

July 28, 2003

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

> a t 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 June 3, 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.

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2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On June 3, 2003, ASE measured the depth to water in each 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. No free-floating hydrocarbons or sheen were observed in any site monitoring well. Groundwater elevation data is presented as *Table One*.

A groundwater potentiometric surface map is presented as Figure 2. Groundwater beneath the site flows to the west with a gradient of approximately 0.007-feet/foot.

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 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*.

1310 Central Avenue - Quarterly Monitoring Report - June 2003

4.0 CONCLUSIONS

The groundwater beneath the site flows to the west with a gradient of approximately 0.007-feet/foot.

Concentrations of all parameters analyzed for in the groundwater sample collected from monitoring well MW-1 have increased since the previous quarter. Groundwater samples collected from monitoring well MW-2 contained TPH-D at a concentration of 700 ppb, which is a decrease since last quarter. The MTBE concentration detected in the groundwater sample collected from monitoring well MW-2 remained consistent from 1 ppb last quarter to 2 ppb this quarter. Hydrocarbon concentrations detected in the groundwater sample collected from monitoring well MW-3 have decreased this quarter with the exceptions of MTBE and TBA, which increased slightly.

The TPH-G, ethylbenzene, and total xylene concentrations detected in the groundwater sample collected from monitoring well MW-1 exceeded Risk-Based Screenings Levels (RBSLs) for groundwater that is not a current or potential source of drinking water as presented in the "Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region dated December 2001. 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 exceeded the RBSLs.

5.0 RECOMMENDATIONS

ASE recommends that this site remain on a quarterly sampling schedule. The next sampling is scheduled for September 2003. ASE will also conduct the additional soil and groundwater assessment described in the work plan dated December 13, 2002 during the next quarter.

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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 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.

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) 820-939 1 if you have any questions or comments.

No. 6586

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

Damian Hriciga Project Geologist

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

Senior Geologist

Attachments: Table One and Two

Figures 1 and 2 Appendices A and B

cc: Mr. Nissan Saidian

Mr. Amir Gholami, ACHCSA

Mr. Chuck Headlee, RWOCB, San Francisco Bay Region

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 5/16/00 8/3/00 12/5/00 3/5/01 6/4/01 6/5/02 9/9/02 12/19/02 3/10/03 6/3/03	26.85	5.16 3.24 4.15 4.90 3.04 4.01 3.73 5.06 4.09 3.50 3.66	21.69 23.61 22.70 21.95 23.81 22.84 23.12 21.79 22.76 23.35 23.19
MW-2	9/6/99 5/16/00 8/3/00 12/5/00 3/5/01 6/4/01 6/5/02 9/9/02 12/19/02 3/10/03 6/3/03	27.18	5.56 3.52 4.44 5.24 3.28 4.33 3.98 5.34 4.33 3.58 3.87	21.62 23.66 22.74 21.94 23.90 22.85 23.20 21.84 22.85 23.60 23.31
MW-3	9/6/00 5/16/00 8/3/00 12/5/00 3/5/01 6/4/01 6/5/02 9/9/02 12/19/02 3/10/03 6/3/03	25.3 <i>0</i>	4.02 2.06 3.20 3.71 1.90 2.72 2.75 3.88 2.79 2.36 2.65	21.28 23.24 22.10 21.59 23.40 22.58 22.55 21.42 22.51 22.94 22.65

TABLE TWO

Summary of Chemical Analysis of GROUNDWATER Samples

Saldian Property-Alameda

Petroleum Hydrocarbons

All results are in parts per billion (ppb)

Well/	TPH	TPH			Ethyl	Total				Other
Date Sampled	Gasoline	Diesel	Benzene	Toluene	Benzene	Xylenes	MTBE	TAME	TBA	Oxygenates
MW-1										
9/6/1999	5.700	8.700	170	59	22	<i>8</i> 5	20.000	NA	NA	NA
5/16/2000	20.000	< 7.500	38	63	740	1,600	< 5.0	< 5.0	< 50	< 5 <i>0</i>
8/3/2000	20.000	< 6.000	56	9.7	920	1.600	< 0.5	< 0.5	<50	<05
12/5/2000	31.000	< 4.000	64	27	820	2.200	< 10	< 5.0	< 50	<5 <i>0</i>
3/5/2001	20.000	<4.000	19	<50	480	870	<5.0	<5.0	<50	<5 <i>0</i>
6/4/2001	23 000	<7.000	58	50	710	2,100	5.1	<5.0	<50	<5 <i>0</i>
6/5/2002	7.400	<1.500	93	6.7	180	230	<10	<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	10.500	7.9	25	56	93	< 1.0	< 1.0	< 10	< 1.0
3/10/2003	2.000	< 2.000	3.4	29	80	98	< 0.5	< 0.5	< 5.0	< 0.5
6/3/2003	7,300	<4000	6.8	9.9	300	1000	2.3	< 0.5	< 5.0	< 0.5
	•									
<u>MW-2</u>										
9/6/1999	6.000	70	1.300	92	50	400	6.800	NA	NA	NA
5/16/2000	< 5 <i>0</i>	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50	<50
8/3/2000	< 50	< 50	< 05	< 0.5	< 05	< 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	< 05	< 5.0	< 05
3/5/2001	<50	<50	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	<05	< 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	< 05	< 0.5	< 0.5	< 0.5	1.4	< 0.5	< 5.0	<05
12/19/2002	< 50		< 0.5	< 0.5	< 0.5	< 0.5	16	< 0.5	<50	< 0.5
3/10/2003	< 50	3 000	< 0.5	< 0.5	< 0.5	< 0.5	1.0	< 0.5	< 50	< 0.5
6/3/2003	<50	700	< 0.5	< 0.5	< 0.5	< 0.5	2.0	< 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	91	350	<5 <i>0</i>
8/3/2000	16.000	< 2.000	1600	29	210	53	1.200	21	260	<20
12/5/2000	17.000	5.800	1700	45	460	240	1,100	21	230	< 5.0
3/5/2001	29.000	<1300	2 100	68	280	100	180	<8.0	<80	<80
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	<50
3/10/2003	13.000	< 6.000	1,200	42	240	35	470	5.3	140	< 5.0
6/3/2003	6,500	<3000	750	21	46	15	1.300	<50	280	< 2.5
	-,		, 50				,,000			

MTBE = Methyl-t-butyl ether

TAME = Tert-amyl methyl ether

TBA = Tert-Butanol
TBA = Tert-Butanol
RBSL = Risk Based Screening Levels presented in the "Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and
Groundwater" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region, dated December 2001

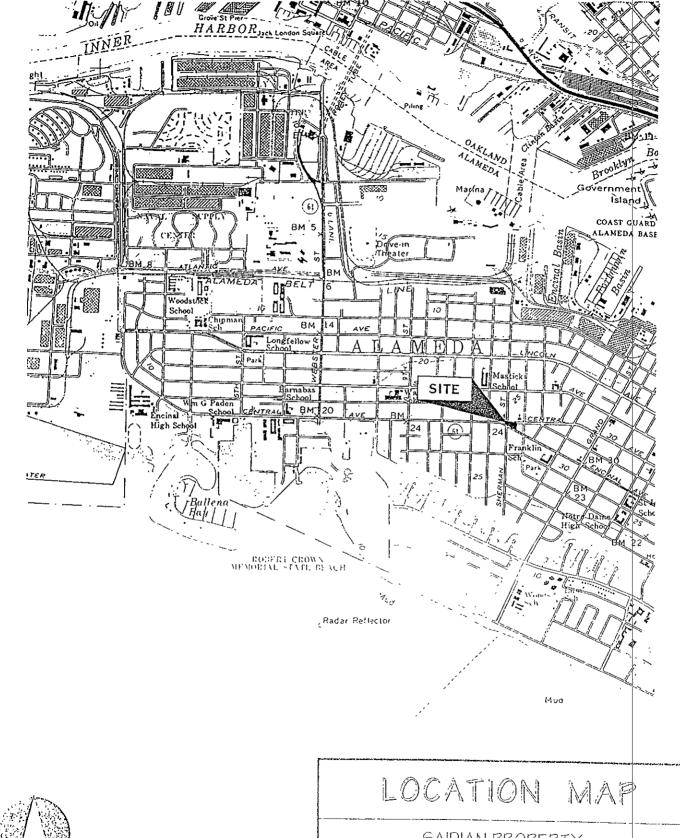
NA = Samples Not Analyzed for this compound.

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.

FIGURES



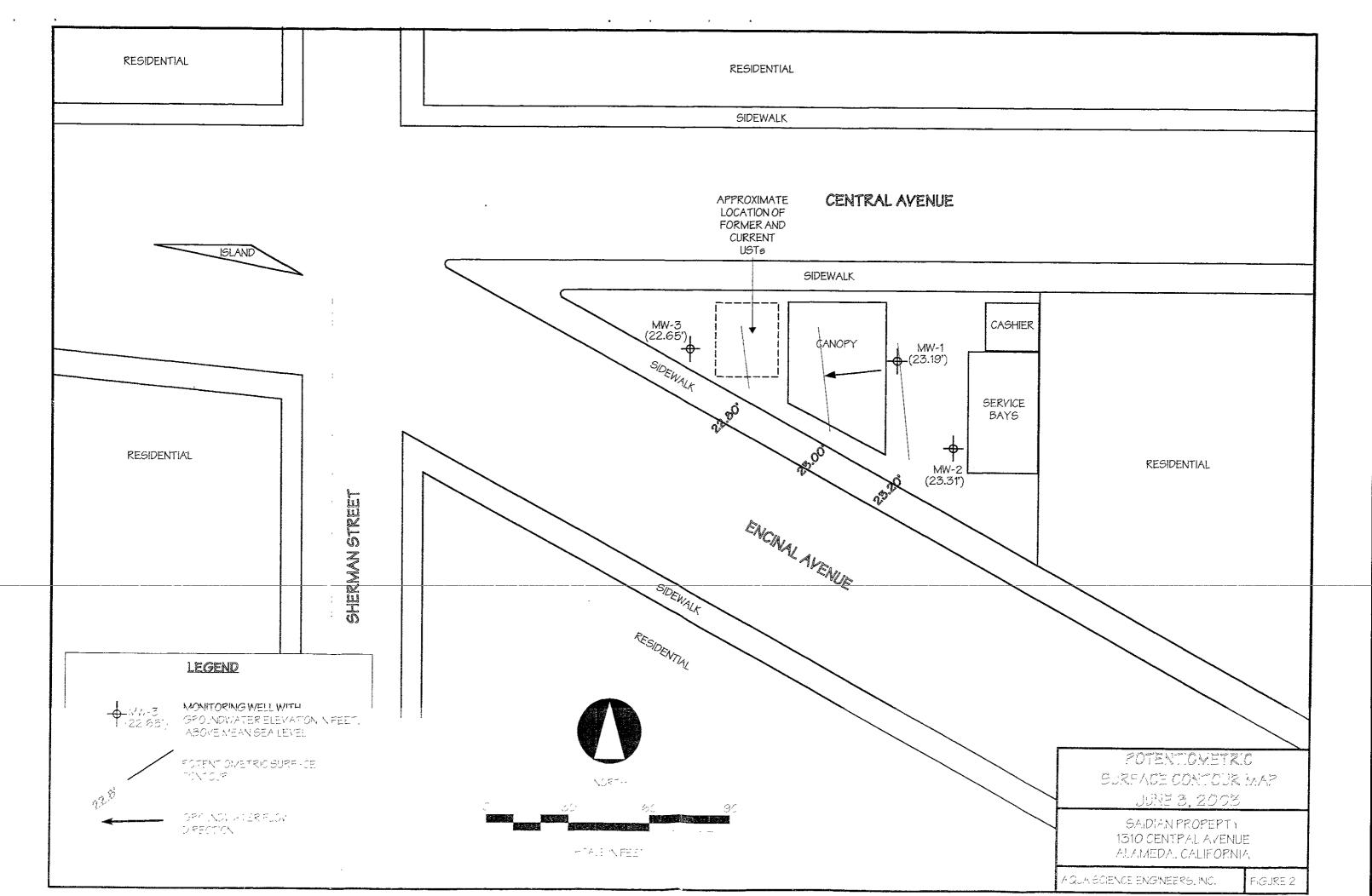


NORTH

SAIDIAN PROPERTY 1310 CENTRAL AVENUE ALAMEDA, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC.

Figure 1



APPENDIX A

Well Sampling Field Logs

aqua science engineers inc.

WELL SAMPLING FIELD LOG

HAY!					
Project Name and Ac	ddress:	THAN HILL	menna	1310 CONIRA	11=
Job #:		Date of	sampling:	6/2/02	
Well Name:	TMU-(Sampled	by: \) H-	
Total depth of well (reet): <u>+</u>	7-80 18.0	Well dia	meter (inches):	2
Depth to water befor	e sampling	(feet):	2.57	3.66	
Thickness of floating	product if	any:			
Depth of well casing	in water (f	eet): 4	145 16	1.34	
Number of gallons po	er well casi	ng volume	(gallons):	2-54 24	7
Number of well casing	ng volumes	to be remo	oved:	E 3	
Req'd volume of grou	indwater to	be purged	before san	opling (gallons):	74-7.3
Equipment used to p	urge the we	ell:{\scrice{\sice{\scrice{\scrice{\scrice{\scrice{\scrice{\scrice{\scrice{\scrice{\scrice{\sice{\scrice{\scrice{\scrice{\scrice{\scrice{\scrice{\scrice{\scrice{\sice{\scrice{\scrice{\scrice{\sice\sice{\sice{\sice{\sice{\sice{\sice}\sice{\sice{\sice{\sice{\sice{\sic	HILER -	-	******
Time Evacuation Beg	an:	2 Ti	me Evacua	tion Finished:	1155
Approximate volume	of groundy	water purge	d: 7	0	
Did the well go dry?:	<u>" " " " " " " " " " " " " " " " " " " </u>	. Aí	ter how m	any gallons:	
Did the well go dry?: Time samples were	collected:	1200			
Depth to water at tir	ne of samp	ling: 3	.67		
Percent recovery at t Samples collected wi	ime of sam	pling:			
Samples collected wi	th: <u>{</u>	SANLER			
Sample color:	<u></u>	Oo	lor: Made	RAJE HC	
Description of sedime					
CHEMICAL DATA					
Volume Purged	Temp	pH /	Conducti		
	<u> </u>	<u> 5.65</u>	40		
<u> </u>	<u> </u>	4.99	***************************************	435	
	69.7	3,6		46/	٠
(09.7	2150		<u>UCS</u>	
					
SAMPLES COLLECT	'ED				
Sample # of containers	Volume & ty	pe container	Pres Iced?	Analysis	
	11,2ml				
	- /				

aqua science engineers inc.

WELL SAMPLING FIELD LOG

in the second of
Project Name and Address: SAIDIAW/VICEMEN 1310, CENTRA 4,05
Job #:
Well Name: Mw-7. Sampled by: DH
Total depth of well (feet): 48 to 17.8 Well diameter (inches): 2
Depth to water before sampling (feet):
Thickness of floating product if any: Depth of well casing in water (feet):
Number of callens per well essing in Water (feet):
Number of gallons per well casing volume (gallons): 244 254 Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 73/76
Equipment used to purge the well: $\langle A (A C) \rangle$
Time Evacuation Began: 12 6 Time Evacuation Finished: 12 40
Approximate volume of groundwater purged:
Did the well go dry?: NO After how many gallons: Time samples were collected: 1245
Depth to water at time of sampling:
Percent recovery at time of sampling:
Samples collected with: 1341 Lel
Sample color:
Description of sediment in sample:
CHEMICAL DATA
Volume Purged Temp 5 pH Conductivity
700 5105 303
<u> </u>
<u> </u>
<u> </u>
SAMPLES COLLECTED
Sample # of containers Volume & type container Pres Iced? Analysis
MW-1 5 YORK VIALS HELX



WELL SAMPLING FIELD LOG

BIK

Project Name and Address: Saloran Areman 1310 Central Job #: 3618 Date of sampling: 6/5/03 Well Name: 190-3 Sampled by: 94 Total depth of well (feet): 18.0 Well diameter (inches): Depth to water before sampling (feet): 2.6 Thickness of floating product if any: Depth of well casing in water (feet): 15-35 Number of gallons per well casing volume (gallons): 2.6 Number of well casing volumes to be removed: 3 Req'd volume of groundwater to be purged before sampling (gallons): Equipment used to purge the well: 1500 Time Evacuation Began: 1570 Time Evacuation Finished:	2. 7.8
Approximate volume of groundwater purged: Did the well go dry?: Time samples were collected: Depth to water at time of sampling: Percent recovery at time of sampling: Samples collected with: Sample color: Description of sediment in sample:	3 (3
CHEMICAL DATA Volume Purged Temp 7 PH Conductivity 1 70.73	
Sample # of containers Volume & type container Pres Iced? Analysis	

APPENDIX B

Certified Analytical Report and Chain of Custody Documentation



Date: 6/13/2003

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,



Report Number: 3351\$

Date: 6/13/2003

Subject : Project Name : 3 Water Samples 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. Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample MW-2. The Method Reporting Limit for Tert-amyl methyl ether has been increased due to the presence of an interfering compound for sample MW-3.

Approved By: Jeff



Date: 6/13/2003

Project Name: SAIDIAN / ALAMEDA

Project Number:

Sample: MW-1

Matrix : Water

Lab Number : 33515-01

Sample Date :6/3/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	6.8	0.50	ug/L	EPA 8260B	6/8/2003
Toluene	9.9	0.50	ug/L	EPA 8260B	6/8/2003
Ethylbenzene	300	0.50	ug/L	EPA 8260B	6/8/2003
Total Xylenes	1000	2.0	ug/L	EPA 8260B	6/10/2003
Methyl-t-butyl ether (MTBE)	2.3	0.50	ug/L	EPA 8260B	6/8/2003
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	6/8/2003
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	6/8/2003
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	6/8/2003
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	6/8/2003
TPH as Gasoline	7300	200	ug/L	EPA 8260B	6/10/2003
Toluene - d8 (Surr)	105		% Recovery	EPA 8260B	6/8/2003
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	6/8/2003
TPH as Diesel	< 4000	4000	ug/L	M EPA 8015	6/12/2003

Approved By: Jeff



Date: 6/13/2003

Project Name: SAIDIAN / ALAMEDA

Project Number:

Sample: MW-2

Matrix : Water

Lab Number : 33515-02

Sample Date :6	3/3/2003
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Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/8/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/8/2003
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/8/2003
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/11/2003
Methyl-t-butyl ether (MTBE)	2.0	0.50	ug/L	EPA 8260B	6/8/2003
Dilsopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	6/8/2003
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	6/8/2003
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	6/8/2003
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	6/8/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/8/2003
Toluene - d8 (Surr)	109		% Recovery	EPA 8260B	6/8/2003
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	6/8/2003
TPH as Diesel	700	50	ug/L	M EPA 8015	6/12/2003

Approved By: Jeff Dahl



Date: 6/13/2003

Project Name: SAIDIAN / ALAMEDA

Project Number:

Sample: MW-3

Matrix: Water

Lab Number : 33515-03

Sample Date :6/3/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	750	2.5	ug/L	EPA 8260B	6/13/2003
Toluene	21	2.5	ug/L	EPA 8260B	6/13/2003
Ethylbenzene	46	2.5	ug/L	EPA 8260B	6/13/2003
Total Xylenes	15	2.5	ug/L	EPA 8260B	6/13/2003
Methyl-t-butyl ether (MTBE)	1300	2.5	ug/L	EPA 8260B	6/13/2003
Diisopropyl ether (DIPE)	< 2.5	2.5	ug/L	EPA 8260B	6/13/2003
Ethyl-t-butyl ether (ETBE)	< 2.5	2.5	ug/L	EPA 8260B	6/13/2003
Tert-amyl methyl ether (TAME)	< 50	50	ug/L	EPA 8260B	6/13/2003
Tert-Butanol	280	25	ug/L	EPA 8260B	6/13/2003
TPH as Gasoline	6500	250	ug/L	EPA 8260B	6/13/2003
Toluene - d8 (Surr)	109		% Recovery	EPA 8260B	6/13/2003
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	6/13/2003
TPH as Diesel	< 3000	3000	ug/L	M EPA 8015	6/12/2003

Approved By: /Jeff

Date: 6/13/2003

QC Report : Method Blank Data

Project Name: SAIDIAN / ALAMEDA

Project Number:

Parameter	Measured Value	Method Reportii Limit		Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	6/11/2003
Benzene	< 0.50	0 50	ug/L	EPA 8260B	6/7/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/7/2003
Ethylbenzene	< 0.50	0 50	ug/L	EPA 8260B	6/7/2003
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/7/2003
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/7/2003
Dasopropyl ether (DIPE)	< 0.50	0 50	ug/L	EPA 8260B	6/7/2003
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	6/7/2003
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	6/7/2003
Tert-Butanol	< 5 0	5.0	ug/L	EPA 8260B	6/7/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/7/2003
Toluene - d8 (Surr)	101		%	EPA 8260B	6/7/2003
4-Bromofluorobenzene (Surr)	104		%	EPA 8260B	6/7/2003
Benzene	< 0.50	0.50	ug/L	EPA 82608	6/12/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/12/2003
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/12/2003
Total Xylenes	< 0.50	0 50	ug/L	EPA 8260B	6/12/2003
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/12/2003
Diisopropyl ether (DIPE)	< 0 50	0.50	ug/L	EPA 8260B	6/12/2003
Ethyl-t-butyl ether (ETBE)	< 0.50	0 50	ug/L	EPA 8260B	6/12/2003
Tert-amyl methyl ether (TAME)	< 0.50	0 50	ug/L	EPA 8260B	6/12/2003
Tert-Butanol	< 50	5.0	ug/L	EPA 8260B	6/12/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/12/2003
Toluene - d8 (Surr)	106		%	EPA 8260B	6/12/2003
4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	6/12/2003

Parameter	Measured Value	Method Reporti Limit		Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/11/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/11/2003
Ethylbenzene	< 0.50	0 50	ug/L	EPA 8260B	6/11/2003
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/11/2003
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/11/2003
Disopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	6/11/2003
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	6/11/2003
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	6/11/2003
Tert-Butanoi	< 5.0	5.0	ug/L	EPA 8260B	6/11/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/11/2003
Toluene - d8 (Surr)	102		%	EPA 8260B	6/11/2003
4-Bromoffuorobenzene (Surr)	94.2		%	EPA 8260B	6/11/2003

Approved By: Jeff Dahil

KIFF ANALYTICAL, LLC

Date: 6/13/2003

Project Name: SAIDIAN / ALAMEDA

QC Report : Matrix Spike/ Matrix Spike Duplicate

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.	Duplicat Spiked Sample Percent Recov.	Relative	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	1020	920	ug/L	M EPA 8015	6/11/03	102	92.0	10.1	70-130	25
Benzene Toluene Tert-Butanol Methyl-t-Butyl Ethe	33543-03 33543-03 33543-03 or 33543-03	<0.50 <0.50 <5.0 <0.50	40.0 40.0 200 40.0	40.0 40.0 200 40.0	39.1 40.2 203 43.4	38.1 39.8 200 43.6	ug/L ug/L ug/L ug/L	EPA 8260B EPA 8260B EPA 8260B EPA 8260B	6/7/03 6/7/03 6/7/03 6/7/03	97.6 100 101 108	95.2 99.4 99.8 109	2.57 1.02 1.50 0.345	70-130 70-130 70-130 70-130	25 25 25 25
Benzene	33570-02	<0.50	40.0	40.0	38.9	37.6	ug/L	EPA 8260B	6/12/03	97.3	94.1	3.40	70-130	25
Toluene	33570-02	0.64	40.0	40.0	42.3	41.0	ug/L	EPA 8260B	6/12/03	104	101	3.19	70-130	25
Tert-Butanol	33570-02	<5.0	200	200	209	200	ug/L	EPA 8260B	6/12/03	104	99.8	4.43	70-130	25
Methyl-t-Butyl Ethe	r 33570-02	11	40.0	40.0	59.9	56.9	ug/L	EPA 8260B	6/12/03	122	115	6.43	70-130	25
Benzene Toluene Tert-Butanol	33577-03 33577-03 33577-03	<0.50 <0.50 <5.0	40.0 40.0 200	40.0 40.0 200	43.0 42.1 210	42.4 41.8 209	ug/L ug/L ug/L	EPA 8260B EPA 8260B EPA 8260B	6/11/03 6/11/03 6/11/03	108 105 105	106 104 104	1.38 0.787 0.358	70-130 70-130 70-130	25 25 25
Methyl-t-Butyl Ethe	133577-03	<0.50	40.0	40.0	38.5	37.8	ug/L	EPA 8260B	6/11/03	96.2	94.6	1.65	70-130	25

Approved By: Jeff Dahl

KIFF ANALYTICAL, LLC

Date: 6/13/2003

QC Report : Laboratory Control Sample (LCS)

Project Name: SAIDIAN / ALAMEDA

Project Number:

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	6/7/03	92.7	70-130
Toluene	40.0	ug/L	EPA 8260B	6/7/03	101	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/7/03	100	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/7/03	106	70-130
Benzene Toluene Tert-Butanol Methyl-t-Butyl Ether	40.0 40.0 200 40.0	ug/L ug/L ug/L ug/L	EPA 8260B EPA 8260B EPA 8260B EPA 8260B	6/12/03 6/12/03 6/12/03 6/12/03	94.9 99.7 99.9 102	70-130 70-130 70-130 70-130
Benzene Toluene Tert-Butanol Methyl-t-Butyl Ether	40.0 40.0 200 40.0	ug/L ug/L ug/L ug/L	EPA 8260B EPA 8260B EPA 8260B EPA 8260B	6/11/03 6/11/03 6/11/03 6/11/03	105 104 103 88.0	70-130 70-130 70-130 70-130

Approved By: Ueff Dah

KIFF ANALYTICAL, LLC

Aqua Science Engineers, Inc. Chain of Custody 208 W. El Pintado Road Danville, CA 94526 33515 (925) 820-9391 FAX (925) 837-4853 PAGE _ SAMPLER (SIGNATURE) SAIDIAN/ALAMODA PROJECT NAME JOB NO. ADDRESS 1310 CENTRAL AVE ALAMEDA YSIS REQUEST Pb (TOTAL or DISSOLVED) (EPA 6010) 7PH-6AS/07EX 8260R PURGEABLE HALOCARBONS (EPA 601/8010) ORGANOPHOSPHORUS PESTICIDES (EPA 8140 EPA 608/8080) TPH-G/BTEX/7 0XY'S / LEAD SCAVANGERS/ 1.2-DCP (EPA 8260) SEMI-VOLATILE ORGANICS (EPA 625/8270) SPECIAL INSTRUCTIONS: TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020) VOLATILE ORGANICS (EPA 624/8240/8260) TPH-DIESEL & MOTOR OIL (EPA 3510/8015) тРН-G/ВТЕХ/5 ОХҮ'Э (EPA 8260) PCB₅ & PESTICIDES (EPA 608/8080) FUEL OXYGENATES (EPA 8260) LUFT METALS (5) (EPA 6010+7000) CAM 17 METALS (EPA 6010+7000) OIL & GREASE (EPA 5520) — PIESE NO. OF SAMPLE ID. DATE TIME MATRIX SAMPLES to 6030 MW-1200 mw-2 1245 U Mw-3 1547 63 COMMENTS: RELINQUISHED BY: RECEIVED BY: RECEIVED BY LABORATORY: RELINQUISHED BY: Hoth Cuttle 10933 1,2-DCP = 1,2-dichloropropane side (time) (signature) (time) (sianature) (time) CUTTLE Obobos DAMIAN HELICA TURN AROUND TIME (printed name) (date) (printed name) (date) (printed name) (date) (printed name) (date) STANDARD 24Hr 48Hr 72Hr Company-Company-Company-Company-KIFF SNADIMA