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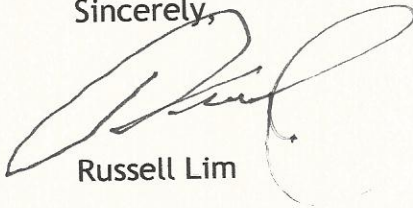
Alameda County Health Care Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: RO #479, Report 

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have further questions I may be reached at 925-381-3608.

Sincerely,



Russell Lim



Aqua Science Engineers, Inc. 55 Oak Court, Suite 220, Danville, CA 94526
(925) 820-9391 - Fax (925) 837-4853 - www.aquascienceengineers.com

July 28, 2014

SEMI-ANNUAL GROUNDWATER MONITORING REPORT
JUNE 2014 GROUNDWATER SAMPLING

at

Lim Family Property
250 8th Street
Oakland, California

Submitted by:
AQUA SCIENCE ENGINEERS, INC.
55 Oak Court, Suite 220
Danville, CA 94526
(925) 820-9391



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1.0 INTRODUCTION

This report presents the methods and findings of Aqua Science Engineers, Inc. (ASE)'s semi-annual groundwater monitoring event 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 June 30, 2014, ASE measured the depth to water in monitoring wells MW-1, MW-2, MW-4, MW-5, and MW-7 using an electric water level sounder. The depth to groundwater in monitoring well MW-3 could not be measured due to a malfunction in the interface probe. Monitoring wells MW-6 and MW-8 are no longer sampled. The surface of the groundwater was also checked for the presence of free-floating hydrocarbons or sheen. No free-floating hydrocarbons were present in any of the monitoring wells other than a sheen on the surface of water in monitoring well MW-3. This is the fourth consecutive semi-annual sampling event where neither monitoring well MW-3 nor MW-4R contained free-floating hydrocarbons thicker than a sheen. Groundwater elevation data is presented in Table One. Water levels were somewhat unusual during this sampling even with some water levels higher than the previous sampling event, while others are lower. In particular, the water level in monitoring well MW-2 appeared anomalous and was not used for contouring.

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 approximately 0.005 feet/foot during this sampling period. The gradient and flow direction are generally consistent with previous findings.

3.0 MONITORING WELL SAMPLING

On June 30, 2014, ASE collected groundwater samples from six monitoring wells for analysis. 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.



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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), fuel oxygenates including methyl tertiary butyl ether (MTBE), and lead scavengers by EPA Method 8260B, and total petroleum hydrocarbons as diesel (TPH-D) by modified EPA Method 8015. The analytical results are tabulated in Table Two, 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 are very similar to concentrations from the previous sampling event, with a very slight decrease in TPH-G and TPH-D concentrations and slight increases in benzene and DIPE concentrations.
- Hydrocarbon concentrations, other than TPH-D, in groundwater samples collected from monitoring well MW-2 increased to the highest concentrations since June 2011.
- No free-floating hydrocarbons were detected in monitoring well MW-3 this period. However, very high hydrocarbon concentrations (97,000 ppb TPH-G, 5,900 ppb TPH-D, 4,800 ppb benzene, 2,100 ppb toluene, 860 ppb ethyl benzene, and 11,000 ppb total xylenes) were detected in the groundwater sample collected from this monitoring well. All of these concentrations were similar to or an increase from the previous sampling event.
- No free-floating hydrocarbons were detected in monitoring well MW-4R this period. Hydrocarbon concentrations in groundwater samples collected from monitoring well MW-4R generally increased from the historic low concentrations during the last sampling event in December 2013 to concentrations generally similar to the results one year ago, with the exception of benzene which increased to the highest concentration since June 2011.
- No hydrocarbon concentrations were detected in groundwater samples collected from monitoring well MW-5 during this sampling period, other than 0.70 ppb DIPE. These results are consistent with previous results.
- There was a slight increase in hydrocarbon concentrations detected in groundwater samples collected from monitoring well MW-7 during this sampling event from the previous sampling event in December 2013. However, there is a long term decreasing trend in hydrocarbon concentrations for samples collected from this well dating back to 2010.

Concentrations in groundwater samples collected from the following wells exceeded Environmental Screening Levels (ESLs) for drinking water 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 December 2013:



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- Concentrations of TPH-G, TPH-D, benzene, toluene, ethyl benzene, total xylenes, and TBA in the groundwater sample collected from monitoring wells MW-2, MW-3, and MW-7 exceeded ESLs.
- Concentrations of TPH-G, TPH-D and benzene in groundwater samples collected from monitoring wells MW-1 and MW-4R exceeded ESLs.

6.0 RECOMMENDATIONS

ASE recommends continued operation of the remediation systems.

ASE also recommends that the site remain on a semi-annual sampling schedule. The next groundwater monitoring event is scheduled for December 2014.

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.



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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.

A handwritten signature in black ink that reads "Robert E. Kitay". The signature is written in a cursive style with a long, sweeping underline.



Robert E. Kitay, P.G.
Senior Geologist

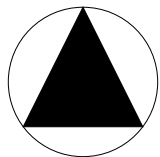
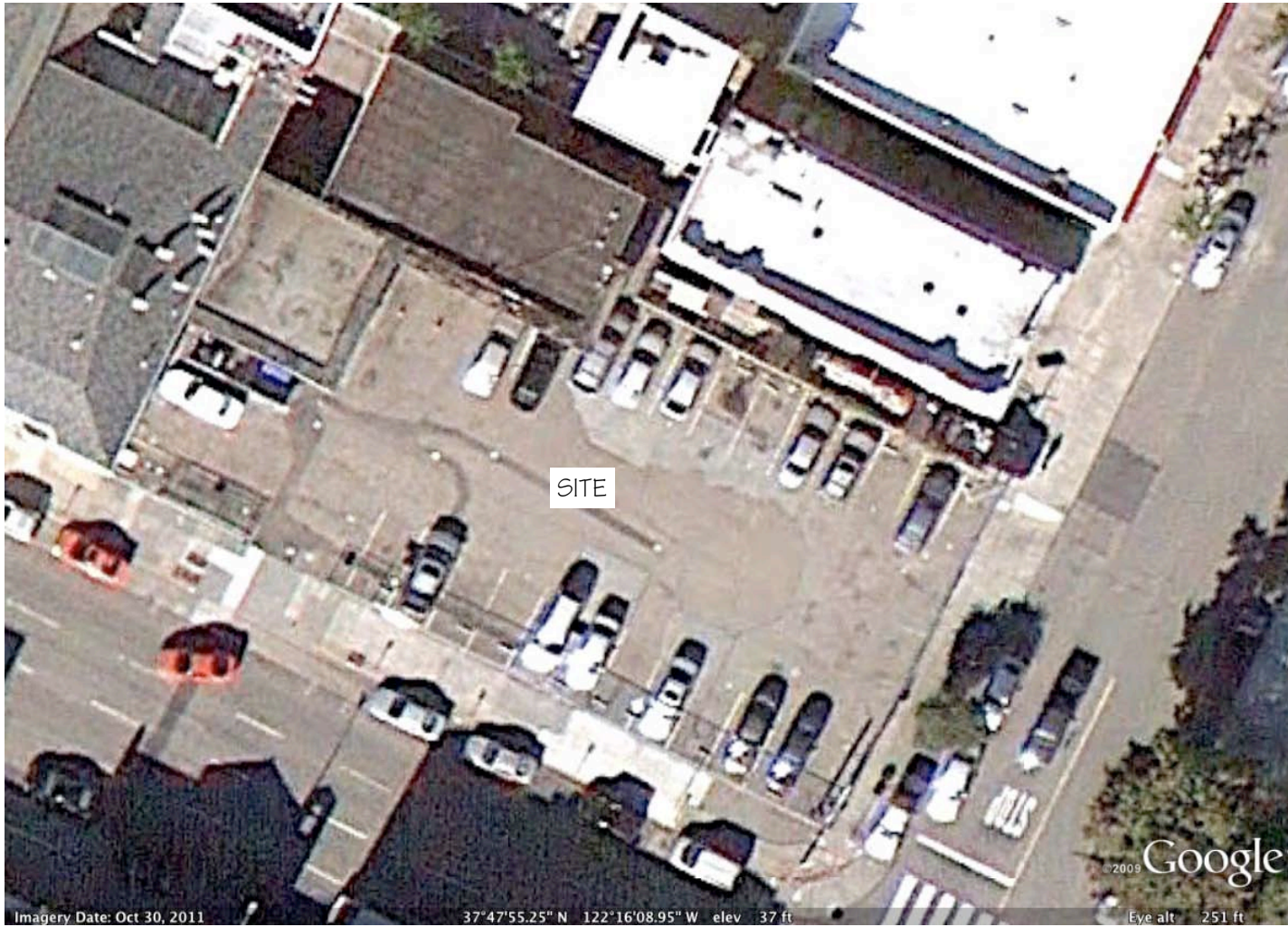
Attachments: Figures 1 and 2
Tables One, Two, and Three
Appendices A and B

cc: Mr. Jerry Wickham, ACHCSA



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FIGURES



NORTH

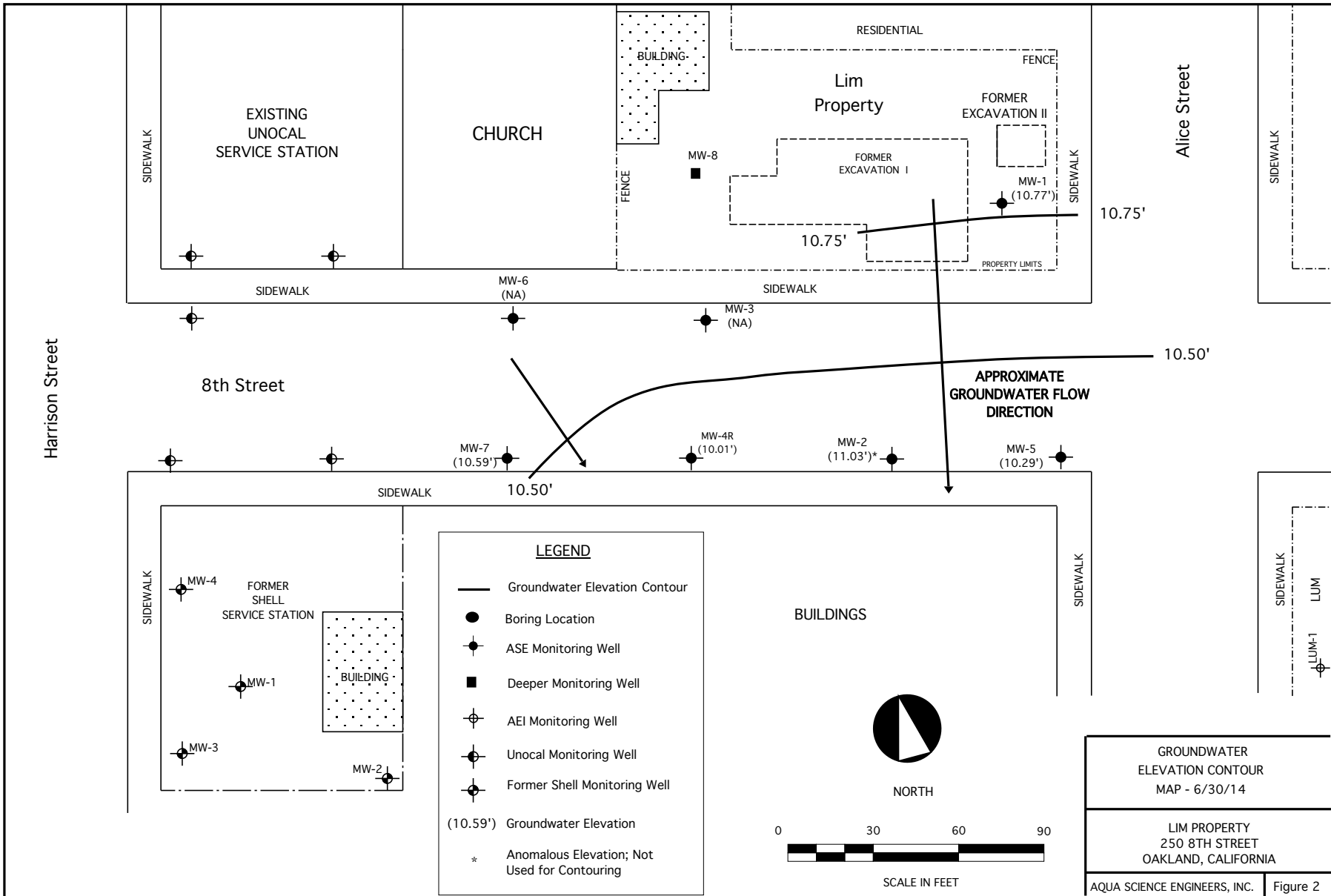
NOT TO SCALE

SITE LOCATION MAP

Lim Family Property
250 8th Street
Oakland, California

Aqua Science Engineers

Figure 1



LEGEND

- Groundwater Elevation Contour
- Boring Location
- ASE Monitoring Well
- Deeper Monitoring Well
- AEI Monitoring Well
- Unocal Monitoring Well
- Former Shell Monitoring Well
- (10.59') Groundwater Elevation
- * Anomalous Elevation; Not Used for Contouring

GROUNDWATER ELEVATION CONTOUR MAP - 6/30/14	
LIM PROPERTY 250 8TH STREET OAKLAND, CALIFORNIA	
AQUA SCIENCE ENGINEERS, INC.	Figure 2



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TABLES

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	
	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	
	06/28/06	14.92		14.80	
	08/31/06	15.60		14.12	
	11/21/06	17.20		12.52	
	02/12/07	16.12		13.60	
	05/02/07	16.92		12.80	
08/09/07	17.58		12.14		
12/06/07	18.60		11.12		
02/26/08	17.13		12.59		
05/30/08	18.17		11.55		
08/28/08	18.47		11.25		
12/11/08	19.19		10.53		
03/31/09	17.59		12.13		
12/31/09	18.57		11.15		
06/03/10	16.94		12.78		
12/20/10	18.21		11.51		
06/30/11	17.43		12.29		
06/22/12	17.08		12.64		
12/13/12	17.32		12.40		
06/18/13	18.13		11.59		
12/23/13	18.29		11.43		
06/30/14			18.95		10.77

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 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	
	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
	06/28/06	14.45			13.74
	08/31/06	15.37		12.82	
11/21/06	16.22		11.97		
02/12/07	16.12		12.07		
05/02/07	16.12		12.07		
08/09/07	16.85		11.34		
12/06/07	17.95		10.24		
02/26/08	16.15		12.04		
05/30/08	17.33		10.86		
08/28/08	17.53		10.66		
12/11/08	18.28		9.91		
03/31/09	16.63		11.56		
12/31/09	17.46		10.73		
06/03/10	16.00		12.19		
12/20/10	17.25		10.94		
06/30/11	16.55		11.64		
06/22/12	16.36		11.83		
12/13/12	16.24		11.95		
06/18/13	17.28		10.91		
12/23/13	18.60		9.59		
06/30/14		17.16		11.03	

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 Lim Family Property
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 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*	
	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	15.49*		
	06/28/06	13.55	2.61	16.16*		
	08/31/06	14.85	2.20	15.49*		
	11/21/06	16.05	1.10	13.41*		
	02/12/07	15.96	0.35	12.90*		
	05/02/07	15.11	0.09	13.54*		
	08/09/07	15.83	0.09	12.82*		
12/06/07	18.10	0.50	10.88*			
02/26/08	16.47	0.22	12.29*			
05/30/08	17.90	0.70	11.24*			
08/28/08	18.05	0.54	10.96*			
12/11/08	18.57	0.46	10.38*			
03/31/09	16.89	0.23	11.87*			
12/31/09	17.64	sheen	10.94*			
06/03/10	16.58	0.56	12.45*			
12/20/10	17.20	0.45	11.74*			
06/30/11	15.92		12.66			
06/22/12	16.64	0.69	12.48*			
12/13/12	16.24	None	12.34			
06/18/13	17.01		11.57			
12/23/13	18.29		10.29			
06/30/14		NOT MEASURED - PROBE MALFUNCTION				

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Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)	
MW-4	01/12/00	23.71	17.24		6.47	
	04/24/00		16.18		7.53	
	07/20/00		16.18		7.53	
	10/24/00		17.03		6.68	
	01/18/01		16.87		6.84	
	04/05/01		15.28		8.43	
	07/17/01		15.92		7.79	
	10/25/01		16.23		7.48	
	01/21/01		14.14		9.57	
	04/11/02		14.43		9.28	
	06/11/02		28.61	14.72		13.89
	09/17/02			15.29		13.32
	12/18/02			15.20		13.41
	03/25/03			15.53		13.08
	06/23/03			15.35		13.26
	09/26/03	15.91			12.70	
	12/18/03	15.63			12.98	
	03/12/04	13.88			14.73	
	06/17/04	15.03			13.58	
	09/17/04	15.61			13.00	
	12/17/04	15.32			13.29	
	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	
	06/28/06	14.49			14.12	
	08/31/06	15.75			12.86	
	11/21/06	16.70		11.91		
	02/12/07	16.51		12.10		
	05/02/07	16.51		12.10		
	08/09/07	17.17		11.44		
	12/06/07	18.08		10.53		
02/26/08	16.57		12.04			
05/30/08	17.66		10.95			
08/28/08	17.98		10.63			
12/11/08	18.61		10.00			
03/31/09	18.75		2.00	11.46*		
MW-4R	12/31/09	28.78	19.85	2.30	10.77*	
	06/03/10		18.67	2.57	12.17*	
	12/20/10		18.95	2.00	11.43*	
	06/30/11		16.45		12.33	
	06/22/12		16.69		12.09	
	12/13/12		16.61		12.17	
	06/18/13		17.60		11.18	
	12/23/13		19.07		9.71	
06/30/14	18.77			10.01		

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 Lim Family Property
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Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-5	06/11/02	28.40	14.23		14.17
	09/17/02		14.80		13.60
	12/18/02		15.08		13.32
	03/25/03		15.31		13.09
	06/23/03		15.16		13.24
	09/26/03		15.72		12.68
	12/18/03		15.47		12.93
	03/12/04		13.44		14.96
	06/17/04		14.90		13.50
	09/17/04		15.45		12.95
	12/17/04		15.12		13.28
	04/28/05		13.63		14.77
	07/19/05		15.67		12.73
	10/03/05		15.81		12.59
	12/06/05		15.60		12.80
	03/15/06		12.81		15.59
	06/28/06		15.21		13.19
	08/31/06		15.55		12.85
	11/21/06		17.09		11.31
	02/12/07		16.29		12.11
	05/02/07		16.21		12.19
	08/09/07		16.97		11.43
	12/06/07		18.35		10.05
	02/26/08		16.35		12.05
	05/30/08		17.62		10.78
	08/28/08		17.72		10.68
	12/11/08		18.62		9.78
	03/31/09		16.94		11.46
	12/31/09		17.73		10.67
	06/03/10		16.20		12.20
	12/20/10		17.72		10.68
	06/30/11		16.75		11.65
06/22/12	16.41		11.99		
12/13/12	16.46		11.94		
06/18/13	17.48		10.92		
12/23/13	18.62		9.78		
06/30/14			18.11		10.29

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Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)	
MW-6	06/11/02	29.20	14.95		14.25	
	09/17/02		15.47		13.73	
	12/18/02		15.43		13.77	
	03/25/03		15.67		13.53	
	06/23/03		15.48		13.72	
	09/26/03	NOT MEASURED - SOUNDER MALFUNCTION				
	12/18/03		15.79		13.41	
	03/12/04		14.04		15.16	
	06/17/04		15.13		14.07	
	09/17/04		15.74		13.46	
	12/17/04		15.54		13.66	
	04/28/05		13.91		15.29	
	07/19/05		15.30		13.90	
	10/03/05		15.35		13.85	
	12/06/05		15.69		13.51	
	03/15/06		13.14		16.06	
	06/28/06		14.44		14.76	
	08/31/06		16.25		12.95	
	11/21/06		16.69		12.51	
	02/12/07		16.63		12.57	
	05/02/07		16.57		12.63	
	08/09/07		17.19		12.01	
	12/06/07		17.95		11.25	
	02/26/08		16.66		12.54	
	05/30/08		17.64		11.56	
	08/28/08		18.03		11.17	
	12/11/08		18.54		10.66	
	03/31/09		17.10		12.10	
	12/31/09		18.00		11.20	
	06/03/10		16.58		12.62	
	12/20/10		17.40		11.80	
	06/30/11		17.02		12.18	
06/22/12		16.70		12.50		
12/13/12		16.77		12.43		
06/18/13		17.69		11.51		
12/23/13		18.74		10.46		
06/30/14	No Longer measured					

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-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
	06/28/06			14.81		14.14
	08/31/06			16.13		12.82
	11/21/06			17.06		11.89
	02/12/07			16.97		11.98
	05/02/07			16.93		12.02
	08/09/07			17.56		11.39
	12/06/07			18.32		10.63
	02/26/08			16.93		12.02
	05/30/08			17.97		10.98
	08/28/08			18.33		10.62
	12/11/08			18.86		10.09
	03/31/09			17.37		11.58
	12/31/09			18.26		10.69
	06/03/10			16.86		12.09
12/20/10		17.70		11.25		
06/30/11		17.36		11.59		
06/22/12		17.03		11.92		
12/13/12		17.01		11.94		
06/18/13		18.02		10.93		
12/23/13		19.77		9.18		
06/30/14			18.36		10.59	
MW-8	02/26/08	30.14	21.50		8.64	
	05/30/08		22.52		7.62	
	08/28/08		23.27		6.87	
	12/11/08		23.15		6.99	
	03/31/09		21.46		8.68	
	12/31/09		22.75		7.39	
	06/03/10		21.06		9.08	
	12/20/10		22.18		7.96	
	06/30/11		21.95		8.19	
	06/22/12		21.23		8.91	
	12/13/12		21.89		8.25	
	06/18/13		22.44		7.70	
	12/23/13		23.22		6.92	
06/30/14		No Longer measured				

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	DIFE	TBA	Other Oxys	EDC	EDB
<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	---	---	---	<0.5	<0.5
01/26/98	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	---	---	---	<0.5	<0.5
07/23/98	190	<50	0.54	2.8	2	1.8	<5.0	---	---	---	<2	<2
01/05/99	200	<50	1.8	1.6	3.3	<0.5	<5.0	---	---	---	<0.5	<0.5
07/13/99	340	<50	<0.5	<0.5	2.6	<0.5	<5.0	---	---	---	<0.5	<0.5
01/12/00	300	1,000	22	36	5.5	24	<5.0	---	---	---	<0.5	<0.5
04/24/00	360	280*	<0.5	<0.5	<0.5	2.1	<5.0	---	---	---	<0.5	<0.5
07/20/00	290	150*	1.8	<0.5	<0.5	<0.5	<5.0	---	---	---	<0.5	<0.5
10/24/00	170**	280*	<0.5	<0.5	<0.5	<0.5	<5.0	---	---	---	<0.5	<0.5
01/18/01	170**	150*	<0.5	<0.5	<0.5	2.1	<5.0	---	---	---	<0.5	<0.5
04/05/01	350**	190*	<0.5	<0.5	<0.5	<0.5	<5.0	---	---	---	<0.5	<0.5
07/17/01	310	570	<0.5	<0.5	<0.5	<0.5	<5.0	---	---	---	<0.5	<0.5
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	---	---	---	<0.5	<0.5
12/18/03	150	340	<0.5	<0.5	<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	---	---	---	<0.5	<0.5
06/17/04	250	490	<0.5	<0.5	<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	---	---	---	<0.5	<0.5
04/28/05	250	190	<0.5	<0.5	<0.5	<0.5	<0.5	0.67	<0.5	<0.5	<0.5	<0.5
07/19/05	340	na	<0.5	<0.5	<0.5	<0.5	<0.5	0.76	<5.0	<0.5	<0.5	<0.5
10/03/05	170	<100	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<5.0	<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	<0.5	<0.5	<0.5	<0.5	<0.5
06/28/06	230	130	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
08/31/06	310	<200	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
11/21/06	220	160	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
02/23/07	140	120	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	<5.0	<0.50	<0.50	<0.50
05/02/07	180	140	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	<5.0	<0.50	<0.50	<0.50
08/09/07	130	120	<0.50	<0.50	<0.50	<0.50	<0.50	0.85	<5.0	<0.50	<0.50	<0.50
12/06/07	53	160	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<5.0	<0.50	<0.50	<0.50
02/26/08	93	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	<5.0	<0.50	<0.50	<0.50
05/30/08	200	240	<0.50	<0.50	<0.50	<0.50	<0.50	0.95	<5.0	<0.50	<0.50	<0.50
08/28/08	150	200	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	<5.0	<0.50	---	---
12/11/08	110	140	<0.50	<0.50	<0.50	<0.50	<0.50	0.92	<5.0	<0.50	---	---
03/31/09	160	<200	<0.50	<0.50	<0.50	<0.50	<0.50	1.8	<5.0	<0.50	<0.50	<0.50
12/31/09	140	200	<0.50	<0.50	<0.50	<0.50	<0.50	0.84	<5.0	<0.50	<0.50	<0.50
06/03/10	300	140	<0.50	<0.50	<0.50	<0.50	<0.50	0.72	<5.0	<0.50	<0.50	<0.50
12/20/10	140	180	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50
06/30/11	650	<200	1.9	<0.50	<0.50	<0.50	<0.50	0.78	<5.0	<0.50	<0.50	<0.50
06/22/12	750	<200	23	<0.50	1.1	2.3	<0.50	0.80	12	<0.50	<0.50	<0.50
12/13/12	180	90	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50
06/18/13	370	84	1.5	<0.50	<0.50	<0.50	<0.50	0.52	<5.0	<0.50	<0.50	<0.50
12/23/13	410	200	2.0	<0.50	<0.50	<0.50	<0.50	0.64	<5.0	<0.50	<0.50	<0.50
06/30/14	400	140	6.9	<0.50	<0.50	<0.50	<0.50	1.4	<5.0	<0.50	<0.50	<0.50

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	DIFE	TBA	Other Oxys	EDC	EDB
<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	---	---	---	< 0.5	< 0.5
01/26/98	50,000	11,000	12,000	12,000	1,600	6,700	< 250	---	---	---	11	< 0.5
07/23/98	50,000	8,100#	11,000	8,300	1,800	7,000	1,100	---	---	---	9.9	< 0.5
01/05/99	50,000	7,600#	12,000	12,000	2,300	9,600	1,300	---	---	---	< 50	< 50
07/13/99	73,000	8,500	11,000	13,000	2,200	9,800	< 500	---	---	---	7.7	< 0.5
01/12/00	63,000	11,000	10,000	12,000	1,800	7,800	< 500	---	---	---	8.8	< 1.0
04/24/00	76,000	23,000*	7,100	14,000	2,000	9,400	< 500	---	---	---	5.9	< 5.0
07/20/00	68,000	5,300#	11,000	14,000	2,300	11,000	< 1,000	---	---	---	6.7	< 5.0
10/24/00	48,000	6,400*	11,000	9,400	1,500	7,300	< 500	---	---	---	< 5.0	< 5.0
01/18/01	37,000	4,600*	6,900	5,600	1,200	5,300	< 500	---	---	---	< 5.0	< 5.0
04/05/01	59,000	4,600*	7,100	9,800	1,600	7,600	< 500	---	---	---	4.6	< 5.0
07/17/01	90,000	< 10,000	9,200	14,000	2,700	11,000	< 50	---	---	---	< 50	---
10/25/01	79,000	< 3,800	9,200	14,000	2,400	11,000	< 50	---	---	---	< 50	< 50
01/22/02	76,000	< 2,300	7,000	13,000	2,200	9,600	< 50	---	---	---	< 50	< 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	---	---	---	< 20	< 20
12/18/02	46,000	< 6,000	2,900	3,000	1,800	7,600	22	---	---	---	< 10	< 10
03/25/03	87,000	< 8,000	7,900	9,300	2,900	12,000	< 50	---	---	---	< 50	< 50
06/23/03	46,000	< 3000	7,800	4,000	1,900	6,600	< 50	---	---	---	< 50	< 50
09/26/03	52,000	< 3000	9,100	3,500	1,300	5,000	< 50	---	---	---	< 50	< 50
12/18/03	61,000	< 4,000	13,000	3,500	1,600	5,600	< 20	---	---	---	< 20	< 20
03/12/04	53,000	< 4,000	9,100	3,500	1,700	5,700	< 25	---	---	---	< 25	< 25
06/17/04	59,000	< 3,000	7,100	4,000	1,700	7,300	< 25	---	---	---	< 25	< 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	---	---	---	< 15	< 15
04/28/05	81,000	< 3,000	7,000	6,000	2,100	8,700	< 15	90	< 15	< 15	< 15	< 15
07/19/05	59,000	na	7,900	4,400	1,900	7,000	< 15	< 15	77	< 15	< 15	< 15
10/03/05	34,000	< 800	7,800	810	1,000	2,800	< 15	< 15	< 70	< 15	< 15	< 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	< 15	< 15	< 15	< 15	< 15
06/28/06	96,000	< 4,000	10,000	14,000	2,900	12,000	< 15	< 15	< 5.0	< 15	33	< 15
8/31/06	47,000	< 3,000	5,800	5,100	2,200	8,700	< 15	< 15	81	< 15	< 15	< 15
11/21/06	51,000	< 1,500	6,800	3,400	1,700	6,200	< 15	< 15	82	< 15	< 15	< 15
02/23/07	38,000	< 1,500	7,800	2,000	1,500	4,600	< 15	< 15	190	< 15	< 15	< 15
05/02/07	55,000	< 3,000	6,500	5,100	2,400	8,600	< 15	< 15	110	< 15	< 15	< 15
08/09/07	39,000	< 3,000	6,600	2,200	1,600	4,900	< 15	< 15	81	< 15	< 15	< 15
12/06/07	20,000	< 1,500	7,400	510	680	1,200	< 15	< 15	120	< 15	< 15	< 15
02/26/08	43,000	< 4,000	8,200	940	1,400	3,700	< 15	< 15	70	< 15	< 15	< 15
05/30/08	31,000	< 1,000	11,000	620	1,100	2,300	< 15	< 15	84	< 15	< 15	< 15
08/28/08	38,000	< 3,000	11,000	630	1,400	3,800	< 25	< 25	< 150	< 25	---	---
12/11/08	32,000	< 2,000	11,000	610	1,000	2,700	< 25	< 25	< 150	< 25	---	---
03/31/09	44,000	< 4,000	6,500	3,300	1,700	5,600	< 9.0	< 9.0	56	< 9.0	< 9.0	< 9.0
12/31/09	36,000	< 4,000	9,700	350	1,600	3,800	< 9.0	13	56	< 9.0	< 9.0	< 9.0
06/03/10	53,000	< 10,000	8,600	2,600	2,500	8,000	< 5.0	8.9	69	< 5.0	< 5.0	< 5.0
12/20/10	39,000	< 4,000	13,000	530	1,600	3,600	< 15	21	< 70	< 15	< 15	< 15
06/30/11	65,000	< 6,000	7,300	5,900	2,400	10,000	< 20	< 20	< 90	< 20	< 20	< 20
06/22/12	1,200	140	50	56	4.0	160	< 0.50	1.6	17	< 0.50	1.1	< 0.50
12/13/12	2,400	66	890	4.1	9.6	16	< 0.50	5.4	17	< 0.50	1.4	< 0.50
06/18/13	5,300	88	2,400	7.8	80	31	< 1.5	7.8	17	< 1.5	< 1.5	< 1.5
12/23/13	6,600	210	2,200	6.6	15	16	< 4.0	7.9	34	< 4.0	< 4.0	< 4.0
06/30/14	21,000	200	8,000	94	290	400	< 4.0	16	66	< 4.0	< 4.0	< 4.0

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	DIFE	TBA	Other Oxys	EDC	EDB
<u>MW-3</u>												
01/12/00	140,000	13,000*	22,000	19,000	2,400	11,000	< 500	---	---	---	---	---
04/24/00	240,000	700,000*	33,000/	52,000/	5,700/	28,000/	< 5,000	---	---	---	---	---
			35,000	87,000	18,000	84,000						
07/20/00	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
10/24/00	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
01/18/01	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
04/05/01	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
07/17/01	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
10/25/01	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
01/22/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
04/11/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/11/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
09/17/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/18/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
03/25/03	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/23/03	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
09/26/03	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/18/03	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
03/12/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/17/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
09/17/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
11/10/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/17/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
04/28/05	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
07/19/05	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
10/03/05	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/10/05	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
03/15/06	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/28/06	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
8/31/06	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
11/21/06	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
02/23/07	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
05/02/07	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
08/09/07	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/06/07	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
02/26/08	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
05/30/08	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
08/28/08	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/11/08	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
03/31/09	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/31/09	60,000	< 25,000	7,500	6,500	1,000	6,600	< 20	< 20	< 90	< 20	< 20	< 20
06/03/10	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/20/10	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/30/11	140,000	< 40,000	12,000	21,000	4,000	17,000	< 20	< 20	< 90	< 20	< 20	< 20
06/22/12	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS (0.69-feet)											
12/13/12	99,000	< 12,000	5,800	5,800	2,100	11,000	< 10	< 10	60	< 10	< 10	< 10
06/18/13	100,000	220,000	6,700	7,900	2,000	15,000	< 10	< 10	< 50	< 10	< 10	< 10
12/23/13	80,000	4,700	4,800	2,100	860	11,000	< 15	< 15	110	< 15	< 15	< 15
06/30/14	97,000	5,900	4,600	6,200	1,300	11,000	< 15	< 15	500	< 15	< 15	< 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	DIFE	TBA	Other Oxys	EDC	EDB
MW-4												
01/12/00	99,000	7,900*	16,000	20,000	2,100	12,000	<2,500	---	---	---	<50	<50
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	---	---	---	<250	<250
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	---	---	---	<200	<200
10/24/00	98,000	8,000*	21,000	29,000	2,700	15,000	<1,000	---	---	---	<250	<250
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	---	---	---	<250	<250
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	---	---	---	<50	<50
07/17/01	95,000	<3,000	8,000	16,000	2,900	11,000	49	---	---	---	69	---
10/25/01	89,000	<2,200	9,300	18,000	2,400	12,000	66	---	---	---	72	<50
01/22/02	80,000	<2,300	4,600	15,000	2,500	11,000	<50	---	---	---	<50	<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	---	---	---	<100	<100
09/17/02	110,000	<3,000	9,600	21,000	2,800	13,000	<100	---	---	---	<100	<100
12/18/02	97,000	<4,000	8,000	20,000	2,600	12,000	<50	---	---	---	<50	<50
03/25/03	97,000	<7,500	7,600	22,000	2,500	12,000	<100	---	---	---	<100	<100
06/23/03	100,000	<3,000	9,600	22,000	3,300	15,000	<100	---	---	---	<100	<100
09/26/03	110,000	<4,000	9,300	17,000	2,100	10,000	<50	---	---	---	87	<50
12/18/03	110,000	<2,000	8,900	19,000	2,500	12,000	<25	---	---	---	46	<25
03/12/04	96,000	<4,000	6,500	18,000	2,700	12,000	<40	---	---	---	<40	<40
06/17/04	110,000	<4,000	10,000	20,000	2,900	13,000	<50	---	---	---	93	<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	---	---	---	53	<25
04/28/05	110,000	<3,000	7,800	14,000	2,200	10,000	<25	<25	<25	<25	46	<25
07/19/05	90,000	na	10,000	13,000	2,300	10,000	<40	<20	<20	<20	73	<40
10/03/05	68,000	<800	9,400	4,000	1,800	8,700	23	23	<5.0	<20	62	<20
12/06/05	81,000	<1,500	8,900	7,200	2,200	9,500	<20	---	---	---	---	---
03/15/06	68,000	<3,000	7,300	14,000	2,500	10,000	<20	<20	<20	<20	<20	<20
06/28/06	61,000	<3,000	8,500	4,100	2,600	11,000	<20	<20	<5.0	<20	20	<20
08/31/06	68,000	<2,000	9,500	9,600	2,500	12,000	<20	<20	<5.0	<20	36	<20
11/21/06	68,000	<1,500	9,000	5,000	2,000	9,300	<20	<20	230	<20	42	<20
02/23/07	90,000	<2,000	11,000	11,000	2,800	12,000	<20	<20	290	<20	36	<20
05/02/07	56,000	<2,000	7,300	6,300	2,500	11,000	<15	<15	160	<15	20	<15
08/09/07	52,000	<2,000	7,600	2,600	2,100	8,400	<15	15	170	<15	31	<15
12/06/07	60,000	<2,000	13,000	2,000	2,800	11,000	<15	22	150	<15	<15	<15
02/26/08	42,000	<2,000	3,700	2,300	2,300	8,900	<15	<15	90	<15	<15	<15
05/30/08	64,000	<3,000	9,200	5,100	3,000	12,000	<15	<15	83	<15	19	<15
08/28/08	73,000	<5,000	9,700	5,500	3,300	12,000	<15	<15	<70	<15	---	---
12/11/08	120,000	<40,000	14,000	12,000	4,400	19,000	<25	<25	<150	<25	---	---
03/31/09	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
MW-4R												
12/31/09	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/03/10	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/20/10	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/30/11	190,000	<30,000	3,800	11,000	2,900	20,000	<25	<25	<150	<25	<25	<25
06/22/12	4,500	<200	31	53	5.0	500	6.3	6.1	180	<0.5	21	<0.5
12/13/12	3,700	<200	97	76	50	590	<0.50	1.0	41	<0.50	2.5	<0.50
06/18/13	3,800	110	37	33	10	400	1.5	2.5	120	<0.50	7.2	<0.50
12/23/13	240	100	<0.50	<0.50	<0.50	5.4	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50
06/30/14	3,600	340	1,300	6.3	1.3	16	<0.50	0.93	22	<0.50	<0.50	<0.50

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	DIFE	TBA	Other Oxys	EDC	EDB
<u>MW-5</u>												
06/11/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	2.8	---	---	---	< 0.5	< 0.5
09/17/02	< 50	110	< 0.5	< 0.5	< 0.5	< 0.5	4.8	---	---	---	< 0.5	< 0.5
12/18/02	< 50	140	< 0.5	< 0.5	< 0.5	< 0.5	1.8	---	---	---	< 0.5	< 0.5
03/25/03	< 50	130	< 0.5	< 0.5	< 0.5	< 0.5	7.4	---	---	---	< 0.5	< 0.5
06/23/03	< 50	390	< 0.5	< 0.5	< 0.5	< 0.5	17	---	---	---	< 0.5	< 0.5
09/26/03	< 50	700	< 0.5	< 0.5	< 0.5	< 0.5	21	---	---	---	< 0.5	< 0.5
12/18/03	< 50	550	< 0.5	< 0.5	< 0.5	< 0.5	16	---	---	---	< 0.5	< 0.5
03/12/04	< 50	490	< 0.5	< 0.5	< 0.5	< 0.5	9.1	---	---	---	< 40	< 40
06/17/04	< 50	510	< 0.5	< 0.5	< 0.5	< 0.5	9.8	---	---	---	< 0.5	< 0.5
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	---	---	---	< 0.5	< 0.5
04/28/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	2.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
07/19/05	< 50	na	< 0.5	< 0.5	< 0.5	< 0.5	6.1	2.1	< 5.0	< 0.5	< 0.5	< 0.5
10/03/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	2.4	1.7	< 5.0	< 0.5	< 0.5	< 0.5
12/06/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
03/15/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	3.3	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5
06/28/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.8	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5
08/31/06	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	3.4	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/05/06	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	5.2	1.7	5.4	< 0.50	< 0.50	< 0.50
02/23/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	6.0	1.4	< 5.0	< 0.50	< 0.50	< 0.50
05/02/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	3.8	1.3	< 5.0	< 0.50	< 0.50	< 0.50
08/09/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	5.5	1.3	< 5.0	< 0.50	< 0.50	< 0.50
12/06/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	1.8	1.5	< 5.0	< 0.50	< 0.50	< 0.50
02/26/08	260	< 50	32	1.3	0.62	0.92	3.4	5.6	7.7	< 0.50	0.60	< 0.50
05/30/08	71	< 50	1.8	< 0.50	< 0.50	< 0.50	2.4	3.1	< 5.0	< 0.50	< 0.50	< 0.50
08/28/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	2.1	2.2	< 5.0	< 0.50	---	---
12/11/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	2.2	2.5	< 5.0	< 0.50	---	---
03/31/09	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	1.2	1.3	< 5.0	< 0.50	< 0.50	< 0.50
12/31/09	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	1.9	1.5	< 5.0	< 0.50	< 0.50	< 0.50
06/03/10	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	0.56	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/20/10	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	0.61	0.67	< 5.0	< 0.50	< 0.50	< 0.50
06/30/11	< 50	< 50	1.6	< 0.50	< 0.50	< 0.50	< 0.50	1.0	< 5.0	< 0.50	< 0.50	< 0.50
06/22/12	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/13/12	79	< 50	2.7	< 0.50	0.86	0.74	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/18/13	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/23/13	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.65	< 5.0	< 0.50	< 0.50	< 0.50
06/30/14	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.70	< 5.0	< 0.50	< 0.50	< 0.50

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	DIFE	TBA	Other Oxys	EDC	EDB
MW-6												
06/11/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.2	---	---	---	< 0.5	< 0.5
09/17/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.0	---	---	---	< 0.5	< 0.5
12/18/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	0.90	---	---	---	< 0.5	< 0.5
03/25/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	< 0.5	< 0.5
06/23/03	< 50	< 50	< 0.5	< 0.5	< 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	---	---	---	< 0.5	< 0.5
12/18/03	< 50	< 50	< 0.5	< 0.5	< 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	---	---	---	< 0.5	< 0.5
06/17/04	< 50	< 50	< 0.5	< 0.5	< 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	---	---	---	< 0.5	< 0.5
04/28/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 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	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5
10/03/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5
12/06/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
03/15/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
06/28/06	< 50	< 50	< 0.5	< 0.5	< 0.5	0.65	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5
08/31/06	< 50	< 50	< 0.50	2.4	0.90	4.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
11/21/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
02/23/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
05/02/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
08/09/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/06/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
02/26/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
05/30/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
08/28/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	---	---
12/11/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	---	---
03/31/09	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/31/09	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/03/10	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/20/10	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/30/11	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/22/12	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/13/12	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/18/13	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/23/13	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/30/14							No Longer Sampled					

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	DIFE	TBA	Other Oxys	EDC	EDB
<u>MW-7</u>												
06/25/02	38,000	<2,000	890	5,100	1,200	5,200	<20	---	---	---	<20	<20
09/17/02	26,000	<2,000	590	3,600	880	4,000	<20	---	---	---	<20	<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	---	---	---	<2.5	<2.5
06/23/03	17,000	<1,000	440	2,600	630	2,600	<10	---	---	---	<10	<10
09/26/03	17,000	<1,000	230	1,800	470	2,200	<5.0	---	---	---	<5.0	<5.0
12/18/03	20,000	<1,000	290	2,500	590	2,900	<5.0	---	---	---	<5.0	<5.0
03/12/04	20,000	<1,500	300	3,000	760	3,200	<10	---	---	---	<10	<10
06/17/04	12,000	<800	250	1,800	450	1,900	<5.0	---	---	---	<5.0	<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	---	---	---	<3.0	<3.0
04/28/05	13,000	<300	84	1,000	660	2,200	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
07/19/05	16,000	na	170	1,800	540	2,200	<2.5	<2.5	<5.0	<2.5	<2.5	<2.5
10/03/05	7,400	<200	140	710	350	1,100	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50
12/06/05	22,000	<600	240	2,300	800	3,400	<5.0	---	---	---	---	---
03/15/06	3,800	<200	4.6	160	120	620	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50
06/28/06	6,400	<500	19.0	340	490	940	<0.90	<0.50	<5.0	<0.50	<0.90	<0.90
08/31/06	20,000	<600	160	2,200	1,300	3,500	<2.5	1.4	<15	<5.0	<2.5	<2.5
11/21/06	21,000	<1,000	240	2,500	880	3,400	<5.0	<5.0	<25	<5.0	<5.0	<5.0
02/23/07	10,000	<200	150	1,300	580	2,400	<2.5	<2.5	<15	<2.5	<2.5	<2.5
05/02/07	26,000	<1,000	300	2,400	1,800	6,700	<2.5	<2.5	<50	<2.5	<2.5	<2.5
08/09/07	13,000	<800	250	800	1,000	3,000	<2.5	<2.5	<15	<2.5	<2.5	<2.5
12/06/07	9,600	<1,000	160	850	530	2,000	<2.5	<2.5	45	<2.5	<2.5	<2.5
02/26/08	14,000	<800	190	1,000	740	3,000	<2.5	<2.5	69	<2.5	<2.5	<2.5
05/30/08	9,900	<200	160	620	590	2,300	<2.5	<2.5	<15	<2.5	<2.5	<2.5
08/28/08	11,000	<800	180	500	650	2,400	<2.5	<2.5	<15	<2.5	---	---
12/11/08	8,000	<500	160	300	540	1,600	<2.5	<2.5	<15	<2.5	---	---
03/31/09	5,600	<300	82	190	360	1,000	<1.5	<1.5	<7.0	<1.5	<1.5	<1.5
12/31/09	16,000	<800	140	1,200	750	2,800	<0.5	<0.50	10	<0.50	<0.50	<0.50
06/03/10	22,000	<2,000	160	1,000	1,300	3,500	<5.0	<5.0	<25	<5.0	<5.0	<5.0
12/20/10	23,000	<1,000	230	820	1,500	4,900	<5.0	<5.0	<25	<5.0	<5.0	<5.0
06/30/11	26,000	<4,000	190	310	1,800	3,900	<5.0	<5.0	<25	<5.0	<5.0	<5.0
06/22/12	10,000	<600	120	52	1,100	310	<2.0	<2.0	43	<2.0	<2.0	<2.0
12/13/12	16,000	610	78	80	1,000	940	<2.5	<2.5	<15	<2.5	<2.5	<2.5
06/18/13	6,000	250	19	22	310	390	<0.90	<0.90	6.3	<0.90	<0.90	<0.90
12/23/13	2,200	290	6.8	5.2	15	78	<0.50	<0.50	10	<0.50	<0.50	<0.50
06/30/14	2,700	380	12	7.3	83	63	<0.50	<0.50	32	<0.50	<0.50	<0.50

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	DIPE	TBA	Other Oxys	EDC	EDB
MW-8												
02/26/08	< 50	< 50	0.51	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
05/30/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
08/28/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	---	---
12/11/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	---	---
03/31/09	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/31/09	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/03/10	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/20/10	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/30/11	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/22/12	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/13/12	< 50	56	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/18/13	< 50	83	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/23/13	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/30/14	No Longer Sampled											
ESL	100	100	1	40	30	20	5	NE	12	NE	0.5	0.05

Notes:

* = Hydrocarbons reported are in the early diesel range, and do not match the laboratory standards.

** = 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 (December 2013)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

TPH = Total petroleum hydrocarbons

EDC = 1,2-Dichloroethane

MTBE = Methyl tertiary butyl ether

EDB = 1,2-Dibromoethane

DIPE = Diisopropyl ether

TBA = Tery-butanol

Oxy = Oxygenates



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APPENDIX A

Well Sampling Field Log

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM

JOB NUMBER 2808 DATE OF SAMPLING 6-30-14

WELL ID. MW-1 SAMPLER DA

TOTAL DEPTH OF WELL 26.8 WELL DIAMETER 2"

DEPTH TO WATER PRIOR TO PURGING 18.95 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 7.85

NUMBER OF GALLONS PER WELL CASING VOLUME 1.3

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PUGGED PRIOR TO SAMPLING 3.9 gal

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED 8:20 TIME EVACUATION COMPLETED 8:30

TIME SAMPLES WERE COLLECTED 8:30

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PUGGED 3.9 gal

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR light brown ODOR/SEDIMENT slight hc / slight silt

CHEMICAL DATA

VOLUME PUGGED	TEMPERATURE	PH	CONDUCTIVITY
1	20.3	7.1	470
2	20.4	7.1	520
3	20.4	7.1	520

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-1	5	40 ML VOA'S	8015/8260B	✓

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME	LIM		
JOB NUMBER	2808	DATE OF SAMPLING	6-30-14
WELL ID.	MW-2	SAMPLER	DA
TOTAL DEPTH OF WELL	26.8	WELL DIAMETER	2"
DEPTH TO WATER PRIOR TO PURGING	17.14	TIME OF MEASUREMENT	
PRODUCT THICKNESS			
DEPTH OF WELL CASING IN WATER	9.64		
NUMBER OF GALLONS PER WELL CASING VOLUME	1.4		
NUMBER OF WELL CASING VOLUMES TO BE REMOVED	3		
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING	4.9 gal		
EQUIPMENT USED TO PURGE WELL	NEW DISPOSABLE BAILER		
TIME EVACUATION STARTED	7:10	TIME EVACUATION COMPLETED	7:17
TIME SAMPLES WERE COLLECTED	7:17		
DID WELL GO DRY	No	AFTER HOW MANY GALLONS	—
VOLUME OF GROUNDWATER PURGED	4.9 gal		
SAMPLING DEVICE	NEW DISPOSABLE BAILER		
SAMPLE COLOR	ODOR/SEDIMENT		

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	19.7	7.2	690
2	19.8	7.3	730
3	19.8	7.3	740

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-2	5	40 ML VOA'S	8015/82608	✓

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM

JOB NUMBER 2808 DATE OF SAMPLING 6-30-14

WELL ID. MW-3 SAMPLER DA

TOTAL DEPTH OF WELL 30.0 WELL DIAMETER 2"

DEPTH TO WATER PRIOR TO PURGING _____ TIME OF MEASUREMENT _____

PRODUCT THICKNESS Sheen

DEPTH OF WELL CASING IN WATER _____

NUMBER OF GALLONS PER WELL CASING VOLUME _____

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING _____

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED 850 TIME EVACUATION COMPLETED 900

TIME SAMPLES WERE COLLECTED 900

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 5 gal

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR gray ODOR/SEDIMENT mod odor / mod silt (bacteria?)

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	22.5	6.9	810
2	22.7	7.0	820
3	22.7	7.0	810

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-3	5	40 ML VOA'S	8015/82600	✓

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME <u>LIM</u>	
JOB NUMBER <u>2808</u>	DATE OF SAMPLING <u>6-30-14</u>
WELL ID. <u>MW-4R</u>	SAMPLER <u>DA</u>
TOTAL DEPTH OF WELL <u>28.0</u>	WELL DIAMETER <u>4"</u>
DEPTH TO WATER PRIOR TO PURGING <u>18.77</u>	TIME OF MEASUREMENT
PRODUCT THICKNESS <u>0</u>	
DEPTH OF WELL CASING IN WATER <u>9.23</u>	
NUMBER OF GALLONS PER WELL CASING VOLUME <u>6.1</u>	
NUMBER OF WELL CASING VOLUMES TO BE REMOVED <u>3</u>	
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING <u>18.3 gal</u>	
EQUIPMENT USED TO PURGE WELL	<u>NEW DISPOSABLE BAILER</u>
TIME EVACUATION STARTED <u>740</u>	TIME EVACUATION COMPLETED <u>810</u>
TIME SAMPLES WERE COLLECTED <u>18.3 gal</u>	
DID WELL GO DRY <u>No</u>	AFTER HOW MANY GALLONS <u>—</u>
VOLUME OF GROUNDWATER PURGED <u>18.3 gal</u>	
SAMPLING DEVICE	<u>NEW DISPOSABLE BAILER</u>
SAMPLE COLOR <u>light brown</u>	ODOR/SEDIMENT <u>moderate hc / mod silt</u>

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	21.4	7.3	550
2	21.3	7.4	600
3	21.3	7.4	600

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
<u>MW-4R</u>	<u>5</u>	<u>40 ML VOA'S</u>	<u>8015/8260B</u>	<u>✓</u>

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME <u>LIM</u>	
JOB NUMBER <u>2808</u>	DATE OF SAMPLING <u>6-30-14</u>
WELL ID. <u>MW-5</u>	SAMPLER <u>DA</u>
TOTAL DEPTH OF WELL <u>29.6</u>	WELL DIAMETER <u>2"</u>
DEPTH TO WATER PRIOR TO PURGING <u>18.1</u>	TIME OF MEASUREMENT
PRODUCT THICKNESS <u>0</u>	
DEPTH OF WELL CASING IN WATER <u>11.49</u>	
NUMBER OF GALLONS PER WELL CASING VOLUME <u>1.9</u>	
NUMBER OF WELL CASING VOLUMES TO BE REMOVED <u>3</u>	
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING <u>5.8 gal</u>	
EQUIPMENT USED TO PURGE WELL	<u>NEW DISPOSABLE BAILER</u>
TIME EVACUATION STARTED <u>6:40</u>	TIME EVACUATION COMPLETED <u>6:50</u>
TIME SAMPLES WERE COLLECTED <u>6:50</u>	
DID WELL GO DRY <u>No</u>	AFTER HOW MANY GALLONS <u>—</u>
VOLUME OF GROUNDWATER PURGED <u>5.8 gal</u>	
SAMPLING DEVICE	<u>NEW DISPOSABLE BAILER</u>
SAMPLE COLOR <u>light brown</u>	ODOR/SEDIMENT <u>no odor / slight silt</u>

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	<u>19.1</u>	<u>7.5</u>	<u>530</u>
2	<u>18.5</u>	<u>7.5</u>	<u>530</u>
3	<u>18.7</u>	<u>7.5</u>	<u>530</u>

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
<u>MW-5</u>	<u>5</u>	<u>40 ML VOA'S</u>	<u>8015/8260B</u>	<u>✓</u>

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM

JOB NUMBER 2808 DATE OF SAMPLING 6-30-14

WELL ID. MW-7 SAMPLER DA

TOTAL DEPTH OF WELL 28.0 WELL DIAMETER 2"

DEPTH TO WATER PRIOR TO PURGING 18.36 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 9.64

NUMBER OF GALLONS PER WELL CASING VOLUME 1.6

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 4.9 gal

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED 7:30 TIME EVACUATION COMPLETED 7:37

TIME SAMPLES WERE COLLECTED 1

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 4.9 gal

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR light gray ODOR/SEDIMENT Slight hc / v. slight silt

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	20.1	7.3	620
2	20.1	7.3	580
3	20.1	7.3	570

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-	5	40 ML VOA'S	8015/82608	✓



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APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation

Laboratory Results

Robert Kitay
Aqua Science Engineers, Inc.
55 Oak Court, Suite 220
Danville, CA 94526

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


Dear Mr. Kitay,

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. Testing procedures comply with the 2003 NELAC and TNI 2009 standards. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC.

Kiff Analytical, LLC is certified by the State of California under the Environmental Laboratory Accreditation Program (ELAP), lab number 08263CA.

If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Troy Turpen

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

Case Narrative

Surrogate Recovery for sample MW-3 for test method Mod. EPA 8015 was outside of control limits. This may indicate a bias in the analysis due to the sample's matrix or an interference from compounds present in the sample.

Project Name : **Lim**

Project Number : **2808**

Sample : **MW-1**

Matrix : Water

Lab Number : 88588-01

Sample Date :06/30/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	6.9	0.50	ug/L	EPA 8260B	07/02/14 09:53
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
Diisopropyl ether (DIPE)	1.4	0.50	ug/L	EPA 8260B	07/02/14 09:53
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/02/14 09:53
TPH as Gasoline	400	50	ug/L	EPA 8260B	07/02/14 09:53
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
1,2-Dichloroethane-d4 (Surr)	97.4		% Recovery	EPA 8260B	07/02/14 09:53
Toluene - d8 (Surr)	97.6		% Recovery	EPA 8260B	07/02/14 09:53
TPH as Diesel (Silica Gel)	140	50	ug/L	M EPA 8015	07/09/14 03:36
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel.)					
Octacosane (Silica Gel Surr)	112		% Recovery	M EPA 8015	07/09/14 03:36

Project Name : **Lim**

Project Number : **2808**

Sample : **MW-2**

Matrix : Water

Lab Number : 88588-02

Sample Date :06/30/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	8000	25	ug/L	EPA 8260B	07/08/14 14:39
Toluene	94	4.0	ug/L	EPA 8260B	07/03/14 23:22
Ethylbenzene	290	4.0	ug/L	EPA 8260B	07/03/14 23:22
Total Xylenes	400	4.0	ug/L	EPA 8260B	07/03/14 23:22
Methyl-t-butyl ether (MTBE)	< 4.0	4.0	ug/L	EPA 8260B	07/03/14 23:22
Diisopropyl ether (DIPE)	16	4.0	ug/L	EPA 8260B	07/03/14 23:22
Ethyl-t-butyl ether (ETBE)	< 4.0	4.0	ug/L	EPA 8260B	07/03/14 23:22
Tert-amyl methyl ether (TAME)	< 4.0	4.0	ug/L	EPA 8260B	07/03/14 23:22
Tert-Butanol	66	20	ug/L	EPA 8260B	07/03/14 23:22
TPH as Gasoline	21000	400	ug/L	EPA 8260B	07/03/14 23:22
1,2-Dichloroethane	< 4.0	4.0	ug/L	EPA 8260B	07/03/14 23:22
1,2-Dibromoethane	< 4.0	4.0	ug/L	EPA 8260B	07/03/14 23:22
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	07/03/14 23:22
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	07/03/14 23:22
TPH as Diesel (Silica Gel)	200	50	ug/L	M EPA 8015	07/09/14 03:07
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel.)					
Octacosane (Silica Gel Surr)	115		% Recovery	M EPA 8015	07/09/14 03:07

Project Name : **Lim**

Project Number : **2808**

Sample : **MW-3**

Matrix : Water

Lab Number : 88588-03

Sample Date :06/30/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	4600	15	ug/L	EPA 8260B	07/03/14 23:56
Toluene	6200	15	ug/L	EPA 8260B	07/03/14 23:56
Ethylbenzene	1300	15	ug/L	EPA 8260B	07/03/14 23:56
Total Xylenes	11000	15	ug/L	EPA 8260B	07/03/14 23:56
Methyl-t-butyl ether (MTBE)	< 15	15	ug/L	EPA 8260B	07/03/14 23:56
Diisopropyl ether (DIPE)	< 15	15	ug/L	EPA 8260B	07/03/14 23:56
Ethyl-t-butyl ether (ETBE)	< 15	15	ug/L	EPA 8260B	07/03/14 23:56
Tert-amyl methyl ether (TAME)	< 15	15	ug/L	EPA 8260B	07/03/14 23:56
Tert-Butanol	500	70	ug/L	EPA 8260B	07/03/14 23:56
TPH as Gasoline	97000	1500	ug/L	EPA 8260B	07/03/14 23:56
1,2-Dichloroethane	< 15	15	ug/L	EPA 8260B	07/03/14 23:56
1,2-Dibromoethane	< 15	15	ug/L	EPA 8260B	07/03/14 23:56
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	07/03/14 23:56
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	07/03/14 23:56
TPH as Diesel (Silica Gel)	5900	50	ug/L	M EPA 8015	07/10/14 12:43
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel.)					
Octacosane (Silica Gel Surr)	147		% Recovery	M EPA 8015	07/10/14 12:43

Project Name : **Lim**

Project Number : **2808**

Sample : **MW-4R**

Matrix : Water

Lab Number : 88588-04

Sample Date :06/30/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	1300	2.5	ug/L	EPA 8260B	07/09/14 04:56
Toluene	6.3	0.50	ug/L	EPA 8260B	07/02/14 11:37
Ethylbenzene	1.3	0.50	ug/L	EPA 8260B	07/02/14 11:37
Total Xylenes	16	0.50	ug/L	EPA 8260B	07/02/14 11:37
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 11:37
Diisopropyl ether (DIPE)	0.93	0.50	ug/L	EPA 8260B	07/02/14 11:37
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 11:37
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 11:37
Tert-Butanol	22	5.0	ug/L	EPA 8260B	07/02/14 11:37
TPH as Gasoline	3600	50	ug/L	EPA 8260B	07/02/14 11:37
1,2-Dichloroethane	0.85	0.50	ug/L	EPA 8260B	07/02/14 11:37
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 11:37
1,2-Dichloroethane-d4 (Surr)	96.8		% Recovery	EPA 8260B	07/02/14 11:37
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	07/02/14 11:37
TPH as Diesel (Silica Gel)	340	50	ug/L	M EPA 8015	07/08/14 20:17
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel.)					
Octacosane (Silica Gel Surr)	128		% Recovery	M EPA 8015	07/08/14 20:17

Project Name : **Lim**

Project Number : **2808**

Sample : **MW-5**

Matrix : Water

Lab Number : 88588-05

Sample Date :06/30/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
Diisopropyl ether (DIPE)	0.70	0.50	ug/L	EPA 8260B	07/02/14 09:53
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/02/14 09:53
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/02/14 09:53
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 09:53
1,2-Dichloroethane-d4 (Surr)	99.7		% Recovery	EPA 8260B	07/02/14 09:53
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	07/02/14 09:53
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	07/08/14 23:13
Octacosane (Silica Gel Surr)	112		% Recovery	M EPA 8015	07/08/14 23:13

Project Name : **Lim**

Project Number : **2808**

Sample : **MW-7**

Matrix : Water

Lab Number : 88588-06

Sample Date :06/30/2014

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	12	0.50	ug/L	EPA 8260B	07/02/14 12:09
Toluene	7.3	0.50	ug/L	EPA 8260B	07/02/14 12:09
Ethylbenzene	83	0.50	ug/L	EPA 8260B	07/02/14 12:09
Total Xylenes	63	0.50	ug/L	EPA 8260B	07/02/14 12:09
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 12:09
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 12:09
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 12:09
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 12:09
Tert-Butanol	32	5.0	ug/L	EPA 8260B	07/02/14 12:09
TPH as Gasoline	2700	50	ug/L	EPA 8260B	07/02/14 12:09
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 12:09
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/14 12:09
1,2-Dichloroethane-d4 (Surr)	98.7		% Recovery	EPA 8260B	07/02/14 12:09
Toluene - d8 (Surr)	98.7		% Recovery	EPA 8260B	07/02/14 12:09
TPH as Diesel (Silica Gel)	380	50	ug/L	M EPA 8015	07/08/14 13:08
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
Octacosane (Silica Gel Surr)	129		% Recovery	M EPA 8015	07/08/14 13:08

QC Report : Method Blank Data

Project Name : Lim

Project Number : 2808

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed	Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	07/07/2014	Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/08/2014
Octacosane (Silica Gel Surr)	107		%	M EPA 8015	07/07/2014	Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/08/2014
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2014	Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2014	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/03/2014	Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/03/2014	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/03/2014	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/03/2014	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/03/2014	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/03/2014	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/02/2014
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/03/2014	Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/03/2014	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/02/2014
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/03/2014	1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/03/2014	1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014
1,2-Dichloroethane-d4 (Surr)	104		%	EPA 8260B	07/03/2014	1,2-Dichloroethane-d4 (Surr)	99.4		%	EPA 8260B	07/02/2014
Toluene - d8 (Surr)	102		%	EPA 8260B	07/03/2014	Toluene - d8 (Surr)	102		%	EPA 8260B	07/02/2014
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014						
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014						
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014						
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014						
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014						
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014						
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014						
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/02/2014						
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014						
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/02/2014						
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014						
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/2014						
1,2-Dichloroethane-d4 (Surr)	98.4		%	EPA 8260B	07/02/2014						
Toluene - d8 (Surr)	98.0		%	EPA 8260B	07/02/2014						

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
1,2-Dibromoethane	88580-01	<0.50	39.7	39.9	43.8	43.8	ug/L	EPA 8260B	7/3/14	110	110	0.320	70.0-130	25
1,2-Dichloroethane	88580-01	<0.50	39.4	39.6	46.9	47.5	ug/L	EPA 8260B	7/3/14	119	120	0.830	70.0-130	25
Benzene	88580-01	<0.50	39.4	39.6	43.6	43.2	ug/L	EPA 8260B	7/3/14	110	109	1.25	70.0-130	25
Diisopropyl ether	88580-01	<0.50	39.4	39.6	46.1	46.2	ug/L	EPA 8260B	7/3/14	117	117	0.0912	70.0-130	25
Ethyl-tert-butyl ether	88580-01	<0.50	39.4	39.6	45.6	45.9	ug/L	EPA 8260B	7/3/14	116	116	0.245	70.0-130	25
Ethylbenzene	88580-01	<0.50	39.4	39.6	39.3	39.1	ug/L	EPA 8260B	7/3/14	99.7	98.8	0.967	70.0-130	25
Methyl-t-butyl ether	88580-01	<0.50	39.6	39.7	47.1	48.4	ug/L	EPA 8260B	7/3/14	119	122	2.25	70.0-130	25
P + M Xylene	88580-01	<0.50	39.4	39.6	39.1	38.0	ug/L	EPA 8260B	7/3/14	99.0	96.0	3.13	70.0-130	25
Tert-Butanol	88580-01	<5.0	197	198	213	204	ug/L	EPA 8260B	7/3/14	108	103	4.71	70.0-130	25
Tert-amyl-methyl ether	88580-01	<0.50	39.4	39.6	46.8	46.8	ug/L	EPA 8260B	7/3/14	119	118	0.393	70.0-130	25

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
Toluene	88580-01	<0.50	39.4	39.6	43.5	42.8	ug/L	EPA 8260B	7/3/14	110	108	2.17	70.0-130	25
1,2-Dibromoethane	88588-01	<0.50	40.3	40.3	40.9	41.8	ug/L	EPA 8260B	7/2/14	102	104	2.02	70.0-130	25
1,2-Dichloroethane	88588-01	<0.50	40.0	40.0	38.8	39.6	ug/L	EPA 8260B	7/2/14	97.0	98.9	1.93	70.0-130	25
Benzene	88588-01	6.9	40.0	40.0	44.7	45.7	ug/L	EPA 8260B	7/2/14	94.5	97.0	2.60	70.0-130	25
Diisopropyl ether	88588-01	1.4	40.0	40.0	41.0	42.1	ug/L	EPA 8260B	7/2/14	99.0	102	2.80	70.0-130	25
Ethyl-tert-butyl ether	88588-01	<0.50	40.0	40.0	42.1	43.8	ug/L	EPA 8260B	7/2/14	105	109	3.91	70.0-130	25
Ethylbenzene	88588-01	<0.50	40.0	40.0	39.8	40.9	ug/L	EPA 8260B	7/2/14	99.6	102	2.70	70.0-130	25
Methyl-t-butyl ether	88588-01	<0.50	40.1	40.1	41.8	43.2	ug/L	EPA 8260B	7/2/14	104	108	3.46	70.0-130	25
P + M Xylene	88588-01	<0.50	40.0	40.0	39.5	40.8	ug/L	EPA 8260B	7/2/14	98.8	102	3.34	70.0-130	25

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
Tert-Butanol	88588-01	<5.0	200	200	203	208	ug/L	EPA 8260B	7/2/14	102	104	2.35	70.0-130	25
Tert-amyl-methyl ether	88588-01	<0.50	40.0	40.0	41.7	43.7	ug/L	EPA 8260B	7/2/14	104	109	4.67	70.0-130	25
Toluene	88588-01	<0.50	40.0	40.0	39.5	40.4	ug/L	EPA 8260B	7/2/14	98.8	101	2.32	70.0-130	25
Benzene	88565-04	<0.50	40.0	40.0	41.1	39.5	ug/L	EPA 8260B	7/8/14	103	98.7	4.04	70.0-130	25
Benzene	88641-06	<0.50	40.0	40.0	39.8	40.5	ug/L	EPA 8260B	7/8/14	99.6	101	1.69	70.0-130	25
1,2-Dibromoethane	88588-05	<0.50	40.3	40.3	45.6	45.9	ug/L	EPA 8260B	7/2/14	113	114	0.628	70.0-130	25
1,2-Dichloroethane	88588-05	<0.50	40.0	40.0	44.8	45.1	ug/L	EPA 8260B	7/2/14	112	113	0.498	70.0-130	25
Benzene	88588-05	<0.50	40.0	40.0	43.4	43.6	ug/L	EPA 8260B	7/2/14	108	109	0.632	70.0-130	25
Diisopropyl ether	88588-05	0.70	40.0	40.0	41.1	41.5	ug/L	EPA 8260B	7/2/14	101	102	1.07	70.0-130	25

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
Ethyl-tert-butyl ether	88588-05	<0.50	40.0	40.0	42.3	42.8	ug/L	EPA 8260B	7/2/14	106	107	1.23	70.0-130	25
Ethylbenzene	88588-05	<0.50	40.0	40.0	43.8	44.3	ug/L	EPA 8260B	7/2/14	109	111	1.10	70.0-130	25
Methyl-t-butyl ether	88588-05	<0.50	40.1	40.1	42.2	43.2	ug/L	EPA 8260B	7/2/14	105	108	2.54	70.0-130	25
P + M Xylene	88588-05	<0.50	40.0	40.0	41.5	41.4	ug/L	EPA 8260B	7/2/14	104	103	0.296	70.0-130	25
Tert-Butanol	88588-05	<5.0	200	200	210	213	ug/L	EPA 8260B	7/2/14	105	106	1.17	70.0-130	25
Tert-amyl-methyl ether	88588-05	<0.50	40.0	40.0	44.8	45.7	ug/L	EPA 8260B	7/2/14	112	114	2.08	70.0-130	25
Toluene	88588-05	<0.50	40.0	40.0	44.9	45.1	ug/L	EPA 8260B	7/2/14	112	113	0.449	70.0-130	25
TPH-D (Si Gel)	88568-04	500	1000	1000	1680	1540	ug/L	M EPA 8015	7/7/14	118	104	12.2	70-130	25

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
TPH-D (Si Gel)	1000	ug/L	M EPA 8015	7/7/14	73.9	70-130
1,2-Dibromoethane	40.3	ug/L	EPA 8260B	7/3/14	112	70.0-130
1,2-Dichloroethane	40.0	ug/L	EPA 8260B	7/3/14	120	70.0-130
Benzene	40.0	ug/L	EPA 8260B	7/3/14	111	70.0-130
Diisopropyl ether	40.0	ug/L	EPA 8260B	7/3/14	115	70.0-130
Ethyl-tert-butyl ether	40.0	ug/L	EPA 8260B	7/3/14	115	70.0-130
Ethylbenzene	40.0	ug/L	EPA 8260B	7/3/14	100	70.0-130
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	7/3/14	112	70.0-130
P + M Xylene	40.0	ug/L	EPA 8260B	7/3/14	97.9	70.0-130
Tert-Butanol	200	ug/L	EPA 8260B	7/3/14	104	70.0-130
Tert-amyl-methyl ether	40.0	ug/L	EPA 8260B	7/3/14	116	70.0-130
Toluene	40.0	ug/L	EPA 8260B	7/3/14	111	70.0-130
1,2-Dibromoethane	40.4	ug/L	EPA 8260B	7/2/14	98.2	70.0-130
1,2-Dichloroethane	40.1	ug/L	EPA 8260B	7/2/14	94.5	70.0-130
Benzene	40.1	ug/L	EPA 8260B	7/2/14	93.9	70.0-130
Diisopropyl ether	40.1	ug/L	EPA 8260B	7/2/14	99.0	70.0-130
Ethyl-tert-butyl ether	40.1	ug/L	EPA 8260B	7/2/14	108	70.0-130
Ethylbenzene	40.1	ug/L	EPA 8260B	7/2/14	96.1	70.0-130
Methyl-t-butyl ether	40.2	ug/L	EPA 8260B	7/2/14	108	70.0-130
P + M Xylene	40.1	ug/L	EPA 8260B	7/2/14	96.0	70.0-130

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
TPH as Gasoline	482	ug/L	EPA 8260B	7/2/14	88.5	70.0-130
Tert-Butanol	200	ug/L	EPA 8260B	7/2/14	99.6	70.0-130
Tert-amyl-methyl ether	40.1	ug/L	EPA 8260B	7/2/14	103	70.0-130
Toluene	40.1	ug/L	EPA 8260B	7/2/14	95.8	70.0-130
Benzene	39.8	ug/L	EPA 8260B	7/8/14	97.3	70.0-130
Benzene	39.8	ug/L	EPA 8260B	7/8/14	93.4	70.0-130
1,2-Dibromoethane	40.1	ug/L	EPA 8260B	7/2/14	112	70.0-130
1,2-Dichloroethane	39.8	ug/L	EPA 8260B	7/2/14	111	70.0-130
Benzene	39.8	ug/L	EPA 8260B	7/2/14	107	70.0-130
Diisopropyl ether	39.8	ug/L	EPA 8260B	7/2/14	98.2	70.0-130
Ethyl-tert-butyl ether	39.8	ug/L	EPA 8260B	7/2/14	102	70.0-130
Ethylbenzene	39.8	ug/L	EPA 8260B	7/2/14	109	70.0-130
Methyl-t-butyl ether	39.9	ug/L	EPA 8260B	7/2/14	102	70.0-130
P + M Xylene	39.8	ug/L	EPA 8260B	7/2/14	103	70.0-130
TPH as Gasoline	483	ug/L	EPA 8260B	7/2/14	95.8	70.0-130
Tert-Butanol	199	ug/L	EPA 8260B	7/2/14	105	70.0-130
Tert-amyl-methyl ether	39.8	ug/L	EPA 8260B	7/2/14	110	70.0-130
Toluene	39.8	ug/L	EPA 8260B	7/2/14	112	70.0-130

Chain of Custody

88588

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SAMPLER (SIGNATURE)

PROJECT NAME Lim

JOB NO. 2808

ADDRESS 250 8th Street, Oakland, CA

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	QUANTITY	TPH-GAS /MTBE & BTEX (EPA 5030/8015-8020)	TPH-DIESEL w/ S.O. (EPA 3510/8015) <i>cleaning</i>	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	OIL & GREASE (EPA 5520)	LUFT METALS (5) (EPA 6010+7000)	CAM 17 METALS (EPA 6010+7000)	PCBS (EPA 8082)	ORGANOCHLORINATED PESTICIDES (EPA 8081A)	FUEL OXYGENATES (EPA 8260)	Pb (TOTAL or DISSOLVED) (EPA 6010)	TPH-G, BTEX & 5 OXY's (EPA 8260) + Pb <i>5-uv</i>	COMPOSITE	EDF	HOLD	
MW-1	6-30-14	830	W	5		X															
MW-2		717				X														X	
MW-3		900				X														X	
MW-4R		810				X														X	
MW-5		650				X														X	
MW-7		737				X														X	

01
02
03
04
05
06

RELINQUISHED BY:
R. C. Kelly 7-1-14
 (signature) (time)
 Robert E. Kelly 1215
 (printed name) (date)
 Company-ASE, INC.

RECEIVED BY:
 (signature) (time)
 (printed name) (date)
 Company-

RELINQUISHED BY:
 (signature) (time)
 (printed name) (date)
 Company-

RECEIVED BY LABORATORY
Harold Brown 1220
 (signature) (time)
 Harold Brown
 (printed name) (date)
 Company- *Hill* 07014

COMMENTS:
 TURN AROUND TIME
 STANDARD 24Hr 48Hr 72Hr
 OTHER:

