

2022 ✓



BC

July 6, 2004

Alameda County
JUL 14 2004
Environmental Health

QUARTERLY GROUNDWATER MONITORING REPORT
JUNE 2004 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 June 11, 2004 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 June 11, 2004, 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 west-southwest with a hydraulic gradient of approximately 0.006-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 disposable 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 disposable 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 a 55-gallon steel drum 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 in the groundwater sample collected from monitoring well MW-1 increased notably this quarter. However, this appears to be a seasonal fluctuation relative to a low water table. Concentrations in monitoring wells MW-2 and MW-3 remained similar to those observed during the previous quarter.

The TPH-G, ethylbenzene and total xylene concentrations detected in the groundwater sample collected from monitoring well MW-1 exceeded the Environmental Screening Levels (ESLs) as presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region dated July 2003. The 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 September 2004. ASE has also made recommendations for an additional groundwater monitoring well, and an additional boring in the January 30, 2004 report. ASE will implement the recommendations once a written request has been made by the ACHCSA.

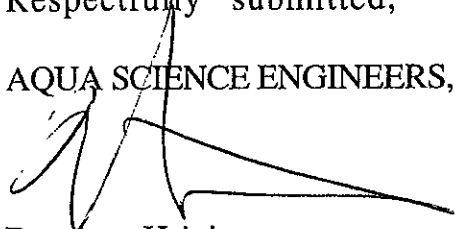
6.0 REPORT LIMITATIONS

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.

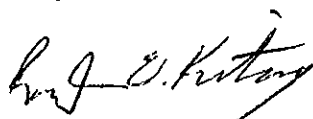
Aqua Science Engineers appreciates the opportunity to provide environmental consulting services for this project, and trust that this report meets your needs. Please feel free to call us at (925) 820-9391 if you have any questions or comments.

Respectfully submitted,

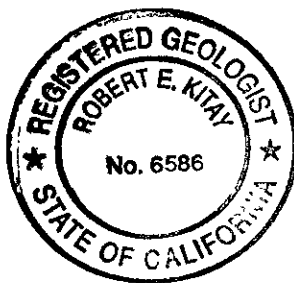
AQUA SCIENCE ENGINEERS, INC.



Damian 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, 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 (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
	12/22/03		4.30	22.55
	3/12/04		2.93	23.92
6/11/04	4.23	22.62		
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
	12/22/03		4.47	22.71
	3/12/04		3.10	24.08
6/11/04	4.51	22.67		
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
	12/22/03		2.83	22.47
	3/12/04		2.00	23.30
6/11/04	3.11	22.19		

TABLE TWO
Summary of Chemical Analysis of GROUNDWATER Samples
Saidian 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										
9/6/99	5,700	8,700	170	59	22	85	20,000	NA	NA	NA
5/16/00	20,000	<7,500	38	6.3	740	1,600	<5.0	<5.0	<50	<5.0
8/3/00	20,000	<6,000	56	9.7	920	1,600	<0.5	<0.5	<50	<0.5
12/5/00	31,000	<4,000	64	27	820	2,200	<10	<5.0	<50	<5.0
3/5/01	20,000	<4,000	19	<5.0	480	870	<5.0	<5.0	<50	<5.0
6/4/01	23,000	<7,000	58	50	710	2,100	5.1	<5.0	<50	<5.0
6/5/02	7,400	<1,500	9.3	6.7	180	230	<1.0	<1.0	<10	<1.0
9/9/02	8,300	<3,500	32	20	390	670	<2.0	<2.0	<20	<2.0
12/19/02	5,100	--	7.9	2.5	56	93	<1.0	<1.0	<10	<1.0
3/10/03	2,000	<2,000	3.4	2.9	80	98	<0.5	<0.5	<5.0	<0.5
6/3/03	7,300	<4,000	6.8	9.9	300	1000	2.3	<0.5	<5.0	<0.5
9/18/03	9,000	<3,000	26	22	420	1200	4.5	<1.5	<20	<1.5
12/22/03	4,300	<2,000	12	6.7	200	290	9.1	<1.0	<10	<1.0
3/12/04	7,000	<3,000	8.3	8.2	250	760	3.9	<2.0	<20	<2.0
6/11/04	13,000	<4,000	26	27	530	1700	<2.5	<2.5	<15	<2.5
MW-2										
9/6/99	6,000	70	1,300	92	50	400	6,800	NA	NA	NA
5/16/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<5.0
8/3/00	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<50	<0.5
12/5/00	<50	1,400	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5
3/5/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5
6/4/01	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5
6/5/02	<50	2,300	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5
9/9/02	<50	1,300	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<5.0	<0.5
12/19/02	<50	--	<0.5	<0.5	<0.5	<0.5	16	<0.5	<5.0	<0.5
3/10/03	<50	3,000	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<5.0	<0.5
6/3/03	<50	700	<0.5	<0.5	<0.5	<0.5	2.0	<0.5	<5.0	<0.5
9/18/03	<50	1,400	<0.5	<0.5	<0.5	<0.5	4.7	<0.5	<5.0	<0.5
12/22/03	<50	1,000	<0.5	<0.5	<0.5	<0.5	39	<0.5	<5.0	<0.5
3/12/04	<50	250	<0.5	<0.5	<0.5	<0.5	2.1	<0.5	<5.0	<0.5
6/11/04	<50	920	<0.5	<0.5	<0.5	<0.5	0.75	<0.5	<5.0	<0.5
MW-3										
9/6/99	43,000	870	860	70	<0.5	65	120,000	NA	NA	NA
5/16/00	17,000	<5,000	2,800	60	380	190	990	9.1	350	<5.0
8/3/00	16,000	<2,000	1,600	29	210	53	1,200	21	260	<2.0
12/5/00	17,000	5,800	1,700	45	460	240	1,100	21	230	<5.0
3/5/01	29,000	<1300	2,100	68	280	100	180	<8.0	<80	<8.0
6/4/01	17,000	<6,000	2,000	56	340	230	300	<10	130	<10
6/5/02	11,000	<2,000	1,600	46	210	47	790	<10	220	<10
9/9/02	12,000	<800	1,400	44	130	27	760	<10	160	<10
12/19/02	10,000	--	740	32	180	38	86	<5.0	<50	<5.0
3/10/03	13,000	<6,000	1,200	42	240	35	470	5.3	140	<5.0
6/3/03	6,500	<3,000	750	21	46	15	1,300	<5.0	280	<2.5
9/18/03	9,800	<3,000	1,500	38	170	32	420	<10	150	<10
12/22/03	8,800	<2,000	1,100	32	82	20	330	5.8	52	<5.0
3/12/04	7,600	<3,000	590	23	69	17	470	9.2	63	<2.5
6/11/04	7,800	<2,000	840	19	58	15	710	12	140	<1.5
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.

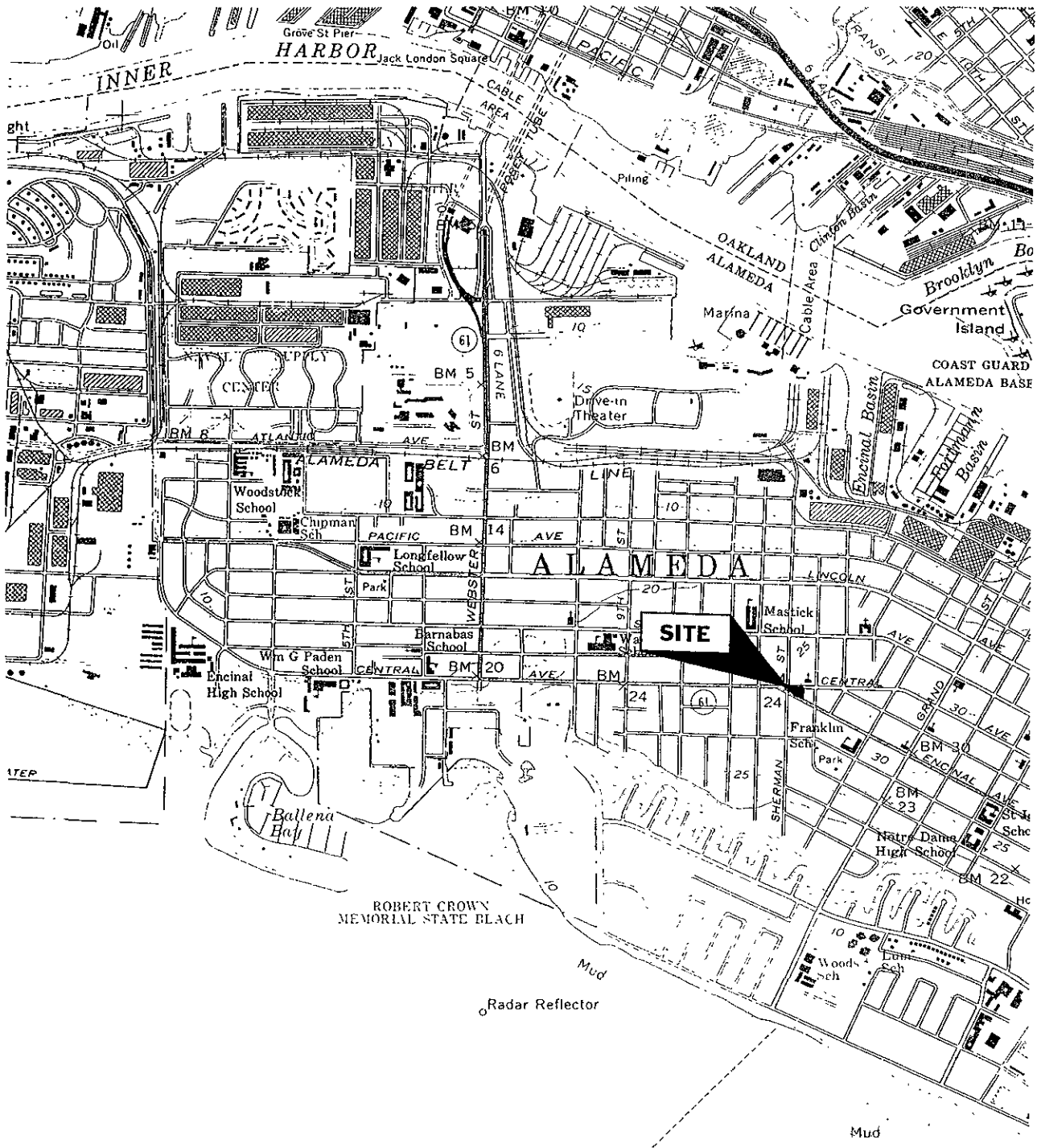
NA = Samples Not Analyzed for this compound.

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

FIGURES

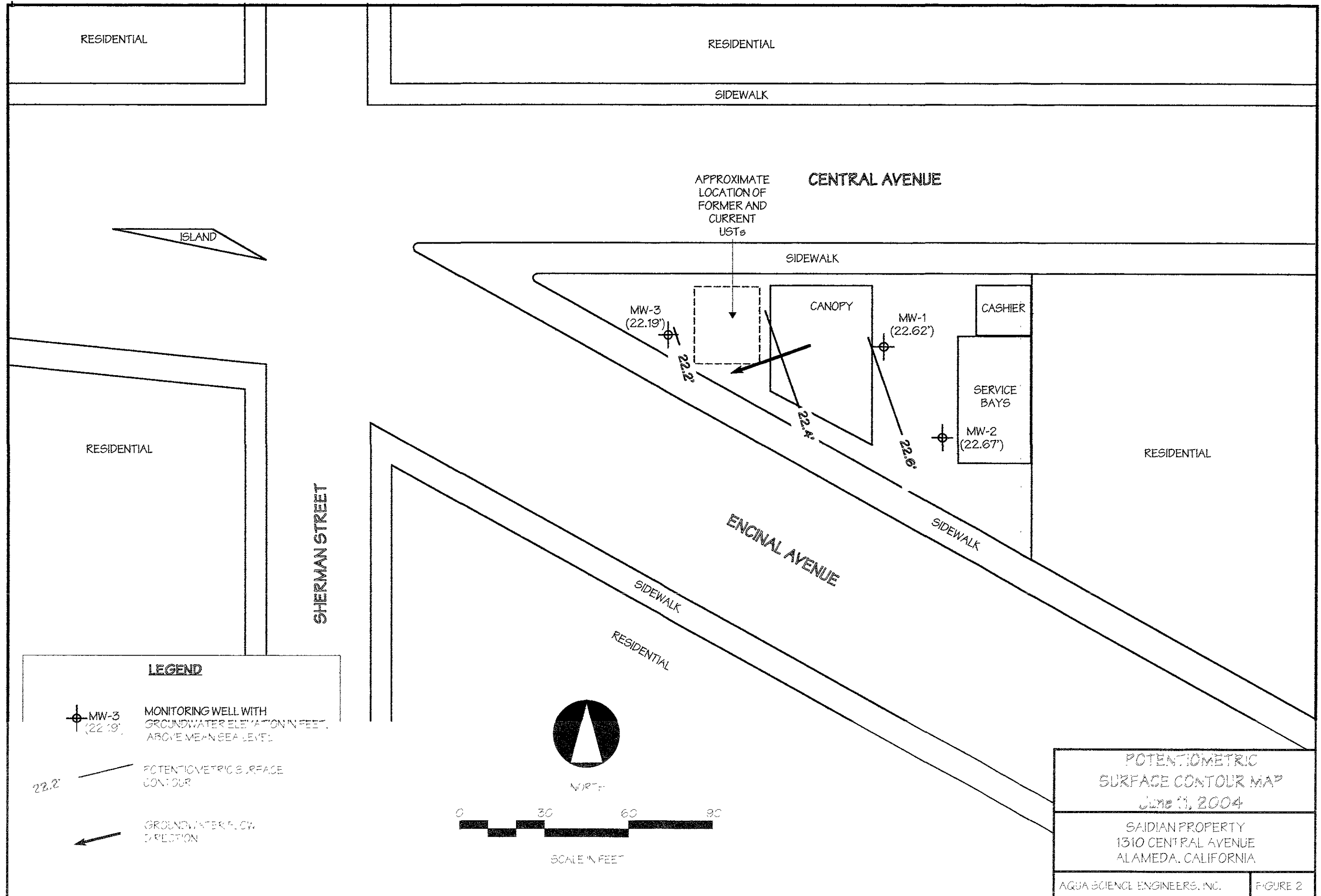


NORTH

LOCATION MAP

SAIDIAN PROPERTY
 1310 CENTRAL AVENUE
 ALAMEDA, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. Figure 1



RESIDENTIAL

RESIDENTIAL

SIDEWALK

CENTRAL AVENUE

APPROXIMATE
LOCATION OF
FORMER AND
CURRENT
USTs

ISLAND

SIDEWALK

MW-3
(22.19')

MW-1
(22.62')

CASHIER

CANOPY

SERVICE
BAYS

MW-2
(22.67')

RESIDENTIAL

RESIDENTIAL

SHERMAN STREET

ENCINAL AVENUE

SIDEWALK

SIDEWALK

RESIDENTIAL

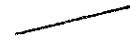
LEGEND



MW-3
(22.19')

MONITORING WELL WITH
GROUNDWATER ELEVATION IN FEET,
ABOVE MEAN SEA LEVEL

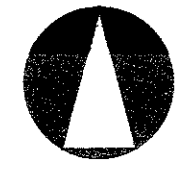
22.2'



POTENTIOMETRIC SURFACE
CONTOUR



GROUNDWATER FLOW
DIRECTION



NORTH



SCALE IN FEET

POTENTIOMETRIC
SURFACE CONTOUR MAP
June 11, 2004

SAIDIAN PROPERTY
1310 CENTRAL AVENUE
ALAMEDA, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC.

FIGURE 2

APPENDIX A

Well Sampling Field Logs



8/20/03

WELL SAMPLING FIELD LOG

Project Name and Address: SALDIAN / ALAMEDA
 Job #: 3048 Date of sampling: 8/10/03
 Well Name: MW-1 Sampled by: DK
 Total depth of well (feet): 18.0 Well diameter (inches): 2
 Depth to water before sampling (feet): 4.23
 Thickness of floating product if any: -
 Depth of well casing in water (feet): 13.77
 Number of gallons per well casing volume (gallons): 2.2
 Number of well casing volumes to be removed: 3
 Req'd volume of groundwater to be purged before sampling (gallons): 6.6
 Equipment used to purge the well: BAILER
 Time Evacuation Began: 12:00 Time Evacuation Finished: 12:25
 Approximate volume of groundwater purged: 6.6
 Did the well go dry?: NO After how many gallons: -
 Time samples were collected: 12:30
 Depth to water at time of sampling: 8.30
 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
<u>2.2</u>	<u>72.1</u>	<u>6.73</u>	<u>525</u>
<u>4.4</u>	<u>71.0</u>	<u>6.74</u>	<u>540</u>
<u>6.6</u>	<u>69.9</u>	<u>6.73</u>	<u>525</u>
_____	_____	_____	_____
_____	_____	_____	_____

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
<u>MW-1</u>	<u>5</u>	<u>4) 16 USA</u>	<u>(H.C.)</u>	<u>Y</u>	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____



DAY

WELL SAMPLING FIELD LOG

Project Name and Address: SALDIAN/AZMEDA
 Job #: 3648 Date of sampling: 6/11/04
 Well Name: MU-2 Sampled by: DIT
 Total depth of well (feet): 17.8 Well diameter (inches): 2
 Depth to water before sampling (feet): 4.51
 Thickness of floating product if any:
 Depth of well casing in water (feet): 13.29
 Number of gallons per well casing volume (gallons): 2.1
 Number of well casing volumes to be removed: 3
 Req'd volume of groundwater to be purged before sampling (gallons): 6.3
 Equipment used to purge the well: RALCO
 Time Evacuation Began: 1135 Time Evacuation Finished: 1145
 Approximate volume of groundwater purged: 6.5
 Did the well go dry?: No After how many gallons:
 Time samples were collected: 1150
 Depth to water at time of sampling: 4.65
 Percent recovery at time of sampling:
 Samples collected with: RALCO
 Sample color: LI BROWN Odor:
 Description of sediment in sample: SILT

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>2.1</u>	<u>70.6</u>	<u>6.58</u>	<u>420</u>
<u>4.2</u>	<u>69.5</u>	<u>6.41</u>	<u>359</u>
<u>6.3</u>	<u>69.6</u>	<u>6.47</u>	<u>330</u>

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
<u>MU-2</u>	<u>5</u>	<u>40 ml VOA</u>	<u>HEC</u>	<u>Y</u>	



A12

WELL SAMPLING FIELD LOG

Project Name and Address: SAIDIAN / ALAMEDA
 Job #: 3648 Date of sampling: _____
 Well Name: MW-3 Sampled by: PH
 Total depth of well (feet): 18.0 Well diameter (inches): 2
 Depth to water before sampling (feet): 3.11
 Thickness of floating product if any: 14.89
 Depth of well casing in water (feet): 14.89
 Number of gallons per well casing volume (gallons): 2.4
 Number of well casing volumes to be removed: 3
 Req'd volume of groundwater to be purged before sampling (gallons): 7.1
 Equipment used to purge the well: BALOR
 Time Evacuation Began: 1240 Time Evacuation Finished: 1255
 Approximate volume of groundwater purged: 7.1
 Did the well go dry?: NO After how many gallons: _____
 Time samples were collected: 1300
 Depth to water at time of sampling: 3.25
 Percent recovery at time of sampling: _____
 Samples collected with: BALOR
 Sample color: _____ Odor: HC
 Description of sediment in sample: _____

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>2.4</u>	<u>70.7</u>	<u>68.3</u>	<u>665</u>
<u>4.8</u>	<u>69.4</u>	<u>657</u>	<u>666</u>
<u>7.1</u>	<u>69.5</u>	<u>660</u>	<u>649</u>
_____	_____	_____	_____
_____	_____	_____	_____

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
<u>MW-3</u>	<u>5</u>	<u>2.0 - VSA</u>	<u>HC</u>	<u>✓</u>	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation



Report Number : 38752

Date : 6/22/2004

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,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff



Report Number : 38752

Date : 6/22/2004

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:

A handwritten signature in black ink, appearing to read "Joe Kiff".

Joe Kiff

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



Report Number : 38752

Date : 6/22/2004

Project Name : SAIDIAN / ALAMEDA

Project Number : 3648

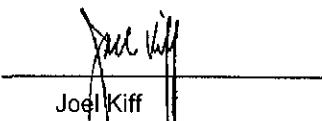
Sample : MW-1

Matrix : Water

Lab Number : 38752-01

Sample Date :6/11/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	26	2.5	ug/L	EPA 8260B	6/17/2004
Toluene	27	2.5	ug/L	EPA 8260B	6/17/2004
Ethylbenzene	530	2.5	ug/L	EPA 8260B	6/17/2004
Total Xylenes	1700	2.5	ug/L	EPA 8260B	6/17/2004
Methyl-t-butyl ether (MTBE)	< 2.5	2.5	ug/L	EPA 8260B	6/21/2004
Diisopropyl ether (DIPE)	< 2.5	2.5	ug/L	EPA 8260B	6/17/2004
Ethyl-t-butyl ether (ETBE)	< 2.5	2.5	ug/L	EPA 8260B	6/17/2004
Tert-amyl methyl ether (TAME)	< 2.5	2.5	ug/L	EPA 8260B	6/17/2004
Tert-Butanol	< 15	15	ug/L	EPA 8260B	6/17/2004
TPH as Gasoline	13000	250	ug/L	EPA 8260B	6/17/2004
1,2-Dichloroethane	< 2.5	2.5	ug/L	EPA 8260B	6/17/2004
1,2-Dibromoethane	< 2.5	2.5	ug/L	EPA 8260B	6/17/2004
Toluene - d8 (Surr)	110		% Recovery	EPA 8260B	6/17/2004
4-Bromofluorobenzene (Surr)	95.0		% Recovery	EPA 8260B	6/17/2004
Dibromofluoromethane (Surr)	109		% Recovery	EPA 8260B	6/17/2004
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	6/17/2004
TPH as Diesel (Silica Gel)	< 4000	4000	ug/L	M EPA 8015	6/19/2004

Approved By:  Joel Kiff

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



Report Number : 38752

Date : 6/22/2004

Project Name : SAIDIAN / ALAMEDA

Project Number : 3648

Sample : MW-2

Matrix : Water

Lab Number : 38752-02

Sample Date :6/11/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Methyl-t-butyl ether (MTBE)	0.75	0.50	ug/L	EPA 8260B	6/17/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	6/17/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/17/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Toluene - d8 (Surr)	109		% Recovery	EPA 8260B	6/17/2004
4-Bromofluorobenzene (Surr)	90.5		% Recovery	EPA 8260B	6/17/2004
Dibromofluoromethane (Surr)	106		% Recovery	EPA 8260B	6/17/2004
1,2-Dichloroethane-d4 (Surr)	99.6		% Recovery	EPA 8260B	6/17/2004
TPH as Diesel (Silica Gel)	920	50	ug/L	M EPA 8015	6/19/2004

Approved By:

Joel Kiff



Report Number : 38752

Date : 6/22/2004

Project Name : SAIDIAN / ALAMEDA

Project Number : 3648


Sample : MW-3

Matrix : Water

Lab Number : 38752-03

Sample Date :6/11/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	840	1.5	ug/L	EPA 8260B	6/17/2004
Toluene	19	1.5	ug/L	EPA 8260B	6/17/2004
Ethylbenzene	58	1.5	ug/L	EPA 8260B	6/17/2004
Total Xylenes	15	1.5	ug/L	EPA 8260B	6/17/2004
Methyl-t-butyl ether (MTBE)	710	1.5	ug/L	EPA 8260B	6/17/2004
Diisopropyl ether (DIPE)	< 1.5	1.5	ug/L	EPA 8260B	6/17/2004
Ethyl-t-butyl ether (ETBE)	< 1.5	1.5	ug/L	EPA 8260B	6/17/2004
Tert-amyl methyl ether (TAME)	12	1.5	ug/L	EPA 8260B	6/17/2004
Tert-Butanol	140	7.0	ug/L	EPA 8260B	6/17/2004
TPH as Gasoline	7800	150	ug/L	EPA 8260B	6/17/2004
1,2-Dichloroethane	< 1.5	1.5	ug/L	EPA 8260B	6/17/2004
1,2-Dibromoethane	< 1.5	1.5	ug/L	EPA 8260B	6/17/2004
Toluene - d8 (Surr)	109		% Recovery	EPA 8260B	6/17/2004
4-Bromofluorobenzene (Surr)	94.9		% Recovery	EPA 8260B	6/17/2004
Dibromofluoromethane (Surr)	106		% Recovery	EPA 8260B	6/17/2004
1,2-Dichloroethane-d4 (Surr)	98.8		% Recovery	EPA 8260B	6/17/2004
TPH as Diesel (Silica Gel)	< 2000	2000	ug/L	M EPA 8015	6/19/2004

Approved By:  Joel Kiff

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

Report Number : 38752

Date : 6/22/2004

QC Report : Method Blank Data

Project Name : **SAIDIAN / ALAMEDA**

Project Number : **3648**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	6/19/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/21/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/16/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/16/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/16/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/16/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/16/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	6/16/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	6/16/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	6/16/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	6/16/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/16/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	6/16/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	6/16/2004
Toluene - d8 (Surr)	111		%	EPA 8260B	6/16/2004
4-Bromofluorobenzene (Surr)	90.0		%	EPA 8260B	6/16/2004
Dibromofluoromethane (Surr)	109		%	EPA 8260B	6/16/2004
1,2-Dichloroethane-d4 (Surr)	103		%	EPA 8260B	6/16/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	6/17/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/17/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	6/17/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Toluene - d8 (Surr)	109		%	EPA 8260B	6/17/2004
4-Bromofluorobenzene (Surr)	93.5		%	EPA 8260B	6/17/2004
Dibromofluoromethane (Surr)	107		%	EPA 8260B	6/17/2004
1,2-Dichloroethane-d4 (Surr)	99.5		%	EPA 8260B	6/17/2004

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 38752

Date : 6/22/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : SAIDIAN / ALAMEDA

Project Number : 3648

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 Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	972	988	ug/L	M EPA 8015	6/19/04	97.2	98.8	1.59	70-130	25
Benzene	38782-05	<0.50	40.0	40.0	39.9	39.0	ug/L	EPA 8260B	6/21/04	99.7	97.4	2.37	70-130	25
Toluene	38782-05	<0.50	40.0	40.0	41.3	39.7	ug/L	EPA 8260B	6/21/04	103	99.3	4.04	70-130	25
Tert-Butanol	38782-05	<5.0	200	200	197	208	ug/L	EPA 8260B	6/21/04	98.7	104	5.19	70-130	25
Methyl-t-Butyl Ether	38782-05	<0.50	40.0	40.0	42.0	40.4	ug/L	EPA 8260B	6/21/04	105	101	3.84	70-130	25
Benzene	38760-07	6.5	40.0	40.0	42.8	42.2	ug/L	EPA 8260B	6/16/04	90.6	89.2	1.65	70-130	25
Toluene	38760-07	3.1	40.0	40.0	39.4	39.0	ug/L	EPA 8260B	6/16/04	90.8	89.8	1.07	70-130	25
Tert-Butanol	38760-07	7.9	200	200	195	191	ug/L	EPA 8260B	6/16/04	93.6	91.4	2.38	70-130	25
Methyl-t-Butyl Ether	38760-07	<0.50	40.0	40.0	38.0	38.4	ug/L	EPA 8260B	6/16/04	94.9	96.1	1.22	70-130	25
Benzene	38785-08	<0.50	40.0	40.0	40.6	40.1	ug/L	EPA 8260B	6/17/04	102	100	1.35	70-130	25
Toluene	38785-08	<0.50	40.0	40.0	41.0	39.2	ug/L	EPA 8260B	6/17/04	102	98.1	4.27	70-130	25
Tert-Butanol	38785-08	<5.0	200	200	202	203	ug/L	EPA 8260B	6/17/04	101	101	0.296	70-130	25
Methyl-t-Butyl Ether	38785-08	<0.50	40.0	40.0	37.8	37.2	ug/L	EPA 8260B	6/17/04	94.4	93.1	1.36	70-130	25

KIFF ANALYTICAL, LLC

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

Approved By: Joe Kiff



Report Number : 38752

Date : 6/22/2004

QC Report : Laboratory Control Sample (LCS)

Project Name : SAIDIAN / ALAMEDA

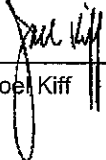
Project Number : 3648

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	6/21/04	95.7	70-130
Toluene	40.0	ug/L	EPA 8260B	6/21/04	98.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/21/04	93.1	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/21/04	95.7	70-130
Benzene	40.0	ug/L	EPA 8260B	6/16/04	95.5	70-130
Toluene	40.0	ug/L	EPA 8260B	6/16/04	93.1	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/16/04	93.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/16/04	92.0	70-130
Benzene	40.0	ug/L	EPA 8260B	6/17/04	98.2	70-130
Toluene	40.0	ug/L	EPA 8260B	6/17/04	97.7	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/17/04	106	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/17/04	89.5	70-130

KIFF ANALYTICAL, LLC

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

Approved By:


Joe Kiff

