ENVIRONENTION

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November 13, 2000

730 MM

QUARTERLY GROUNDWATER MONITORING REPORT OCTOBER 2000 GROUNDWATER SAMPLING ASE JOB NO. 3411

a t

Hutch's Carwash 17945 Hesperian Boulevard San Lorenzo, California

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

#### 1.0 INTRODUCTION

The following is a report detailing the results of the October 2000 quarterly groundwater sampling at the Hutch's Carwash property located at 17945 Hesperian Boulevard in San Lorenzo, California (Figures 1 and 2).

#### 2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On October 25, 2000, ASE associate geologist Ian Reed measured the depth to water in each site monitoring well using an electric water level sounder. The surface of the groundwater was also checked for the presence of free-floating hydrocarbons or sheen. No free-floating hydrocarbons or sheen were observed in any of the monitoring wells. Groundwater elevation data is presented in Table One and groundwater elevation (potentiometric surface) contours are plotted on Figure 2. The groundwater flow is to the northwest at a gradient of 0.002-feet/foot.

TABLE ONE
Groundwater Elevation Data

	Date	Top of Casing	Depth to	Groundwater
Well	of	Elevation	Water	Elevation
I.D	Measurement	(relative to project datum)	(feet)	(project data)
MW-1	10-06-99	35.00	15.58	19.42
	01-13-00		15.58	19.42
	04-12-00		14.75	20.25
	07-19-00		15.29	19.71
	10-25-00		15.56	19.44
MW-2	10-06-99	35.21	15.84	19.37
	01-13-00	00,121	15.78	19.43
	04-12-00		14.94	20.27
	07-19-00		15.54	19.67
	10-25-00		15.81	19.40
MW-3	10-06-99	34.47	14.98	19.49
	01-13-00	=,,	14.98	19.49
	04-12-00		14.09	20.38
	07-19-00		14.70	19.77
	10-25-00		14.98	19.49

#### 3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

On October 25, 2000, ASE associate geologist Ian Reed collected groundwater samples from all three site monitoring wells for analysis. No

free-floating hydrocarbons or sheen were present on the surface of groundwater in any of the monitoring wells. However, hydrocarbon odors were present in water purged from monitoring well MW-1. Prior to sampling, the wells were purged of four well casing volumes of groundwater. The pH, temperature and conductivity of the purge water were monitored during evacuation, and samples were not collected until these parameters stabilized. Samples were collected from each well using dedicated polyethylene bailers. The groundwater samples were decanted from the bailers into 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid, labeled, placed in protective foam sleeves, and stored on ice for transport to Chromalab, Inc. of Pleasanton, California under chain of custody. Well sampling purge water was contained in sealed and labeled 55-gallon steel drums. See Appendix A for a copy of the Field Logs.

The groundwater samples were analyzed by Chromalab for total petroleum hydrocarbons as gasoline (TPH-G) by modified EPA Method 5030/8015 and benzene, toluene, ethyl benzene, and total xylenes (collectively known as BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8020. The analytical results are tabulated in Table Two, and copies of the certified analytical report and chain of custody form are included in Appendix B.

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TABLE TWO
Certified Analytical Results of GROUNDWATER Samples
All results are in parts per billion

Well	Date Sampled	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	МТВЕ
MW-I	10-06-99	1,500	3.3	2.3	27	72	120
TAT AA 1	01-13-00	1,500	15	19	19	33	650
	04-12-00	1,700	18	13	45	79	2,600
	07-12-00	2,200	31	< 5.0	81	100	•
	10-25-00	3,300	2 0	< 5.0	9.8	9.4	2,000 3,300
MW-2	10-06-99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	18
	01-13-00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	16
	04-12-00	< 100	< 1.0	< 1.0	< 1.0	< 1.0	240
	07-19-00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
	10-25-00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	6.0
MW-3	10-06-99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
	01-13-00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
	04-12-00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
	07-19-00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
	10-25-00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
DHSMCL		NE .		150	700	1,750	13

#### Notes:

Most recent concentrations are in bold.

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

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

NE = DHS MCL not established

#### 4.0 CONCLUSIONS AND RECOMMENDATIONS

The groundwater samples collected from monitoring well MW-1 contained 3,300 parts per billion (ppb) TPH-G, 20 ppb benzene, 9.8 ppb ethyl benzene, 9.4 ppb total xylenes, and 3,300 ppb MTBE. The groundwater samples collected from monitoring well MW-2 contained 6 ppb MTBE. No hydrocarbons were detected above laboratory reporting limits in groundwater samples collected from monitoring well MW-3.

The benzene and MTBE concentrations 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 analytical results this quarter are similar to last quarter's results with only a slight increase in MTBE concentrations in groundwater samples collected from monitoring well MW-1.

ASE recommends that this site remain on a quarterly groundwater monitoring program. Based on this sampling schedule, the next sampling is scheduled for January 2001.

ASE also recommends that monitoring well MW-3 be removed from the quarterly monitoring program since no hydrocarbons have been detected in that well and since it is located upgradient of the abandoned tanks.

#### 5.0 REPORT LIMITATIONS

The results of this assessment represent conditions at the time of 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.

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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.

Ian T. Reed.

Associate Geologist

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

Senior Geologist

hald E. Kitay

Attachments: Figures 1 and 2

Appendices A and B

cc: Mr. Kirk Hutchison, Hutch's Car Wash

Mr. Scott Seery, Alameda County Health Care Services Agency

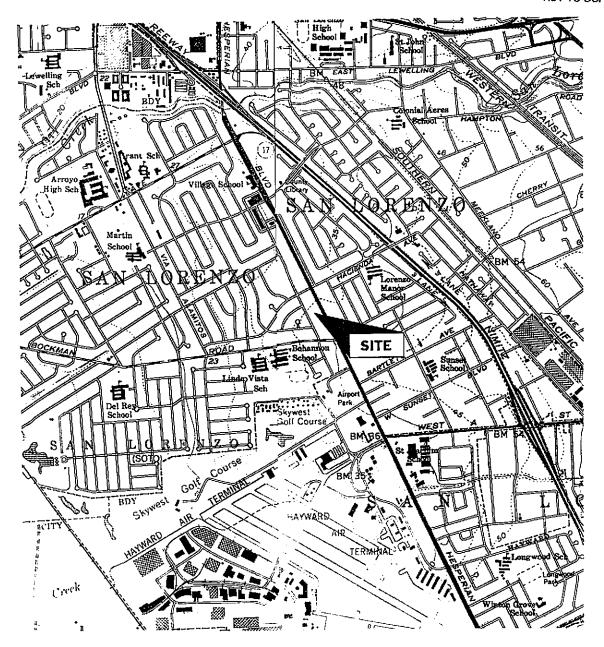
Mr. Chuck Headlee, California Regional Water Quality Control Board

No. 652\*

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NORTH NOT TO SCALE

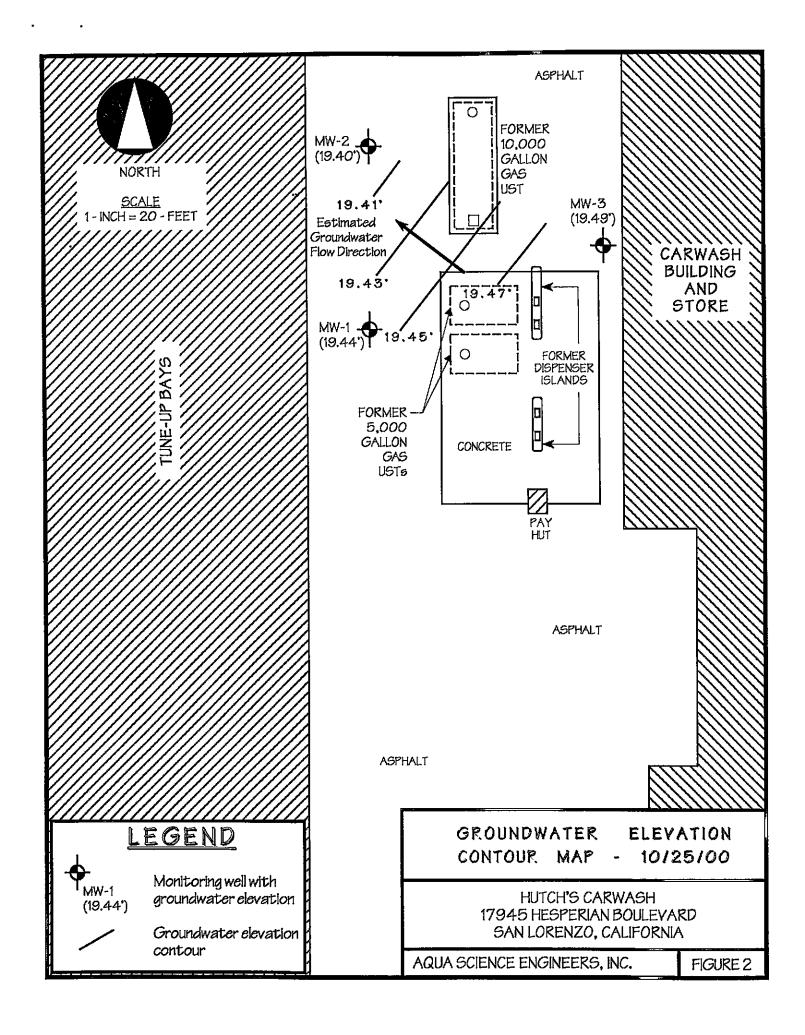


# LOCATION MAP

Hutch's Carwash 17945 Hesperian Boulevard San Lorenzo, California

AQUA SCIENCE ENGINEERS, INC.

Figure 1



## APPENDIX A

Well Sampling Field Logs

## WELL SAMPLING FIELD LOG

Project Name and Address	: <u>flutch's Car</u>	Wash
Project Name and Address Job #: 3411	Date of sampling:	b/25
Well Name: MW-1	Sampled by:	178-
Total depth of well (feet):	20.68 Well diam	meter (inches): z"
Depth to water before san	ipling (feet): 15.56	
Thickness of floating produ	act if any:	
D 4 C 11 ' '	· (C /\ 11 100	<b>)</b>
Number of gallons per we	ater (reet):	1. 9
Number of well casing vo	lumes to be removed:	. 4
Req'd volume of groundwa	ter to be purged before sam	npling (gallons):
Equipment used to purge	the well:	Sciler
Time Evacuation Began:/	<u>400</u> Time Evacua	tion Finished: 1415
Approximate volume of g	roundwater purged:	8
Did the well go dry?:_ 🐹	After how m	any gallons:
Time samples were collec		
Depth to water at time of	sampling: 16.47	
Percent recovery at time of	of sampling:	
Samples collected with:	des. 591	fer
Sample color: deal	bean Odor: v. s	light AC oder
Description of sediment in	sample: <u>&amp; silf</u>	
<u> </u>	1.0 7.01 21 1.6 7.01 21 3 7.02 21 .4 7.06 22	
SAMPLES COLLECTED  Sample # of containers Volum  MW-1 3	ne & type container Pres Iced?	Analysis

## WELL SAMPLING FIELD LOG

Job #: 34   Date of sampling: 10/25/20  Well Name: 18\( \text{IV} \) Sampled by: 17\( \text{TC} \)  Total depth of well (feet): 25.5\( \text{SU} \) Well diameter (inches): 2\( \text{DEMICAL DATA} \)  Depth to water before sampling (feet): 45.8\( \text{SU} \)  Total depth of well casing product if any:  Depth to water before sampling (feet): 45.8\( \text{SU} \)  Well diameter (inches): 2\( \text{DEMICAL DATA} \)  Well diameter (inches): 2\( \text{DEMICAL DATA} \)  Well diameter (inches): 2\( \text{DEMICAL COLLECTED} \)  Well diameter (inches): 2\( \text{DEMICAL DECTED} \)  Thickness of floating product if any: 2\( \text{DEMICAL DECTED} \)  Date of text dectar (inches): 2\( \text{DEMICAL DECTED} \)  Date of text dectar (inches): 2\( \text{DEMICAL DECTED} \)  Date of text dectar (inches): 2\( \text{DEMICAL DECTED} \)  SAMPLES COLLECTED	Project Name and Address: _	tiutch's Car Wash
Well Name: MV2 Sampled by: 1774  Total depth of well (feet): 25.56 Well diameter (inches): 24  Depth to water before sampling (feet): 15.81  Thickness of floating product if any: Depth of well casing in water (feet): 9.75  Number of gallons per well casing volume (gallons): 1.7  Number of well casing volumes to be removed: 4  Req'd volume of groundwater to be purged before sampling (gallons): 6.8  Equipment used to purge the well: 1350  Approximate volume of groundwater purged: 6.8  Did the well go dry?: 150  After how many gallons: 1350  Depth to water at time of sampling: 16.74  Percent recovery at time of sampling: 16.74  Percent recovery at time of sampling: 16.74  Description of sediment in sample: 1.5 in the factor of the factor	Job #:	Date of sampling: 10/25/00
Depth to water before sampling (feet): 15.81  Thickness of floating product if any: 9.75  Number of well casing in water (feet): 9.75  Number of gallons per well casing volume (gallons): 1.7  Number of well casing volumes to be removed: 4  Req'd volume of groundwater to be purged before sampling (gallons): 6.8  Equipment used to purge the well: 1350  Approximate volume of groundwater purged: 6.8  Did the well go dry?: 100  After how many gallons: 1355  Depth to water at time of sampling: 16.74  Percent recovery at time of sampling: 16.74  Percent recovery at time of sampling: 16.74  Description of sediment in sample: 1.5 in the factor of	Well Name: Mw-2	Sampled by:
Thickness of floating product if any:  Depth of well casing in water (feet):  Number of gallons per well casing volume (gallons):  Number of well casing volumes to be removed:  Y  Req'd volume of groundwater to be purged before sampling (gallons):  Equipment used to purge the well:  Time Evacuation Began:  After how many gallons:  Time samples were collected:  Depth to water at time of sampling:  Samples collected with:  Sample color:  CHEMICAL DATA  Volume Purged  Temp  PH  Conductivit(µ5)  11, 13, 12  21  11, 13, 12  21  11, 13, 12  21  SAMPLES COLLECTED  Sample # of containers Yolume & type container Pres Iced? Analysis	Total depth of well (feet):	25.56 Well diameter (inches): 24
Number of gallons per well casing volume (gallons): 1.7  Number of well casing volumes to be removed: 4  Req'd volume of groundwater to be purged before sampling (gallons): 6.8  Equipment used to purge the well: 1350  Time Evacuation Began: 1340 Time Evacuation Finished: 1350  Approximate volume of groundwater purged: 6.8  Did the well go dry?: 100 After how many gallons: 1355  Depth to water at time of sampling: 16.74  Percent recovery at time of sampling: 16.74  Percent recovery at time of sampling: 16.74  Percent recovery at time of sampling: 16.74  CHEMICAL DATA  Yolume Purged Temp pH Conductivit (115)  1.15  1.15  1.15  2.1  1.15  3.11  2.1  1.15  3.11  2.1  SAMPLES COLLECTED  Sample # of containers Volume & type container Pres Iced? Analysis	Depth to water before sampling	ng (feet):
Number of gallons per well casing volume (gallons): 1.7  Number of well casing volumes to be removed: 4  Req'd volume of groundwater to be purged before sampling (gallons): 6.8  Equipment used to purge the well: 1350  Time Evacuation Began: 1340 Time Evacuation Finished: 1350  Approximate volume of groundwater purged: 6.8  Did the well go dry?: 100 After how many gallons: 1355  Depth to water at time of sampling: 16.74  Percent recovery at time of sampling: 16.74  Percent recovery at time of sampling: 16.74  Percent recovery at time of sampling: 16.74  CHEMICAL DATA  Yolume Purged Temp pH Conductivit (115)  1.15  1.15  1.15  2.1  1.15  3.11  2.1  1.15  3.11  2.1  SAMPLES COLLECTED  Sample # of containers Volume & type container Pres Iced? Analysis	Thickness of floating product	if any:
Number of gallons per well casing volume (gallons): 1.7  Number of well casing volumes to be removed: 4  Req'd volume of groundwater to be purged before sampling (gallons): 6.8  Equipment used to purge the well: 1350  Time Evacuation Began: 1340 Time Evacuation Finished: 1350  Approximate volume of groundwater purged: 6.8  Did the well go dry?: 100 After how many gallons: 1355  Depth to water at time of sampling: 16.74  Percent recovery at time of sampling: 16.74  Percent recovery at time of sampling: 16.74  Percent recovery at time of sampling: 16.74  CHEMICAL DATA  Yolume Purged Temp pH Conductivit (115)  1.15  1.15  1.15  2.1  1.15  3.11  2.1  1.15  3.11  2.1  SAMPLES COLLECTED  Sample # of containers Volume & type container Pres Iced? Analysis	Depth of well casing in water	(feet): 9.75
Number of well casing volumes to be removed: 9  Req'd volume of groundwater to be purged before sampling (gallons): 6.8  Equipment used to purge the well: 1550  Approximate volume of groundwater purged: 6.8  Did the well go dry?: 100	Number of gallons per well c	asing volume (gallons): 1.7
Equipment used to purge the well:  Time Evacuation Began: 1340  Approximate volume of groundwater purged:  Did the well go dry?:  Did the well go dry?:  Depth to water at time of sampling:  Samples collected with:  Sample color:  Description of sediment in sample:  CHEMICAL DATA  Volume Purged  Temp  14.9	Number of well casing volum	es to be removed: 4
Equipment used to purge the well:  Time Evacuation Began: 1340  Approximate volume of groundwater purged:  Did the well go dry?:  Did the well go dry?:  Depth to water at time of sampling:  Samples collected with:  Sample color:  Description of sediment in sample:  CHEMICAL DATA  Volume Purged  Temp  14.9	Req'd volume of groundwater	to be purged before sampling (gallons): 6.8
Time Evacuation Began: 1340 Time Evacuation Finished: 1350 Approximate volume of groundwater purged: 6.8  Did the well go dry?: NO After how many gallons: — Time samples were collected: 1355  Depth to water at time of sampling: 16.74  Percent recovery at time of sampling: 16.74  Percent rec		
Approximate volume of groundwater purged:  Did the well go dry?:  Do  After how many gallons:  Time samples were collected:  Depth to water at time of sampling:  Percent recovery at time of sampling:  Samples collected with:  Sample color:  Description of sediment in sample:  CHEMICAL DATA   Volume Purged  Temp  pH  Conductivit(µS)  1 1/8 7.12 20  2 17.1 7.12 20  3 11.5 1.12 21  Y 14.6 7.13 21  SAMPLES COLLECTED  Sample # of containers Volume & type container Pres Iced? Analysis	Time Evacuation Began: 1340	Time Evacuation Finished: 1350
Did the well go dry?: NO After how many gallons: Time samples were collected: 1355  Depth to water at time of sampling: 16.74  Percent recovery at time of sampling: Samples collected with: Att, bailer  Sample color: Clear bearn Odor: U. Slight Healer  Description of sediment in sample: 1.5it and f. 20  CHEMICAL DATA  Volume Purged Temp pH Conductivity (45)  1 12 2 20  2 17.1 7.12 20  3 11.5 7.12 21  Y 118 7.15 21  SAMPLES COLLECTED  Sample # of containers Volume & type container Pres Iced? Analysis		
Time samples were collected: /355  Depth to water at time of sampling: //6.74  Percent recovery at time of sampling: Samples collected with: // // // // // // // // // // // // //		
Depth to water at time of sampling:    C.74	Time samples were collected:	1355
Percent recovery at time of sampling:  Samples collected with:  Sample color:  Clea boan  Odor:  Odo		
Sample color: Clasborn Odor: C. Slight Acader  Description of sediment in sample: ( sit out f send).  CHEMICAL DATA   Volume Purged Temp pH Conductivit (MS)  2 19.9 7.12 20  3 11.5 7.12 20  3 11.5 7.12 21  Y 14.8 7.13 21  SAMPLES COLLECTED  Sample # of containers Volume & type container Pres Iced? Analysis	Percent recovery at time of s	sampling:
Sample color: Clasborn Odor: C. Slight Acader  Description of sediment in sample: ( sit out f send).  CHEMICAL DATA   Volume Purged Temp pH Conductivit (MS)  2 19.9 7.12 20  3 11.5 7.12 20  3 11.5 7.12 21  Y 14.8 7.13 21  SAMPLES COLLECTED  Sample # of containers Volume & type container Pres Iced? Analysis	Samples collected with:	ded, bailer
CHEMICAL DATA  Volume Purged Temp pH Conductivit(µ5)  1 19.8 7.13 20  2 17.1 7.12 20  3 11.5 7.12 21  1 19.8 7.13  2 11.5 7.12 21  2 11.5 7.12 21  2 11.5 7.12 21  SAMPLES COLLECTED  Sample # of containers Volume & type container Pres Iced? Analysis	Sample color:clca/ban	Odor: u. slight Header
CHEMICAL DATA  Volume Purged Temp pH Conductivit(µ5)  1 19.8 7.13 20  2 17.1 7.12 20  3 11.5 7.12 21  1 19.8 7.13  2 11.5 7.12 21  2 11.5 7.12 21  2 11.5 7.12 21  SAMPLES COLLECTED  Sample # of containers Volume & type container Pres Iced? Analysis	Description of sediment in sa	mple: f. sit are f send.
Sample # of containers Volume & type container Pres Iced? Analysis	1 19.8 2 19.9 3 19.5	7.12 20 7.12 20 7.12 21
Sample # of containers Volume & type container Pres Iced? Analysis  MW-2 3 40MI VOA V	SAMPLES COLLECTED	
	Sample # of containers Volume & Your Your	type container Pres Iced? Analysis

## WELL SAMPLING FIELD LOG

Project Name and Address: _	Mutch's Car Wash
Job #: 3411	Date of sampling: 10/25/bo
Well Name: Mw-3	Sampled by:
Total depth of well (feet):	Well diameter (inches): 24
Depth to water before sampling	g (feet): 14.98
Thickness of floating product:	if any: (feet):
Depth of well casing in water	(feet):
Number of gallons per well ca	asing volume (gallons): 2
Number of well casing volume	es to be removed: 4
Req'd volume of groundwater	to be purged before sampling (gallons): 8
	well: ded. bailer
Time Evacuation Began: 1320	Time Evacuation Finished: (330)
Approximate volume of groun	dwater purged:
Did the well go dry?:	After how many gallons:
Time samples were collected:	1335
Depth to water at time of san	npling:
Percent recovery at time of s	amnling.
Samples collected with:  Sample color:	ded. bailer
Sample color:clear/brun	Odor: None
Description of sediment in san	mple: 6 silt
CHEMICAL DATA	•
Volume Purged Temp	PH Conductivity (45)
	7.31
<u>z</u> <u>zy,</u>	7.29
	7.28
ال 24، ١	7.18
SAMPLES COLLECTED	·
Sample # of containers Volume & 40 MW 3 9 40 MI	type container Pres Iced? Analysis

## APPENDIX B

Certified Analytical Report and Chain of Custody Documentation Environmental Services (SDB)

Submission #: 2000-10-0517

Date: November 2, 2000

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

Attn.: Mr. lan T. Reed

Project: 3411

Hutch's Car Wash

Site:

17945 Hesperion Blvd.

San Lorrenzo, CA

Dear Mr. Reed,

Attached is our report for your samples received on Wednesday October 25, 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 December 9, 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

Printed on: 11/02/2000 09:06

#### Submission #: 2000-10-0517

## CHROMALAB, INC.

Environmental Services (SDB)

#### Gas/BTEX and MTBE

Aqua Science Engineers, Inc.

208 West El Pintado Road

Danville, CA 94526

Attn: lan T. Reed

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

Project #: 3411

Project: Hutch's Car Wash

Site:

17945 Hesperion Blvd.

San Lorrenzo, CA

#### Samples Reported

Sample ID	Matrix	Date Sampled	Lab#
MW-1	Water	10/25/2000 14:20	1
MW-2	Water	10/25/2000 13:55	2
MW-3	Water	10/25/2000 13:35	3

Printed on: 11/06/2000 12:03

## CHROMALAB, INC.

Submission #: 2000-10-0517

**Environmental Services (SDB)** 

To: Aqua Science Engineers, Inc. Test Method:

8020 8015M

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

Attn.: Ian T. Reed

MW-1

Lab Sample ID: 2000-10-0517-001

Project:

3411

Received:

10/25/2000 14:30

Hutch's Car Wash

Extracted:

11/01/2000 11:42

Site:

17945 Hesperion Blvd. San Lorrenzo, CA

Sampled:

10/25/2000 14:20

QC-Batch:

2000/10/31-01.02 2000/11/01-01.02

Matrix:

Water

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	3300	2500	ug/L	50.00	11/01/2000 11:42	g
Benzene	20	5.0	ug/L	10.00	10/31/2000 20:14	
Toluene	ND	5.0	ug/L	10.00	10/31/2000 20:14	
Ethyl benzene	9.8	5.0	ug/L	10.00	10/31/2000 20:14	
Xylene(s)	9.4	5.0	ug/L	10.00	10/31/2000 20:14	
MTBE	3300	250	ug/L	50.00	11/01/2000 11:42	
Surrogate(s)	1					
Trifluorotoluene	82.1	58-124	%	1.00	10/31/2000 20:14	
4-Bromofluorobenzene-FID	84.0	50-150	%	1.00	11/01/2000 11:42	

Printed on: 11/06/2000 12:03

#### Submission #: 2000-10-0517

### CHROMALAB, INC.

Environmental Services (SDB)

Test Method: Aqua Science Engineers, Inc.

8020 8015M

Attn.: Ian T. Reed

To:

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

MW-2

Lab Sample ID: 2000-10-0517-002

Project:

3411

Received:

10/25/2000 14:30

Hutch's Car Wash

Extracted:

11/01/2000 00:24

Site:

17945 Hesperion Blvd. San Lorrenzo, CA

Sampled:

10/25/2000 13:55

QC-Batch:

2000/10/31-01.02

Matrix:

Water

Compound	Result	Result Rep.Limit		Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	11/01/2000 00:24	
Benzene	ND	0.50	ug/L	1.00	11/01/2000 00:24	
Toluene	ND	0.50	ug/L	1.00	11/01/2000 00:24	
Ethyl benzene	ND	0.50	ug/L	1.00	11/01/2000 00:24	
Xylene(s)	ND	0.50	ug/L	1.00	11/01/2000 00:24	
MTBE	6.0	5.0	ug/L	1.00	11/01/2000 00:24	
Surrogate(s)						
Trifluorotoluene	87.7	58-124	%	1.00	11/01/2000 00:24	
4-Bromofluorobenzene-FID	84.6	50-150	%	1.00	11/01/2000 00:24	

Submission #: 2000-10-0517

## CHROMALAB, INC.

Environmental Services (SDB)

Aqua Science Engineers, Inc. To:

Test Method:

8020

8015M

Attn.: Ian T. Reed

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

MW-3

Lab Sample ID: 2000-10-0517-003

Project:

3411

Received:

10/25/2000 14:30

Hutch's Car Wash

11/01/2000 12:13

Site:

17945 Hesperion Blvd. San Lorrenzo, CA

Extracted:

Sampled:

10/25/2000 13:35

QC-Batch:

2000/11/01-01.02

Matrix:

Water

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	11/01/2000 12:13	
Benzene	ND	0.50	ug/L	1.00	11/01/2000 12:13	
Toluene	ND	0.50	ug/L	1.00	11/01/2000 12:13	
Ethyl benzene	ND	0.50	ug/L	1.00	11/01/2000 12:13	
Xylene(s)	ND	0.50	ug/L	1.00	11/01/2000 12:13	
MTBE	ND	5.0	ug/L	1.00	11/01/2000 12:13	
Surrogate(s)						
Trifluorotoluene	109.1	58-124	%	1.00	11/01/2000 12:13	
4-Bromofluorobenzene-FID	87.0	50-150	%	1.00	11/01/2000 12:13	

Printed on: 11/06/2000 12:03

CHROMALAB, INC.

Submission #: 2000-10-0517

Environmental Services (SDB)

To: Aqua Science Engineers, Inc. Test Method:

8015M

8020 8021B

Attn.: Ian T. Reed

Prep Method:

5030

Batch QC Report Gas/BTEX and MTBE

Method Blank

Water

QC Batch # 2000/10/31-01.02

MB:

2000/10/31-01.02-001

Date Extracted: 10/31/2000 06:41

Compound	Result	Rep.Limit	Units	Analyzed Fla
Gasoline	ND	50	ug/L	10/31/2000 06:41
Benzene	ND	0.5	ug/L	10/31/2000 06:41
Toluene	ND	0.5	ug/L	10/31/2000 06:41
Ethyl benzene	ND	0.5	ug/L	10/31/2000 06:41
Xylene(s)	ND	0.5	ug/L	10/31/2000 06:41
MTBE	ND	5.0	ug/L	10/31/2000 06:41
Surrogate(s)	!			
Trifluorotoluene	79.8	58-124	%	10/31/2000 06:41
4-Bromofluorobenzene-FID	80.8	50-150	%	10/31/2000 06:41

Printed on: 11/06/2000 12:03

CHROMALAB, INC.

Submission #: 2000-10-0517

Environmental Services (SDB)

Aqua Science Engineers, Inc. To:

MB:

Test Method:

8015M

8020 8021B

Attn.: Ian T. Reed

Prep Method:

5030

Batch QC Report Gas/BTEX and MTBE

Water

Method Blank

2000/11/01-01.02-001

QC Batch # 2000/11/01-01.02

Date Extracted: 11/01/2000 05:56

Compound	Result	Rep.Limit	Unīts	Analyzed	Flag
Gasoline	ND	50	ug/L	11/01/2000 05:56	
	ND	0.5	ug/L	11/01/2000 05:56	
	ND	0.5	ug/L	11/01/2000 05:56	
	ND	0.5	ug/L	11/01/2000 05:56	
3	ND	0.5	ug/L	11/01/2000 05:56	
Gasoline Benzene Toluene Ethyl benzene Xylene(s) MTBE Surrogate(s) Trifluorotoluene	ND	5.0	ug/L	11/01/2000 05:56	
Surrogate(s)		ļ			
Trifluorotoluene	81.6	58-124	%	11/01/2000 05:56	
4-Bromofluorobenzene-FID	82.8	50-150	%	11/01/2000 05:56	

#### Submission #: 2000-10-0517

## CHROMALAB, INC.

Environmental Services (SDB)

To: Aqua Science Engineers, Inc.

Test Method:

8015M

8020

8021B

Prep Method:

5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)

Water

QC Batch # 2000/10/31-01.02

LCS:

Attn: Ian T. Reed

2000/10/31-01.02-002

Extracted: 10/31/2000 07:12

Analyzed

10/31/2000 07:12

LCSD:

2000/10/31-01.02-003

Extracted: 10/31/2000 07:43

Analyzed

10/31/2000 07:43

Compound	Conc.	[ ug/L ]	Exp.Conc.	[ ug/L ]	Recov	ery [%]	RPD	Ctrl. Limi	ts [%]	Flag	js
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	490	499	500	500	98.0	99.8	1.8	75-125	20		ŀ
Benzene	103	102	100.0	100.0	103.0	102.0	1.0	77-123	20		
Toluene	99.7	99.8	100.0	100.0	99.7	99.8	0.1	78-122	20		
Ethyl benzene	92.3	98.6	100.0	100.0	92.3	98.6	6.6	70-130	20		
Xylene(s)	268	287	300	300	89.3	95.7	6.9	75-125	20		
Surrogate(s)		i									
Trifluorotoluene	434	416	500	500	86.8	83.2		58-124			
4-Bromofluorobenzene-FI	445	457	500	500	89.0	91.4		50-150			

## CHROMALAB, INC. Submission #: 2000-10-0517

Environmental Services (SDB)

To: Aqua Science Engineers, Inc.

Test Method: 801

8015M

8020 8021B

Attn: Ian T. Reed

Prep Method:

5030

**Batch QC Report** 

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)

Water

QC Batch # 2000/11/01-01.02

LCS:

2000/11/01-01.02-002

Extracted: 11/01/2000 06:27

Analyzed

11/01/2000 06:27

LCSD: 2000/11/01-01.02-003

Extracted: 11/01/2000 06:58

Analyzed 11/01/2000 06:58

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	518	500	500	99.8	103.6	3.7	75-125	20		
Benzene	107	102	100.0	100.0	107.0	102.0	4.8	77-123	20	:	
Toluene	103	97.4	100.0	100.0	103.0	97.4	5.6	78-122	20	:	
Ethyl benzene	94.8	90.6	100.0	100.0	94.8	90.6	4.5	70-130	20		
Xylene(s)	274	264	300	300	91.3	88.0	3.7	75-125	. 20		
Surrogate(s)	<u> </u>			:				1		i	
Trifluorotoluene	440	403	500	500	88.0	80.6		58-124			
4-Bromofluorobenzene-FI	448	459	500	500	89.6	91.8		50-150			

## CHROMALAB, INC.

To: Aqua Science Engineers, Inc.

Submission #: 2000-10-0517

Environmental Services (SDB)

Test Method: 8015M

8020

Attn: Ian T. Reed

Prep Method: 5030

Legend & Notes

Gas/BTEX and MTBE

**Analyte Flags** 

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

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

# Chain of Custody 2000-10-0517

<u>/</u>\_ 0F\_ HUTCH'S CARWASH (PHONE NO.) SAMPLED (SIGNATURE 3411 JOB NO. PROJECT NAME 17945 Hesperian blud. Son Lowner CA (925)820-9391 Pb (TOTAL or DISSOLVED) (EPA 6010) ORGANOPHOSPHORUS PESTICIDES (EPA 8140 EPA 608/8080) PURGEABLE HALOCARBONS (EPA 601/8010) SEMI-VOLATILE ORGANICS (EPA 625/8270) TPH-G/BTEX/ 7 0XY'S HV0CS (EPA 8260) TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020) VOLATILE ORGANICS (EPA 624/8240/8260) TPH-G4BTEX/5 OXY'S (EPA 8260) SPECIAL INSTRUCTIONS: TPH-DIESEL & MOTOR OIL (EPA 351018015) PCB<sub>9</sub> & PESTICIDES (EPA 608/8080) FUEL OXYGENATES (EPA 8260) CAM 17 METALS (EPA 6010+7000) LUFT METALS (5) (EPA 6010+7000) EPA 3510/8015) 5-day TAT COMPOSITE TPH-DIESE NO. OF SAMPLE ID. DATE TIME MATRIX SAMPLES 3 MV-1 10/25 1420 LOGHE 7 MU-Z 1363 motor 3 MW-3 1425 water COMMENTS: RECEIVED BY: RECEIVED BY LABORATORY: RELINQUISHED BY: (time) (time) (sianature) (time) (slanature) TURN AROUND TIME (printed name) (printed name) (printed name) (date) (printed name) (date) STANDADO 24Hr 48Hr 72Hr Company-Company- . Company-Company-OTHER: 24 lers