



Alameda County

April 13, 2004

APR 15 2004

Environmental Health

QUARTERLY GROUNDWATER MONITORING REPORT
MARCH 2004 GROUNDWATER SAMPLING

at

Lim Family Property
250 8th Street
Oakland, California

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

1.0 INTRODUCTION

This report 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 12, 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 1.21-feet of free-floating hydrocarbons this quarter. 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 is consistent with previous findings.

3.0 MONITORING WELL SAMPLING

On March 12, 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 at the time of sampling.

Prior to sampling, the wells were purged of three well casing volumes of groundwater using dedicated polyethylene bailers. The pH, temperature, and conductivity of the purge water were monitored during evacuation, and samples were not collected until these parameters stabilized. Samples were collected from each well using dedicated polyethylene bailers. The groundwater samples were decanted from the bailers 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. With the approval of the Alameda County Health Care Services Agency (ACHCSA), laboratory analysis for Oil and Grease has been discontinued since concentrations have been consistently near or below laboratory method reporting limits and reportable concentrations have not been detected since December 2002. 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 1.21-feet of free-floating hydrocarbons this quarter. Overall, the 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 will be conducting a dual-phase extraction event as an interim remedial action during the following quarter. Additionally, ASE recommends continued groundwater monitoring on a quarterly basis for monitoring wells MW-2, MW-3, MW-4, and MW-7. Hydrocarbon concentrations in monitoring wells MW-1, MW-5, and MW-6 have consistently been below their respective laboratory method reporting limits or ESLs; therefore, ASE recommends reducing their sampling frequency to semi-annual. The next groundwater sampling is scheduled for June 2004. ASE will also continue periodic product bailing from monitoring well MW-3.

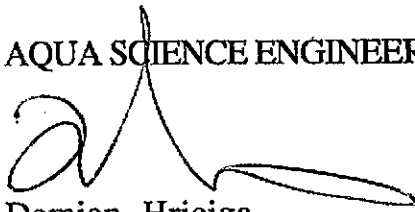
7.0 REPORT LIMITATIONS

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.

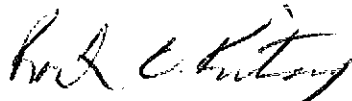
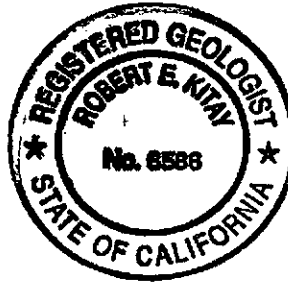
Aqua Science Engineers appreciates the opportunity to assist The Lim Family with their environmental needs. Should you have any questions or comments, please feel free to call us at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.



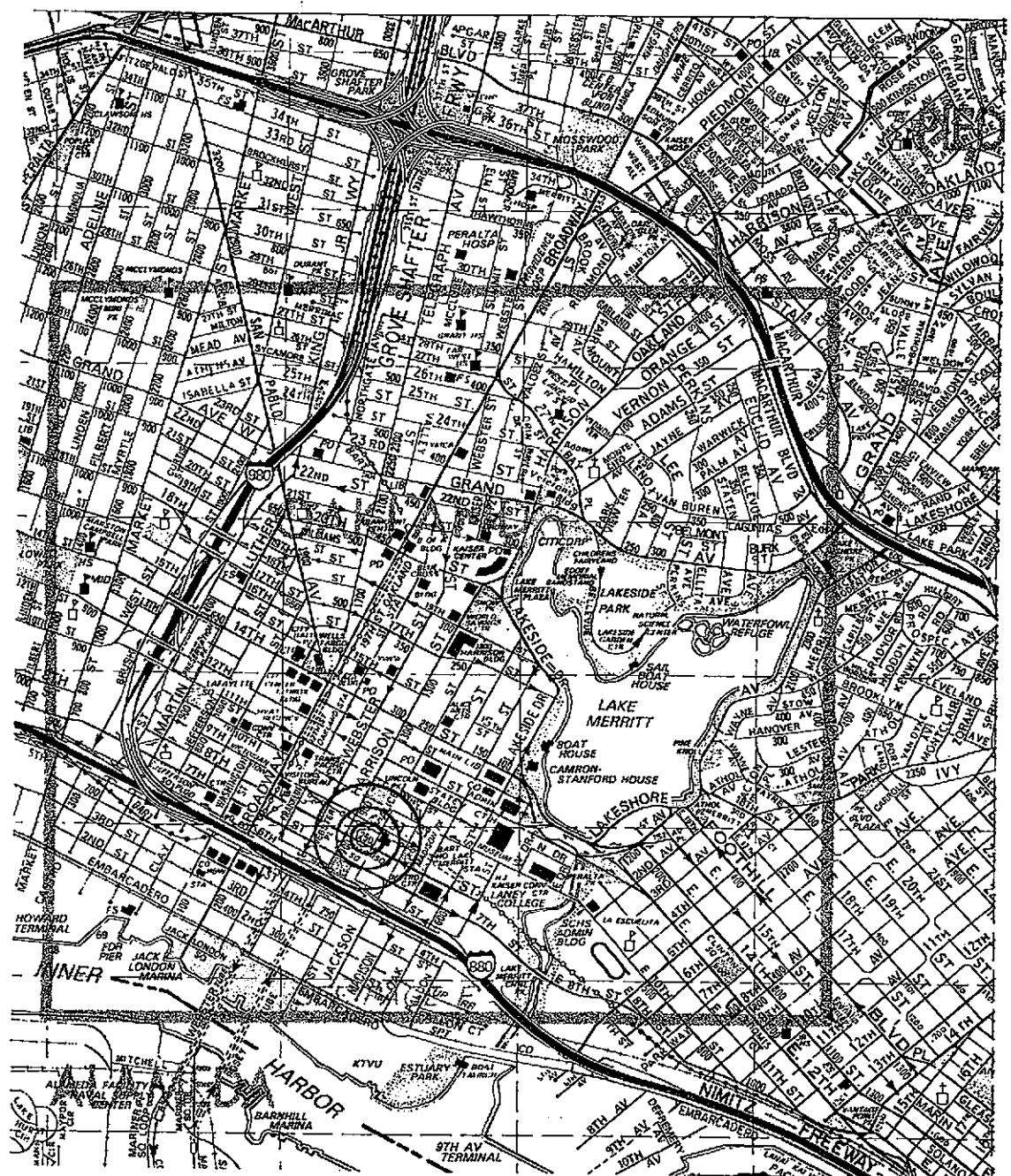
Damian Hriciga
Project Geologist



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

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

cc: Mr. Barney Chan, Alameda County Health Care Services
Mr. Chuck Headlee, RWQCB, San Francisco Bay Region



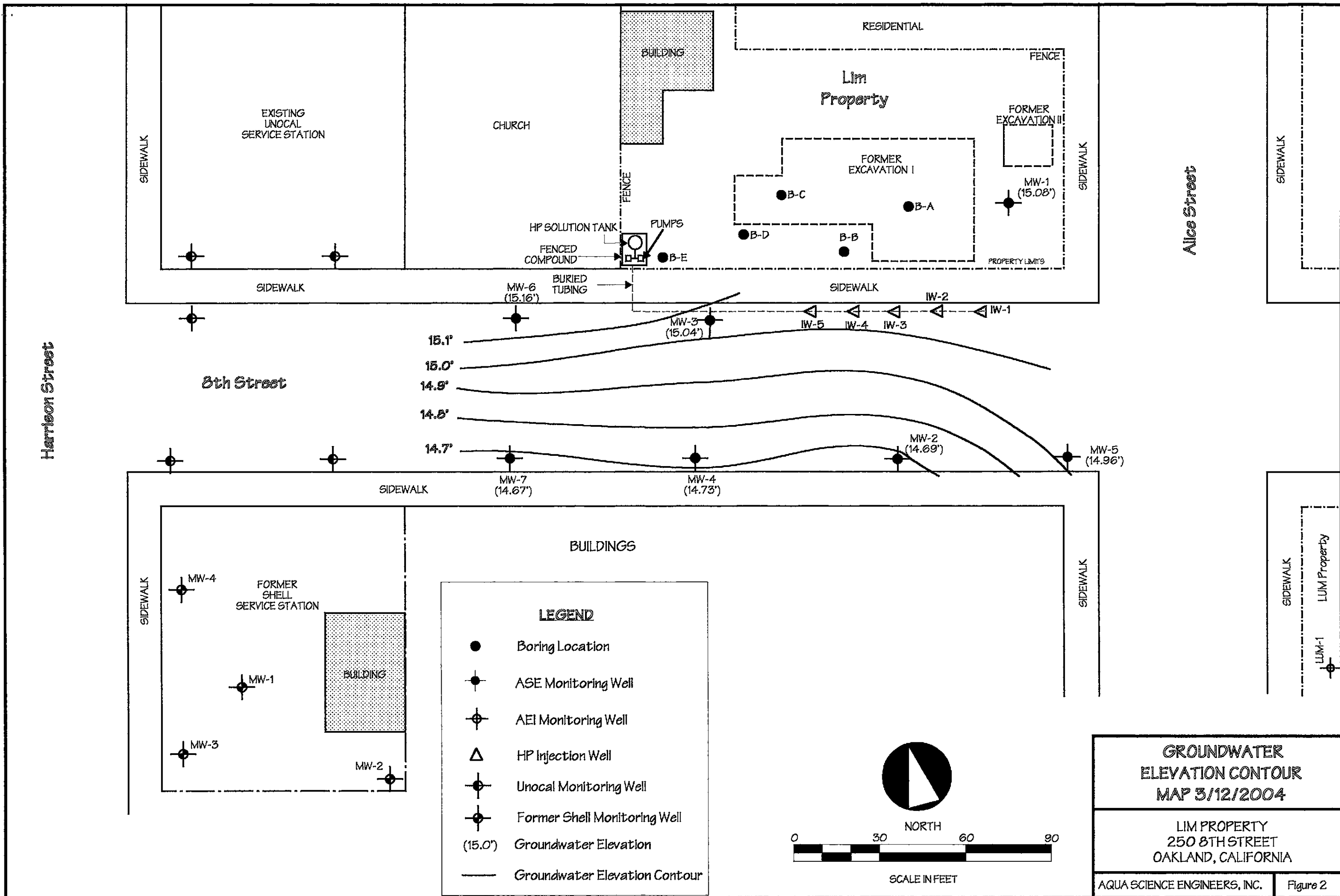
SITE LOCATION MAP

Lim Property
250 8th Street
Oakland, California

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

Aqua Science Engineers

Figure 1



Harleem Street

8th Street

Alice Street

SIDEWALK

SIDEWALK

SIDEWALK

SIDEWALK

SIDEWALK

SIDEWALK

LUM Property

LUM-1

RESIDENTIAL

BUILDING

Lim Property

FENCE

EXISTING UNOCAL SERVICE STATION

CHURCH

FORMER EXCAVATION II

FORMER EXCAVATION I

PROPERTY LIMITS

HP SOLUTION TANK
FENCED COMPOUND
PUMPS
BURIED TUBING

B-C

B-A

MW-1 (15.08')

B-D

B-B

B-E

MW-6 (15.16')

MW-3 (15.04')

MW-2 (14.69')

MW-5 (14.96')

MW-7 (14.67')

MW-4 (14.73')

MW-4

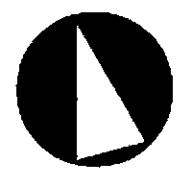
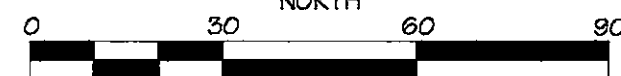
FORMER SHELL SERVICE STATION

MW-1

BUILDING

MW-3

MW-2



NORTH

SCALE IN FEET

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	

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-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	

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-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*			
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		

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-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	
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	
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	
IW-1	07/13/99	24.05	14.75		9.30	
	06/11/02	28.33				
IW-2	07/13/99	24.21	15.10		9.11	
	06/11/02	28.50				
IW-3	07/13/99	23.93	15.00		8.93	
	06/11/02	28.14				
IW-4	07/13/99	23.83	Unknown		Unknown	
	06/11/02	28.24				

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)
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		

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

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-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

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

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

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

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
MW-5							
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
MW-6							
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
MW-7							
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
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.

= 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	-	-	-
<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	590	-	-	-
Isopropylbenzene	-	-	1,200	<250	-	-	-
Other VOCs	<0.5 - <5.0	<5.0 - <20	: 1,000 - <100,000	<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>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	-	-	-	-
<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	---	-	-	-

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>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	-	-	-	-
<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	-	-	-	-

APPENDIX A

Well Sampling Field Log



WELL SAMPLING FIELD LOG

Project Name and Address: LCM
 Job #: _____ Date of sampling: 3/2/04
 Well Name: MW-1 Sampled by: PH
 Total depth of well (feet): 20.8 Well diameter (inches): _____
 Depth to water before sampling (feet): 14.64
 Thickness of floating product if any: _____
 Depth of well casing in water (feet): 12.16
 Number of gallons per well casing volume (gallons): 1.9
 Number of well casing volumes to be removed: 3
 Req'd volume of groundwater to be purged before sampling (gallons): 6
 Equipment used to purge the well: BALLER
 Time Evacuation Began: 1100 Time Evacuation Finished: 1115
 Approximate volume of groundwater purged: 6
 Did the well go dry?: NO After how many gallons: _____
 Time samples were collected: 1120
 Depth to water at time of sampling: 14.64
 Percent recovery at time of sampling: _____
 Samples collected with: BALLER
 Sample color: _____ Odor: MILD
 Description of sediment in sample: _____

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>2</u>	<u>68.3</u>	<u>6.71</u>	<u>718</u>
<u>4</u>	<u>67.7</u>	<u>6.68</u>	<u>720</u>
<u>6</u>	<u>67.5</u>	<u>6.84</u>	<u>716</u>
_____	_____	_____	_____
_____	_____	_____	_____

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
<u>MW-1</u>	<u>5</u>	<u>40 mL UOA</u>	<u>HCC</u>	<u>Y</u>	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____



WELL SAMPLING FIELD LOG

Project Name and Address: LIM
 Job #: _____ Date of sampling: 3/12/04
 Well Name: MW-3 Sampled by: PH
 Total depth of well (feet): _____ Well diameter (inches): 2
 Depth to water before sampling (feet): 13.30 / 14.51
 Thickness of floating product if any: _____
 Depth of well casing in water (feet): _____
 Number of gallons per well casing volume (gallons): _____
 Number of well casing volumes to be removed: _____
 Required volume of groundwater to be purged before sampling (gallons): _____
 Equipment used to purge the well: _____
 Time Evacuation Began: _____ Time Evacuation Finished: _____
 Approximate volume of groundwater purged: _____
 Did the well go dry: _____ After how many gallons: _____
 Time samples were collected: _____
 Depth to water at time of sampling: _____
 Percent recovery at time of sampling: _____
 Samples collected with: _____
 Sample color: _____ Odor: _____
 Description of sediment in sample: _____

CHEMICAL DATA

<u>Volume Purged</u>	<u>Temp</u>	<u>pH</u>	<u>Conductivity</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

SAMPLES COLLECTED

<u>Sample</u>	<u># of containers</u>	<u>Volume & type container</u>	<u>Pres</u>	<u>Iced?</u>	<u>Analysis</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

NOT SAMPLED THIS QUARTER



WELL SAMPLING FIELD LOG

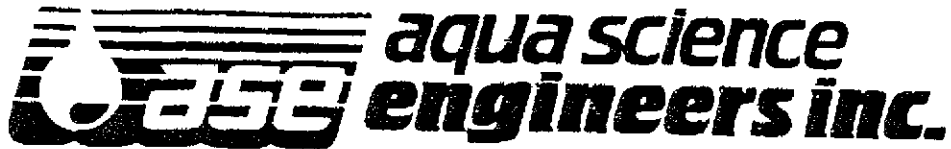
Project Name and Address: LIM
 Job #: _____ Date of sampling: 3/2/01
 Well Name: Mwell Sampled by: DM
 Total depth of well (feet): 21.8 Well diameter (inches): 2
 Depth to water before sampling (feet): 13.88
 Thickness of floating product if any: _____
 Depth of well casing in water (feet): 7.92
 Number of gallons per well casing volume (gallons): 1.3
 Number of well casing volumes to be removed: 3
 Req'd volume of groundwater to be purged before sampling (gallons): 3.9
 Equipment used to purge the well: BALLER
 Time Evacuation Began: 0840 Time Evacuation Finished: 0858
 Approximate volume of groundwater purged: _____
 Did the well go dry?: _____ After how many gallons: _____
 Time samples were collected: 0900
 Depth to water at time of sampling: _____
 Percent recovery at time of sampling: _____
 Samples collected with: _____
 Sample color: _____ Odor: _____
 Description of sediment in sample: _____

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>1.3</u>	<u>65.6</u>	<u>6.45</u>	<u>535</u>
<u>2.6</u>	<u>66.0</u>	<u>6.60</u>	<u>603</u>
<u>3.9</u>	<u>66.1</u>	<u>6.75</u>	<u>618</u>
_____	_____	_____	_____
_____	_____	_____	_____

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Icecd?	Analysis
<u>MW-4</u>	<u>5</u>	<u>40 mL VOA</u>	<u>HCL</u>	<u>Y</u>	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____



WELL SAMPLING FIELD LOG

Project Name and Address: Lim
 Job #: _____ Date of sampling: 3/2/04
 Well Name: MWS Sampled by: OH
 Total depth of well (feet): 29.6 Well diameter (inches): 2
 Depth to water before sampling (feet): _____
 Thickness of floating product if any: 13.14
 Depth of well casing in water (feet): 16.16
 Number of gallons per well casing volume (gallons): 2.6
 Number of well casing volumes to be removed: 3
 Req'd volume of groundwater to be purged before sampling (gallons): 7.8
 Equipment used to purge the well: BALLER
 Time Evacuation Began: 0800 Time Evacuation Finished: 0822
 Approximate volume of groundwater purged: 8
 Did the well go dry?: W After how many gallons: _____
 Time samples were collected: 0825
 Depth to water at time of sampling: 16.17
 Percent recovery at time of sampling: _____
 Samples collected with: BALLER
 Sample color: _____ Odor: _____
 Description of sediment in sample: _____

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>2.6</u>	<u>65.0</u>	<u>6.70</u>	<u>715</u>
<u>5.2</u>	<u>65.5</u>	<u>6.78</u>	<u>728</u>
<u>7.8</u>	<u>65.6</u>	<u>6.80</u>	<u>701</u>
_____	_____	_____	_____
_____	_____	_____	_____

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	ICcd?	Analysis
<u>MWS</u>	<u>5</u>	<u>40ml WJA</u>	<u>HIL</u>	<u>Y</u>	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____



WELL SAMPLING FIELD LOG

Project Name and Address: LIM
 Job #: _____ Date of sampling: 3/12/04
 Well Name: MW-6 Sampled by: DIF
 Total depth of well (feet): 29.5 Well diameter (inches): 2
 Depth to water before sampling (feet): 14.04
 Thickness of floating product if any: _____
 Depth of well casing in water (feet): 15.46
 Number of gallons per well casing volume (gallons): 2.5
 Number of well casing volumes to be removed: 3
 Req'd volume of groundwater to be purged before sampling (gallons): 7.5
 Equipment used to purge the well: SAILER
 Time Evacuation Began: 0915 Time Evacuation Finished: 936
 Approximate volume of groundwater purged: 7.5
 Did the well go dry?: No After how many gallons: _____
 Time samples were collected: 0940
 Depth to water at time of sampling: 14.06
 Percent recovery at time of sampling: _____
 Samples collected with: SAILER
 Sample color: _____ Odor: _____
 Description of sediment in sample: _____

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>2.5</u>	<u>66.8</u>	<u>7.44</u>	<u>329</u>
<u>5.0</u>	<u>66.2</u>	<u>7.44</u>	<u>342</u>
<u>7.5</u>	<u>66.8</u>	<u>7.44</u>	<u>340</u>
_____	_____	_____	_____
_____	_____	_____	_____

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iccd?	Analysis
<u>MW-6</u>	<u>5</u>	<u>40 ml VOA</u>	<u>HCC</u>	<u>Y</u>	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____



WELL SAMPLING FIELD LOG

Project Name and Address: LIM
 Job #: _____ Date of sampling: 3/2/01
 Well Name: MW-7 Sampled by: DH
 Total depth of well (feet): 29.7 Well diameter (inches): 2
 Depth to water before sampling (feet): 14.28
 Thickness of floating product if any: _____
 Depth of well casing in water (feet): 15.42
 Number of gallons per well casing volume (gallons): 2.5
 Number of well casing volumes to be removed: 3
 Req'd volume of groundwater to be purged before sampling (gallons): 7.5
 Equipment used to purge the well: SALLER
 Time Evacuation Began: 1005 Time Evacuation Finished: 1022
 Approximate volume of groundwater purged: 7.5
 Did the well go dry?: NO After how many gallons: _____
 Time samples were collected: 1025
 Depth to water at time of sampling: 14.28
 Percent recovery at time of sampling: _____
 Samples collected with: SALLER
 Sample color: _____ Odor: M.O
 Description of sediment in sample: _____

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>2.5</u>	<u>68.8</u>	<u>6.84</u>	<u>514</u>
<u>5.0</u>	<u>68.8</u>	<u>6.71</u>	<u>507</u>
<u>7.5</u>	<u>67.9</u>	<u>6.75</u>	<u>508</u>
_____	_____	_____	_____
_____	_____	_____	_____

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Icecd?	Analysis
<u>MW-7</u>	<u>5</u>	<u>40 ml VOA</u>	<u>HCC</u>	<u>Y</u>	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation



Report Number : 37446

Date : 3/25/2004

Damian Hriciga
Aqua Science Engineers, Inc.
208 W. El Pintado Road
Danville, CA 94526

Subject : 6 Water Samples
Project Name : LIM
Project Number : 2808

Dear Mr. Hriciga,

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, appearing to read "Joel Kiff", written in a cursive style.

Joel Kiff



Report Number : 37446

Date : 3/25/2004

Subject : 6 Water Samples

Project Name : LIM

Project Number : 2808

Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for samples MW-2, MW-4 and MW-7. Surrogate recovery for Method 8015, for sample MW-2 is above the control limits. This may indicate a bias in the analysis due to the sample's matrix or an interference with the surrogate from compounds present in the sample.

A handwritten signature in black ink, appearing to read "Joel Kiff", is written above a horizontal line.

Approved By: Joel Kiff



Report Number : 37446

Date : 3/25/2004

Project Name : LIM

Project Number : 2808

Sample : MW-1

Matrix : Water

Lab Number : 37446-01

Sample Date : 3/12/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
TPH as Gasoline	220	50	ug/L	EPA 8260B	3/16/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	3/16/2004
4-Bromofluorobenzene (Surr)	93.2		% Recovery	EPA 8260B	3/16/2004
Dibromofluoromethane (Surr)	94.3		% Recovery	EPA 8260B	3/16/2004
1,2-Dichloroethane-d4 (Surr)	99.2		% Recovery	EPA 8260B	3/16/2004
TPH as Diesel	510	50	ug/L	M EPA 8015	3/17/2004
Octacosane (Diesel Surrogate)	120		% Recovery	M EPA 8015	3/17/2004

Approved By:  Joel Kiff



Report Number : 37446

Date : 3/25/2004

Project Name : LIM

Project Number : 2808

Sample : MW-2

Matrix : Water

Lab Number : 37446-02

Sample Date :3/12/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	9100	25	ug/L	EPA 8260B	3/18/2004
Toluene	3500	25	ug/L	EPA 8260B	3/18/2004
Ethylbenzene	1700	25	ug/L	EPA 8260B	3/18/2004
Total Xylenes	5700	25	ug/L	EPA 8260B	3/18/2004
Methyl-t-butyl ether (MTBE)	< 25	25	ug/L	EPA 8260B	3/18/2004
TPH as Gasoline	53000	2500	ug/L	EPA 8260B	3/18/2004
1,2-Dichloroethane	< 25	25	ug/L	EPA 8260B	3/18/2004
1,2-Dibromoethane	< 25	25	ug/L	EPA 8260B	3/18/2004
Toluene - d8 (Surr)	93.2		% Recovery	EPA 8260B	3/18/2004
4-Bromofluorobenzene (Surr)	96.9		% Recovery	EPA 8260B	3/18/2004
Dibromofluoromethane (Surr)	111		% Recovery	EPA 8260B	3/18/2004
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	3/18/2004
TPH as Diesel	< 4000	4000	ug/L	M EPA 8015	3/17/2004
Octacosane (Diesel Surrogate)	132		% Recovery	M EPA 8015	3/17/2004

Approved By: Joel Kiff



Report Number : 37446

Date : 3/25/2004

Project Name : LIM

Project Number : 2808

Sample : MW-4

Matrix : Water

Lab Number : 37446-03

Sample Date :3/12/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	6500	40	ug/L	EPA 8260B	3/18/2004
Toluene	18000	40	ug/L	EPA 8260B	3/18/2004
Ethylbenzene	2700	40	ug/L	EPA 8260B	3/18/2004
Total Xylenes	12000	40	ug/L	EPA 8260B	3/18/2004
Methyl-t-butyl ether (MTBE)	< 40	40	ug/L	EPA 8260B	3/18/2004
TPH as Gasoline	96000	4000	ug/L	EPA 8260B	3/18/2004
1,2-Dichloroethane	< 40	40	ug/L	EPA 8260B	3/18/2004
1,2-Dibromoethane	< 40	40	ug/L	EPA 8260B	3/18/2004
Toluene - d8 (Surr)	93.8		% Recovery	EPA 8260B	3/18/2004
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	3/18/2004
Dibromofluoromethane (Surr)	113		% Recovery	EPA 8260B	3/18/2004
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	3/18/2004
TPH as Diesel	< 4000	4000	ug/L	M EPA 8015	3/17/2004
Octacosane (Diesel Surrogate)	112		% Recovery	M EPA 8015	3/17/2004

Approved By: Joel Kiff



Report Number : 37446

Date : 3/25/2004

Project Name : LIM

Project Number : 2808

Sample : MW-5

Matrix : Water

Lab Number : 37446-04

Sample Date :3/12/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Methyl-t-butyl ether (MTBE)	9.1	0.50	ug/L	EPA 8260B	3/16/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/16/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Toluene - d8 (Surr)	99.7		% Recovery	EPA 8260B	3/16/2004
4-Bromofluorobenzene (Surr)	90.8		% Recovery	EPA 8260B	3/16/2004
Dibromofluoromethane (Surr)	94.8		% Recovery	EPA 8260B	3/16/2004
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	3/16/2004
TPH as Diesel	490	50	ug/L	M EPA 8015	3/17/2004
Octacosane (Diesel Surrogate)	112		% Recovery	M EPA 8015	3/17/2004

Approved By: Joel Kiff



Report Number : 37446

Date : 3/25/2004

Project Name : LIM

Project Number : 2808

Sample : MW-6

Matrix : Water

Lab Number : 37446-05

Sample Date : 3/12/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/16/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	3/16/2004
4-Bromofluorobenzene (Surr)	96.9		% Recovery	EPA 8260B	3/16/2004
Dibromofluoromethane (Surr)	96.5		% Recovery	EPA 8260B	3/16/2004
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	3/16/2004
TPH as Diesel	< 50	50	ug/L	M EPA 8015	3/17/2004
Octacosane (Diesel Surrogate)	105		% Recovery	M EPA 8015	3/17/2004

Approved By: Joel Kiff



Report Number : 37446

Date : 3/25/2004

Project Name : LIM

Project Number : 2808

Sample : MW-7

Matrix : Water

Lab Number : 37446-06

Sample Date :3/12/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	300	10	ug/L	EPA 8260B	3/18/2004
Toluene	3000	10	ug/L	EPA 8260B	3/18/2004
Ethylbenzene	760	10	ug/L	EPA 8260B	3/18/2004
Total Xylenes	3200	10	ug/L	EPA 8260B	3/18/2004
Methyl-t-butyl ether (MTBE)	< 10	10	ug/L	EPA 8260B	3/18/2004
TPH as Gasoline	20000	1000	ug/L	EPA 8260B	3/18/2004
1,2-Dichloroethane	< 10	10	ug/L	EPA 8260B	3/18/2004
1,2-Dibromoethane	< 10	10	ug/L	EPA 8260B	3/18/2004
Toluene - d8 (Surr)	96.9		% Recovery	EPA 8260B	3/18/2004
4-Bromofluorobenzene (Surr)	92.7		% Recovery	EPA 8260B	3/18/2004
Dibromofluoromethane (Surr)	111		% Recovery	EPA 8260B	3/18/2004
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	3/18/2004
TPH as Diesel	< 1500	1500	ug/L	M EPA 8015	3/17/2004
Octacosane (Diesel Surrogate)	116		% Recovery	M EPA 8015	3/17/2004

Approved By: Joel Kiff

Report Number : 37446

Date : 3/25/2004

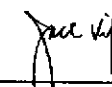
QC Report : Method Blank Data

Project Name : **LIM**

Project Number : **2808**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	3/16/2004
Octacosane (Diesel Surrogate)	114		%	M EPA 8015	3/16/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/17/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/17/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/17/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/17/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/17/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/17/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/17/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/17/2004
Toluene - d8 (Surr)	95.1		%	EPA 8260B	3/17/2004
4-Bromofluorobenzene (Surr)	96.9		%	EPA 8260B	3/17/2004
Dibromofluoromethane (Surr)	96.9		%	EPA 8260B	3/17/2004
1,2-Dichloroethane-d4 (Surr)	95.6		%	EPA 8260B	3/17/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/16/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/16/2004
Toluene - d8 (Surr)	99.1		%	EPA 8260B	3/16/2004
4-Bromofluorobenzene (Surr)	96.3		%	EPA 8260B	3/16/2004
Dibromofluoromethane (Surr)	95.4		%	EPA 8260B	3/16/2004
1,2-Dichloroethane-d4 (Surr)	98.6		%	EPA 8260B	3/16/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 37446

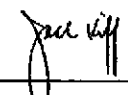
Date : 3/25/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **LIM**

Project Number : **2808**

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	1040	1120	ug/L	M EPA 8015	3/16/04	104	112	8.06	70-130	25
Benzene	37461-03	0.75	40.3	39.9	36.1	35.6	ug/L	EPA 8260B	3/17/04	87.7	87.4	0.417	70-130	25
Toluene	37461-03	<0.50	40.3	39.9	34.6	33.9	ug/L	EPA 8260B	3/17/04	85.7	84.9	0.973	70-130	25
Tert-Butanol	37461-03	7.4	202	200	197	182	ug/L	EPA 8260B	3/17/04	94.0	87.3	7.45	70-130	25
Methyl-t-Butyl Ether	37461-03	3.1	40.3	39.9	39.5	37.8	ug/L	EPA 8260B	3/17/04	90.1	86.9	3.63	70-130	25
Benzene	37420-06	<0.50	40.0	40.0	38.2	37.5	ug/L	EPA 8260B	3/16/04	95.6	93.8	1.93	70-130	25
Toluene	37420-06	<0.50	40.0	40.0	39.0	38.1	ug/L	EPA 8260B	3/16/04	97.6	95.2	2.46	70-130	25
Tert-Butanol	37420-06	240	200	200	438	444	ug/L	EPA 8260B	3/16/04	99.8	102	2.67	70-130	25
Methyl-t-Butyl Ether	37420-06	31	40.0	40.0	70.3	68.9	ug/L	EPA 8260B	3/16/04	97.9	94.3	3.79	70-130	25



Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 37446

Date : 3/25/2004

QC Report : Laboratory Control Sample (LCS)

Project Name : **LIM**

Project Number : **2808**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	3/17/04	87.1	70-130
Toluene	40.0	ug/L	EPA 8260B	3/17/04	84.8	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/17/04	90.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/17/04	90.3	70-130
Benzene	40.0	ug/L	EPA 8260B	3/16/04	97.8	70-130
Toluene	40.0	ug/L	EPA 8260B	3/16/04	101	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/16/04	96.1	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/16/04	91.3	70-130

KIFF ANALYTICAL, LLC

Approved By:  Joel Kiff

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

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

Chain of Custody

37446

PAGE 1 OF 1


SAMPLER (SIGNATURE) 


PROJECT NAME LHM JOB NO. 2808
 ADDRESS OAKLAND CA

ANALYSIS REQUEST


SPECIAL INSTRUCTIONS:
 SEND EDF
 TO 600 100 535

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GAS / MTBE & BTEX (EPA 5030/8015/8016/8260) LEAD 5010	TPH-DIESEL (EPA 3510/8015)	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	PURGEABLE HALOCARBONS (EPA 6011/8010)	VOLATILE ORGANICS (EPA 624/8240/8260)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	OIL & GREASE (EPA 8520)	LUFT METALS (5) (EPA 6010+7000)	CAM17 METALS (EPA 6010+7000)	PCBs & PESTICIDES (EPA 608/8080)	ORGANOPHOSPHORUS PESTICIDES (EPA 8140 EPA 608/8080)	FUEL OXYGENATES (EPA 8260)	Pb (TOTAL or DISSOLVED) (EPA 6010)	TPH-G/BTEX/5 OXY/5A/2 DCA/PCE (EPA 8260)	LEAD			
MW-1	3/12/04	1120	W	5	X	X															01	
MW-2		0740	W	5	X	X																02
MW-4		0900	W	5	X	X																03
MW-5		0825	W	5	X	X																04
MW-6		0940	W	5	X	X																05
MW-7		1025	W	5	X	X																06
X																						

RELINQUISHED BY: 1645
 (signature) 3/12/04 (time)

RECEIVED BY:  (signature) _____ (time)

RELINQUISHED BY:  (signature) _____ (time)

RECEIVED BY LABORATORY: Michelle Woodworth 1045
 (signature) _____ (time)

COMMENTS:

DAMIAN HERRERA (printed name) 3/12/04 (date)

 (printed name) _____ (date)

 (printed name) _____ (date)

Michelle Woodworth 031504 (printed name) (date)

TURN AROUND TIME

Company- ASE

Company- _____

Company- _____

Company- Kitt Analytical

STANDARD 24H 48H 72H

OTHER: