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January 17, 2005

Alameda County  
JAN 31 2005  
Environmental Services

QUARTERLY GROUNDWATER MONITORING REPORT  
DECEMBER 2004 GROUNDWATER SAMPLING

at

Lim Family Property  
250 8th Street  
Oakland, California

Submitted by:  
AQUA SCIENCE ENGINEERS, INC.  
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(925) 820-9391

## 1.0 INTRODUCTION

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

## 2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On December 17, 2004, ASE measured the depth to water in monitoring wells MW-1 through MW-7 using an electric water level sounder. The surface of the groundwater was also checked for the presence of free-floating hydrocarbons or sheen. Monitoring well MW-3 contained 0.25-feet of free-floating hydrocarbons. Injection wells IW-1 through IW-5 were obstructed by parked cars and could not be gauged. ASE attempted to gauge the wells on December 22 and 30, 2004, but again found them to be obstructed. ASE accessed the wells on January 13, 2005 and measured the depth to water and free-floating hydrocarbon thickness in injection wells IW-1 through IW-5, and monitoring well MW-3. Monitoring well MW-3 contained 0.45 feet of free-floating hydrocarbons. No free-floating hydrocarbons were observed in any of the injection wells. Groundwater elevation data is presented in Table One.

A groundwater elevation (potentiometric surface) contour map is shown as Figure 2. The groundwater flow direction at the site is generally to the south with an approximate gradient of 0.006 feet/foot during this quarterly sampling period. The gradient and flow direction are consistent with previous findings.

## 3.0 MONITORING WELL SAMPLING

On December 17, 2004, ASE collected groundwater samples from monitoring wells MW-1, MW-2, and MW-4 through MW-7 for analysis. Monitoring well MW-3 was not sampled due to the presence of free-floating hydrocarbons.

Prior to sampling, the wells were purged of three well casing volumes of groundwater using disposable polyethylene bailers. The pH, temperature, and conductivity of the purge water were monitored during evacuation, and samples were not collected until these parameters stabilized. Samples were collected from each well using disposable polyethylene bailers. The groundwater samples were decanted from the bottom of the bailers using low-flow emptying devices into 40-ml volatile organic analysis (VOA)

vials, preserved with hydrochloric acid, sealed without headspace and labeled. All samples were stored on ice for transport to Kiff Analytical, LLC, (KIFF) of Davis, California under appropriate chain of custody documentation.

Well sampling purge water was contained in a sealed and labeled 55-gallon steel drum for temporary storage until off-site disposal can be arranged. See Appendix A for copies of the well sampling field logs.

#### **4.0 ANALYTICAL RESULTS FOR GROUNDWATER**

All groundwater samples were analyzed by KIFF for total petroleum hydrocarbons as diesel (TPH-D) by modified EPA Method 3510/8015M, total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethyl benzene, total xylenes (collectively known as BTEX), lead scavengers, and methyl tertiary butyl ether (MTBE) by EPA Method 8260B. The analytical results are tabulated in Tables Two and Three, and copies of the certified analytical report and chain of custody form are included in Appendix B.

#### **5.0 CONCLUSIONS**

Monitoring well MW-3 contained 0.25 feet of free-floating hydrocarbons on December 17, 2004, and 0.45 feet on January 13, 2005. No free-floating hydrocarbons were observed in injection well IW-5 on January 13, 2005, which had contained 1.33 feet of free-floating hydrocarbons on October 25, 2004, prior to a dual phase extraction event conducted at the site between October 25, 2004 and December 9, 2004.

Overall, the dissolved hydrocarbon concentrations are consistent with previous analytical results and remain elevated in downgradient monitoring wells MW-2, MW-3, MW-4, and MW-7. The TPH-G and BTEX concentrations in groundwater samples collected from monitoring wells MW-2, MW-4, and MW-7 exceeded Environmental Screening Levels (ESLs) as presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region dated July 2003.

#### **6.0 RECOMMENDATIONS**

ASE recommends continued quarterly groundwater monitoring at the site. The next sampling event is scheduled for March 2004. Also, ASE has

proposed a second dual phase extraction event as an additional interim remedial measure, to be followed by the installation of a permanent remediation system, and is awaiting approval by the Alameda County Health Care Services Agency (ACHCSA).

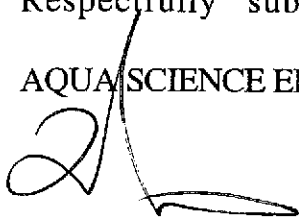
## 7.0 REPORT LIMITATIONS

The results presented in this report represent conditions at the time of the groundwater sampling, at the specific locations where the samples were collected, and for the specific parameters analyzed by the laboratory. It does not fully characterize the site for contamination resulting from unknown sources, or for parameters not analyzed by the laboratory. All of the laboratory work cited in this report was prepared under the direction of an independent CAL-DHS certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

Aqua Science Engineers appreciates the opportunity to assist The Lim Family with their environmental needs. Should you have any questions or comments, please feel free to call us at (925) 820-9391.

Respectfully submitted,

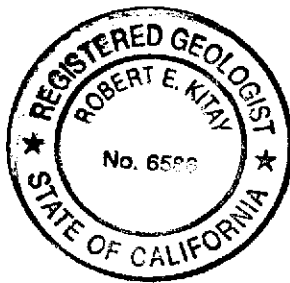
AQUA SCIENCE ENGINEERS, INC.



Damian Hriciga  
Project Geologist



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Senior Geologist



Attachments: Figures 1 and 2  
Tables One, Two, and Three  
Appendices A and B

cc: Mr. Barney Chan, ACHCSA  
Mr. Chuck Headlee, RWQCB, San Francisco Bay Region

**TABLE ONE**  
 Groundwater Elevation Data  
 Lim Family Property  
 250 8th Street  
 Oakland, CA

Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-1	01/30/95	25.51	16.21		9.30
	04/12/95		15.71		9.80
	07/14/95		16.71		8.80
	10/17/95		17.72		7.79
	01/12/96		18.03		7.48
	07/25/96		16.82		8.69
	01/06/97		15.60		9.91
	07/08/97		17.31		8.20
	01/26/98		15.21		10.30
	07/23/98		15.38		10.13
	01/05/99		16.82		8.69
	07/13/99		15.89		9.62
	01/12/00		17.44		8.07
	04/24/00		16.37		9.14
	07/20/00		16.30		9.21
	10/24/00		17.25		8.26
	01/18/01		17.29		8.22
	04/05/01		15.88		9.63
	07/17/01		16.54		8.97
	10/25/01	16.89		8.62	
	01/21/02	14.92		10.59	
	04/11/02	14.02		11.49	
	06/11/02	29.72	15.33		14.39
	09/17/02		15.96		13.76
	12/18/02		16.14		13.58
	03/25/03		16.16		13.56
	06/23/03		16.01		13.71
	09/26/03		16.57		13.15
	12/18/03		16.41		13.31
	03/12/04		14.64		15.08
	06/17/04		15.71		14.01
	09/17/04		16.35		13.37
	12/17/04		16.10		13.62

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Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-2	01/30/95	23.99	15.02		8.97
	04/12/95		14.75		9.24
	07/14/95		16.02		7.97
	10/17/95		16.94		7.05
	01/12/96		17.05		6.94
	07/25/96		16.02		7.97
	01/06/97		14.34		9.65
	07/08/97		16.52		7.47
	01/26/98		14.10		9.89
	07/23/98		14.70		9.29
	01/05/99		16.01		7.98
	07/13/99		15.40		8.59
	01/12/00		16.76		7.23
	04/24/00		15.67		8.32
	07/20/00		15.70		8.29
	10/24/00		16.56		7.43
	01/18/01		16.47		7.52
	04/05/01		15.88		8.11
	07/17/01		15.35		8.64
	10/25/01		15.63		8.36
	01/21/02	13.55		10.44	
	04/11/02	13.74		10.25	
	06/11/02	28.19	14.06	14.13	
	09/17/02	14.67		13.52	
	12/18/02	14.88		13.31	
	03/25/03	15.11		13.08	
	06/23/03	14.94		13.25	
	09/26/03	15.49		12.70	
	12/18/03	15.13		13.06	
	03/12/04	13.50		14.69	
	06/17/04	14.63		13.56	
	09/17/04	15.19		13.00	
12/17/04	14.88		13.31		

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Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)	
MW-3	01/12/00	24.25	16.68	0.01	7.58*	
	04/24/00		15.58	0.15	8.79*	
	07/20/00		16.01	0.41	8.57*	
	10/24/00		16.95	0.21	7.47*	
	01/18/01		16.63	0.21	7.79*	
	04/05/01		15.16	0.23	9.27*	
	07/17/01		15.92	0.39	8.64*	
	10/25/01		16.26	0.38	8.29*	
	01/21/02		14.08	0.16	10.30*	
	04/11/02		14.59	0.54	10.09*	
	06/11/02		28.58	15.16	0.90	14.14*
	09/17/02			16.04	1.24	13.53*
	10/01/02			16.14	1.23	13.42*
	10/25/02			15.80	0.60	13.26*
	11/12/02	15.87		0.47	13.09*	
	12/18/02	15.42		0.47	13.54*	
	03/25/03	16.11		1.14	13.38*	
	06/23/03	16.58		1.86	13.49*	
	09/26/03	16.11		0.66	13.00*	
	12/18/03	15.83		0.59	13.22*	
	03/12/04	14.51		1.21	15.04*	
	06/17/04	15.25		0.68	13.87*	
	09/17/04	16.14	0.96	13.21*		
	12/17/04	15.05	0.25	13.73*		
	01/13/05	13.40	0.45	15.54*		

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Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-4	01/12/00	23.71	17.24		6.47
	04/24/00		16.18		7.53
	07/20/00		16.18		7.53
	10/24/00		17.03		6.68
	01/18/01		16.87		6.84
	04/05/01		15.28		8.43
	07/17/01		15.92		7.79
	10/25/01		16.23		7.48
	01/21/01		14.14		9.57
	04/11/02		14.43		9.28
	06/11/02	28.61	14.72		13.89
	09/17/02		15.29		13.32
	12/18/02		15.20		13.41
	03/25/03		15.53		13.08
	06/23/03		15.35		13.26
	09/26/03		15.91		12.70
	12/18/03		15.63		12.98
	03/12/04		13.88		14.73
	06/17/04		15.03		13.58
	09/17/04		15.61		13.00
12/17/04	15.32		13.29		



