



September 29, 2005

Alameda County  
OCT 07 2005  
Environmental Health

INTERIM REPORT  
of  
SOIL AND GROUNDWATER ASSESSMENT  
AND  
WORKPLAN FOR ADDITIONAL ACTIVITIES  
ASE JOB NO. 3934  
at  
Albany Hill Mini Mart  
800 San Pablo Avenue  
Albany, California

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## 1.0 INTRODUCTION

This submittal presents Aqua Science Engineers, Inc. (ASE) interim soil and groundwater assessment and a workplan for additional investigation at the Albany Hill Mini Mart located at 800 San Pablo Avenue in Albany, California (Figures 1 and 2). The proposed site assessment activities were initiated by Dr. Joginder Sikand, owner of the property, as requested by the Alameda County Health Care Services Agency (ACHCSA).

## 2.0 BACKGROUND INFORMATION

The subject site is currently a mini market and gasoline service station. It is ASE's understanding that the site has operated as a gasoline service station since 1930. Dr. Sikand, the present owner, purchased the property in 1973. At that time, three underground fuel storage tanks (USTs) operated at the site. These tanks consisted of two 500-gallon regular gasoline USTs and one 1,000-gallon super gasoline UST. In 1986, the site was remodeled and the three old USTs were removed and were replaced by four new USTs. These new USTs consisted of two 10,000-gallon gasoline USTs, one 6,000-gallon gasoline UST, and one 2,000-gallon diesel UST. The automotive repair operation also ceased at that time.

### 2.1 March 1997 Underground Storage Tank (UST) Removal

In March 1997, Superior Underground Tank Services removed five USTs. These USTs consisted of the four USTs installed in 1986 and one 750-gallon UST, which was previously unknown and was found during excavation activities at the site. Soil samples collected from the excavations following the UST removal contained up to 3,800 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPH-G), 820 ppm total petroleum hydrocarbons as diesel (TPH-D), and detectable concentrations of benzene, toluene, ethylbenzene and total xylenes (collectively known as BTEX) and methyl tertiary butyl ether (MTBE). Groundwater samples collected from the excavations also contained elevated concentrations of TPH-G, TPH-D, BTEX and MTBE.

### 2.2 August 1999 Preliminary Soil and Groundwater Assessment

In August 1999, Advanced Assessment and Remediation Services (AARS) conducted a preliminary soil and groundwater assessment at the site. This assessment included the installation of monitoring wells MW-1, MW-2 and MW-3 at the site. Sediments encountered during drilling generally consisted of clay from the ground surface to approximately 13-feet below

ground surface (bgs), and sand or silty sand from 13-foot bgs to the total depth explored of 25-foot bgs. Groundwater was encountered at approximately 17-foot bgs and rose to approximately 10.5-foot bgs in the completed monitoring wells. Relatively low concentrations of hydrocarbons were detected in soil samples collected from MW-1, and no hydrocarbons were detected in soil samples collected from MW-2 and MW-3. Groundwater samples collected from the monitoring wells contained up to 1,500 parts per billion (ppb) TPH-G, 1,200 ppb TPH-D, 4.3 ppb benzene, 2.9 ppb toluene, 9.1 ppb ethylbenzene, and 28 ppb total xylenes. The highest concentrations were in monitoring well MW-1, with much lower or non-detectable concentrations in the other two wells. The groundwater flow direction during this assessment was calculated to be to the southeast.

### 2.3 June 2001 Soil and Groundwater Assessment

In June 2001, AARS conducted an additional soil and groundwater assessment at the site, which included the drilling of four soil borings (SB-1 through SB-4). Hydrocarbons were detected in soil samples collected from approximately 10-foot bgs in all four borings. The highest concentrations were in SB-1, which contained 2,300 ppm TPH-G, 550 ppm TPH-D, 5.3 ppm benzene, 78 ppm toluene, 45 ppm ethylbenzene, and 330 ppm total xylenes. Elevated petroleum hydrocarbon concentrations were detected in groundwater samples collected in all four borings. The highest concentrations were in SB-2 and SB-4, which contained up to 8,900 ppb TPH-G, 19,000 ppb TPH-D, 1,400 ppb benzene, 1,900 ppb toluene, 280 ppb ethylbenzene, 1,300 ppb total xylenes, and 4,500 ppb MTBE.

### 2.4 June 2002 Soil and Groundwater Assessment

In June 2002, AARS conducted an additional soil and groundwater assessment at the site, which included the installation of six additional monitoring wells (MW-4 through MW-9) and one additional soil boring (SB-6). Hydrocarbons were detected in soil samples collected from all of these borings, with the highest concentrations detected in the soil samples collected from 11-foot bgs in MW-4 and 15-foot bgs in MW-9. All of the hydrocarbon concentrations in soil were well below the concentrations detected in previous boring SB-2. The groundwater samples collected from these new monitoring wells contained up to 24,100 ppb TPH-G, 19,000 ppb TPH-D, 2,300 ppb benzene, 1,900 ppb toluene, 1,050 ppb ethylbenzene, 5,410 ppb total xylenes, and 12,000 ppb MTBE.

## 2.5 June 2002 Area Well Survey

In June 2002, AARS also conducted an area well survey that identified wells within a 2,000-foot radius of the site. AARS listed seven wells in the site vicinity. However, all of the wells are over 2,000-feet from the site and none of the wells are domestic, municipal, irrigation or other water supply wells.

## 2.6 Quarterly Groundwater Monitoring

Between August 1999 and February 2003, groundwater samples were collected from the site monitoring wells on an approximate quarterly sampling schedule. The analytical results are tabulated in Table One.

## 2.7 October 2003 Area Conduit Study

In October 2003, ASE conducted a study of underground utility conduits in the site vicinity to determine if any of these conduits could be a potential preferred pathway for the movement of groundwater contamination in the site vicinity. This study was conducted by reviewing Underground Service Alert (USA) markings in the site vicinity, 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. None of the water, natural gas, electric, telephone, cable TV, or Caltrans communication conduits could be potential conduits based on their depth and the depth to groundwater in the site vicinity. There is a sewer line beneath San Pablo Avenue that, although currently above all historical depths to water, could potentially have been above the potentiometric surface during periods of extremely high water levels. However, since it appears that the actual water level is well below the potentiometric surface at the site, ASE does not believe that this line presents a potential preferred pathway for the movement of groundwater even during periods of high water table.

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

The purpose of this assessment was to further define the extent of soil and groundwater contamination at the site. The scope of work performed was as follows:

- 1) Obtain a drilling permit from the Alameda County Public Works Agency.

- 2) Obtain encroachment permits from Caltrans and the City of Albany to drill in San Pablo Avenue and Washington Avenue.
- 3) Obtain an access agreement from the property owner at 1020 Washington Avenue to drill soil borings on his property.
- 4) Contract with a subsurface utility locating service to clear drilling locations of underground utility lines.
- 5) Drill soil borings in on and off-site locations. Soil borings will be drilled using dual-wall samplers to a depth of 50-feet bgs collecting soil samples continuously and collecting groundwater samples from adjacent borings using a Hydropunch sampler. Based on the results from these initial soil borings, additional borings will be drilled to depths appropriate for the project using whatever method is needed to complete the assessment.
- 6) Following collection of the soil and groundwater samples, backfill the borings described in task 5 with neat cement placed by tremie pipe.
- 7) Analyze soil and groundwater samples collected from each boring described in task 5 at a CAL-DHS certified analytical laboratory for TPH-D by EPA Method 8015 and TPH-G, BTEX, fuel oxygenates and lead scavengers by EPA Method 8260B.
- 8) Prepare an interim report presenting the results from the initial soil borings and propose additional work as needed.

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

##### **4.1 Obtain Necessary Permits**

Prior to drilling, ASE obtained a drilling permit from the ACPWA. ASE also obtained encroachment permits from the City of Albany and Caltrans to allow for drilling in their street areas. Copies of the permits are presented in Appendix A. ASE also obtained permission from Gueyming Hwang, owner of the property located at 1020 Washington Avenue, to allow for the drilling of boring BH-M on his property.

## 4.2 Drilling and Soil Sample Collection

Between August 20, 2004 and October 25, 2004, Vironex, Inc. of San Leandro, California drilled soil borings BH-A through BH-Q using a Geoprobe hydraulic sampling rig. A dual-wall sampler was advanced to allow drilling through the first water-bearing zone into the second water-bearing zone while minimizing the possibility of cross-contamination. Due to the difficulty in drilling with a dual-wall sampler, all of the borings met with refusal before reaching the planned depth. The boring locations are shown on Figure 2. The drilling was directed by ASE associate geologist Damian Hriciga.

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 squares and plastic end caps, and labeled with the site location, sample designation, date and time the sample was collected, and the initials of the person collecting the sample. The samples were placed into an ice chest containing wet ice for delivery under chain of custody to a CAL-DHS certified analytical laboratory 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 VOCs 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 volatile compounds 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 listed on the boring logs presented in Appendix B.

## 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 to be analyzed for volatile compounds were contained in 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid, and sealed without headspace. The samples to be analyzed for non-volatile compounds were placed into 1-liter amber glass



bottles. 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. 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 be 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.

#### 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.

### **5.0 LITHOLOGY AND HYDROGEOLOGY**

Boring logs are presented in Appendix B. Geologic cross-section A-A' was prepared for the site. The cross-section location is shown on Figure 3. The geologic cross-section is shown on Figure 4.

### **6.0 ANALYTICAL RESULTS FOR SOIL AND GROUNDWATER SAMPLES**

#### 6.1 Soil Sample Analysis

Selective soil samples were analyzed by Kiff Analytical, LLC (Kiff) of Davis, California (ELAP #2236) for TPH-G, benzene, toluene, ethylbenzene, and total xylenes (collectively known as BTEX), fuel oxygenates, and VOCs by EPA Method 8260B, and TPH-D by EPA Method 8015. The analytical results are tabulated in Table Two. The certified analytical report and chain of custody are presented in Appendix C.

In general, hydrocarbons were only detected in soil samples collected at depths above 15-feet bgs. None of the deeper soil samples contained concentrations of hydrocarbons exceeding Environmental Screening Levels (ESLs) for residential soil in areas where groundwater is not a current or potential source of drinking water. The ESLs are established by the California Regional Water Quality Control Board, San Francisco Bay Region and are presented in the "Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater" dated July 2003.

## 6.2 Groundwater Sample Analysis

The groundwater samples were analyzed by Kiff for TPH-G, BTEX, fuel oxygenates, and VOCs by EPA Method 8260B, and TPH-D by EPA Method 8015. The analytical results are tabulated in Table Three. The certified analytical report and chain of custody are presented in Appendix C.

## **7.0 CONCLUSIONS**

- In general, the analytical results show that elevated hydrocarbon concentrations are present in street areas immediately adjacent to the site to the north and to the east.
- The extent of hydrocarbons appears to be completely defined to the east as all of the hydrocarbon concentrations detected in borings drilled on the eastern side of San Pablo Avenue were below ESLs.
- The extent of hydrocarbons appears to be adequately defined to the southeast as hydrocarbon concentrations detected in boring BH-Q drilled on the western side of San Pablo Avenue south of the site were below ESLs.
- The extent of hydrocarbons to the north of the site is not yet defined. Additional borings are needed north of the site to complete the definition of the extent of hydrocarbons to the north. In addition, the vertical extent of hydrocarbons north of the site is not defined. ASE recommends that additional borings be drilled into deeper water-bearing zones north of the site. These additional deep borings will need to be completed using a different drilling method such as sonic drilling or CPT since there was refusal using a dual-wall sampler and a Geoprobe direct-push drill rig during the previous assessment.
- The extent of hydrocarbons to the west is not yet defined based on the results from BH-M. However, based on the long distance to the next

possible drilling location to the west, and based on the topographic gradient and unlikely groundwater flow in that direction, ASE does not recommend any further definition of the extent of hydrocarbons to the west at this time.

## 8.0 RECOMMENDATIONS

In order to obtain case closure for the site, ASE recommends the following.

- Complete the definition of the extent of elevated hydrocarbons in both on and off-site areas. ASE recommends that three additional borings be drilled to the north of the site, two additional borings be drilled south of the site, and two borings be drilled on-site. These locations are shown on Figure 5. Borings will be drilled using a sonic drill rig, which will allow the borings to be drilled with a conductor casing to minimize the possibility of cross-contamination. Samples will be collected in the same manner and at the same sampling intervals as was completed during the previous assessment. All of the borings will be drilled to a depth of 60-feet bgs. If there is difficulty in obtaining an access agreement with the property owner for the property south of the site, then the assessment will not be held up while an access agreement is being negotiated.
- Conduct an air-sparging and soil vapor extraction test at the site. The air-sparging and soil vapor extraction tests will be conducted as follows:

### 8.1 Well installation for air-sparging and vapor extraction

In order to conduct air-sparging and soil vapor extraction tests, air-sparging and vapor extraction wells will have to be constructed. These wells will be placed near the northern property line (Figure 6).

The air-sparging wells will be constructed using a drill rig equipped with 5-inch diameter hollow-stem augers. The wells will be constructed with 3/4-inch diameter PVC well casing with a 2-inch diameter by 30-inch long sparge point with 10-50 micron perforations at the bottom. These sparge points will be placed in the location of the permeable water-bearing zone estimated to be between 25 and 27-feet bgs. Lonestar #2/16 sand will be placed between the sparge point and the boring from the bottom of the boring to 1-foot above the top of the sparge point. A 0.5-foot thick bentonite layer will be placed between the sandpack and the overlying

cement sanitary seal. A Portland cement sanitary seal will be placed above the bentonite layer to prevent surface water from infiltrating into the well. The well head will be protected with a locking well plug beneath an at-grade, traffic-rated well box (See Figure 7 - Typical Air Sparging Well).

The vapor extraction wells will be installed to approximately 20-feet bgs at the site using a drill rig equipped with 8-inch diameter hollow stem augers (Figure 5). The drilling will be directed by a qualified ASE geologist. Undisturbed soil samples will be collected continuously for subsurface hydrogeologic description and will be described according to the USCS. The samples will be collected in brass tubes using a split-barrel drive sampler advanced ahead of the auger tip by successive blows from a 140-lb. hammer dropped 30-inches. The wells will be constructed within the hollow-stem augers using 2-inch diameter, flush-threaded, schedule 40, 0.020-inch slotted PVC well screen and blank casing. The wells will be screened in the vadose zone only. Based on the boring logs and depth to groundwater during the previous drilling at this site, ASE estimates that these wells will be screened between approximately 15 and 20-feet bgs. The well casing will be lowered through the augers and #2/12 filter pack sand will be placed in the annular space between the well casing and the borehole from the bottom of the boring to approximately 0.5-feet above the screened interval. Approximately 0.5-feet of bentonite pellets will be placed on top of the sand pack prior to placing the cement sanitary seal. Since the bentonite seal will be placed in the unsaturated zone, the bentonite will be hydrated with potable water prior to placing the cement sanitary seal. Cement mixed with 3 to 5 percent bentonite powder by volume will be used to fill the annular space between the bentonite layer and the surface to prevent surface water from infiltrating into the well. The seal will be placed by simply pouring the seal into the boring. The well heads will be protected with a locking well plug beneath an at-grade, traffic-rated well box (See Figure 8 - Typical Vapor Extraction Well).

## 8.2 Conduct a Vapor Extraction Test

Vapors will be extracted from a vapor extraction well using a regenerative blower. The hydrocarbon-laden vapors will be abated by vapor phase activated carbon. The radius of vacuum influence in the vadose zone will be determined by measuring negative pressure in surrounding wells. The flow from the blower in cubic feet per minute (cfm) and negative pressure in the surrounding wells will be logged every 15 minutes for the duration of the test.

Vapor samples will be collected from the extraction well in Tedlar bags at the beginning and at the end of the test. These samples will be analyzed for TPH-G, BTEX and oxygenates by EPA Method 8260. In addition, the influent vapor stream will be measured using a hand-held PID at periodic intervals during the test.

### 8.3 Conduct an Air-Sparging Test

An air sparging test will be conducted to determine whether air-sparging may be an effective method of remediation for the site. The air-sparging test will be conducted by injecting compressed air into one of the new ozone-sparging wells at a rate of approximately 2-5 cubic feet per minute (cfm) and 25 pounds per square inch (PSI). This flow and pressure are typical operating parameters of current ozone-sparging generation systems on the market today. Pressure and water levels in the other ozone sparge wells and surrounding monitoring wells will be monitored to determine whether there is any pressure increase in the vadose zone or mounding of the water table. The test will continue until pressures and water table elevations remain stable. Injected air pressure and volume will be adjusted to determine future design criteria of the ozone generating system.

An alternate test technique that may be used will be injecting a tracer gas, such as helium, into the air stream. A helium detector would then be used to measure the concentration of helium, if any, in the surrounding observation wells. The presence of helium in the surrounding wells will be an indication of the area of influence.

## **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-DHS certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

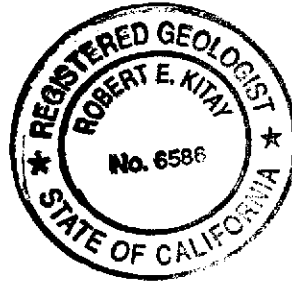
Aqua Science Engineers appreciates the opportunity provide environmental consulting services for this project. Should you have any questions or comments, please feel free to call us at (925) 820-9391.

Respectfully submitted,

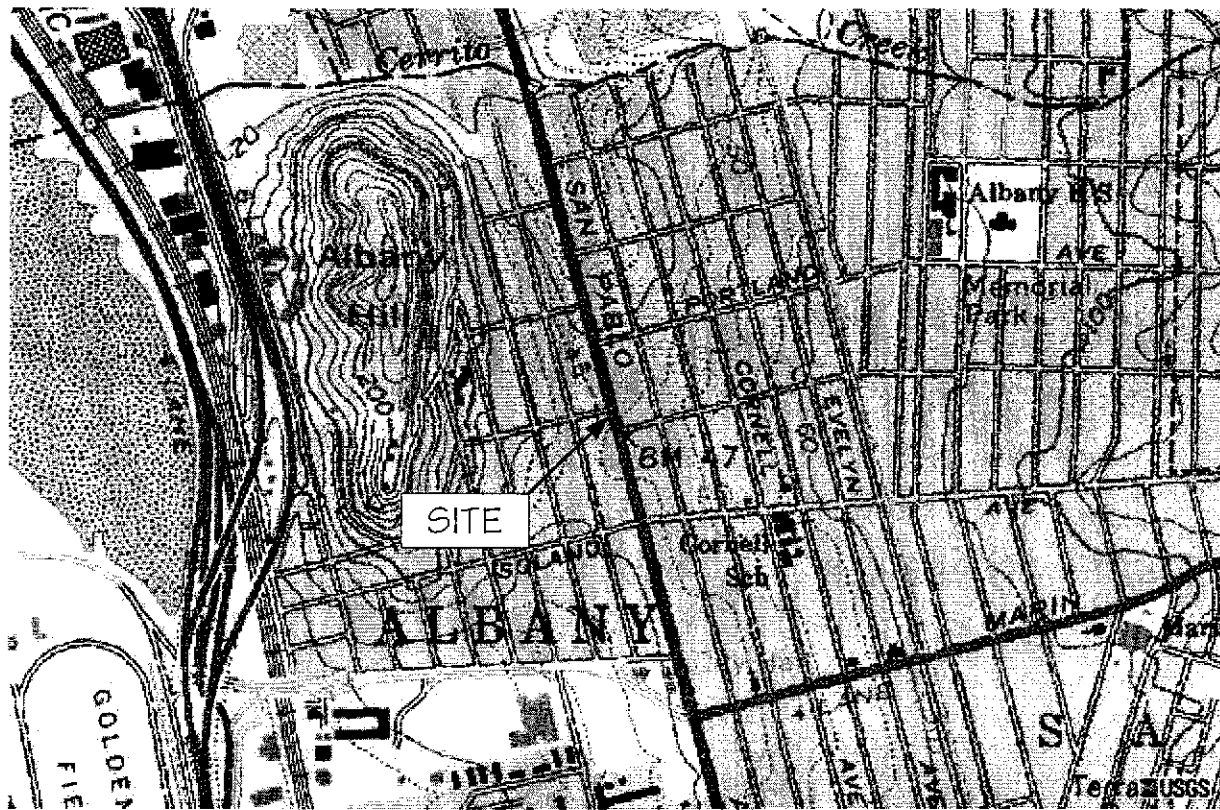
AQUA SCIENCE ENGINEERS, INC.



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



Attachments: Figures 1 through 8  
Tables One through Three  
Appendices A through C

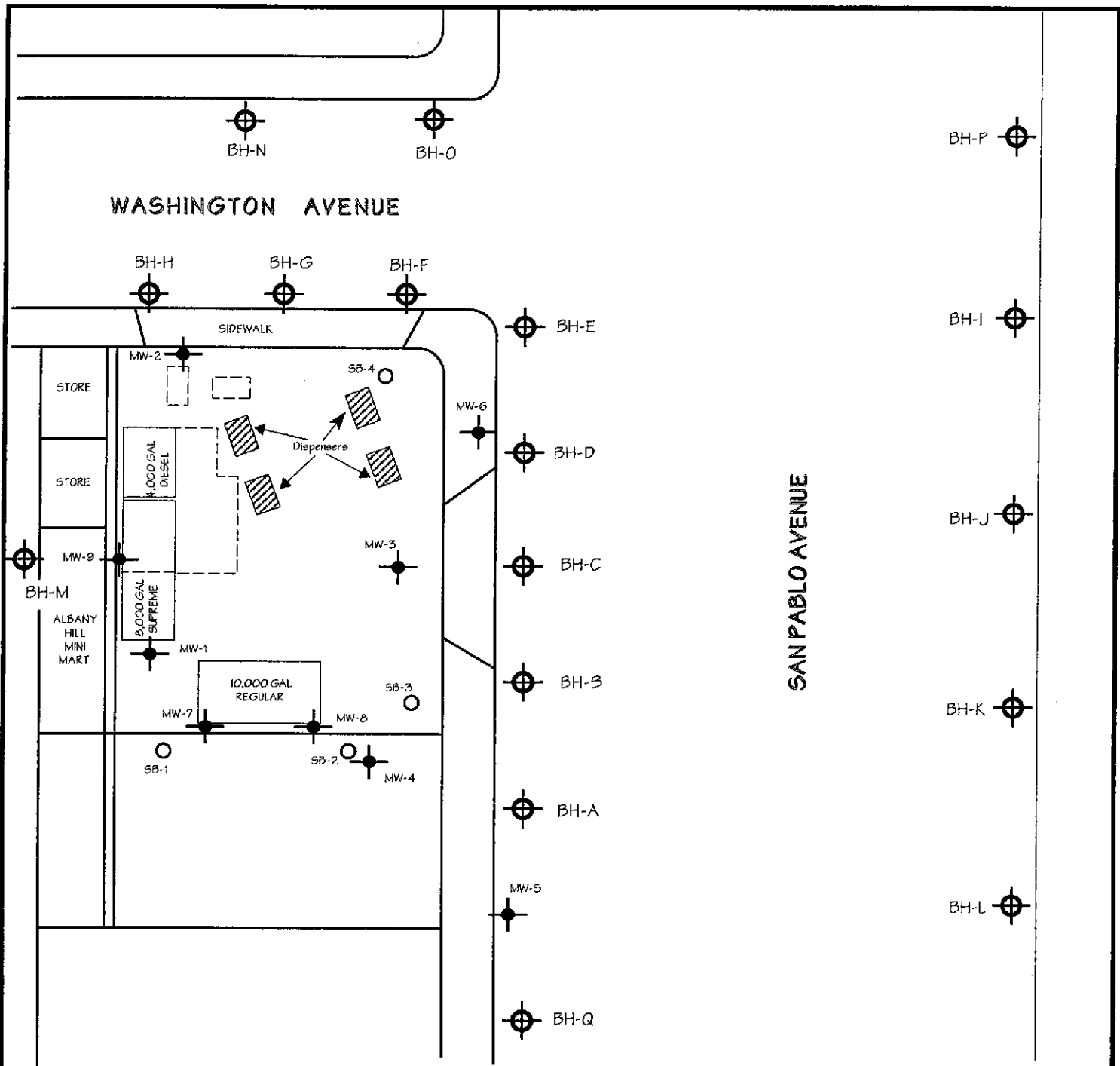


LOCATION MAP

ALBANY HILL MINI MART  
800 SAN PABLO AVENUE  
ALBANY, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC.

