R022 ✓

aqua science engineers inc.

October 14, 2004

QUARTERLY GROUNDWATER MONITORING REPORT
SEPTEMBER 2004 GROUNDWATER SAMPLING
ASE JOB NO. 3648 (Alaska)

at
1310 Central Avenue
Alameda, California

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

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

1.0 INTRODUCTION

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

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

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

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

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

The following is a report detailing the methods and findings of the September 13, 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 September 13, 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. A hydrocarbon sheen was observed in monitoring well MW-3. Groundwater elevation data is presented as *Table One*.

A groundwater potentiometric surface map is presented as *Figure 2*. Groundwater beneath the site was calculated as flowing to the southwest with a hydraulic gradient of approximately 0.0067-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.

The samples were decanted from the bottom of the bailers using low flow emptying devices 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 again this quarter, which is consistent with previous 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 December 2004. ASE recommended an additional groundwater monitoring well, and an additional soil 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

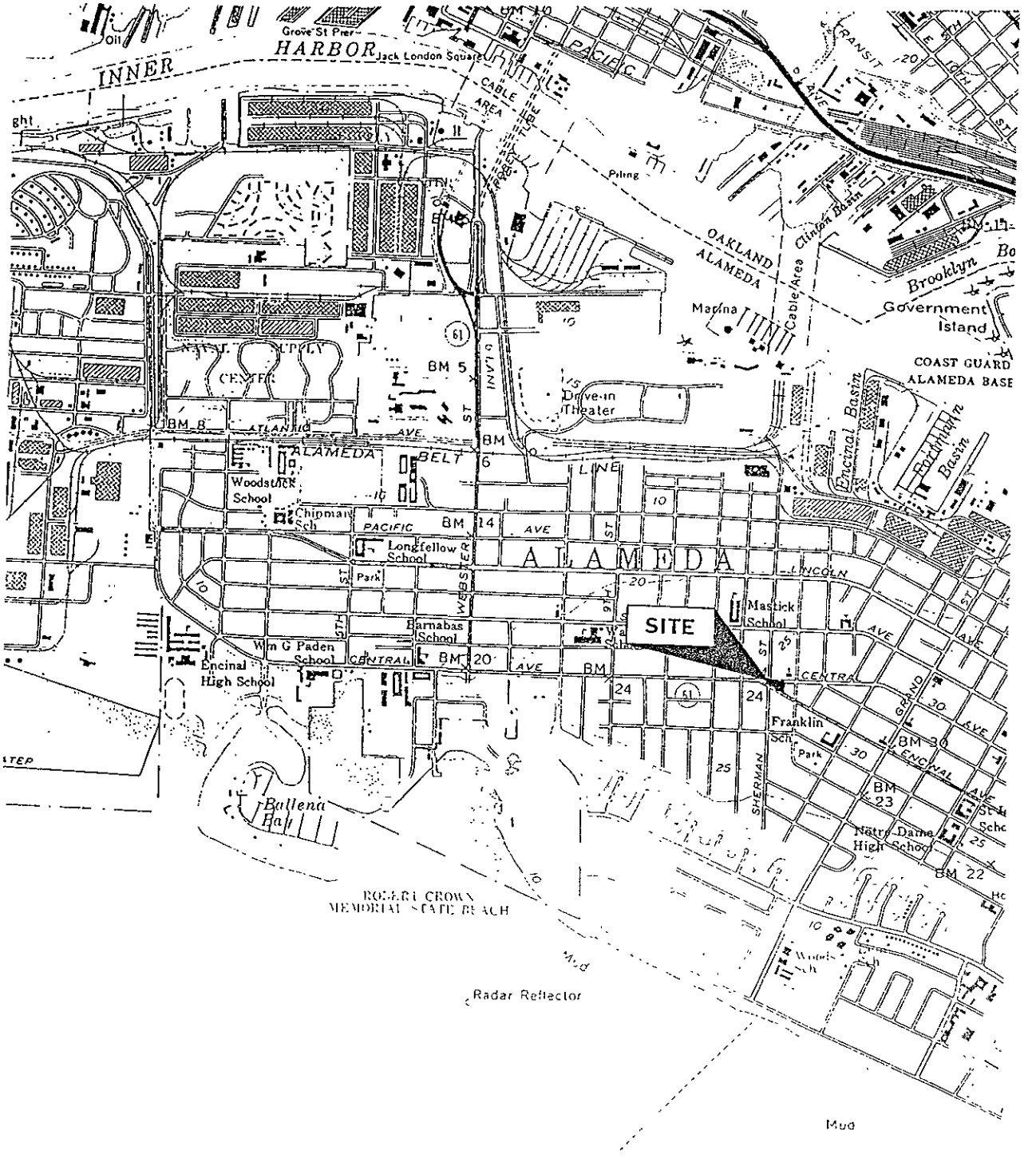
Robert E. Kitay, R.G., R.E.A.
Senior Geologist

REGISTERED GEOLOGIST
ROBERT E. KITAY
No. 65[illegible]
STATE OF CALIFORNIA

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

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

FIGURES



NORTH

LOCATION MAP

SAIDIAN PROPERTY
1310 CENTRAL AVENUE
ALAMEDA, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | Figure 1

RESIDENTIAL

RESIDENTIAL

SIDEWALK

APPROXIMATE LOCATION OF FORMER AND CURRENT USTs

CENTRAL AVENUE

ISLAND

SIDEWALK

MW-3 (21.40')

CANOPY

MW-1 (21.83')

CASHIER

SERVICE BAYS

MW-2 (21.83')

21.4'

21.6'

21.8'

RESIDENTIAL

RESIDENTIAL

SHERMAN STREET

ENCINAL AVENUE

SIDEWALK

SIDEWALK

RESIDENTIAL

LEGEND

MW-3 2.41' — MONITORING WELL WITH GROUNDWATER ELEVATION IN FEET, ABOVE MEAN SEA LEVEL

21.6' — POTENTIOMETRIC SURFACE CONTOUR

GROUNDWATER FLOW DIRECTION

NORTH

0 30 60 90

SCALE IN FEET

POTENTIOMETRIC SURFACE CONTOUR MAP

September 13, 2004

SAIDIAN PROPERTY
1310 CENTRAL AVENUE
ALAMEDA, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC | FIGURE 2

TABLES

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

Well	Date of Measurement	Top of Casing Elevation	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
	9/13/04		**5.02**	**21.83**
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
	9/13/04		**5.35**	**21.83**
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
	9/13/04		**3.90**	**21.40**

TABLE TWO

Summary of Chemical Analysis of GROUNDWATER Samples

Saldian 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	1,000	2.3	<0.5	<5.0	<0.5
9/18/03	9,000	<3,000	26	22	420	1,200	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	1,700	<2.5	<2.5	<15	<2.5
9/13/04	**17,000**	**<4,000**	**37**	**42**	**840**	**2,000**	**<5.0**	**<5.0**	**<50**	**<5.0**
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	<5.0	<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
9/13/04	**<50**	**140**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**1.5**	**<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	<50	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
9/13/04	**7,500**	**<1,500**	**840**	**17**	**23**	**7.8**	**730**	**15**	**93**	**<2.5**
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

APPENDIX A

Well Sampling Field Logs

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Pump

Project Name and Address: ALAMEDA
Job #: 3648
Well Name: MW-1
Date of sampling: 9/13/01
Sampled by: RH
Total depth of well (feet): 18.0
Well diameter (inches):
Depth to water before sampling (feet): 5.02
Thickness of floating product if any: —
Depth of well casing in water (feet): 12.98
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: BAILER
Time Evacuation Began: 1655 Time Evacuation Finished: 1604
Approximate volume of groundwater purged: 2.1
Did the well go dry?: YES After how many gallons: 2.1
Time samples were collected: 1608
Depth to water at time of sampling: 16.58
Percent recovery at time of sampling: —
Samples collected with: BAILER
Sample color: CLEAR Odor: HC
Description of sediment in sample: SILT

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
0	7.58	6.34	482
2.1	74.6	6.61	509
4.2	74.1	6.73	510
6.3	73.8	6.88	511

SAMPLES COLLECTED

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

aqua science engineers inc.

BM

WELL SAMPLING FIELD LOG

Project Name and Address: ALAMEDA
Job #: 3618
Well Name: MW-2
Date of sampling: 9/3/04
Sampled by: RH
Total depth of well (feet): 17.8
Well diameter (inches): 2
Depth to water before sampling (feet): 5.35
Thickness of floating product if any: —
Depth of well casing in water (feet): 12.45
Number of gallons per well casing volume (gallons): 2
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 6
Equipment used to purge the well: BAILER
Time Evacuation Began: 1620
Time Evacuation Finished: 1640
Approximate volume of groundwater purged: 6
Did the well go dry?: NO
After how many gallons: —
Time samples were collected: 1645
Depth to water at time of sampling: 12.41
Percent recovery at time of sampling: —
Samples collected with: BAILER
Sample color: —
Odor: —
Description of sediment in sample: —

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
0	76.0	6.64	346
2	74.1	6.22	310
4	73.6	6.25	300
6	73.6	6.30	317

SAMPLES COLLECTED

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

aqua science engineers inc.

WELL SAMPLING FIELD LOG

AR

Project Name and Address: ARCO
Job #: 3648
Well Name: MW-3
Date of sampling: 9/13/04
Sampled by: DH
Total depth of well (feet): 18.0
Well diameter (inches): 2
Depth to water before sampling (feet): 3.90
Thickness of floating product if any: SHEEN
Depth of well casing in water (feet): 14.10
Number of gallons per well casing volume (gallons): 2.3
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 6.8
Equipment used to purge the well: BAILER
Time Evacuation Began: 1720
Time Evacuation Finished: 1735
Approximate volume of groundwater purged: 6.9
Did the well go dry?: NO
After how many gallons: —
Time samples were collected: 1748
Depth to water at time of sampling: 5.20
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
2.3	75.8	6.51	884
4.6	74.8	6.53	779 781
6.8	73.1	6.51	762
9.0			
11.6			

SAMPLES COLLECTED

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

APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation

KIFF ANALYTICAL LLC

Report Number : 40136
Date : 09/21/2004

Damian Hriciga
Aqua Science Engineers, Inc.
208 West El Pintado Rd.
Danville, CA 94526

Subject : 3 Water Samples
Project Name : 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,

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 40136
Date : 09/21/2004

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

Case Narrative

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

Approved By:

Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 40136
Date : 09/21/2004

Project Name : **ALAMEDA**
Project Number :

Sample : **MW-1** Matrix : Water Lab Number : 40136-01
Sample Date :09/13/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**37**	5.0	ug/L	EPA 8260B	09/19/2004
Toluene	**42**	5.0	ug/L	EPA 8260B	09/19/2004
Ethylbenzene	**840**	5.0	ug/L	EPA 8260B	09/19/2004
Total Xylenes	**2000**	5.0	ug/L	EPA 8260B	09/19/2004
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	09/19/2004
Diisopropyl ether (DIPE)	**< 5.0**	5.0	ug/L	EPA 8260B	09/19/2004
Ethyl-t-butyl ether (ETBE)	**< 5.0**	5.0	ug/L	EPA 8260B	09/19/2004
Tert-amyl methyl ether (TAME)	**< 5.0**	5.0	ug/L	EPA 8260B	09/19/2004
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	09/19/2004
TPH as Gasoline	**17000**	500	ug/L	EPA 8260B	09/19/2004
1,2-Dichloroethane	**< 5.0**	5.0	ug/L	EPA 8260B	09/19/2004
1,2-Dibromoethane	**< 5.0**	5.0	ug/L	EPA 8260B	09/19/2004
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	09/19/2004
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	09/19/2004
Dibromofluoromethane (Surr)	113		% Recovery	EPA 8260B	09/19/2004
1,2-Dichloroethane-d4 (Surr)	98.8		% Recovery	EPA 8260B	09/19/2004
TPH as Diesel (Silica Gel)	**< 4000**	4000	ug/L	M EPA 8015	09/17/2004

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 40136
Date : 09/21/2004

Project Name : **ALAMEDA**
Project Number :

Sample : **MW-2** Matrix : Water Lab Number : 40136-02
Sample Date :09/13/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	09/18/2004
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	09/18/2004
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	09/18/2004
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	09/18/2004
Methyl-t-butyl ether (MTBE)	**1.5**	0.50	ug/L	EPA 8260B	09/18/2004
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	09/18/2004
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	09/18/2004
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	09/18/2004
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	09/18/2004
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	09/18/2004
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	09/18/2004
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	09/18/2004
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	09/18/2004
4-Bromofluorobenzene (Surr)	97.1		% Recovery	EPA 8260B	09/18/2004
Dibromofluoromethane (Surr)	94.5		% Recovery	EPA 8260B	09/18/2004
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	09/18/2004
TPH as Diesel (Silica Gel)	**140**	50	ug/L	M EPA 8015	09/17/2004

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 40136
Date : 09/21/2004

Project Name : **ALAMEDA**
Project Number :

Sample : **MW-3** Matrix : Water Lab Number : 40136-03
Sample Date :09/13/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**840**	2.5	ug/L	EPA 8260B	09/21/2004
Toluene	**17**	2.5	ug/L	EPA 8260B	09/21/2004
Ethylbenzene	**23**	2.5	ug/L	EPA 8260B	09/21/2004
Total Xylenes	**7.8**	2.5	ug/L	EPA 8260B	09/21/2004
Methyl-t-butyl ether (MTBE)	**730**	2.5	ug/L	EPA 8260B	09/21/2004
Diisopropyl ether (DIPE)	**< 2.5**	2.5	ug/L	EPA 8260B	09/21/2004
Ethyl-t-butyl ether (ETBE)	**< 2.5**	2.5	ug/L	EPA 8260B	09/21/2004
Tert-amyl methyl ether (TAME)	**15**	2.5	ug/L	EPA 8260B	09/21/2004
Tert-Butanol	**93**	25	ug/L	EPA 8260B	09/21/2004
TPH as Gasoline	**7500**	250	ug/L	EPA 8260B	09/21/2004
1,2-Dichloroethane	**< 2.5**	2.5	ug/L	EPA 8260B	09/21/2004
1,2-Dibromoethane	**< 2.5**	2.5	ug/L	EPA 8260B	09/21/2004
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	09/21/2004
4-Bromofluorobenzene (Surr)	99.8		% Recovery	EPA 8260B	09/21/2004
Dibromofluoromethane (Surr)	94.2		% Recovery	EPA 8260B	09/21/2004
1,2-Dichloroethane-d4 (Surr)	99.9		% Recovery	EPA 8260B	09/21/2004
TPH as Diesel (Silica Gel)	**< 1500**	1500	ug/L	M EPA 8015	09/17/2004

Approved By: Joel Kiff

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

Report Number : 40136

Date : 09/21/2004

QC Report : Method Blank Data

Project Name : **ALAMEDA**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	09/16/2004
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	09/17/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Toluene	< 0 50	0.50	ug/L	EPA 8260B	09/18/2004
Ethylbenzene	< 0 50	0.50	ug/L	EPA 8260B	09/18/2004
Total Xylenes	< 0 50	0.50	ug/L	EPA 8260B	09/18/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Diisopropyl ether (DIPE)	< 0.50	0 50	ug/L	EPA 8260B	09/18/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Tert-Butanol	< 5 0	5.0	ug/L	EPA 8260B	09/18/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/18/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Toluene - d8 (Surr)	93.7		%	EPA 8260B	09/18/2004
4-Bromofluorobenzene (Surr)	99.7		%	EPA 8260B	09/18/2004
Dibromofluoromethane (Surr)	97.6		%	EPA 8260B	09/18/2004
1,2-Dichloroethane-d4 (Surr)	105		%	EPA 8260B	09/18/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/20/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/20/2004
Ethylbenzene	< 0.50	0 50	ug/L	EPA 8260B	09/20/2004
Total Xylenes	< 0.50	0 50	ug/L	EPA 8260B	09/20/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0 50	ug/L	EPA 8260B	09/20/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/20/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0 50	ug/L	EPA 8260B	09/20/2004
Tert-amyl methyl ether (TAME)	< 0.50	0 50	ug/L	EPA 8260B	09/20/2004
Tert-Butanol	< 5.0	5 0	ug/L	EPA 8260B	09/20/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/20/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/20/2004
1,2-Dibromoethane	< 0.50	0 50	ug/L	EPA 8260B	09/20/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Toluene - d8 (Surr)	99.7		%	EPA 8260B	09/20/2004
4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	09/20/2004
Dibromofluoromethane (Surr)	97.0		%	EPA 8260B	09/20/2004
1,2-Dichloroethane-d4 (Surr)	106		%	EPA 8260B	09/20/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Ethylbenzene	< 0 50	0.50	ug/L	EPA 8260B	09/18/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Methyl-t-butyl ether (MTBE)	< 0 50	0 50	ug/L	EPA 8260B	09/18/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0 50	ug/L	EPA 8260B	09/18/2004
Tert-amyl methyl ether (TAME)	< 0.50	0 50	ug/L	EPA 8260B	09/18/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/18/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/18/2004
1,2-Dichloroethane	< 0.50	0 50	ug/L	EPA 8260B	09/18/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Toluene - d8 (Surr)	99.9		%	EPA 8260B	09/18/2004
4-Bromofluorobenzene (Surr)	96.7		%	EPA 8260B	09/18/2004
Dibromofluoromethane (Surr)	93.6		%	EPA 8260B	09/18/2004
1,2-Dichloroethane-d4 (Surr)	97.5		%	EPA 8260B	09/18/2004

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 40136

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 09/21/2004

Project Name : **ALAMEDA**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	940	940	ug/L	M EPA 8015	9/16/04	94.0	94.0	0.0957	70-130	25
TPH as Diesel	Blank	<50	1000	1000	1040	1150	ug/L	M EPA 8015	9/17/04	104	115	9.86	70-130	25
Benzene	40117-01	<0.50	39.4	39.0	38.7	38.0	ug/L	EPA 8260B	9/18/04	98.3	97.4	0.866	70-130	25
Toluene	40117-01	<0.50	39.4	39.0	35.6	35.2	ug/L	EPA 8260B	9/18/04	90.3	90.3	0.00642	70-130	25
Tert-Butanol	40117-01	<5.0	197	195	205	205	ug/L	EPA 8260B	9/18/04	104	105	1.02	70-130	25
Methyl-t-Butyl Ether	40117-01	<0.50	39.4	39.0	36.1	36.0	ug/L	EPA 8260B	9/18/04	91.8	92.3	0.562	70-130	25
Benzene	40187-02	<0.50	40.0	40.0	39.3	37.1	ug/L	EPA 8260B	9/20/04	98.2	92.7	5.70	70-130	25
Toluene	40187-02	<0.50	40.0	40.0	38.5	36.4	ug/L	EPA 8260B	9/20/04	96.3	91.0	5.75	70-130	25
Tert-Butanol	40187-02	<5.0	200	200	210	202	ug/L	EPA 8260B	9/20/04	105	101	4.15	70-130	25
Methyl-t-Butyl Ether	40187-02	<0.50	40.0	40.0	38.5	38.0	ug/L	EPA 8260B	9/20/04	96.3	95.0	1.31	70-130	25
Benzene	40136-02	<0.50	40.0	40.0	40.4	39.0	ug/L	EPA 8260B	9/18/04	101	97.4	3.52	70-130	25
Toluene	40136-02	<0.50	40.0	40.0	40.8	39.3	ug/L	EPA 8260B	9/18/04	102	98.3	3.71	70-130	25
Tert-Butanol	40136-02	<5.0	200	200	202	207	ug/L	EPA 8260B	9/18/04	101	103	2.30	70-130	25
Methyl-t-Butyl Ether	40136-02	1.5	40.0	40.0	37.7	36.9	ug/L	EPA 8260B	9/18/04	90.4	88.5	2.14	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 40136

QC Report : Laboratory Control Sample (LCS)

Date : 09/21/2004

Project Name : **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	9/18/04	98.2	70-130
Toluene	40.0	ug/L	EPA 8260B	9/18/04	90.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/18/04	102	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/18/04	95.6	70-130
Benzene	40.0	ug/L	EPA 8260B	9/20/04	91.7	70-130
Toluene	40.0	ug/L	EPA 8260B	9/20/04	93.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/20/04	95.9	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/20/04	89.2	70-130
Benzene	40.0	ug/L	EPA 8260B	9/18/04	101	70-130
Toluene	40.0	ug/L	EPA 8260B	9/18/04	104	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/18/04	97.0	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/18/04	84.3	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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KIFF ANALYTICAL LLC

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Davis, CA 95616
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Lab No. 40136 Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): RAMON HRICIK
Company/Address: AQUA SCIENCE ENGINEERS
Phone No.: 9258249891 FAX No.:
Project Number: P.O. No:
Project Name: ALAMEDA
Project Address: ALAMEDA

California EDF Report? ☑ Yes ☐ No
Recommended but not mandatory to complete this section:
Sampling Company Log Code:
Global ID: T0600102128
EDF Deliverable To (Email Address):
Sampler Signature:

Sample Designation	Sampling Date	Sampling Time	Container: 40 ml VOA	Container: SLEEVE	Preservative: HCl	Preservative: HNO_3	Preservative: ICE	Preservative: NONE	Matrix: WATER	Matrix: SOIL	BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/M8015)	TPH as Diesel (M8015) SILICA GEL	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	6 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/239.2) TOTAL (X) W.E.T. (X)	TAT: 12 hr/24 hr/48 hr/72 hr/1 wk	For Lab Use Only
MW-1	9/13/04	1708	5		5		5		5				X	X		X				X					01
MW-2	↓	1645	5		5		5		5				X	X		X				X					02
MW-3	↓	1748	5		5		5		5				X	X		X				X					03

Relinquished by:	Date	Time	Received by:
	9/15/04	1320	
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by Laboratory:
	091504	1320	KIFF MANAGEMENT

Remarks:

Bill to:

Distribution: White - Lab, Pink - Originator

Forms/coc 121001.fh9