



102514

May 23, 2005

QUARTERLY GROUNDWATER MONITORING REPORT
MARCH 2005 GROUNDWATER SAMPLING
ASE JOB NO. 3928

at
Kim Property
~~925-949~~ West Grand Avenue
Oakland, CA 94607

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

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ENVIRONMENTAL HEALTH SERVICES

1.0 INTRODUCTION

Site Location (Site), See Figure 1

Kim Property
925-949 West Grand Avenue
Oakland, CA 94607

Responsible Party

Chong and Myung Kim
2601 Telegraph Avenue
Oakland, CA 94612

Environmental Consulting Firm

Aqua Science Engineers, Inc. (ASE)
208 W. El Pintado
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. Barney Chan
(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 March 2005 quarterly groundwater sampling at the Kim Property. This sampling was conducted as required by the ACHCSA and RWQCB. ASE has prepared this report on behalf of Chong Kim, the responsible party. This report is intended to supplement the ASE report: "Report of Soil and Groundwater Assessment" dated September 30, 2004.

2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On March 31, 2005, ASE measured the depth to groundwater in all three 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, neither was observed in any of the wells. Groundwater elevation data is presented in Table One. A groundwater potentiometric surface map is presented as Figure 2. The groundwater flow direction below the site is generally to the southwest with a gradient of 0.008 feet/foot, which is consistent with previous findings.

3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

On March 31, 2005, ASE collected groundwater samples from all three 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 well MW-2. 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 the same 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 of Davis, California (ELAP #2236) under appropriate chain-of-custody documentation. Well sampling field logs are presented in Appendix A.

The well purge water was placed into a 55-gallon steel drum and labeled for temporary storage until proper disposal could be arranged.

The groundwater samples were analyzed by Kiff for total petroleum hydrocarbons as diesel (TPH-D) by EPA Method 3550/8015M. The samples were also analyzed for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene, and total xylenes (collectively known as BTEX), fuel oxygenates, and halogenated volatile organic compounds (HVOCs) by EPA Method 8260B. The analytical results for this and previous sampling events are presented in Table Two. The certified analytical report and chain-of-custody documentation are included as Appendix B.

4.0 CONCLUSIONS

- Monitoring well MW-1 contained no detectable concentrations of any of the compounds analyzed.
- The TPH-G and BTEX concentrations in monitoring well MW-2 decreased slightly in comparison to the previous quarter; MTBE rose only very slightly.
- The TPH-D concentration in monitoring well MW-3 increased slightly in comparison to the previous quarter; MTBE and 1,2-DCA decreased slightly.
- The laboratory noted that the hydrocarbons reported as diesel in monitoring well MW-3 did not exhibit a typical diesel chromatographic pattern. Also noted was that the reporting limit for TPH-D was increased due to TPH-G interference in monitoring well MW-2.

The TPH-G, benzene, ethylbenzene, xylenes, and MTBE concentrations detected in the groundwater sample collected from monitoring well MW-2 exceeded the 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 July 2003. The 1,2-DCA concentration in the groundwater sample collected from monitoring well MW-3 also exceeded the ESL.

5.0 RECOMMENDATIONS

ASE recommends continued groundwater monitoring on a quarterly basis. The next groundwater sampling is scheduled for June 2005.

An additional soil and groundwater assessment was performed at the site during the previous quarter. The report for this assessment will be submitted within the next 30 days. Additional recommendations will be made in that report.

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.

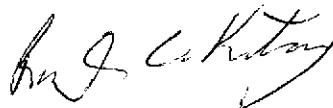
Aqua Science Engineers appreciates the opportunity to provide environmental consulting services for this project, and trust that this report meets your needs. Please feel free to call us at (925) 820-9391 if you have any questions or comments.

Respectfully submitted,

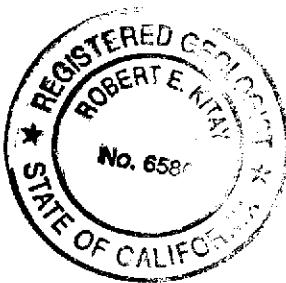
AQUA SCIENCEENGINEERS, INC.



David Allen, R.E.A.
Senior Project Manager



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



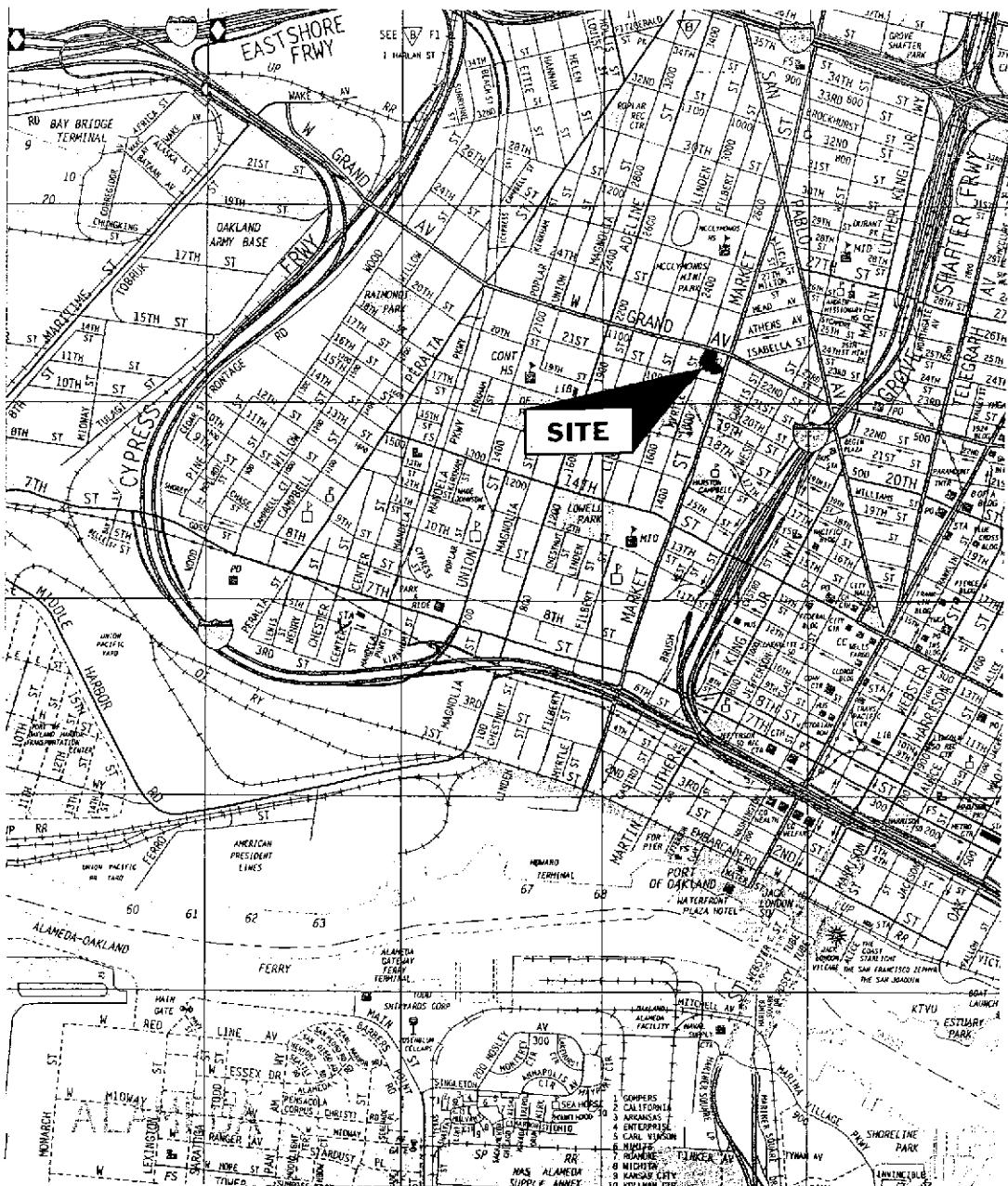
Attachments: Figures 1 and 2
Tables One and Two
Appendices A and B

cc: Mr. Barney Chan, ACHCSA
Ms. Betty Graham, RWQCB
Mr. Don Kim, Compass Realty, 1714 Franklin Street, Suite 400,
Oakland, CA 94612

Kim Property Quarterly Report- March 2005 Sampling Event



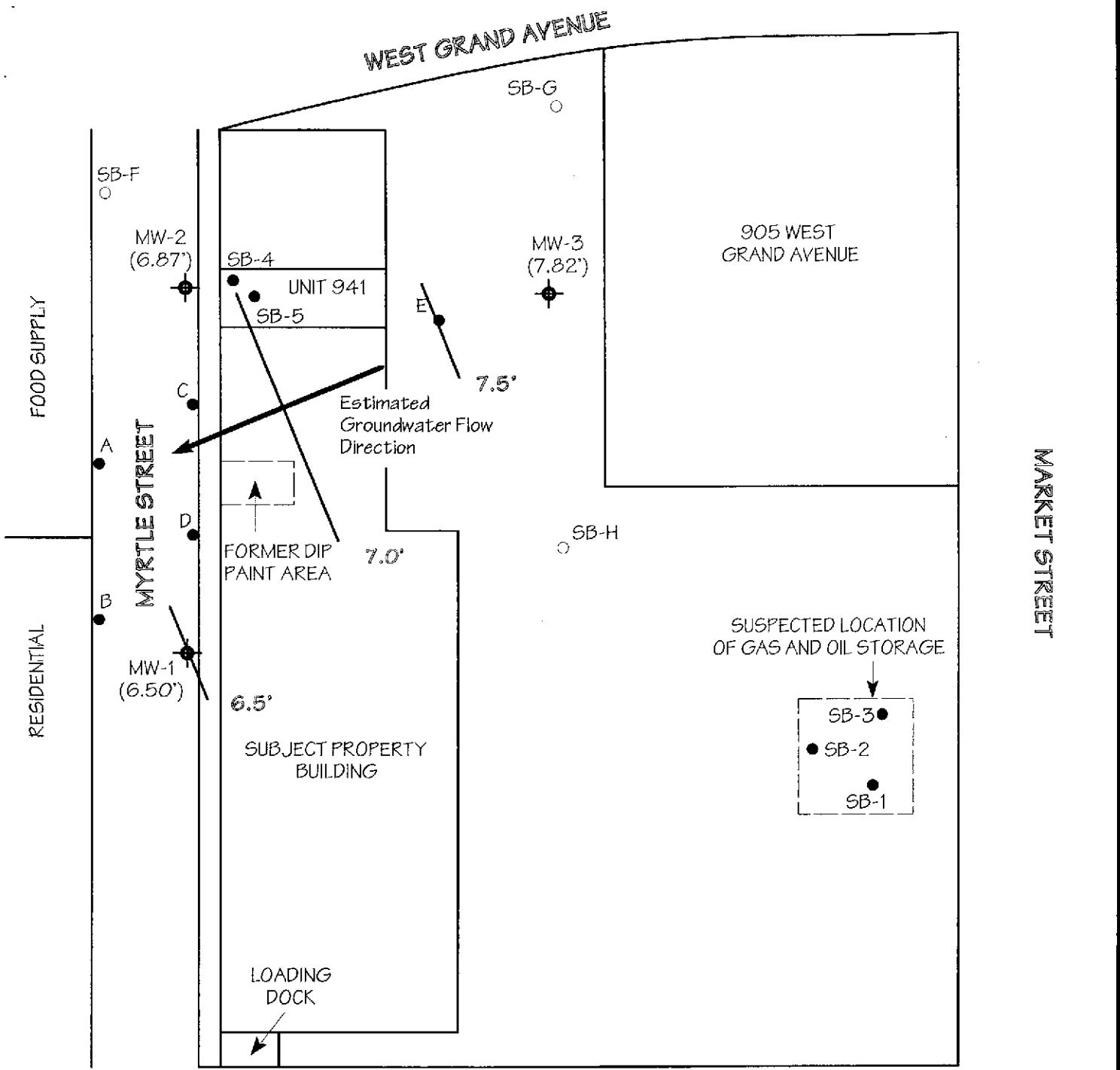
NORTH



SITE LOCATION MAP

KIM PROPERTY
925-949 West Grand Avenue
Oakland, California

AQUA SCIENCE ENGINEERS, INC. | Figure 1

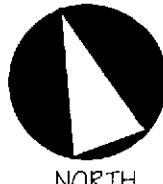


BASE MAP:
ERAS ENVIRONMENTAL "LIMITED SOIL AND GROUNDWATER INVESTIGATION," 5/27/2003, FIGURE 2
AND AEI CONSULTANTS "PHASE II SUBSURFACE INVESTIGATION," 3/21/2002, FIGURE 2

21ST STREET

LEGEND

- B • Previous Soil Boring
- SB-F ○ Soil Boring Drilled for this Assessment
- MW-1 (6.50') Monitoring Well with Groundwater Elevation
- Groundwater Elevation Contour



SCALE
1 INCH = 50 FEET

GROUNDWATER ELEVATION CONTOUR MAP - 03/31/05

KIM PROPERTY
925-949 West Grand Avenue
Oakland, California

AQUA SCIENCE ENGINEERS, INC. Figure 2

TABLE ONE
Groundwater Elevation Data
Kim Property
925-949 West Grand Avenue, Oakland, CA

Well ID	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Groundwater Elevation (msl)
MW-1	9/14/04	15.12	10.79	4.33
	12/15/04		9.77	5.35
	3/31/05		8.62	6.50
MW-2	9/14/04	14.42	9.76	4.66
	12/15/04		8.67	5.75
	3/31/05		7.55	6.87
MW-3	9/14/04	15.20	10.11	5.09
	12/15/04		8.80	6.40
	3/31/05		7.38	7.82

Notes:

Recent data is in BOLD.

TABLE TWO
 Summary of Analytical Results of GROUNDWATER Samples
 Petroleum Hydrocarbons and Halogenated Volatile Organic Compounds (HVOCs)
 By EPA Methods 8015 and 8260B
 925-949 West Grand Avenue, Oakland, California
 Results are in parts per billion (ppb)

Well/ Boring	Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	1,2- DCA	cis-1,2- DCE	trans-1,2- DCE	TCE	Vinyl Chloride	Other VOCs
MW-1	9/14/04	<50	150	<0.5	<0.5	<0.5	<0.5	0.89	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 - <20
	12/15/04	<50	65	<0.5	<0.5	<0.5	<0.5	0.74	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 - <20
	3/31/05	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 - <20
MW-2	9/14/04	6,100	<1,000	56	2.6	87	190	15	<1.5	1.5	<1.5	<1.5	<1.5	<1.5 - <20
	12/15/04	22,000	<6,000	150	6.7	760	1900	11	<1.5	7.2	<1.5	<1.5	1.5	<1.5 - <20
	3/31/05	14,000	<4,000	110	4.0	480	1100	14	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0 - <20
MW-3	9/14/04	<50	100	<0.5	<0.5	<0.5	<0.5	5.8	0.77	<0.5	<0.5	<0.5	<0.5	<0.5 - <20
	12/15/04	<50	67	<0.5	<0.5	<0.5	<0.5	6.0	0.70	<0.5	<0.5	<0.5	<0.5	<0.5 - <20
	3/31/05	<50	84	<0.5	<0.5	<0.5	<0.5	2.2	0.60	<0.5	<0.5	<0.5	<0.5	<0.5 - <20
ESL		100	100	1.0	40	30	13	5.0	0.5	6.0	10	5.0	0.5	VARIABLES

Notes:

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

Recent concentrations are in BOLD.

ESL = Environmental Screening Levels presented in the "Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater" document prepared by

TCE - trichloroethene

MTBE - methyl tertiary butyl ether

DCE - dichloroethene

DCA - dichloroethane

TPH - total petroleum hydrocarbons

APPENDIX A

Well Sampling Field Logs



WELL SAMPLING FIELD LOG

Project Name and Address: _____
Job #: 3-128 Date of sampling: 4-11-87
Well Name: MW-1 Sampled by: DA
Total depth of well (feet): 20.0 Well diameter (inches): 2
Depth to water before sampling (feet): 8.62
Thickness of floating product if any: _____
Depth of well casing in water (feet): 11.38
Number of gallons per well casing volume (gallons): 1.12
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 5.5
Equipment used to purge the well: new blower
Time Evacuation Began: 0805 Time Evacuation Finished: 0820
Approximate volume of groundwater purged: 6
Did the well go dry?: No After how many gallons: _____
Time samples were collected: 0825
Depth to water at time of sampling: 9.03
Percent recovery at time of sampling: _____
Samples collected with: new blower
Sample color: blue Odor: _____
Description of sediment in sample: light tan

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	67.8	7.30	1650
2	67.8	7.27	1110
3	67.8	7.28	1098
-----	-----	-----	-----
-----	-----	-----	-----

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-1	5	4 ft and 1/2 ft	Y	Y	_____
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----



WELL SAMPLING FIELD LOG

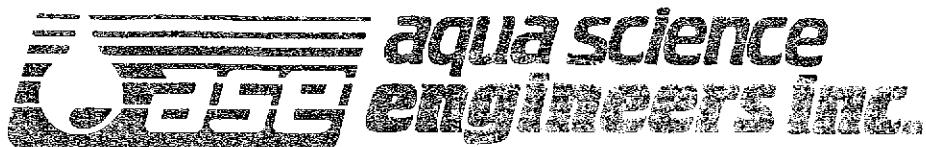
Project Name and Address: KIM
Job #: 3918 Date of sampling: 03-31-95
Well Name: MW-2 Sampled by: DA
Total depth of well (feet): 14.0 Well diameter (inches): 2
Depth to water before sampling (feet): 7.55
Thickness of floating product if any: 0
Depth of well casing in water (feet): 6.45
Number of gallons per well casing volume (gallons): 1,03
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 3.1
Equipment used to purge the well: NEW BAILEY
Time Evacuation Began: 0740 Time Evacuation Finished: 0755
Approximate volume of groundwater purged: 3.5
Did the well go dry?: NO After how many gallons: -
Time samples were collected: 0800
Depth to water at time of sampling: 7.68
Percent recovery at time of sampling:
Samples collected with: NEW BAILEY
Sample color: BROWN Odor: Moderate H2S
Description of sediment in sample: SILT

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	67.6	7.05	12.70
2	67.4	7.11	12.85
3	67.5	7.08	12.25

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-2	5	40 ml VIAL	✓	✓	



WELL SAMPLING FIELD LOG

Project Name and Address: FIM
Job #: 3928 Date of sampling: 03-31-05
Well Name: MW-3 Sampled by: DK
Total depth of well (feet): 20 Well diameter (inches): 2
Depth to water before sampling (feet): 7.38
Thickness of floating product if any: 0
Depth of well casing in water (feet): 12.62
Number of gallons per well casing volume (gallons): 2
Number of well casing volumes to be removed: 2
Req'd volume of groundwater to be purged before sampling (gallons): 6
Equipment used to purge the well: NEW BAKER
Time Evacuation Began: 0830 Time Evacuation Finished: 0845
Approximate volume of groundwater purged: 6
Did the well go dry?: No After how many gallons: -
Time samples were collected: 0850
Depth to water at time of sampling: 7.69
Percent recovery at time of sampling:
Samples collected with: NEW BAKER
Sample color: clear Odor: no
Description of sediment in sample: none

CHEMICAL DATA

<u>Volume Purged</u>	<u>Temp</u>	<u>pH</u>	<u>Conductivity</u>
<u>1</u>	<u>68.4</u>	<u>7.17</u>	<u>1120</u>
<u>2</u>	<u>68.2</u>	<u>7.12</u>	<u>1130</u>
<u>3</u>	<u>68.4</u>	<u>7.12</u>	<u>1130</u>
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----

SAMPLES COLLECTED

<u>Sample</u>	<u># of containers</u>	<u>Volume & type container</u>	<u>Pres</u>	<u>Iced?</u>	<u>Analysis</u>
<u>MW-3</u>	<u>5</u>	<u>40 ml vials</u>	<u>N</u>	<u>Y</u>	-----
-----	-----	-----	-----	-----	-----
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APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation

Report Number : 43072

Date : 4/5/2005

QC Report : Matrix Spike/ Matrix Spike DuplicateProject Name : **KIM**Project Number : **3928**

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	1040	968	ug/L	M EPA 8015	4/1/05	104	96.8	6.78	70-130	25
Benzene	43092-04	<0.50	40.0	40.0	41.1	40.1	ug/L	EPA 8260B	4/4/05	103	100	2.52	70-130	25
Toluene	43092-04	<0.50	40.0	40.0	40.5	38.8	ug/L	EPA 8260B	4/4/05	101	97.0	4.26	70-130	25
Tert-Butanol	43092-04	<5.0	200	200	210	209	ug/L	EPA 8260B	4/4/05	105	105	0.575	70-130	25
Methyl-t-Butyl Ether	43092-04	<0.50	40.0	40.0	35.5	35.4	ug/L	EPA 8260B	4/4/05	88.7	88.4	0.329	70-130	25
Benzene	43073-01	<0.50	40.0	40.0	40.2	39.4	ug/L	EPA 8260B	4/2/05	100	98.6	1.96	70-130	25
Toluene	43073-01	<0.50	40.0	40.0	39.5	38.5	ug/L	EPA 8260B	4/2/05	98.7	96.3	2.47	70-130	25
Tert-Butanol	43073-01	<5.0	200	200	191	192	ug/L	EPA 8260B	4/2/05	95.5	95.9	0.384	70-130	25
Methyl-t-Butyl Ether	43073-01	<0.50	40.0	40.0	39.9	39.5	ug/L	EPA 8260B	4/2/05	99.8	98.6	1.19	70-130	25

Approved By: Joe Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 43072

Date : 4/5/2005

QC Report : Method Blank Data

Project Name : KIM

Project Number : 3928

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
1,1,1-Trichloroethane	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Carbon Tetrachloride	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Trichloroethylene	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
1,2-Dichloropropane	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Bromodichloromethane	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
cis-1,3-Dichloropropene	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
trans-1,3-Dichloropropene	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
1,1,2-Trichloroethane	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Tetrachloroethylene	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Dibromochloromethane	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Chlorobenzene	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Bromoform	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
1,1,2,2-Tetrachloroethane	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
1,3-Dichlorobenzene	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
1,4-Dichlorobenzene	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
1,2-Dichlorobenzene	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Toluene - d8 (Surr)	99.1	%		EPA 8260B	4/2/2005
4-Bromofluorobenzene (Surr)	96.8	%		EPA 8260B	4/2/2005
Dibromofluoromethane (Surr)	102	%		EPA 8260B	4/2/2005
1,2-Dichloroethane-d4 (Surr)	100	%		EPA 8260B	4/2/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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Approved By: Joe Kiff

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

Report Number : 43072

Date : 4/5/2005

QC Report : Method Blank Data

Project Name : KIM

Project Number : 3928

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	4/1/2005
Octacosane (Diesel Surrogate)	96.4		%	M EPA 8015	4/1/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	4/4/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	4/4/2005
Chloromethane	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Vinyl Chloride	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Bromomethane	< 20	20	ug/L	EPA 8260B	4/4/2005
Chloroethane	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Trichlorofluoromethane	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
1,1-Dichloroethene	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Methylene Chloride	< 5.0	5.0	ug/L	EPA 8260B	4/4/2005
trans-1,2-Dichloroethene	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
1,1-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
cis-1,2-Dichloroethene	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Chloroform	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
1,1,1-Trichloroethane	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Carbon Tetrachloride	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Trichloroethene	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
1,2-Dichloropropane	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Bromodichloromethane	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
cis-1,3-Dichloropropene	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
trans-1,3-Dichloropropene	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
1,1,2-Trichloroethane	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Tetrachloroethene	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Dibromochloromethane	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Chlorobenzene	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Bromoform	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
1,1,2,2-Tetrachloroethane	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
1,3-Dichlorobenzene	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
1,4-Dichlorobenzene	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
1,2-Dichlorobenzene	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	4/4/2005
Toluene - d8 (Surr)	99.4		%	EPA 8260B	4/4/2005
4-Bromofluorobenzene (Surr)	103		%	EPA 8260B	4/4/2005
Dibromofluoromethane (Surr)	98.2		%	EPA 8260B	4/4/2005
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	4/4/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	4/2/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	4/2/2005
Chloromethane	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Vinyl Chloride	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Bromomethane	< 20	20	ug/L	EPA 8260B	4/2/2005
Chloroethane	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Trichlorofluoromethane	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
1,1-Dichloroethene	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Methylene Chloride	< 5.0	5.0	ug/L	EPA 8260B	4/2/2005
trans-1,2-Dichloroethene	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
1,1-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
cis-1,2-Dichloroethene	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005
Chloroform	< 0.50	0.50	ug/L	EPA 8260B	4/2/2005

Approved By: Joe Kiff

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



Report Number : 43072
Date : 4/5/2005

Sample : MW-3

Project Name : KIM

Project Number : 3928

Lab Number : 43072-03

Date Analyzed : 4/2/2005

Matrix : Water

Sample Date : 3/31/2005

Analysis Method: EPA 8260B

Parameter	Measured Value	MRL ¹	Units	Parameter	Measured Value	MRL ¹	Units
Benzene	< 0.50	0.50	ug/L	1,4-Dichlorobenzene	< 0.50	0.50	ug/L
Toluene	< 0.50	0.50	ug/L	1,2-Dichlorobenzene	< 0.50	0.50	ug/L
Ethylbenzene	< 0.50	0.50	ug/L	1,2-Dibromoethane	< 0.50	0.50	ug/L
Total Xylenes	< 0.50	0.50	ug/L	Toluene - d8 (Surr)	98.6		% Recovery
Methyl-t-butyl ether (MTBE)	2.2	0.50	ug/L	4-Bromofluorobenzene (Surr)	96.6		% Recovery
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	Dibromofluoromethane (Surr)	103		% Recovery
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	1,2-Dichloroethane-d4 (Surr)	100		% Recovery
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L				
Tert-Butanol	< 5.0	5.0	ug/L				
TPH as Gasoline	< 50	50	ug/L				
Chlormethane	< 0.50	0.50	ug/L				
Vinyl Chloride	< 0.50	0.50	ug/L				
Bromomethane	< 20	20	ug/L				
Chloroethane	< 0.50	0.50	ug/L				
Trichlorofluoromethane	< 0.50	0.50	ug/L				
1,1-Dichloroethene	< 0.50	0.50	ug/L				
Methylene Chloride	< 5.0	5.0	ug/L				
trans-1,2-Dichloroethene	< 0.50	0.50	ug/L				
1,1-Dichloroethane	< 0.50	0.50	ug/L				
cis-1,2-Dichloroethene	< 0.50	0.50	ug/L				
Chloroform	< 0.50	0.50	ug/L				
1,1,1-Trichloroethane	< 0.50	0.50	ug/L				
1,2-Dichloroethane	0.60	0.50	ug/L				
Carbon Tetrachloride	< 0.50	0.50	ug/L				
Trichloroethene	< 0.50	0.50	ug/L				
1,2-Dichloropropane	< 0.50	0.50	ug/L				
Bromodichloromethane	< 0.50	0.50	ug/L				
cis-1,3-Dichloropropene	< 0.50	0.50	ug/L				
trans-1,3-Dichloropropene	< 0.50	0.50	ug/L				
1,1,2-Trichloroethane	< 0.50	0.50	ug/L				
Tetrachloroethene	< 0.50	0.50	ug/L				
Dibromochloromethane	< 0.50	0.50	ug/L				
Chlorobenzene	< 0.50	0.50	ug/L				
Bromoform	< 0.50	0.50	ug/L				
1,1,2,2-Tetrachloroethane	< 0.50	0.50	ug/L				
1,3-Dichlorobenzene	< 0.50	0.50	ug/L				

1) MRL = Method reporting limit

Approved By:

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


Joel Kiff



Report Number : 43072

Date : 4/5/2005

Sample : MW-2

Project Name : KIM

Project Number : 3928

Lab Number : 43072-02

Date Analyzed : 4/4/2005

Matrix : Water

Sample Date : 3/31/2005

Analysis Method: EPA 8260B

Parameter	Measured Value	MRL ¹	Units	Parameter	Measured Value	MRL ¹	Units
Benzene	110	3.0	ug/L	1,4-Dichlorobenzene	< 3.0	3.0	ug/L
Toluene	4.0	3.0	ug/L	1,2-Dichlorobenzene	< 3.0	3.0	ug/L
Ethylbenzene	480	3.0	ug/L	1,2-Dibromoethane	< 3.0	3.0	ug/L
Total Xylenes	1100	3.0	ug/L	Toluene - d8 (Surr)	98.2		% Recovery
Methyl-t-butyl ether (MTBE)	14	3.0	ug/L	4-Bromofluorobenzene (Surr)	108		% Recovery
Diisopropyl ether (DIPE)	< 3.0	3.0	ug/L	Dibromofluoromethane (Surr)	96.4		% Recovery
Ethyl-t-butyl ether (ETBE)	< 3.0	3.0	ug/L	1,2-Dichloroethane-d4 (Surr)	97.1		% Recovery
Tert-amyl methyl ether (TAME)	< 3.0	3.0	ug/L				
Tert-Butanol	< 15	15	ug/L				
TPH as Gasoline	14000	300	ug/L				
Chloromethane	< 3.0	3.0	ug/L				
Vinyl Chloride	< 3.0	3.0	ug/L				
Bromomethane	< 20	20	ug/L				
Chloroethane	< 3.0	3.0	ug/L				
Trichlorofluoromethane	< 3.0	3.0	ug/L				
1,1-Dichloroethene	< 3.0	3.0	ug/L				
Methylene Chloride	< 5.0	5.0	ug/L				
trans-1,2-Dichloroethene	< 3.0	3.0	ug/L				
1,1-Dichloroethane	< 3.0	3.0	ug/L				
cis-1,2-Dichloroethene	< 3.0	3.0	ug/L				
Chloroform	< 3.0	3.0	ug/L				
1,1,1-Trichloroethane	< 3.0	3.0	ug/L				
1,2-Dichloroethane	< 3.0	3.0	ug/L				
Carbon Tetrachloride	< 3.0	3.0	ug/L				
Trichloroethene	< 3.0	3.0	ug/L				
1,2-Dichloropropane	< 3.0	3.0	ug/L				
Bromodichloromethane	< 3.0	3.0	ug/L				
cis-1,3-Dichloropropene	< 3.0	3.0	ug/L				
trans-1,3-Dichloropropene	< 3.0	3.0	ug/L				
1,1,2-Trichloroethane	< 3.0	3.0	ug/L				
Tetrachloroethene	< 3.0	3.0	ug/L				
Dibromochloromethane	< 3.0	3.0	ug/L				
Chlorobenzene	< 3.0	3.0	ug/L				
Bromoform	< 3.0	3.0	ug/L				
1,1,2,2-Tetrachloroethane	< 3.0	3.0	ug/L				
1,3-Dichlorobenzene	< 3.0	3.0	ug/L				

1) MRL = Method reporting limit

Approved By:

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


Joel Kiff



Report Number : 43072
Date : 4/5/2005

Sample : MW-1

Project Name : KIM

Project Number : 3928

Lab Number : 43072-01

Date Analyzed : 4/2/2005

Matrix : Water

Sample Date : 3/31/2005

Analysis Method: EPA 8260B

Parameter	Measured Value	MRL ¹⁾	Units	Parameter	Measured Value	MRL ¹⁾	Units
Benzene	< 0.50	0.50	ug/L	1,4-Dichlorobenzene	< 0.50	0.50	ug/L
Toluene	< 0.50	0.50	ug/L	1,2-Dichlorobenzene	< 0.50	0.50	ug/L
Ethylbenzene	< 0.50	0.50	ug/L	1,2-Dibromoethane	< 0.50	0.50	ug/L
Total Xylenes	< 0.50	0.50	ug/L	Toluene - d8 (Surr)	99.5		% Recovery
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	4-Bromofluorobenzene (Surr)	95.8		% Recovery
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	Dibromofluoromethane (Surr)	102		% Recovery
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	1,2-Dichloroethane-d4 (Surr)	100		% Recovery
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L				
Tert-Butanol	< 5.0	5.0	ug/L				
TPH as Gasoline	< 50	50	ug/L				
Chloromethane	< 0.50	0.50	ug/L				
Vinyl Chloride	< 0.50	0.50	ug/L				
Bromomethane	< 20	20	ug/L				
Chloroethane	< 0.50	0.50	ug/L				
Trichlorofluoromethane	< 0.50	0.50	ug/L				
1,1-Dichloroethene	< 0.50	0.50	ug/L				
Methylene Chloride	< 5.0	5.0	ug/L				
trans-1,2-Dichloroethene	< 0.50	0.50	ug/L				
1,1-Dichloroethane	< 0.50	0.50	ug/L				
cis-1,2-Dichloroethene	< 0.50	0.50	ug/L				
Chloroform	< 0.50	0.50	ug/L				
1,1,1-Trichloroethane	< 0.50	0.50	ug/L				
1,2-Dichloroethane	< 0.50	0.50	ug/L				
Carbon Tetrachloride	< 0.50	0.50	ug/L				
Trichloroethene	< 0.50	0.50	ug/L				
1,2-Dichloropropane	< 0.50	0.50	ug/L				
Bromodichloromethane	< 0.50	0.50	ug/L				
cis-1,3-Dichloropropene	< 0.50	0.50	ug/L				
trans-1,3-Dichloropropene	< 0.50	0.50	ug/L				
1,1,2-Trichloroethane	< 0.50	0.50	ug/L				
Tetrachloroethene	< 0.50	0.50	ug/L				
Dibromochloromethane	< 0.50	0.50	ug/L				
Chlorobenzene	< 0.50	0.50	ug/L				
Bromoform	< 0.50	0.50	ug/L				
1,1,2,2-Tetrachloroethane	< 0.50	0.50	ug/L				
1,3-Dichlorobenzene	< 0.50	0.50	ug/L				

1) MRL = Method reporting limit

Approved By:

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


Joel Kiff



Report Number : 43072

Date : 4/5/2005

Project Name : KIM

Project Number : 3928

Sample : MW-1 Matrix : Water Lab Number : 43072-01

Sample Date : 3/31/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	4/2/2005
Octacosane (Diesel Surrogate)	97.2		% Recovery	M EPA 8015	4/2/2005

Sample : MW-2 Matrix : Water Lab Number : 43072-02

Sample Date : 3/31/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 4000	4000	ug/L	M EPA 8015	4/2/2005
Octacosane (Diesel Surrogate)	93.8		% Recovery	M EPA 8015	4/2/2005

Sample : MW-3 Matrix : Water Lab Number : 43072-03

Sample Date : 3/31/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	84	50	ug/L	M EPA 8015	4/2/2005
Octacosane (Diesel Surrogate)	98.2		% Recovery	M EPA 8015	4/2/2005

Approved By:

Joel Kiff

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



Report Number : 43072

Date : 4/5/2005

Subject : 3 Water Samples
Project Name : KIM
Project Number : 3928

Case Narrative

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

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample MW-3. These hydrocarbons are higher boiling than typical diesel fuel.

Approved By:

A handwritten signature in black ink, appearing to read "Joe Kiff". To the right of the signature, there are two vertical parallel lines.

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



Report Number : 43072

Date : 4/5/2005

David Allen
Aqua Science Engineers, Inc.
208 West El Pintado Rd.
Danville, CA 94526

Subject : 3 Water Samples
Project Name : KIM
Project Number : 3928

Dear Mr. Allen,

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

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,

A handwritten signature in black ink. The signature appears to read "Joel Kiff" and is enclosed within a stylized oval shape.

Report Number : 43072

Date : 4/5/2005

QC Report : Laboratory Control Sample (LCS)

Project Name : **KIM**

Project Number : **3928**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	4/4/05	96.9	70-130
Toluene	40.0	ug/L	EPA 8260B	4/4/05	98.3	70-130
Tert-Butanol	200	ug/L	EPA 8260B	4/4/05	101	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	4/4/05	89.0	70-130
Benzene	40.0	ug/L	EPA 8260B	4/2/05	94.1	70-130
Toluene	40.0	ug/L	EPA 8260B	4/2/05	94.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	4/2/05	92.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	4/2/05	102	70-130

KIFF ANALYTICAL, LLC

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

Approved By:

Joe Kiff



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

Chain of Custody

43072

PAGE 1 OF 1

SAMPLER (SIGNATURE) <i>[Signature]</i>					PROJECT NAME <u>KIM</u>		JOB NO. <u>3928</u>														
ANALYSIS REQUEST					ADDRESS <u>OAKLAND, CA</u>																
SPECIAL INSTRUCTIONS:																					
SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GAS / MTBE & BTEX (EPA 5030/B015-B020)	TPH-DIESEL (EPA 3510/B015)	TPH-DIESEL & MOTOR OIL (EPA 3510/B015)	PURGEABLE HALOCARBONS (EPA 601/B010)	VOLATILE ORGANICS (EPA 624/B240/B260)	SEMI-VOLATILE ORGANICS (EPA 625/B270)	OIL & GREASE (EPA 5520)	LUFT METALS (5) (EPA 6010+7000)	CAM17 METALS (EPA 6010+7000)	PCBs & PESTICIDES (EPA 608/B080)	ORGANOPHOSPHORUS PESTICIDES (EPA 8140 EPA 608/B080)	FUEL OXYGENATES (EPA 8260)	MTBE ONLY	TPH-G/BTEX/5 OXY'S (EPA 8260)	TPH-G/BTEX/5 OXY'S & HALOGENATED VOC'S (EPA 8260B)	EDF	HOLD
MW-1	3-31-05	0925	H ₂ O	5	X													X	X	01	
MW-2	3	0800	↓	↓	X													X	X	02	
MW-3	3	0950	↓	↓	X													X	X	03	
RELINQUISHED BY: <i>[Signature]</i> (signature)		RECEIVED BY: <i>[Signature]</i> (signature)		RELINQUISHED BY: <i>[Signature]</i> (signature)		RECEIVED BY LABORATORY: <i>[Signature]</i> (signature)		COMMENTS:													
D. ALLEN (printed name)		03-31-05 (date)		Company- ASE, INC.		Jason N Hermsen 040105 (printed name) (date)		TURN AROUND TIME STANDARD 24+ 48+ 72+ OTHER:													