January 7, 2004

Alameda County

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ROW

QUARTERLY GROUNDWATER MONITORING REPORT DECEMBER 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 December 22, 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 December 22, 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. No free-floating hydrocarbons or sheen was present in any of the monitoring wells. 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 northwest with a hydraulic gradient of approximately 0.003-feet/foot. Flow direction at the site has varied from quarter to quarter. Additionally, all three monitoring wells, and MW-3 in particular have consistently been noted to be under pressure, and water level measurements may not accurately 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

Hydrocarbon concentrations generally decreased in monitoring well MW-1 and remained relatively constant in MW-2 and MW-3. The MTBE concentration in the groundwater sample collected from monitoring well MW-2 increased this quarter.

The TPH-G 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 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 March 2004. Furthermore, ASE will conduct the additional soil and groundwater assessment described in the workplan dated December 13, 2002 during the next quarter.

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.

1310 Central Avenue - Quarterly Monitoring Report - December 2003

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.

Damian Mriciga
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

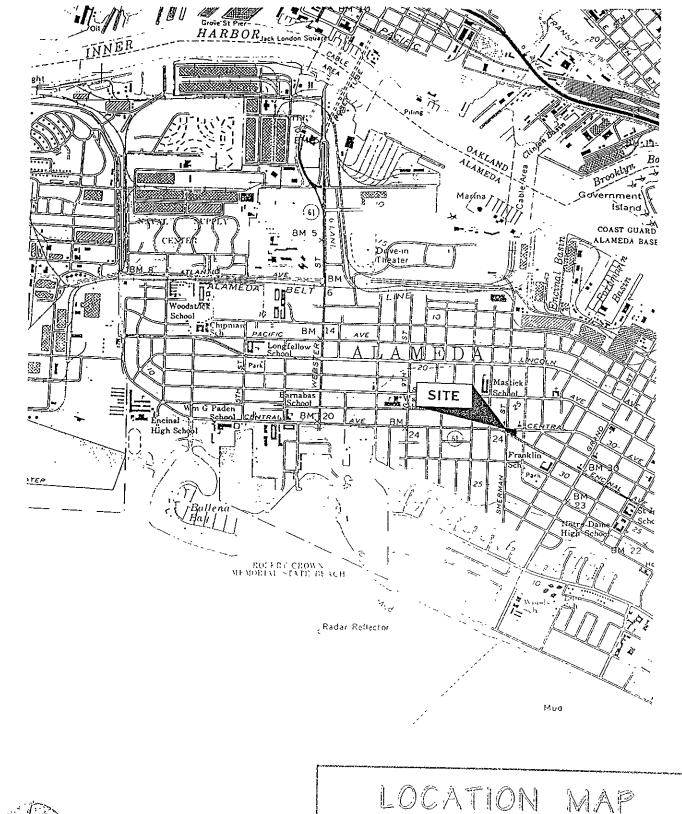
cc: Mr. Nissan Saidian

Mr. Amir Gholami, ACHCSA

Mr. Chuck Headlee, RWQCB, San Francisco Bay Region

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FIGURES





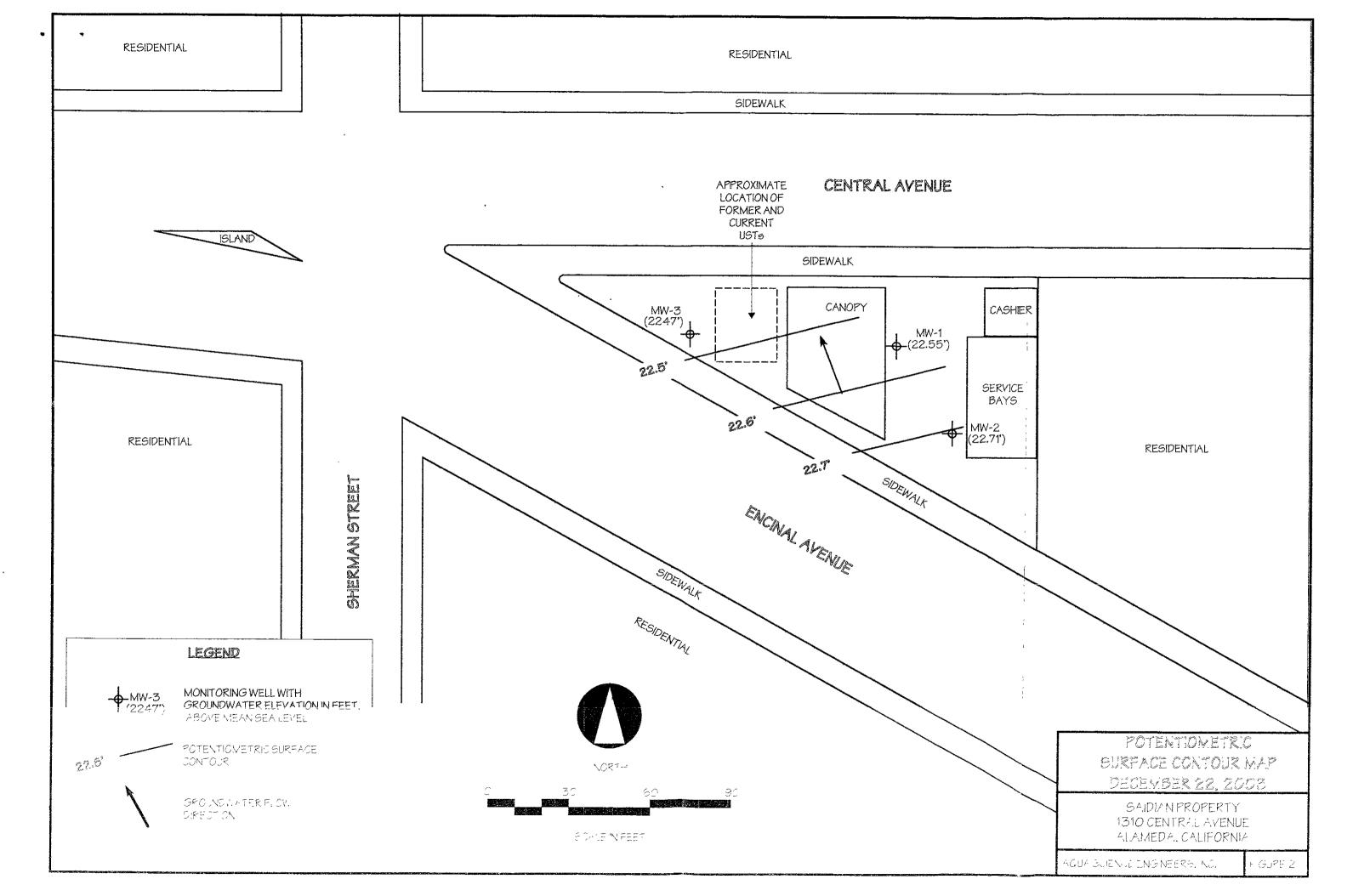
NORTH

MAP

SAIDIAN PROPERTY 1310 CENTRAL AVENUE ALAMEDA, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC.

Figure 1



TABLES

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

	Date of	Top of Casing Elevation	Depth to Water	Groundwater Elevation
Well	Meaourement	(møl)	(feet)	(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 9/18/03 12/22/03	26.85	5.16 3.24 4.15 4.90 3.04 4.01 3.73 5.06 4.09 3.50 3.66 4.91 4.30	21.69 23.61 22.70 21.95 23.81 22.84 23.12 21.79 22,76 23,35 23.19 21.94 22.55
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 9/18/03 12/22/03	27.18	5.56 3.52 4.44 5.24 5.28 4.33 3.98 5.34 4.33 3.58 3.87 5.24 4.47	21.62 23.66 22.74 21.94 23.90 22.85 23.20 21.84 22.85 23.60 23.31 21.94 22.71
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 9/19/03	25.30	4.02 2.06 3.20 3.71 1.90 2.72 2.75 3.88 2.79 2.36 2.65 3.15 2.83	21.28 23.24 22.10 21.59 23.40 22.58 22.55 21.42 22.51 22.94 22.65 22.15 22.47

TABLE TWO

Summary of Chemical Analysis of GROUNDWATER Samples

Saidian 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
[O A y O O MATO O S
MW-1										
9/6/1999	5,700	8,700	17 <i>0</i>	59	22	<i>8</i> 5	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
12/22/2003	4,300	< 2,000	12	6.7	200	290	9.1	< 1.0	< 10	< 1.0
(0, -10, -10	.,	12,000		0.,	200	200	OII	\ 1.0	(10	\ 1.0
MW-2										
9/6/1999	6.000	70	1,300	92	5 <i>0</i>	400	6,800	NA	NA	NA
5/16/2000	< 50	< 5 <i>0</i>	< 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	<5 <i>0</i>	<0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5
6/4/2001	<50	<5 <i>0</i>	<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	
9/18/2003	< 50	1,400	< 0.5	< 0.5	< 0.5	< 0.5	4.7	< 0.5		< 0.5
12/22/2003	<50	1,000	< 0.5	< 0.5	< 0.5	< 0.5	39	< 0.5	< 5.0 < 5. 0	< 0.5
12/22/2000	(50	1,000	(0.5	(0.5	₹0.5	₹0.5	09	₹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	
6/4/2001	17,000	<6,000	2,000	56	340	230	300			<8.0
		•						<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 35	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	< 5 <i>0</i>	280	< 2.5
9/18/2003	9,800	< 3,000	1,500	38	17 <i>0</i>	32	420	< 10	150	< 10
12/22/2003	8,800	< 2,000	1,100	32	<i>8</i> 2	20	33 <i>0</i>	5.8	52	< 5.0
ESL	500	640	46	. 130	.290: ;	180		· NĒ	NE:	VARIES

Notes:

MTBE = Methyl-t-butyl ethor

TAME = Fort-anyl methyl ether

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

NA = Samples Not Analyzed for this compound.

NE = DH5 MCLs are not cetablished

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

Most recent data in bold

TBA = Tort-Butanol

APPENDIX A

Well Sampling Field Logs



Project Name and Address:	SADIA	A AMOOR
Job #: 3648	Date of sampling:	12/27/03
Well Name: Mw-	Sampled by:	Dit-
Total depth of well (feet):	Well diameter	(inches): Z-
Depth to water before sampling (fe	eet): +1.3a	· ·
Thickness of floating product if an Depth of well casing in water (feet	y:	
Depth of well casing in water (feet	():	
Number of gallons per well casing	volume (gallons):	16
Number of well casing volumes to	be removed:	3
Req'd volume of groundwater to be	purged before sampling	(gallons): 3
Equipment used to purge the well	SATURIC	
Time Evacuation Began: 1635		Finished: 1700
Approximate volume of groundwat		
Did the well go dry?: YES		gallons:
Time samples were collected:	1702	
Depth to water at time of sampling		
Percent recovery at time of sample		
Samples collected with: SAL		
Sample color: CCCC		
Description of sediment in sample:	SICT ISAND	
CHEMICAL DATA		
Volume Purged Temp	pH Conductivity	
731	<u>610</u> <u>510</u>	•
	638 450	•
	6.42 -181	-
		•
		-
SAMPLES COLLECTED		
Sample # of containers Volume & type	container Pres Iced? Analy	<u>/sis</u>
Twil 5 Mini	MA HIC +	
		V
		····

i



WELL SAMPLING FIELD LOG

Project Name and Address:	SAIDIAN AT ATERA
Job #: \$ らい(と	Date of sampling: Pt 12/22/c3
Well Name: MW-7	Sampled by:
Total depth of well (feet):	Well diameter (inches): Z
TS .1 . 1 C . 11	10
Thickness of floating product if Depth of well casing in water (f	any:
Depth of well casing in water (f	eet): 853
Number of gallons per well casi	ng volume (gallons): 1
Number of well casing volumes	to be removed:3
	be purged before sampling (gallons): [1.]
Equipment used to purge the we	ell: SALER
Time Evacuation Began: 1670	Time Evacuation Finished: 1633
Approximate volume of groundy	vater purged. 4,5
Did the well go dry?: No	After how many gallons:
Time samples were collected:	1632
Depth to water at time of sample	ling: 47.43
Percent recovery at time of sam	ipling:
Samples collected with:	
Sample color:	Odor:
Description of sediment in samp	ile:
CHEMICAL DATA	
Volume Purged Temp	pH Conductivity
<u> </u>	<u>601 250</u>
2.8 72.8	6.30 273
<u> 42</u> 72.5	6.28 279
SAMPLES COLLECTED	
Sample # of containers Volume & ty	
M4-7 5 40 ML	vort lec

aqua science engineers inc. WELL SAMPLING FIELD LOG

Project Name and Address:	SAI	PLAN .	ALAMEDA	
Job #:	Date of	sampling:	17 (27/	6.7
Well Name: $M\omega - 3$	Sampled	by:	17/22(<u> </u>
Total depth of well (feet):	16.4(Well diam	neter (inches)	2
Depth to water before sampli	no (feet).	11	(
Thickness of floating product	if any:	+5	3-3-7	
Debin or wen casing in Matel	' (leet):	,	$\zeta \zeta \gamma$	
Number of gallons per well of	asing volume (gallons).	2.7	
Number of well casing volum	es to be remov	ved:		
Req'd volume of groundwater Equipment used to purge the	to be purged l	before samp	pling (gallons):	
Time Evacuation Began: 17	<u>⊘S</u> Tim	e Evacuati	on Finished:	1720
Approximate volume of ground	ndwater nurged	•	<i>-</i> / .	
Did the well go dry?: 10 3 Time samples were collected:	Afte	er how ma	ny gallons:	The state of the s
Time samples were collected:	1 (2			
Depth to water at time of sai	npling: LI	10	· — — — — — — — — — — — — — — — — — — —	
Percent recovery at time of s Samples collected with: Sample color: Occes	sampling:	1.07		
Sample color: (1) (1)	35231	117		
Description of sediment in sa	Udo	ri		
besoftprion of seatment in sa	impie: <u>></u>			
CHEMICAL DATA				
Volume Purged Temp	pН	Conductivi	ty	
2.7 74.0		640		
732	L.08	651		
72.9	6.18	650		
				•
SAMPLES COLLECTED				
Sample # of containers Values &				
Sample # of containers Volume &	type container Pr	es leed? A	<u>Analysis</u>	
	L WOLT IV			
	·			

APPENDIX B

Certified Analytical Report and Chain of Custody Documentation



Date: 12/31/2003

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

Subject: 3 Water Samples

Project Name: SAIDIAN ALAMEDA

Project Number: 3648

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,



Date: 12/31/2003

Subject: 3 Water Samples
Project Name: SAIDIAN ALAMEDA

Project Number: 3648

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



Date: 12/31/2003

Project Name: SAIDIAN ALAMEDA

Project Number: 3648

Sample: MW-1 Matrix: Water Lab Number: 36465-01

Sample Date :12/22/2003

Sample Date :12/22/2003					
Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	12	1.0	ug/L.	EPA 8260B	12/27/2003
Toluene	6.7	1.0	ug/L	EPA 8260B	12/27/2003
Ethylbenzene	200	1.0	ug/L	EPA 8260B	12/27/2003
Total Xylenes	290	1.0	ug/L	EPA 8260B	12/27/2003
Methyl-t-butyl ether (MTBE)	9.1	1.0	ug/L	EPA 8260B	12/27/2003
Diisopropyl ether (DIPE)	< 1.0	1.0	ug/L	EPA 8260B	12/27/2003
Ethyl-t-butyl ether (ETBE)	< 1.0	1.0	ug/L	EPA 8260B	12/27/2003
Tert-amyl methyl ether (TAME)	< 1.0	1.0	ug/L	EPA 8260B	12/27/2003
Tert-Butanol	< 10	10	ug/L	EPA 8260B	12/27/2003
TPH as Gasoline	4300	100	ug/L	EPA 8260B	12/27/2003
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	12/27/2003
4-Bromofluorobenzene (Surr)	95.3		% Recovery	EPA 8260B	12/27/2003
TPH as Diesel	< 2000	2000	ug/L	M EPA 8015	12/31/2003
Octacosane (Diesel Surrogate)	96.2		% Recovery	M EPA 8015	12/31/2003

Approved By: Jeff Dani



Date: 12/31/2003

Project Name: SAIDIAN ALAMEDA

Project Number: 3648

Sample: MW-2

Matrix : Water

Lab Number : 36465-02

Sample Date :12/22/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/29/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/29/2003
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/29/2003
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/29/2003
Methyl-t-butyl ether (MTBE)	39	0.50	ug/L	EPA 8260B	12/29/2003
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/29/2003
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/29/2003
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/29/2003
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/29/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/29/2003
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	12/29/2003
4-Bromofluorobenzene (Surr)	97.2		% Recovery	EPA 8260B	12/29/2003
TPH as Diesel	1000	50	ug/L	M EPA 8015	12/31/2003
Octacosane (Diesel Surrogate)	91.5		% Recovery	M EPA 8015	12/31/2003

Approved By: Jeff Dahl



Date: 12/31/2003

Project Name: SAIDIAN ALAMEDA

Project Number: 3648

Sample: MW-3

Matrix: Water

Lab Number: 36465-03

Sample Date :12/22/2003

Sample Date :12/22/2003		8.6 - 411			
Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	1100	5.0	ug/L	EPA 8260B	12/28/2003
Toluene	32	5.0	ug/L	EPA 8260B	12/28/2003
Ethylbenzene	82	5.0	ug/L	EPA 8260B	12/28/2003
Total Xylenes	20	5.0	ug/L	EPA 8260B	12/28/2003
Methyl-t-butyl ether (MTBE)	330	5.0	ug/L	EPA 8260B	12/28/2003
Diisopropyl ether (DIPE)	< 5.0	5.0	ug/L	EPA 8260B	12/28/2003
Ethyl-t-butyl ether (ETBE)	< 5.0	5.0	ug/L	EPA 8260B	12/28/2003
Tert-amyl methyl ether (TAME)	5.8	5.0	ug/L	EPA 8260B	12/28/2003
Tert-Butanol	52	50	ug/L	EPA 8260B	12/28/2003
TPH as Gasoline	8800	500	ug/L	EPA 8260B	12/28/2003
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	12/28/2003
4-Bromofluorobenzene (Surr)	91.2		% Recovery	EPA 8260B	12/28/2003
TPH as Diesel	< 2000	2000	ug/L	M EPA 8015	12/31/2003
Octacosane (Diesel Surrogate)	109		% Recovery	M EPA 8015	12/31/2003

Approved By: Jeff Dahl

Date: 12/31/2003

QC Report : Method Blank Data

Project Name: SAIDIAN ALAMEDA

Project Number: 3648

Parameter	Measured Value	Method Reportir Limit	ng Units	Analysis Method	Date Analyzec
TPH as Diesel	< 50	50	ug/L	M EPA 8015	12/30/200
Octacosane (Diesel Surrogate)	92.0		%	M EPA 8015	12/30/200
TPH as Diesel	< 50	50	ug/L	M EPA 8015	12/30/200
Octacosane (Diesel Surrogate)	8.08		%	M EPA 8015	12/30/200
Benzene	< 0.50	0 50	ug/L	EPA 8260B	12/27/200
Toluene	< 0.50	0 50	ug/L	EPA 8260B	12/27/200
Ethylbenzene	< 0.50	0 50	ug/L	EPA 8260B	12/27/200
Total Xylenes	< 0.50	0 50	սց/L	EPA 8260B	12/27/200
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/27/200
Disopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/27/200
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/27/200
Tert-amyl methyl ether (TAME)	< 0.50	0 50	ug/L	EPA 8260B	12/27/200
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/27/200
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/27/200
Toluene - d8 (Surr)	101		%	EPA 8260B	12/27/200
4-Bromofluorobenzene (Surr)	92 6		%	EPA 8260B	12/27/200
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/28/200
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/28/200
Ethylbenzene	< 0 50	0 50	ug/L	EPA 8260B	12/28/200
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/28/200
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/28/200
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/28/200
Ethyl-t-butyl ether (ETBE)	< 0.50	0 50	ug/L	EPA 8260B	12/28/200
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/28/200
Tert-Butanol	< 50	5.0	ug/L	EPA 8260B	12/28/200
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/28/200
Toluene - d8 (Surr)	102		%	EPA 8260B	12/28/200
4-Bromofluorobenzene (Surr)	97.3		%	EPA 8260B	12/28/200

Parameter	Measured Value	Method Reportin Limit	g Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/28/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/28/2003
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/28/2003
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/28/2003
Methyl-t-butyl ether (MTBE)	< 0.50	0 50	ug/L	EPA 8260B	12/28/2003
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/28/2003
Ethyl-t-butyl ether (ETBE)	< 0 50	0 50	ug/L	EPA 8260B	12/28/2003
Tert-amyl methyl ether (TAME)	< 0.50	0 50	ug/L	EPA 8260B	12/28/2003
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	12/28/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/28/2003
Toluene - d8 (Surr)	101		%	EPA 8260B	12/28/2003
4-Bromofluorobenzene (Surr)	90 2		%	EPA 8260B	12/28/2003

Approved By: Jeff Danl

KIFF ANALYTICAL, LLC

Date: 12/31/2003

Project Name: SAIDIAN ALAMEDA

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Number: 3648

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	e 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	1060	1140	ug/L	M EPA 8015	12/30/03	106	114	7.22	70-130	25
TPH as Diesel	Blank	<50	1000	1000	981	981	ug/L	M EPA 8015	12/30/03	98.1	98.1	0.00	70-130	25
Benzene	36464-01	1,1	39.9	39.9	42.8	43.0	ug/L	EPA 8260B	12/27/03	104	105	0.382	70-130	25
Toluene	36464-01	<0.50	39.9	39.9	41.5	41.5	ug/L	EPA 8260B	12/27/03	104	104	0.0481	70-130	25
Tert-Butanol	36464-01	<5.0	200	200	203	204	ug/L	EPA 8260B	12/27/03	102	102	0.0932	70-130	25
Methyl-t-Butyl Eth	er 36464-01	0.58	39.9	39.9	41.1	41.0	ug/L	EPA 8260B	12/27/03	101	101	0.0493	70-130	25
Benzene	36457-05	<0.50	40.0	40.0	416	41.3	ug/L	EPA 8260B	12/28/03	104	103	0.747	70-130	25
Toluene	36457-05	< 0.50	40.0	40.0	43 9	43.0	ug/L	EPA 8260B	12/28/03	110	107	2.19	70-130	25
Tert-Butanol	36457-05	<5.0	200	200	216	216	ug/L	EPA 8260B	12/28/03	108	108	0.0323	70-130	25
Methyl-t-Butyl Eth	er 36457-05	4.7	40.0	40.0	48.5	46.8	ug/L	EPA 8260B	12/28/03	109	105	3.91	70-130	25
Benzene	36413-06	20	40.0	40.0	65.0	63.9	ug/L	EPA 8260B	12/28/03	112	110	2.47	70-130	25
Toluene	36413-06	48	40.0	40.0	89.3	86.6	ug/L	EPA 8260B	12/28/03	103	96.6	6.77	70-130	25
Tert-Butanol	36413-06	<5.0	200	200	208	212	ug/L	EPA 8260B	12/28/03	104	106	1 50	70-130	25
Methyl-t-Butyl Eth	er 36413-06	3.4	40.0	40.0	44.1	42.6	ug/L	EPA 8260B	12/28/03	102	98.0	3.88	70-130	25

Approved By: Jeff Dahl

KIFF ANALYTICAL, LLC

Date: 12/31/2003

QC Report : Laboratory Control Sample (LCS)

Project Name: SAIDIAN ALAMEDA

Project Number: 3648

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	12/27/03	110	70-130
Toluene	40.0	ug/L	EPA 8260B	12/27/03	107	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/27/03	97.9	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/27/03	109	70-130
Benzene	40.0	ug/L	EPA 8260B	12/28/03	100	70-130
Toluene	40.0	_	EPA 8260B	12/28/03	103	
Tert-Butanol	200	ug/L	EPA 8260B	12/28/03	100	70-130 70-130
Methyl-t-Butyl Ether	40.0	ug/L ug/L	EPA 8260B	12/28/03	100	70-130 70-130
Meary-t-Daty: Ealer	40.0	ug/L	LF A 0200B	12/20/03	101	70-130
Benzene	40.0	ug/L	EPA 8260B	12/28/03	115	70-130
Toluene	40.0	ug/L	EPA 8260B	12/28/03	108	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/28/03	105	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/28/03	98.1	70-130

Approved By:

KIFF ANALYTICAL, LLC

36465 Aqua Science Engineers, Inc. Chain of Custody 208 W. El Pintado Road Danville, CA 94526 (925) 820-9391 FAX (925) 837-4853 SAMPLER (SIGNATURE) SAIAM AL MEDA PROJECT NAME 3648 JOB NO. ALAMOOA **ADDRESS** ANALYSIS REQUEST Pb (TOTAL or DISSOLVED) (EPA 6010) PURGEABLE HALOCARBONS (EPA 601/8010) ORGANOPHOSPHORUS
PESTICIDES (EPA 8140
EPA 608/8080) TPH-G/BTEX/7 OXY'S / LEAD SCAVANGERS/ 1,2-DCP (EPA 8260) SPECIAL INSTRUCTIONS: SEMI-VOLATILE ORGANICS (EPA 625/8270) TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020) TPH-DIESEL & MOTOR OIL (EPA 3510/8015) VOLATILE ORGANICS (EPA 624/8240/8260) TPH-G/BTEX/5 0XY'S (EPA 8260) PLEASE SELD EDF PCBs & PESTICIDES (EPA 608/8080) FUEL OXYGENATES (EPA 8260) CAM 17 METALS (EPA 6010+7000) LUFT METALS (5) (EPA 6010+7000) TPH-DIESEL (EPA 3510/8015) OIL & GREASE (EPA 5520) — NO. OF SAMPLE ID. DATE TIME MATRIX SAMPLES 3 X 1702 5 01 W 02 172/ 03 ISHED BY: RECEIVED BY: COMMENTS: RELINQUISHED BY: RECEIVED BY LABORATORY: 12-DCP - 12-dichloropropane O955 While worked 0915 (signature) (time) (signature) signature) (time) michelly woodwarth 122403 TURN AROUND TIME (printed name). (date) (printed namé (date) (printed name) STANDARD 24Hr 48H 72Hr Company-Company Company-Company-Kilf Analytical OTHER: