aqua science engineers inc.

10 22

October 6, 2003

QUARTERLY GROUNDWATER MONITORING REPORT
SEPTEMBER 2003 GROUNDWATER SAMPLING
ASE JOB NO. 3648

at
1310 Central Avenue
Alameda, California

Prepared for:
Mr. Nissan Saidian
5733 Medallion Court
Castro Valley, CA 94522

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

1.0 INTRODUCTION

Site Location (Site), See Figure 1
1310 Central Avenue
Alameda, CA

Responsible Party
Mr. Nissan Saidian
5733 Medallion Court
Castro Valley, CA 94522

Environmental Consulting Firm
Aqua Science Engineers, Inc. (ASE)
208 West El Pintado
Danville, CA 94526
Contact: Robert Kitay, Senior Geologist
(925) 820-9391

Agency Review
Mr. Amir Gholami
Alameda County Health Care Services Agency (ACHCSA)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Mr. Chuck Headlee
California Regional Water Quality Control Board (RWQCB)
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

The following is a report detailing the methods and findings of the September 18, 2003 quarterly groundwater sampling at the above-referenced site (*Figure 1*). This sampling was conducted as required by the ACHCSA and RWQCB. ASE has prepared this report on behalf of Mr. Nissan Saidian, owner of the property.

2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On September 18, 2003, ASE measured the depth to water in each site groundwater monitoring well using an electric water level sounder. The surface of the groundwater was also checked for the presence of free-floating hydrocarbons or sheen. A sheen was observed in the purge water from monitoring well MW-3. Groundwater elevation data is presented as *Table One*.

A groundwater potentiometric surface map is presented as *Figure 2*. Groundwater beneath the site was calculated as flowing to the east-northeast with a hydraulic gradient of approximately 0.003-feet/foot. This flow direction opposes previously observed flow directions. However, monitoring well MW-3 was noted to be under pressure, and water level measurements taken on September 18, 2003 may not reflect static conditions.

3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

Prior to sampling, all monitoring wells were purged of three well casing volumes of groundwater using dedicated polyethylene bailers. Petroleum hydrocarbon odors were present during the purging and sampling of monitoring wells MW-1 and MW-3. The parameters pH, temperature, and conductivity were monitored during the well purging, and samples were not collected until the parameters stabilized. Groundwater samples were collected from each well using dedicated polyethylene bailers.

All samples were decanted from the bailers into 40-ml volatile organic analysis (VOA) vials, pre-preserved with hydrochloric acid, and sealed without headspace. The samples were then labeled and placed in a cooler with wet ice for transport to Kiff Analytical, LLC (ELAP #2236) of Davis, California under appropriate chain-of-custody documentation. Well sampling field logs are presented in *Appendix A*.

The well purge water was placed in 55-gallon steel drums and labeled for temporary storage.

The groundwater samples collected from all three site monitoring wells were analyzed for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethyl benzene, and total xylenes (collectively known as BTEX), and fuel oxygenates by EPA Method 8260, and total petroleum hydrocarbons as diesel (TPH-D) by EPA Method 3550/8015M. The

analytical results are presented in *Table Two,* and the certified analytical report and chain-of-custody documentation are included as *Appendix B.*

4.0 CONCLUSIONS

Concentrations of all detectable hydrocarbons continued to increase in all site wells this quarter with the exception of MTBE and TBA in monitoring well MW-3, which decreased this quarter. All of the results remain relatively consistent with previous results.

The TPH-G, ethylbenzene, and total xylene concentrations detected in the groundwater sample collected from monitoring well MW-1 exceeded 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 TPH-D detected in the groundwater samples collected from monitoring well MW-2 and the TPH-G, benzene, and total xylene concentrations detected in the groundwater sample collected from monitoring well MW-3 also exceeded the ESLs.

5.0 RECOMMENDATIONS

ASE recommends that this site remain on a quarterly sampling schedule. The next sampling is scheduled for December 2003. Furthermore, ASE will conduct the additional soil and groundwater assessment described in the workplan dated December 13, 2002 upon receipt of approval from ACHCSA.

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 independent CAL-DHS certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

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.

Damian Hriciga
Project Geologist

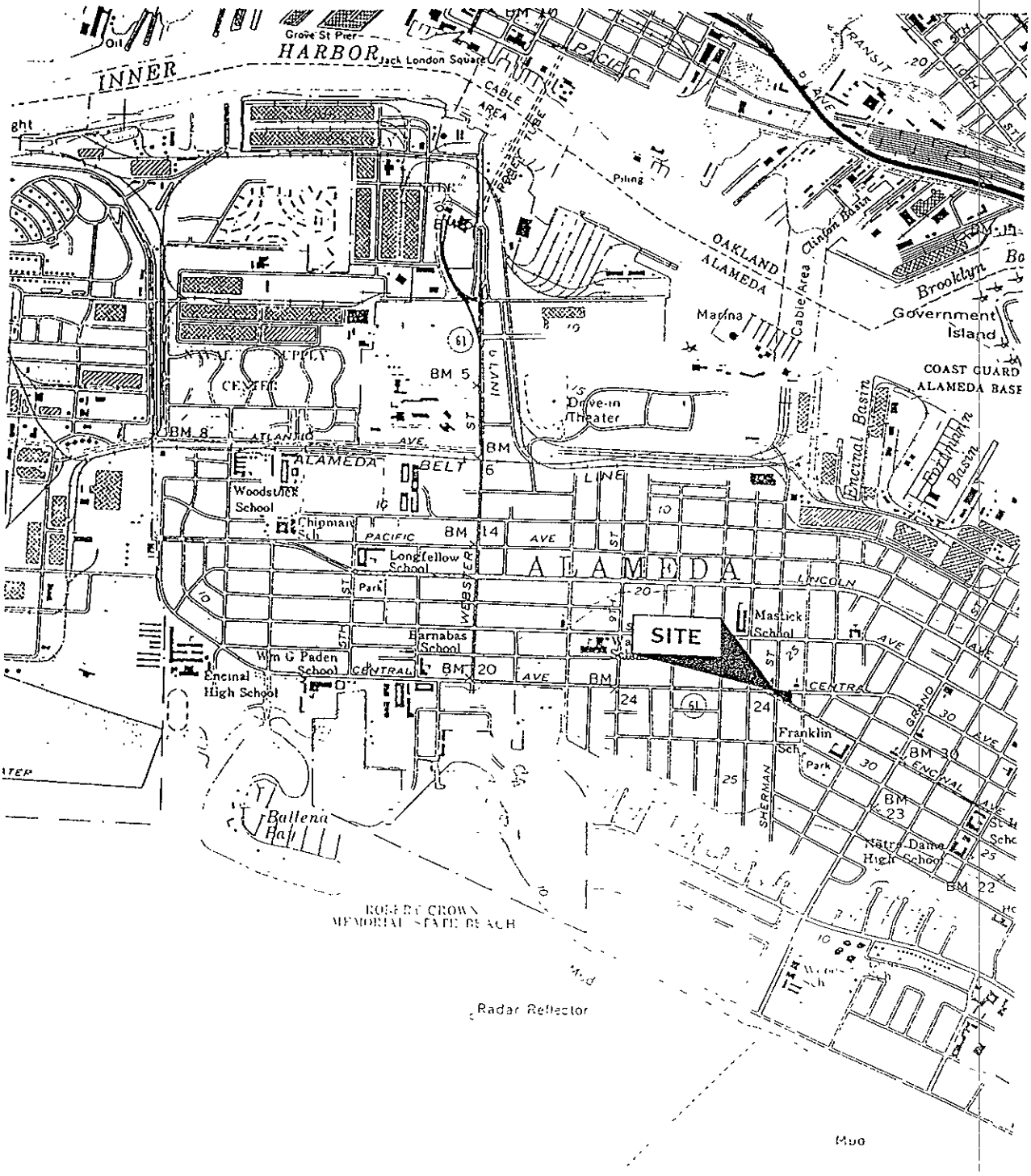
Robert E. Kitay, R.G., R.E.A.
Senior Geologist

REGISTERED GEOLOGIST
ROBERT E. KITAY
No. 6586
STATE OF CALIFORNIA

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

cc: Mr. Nissan Saidian
Mr. Amir Gholami, ACHCSA
Mr. Chuck Headlee, RWQCB, San Francisco Bay Region

FIGURES



NORTH

LOCATION MAP

SAIDIAN PROPERTY
1310 CENTRAL AVENUE
ALAMEDA, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | Figure 1

RESIDENTIAL

RESIDENTIAL

SIDEWALK

APPROXIMATE LOCATION OF FORMER AND CURRENT USTs

CENTRAL AVENUE

ISLAND

SIDEWALK

MW-3 (22.15')

CANOPY

CASHIER

MW-1 (21.94')

SIDEWALK

22.10'

22.05'

22.00'

21.95'

SERVICE BAYS

MW-2 (21.94')

RESIDENTIAL

RESIDENTIAL

SHERMAN STREET

ENCINAL AVENUE

SIDEWALK

RESIDENTIAL

LEGEND

MW-3 — MONITORING WELL WITH GROUNDWATER ELEVATION IN FEET

POTENTIOMETRIC SURFACE CONTOUR

GROUNDWATER FLOW DIRECTION

NORTH

0 30 60 120

SCALE IN FEET

POTENTIOMETRIC SURFACE CONTOUR MAP
SEPTEMBER 18, 2003

SAIDIAN PROPERTY
1310 CENTRAL AVENUE
ALAMEDA, CALIFORNIA

ACHIEVE ENGINEERING | FIGURE 2

TABLES

TABLE ONE
Groundwater Elevation Data
Saidian Property-Alameda
Alameda, CA

Well	Date of Measurement	Top of Casing Elevation (msl)	Depth to Water (feet)	Groundwater Elevation (msl)
MW-1	9/6/99	26.85	5.16	21.69
	5/16/00		3.24	23.61
	8/3/00		4.15	22.70
	12/5/00		4.90	21.95
	3/5/01		3.04	23.81
	6/4/01		4.01	22.84
	6/5/02		3.73	23.12
	9/9/02		5.06	21.79
	12/19/02		4.09	22.76
	3/10/03		3.50	23.35
	6/3/03		3.66	23.19
	9/18/03		**4.91**	**21.94**
MW-2	9/6/99	27.18	5.56	21.62
	5/16/00		3.52	23.66
	8/3/00		4.44	22.74
	12/5/00		5.24	21.94
	3/5/01		3.28	23.90
	6/4/01		4.33	22.85
	6/5/02		3.98	23.20
	9/9/02		5.34	21.84
	12/19/02		4.33	22.85
	3/10/03		3.58	23.60
	6/3/03		3.87	23.31
	9/18/03		**5.24**	**21.94**
MW-3	9/6/00	25.30	4.02	21.28
	5/16/00		2.06	23.24
	8/3/00		3.20	22.10
	12/5/00		3.71	21.59
	3/5/01		1.90	23.40
	6/4/01		2.72	22.58
	6/5/02		2.75	22.55
	9/9/02		3.88	21.42
	12/19/02		2.79	22.51
	3/10/03		2.36	22.94
	6/3/03		2.65	22.65
	9/19/03		**3.15**	**22.15**

TABLE TWO

Summary of Chemical Analysis of GROUNDWATER Samples

Saldlan Property-Alameda

Petroleum Hydrocarbons

All results are in **parts per billion (ppb)**

Well/ Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	TAME	TBA	Other Oxygenates
MW-1										
9/6/1999	5,700	8,700	170	59	22	85	20,000	NA	NA	NA
5/16/2000	20,000	< 7,500	38	6.3	740	1,600	< 5.0	< 5.0	< 50	< 5.0
8/3/2000	20,000	< 6,000	56	9.7	920	1,600	< 0.5	< 0.5	< 50	< 0.5
12/5/2000	31,000	< 4,000	64	27	820	2,200	< 10	< 5.0	< 50	< 5.0
3/5/2001	20,000	<4,000	19	<5.0	480	870	<5.0	<5.0	<50	<5.0
6/4/2001	23,000	<7,000	58	50	710	2,100	5.1	<5.0	<50	<5.0
6/5/2002	7,400	<1,500	9.3	6.7	180	230	<1.0	<1.0	<10	<1.0
9/9/2002	8,300	< 3,500	32	20	390	670	< 2.0	< 2.0	< 20	< 2.0
12/19/2002	5,100	--	7.9	2.5	56	93	< 1.0	< 1.0	< 10	< 1.0
3/10/2003	2,000	< 2,000	3.4	2.9	80	98	< 0.5	< 0.5	< 5.0	< 0.5
6/3/2003	7,300	< 4,000	6.8	9.9	300	1000	2.3	< 0.5	< 5.0	< 0.5
9/18/2003	**9,000**	**< 3,000**	**26**	**22**	**420**	**1200**	**4.5**	**< 1.5**	**< 20**	**< 1.5**
MW-2										
9/6/1999	6,000	70	1,300	92	50	400	6,800	NA	NA	NA
5/16/2000	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50	< 5.0
8/3/2000	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5
12/5/2000	< 50	1,400	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5
3/5/2001	<50	<50	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5
6/4/2001	<50	<50	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5
6/5/2002	< 50	2,300	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5
9/9/2002	< 50	1,300	< 0.5	< 0.5	< 0.5	< 0.5	1.4	< 0.5	< 5.0	< 0.5
12/19/2002	< 50	--	< 0.5	< 0.5	< 0.5	< 0.5	16	< 0.5	< 5.0	< 0.5
3/10/2003	< 50	3,000	< 0.5	< 0.5	< 0.5	< 0.5	1.0	< 0.5	< 5.0	< 0.5
6/3/2003	< 50	700	< 0.5	< 0.5	< 0.5	< 0.5	2.0	< 0.5	< 5.0	< 0.5
9/18/2003	**< 50**	**1,400**	**< 0.5**	**< 0.5**	**< 0.5**	**< 0.5**	**4.7**	**< 0.5**	**< 5.0**	**< 0.5**
MW-3										
9/6/1999	43,000	870	860	70	< 0.5	65	120,000	NA	NA	NA
5/16/2000	17,000	< 5,000	2,800	60	380	190	990	9.1	350	< 5.0
8/3/2000	16,000	< 2,000	1,600	29	210	53	1,200	21	260	< 2.0
12/5/2000	17,000	5,800	1,700	45	460	240	1,100	21	230	< 5.0
3/5/2001	29,000	<1300	2,100	68	280	100	180	<8.0	<80	<8.0
6/4/2001	17,000	<6,000	2,000	56	340	230	300	<10	130	<10
6/5/2002	11,000	<2,000	1,600	46	210	47	790	<10	220	<10
9/9/2002	12,000	< 800	1,400	44	130	27	760	< 10	160	< 10
12/19/2002	10,000	--	740	32	180	38	86	< 5.0	< 50	< 5.0
3/10/2003	13,000	< 6,000	1,200	42	240	35	470	5.3	140	< 5.0
6/3/2003	6,500	< 3,000	750	21	46	15	1,300	< 50	280	< 2.5
9/18/2003	**9,800**	**< 3,000**	**1,500**	**38**	**170**	**32**	**420**	**< 10**	**150**	**< 10**
ESL	500	640	46	130	290	13	1,800	NE	NE	VARIES

Notes:

MTBE = Methyl-t-butyl ether

TAME = Tert-amyl methyl ether

TBA = Tert-Butanol

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.

NA = Samples Not Analyzed for this compound.

NE = DHS MCLs are not established.

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

Most recent data in bold

APPENDIX A

Well Sampling Field Logs

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: SA.DOMW / AZ AMLDA
Job #: 5648 Date of sampling: 9/11/03
Well Name: MW-1 Sampled by: PH
Total depth of well (feet): 10.3 Well diameter (inches): 2
Depth to water before sampling (feet): 4.91
Thickness of floating product if any: —
Depth of well casing in water (feet): 5.39
Number of gallons per well casing volume (gallons): .9
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 2.7
Equipment used to purge the well: BAILER
Time Evacuation Began: 1525 Time Evacuation Finished: 1540
Approximate volume of groundwater purged: 4
Did the well go dry?: ND After how many gallons: —
Time samples were collected: 1543
Depth to water at time of sampling: 5.81
Percent recovery at time of sampling: —
Samples collected with: BAILER
Sample color: — Odor: HC
Description of sediment in sample: —

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
.9	77.8	5.67	4.67
1.8	75.6	5.74	4.74
2.7	74.6	5.91	4.82
3.6	74.2	6.03	4.78

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-1	5	40mL VOA	HCl	Y	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

BAK

Project Name and Address: SAIDIAN / ALAMEDA
Job #: 3648 Date of sampling: 9/18/2003
Well Name: MW-2 Sampled by: DH
Total depth of well (feet): ~~23~~ 13 Well diameter (inches): 2
Depth to water before sampling (feet): 5.24
Thickness of floating product if any: —
Depth of well casing in water (feet): 7.76
Number of gallons per well casing volume (gallons): 1.3
Number of well casing volumes to be removed: ~~4~~ 3
Req'd volume of groundwater to be purged before sampling (gallons): 4
Equipment used to purge the well: BAILER
Time Evacuation Began: 1405 Time Evacuation Finished: 1428
Approximate volume of groundwater purged: —
Did the well go dry?: — After how many gallons: —
Time samples were collected: 1431
Depth to water at time of sampling: 5.57
Percent recovery at time of sampling: —
Samples collected with: BAILER
Sample color: LT BROWN Odor: NO
Description of sediment in sample: SILT

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1.3	75.4 ~~76.0~~	~~7.8~~ 5.33	278
2.6	74.4	5.28	260
4.0	73.5	5.12	291
5.3	73.1	~~5.29~~	300

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-2	5	40mL VOA	HCl	Y	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

A·R

Project Name and Address: SAN JOAN / ALAMEDA
Job #: 3648 Date of sampling: 9/18/2003
Well Name: MW-3 Sampled by: DT
Total depth of well (feet): 16.00 Well diameter (inches):
Depth to water before sampling (feet): 3.15
Thickness of floating product if any: —
Depth of well casing in water (feet): 13.25
Number of gallons per well casing volume (gallons): 2.3
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 6.8
Equipment used to purge the well: BAILER
Time Evacuation Began: 1445 Time Evacuation Finished:
Approximate volume of groundwater purged: 7
Did the well go dry?: No After how many gallons: —
Time samples were collected: 1509
Depth to water at time of sampling: 3.78
Percent recovery at time of sampling:
Samples collected with: BAILER
Sample color: OLIVE Odor: STRONG HC
Description of sediment in sample: SILT

CHEMICAL DATA

NOTE: SHEEN

Volume Purged	Temp	pH	Conductivity
2.3	77.0	6.76	5.91
4.6	74.5	5.90	6.04
6.9	74.6	5.82	6.07

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-3	5	40 mL VOA	HCl	Y	

APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation

KIFF ANALYTICAL LLC

Report Number : 35042
Date . 9/29/2003

Damian Hriciga
Aqua Science Engineers, Inc.
208 W. El Pintado Road
Danville, CA 94526

Subject : 3 Water Samples
Project Name : SAIDIAN ALAMEDA
Project Number :

Dear Mr. Hriciga,

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,

Jeff Dahl

KIFF ANALYTICAL LLC

Report Number : 35042
Date : 9/29/2003

Subject : 3 Water Samples
Project Name : SAIDIAN ALAMEDA
Project Number .

Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for samples MW-1 and MW-3.

Approved By: Jeff Dahl

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

KIFF ANALYTICAL LLC

Report Number : 35042
Date : 9/29/2003

Project Name : **SAIDIAN ALAMEDA**
Project Number :

Sample : **MW-1** Matrix : Water Lab Number : 35042-01
Sample Date :9/18/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**26**	1.5	ug/L	EPA 8260B	9/29/2003
Toluene	**22**	1.5	ug/L	EPA 8260B	9/29/2003
Ethylbenzene	**420**	1.5	ug/L	EPA 8260B	9/29/2003
Total Xylenes	**1200**	1.5	ug/L	EPA 8260B	9/29/2003
Methyl-t-butyl ether (MTBE)	**4.5**	1.5	ug/L	EPA 8260B	9/29/2003
Diisopropyl ether (DIPE)	**< 1.5**	1.5	ug/L	EPA 8260B	9/29/2003
Ethyl-t-butyl ether (ETBE)	**< 1.5**	1.5	ug/L	EPA 8260B	9/29/2003
Tert-amyl methyl ether (TAME)	**< 1.5**	1.5	ug/L	EPA 8260B	9/29/2003
Tert-Butanol	**< 20**	20	ug/L	EPA 8260B	9/29/2003
TPH as Gasoline	**9000**	200	ug/L	EPA 8260B	9/29/2003
Toluene - d8 (Surr)	99.6		% Recovery	EPA 8260B	9/29/2003
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	9/29/2003
TPH as Diesel	**< 3000**	3000	ug/L	M EPA 8015	9/25/2003
Octacosane (Diesel Surrogate)	88 0		% Recovery	M EPA 8015	9/25/2003

Approved By: Jeff Dahl

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

KIFF ANALYTICAL LLC

Report Number : 35042
Date : 9/29/2003

Project Name : **SAIDIAN ALAMEDA**
Project Number :

Sample : **MW-2** Matrix : Water Lab Number : 35042-02
Sample Date :9/18/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	9/24/2003
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	9/24/2003
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	9/24/2003
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	9/24/2003
Methyl-t-butyl ether (MTBE)	**4.7**	0.50	ug/L	EPA 8260B	9/24/2003
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	9/24/2003
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	9/24/2003
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	9/24/2003
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	9/24/2003
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	9/24/2003
Toluene - d8 (Surr)	89.5		% Recovery	EPA 8260B	9/24/2003
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	9/24/2003
TPH as Diesel	**1400**	50	ug/L	M EPA 8015	9/25/2003
Octacosane (Diesel Surrogate)	88.8		% Recovery	M EPA 8015	9/25/2003

Approved By: Jeff Dahl

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

KIFF ANALYTICAL LLC

Report Number : 35042
Date : 9/29/2003

Project Name : **SAIDIAN ALAMEDA**
Project Number :

Sample : **MW-3** Matrix : Water Lab Number : 35042-03
Sample Date :9/18/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**1500**	10	ug/L	EPA 8260B	9/29/2003
Toluene	**38**	10	ug/L	EPA 8260B	9/29/2003
Ethylbenzene	**170**	10	ug/L	EPA 8260B	9/29/2003
Total Xylenes	**32**	10	ug/L	EPA 8260B	9/29/2003
Methyl-t-butyl ether (MTBE)	**420**	10	ug/L	EPA 8260B	9/29/2003
Diisopropyl ether (DIPE)	**< 10**	10	ug/L	EPA 8260B	9/29/2003
Ethyl-t-butyl ether (ETBE)	**< 10**	10	ug/L	EPA 8260B	9/29/2003
Tert-amyl methyl ether (TAME)	**< 10**	10	ug/L	EPA 8260B	9/29/2003
Tert-Butanol	**150**	100	ug/L	EPA 8260B	9/29/2003
TPH as Gasoline	**9800**	1000	ug/L	EPA 8260B	9/29/2003
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	9/29/2003
4-Bromofluorobenzene (Surr)	98.3		% Recovery	EPA 8260B	9/29/2003
TPH as Diesel	**< 3000**	3000	ug/L	M EPA 8015	9/27/2003
Octacosane (Diesel Surrogate)	84.2		% Recovery	M EPA 8015	9/27/2003

Approved By: Jeff Dahl

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

Report Number : 35042

Date : 9/29/2003

QC Report : Method Blank Data

Project Name : **SAIDIAN ALAMEDA**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	9/25/2003
Octacosane (Diesel Surrogate)	88.8		%	M EPA 8015	9/25/2003
TPH as Diesel	< 50	50	ug/L	M EPA 8015	9/26/2003
Octacosane (Diesel Surrogate)	74.6		%	M EPA 8015	9/26/2003
Benzene	< 0.50	0 50	ug/L	EPA 8260B	9/27/2003
Toluene	< 0.50	0 50	ug/L	EPA 8260B	9/27/2003
Ethylbenzene	< 0 50	0.50	ug/L	EPA 8260B	9/27/2003
Total Xylenes	< 0 50	0 50	ug/L	EPA 8260B	9/27/2003
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	9/27/2003
Diisopropyl ether (DIPE)	< 0 50	0.50	ug/L	EPA 8260B	9/27/2003
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/27/2003
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/27/2003
Tert-Butanol	< 5.0	5 0	ug/L	EPA 8260B	9/27/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/27/2003
Toluene - d8 (Surr)	96 6		%	EPA 8260B	9/27/2003
4-Bromofluorobenzene (Surr)	99 0		%	EPA 8260B	9/27/2003
Benzene	< 0 50	0.50	ug/L	EPA 8260B	9/28/2003
Toluene	< 0 50	0.50	ug/L	EPA 8260B	9/28/2003
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/28/2003
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/28/2003
Methyl-t-butyl ether (MTBE)	< 0 50	0.50	ug/L	EPA 8260B	9/28/2003
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/28/2003
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/28/2003
Tert-amyl methyl ether (TAME)	< 0 50	0 50	ug/L	EPA 8260B	9/28/2003
Tert-Butanol	< 5 0	5.0	ug/L	EPA 8260B	9/28/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/28/2003
Toluene - d8 (Surr)	99 6		%	EPA 8260B	9/28/2003
4-Bromofluorobenzene (Surr)	98.8		%	EPA 8260B	9/28/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0 50	0.50	ug/L	EPA 8260B	9/24/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	9/24/2003
Ethylbenzene	< 0 50	0.50	ug/L	EPA 8260B	9/24/2003
Total Xylenes	< 0.50	0 50	ug/L	EPA 8260B	9/24/2003
Methyl-t-butyl ether (MTBE)	< 0 50	0.50	ug/L	EPA 8260B	9/24/2003
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/24/2003
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/24/2003
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/24/2003
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/24/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/24/2003
Toluene - d8 (Surr)	91 9		%	EPA 8260B	9/24/2003
4-Bromofluorobenzene (Surr)	95.8		%	EPA 8260B	9/24/2003

Approved By: Jeff Dahl

KIFF ANALYTICAL, LLC

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

Report Number : 35042

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 9/29/2003

Project Name : **SAIDIAN ALAMEDA**

Project Number :

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	1090	967	ug/L	M EPA 8015	9/25/03	109	96.7	12.3	70-130	25
TPH as Diesel	Blank	<50	1000	1000	1100	1080	ug/L	M EPA 8015	9/26/03	110	108	1.79	70-130	25
Benzene	35113-02	<0.50	40.1	39.9	41.0	42.8	ug/L	EPA 8260B	9/27/03	102	107	4.61	70-130	25
Toluene	35113-02	<0.50	40.1	39.9	41.4	43.0	ug/L	EPA 8260B	9/27/03	103	108	4.22	70-130	25
Tert-Butanol	35113-02	<5.0	200	200	188	195	ug/L	EPA 8260B	9/27/03	93.7	97.6	4.15	70-130	25
Methyl-t-Butyl Ether	35113-02	<0.50	40.1	39.9	37.2	38.0	ug/L	EPA 8260B	9/27/03	92.7	95.2	2.61	70-130	25
Benzene	35153-04	<0.50	40.0	40.0	41.7	41.7	ug/L	EPA 8260B	9/29/03	104	104	0.144	70-130	25
Toluene	35153-04	<0.50	40.0	40.0	42.2	41.7	ug/L	EPA 8260B	9/29/03	105	104	1.02	70-130	25
Tert-Butanol	35153-04	<5.0	200	200	206	204	ug/L	EPA 8260B	9/29/03	103	102	0.982	70-130	25
Methyl-t-Butyl Ether	35153-04	<0.50	40.0	40.0	41.7	40.6	ug/L	EPA 8260B	9/29/03	104	102	2 65	70-130	25
Benzene	35042-02	<0.50	40.0	40.0	40.2	39.1	ug/L	EPA 8260B	9/24/03	100	97.6	2.88	70-130	25
Toluene	35042-02	<0.50	40.0	40.0	37.9	37.4	ug/L	EPA 8260B	9/24/03	94.8	93.6	1.22	70-130	25
Tert-Butanol	35042-02	<5.0	200	200	209	257	ug/L	EPA 8260B	9/24/03	105	128	20.4	70-130	25
Methyl-t-Butyl Ether	35042-02	4.7	40.0	40.0	45.9	41.2	ug/L	EPA 8260B	9/24/03	103	91.2	12.0	70-130	25

Approved By: Jeff Dahl

KIFF ANALYTICAL, LLC

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

Report Number : 35042

QC Report : Laboratory Control Sample (LCS)

Date : 9/29/2003

Project Name : **SAIDIAN ALAMEDA**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	20.0	ug/L	EPA 8260B	9/27/03	106	70-130
Toluene	20.0	ug/L	EPA 8260B	9/27/03	107	70-130
Tert-Butanol	100	ug/L	EPA 8260B	9/27/03	102	70-130
Methyl-t-Butyl Ether	20.0	ug/L	EPA 8260B	9/27/03	98.9	70-130
Benzene	40.0	ug/L	EPA 8260B	9/28/03	102	70-130
Toluene	40.0	ug/L	EPA 8260B	9/28/03	104	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/28/03	100	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/28/03	102	70-130
Benzene	40.0	ug/L	EPA 8260B	9/24/03	97.8	70-130
Toluene	40.0	ug/L	EPA 8260B	9/24/03	98.0	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/24/03	109	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/24/03	94.2	70-130

KIFF ANALYTICAL, LLC

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

Approved By: Jeff Dahl

35042

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

Chain of Custody

PAGE 1 OF 1

SAMPLER (SIGNATURE)

PROJECT NAME SAMOAN ALAMEDA JOB NO.

ADDRESS ALAMEDA

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:
PLEASE SEND EDF

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015)	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	PURGEABLE HALOCARBONS (EPA 601/8010)	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)	TPH-G/BTEX/5 OXY'S (EPA 8260)	TPH-G/BTEX/7 OXY'S / LEAD SCAVANGERS/ 1,2-DCP (EPA 8260)			
MW-1	9/8	1545	W	5		X												X				-01
MW-2	9/8	1431	W	5		X												X				-02
MW-3	9/8	1504	W	5		X												X				-03

RELINQUISHED BY:
(signature) (time)
DAMIAN HERRERA
(printed name) (date)
Company ASE

RECEIVED BY:
(signature) (time)
(printed name) (date)
Company-

RELINQUISHED BY:
(signature) (time)
(printed name) (date)
Company-

RECEIVED BY LABORATORY:
Michelle Woodworth 0850
(signature) (time)
Michelle Woodworth 092203
(printed name) (date)
Company- Kiff Analytical

COMMENTS:
1,2-DCP = 1,2-dichloropropane

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