aqua science engineers inc.

ENVIRONMENTAL
CTION

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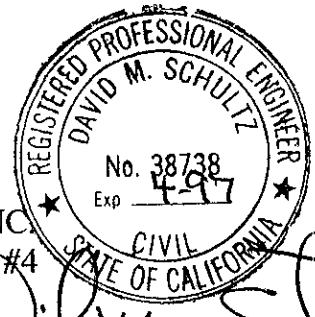
December 16, 1996

QUARTERLY GROUNDWATER MONITORING REPORT
DECEMBER 3, 1996 GROUNDWATER SAMPLING
ASE JOB NO. 2607

at
Former Alameda Max's
1357 High Street
Alameda, California 94501

Prepared for:
Mr. James A. Phillipsen
3111 Marina Drive
Alameda, CA 94501



Prepared by:
AQUA SCIENCE ENGINEERS, INC.
2411 Old Crow Canyon Road, #4
San Ramon, CA 94583
(510) 820-9391

1.0 INTRODUCTION

Site Location (Site), See Figure 1
Former Alameda Max's
1357 High Street
Alameda, CA 94501

Property Owner
Mr. James A. Phillipsen
3111 Marina Drive
Alameda, CA 94501

Environmental Consulting Firm
Aqua Science Engineers, Inc. (ASE)
2411 Old Crow Canyon Road, #4
San Ramon, CA 94583
Contact: Robert Kitay, Project Manager
(510) 820-9391

Agency Review
Alameda County Health Care Services Agency (ACHCSA)
1131 Harbor Bay Parkway
Alameda, CA 94502
Contact: Ms. Juliet Shin
(510) 567-6700

California Regional Water Quality Control Board (RWQCB),
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612
Contact: Mr. Kevin Graves
(510) 286-4359

The following is a report detailing the results of the December 3, 1996, quarterly groundwater sampling at the above referenced site.

2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On December 3, 1996, ASE environmental specialist Scott Ferriman measured the depth to water in each site 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 present on the surface of groundwater in any of the monitoring wells. Depth to groundwater measurements are presented in Table One.

Groundwater elevation contours are presented on Figure 2. On December 3, 1996, groundwater flowed to the southeast beneath the site at a gradient of 0.011-feet/foot, which is consistent with previous findings.

3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

Prior to sampling, each monitoring well was purged of four well casing volumes of water using a 12 volt PVC pump. The pH, temperature and conductivity of the water were monitored during the purging, and samples were not collected until these parameters stabilized. Groundwater samples were then collected using dedicated polyethylene bailers. The samples were decanted from the bailers into 40-ml volatile organic analysis (VOA) vials and 1-liter amber glass bottles. The samples were preserved with hydrochloric acid, capped, labeled and placed into an ice chest containing wet ice for transport to Chromalab, Inc. of Pleasanton, California (ELAP #1094) under chain-of-custody.

The analytical results for this and previous quarters are presented in Tables Two and Three, and the certified analytical report and chain-of-custody form are included as Appendix A.

The well purge water was placed in 55-gallon steel DOT 17H drums, labeled, and left on-site for temporary storage.

The groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) by EPA Method 5030/8015M, total petroleum hydrocarbons as diesel (TPH-D) by EPA Method 3510/8015M, hydrocarbon oil and grease (O&G) by Standard Method 5520 B&F, benzene, toluene, ethylbenzene and total xylenes (BTEX) by EPA 8020 and methyl t-butyl ether (MTBE) by EPA Method 8020.

4.0 CONCLUSIONS

Hydrocarbon concentrations in groundwater samples collected from all three monitoring wells are consistent with previous quarters. No hydrocarbons were detected in groundwater samples collected from monitoring well MW-1 this quarter. Only low concentrations of TPH-G, TPH-D, benzene, toluene, ethylbenzene, xylenes and MTBE were detected in groundwater samples collected from monitoring wells MW-3 and MW-4. Benzene concentrations detected in groundwater samples collected from monitoring wells MW-3 and MW-4 were at or slightly exceeded California Department of Toxic Substances Control (DTSC) maximum contaminant level (MCL) of 1 ppb for drinking water.

5.0 RECOMMENDATIONS

Hydrocarbon concentrations detected in groundwater samples collected from the site have been relatively low and consistent since the completion of the soil and groundwater remediation activities in spring of 1996. **Based on these results, ASE requests that the Alameda County Health Care Services Agency and the California Regional Water Quality Control Board evaluate this site for case closure.**

6.0 REPORT LIMITATIONS

The results 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-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 to you, and trust that this report meets your needs. Please feel free to call us at (510) 820-9391 if you have any questions or comments.

Respectfully submitted,

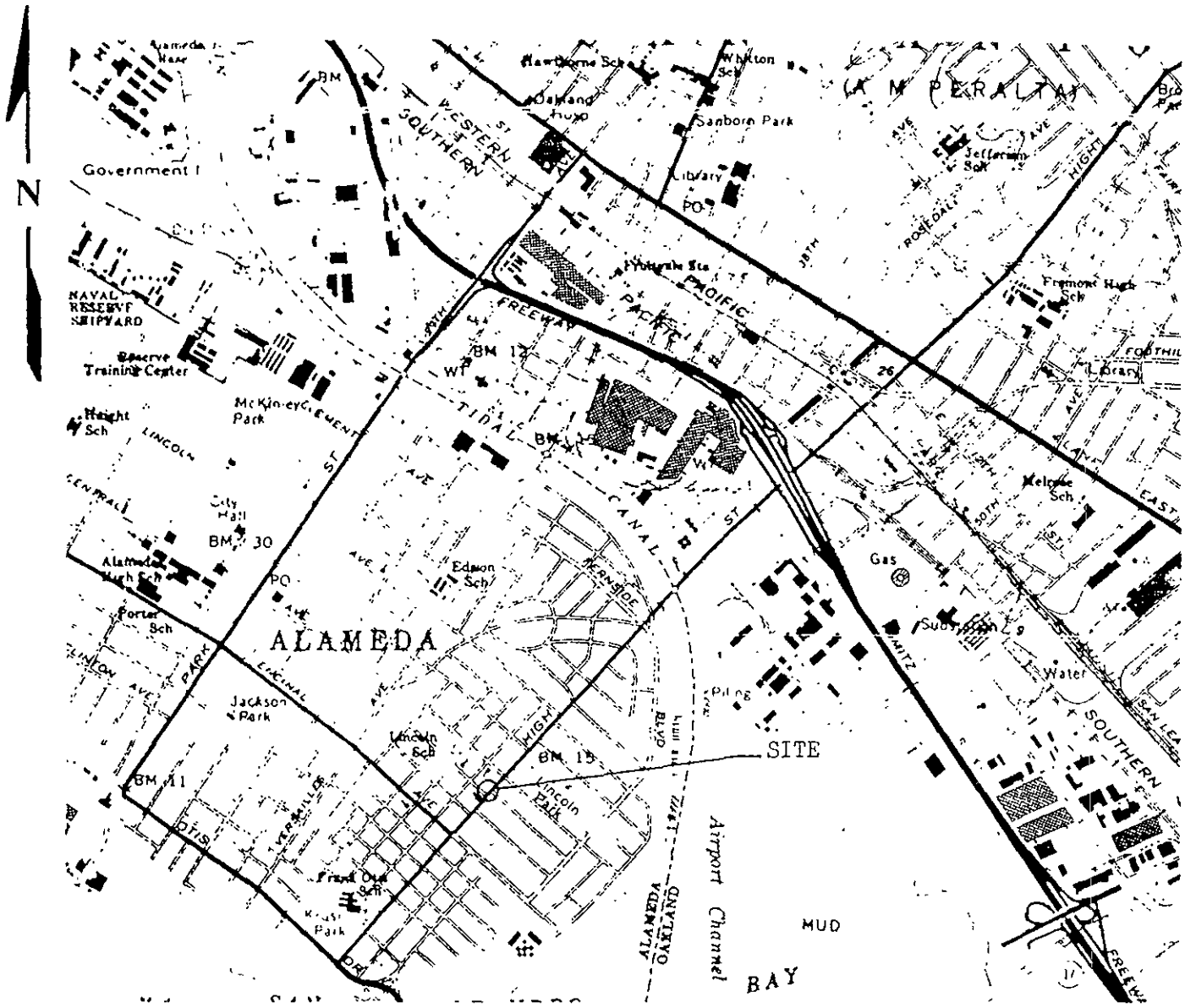
AQUA SCIENCE ENGINEERS, INC.

Scott T. Ferriman
Environmental Specialist

Attachments: Figures 1 and 2
Tables 1, 2 and 3
Appendices A and B

cc: Ms. Juliet Shin, Alameda County Health Care Services Agency
Mr. Kevin Graves, RWQCB, San Francisco Bay Region

FIGURES

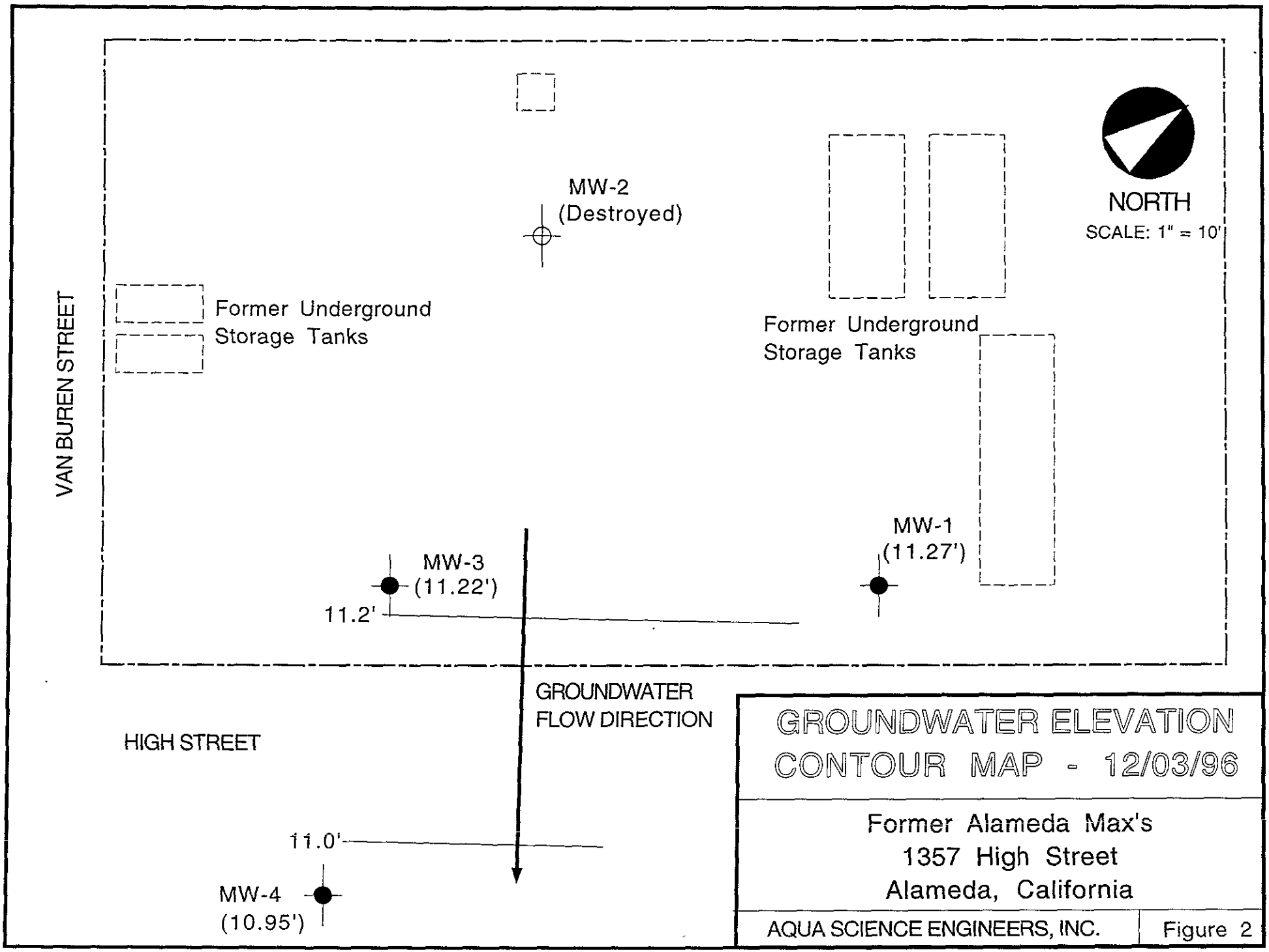


BASE. Oakland East and Oakland West 7.5 minute quadrangle topographic map, dated 1980, scale 1:24,000

SITE LOCATION MAP

Alameda Max's
1357 High Street
Alameda, California

Aqua Science Engineers | Figure 1



GROUNDWATER ELEVATION CONTOUR MAP - 12/03/96

Former Alameda Max's
1357 High Street
Alameda, California

AQUA SCIENCE ENGINEERS, INC. | Figure 2

TABLES

TABLE ONE

Summary of Groundwater Well Survey Data

Well I.D.	Date of Measurement	Top of Casing Elevation (relative to project datum)	Depth to Water (feet)	Groundwater Elevation (project data)
MW-1	04-06-94	15.00	3.92	11.08
	08-02-94		4.10	10.90
	10-04-94		4.42	10.58
	12-14-94		3.42	11.58
	03-16-95		3.21	11.79
	06-06-95		3.84	11.16
	09-14-95		4.18	10.82
	12-05-95		4.28	10.72
	03-11-96		3.41	11.59
	06-06-96		3.74	11.26
	09-04-96		4.07	10.93
	12-03-96		3.73	11.27
MW-2	04-06-94	14.37	3.02	11.35
	08-02-94		3.32	11.18*
	12-14-94		2.90	11.52*
	03-16-95		Unknown	Unknown
	06-06-95		Unknown	Unknown
	09-14-95		Unknown	Unknown
	12-05-95		3.49	10.88
	03-11-96		Unknown	Unknown
	Monitoring well MW-2 was destroyed on March 13, 1996			
MW-3	04-06-94	14.56	3.51	11.05
	08-02-94		3.68	10.88
	10-04-94		3.97	10.59
	12-14-94		3.04	11.52
	03-16-95		2.84	11.72
	06-06-95		3.44	11.12
	09-14-95		3.76	10.80
	12-05-95		3.87	10.69
	03-11-96		3.04	11.52
	06-06-96		3.34	11.22
	09-04-96		3.65	10.91
	12-03-96		3.34	11.22

* = Adjusted for the presence of free-floating oil by the equation: Adjusted Groundwater Elevation = Top of Casing Elevation - Depth to Groundwater + (0.8 x Floating Hydrocarbon Thickness)

TABLE ONE (continued)
Summary of Groundwater Well Survey Data

Well I.D.	Date of Measurement	Top of Casing Elevation (relative to project datum)	Depth to Water (feet)	Groundwater Elevation (project data)
MW-4	10-04-94	14.70	4.31	10.39
	12-14-94		3.62	11.08
	03-16-95		3.48	11.22
	06-06-95		3.86	10.84
	09-14-95		4.10	10.60
	12-05-95		4.18	10.52
	03-11-96		3.62	11.08
	06-06-96		3.80	10.90
	09-04-96		4.14	10.56
	12-03-96		3.75	10.95

TABLE TWO
Summary of Chemical Analysis of **GROUNDWATER** Samples
All results are in **parts per billion**

Sample & Date	TPH Gasoline	TPH Diesel	Oil & Grease	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
MW-1								
04/04/94	80	<50	<500	<0.5	<0.5	0.5	2	---
08/02/94	60	500	< 1,000	<0.5	<0.5	<0.5	<2	---
12/14/94	200	1,500	< 1,000	<0.5	<0.5	6	<2	---
03/16/95	200	1,600	<500	<0.5	<0.5	3	<2	---
06/06/95	<50	680	<500	<0.5	<0.5	<0.5	<2	---
09/14/95	<50	500	<500	<0.5	<0.5	0.8	<2	---
12/05/95	69	<50	< 1,000	1	6	2	12	<50
03/11/96	260	380	< 5,000	<0.5	2.4	4	1.2	<2
06/06/96	400	180**	< 1,000	<0.5	<0.5	18	9.2	<5
09/04/96	<50	200**	< 1,000	<0.5	<0.5	<0.5	<0.5	<5
12/03/96	**< 50**	**< 50**	**< 1,100**	**< 0.5**	**< 0.5**	**< 0.5**	**< 0.5**	**< 5**
MW-2								
04/04/94	150	<50	6,200	0.6	1	2	6	---
08/02/94	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS							
12/14/94	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS							
03/16/95	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS							
06/06/95	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS							
09/14/95	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS							
12/05/95	110	<50	2,000*	<0.5	<0.5	<0.5	<2	<50
03/11/96	NOT SAMPLED DUE TO FREE-FLOATING HYDROCARBONS							
	Monitoring well MW-2 was destroyed on March 13, 1996							
MW-3								
04/04/94	1,200	180	<500	3	27	44	230	---
08/02/94	2,700	<50	< 1,000	6	16	70	470	---
12/14/94	2,600	80	< 1,000	9	30	78	430	---
03/16/95	1,200	300	<500	4	16	38	270	---
06/06/95	500	300	<500	2	1	13	61	---
09/14/95	730	300	<500	3	5	28	94	---
12/05/95	360	<50	< 1,000	3	5	8	33	<50
03/11/96	2,400	490	< 5,000	<0.5	15	44	230	<2
06/06/96	970	140**	< 1,000	4.7	8.4	41	110	17
09/04/96	300	220**	< 1,000	<0.5	4.2	9.4	62	<5
12/03/96	**510**	**< 50**	**< 1,100**	**1.0**	**< 0.5**	**11**	**67**	**29**

TABLE TWO (continued)
Summary of Chemical Analysis of **GROUNDWATER** Samples
All results are in **parts per billion**

Sample & Date	TPH Gasoline	TPH Diesel	Oil & Grease	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
MW-4								
10/04/94	500	200	< 1,000	2	19	14	70	---
12/14/94	1,500	200	< 1,000	8	37	68	190	---
03/16/95	500	300	< 500	3	5	23	41	---
06/06/95	1,600	620	< 500	5.9	48	83	240	---
09/14/95	2,900	300	600	13	79	180	450	---
12/05/95	1,500	500	< 1,000	9	27	72	130	< 50
03/11/96	340	220	< 5,000	< 0.5	2.3	13	17	< 2
06/06/96	210	800**	< 1,000	0.77	4.8	12	21	< 5
09/04/96	**< 50**	**150****	**< 1,000**	**< 0.5**	**< 0.5**	**< 0.5**	**< 0.5**	**< 5**
12/03/96	**560**	**1,000****	**< 1,400**	**1.5**	**11**	**28**	**56**	**7.0**
EPA METHOD	5030/ 8015M	3510/ 8015M	5520 B&F	8020	8020	8020	8020	8020

Notes:
MTBE = Methyl t-butyl ether
--- = Not analyzed
* = Hydrocarbon oil and grease; total oil and grease is 3,000 ppb
** = TPH as Diesel was characterized as ~~Motor Oil~~ never said motor oil in lab results

12/19/96 We motor oil according to Alex Tam. Some peaks might be due to gas

TABLE THREE
Summary of Chemical Analysis of **GROUNDWATER** Samples
Volatile Organic Compounds
All results in **parts per billion**

Sample I.D.	Date of Sampling	TCE	Other VOCs
MW-1	08-02-94	< 0.5	< 0.5
	12-14-94	< 0.5	< 0.5
	03-16-95	< 0.5	< 0.5
	06-06-95	< 0.5	< 0.5
	12-05-95	< 0.5	< 0.5-2
MW-2	04-04-94	0.7	< 0.5
	08-02-94	NOT SAMPLED DUE TO FLOATING HYDROCARBONS	
	12-14-94	NOT SAMPLED DUE TO FLOATING HYDROCARBONS	
	03-16-95	NOT SAMPLED DUE TO FLOATING HYDROCARBONS	
	06-06-95	NOT SAMPLED DUE TO FLOATING HYDROCARBONS	
	12-05-95	< 0.5	< 0.5-2
	Monitoring well MW-2 was destroyed on April 19, 1996		
MW-3	08-02-94	< 0.5	< 0.5
	12-14-94	< 0.5	< 0.5
	03-16-95	< 0.5	< 0.5
	06-06-95	< 0.5	< 0.5
	12-05-95	< 0.5	< 0.5-2
MW-4	10-04-94	< 0.5	< 0.5
	12-14-94	< 0.5	< 0.5
	03-16-95	< 0.5	< 0.5
	06-06-95	< 0.5	< 0.5
	12-05-95	< 0.5	< 0.5-2
EPA METHOD		8010	8010

TCE = Trichloroethene
VOCs = volatile organic compounds

APPENDIX A

California EPA Certified Laboratory
Report of Groundwater Samples

CHROMALAB, INC.

Environmental Services (SDB)

December 10, 1996 *Submission #:* 9612023

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: FORMER ALAMEDA MAX *Project#:* 2607
Received: December 3, 1996

re: 3 samples for Oil and Grease analysis.
Method: *5520 B&F*

Matrix: WATER *Extracted:* December 10, 1996
Sampled: December 3, 1996 *Run#:* 4427 *Analyzed:* December 10, 1996

Spl#	CLIENT SPL ID	OIL & GREASE (mg/L)	REPORTING LIMIT (mg/L)	BLANK RESULT (mg/L)	BLANK SPIKE (%)	DILUTION FACTOR
109404	MW-1	N.D.	1.1	N.D.	99.0	1
109405	MW-3	N.D.	1.0	N.D.	99.0	1
109406	MW-4	N.D.	1.4	N.D.	99.0	1

Carolyn House
Extractions Supervisor

Chip Poalinelli
Operations Manager

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 10, 1996 *Submission #:* 9612023

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: FORMER ALAMEDA MAX *Project#:* 2607
Received: December 3, 1996

re: 3 samples for TPH - Diesel analysis.
Method: *EPA 8015M*

Matrix: WATER *Extracted:* December 9, 1996
Sampled: December 3, 1996 *Run#:* 4415 *Analyzed:* December 10, 1996

Spl#	CLIENT SPL ID	DIESEL (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
109404	MW-1	N.D.	50	N.D.	77.5	1
109405	MW-3	N.D.	50	N.D.	77.5	1
109406	MW-4	1000	50	N.D.	77.5	1

Note: Hydrocarbon reported does not match the pattern of our Diesel standard. Estimated concentration due to overlapping fuel patterns.

Bruce Havlik
Chemist

Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

December 10, 1996 *Submission #:* 9612023

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: FORMER ALAMEDA MAX *Project#:* 2607
Received: December 3, 1996

re: One sample for Gasoline, BTEX & MTBE analysis.
Method: *EPA 8015M SW846 8020A Nov 1990*

Client Sample ID: **MW-1**
Spl#: 109404 *Matrix:* WATER
Sampled: December 3, 1996 *Run#:* 4383 *Analyzed:* December 6, 1996

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	50	N.D.	103	1
BENZENE	N.D.	0.50	N.D.	94.0	1
TOLUENE	N.D.	0.50	N.D.	89.9	1
ETHYL BENZENE	N.D.	0.50	N.D.	90.8	1
XYLENES	N.D.	0.50	N.D.	90.1	1
MTBE	N.D.	5.0	N.D.	85.3	1

Kayvan Kimyai
Chemist

Michael R. Verna for
Marianne Alexander
Gas/BTEX Supervisor

510-837-4853 MV 12/10

1220 Quarry Lane • Pleasanton, California 94566-4756
(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 10, 1996 *Submission #:* 9612023

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: FORMER ALAMEDA MAX *Project#:* 2607
Received: December 3, 1996

re: One sample for Gasoline, BTEX & MTBE analysis.
Method: *EPA 8015M SW846 8020A Nov 1990*

Client Sample ID: **MW-3**
Spl#: 109405 *Matrix:* WATER
Sampled: December 3, 1996 *Run#:* 4383 *Analyzed:* December 6, 1996

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	510	50	N.D.	103	1
BENZENE	1.0	0.50	N.D.	94.0	1
TOLUENE	N.D.	0.50	N.D.	89.9	1
ETHYL BENZENE	11	0.50	N.D.	90.8	1
XYLENES	67	0.50	N.D.	90.1	1
MTBE	29	5.0	N.D.	85.3	1

Kayvan Kimyai
Chemist

Marianne Alexander
Gas/BTEX Supervisor

510-837-4853 MV 12/10

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(510) 484-1919 • Facsimile (510) 484-1096
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Services (SDB)

December 10, 1996 *Submission #:* 9612023

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman.

Project: FORMER ALAMEDA MAX *Project#:* 2607
Received: December 3, 1996

re: One sample for Gasoline, BTEX & MTBE analysis.
Method: *EPA 8015M SW846 8020A Nov 1990*

Client Sample ID: **MW-4**
Spl#: 109406 *Matrix:* WATER
Sampled: December 3, 1996 *Run#:* 4383 *Analyzed:* December 6, 1996

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	560	50	N.D.	103	1
BENZENE	1.5	0.50	N.D.	94.0	1
TOLUENE	11	0.50	N.D.	89.9	1
ETHYL BENZENE	28	0.50	N.D.	90.8	1
XYLENES	56	0.50	N.D.	90.1	1
MTBE	7.0	5.0	N.D.	85.3	1

Kayvan Kimyai
Chemist

Michael R. Kerr for
Marianne Alexander
Gas/BTEX Supervisor

SS/104404 - 104406

31005

Aqua Science Engineers, Inc.
2411 Old Crow Canyon Road, #4,
San Ramon, CA 94583
(510) 820-9391 - FAX (510) 837-4853

Chain of Custody

DATE 12-3-96 PAGE 1 OF 1

SAMPLERS (SIGNATURE) (PHONE NO.)
Scott T. [illegible] 510-820-9391

PROJECT NAME Former Alameda Max (Phillipsen) NO. 2607
ADDRESS

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:
5-Day

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH: GASOLINE (EPA 5030/8015)	TPH: GASOLINE/BTEX/MTBE (EPA 5030/8015-8020)	TPH: DIESEL (EPA 3510/8015)	PURGABLE AROMATICS (EPA 602/8020)	PURGABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240)	BASE/NUETRALS, ACIDS (EPA 625/8270)	OIL & GREASE (EPA 5520 E&F or B&F)	LUFT METALS (5) (EPA 6010+7000)	TITLE 22 (CAM 17) (EPA 6010+7000)	TCLP (EPA 1311/1310)	STLC- CAM WET (EPA 1311/1310)	REACTIVITY CORROSIVITY IGNITABILITY
MW-1	12-3-96	13:12	water	5		X	X					X					
MW-3	↓	13:45	↓	↓		X	X					X					
MW-4	↓	14:05	↓	↓		X	X					X					

SUBM #: 9612023 REP: N
CLIENT: ASE
DUE: 12/10/96
REF #: 31005

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Scott T. [illegible] 14:45			[illegible] 1445	
(signature) (time)	(signature) (time)	(signature) (time)	(signature) (time)	
Scott T. Freeman 12-3-96			Tamara Antone	
(printed name) (date)	(printed name) (date)	(printed name) (date)	(printed name) (date)	
Company- ASE, Inc	Company-	Company-	Company- CL 12-3-96	

APPENDIX B

Well Sampling Field Logs

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Former Alameda Max, 1357 High Street, Alameda, CA
Job #: 2607 Date of sampling: 12-3-96
Well Name: MW-1 Sampled by: SF
Total depth of well (feet): 18.14 Well diameter (inches): 4"
Depth to water before sampling (feet): 3.73
Thickness of floating product if any: none
Depth of well casing in water (feet): 14.41
Number of gallons per well casing volume (gallons): 9.5
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 38
Equipment used to purge the well: 12 Volt PVC Pump
Time Evacuation Began: 12:36 Time Evacuation Finished: 13:04
Approximate volume of groundwater purged: 40
Did the well go dry?: no After how many gallons: —
Time samples were collected: 13:12
Depth to water at time of sampling: 4.02
Percent recovery at time of sampling: 97%
Samples collected with: Dedicated Poly Bailer
Sample color: Clear Odor: Slight HC odor
Description of sediment in sample: none

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	67.3	8.49	693
2	67.4	8.37	649
3	67.5	8.14	577
4	67.6	8.09	579

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-1	3	40 ml VOAs	HCl	Yes	TPHg / BTEX / MTBE
↓	1	1 L Amber	↓	↓	TPHD
↓	1	1 L Amber	↓	↓	O+G BF

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Former Alameda Max, 1357 High Street, Alameda, CA
Job #: 2607 Date of sampling: 12-3-96
Well Name: MW-3 Sampled by: SF
Total depth of well (feet): 16.84 Well diameter (inches): 4"
Depth to water before sampling (feet): 3.34
Thickness of floating product if any: none
Depth of well casing in water (feet): 13.5
Number of gallons per well casing volume (gallons): 8.9
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 36
Equipment used to purge the well: 12 Volt PVC Pump
Time Evacuation Began: 13:20 Time Evacuation Finished: 13:40
Approximate volume of groundwater purged: 36
Did the well go dry?: No After how many gallons: -
Time samples were collected: 13:45
Depth to water at time of sampling: 3.62
Percent recovery at time of sampling: 98%
Samples collected with: Dedicated Poly Bailer
Sample color: Clear Odor: Moderate HC odor
Description of sediment in sample: none

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	67.3	7.98	329
2	67.5	7.81	328
3	67.6	7.77	312
4	67.6	7.72	308

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-3	3	40ml VOAs	HCl	Yes	TPHg/BTEX/MTBE
↓	1	1 L Amber	↓	↓	TPHD
↓	1	1 L Amber	↓	↓	O+G BF

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Former Alameda Nax, 1357 High Street, Alameda, CA
Job #: 2607 Date of sampling: 12-3-96
Well Name: MW-4 Sampled by: SF
Total depth of well (feet): 13.12 Well diameter (inches): 2"
Depth to water before sampling (feet): 3.75
Thickness of floating product if any: none
Depth of well casing in water (feet): 9.37
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): 6.2
Equipment used to purge the well: 12 Volt PVC Pump
Time Evacuation Began: 13:55 Time Evacuation Finished: 14:00
Approximate volume of groundwater purged: 7
Did the well go dry?: no After how many gallons: ~
Time samples were collected: 14:05
Depth to water at time of sampling: 3.82
Percent recovery at time of sampling: 99%
Samples collected with: Dedicated Poly Bailer
Sample color: Clear Odor: Moderate HC odor
Description of sediment in sample: none

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	65.7	7.36	432
2	67.4	7.38	433
3	67.5	7.44	419
4	67.6	7.45	420

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-4	3	40 ml VOAs	HCl	Y/S	TPHg/BTEX/MTBE
↓	1	1 L Amber	↓	↓	TPHD
↓	1	1 L Amber	↓	↓	O+G BF