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By Alameda County Environmental Health at 3:17 pm, Feb 05, 2013

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

Re: RO #479, Report [redacted]

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

January 30, 2013

SEMI-ANNUAL GROUNDWATER MONITORING REPORT
DECEMBER 2012 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 at the Lim family property located at 250 8th Street in Oakland, California *(Figures 1 and 2)*.

2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On December 13, 2012, ASE measured the depth to water in monitoring wells MW-1 through MW-8 using an electric water level sounder. 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 slight sheen on the purge water from monitoring well MW-7. This is only the second sampling event where neither monitoring well MW-3 nor MW-4R contained 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 with an approximate gradient of between 0.005 and 0.011 feet/foot during this sampling period. The gradient and flow direction are generally consistent with previous findings, although there is slightly more flow components to the southeast and southwest than typical. This is likely due to slight groundwater mounding related to the ozone sparging at the site.

3.0 MONITORING WELL SAMPLING

On December 13, 2012, ASE collected groundwater samples from all eight 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.

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

- All hydrocarbon concentrations in groundwater samples collected from monitoring well MW-1 decreased approximately one order of magnitude from the previous sampling.

- Hydrocarbon concentrations in groundwater samples collected from monitoring well MW-2 are relatively similar to the previous sampling and continue to represent a significant decrease of up to several orders of magnitude from pre-remediation conditions. The TPH-G, benzene, and ethyl benzene concentrations increased from the previous sampling. However, the TPH-D, toluene, and total xylene concentrations decreased, and are at historic lows.

- No free-floating hydrocarbons were detected in monitoring well MW-3 this period. However, very high hydrocarbon concentrations (99,000 ppb TPH-G, 5,800 ppb benzene, 5,800 ppb toluene, 2,100 ppb ethyl benzene, and 11,000 ppb total xylenes) were detected in the groundwater sample collected from this monitoring well. Although still very high, the benzene and toluene concentrations represent historic lows.

- No free-floating hydrocarbons were detected in monitoring well MW-4R this period. Hydrocarbon concentrations in groundwater samples collected from monitoring well MW-4R are relatively similar to the previous sampling and continue to represent a significant decrease of up to several orders of magnitude from pre-remediation conditions. The TPH-G concentration decreased to a historic low, although the BTEX concentrations increased slightly from the previous sampling event.

- Relatively low TPH-G, benzene, ethyl benzene, and total xylenes concentrations were detected in groundwater samples collected from monitoring well MW-5, all of which represent an increase from the non-detectable concentrations during the previous sampling event. These concentrations may be due to a slight mounding of the water table related to the ozone-sparging.

- No hydrocarbons or oxygenates were detected in groundwater samples collected from monitoring well MW-6.

- In monitoring well MW-7, TPH-G, TPH-D, toluene, and total xylene concentrations increased very slightly from the previous sampling event, while the benzene, ethyl benzene, and TBA concentrations decreased. The benzene concentration is now at a historic low. In

general, there has been a decreasing trend in hydrocarbon concentrations in this well, especially since the start of the current remediation system.

- No hydrocarbons were detected in groundwater samples collected from monitoring well MW-8, other than 56 ppb TPH-D, indicating that the contamination has not reached the deeper water-bearing zones.

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 May 2008:

- Concentrations of TPH-G, benzene, toluene, ethyl benzene, and xylenes in groundwater samples collected from monitoring wells MW-3, MW-4R and MW-7 exceeded ESLs.

- Concentrations of TPH-G and/or benzene in groundwater samples collected from monitoring wells MW-1, MW-2 and MW-5 exceeded the ESLs

6.0 RECOMMENDATIONS

ASE recommends continued operation of the remediation system.

ASE also recommends that the site remain on a semi-annual sampling schedule. The next groundwater sampling event is scheduled for June 2013.

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.

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

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

cc: Mr. Jerry Wickham, ACHCSA

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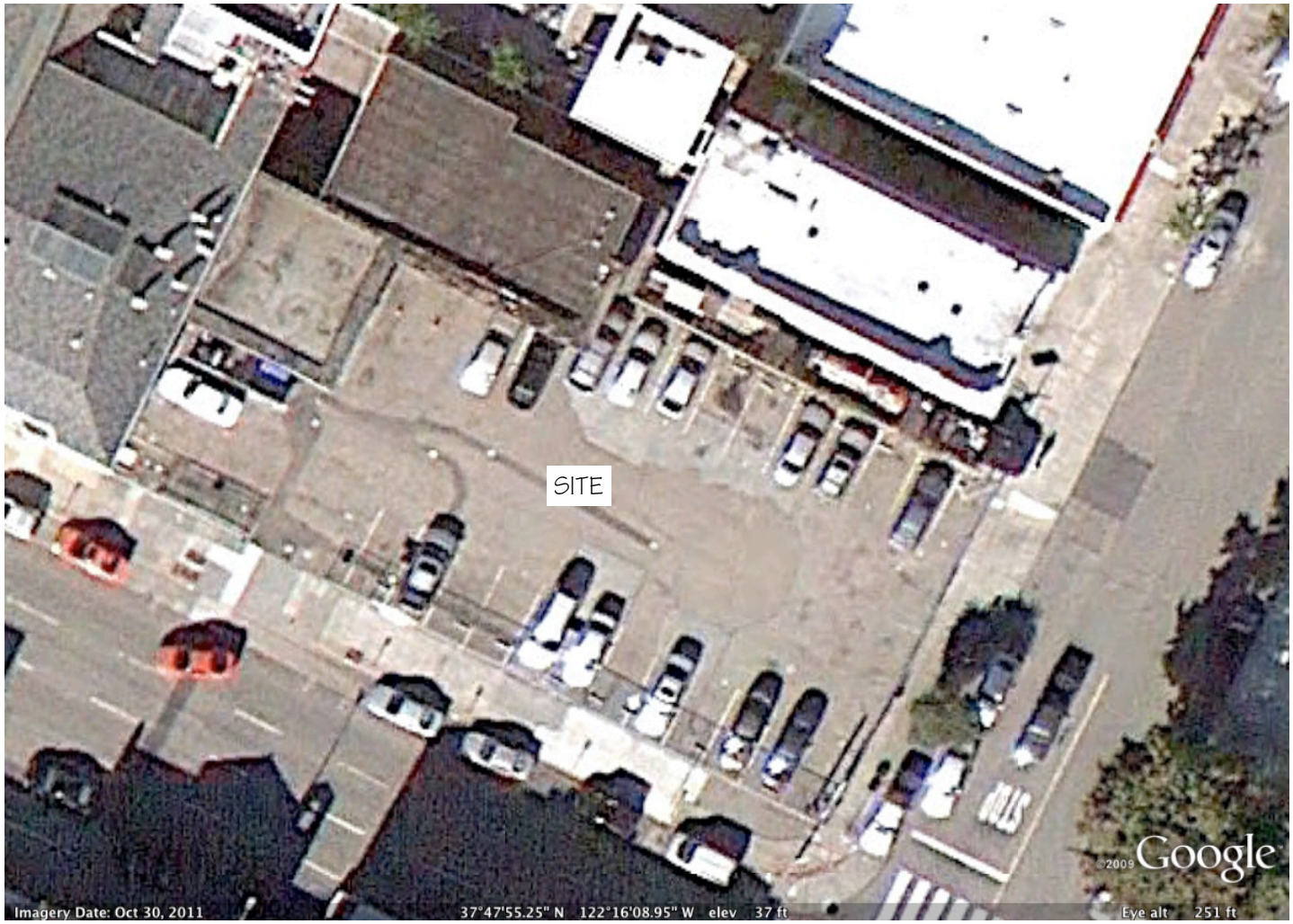
FIGURES



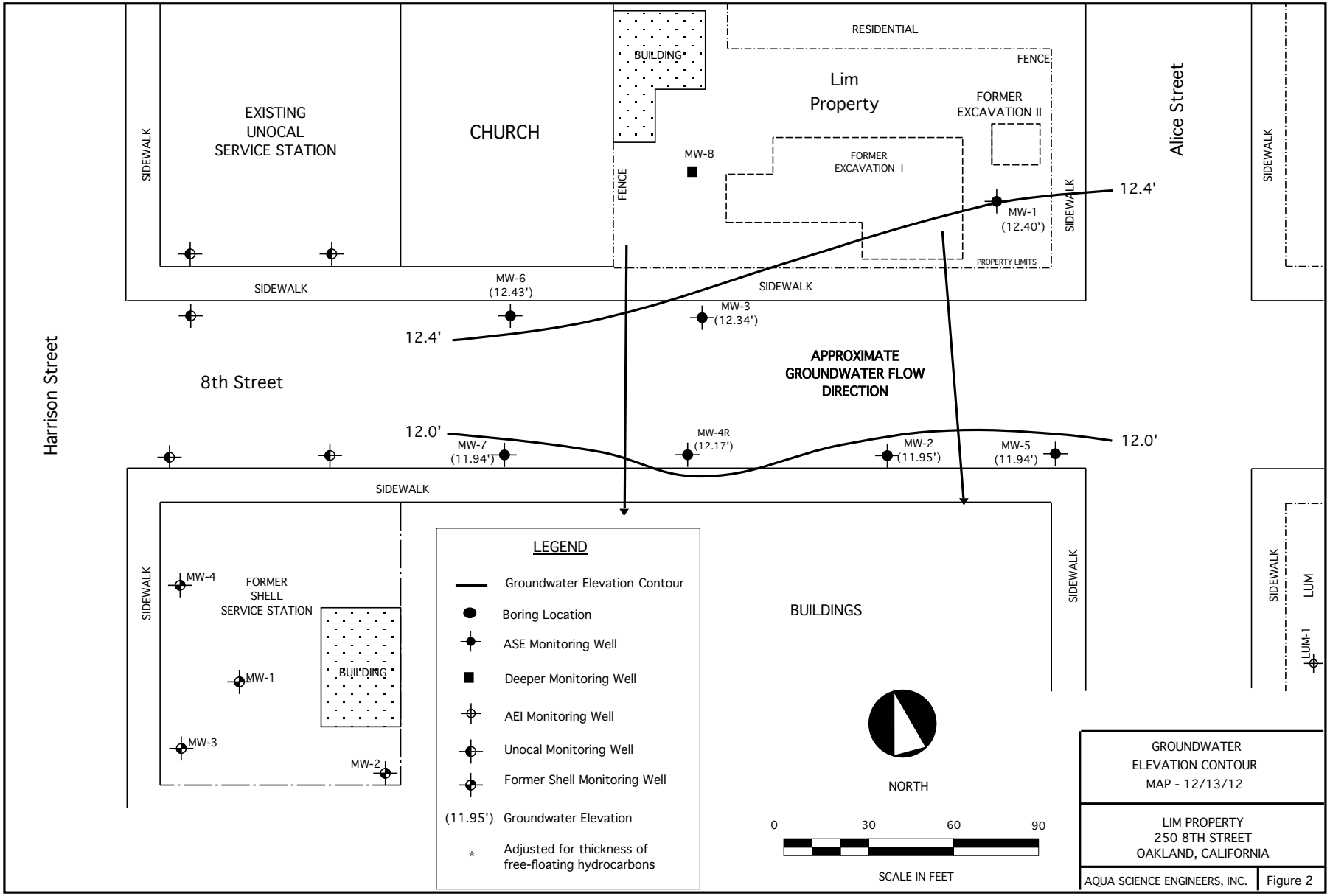
NORTH

NOT TO SCALE

SITE LOCATION MAP

Lim Family Property
250 8th Street
Oakland, California

Aqua Science Engineers	Figure 1


RESIDENTIAL
FENCE
BUILDING
Lim
Property
FORMER
EXCAVATION II
EXISTING
UNOCAL
SERVICE STATION
CHURCH
SIDEWALK
FENCE
MW-8
FORMER
EXCAVATION I
Alice Street
SIDEWALK
12.4'
MW-1
(12.40')
SIDEWALK
PROPERTY LIMITS
SIDEWALK
MW-6
(12.43')
MW-3
(12.34')
12.4'
Harrison Street
8th Street
APPROXIMATE
GROUNDWATER FLOW
DIRECTION
12.0'
MW-7
(11.94')
MW-4R
(12.17')
MW-2
(11.95')
MW-5
(11.94')
12.0'
SIDEWALK
SIDEWALK
MW-4
FORMER
SHELL
SERVICE STATION
BUILDING
MW-1
MW-3
MW-2
BUILDINGS
SIDEWALK
SIDEWALK
LUM
LUM-1
LEGEND
Groundwater Elevation Contour
Boring Location
ASE Monitoring Well
Deeper Monitoring Well
AEI Monitoring Well
Unocal Monitoring Well
Former Shell Monitoring Well
(11.95') Groundwater Elevation
* Adjusted for thickness of free-floating hydrocarbons
NORTH
0
30
60
90
SCALE IN FEET
GROUNDWATER
ELEVATION CONTOUR
MAP - 12/13/12
LIM PROPERTY
250 8TH STREET
OAKLAND, CALIFORNIA
AQUA SCIENCE ENGINEERS, INC.
Figure 2

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

TABLE ONE

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

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

TABLE ONE

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

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

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-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**

TABLE ONE

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

Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-5	06/11/02	28.40	14.23		14.17
	09/17/02		14.80		13.60
	12/18/02		15.08		13.32
	03/25/03		15.31		13.09
	06/23/03		15.16		13.24
	09/26/03		15.72		12.68
	12/18/03		15.47		12.93
	03/12/04		13.44		14.96
	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**

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-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**

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**
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**

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**

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	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**

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**

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 <5,000	---	---	---	< 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 < 500	---	---	---	< 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**

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**

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-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**

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**
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**
ESL	100	100	1	40	30	20	5					

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 (May 2008)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

TPH = Total petroleum hydrocarbons

MTBE = Methyl tertiary butyl ether

DIPE = Diisopropyl ether

TBA = Tery-butanol

Oxy = Oxygenates

EDC = 1,2-Dichloroethane

EDB = 1,2-Dibromoethane

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

APPENDIX A

Well Sampling Field Log

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM

JOB NUMBER 2808 DATE OF SAMPLING 12.13.12

WELL ID. MW-1 SAMPLER DA

TOTAL DEPTH OF WELL 26.8 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 17.32 TIME OF MEASUREMENT

PRODUCT THICKNESS None

DEPTH OF WELL CASING IN WATER 9.48

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 4-8 gal

EQUIPMENT USED TO PURGE WELL (NEW DISPOSABLE BAILER)

TIME EVACUATION STARTED 930 TIME EVACUATION COMPLETED 940

TIME SAMPLES WERE COLLECTED 940

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 4-8 gals

SAMPLING DEVICE (NEW DISPOSABLE BAILER)

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

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	19.9	8.5	470
2	20.9	8.4	460
3	20.9	8.4	460

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-1	5	40 ml VOA	8015/8260B	HCl

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM

JOB NUMBER 2808 DATE OF SAMPLING 12.13.12

WELL ID. MW-2 SAMPLER DA

TOTAL DEPTH OF WELL 26.8 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 16.24 TIME OF MEASUREMENT

PRODUCT THICKNESS None

DEPTH OF WELL CASING IN WATER 10.56

NUMBER OF GALLONS PER WELL CASING VOLUME 1.8

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 5.4 gal

EQUIPMENT USED TO PURGE WELL (NEW DISPOSABLE BAILER)

TIME EVACUATION STARTED 915 TIME EVACUATION COMPLETED 922

TIME SAMPLES WERE COLLECTED 922

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 5.4 gal

SAMPLING DEVICE (NEW DISPOSABLE BAILER)

SAMPLE COLOR light brown ODOR/SEDIMENT ~~None~~ EK slight hc / slightly silty

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	19.7	8.2	690 us
2	19.7	8.2	680
3	19.7	8.2	680

SAMPLES COLLECTED

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

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM

JOB NUMBER 2808 DATE OF SAMPLING 12·13·12

WELL ID. MW-3 SAMPLER DA

TOTAL DEPTH OF WELL 30.0 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 16.24 TIME OF MEASUREMENT

PRODUCT THICKNESS None

DEPTH OF WELL CASING IN WATER 13.76

NUMBER OF GALLONS PER WELL CASING VOLUME 2.3

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 6.9 gal

EQUIPMENT USED TO PURGE WELL (NEW DISPOSABLE BAILER)

TIME EVACUATION STARTED 1025 TIME EVACUATION COMPLETED 1038

TIME SAMPLES WERE COLLECTED 1040

DID WELL GO DRY NO AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 7

SAMPLING DEVICE (NEW DISPOSABLE BAILER)

SAMPLE COLOR GRAY ODOR/SEDIMENT STRONG HC / STRONG

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	20.6	8.6	1000
2	20.2	8.6	980
3	20.1	8.7	990

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-3	5	40 ml VOA	8015/8260B	HCl

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM

JOB NUMBER 2808 DATE OF SAMPLING 12-13-12

WELL ID. MW-4R SAMPLER DA

TOTAL DEPTH OF WELL 28.0 WELL DIAMETER 4

DEPTH TO WATER PRIOR TO PURGING 16.61 TIME OF MEASUREMENT

PRODUCT THICKNESS None

DEPTH OF WELL CASING IN WATER 11.39

NUMBER OF GALLONS PER WELL CASING VOLUME 7.5 g-1

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 22.5 gal

EQUIPMENT USED TO PURGE WELL (NEW DISPOSABLE BAILER)

TIME EVACUATION STARTED 7 00 TIME EVACUATION COMPLETED 7:35

TIME SAMPLES WERE COLLECTED 7:35

DID WELL GO DRY NO AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 22.5 gal

SAMPLING DEVICE (NEW DISPOSABLE BAILER)

SAMPLE COLOR yellow brown ODOR/SEDIMENT strong hc odor / slight silt

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	21.1	8.0	870
2	21.0	8.0	760
3	21.0	8.0	

SAMPLES COLLECTED

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

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM

JOB NUMBER 2808 DATE OF SAMPLING 12.13.12

WELL ID. MW-5 SAMPLER DA

TOTAL DEPTH OF WELL 29.6 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 16.46 TIME OF MEASUREMENT

PRODUCT THICKNESS None

DEPTH OF WELL CASING IN WATER 13.14

NUMBER OF GALLONS PER WELL CASING VOLUME 2.2

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 6.6 gal

EQUIPMENT USED TO PURGE WELL (NEW DISPOSABLE BAILER)

TIME EVACUATION STARTED 855 TIME EVACUATION COMPLETED 905

TIME SAMPLES WERE COLLECTED 905

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 6.6 gal

SAMPLING DEVICE (NEW DISPOSABLE BAILER)

SAMPLE COLOR clear ODOR/SEDIMENT None to slight / clear with silt

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	19.3	8.3	510 us
2	19.6	8.5	520
3	19.6	8.5	520

SAMPLES COLLECTED

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

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM

JOB NUMBER 2808 DATE OF SAMPLING 12.13.12

WELL ID. MW-6 SAMPLER DA

TOTAL DEPTH OF WELL 29.5 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING ~~NEC~~ 16.77 TIME OF MEASUREMENT

PRODUCT THICKNESS None

DEPTH OF WELL CASING IN WATER 12.73

NUMBER OF GALLONS PER WELL CASING VOLUME 2.2

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 66 gal

EQUIPMENT USED TO PURGE WELL (NEW DISPOSABLE BAILER)

TIME EVACUATION STARTED 830 TIME EVACUATION COMPLETED 840

TIME SAMPLES WERE COLLECTED 840

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 66 gal

SAMPLING DEVICE (NEW DISPOSABLE BAILER)

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

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	19.9	8.8	310 ms
2	20.0	8.6	310
3	20.0	8.6	310

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-6	5	40 ml VOA	8015/8260B	HCl

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM

JOB NUMBER 2808 DATE OF SAMPLING 12.13.12

WELL ID. MW-7 SAMPLER DA

TOTAL DEPTH OF WELL 28.0 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 17.01 TIME OF MEASUREMENT

PRODUCT THICKNESS None - slight sheen

DEPTH OF WELL CASING IN WATER 10.99

NUMBER OF GALLONS PER WELL CASING VOLUME 1.9

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 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 800 TIME EVACUATION COMPLETED 810

TIME SAMPLES WERE COLLECTED 810

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 5.7 gal

SAMPLING DEVICE (NEW DISPOSABLE BAILER)

SAMPLE COLOR slight grey ODOR/SEDIMENT strong hc / slightly silty

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	19.7	8.1	1080
2	19.8	8.1	1040
3	19.8	8.1	1070

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-7	5	40 ml VOA	8015/8260B	HCl

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM

JOB NUMBER 2808 DATE OF SAMPLING 12·13·12

WELL ID. MW-8 SAMPLER DA

TOTAL DEPTH OF WELL 49.0 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 21.89 TIME OF MEASUREMENT

PRODUCT THICKNESS None

DEPTH OF WELL CASING IN WATER 27.11

NUMBER OF GALLONS PER WELL CASING VOLUME 4.6

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 13.8 gal

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED 950 TIME EVACUATION COMPLETED 1010

TIME SAMPLES WERE COLLECTED 1010

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 13.8 gal

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR Clear ODOR/SEDIMENT NO / NO

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	21.4	8.6	450
2	19.6	9.00	450
3	19.5	9.0	480

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-8	5	40 ml VOA	8015/8260B	HCl

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

Certified Analytical Report
and
Chain of Custody Documentation

KIFF Analytical LLC

Report Number : 83569
Date : 12/28/2012

Laboratory Results

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

Subject : 8 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 National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Troy G. Turpen

Troy Turpen

KIFF Analytical LLC

Report Number : 83569
Date : 12/28/2012

Project Name : **Lim**
Project Number : **2808**

Sample : **MW-1** Matrix : Water Lab Number : 83569-01
Sample Date :12/13/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**2.6**	0.50	ug/L	EPA 8260B	12/23/12 20:18
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 20:18
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 20:18
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 20:18
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 20:18
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 20:18
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 20:18
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 20:18
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/23/12 20:18
TPH as Gasoline	**180**	50	ug/L	EPA 8260B	12/23/12 20:18
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 20:18
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 20:18
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	12/23/12 20:18
Toluene - d8 (Surr)	94.2		% Recovery	EPA 8260B	12/23/12 20:18
TPH as Diesel (Silica Gel)	**90**	50	ug/L	M EPA 8015	12/28/12 11:59
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
Octacosane (Silica Gel Surr)	102		% Recovery	M EPA 8015	12/28/12 11:59

KIFF Analytical LLC

Report Number : 83569
Date : 12/28/2012

Project Name : **Lim**
Project Number : **2808**

Sample : **MW-2** Matrix : Water Lab Number : 83569-02
Sample Date :12/13/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**890**	1.5	ug/L	EPA 8260B	12/26/12 13:33
Toluene	**4.1**	0.50	ug/L	EPA 8260B	12/23/12 21:28
Ethylbenzene	**9.6**	0.50	ug/L	EPA 8260B	12/23/12 21:28
Total Xylenes	**16**	0.50	ug/L	EPA 8260B	12/23/12 21:28
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 21:28
Diisopropyl ether (DIPE)	**5.4**	0.50	ug/L	EPA 8260B	12/23/12 21:28
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 21:28
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 21:28
Tert-Butanol	**17**	5.0	ug/L	EPA 8260B	12/23/12 21:28
TPH as Gasoline	**2400**	50	ug/L	EPA 8260B	12/23/12 21:28
1,2-Dichloroethane	**1.4**	0.50	ug/L	EPA 8260B	12/23/12 21:28
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 21:28
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	12/23/12 21:28
Toluene - d8 (Surr)	94.1		% Recovery	EPA 8260B	12/23/12 21:28
TPH as Diesel (Silica Gel)	**66**	50	ug/L	M EPA 8015	12/28/12 12:33
Octacosane (Silica Gel Surr)	90.6		% Recovery	M EPA 8015	12/28/12 12:33

KIFF Analytical LLC

Report Number : 83569
Date : 12/28/2012

Project Name : **Lim**
Project Number : **2808**

Sample : **MW-3** Matrix : Water Lab Number : 83569-03
Sample Date :12/13/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**5800**	10	ug/L	EPA 8260B	12/26/12 15:55
Toluene	**5800**	10	ug/L	EPA 8260B	12/26/12 15:55
Ethylbenzene	**2100**	10	ug/L	EPA 8260B	12/26/12 15:55
Total Xylenes	**11000**	10	ug/L	EPA 8260B	12/26/12 15:55
Methyl-t-butyl ether (MTBE)	< 10	10	ug/L	EPA 8260B	12/26/12 15:55
Diisopropyl ether (DIPE)	< 10	10	ug/L	EPA 8260B	12/26/12 15:55
Ethyl-t-butyl ether (ETBE)	< 10	10	ug/L	EPA 8260B	12/26/12 15:55
Tert-amyl methyl ether (TAME)	< 10	10	ug/L	EPA 8260B	12/26/12 15:55
Tert-Butanol	**60**	50	ug/L	EPA 8260B	12/26/12 15:55
TPH as Gasoline	**99000**	1000	ug/L	EPA 8260B	12/26/12 15:55
1,2-Dichloroethane	< 10	10	ug/L	EPA 8260B	12/26/12 15:55
1,2-Dibromoethane	< 10	10	ug/L	EPA 8260B	12/26/12 15:55
1,2-Dichloroethane-d4 (Surr)	97.0		% Recovery	EPA 8260B	12/26/12 15:55
Toluene - d8 (Surr)	99.3		% Recovery	EPA 8260B	12/26/12 15:55
TPH as Diesel (Silica Gel)	< 12000	12000	ug/L	M EPA 8015	12/27/12 12:04
(Note: MRL increased due to interference from Gasoline-range hydrocarbons.)					
Octacosane (Silica Gel Surr)	114		% Recovery	M EPA 8015	12/27/12 12:04

KIFF Analytical LLC

Report Number : 83569
Date : 12/28/2012

Project Name : **Lim**
Project Number : **2808**

Sample : **MW-4R** Matrix : Water Lab Number : 83569-04
Sample Date :12/13/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**97**	0.50	ug/L	EPA 8260B	12/23/12 22:03
Toluene	**76**	0.50	ug/L	EPA 8260B	12/23/12 22:03
Ethylbenzene	**50**	0.50	ug/L	EPA 8260B	12/23/12 22:03
Total Xylenes	**590**	1.5	ug/L	EPA 8260B	12/26/12 12:58
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 22:03
Diisopropyl ether (DIPE)	**1.0**	0.50	ug/L	EPA 8260B	12/23/12 22:03
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 22:03
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 22:03
Tert-Butanol	**41**	5.0	ug/L	EPA 8260B	12/23/12 22:03
TPH as Gasoline	**3700**	150	ug/L	EPA 8260B	12/26/12 12:58
1,2-Dichloroethane	**2.5**	0.50	ug/L	EPA 8260B	12/23/12 22:03
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 22:03
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	12/23/12 22:03
Toluene - d8 (Surr)	96.8		% Recovery	EPA 8260B	12/23/12 22:03
TPH as Diesel (Silica Gel)	< 200	200	ug/L	M EPA 8015	12/27/12 12:33
(Note: MRL increased due to interference from Gasoline-range hydrocarbons.)					
Octacosane (Silica Gel Surr)	110		% Recovery	M EPA 8015	12/27/12 12:33

KIFF Analytical LLC

Report Number : 83569
Date : 12/28/2012

Project Name : **Lim**
Project Number : **2808**

Sample : **MW-5** Matrix : Water Lab Number : 83569-05
Sample Date :12/13/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**2.7**	0.50	ug/L	EPA 8260B	12/24/12 10:11
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 10:11
Ethylbenzene	**0.86**	0.50	ug/L	EPA 8260B	12/24/12 10:11
Total Xylenes	**0.74**	0.50	ug/L	EPA 8260B	12/24/12 10:11
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 10:11
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 10:11
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 10:11
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 10:11
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/24/12 10:11
TPH as Gasoline	**79**	50	ug/L	EPA 8260B	12/24/12 10:11
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 10:11
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 10:11
1,2-Dichloroethane-d4 (Surr)	99.8		% Recovery	EPA 8260B	12/24/12 10:11
Toluene - d8 (Surr)	107		% Recovery	EPA 8260B	12/24/12 10:11
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	12/27/12 13:02
Octacosane (Silica Gel Surr)	115		% Recovery	M EPA 8015	12/27/12 13:02

KIFF Analytical LLC

Report Number : 83569
Date : 12/28/2012

Project Name : **Lim**
Project Number : **2808**

Sample : **MW-6** Matrix : Water Lab Number : 83569-06
Sample Date :12/13/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 17:11
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 17:11
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 17:11
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 17:11
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 17:11
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 17:11
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 17:11
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 17:11
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/24/12 17:11
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/24/12 17:11
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 17:11
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/24/12 17:11
1,2-Dichloroethane-d4 (Surr)	99.7		% Recovery	EPA 8260B	12/24/12 17:11
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	12/24/12 17:11
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	12/27/12 13:31
Octacosane (Silica Gel Surr)	112		% Recovery	M EPA 8015	12/27/12 13:31

KIFF Analytical LLC

Report Number : 83569
Date : 12/28/2012

Project Name : **Lim**
Project Number : **2808**

Sample : **MW-7** Matrix : Water Lab Number : 83569-07
Sample Date :12/13/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**78**	2.5	ug/L	EPA 8260B	12/26/12 13:23
Toluene	**80**	2.5	ug/L	EPA 8260B	12/26/12 13:23
Ethylbenzene	**1000**	2.5	ug/L	EPA 8260B	12/26/12 13:23
Total Xylenes	**940**	2.5	ug/L	EPA 8260B	12/26/12 13:23
Methyl-t-butyl ether (MTBE)	< 2.5	2.5	ug/L	EPA 8260B	12/26/12 13:23
Diisopropyl ether (DIPE)	< 2.5	2.5	ug/L	EPA 8260B	12/26/12 13:23
Ethyl-t-butyl ether (ETBE)	< 2.5	2.5	ug/L	EPA 8260B	12/26/12 13:23
Tert-amyl methyl ether (TAME)	< 2.5	2.5	ug/L	EPA 8260B	12/26/12 13:23
Tert-Butanol	< 15	15	ug/L	EPA 8260B	12/26/12 13:23
TPH as Gasoline	**16000**	250	ug/L	EPA 8260B	12/26/12 13:23
1,2-Dichloroethane	< 2.5	2.5	ug/L	EPA 8260B	12/26/12 13:23
1,2-Dibromoethane	< 2.5	2.5	ug/L	EPA 8260B	12/26/12 13:23
1,2-Dichloroethane-d4 (Surr)	97.1		% Recovery	EPA 8260B	12/26/12 13:23
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	12/26/12 13:23
TPH as Diesel (Silica Gel)	**610**	50	ug/L	M EPA 8015	12/28/12 10:35
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
Octacosane (Silica Gel Surr)	126		% Recovery	M EPA 8015	12/28/12 10:35

KIFF Analytical LLC

Report Number : 83569
Date : 12/28/2012

Project Name : **Lim**
Project Number : **2808**

Sample : **MW-8** Matrix : Water Lab Number : 83569-08
Sample Date :12/13/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 21:55
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 21:55
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 21:55
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 21:55
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 21:55
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 21:55
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 21:55
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 21:55
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/23/12 21:55
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/23/12 21:55
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 21:55
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/23/12 21:55
1,2-Dichloroethane-d4 (Surr)	98.8		% Recovery	EPA 8260B	12/23/12 21:55
Toluene - d8 (Surr)	107		% Recovery	EPA 8260B	12/23/12 21:55
TPH as Diesel (Silica Gel)	**56**	50	ug/L	M EPA 8015	12/28/12 10:06
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
Octacosane (Silica Gel Surr)	115		% Recovery	M EPA 8015	12/28/12 10:06

Report Number : 83569

Date : 12/28/2012

QC Report : Method Blank Data

Project Name : **Lim**

Project Number : **2808**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	12/27/2012
Octacosane (Silica Gel Surr)	93.6		%	M EPA 8015	12/27/2012
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/23/2012
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/23/2012
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	12/23/2012
Toluene - d8 (Surr)	99.0		%	EPA 8260B	12/23/2012
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/26/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/23/2012
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/23/2012
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/23/2012
1,2-Dichloroethane-d4 (Surr)	99.2		%	EPA 8260B	12/23/2012
Toluene - d8 (Surr)	107		%	EPA 8260B	12/23/2012
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/24/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/24/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/24/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/24/2012
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/24/2012
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/24/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/24/2012
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/24/2012
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/24/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/24/2012
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/24/2012
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/24/2012
1,2-Dichloroethane-d4 (Surr)	99.8		%	EPA 8260B	12/24/2012
Toluene - d8 (Surr)	106		%	EPA 8260B	12/24/2012

KIFF ANALYTICAL, LLC

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Report Number : 83569

Date : 12/28/2012

QC Report : Method Blank Data

Project Name : **Lim**

Project Number : **2808**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/26/2012
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/26/2012
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
1,2-Dichloroethane-d4 (Surr)	99.6		%	EPA 8260B	12/26/2012
Toluene - d8 (Surr)	107		%	EPA 8260B	12/26/2012
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/26/2012
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/26/2012
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	12/26/2012
1,2-Dichloroethane-d4 (Surr)	99.0		%	EPA 8260B	12/26/2012
Toluene - d8 (Surr)	100		%	EPA 8260B	12/26/2012

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 83569

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 12/28/2012

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														
	83635-04	<0.50	40.0	40.0	39.9	40.0	ug/L	EPA 8260B	12/23/12	99.9	100	0.222	80-120	25
1,2-Dichloroethane														
	83635-04	<0.50	40.0	40.0	36.9	36.6	ug/L	EPA 8260B	12/23/12	92.4	91.5	0.934	75.7-122	25
Benzene														
	83635-04	<0.50	40.0	40.0	41.2	40.4	ug/L	EPA 8260B	12/23/12	103	101	1.78	80-120	25
Diisopropyl ether														
	83635-04	<0.50	39.4	39.4	40.9	40.7	ug/L	EPA 8260B	12/23/12	104	103	0.619	80-120	25
Ethyl-tert-butyl ether														
	83635-04	<0.50	40.6	40.6	39.8	39.4	ug/L	EPA 8260B	12/23/12	98.1	97.0	1.11	76.5-120	25
Ethylbenzene														
	83635-04	<0.50	40.0	40.0	43.9	43.5	ug/L	EPA 8260B	12/23/12	110	109	0.794	80-120	25
Methyl-t-butyl ether														
	83635-04	<0.50	40.1	40.1	38.8	38.5	ug/L	EPA 8260B	12/23/12	96.8	96.2	0.620	69.7-121	25
P + M Xylene														
	83635-04	<0.50	40.0	40.0	42.8	42.4	ug/L	EPA 8260B	12/23/12	107	106	0.883	76.8-120	25
Tert-Butanol														
	83635-04	<5.0	201	201	203	204	ug/L	EPA 8260B	12/23/12	101	101	0.428	80-120	25
Tert-amyl-methyl ether														
	83635-04	<0.50	40.4	40.4	39.2	38.8	ug/L	EPA 8260B	12/23/12	97.1	96.2	0.877	78.9-120	25

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Report Number : 83569

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 12/28/2012

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														
	83635-04	<0.50	40.0	40.0	42.0	41.4	ug/L	EPA 8260B	12/23/12	105	103	1.46	80-120	25
Benzene														
	83579-02	32	40.0	40.0	73.6	71.8	ug/L	EPA 8260B	12/26/12	103	98.2	4.62	80-120	25
P + M Xylene														
	83579-02	2.0	40.0	40.0	43.9	42.8	ug/L	EPA 8260B	12/26/12	105	102	2.52	76.8-120	25
1,2-Dibromoethane														
	83635-03	<0.50	40.0	40.0	44.3	44.5	ug/L	EPA 8260B	12/23/12	111	111	0.491	80-120	25
1,2-Dichloroethane														
	83635-03	<0.50	40.0	40.0	44.4	44.1	ug/L	EPA 8260B	12/23/12	111	110	0.677	75.7-122	25
Benzene														
	83635-03	<0.50	40.0	40.0	41.1	40.7	ug/L	EPA 8260B	12/23/12	103	102	0.852	80-120	25
Diisopropyl ether														
	83635-03	<0.50	39.4	39.4	43.0	43.4	ug/L	EPA 8260B	12/23/12	109	110	0.770	80-120	25
Ethyl-tert-butyl ether														
	83635-03	<0.50	40.6	40.6	42.7	42.7	ug/L	EPA 8260B	12/23/12	105	105	0.0322	76.5-120	25
Ethylbenzene														
	83635-03	<0.50	40.0	40.0	42.1	42.0	ug/L	EPA 8260B	12/23/12	105	105	0.346	80-120	25

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Report Number : 83569

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 12/28/2012

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
Methyl-t-butyl ether														
	83635-03	<0.50	40.1	40.1	43.6	43.9	ug/L	EPA 8260B	12/23/12	109	110	0.675	69.7-121	25
P + M Xylene														
	83635-03	<0.50	40.0	40.0	41.4	41.2	ug/L	EPA 8260B	12/23/12	104	103	0.466	76.8-120	25
Tert-Butanol														
	83635-03	5.9	201	201	217	215	ug/L	EPA 8260B	12/23/12	105	104	1.00	80-120	25
Tert-amyl-methyl ether														
	83635-03	<0.50	40.4	40.4	43.7	44.1	ug/L	EPA 8260B	12/23/12	108	109	0.915	78.9-120	25
Toluene														
	83635-03	<0.50	40.0	40.0	44.3	44.1	ug/L	EPA 8260B	12/23/12	111	110	0.515	80-120	25
1,2-Dibromoethane														
	83569-05	<0.50	40.0	40.0	44.0	43.9	ug/L	EPA 8260B	12/24/12	110	110	0.219	80-120	25
1,2-Dichloroethane														
	83569-05	<0.50	40.0	40.0	43.9	42.9	ug/L	EPA 8260B	12/24/12	110	107	2.46	75.7-122	25
Benzene														
	83569-05	2.7	40.0	40.0	43.0	41.9	ug/L	EPA 8260B	12/24/12	101	97.9	2.75	80-120	25
Diisopropyl ether														
	83569-05	<0.50	39.4	39.4	43.6	43.2	ug/L	EPA 8260B	12/24/12	111	110	1.05	80-120	25

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 83569

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 12/28/2012

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														
	83569-05	<0.50	40.6	40.6	42.9	42.9	ug/L	EPA 8260B	12/24/12	106	106	0.0986	76.5-120	25
Ethylbenzene														
	83569-05	0.86	40.0	40.0	43.5	42.2	ug/L	EPA 8260B	12/24/12	107	103	3.19	80-120	25
Methyl-t-butyl ether														
	83569-05	<0.50	40.1	40.1	43.7	44.4	ug/L	EPA 8260B	12/24/12	109	111	1.50	69.7-121	25
P + M Xylene														
	83569-05	0.74	40.0	40.0	42.6	41.2	ug/L	EPA 8260B	12/24/12	105	101	3.56	76.8-120	25
Tert-Butanol														
	83569-05	<5.0	201	201	213	212	ug/L	EPA 8260B	12/24/12	106	105	0.620	80-120	25
Tert-amyl-methyl ether														
	83569-05	<0.50	40.4	40.4	43.7	43.8	ug/L	EPA 8260B	12/24/12	108	108	0.191	78.9-120	25
Toluene														
	83569-05	<0.50	40.0	40.0	44.3	43.0	ug/L	EPA 8260B	12/24/12	111	108	2.78	80-120	25
1,2-Dibromoethane														
	83583-01	<0.50	40.0	40.0	42.3	42.2	ug/L	EPA 8260B	12/26/12	106	106	0.243	80-120	25
1,2-Dichloroethane														
	83583-01	<0.50	40.0	40.0	42.5	42.2	ug/L	EPA 8260B	12/26/12	106	106	0.567	75.7-122	25

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 83569

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Project Name : **Lim**

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Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene														
	83583-01	<0.50	40.0	40.0	39.1	38.8	ug/L	EPA 8260B	12/26/12	97.8	97.1	0.710	80-120	25
Diisopropyl ether														
	83583-01	<0.50	39.4	39.4	41.6	41.8	ug/L	EPA 8260B	12/26/12	106	106	0.397	80-120	25
Ethyl-tert-butyl ether														
	83583-01	<0.50	40.6	40.6	39.6	39.4	ug/L	EPA 8260B	12/26/12	97.6	97.1	0.521	76.5-120	25
Ethylbenzene														
	83583-01	<0.50	40.0	40.0	40.9	40.5	ug/L	EPA 8260B	12/26/12	102	101	1.08	80-120	25
Methyl-t-butyl ether														
	83583-01	<0.50	40.1	40.1	44.7	42.3	ug/L	EPA 8260B	12/26/12	112	106	5.43	69.7-121	25
P + M Xylene														
	83583-01	<0.50	40.0	40.0	40.0	40.0	ug/L	EPA 8260B	12/26/12	100	100	0.0265	76.8-120	25
Tert-Butanol														
	83583-01	750	201	201	927	927	ug/L	EPA 8260B	12/26/12	88.0	87.9	0.160	80-120	25
Tert-amyl-methyl ether														
	83583-01	<0.50	40.4	40.4	41.0	40.8	ug/L	EPA 8260B	12/26/12	102	101	0.357	78.9-120	25
Toluene														
	83583-01	<0.50	40.0	40.0	42.5	42.1	ug/L	EPA 8260B	12/26/12	106	105	0.902	80-120	25

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 83569

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 12/28/2012

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														
	83583-03	<0.50	40.0	40.0	40.5	39.8	ug/L	EPA 8260B	12/26/12	101	99.6	1.61	80-120	25
1,2-Dichloroethane														
	83583-03	2.8	40.0	40.0	47.3	46.1	ug/L	EPA 8260B	12/26/12	111	108	2.62	75.7-122	25
Benzene														
	83583-03	40	40.0	40.0	78.7	76.0	ug/L	EPA 8260B	12/26/12	96.1	89.4	7.13	80-120	25
Diisopropyl ether														
	83583-03	<0.50	39.4	39.4	42.1	41.2	ug/L	EPA 8260B	12/26/12	107	104	2.34	80-120	25
Ethyl-tert-butyl ether														
	83583-03	<0.50	40.6	40.6	41.3	40.8	ug/L	EPA 8260B	12/26/12	102	100	1.24	76.5-120	25
Ethylbenzene														
	83583-03	2.3	40.0	40.0	41.8	40.2	ug/L	EPA 8260B	12/26/12	98.8	94.7	4.25	80-120	25
Methyl-t-butyl ether														
	83583-03	120	40.1	40.1	168	166	ug/L	EPA 8260B	12/26/12	116	110	5.24	69.7-121	25
P + M Xylene														
	83583-03	6.0	40.0	40.0	44.8	42.5	ug/L	EPA 8260B	12/26/12	97.1	91.3	6.21	76.8-120	25
Tert-Butanol														
	83583-03	580	201	201	790	784	ug/L	EPA 8260B	12/26/12	106	103	2.89	80-120	25
Tert-amyl-methyl ether														
	83583-03	<0.50	40.4	40.4	41.8	41.2	ug/L	EPA 8260B	12/26/12	104	102	1.56	78.9-120	25

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Report Number : 83569

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 12/28/2012

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														
	83583-03	4.1	40.0	40.0	45.6	43.9	ug/L	EPA 8260B	12/26/12	104	99.5	4.04	80-120	25
TPH-D (Si Gel)														
	BLANK	<50	1000	1000	882	874	ug/L	M EPA 8015	12/27/12	88.2	87.4	0.888	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

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
1,2-Dibromoethane	39.9	ug/L	EPA 8260B	12/23/12	100	80-120
1,2-Dichloroethane	39.9	ug/L	EPA 8260B	12/23/12	91.3	75.7-122
Benzene	39.9	ug/L	EPA 8260B	12/23/12	103	80-120
Diisopropyl ether	39.3	ug/L	EPA 8260B	12/23/12	103	80-120
Ethyl-tert-butyl ether	40.5	ug/L	EPA 8260B	12/23/12	97.7	76.5-120
Ethylbenzene	39.9	ug/L	EPA 8260B	12/23/12	108	80-120
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	12/23/12	96.4	69.7-121
P + M Xylene	39.9	ug/L	EPA 8260B	12/23/12	107	76.8-120
TPH as Gasoline	497	ug/L	EPA 8260B	12/23/12	93.7	70.0-130
Tert-Butanol	201	ug/L	EPA 8260B	12/23/12	98.9	80-120
Tert-amyl-methyl ether	40.3	ug/L	EPA 8260B	12/23/12	96.5	78.9-120
Toluene	39.9	ug/L	EPA 8260B	12/23/12	105	80-120
Benzene	39.8	ug/L	EPA 8260B	12/26/12	100	80-120
P + M Xylene	39.8	ug/L	EPA 8260B	12/26/12	106	76.8-120
TPH as Gasoline	498	ug/L	EPA 8260B	12/26/12	94.0	70.0-130
1,2-Dibromoethane	40.1	ug/L	EPA 8260B	12/23/12	106	80-120
1,2-Dichloroethane	40.1	ug/L	EPA 8260B	12/23/12	105	75.7-122
Benzene	40.1	ug/L	EPA 8260B	12/23/12	98.2	80-120
Diisopropyl ether	39.5	ug/L	EPA 8260B	12/23/12	106	80-120
Ethyl-tert-butyl ether	40.7	ug/L	EPA 8260B	12/23/12	97.8	76.5-120

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Date : 12/28/2012

Project Name : **Lim**

Project Number : **2808**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Ethylbenzene	40.1	ug/L	EPA 8260B	12/23/12	101	80-120
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	12/23/12	104	69.7-121
P + M Xylene	40.1	ug/L	EPA 8260B	12/23/12	99.9	76.8-120
TPH as Gasoline	495	ug/L	EPA 8260B	12/23/12	102	70.0-130
Tert-Butanol	202	ug/L	EPA 8260B	12/23/12	102	80-120
Tert-amyl-methyl ether	40.4	ug/L	EPA 8260B	12/23/12	101	78.9-120
Toluene	40.1	ug/L	EPA 8260B	12/23/12	106	80-120
1,2-Dibromoethane	40.2	ug/L	EPA 8260B	12/24/12	108	80-120
1,2-Dichloroethane	40.2	ug/L	EPA 8260B	12/24/12	106	75.7-122
Benzene	40.2	ug/L	EPA 8260B	12/24/12	98.5	80-120
Diisopropyl ether	39.6	ug/L	EPA 8260B	12/24/12	106	80-120
Ethyl-tert-butyl ether	40.8	ug/L	EPA 8260B	12/24/12	100	76.5-120
Ethylbenzene	40.2	ug/L	EPA 8260B	12/24/12	102	80-120
Methyl-t-butyl ether	40.2	ug/L	EPA 8260B	12/24/12	105	69.7-121
P + M Xylene	40.2	ug/L	EPA 8260B	12/24/12	100	76.8-120
TPH as Gasoline	496	ug/L	EPA 8260B	12/24/12	105	70.0-130
Tert-Butanol	202	ug/L	EPA 8260B	12/24/12	103	80-120
Tert-amyl-methyl ether	40.6	ug/L	EPA 8260B	12/24/12	104	78.9-120
Toluene	40.2	ug/L	EPA 8260B	12/24/12	107	80-120
1,2-Dibromoethane	40.2	ug/L	EPA 8260B	12/26/12	106	80-120
1,2-Dichloroethane	40.2	ug/L	EPA 8260B	12/26/12	106	75.7-122

Report Number : 83569

QC Report : Laboratory Control Sample (LCS)

