

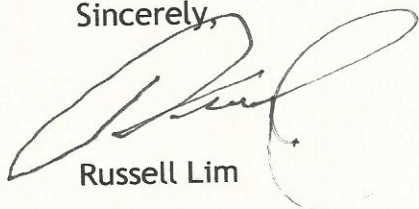
Alameda County Health Care Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

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

RECEIVED

8:44 am, Jul 31, 2012

Alameda County
Environmental Health



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

July 23, 2012

Mr. Jerry Wickham
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

SUBJECT: OZONE-SPARGING AND VAPOR EXTRACTION REMEDIATION
SYSTEMS ANNUAL OPERATION REPORT
AND GROUNDWATER MONITORING REPORT
Lim Property, RO #0000479
250 8th Street
Oakland, California

Dear Mr. Wickham:

On behalf of our clients, Alice Ng and May Lee Lim, Aqua Science Engineers, Inc. (ASE) is pleased to submit this report detailing the annual operation of the ozone-sparging and vapor-extraction remediation equipment at the subject site. This report also includes current groundwater monitoring well analytical results. Should this report satisfy your recent request, we respectfully request you contact the USTCF and notify them that the site is once again in compliance.

Should you require any additional information, please feel free to call me at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

A handwritten signature in black ink that reads "David Allen". The signature is written in a cursive, flowing style.

David Allen
Vice President



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July 9, 2012

REMEDICATION SYSTEMS ANNUAL OPERATION REPORT
AND GROUNDWATER MONITORING RESULTS
LIM PROPERTY
250 8TH STREET
OAKLAND, CALIFORNIA
(ASE JOB NO. 2808)
(RO #0000479)
(USTCF Claim Number 7699)

for

Alice Ng Lim & May Lee Lim
c/o Mr. Russell Lim
3111 Diablo Road
Lafayette, CA 94549

Submitted by:

Aqua Science Engineers
55 Oak Court, Suite 220
Danville, CA 94526
(925) 820-9391



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1.0 INTRODUCTION

This report presents Aqua Science Engineers, Inc. (ASE) details of the operation of the ozone-sparging and vapor-extraction remediation systems at the Lim property located at 250 8th Street in Oakland, California since its start-up in early 2011 (Figure 1). This report also provides current groundwater concentrations in the site's on and off-site groundwater monitoring wells. For the installation and first quarter's operation of the remediation systems, see the ASE system installation report dated June 30, 2011.

2.0 WEEKLY OPERATION AND MAINTENANCE ACTIVITIES

ASE personnel visited the site on a regular basis at least 2 times per week to maintain the remediation equipment. During most visits, ASE personnel completes the following:

- Record the flowrate and vacuum influence of the vapor-extraction system,
- Measure and record the influent vapor concentration of each individual vapor-extraction well with ASE's photoionization detector (PID),
- Measure with ASE's PID and record the influent vapor concentration on the positive side of the remediation system blower which provides the total hydrocarbon concentration entering the remediation system catalytic oxidizer. This concentration is less than the sum of the individual vapor-extraction wells due to fresh air that enters the system as a safety mechanism by the equipment supply company, Mako Industries (Mako),
- Measure with ASE's PID and record hydrocarbon concentrations in the on and off-site utility boxes and the vapor-monitoring points to ensure that hydrocarbon vapors are not being forced to the atmosphere due to the sparging activities,
- Record alarms and information on the sparging remediation equipment,
- Inspect site security fencing.

3.0 REMEDIATION SYSTEMS OPERATION

3.1 Ozone-Sparging Remediation System Operation

Since mid May 2011, the ozone-sparging remediation equipment has operated 99% of the time in "air-only" mode with a constant high flow air stream into each of the 10 sparging wells that are located on and off-site (Figure 2). Ozone has yet to be turned on due to the operation of the Mako vapor-extraction system which is using a catalytic oxidizer as its abatement device. Ozone, if injected and sucked out of the ground by the vapor-extraction equipment, could damage the catalytic oxidizer. It is ASE's intent to modify the abatement device of the vapor-extraction system from the catalytic oxidizer to activated carbon, thus allowing for ozone to be injected, which is harmless to the activated carbon. ASE believes that this change-over can occur within the third quarter of 2012 when hydrocarbon vapor concentrations are stable and low.

Downtime for the ozone-sparging system has only occurred for maintenance purposes and an occasional power failure at the site. To date, no major maintenance has been required for the



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sparging equipment. A complete tune-up of the sparging system that will include compressor rebuild kits, new filters, new solenoid valves, and general maintenance tasks is scheduled for the third quarter of 2012.

3.2 Vapor-Extraction Remediation System Operation

In mid April 2011, the vapor-extraction system, provided to ASE by Mako, was turned on and has been operating continuously since that time. All existing vapor-extraction wells (VE-1 through VE-9) and monitoring wells that were fitted with vapor-extraction plumbing (MW-3 and MW-4R) have been operating in 100% open mode since mid April 2011. The only exceptions to this are VE-2 was closed on April 25, 2012, and VE-4 was closed on March 6, 2012 due to continued low PID concentrations. ASE closed these vapor-extraction wells to allow for greater vacuum influence on the more polluted vapor-extraction wells.

As shown on the attached Vapor-Extraction System Log, the influent vapor concentrations, when measured using ASE's PID, have been on a slowly declining trend. Note that the total influent concentration measured just prior to the catalytic oxidizer is less than the sum of the individual vapor-extraction wells. This is due to fresh air that enters the system as a safety mechanism by Mako. ASE will continue to reduce the vacuum influence on the various vapor-extraction wells as time goes on in an effort to increase the vacuum influence on the most polluted vapor-extraction wells.

3.21 Periodic Influent Vapor Sampling

Since start-up, ASE has collected five influent vapor samples to determine actual petroleum-hydrocarbon concentrations in the extracted subsurface air. Each influent vapor sample was collected from a sample port on the positive side of the blower (just prior to entering the catalytic oxidizer), and consisted of soil vapors being extracted from the vapor-extraction wells on-site and off-site (VE-1 through VE-9) and monitoring wells MW-3 and MW-4R.

The samples were collected in new 1-liter Tedlar bags, labeled individually, and submitted to McCampbell Analytical of Pittsburg, California under chain of custody procedures. The samples were analyzed by McCampbell for TPH-G by EPA Method 8015, and MTBE, benzene, toluene, ethylbenzene, and xylenes (collectively known as MBTEX) by EPA Method 8021. The analytical results are summarized below, and copies of the certified analytical reports from McCampbell are attached in Appendix A.

- The 4/28/11 influent vapor sample contained 4,600 ug/L TPH-G, 38 ug/L benzene, 70 ug/L toluene, 13 ug/L ethylbenzene, 61 ug/L xylenes, and < 50 ug/L MTBE.
- The 5/26/11 influent vapor sample contained 4,100 ug/L TPH-G, 61 ug/L benzene, 93 ug/L toluene, 15 ug/L ethylbenzene, 80 ug/L xylenes, and < 60 ug/L MTBE.
- The 6/30/11 influent vapor sample contained 4,900 ug/L TPH-G, 76 ug/L benzene, 180 ug/L toluene, 36 ug/L ethylbenzene, 190 ug/L xylenes, and < 30 ug/L MTBE.



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- The 12/20/11 influent vapor sample contained 3,100 ug/L TPH-G, 21 ug/L benzene, 48 ug/L toluene, 7.5 ug/L ethylbenzene, 90 ug/L xylenes, and < 50 ug/L MTBE.
- The 6/20/12 influent vapor sample contained 38 ug/L TPH-G, < 0.25 ug/L benzene, 0.33 ug/L toluene, < 0.25 ug/L ethylbenzene, 0.87 ug/L xylenes, and < 2.5 ug/L MTBE.

Based on these analytical results, there has been a significant reduction in vadose-zone hydrocarbon concentrations. ASE plans to continue operation of the vapor-extraction system to (a) reduce the final area of free-floating hydrocarbons identified in well MW-3, (b) continue to alleviate the potential for build-up of vapors due to sparging beneath the off-site properties, and (c) to stimulate air-flow through the polluted zone for assistance in bio-remediation. ASE will notify the BAAQMD and the ACHCSA of the potential to replace the current vapor-extraction abatement device (catalytic oxidizer) with activated carbon.

3.22 *Estimated TPH-G Extracted from Vadose Zone*

Using the analytical results of the influent vapor samples collected from the vapor-extraction remediation system, ASE has calculated the volume of gasoline, in gallons, extracted from the subsurface both on and off-site. As shown on the attached Gasoline Extraction Log, and associated Mass Extraction Calculations, ASE estimates that 814.46 gallons of gasoline, in vapor phase, have been removed from the subsurface vadose zone. These calculations use a typical operating flowrate of 50 cfm, and assume 24/7 operation of the system. For months where actual air bag samples were not collected, ASE estimated the gallons extracted per day by using the actual air bag analytical results of the samples collected prior to and after the months without data, and finding the average between these months. See Appendix B for a copy of the Gasoline Extraction Log.

4.0 REMEDIATION SYSTEMS AND SITE MONITORING

4.1 Remediation Equipment Operating Parameters

ASE visits the site on a regular basis to confirm that the remediation equipment, both sparging and vapor-extraction, are working as designed. As the attached Vapor-Extraction Equipment Log shows, ASE logged/measured the system's operating flow in cfm, the overall influent vapor concentration (using a PID), and the individual well influent vapor concentrations. As the attached Sparging Well Log shows, ASE logged the operating parameters of each sparging well, showing the duration and injection media (low or high-flow air). At this point in time, ASE is operating the sparging equipment in a non-ozone mode to eliminate the potential for ozone to be extracted by the vapor-extraction wells and thus injecting ozone into the Mako equipment. Ozone in the Mako equipment could damage the catalyst. See Appendix B for copies of the Sparging Well Log and Vapor-Extraction System Log.



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4.2 Hydrocarbon Vapor Readings from Utility and Well Boxes Using PID

ASE measured for hydrocarbon vapors in the VMP's, remediation well boxes, and sidewalk utility boxes across 8th Street using a PID multiple times per week in an effort to determine if stripped hydrocarbons were being forced to the atmosphere by operation of the sparging wells. As shown on the attached Hydrocarbon Vapor Measurement Log, PID readings have always been "0" since the start-up of the vapor-extraction remediation system. ASE also measured for hydrocarbons in the utility boxes in the sidewalk in front of the subject site and within the well boxes and underground piping manifold box on site. Again, at no time were any PID readings above "0" observed in any sampling point. See Appendix B for a copy of the Hydrocarbon Vapor Measurement Log.

5.0 GROUNDWATER MONITORING WELL SAMPLE COLLECTION

5.1 Water levels, Free-Product Thickness, and Flow Direction

On June 22, 2012, ASE measured the depth to water in monitoring wells MW-1 and MW-2 and MW-5 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. Free-floating hydrocarbon measurements were taken on vapor-extraction wells MW-3 and MW-4R using an interface probe due to the occasional historic presence of free-floating hydrocarbons. No free-floating hydrocarbons or sheen were present in any of the wells described above except for well MW-3 which contained 0.69-feet of free-floating hydrocarbons. Groundwater elevation data is presented in Table One.

A groundwater elevation (potentiometric surface) contour map is shown as Figure 3. The groundwater flow direction at the site is generally to the south with an approximate gradient of 0.01 feet/foot during this sampling period. The gradient and flow direction are generally consistent with previous findings.

5.2 Groundwater Sample Collection

On June 22, 2012, ASE collected groundwater samples from all monitoring wells except well MW-3 for analysis. The free-floating hydrocarbons in well MW-3 were removed with a bailer, and the product/water mixture was stored on site in a drum for later disposal. Prior to sampling, the remaining 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 C for copies of the well sampling field logs.



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5.3 Analytical Results for Groundwater Samples

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 D. The groundwater analytical results are summarized below:

- MW-1 contained 750 parts per billion (ppb) TPH-G, 23 ppb benzene, 1.1 ppb ethylbenzene, 2.3 ppb total xylenes, 0.80 ppb DIPE, and 12 ppb TBA. These concentrations are similar to the results from 2001. The current detectable concentrations are likely due to the sparging at the site and represents a slight shift in the water table from mounding.
- MW-2 contained 1,200 ppb TPH-G, 140 ppb TPH-D, 50 ppb benzene, 56 ppb toluene, 4.0 ppb ethylbenzene, 160 ppb xylenes, 1.6 ppb DIPE, 17 ppb TBA and 1.1 EDC. These concentrations represent historic lows for this well.
- 0.69-feet of free-floating hydrocarbons were detected in monitoring well MW-3. This product was bailed and stored within a drum. The thickness of product is similar to previous measurements.
- MW-4R contained 4,500 ppb TPH-G, 31 ppb benzene, 53 ppb toluene, 5.0 ppb ethylbenzene, 500 ppb xylenes, 6.3 ppb MTBE, 6.1 ppb DIPE, 180 ppb TBA and 21 EDC. A majority of these concentrations represent historic lows for this well.
- No hydrocarbons or oxygenates were detected in groundwater samples collected from monitoring well MW-5.
- No hydrocarbons or oxygenates were detected in groundwater samples collected from monitoring well MW-6.
- MW-7 contained 10,000 ppb TPH-G, 120 ppb benzene, 52 ppb toluene, 1,100 ppb ethylbenzene, 310 ppb xylenes, and 43 ppb TBA. These concentrations are similar to but lower than the last sampling event in 2011.
- No hydrocarbons were detected in groundwater samples collected from monitoring well MW-8, indicating that the contamination has not reached the deeper water-bearing zones.

Concentrations of various chemicals in groundwater samples collected from wells MW-1, MW-2, MW-3, MW-4R and MW-7 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.

Current groundwater concentrations are much lower than in previous sampling events; this is obviously do to the ongoing soil vapor and groundwater remediation activities. ASE believes that continuation of the remediation systems will have an even greater affect on decreasing the hydrocarbon concentrations in groundwater over the next 12 to 18 months.



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6.0 RECOMMENDATIONS

Based on the findings and the details reported within, ASE recommends the following:

- Continued operation of the remediation systems at the site for a minimum period of 12 months, with some modifications as listed below.
- During the month of August, ASE will turn off the vapor-extraction system for a period of two weeks. At the same time, switch the ozone-sparging system to “low-flow ozone sparging.” During the two weeks, visit the site daily to evaluate and monitor for hydrocarbon vapor and ozone concentrations in the off-site street boxes, VMPs, and well boxes.
- Once free-product is no longer visible on the surface of well MW-3, contact Mako Industries and have them re-engineer the vapor-extraction system to use activated carbon as the abatement device. ASE believes this can be achieved sometime during the Fall of 2012. ASE will notify the BAAQMD and ACHCSA of this change prior to actual field work.
- Operate the ozone-sparging remediation equipment in ozone mode as soon as the vapor-extraction abatement device is switched to activated carbon.
- Collect groundwater samples from monitoring wells MW-1 through MW-8, including wells MW-3 and MW-4R which are now vapor-extraction wells, in January 2013 and June 2013. In July 2013, prepare an annual remediation effectiveness report.



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7.0 SIGNATURES

Should you require any additional information, please feel free to contact us at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

A handwritten signature in cursive script that reads "David Allen".

David Allen
Vice President

A handwritten signature in cursive script that reads "Robert E. Kitay".

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

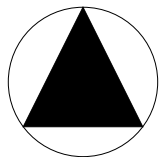
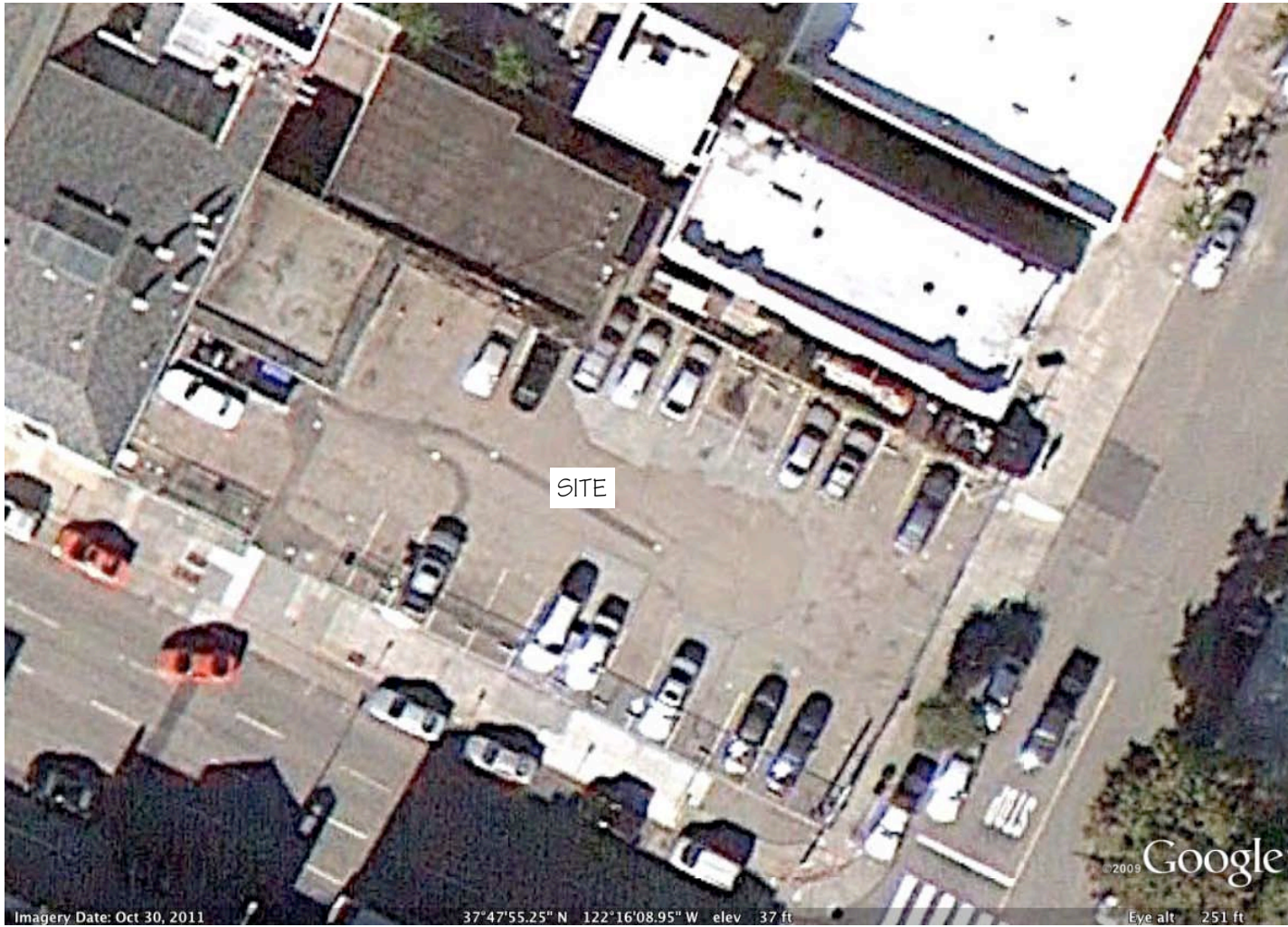


Cc: Mr. Jerry Wickhman, ACHCSA, electronically
Mr. Russ Lim, responsible party representative, electronically
RWQCB Geotracker Database, electronically



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



NORTH

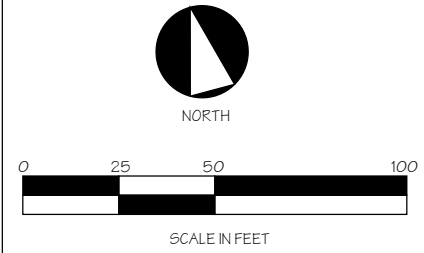
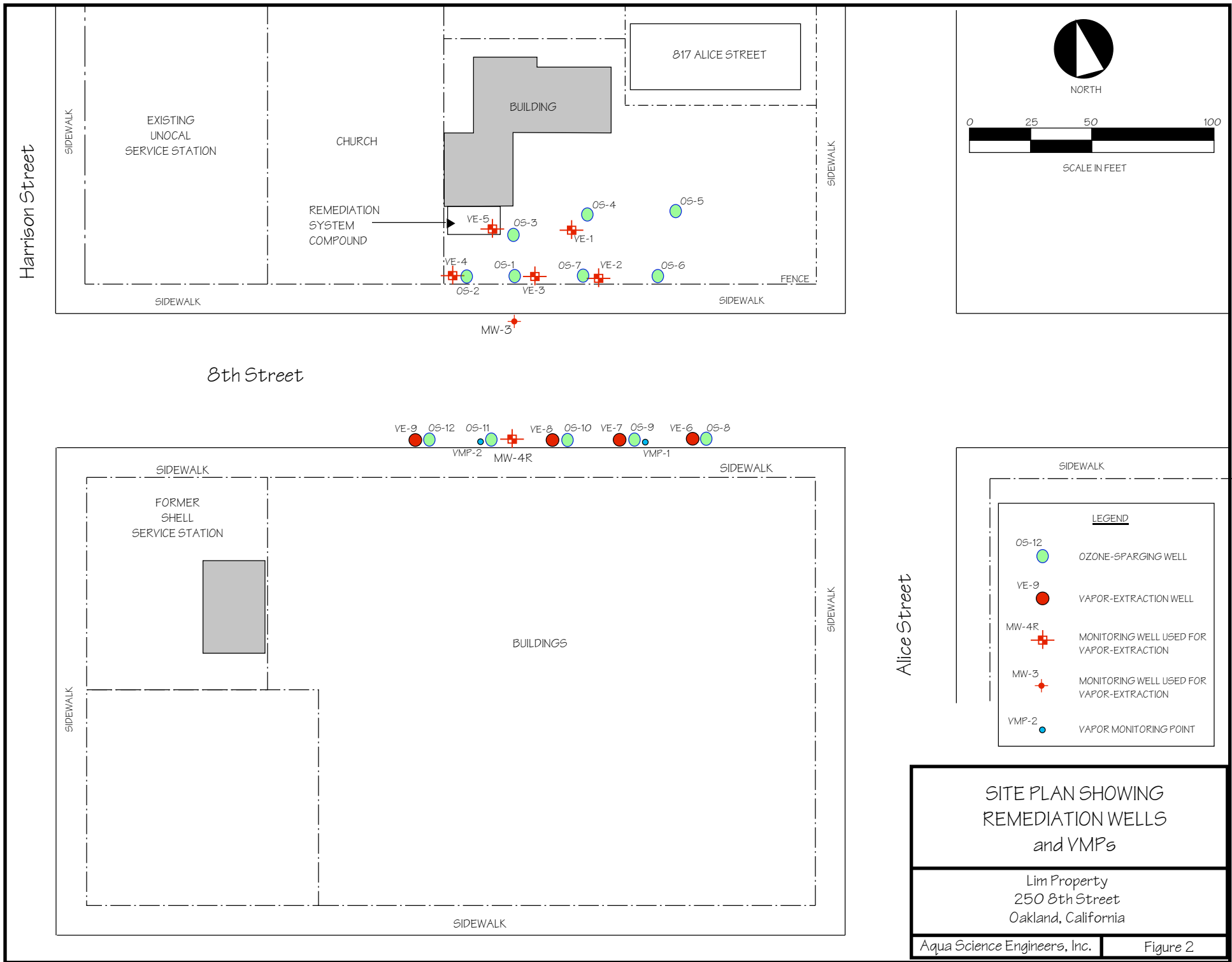
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SITE LOCATION MAP

Lim Family Property
250 8th Street
Oakland, California

Aqua Science Engineers

Figure 1

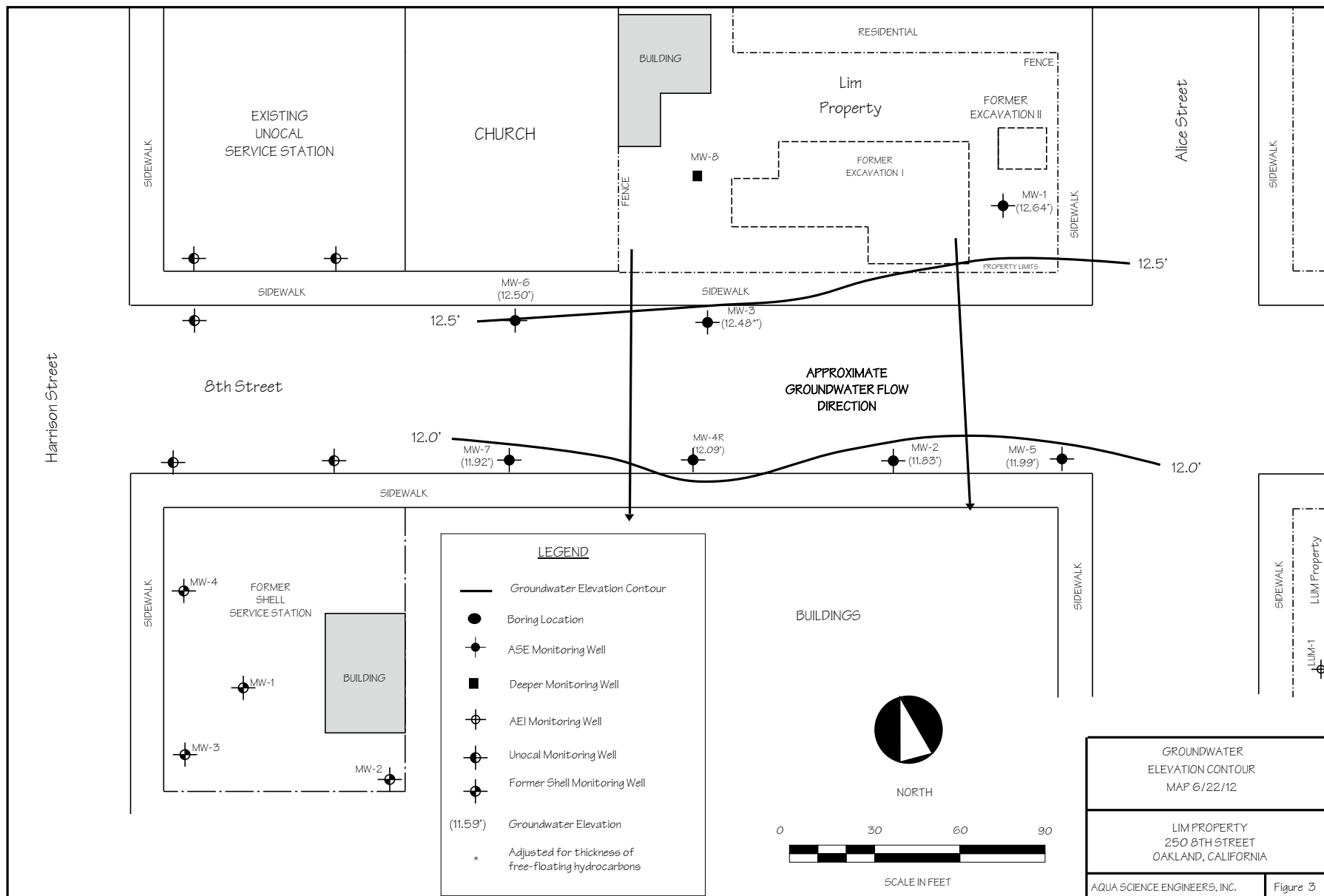


LEGEND

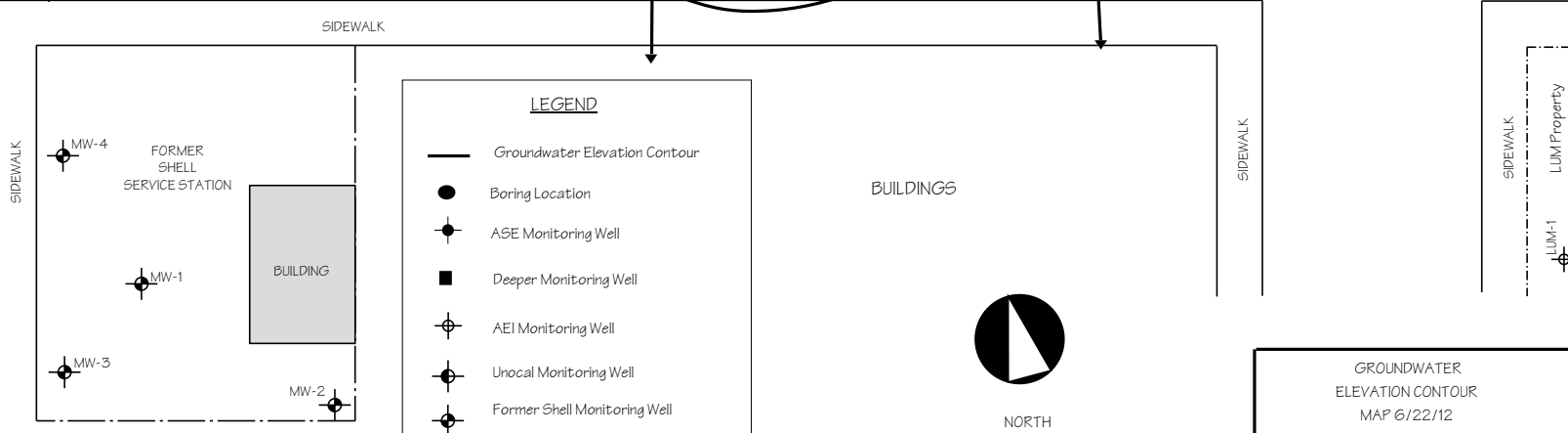
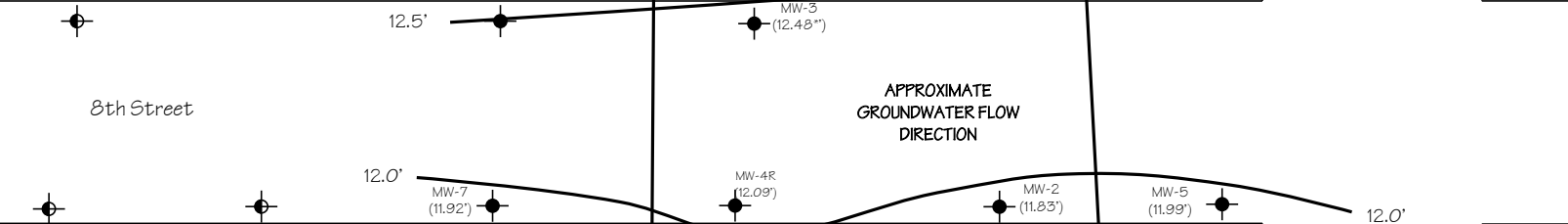
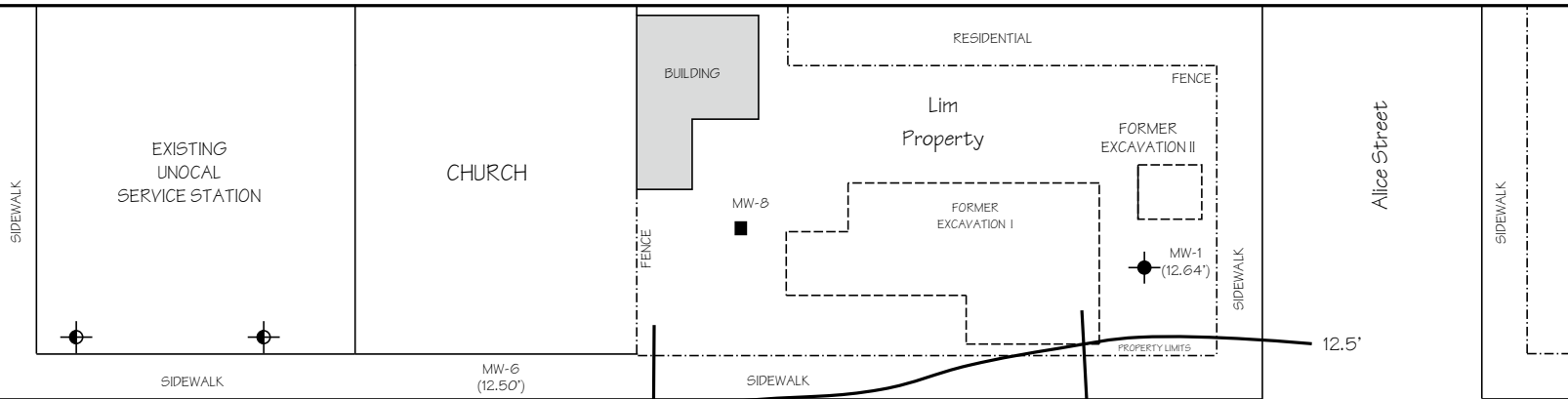
OS-12 	OZONE-SPARGING WELL
VE-9 	VAPOR-EXTRACTION WELL
MW-4R 	MONITORING WELL USED FOR VAPOR-EXTRACTION
MW-3 	MONITORING WELL USED FOR VAPOR-EXTRACTION
VMP-2 	VAPOR MONITORING POINT

SITE PLAN SHOWING
REMEDATION WELLS
and VMPs

Lim Property
250 8th Street
Oakland, California



Harrison Street





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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

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		16.56		11.85

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	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	
08/22/12			15.95	16.64	0.69*

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

Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-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
	08/22/12		18.89		Survey

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

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

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		17.05		11.92
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		21.25	

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	25	<0.50	11	2.5	<0.50	0.80	12	<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
<u>MW-2</u>												
01/30/95	88,000	800	19,000	18,000	2,400	10,000	--	---	---	---	---	---
04/12/95	110,000	990	21,000	28,000	2,800	14,000	--	---	---	---	---	---
07/14/95	120,000	5,000	20,000	25,000	3,200	15,000	--	---	---	---	---	---
10/17/95	190,000	4,000	15,000	26,000	4,900	23,000	--	---	---	---	---	---
01/12/96	32,000	2,600	10,000	8,000	1,100	4,800	< 2	---	---	---	---	---
07/08/96	110,000	2,500	20,000	18,000	2,500	12,000	< 500	---	---	---	---	---
01/06/97	230,000	37,000	11,000	19,000	4,300	20,000	<1,200	---	---	---	---	---
07/08/97	91,000	35,000	16,000	20,000	2,700	13,000	<1,000	---	---	---	< 0.5	< 0.5
01/26/98	50,000	11,000	12,000	12,000	1,600	6,700	< 250	---	---	---	11	< 0.5
07/23/98	50,000	8,100#	11,000	8,300	1,800	7,000	1,100	---	---	---	9.9	< 0.5
01/05/99	50,000	7,600#	12,000	12,000	2,300	9,600	1,300	---	---	---	< 50	< 50
07/13/99	73,000	8,500	11,000	13,000	2,200	9,800	< 500	---	---	---	7.7	< 0.5
01/12/00	63,000	11,000	10,000	12,000	1,800	7,800	< 500	---	---	---	8.8	< 1.0
04/24/00	76,000	23,000*	7,100	14,000	2,000	9,400	< 500	---	---	---	5.9	< 5.0
07/20/00	68,000	5,300#	11,000	14,000	2,300	11,000	<1,000	---	---	---	6.7	< 5.0
10/24/00	48,000	6,400*	11,000	9,400	1,500	7,300	< 500	---	---	---	< 5.0	< 5.0
01/18/01	37,000	4,600*	6,900	5,600	1,200	5,300	< 500	---	---	---	< 5.0	< 5.0
04/05/01	59,000	4,600*	7,100	9,800	1,600	7,600	< 500	---	---	---	4.6	< 5.0
07/17/01	90,000	< 10,000	9,200	14,000	2,700	11,000	< 50	---	---	---	< 50	---
10/25/01	79,000	< 3,800	9,200	14,000	2,400	11,000	< 50	---	---	---	< 50	< 50
01/22/02	76,000	< 2,300	7,000	13,000	2,200	9,600	< 50	---	---	---	< 50	< 50
04/11/02	76,000	< 1,500	7,800	11,000	2,900	12,000	< 50	---	---	---	---	---
06/11/02	72,000	< 2,500	7,300	9,600	2,500	12,000	< 50	---	---	---	---	---
09/17/02	52,000	< 3,000	5,000	5,400	2,100	9,100	< 20	---	---	---	< 20	< 20
12/18/02	46,000	< 6,000	2,900	3,000	1,800	7,600	22	---	---	---	< 10	< 10
03/25/03	87,000	< 8,000	7,900	9,300	2,900	12,000	< 50	---	---	---	< 50	< 50
06/23/03	46,000	< 3000	7,800	4,000	1,900	6,600	< 50	---	---	---	< 50	< 50
09/26/03	52,000	< 3000	9,100	3,500	1,300	5,000	< 50	---	---	---	< 50	< 50
12/18/03	61,000	< 4,000	13,000	3,500	1,600	5,600	< 20	---	---	---	< 20	< 20
03/12/04	53,000	< 4,000	9,100	3,500	1,700	5,700	< 25	---	---	---	< 25	< 25
06/17/04	59,000	< 3,000	7,100	4,000	1,700	7,300	< 25	---	---	---	< 25	< 25
09/17/04	33,000	--	9,800	1,200	1,300	4,000	< 20	---	---	---	---	---
11/10/04***	44,000	3,600	13,000	4,400	1,600	6,000	<1000	---	---	---	---	---
12/17/04	54,000	< 3,000	7,900	2,200	1,700	3,900	< 15	---	---	---	< 15	< 15
04/28/05	81,000	< 3,000	7,000	6,000	2,100	8,700	< 15	90	< 15	< 15	< 15	< 15
07/19/05	59,000	na	7,900	4,400	1,900	7,000	< 15	< 15	77	< 15	< 15	< 15
10/03/05	34,000	< 800	7,800	810	1,000	2,800	< 15	< 15	< 70	< 15	< 15	< 15
12/06/05	26,000	< 800	6,100	940	770	2,000	< 15	---	---	---	---	---
03/15/06	33,000	< 1,500	7,700	2,600	1,400	4,200	< 15	< 15	< 15	< 15	< 15	< 15
06/28/06	96,000	< 4,000	10,000	14,000	2,900	12,000	< 15	< 15	< 5.0	< 15	33	< 15
8/31/06	47,000	< 3,000	5,800	5,100	2,200	8,700	< 15	< 15	81	< 15	< 15	< 15
11/21/06	51,000	< 1,500	6,800	3,400	1,700	6,200	< 15	< 15	82	< 15	< 15	< 15
02/23/07	38,000	< 1,500	7,800	2,000	1,500	4,600	< 15	< 15	190	< 15	< 15	< 15
05/02/07	55,000	< 3,000	6,500	5,100	2,400	8,600	< 15	< 15	110	< 15	< 15	< 15
08/09/07	39,000	< 3,000	6,600	2,200	1,600	4,900	< 15	< 15	81	< 15	< 15	< 15
12/06/07	20,000	< 1,500	7,400	510	680	1,200	< 15	< 15	120	< 15	< 15	< 15
02/26/08	43,000	< 4,000	8,200	940	1,400	3,700	< 15	< 15	70	< 15	< 15	< 15
05/30/08	31,000	< 1,000	11,000	620	1,100	2,300	< 15	< 15	84	< 15	< 15	< 15
08/28/08	38,000	< 3,000	11,000	630	1,400	3,800	< 25	< 25	< 150	< 25	---	---
12/11/08	32,000	< 2,000	11,000	610	1,000	2,700	< 25	< 25	< 150	< 25	---	---
03/31/09	44,000	< 4,000	6,500	3,300	1,700	5,600	< 9.0	< 9.0	56	< 9.0	< 9.0	< 9.0
12/31/09	36,000	< 4,000	9,700	350	1,600	3,800	< 9.0	13	56	< 9.0	< 9.0	< 9.0
06/03/10	53,000	< 10,000	8,600	2,600	2,500	8,000	< 5.0	8.9	69	< 5.0	< 5.0	< 5.0
12/20/10	39,000	< 4,000	13,000	530	1,600	3,600	< 15	21	< 70	< 15	< 15	< 15
06/30/11	65,000	< 6,000	7,300	5,900	2,400	10,000	< 20	< 20	< 90	< 20	< 20	< 20
06/22/12	1,200	140	50	56	4.0	180	< 0.50	16	17	< 0.50	11	< 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
<u>MW-3</u>												
01/12/00	140,000	13,000*	22,000	19,000	2,400	11,000	< 500	---	---	---	---	---
04/24/00	240,000	700,000*	33,000/	52,000/	5,700/	28,000/	< 5,000	---	---	---	---	---
			35,000	87,000	18,000	84,000						
07/20/00	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
10/24/00	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
01/18/01	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
04/05/01	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
07/17/01	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
10/25/01	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
01/22/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
04/11/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/11/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
09/17/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/18/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
03/25/03	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/23/03	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
09/26/03	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/18/03	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
03/12/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/17/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
09/17/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
11/10/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/17/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
04/28/05	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
07/19/05	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
10/03/05	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/06/05	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)											

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
<u>MW-4</u>												
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											
<u>MW-4R</u>												
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	6.5	6.1	180	<0.5	21	<0.5

TABLE TWO

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

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	DIPE	TBA	Other Oxys	EDC	EDB
<u>MW-5</u>												
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

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
<u>MW-6</u>												
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

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	1100	310	< 2.0	< 2.0	45	< 2.0	< 2.0	< 2.0
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
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 (B020/B260)

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

EDC = 1,2-Dichloroethane

MTBE = Methyl tertiary butyl ether

EDB = 1,2-Dibromoethane

DIPE = Diisopropyl ether

TBA = Tery-butanol

Oxy = Oxygenates



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

APPENDIX A

CERTIFIED ANALYTICAL REPORT
AND CHAIN OF CUSTODY DOCUMENTATION
FOR AIR BAG SAMPLES



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2808; LIM, 250 8th St	Date Sampled: 04/28/11
		Date Received: 04/28/11
	Client Contact: Dave Allen	Date Reported: 05/03/11
	Client P.O.:	Date Completed: 05/02/11

WorkOrder: 1104821

May 03, 2011

Dear Dave:

Enclosed within are:

- 1) The results of the 2 analyzed samples from your project: #2808; LIM, 250 8th St,
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

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

Chain of Custody

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SAMPLER (SIGNATURE)

David Allen

PROJECT NAME LIM

JOB NO. 2808

ADDRESS 250 8th St. Oakland, Ct

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	QUANTITY	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015)	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 (EPA METHOD 8260)	MULT-RANGE HYDROCARBONS WITH SILICA GEL CLEANUP (EPA 8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	LIFT METALS (5) (EPA 6010+7000)	COMPOSITE 4:1	EDF	
																				VE-INF-04-28-11
VE-EFF-04-28-11	"	1240	Air	1	X															

RELINQUISHED BY:

David Allen
 (signature) (time)

DAVID ALLEN 4/28/11
 (printed name) (date)

Company-ASE, INC.

RECEIVED BY:

Ben Klas 1445
 (signature) (time)

Ben Klas 4/28/11
 (printed name) (date)

Company-mcCampbell

RELINQUISHED BY:

Ben Klas 1715
 (signature) (time)

Ben Klas 4/28/11
 (printed name) (date)

Company-

RECEIVED BY LABORATORY:

Anal
 (signature) (time)

anal 4/28/11
 (printed name) (date)

Company-

COMMENTS:

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

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1104821

ClientCode: ASED

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:		Bill to:	Requested TAT: 5 days
Dave Allen	Email: dallen@aquascienceengineers.com	Diane Schiell	
Aqua Science Engineers, Inc.	cc:	Aqua Science Engineers, Inc.	Date Received: 04/28/2011
55 Oak Court Suite 220	PO:	217 Wild Flower Drive	Date Printed: 04/28/2011
Danville, CA 94526	ProjectNo: #2808; LIM, 250 8th St	Roseville, CA 95678	
(925) 820-9391 FAX (925) 837-4853		deezthng22@yahoo.com	

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	
1104821-001	VE-INF-04-28-11	Air	4/28/2011 12:35	<input type="checkbox"/>	A	A											
1104821-002	VE-EFF-04-28-11	Air	4/28/2011 12:40	<input type="checkbox"/>	A												

Test Legend:

1	G-MBTEX AIR	2	PREDF REPORT	3		4		5	
6		7		8		9		10	
11		12							

The following SamplIDs: 001A, 002A contain testgroup.

Prepared by: Ana Venegas

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.



Sample Receipt Checklist

Client Name: **Aqua Science Engineers, Inc.**

Date and Time Received: **4/28/2011 5:42:08 PM**

Project Name: **#2808; LIM, 250 8th St**

Checklist completed and reviewed by: **Ana Venegas**

WorkOrder N°: **1104821** Matrix Air

Carrier: Benjamin Yslas (MAI Courier)

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
- Container/Temp Blank temperature Cooler Temp: NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- Metal - pH acceptable upon receipt (pH<2)? Yes No NA
- Samples Received on Ice? Yes No

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

Client contacted:

Date contacted:

Contacted by:

Comments:



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Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2808; LIM, 250 8th St	Date Sampled: 04/28/11
	Client Contact: Dave Allen	Date Received: 04/28/11
	Client P.O.:	Date Extracted: 04/29/11
		Date Analyzed: 04/29/11

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1104821

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	VE-INF-04-28-11	A	4600	ND<50	38	70	13	61	20	94	d1
002A	VE-EFF-04-28-11	A	ND	ND	ND	ND	ND	ND	1	100	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	0.25	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

d1) weakly modified or unmodified gasoline is significant



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Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2808; LIM, 250 8th St	Date Sampled: 04/28/11
	Client Contact: Dave Allen	Date Received: 04/28/11
	Client P.O.:	Date Extracted: 04/29/11
		Date Analyzed: 04/29/11

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with MTBE and BTEX in ppmv*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1104821

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	VE-INF-04-28-11	A	1300	ND<14	12	18	2.9	14	20	94	d1
002A	VE-EFF-04-28-11	A	ND	ND	ND	ND	ND	ND	1	100	

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* vapor samples are reported in µL/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L, water samples and all TCLP & SPLP extracts are reported in µg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

d1) weakly modified or unmodified gasoline is significant



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air

QC Matrix: Water

BatchID: 57991

WorkOrder 1104821

EPA Method SW8021B/8015Bm		Extraction SW5030B							Spiked Sample ID: 1104823-002A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	99.4	109	9.39	105	98.6	6.48	70 - 130	20	70 - 130	20
MTBE	ND	10	123	118	4.76	119	123	3.13	70 - 130	20	70 - 130	20
Benzene	ND	10	105	109	3.86	106	107	0.633	70 - 130	20	70 - 130	20
Toluene	ND	10	102	108	6.27	108	105	2.28	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	102	107	4.70	102	103	0.680	70 - 130	20	70 - 130	20
Xylenes	ND	30	104	107	3.39	105	105	0	70 - 130	20	70 - 130	20
%SS:	104	10	99	99	0	102	101	1.78	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 57991 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1104821-001A	04/28/11 12:35 PM	04/29/11	04/29/11 11:24 AM	1104821-001A	04/28/11 12:35 PM	04/29/11	04/29/11 11:24 AM
1104821-002A	04/28/11 12:40 PM	04/29/11	04/29/11 12:54 PM	1104821-002A	04/28/11 12:40 PM	04/29/11	04/29/11 12:54 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2808; LIM	Date Sampled: 05/26/11
		Date Received: 05/27/11
	Client Contact: Dave Allen	Date Reported: 06/02/11
	Client P.O.:	Date Completed: 06/02/11

WorkOrder: 1105859

June 02, 2011

Dear Dave:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#2808; LIM,**
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

1105859

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

Chain of Custody

PAGE 1 of 1

SAMPLER (SIGNATURE)
David Allen

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)	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 (EPA METHOD 8260)	MULT-RANGE HYDROCARBONS WITH SILICA GEL CLEANUP (EPA 8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	LUFT METALS (5) (EPA 6010+7000)	COMPOSITE 4:1	EDF		
																				<u>VE-INF-05.26.11</u>	<u>5/26/11</u>

ICE# N/A
 GOOD CONDITION
 HEAD SPACE ABSENT
 DECHLORINATED IN LAB
 PRESERVATION VOAS O&G METALS OTHER
 APPROPRIATE CONTAINERS PRESERVED IN LAB

RELINQUISHED BY:
David Allen 1630
(signature) (time)
DAVID ALLEN 05.26.11
(printed name) (date)
Company-ASE, INC.

RECEIVED BY:
Ben 1045
(signature) (time)
BEN GLAS 5/27/11
(printed name) (date)
Company-*m Campbell*

RELINQUISHED BY:
Ben 1227
(signature) (time)
Ben 5/27/11
(printed name) (date)
Company-

RECEIVED BY LABORATORY:
Maria
(signature) (time)
Maria Venegas
(printed name) (date)
Company-MAE 5/27/11 1227

COMMENTS:
95cfm @ time of sampling.
TURN AROUND TIME
STANDARD 24Hr 48Hr 72Hr
OTHER:

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1105859

ClientCode: ASED

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:	Bill to:	Requested TAT: 5 days
Dave Allen	Diane Schiell	
Aqua Science Engineers, Inc.	Aqua Science Engineers, Inc.	<i>Date Received: 05/27/2011</i>
55 Oak Court Suite 220	217 Wild Flower Drive	<i>Date Printed: 05/27/2011</i>
Danville, CA 94526	Roseville, CA 95678	
(925) 820-9391 FAX (925) 837-4853	deezthng22@yahoo.com	
Email: dallen@aquascienceengineers.com		
cc:		
PO:		
ProjectNo: #2808; LIM		

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		
1105859-001	VE-INF-05.26.11	Air	5/26/2011 13:00	<input type="checkbox"/>	A													

Test Legend:

1	G-MBTEX AIR	2		3		4		5	
6		7		8		9		10	
11		12							

The following SampID: 001A contains testgroup.

Prepared by: Maria Venegas

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.



Sample Receipt Checklist

Client Name: **Aqua Science Engineers, Inc.**

Date and Time Received: **5/27/2011 1:26:07 PM**

Project Name: **#2808; LIM**

Checklist completed and reviewed by: **Maria Venegas**

WorkOrder N°: **1105859** Matrix Air

Carrier: Benjamin Yslas (MAI Courier)

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
- Container/Temp Blank temperature Cooler Temp: NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- Metal - pH acceptable upon receipt (pH<2)? Yes No NA
- Samples Received on Ice? Yes No

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

Client contacted:

Date contacted:

Contacted by:

Comments:



McC Campbell Analytical, Inc.

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 Web: www.mcccampbell.com E-mail: main@mcccampbell.com
 Telephone: 877-252-9262 Fax: 925-252-9269

Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2808; LIM	Date Sampled: 05/26/11
		Date Received: 05/27/11
	Client Contact: Dave Allen	Date Extracted: 05/27/11
	Client P.O.:	Date Analyzed: 05/27/11

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1105859

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	VE-INF-05.26.11	A	4100	ND<60	61	93	15	80	4	109	d1

Reporting Limit for DF =1;	A	25	2.5	0.25	0.25	0.25	0.25	0.25	μg/L
ND means not detected at or above the reporting limit	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in μg/L, soil/sludge/solid samples in mg/kg, wipe samples in μg/wipe, product/oil/non-aqueous liquid samples in mg/L.
 # cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
 +The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 d1) weakly modified or unmodified gasoline is significant



McC Campbell Analytical, Inc.

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Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2808; LIM	Date Sampled: 05/26/11
		Date Received: 05/27/11
	Client Contact: Dave Allen	Date Extracted: 05/27/11
	Client P.O.:	Date Analyzed: 05/27/11

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with MTBE and BTEX in ppmv*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1105859

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	VE-INF-05.26.11	A	1100	ND<20	19	24	3.4	18	4	109	d1

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* vapor samples are reported in µL/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L, water samples and all TCLP & SPLP extracts are reported in µg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

d1) weakly modified or unmodified gasoline is significant

 Angela Rydelius, Lab Manager



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air

QC Matrix: Water

BatchID: 58655

WorkOrder 1105859

EPA Method SW8021B/8015Bm		Extraction SW5030B							Spiked Sample ID: 1105857-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) [£]	ND	60	84.1	87.9	4.50	86.6	82.6	4.70	70 - 130	20	70 - 130	20
MTBE	ND	10	93.7	92.1	1.73	99.5	95.6	3.99	70 - 130	20	70 - 130	20
Benzene	ND	10	93.5	101	7.33	91.4	90.8	0.640	70 - 130	20	70 - 130	20
Toluene	ND	10	84.2	91	7.73	83.5	82	1.83	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	86.5	93.3	7.52	85	83.7	1.52	70 - 130	20	70 - 130	20
Xylenes	ND	30	101	108	7.53	98.9	97	1.94	70 - 130	20	70 - 130	20
%SS:	102	10	100	102	2.12	98	98	0	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 58655 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1105859-001A	05/26/11 1:00 PM	05/27/11	05/27/11 7:28 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



Analytical Report

Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2808; LIM, 250 8th St	Date Sampled: 06/30/11
		Date Received: 06/30/11
	Client Contact: Dave Allen	Date Reported: 07/05/11
	Client P.O.:	Date Completed: 07/01/11

WorkOrder: 1106A09

July 05, 2011

Dear Dave:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#2808; LIM, 250 8th St**,
- 2) A QC report for the above sample,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.

1106A09

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

Chain of Custody

PAGE 1 of 1

SAMPLER (SIGNATURE)

PROJECT NAME LM JOB NO. 2808
ADDRESS 250 8th St, 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)	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	C&M 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/S OXYS (EPA METHOD 8260)	MULT-RANGE HYDROCARBONS WITH SILICA GEL CLEANUP (EPA 8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	LIFT METALS (5) (EPA 6010+7000)	COMPOSITE 4:1	EDF	
																				INF-VE-06-30-11

RELINQUISHED BY:

(signature) (time)

RECEIVED BY:

(signature) (time)

RELINQUISHED BY:

(signature) (time)

RECEIVED BY LABORATORY:

(signature) (time)

COMMENTS:

David M... 6/30/11
(printed name) (date)

DEK... 6/30/11
(printed name) (date)

David M... 6/30/11
(printed name) (date)

ANALYSIS
Company- MAI 6/30 1730
(printed name) (date)

TURN AROUND TIME
STANDARD 24Hr 48Hr 72Hr

Company- ASE, INC.

Company- MCCAMPBELL

Company-

Company-

OTHER:

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1106A09

ClientCode: ASED

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Report to:

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

Email: dallen@aquascienceengineers.com
 cc:
 PO:
 ProjectNo: #2808; LIM, 250 8th St

Bill to:

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

Requested TAT: 5 days

Date Received: 06/30/2011

Date Printed: 07/01/2011

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	
1106A09-001	INF-VE-06.30.11	Air	6/30/2011 11:10	<input type="checkbox"/>	A	A											

Test Legend:

1	G-MBTEX_AIR	2	PREFD REPORT	3		4		5	
6		7		8		9		10	
11		12							

The following SampID: 001A contains testgroup.

Prepared by: Ana Venegas

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.



Sample Receipt Checklist

Client Name: **Aqua Science Engineers, Inc.**

Date and Time Received: **6/30/2011 5:50:20 PM**

Project Name: **#2808; LIM, 250 8th St**

Checklist completed and reviewed by: **Ana Venegas**

WorkOrder N°: **1106A09** Matrix: Air

Carrier: Derik Cartan (MAI Courier)

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
- Container/Temp Blank temperature Cooler Temp: NA
- Water - VOA vials have zero headspace / no bubbles? Yes No No VOA vials submitted
- Sample labels checked for correct preservation? Yes No
- Metal - pH acceptable upon receipt (pH<2)? Yes No NA
- Samples Received on Ice? Yes No

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

Client contacted:

Date contacted:

Contacted by:

Comments:



McC Campbell Analytical, Inc.

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Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2808; LIM, 250 8th St	Date Sampled: 06/30/11
	Client Contact: Dave Allen	Date Received: 06/30/11
	Client P.O.:	Date Extracted: 07/01/11
		Date Analyzed: 07/01/11

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1106A09

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-VE-06.30.11	A	4900	ND<30	76	180	36	190	4	122	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	0.25	0.25	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant



McC Campbell Analytical, Inc.

"When Quality Counts"

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Web: www.mcccampbell.com E-mail: main@mcccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2808; LIM, 250 8th St	Date Sampled: 06/30/11
	Client Contact: Dave Allen	Date Received: 06/30/11
	Client P.O.:	Date Extracted: 07/01/11
		Date Analyzed: 07/01/11

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with MTBE and BTEX in ppmv*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1106A09

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-VE-06.30.11	A	1400	ND<10	23	48	8.3	44	4	122	d1

ppm (mg/L) to ppmv (ul/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* vapor samples are reported in µL/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L, water samples and all TCLP & SPLP extracts are reported in µg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air

QC Matrix: Water

BatchID: 59407

WorkOrder: 1106A09

EPA Method: SW8021B/8015Bm		Extraction: SW5030B							Spiked Sample ID: 1106A37-002A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex) £	ND	60	114	119	3.69	110	108	1.63	70 - 130	20	70 - 130	20
MTBE	ND	10	107	110	3.42	113	112	1.30	70 - 130	20	70 - 130	20
Benzene	ND	10	85.9	90.5	5.16	89.2	88.3	1.09	70 - 130	20	70 - 130	20
Toluene	ND	10	86.7	90	3.75	88.2	87.6	0.642	70 - 130	20	70 - 130	20
Ethylbenzene	ND	10	88.9	92	3.40	89.2	88.8	0.464	70 - 130	20	70 - 130	20
Xylenes	ND	30	89.2	91.6	2.66	89.1	88.5	0.661	70 - 130	20	70 - 130	20
%SS:	114	10	92	95	2.23	98	97	0.892	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 59407 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1106A09-001A	06/30/11 11:10 AM	07/01/11	07/01/11 7:41 AM	1106A09-001A	06/30/11 11:10 AM	07/01/11	07/01/11 7:41 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 £ TPH(btex) = sum of BTEX areas from the FID.
 # cluttered chromatogram; sample peak coelutes with surrogate peak.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



Analytical Report

Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2808; LIM	Date Sampled: 12/20/11
		Date Received: 12/20/11
	Client Contact: Dave Allen	Date Reported: 12/27/11
	Client P.O.:	Date Completed: 12/27/11

WorkOrder: 1112600

December 27, 2011

Dear Dave:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#2808; LIM,**
- 2) QC data for the above sample, and
- 3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing

McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
 Laboratory Manager
 McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.

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

Chain of Custody

1112600

PAGE 1 of 1

SAMPLER (SIGNATURE)

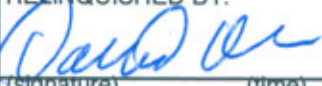


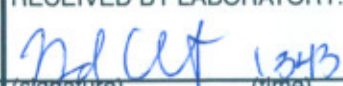

PROJECT NAME LIM JOB NO. 2808
 ADDRESS 250 8th Street, Oakland

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	QUANTITY	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015)	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	CAM 17 METALS (EPA 6010-7000)	SEMI-VOLATILE ORGANICS (EPA 825/8270)	Pb (TOTAL or DISSOLVED) (EPA 6010)	PESTICIDES (EPA 8081)	FUEL OXYGENATES (EPA 8260)	PURGEABLE HALOCARBONS (EPA 601/8010)	TPH-G/BTEX/5 OXYS (EPA METHOD 8260)	MULTIRANGE HYDROCARBONS WITH SILICA GEL CLEANUP (EPA 8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	LIFT METALS (5) (EPA 6010-7000)	COMPOSITE 4:1	EDF	
																				INF-VE-12-20-11

ICE / n/a
 GOOD CONDITION APPROPRIATE CONTAINERS
 HEAD SPACE ABSENT
 DECHLORINATED IN LAB PRESERVED IN LAB
 PRESERVATION VOAS (O & G) MET-5 (OTHER)

RELINQUISHED BY:  (signature) (time)	RECEIVED BY:  (signature) (time) <u>1145</u>	RELINQUISHED BY:  (signature) (time) <u>1443</u>	RECEIVED BY LABORATORY:  (signature) (time) <u>1343</u>
DAVID ALLEN 12/20/11 (printed name) (date)	B. Ysleps 12/20/11 (printed name) (date)	B. Ysleps 12/20 (printed name) (date)	ZORaida cortez 12-20-11 (printed name) (date)
Company-ASE, INC.	Company- <u>McClampbell</u>	Company-	Company- <u>MAI</u>

COMMENTS:

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

McC Campbell Analytical, Inc.



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1112600

ClientCode: ASED

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

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

Email: dallen@aquascienceengineers.com
cc:
PO:
ProjectNo: #2808; 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: **12/20/2011**
Date Printed: **12/20/2011**

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			
1112600-001	INF-VE-12-20-11	Air	12/20/2011 9:30	<input type="checkbox"/>	A														

Test Legend:

1	G-MBTX_AIR	2		3		4		5	
6		7		8		9		10	
11		12							

The following SampID: 001A contains testgroup.

Prepared by: Zoraida Cortez

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.



Sample Receipt Checklist

Client Name: **Aqua Science Engineers, Inc.**

Date and Time Received: **12/20/2011 4:25:25 PM**

Project Name: **#2808; LIM**

Checklist completed and reviewed by: **Zoraida Cortez**

WorkOrder N°: **1112600** Matrix: Air

Carrier: Benjamin Yslas (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp:		NA <input checked="" type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Metal - pH acceptable upon receipt (pH<2)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

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

 Comments:



Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2808; LIM	Date Sampled: 12/20/11
		Date Received: 12/20/11
	Client Contact: Dave Allen	Date Extracted: 12/21/11
	Client P.O.:	Date Analyzed: 12/21/11

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1112600

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-VE-12-20-11	A	3100	ND<50	21	48	7.5	90	20	109	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	0.25	0.25	μg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in μg/L, soil/sludge/solid samples in mg/kg, wipe samples in μg/wipe, product/oil/non-aqueous liquid samples in mg/L.
 # cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor
 The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 d1) weakly modified or unmodified gasoline is significant



McC Campbell Analytical, Inc.
 "When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
 Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
 http://www.mcccampbell.com / E-mail: main@mcccampbell.com

Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2808; LIM	Date Sampled: 12/20/11
	Client Contact: Dave Allen	Date Received: 12/20/11
	Client P.O.:	Date Extracted: 12/21/11
		Date Analyzed: 12/21/11

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with MTBE and BTEX in ppmv*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1112600

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-VE-12-20-11	A	870	ND<14	6.3	13	1.7	20	20	109	d1

ppm (mg/L) to ppmv (uL/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* vapor samples are reported in µL/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L, water samples and all TCLP & SPLP extracts are reported in µg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
 d1) weakly modified or unmodified gasoline is significant



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air

QC Matrix: Water

BatchID: 63553

WorkOrder: 1112600

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1112615-007A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) [£]	ND	60	119	114	3.84	126	70 - 130	20	70 - 130	
MTBE	ND	10	85.4	83	2.78	82.4	70 - 130	20	70 - 130	
Benzene	ND	10	107	100	6.38	106	70 - 130	20	70 - 130	
Toluene	ND	10	108	100	7.75	106	70 - 130	20	70 - 130	
Ethylbenzene	ND	10	108	101	6.35	107	70 - 130	20	70 - 130	
Xylenes	ND	30	111	104	6.95	111	70 - 130	20	70 - 130	
%SS:	104	10	97	98	0.303	97	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 63553 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1112600-001A	12/20/11 9:30 AM	12/21/11	12/21/11 12:42 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 £ TPH(btex) = sum of BTEX areas from the FID.
 # cluttered chromatogram; sample peak coelutes with surrogate peak.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



Analytical Report

Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2088; Lim Family Property	Date Sampled: 06/20/12
		Date Received: 06/20/12
	Client Contact: Dave Allen	Date Reported: 06/25/12
	Client P.O.:	Date Completed: 06/22/12

WorkOrder: 1206612

June 25, 2012

Dear Dave:

Enclosed within are:

- 1) The results of the **1** analyzed sample from your project: **#2088; Lim Family Property**,
- 2) QC data for the above sample, and
- 3) A copy of the chain of custody.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing McC Campbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
 Laboratory Manager
 McC Campbell Analytical, Inc.

The analytical results relate only to the items tested.

1206612

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

Chain of Custody

PAGE 1 of 1

SAMPLER (SIGNATURE)


PROJECT NAME LIM FAMILY PROPERTY JOB NO. 2808
ADDRESS 250 8th ST., OAKLAND

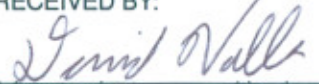
ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

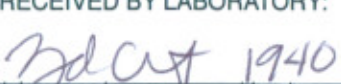
SAMPLE ID.	DATE	TIME	MATRIX	QUANTITY	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015)	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	CAM 17 METALS (EPA 6010+7000)	SEMI-VOLATILE ORGANICS (EPA 825/8270)	Pb (TOTAL or DISSOLVED) (EPA 6010)	PESTICIDES (EPA 8081)	FUEL OXYGENATES (EPA 8260)	PURGEABLE HALOCARBONS (EPA 601/8010)	TPH-GIBTEX/5 OXYS (EPA METHOD 8260)	MULTI-RANGE HYDROCARBONS WITH SILICA GEL CLEANUP (EPA 8015)	VOLATILE ORGANICS (EPA 824/8240/8260)	LUFF METALS (5) (EPA 6010+7000)	COMPOSITE 4:1	EDF	
VE-WF-06.20.12	6/20/12	1130	Air	1																

RELINQUISHED BY:

(signature)

RECEIVED BY:

(signature)

RELINQUISHED BY:
DAVID VALLES
(signature)

RECEIVED BY LABORATORY:

(signature)

COMMENTS:

DAVID VALLES 6/20/12
(printed name) (date)

DAVID VALLES 6-20-12 13:21
(printed name) (date) (time)

DAVID VALLES 6-20-12
(printed name) (date) (time)

ZORABLA CORTEZ 6/20/12
(printed name) (date)

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

Company-ASE, INC.

Company-

Company-

Company- MAI



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

WorkOrder: 1206612

ClientCode: ASED

WaterTrax
 WriteOn
 EDF
 Excel
 EQulS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

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

Email: dallen@aquascienceengineers.com
cc:
PO:
ProjectNo: #2088; Lim Family Property

Bill to:

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

Requested TAT:

5 days

Date Received: 06/20/2012

Date Printed: 06/20/2012

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	
1206612-001	VE-INF-06.20.12	Air	6/20/2012 11:30	<input type="checkbox"/>	A												

Test Legend:

1	G-MBTEx_AIR	2		3		4		5	
6		7		8		9		10	
11		12							

The following SampID: 001A contains testgroup.

Prepared by: Zoraida Cortez

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.



Sample Receipt Checklist

Client Name: **Aqua Science Engineers, Inc.**

Date and Time Received: **6/20/2012 8:19:55 PM**

Project Name: **#2088; Lim Family Property**

LogIn Reviewed by: **Zoraida Cortez**

WorkOrder N°: **1206612** Matrix: Air

Carrier: Courier

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature	Cooler Temp:		NA <input checked="" type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Metal - pH acceptable upon receipt (pH<2)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

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

 Comments:



Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2088; Lim Family Property	Date Sampled: 06/20/12
	Client Contact: Dave Allen	Date Received: 06/20/12
	Client P.O.:	Date Extracted: 06/21/12
		Date Analyzed: 06/21/12

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1206612

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	VE-INF-06.20.12	A	38	ND	ND	0.33	ND	0.87	1	102	d1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	25	2.5	0.25	0.25	0.25	0.25	0.25	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant



Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2088; Lim Family Property	Date Sampled: 06/20/12
	Client Contact: Dave Allen	Date Received: 06/20/12
	Client P.O.:	Date Extracted: 06/21/12
		Date Analyzed: 06/21/12

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with MTBE and BTEX in ppmv*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1206612

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	VE-INF-06.20.12	A	11	ND	ND	0.085	ND	0.20	1	102	d1

ppm (mg/L) to ppmv (uL/L) conversion for TPH(g) assumes the molecular weight of gasoline to be equal to that of hexane.

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	A	7.0	0.68	0.077	0.065	0.057	0.057	1	uL/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* vapor samples are reported in µL/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L, water samples and all TCLP & SPLP extracts are reported in µg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation:

d1) weakly modified or unmodified gasoline is significant



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air

QC Matrix: Water

BatchID: 68506

WorkOrder: 1206612

EPA Method: SW8021B/8015Bm		Extraction: SW5030B					Spiked Sample ID: 1206563-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS	
TPH(btex) [£]	ND	60	109	103	5.84	89	70 - 130	20	70 - 130	
MTBE	220	10	NR	NR	NR	96.6	N/A	N/A	70 - 130	
Benzene	ND	10	98	95	3.10	77.8	70 - 130	20	70 - 130	
Toluene	ND	10	97.4	93.4	4.25	77.3	70 - 130	20	70 - 130	
Ethylbenzene	ND	10	96.3	92.6	3.97	79.1	70 - 130	20	70 - 130	
Xylenes	ND	30	93.2	89.1	4.41	80.6	70 - 130	20	70 - 130	
%SS:	85	10	98	97	1.14	91	70 - 130	20	70 - 130	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 68506 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1206612-001A	06/20/12 11:30 AM	06/21/12	06/21/12 4:35 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 $\% \text{ Recovery} = 100 * (\text{MS} - \text{Sample}) / (\text{Amount Spiked})$; $\text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2)$.
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 £ TPH(btex) = sum of BTEX areas from the FID.
 # cluttered chromatogram; sample peak coelutes with surrogate peak.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.



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

APPENDIX B

FIELD LOGS

GASOLINE EXTRACTION LOG

LIM FAMILY PROPERTY

250 8th Street, Oakland, California

DATE	TPH-G CONCENTRATION (ug/l) IN INFLUENT VAPOR SAMPLE	GALLONS OF GASOLINE EXTRACTED, PER DAY	NUMBER OF DAYS VE SYSTEM OPERATED IN MONTH	GALLONS OF GASOLINE EXTRACTED IN MONTH
4/28/11	4600	2.75	30	82.50
5/26/11	4100	2.45	31	75.95
6/30/11	4900	2.93	30	87.90
7/31/11	NA	2.75*	31	85.25
8/31/11	NA	2.57*	31	79.67
9/30/11	NA	2.39*	30	71.70
10/31/11	NA	2.21*	31	68.51
11/30/11	NA	2.03*	30	60.90
12/20/11	3100	1.85	31	57.38
1/31/12	NA	1.55*	31	48.05
2/29/12	NA	1.25*	29	36.25
3/31/12	NA	0.95*	31	29.45
4/30/12	NA	0.65*	30	19.50
5/31/12	NA	0.35*	31	10.85
6/20/12	38	0.02	30	0.60

TOTAL GALLONS OF GASOLINE REMOVED FROM VADOSE ZONE SINCE SYSTEM START-UP 814.46

NOTES:

NA means "not applicable." This is due to the fact that an air bag sample of the influent vapor stream was not collected on a monthly basis.

The asterisk symbol (*) means this number is an estimate. Actual air bag TPH-G concentrations were not available due to lack of sampling.

A Flowrate of 50 cubic feet per minute was used to calculate daily extraction volumes. The VE system operated typically between 45 and 60 cfm. See calculation sheets attached.

MASS EXTRACTION CALCULATIONS
 LIM PROPERTY VAPOR EXTRACTION SYSTEM
 250 8TH STREET, OAKLAND, CALIFORNIA
 AIR BAG SAMPLE COLLECTED ON 04/28/11

AVERAGE VAPOR EXTRACTION FLOW RATE	MULTIPLY	VOLUME CONVERSION FACTOR	MULTIPLY	TIME CONVERSION FACTOR	MULTIPLY	TPH-G CONCENTRATION IN INFLUENT SAMPLE	DIVIDE	MASS CONVERSION FACTOR	DIVIDE	MASS CONVERSION FACTOR	EQUALS	MASS TPH-G EXTRACTION RATE	EQUALS	MASS TPH-G EXTRACTION RATE
CFM		l/cu. ft.		min/day		ug/l		ugs/gm		gms/lb		lbs/day		gallons/day
50		28.32		1,200		4,600		1,000,000		454		17.22		2.75

MASS EXTRACTION CALCULATIONS
 LIM PROPERTY VAPOR EXTRACTION SYSTEM
 250 8TH STREET, OAKLAND, CALIFORNIA
 AIR BAG SAMPLE COLLECTED ON 05/26/11

AVERAGE VAPOR EXTRACTION FLOW RATE	MULTIPLY	VOLUME CONVERSION FACTOR	MULTIPLY	TIME CONVERSION FACTOR	MULTIPLY	TPH-G CONCENTRATION IN INFLUENT SAMPLE	DIVIDE	MASS CONVERSION FACTOR	DIVIDE	MASS CONVERSION FACTOR	EQUALS	MASS TPH-G EXTRACTION RATE	EQUALS	MASS TPH-G EXTRACTION RATE
CFM		l/cu. ft.		min/day		ug/l		ugs/gm		gms/lb		lbs/day		gallons/day
50		28.32		1,200		4,100		1,000,000		454		15.35		2.45

MASS EXTRACTION CALCULATIONS
 LIM PROPERTY VAPOR EXTRACTION SYSTEM
 250 8TH STREET, OAKLAND, CALIFORNIA
 AIR BAG SAMPLE COLLECTED ON 06/30/11

AVERAGE VAPOR EXTRACTION FLOW RATE	MULTIPLY	VOLUME CONVERSION FACTOR	MULTIPLY	TIME CONVERSION FACTOR	MULTIPLY	TPH-G CONCENTRATION IN INFLUENT SAMPLE	DIVIDE	MASS CONVERSION FACTOR	DIVIDE	MASS CONVERSION FACTOR	EQUALS	MASS TPH-G EXTRACTION RATE	EQUALS	MASS TPH-G EXTRACTION RATE
CFM		l/cu. ft.		min/day		ug/l		ugs/gm		gms/lb		lbs/day		gallons/day
50		28.32		1,200		4,900		1,000,000		454		18.34		2.93

MASS EXTRACTION CALCULATIONS
 LIM PROPERTY VAPOR EXTRACTION SYSTEM
 250 8TH STREET, OAKLAND, CALIFORNIA
 AIR BAG SAMPLE COLLECTED ON 12/20/11

AVERAGE VAPOR EXTRACTION FLOW RATE	MULTIPLY	VOLUME CONVERSION FACTOR	MULTIPLY	TIME CONVERSION FACTOR	MULTIPLY	TPH-G CONCENTRATION IN INFLUENT SAMPLE	DIVIDE	MASS CONVERSION FACTOR	DIVIDE	MASS CONVERSION FACTOR	EQUALS	MASS TPH-G EXTRACTION RATE	EQUALS	MASS TPH-G EXTRACTION RATE
CFM		l/cu. ft.		min/day		ug/l		ugs/gm		gms/lb		lbs/day		gallons/day
50		28.32		1,200		3,100		1,000,000		454		11.60		1.85

MASS EXTRACTION CALCULATIONS
 LIM PROPERTY VAPOR EXTRACTION SYSTEM
 250 8TH STREET, OAKLAND, CALIFORNIA
 AIR BAG SAMPLE COLLECTED ON 6/20/12

AVERAGE VAPOR EXTRACTION FLOW RATE	MULTIPLY	VOLUME CONVERSION FACTOR	MULTIPLY	TIME CONVERSION FACTOR	MULTIPLY	TPH-G CONCENTRATION IN INFLUENT SAMPLE	DIVIDE	MASS CONVERSION FACTOR	DIVIDE	MASS CONVERSION FACTOR	EQUALS	MASS TPH-G EXTRACTION RATE	EQUALS	MASS TPH-G EXTRACTION RATE
CFM		l/cu. ft.		min/day		ug/l		ugs/gm		gms/lb		lbs/day		gallons/day
50		28.32		1,200		38		1,000,000		454		0.14		0.02

**LIM PROPERTY - 250 8TH STREET, OAKLAND, CALIFORNIA
VAPOR-EXTRACTION SYSTEM LOG**

DATE	CAT-OX SYSTEM		VAPOR-EXTRACTION WELLS PID CONCENTRATION IN PPMV										
	FLOW IN CFM	INFLUENT IN PPMV	VE-1	VE-2	VE-3	VE-4	VE-5	VE-6	VE-7	VE-8	VE-9	MW-3	MW-4
4/22/11	130	1096	240	34	119	125	440					465	570
4/25/11	130	986	185	28	95	130	400					390	565
4/25/11	100	923	210	26	100	100	350					450	442
4/26/11	90	912	230	25	98	86	410					422	388
4/27/11	78	747	210	32	112	56	360					364	224
4/29/11	65	790	320	30	90	45	320					320	312
5/2/11	58	879	350	28	88	66	400					420	246
5/4/11	52	916	520	25	98	48	365					310	300
5/6/11	52	892	590	26	119	30	328					263	265
5/9/11	52	1079	610	22	234	45	290	85	80	140	15	200	240
5/12/11	50	1016	556	40	185	40	265	80	84	135	11	216	235
5/16/11	48	1155	764	32	156	36	213	75	70	124	10	310	310
5/20/11	52	1158	810	26	164	38	312	92	88	156	14	186	220
5/23/11	50	1013	564	26	242	28	286	94	102	140	9	165	186
5/25/11	46	1169	686	28	310	42	310	90	95	125	15	220	205
5/27/11	52	1031	712	35	126	58	268	110	115	120	22	165	143
5/30/11	50	923	572	34	164	29	345	102	99	133	13	120	68
6/3/11	48	948	660	30	135	20	320	86	95	144	11	110	112
6/6/11	43	981	742	25	133	14	285	95	90	126	8	123	142
6/8/11	48	983	762	26	142	25	246	84	84	139	7	120	152
6/10/11	48	944	688	22	139	28	288	116	96	120	8	105	106
6/13/11	52	1152	884	24	115	32	296	125	102	144	9	134	229
6/16/11	50	1183	920	24	135	18	305	102	114	152	5	130	245
6/20/11	46	1277	1122	28	128	22	308	96	84	132	11	125	266
6/22/11	42	1180	952	18	130	24	264	85	98	130	6	128	310
6/24/11	55	1105	878	20	134	26	277	118	102	148	5	106	195
6/27/11	52	1141	765	26	127	26	263	102	100	122	6	144	393
7/8/11	49	926	555	25	130	18	298	99	90	130	9	132	222
7/12/11	45	788	500	24	125	15	287	101	89	133	8	124	252
7/18/11	46	745	541	21	124	14	302	85	88	125	8	142	244
7/25/11	47	688	488	22	124	17	278	87	95	126	7	133	232

Continued on Next Page

**LIM PROPERTY - 250 8TH STREET, OAKLAND, CALIFORNIA
VAPOR-EXTRACTION SYSTEM LOG**

DATE	CAT-OX SYSTEM		VAPOR-EXTRACTION WELLS PID CONCENTRATION IN PPMV										
	FLOW IN CFM	INFLUENT IN PPMV	VE-1	VE-2	VE-3	VE-4	VE-5	VE-6	VE-7	VE-8	VE-9	MW-3	MW-4
8/1/11	52	655	600	26	132	12	273	96	93	144	6	125	235
8/9/11	51	725	553	21	111	14	263	80	93	112	5	126	226
8/15/11	53	718	523	21	110	13	255	75	92	132	5	131	212
8/24/11	45	802	514	24	141	14	264	68	88	123	6	134	238
8/29/11	46	644	506	21	123	15	270	88	89	130	4	129	230
9/7/11	56	640	488	26	111	11	266	99	96	112	6	111	211
9/12/11	55	636	478	25	100	10	255	90	95	11	5	110	212
9/20/11	52	632	465	24	102	12	254	88	95	123	4	122	210
9/27/11	50	622	412	25	101	14	232	87	96	120	6	114	223
10/3/11	55	612	400	22	98	9	211	96	90	119	5	100	232
10/10/11	50	621	412	21	114	11	224	92	90	11	3	98	216
10/18/11	51	602	388	23	121	12	222	98	91	114	6	103	222
10/25/11	51	611	377	22	102	15	200	87	91	102	7	110	232
11/1/11	49	598	366	20	100	8	214	78	88	90	6	105	208
11/7/11	48	588	365	13	98	8	211	74	88	90	5	106	214
11/14/11	48	586	385	19	97	7	225	78	88	95	5	105	210
11/22/11	48	574	364	17	106	11	223	89	87	92	5	99	211
11/30/11	47	545	344	22	97	10	208	95	88	81	4	98	219
12/5/11	47	588	355	20	99	9	211	95	85	81	3	100	203
12/12/11	49	541	323	18	111	9	195	90	83	83	4	111	200
12/20/11	48	540	311	17	105	7	196	91	81	75	4	99	201
12/30/11	48	532	302	18	101	7	188	83	76	78	5	92	199
1/5/12	49	485	302	11	99	6	174	88	77	85	6	92	199
1/10/12	51	487	311	14	99	6	175	84	74	77	5	92	203
1/16/12	50	465	312	15	98	8	165	85	77	74	3	95	195
1/23/12	48	455	310	14	98	7	166	87	78	78	4	94	188
1/31/12	47	444	311	11	95	7	152	78	75	86	5	99	187

Continued on Next Page

LIM PROPERTY - 250 8TH STREET, OAKLAND, CALIFORNIA
VAPOR-EXTRACTION SYSTEM LOG

DATE	CAT-OX SYSTEM		VAPOR-EXTRACTION WELLS PID CONCENTRATION IN PPMV										
	FLOW IN CFM	INFLUENT IN PPMV	VE-1	VE-2	VE-3	VE-4	VE-5	VE-6	VE-7	VE-8	VE-9	MW-3	MW-4
2/7/12	47	420	299	9	93	8	140	70	77	85	6	95	177
2/13/12	44	388	290	8	90	7	141	66	71	88	5	96	165
2/20/12	41	355	295	9	77	8	133	62	71	81	4	95	158
2/27/12	45	356	295	9	75	8	132	63	71	84	6	88	145
3/6/12	42	354	288	11	77	OFF	125	61	68	84	6	87	165
3/12/12	40	338	290	9	74	OFF	125	60	68	81	5	87	157
3/19/12	41	334	290	7	75	OFF	111	55	71	78	5	85	180
3/26/12	43	321	277	9	77	OFF	105	58	70	77	7	84	174
4/2/12	45	333	255	8	68	OFF	99	61	59	78	5	81	166
4/9/12	41	311	255	8	68	OFF	95	61	59	72	4	80	165
4/16/12	39	310	241	7	74	OFF	95	62	58	71	4	86	184
4/25/12	39	300	243	OFF	73	OFF	96	60	57	74	4	77	177
5/4/12	40	288	225	OFF	71	OFF	88	60	56	74	4	78	174
5/8/12	40	275	233	OFF	65	OFF	87	55	55	75	5	78	175
5/14/12	40	280	241	OFF	58	OFF	95	57	58	74	6	79	181
5/22/12	41	256	211	OFF	55	OFF	75	58	61	69	5	95	166
5/29/12	41	255	205	OFF	54	OFF	77	51	62	69	4	94	158
6/4/12	40	241	195	OFF	54	OFF	81	51	60	63	4	99	144
6/12/12	38	222	188	OFF	52	OFF	66	50	60	62	4	103	158
6/18/12	38	232	175	OFF	51	OFF	63	52	61	60	4	102	180

LIM PROPERTY - 250 8TH STREET, OAKLAND, CALIFORNIA

HYDROCARBON VAPOR MEASUREMENT LOG

HYDROCARBON CONCENTRATIONS IN PPMV* MEASURED WITH ORGANIC VAPOR METER																
DATE	VAPOR MONITORING POINTS		METER BOXES (SITE SIDE OF 8TH STREET)			METER BOXES (OPPOSITE SIDE OF 8TH STREET)										
	VMP-1	VMP-1	PIPING MANIFOLD	PG&E BOX	EBMUD BOX	GAS METER 1	GAS METER 2	GAS METER 3	EBMUD BOX 1	EBMUD BOX 2	OS-8/VE-6 WELL BOX	OS-9/VE-7 WELL BOX	OS-10/VE-8 WELL BOX	OS-11 WELL BOX	OS-12/VE-9 WELL BOX	
1/18/11	0	0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
1/19/11	0	0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
1/20/11	0	0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
1/21/11	11	21	NM	NM	NM	10	8	11	5	7	NM	NM	NM	NM	NM	NM
1/22/11	3	7	NM	NM	NM	12	11	8	4	6	NM	NM	NM	NM	NM	NM
1/23/11	0	0	NM	NM	NM	0	0	0	0	0	NM	NM	NM	NM	NM	NM
1/28/11	0	0	NM	NM	NM	0	0	0	0	0	NM	NM	NM	NM	NM	NM
2/15/11	0	0	NM	NM	NM	0	0	0	0	0	NM	NM	NM	NM	NM	NM
2/28/11	0	0	NM	NM	NM	0	0	0	0	0	NM	NM	NM	NM	NM	NM
3/8/11	0	0	NM	NM	NM	0	0	0	0	0	NM	NM	NM	NM	NM	NM
3/29/11	0	0	NM	NM	NM	0	0	0	0	0	NM	NM	NM	NM	NM	NM
4/12/11	0	0	NM	NM	NM	0	0	0	0	0	NM	NM	NM	NM	NM	NM
4/25/11	0	0	NM	NM	NM	0	0	0	0	0	NM	NM	NM	NM	NM	NM
5/13/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/16/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/20/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/23/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/25/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/27/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/30/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/3/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/6/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/8/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/10/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/13/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/16/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/20/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/22/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/24/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/27/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NM = Not Measured



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APPENDIX C

MONITORING WELL SAMPLING LOGS

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM FAMILY PROPERTY

JOB NUMBER 2808 DATE OF SAMPLING 06-22-2012

WELL ID. MW-1 SAMPLER DA

TOTAL DEPTH OF WELL 26.80 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 17.08 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 9.72

NUMBER OF GALLONS PER WELL CASING VOLUME 1.55

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 4.6

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED 0626 TIME EVACUATION COMPLETED 0634

TIME SAMPLES WERE COLLECTED 0635

DID WELL GO DRY NO AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 4.6.

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR LT BWN ODOR/SEDIMENT N./NO

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	19.0	7.1	700
2	19.0	7.1	710
3	18.9	7.0	700

SAMPLES COLLECTED

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

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM FAMILY PROPERTY

JOB NUMBER 2808 DATE OF SAMPLING 06-22-2012

WELL ID. MW-2 SAMPLER DA

TOTAL DEPTH OF WELL 26.80 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 16.36 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 10.44

NUMBER OF GALLONS PER WELL CASING VOLUME 1.67

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 5

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED 0730 TIME EVACUATION COMPLETED 0738

TIME SAMPLES WERE COLLECTED 0740

DID WELL GO DRY NO AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 5

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR LT. BRN ODOR/SEDIMENT MOD HC / SLIGHT

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	18.4	7.1	710
2	18.4	4.8 7.0	710
3	18.5	7.1	700

SAMPLES COLLECTED

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

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM FAMILY PROPERTY

JOB NUMBER 2808 DATE OF SAMPLING 06-22-2012

WELL ID. MW-3 SAMPLER DA

TOTAL DEPTH OF WELL 30.0 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 15.95 TIME OF MEASUREMENT 16.64

PRODUCT THICKNESS 0.69'

DEPTH OF WELL CASING IN WATER

NUMBER OF GALLONS PER WELL CASING VOLUME

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED TIME EVACUATION COMPLETED

TIME SAMPLES WERE COLLECTED

DID WELL GO DRY AFTER HOW MANY GALLONS

VOLUME OF GROUNDWATER PURGED

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR ODOR/SEDIMENT

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	pH	CONDUCTIVITY
1			
2			
3			

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
<u>MW-3</u>	<u>5</u>	<u>40ML VOA</u>	<u>8015/8260</u>	<u>✓</u>

BAILED PRODUCT TO SCREEN

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM FAMILY PROPERTY

JOB NUMBER 2808 DATE OF SAMPLING 06-22-2012

WELL ID. MW-4R SAMPLER DA

TOTAL DEPTH OF WELL 28.0 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 16.69 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 11.31

NUMBER OF GALLONS PER WELL CASING VOLUME 1.81

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 5.4

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED 0815 TIME EVACUATION COMPLETED 0824

TIME SAMPLES WERE COLLECTED 0826

DID WELL GO DRY NO AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 5.5

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR LT BRN. ODOR/SEDIMENT MOD HR / SUGGY

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	18.2	7.0	1040
2	18.3	7.1	1080
3	18.3	7.0	1090

SAMPLES COLLECTED

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

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM FAMILY PROPERTY

JOB NUMBER 2808 DATE OF SAMPLING 06.22.2012

WELL ID. MW-5 SAMPLER DA

TOTAL DEPTH OF WELL 29.6 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 16.41 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 13.19

NUMBER OF GALLONS PER WELL CASING VOLUME 2.11

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 6.3

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED 0610 TIME EVACUATION COMPLETED 0621

TIME SAMPLES WERE COLLECTED 0622

DID WELL GO DRY no AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 6.5

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR LT BRN ODOR/SEDIMENT no/no

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	18.2	7.1	610
2	18.0	7.3	590
3	18.0	7.3	570

SAMPLES COLLECTED

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

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM FAMILY PROPERTY

JOB NUMBER 2808 DATE OF SAMPLING 06-22-2012

WELL ID. MW-6 SAMPLER DA

TOTAL DEPTH OF WELL 29.5 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 16.70 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 12.8

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 0710 TIME EVACUATION COMPLETED 0721

TIME SAMPLES WERE COLLECTED 0722

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 6

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR LT BRN ODOR/SEDIMENT No / No

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	18.4	7.4	370
2	18.3	7.5	360
3	18.3	7.6	370

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-6	5	40ML VOA	8015/8260	✓

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM FAMILY PROPERTY

JOB NUMBER 2808 DATE OF SAMPLING 06.22.2012

WELL ID. MW-7 SAMPLER DA

TOTAL DEPTH OF WELL 28.0 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 17.03 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 10.97

NUMBER OF GALLONS PER WELL CASING VOLUME 1.75

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 5.25

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED 0755 TIME EVACUATION COMPLETED 0804

TIME SAMPLES WERE COLLECTED 0805

DID WELL GO DRY NO AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 5.5

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR lt. Gray ODOR/SEDIMENT NOO HC / SLIGHT

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	18.2	7.0	1090
2	18.2	7.2	1140
3	18.3	7.1	1160

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
MW-7	5	40ML VOA	8015/8260	✓

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM FAMILY PROPERTY

JOB NUMBER 2808 DATE OF SAMPLING 06-22-2012

WELL ID. MW-8 SAMPLER DA

TOTAL DEPTH OF WELL 49.0 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 21.23 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 27.77

NUMBER OF GALLONS PER WELL CASING VOLUME 4.44

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 13.3

EQUIPMENT USED TO PURGE WELL NEW DISPOSABLE BAILER

TIME EVACUATION STARTED 0645 TIME EVACUATION COMPLETED 0659

TIME SAMPLES WERE COLLECTED 0702

DID WELL GO DRY NO AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 13.3

SAMPLING DEVICE NEW DISPOSABLE BAILER

SAMPLE COLOR CLEAR ODOR/SEDIMENT NO/NO

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	21.0	7.7	480
2	21.0	7.8	490
3	21.4	7.7	490

SAMPLES COLLECTED

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



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

APPENDIX D

CERTIFIED ANALYTICAL REPORT
AND CHAIN OF CUSTODY DOCUMENTATION
FOR GROUNDWATER SAMPLES



Laboratory Results

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

Subject : 7 Water Samples
Project Name : LIM
Project Number : 2808

Dear Mr. Allen,

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

A handwritten signature in black ink that reads "Troy G. Turpen". The signature is written in a cursive style.

Troy Turpen

Subject : 7 Water Samples
Project Name : LIM
Project Number : 2808

Case Narrative

Matrix Spike/Matrix Spike Duplicate results associated with samples MW-2, MW-4R, and MW-7 for the analyte Tert-Butanol were affected by the analyte concentrations already present in the un-spiked sample.

Matrix Spike/Matrix Spike Duplicate results associated with samples MW-1 and MW-5 for the analyte Benzene were outside of control limits. This may indicate a bias for the sample that was spiked. Since the LCS recoveries were within control limits, no data are flagged.

Project Name : **LIM**

Project Number : **2808**

Sample : **MW-1**

Matrix : Water

Lab Number : 81716-01

Sample Date :06/22/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	23	0.50	ug/L	EPA 8260B	06/27/12 03:31
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:31
Ethylbenzene	1.1	0.50	ug/L	EPA 8260B	06/27/12 03:31
Total Xylenes	2.3	0.50	ug/L	EPA 8260B	06/27/12 03:31
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:31
Diisopropyl ether (DIPE)	0.80	0.50	ug/L	EPA 8260B	06/27/12 03:31
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:31
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:31
Tert-Butanol	12	5.0	ug/L	EPA 8260B	06/27/12 03:31
TPH as Gasoline	750	50	ug/L	EPA 8260B	06/27/12 03:31
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:31
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:31
1,2-Dichloroethane-d4 (Surr)	98.1		% Recovery	EPA 8260B	06/27/12 03:31
Toluene - d8 (Surr)	98.3		% Recovery	EPA 8260B	06/27/12 03:31
TPH as Diesel (Silica Gel)	< 200	200	ug/L	M EPA 8015	06/27/12 18:20
(Note: MRL increased due to interference from Gasoline-range hydrocarbons.)					
Octacosane (Silica Gel Surr)	111		% Recovery	M EPA 8015	06/27/12 18:20

Project Name : **LIM**

Project Number : **2808**

Sample : **MW-2**

Matrix : Water

Lab Number : 81716-02

Sample Date :06/22/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	50	0.50	ug/L	EPA 8260B	07/02/12 12:50
Toluene	56	0.50	ug/L	EPA 8260B	07/02/12 12:50
Ethylbenzene	4.0	0.50	ug/L	EPA 8260B	07/02/12 12:50
Total Xylenes	160	0.50	ug/L	EPA 8260B	07/02/12 12:50
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/12 12:50
Diisopropyl ether (DIPE)	1.6	0.50	ug/L	EPA 8260B	07/02/12 12:50
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/12 12:50
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/02/12 12:50
Tert-Butanol	17	5.0	ug/L	EPA 8260B	07/02/12 12:50
TPH as Gasoline	1200	50	ug/L	EPA 8260B	07/02/12 12:50
1,2-Dichloroethane	1.1	0.50	ug/L	EPA 8260B	07/02/12 12:50
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/12 12:50
1,2-Dichloroethane-d4 (Surr)	96.5		% Recovery	EPA 8260B	07/02/12 12:50
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	07/02/12 12:50
TPH as Diesel (Silica Gel)	140	50	ug/L	M EPA 8015	06/27/12 23:50
Octacosane (Silica Gel Surr)	111		% Recovery	M EPA 8015	06/27/12 23:50

Project Name : **LIM**

Project Number : **2808**

Sample : **MW-4R**

Matrix : Water

Lab Number : 81716-03

Sample Date :06/22/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	31	0.50	ug/L	EPA 8260B	07/02/12 13:22
Toluene	53	0.50	ug/L	EPA 8260B	07/02/12 13:22
Ethylbenzene	5.0	0.50	ug/L	EPA 8260B	07/02/12 13:22
Total Xylenes	500	0.50	ug/L	EPA 8260B	07/02/12 13:22
Methyl-t-butyl ether (MTBE)	6.3	0.50	ug/L	EPA 8260B	07/02/12 13:22
Diisopropyl ether (DIPE)	6.1	0.50	ug/L	EPA 8260B	07/02/12 13:22
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/12 13:22
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/02/12 13:22
Tert-Butanol	180	5.0	ug/L	EPA 8260B	07/02/12 13:22
TPH as Gasoline	4500	50	ug/L	EPA 8260B	07/02/12 13:22
1,2-Dichloroethane	21	0.50	ug/L	EPA 8260B	07/02/12 13:22
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/12 13:22
1,2-Dichloroethane-d4 (Surr)	98.7		% Recovery	EPA 8260B	07/02/12 13:22
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	07/02/12 13:22
TPH as Diesel (Silica Gel)	< 200	200	ug/L	M EPA 8015	06/27/12 21:22
(Note: MRL increased due to interference from Gasoline-range hydrocarbons.)					
Octacosane (Silica Gel Surr)	114		% Recovery	M EPA 8015	06/27/12 21:22

Project Name : **LIM**

Project Number : **2808**

Sample : **MW-5**

Matrix : Water

Lab Number : 81716-04

Sample Date :06/22/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 04:05
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 04:05
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 04:05
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 04:05
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 04:05
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 04:05
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 04:05
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 04:05
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/27/12 04:05
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/27/12 04:05
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 04:05
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 04:05
1,2-Dichloroethane-d4 (Surr)	99.4		% Recovery	EPA 8260B	06/27/12 04:05
Toluene - d8 (Surr)	98.6		% Recovery	EPA 8260B	06/27/12 04:05
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/27/12 21:51
Octacosane (Silica Gel Surr)	109		% Recovery	M EPA 8015	06/27/12 21:51

Project Name : **LIM**

Project Number : **2808**

Sample : **MW-6**

Matrix : Water

Lab Number : 81716-05

Sample Date :06/22/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 13:28
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 13:28
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 13:28
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 13:28
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 13:28
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 13:28
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 13:28
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 13:28
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/27/12 13:28
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/27/12 13:28
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 13:28
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 13:28
1,2-Dichloroethane-d4 (Surr)	98.7		% Recovery	EPA 8260B	06/27/12 13:28
Toluene - d8 (Surr)	96.6		% Recovery	EPA 8260B	06/27/12 13:28
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/27/12 22:21
Octacosane (Silica Gel Surr)	106		% Recovery	M EPA 8015	06/27/12 22:21

Project Name : **LIM**

Project Number : **2808**

Sample : **MW-7**

Matrix : Water

Lab Number : 81716-06

Sample Date :06/22/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	120	2.0	ug/L	EPA 8260B	07/02/12 13:55
Toluene	52	2.0	ug/L	EPA 8260B	07/02/12 13:55
Ethylbenzene	1100	5.0	ug/L	EPA 8260B	06/30/12 22:39
Total Xylenes	310	2.0	ug/L	EPA 8260B	07/02/12 13:55
Methyl-t-butyl ether (MTBE)	< 2.0	2.0	ug/L	EPA 8260B	07/02/12 13:55
Diisopropyl ether (DIPE)	< 2.0	2.0	ug/L	EPA 8260B	07/02/12 13:55
Ethyl-t-butyl ether (ETBE)	< 2.0	2.0	ug/L	EPA 8260B	07/02/12 13:55
Tert-amyl methyl ether (TAME)	< 2.0	2.0	ug/L	EPA 8260B	07/02/12 13:55
Tert-Butanol	43	9.0	ug/L	EPA 8260B	07/02/12 13:55
TPH as Gasoline	10000	200	ug/L	EPA 8260B	07/02/12 13:55
1,2-Dichloroethane	< 2.0	2.0	ug/L	EPA 8260B	07/02/12 13:55
1,2-Dibromoethane	< 2.0	2.0	ug/L	EPA 8260B	07/02/12 13:55
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	07/02/12 13:55
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	07/02/12 13:55
TPH as Diesel (Silica Gel)	< 600	600	ug/L	M EPA 8015	06/27/12 22:50
(Note: MRL increased due to interference from Gasoline-range hydrocarbons.)					
Octacosane (Silica Gel Surr)	110		% Recovery	M EPA 8015	06/27/12 22:50

Project Name : **LIM**

Project Number : **2808**

Sample : **MW-8**

Matrix : Water

Lab Number : 81716-07

Sample Date :06/22/2012

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:54
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:54
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:54
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:54
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:54
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:54
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:54
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:54
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/27/12 03:54
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/27/12 03:54
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:54
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/27/12 03:54
1,2-Dichloroethane-d4 (Surr)	99.3		% Recovery	EPA 8260B	06/27/12 03:54
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	06/27/12 03:54
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/27/12 23:20
Octacosane (Silica Gel Surr)	113		% Recovery	M EPA 8015	06/27/12 23:20

QC Report : Method Blank Data

Project Name : LIM

Project Number : 2808

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed	Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/27/2012	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/30/2012
Octacosane (Silica Gel Surr)	119		%	M EPA 8015	06/27/2012	Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/02/2012
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/27/2012	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/02/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/27/2012	Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/02/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/27/2012	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/02/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/27/2012	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/2012
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/27/2012	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/2012
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/27/2012	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/02/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/27/2012	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/02/2012
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/27/2012	Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/02/2012
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/27/2012	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/02/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/27/2012	1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/2012
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/27/2012	1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/02/2012
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/27/2012	1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	07/02/2012
1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	06/27/2012	Toluene - d8 (Surr)	102		%	EPA 8260B	07/02/2012
Toluene - d8 (Surr)	98.4		%	EPA 8260B	06/27/2012	Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012	Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/26/2012
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/26/2012	Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/26/2012
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/26/2012	1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012	1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/26/2012	1,2-Dichloroethane-d4 (Surr)	98.9		%	EPA 8260B	06/26/2012
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	06/26/2012	Toluene - d8 (Surr)	99.0		%	EPA 8260B	06/26/2012
Toluene - d8 (Surr)	101		%	EPA 8260B	06/26/2012						

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : LIM

Project Number : 2808

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH-D (Si Gel)	BLANK	<50	1000	1000	816	873	ug/L	M EPA 8015	6/27/12	81.6	87.3	6.71	70-130	25
1,2-Dibromoethane	81712-01	<0.50	39.9	39.9	40.3	40.4	ug/L	EPA 8260B	6/27/12	101	101	0.401	80-120	25
1,2-Dichloroethane	81712-01	2.5	40.0	40.0	43.6	43.0	ug/L	EPA 8260B	6/27/12	103	101	1.49	75.7-122	25
Benzene	81712-01	<0.50	40.0	40.0	39.1	38.6	ug/L	EPA 8260B	6/27/12	97.9	96.5	1.40	80-120	25
Diisopropyl ether	81712-01	1.3	39.5	39.5	40.4	39.9	ug/L	EPA 8260B	6/27/12	98.8	97.6	1.17	80-120	25
Ethyl-tert-butyl ether	81712-01	<0.50	39.8	39.8	35.2	37.8	ug/L	EPA 8260B	6/27/12	88.5	95.0	7.10	76.5-120	25
Ethylbenzene	81712-01	0.89	40.0	40.0	41.8	42.3	ug/L	EPA 8260B	6/27/12	102	104	1.12	80-120	25
Methyl-t-butyl ether	81712-01	8.8	40.0	40.0	42.0	46.9	ug/L	EPA 8260B	6/27/12	82.8	95.1	13.8	69.7-121	25
P + M Xylene	81712-01	<0.50	40.0	40.0	40.1	40.6	ug/L	EPA 8260B	6/27/12	100	102	1.28	76.8-120	25

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : LIM

Project Number : 2808

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Tert-Butanol	81712-01	<5.0	202	202	199	200	ug/L	EPA 8260B	6/27/12	98.6	99.4	0.761	80-120	25
Tert-amyl-methyl ether	81712-01	<0.50	39.9	39.9	36.9	38.9	ug/L	EPA 8260B	6/27/12	92.5	97.4	5.22	78.9-120	25
Toluene	81712-01	<0.50	40.0	40.0	39.4	39.3	ug/L	EPA 8260B	6/27/12	98.5	98.2	0.332	80-120	25
1,2-Dibromoethane	81707-04	<0.50	39.9	39.9	42.3	42.4	ug/L	EPA 8260B	6/26/12	106	106	0.164	80-120	25
1,2-Dichloroethane	81707-04	<0.50	40.0	40.0	40.3	40.3	ug/L	EPA 8260B	6/26/12	101	101	0.204	75.7-122	25
Benzene	81707-04	<0.50	40.0	40.0	39.5	39.1	ug/L	EPA 8260B	6/26/12	98.8	97.8	1.04	80-120	25
Diisopropyl ether	81707-04	<0.50	39.5	39.5	40.9	41.0	ug/L	EPA 8260B	6/26/12	104	104	0.198	80-120	25
Ethyl-tert-butyl ether	81707-04	<0.50	39.8	39.8	39.8	40.4	ug/L	EPA 8260B	6/26/12	99.9	101	1.43	76.5-120	25
Ethylbenzene	81707-04	<0.50	40.0	40.0	40.2	39.1	ug/L	EPA 8260B	6/26/12	100	97.6	2.80	80-120	25

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : LIM

Project Number : 2808

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Methyl-t-butyl ether	81707-04	<0.50	40.0	40.0	39.9	40.2	ug/L	EPA 8260B	6/26/12	99.7	100	0.837	69.7-121	25
P + M Xylene	81707-04	<0.50	40.0	40.0	40.3	39.2	ug/L	EPA 8260B	6/26/12	101	98.1	2.58	76.8-120	25
Tert-Butanol	81707-04	<5.0	202	202	194	193	ug/L	EPA 8260B	6/26/12	96.2	95.9	0.309	80-120	25
Tert-amyl-methyl ether	81707-04	<0.50	39.9	39.9	41.1	41.9	ug/L	EPA 8260B	6/26/12	103	105	1.98	78.9-120	25
Toluene	81707-04	<0.50	40.0	40.0	40.8	40.3	ug/L	EPA 8260B	6/26/12	102	101	1.30	80-120	25
Ethylbenzene	81729-05	<0.50	40.0	40.0	39.8	38.4	ug/L	EPA 8260B	6/30/12	99.6	95.9	3.77	80-120	25
1,2-Dibromoethane	81763-01	<0.50	39.9	39.9	42.0	41.7	ug/L	EPA 8260B	7/2/12	105	104	0.587	80-120	25
1,2-Dichloroethane	81763-01	<0.50	40.0	40.0	39.1	38.6	ug/L	EPA 8260B	7/2/12	97.8	96.6	1.18	75.7-122	25
Benzene	81763-01	<0.50	40.0	40.0	39.3	38.3	ug/L	EPA 8260B	7/2/12	98.4	95.6	2.80	80-120	25

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : LIM

Project Number : 2808

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Diisopropyl ether	81763-01	<0.50	39.5	39.5	38.9	38.9	ug/L	EPA 8260B	7/2/12	98.4	98.3	0.0355	80-120	25
Ethyl-tert-butyl ether	81763-01	<0.50	39.8	39.8	35.9	35.7	ug/L	EPA 8260B	7/2/12	90.1	89.7	0.475	76.5-120	25
Ethylbenzene	81763-01	<0.50	40.0	40.0	39.8	38.4	ug/L	EPA 8260B	7/2/12	99.4	95.9	3.62	80-120	25
Methyl-t-butyl ether	81763-01	8.2	40.0	40.0	41.2	41.8	ug/L	EPA 8260B	7/2/12	82.7	84.2	1.81	69.7-121	25
P + M Xylene	81763-01	<0.50	40.0	40.0	39.6	38.3	ug/L	EPA 8260B	7/2/12	98.9	95.8	3.22	76.8-120	25
Tert-Butanol	81763-01	1800	202	202	1900	1890	ug/L	EPA 8260B	7/2/12	48.5	43.2	11.6	80-120	25
Tert-amyl-methyl ether	81763-01	<0.50	39.9	39.9	38.4	38.5	ug/L	EPA 8260B	7/2/12	96.0	96.3	0.314	78.9-120	25
Toluene	81763-01	<0.50	40.0	40.0	40.9	39.9	ug/L	EPA 8260B	7/2/12	102	99.7	2.50	80-120	25
1,2-Dibromoethane	81707-05	<0.50	39.9	39.9	40.7	39.8	ug/L	EPA 8260B	6/26/12	102	99.8	2.17	80-120	25

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : LIM

Project Number : 2808

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
1,2-Dichloroethane	81707-05	<0.50	40.0	40.0	41.4	40.1	ug/L	EPA 8260B	6/26/12	103	100	3.11	75.7-122	25
Benzene	81707-05	14	40.0	40.0	40.6	39.5	ug/L	EPA 8260B	6/26/12	65.5	62.7	4.41	80-120	25
Diisopropyl ether	81707-05	<0.50	39.5	39.5	39.0	38.6	ug/L	EPA 8260B	6/26/12	98.7	97.6	1.12	80-120	25
Ethyl-tert-butyl ether	81707-05	<0.50	39.8	39.8	37.0	35.9	ug/L	EPA 8260B	6/26/12	92.8	90.2	2.85	76.5-120	25
Ethylbenzene	81707-05	<0.50	40.0	40.0	39.5	38.3	ug/L	EPA 8260B	6/26/12	98.8	95.7	3.20	80-120	25
Methyl-t-butyl ether	81707-05	<0.50	40.0	40.0	38.2	36.9	ug/L	EPA 8260B	6/26/12	95.4	92.3	3.34	69.7-121	25
P + M Xylene	81707-05	<0.50	40.0	40.0	39.6	38.3	ug/L	EPA 8260B	6/26/12	99.0	95.8	3.29	76.8-120	25
Tert-Butanol	81707-05	<5.0	202	202	202	204	ug/L	EPA 8260B	6/26/12	100	101	0.877	80-120	25
Tert-amyl-methyl ether	81707-05	<0.50	39.9	39.9	38.2	37.5	ug/L	EPA 8260B	6/26/12	95.8	93.8	2.01	78.9-120	25
Toluene	81707-05	<0.50	40.0	40.0	39.8	38.5	ug/L	EPA 8260B	6/26/12	99.5	96.2	3.35	80-120	25

QC Report : Laboratory Control Sample (LCS)

Project Name : LIM

Project Number : 2808

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
1,2-Dibromoethane	40.1	ug/L	EPA 8260B	6/27/12	97.4	80-120
1,2-Dichloroethane	40.2	ug/L	EPA 8260B	6/27/12	99.7	75.7-122
Benzene	40.2	ug/L	EPA 8260B	6/27/12	94.6	80-120
Diisopropyl ether	39.7	ug/L	EPA 8260B	6/27/12	96.9	80-120
Ethyl-tert-butyl ether	40.0	ug/L	EPA 8260B	6/27/12	84.4	76.5-120
Ethylbenzene	40.2	ug/L	EPA 8260B	6/27/12	100	80-120
Methyl-t-butyl ether	40.2	ug/L	EPA 8260B	6/27/12	81.5	69.7-121
P + M Xylene	40.2	ug/L	EPA 8260B	6/27/12	97.9	76.8-120
TPH as Gasoline	506	ug/L	EPA 8260B	6/27/12	98.6	70.0-130
Tert-Butanol	202	ug/L	EPA 8260B	6/27/12	97.3	80-120
Tert-amyl-methyl ether	40.1	ug/L	EPA 8260B	6/27/12	90.6	78.9-120
Toluene	40.2	ug/L	EPA 8260B	6/27/12	95.0	80-120
1,2-Dibromoethane	40.0	ug/L	EPA 8260B	6/26/12	105	80-120
1,2-Dichloroethane	40.1	ug/L	EPA 8260B	6/26/12	103	75.7-122
Benzene	40.1	ug/L	EPA 8260B	6/26/12	99.9	80-120
Diisopropyl ether	39.6	ug/L	EPA 8260B	6/26/12	102	80-120
Ethyl-tert-butyl ether	39.9	ug/L	EPA 8260B	6/26/12	101	76.5-120
Ethylbenzene	40.1	ug/L	EPA 8260B	6/26/12	97.7	80-120
Methyl-t-butyl ether	40.1	ug/L	EPA 8260B	6/26/12	99.4	69.7-121
P + M Xylene	40.1	ug/L	EPA 8260B	6/26/12	98.2	76.8-120
TPH as Gasoline	507	ug/L	EPA 8260B	6/26/12	91.1	70.0-130
Tert-Butanol	202	ug/L	EPA 8260B	6/26/12	95.7	80-120

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
Tert-amyl-methyl ether	40.0	ug/L	EPA 8260B	6/26/12	101	78.9-120
Toluene	40.1	ug/L	EPA 8260B	6/26/12	100	80-120
Ethylbenzene	39.9	ug/L	EPA 8260B	6/30/12	100	80-120
1,2-Dibromoethane	40.1	ug/L	EPA 8260B	7/2/12	104	80-120
1,2-Dichloroethane	40.2	ug/L	EPA 8260B	7/2/12	97.5	75.7-122
Benzene	40.2	ug/L	EPA 8260B	7/2/12	98.4	80-120
Diisopropyl ether	39.7	ug/L	EPA 8260B	7/2/12	98.4	80-120
Ethyl-tert-butyl ether	40.0	ug/L	EPA 8260B	7/2/12	89.5	76.5-120
Ethylbenzene	40.2	ug/L	EPA 8260B	7/2/12	99.6	80-120
Methyl-t-butyl ether	40.2	ug/L	EPA 8260B	7/2/12	81.8	69.7-121
P + M Xylene	40.2	ug/L	EPA 8260B	7/2/12	99.6	76.8-120
TPH as Gasoline	502	ug/L	EPA 8260B	7/2/12	97.1	70.0-130
Tert-Butanol	202	ug/L	EPA 8260B	7/2/12	96.8	80-120
Tert-amyl-methyl ether	40.1	ug/L	EPA 8260B	7/2/12	96.1	78.9-120
Toluene	40.2	ug/L	EPA 8260B	7/2/12	102	80-120
1,2-Dibromoethane	39.8	ug/L	EPA 8260B	6/26/12	98.5	80-120
1,2-Dichloroethane	39.9	ug/L	EPA 8260B	6/26/12	102	75.7-122
Benzene	39.9	ug/L	EPA 8260B	6/26/12	97.6	80-120
Diisopropyl ether	39.4	ug/L	EPA 8260B	6/26/12	96.0	80-120

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
Ethyl-tert-butyl ether	39.7	ug/L	EPA 8260B	6/26/12	89.1	76.5-120
Ethylbenzene	39.9	ug/L	EPA 8260B	6/26/12	96.0	80-120
Methyl-t-butyl ether	39.9	ug/L	EPA 8260B	6/26/12	90.6	69.7-121
P + M Xylene	39.9	ug/L	EPA 8260B	6/26/12	95.4	76.8-120
TPH as Gasoline	504	ug/L	EPA 8260B	6/26/12	94.0	70.0-130
Tert-Butanol	201	ug/L	EPA 8260B	6/26/12	98.3	80-120
Tert-amyl-methyl ether	39.8	ug/L	EPA 8260B	6/26/12	92.1	78.9-120
Toluene	39.9	ug/L	EPA 8260B	6/26/12	97.2	80-120

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

Chain of Custody

8176

PAGE 1 of 1

SAMPLER (SIGNATURE)

David Allen

PROJECT NAME LIM

JOB NO. 2808

ADDRESS 250 8th ST. OAKLAND

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	QUANTITY	TPH-GAS / MTBE & BTEX (EPA 5030/6015-8020)	TPH-DIESEL (EPA 3510/6015) <i>w/ SILICA GEL CLEANUP</i>	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 (EPA METHOD 8260) <i>SCAVS</i>	MULTI-RANGE HYDROCARBONS WITH SILICA GEL CLEANUP (EPA 8015)	VOLATILE ORGANICS (EPA 824/8240/8260)	LUFT METALS (5) (EPA 6010+7000)	COMPOSITE 4:1	EDF
					MW-1	4/22/12	0635	W	5		6								
MW-2		0740				6													
MW-4R		0826				6													
MW-5		0622				6													
MW-6		0722				6													
MW-7		0805				6													
MW-8		0702				6													

01
02
03
04
05
06
07

RELINQUISHED BY:

David Allen
(signature) (time)

DAVID ALLEN 4/22/12
(printed name) (date)

Company-ASE, INC.

RECEIVED BY:

(signature) (time)

(printed name) (date)

Company- _____

RELINQUISHED BY:

(signature) (time)

(printed name) (date)

Company- _____

RECEIVED BY LABORATORY:

Harold Brown 1150
(signature) (time)

Harold Brown 6:25:12
(printed name) (date)

Company- *Kiff*

COMMENTS:

TURN AROUND TIME
 STANDARD 24Hr 48Hr 72Hr

OTHER:

SAMPLE RECEIPT CHECKLIST

RECEIVER

NB
Initials

SRG#: 81716 Date: 062512

Project ID: LIM

Method of Receipt: Courier Over-the-counter Shipper

COC Inspection

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

Sample Inspection

Coolant Present: 2.8 Yes No (includes water)
 Temperature °C 2.8 Therm. ID# IR-4 Initial LJR Date/Time 062512/1427 N/A
 Are there custody seals on sample containers? Intact Broken Not present
 Do containers match COC? 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 No
 Are any sample containers broken, leaking or damaged? Yes No
 Are preservatives indicated? Yes, on sample containers Yes, on COC Not indicated N/A
 Are preservatives correct for analyses requested? Yes No N/A
 Are samples within holding time for analyses requested? Yes No
 Are the correct sample containers used for the analyses requested? Yes No
 Is there sufficient sample to perform testing? Yes No
 Does any sample contain product, have strong odor or are otherwise suspected to be hot? Yes No

Receipt Details

Matrix WA Container type VOA # of containers received 35
 Matrix _____ Container type _____ # of containers received _____
 Matrix _____ Container type _____ # of containers received _____
 Date and Time Sample Put into Temp Storage Date: 062512 Time: 1429

Quicklog

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

COMMENTS:
