

Alomeda County

APR 0 4 2003

Environmental Health

QUARTERLY GROUNDWATER MONITORING REPORT MARCH 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 March 10, 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 March 10, 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 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 northwest with a gradient of approximately 0.007-feet/foot. This gradient is consistent with the previous quarter's results and the off-site distribution of hydrocarbons found during a previous subsurface investigation.

#### 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*.

#### 4.0 CONCLUSIONS

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

Groundwater samples collected from monitoring well MW-1 continue to show a decreasing trend in concentrations of TPH-G and benzene, while the concentrations of toluene, ethyl benzene, and total xylenes have risen slightly since the previous quarter. Groundwater samples collected from monitoring well MW-2 contained TPH-D at a concentration of 3,000 ppb, which is the highest concentration ever detected at this well. The MTBE detected in the groundwater sample collected from monitoring well MW-2 decreased from 16 ppb last quarter to 1 ppb this quarter. The hydrocarbon concentrations detected in groundwater samples collected from monitoring well MW-3 have risen slightly this quarter and remain elevated.

The TPH-G and total xylene concentrations detected in groundwater samples 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 also exceeded the RBSLs.

#### 5.0 RECOMMENDATIONS

ASE recommends that this site remain on a quarterly sampling schedule. The next sampling is scheduled for March 2003. ASE is awaiting approval of the workplan dated December 13, 2002 for the additional work needed to be performed at the site. Following the approval of the workplan, the cost for the additional assessment will require pre-approval from the UST Cleanup Fund.

#### 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-EPA 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.

No. 6586

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

Erik H. Paddleford Associate Geologist

Ent H Paddho

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

Senior Geologist

hald E.K.T.

Attachments: Table One and Two

Figures 1 and 2

Appendices A and B

ce: Mr. Nissan Saidian

Mr. Amir Gholami, ACHCSA

Mr. Chuck Headlee, RWQCB, 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 (m51)
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 <b>3/10/03</b>	26.85	5.16 3.24 4.15 4.90 3.04 4.01 3.73 5.06 4.09 <b>3.50</b>	21.69 23.61 22.70 21.95 23.81 22.84 23.12 21.79 22.76 <b>23.35</b>
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 <b>3/10/03</b>	27.18	5.56 3.52 4.44 5.24 3.28 4.33 3.98 5.34 4.33 <b>3.58</b>	21.62 23.66 22.74 21.94 23.90 22.85 23.20 21.84 22.85 <b>23.60</b>
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 <b>3/10/03</b>	25.3 <i>0</i>	4.02 2.06 3.20 3.71 1.90 2.72 2.75 3.88 2.79 <b>2.36</b>	21.28 23.24 22.10 21.59 23.40 22.58 22.55 21.42 22.51 <b>22.94</b>

#### TABLE TWO

#### Summary of Chemical Analysis of GROUNDWATER Samples

#### Saidian Property-Alameda

Petro eum '-yarocarpors

...resuts are riparts per billion (ppb)

		TPL			Ethyo	OCC				Other
Date Samplea	Gasolino	2 898	Berzere	Tolere	Berzene	Ky eres	VTBE	TAVE	75.	Crygenates
May-1										
9.6/1999	5.700	8.700	·70	59	22	<i>3</i> 5	20.000		N#	
5 16/2000	20.000	< 7.500	38	55 6.3	740	1.600	< 5 O	<50	×50	√; <50
8:3.2000	20,000	< 6.000	56	97	920	1.600	<05	<05	< 50	< 0.5
12/5/2000	31.000	< 4.000	64	27	820	2,200	< 10	<50	< 50	<5 <i>0</i>
3/5/2001	20.000	<4.000	19	<5 <i>0</i>	480	870	<5 <i>0</i>	<5 <i>0</i>	<50	<5.0
6/4/2001	23.000	<7.000	58	50	710	2.100	51	<5 <i>0</i>	<50	<5.0
6/5/2002	7,400	<1500	93	6.7	.90	230	<10	<1.0	<10	<10
9/9/2002	8,300	< 3,500	32	20	390	670	<20	< 2.0	< 20	<20
12/19/2002	5,100		79	25	56	93	<10	< 1.0	< 10	<10
3/10/2003	2,000	< 2,000	3.4	2.9	80	98	< 0.5	< 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	< 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	< 05	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5
12/5/2000 3/5/2001	< 5 <i>0</i> <50	1,400 <50	< 0.5 < 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5
6/4/2001	<50 <50	<50 <50	<0.5	<05 <05	<05 <05	<05 <05	< 0.5 < 0.5	< 0.5 < 0.5	< 5 <i>0</i> < 5.0	< 05
6/5/2002	< 50	2,300	<0.5 <0.5	< 0.5	<05	< 0.5	< 0.5	< 0.5	< 5.0 < 5.0	<05 <05
9/9/2002	< 50	1,300	< 0.5	< 0.5	< 0.5	<05	1.4	< 0.5	< 5.0	< 0.5
12/19/2002	<50	1,000	< 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
		-,	(0.0	10.0	(0.0	10.0		1010	(0.0	(0.0
<u>MW-3</u>										
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	3 <i>80</i>	190	990	9.1	35 <i>0</i>	< 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	23 <i>0</i>	< 5.0
3/5/2001	29.000	<1300	2,100	68	280	100	1 <i>80</i>	<80	<80	<8.0
6/4/2001	17,000	<6,000	2,000	56	340	230	30 <i>0</i>	<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

RBSL 500 640 46 130 290 13 800 NE NE VARIES

#### Notes

MTBE = Methyl-t-butylether

TAME = Tert-amyl methyl ether

TBA = Tert-Butanol

TDN = 18 J-00-140.7. 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 Regoral Water Qual-ty Control Board, San Francisco Bay Region, datea December 2001

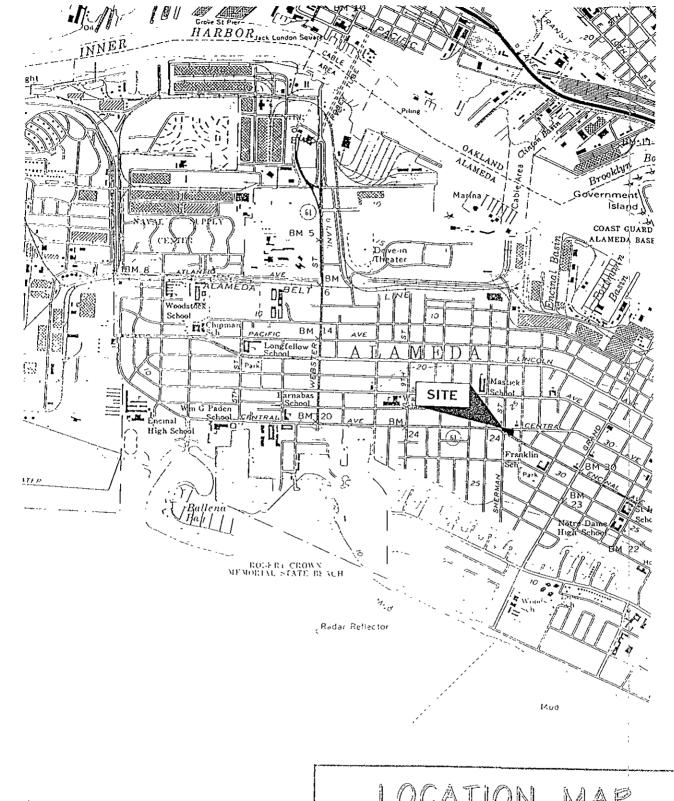
NA = Samples Not Analyzed for this compound

NE = DHS MCLs are not established

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

Most recent aatain bold

### **FIGURES**





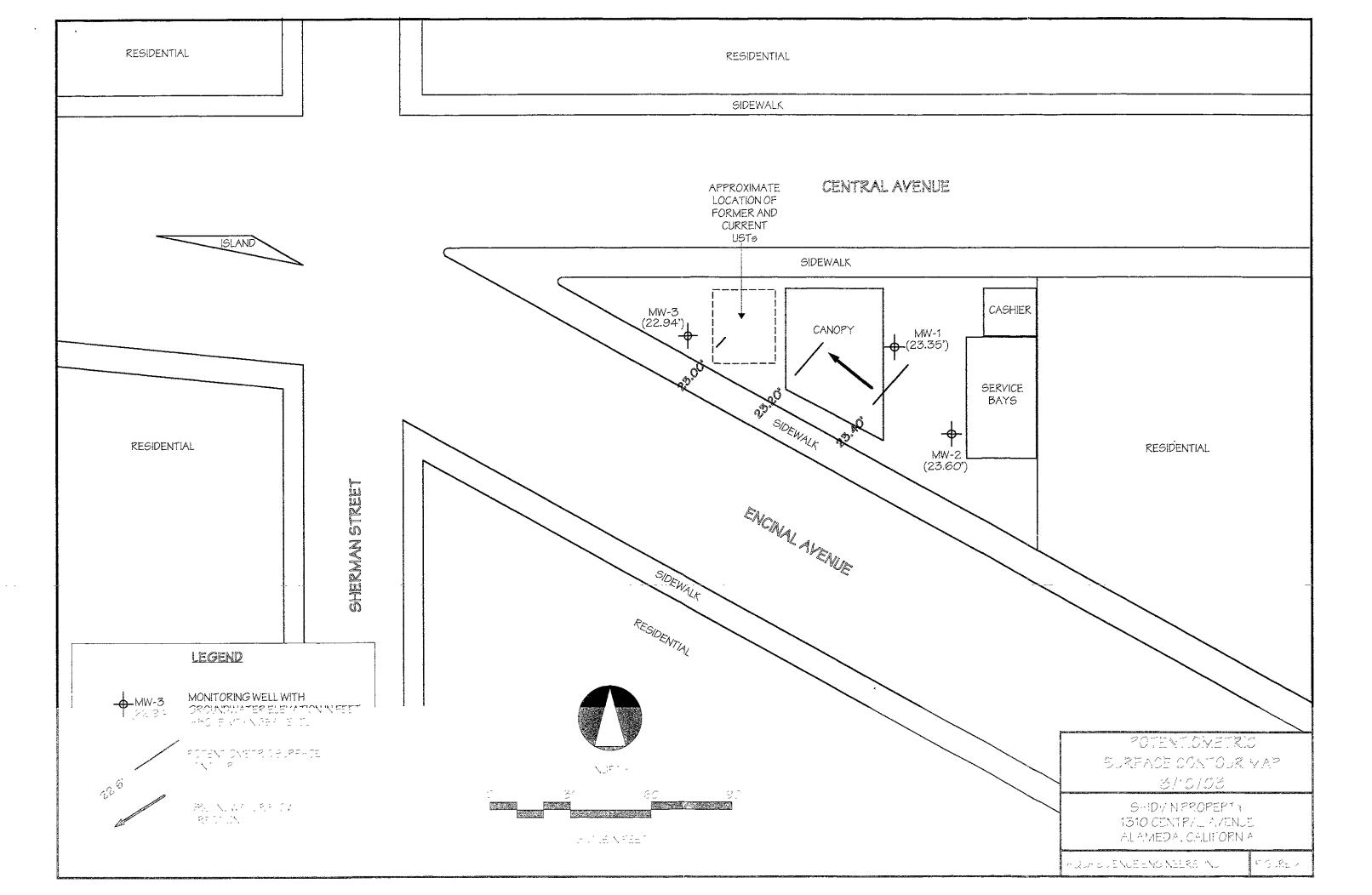
NORTH

LOCATION MAP

> SAIDIAN PROPERTY 1310 CENTRAL AVENUE ALAMEDA, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC.

Figure 1



# APPENDIX A

Well Sampling Field Logs

Project Name and Ac	ddress:	Saidian -	Alamed 4	
Job #:3648		Date of sar	mpling: 3/10/03	
Well Name:		Sampled by	ν: <i>•</i> ρ	
Total depth of well (1	eet): <u>18-0</u>	7	Wall diamaka (* )	• • =
Denth to water befor	e sampling (t	Path 5.5/7	i e e e e e e e e e e e e e e e e e e e	1
Thickness of floating	product if ar	ıy:		
Depth of well casing	in water (fee	t): 14,6		,
Number of gallons pe				<u> </u>
Number of well casin	ig volumes to	be remove	d: 3	
Req'd volume of grou	indwater to b	e purged be	fore sampling (ga	llone).
Equipment used to p	urge the well	: bailer		
Time Evacuation Beg	an: 1440	Time	Evacuation Finis	had. 1500
Approximate volume	of groundwa	ter purged:	7	
Did the wen go dry?	NO	After	how many gallou	na: —
Time samples were of	collected: 150	05		1
Depth to water at tin	ne of samplin	g: -		
Percent recovery at t	ime of sampl	ing: -		
Samples collected wi	th: bailer			
Sample color: <u>clear</u>	gray	Odor:	s/ialt	
Description of sedime	ent in sample	:5;1+		
CHEMICAL DATA				,
Volume Purged	Temp	<u>44</u>	Conductivity	
7	67.4	6-58	379	
3	66.8	6.60	386	
<u> </u>	66.2	6-60	385	
			**************************************	•
	-	<u> </u>		
SAMPLES COLLECT	ED			
Sample # of containers  Mer   S	Volume & type 40 ml V	container Pres	S Iced? Analysis	
· · · · · · · · · · · · · · · · · · ·				
			· · · · · · · · · · · · · · · · · · ·	



# WELL SAMPLING FIELD LOG

Project Name and Address:	
Req'd volume of groundwater to be purged before sampling (gallons): 7  Equipment used to purge the well: 6 Time Evacuation Finished: 1535  Approximate volume of groundwater purged: 7  Did the well go dry?: 1540  Time samples were collected: 1540  Depth to water at time of sampling: 8  Samples collected with: 60.000	
Samples collected with: bailer  Sample color: (leat/brown Odor: nae  Description of sediment in sample: 5,1+  CHEMICAL DATA	
Volume Purged Temp pH Conductivity  1 65.6 6.45 365  2 64.2 6.43 360  3 63.8 6.41 357	
SAMPLES COLLECTED	
Sample # of containers Volume & type container Pres Iced? Analysis  NW-2 5 Y0 m   W04 × x	 



Project Name and Add	ress:		
Job #: 3648		Date of san	npling: 3/10/02
Well Name: _mw@3		Sampled by	7: <u>cp</u>
Total depth of well (fe	et): <u>18-0</u>	<i>W</i>	V: <u>cp</u> Vell diameter (inches): >
Depth to water before	sampling (f	eet): 2-40 2.	36
Thickness of floating p	roduct if ar	ıy:	
Depth of well casing i	n water (fee	et): \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
			illons): 24
Number of well casing	volumes to	be removed	d: 3
Req'd volume of groun	dwater to b	e purged bef	fore sampling (gallons): 7
Equipment used to pur	ge the well	l: bailer	
Time Evacuation Began	n: 1545	Time	Evacuation Finished: 1600
Approximate volume of	of groundwa	ter purged:	7
Did the well go dry?:	NO	After	how many gallong
Time samples were co	llected: 1610	)	
Depth to water at time	e of samplin	ng:	
Percent recovery at tir	ne of samp	ling: -	
Samples collected with	· /a - 1 -		
Sample color:	4	Odor:	moderate to strong
Description of sedimen	it in sample	: srl+	1
CHEMICAL DATA			
Volume Purged	Temp	<u> Hq</u>	Conductivity
	65.1	6.69	625
<u>7</u>	65.1	6.59	6.29
<b>&gt;</b>	65.5	6.53	63/
	****	<del></del>	
SAMPLES COLLECTE	D		
Sample # of containers V	Volume & type YU wl	V04 ×	Iced? Analysis x

### APPENDIX B

Certified Analytical Report and Chain of Custody Documentation



Date: 3/24/2003

Eric Paddleford 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. Paddleford,

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

oel Kiff



Date: 3/24/2003

Project Name: Saidian-Alameda

Project Number: 3648

Sample . MW-1

Matrix : Water

Lab Number : 32076-01

Sample Date .3/10/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date⊹ Analyzed
Benzene	3.4	0.50	ug/L	EPA 8260B	3/16/2003
Toluene	2.9	0.50	ug/L	EPA 8260B	3/16/2003
Ethylbenzene	80	0.50	ug/L	EPA 8260B	3/16/2003
Total Xylenes	98	0.50	ug/L	EPA 8260B	3/16/2003
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/16/2003
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/16/2003
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/16/2003
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/16/2003
Tert-Butanoi	< 5.0	5.0	ug/L	EPA 8260B	3/16/2003
TPH as Gasoline	2000	50	ug/L	EPA 8260B	3/16/2003
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	3/16/2003
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	3/16/2003
TPH as Diesel	< 2000	2000	ug/L	M EPA 8015	3/15/2003

Approved By: Joel Kiff

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



Date: 3/24/2003

Saidian-Alameda Project Name:

Project Number . 3648

Sample . MW-2

Matrix . Water

Lab Number : 32076-02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/13/2003
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/13/2003
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/13/2003
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/13/2003
Methyl-t-butyl ether (MTBE)	1.0	0.50	ug/L	EPA 8260B	3/13/2003
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2003
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2003
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2003
Tert-Butanol	< 5.0	5.0	ug/L.	EPA 8260B	3/13/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/13/2003
Toluene - d8 (Surr)	94.0		% Recovery	EPA 8260B	3/13/2003
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	3/13/2003
TPH as Diesel	3000	50	ug/L	M EPA 8015	3/15/2003

Approved By: Joel Kiff

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



Date: 3/24/2003

Project Name: Saidian-Alameda

Project Number: 3648

Sample: MW-3

Matrix : Water

Lab Number : 32076-03

Sample Date '3/10/2003

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date ⊹ Analyzed
Benzene	1200	5.0	ug/L	EPA 8260B	3/19/2003
Toluene	42	5.0	ug/L	EPA 8260B	3/19/2003
Ethylbenzene	240	5.0	ug/L	EPA 8260B	3/19/2003
Total Xylenes	35	5.0	ug/L	EPA 8260B	3/19/2003
Methyl-t-butyl ether (MTBE)	470	5.0	ug/L	EPA 8260B	3/19/2003
Diisopropyl ether (DIPE)	< 5.0	50	ug/L	EPA 8260B	3/19/2003
Ethyl-t-butyl ether (ETBE)	< 5.0	5.0	ug/L	EPA 8260B	3/19/2003
Tert-amyl methyl ether (TAME)	5.3	5.0	ug/L	EPA 8260B	3/19/2003
Tert-Butanol	140	50	ug/L	EPA 8260B	3/19/2003
TPH as Gasoline	13000	500	ug/L	EPA 8260B	3/19/2003
Toluene - d8 (Surr)	110		% Recovery	EPA 8260B	3/19/2003
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	3/19/2003
TPH as Diesel	< 6000	6000	ug/L	M EPA 8015	3/15/2003

Approved By: Joel Kiff

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

Date: 3/24/2003

QC Report : Method Blank Data

Project Name: Saidian-Alameda

Project Number: 3648

Parameter	Measured Value	Method Reporti Limit		Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	3/15/2003
Benzene	< 0.50	0 50	ug/L	EPA 8260B	3/16/2003
Toluene	< 0.50	0 50	ug/L	EPA 8260B	3/16/2003
Ethylbenzene	< 0.50	0 50	ug/L	EPA 8260B	3/16/2003
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/16/2003
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/16/2003
Disopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/16/2003
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/16/2003
Tert-amyi methyi ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/16/2003
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/16/2003
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/16/2003
Toluene - d8 (Surr)	99.9		%	EPA 8260B	3/16/2003
4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	3/16/2003
Benzene	< 0.50	0 50	ug/L	EPA 8260B	3/13/2003
Toluene	< 0.50	0 50	ug/L	EPA 8260B	3/13/2003
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/13/2003
Total Xylenes	< 0 50	0.50	ug/L	EPA 8260B	3/13/2003
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2003
Disopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2003
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/13/2003
Tert-amyl methyl ether (TAME)	< 0.50	0 50	ug/L	EPA 8260B	3/13/2003
Fert-Butanol	< 5 0	5.0	ug/L	EPA 8260B	3/13/2003
PH as Gasoline	< 50	50	ug/L	EPA 8260B	3/13/2003
foluene - d8 (Surr)	94.5		%	EPA 8260B	3/13/2003
4-Bromofluorobenzene (Surr)	105		%	EPA 8260B	3/13/2003

Method
Measured Reporting Analysis Date
Parameter Value Limit Units Method Analyzed

Approved By: Joel Kiff

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

Date: 3/24/2003

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	Percent	Duplicat Spiked Sample Percent Recov.	Relative	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	881	994	ug/L	M EPA 8015	3/15/03	88.1	99.4	12.1	70-130	25
Benzene	32076-01	3.4	39.9	40.0	43.6	43.5	ug/L	EPA 8260B	3/16/03	101	100	0.655	70-130	25
Toluene	32076-01	2.9	39.9	40.0	42.6	42.9	ug/L	EPA 8260B	3/16/03	99.4	99.8	0.467	70-130	25
Tert-Butanol	32076-01	<5.0	200	200	201	191	ug/L	EPA 8260B	3/16/03	101	95.7	5.10	70-130	25
Methyl-t-Butyl Ethe	er 32076-01	<0.50	39.9	40.0	38.3	37.4	ug/L	EPA 8260B	3/16/03	96.0	93.6	2.58	70-130	25
Benzene	32076-02	<0.50	40.0	40.0	38.4	37.4	ug/L	EPA 8260B	3/13/03	96.1	93.6	2.69	70-130	25
Toluene	32076-02	<0.50	40.0	40.0	37.1	36.3	ug/L	EPA 8260B	3/13/03	92.8	90.7	2.37	70-130	25
Tert-Butanol	32076-02	<5.0	200	200	198	196	ug/L	EPA 8260B	3/13/03	99.0	98.2	0.852	70-130	25
Methyl-t-Butyl Ethe	er 32076-02	1.0	40.0	40.0	38.7	39.4	ug/L	EPA 8260B	3/13/03	94.2	95.8	1.74	70-130	25

Approved By:

oel Kiff

KIFF ANALYTICAL, LLC

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

Date: 3/24/2003

Project Name: Saidian-Alameda

QC Report : Laboratory Control Sample (LCS)

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	3/16/03	101	70-130
Toluene	40.0	ug/L	EPA 8260B	3/16/03	99.3	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/16/03	96.3	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/16/03	95.7	70-130
Benzene	40.0	ug/L	EPA 8260B	3/13/03	94.6	70-130
Toluene	40.0	ug/L	EPA 8260B	3/13/03	92.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/13/03	94.3	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/13/03	90.5	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

KIFF			1	Davi Lab:	5 2nd 5 is, CA : 530.2 : 530.2	95616 297.48	00	300	ס													Lab	No.	_3	2(	<b>)7</b> (	e		Pa	ıge _		of
Project Contact (Hardcopy or PDF To):  Erik Pand le ford  Company/Address:					California EDF Report? ☐ Yes ☐ No																											
ASE, Danville, CA					Recommended but not mandatory to complete this section: Sampling Company Log Code:									1	Analysis Request														¥	T		
Phone No.: FAX No.:  925-820-939)  Project Number: P.O. No: 3648					Global ID:  EDF Deliverable To (Email Address):											B/M8015)			(B)	X (8260B)	X (8260B)			EDB - 8260B)		260B)	TOTAL (X) W.E.T. (X)				۵	è
Project Name:  Sq.dian - Alameda  Project Address:  1310 Central Auc  Sampling				S	iample:	1.	ne	Preservative Matrix							BTEX/TPH Gas/MTBE (8021B/M8015)	(M8015)	Oil (M8015)	IPH Gas/BTEXMTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	(8260B)	s (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	ull List)	Volatile Halocarbons (EPA 8260B)	19.2) TOTAL				12 hr/24 hr/48 hr/72 hr(1 wk)	For Lab Use Only	
1310 (entral A Alameda, (A Sample Designation		Date	Time	40 ml VOA	SLEEVE		로	HNO <sub>3</sub>	ICE	NONE	0	WAIEK	SOIL		BIEX (80218)	BTEX/TPH G	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	IPH Gas/BTE	5 Oxygenates/	7 Oxygenates/	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1	EPA 8260B (Full List)	Volatile Haloca	Lead (7421/239.2)				12 hr /24 hr /48	For
MW-1		3/10/03	1505	5			χ		X					Ī			X			X	<b>V</b> -			Ī		ĺ	-				X	-01
MW-3			1540														X			X											1	-02
MW-3		d_	1610	1		+			V		ď	/		+			X			X											V	-03
														+																		
Relinquished by: Dat			Date	e 	Time Received by:							<u></u>	Remarks:																			
_ :			Date	е	Time	Received by:																										
			Date 03/f	i	Time /330	1.1000.100 by 2020.2019.									igh	ial	Bill to:															

Forms/coc 121001.fh9