aqua science engineers inc.

B. C.
R022

May 23, 2005

QUARTERLY GROUNDWATER MONITORING REPORT
MARCH 2005 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 21, 2005 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 21, 2005, 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 of the monitoring wells this quarter. 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 gradient of approximately 0.009-feet/foot. Groundwater flow direction beneath the site has varied from quarter to quarter. Additionally, monitoring wells, MW-1 and MW-3 in particular, have consistently been noted to be under pressure.

3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

Prior to sampling, all three monitoring wells were purged of three well casing volumes of groundwater using disposable polyethylene bailers. The parameters pH, temperature, and conductivity were monitored during the well purging, and samples were not collected until the parameters stabilized. Petroleum hydrocarbon odors were present during the purging and sampling of monitoring wells MW-1 and MW-3. 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

The TPH-G and BTEX concentrations in the groundwater sample collected from monitoring well MW-1 rebounded from last quarter's lower concentrations back to concentrations similar to those found one year ago. MTBE concentrations dropped slightly in all three monitoring wells. The remaining concentrations are generally similar to those observed during the previous quarter.

The TPH-G, ethylbenzene and total xylenes concentrations detected in the groundwater sample collected from monitoring well MW-1 equaled or 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-G, benzene and total xylenes 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 June 2005. 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.

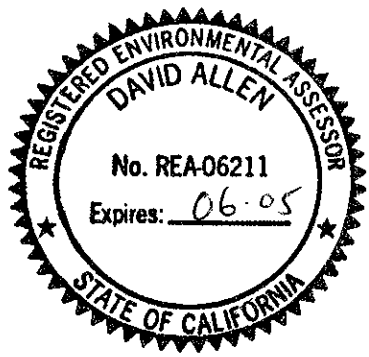
6.0 REPORT LIMITATIONS

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.

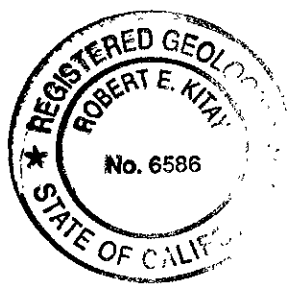
Aqua Science Engineers appreciates the opportunity to provide environmental consulting services for this project, and trust that this report meets your needs. Please feel free to call us at (925) 820-9391 if you have any questions or comments.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.



David Allen, R.E.A.
Senior Project Manager



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
Saldian Property-Alameda
1310 Central Avenue, Alameda, CA

Well	Date of Measuremen	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
	12/16/04		3.76	23.09
	3/21/05		2.81	24.04
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
	12/16/04		4.09	23.09
	3/21/05		3.01	24.17
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
	12/16/04		2.89	22.41
	3/21/05		1.93	23.37

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	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
12/16/04	1,800	<1,000	5.9	1.9	100	35	16	<0.5	<5.0	<0.5
3/21/05	7,500	<3,000	3.4	4.2	290	760	<1.5	<1.5	<20	<1.5
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	<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	14	<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
12/16/04	<50	150	<0.5	<0.5	<0.5	<0.5	12	<0.5	<5.0	<0.5
3/21/05	<50	130	<0.5	<0.5	<0.5	<0.5	<0.5	<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
12/16/04	9,300	<2,000	1,100	26	76	13	600	12	130	<2.5
3/21/05	11,000	<3,000	1,200	37	190	24	460	9.3	100	<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.

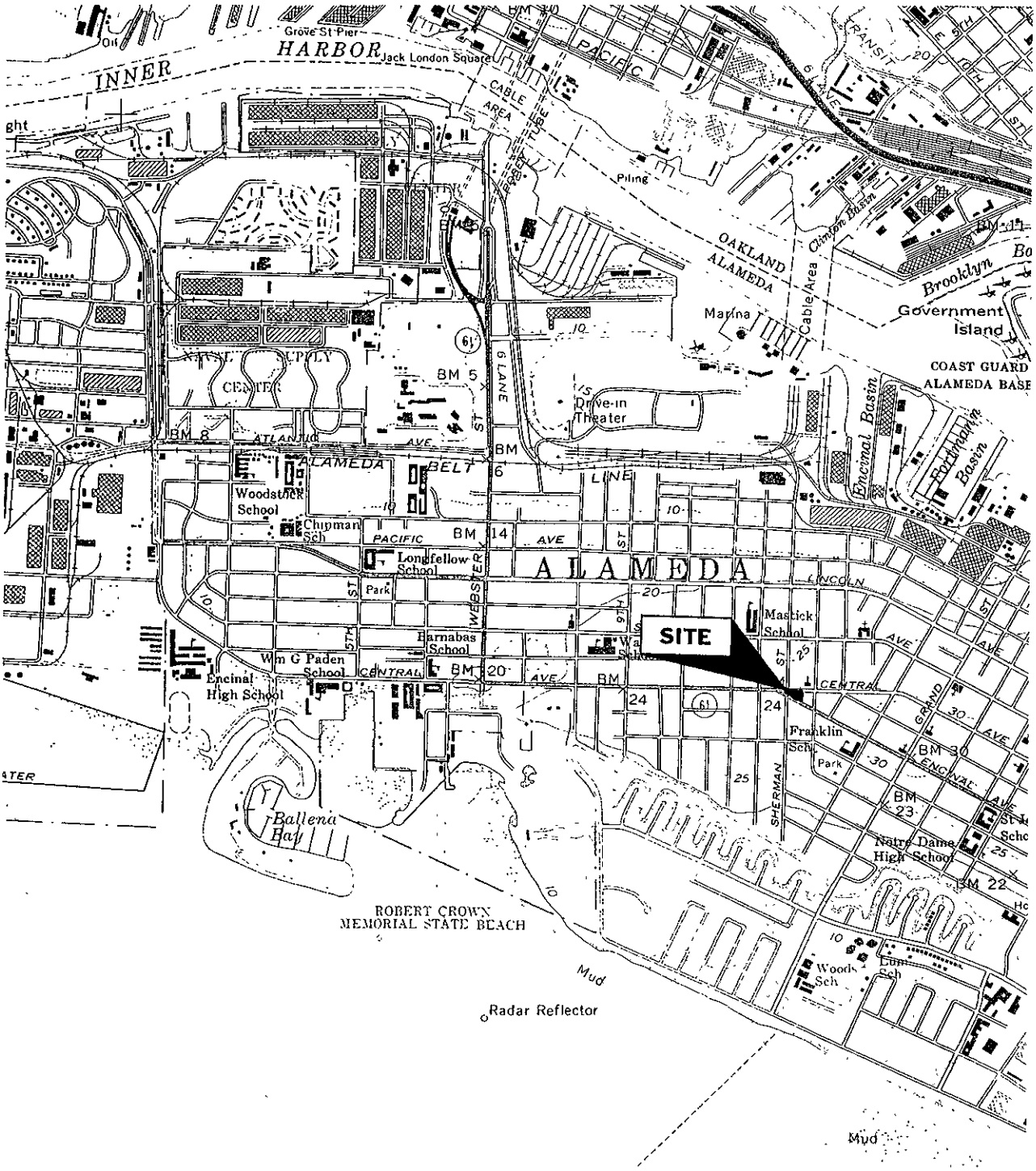
NA = Samples Not Analyzed for this compound

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.

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 (23.37')

23.5'

CANOPY

MW-1 (24.04')

CASHIER

SERVICE BAYS

24.0'

MW-2 (24.17')

RESIDENTIAL

RESIDENTIAL

SHERMAN STREET

ENCINAL AVENUE

SIDEWALK

SIDEWALK

RESIDENTIAL

LEGEND

MW-3 (22.4') — MONITORING WELL WITH GROUNDWATER ELEVATION IN FEET, ABOVE MEAN SEA LEVEL

24.0' — POTENTIOMETRIC SURFACE CONTOUR

GROUNDWATER FLOW DIRECTION

NORTH

0 30 60 90

SCALE IN FEET

POTENTIOMETRIC SURFACE CONTOUR MAP MARCH 21, 2005

SAJDIAN PROPERTY
1310 CENTRAL AVENUE
ALAMEDA, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | FIGURE 2

APPENDIX A

Well Sampling Field Logs

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: ALAMEDA
Job #: 3648 Date of sampling: 3/21/05
Well Name: MW-1 Sampled by: DA
Total depth of well (feet): 18 Well diameter (inches): 2
Depth to water before sampling (feet): 2.81
Thickness of floating product if any: —
Depth of well casing in water (feet): 15.19
Number of gallons per well casing volume (gallons): 2.6
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 7.75
Equipment used to purge the well: NEW BAILER
Time Evacuation Began: _____ Time Evacuation Finished: _____
Approximate volume of groundwater purged: 8 GAL
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1140
Depth to water at time of sampling: 2.90
Percent recovery at time of sampling: 79
Samples collected with: NEW BAILER
Sample color: CLEAR Odor: NONE
Description of sediment in sample: NONE

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	73.8	6.52	800
2	73.6	652	780
3	73.8	654	790

SAMPLES COLLECTED

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

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: ALAMEDA
Job #: 3648 Date of sampling: 3/21/05
Well Name: MW-2 Sampled by: BA
Total depth of well (feet): 17.8 Well diameter (inches):
Depth to water before sampling (feet): 3.01
Thickness of floating product if any: 0
Depth of well casing in water (feet): 14.79
Number of gallons per well casing volume (gallons): 2.5
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 7.5
Equipment used to purge the well: NEW BAILER
Time Evacuation Began: Time Evacuation Finished:
Approximate volume of groundwater purged: 8 GAL
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1130
Depth to water at time of sampling: 3.1
Percent recovery at time of sampling: 99
Samples collected with: NEW BAILER
Sample color: CLEAR Odor: MILD HC
Description of sediment in sample: CLEAR

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	73.8	6.30	650
2	73.8	6.22	640
3	73.8	6.25	650

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-2	5	40ml VOAs	✓	✓	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: ALAMEDA
Job #: 3648 Date of sampling: 3/21/05
Well Name: MW-3 Sampled by: DA
Total depth of well (feet): 18 Well diameter (inches): _____
Depth to water before sampling (feet): 1.93
Thickness of floating product if any: 0
Depth of well casing in water (feet): 16.07
Number of gallons per well casing volume (gallons): 2.73
Number of well casing volumes to be removed: 3
Req'd volume of groundwater to be purged before sampling (gallons): 8.2
Equipment used to purge the well: NEW BAILER
Time Evacuation Began: 0910 Time Evacuation Finished: 0920
Approximate volume of groundwater purged: 8.2 GAL
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1150
Depth to water at time of sampling: 1.98
Percent recovery at time of sampling: 99
Samples collected with: NEW BAILER
Sample color: CLEAR Odor: MODERATE HC
Description of sediment in sample: NONE

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	73.4	6.50	750
2	73.6	6.48	740
3	73.4	6.48	745

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-3	5	40ML VOAS	✓	✓	

APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation

KIFF ANALYTICAL LLC

Report Number : 42918
Date : 3/25/2005

Project Name : **ALAMEDA**
Project Number : **3648**

Sample : **MW-1** Matrix : Water Lab Number : 42918-01
Sample Date :3/21/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**3.4**	1.5	ug/L	EPA 8260B	3/24/2005
Toluene	**4.2**	1.5	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	**290**	1.5	ug/L	EPA 8260B	3/24/2005
Total Xylenes	**760**	1.5	ug/L	EPA 8260B	3/24/2005
Methyl-t-butyl ether (MTBE)	**< 1.5**	1.5	ug/L	EPA 8260B	3/24/2005
Diisopropyl ether (DIPE)	**< 1.5**	1.5	ug/L	EPA 8260B	3/24/2005
Ethyl-t-butyl ether (ETBE)	**< 1.5**	1.5	ug/L	EPA 8260B	3/24/2005
Tert-amyl methyl ether (TAME)	**< 1.5**	1.5	ug/L	EPA 8260B	3/24/2005
Tert-Butanol	**< 20**	20	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	**7500**	200	ug/L	EPA 8260B	3/24/2005
1,2-Dichloroethane	**< 1.5**	1.5	ug/L	EPA 8260B	3/24/2005
1,2-Dibromoethane	**< 1.5**	1.5	ug/L	EPA 8260B	3/24/2005
Toluene - d8 (Surr)	94.9		% Recovery	EPA 8260B	3/24/2005
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	3/24/2005
Dibromofluoromethane (Surr)	104		% Recovery	EPA 8260B	3/24/2005
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	3/24/2005
TPH as Diesel	**< 3000**	3000	ug/L	M EPA 8015	3/23/2005
Octacosane (Diesel Surrogate)	109		% Recovery	M EPA 8015	3/23/2005

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 42918
Date : 3/25/2005

Project Name : **ALAMEDA**
Project Number : **3648**

Sample : **MW-2** Matrix : Water Lab Number : 42918-02
Sample Date :3/21/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	3/23/2005
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	3/23/2005
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	3/23/2005
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	3/23/2005
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	3/23/2005
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	3/23/2005
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	3/23/2005
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	3/23/2005
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	3/23/2005
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	3/23/2005
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	3/23/2005
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	3/23/2005
Toluene - d8 (Surr)	96.1		% Recovery	EPA 8260B	3/23/2005
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	3/23/2005
Dibromofluoromethane (Surr)	103		% Recovery	EPA 8260B	3/23/2005
1,2-Dichloroethane-d4 (Surr)	94.4		% Recovery	EPA 8260B	3/23/2005
TPH as Diesel	**130**	50	ug/L	M EPA 8015	3/23/2005
Octacosane (Diesel Surrogate)	111		% Recovery	M EPA 8015	3/23/2005

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 42918
Date : 3/25/2005

Project Name : **ALAMEDA**
Project Number : **3648**

Sample : **MW-3** Matrix : Water Lab Number : 42918-03
Sample Date :3/21/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**1200**	2.5	ug/L	EPA 8260B	3/24/2005
Toluene	**37**	2.5	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	**190**	2.5	ug/L	EPA 8260B	3/24/2005
Total Xylenes	**24**	2.5	ug/L	EPA 8260B	3/24/2005
Methyl-t-butyl ether (MTBE)	**460**	2.5	ug/L	EPA 8260B	3/24/2005
Diisopropyl ether (DIPE)	**< 2.5**	2.5	ug/L	EPA 8260B	3/24/2005
Ethyl-t-butyl ether (ETBE)	**< 2.5**	2.5	ug/L	EPA 8260B	3/24/2005
Tert-amyl methyl ether (TAME)	**9.3**	2.5	ug/L	EPA 8260B	3/24/2005
Tert-Butanol	**100**	25	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	**11000**	250	ug/L	EPA 8260B	3/24/2005
1,2-Dichloroethane	**< 2.5**	2.5	ug/L	EPA 8260B	3/24/2005
1,2-Dibromoethane	**< 2.5**	2.5	ug/L	EPA 8260B	3/24/2005
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	3/24/2005
4-Bromofluorobenzene (Surr)	96.8		% Recovery	EPA 8260B	3/24/2005
Dibromofluoromethane (Surr)	99.8		% Recovery	EPA 8260B	3/24/2005
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	3/24/2005
TPH as Diesel	**< 3000**	3000	ug/L	M EPA 8015	3/23/2005
Octacosane (Diesel Surrogate)	110		% Recovery	M EPA 8015	3/23/2005

Approved By: Joel Kiff

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

Report Number : 42918

Date : 3/25/2005

QC Report : Method Blank Data

Project Name : **ALAMEDA**

Project Number : **3648**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	3/23/2005
Octacosane (Diesel Surrogate)	105		%	M EPA 8015	3/23/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/23/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/23/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/23/2005
Total Xylenes	< 0 50	0 50	ug/L	EPA 8260B	3/23/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0 50	ug/L	EPA 8260B	3/23/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/23/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/23/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/23/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/23/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/23/2005
1,2-Dichloroethane	< 0 50	0.50	ug/L	EPA 8260B	3/23/2005
1,2-Dibromoethane	< 0 50	0.50	ug/L	EPA 8260B	3/23/2005
Toluene - d8 (Surr)	94.9		%	EPA 8260B	3/23/2005
4-Bromofluorobenzene (Surr)	105		%	EPA 8260B	3/23/2005
Dibromofluoromethane (Surr)	100		%	EPA 8260B	3/23/2005
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	3/23/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Total Xylenes	< 0 50	0.50	ug/L	EPA 8260B	3/24/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0 50	ug/L	EPA 8260B	3/24/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Tert-amyl methyl ether (TAME)	< 0 50	0 50	ug/L	EPA 8260B	3/24/2005
Tert-Butanol	< 5 0	5.0	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/24/2005
1,2-Dichloroethane	< 0 50	0.50	ug/L	EPA 8260B	3/24/2005
1,2-Dibromoethane	< 0 50	0.50	ug/L	EPA 8260B	3/24/2005
Toluene - d8 (Surr)	93.2		%	EPA 8260B	3/24/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
4-Bromofluorobenzene (Surr)	95.4		%	EPA 8260B	3/24/2005
Dibromofluoromethane (Surr)	103		%	EPA 8260B	3/24/2005
1,2-Dichloroethane-d4 (Surr)	104		%	EPA 8260B	3/24/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Diisopropyl ether (DIPE)	< 0.50	0 50	ug/L	EPA 8260B	3/24/2005
Ethyl-t-butyl ether (ETBE)	< 0 50	0.50	ug/L	EPA 8260B	3/24/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/24/2005
1,2-Dichloroethane	< 0 50	0 50	ug/L	EPA 8260B	3/24/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Toluene - d8 (Surr)	99.2		%	EPA 8260B	3/24/2005
4-Bromofluorobenzene (Surr)	94.4		%	EPA 8260B	3/24/2005
Dibromofluoromethane (Surr)	100		%	EPA 8260B	3/24/2005
1,2-Dichloroethane-d4 (Surr)	99.4		%	EPA 8260B	3/24/2005

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 42918

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 3/25/2005

Project Name : **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 Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	1070	1030	ug/L	M EPA 8015	3/23/05	107	103	3.36	70-130	25
Benzene	42918-02	<0.50	39.9	39.8	36.6	37.7	ug/L	EPA 8260B	3/23/05	91.8	94.9	3.32	70-130	25
Toluene	42918-02	<0.50	39.9	39.8	36.0	36.9	ug/L	EPA 8260B	3/23/05	90.3	92.7	2.63	70-130	25
Tert-Butanol	42918-02	<5.0	200	199	189	176	ug/L	EPA 8260B	3/23/05	94.9	88.6	6.92	70-130	25
Methyl-t-Butyl Ether	42918-02	<0.50	39.9	39.8	37.6	38.0	ug/L	EPA 8260B	3/23/05	94.1	95.6	1.57	70-130	25
Benzene	42937-02	<0.50	40.0	40.0	40.1	38.7	ug/L	EPA 8260B	3/24/05	100	96.8	3.62	70-130	25
Toluene	42937-02	<0.50	40.0	40.0	37.6	36.9	ug/L	EPA 8260B	3/24/05	94.1	92.3	1.92	70-130	25
Tert-Butanol	42937-02	5.1	200	200	200	205	ug/L	EPA 8260B	3/24/05	97.3	100	2.87	70-130	25
Methyl-t-Butyl Ether	42937-02	<0.50	40.0	40.0	36.2	36.4	ug/L	EPA 8260B	3/24/05	90.5	91.0	0.553	70-130	25
Benzene	42917-04	<0.50	40.0	40.0	41.4	40.5	ug/L	EPA 8260B	3/24/05	103	101	2.21	70-130	25
Toluene	42917-04	<0.50	40.0	40.0	40.9	39.7	ug/L	EPA 8260B	3/24/05	102	99.3	2.83	70-130	25
Tert-Butanol	42917-04	<5.0	200	200	197	198	ug/L	EPA 8260B	3/24/05	98.6	99.2	0.607	70-130	25
Methyl-t-Butyl Ether	42917-04	1.5	40.0	40.0	42.2	42.0	ug/L	EPA 8260B	3/24/05	102	101	0.610	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 42918

QC Report : Laboratory Control Sample (LCS)

Date : 3/25/2005

Project Name : **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	3/23/05	92.2	70-130
Toluene	40.0	ug/L	EPA 8260B	3/23/05	89.7	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/23/05	93.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/23/05	91.4	70-130
Benzene	40.0	ug/L	EPA 8260B	3/24/05	99.6	70-130
Toluene	40.0	ug/L	EPA 8260B	3/24/05	95.1	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/24/05	100	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/24/05	82.8	70-130
Benzene	40.0	ug/L	EPA 8260B	3/24/05	100	70-130
Toluene	40.0	ug/L	EPA 8260B	3/24/05	102	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/24/05	97.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/24/05	91.9	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

42918

Aqua Science Engineers, Inc.
208 W. El Pintado Road
Danville, CA 94526
(925) 820-9391
FAX (925) 837-4853

Chain of Custody

PAGE 1 OF 1

SAMPLER (SIGNATURE)

PROJECT NAME ALAMEDA JOB NO. 3648

ADDRESS 1310 CENTRAL AVE, ALAMEDA

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

T0600102128

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015)	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	PURGEABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240/8260)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	OIL & GREASE (EPA 5520) ____	LUFT METALS (5) (EPA 6010+7000)	CAM 17 METALS (EPA 6010+7000)	PCBs & PESTICIDES (EPA 608/8080)	ORGANOPHOSPHORUS PESTICIDES (EPA 8140 EPA 608/8080)	FUEL OXYGENATES (EPA 8260)	Pb (TOTAL or DISSOLVED) (EPA 6010)	TPH-G/BTEX/5 OXY'S (EPA 8260)	TPH-G/BTEX/5 OXY'S & LEAD SCAVANGERS (EPA 8260)	EDF	HOLD	
MW-1	3/21/05	1140	water	5		X													X	X	~~HOLD~~	01
MW-2	"	1130	"	"		X													X	X		02
MW-3	"	1150	"	"		X													X	X		03

RELINQUISHED BY: (signature) (time)

D. ALLEN (printed name) 03.21.05 (date)

Company- ASE. INC.

RECEIVED BY: (signature) (time)

(printed name) (date)

Company-

RELINQUISHED BY: (signature) (time)

(printed name) (date)

Company-

RECEIVED BY LABORATORY: Michelle Spencer (signature) (time) 1305

Michelle Spencer (printed name) 032205 (date)

Company- Kiff Analytical

COMMENTS: SEND REPORT TO D. ALLEN E-MAIL.

TURN AROUND TIME

STANDARD 24H 48H 72H

OTHER: