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Ro 2488

September 16, 2005

Alameda County
SEP 26 2005
Environmental Health

QUARTERLY GROUNDWATER MONITORING REPORT
AUGUST 2005 GROUNDWATER SAMPLING EVENT
ASE JOB NO. 3515

at

J & A Truck Repair Facility
2221 Union Street
Oakland, California

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

1.0 INTRODUCTION

The following is Aqua Science Engineers, Inc. (ASE's) report detailing the results of the August 2005 quarterly groundwater sampling at the J & A Truck Repair facility located at 2221 Union Street, in Oakland, California (*Figures 1 and 2*). This work was performed at the request of the property owner, Mr. Alex Aquilar, in response to the Alameda County Health Care Services Agency (ACHCSA) letter dated April 29, 2005.

2.0 GROUNDWATER ELEVATIONS

On August 11, 2005, ASE personnel measured the depth to water in all four site groundwater monitoring wells using an electric water level sounder. The depth to water and groundwater elevations are presented in *Table One*, and a groundwater elevation (potentiometric surface) contour map is presented as *Figure 2*. The groundwater flow direction is to the north, northwest and west at a gradient of 0.027-feet/foot. The groundwater flow direction and gradient beneath the site has been highly variable and may be tidally influenced.

3.0 SAMPLE COLLECTION AND ANALYSIS

Prior to sampling, the monitoring wells were purged of three well casing volumes of groundwater using new disposable polyethylene bailers. The parameters pH, temperature and conductivity were monitored during the well purging. Samples were not collected until these parameters stabilized. The groundwater samples were collected using new disposable polyethylene bailers. The samples were decanted from the bailers into 40-ml volatile organic analysis (VOA) vials, pre-preserved with hydrochloric acid and capped without headspace. The samples were then labeled and placed in a cooler with wet ice for transport to McCampbell Analytical of Pacheco, California (DHS Certification #1644) under appropriate chain-of-custody documentation. Well sampling field logs are presented in *Appendix A*. The groundwater samples were analyzed for halogenated volatile organic compounds (HVOCs) by EPA Method 8010. The analytical results for this and previous sampling periods are presented in *Table Two*.

Well sampling purge water was contained in sealed and labeled 55-gallon steel drums and left on-site for temporary storage until off-site disposal can be arranged. The certified analytical report and chain-of-custody documentation are included as *Appendix B*.

4.0 CONCLUSIONS AND RECOMMENDATIONS

- The groundwater sample collected from monitoring well MW-1 contained 6.5 parts per billion (ppb) trichloroethene (TCE), 52 ppb cis-1,2-dichloroethene (cis-1,2-DCE), 5.9 ppb trans-1,2-dichloroethene (trans-1,2-DCE), and 170 ppb vinyl chloride (VC).
- The groundwater sample collected from monitoring well MW-2 contained 8.6 ppb tetrachloroethene (PCE), 14 ppb TCE, 15 ppb cis-1,2-DCE, 0.67 ppb trans-1,2-DCE, 0.53 ppb 1,2-dichloropropane, and 3.1 ppb VC.
- The groundwater sample collected from monitoring well MW-3 contained 22 ppb PCE, 23 ppb TCE, 32 ppb cis-1,2-DCE, 1.0 ppb trans-1,2-DCE, 11 ppb 1,1-dichloroethane (1,1-DCA), and 0.59 ppb 1,1-dichloroethene (1,1-DCE).
- The groundwater sample collected from monitoring well MW-4 contained 2.6 ppb PCE, 3.9 ppb TCE, 6.1 ppb cis-1,2-DCE, 11 ppb 1,1-DCA, and 2.0 ppb 1,1-DCE.

In general, groundwater samples from all four monitoring wells show a pattern of degradation of PCE and TCE to breakdown compounds such as cis-1,2-DCE and vinyl chloride. For example, PCE in groundwater samples collected from monitoring well MW-1 contained a high of 510 ppb PCE in May 2000 and contained no detectable PCE during the most recent sampling event. PCE concentrations in MW-2 dropped from 820 ppb to 8.6 ppb during the same period. Vinyl chloride concentrations in groundwater samples from monitoring wells MW-1 and MW-2 have risen in these wells as would be expected in relation to the degradation of PCE and TCE.

Concentrations of one or more compounds in groundwater samples collected from all four monitoring wells exceeded the Environmental Screening Levels (ESLs) 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 (RWQCB), dated February 2005 for sites where groundwater is a current or potential source of drinking water. However, only the vinyl chloride concentration in groundwater samples collected from monitoring well MW-1 exceeded the ESL for sites where groundwater is not a current or potential source of drinking water.

