

# Hutch's Car Washes

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DETAILING

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January 20, 2011

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Alameda County  
Environmental Health

Mark Detterman  
Alameda County Health Care Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

SUBJECT: RO0000451  
Hutch's Car Wash  
17945 Hesperian Blvd.  
San Lorenzo, CA 94580

Dear Mr. Detterman:

Attached please find a copy of the most recent groundwater sampling report for the above referenced site. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Sincerely,



Allen Kirk Hutchison

Attachment



Aqua Science Engineers, Inc. 55 Oak Court, Suite 220, Danville, CA 94526  
(925) 820-9391 - Fax (925) 837-4853 - [www.aquascienceengineers.com](http://www.aquascienceengineers.com)

August 12, 2010

SOIL AND GROUNDWATER ASSESSMENT REPORT  
ASE JOB NO. 4096

at  
Hutch's Carwash  
17945 Hesperian Boulevard  
San Lorenzo, California

Prepared by:  
AQUA SCIENCE ENGINEERS, INC.  
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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, former owner of the property, as required by the Alameda County Health Care Services Agency (ACHCSA) in their letter dated November 28, 2006.

## **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), benzene, toluene, ethyl benzene and total xylenes (collectively known as BTEX) and methyl tertiary butyl ether (MTBE), and total lead. None of the soil samples contained significant concentrations of any of the compounds analyzed. Groundwater samples collected from the six deeper borings were analyzed for TPH-G, BTEX and MTBE. The water samples contained up to 290 parts per billion (ppb) benzene, 620 ppb toluene, 3,000 ppb ethylbenzene, 7,100 ppb total xylenes, and 4,400 ppb MTBE. 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 plan was to use 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.



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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.

### 2.3 Monitoring Well Installation

In September 1999, ASE drilled three soil borings at the site and installed monitoring wells MW-1 through MW-3 in the borings. The only hydrocarbons detected in the soil samples collected during the assessment were 24 parts per million (ppm) TPH-G in the soil sample collected from 15.0-feet below ground surface (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 soil samples analyzed.

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.

### 2.4 Groundwater Monitoring

The site has been on a quarterly, and then semi-annual sampling program since the well installation. In general, the hydrocarbon concentrations have decreased and currently only groundwater samples are collected from monitoring well MW-1 following periods of non-detectable concentrations in monitoring wells MW-2 and MW-3. Depth to groundwater and analytical results from the groundwater monitoring are presented in Tables One and Two.

### 2.5 Workplan for Additional Assessment

In May 2008, ASE prepared a workplan to conduct an additional soil and groundwater assessment on the downgradient edge of the site. This workplan was generally approved by the ACHCSA in a letter dated October 23, 2008 with a requested modification of the spacing of the borings. This letter from the ACHCSA also requested that a preferential pathway survey and area well survey be conducted for the site.

### 2.6 Preferential Pathway Survey and Area Well Survey

In April 2010, ASE prepared a preferential pathway survey and area well survey for the site. The preferential pathway survey consisted of reviewing Underground Service Alert (USA) markings in the site vicinity, making visual inspections of the property and surrounding area, reviewing documents such as as-built drawings supplied by the city and individual utility companies, and contacting individuals that would have knowledge of the individual utility lines.



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Based on the location and depth of the underground utility lines in the site vicinity and the depth to groundwater in the site vicinity, no potential preferential pathways for the migration of groundwater contamination that may have originated from the subject site were identified.

The area well survey consisted of reviewing records of wells in the site vicinity from the Alameda County Public Works Agency (ACPWA) and California Department of Water Resources (DWR) for wells located within 1/4-mile of the site. Forty wells were located during this survey. Of these wells, 29 are monitoring wells, two are extraction (remediation) wells, four are destroyed wells, three are irrigation wells, one is a boring, and one is a domestic well. In addition, there are three wells in the southern portion of the study area that could not be located precisely given the data provided that may also be in the study area. These additional wells are listed as a domestic well, a destroyed well and an irrigation well. It is believed that these wells are likely located in John F. Kennedy Park on the southern edge of the study area and in a crossgradient location of the site.

All of the wells listed as irrigation or domestic wells are located either upgradient of the site or crossgradient of the site at a distance of approximately 1,000-feet from the site. Based on this data, none of the domestic and irrigation wells in the site vicinity are at risk of contamination from hydrocarbons that originated from sources on the subject site. All of the downgradient wells are located at least 1/8<sup>th</sup> of a mile from the site and all are monitoring wells related to the Arco Petroleum Products environmental investigation.

### **3.0 SCOPE OF WORK (SOW)**

The ACHCSA requested that the horizontal and vertical extent of contamination be defined at the site, including off-site drilling. However, in researching drilling locations, ASE determined that the alley west of the tune up bays is actually part of the property. The proposed SOW is as follows:

- 1) Obtain the necessary drilling permit from the ACPWA.
- 2) Notify USA of the drilling project and contract with a private underground utility locating service to clear the drilling locations of underground utility lines.
- 3) Drill four soil borings on the downgradient (western edge) of the site to 40-feet bgs using a Geoprobe with a dual-walled sampler and collect soil samples for analysis.
- 4) Collect groundwater samples from the borings.
- 5) At a minimum, analyze two soil and one groundwater sample from each boring at a CAL-EPA certified analytical laboratory for total petroleum hydrocarbons as diesel (TPH-D), TPH-G, BTEX, five fuel oxygenates including MTBE, and lead scavengers.
- 6) Backfill each boring with neat cement.
- 7) Prepare a report presenting the methods and findings of this assessment.



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## **4.0 DRILL SOIL BORINGS AND COLLECT SAMPLES**

### 4.1 Drilling Permit and Underground Utility Line Clearance

Prior to drilling, ASE obtained drilling permit W2010-0497 from the ACPWA. A copy of this permit is presented in Appendix A.

ASE also notified Underground Service Alert (USA) to have public underground utility lines marked in the site vicinity. A private underground utility line locating service, Subtronic Corporation of Concord, California, was also contracted to clear each boring location of underground utility lines.

### 4.2 Drilling and Soil Sample Collection

On July 20 and 21, 2010, Vironex, Inc. of Pacheco, California drilled soil borings BH-I through BH-L at the site using a Geoprobe hydraulic sampling rig equipped with a dual-wall sampler. All of these borings were drilled in a straight line at a spacing of 30-feet along the western edge of the property. The boring locations are shown on Figure 3. ASE senior geologist Robert E. Kitay, P.G. directed the drilling.

Undisturbed soil samples were collected continuously as drilling progressed for lithologic and hydrogeologic description and for possible chemical analysis. The samples were collected by driving a sampler lined with acetate tubes using hydraulic direct push methods. Selective soil samples were immediately cut, sealed with Teflon tape and plastic end caps, labeled and chilled in an ice chest with wet ice for transport to Kiff Analytical, LLC. of Davis, California (DHS ELAP certification #2236) under chain of custody documentation.

Soil from the remaining tubes was described by the site geologist using the Unified Soil Classification System (USCS) and was screened for volatile compounds using a photoionization detector (PID). 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 VOCs were allowed to volatilize, the PID measured the vapor in the bag through a small hole punched in the bag. PID readings are used as a screening tool only, since the procedures are not as rigorous as those used in the laboratory. The PID readings are shown on the boring logs presented in Appendix B. There was no evidence of contamination in any of the soil samples based on odors, staining or PID readings.

### 4.3 Groundwater Sample Collection

Once groundwater was encountered, a temporary PVC well casing was driven into place for the collection of groundwater samples. Groundwater samples were removed from the boring with a pre-cleaned bailer. The groundwater samples were contained in 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid, and sealed without headspace. The samples were then labeled and stored in an ice chest with wet ice for transport to the analytical laboratory under chain of custody.



Groundwater samples from deeper water-bearing zones were collected using a Hydropunch in a second boring drilled immediately adjacent to the first. The Hydropunch was driven into the target zone and was then checked to verify that there was no leakage of groundwater into the rods prior to opening. Once the rods were shown to be dry, the Hydropunch screen was then opened and groundwater was allowed to enter the rods. Groundwater samples were then collected from within the rods using a bailer. Groundwater samples were then decanted from the bailer into 40-ml VOA vials, preserved with hydrochloric acid and sealed without headspace. The samples were then labeled with the site location, sample designation, date and time the samples were collected, and the initials of the person collecting the samples. The samples were then sealed in plastic bags and cooled in an ice chest with wet ice for transport to a state-certified analytical laboratory under chain-of-custody.

In some instances, no water was produced during a sampling attempt. The following is a list of all sampling attempts and the results of the sampling attempt:

<u>Boring</u>	<u>Sampling Attempt Depth</u>	<u>Result</u>
BH-I	16-20'	Water sample collected
BH-I	25-29'	Water sample collected (Only 2 VOAs)
BH-J	10-20'	Dry after waiting 1 hour – No sample
BH-J	20-25'	Dry after 15 minute wait – No sample
BH-J	25-30'	Water sample collected
BH-J	31-35'	Water sample collected after 1 hr wait
BH-K	10-20'	Dry after waiting 40 minutes – No sample
BH-K	20-25'	Water sample collected
BH-K	26-28'	Water sample collected
BH-L	10-20'	Dry after waiting 40 minutes – No sample
BH-L	20-24'	Water sample collected
BH-L	25-28'	Water sample collected
BH-L	38-40'	Water sample collected (1 VOA after 30 min wait)

#### 4.4 Decontamination and Borehole Backfilling

Drilling equipment was cleaned with an Alconox solution between sampling intervals and between borings to prevent potential cross-contamination. Following collection of the soil and groundwater samples, each boring was backfilled with neat cement to the ground surface.

#### 4.5 Subsurface Lithology and Hydrogeology

With some variation, sediments encountered during drilling generally consisted of clayey silt and/or silty clay from beneath the asphalt surface to approximately 10-feet bgs, silty sand or





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sandy silt from 10-foot bgs to 18-foot bgs, clayey silt from 18 to 20-foot bgs, silty sand from 20 to 22-foot bgs, silty clay from 22 to 25-foot bgs, silty sand from 25 to between 30 and 35-foot bgs, and silty clay and/or clayey silt from between 30 or 35-foot bgs and the total depth explored of 40-foot bgs. Groundwater was encountered at approximately 14 to 16-foot bgs. Boring logs are presented as Appendix B.

## **5.0 ANALYTICAL RESULTS FOR SOIL**

At least two soil samples collected from each boring were analyzed by Kiff Analytical, LLC. of Davis, California (DHS ELAP certification #2236) for TPH-D by modified EPA Method 8015 (with silica gel cleanup), and TPH-G, BTEX, five oxygenates and lead scavengers by EPA Method 8260B. In each boring, a soil sample from the capillary zone (13.5 to 14.5-foot bgs) and the bottom of the boring (34 to 39.5-foot bgs) were selected for analysis. There was no evidence of soil contamination in any sample based on odors, staining or PID readings.

The analytical results are tabulated in Table Three, and the certified analytical report and chain of custody forms are included in Appendix C. No hydrocarbons, oxygenates or lead scavengers were detected in any of the soil samples analyzed.

## **6.0 ANALYTICAL RESULTS FOR GROUNDWATER**

The groundwater samples were analyzed by McCampbell Analytical for TPH-D and TPH-MO by modified EPA Method 8015 (with silica gel cleanup), and TPH-G, BTEX, five oxygenates and lead scavengers by EPA Method 8260B. The analytical results are tabulated in Table Four, and the certified analytical report and chain of custody forms are included in Appendix D.

The groundwater sample collected 25-29-foot bgs in boring BH-I contained 130 ppm TPH-D. No other compounds were detected in this sample, and no hydrocarbons were detected in the sample collected from 16-20-foot bgs from this borings.

The groundwater samples collected from 25-30-foot bgs and 31-35-foot bgs in boring BH-J contained MTBE at 1.6 ppb and 1.4 ppb, respectively. No other compounds were detected in either of these groundwater samples.

The groundwater sample collected from 20-25-foot bgs in boring BH-K contained 170 ppb TPH-D, 59 ppb MTBE and 28 ppb TAME. The laboratory noted that the hydrocarbons identified as TPH-D were higher-boiling than typical diesel fuel. No other compounds were detected, and no hydrocarbons were detected in the deeper water sample collected from 26-28-foot bgs in this boring.

The only hydrocarbon detected in a water sample from BH-L was 430 ppb TPH-D in the water sample collected from 38-40-foot bgs. The laboratory noted that the hydrocarbons identified as TPH-D were higher-boiling than typical diesel fuel. No other compounds were detected in this sample, and no hydrocarbons were detected in either of the shallower groundwater samples from this boring.





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The TPH-D concentrations detected in groundwater samples collected from 25-29-feet bgs in boring BH-I, 20-25-feet bgs in boring BH-K, and 38-40-feet bgs in boring BH-L exceeded Environmental Screening Levels (ESLs) for sites where groundwater is a current or potential source of drinking water as established by the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) in their “Screening for Environmental Concerns at Sites with Contaminated Soil and Drinking Water” document dated May 2008. It should be noted, however, that the laboratory noted that in two of the three samples the hydrocarbons were higher-boiling than typical diesel fuel. In addition, the MTBE concentration in the groundwater sample collected from 20-25-feet bgs in boring BH-K also exceeded the drinking water ESL. Only the TPH-D concentration in the groundwater sample collected from 38-40-feet bgs in boring BH-L exceeded the non-drinking water ESL.

## **7.0 CONCLUSIONS**

ASE concludes the following:

- No hydrocarbons or oxygenates were detected in any of the soil samples analyzed.
- TPH-D concentrations above drinking water ESLs were detected in three of the nine groundwater samples analyzed at concentrations up to 430 ppb. However, only one of these samples contained TPH-D concentrations above non-drinking water ESLs.
- The MTBE concentration of 59 ppb detected in the groundwater sample collected from 20-25-feet bgs in boring BH-K exceeded the drinking water ESL but not the non-drinking water ESL. No MTBE was detected in the deeper 26-28-feet bgs groundwater sample from this boring and none of the other samples from the other borings contained MTBE in excess of any ESL.

## **8.0 RECOMMENDATIONS**

ASE recommends that this site be considered for case closure based on the following:

- The source of the hydrocarbons, the USTs, piping and dispensers, no longer exist as a potential source of soil and groundwater pollution as they have been abandoned in-place by permit from the ACHCSA, and can no longer be used to store petroleum products.
- No domestic or irrigation wells are located within 1/4-mile downgradient of the site.
- The hydrocarbons concentrations in on-site groundwater have been decreasing and are limited in extent.
- Other than 430 ppb TPH-D in one of the groundwater samples, none of the hydrocarbon or oxygenate concentrations detected at the site exceed non-drinking water ESLs. ASE recommends using non-drinking water ESLs since no drinking water wells are located within 1/4-mile downgradient of the site.



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- No preferential pathways for the movement of groundwater were located on or downgradient of the site.

## 9.0 REPORT LIMITATIONS

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

This report 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 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.



A handwritten signature in black ink, appearing to read 'Robert E. Kitay'.

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

Attachments: Figures 1 and 2  
Tables One through Four  
Appendices A through D



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## **FIGURES**



NORTH



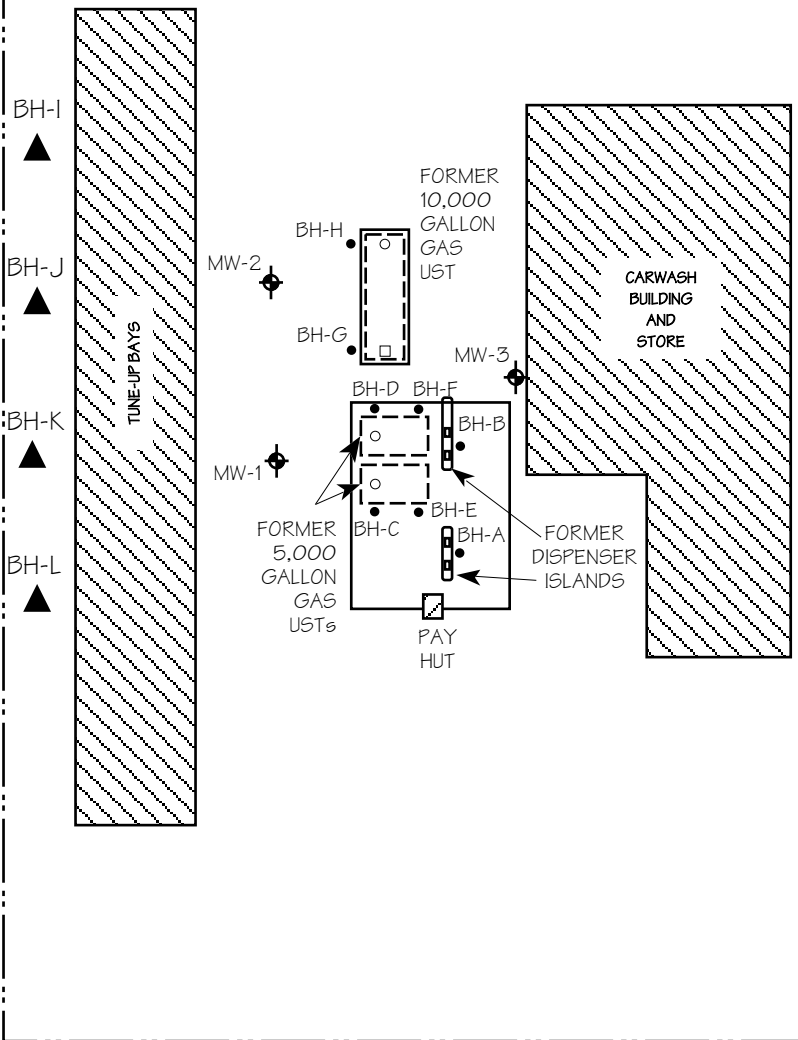
SITE LOCATION MAP	
HUTCH'S CARWASH 17945 HESPERIAN BOULEVARD SAN LORENZO, CA	
AQUA SCIENCE ENGINEERS, INC.	Figure 1



NORTH

SCALE  
1 - INCH = 40 - FEET

PROPERTY BOUNDARY



LEGEND

BH-H ● SOIL BORING, DRILLED BY ASE IN 12/98

MW-3 ⊕ MONITORING WELL, INSTALLED BY ASE IN 9/99

BH-I ▲ SOIL BORING DRILLED, BY ASE IN JULY 2010



SCALE IN FEET

**BORING &  
WELL LOCATION MAP**

HUTCH'S CARWASH  
17945 HESPERIAN BOULEVARD  
SAN LORENZO, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC.

FIGURE 2



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## **TABLES**

TABLE ONE  
Groundwater Elevation Data  
Hutch's Carwash  
17945 Hesperian Blvd., San Lorenzo, CA

Well ID	Date of Measurement	Top of Casing Elevation (Relative to Mean Sea Level)	Depth to Water (feet)	Groundwater Elevation (project data)
MW-1	10/6/99	35.00	15.58	19.42
	1/13/00		15.58	19.42
	4/12/00		14.75	20.25
	7/19/00		15.29	19.71
	10/25/00		15.56	19.44
	1/16/01		15.22	19.78
	4/4/01		15.05	19.95
	7/6/01		15.49	19.51
	10/1/01		15.78	19.22
	1/7/02		13.83	21.17
	4/2/02		14.83	20.17
	7/9/02		15.41	19.59
	10/1/02		15.70	19.3
	1/24/03		14.69	20.31
	7/25/03		15.41	19.59
	1/16/04		14.73	20.27
	7/14/04		15.54	19.46
	1/29/05		14.38	20.62
	7/22/05		15.23	19.77
	1/25/06		14.00	21.00
	6/10/06		15.13	19.87
1/26/07	15.30	19.70		
7/5/07	15.46	19.54		
1/30/08	14.32	20.68		
1/27/09	15.43	19.57		
12/8/09	15.57	19.43		
<b>5/21/10</b>	<b>15.06</b>	<b>19.94</b>		
MW-2	10/6/99	35.21	15.84	19.37
	1/13/00		15.78	19.43
	4/12/00		14.94	20.27
	7/19/00		15.54	19.67
	10/25/00		15.81	19.4
	1/16/01		15.50	19.71
	4/4/01		15.28	19.93
	7/6/01		15.73	19.48
	10/1/01		16.06	19.15
	1/7/02		14.08	21.13
	4/2/02		15.04	20.17
	7/9/02		15.66	19.55
	10/1/02		15.96	19.25
	1/24/03		14.90	20.31
	7/25/03		15.68	19.53
	1/16/04		14.93	20.28
	7/14/04		15.81	19.40
	1/29/05		14.90	20.31
	7/22/05		15.46	19.75
	1/25/06		14.16	21.05
	6/10/06		15.40	19.81
1/26/07	15.55	19.66		
7/5/07	15.72	19.49		
1/30/08	14.51	20.70		
1/27/09	15.67	19.54		
12/8/09	15.85	19.36		
<b>5/21/10</b>	<b>15.29</b>	<b>19.92</b>		



**TABLE ONE**  
**Groundwater Elevation Data**  
**Hutch's Carwash**  
**17945 Hesperian Blvd., San Lorenzo, CA**

Well ID	Date of Measurement	Top of Casing Elevation (Relative to Mean Sea Level)	Depth to Water (feet)	Groundwater Elevation (project data)
<b>MW-3</b>	10/6/99	34.47	14.98	19.49
	1/13/00		14.98	19.49
	4/12/00		14.09	20.38
	7/19/00		14.70	19.77
	10/25/00		14.98	19.49
	1/16/01		14.58	19.89
	4/4/01		14.43	20.04
	7/6/01		14.85	19.62
	10/1/01		15.21	19.26
	1/7/02		13.24	21.23
	4/2/02		14.20	20.27
	7/9/02		14.81	19.66
	10/1/02		15.12	19.35
	1/24/03		14.05	20.42
	7/25/03		14.82	19.65
	1/16/04		14.08	20.39
	7/14/04		14.94	19.53
	1/29/05		14.03	20.44
	7/22/05		14.59	19.88
	1/25/06		13.31	21.16
	6/10/06		14.53	19.94
	1/26/07		14.69	19.78
	7/5/07		14.88	19.59
1/30/08	13.64	20.83		
1/27/09	14.83	19.64		
12/8/09	14.98	19.49		
<b>5/21/10</b>	<b>14.44</b>	<b>20.03</b>		

TABLE TWO  
Summary of Analytical Results for GROUNDWATER Samples  
Hutch's Carwash  
17945 Hesperian Blvd., San Lorenzo, CA  
All results are in parts per billion (ppb)

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<b>MW-1</b>						
10/6/99	1,500	3.3	2.3	27	72	120
1/13/00	1,500	15	19	19	33	650
4/12/00	1,700	18	13	45	79	2,600
7/19/00	2,200	31	< 5.0	81	100	2,000
10/25/00	3,300	20	< 5.0	98	9.4	3,300
1/16/01	4,100	34	14	60	120	1,300
4/4/01	2,900	14	< 0.5	34	32	2,000
7/6/01	1,300	4.4	< 0.5	12	13	700
10/1/01	1,100	4.1	< 0.5	18	19	520
1/7/02	1,400	34	< 0.5	13	15	1,300
4/2/02	1,900	30	6.7	24	30	1,000
7/9/02	1,500	26	< 5.0	12	8.6	820
10/1/02	830	3.6	< 2.5	7.4	2.9	520
1/24/03	1,300	6.2	< 5.0	12	< 5.0	680
7/25/03	520	15	< 1.0	11	1.0	250
1/16/04	540	3.9	< 2.5	8.3	3.1	290
7/14/04	220	< 1.0	< 1.0	8.1	< 1.0	140
1/29/05	160	1.0	< 0.5	2.5	< 1.0	60
7/22/05	380	2.5	< 1.0	9.1	< 2.0	210
1/25/06	250	1.2	< 1.0	3.3	< 2.0	220
6/10/06	< 100	< 1.0	< 1.0	1.3	< 2.0	180
1/26/07	< 50	< 0.5	< 0.5	< 0.5	< 1.0	18
7/5/07	< 50	< 0.5	< 0.5	< 0.5	< 1.0	37
1/30/08	< 200	< 2.0	< 2.0	< 2.0	< 4.0	290
1/27/09	140	< 0.5	< 0.5	< 0.5	< 0.5	170
12/8/09	170	< 0.5	< 0.5	< 0.5	< 0.5	150
5/20/10	69	< 0.5	< 0.5	< 0.5	< 0.5	33

**TABLE TWO**  
**Summary of Analytical Results for GROUNDWATER Samples**  
**Hutch's Carwash**  
**17945 Hesperian Blvd., San Lorenzo, CA**  
**All results are in parts per billion (ppb)**

Well ID & Dates Sampled	TPH-G	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE
<b>MW-2</b>						
10/6/99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	18
1/13/00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	16
4/12/00	< 100	< 1.0	< 1.0	< 1.0	< 1.0	240
7/19/00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
10/25/00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	6
1/16/01	< 50	< 0.5	< 0.5	< 0.5	< 0.5	8
4/4/01	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
7/6/01	< 50	< 0.5	< 0.5	< 0.5	< 0.5	6
10/1/01	< 50	< 0.5	< 0.5	< 0.5	< 0.5	21
1/7/02	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
4/2/02	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
7/9/02	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
10/1/02	No longer sampled					
<b>MW-3</b>						
10/6/99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
1/13/00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
4/12/00	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
7/19/00	< 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
1/16/01	No longer sampled					
ESL (DW)	100	1	40	30	20	5
ESL (NDW)	210	46	130	43	100	1,800

Notes:

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

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

\*\*\* Sample contains a discrete peak in addition to gasoline

ESL = Environmental screening level presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (May 2008)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

DW = Groundwater is considered a current or potential source of drinking water

NDW = Groundwater is not considered a current or potential source of drinking water

Most current data is in **Bold**

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

### TABLE THREE

Summary of Analytical Results of Soil Samples  
 Petroleum Hydrocarbons, Fuel Oxygenates and Lead Scavengers  
 Hutch's Carwash, 17945 Hesperian Blvd, San Lorenzo, California  
 Results are in parts per million (ppm)

Boring	Sample Depth (ft)	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	TAME	DIPE	ETBE	TBA	EDB	1,2- DCA
BH-I	14.5	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	39.5	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
BH-J	14.0	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	34.0	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
BH-K	13.5	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	39.5	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
BH-L	14.5	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	39.5	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Notes:

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

Detectable concentrations in **BOLD**

TABLE FOUR

Summary of Analytical Results of Groundwater Samples  
 Petroleum Hydrocarbons, Fuel Oxygenates and Lead Scavengers  
 Hutch's Carwash, 17945 Hesperian Blvd, San Lorenzo, California  
 Results are in parts per billion (ppb)

Boring	Sample Depth (ft)	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	TAME	DIPE	ETBE	TBA	EDB	1,2-DCA
BH-I	16-20	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
	25-29	< 50	<b>130</b>	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
BH-J	25-30	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	<b>1.6</b>	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
	31-35	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	<b>1.4</b>	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
BH-K	20-25	< 50	<b>170*</b>	< 0.50	< 0.50	< 0.50	< 0.50	<b>59</b>	<b>28</b>	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
	26-28	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
BH-L	20-24	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
	25-28	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
	38-40	< 50	<b>430*</b>	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
ESL (DW)		100	100	1.0	40	30	20	5	NE	NE	NE	12	0.05	0.5
ESL (NDW)		210	210	46.0	130	130	100	1800	NE	NE	NE	18000	150	200

Notes:

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

Detectable concentrations in **BOLD**

\* = Hydrocarbons are higher-boiling than typical diesel fuel.

ESL = Environmental Screening Levels presented in the "Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) dated May 2008 for site where groundwater is a current or potential source of drinking water (DW) or not a potential source of drinking water (NDW).



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## **APPENDIX A**

### **Drilling Permit**

# Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street  
Hayward, CA 94544-1395  
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 07/07/2010 By jamesy

Permit Numbers: W2010-0497  
Permits Valid from 07/20/2010 to 08/31/2010

Application Id: 1278466352530  
Site Location: 17945 Hesperian Blvd  
Project Start Date: 07/20/2010  
Assigned Inspector: Contact John Shouldice at (510) 670-5424 or johns@acpwa.org

City of Project Site: San Lorenzo

Completion Date: 08/31/2010

Applicant: Aqua Science Engineers - Robert Kitay  
55 Oak Court, Suite 220, Danville, CA 94526  
Property Owner: Danny Soroudi  
9595 Wilshire Boulevard, Suite 501, Beverly Hills, CA 90212  
Client: Kirk Hutchinson  
6355 McCarran Blvd, Reno, NV 89509

Phone: 925-820-9391

Phone: --

Phone: --

Receipt Number: WR2010-0239  
Payer Name : Aqua Science Engineers  
Total Due: \$265.00  
Total Amount Paid: \$265.00  
Paid By: VISA  
**PAID IN FULL**

## Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 4 Boreholes  
Driller: Vironex - Lic #: 705927 - Method: DP

**Work Total: \$265.00**

### Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2010-0497	07/07/2010	10/18/2010	4	2.00 in.	25.00 ft

### Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Applicant shall contact John Shouldice for an inspection time at 510-670-5424 at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
5. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.



## **Alameda County Public Works Agency - Water Resources Well Permit**

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

7. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

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## **APPENDIX B**

### Boring Logs

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

BORING: BH-I

Project Name: Hutch's Carwash	Project Location: 17945 Hesperian Blvd, San Lorenzo, CA	Page 1 of 2
Driller: Vironex	Type of Rig: Geoprobe 6600	Size of Drill: 2.0" Diameter
Logged By: Robert E. Kitay, P.G.	Date Drilled: July 20, 2010	Checked By: Robert E. Kitay, P.G.

<b>WATER AND WELL DATA</b>	Total Depth of Well Completed: NA
Depth of Water First Encountered: 16'	Well Screen Type and Diameter: NA
Static Depth of Water in Well: NA	Well Screen Slot Size: NA
Total Depth of Boring: 40'	Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler

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								Asphalt	
0-5					0			Silty CLAY (CH); black; stiff; dry; 85% clay; 15% silt; high plasticity; very low estimated K; no odor	
5-10					0			Clayey SILT (ML); dark yellow brown; stiff; dry; 80% silt; 20% clay; moderate plasticity; low estimated K; no odor	
10-15					0			Silty SAND (SM); yellow brown; medium dense; dry; 70% fine sand; 25% silt; 5% clay; medium estimated K; no odor 90% fine sand; 10% silt at 10'	
15-20					0			Clayey SILT (ML); yellow brown; stiff; wet; 60% silt; 30% clay; 10% fine sand; high plasticity; low estimated K; no odor	
20-25					0			Sandy SILT (ML); yellow brown; soft; wet; 75-80% silt; 20-25% fine sand; non-plastic; low estimated K; no odor	
25-30					0			Sandy CLAY (CH); dark yellow brown; very stiff; dry; 70% clay; 20% fine sand; 10% silt; high plasticity; very low estimated K; no odor	
30-35					0			Silty SAND (SM); yellow brown; loose; wet; 80-85% fine sand; 15-20% silt; non-plastic; high estimated K; no odor	

Portland Cement



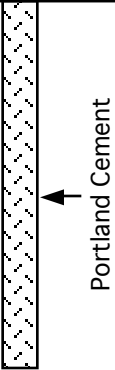




**SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS**

BORING: BH-I

Project Name: Hutch's Carwash

Project Location: 17945 Hesperian Blvd, San Lorenzo, CA

Page 2 of 2

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		standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
35					0			Sandy SILT (ML); yellow brown; very stiff; wet; 70% silt; 20% fine sand; 10% clay; moderate plasticity; low estimated K; no odor	
40					0				
45								End of boring at 40'	
50									
55									
60									
65									

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

BORING: BH-J

Project Name: Hutch's Carwash	Project Location: 17945 Hesperian Blvd, San Lorenzo, CA	Page 1 of 2
Driller: Vironex	Type of Rig: Geoprobe 6600	Size of Drill: 2.0" Diameter
Logged By: Robert E. Kitay, P.G.	Date Drilled: July 20, 2010	Checked By: Robert E. Kitay, P.G.

<b>WATER AND WELL DATA</b>	Total Depth of Well Completed: NA
Depth of Water First Encountered: 14.5'	Well Screen Type and Diameter: NA
Static Depth of Water in Well: NA	Well Screen Slot Size: NA
Total Depth of Boring: 34.5'	Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler

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								Asphalt	
5					0			Clayey SILT (ML); black; medium stiff; dry; 80% silt; 20% clay; moderate plasticity; low estimated K; no odor  red brown; 90% silt; 10% clay at 4'	
10		← Portland Cement			0			Silty SAND (SM); yellow brown; medium dense; dry; 60% fine sand; 40% silt; non-plastic; low estimated K; no odor  moist at 12.5' wet at 14.5'	
15					0			Sandy SILT (ML); yellow brown; medium stiff; wet; 70-80% silt; 20-30% fine sand; trace clay; non-plastic; low estimated K; no odor  < Water sample attempt from 10-20' - No water after 1 hr >  < Water sample attempt from 20-25' - No water after 15 min >	
20					0			Silty SAND (SM); yellow brown; medium dense; wet; 60% fine sand; 40% silt; trace clay; low plasticity; low estimated K; no odor	
25					0			Sandy SILT (ML); yellow brown; stiff; wet; 70% silt; 20% fine sand; 10% clay; low plasticity; low estimated K; no odor	
30					0				



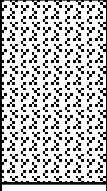
**SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS**

BORING: BH-J

Project Name: Hutch's Carwash

Project Location: 17945 Hesperian Blvd, San Lorenzo, CA

Page 2 of 2

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
35		Portland Cement			0			Silty SAND (SM); yellow brown; dense; wet; 60-70% fine sand; 30-40% silt; non-plastic; medium estimated K; no odor
40								Refusal - End of boring at 34.5'
45								
50								
55								
60								
65								

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

BORING: BH-K

Project Name: Hutch's Carwash		Project Location: 17945 Hesperian Blvd, San Lorenzo, CA		Page 1 of 2
Driller: Vironex		Type of Rig: Geoprobe 6600	Size of Drill: 2.0" Diameter	
Logged By: Robert E. Kitay, P.G.		Date Drilled: July 20, 2010		Checked By: Robert E. Kitay, P.G.

<b>WATER AND WELL DATA</b>		Total Depth of Well Completed: NA
Depth of Water First Encountered: 14'		Well Screen Type and Diameter: NA
Static Depth of Water in Well: NA		Well Screen Slot Size: NA
Total Depth of Boring: 40'		Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler

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								Asphalt	
0 - 10					0		0	Clayey SILT (ML); black; medium stiff; dry; 80% silt; 20% clay; low plasticity; low estimated K; no odor	
10 - 14					0		0	Silty SAND (SM); yellow brown; medium dense; dry; 90% fine sand; 10% silt; medium estimated K; no odor	
14					0		14	wet at 14'	
14 - 20					0		20	Clayey SILT (MH); yellow brown; stiff; wet; 60% silt; 30% clay; 10% fine sand; high plasticity; low estimated K; no odor	
20 - 25					0		25	Silty SAND (SM); yellow brown; soft; wet; 90% fine sand; 10% silt; non-plastic; medium estimated K; no odor	
25 - 28					0		28	Silty CLAY (CH); yellow brown; stiff; wet; 70% clay; 30% silt; high plasticity; very low estimated K; no odor	
28 - 30					0		30	SAND (SP); grey; loose; wet; 100% fine to medium sand; non-plastic; high estimated K; no odor	
30 - 33					0		33	Clayey SILT (MH); yellow brown; stiff; moist; 65% silt; 30% clay; 5% fine sand; high plasticity; low estimated K; no odor	

Portland Cement








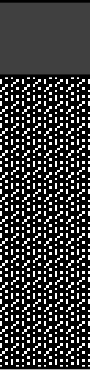
**SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS**

BORING: BH-K

Project Name: Hutch's Carwash

Project Location: 17945 Hesperian Blvd, San Lorenzo, CA

Page 2 of 2

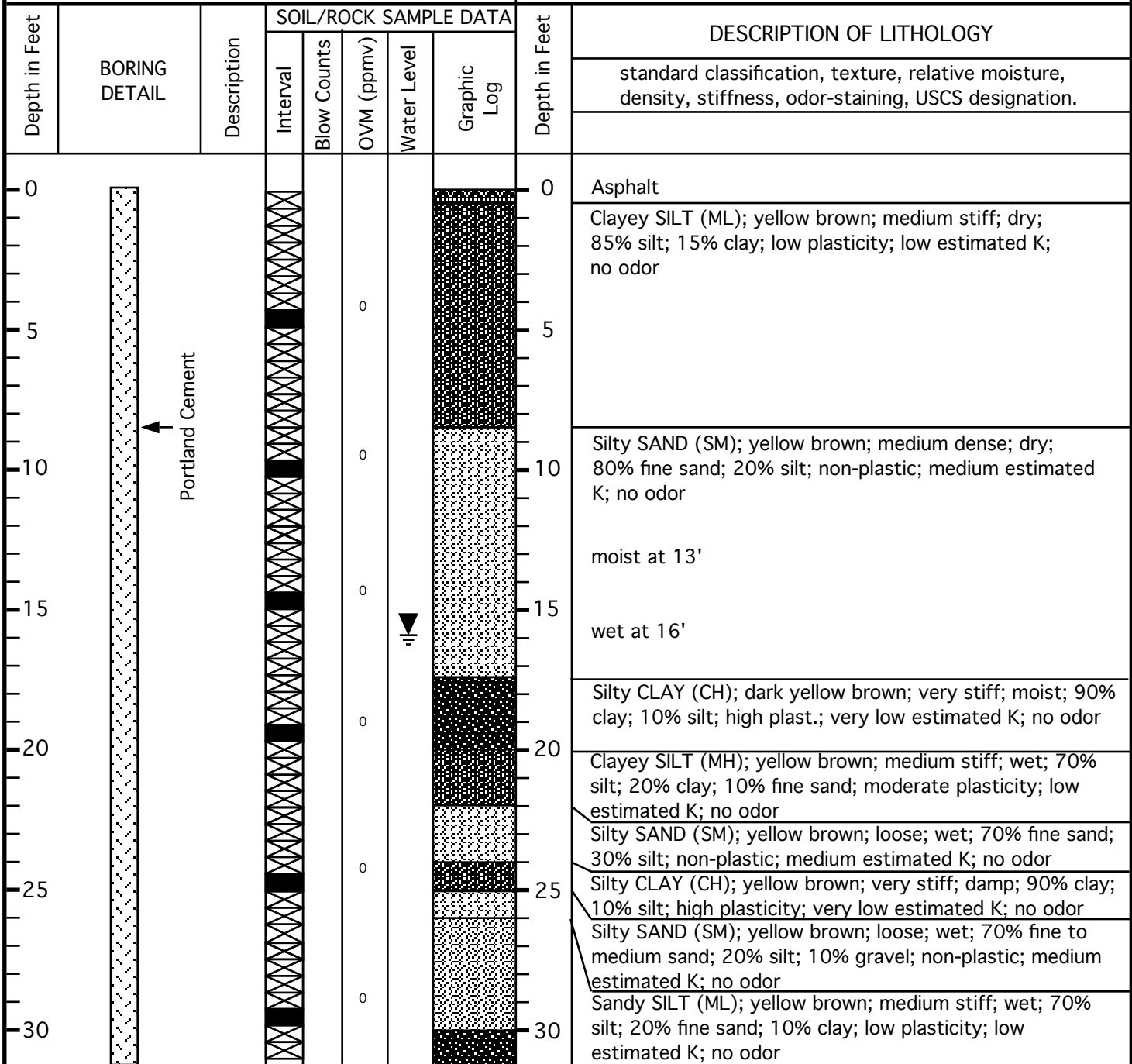
Depth in Feet	BORING DETAIL	Description	SOIL/ROCK SAMPLE DATA					Depth in Feet	DESCRIPTION OF LITHOLOGY
			Interval	Blow Counts	OVM (ppmv)	Water Level	Graphic Log		standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
35	 <p>Portland Cement</p>						35	CLAY (CH); yellow brown; very stiff; damp; 100% clay; high plasticity; very low estimated K; no odor	
40								40	Clayey SILT (MH); yellow brown; stiff; damp; 70% silt; 25% clay; 5% fine sand; high plasticity; very low estimated K; no odor (minor caliche)
45							45	End of boring at 40'	
50							50		
55							55		
60							60		
65							65		

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

BORING: BH-L

Project Name: Hutch's Carwash	Project Location: 17945 Hesperian Blvd, San Lorenzo, CA	Page 1 of 2
Driller: Vironex	Type of Rig: Geoprobe 6600	Size of Drill: 2.0" Diameter
Logged By: Robert E. Kitay, P.G.	Date Drilled: July 21, 2010	Checked By: Robert E. Kitay, P.G.

<b>WATER AND WELL DATA</b>	Total Depth of Well Completed: NA
Depth of Water First Encountered: 14'	Well Screen Type and Diameter: NA
Static Depth of Water in Well: NA	Well Screen Slot Size: NA
Total Depth of Boring: 40'	Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler





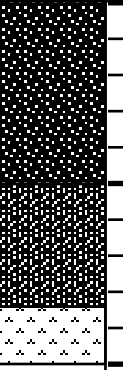
**SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS**

BORING: BH-L

Project Name: Hutch's Carwash

Project Location: 17945 Hesperian Blvd, San Lorenzo, CA

Page 2 of 2

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		standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.				
35	 <p>Portland Cement</p>				0			Silty CLAY (CH); yellow brown; very stiff; damp; 70% clay; 30% silt; high plasticity; very low estimated K; no odor					
35													Clayey SILT (ML); yellow brown; stiff; damp; 70% silt; 20% clay; 10% fine sand; moderate plasticity; low estimated K; no odor
40											0		
40								End of boring at 40'					
45													
50													
55													
60													
65													



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## **APPENDIX C**

**Certified Analytical Report  
and  
Chain of Custody Documentation  
For Soil Samples**



## Laboratory Results

Robert Kitay  
Aqua Science Engineers, Inc.  
55 Oak Court, Suite 220  
Danville, CA 94526

Subject : 8 Soil Samples  
Project Name : Hutch's Carwash  
Project Number :

Dear Mr. Kitay,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC standard. All soil samples are reported on a total weight (wet weight) basis unless noted otherwise in the case narrative. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-I 14.5'**

Matrix : Soil

Lab Number : 73869-03

Sample Date :07/20/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:45
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:45
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:45
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:45
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:45
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:45
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:45
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:45
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:45
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/24/10 10:45
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:45
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:45
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	07/24/10 10:45
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	07/24/10 10:45
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	07/27/10 16:35
TPH as Motor Oil (Silica Gel)	< 10	10	mg/Kg	M EPA 8015	07/27/10 16:35
Octacosane (Silica Gel Surr)	104		% Recovery	M EPA 8015	07/27/10 16:35

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-I 39.5'**

Matrix : Soil

Lab Number : 73869-08

Sample Date :07/20/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:07
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:07
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:07
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:07
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:07
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:07
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:07
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:07
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:07
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/24/10 10:07
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:07
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 10:07
1,2-Dichloroethane-d4 (Surr)	99.7		% Recovery	EPA 8260B	07/24/10 10:07
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	07/24/10 10:07
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	07/27/10 17:11
TPH as Motor Oil (Silica Gel)	< 10	10	mg/Kg	M EPA 8015	07/27/10 17:11
Octacosane (Silica Gel Surr)	102		% Recovery	M EPA 8015	07/27/10 17:11

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-J 14.0'**

Matrix : Soil

Lab Number : 73869-11

Sample Date :07/20/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:54
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:54
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:54
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:54
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:54
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:54
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:54
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:54
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:54
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/24/10 12:54
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:54
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:54
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	07/24/10 12:54
Toluene - d8 (Surr)	99.4		% Recovery	EPA 8260B	07/24/10 12:54
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	07/27/10 14:55
TPH as Motor Oil (Silica Gel)	< 10	10	mg/Kg	M EPA 8015	07/27/10 14:55
Octacosane (Silica Gel Surr)	99.7		% Recovery	M EPA 8015	07/27/10 14:55



Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-J 34.0'**

Matrix : Soil

Lab Number : 73869-15

Sample Date :07/20/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 01:53
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 01:53
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 01:53
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 01:53
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 01:53
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 01:53
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 01:53
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 01:53
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 01:53
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/24/10 01:53
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 01:53
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 01:53
1,2-Dichloroethane-d4 (Surr)	99.6		% Recovery	EPA 8260B	07/24/10 01:53
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	07/24/10 01:53
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	07/27/10 19:20
TPH as Motor Oil (Silica Gel)	< 10	10	mg/Kg	M EPA 8015	07/27/10 19:20
Octacosane (Silica Gel Surr)	89.9		% Recovery	M EPA 8015	07/27/10 19:20

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-K 13.5'**

Matrix : Soil

Lab Number : 73869-18

Sample Date :07/20/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:28
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:28
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:28
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:28
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:28
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:28
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:28
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:28
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:28
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/24/10 12:28
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:28
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:28
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	07/24/10 12:28
Toluene - d8 (Surr)	99.4		% Recovery	EPA 8260B	07/24/10 12:28
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	07/28/10 15:21
TPH as Motor Oil (Silica Gel)	< 10	10	mg/Kg	M EPA 8015	07/28/10 15:21
Octacosane (Silica Gel Surr)	92.6		% Recovery	M EPA 8015	07/28/10 15:21

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-K 39.5'**

Matrix : Soil

Lab Number : 73869-23

Sample Date :07/20/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:22
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:22
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:22
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:22
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:22
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:22
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:22
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:22
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:22
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/24/10 12:22
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:22
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 12:22
1,2-Dichloroethane-d4 (Surr)	99.2		% Recovery	EPA 8260B	07/24/10 12:22
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	07/24/10 12:22
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	07/28/10 01:13
TPH as Motor Oil (Silica Gel)	< 10	10	mg/Kg	M EPA 8015	07/28/10 01:13
Octacosane (Silica Gel Surr)	89.2		% Recovery	M EPA 8015	07/28/10 01:13

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-L 14.5'**

Matrix : Soil

Lab Number : 73869-26

Sample Date :07/21/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 11:14
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 11:14
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 11:14
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 11:14
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 11:14
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 11:14
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 11:14
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 11:14
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 11:14
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/24/10 11:14
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 11:14
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/10 11:14
1,2-Dichloroethane-d4 (Surr)	99.0		% Recovery	EPA 8260B	07/24/10 11:14
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	07/24/10 11:14
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	07/28/10 09:38
TPH as Motor Oil (Silica Gel)	< 10	10	mg/Kg	M EPA 8015	07/28/10 09:38
Octacosane (Silica Gel Surr)	112		% Recovery	M EPA 8015	07/28/10 09:38

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-L 39.5'**

Matrix : Soil

Lab Number : 73869-31

Sample Date :07/21/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/28/10 00:22
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/28/10 00:22
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/28/10 00:22
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/28/10 00:22
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/28/10 00:22
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/28/10 00:22
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/28/10 00:22
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/28/10 00:22
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/28/10 00:22
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/28/10 00:22
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/28/10 00:22
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/28/10 00:22
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	07/28/10 00:22
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	07/28/10 00:22
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	07/27/10 16:01
TPH as Motor Oil (Silica Gel)	< 10	10	mg/Kg	M EPA 8015	07/27/10 16:01
Octacosane (Silica Gel Surr)	98.8		% Recovery	M EPA 8015	07/27/10 16:01

**QC Report : Method Blank Data**Project Name : **Hutch's Carwash**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 0.99	0.99	mg/Kg	M EPA 8015	07/27/2010
TPH as Motor Oil (Silica Gel)	< 9.9	9.9	mg/Kg	M EPA 8015	07/27/2010
Octacosane (Silica Gel Surr)	85.8		%	M EPA 8015	07/27/2010
TPH as Diesel (Silica Gel)	< 1.0	1.0	mg/Kg	M EPA 8015	07/28/2010
TPH as Motor Oil (Silica Gel)	< 10	10	mg/Kg	M EPA 8015	07/28/2010
Octacosane (Silica Gel Surr)	82.8		%	M EPA 8015	07/28/2010
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/2010
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/2010
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/2010
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/2010
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/2010
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/2010
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/2010
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/2010
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/2010
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/24/2010
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/2010
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/24/2010
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	07/24/2010
Toluene - d8 (Surr)	100		%	EPA 8260B	07/24/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/27/2010
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/27/2010
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/27/2010
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/27/2010
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/27/2010
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/27/2010
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/27/2010
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/27/2010
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/27/2010
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	07/27/2010
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/27/2010
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	07/27/2010
1,2-Dichloroethane-d4 (Surr)	103		%	EPA 8260B	07/27/2010
Toluene - d8 (Surr)	100		%	EPA 8260B	07/27/2010

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Hutch's Carwash**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH-D (Si Gel)	73884-02	1.6	19.9	19.8	19.1	19.4	mg/Kg	M EPA 8015	7/27/10	88.3	90.2	2.16	60-140	25
TPH-D (Si Gel)	73886-06	<1.0	19.9	19.8	18.4	18.4	mg/Kg	M EPA 8015	7/28/10	92.2	93.1	0.983	60-140	25
1,2-Dibromoethane	73869-15	<0.0050	0.0379	0.0382	0.0335	0.0320	mg/Kg	EPA 8260B	7/24/10	88.5	83.6	5.71	67.2-121	25
1,2-Dichloroethane	73869-15	<0.0050	0.0379	0.0382	0.0335	0.0322	mg/Kg	EPA 8260B	7/24/10	88.4	84.2	4.93	64.0-124	25
Benzene	73869-15	<0.0050	0.0379	0.0382	0.0349	0.0344	mg/Kg	EPA 8260B	7/24/10	92.2	90.0	2.40	67.9-120	25
Diisopropyl ether	73869-15	<0.0050	0.0380	0.0383	0.0342	0.0338	mg/Kg	EPA 8260B	7/24/10	90.1	88.1	2.24	65.2-122	25
Ethyl-tert-butyl ether	73869-15	<0.0050	0.0379	0.0383	0.0327	0.0322	mg/Kg	EPA 8260B	7/24/10	86.2	84.0	2.60	64.6-122	25
Ethylbenzene	73869-15	<0.0050	0.0379	0.0382	0.0352	0.0350	mg/Kg	EPA 8260B	7/24/10	93.0	91.6	1.46	65.5-127	25
Methyl-t-butyl ether	73869-15	<0.0050	0.0379	0.0382	0.0317	0.0309	mg/Kg	EPA 8260B	7/24/10	83.8	80.9	3.44	57.0-122	25

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Hutch's Carwash**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
P + M Xylene	73869-15	<0.0050	0.0379	0.0382	0.0348	0.0350	mg/Kg	EPA 8260B	7/24/10	91.8	91.4	0.426	62.5-124	25
Tert-Butanol	73869-15	<0.0050	0.189	0.191	0.169	0.178	mg/Kg	EPA 8260B	7/24/10	89.3	93.1	4.14	64.3-122	25
Tert-amyl-methyl ether	73869-15	<0.0050	0.0381	0.0384	0.0334	0.0330	mg/Kg	EPA 8260B	7/24/10	87.8	86.0	2.10	64.9-122	25
Toluene	73869-15	<0.0050	0.0379	0.0382	0.0350	0.0347	mg/Kg	EPA 8260B	7/24/10	92.3	90.7	1.72	65.7-120	25
1,2-Dibromoethane	73869-31	<0.0050	0.0400	0.0394	0.0385	0.0405	mg/Kg	EPA 8260B	7/28/10	96.4	103	6.36	67.2-121	25
1,2-Dichloroethane	73869-31	<0.0050	0.0400	0.0394	0.0360	0.0372	mg/Kg	EPA 8260B	7/28/10	90.0	94.4	4.70	64.0-124	25
Benzene	73869-31	<0.0050	0.0400	0.0394	0.0368	0.0375	mg/Kg	EPA 8260B	7/28/10	91.9	95.0	3.33	67.9-120	25
Diisopropyl ether	73869-31	<0.0050	0.0401	0.0396	0.0390	0.0398	mg/Kg	EPA 8260B	7/28/10	97.3	100	3.27	65.2-122	25
Ethyl-tert-butyl ether	73869-31	<0.0050	0.0401	0.0395	0.0408	0.0400	mg/Kg	EPA 8260B	7/28/10	102	101	0.601	64.6-122	25



## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Hutch's Carwash**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Ethylbenzene	73869-31	<0.0050	0.0400	0.0394	0.0380	0.0386	mg/Kg	EPA 8260B	7/28/10	94.9	97.8	3.01	65.5-127	25
Methyl-t-butyl ether	73869-31	<0.0050	0.0400	0.0394	0.0380	0.0363	mg/Kg	EPA 8260B	7/28/10	95.1	92.0	3.36	57.0-122	25
P + M Xylene	73869-31	<0.0050	0.0400	0.0394	0.0383	0.0382	mg/Kg	EPA 8260B	7/28/10	95.8	96.7	0.920	62.5-124	25
Tert-Butanol	73869-31	<0.0050	0.200	0.197	0.192	0.195	mg/Kg	EPA 8260B	7/28/10	96.2	98.7	2.62	64.3-122	25
Tert-amyl-methyl ether	73869-31	<0.0050	0.0402	0.0397	0.0394	0.0397	mg/Kg	EPA 8260B	7/28/10	97.8	100	2.30	64.9-122	25
Toluene	73869-31	<0.0050	0.0400	0.0394	0.0380	0.0380	mg/Kg	EPA 8260B	7/28/10	94.9	96.4	1.54	65.7-120	25

**QC Report : Laboratory Control Sample (LCS)**Project Name : **Hutch's Carwash**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH-D (Si Gel)	19.6	mg/Kg	M EPA 8015	7/27/10	90.3	70-130
TPH-D (Si Gel)	19.6	mg/Kg	M EPA 8015	7/28/10	91.0	70-130
1,2-Dibromoethane	0.0399	mg/Kg	EPA 8260B	7/24/10	86.5	67.2-121
1,2-Dichloroethane	0.0399	mg/Kg	EPA 8260B	7/24/10	86.7	64.0-124
Benzene	0.0399	mg/Kg	EPA 8260B	7/24/10	90.6	67.9-120
Diisopropyl ether	0.0400	mg/Kg	EPA 8260B	7/24/10	89.6	65.2-122
Ethyl-tert-butyl ether	0.0400	mg/Kg	EPA 8260B	7/24/10	84.6	64.6-122
Ethylbenzene	0.0399	mg/Kg	EPA 8260B	7/24/10	92.9	65.5-127
Methyl-t-butyl ether	0.0399	mg/Kg	EPA 8260B	7/24/10	81.3	57.0-122
P + M Xylene	0.0399	mg/Kg	EPA 8260B	7/24/10	92.7	62.5-124
Tert-Butanol	0.200	mg/Kg	EPA 8260B	7/24/10	91.0	64.3-122
Tert-amyl-methyl ether	0.0402	mg/Kg	EPA 8260B	7/24/10	86.0	64.9-122
Toluene	0.0399	mg/Kg	EPA 8260B	7/24/10	91.8	65.7-120
1,2-Dibromoethane	0.0396	mg/Kg	EPA 8260B	7/27/10	96.5	67.2-121
1,2-Dichloroethane	0.0396	mg/Kg	EPA 8260B	7/27/10	90.1	64.0-124
Benzene	0.0396	mg/Kg	EPA 8260B	7/27/10	88.7	67.9-120
Diisopropyl ether	0.0397	mg/Kg	EPA 8260B	7/27/10	93.7	65.2-122
Ethyl-tert-butyl ether	0.0397	mg/Kg	EPA 8260B	7/27/10	94.6	64.6-122
Ethylbenzene	0.0396	mg/Kg	EPA 8260B	7/27/10	90.8	65.5-127

**QC Report : Laboratory Control Sample (LCS)**Project Name : **Hutch's Carwash**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Methyl-t-butyl ether	0.0396	mg/Kg	EPA 8260B	7/27/10	86.0	57.0-122
P + M Xylene	0.0396	mg/Kg	EPA 8260B	7/27/10	90.8	62.5-124
Tert-Butanol	0.198	mg/Kg	EPA 8260B	7/27/10	86.6	64.3-122
Tert-amyl-methyl ether	0.0398	mg/Kg	EPA 8260B	7/27/10	93.3	64.9-122
Toluene	0.0396	mg/Kg	EPA 8260B	7/27/10	90.5	65.7-120

# Chain of Custody

73869

PAGE 1

SAMPLER (SIGNATURE)  
*R. E. Kity*

PROJECT NAME Hutch's Carwash JOB NO. \_\_\_\_\_  
 ADDRESS 17945 Hesperian Blvd, San Lorenzo, CA

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	QUANTITY	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015) <i>w/ Silicon</i>	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	CAM 17 METALS (EPA 6010+7000)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	Pb (TOTAL or DISSOLVED) (EPA 6010)	PESTICIDES (EPA 8081)	FUEL OXYGENATES (EPA 8260)	PURGEABLE HALOCARBONS (EPA 601/8010)	TPH-G/BTEX/5 OXYS / 16 <i>µmV</i> (EPA METHOD 8260)	MULTI-RANGE HYDROCARBONS WITH SILICA GEL CLEANUP (EPA 8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	LUFT METALS (5) (EPA 6010+7000)	COMPOSITE 4:1	EDF	HOLD		
																					BH-I 4.5'	7-20-10
BH-I 9.5'		840																				X
BH-I 14.5'		850					X															X
BH-I 19.5'		900																				X
BH-I 24.5'		924																				X
BH-I 29.5'		940																				X
BH-I 34.5'		950																				X
BH-I 39.5'		1000					X															X
BH-J 4.5'		1040																				X
BH-J 9.5'		1050																				X
BH-J 14.0'		1050					X															X

01  
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11

RELINQUISHED BY:  
*R. E. Kity*  
 (signature) (time)  
 Robert E. Kity  
 (printed name) (date)  
 Company-ASE, INC.

RECEIVED BY:  
 (signature) (time)  
 (printed name) (date)  
 Company-

RELINQUISHED BY:  
 (signature) (time)  
 (printed name) (date)  
 Company-

RECEIVED BY LABORATORY:  
*E. Galtress* 1320  
 (signature) (time)  
 E. Galtress 072210  
 (printed name) (date)  
 Company- *will Analytical*

COMMENTS:  
 TURN AROUND TIME  
 STANDARD 24Hr 48Hr 72Hr  
 OTHER:

# Chain of Custody

73869

SAMPLER (SIGNATURE)

PROJECT NAME Hutch's Carwash

JOB NO. \_\_\_\_\_

ADDRESS 17945 Hesperian Blvd, San Lorenzo, CA

*R. E. Kity*

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	QUANTITY	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-DIESEL w/Silica (EPA 3510/8015) <i>cal cleanup</i>	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	CAM 17 METALS (EPA 6010+7000)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	Pb (TOTAL or DISSOLVED) (EPA 6010)	PESTICIDES (EPA 8081)	FUEL OXYGENATES (EPA 8260)	PURGEABLE HALOCARBONS (EPA 601/8010)	TPH-G/BTEX/5 OXYS / <i>16 seal</i> (EPA METHOD 8260)	MULT-RANGE HYDROCARBONS WITH SILICA GEL CLEANUP (EPA 8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	LUFT METALS (6) (EPA 6010+7000)	COMPOSITE 4:1	EDF	HOLD			
																					BH-J 19.5'	7-20-10	1102
BH-J 24.5'		1225																				X	13
BH-J 29.5'		1245																				X	14
BH-J 34.0'		1355				X								X						X			15
BH-K 4.5'		1440																				X	16
BH-K 9.5'		1455																				X	17
BH-K 13.5'		1500				X								X						X			18
BH-K 19.5'		1516																				X	19
BH-K 24.5'		1610																				X	20
BH-K 29.5'		1700																				X	21
BH-K 34.5'		1706																				X	22

RELINQUISHED BY:

RECEIVED BY:

RELINQUISHED BY:

RECEIVED BY LABORATORY:

COMMENTS:

*R. E. Kity*  
(signature) (time)

(signature) (time)

(signature) (time)

*EA* 1320  
(signature) (time)

Robert E. Kity  
(printed name) (date)

(printed name) (date)

(printed name) (date)

*E. address* 072210  
(printed name) (date)

TURN AROUND TIME  
 STANDARD 24Hr 48Hr 72Hr

Company-ASE, INC.

Company-

Company-

Company- *Kity Analytical*

OTHER:

# Chain of Custody

73869

SAMPLER (SIGNATURE)

PROJECT NAME Hutch's Carwash

JOB NO. \_\_\_\_\_

ADDRESS 17945 Hesperian Blvd, San Lorenzo, CA

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	QUANTITY	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-DIESEL w/Silica Gel (EPA 3510/8015) <i>Cleaning</i>	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	CAM 17 METALS (EPA 6010+7000)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	Pb (TOTAL or DISSOLVED) (EPA 6010)	PESTICIDES (EPA 8081)	FUEL OXYGENATES (EPA 8260)	PURGEABLE HALOCARBONS (EPA 601/8010)	TPH-G/BTEX/5 OXYS /fb <sub>5</sub> sw (EPA METHOD 8260)	MULT-RANGE HYDROCARBONS WITH SILICA GEL CLEANUP (EPA 8015)	VOLATILE ORGANICS (EPA 624/8240/8260)	LIFT METALS (5) (EPA 6010+7000)	COMPOSITE 4:1	EDF	HOLD		
																					BH-K 39.5	7-20-10
BH-L 5.0'	7-21-10	8:35																			X	23
BH-L 9.5'		8:40																			X	24
BH-L 14.5'		8:46				X								X							X	25
BH-L 19.5'		8:54																			X	26
BH-L 24.5'		9:13																			X	27
BH-L 29.5'		9:26																			X	28
BH-L 34.5'		9:40																			X	29
BH-L 39.5'		9:50				X								X							X	30

RELINQUISHED BY:

RECEIVED BY:

RELINQUISHED BY:

RECEIVED BY LABORATORY:

COMMENTS:

*Robert E. Kitz*  
 (signature) (time)

*[Signature]*  
 (signature) (time)

*[Signature]*  
 (signature) (time)

*[Signature]* 1320  
 (signature) (time)

Robert E. Kitz  
 (printed name) (date)

*[Signature]*  
 (printed name) (date)

*[Signature]*  
 (printed name) (date)

E. Gaddess 072210  
 (printed name) (date)

TURN AROUND TIME  
 STANDARD 24Hr 48Hr 72Hr

Company-ASE, INC.

Company-

Company-

Company- *Kell Analytical*

OTHER:





Aqua Science Engineers, Inc. 55 Oak Court, Suite 220, Danville, CA 94526  
(925) 820-9391 - Fax (925) 837-4853 - [www.aquascienceengineers.com](http://www.aquascienceengineers.com)

## **APPENDIX D**

Certified Analytical Report  
and  
Chain of Custody Documentation  
For Groundwater Samples





## Laboratory Results

Robert Kitay  
Aqua Science Engineers, Inc.  
55 Oak Court, Suite 220  
Danville, CA 94526

Subject : 9 Water Samples  
Project Name : Hutch's Carwash  
Project Number :

Dear Mr. Kitay,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed. Testing procedures comply with the 2003 NELAC standard. All soil samples are reported on a total weight (wet weight) basis unless noted otherwise in the case narrative. Laboratory results relate only to the samples tested. This report may be freely reproduced in full, but may only be reproduced in part with the express permission of Kiff Analytical, LLC. Kiff Analytical, LLC is certified by the State of California under the National Environmental Laboratory Accreditation Program (NELAP), lab # 08263CA. If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-I 16-20' WATER**

Matrix : Water

Lab Number : 73868-01

Sample Date :07/20/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:10
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:10
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:10
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:10
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:10
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:10
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:10
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:10
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/10 12:10
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/24/10 12:10
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:10
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:10
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	07/24/10 12:10
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	07/24/10 12:10
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	07/28/10 11:13
Octacosane (Silica Gel Surr)	97.0		% Recovery	M EPA 8015	07/28/10 11:13

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-I 25-29' WATER**

Matrix : Water

Lab Number : 73868-02

Sample Date :07/21/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:03
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:03
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:03
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:03
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:03
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:03
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:03
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:03
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/10 13:03
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/24/10 13:03
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:03
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:03
1,2-Dichloroethane-d4 (Surr)	95.6		% Recovery	EPA 8260B	07/24/10 13:03
Toluene - d8 (Surr)	99.4		% Recovery	EPA 8260B	07/24/10 13:03
<b>TPH as Diesel (Silica Gel)</b>	<b>130</b>	50	ug/L	M EPA 8015	07/28/10 11:49
Octacosane (Silica Gel Surr)	112		% Recovery	M EPA 8015	07/28/10 11:49

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-J 25-30' WATER**

Matrix : Water

Lab Number : 73868-03

Sample Date :07/20/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:47
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:47
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:47
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:47
<b>Methyl-t-butyl ether (MTBE)</b>	<b>1.6</b>	0.50	ug/L	EPA 8260B	07/24/10 12:47
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:47
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:47
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:47
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/10 12:47
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/24/10 12:47
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:47
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:47
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	07/24/10 12:47
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	07/24/10 12:47
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	07/28/10 12:24
Octacosane (Silica Gel Surr)	102		% Recovery	M EPA 8015	07/28/10 12:24

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-J 31-35' WATER**

Matrix : Water

Lab Number : 73868-04

Sample Date :07/21/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:24
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:24
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:24
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:24
<b>Methyl-t-butyl ether (MTBE)</b>	<b>1.4</b>	0.50	ug/L	EPA 8260B	07/24/10 13:24
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:24
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:24
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:24
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/10 13:24
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/24/10 13:24
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:24
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 13:24
1,2-Dichloroethane-d4 (Surr)	97.8		% Recovery	EPA 8260B	07/24/10 13:24
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	07/24/10 13:24
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	07/28/10 12:59
Octacosane (Silica Gel Surr)	99.9		% Recovery	M EPA 8015	07/28/10 12:59

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-K 20-25' WATER**

Matrix : Water

Lab Number : 73868-05

Sample Date :07/20/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:01
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:01
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:01
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:01
<b>Methyl-t-butyl ether (MTBE)</b>	<b>59</b>	0.50	ug/L	EPA 8260B	07/24/10 14:01
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:01
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:01
<b>Tert-amyl methyl ether (TAME)</b>	<b>28</b>	0.50	ug/L	EPA 8260B	07/24/10 14:01
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/10 14:01
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/24/10 14:01
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:01
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:01
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	07/24/10 14:01
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	07/24/10 14:01
<b>TPH as Diesel (Silica Gel)</b>	<b>170</b>	50	ug/L	M EPA 8015	07/29/10 02:08
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
Octacosane (Silica Gel Surr)	102		% Recovery	M EPA 8015	07/29/10 02:08

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-K 26-28' WATER**

Matrix : Water

Lab Number : 73868-06

Sample Date :07/21/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/28/10 11:56
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/28/10 11:56
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/28/10 11:56
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/28/10 11:56
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/10 11:56
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/10 11:56
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/10 11:56
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/28/10 11:56
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/28/10 11:56
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/28/10 11:56
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/28/10 11:56
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/28/10 11:56
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	07/28/10 11:56
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	07/28/10 11:56
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	07/28/10 13:35
Octacosane (Silica Gel Surr)	99.0		% Recovery	M EPA 8015	07/28/10 13:35

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-L 20-24' WATER**

Matrix : Water

Lab Number : 73868-07

Sample Date :07/21/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:39
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:39
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:39
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:39
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:39
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:39
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:39
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:39
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/10 14:39
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/24/10 14:39
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:39
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 14:39
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	07/24/10 14:39
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	07/24/10 14:39
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	07/28/10 14:10
Octacosane (Silica Gel Surr)	100		% Recovery	M EPA 8015	07/28/10 14:10



Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-L 25-28' WATER**

Matrix : Water

Lab Number : 73868-08

Sample Date :07/21/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 17:14
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 17:14
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 17:14
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 17:14
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 17:14
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 17:14
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 17:14
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 17:14
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/10 17:14
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/24/10 17:14
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 17:14
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 17:14
1,2-Dichloroethane-d4 (Surr)	98.1		% Recovery	EPA 8260B	07/24/10 17:14
Toluene - d8 (Surr)	97.7		% Recovery	EPA 8260B	07/24/10 17:14
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	07/28/10 14:45
Octacosane (Silica Gel Surr)	95.1		% Recovery	M EPA 8015	07/28/10 14:45

Project Name : **Hutch's Carwash**

Project Number :

Sample : **BH-L 38-40' WATER**

Matrix : Water

Lab Number : 73868-09

Sample Date :07/21/2010

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date/Time Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:59
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:59
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:59
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:59
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:59
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:59
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:59
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:59
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/10 12:59
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/24/10 12:59
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:59
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/10 12:59
1,2-Dichloroethane-d4 (Surr)	95.4		% Recovery	EPA 8260B	07/24/10 12:59
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	07/24/10 12:59
<b>TPH as Diesel (Silica Gel)</b>	<b>430</b>	50	ug/L	M EPA 8015	07/29/10 02:43
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
Octacosane (Silica Gel Surr)	110		% Recovery	M EPA 8015	07/29/10 02:43

**QC Report : Method Blank Data**Project Name : **Hutch's Carwash**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed	Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel (Silica Gel)	< 50	50	ug/L	M EPA 8015	07/28/2010	Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Octacosane (Silica Gel Surr)	99.8		%	M EPA 8015	07/28/2010	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010	Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/2010
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010	Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/2010	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/24/2010
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010	1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/24/2010	1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010	1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	07/24/2010
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010	Toluene - d8 (Surr)	101		%	EPA 8260B	07/24/2010
1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	07/24/2010	Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Toluene - d8 (Surr)	100		%	EPA 8260B	07/24/2010	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Benzene	< 0.50	0.50	ug/L	EPA 8260B	07/28/2010	Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	07/28/2010	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Toluene	< 0.50	0.50	ug/L	EPA 8260B	07/28/2010	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	07/28/2010	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2010	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2010	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/24/2010
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2010	Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	07/28/2010	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/24/2010
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	07/28/2010	1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	07/28/2010	1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/24/2010
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	07/28/2010	1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	07/24/2010
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	07/28/2010	Toluene - d8 (Surr)	98.9		%	EPA 8260B	07/24/2010
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	07/28/2010						
Toluene - d8 (Surr)	99.7		%	EPA 8260B	07/28/2010						

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Hutch's Carwash**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH-D (Si Gel)	BLANK	<50	1000	1000	1040	1020	ug/L	M EPA 8015	7/28/10	104	102	2.63	70-130	25
1,2-Dibromoethane	73876-01	<0.50	39.9	39.9	33.6	33.4	ug/L	EPA 8260B	7/24/10	84.1	83.7	0.554	80-120	25
1,2-Dichloroethane	73876-01	<0.50	39.9	39.9	35.2	34.4	ug/L	EPA 8260B	7/24/10	88.2	86.1	2.46	75.7-122	25
Benzene	73876-01	<0.50	39.9	39.9	37.3	37.8	ug/L	EPA 8260B	7/24/10	93.5	94.7	1.21	80-120	25
Diisopropyl ether	73876-01	<0.50	40.0	40.0	36.9	37.2	ug/L	EPA 8260B	7/24/10	92.1	93.0	0.932	80-120	25
Ethyl-tert-butyl ether	73876-01	<0.50	40.0	40.0	34.8	34.6	ug/L	EPA 8260B	7/24/10	86.9	86.6	0.407	76.5-120	25
Ethylbenzene	73876-01	<0.50	39.9	39.9	38.2	38.4	ug/L	EPA 8260B	7/24/10	95.7	96.1	0.466	80-120	25
Methyl-t-butyl ether	73876-01	64	39.9	39.9	93.8	93.6	ug/L	EPA 8260B	7/24/10	74.8	74.2	0.791	69.7-121	25
P + M Xylene	73876-01	<0.50	39.9	39.9	37.6	38.5	ug/L	EPA 8260B	7/24/10	94.1	96.5	2.53	76.8-120	25

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Hutch's Carwash**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Tert-Butanol	73876-01	310	200	200	505	508	ug/L	EPA 8260B	7/24/10	97.9	99.8	1.95	80-120	25
Tert-amyl-methyl ether	73876-01	<0.50	40.1	40.1	35.3	35.6	ug/L	EPA 8260B	7/24/10	87.9	88.8	1.02	78.9-120	25
Toluene	73876-01	<0.50	39.9	39.9	37.7	38.1	ug/L	EPA 8260B	7/24/10	94.5	95.4	0.922	80-120	25
1,2-Dibromoethane	73895-01	<0.50	39.7	39.9	39.2	39.2	ug/L	EPA 8260B	7/28/10	98.7	98.1	0.641	80-120	25
1,2-Dichloroethane	73895-01	<0.50	39.7	39.9	35.8	35.7	ug/L	EPA 8260B	7/28/10	90.2	89.4	0.894	75.7-122	25
Benzene	73895-01	<0.50	39.7	39.9	38.3	38.6	ug/L	EPA 8260B	7/28/10	96.5	96.8	0.275	80-120	25
Diisopropyl ether	73895-01	<0.50	39.8	40.0	38.1	38.0	ug/L	EPA 8260B	7/28/10	95.7	94.9	0.863	80-120	25
Ethyl-tert-butyl ether	73895-01	<0.50	39.7	40.0	35.4	36.0	ug/L	EPA 8260B	7/28/10	89.0	90.0	1.19	76.5-120	25
Ethylbenzene	73895-01	<0.50	39.7	39.9	39.4	39.4	ug/L	EPA 8260B	7/28/10	99.4	98.8	0.692	80-120	25

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Hutch's Carwash**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Methyl-t-butyl ether	73895-01	<0.50	39.7	39.9	33.5	33.8	ug/L	EPA 8260B	7/28/10	84.5	84.6	0.0949	69.7-121	25
P + M Xylene	73895-01	<0.50	39.7	39.9	39.7	39.5	ug/L	EPA 8260B	7/28/10	100	99.0	1.06	76.8-120	25
Tert-Butanol	73895-01	<5.0	198	200	195	192	ug/L	EPA 8260B	7/28/10	98.0	96.4	1.64	80-120	25
Tert-amyl-methyl ether	73895-01	<0.50	39.9	40.1	36.9	36.0	ug/L	EPA 8260B	7/28/10	92.5	89.8	2.99	78.9-120	25
Toluene	73895-01	<0.50	39.7	39.9	38.6	38.8	ug/L	EPA 8260B	7/28/10	97.4	97.2	0.164	80-120	25
1,2-Dibromoethane	73880-02	<0.50	40.0	40.0	36.8	36.7	ug/L	EPA 8260B	7/24/10	91.9	91.8	0.148	80-120	25
1,2-Dichloroethane	73880-02	<0.50	40.0	40.0	46.2	45.0	ug/L	EPA 8260B	7/24/10	116	113	2.59	75.7-122	25
Benzene	73880-02	<0.50	40.0	40.0	36.8	36.2	ug/L	EPA 8260B	7/24/10	92.1	90.6	1.72	80-120	25
Diisopropyl ether	73880-02	<0.50	40.1	40.1	40.4	39.6	ug/L	EPA 8260B	7/24/10	101	98.8	1.91	80-120	25

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Hutch's Carwash**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Ethyl-tert-butyl ether	73880-02	<0.50	40.1	40.1	38.9	38.6	ug/L	EPA 8260B	7/24/10	97.1	96.4	0.749	76.5-120	25
Ethylbenzene	73880-02	<0.50	40.0	40.0	38.3	37.9	ug/L	EPA 8260B	7/24/10	95.8	94.8	1.09	80-120	25
Methyl-t-butyl ether	73880-02	2.7	40.0	40.0	43.1	42.5	ug/L	EPA 8260B	7/24/10	101	99.5	1.41	69.7-121	25
P + M Xylene	73880-02	<0.50	40.0	40.0	37.8	37.2	ug/L	EPA 8260B	7/24/10	94.4	92.9	1.64	76.8-120	25
Tert-Butanol	73880-02	320	200	200	558	532	ug/L	EPA 8260B	7/24/10	119	106	11.4	80-120	25
Tert-amyl-methyl ether	73880-02	<0.50	40.2	40.2	40.3	40.3	ug/L	EPA 8260B	7/24/10	100	100	0.0398	78.9-120	25
Toluene	73880-02	<0.50	40.0	40.0	39.2	38.4	ug/L	EPA 8260B	7/24/10	98.1	96.1	2.06	80-120	25
1,2-Dibromoethane	73880-03	<0.50	40.0	40.0	38.0	38.4	ug/L	EPA 8260B	7/24/10	95.1	95.9	0.824	80-120	25
1,2-Dichloroethane	73880-03	<0.50	40.0	40.0	40.3	39.0	ug/L	EPA 8260B	7/24/10	101	97.4	3.31	75.7-122	25

**QC Report : Matrix Spike/ Matrix Spike Duplicate**Project Name : **Hutch's Carwash**

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	73880-03	<0.50	40.0	40.0	40.9	40.2	ug/L	EPA 8260B	7/24/10	102	100	1.78	80-120	25
Diisopropyl ether	73880-03	<0.50	40.1	40.1	41.4	43.3	ug/L	EPA 8260B	7/24/10	103	108	4.45	80-120	25
Ethyl-tert-butyl ether	73880-03	<0.50	40.1	40.1	40.9	42.0	ug/L	EPA 8260B	7/24/10	102	105	2.69	76.5-120	25
Ethylbenzene	73880-03	<0.50	40.0	40.0	41.1	41.8	ug/L	EPA 8260B	7/24/10	103	104	1.71	80-120	25
Methyl-t-butyl ether	73880-03	<0.50	40.0	40.0	40.6	42.2	ug/L	EPA 8260B	7/24/10	102	106	3.83	69.7-121	25
P + M Xylene	73880-03	<0.50	40.0	40.0	41.2	41.9	ug/L	EPA 8260B	7/24/10	103	105	1.69	76.8-120	25
Tert-Butanol	73880-03	<5.0	200	200	200	200	ug/L	EPA 8260B	7/24/10	100	99.8	0.309	80-120	25
Tert-amyl-methyl ether	73880-03	<0.50	40.2	40.2	40.8	42.4	ug/L	EPA 8260B	7/24/10	101	105	3.68	78.9-120	25
Toluene	73880-03	<0.50	40.0	40.0	39.5	40.1	ug/L	EPA 8260B	7/24/10	98.7	100	1.57	80-120	25



**QC Report : Laboratory Control Sample (LCS)**Project Name : **Hutch's Carwash**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
1,2-Dibromoethane	40.0	ug/L	EPA 8260B	7/24/10	81.9	80-120
1,2-Dichloroethane	40.0	ug/L	EPA 8260B	7/24/10	86.3	75.7-122
Benzene	40.0	ug/L	EPA 8260B	7/24/10	92.4	80-120
Diisopropyl ether	40.1	ug/L	EPA 8260B	7/24/10	91.3	80-120
Ethyl-tert-butyl ether	40.1	ug/L	EPA 8260B	7/24/10	86.5	76.5-120
Ethylbenzene	40.0	ug/L	EPA 8260B	7/24/10	94.1	80-120
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	7/24/10	80.4	69.7-121
P + M Xylene	40.0	ug/L	EPA 8260B	7/24/10	93.2	76.8-120
Tert-Butanol	200	ug/L	EPA 8260B	7/24/10	94.8	80-120
Tert-amyl-methyl ether	40.2	ug/L	EPA 8260B	7/24/10	87.6	78.9-120
Toluene	40.0	ug/L	EPA 8260B	7/24/10	93.4	80-120
1,2-Dibromoethane	40.0	ug/L	EPA 8260B	7/28/10	96.0	80-120
1,2-Dichloroethane	40.0	ug/L	EPA 8260B	7/28/10	90.3	75.7-122
Benzene	40.0	ug/L	EPA 8260B	7/28/10	96.3	80-120
Diisopropyl ether	40.1	ug/L	EPA 8260B	7/28/10	96.3	80-120
Ethyl-tert-butyl ether	40.1	ug/L	EPA 8260B	7/28/10	90.1	76.5-120
Ethylbenzene	40.0	ug/L	EPA 8260B	7/28/10	99.0	80-120
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	7/28/10	84.6	69.7-121
P + M Xylene	40.0	ug/L	EPA 8260B	7/28/10	98.7	76.8-120
Tert-Butanol	200	ug/L	EPA 8260B	7/28/10	97.2	80-120
Tert-amyl-methyl ether	40.2	ug/L	EPA 8260B	7/28/10	93.4	78.9-120
Toluene	40.0	ug/L	EPA 8260B	7/28/10	97.6	80-120

## QC Report : Laboratory Control Sample (LCS)

Project Name : **Hutch's Carwash**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
1,2-Dibromoethane	40.2	ug/L	EPA 8260B	7/24/10	92.0	80-120
1,2-Dichloroethane	40.2	ug/L	EPA 8260B	7/24/10	117	75.7-122
Benzene	40.2	ug/L	EPA 8260B	7/24/10	92.0	80-120
Diisopropyl ether	40.3	ug/L	EPA 8260B	7/24/10	101	80-120
Ethyl-tert-butyl ether	40.2	ug/L	EPA 8260B	7/24/10	99.9	76.5-120
Ethylbenzene	40.2	ug/L	EPA 8260B	7/24/10	95.6	80-120
Methyl-t-butyl ether	40.2	ug/L	EPA 8260B	7/24/10	102	69.7-121
P + M Xylene	40.2	ug/L	EPA 8260B	7/24/10	92.6	76.8-120
TPH as Gasoline	512	ug/L	EPA 8260B	7/24/10	101	70.0-130
Tert-Butanol	201	ug/L	EPA 8260B	7/24/10	102	80-120
Tert-amyl-methyl ether	40.4	ug/L	EPA 8260B	7/24/10	99.9	78.9-120
Toluene	40.2	ug/L	EPA 8260B	7/24/10	96.8	80-120
1,2-Dibromoethane	40.0	ug/L	EPA 8260B	7/24/10	93.9	80-120
1,2-Dichloroethane	40.0	ug/L	EPA 8260B	7/24/10	96.4	75.7-122
Benzene	40.0	ug/L	EPA 8260B	7/24/10	99.1	80-120
Diisopropyl ether	40.1	ug/L	EPA 8260B	7/24/10	103	80-120
Ethyl-tert-butyl ether	40.1	ug/L	EPA 8260B	7/24/10	96.6	76.5-120
Ethylbenzene	40.0	ug/L	EPA 8260B	7/24/10	104	80-120
Methyl-t-butyl ether	40.0	ug/L	EPA 8260B	7/24/10	94.0	69.7-121
P + M Xylene	40.0	ug/L	EPA 8260B	7/24/10	105	76.8-120
TPH as Gasoline	511	ug/L	EPA 8260B	7/24/10	109	70.0-130

**QC Report : Laboratory Control Sample (LCS)**

Project Name : **Hutch's Carwash**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Tert-Butanol	200	ug/L	EPA 8260B	7/24/10	99.5	80-120
Tert-amyl-methyl ether	40.2	ug/L	EPA 8260B	7/24/10	98.4	78.9-120
Toluene	40.0	ug/L	EPA 8260B	7/24/10	98.8	80-120

Aqua Science Engineers, Inc.  
 55 Oak Court, Suite 220  
 Danville, CA 94526  
 (925) 820-9391  
 FAX (925) 837-4853

# Chain of Custody

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PAGE 1 of 1

SAMPLER (SIGNATURE) Robert E. Kiley PROJECT NAME Hutch's Carwash JOB NO. \_\_\_\_\_  
 ADDRESS 17945 Hesperian Blvd, San Lorenzo, CA

ANALYSIS REQUEST					TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015) <i>w/ Silicon Gel</i>	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	CAM 17 METALS (EPA 6010+7000)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	Pb (TOTAL or DISSOLVED) (EPA 6010)	PESTICIDES (EPA 8081)	FUEL OXYGENATES (EPA 8260)	PURGEABLE HALOCARBONS (EPA 6018010)	TPH-G/BTEX/5 OXYS / Pb <i>Swirl</i> (EPA METHOD 8260)	MULT-RANGE HYDROCARBONS WITH SILICA GEL CLEANUP (EPA 6015)	VOLATILE ORGANICS (EPA 624/8240/8260)	LUFT METALS (5) (EPA 6010+7000)	COMPOSITE 4:1	EDF
SPECIAL INSTRUCTIONS: <i>If there is insufficient water for all analyses, give priority to TPH-G/BTEX/5 OXYS</i>	DATE	TIME	MATRIX	QUANTITY															
BH-T	16-20' Water	7-20-10	908	W	3									X					X
BH-I	25-29' Water	7-21-10	1345		2									X					X
BH-J	25-30' Water	7-20-10	1330		3									X					X
BH-J	31-35' Water	7-21-10	1350		3									X					X
BH-K	20-25' Water	7-20-10	1630		3									X					X
BH-K	26-28' Water	7-21-10	1204		4									X					X
BH-L	20-24' Water	7-21-10	918		3									X					X
BH-L	25-28' Water		1030		3									X					X
BH-L	38-40' Water		1125		1									X					X

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RELINQUISHED BY: <u>Robert E. Kiley</u> (signature) (time)	RECEIVED BY: <i>[Signature]</i> (signature) (time)	RELINQUISHED BY: <i>[Signature]</i> (signature) (time)	RECEIVED BY LABORATORY: <u>E. Gaddess</u> 1332 (signature) (time)	COMMENTS:  TURN AROUND TIME STANDARD 24Hr 48Hr 72Hr OTHER:
Robert E. Kiley (printed name) (date)	<i>[Signature]</i> (printed name) (date)	<i>[Signature]</i> (printed name) (date)	E. Gaddess 07210 (printed name) (date)	
Company-ASE, INC.	Company-	Company-	Company- <i>with Analytical</i>	

LZ 10 02 a6p

