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Alameda County
Environmental Health

August 25, 2007

# QUARTERLY GROUNDWATER MONITORING REPORT
# AUGUST 2007 GROUNDWATER SAMPLING
# ASE JOB NO. 3412

at
Yee Property
726 Harrison Street
Oakland, CA 94602

Prepared by:
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## 1.0 INTRODUCTION

Site Location (Site), See Figure 1
Yee Property
(Previously Former Chan's Shell Station)
726 Harrison Street
Oakland, CA 94602
(510) 444-6583

Responsible Party
Peter Yee
1000 San Antonio Avenue
Alameda, CA 94501

Environmental Consulting Firm
Aqua Science Engineers, Inc. (ASE)
55 Oak Court, Suite 220
Danville, CA 94526
Contact: Robert Kitay, Senior Geologist
(925) 820-9391

Agency Review
Alameda County Health
Care Services Agency (ACHCSA)
1131 Harbor Bay Pkwy
Suite 250
Alameda, CA 94502
Contact: Mr. Steven Plunkett
(510) 567-6700

California Regional Water
Quality Control Board (RWQCB)
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612
Contact: Ms. Betty Graham
(510) 622-2433

The following is a report detailing the results of the August 2007 quarterly groundwater sampling at the Yee Property, previously referred to as the former Chan's Shell Station. This sampling was conducted as required by the ACHCSA and RWQCB. ASE has prepared this report on behalf of Peter Yee, the current responsible party, who purchased the property from Kin Chan. This report is intended to supplement the ASE report: "Report of Soil and Groundwater Assessment" dated January 8, 1999.

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## 2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On August 2, 2007, ASE measured the depth to groundwater in all five site monitoring wells using an electric water level sounder. The surface of the groundwater was also checked for the presence of free-floating hydrocarbons or sheen. No free-floating hydrocarbons were observed in any site well. ASE coordinated this groundwater sampling with Conestoga-Rovers and Associates, Inc., (CRA), who is investigating the adjacent property located at 706 Harrison Street, referred to in this report as the former ARCO station, and groundwater elevation levels were measured on the same day. Groundwater elevation data for both sites are presented in Tables One and Two. A groundwater potentiometric surface map illustrating groundwater elevation contours is presented as Figure 2. The groundwater flow direction below the site is generally to the south at a gradient of 0.009 feet/foot.

## 3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

On August 2, 2007, ASE collected groundwater samples from all five monitoring wells. Prior to sampling, each well was purged of three well casing volumes of groundwater using disposable polyethylene bailers. Petroleum hydrocarbon odors were noted during the purging and sampling of monitoring wells MW-1, MW-3, MW-4, and MW-5. The parameters pH, temperature, and conductivity were monitored during the well purging, and samples were not collected until these parameters stabilized. Groundwater samples were collected from each well using disposable polyethylene bailers and were decanted from the bottom of the bailers using low-flow emptying devices into 40-ml volatile organic analysis (VOA) vials, pre-preserved with hydrochloric acid. The samples were capped without headspace, labeled, and placed in coolers with wet ice for transport to Kiff Analytical, LLC, (KIFF) of Davis, California under appropriate chain-of-custody documentation. Well sampling field logs are presented in Appendix A. Well sampling purge water was contained in a sealed and labeled 55-gallon steel drum for temporary storage until off-site disposal can be arranged. See Appendix A for copies of the well sampling field logs.

All groundwater samples were analyzed by KIFF for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene and total xylenes (collectively known as BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8260B. The analytical results for this and previous sampling periods are presented in Table Three. The certified analytical report and chain-of-custody documentation are included as Appendix B.

## 4.0 CONCLUSIONS

- Concentrations of TPH-G, BTEX and MTBE in groundwater samples collected from monitoring well MW-1 increased from the previous quarter.
- The only hydrocarbon detected in groundwater samples collected from monitoring well MW-2 was MTBE at 2.2 parts per billion (ppb).
- Concentrations of MTBE decreased significantly in groundwater samples collected from monitoring well MW-3 and are at a historic low.

- Concentrations of MTBE increased in groundwater samples collected from monitoring well MW-4.
- Concentrations of TPH-G and BTEX decreased in groundwater samples collected from monitoring well MW-5, while MTBE concentrations increased in the same sample.

The following hydrocarbon concentrations in groundwater remain in excess of Environmental Screening Levels (ESLs) 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 February 2005.

- Monitoring well MW-1 contained concentrations of TPH-G, BTEX and MTBE in excess of the ESLs.
- Monitoring wells MW-3 and contained concentrations of TPH-G and MTBE in excess of the ESLs.
- Monitoring well MW-4 contained concentrations of MTBE in excess of the ESLs.
- Monitoring well MW-5 contained concentrations of TPH-G, BTEX and MTBE in excess of the ESLs.

## 5.0 RECOMMENDATION

ASE recommends continued groundwater monitoring on a quarterly basis. The next groundwater sampling is scheduled for October 2007.

Additionally, ASE has received approval from the ACHCSA for a workplan to conduct an in-situ pilot study using chemical oxidation of hydrocarbons in the soil and groundwater beneath the site. In a pre-approval letter from the California Underground Storage Tank Cleanup Fund (USTCF), the pilot study costs were approved. However, the technology was questioned by the USTCF based on their belief of a co-mingled plume situation. The USTCF voiced their concern with the ACHCSA, and the ACHCSA agreed that the plumes of nearby sites may be co-mingled. ASE is awaiting a response from the ACHCSA for guidance of future remedial options for this case.

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## 6.0 REPORT LIMITATIONS

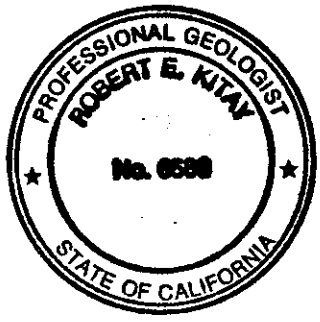
The results presented in this report represent the conditions at the time of the groundwater sampling, at the specific locations where the groundwater samples were collected, and for the specific parameters analyzed by the laboratory. It does not fully characterize the site for contamination resulting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

Aqua Science Engineers appreciates the opportunity to provide environmental consulting services for this project, and trust that this report meets your needs. Please feel free to call us at (925) 820-9391 if you have any questions or comments.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

Michael Rauser
Project Geologist




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

Attachments: Figures 1 and 2
Appendices A and B

cc: Mr. Steven Plunkett, Alameda County Health Care Services Agency
Ms. Betty Graham, RWQCB, San Francisco Bay Region

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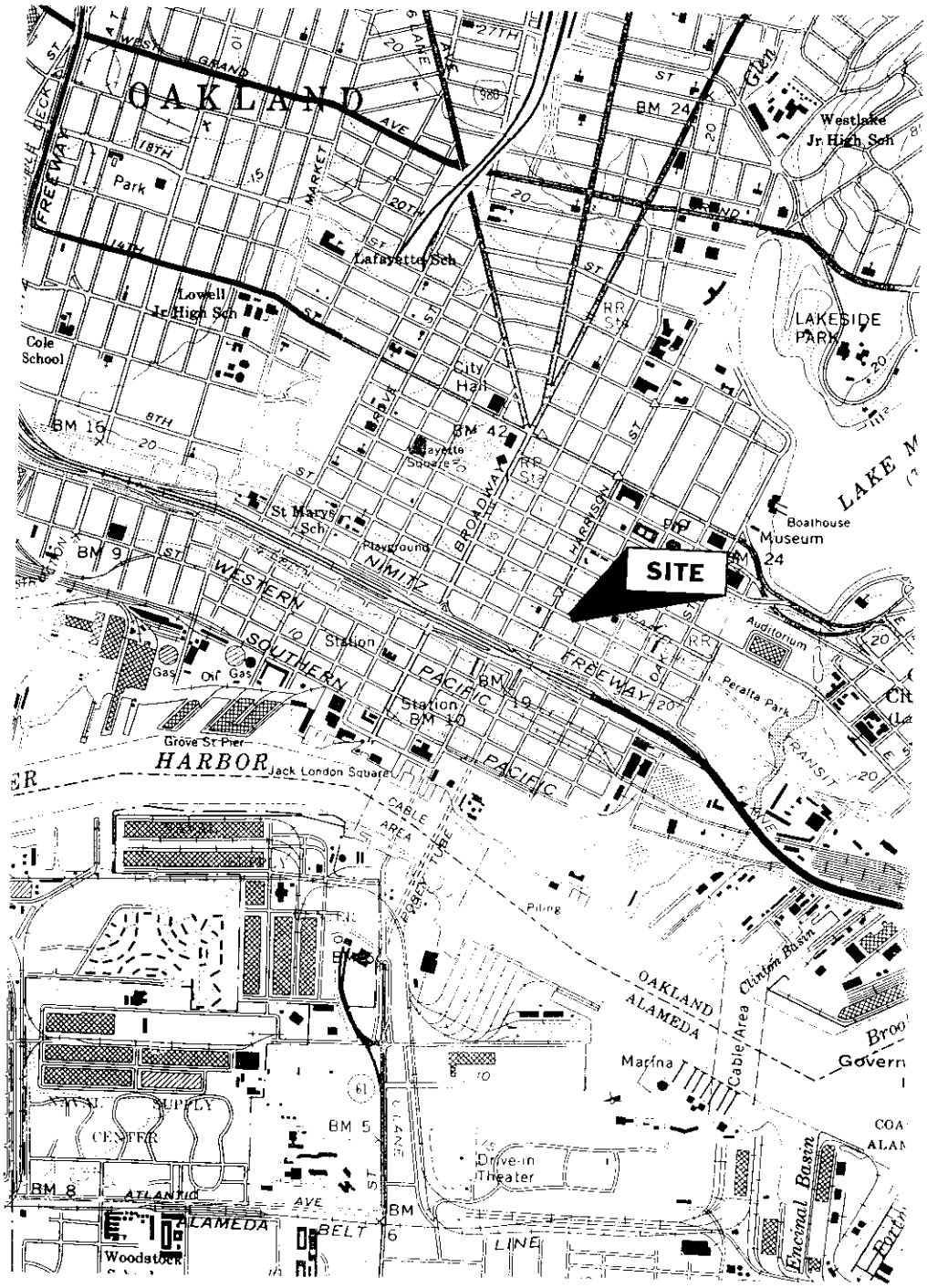
# FIGURES

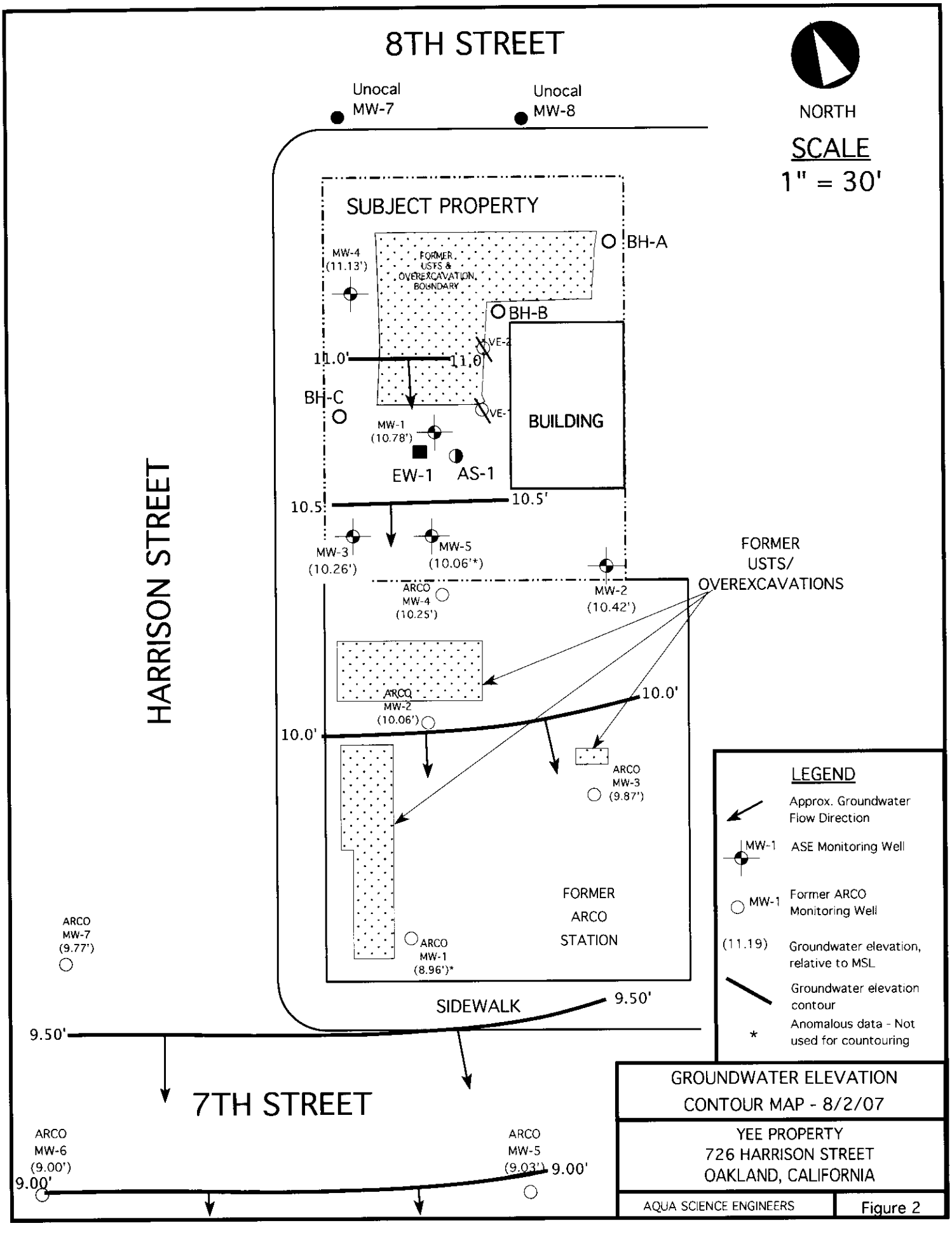
NORTH




# SITE LOCATION MAP

YEE PROPERTY
726 HARRISON STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS | Figure 1


8TH STREET
Unocal MW-7
Unocal MW-8
NORTH
SCALE
1" = 30'
SUBJECT PROPERTY
BH-A
MW-4 (11.13')
FORMER USTS & OVEREXCAVATION BOUNDARY
BH-B
VE-2
11.0'
11.0'
BH-C
VE-
BUILDING
MW-1 (10.78')
EW-1
AS-1
10.5'
10.5'
MW-3 (10.26')
MW-5 (10.06'*)
MW-2 (10.42')
FORMER USTS/ OVEREXCAVATIONS
ARCO MW-4 (10.25')
HARRISON STREET
ARCO MW-2 (10.06')
10.0'
10.0'
ARCO MW-3 (9.87')
FORMER ARCO STATION
ARCO MW-1 (8.96')*
ARCO MW-7 (9.77')
SIDEWALK
9.50'
9.50'
7TH STREET
ARCO MW-6 (9.00')
9.00'
ARCO MW-5 (9.03')
9.00'
LEGEND
Approx. Groundwater Flow Direction
MW-1 ASE Monitoring Well
MW-1 Former ARCO Monitoring Well
(11.19) Groundwater elevation, relative to MSL
Groundwater elevation contour
* Anomalous data - Not used for countouring
GROUNDWATER ELEVATION CONTOUR MAP - 8/2/07
YEE PROPERTY
726 HARRISON STREET
OAKLAND, CALIFORNIA
AQUA SCIENCE ENGINEERS
Figure 2

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# TABLES

**TABLE ONE**
**Groundwater Elevation Data**
**Yee Property**
**726 Harrison St., Oakland, CA**

| Well ID | Date of Measurement | Top of Casing Elevation (Relative to Mean Sea Level) | Depth to Water (feet) | Groundwater Elevation (project data) |
|---|---|---|---|---|
| **MW-1** | 12/15/98 | 31.95* | 17.32 | 14.63 |
| | 3/4/99 | | 15.52 | 16.43 |
| | 6/17/99 | | 16.9 | 15.05 |
| | 8/27/99 | | 17.39 | 14.56 |
| | 12/9/99 | | 18.03 | 13.92 |
| | 3/7/00 | | 15.11 | 16.84 |
| | 6/7/00 | | 16.66 | 15.29 |
| | 10/11/00 | | 18.08 | 13.87 |
| | 1/18/01 | | 17.96 | 13.99 |
| | 4/5/01 | | 16.35 | 15.60 |
| | 7/17/01 | | 16.94 | 15.01 |
| | 10/5/01 | 28.98 | 17.35 | 11.63 |
| | 1/18/02 | | 15.40 | 13.58 |
| | 4/11/02 | | 15.76 | 13.22 |
| | 7/8/02 | | 16.17 | 12.81 |
| | 10/9/02 | | 16.72 | 12.26 |
| | 1/29/03 | | 16.26 | 12.72 |
| | 4/11/03 | | 16.56 | 12.42 |
| | 7/18/03 | | 16.42 | 12.56 |
| | 10/9/03 | | 16.88 | 12.10 |
| | 1/28/04 | | 16.10 | 12.88 |
| | 4/7/04 | | 15.43 | 13.55 |
| | 7/23/04 | | 16.41 | 12.57 |
| | 10/12/04 | | 17.73 | 11.25 |
| | 1/29/05 | | 15.02 | 13.96 |
| | 4/28/05 | | 14.99 | 13.99 |
| | 7/19/05 | | 16.36 | 12.62 |
| | 10/18/05 | | 17.82 | 11.16 |
| | 1/23/06 | | 15.80 | 13.18 |
| | 4/12/06 | | 13.24 | 15.74 |
| | 7/10/06 | | 15.64 | 13.34 |
| | 10/16/06 | | 17.51 | 11.47 |
| | 1/26/07 | | 18.36 | 10.62 |
| | 4/18/07 | | 17.79 | 11.19 |
| | **8/2/07** | | **18.20** | **10.78** |
| **MW-2** | 12/15/98 | 32.40* | 18.03 | 14.37 |
| | 3/4/99 | | 16.11 | 16.29 |
| | 6/17/99 | | 17.72 | 14.68 |
| | 8/27/99 | | Inaccessible | |
| | 12/9/99 | | Inaccessible | |
| | 3/7/00 | | Inaccessible | |
| | 6/7/00 | | 17.67 | 14.73 |
| | 10/11/00 | | 18.91 | 13.49 |
| | 1/18/01 | | 18.66 | 13.74 |
| | 4/5/01 | | 16.97 | 15.43 |
| | 7/17/01 | | 17.54 | 14.86 |
| | 10/5/01 | 29.44 | 17.98 | 11.46 |
| | 1/18/02 | | 15.87 | 13.57 |
| | 4/11/02 | | 16.36 | 13.08 |
| | 7/8/02 | | 16.72 | 12.72 |
| | 10/9/02 | | 17.33 | 12.11 |
| | 1/29/03 | | 16.82 | 12.62 |
| | 4/11/03 | | 17.15 | 12.29 |
| | 7/18/03 | | 17.05 | 12.39 |
| | 10/9/03 | | 17.52 | 11.92 |
| | 1/28/04 | | 16.70 | 12.74 |
| | 4/7/04 | | 16.02 | 13.42 |
| | 7/23/04 | | Inaccessible | |
| | 10/12/04 | | 17.31 | 12.13 |
| | 1/29/05 | | 15.46 | 13.98 |
| | 4/28/05 | | 15.79 | 13.65 |
| | 7/19/05 | | 17.25 | 12.19 |
| | 10/18/05 | | 17.72 | 11.72 |
| | 1/23/05 | | 15.65 | 13.79 |
| | 4/12/06 | | 12.33 | 17.11 |
| | 7/10/06 | | 16.58 | 12.86 |
| | 10/16/06 | | 18.33 | 11.11 |
| | 1/26/07 | | 19.21 | 10.23 |
| | 4/18/07 | | 18.58 | 10.86 |
| | **8/2/07** | | **19.02** | **10.42** |

**TABLE ONE**
**Groundwater Elevation Data**
**Yee Property**
**726 Harrison St., Oakland, CA**

| Well ID | Date of Measurement | Top of Casing Elevation (Relative to Mean Sea Level) | Depth to Water (feet) | Groundwater Elevation (project data) |
|---|---|---|---|---|
| **MW-3** | 12/15/98 | 31.61* | 17.26 | 14.35 |
| | 3/4/99 | | 15.47 | 16.14 |
| | 6/17/99 | | 16.92 | 14.69 |
| | 8/27/99 | | 17.40 | 14.21 |
| | 12/9/99 | | 18.01 | 13.60 |
| | 3/7/00 | | 16.15 | 15.46 |
| | 6/7/00 | | 16.85 | 14.76 |
| | 10/11/00 | | 18.07 | 13.54 |
| | 1/18/01 | | 17.89 | 13.72 |
| | 4/5/01 | | 16.21 | 15.40 |
| | 7/17/01 | | 16.90 | 14.71 |
| | 10/5/01 | 28.64 | 17.32 | 11.32 |
| | 1/18/02 | | 15.35 | 13.29 |
| | 4/11/02 | | 15.82 | 12.82 |
| | 7/8/02 | | 16.15 | 12.49 |
| | 10/9/02 | | 16.67 | 11.97 |
| | 1/29/03 | | 16.19 | 12.45 |
| | 4/11/03 | | 16.49 | 12.15 |
| | 7/18/03 | | 16.42 | 12.22 |
| | 10/9/03 | | 16.80 | 11.84 |
| | 1/28/03 | | 15.94 | 12.70 |
| | 4/7/04 | | 15.28 | 13.36 |
| | 7/23/04 | | 16.15 | 12.49 |
| | 10/12/04 | | 16.63 | 12.01 |
| | 1/29/05 | | 16.15 | 12.49 |
| | 4/28/05 | | 14.94 | 13.70 |
| | 7/19/05 | | 16.25 | 12.39 |
| | 10/18/05 | | 16.76 | 11.88 |
| | 1/23/06 | | 15.81 | 12.83 |
| | 4/12/06 | | 13.22 | 15.42 |
| | 7/10/06 | | 15.49 | 13.15 |
| | 10/16/06 | | 17.46 | 11.18 |
| | 1/26/07 | | 18.02 | 10.62 |
| | 4/18/07 | | 17.75 | 10.89 |
| | **8/2/07** | | **18.38** | **10.26** |
| **MW-4** | 12/15/98 | 32.53* | 17.59 | 14.94 |
| | 3/4/99 | | 15.88 | 16.65 |
| | 6/17/99 | | 17.14 | 15.39 |
| | 8/27/99 | | 17.65 | 14.88 |
| | 12/9/99 | | 18.28 | 14.25 |
| | 3/7/00 | | 15.41 | 17.12 |
| | 6/7/00 | | 17.09 | 15.44 |
| | 10/11/00 | | 18.33 | 14.20 |
| | 1/18/01 | | 18.23 | 14.30 |
| | 4/5/01 | | 16.69 | 15.84 |
| | 7/17/01 | | 17.32 | 15.21 |
| | 10/5/01 | 29.58 | 17.71 | 11.87 |
| | 1/18/02 | | 15.85 | 13.73 |
| | 4/11/02 | | 16.14 | 13.44 |
| | 7/8/02 | | 16.56 | 13.02 |
| | 10/9/02 | | 17.09 | 12.49 |
| | 1/29/03 | | 16.65 | 12.93 |
| | 4/11/03 | | 16.93 | 12.65 |
| | 7/18/03 | | 16.78 | 12.80 |
| | 10/9/03 | | 17.26 | 12.32 |
| | 1/28/04 | | 16.38 | 13.20 |
| | 4/7/04 | | 15.64 | 13.94 |
| | 7/23/04 | | 16.58 | 13.00 |
| | 10/12/04 | | Inaccessible | |
| | 1/29/05 | | 14.90 | 14.68 |
| | 4/28/05 | | 15.18 | 14.40 |
| | 7/19/05 | | 16.48 | 13.10 |
| | 10/18/05 | | 16.99 | 12.59 |
| | 1/23/06 | | 15.09 | 14.49 |
| | 4/12/06 | | 13.49 | 16.09 |
| | 7/10/06 | | 14.99 | 14.59 |
| | 10/16/06 | | 17.29 | 12.29 |
| | 1/26/07 | | 18.17 | 11.41 |
| | 4/18/07 | | 18.06 | 11.52 |
| | **8/2/07** | | **18.45** | **11.13** |

## TABLE ONE
**Groundwater Elevation Data**
**Yee Property**
**726 Harrison St., Oakland, CA**

| Well ID | Date of Measurement | Top of Casing Elevation (Relative to Mean Sea Level) | Depth to Water (feet) | Groundwater Elevation (project data) |
|---|---|---|---|---|
| **MW-5** | 8/29/01 | 29.06 | 17.42 | 11.64 |
| | 1/18/02 | | 15.68 | 13.38 |
| | 4/11/02 | | 16.17 | 12.89 |
| | 7/8/02 | | 16.51 | 12.55 |
| | 10/9/02 | | 17.10 | 11.96 |
| | 1/29/03 | | 16.58 | 12.48 |
| | 4/11/03 | | 16.87 | 12.19 |
| | 7/18/03 | | 16.77 | 12.29 |
| | 10/9/03 | | 17.21 | 11.85 |
| | 1/28/04 | | 16.34 | 12.72 |
| | 4/7/04 | | 15.38 | 13.68 |
| | 7/23/04 | | 16.55 | 12.51 |
| | 10/12/04 | | 17.02 | 12.04 |
| | 1/29/05 | | 15.23 | 13.83 |
| | 4/28/05 | | 15.41 | 13.65 |
| | 7/19/05 | | 16.79 | 12.27 |
| | 10/18/05 | | 17.28 | 11.78 |
| | 1/23/06 | | 15.28 | 13.78 |
| | 4/12/06 | | 13.66 | 15.40 |
| | 7/10/06 | | 16.14 | 12.92 |
| | 10/16/06 | | 19.33 | 9.73 |
| | 1/26/07 | | 18.94 | 10.12 |
| | 4/18/07 | | 18.21 | 10.85 |
| | **8/2/07** | | **19.00** | **10.06** |

* Top of casing elevation relative to arbitrary project datum

## TABLE TWO
### Groundwater Elevation Data
### Former ARCO Station
### 706 Harrison St., Oakland, CA

| Well ID | Date of Measurement | Top of Casing Elevation* (Relative to Mean Sea Level) | Depth to Water (feet) | Groundwater Elevation (project data) |
|---|---|---|---|---|
| **MW-1** | 7/18/03 | 29.15 | 14.50 | 14.65 |
| | 10/9/03 | 26.17 | 13.81 | 12.36 |
| | 1/28/04 | | 13.09 | 13.08 |
| | 4/7/04 | | 14.97 | 11.20 |
| | 7/23/04 | | 14.15 | 12.02 |
| | 10/12/04 | | 16.30 | 9.87 |
| | 4/27/05 | | 13.35 | 12.82 |
| | 7/19/05 | | 14.68 | 11.49 |
| | 10/18/05 | | 15.15 | 11.02 |
| | 1/23/06 | | 13.27 | 12.90 |
| | 4/12/06 | | 12.33 | 13.84 |
| | 7/10/06 | | 14.93 | 11.24 |
| | 10/16/06 | | 16.51 | 9.66 |
| | 1/26/07 | | 16.87 | 9.30 |
| | 4/18/07 | | 16.77 | 9.40 |
| | **8/2/07** | | **17.21** | **8.96** |
| **MW-2** | 7/18/03 | 30.51 | 16.84 | 13.67 |
| | 10/9/03 | 27.53 | 16.05 | 11.48 |
| | 1/28/04 | | 15.39 | 12.14 |
| | 4/7/04 | | 16.01 | 11.52 |
| | 7/23/04 | | 15.30 | 12.23 |
| | 10/12/04 | | 17.87 | 9.66 |
| | 4/27/05 | | 14.63 | 12.90 |
| | 7/19/05 | | 15.60 | 11.93 |
| | 10/18/05 | | 16.08 | 11.45 |
| | 1/23/06 | | 14.20 | 13.33 |
| | 4/12/06 | | 12.51 | 15.02 |
| | 7/10/06 | | 14.76 | 12.77 |
| | 10/16/06 | | 16.74 | 10.79 |
| | 1/26/07 | | 17.10 | 10.43 |
| | 4/18/07 | | 17.02 | 10.51 |
| | **8/2/07** | | **17.47** | **10.06** |
| **MW-3** | 7/18/03 | 29.77 | 14.80 | 14.97 |
| | 10/9/03 | 26.79 | 14.13 | 12.66 |
| | 1/28/04 | | 13.47 | 13.32 |
| | 4/7/04 | | 15.41 | 11.38 |
| | 7/23/04 | | 14.54 | 12.25 |
| | 10/12/04 | | 16.58 | 10.21 |
| | 4/27/05 | | 13.68 | 13.11 |
| | 7/19/05 | | 15.15 | 11.64 |
| | 10/18/05 | | 15.60 | 11.19 |
| | 1/23/06 | | 11.94 | 14.85 |
| | 4/12/06 | | 11.94 | 14.85 |
| | 7/10/06 | | 14.48 | 12.31 |
| | 10/16/06 | | 16.19 | 10.60 |
| | 1/26/07 | | 16.56 | 10.23 |
| | 4/18/07 | | 16.45 | 10.34 |
| | **8/2/07** | | **16.92** | **9.87** |

## TABLE TWO
**Groundwater Elevation Data**
**Former ARCO Station**
**706 Harrison St., Oakland, CA**

| Well ID | Date of Measurement | Top of Casing Elevation* (Relative to Mean Sea Level) | Depth to Water (feet) | Groundwater Elevation (project data) |
|---|---|---|---|---|
| **MW-4** | 7/18/03 | 31.18 | 17.08 | 14.10 |
| | 10/9/03 | 28.20 | 16.25 | 11.95 |
| | 1/28/04 | | 15.65 | 12.55 |
| | 4/7/04 | | 16.49 | 11.71 |
| | 7/23/04 | | 15.86 | 12.34 |
| | 10/12/04 | | 18.05 | 10.15 |
| | 4/27/05 | | 14.20 | 14.00 |
| | 7/19/05 | | 16.08 | 12.12 |
| | 10/18/05 | | 16.55 | 11.65 |
| | 1/23/06 | | 14.66 | 13.54 |
| | 4/12/06 | | 12.92 | 15.28 |
| | 7/10/06 | | 15.38 | 12.82 |
| | 10/16/06 | | 17.21 | 10.99 |
| | 1/26/07 | | 17.58 | 10.62 |
| | 4/18/07 | | 17.46 | 10.74 |
| | **8/2/07** | | **17.95** | **10.25** |
| **MW-5** | 7/18/03 | 28.04 | 14.28 | 13.76 |
| | 10/9/03 | 25.07 | 13.36 | 11.71 |
| | 1/28/04 | | 12.68 | 12.39 |
| | 4/7/04 | | 14.71 | 10.36 |
| | 7/23/04 | | 13.49 | 11.58 |
| | 10/12/04 | | 15.88 | 9.19 |
| | 4/27/05 | | 13.40 | 11.67 |
| | 7/19/05 | | 14.21 | 10.86 |
| | 10/18/05 | | 14.79 | 10.28 |
| | 1/23/06 | | 13.12 | 11.95 |
| | 4/12/06 | | 11.39 | 13.68 |
| | 7/10/06 | | 14.40 | 10.67 |
| | 10/16/06 | | 15.44 | 9.63 |
| | 1/26/07 | | 15.76 | 9.31 |
| | 4/18/07 | | 15.61 | 9.46 |
| | **8/2/07** | | **16.04** | **9.03** |
| **MW-6** | 7/18/03 | 29.10 | 15.47 | 13.63 |
| | 10/9/03 | 26.13 | 14.73 | 11.40 |
| | 1/28/04 | | 14.05 | 12.08 |
| | 4/7/04 | | 14.41 | 11.72 |
| | 7/23/04 | | 15.15 | 10.98 |
| | 10/12/04 | | 17.27 | 8.86 |
| | 4/27/05 | | 14.10 | 12.03 |
| | 7/19/05 | | 15.18 | 10.95 |
| | 10/18/05 | | 15.65 | 10.48 |
| | 1/23/06 | | 14.02 | 12.11 |
| | 4/12/06 | | 12.66 | 13.47 |
| | 7/10/06 | | 14.64 | 11.49 |
| | 10/16/06 | | 16.50 | 9.63 |
| | 1/26/07 | | 16.83 | 9.30 |
| | 4/18/07 | | 16.72 | 9.41 |
| | **8/2/07** | | **17.13** | **9.00** |
| **MW-7** | 7/18/03 | | 15.19 | 14.48 |
| | 10/9/03 | 26.70 | 14.45 | 12.25 |
| | 1/28/04 | | 13.88 | 12.82 |
| | 4/7/04 | | 15.71 | 10.99 |
| | 7/23/04 | | 14.85 | 11.85 |
| | 10/12/04 | | 16.90 | 9.80 |
| | 4/27/05 | | 13.75 | 12.95 |
| | 7/19/05 | | 14.91 | 11.79 |
| | 10/18/05 | | 15.40 | 11.30 |
| | 1/23/06 | | 13.99 | 12.71 |
| | 4/12/06 | | 12.32 | 14.38 |
| | 7/10/06 | | 14.31 | 12.39 |
| | 10/16/06 | | 16.23 | 10.47 |
| | 1/26/07 | | 16.61 | 10.09 |
| | 4/18/07 | | 16.54 | 10.16 |
| | **8/2/07** | | **16.93** | **9.77** |

## TABLE THREE

Summary of Analytical Results for GROUNDWATER Samples
Yee Property
726 Harrison St., Oakland, CA
All results are in parts per billion (ppb)

| Well ID & Dates Sampled | TPH-G | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE |
|---|---|---|---|---|---|---|
| **MW-1** | | | | | | |
| 7/3/97 | 18,000 | 2,700 | 350 | 450 | 900 | 7,400 |
| 12/5/98 | 18,000 | 1,500 | 270 | 260 | 560 | 14,000 |
| 3/4/99 | 44,000 | 2,800 | 400 | 440 | 960 | 43,000 |
| 6/17/99 | 33,000 | 2,200 | 250 | 460 | 660 | 25,000 |
| 8/27/99 | 6,000 | 1,000 | 97 | 190 | 230 | 14,000/ 16,000* |
| 12/9/99 | 15,000 | 1,500 | 160 | 220 | 420 | 17,000 |
| 3/7/00 | 9,300 | 1,500 | 210 | 66 | 530 | 12,000 |
| 6/7/00 | 26,000** | 1,700 | < 250 | 360 | 580 | 30,000 |
| 10/11/00 | 13,000** | 1,600 | < 100 | 140 | 160 | 19,000 |
| 1/18/01 | 14,000** | 450 | < 100 | 110 | 230 | 9,600 |
| 4/5/01 | 38,000 | 2,200 | 180 | 290 | 590 | 35,000 |
| 7/17/01 | 35,000** | 1,800 | < 100 | 300 | 170 | 35,000 |
| 10/5/01 | 17,000 | 1,500 | 210 | 420 | 790 | 27,000 |
| 1/18/02 | 18,000 | 1,500 | 120 | 160 | 220 | 22,000 |
| 4/11/02 | 41,000 | 2,700 | 210 | 340 | 380 | 30,000 |
| 7/8/02 | 36,000 | 2,800 | 140 | 360 | 300 | 31,000 |
| 10/9/02 | 30,000 | 1,700 | 310 | < 100 | < 100 | 19,000 |
| 1/29/03 | 26,000 | 2,400 | < 100 | 310 | 520 | 20,000 |
| 4/11/03 | 22,000 | 1,700 | < 100 | 270 | 580 | 16,000 |
| 7/18/03 | 40,000 | 3,200 | 290 | 480 | 830 | 39,000 |
| 10/9/03 | 54,000** | 3,300 | < 130 | 350 | 310 | 49,000 |
| 1/28/04 | 26,000*** | 3,000 | 310 | 420 | 800 | 31,000 |
| 4/7/04 | 33,000*** | 2,800 | 130 | 310 | 310 | 39,000 |
| 7/23/04 | 56,000*** | 4,500 | < 250 | 390 | < 500 | 53,000 |
| 10/12/04 | 25,000*** | 1,400 | < 250 | < 250 | < 500 | 25,000 |
| 1/29/05 | 24,000 | 1,600 | < 100 | 160 | < 200 | 19,000 |
| 4/28/05 | < 10,000 | 2,000 | < 100 | 160 | 100 | 34,000 |
| 7/19/05 | 37,000 | 2,100 | 83 | 210 | 230 | 28,000 |
| 10/18/05 | 37,000 | 1,300 | < 250 | < 250 | < 250 | 23,000 |
| 1/24/06 | 23,000 | 780 | < 100 | 160 | 260 | 11,000 |
| 4/12/06 | 11,000 | 1,500 | 87 | 360 | 670 | 17,000 |
| 7/10/06 | 72,000 | 4,700 | < 250 | 350 | < 500 | 66,000 |
| 10/16/06 | 26,000 | 1,600 | < 250 | 330 | < 500 | 22,000 |
| 1/26/07 | 7,200 | 1,500 | < 70 | 140 | 96 | 34,000 |
| 4/18/07 | 5,400 | 1,100 | < 50 | 200 | 120 | 21,000 |
| **8/2/07** | **6,600** | **1,500** | **64** | **240** | **190** | **32,000** |

# TABLE THREE

**Summary of Analytical Results for GROUNDWATER Samples**
**Yee Property**
**726 Harrison St., Oakland, CA**
**All results are in parts per billion (ppb)**

| Well ID & Dates Sampled | TPH-G | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE |
|---|---|---|---|---|---|---|
| **MW-2** | | | | | | |
| 12/5/98 | < 50 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5.0 |
| 3/4/99 | Inaccessible due to car parked over well | | | | | |
| 6/17/99 | < 50 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5.0 |
| 8/27/99 | Inaccessible due to car parked over well | | | | | |
| 12/9/99 | Inaccessible due to car parked over well | | | | | |
| 3/7/00 | Inaccessible due to car parked over well | | | | | |
| 6/7/00 | < 50 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5.0 |
| 10/11/00 | < 50 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5.0 |
| 1/18/01 | < 50 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5.0 |
| 4/5/01 | < 50 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 5.0 |
| 7/17/01 | No longer sampled | | | | | |
| 7/10/06 | < 50 | < 0.50 | < 0.50 | < 0.50 | < 1.0 | 4.5 |
| 10/16/07 | < 50 | < 0.50 | < 0.50 | < 0.50 | < 1.0 | < 0.5 |
| 1/26/07 | < 50 | 0.55 | 1.0 | < 0.50 | 1.4 | 0.97 |
| 4/18/07 | < 50 | 1.5 | 2.6 | 0.93 | 3.2 | 0.64 |
| **8/2/07** | **< 50** | **< 0.50** | **< 0.50** | **< 0.50** | **< 0.50** | **2.2** |

# TABLE THREE

**Summary of Analytical Results for GROUNDWATER Samples**
**Yee Property**
**726 Harrison St., Oakland, CA**
**All results are in parts per billion (ppb)**

| Well ID & Dates Sampled | TPH-G | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE |
|---|---|---|---|---|---|---|
| **MW-3** | | | | | | |
| 12/5/98 | 6,500 | < 50 | 50 | 60 | 502 | 3,900 |
| 3/4/99 | 2,800 | < 25 | < 25 | < 25 | < 25 | 1,600 |
| 6/17/99 | 1,000 | < 10 | < 10 | < 10 | < 10 | 1,400 |
| 8/27/99 | 230 | < 0.5 | 0.51 | 0.5 | 1 | 1,500/ 1,600* |
| 12/9/99 | 870** | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 2,100 |
| 3/7/00 | 150** | 4 | < 0.5 | < 0.5 | < 0.5 | 830 |
| 6/7/00 | 140** | < 0.5 | < 0.5 | < 0.5 | < 0.5 | 1,100 |
| 10/11/00 | 620** | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 1,500 |
| 1/18/01 | 1,200** | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 1,000 |
| 4/5/01 | 1,700** | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 1,900 |
| 7/17/01 | 1,400** | < 10 | < 10 | < 10 | < 10 | 1,700 |
| 10/5/01 | < 1,000 | < 10 | < 10 | < 10 | < 10 | 1,700 |
| 1/18/02 | 1,600 | 26 | 20 | 16 | 54 | 2,100 |
| 4/11/02 | 2,600 | 21 | 16 | < 10 | 21 | 2,300 |
| 7/8/02 | 2,800 | < 10 | < 10 | < 10 | < 10 | 3,800 |
| 10/9/02 | 6,000 | < 50 | < 50 | < 50 | < 50 | 4,900 |
| 1/29/03 | 1,800 | < 10 | < 10 | < 10 | < 10 | 2,300 |
| 4/11/03 | 2,900 | < 25 | < 25 | < 25 | < 25 | 3,100 |
| 7/18/03 | 3,400 | < 10 | < 10 | < 10 | < 10 | 3,200 |
| 10/9/03 | 2,300 | < 10 | < 10 | < 10 | < 10 | 2,700 |
| 1/28/03 | 1,700** | < 10 | < 10 | < 10 | < 10 | 2,900 |
| 4/7/04 | 2,700** | < 10 | < 10 | < 10 | < 20 | 3,600 |
| 7/23/04 | 4,200** | < 25 | < 25 | < 25 | < 50 | 4,900 |
| 10/12/04 | 5,000** | < 50 | < 50 | < 50 | < 100 | 5,900 |
| 1/29/05 | < 1,000 | < 10 | < 10 | < 10 | < 20 | 3,100 |
| 4/28/05 | < 200 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | 1,300 |
| 7/19/05 | 4,400 | < 20 | < 20 | < 20 | < 40 | 3,000 |
| 10/18/05 | 18,000 | < 50 | < 50 | < 50 | < 50 | 6,800 |
| 1/24/06 | 17,000 | < 100 | < 100 | < 100 | < 200 | 7,000 |
| 4/12/06 | < 200 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | 7,800 |
| 7/10/06 | 11,000 | < 100 | < 100 | < 100 | < 200 | 12,000 |
| 10/16/06 | < 10,000 | < 100 | < 100 | < 100 | < 100 | 17,000 |
| 1/26/07 | < 200 | < 2.0 | < 2.0 | < 2.0 | < 2.0 | 4,000 |
| 4/18/07 | < 900 | < 9.0 | < 9.0 | < 9.0 | < 9.0 | 11,000 |
| **8/2/07** | **110** | **< 0.80** | **< 0.80** | **< 0.80** | **2.0** | **410** |

# TABLE THREE

Summary of Analytical Results for GROUNDWATER Samples
Yee Property
726 Harrison St., Oakland, CA
All results are in parts per billion (ppb)

| Well ID & Dates Sampled | TPH-G | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE |
|---|---|---|---|---|---|---|
| **MW-4** | | | | | | |
| 12/5/98 | 880 | 3 | < 0.5 | < 0.5 | < 0.5 | 950 |
| 3/4/99 | 3,800 | < 25 | < 25 | < 25 | < 25 | 3,700 |
| 6/17/99 | 2,700 | < 25 | < 25 | < 25 | < 25 | 2,700 |
| 8/27/99 | 440 | 4.7 | 1.1 | 0.58 | 1.3 | 1,600/ 1,700* |
| 12/9/99 | 1,100** | < 2.5 | < 2.5 | < 2.5 | < 2.5 | 1,700 |
| 3/7/00 | < 250 | < 2.5 | < 2.5 | < 2.5 | < 2.5 | 1,700 |
| 6/7/00 | 530** | 8.8 | < 2.5 | < 2.5 | < 2.5 | 440 |
| 10/11/00 | 700** | 3.9 | < 2.5 | < 2.5 | < 2.5 | 680 |
| 1/18/01 | 2,000** | < 2.5 | < 2.5 | < 2.5 | < 2.5 | 780 |
| 4/5/01 | 810** | < 2.5 | < 2.5 | < 2.5 | < 2.5 | 620 |
| 7/17/01 | 880** | < 2.5 | < 2.5 | < 2.5 | < 2.5 | 570 |
| 10/5/01 | 550** | < 2.5 | < 2.5 | < 2.5 | < 2.5 | 710 |
| 1/18/02 | 960** | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 1,300 |
| 4/11/02 | 1,100** | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 550 |
| 7/8/02 | 1,200** | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 890 |
| 10/9/02 | 1,300** | < 5.0 | < 5.0 | < 5.0 | < 5.0 | 880 |
| 1/29/03 | 530** | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 190 |
| 4/11/03 | 690** | < 2.5 | < 2.5 | < 2.5 | < 2.5 | 310 |
| 7/18/03 | 1,600** | < 10 | < 10 | < 10 | < 10 | 1,300 |
| 10/9/03 | 1500*** | < 10 | < 10 | < 10 | < 10 | 1,400 |
| 1/28/04 | 1,200** | < 10 | < 10 | < 10 | < 10 | 1,900 |
| 4/7/04 | 1,900** | < 10 | < 10 | < 10 | < 20 | 2,200 |
| 7/23/04 | 1,800** | < 10 | < 10 | < 10 | < 20 | 1,600 |
| 10/12/04 | Inaccessible due to car parked over well | | | | | |
| 1/29/05 | < 1,300 | < 13 | < 13 | < 13 | < 25 | 3,900 |
| 4/28/05 | 510 | < 1.5 | < 1.5 | < 1.5 | < 1.5 | 510 |
| 7/19/05 | 5,400 | < 50 | < 50 | < 50 | < 100 | 2,700 |
| 10/18/05 | 10,000 | < 50 | < 50 | < 50 | < 50 | 9,000 |
| 1/24/06 | 10,000 | < 100 | < 100 | < 100 | < 200 | 8,300 |
| 4/12/06 | 1,900 | < 10 | < 10 | < 10 | < 20 | 2,200 |
| 7/10/06 | 750 | 5.4 | < 5.0 | < 5.0 | < 10 | 790 |
| 10/16/06 | 2,400 | < 10 | < 10 | < 10 | < 10 | 2,200 |
| 1/26/07 | 250 | < 1.5 | < 1.5 | < 1.5 | < 1.5 | 7,000 |
| 4/18/07 | < 400 | < 4.0 | < 4.0 | < 4.0 | < 4.0 | 2,300 |
| **8/2/07** | **400** | **< 4.0** | **< 4.0** | **< 4.0** | **< 4.0** | **4,500** |

# TABLE THREE

**Summary of Analytical Results for GROUNDWATER Samples**
**Yee Property**
**726 Harrison St., Oakland, CA**
**All results are in parts per billion (ppb)**

| Well ID & Dates Sampled | TPH-G | Benzene | Toluene | Ethyl-benzene | Total Xylenes | MTBE |
|---|---|---|---|---|---|---|
| **MW-5** | | | | | | |
| 8/29/01 | 14,000 | 1,300 | 470 | 230 | 800 | 14,000 |
| 1/18/02 | 24,000 | 3,200 | 1,300 | 390 | 1,500 | 5,700 |
| 4/11/02 | 23,000 | 2,700 | 980 | 38 | 950 | 4,300 |
| 7/8/02 | 19,000 | 3,300 | 25 | 360 | 1,100 | 2,100 |
| 10/9/02 | 24,000 | 2,800 | 990 | 360 | 820 | 2,400 |
| 1/29/03 | 17,000 | 2,100 | 1,400 | 380 | 1,400 | < 250 |
| 4/11/03 | 26,000 | 2,900 | 2,200 | 590 | 2,200 | 630 |
| 7/18/03 | 26,000 | 3,500 | 1,700 | 480 | 1,300 | 1,300 |
| 10/9/03 | 27,000 | 3,800 | 1,900 | 510 | 1,700 | 1,200 |
| 1/28/04 | 29,000 | 4,800 | 2,900 | 770 | 2,300 | 3,300 |
| 4/7/04 | 23,000 | 4,400 | 2,700 | 720 | 2,200 | 1,700 |
| 7/23/04 | 29,000 | 5,200 | 2,200 | 810 | 1,400 | 2,200 |
| 10/12/04 | 26,000 | 4,300 | 2,000 | 670 | 1,300 | 2,200 |
| 7/18/03 | 8,200 | 650 | 77 | 99 | 140 | 4,300 |
| 10/9/03 | 5,700** | 500 | 28 | 53 | 35 | 3,600 |
| 1/28/04 | 17,000*** | 1,600 | 90 | 250 | 280 | 9,700 |
| 4/7/04 | | | No longer sampled | | | |
| 1/24/06 | 21,000 | 1,800 | 1,200 | 270 | 820 | 13,000 |
| 7/10/06 | 45,000 | 3,700 | 2,600 | 650 | 1,800 | 23,000 |
| 10/16/06 | 66,000 | 4,200 | 3,300 | 800 | 2,100 | 35,000 |
| 1/26/07 | 30,000 | 3,200 | 2,600 | 610 | 2,400 | 38,000 |
| 4/18/07 | 30,000 | 4,300 | 3,300 | 800 | 2,600 | 27,000 |
| **8/2/07** | **26,000** | **3,700** | **2,800** | **690** | **1,900** | **32,000** |
| ESL | 100 | 1 | 40 | 30 | 20 | 5 |

Notes:

* EPA Method 8020/EPA Method 8260 (MTBE confirmation)
** Hydrocarbon reported in the gasoline range does not match the laboratory gasoline standard
*** Sample contains a discrete peak in addition to gasoline

ESL = Environmental screening levels presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (July 2003)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

Most current data is in **Bold**

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

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# APPENDIX A

Well Sampling Field Logs

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME Yee

JOB NUMBER 3412 DATE OF SAMPLING 8-2-07

WELL ID. MW-1 SAMPLER MLR

TOTAL DEPTH OF WELL 27.2 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 18.20

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 9.0

NUMBER OF GALLONS PER WELL CASING VOLUME ~~0~~ 1.44

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 4.32

EQUIPMENT USED TO PURGE WELL Bailer

TIME EVACUATION STARTED 630 TIME EVACUATION COMPLETED 640

TIME SAMPLES WERE COLLECTED 650

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 5.0

SAMPLING DEVICE Bailer

SAMPLE COLOR Clear ODOR/SEDIMENT Strong O/ No S slight sheen

### CHEMICAL DATA

| VOLUME PURGED | TEMPERATURE | PH | CONDUCTIVITY |
|---|---|---|---|
| 1 | 64.5 | 6.62 | 537 |
| 2 | 64.7 | 6.53 | 6.87 |
| 3 | 64.9 | 6.47 | 748 |

### SAMPLES COLLECTED

| SAMPLE | # OF CONTAINERS | SIZE AND TYPE OF CONTAINER | ANALYSIS | PRESERVEL |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME: Yee

JOB NUMBER: 3412 — DATE OF SAMPLING: 8-2-07

WELL ID.: MW-2 — SAMPLER: MLR

TOTAL DEPTH OF WELL: 28.0 — WELL DIAMETER: 2

DEPTH TO WATER PRIOR TO PURGING: 19.02

PRODUCT THICKNESS: 0

DEPTH OF WELL CASING IN WATER: 8.98

NUMBER OF GALLONS PER WELL CASING VOLUME: 1.4

NUMBER OF WELL CASING VOLUMES TO BE REMOVED: 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING: 4.3

EQUIPMENT USED TO PURGE WELL: Bailer

TIME EVACUATION STARTED: 450 — TIME EVACUATION COMPLETED: 500

TIME SAMPLES WERE COLLECTED: 510

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

VOLUME OF GROUNDWATER PURGED: 4.5

SAMPLING DEVICE: Bailer

SAMPLE COLOR: Clear — ODOR/SEDIMENT: N. O / Nr S

### CHEMICAL DATA

| VOLUME PURGED | TEMPERATURE | PH | CONDUCTIVITY |
|---|---|---|---|
| 1 | 65.4 | 7.80 | 375 |
| 2 | 65.7 | 6.15 | 416 |
| 3 | 65.1 | 6.92 | 435 |

### SAMPLES COLLECTED

| SAMPLE | # OF CONTAINERS | SIZE AND TYPE OF CONTAINER | ANALYSIS | PRESERVED |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME Yee

JOB NUMBER 3412 DATE OF SAMPLING 8-2-07

WELL ID. MW-3 SAMPLER MLR

TOTAL DEPTH OF WELL 29.2 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 18.38

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 10.82

NUMBER OF GALLONS PER WELL CASING VOLUME 1.7

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 5.1

EQUIPMENT USED TO PURGE WELL Bailer

TIME EVACUATION STARTED 600 TIME EVACUATION COMPLETED 610

TIME SAMPLES WERE COLLECTED 620

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 5.5

SAMPLING DEVICE Bailer

SAMPLE COLOR Clear ODOR/SEDIMENT slight O/ No S

### CHEMICAL DATA

| VOLUME PURGED | TEMPERATURE | PH | CONDUCTIVITY |
|---|---|---|---|
| 1 | 63.6 | 7.13 | 528 |
| 2 | 64.8 | 6.72 | 578 |
| 3 | 64.9 | 6.68 | 623 |

### SAMPLES COLLECTED

| SAMPLE | # OF CONTAINERS | SIZE AND TYPE OF CONTAINER | ANALYSIS | PRESERVED |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME Yee

JOB NUMBER 3412 DATE OF SAMPLING 8-2-07

WELL ID. MW-4 SAMPLER MLK

TOTAL DEPTH OF WELL 29.7 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 18.45

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 11.25

NUMBER OF GALLONS PER WELL CASING VOLUME 1.8

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 5.4

EQUIPMENT USED TO PURGE WELL Bailer

TIME EVACUATION STARTED 520 TIME EVACUATION COMPLETED 530

TIME SAMPLES WERE COLLECTED 540

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 6.0

SAMPLING DEVICE Bailer

SAMPLE COLOR Clear ODOR/SEDIMENT Slight O / No O

### CHEMICAL DATA

| VOLUME PURGED | TEMPERATURE | PH | CONDUCTIVITY |
|---|---|---|---|
| 1 | 64.9 | 6.73 | 595 |
| 2 | 66.0 | | 574 |
| 3 | 66.1 | 6.88 | 558 |

### SAMPLES COLLECTED

| SAMPLE | # OF CONTAINERS | SIZE AND TYPE OF CONTAINER | ANALYSIS | PRESERVED |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

# AQUA SCIENCE ENGINEERS

## WELL SAMPLING FIELD LOG

PROJECT NAME Yee

JOB NUMBER 3412 DATE OF SAMPLING 8-2-07

WELL ID. MW-5 SAMPLER MLR

TOTAL DEPTH OF WELL 28.5 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 19.0

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 9.50

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 4.56

EQUIPMENT USED TO PURGE WELL Bailer

TIME EVACUATION STARTED 710 TIME EVACUATION COMPLETED 720

TIME SAMPLES WERE COLLECTED 730

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 5.0

SAMPLING DEVICE Bailer

SAMPLE COLOR Clear ODOR/SEDIMENT strong O / No S

slight sheen

### CHEMICAL DATA

| VOLUME PURGED | TEMPERATURE | PH | CONDUCTIVITY |
|---|---|---|---|
| 1 | 64.2 | 6.56 | 806 |
| 2 | 63.8 | 6.51 | 957 |
| 3 | 63.5 | 6.47 | 1076 |

### SAMPLES COLLECTED

| SAMPLE | # OF CONTAINERS | SIZE AND TYPE OF CONTAINER | ANALYSIS | PRESERVED |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

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

# APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation

KIFF Analytical LLC

Report Number : 57822
Date : 8/13/2007

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

Subject : 5 Water Samples
Project Name : Yee
Project Number : 3412

Dear Mr. Rauser,

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

KIFF Analytical LLC

Report Number : 57822
Date : 8/13/2007

Project Name : **Yee**
Project Number : **3412**

Sample : **MW-1** Matrix : Water Lab Number : 57822-01
Sample Date :8/2/2007

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **1500** | 50 | ug/L | EPA 8260B | 8/6/2007 |
| **Toluene** | **64** | 50 | ug/L | EPA 8260B | 8/6/2007 |
| **Ethylbenzene** | **240** | 50 | ug/L | EPA 8260B | 8/6/2007 |
| **Total Xylenes** | **190** | 50 | ug/L | EPA 8260B | 8/6/2007 |
| **Methyl-t-butyl ether (MTBE)** | **32000** | 50 | ug/L | EPA 8260B | 8/6/2007 |
| **TPH as Gasoline** | **6600** | 5000 | ug/L | EPA 8260B | 8/6/2007 |
| Toluene - d8 (Surr) | 99.9 | | % Recovery | EPA 8260B | 8/6/2007 |
| 4-Bromofluorobenzene (Surr) | 96.7 | | % Recovery | EPA 8260B | 8/6/2007 |

Sample : **MW-2** Matrix : Water Lab Number : 57822-02
Sample Date :8/2/2007

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 8/6/2007 |
| **Toluene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 8/6/2007 |
| **Ethylbenzene** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 8/6/2007 |
| **Total Xylenes** | **< 0.50** | 0.50 | ug/L | EPA 8260B | 8/6/2007 |
| **Methyl-t-butyl ether (MTBE)** | **2.2** | 0.50 | ug/L | EPA 8260B | 8/6/2007 |
| **TPH as Gasoline** | **< 50** | 50 | ug/L | EPA 8260B | 8/6/2007 |
| Toluene - d8 (Surr) | 90.3 | | % Recovery | EPA 8260B | 8/6/2007 |
| 4-Bromofluorobenzene (Surr) | 95.3 | | % Recovery | EPA 8260B | 8/6/2007 |

Approved By: Joel Kiff

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

KIFF Analytical LLC

Report Number : 57822
Date : 8/13/2007

Project Name : **Yee**
Project Number : **3412**

Sample : **MW-3** Matrix : Water Lab Number : 57822-03
Sample Date :8/2/2007

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 0.80** | 0.80 | ug/L | EPA 8260B | 8/9/2007 |
| **Toluene** | **< 0.80** | 0.80 | ug/L | EPA 8260B | 8/9/2007 |
| **Ethylbenzene** | **< 0.80** | 0.80 | ug/L | EPA 8260B | 8/9/2007 |
| **Total Xylenes** | **2.0** | 0.80 | ug/L | EPA 8260B | 8/9/2007 |
| **Methyl-t-butyl ether (MTBE)** | **410** | 0.80 | ug/L | EPA 8260B | 8/9/2007 |
| **TPH as Gasoline** | **110** | 80 | ug/L | EPA 8260B | 8/9/2007 |
| Toluene - d8 (Surr) | 96.7 | | % Recovery | EPA 8260B | 8/9/2007 |
| 4-Bromofluorobenzene (Surr) | 91.6 | | % Recovery | EPA 8260B | 8/9/2007 |

Sample : **MW-4** Matrix : Water Lab Number : 57822-04
Sample Date :8/2/2007

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **< 4.0** | 4.0 | ug/L | EPA 8260B | 8/6/2007 |
| **Toluene** | **< 4.0** | 4.0 | ug/L | EPA 8260B | 8/6/2007 |
| **Ethylbenzene** | **< 4.0** | 4.0 | ug/L | EPA 8260B | 8/6/2007 |
| **Total Xylenes** | **< 4.0** | 4.0 | ug/L | EPA 8260B | 8/6/2007 |
| **Methyl-t-butyl ether (MTBE)** | **4500** | 9.0 | ug/L | EPA 8260B | 8/7/2007 |
| **TPH as Gasoline** | **< 400** | 400 | ug/L | EPA 8260B | 8/6/2007 |
| Toluene - d8 (Surr) | 101 | | % Recovery | EPA 8260B | 8/6/2007 |
| 4-Bromofluorobenzene (Surr) | 96.5 | | % Recovery | EPA 8260B | 8/6/2007 |

Approved By: Joel Kiff

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

KIFF Analytical LLC

Report Number : 57822
Date : 8/13/2007

Project Name : **Yee**
Project Number : **3412**

Sample : **MW-5** Matrix : Water Lab Number : 57822-05
Sample Date :8/2/2007

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| **Benzene** | **3700** | 90 | ug/L | EPA 8260B | 8/6/2007 |
| **Toluene** | **2800** | 90 | ug/L | EPA 8260B | 8/6/2007 |
| **Ethylbenzene** | **690** | 90 | ug/L | EPA 8260B | 8/6/2007 |
| **Total Xylenes** | **1900** | 90 | ug/L | EPA 8260B | 8/6/2007 |
| **Methyl-t-butyl ether (MTBE)** | **32000** | 90 | ug/L | EPA 8260B | 8/6/2007 |
| **TPH as Gasoline** | **26000** | 9000 | ug/L | EPA 8260B | 8/6/2007 |
| Toluene - d8 (Surr) | 99.4 | | % Recovery | EPA 8260B | 8/6/2007 |
| 4-Bromofluorobenzene (Surr) | 97.9 | | % Recovery | EPA 8260B | 8/6/2007 |

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

Report Number : 57822

Date : 8/13/2007

**QC Report : Method Blank Data**

Project Name : **Yee**

Project Number : **3412**

| Parameter | Measured Value | Method Reporting Limit | Units | Analysis Method | Date Analyzed |
|---|---|---|---|---|---|
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 8/6/2007 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 8/6/2007 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 8/6/2007 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 8/6/2007 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 8/6/2007 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 8/6/2007 |
| Toluene - d8 (Surr) | 99.7 | | % | EPA 8260B | 8/6/2007 |
| 4-Bromofluorobenzene (Surr) | 100 | | % | EPA 8260B | 8/6/2007 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 8/7/2007 |
| Benzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 8/8/2007 |
| Toluene | < 0.50 | 0.50 | ug/L | EPA 8260B | 8/8/2007 |
| Ethylbenzene | < 0.50 | 0.50 | ug/L | EPA 8260B | 8/8/2007 |
| Total Xylenes | < 0.50 | 0.50 | ug/L | EPA 8260B | 8/8/2007 |
| Methyl-t-butyl ether (MTBE) | < 0.50 | 0.50 | ug/L | EPA 8260B | 8/8/2007 |
| TPH as Gasoline | < 50 | 50 | ug/L | EPA 8260B | 8/8/2007 |
| Toluene - d8 (Surr) | 98.2 | | % | EPA 8260B | 8/8/2007 |
| 4-Bromofluorobenzene (Surr) | 88.2 | | % | EPA 8260B | 8/8/2007 |

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

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 57822

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

Date : 8/13/2007

Project Name : **Yee**

Project Number : **3412**

| 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 | 57822-02 | <0.50 | 39.9 | 40.0 | 38.3 | 38.1 | ug/L | EPA 8260B | 8/6/07 | 96.0 | 95.2 | 0.824 | 70-130 | 25 |
| Toluene | 57822-02 | <0.50 | 39.9 | 40.0 | 37.3 | 37.5 | ug/L | EPA 8260B | 8/6/07 | 93.4 | 93.7 | 0.376 | 70-130 | 25 |
| Tert-Butanol | 57822-02 | <5.0 | 200 | 200 | 192 | 196 | ug/L | EPA 8260B | 8/6/07 | 96.4 | 97.8 | 1.37 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 57822-02 | 2.2 | 39.9 | 40.0 | 38.6 | 38.8 | ug/L | EPA 8260B | 8/6/07 | 91.2 | 91.5 | 0.280 | 70-130 | 25 |
| Benzene | 57765-06 | <0.50 | 39.7 | 40.1 | 41.6 | 42.0 | ug/L | EPA 8260B | 8/7/07 | 105 | 105 | 0.0567 | 70-130 | 25 |
| Toluene | 57765-06 | <0.50 | 39.7 | 40.1 | 40.2 | 40.9 | ug/L | EPA 8260B | 8/7/07 | 101 | 102 | 0.693 | 70-130 | 25 |
| Tert-Butanol | 57765-06 | <5.0 | 198 | 200 | 209 | 212 | ug/L | EPA 8260B | 8/7/07 | 105 | 106 | 0.563 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 57765-06 | 0.82 | 39.7 | 40.1 | 40.5 | 40.7 | ug/L | EPA 8260B | 8/7/07 | 100 | 99.6 | 0.511 | 70-130 | 25 |
| Benzene | 57851-01 | <0.50 | 40.0 | 40.0 | 38.7 | 37.4 | ug/L | EPA 8260B | 8/8/07 | 96.7 | 93.6 | 3.29 | 70-130 | 25 |
| Toluene | 57851-01 | <0.50 | 40.0 | 40.0 | 36.8 | 36.0 | ug/L | EPA 8260B | 8/8/07 | 92.0 | 90.0 | 2.29 | 70-130 | 25 |
| Tert-Butanol | 57851-01 | <5.0 | 200 | 200 | 185 | 187 | ug/L | EPA 8260B | 8/8/07 | 92.4 | 93.7 | 1.38 | 70-130 | 25 |
| Methyl-t-Butyl Ether | 57851-01 | <0.50 | 40.0 | 40.0 | 38.7 | 38.6 | ug/L | EPA 8260B | 8/8/07 | 96.7 | 96.5 | 0.187 | 70-130 | 25 |

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 57822

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

Date : 8/13/2007

Project Name : **Yee**

Project Number : **3412**

| Parameter | Spike Level | Units | Analysis Method | Date Analyzed | LCS Percent Recov. | LCS Percent Recov. Limit |
|---|---|---|---|---|---|---|
| Benzene | 40.0 | ug/L | EPA 8260B | 8/6/07 | 94.9 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 8/6/07 | 93.1 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 8/6/07 | 95.3 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 8/6/07 | 90.3 | 70-130 |
| Benzene | 40.0 | ug/L | EPA 8260B | 8/7/07 | 105 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 8/7/07 | 102 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 8/7/07 | 104 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 8/7/07 | 96.6 | 70-130 |
| Benzene | 40.0 | ug/L | EPA 8260B | 8/8/07 | 99.6 | 70-130 |
| Toluene | 40.0 | ug/L | EPA 8260B | 8/8/07 | 96.1 | 70-130 |
| Tert-Butanol | 200 | ug/L | EPA 8260B | 8/8/07 | 93.1 | 70-130 |
| Methyl-t-Butyl Ether | 40.0 | ug/L | EPA 8260B | 8/8/07 | 101 | 70-130 |

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

57822

Aqua Science Engineers, Inc.
208 W. El Pintado Road
Danville, CA 94526
(925) 820 9391
FAX (925) 837-4853

# Chain of Custody

SAMPLER (SIGNATURE) M. Rauser

PAGE 1 OF 1

PROJECT NAME Yee

ADDRESS 726 Harrison St, Oakland, CA

JOB NO. 3412

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS

| SAMPLE ID. | DATE | TIME | MATRIX | QUANTITY | TPH-GAS / MTBE & BTEX (EPA 5030/8015/8020) $8260 | TPH DIESEL (EPA 3510/8015) | TPH-DIESEL & MOTOR OIL (EPA 3510/8015) | VOLATILE ORGANICS (EPA 624/8240/8260) | SEMI-VOLATILE ORGANICS (EPA 625/8270) | OIL & GREASE (EPA 5520) | LUFT METALS (5) (EPA 6010+7000) | CAM 17 METALS (EPA 6010+7000) | PCBs & PESTICIDES (EPA 608/8080) | ORGANOPHOSPHORUS PESTICIDES (EPA 8140 EPA 608/8080) | FUEL OXYGENATES (EPA 8260) | Pb (TOTAL or DISSOLVED) (EPA 6010) | PURGEABLE HALOCARBONS (EPA 601/8010) | MULTI-RANGE HYDROCARBONS | SILICA GEL CLEAN UP | | HOLD | EDF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 8-2-07 | 650 | W | 4 | X | | | | | | | | | | | | | | | | | |
| MW-2 | | 510 | | | X | | | | | | | | | | | | | | | | | |
| MW-3 | | 620 | | | X | | | | | | | | | | | | | | | | | |
| MW-4 | | 540 | | | X | | | | | | | | | | | | | | | | | |
| MW-5 | | 730 | | | X | | | | | | | | | | | | | | | | | |

SAMPLE RECEIPT
Temp °C 4.4 Therm. ID# ID-5
Initial RLM Date 080607
Time 1200 Coolant present: Yes No

RELINQUISHED BY: (signature) (time) M. Rauser 8-2-07 (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) 0947 (time) Ron McGee 080607 (printed name) (date) Company: Kiff Analytical

COMMENTS: HCl = VOA

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