ASE recommends that this site remain on a quarterly sampling schedule. The next sampling is scheduled for November 2005. ASE will also complete the additional tasks requested by the ACHCSA in their letter dated April 29, 2005.

5.0 REPORT LIMITATIONS

The results of this assessment represent conditions at the time of the groundwater sampling, at the specific locations where the samples were collected, and for the specific parameters analyzed by the laboratory.

It does not fully characterize the site for contamination resulting from unknown sources, or for parameters not analyzed by the laboratory. All of the laboratory work cited in this report was prepared under the direction of an independent CAL-EPA certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

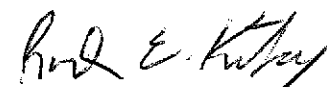
Aqua Science Engineers appreciates the opportunity to provide environmental consulting services for this project. Should you have any questions or comments, please feel free to call us at (925) 820-9391.

Respectfully submitted,

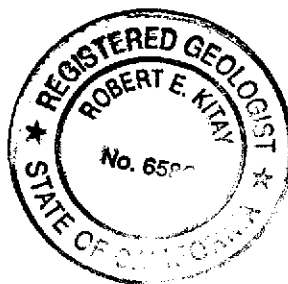
AQUA SCIENCE ENGINEERS, INC.



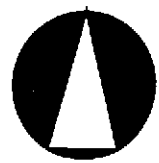
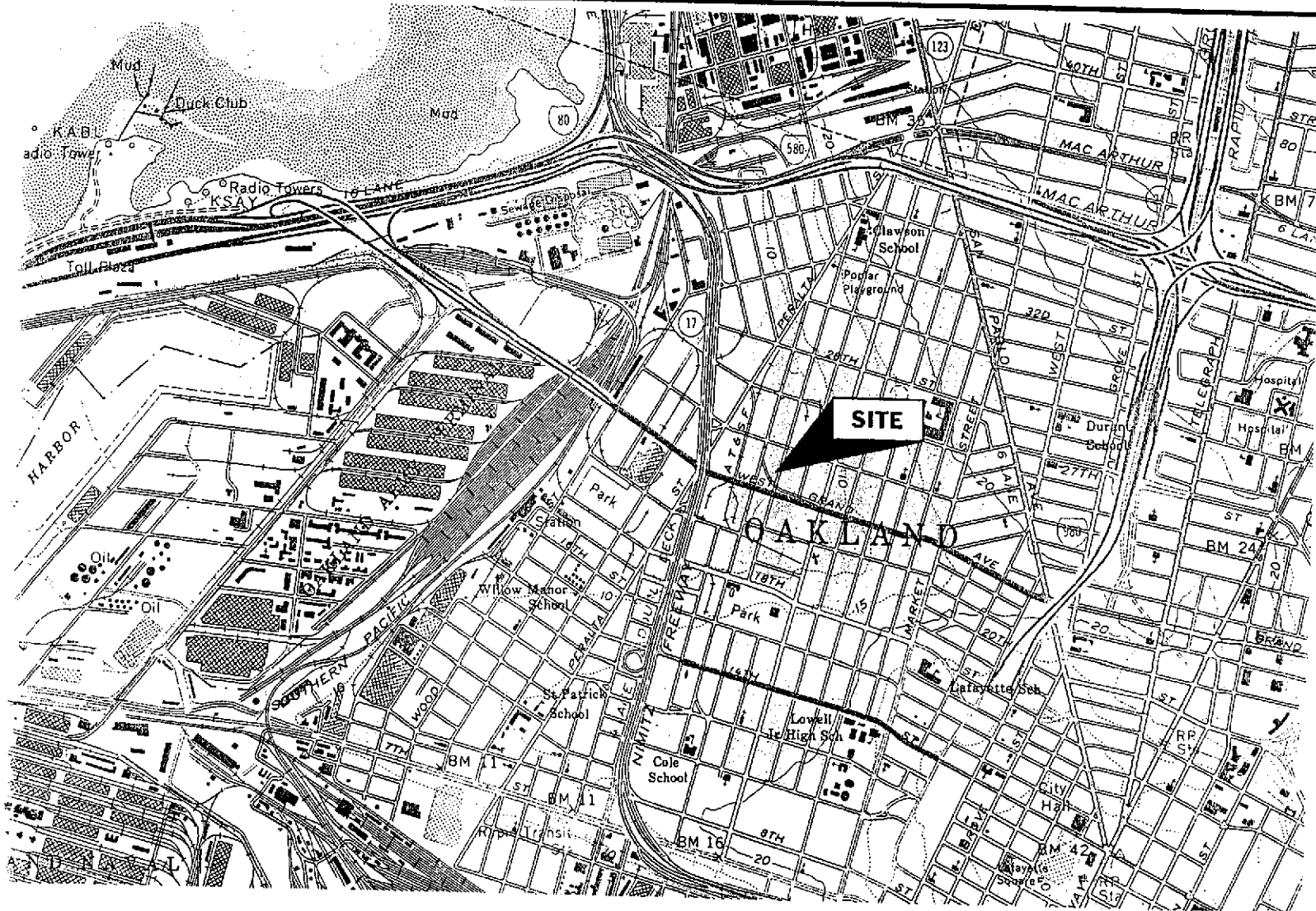
David Allen, R.E.A.
Senior Project Manager



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



Attachments: Figures 1 and 2
Appendices A and B

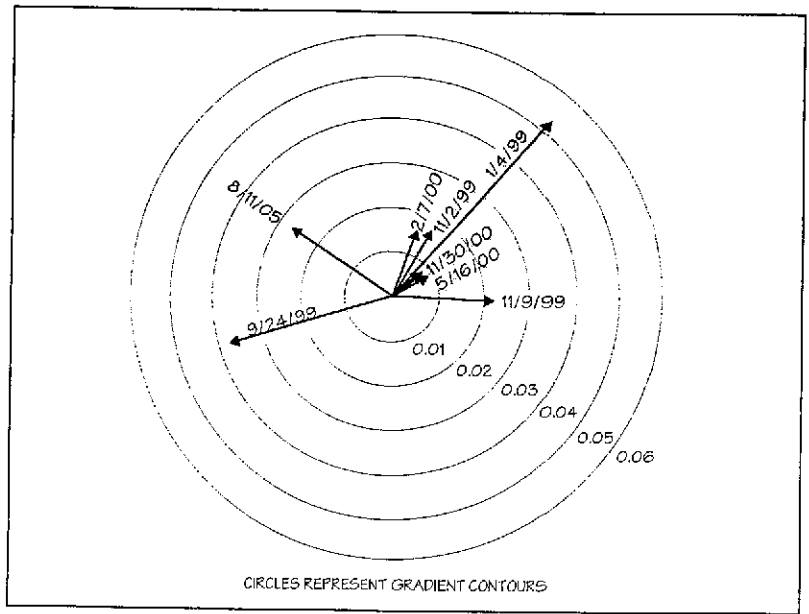
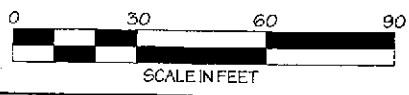
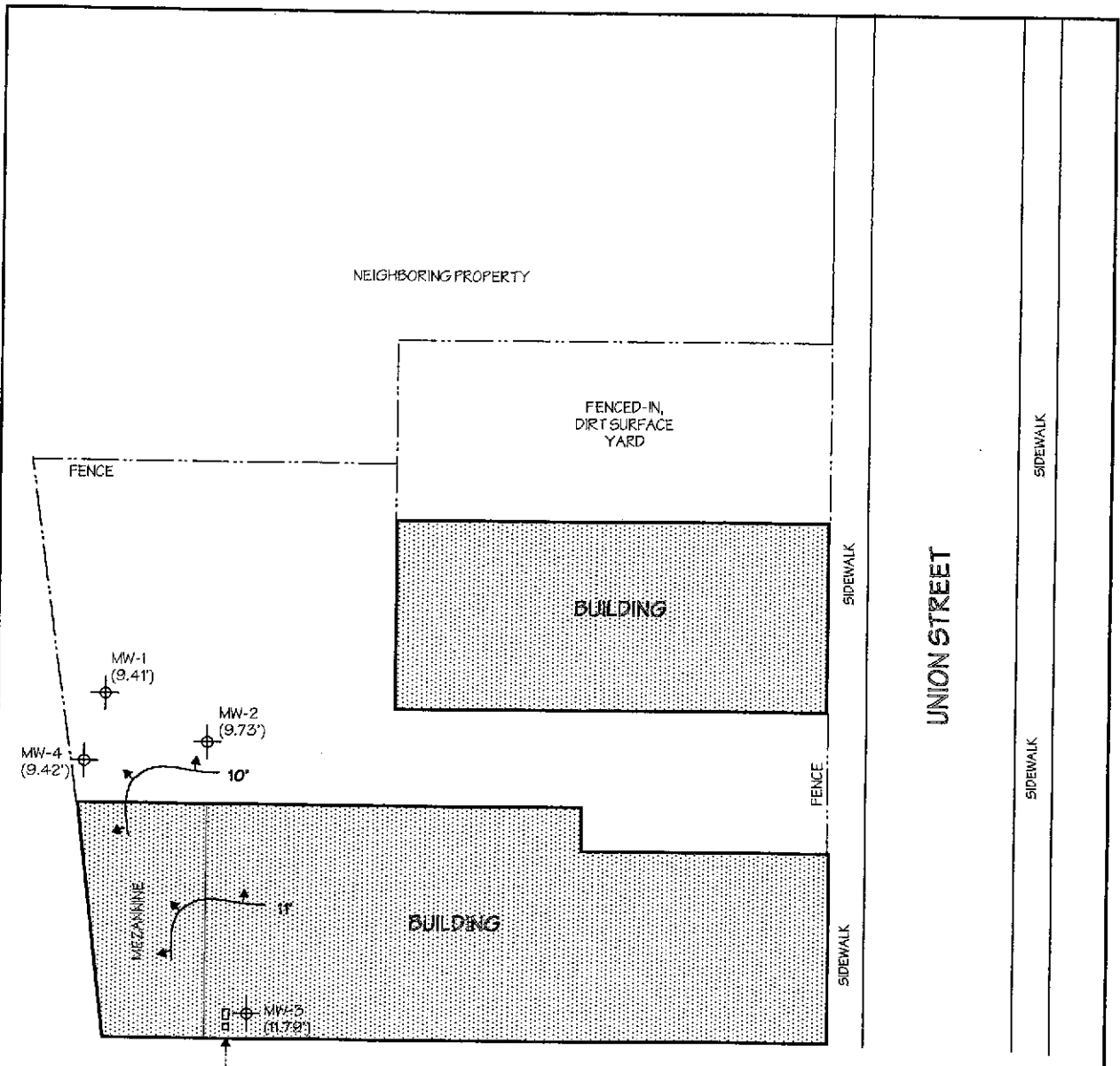


NORTH

LOCATION MAP

2221 Union Street
Oakland, California

AQUA SCIENCE ENGINEERS, INC. Figure 1



LEGEND

MW-4 (9.42')

ASE Monitoring Well with groundwater elevation in feet based on site datum referenced to regional topographic map

11'

Potentiometric Surface Elevation of Groundwater

↗

Groundwater Flow Direction

POTENTIOMETRIC SURFACE MAP - AUGUST 11, 2005

J & A TRUCK REPAIR
2221 UNION STREET
OAKLAND, CALIFORNIA

TABLE ONE
Groundwater Elevation Data
J & A Truck Repair
2221 Union Street, Oakland, California

WELL ID	DATE OF MEASUREMENT	TOP OF CASING ELEVATION IN FEET (MSL)	DEPTH TO WATER (feet)	GROUNDWATER ELEVATION IN FEET (MSL)
MW-1	9/2/99	15.00	8.81	6.19
	11/2/99		5.94	9.06
	11/4/99		7.15	7.85
	11/9/99		4.72	10.28
	2/7/00		3.55	11.45
	5/16/00		3.88	11.12
	8/8/00		5.79	9.21
	11/30/00		4.14	10.86
	8/8/02		5.94	9.06
8/11/05	5.59	9.41		
MW-2	9/2/99	15.29	6.29	9.00
	11/2/99	15.24	6.01	9.23
	11/4/99		5.94	9.30
	11/9/99		5.28	9.96
	2/7/00		4.12	11.12
	5/16/00		4.24	11.00
	8/8/00		5.68	9.56
	11/30/00		4.78	10.46
	8/8/02		5.90	9.34
8/11/05		5.51	9.73	
MW-3	9/2/99	15.15	6.26	8.89
	11/2/99	15.17	5.74	9.43
	11/4/99		6.09	9.08
	11/9/99		5.64	9.53
	2/7/00		3.06	12.11
	5/16/00		3.80	11.37
	8/8/00		3.54	11.63
	11/30/00		3.56	11.61
	8/8/02		3.53	11.64
8/11/05		3.38	11.79	
MW-4	11/2/99	15.21	5.86	9.35
	11/4/99		5.85	9.36
	11/9/99		4.56	10.65
	2/7/00		3.66	11.55
	5/16/00		3.89	11.32
	8/8/00		5.77	9.44
	11/30/00		4.15	11.06
	8/8/02		6.33	8.88
8/11/05	5.79	9.42		

TABLE TWO
 Summary of Chemical Analysis of Water Samples
 J A Truck Repair
 Volatile Organic Compounds
 All results are in parts per billion

SAMPLE NAME	DATE	PCE	TCE	CIS 1,2-DCE	TRANS 1,2-DCE	1,1-DCA	1,1-DCE	1,2-DCA	CHLORO-ETHANE	VC	REMAINING VOCs
MW-1	9/2/99	9.9	3.2	3.9	<1	5.8	<1	<1	<1	<1	<1 - <10
	11/2/99	100	15	17	3.4	1.7	<1	<1	<1	<1	<1 - <10
	2/7/00	510	160	8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 - <20
	5/16/00	260	73	10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 - <20
	8/8/00	38	19	21	8.7	1.2	<0.5	<0.5	<0.5	17	<0.5 - <5.0
	11/30/00	110	45	9.0	<2.5	<2.5	<2.5	<2.5	<2.5	4.2	<2.5 - <25
	8/8/02	78	49	18	6.3	<5.0	<5.0	<5.0	<5.0	130	<5.0 - <50
	8/11/05	<5.0	6.5	52	5.9	<5.0	<5.0	<5.0	<5.0	170	<5.0 - <10
MW-2	9/2/99	48	4.5	1.7	<1	<1	<1	<1	<1	<1	<1 - <10
	11/2/99	110	9.5	1.4	<1	<1	<1	<1	<1	<1	<1 - <10
	2/7/00	200	21	6.6	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5 - <10
	5/16/00	820	220	74	<10	<10	<10	<10	<10	<10	<10 - <40
	8/8/00	280	82	33	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 - <20
	11/30/00	660	360	130	<10	<10	<10	<10	<10	<10	<10 - <100
	8/8/02	<0.5	<0.5	31	<0.5	<0.5	<0.5	<0.5	<0.5	2.5	<0.5 - <5.0
	8/11/05	8.6	14	15	0.67	<0.5	<0.5	<0.5	<0.5	3.1	0.53 1,2-DCE
MW-3	9/2/99	38	21	34	<0.5	22	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
	11/2/99	59	21	35	<0.5	22	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
	2/7/00	56	13	22	<0.5	8.5	<0.5	<0.5	<0.5	<0.5	<0.5 - <5
	5/16/00	54	8.7	<1	<1	5.3	<1	<1	<1	<1	<1 - <10
	8/8/00	74	11	17	<1.0	12	<1.0	<1.0	<1.0	<1.0	<1.0 - <4.0
	11/30/00	63	14	25	<1.0	14	<1.0	<1.0	<1.0	<1.0	<1.0 - <10
	8/8/02	58	19	25	<2.5	17	<2.5	<2.5	<2.5	<2.5	<2.5 - <25
	8/11/05	22	23	32	1.0	11	0.59	<0.5	<0.5	<0.5	<0.5 - <1.0
MW-4	11/2/99	0.68	0.74	21	<0.5	14	2.7	2.1	12	6.3	<0.5 - <5
	2/7/00	14	4.1	18	<0.5	8.1	0.64	<0.5	0.71	6	<0.5 - <5
	5/16/00	24	13	12	<0.5	19	<0.5	<0.5	<0.5	0.75	<0.5 - <5
	8/8/00	2.1	7.4	17	<0.5	8.3	1.8	1.9	3.1	9.6	<0.5 - <5.0
	11/30/00	30	6.9	2.8	<0.5	8.3	<0.5	<0.5	<0.5	<0.5	4.6*
	8/8/02	19	12	13	<0.5	28	<0.5	<0.5	<0.5	0.89	<0.5 - <5.0
8/11/05	2.6	3.9	6.1	<0.5	11	2.0	<0.5	<0.5	<0.5	<0.5 - <1.0	
ESL DW		5	5	6	10	5	6	0.5	12	0.5	VARIES
ESL NDW		120	360	590	590	47	25	200	12	3.8	VARIES

NOTES:

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

ESL = Environmental 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 Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) dated February 2005.

DW = Groundwater IS a current of potential Source of Drinking Water.

NDW = Groundwater IS NOT a current of potential Source of Drinking Water.

TCE is Trichloroethene

DCE is Dichloroethene

DCA is Dichloroethane

VC is Vinyl Chloride

* = 1,1,1-Trichloroethane

APPENDIX A

Well Sampling Field Logs

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME J+A Truck Repair

JOB NUMBER 3515 DATE OF SAMPLING 08-11-05

WELL ID. MW-1 SAMPLER DG

TOTAL DEPTH OF WELL 17.2 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 5.59

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 13.61

NUMBER OF GALLONS PER WELL CASING VOLUME 2.27

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 6.81

EQUIPMENT USED TO PURGE WELL DUP. BAUER

TIME EVACUATION STARTED 1340 TIME EVACUATION COMPLETED 1355

TIME SAMPLES WERE COLLECTED 1400

DID WELL GO DRY NO AFTER HOW MANY GALLONS -

VOLUME OF GROUNDWATER PURGED 7

SAMPLING DEVICE DUP. BAUER

SAMPLE COLOR CLEAR ODOR/SEDIMENT NONE/NONE

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	71.8	7.16	717
2	69.4	7.03	811
3	69.6	7.04	810

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
<u>MW-1</u>	<u>3</u>	<u>40 ml VOA</u>	<u>RO/0</u>	<input checked="" type="checkbox"/>

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME 34A Truck Repair

JOB NUMBER 305 DATE OF SAMPLING 8/11/05

WELL ID. MW-2 SAMPLER DA

TOTAL DEPTH OF WELL 19.3 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 5.51

PRODUCT THICKNESS Ø

DEPTH OF WELL CASING IN WATER 13.79

NUMBER OF GALLONS PER WELL CASING VOLUME 2.3

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 6.9

EQUIPMENT USED TO PURGE WELL DISP. BAILEY

TIME EVACUATION STARTED 12:16 TIME EVACUATION COMPLETED 12:58

TIME SAMPLES WERE COLLECTED 1:00

DID WELL GO DRY NO AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 7

SAMPLING DEVICE DISP. BAILEY

SAMPLE COLOR clear ODOR/SEDIMENT None/None

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	70.3	7.44	977
2	69.6	7.54	1356
3	69.6	7.51	1358

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
<u>MW-2</u>	<u>3</u>	<u>40 ml VOA</u>	<u>2010</u>	<u>✓</u>

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME Hot Truck Repair

JOB NUMBER 3515 DATE OF SAMPLING 8/11/07

WELL ID. MW-3 SAMPLER DA

TOTAL DEPTH OF WELL 19.5 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 3.38

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 16.12

NUMBER OF GALLONS PER WELL CASING VOLUME 2.69

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 8.07

EQUIPMENT USED TO PURGE WELL DISP. BAILER

TIME EVACUATION STARTED 1315 TIME EVACUATION COMPLETED 1325

TIME SAMPLES WERE COLLECTED 1330

DID WELL GO DRY No AFTER HOW MANY GALLONS —

VOLUME OF GROUNDWATER PURGED 8.1

SAMPLING DEVICE DISP. BAILER

SAMPLE COLOR Clear ODOR/SEDIMENT None / None

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	71.2	6.54	782
2	69.9	6.40	818
3	67.6	6.54	880

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
<u>MW-3</u>	<u>3</u>	<u>40 ml 122</u>	<u>P10</u>	<input checked="" type="checkbox"/>

AQUA SCIENCE ENGINEERS

WELL SAMPLING FIELD LOG

PROJECT NAME JTA Truck Repair

JOB NUMBER 3515 DATE OF SAMPLING 02-11-05

WELL ID. MW-4 SAMPLER DA

TOTAL DEPTH OF WELL 19.05 WELL DIAMETER 2

DEPTH TO WATER PRIOR TO PURGING 5.79

PRODUCT THICKNESS 0

DEPTH OF WELL CASING IN WATER 13.26

NUMBER OF GALLONS PER WELL CASING VOLUME 2.21

NUMBER OF WELL CASING VOLUMES TO BE REMOVED 3

REQUIRED VOLUME OF GROUNDWATER TO BE PURGED PRIOR TO SAMPLING 6.63

EQUIPMENT USED TO PURGE WELL DISP. BAILEY

TIME EVACUATION STARTED 1222 TIME EVACUATION COMPLETED 1238

TIME SAMPLES WERE COLLECTED 1240

DID WELL GO DRY no AFTER HOW MANY GALLONS

VOLUME OF GROUNDWATER PURGED 6.7

SAMPLING DEVICE DISP. BAILEY

SAMPLE COLOR light tan ODOR/SEDIMENT none, trace silt

CHEMICAL DATA

VOLUME PURGED	TEMPERATURE	PH	CONDUCTIVITY
1	70.8	6.97	970
2	66.7	6.98	1146
3	66.6	7.01	1158

SAMPLES COLLECTED

SAMPLE	# OF CONTAINERS	SIZE AND TYPE OF CONTAINER	ANALYSIS	PRESERVED
<u>MW-4</u>	<u>3</u>	<u>40ml UOA</u>	<u>8010</u>	<u>✓</u>

APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation



McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
Website: www.mcccampbell.com E-mail: main@mcccampbell.com

Aqua Science Engineers, Inc. 208 West El Pintado Road Danville, CA 94526	Client Project ID: #3515; J & A Truck Repair	Date Sampled: 08/11/05
		Date Received: 08/12/05
	Client Contact: Dave Allen	Date Reported: 08/18/05
	Client P.O.:	Date Completed: 08/18/05

WorkOrder: 0508226

August 18, 2005

Dear Dave:

Enclosed are:

- 1). the results of 4 analyzed samples from your #3515; J & A Truck Repair project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McC Campbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,

Angela Rydelius, Lab Manager



McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
 Telephone : 925-798-1620 Fax : 925-798-1622
 Website: www.mcccampbell.com E-mail: main@mcccampbell.com

Aqua Science Engineers, Inc. 208 West El Pintado Road Danville, CA 94526	Client Project ID: #3515; J & A Truck Repair	Date Sampled: 08/11/05
	Client Contact: Dave Allen	Date Received: 08/12/05
	Client P.O.:	Date Extracted: 08/15/05
		Date Analyzed: 08/15/05

Halogenated Volatile Organics by P&T and GC-MS (8010 Basic Target List)*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 0508226

Lab ID	0508226-001A	0508226-002A	0508226-003A	0508226-004A	Reporting Limit for DF=1	
Client ID	MW-1	MW-2	MW-3	MW-4	S	W
Matrix	W	W	W	W		
DF	10	1	1	1		
Compound	Concentration				µg/kg	µg/L
Bromodichloromethane	ND<5.0	ND	ND	ND	NA	0.5
Bromoform	ND<5.0	ND	ND	ND	NA	0.5
Bromomethane	ND<5.0	ND	ND	ND	NA	0.5
Carbon Tetrachloride	ND<5.0	ND	ND	ND	NA	0.5
Chlorobenzene	ND<5.0	ND	ND	ND	NA	0.5
Chloroethane	ND<5.0	ND	ND	ND	NA	0.5
2-Chloroethyl Vinyl Ether	ND<10	ND	ND	ND	NA	1.0
Chloroform	ND<5.0	ND	ND	ND	NA	0.5
Chloromethane	ND<5.0	ND	ND	ND	NA	0.5
Dibromochloromethane	ND<5.0	ND	ND	ND	NA	0.5
1,2-Dichlorobenzene	ND<5.0	ND	ND	ND	NA	0.5
1,3-Dichlorobenzene	ND<5.0	ND	ND	ND	NA	0.5
1,4-Dichlorobenzene	ND<5.0	ND	ND	ND	NA	0.5
Dichlorodifluoromethane	ND<5.0	ND	ND	ND	NA	0.5
1,1-Dichloroethane	ND<5.0	ND	11	11	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND<5.0	ND	ND	ND	NA	0.5
1,1-Dichloroethene	ND<5.0	ND	0.59	2.0	NA	0.5
cis-1,2-Dichloroethene	52	15	32	6.1	NA	0.5
trans-1,2-Dichloroethene	5.9	0.67	1.0	ND	NA	0.5
1,2-Dichloropropane	ND<5.0	0.53	ND	ND	NA	0.5
cis-1,3-Dichloropropene	ND<5.0	ND	ND	ND	NA	0.5
trans-1,3-Dichloropropene	ND<5.0	ND	ND	ND	NA	0.5
Methylene chloride	ND<5.0	ND	ND	ND	NA	0.5
1,1,2,2-Tetrachloroethane	ND<5.0	ND	ND	ND	NA	0.5
Tetrachloroethene	ND<5.0	8.6	22	2.6	NA	0.5
1,1,1-Trichloroethane	ND<5.0	ND	ND	ND	NA	0.5
1,1,2-Trichloroethane	ND<5.0	ND	ND	ND	NA	0.5
Trichloroethene	6.5	14	23	3.9	NA	0.5
Trichlorofluoromethane	ND<5.0	ND	ND	ND	NA	0.5
Vinyl Chloride	170	3.1	ND	ND	NA	0.5

Surrogate Recoveries (%)

%SS:	98	98	97	99
Comments	i			i

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or surrogate coelutes with another peak.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative.



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0508226

EPA Method: SW8260B		Extraction: SW5030B			BatchID: 17531			Spiked Sample ID: 0508185-002A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
Chlorobenzene	ND	10	105	104	0.474	98.4	102	3.73	70 - 130	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	108	110	2.10	105	106	1.42	70 - 130	70 - 130
1,1-Dichloroethene	ND	10	98.8	98.7	0.174	94.9	99	4.16	70 - 130	70 - 130
Trichloroethene	ND	10	88.6	89.7	1.23	85.1	90.8	6.48	70 - 130	70 - 130
%SS:	110	10	105	104	1.19	111	110	0.995	70 - 130	70 - 130
%SS:	99	10	97	97	0	98	96	2.14	70 - 130	70 - 130
%SS:	95	10	100	98	2.04	89	95	6.39	70 - 130	70 - 130

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 17531 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0508226-001A	8/11/05	8/15/05	8/15/05 7:35 PM	0508226-002A	8/11/05	8/15/05	8/15/05 8:26 PM
0508226-003A	8/11/05	8/15/05	8/15/05 4:58 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 % Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.
 Laboratory extraction solvents such as methylene chloride and freon 113 may occasionally appear in the method blank at low levels.

QA/QC Officer



McC Campbell Analytical, Inc.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
 Telephone : 925-798-1620 Fax : 925-798-1622
 Website: www.mccampbell.com E-mail: main@mccampbell.com

QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

WorkOrder: 0508226

EPA Method: SW8260B		Extraction: SW5030B			BatchID: 17553			Spiked Sample ID: 0508230-001A		
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)	
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	LCS / LCSD
Chlorobenzene	ND	10	104	97.1	6.76	98.8	99.9	1.08	70 - 130	70 - 130
1,2-Dichloroethane (1,2-DCA)	ND	10	105	103	1.66	105	105	0	70 - 130	70 - 130
1,1-Dichloroethene	ND	10	99	95.4	3.66	102	97.3	5.08	70 - 130	70 - 130
Trichloroethene	ND	10	89.1	86.3	3.12	89.7	86.4	3.78	70 - 130	70 - 130
%SS:	113	10	108	110	1.36	115	112	1.97	70 - 130	70 - 130
%SS:	99	10	99	97	1.76	98	99	0.511	70 - 130	70 - 130
%SS:	95	10	100	93	7.96	96	93	2.68	70 - 130	70 - 130


All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
 NONE

BATCH 17553 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0508226-004A	8/11/05	8/15/05	8/15/05 5:49 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.
 $\% \text{ Recovery} = 100 * (\text{MS-Sample}) / (\text{Amount Spiked}); \text{RPD} = 100 * (\text{MS} - \text{MSD}) / ((\text{MS} + \text{MSD}) / 2).$
 MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.
 N/A = not enough sample to perform matrix spike and matrix spike duplicate.
 NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.
 Laboratory extraction solvents such as methylene chloride and freon 113 may occasionally appear in the method blank at low levels.

DHS Certification No. 1644

 QA/QC Officer

ASEC 0508226

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)

[Signature]

PROJECT NAME J+A Truck Repair

JOB NO. 3515

ADDRESS 2221 Union St, Oakland

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:
 GOOD CONDITION APPROPRIATE CONTAINERS
 HEAD SPACE ABSENT _____ PRESERVED IN LAB _____
 DECHLORINATED IN LAB _____
 PRESERVATION VOAS O&G METALS OTHER

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)	CANNED METALS (EPA 6010+7000)	PCBS & PESTICIDES (EPA 608/8080)	ORGANOPHOSPHORUS PESTICIDES (EPA 8140 EPA 608/8080)	FUEL OXYGENATES (EPA 8260)	MTBE ONLY	TPH-G/BTEX/5 OXY'S (EPA 8260)	TPH-G/BTEX/5 OXY'S & HALOGENATED VOCS (EPA 8260B)	HOLD	
																					+1 MW-1
+ MW-2								X													
+ MW-3								X													
+7 MW-4								X													

RELINQUISHED BY:
[Signature]
 (signature) (time)

RECEIVED BY:
[Signature]
 (signature) (time) 3:30

RELINQUISHED BY:
[Signature]
 (signature) (time) 3:30

RECEIVED BY LABORATORY:
[Signature]
 (signature) (time) 15:30

COMMENTS:

D. ALLEN
 (printed name) 8/12/05
 (date)

(printed name) 8/12/05
 (date)

(printed name) 8/12/05
 (date)

POSH VEREGNIS 8/12
 (printed name) (date)

TURN AROUND TIME
 STANDARD 24hr 48hr 72hr

Company- ASE, INC.

Company-

Company-

Company- McCampbell

OTHER: