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May 16, 2006

QUARTERLY GROUNDWATER MONITORING REPORT  
MARCH 2006 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 March 15, 2006, 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 2.41-feet of free-floating hydrocarbons, a 1.24-foot increase from the previous quarter. The product was subsequently bailed by ASE and contained in a sealed and labeled 55-gallon steel drum for temporary storage until off-site disposal can be arranged. Injection wells IW-1 through IW-5 were obstructed by parked cars and could not be gauged. Groundwater elevation data is presented in Table One.

A groundwater elevation (potentiometric surface) contour map is shown as Figure 2. Groundwater elevations in monitoring wells MW-1 and MW-3 were anomalous this quarter, and were not used for contouring. The groundwater flow direction at the site is generally to the south with an approximate gradient of 0.01 feet/foot during this quarterly sampling period. The gradient and flow direction are consistent with previous findings.

## **3.0 MONITORING WELL SAMPLING**

On March 15, 2006, ASE collected groundwater samples from six of the seven monitoring wells 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 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, and total petroleum hydrocarbons as diesel (TPH-D) by modified EPA Method 8015. 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**

- Hydrocarbon concentrations in groundwater samples collected from monitoring well MW-1 remained very similar to previous results.
- Concentrations of TPH-G, benzene, toluene, ethyl benzene and total xylenes increased in groundwater samples collected from monitoring well MW-2.
- Monitoring well MW-3 contained 2.41 feet of free-floating hydrocarbons, which is 1.24 feet greater than measured the previous quarter.
- Concentrations of toluene, ethyl benzene and total xylenes increased in groundwater samples collected from monitoring well MW-4; TPH-G and benzene concentrations, however, decreased in the same sample.
- MTBE was the only petroleum hydrocarbon detected in groundwater samples collected from monitoring wells MW-5 at 3.3 part per billion, which is generally consistant with previous findings
- No petroleum hydrocarbons were detected in groundwater samples collected from monitoring well MW-6.
- There was a significant decrease in all petroleum hydrocarbon concentrations in groundwater samples collected from monitoring well MW-7, with all hydrocarbon concentrations at a historic low.

Concentrations in groundwater samples collected from the following wells 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 February 2005:

- Concentrations of TPH-G, benzene, toluene, ethyl benzene, and xylene in groundwater samples collected from monitoring wells MW-2 and MW-4 exceeded the ESLs.
- Concentrations of TPH-G and xylene in groundwater samples collected from monitoring well MW-7 exceeded the ESLs.

## **6.0 RECOMMENDATIONS**

ASE prepared a report dated January 10, 2005 detailing the Dual-Phase Extraction interim remediation activities performed at the site in 2004, and provided a corrective action plan for future remedial options. This report proposed a second dual-phase extraction event as an additional interim remedial measure, to be followed by the installation of a permanent remediation system. This work has been approved by the Alameda County Health Care Services Agency (ACHCSA), and will be conducted once funds are received from the California State UST Cleanup Fund for work previously performed at the site. In addition, quarterly groundwater monitoring will continue at the site. The next sampling event is scheduled for June 2006.

## **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,

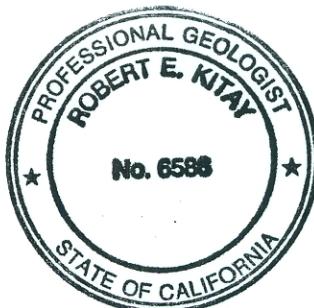
AQUA SCIENCE ENGINEERS, INC.



Mike Rauser  
Project Geologist



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



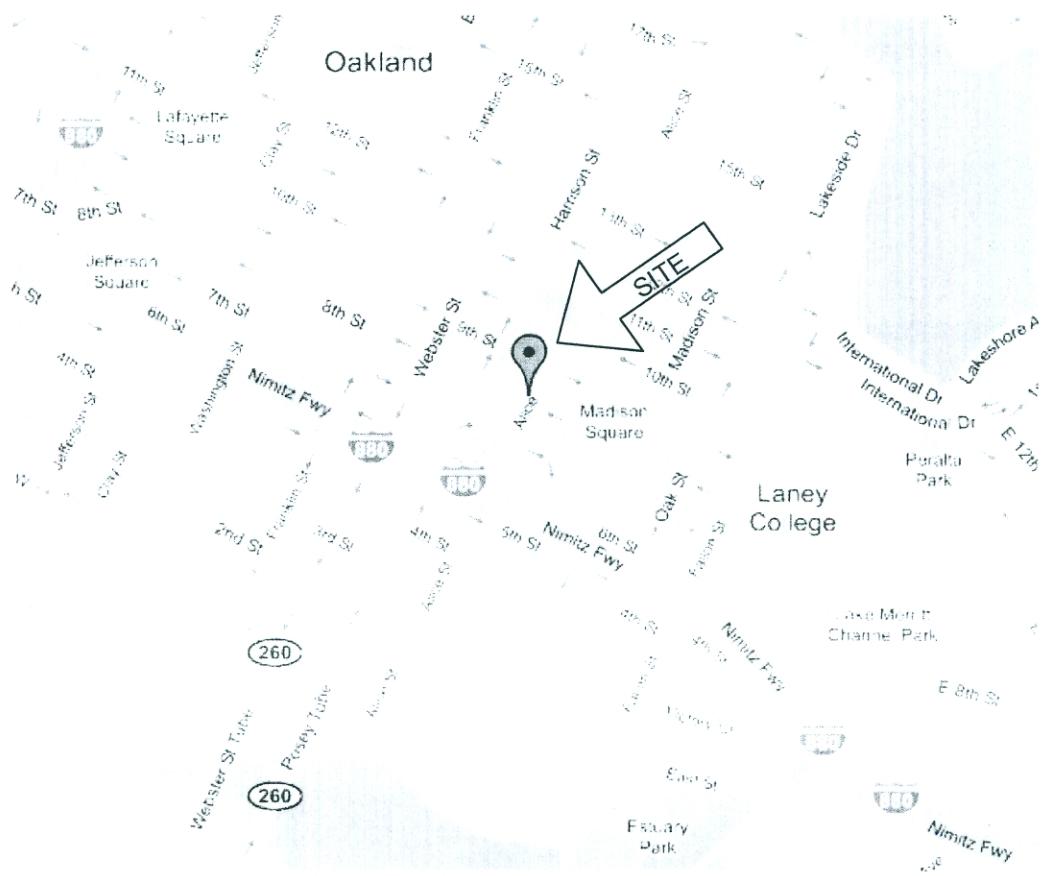
Attachments: Figures 1 and 2  
Tables One, Two, and Three  
Appendices A and B

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

## **FIGURES**



NORTH

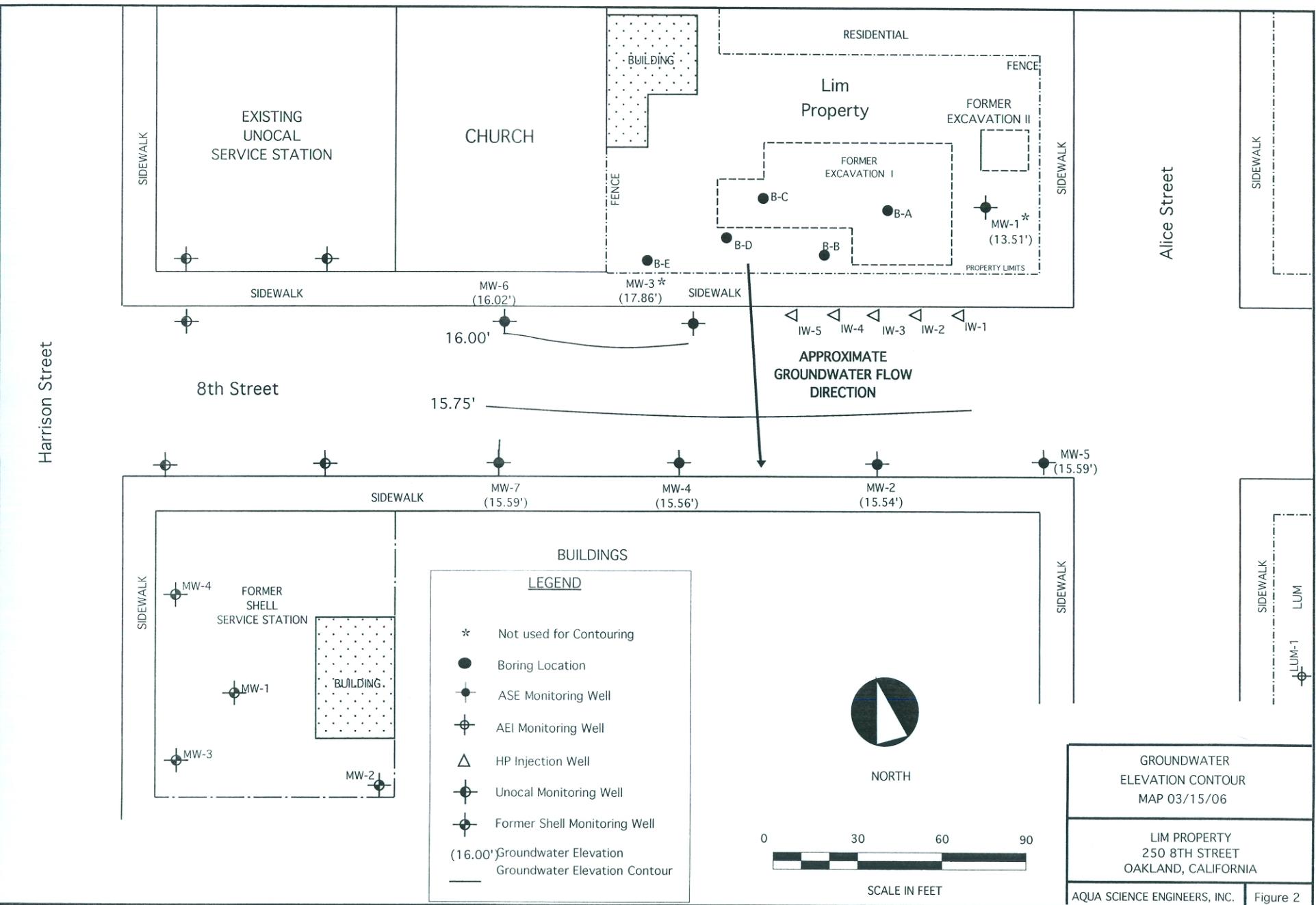


LOCATION MAP

LIM PROPERTY  
250 8<sup>TH</sup> STREET  
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS

FIGURE 1



## **TABLES**

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

Well I.D.	Date of Measurement	Top of 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
	04/28/05		14.10		15.62
	07/19/05		15.94		13.78
	10/03/05		16.34		13.38
	12/06/05		16.21		13.51
	03/15/06		16.21		13.51

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

Well I.D.	Date of Measurement	Top of 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
	04/28/05		13.39		14.80
	07/19/05		15.27		12.92
	10/03/05		15.57		12.62
	12/06/05		15.35		12.84
	03/15/06		12.65		15.54

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

Well I.D.	Date of Measurement	Top of 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*
	04/28/05		15.31	2.43	15.21*
	07/19/05		16.29	1.67	13.63*
	10/03/05		16.10	1.47	13.66*
	12/06/05		15.04	1.17	14.48*
	03/15/06		12.65	2.41	17.86*

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

Well I.D.	Date of Measurement	Top of 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
	04/28/05		13.82		14.79
	07/19/05		15.44		13.17
	10/03/05		15.91		12.70
	12/06/05		15.71		12.90
	03/15/06		13.05		15.56

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

Well I.D.	Date of Measurement	Top of Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
<b>MW-5</b>	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
	04/28/05		13.63		14.77
	07/19/05		15.67		12.73
	10/03/05		15.81		12.59
<b>MW-6</b>	12/06/05		15.60		12.80
	03/15/06		12.81		15.59
<b>MW-6</b>	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
	04/28/05		13.91		15.29
	07/19/05		15.30		13.90
	10/03/05		15.35		13.85
<b>MW-6</b>	12/06/05		15.69		13.51
	03/15/06		13.14		16.06

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

Well I.D.	Date of Measurement	Top of Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
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
	04/28/05		14.15		14.80
	07/19/05		15.30		13.65
	10/03/05		16.25		12.70
	12/06/05		16.05		12.90
	03/15/06		13.36		15.59

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
04/28/05	250	190	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
07/19/05	340	na	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
10/03/05	170	< 100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
12/06/05	140	67	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
03/15/06	170	< 80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

**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	Total 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
04/28/05	81,000	< 3,000	7,000	6,000	2,100	8,700	< 15
07/19/05	59,000	na	7,900	4,400	1,900	7,000	< 15
10/03/05	34,000	< 800	7,800	810	1,000	2,800	< 15
12/06/05	26,000	< 800	6,100	940	770	2,000	< 15
03/15/06	33,000	< 1,500	7,700	2,600	1,400	4,200	< 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-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
04/28/05	110,000	< 3,000	7,800	14,000	2,200	10,000	< 25
07/19/05	90,000	na	10,000	13,000	2,300	10,000	< 40
10/03/05	68,000	< 800	9,400	4,000	1,800	8,700	23
12/06/05	81,000	< 1,500	8,900	7,200	2,200	9,500	< 20
<b>03/15/06</b>	<b>68,000</b>	<b>&lt; 3,000</b>	<b>7,300</b>	<b>14,000</b>	<b>2,500</b>	<b>10,000</b>	<b>&lt; 20</b>
<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
04/28/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	2.2
07/19/05	< 50	na	< 0.5	< 0.5	< 0.5	< 0.5	6.1
10/03/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	2.4
12/06/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
<b>03/15/06</b>	<b>&lt; 50</b>	<b>&lt; 50</b>	<b>&lt; 0.5</b>	<b>&lt; 0.5</b>	<b>&lt; 0.5</b>	<b>&lt; 0.5</b>	<b>3.3</b>

**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	Total 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
04/28/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
07/19/05	< 50	na	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
10/03/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
12/06/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
<b>03/15/06</b>	<b>&lt; 50</b>	<b>&lt; 50</b>	<b>&lt; 0.5</b>	<b>&lt; 0.5</b>	<b>&lt; 0.5</b>	<b>&lt; 0.5</b>	<b>&lt; 0.5</b>
:							
<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
04/28/05	13,000	< 300	84	1,000	660	2,200	< 2.5
07/19/05	16,000	na	170	1,800	540	2,200	< 2.5
10/03/05	7,400	< 200	140	710	350	1,100	< 0.50
12/06/05	22,000	< 600	240	2,300	800	3,400	< 5.0
<b>03/15/06</b>	<b>3,800</b>	<b>&lt; 200</b>	<b>4.6</b>	<b>160</b>	<b>120</b>	<b>620</b>	<b>&lt; 0.50</b>
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).

na = not analyzed

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
<b>7/8/97</b>							
Hydrocarbon Oil and Grease	-	< 1,000	-	-	-	-	-
Tetrachloroethane (PCE)	0.9	< 0.5	-	-	-	-	-
Other VOCs	< 0.5 - < 3	< 0.5 - < 3	-	-	-	-	-
<b>1/26/98</b>							
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	-	-	-	-	-
<b>7/23/98</b>							
Hydrocarbon Oil and Grease	-	< 1,000	-	-	-	-	-
Tetrachloroethene	4	4.6	-	-	-	-	-
1,2-Dichloroethane	< 2	9.9	-	-	-	-	-
Other VOCs	< 2 - < 10	< 0.5 - < 5.0	-	-	-	-	-
<b>1/5/99</b>							
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	-	-	-	-	-
<b>7/13/99</b>							
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	-	-	-	-	-
<b>1/12/00</b>							
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	-	-	-
<b>4/24/00</b>							
Hydrocarbon Oil and Grease	-	< 1,000	4,100	< 1,000	-	-	-
1,2-Dichloroethane	< 0.5	5.9	< 1,000	< 250	-	-	-
Naphthalene	-	-	3,800	590	-	-	-
Isopropylbenzene	-	-	1,200	< 250	-	-	-
Other VOCs	< 0.5 - < 5.0	< 5.0 - < 20	1,000 - < 100,000	< 250 - < 25,000	-	-	-
<b>7/20/00</b>							
Hydrocarbon Oil and Grease	-	< 1,000		< 1,000	-	-	-
Tetrachloroethene	0.59	< 5.0	FREE PRODUCT	< 200	-	-	-
Chloroform	2.1	< 5.0		< 200	-	-	-
1,2-Dichloroethane	< 0.5	6.7	---	< 200	-	-	-
Acetone	-	-	NOT SAMPLED	< 20,000	-	-	-
Naphthalene	-	-		730	-	-	-
Other VOCs	< 0.5 - < 20	< 5.0 - < 20		< 250 - < 20,000	-	-	-
<b>10/24/00</b>							
Hydrocarbon Oil and Grease	-	< 1,000	FREE PRODUCT	< 1,000	-	-	-
Tetrachloroethene	< 0.5	< 5.0	---	< 250	-	-	-
Chloroform	1.0	< 5.0	NOT SAMPLED	< 250	-	-	-
Other VOCs	< 0.5 - < 20	< 5.0 - < 20		< 250 - < 25,000	-	-	-
<b>1/18/01</b>							
Hydrocarbon Oil and Grease	-	2,100	FREE PRODUCT	1,300	-	-	-
Tetrachloroethene	1.3	< 5.0	---	< 250	-	-	-
Chloroform	6.4	< 5.0	NOT SAMPLED	< 250	-	-	-
Other VOCs	< 0.5 - < 20	< 5.0 - < 20		< 250 - < 25,000	-	-	-

**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>4/5/01</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	-	-	-	-
<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
<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	-	-	-	-

**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
<b>9/26/03</b>							
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	-	-	-	-
<b>12/18/03</b>							
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	-	-	-	-
<b>3/12/04</b>							
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	-	-	-	-
<b>6/17/04</b>							
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	-	-	-	-
<b>9/17/04</b>							
Oil and Grease	-	-	FREE	-	-	-	-
1,2 dichloroethane	-	-	PRODUCT	-	-	-	-
1,2 dibromoethane	-	-	NOT	-	-	-	-
Other VOCs	-	-	SAMPLED	-	-	-	-
<b>12/17/04</b>							
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	-	-	-	-
<b>4/28/05</b>							
Oil and Grease	-	-	FREE	-	-	-	-
1,2 dichloroethane	< 0.5	< 15	PRODUCT	46	< 0.50	< 0.50	< 2.5
1,2 dibromoethane	< 0.5	< 15	NOT	< 25	< 0.50	< 0.50	< 2.5
Other VOCs	DIPE @ 0.67	TBA @ 90	SAMPLED	-	-	-	-
<b>7/19/05</b>							
Oil and Grease	-	-	FREE	-	-	-	-
1,2 dichloroethane	< 0.5	< 15	PRODUCT	73	< 0.50	< 0.50	< 2.5
1,2 dibromoethane	< 0.5	< 15	NOT	< 40	< 0.50	< 0.50	< 2.5
Other VOCs	DIPE @ 0.76	TBA @ 77	SAMPLED	-	DIPE @ 2.1	-	-
<b>10/3/05</b>							
Oil and Grease	-	-	-	-	-	-	-
1,2 dichloroethane	< 0.5	< 15	FREE	62	< 0.50	< 0.50	< 0.50
1,2 dibromoethane	< 0.5	< 15	PRODUCT	< 20	< 0.50	< 0.50	< 0.50
Other VOCs	< 0.5	< 15	NOT	DIPE @ 23	DIPE @ 1.7	< 0.50	< 0.50
TBA	< 5.0	< 70	SAMPLED	< 5.0	< 5.0	< 5.0	< 5.0
<b>3/15/06</b>							
Oil and Grease	-	-	-	-	-	-	-
1,2 dichloroethane	< 0.5	< 15	FREE	< 20	< 0.50	< 0.50	< 0.50
1,2 dibromoethane	< 0.5	< 15	PRODUCT	< 20	< 0.50	< 0.50	< 0.50
Other VOCs	-	-	NOT	-	-	-	-
TBA	-	-	SAMPLED	-	-	-	-

## **APPENDIX A**

### Well Sampling Field Log

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	Lim		
JOB NUMBER	2608	DATE OF SAMPLING	3/15/06
WELL ID.	MW-1	SAMPLER	dr
TOTAL DEPTH OF WELL	24.8	WELL DIAMETER	2
DEPTH TO WATER PRIOR TO PURGING	16.21		
PRODUCT THICKNESS	/		
DEPTH OF WELL CASING IN WATER	10.57		
NUMBER OF GALLONS PER WELL CASING VOLUME	1.8		
NUMBER OF WELL CASING VOLUMES TO BE REMOVE	3		
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING	5.4		
EQUIPMENT USED TO PURGE WELL	disposable bailer		
TIME EVACUATION STARTED	913	TIME EVACUATION COMPLETED	934
TIME SAMPLES WERE COLLECTED	935		
DID WELL GO DRY	/	AFTER HOW MANY GALLONS	/
VOLUME OF GROUNDWATER PURGED	5.4		
SAMPLING DEVICE	disposable bailer		
SAMPLE COLOR	clear	ODOR/SEDIMENT	no

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	63.2	6.37	590
2	63.4	6.50	540
3	63.5	6.53	536

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-1	5	40ml VOA	tph-g&d, btex, mtbe	Y

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	Lim		
JOB NUMBER	2808	DATE OF SAMPLING	3/15/06
WELL ID.	MW - 2	SAMPLER	dr
TOTAL DEPTH OF WELL	24.8	WELL DIAMETER	2
DEPTH TO WATER PRIOR TO PURGING	12.65		
PRODUCT THICKNESS	0		
DEPTH OF WELL CASING IN WATER	14.15		
NUMBER OF GALLONS PER WELL CASING VOLUME	2.4		
NUMBER OF WELL CASING VOLUMES TO BE REMOVE	3		
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING	7.21		
EQUIPMENT USED TO PURGE WELL	disposable bailer		
TIME EVACUATION STARTED	8 17	TIME EVACUATION COMPLETED	8 34
TIME SAMPLES WERE COLLECTED	8 35		
DID WELL GO DRY	✓	AFTER HOW MANY GALLONS	✓
VOLUME OF GROUNDWATER PURGED	7.21		
SAMPLING DEVICE	disposable bailer		
SAMPLE COLOR	ODOR/SEDIMENT		

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	59.2	6.60	680
2	60.2	6.48	691
3	60.3	4.46	692

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW - 2	5	40ml VOA	tph-g&d, btex, mtbe	Y

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	Lim		
JOB NUMBER	<u>2808</u>	DATE OF SAMPLING	3/15/06
WELL ID.	<u>MW-3</u>	SAMPLER	dr
TOTAL DEPTH OF WELL		WELL DIAMETER	2
DEPTH TO WATER PRIOR TO PURGING	<u>14.61 - 12.20</u>		
PRODUCT THICKNESS	<u>2.41</u>		
DEPTH OF WELL CASING IN WATER			
NUMBER OF GALLONS PER WELL CASING VOLUME			
NUMBER OF WELL CASING VOLUMES TO BE REMOVE	3		
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING			
EQUIPMENT USED TO PURGE WELL	disposable bailer		
TIME EVACUATION STARTED	TIME EVACUATION COMPLETED		
TIME SAMPLES WERE COLLECTED			
DID WELL GO DRY	AFTER HOW MANY GALLONS		
VOLUME OF GROUNDWATER PURGED			
SAMPLING DEVICE	disposable bailer		
SAMPLE COLOR	ODOR/SEDIMENT		

### CHEMICAL DATA

\* NOT SAMPLED \*

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1			
2			
3			

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
	5	40ml VOA	tph-g&d, btex, mtbe	Y

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	Lim		
JOB NUMBER	2808	DATE OF SAMPLING	3/15/06
WELL ID.	MW-4	SAMPLER	dr
TOTAL DEPTH OF WELL	21.8	WELL DIAMETER	2
DEPTH TO WATER PRIOR TO PURGING	13.05		
PRODUCT THICKNESS	05		
DEPTH OF WELL CASING IN WATER	8.75		
NUMBER OF GALLONS PER WELL CASING VOLUME	1.49		
NUMBER OF WELL CASING VOLUMES TO BE REMOVE	3		
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING	4.47		
EQUIPMENT USED TO PURGE WELL	disposable bailer		
TIME EVACUATION STARTED	802	TIME EVACUATION COMPLETED	814
TIME SAMPLES WERE COLLECTED	815		
DID WELL GO DRY	/	AFTER HOW MANY GALLONS	/
VOLUME OF GROUNDWATER PURGED	4.47		
SAMPLING DEVICE	disposable bailer		
SAMPLE COLOR	clear	ODOR/SEDIMENT	None

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	61.5	7.00	555
2	61.7	6.75	560
3	61.8	6.71	567

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-4	5	40ml VOA	tph-g&d, btex, mtbe	Y

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	Lim		
JOB NUMBER	2808	DATE OF SAMPLING	3/15/06
WELL ID.	MW-5	SAMPLER	dr
TOTAL DEPTH OF WELL	29.14	WELL DIAMETER	2
DEPTH TO WATER PRIOR TO PURGING	12.81		
PRODUCT THICKNESS			
DEPTH OF WELL CASING IN WATER	16.79		
NUMBER OF GALLONS PER WELL CASING VOLUME	2.85		
NUMBER OF WELL CASING VOLUMES TO BE REMOVE	3		
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING	8.55		
EQUIPMENT USED TO PURGE WELL	disposable bailer		
TIME EVACUATION STARTED	840	TIME EVACUATION COMPLETED	710
TIME SAMPLES WERE COLLECTED	911		
DID WELL GO DRY	/	AFTER HOW MANY GALLONS	/
VOLUME OF GROUNDWATER PURGED	8.55		
SAMPLING DEVICE	disposable bailer		
SAMPLE COLOR	clear	ODOR/SEDIMENT	no

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	59.0	6.71	621
2	61.3	6.70	629
3	61.8	6.65	634

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-5	5	40ml VOA	tph-g&d, btex, mtbe	Y

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	Lim		
JOB NUMBER	2808	DATE OF SAMPLING	3/15/06
WELL ID.	MW-6	SAMPLER	dr
TOTAL DEPTH OF WELL	29.5	WELL DIAMETER	2
DEPTH TO WATER PRIOR TO PURGING	B.14		
PRODUCT THICKNESS			
DEPTH OF WELL CASING IN WATER			
NUMBER OF GALLONS PER WELL CASING VOLUME			
NUMBER OF WELL CASING VOLUMES TO BE REMOVE		3	
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING			
EQUIPMENT USED TO PURGE WELL	disposable bailer		
TIME EVACUATION STARTED	TIME EVACUATION COMPLETED		
TIME SAMPLES WERE COLLECTED			
DID WELL GO DRY	AFTER HOW MANY GALLONS		
VOLUME OF GROUNDWATER PURGED			
SAMPLING DEVICE	disposable bailer		
SAMPLE COLOR	ODOR/SEDIMENT		

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	60.0	7.21	315
2	61.7	7.30	310
3	61.7	7.34	306

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-6	5	40ml VOA	tph-g&d, btex, mtbe	Y

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME	Lim		
JOB NUMBER	2808	DATE OF SAMPLING	3/15/06
WELL ID.	MW-7	SAMPLER	dr
TOTAL DEPTH OF WELL	29.70	WELL DIAMETER	2
DEPTH TO WATER PRIOR TO PURGING	13.34		
PRODUCT THICKNESS	0		
DEPTH OF WELL CASING IN WATER	13.34		
NUMBER OF GALLONS PER WELL CASING VOLUME	2.78		
NUMBER OF WELL CASING VOLUMES TO BE REMOVE	3		
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING	8.34		
EQUIPMENT USED TO PURGE WELL	disposable bailer		
TIME EVACUATION STARTED	745	TIME EVACUATION COMPLETED	759
TIME SAMPLES WERE COLLECTED	800		
DID WELL GO DRY	✓	AFTER HOW MANY GALLONS	✓
VOLUME OF GROUNDWATER PURGED	8.34		
SAMPLING DEVICE	disposable bailer		
SAMPLE COLOR	clear	ODOR/SEDIMENT	h.e

### CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	60.2	7.42	425
2	60.4	7.55	420
3	60.6	7.61	415

### SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-7	5	40ml VOA	tph-g&d, btex, mtbe	Y

## **APPENDIX B**

Certified Analytical Report  
and  
Chain of Custody Documentation



Report Number : 48995

Date : 03/27/2006

David Allen  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 6 Water Samples  
Project Name : LIM  
Project Number :

Dear Mr. Allen,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink that reads "Joel Kiff".

Joel Kiff



Report Number : 48995

Date : 03/27/2006

Subject : 6 Water Samples  
Project Name : LIM  
Project Number :

## Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for samples MW-1, MW-2, MW-4 and MW-7.

Approved By:

Joe Kiff

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800



Report Number : 48995

Date : 03/27/2006

Project Name : LIM

Project Number :

Sample : MW-1

Matrix : Water

Lab Number : 48995-01

Sample Date : 03/15/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
TPH as Gasoline	170	50	ug/L	EPA 8260B	03/21/2006
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	03/21/2006
4-Bromofluorobenzene (Surr)	98.9		% Recovery	EPA 8260B	03/21/2006
Dibromofluoromethane (Surr)	112		% Recovery	EPA 8260B	03/21/2006
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	03/21/2006
TPH as Diesel (Silica Gel)	< 80	80	ug/L	M EPA 8015	03/24/2006
Octacosane (Diesel Surrogate)	89.0		% Recovery	M EPA 8015	03/24/2006

Approved By:

Joel Kiff



Report Number : 48995 

Date : 03/27/2006

Project Name : LIM

Project Number :

Sample : MW-2

Matrix : Water

Lab Number : 48995-02

Sample Date : 03/15/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	7700	15	ug/L	EPA 8260B	03/22/2006
Toluene	2600	15	ug/L	EPA 8260B	03/22/2006
Ethylbenzene	1400	15	ug/L	EPA 8260B	03/22/2006
Total Xylenes	4200	15	ug/L	EPA 8260B	03/22/2006
Methyl-t-butyl ether (MTBE)	< 15	15	ug/L	EPA 8260B	03/22/2006
TPH as Gasoline	33000	1500	ug/L	EPA 8260B	03/22/2006
1,2-Dichloroethane	< 15	15	ug/L	EPA 8260B	03/22/2006
1,2-Dibromoethane	< 15	15	ug/L	EPA 8260B	03/22/2006
Toluene - d8 (Surr)	107		% Recovery	EPA 8260B	03/22/2006
4-Bromofluorobenzene (Surr)	99.4		% Recovery	EPA 8260B	03/22/2006
Dibromofluoromethane (Surr)	102		% Recovery	EPA 8260B	03/22/2006
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	03/22/2006
TPH as Diesel (Silica Gel)	< 1500	1500	ug/L	M EPA 8015	03/24/2006
Octacosane (Diesel Surrogate)	86.6		% Recovery	M EPA 8015	03/24/2006

Approved By:   
Joel Kiff



Report Number : 48995

Date : 03/27/2006

Project Name : LIM

Project Number :

Sample : MW-4

Matrix : Water

Lab Number : 48995-03

Sample Date : 03/15/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	7300	20	ug/L	EPA 8260B	03/22/2006
Toluene	14000	40	ug/L	EPA 8260B	03/24/2006
Ethylbenzene	2500	20	ug/L	EPA 8260B	03/22/2006
Total Xylenes	10000	20	ug/L	EPA 8260B	03/22/2006
Methyl-t-butyl ether (MTBE)	< 20	20	ug/L	EPA 8260B	03/22/2006
TPH as Gasoline	68000	2000	ug/L	EPA 8260B	03/22/2006
1,2-Dichloroethane	< 20	20	ug/L	EPA 8260B	03/22/2006
1,2-Dibromoethane	< 20	20	ug/L	EPA 8260B	03/22/2006
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	03/22/2006
4-Bromofluorobenzene (Surr)	96.1		% Recovery	EPA 8260B	03/22/2006
Dibromofluoromethane (Surr)	100		% Recovery	EPA 8260B	03/22/2006
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	03/22/2006
TPH as Diesel (Silica Gel)	< 3000	3000	ug/L	M EPA 8015	03/24/2006
Octacosane (Diesel Surrogate)	89.6		% Recovery	M EPA 8015	03/24/2006

Approved By: Joel Kiff



Report Number : 48995

Date : 03/27/2006

Project Name : LIM

Project Number :

Sample : MW-5

Matrix : Water

Lab Number : 48995-04

Sample Date : 03/15/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/22/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/22/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/22/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/22/2006
Methyl-t-butyl ether (MTBE)	3.3	0.50	ug/L	EPA 8260B	03/22/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	03/22/2006
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/22/2006
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	03/22/2006
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	03/22/2006
4-Bromofluorobenzene (Surr)	96.7		% Recovery	EPA 8260B	03/22/2006
Dibromofluoromethane (Surr)	111		% Recovery	EPA 8260B	03/22/2006
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	03/22/2006
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	03/24/2006
Octacosane (Diesel Surrogate)	88.6		% Recovery	M EPA 8015	03/24/2006

Approved By: Joel Kiff



Report Number : 48995

Date : 03/27/2006

Project Name : LIM

Project Number :

Sample : MW-6

Matrix : Water

Lab Number : 48995-05

Sample Date : 03/15/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	03/21/2006
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	03/21/2006
4-Bromofluorobenzene (Surr)	98.8		% Recovery	EPA 8260B	03/21/2006
Dibromofluoromethane (Surr)	106		% Recovery	EPA 8260B	03/21/2006
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	03/21/2006
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	03/24/2006
Octacosane (Diesel Surrogate)	89.6		% Recovery	M EPA 8015	03/24/2006

Approved By: Joel Kiff



Report Number : 48995

Date : 03/27/2006

Project Name : LIM

Project Number :

Sample : MW-7

Matrix : Water

Lab Number : 48995-06

Sample Date : 03/15/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	4.6	0.50	ug/L	EPA 8260B	03/27/2006
Toluene	160	0.50	ug/L	EPA 8260B	03/27/2006
Ethylbenzene	120	0.50	ug/L	EPA 8260B	03/27/2006
Total Xylenes	620	0.50	ug/L	EPA 8260B	03/27/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/27/2006
TPH as Gasoline	3800	50	ug/L	EPA 8260B	03/27/2006
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/27/2006
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	03/27/2006
Toluene - d8 (Surr)	98.7		% Recovery	EPA 8260B	03/27/2006
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	03/27/2006
Dibromofluoromethane (Surr)	112		% Recovery	EPA 8260B	03/27/2006
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	03/27/2006
TPH as Diesel (Silica Gel)	< 200	200	ug/L	M EPA 8015	03/24/2006
Octacosane (Diesel Surrogate)	90.0		% Recovery	M EPA 8015	03/24/2006

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 48995

Date : 03/27/2006

## QC Report : Method Blank Data

Project Name : LIM

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	03/22/2006
Octacosane (Diesel Surrogate)	89.8		%	M EPA 8015	03/22/2006
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	03/21/2006
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Toluene - d8 (Surr)	97.6		%	EPA 8260B	03/21/2006
4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	03/21/2006
Dibromofluoromethane (Surr)	99.1		%	EPA 8260B	03/21/2006
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	03/21/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/24/2006
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	03/21/2006
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Toluene - d8 (Surr)	102		%	EPA 8260B	03/21/2006
4-Bromofluorobenzene (Surr)	97.1		%	EPA 8260B	03/21/2006
Dibromofluoromethane (Surr)	106		%	EPA 8260B	03/21/2006
1,2-Dichloroethane-d4 (Surr)	98.0		%	EPA 8260B	03/21/2006

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	03/21/2006
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Toluene - d8 (Surr)	100		%	EPA 8260B	03/21/2006
4-Bromofluorobenzene (Surr)	101		%	EPA 8260B	03/21/2006
Dibromofluoromethane (Surr)	109		%	EPA 8260B	03/21/2006
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	03/21/2006
Benzene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	03/21/2006
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	03/21/2006
Toluene - d8 (Surr)	99.8		%	EPA 8260B	03/21/2006
4-Bromofluorobenzene (Surr)	96.9		%	EPA 8260B	03/21/2006
Dibromofluoromethane (Surr)	111		%	EPA 8260B	03/21/2006
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	03/21/2006

Approved By: Joel Kiff

Report Number : 48995

Date : 03/27/2006

**QC Report : Method Blank Data**

Project Name : LIM

Project Number :

Parameter	Measured Value	Method Reporting Limit	Analysis Units	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B 03/27/2006
Toluene	< 0.50	0.50	ug/L	EPA 8260B 03/27/2006
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B 03/27/2006
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B 03/27/2006
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B 03/27/2006
TPH as Gasoline	< 50	50	ug/L	EPA 8260B 03/27/2006
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B 03/27/2006
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B 03/27/2006
Toluene - d8 (Surr)	97.9	%	EPA 8260B	03/27/2006
4-Bromofluorobenzene (Surr)	99.2	%	EPA 8260B	03/27/2006
Dibromofluoromethane (Surr)	112	%	EPA 8260B	03/27/2006
1,2-Dichloroethane-d4 (Surr)	103	%	EPA 8260B	03/27/2006

Parameter	Measured Value	Method Reporting Limit	Analysis Units	Date Analyzed
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## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : LIM

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	772	816	ug/L	M EPA 8015	3/22/06	77.2	81.6	5.58	70-130	25
Benzene	48996-11	6.6	39.8	39.6	47.0	46.2	ug/L	EPA 8260B	3/21/06	102	100	1.48	70-130	25
Toluene	48996-11	5.0	39.8	39.6	43.8	43.6	ug/L	EPA 8260B	3/21/06	97.4	97.4	0.0164	70-130	25
Tert-Butanol	48996-11	8.0	199	198	202	196	ug/L	EPA 8260B	3/21/06	97.9	95.2	2.76	70-130	25
Methyl-t-Butyl Ether	48996-11	<0.50	39.8	39.6	43.5	44.1	ug/L	EPA 8260B	3/21/06	109	111	1.71	70-130	25
Benzene	49106-05	<0.50	40.0	40.0	41.2	40.8	ug/L	EPA 8260B	3/24/06	103	102	1.02	70-130	25
Toluene	49106-05	<0.50	40.0	40.0	39.9	39.1	ug/L	EPA 8260B	3/24/06	99.8	97.7	2.13	70-130	25
Tert-Butanol	49106-05	<5.0	200	200	207	207	ug/L	EPA 8260B	3/24/06	103	103	0.0648	70-130	25
Methyl-t-Butyl Ether	49106-05	<0.50	40.0	40.0	40.0	40.1	ug/L	EPA 8260B	3/24/06	100	100	0.152	70-130	25
Benzene	49002-04	7.8	40.0	40.0	49.8	47.9	ug/L	EPA 8260B	3/21/06	105	100	4.46	70-130	25
Toluene	49002-04	<0.50	40.0	40.0	43.1	41.8	ug/L	EPA 8260B	3/21/06	108	104	3.14	70-130	25
Tert-Butanol	49002-04	<5.0	200	200	209	210	ug/L	EPA 8260B	3/21/06	104	105	0.442	70-130	25
Methyl-t-Butyl Ether	49002-04	24	40.0	40.0	66.1	65.4	ug/L	EPA 8260B	3/21/06	105	103	1.75	70-130	25
Benzene	49001-08	<0.50	40.0	40.0	43.8	43.5	ug/L	EPA 8260B	3/21/06	110	109	0.718	70-130	25
Toluene	49001-08	<0.50	40.0	40.0	44.3	44.2	ug/L	EPA 8260B	3/21/06	111	110	0.366	70-130	25
Tert-Butanol	49001-08	<5.0	200	200	202	212	ug/L	EPA 8260B	3/21/06	101	106	4.93	70-130	25
Methyl-t-Butyl Ether	49001-08	1.6	40.0	40.0	43.3	43.5	ug/L	EPA 8260B	3/21/06	104	104	0.331	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By: Joe Kiff



## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : LIM

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	49050-07	<0.50	40.0	40.0	45.0	44.4	ug/L	EPA 8260B	3/21/06	112	111	1.18	70-130	25
Toluene	49050-07	<0.50	40.0	40.0	44.9	44.5	ug/L	EPA 8260B	3/21/06	112	111	0.862	70-130	25
Tert-Butanol	49050-07	<5.0	200	200	207	207	ug/L	EPA 8260B	3/21/06	103	103	0.00769	70-130	25
Methyl-t-Butyl Ether	49050-07	<0.50	40.0	40.0	42.3	36.7	ug/L	EPA 8260B	3/21/06	106	91.7	14.2	70-130	25
Benzene	49138-03	<0.50	40.0	40.0	40.9	39.4	ug/L	EPA 8260B	3/27/06	102	98.6	3.75	70-130	25
Toluene	49138-03	<0.50	40.0	40.0	41.4	40.0	ug/L	EPA 8260B	3/27/06	104	100	3.46	70-130	25
Tert-Butanol	49138-03	<5.0	200	200	190	186	ug/L	EPA 8260B	3/27/06	95.2	92.9	2.41	70-130	25
Methyl-t-Butyl Ether	49138-03	<0.50	40.0	40.0	38.0	37.5	ug/L	EPA 8260B	3/27/06	95.0	93.7	1.40	70-130	25

Approved By: Joe Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

## QC Report : Laboratory Control Sample (LCS)

Date : 03/27/2006

Project Name : LIM

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	3/21/06	106	70-130
Toluene	40.0	ug/L	EPA 8260B	3/21/06	101	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/21/06	96.9	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/21/06	113	70-130
Benzene	40.0	ug/L	EPA 8260B	3/24/06	98.2	70-130
Toluene	40.0	ug/L	EPA 8260B	3/24/06	102	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/24/06	105	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/24/06	90.4	70-130
Benzene	40.0	ug/L	EPA 8260B	3/21/06	97.5	70-130
Toluene	40.0	ug/L	EPA 8260B	3/21/06	105	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/21/06	106	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/21/06	105	70-130
Benzene	40.0	ug/L	EPA 8260B	3/21/06	106	70-130
Toluene	40.0	ug/L	EPA 8260B	3/21/06	108	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/21/06	98.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/21/06	101	70-130
Benzene	40.0	ug/L	EPA 8260B	3/21/06	110	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joel Kiff

Report Number : 48995

Date : 03/27/2006

QC Report : Laboratory Control Sample (LCS)

Project Name : LIM

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Toluene	40.0	ug/L	EPA 8260B	3/21/06	111	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/21/06	103	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/21/06	103	70-130
Benzene	40.0	ug/L	EPA 8260B	3/27/06	101	70-130
Toluene	40.0	ug/L	EPA 8260B	3/27/06	101	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/27/06	94.1	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/27/06	91.0	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joe Kiff



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

# Chain of Custody

48975

Analytical Laboratory Name:

Kiff

Project Name:

LIM

Sample Location:

Oakland, CA

Sampled by:

David Rains

Sampler Signature:

Sample ID	Sample Type	Matrix		Method Preserved		Sampling		TPH-D w/ Silica Gel Cleaned	TPH-G/BTEX / MTBE	EDP	Comments: <i>Lead scavengers</i>	Other	Turnaround Time		
		Grab	Composite	Water	Soil	Other	Cold (4°C)	HCL	HNO <sub>3</sub>	Other	Date	Date			
MW - 1	X	X					X X				935	3-15-06	X X X X	X	Standard 1 day
MW - 2											835				2 day
MW - 4											815				5 day
MW - 5											911				Other
MW - 6	X	X					X X				800		X X X X		01
MW - 7											800				02
															03
															04
															05
															06

Total # of containers: 30

Comments:

**Sample Receipt**  
 Temp °C 1.40 Therm. ID# IR-4  
 Initial Jen  
 Date 03/17/06 Time 1735  
 Coolant present? Yes No

Relinquished by:	Date	Time	Received by:	Date	Time
	3-17-06	13:00			

*David N. Henning Analytical 03/17/06 1250*