aqua science engineers inc.

August 3, 2001

AUG 07 2001

RO # 321

QUARTERLY GROUNDWATER MONITORING REPORT
JULY 2001 GROUNDWATER SAMPLING
ASE JOB NO. 3412

at
Former Chan's Shell Station
726 Harrison Street
Oakland, CA 94602

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
Former Chan's Shell Station
726 Harrison Street
Oakland, CA 94602
(510) 444-6583

Responsible Party
Kin Chan
4328 Edgewood Avenue
Oakland, CA 94602

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

Agency Review
Contact: Mr. Barney Chan
Alameda County Health Care Services Agency (ACHCSA)
1131 Harbor Bay Pkwy., Suite 250
Alameda, CA 94502
(510) 567-6700

California Regional Water Quality Control Board (RWQCB)
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612
Contact: Mr. Chuck Headlee
(510) 622-2433

The following is a report detailing the results of the July 2001 quarterly groundwater sampling at the former Chan's Shell Station. This sampling was conducted as required by the ACHCSA and RWQCB. ASE has prepared this report on behalf of Kin Chan, property owner. This report is intended to supplement the ASE report: "Report of Soil and Groundwater Assessment" dated January 8, 1999.

2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On July 17, 2001, ASE associate geologist Erik Paddleford measured the depth to groundwater in all site monitoring wells using an electric water level sounder. The surface of the groundwater was also checked for the presence of free-floating hydrocarbons or sheen. No free-floating hydrocarbons or sheen were observed in any site monitoring well. Groundwater elevation data is presented in Table One. A groundwater potentiometric surface map is presented as Figure 2. The groundwater flow direction is generally to the south/southwest with a gradient of approximately 0.0083-feet/foot. The water table has dropped an average of 0.62-feet this quarter.

3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

Prior to sampling, monitoring wells MW-1, MW-3, and MW-4 were purged of four well casing volumes of groundwater using dedicated polyethylene bailers. Groundwater monitoring well MW-2 is no longer being sampled at the site in accordance with ASE's recommendation in the April 2001 quarterly groundwater monitoring report and the May 14, 2001 letter from the ACHCSA. Petroleum hydrocarbon odors were noted during the purging and sampling of monitoring wells MW-1 and MW-4. The parameters pH, temperature, and conductivity were monitored during the well purging, and samples were not collected until these parameters stabilized. Groundwater samples were collected from each well using dedicated polyethylene bailers. The samples were decanted from the bailers into 40-ml volatile organic analysis (VOA) vials, pre-preserved with hydrochloric acid. The samples were capped without headspace, labeled and placed in coolers with wet ice for transport to Chromolab, Inc. of Pleasanton California (DHS #1644) under appropriate chain-of-custody documentation. Well sampling field logs are presented in Appendix A.

The well purge water was placed into a 55-gallon steel drum, labeled, and left on-site for temporary storage.

The groundwater samples were analyzed by Chromalab, Inc. for total petroleum hydrocarbons as gasoline (TPH-G) by EPA Method 5030/8015M, benzene, toluene, ethylbenzene and total xylenes (collectively known as BTEX) by EPA Method 8020 and methyl tertiary butyl ether (MTBE) by EPA Method 8020. The analytical results for this and previous sampling periods are presented in Table Two. The certified

analytical report and chain-of-custody documentation are included as Appendix B.

4.0 CONCLUSIONS

The groundwater samples collected from monitoring well MW-1 contained 35,000 parts per billion (ppb) TPH-G, 1,800 ppb benzene, 300 ppb ethyl benzene, 170 ppb total xylenes, and 35,000 ppb MTBE. The groundwater samples collected from monitoring well MW-3 contained 1,400 ppb TPH-G and 1,700 ppb MTBE. The groundwater samples collected from monitoring well MW-4 contained 880 ppb TPH-G and 570 ppb MTBE.

The groundwater samples collected from all three monitoring wells had hydrocarbon concentrations consistent with previous findings.

The benzene and MTBE concentrations detected in groundwater samples collected from monitoring well MW-1 exceeded the California Department of Health Services (DHS) maximum contaminant level (MCL) for drinking water. The MTBE concentrations detected in groundwater samples collected from monitoring wells MW-3 and MW-4 also exceeded the DHS MCL for drinking water.

5.0 RECOMMENDATIONS

ASE prepared a workplan dated April 30, 2001 to conduct an additional soil and groundwater assessment and remediation feasability tests at the site. ASE will begin the work outlined in that workplan the week of August 13, 2001. ASE also recommends continued groundwater monitoring on a quarterly basis. The next groundwater sampling is scheduled for October 2001.

6.0 REPORT LIMITATIONS

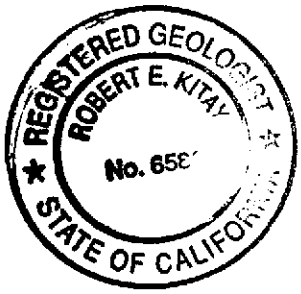
The results presented in this report represent the conditions at the time of the groundwater sampling, at the specific locations where the groundwater samples were collected, and for the specific parameters analyzed by the laboratory. It does not fully characterize the site for contamination resulting 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 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, 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.

Erik H. Paddleford
Associate Geologist



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

Attachments: Figures 1 and 2
Appendices A and B

cc: Mr. Barney Chan, Alameda County Health Care Services
Mr. Chuck Headlee, RWQCB, San Francisco Bay Region

TABLE ONE
Groundwater Elevation Data
Chan's Former Shell Station

Well ID	Date of Measurement	Top of Casing Elevation (relative to Project Datum)	Depth to Water (feet)	Groundwater Elevation (project data)
MW-1	12/15/1998	31.95	17.32	14.63
	3/4/1999		15.52	16.43
	6/17/1999		16.9	15.05
	8/27/1999		17.39	14.56
	12/9/1999		18.03	13.92
	3/7/2000		15.11	16.84
	6/7/2000		16.66	15.29
	10/11/2000		18.08	13.87
	1/18/2001		17.96	13.99
	4/5/2001		16.35	15.60
	7/17/2001		**16.94**	**15.01**
MW-2	12/15/1998	32.40	18.03	14.37
	3/4/1999		16.11	16.29
	6/17/1999		17.72	14.68
	8/27/1999	Inaccessible		
	12/9/1999	Inaccessible		
	3/7/2000	Inaccessible		
	6/7/2000		17.67	14.73
	10/11/2000		18.91	13.49
	1/18/2001		18.66	13.74
	4/5/2001		16.97	15.43
	7/17/2001		**17.54**	**14.86**
MW-3	12/15/1998	31.61	17.26	14.35
	3/4/1999		15.47	16.14
	6/17/1999		16.92	14.69
	8/27/1999		17.40	14.21
	12/9/1999		18.01	13.60
	3/7/2000		16.15	15.46
	6/7/2000		16.85	14.76
	10/11/2000		18.07	13.54
	1/18/2001		17.89	13.72
	4/5/2001		16.21	15.40
	7/17/2001		**16.90**	**14.71**

TABLE ONE
Groundwater Elevation Data
Chan's Former Shell Station

Well ID	Date of Measurement	Top of Casing Elevation (relative to Project Datum)	Depth to Water (feet)	Groundwater Elevation (project data)
MW-4	12/15/1998	32.53	17.59	14.94
	3/4/1999		15.88	16.65
	6/17/1999		17.14	15.39
	8/27/1999		17.65	14.88
	12/9/1999		18.28	14.25
	3/7/2000		15.41	17.12
	6/7/2000		17.09	15.44
	10/11/2000		18.33	14.20
	1/18/2001		18.23	14.30
	4/5/2001		16.69	15.84
	7/17/2001		**17.32**	**15.21**

TABLE TWO

Certified Analytical Results for GROUNDWATER Samples
Chan's Former Shell Station
All results are in parts per billion (ppb)

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE
MW-1						
7/3/1997	18,000	2,700	350	450	900	7,400
12/5/1998	18,000	1,500	270	260	560	14,000
3/4/1999	44,000	2,800	400	440	960	43,000
6/17/1999	33,000	2,200	250	460	660	25,000
8/27/1999	6,000	1,000	97	190	230	14,000/ 16,000*
12/9/1999	15,000	1,500	160	220	420	17,000
3/7/2000	9,300	1,500	210	66	530	12,000
6/7/2000	26,000**	1,700	< 250	360	580	30,000
10/11/2000	13,000**	1,600	< 100	140	160	19,000
1/18/2001	14,000**	450	< 100	110	230	9,600
4/5/2001	38,000	2,200	180	290	590	35,000
7/17/2001	**35,000****	**1,800**	**< 100**	**300**	**170**	**35,000**
MW-2						
12/5/1998	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
3/4/1999		Inaccessible due to car parked over well				
6/17/1999	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
8/27/1999		Inaccessible due to car parked over well				
12/9/1999		Inaccessible due to car parked over well				
3/7/2000		Inaccessible due to car parked over well				
6/7/2000	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
10/11/2000	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
1/18/2001	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
4/5/2001	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
7/17/2001			**No Longer Sampled**			
MW-3						
12/5/1998	6,500	< 50	50	60	50	3,900
3/4/1999	2,800	< 25	< 25	< 25	< 25	1,600
6/17/1999	1,000	< 10	< 10	< 10	< 10	1,400
8/27/1999	230	< 0.5	0.51	0.5	1	1,500/ 1,600*
12/9/1999	870**	< 0.5	< 0.5	< 0.5	< 0.5	2,100
3/7/2000	150**	4	< 0.5	< 0.5	< 0.5	830
6/7/2000	140**	< 0.5	< 0.5	< 0.5	< 0.5	1,100
10/11/2000	620**	< 5.0	< 5.0	< 5.0	< 5.0	1,500
1/18/2001	1,200**	< 5.0	< 5.0	< 5.0	< 5.0	1,000
4/5/2001	1,700**	< 5.0	< 5.0	< 5.0	< 5.0	1,900
7/17/2001	**1,400****	**< 10**	**< 10**	**< 10**	**< 10**	**1,700**

TABLE TWO

Certified Analytical Results for GROUNDWATER Samples
Chan's Former Shell Station
All results are in parts per billion (ppb)

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE
MW-4						
12/5/1998	880	3	< 0.5	< 0.5	< 0.5	950
3/4/1999	3,800	< 25	< 25	< 25	< 25	3,700
6/17/1999	2,700	< 25	< 25	< 25	< 25	2,700
8/27/1999	440	4.7	1.1	0.58	1.3	1,600/ 1,700*
12/9/1999	1,100**	< 2.5	< 2.5	< 2.5	< 2.5	1,700
3/7/2000	< 250	< 2.5	< 2.5	< 2.5	< 2.5	1,700
6/7/2000	530**	8.8	< 2.5	< 2.5	< 2.5	440
10/11/2000	700**	3.9	< 2.5	< 2.5	< 2.5	680
1/18/2001	2,000**	< 2.5	< 2.5	< 2.5	< 2.5	780
4/5/2001	810**	< 2.5	< 2.5	< 2.5	< 2.5	620
7/17/2001	**880****	**< 2.5**	**< 2.5**	**< 2.5**	**< 2.5**	**570**
DHS MCL	NE		150	700	1750	13

Notes:

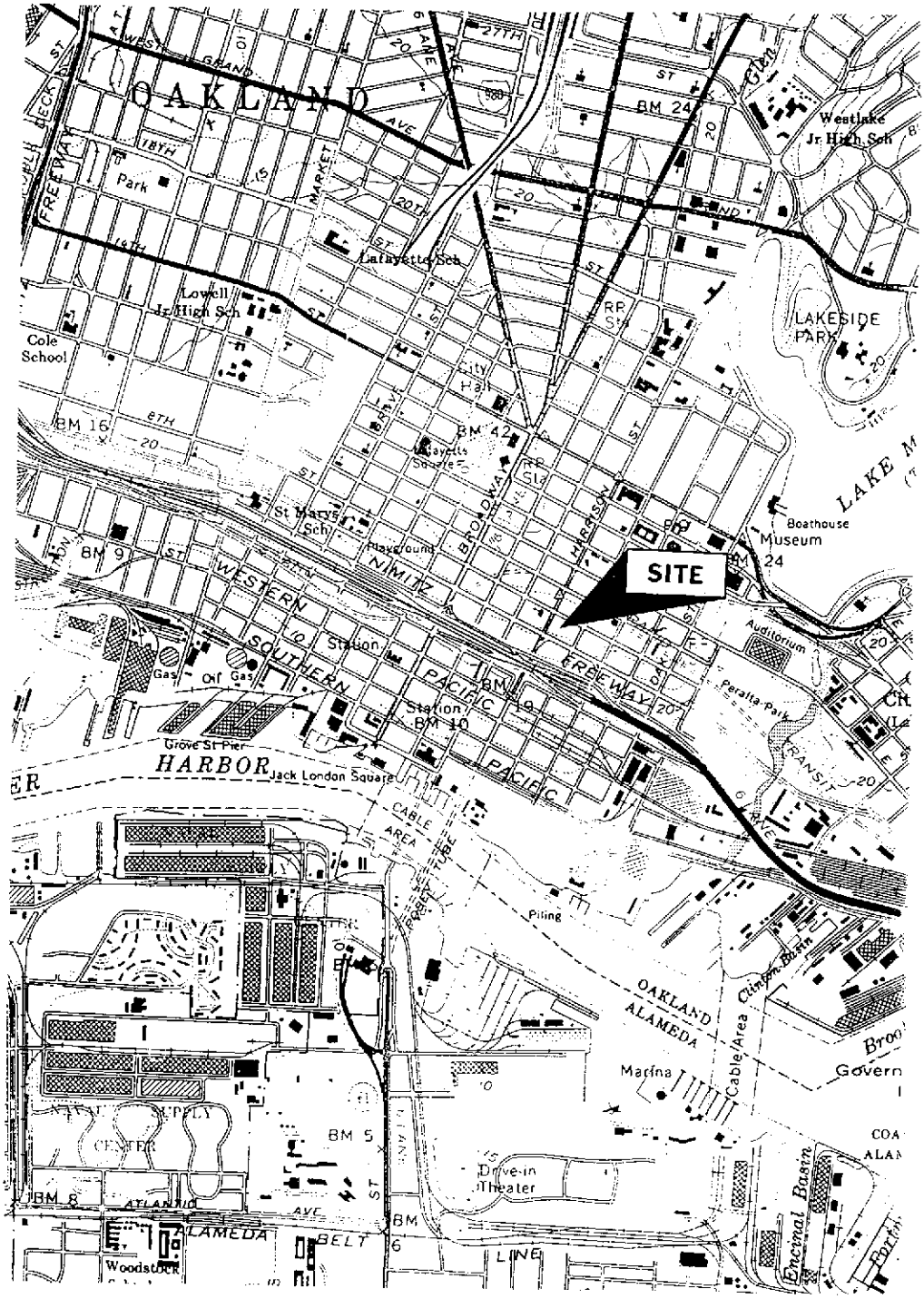
* EPA Method 8020/EPA Method 8260 (MTBE confirmation)

** Hydrocarbon reported in the gasoline range does not match the laboratory gasoline standard

DHS MCL = California Department of Health Services maximum contaminant level for

NE = DHS MCL not established

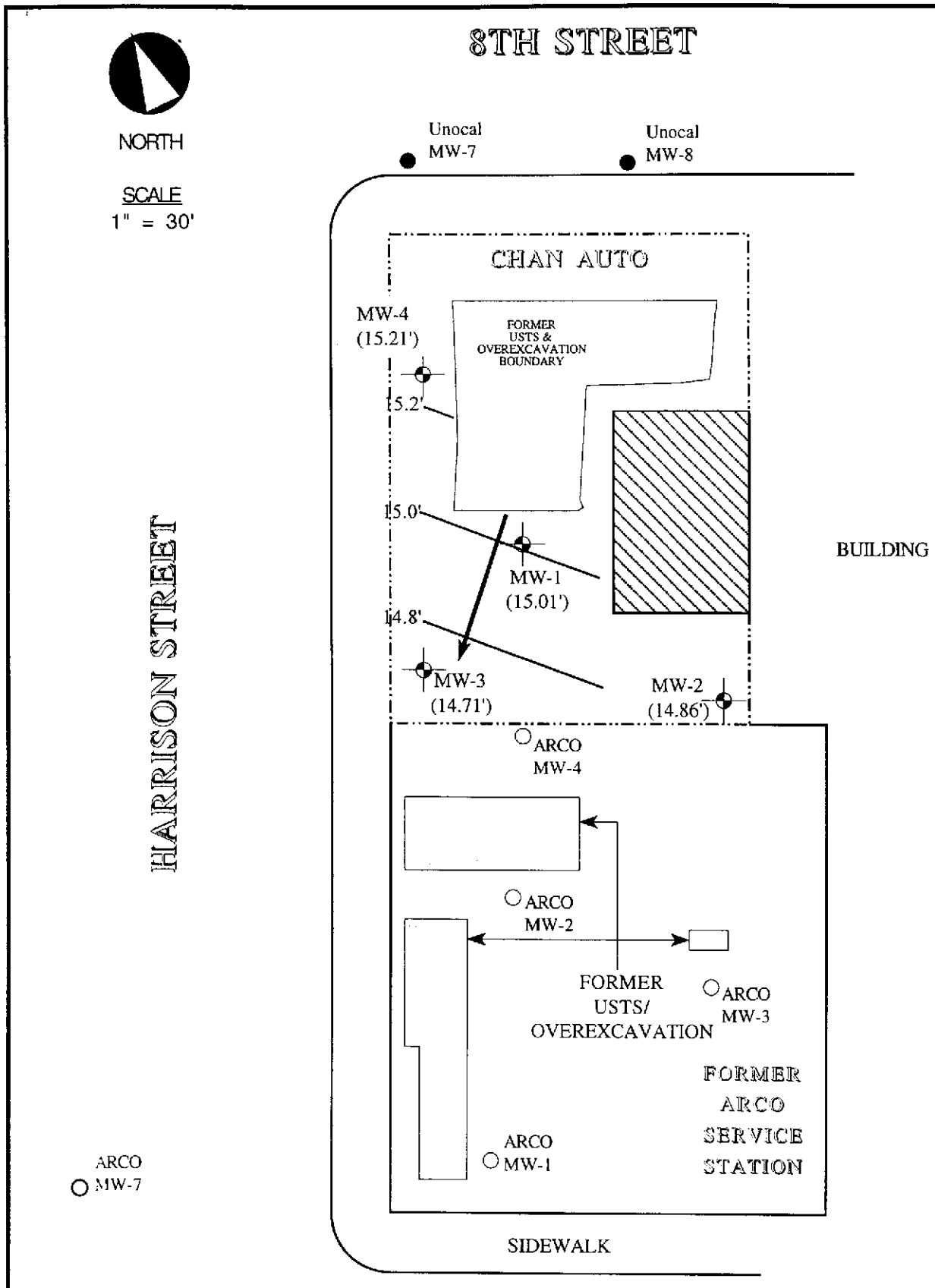
Non-detectable concentrations noted by the less than sign (<) followed by the laboratory detection limit.



SITE LOCATION MAP

FORMER CHAN'S SHELL STATION
726 HARRISION STREET
OAKLAND, CALIFORNIA

Aqua Science Engineers | Figure 1



GROUNDWATER ELEVATION
CONTOUR MAP - 07/17/01

726 HARRISON STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS | Figure 2

APPENDIX A

Well Sampling Field Logs

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WELL SAMPLING FIELD LOG

Project Name and Address: Chan Auto
Job #: MW-1 5 Date of sampling: 7/17/01
Well Name: 3412 6 Sampled by: EP
Total depth of well (feet): 27.21 Well diameter (inches): 2
Depth to water before sampling (feet): 16.94
Thickness of floating product if any: —
Depth of well casing in water (feet): 10.27
Number of gallons per well casing volume (gallons): 1.75
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 6.9
Equipment used to purge the well: bailer
Time Evacuation Began: 845 Time Evacuation Finished: 905
Approximate volume of groundwater purged: 6.9
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 910
Depth to water at time of sampling: —
Percent recovery at time of sampling: >90%
Samples collected with: bailer
Sample color: ~~clear~~ clear/gray Odor: moderate HC
Description of sediment in sample: silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	64.9	6.98	1108
2	65.1	6.98	902
3	65.1	6.99	851
4	65.6	7.00	801

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-1	3	40 ml VOA	X	X	

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aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Chan Auto
Job #: 3412 Date of sampling: 7/17/01
Well Name: MW-3 Sampled by: EP
Total depth of well (feet): 29.66 Well diameter (inches): 2
Depth to water before sampling (feet): 16.90
Thickness of floating product if any: —
Depth of well casing in water (feet): 12.72
Number of gallons per well casing volume (gallons): 2.17
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 8.6
Equipment used to purge the well: bailer
Time Evacuation Began: 945 Time Evacuation Finished: 1005
Approximate volume of groundwater purged: 8.5
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1015
Depth to water at time of sampling: —
Percent recovery at time of sampling: >90%
Samples collected with: bailer
Sample color: clear/tan Odor: none
Description of sediment in sample: silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	67.5	6.88	696
2	68.1	6.88	681
3	68.9	6.88	672
4	69.5	6.88	668

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-3	3	40 ml VOA	X	X	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Chan Auto
Job #: 3412 Date of sampling: 7/17/01
Well Name: MW-4 Sampled by: EP
Total depth of well (feet): 29.97 Well diameter (inches): 2
Depth to water before sampling (feet): 17.32
Thickness of floating product if any: 7
Depth of well casing in water (feet): 12.65
Number of gallons per well casing volume (gallons): 2.15
Number of well casing volumes to be removed: ~~8.6~~ 4.0
Req'd volume of groundwater to be purged before sampling (gallons): 8.6
Equipment used to purge the well: bailer
Time Evacuation Began: 915 Time Evacuation Finished: 930
Approximate volume of groundwater purged: 8.6
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 940
Depth to water at time of sampling: —
Percent recovery at time of sampling: >90%
Samples collected with: bailer
Sample color: grey Odor: slight HC
Description of sediment in sample: silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	66.8	6.78	891
2	66.7	6.78	8.72
3	66.6	6.77	8.69
4	66.5	6.77	860

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-4	3	40 ml VOA	x	x	

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APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation

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

Attn.: Erik Paddleford

Project: 3412
Chan Auto

Attached is our report for your samples received on Wednesday July 18, 2001
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after September 1, 2001 unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: vvancil@chromalab.com

Sincerely,

Vincent Vancil

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-07-0329

Gas/BTEX Compounds by 8015M/8021

Aqua Science Engineers, Inc.

208 West El Pintado
Danville, CA 94526

Attn: Erik Paddleford

Phone: (925) 820-9391 Fax: (925) 837-4853

Project #: 3412

Project: Chan Auto

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1	Water	07/17/2001 09:10	1
MW-3	Water	07/17/2001 10:15	2
MW-4	Water	07/17/2001 09:40	3

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-07-0329

To: **Aqua Science Engineers, Inc.**

Attn.: Erik Paddleford

Test Method: 8021B
8015M

Prep Method: 5030

Gas/BTEX Compounds by 8015M/8021

Sample ID:	**MW-1**	Lab Sample ID:	**2001-07-0329-001**
Project:	3412 Chan Auto	Received:	07/18/2001 18:36
		Extracted:	07/19/2001 23:36
Sampled:	07/17/2001 09:10	QC-Batch:	2001/07/19-01.03
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	35000	10000	ug/L	200.00	07/19/2001 23:36	g
Benzene	1800	100	ug/L	200.00	07/19/2001 23:36	
Toluene	ND	100	ug/L	200.00	07/19/2001 23:36	
Ethyl benzene	300	100	ug/L	200.00	07/19/2001 23:36	
Xylene(s)	170	100	ug/L	200.00	07/19/2001 23:36	
MTBE	35000	1000	ug/L	200.00	07/19/2001 23:36	
Surrogate(s)						
4-Bromofluorobenzene	118.9	50-150	%	200.00	07/19/2001 23:36	
4-Bromofluorobenzene-FID	101.0	50-150	%	200.00	07/19/2001 23:36	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-07-0329

To: **Aqua Science Engineers, Inc.**

Attn.: Erik Paddleford

Test Method: 8021B
8015M

Prep Method: 5030

Gas/BTEX Compounds by 8015M/8021

Sample ID:	**MW-3**	Lab Sample ID:	**2001-07-0329-002**
Project:	3412 Chan Auto	Received:	07/18/2001 18:36
		Extracted:	07/20/2001 01:08
Sampled:	07/17/2001 10:15	QC-Batch:	2001/07/19-01.03
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	1400	1000	ug/L	20.00	07/20/2001 01:08	g
Benzene	ND	10	ug/L	20.00	07/20/2001 01:08	
Toluene	ND	10	ug/L	20.00	07/20/2001 01:08	
Ethyl benzene	ND	10	ug/L	20.00	07/20/2001 01:08	
Xylene(s)	ND	10	ug/L	20.00	07/20/2001 01:08	
MTBE	1700	100	ug/L	20.00	07/20/2001 01:08	
Surrogate(s)						
Trifluorotoluene	115.2	58-124	%	20.00	07/20/2001 01:08	
4-Bromofluorobenzene-FID	103.4	50-150	%	20.00	07/20/2001 01:08	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-07-0329

To: **Aqua Science Engineers, Inc.**

Attn.: Erik Paddleford

Test Method: 8021B
8015M

Prep Method: 5030

Gas/BTEX Compounds by 8015M/8021

Sample ID:	**MW-4**	Lab Sample ID:	**2001-07-0329-003**
Project:	3412 Chan Auto	Received:	07/18/2001 18:36
		Extracted:	07/20/2001 01:39
Sampled:	07/17/2001 09:40	QC-Batch:	2001/07/19-01.03
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	880	250	ug/L	5.00	07/20/2001 01:39	g
Benzene	ND	2.5	ug/L	5.00	07/20/2001 01:39	
Toluene	ND	2.5	ug/L	5.00	07/20/2001 01:39	
Ethyl benzene	ND	2.5	ug/L	5.00	07/20/2001 01:39	
Xylene(s)	ND	2.5	ug/L	5.00	07/20/2001 01:39	
MTBE	570	25	ug/L	5.00	07/20/2001 01:39	
Surrogate(s)						
4-Bromofluorobenzene	116.4	50-150	%	5.00	07/20/2001 01:39	
4-Bromofluorobenzene-FID	111.1	50-150	%	5.00	07/20/2001 01:39	

To: **Aqua Science Engineers, Inc.**
Attn.: Erik Paddleford

Test Method: 8015M
8021B
Prep Method: 5030

Batch QC Report
Gas/BTEX Compounds by 8015M/8021

Method Blank **Water** **QC Batch # 2001/07/19-01.03**

MB: 2001/07/19-01.03-004 Date Extracted: 07/19/2001 12:24

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	07/19/2001 12:24	
Benzene	ND	0.5	ug/L	07/19/2001 12:24	
Toluene	ND	0.5	ug/L	07/19/2001 12:24	
Ethyl benzene	ND	0.5	ug/L	07/19/2001 12:24	
Xylene(s)	ND	0.5	ug/L	07/19/2001 12:24	
MTBE	ND	5.0	ug/L	07/19/2001 12:24	
Surrogate(s)					
4-Bromofluorobenzene	112.0	50-150	%	07/19/2001 12:24	
4-Bromofluorobenzene-FID	100.0	50-150	%	07/19/2001 12:24	

To: **Aqua Science Engineers, Inc.**
Attn: Erik Paddleford

Test Method: 8021B
Prep Method: 5030

Batch QC Report

Gas/BTEX Compounds by 8015M/8021

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2001/07/19-01.03**

LCS: 2001/07/19-01.03-005 Extracted: 07/19/2001 12:55 Analyzed 07/19/2001 12:55
LCSD: 2001/07/19-01.03-006 Extracted: 07/19/2001 13:26 Analyzed 07/19/2001 13:26

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	104	103	100.0	100.0	104.0	103.0	1.0	77-123	20		
Toluene	100	100	100.0	100.0	100.0	100.0	0.0	78-122	20		
Ethyl benzene	102	102	100.0	100.0	102.0	102.0	0.0	70-130	20		
Xylene(s)	300	303	300	300	100.0	101.0	1.0	75-125	20		
Surrogate(s)											
Trifluorotoluene	531	515	500	500	106.2	103.0		58-124			

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-07-0329

To: **Aqua Science Engineers, Inc.**
Attn: Erik Paddleford

Test Method: 8015M
Prep Method: 5030

Batch QC Report

Gas/BTEX Compounds by 8015M/8021

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2001/07/19-01.03**

LCS: 2001/07/19-01.03-007 Extracted: 07/19/2001 13:57 Analyzed 07/19/2001 13:57
LCSD: 2001/07/19-01.03-008 Extracted: 07/19/2001 14:28 Analyzed 07/19/2001 14:28

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	512	517	500	500	102.4	103.4	1.0	75-125	20		
Surrogate(s)											
4-Bromofluorobenzene-FI	465	472	500	500	93.0	94.4		50-150			

To: **Aqua Science Engineers, Inc.**

Attn: Erik Paddleford

Test Method: 8015M
8021B

Prep Method: 5030

Legend & Notes

Gas/BTEX Compounds by 8015M/8021

Analyte Flags

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

SEVERN TRENT SERVICES

STL ChromaLab

Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 484-1096
Email: info@chromalab.com

Reference #: 60492

Date 7/18/01 Page 1 of 1

From

Proj.Mgr	Erik Paddleford
Company	Aqua Science Engineers
Address	208 W. El Pintado Danville, CA 94526
Sampler (Signature)	Erik Paddleford
Phone	925 820 9391
Fax/Email	

Analysis Request

Sample ID	Date	Time	Matrix	Preserv.	TPH (EPA 8015, 8020/8021) ☒ Gas w/ ☒ BTEX ☒ MTBE	Purgeable Aromatics BTEX (EPA 8020/8021)	TEPH (EPA 8015M) ☐ Silica Gel ☐ Diesel ☐ Motor Oil ☐ Other	Fuel Oxygenates (8260B): ☐ DCA, EDB ☐ Full Oxygenate List ☐ MTBE ☐ BTEX	Purgeable Halocarbons (HVOCs) (EPA 8010/8021)	Volatile Organics GC/MS (VOCs) (EPA 8260A/8260B)	Semivolatiles GC/MS (EPA 8270)	Oil and Grease ☐ Petroleum (EPA 1664) ☐ Total	Pesticides (EPA 8081) ☐ PCBs (EPA 8082)	PNAs by ☐ 8270 ☐ 8310	CAM17 Metals (EPA 6010/7470/7471)	Metals: ☐ Lead ☐ LUFT ☐ RCRA ☐ Other:	W.E.T (STLC) ☐ TCLP	Hexavalent Chromium ☐ pH (24h hold time for H_2O)	Spec Cond. ☐ Alkalinity ☐ TDS ☐ TSS	Anions: ☐ Cl ☐ SO_4 ☐ NO_3 ☐ F ☐ Br ☐ NO_2 ☐ PO_4					Number of Containers
MW-1	7/17	910	W	HCl	X																					3
MW-3	7/17	1015	W	HCl	X																					3
MW-4	7/17	940	W	HCl	X																					3

Project Info.

Project Name: Chan Auto
Project#: 3412
PO#:
Cre[illegible] Card#:

Std 5 Day | 72h | 48h | 24h

Report: ☐ Routine ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ EDD
Special Instructions / Comments:

Sample Receipt

of Containers:
Head Space:
Temp: 3.0°C
Conforms to record:
Other

1) Relinquished by:
Erik Paddleford
Signature Time
Erik Paddleford
Printed Name Date
ASE
Company

1) Received by:
Signature 1035 Time
B Morrow 7/18/01
Printed Name Date
STL-CL
Company

2) Relinquished by:
Signature Time
Printed Name Date
Company

2) Received by:
Signature Time
Printed Name Date
Company

3) Relinquished by:
Signature 1836 Time
B Morrow 7/18/01
Printed Name Date
STL-CL
Company

3) Received by:
Denise Harrington
Signature Time
D. Harrington
Printed Name Date
STL-CL
Company