aqua science engineers inc.

00 NOV -6 PM 5:17
ENVIRONMENTAL PROTECTION

Conversation w/ Jerry
Realtor: Jun Lee
Daughter: Susan
Auditor: Rani Lee

November 2, 2000

#39

QUARTERLY GROUNDWATER MONITORING REPORT
OCTOBER 2000 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

aqua science engineers inc.

November 2, 2000

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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
Larry Seto
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 October 2000, 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 October 11, 2000, ASE associate geologist Ian Reed 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.

TABLE ONE
Groundwater Elevation Data
Chan's Former Shell Station

Well I.D.	Date of Measurement	Top of Casing Elevation (relative to project datum)	Depth to Water (feet)	Groundwater Elevation (project data)
MW-1	12-15-98	31.95	17.32	14.63
	03-04-99		15.52	16.43
	06-17-99		16.90	15.05
	08-27-99		17.39	14.56
	12-09-99		18.03	13.92
	03-07-00		15.11	16.84
	06-07-00		16.66	15.29
	10-11-00		**18.08**	**13.87**
MW-2	12-15-98	32.40	18.03	14.37
	03-04-99		16.11	16.29
	06-17-99		17.72	14.68
	08-27-99	Inaccessible		
	12-09-99	Inaccessible		
	03-07-00	Inaccessible		
	06-07-00		17.67	14.73
	10-11-00		**18.91**	**13.49**
MW-3	12-15-98	31.61	17.26	14.35
	03-04-99		15.47	16.14
	06-17-99		16.92	14.69
	08-27-99		17.40	14.21
	12-09-99		18.01	13.60
	03-07-00		16.15	15.46
	06-07-00		16.85	14.76
	10-11-00		**18.07**	**13.54**
MW-4	12-15-98	32.53	17.59	14.94
	03-04-99		15.88	16.65
	06-17-99		17.14	15.39
	08-27-99		17.65	14.88
	12-09-99		18.28	14.25
	03-07-00		15.41	17.12
	06-07-00		17.09	15.44
	10-11-00		**18.33**	**14.20**

A groundwater potentiometric surface map is presented as Figure 2. The groundwater flow direction is generally to the south with flow components to the southeast and southwest. The gradient is approximately 0.01-feet/foot. The water table has dropped approximately 1.28-feet this quarter.

3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

Prior to sampling, all four monitoring wells were purged of four well casing volumes of groundwater using dedicated polyethylene bailers. Petroleum hydrocarbon odors were present during the purging and sampling of all four groundwater monitoring wells sampled. 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 in 55-gallon steel drums, labeled, and left on-site for temporary storage.

The groundwater samples were analyzed by Chromolab, 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.

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						
07/03/97	18,000	2,700	350	450	900	7,400
12/05/98	18,000	1,500	270	260	560	14,000
03/04/99	44,000	2,800	400	440	960	43,000
06/17/99	33,000	2,200	250	460	660	25,000
08/27/99	6,000	1,000	97	190	230	14,000/ 16,000*
12/09/99	15,000	1,500	160	220	420	17,000
03/07/00	9,300	1,500	210	66	530	12,000
06/07/00	26,000**	1,700	< 250	360	580	30,000
10/11/00	**13,000****	**1,600**	**< 100**	**140**	**160**	**19,000**
MW-2						
12/05/98	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
03/04/99	Inaccessible due to car parked over well					
06/17/99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5
08/27/99	Inaccessible due to car parked over well					
12/09/99	Inaccessible due to car parked over well					
03/07/00	Inaccessible due to car parked over well					
06/07/00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
10/11/00	**< 50**	**< 0.5**	**< 0.5**	**< 0.5**	**< 0.5**	**< 5.0**
MW-3						
12/05/98	6,500	< 50	50	60	50	3,900
03/04/99	2,800	< 25	< 25	< 25	< 25	1,600
06/17/99	1,000	< 10	< 10	< 10	< 10	1,400
08/27/99	230	< 0.5	0.51	0.5	1.0	1,500/ 1,600*
12/09/99	870**	< 0.5	< 0.5	< 0.5	< 0.5	2,100
03/07/00	150**	4.0	< 0.5	< 0.5	< 0.5	830
06/07/00	140**	< 0.5	< 0.5	< 0.5	< 0.5	1,100
10/11/00	**620****	**< 5.0**	**< 5.0**	**< 5.0**	**< 5.0**	**1,500**

Table Two continued on next page

TABLE TWO (continued)
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						
12/05/98	880	3	<0.5	<0.5	<0.5	950
03/04/99	3,800	<25	<25	<25	<25	3,700
06/17/99	2,700	<25	<25	<25	<25	2,700
08/27/99	440	4.7	1.1	0.58	1.3	1,600/ 1,700*
12/09/99	1,100**	<2.5	<2.5	<2.5	<2.5	1,700
03/07/00	<250	<2.5	<2.5	<2.5	<2.5	1,700
06/07/00	530**	8.8	<2.5	<2.5	<2.5	440
10/11/00	**700**	**3.9**	**< 2.5**	**< 2.5**	**< 2.5**	**680**
2/5/00						
DHS MCL	NE	1	150	700	1,750	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.

4.0 CONCLUSIONS

The groundwater samples collected from monitoring well MW-1 contained 13,000 parts per billion (ppb) TPH-G, 1,600 ppb benzene, 140 ppb ethyl benzene, 160 ppb total xylenes, and 19,000 ppb MTBE. The groundwater samples collected from monitoring well MW-3 contained 620 ppb TPH-G and 1,500 ppb MTBE. The groundwater samples collected from monitoring well MW-4 contained 700 ppb TPH-G, 3.9 ppb benzene, and 680 ppb MTBE. No hydrocarbons were detected above their laboratory reporting limits in groundwater samples collected from monitoring well MW-2.

Hydrocarbon concentrations in groundwater samples collected from monitoring well MW-1 decreased slightly from last quarter's results. The hydrocarbon concentrations in groundwater samples collected from monitoring wells MW-3 and MW-4 were relatively consistent with previous results.

The benzene and MTBE concentrations detected in groundwater samples collected from monitoring wells MW-1 and MW-4 exceeded California Department of Health Services (DHS) maximum contaminant levels (MCLs) for drinking water. The MTBE concentration in monitoring well MW-3 also exceeded the DHS MCL for drinking water. Overall the results were similar to the previous sampling results.

5.0 RECOMMENDATIONS

ASE recommends continued monitoring of the site on a quarterly basis. The next groundwater sampling is scheduled for December 2000.

6.0 REPORT LIMITATIONS

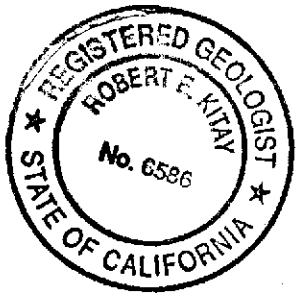
The results of this report represent the conditions at the time of the groundwater sampling, at the specific locations where the groundwater samples were collected, and for the specific parameters analyzed by the laboratory. It does not fully characterize the site for contamination resulting from sources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

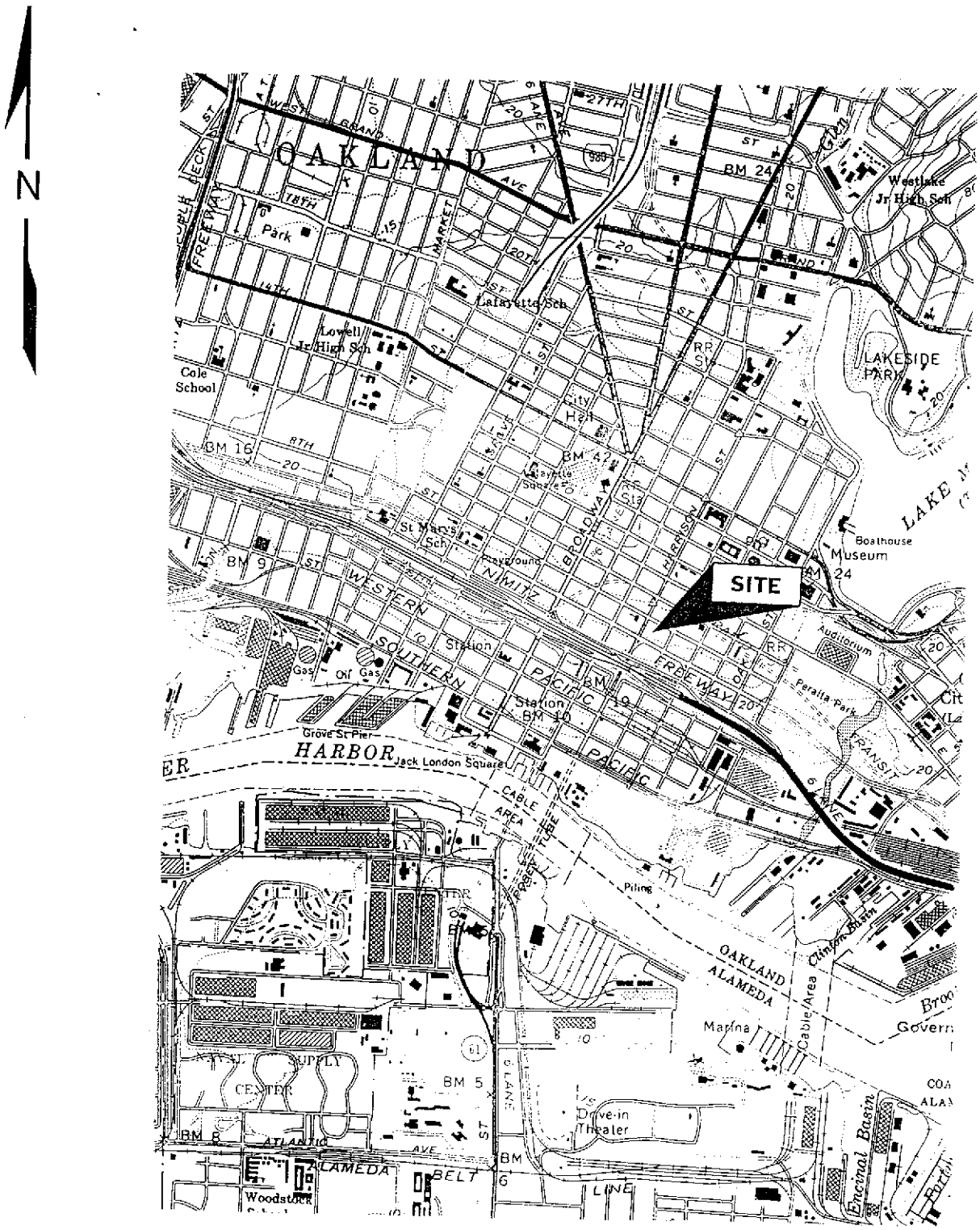
Ian T. Reed
Associate Geologist



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

Attachments: Figures 1 and 2
Appendices A and B

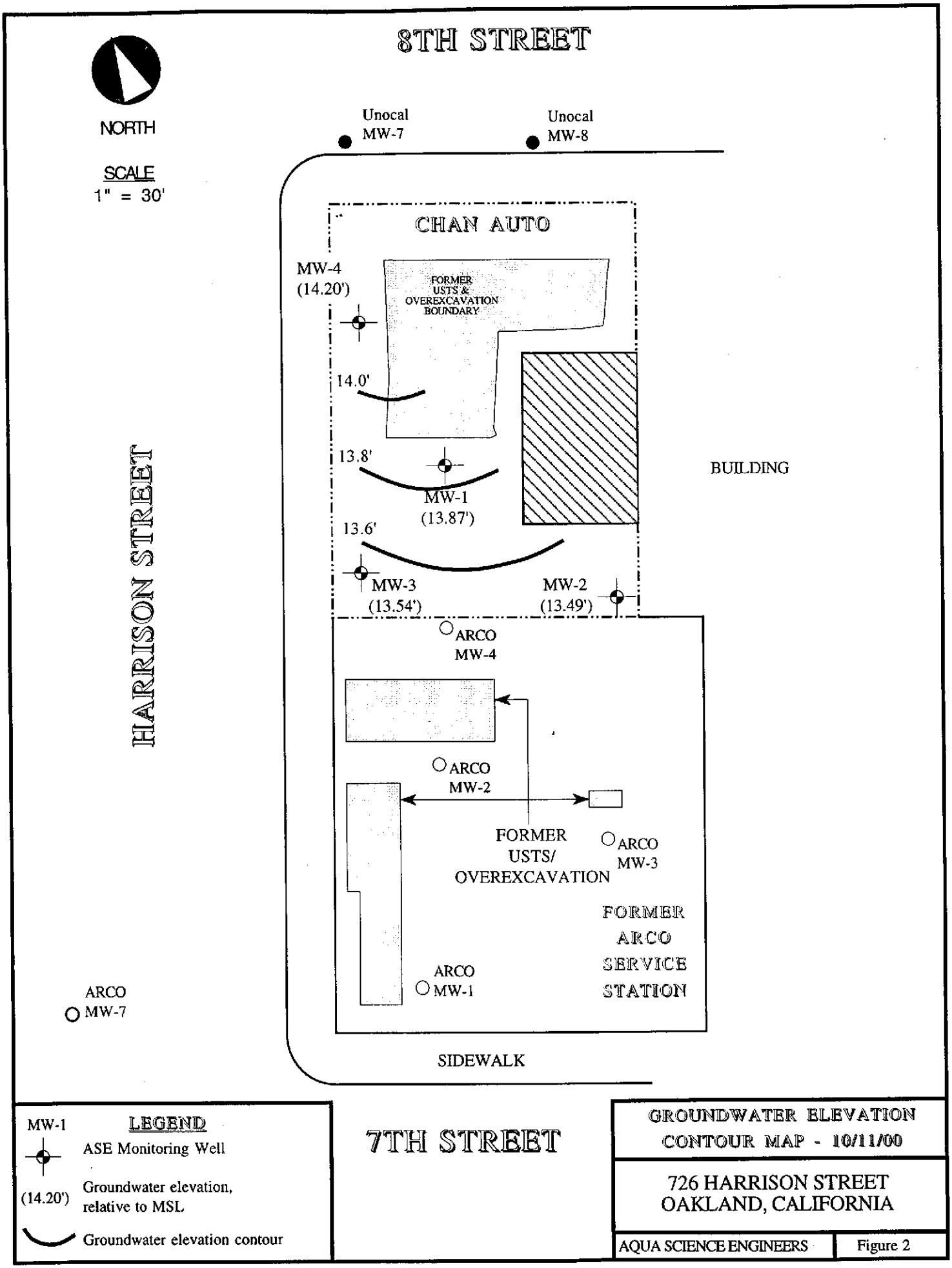
cc: Mr. Larry Seto, Alameda County Health Care Services
Mr. Chuck Headlee, RWQCB, San Francisco Bay Region



SITE LOCATION MAP

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

Aqua Science Engineers | Figure 1


8TH STREET
NORTH
SCALE
1" = 30'
Unocal
MW-7
Unocal
MW-8
CHAN AUTO
MW-4
(14.20')
FORMER
USTS &
OVEREXCAVATION
BOUNDARY
14.0'
13.8'
MW-1
(13.87')
13.6'
MW-3
(13.54')
MW-2
(13.49')
BUILDING
HARRISON STREET
ARCO
MW-4
ARCO
MW-2
FORMER
USTS/
OVEREXCAVATION
ARCO
MW-3
FORMER
ARCO
SERVICE
STATION
ARCO
MW-1
ARCO
MW-7
SIDEWALK
7TH STREET
MW-1
LEGEND
ASE Monitoring Well
(14.20')
Groundwater elevation,
relative to MSL
Groundwater elevation contour
GROUNDWATER ELEVATION
CONTOUR MAP - 10/11/00
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 #: 3412 Date of sampling: 10/11/00
Well Name: MW-1 Sampled by: _____
Total depth of well (feet): 27.21 Well diameter (inches): 2"
Depth to water before sampling (feet): 18.98'
Thickness of floating product if any: —
Depth of well casing in water (feet): 9.13
Number of gallons per well casing volume (gallons): 1.6
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 6.4
Equipment used to purge the well: ded bailer
Time Evacuation Began: 0625 Time Evacuation Finished: 0645
Approximate volume of groundwater purged: 6.5
Did the well go dry?: no After how many gallons: —
Time samples were collected: 0650
Depth to water at time of sampling: 18.23
Percent recovery at time of sampling: 95%
Samples collected with: ded. bailer
Sample color: clear/gray Odor: slight HC odor
Description of sediment in sample: silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
	25.3	6.81	810
2	25.2	6.90	800
3	25.3	6.80	810
4	[illegible]	[illegible]	820

SAMPLES COLLECTED

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

208 W. El Pintado, Danville, California 94526 • 925-820-9391 • Fax 925-837-4853

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: CHAN AUTO
Job #: 3412 Date of sampling: 10/11/00
Well Name: MW-2 Sampled by: ITR
Total depth of well (feet): 27' Well diameter (inches): 2"
Depth to water before sampling (feet): 18.91'
Thickness of floating product if any: —
Depth of well casing in water (feet): 8.09'
Number of gallons per well casing volume (gallons): 1.4
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 5.6
Equipment used to purge the well: ded. bailer
Time Evacuation Began: 0700 Time Evacuation Finished: 0710
Approximate volume of groundwater purged: 5.6
Did the well go dry?: no After how many gallons: —
Time samples were collected: 0715
Depth to water at time of sampling: 19.37'
Percent recovery at time of sampling: 97.1
Samples collected with: ded. bailer
Sample color: clear Odor: slight HC odor
Description of sediment in sample: fine

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1		7.01	680
2		7.07	668
3		7.02	670
4		7.02	670

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-2	3	40ml VOA	✓	✓	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: CHAN AUTO
Job #: 3412 Date of sampling: 10/11/00
Well Name: MW-3 Sampled by: TR
Total depth of well (feet): 29.66 Well diameter (inches): 2"
Depth to water before sampling (feet): 18.07
Thickness of floating product if any: —
Depth of well casing in water (feet): 11.59
Number of gallons per well casing volume (gallons): 1.9
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 7.6
Equipment used to purge the well: disp. bailer
Time Evacuation Began: 0720 Time Evacuation Finished: 0735
Approximate volume of groundwater purged: 7.6
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 0740
Depth to water at time of sampling: 18.56
Percent recovery at time of sampling: 97.1
Samples collected with: disp. bailer
Sample color: clear/gray Odor: slight HC odor
Description of sediment in sample: [illegible]

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	25.9	6.12	760
2	25.8	6.13	[illegible]
3	25.9	6.14	720
4	25.9	[illegible]	[illegible]

SAMPLES COLLECTED

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

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: CHAN AUTO
Job #: 3112 Date of sampling: 10/11/00
Well Name: MW-4 Sampled by: TTR
Total depth of well (feet): 29.97 Well diameter (inches): 2"
Depth to water before sampling (feet): 18.33'
Thickness of floating product if any: —
Depth of well casing in water (feet): 11.64
Number of gallons per well casing volume (gallons): 1.97
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 7.9
Equipment used to purge the well: disp. bailer
Time Evacuation Began: 0730 Time Evacuation Finished: 0810
Approximate volume of groundwater purged: 8
Did the well go dry?: — After how many gallons: —
Time samples were collected: 08 45
Depth to water at time of sampling: 18.93
Percent recovery at time of sampling: 43%
Samples collected with: disp. bailer
Sample color: clear, gray Odor: Slight Acetone
Description of sediment in sample: silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
2	20.4	7.19	630
4	20.2	7.22	630
6	20.2	7.22	670
8	20.3	7.22	670

SAMPLES COLLECTED

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

APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation

CHROMALAB, INC.
Environmental Services (SDB)

Submission #: 2000-10-0211
Date: October 17, 2000

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

Attn.: Mr. Ian T. Reed

Project: 3412
CHAN

Site: 726 Harrison St., Oakland CA

Dear Mr. Reed,

Attached is our report for your samples received on Wednesday October 11, 2000
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 November 25, 2000 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

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-10-0211

Gas/BTEX and MTBE

Aqua Science Engineers, Inc.

208 West El Pintado Road
Danville, CA 94526

Attn: Ian T. Reed

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

Project #: 3412

Project: CHAN

Site: 726 Harrison St., Oakland CA

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1	Water	10/11/2000 06:50	1
MW-2	Water	10/11/2000 07:15	2
MW-3	Water	10/11/2000 07:40	3
MW-4	Water	10/11/2000 08:15	4

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-10-0211

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

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-1**	Lab Sample ID:	**2000-10-0211-001**
Project:	3412 CHAN	Received:	10/11/2000 17:19
Site:	726 Harrison St., Oakland CA	Extracted:	10/13/2000 14:45
Sampled:	10/11/2000 06:50	QC-Batch:	2000/10/13-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	13000	10000	ug/L	200.00	10/13/2000 14:45	g
Benzene	1600	100	ug/L	200.00	10/13/2000 14:45	
Toluene	ND	100	ug/L	200.00	10/13/2000 14:45	
Ethyl benzene	140	100	ug/L	200.00	10/13/2000 14:45	
Xylene(s)	160	100	ug/L	200.00	10/13/2000 14:45	
MTBE	19000	1000	ug/L	200.00	10/13/2000 14:45	
Surrogate(s)						
Trifluorotoluene	82.1	58-124	%	1.00	10/13/2000 14:45	
4-Bromofluorobenzene-FID	76.0	50-150	%	1.00	10/13/2000 14:45	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-10-0211

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

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-2**	Lab Sample ID:	**2000-10-0211-002**
Project:	3412 CHAN	Received:	10/11/2000 17:19
Site:	726 Harrison St., Oakland CA	Extracted:	10/13/2000 15:16
Sampled:	10/11/2000 07:15	QC-Batch:	2000/10/13-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	10/13/2000 15:16	
Benzene	ND	0.50	ug/L	1.00	10/13/2000 15:16	
Toluene	ND	0.50	ug/L	1.00	10/13/2000 15:16	
Ethyl benzene	ND	0.50	ug/L	1.00	10/13/2000 15:16	
Xylene(s)	ND	0.50	ug/L	1.00	10/13/2000 15:16	
MTBE	ND	5.0	ug/L	1.00	10/13/2000 15:16	
Surrogate(s)						
Trifluorotoluene	91.5	58-124	%	1.00	10/13/2000 15:16	
4-Bromofluorobenzene-FID	82.9	50-150	%	1.00	10/13/2000 15:16	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-10-0211

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

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-3**	Lab Sample ID:	**2000-10-0211-003**
Project:	3412 CHAN	Received:	10/11/2000 17:19
Site:	726 Harrison St., Oakland CA	Extracted:	10/16/2000 10:27
Sampled:	10/11/2000 07:40	QC-Batch:	2000/10/16-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	620	500	ug/L	10.00	10/16/2000 10:27	g
Benzene	ND	5.0	ug/L	10.00	10/16/2000 10:27	
Toluene	ND	5.0	ug/L	10.00	10/16/2000 10:27	
Ethyl benzene	ND	5.0	ug/L	10.00	10/16/2000 10:27	
Xylene(s)	ND	5.0	ug/L	10.00	10/16/2000 10:27	
MTBE	1500	50	ug/L	10.00	10/16/2000 10:27	
Surrogate(s)						
Trifluorotoluene	100.7	58-124	%	1.00	10/16/2000 10:27	
4-Bromofluorobenzene-FID	81.7	50-150	%	1.00	10/16/2000 10:27	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-10-0211

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

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-4**	Lab Sample ID:	**2000-10-0211-004**
Project:	3412 CHAN	Received:	10/11/2000 17:19
Site:	726 Harrison St., Oakland CA	Extracted:	10/13/2000 19:25
Sampled:	10/11/2000 08:15	QC-Batch:	2000/10/13-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	700	250	ug/L	5.00	10/13/2000 19:25	g
Benzene	3.9	2.5	ug/L	5.00	10/13/2000 19:25	
Toluene	ND	2.5	ug/L	5.00	10/13/2000 19:25	
Ethyl benzene	ND	2.5	ug/L	5.00	10/13/2000 19:25	
Xylene(s)	ND	2.5	ug/L	5.00	10/13/2000 19:25	
MTBE	680	25	ug/L	5.00	10/13/2000 19:25	
Surrogate(s)						
Trifluorotoluene	85.5	58-124	%	1.00	10/13/2000 19:25	
4-Bromofluorobenzene-FID	82.3	50-150	%	1.00	10/13/2000 19:25	

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

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report
Gas/BTEX and MTBE

Method Blank | **Water** | **QC Batch # 2000/10/13-01.02**

MB: 2000/10/13-01.02-001 | Date Extracted: 10/13/2000 04:58

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	10/13/2000 04:58	
Benzene	ND	0.5	ug/L	10/13/2000 04:58	
Toluene	ND	0.5	ug/L	10/13/2000 04:58	
Ethyl benzene	ND	0.5	ug/L	10/13/2000 04:58	
Xylene(s)	ND	0.5	ug/L	10/13/2000 04:58	
MTBE	ND	5.0	ug/L	10/13/2000 04:58	
Surrogate(s)					
Trifluorotoluene	81.4	58-124	%	10/13/2000 04:58	
4-Bromofluorobenzene-FID	85.6	50-150	%	10/13/2000 04:58	

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

Attn.: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Method Blank | **Water** | **QC Batch # 2000/10/16-01.02**

MB: 2000/10/16-01.02-001

Date Extracted: 10/16/2000 06:30

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	10/16/2000 06:30	
Benzene	ND	0.5	ug/L	10/16/2000 06:30	
Toluene	ND	0.5	ug/L	10/16/2000 06:30	
Ethyl benzene	ND	0.5	ug/L	10/16/2000 06:30	
Xylene(s)	ND	0.5	ug/L	10/16/2000 06:30	
MTBE	ND	5.0	ug/L	10/16/2000 06:30	
Surrogate(s)					
Trifluorotoluene	90.8	58-124	%	10/16/2000 06:30	
4-Bromofluorobenzene-FID	78.6	50-150	%	10/16/2000 06:30	

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

Attn: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/10/13-01.02**

LCS: 2000/10/13-01.02-002 Extracted: 10/13/2000 05:29 Analyzed 10/13/2000 05:29

LCSD: 2000/10/13-01.02-003 Extracted: 10/13/2000 06:05 Analyzed 10/13/2000 06:05

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	466	468	500	500	93.2	93.6	0.4	75-125	20		
Benzene	103	92.5	100.0	100.0	103.0	92.5	10.7	77-123	20		
Toluene	101	89.2	100.0	100.0	101.0	89.2	12.4	78-122	20		
Ethyl benzene	98.2	87.4	100.0	100.0	98.2	87.4	11.6	70-130	20		
Xylene(s)	279	251	300	300	93.0	83.7	10.5	75-125	20		
Surrogate(s)											
Trifluorotoluene	449	372	500	500	89.8	74.4		58-124			
4-Bromofluorobenzene-FI	429	437	500	500	85.8	87.4		50-150			

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-10-0211

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

Attn: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/10/16-01.02**

LCS: 2000/10/16-01.02-002 Extracted: 10/16/2000 07:01 Analyzed 10/16/2000 07:01

LCSD: 2000/10/16-01.02-003 Extracted: 10/16/2000 07:32 Analyzed 10/16/2000 07:32

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	499	501	500	500	99.8	100.2	0.4	75-125	20		
Benzene	104	100	100.0	100.0	104.0	100.0	3.9	77-123	20		
Toluene	102	97.5	100.0	100.0	102.0	97.5	4.5	78-122	20		
Ethyl benzene	98.2	95.1	100.0	100.0	98.2	95.1	3.2	70-130	20		
Xylene(s)	278	270	300	300	92.7	90.0	3.0	75-125	20		
Surrogate(s)											
Trifluorotoluene	463	430	500	500	92.6	86.0		58-124			
4-Bromofluorobenzene-FI	466	458	500	500	93.2	91.6		50-150			

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

Attn: Ian T. Reed

Test Method: 8015M
8020

Prep Method: 5030

Legend & Notes

Gas/BTEX and MTBE

Analyte Flags

g

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

2000-10-021 55047

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) Ian T. Reed (PHONE NO.) (925) 820-9391

PROJECT NAME CHAN JOB NO. 3412

ADDRESS 726 Harrison St. Oakland CA

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

5-day

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-GABTEX/5 OXY'S (EPA 8260)	TPH-GIBTEX/7 OXY'S / HVOCS (EPA 8260)			COMPOSITE
MW-1	10/11	0850	water	3	X																	
MW-2	10/11	0925	water	3	X																	
MW-3	10/11	0940	water	3	X																	
MW-4	10/11	0815	water	3	X																	
																		3.4				

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:
(signature) Ian T Reed (time)	(signature) (time)	(signature) (time) 16:15	(signature) (time)
Ian T. Reed 10/11/00			
(printed name) (date)	(printed name) (date)	(printed name) (date) 10/11/00	(printed name) (date) 10/11/00
Company- ASE	Company-	Company-	Company-

COMMENTS:

TURN AROUND TIME

STANDARD 24Hr 48Hr 72Hr

OTHER: