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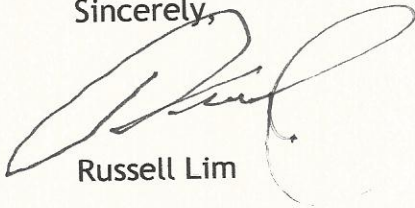
Alameda County Health Care Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

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

February 5, 2016

QUARTERLY GROUNDWATER MONITORING REPORT
JANUARY 2016 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 quarterly 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 January 8, 2016, ASE measured the depth to water in monitoring wells MW-1, MW-2, MW-3, MW-4R, MW-5, and MW-7 using an electric water level sounder. 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. Monitoring well MW-3 contained 0.02-feet of free-floating hydrocarbons floating on the water surface. No free-floating hydrocarbons or sheen were present in any of the other monitoring wells. This is the eighth consecutive sampling event where MW-4R didn't contain free-floating hydrocarbons. 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 at an approximate gradient of 0.006-feet/foot during this sampling period. The gradient and flow direction are generally consistent with previous findings.

3.0 MONITORING WELL SAMPLING

On January 8, 2016, 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 McCampbell Analytical of Pittsburg, 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 McCampbell 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 decreased from the previous sampling event. The only compounds detected this quarter were 130 parts per billion (ppb) TPH-G, 60 ppb TPH-D, and 0.64 ppb benzene. No toluene, ethyl benzene, xylenes, oxygenates, or lead scavengers were detected.
- Hydrocarbon concentrations in groundwater samples collected from monitoring well MW-2 are generally similar to concentrations from the previous sampling event, with a slight increase in TPH-G and decreases in TPH-D and benzene concentrations from the previous sampling event. There has been a long term decreasing trend for hydrocarbon concentrations in this well, although the results during the 2014 through 2016 sampling events are higher than those seen during 2012 and 2013.
- A thickness of 0.02-feet of free-floating hydrocarbons was measured in monitoring well MW-3 this period, although TPH-G, benzene, and toluene concentrations decreased from the previous quarter. TPH-D, ethyl benzene and total xylene concentrations all increased from the previous quarter. Despite the reemergence of free-floating hydrocarbons in this well, there appears to be a decreasing trend in hydrocarbon concentrations in this well.
- No free-floating hydrocarbons were detected in monitoring well MW-4R this period, and no hydrocarbons were detected in groundwater samples from this well for the first time.
- Anomalous hydrocarbon concentrations were detected in groundwater samples collected from MW-5 this quarter. These concentrations included 2,800 ppb TPH-G, 610 ppb TPH-D, 660 ppb benzene, 6.7 ppb toluene, 20 ppb total xylenes, and 100 ppb TBA. This is the first time that significant hydrocarbon concentrations were detected in groundwater samples collected from this well.
- There was a slight decrease in hydrocarbon concentrations detected in groundwater samples collected from monitoring well MW-7 during this sampling event. In general, the concentrations detected this quarter are the second lowest concentrations historically detected at the site and represent a long term decreasing trend in hydrocarbon concentrations for samples collected from this well dating back to 2010.



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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:

- Concentrations of TPH-G in the groundwater sample collected from monitoring well MW-1.
- Concentrations of TPH-G, TPH-D and benzene in the groundwater samples collected from monitoring wells MW-2 and MW-5.
- Concentrations of TPH-G, TPH-D, and BTEX in the groundwater sample collected from monitoring well MW-3 exceeded ESLs.
- Concentrations of TPH-G, TPH-D, benzene and TBA in the groundwater sample collected from monitoring well MW-7 exceeded ESLs.

6.0 RECOMMENDATIONS

ASE recommends continuing groundwater monitoring on a quarterly sampling schedule to monitor for rebound during non-remediation conditions. Based on a quarterly sampling schedule, the next groundwater monitoring event is scheduled for April 2016.

ASE will also conduct a soil vapor survey during the next quarter.

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, Inc. 55 Oak Court, Suite 220, Danville, CA 94526
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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".



Robert E. Kitay, P.G.
Senior Geologist

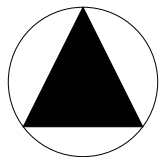
Attachments: Figures 1 and 2
Tables One, Two, and Three
Appendices A and B