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Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)	
MW-5	06/11/02	28.40	14.23		14.17	
	09/17/02		14.80		13.60	
	12/18/02		15.08		13.32	
	03/25/03		15.31		13.09	
	06/23/03		15.16		13.24	
	09/26/03		15.72		12.68	
	12/18/03		15.47		12.93	
	03/12/04		13.44		14.96	
	06/17/04		14.90		13.50	
	09/17/04		15.45		12.95	
	12/17/04		15.12		13.28	
MW-6	06/11/02	29.20	14.95		14.25	
	09/17/02		15.47		13.73	
	12/18/02		15.43		13.77	
	03/25/03		15.67		13.53	
	06/23/03		15.48		13.72	
	09/26/03		NOT MEASURED - SOUNDER MALFUNCTION			
	12/18/03		15.79		13.41	
	03/12/04		14.04		15.16	
	06/17/04		15.13		14.07	
	09/17/04		15.74		13.46	
	12/17/04		15.54		13.66	
MW-7	06/11/02	28.95	15.19		13.76	
	09/17/02		15.73		13.22	
	12/18/02		NOT MEASURED - CAR PARKED OVER WELL			
	03/25/03		15.96		12.99	
	06/23/03		15.75		13.20	
	09/26/03		16.29		12.66	
	12/18/03		16.03		12.92	
	03/12/04		14.28		14.67	
	06/17/04		15.42		13.53	
	09/17/04		16.02		12.93	
	12/17/04		15.45		13.50	

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Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
IW-1	07/13/99	24.05	14.75		9.30
	06/11/02	28.33			
	10/25/04		15.07		13.26
	01/13/05		13.12		15.21
IW-2	07/13/99	24.21	15.10		9.11
	06/11/02	28.50			
	10/25/04		15.21		13.29
	01/13/05		13.27		15.23
IW-3	07/13/99	23.93	15.00		8.93
	06/11/02	28.14			
	10/25/04		14.73		13.41
	01/13/05		12.87		15.27
IW-4	07/13/99	23.83	Unknown		Unknown
	06/11/02	28.24			
	10/25/04		14.57		13.67
	01/13/05		12.93		15.31
IW-5	07/13/99	24.00	15.50	1.00	9.55*
	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*
	06/11/02	28.32			
	10/25/04		15.92	1.33	13.46*
01/13/05		13.05		15.27	

Notes:

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

Top of casing elevations resurveyed by Mid Coast Engineers on 6/27/02 and 7/11/02.

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

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<u>MW-1</u>							
01/30/95	740	200	3	5	1	4	--
04/12/95	400	500	<0.5	<0.5	3	<2	--
07/14/95	520	400	1	<0.5	2	3	--
10/17/95	400	200	0.5	1	3	<2	--
01/12/96	120	890	<0.5	<0.5	<0.5	<1.0	<2.0
07/08/96	320	300	0.52	2.7	1.2	2.3	<5.0
01/06/97	110	75	<0.5	0.68	<0.5	<0.5	<5.0
07/08/97	380	290	<0.5	1.5	1.4	1.9	<5.0
01/26/98	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0
07/23/98	190	<50	0.54	2.8	2	1.8	<5.0
01/05/99	200	<50	1.8	1.6	3.3	<0.5	<5.0
07/13/99	340	<50	<0.5	<0.5	2.6	<0.5	<5.0
01/12/00	300	1,000	22	36	5.5	24	<5.0
04/24/00	360	280*	<0.5	<0.5	<0.5	2.1	<5.0
07/20/00	290	150*	1.8	<0.5	<0.5	<0.5	<5.0
10/24/00	170**	280*	<0.5	<0.5	<0.5	<0.5	<5.0
01/18/01	170**	150*	<0.5	<0.5	<0.5	2.1	<5.0
04/05/01	350**	190*	<0.5	<0.5	<0.5	<0.5	<5.0
07/17/01	310	570	<0.5	<0.5	<0.5	<0.5	<5.0
10/25/01	250	260	<0.5	<0.5	<0.5	<0.5	<5.0
01/22/02	200	250	<0.5	<0.5	<0.5	<0.5	<5.0
04/11/02	260	300	<0.5	<0.5	<0.5	<0.5	<5.0
06/11/02	270	330	<0.5	<0.5	<0.5	<0.5	<5.0
09/17/02	320	1,700	<0.5	<0.5	<0.5	<0.5	<5.0
12/18/02	170	320	<0.5	<0.5	<0.5	<0.5	<5.0
03/25/03	320	<500	<0.5	<0.5	<0.5	<0.5	<5.0
06/23/03	240	310	<0.5	<0.5	<0.5	<0.5	<5.0
09/26/03	110	300	<0.5	<0.5	<0.5	<0.5	<0.5
12/18/03	150	340	<0.5	<0.5	<0.5	<0.5	<0.5
03/12/04	220	510	<0.5	<0.5	<0.5	<0.5	<0.5
06/17/04	250	490	<0.5	<0.5	<0.5	<0.5	<0.5
09/17/04	110	--	<0.5	<0.5	<0.5	<0.5	<0.5
11/10/04***	180	400	0.68	<0.5	1.7	<0.5	<5.0
12/17/04	77	130	<0.5	<0.5	<0.5	<0.5	<0.5

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 All results are in parts per billion

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<u>MW-2</u>							
01/30/95	88,000	800	19,000	18,000	2,400	10,000	--
04/12/95	110,000	990	21,000	28,000	2,800	14,000	--
07/14/95	120,000	5,000	20,000	25,000	3,200	15,000	--
10/17/95	190,000	4,000	15,000	26,000	4,900	23,000	--
01/12/96	32,000	2,600	10,000	8,000	1,100	4,800	< 2
07/08/96	110,000	2,500	20,000	18,000	2,500	12,000	< 500
01/06/97	230,000	37,000	11,000	19,000	4,300	20,000	< 1,200
07/08/97	91,000	35,000	16,000	20,000	2,700	13,000	< 1,000
01/26/98	50,000	11,000	12,000	12,000	1,600	6,700	< 250
07/23/98	50,000	8,100#	11,000	8,300	1,800	7,000	1,100
01/05/99	50,000	7,600#	12,000	12,000	2,300	9,600	1,300
07/13/99	73,000	8,500	11,000	13,000	2,200	9,800	< 500
01/12/00	63,000	11,000	10,000	12,000	1,800	7,800	< 500
04/24/00	76,000	23,000*	7,100	14,000	2,000	9,400	< 500
07/20/00	68,000	5,300#	11,000	14,000	2,300	11,000	< 1,000
10/24/00	48,000	6,400*	11,000	9,400	1,500	7,300	< 500
01/18/01	37,000	4,600*	6,900	5,600	1,200	5,300	< 500
04/05/01	59,000	4,600*	7,100	9,800	1,600	7,600	< 500
07/17/01	90,000	< 10,000	9,200	14,000	2,700	11,000	< 50
10/25/01	79,000	< 3,800	9,200	14,000	2,400	11,000	< 50
01/22/02	76,000	< 2,300	7,000	13,000	2,200	9,600	< 50
04/11/02	76,000	< 1,500	7,800	11,000	2,900	12,000	< 50
06/11/02	72,000	< 2,500	7,300	9,600	2,500	12,000	< 50
09/17/02	52,000	< 3,000	5,000	5,400	2,100	9,100	< 20
12/18/02	46,000	< 6,000	2,900	3,000	1,800	7,600	22
03/25/03	87,000	< 8,000	7,900	9,300	2,900	12,000	< 50
06/23/03	46,000	< 3000	7,800	4,000	1,900	6,600	< 50
09/26/03	52,000	< 3000	9,100	3,500	1,300	5,000	< 50
12/18/03	61,000	< 4,000	13,000	3,500	1,600	5,600	< 20
03/12/04	53,000	< 4,000	9,100	3,500	1,700	5,700	< 25
06/17/04	59,000	< 3,000	7,100	4,000	1,700	7,300	< 25
09/17/04	33,000	--	9,800	1,200	1,300	4,000	< 20
11/10/04***	44,000	3,600	13,000	4,400	1,600	6,000	< 1000
12/17/04	54,000	< 3,000	7,900	2,200	1,700	3,900	< 15

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

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<u>MW-3</u>							
01/12/00	140,000	13,000*	22,000	19,000	2,400	11,000	<500
04/24/00	240,000	700,000*	33,000/	52,000/	5,700/	28,000/	<5,000
			35,000	87,000	18,000	84,000	
07/20/00			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
10/24/00			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
01/18/01			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
04/05/01			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
07/17/01			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
10/25/01			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
01/22/02			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
04/11/02			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
06/11/02			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
09/17/02			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
12/18/02			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
03/25/03			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
06/23/03			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
09/26/03			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
12/18/03			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
03/12/04			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
06/17/04			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
09/17/04			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
11/10/04			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				
12/17/04			NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS				

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

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<u>MW-4</u>							
01/12/00	99,000	7,900*	16,000	20,000	2,100	12,000	< 2,500
04/24/00	54,000	44,000*	3,400/ 4,500	13,000/ 20,000	1,800/ 2,800	8,800/ 14,000	< 1,300
07/20/00	8,000	3,500	9,200/ 11,000	20,000 22,000	2,500 3,400	12,000/ 13,000	< 1,000
10/24/00	98,000	8,000*	21,000	29,000	2,700	15,000	< 1,000
01/18/01	91,000	12,000	17,000/ 15,000	21,000/ 21,000	2,500/ 2,800	13,000/ 11,000	< 1,000 < 5,000
04/05/01	88,000	7,500*	6,900/ 3,200	18,000/ 9,000	2,500/ 1,300	12,000/ 6,400	< 1,000 < 500
07/17/01	95,000	< 3,000	8,000	16,000	2,900	11,000	49
10/25/01	89,000	< 2,200	9,300	18,000	2,400	12,000	66
01/22/02	80,000	< 2,300	4,600	15,000	2,500	11,000	< 50
04/11/02	90,000	< 900	6,600	18,000	2,800	12,000	55
06/25/02	110,000	< 3,000	10,000	20,000	2,900	13,000	< 100
09/17/02	110,000	< 3,000	9,600	21,000	2,800	13,000	< 100
12/18/02	97,000	< 4,000	8,000	20,000	2,600	12,000	< 50
03/25/03	97,000	< 7,500	7,600	22,000	2,500	12,000	< 100
06/23/03	100,000	< 3,000	9,600	22,000	3,300	15,000	< 100
09/26/03	110,000	< 4,000	9,300	17,000	2,100	10,000	< 50
12/18/03	110,000	< 2,000	8,900	19,000	2,500	12,000	< 25
03/12/04	96,000	< 4,000	6,500	18,000	2,700	12,000	< 40
06/17/04	110,000	< 4,000	10,000	20,000	2,900	13,000	< 50
09/17/04	78,000	--	9,300	15,000	2,400	11,000	< 50
11/10/04***	87,000	4,300	15,000	21,000	3,000	16,000	< 1300
12/17/04	88,000	< 3,000	8,500	16,000	2,800	12,000	< 25
<u>MW-5</u>							
06/11/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	28
09/17/02	< 50	110	< 0.5	< 0.5	< 0.5	< 0.5	4.8
12/18/02	< 50	140	< 0.5	< 0.5	< 0.5	< 0.5	1.8
03/25/03	< 50	130	< 0.5	< 0.5	< 0.5	< 0.5	7.4
06/23/03	< 50	390	< 0.5	< 0.5	< 0.5	< 0.5	17
09/26/03	< 50	700	< 0.5	< 0.5	< 0.5	< 0.5	21
12/18/03	< 50	550	< 0.5	< 0.5	< 0.5	< 0.5	16
03/12/04	< 50	490	< 0.5	< 0.5	< 0.5	< 0.5	9.1
06/17/04	< 50	510	< 0.5	< 0.5	< 0.5	< 0.5	9.8
09/17/04	< 50	--	< 0.5	< 0.5	< 0.5	< 0.5	5.5
11/10/04***	< 50	370	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
12/17/04	< 50	120	< 0.5	< 0.5	< 0.5	< 0.5	9.2

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

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<b>MW-6</b>							
06/11/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.2
09/17/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.0
12/18/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	0.90
03/25/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
06/23/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
09/26/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
12/18/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
03/12/04	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
06/17/04	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
09/17/04	< 50	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
11/10/04***	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
12/17/04	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
<b>MW-7</b>							
06/25/02	38,000	< 2,000	890	5,100	1,200	5,200	< 20
09/17/02	26,000	< 2,000	590	3,600	880	4,000	< 20
12/18/02	NOT SAMPLED - CAR PARKED OVER WELL						
03/25/03	39,000	< 2,900	410	7,700	1,000	6,400	< 5.0
06/23/03	17,000	< 1,000	440	2,600	630	2,600	< 10
09/26/03	17,000	< 1,000	230	1,800	470	2,200	< 5.0
12/18/03	20,000	< 1,000	290	2,500	590	2,900	< 5.0
03/12/04	20,000	< 1,500	300	3,000	760	3,200	< 10
06/17/04	12,000	< 800	250	1,800	450	1,900	< 5.0
09/17/04	9,900	--	200	1,500	450	1,800	< 5.0
11/10/04***	20,000	1,900	550	4,200	920	4,000	< 500
12/17/04	14,000	< 800	220	1,700	530	2,000	< 3.0
ESL	500	640	46	130	290	13	1,800

**Notes:**

- \* = Hydrocarbons reported are in the early diesel range, and do not match the laboratory standard.
- \*\* = Hydrocarbons reported do not match the laboratory gasoline standard.
- \*\*\* = Grab sample - Not purged
- # = Estimated concentration reported due to overlapping fuel patterns.
- / = Results separated by a slash represent results from two different laboratory methods (8020/8260).
- Non-detectable concentrations noted by the less than sign (<) followed by the detection limit.
- Most recent data in bold.
- ESL = Environmental screening levels presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (July 2003)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

**TABLE THREE**  
**Groundwater Analytical Results**  
**Oil & Grease and Volatile Organic Compounds**  
 All results are in parts per billion

Date Sampled & Compound Analyzed	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
<u>7/8/97</u>							
Hydrocarbon Oil and Grease	-	<1,000	-	-	-	-	-
Tetrachloroethane (PCE)	0.9	<0.5	-	-	-	-	-
Other VOCs	<0.5 - <3	<0.5 - <3	-	-	-	-	-
<u>1/26/98</u>							
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	-	-	-	-	-
<u>7/23/98</u>							
Hydrocarbon Oil and Grease	-	<1,000	-	-	-	-	-
Tetrachloroethene	4	4.6	-	-	-	-	-
1,2-Dichloroethane	<2	9.9	-	-	-	-	-
Other VOCs	<2 - <10	<0.5 - <5.0	-	-	-	-	-
<u>1/5/99</u>							
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	-	-	-	-	-
<u>7/13/99</u>							
Hydrocarbon Oil and Grease	-	<1,000	-	-	-	-	-
Tetrachloroethene	1.5	0.68	-	-	-	-	-
Chloroform	4.6	<50	-	-	-	-	-
1,2-Dichloroethane	<0.50	7.7	-	-	-	-	-
Other VOCs	<0.5 - <5	<0.5 - <500	-	-	-	-	-
<u>1/12/00</u>							
Hydrocarbon Oil and Grease	-	<1,000	<1,000	<1,000	-	-	-
Tetrachloroethene	0.8	<1.0	<100	<50	-	-	-
Chloroform	3.2	<1.0	<100	<50	-	-	-
1,2-Dichloroethane	<0.50	8.8	120	140	-	-	-
Acetone	-	-	25,000	6,400	-	-	-
Naphthalene	-	-	550	540	-	-	-
Isopropylbenzene	-	-	120	89	-	-	-
Other VOCs	<0.5 - <5.0	<1.0 - <4.0	<100 - <10,000	<50 - <5,000	-	-	-



**TABLE THREE**  
**Groundwater Analytical Results**  
**Oil & Grease and Volatile Organic Compounds**  
 All results are in parts per billion

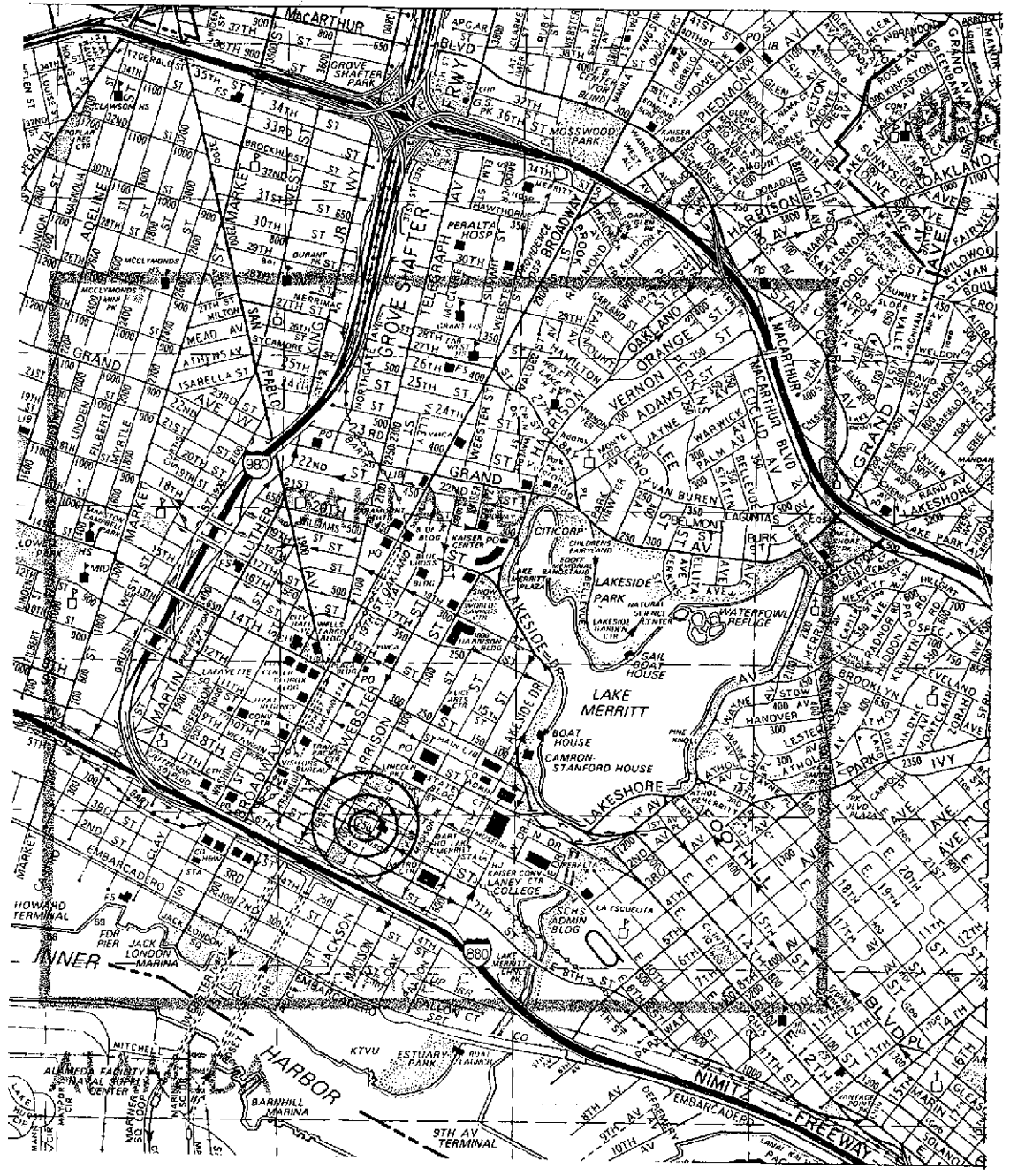
Date Sampled & Compound Analyzed	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
<u>4/24/00</u>							
Hydrocarbon Oil and Grease	-	<1,000	4,100	<1,000	-	-	-
1,2-Dichloroethane	<0.5	5.9	<1,000	<250	-	-	-
Naphthalene	-	-	3,800	580	-	-	-
Isopropylbenzene	-	-	1,200	<250	-	-	-
Other VOCs	<0.5 - <5.0	<5.0 - <20	:1,000 - <100,000	<250 - <25,000	-	-	-
<u>7/20/00</u>							
Hydrocarbon Oil and Grease	-	<1,000		<1,000	-	-	-
Tetrachloroethene	0.59	<5.0	FREE	<200	-	-	-
Chloroform	2.1	<5.0	PRODUCT	<200	-	-	-
1,2-Dichloroethane	<0.5	6.7	---	<200	-	-	-
Acetone	-	-	NOT	<20,000	-	-	-
Naphthalene	-	-	SAMPLED	730	-	-	-
Other VOCs	<0.5 - <20	<5.0 - <20		<250 - <20,000	-	-	-
<u>10/24/00</u>							
Hydrocarbon Oil and Grease	-	<1,000	FREE	<1,000	-	-	-
Tetrachloroethene	<0.5	<5.0	---	<250	-	-	-
Chloroform	1.0	<5.0	NOT	<250	-	-	-
Other VOCs	<0.5 - <20	<5.0 - <20	SAMPLED	<250 - <25,000	-	-	-
<u>1/18/01</u>							
Hydrocarbon Oil and Grease	-	2,100	FREE	1,300	-	-	-
Tetrachloroethene	1.3	<5.0	---	<250	-	-	-
Chloroform	6.4	<5.0	NOT	<250	-	-	-
Other VOCs	<0.5 - <20	<5.0 - <20	SAMPLED	<250 - <25,000	-	-	-
<u>4/5/01</u>							
Hydrocarbon Oil and Grease	-	<1.0	FREE	1,100.0	-	-	-
Tetrachloroethene	<0.5	1.1	PRODUCT	<50	-	-	-
1,2 dichloroethane	<0.5	4.6	---	<50	-	-	-
Trichloroethene	<0.5	0.58	NOT	<50	-	-	-
Naphthalene	-	-	---	320	-	-	-
Other VOCs	<0.5 - <2.0	<5.0 - <20	SAMPLED	<50 - <5,000	-	-	-
<u>7/17/01</u>							
Hydrocarbon Oil and Grease	-	<500	FREE	<500	-	-	-
Tetrachloroethene	-	-	PRODUCT	-	-	-	-
1,2 dichloroethane	<0.5	<50	---	69.0	-	-	-
Trichloroethene	-	-	NOT	-	-	-	-
Naphthalene	-	-	---	-	-	-	-
Other VOCs	-	-	SAMPLED	-	-	-	-

**TABLE THREE**  
**Groundwater Analytical Results**  
**Oil & Grease and Volatile Organic Compounds**  
 All results are in parts per billion

Date Sampled & Compound Analyzed	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
<u>10/25/01</u>							
Hydrocarbon Oil and Grease	-	< 5,000	FREE	< 5,000	-	-	-
1,2 dichloroethane	-	< 50	PRODUCT	72	-	-	-
1,2 dibromoethane	-	< 50	NOT	< 50	-	-	-
Other VOCs	-	-	SAMPLED	---	-	-	-
<u>1/22/02</u>							
Hydrocarbon Oil and Grease	-	< 5,000	FREE	< 5,000	-	-	-
1,2 dichloroethane	-	< 50	PRODUCT	< 50	-	-	-
1,2 dibromoethane	-	< 50	NOT	< 50	-	-	-
Other VOCs	-	-	SAMPLED	---	-	-	-
<u>6/11/02</u>							
Oil and Grease	-	1,100	FREE	-	< 1,000	< 1,000	-
1,2 dichloroethane	-	< 50	PRODUCT	-	< 0.5	< 0.5	-
1,2 dibromoethane	-	< 50	NOT	-	< 0.5	< 0.5	-
Other VOCs	-	-	SAMPLED	-	-	-	-
<u>6/25/02</u>							
Oil and Grease	-	-	FREE	1,400	-	-	< 1,000
1,2 dichloroethane	-	-	PRODUCT	< 100	-	-	< 20
1,2 dibromoethane	-	-	NOT	< 100	-	-	< 20
Other VOCs	-	-	SAMPLED	-	-	-	-
<u>9/17/02</u>							
Oil and Grease	-	< 1,000	FREE	< 1,000	< 1,000	< 1,000	< 1,000
1,2 dichloroethane	-	< 20	PRODUCT	< 100	< 0.50	< 0.50	< 20
1,2 dibromoethane	-	< 20	NOT	< 100	< 0.50	< 0.50	< 20
Other VOCs	-	-	SAMPLED	-	-	-	-
<u>12/18/02</u>							
Oil and Grease	-	1,200	FREE	< 1,000	< 1,000	< 1,000	CAR PARKED
1,2 dichloroethane	-	< 10	PRODUCT	< 50	< 0.50	< 0.50	OVER WELL
1,2 dibromoethane	-	< 10	NOT	< 50	< 0.50	< 0.50	NOT
Other VOCs	-	-	SAMPLED	-	-	-	SAMPLED

**TABLE THREE**  
**Groundwater Analytical Results**  
**Oil & Grease and Volatile Organic Compounds**  
 All results are in parts per billion

Date Sampled & Compound Analyzed	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
<u>3/25/03</u>							
Oil and Grease	-	<1,000	FREE	<1,000	<1,000	<1,000	<1,000
1,2 dichloroethane	-	<50	PRODUCT	<100	<0.50	<0.50	<2.5
1,2 dibromoethane	-	<50	NOT	<100	<0.50	<0.50	<2.5
Other VOCs	-	-	SAMPLED	-	-	-	-
<u>6/23/03</u>							
Oil and Grease	-	<1,000	FREE	<1,000	<1,000	<1,000	<1,000
1,2 dichloroethane	<0.5	<50	PRODUCT	<100	<0.50	<0.50	<10
1,2 dibromoethane	<0.5	<50	NOT	<100	<0.50	<0.50	<10
Other VOCs	-	-	SAMPLED	-	-	-	-
<u>9/26/03</u>							
Oil and Grease	-	<1,000	FREE	<1,000	<1,000	<1,000	<1,000
1,2 dichloroethane	<0.5	<50	PRODUCT	87	<0.50	<0.50	<5.0
1,2 dibromoethane	<0.5	<50	NOT	<50	<0.50	<0.50	<5.0
Other VOCs	-	-	SAMPLED	-	-	-	-
<u>12/18/03</u>							
Oil and Grease	-	-	FREE	-	-	-	-
1,2 dichloroethane	<0.5	<20	PRODUCT	46	<0.50	<0.50	<5.0
1,2 dibromoethane	<0.5	<20	NOT	<25	<0.50	<0.50	<5.0
Other VOCs	-	-	SAMPLED	-	-	-	-
<u>3/12/04</u>							
Oil and Grease	-	-	FREE	-	-	-	-
1,2 dichloroethane	<0.5	<25	PRODUCT	<40	<0.50	<0.50	<10
1,2 dibromoethane	<0.5	<25	NOT	<40	<0.50	<0.50	<10
Other VOCs	-	-	SAMPLED	-	-	-	-
<u>6/17/04</u>							
Oil and Grease	-	-	FREE	-	-	-	-
1,2 dichloroethane	<0.5	<25	PRODUCT	93	<0.50	<0.50	<5.0
1,2 dibromoethane	<0.5	<25	NOT	<50	<0.50	<0.50	<5.0
Other VOCs	-	-	SAMPLED	-	-	-	-
<u>9/17/04</u>							
Oil and Grease	-	-	FREE	-	-	-	-
1,2 dichloroethane	-	-	PRODUCT	-	-	-	-
1,2 dibromoethane	-	-	NOT	-	-	-	-
Other VOCs	-	-	SAMPLED	-	-	-	-
<u>12/17/04</u>							
Oil and Grease	-	-	FREE	-	-	-	-
1,2 dichloroethane	<0.5	<15	PRODUCT	53	<0.50	<0.50	<3.0
1,2 dibromoethane	<0.5	<15	NOT	<25	<0.50	<0.50	<3.0
Other VOCs	-	-	SAMPLED	-	-	-	-



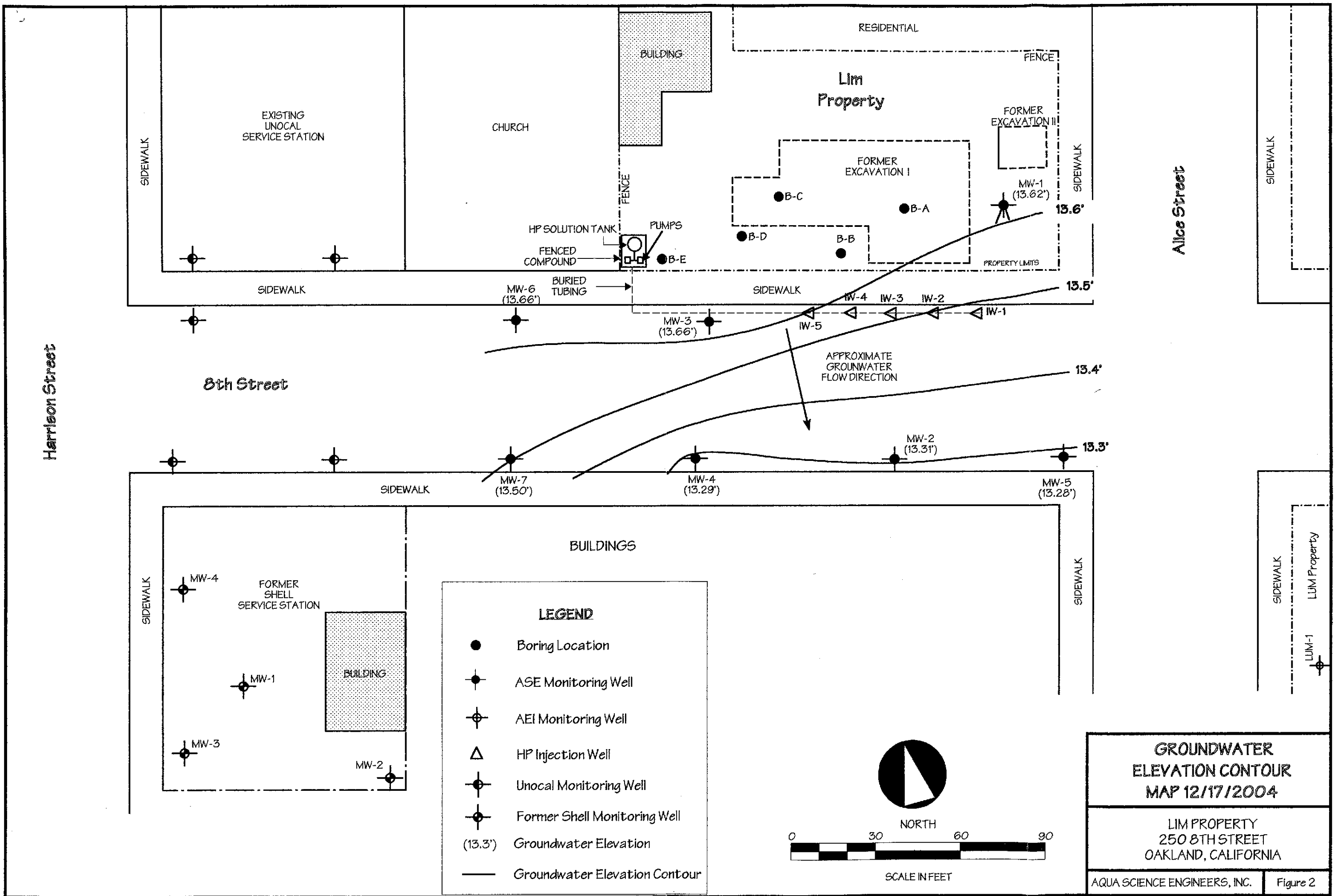
# SITE LOCATION MAP

Lim Property  
250 8th Street  
Oakland, California

Aqua Science Engineers

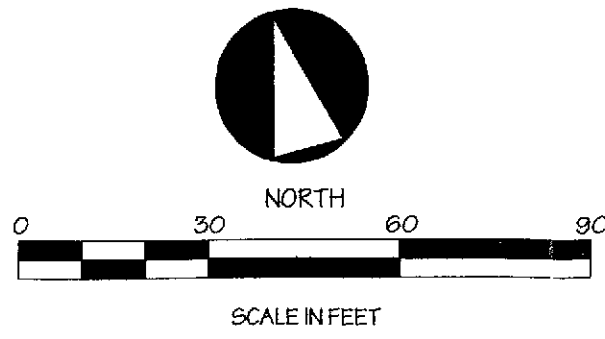
Figure 1

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



**LEGEND**

- Boring Location
- ⊕ ASE Monitoring Well
- ⊕ AEI Monitoring Well
- △ HP Injection Well
- ⊕ Unocal Monitoring Well
- ⊕ Former Shell Monitoring Well
- (13.3') Groundwater Elevation
- Groundwater Elevation Contour



**GROUNDWATER  
ELEVATION CONTOUR  
MAP 12/17/2004**

LIM PROPERTY  
250 8TH STREET  
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. Figure 2