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

Re: RO #479, Report [redacted]

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

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

Sincerely,

Russell Lim

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

August 23, 2013

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 SEMI-ANNUAL OPERATION REPORT AND CURRENT GROUNDWATER MONITORING WELL ANALYTICAL RESULTS
Lim Family 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 semi-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 you require any additional information, please feel free to call me at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

David Allen
Vice President

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

August 23, 2013

REMEDIATION SYSTEMS SEMI-ANNUAL OPERATION REPORT AND GROUNDWATER MONITORING RESULTS
LIM FAMILY 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 View Road
Lafayette, CA 94549

Submitted by:

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

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

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Aqua Science Engineers, Inc. 55 Oak Court, Danville, CA 94526
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1.0 INTRODUCTION

This report details Aqua Science Engineers, Inc. (ASE) operation of the ozone-sparging and vapor-extraction remediation systems at the Lim property located at 250 8th Street in Oakland, California since January 2013 (Figure 1). This report also provides current groundwater concentrations in the site's on and off-site groundwater monitoring wells.

2.0 WEEKLY OPERATION AND MAINTENANCE ACTIVITIES

ASE personnel visited the site on a regular basis to maintain the remediation equipment and to comply with Bay Area Air Quality Management District (BAAQMD) permit requirements. During most visits, ASE personnel completes the following:

- Record the 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 which provides the total hydrocarbon concentration entering the remediation system. 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 ASE for the granulated activated carbon canisters (GAC's) installed in November 2012,
- 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

Between January and April 2013, the ozone-sparging remediation equipment operated in "low-flow ozone" mode into each of the ten sparging wells that are located on and off-site (Figure 2). Beginning in May 2013, the ozone-sparging remediation equipment operated in "high-flow ozone" mode into each of the ten sparging wells that are located on and off-site (see the attached Ozone Sparging Log). The difference between the two modes are a greater operating pressure and greater airflow (in cfm) in the high-flow mode. The change from "low-flow ozone" to "high-flow ozone" was made due to the elimination of free-phase hydrocarbons at the site. Downtime for the ozone-sparging system only occurred for maintenance purposes and an occasional power failure at the site.

3.2 Vapor-Extraction Remediation System Operation

Since January 2013, the ASE vapor-extraction system has operated continuously. The ASE fixed vapor-extraction system consists of a 100 cfm Rotron blower piped to a moisture knock-out drum. The negative-pressure side of the ASE vapor-extraction system is plumbed to the manifold of vapor-extraction wells. The positive-pressure side of the ASE vapor-extraction system is plumbed to two 200 pound GAC

canisters filled with virgin, vapor-phase GAC supplied to ASE by Baker Corporation. These GAC canisters are plumbed in series, and are approved for used by Bay Area Air Quality Management District (BAAQMD) Permit To Operate - Plant Number 18100. The ASE vapor-extraction system, plumbed to two 200 pound GAC canisters (ASE VE System), became fully operational on November 12, 2012.

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 used for vapor-extraction in various percentages of open mode. For the most part, wells with consistent measureable hydrocarbons, using the PID, are in 50% - 100% open mode, with the remainder of the wells in a 15% - 25% open mode to allow for air movement through the entire vadose zone. As shown on the attached Vapor-Extraction System Log, the influent vapor concentrations, when measured using ASE's PID, have been on a slight gradual increasing trend for the overall influent as well as several vapor-extraction wells (VE-2 through VE-5 and MW-3), see the attached Vapor-Extraction System Log. ASE believes this is in part due to the high-flow ozone-sparging that is now occurring at the site. In all likelihood, the greater air-flow volume and pressure is causing a greater amount of hydrocarbons to be sparged off of the polluted groundwater. Note that the total influent concentration measured just prior to the GAC canisters is far 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 ASE. The BAAQMD permit requires ASE to measure the influent and effluent on a weekly basis to determine when breakthrough of hydrocarbons occurs on the first and second GAC canisters.

3.21 Periodic Influent Vapor Sampling

Since January 2013, ASE has collected two influent vapor samples, both on August 8, 2013, to determine petroleum hydrocarbon concentrations in the extracted subsurface air.

- The first sample, collected on August 8, 2013, is an influent vapor sample collected from a sample port on the negative side of the blower, and consisted of soil vapors being extracted from only vapor-extraction well MW-3. This sample (sample Id. INF-8.8.13 @ 1230) was collected to determine the worst-case scenario of vapors beneath the subject site. All other VE wells were 0% open for a brief time while the sample was being collected. Also, this sample was taken at the wellhead, and prior to the dilution air valve that brings fresh-air into the ASE VE System. Once this sample was collected, the remaining VE wells were opened back to their pre-sample position.

- The second sample, collected on August 8, 2013, is an influent vapor sample collected from a sample port on the negative side of the blower (on the VE subsurface piping manifold and before the fresh-air dilution point) and consisted of soil vapors being extracted from all the vapor-extraction wells on-site and off-site (VE-1 through VE-9) and monitoring wells MW-3 and MW-4R. This sample (sample Id. INF-8.8.13 @ 1245) was used to calculate the pounds of hydrocarbons removed from the site during the consistent operating parameters of the VE system.

The samples were collected in new 1-liter Tedlar bags, labeled individually, and submitted to McCampbell Anlaytical of Pittsburg, California under chain of custody procedures. These samples were analyzed by McCampbell for total petroleum hydrocarbons as gasoline (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 INF-8.8.13 @ 1230 influent vapor sample contained 20,000 ug/L TPH-G, 250 ug/L benzene, 340 ug/L toluene, 12 ug/L ethylbenzene, 480 ug/L xylenes, and < 350 ug/L MTBE.

- The INF-8.8.13 @ 1245 influent vapor sample contained 1,400 ug/L TPH-G, 12 ug/L benzene, 23 ug/L toluene, 1.3 ug/L ethylbenzene, 47 ug/L xylenes, and < 15 ug/L MTBE.

The influent vapor sample collected when only MW-3 was open is very similar to the January 2013 air bag sample. However, the influent vapor sample collected during typical operating parameters is one order of magnitude higher for TPH-G, and two orders of magnitude higher for benzene when compared to the January 2013 results. This indicates that there still exists moderate levels of hydrocarbons within the vadose zone that require continued removal with the VE system. The higher concentrations are likely related to additional sparging volumes since the system was swithed from low-flow to high-flow.

ASE plans to continue operation of the ASE VE System to (a) reduce the elevated concentration of 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.

3.22 Estimated TPH-G Extracted from Vadose Zone

Using an average of the analytical results of the influent vapor samples collected on January 29, 2013, and August 8, 2013 (the 1245 air bag sample representing typical operating parameters), 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 90.72 gallons of gasoline, in vapor phase, have been removed from the subsurface vadose zone between the time of January 2013 and August 2013. *This volume is over 9-times greater than in the previous period (which was 10.15 gallons).* Since start-up of the VE System, ASE estimates that 915.33 gallons of gasoline, in vapor phase, have been removed from the subsurface vadose zone. These calculations used a typical operating flowrate of 50 cfm (based on the blower curve supplied with the regenerative blower), and used actual days of operation of the system. An average of the two sample concentrations was calculated and used as the daily concentration for calculating the total hydrocarbons removed for the period. For months of operation 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/ozone). See Appendix B for copies of the Sparging Well Log and Vapor-Extraction System Log.

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 month 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" ppmv 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 18, 2013, 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 were present in any of the wells this sampling period. 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 18, 2013, ASE collected groundwater samples from all monitoring wells for analysis. Prior to sampling, the wells were purged of three well casing volumes of groundwater using disposable polyethylene bailers. The pH, temperature and conductivity of the purge water were monitored during evacuation, and samples were not collected until these parameters stabilized. Samples were collected from each well using disposable polyethylene bailers. The groundwater samples were decanted from the bottom of the bailers using low-flow emptying devices into 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid, sealed without headspace and labeled. All samples were stored on ice for transport to Kiff Analytical, LLC, (KIFF) of Davis, California under appropriate chain of custody documentation. Well sampling purge water was contained in a sealed and labeled 55-gallon steel drum for temporary storage until off-site disposal can be arranged. See Appendix C for copies of the well sampling field logs.

5.3 Analytical Results for Groundwater Samples

All groundwater samples were analyzed by KIFF for TPH-G, benzene, toluene, ethylbenzene, 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:

- Groundwater samples collected from monitoring well MW-1 contained 370 parts per billion (ppb) TPH-G, 84 ppb TPH-D, 1.5 ppb benzene, and 0.52 ppb diisopropyl ether (DIPE). These concentrations are very similar to the previous sampling event and significantly lower than concentrations from one year ago in June 2012.

- Groundwater samples collected from monitoring well MW-2 contained 5,300 ppb TPH-G, 88 ppb total petroleum hydrocarbons as diesel (TPH-D), 2,400 ppb benzene, 7.8 ppb toluene, 80 ppb ethylbenzene, 31 ppb xylenes, 7.8 ppb DIPE, and 17 ppb TBA. Hydrocarbon concentrations in groundwater samples collected from monitoring well MW-2 increased noticeable from the two previous sampling events in 2012, but continue to represent a significant decrease of up to several orders of magnitude from pre-remediation conditions.

- Groundwater samples collected from monitoring well MW-3 did not contain a measurable thickness of free-floating hydrocarbons, nor were free-phase hydrocarbons visible when a bailer was retrieved from the well. The samples collected from MW-3 contained 100,000 ppb TPH-G, 220,000 ppb TPH-D, 6,700 ppb benzene, 7,900 ppb toluene, 2,000 ppb ethylbenzene, and 15,000 ppb xylenes. Although these concentrations are still very high, the fact that free-phase hydrocarbons were not present for a second consecutive sampling event is a positive indicator of the remediation effectiveness.

- Groundwater samples collected from monitoring well MW-4R contained 3,800 ppb TPH-G, 110 ppb TPH-D, 37 ppb benzene, 33 ppb toluene, 10 ppb ethylbenzene, 400 ppb xylenes, 1.5 ppb MTBE, 2.5 ppb DIPE, and 120 ppb TBA. These concentrations are similar to the previous sampling event and continue to represent a significant decrease of up to several orders of magnitude from pre-remediation conditions. The toluene and total xylenes concentrations decreased to a historic low.

- No hydrocarbons or oxygenates were detected in groundwater samples collected from monitoring well MW-5. These concentrations represent a decrease since the previous sampling event.

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

- Groundwater samples collected from monitoring well MW-7 contained 6,000 ppb TPH-G, 250 ppb TPH-D, 19 ppb benzene, 22 ppb toluene, 310 ppb ethylbenzene, 390 ppb xylenes, and 6.3 ppb TBA. These concentrations represent a significant decrease from the previous sampling event with most compounds at or near historic lows.

- No hydrocarbons or oxygenates were detected in groundwater samples collected from monitoring well MW-8 other than 83 ppb TPH-D. These results continue to indicate that no significant hydrocarbon concentrations exist in the deeper water-bearing zones.

Concentrations in groundwater samples collected from the following wells exceeded Environmental Screening Levels (ESLs) for drinking water as presented in the "Screening For Environmental Concerns

at Sites With Contaminated Soil and Groundwater" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region dated May 2008:

Concentrations of TPH-G, benzene, toluene, ethylbenzene, and xylenes in groundwater samples collected from monitoring wells MW-2, MW-3, MW-4R, and MW-7 exceeded ESLs.

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

Current groundwater concentrations are trending 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 months.

6.0 DISCUSSION OF COST

The cost for operation of the ozone-sparging and vapor-extraction systems is the largest portion of the annual operating budget set for this site by the USTCF. Typically, continued operation of such remediation systems is based on multiple factors – one being the cost for operation. At the point where diminishing returns are achieved (cost outweighed by remedial effect on the subsurface soil and groundwater), operation of remediation equipment is typically suspended for a period of time to see if a rebounding effect will occur.

- Based on hydrocarbon concentrations in groundwater, it appears that the remedial effect has eliminated free-phase hydrocarbons in wells MW-3 and MW-4R, and total hydrocarbon concentrations on the remaining monitoring wells are showing a decreasing trend due to the ozone-sparging.

- Based on the rising hydrocarbon concentrations in the vadose-zone, it appears that the remedial effect continues to remove hydrocarbons in both soil and groundwater that are being stripped by ozone-sparging.

It is the opinion of ASE that the data within this report supports the continued operation of both the ozone-sparging and vapor-extraction systems until the end of the 2013 fiscal year or until diminishing returns appears to have been achieved. ASE believes that at that time, it may be prudent to shut off the VE system for a period of time to determine if the build-up of stripped hydrocarbons from the groundwater no longer have an effect on the businesses above and adjacent to the plume. If that is found to be true, ASE will recommend shutting off the ASE VE system for a period of time to determine if a rebounding effect occurs.

7.0 COMPARISON TO LOW-THREAT CLOSURE POLICY CRITERIA

A full evaluation on how the current site conditions compare to the California Regional Water Quality Control Board Low-Threat Closure Policy has not been made; however, based on recent groundwater sample analysis data, it is clear that the site does not meet the criteria at this time. In particular, the benzene concentration of 6,700 ppb in groundwater samples collected recently from monitoring well

MW-3 is over twice what the low-threat closure policy allows for sites with a groundwater plume over 100-feet in length without land use conditions.

8.0 RECOMMENDATIONS

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

Continued operation of the remediation systems at the site. Re-evaluate the need for vapor-extraction remediation in 6 months. Maintain the current remediation system's operating parameters, adjusting the VE wells as necessary based on periodic influent air sampling with the ASE PID. Collect groundwater samples from monitoring wells MW-1 through MW-5 and MW-7in December 2013 ASE recommends removing monitoring wells MW-6 and MW-8 from the monitoring program since neither has contained a hydrocarbon concentration exceeding an ESL for at least 5 years. Prepare a Remediation Effectiveness and Groundwater Results report within the first quarter of 2014.

Aqua Science Engineers, Inc. 55 Oak Court, Danville, CA 94526
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9.0 SIGNATURES

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

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

David Allen
Vice President

Robert Kitay, P.G.
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, Danville, CA 94526
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FIGURES

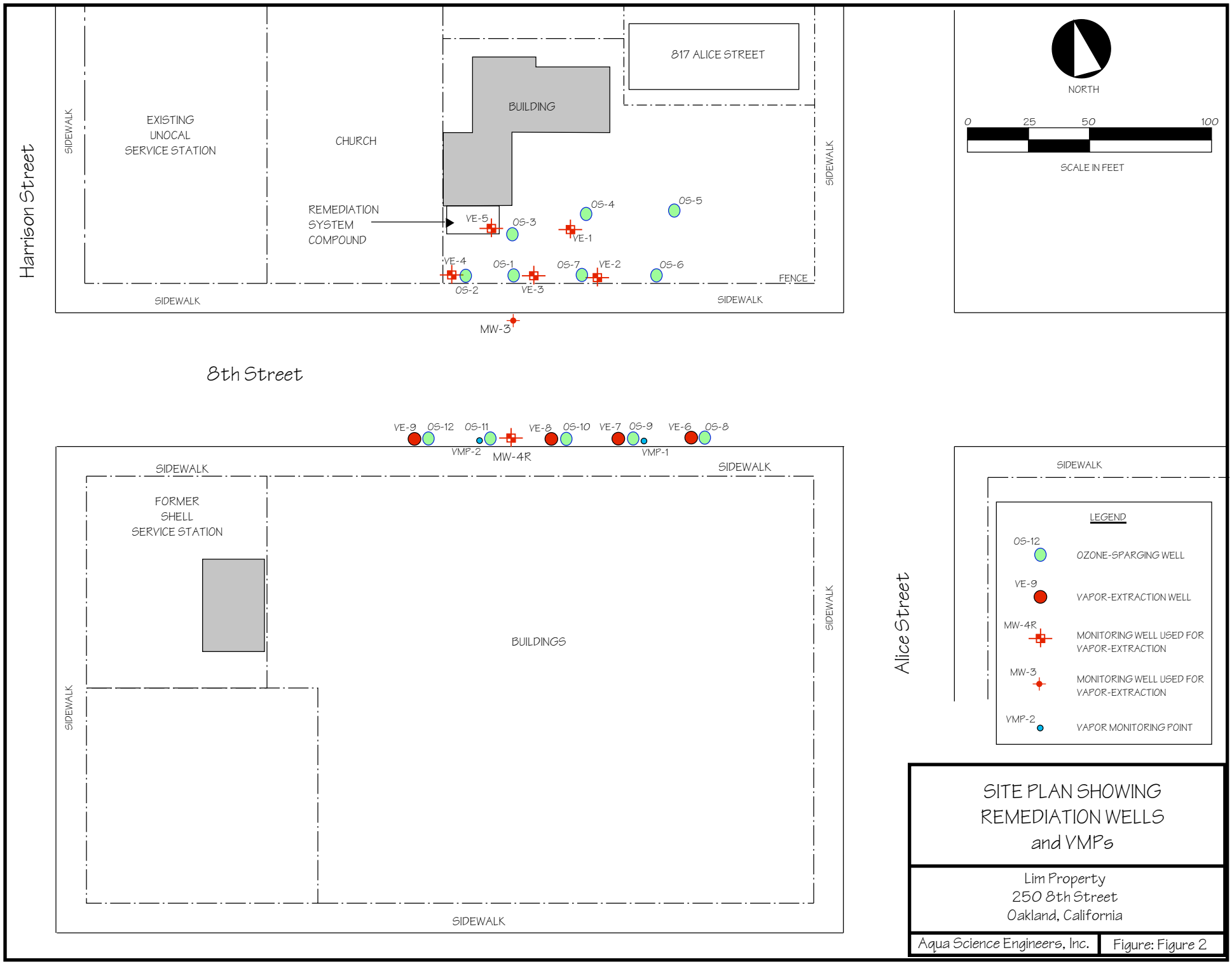
NORTH

NOT TO SCALE

SITE LOCATION MAP

Lim Family Property
250 8th Street
Oakland, California

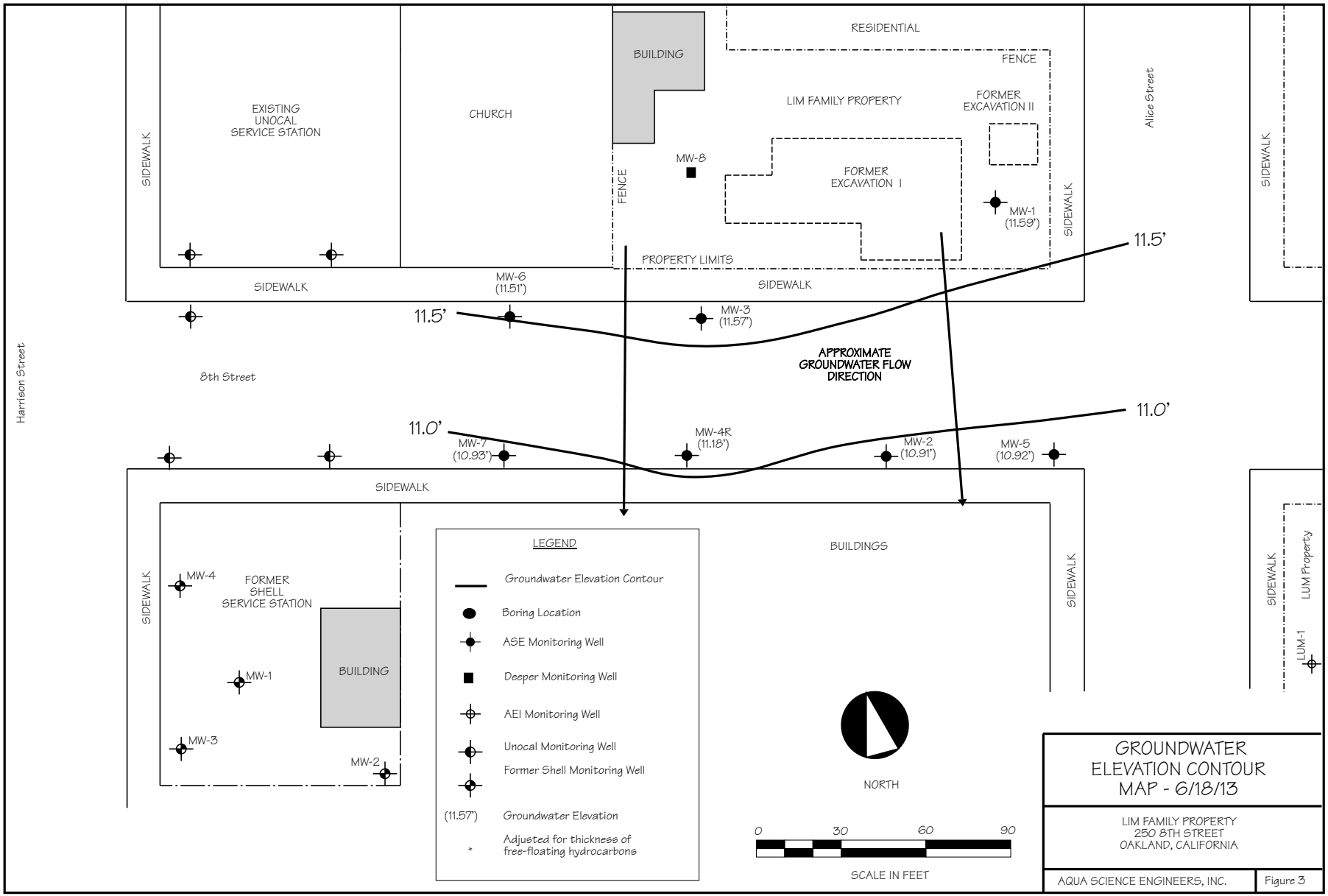
Aqua Science Engineers	Figure 1



SITE PLAN SHOWING REMEDIATION WELLS and VMPs

Lim Property
250 8th Street
Oakland, California

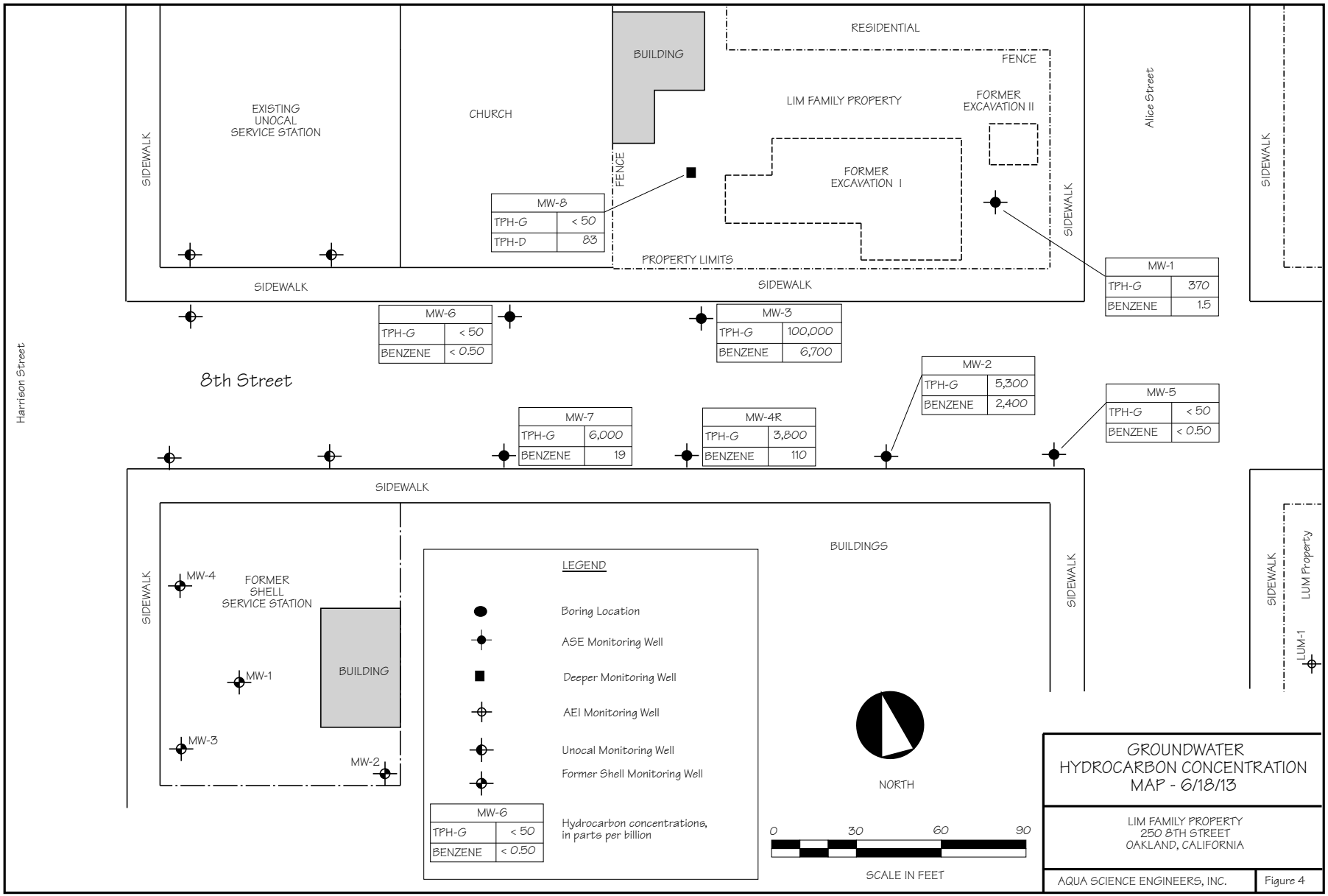
Aqua Science Engineers, Inc. | Figure: Figure 2



GROUNDWATER ELEVATION CONTOUR MAP - 6/18/13

LIM FAMILY PROPERTY
250 8TH STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | Figure 3


Harrison Street
SIDEWALK
EXISTING
UNOCAL
SERVICE STATION
CHURCH
BUILDING
RESIDENTIAL
FENCE
LIM FAMILY PROPERTY
FORMER
EXCAVATION II
Alice Street
SIDEWALK
FENCE
FORMER
EXCAVATION I
SIDEWALK
PROPERTY LIMITS
SIDEWALK
SIDEWALK
MW-8
TPH-G < 50
TPH-D 83
MW-1
TPH-G 370
BENZENE 1.5
MW-6
TPH-G < 50
BENZENE < 0.50
MW-3
TPH-G 100,000
BENZENE 6,700
8th Street
MW-2
TPH-G 5,300
BENZENE 2,400
MW-5
TPH-G < 50
BENZENE < 0.50
MW-7
TPH-G 6,000
BENZENE 19
MW-4R
TPH-G 3,800
BENZENE 110
SIDEWALK
SIDEWALK
MW-4
FORMER
SHELL
SERVICE STATION
BUILDING
MW-1
MW-3
MW-2
BUILDINGS
SIDEWALK
SIDEWALK
LUM Property
LUM-1
LEGEND
Boring Location
ASE Monitoring Well
Deeper Monitoring Well
AEI Monitoring Well
Unocal Monitoring Well
Former Shell Monitoring Well
MW-6
TPH-G < 50
BENZENE < 0.50
Hydrocarbon concentrations,
in parts per billion
NORTH
0 30 60 90
SCALE IN FEET
GROUNDWATER
HYDROCARBON CONCENTRATION
MAP - 6/18/13
LIM FAMILY PROPERTY
250 8TH STREET
OAKLAND, CALIFORNIA
AQUA SCIENCE ENGINEERS, INC.
Figure 4

Aqua Science Engineers, Inc. 55 Oak Court, Danville, CA 94526
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TABLES

TABLE ONE

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

Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-1	01/30/95	25.51	16.21		9.30
	04/12/95		15.71		9.80
	07/14/95		16.71		8.80
	10/17/95		17.72		7.79
	01/12/96		18.03		7.48
	07/25/96		16.82		8.69
	01/06/97		15.60		9.91
	07/08/97		17.31		8.20
	01/26/98		15.21		10.30
	07/23/98		15.38		10.13
	01/05/99		16.82		8.69
	07/13/99		15.89		9.62
	01/12/00		17.44		8.07
	04/24/00		16.37		9.14
	07/20/00		16.30		9.21
	10/24/00		17.25		8.26
	01/18/01		17.29		8.22
	04/05/01		15.88		9.63
	07/17/01		16.54		8.97
	10/25/01		16.89		8.62
	01/21/02		14.92		10.59
	04/11/02		14.02		11.49
	06/11/02	29.72	15.33		14.39
	09/17/02		15.96		13.76
	12/18/02		16.14		13.58
	03/25/03		16.16		13.56
	06/23/03		16.01		13.71
	09/26/03		16.57		13.15
	12/18/03		16.41		13.31
	03/12/04		14.64		15.08
	06/17/04		15.71		14.01
	09/17/04		16.35		13.37
	12/17/04		16.10		13.62
	04/28/05		14.10		15.62
	07/19/05		15.94		13.78
	10/03/05		16.34		13.38
	12/06/05		16.21		13.51
	03/15/06		16.21		13.51
	06/28/06		14.92		14.80
	08/31/06		15.60		14.12
	11/21/06		17.20		12.52
	02/12/07		16.12		13.60
	05/02/07		16.92		12.80
	08/09/07		17.58		12.14
	12/06/07		18.60		11.12
	02/26/08		17.13		12.59
	05/30/08		18.17		11.55
	08/28/08		18.47		11.25
	12/11/08		19.19		10.53
	03/31/09		17.59		12.13
	12/31/09		18.57		11.15
	06/03/10		16.94		12.78
	12/20/10		18.21		11.51
	06/30/11		17.43		12.29
	06/22/12		17.08		12.64
	12/13/12		17.32		12.40
	06/18/13		**18.13**		**11.59**

TABLE ONE

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

Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-2	01/30/95	23.99	15.02		8.97
	04/12/95		14.75		9.24
	07/14/95		16.02		7.97
	10/17/95		16.94		7.05
	01/12/96		17.05		6.94
	07/25/96		16.02		7.97
	01/06/97		14.34		9.65
	07/08/97		16.52		7.47
	01/26/98		14.10		9.89
	07/23/98		14.70		9.29
	01/05/99		16.01		7.98
	07/13/99		15.40		8.59
	01/12/00		16.76		7.23
	04/24/00		15.67		8.32
	07/20/00		15.70		8.29
	10/24/00		16.56		7.43
	01/18/01		16.47		7.52
	04/05/01		15.88		8.11
	07/17/01		15.35		8.64
	10/25/01		15.63		8.36
	01/21/02		13.55		10.44
	04/11/02		13.74		10.25
	06/11/02	28.19	14.06		14.13
	09/17/02		14.67		13.52
	12/18/02		14.88		13.31
	03/25/03		15.11		13.08
	06/23/03		14.94		13.25
	09/26/03		15.49		12.70
	12/18/03		15.13		13.06
	03/12/04		13.50		14.69
	06/17/04		14.63		13.56
	09/17/04		15.19		13.00
	12/17/04		14.88		13.31
	04/28/05		13.39		14.80
	07/19/05		15.27		12.92
	10/03/05		15.57		12.62
	12/06/05		15.35		12.84
	03/15/06		12.65		15.54
	06/28/06		14.45		13.74
	08/31/06		15.37		12.82
	11/21/06		16.22		11.97
	02/12/07		16.12		12.07
	05/02/07		16.12		12.07
	08/09/07		16.85		11.34
	12/06/07		17.95		10.24
	02/26/08		16.15		12.04
	05/30/08		17.33		10.86
	08/28/08		17.53		10.66
	12/11/08		18.28		9.91
	03/31/09		16.63		11.56
	12/31/09		17.46		10.73
	06/03/10		16.00		12.19
	12/20/10		17.25		10.94
	06/30/11		16.55		11.64
	06/22/12		16.36		11.83
	12/13/12		16.24		11.95
	06/18/13		**17.28**		**10.91**

TABLE ONE

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

Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-3	01/12/00	24.25	16.68	0.01	7.58*
	04/24/00		15.58	0.15	8.79*
	07/20/00		16.01	0.41	8.57*
	10/24/00		16.95	0.21	7.47*
	01/18/01		16.63	0.21	7.79*
	04/05/01		15.16	0.23	9.27*
	07/17/01		15.92	0.39	8.64*
	10/25/01		16.26	0.38	8.29*
	01/21/02		14.08	0.16	10.30*
	04/11/02		14.59	0.54	10.09*
	06/11/02	28.58	15.16	0.90	14.14*
	09/17/02		16.04	1.24	13.53*
	10/01/02		16.14	1.23	13.42*
	10/25/02		15.80	0.60	13.26*
	11/12/02		15.87	0.47	13.09*
	12/18/02		15.42	0.47	13.54*
	03/25/03		16.11	1.14	13.38*
	06/23/03		16.58	1.86	13.49*
	09/26/03		16.11	0.66	13.00*
	12/18/03		15.83	0.59	13.22*
	03/12/04		14.51	1.21	15.04*
	06/17/04		15.25	0.68	13.87*
	09/17/04		16.14	0.96	13.21*
	12/17/04		15.05	0.25	13.73*
	01/13/05		13.40	0.45	15.54*
	04/28/05		15.31	2.43	15.21*
	07/19/05		16.29	1.67	13.63*
	10/03/05		16.10	1.47	13.66*
	12/06/05		15.04	1.17	14.48*
	03/15/06		12.65	2.41	15.49*
	06/28/06		13.55	2.61	16.16*
	08/31/06		14.85	2.20	15.49*
	11/21/06		16.05	1.10	13.41*
	02/12/07		15.96	0.35	12.90*
	05/02/07		15.11	0.09	13.54*
	08/09/07		15.83	0.09	12.82*
	12/06/07		18.10	0.50	10.88*
	02/26/08		16.47	0.22	12.29*
	05/30/08		17.90	0.70	11.24*
	08/28/08		18.05	0.54	10.96*
	12/11/08		18.57	0.46	10.38*
	03/31/09		16.89	0.23	11.87*
	12/31/09		17.64	sheen	10.94*
	06/03/10		16.58	0.56	12.45*
	12/20/10		17.20	0.45	11.74*
	06/30/11		15.92		12.66
	06/22/12		16.64	0.69	12.48*
	12/13/12		16.24	None	12.34
	06/18/13		**17.01**		**11.57**

TABLE ONE

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

Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-4	01/12/00	23.71	17.24		6.47
	04/24/00		16.18		7.53
	07/20/00		16.18		7.53
	10/24/00		17.03		6.68
	01/18/01		16.87		6.84
	04/05/01		15.28		8.43
	07/17/01		15.92		7.79
	10/25/01		16.23		7.48
	01/21/01		14.14		9.57
	04/11/02		14.43		9.28
	06/11/02	28.61	14.72		13.89
	09/17/02		15.29		13.32
	12/18/02		15.20		13.41
	03/25/03		15.53		13.08
	06/23/03		15.35		13.26
	09/26/03		15.91		12.70
	12/18/03		15.63		12.98
	03/12/04		13.88		14.73
	06/17/04		15.03		13.58
	09/17/04		15.61		13.00
	12/17/04		15.32		13.29
	04/28/05		13.82		14.79
	07/19/05		15.44		13.17
	10/03/05		15.91		12.70
	12/06/05		15.71		12.90
	03/15/06		13.05		15.56
	06/28/06		14.49		14.12
	08/31/06		15.75		12.86
	11/21/06		16.70		11.91
	02/12/07		16.51		12.10
	05/02/07		16.51		12.10
	08/09/07		17.17		11.44
	12/06/07		18.08		10.53
	02/26/08		16.57		12.04
	05/30/08		17.66		10.95
	08/28/08		17.98		10.63
	12/11/08		18.61		10.00
	03/31/09		18.75	2.00	11.46*
MW-4R	12/31/09	28.78	19.85	2.30	10.77*
	06/03/10		18.67	2.57	12.17*
	12/20/10		18.95	2.00	11.43*
	06/30/11		16.45		12.33
	06/22/12		16.69		12.09
	12/13/12		16.61		12.17
	06/18/13		**17.60**		**11.18**

TABLE ONE

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

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

TABLE ONE

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

Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-6	06/11/02	29.20	14.95		14.25
	09/17/02		15.47		13.73
	12/18/02		15.43		13.77
	03/25/03		15.67		13.53
	06/23/03		15.48		13.72
	09/26/03		NOT MEASURED - SOUNDER MALFUNCTION		
	12/18/03		15.79		13.41
	03/12/04		14.04		15.16
	06/17/04		15.13		14.07
	09/17/04		15.74		13.46
	12/17/04		15.54		13.66
	04/28/05		13.91		15.29
	07/19/05		15.30		13.90
	10/03/05		15.35		13.85
	12/06/05		15.69		13.51
	03/15/06		13.14		16.06
	06/28/06		14.44		14.76
	08/31/06		16.25		12.95
	11/21/06		16.69		12.51
	02/12/07		16.63		12.57
	05/02/07		16.57		12.63
	08/09/07		17.19		12.01
	12/06/07		17.95		11.25
	02/26/08		16.66		12.54
	05/30/08		17.64		11.56
	08/28/08		18.03		11.17
	12/11/08		18.54		10.66
	03/31/09		17.10		12.10
	12/31/09		18.00		11.20
	06/03/10		16.58		12.62
	12/20/10		17.40		11.80
	06/30/11		17.02		12.18
	06/22/12		16.70		12.50
	12/13/12		16.77		12.43
	06/18/13		**17.69**		**11.51**

TABLE ONE

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

Well I.D.	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
MW-7	06/11/02	28.95	15.19		13.76
	09/17/02		15.73		13.22
	12/18/02		NOT MEASURED - CAR PARKED OVER WELL		
	03/25/03		15.96		12.99
	06/23/03		15.75		13.20
	09/26/03		16.29		12.66
	12/18/03		16.03		12.92
	03/12/04		14.28		14.67
	06/17/04		15.42		13.53
	09/17/04		16.02		12.93
	12/17/04		15.45		13.50
	04/28/05		14.15		14.80
	07/19/05		15.30		13.65
	10/03/05		16.25		12.70
	12/06/05		16.05		12.90
	03/15/06		13.36		15.59
	06/28/06		14.81		14.14
	08/31/06		16.13		12.82
	11/21/06		17.06		11.89
	02/12/07		16.97		11.98
	05/02/07		16.93		12.02
	08/09/07		17.56		11.39
	12/06/07		18.32		10.63
	02/26/08		16.93		12.02
	05/30/08		17.97		10.98
	08/28/08		18.33		10.62
	12/11/08		18.86		10.09
	03/31/09		17.37		11.58
	12/31/09		18.26		10.69
	06/03/10		16.86		12.09
	12/20/10		17.70		11.25
	06/30/11		17.36		11.59
	06/22/12		17.03		11.92
	12/13/12		17.01		11.94
	06/18/13		**18.02**		**10.93**
MW-8	02/26/08	30.14	21.50		8.64
	05/30/08		22.52		7.62
	08/28/08		23.27		6.87
	12/11/08		23.15		6.99
	03/31/09		21.46		8.68
	12/31/09		22.75		7.39
	06/03/10		21.06		9.08
	12/20/10		22.18		7.96
	06/30/11		21.95		8.19
	06/22/12		21.23		8.91
	12/13/12		21.89		8.25
	06/18/13		**22.44**		**7.70**

Notes:
* = Adjusted for the presence of free-floating oil by the equation: Top of Casing Elevation - Depth to Water + (0.8 x Floating Hydrocarbon Thickness) = Groundwater Elevation (Adjusted).

Top of casing elevations resurveyed by Mid Coast Engineers on 6/27/02 and 7/11/02.

TABLE TWO

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

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	TBA	Other Oxys	EDC	EDB
MW-1												
01/30/95	740	200	3	5	1	4	--	---	---	---	---	---
04/12/95	400	500	< 0.5	< 0.5	3	< 2	--	---	---	---	---	---
07/14/95	520	400	1	< 0.5	2	3	--	---	---	---	---	---
10/17/95	400	200	0.5	1	3	< 2	--	---	---	---	---	---
01/12/96	120	890	< 0.5	< 0.5	< 0.5	< 1.0	< 2.0	---	---	---	---	---
07/08/96	320	300	0.52	2.7	1.2	2.3	< 5.0	---	---	---	---	---
01/06/97	110	75	< 0.5	0.68	< 0.5	< 0.5	< 5.0	---	---	---	---	---
07/08/97	380	290	< 0.5	1.5	1.4	1.9	< 5.0	---	---	---	< 0.5	< 0.5
01/26/98	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	< 0.5	< 0.5
07/23/98	190	< 50	0.54	2.8	2	1.8	< 5.0	---	---	---	< 2	< 2
01/05/99	200	< 50	1.8	1.6	3.3	< 0.5	< 5.0	---	---	---	< 0.5	< 0.5
07/13/99	340	<50	<0.5	<0.5	2.6	<0.5	< 5.0	---	---	---	< 0.5	< 0.5
01/12/00	300	1,000	22	36	5.5	24	< 5.0	---	---	---	< 0.5	< 0.5
04/24/00	360	280*	< 0.5	< 0.5	< 0.5	2.1	< 5.0	---	---	---	< 0.5	< 0.5
07/20/00	290	150*	1.8	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	< 0.5	< 0.5
10/24/00	170**	280*	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	< 0.5	< 0.5
01/18/01	170**	150*	< 0.5	<0.5	< 0.5	2.1	< 5.0	---	---	---	< 0.5	< 0.5
04/05/01	350**	190*	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	< 0.5	< 0.5
07/17/01	310	570	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	< 0.5	< 0.5
10/25/01	250	260	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
01/22/02	200	250	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
04/11/02	260	300	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
06/11/02	270	330	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
09/17/02	320	1,700	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
12/18/02	170	320	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
03/25/03	320	< 500	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
06/23/03	240	310	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
09/26/03	110	300	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---	---	---	< 0.5	< 0.5
12/18/03	150	340	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---	---	---	< 0.5	< 0.5
03/12/04	220	510	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---	---	---	< 0.5	< 0.5
06/17/04	250	490	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---	---	---	< 0.5	< 0.5
09/17/04	110	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---	---	---	---	---
11/10/04***	180	400	0.68	< 0.5	1.7	< 0.5	< 5.0	---	---	---	---	---
12/17/04	77	130	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---	---	---	< 0.5	< 0.5
04/28/05	250	190	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.67	< 0.5	< 0.5	< 0.5	< 0.5
07/19/05	340	na	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.76	< 5.0	< 0.5	< 0.5	< 0.5
10/03/05	170	< 100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.50	< 5.0	< 0.5	< 0.5	< 0.5
12/06/05	140	67	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
03/15/06	170	< 80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
06/28/06	230	130	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
08/31/06	310	< 200	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
11/21/06	220	160	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
02/23/07	140	120	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.2	< 5.0	< 0.50	< 0.50	< 0.50
05/02/07	180	140	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.3	< 5.0	< 0.50	< 0.50	< 0.50
08/09/07	130	120	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.85	< 5.0	< 0.50	< 0.50	< 0.50
12/06/07	53	160	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 5.0	< 0.50	< 0.50	< 0.50
02/26/08	93	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.1	< 5.0	< 0.50	< 0.50	< 0.50
05/30/08	200	240	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.95	< 5.0	< 0.50	< 0.50	< 0.50
08/28/08	150	200	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.2	< 5.0	< 0.50	---	---
12/11/08	110	140	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.92	< 5.0	< 0.50	---	---
03/31/09	160	< 200	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.8	< 5.0	< 0.50	< 0.50	< 0.50
12/31/09	140	200	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.84	< 5.0	< 0.50	< 0.50	< 0.50
06/03/10	300	140	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.72	< 5.0	< 0.50	< 0.50	< 0.50
12/20/10	140	180	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/30/11	650	< 200	1.9	< 0.50	< 0.50	< 0.50	< 0.50	0.78	< 5.0	< 0.50	< 0.50	< 0.50
06/22/12	750	< 200	23	< 0.50	1.1	2.3	< 0.50	0.80	12	< 0.50	< 0.50	< 0.50
12/13/12	180	90	2.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/18/13	**370**	**84**	**1.5**	**< 0.50**	**< 0.50**	**< 0.50**	**< 0.50**	**0.52**	**< 5.0**	**< 0.50**	**< 0.50**	**< 0.50**

TABLE TWO

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

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	DIPE	TBA	Other Oxys	EDC	EDB
MW-2												
01/30/95	88,000	800	19,000	18,000	2,400	10,000	--	---	---	---	---	---
04/12/95	110,000	990	21,000	28,000	2,800	14,000	--	---	---	---	---	---
07/14/95	120,000	5,000	20,000	25,000	3,200	15,000	--	---	---	---	---	---
10/17/95	190,000	4,000	15,000	26,000	4,900	23,000	--	---	---	---	---	---
01/12/96	32,000	2,600	10,000	8,000	1,100	4,800	< 2	---	---	---	---	---
07/08/96	110,000	2,500	20,000	18,000	2,500	12,000	< 500	---	---	---	---	---
01/06/97	230,000	37,000	11,000	19,000	4,300	20,000	< 1,200	---	---	---	---	---
07/08/97	91,000	35,000	16,000	20,000	2,700	13,000	< 1,000	---	---	---	< 0.5	< 0.5
01/26/98	50,000	11,000	12,000	12,000	1,600	6,700	< 250	---	---	---	11	< 0.5
07/23/98	50,000	8,100#	11,000	8,300	1,800	7,000	1,100	---	---	---	9.9	< 0.5
01/05/99	50,000	7,600#	12,000	12,000	2,300	9,600	1,300	---	---	---	< 50	< 50
07/13/99	73,000	8,500	11,000	13,000	2,200	9,800	< 500	---	---	---	7.7	< 0.5
01/12/00	63,000	11,000	10,000	12,000	1,800	7,800	< 500	---	---	---	8.8	< 1.0
04/24/00	76,000	23,000*	7,100	14,000	2,000	9,400	< 500	---	---	---	5.9	< 5.0
07/20/00	68,000	5,300#	11,000	14,000	2,300	11,000	< 1,000	---	---	---	6.7	< 5.0
10/24/00	48,000	6,400*	11,000	9,400	1,500	7,300	< 500	---	---	---	< 5.0	< 5.0
01/18/01	37,000	4,600*	6,900	5,600	1,200	5,300	< 500	---	---	---	< 5.0	< 5.0
04/05/01	59,000	4,600*	7,100	9,800	1,600	7,600	< 500	---	---	---	4.6	< 5.0
07/17/01	90,000	< 10,000	9,200	14,000	2,700	11,000	< 50	---	---	---	< 50	---
10/25/01	79,000	< 3,800	9,200	14,000	2,400	11,000	< 50	---	---	---	< 50	< 50
01/22/02	76,000	< 2,300	7,000	13,000	2,200	9,600	< 50	---	---	---	< 50	< 50
04/11/02	76,000	< 1,500	7,800	11,000	2,900	12,000	< 50	---	---	---	---	---
06/11/02	72,000	< 2,500	7,300	9,600	2,500	12,000	< 50	---	---	---	---	---
09/17/02	52,000	< 3,000	5,000	5,400	2,100	9,100	< 20	---	---	---	< 20	< 20
12/18/02	46,000	< 6,000	2,900	3,000	1,800	7,600	22	---	---	---	< 10	< 10
03/25/03	87,000	< 8,000	7,900	9,300	2,900	12,000	< 50	---	---	---	< 50	< 50
06/23/03	46,000	< 3000	7,800	4,000	1,900	6,600	< 50	---	---	---	< 50	< 50
09/26/03	52,000	< 3000	9,100	3,500	1,300	5,000	< 50	---	---	---	< 50	< 50
12/18/03	61,000	< 4,000	13,000	3,500	1,600	5,600	< 20	---	---	---	< 20	< 20
03/12/04	53,000	< 4,000	9,100	3,500	1,700	5,700	< 25	---	---	---	< 25	< 25
06/17/04	59,000	< 3,000	7,100	4,000	1,700	7,300	< 25	---	---	---	< 25	< 25
09/17/04	33,000	--	9,800	1,200	1,300	4,000	< 20	---	---	---	---	---
11/10/04***	44,000	3,600	13,000	4,400	1,600	6,000	< 1000	---	---	---	---	---
12/17/04	54,000	< 3,000	7,900	2,200	1,700	3,900	< 15	---	---	---	< 15	< 15
04/28/05	81,000	< 3,000	7,000	6,000	2,100	8,700	< 15	90	< 15	< 15	< 15	< 15
07/19/05	59,000	na	7,900	4,400	1,900	7,000	< 15	< 15	77	< 15	< 15	< 15
10/03/05	34,000	< 800	7,800	810	1,000	2,800	< 15	< 15	< 70	< 15	< 15	< 15
12/06/05	26,000	< 800	6,100	940	770	2,000	< 15	---	---	---	---	---
03/15/06	33,000	< 1,500	7,700	2,600	1,400	4,200	< 15	< 15	< 15	< 15	< 15	< 15
06/28/06	96,000	< 4,000	10,000	14,000	2,900	12,000	< 15	< 15	< 5.0	< 15	33	< 15
8/31/06	47,000	< 3,000	5,800	5,100	2,200	8,700	< 15	< 15	81	< 15	< 15	< 15
11/21/06	51,000	< 1,500	6,800	3,400	1,700	6,200	< 15	< 15	82	< 15	< 15	< 15
02/23/07	38,000	< 1,500	7,800	2,000	1,500	4,600	< 15	< 15	190	< 15	< 15	< 15
05/02/07	55,000	< 3,000	6,500	5,100	2,400	8,600	< 15	< 15	110	< 15	< 15	< 15
08/09/07	39,000	< 3,000	6,600	2,200	1,600	4,900	< 15	< 15	81	< 15	< 15	< 15
12/06/07	20,000	< 1,500	7,400	510	680	1,200	< 15	< 15	120	< 15	< 15	< 15
02/26/08	43,000	< 4,000	8,200	940	1,400	3,700	< 15	< 15	70	< 15	< 15	< 15
05/30/08	31,000	< 1,000	11,000	620	1,100	2,300	< 15	< 15	84	< 15	< 15	< 15
08/28/08	38,000	< 3,000	11,000	630	1,400	3,800	< 25	< 25	< 150	< 25	---	---
12/11/08	32,000	< 2,000	11,000	610	1,000	2,700	< 25	< 25	< 150	< 25	---	---
03/31/09	44,000	< 4,000	6,500	3,300	1,700	5,600	< 9.0	< 9.0	56	< 9.0	< 9.0	< 9.0
12/31/09	36,000	< 4,000	9,700	350	1,600	3,800	< 9.0	13	56	< 9.0	< 9.0	< 9.0
06/03/10	53,000	< 10,000	8,600	2,600	2,500	8,000	< 5.0	8.9	69	< 5.0	< 5.0	< 5.0
12/20/10	39,000	< 4,000	13,000	530	1,600	3,600	< 15	21	< 70	< 15	< 15	< 15
06/30/11	65,000	< 6,000	7,300	5,900	2,400	10,000	< 20	< 20	< 90	< 20	< 20	< 20
06/22/12	1,200	140	50	56	4.0	160	< 0.50	1.6	17	< 0.50	1.1	< 0.50
12/13/12	2,400	66	890	4.1	9.6	16	< 0.50	5.4	17	< 0.50	1.4	< 0.50
06/18/13	**5,300**	**88**	**2,400**	**7.8**	**80**	**31**	**< 1.5**	**7.8**	**17**	**< 1.5**	**< 1.5**	**< 1.5**

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
MW-3												
01/12/00	140,000	13,000*	22,000	19,000	2,400	11,000	< 500	---	---	---	---	---
04/24/00	240,000	700,000*	33,000/ 35,000	52,000/ 87,000	5,700/ 18,000	28,000/ 84,000	< 5,000	---	---	---	---	---
07/20/00	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
10/24/00	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
01/18/01	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
04/05/01	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
07/17/01	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
10/25/01	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
01/22/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
04/11/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/11/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
09/17/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/18/02	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
03/25/03	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/23/03	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
09/26/03	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/18/03	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
03/12/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/17/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
09/17/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
11/10/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/17/04	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
04/28/05	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
07/19/05	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
10/03/05	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/06/05	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
03/15/06	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/28/06	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
8/31/06	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
11/21/06	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
02/23/07	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
05/02/07	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
08/09/07	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/06/07	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
02/26/08	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
05/30/08	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
08/28/08	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/11/08	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
03/31/09	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/31/09	60,000	< 25,000	7,500	6,500	1,000	6,600	< 20	< 20	< 90	< 20	< 20	< 20
06/03/10	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/20/10	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/30/11	140,000	< 40,000	12,000	21,000	4,000	17,000	< 20	< 20	< 90	< 20	< 20	< 20
06/22/12	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS (0.69-feet)											
12/13/12	99,000	< 12,000	5,800	5,800	2,100	11,000	< 10	< 10	60	< 10	< 10	< 10
06/18/13	**100,000**	**220,000**	**6,700**	**7,900**	**2,000**	**15,000**	**< 10**	**< 10**	**< 50**	**< 10**	**< 10**	**< 10**

TABLE TWO

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

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	TBA	Other Oxys	EDC	EDB
MW-4												
01/12/00	99,000	7,900*	16,000	20,000	2,100	12,000	< 2,500	---	---	---	< 50	< 50
04/24/00	54,000	44,000*	3,400/ 4,500	13,000/ 20,000	1,800/ 2,800	8,800/ 14,000	< 1,300	---	---	---	< 250	< 250
07/20/00	8,000	3,500	9,200/ 11,000	20,000 22,000	2,500 3,400	12,000/ 13,000	< 1,000	---	---	---	< 200	< 200
10/24/00	98,000	8,000*	21,000	29,000	2,700	15,000	< 1,000	---	---	---	< 250	< 250
01/18/01	91,000	12,000	17,000/ 15,000	21,000/ 21,000	2,500/ 2,800	13,000/ 11,000	<1,000 <5,000	---	---	---	< 250	< 250
04/05/01	88,000	7,500*	6,900/ 3,200	18,000/ 9,000	2,500/ 1,300	12,000/ 6,400	< 1,000 < 500	---	---	---	< 50	< 50
07/17/01	95,000	< 3,000	8,000	16,000	2,900	11,000	49	---	---	---	69	---
10/25/01	89,000	< 2,200	9,300	18,000	2,400	12,000	66	---	---	---	72	< 50
01/22/02	80,000	< 2,300	4,600	15,000	2,500	11,000	< 50	---	---	---	< 50	< 50
04/11/02	90,000	< 900	6,600	18,000	2,800	12,000	55	---	---	---	---	---
06/25/02	110,000	< 3,000	10,000	20,000	2,900	13,000	< 100	---	---	---	< 100	< 100
09/17/02	110,000	< 3,000	9,600	21,000	2,800	13,000	< 100	---	---	---	< 100	< 100
12/18/02	97,000	< 4,000	8,000	20,000	2,600	12,000	< 50	---	---	---	< 50	< 50
03/25/03	97,000	< 7,500	7,600	22,000	2,500	12,000	< 100	---	---	---	< 100	< 100
06/23/03	100,000	< 3,000	9,600	22,000	3,300	15,000	< 100	---	---	---	< 100	< 100
09/26/03	110,000	< 4,000	9,300	17,000	2,100	10,000	< 50	---	---	---	87	< 50
12/18/03	110,000	< 2,000	8,900	19,000	2,500	12,000	< 25	---	---	---	46	< 25
03/12/04	96,000	< 4,000	6,500	18,000	2,700	12,000	< 40	---	---	---	< 40	< 40
06/17/04	110,000	< 4,000	10,000	20,000	2,900	13,000	< 50	---	---	---	93	< 50
09/17/04	78,000	--	9,300	15,000	2,400	11,000	<50	---	---	---	---	---
11/10/04***	87,000	4,300	15,000	21,000	3,000	16,000	< 1300	---	---	---	---	---
12/17/04	88,000	< 3,000	8,500	16,000	2,800	12,000	< 25	---	---	---	53	< 25
04/28/05	110,000	< 3,000	7,800	14,000	2,200	10,000	< 25	< 25	< 25	< 25	46	< 25
07/19/05	90,000	na	10,000	13,000	2,300	10,000	< 40	< 20	< 20	< 20	73	< 40
10/03/05	68,000	< 800	9,400	4,000	1,800	8,700	23	23	< 5.0	< 20	62	< 20
12/06/05	81,000	< 1,500	8,900	7,200	2,200	9,500	< 20	---	---	---	---	---
03/15/06	68,000	< 3,000	7,300	14,000	2,500	10,000	< 20	< 20	< 20	< 20	< 20	< 20
06/28/06	61,000	< 3,000	8,500	4,100	2,600	11,000	< 20	< 20	< 5.0	< 20	20	< 20
08/31/06	68,000	< 2,000	9,500	9,600	2,500	12,000	< 20	< 20	< 5.0	< 20	36	< 20
11/21/06	68,000	< 1,500	9,000	5,000	2,000	9,300	< 20	< 20	230	< 20	42	< 20
02/23/07	90,000	< 2,000	11,000	11,000	2,800	12,000	< 20	< 20	290	< 20	36	< 20
05/02/07	56,000	< 2,000	7,300	6,300	2,500	11,000	< 15	< 15	160	< 15	20	< 15
08/09/07	52,000	< 2,000	7,600	2,600	2,100	8,400	< 15	15	170	< 15	31	< 15
12/06/07	60,000	< 2,000	13,000	2,000	2,800	11,000	< 15	22	150	< 15	< 15	< 15
02/26/08	42,000	< 2,000	3,700	2,300	2,300	8,900	< 15	< 15	90	< 15	< 15	< 15
05/30/08	64,000	< 3,000	9,200	5,100	3,000	12,000	< 15	< 15	83	< 15	19	< 15
08/28/08	73,000	< 5,000	9,700	5,500	3,300	12,000	< 15	< 15	< 70	< 15	---	---
12/11/08	120,000	< 40,000	14,000	12,000	4,400	19,000	< 25	< 25	< 150	< 25	---	---
03/31/09	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
MW-4R												
12/31/09	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/03/10	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
12/20/10	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS											
06/30/11	190,000	< 30,000	3,800	11,000	2,900	20,000	< 25	< 25	< 150	< 25	< 25	< 25
06/22/12	4,500	< 200	31	53	5.0	500	6.3	6.1	180	< 0.5	21	< 0.5
12/13/12	3,700	< 200	97	76	50	590	< 0.50	1.0	41	< 0.50	2.5	< 0.50
06/18/13	**3,800**	**110**	**37**	**33**	**10**	**400**	**1.5**	**2.5**	**120**	**< 0.50**	**7.2**	**< 0.50**

TABLE TWO

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

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	TBA	Other Oxys	EDC	EDB
MW-5												
06/11/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	28	---	---	---	< 0.5	< 0.5
09/17/02	< 50	110	< 0.5	< 0.5	< 0.5	< 0.5	4.8	---	---	---	< 0.5	< 0.5
12/18/02	< 50	140	< 0.5	< 0.5	< 0.5	< 0.5	1.8	---	---	---	< 0.5	< 0.5
03/25/03	< 50	130	< 0.5	< 0.5	< 0.5	< 0.5	7.4	---	---	---	< 0.5	< 0.5
06/23/03	< 50	390	< 0.5	< 0.5	< 0.5	< 0.5	17	---	---	---	< 0.5	< 0.5
09/26/03	< 50	700	< 0.5	< 0.5	< 0.5	< 0.5	21	---	---	---	< 0.5	< 0.5
12/18/03	< 50	550	< 0.5	< 0.5	< 0.5	< 0.5	16	---	---	---	< 0.5	< 0.5
03/12/04	< 50	490	< 0.5	< 0.5	< 0.5	< 0.5	9.1	---	---	---	< 40	< 40
06/17/04	< 50	510	< 0.5	< 0.5	< 0.5	< 0.5	9.8	---	---	---	< 0.5	< 0.5
09/17/04	< 50	--	< 0.5	< 0.5	< 0.5	< 0.5	5.5	---	---	---	---	---
11/10/04***	< 50	370	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
12/17/04	< 50	120	< 0.5	< 0.5	< 0.5	< 0.5	9.2	---	---	---	< 0.5	< 0.5
04/28/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	2.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
07/19/05	< 50	na	< 0.5	< 0.5	< 0.5	< 0.5	6.1	2.1	< 5.0	< 0.5	< 0.5	< 0.5
10/03/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	2.4	1.7	< 5.0	< 0.5	< 0.5	< 0.5
12/06/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
03/15/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	3.3	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5
06/28/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.8	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5
08/31/06	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	3.4	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/05/06	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	5.2	1.7	5.4	< 0.50	< 0.50	< 0.50
02/23/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	6.0	1.4	< 5.0	< 0.50	< 0.50	< 0.50
05/02/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	3.8	1.3	< 5.0	< 0.50	< 0.50	< 0.50
08/09/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	5.5	1.3	< 5.0	< 0.50	< 0.50	< 0.50
12/06/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	1.8	1.5	< 5.0	< 0.50	< 0.50	< 0.50
02/26/08	260	< 50	32	1.3	0.62	0.92	3.4	5.6	7.7	< 0.50	0.60	< 0.50
05/30/08	71	< 50	1.8	< 0.50	< 0.50	< 0.50	2.4	3.1	< 5.0	< 0.50	< 0.50	< 0.50
08/28/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	2.1	2.2	< 5.0	< 0.50	---	---
12/11/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	2.2	2.5	< 5.0	< 0.50	---	---
03/31/09	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	1.2	1.3	< 5.0	< 0.50	< 0.50	< 0.50
12/31/09	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	1.9	1.5	< 5.0	< 0.50	< 0.50	< 0.50
06/03/10	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	0.56	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/20/10	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	0.61	0.67	< 5.0	< 0.50	< 0.50	< 0.50
06/30/11	< 50	< 50	1.6	< 0.50	< 0.50	< 0.50	< 0.50	1.0	< 5.0	< 0.50	< 0.50	< 0.50
06/22/12	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/13/12	79	< 50	2.7	< 0.50	0.86	0.74	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/18/13	**< 50**	**< 50**	**< 0.50**	**< 0.50**	**< 0.50**	**< 0.50**	**< 0.50**	**< 0.50**	**< 5.0**	**< 0.50**	**< 0.50**	**< 0.50**

TABLE TWO

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

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	TBA	Other Oxys	EDC	EDB
MW-6												
06/11/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.2	---	---	---	< 0.5	< 0.5
09/17/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.0	---	---	---	< 0.5	< 0.5
12/18/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	0.90	---	---	---	< 0.5	< 0.5
03/25/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	< 0.5	< 0.5
06/23/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---	---	---	< 0.5	< 0.5
09/26/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---	---	---	< 0.5	< 0.5
12/18/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---	---	---	< 0.5	< 0.5
03/12/04	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---	---	---	< 0.5	< 0.5
06/17/04	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---	---	---	< 0.5	< 0.5
09/17/04	< 50	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---	---	---	---	---
11/10/04***	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
12/17/04	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	---	---	---	< 0.5	< 0.5
04/28/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
07/19/05	< 50	na	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5
10/03/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5
12/06/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	---	---	---	---	---
03/15/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
06/28/06	< 50	< 50	< 0.5	< 0.5	< 0.5	0.65	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5
08/31/06	< 50	< 50	< 0.50	2.4	0.90	4.0	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
11/21/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
02/23/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
05/02/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
08/09/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/06/07	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
02/26/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
05/30/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
08/28/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	---	---
12/11/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	---	---
03/31/09	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/31/09	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/03/10	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/20/10	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/30/11	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/22/12	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/13/12	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/18/13	**< 50**	**< 50**	**< 0.50**	**< 0.50**	**< 0.50**	**< 0.50**	**< 0.50**	**< 0.50**	**< 5.0**	**< 0.50**	**< 0.50**	**< 0.50**

TABLE TWO

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

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	TBA	Other Oxys	EDC	EDB
MW-7												
06/25/02	38,000	< 2,000	890	5,100	1,200	5,200	< 20	---	---	---	< 20	< 20
09/17/02	26,000	< 2,000	590	3,600	880	4,000	< 20	---	---	---	< 20	< 20
12/18/02	NOT SAMPLED - CAR PARKED OVER WELL											
03/25/03	39,000	< 2,900	410	7,700	1,000	6,400	< 5.0	---	---	---	< 2.5	< 2.5
06/23/03	17,000	< 1,000	440	2,600	630	2,600	< 10	---	---	---	< 10	< 10
09/26/03	17,000	< 1,000	230	1,800	470	2,200	< 5.0	---	---	---	< 5.0	< 5.0
12/18/03	20,000	< 1,000	290	2,500	590	2,900	< 5.0	---	---	---	< 5.0	< 5.0
03/12/04	20,000	< 1,500	300	3,000	760	3,200	< 10	---	---	---	< 10	< 10
06/17/04	12,000	< 800	250	1,800	450	1,900	< 5.0	---	---	---	< 5.0	< 5.0
09/17/04	9,900	--	200	1,500	450	1,800	< 5.0	---	---	---	---	---
11/10/04***	20,000	1,900	550	4,200	920	4,000	< 500	---	---	---	---	---
12/17/04	14,000	< 800	220	1,700	530	2,000	< 3.0	---	---	---	< 3.0	< 3.0
04/28/05	13,000	< 300	84	1,000	660	2,200	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
07/19/05	16,000	na	170	1,800	540	2,200	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5
10/03/05	7,400	< 200	140	710	350	1,100	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/06/05	22,000	< 600	240	2,300	800	3,400	< 5.0	---	---	---	---	---
03/15/06	3,800	< 200	4.6	160	120	620	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/28/06	6,400	< 500	19.0	340	490	940	< 0.90	< 0.50	< 5.0	< 0.50	< 0.90	< 0.90
08/31/06	20,000	< 600	160	2,200	1,300	3,500	< 2.5	1.4	< 15	< 5.0	< 2.5	< 2.5
11/21/06	21,000	< 1,000	240	2,500	880	3,400	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0
02/23/07	10,000	< 200	150	1,300	580	2,400	< 2.5	< 2.5	< 15	< 2.5	< 2.5	< 2.5
05/02/07	26,000	< 1,000	300	2,400	1,800	6,700	< 2.5	< 2.5	< 50	< 2.5	< 2.5	< 2.5
08/09/07	13,000	< 800	250	800	1,000	3,000	< 2.5	< 2.5	< 15	< 2.5	< 2.5	< 2.5
12/06/07	9,600	< 1,000	160	850	530	2,000	< 2.5	< 2.5	45	< 2.5	< 2.5	< 2.5
02/26/08	14,000	< 800	190	1,000	740	3,000	< 2.5	< 2.5	69	< 2.5	< 2.5	< 2.5
05/30/08	9,900	< 200	160	620	590	2,300	< 2.5	< 2.5	< 15	< 2.5	< 2.5	< 2.5
08/28/08	11,000	< 800	180	500	650	2,400	< 2.5	< 2.5	< 15	< 2.5	---	---
12/11/08	8,000	< 500	160	300	540	1,600	< 2.5	< 2.5	< 15	< 2.5	---	---
03/31/09	5,600	< 300	82	190	360	1,000	< 1.5	< 1.5	< 7.0	< 1.5	< 1.5	< 1.5
12/31/09	16,000	< 800	140	1,200	750	2,800	< 0.5	< 0.50	10	< 0.50	< 0.50	< 0.50
06/03/10	22,000	< 2,000	160	1,000	1,300	3,500	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0
12/20/10	23,000	< 1,000	230	820	1,500	4,900	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0
06/30/11	26,000	< 4,000	190	310	1,800	3,900	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0
06/22/12	10,000	< 600	120	52	1,100	310	< 2.0	< 2.0	43	< 2.0	< 2.0	< 2.0
12/13/12	16,000	610	78	80	1,000	940	< 2.5	< 2.5	< 15	< 2.5	< 2.5	< 2.5
06/18/13	**6,000**	**250**	**19**	**22**	**310**	**390**	**< 0.90**	**< 0.90**	**6.3**	**< 0.90**	**< 0.90**	**< 0.90**

TABLE TWO

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

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	TBA	Other Oxys	EDC	EDB
MW-8												
02/26/08	< 50	< 50	0.51	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
05/30/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
08/28/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	---	---
12/11/08	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	---	---
03/31/09	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/31/09	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/03/10	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/20/10	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/30/11	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/22/12	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
12/13/12	< 50	56	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50
06/18/13	**< 50**	**83**	**< 0.50**	**< 0.50**	**< 0.50**	**< 0.50**	**< 0.50**	**< 0.50**	**< 5.0**	**< 0.50**	**< 0.50**	**< 0.50**
ESL	100	100	1	40	30	20	5					

Notes:

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

** = Hydrocarbons reported do not match the laboratory gasoline standard.

***= Grab sample - Not purged

= Estimated concentration reported due to overlapping fuel patterns.

/ = Results separated by a slash represent results from two different laboratory methods (8020/8260)

na = not analyzed

Non-detectable concentrations noted by the less than sign (<) followed by the detection limit.

Most recent data in bold.

ESL = Environmental screening levels presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (May 2008)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

TPH = Total petroleum hydrocarbons

MTBE = Methyl tertiary butyl ether

DIPE = Diisopropyl ether

TBA = Tery-butanol

Oxy = Oxygenates

EDC = 1,2-Dichloroethane

EDB = 1,2-Dibromoethane

Aqua Science Engineers, Inc. 55 Oak Court, 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

McCampbell 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.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2808; LIM	Date Sampled: 08/08/13
		Date Received: 08/08/13
	Client Contact: Dave Allen	Date Reported: 08/09/13
	Client P.O.:	Date Completed: 08/09/13

WorkOrder: 1308299

August 09, 2013

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 McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

1308299

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

RUSH Chain of Custody

PAGE 1 of 1

SAMPLER (SIGNATURE) David Allen

PROJECT NAME L/M 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 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)	MULTI-RANGE HYDROCARBONS WITH SILICA GEL CLEANUP (EPA 8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	LUFT METALS (5) (EPA 6010+7000)	COMPOSITE 4:1	EDF	
INF-8.8.13	8/8	1230	Air	1	X															

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
(signature) (time)	(signature) 1745 (time)	(signature) 1850 (time)	(signature) (time)	
DAVID ALLEN 8/8/13	Ben Yslas 8/8/13	8/8		
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	TURN AROUND TIME
Company-ASE, INC.	Company- RM Campbell	Company-	Company-	STANDARD 24Hr 48Hr 72Hr
				OTHER:

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1308299 **ClientCode: ASED**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ 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: 3 days

Date Received: **08/08/2013**
Date Printed: **08/08/2013**

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
1308299-001	INF-8.8.13	Air	8/8/2013 12:30	☐	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: Jena Alfaro

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.

McCampbell 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.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name: **Aqua Science Engineers, Inc.**
Date and Time Received: **8/8/2013 7:28:38 PM**

Project Name: **#2808; LIM**
LogIn Reviewed by: Jena Alfaro

WorkOrder N°: **1308299** 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.*

Comments:

McCampbell 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.mccampbell.com / E-mail: main@mccampbell.com

Aqua Science Engineers, Inc.	Client Project ID: #2808; LIM	Date Sampled: 08/08/13
		Date Received: 08/08/13
55 Oak Court Suite 220	Client Contact: Dave Allen	Date Extracted: 08/09/13
Danville, CA 94526	Client P.O.:	Date Analyzed: 08/09/13

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1308299

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-8.8.13	A	20,000	ND<350	250	340	12	480	6.7	---#	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	µg/L
	S	1.0	0.05	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 McCampbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant

CDPH ELAP 1644 ♦ NELAP 12283CA IA Analyst's Initial Angela Rydelius, Lab Manager

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Aqua Science Engineers, Inc.	Client Project ID: #2808; LIM	Date Sampled: 08/08/13
		Date Received: 08/08/13
55 Oak Court Suite 220	Client Contact: Dave Allen	Date Extracted: 08/09/13
Danville, CA 94526	Client P.O.:	Date Analyzed: 08/09/13

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1308299

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-8.8.13	A	5600	ND<90	78	89	2.7	110	6.7	---#	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 McCampbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant

CDPH ELAP 1644 ♦ NELAP 12283CA IA Analyst's Initial Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air | QC Matrix: Water | BatchID: 80379 | WorkOrder: 1308299

EPA Method: SW8021B/8015Bm **Extraction: SW5030B** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex)£	N/A	60	N/A	N/A	N/A	102	N/A	N/A	70 - 130
MTBE	N/A	10	N/A	N/A	N/A	94.3	N/A	N/A	70 - 130
Benzene	N/A	10	N/A	N/A	N/A	103	N/A	N/A	70 - 130
Toluene	N/A	10	N/A	N/A	N/A	105	N/A	N/A	70 - 130
Ethylbenzene	N/A	10	N/A	N/A	N/A	105	N/A	N/A	70 - 130
Xylenes	N/A	30	N/A	N/A	N/A	106	N/A	N/A	70 - 130
%SS:	N/A	10	N/A	N/A	N/A	99	N/A	N/A	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 80379 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308299-001A	08/08/13 12:30 PM	08/09/13	08/09/13 6:56 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.

CDPH ELAP 1644 ♦ NELAP 12283CA

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Aqua Science Engineers, Inc. 55 Oak Court Suite 220 Danville, CA 94526	Client Project ID: #2808; LIM	Date Sampled: 08/08/13
		Date Received: 08/08/13
	Client Contact: Dave Allen	Date Reported: 08/09/13
	Client P.O.:	Date Completed: 08/09/13

WorkOrder: 1308300

August 09, 2013

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 McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

13008300

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

RUSH Chain of Custody

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 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)	MULTI-RANGE HYDROCARBONS WITH SILICA GEL CLEANUP (EPA 8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	LUFT METALS (5) (EPA 6010+7000)	COMPOSITE 4:1	EDF	
INF-8.8.13	8/8	1245	Air	1	X															

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:
(signature) (time) 1745	(signature) (time) 1745	(signature) (time) 1850	(signature) (time)
DAVID ALLEN 8/8/13	Ben Y 5/LAS 8/8	8/8	8/8
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)
Company-ASE, INC.	Company-	Company-	Company- MAI

COMMENTS:

TURN AROUND TIME

STANDARD 24Hr 48Hr 72Hr

OTHER:

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1308300 **ClientCode: ASED**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ 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: 3 days

Date Received: **08/08/2013**
Date Printed: **08/08/2013**

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
1308300-001	INF-8.8.13	Air	8/8/2013 12:45	☐	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.

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Sample Receipt Checklist

Client Name: **Aqua Science Engineers, Inc.**
Date and Time Received: **8/8/2013 7:30:45 PM**

Project Name: **#2808; LIM**
LogIn Reviewed by: Zoraida Cortez

WorkOrder N°: **1308300** 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.*

Comments:

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Aqua Science Engineers, Inc.	Client Project ID: #2808; LIM	Date Sampled: 08/08/13
		Date Received: 08/08/13
55 Oak Court Suite 220	Client Contact: Dave Allen	Date Extracted: 08/09/13
Danville, CA 94526	Client P.O.:	Date Analyzed: 08/09/13

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1308300

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-8.8.13	A	1400	ND<15	12	23	1.3	47	1	---#	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	µg/L
	S	1.0	0.05	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 McCampbell Analytical is not responsible for their interpretation:
d1) weakly modified or unmodified gasoline is significant

CDPH ELAP 1644 ♦ NELAP 12283CA IA Analyst's Initial Angela Rydelius, Lab Manager

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Aqua Science Engineers, Inc.	Client Project ID: #2808; LIM	Date Sampled: 08/08/13
		Date Received: 08/08/13
55 Oak Court Suite 220	Client Contact: Dave Allen	Date Extracted: 08/09/13
Danville, CA 94526	Client P.O.:	Date Analyzed: 08/09/13

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Bm Work Order: 1308300

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	INF-8.8.13	A	380	ND<5.0	3.7	6.0	0.30	11	1	---#	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 McCampbell Analytical is not responsible for their interpretation:
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http://www.mccampbell.com / E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Air | QC Matrix: Water | BatchID: 80379 | WorkOrder: 1308300

EPA Method: SW8021B/8015Bm **Extraction: SW5030B** **Spiked Sample ID: N/A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	Acceptance Criteria (%)		
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	MS / MSD	RPD	LCS
TPH(btex)£	N/A	60	N/A	N/A	N/A	102	N/A	N/A	70 - 130
MTBE	N/A	10	N/A	N/A	N/A	94.3	N/A	N/A	70 - 130
Benzene	N/A	10	N/A	N/A	N/A	103	N/A	N/A	70 - 130
Toluene	N/A	10	N/A	N/A	N/A	105	N/A	N/A	70 - 130
Ethylbenzene	N/A	10	N/A	N/A	N/A	105	N/A	N/A	70 - 130
Xylenes	N/A	30	N/A	N/A	N/A	106	N/A	N/A	70 - 130
%SS:	N/A	10	N/A	N/A	N/A	99	N/A	N/A	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 80379 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1308300-001A	08/08/13 12:45 PM	08/09/13	08/09/13 6:26 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.

CDPH ELAP 1644 ♦ NELAP 12283CA

QA/QC Officer

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

APPENDIX B

Remediation Systems
Field Logs

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

	CAT-OX SYSTEM		VAPOR-EXTRACTION WELLS OVM CONCENTRATION IN PPMV*										
DATE	FLOW IN CFM	INFLUENT IN PPMV*C35	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

	CAT-OX SYSTEM		VAPOR-EXTRACTION WELLS OVM CONCENTRATION IN PPMV*										
DATE	FLOW IN CFM	INFLUENT IN PPMV*C84	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
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

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

	CAT-OX SYSTEM		VAPOR-EXTRACTION WELLS OVM CONCENTRATION IN PPMV*										
DATE	FLOW IN CFM	INFLUENT IN PPMV*C121	VE-1	VE-2	VE-3	VE-4	VE-5	VE-6	VE-7	VE-8	VE-9	MW-3	MW-4
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
6/28/12	38	195	170	OFF	46	OFF	51	48	55	58	4	111	165
7/9/12	37	180	150	OFF	36	OFF	44	44	50	55	4	99	144
7/18/12	35	175	144	OFF	41	OFF	43	39	44	54	5	94	128
7/26/12	37	165	143	OFF	29	OFF	29	40	41	49	4	96	180
8/2/12	35	152	129	OFF	44	OFF	32	44	41	48	4	102	119
8/10/12	38	144	111	OFF	34	OFF	25	38	37	44	3	101	120
8/15/12	40	141	113	OFF	38	OFF	19	29	32	47	4	92	87
8/23/12	41	129	109	OFF	29	OFF	21	31	29	36	3	88	83
9/7/12	38	116	65	OFF	33	OFF	13	22	18	28	4	101	81
9/13/12	41	96	71	OFF	28	OFF	11	24	16	22	3	95	75
9/21/12	40	79	58	OFF	26	OFF	9	19	12	20	4	93	73
9/28/12	39	58	44	OFF	24	OFF	10	15	14	18	5	102	68

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

	ASE VE SYSTEM		VAPOR-EXTRACTION WELLS OVM CONCENTRATION IN PPMV*D167										
DATE	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
11/12/12	50	12	33	4	20	5	8	15	11	22	6	111	75
11/28/12	50	14	29	4	18	2	6	12	15	19	4	109	72
12/5/12	50	11	27	6	18	2	7	13	15	17	4	99	64
12/13/12	50	11	23	3	15	2	5	19	18	21	5	87	62
12/20/12	50	9	19	3	11	4	8	12	21	17	4	113	66
1/7/13	50	19	17	2	9	2	7	11	12	16	3	101	71
1/14/13	50	11	16	5	9	3	5	16	13	15	4	99	66
1/24/13	50	8	12	3	10	2	6	18	13	15	4	97	69
1/29/13	50	12	11	4	9	3	5	17	15	12	3	96	70
2/6/13	50	16	12	3	6	3	5	9	9	12	3	94	68
2/15/13	50	18	13	5	6	3	6	7	9	10	4	89	66
2/21/13	50	17	13	4	7	2	6	9	8	12	4	93	62
2/28/13	50	14	14	5	7	3	5	8	8	11	3	99	70
3/4/13	50	15	13	5	12	4	11	8	7	9	5	111	71
3/8/13	50	15	14	5	12	4	14	7	7	10	5	123	74
3/15/13	50	15	11	11	14	5	15	7	7	11	5	128	75
3/19/13	50	16	10	4	14	5	21	6	6	8	6	135	66
3/22/13	50	16	8	7	15	7	28	5	6	7	4	144	68
4/5/13	50	17	8	8	14	9	28	5	3	7	7	175	60
4/12/13	50	14	12	8	16	11	26	6	4	7	5	199	65
4/19/13	50	12	11	9	18	10	24	5	5	6	7	167	64
4/26/30	50	18	11	11	17	9	27	6	4	5	5	188	62
5/3/13	50	18	10	10	20	11	33	5	4	7	6	198	58
5/10/13	50	18	10	8	20	12	33	7	6	7	6	223	65
5/17/13	50	19	9	11	21	14	34	5	3	8	5	245	59
5/24/13	50	12	11	11	24	13	35	5	4	7	5	255	63
5/31/13	50	11	8	12	23	18	33	5	5	7	5	215	66
6/7/13	50	12	8	12	33	18	44	6	4	5	6	222	67
6/14/13	50	13	8	14	33	17	49	4	4	4	5	266	67
6/21/13	50	18	7	12	34	17	41	6	5	6	5	199	66
6/28/13	50	21	8	11	36	19	48	4	6	5	6	228	61

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

	ASE VE SYSTEM		VAPOR-EXTRACTION WELLS OVM CONCENTRATION IN PPMV*										
DATE	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
7/5/13	50	22	7	10	44	20	50	4	6	7	6	265	65
7/12/13	50	21	7	11	38	21	57	5	7	5	7	281	62
7/19/13	50	26	5	11	39	24	55	4	8	6	7	244	63
7/26/13	50	24	6	12	49	28	49	6	8	7	7	254	66
7/31/13	50	25	5	11	56	19	50	7	9	6	7	310	59
8/2/13	50	27	7	11	57	22	59	7	7	6	8	315	60
8/8/13	50	27	6	13	68	27	55	8	9	7	8	330	67

NOTE:

The asterisk symbol (*) denotes influent vapor concentrations using a photoionization detector.

LIM PROPERTY - 250 8TH STREET, OAKLAND, CALIFORNIA
SPARGING WELL LOG

DATE	SPARGING WELLS											
	OS-1	OS-2	OS-3	OS-4	OS-5	OS-6	OS-7	OS-8	OS-9	OS-10	OS-11	OS-12
	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM
1/18/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
1/19/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
1/20/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
1/21/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
1/22/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
1/26/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
1/28/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
2/2/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
2/4/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
2/8/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
2/11/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
2/15/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
2/18/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
2/22/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
2/25/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
2/28/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF

Continued on Next Page

LIM PROPERTY - 250 8TH STREET, OAKLAND, CALIFORNIA
SPARGING WELL LOG

	SPARGING WELLS											
	OS-1	OS-2	OS-3	OS-4	OS-5	OS-6	OS-7	OS-8	OS-9	OS-10	OS-11	OS-12
DATE	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM
3/1/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
3/4/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
3/8/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
3/11/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
3/914/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
3/17/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
3/22/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
3/25/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
3/29/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
4/1/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
4/5/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
4/8/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
4/12/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
4/15/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
4/19/11	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
4/25/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
5/2/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF

Continued on Next Page

LIM PROPERTY - 250 8TH STREET, OAKLAND, CALIFORNIA
SPARGING WELL LOG

	SPARGING WELLS											
	OS-1	OS-2	OS-3	OS-4	OS-5	OS-6	OS-7	OS-8	OS-9	OS-10	OS-11	OS-12
DATE	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM
5/9/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
5/13/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	10 MIN./LOW FLOW AIR	10 MIN./LOW FLOW AIR	10 MIN./LOW FLOW AIR	10 MIN./LOW FLOW AIR	10 MIN./LOW FLOW AIR
5/16/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	10 MIN./LOW FLOW AIR	10 MIN./LOW FLOW AIR	10 MIN./LOW FLOW AIR	10 MIN./LOW FLOW AIR	10 MIN./LOW FLOW AIR
5/23/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	10 MIN./LOW FLOW AIR	10 MIN./LOW FLOW AIR	10 MIN./LOW FLOW AIR	10 MIN./LOW FLOW AIR	10 MIN./LOW FLOW AIR
5/30/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	20 MIN./LOW FLOW AIR	20 MIN./LOW FLOW AIR	20 MIN./LOW FLOW AIR	20 MIN./LOW FLOW AIR	20 MIN./LOW FLOW AIR
6/6/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	20 MIN./LOW FLOW AIR	20 MIN./LOW FLOW AIR	20 MIN./LOW FLOW AIR	20 MIN./LOW FLOW AIR	20 MIN./LOW FLOW AIR
6/13/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	10 MIN./HIGH FLOW AIR	10 MIN./HIGH FLOW AIR	10 MIN./HIGH FLOW AIR	10 MIN./HIGH FLOW AIR	10 MIN./HIGH FLOW AIR
6/20/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	10 MIN./HIGH FLOW AIR	10 MIN./HIGH FLOW AIR	10 MIN./HIGH FLOW AIR	10 MIN./HIGH FLOW AIR	10 MIN./HIGH FLOW AIR
6/27/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	20 MIN./HIGH FLOW AIR	20 MIN./HIGH FLOW AIR	20 MIN./HIGH FLOW AIR	20 MIN./HIGH FLOW AIR	20 MIN./HIGH FLOW AIR
8/1/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
9/1/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
10/1/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
11/1/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
12/1/11	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
1/1/12	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
2/1/12	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
3/1/12	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
4/1/12	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
5/1/12	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR

Continued on Next Page

LIM PROPERTY - 250 8TH STREET, OAKLAND, CALIFORNIA
SPARGING WELL LOG

	SPARGING WELLS											
	OS-1	OS-2	OS-3	OS-4	OS-5	OS-6	OS-7	OS-8	OS-9	OS-10	OS-11	OS-12
DATE	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM	DURATION/ AIRSTREAM
6/1/12	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
7/1/12	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
8/1/12	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
9/1/12	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR
10/3/12	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
11/11/12	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	30 MIN./HIGH FLOW AIR	OFF	OFF	OFF	OFF	OFF
12/1/12	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE
1/1/13	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE
2/1/13	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE
3/1/13	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE
4/1/13	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE	30 MIN./LOW FLOW OZONE
5/1/13	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE
6/1/13	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE
7/1/13	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE
8/1/13	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE	30 MIN./HIGH FLOW OZONE

LIM PROPERTY - 250 8TH STREET, OAKLAND, CALIFORNIA
HYDROCARBON VAPOR MEASUREMENT LOG

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

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LIM PROPERTY - 250 8TH STREET, OAKLAND, CALIFORNIA
HYDROCARBON VAPOR MEASUREMENT LOG

HYDROCARBON CONCENTRATIONS IN PPMV* MEASURED WITH ORGANIC VAPOR METER															
	VAPOR MONITORING POINTS		METER BOXES (SITE SIDE OF 8TH STREET)			METER BOXES (OPPOSITE SIDE OF 8TH STREET)									
DATE	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
9/7/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/12/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/20/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/27/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/3/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/10/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/18/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/25/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/1/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/7/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/22/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/30/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/5/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/12/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/20/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/30/11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/5/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/10/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/16/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/23/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/31/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/7/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/13/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/20/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/27/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/6/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/12/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/19/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/26/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/2/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/9/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/16/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/25/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/4/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/8/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/14/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/22/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/29/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/4/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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LIM PROPERTY - 250 8TH STREET, OAKLAND, CALIFORNIA
HYDROCARBON VAPOR MEASUREMENT LOG

HYDROCARBON CONCENTRATIONS IN PPMV* MEASURED WITH ORGANIC VAPOR METER															
	VAPOR MONITORING POINTS		METER BOXES (SITE SIDE OF 8TH STREET)			METER BOXES (OPPOSITE SIDE OF 8TH STREET)									
DATE	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
6/12/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/18/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/28/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/9/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/18/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/26/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/2/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/10/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/15/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/23/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/7/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/13/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/21/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9/28/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/12/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/5/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/13/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/20/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/7/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/14/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/24/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/29/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/6/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/15/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/21/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/28/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/4/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/8/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/15/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/19/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/22/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/5/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/12/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/19/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/26/30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/3/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/10/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/17/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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LIM PROPERTY - 250 8TH STREET, OAKLAND, CALIFORNIA
HYDROCARBON VAPOR MEASUREMENT LOG

HYDROCARBON CONCENTRATIONS IN PPMV* MEASURED WITH ORGANIC VAPOR METER															
	VAPOR MONITORING POINTS		METER BOXES (SITE SIDE OF 8TH STREET)			METER BOXES (OPPOSITE SIDE OF 8TH STREET)									
DATE	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
5/24/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/31/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/7/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/14/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/21/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/28/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/5/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/12/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/19/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/26/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/31/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/2/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/8/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NOTE:
NM = Not Measured

MASS EXTRACTION CALCULATIONS
LIM PROPERTY VAPOR EXTRACTION SYSTEM
250 8TH STREET, OAKLAND, CALIFORNIA

AIR BAG SAMPLE COLLECTED ON 1/29/13

AVERAGE VAPOR EXTRACTION FLOW RATE	MULTPLY	VOLUME CONVERSION FACTOR	MULTPLY	TIME CONVERSION FACTOR	MULTPLY	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		190		1,000,000		454		0.71		0.11

AIR BAG SAMPLE COLLECTED ON 8/8/13

AVERAGE VAPOR EXTRACTION FLOW RATE	MULTPLY	VOLUME CONVERSION FACTOR	MULTPLY	TIME CONVERSION FACTOR	MULTPLY	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		1,400		1,000,000		454		5.24		0.84

USING AN AVERAGE OF THE JANUARY 2013 AND AUGUST 2013 ANALYTICAL RESULTS

AIR BAG SAMPLE COLLECTED ON 8/8/13

AVERAGE VAPOR EXTRACTION FLOW RATE	MULTPLY	VOLUME CONVERSION FACTOR	MULTPLY	TIME CONVERSION FACTOR	MULTPLY	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		795		1,000,000		454		2.98		0.48

GASOLINE EXTRACTION LOG

LIM FAMILY PROPERTY

250 8th Street, Oakland, CA

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	82.5
5/26/11	4100	2.45	31	75.95
6/30/11	4900	2.93	30	87.9
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	71.7
10/31/11	NA	2.21*	31	68.51
11/30/11	NA	2.03*	30	60.9
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	19.5
5/31/12	NA	0.35*	31	10.85
6/20/12	38	0.02	30	0.6
TOTAL GALLONS OF GASOLINE REMOVED FROM VADOSE ZONE SINCE START-UP TO JUNE 2012				814.46

6/20/12	38	0.02		
1/29/13	190	0.11		
AVERAGE OF 6/20/12 AND 1/29/13 AIR BAG RESULTS	114*	0.07*	145	10.15
TOTAL GALLONS OF GASOLINE REMOVED FROM VADOSE ZONE SINCE BETWEEN JUNE 2012 AND JANUARY 2013				10.15

1/29/13	190	0.11		
8/8/13	1400	0.84		
AVERAGE OF 1/29/13 AND 8/8/13 AIR BAG RESULTS	795*	0.48*	189	90.72
TOTAL GALLONS OF GASOLINE REMOVED FROM VADOSE ZONE SINCE BETWEEN JANUARY 2013 AND AUGUST 2013				90.72

GRAND TOTAL, TO DATE, OF GALLONS OF GASOLINE REMOVED FROM THE VADOSE ZONE	915.33

NOTES:

1. 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.

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

3. A flowrate of 50 cubic feet per minute was used to calculate daily extraction quantities

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

APPENDIX C

Monitoring Well Sampling Logs

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME: LIM

JOB NUMBER: 2808 — DATE OF SAMPLING: 6.18.13

WELL ID.: MW-1 — SAMPLER: DA

TOTAL DEPTH OF WELL: 26.8 — WELL DIAMETER: 2

DEPTH TO WATER PRIOR TO PURGING: 18.13 — TIME OF MEASUREMENT:

PRODUCT THICKNESS: 0

DEPTH OF WELL CASING IN WATER: 8.67

NUMBER OF GALLONS PER WELL CASING VOLUME: 1.38

NUMBER OF WELL CASING VOLUMES TO BE REMOVED: 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING: 4

EQUIPMENT USED TO PURGE WELL: (NEW DISPOSABLE BAILER)

TIME EVACUATION STARTED: 1115 — TIME EVACUATION COMPLETED: 1122

TIME SAMPLES WERE COLLECTED: 1125

DID WELL GO DRY: NO — AFTER HOW MANY GALLONS: —

VOLUME OF GROUNDWATER PURGED: 4

SAMPLING DEVICE: (NEW DISPOSABLE BAILER)

SAMPLE COLOR: LT BRN — ODOR/SEDIMENT: SL HC / SL

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	19.9	6.1	660
2	19.9	6.3	
3	20.3	6.3	640

SAMPLES COLLECTED

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

1

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM

JOB NUMBER 2808 DATE OF SAMPLING 6.18.13

WELL ID. MW-2 SAMPLER DA

TOTAL DEPTH OF WELL 26.8 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 17.28 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 9.52

NUMBER OF GALLONS PER WELL CASING VOLUME 1.52

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 4.5

EQUIPMENT USED TO PURGE WELL (NEW DISPOSABLE BAILER)

TIME EVACUATION STARTED 0945 TIME EVACUATION COMPLETED 0957

TIME SAMPLES WERE COLLECTED 1000

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 NONE / SLIGHT

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	19.1	6.5	590
2	19.4	6.3	590
3	19.6	6.1	600

SAMPLES COLLECTED

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

Brown orange purge water. No odors.

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME: LIM

JOB NUMBER: 2808 — DATE OF SAMPLING: 6.18.13

WELL ID.: MW-3 — SAMPLER: DA

TOTAL DEPTH OF WELL: 30.0 — WELL DIAMETER: 2

DEPTH TO WATER PRIOR TO PURGING: 17.01 — TIME OF MEASUREMENT:

PRODUCT THICKNESS: ø

DEPTH OF WELL CASING IN WATER: 12.99

NUMBER OF GALLONS PER WELL CASING VOLUME: 2.07

NUMBER OF WELL CASING VOLUMES TO BE REMOVED: 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING: 6.2

EQUIPMENT USED TO PURGE WELL: (NEW DISPOSABLE BAILER)

TIME EVACUATION STARTED: 0835 — TIME EVACUATION COMPLETED: 0845

TIME SAMPLES WERE COLLECTED: 0850

DID WELL GO DRY: NO — AFTER HOW MANY GALLONS: —

VOLUME OF GROUNDWATER PURGED: 6.2

SAMPLING DEVICE: (NEW DISPOSABLE BAILER)

SAMPLE COLOR: LT GRAY — ODOR/SEDIMENT: NOD HC / SLIGHT

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	18.8	6.5	610
2	18.8	6.4	620
3	18.9	6.4	610

SAMPLES COLLECTED

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

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME: LIM

JOB NUMBER: 2808 — DATE OF SAMPLING: 6.18.13

WELL ID.: MW-4R — SAMPLER: DA

TOTAL DEPTH OF WELL: 28.0 — WELL DIAMETER: 4

DEPTH TO WATER PRIOR TO PURGING: 17.60 — TIME OF MEASUREMENT:

PRODUCT THICKNESS: 0

DEPTH OF WELL CASING IN WATER: 10.4

NUMBER OF GALLONS PER WELL CASING VOLUME: 1.66

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: 0805 — TIME EVACUATION COMPLETED: 0825

TIME SAMPLES WERE COLLECTED: 0830

DID WELL GO DRY: NO — AFTER HOW MANY GALLONS: —

VOLUME OF GROUNDWATER PURGED:

SAMPLING DEVICE: (NEW DISPOSABLE BAILER)

SAMPLE COLOR: LT GRAY — ODOR/SEDIMENT: SL HC / SL

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	18.8	6.50	510
2	18.8	6.6	520
3	18.8	6.6	520

SAMPLES COLLECTED

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

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME: LIM

JOB NUMBER: 2808 — DATE OF SAMPLING: 6.18.13

WELL ID.: MW-5 — SAMPLER: DA

TOTAL DEPTH OF WELL: 29.6 — WELL DIAMETER: 2

DEPTH TO WATER PRIOR TO PURGING: 17.48 — TIME OF MEASUREMENT:

PRODUCT THICKNESS: 0

DEPTH OF WELL CASING IN WATER: 12.12

NUMBER OF GALLONS PER WELL CASING VOLUME: 1.93

NUMBER OF WELL CASING VOLUMES TO BE REMOVED: 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING: 5.8

EQUIPMENT USED TO PURGE WELL: 0 — (NEW DISPOSABLE BAILER)

TIME EVACUATION STARTED: 0900 — TIME EVACUATION COMPLETED: 0912

TIME SAMPLES WERE COLLECTED: 0915

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

VOLUME OF GROUNDWATER PURGED: 6

SAMPLING DEVICE: (NEW DISPOSABLE BAILER)

SAMPLE COLOR: CLEAR — ODOR/SEDIMENT: No - NO

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	18.9	6.7	560
2	18.9	6.5	540
3	18.9	6.5	540

SAMPLES COLLECTED

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

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM

JOB NUMBER 2808 DATE OF SAMPLING 6.18.13

WELL ID. MW-6 SAMPLER DA

TOTAL DEPTH OF WELL 29.5 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 17.69 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 11.81

NUMBER OF GALLONS PER WELL CASING VOLUME 1.88

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 5.64

EQUIPMENT USED TO PURGE WELL (NEW DISPOSABLE BAILER)

TIME EVACUATION STARTED 1015 TIME EVACUATION COMPLETED 1025

TIME SAMPLES WERE COLLECTED 1030

DID WELL GO DRY NO AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 6

SAMPLING DEVICE (NEW DISPOSABLE BAILER)

SAMPLE COLOR LT BN ODOR/SEDIMENT NO / SL

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	18.9	6.7	710
2	19.1	6.5	710
3	19.1	6.6	710

SAMPLES COLLECTED

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

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME: LIM

JOB NUMBER: 2808 | DATE OF SAMPLING: 6.18.13

WELL ID.: MW-7 | SAMPLER: DA

TOTAL DEPTH OF WELL: 28.0 | WELL DIAMETER: 2

DEPTH TO WATER PRIOR TO PURGING: 18.02 | TIME OF MEASUREMENT:

PRODUCT THICKNESS: Ø

DEPTH OF WELL CASING IN WATER: 9.98

NUMBER OF GALLONS PER WELL CASING VOLUME: 1.6

NUMBER OF WELL CASING VOLUMES TO BE REMOVED: 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING: 4.8

EQUIPMENT USED TO PURGE WELL: (NEW DISPOSABLE BAILER)

TIME EVACUATION STARTED: 0920 | TIME EVACUATION COMPLETED: 0932

TIME SAMPLES WERE COLLECTED: 0935

DID WELL GO DRY: NO | AFTER HOW MANY GALLONS: —

VOLUME OF GROUNDWATER PURGED: 5

SAMPLING DEVICE: (NEW DISPOSABLE BAILER)

SAMPLE COLOR: LT GRAY | ODOR/SEDIMENT: SL HC / SL

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	18.9	6.6	770
2	18.9	6.5	740
3	18.9	6.5	710

SAMPLES COLLECTED

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

BLACK, SULFUR ODOR WHILE PURGING

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME LIM

JOB NUMBER 2805 DATE OF SAMPLING 6.18.13

WELL ID. MW-8 SAMPLER DA

TOTAL DEPTH OF WELL 49.0 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 22.44 TIME OF MEASUREMENT

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 26.56

NUMBER OF GALLONS PER WELL CASING VOLUME 4.25

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 12.75 14

EQUIPMENT USED TO PURGE WELL (NEW DISPOSABLE BAILER)

TIME EVACUATION STARTED 1040 TIME EVACUATION COMPLETED 1055

TIME SAMPLES WERE COLLECTED 1100

DID WELL GO DRY NO AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 13

SAMPLING DEVICE (NEW DISPOSABLE BAILER)

SAMPLE COLOR CLEAR ODOR/SEDIMENT NO / NO

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	21.1	6.8	360
2	21.2	6.7	370
3	21.2	6.7	360

SAMPLES COLLECTED

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

Aqua Science Engineers, Inc. 55 Oak Court, 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

KIFF Analytical LLC

Report Number : 85194
Date : 06/27/2013

Laboratory Results

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

Subject : 8 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,

Troy G. Turpen

Troy Turpen

KIFF Analytical LLC

Report Number : 85194
Date : 06/27/2013

Project Name : **LIM**
Project Number : **2808**

Sample : **MW-1** Matrix : Water Lab Number : 85194-01
Sample Date :06/18/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**1.5**	0.50	ug/L	EPA 8260B	06/21/13 22:03
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:03
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:03
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:03
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:03
Diisopropyl ether (DIPE)	**0.52**	0.50	ug/L	EPA 8260B	06/21/13 22:03
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:03
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:03
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/13 22:03
TPH as Gasoline	**370**	50	ug/L	EPA 8260B	06/21/13 22:03
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:03
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:03
1,2-Dichloroethane-d4 (Surr)	95.2		% Recovery	EPA 8260B	06/21/13 22:03
Toluene - d8 (Surr)	97.4		% Recovery	EPA 8260B	06/21/13 22:03
TPH as Diesel (Silica Gel)	**84**	50	ug/L	M EPA 8015	06/27/13 01:07
Octacosane (Silica Gel Surr)	116		% Recovery	M EPA 8015	06/27/13 01:07

KIFF Analytical LLC

Report Number : 85194
Date : 06/27/2013

Project Name : **LIM**
Project Number : **2808**

Sample : **MW-2** Matrix : Water Lab Number : 85194-02
Sample Date :06/18/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**2400**	4.0	ug/L	EPA 8260B	06/26/13 15:51
Toluene	**7.8**	4.0	ug/L	EPA 8260B	06/26/13 15:51
Ethylbenzene	**80**	4.0	ug/L	EPA 8260B	06/26/13 15:51
Total Xylenes	**31**	4.0	ug/L	EPA 8260B	06/26/13 15:51
Methyl-t-butyl ether (MTBE)	< 1.5	1.5	ug/L	EPA 8260B	06/25/13 04:59
Diisopropyl ether (DIPE)	**7.8**	1.5	ug/L	EPA 8260B	06/25/13 04:59
Ethyl-t-butyl ether (ETBE)	< 1.5	1.5	ug/L	EPA 8260B	06/25/13 04:59
Tert-amyl methyl ether (TAME)	< 1.5	1.5	ug/L	EPA 8260B	06/25/13 04:59
Tert-Butanol	**17**	7.0	ug/L	EPA 8260B	06/25/13 04:59
TPH as Gasoline	**5300**	150	ug/L	EPA 8260B	06/25/13 04:59
1,2-Dichloroethane	< 1.5	1.5	ug/L	EPA 8260B	06/25/13 04:59
1,2-Dibromoethane	< 1.5	1.5	ug/L	EPA 8260B	06/25/13 04:59
1,2-Dichloroethane-d4 (Surr)	93.9		% Recovery	EPA 8260B	06/25/13 04:59
Toluene - d8 (Surr)	95.8		% Recovery	EPA 8260B	06/25/13 04:59
TPH as Diesel (Silica Gel)	**88**	50	ug/L	M EPA 8015	06/27/13 01:41
Octacosane (Silica Gel Surr)	92.7		% Recovery	M EPA 8015	06/27/13 01:41

KIFF Analytical LLC

Report Number : 85194
Date : 06/27/2013

Project Name : **LIM**
Project Number : **2808**

Sample : **MW-3** Matrix : Water Lab Number : 85194-03
Sample Date :06/18/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**6700**	10	ug/L	EPA 8260B	06/25/13 13:43
Toluene	**7900**	10	ug/L	EPA 8260B	06/25/13 13:43
Ethylbenzene	**2000**	10	ug/L	EPA 8260B	06/25/13 13:43
Total Xylenes	**15000**	25	ug/L	EPA 8260B	06/26/13 00:21
Methyl-t-butyl ether (MTBE)	< 10	10	ug/L	EPA 8260B	06/25/13 13:43
Diisopropyl ether (DIPE)	< 10	10	ug/L	EPA 8260B	06/25/13 13:43
Ethyl-t-butyl ether (ETBE)	< 10	10	ug/L	EPA 8260B	06/25/13 13:43
Tert-amyl methyl ether (TAME)	< 10	10	ug/L	EPA 8260B	06/25/13 13:43
Tert-Butanol	< 50	50	ug/L	EPA 8260B	06/25/13 13:43
TPH as Gasoline	**100000**	2500	ug/L	EPA 8260B	06/26/13 00:21
1,2-Dichloroethane	< 10	10	ug/L	EPA 8260B	06/25/13 13:43
1,2-Dibromoethane	< 10	10	ug/L	EPA 8260B	06/25/13 13:43
1,2-Dichloroethane-d4 (Surr)	89.6		% Recovery	EPA 8260B	06/25/13 13:43
Toluene - d8 (Surr)	95.9		% Recovery	EPA 8260B	06/25/13 13:43
TPH as Diesel (Silica Gel)	**220000**	1000	ug/L	M EPA 8015	06/27/13 13:28
(Note: Lower boiling hydrocarbons present, atypical for Diesel Fuel.)					
Octacosane (Silica Gel Surr)	Diluted Out		% Recovery	M EPA 8015	06/27/13 13:28

KIFF Analytical LLC

Report Number : 85194
Date : 06/27/2013

Project Name : **LIM**
Project Number : **2808**

Sample : **MW-4R** Matrix : Water Lab Number : 85194-04
Sample Date :06/18/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**37**	0.50	ug/L	EPA 8260B	06/26/13 02:41
Toluene	**33**	0.50	ug/L	EPA 8260B	06/26/13 02:41
Ethylbenzene	**10**	0.50	ug/L	EPA 8260B	06/26/13 02:41
Total Xylenes	**400**	0.50	ug/L	EPA 8260B	06/26/13 02:41
Methyl-t-butyl ether (MTBE)	**1.5**	0.50	ug/L	EPA 8260B	06/26/13 02:41
Diisopropyl ether (DIPE)	**2.5**	0.50	ug/L	EPA 8260B	06/26/13 02:41
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/26/13 02:41
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/26/13 02:41
Tert-Butanol	**120**	5.0	ug/L	EPA 8260B	06/26/13 02:41
TPH as Gasoline	**3800**	50	ug/L	EPA 8260B	06/26/13 02:41
1,2-Dichloroethane	**7.2**	0.50	ug/L	EPA 8260B	06/26/13 02:41
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/26/13 02:41
1,2-Dichloroethane-d4 (Surr)	96.3		% Recovery	EPA 8260B	06/26/13 02:41
Toluene - d8 (Surr)	98.0		% Recovery	EPA 8260B	06/26/13 02:41
TPH as Diesel (Silica Gel)	**110**	50	ug/L	M EPA 8015	06/27/13 02:16
Octacosane (Silica Gel Surr)	105		% Recovery	M EPA 8015	06/27/13 02:16

KIFF Analytical LLC

Report Number : 85194
Date : 06/27/2013

Project Name : **LIM**
Project Number : **2808**

Sample : **MW-5** Matrix : Water Lab Number : 85194-05

Sample Date :06/18/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:35
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:35
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:35
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:35
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:35
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:35
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:35
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:35
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/13 22:35
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/21/13 22:35
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:35
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 22:35
1,2-Dichloroethane-d4 (Surr)	96.2		% Recovery	EPA 8260B	06/21/13 22:35
Toluene - d8 (Surr)	97.1		% Recovery	EPA 8260B	06/21/13 22:35
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/27/13 13:13
Octacosane (Silica Gel Surr)	105		% Recovery	M EPA 8015	06/27/13 13:13

KIFF Analytical LLC

Report Number : 85194
Date : 06/27/2013

Project Name : **LIM**
Project Number : **2808**

Sample : **MW-6** Matrix : Water Lab Number : 85194-06

Sample Date :06/18/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 23:08
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 23:08
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 23:08
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 23:08
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 23:08
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 23:08
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 23:08
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 23:08
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/13 23:08
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/21/13 23:08
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 23:08
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/13 23:08
1,2-Dichloroethane-d4 (Surr)	96.2		% Recovery	EPA 8260B	06/21/13 23:08
Toluene - d8 (Surr)	97.6		% Recovery	EPA 8260B	06/21/13 23:08
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/27/13 13:42
Octacosane (Silica Gel Surr)	87.0		% Recovery	M EPA 8015	06/27/13 13:42

KIFF Analytical LLC

Report Number : 85194
Date : 06/27/2013

Project Name : **LIM**
Project Number : **2808**

Sample : **MW-7** Matrix : Water Lab Number : 85194-07

Sample Date :06/18/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	**19**	0.90	ug/L	EPA 8260B	06/26/13 01:24
Toluene	**22**	0.90	ug/L	EPA 8260B	06/26/13 01:24
Ethylbenzene	**310**	0.90	ug/L	EPA 8260B	06/26/13 01:24
Total Xylenes	**390**	0.90	ug/L	EPA 8260B	06/26/13 01:24
Methyl-t-butyl ether (MTBE)	< 0.90	0.90	ug/L	EPA 8260B	06/26/13 01:24
Diisopropyl ether (DIPE)	< 0.90	0.90	ug/L	EPA 8260B	06/26/13 01:24
Ethyl-t-butyl ether (ETBE)	< 0.90	0.90	ug/L	EPA 8260B	06/26/13 01:24
Tert-amyl methyl ether (TAME)	< 0.90	0.90	ug/L	EPA 8260B	06/26/13 01:24
Tert-Butanol	**6.3**	5.0	ug/L	EPA 8260B	06/26/13 01:24
TPH as Gasoline	**6000**	90	ug/L	EPA 8260B	06/26/13 01:24
1,2-Dichloroethane	< 0.90	0.90	ug/L	EPA 8260B	06/26/13 01:24
1,2-Dibromoethane	< 0.90	0.90	ug/L	EPA 8260B	06/26/13 01:24
1,2-Dichloroethane-d4 (Surr)	99.2		% Recovery	EPA 8260B	06/26/13 01:24
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	06/26/13 01:24
TPH as Diesel (Silica Gel)	**250**	50	ug/L	M EPA 8015	06/27/13 04:00
(Note: Some hydrocarbons lower-boiling, some higher-boiling than Diesel.)					
Octacosane (Silica Gel Surr)	110		% Recovery	M EPA 8015	06/27/13 04:00

KIFF Analytical LLC

Report Number : 85194
Date : 06/27/2013

Project Name : **LIM**
Project Number : **2808**

Sample : **MW-8** Matrix : Water Lab Number : 85194-08

Sample Date :06/18/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/24/13 11:38
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/24/13 11:38
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/24/13 11:38
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/24/13 11:38
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/24/13 11:38
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/24/13 11:38
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/24/13 11:38
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/24/13 11:38
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/24/13 11:38
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/24/13 11:38
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/24/13 11:38
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/24/13 11:38
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	06/24/13 11:38
Toluene - d8 (Surr)	96.9		% Recovery	EPA 8260B	06/24/13 11:38
TPH as Diesel (Silica Gel)	**83**	50	ug/L	M EPA 8015	06/27/13 04:34
Octacosane (Silica Gel Surr)	102		% Recovery	M EPA 8015	06/27/13 04:34

Report Number : 85194

Date : 06/27/2013

QC Report : Method Blank Data

Project Name : **LIM**

Project Number : **2808**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/26/2013
Octacosane (Silica Gel Surr)	119		%	M EPA 8015	06/26/2013
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	06/27/2013
Octacosane (Silica Gel Surr)	107		%	M EPA 8015	06/27/2013
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/24/2013
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/24/2013
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/24/2013
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/24/2013
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/24/2013
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/24/2013
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/24/2013
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/24/2013
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/24/2013
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/24/2013
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/24/2013
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/24/2013
1,2-Dichloroethane-d4 (Surr)	98.7		%	EPA 8260B	06/24/2013
Toluene - d8 (Surr)	97.0		%	EPA 8260B	06/24/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/26/2013
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/26/2013
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/26/2013
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/26/2013
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/25/2013
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/25/2013
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
1,2-Dichloroethane-d4 (Surr)	99.7		%	EPA 8260B	06/25/2013
Toluene - d8 (Surr)	99.2		%	EPA 8260B	06/25/2013
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2013
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2013
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2013
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/21/2013
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2013
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2013
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2013
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2013
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2013
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/21/2013
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2013
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2013
1,2-Dichloroethane-d4 (Surr)	95.6		%	EPA 8260B	06/21/2013

KIFF ANALYTICAL, LLC

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

Report Number : 85194

Date : 06/27/2013

QC Report : Method Blank Data

Project Name : **LIM**

Project Number : **2808**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Toluene - d8 (Surr)	97.3		%	EPA 8260B	06/21/2013
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/25/2013
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/25/2013
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/25/2013
1,2-Dichloroethane-d4 (Surr)	99.4		%	EPA 8260B	06/25/2013
Toluene - d8 (Surr)	99.7		%	EPA 8260B	06/25/2013

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

KIFF ANALYTICAL, LLC

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

Report Number : 85194

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 06/27/2013

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	1000	1060	ug/L	M EPA 8015	6/26/13	100	106	5.06	70-130	25
1,2-Dibromoethane														
	85194-08	<0.50	40.0	39.9	36.4	38.8	ug/L	EPA 8260B	6/24/13	91.0	97.1	6.45	70.0-130	25
1,2-Dichloroethane														
	85194-08	<0.50	39.9	39.8	32.7	34.1	ug/L	EPA 8260B	6/24/13	81.9	85.6	4.46	70.0-130	25
Benzene														
	85194-08	<0.50	39.9	39.8	35.1	35.6	ug/L	EPA 8260B	6/24/13	88.0	89.3	1.48	70.0-130	25
Diisopropyl ether														
	85194-08	<0.50	39.9	39.8	35.2	35.4	ug/L	EPA 8260B	6/24/13	88.3	89.0	0.798	70.0-130	25
Ethyl-tert-butyl ether														
	85194-08	<0.50	39.0	39.0	35.3	35.9	ug/L	EPA 8260B	6/24/13	90.5	92.2	1.83	70.0-130	25
Ethylbenzene														
	85194-08	<0.50	39.9	39.8	37.5	37.8	ug/L	EPA 8260B	6/24/13	93.8	94.8	0.975	70.0-130	25
Methyl-t-butyl ether														
	85194-08	<0.50	39.3	39.3	34.7	36.4	ug/L	EPA 8260B	6/24/13	88.2	92.7	5.02	70.0-130	25
P + M Xylene														
	85194-08	<0.50	39.9	39.8	38.1	38.7	ug/L	EPA 8260B	6/24/13	95.4	97.1	1.75	70.0-130	25

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

Report Number : 85194

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 06/27/2013

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														
	85194-08	<5.0	200	200	174	172	ug/L	EPA 8260B	6/24/13	86.8	85.9	0.948	70.0-130	25
Tert-amyl-methyl ether														
	85194-08	<0.50	39.2	39.1	35.0	36.4	ug/L	EPA 8260B	6/24/13	89.1	93.1	4.34	70.0-130	25
Toluene														
	85194-08	<0.50	39.9	39.8	36.3	36.6	ug/L	EPA 8260B	6/24/13	90.8	92.0	1.23	70.0-130	25
Benzene														
	85234-05	5.4	40.0	40.0	42.6	40.8	ug/L	EPA 8260B	6/26/13	92.8	88.4	4.95	70.0-130	25
Ethylbenzene														
	85234-05	0.76	40.0	40.0	42.4	41.0	ug/L	EPA 8260B	6/26/13	104	100	3.51	70.0-130	25
P + M Xylene														
	85234-05	6.0	40.0	40.0	47.0	45.2	ug/L	EPA 8260B	6/26/13	102	97.9	4.62	70.0-130	25
Toluene														
	85234-05	1.1	40.0	40.0	38.4	36.9	ug/L	EPA 8260B	6/26/13	93.2	89.4	4.17	70.0-130	25
1,2-Dibromoethane														
	85244-03	<0.50	40.3	40.3	45.3	41.7	ug/L	EPA 8260B	6/25/13	112	104	8.08	70.0-130	25
1,2-Dichloroethane														
	85244-03	<0.50	40.0	40.0	41.3	40.0	ug/L	EPA 8260B	6/25/13	103	99.9	3.29	70.0-130	25

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Report Number : 85194

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 06/27/2013

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
Benzene														
	85244-03	<0.50	40.0	40.0	40.6	39.8	ug/L	EPA 8260B	6/25/13	101	99.5	1.96	70.0-130	25
Diisopropyl ether														
	85244-03	<0.50	39.3	39.3	42.2	41.8	ug/L	EPA 8260B	6/25/13	107	106	0.910	70.0-130	25
Ethyl-tert-butyl ether														
	85244-03	<0.50	40.1	40.1	44.9	46.6	ug/L	EPA 8260B	6/25/13	112	116	3.60	70.0-130	25
Ethylbenzene														
	85244-03	<0.50	40.0	40.0	42.2	41.6	ug/L	EPA 8260B	6/25/13	105	104	1.25	70.0-130	25
Methyl-t-butyl ether														
	85244-03	<0.50	39.9	39.9	43.0	42.6	ug/L	EPA 8260B	6/25/13	108	107	0.885	70.0-130	25
P + M Xylene														
	85244-03	<0.50	40.0	40.0	42.4	41.4	ug/L	EPA 8260B	6/25/13	106	104	2.35	70.0-130	25
Tert-Butanol														
	85244-03	<5.0	202	202	221	218	ug/L	EPA 8260B	6/25/13	110	108	1.52	70.0-130	25
Tert-amyl-methyl ether														
	85244-03	<0.50	40.3	40.3	45.1	45.6	ug/L	EPA 8260B	6/25/13	112	113	1.15	70.0-130	25
Toluene														
	85244-03	<0.50	40.0	40.0	41.3	40.5	ug/L	EPA 8260B	6/25/13	103	101	2.02	70.0-130	25

KIFF ANALYTICAL, LLC

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

Report Number : 85194

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 06/27/2013

Project Name : **LIM**

Project Number : **2808**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
1,2-Dibromoethane														
	85191-04	<0.50	40.1	40.1	38.0	38.2	ug/L	EPA 8260B	6/21/13	94.8	95.3	0.574	70.0-130	25
1,2-Dichloroethane														
	85191-04	<0.50	40.0	40.0	38.3	39.4	ug/L	EPA 8260B	6/21/13	95.7	98.4	2.74	70.0-130	25
Benzene														
	85191-04	3.7	40.0	40.0	41.2	41.4	ug/L	EPA 8260B	6/21/13	93.8	94.4	0.583	70.0-130	25
Diisopropyl ether														
	85191-04	<0.50	40.0	40.0	34.8	35.5	ug/L	EPA 8260B	6/21/13	87.1	88.8	1.90	70.0-130	25
Ethyl-tert-butyl ether														
	85191-04	<0.50	39.1	39.1	35.8	36.5	ug/L	EPA 8260B	6/21/13	91.5	93.3	1.91	70.0-130	25
Ethylbenzene														
	85191-04	1.9	40.0	40.0	42.4	42.8	ug/L	EPA 8260B	6/21/13	101	102	0.842	70.0-130	25
Methyl-t-butyl ether														
	85191-04	5.9	39.4	39.4	40.9	41.7	ug/L	EPA 8260B	6/21/13	88.8	90.9	2.36	70.0-130	25
P + M Xylene														
	85191-04	<0.50	40.0	40.0	40.0	40.3	ug/L	EPA 8260B	6/21/13	100	101	0.759	70.0-130	25
Tert-Butanol														
	85191-04	<5.0	201	201	194	196	ug/L	EPA 8260B	6/21/13	96.9	97.4	0.571	70.0-130	25
Tert-amyl-methyl ether														
	85191-04	<0.50	39.3	39.3	37.4	38.0	ug/L	EPA 8260B	6/21/13	95.2	96.8	1.72	70.0-130	25

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Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Toluene														
	85191-04	<0.50	40.0	40.0	38.9	39.2	ug/L	EPA 8260B	6/21/13	97.3	97.9	0.556	70.0-130	25
1,2-Dibromoethane														
	85183-05	0.58	40.3	40.3	43.8	43.5	ug/L	EPA 8260B	6/25/13	107	106	0.558	70.0-130	25
1,2-Dichloroethane														
	85183-05	1.0	40.0	40.0	41.7	40.8	ug/L	EPA 8260B	6/25/13	102	99.5	2.05	70.0-130	25
Benzene														
	85183-05	12	40.0	40.0	53.7	52.9	ug/L	EPA 8260B	6/25/13	103	101	2.05	70.0-130	25
Diisopropyl ether														
	85183-05	<0.50	39.3	39.3	42.9	42.3	ug/L	EPA 8260B	6/25/13	109	108	1.60	70.0-130	25
Ethyl-tert-butyl ether														
	85183-05	<0.50	40.1	40.1	46.0	45.2	ug/L	EPA 8260B	6/25/13	115	112	1.78	70.0-130	25
Ethylbenzene														
	85183-05	30	40.0	40.0	73.4	72.0	ug/L	EPA 8260B	6/25/13	108	104	3.27	70.0-130	25
Methyl-t-butyl ether														
	85183-05	3.5	39.9	39.9	47.0	46.6	ug/L	EPA 8260B	6/25/13	109	108	0.925	70.0-130	25
P + M Xylene														
	85183-05	70	40.0	40.0	111	109	ug/L	EPA 8260B	6/25/13	103	99.5	3.72	70.0-130	25

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Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Tert-Butanol														
	85183-05	<5.0	202	202	221	220	ug/L	EPA 8260B	6/25/13	110	109	0.298	70.0-130	25
Tert-amyl-methyl ether														
	85183-05	<0.50	40.3	40.3	44.8	44.8	ug/L	EPA 8260B	6/25/13	111	111	0.0729	70.0-130	25
Toluene														
	85183-05	32	40.0	40.0	73.8	72.3	ug/L	EPA 8260B	6/25/13	105	102	3.64	70.0-130	25
TPH-D (Si Gel)														
	BLANK	<50	1000	1000	890	888	ug/L	M EPA 8015	6/27/13	89.0	88.8	0.175	70-130	25

KIFF ANALYTICAL, LLC

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

QC Report : Laboratory Control Sample (LCS)

Project Name : **LIM**

Project Number : **2808**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
1,2-Dibromoethane	40.1	ug/L	EPA 8260B	6/24/13	86.8	70.0-130
1,2-Dichloroethane	40.0	ug/L	EPA 8260B	6/24/13	82.2	70.0-130
Benzene	40.0	ug/L	EPA 8260B	6/24/13	91.2	70.0-130
Diisopropyl ether	40.0	ug/L	EPA 8260B	6/24/13	91.5	70.0-130
Ethyl-tert-butyl ether	39.1	ug/L	EPA 8260B	6/24/13	90.5	70.0-130
Ethylbenzene	40.0	ug/L	EPA 8260B	6/24/13	96.9	70.0-130
Methyl-t-butyl ether	39.4	ug/L	EPA 8260B	6/24/13	82.2	70.0-130
P + M Xylene	40.0	ug/L	EPA 8260B	6/24/13	98.7	70.0-130
Tert-Butanol	201	ug/L	EPA 8260B	6/24/13	96.0	70.0-130
Tert-amyl-methyl ether	39.3	ug/L	EPA 8260B	6/24/13	88.0	70.0-130
Toluene	40.0	ug/L	EPA 8260B	6/24/13	93.6	70.0-130
Benzene	40.2	ug/L	EPA 8260B	6/26/13	91.6	70.0-130
Ethylbenzene	40.2	ug/L	EPA 8260B	6/26/13	102	70.0-130
P + M Xylene	40.2	ug/L	EPA 8260B	6/26/13	101	70.0-130
Toluene	40.2	ug/L	EPA 8260B	6/26/13	93.0	70.0-130
1,2-Dibromoethane	40.3	ug/L	EPA 8260B	6/25/13	110	70.0-130
1,2-Dichloroethane	40.0	ug/L	EPA 8260B	6/25/13	99.6	70.0-130
Benzene	40.0	ug/L	EPA 8260B	6/25/13	98.3	70.0-130
Diisopropyl ether	39.3	ug/L	EPA 8260B	6/25/13	104	70.0-130
Ethyl-tert-butyl ether	40.1	ug/L	EPA 8260B	6/25/13	108	70.0-130

QC Report : Laboratory Control Sample (LCS)

Project Name : **LIM**

Project Number : **2808**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Ethylbenzene	40.0	ug/L	EPA 8260B	6/25/13	102	70.0-130
Methyl-t-butyl ether	39.9	ug/L	EPA 8260B	6/25/13	105	70.0-130
P + M Xylene	40.0	ug/L	EPA 8260B	6/25/13	101	70.0-130
TPH as Gasoline	503	ug/L	EPA 8260B	6/25/13	95.6	70.0-130
Tert-Butanol	202	ug/L	EPA 8260B	6/25/13	104	70.0-130
Tert-amyl-methyl ether	40.3	ug/L	EPA 8260B	6/25/13	107	70.0-130
Toluene	40.0	ug/L	EPA 8260B	6/25/13	100	70.0-130
1,2-Dibromoethane	39.9	ug/L	EPA 8260B	6/21/13	96.9	70.0-130
1,2-Dichloroethane	39.8	ug/L	EPA 8260B	6/21/13	97.1	70.0-130
Benzene	39.8	ug/L	EPA 8260B	6/21/13	96.0	70.0-130
Diisopropyl ether	39.8	ug/L	EPA 8260B	6/21/13	89.2	70.0-130
Ethyl-tert-butyl ether	38.9	ug/L	EPA 8260B	6/21/13	94.4	70.0-130
Ethylbenzene	39.8	ug/L	EPA 8260B	6/21/13	104	70.0-130
Methyl-t-butyl ether	39.2	ug/L	EPA 8260B	6/21/13	90.2	70.0-130
P + M Xylene	39.8	ug/L	EPA 8260B	6/21/13	101	70.0-130
TPH as Gasoline	497	ug/L	EPA 8260B	6/21/13	99.6	70.0-130
Tert-Butanol	200	ug/L	EPA 8260B	6/21/13	99.4	70.0-130
Tert-amyl-methyl ether	39.1	ug/L	EPA 8260B	6/21/13	96.6	70.0-130
Toluene	39.8	ug/L	EPA 8260B	6/21/13	98.7	70.0-130
1,2-Dibromoethane	40.4	ug/L	EPA 8260B	6/25/13	105	70.0-130
1,2-Dichloroethane	40.1	ug/L	EPA 8260B	6/25/13	99.6	70.0-130

QC Report : Laboratory Control Sample (LCS)

Project Name : **LIM**

Project Number : **2808**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.1	ug/L	EPA 8260B	6/25/13	101	70.0-130
Diisopropyl ether	39.4	ug/L	EPA 8260B	6/25/13	107	70.0-130
Ethyl-tert-butyl ether	40.2	ug/L	EPA 8260B	6/25/13	112	70.0-130
Ethylbenzene	40.1	ug/L	EPA 8260B	6/25/13	105	70.0-130
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	6/25/13	108	70.0-130
P + M Xylene	40.1	ug/L	EPA 8260B	6/25/13	104	70.0-130
TPH as Gasoline	504	ug/L	EPA 8260B	6/25/13	111	70.0-130
Tert-Butanol	202	ug/L	EPA 8260B	6/25/13	107	70.0-130
Tert-amyl-methyl ether	40.4	ug/L	EPA 8260B	6/25/13	108	70.0-130
Toluene	40.1	ug/L	EPA 8260B	6/25/13	102	70.0-130

KIFF ANALYTICAL, LLC

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

85194

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) [signature]

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 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015) w/silica gel c.u.	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	CAM 17 METALS (EPA 6010+7000)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	Pb (TOTAL or DISSOLVED) (EPA 6012)	PESTICIDES (EPA 8081)	FUEL OXYGENATES (EPA 8260)	PURGEABLE HALOCARBONS (EPA 601/8010)	TPH-G/BTEX/5 OXYS (EPA METHOD 8260) Pb scav.	MULTI-RANGE HYDROCARBONS WITH SILICA GEL CLEANUP (EPA 8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	LUFT METALS (5) (EPA 6010+7000)	COMPOSITE 4:1	EDF	
MW-1	6/18/13	1125	W	5		Y								Y					Y	01
MW-2		1000				Y								Y					Y	02
MW-3		0850				Y								Y					Y	03
MW-4R		0830				Y								Y					Y	04
MW-5		0915				Y								Y					Y	05
MW-6		1030				Y								Y					Y	06
MW-7		0935				Y								Y					Y	07
MW-8		1100				Y								Y					Y	08
MW																				

RELINQUISHED BY: [signature] 1043
(signature) (time)
DAVID ALLEN 6/20/13
(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:
[signature] 1043
(signature) (time)
Allison Premzic 06/2013
(printed name) (date)
Company- KIFF ANALYTICAL

COMMENTS:
MW-3 HIGH HC CONCENTRATIONS EXPECTED

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

KIFF Analytical LLC

SAMPLE RECEIPT CHECKLIST

SRG #: 85194	**TAT:** ☒ Standard	☐ Rush	☐ Split	☐ None			
Sample Receipt	**Initials/Date:** ABP 062013	**Storage Time:** 1313	**Sample Login**	**Initials/Date:** MAS/06/21/13			
Method of Receipt:	☒ Courier	☐ Over-the-counter	☐ Shipped	Shipping Custody Seals	☒ N/A	☐ Intact	☐ Broken

Temp °C	0.4	☐ N/A	Therm ID	IR-1	Time	1304	Coolant present	☒ Yes ☐ No ☐ Water	☐ Temp Excursion

Chain-of-Custody:	**Yes**	**No**
Is COC present?	X	
Is COC signed by relinquisher?	X	
Is COC dated by relinquisher?	X	
Is the sampler's name on the COC?	X	
Are there analyses or hold for all samples?	X	

Documented on	**COC**	**Labels**	**Discrepancies:**
Sample ID	X	X	
Project ID	X	X	
Sample Date	X	X	
Sample Time	X		
Does COC match project history?	☐ N/A	☒ Yes	☐ No

Samples:	**N/A**	**Yes**	**No**
Are sample custody seals intact?	X		
Are sample containers intact?		X	
Is preservation documented?		X	
In-house Analysis:	**N/A**	**Yes**	**No**
Are preservatives acceptable?		X	
Are samples within holding time?		X	
Are sample container types correct?		X	
Is there adequate sample volume?		X	

Comments:

Receipt Details:

Matrix	Container Type	# of Containers
WA	Voa	40

CS Required: ☐

Proceed With Analysis: ☐ YES ☐ NO Init/Date:
Client Communication: