aqua science engineers inc.

R0479

January 21, 2003



# QUARTERLY GROUNDWATER MONITORING REPORT
# DECEMBER 2002 GROUNDWATER SAMPLING
at
Lim Family Property
250 8th Street
Oakland, California

Submitted by:
AQUA SCIENCE ENGINEERS, INC.
208 W. El Pintado
Danville, CA 94526
(925) 820-9391

## 1.0 INTRODUCTION

This report outlines the methods and findings of Aqua Science Engineers, Inc. (ASE)'s quarterly groundwater monitoring at the Lim family property located at 250 8th Street in Oakland, California *(Figures 1 and 2).*

## 2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On December 18, 2002, ASE measured the depth to water in each assessable site well using an electric water level sounder. Monitoring well MW-7 was not measured this quarter since a car was parked over the well. The surface of the groundwater was also checked for the presence of free-floating hydrocarbons or sheen. Monitoring well MW-3 contained 0.47-feet of free-floating hydrocarbons this quarter. Groundwater elevation data is presented in Table One.

A groundwater elevation (potentiometric surface) contour map is shown as Figure 2. The groundwater flow direction at the site is generally to the south with a gradient of 0.004 feet/foot during this quarterly sampling period. Previously, the groundwater flow direction was to the southwest. The gradient is consistent with previous findings.

## 3.0 MONITORING WELL SAMPLING

On December 18, 2002, ASE collected groundwater samples from monitoring wells MW-1, MW-2, and MW-4 through MW-6 for analysis. Monitoring well MW-3 was not sampled due to the presence of free-floating hydrocarbons at the time of sampling. Monitoring well MW-7 was not sampled this quarter since a car was parked over the well.

Prior to sampling, the wells were purged of three well casing volumes of groundwater using dedicated 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 dedicated polyethylene bailers. The groundwater samples to be analyzed for volatile compounds were decanted from the bailers into 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid, sealed without headspace and labeled. The samples to be analyzed for extractable range hydrocarbons were contained in 1-liter amber glass bottles. All samples were stored on ice for transport to Kiff Analytical, LLC, (KIFF) of Davis, California under appropriate chain of custody documentation.

Well sampling purge water was contained in a sealed and labeled 55-gallon steel drum for temporary storage until off-site disposal can be arranged. See Appendix A for a copy of the well sampling field logs.

## 4.0 ANALYTICAL RESULTS FOR GROUNDWATER

All groundwater samples were analyzed by KIFF for total petroleum hydrocarbons as diesel (TPH-D) by modified EPA Method 3510/8015M, total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethyl benzene, total xylenes (collectively known as BTEX), lead scavengers, and methyl tertiary butyl ether (MTBE) by EPA Method 8260B. The groundwater samples collected from monitoring wells MW-2 and MW-4 through MW-7 were also analyzed for oil and grease (O&G) by EPA Method 1664. The analytical results are tabulated in Tables Two and Three, and copies of the certified analytical report and chain of custody form are included in Appendix B.

## 5.0 CONCLUSIONS

Monitoring well MW-3 contained 0.47-feet of free-floating hydrocarbons this quarter. Overall, the hydrocarbon concentrations are consistent with previous analytical results and remain elevated in downgradient monitoring wells MW-2, MW-3, and MW-4. The BTEX concentrations in groundwater samples collected from monitoring wells MW-2 and MW-4 exceeded Risk Based Screening Levels (RBSLs) for those compounds as presented in the "Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region dated December 2001.

## 6.0 RECOMMENDATIONS

ASE has prepared and submitted a corrective action plan (CAP) dated August 26, 2002 to the Alameda County Health Care Services Agency (ACHCSA) and is awaiting approval of ASE's selection of remediation technology for the site. In the meantime, ASE recommends continued groundwater monitoring on a quarterly basis. The next groundwater sampling is scheduled for March 2003. ASE will also continue periodic product bailing from monitoring well MW-3 during the next quarter.

## 7.0 REPORT LIMITATIONS

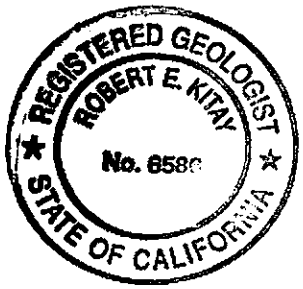
The results presented in this report represent conditions at the time of the groundwater sampling, at the specific locations where the samples were collected, and for the specific parameters analyzed by the laboratory. It does not fully characterize the site for contamination resulting from unknown sources, or for parameters not analyzed by the laboratory. All of the laboratory work cited in this report was prepared under the direction of an independent CAL-EPA certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

Aqua Science Engineers appreciates the opportunity to assist The Lim Family with their environmental needs. Should you have any questions or comments, please feel free to call us at (925) 820-9391.

Respectfully submitted,

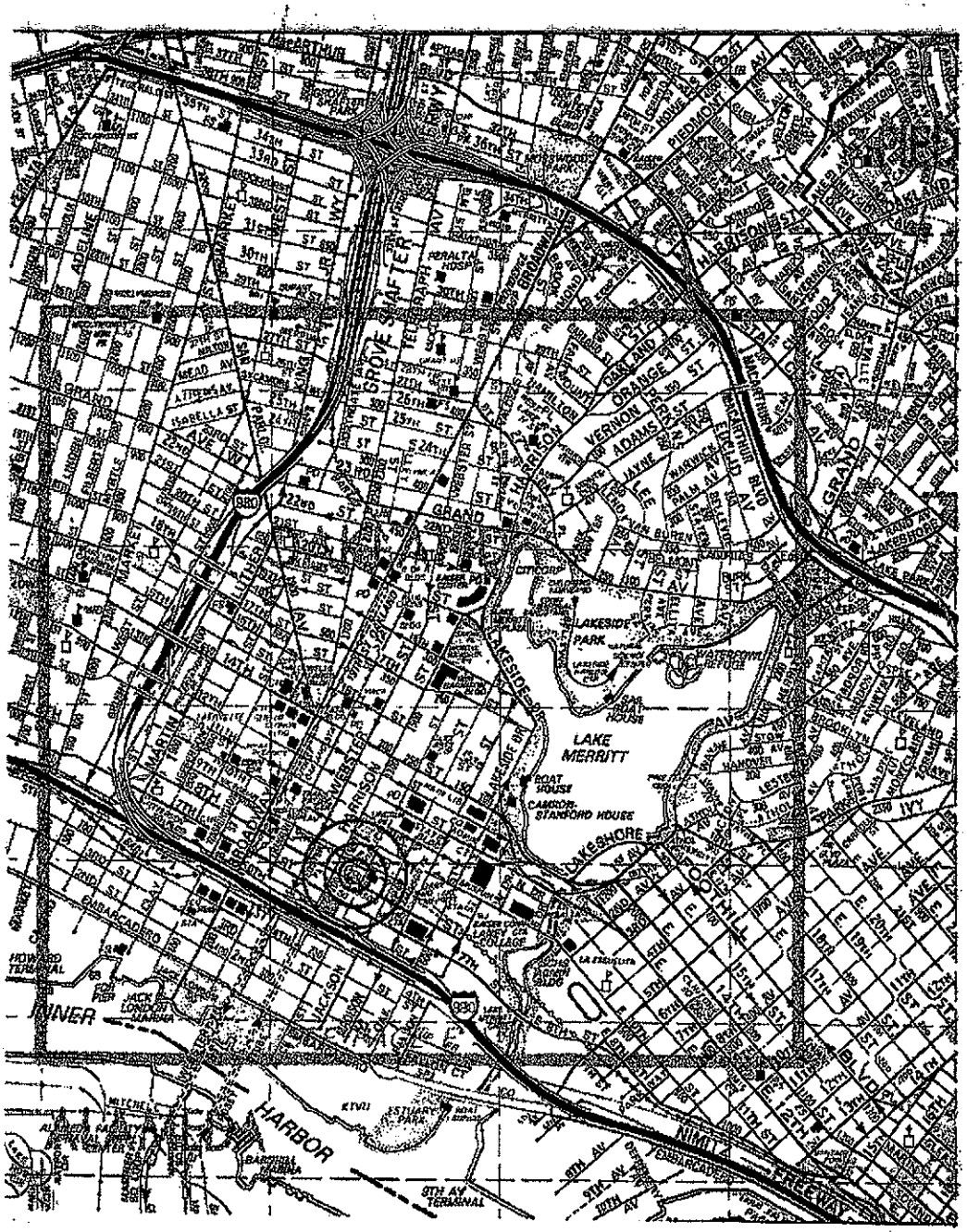
AQUA SCIENCE ENGINEERS, INC.

Erik H. Paddleford
Associate Geologist




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

Attachments: Figures 1 and 2
Appendices A and B

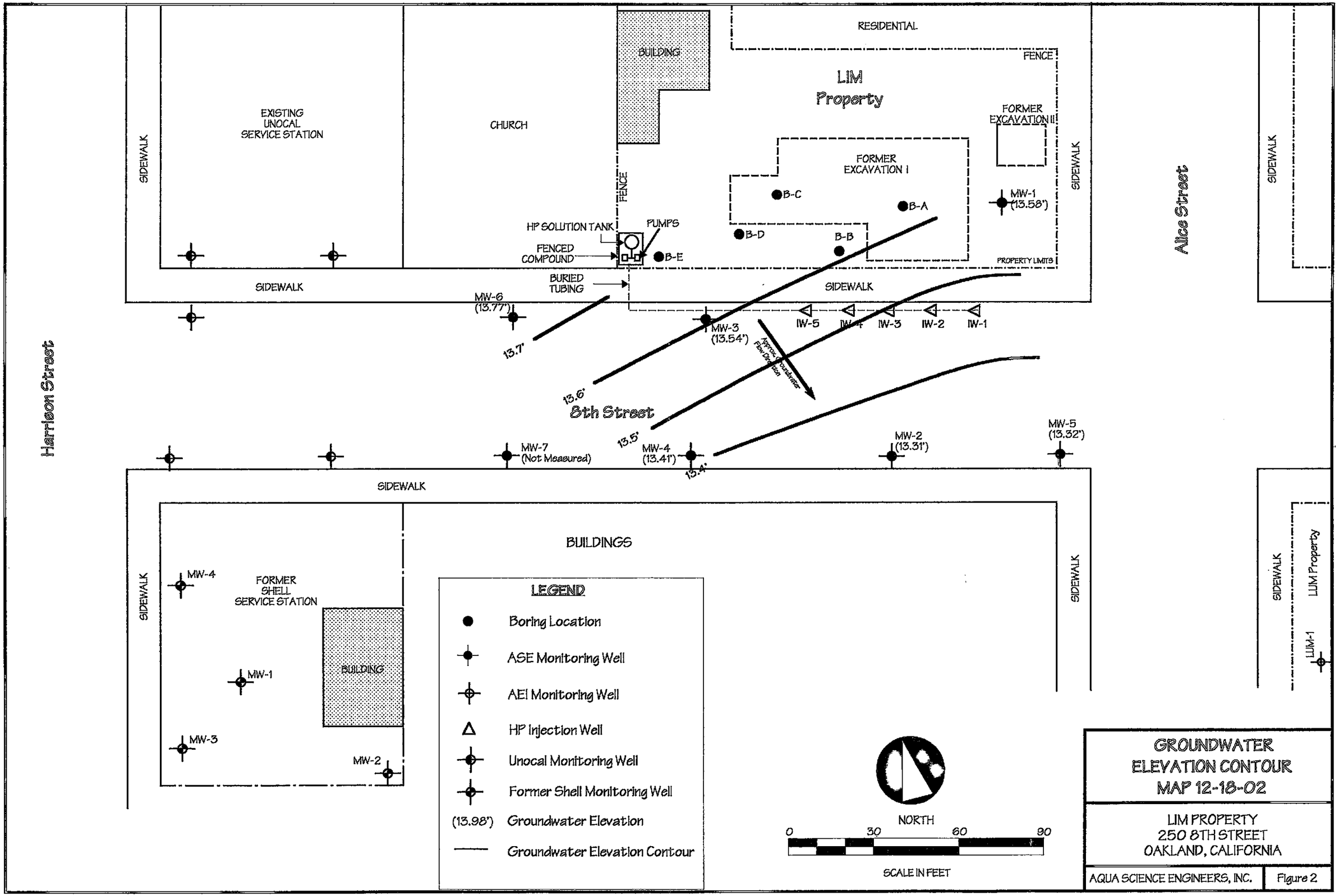



# SITE LOCATION MAP

Lim Property
250 8th Street
Oakland, California

Aqua Science Engineers | Figure 1

BASE: The Thomas Guide, Alameda and Contra Costa Counties Street Guide & Directory, 1990




# GROUNDWATER ELEVATION CONTOUR MAP 12-18-02

LIM PROPERTY
250 8TH STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | Figure 2

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** |
| 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** |

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*** |
| 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** |
| 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** |
| 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** |
| 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 | | |
| IW-1 | 07/13/99 | 24.05 | 14.75 | | 9.30 |
| | 06/11/02 | 28.33 | | | |
| IW-2 | 07/13/99 | 24.21 | 15.10 | | 9.11 |
| | 06/11/02 | 28.50 | | | |
| IW-3 | 07/13/99 | 23.93 | 15.00 | | 8.93 |
| | 06/11/02 | 28.14 | | | |
| IW-4 | 07/13/99 | 23.83 | Unknown | | Unknown |
| | 06/11/02 | 28.24 | | | |

# 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 | 07/13/99 | 24.00 | 15.50 | 1.00 | 9.55* |
| | 07/23/99 | | 15.52 | 1.05 | 9.32* |
| | 08/03/99 | | 15.58 | 0.64 | 8.93* |
| | 08/17/99 | | 15.62 | 0.86 | 9.07* |
| | 08/27/99 | | 15.92 | 0.77 | 8.70* |
| | 09/10/99 | | 15.82 | 0.56 | 8.63* |
| | 09/24/99 | | 15.57 | 0.26 | 8.64* |
| | 10/08/99 | | 15.56 | 0.23 | 8.62* |
| | 11/02/99 | | 15.59 | 0.22 | 8.59* |
| | 11/19/99 | | 15.64 | 0.07 | 8.42* |
| | 12/16/99 | | 16.12 | 0.64 | 8.39* |
| | 01/12/00 | | 16.54 | 0.28 | 7.68* |
| | 06/11/02 | 28.32 | | | |

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 |
|---|---|---|---|---|---|---|---|
| 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 |
| 01/26/98 | < 50 | < 50 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5.0 |
| 07/23/98 | 190 | < 50 | 0.54 | 2.8 | 2 | 1.8 | < 5.0 |
| 01/05/99 | 200 | < 50 | 1.8 | 1.6 | 3.3 | < 0.5 | < 5.0 |
| 07/13/99 | 340 | <50 | <0.5 | <0.5 | 2.6 | <0.5 | < 5.0 |
| 01/12/00 | 300 | 1,000 | 22 | 36 | 5.5 | 24 | < 5.0 |
| 04/24/00 | 360 | 280* | < 0.5 | < 0.5 | < 0.5 | 2.1 | < 5.0 |
| 07/20/00 | 290 | 150* | 1.8 | < 0.5 | < 0.5 | < 0.5 | < 5.0 |
| 10/24/00 | 170** | 280* | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5.0 |
| 01/18/01 | 170** | 150* | < 0.5 | <0.5 | < 0.5 | 2.1 | < 5.0 |
| 04/05/01 | 350** | 190* | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5.0 |
| 07/17/01 | 310 | 570 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5.0 |
| 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** |

## 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 |
|---|---|---|---|---|---|---|---|
| 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 |
| 01/26/98 | 50,000 | 11,000 | 12,000 | 12,000 | 1,600 | 6,700 | < 250 |
| 07/23/98 | 50,000 | 8,100# | 11,000 | 8,300 | 1,800 | 7,000 | 1,100 |
| 01/05/99 | 50,000 | 7,600# | 12,000 | 12,000 | 2,300 | 9,600 | 1,300 |
| 07/13/99 | 73,000 | 8,500 | 11,000 | 13,000 | 2,200 | 9,800 | < 500 |
| 01/12/00 | 63,000 | 11,000 | 10,000 | 12,000 | 1,800 | 7,800 | < 500 |
| 04/24/00 | 76,000 | 23,000* | 7,100 | 14,000 | 2,000 | 9,400 | < 500 |
| 07/20/00 | 68,000 | 5,300# | 11,000 | 14,000 | 2,300 | 11,000 | < 1,000 |
| 10/24/00 | 48,000 | 6,400* | 11,000 | 9,400 | 1,500 | 7,300 | < 500 |
| 01/18/01 | 37,000 | 4,600* | 6,900 | 5,600 | 1,200 | 5,300 | < 500 |
| 04/05/01 | 59,000 | 4,600* | 7,100 | 9,800 | 1,600 | 7,600 | < 500 |
| 07/17/01 | 90,000 | < 10,000 | 9,200 | 14,000 | 2,700 | 11,000 | < 50 |
| 10/25/01 | 79,000 | < 3,800 | 9,200 | 14,000 | 2,400 | 11,000 | < 50 |
| 01/22/02 | 76,000 | < 2,300 | 7,000 | 13,000 | 2,200 | 9,600 | < 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 |
| **12/18/02** | **46,000** | **< 6,000** | **2,900** | **3,000** | **1,800** | **7,600** | **22** |

## 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 |
|---|---|---|---|---|---|---|---|
| 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** | | | | | | |
| MW-4 | | | | | | | |
| 01/12/00 | 99,000 | 7,900* | 16,000 | 20,000 | 2,100 | 12,000 | < 2,500 |
| 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 |
| 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 |
| 10/24/00 | 98,000 | 8,000* | 21,000 | 29,000 | 2,700 | 15,000 | < 1,000 |
| 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 |
| 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 |
| 07/17/01 | 95,000 | < 3,000 | 8,000 | 16,000 | 2,900 | 11,000 | 49 |
| 10/25/01 | 89,000 | < 2,200 | 9,300 | 18,000 | 2,400 | 12,000 | 66 |
| 01/22/02 | 80,000 | < 2,300 | 4,600 | 15,000 | 2,500 | 11,000 | < 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 |
| 09/17/02 | 110,000 | < 3,000 | 9,600 | 21,000 | 2,800 | 13,000 | < 100 |
| **12/18/02** | **97,000** | **< 4,000** | **8,000** | **20,000** | **2,600** | **12,000** | **< 50** |
| MW-5 | | | | | | | |
| 06/11/02 | < 50 | < 50 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 28 |
| 09/17/02 | < 50 | 110 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 4.8 |
| **12/18/02** | **< 50** | **140** | **< 0.5** | **< 0.5** | **< 0.5** | **< 0.5** | **1.8** |
| MW-6 | | | | | | | |
| 06/11/02 | < 50 | < 50 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 1.2 |
| 09/17/02 | < 50 | < 50 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 1.0 |
| **12/18/02** | **< 50** | **< 50** | **< 0.5** | **< 0.5** | **< 0.5** | **< 0.5** | **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 |
|---|---|---|---|---|---|---|---|
| MW-7 | | | | | | | |
| 06/25/02 | 38,000 | < 2,000 | 890 | 5,100 | 1,200 | 5,200 | < 20 |
| **09/17/02** | **26,000** | **< 2,000** | **590** | **3,600** | **880** | **4,000** | **< 20** |
| 12/18/02 | NOT SAMPLED - CAR PARKED OVER WELL | | | | | | |
| RBSL | 500 | 640 | 46 | 130 | 290 | 13 | 1,800 |

Notes:

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

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

# = Estimated concentration reported due to overlapping fuel patterns.

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

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

Most recent data in bold.

RBSL is the California Regional Water Quality Control Board, San Francisco Bay Region Risk-Based Screening Level for Groundwater where groundwater is not a current or potential source of drinking water.

# TABLE THREE
## Groundwater Analytical Results
## Oil & Grease and Volatile Organic Compounds
## All results are in parts per billion

| Date Sampled & Compound Analyzed | MW-1 | MW-2 | MW-3 | MW-4 | MW-5 | MW-6 | MW-7 |
|---|---|---|---|---|---|---|---|
| 7/8/1997 | | | | | | | |
| Hydrocarbon Oil and Grease | - | < 1,000 | - | - | - | - | - |
| Tetrachloroethane (PCE) | 0.9 | < 0.5 | - | - | - | - | - |
| Other VOCs | < 0.5 - < 3 | < 0.5 - < 3 | - | - | - | - | - |
| 1/26/1998 | | | | | | | |
| Hydrocarbon Oil and Grease | - | < 1,000 | - | - | - | - | - |
| Trichloroethene | 0.7 | < 5.0 | - | - | - | - | - |
| Tetrachloroethene | 10 | < 5.0 | - | - | - | - | - |
| 1,2-Dichloroethane | < 0.5 | 11 | - | - | - | - | - |
| Other VOCs | < 0.5 - < 50 | < 0.5 - < 50 | - | - | - | - | - |
| 7/23/1998 | | | | | | | |
| Hydrocarbon Oil and Grease | - | < 1,000 | - | - | - | - | - |
| Tetrachloroethene | 4 | 4.6 | - | - | - | - | - |
| 1,2-Dichloroethane | < 2 | 9.9 | - | - | - | - | - |
| Other VOCs | < 2 - < 10 | < 0.5 - < 5.0 | - | - | - | - | - |
| 1/5/1999 | | | | | | | |
| Hydrocarbon Oil and Grease | - | < 1,000 | - | - | - | - | - |
| Tetrachloroethene | 5.1 | < 50 | - | - | - | - | - |
| Trichloroethene | 0.52 | < 50 | - | - | - | - | - |
| 1,1,2,2-Tetrachloroethane | 0.58 | < 50 | - | - | - | - | - |
| Chloroform | 8.2 | < 50 | - | - | - | - | - |
| Other VOCs | < 0.5 - < 5 | < 50 - < 500 | - | - | - | - | - |
| 7/13/1999 | | | | | | | |
| Hydrocarbon Oil and Grease | - | < 1,000 | - | - | - | - | - |
| Tetrachloroethene | 1.5 | 0.68 | - | - | - | - | - |
| Chloroform | 4.6 | < 50 | - | - | - | - | - |
| 1,2-Dichloroethane | <0.50 | 7.7 | - | - | - | - | - |
| Other VOCs | < 0.5 - < 5 | < 0.5 - < 500 | - | - | - | - | - |
| 1/12/2000 | | | | | | | |
| Hydrocarbon Oil and Grease | - | < 1,000 | < 1,000 | < 1,000 | - | - | - |
| Tetrachloroethene | 0.8 | < 1.0 | < 100 | < 50 | - | - | - |
| Chloroform | 3.2 | < 1.0 | < 100 | < 50 | - | - | - |
| 1,2-Dichloroethane | <0.50 | 8.8 | 120 | 140 | - | - | - |
| Acetone | - | - | 25,000 | 6,400 | - | - | - |
| Naphthalene | - | - | 550 | 540 | - | - | - |
| Isopropylbenzene | - | - | 120 | 89 | - | - | - |
| Other VOCs | < 0.5 - < 5.0 | < 1.0 - < 4.0 | < 100 - < 10,000 | < 50 - < 5,000 | - | - | - |

# TABLE THREE
## Groundwater Analytical Results
## Oil & Grease and Volatile Organic Compounds
## All results are in parts per billion

| Date Sampled & Compound Analyzed | MW-1 | MW-2 | MW-3 | MW-4 | MW-5 | MW-6 | MW-7 |
|---|---|---|---|---|---|---|---|
| 4/24/2000 | | | | | | | |
| Hydrocarbon Oil and Grease | - | <1,000 | 4,100 | < 1,000 | - | - | - |
| 1,2-Dichloroethane | < 0.5 | 5.9 | < 1,000 | < 250 | - | - | - |
| Naphthalene | - | - | 3,800 | 590 | - | - | - |
| Isopropylbenzene | - | - | 1,200 | < 250 | - | - | - |
| Other VOCs | < 0.5 - < 5.0 | < 5.0 - < 20 | 1,000 - < 100,000 | < 250 - < 25,000 | - | - | - |
| 7/20/2000 | | | | | | | |
| Hydrocarbon Oil and Grease | - | < 1,000 | | < 1,000 | - | - | - |
| Tetrachloroethene | 0.59 | < 5.0 | FREE | < 200 | - | - | - |
| Chloroform | 2.1 | < 5.0 | PRODUCT | < 200 | - | - | - |
| 1,2-Dichloroethane | < 0.5 | 6.7 | --- | < 200 | - | - | - |
| Acetone | - | - | NOT | < 20,000 | - | - | - |
| Naphthalene | - | - | SAMPLED | 730 | - | - | - |
| Other VOCs | < 0.5 - < 20 | < 5.0 - < 20 | | < 250 - < 20,000 | - | - | - |
| 10/24/2000 | | | FREE | | | | |
| Hydrocarbon Oil and Grease | - | < 1,000 | PRODUCT | < 1,000 | - | - | - |
| Tetrachloroethene | < 0.5 | < 5.0 | --- | < 250 | - | - | - |
| Chloroform | 1.0 | < 5.0 | NOT | < 250 | - | - | - |
| Other VOCs | < 0.5 - < 20 | < 5.0 - < 20 | SAMPLED | < 250 - < 25,000 | - | - | - |
| 1/18/2001 | | | FREE | | | | |
| Hydrocarbon Oil and Grease | - | 2,100 | PRODUCT | 1,300 | - | - | - |
| Tetrachloroethene | 1.3 | < 5.0 | --- | < 250 | - | - | - |
| Chloroform | 6.4 | < 5.0 | NOT | < 250 | - | - | - |
| Other VOCs | < 0.5 - < 20 | < 5.0 - < 20 | SAMPLED | < 250 - < 25,000 | - | - | - |
| 4/5/2001 | | | | | | | |
| Hydrocarbon Oil and Grease | - | < 1.0 | FREE | 1,100.0 | - | - | - |
| Tetrachloroethene | < 0.5 | 1.1 | PRODUCT | < 50 | - | - | - |
| 1,2 dichloroethane | < 0.5 | 4.6 | --- | < 50 | - | - | - |
| Trichloroethene | < 0.5 | 0.58 | NOT | < 50 | - | - | - |
| Naphthalene | - | - | --- | 320 | - | - | - |
| Other VOCs | < 0.5 - < 2.0 | < 5.0 - < 20 | SAMPLED | < 50 - < 5,000 | - | - | - |
| 7/17/2001 | | | | | | | |
| Hydrocarbon Oil and Grease | - | < 500 | FREE | < 500 | - | - | - |
| Tetrachloroethene | - | - | PRODUCT | - | - | - | - |
| 1,2 dichloroethane | < 0.5 | < 50 | --- | 69.0 | - | - | - |
| Trichloroethene | - | - | NOT | - | - | - | - |
| Naphthalene | - | - | --- | - | - | - | - |
| Other VOCs | - | - | SAMPLED | - | - | - | - |

# TABLE THREE

## Groundwater Analytical Results
## Oil & Grease and Volatile Organic Compounds
## All results are in parts per billion

| Date Sampled & Compound Analyzed | MW-1 | MW-2 | MW-3 | MW-4 | MW-5 | MW-6 | MW-7 |
|---|---|---|---|---|---|---|---|
| 10/25/2001 | | | | | | | |
| Hydrocarbon Oil and Grease | - | < 5,000 | FREE | < 5,000 | - | - | - |
| 1,2 dichloroethane | - | < 50 | PRODUCT | 72 | - | - | - |
| 1,2 dibromoethane | - | < 50 | NOT | < 50 | - | - | - |
| Other VOCs | - | - | SAMPLED | --- | - | - | - |
| 1/22/2002 | | | | | | | |
| Hydrocarbon Oil and Grease | - | < 5,000 | FREE | < 5,000 | - | - | - |
| 1,2 dichloroethane | - | < 50 | PRODUCT | < 50 | - | - | - |
| 1,2 dibromoethane | - | < 50 | NOT | < 50 | - | - | - |
| Other VOCs | - | - | SAMPLED | --- | - | - | - |
| 6/11/2002 | | | | | | | |
| Oil and Grease | - | 1,100 | FREE | - | < 1,000 | < 1,000 | - |
| 1,2 dichloroethane | - | < 50 | PRODUCT | - | < 0.5 | < 0.5 | - |
| 1,2 dibromoethane | - | < 50 | NOT | - | < 0.5 | < 0.5 | - |
| Other VOCs | - | - | SAMPLED | - | - | - | - |
| 6/25/2002 | | | | | | | |
| Oil and Grease | - | - | FREE | 1,400 | - | - | < 1,000 |
| 1,2 dichloroethane | - | - | PRODUCT | < 100 | - | - | < 20 |
| 1,2 dibromoethane | - | - | NOT | < 100 | - | - | < 20 |
| Other VOCs | - | - | SAMPLED | - | - | - | - |
| 9/17/2002 | | | | | | | |
| Oil and Grease | - | < 1,000 | FREE | < 1,000 | < 1,000 | < 1,000 | < 1,000 |
| 1,2 dichloroethane | - | < 20 | PRODUCT | < 100 | < 0.50 | < 0.50 | < 20 |
| 1,2 dibromoethane | - | < 20 | NOT | < 100 | < 0.50 | < 0.50 | < 20 |
| Other VOCs | - | - | SAMPLED | - | - | - | - |
| 12/18/2002 | | | | | | | |
| Oil and Grease | - | 1,200 | FREE | < 1,000 | < 1,000 | < 1,000 | CAR PARKED |
| 1,2 dichloroethane | - | < 10 | PRODUCT | < 50 | < 0.50 | < 0.50 | OVER WELL |
| 1,2 dibromoethane | - | < 10 | NOT | < 50 | < 0.50 | < 0.50 | NOT |
| Other VOCs | - | -- | SAMPLED | - | - | - | SAMPLED |

# APPENDIX A

Well Sampling Field Log

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# WELL SAMPLING FIELD LOG

Project Name and Address: Lim
Job #: 2808 Date of sampling: 12/18/02
Well Name: MW-1 Sampled by: ep
Total depth of well (feet): 26.78 Well diameter (inches): 2
Depth to water before sampling (feet): 16.14
Thickness of floating product if any: -
Depth of well casing in water (feet): 10.64
Number of gallons per well casing volume (gallons): 1.7
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 5
Equipment used to purge the well: bailer
Time Evacuation Began: 945 Time Evacuation Finished: 1000
Approximate volume of groundwater purged: 5
Did the well go dry?: no After how many gallons: -
Time samples were collected: 1005
Depth to water at time of sampling: -
Percent recovery at time of sampling: -
Samples collected with: bailer
Sample color: clear/brown Odor: slight
Description of sediment in sample: silt

## CHEMICAL DATA

| Volume Purged | Temp | pH | Conductivity |
|---|---|---|---|
| 1 | 72.3 | 6.41 | 810 |
| 2 | 70.8 | 6.38 | 796 |
| 3 | 70.1 | 6.32 | 792 |
| | | | |
| | | | |

## SAMPLES COLLECTED

| Sample | # of containers | Volume & type container | Pres | Iced? | Analysis |
|---|---|---|---|---|---|
| MW-1 | 5 | 40 ml VOA | x | x | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

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# WELL SAMPLING FIELD LOG

Project Name and Address: Lim
Job #: 2808 Date of sampling: 12/18/02
Well Name: MW-2 Sampled by: RP
Total depth of well (feet): 26.78 Well diameter (inches): 2
Depth to water before sampling (feet): 14.88
Thickness of floating product if any: —
Depth of well casing in water (feet): 11.90
Number of gallons per well casing volume (gallons): 1.9
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 5.7
Equipment used to purge the well: bailer
Time Evacuation Began: 815 Time Evacuation Finished: 835
Approximate volume of groundwater purged: 6
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 840
Depth to water at time of sampling: —
Percent recovery at time of sampling: —
Samples collected with: bailer
Sample color: clear/gray Odor: moderate
Description of sediment in sample: silt

## CHEMICAL DATA

| Volume Purged | Temp | pH | Conductivity |
|---|---|---|---|
| 1 | 65.2 | 6.24 | 864 |
| 2 | 63.7 | 6.28 | 863 |
| 3 | 63.1 | 6.31 | 862 |
| | | | |
| | | | |

## SAMPLES COLLECTED

| Sample | # of containers | Volume & type container | Pres | Iced? | Analysis |
|---|---|---|---|---|---|
| MW-2 | 5 | 40 ml VOA | X | X | |
| | 1 | 1 liter amber | | X | |
| | | | | | |
| | | | | | |
| | | | | | |

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# WELL SAMPLING FIELD LOG

Project Name and Address: Lim
Job #: a
Date of sampling: _____
Well Name: MW-3
Sampled by: _____
Total depth of well (feet): _____
Well diameter (inches): _____
Depth to water before sampling (feet): 14.95 15.42
Thickness of floating product if any: _____
Depth of well casing in water (feet): _____
Number of gallons per well casing volume (gallons): _____
Number of well casing volumes to be removed: _____
Req'd volume of groundwater to be purged before sampling (gallons): _____
Equipment used to purge the well: _____
Time Evacuation Began: _____
Time Evacuation Finished: _____
Approximate volume of groundwater purged: _____
Did the well go dry?: _____
After how many gallons: _____
Time samples were collected: _____
Depth to water at time of sampling: _____
Percent recovery at time of sampling: _____
Samples collected with: _____
Sample color: _____
Odor: _____
Description of sediment in sample: _____

Sampled

## CHEMICAL DATA

| Volume Purged | Temp | pH | Conductivity |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

## SAMPLES COLLECTED

| Sample | # of containers | Volume & type container | Pres | Iced? | Analysis |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

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# WELL SAMPLING FIELD LOG

Project Name and Address: Lin
Job #: 2808 Date of sampling: 12/18/02
Well Name: MW-4 Sampled by: EP
Total depth of well (feet): 21.90 Well diameter (inches): _____
Depth to water before sampling (feet): 15.20
Thickness of floating product if any: -
Depth of well casing in water (feet): 6.6
Number of gallons per well casing volume (gallons): 1
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 3
Equipment used to purge the well: bailer
Time Evacuation Began: 900 Time Evacuation Finished: 910
Approximate volume of groundwater purged: 3
Did the well go dry?: no After how many gallons: -
Time samples were collected: 915
Depth to water at time of sampling: -
Percent recovery at time of sampling: -
Samples collected with: bailer
Sample color: cloudy gray Odor: moderate
Description of sediment in sample: silt

## CHEMICAL DATA

| Volume Purged | Temp | pH | Conductivity |
|---|---|---|---|
| 1 | 69.1 | 6.52 | 824 |
| 2 | 68.2 | 6.57 | 826 |
| 3 | 68.4 | 6.59 | 826 |
| | | | |
| | | | |

## SAMPLES COLLECTED

| Sample | # of containers | Volume & type container | Pres | Iced? | Analysis |
|---|---|---|---|---|---|
| MW-4 | 5 | 40 ml VOA | * | * | |
| | 1 | 1 liter amber | | * | |
| | | | | | |
| | | | | | |
| | | | | | |

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# WELL SAMPLING FIELD LOG

Project Name and Address: Lim
Job #: 2808 Date of sampling: 12/18/02
Well Name: MW-5 Sampled by: ep
Total depth of well (feet): 29.58 Well diameter (inches): 2
Depth to water before sampling (feet): 15.08
Thickness of floating product if any: —
Depth of well casing in water (feet): 14.50
Number of gallons per well casing volume (gallons): 2.32
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 7
Equipment used to purge the well: bailer
Time Evacuation Began: 745 Time Evacuation Finished: 805
Approximate volume of groundwater purged: 7
Did the well go dry?: No After how many gallons: —
Time samples were collected: 810
Depth to water at time of sampling: —
Percent recovery at time of sampling: —
Samples collected with: bailer
Sample color: clear/brown Odor: none
Description of sediment in sample: silt

## CHEMICAL DATA

| Volume Purged | Temp | pH | Conductivity |
|---|---|---|---|
| 1 | 67.3 | 6.14 | 723 |
| 2 | 66.9 | 6.20 | 713 |
| 3 | 66.8 | 6.23 | 715 |
| | | | |
| | | | |

## SAMPLES COLLECTED

| Sample | # of containers | Volume & type container | Pres | Iced? | Analysis |
|---|---|---|---|---|---|
| MW-5 | 5 | 40 ml VOA | X | X | |
| | 1 | 1 liter amber | | X | |
| | | | | | |
| | | | | | |
| | | | | | |

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# WELL SAMPLING FIELD LOG

Project Name and Address: Lin
Job #: 2808 Date of sampling: 12/18/12
Well Name: MW-6 Sampled by: EP
Total depth of well (feet): 29.48 Well diameter (inches): 2
Depth to water before sampling (feet): 15.43
Thickness of floating product if any: -
Depth of well casing in water (feet): 14.05
Number of gallons per well casing volume (gallons): 2.2
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 6.6
Equipment used to purge the well: bailer
Time Evacuation Began: 715 Time Evacuation Finished: 735
Approximate volume of groundwater purged: 6.5
Did the well go dry?: no After how many gallons: -
Time samples were collected: 740
Depth to water at time of sampling: -
Percent recovery at time of sampling: -
Samples collected with: bailer
Sample color: clear/brown Odor: none
Description of sediment in sample: silt

## CHEMICAL DATA

| Volume Purged | Temp | pH | Conductivity |
|---|---|---|---|
| 1 | 62.3 | 6.46 | 498 |
| 2 | 62.0 | 6.34 | 500 |
| 3 | 61.8 | 6.29 | 502 |
| | | | |
| | | | |

## SAMPLES COLLECTED

| Sample | # of containers | Volume & type container | Pres | Iced? | Analysis |
|---|---|---|---|---|---|
| MW-6 | 5 | 40 ml VOA | x | x | |
| | 1 | 1 liter amber | | x | |
| | | | | | |
| | | | | | |
| | | | | | |

# APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation

KIFF ANALYTICAL LLC

Report Number : 30519
Date : 12/30/2002

Eric Paddleford
Aqua Science Engineers, Inc.
208 West El Pintado Rd.
Danville, CA 94526

Subject : 5 Water Samples
Project Name : Lim Property
Project Number : 2808

Dear Mr. Paddleford,

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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 30519
Date : 12/30/2002

Subject : 5 Water Samples
Project Name : Lim Property
Project Number : 2808

# Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for samples MW-2 and MW-4.

Approved By: Joel Kiff

2795 2nd St, Suite 300 Davis, CA 95616 916-297-4800

KIFF ANALYTICAL LLC

Report Number : 30519
Date : 12/30/2002

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

Sample : **MW-1** Matrix : Water Lab Number : 30519-01
Sample Date :12/18/2002

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **Toluene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **Ethylbenzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **Total Xylenes** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **Methyl-t-butyl ether (MTBE)** | **< 5.0** | 5.0 | ug/L | EPA 8260B | 12/20/2002 |
| **TPH as Gasoline** | **170** | 50 | ug/L | EPA 8260B | 12/20/2002 |
| Toluene - d8 (Surr) | 101 | | % Recovery | EPA 8260B | 12/20/2002 |
| 4-Bromofluorobenzene (Surr) | 100 | | % Recovery | EPA 8260B | 12/20/2002 |
| **TPH as Diesel** | **320** | 50 | ug/L | M EPA 8015 | 12/22/2002 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 30519
Date : 12/30/2002

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

Sample : **MW-2** Matrix : Water Lab Number : 30519-02
Sample Date :12/18/2002

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **2900** | 10 | ug/L | EPA 8260B | 12/22/2002 |
| **Toluene** | **3000** | 10 | ug/L | EPA 8260B | 12/22/2002 |
| **Ethylbenzene** | **1800** | 10 | ug/L | EPA 8260B | 12/22/2002 |
| **Total Xylenes** | **7600** | 10 | ug/L | EPA 8260B | 12/22/2002 |
| **Methyl-t-butyl ether (MTBE)** | **22** | 10 | ug/L | EPA 8260B | 12/22/2002 |
| **TPH as Gasoline** | **46000** | 1000 | ug/L | EPA 8260B | 12/22/2002 |
| **1,2-Dichloroethane** | **< 10** | 10 | ug/L | EPA 8260B | 12/22/2002 |
| **1,2-Dibromoethane** | **< 10** | 10 | ug/L | EPA 8260B | 12/22/2002 |
| Toluene - d8 (Surr) | 103 | | % Recovery | EPA 8260B | 12/22/2002 |
| 4-Bromofluorobenzene (Surr) | 99.6 | | % Recovery | EPA 8260B | 12/22/2002 |
| Dibromofluoromethane (Surr) | 99.9 | | % Recovery | EPA 8260B | 12/22/2002 |
| 1,2-Dichloroethane-d4 (Surr) | 101 | | % Recovery | EPA 8260B | 12/22/2002 |
| **TPH as Diesel** | **< 6000** | 6000 | ug/L | M EPA 8015 | 12/22/2002 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 30519
Date : 12/30/2002

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

Sample : **MW-4** Matrix : Water Lab Number : 30519-03
Sample Date :12/18/2002

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **8000** | 50 | ug/L | EPA 8260B | 12/22/2002 |
| **Toluene** | **20000** | 50 | ug/L | EPA 8260B | 12/22/2002 |
| **Ethylbenzene** | **2600** | 50 | ug/L | EPA 8260B | 12/22/2002 |
| **Total Xylenes** | **12000** | 50 | ug/L | EPA 8260B | 12/22/2002 |
| **Methyl-t-butyl ether (MTBE)** | **< 50** | 50 | ug/L | EPA 8260B | 12/22/2002 |
| **TPH as Gasoline** | **97000** | 5000 | ug/L | EPA 8260B | 12/22/2002 |
| **1,2-Dichloroethane** | **< 50** | 50 | ug/L | EPA 8260B | 12/22/2002 |
| **1,2-Dibromoethane** | **< 50** | 50 | ug/L | EPA 8260B | 12/22/2002 |
| Toluene - d8 (Surr) | 104 | | % Recovery | EPA 8260B | 12/22/2002 |
| 4-Bromofluorobenzene (Surr) | 101 | | % Recovery | EPA 8260B | 12/22/2002 |
| Dibromofluoromethane (Surr) | 99.8 | | % Recovery | EPA 8260B | 12/22/2002 |
| 1,2-Dichloroethane-d4 (Surr) | 96.8 | | % Recovery | EPA 8260B | 12/22/2002 |
| **TPH as Diesel** | **< 4000** | 4000 | ug/L | M EPA 8015 | 12/22/2002 |

Joel Kiff

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 30519
Date : 12/30/2002

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

Sample : **MW-5** Matrix : Water Lab Number : 30519-04
Sample Date :12/18/2002

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **Toluene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **Ethylbenzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **Total Xylenes** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **Methyl-t-butyl ether (MTBE)** | **1.8** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **TPH as Gasoline** | **< 50** | 50 | ug/L | EPA 8260B | 12/20/2002 |
| **1,2-Dichloroethane** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **1,2-Dibromoethane** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| Toluene - d8 (Surr) | 99.1 | | % Recovery | EPA 8260B | 12/20/2002 |
| 4-Bromofluorobenzene (Surr) | 99.0 | | % Recovery | EPA 8260B | 12/20/2002 |
| Dibromofluoromethane (Surr) | 107 | | % Recovery | EPA 8260B | 12/20/2002 |
| 1,2-Dichloroethane-d4 (Surr) | 103 | | % Recovery | EPA 8260B | 12/20/2002 |
| **TPH as Diesel** | **140** | 50 | ug/L | M EPA 8015 | 12/22/2002 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 30519
Date : 12/30/2002

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

Sample : **MW-6** Matrix : Water Lab Number : 30519-05
Sample Date :12/18/2002

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **Toluene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **Ethylbenzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **Total Xylenes** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **Methyl-t-butyl ether (MTBE)** | **0.90** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **TPH as Gasoline** | **< 50** | 50 | ug/L | EPA 8260B | 12/20/2002 |
| **1,2-Dichloroethane** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| **1,2-Dibromoethane** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| Toluene - d8 (Surr) | 95.6 | | % Recovery | EPA 8260B | 12/20/2002 |
| 4-Bromofluorobenzene (Surr) | 101 | | % Recovery | EPA 8260B | 12/20/2002 |
| Dibromofluoromethane (Surr) | 109 | | % Recovery | EPA 8260B | 12/20/2002 |
| 1,2-Dichloroethane-d4 (Surr) | 102 | | % Recovery | EPA 8260B | 12/20/2002 |
| **TPH as Diesel** | **< 50** | 50 | ug/L | M EPA 8015 | 12/22/2002 |

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 30519

Date : 12/30/2002

**QC Report : Method Blank Data**

Project Name : **Lim Property**

Project Number : **2808**

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| TPH as Diesel | < 50 | 50 | ug/L | M EPA 8015 | 12/21/2002 |
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 12/24/2002 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 12/24/2002 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 12/24/2002 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 12/24/2002 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 12/24/2002 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 12/24/2002 |
| 1,2-Dichloroethane | < 0.50 | 0.50 | ug/L | EPA 8260B | 12/24/2002 |
| 1,2-Dibromoethane | < 0.50 | 0.50 | ug/L | EPA 8260B | 12/24/2002 |
| Toluene - d8 (Surr) | 103 | | % | EPA 8260B | 12/24/2002 |
| 4-Bromofluorobenzene (Surr) | 101 | | % | EPA 8260B | 12/24/2002 |
| Dibromofluoromethane (Surr) | 101 | | % | EPA 8260B | 12/24/2002 |
| 1,2-Dichloroethane-d4 (Surr) | 104 | | % | EPA 8260B | 12/24/2002 |
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 12/20/2002 |
| 1,2-Dichloroethane | < 0.50 | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| 1,2-Dibromoethane | < 0.50 | 0.50 | ug/L | EPA 8260B | 12/20/2002 |
| Toluene - d8 (Surr) | 105 | | % | EPA 8260B | 12/20/2002 |
| 4-Bromofluorobenzene (Surr) | 101 | | % | EPA 8260B | 12/20/2002 |
| Dibromofluoromethane (Surr) | 104 | | % | EPA 8260B | 12/20/2002 |
| 1,2-Dichloroethane-d4 (Surr) | 100 | | % | EPA 8260B | 12/20/2002 |

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 30519

**QC Report : Matrix Spike/ Matrix Spike Duplicate**

Date : 12/30/2002

Project Name : **Lim Property**

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 as Diesel | Blank | <50 | 1000 | 1000 | 825 | 833 | ug/L | M EPA 8015 | 12/21/02 | 82.5 | 83.3 | 1.01 | 70-130 | 25 |
| Benzene | 30513-06 | <0.50 | 20.0 | 19.7 | 19.0 | 19.2 | ug/L | EPA 8260B | 12/22/02 | 95.4 | 97.2 | 1.90 | 70-130 | 25 |
| Toluene | 30513-06 | <0.50 | 20.0 | 19.7 | 18.6 | 18.6 | ug/L | EPA 8260B | 12/22/02 | 93.2 | 94.1 | 0.881 | 70-130 | 25 |
| Tert-Butanol | 30513-06 | <5.0 | 99.8 | 98.6 | 99.9 | 102 | ug/L | EPA 8260B | 12/22/02 | 100 | 104 | 3.46 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 30513-06 | 0.81 | 20.0 | 19.7 | 18.6 | 18.1 | ug/L | EPA 8260B | 12/22/02 | 89.4 | 87.6 | 2.03 | 70-130 | 25 |
| Benzene | 30519-01 | <0.50 | 40.0 | 40.0 | 39.7 | 39.6 | ug/L | EPA 8260B | 12/20/02 | 99.2 | 98.9 | 0.252 | 70-130 | 25 |
| Toluene | 30519-01 | <0.50 | 40.0 | 40.0 | 39.0 | 39.6 | ug/L | EPA 8260B | 12/20/02 | 97.6 | 99.1 | 1.52 | 70-130 | 25 |
| Tert-Butanol | 30519-01 | <5.0 | 200 | 200 | 202 | 198 | ug/L | EPA 8260B | 12/20/02 | 101 | 99.2 | 1.90 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 30519-01 | <0.50 | 40.0 | 40.0 | 42.0 | 42.0 | ug/L | EPA 8260B | 12/20/02 | 105 | 105 | 0.0476 | 70-130 | 25 |

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 30519

**QC Report : Laboratory Control Sample (LCS)**

Date : 12/30/2002

Project Name : **Lim Property**

Project Number : **2808**

| Parameter | Spike Level | Units | Analysis Method | Date Analyzed | LCS Percent Recov. | LCS Percent Recov. Limit |
|---|---|---|---|---|---|---|
| Benzene | 40.0 | ug/L | EPA 8260B | 12/22/02 | 97.8 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 12/22/02 | 93.3 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 12/22/02 | 94.5 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 12/22/02 | 75.1 | 70-130 |
| | | | | | | |
| Benzene | 40.0 | ug/L | EPA 8260B | 12/20/02 | 98.2 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 12/20/02 | 95.3 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 12/20/02 | 101 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 12/20/02 | 108 | 70-130 |

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Calscience
Environmental
Laboratories, Inc.

December 30, 2002

Joel Kiff
Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Subject: **Calscience Work Order No.: 02-12-1556**
**Client Reference: Lim Property**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/21/2002 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Michael J. Crisostomo
Quality Assurance Manager

Calscience Environmental Laboratories, Inc.

# ANALYTICAL REPORT

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: 12/21/02
Work Order No: 02-12-1556
Preparation: N/A
Method: EPA 413.1

Project: Lim Property



| Client Sample Number | Lab Sample Number | Date Collected | Matrix | Date Prepared | Date Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|
| MW-2 | 02-12-1556-1 | 12/18/02 | Aqueous | N/A | 12/29/02 | 21229OGB1 |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| Oil and Grease | 1.2 | 1.0 | 1 | | mg/L |

| Client Sample Number | Lab Sample Number | Date Collected | Matrix | Date Prepared | Date Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|
| MW-4 | 02-12-1556-3 | 12/18/02 | Aqueous | N/A | 12/29/02 | 21229OGB1 |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| Oil and Grease | ND | 1.0 | 1 | | mg/L |

| Client Sample Number | Lab Sample Number | Date Collected | Matrix | Date Prepared | Date Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|
| MW-5 | 02-12-1556-5 | 12/18/02 | Aqueous | N/A | 12/29/02 | 21229OGB1 |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| Oil and Grease | ND | 1.0 | 1 | | mg/L |

| Client Sample Number | Lab Sample Number | Date Collected | Matrix | Date Prepared | Date Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|
| MW-6 | 02-12-1556-4 | 12/18/02 | Aqueous | N/A | 12/29/02 | 21229OGB1 |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| Oil and Grease | ND | 1.0 | 1 | | mg/L |

| Client Sample Number | Lab Sample Number | Date Collected | Matrix | Date Prepared | Date Analyzed | QC Batch ID |
|---|---|---|---|---|---|---|
| Method Blank | 099-05-081-1,286 | N/A | Aqueous | N/A | 12/29/02 | 21229OGB1 |

| Parameter | Result | RL | DF | Qual | Units |
|---|---|---|---|---|---|
| Oil and Grease | ND | 1.0 | 1 | | mg/L |

RL - Reporting Limit, DF - Dilution Factor, Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

# GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 02-12-1556

| Qualifier | Definition |
|---|---|
| ND | Not detected at indicated reporting limit. |

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 02-12-1556

Cooler 1 of 1

# SAMPLE RECEIPT FORM

CLIENT: KIFF DATE: 12/21/02

**TEMPERATURE – SAMPLES RECEIVED BY:**

**CALSCIENCE COURIER:**

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.
_____ °C Temperature blank.

**LABORATORY (Other than Calscience Courier):**

2 °C Temperature blank.
_____ °C IR thermometer.
_____ Ambient temperature.

Initial: SK

**CUSTODY SEAL INTACT:**

Sample(s): _____ Cooler: ✓ No (Not Intact): _____ Not Applicable (N/A): _____

Initial: SK

**SAMPLE CONDITION:**

| | Yes | No | N/A |
|---|---|---|---|
| Chain-Of-Custody document(s) received with samples | ✓ | | |
| Sample container label(s) consistent with custody papers | ✓ | | |
| Sample container(s) intact and good condition | | | |
| Correct containers for analyses requested | ✓ | | |
| Proper preservation noted on sample label(s) | ✓ | | |
| VOA vial(s) free of headspace | | | ✓ |
| Tedlar bag(s) free of condensation | | | ✓ |

Initial: SK

**COMMENTS:**

12-1556

KIFF ANALYTICAL LLC
2795 Second Street, Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4808

Cal Science Environmental
7440 Lincoln Way
Garden Grove, CA 92841
714-895-5494

Lab No. _____ Page 1 of 1

# Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF to): Joel Kiff

EDF Report? ___ Yes _X_ No

Company/Address: Kiff Analytical, LLC

Recommended but not mandatory to complete this section:

Sampling Company Log Code:

Phone No.: FAX No.:

Global ID:

Project Number: 2808 P.O. No.: 30519

EDF Deliverable to (Email Address):

Project Name: Lim Property

E-mail address: inbox@kiffanalytical.com

Project Address:

| Sample Designation | Sampling Date | Sampling Time | Container: Glass Jar | Container: Poly | Container: Amber | Container: Sleeve | Preservative: HCl | Preservative: HNO3 | Preservative: ICE | Preservative: NONE | Matrix: WATER | Matrix: SOIL | Analysis Request: Oil and Grease | Date Due: December 31, 2002 | For Lab Use Only |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-2 | 12/18/02 | 840 | | | 1 | | | | X | X | X | | X | X | |
| MW-4 | 12/18/02 | 915 | | | 1 | | | | X | X | X | | X | X | |
| MW-5 | 12/18/02 | 810 | | | 1 | | | | X | X | X | | X | X | |
| MW-6 | 12/18/02 | 740 | | | 1 | | | | X | X | X | | X | X | |

| Relinquished by: | Date | Time | Received by: |
|---|---|---|---|
| Kiff Analytical / Kris A. Kuniga | 12/20/02 | 1845 | Ultra EX |
| Relinquished by: | Date | Time | Received by: |
| Relinquished by: Ultra EX | Date 12/21/02 | Time 1200 | Received by Laboratory: |

Remarks:

Bill to:

**KIFF ANALYTICAL LLC**

2795 2nd Street, Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4808

Lab No. 30519 Page 1 of 1

# Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Erik Reddlefold
Company/Address: ASE, Danville, CA
Phone No.: 925-820-9391 FAX No.:
Project Number: 2808 P.O. No:
Project Name: Lin Property
Project Address: 250 8th Street Oakland, CA

California EDF Report? ☐ Yes ☐ No
Recommended but not mandatory to complete this section:
Sampling Company Log Code:
Global ID:
EDF Deliverable To (Email Address):
Sampler Signature: E Reddlefold

| Sample Designation | Sampling Date | Sampling Time | Container: 40 ml VOA | Container: SLEEVE | Container: amber | Preservative: HCl | Preservative: $HNO_3$ | Preservative: ICE | Preservative: NONE | Matrix: WATER | Matrix: SOIL | Analysis Request: BTEX (8021B) | BTEX/TPH Gas/MTBE (8021B/M8015) | TPH as Diesel (M8015) | TPH as Motor Oil (M8015) | TPH Gas/BTEX/MTBE (8260B) | 5 Oxygenates/TPH Gas/BTEX (8260B) | 7 Oxygenates/TPH Gas/BTEX (8260B) | 5 Oxygenates (8260B) | 7 Oxygenates (8260B) | Lead Scav. (1,2 DCA & 1,2 EDB - 8260B) | EPA 8260B (Full List) | Volatile Halocarbons (EPA 8260B) | Lead (7421/239.2) TOTAL (X) W.E.T. (X) | Oil and grease | TAT: 12 hr/24 hr/48 hr/72 hr/1 wk | For Lab Use Only |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ✓ MW-1 | 12/18/02 | 1005 | 5 | | 1 | X | | X | | X | | | X | X | | | | | | | X | | | | X | | -01 |
| ✓ MW-2 | | 840 | | | X | X | | X | | X | | | X | X | | | | | | | X | | | | X | | -02 |
| ✓ MW-4 | | 915 | | | X | X | | X | | X | | | X | X | | | | | | | X | | | | X | | -03 |
| ✓ MW-5 | | 810 | | | X | X | | X | | X | | | X | X | | | | | | | X | | | | X | | -04 |
| ✓ MW-6 | ↓ | 740 | ↓ | | X | X | | X | | X | | | X | X | | | | | | | X | | | | X | | -05 |

| Relinquished by: | Date | Time | Received by: |
|---|---|---|---|
| E Reddlefold | | | |
| Relinquished by: | Date | Time | Received by: |
| | | | |
| Relinquished by: | Date | Time | Received by Laboratory: |
| | 12/20/02 | 0934 | John Cuttle / K Ardlefold |

Remarks:

Bill to:

*Distribution: White - Lab, Yellow - File, Pink - Originator*

Forms/coc 121001.fh9