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October 29, 1999

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RESPOND TO 11/24/99  
AG

REPORT  
of  
SOIL AND GROUNDWATER ASSESSMENT  
ASE JOB NO. 3411  
at  
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

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## 1.0 INTRODUCTION

This report presents the methods and findings of Aqua Science Engineers, Inc. (ASE)'s soil and groundwater assessment at the Hutch's Carwash property located at 17945 Hesperian Boulevard in San Lorenzo, California (Figure 1). The site assessment activities were initiated by Mr. Kirk Hutchison, owner of the property, in order to comply with the request made by Mr. Scott Seery of the Alameda County Health Care Services Agency (ACHCSA) in his letters dated May 10 and July 29, 1999 (Appendix A). The letters request a soil and groundwater assessment at the site which would include the installation of groundwater monitoring wells.

## 2.0 SITE HISTORY

### 2.1 Soil and Groundwater Assessment, December 1998

On December 1, 1998, eight soil borings were drilled at the site using a Geoprobe hydraulic sampling rig (Figure 2). Borings BH-A and BH-B were located near the former fuel dispensers. The remaining borings (BH-C through BH-H) were located in areas surrounding the underground storage tanks (USTs).

Soil samples were collected from each of the eight borings and were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) by modified EPA Method 5030/8015, benzene, toluene, ethyl benzene and total xylenes (collectively known as BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8020, and total lead by EPA Method 6010. None of the soil samples contained significant concentrations of any of the compounds analyzed. Groundwater samples were collected from the six deeper borings and were analyzed for TPH-G, BTEX and MTBE. The water samples contained elevated hydrocarbon concentrations. For complete details of the afore-mentioned assessment activities, see the ASE Assessment Report dated December 22, 1998.

### 2.2 UST Closure Activities

~~On January 21, 1999, ASE provided project management support for the closure-in-place of the two 5,000 gallon USTs and one 10,000 gallon UST at the subject site (Figure 2). Hutch's Carwash plans on using the former fuel tanks for a water-reclamation system for their car washing operations. This proposed plan for the USTs' closure-in-place and subsequent re-use as water holding tanks was previously approved by the ACHCSA.~~

Clearwater Environmental Management, Inc. (Clearwater) mobilized to the site on January 21, 1999 with a pressure washing unit and a vacuum truck for UST evacuation. Using the pressure washer, the interior of the piping systems and each UST was rinsed. The rinsate and residual fuel was then removed from each UST using the vacuum truck. The liquid was transported by Clearwater from the site to the Alviso Independent Oil facility in Alviso, California where it was recycled.

Using a remote camera and television screen supplied by Rescue Rooter, the interior of each UST was inspected by ASE and Mr. Weston of the ACHCSA. It was visually obvious that the interior of the USTs had been coated with a sprayed-on coating that appeared shiny in most views. There did not appear to exist any obvious integrity failures, staining or scaling.

Hutch's personnel later filled each of the USTs to capacity with water then sealed all pipe and tank openings with caps and plugs as necessary. For complete details regarding the UST closure activities, see the ASE UST Closure Report dated February 8, 1999.

### **3.0 SCOPE OF WORK**

The scope of work for this assessment was to further delineate the hydrocarbon plume previously identified in the Geoprobe borings drilled in 1998. The scope of work is as follows:

- 1) Prepare a workplan and site specific health and safety plan for approval by the ACHCSA.
- 2) Obtain a subsurface drilling permit from the Alameda County Public Works Agency (ACPWA). Call Underground Service Alert (USA) to have all public utilities in the area marked prior to drilling.
- 3) Drill three (3) soil borings at the site for the installation of groundwater monitoring wells.
- 4) Analyze two soil samples collected from each soil boring at a CAL-EPA certified environmental laboratory TPH-G, BTEX, MTBE and total lead.
- 5) Install 2-inch diameter groundwater monitoring wells in each boring described in task 3.
- 6) Develop the monitoring wells.

- 7) Collect groundwater samples from each monitoring well for analyses.
- 8) Analyze the groundwater samples at a CAL-EPA certified analytical laboratory for TPH-G, BTEX and MTBE.
- 9) Survey the top of casing elevation of each well, and determine the groundwater flow direction and gradient beneath the site.
- 10) Prepare a report detailing the methods and findings of this assessment.

Details of this assessment follow.

#### **4.0 DRILLING SOIL BORINGS AND COLLECTING SAMPLES**

##### 4.1 Drilling and Collection of Soil Samples

Prior to drilling, ASE obtained an Alameda County Public Works Agency (ACPWA) drilling permit (Appendix A). ASE also notified Underground Service Alert (USA) to have underground public utilities in the vicinity of the site marked prior to drilling.

On September 29, 1999, West Hazmat Drilling of Newark, California drilled soil borings MW-1, MW-2 and MW-3 at the site using a Mobile B-61 drill rig equipped with 8-inch diameter hollow-stem augers (Figure 3). Groundwater monitoring wells MW-1, MW-2 and MW-3 were subsequently constructed in these borings. The drilling was directed by ASE senior geologist Robert E. Kitay, R.G.

Undisturbed soil samples were collected at 5-foot intervals as drilling progressed for lithologic and hydrogeologic description and for possible chemical analyses. The samples were collected by driving a split-barrel drive sampler lined with 2-inch diameter brass tubes ahead of the auger tip with successive blows from a 140-lb. hammer dropped 30-inches. One tube from each sampling interval was immediately trimmed, sealed with Teflon tape, plastic end caps and duct tape, labeled, sealed in a plastic bag and stored on ice for transport to Chromalab, Inc. of Pleasanton, California (ELAP #1094) under chain of custody. Soil from the remaining tubes was described by an ASE geologist using the Unified Soil Classification System and was screened for volatile compounds with an Organic Vapor Meter (OVM). The soil was screened by emptying soil from one of the sample tubes into a plastic bag. The bag was then sealed and placed in the sun for approximately 10 minutes. After the

hydrocarbons were allowed to volatilize, the OVM measured the vapor in the bag through a small hole punched in the bag. OVM readings are used as a screening tool only, since the procedures are not as rigorous as those used in the laboratory.

Drilling equipment was steam-cleaned prior to use and between borings, and sampling equipment was washed with a TSP solution between sampling intervals to prevent cross-contamination. Steam cleaning rinsate and drill cuttings were contained in sealed and labeled 55-gallon steel drums and left on-site for temporary storage until off-site disposal can be arranged.

#### 4.2 Site Specific Geology

Sediments encountered during drilling generally consisted of clayey silt/sandy silt from beneath the asphalt surface to 7.5-feet bgs, and sandy silt, silty sand and/or sand from 7.5-feet bgs to 27-feet bgs. Groundwater was encountered at approximately 15.5-feet bgs. The boring log and well construction details are included as Appendix B.

### **5.0 ANALYTICAL RESULTS FOR SOIL**

Two soil samples collected from each boring were submitted to Chromalab, Inc. for analysis. One of the soil samples was from either 10.5 or 11.0-feet bgs and the other sample was from 15.0-feet bgs. These samples were analyzed for TPH-G by modified EPA Method 5030/8015, BTEX and MTBE by EPA Method 8020, and total lead by EPA Method 6010. The analytical results are tabulated in Table One, and a copy of the certified analytical report and chain of custody form are included in Appendix C.

The only hydrocarbons detected in the soil samples were 24 ppm TPH-G in the soil sample collected from 15.0-feet bgs in boring MW-1, 200 ppm MTBE in the soil sample collected from 10.5-feet bgs in boring MW-1, 0.011 ppm MTBE in the soil sample collected from 11.0-feet bgs in boring MW-2 and 0.070 ppm in the soil sample collected from 15.0-feet bgs in boring MW-2. Lead was detected in the soil sample collected from 15.0-feet bgs in boring MW-1 at 5.0 ppm and in the soil sample collected from 15.0-feet bgs in boring MW-3 at 6.0 ppm. No other hydrocarbons or lead were detected in any of the samples analyzed.

**TABLE ONE**  
**Summary of Chemical Analysis of SOIL Samples**  
**All results are in parts per million**

Boring	Depth Sampled	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	Total Lead
MW-1	10.5'	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<b>2.00</b>	< 5.0
	15.0'	2.4	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	<b>5.0</b>
MW-2	11.0'	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<b>0.011</b>	< 5.0
	15.0'	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<b>0.070</b>	< 5.0
MW-3	10.5'	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 5.0
	15.0'	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<b>6.0</b>

Notes:

Detectable concentrations are in **bold**.

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

## 6.0 MONITORING WELL CONSTRUCTION, DEVELOPMENT AND SAMPLING

### 6.1 Monitoring Well Construction

Groundwater monitoring wells MW-1, MW-2 and MW-3 were constructed in borings MW-1, MW-2 and MW-3, respectively. The wells are constructed with 2-inch diameter, 0.020-inch factory slotted, flush-threaded, schedule 40 PVC well screen and blank casing. The wells are screened between 10-foot bgs and 27-foot bgs to monitor the first water bearing zone encountered. Lonestar #3 Monterey sand occupies the annular space between the borehole and the casing from the bottom of the boring to approximately 2-feet above the well screen. A 1-foot thick hydrated bentonite layer separates the sand from the overlying cement surface seal. The wellhead is secured with a locking wellplug beneath an at-grade, traffic-rated vault.

### 6.2 Monitoring Well Development

On October 4, 1999, ASE associate geologist Ian Reed developed the three monitoring wells using multiple episodes of surge-block agitation and bailer and pump evacuation. Over ten well casing volumes of water were



removed from each well during development, and evacuation continued until the water was relatively clear. Well development purge water was contained in sealed and labeled 55-gallon steel drums and left on-site for temporary storage until off-site disposal can be arranged. No free-floating hydrocarbons or sheen were present on the surface of groundwater during well development.

### 6.3 Monitoring Well Sampling

On October 6, 1999, 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, and a slight hydrocarbon odor was present in groundwater purged from monitoring well MW-2. 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 new, unused 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 and left on-site for temporary storage until off-site disposal can be arranged. See Appendix D for a copy of the Field Logs.

## **7.0 GROUNDWATER ELEVATIONS**

On October 15, 1999, ASE surveyed the top of casing elevation of each site monitoring well relative to a site datum. The top of casing elevation of monitoring well MW-1 was set to 35.00-feet based on data interpolated from a USGS topographic map.

The depth to groundwater was measured in each site well prior to sampling on October 6, 1999 with an electric water level sounder. Top of casing elevations, depth to groundwater measurements and groundwater elevations are presented in Table Two, and groundwater elevation (potentiometric surface) contours are plotted on Figure 3. Groundwater appeared to generally flow to the northwest beneath the site at a gradient of approximately 0.002-feet/foot.

**TABLE TWO**  
~~Groundwater Elevation Data~~

Well I.D.	Date of Measurement	Top of Casing Elevation (relative to project datum)	Depth to Water (feet)	Groundwater Elevation (project data)
<del>          </del>	10-06-99	35.00	15.58	19.42
MW-2	10-06-99	35.21	15.84	19.37
<del>          </del>	10-06-99	34.47	14.98	19.49

**8.0 ANALYTICAL RESULTS FOR GROUNDWATER**

The groundwater samples were analyzed by Chromalab for TPH-G by modified EPA Method 5030/8015 and BTEX and MTBE by EPA Method 8020. The analytical results are tabulated in Table Three, and copies of the certified analytical report and chain of custody form are included in Appendix E.

**TABLE THREE**  
 Certified Analytical Results of ~~GROUNDWATER Samples~~  
 All results are in ~~parts per billion~~

Well	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	<del>          </del>
MW-1	<b>1,500</b>	<b>3.3</b>	<b>2.3</b>	<b>2.7</b>	<b>7.2</b>	<b>12.0</b>
MW-2	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.8
MW-3	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
DHS MCL	NE	1	150	700	1,750	13

Notes:

Detectable 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

The groundwater sample collected from monitoring well MW-1 contained 1,500 parts per billion (ppb) TPH-G, 3.3 ppb benzene, 2.3 ppb ethyl benzene, 27 ppb toluene, 72 ppb total xylenes and 120 ppb MTBE. The groundwater sample collected from monitoring well MW-2 contained 18 ppb MTBE. No TPH-G or BTEX were detected in groundwater samples collected from monitoring well MW-2. No hydrocarbons were detected in groundwater samples collected from monitoring well MW-3.

The benzene and MTBE concentrations in groundwater samples collected from monitoring well MW-1 exceeded California Department of Health Services (DHS) maximum contaminant levels (MCLs) for drinking water. In addition, the MTBE concentration in groundwater samples collected from monitoring well MW-2 also exceeded the DHS MCL for drinking water.

## 9.0 CONCLUSIONS AND RECOMMENDATIONS

The only hydrocarbons detected in the soil samples were 24 ppm TPH-G in the soil sample collected from 15.0-foot bgs in boring MW-1, 200 ppm MTBE in the soil sample collected from 10.5-foot bgs in boring MW-1, 0.011 ppm MTBE in the soil sample collected from 11.0-foot bgs in boring MW-2 and 0.070 ppm in the soil sample collected from 15.0-foot bgs in boring MW-2. Lead was detected in the soil sample collected from 15.0-foot bgs in boring MW-1 at 5.0 ppm and in the soil sample collected from 15.0-foot bgs in boring MW-3 at 6.0 ppm. No other hydrocarbons or lead were detected in any of the soil samples analyzed.

The groundwater flow is to the northwest beneath the site at a gradient of approximately 0.002-feet/foot.

The groundwater sample collected from monitoring well MW-1 contained 1,500 ppb TPH-G, 3.3 ppb benzene, 2.3 ppb ethyl benzene, 27 ppb toluene, 72 ppb total xylenes and 120 ppb MTBE. The groundwater sample collected from monitoring well MW-2 contained 18 ppb MTBE. No TPH-G or BTEX were detected in groundwater samples collected from monitoring well MW-2. No hydrocarbons were detected in groundwater samples collected from monitoring well MW-3.

The benzene and MTBE concentrations in groundwater samples collected from monitoring well MW-1 exceeded DHS MCLs for drinking water. In addition, the MTBE concentration in groundwater samples collected from monitoring well MW-2 also exceeded the DHS MCL for drinking water. All

of the hydrocarbon concentrations detected are below those detected during the previous soil and groundwater assessment.

ASE recommends that this site be placed on a quarterly groundwater monitoring program. Based on this sampling schedule, the next sampling is scheduled for January 2000.

## 10.0 REPORT LIMITATIONS

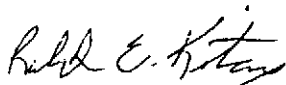
The results of this assessment represent conditions at the time of the soil and groundwater sampling, at the specific locations where the samples were collected, and for the specific parameters analyzed by the laboratory.

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

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

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

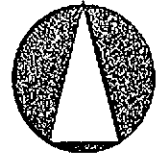


Robert E. Kitay, R.G., R.E.A.  
Senior Geologist



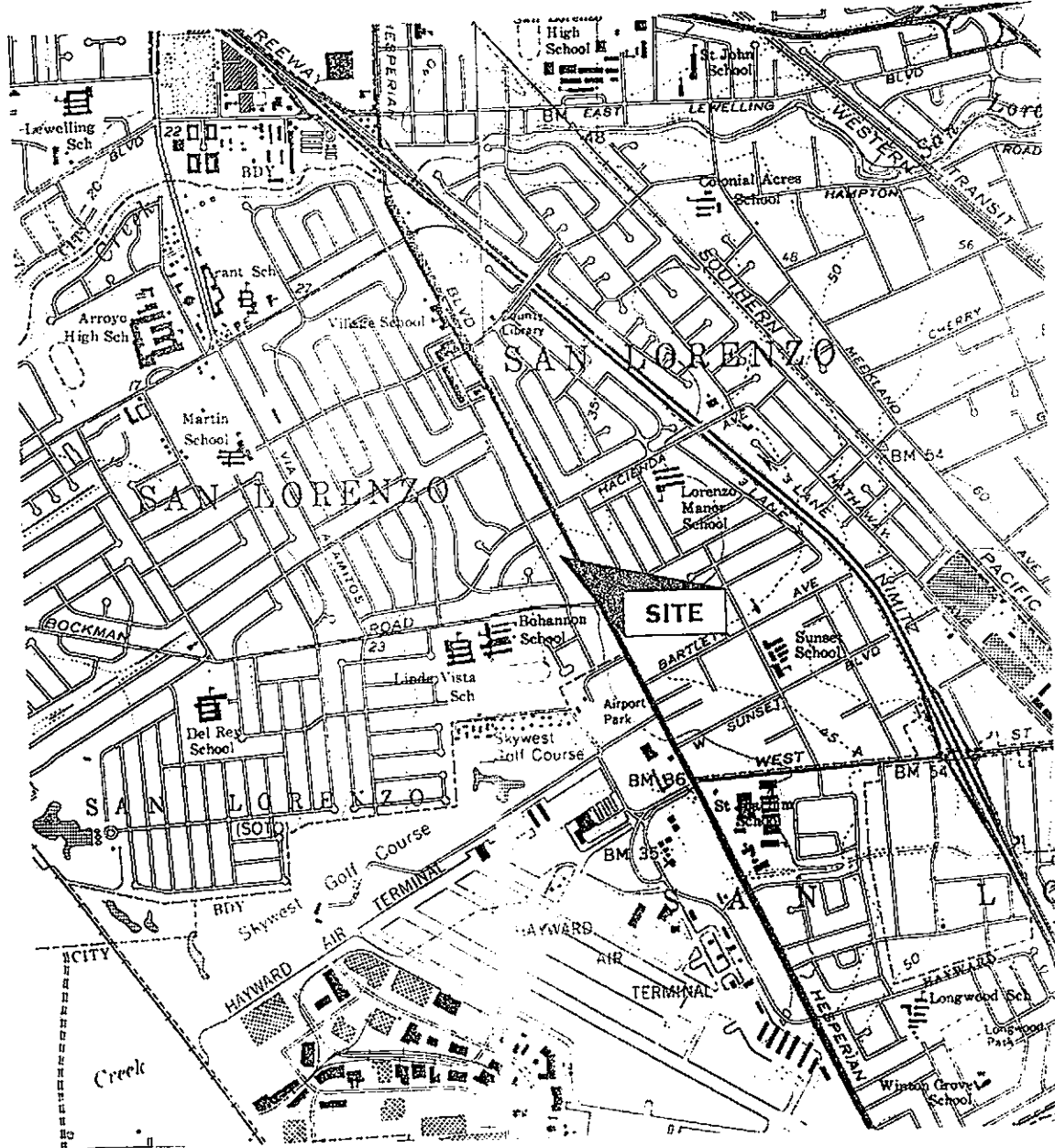
Attachments: Figures 1 through 3  
Appendices A through E

cc: Mr. Kirk Hutchison, Hutch's Car Wash  
Mr. Amir Gholami, Alameda County Health Care Services Agency  
Mr. Chuck Headlee, California Regional Water Quality Control Board



NORTH

NOT TO SCALE



# LOCATION MAP

Hutch's Carwash  
17945 Hesperian Boulevard  
San Lorenzo, California

AQUA SCIENCE ENGINEERS, INC.

Figure 1



NORTH

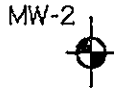
SCALE  
1 - INCH = 20 - FEET

TUNE-UP BAYS

ASPHALT

ASPHALT

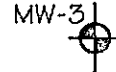
BH-H



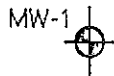
FORMER  
10,000  
GALLON  
GAS  
UST

BH-G

CONCRETE



CARWASH  
BUILDING  
AND  
STORE



BH-D BH-F

FORMER  
5,000  
GALLON  
GAS  
USTs

FORMER  
DISPENSER  
ISLANDS

BH-C BH-E

CONCRETE

BH-A

ASPHALT

PAY  
HUT

ASPHALT

ASPHALT

### LEGEND

MW-3



MONITORING WELL

BH-H



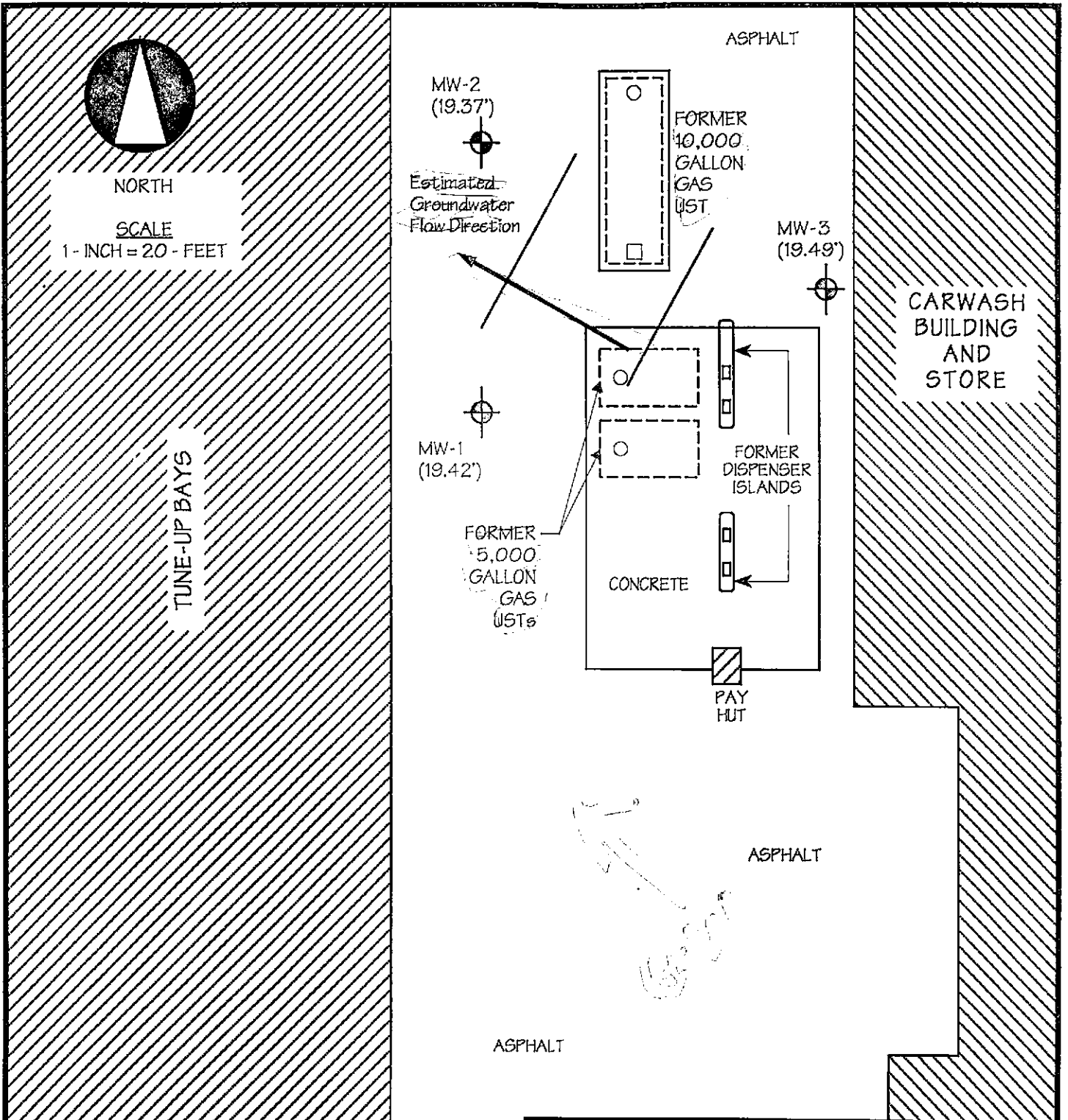
SOIL BORING

# SITE PLAN



HUTCH'S CARWASH  
17945 HESPERIAN BOULEVARD  
SAN LORENZO, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC.

FIGURE 2



**LEGEND**

 MW-1 (19.42') Monitoring well with groundwater elevation  
 Groundwater elevation contour

**GROUNDWATER ELEVATION CONTOUR MAP - 10/6/99**

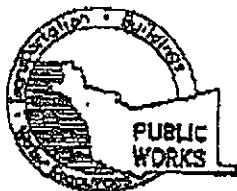
HUTCH'S CARWASH  
 17945 HESPERIAN BOULEVARD  
 SAN LORENZO, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. FIGURE 3

# **APPENDIX A**

Drilling Permit





**ALAMEDA COUNTY PUBLIC WORKS AGENCY**

**WATER RESOURCES SECTION**  
 951 TURNER COURT, SUITE 300, HAYWARD, CA 94546-2661  
 PHONE (510) 870-6575 ANDREAS GODFREY FAX (510) 870-6282  
 (510) 870-8344 ALVIN KAN

**DRILLING PERMIT APPLICATION**

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT Hutch's Carwash  
17945 Hesperian Blvd.  
San Lorenzo, CA

PERMIT NUMBER 99WR485  
 WELL NUMBER \_\_\_\_\_  
 APN \_\_\_\_\_

California Coordinates Source \_\_\_\_\_ Accuracy 0  
 CCR \_\_\_\_\_ n. OCE \_\_\_\_\_ n.  
 XPN \_\_\_\_\_

**PERMIT CONDITIONS**

Circled Permit Requirements Apply

CLIENT  
 Name Hutch's Carwash  
 Address 17945 Hesperian Blvd  
 City San Lorenzo, CA Zip 94564

**A. GENERAL**

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

APPLICANT  
 Name Agua Seiviana Engineers, Inc.  
Attn: Robert Kiley Fax 925-837-4853  
 Address 208 W. El Pintado Rd. Phone 925-820-9391  
 City Danville, CA Zip 94526

**B. WATER SUPPLY WELLS**

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

TYPE OF PROJECT  
 Well Construction  Geotechnical Investigation   
 Cathodic Protection  General   
 Water Supply  Contamination   
 Monitoring  Well Destruction

**C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

PROPOSED WATER SUPPLY WELL USE  
 New Domestic  Replacement Domestic   
 Municipal  Irrigation   
 Industrial  Other \_\_\_\_\_

**D. GEOTECHNICAL**

Backfill bore hole with compacted cuttings or heavy benonim and upper two feet with compacted material. In case of known or suspected contamination, treated cement grout shall be used in place of compacted cuttings.

DRILLING METHOD:  
 Mud Rotary  Air Rotary  Auger   
 Cable  Other  Gasprobe

**E. CATHODIC**

Fill hole above anode zone with concrete placed by tremie.

DRILLER'S LICENSE NO. 6-57485165 (Grass)

**F. WELL DESTRUCTION**


See attached.

WELL PROJECTS  
 Drill Hole Diameter \_\_\_\_\_ in. Maximum \_\_\_\_\_ ft.  
 Casing Diameter \_\_\_\_\_ in. Depth \_\_\_\_\_ ft.  
 Surface Seal Depth \_\_\_\_\_ ft. Number \_\_\_\_\_

**G. SPECIAL CONDITIONS**

GEOTECHNICAL PROJECTS  
 Number of Barlags 7 Maximum \_\_\_\_\_  
 Hole Diameter 2 in. Depth 30 ft.

ESTIMATED STARTING DATE 12-1-98  
 ESTIMATED COMPLETION DATE 12-7-98

APPROVED  DATE 11/16/98

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Robert C. Kiley DATE 11-13-98

## **APPENDIX B**

Boring Logs and Well Construction Details

**SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS**

MONITORING WELL: MW-1

Project Name: Hutch's Car Wash

Project Location: San Lorenzo, CA

Page 1 of 1

Driller: West Hazmat Drilling

Type of Rig: Hollow-Stem Auger

Size of Drill: 8.0" Diameter

Logged By: Robert Kitay

Date Drilled: September 29, 1999

Checked By: Robert E. Kitay, R.G.

**WATER AND WELL DATA**

Depth of Water First Encountered: 16'

Total Depth of Well Completed: 27.0'

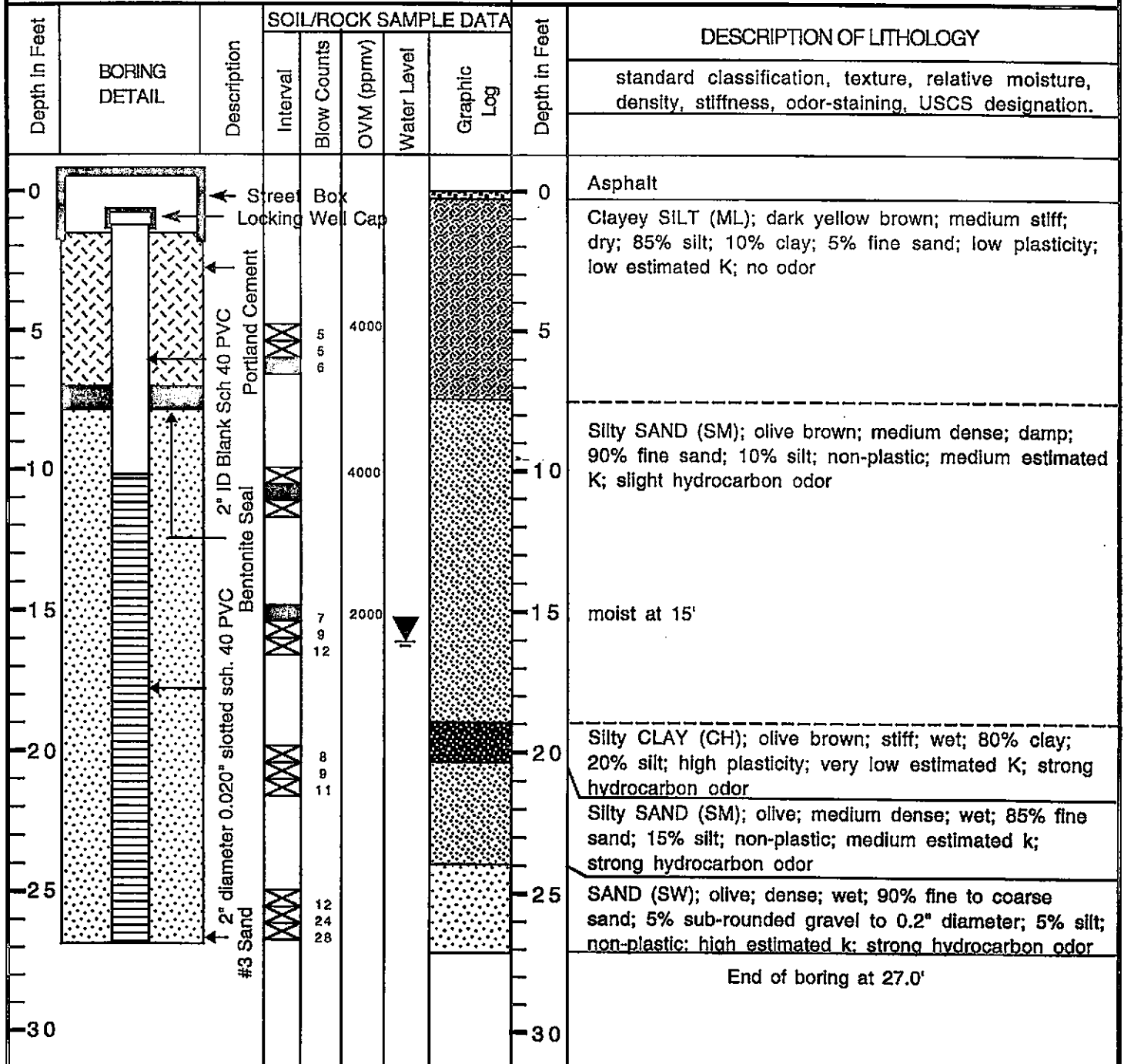
Well Screen Type and Diameter: 0.020" slotted, 2" sch. PVC

Static Depth of Water in Well: 16'

Well Screen Slot Size: 0.020"

Total Depth of Boring: 27.0'

Type and Size of Soil Sampler: 2.0" I.D. Split Barrell



**SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS**

**MONITORING WELL: MW-2**

Project Name: Hutch's Car Wash

Project Location: San Lorenzo, CA

Page 1 of 1

Driller: West Hazmat Drilling

Type of Rig: Hollow-Stem Auger

Size of Drill: 8.0" Diameter

Logged By: Robert Kitay

Date Drilled: September 29, 1999

Checked By: Robert E. Kitay, R.G.

**WATER AND WELL DATA**

Depth of Water First Encountered: 16'

Total Depth of Well Completed: 27.0'

Well Screen Type and Diameter: 0.020" slotted, 2" sch. PVC

Static Depth of Water in Well: 16'

Well Screen Slot Size: 0.020"

Total Depth of Boring: 27.0'

Type and Size of Soil Sampler: 2.0" I.D. Split Barrell

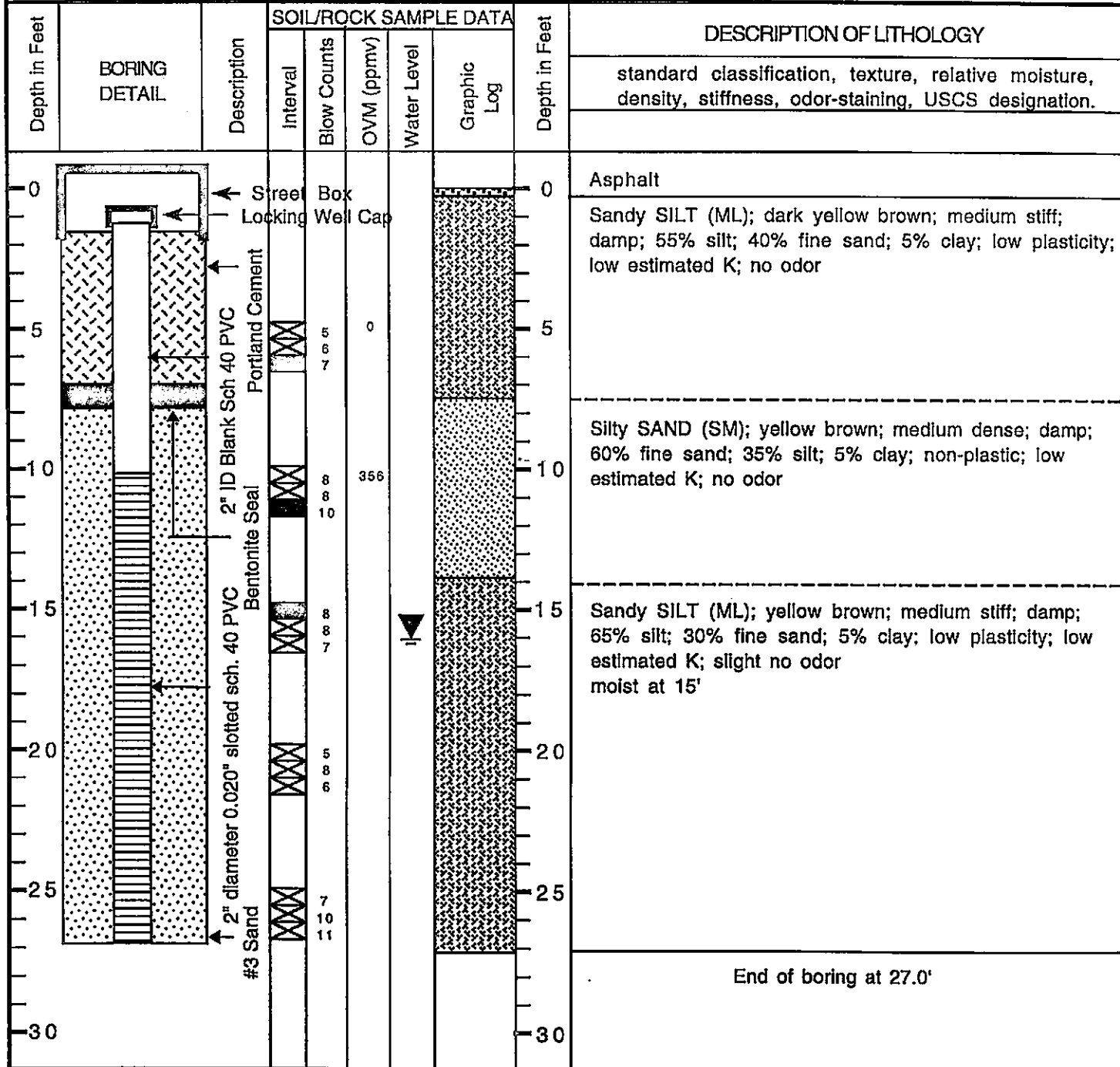
Depth in Feet	BORING DETAIL	Description	SOIL/ROCK SAMPLE DATA					Depth in Feet	DESCRIPTION OF LITHOLOGY
			Interval	Blow Counts	OVM (ppmv)	Water Level	Graphic Log		
0		Street Box Locking Well Cap						Asphalt	
0-5		Portland Cement						Clayey SILT (ML); dark yellow brown; medium stiff; dry; 85% silt; 10% clay; 5% fine sand; low plasticity; low estimated K; no odor	
5-7		2" ID Blank Sch 40 PVC	5 6 7		0				
7-10		Bentonite Seal	8 11 12		356			Silty SAND (SM); yellow brown; medium dense; damp; 90% fine sand; 10% silt; non-plastic; medium estimated K; slight hydrocarbon odor	
10-15		2" ID Blank Sch 40 PVC	7 8 10					Sandy SILT (ML); yellow brown; medium stiff; moist; 80% silt; 15% fine sand; 5% clay; low plasticity; low estimated K; slight hydrocarbon odor	
15-20		2" diameter 0.020" slotted sch. 40 PVC	9 11 11					olive; wet; 50-60% silt; 35-45% fine sand; 5% clay; slight hydrocarbon odor	
20-25		#3 Sand						sand stringers at 25'	
25-30								End of boring at 27.0'	

**SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS**

MONITORING WELL: MW-3

Project Name: Hutch's Car Wash		Project Location: San Lorenzo, CA		Page 1 of 1
Driller: West Hazmat Drilling		Type of Rig: Hollow-Stem Auger	Size of Drill: 8.0" Diameter	
Logged By: Robert Kitay		Date Drilled: September 29, 1999	Checked By: Robert E. Kitay, R.G.	

<b>WATER AND WELL DATA</b>		Total Depth of Well Completed: 27.0'
Depth of Water First Encountered: 16'		Well Screen Type and Diameter: 0.020" slotted, 2" sch. PVC
Static Depth of Water in Well: 16'		Well Screen Slot Size: 0.020"
Total Depth of Boring: 27.0'		Type and Size of Soil Sampler: 2.0" I.D. Split Barrell



## **APPENDIX C**

Analytical Report and Chain of Custody Form  
For Soil Samples

**Aqua Science Engineers, Inc.**

208 West El Pintado Road

Danville, CA 94526

Attn.: Mr. Robert Kitay

Project: 3411

Hutch's Car Wash

Site: 17945 Hesperian Blvd.

San Lorenzo, CA.

Dear Mr. Kitay,

Attached is our report for your samples received on Thursday September 30, 1999. 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 October 30, 1999 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.

Sincerely,



Pierre Monette

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-10-0016

Reported on: 10/08/1999 18:26

## Summary Report

From: Pierre Monette

To: Aqua Science Engineers, Inc.  
Attn: Robert Kitay  
Phone: (925) 820-9310 Fax: (925) 837-4853

Project #: 3411  
Project: Hutch's Car Wash  
Site: 17945 Hesperian Blvd.  
San Lorenzo, CA.

<u>MW-1-10.5` on 09/29/1999 09:20</u>	<u>LabID: 1999-10-0016-004</u>	<u>Results</u>	<u>RL</u>	<u>Units</u>
G/BTEX with MTBE ( 8015M/8020 )	Gasoline	ND	1.0	mg/Kg
	Benzene	ND	0.0050	mg/Kg
	Toluene	ND	0.0050	mg/Kg
	Ethyl benzene	ND	0.0050	mg/Kg
	Xylene(s)	ND	0.0050	mg/Kg
	MTBE	200	0.0050	mg/Kg
Lead ( 6010B )	Lead	ND	5.0	mg/Kg
<u>MW-1-15.0` on 09/29/1999 09:28</u>	<u>LabID: 1999-10-0016-005</u>	<u>Results</u>	<u>RL</u>	<u>Units</u>
G/BTEX Extract	Gasoline	24	10	mg/Kg
	Benzene	ND	0.62	mg/Kg
	Toluene	ND	0.62	mg/Kg
	Ethyl benzene	ND	0.62	mg/Kg
	Xylene(s)	ND	0.62	mg/Kg
	MTBE	ND	0.62	mg/Kg
Lead ( 6010B )	Lead	5.0	5.0	mg/Kg
<u>MW-2-11.0` on 09/29/1999 11:00</u>	<u>LabID: 1999-10-0016-006</u>	<u>Results</u>	<u>RL</u>	<u>Units</u>
G/BTEX with MTBE ( 8015M/8020 )	Gasoline	ND	1.0	mg/Kg
	Benzene	ND	0.0050	mg/Kg
	Toluene	ND	0.0050	mg/Kg
	Ethyl benzene	ND	0.0050	mg/Kg
	Xylene(s)	ND	0.0050	mg/Kg
	MTBE	0.011	0.0050	mg/Kg
Lead ( 6010B )	Lead	ND	5.0	mg/Kg
<u>MW-2-15.0` on 09/29/1999 11:07</u>	<u>LabID: 1999-10-0016-007</u>	<u>Results</u>	<u>RL</u>	<u>Units</u>
G/BTEX with MTBE ( 8015M/8020 )	Gasoline	ND	1.0	mg/Kg
	Benzene	ND	0.0050	mg/Kg
	Toluene	ND	0.0050	mg/Kg
	Ethyl benzene	ND	0.0050	mg/Kg
	Xylene(s)	ND	0.0050	mg/Kg
	MTBE	0.070	0.0050	mg/Kg
Lead ( 6010B )	Lead	ND	5.0	mg/Kg
<u>MW-3-10.5` on 09/29/1999 13:26</u>	<u>LabID: 1999-10-0016-008</u>	<u>Results</u>	<u>RL</u>	<u>Units</u>
G/BTEX with MTBE ( 8015M/8020 )	Gasoline	ND	1.0	mg/Kg

RL = Reporting Limit Surr. = Surrogate

1220 Quarry Lane \* Pleasanton, CA 94566-4756

Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096



# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-10-0016

Reported on: 10/08/1999 18:26

## Summary Report

---

From: Pierre Monette

To: Aqua Science Engineers, Inc.  
Attn: Robert Kitay  
Phone: (925) 820-9310 Fax: (925) 837-4853

Project #: 3411  
Project: Hutch's Car Wash  
Site: 17945 Hesperian Blvd.  
San Lorenzo, CA.

---

MW-3-10.5` on 09/29/1999 13:26  
G/BTEX with MTBE ( 8015M/8020 )

<u>LabID: 1999-10-0016-008</u>	<u>Results</u>	<u>RL</u>	<u>Units</u>
Benzene	ND	0.0050	mg/Kg
Toluene	ND	0.0050	mg/Kg
Ethyl benzene	ND	0.0050	mg/Kg
Xylene(s)	ND	0.0050	mg/Kg
MTBE	ND	0.0050	mg/Kg
Lead ( 6010B )	Lead	5.0	mg/Kg

MW-3-15.0` on 09/29/1999 13:35  
G/BTEX with MTBE ( 8015M/8020 )

<u>LabID: 1999-10-0016-009</u>	<u>Results</u>	<u>RL</u>	<u>Units</u>	
Gasoline	ND	1.0	mg/Kg	
Benzene	ND	0.0050	mg/Kg	
Toluene	ND	0.0050	mg/Kg	
Ethyl benzene	ND	0.0050	mg/Kg	
Xylene(s)	ND	0.0050	mg/Kg	
MTBE	ND	0.0050	mg/Kg	
Lead ( 6010B )	Lead	6.0	5.0	mg/Kg

RL = Reporting Limit Surr. = Surrogate

---

1220 Quarry Lane \* Pleasanton, CA 94566-4756

Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096

Total Lead

<b>Aqua Science Engineers, Inc.</b>	☒ -208 West El Pintado Road Danville, CA 94526
Attn: Robert Kitay	Phone: (925) 820-9310 Fax: (925) 837-4853
Project #: 3411	Project: Hutch's Car Wash
Site: 17945 Hesperian Blvd. San Lorenzo, CA.	

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1-10.5'	Soil	09/29/1999 09:20	4
MW-1-15.0'	Soil	09/29/1999 09:28	5
MW-2-11.0'	Soil	09/29/1999 11:00	6
MW-2-15.0'	Soil	09/29/1999 11:07	7
MW-3-10.5'	Soil	09/29/1999 13:26	8
MW-3-15.0'	Soil	09/29/1999 13:35	9

To: Aqua Science Engineers, Inc.

Test Method: 6010B

Attn.: Robert Kitay

Prep Method: 3050B

Total Lead

Sample ID:	MW-1-10.5	Lab Sample ID:	1999-10-0016-004
Project:	3411 Hutch's Car Wash	Received:	09/30/1999 16:31
Site:	17945 Hesperian Blvd. San Lorenzo, CA.	Extracted:	10/06/1999 08:17
Sampled:	09/29/1999 09:20	QC-Batch:	1999/10/06-02.15
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	ND	5.0	mg/Kg	1.00	10/06/1999 11:41	

To: Aqua Science Engineers, Inc.

Test Method: 6010B

Attn.: Robert Kitay

Prep Method: 3050B

Total Lead

Sample ID:	MW-1-15.0	Lab Sample ID:	1999-10-0016-005
Project:	3411 Hutch's Car Wash	Received:	09/30/1999 16:31
Site:	17945 Hesperian Blvd. San Lorenzo, CA.	Extracted:	10/06/1999 08:17
Sampled:	09/29/1999 09:28	QC-Batch:	1999/10/06-02.15
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	5.0	5.0	mg/Kg	1.00	10/06/1999 11:45	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-10-0016

To: Aqua Science Engineers, Inc.  
Attn.: Robert Kitay

Test Method: 6010B  
Prep Method: 3050B

### Total Lead

Sample ID:	MW-2-11.0	Lab Sample ID:	1999-10-0016-006
Project:	3411 Hutch's Car Wash	Received:	09/30/1999 16:31
Site:	17945 Hesperian Blvd. San Lorenzo, CA.	Extracted:	10/06/1999 08:17
Sampled:	09/29/1999 11:00	QC-Batch:	1999/10/06-02.15
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	ND	5.0	mg/Kg	1.00	10/06/1999 11:49	

To: Aqua Science Engineers, Inc.  
Attn.: Robert Kitay

Test Method: 6010B  
Prep Method: 3050B

Total Lead

Sample ID: MW-2-15.0`	Lab Sample ID: 1999-10-0016-007
Project: 3411 Hutch's Car Wash	Received: 09/30/1999 16:31
Site: 17945 Hesperian Blvd. San Lorenzo, CA.	Extracted: 10/06/1999 08:17
Sampled: 09/29/1999 11:07	QC-Batch: 1999/10/06-02.15
Matrix: Soil	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	ND	5.0	mg/Kg	1.00	10/06/1999 11:53	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-10-0016

To: Aqua Science Engineers, Inc.

Test Method: 6010B

Attn.: Robert Kitay

Prep Method: 3050B

## Total Lead

Sample ID:	MW-3-10.5	Lab Sample ID:	1999-10-0016-008
Project:	3411 Hutch's Car Wash	Received:	09/30/1999 16:31
Site:	17945 Hesperian Blvd. San Lorenzo, CA.	Extracted:	10/06/1999 08:17
Sampled:	09/29/1999 13:26	QC-Batch:	1999/10/06-02.15
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	ND	5.0	mg/Kg	1.00	10/06/1999 11:56	

To: Aqua Science Engineers, Inc.

Test Method: 6010B

Attn.: Robert Kitay

Prep Method: 3050B

Total Lead

Sample ID:	MW-3-15.0	Lab Sample ID:	1999-10-0016-009
Project:	3411 Hutch's Car Wash	Received:	09/30/1999 16:31
Site:	17945 Hesperian Blvd. San Lorenzo, CA.	Extracted:	10/06/1999 08:17
Sampled:	09/29/1999 13:35	QC-Batch:	1999/10/06-02.15
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	6.0	5.0	mg/Kg	1.00	10/06/1999 12:16	



To: Aqua Science Engineers, Inc.  
Attn.: Robert Kitay

Test Method: 6010B  
Prep Method: 3050B

Batch QC Report  
Total Lead

Method Blank	Soil	QC Batch # 1999/10/06-02.15
MB: 1999/10/06-02.15-024		Date Extracted: 10/06/1999 08:17

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Lead	ND	1.0	mg/Kg	10/06/1999 11:11	

To: Aqua Science Engineers, Inc.

Test Method: 6010B

Attn: Robert Kitay

Prep Method: 3050B

### Batch QC Report

#### Total Lead

Laboratory Control Spike (LCS/LCSD)	Soil	QC Batch # 1999/10/06-02.15
LCS: 1999/10/06-02.15-027	Extracted: 10/06/1999 08:17	Analyzed: 10/06/1999 11:23
LCSD: 1999/10/06-02.15-028	Extracted: 10/06/1999 08:17	Analyzed: 10/06/1999 11:28

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Lead	101	96.0	100.0	100.0	101.0	96.0	5.1	80-120	20		

Gas/BTEX (Methanol Extraction)

<b>Aqua Science Engineers, Inc.</b>	<input checked="" type="checkbox"/> 208 West El Pintado Road Danville, CA 94526
Attn: Robert Kitay	Phone: (925) 820-9310 Fax: (925) 837-4853
Project #: 3411	Project: Hutch's Car Wash
Site: 17945 Hesperian Blvd. San Lorenzo, CA.	

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1-15.0'	Soil	09/29/1999 09:28	5

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-10-0016

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn.: Robert Kitay

Prep Method: 5030

Gas/BTEX (Methanol Extraction)

Sample ID: MW-1-15.0	Lab Sample ID: 1999-10-0016-005
Project: 3411 Hutch's Car Wash	Received: 09/30/1999 16:31
Site: 17945 Hesperian Blvd. San Lorenzo, CA.	Extracted: 10/07/1999 15:55
Sampled: 09/29/1999 09:28	QC-Batch: 1999/10/07-05.02
Matrix: Soil	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	24	10	mg/Kg	1.00	10/07/1999 15:55	g
Benzene	ND	0.62	mg/Kg	1.00	10/07/1999 15:55	
Toluene	ND	0.62	mg/Kg	1.00	10/07/1999 15:55	
Ethyl benzene	ND	0.62	mg/Kg	1.00	10/07/1999 15:55	
Xylene(s)	ND	0.62	mg/Kg	1.00	10/07/1999 15:55	
MTBE	ND	0.62	mg/Kg	1.00	10/07/1999 15:55	
<i>Surrogate(s)</i>						
Trifluorotoluene	59.1	53-125	%	.00	10/07/1999 15:55	
4-Bromofluorobenzene-FID	71.2	58-124	%	.00	10/07/1999 15:55	

1220 Quarry Lane \* Pleasanton, CA 94566-4756  
Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn.: Robert Kitay

Prep Method: 5030

**Batch QC Report**  
Gas/BTEX (Methanol Extraction)

<b>Method Blank</b>	<b>Soil</b>	<b>QC Batch # 1999/10/07-05.02</b>
MB: 1999/10/07-05.02-001		Date Extracted: 10/07/1999 14:11

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	10	mg/Kg	10/07/1999 14:11	
Benzene	ND	0.62	mg/Kg	10/07/1999 14:11	
Toluene	ND	0.62	mg/Kg	10/07/1999 14:11	
Ethyl benzene	ND	0.62	mg/Kg	10/07/1999 14:11	
Xylene(s)	ND	0.62	mg/Kg	10/07/1999 14:11	
MTBE	ND	0.62	mg/Kg	10/07/1999 14:11	
<i>Surrogate(s)</i>					
Trifluorotoluene	102.0	53-125	%	10/07/1999 14:11	
4-Bromofluorobenzene-FID	101.0	58-124	%	10/07/1999 14:11	

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn: Robert Kitay

Prep Method: 5030

**Batch QC Report**

Gas/BTEX (Methanol Extraction)

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 1999/10/07-05.02	
LCS:	1999/10/07-05.02-002	Extracted:	10/07/1999 10:00	Analyzed:	10/07/1999 10:00
LCSD:	1999/10/07-05.02-003	Extracted:	10/07/1999 10:27	Analyzed:	10/07/1999 10:27

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Gasoline	0.508	0.499	0.625	0.625	81.3	79.8	1.9	75-125	35		
Benzene	0.143	0.149	0.125	0.125	114.4	119.2	4.1	77-123	35		
Toluene	0.148	0.142	0.125	0.125	118.4	113.6	4.1	78-122	35		
Ethyl benzene	0.152	0.138	0.125	0.125	121.6	110.4	9.7	70-130	35		
Xylene(s)	0.399	0.423	0.375	0.375	106.4	112.8	5.8	75-125	35		
<b>Surrogate(s)</b>											
Trifluorotoluene	570	568	500	500	114.0	113.6		53-125			
4-Bromofluorobenzene-FI	474	466	500	500	94.8	93.2		58-124			

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn: Robert Kitay

Prep Method: 5030

## Legend & Notes

Gas/BTEX (Methanol Extraction)

### Analyte Flags

g

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

Gas/BTEX and MTBE

<b>Aqua Science Engineers, Inc.</b>	☐ 208 West El Pintado Road Danville, CA 94526
Attn: Robert Kitay	Phone: (925) 820-9310 Fax: (925) 837-4853
Project #: 3411	Project: Hutch's Car Wash
Site: 17945 Hesperian Blvd. San Lorenzo, CA.	

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1-10.5'	Soil	09/29/1999 09:20	4
MW-2-11.0'	Soil	09/29/1999 11:00	6
MW-2-15.0'	Soil	09/29/1999 11:07	7
MW-3-10.5'	Soil	09/29/1999 13:26	8
MW-3-15.0'	Soil	09/29/1999 13:35	9



# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-10-0016

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn.: Robert Kitay

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	MW-1-10.5'	Lab Sample ID:	1999-10-0016-004
Project:	3411 Hutch's Car Wash	Received:	09/30/1999 16:31
Site:	17945 Hesperian Blvd. San Lorenzo, CA.	Extracted:	10/06/1999 21:44
Sampled:	09/29/1999 09:20	QC-Batch:	1999/10/06-01.04
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	10/06/1999 21:44	
Benzene	ND	0.0050	mg/Kg	1.00	10/06/1999 21:44	
Toluene	ND	0.0050	mg/Kg	1.00	10/06/1999 21:44	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	10/06/1999 21:44	
Xylene(s)	ND	0.0050	mg/Kg	1.00	10/06/1999 21:44	
MTBE	200	0.0050	mg/Kg	1.00	10/06/1999 21:44	
<i>Surrogate(s)</i>						
Trifluorotoluene	87.3	53-125	%	1.00	10/06/1999 21:44	
4-Bromofluorobenzene-FID	76.7	58-124	%	1.00	10/06/1999 21:44	

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn.: Robert Kitay

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	MW-2-11.0`	Lab Sample ID:	1999-10-0016-006
Project:	3411 Hutch's Car Wash	Received:	09/30/1999 16:31
Site:	17945 Hesperian Blvd. San Lorenzo, CA.	Extracted:	10/06/1999 19:56
Sampled:	09/29/1999 11:00	QC-Batch:	1999/10/06-01.04
Matrix:	Soil		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	10/06/1999 19:56	
Benzene	ND	0.0050	mg/Kg	1.00	10/06/1999 19:56	
Toluene	ND	0.0050	mg/Kg	1.00	10/06/1999 19:56	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	10/06/1999 19:56	
Xylene(s)	ND	0.0050	mg/Kg	1.00	10/06/1999 19:56	
MTBE	0.011	0.0050	mg/Kg	1.00	10/06/1999 19:56	
<i>Surrogate(s)</i>						
Trifluorotoluene	84.4	53-125	%	1.00	10/06/1999 19:56	
4-Bromofluorobenzene-FID	73.8	58-124	%	1.00	10/06/1999 19:56	

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn.: Robert Kitay

Prep Method: 5030

## Gas/BTEX and MTBE

Sample ID: MW-2-15.0	Lab Sample ID: 1999-10-0016-007
Project: 3411 Hutch's Car Wash	Received: 09/30/1999 16:31
Site: 17945 Hesperian Blvd. San Lorenzo, CA.	Extracted: 10/06/1999 20:23
Sampled: 09/29/1999 11:07	QC-Batch: 1999/10/06-01.04
Matrix: Soil	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	10/06/1999 20:23	
Benzene	ND	0.0050	mg/Kg	1.00	10/06/1999 20:23	
Toluene	ND	0.0050	mg/Kg	1.00	10/06/1999 20:23	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	10/06/1999 20:23	
Xylene(s)	ND	0.0050	mg/Kg	1.00	10/06/1999 20:23	
MTBE	0.070	0.0050	mg/Kg	1.00	10/06/1999 20:23	
<i>Surrogate(s)</i>						
Trifluorotoluene	91.7	53-125	%	1.00	10/06/1999 20:23	
4-Bromofluorobenzene-FID	82.8	58-124	%	1.00	10/06/1999 20:23	

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn.: Robert Kitay

Prep Method: 5030

## Gas/BTEX and MTBE

Sample ID: MW-3-10.5	Lab Sample ID: 1999-10-0016-008
Project: 3411 Hutch's Car Wash	Received: 09/30/1999 16:31
Site: 17945 Hesperian Blvd. San Lorenzo, CA.	Extracted: 10/06/1999 20:50
Sampled: 09/29/1999 13:26	QC-Batch: 1999/10/06-01.04
Matrix: Soil	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	10/06/1999 20:50	
Benzene	ND	0.0050	mg/Kg	1.00	10/06/1999 20:50	
Toluene	ND	0.0050	mg/Kg	1.00	10/06/1999 20:50	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	10/06/1999 20:50	
Xylene(s)	ND	0.0050	mg/Kg	1.00	10/06/1999 20:50	
MTBE	ND	0.0050	mg/Kg	1.00	10/06/1999 20:50	
<i>Surrogate(s)</i>						
Trifluorotoluene	80.8	53-125	%	1.00	10/06/1999 20:50	
4-Bromofluorobenzene-FID	70.1	58-124	%	1.00	10/06/1999 20:50	

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn.: Robert Kitay

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	MW-3-15.0'	Lab Sample ID:	1999-10-0016-009
Project:	3411 Hutch's Car Wash	Received:	09/30/1999 16:31
Site:	17945 Hesperian Blvd. San Lorenzo, CA.	Extracted:	10/06/1999 21:17
Sampled:	09/29/1999 13:35	QC-Batch:	1999/10/06-01.04
Matrix:	Soil		

Compound	Result	Rep. Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	10/06/1999 21:17	
Benzene	ND	0.0050	mg/Kg	1.00	10/06/1999 21:17	
Toluene	ND	0.0050	mg/Kg	1.00	10/06/1999 21:17	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	10/06/1999 21:17	
Xylene(s)	ND	0.0050	mg/Kg	1.00	10/06/1999 21:17	
MTBE	ND	0.0050	mg/Kg	1.00	10/06/1999 21:17	
<i>Surrogate(s)</i>						
Trifluorotoluene	85.7	53-125	%	1.00	10/06/1999 21:17	
4-Bromofluorobenzene-FID	70.6	58-124	%	1.00	10/06/1999 21:17	

To: Aqua Science Engineers, Inc.

Test Method: 8015M  
8020

Attn.: Robert Kitay

Prep Method: 5030

**Batch QC Report**  
Gas/BTEX and MTBE

Method Blank	Soil	QC Batch # 1999/10/06-01.04
MB: 1999/10/06-01.04-001		Date Extracted: 10/06/1999 06:44

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	10/06/1999 06:44	
Benzene	ND	0.0050	mg/Kg	10/06/1999 06:44	
Toluene	ND	0.0050	mg/Kg	10/06/1999 06:44	
Ethyl benzene	ND	0.0050	mg/Kg	10/06/1999 06:44	
Xylene(s)	ND	0.0050	mg/Kg	10/06/1999 06:44	
MTBE	ND	0.0050	mg/Kg	10/06/1999 06:44	
<i>Surrogate(s)</i>					
Trifluorotoluene	96.2	53-125	%	10/06/1999 06:44	
4-Bromofluorobenzene-FID	91.6	58-124	%	10/06/1999 06:44	

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn: Robert Kitay

Prep Method: 5030

## Batch QC Report

Gas/BTEX and MTBE

### Laboratory Control Spike (LCS/LCSD)

Soil

QC Batch # 1999/10/06-01.04

LCS: 1999/10/06-01.04-002

Extracted: 10/06/1999 07:11

Analyzed: 10/06/1999 07:11

LCSD: 1999/10/06-01.04-003

Extracted: 10/06/1999 07:38

Analyzed: 10/06/1999 07:38

Compound	Conc. [ mg/Kg ]		Exp. Conc. [ mg/Kg ]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Gasoline	0.620	0.467	0.500	0.500	124.0	93.4	28.2	75-125	35		
Benzene	0.0907	0.0865	0.1000	0.1000	90.7	86.5	4.7	77-123	35		
Toluene	0.0871	0.0825	0.1000	0.1000	87.1	82.5	5.4	78-122	35		
Ethyl benzene	0.0847	0.0807	0.1000	0.1000	84.7	80.7	4.8	70-130	35		
Xylene(s)	0.253	0.243	0.300	0.300	84.3	81.0	4.0	75-125	35		
<i>Surrogate(s)</i>											
Trifluorotoluene	464	436	500	500	92.8	87.2		53-125			
4-Bromofluorobenzene-FI	590	471	500	500	118.0	94.2		58-124			

79-10-VU16

48275

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) Robert E. Kitany (PHONE NO.) (925) 820-9391

PROJECT NAME Hutch's Car Wash JOB NO. 3411  
ADDRESS 17945 Hesperian Blvd, San Lorenzo, CA DATE 9-29-99

## ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-GASOLINE (EPA 5030/8015)	TPH-DIESEL (EPA 3510/8015)	PURGEABLE HALOCARBONS (EPA 601/8010)	PURGEABLE AROMATICS (EPA 602/8020)	VOLATILE ORGANICS (EPA 624/8240)	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)	ORGANOCHLORINE HERBICIDES (EPA 8150)	FUEL OXYGENATES (EPA 8260)	Hex-D	Total Pb	COMPOSITE	
MW-1 6.0'	9/29	9:15	Soil	1																X		
MW-1 10.5'		9:20	↓	↓	X																X	
MW-1 15.0'		9:28	↓	↓	X																X	
MW-2 6.0'		10:55	↓	↓																X		
MW-2 11.0'		11:00	↓	↓	Y																X	
MW-2 15.0'		11:07	↓	↓	X																X	
MW-3 6.0'		13:18	↓	↓																X		
MW-3 10.5'		13:26	↓	↓	X																X	
MW-3 15.0'	✓	13:35	↓	↓	X																X	

4.5

RELINQUISHED BY: Robert E. Kitany (signature) (time)

RECEIVED BY: Rich Denty (signature) (time) 093099

RELINQUISHED BY: Rich Denty (signature) (time) 093099

RECEIVED BY LABORATORY: Denise Harrington (signature) (time)

COMMENTS: 5-DAY T.A.T.

Robert E. Kitany (printed name) 9-30-99 (date)

RICHARD DENTY (printed name) 09/30 (date)

RICHARD DENTY (printed name) (date)

D. Harrington (printed name) 10/31 (date)

Company- ASE

Company- CHROMALAB

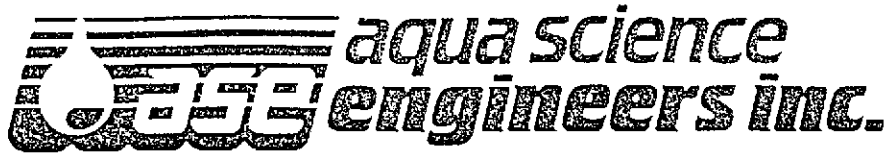
Company- CHROMALAB

Company- Chromalab 9/30/99



## **APPENDIX D**

Well Sampling Field Logs



# WELL SAMPLING FIELD LOG

Project Name and Address: HUTCHS CAR WASH  
 Job #: 3411 Date of sampling: 10-6-99  
 Well Name: MW-1 Sampled by: 172  
 Total depth of well (feet): 26.5 Well diameter (inches): 2"  
 Depth to water before sampling (feet): 15.58  
 Thickness of floating product if any: -  
 Depth of well casing in water (feet): 10.92  
 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): 8  
 Equipment used to purge the well: dedicated bailer  
 Time Evacuation Began: 1010 Time Evacuation Finished: 1025  
 Approximate volume of groundwater purged: 8  
 Did the well go dry?: NO After how many gallons: \_\_\_\_\_  
 Time samples were collected: 1030  
 Depth to water at time of sampling: 15.59  
 Percent recovery at time of sampling: 99%  
 Samples collected with: dedicated bailer  
 Sample color: gray/yellow Odor: H2S odor  
 Description of sediment in sample: -

## CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>1</u>	<u>70.1</u>	<u>6.77</u>	<u>387</u>
<u>2</u>	<u>69.8</u>	<u>6.99</u>	<u>392</u>
<u>3</u>	<u>69.7</u>	<u>6.87</u>	<u>309</u>
<u>4</u>	<u>71.0</u>	<u>6.93</u>	<u>401</u>

## SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
<u>MW-1</u>	<u>3</u>	<u>40 ml VOA3</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>TPH-G/BTEX/MTBE</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____



## WELL SAMPLING FIELD LOG

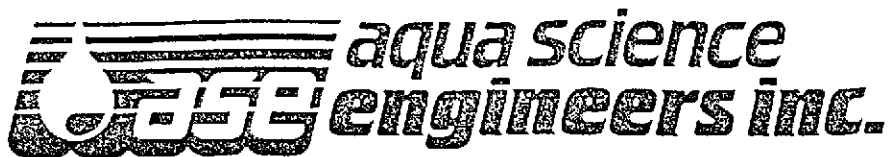
Project Name and Address: HUTCHES CAR WASH  
 Job #: 3411 Date of sampling: 10-6-99  
 Well Name: MW-2 Sampled by: MTZ  
 Total depth of well (feet): 26.5 Well diameter (inches): 2"  
 Depth to water before sampling (feet): 15.84  
 Thickness of floating product if any: \_\_\_\_\_  
 Depth of well casing in water (feet): 10.66  
 Number of gallons per well casing volume (gallons): 1.8  
 Number of well casing volumes to be removed: 4  
 Req'd volume of groundwater to be purged before sampling (gallons): 7.2  
 Equipment used to purge the well: dedicated boiler  
 Time Evacuation Began: 0935 Time Evacuation Finished: 0950  
 Approximate volume of groundwater purged: 7.5  
 Did the well go dry?: NO After how many gallons: \_\_\_\_\_  
 Time samples were collected: 0955  
 Depth to water at time of sampling: 15.86'  
 Percent recovery at time of sampling: 99.9%  
 Samples collected with: dedicated boiler  
 Sample color: yellow grey Odor: Slight HC  
 Description of sediment in sample: ✓

### CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>1</u>	<u>71.1</u>	<u>6.73</u>	<u>587</u>
<u>2</u>	<u>71.0</u>	<u>7.04</u>	<u>542</u>
<u>3</u>	<u>72.1</u>	<u>6.93</u>	<u>509</u>
<u>4</u>	<u>71.3</u>	<u>6.87</u>	<u>542</u>

### SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
<u>MW-2</u>	<u>3</u>	<u>40-ml VOA's</u>	<u>✓</u>	<u>✓</u>	<u>TPH-G/BTEX/MTBE</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____



## WELL SAMPLING FIELD LOG

Project Name and Address: HUTCH'S CAR WASH  
 Job #: 3411 Date of sampling: 10-6-99  
 Well Name: MW-3 Sampled by: ITR  
 Total depth of well (feet): 26.9' Well diameter (inches): 2"  
 Depth to water before sampling (feet): 14.98'  
 Thickness of floating product if any: -  
 Depth of well casing in water (feet): 11.92'  
 Number of gallons per well casing volume (gallons): 2.6'  
 Number of well casing volumes to be removed: 4  
 Req'd volume of groundwater to be purged before sampling (gallons): 8.1  
 Equipment used to purge the well: dedicated bailer  
 Time Evacuation Began: 0960 Time Evacuation Finished: 0912  
 Approximate volume of groundwater purged: 8.5  
 Did the well go dry?: NO After how many gallons: -  
 Time samples were collected: 0915  
 Depth to water at time of sampling: 14.99'  
 Percent recovery at time of sampling: 99.9%  
 Samples collected with: dedicated bailer  
 Sample color: yellow gray Odor: none  
 Description of sediment in sample: -

### CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	76.0	7.04	947
2	69.7	7.43	941
3	69.4	7.79	907
4	69.3	7.69	849

### SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-3	3	40-ml VOLS	✓	✓	SPH-6/ BTEX/ MTBE
<del>MW-3</del>	<del>3</del>				

## **APPENDIX E**

Analytical Report and Chain of Custody Form  
For Groundwater Samples

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

Attn.: Mr. Ian T. Reed

Project: 3411  
Hutches Car Wash

Site: 17945 Hesperian Blvd.  
San Lorenzo

Dear Mr. Reed,

Attached is our report for your samples received on Tuesday October 12, 1999.  
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 11, 1999  
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.

Sincerely,



Pierre Monette

Gas/BTEX and MTBE

<b>Aqua Science Engineers, Inc.</b>	☒ 208 West El Pintado Road Danville, CA 94526
Attn: Ian T. Reed	Phone: (925) 820-9391 Fax: (925) 837-4853
Project #: 3411	Project: Hutches Car Wash
Site: 17945 Hesperian Blvd. San Lorenzo	

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1	Water	10/06/1999 10:30	1
MW-2	Water	10/06/1999 09:55	2
MW-3	Water	10/06/1999 09:15	3

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-10-0206

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn.: Ian T. Reed

Prep Method: 5030

## Gas/BTEX and MTBE

Sample ID: MW-1	Lab Sample ID: 1999-10-0206-001
Project: 3411 Hutches Car Wash	Received: 10/12/1999 17:08
Site: 17945 Hesperian Blvd. San Lorenzo	Extracted: 10/18/1999 16:02
Sampled: 10/06/1999 10:30	QC-Batch: 1999/10/18-01.01
Matrix: Water	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	1500	50	ug/L	1.00	10/18/1999 16:02	
Benzene	3.3	0.50	ug/L	1.00	10/18/1999 16:02	
Toluene	2.3	0.50	ug/L	1.00	10/18/1999 16:02	
Ethyl benzene	27	0.50	ug/L	1.00	10/18/1999 16:02	
Xylene(s)	72	0.50	ug/L	1.00	10/18/1999 16:02	
MTBE	120	5.0	ug/L	1.00	10/18/1999 16:02	
<i>Surrogate(s)</i>						
Trifluorotoluene	98.9	58-124	%	1.00	10/18/1999 16:02	
4-Bromofluorobenzene-FID	119.3	50-150	%	1.00	10/18/1999 16:02	

1220 Quarry Lane \* Pleasanton, CA 94566-4756  
Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096



# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-10-0206

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn.: Ian T. Reed

Prep Method: 5030

## Gas/BTEX and MTBE

Sample ID: MW-2	Lab Sample ID: 1999-10-0206-002
Project: 3411 Hutches Car Wash	Received: 10/12/1999 17:08
Site: 17945 Hesperian Blvd. San Lorenzo	Extracted: 10/13/1999 21:08
Sampled: 10/06/1999 09:55	QC-Batch: 1999/10/13-01.01
Matrix: Water	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	10/13/1999 21:08	
Benzene	ND	0.50	ug/L	1.00	10/13/1999 21:08	
Toluene	ND	0.50	ug/L	1.00	10/13/1999 21:08	
Ethyl benzene	ND	0.50	ug/L	1.00	10/13/1999 21:08	
Xylene(s)	ND	0.50	ug/L	1.00	10/13/1999 21:08	
MTBE	18	5.0	ug/L	1.00	10/13/1999 21:08	
<i>Surrogate(s)</i>						
Trifluorotoluene	97.4	58-124	%	1.00	10/13/1999 21:08	
4-Bromofluorobenzene-FID	79.4	50-150	%	1.00	10/13/1999 21:08	

1220 Quarry Lane \* Pleasanton, CA 94566-4756  
Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 1999-10-0206

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn.: Ian T. Reed

Prep Method: 5030

## Gas/BTEX and MTBE

Sample ID: MW-3	Lab Sample ID: 1999-10-0206-003
Project: 3411 Hutches Car Wash	Received: 10/12/1999 17:08
Site: 17945 Hesperian Blvd. San Lorenzo	Extracted: 10/13/1999 20:39
Sampled: 10/06/1999 09:15	QC-Batch: 1999/10/13-01.01
Matrix: Water	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	10/13/1999 20:39	
Benzene	ND	0.50	ug/L	1.00	10/13/1999 20:39	
Toluene	ND	0.50	ug/L	1.00	10/13/1999 20:39	
Ethyl benzene	ND	0.50	ug/L	1.00	10/13/1999 20:39	
Xylene(s)	ND	0.50	ug/L	1.00	10/13/1999 20:39	
MTBE	ND	5.0	ug/L	1.00	10/13/1999 20:39	
<i>Surrogate(s)</i>						
Trifluorotoluene	88.8	58-124	%	1.00	10/13/1999 20:39	
4-Bromofluorobenzene-FID	77.8	50-150	%	1.00	10/13/1999 20:39	

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn.: Ian T. Reed

Prep Method: 5030

**Batch QC Report**  
Gas/BTEX and MTBE

Method Blank	Water	QC Batch # 1999/10/13-01.01
MB: 1999/10/13-01.01-001		Date Extracted: 10/13/1999 05:20

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	10/13/1999 05:20	
Benzene	ND	0.5	ug/L	10/13/1999 05:20	
Toluene	ND	0.5	ug/L	10/13/1999 05:20	
Ethyl benzene	ND	0.5	ug/L	10/13/1999 05:20	
Xylene(s)	ND	0.5	ug/L	10/13/1999 05:20	
MTBE	ND	5.0	ug/L	10/13/1999 05:20	
<i>Surrogate(s)</i>					
Trifluorotoluene	89.4	58-124	%	10/13/1999 05:20	
4-Bromofluorobenzene-FID	73.6	50-150	%	10/13/1999 05:20	

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn.: Ian T. Reed

Prep Method: 5030

**Batch QC Report**  
Gas/BTEX and MTBE

Method Blank	Water	QC Batch # 1999/10/18-01.01
MB: 1999/10/18-01.01-001		Date Extracted: 10/18/1999 06:04

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	10/18/1999 06:04	
Benzene	ND	0.5	ug/L	10/18/1999 06:04	
Toluene	ND	0.5	ug/L	10/18/1999 06:04	
Ethyl benzene	ND	0.5	ug/L	10/18/1999 06:04	
Xylene(s)	ND	0.5	ug/L	10/18/1999 06:04	
MTBE	ND	5.0	ug/L	10/18/1999 06:04	
<i>Surrogate(s)</i>					
Trifluorotoluene	92.0	58-124	%	10/18/1999 06:04	
4-Bromofluorobenzene-FID	68.2	50-150	%	10/18/1999 06:04	

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn: Ian T. Reed

Prep Method: 5030

**Batch QC Report**  
**Gas/BTEX and MTBE**

<b>Laboratory Control Spike (LCS/LCSD)</b>	<b>Water</b>	<b>QC Batch # 1999/10/13-01.01</b>
LCS: 1999/10/13-01.01-002	Extracted: 10/13/1999 07:45	Analyzed: 10/13/1999 07:45
LCSD: 1999/10/13-01.01-003	Extracted: 10/13/1999 08:12	Analyzed: 10/13/1999 08:12

Compound	Conc. [ ug/L ]		Exp. Conc. [ ug/L ]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Gasoline	424	477	500	500	84.8	95.4	11.8	75-125	20		
Benzene	106	110	100.0	100.0	106.0	110.0	3.7	77-123	20		
Toluene	105	112	100.0	100.0	105.0	112.0	6.5	78-122	20		
Ethyl benzene	103	108	100.0	100.0	103.0	108.0	4.7	70-130	20		
Xylene(s)	309	324	300	300	103.0	108.0	4.7	75-125	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	543	556	500	500	108.6	111.2		58-124			
4-Bromofluorobenzene-FI	409	446	500	500	81.8	89.2		50-150			

To: Aqua Science Engineers, Inc.

Test Method: 8020  
8015M

Attn: Ian T. Reed

Prep Method: 5030

### Batch QC Report

### Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)		Water	QC Batch # 1999/10/18-01.01
LCS:	1999/10/18-01.01-002	Extracted: 10/18/1999 06:32	Analyzed: 10/18/1999 06:32
LCSD:	1999/10/18-01.01-003	Extracted: 10/18/1999 06:59	Analyzed: 10/18/1999 06:59

Compound	Conc. [ ug/L ]		Exp. Conc. [ ug/L ]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Gasoline	478	465	500	500	95.6	93.0	2.8	75-125	20		
Benzene	105	106	100.0	100.0	105.0	106.0	0.9	77-123	20		
Toluene	109	110	100.0	100.0	109.0	110.0	0.9	78-122	20		
Ethyl benzene	105	106	100.0	100.0	105.0	106.0	0.9	70-130	20		
Xylene(s)	314	316	300	300	104.7	105.3	0.6	75-125	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	525	531	500	500	105.0	106.2		58-124			
4-Bromofluorobenzene-Fl	446	436	500	500	89.2	87.2		50-150			

99-10-0206

48482

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) Lat Reed (PHONE NO.) (925) 820-9391 PROJECT NAME Hutches Car Wash JOB NO. 3411  
ADDRESS 17945 Hesperian Blvd, San Lorenzo DATE 10-12-99

ANALYSIS REQUEST					TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-GASOLINE (EPA 5030/8015)	TPH-DIESEL (EPA 3510/8015)	PURGEABLE HALOCARBONS (EPA 601/8010)	PURGEABLE AROMATICS (EPA 602/8020)	VOLATILE ORGANICS (EPA 624/8240)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	OIL & GREASE (EPA 5520)	LIFT METALS (5) (EPA 6010+7000)	CATION METALS (EPA 6010+7000)	PCBs & PESTICIDES (EPA 608/8080)	ORGANOPHOSPHORUS PESTICIDES (EPA 8140) (EPA 608/8080)	ORGANOCHLORINE HERBICIDES (EPA 8150)	FUEL OXYGENATES (EPA 8260)				COMPOSITE	
SPECIAL INSTRUCTIONS:	SAMPLE ID.	DATE	TIME	MATRIX																			NO. OF SAMPLES
5-day TAT																							
	MW-1	10-6-99	1030	water	3																		
	MW-2	10-6-99	0955	water	3																		
	MW-3	10-6-99	0915	water	3																		

RELINQUISHED BY: <u>Lat Reed</u> 11:50 (signature) (time)	RECEIVED BY: (signature) (time)	RELINQUISHED BY: (signature) (time)	RECEIVED BY LABORATORY: <u>Debbie Harrington</u> (signature) (time)	COMMENTS:  5 day TAT.
<u>Lat T. Reed</u> 10/12/99 (printed name) (date)	(printed name) (date)	(printed name) (date)	<u>D. Harrington</u> (printed name) (date)	
Company- <u>ASE</u>	Company-	Company-	Company- <u>10/12/99</u> <u>Chromalab 1708</u>	

Lat Reed 1705