Date : 12/28/2012

Project Name : **Lim**

Project Number : **2808**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.2	ug/L	EPA 8260B	12/26/12	98.3	80-120
Diisopropyl ether	39.6	ug/L	EPA 8260B	12/26/12	106	80-120
Ethyl-tert-butyl ether	40.8	ug/L	EPA 8260B	12/26/12	85.0	76.5-120
Ethylbenzene	40.2	ug/L	EPA 8260B	12/26/12	104	80-120
Methyl-t-butyl ether	40.2	ug/L	EPA 8260B	12/26/12	99.7	69.7-121
P + M Xylene	40.2	ug/L	EPA 8260B	12/26/12	102	76.8-120
TPH as Gasoline	494	ug/L	EPA 8260B	12/26/12	99.9	70.0-130
Tert-Butanol	202	ug/L	EPA 8260B	12/26/12	105	80-120
Tert-amyl-methyl ether	40.5	ug/L	EPA 8260B	12/26/12	90.4	78.9-120
Toluene	40.2	ug/L	EPA 8260B	12/26/12	108	80-120
1,2-Dibromoethane	40.0	ug/L	EPA 8260B	12/26/12	101	80-120
1,2-Dichloroethane	40.0	ug/L	EPA 8260B	12/26/12	110	75.7-122
Benzene	40.0	ug/L	EPA 8260B	12/26/12	104	80-120
Diisopropyl ether	39.4	ug/L	EPA 8260B	12/26/12	106	80-120
Ethyl-tert-butyl ether	40.6	ug/L	EPA 8260B	12/26/12	101	76.5-120
Ethylbenzene	40.0	ug/L	EPA 8260B	12/26/12	99.1	80-120
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	12/26/12	102	69.7-121
P + M Xylene	40.0	ug/L	EPA 8260B	12/26/12	97.3	76.8-120
TPH as Gasoline	496	ug/L	EPA 8260B	12/26/12	94.1	70.0-130
Tert-Butanol	201	ug/L	EPA 8260B	12/26/12	102	80-120
Tert-amyl-methyl ether	40.4	ug/L	EPA 8260B	12/26/12	103	78.9-120
Toluene	40.0	ug/L	EPA 8260B	12/26/12	104	80-120

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

83569

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

Chain of Custody

SAMPLER (SIGNATURE): [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 (EPA 3510/8015) w/ silica gel CU	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	CAM 17 METALS (EPA 6010+7000)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	Pb (TOTAL or DISSOLVED) (EPA 6010)	PESTICIDES (EPA 8081)	FUEL OXYGENATES (EPA 8260)	PURGEABLE HALOCARBONS (EPA 601/8010)	TPH-G/BTEX/5 OXYS /Pb scav (EPA METHOD 8260)	MULTI-RANGE HYDROCARBONS WITH SILICA GEL CLEANUP (EPA 8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	LUFT METALS (5) (EPA 6010+7000)	COMPOSITE 4:1	EDF	
MW-1	12-13-12	940	W	5		X								X					X	01
MW-2	↓	922	↓	↓		X								X					X	02
MW-3	↓	1040	↓	↓		X								X					X	03
MW-4R	↓	735	↓	↓		X								X					X	04
MW-5	↓	905	↓	↓		X								X					X	05
MW-6	↓	840	↓	↓		X								X					X	06
MW-7	↓	810	↓	↓		X								X					X	07
MW-8	↓	1010	↓	↓		X								X					X	08

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
[signature] (signature) (time)	(signature) (time)	(signature) (time)	[signature] 1150 (signature) (time)	
Robert E. Kitay (printed name) (date)	(printed name) (date)	(printed name) (date)	HAROLD BREWER 121812 (printed name) (date)	TURN AROUND TIME: (STANDARD) 24Hr 48Hr 72Hr
Company-ASE, INC.	Company-	Company-	Company- Kiff analytical	OTHER:

KIFF Analytical LLC

SAMPLE RECEIPT CHECKLIST

RECEIVER: TJB for HB (Initials)

SRG#: 83569 Date: 121812

Project ID: Lim

Method of Receipt: [X] Courier [ ] Over-the-counter [ ] Shipper

Shipping Only: [ ] FedEx * [ ] OnTrac * [ ] Greyhound [ ] Other *Service level if not Priority or Sunrise (M-F): _____

COC Inspection

Is COC present?	[X] Yes	[ ] No		
Custody seals on shipping container?	[ ] Intact	[ ] Broken	[ ] Not present	[X] N/A
Is COC Signed by Relinquisher? [X] Yes [ ] No Dated?	[ ] Yes	[X] No		
Is sampler name legibly indicated on COC?	[X] Yes	[ ] No		
Is analysis or hold requested for all samples?	[X] Yes	[ ] No		
Is the turnaround time indicated on COC?	[X] Yes	[ ] No		
Is COC free of whiteout and uninitialed cross-outs?	[X] Yes	[ ] No, Whiteout	[ ] No, Cross-outs	

Sample Inspection

Coolant Present: [X] Yes [ ] No (includes water)

Temperature °C 8.6 Therm. ID# IR-3 Initial TJB Date/Time 121812/1721 [ ] N/A

Are there custody seals on sample containers?	[ ] Intact	[ ] Broken	[X] Not present	
Do containers match COC? [X] Yes [ ] No	[ ] No, COC lists absent sample(s)	[ ] No, Extra sample(s) present		
Are there samples matrices other than soil, water, air or carbon?	[ ] Yes	[X] No		
Are any sample containers broken, leaking or damaged?	[ ] Yes	[X] No		
Are preservatives indicated? [X] Yes, on sample containers	[ ] Yes, on COC	[ ] Not indicated	[ ] N/A	
Are preservatives correct for analyses requested?	[X] Yes	[ ] No	[ ] N/A	
Are samples within holding time for analyses requested?	[X] Yes	[ ] No		
Are the correct sample containers used for the analyses requested?	[X] Yes	[ ] No		
Is there sufficient sample to perform testing?	[X] Yes	[ ] No		

Does any sample contain product, have strong odor or are otherwise suspected to be hot? [ ] Yes [X] No

Receipt Details

Matrix WW	Container type VOA	# of containers received 40
Matrix _____	Container type _____	# of containers received _____
Matrix _____	Container type _____	# of containers received _____

Date and Time Sample Put into Temp Storage Date: 121812 Time: 1727

Quicklog

Are the Sample ID's indicated:	[ ] On COC	[ ] On sample container(s)	[X] On Both	[ ] Not indicated
If Sample ID's are listed on both COC and containers, do they all match?	[X] Yes	[ ] No	[ ] N/A	
Is the Project ID indicated:	[ ] On COC	[ ] On sample container(s)	[X] On Both	[ ] Not indicated
If project ID is listed on both COC and containers, do they all match?	[X] Yes	[ ] No	[ ] N/A	
Are the sample collection dates indicated:	[ ] On COC	[ ] On sample container(s)	[X] On Both	[ ] Not indicated
If collection dates are listed on both COC and containers, do they all match?	[X] Yes	[ ] No	[ ] N/A	
Are the sample collection times indicated:	[ ] On COC	[ ] On sample container(s)	[X] On Both	[ ] Not indicated
If collection times are listed on both COC and containers, do they all match?	[X] Yes	[ ] No	[ ] N/A	

COMMENTS: