | Date Extracted: 07/31/2000 15:01

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Acetone	ND	50	ug/L	07/31/2000 15:01	
Benzene	ND	0.5	ug/L	07/31/2000 15:01	
Bromodichloromethane	ND	0.5	ug/L	07/31/2000 15:01	
Bromoform	ND	0.5	ug/L	07/31/2000 15:01	
Bromomethane	ND	1.0	ug/L	07/31/2000 15:01	
Carbon tetrachloride	ND	0.5	ug/L	07/31/2000 15:01	
Chlorobenzene	ND	0.5	ug/L	07/31/2000 15:01	
Chloroethane	ND	1.0	ug/L	07/31/2000 15:01	
2-Butanone(MEK)	ND	50	ug/L	07/31/2000 15:01	
2-Chloroethylvinyl ether	ND	0.5	ug/L	07/31/2000 15:01	
Chloroform	ND	0.5	ug/L	07/31/2000 15:01	
Chloromethane	ND	1.0	ug/L	07/31/2000 15:01	
Dibromochloromethane	ND	0.5	ug/L	07/31/2000 15:01	
1,2-Dichlorobenzene	ND	0.5	ug/L	07/31/2000 15:01	
1,3-Dichlorobenzene	ND	0.5	ug/L	07/31/2000 15:01	
1,4-Dichlorobenzene	ND	0.5	ug/L	07/31/2000 15:01	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	07/31/2000 15:01	
1,2-Dibromoethane	ND	0.5	ug/L	07/31/2000 15:01	
Dibromomethane	ND	0.5	ug/L	07/31/2000 15:01	
Dichlorodifluoromethane	ND	0.5	ug/L	07/31/2000 15:01	
1,1-Dichloroethane	ND	0.5	ug/L	07/31/2000 15:01	
1,2-Dichloroethane	ND	0.5	ug/L	07/31/2000 15:01	
1,1-Dichloroethene	ND	0.5	ug/L	07/31/2000 15:01	
cis-1,2-Dichloroethene	ND	0.5	ug/L	07/31/2000 15:01	
trans-1,2-Dichloroethene	ND	0.5	ug/L	07/31/2000 15:01	
1,2-Dichloropropane	ND	0.5	ug/L	07/31/2000 15:01	
cis-1,3-Dichloropropene	ND	0.5	ug/L	07/31/2000 15:01	
trans-1,3-Dichloropropene	ND	0.5	ug/L	07/31/2000 15:01	
Ethylbenzene	ND	0.5	ug/L	07/31/2000 15:01	
2-Hexanone	ND	50	ug/L	07/31/2000 15:01	
Methylene chloride	ND	5.0	ug/L	07/31/2000 15:01	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	07/31/2000 15:01	
Naphthalene	ND	1.0	ug/L	07/31/2000 15:01	
Styrene	ND	0.5	ug/L	07/31/2000 15:01	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	07/31/2000 15:01	
Tetrachloroethene	ND	0.5	ug/L	07/31/2000 15:01	
Toluene	ND	0.5	ug/L	07/31/2000 15:01	
1,1,1-Trichloroethane	ND	0.5	ug/L	07/31/2000 15:01	
1,1,2-Trichloroethane	ND	0.5	ug/L	07/31/2000 15:01	
Trichloroethene	ND	0.5	ug/L	07/31/2000 15:01	

To: Aqua Science Engineers, Inc.
Attn.: Ian T. Reed

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Volatile Organic Compounds

Method Blank | Water | QC Batch # 2000/07/31-01.39

MB: 2000/07/31-01.39-001 | Date Extracted: 07/31/2000 15:01

Compound	Result	Rep.Limit	Units	Analyzed	Flag
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	07/31/2000 15:01	
Vinyl acetate	ND	5.0	ug/L	07/31/2000 15:01	
Vinyl chloride	ND	0.5	ug/L	07/31/2000 15:01	
Total xylenes	ND	1.0	ug/L	07/31/2000 15:01	
Trichlorotrifluoroethane	ND	0.5	ug/L	07/31/2000 15:01	
Carbon disulfide	ND	1.0	ug/L	07/31/2000 15:01	
Isopropylbenzene	ND	0.5	ug/L	07/31/2000 15:01	
Bromobenzene	ND	0.5	ug/L	07/31/2000 15:01	
Bromochloromethane	ND	1.0	ug/L	07/31/2000 15:01	
Trichlorofluoromethane	ND	2.0	ug/L	07/31/2000 15:01	
Surrogate(s)					
4-Bromofluorobenzene	97.0	86-115	%	07/31/2000 15:01	
1,2-Dichloroethane-d4	100.8	76-114	%	07/31/2000 15:01	
Toluene-d8	104.6	88-110	%	07/31/2000 15:01	

To: Aqua Science Engineers, Inc.

Attn: Ian T. Reed

Test Method: 8260A

Prep Method: 5030

Batch QC Report

Volatile Organic Compounds

Laboratory Control Spike (LCS/LCSD) Water **QC Batch # 2000/07/31-01.39**

LCS: 2000/07/31-01.39-002 Extracted: 07/31/2000 13:40 Analyzed 07/31/2000 13:40

LCSD: 2000/07/31-01.39-003 Extracted: 07/31/2000 14:25 Analyzed 07/31/2000 14:25

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	46.4	47.4	50.0	50.0	96.8	94.8	2.1	69-129	20		
Chlorobenzene	54.0	52.8	50.0	50.0	108.0	105.6	2.2	61-121	20		
1,1-Dichloroethene	38.6	36.4	50.0	50.0	77.2	72.8	5.9	65-125	20		
Toluene	50.6	49.5	50.0	50.0	101.2	99.6	1.6	70-130	20		
Trichloroethene	50.2	49.9	50.0	50.0	100.4	99.8	0.6	74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	482	490	500	500	96.4	98.0		86-115			
1,2-Dichloroethane-d4	494	497	500	500	98.8	99.4		76-114			
Toluene-d8	508	512	500	500	101.6	102.4		88-110			

To: Aqua Science Engineers, Inc.
Attn:Ian T. Reed

Test Method: 8260A
Prep Method: 5030

Legend & Notes

Volatile Organic Compounds

Analysis Flags

o Reporting limits were raised due to high level of analyte present in the sample.

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

Halogenated Volatile Organic Compounds

Aqua Science Engineers, Inc.

208 West El Pintado Road
Danville, CA 94526

Attn: Ian T. Reed

Phone: (925) 820-9391 Fax: (925) 837-4853

Project #: 2808

Project: LIM Property

Site: 250 8th Street
Oakland, CA

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1	Water	07/20/2000 11:10	1
MW-2	Water	07/20/2000 12:20	2

To: Aqua Science Engineers, Inc.
Attn.: Ian T. Reed

Test Method: 8010
Prep Method: 5030

Halogenated Volatile Organic Compounds

Sample ID:	MW-1	Lab Sample ID:	2000-07-0352-001
Project:	2808 LIM Property	Received:	07/21/2000 15:40
Site:	250 8th Street Oakland, CA	Extracted:	07/24/2000 13:46
Sampled:	07/20/2000 11:10	QC-Batch:	2000/07/24-01.25
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	07/24/2000 13:46	
Vinyl chloride	ND	0.50	ug/L	1.00	07/24/2000 13:46	
Chloroethane	ND	0.50	ug/L	1.00	07/24/2000 13:46	
Trichlorofluoromethane	ND	0.50	ug/L	1.00	07/24/2000 13:46	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	07/24/2000 13:46	
Methylene chloride	ND	5.0	ug/L	1.00	07/24/2000 13:46	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	07/24/2000 13:46	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	07/24/2000 13:46	
1,1-Dichloroethane	ND	0.50	ug/L	1.00	07/24/2000 13:46	
Chloroform	2.1	0.50	ug/L	1.00	07/24/2000 13:46	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	07/24/2000 13:46	
Carbon tetrachloride	ND	0.50	ug/L	1.00	07/24/2000 13:46	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	07/24/2000 13:46	
Trichloroethene	ND	0.50	ug/L	1.00	07/24/2000 13:46	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	07/24/2000 13:46	
Bromodichloromethane	ND	0.50	ug/L	1.00	07/24/2000 13:46	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	07/24/2000 13:46	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	07/24/2000 13:46	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	07/24/2000 13:46	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	07/24/2000 13:46	
Tetrachloroethene	0.59	0.50	ug/L	1.00	07/24/2000 13:46	
Dibromochloromethane	ND	0.50	ug/L	1.00	07/24/2000 13:46	
Chlorobenzene	ND	0.50	ug/L	1.00	07/24/2000 13:46	
Bromoform	ND	2.0	ug/L	1.00	07/24/2000 13:46	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	07/24/2000 13:46	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	07/24/2000 13:46	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	07/24/2000 13:46	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	07/24/2000 13:46	
Trichlorotrifluoroethane	ND	2.0	ug/L	1.00	07/24/2000 13:46	
Chloromethane	ND	1.0	ug/L	1.00	07/24/2000 13:46	
Bromomethane	ND	1.0	ug/L	1.00	07/24/2000 13:46	
Surrogate(s)						
1-Chloro-2-fluorobenzene	86.5	50-150	%	1.00	07/24/2000 13:46	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: **Aqua Science Engineers, Inc.**
Attn.: Ian T. Reed

Test Method: 8010
Prep Method: 5030

Halogenated Volatile Organic Compounds

Sample ID:	**MW-2**	Lab Sample ID:	**2000-07-0352-002**
Project:	2808 LIM Property	Received:	07/21/2000 15:40
Site:	250 8th Street Oakland, CA	Extracted:	07/24/2000 14:38
Sampled:	07/20/2000 12:20	QC-Batch:	2000/07/24-01.25
Matrix:	Water		

Sample/Analysis Flag Irn (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	10	ug/L	10.00	07/24/2000 14:38	
Vinyl chloride	ND	5.0	ug/L	10.00	07/24/2000 14:38	
Chloroethane	ND	5.0	ug/L	10.00	07/24/2000 14:38	
Trichlorofluoromethane	ND	5.0	ug/L	10.00	07/24/2000 14:38	
1,1-Dichloroethene	ND	5.0	ug/L	10.00	07/24/2000 14:38	
Methylene chloride	ND	50	ug/L	10.00	07/24/2000 14:38	
trans-1,2-Dichloroethene	ND	5.0	ug/L	10.00	07/24/2000 14:38	
cis-1,2-Dichloroethene	ND	5.0	ug/L	10.00	07/24/2000 14:38	
1,1-Dichloroethane	ND	5.0	ug/L	10.00	07/24/2000 14:38	
Chloroform	ND	5.0	ug/L	10.00	07/24/2000 14:38	
1,1,1-Trichloroethane	ND	5.0	ug/L	10.00	07/24/2000 14:38	
Carbon tetrachloride	ND	5.0	ug/L	10.00	07/24/2000 14:38	
1,2-Dichloroethane	6.7	5.0	ug/L	10.00	07/24/2000 14:38	
Trichloroethene	ND	5.0	ug/L	10.00	07/24/2000 14:38	
1,2-Dichloropropane	ND	5.0	ug/L	10.00	07/24/2000 14:38	
Bromodichloromethane	ND	5.0	ug/L	10.00	07/24/2000 14:38	
2-Chloroethylvinyl ether	ND	5.0	ug/L	10.00	07/24/2000 14:38	
trans-1,3-Dichloropropene	ND	5.0	ug/L	10.00	07/24/2000 14:38	
cis-1,3-Dichloropropene	ND	5.0	ug/L	10.00	07/24/2000 14:38	
1,1,2-Trichloroethane	ND	5.0	ug/L	10.00	07/24/2000 14:38	
Tetrachloroethene	ND	5.0	ug/L	10.00	07/24/2000 14:38	
Dibromochloromethane	ND	5.0	ug/L	10.00	07/24/2000 14:38	
Chlorobenzene	ND	5.0	ug/L	10.00	07/24/2000 14:38	
Bromoform	ND	20	ug/L	10.00	07/24/2000 14:38	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	10.00	07/24/2000 14:38	
1,3-Dichlorobenzene	ND	5.0	ug/L	10.00	07/24/2000 14:38	
1,4-Dichlorobenzene	ND	5.0	ug/L	10.00	07/24/2000 14:38	
1,2-Dichlorobenzene	ND	5.0	ug/L	10.00	07/24/2000 14:38	
Trichlorotrifluoroethane	ND	20	ug/L	10.00	07/24/2000 14:38	
Chloromethane	ND	10	ug/L	10.00	07/24/2000 14:38	
Bromomethane	ND	10	ug/L	10.00	07/24/2000 14:38	
Surrogate(s)						
1-Chloro-2-fluorobenzene	74.0	50-150	%	1.00	07/24/2000 14:38	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

To: Aqua Science Engineers, Inc.
Attn.: Ian T. Reed

Test Method: 8010
Prep Method: 5030

Batch QC Report

Halogenated Volatile Organic Compounds

Method Blank | Water | QC Batch # 2000/07/24-01.25

MB: 2000/07/24-01.25-001 | Date Extracted: 07/24/2000 09:29

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	07/24/2000 09:29	
Vinyl chloride	ND	0.5	ug/L	07/24/2000 09:29	
Chloroethane	ND	0.5	ug/L	07/24/2000 09:29	
Trichlorofluoromethane	ND	0.5	ug/L	07/24/2000 09:29	
1,1-Dichloroethene	ND	0.5	ug/L	07/24/2000 09:29	
Methylene chloride	ND	5.0	ug/L	07/24/2000 09:29	
trans-1,2-Dichloroethene	ND	0.5	ug/L	07/24/2000 09:29	
cis-1,2-Dichloroethene	ND	0.5	ug/L	07/24/2000 09:29	
1,1-Dichloroethane	ND	0.5	ug/L	07/24/2000 09:29	
Chloroform	ND	0.5	ug/L	07/24/2000 09:29	
1,1,1-Trichloroethane	ND	0.5	ug/L	07/24/2000 09:29	
Carbon tetrachloride	ND	0.5	ug/L	07/24/2000 09:29	
1,2-Dichloroethane	ND	0.5	ug/L	07/24/2000 09:29	
Trichloroethene	ND	0.5	ug/L	07/24/2000 09:29	
1,2-Dichloropropane	ND	0.5	ug/L	07/24/2000 09:29	
Bromodichloromethane	ND	0.5	ug/L	07/24/2000 09:29	
2-Chloroethylvinyl ether	ND	0.5	ug/L	07/24/2000 09:29	
trans-1,3-Dichloropropene	ND	0.5	ug/L	07/24/2000 09:29	
cis-1,3-Dichloropropene	ND	0.5	ug/L	07/24/2000 09:29	
1,1,2-Trichloroethane	ND	0.5	ug/L	07/24/2000 09:29	
Tetrachloroethene	ND	0.5	ug/L	07/24/2000 09:29	
Dibromochloromethane	ND	0.5	ug/L	07/24/2000 09:29	
Chlorobenzene	ND	0.5	ug/L	07/24/2000 09:29	
Bromoform	ND	2.0	ug/L	07/24/2000 09:29	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	07/24/2000 09:29	
1,3-Dichlorobenzene	ND	0.5	ug/L	07/24/2000 09:29	
1,4-Dichlorobenzene	ND	0.5	ug/L	07/24/2000 09:29	
1,2-Dichlorobenzene	ND	0.5	ug/L	07/24/2000 09:29	
Trichlorotrifluoroethane	ND	2.0	ug/L	07/24/2000 09:29	
Chloromethane	ND	1.0	ug/L	07/24/2000 09:29	
Bromomethane	ND	1.0	ug/L	07/24/2000 09:29	
Surrogate(s)					
1-Chloro-2-fluorobenzene	73.0	50-150	%	07/24/2000 09:29	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: **Aqua Science Engineers, Inc.** Test Method: 8010

Attn: Ian T. Reed Prep Method: 5030

Batch QC Report

Halogenated Volatile Organic Compounds

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/07/24-01.25**

LCS: 2000/07/24-01.25-002 Extracted: 07/24/2000 10:20 Analyzed 07/24/2000 10:20

LCSD: 2000/07/24-01.25-003 Extracted: 07/24/2000 11:11 Analyzed 07/24/2000 11:11

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
1,1-Dichloroethene	18.4	17.7	20.0	20.0	92.0	88.5	3.9	50-140	20		
Trichloroethene	19.2	18.9	20.0	20.0	96.0	94.5	1.6	50-150	20		
Chlorobenzene	19.5	19.5	20.0	20.0	97.5	97.5	0.0	50-150	20		
Surrogate(s)											
1-Chloro-2-fluorobenzene	18.2	18.1	20	20	91.0	90.5		50-150			

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: **Aqua Science Engineers, Inc.**
Attn.: Ian T. Reed

Test Method: 8010
Prep Method: 5030

Batch QC Report

Halogenated Volatile Organic Compounds

Matrix Spike (MS / MSD) Water **QC Batch # 2000/07/24-01.25**

Sample ID: **MW-1** Lab Sample ID: 2000-07-0352-001

MS: 2000/07/24-01.25-004 Extracted: 07/24/2000 15:30 Analyzed: 07/24/2000 15:30 Dilution: 1.0
MSD: 2000/07/24-01.25-005 Extracted: 07/24/2000 16:22 Analyzed: 07/24/2000 16:22 Dilution: 1.0

Compound	Conc. [ug/L]			Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
1,1-Dichloroethene	20.7	19.8	ND	20.0	20.0	103.5	99.0	4.4	50-140	20		
Trichloroethene	22.2	21.3	ND	20.0	20.0	111.0	106.5	4.1	50-150	20		
Chlorobenzene	22.5	21.0	ND	20.0	20.0	112.5	105.0	6.9	50-150	20		
Surrogate(s)												
1-Chloro-2-fluorobenzen	21.7	20.4		20	20	108.5	102.0		50-150			

To: **Aqua Science Engineers, Inc.**
Attn:Ian T. Reed

Test Method: 8010
Prep Method: 5030

Legend & Notes

Halogenated Volatile Organic Compounds

Analysis Flags

Irn

Reporting limits raised due to high level of non-target analyte materials.

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

Petroleum Oil & Grease

Aqua Science Engineers, Inc.	✉ 208 West El Pintado Road Danville, CA 94526
Attn: Ian T. Reed	Phone: (925) 820-9391 Fax: (925) 837-4853
Project #: 2808	Project: LIM Property
Site: 250 8th Street Oakland, CA	

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-2	Water	07/20/2000 12:20	2
MW-4	Water	07/20/2000 11:50	3

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: **Aqua Science Engineers, Inc.**
Attn.: Ian T. Reed

Test Method: 5520 B & F
Prep Method: 5520 B & F

Petroleum Oil & Grease

Sample ID:	MW-2	Lab Sample ID:	2000-07-0352-002
Project:	2808 LIM Property	Received:	07/21/2000 15:40
Site:	250 8th Street Oakland, CA	Extracted:	07/21/2000
Sampled:	07/20/2000 12:20	QC-Batch:	2000/07/21-01.23
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil and Grease (Petroleum)	ND	1.0	mg/L	1.00	07/24/2000	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: **Aqua Science Engineers, Inc.**
Attn.: Ian T. Reed

Test Method: 5520 B & F
Prep Method: 5520 B & F

Petroleum Oil & Grease

Sample ID:	MW-4	Lab Sample ID:	2000-07-0352-003
Project:	2808 LIM Property	Received:	07/21/2000 15:40
Site:	250 8th Street Oakland, CA	Extracted:	07/21/2000
Sampled:	07/20/2000 11:50	QC-Batch:	2000/07/21-01.23
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil and Grease (Petroleum)	ND	1.0	mg/L	1.00	07/24/2000	

To: **Aqua Science Engineers, Inc.**
Attn.: Ian T. Reed

Test Method: 5520 B & F
Prep Method: 5520 B & F

Batch QC Report
Petroleum Oil & Grease

Method Blank | **Water** | **QC Batch # 2000/07/21-01.23**

MB: 2000/07/21-01.23-001 | Date Extracted: 07/21/2000

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Oil and Grease (Petroleum)	ND	1	mg/L	07/24/2000	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: **Aqua Science Engineers, Inc.**

Attn: Ian T. Reed

Test Method: 5520 B & F

Prep Method: 5520 B & F

Batch QC Report

Petroleum Oil & Grease

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/07/21-01.23**

LCS: 2000/07/21-01.23-002 Extracted: 07/21/2000 Analyzed 07/24/2000

LCSD: 2000/07/21-01.23-003 Extracted: 07/24/2000 Analyzed 07/25/2000

Compound	Conc. [mg/L]		Exp.Conc. [mg/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Oil and Grease	39.0	39.6	40.0	40.0	97.5	99.0	1.5	80-120	20		

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

Gas/BTEX and MTBE

Aqua Science Engineers, Inc.

208 West El Pintado Road
Danville, CA 94526

Attn: Ian T. Reed

Phone: (925) 820-9391 Fax: (925) 837-4853

Project #: 2808

Project: LIM Property

Site: 250 8th Street
Oakland, CA

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1	Water	07/20/2000 11:10	1
MW-2	Water	07/20/2000 12:20	2
MW-4	Water	07/20/2000 11:50	3

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: **Aqua Science Engineers, Inc.**

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-1**	Lab Sample ID:	**2000-07-0352-001**
Project:	2808 LIM Property	Received:	07/21/2000 15:40
Site:	250 8th Street Oakland, CA	Extracted:	07/26/2000 17:33
Sampled:	07/20/2000 11:10	QC-Batch:	2000/07/26-01.03
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	290	50	ug/L	1.00	07/26/2000 17:33	g
Benzene	1.8	0.50	ug/L	1.00	07/26/2000 17:33	
Toluene	ND	0.50	ug/L	1.00	07/26/2000 17:33	
Ethyl benzene	ND	0.50	ug/L	1.00	07/26/2000 17:33	
Xylene(s)	ND	0.50	ug/L	1.00	07/26/2000 17:33	
MTBE	ND	5.0	ug/L	1.00	07/26/2000 17:33	
Surrogate(s)						
Trifluorotoluene	64.2	58-124	%	1.00	07/26/2000 17:33	
4-Bromofluorobenzene-FID	63.9	50-150	%	1.00	07/26/2000 17:33	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: **Aqua Science Engineers, Inc.**

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	MW-2	Lab Sample ID:	2000-07-0352-002
Project:	2808 LIM Property	Received:	07/21/2000 15:40
Site:	250 8th Street Oakland, CA	Extracted:	07/27/2000 12:29
Sampled:	07/20/2000 12:20	QC-Batch:	2000/07/27-01.01
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	68000	10000	ug/L	200.00	07/27/2000 12:29	
Benzene	11000	100	ug/L	200.00	07/27/2000 12:29	
Toluene	14000	100	ug/L	200.00	07/27/2000 12:29	
Ethyl benzene	2300	100	ug/L	200.00	07/27/2000 12:29	
Xylene(s)	11000	100	ug/L	200.00	07/27/2000 12:29	
MTBE	ND	1000	ug/L	200.00	07/27/2000 12:29	
Surrogate(s)						
Trifluorotoluene	103.4	58-124	%	1.00	07/27/2000 12:29	
4-Bromofluorobenzene-FID	69.8	50-150	%	1.00	07/27/2000 12:29	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: **Aqua Science Engineers, Inc.**

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-4**	Lab Sample ID:	**2000-07-0352-003**
Project:	2808 LIM Property	Received:	07/21/2000 15:40
Site:	250 8th Street Oakland, CA	Extracted:	07/27/2000 13:04
Sampled:	07/20/2000 11:50	QC-Batch:	2000/07/27-01.01
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	80000	10000	ug/L	200.00	07/27/2000 13:04	
Benzene	9200	100	ug/L	200.00	07/27/2000 13:04	
Toluene	20000	100	ug/L	200.00	07/27/2000 13:04	
Ethyl benzene	2500	100	ug/L	200.00	07/27/2000 13:04	
Xylene(s)	12000	100	ug/L	200.00	07/27/2000 13:04	
MTBE	ND	1000	ug/L	200.00	07/27/2000 13:04	
Surrogate(s)						
Trifluorotoluene	96.9	58-124	%	1.00	07/27/2000 13:04	
4-Bromofluorobenzene-FID	70.3	50-150	%	1.00	07/27/2000 13:04	

To: Aqua Science Engineers, Inc.

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report
Gas/BTEX and MTBE

Method Blank | **Water** | **QC Batch # 2000/07/26-01.03**

MB: 2000/07/26-01.03-001

Date Extracted: 07/26/2000 07:52

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	07/26/2000 07:52	
Benzene	ND	0.5	ug/L	07/26/2000 07:52	
Toluene	ND	0.5	ug/L	07/26/2000 07:52	
Ethyl benzene	ND	0.5	ug/L	07/26/2000 07:52	
Xylene(s)	ND	0.5	ug/L	07/26/2000 07:52	
MTBE	ND	5.0	ug/L	07/26/2000 07:52	
Surrogate(s)					
Trifluorotoluene	113.2	58-124	%	07/26/2000 07:52	
4-Bromofluorobenzene-FID	117.0	50-150	%	07/26/2000 07:52	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: Aqua Science Engineers, Inc.

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report
Gas/BTEX and MTBE

Method Blank | Water | QC Batch # 2000/07/27-01.01

MB: 2000/07/27-01.01-001 | Date Extracted: 07/27/2000 11:37

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	07/27/2000 11:37	
Benzene	ND	0.5	ug/L	07/27/2000 11:37	
Toluene	ND	0.5	ug/L	07/27/2000 11:37	
Ethyl benzene	ND	0.5	ug/L	07/27/2000 11:37	
Xylene(s)	ND	0.5	ug/L	07/27/2000 11:37	
MTBE	ND	5.0	ug/L	07/27/2000 11:37	
Surrogate(s)					
Trifluorotoluene	111.8	58-124	%	07/27/2000 11:37	
4-Bromofluorobenzene-FID	77.4	50-150	%	07/27/2000 11:37	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: Aqua Science Engineers, Inc.

Attn: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) Water **QC Batch # 2000/07/26-01.03**

LCS: 2000/07/26-01.03-002 Extracted: 07/26/2000 08:22 Analyzed 07/26/2000 08:22

LCSD: 2000/07/26-01.03-003 Extracted: 07/26/2000 08:53 Analyzed 07/26/2000 08:53

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	615	609	500	500	123.0	121.8	1.0	75-125	20		
Benzene	49.9	48.9	50	50	99.8	97.8	2.0	77-123	20		
Toluene	48.3	47.7	50	50	96.6	95.4	1.3	78-122	20		
Ethyl benzene	49.6	49.4	50	50	99.2	98.8	0.4	70-130	20		
Xylene(s)	150	150	150	150	100.0	100.0	0.0	75-125	20		
Surrogate(s)											
Trifluorotoluene	271	262	250	250	108.4	104.8		58-124			
4-Bromofluorobenzene-FI	581	576	500	500	116.2	115.2		50-150			

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: **Aqua Science Engineers, Inc.**

Attn: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) Water **QC Batch # 2000/07/27-01.01**

LCS: 2000/07/27-01.01-002 Extracted: 07/27/2000 07:36 Analyzed 07/27/2000 07:36

LCSD: 2000/07/27-01.01-003 Extracted: 07/27/2000 08:11 Analyzed 07/27/2000 08:11

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	506	466	500	500	101.2	93.2	8.2	75-125	20		
Benzene	93.1	94.0	100.0	100.0	93.1	94.0	1.0	77-123	20		
Toluene	97.0	98.1	100.0	100.0	97.0	98.1	1.1	78-122	20		
Ethyl benzene	94.8	95.2	100.0	100.0	94.8	95.2	0.4	70-130	20		
Xylene(s)	283	286	300	300	94.3	95.3	1.1	75-125	20		
Surrogate(s)											
Trifluorotoluene	485	488	500	500	97.0	97.6		58-124			
4-Bromofluorobenzene-FI	360	354	500	500	72.0	70.8		50-150			

To: **Aqua Science Engineers, Inc.**

Attn:Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Legend & Notes

Gas/BTEX and MTBE

Analyte Flags

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

Diesel

Aqua Science Engineers, Inc.	☒ 208 West El Pintado Road Danville, CA 94526
Attn: Ian T. Reed	Phone: (925) 820-9391 Fax: (925) 837-4853
Project #: 2808	Project: LIM Property
Site: 250 8th Street Oakland, CA	

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1	Water	07/20/2000 11:10	1
MW-2	Water	07/20/2000 12:20	2
MW-4	Water	07/20/2000 11:50	3

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: **Aqua Science Engineers, Inc.**
Attn.: Ian T. Reed

Test Method: 8015M
Prep Method: 3510/8015M

Diesel

Sample ID:	MW-1	Lab Sample ID:	**2000-07-0352-001**
Project:	2808 LIM Property	Received:	07/21/2000 15:40
Site:	250 8th Street Oakland, CA	Extracted:	07/24/2000 12:16
Sampled:	07/20/2000 11:10	QC-Batch:	2000/07/24-04.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	150	50	ug/L	1.00	07/25/2000 05:11	ndp
Surrogate(s)						
o-Terphenyl	72.1	60-130	%	1.00	07/25/2000 05:11	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

Printed on: 07/28/2000 16:03

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: **Aqua Science Engineers, Inc.**
Attn.: Ian T. Reed

Test Method: 8015M
Prep Method: 3510/8015M

Diesel

Sample ID:	**MW-2**	Lab Sample ID:	**2000-07-0352-002**
Project:	2808 LIM Property	Received:	07/21/2000 15:40
Site:	250 8th Street Oakland, CA	Extracted:	07/24/2000 12:16
Sampled:	07/20/2000 12:20	QC-Batch:	2000/07/24-04.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	5300	50	ug/L	1.00	07/25/2000 05:50	,ofp
Surrogate(s) o-Terphenyl	71.8	60-130	%	1.00	07/25/2000 05:50	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: Aqua Science Engineers, Inc.
Attn.: Ian T. Reed

Test Method: 8015M
Prep Method: 3510/8015M

Diesel

Sample ID:	MW-4	Lab Sample ID:	2000-07-0352-003
Project:	2808 LIM Property	Received:	07/21/2000 15:40
Site:	250 8th Street Oakland, CA	Extracted:	07/24/2000 12:16
Sampled:	07/20/2000 11:50	QC-Batch:	2000/07/24-04.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	3500	50	ug/L	1.00	07/25/2000 06:30	edr
Surrogate(s) o-Terphenyl	87.4	60-130	%	1.00	07/25/2000 06:30	

To: Aqua Science Engineers, Inc.
Attn.: Ian T. Reed

Test Method: 8015M
Prep Method: 3510/8015M

Batch QC Report
Diesel

Method Blank	Water	QC Batch # 2000/07/24-04.10
MB: 2000/07/24-04.10-001		Date Extracted: 07/24/2000 12:16

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	50	ug/L	07/24/2000 23:17	
Surrogate(s)					
o-Terphenyl	97.0	60-130	%	07/24/2000 23:17	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-07-0352

To: Aqua Science Engineers, Inc.

Attn: Ian T. Reed

Test Method: 8015M

Prep Method: 3510/8015M

Batch QC Report

Diesel

Laboratory Control Spike (LCS/LCSD) Water **QC Batch # 2000/07/24-04.10**

LCS: 2000/07/24-04.10-002 Extracted: 07/24/2000 12:16 Analyzed 07/24/2000 23:56

LCSD: 2000/07/24-04.10-003 Extracted: 07/24/2000 12:16 Analyzed 07/25/2000 00:35

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	917	933	1250	1250	73.4	74.6	1.6	60-130	25		
Surrogate(s)											
o-Terphenyl	20.7	21.0	20.0	20.0	103.5	105.0		60-130			

2000-07-0352

53467

Aqua Science Engineers, Inc.
208 W. El Pintado Road
Danville, CA 94526
(925) 820-9391
FAX (925) 837-4853

Chain of Custody

PAGE 1 OF 1

SAMPLER (SIGNATURE): Lat Reed (PHONE NO.) (925) 820-9391

PROJECT NAME: L/M Property JOB NO. 2803

ADDRESS: 250 8th Street, Oakland CA DATE 7/21/00

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

5-day TAT

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-GASOLINE (EPA 5030/8015)	TPH-DIESEL (EPA 3510/8015)	PURGEABLE HALOCARBONS (EPA 601/8010)	PURGEABLE AROMATICS (EPA 602/8020)	VOLATILE ORGANICS (EPA 624/8240) (8 26 C)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	OIL & GREASE (EPA 5520)	LUFT METALS (5) (EPA 6010+7000)	CAM 17 METALS (EPA 6010+7000)	PCBs & PESTICIDES (EPA 608/8080)	ORGANOPHOSPHORUS PESTICIDES (EPA 8140) (EPA 608/8080)	ORGANOCHLORINE HERBICIDES (EPA 8150)	FUEL OXYGENATES (EPA 8260)					COMPOSITE
MW-1	7/20	1110	water	7	X		X	X				X											
MW-2	7/20	1220	water	8	X		X	X				X											
MW-4	7/20	1150	water	8	X		X			X		X											

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Lat Reed 1000 (signature) (time)	(signature) (time) 0934	(signature) (time) 1540	Denise Harrington (signature) (time)	4.4°C
Lat T Reed 7/21/00 (printed name) (date)	B Morrow - 7/21/00 (printed name) (date)	B Morrow (printed name) (date) 7/21/00	D. Harrington (printed name) (date)	
Company- ASE	Company-	Company-	Company- Chromalab 7/21/00 @ 1540	

JUL.-31'00(MON) 15:12 CHROMALAB, INC. TEL:510 484 1096 P.002