cc: Mr. Jerry Wickham, ACHCSA



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



NORTH

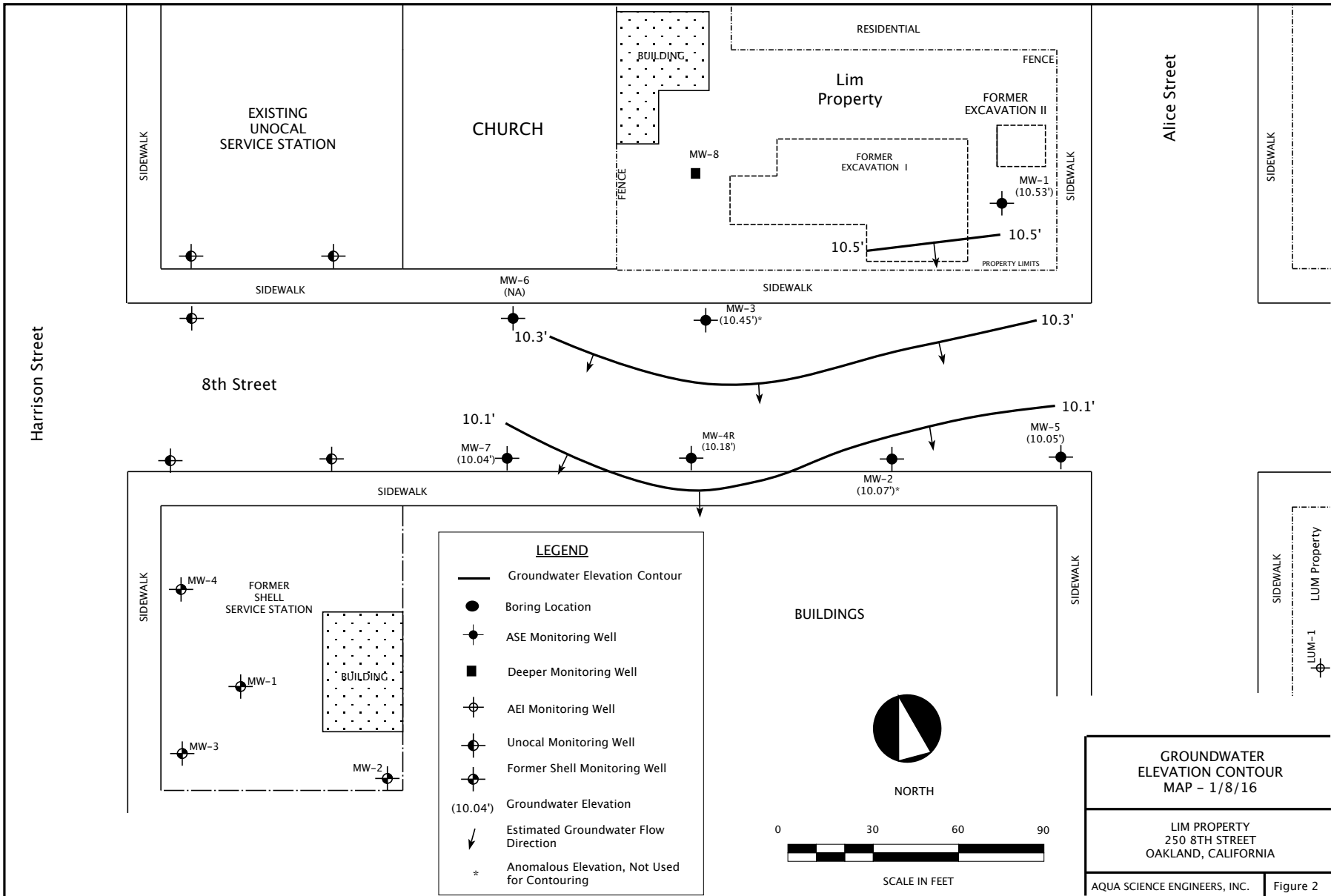
NOT TO SCALE

SITE LOCATION MAP

Lim Family Property
250 8th Street
Oakland, California

Aqua Science Engineers

Figure 1



Harrison Street

8th Street

Alice Street

CHURCH

RESIDENTIAL
Lim Property

EXISTING UNOCAL SERVICE STATION

BUILDING

FORMER EXCAVATION II

FORMER EXCAVATION I

MW-8

MW-1 (10.53')

MW-6 (NA)

MW-3 (10.45)*

10.3'

MW-7 (10.04')

MW-4R (10.18')

MW-5 (10.05')

MW-2 (10.07)*

MW-4

FORMER SHELL SERVICE STATION

MW-1

BUILDING

MW-3

MW-2

BUILDINGS



NORTH

0 30 60 90



SCALE IN FEET

SIDEWALK

SIDEWALK

SIDEWALK

SIDEWALK

SIDEWALK

SIDEWALK

SIDEWALK

SIDEWALK

SIDEWALK

SIDEWALK

LUM Property

LUM-1

FENCE

FENCE

PROPERTY LIMITS

10.5'

10.5'



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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 Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-1	01/30/95	25.51	16.21		9.30
	04/12/95		15.71		9.80
	07/14/95		16.71		8.80
	10/17/95		17.72		7.79
	01/12/96		18.03		7.48
	07/25/96		16.82		8.69
	01/06/97		15.60		9.91
	07/08/97		17.31		8.20
	01/26/98		15.21		10.30
	07/23/98		15.38		10.13
	01/05/99		16.82		8.69
	07/13/99		15.89		9.62
	01/12/00		17.44		8.07
	04/24/00		16.37		9.14
	07/20/00		16.30		9.21
	10/24/00		17.25		8.26
	01/18/01		17.29		8.22
	04/05/01		15.88		9.63
	07/17/01		16.54		8.97
	10/25/01		16.89		8.62
	01/21/02		14.92		10.59
	04/11/02		14.02		11.49
	06/11/02		29.72	15.33	14.39
	09/17/02	15.96		13.76	
	12/18/02	16.14		13.58	
	03/25/03	16.16		13.56	
	06/23/03	16.01		13.71	
	09/26/03	16.57		13.15	
	12/18/03	16.41		13.31	
	03/12/04	14.64		15.08	
	06/17/04	15.71		14.01	
	09/17/04	16.35		13.37	
	12/17/04	16.10		13.62	
	04/28/05	14.10		15.62	
	07/19/05	15.94		13.78	
	10/03/05	16.34		13.38	
	12/06/05	16.21		13.51	
	03/15/06	16.21		13.51	
	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		
12/17/14	18.39		11.33		
06/23/15	19.12		10.60		
09/30/15	19.49		10.23		
01/08/16			19.19	10.53	

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

Well I.D.	Date of Measurement	Top of Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-2	01/30/95	23.99	15.02		8.97
	04/12/95		14.75		9.24
	07/14/95		16.02		7.97
	10/17/95		16.94		7.05
	01/12/96		17.05		6.94
	07/25/96		16.02		7.97
	01/06/97		14.34		9.65
	07/08/97		16.52		7.47
	01/26/98		14.10		9.89
	07/23/98		14.70		9.29
	01/05/99		16.01		7.98
	07/13/99		15.40		8.59
	01/12/00		16.76		7.23
	04/24/00		15.67		8.32
	07/20/00		15.70		8.29
	10/24/00		16.56		7.43
	01/18/01		16.47		7.52
	04/05/01		15.88		8.11
	07/17/01		15.35		8.64
	10/25/01		15.63		8.36
	01/21/02		13.55		10.44
	04/11/02		13.74		10.25
	06/11/02		28.19	14.06	14.13
	09/17/02	14.67		13.52	
	12/18/02	14.88		13.31	
	03/25/03	15.11		13.08	
	06/23/03	14.94		13.25	
	09/26/03	15.49		12.70	
	12/18/03	15.13		13.06	
	03/12/04	13.50		14.69	
	06/17/04	14.63		13.56	
	09/17/04	15.19		13.00	
	12/17/04	14.88		13.31	
	04/28/05	13.39		14.80	
	07/19/05	15.27		12.92	
	10/03/05	15.57		12.62	
	12/06/05	15.35		12.84	
	03/15/06	12.65		15.54	
	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		
12/17/14	17.39		10.80		
06/23/15	18.57		9.62		
09/30/15	18.51		9.68		
01/08/16			18.12		10.07

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

Well I.D.	Date of Measurement	Top of Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-3	01/12/00	24.25	16.68	0.01	7.58*
	04/24/00		15.58	0.15	8.79*
	07/20/00		16.01	0.41	8.57*
	10/24/00		16.95	0.21	7.47*
	01/18/01		16.63	0.21	7.79*
	04/05/01		15.16	0.23	9.27*
	07/17/01		15.92	0.39	8.64*
	10/25/01		16.26	0.38	8.29*
	01/21/02		14.08	0.16	10.30*
	04/11/02		14.59	0.54	10.09*
	06/11/02	28.58	15.16	0.90	14.14*
	09/17/02		16.04	1.24	13.53*
	10/01/02		16.14	1.23	13.42*
	10/25/02		15.80	0.60	13.26*
	11/12/02		15.87	0.47	13.09*
	12/18/02		15.42	0.47	13.54*
	03/25/03		16.11	1.14	13.38*
	06/23/03		16.58	1.86	13.49*
	09/26/03		16.11	0.66	13.00*
	12/18/03		15.83	0.59	13.22*
	03/12/04	14.51	1.21	15.04*	
	06/17/04	15.25	0.68	13.87*	
	09/17/04	16.14	0.96	13.21*	
	12/17/04	15.05	0.25	13.73*	
	01/13/05	13.40	0.45	15.54*	
	04/28/05	15.31	2.43	15.21*	
	07/19/05	16.29	1.67	13.63*	
	10/03/05	16.10	1.47	13.66*	
	12/06/05	15.04	1.17	14.48*	
	03/15/06	12.65	2.41	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				
12/17/14		16.91		11.67	
06/23/15		17.61		10.97	
09/30/15		19.62		8.96	
01/08/16			18.15	0.02	10.45

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Lim Family Property
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Oakland, CA

Well I.D.	Date of Measurement	Top of Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-4	01/12/00	23.71	17.24		6.47
	04/24/00		16.18		7.53
	07/20/00		16.18		7.53
	10/24/00		17.03		6.68
	01/18/01		16.87		6.84
	04/05/01		15.28		8.43
	07/17/01		15.92		7.79
	10/25/01		16.23		7.48
	01/21/01		14.14		9.57
	04/11/02		14.43		9.28
	06/11/02	28.61	14.72		13.89
	09/17/02		15.29		13.32
	12/18/02		15.20		13.41
	03/25/03		15.53		13.08
	06/23/03		15.35		13.26
	09/26/03		15.91		12.70
	12/18/03		15.63		12.98
	03/12/04		13.88		14.73
	06/17/04		15.03		13.58
	09/17/04		15.61		13.00
	12/17/04		15.32		13.29
	04/28/05		13.82		14.79
	07/19/05		15.44		13.17
	10/03/05		15.91		12.70
	12/06/05		15.71		12.90
	03/15/06		13.05		15.56
	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
	12/17/14		17.95		10.83
	06/23/15		18.35		10.43
	09/30/15		18.96		9.82
01/08/16	18.60			10.18	

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

Well I.D.	Date of Measurement	Top of Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-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	
12/17/14		17.46		10.94	
06/23/15		18.12		10.28	
09/30/15		18.74		9.66	
01/08/16			18.35		10.05

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

Well I.D.	Date of Measurement	Top of Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)	
MW-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 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	
12/17/14		18.75		10.20	
06/23/15		18.75		10.20	
09/30/15		19.25		9.70	
01/08/16			18.91		10.04
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	DIPE	TBA	Other Oxys	EDC	EDB
MW-1												
01/30/95	740	200	3	5	1	4	--	---	---	---	---	---
04/12/95	400	500	< 0.5	< 0.5	3	< 2	--	---	---	---	---	---
07/14/95	520	400	1	< 0.5	2	3	--	---	---	---	---	---
10/17/95	400	200	0.5	1	3	< 2	--	---	---	---	---	---
01/12/96	120	890	< 0.5	< 0.5	< 0.5	< 1.0	< 2.0	---	---	---	---	---
07/08/96	320	300	0.52	2.7	1.2	2.3	< 5.0	---	---	---	---	---
01/06/97	110	75	< 0.5	0.68	< 0.5	< 0.5	< 5.0	---	---	---	---	---
07/08/97	380	290	< 0.5	1.5	1.4	1.9	< 5.0	---	---	---	< 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	< 5.0	< 0.50	< 0.50	< 0.50
11/21/06	220	160	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 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	2.6	< 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
12/17/14	520	77	11	< 0.50	< 0.50	1.8	< 0.50	0.56	< 5.0	< 0.50	< 0.50	< 0.50
06/23/15	380	130	3.2	< 0.50	< 0.50	0.92	< 0.50	< 0.50	2.2	< 0.50	< 0.50	< 0.50
09/30/15	210	280	1.2	< 0.50	< 0.50	< 0.50	< 0.50	0.59	4.3	< 0.50	< 0.50	< 0.50
01/08/16	130	60	0.64	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0	< 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	DIPE	TBA	Other Oxys	EDC	EDB
MW-2												
01/30/95	88,000	800	19,000	18,000	2,400	10,000	--	--	--	--	--	--
04/12/95	110,000	990	21,000	28,000	2,800	14,000	--	--	--	--	--	--
07/14/95	120,000	5,000	20,000	25,000	3,200	15,000	--	--	--	--	--	--
10/17/95	190,000	4,000	15,000	26,000	4,900	23,000	--	--	--	--	--	--
01/12/96	32,000	2,600	10,000	8,000	1,100	4,800	< 2	--	--	--	--	--
07/08/96	110,000	2,500	20,000	18,000	2,500	12,000	< 500	--	--	--	--	--
01/06/97	230,000	37,000	11,000	19,000	4,300	20,000	< 1,200	--	--	--	--	--
07/08/97	91,000	35,000	16,000	20,000	2,700	13,000	< 1,000	--	--	--	< 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	< 15	< 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
12/17/14	27,000	180	7,600	53	100	210	< 15	< 15	< 70	< 15	< 15	< 15
06/23/15	17,000	1,400	7,800	< 250	< 250	560	< 250	< 250	< 1,000	< 250	< 250	< 250
09/30/15	11,000	1,500	8,900	< 500	< 500	< 500	< 500	< 500	< 2,000	< 500	< 500	< 500
01/08/16	12,000	1,000	7,000	< 120	< 120	< 120	< 120	< 120	< 500	< 120	< 120	< 120

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-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											
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											
12/06/05	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
12/17/14	53,000	8,300	1,800	1,200	560	5,300	< 9.0	< 9.0	400	< 9.0	10	< 9.0
06/23/15	27,000	13,000	3,500	390	580	4,600	< 50	< 50	420	< 50	< 50	< 50
09/30/15	77,000	130,000	4,100	1,000	870	9,100	< 100	< 100	< 400	< 100	< 100	< 100
01/08/16	47,000	220,000	3,900	440	1,200	10,000	< 100	< 100	< 400	< 100	< 100	< 100

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-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
12/17/14	210	240	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/23/15	200	99	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0	< 0.50	< 0.50	< 0.50
09/30/15	1,800	600	650	< 17	< 17	18	< 17	< 17	78	< 17	< 17	< 17
01/08/16	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.0	< 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	DIPE	TBA	Other Oxys	EDC	EDB
MW-5												
06/11/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	28	---	---	---	< 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
12/17/14	100	< 50	21	0.56	< 0.50	< 0.50	< 0.50	1.2	< 5.0	< 0.50	< 0.50	< 0.50
06/23/15	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.53	< 2.0	< 0.50	< 0.50	< 0.50
09/30/15	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.54	< 2.0	< 0.50	< 0.50	< 0.50
01/08/16	2,800	610	660	6.7	< 5.0	20	< 5.0	< 5.0	100	< 5.0	< 5.0	< 5.0

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	DIPE	TBA	Other Oxys	EDC	EDB
MW-7												
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
12/17/14	3,300	700	3.0	8.3	31	200	< 0.50	< 0.50	14	< 0.50	< 0.50	< 0.50
06/23/15	440	180	< 0.50	0.50	2.7	4.9	< 0.50	< 0.50	5.3	< 0.50	< 0.50	< 0.50
09/30/15	700	610	2.6	2.2	7.2	13	< 0.50	< 0.50	27	< 0.50	< 0.50	< 0.50
01/08/16	480	470	1.3	0.63	6.6	16	< 0.50	< 0.50	9.5	< 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
12/17/14												No Longer Sampled
06/23/15												No Longer Sampled
09/30/15												No Longer Sampled
01/08/16												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 1-8-16

WELL ID. MW-1 SAMPLER RK

TOTAL DEPTH OF WELL 26.80 WELL DIAMETER 2"

DEPTH TO WATER PRIOR TO PURGING 19.19 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 7.41

NUMBER OF GALLONS PER WELL CASING VOLUME 1.3

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

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

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED 900 TIME EVACUATION COMPLETED 920

TIME SAMPLES WERE COLLECTED 930

DID WELL GO DRY NO AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 3.9 gal

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR slight red-brown ODOR/SEDIMENT slight hc

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	21.0°C	6.2	450 μ S
2	21.3	6.0	500
3	21.3	6.0	510

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-1	5	40-ml VOA	8015/8240	HC1

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME Lim
 JOB NUMBER 2808
 WELL ID. MW-2 DATE OF SAMPLING 1-8-16
 TOTAL DEPTH OF WELL 26.80 SAMPLER RC
 DEPTH TO WATER PRIOR TO PURGING 18.12 WELL DIAMETER 2"
 PRODUCT THICKNESS 0 TIME OF MEASUREMENT
 DEPTH OF WELL CASING IN WATER 8.68
 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 4.2 gal
 EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER
 TIME EVACUATION STARTED 1430 TIME EVACUATION COMPLETED 1450
 TIME SAMPLES WERE COLLECTED 1500
 DID WELL GO DRY No AFTER HOW MANY GALLONS ---
 VOLUME OF GROUNDWATER PURGED 4.2 gal
 SAMPLING DEVICE NEW DISPOSABLE BAILER
 SAMPLE COLOR clear ODOR/SEDIMENT Mod he / None

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	20.4	6.6	760
2	20.5	6.5	740
3	20.5	6.5	730

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-2	5	40-ml VOA	8015/8260	H4

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME Lim

JOB NUMBER 2808 DATE OF SAMPLING 1-8-16

WELL ID. MW-3 SAMPLER RK

TOTAL DEPTH OF WELL 30.0' WELL DIAMETER 2"

DEPTH TO WATER PRIOR TO PURGING 18.15 TIME OF MEASUREMENT

PRODUCT THICKNESS (18.13') 0.02'

DEPTH OF WELL CASING IN WATER 11.85

NUMBER OF GALLONS PER WELL CASING VOLUME 2

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 6

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED 1330 TIME EVACUATION COMPLETED 1350

TIME SAMPLES WERE COLLECTED 1400

DID WELL GO DRY NO AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 6.0 gal

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR black ODOR/SEDIMENT v. strong / mod silt

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
<u>MW-3</u>	<u>5</u>	<u>40-ml VOA</u>	<u>8015/82605</u>	<u>UC</u>

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME Lim

JOB NUMBER 2808 DATE OF SAMPLING 1-8-16

WELL ID. MW-4R SAMPLER PK

TOTAL DEPTH OF WELL 28.0' WELL DIAMETER 2"

DEPTH TO WATER PRIOR TO PURGING 18.60 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 9.4

NUMBER OF GALLONS PER WELL CASING VOLUME 6.2

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 18.6

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED 1100 TIME EVACUATION COMPLETED 1205

TIME SAMPLES WERE COLLECTED 1210

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 18.6 gal

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR clear ODOR/SEDIMENT Moderate bc / none

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	20.5	5.7	1090
2	21.2	6.5	970
3	21.1	6.5	980

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-4R	5	40-ml VOA	8015/8260	H4

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME Lim

JOB NUMBER 2808 DATE OF SAMPLING 1-8-15

WELL ID. MW-5 SAMPLER RK

TOTAL DEPTH OF WELL 29.6 WELL DIAMETER 2"

DEPTH TO WATER PRIOR TO PURGING 18.35 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 11.25

NUMBER OF GALLONS PER WELL CASING VOLUME 1.9

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 5.7 gal ^{BY} 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 5.7 gal

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED 12:30 TIME EVACUATION COMPLETED 12:50

TIME SAMPLES WERE COLLECTED 12:55

DID WELL GO DRY No AFTER HOW MANY GALLONS ————

VOLUME OF GROUNDWATER PURGED 5.7 gal

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR yellow brown ODOR/SEDIMENT None / yellow brown silt

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	20.1	6.7	670
2	20.1	6.4	660
3	20.1	6.4	660

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-5	5	40-ml VOA	8015/8260	HCl

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME <u>Lim</u>	
JOB NUMBER <u>2808</u>	DATE OF SAMPLING <u>1-8-16</u>
WELL ID. <u>MW-7</u>	SAMPLER <u>RC</u>
TOTAL DEPTH OF WELL <u>28.0'</u>	WELL DIAMETER <u>2"</u>
DEPTH TO WATER PRIOR TO PURGING <u>18.91</u>	TIME OF MEASUREMENT
PRODUCT THICKNESS <u>0</u>	
DEPTH OF WELL CASING IN WATER <u>9.09</u>	
NUMBER OF GALLONS PER WELL CASING VOLUME <u>1.5</u>	
NUMBER OF WELL CASING VOLUMES TO BE REMOVED <u>3</u>	
REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING <u>4.5 gal</u>	
EQUIPMENT USED TO PURGE WELL	<u>NEW DISPOSABLE BAILER</u>
TIME EVACUATION STARTED <u>10:10</u>	TIME EVACUATION COMPLETED <u>1035</u>
TIME SAMPLES WERE COLLECTED <u>1040</u>	
DID WELL GO DRY <u>no</u>	AFTER HOW MANY GALLONS <u>—</u>
VOLUME OF GROUNDWATER PURGED <u>4.5 gal</u>	
SAMPLING DEVICE	<u>NEW DISPOSABLE BAILER</u>
SAMPLE COLOR <u>slight gray</u>	ODOR/SEDIMENT <u>mod hc / v. little silt</u>

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
<u>1</u>	<u>20.3</u>	<u>6.8</u>	<u>400</u>
<u>2</u>	<u>20.4</u>	<u>6.3</u>	<u>380</u>
<u>3</u>	<u>20.4</u>	<u>6.3</u>	<u>380</u>

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
<u>MW-7</u>	<u>5</u>	<u>40-ml VOA</u>	<u>8015/8260</u>	<u>174</u>



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APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1601300 **Amended:** 01/28/2016

Report Created for: Aqua Science Engineers, Inc.

55 Oak Court Suite 220
Danville, CA 94526

Project Contact: Robert Kitay

Project P.O.:

Project Name: Lim

Project Received: 01/11/2016

Analytical Report reviewed & approved for release on 01/20/2016 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: Aqua Science Engineers, Inc.
Project: Lim
WorkOrder: 1601300

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: Aqua Science Engineers, Inc.
Project: Lim
WorkOrder: 1601300

Analytical Qualifiers

b6	lighter than water immiscible sheen/product is present
e4	gasoline range compounds are significant.
e7	oil range compounds are significant
e8	kerosene/kerosene range/jet fuel range
e11/e4	stoddard solvent/mineral spirit (?); and/or gasoline range compounds are significant.
e11	stoddard solvent/mineral spirit (?)



Analytical Report

Client: Aqua Science Engineers, Inc.
Date Received: 1/11/16 20:28
Date Prepared: 1/15/16-1/20/16
Project: Lim

WorkOrder: 1601300
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Oxygenates, MBTEX & Lead Scavengers by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	1601300-001A	Water	01/08/2016 09:30	GC16	115372

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/20/2016 11:53
Benzene	0.64	0.50	1	01/20/2016 11:53
t-Butyl alcohol (TBA)	ND	2.0	1	01/20/2016 11:53
1,2-Dibromoethane (EDB)	ND	0.50	1	01/20/2016 11:53
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/20/2016 11:53
Diisopropyl ether (DIPE)	ND	0.50	1	01/20/2016 11:53
Ethylbenzene	ND	0.50	1	01/20/2016 11:53
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/20/2016 11:53
Methyl-t-butyl ether (MTBE)	ND	0.50	1	01/20/2016 11:53
Toluene	ND	0.50	1	01/20/2016 11:53
Xylenes, Total	ND	0.50	1	01/20/2016 11:53
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	74	70-130		01/20/2016 11:53
Toluene-d8	71	70-130		01/20/2016 11:53

Analyst(s): AK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	1601300-002A	Water	01/08/2016 15:00	GC16	115423

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	120	250	01/20/2016 13:21
Benzene	7000	120	250	01/20/2016 13:21
t-Butyl alcohol (TBA)	ND	500	250	01/20/2016 13:21
1,2-Dibromoethane (EDB)	ND	120	250	01/20/2016 13:21
1,2-Dichloroethane (1,2-DCA)	ND	120	250	01/20/2016 13:21
Diisopropyl ether (DIPE)	ND	120	250	01/20/2016 13:21
Ethylbenzene	ND	120	250	01/20/2016 13:21
Ethyl tert-butyl ether (ETBE)	ND	120	250	01/20/2016 13:21
Methyl-t-butyl ether (MTBE)	ND	120	250	01/20/2016 13:21
Toluene	ND	120	250	01/20/2016 13:21
Xylenes, Total	ND	120	250	01/20/2016 13:21
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	76	70-130		01/20/2016 13:21
Toluene-d8	71	70-130		01/20/2016 13:21

Analyst(s): AK

(Cont.)



Analytical Report

Client: Aqua Science Engineers, Inc.
Date Received: 1/11/16 20:28
Date Prepared: 1/15/16-1/20/16
Project: Lim

WorkOrder: 1601300
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Oxygenates, MBTEX & Lead Scavengers by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	1601300-003A	Water	01/08/2016 13:30	GC16	115423

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	100	200	01/20/2016 16:39
Benzene	3900	100	200	01/20/2016 16:39
t-Butyl alcohol (TBA)	ND	400	200	01/20/2016 16:39
1,2-Dibromoethane (EDB)	ND	100	200	01/20/2016 16:39
1,2-Dichloroethane (1,2-DCA)	ND	100	200	01/20/2016 16:39
Diisopropyl ether (DIPE)	ND	100	200	01/20/2016 16:39
Ethylbenzene	1200	100	200	01/20/2016 16:39
Ethyl tert-butyl ether (ETBE)	ND	100	200	01/20/2016 16:39
Methyl-t-butyl ether (MTBE)	ND	100	200	01/20/2016 16:39
Toluene	440	100	200	01/20/2016 16:39
Xylenes, Total	10,000	100	200	01/20/2016 16:39
Surrogates	REC (%)	Limits		
Dibromofluoromethane	75	70-130		01/20/2016 16:39
Toluene-d8	71	70-130		01/20/2016 16:39

Analyst(s): AK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4R	1601300-004A	Water	01/08/2016 12:10	GC28	115423

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/15/2016 02:21
Benzene	ND	0.50	1	01/15/2016 02:21
t-Butyl alcohol (TBA)	ND	2.0	1	01/15/2016 02:21
1,2-Dibromoethane (EDB)	ND	0.50	1	01/15/2016 02:21
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/15/2016 02:21
Diisopropyl ether (DIPE)	ND	0.50	1	01/15/2016 02:21
Ethylbenzene	ND	0.50	1	01/15/2016 02:21
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/15/2016 02:21
Methyl-t-butyl ether (MTBE)	ND	0.50	1	01/15/2016 02:21
Toluene	ND	0.50	1	01/15/2016 02:21
Xylenes, Total	ND	0.50	1	01/15/2016 02:21
Surrogates	REC (%)	Limits		
Dibromofluoromethane	86	70-130		01/15/2016 02:21
Toluene-d8	74	70-130		01/15/2016 02:21

Analyst(s): KF

(Cont.)



Analytical Report

Client: Aqua Science Engineers, Inc.
Date Received: 1/11/16 20:28
Date Prepared: 1/15/16-1/20/16
Project: Lim

WorkOrder: 1601300
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Oxygenates, MBTEX & Lead Scavengers by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	1601300-005A	Water	01/08/2016 12:55	GC28	115423

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	5.0	10	01/15/2016 02:59
Benzene	660	10	20	01/20/2016 14:40
t-Butyl alcohol (TBA)	100	20	10	01/15/2016 02:59
1,2-Dibromoethane (EDB)	ND	5.0	10	01/15/2016 02:59
1,2-Dichloroethane (1,2-DCA)	ND	5.0	10	01/15/2016 02:59
Diisopropyl ether (DIPE)	ND	5.0	10	01/15/2016 02:59
Ethylbenzene	ND	5.0	10	01/15/2016 02:59
Ethyl tert-butyl ether (ETBE)	ND	5.0	10	01/15/2016 02:59
Methyl-t-butyl ether (MTBE)	ND	5.0	10	01/15/2016 02:59
Toluene	6.7	5.0	10	01/15/2016 02:59
Xylenes, Total	20	5.0	10	01/15/2016 02:59
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	82	70-130		01/15/2016 02:59
Toluene-d8	72	70-130		01/15/2016 02:59

Analyst(s): AK, KF

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	1601300-006A	Water	01/08/2016 10:40	GC16	115423

Analytes	Result	RL	DF	Date Analyzed
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/20/2016 16:00
Benzene	1.3	0.50	1	01/20/2016 16:00
t-Butyl alcohol (TBA)	9.5	2.0	1	01/20/2016 16:00
1,2-Dibromoethane (EDB)	ND	0.50	1	01/20/2016 16:00
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/20/2016 16:00
Diisopropyl ether (DIPE)	ND	0.50	1	01/20/2016 16:00
Ethylbenzene	6.6	0.50	1	01/20/2016 16:00
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/20/2016 16:00
Methyl-t-butyl ether (MTBE)	ND	0.50	1	01/20/2016 16:00
Toluene	0.63	0.50	1	01/20/2016 16:00
Xylenes, Total	16	0.50	1	01/20/2016 16:00
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	76	70-130		01/20/2016 16:00
Toluene-d8	72	70-130		01/20/2016 16:00

Analyst(s): AK



Analytical Report

Client: Aqua Science Engineers, Inc.
Date Received: 1/11/16 20:28
Date Prepared: 1/20/16
Project: Lim

WorkOrder: 1601300
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	1601300-001A	Water	01/08/2016 09:30	GC16	115372

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	130	50	1	01/20/2016 11:53

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	94	70-130	01/20/2016 11:53

Analyst(s): AK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	1601300-002A	Water	01/08/2016 15:00	GC16	115423

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	12,000	2500	50	01/20/2016 03:35

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	97	70-130	01/20/2016 03:35

Analyst(s): KF

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	1601300-003A	Water	01/08/2016 13:30	GC16	115423

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	47,000	10,000	200	01/20/2016 16:39

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	94	70-130	01/20/2016 16:39

Analyst(s): AK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4R	1601300-004A	Water	01/08/2016 12:10	GC16	115423

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	01/20/2016 02:56

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	95	70-130	01/20/2016 02:56

Analyst(s): KF

(Cont.)



Analytical Report

Client: Aqua Science Engineers, Inc.
Date Received: 1/11/16 20:28
Date Prepared: 1/20/16
Project: Lim

WorkOrder: 1601300
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	1601300-005A	Water	01/08/2016 12:55	GC16	115423

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	2800	500	10	01/20/2016 04:14

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	98	70-130	01/20/2016 04:14

Analyst(s): KF

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	1601300-006A	Water	01/08/2016 10:40	GC16	115423

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	480	50	1	01/20/2016 16:00

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	96	70-130	01/20/2016 16:00

Analyst(s): AK



Analytical Report

Client: Aqua Science Engineers, Inc.
Date Received: 1/11/16 20:28
Date Prepared: 1/14/16
Project: Lim

WorkOrder: 1601300
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/ SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-1	1601300-001C	Water	01/08/2016 09:30	GC39A	115381
<u>Analytes</u>					
TPH-Diesel (C10-C23)	60		RL 50	DF 1	Date Analyzed 01/14/2016 22:28
<u>Surrogates</u>					
C9	106		Limits 70-130		01/14/2016 22:28
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e8		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-2	1601300-002C	Water	01/08/2016 15:00	GC39A	115381
<u>Analytes</u>					
TPH-Diesel (C10-C23)	1000		RL 50	DF 1	Date Analyzed 01/14/2016 23:46
<u>Surrogates</u>					
C9	107		Limits 70-130		01/14/2016 23:46
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e4		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-3	1601300-003C	Water	01/08/2016 13:30	GC6B	115381
<u>Analytes</u>					
TPH-Diesel (C10-C23)	220,000		RL 500	DF 5	Date Analyzed 01/15/2016 14:08
<u>Surrogates</u>					
C26	119		Limits 70-130		01/15/2016 14:08
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e11,e7,b6		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-4R	1601300-004C	Water	01/08/2016 12:10	GC39A	115381
<u>Analytes</u>					
TPH-Diesel (C10-C23)	ND		RL 50	DF 1	Date Analyzed 01/15/2016 01:04
<u>Surrogates</u>					
C9	104		Limits 70-130		01/15/2016 01:04
<u>Analyst(s):</u> TK					

(Cont.)



Analytical Report

Client: Aqua Science Engineers, Inc.
Date Received: 1/11/16 20:28
Date Prepared: 1/14/16
Project: Lim

WorkOrder: 1601300
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/ SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-5	1601300-005C	Water	01/08/2016 12:55	GC39A	115381
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	610		50	1	01/15/2016 02:22
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	105		70-130		01/15/2016 02:22
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e4		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW-7	1601300-006C	Water	01/08/2016 10:40	GC39A	115381
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	470		50	1	01/15/2016 03:40
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	105		70-130		01/15/2016 03:40
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e11/e4		



Quality Control Report

Client: Aqua Science Engineers, Inc.
Date Prepared: 1/13/16
Date Analyzed: 1/13/16
Instrument: GC16
Matrix: Water
Project: Lim

WorkOrder: 1601300
BatchID: 115372
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-115372
 1601395-006AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	9.90	0.50	10	-	99	54-140
Benzene	ND	9.99	0.50	10	-	100	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	37.2	2.0	40	-	93	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	-	0.50	-	-	-	-
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	9.33	0.50	10	-	93	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	10.1	0.50	10	-	101	66-125
1,1-Dichloroethene	ND	-	0.50	-	-	-	-
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-

(Cont.)



Quality Control Report

Client: Aqua Science Engineers, Inc.
Date Prepared: 1/13/16
Date Analyzed: 1/13/16
Instrument: GC16
Matrix: Water
Project: Lim

WorkOrder: 1601300
BatchID: 115372
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-115372
 1601395-006AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	10.1	0.50	10	-	101	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	10.1	0.50	10	-	101	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	9.79	0.50	10	-	98	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	9.43	0.50	10	-	94	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	-	0.50	-	-	-	-
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

(Cont.)



Quality Control Report

Client: Aqua Science Engineers, Inc.
Date Prepared: 1/13/16
Date Analyzed: 1/13/16
Instrument: GC16
Matrix: Water
Project: Lim

WorkOrder: 1601300
BatchID: 115372
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-115372
 1601395-006AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	19.5	19.6		25	78	78	70-130
Toluene-d8	17.6	17.8		25	70	71	70-130
4-BFB	1.82	-		2.5	73	-	-

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	10.7	10.3	10	ND	107	103	69-139	3.94	20
Benzene	10.1	10.0	10	ND	101	100	69-141	0.982	20
t-Butyl alcohol (TBA)	38.9	37.7	40	ND	97	94	41-152	3.11	20
1,2-Dibromoethane (EDB)	9.51	9.48	10	ND	95	95	76-135	0	20
1,2-Dichloroethane (1,2-DCA)	10.6	10.4	10	ND	106	104	73-139	1.34	20
Diisopropyl ether (DIPE)	10.4	10.2	10	ND	104	102	72-140	1.46	20
Ethyl tert-butyl ether (ETBE)	10.6	10.4	10	ND	106	104	71-140	1.46	20
Methyl-t-butyl ether (MTBE)	10.3	10.2	10	ND	103	103	73-139	0	20
Toluene	9.40	9.10	10	ND	94	91	71-128	3.22	20
Surrogate Recovery									
Dibromofluoromethane	19.6	19.8	25		78	79	70-130	1.38	20
Toluene-d8	17.7	17.6	25		71	70	70-130	0.382	20

(Cont.)



Quality Control Report

Client: Aqua Science Engineers, Inc.
Date Prepared: 1/14/16
Date Analyzed: 1/14/16
Instrument: GC28
Matrix: Water
Project: Lim

WorkOrder: 1601300
BatchID: 115423
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-115423
 1601398-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	7.83	0.50	10	-	78	54-140
Benzene	ND	9.51	0.50	10	-	95	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	45.4	2.0	40	-	113	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	-	0.50	-	-	-	-
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	8.60	0.50	10	-	86	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	8.55	0.50	10	-	85	66-125
1,1-Dichloroethene	ND	-	0.50	-	-	-	-
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-

(Cont.)



Quality Control Report

Client: Aqua Science Engineers, Inc.
Date Prepared: 1/14/16
Date Analyzed: 1/14/16
Instrument: GC28
Matrix: Water
Project: Lim

WorkOrder: 1601300
BatchID: 115423
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-115423
 1601398-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	9.79	0.50	10	-	98	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	9.34	0.50	10	-	93	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	11.0	0.50	10	-	110	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	8.41	0.50	10	-	84	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	-	0.50	-	-	-	-
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

(Cont.)



Quality Control Report

Client: Aqua Science Engineers, Inc.
Date Prepared: 1/14/16
Date Analyzed: 1/14/16
Instrument: GC28
Matrix: Water
Project: Lim

WorkOrder: 1601300
BatchID: 115423
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-115423
 1601398-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	21.7	21.7		25	87	87	70-130
Toluene-d8	18.9	18.7		25	76	75	70-130
4-BFB	2.02	-		2.5	81	-	-

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	9.21	9.27	10	ND	92	93	69-139	0.637	20
Benzene	10.3	10.1	10	ND	103	101	69-141	1.74	20
t-Butyl alcohol (TBA)	59.5	58.7	40	ND	149	147	41-152	1.27	20
1,2-Dibromoethane (EDB)	10.1	10.2	10	ND	101	102	76-135	0.929	20
1,2-Dichloroethane (1,2-DCA)	9.37	9.57	10	ND	94	96	73-139	2.16	20
Diisopropyl ether (DIPE)	10.4	10.7	10	ND	104	107	72-140	2.86	20
Ethyl tert-butyl ether (ETBE)	10.1	10.6	10	ND	101	106	71-140	5.01	20
Methyl-t-butyl ether (MTBE)	12.4	13.2	10	ND	124	132	73-139	6.12	20
Toluene	8.83	8.52	10	ND	87	84	71-128	3.52	20
Surrogate Recovery									
Dibromofluoromethane	22.1	22.2	25		88	89	73-131	0.265	20
Toluene-d8	18.2	18.5	25		73	74	72-117	1.64	20

CLIENT: Aqua Science Engineers, Inc.

Work Order: 1601300

Project: Lim

ANALYTICAL QC SUMMARY REPORT

BatchID: 115372

SampleID MB-115372	TestCode: 8260GAS_W	Units: µg/L	Prep Date: 1/20/2016
Batch ID: 115372	TestNo: SW8260B	Run ID: GC16_160121A	Analysis Date: 1/20/2016
Analyte	Result	PQL SPKValue SPKRefVal %REC Limits	RPDRefVal %RPD RPDLimit Qual

TPH(g)	ND	50	-
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Surrogate Recovery

Dibromofluoromethane	23.9	25	96	70 - 130
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Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

CLIENT: Aqua Science Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Work Order: 1601300

Project: Lim

BatchID: 115372

SampleID	LCS-115372	TestCode:	8260GAS_W	Units:	µg/L	Prep Date:	1/20/2016			
Batch ID:	115372	TestNo:	SW8260B	Run ID:	GC16_160121A	Analysis Date:	1/20/2016			
Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual

VOC (C6-C12)	555	50	644	0	86	75 - 105				
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Surrogate Recovery

Dibromofluoromethane	24.0		25		96	70 - 130				
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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: Aqua Science Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Work Order: 1601300

Project: Lim

BatchID: 115423

SampleID MB-115423	TestCode: 8260GAS_W	Units: µg/L	Prep Date: 1/20/2016
Batch ID: 115423	TestNo: SW8260B	Run ID: GC16_160120D	Analysis Date: 1/20/2016
Analyte	Result	PQL SPKValue SPKRefVal %REC Limits	RPDRefVal %RPD RPDLimit Qual

TPH(g)	ND	50	-						
Surrogate Recovery									
Dibromofluoromethane	23.9		25		96	70 - 130			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: Aqua Science Engineers, Inc.

ANALYTICAL QC SUMMARY REPORT

Work Order: 1601300

Project: Lim

BatchID: 115423

SampleID	LCS-115423	TestCode:	8260GAS_W	Units:	µg/L	Prep Date:	1/20/2016			
Batch ID:	115423	TestNo:	SW8260B	Run ID:	GC16_160120D	Analysis Date:	1/20/2016			
Analyte	Result	PQL	SPKValue	SPKRefVal	%REC	Limits	RPDRefVal	%RPD	RPDLimit	Qual

VOC (C6-C12)	555	50	644	0	86	75 - 105				
--------------	-----	----	-----	---	----	----------	--	--	--	--

Surrogate Recovery

Dibromofluoromethane	24.0		25		96	70 - 130				
----------------------	------	--	----	--	----	----------	--	--	--	--

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range



Quality Control Report

Client: Aqua Science Engineers, Inc.
Date Prepared: 1/14/16
Date Analyzed: 1/14/16
Instrument: GC11B, GC39A
Matrix: Water
Project: Lim

WorkOrder: 1601300
BatchID: 115381
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L
Sample ID: MB/LCS-115381

QC Report for SW8015B w/ SG Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	1150	50	1000	-	115	59-151
TPH-Motor Oil (C18-C36)	ND	-	250	-	-	-	-
Surrogate Recovery							
C9	642	677		625	103	108	65-122



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1601300

ClientCode: ASED

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:
 Robert Kitay
 Aqua Science Engineers, Inc.
 55 Oak Court Suite 220
 Danville, CA 94526
 (925) 820-9391 FAX: (925) 837-4853

Email: rkitay@aquascienceengineers.com
 cc/3rd Party:
 PO:
 ProjectNo: Lim

Bill to:
 Diane Schiell
 Aqua Science Engineers, Inc.
 217 Wild Flower Drive
 Roseville, CA 95678
 deezthng22@yahoo.com

Requested TAT: 5 days;

Date Received: 01/11/2016
Date Logged: 01/11/2016

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1601300-001	MW-1	Water	1/8/2016 9:30	<input type="checkbox"/>	B	A											
1601300-002	MW-2	Water	1/8/2016 15:00	<input type="checkbox"/>	B	A											
1601300-003	MW-3	Water	1/8/2016 13:30	<input type="checkbox"/>	B	A											
1601300-004	MW-4R	Water	1/8/2016 12:10	<input type="checkbox"/>	B	A											
1601300-005	MW-5	Water	1/8/2016 12:55	<input type="checkbox"/>	B	A											
1601300-006	MW-7	Water	1/8/2016 10:40	<input type="checkbox"/>	B	A											

Test Legend:

1	8260B_5OXYPBSCV_W	2	G-MBTX_W	3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Briana Cutino

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: AQUA SCIENCE ENGINEERS, INC.

QC Level: LEVEL 2

Work Order: 1601300

Project: Lim

Client Contact: Robert Kitay

Date Logged: 1/11/2016

Comments:

Contact's Email: rkitay@aquascienceengineers.com

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

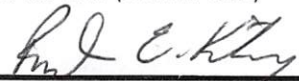
Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1601300-001A	MW-1	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/8/2016 9:30	5 days	Trace	<input type="checkbox"/>	
1601300-001B	MW-1	Water	SW8260B (5 Oxys+Lead Scav.)	2	VOA w/ HCl	<input type="checkbox"/>	1/8/2016 9:30	5 days	Trace	<input type="checkbox"/>	
1601300-002A	MW-2	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/8/2016 15:00	5 days	Trace	<input type="checkbox"/>	
1601300-002B	MW-2	Water	SW8260B (5 Oxys+Lead Scav.)	2	VOA w/ HCl	<input type="checkbox"/>	1/8/2016 15:00	5 days	Trace	<input type="checkbox"/>	
1601300-003A	MW-3	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/8/2016 13:30	5 days	Trace	<input type="checkbox"/>	
1601300-003B	MW-3	Water	SW8260B (5 Oxys+Lead Scav.)	2	VOA w/ HCl	<input type="checkbox"/>	1/8/2016 13:30	5 days	Trace	<input type="checkbox"/>	
1601300-004A	MW-4R	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/8/2016 12:10	5 days	Trace	<input type="checkbox"/>	
1601300-004B	MW-4R	Water	SW8260B (5 Oxys+Lead Scav.)	2	VOA w/ HCl	<input type="checkbox"/>	1/8/2016 12:10	5 days	Trace	<input type="checkbox"/>	
1601300-005A	MW-5	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/8/2016 12:55	5 days	Trace	<input type="checkbox"/>	
1601300-005B	MW-5	Water	SW8260B (5 Oxys+Lead Scav.)	2	VOA w/ HCl	<input type="checkbox"/>	1/8/2016 12:55	5 days	Trace	<input type="checkbox"/>	
1601300-006A	MW-7	Water	SW8021B/8015Bm (G/MBTEX)	2	VOA w/ HCl	<input type="checkbox"/>	1/8/2016 10:40	5 days	Trace	<input type="checkbox"/>	
1601300-006B	MW-7	Water	SW8260B (5 Oxys+Lead Scav.)	2	VOA w/ HCl	<input type="checkbox"/>	1/8/2016 10:40	5 days	Trace	<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

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

Chain of Custody 1601300

PAGE 1 / 1

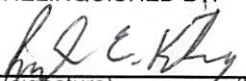
SAMPLER (SIGNATURE)


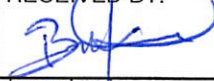
PROJECT NAME Lim JOB NO. 2808
 ADDRESS 250 8th Street, Oakland, CA

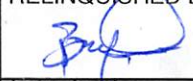
ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	QUANTITY	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-DIESEL with Silicon (EPA 3510/8015) and C.O.	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	ORGANOCHLORINATED HERBICIDES (EPA 8151A)	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) <i>Pb scan.</i>	ARSENIC, LEAD & MERCURY (EPA 6010)	COMPOSITE	EDF	HOLD	
																						MW-1
MW-2		1500				X																
MW-3		1330				X																
MW-4R		1210				X																
MW-5		1255				X																
MW-7		1040				X																

RELINQUISHED BY:
 1549
 (signature) (time)

RECEIVED BY:
 1530
 (signature) (time)

RELINQUISHED BY:
 1740
 (signature) (time)

RECEIVED BY LABORATORY
 (signature) (time)

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

(printed name) (date)
 Robert E. Kitay 1-11-16

(printed name) (date)
 B Y S L A S 1/11/16

(printed name) (date)
 B Y S L A S 1/11/16

(printed name) (date)
 B Y S L A S 1/11/16

OTHER:

Company-ASE, INC.

Company- MAI

Company- Branard

Company- Branard



Sample Receipt Checklist

Client Name: **Aqua Science Engineers, Inc.**
 Project Name: **Lim**
 WorkOrder №: **1601300** Matrix: Water
 Carrier: Randy Glen (MAI Courier)

Date and Time Received: **1/11/2016 17:40**
 Date Logged: **1/11/2016**
 Received by: **Briana Cutino**
 Logged by: **Briana Cutino**

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No
 Sample/Temp Blank temperature Temp: 1.2°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No NA
 Sample labels checked for correct preservation? Yes No
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes No NA
 Samples Received on Ice? Yes No
 (Ice Type: WET ICE)

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522? Yes No NA
 Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? Yes No NA

* NOTE: If the "No" box is checked, see comments below.

 Comments: