aqua science engineers inc.

February 22, 2000

REPORT
of
ADDITIONAL WELL INSTALLATION
AND
QUARTERLY GROUNDWATER SAMPLING
at
The Lim Family Property
250 8th Street
Oakland, California

Submitted by:
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1.0 INTRODUCTION

This report presents the methods and findings of Aqua Science Engineers, Inc. (ASE)'s installation of two additional monitoring wells and the results of the quarterly groundwater monitoring at the Lim family property located at 250 8th Street in Oakland, California (Figure 1). The additional monitoring wells were installed to assist in delineating the thickness and extent of free floating hydrocarbons southwest of well IW-5 (Figure 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 Lafayette, 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 Three and Four.

In February 1999, ASE installed a five-well hydrogen peroxide injection system to assist in the bioremediation of hydrocarbons detected in the groundwater downgradient of the subject site. For complete details

regarding this system, see the ASE Report, titled "Report of Remediation System Installation," dated March 17, 1999.

On June 24, 1999, free-floating hydrocarbons were discovered in hydrogen peroxide injection well IW-5. As a result, the Alameda County Health Care Services Agency (ACHCSA) requested that the extent of free-floating hydrocarbons southwest of the site be defined. Since its discovery, the product thickness has been measured and bailed every two weeks. Results are reported in Table Two.

3.0 SCOPE OF WORK

Due to the presence of free-floating hydrocarbons in injection well IW-5, ASE prepared the following scope of work (SOW) to delineate the thickness and extent of floating product southwest of well IW-5.

1) Prepare a workplan for approval by Mr. Seto of the ACHCSA.

2) Obtain a drilling permit from the Alameda County Public Works Agency (ACPWA). Obtain excavation and encroachment permits from the City of Oakland.

3) Drill two (2) soil borings to 25-feet below ground surface (bgs) at the site.

4) Analyze one soil sample collected from each soil boring at a CAL-EPA certified environmental laboratory for TPH-G by modified EPA Method 5030/8015M, TPH-D by modified EPA Method 3510/8015M, benzene, toluene, ethylbenzene and total xylenes (collectively known as BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8020, oil and grease (O&G) by Standard Method 5520, and volatile organic compounds (VOCs) by EPA Method 8240.

5) Install 2-inch diameter groundwater monitoring wells in each boring described in task 3.

6) Develop the monitoring wells.

7) Collect groundwater samples from each monitoring well for analyses.

8) Analyze the groundwater samples at a CAL-EPA certified analytical laboratory for TPH-G, TPH-D, BTEX, MTBE, O&G and VOCs.

9) Survey the top of casing elevation of each well, and determine the groundwater flow direction and gradient beneath the site.

10) Prepare a report detailing the methods and findings of this assessment.

Details of the assessment are presented below.

4.0 DRILLING SOIL BORING AND COLLECTING SAMPLES

4.1 Drilling and Collection of Soil Samples

Prior to drilling, ASE obtained an Alameda County Public Works Agency (ACPWA) drilling permit and an excavation and encroachment permit from the City of Oakland (Appendix A). ASE also notified Underground Service Alert (USA) to have underground public utilities in the vicinity of the site marked prior to drilling.

On January 3, 2000, West Hazmat Drilling of Rancho Cordova, California drilled soil borings MW-3 and MW-4 at the site using a Mobile B-61 drill rig equipped with 8-inch diameter hollow-stem augers (Figure 2). Groundwater monitoring wells MW-3 and MW-4, were subsequently constructed in these borings. The drilling was directed by ASE associate geologist Ian Reed.

Undisturbed soil samples were collected at 5-foot intervals as drilling progressed for lithologic and hydrogeologic description and for possible chemical analyses. The samples were collected by driving a split-barrel drive sampler lined with 2-inch diameter brass tubes ahead of the auger tip with successive blows from a 140-lb. hammer dropped 30-inches. One tube from each sampling interval was immediately trimmed, sealed with Teflon tape, plastic end caps and duct tape, labeled, sealed in a plastic bag and stored on ice for transport to Chromalab, Inc. of Pleasanton, California (ELAP #1094) under chain of custody. Soil from the remaining tubes was described by an ASE geologist using the Unified Soil Classification System and was screened for volatile compounds with an Organic Vapor Meter (OVM). The soil was screened by emptying soil from one of the sample tubes into a plastic bag. The bag was then sealed and placed in the sun for approximately 10 minutes. After the hydrocarbons were allowed to volatilize, the OVM measured the vapor in the bag through a small hole punched in the bag. OVM readings are used as a screening tool only, since the procedures are not as rigorous as those used in the laboratory.

Drilling equipment was steam-cleaned prior to use and sampling equipment was washed with a TSP solution between sampling intervals to prevent cross-contamination. Drill cuttings were contained in sealed and labeled 55-gallon steel drums and left on-site for temporary storage until off-site disposal can be arranged.

4.2 Site Specific Geology

Sediments encountered during drilling generally consisted of silty sand and sandy silt from 1-foot bgs to the total depth explored of 30-feet bgs. The boring logs and well construction details are included as Appendix B.

5.0 ANALYTICAL RESULTS FOR SOIL

The soil samples collected from 16-feet bgs in both borings MW-3 and MW-4 were submitted to Chromalab, Inc. for analysis. The samples were analyzed for TPH-G by modified EPA Method 5030/8015M, TPH-D by modified EPA Method 3510/8015M, BTEX and MTBE by EPA Method 8020, O&G by Standard Method 5520, and VOCs by EPA Method 8240. The analytical results for soil are included in Table One and a copy of the certified analytical report and chain of custody form are included in Appendix C.

The soil sample analyzed from monitoring well MW-3 contained 0.016 ppm benzene, 0.0084 ppm toluene and 0.012 ppm total xylenes. Ño other compounds were detected above laboratory reporting limits in either of the soil samples analyzed.

6.0 MONITORING WELL CONSTRUCTION AND DEVELOPMENT

6.1 Monitoring Well Construction

Groundwater monitoring wells MW-3 and MW-4 were constructed in borings MW-3 and MW-4, respectively. These wells were constructed with 2-inch diameter, 0.020-inch factory slotted, flush-threaded, schedule 40 PVC well screen and blank casing. Both wells are screened between 7-feet bgs and 27-feet bgs to monitor the first water bearing zone encountered. Lonestar #3 Monterey sand occupies the annular space between the borehole and the casing from the bottom of the boring to approximately 1-foot above the well screen. A 1-foot thick hydrated bentonite layer separates the sand from the overlying cement surface seal. The wellhead is secured with a locking wellplug beneath an at-grade, traffic-rated vault.

6.2 Monitoring Well Development

On January 6, 2000, ASE associate geologist Ian Reed developed monitoring wells MW-3 and MW-4. The wells were developed using multiple episodes of surge-block agitation and submersible pumping. Well development 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.

7.0 QUARTERLY MONITORING WELL SAMPLING

On January 12, 2000, ASE associate geologist Ian Reed collected groundwater samples from all four site monitoring wells for analysis. Prior to sampling, the wells were purged of four well casing volumes of groundwater. 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, labeled, 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 D for a copy of the Field Logs.

8.0 GROUNDWATER ELEVATIONS

On February 2, 2000, ASE surveyed the top of casing elevation of the two new wells relative to the existing site wells. ASE measured the depth to water in all site wells on January 12, 2000 using an electric water level sounder. Top of casing elevations, depth to groundwater measurements and groundwater elevations are presented below in Table Two.

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 0.015 feet/foot.

9.0 ANALYTICAL RESULTS FOR GROUNDWATER

The groundwater samples were analyzed by Chromalab for TPH-G by modified EPA Method 5030/8015M, TPH-D by modified EPA Method 3510/8015M, BTEX and MTBE by EPA Method 8020, O&G by Standard Method 5520, and VOCs by EPA Method 8240. The analytical results are tabulated in Tables Three, and Four and copies of the certified analytical report and chain of custody form are included in Appendix E.

The groundwater samples collected from monitoring well MW-1 contained 300 ppb TPH-G, 1,000 ppb TPH-D, 22 ppb benzene, 36 ppb toluene, 5.5 ppb ethyl benzene, 24 ppb total xylenes, 0.8 ppb tetrachloroethene (PCE) and 3.2 ppb chloroform. The groundwater samples collected from monitoring well MW-2 contained 63,000 ppb TPH-G, 11,000 ppb TPH-D, 10,000 ppb benzene, 12,000 ppb toluene, 1,800 ppb ethyl benzene, 7,800 ppb total xylenes, and 8.8 ppb 1,2-dichloroethane (1,2-DCA). The groundwater samples collected from monitoring well MW-3 contained 140,000 ppb TPH-G, 13,000 ppb TPH-D, 22,000 ppb benzene, 19,000 ppb toluene, 2,400 ppb ethyl benzene, 11,000 ppb total xylenes, 120 ppb 1,2-DCA, 25,000 ppb acetone, 550 ppb naphthalene, and 120 ppb isopropyl benzene. The groundwater samples collected from monitoring well MW-4 contained 99,000 ppb TPH-G, 7,900 ppb TPH-D, 16,000 ppb benzene, 20,000 ppb toluene, 2,100 ppb ethyl benzene, 12,000 ppb total xylenes, 140 ppb 1,2-DCA, 6,400 ppb acetone, 540 ppb naphthalene, and 89 ppb isopropyl benzene.

The benzene concentration in groundwater samples collected from monitoring well MW-1 exceeded the Department of Health Services (DHS) maximum contaminant level (MCL) for drinking water. The BTEX and 1,2-DCA concentrations in groundwater samples collected from monitoring wells MW-2, MW-3, and MW-4 all exceeded DHS MCLs for drinking water.

10.0 CONCLUSIONS

The soil samples analyzed from monitoring well MW-3 contained 0.016 ppm benzene, 0.0084 ppm toluene, and 0.012 ppm MTBE. No other compounds were detected above the laboratory reporting limit in the soil samples analyzed.

The BTEX and 1,2-DCA concentrations in groundwater samples collected from monitoring wells MW-2, MW-3, and MW-4 all exceeded the DHS MCLs for drinking water. In addition, the benzene concentration in

groundwater samples collected from monitoring well MW-1 exceeded the DHS MCL for drinking water.

11.0 RECOMMENDATIONS

Due to the consistent presence of free-floating hydrocarbons in injection well IW-5 and elevated hydrocarbon concentrations in monitoring wells MW-3 and MW-4, it appears that further plume definition is needed.

ASE recommends that further assessment be done to assist in defining the extent of hydrocarbons west of the site. After further definition of the hydrocarbon extent is complete, ASE will discuss more effective treatment system options. ASE also recommends that this site be sampled on a quarterly basis.

12.0 REPORT LIMITATIONS

The results of this assessment represent conditions at the time of the soil and 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 provide environmental consulting services for this project. Should you have any questions or comments, please feel free to call us at (925) 820-9391.

Respectfully submitted,

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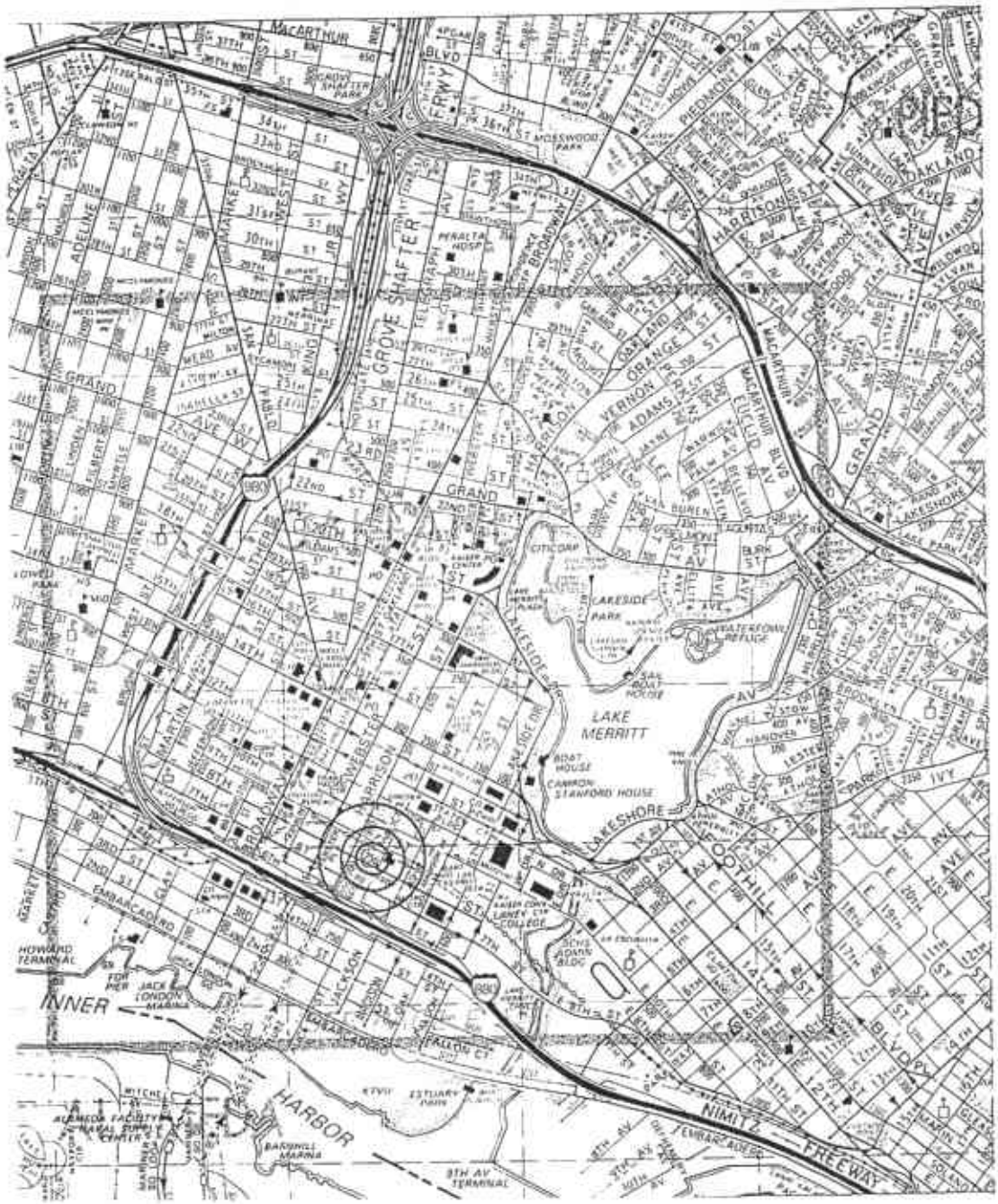


BASE: The Thomas Guide, Alameda and Contra Costa Counties Street Guide & Directory, 1990

SITE LOCATION MAP

Lim Property
250 8th Street
Oakland, California

Aqua Science Engineers | Figure 1

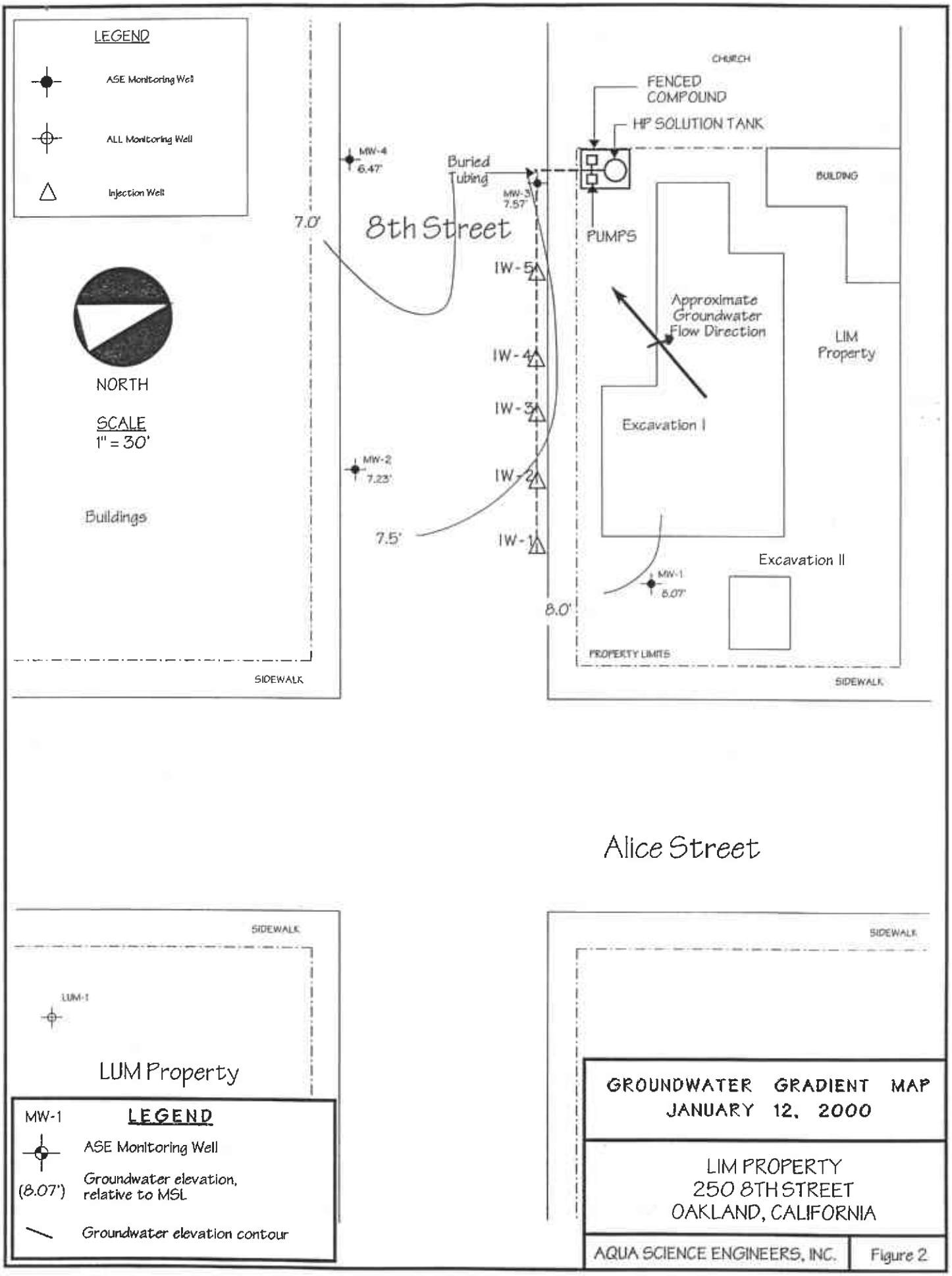

LEGEND
ASE Monitoring Well
ALL Monitoring Well
Injection Well
NORTH
SCALE
1" = 30'
Buildings
SIDEWALK
7.0'
8th Street
MW-4
6.47'
Buried Tubing
MW-3
7.57'
IW-5
IW-4
IW-3
IW-2
IW-1
MW-2
7.23'
7.5'
CHURCH
FENCED COMPOUND
HP SOLUTION TANK
BUILDING
PUMPS
Approximate Groundwater Flow Direction
LIM Property
Excavation I
Excavation II
MW-1
8.07'
8.0'
PROPERTY LIMITS
SIDEWALK
Alice Street
SIDEWALK
SIDEWALK
LUM-1
LUM Property
MW-1
LEGEND
ASE Monitoring Well
(8.07')
Groundwater elevation, relative to MSL
Groundwater elevation contour
GROUNDWATER GRADIENT MAP
JANUARY 12, 2000
LIM PROPERTY
250 8TH STREET
OAKLAND, CALIFORNIA
AQUA SCIENCE ENGINEERS, INC.
Figure 2

TABLE ONE

Summary of Chemical Analysis of SOIL Samples

All results are in parts per million

Boring	Depth (feet)	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	TPH Diesel	TPH Motor Oil	Oil and Grease	Fuel Oxygenates
MW-3	16.0'	< 1.0	**0.016**	**0.0084**	< 0.005	**0.012**	< 0.005	< 1.0	< 50	< 50	< 0.005 - < 0.01
MW-4	16.0'	< 1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 1.0	< 50	< 50	< 0.005 - < 0.01
PRG		NE	0.62	520	230	210	NE	NE	NE	NE	varies

Notes:

Detectable concentrations are in bold.

Non-detectable concentrations are noted by the less than sign (<) followed by the detection limit.

PRG = The US EPA Region IX Preliminary Remediation Goal for Residential Soil.

NE = PRG has not been established.

TABLE TWO

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

* = 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

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**
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**
MW-3	**01/12/00**	**24.25**	**16.68**	**0.01**	**7.57**
MW-4	**01/12/00**	**23.71**	**17.24**		**6.47**
IW-1	07/13/99	24.05	14.75		9.30
IW-2	07/13/99	24.21	15.10		9.11

TABLE THREE

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**
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**

TABLE THREE

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**
MW-4							
01/12/00	**99,000**	**7,900***	**16,000**	**20,000**	**2,100**	**12,000**	**< 2,500**
DHS MCL	NE	NE	1	150	700	1,750	13
EPA METHOD	5030/ 8015M	3550/ 8015M	8020	8020	8020	8020	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 FOUR

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 FOUR

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**

APPENDIX A

Permits

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-5262
(510) 670-5248 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 250 - 8th Street
Oakland, CA

California Coordinate Source ____ ft. Accuracy ± ____ ft.
CCN ____ ft. CCE ____ ft.
APN ____

CLIENT
Name Russell Wick
Address 3100 La Playa Ct Phone ____
City Livermore, CA Zip 94549

APPLICANT
Name Aqua Science Engineers
Attn: Robert Kitay Fax ____
Address 208 W. El Pintado Phone ____
City Danville, CA Zip ____

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	☐	General	☐
Water Supply	☐	Contamination	☐
Monitoring	☒	Well Destruction	☐

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other ____	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☒
Cable	☐	Other	☐		

DRILLER'S LICENSE NO. C-57 487000

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum
Casing Diameter 2" in. Depth 30 ft.
Surface Seal Depth 10 ft. Number 2

GEOTECHNICAL PROJECTS
Number of Borings ____ Maximum
Hole Diameter ____ in. Depth ____ ft.

ESTIMATED STARTING DATE 1-3-00
ESTIMATED COMPLETION DATE 1-3-00

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Robert C. Kitay DATE 12-27-99

FOR OFFICE USE
PERMIT NUMBER 99WR716
WELL NUMBER ____
APN ____

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A) GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

(C) GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL
Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

E. CATHODIC
Fill hole above anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
See attached.

G. SPECIAL CONDITIONS

APPROVED Frank L Cobb DATE 12-28-99

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

PERMIT NUMBER		SITE ADDRESS/LOCATION
X9900983		250 8TH ST.
APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
CONTRACTOR'S LICENSE # AND CLASS		CITY BUSINESS TAX #

ATTENTION:

1) State law requires that the contractor/owner call *Underground Service Alert (USA)* two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #: _____

2) 48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than $500):

☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

☐ I am exempt under Sec. _____, B&PC for this reason _____.

WORKER'S COMPENSATION

☐ I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # _____ Company Name _____

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

X Gerald W. Lance — 12/14/99

Signature of Permittee ☐ Agent for ☒ Contractor ☐ Owner — Date

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☒ NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) ☒ YES ☐ NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) ☒ YES ☐ NO
88			

ISSUED BY — DATE ISSUED 12/14/99

APPENDIX B

Boring Log and Well Construction Details

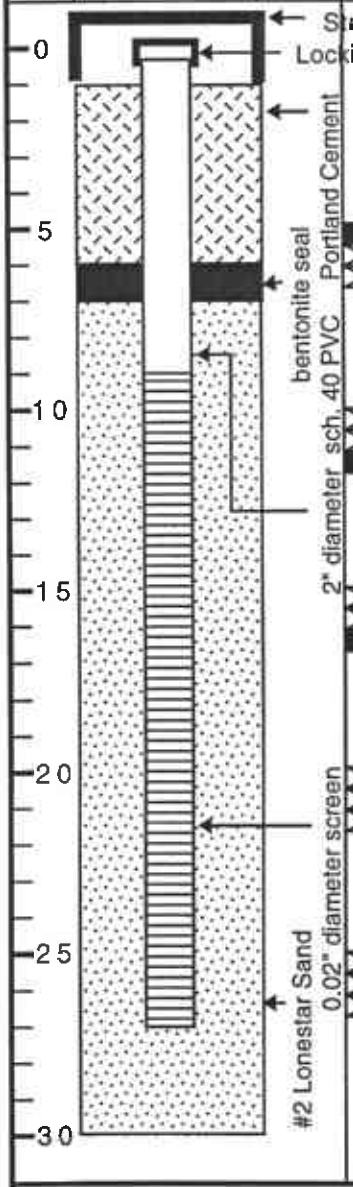
SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS

Well: MW-3

Project Name: Lim Family Property	Project Location: 250 8th Street, Oakland, CA	Page 1 of 1
Driller: West Hazmat Drilling	Type of Rig: Hollow-Stem Auger	Size of Drill: 8.0" Diameter
Logged By: Ian T. Reed	Date Drilled: January 3, 2000	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA

- Depth of Water First Encountered: 16'
- Static Depth of Water in Well: 16.68'
- Total Depth of Boring: 30'
- Total Depth of Well Completed: 27'
- Well Screen Type and Diameter: 2" diameter sch. 40 PVC
- Well Screen Slot Size: 0.020" diameter
- Type and Size of Soil Sampler: 2.0" I.D. Split-barrel



Depth in Feet	Interval	Blow Counts	OVM (ppmv)	Water Level	Graphic Log	Depth in Feet	DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
						0	Concrete
							Sandy SILT (ML); brown; damp; stiff; 70% silt; 30% fine to medium sand; medium estimated K; non-plastic; no odor
5		35 39	3			5	
10		39 15 28	4			10	olive brown; moist; slight hydrocarbon odor
15		35 18 45	50	▼		15	wet
20		12 37 46				20	Silty SAND (SM); olive gray; wet; stiff; 60% fine sand; 40% silt; non-plastic; medium estimated K; strong hydrocarbon odor
25		13 25 35				25	Sandy SILT (ML); olive brown; wet; stiff; 70% silt; 30% fine to coarse sand; trace gravel; non-plastic; medium estimated K; moderate hydrocarbon odor
30						30	End of boring at 30'

AQUA SCIENCE ENGINEERS, INC.

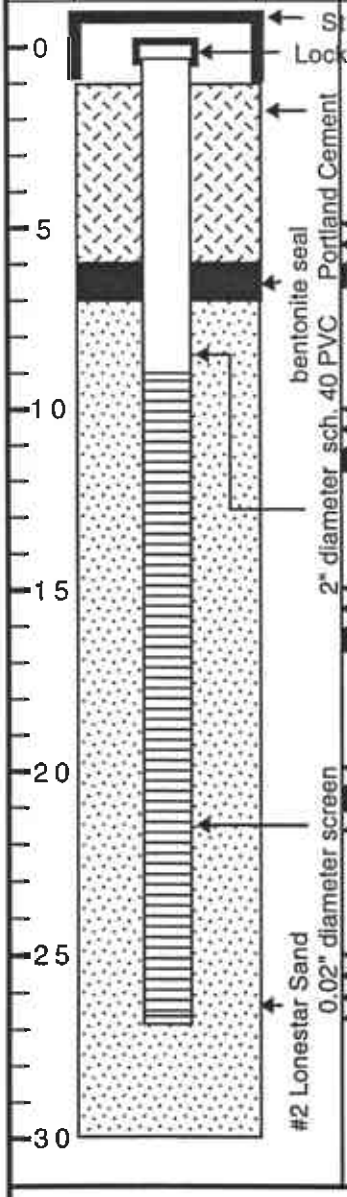
SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS

Well: MW-4

Project Name: Lim Family Property	Project Location: 250 8th Street, Oakland, CA	Page 1 of 1
Driller: West Hazmat Drilling	Type of Rig: Hollow-Stem Auger	Size of Drill: 8.0" Diameter
Logged By: Ian T. Reed	Date Drilled: January 3, 2000	Checked By: Robert E. Kitay, R.G.

WATER AND WELL DATA

- Depth of Water First Encountered: 16'
- Static Depth of Water in Well: 17.24'
- Total Depth of Boring: 30'
- Total Depth of Well Completed: 27'
- Well Screen Type and Diameter: 2" diameter sch. 40 PVC
- Well Screen Slot Size: 0.020" diameter
- Type and Size of Soil Sampler: 2.0" I.D. Split-barrel



Depth in Feet	Interval	Blow Counts	OVM (ppmv)	Water Level	Graphic Log	DESCRIPTION OF LITHOLOGY (standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.)
0						Concrete
		41 27 40	3.8			Silty SAND (SM); orange brown; damp; stiff; 60% fine sand; 40% silt; non-plastic; medium estimated K; no odor
5						
		10 16 60	5.5			Sandy SILT (ML); orange brown and olive; damp; stiff; 70% silt; 30% fine sand; non-plastic; medium estimated K; slight hydrocarbon odor
10						
		20 30 50	62	▼		olive; moist; stiff; non-plastic; medium estimated K; strong hydrocarbon odor
15						
		17 31 41	436			
20						
		50/ 0.5	72			Silty SAND (SM); olive; wet; stiff; 70% fine sand; 30% silt; non-plastic; high estimated K; moderate hydrocarbon odor
25						
30						End of boring at 30'

AQUA SCIENCE ENGINEERS, INC.

APPENDIX C

Analytical Report and Chain of Custody Form
For Soil Samples

CHROMALAB, INC.
Environmental Services (SDB)

Submission #: 2000-01-0048
Date: January 12, 2000

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

Attn.: Mr. Ian T. Reed

Project: 2808
LIM Family Property

Site: 580 8th Street, Oakland, CA

Dear Mr. Reed,

Attached is our report for your samples received on Wednesday January 5, 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 February 4, 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 #: 2000-01-0048

Fuel Oxygenates by GC/MS

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 Family Property
Site: 580 8th Street, Oakland, CA	

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-3-16`	Soil	01/03/2000 08:45	1
MW-4-16`	Soil	01/03/2000 13:35	2

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

Test Method: 8260A
Prep Method: 8260A

Fuel Oxygenates by GC/MS

Sample ID:	**MW-3-16`**	Lab Sample ID:	**2000-01-0048-001**
Project:	2808 LIM Family Property	Received:	01/05/2000 16:43
Site:	580 8th Street, Oakland, CA	Extracted:	01/11/2000 15:18
Sampled:	01/03/2000 08:45	QC-Batch:	2000/01/11-02.06
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/Kg	1.00	01/11/2000 15:18	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	01/11/2000 15:18	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	01/11/2000 15:18	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	01/11/2000 15:18	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	01/11/2000 15:18	
Surrogate(s)						
1,2-Dichloroethane-d4	102.9	70-121	%	1.00	01/11/2000 15:18	

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

Test Method: 8260A
Prep Method: 8260A

Fuel Oxygenates by GC/MS

Sample ID:	**MW-4-16`**	Lab Sample ID:	**2000-01-0048-002**
Project:	2808 LIM Family Property	Received:	01/05/2000 16:43
Site:	580 8th Street, Oakland, CA	Extracted:	01/10/2000 17:57
Sampled:	01/03/2000 13:35	QC-Batch:	2000/01/10-03.06
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/Kg	1.00	01/10/2000 17:57	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	1.00	01/10/2000 17:57	
Di-isopropyl Ether (DIPE)	ND	10	ug/Kg	1.00	01/10/2000 17:57	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	1.00	01/10/2000 17:57	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	1.00	01/10/2000 17:57	
Surrogate(s)						
1,2-Dichloroethane-d4	102.1	70-121	%	1.00	01/10/2000 17:57	

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

Test Method: 8260A
Prep Method: 8260A

Batch QC Report
Fuel Oxygenates by GC/MS

Method Blank | **Soil** | **QC Batch # 2000/01/10-03.06**

MB: 2000/01/10-03.06-001 | Date Extracted: 01/10/2000 13:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/Kg	01/10/2000 13:00	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	01/10/2000 13:00	
Di-isopropyl Ether (DIPE)	ND	10.0	ug/Kg	01/10/2000 13:00	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	01/10/2000 13:00	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	01/10/2000 13:00	
Surrogate(s)					
1,2-Dichloroethane-d4	100.6	70-121	%	01/10/2000 13:00	

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

Test Method: 8260A
Prep Method: 8260A

Batch QC Report
Fuel Oxygenates by GC/MS

Method Blank | **Soil** | **QC Batch # 2000/01/11-02.06**

MB: 2000/01/11-02.06-001 | Date Extracted: 01/11/2000 13:03

Compound	Result	Rep.Limit	Units	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/Kg	01/11/2000 13:03	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/Kg	01/11/2000 13:03	
Di-isopropyl Ether (DIPE)	ND	10.0	ug/Kg	01/11/2000 13:03	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/Kg	01/11/2000 13:03	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/Kg	01/11/2000 13:03	
Surrogate(s)					
1,2-Dichloroethane-d4	99.0	70-121	%	01/11/2000 13:03	

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

Attn: Ian T. Reed

Test Method: 8260A

Prep Method: 8260A

Batch QC Report

Fuel Oxygenates by GC/MS

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2000/01/10-03.06**

LCS: 2000/01/10-03.06-002 Extracted: 01/10/2000 12:33 Analyzed: 01/10/2000 12:33

LCSD: 2000/01/10-03.06-003 Extracted: 01/10/2000 14:16 Analyzed: 01/10/2000 14:16

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Methyl tert-butyl ether	128	121	100.0	100.0	128.0	121.0	5.6	65-165	20		
Surrogate(s)											
1,2-Dichloroethane-d4	490	484	500	500	98.0	96.8		70-121			

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

Attn: Ian T. Reed

Test Method: 8260A

Prep Method: 8260A

Batch QC Report

Fuel Oxygenates by GC/MS

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2000/01/11-02.06**

LCS: 2000/01/11-02.06-002 Extracted: 01/11/2000 13:42 Analyzed: 01/11/2000 13:42

LCSD: 2000/01/11-02.06-003 Extracted: 01/11/2000 12:36 Analyzed: 01/11/2000 12:36

Compound	Conc. [ug/Kg]		Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Methyl tert-butyl ether	115	120	100.0	100.0	115.0	120.0	4.3	65-165	20		
Surrogate(s)											
1,2-Dichloroethane-d4	464	493	500	500	92.8	98.6		70-121			

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

Attn.: Ian T. Reed

Test Method: 8260A

Prep Method: 8260A

Batch QC Report

Fuel Oxygenates by GC/MS

Matrix Spike (MS / MSD) **Soil** **QC Batch # 2000/01/10-03.06**

Sample ID: **MW-4-16`**

Lab Sample ID: 2000-01-0048-002

MS: 2000/01/10-03.06-004 Extracted: 01/10/2000 18:23 Analyzed: 01/10/2000 18:23 Dilution: 1.0

MSD: 2000/01/10-03.06-005 Extracted: 01/10/2000 18:50 Analyzed: 01/10/2000 18:50 Dilution: 1.0

Compound	Conc. [ug/Kg]			Exp.Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Methyl tert-butyl ether	107	116	ND	88.3	100.0	121.2	116.0	4.4	65-165	20		
Surrogate(s)												
1,2-Dichloroethane-d4	518	505		500	500	103.6	101.0		70-121			

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 Family Property

Site: 580 8th Street, Oakland, CA

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-3-16`	Soil	01/03/2000 08:45	1
MW-4-16`	Soil	01/03/2000 13:35	2

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

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-3-16`**	Lab Sample ID:	**2000-01-0048-001**
Project:	2808 LIM Family Property	Received:	01/05/2000 16:43
Site:	580 8th Street, Oakland, CA	Extracted:	01/10/2000 18:48
Sampled:	01/03/2000 08:45	QC-Batch:	2000/01/10-01.04
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	01/10/2000 18:48	
Benzene	0.016	0.0050	mg/Kg	1.00	01/10/2000 18:48	
Toluene	0.0084	0.0050	mg/Kg	1.00	01/10/2000 18:48	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	01/10/2000 18:48	
Xylene(s)	0.012	0.0050	mg/Kg	1.00	01/10/2000 18:48	
MTBE	ND	0.0050	mg/Kg	1.00	01/10/2000 18:48	
Surrogate(s)						
Trifluorotoluene	67.8	53-125	%	1.00	01/10/2000 18:48	
4-Bromofluorobenzene-FID	61.5	58-124	%	1.00	01/10/2000 18:48	

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

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-4-16**	Lab Sample ID:	**2000-01-0048-002**
Project:	2808 LIM Family Property	Received:	01/05/2000 16:43
Site:	580 8th Street, Oakland, CA	Extracted:	01/10/2000 20:10
Sampled:	01/03/2000 13:35	QC-Batch:	2000/01/10-01.04
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	01/10/2000 20:10	
Benzene	ND	0.0050	mg/Kg	1.00	01/10/2000 20:10	
Toluene	ND	0.0050	mg/Kg	1.00	01/10/2000 20:10	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	01/10/2000 20:10	
Xylene(s)	ND	0.0050	mg/Kg	1.00	01/10/2000 20:10	
MTBE	ND	0.0050	mg/Kg	1.00	01/10/2000 20:10	
Surrogate(s)						
Trifluorotoluene	63.2	53-125	%	1.00	01/10/2000 20:10	
Trifluorotoluene-FID	68.7	53-125	%	1.00	01/10/2000 20:10	

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 | **Soil** | **QC Batch # 2000/01/10-01.04**

MB: 2000/01/10-01.04-001

Date Extracted: 01/10/2000 06:48

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	01/10/2000 06:48	
Benzene	ND	0.0050	mg/Kg	01/10/2000 06:48	
Toluene	ND	0.0050	mg/Kg	01/10/2000 06:48	
Ethyl benzene	ND	0.0050	mg/Kg	01/10/2000 06:48	
Xylene(s)	ND	0.0050	mg/Kg	01/10/2000 06:48	
MTBE	ND	0.0050	mg/Kg	01/10/2000 06:48	
Surrogate(s)					
Trifluorotoluene	98.2	53-125	%	01/10/2000 06:48	
4-Bromofluorobenzene-FID	82.2	58-124	%	01/10/2000 06:48	

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) **Soil** **QC Batch # 2000/01/10-01.04**

LCS: 2000/01/10-01.04-002 Extracted: 01/10/2000 07:15 Analyzed: 01/10/2000 07:15

LCSD: 2000/01/10-01.04-003 Extracted: 01/10/2000 07:43 Analyzed: 01/10/2000 07:43

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	0.523	0.547	0.500	0.500	104.6	109.4	4.5	75-125	35		
Benzene	0.0947	0.0890	0.1000	0.1000	94.7	89.0	6.2	77-123	35		
Toluene	0.0944	0.0881	0.1000	0.1000	94.4	88.1	6.9	78-122	35		
Ethyl benzene	0.0942	0.0892	0.1000	0.1000	94.2	89.2	5.5	70-130	35		
Xylene(s)	0.281	0.268	0.300	0.300	93.7	89.3	4.8	75-125	35		
Surrogate(s)											
Trifluorotoluene	442	421	500	500	88.4	84.2		53-125			
4-Bromofluorobenzene-FI	434	434	500	500	86.8	86.8		58-124			

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 Family Property

Site: 580 8th Street, Oakland, CA

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-3-16`	Soil	01/03/2000 08:45	1
MW-4-16`	Soil	01/03/2000 13:35	2

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

Test Method: 5520 E & F
Prep Method: 5520 E & F

Petroleum Oil & Grease

Sample ID:	**MW-3-16`**	Lab Sample ID:	**2000-01-0048-001**
Project:	2808 LIM Family Property	Received:	01/05/2000 16:43
Site:	580 8th Street, Oakland, CA	Extracted:	01/06/2000
Sampled:	01/03/2000 08:45	QC-Batch:	2000/01/06-02.23
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (Petroleum)	ND	50	mg/Kg	1.00	01/07/2000	

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

Test Method: 5520 E & F
Prep Method: 5520 E & F

Petroleum Oil & Grease

Sample ID:	**MW-4-16**	Lab Sample ID:	**2000-01-0048-002**
Project:	2808 LIM Family Property	Received:	01/05/2000 16:43
Site:	580 8th Street, Oakland, CA	Extracted:	01/06/2000
Sampled:	01/03/2000 13:35	QC-Batch:	2000/01/06-02.23
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (Petroleum)	ND	50	mg/Kg	1.00	01/07/2000	

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

Test Method: 5520 E & F
Prep Method: 5520 E & F

Batch QC Report
Petroleum Oil & Grease

Method Blank **Soil** **QC Batch # 2000/01/06-02.23**

MB: 2000/01/06-02.23-001 Date Extracted: 01/06/2000

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Oil & Grease (Petroleum)	ND	50	mg/Kg	01/07/2000	

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

Attn: Ian T. Reed

Test Method: 5520 E & F

Prep Method: 5520 E & F

Batch QC Report

Petroleum Oil & Grease

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2000/01/06-02.23**

LCS: 2000/01/06-02.23-002 Extracted: 01/06/2000 Analyzed: 01/07/2000

LCSD: 2000/01/06-02.23-003 Extracted: 01/06/2000 Analyzed: 01/07/2000

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Oil & Grease (Petroleum)	350	386	400	400	87.5	96.5	9.8	80-120	20		

Total Extractable Petroleum Hydrocarbons (TEPH)

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 Family Property

Site: 580 8th Street, Oakland, CA

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-3-16`	Soil	01/03/2000 08:45	1
MW-4-16`	Soil	01/03/2000 13:35	2

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

Test Method: 8015M
Prep Method: 3550/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID:	**MW-3-16`**	Lab Sample ID:	**2000-01-0048-001**
Project:	2808 LIM Family Property	Received:	01/05/2000 16:43
Site:	580 8th Street, Oakland, CA	Extracted:	01/07/2000 09:00
Sampled:	01/03/2000 08:45	QC-Batch:	2000/01/06-02.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	01/07/2000 23:06	
Motor Oil	ND	50	mg/Kg	1.00	01/07/2000 23:06	
Surrogate(s)						
o-Terphenyl	84.1	60-130	%	1.00	01/07/2000 23:06	

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

Test Method: 8015M
Prep Method: 3550/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID:	**MW-4-16`**	Lab Sample ID:	**2000-01-0048-002**
Project:	2808 LIM Family Property	Received:	01/05/2000 16:43
Site:	580 8th Street, Oakland, CA	Extracted:	01/06/2000 09:00
Sampled:	01/03/2000 13:35	QC-Batch:	2000/01/06-02.10
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	01/07/2000 23:43	
Motor Oil	ND	50	mg/Kg	1.00	01/07/2000 23:43	
Surrogate(s)						
o-Terphenyl	79.6	60-130	%	1.00	01/07/2000 23:43	

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

Test Method: 8015M
Prep Method: 3550/8015M

Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Method Blank **Soil** **QC Batch # 2000/01/06-02.10**

MB: 2000/01/06-02.10-001 Date Extracted: 01/06/2000 09:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	01/06/2000 23:04	
Motor Oil	ND	50	mg/Kg	01/06/2000 23:04	
Surrogate(s)					
o-Terphenyl	89.5	60-130	%	01/06/2000 23:04	

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

Attn: Ian T. Reed

Test Method: 8015M

Prep Method: 3550/8015M

Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Laboratory Control Spike (LCS/LCSD) **Soil** **QC Batch # 2000/01/06-02.10**

LCS: 2000/01/06-02.10-002 Extracted: 01/06/2000 09:00 Analyzed: 01/07/2000 09:00

LCSD: 2000/01/06-02.10-003 Extracted: 01/06/2000 09:00 Analyzed: 01/07/2000 09:45

Compound	Conc. [mg/Kg]		Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	31.3	32.4	41.7	41.7	75.1	77.7	3.4	60-130	25		
Surrogate(s)											
o-Terphenyl	19.0	20.0	20.0	20.0	95.0	100.0		60-130			

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

Attn.: Ian T. Reed

Test Method: 8015M

Prep Method: 3550/8015M

Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Matrix Spike (MS / MSD) **Soil** **QC Batch # 2000/01/06-02.10**

Sample ID: **MW-3-16`** Lab Sample ID: 2000-01-0048-001

MS: 2000/01/06-02.10-004 Extracted: 01/06/2000 09:00 Analyzed: 01/07/2000 17:51 Dilution: 1.0

MSD: 2000/01/06-02.10-005 Extracted: 01/06/2000 09:00 Analyzed: 01/07/2000 18:38 Dilution: 1.0

Compound	Conc. [mg/Kg]			Exp.Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Diesel	33.2	33.2	ND	41.7	41.7	79.6	79.6	0.0	60-130	25		
Surrogate(s)												
o-Terphenyl	18.8	20.7		20.0	20.0	94.0	103.5		60-130			

2000-01-0048

49812

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) Lan Reed (PHONE NO.) (925) 820-9391

PROJECT NAME LIM Family Property JOB NO. 1808

ADDRESS 250 8th Street, Oakland, CA DATE 1-5-00

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 and MO (EPA 3510/8015)	PURGEABLE HALOCARBONS (EPA 601/8010)	PURGEABLE AROMATICS (EPA 602/8020)	VOLATILE ORGANICS (EPA 624/8240)	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-3-16'	1-3-00	0845	soil	1	X		X					X						X					
MW-4-16'	1-3-00	1335	soil	1	X		X					X						X					

RELINQUISHED BY: Lan Reed 1100 (signature) (time)

Lan T Reed 1/5/00 (printed name) (date)

Company- ASE

RECEIVED BY: [signature] 1/5 (signature) 12:27 (time)

(printed name) (date)

Company-

RELINQUISHED BY: [signature] (signature) 1/5/00 (time) 12:50

(printed name) (date)

Company-

RECEIVED BY LABORATORY: Denise Harrington (signature) (time) 1250

D. Harrington 1/5/00 (printed name) (date)

Company- Chromalab

COMMENTS:

5-day TAT

5.2°C

APPENDIX D

Well Sampling Field Logs

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: LIM
Job #: 2808 Date of sampling: 1/12/00
Well Name: MW-1 Sampled by: LTR
Total depth of well (feet): 27.99 Well diameter (inches): 2"
Depth to water before sampling (feet): 17.44
Thickness of floating product if any: —
Depth of well casing in water (feet): 10.55
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: dedicated bailer
Time Evacuation Began: 1305 Time Evacuation Finished: 1320
Approximate volume of groundwater purged: 7.5
Did the well go dry?: No After how many gallons: —
Time samples were collected: 1325
Depth to water at time of sampling: 17.50
Percent recovery at time of sampling: 98%
Samples collected with: dedicated bailer
Sample color: grey/clear Odor: mod. HC odor
Description of sediment in sample: silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	72.6	5.76	713
2	71.9	6.13	813
3	72.6	7.10	927
4	73.0	5.96	871

SAMPLES COLLECTED

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

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: LIM
Job #: 2808 Date of sampling: 11/12/00
Well Name: MW-2 Sampled by: TR
Total depth of well (feet): 26.78 Well diameter (inches): 2"
Depth to water before sampling (feet): 16.76'
Thickness of floating product if any: - sheen
Depth of well casing in water (feet): 10.02
Number of gallons per well casing volume (gallons): 1.7
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 6.8
Equipment used to purge the well: dedicated
Time Evacuation Began: 1345 Time Evacuation Finished: 1400
Approximate volume of groundwater purged: 7.0
Did the well go dry?: ND After how many gallons: -
Time samples were collected: 1405
Depth to water at time of sampling: 16.28'
Percent recovery at time of sampling: 99%
Samples collected with: dedicated bailer
Sample color: gray/clear Odor: mod. HC odor
Description of sediment in sample: silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	72.3	6.73	213
2	71.9	6.81	824
3	72.3	7.13	793
4	72.9	7.24	781

SAMPLES COLLECTED

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

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aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: LIM
Job #: 2808 Date of sampling: 1/12/00
Well Name: MW-3 Sampled by: ITR
Total depth of well (feet): 26.5 Well diameter (inches): 2"
Depth to water before sampling (feet): 16.68
Thickness of floating product if any: 0.01
Depth of well casing in water (feet): 8.82
Number of gallons per well casing volume (gallons): 1.5
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 6.0
Equipment used to purge the well: dedicated bailer
Time Evacuation Began: 1216 Time Evacuation Finished: 1238
Approximate volume of groundwater purged: 7.5'
Did the well go dry?: NO After how many gallons: -
Time samples were collected: 1245
Depth to water at time of sampling: 16.69
Percent recovery at time of sampling: 99%
Samples collected with: dedicated bailer
Sample color: gray clear Odor: mod. HC odor
Description of sediment in sample: heavy silt

CHEMICAL DATA

Volume Purged	Temp.	pH	Conductivity
1	71.3	6.71	631
2	72.6	6.81	790
3	71.9	6.93	673
4	73.1	7.01	710

SAMPLES COLLECTED

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

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aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: LIM
Job #: 2808 Date of sampling: 1/12/00
Well Name: MW-4 Sampled by: TR
Total depth of well (feet): 26.6' Well diameter (inches): 2"
Depth to water before sampling (feet): 17.24'
Thickness of floating product if any: —
Depth of well casing in water (feet): 9.36'
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): 6.4
Equipment used to purge the well: dedicated bailer
Time Evacuation Began: 1133 Time Evacuation Finished: 1150
Approximate volume of groundwater purged: 6.5
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1155
Depth to water at time of sampling: 17.34'
Percent recovery at time of sampling: 98%
Samples collected with: dedicated bailer
Sample color: very yellow brown Odor: slight HC odor
Description of sediment in sample: heavy silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	72.1	5.61	781
2	71.6	6.72	643
3	70.9	6.10	914
4	71.6	5.97	910

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-4	3	40ml VOA	✓	✓	TPH-G/BTEX/MTBE
	2	40ml VOA	✓	✓	[illegible]
	2	1-liter Amber		✓	TPH D
	2	1-liter Amber		✓	O&G

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APPENDIX E

Analytical Report and Chain of Custody Form
For Groundwater Samples

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 January 14, 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 February 13, 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

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	01/12/2000 13:25	1
MW-2	Water	01/12/2000 14:05	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:	**2000-01-0223-001**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/20/2000 23:26
Sampled:	01/12/2000 13:25	QC-Batch:	2000/01/20-01.25
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	01/20/2000 23:26	
Vinyl chloride	ND	0.50	ug/L	1.00	01/20/2000 23:26	
Chloroethane	ND	0.50	ug/L	1.00	01/20/2000 23:26	
Trichlorofluoromethane	ND	0.50	ug/L	1.00	01/20/2000 23:26	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	01/20/2000 23:26	
Methylene chloride	ND	5.0	ug/L	1.00	01/20/2000 23:26	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	01/20/2000 23:26	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	01/20/2000 23:26	
1,1-Dichloroethane	ND	0.50	ug/L	1.00	01/20/2000 23:26	
Chloroform	3.2	0.50	ug/L	1.00	01/20/2000 23:26	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	01/20/2000 23:26	
Carbon tetrachloride	ND	0.50	ug/L	1.00	01/20/2000 23:26	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	01/20/2000 23:26	
Trichloroethene	ND	0.50	ug/L	1.00	01/20/2000 23:26	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	01/20/2000 23:26	
Bromodichloromethane	ND	0.50	ug/L	1.00	01/20/2000 23:26	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	01/20/2000 23:26	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	01/20/2000 23:26	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	01/20/2000 23:26	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	01/20/2000 23:26	
Tetrachloroethene	0.80	0.50	ug/L	1.00	01/20/2000 23:26	
Dibromochloromethane	ND	0.50	ug/L	1.00	01/20/2000 23:26	
Chlorobenzene	ND	0.50	ug/L	1.00	01/20/2000 23:26	
Bromoform	ND	2.0	ug/L	1.00	01/20/2000 23:26	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	01/20/2000 23:26	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	01/20/2000 23:26	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	01/20/2000 23:26	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	01/20/2000 23:26	
Trichlorotrifluoroethane	ND	2.0	ug/L	1.00	01/20/2000 23:26	
Chloromethane	ND	1.0	ug/L	1.00	01/20/2000 23:26	
Bromomethane	ND	1.0	ug/L	1.00	01/20/2000 23:26	
Surrogate(s)						
1-Chloro-2-fluorobenzene	86.0	50-150	%	1.00	01/20/2000 23:26	

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:	**2000-01-0223-002**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/20/2000 02:03
Sampled:	01/12/2000 14:05	QC-Batch:	2000/01/19-01.26
Matrix:	Water		

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

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	2.0	ug/L	2.00	01/20/2000 02:03	
Vinyl chloride	ND	1.0	ug/L	2.00	01/20/2000 02:03	
Chloroethane	ND	1.0	ug/L	2.00	01/20/2000 02:03	
Trichlorofluoromethane	ND	1.0	ug/L	2.00	01/20/2000 02:03	
1,1-Dichloroethene	ND	1.0	ug/L	2.00	01/20/2000 02:03	
Methylene chloride	ND	10	ug/L	2.00	01/20/2000 02:03	
trans-1,2-Dichloroethene	ND	1.0	ug/L	2.00	01/20/2000 02:03	
cis-1,2-Dichloroethene	ND	1.0	ug/L	2.00	01/20/2000 02:03	
1,1-Dichloroethane	ND	1.0	ug/L	2.00	01/20/2000 02:03	
Chloroform	ND	1.0	ug/L	2.00	01/20/2000 02:03	
1,1,1-Trichloroethane	ND	1.0	ug/L	2.00	01/20/2000 02:03	
Carbon tetrachloride	ND	1.0	ug/L	2.00	01/20/2000 02:03	
1,2-Dichloroethane	8.8	1.0	ug/L	2.00	01/20/2000 02:03	
Trichloroethene	ND	1.0	ug/L	2.00	01/20/2000 02:03	
1,2-Dichloropropane	ND	1.0	ug/L	2.00	01/20/2000 02:03	
Bromodichloromethane	ND	1.0	ug/L	2.00	01/20/2000 02:03	
2-Chloroethylvinyl ether	ND	1.0	ug/L	2.00	01/20/2000 02:03	
trans-1,3-Dichloropropene	ND	1.0	ug/L	2.00	01/20/2000 02:03	
cis-1,3-Dichloropropene	ND	1.0	ug/L	2.00	01/20/2000 02:03	
1,1,2-Trichloroethane	ND	1.0	ug/L	2.00	01/20/2000 02:03	
Tetrachloroethene	ND	1.0	ug/L	2.00	01/20/2000 02:03	
Dibromochloromethane	ND	1.0	ug/L	2.00	01/20/2000 02:03	
Chlorobenzene	ND	1.0	ug/L	2.00	01/20/2000 02:03	
Bromoform	ND	4.0	ug/L	2.00	01/20/2000 02:03	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	2.00	01/20/2000 02:03	
1,3-Dichlorobenzene	ND	1.0	ug/L	2.00	01/20/2000 02:03	
1,4-Dichlorobenzene	ND	1.0	ug/L	2.00	01/20/2000 02:03	
1,2-Dichlorobenzene	ND	1.0	ug/L	2.00	01/20/2000 02:03	
Trichlorotrifluoroethane	ND	4.0	ug/L	2.00	01/20/2000 02:03	
Chloromethane	ND	2.0	ug/L	2.00	01/20/2000 02:03	
Bromomethane	ND	2.0	ug/L	2.00	01/20/2000 02:03	
Surrogate(s)						

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:	**2000-01-0223-002**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/20/2000 02:03
Sampled:	01/12/2000 14:05	QC-Batch:	2000/01/19-01.26
Matrix:	Water		

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

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
1-Chloro-2-fluorobenzene	91.0	50-150	%	1.00	01/20/2000 02:03	

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 # 2000/01/19-01.26**

MB: 2000/01/19-01.26-001

Date Extracted: 01/19/2000 18:54

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	01/19/2000 18:54	
Vinyl chloride	ND	0.5	ug/L	01/19/2000 18:54	
Chloroethane	ND	0.5	ug/L	01/19/2000 18:54	
Trichlorofluoromethane	ND	0.5	ug/L	01/19/2000 18:54	
1,1-Dichloroethene	ND	0.5	ug/L	01/19/2000 18:54	
Methylene chloride	ND	5.0	ug/L	01/19/2000 18:54	
trans-1,2-Dichloroethene	ND	0.5	ug/L	01/19/2000 18:54	
cis-1,2-Dichloroethene	ND	0.5	ug/L	01/19/2000 18:54	
1,1-Dichloroethane	ND	0.5	ug/L	01/19/2000 18:54	
Chloroform	ND	0.5	ug/L	01/19/2000 18:54	
1,1,1-Trichloroethane	ND	0.5	ug/L	01/19/2000 18:54	
Carbon tetrachloride	ND	0.5	ug/L	01/19/2000 18:54	
1,2-Dichloroethane	ND	0.5	ug/L	01/19/2000 18:54	
Trichloroethene	ND	0.5	ug/L	01/19/2000 18:54	
1,2-Dichloropropane	ND	0.5	ug/L	01/19/2000 18:54	
Bromodichloromethane	ND	0.5	ug/L	01/19/2000 18:54	
2-Chloroethylvinyl ether	ND	0.5	ug/L	01/19/2000 18:54	
trans-1,3-Dichloropropene	ND	0.5	ug/L	01/19/2000 18:54	
cis-1,3-Dichloropropene	ND	0.5	ug/L	01/19/2000 18:54	
1,1,2-Trichloroethane	ND	0.5	ug/L	01/19/2000 18:54	
Tetrachloroethene	ND	0.5	ug/L	01/19/2000 18:54	
Dibromochloromethane	ND	0.5	ug/L	01/19/2000 18:54	
Chlorobenzene	ND	0.5	ug/L	01/19/2000 18:54	
Bromoform	ND	2.0	ug/L	01/19/2000 18:54	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	01/19/2000 18:54	
1,3-Dichlorobenzene	ND	0.5	ug/L	01/19/2000 18:54	
1,4-Dichlorobenzene	ND	0.5	ug/L	01/19/2000 18:54	
1,2-Dichlorobenzene	ND	0.5	ug/L	01/19/2000 18:54	
Trichlorotrifluoroethane	ND	2.0	ug/L	01/19/2000 18:54	
Chloromethane	ND	1.0	ug/L	01/19/2000 18:54	
Bromomethane	ND	1.0	ug/L	01/19/2000 18:54	
Surrogate(s)					
1-Chloro-2-fluorobenzene	84.5	50-150	%	01/19/2000 18:54	

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 # 2000/01/20-01.25**

MB: 2000/01/20-01.25-001

Date Extracted: 01/20/2000 09:22

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	01/20/2000 09:22	
Vinyl chloride	ND	0.5	ug/L	01/20/2000 09:22	
Chloroethane	ND	0.5	ug/L	01/20/2000 09:22	
Trichlorofluoromethane	ND	0.5	ug/L	01/20/2000 09:22	
1,1-Dichloroethene	ND	0.5	ug/L	01/20/2000 09:22	
Methylene chloride	ND	5.0	ug/L	01/20/2000 09:22	
trans-1,2-Dichloroethene	ND	0.5	ug/L	01/20/2000 09:22	
cis-1,2-Dichloroethene	ND	0.5	ug/L	01/20/2000 09:22	
1,1-Dichloroethane	ND	0.5	ug/L	01/20/2000 09:22	
Chloroform	ND	0.5	ug/L	01/20/2000 09:22	
1,1,1-Trichloroethane	ND	0.5	ug/L	01/20/2000 09:22	
Carbon tetrachloride	ND	0.5	ug/L	01/20/2000 09:22	
1,2-Dichloroethane	ND	0.5	ug/L	01/20/2000 09:22	
Trichloroethene	ND	0.5	ug/L	01/20/2000 09:22	
1,2-Dichloropropane	ND	0.5	ug/L	01/20/2000 09:22	
Bromodichloromethane	ND	0.5	ug/L	01/20/2000 09:22	
2-Chloroethylvinyl ether	ND	0.5	ug/L	01/20/2000 09:22	
trans-1,3-Dichloropropene	ND	0.5	ug/L	01/20/2000 09:22	
cis-1,3-Dichloropropene	ND	0.5	ug/L	01/20/2000 09:22	
1,1,2-Trichloroethane	ND	0.5	ug/L	01/20/2000 09:22	
Tetrachloroethene	ND	0.5	ug/L	01/20/2000 09:22	
Dibromochloromethane	ND	0.5	ug/L	01/20/2000 09:22	
Chlorobenzene	ND	0.5	ug/L	01/20/2000 09:22	
Bromoform	ND	2.0	ug/L	01/20/2000 09:22	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	01/20/2000 09:22	
1,3-Dichlorobenzene	ND	0.5	ug/L	01/20/2000 09:22	
1,4-Dichlorobenzene	ND	0.5	ug/L	01/20/2000 09:22	
1,2-Dichlorobenzene	ND	0.5	ug/L	01/20/2000 09:22	
Trichlorotrifluoroethane	ND	2.0	ug/L	01/20/2000 09:22	
Chloromethane	ND	1.0	ug/L	01/20/2000 09:22	
Bromomethane	ND	1.0	ug/L	01/20/2000 09:22	
Surrogate(s)					
1-Chloro-2-fluorobenzene	81.5	50-150	%	01/20/2000 09:22	

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

Attn: Ian T. Reed

Test Method: 8010

Prep Method: 5030

Batch QC Report

Halogenated Volatile Organic Compounds

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/01/19-01.26**

LCS: 2000/01/19-01.26-002 Extracted: 01/19/2000 19:42 Analyzed: 01/19/2000 19:42

LCSD: 2000/01/19-01.26-003 Extracted: 01/19/2000 20:29 Analyzed: 01/19/2000 20:29

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	17.3	16.5	20.0	20.0	86.5	82.5	4.7	50-140	20		
Trichloroethene	20.6	21.3	20.0	20.0	103.0	106.5	3.3	50-150	20		
Chlorobenzene	18.6	19.3	20.0	20.0	93.0	96.5	3.7	50-150	20		
Surrogate(s)											
1-Chloro-2-fluorobenzene	19.5	19.1	20	20	97.5	95.5		50-150			

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

Attn: Ian T. Reed

Test Method: 8010

Prep Method: 5030

Batch QC Report

Halogenated Volatile Organic Compounds

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/01/20-01.25**

LCS: 2000/01/20-01.25-002 Extracted: 01/20/2000 10:19 Analyzed: 01/20/2000 10:19

LCSD: 2000/01/20-01.25-003 Extracted: 01/20/2000 11:16 Analyzed: 01/20/2000 11:16

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	19.1	18.8	20.0	20.0	95.5	94.0	1.6	50-140	20		
Trichloroethene	19.5	18.8	20.0	20.0	97.5	94.0	3.7	50-150	20		
Chlorobenzene	19.6	19.5	20.0	20.0	98.0	97.5	0.5	50-150	20		
Surrogate(s)											
1-Chloro-2-fluorobenzene	18.9	17.9	20	20	94.5	89.5		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

lrn

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

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-3	Water	01/12/2000 12:45	3
MW-4	Water	01/12/2000 11:55	4

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

Attn.: Ian T. Reed

Test Method: 8260A

Prep Method: 5030

Volatile Organic Compounds

Sample ID:	**MW-3**	Lab Sample ID:	**2000-01-0223-003**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/20/2000 18:02
Sampled:	01/12/2000 12:45	QC-Batch:	2000/01/20-01.27
Matrix:	Water		

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

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	25000	10000	ug/L	200.00	01/20/2000 18:02	
Benzene	22000	100	ug/L	200.00	01/20/2000 18:02	
Bromodichloromethane	ND	100	ug/L	200.00	01/20/2000 18:02	
Bromoform	ND	100	ug/L	200.00	01/20/2000 18:02	
Bromomethane	ND	200	ug/L	200.00	01/20/2000 18:02	
Carbon tetrachloride	ND	100	ug/L	200.00	01/20/2000 18:02	
Chlorobenzene	ND	100	ug/L	200.00	01/20/2000 18:02	
Chloroethane	ND	200	ug/L	200.00	01/20/2000 18:02	
2-Butanone(MEK)	ND	10000	ug/L	200.00	01/20/2000 18:02	
2-Chloroethylvinyl ether	ND	100	ug/L	200.00	01/20/2000 18:02	
Chloroform	ND	100	ug/L	200.00	01/20/2000 18:02	
Chloromethane	ND	200	ug/L	200.00	01/20/2000 18:02	
Dibromochloromethane	ND	100	ug/L	200.00	01/20/2000 18:02	
1,2-Dichlorobenzene	ND	100	ug/L	200.00	01/20/2000 18:02	
1,3-Dichlorobenzene	ND	100	ug/L	200.00	01/20/2000 18:02	
1,4-Dichlorobenzene	ND	100	ug/L	200.00	01/20/2000 18:02	
1,2-Dibromo-3-chloropropane	ND	1000	ug/L	200.00	01/20/2000 18:02	
1,2-Dibromoethane	ND	100	ug/L	200.00	01/20/2000 18:02	
Dibromomethane	ND	100	ug/L	200.00	01/20/2000 18:02	
Dichlorodifluoromethane	ND	100	ug/L	200.00	01/20/2000 18:02	
1,1-Dichloroethane	ND	100	ug/L	200.00	01/20/2000 18:02	
1,2-Dichloroethane	120	100	ug/L	200.00	01/20/2000 18:02	
1,1-Dichloroethene	ND	100	ug/L	200.00	01/20/2000 18:02	
cis-1,2-Dichloroethene	ND	100	ug/L	200.00	01/20/2000 18:02	
trans-1,2-Dichloroethene	ND	100	ug/L	200.00	01/20/2000 18:02	
1,2-Dichloropropane	ND	100	ug/L	200.00	01/20/2000 18:02	
cis-1,3-Dichloropropene	ND	100	ug/L	200.00	01/20/2000 18:02	
trans-1,3-Dichloropropene	ND	100	ug/L	200.00	01/20/2000 18:02	
Ethylbenzene	2400	100	ug/L	200.00	01/20/2000 18:02	
2-Hexanone	ND	10000	ug/L	200.00	01/20/2000 18:02	
Methylene chloride	ND	1000	ug/L	200.00	01/20/2000 18:02	
4-Methyl-2-pentanone (MIBK)	ND	10000	ug/L	200.00	01/20/2000 18:02	

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

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds

Sample ID:	**MW-3**	Lab Sample ID:	**2000-01-0223-003**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/20/2000 18:02
Sampled:	01/12/2000 12:45	QC-Batch:	2000/01/20-01.27
Matrix:	Water		

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

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	550	200	ug/L	200.00	01/20/2000 18:02	
Styrene	ND	100	ug/L	200.00	01/20/2000 18:02	
1,1,2,2-Tetrachloroethane	ND	100	ug/L	200.00	01/20/2000 18:02	
Tetrachloroethene	ND	100	ug/L	200.00	01/20/2000 18:02	
Toluene	18000	100	ug/L	200.00	01/20/2000 18:02	
1,1,1-Trichloroethane	ND	100	ug/L	200.00	01/20/2000 18:02	
1,1,2-Trichloroethane	ND	100	ug/L	200.00	01/20/2000 18:02	
Trichloroethene	ND	100	ug/L	200.00	01/20/2000 18:02	
1,1,1,2-Tetrachloroethane	ND	100	ug/L	200.00	01/20/2000 18:02	
Vinyl acetate	ND	1000	ug/L	200.00	01/20/2000 18:02	
Vinyl chloride	ND	100	ug/L	200.00	01/20/2000 18:02	
Total xylenes	12000	200	ug/L	200.00	01/20/2000 18:02	
Trichlorotrifluoroethane	ND	100	ug/L	200.00	01/20/2000 18:02	
Carbon disulfide	ND	200	ug/L	200.00	01/20/2000 18:02	
Isopropylbenzene	120	100	ug/L	200.00	01/20/2000 18:02	
Bromobenzene	ND	100	ug/L	200.00	01/20/2000 18:02	
Bromochloromethane	ND	200	ug/L	200.00	01/20/2000 18:02	
Trichlorofluoromethane	ND	400	ug/L	200.00	01/20/2000 18:02	
Surrogate(s)						
4-Bromofluorobenzene	102.0	86-115	%	1.00	01/20/2000 18:02	
1,2-Dichloroethane-d4	103.8	76-114	%	1.00	01/20/2000 18:02	
Toluene-d8	95.0	88-110	%	1.00	01/20/2000 18:02	

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:	**2000-01-0223-004**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/20/2000 18:40
Sampled:	01/12/2000 11:55	QC-Batch:	2000/01/20-01.27
Matrix:	Water		

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

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	6400	5000	ug/L	100.00	01/20/2000 18:40	
Benzene	15000	250	ug/L	500.00	01/21/2000 15:44	
Bromodichloromethane	ND	50	ug/L	100.00	01/20/2000 18:40	
Bromoform	ND	50	ug/L	100.00	01/20/2000 18:40	
Bromomethane	ND	100	ug/L	100.00	01/20/2000 18:40	
Carbon tetrachloride	ND	50	ug/L	100.00	01/20/2000 18:40	
Chlorobenzene	ND	50	ug/L	100.00	01/20/2000 18:40	
Chloroethane	ND	100	ug/L	100.00	01/20/2000 18:40	
2-Butanone(MEK)	ND	5000	ug/L	100.00	01/20/2000 18:40	
2-Chloroethylvinyl ether	ND	50	ug/L	100.00	01/20/2000 18:40	
Chloroform	ND	50	ug/L	100.00	01/20/2000 18:40	
Chloromethane	ND	100	ug/L	100.00	01/20/2000 18:40	
Dibromochloromethane	ND	50	ug/L	100.00	01/20/2000 18:40	
1,2-Dichlorobenzene	ND	50	ug/L	100.00	01/20/2000 18:40	
1,3-Dichlorobenzene	ND	50	ug/L	100.00	01/20/2000 18:40	
1,4-Dichlorobenzene	ND	50	ug/L	100.00	01/20/2000 18:40	
1,2-Dibromo-3-chloropropane	ND	500	ug/L	100.00	01/20/2000 18:40	
1,2-Dibromoethane	ND	50	ug/L	100.00	01/20/2000 18:40	
Dibromomethane	ND	50	ug/L	100.00	01/20/2000 18:40	
Dichlorodifluoromethane	ND	50	ug/L	100.00	01/20/2000 18:40	
1,1-Dichloroethane	ND	50	ug/L	100.00	01/20/2000 18:40	
1,2-Dichloroethane	140	50	ug/L	100.00	01/20/2000 18:40	
1,1-Dichloroethene	ND	50	ug/L	100.00	01/20/2000 18:40	
cis-1,2-Dichloroethene	ND	50	ug/L	100.00	01/20/2000 18:40	
trans-1,2-Dichloroethene	ND	50	ug/L	100.00	01/20/2000 18:40	
1,2-Dichloropropane	ND	50	ug/L	100.00	01/20/2000 18:40	
cis-1,3-Dichloropropene	ND	50	ug/L	100.00	01/20/2000 18:40	
trans-1,3-Dichloropropene	ND	50	ug/L	100.00	01/20/2000 18:40	
Ethylbenzene	2200	50	ug/L	100.00	01/20/2000 18:40	
2-Hexanone	ND	5000	ug/L	100.00	01/20/2000 18:40	
Methylene chloride	ND	500	ug/L	100.00	01/20/2000 18:40	
4-Methyl-2-pentanone (MIBK)	ND	5000	ug/L	100.00	01/20/2000 18:40	

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:	**2000-01-0223-004**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/20/2000 18:40
Sampled:	01/12/2000 11:55	QC-Batch:	2000/01/20-01.27
Matrix:	Water		

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

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Naphthalene	540	100	ug/L	100.00	01/20/2000 18:40	
Styrene	ND	50	ug/L	100.00	01/20/2000 18:40	
1,1,2,2-Tetrachloroethane	ND	50	ug/L	100.00	01/20/2000 18:40	
Tetrachloroethene	ND	50	ug/L	100.00	01/20/2000 18:40	
Toluene	18000	250	ug/L	500.00	01/21/2000 15:44	
1,1,1-Trichloroethane	ND	50	ug/L	100.00	01/20/2000 18:40	
1,1,2-Trichloroethane	ND	50	ug/L	100.00	01/20/2000 18:40	
Trichloroethene	ND	50	ug/L	100.00	01/20/2000 18:40	
1,1,1,2-Tetrachloroethane	ND	50	ug/L	100.00	01/20/2000 18:40	
Vinyl acetate	ND	500	ug/L	100.00	01/20/2000 18:40	
Vinyl chloride	ND	50	ug/L	100.00	01/20/2000 18:40	
Total xylenes	14000	100	ug/L	100.00	01/20/2000 18:40	
Trichlorotrifluoroethane	ND	50	ug/L	100.00	01/20/2000 18:40	
Carbon disulfide	ND	100	ug/L	100.00	01/20/2000 18:40	
Isopropylbenzene	89	50	ug/L	100.00	01/20/2000 18:40	
Bromobenzene	ND	50	ug/L	100.00	01/20/2000 18:40	
Bromochloromethane	ND	100	ug/L	100.00	01/20/2000 18:40	
Trichlorofluoromethane	ND	200	ug/L	100.00	01/20/2000 18:40	
Surrogate(s)						
4-Bromofluorobenzene	100.1	86-115	%	1.00	01/20/2000 18:40	
1,2-Dichloroethane-d4	100.9	76-114	%	1.00	01/20/2000 18:40	
Toluene-d8	96.5	88-110	%	1.00	01/20/2000 18:40	

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 # 2000/01/20-01.27**

MB: 2000/01/20-01.27-001 | Date Extracted: 01/20/2000 13:10

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Acetone	ND	50	ug/L	01/20/2000 13:10	
Benzene	ND	0.5	ug/L	01/20/2000 13:10	
Bromodichloromethane	ND	0.5	ug/L	01/20/2000 13:10	
Bromoform	ND	0.5	ug/L	01/20/2000 13:10	
Bromomethane	ND	1.0	ug/L	01/20/2000 13:10	
Carbon tetrachloride	ND	0.5	ug/L	01/20/2000 13:10	
Chlorobenzene	ND	0.5	ug/L	01/20/2000 13:10	
Chloroethane	ND	1.0	ug/L	01/20/2000 13:10	
2-Butanone(MEK)	ND	50	ug/L	01/20/2000 13:10	
2-Chloroethylvinyl ether	ND	0.5	ug/L	01/20/2000 13:10	
Chloroform	ND	0.5	ug/L	01/20/2000 13:10	
Chloromethane	ND	1.0	ug/L	01/20/2000 13:10	
Dibromochloromethane	ND	0.5	ug/L	01/20/2000 13:10	
1,2-Dichlorobenzene	ND	0.5	ug/L	01/20/2000 13:10	
1,3-Dichlorobenzene	ND	0.5	ug/L	01/20/2000 13:10	
1,4-Dichlorobenzene	ND	0.5	ug/L	01/20/2000 13:10	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	01/20/2000 13:10	
1,2-Dibromoethane	ND	0.5	ug/L	01/20/2000 13:10	
Dibromomethane	ND	0.5	ug/L	01/20/2000 13:10	
Dichlorodifluoromethane	ND	0.5	ug/L	01/20/2000 13:10	
1,1-Dichloroethane	ND	0.5	ug/L	01/20/2000 13:10	
1,2-Dichloroethane	ND	0.5	ug/L	01/20/2000 13:10	
1,1-Dichloroethene	ND	0.5	ug/L	01/20/2000 13:10	
cis-1,2-Dichloroethene	ND	0.5	ug/L	01/20/2000 13:10	
trans-1,2-Dichloroethene	ND	0.5	ug/L	01/20/2000 13:10	
1,2-Dichloropropane	ND	0.5	ug/L	01/20/2000 13:10	
cis-1,3-Dichloropropene	ND	0.5	ug/L	01/20/2000 13:10	
trans-1,3-Dichloropropene	ND	0.5	ug/L	01/20/2000 13:10	
Ethylbenzene	ND	0.5	ug/L	01/20/2000 13:10	
2-Hexanone	ND	50	ug/L	01/20/2000 13:10	
Methylene chloride	ND	5.0	ug/L	01/20/2000 13:10	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	01/20/2000 13:10	
Naphthalene	ND	1.0	ug/L	01/20/2000 13:10	
Styrene	ND	0.5	ug/L	01/20/2000 13:10	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	01/20/2000 13:10	
Tetrachloroethene	ND	0.5	ug/L	01/20/2000 13:10	
Toluene	ND	0.5	ug/L	01/20/2000 13:10	

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 # 2000/01/20-01.27**

MB: 2000/01/20-01.27-001

Date Extracted: 01/20/2000 13:10

Compound	Result	Rep.Limit	Units	Analyzed	Flag
1,1,1-Trichloroethane	ND	0.5	ug/L	01/20/2000 13:10	
1,1,2-Trichloroethane	ND	0.5	ug/L	01/20/2000 13:10	
Trichloroethene	ND	0.5	ug/L	01/20/2000 13:10	
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	01/20/2000 13:10	
Vinyl acetate	ND	5.0	ug/L	01/20/2000 13:10	
Vinyl chloride	ND	0.5	ug/L	01/20/2000 13:10	
Total xylenes	ND	1.0	ug/L	01/20/2000 13:10	
Trichlorotrifluoroethane	ND	0.5	ug/L	01/20/2000 13:10	
Carbon disulfide	ND	1.0	ug/L	01/20/2000 13:10	
Isopropylbenzene	ND	0.5	ug/L	01/20/2000 13:10	
Bromobenzene	ND	0.5	ug/L	01/20/2000 13:10	
Bromochloromethane	ND	1.0	ug/L	01/20/2000 13:10	
Trichlorofluoromethane	ND	2.0	ug/L	01/20/2000 13:10	
Surrogate(s)					
4-Bromofluorobenzene	101.0	86-115	%	01/20/2000 13:10	
1,2-Dichloroethane-d4	100.8	76-114	%	01/20/2000 13:10	
Toluene-d8	93.8	88-110	%	01/20/2000 13:10	

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 # 2000/01/21-01.27**

MB: 2000/01/21-01.27-001

Date Extracted: 01/21/2000 12:36

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Acetone	ND	50	ug/L	01/21/2000 12:36	
Benzene	ND	0.5	ug/L	01/21/2000 12:36	
Bromodichloromethane	ND	0.5	ug/L	01/21/2000 12:36	
Bromoform	ND	0.5	ug/L	01/21/2000 12:36	
Bromomethane	ND	1.0	ug/L	01/21/2000 12:36	
Carbon tetrachloride	ND	0.5	ug/L	01/21/2000 12:36	
Chlorobenzene	ND	0.5	ug/L	01/21/2000 12:36	
Chloroethane	ND	1.0	ug/L	01/21/2000 12:36	
2-Butanone(MEK)	ND	50	ug/L	01/21/2000 12:36	
2-Chloroethylvinyl ether	ND	0.5	ug/L	01/21/2000 12:36	
Chloroform	ND	0.5	ug/L	01/21/2000 12:36	
Chloromethane	ND	1.0	ug/L	01/21/2000 12:36	
Dibromochloromethane	ND	0.5	ug/L	01/21/2000 12:36	
1,2-Dichlorobenzene	ND	0.5	ug/L	01/21/2000 12:36	
1,3-Dichlorobenzene	ND	0.5	ug/L	01/21/2000 12:36	
1,4-Dichlorobenzene	ND	0.5	ug/L	01/21/2000 12:36	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	01/21/2000 12:36	
1,2-Dibromoethane	ND	0.5	ug/L	01/21/2000 12:36	
Dibromomethane	ND	0.5	ug/L	01/21/2000 12:36	
Dichlorodifluoromethane	ND	0.5	ug/L	01/21/2000 12:36	
1,1-Dichloroethane	ND	0.5	ug/L	01/21/2000 12:36	
1,2-Dichloroethane	ND	0.5	ug/L	01/21/2000 12:36	
1,1-Dichloroethene	ND	0.5	ug/L	01/21/2000 12:36	
cis-1,2-Dichloroethene	ND	0.5	ug/L	01/21/2000 12:36	
trans-1,2-Dichloroethene	ND	0.5	ug/L	01/21/2000 12:36	
1,2-Dichloropropane	ND	0.5	ug/L	01/21/2000 12:36	
cis-1,3-Dichloropropene	ND	0.5	ug/L	01/21/2000 12:36	
trans-1,3-Dichloropropene	ND	0.5	ug/L	01/21/2000 12:36	
Ethylbenzene	ND	0.5	ug/L	01/21/2000 12:36	
2-Hexanone	ND	50	ug/L	01/21/2000 12:36	
Methylene chloride	ND	5.0	ug/L	01/21/2000 12:36	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	01/21/2000 12:36	
Naphthalene	ND	1.0	ug/L	01/21/2000 12:36	
Styrene	ND	0.5	ug/L	01/21/2000 12:36	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	01/21/2000 12:36	
Tetrachloroethene	ND	0.5	ug/L	01/21/2000 12:36	
Toluene	ND	0.5	ug/L	01/21/2000 12:36	

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 # 2000/01/21-01.27**

MB: 2000/01/21-01.27-001 | Date Extracted: 01/21/2000 12:36

Compound	Result	Rep.Limit	Units	Analyzed	Flag
1,1,1-Trichloroethane	ND	0.5	ug/L	01/21/2000 12:36	
1,1,2-Trichloroethane	ND	0.5	ug/L	01/21/2000 12:36	
Trichloroethene	ND	0.5	ug/L	01/21/2000 12:36	
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	01/21/2000 12:36	
Vinyl acetate	ND	5.0	ug/L	01/21/2000 12:36	
Vinyl chloride	ND	0.5	ug/L	01/21/2000 12:36	
Total xylenes	ND	1.0	ug/L	01/21/2000 12:36	
Trichlorotrifluoroethane	ND	0.5	ug/L	01/21/2000 12:36	
Carbon disulfide	ND	1.0	ug/L	01/21/2000 12:36	
Isopropylbenzene	ND	0.5	ug/L	01/21/2000 12:36	
Bromobenzene	ND	0.5	ug/L	01/21/2000 12:36	
Bromochloromethane	ND	1.0	ug/L	01/21/2000 12:36	
Trichlorofluoromethane	ND	2.0	ug/L	01/21/2000 12:36	
Surrogate(s)					
4-Bromofluorobenzene	102.2	86-115	%	01/21/2000 12:36	
1,2-Dichloroethane-d4	95.0	76-114	%	01/21/2000 12:36	
Toluene-d8	93.8	88-110	%	01/21/2000 12:36	

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 # 2000/01/20-01.27**

LCS: 2000/01/20-01.27-002 Extracted: 01/20/2000 11:30 Analyzed: 01/20/2000 11:30

LCSD: 2000/01/20-01.27-003 Extracted: 01/20/2000 12:19 Analyzed: 01/20/2000 12:19

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	47.5	46.5	50.0	50.0	95.0	93.0	2.1	69-129	20		
Chlorobenzene	55.4	57.5	50.0	50.0	110.8	115.0	3.7	61-121	20		
1,1-Dichloroethene	46.5	42.6	50.0	50.0	93.0	85.2	8.8	65-125	20		
Toluene	45.4	46.5	50.0	50.0	90.8	93.0	2.4	70-130	20		
Trichloroethene	43.8	44.6	50.0	50.0	87.6	89.2	1.8	74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	493	519	500	500	98.6	103.8		86-115			
1,2-Dichloroethane-d4	550	475	500	500	110.0	95.0		76-114			
Toluene-d8	477	471	500	500	95.4	94.2		88-110			

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 # 2000/01/21-01.27**

LCS: 2000/01/21-01.27-002 Extracted: 01/21/2000 11:09 Analyzed: 01/21/2000 11:09

LCSD: 2000/01/21-01.27-003 Extracted: 01/21/2000 11:57 Analyzed: 01/21/2000 11:57

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	45.0	46.2	50.0	50.0	90.0	92.4	2.6	69-129	20		
Chlorobenzene	59.6	55.4	50.0	50.0	119.2	110.8	7.3	61-121	20		
1,1-Dichloroethene	44.6	45.1	50.0	50.0	89.2	90.2	1.1	65-125	20		
Toluene	44.1	45.6	50.0	50.0	88.2	91.2	3.3	70-130	20		
Trichloroethene	41.2	44.5	50.0	50.0	82.4	89.0	7.7	74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	516	485	500	500	103.2	97.0		86-115			
1,2-Dichloroethane-d4	533	539	500	500	106.6	107.8		76-114			
Toluene-d8	473	474	500	500	94.6	94.8		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.

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	01/12/2000 13:25	1
MW-2	Water	01/12/2000 14:05	2
MW-3	Water	01/12/2000 12:45	3
MW-4	Water	01/12/2000 11:55	4

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

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

Diesel

Sample ID:	**MW-1**	Lab Sample ID:	**2000-01-0223-001**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/19/2000 08:00
Sampled:	01/12/2000 13:25	QC-Batch:	2000/01/19-01.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	1000	52	ug/L	1.03	01/19/2000 17:35	edr
Surrogate(s)						
o-Terphenyl	99.5	60-130	%	1.00	01/19/2000 17:35	

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

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

Diesel

Sample ID:	**MW-2**	Lab Sample ID:	**2000-01-0223-002**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/19/2000 08:00
Sampled:	01/12/2000 14:05	QC-Batch:	2000/01/19-01.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	11000	51	ug/L	1.01	01/19/2000 18:22	edr
Surrogate(s)						
o-Terphenyl	101.8	60-130	%	1.00	01/19/2000 18:22	

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

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

Diesel

Sample ID:	**MW-3**	Lab Sample ID:	**2000-01-0223-003**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/19/2000 08:00
Sampled:	01/12/2000 12:45	QC-Batch:	2000/01/19-01.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	13000	51	ug/L	1.01	01/19/2000 19:08	edr
Surrogate(s)						
o-Terphenyl	94.3	60-130	%	1.00	01/19/2000 19:08	

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

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

Diesel

Sample ID:	**MW-4**	Lab Sample ID:	**2000-01-0223-004**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/19/2000 08:00
Sampled:	01/12/2000 11:55	QC-Batch:	2000/01/19-01.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	7900	51	ug/L	1.02	01/21/2000 10:10	edr
Surrogate(s)						
o-Terphenyl	108.1	60-130	%	1.00	01/21/2000 10:10	

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 # 2000/01/19-01.10**

MB: 2000/01/19-01.10-001 | Date Extracted: 01/19/2000 09:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	50	ug/L	01/19/2000 22:37	
Surrogate(s)					
o-Terphenyl	95.5	60-130	%	01/19/2000 22:37	

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 # 2000/01/19-01.10**

LCS: 2000/01/19-01.10-002 Extracted: 01/19/2000 09:00 Analyzed: 01/20/2000 09:01

LCSD: 2000/01/19-01.10-003 Extracted: 01/19/2000 09:00 Analyzed: 01/20/2000 09:46

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	871	874	1250	1250	69.7	69.9	0.3	60-130	25		
Surrogate(s)											
o-Terphenyl	21.2	21.6	20.0	20.0	106.0	108.0		60-130			

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

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

Legend & Notes

Diesel

Analyte Flags

edr

Hydrocarbon reported is in the early Diesel range, and does not match our Diesel standard

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	01/12/2000 13:25	1
MW-2	Water	01/12/2000 14:05	2
MW-3	Water	01/12/2000 12:45	3
MW-4	Water	01/12/2000 11:55	4

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:	**2000-01-0223-001**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/24/2000 12:44
Sampled:	01/12/2000 13:25	QC-Batch:	2000/01/24-01.04
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	300	50	ug/L	1.00	01/24/2000 12:44	
Benzene	22	0.50	ug/L	1.00	01/24/2000 12:44	
Toluene	36	0.50	ug/L	1.00	01/24/2000 12:44	
Ethyl benzene	5.5	0.50	ug/L	1.00	01/24/2000 12:44	
Xylene(s)	24	0.50	ug/L	1.00	01/24/2000 12:44	
MTBE	ND	5.0	ug/L	1.00	01/24/2000 12:44	
Surrogate(s)						
Trifluorotoluene	98.0	58-124	%	1.00	01/24/2000 12:44	
4-Bromofluorobenzene-FID	88.1	50-150	%	1.00	01/24/2000 12:44	

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:	**2000-01-0223-002**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/24/2000 13:12
Sampled:	01/12/2000 14:05	QC-Batch:	2000/01/24-01.04
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	63000	5000	ug/L	100.00	01/24/2000 13:12	
Benzene	10000	50	ug/L	100.00	01/24/2000 13:12	
Toluene	12000	50	ug/L	100.00	01/24/2000 13:12	
Ethyl benzene	1800	50	ug/L	100.00	01/24/2000 13:12	
Xylene(s)	7800	50	ug/L	100.00	01/24/2000 13:12	
MTBE	ND	500	ug/L	100.00	01/24/2000 13:12	
Surrogate(s)						
Trifluorotoluene	84.0	58-124	%	1.00	01/24/2000 13:12	
4-Bromofluorobenzene-FID	89.0	50-150	%	1.00	01/24/2000 13:12	

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

Attn.: Ian T. Reed

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-3**	Lab Sample ID:	**2000-01-0223-003**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/24/2000 13:39
Sampled:	01/12/2000 12:45	QC-Batch:	2000/01/24-01.04
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	140000	10000	ug/L	200.00	01/24/2000 13:39	
Benzene	22000	100	ug/L	200.00	01/24/2000 13:39	
Toluene	19000	100	ug/L	200.00	01/24/2000 13:39	
Ethyl benzene	2400	100	ug/L	200.00	01/24/2000 13:39	
Xylene(s)	11000	100	ug/L	200.00	01/24/2000 13:39	
MTBE	ND	1000	ug/L	200.00	01/24/2000 13:39	
Surrogate(s)						
Trifluorotoluene	87.6	58-124	%	1.00	01/24/2000 13:39	
4-Bromofluorobenzene-FID	88.6	50-150	%	1.00	01/24/2000 13:39	

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:	**2000-01-0223-004**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/25/2000 09:59
Sampled:	01/12/2000 11:55	QC-Batch:	2000/01/25-01.04
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	99000	25000	ug/L	500.00	01/25/2000 09:59	
Benzene	16000	250	ug/L	500.00	01/25/2000 09:59	
Toluene	20000	250	ug/L	500.00	01/25/2000 09:59	
Ethyl benzene	2100	250	ug/L	500.00	01/25/2000 09:59	
Xylene(s)	12000	250	ug/L	500.00	01/25/2000 09:59	
MTBE	ND	2500	ug/L	500.00	01/25/2000 09:59	
Surrogate(s)						
Trifluorotoluene	92.7	58-124	%	1.00	01/25/2000 09:59	
4-Bromofluorobenzene-FID	85.3	50-150	%	1.00	01/25/2000 09:59	

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 # 2000/01/24-01.04**

MB: 2000/01/24-01.04-001

Date Extracted: 01/24/2000 09:18

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	01/24/2000 09:18	
Benzene	ND	0.5	ug/L	01/24/2000 09:18	
Toluene	ND	0.5	ug/L	01/24/2000 09:18	
Ethyl benzene	ND	0.5	ug/L	01/24/2000 09:18	
Xylene(s)	ND	0.5	ug/L	01/24/2000 09:18	
MTBE	ND	5.0	ug/L	01/24/2000 09:18	
Surrogate(s)					
Trifluorotoluene	92.8	58-124	%	01/24/2000 09:18	
4-Bromofluorobenzene-FID	93.0	50-150	%	01/24/2000 09:18	

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 # 2000/01/25-01.04**

MB: 2000/01/25-01.04-001

Date Extracted: 01/25/2000 05:59

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	01/25/2000 05:59	
Benzene	ND	0.5	ug/L	01/25/2000 05:59	
Toluene	ND	0.5	ug/L	01/25/2000 05:59	
Ethyl benzene	ND	0.5	ug/L	01/25/2000 05:59	
Xylene(s)	ND	0.5	ug/L	01/25/2000 05:59	
MTBE	ND	5.0	ug/L	01/25/2000 05:59	
Surrogate(s)					
Trifluorotoluene	90.0	58-124	%	01/25/2000 05:59	
4-Bromofluorobenzene-FID	86.4	50-150	%	01/25/2000 05:59	

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 # 2000/01/24-01.04**

LCS: 2000/01/24-01.04-002 Extracted: 01/24/2000 10:05 Analyzed: 01/24/2000 10:05

LCSD: 2000/01/24-01.04-003 Extracted: 01/24/2000 10:32 Analyzed: 01/24/2000 10:32

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	591	585	500	500	118.2	117.0	1.0	75-125	20		
Benzene	98.7	91.1	100.0	100.0	98.7	91.1	8.0	77-123	20		
Toluene	98.5	89.8	100.0	100.0	98.5	89.8	9.2	78-122	20		
Ethyl benzene	97.6	88.4	100.0	100.0	97.6	88.4	9.9	70-130	20		
Xylene(s)	290	265	300	300	96.7	88.3	9.1	75-125	20		
Surrogate(s)											
Trifluorotoluene	453	408	500	500	90.6	81.6		58-124			
4-Bromofluorobenzene-FI	468	458	500	500	93.6	91.6		50-150			

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 # 2000/01/25-01.04**

LCS: 2000/01/25-01.04-002 Extracted: 01/25/2000 06:35 Analyzed: 01/25/2000 06:35

LCSD: 2000/01/25-01.04-003 Extracted: 01/25/2000 07:02 Analyzed: 01/25/2000 07:02

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	577	551	500	500	115.4	110.2	4.6	75-125	20		
Benzene	98.3	88.5	100.0	100.0	98.3	88.5	10.5	77-123	20		
Toluene	97.7	86.7	100.0	100.0	97.7	86.7	11.9	78-122	20		
Ethyl benzene	96.0	85.3	100.0	100.0	96.0	85.3	11.8	70-130	20		
Xylene(s)	284	256	300	300	94.7	85.3	10.4	75-125	20		
Surrogate(s)											
Trifluorotoluene	453	409	500	500	90.6	81.8		58-124			
4-Bromofluorobenzene-FI	451	432	500	500	90.2	86.4		50-150			

Total 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	01/12/2000 14:05	2
MW-3	Water	01/12/2000 12:45	3
MW-4	Water	01/12/2000 11:55	4

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

Test Method: 5520 B
Prep Method: 5520 B

Total Oil & Grease

Sample ID:	**MW-2**	Lab Sample ID:	**2000-01-0223-002**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/18/2000
Sampled:	01/12/2000 14:05	QC-Batch:	2000/01/18-01.23
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	ND	1.0	mg/L	1.00	01/19/2000 08:00	

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

Attn.: Ian T. Reed

Test Method: 5520 B

Prep Method: 5520 B

Total Oil & Grease

Sample ID:	**MW-3**	Lab Sample ID:	**2000-01-0223-003**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/18/2000
Sampled:	01/12/2000 12:45	QC-Batch:	2000/01/18-01.23
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	ND	1.0	mg/L	1.00	01/19/2000 08:00	

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

Test Method: 5520 B
Prep Method: 5520 B

Total Oil & Grease

Sample ID:	**MW-4**	Lab Sample ID:	**2000-01-0223-004**
Project:	2808 LIM Property	Received:	01/14/2000 18:47
Site:	250 8th Street Oakland, CA	Extracted:	01/18/2000
Sampled:	01/12/2000 11:55	QC-Batch:	2000/01/18-01.23
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil & Grease (total)	ND	1.0	mg/L	1.00	01/19/2000 08:00	

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

Test Method: 5520 B
Prep Method: 5520 B

Batch QC Report
Total Oil & Grease

Method Blank | **Water** | **QC Batch # 2000/01/18-01.23**

MB: 2000/01/18-01.23-001

Date Extracted: 01/18/2000

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Oil & Grease (total)	ND	1	mg/L	01/19/2000	

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

Attn: Ian T. Reed

Test Method: 5520 B

Prep Method: 5520 B

Batch QC Report

Total Oil & Grease

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/01/18-01.23**

LCS: 2000/01/18-01.23-002 Extracted: 01/18/2000 Analyzed: 01/19/2000

LCSD: 2000/01/18-01.23-003 Extracted: 01/18/2000 Analyzed: 01/19/2000

Compound	Conc. [mg/L]		Exp.Conc. [mg/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Oil & Grease (total)	18.7	18.4	20.0	20.0	93.5	92.0	1.6	80-120	20		

2000-01-0223 49980

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) Jon Reed (PHONE NO.) (925) 820-9391

PROJECT NAME LIM Property JOB NO. 2808

ADDRESS 250 8th Street, Oakland CA DATE 1/12/00

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) 8260	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	1/12/00	1325	water	9	X		X	X															
MW-2	1/12/00	1405	water	9	X		X	X				X											
MW-3	1/12/00	1245	water	9	X		X			X		X											
MW-4	1/12/00	1155	water	9	X		X			X		X											

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Jon Reed (signature) (time)	(signature) (time) 1847	(signature) (time) 1847	Denise Harrington (signature) (time)	
Jon T Reed 1/14/00 (printed name) (date)	(printed name) (date) 1-14-00	(printed name) (date) 1-14-00	D. Harrington 1847 (printed name) (date)	5. day TAT.
Company- AE	Company-	Company-	Company- Chromalab 1/14/00	5.0°C