Figure 1



**LEGEND**

MW-2		MONITORING WELL	 NORTH
SB-2		SOIL BORING	
BH-A		ASE ADVANCED SOIL BORING	

SCALE: 1" = 20'

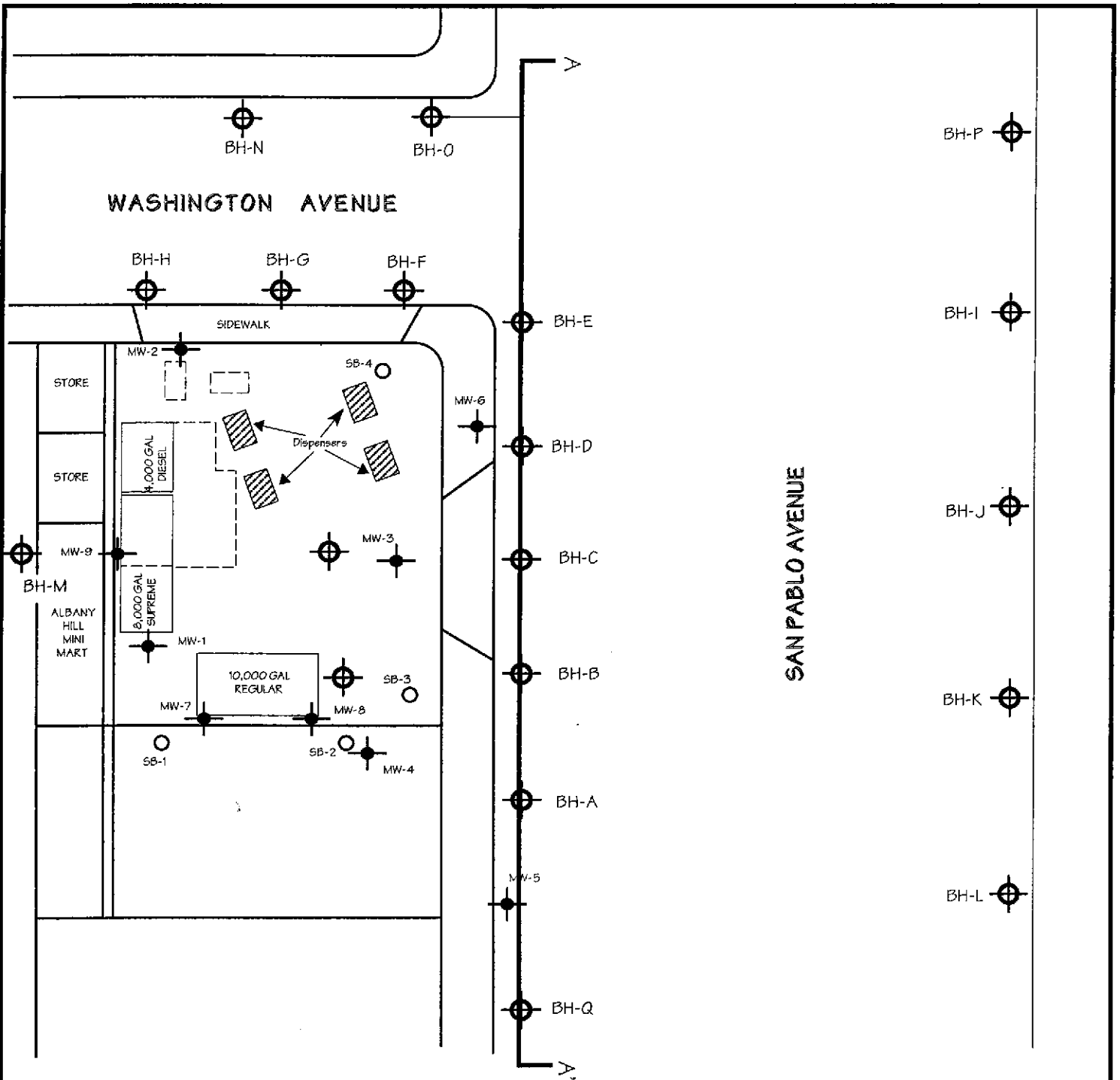
**BORING AND MONITORING  
WELL LOCATION MAP**

ALBANY HILL MINI MART  
800 SAN PABLO AVENUE  
ALBANY, CALIFORNIA

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Figure 2





**LEGEND**

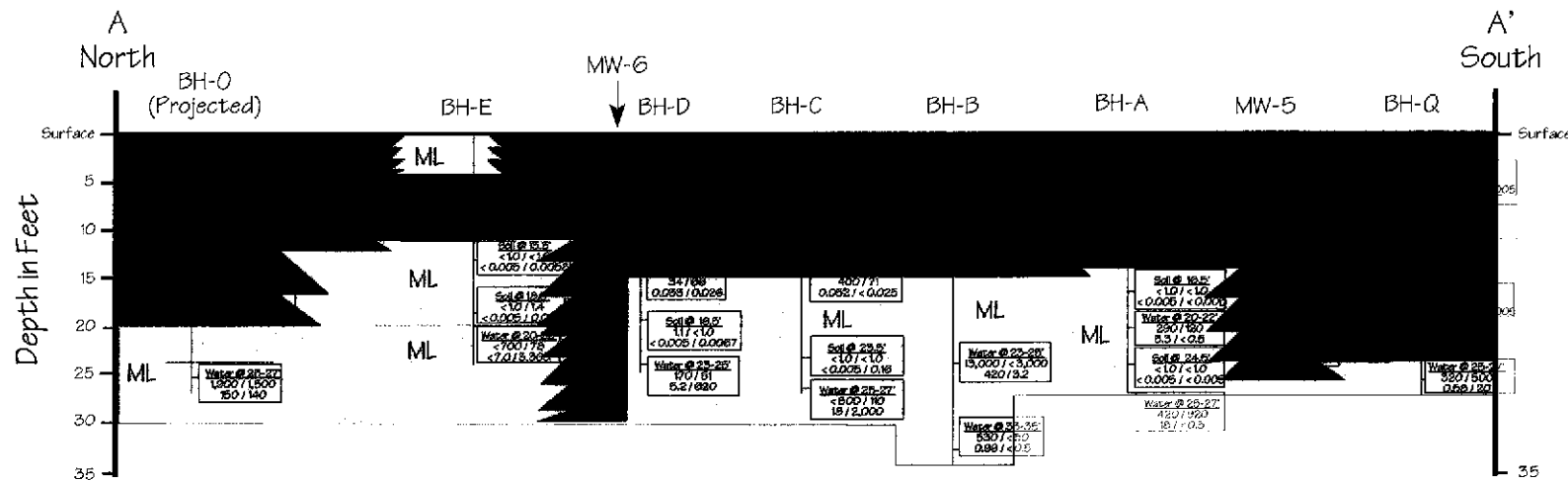
MW-2		MONITORING WELL	 NORTH SCALE: 1" = 20'
SB-2		SOIL BORING	
BH-A		ASE ADVANCED SOIL BORING	

**CROSS-SECTION  
LOCATION MAP**

ALBANY HILL MINI MART  
800 SAN PABLO AVENUE  
ALBANY, CALIFORNIA

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Figure 3



**LEGEND**



Clay or Silty Clay (High Plasticity)



Sandy Silt or Silty Sand



Clayey Sand



Sand, Silty Sand, or Sandy Silt within a Silty Sand



Well Screened Interval



Concentrations (ppm for soil and ppb for water) and Sample Depth

TPH-G / TPH-D  
Benzene / MTBE



SCALE: 1" = 20'

No Vertical Exaggeration

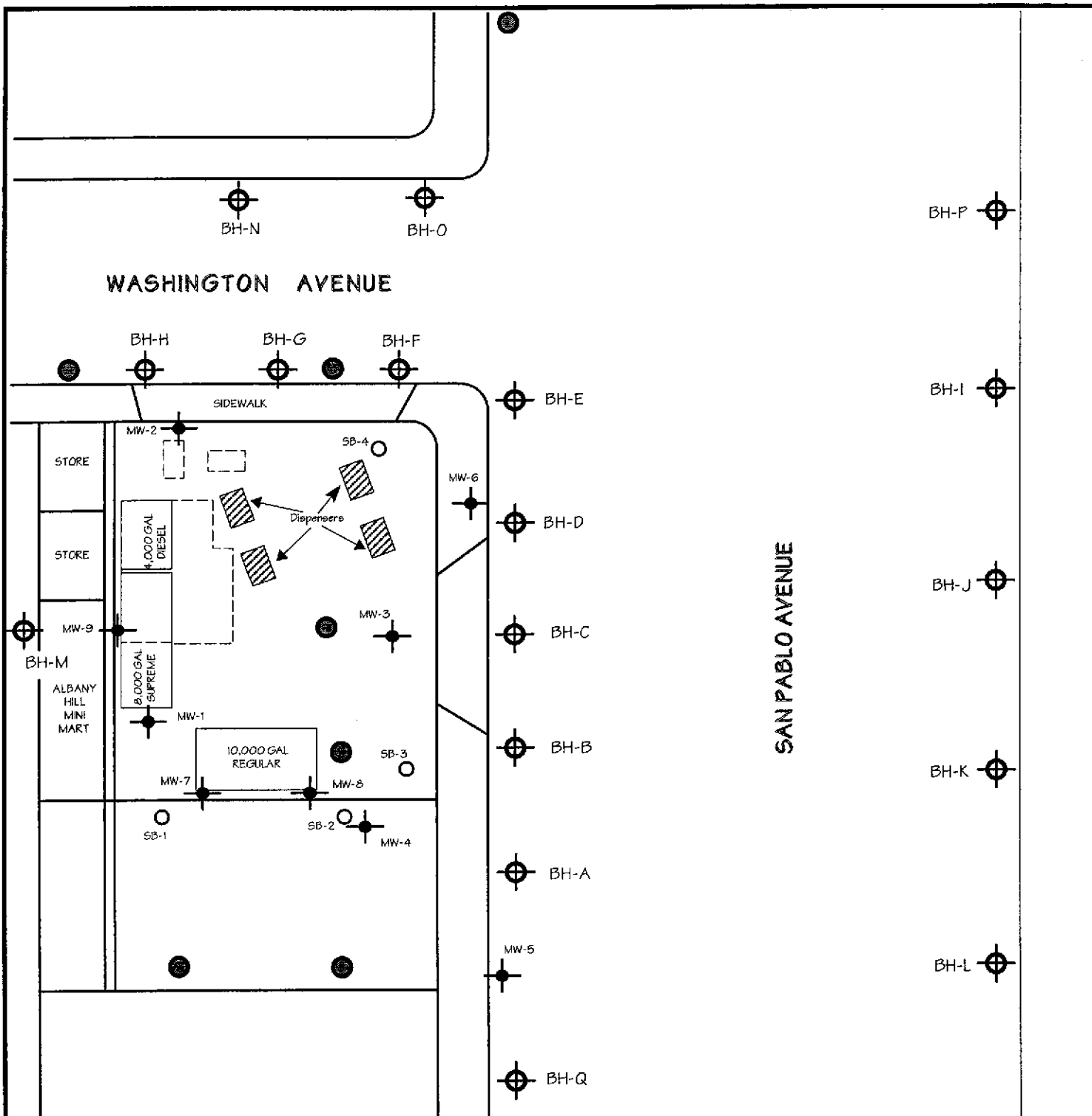
**CROSS-SECTION**

**A - A'**

ALBANY HILL MINI MART  
800 SAN PABLO AVENUE  
ALBANY, CALIFORNIA

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Figure 4



**LEGEND**

MW-2  
 MONITORING WELL

SB-2  
 SOIL BORING

BH-A  
 ASE ADVANCED SOIL BORING

 PROPOSED BORING LOCATION



NORTH

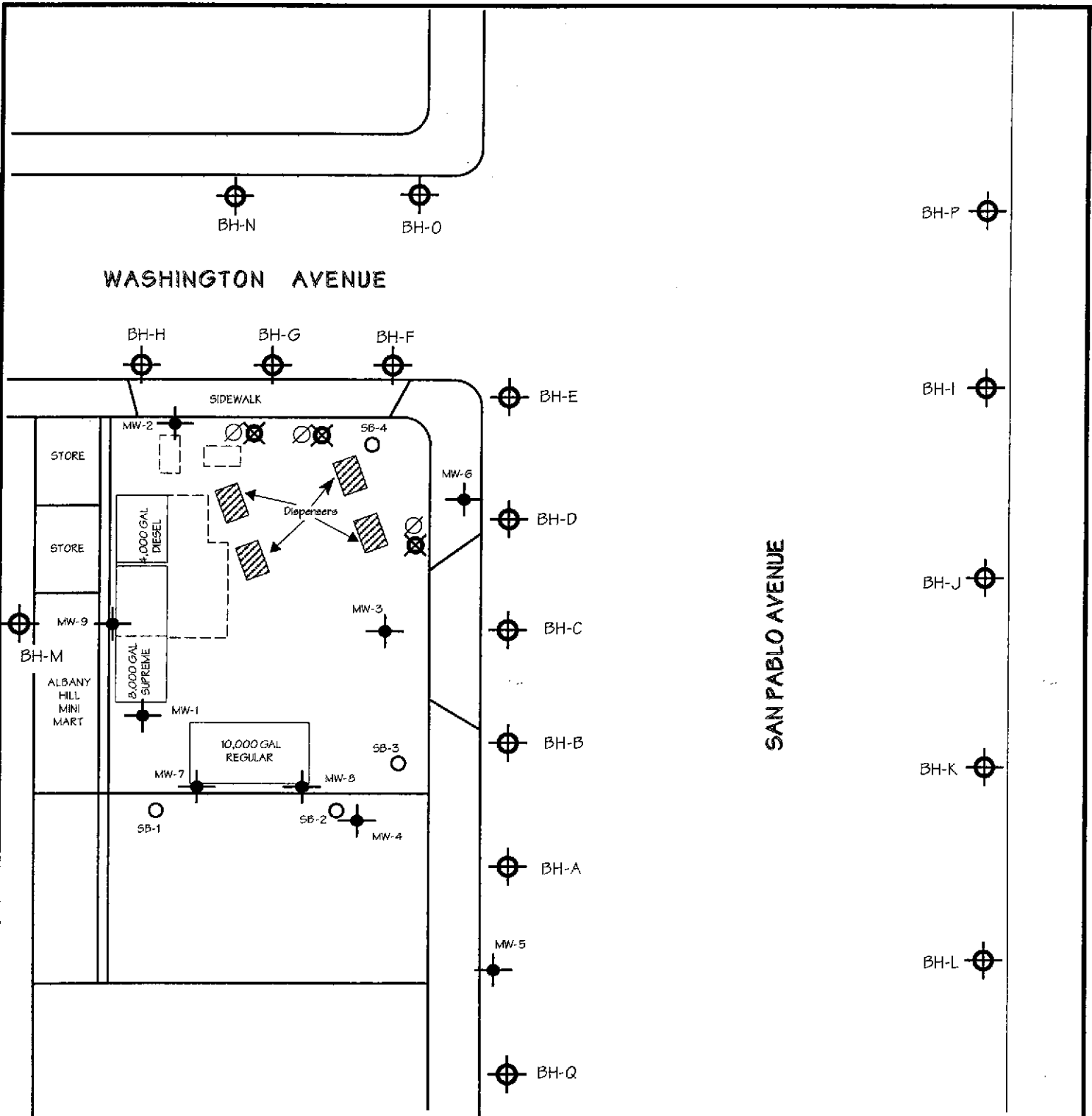
SCALE: 1" = 20'

**PROPOSED BORING  
 LOCATION MAP**

ALBANY HILL MINI MART  
 800 SAN PABLO AVENUE  
 ALBANY, CALIFORNIA

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Figure 5



WASHINGTON AVENUE

SAN PABLO AVENUE

**LEGEND**

- MW-2 MONITORING WELL
- SB-2 SOIL BORING
- BH-A ASE ADVANCED SOIL BORING
- PROPOSED AIR-SPARGING WELL
- PROPOSED VAPOR EXTRACTION WELL



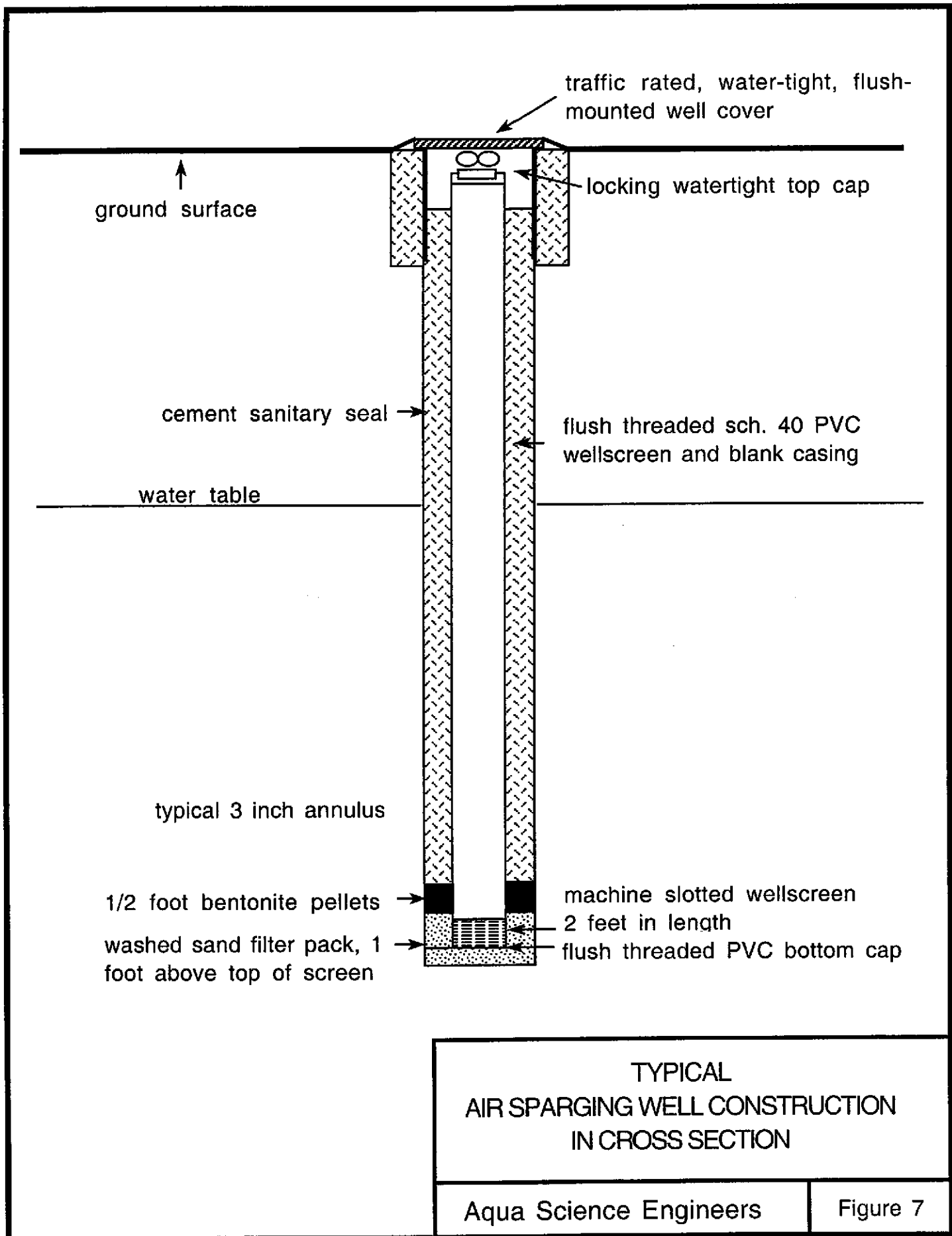
SCALE: 1" = 20'

**PROPOSED AIR-SPARGING & VAPOR EXTRACTION WELL LOCATION MAP**

ALBANY HILL MINI MART  
 800 SAN PABLO AVENUE  
 ALBANY, CALIFORNIA

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Figure 6



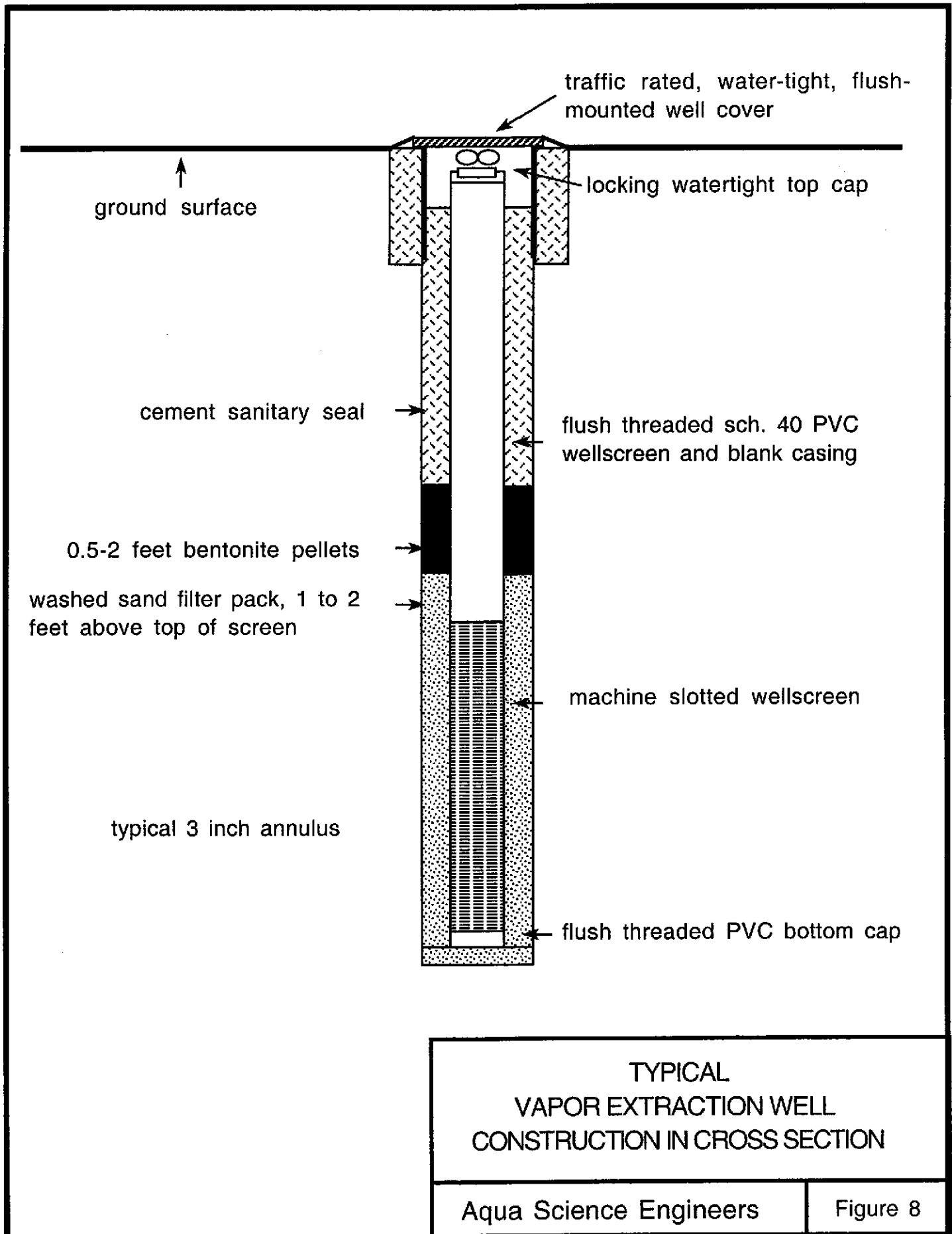


TABLE ONE

Summary of Analytical Results for GROUNDWATER Samples

Albany Hill Mini Mart

800 San Pablo Avenue, Albany, CA

All results are in parts per billion (ppb)

Well ID or Sample Point	Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TAME	TBA	MTBE	Other VOCs
MW-1	8/6/99	1,500	1,200	4.3	2.9	9.1	28	--	--	ND	--
	11/5/99	1,800	1,400	5.1	3.2	8.9	33	--	--	ND	--
	2/7/00	1,100	890	3.3	1.9	5.6	21	--	--	ND	--
	5/7/00	970	650	2.9	1.7	4.9	18	--	--	ND	--
	8/3/00	1,200	270*	190	43	41	160	--	--	360	--
	11/8/00	4,200	230*	990	200	130	560	--	--	840**	--
	2/8/01	2,800	380*	630	130	51	250	--	--	390	--
	6/7/01	650	190	97	13	20	62	--	--	320	--
	9/7/01	970	400	260	17	44	140	--	--	460	--
	12/13/01	291	<50	91.7	1.4	17.4	7.2	--	--	499	--
	6/13/02	5,120	2,160*	1,860	22	316	318	--	--	325	--
	11/11/02	824	<50	216	<5	22	20	--	--	290	--
	2/14/03	1,783	590*	546	5	90	52	--	--	321	--
	9/10/04	900	82	210	8.4	52	23	<0.5	5.1	220	<0.5
	12/7/04	540	<80	130	3.1	24	14	<0.5	<5.0	240	<0.5
	4/18/05	1,600	<200	390	3.6	32	57	<0.5	<5.0	240	0.53 1,2-DCA
6/20/05	2,500	<300	740	12	110	69	<0.5	5.7	240	<0.50	
MW-2	8/6/99	ND	340	ND	ND	ND	ND	--	--	ND	--
	11/5/99	ND	420	ND	ND	ND	0.7	--	--	ND	--
	2/7/00	ND	310	ND	ND	ND	0.6	--	--	ND	--
	5/7/00	ND	280	ND	ND	ND	<1	--	--	ND	--
	8/3/00	460	70*	79	3	43	8	--	--	3,300	--
	11/8/00	200	120	57	2	13	8	--	--	3,000	--
	2/8/01	290	80	50	1	0.6	4	--	--	3,100	--
	6/7/01	210	80	18	0.6	3	5	--	--	2,000	--
	9/7/01	230	ND	51	ND	8	8	--	--	2,400	--
	12/13/01	172	ND	53	1.2	7.7	8.4	--	--	1,780	--
	6/13/02	86	<50	6	6.7	1.1	4.5	--	--	1,830	--
	11/11/02	1,040	<50	5	1	<1	5	--	--	1,250	--
	2/14/03	82	<50	8	<1	1	<3	--	--	1,520	--
	9/10/04	<100	72	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	620	<1.0
	12/7/04	<150	86	17	<1.5	<1.5	<1.5	<1.5	<7.0	540	<1.5
	4/18/05	280	130	55	<1.5	4.4	<1.5	<1.5	<20	840	<1.5
6/20/05	200	100	34	<0.90	2.4	2.7	<0.90	5.2	540	<0.90	

TABLE ONE

Summary of Analytical Results for GROUNDWATER Samples

Albany Hill Mini Mart

800 San Pablo Avenue, Albany, CA

All results are in parts per billion (ppb)

Well ID or Sample Point	Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TAME	TBA	MTBE	Other VOCs
MW-3	8/6/99	ND	ND	ND	ND	ND	ND	--	--	ND	--
	11/5/99	92	54	ND	ND	0.6	1.7	--	--	ND	--
	2/7/00	120	71	ND	0.6	0.8	2.2	--	--	ND	--
	5/7/00	100	68	ND	ND	0.7	1.9	--	--	ND	--
	8/3/00	910	300*	220	9	35	16	--	--	11,000**	--
	11/8/00	990	200	320	0.8	18	9	--	--	8,000	--
	2/8/01	990	110	180	21	7	24	--	--	5,200**	--
	6/7/01	370	140	62	4	8	13	--	--	6,600**	--
	9/7/01	460	ND	87	1	11	25	--	--	9,400**	--
	12/13/01	251	ND	66.8	0.9	2.6	8.4	--	--	6,610	--
	6/13/02	3,630	< 50	41	60	41	187	--	--	8,820**	--
	11/11/02	6,210	< 50	150	< 1	5	< 3	--	--	7,770	--
	2/14/03	176	< 50	31	< 1	2	< 3	--	--	5,040	--
	9/10/04	< 1,000	140	110	< 10	< 10	21	20	200	4,400	< 10
	12/7/04	1,000	150	310	19	24	50	21	< 100	4,000	< 10
4/18/05	750	150	170	16	33	36	6.1	< 50	1,700	< 5.0	
6/20/05	680	120	140	9.7	20	38	7.4	< 20	1,900	< 4.0	
MW-4	6/13/02	4,460	1,500*	425	409	115	730	--	--	32	--
	11/11/02	5,150	2,380*	2,010	74	399	252	--	--	< 20	--
	2/14/03	6,360	2,410*	1,560	82	274	573	--	--	< 1	--
	9/10/04	1,600	180	370	6.5	68	93	< 1.0	10	13	1.1 (DIPE)
	12/7/04	1,900	< 200	450	8.2	72	100	< 0.9	5.4	9.5	< 0.9
	4/18/05	10,000	< 800	1,500	27	420	900	< 1.5	15	18	< 1.5
	6/20/05	6,100	< 600	830	19	280	400	< 1.5	17	22	< 1.5
MW-5	6/13/02	536	< 50	6.4	0.6	22	23	--	--	11	--
	11/11/02	3,270	1,230*	< 1	< 1	28	8	--	--	< 1	--
	2/14/03	1,260	610*	9	7	22	5	--	--	< 1	--
	9/10/04	1,300	150	2.4	< 0.50	0.77	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
	12/7/04	1,000	< 200	4.1	< 0.50	1.4	< 0.50	< 0.50	< 5.0	< 0.50	< 0.50
	4/18/05										

Improperly Destroyed by City of Albany During Street Improvements



### TABLE ONE

Summary of Analytical Results for GROUNDWATER Samples

Albany Hill Mini Mart

800 San Pablo Avenue, Albany, CA

All results are in parts per billion (ppb)

Well ID or Sample Point	Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TAME	TBA	MTBE	Other VOCs
MW-6	6/13/02	2,980	1,460*	31	2.3	3.8	12	--	--	310	--
	11/11/02	3,570	1,210*	336	5	<5	<15	--	--	95	--
	2/14/03	3,770	1,620*	429	12	7	10	--	--	122	--
	9/10/04	<1,000	390	2.7	<0.50	<0.50	<0.50	2.3	48	280	<0.50
	12/7/04	1,800	<600	32	1.7	<0.50	1.1	2.2	49	160	<0.50
	4/18/05	1,200	1,400	34	1.3	<0.50	0.90	0.86	19	36	<0.50
	6/20/05	590	1,300	3.3	<0.50	<0.50	<0.50	<0.50	5.5	8.5	<0.50
MW-7	6/13/02	24,100	1,570*	2,310	657	945	5,430	--	--	951	--
	11/11/02	4,760	2,160*	1,820	21	316	1,141	--	--	702	--
	2/14/03	4,320	2,380*	1,020	7	223	293	--	--	1,410	--
	9/10/04	4,800	<300	640	16	250	490	<1.5	31	590	<1.5
	12/7/04	990	<300	140	3.4	49	70	4.0	<20	960	<2.0
	4/18/05	1,400	<300	260	1.3	96	16	<1.0	20	370	<1.0
	6/20/05	1,900	<200	320	1.0	130	24	<0.50	17	330	<0.50
MW-8	6/13/02	20,000	7,760*	2,200	1,140	1,050	4,090	--	--	12,000	--
	11/11/02	5,010	2,010*	187	<1	15	<3	--	--	16,600	--
	2/14/03	1,980	<50	607	6	113	40	--	--	11,500	--
	9/10/04	<2,000	200	110	<20	26	49	25	<200	8,600	<20
	12/7/04	2,000	280	420	<10	40	61	31	100	6,800	<10
	4/18/05	<1000	250	76	<10	23	<10	17	<100	3,700	<10
	6/20/05	1,300	300	190	<7.0	21	40	19	<40	3,400	<7.0

### TABLE ONE

Summary of Analytical Results for GROUNDWATER Samples

Albany Hill Mini Mart

800 San Pablo Avenue, Albany, CA

All results are in parts per billion (ppb)

Well ID or Sample Point	Date Sampled	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TAME	TBA	MTBE	Other VOCs
MW-9	6/27/02	19,000	--	1,430	1,750	501	5,410	--	--	<0.5	--
	11/11/02	19,000	13,200*	3,390	4,540	1,020	9,050	--	--	549	--
	2/14/03	21,300	8,200*	1,700	2,200	701	4,970	--	--	<1	--
	9/10/04	12,000	<1,500	890	37	280	2,000	<5.0	<50	<5.0	<5.0
	12/7/04	13,000	<1,500	950	580	480	2,900	<5.0	<50	<5.0	<5.0
	4/18/05	9,600	<1,000	620	180	260	1,400	<2.5	<25	<2.5	<2.5
	6/20/05	9,800	<1,500	760	260	430	1,400	<2.0	<9.0	<2.0	<2.0
ESL		500	640	40	130	290	15	NE	NE	1,800	NE

Notes:

Data prior to August 2004 is based on a table compiled by AARS - ASE has not checked results against original laboratory reports.

\* Does not match diesel pattern

\*\* Confirmed by GC/MS method 8260

ESL = Environmental screening levels presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (July 2003)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

Most recent concentrations are in **Bold**.

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

NE indicates that no ESL has been established for this compound.



**TABLE TWO**  
 Certified Analytical Results for SOIL Samples  
 Albany Hill Mini Mart  
 800 San Pablo Avenue, Albany, CA  
 All results are in parts per million (ppm)

Well ID & Dates Sampled	Sample Depth (feet)	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TAME	TBA	MTBE	Other VOCs
BH-P	21.5	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
BH-Q	4.5	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	18	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
ESL		100	500	0.18	9.3	4.7	15	NE	NE	2	Varies

Notes:

ESL = Environmental screening levels presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (July 2003)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

Concentrations exceeding ESLs are in Bold.

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

NE means that no ESL has been established for this compound.

\* = Hydrocarbons reported as TPH-D do not exhibit a typical diesel chromatographic pattern.

### TABLE THREE

Certified Analytical Results for GROUNDWATER Samples  
 Albany Hill Mini Mart  
 800 San Pablo Avenue, Albany, CA  
 All results are in parts per billion (ppb)

Well ID & Dates Sampled	Sample Depth (feet)	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TAME	TBA	MTBE	Other VOCs
BH-A	20-22	290	120*	5.3	<0.5	9.9	16	<0.5	8.1	<0.5	<0.5
	25-27	420	920*	18	1.1	29	50	<0.5	7.1	<0.5	<0.5
BH-B	23-25	13,000	<3,000	420	<2.5	530	740	<2.5	<25	3.2	<2.5
	33-35	530	<50	0.99	0.60	0.53	0.69	<0.5	<5.0	<0.5	<0.5
BH-C	25-27	<500	110	18	<5.0	<5.0	<5.0	7.5	<50	2,000	<5.0
BH-D	10-12	12,000	<80,000	1,600	2,300	190	1,500	<7.0	210	87	<7.0
	23-25	170	51	5.2	8.8	1.2	6.9	2.0	15	620	<0.90
BH-E	20-22	<700	78	<7.0	<7.0	<7.0	<7.0	21.0	<40	3,300	<7.0
BH-F	23-25	5,400	<800	210	320	90	480	750	41	1,500	<2.5
BH-G	23-25	7,300	<400	260	660	180	960	13	<100	5,000	<10
	28-30	<1,000	160	47	30	<10	10	14	<100	4,800	<10
BH-H	23-25	2,300	<300	44	86	79	340	<2.5	<25	1,400	<2.5
	32-34	<500	120	13	12	<5.0	7.2	<5.0	<50	1,900	<5.0
BH-I	25-27	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
BH-J	25-27	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
BH-K	25-27	<50	100	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
BH-L	25-27	320	70	<0.5	0.60	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
BH-M	22-24	730	2,000	94	4.0	36	100	<0.5	<5.0	<0.5	1.4 (DIPE)
BH-N	26-28	<1,000	190	15	<10	<10	<10	36	<50	5,300	<10
BH-O	25-27	1,900	1,500*	150	42	82	340	21	<5.0	140	<0.5
BH-P	23-25	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
BH-Q	7-9	<50	420	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5
	25-27	320	500	0.58	0.74	<0.5	0.62	<0.5	<5.0	20	0.75 (1,2-DCA)

**TABLE THREE**  
 Certified Analytical Results for **GROUNDWATER** Samples  
 Albany Hill Mini Mart  
 800 San Pablo Avenue, Albany, CA  
 All results are in **parts per billion (ppb)**

Well ID & Dates Sampled	Sample Depth (feet)	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	TAME	TBA	MTBE	Other VOCs
MW-1		<b>900</b>	82	<b>210</b>	8.4	52	<b>23</b>	<0.5	5.1		<0.5
MW-2		<100	72	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	620	<1.0
MW-3		<1,000	140	<b>110</b>	<10	<10	<b>21</b>	20	200	<b>4,400</b>	<10
MW-4		<b>1,600</b>	180	<b>370</b>	6.5	68	<b>93</b>	<1.0	10	13	1.1 (DIPE)
MW-5		<b>1,300</b>	150	2.4	<0.5	0.77	<0.5	<0.5	<5.0	<0.5	<0.5
MW-6		<b>1,000</b>	390	2.7	<0.5	<0.5	<0.5	2.3	48	280	<0.5
MW-7		<b>4,800</b>	<300	<b>640</b>	16	250	<b>490</b>	<1.5	31	590	<1.5
MW-8		<2,000	200	<b>110</b>	<20	26	<b>49</b>	25	<200	<b>8,600</b>	<20
MW-9		<b>12,000</b>	<1,500	<b>890</b>	37	280	<b>2,000</b>	<5.0	<50	<5.0	<5.0
ESL		<b>500</b>	<b>640</b>	<b>46</b>	<b>130</b>	<b>290</b>	<b>13</b>	NE	NE	<b>1,800</b>	Yanes

**Notes:**

ESL = Environmental screening levels presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (July 2003)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

Concentrations exceeding ESLs are in **Bold**.

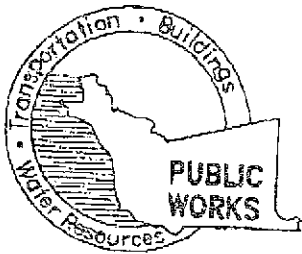
Non-detectable concentrations noted by the less than sign (<) followed by the laboratory detection limit.

NE means that no ESL has been established for this compound.

\* = Hydrocarbons reported as TPH-D do not exhibit a typical diesel chromatographic pattern.

**APPENDIX A**

Permits



COUNTY OF ALAMEDA  
PUBLIC WORKS AGENCY  
WATER RESOURCES SECTION  
399 Elmhurst Street, Hayward, CA 94544-1395  
James Yoo PH: (510) 670-6633 FAX: (510) 782-1939

FOR GENERAL DRILLING PERMIT INFO: WWW.ACFCWCD.ORG

## FAX TRANSMITTAL

TO: *Aqua Science Cos.*  
Attn: *Robert O. Hilary*

DATE: *8-17-04*

FAX NO.: *(525) 837-4853*  
TRANSMITTING THE FOLLOWING:

SHEETS    DATED    TITLE/DESCRIPTION

*2* - *DPR-104-0820 & Conditions*

(3) TOTAL PAGES INCLUDING THIS SHEET.

FROM WATER RESOURCES SECTION

NAME: JAMES YOO

TEL: (510) 670-6633

FAX: (510) 782-1939

E-MAIL: jamesy@acpwa.org

IF YOU EXPERIENCE PROBLEMS WITH THIS TRANSMISSION, PLEASE CALL ME.

REMARKS:





# ALAMEDA COUNTY PUBLIC WORKS AGENCY

**WATER RESOURCES SECTION**  
309 ELAMHERST ST. HAYWARD CA. 94544-1395  
PHONE (510) 670-6633 James Yoo

FAX (510) 782-1939

www.acfwwcd.org

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS  
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

## DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT: 800 San Pablo Ave  
Alhambra CA

PERMIT NUMBER: W04-0827  
WELL NUMBER: \_\_\_\_\_  
APN: \_\_\_\_\_

CLIENT  
Name: Dr. Jyander S. Khandel  
Address: 1700 Pt. Compton Dr #1 Phone: \_\_\_\_\_  
City: Alhambra, CA Zip: 94528

APPLICANT  
Name: Agua Servicios, Eng. Services  
Address: 244 W. Elgin Ave Phone: (925) 937-4853  
City: Danville, CA Zip: 94526

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

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

DRILLING METHOD  
 Mud Rotary  
 Cable  
 Air Rotary  
 Other  
 Auger  
 Comprobe

DRILLER'S NAME: Viremax  
DRILLER'S LICENSE NO.: 2-57 705927

WELL PROJECTS  
Drill Hole Diameter: \_\_\_\_\_ in. Maximum \_\_\_\_\_ in.  
Casing Diameter: \_\_\_\_\_ in. Depth: \_\_\_\_\_ ft.  
Surface Seal Depth: \_\_\_\_\_ ft. Owner's Well Number: \_\_\_\_\_

GEOTECHNICAL/CONTAMINATION PROTECTS  
Number of Borings: 20 Maximum \_\_\_\_\_  
Hole Diameter: 6 in. Depth: 50 ft.

STARTING DATE: 8-19-04

COMPLETION DATE: 10-1-04

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 23-03

APPLICANT'S SIGNATURE: Bob E. Kistner DATE: 8-13-04

PLEASE PRINT NAME: Robert E. Kistner Rev 5-2001

### PERMIT CONDITIONS

Checked Permit Requirements Apply

#### A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

#### B. WATER SUPPLY WELLS

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

#### C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
  2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
- Backfill bore hole by trowel with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

#### D. GEOTECHNICAL/CONTAMINATION

Backfill bore hole by trowel with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

#### E. CATHODIC

Fill hole anode zone with concrete placed by trowel

#### F. WELL DESTRUCTION

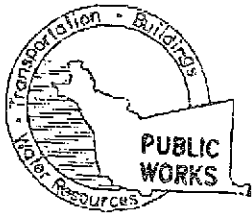
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

#### G. SPECIAL CONDITIONS

BA1

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED: \_\_\_\_\_ DATE: 8-17-04



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION  
399 ELMHURST ST. HAYWARD, CA. 94544-1395  
PHONE (510) 670-6633 James Yoo FAX (510) 782-1939

PERMIT NO. W04-0827

WATER RESOURCES SECTION  
GROUNDWATER PROTECTION ORDINANCE  
B#1-GENERAL CONDITIONS: GEOTECHNICAL & CONTAMINATION BOREHOLES

1. Prior to any drilling activities 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 Federal, State, County or to the City and follow all City and County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained.
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. Permitte, 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.
4. Permit is valid only for the purpose specified herein **August 19 to October 1, 2004**. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.
5. Drilling Permit(s) can be voided/ canceled only in writing. It is the applicants responsibilities to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.
6. 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.



# City of Albany

1000 SAN PABLO AVENUE • ALBANY, CALIFORNIA 94706-2295

## COMMUNITY DEVELOPMENT DEPARTMENT

### FAX TRANSMITTAL

CITY ADMINISTRATOR  
PH. (510) 528-5710  
FAX (510) 528-5797

CITY ATTORNEY  
PH. (510) 524-8205  
FAX (510) 526-8190

CITY CLERK  
PH. (510) 528-5720  
FAX (510) 528-5797

CITY COUNCIL  
PH. (510) 528-5720  
FAX (510) 528-5797

#### COMMUNITY DEVELOPMENT

- Building
- Planning
- Environmental Resources

PH. (510) 528-5750  
FAX (510) 524-9359

- Maintenance
- Public Works

PH. (510) 524-9543  
FAX (510) 524-9722

#### FINANCE & ADMINISTRATIVE SERVICES &

CITY TREASURER  
PH. (510) 528-5730  
FAX (510) 528-2743

#### FIRE & EMERGENCY MEDICAL SERVICES

PH. (510) 528-5771  
FAX (510) 528-5774

#### PERSONNEL

PH. (510) 528-5714  
FAX (510) 528-5797

#### POLICE

PH. (510) 525-7300  
FAX (510) 528-5774

#### RECREATION & COMMUNITY SERVICES

1749 Marin Avenue  
PH. (510) 524-9283  
FAX (510) 528-8914

- Friendship Club/Childcare

- Program Memorial Park

PH. (510) 524-0135

- Senior Center

PH. (510) 524-9122

FAX (510) 524-8940

- Teen Center/Middle School Park

PH. (510) 525-0576

DATE: August 13, 2004

TO: Robert Kitay or Project Manager

COMPANY OR AGENCY: Aqua Science Engineers

DEPARTMENT:

FAX #: (925) 837-4853

# PAGES: 12

(Incl. Cover Sheet)

MESSAGE: Issued Encroachment Permit for soil borings at 800 San Pablo Ave. **Please contact me (preferably via e-mail) to let me know to whom to mail a hard copy of the Permit.\***

Thanks again for your patience!

-JE

FROM: John Erlich

PHONE: (510) 528-5758

FAX: (510) 524-9359

E-MAIL: [jerlich@albanyca.org](mailto:jerlich@albanyca.org)

Original to follow by mail:  YES\*  NO

cc: Vironex - 568-7679



# City of Albany



## ENCROACHMENT PERMIT PERMANENT/TEMPORARY CONSTRUCTION WITHIN CITY RIGHT OF WAY

PERMIT NO. 04-205

LOCATION: 800 San Pablo Ave.

NAME	ADDRESS	Phone No. Normal/Emergency	Business Lic. No. Workers Comp. No.
Applicant Agua Science Engineers	209 W. El Pintado, Danville, CA 94526	(925) 820-9391	See attached app 1747644-03
Owner: Jagjinder Sikand	1300 Farmington Dr, Walnut Creek, CA 94595	(925) 256-1385	
Engineer / Architect Agua Science Engineers	209 W. El Pintado, Danville, CA 94526	(925) 820-9391	See attached app 1747644-03
Contractor Virenex	2110 Adams Ave, San Leandro, CA 94577	(510) 568-7676	

### TYPE OF WORK

- Sidewalk                       Curb & Gutter                       Sewer                       Street Tree  
 Utility Co.                       Permanent Structure                       Other: Soil borings

### DESCRIPTION OF WORK

Drill 17 soil borings at the parking lane areas of San Pablo Ave and Washington Ave and collect soil and water samples for analysis.

### REQUIRED CONDITIONS

- All work shall be in accordance with the attached standard conditions.
- No refund after 120 days or work begins, 70% of fee refundable within 120 days provided no work has begun.
- Permanent structures require City Council approval (City Code 14-2).
- Cut all Pavement to existing lines. CALL USA 1-800-227-2600. No damage to street trees or roots, without city authorization.
- Call for Final Inspection and Sign-Off 48 hr. in advance at (510) 528-5760.

Applicant's Signature: Pat C. Kitey Date: 6-24-04

STAFF USE ONLY	
<b>Permit Fee Computation</b>	
Total construction cost subject to fee	
New construction at 8% of construction cost	
In-Lieu slurry seal fee (when street is out)	
Minimum fee per schedule (if greater than % fee)	
Total Fee due (transfer to fee schedule form) (Utilities to be billed; copy of permit to Finance)	<del>\$\$\$</del> \$110
Special Conditions: <u>See Engineer's Special Conditions attached</u>	
Issued by: <u>Joel Cull</u>	Date: <u>8/13/04</u>
Permit Expiration Date: <u>2/13/05</u>	(not to exceed 180 days for date issued)
Final Sign Off by: _____	Date: _____

OK  
per  
JE

# City of Albany

## ENVIRONMENTAL PROTECTION STATEMENT OF RESPONSIBILITY FOR DISCHARGES & DAMAGE

### I. PURPOSE

This statement is to provide notice to property owners, contractors, and others of the responsibility for compliance with Albany Municipal Code (AMC) as it relates to protection of public trees and waterways.

**Public Trees:** Damage to street trees or other trees located on public property is considered damage to public property. Damage to trees includes, but is not limited to cutting any amount of trees roots, ripping or tearing of branches, and peeling, tearing or scarring of tree bark. Damage may cause death and/or a dangerous condition by destabilizing the tree. Restoring a tree to its pre-damaged state can take years. Therefore, preventing damage to trees is a priority to the City of Albany.

**Waterways:** The City's storm water runoff system conveys rain water directly to the San Francisco Bay through a network of surface flows, underground pipes, and creek channels. Materials discharged to a sidewalk, street gutter, storm drain or creek can cause creeks and the Bay to become polluted. Any material other than rain water is considered an illicit discharge under the Federal Clean Water Act. Examples of illicit discharges include: concrete wash water, stucco wash water, paint wash water, chemicals, and runoff from stockpiled materials such as dirt aggregate, soil products, and other construction materials.

### II. RESPONSIBILITY FOR DAMAGE TO PUBLIC TREES AND/OR ILLICIT DISCHARGES TO WATERWAYS

**Public Trees:** Pursuant to Albany Municipal Code Section 14-1.2., it is unlawful to cause damage to public property. When a public tree is damaged the cost of the damage and the value of the tree will be calculated by a certified arborist in accordance with International Society of Arboriculture Standards. Because valuable resources such as time, energy and money are invested in trees over many years, the calculated value of a tree can be high. The party damaging the tree is liable for all costs associated with the loss of the tree and the repair or replacement of the tree.

**Waterways:** Pursuant to Albany Municipal Code Section 15.4, it is unlawful to discharge materials (liquid or solid) to a sidewalk, street, gutter, storm drain or creek. An illicit discharge is defined as "any discharge to the City storm drain system that is not composed entirely of storm water...". The contractor and/or property owner is responsible for all fines and costs associated with the illicit discharge.

### III. CERTIFICATION OF COMPLIANCE

I understand that as the applicant I am responsible for any damage to public trees and or all illicit discharges resulting from this project and that I am responsible for all fees and fines as a result of non-compliance.

Paul E. Kuley  
Property Owner or Permittee

6-24-04  
Date

Vironix Inc. Jisha White  
Business Name & Contractor's Authorized Representative

6-29-04  
Date

Location or Title of Project: 800 San Pablo Avenue

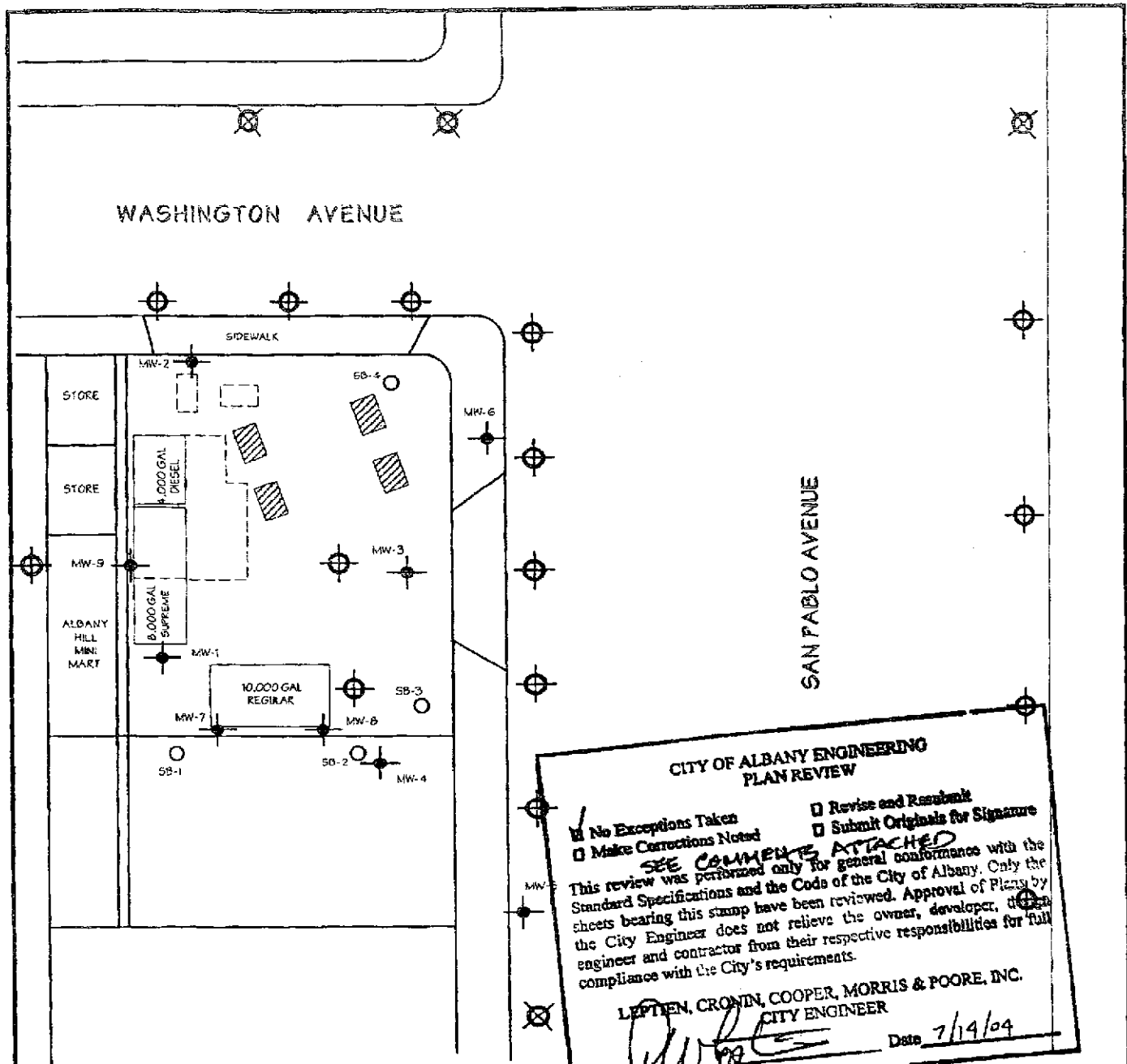
For more information, contact the Community Development & Environmental Resources Department at (510) 528-5760

Date: 7/14/04

## Special Conditions

City of Albany  
Encroachment Permit  
for  
**Aqua Science Engineers**  
**Soil Borings Submittals @**  
**800 San Pablo**

1. Provide for traffic control and pedestrian safety and lane closures per the General Provisions of the City and Caltrans Standard Specifications. No open excavations shall be left unsupervised. All excavations shall be back filled or covered at the end of the working day.
2. Post for no parking in advance per City requirements.
3. Notify USA prior to excavating.
4. Conform to the requirements of the City's monument preservation plan. Any survey monument encountered shall be referenced and preserved or restored per State law.
5. Conform to City Standard Details for Sidewalk Repairs. Sidewalk shall be removed to the nearest joint.
6. Do not install conduits longitudinally within 5 feet of existing sanitary sewers. Crossings should be at right angles if possible. Provide a minimum of 6 inches vertical clearance to existing sanitary sewers.
7. Backfill with concrete or controlled low strength material per PWS Section 201-6.
8. Pavement Replacement shall conform to the City's Standard Specifications and Detail.
9. Attention is directed to City Sanitary Sewer and Storm Drain Maintenance Maps at this location (attached).
10. Provide a minimum of 2.5 feet of cover to finished pavement in right of way.
11. Contact the City's Public Works Inspector, A.J. Silva at 510 559 4271 to schedule inspection a minimum of 48 hours in advance of excavating.



**CITY OF ALBANY ENGINEERING  
PLAN REVIEW**

No Exceptions Taken       Revise and Resubmit  
 Make Corrections Noted       Submit Originals for Signature

**SEE COMMENTS ATTACHED**

This review was performed only for general conformance with the Standard Specifications and the Code of the City of Albany. Only the sheets bearing this stamp have been reviewed. Approval of Plans by the City Engineer does not relieve the owner, developer, design engineer and contractor from their respective responsibilities for full compliance with the City's requirements.

LEPTIEN, CRONIN, COOPER, MORRIS & POORE, INC.  
CITY ENGINEER

By *[Signature]* Date 7/14/04

**LEGEND**

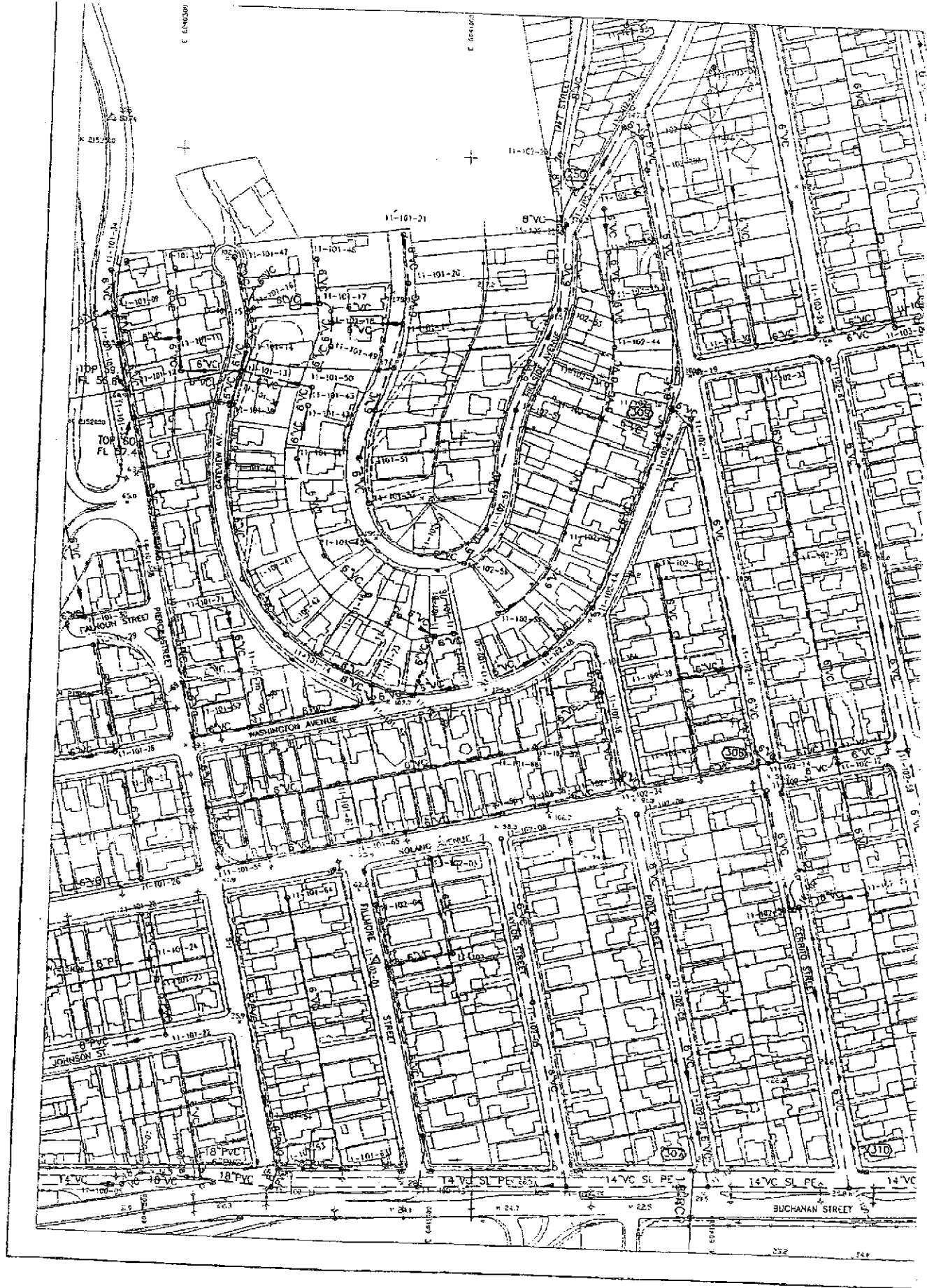
MW-2		MONITORING WELL	
SB-2		SOIL BORING	
		PROPOSED SOIL BORING	
		ADDITIONAL SOIL BORING (ONLY IF NEEDED)	

SCALE: 1" = 20'

**PROPOSED BORING  
LOCATION MAP**

ALBANY HILL MINI MART  
800 SAN PABLO AVENUE  
ALBANY, CALIFORNIA

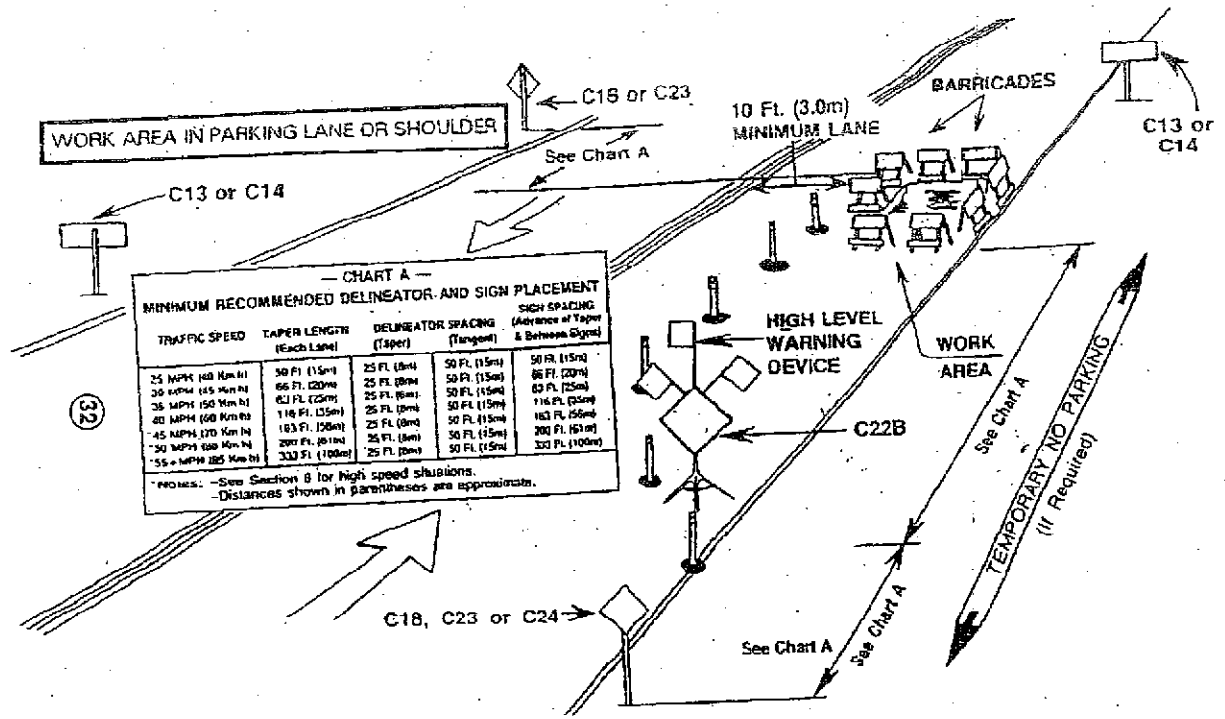
AQUA SCIENCE ENGINEERS	Figure 4
------------------------	----------



2025 4 15 10 30



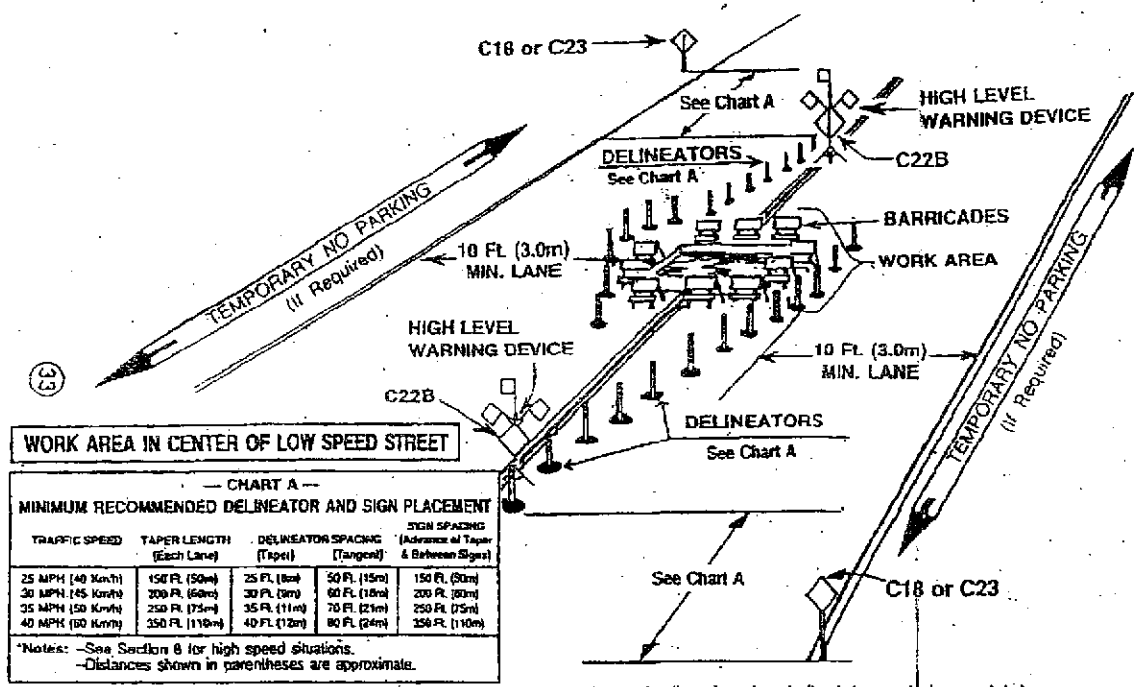




— CHART A —  
MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

TRAFFIC SPEED	TAPER LENGTH (Each Lane)	DELINEATOR SPACING		SIGN SPACING (Advance of Taper & Between Signs)
		(Taper)	(Tangent)	
25 MPH (40 Km/h)	50 Ft. (15m)	25 Ft. (8m)	50 Ft. (15m)	50 Ft. (15m)
30 MPH (45 Km/h)	65 Ft. (20m)	25 Ft. (8m)	50 Ft. (15m)	65 Ft. (20m)
35 MPH (55 Km/h)	83 Ft. (25m)	25 Ft. (8m)	50 Ft. (15m)	83 Ft. (25m)
40 MPH (65 Km/h)	116 Ft. (35m)	25 Ft. (8m)	50 Ft. (15m)	116 Ft. (35m)
45 MPH (75 Km/h)	163 Ft. (50m)	25 Ft. (8m)	50 Ft. (15m)	163 Ft. (50m)
50 MPH (80 Km/h)	200 Ft. (61m)	25 Ft. (8m)	50 Ft. (15m)	200 Ft. (61m)
55 MPH (90 Km/h)	333 Ft. (100m)	25 Ft. (8m)	50 Ft. (15m)	333 Ft. (100m)

\*Notes: —See Section 8 for high speed situations.  
—Distances shown in parentheses are approximate.



— CHART A —  
MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

TRAFFIC SPEED	TAPER LENGTH (Each Lane)	DELINEATOR SPACING		SIGN SPACING (Advance of Taper & Between Signs)
		(Taper)	(Tangent)	
25 MPH (40 Km/h)	150 Ft. (50m)	25 Ft. (8m)	50 Ft. (15m)	150 Ft. (50m)
30 MPH (45 Km/h)	200 Ft. (60m)	30 Ft. (9m)	60 Ft. (18m)	200 Ft. (60m)
35 MPH (55 Km/h)	250 Ft. (75m)	35 Ft. (11m)	70 Ft. (21m)	250 Ft. (75m)
40 MPH (65 Km/h)	350 Ft. (110m)	40 Ft. (12m)	80 Ft. (24m)	350 Ft. (110m)

\*Notes: —See Section 8 for high speed situations.  
—Distances shown in parentheses are approximate.

Note: This traffic diversion plan shall only be used when work is in progress.

August 13, 2004	*****	Receipt #.: 23316
Friday 9:49 am	* City of Albany *	Register #.: 000
By: Steph	*****	Terminal ID: T1
1000 San Pablo Ave. Albany, CA. 94706		

I.D. Number	Amount Paid
AQU0004 A: 017	122.00
Cmt: .00 NEW BL#6550/EXP. 6-12-04	122.00
04220 GF BUSINESS LIC	11.25
Cmt: NEW BL#6550/EXP. 5-12-04	

Check #	Check Amount	Cash	Amt Tendered	Total Paid	Change
028167	133.25	.00	133.25	133.25	.00
Paid By.: AQUA SCIENCE ENGINEERS (sW)					

August 13, 2004                   \*\*\*\*\*  
 Friday 9:51 am                   \* City of Albany \*  
 By: Steph                         \*\*\*\*\*  
                                   1000 San Pablo Ave. Albany, CA. 94706

Receipt #: 23317  
 Register #: 000  
 Terminal ID: T1

I.D. Number	Amount Paid
04605   GF SPEC INSPECTION Cmt: ENCROACHMENT PERMIT	110.00

Check #	Check Amount	Cash	Amt Tendered	Total Paid	Change
028164	110.00	.00	110.00	110.00	.00

Paid By.: AQUA SCIENCE ENGINEERS (sW)

# City of Albany

## SPECIAL PROVISIONS FOR ENCROACHMENT PERMIT FOR PERMANENT IMPROVEMENT IN CITY RIGHT-OF-WAY

Permit # 04-205

Location: 800 San Pablo Avenue

This APPLICATION MUST BE ACCOMPANIED by the DATA and PLANS indicated below:

- Description of Job
- APPROVED Construction Plans and/or Documents
- An Engineer's Estimate of the value of all public improvements and utility services within the public right-of-way
- A Soils Report prepared by a Registered Civil Engineer.
- Others: Specify \_\_\_\_\_

ALL FEES SHALL BE PAID AND DEPOSITS MADE PRIOR TO THE ISSUANCE OF THIS PERMIT: except Utility Companies. Utility Companies will be invoiced.

### STANDARDS/SPECIFICATION:

The following conditions and provisions of the Albany Municipal Code apply to this permit. All work shall be in accordance with City Standard Specifications and Drawings.

### COMMENCEMENT OF WORK

The permittee shall begin the work or use authorized by a permit issued pursuant to this chapter within ninety (90) days from the date of issuance unless a different period is stated in the permit, or an extension of time is granted by the Director of Community Development & Environmental Resources. If the work or use is not begun accordingly the permit shall become void.

### INSPECTION

In general, inspection producers and requirements shall be as established by the Director of Community Development & Environmental Resources. Unless specifically exempted by the City Code, no encroachment work shall take place without inspection by the Director of Community Development & Environmental Resources or his/her authorized agent. Inspections by the City must be requested at least TWENTY-FOUR (24) HOURS (excluding weekends) IN ADVANCE of the work to be performed. No work shall be performed on weekends without PRIOR AUTHORIZATION of the Director of Community Development & Environmental Resources.

### DISPLAY OF PERMIT

The permittee shall keep a copy of this permit at the site of the work, or in the cab of a vehicle when movement on a public street is involved. The permit shall be shown to any authorized representative of the Director of Community Development & Environmental Resources or Law Enforcement Officer on demand.

### ACCEPTANCE OF PERMIT BY APPLICANT

Acceptance by the applicant of the permit shall be conclusive evidence of the reasonableness of the terms imposed and shall constitute a waiver of any right to legislative determination thereof.

### NON-ASSIGNMENT OF PERMIT

Permits shall be issued only to the person making application and may not be assigned to another person by the permittee. If any permittee assigns his permit to another, the permit will be revoked.

### CHANGES IN PERMIT AND WORK

No changes may be made in the location, dimensions, character, or duration of the encroachment or use as granted by the permit except upon written authorization of the Director of Community Development & Environmental Resources.

May 27 04 12:52p

p. 5

## *City of Albany*

### EXCAVATION OF PAVED STREETS

No excavations shall be permitted within the paved area of the public streets unless the applicant can prove to the satisfaction of the Director of Community Development & Environmental Resources that the following conditions exist:

1. Boring of the utility is not feasible; and
2. No reasonable alternative utility alignment is available outside the paved street area; and
3. The cut area and an adjacent area shall be resurfaced as approved by the Director of Community Development & Environmental Resources. The limits of resurfacing shall be as determined by the Director of Community Development & Environmental Resources to insure the excavating area blends visually with the surrounding area. The applicant shall be responsible for the replacement of any and all obliterated or removed pavement markers or striping.

### REVOCAION OF PERMIT

This encroachment permit may be revoked at any time at the option of the Director of Community Development & Environmental Resources, whenever:

1. It appears that continuing allowance of the permitted work, whether because of changed conditions or otherwise, interferes with full, adequate or safe public use of the right-of-way involved; or
2. The permittee fails to comply with or violates any city ordinance, city standard, safety regulations, or any condition of the issuance of the permit.

Upon revocation of the permit, the permittee shall immediately restore the public right-of-way to a condition as required by the Director of Community Development & Environmental Resources. If the restoration is not completed within the time specified by the Director of Community Development & Environmental Resources, the City may take any and all necessary action so required to restore the right-of-way. Any and all costs incurred by the City will be deducted from any deposits posted by the permittee and if necessary recovered by legal action.

### HOURS OF WORK

No work shall commence prior to 8:00 AM and no work shall be conducted after 6:00 PM Monday through Saturday and before 10:00 AM or after 6:00 PM on Sunday and Holidays.

### COMPLETION OF WORK

The permittee must complete the work or use authorized by a permit issued pursuant to this chapter within the time specified in the permit. If at any time the Director of Community Development & Environmental Resources finds that the delay in the prosecution or completion of the work or use authorized is due to lack of diligence on the part of the permittee, the permit may be revoked.

### PERMITTEE LIABILITY

The permittee shall agree to hold the City, its officers, and employees harmless from any and all liability, claims, suits or actions for any and all damages alleged to have been suffered by any person or property by reason of the permittee's installation, operation, maintenance or removal of the encroachment.

BY MY SIGNATURE HEREUNDER, I state that I have read and understand the above conditions and agree to comply therewith. I hereby attest that I am either the owner of the property or duly authorized agent of the applicant.

APPLICANT'S SIGNATURE

Robert E. Kitay

Date: 6-24-04

NAME (print):

Robert E. Kitay

COMPANY:

Agua Science Engineers

Permit No. <b>0404-6SV1135</b>	
Dist/Co/Rte/PM <b>04-Ala-123-4.81</b>	
Date <b>August 6, 2004</b>	
Fee Paid	Deposit
Performance Bond Amount (1)	Payment Bond Amount (2)
Bond Company	
Bond Number (1)	Bond Number (2)

In compliance with (Check one):

- Your application July 21, 2004
- Utility Notice No. \_\_\_\_\_ of \_\_\_\_\_
- Agreement No. \_\_\_\_\_ of \_\_\_\_\_
- R/W Contract No. \_\_\_\_\_ of \_\_\_\_\_

TO:  Aqua Science Engineers  
 208 W. El Pinto  
 Danville, CA 94526

Attn: Mr. Robert E. Kitay  
 Phone: (925) 820-9391  , PERMITTEE

And subject to the following, **PERMISSION IS HEREBY GRANTED** to:

Collect soil and water samples by drilling twelve (12) soil borings in the San Pablo Avenue parking lanes, on State Highways 04-Ala-123, Post Miles 4.81, in the City of Albany.

A minimum of one week prior to the start of work authorized under this permit, notice shall be given and advance approval of construction details, operations, public safety, and traffic control shall be obtained from State Representative Hamid Karami, 1910 Olympic Blvd., Walnut Creek, 94596, weekdays, between 7:30 AM and 4:00 PM.

All permitted work requiring traffic control requires the Permittee to apply for and obtain a Lane Closure Number prior to the start of any work that may affect traffic. See the attached "Encroachment Permit Project Traffic Control Procedures" and the attached "Permit Project Traffic Control Request Form." Additional time beyond the minimum seven day advanced notice required in the above paragraph may be required for obtaining the traffic control approval.

The following attachments are also included as part of this permit (Check applicable):

- Yes  No General Provisions
- Yes  No Utility Maintenance Provisions
- Yes  No Special Provisions
- Yes  No A Cal-OSHA permit required prior to beginning work:  
# \_\_\_\_\_

In addition to fee, the permittee will be billed actual costs for:

- Yes  No Review
- Yes  No Inspection
- Yes ----- Field Work

(If any Caltrans effort expended)

Yes  No The information in the environmental documentation has been reviewed and considered prior to approval of this permit.

This permit is void unless the work is completed before December 31, 2004.

This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized. No project work shall be commenced until all other necessary permits and environmental clearances have been obtained.

APPROVED:

**BIJAN SARTIPI, District Director**

BY:

*Signature of S. S. Nozzari*

**S. S. NOZZARI, District Permit Engineer**

Aqua Science Engineers  
Permit No. 04-6SV1135  
August 6, 2004

All of Permittee's personnel shall wear appropriate personal protective equipment, including hard hats and bright-colored vests, shirts or jackets with retro-reflective material while on State highway right-of-way.

All drilling operations shall be conducted off the traveled way except where necessary to traverse pavements and medians on conventional highways. No operations is allowed on traveled ways of freeways or expressways.

No other work is authorized at locations accessible only from through traffic lanes of freeways or expressways without separate written permission.

Before any work is begun, which will interrupt the normal flow of public traffic, approval shall be obtained from State's representative, and closures will be as shown on the attached copy of Standard Plan Sheets T-10 through T-14.

Plan Sheet T-10 is for shoulder work only.

Traffic control is authorized only between 9:00 AM to 3:00 PM, Monday through Friday, holidays excluded or as directed by State Representative. Any traffic control which requires lane closure shall be in compliance with the appropriate traffic control plan. Where required by the plan, the use of a flashing arrow sign is MANDATORY.

Boring holes shall be backfilled as directed by the State Representative.

The site of the work shall be enclosed by suitable barricades, signs and lights, as approved by State's representative, to warn and protect traffic effectively.

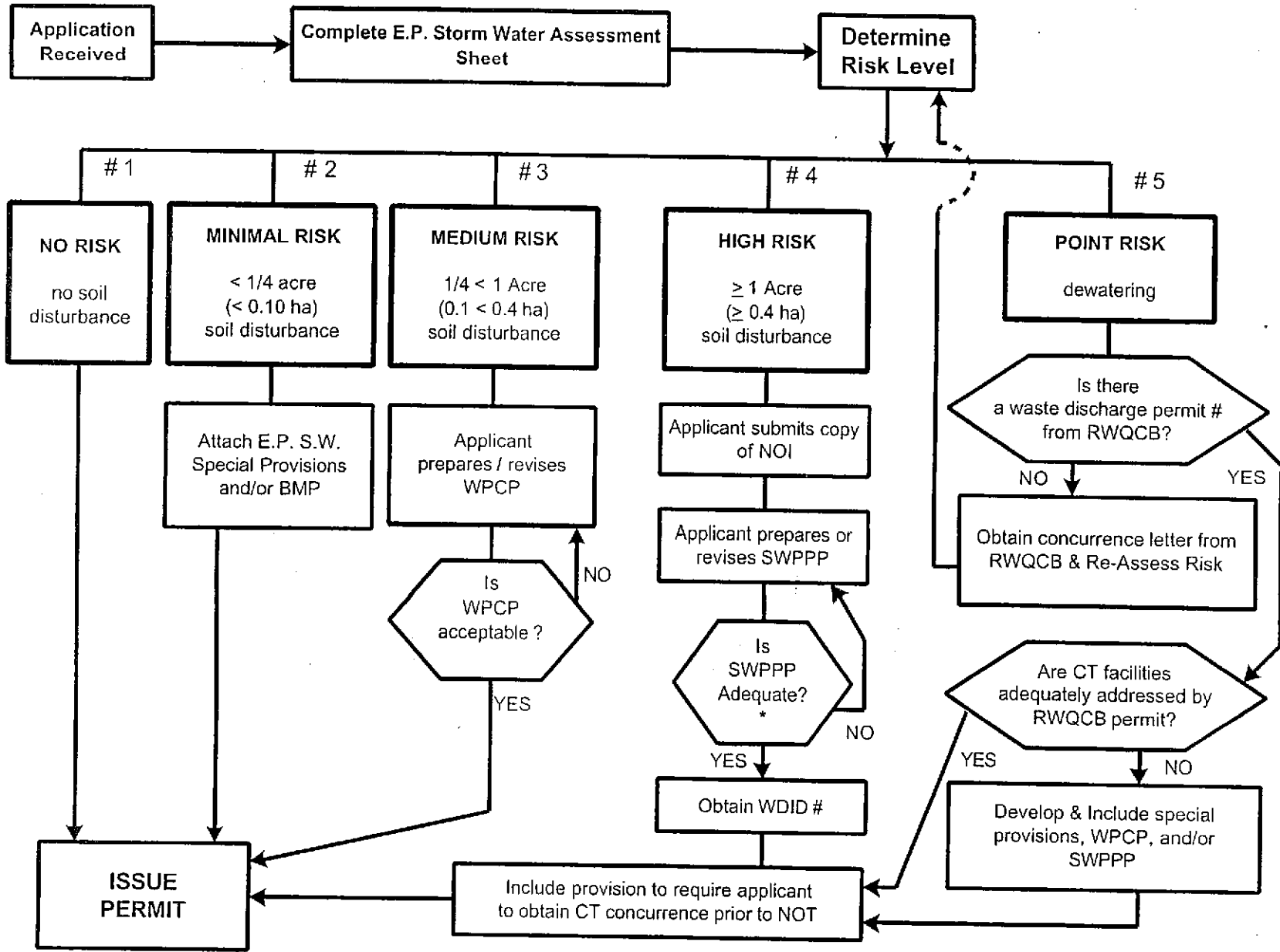
When drilling operations are being conducted, the Permittee shall furnish, place and maintain signs and safety equipment in accordance with the latest edition of the "Manual of Traffic Controls for Construction and Maintenance Work Zones".

When the work area encroaches upon a sidewalk, walkway, or crosswalk area, special consideration must be given to pedestrian safety. Protective barricades, fencing, handrails and bridges, together with warning and guidance devices and signs must be utilized so that the passageway for pedestrians, especially blind and other physically handicapped, is safe and well defined.

Any damage to existing state facilities shall be repaired or replaced in kind by the Permittee immediately.

**Immediately following completion of the work permitted herein, the Permittee shall fill out and mail the "Notice of Completion" attached to this permit.**





Completing the E.P. Storm Water Assessment sheet will assist you in assessing the "RISK LEVEL" of the proposed project.  
 If question # 2 is answered "YES," this will determine - MEDIUM RISK  
 If questions # 3 or # 4 is answered "YES," this will determine - HIGH RISK  
 If question # 8 is answered "YES," this will determine - POINT RISK

\* Consult District Storm Water Coordinator

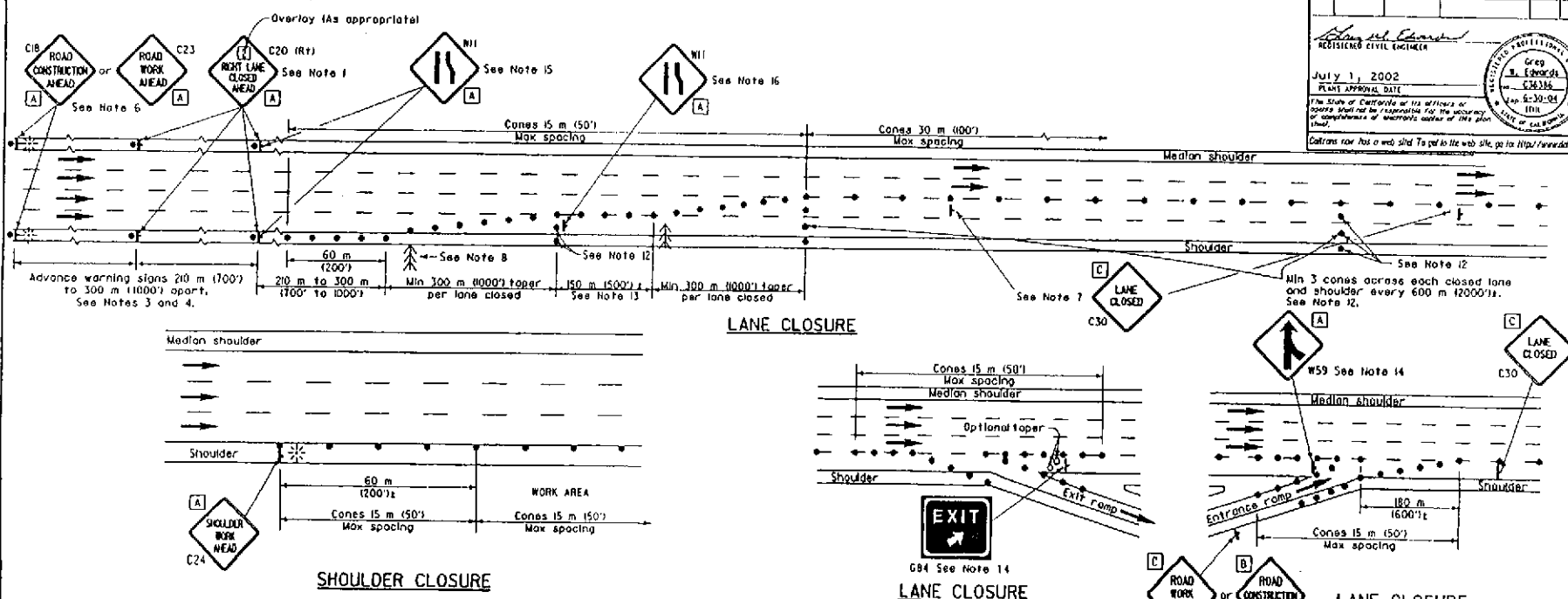
STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION  
ENCROACHMENT PERMIT GENERAL PROVISIONS  
TR-0045 (REV. 8/98)

1. **AUTHORITY:** The Department's authority to issue encroachment permits is provided under, Div. 1, Chpt. 3, Art. 1, Sect. 660 to 734 of the Streets and Highways Code.
2. **REVOCATION:** Encroachment permits are revocable on five days notice unless otherwise stated on the permit and except as provided by law for public corporations, franchise holders, and utilities. These General Provisions and the Encroachment Permit Utility Provisions are subject to modification or abrogation at any time. Permittees' joint use agreements, franchise rights, reserved rights or any other agreements for operating purposes in State highway right of way are exceptions to this revocation.
3. **DENIAL FOR NONPAYMENT OF FEES:** Failure to pay permit fees when due can result in rejection of future applications and denial of permits.
4. **ASSIGNMENT:** No party other than the permittee or permittee's authorized agent is allowed to work under this permit.
5. **ACCEPTANCE OF PROVISIONS:** Permittee understands and agrees to accept these General Provisions and all attachments to this permit, for any work to be performed under this permit.
6. **BEGINNING OF WORK:** When traffic is not impacted (see Number 35), the permittee shall notify the Department's representative, two (2) days before the intent to start permitted work. Permittee shall notify the Department's Representative if the work is to be interrupted for a period of five (5) days or more, unless otherwise agreed upon. All work shall be performed on weekdays during regular work hours, excluding holidays, unless otherwise specified in this permit.
7. **STANDARDS OF CONSTRUCTION:** All work performed within highway right of way shall conform to recognized construction standards and current Department Standard Specifications, Department Standard Plans High and Low Risk Facility Specifications, and Utility Special Provisions. Where reference is made to "Contractor and Engineer," these are amended to be read as "Permittee and Department representative."
8. **PLAN CHANGES:** Changes to plans, specifications, and permit provisions are not allowed without prior approval from the State representative.
9. **INSPECTION AND APPROVAL:** All work is subject to monitoring and inspection. Upon completion of work, permittee shall request a final inspection for acceptance and approval by the Department. The local agency permittee shall not give final construction approval to its contractor until final acceptance and approval by the Department is obtained.
10. **PERMIT AT WORKSITE:** Permittee shall keep the permit package or a copy thereof, at the work site and show it upon request to any Department representative or law enforcement officer. If the permit package is not kept and made available at the work site, the work shall be suspended.
11. **CONFLICTING ENCROACHMENTS:** Permittee shall yield start of work to ongoing, prior authorized, work adjacent to or within the limits of the project site. When existing encroachments conflict with new work, the permittee shall bear all cost for rearrangements, (e.g., relocation, alteration, removal, etc.).
12. **PERMITS FROM OTHER AGENCIES:** This permit is invalidated if the permittee has not obtained all permits necessary and required by law, from the Public Utilities Commission of the State of California (PUC), California Occupational Safety and Health Administration (Cal-OSHA), or any other public agency having jurisdiction.
13. **PEDESTRIAN AND BICYCLIST SAFETY:** A safe minimum passageway of 1.21 meter (4') shall be maintained through the work area at existing pedestrian or bicycle facilities. At no time shall pedestrians be diverted onto a portion of the street used for vehicular traffic. At locations where safe alternate passageways cannot be provided, appropriate signs and barricades shall be installed at the limits of construction and in advance of the limits of construction at the nearest crosswalk or intersection to detour pedestrians to facilities across the street.
14. **PUBLIC TRAFFIC CONTROL:** As required by law, the permittee shall provide traffic control protection warning signs, lights, safety devices, etc., and take all other measures necessary for traveling public's safety. Day and night time lane closures shall comply with the Manuals of Traffic Controls, Standard Plans, and Standard Specifications for traffic control systems. These General Provisions are not intended to impose upon the permittee, by third parties, any duty or standard of care, greater than or different from, as required by law.
15. **MINIMUM INTERFERENCE WITH TRAFFIC:** Permittee shall plan and conduct work so as to create the least possible inconvenience to the traveling public; traffic shall not be unreasonably delayed. On conventional highways, permittee shall place properly attired flagger(s) to stop or warn the traveling public in compliance with the Manual of Traffic Controls and Instructions to Flaggers Pamphlet.
16. **STORAGE OF EQUIPMENT AND MATERIALS:** Equipment and material storage in State right of way shall comply with Standard Specifications, Standard Plans, and Special Provisions. Whenever the permittee places an obstacle within 3.63 m (12') feet of the traveled way, the permittee shall place temporary railing (Type K).
17. **CARE OF DRAINAGE:** Permittee shall provide alternate drainage for any work interfering with an existing drainage facility in compliance with the Standard Specifications, Standard Plans and/or as directed by the Department's representative.
18. **RESTORATION AND REPAIRS IN RIGHT OF WAY:** Permittee is responsible for restoration and repair of State highway right of way resulting from permitted work (State Streets and Highways Code, Sections 670 et. seq.).
19. **RIGHT OF WAY CLEAN UP:** Upon completion of work, permittee shall remove and dispose of all scraps, brush, timber, materials, etc. off the right of way. The aesthetics of the highway shall be as it was before work started.
20. **COST OF WORK:** Unless stated in the permit, or a separate written agreement, the permittee shall bear all costs incurred for work within the State right of way and waives all claims for indemnification or contribution from the State.
21. **ACTUAL COST BILLING:** When specified in the permit, the Department will bill the permittee actual costs at the currently set hourly rate for encroachment permits.
22. **AS-BUILT PLANS:** When required, permittee shall submit one (1) set of as-built plans in compliance with Department's requirements. Plans shall be submitted within thirty (30) days after completion and approval of work.  
  
As-Built plans or accompanying correspondence shall not include disclaimer statements of any kind. Such statements shall constitute non-compliance with these provisions. Failure to provide complete and signed As-Built plans shall be cause for bond or deposit retention by the Department.
23. **PERMITS FOR RECORD PURPOSES ONLY:** When work in the right of way is within an area under a Joint Use Agreement (JUA) or a Consent to Common Use Agreement (CCUA), a fee exempt permit is issued to the permittee for the purpose of providing a notice and record of work. The Permittee's prior rights shall be preserved without the intention of creating new or different rights or obligations. "Notice and Record Purposes Only" shall be stamped across the face of the permit.
24. **BONDING:** The permittee shall file bond(s), in advance, in the amount set by the Department. Failure to maintain bond(s) in full force and effect will result in the Department stopping of all work and revoking permit(s). Bonds are not required of public corporations or privately owned utilities, unless permittee failed to comply with the provision and conditions under a prior permit. The surety company is responsible for any latent defects as provided in California Code of Civil Procedures, Section 337.15. Local agency permittee shall comply with requirements established as follows: In recognition that project construction work done on State property will not be directly funded and paid by State, for the purpose of protecting stop notice claimants and the interests of State relative to successful project completion, the local agency permittee agrees to require the construction contractor furnish both a payment and performance bond in the local agency's name with both bonds complying with the requirements set forth in Section 3-1.02 of State's current Standard Specifications before performing any project construction work. The local agency permittee shall defend, indemnify, and hold harmless the State, its officers and employees from all project construction related claims by contractors and all stop notice or mechanic's lien claimants. The local agency also agrees to remedy, in a timely manner and to State's satisfaction, any latent defects occurring as a result of the project construction work.
25. **FUTURE MOVING OF INSTALLATIONS:** Permittee understands and agrees to rearrange a permitted installation upon request by the Department, for State construction, reconstruction, or maintenance

DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

July 1, 2002  
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 STATE OF CALIFORNIA



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2002 DUAL UNITS STD PLAN T10

**NOTES**

- Median lane closures shall conform to the details for outside lane closures except that C20 (L) signs shall be used.
- Not less than one person shall be assigned to full time maintenance of traffic control devices on all right lane closures or day-time closures exceeding 1.6 km (1 mile) in length, including taper.
- Duplicate sign installations are not required along opposite shoulder if at least one-half of the available lanes remain open to traffic.
  - In the median, if the width of the median shoulder is less than 2.4 m (8') and the outside lanes are to be closed.
- All advance warning sign installations shall be equipped with flags for daytime closures. Flashing beacons shall be placed at the locations indicated during night lane closure.
- A C13 "END CONSTRUCTION" or C14 "END ROAD WORK" signs, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.
- If the C18 (or C23) sign would follow within 600 m (2000') of a stationary C18, C23 or C11 "STATE HIGHWAY CONSTRUCTION NEXT MILES"; use a C20 sign for the first advance warning sign.
- Place a C30 sign every 600 m (2000') throughout length of lane closure.
- One flashing arrow sign for each lane closed. The first flashing arrow sign shall be Type I. All others may be either Type I or Type II.
- A minimum 150 m (500') of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
- All cones used for night lane closures shall be fitted with reflective sleeves as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones may be used in lieu of cones for daytime closures only.
- Unless otherwise specified in the Special Provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 600 m (2000') as shown on the "LANE CLOSURE" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
- Unless otherwise specified in the Special Provisions, the 150 m (500') section of the lane closure shown along lonelines shall be used between the 300 m (1000') lane closure tapers when two or more adjacent traffic lanes are to be closed.
- Unless otherwise specified in the Special Provisions, the G84 and W59 signs shall be used as shown.
- Where specified in the Special Provisions, a W11 "LANE REDUCTION SYMBOL" sign is to be used in place of the C20 "RIGHT LANE CLOSED AHEAD" sign.
- The W11 "LANE REDUCTION SYMBOL" sign shown at this location is to be used where the W11 sign is used as advance warning as described in Note 15.

**SIGN PANEL SIZE (MIN)**

A	1219 mm x 1219 mm (48" x 48")
B	914 mm x 914 mm (36" x 36")
C	762 mm x 762 mm (30" x 30")

- LEGEND**
- Traffic Cone
  - Traffic Cone (optional taper)
  - ↑ Portable Sign
  - ←←← Flashing Arrow Sign
  - Direction of Travel
  - ⚡ Portable Flashing Beacon

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL SYSTEM  
 FOR LANE CLOSURE ON  
 FREEWAYS AND EXPRESSWAYS**

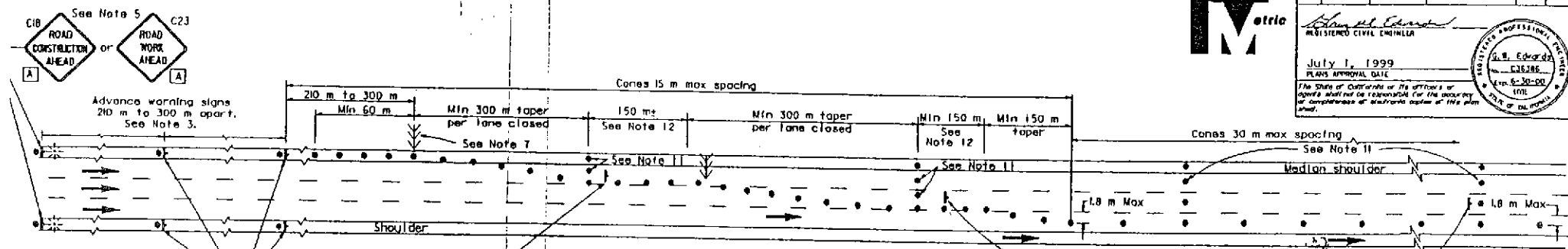
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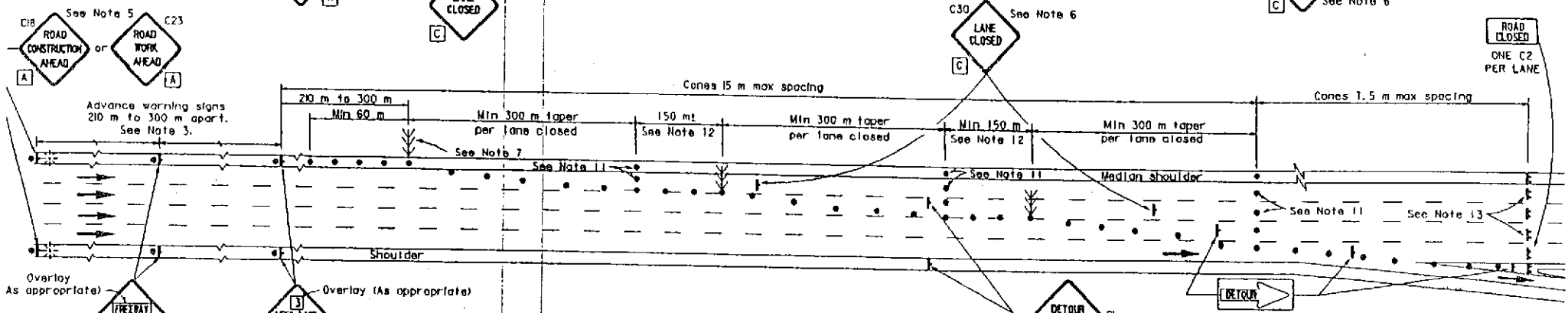
DIST.	COUNTY	ROUTE	KILOMETER POST MILE PROJECT	SHEET NO.	TOTAL SHEETS

July 1, 1999  
 PLANS APPROVAL DATE  
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 J. S. Edwards  
 C18286  
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**LANE CLOSURE WITH PARTIAL SHOULDER USE**



**COMPLETE CLOSURE**

**NOTES**

Lane closures on the right side using partial median shoulder as a traffic lane shall conform to the details for inside lane closure except that C20(R+L) signs shall be used.

Not less than one person shall be assigned to full time maintenance of traffic control devices on all complete closures, on all night lane closures, and daytime closures exceeding 1.6 km in length, including taper.

All advance warning sign installations shall be equipped with flags for daytime closure. Flashing beacons shall be placed at the locations indicated during night lane closures.

A C13 "END CONSTRUCTION" or C14 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.

If the C18 (or C23) sign would follow within 600 m of a stationary C18, C23 or C11 "STATE HIGHWAY CONSTRUCTION NEXT \_\_\_\_ MILES" use a C20 sign for the first advance warning sign.

Place a C30 sign every 600 m throughout length of lane closure.

- One flashing arrow sign for each lane closed. The first flashing arrow sign shall be Type I. All others may be either Type I or Type II.
- A minimum 450 m of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
- All cones used for night lane closures shall be fitted with reflective sleeves as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used in lieu of cones for daytime closures only.
- Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 600 m as shown on the "Lane Closure with Partial Shoulder Use" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.

- Unless otherwise specified in the special provisions, the 150 m section of the lane closure shown along lonelines shall be used between the 300 m lane closure tapers when two or more adjacent traffic lanes are to be closed.
- A minimum of two Type II barricades shall be placed across each closed lane and shoulder at the location shown and every 600 m within the complete closure area. Within the complete closure area, the transverse alignment of the barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
- Where specified in the special provisions, a C1 "DETOUR AHEAD" sign is to be used in place of the C19 "FREEWAY CLOSED AHEAD" sign.

**SIGN PANEL SIZE (Min)**

- A 1219 mm x 1219 mm
- B 914 mm x 914 mm
- C 762 mm x 762 mm

**LEGEND**

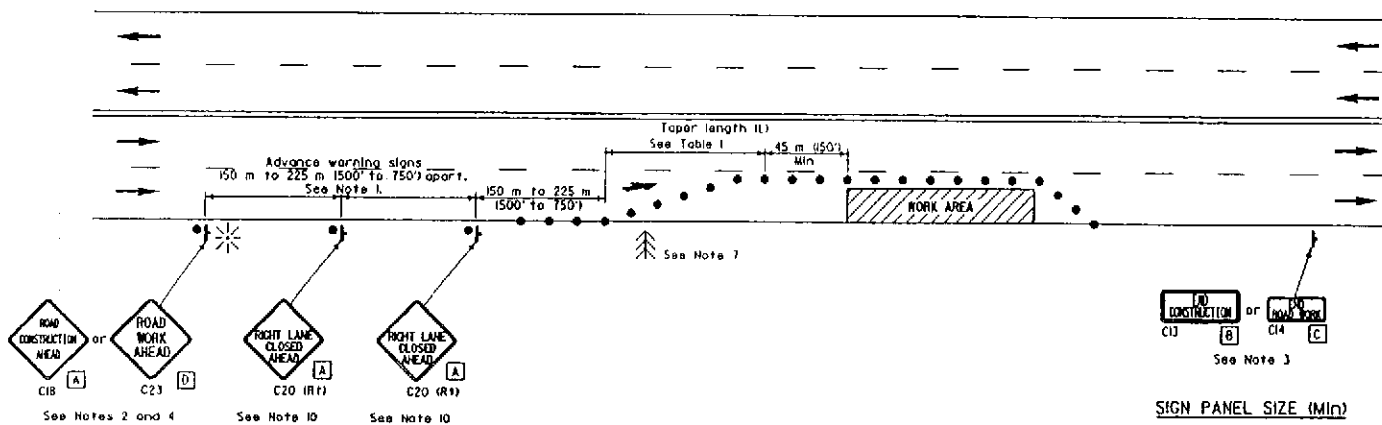
•	Traffic Cone
⚡	Portable Sign
←←←	Flashing Arrow Sign
→	Direction of Travel
⚡	Portable Flashing Beacon

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM  
FOR LANE AND  
COMPLETE CLOSURES ON  
FREEWAYS AND EXPRESSWAYS**

NO SCALE

## TYPICAL LANE CLOSURE



DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

*Greg E. Cooper*  
 REGISTERED CIVIL ENGINEER  
 No. 63616  
 State of California

July 1, 2002  
 FINAL APPROVAL DATE

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- SIGN PANEL SIZE (Min)**
- A 914 mm x 914 mm (36" x 36")
  - B 1219 mm x 457 mm (48" x 18")
  - C 914 mm x 457 mm (36" x 18")
  - D 1622 mm x 762 mm (63" x 30")

- LEGEND**
- Traffic Cone
  - ↑ Portable Sign
  - ← Direction of Travel
  - ↔ Flashing Arrow Sign
  - ⚡ Portable Flashing Beacon

**TABLE I**

Approach Speed	Taper Length (L)	Number of Cones for Taper	Spacing of Cones Along Taper
0-40 km/h (0-25 mph)	36m (125')	6	7.5 m (25')t
40-55 km/h (25-40 mph)	56 m (180')	9	12 m (40')t
55-80 km/h (40-50 mph)	183 m (600')	13	15 m (50')t
Over 80 km/h (50 mph)	See Note 9		

\* Based on 3.6 (12') wide lane. This column is also appropriate for lane widths less than 3.6 m (12').

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL SYSTEM  
 FOR LANE CLOSURE ON  
 MULTILANE CONVENTIONAL  
 HIGHWAYS**

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NO SCALE

T 11

2002 DUAL UNITS STD PLAN T11

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**NOTES:**

1. Where approach speeds are low, signs may be placed at 90 m (300') spacing, and in urban areas, closer.
2. All advance warning sign installations shall be equipped with flags for daytime closures. Flashing Beacons shall be placed at the locations indicated for nighttime closures.
3. A C13 "END CONSTRUCTION" or C14 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
4. If the C1B (or C23) sign would follow within 600 m (2000') of a stationary C1B, C23, or C11 "STATE HIGHWAY CONSTRUCTION NEXT \_\_\_\_\_ MILES", use a C20 sign for the first advance warning sign.
5. All cones used for night lane closures shall be fitted with reflective sleeves as specified in the specifications.
6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used in lieu of cones for daytime closures only.
7. Flashing arrow sign shall be either Type I or Type II.
8. The maximum spacing between cones in a taper shall be approximately as shown in Table I and 15 m (50') maximum spacing on tangent.
9. For approach speeds over 80 km/h (50 mph), use the "Traffic Control System for Lane Closure On Freeways and Expressways" plan for lane closure details and requirements.
10. Where specified in the special provisions, a M11 "LANE REDUCTION SYMBOL" sign is to be used in place of the C20 "RIGHT LANE CLOSED AHEAD" sign.

**LEGEND**

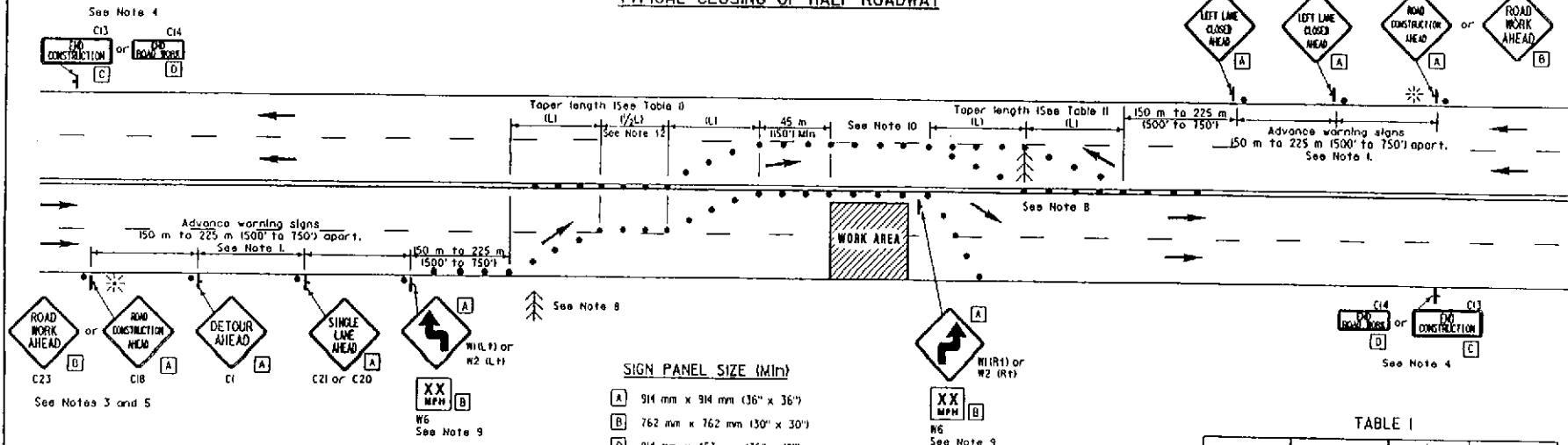
- Traffic Cone
- F Portable Sign
- ←←← Flashing Arrow Sign
- Direction of Travel
- ⊛ Portable Flashing Beacon

DIST	COUNTY	ROUTE	REQUESTER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

July 1, 2002  
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Greg W. GORRUS  
 REGISTERED CIVIL ENGINEER  
 No. C26216  
 Exp. 6-30-04  
 CIVIL  
 STATE OF CALIFORNIA

**TYPICAL CLOSING OF HALF ROADWAY**



**SIGN PANEL SIZE (min)**

- A 914 mm x 914 mm (36" x 36")
- B 762 mm x 762 mm (30" x 30")
- D 914 mm x 457 mm (36" x 18")
- C 1219 mm x 457 mm (48" x 18")

**TABLE I**

Approach Speed	* Taper Length (L1)	* Number of Cones for Taper	Spacing of Cones Along Taper
0-40 km/h (0-25 mph)	30 m (125')	6	7.5 m (25')
40-65 km/h (25-40 mph)	98 m (320')	9	12 m (40')
65-80 km/h (40-50 mph)	183 m (600')	13	15 m (50')
Over 80 km/h (50 mph)	See Note 11		

\* Based on 3.6 m (12') wide lane. This column is also appropriate for lane widths less than 3.6 m (12').

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL SYSTEM  
 FOR LANE CLOSURE ON  
 MULTILANE CONVENTIONAL  
 HIGHWAYS**

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NO SCALE

**T12**

2002 DUAL UNITS STD PLAN T12

18C

**NOTES:**

1. Where Approach speeds are low, signs may be placed at 90 m (300') spacing and in urban areas, closer.
2. Not less than one person shall be assigned to full time maintenance of traffic control devices on all night lane closures.
3. All advance warning sign installations shall be equipped with flags for daytime closures. Flashing beacons shall be placed at the locations indicated during night lane closures.
4. A C13 "END CONSTRUCTION" or C14 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
5. If the C18 (or C23) sign would follow within 600 m (2000') of a stationary C18, C23, C11 "STAT HIGHWAY CONSTRUCTION NEXT \_\_\_\_\_ MILES", use a C20 sign for the first advance warning sign.
6. All cones used for night lane closures shall be fitted with reflective sleeves as specified in the specifications.
7. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used in lieu of cones for daytime closures only.
8. Flashing arrow signs shall be either Type I or Type II.
9. Advisory speed will be determined by the Engineer. The W6 Sign will not be required when advisory speed is more than the posted or maximum speed limit.
10. The maximum spacing between cones within a taper shall be approximately as shown in Table I and the maximum spacing on tangent shall be 15 m (50').
11. For approach speeds over 80 km/h (50 mph), use the "Traffic Control System For Lane Closure on Freeways and Expressways" plan for lane closure details and requirements.
12. Unless otherwise specified in the special provisions, the 1/2(L) shown between the two (L) lane closure tapers shall be used.

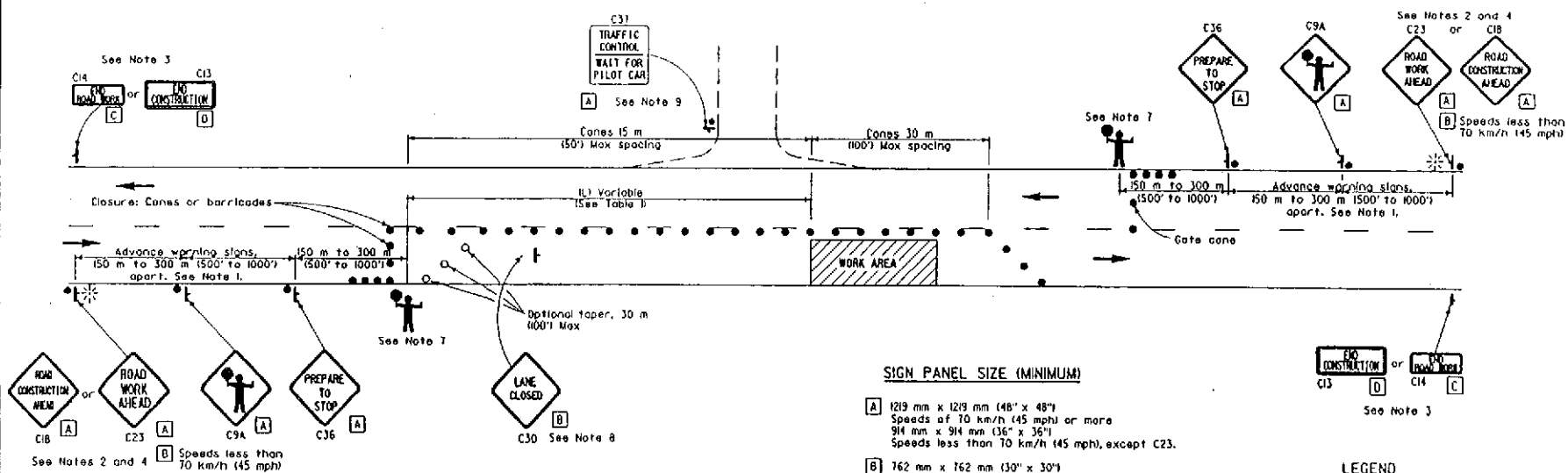
DIST.	COUNTY	ROUTE	KILOMETER TOTAL PROJECT	POST MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

*Greg A. Lopez*  
 REGISTERED CIVIL ENGINEER  
 July 1, 2002  
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**TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL**



2002 DUAL UNITS STD PLAN T13

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**NOTES**

- Where approach speeds are low, signs may be placed at 90 m (300') spacing and in urban areas, closer.
- All advance warning sign installations shall be equipped with flags for daytime closures. Flashing beacons shall be placed at the locations indicated during night lane closures.
- A C13 "END CONSTRUCTION" or C14 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
- If the C13 (or C23) sign would follow within 600 m (2000') of a stationary C13, C23, or C11 "STATE HIGHWAY CONSTRUCTION NEXT \_\_\_\_\_ MILES", use a C9A sign for the first advance warning sign.
- All cones used for night lane closures shall be fitted with reflective sleeves as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used in lieu of cones for daytime closures only.

- Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. Nighttime flagger station shall be illuminated as provided in the current edition of the "Manual of Traffic Controls" published by the State of California, Department of Transportation. Place a minimum of four cones at 15 m (50') intervals in advance of flagger station as shown.
- Place C30 "LANE CLOSED" sign at 150 to 300 m (500' to 1000') intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
- When a pilot car is used, place a C37 "TRAFFIC CONTROL-WAIT FOR PILOT CAR" sign at all intersections within traffic control area. Signs shall be clean and visible at all times.

**SIGN PANEL SIZE (MINIMUM)**

- A 1219 mm x 1219 mm (48" x 48")  
Speeds of 70 km/h (45 mph) or more  
914 mm x 914 mm (36" x 36")  
Speeds less than 70 km/h (45 mph), except C23.
- B 762 mm x 762 mm (30" x 30")
- C 914 mm x 457 mm (36" x 18")
- D 1219 mm x 457 mm (48" x 18")

**TABLE I**

Approach Speed	(L)
0-50 km/h (0-30 mph)	60 m (200') <sup>1</sup>
50-70 km/h (30-45 mph)	90 m (300') <sup>1</sup>
over 70 km/h (45 mph)	150 m (500') <sup>2</sup>

<sup>1</sup>Increase by 20 percent on sustained downgrades steeper than 3 percent and longer than 1.6 km (one mile).

**LEGEND**

- Traffic Cone
- Traffic Cone (Optional Taper)
- † Portable Sign
- ← Direction of Travel
- ⚡ Portable Flashing Beacon
- ♣ Flagger

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL SYSTEM FOR  
 LANE CLOSURE ON TWO LANE  
 CONVENTIONAL HIGHWAYS**

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NO SCALE

**T13**



ADOPT-A-HIGHWAY

## Safety Requirements for Participants: "C R E W P L A N S"

**C**ontact Caltrans. Notify your Maintenance field representative of your plans to work at least five days, but no more than one month, before the event. If State construction or maintenance activities have been scheduled at your adoption site on that same day, you will not be permitted to work.

**R**evise safety procedures. Review these "Safety Requirements for Participants" and the "Bag It, Move It, or Leave It?" instructions with all participants at an off-site location prior to each work event.

**E**valuate weather conditions. Work must be performed during daylight hours. Do not work, or discontinue working, if weather (or other adverse circumstance) decreases visibility or causes a public hazard.

**W**ear your safety gear. It is required that participants wear safety vests, hard hats, gloves, protective eye wear, long pants, and substantial leather shoes or boots with ankle support. Light-colored clothing and long-sleeved shirts are recommended. Put on your safety gear before travelling to your site and do not take it off on until you have left the roadside.

**P**ark in a safe place. Please carpool. Vehicles must park completely off of paved areas and be at least six feet from any traffic lane. If this is not possible and your site has a shoulder, then use a drop-off and pick-up arrangement instead. Or, enter and exit your site on foot from locations that allow you to face oncoming traffic. If in doubt about the safest way to access your site, please contact your Maintenance field representative for advice.

**L**ook out for danger and look out for each other. Always work facing oncoming traffic. Use a safety lookout when fellow workers are unable to see oncoming traffic. Watch your footing and be alert for snakes, stinging insects, and poisonous plants. If your encroachment permit authorizes minors to participate, you must have at least one adult supervisor over the age of 21 at the site for every five minors present. Do not work alone.

**A**lert the California Highway Patrol (call 911) if you find an extremely hazardous item. Identify all objects before touching them and handle found items according to the procedures outlined in the "Bag It, Move It, or Leave It" instructions.

**N**ever risk injury. Work shall not be performed on median strips. Stay completely off of paved areas and always remain at least six feet from any traffic lane; this includes crossing freeway on-ramps and off-ramps. Use extreme caution when crossing conventional, two-lane highways; plan to use crosswalks and signals where available. Do not work on unstable or slippery ground, on bridges, in tunnels, or in drainage facilities. Avoid behaviors that will distract motorists; this includes working in groups of more than three or four persons. Drink plenty of water. Use tools to help prevent over exertion. For example, litter removal groups should use litter pickers instead of bending to pickup litter and graffiti removal groups should use rollers instead of brushes to paint large areas.

**S**tack your bags. Do not overload or compact litter bags and be sure to tie them securely closed. Whenever possible, stack several filled bags together. Place bags completely off of paved areas and at least six feet from any traffic lane. Make sure that the bags are located where Caltrans maintenance crews can easily see them and safely retrieve them.

**ADDITIONAL REQUIREMENTS:** 1) No person shall enter the State's right of way to perform work until a Caltrans representative has given the permittee's safety leader a safety orientation, and, all participants have received safety training from that safety leader. 2) A complete encroachment permit "package" (encroachment permit, special provisions, and any plans and schedules) must be present at the site. In addition, a copy of the encroachment permit must be displayed on the dashboard of each vehicle parked on the State's right of way. 3) Work shall not be conducted on, or within twenty-four hours preceding, holidays or holiday weekends. Refer to your Encroachment Permit Special Provisions for a listing of holidays and possible additional work restrictions specific to your adoption site.



# Encroachment Permit Project Work Scheduling Request Form



Requests for scheduling & approval of traffic control shall be submitted weekly, on this form, through the designated State Representative by FAX to 510-286-3960 or E-mail: [Permit\\_Duty\\_Engineer@DOT.CA.GOV](mailto:Permit_Duty_Engineer@DOT.CA.GOV), a minimum of 7 days in advance of proposed work

1. Permit No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ 2. Request date: \_\_\_\_\_

3. State Representative: \_\_\_\_\_

4. Route \_\_\_\_\_ 5. County \_\_\_\_\_ 6. City or township \_\_\_\_\_

7. Permit Work Hours Use 24 hour clock format: \_\_\_\_\_:\_\_\_\_\_ to \_\_\_\_\_:\_\_\_\_\_ 8. \*Requested Work Week: \_\_\_\_\_ to \_\_\_\_\_

9.  PostMiles or  Kilopost: From: \_\_\_\_\_ To: \_\_\_\_\_ 10. Existing Lanes (each dir) Dir \_\_\_\_\_ Lns \_\_\_\_\_ / Dir \_\_\_\_\_ Lns \_\_\_\_\_

11. Describe Location (use landmark if necessary): From: \_\_\_\_\_ To: \_\_\_\_\_

12. Name of Conventional Highway or Surface St \_\_\_\_\_

13. Check any of the following that apply:  Connector ramp (Connects 2 State Rtes) From SR # \_\_\_\_\_ To SR # \_\_\_\_\_

Off/ramp (Freeway to City St) Ramp Name: \_\_\_\_\_  Ramp or Connector

On/ramp (City St to Freeway) Ramp Name: \_\_\_\_\_  Completely Closed

One-way Traffic Control w/flaggers or pilot car (Alternate use of the same lane for both dir)  Full Closure (All Lns, 1 dir)

Traffic Diversion (Reconfigure lane use & divert traffic to allow at least 1 ln open in each dir, describe in comments below)

Intermittent Traffic Control  Long-Term (24+ hour continuous) Long-Term Date/Time Open \_\_\_\_\_

**\*IMPORTANT:** Resubmit request weekly, a minimum of 7 days in advance. Work Hours and Days must comply with Permit Requirements. Deviation from permit provisions must be requested in writing to Caltrans. Once approved, a rider will be issued.

YEAR:			TIME		DIR	RESTRICTED LANES													BREAKS		#	
Month	Day	Day of Week	Start (10-97)	Finish (10-98)	NB - SB EB - WB	ALL Lanes	SHLDR		1	2	3	4	5	6	V L	Aux Coll	CD Med	LT Pckt	RT Pckt	10-15 Min	Roll	Caltrans will complete and return

**NOTES:**  
 Month: Enter month (1 thru 12) for which traffic control is requested. DAY: Enter day of closure (1 thru 31) Day of Week: Enter (M-T-W-TH-F-SA-SU.)  
 DIRECTION (N - S - W - E) Enter North, South, East, West. Separate lane closure #'s are required for each direction unless work is on an undivided hwy.  
 LANES: Lanes are numbered in direction of travel from left to right, excluding turnpockets (left is always #1 or "fast lane") Check lanes or portions of highway to be closed, including Shoulders, Auxiliary Lane, Center Divide. "V/L" (Various Lanes) may be used, but comments must indicate the # of lanes to remain open at all times. "# " Work Scheduling Number - assigned by Caltrans and faxed back to requestor.

13. Description of work \_\_\_\_\_

14. Detour (Required for full closure) \_\_\_\_\_

15. On-site during work (circle if applicable) CHP / PD / Other \_\_\_\_\_

16. Comments: \_\_\_\_\_

17. Contingency Plan:

Permittee:	Contractor:
Address:	
Contact: (On-Site personnel)	Name(s)
	Telephone-Office: _____ FAX: _____
	Cellular: _____ Pager: _____ Other: _____

While performing the approved traffic control, Permittee shall notify Caltrans Communications Center via telephone at 510-286-6359 daily. Notifications shall be completed at start time (10-97) AND completion time (10-98), OR cancellation (10-22).

**NOTICE OF COMPLETION**

Permit No.: 0404-1135 ALA-123 4. 81

Inspector: N. FREITAG

All work authorized by the above-numbered permit was completed on \_\_\_\_\_

\_\_\_\_\_  
*Permittee Signature*

**CUSTOMER SERVICE QUESTIONNAIRE**

TR-0164 (REV 2/2001)

PERMIT NUMBER

0404-65V1135

Dear Customer,

Our goal is to provide the best service possible to our customers. Please take a few minutes to complete this questionnaire. Your comments will enable us to see how we are doing overall and any areas which may need improvement.

**PLEASE TELL US HOW WE'RE DOING**

INSIDE THE OFFICE	EXCELLENT	VERY GOOD	GOOD	POOR
Staff courteous and helpful				
Staff quick and efficient				
Explanations and instructions clear				
TELEPHONE ANSWERING				
Timely response				
Receiving information or answers				
INSPECTION				
Inspector courteous and helpful				
Pre-construction meeting set and held in a timely manner				
Inspector at job site frequently				
Inspector able to answer questions and deal with problems				
OVERALL PERFORMANCE				
What would you say is our overall performance?				
Is there a staff person you would like to commend?	STAFF'S NAME:			

COMMENTS:

NAME (Optional)

BUSINESS PHONE NUMBER

DATE

**ADA Notice**

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

**APPENDIX B**

Boring Logs

**SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS** BORING: BH-A

Project Name: Albany Hill Project Location: 800 San Pablo Ave, Albany, CA Page 1 of 1  
 Driller: Vironex Type of Rig: Geoprobe Size of Drill: 2.0" Diameter  
 Logged By: Damian Hriciga Date Drilled: August 24, 2004 Checked By: Robert E. Kitay, R.G.

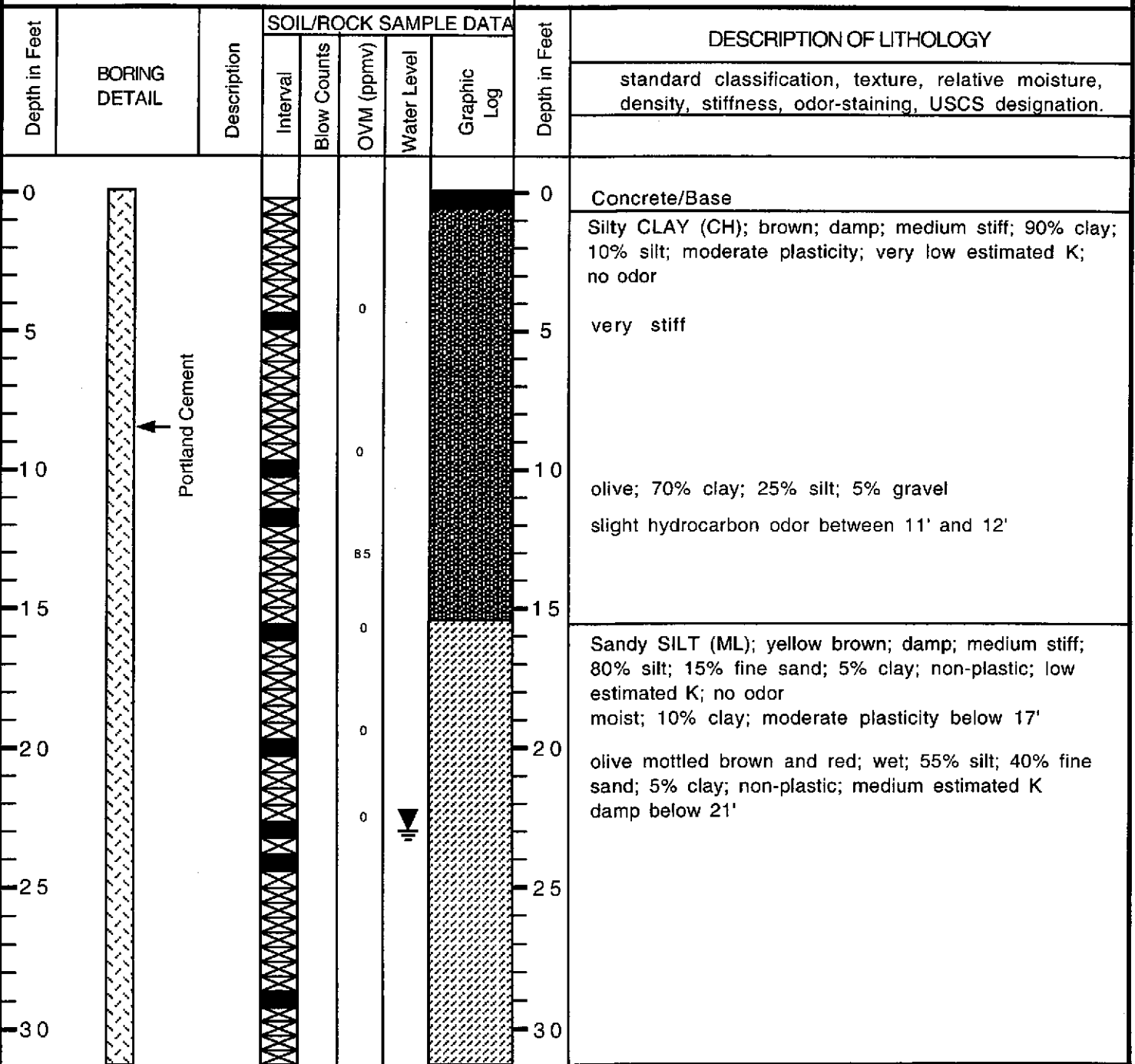
**WATER AND WELL DATA**  
 Total Depth of Well Completed: NA  
 Depth of Water First Encountered: 25' Well Screen Type and Diameter: NA  
 Static Depth of Water in Well: NA Well Screen Slot Size: NA  
 Total Depth of Boring: 27' Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler

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	<p style="text-align: center;">Portland Cement</p>							0	Concrete/Base
5								5	Sandy CLAY (CH); olive mottled yellow brown; dry; very stiff; 80% clay; 20% fine sand; very low plasticity; low estimated K; no odor
10								10	CLAY (CH); olive; damp; stiff; 100% clay; high plasticity; very low estimated K; no odor
15								15	Silty CLAY (CH); olive; moist; medium stiff; 80% clay; 15% silt; 5% fine sand; moderate plasticity; low estimated K; no odor odor below 12 feet
20								20	Sandy SILT (ML); olive mottled yellow brown; moist; stiff; 70% silt; 25% fine sand; 5% clay; low plasticity; low estimated K; no odor
25								25	olive mottled brown and red; 55% silt; 40% fine sand; 5% clay; non-plastic; medium estimated K olive mottled yellow brown; 70% silt; 25% fine sand; 5% clay; low plasticity; low estimated K below 20.5 feet olive mottled brown and red; 55% silt; 40% fine sand; 5% clay; non-plastic; medium estimated K
30								30	End of boring Refusal

**SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS** BORING: BH-B

Project Name: Albany Hill	Project Location: 800 San Pablo Ave, Albany, CA	Page 1 of 2
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: 2.0" Diameter
Logged By: Damian Hriciga	Date Drilled: August 19, 2004	Checked By: Robert E. Kitay, R.G.

<b>WATER AND WELL DATA</b>	Total Depth of Well Completed: NA
Depth of Water First Encountered: 23'	Well Screen Type and Diameter: NA
Static Depth of Water in Well: NA	Well Screen Slot Size: NA
Total Depth of Boring: 35'	Type and Size of Soil Sampler: 2.0" I.D. Macro Sampler





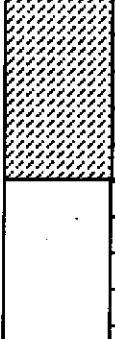
**SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS**

BORING: BH-B

Project Name: Albany Hill

Project Location: 800 San Pablo Ave, Albany, CA

Page 2 of 2

Depth in Feet	BORING DETAIL	Description	SOIL/ROCK SAMPLE DATA					Depth in Feet	DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
			Interval	Blow Counts	OVM (ppmv)	Water Level	Graphic Log		
35		Portland Cement						35	Continuation from above
40								40	End of boring Refusal
45								45	
50								50	
55								55	
60								60	
65								65	

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

BORING: BH-C

Project Name: Albany Hill

Project Location: 800 San Pablo Ave, Albany, CA

Page 1 of 1

Driller: Vironex

Type of Rig: Geoprobe

Size of Drill: 2.0" Diameter

Logged By: Damian Hriciga

Date Drilled: August 24, 2004

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

**WATER AND WELL DATA**

Total Depth of Well Completed: NA

Depth of Water First Encountered: 25'

Well Screen Type and Diameter: NA

Static Depth of Water in Well: NA

Well Screen Slot Size: NA

Total Depth of Boring: 27'

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 standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
			Interval	Blow Counts	OVM (ppmv)	Water Level	Graphic Log		
0	<p>Portland Cement</p>						0	Concrete/Base	
5				0			5	Sandy CLAY (CH); olive; moist; stiff; 90% clay; 10% fine sand; moderate plasticity; very low estimated K; no odor damp, low plasticity below 3'	
10				63			10	CLAY (CH); olive; damp; very stiff; 100% clay; high plasticity; very low estimated K; slight hydrocarbon odor	
15				463			15	Sandy CLAY (CH); olive; damp; stiff; 70% clay; 15% fine sand; 10% silt; 5% gravel; low plasticity; low estimated K; moderate hydrocarbon odor moist; soft below 14'	
20							20	no recovery from 15' to 20'	
25				0			25	Sandy SILT (ML); olive mottled yellow brown; moist; medium stiff; 80% silt; 20% fine sand; non-plastic; low estimated K; no odor	
30							30	no recovery from 24' to 27'; wet	
								End of boring Refusal	



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

BORING: BH-D

Project Name: Albany Hill

Project Location: 800 San Pablo Ave, Albany, CA

Page 1 of 1

Driller: Vironex

Type of Rig: Geoprobe

Size of Drill: 2.0" Diameter

Logged By: Damian Hriciga

Date Drilled: August 25, 2004

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

**WATER AND WELL DATA**

Total Depth of Well Completed: NA

Depth of Water First Encountered: 10'

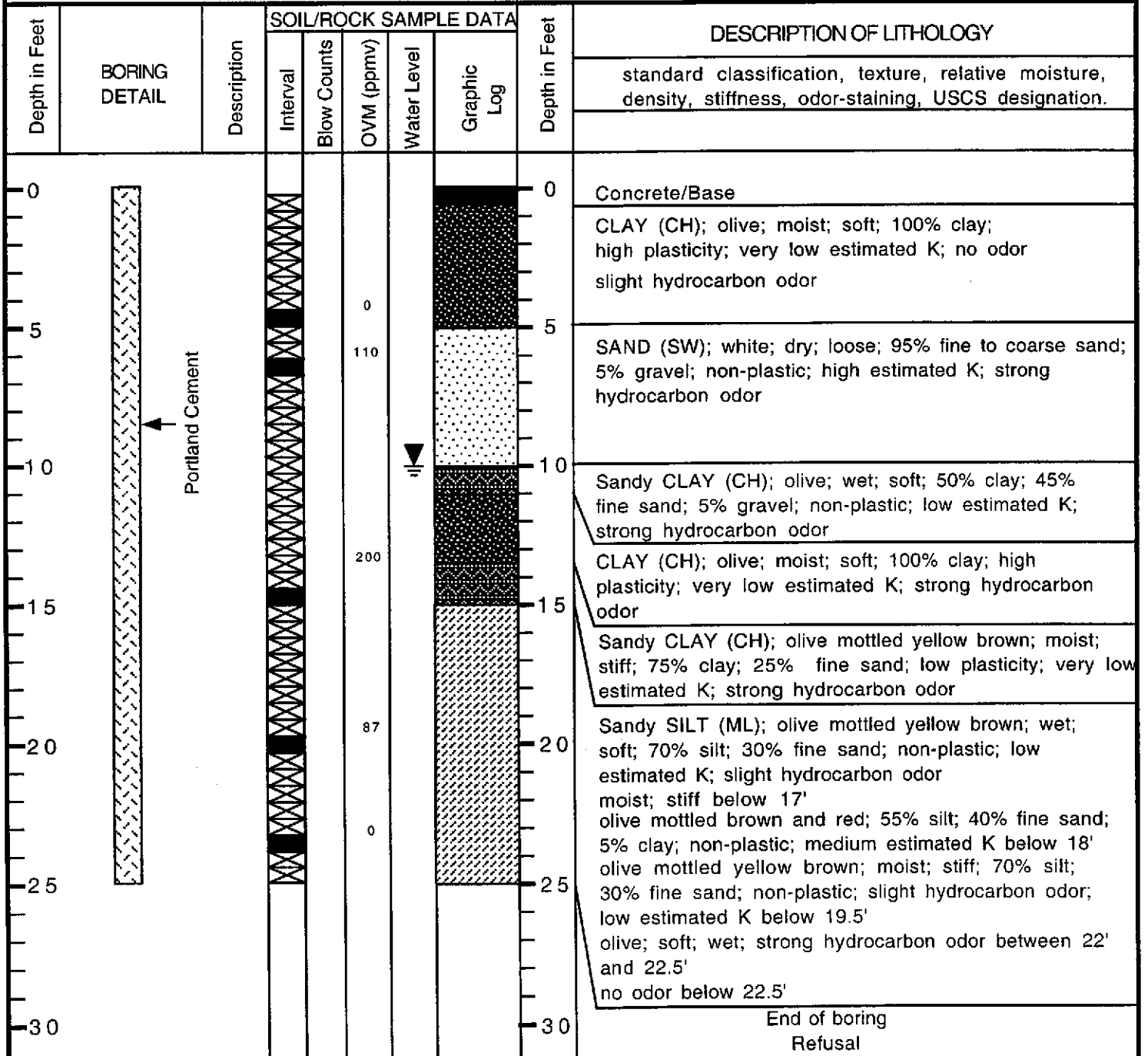
Well Screen Type and Diameter: NA

Static Depth of Water in Well: NA

Well Screen Slot Size: NA

Total Depth of Boring: 25'

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



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

BORING: BH-E

Project Name: Albany Hill

Project Location: 800 San Pablo Ave, Albany, CA

Page 1 of 1

Driller: Vironex

Type of Rig: Geoprobe

Size of Drill: 2.0" Diameter

Logged By: Damian Hriciga

Date Drilled: August 25, 2004

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

**WATER AND WELL DATA**

Depth of Water First Encountered: 20'

Total Depth of Well Completed: NA

Well Screen Type and Diameter: NA

Static Depth of Water in Well: NA

Well Screen Slot Size: NA

Total Depth of Boring: 24'

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		
0	<p>Portland Cement</p>						0	Concrete/Base
0-5							0	Sandy SILT (ML); yellow brown; dry; stiff; 80% silt; 20% fine sand; non-plastic; low estimated K; no odor
5-10							5	Sandy CLAY (CH); olive mottled yellow brown; dry; stiff; 80% clay; 15% fine sand; 5% gravel; very low plasticity; low estimated K; no odor
10-11							10	moist; 90% clay; 10% fine sand below 8'
11-12							10	Approximately 3" of loose gravel and sand
12-14							10	Sandy SILT (ML); olive; moist; medium stiff; 70% silt; 30% fine sand; non-plastic; low estimated K; no odor
14-18							15	no recovery from 14' to 18'
18-20							15	Sandy SILT (ML); olive mottled yellow brown; moist; medium stiff; 70% silt; 30% fine sand; non-plastic; low estimated K; no odor
20-22							20	Approximately 3" of wet loose gravel and sand
22-25							20	Sandy SILT (ML); olive mottled brown and red; moist; medium stiff; 55% silt; 40% fine sand; 5% clay; non-plastic; medium estimated K; no odor
25-30						25	End of boring Refusal	

# SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS

BORING: BH-F

Project Name: Albany Hill

Project Location: 800 San Pablo Ave, Albany, CA

Page 1 of 1

Driller: Vironex

Type of Rig: Geoprobe

Size of Drill: 2.0" Diameter

Logged By: Damian Hriciga

Date Drilled: August 23, 2004

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

## WATER AND WELL DATA

Total Depth of Well Completed: NA

Depth of Water First Encountered: 23'

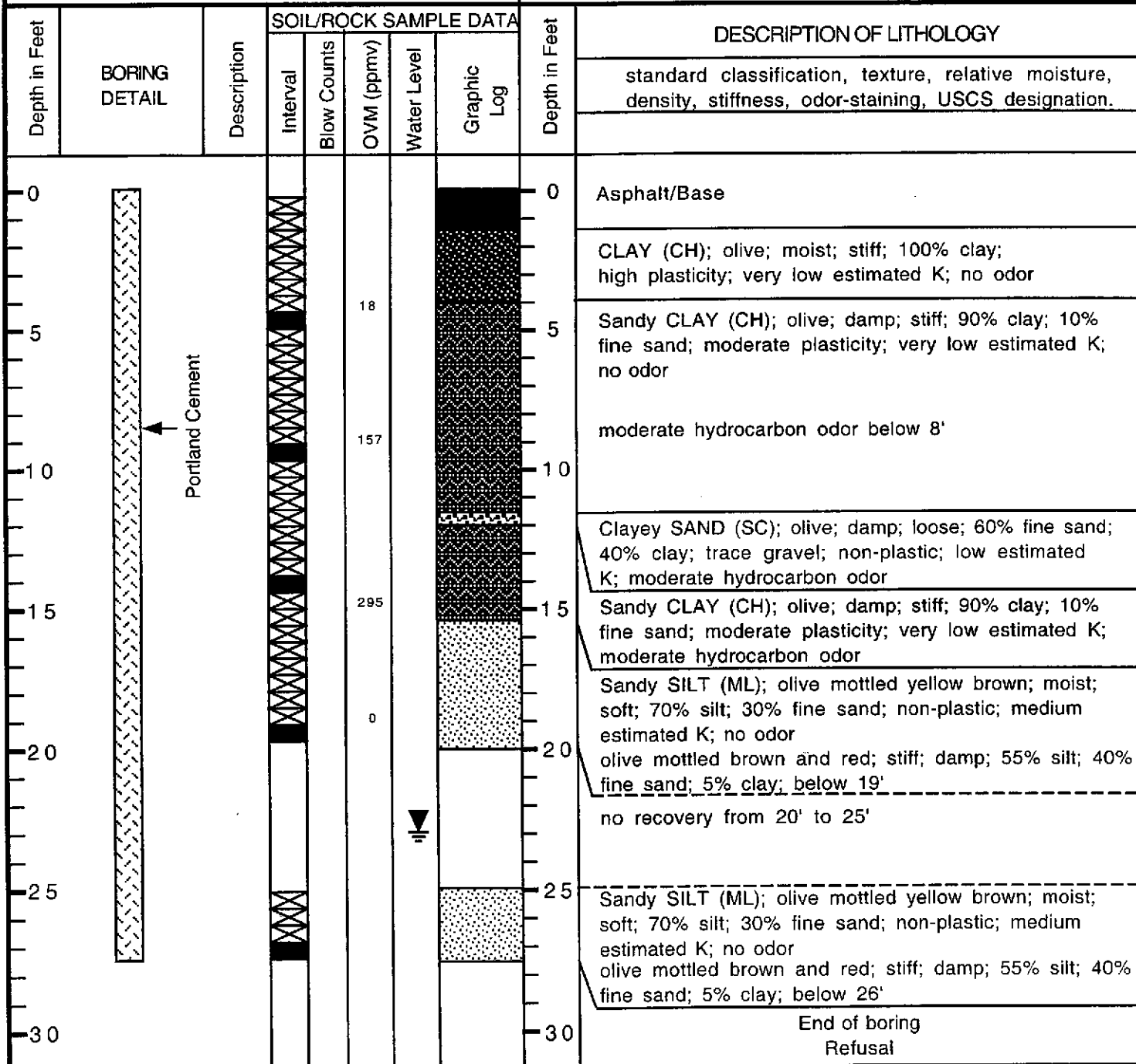
Well Screen Type and Diameter: NA

Static Depth of Water in Well: NA

Well Screen Slot Size: NA

Total Depth of Boring: 27.5'

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



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

BORING: BH-G

Project Name: Albany Hill	Project Location: 800 San Pablo Ave, Albany, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: 2.0" Diameter
Logged By: Damian Hriciga	Date Drilled: August 20, 2004	Checked By: Robert E. Kitay, R.G.

**WATER AND WELL DATA**

Depth of Water First Encountered: 23'	Total Depth of Well Completed: NA
Static Depth of Water in Well: NA	Well Screen Type and Diameter: NA
Total Depth of Boring: 29.5'	Well Screen Slot Size: NA
	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								0	Asphalt/Base					
5								CLAY (CH); olive; moist; stiff; 100% clay; high plasticity; very low estimated K; no odor						
10								Silty CLAY (CH); olive; damp; stiff; 70% clay; 30% silt; moderate plasticity; very low estimated K; no odor slight to moderate hydrocarbon odor						
15								Approximately 4" of gravel at 14'						
20								Sandy SILT (ML); yellow brown; dry; stiff; 70% silt; 25% fine sand; 5% clay; non-plastic; low to medium estimated K; no odor damp; very stiff below 19' olive mottled yellow brown; 85% silt; 10% fine sand; 5% clay						
25								olive mottled brown and red; 60% silt; 20% fine sand; 15% gravel; 5% clay						
30								End of boring Refusal						

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

BORING: BH-H

Project Name: Albany Hill

Project Location: 800 San Pablo Ave, Albany, CA

Page 1 of 1

Driller: Vironex

Type of Rig: Geoprobe

Size of Drill: 2.0" Diameter

Logged By: Damian Hriciga

Date Drilled: August 20, 2004

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

**WATER AND WELL DATA**

Depth of Water First Encountered: 23'

Total Depth of Well Completed: NA

Well Screen Type and Diameter: NA

Static Depth of Water in Well: NA

Well Screen Slot Size: NA

Total Depth of Boring: 33'

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		
0							Asphalt/Base	
5					0		CLAY (CH); dark olive; moist; stiff; 100% clay; trace gravel; high plasticity; very low estimated K; no odor  very stiff	
10		Portland Cement			0		moderate hydrocarbon odor	
15					550		Sandy CLAY (CH); olive; damp; stiff; 70% clay; 20% fine sand; 10% gravel; moderate plasticity; very low estimated K; moderate hydrocarbon odor 70% clay; 20% fine sand; 10% silt below 14'	
20					0		Sandy SILT (ML); yellow brown; dry; stiff; 70% silt; 25% fine sand; 5% clay; non-plastic; low estimated K; no odor brown mottled red; moist; 70% silt; 20% fine sand; 5% gravel; 5% clay; medium estimated K below 18.5' wet; soft below 21.5' olive mottled brown and red; moist; stiff below 22'	
25					0			
30					0			

See next page



**SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS** BORING: BH-1

Project Name: Albany Hill Project Location: 800 San Pablo Ave, Albany, CA Page 1 of 1  
 Driller: Vironex Type of Rig: Geoprobe Size of Drill: 2.0" Diameter  
 Logged By: Damian Hriciga Date Drilled: August 26, 2004 Checked By: Robert E. Kitay, R.G.


**WATER AND WELL DATA**  
 Total Depth of Well Completed: NA  
 Depth of Water First Encountered: 25.5' Well Screen Type and Diameter: NA  
 Static Depth of Water in Well: NA Well Screen Slot Size: NA  
 Total Depth of Boring: 28.5' 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		
0							0	Concrete/Base
0							0	Sandy SILT (ML); yellow brown; damp; soft; 60% silt 30% fine sand; 5% clay; 5% gravel; non-plastic; medium estimated K; no odor
5							5	stiff; 60-70% silt; 20-30% fine sand; 10-20% clay; trace gravel; low plasticity
10							10	olive
15							15	olive mottled yellow brown
15							15	Approximately 2" of sandy gravel
18							18	Approximately 2" of sandy gravel
21							21	Approximately 2" of sandy gravel
21							21	60% silt; 40% sand; moist
25							25	Silty SAND (SM); red brown; moist; loose; 80% sand; 20% silt; non-plastic; high estimated K; no odor
25							25	moist from 23.5' to 24'
25							25	wet from 25.5' to 26'
25							25	olive mottled yellow brown
28							28	Silty CLAY (CH); yellow brown; moist; stiff; 70% clay; 30% silt; moderate plasticity; low estimated K; no odor
30							30	End of boring Refusal

<b>SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS</b>	<b>BORING: BH-J</b>
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Project Name: Albany Hill	Project Location: 800 San Pablo Ave, Albany, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: 2.0" Diameter
Logged By: Damian Hriciga	Date Drilled: August 24, 2004	Checked By: Robert E. Kitay, R.G.

<b>WATER AND WELL DATA</b>	Total Depth of Well Completed: NA
Depth of Water First Encountered: 25'	Well Screen Type and Diameter: NA
Static Depth of Water in Well: NA	Well Screen Slot Size: NA
Total Depth of Boring: 27'	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		standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	 Portland Cement						0	Concrete/Base	
5				0			5	Sandy SILT (ML); yellow brown; damp; stiff; 70% silt; 20% fine sand; 10% clay; trace gravel; non-plastic; medium estimated K; no odor	
10				0			10	Silty CLAY (CH); yellow brown; damp; stiff; 60% clay; 30% silt; 10% fine sand; moderate plasticity; very low estimated K; no odor	
15				0			15	trace gravel Approximately 2" of sandy gravel Sandy SILT (ML); yellow brown; damp; stiff; 70% silt; 15% fine sand; 15% clay; trace gravel; low plasticity; medium estimated K; no odor	
20				0			20	olive mottled red; 60% silt; 20% sand; 10% gravel; 10% clay below 15.5'	
25				0	▼		25		
30							30	End of boring Refusal	



<b>SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS</b>	<b>BORING: BH-K</b>
---------------------------------------------------------------	---------------------

Project Name: Albany Hill	Project Location: 800 San Pablo Ave, Albany, CA	Page 1 of 1
Driller: Vironex	Type of Rig: Geoprobe	Size of Drill: 2.0" Diameter
Logged By: Damian Hriciga	Date Drilled: August 26, 2004	Checked By: Robert E. Kitay, R.G.

<b>WATER AND WELL DATA</b>	Total Depth of Well Completed: NA
Depth of Water First Encountered: 25'	Well Screen Type and Diameter: NA
Static Depth of Water in Well: NA	Well Screen Slot Size: NA
Total Depth of Boring: 28.5'	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		standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	 Portland Cement						0	Concrete/Base	
5							5	Sandy SILT (ML); yellow brown; damp; stiff; 70% silt; 20% fine sand; 10% clay; trace gravel; non-plastic; medium estimated K; no odor	
10							10	Silty CLAY (CH); yellow brown; damp; stiff; 60% clay; 30% silt; 10% fine sand; moderate plasticity; very low estimated K; no odor	
15							15	Clayey SILT (ML); olive mottled red; moist; medium stiff; 70% silt; 20% clay; 10% fine sand; non-plastic; low estimated K; no odor	
20							20	olive below 20'	
25							25	Sandy SILT (ML); olive mottled red; damp; stiff; 60-70% silt; 20-30% fine sand; 0-10% clay; trace gravel; low plasticity; medium estimated K; no odor	
30							30	End of boring Refusal	

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

BORING: BH-L

Project Name: Albany Hill

Project Location: 800 San Pablo Ave, Albany, CA

Page 1 of 1

Driller: Vironex

Type of Rig: Geoprobe

Size of Drill: 2.0" Diameter

Logged By: Damian Hriciga

Date Drilled: August 27, 2004

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

**WATER AND WELL DATA**

Total Depth of Well Completed: NA

Depth of Water First Encountered: 25.5'

Well Screen Type and Diameter: NA

Static Depth of Water in Well: NA

Well Screen Slot Size: NA

Total Depth of Boring: 27'

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  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
			Interval	Blow Counts	OVM (ppmv)	Water Level	Graphic Log		
0					0			0	Concrete/Base
5								5	Sandy SILT (ML); yellow brown; damp; stiff; 70% silt; 20% fine sand; 10% clay; trace gravel; non-plastic; medium estimated K; no odor
10								10	Silty SAND/Gravelly SAND (SM); dry; loose; 60% sand; 20% silt; 20% gravel; high estimated K; no odor
15								15	Silty CLAY (CH); yellow brown; damp; stiff; 60% clay; 30% silt; 10% fine sand; moderate plasticity; low estimated K; no odor
20								20	Sandy SILT (ML); yellow brown; damp; stiff; 70% silt; 15% fine sand; 15% clay; trace gravel; low plasticity; medium estimated K; no odor
25								25	brown mottled red; moist; 70% silt; 20% fine sand; 5% gravel; 5% clay; medium estimated K
30								30	Silty SAND/Gravelly SAND (SM); moist; loose; 60% sand; 20% silt; 20% gravel; high estimated K; no odor
									End of boring Refusal

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

BORING: BH-M

Project Name: Albany Hill

Project Location: 800 San Pablo Ave, Albany, CA

Page 1 of 1

Driller: Vironex

Type of Rig: Geoprobe

Size of Drill: 2.0" Diameter

Logged By: Damian Hriciga

Date Drilled: September 9, 2004

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

**WATER AND WELL DATA**

Total Depth of Well Completed: NA

Depth of Water First Encountered: 22'

Well Screen Type and Diameter: NA

Static Depth of Water in Well: NA

Well Screen Slot Size: NA

Total Depth of Boring: 24'

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								Concrete/Base	
0					0			Silty CLAY (CL); olive mottled brown; damp; medium stiff; 70% clay; 15% silt; 15% fine sand; low plasticity; very low estimated K; no odor	
5					0			Clayey SILT (ML); olive mottled brown; damp; stiff; 65% silt; 20% clay; 10% fine sand; 5% gravel; low plasticity; low estimated K; no odor	
10					14			slight hydrocarbon odor	
15					430				
15					0.7			Sandy CLAY (CL); olive mottled brown and red; moist; stiff; 60% clay; 30% fine sand; 10% silt; moderate plasticity; low estimated K; moderate hydrocarbon odor	
20					0			Sandy SILT (ML); olive mottled brown and red; dry; stiff; 60% silt; 35% fine sand; 5% gravel; non-plastic; medium estimated K; no odor	
20					0			moist below 21' 60% silt; 35% sand; 5% clay	
25								End of boring	
30									

Portland Cement



**SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS** BORING: BH-N

Project Name: Albany Hill Project Location: 800 San Pablo Ave, Albany, CA Page 1 of 1  
 Driller: Vironex Type of Rig: Geoprobe Size of Drill: 2.0" Diameter  
 Logged By: Damian Hriciga Date Drilled: September 15, 2004 Checked By: Robert E. Kitay, R.G.

**WATER AND WELL DATA**  
 Total Depth of Well Completed: NA  
 Depth of Water First Encountered: 20'  
 Well Screen Type and Diameter: NA  
 Static Depth of Water in Well: NA Well Screen Slot Size: NA  
 Total Depth of Boring: 29' 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		standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	<p>Portland Cement</p>					0	Asphalt/Base		
5						Silty CLAY (CH); olive; moist; stiff; 70% clay; 30% silt; trace gravel; moderate plasticity; very low estimated K; no odor			
10						slight hydrocarbon odor			
15						Sandy SILT (ML); olive; damp; stiff; 70% silt; 20% fine sand; 10% clay; non-plastic; low estimated K; slight hydrocarbon odor			
20						Silty SAND (SM); yellow brown; damp; loose; 60% sand; 40% silt; medium estimated K; no odor wet			
25						Sandy SILT (ML); olive mottled yellow brown; moist; soft; 70% silt; 25% fine sand; 5% clay; non-plastic; low estimated K; no odor			
30	End of boring Refusal								

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

BORING: BH-O

Project Name: Albany Hill

Project Location: 800 San Pablo Ave, Albany, CA

Page 1 of 1

Driller: Vironex

Type of Rig: Geoprobe

Size of Drill: 2.0" Diameter

Logged By: Damian Hriciga

Date Drilled: September 15, 2004

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

**WATER AND WELL DATA**

Depth of Water First Encountered: 24'

Total Depth of Well Completed: NA

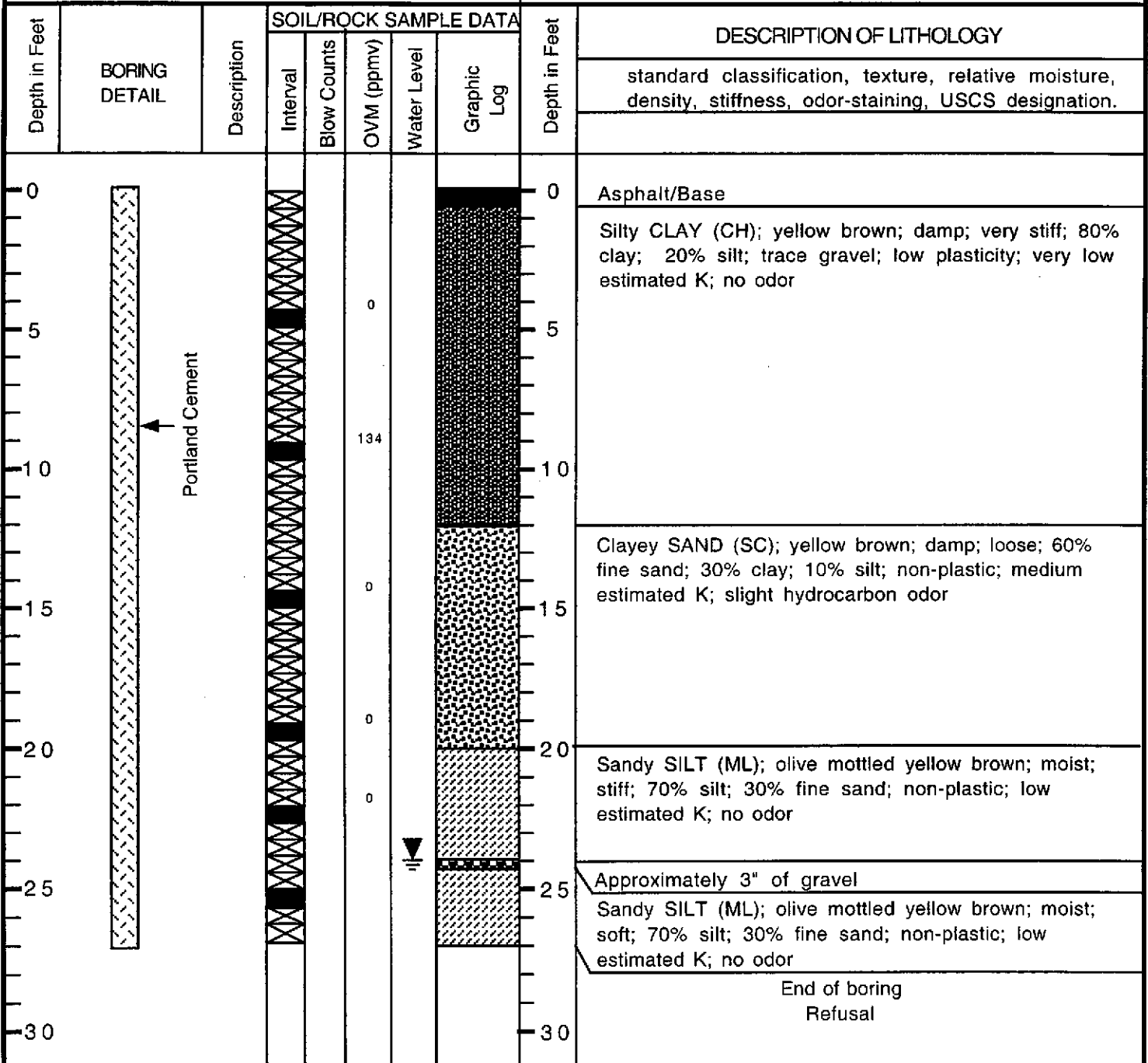
Well Screen Type and Diameter: NA

Static Depth of Water in Well: NA

Well Screen Slot Size: NA

Total Depth of Boring: 27'

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



**APPENDIX C**

Analytical Report and Chain of Custody Forms  
For Soil and Groundwater Samples



Report Number : 39758

Date : 8/30/2004

Robert Kitay  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 6 Water Samples  
Project Name : ALBANY HILL  
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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff



Report Number : 39758

Date : 8/30/2004

Subject : 6 Water Samples  
Project Name : ALBANY HILL  
Project Number :

## Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for samples BH-B 23'-25', BH-G 23'-25', BH-H 23'-25' and BH-F 23'-25'.

Hydrocarbons reported as TPH as Gasoline do not exhibit a typical Gasoline chromatographic pattern for sample BH-B 33-35'.

Tert-Butanol results for sample BH-F 23'-25' may be biased slightly high and are flagged with a 'J'. A fraction of MtBE (typically less than 1%) converts to Tert-Butanol during the analysis of water samples. We consider this conversion effect to be mathematically significant in samples that contain MtBE/Tert-Butanol in ratios of over 20:1.

Approved By:



Joe Kiff

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800





Report Number : 39758

Date : 8/30/2004

Project Name : **ALBANY HILL**

Project Number :

Sample : **BH-B 23'-25'**

Matrix : Water

Lab Number : 39758-01

Sample Date :8/20/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>420</b>	2.5	ug/L	EPA 8260B	8/28/2004
<b>Toluene</b>	<b>&lt; 2.5</b>	2.5	ug/L	EPA 8260B	8/28/2004
<b>Ethylbenzene</b>	<b>530</b>	2.5	ug/L	EPA 8260B	8/28/2004
<b>Total Xylenes</b>	<b>740</b>	2.5	ug/L	EPA 8260B	8/28/2004
<b>Methyl-t-butyl ether (MTBE)</b>	<b>3.2</b>	2.5	ug/L	EPA 8260B	8/28/2004
<b>Diisopropyl ether (DIPE)</b>	<b>&lt; 2.5</b>	2.5	ug/L	EPA 8260B	8/28/2004
<b>Ethyl-t-butyl ether (ETBE)</b>	<b>&lt; 2.5</b>	2.5	ug/L	EPA 8260B	8/28/2004
<b>Tert-amyl methyl ether (TAME)</b>	<b>&lt; 2.5</b>	2.5	ug/L	EPA 8260B	8/28/2004
<b>Tert-Butanol</b>	<b>&lt; 25</b>	25	ug/L	EPA 8260B	8/28/2004
<b>TPH as Gasoline</b>	<b>13000</b>	250	ug/L	EPA 8260B	8/28/2004
<b>1,2-Dichloroethane</b>	<b>&lt; 2.5</b>	2.5	ug/L	EPA 8260B	8/28/2004
<b>1,2-Dibromoethane</b>	<b>&lt; 2.5</b>	2.5	ug/L	EPA 8260B	8/28/2004
Toluene - d8 (Surr)	94.7		% Recovery	EPA 8260B	8/28/2004
4-Bromofluorobenzene (Surr)	94.4		% Recovery	EPA 8260B	8/28/2004
Dibromofluoromethane (Surr)	110		% Recovery	EPA 8260B	8/28/2004
1,2-Dichloroethane-d4 (Surr)	99.3		% Recovery	EPA 8260B	8/28/2004
<b>TPH as Diesel</b>	<b>&lt; 3000</b>	3000	ug/L	M EPA 8015	8/27/2004
Octacosane (Diesel Surrogate)	111		% Recovery	M EPA 8015	8/27/2004

Approved By:

Joel Kiff



Report Number : 39758

Date : 8/30/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-B 33-35'

Matrix : Water

Lab Number : 39758-02

Sample Date :8/20/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.99	0.50	ug/L	EPA 8260B	8/28/2004
Toluene	0.60	0.50	ug/L	EPA 8260B	8/28/2004
Ethylbenzene	0.53	0.50	ug/L	EPA 8260B	8/28/2004
Total Xylenes	0.69	0.50	ug/L	EPA 8260B	8/28/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	8/28/2004
TPH as Gasoline	530	50	ug/L	EPA 8260B	8/28/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	8/28/2004
4-Bromofluorobenzene (Surr)	95.0		% Recovery	EPA 8260B	8/28/2004
Dibromofluoromethane (Surr)	106		% Recovery	EPA 8260B	8/28/2004
1,2-Dichloroethane-d4 (Surr)	99.7		% Recovery	EPA 8260B	8/28/2004
TPH as Diesel	< 50	50	ug/L	M EPA 8015	8/27/2004
Octacosane (Diesel Surrogate)	99.6		% Recovery	M EPA 8015	8/27/2004

Approved By:

Joel Kiff



Report Number : 39758

Date : 8/30/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-G 23'-25'

Matrix : Water

Lab Number : 39758-03

Sample Date :8/20/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	260	10	ug/L	EPA 8260B	8/27/2004
Toluene	660	10	ug/L	EPA 8260B	8/27/2004
Ethylbenzene	180	10	ug/L	EPA 8260B	8/27/2004
Total Xylenes	960	10	ug/L	EPA 8260B	8/27/2004
Methyl-t-butyl ether (MTBE)	5000	10	ug/L	EPA 8260B	8/27/2004
Diisopropyl ether (DIPE)	< 10	10	ug/L	EPA 8260B	8/27/2004
Ethyl-t-butyl ether (ETBE)	< 10	10	ug/L	EPA 8260B	8/27/2004
Tert-amyl methyl ether (TAME)	13	10	ug/L	EPA 8260B	8/27/2004
Tert-Butanol	< 100	100	ug/L	EPA 8260B	8/27/2004
TPH as Gasoline	7300	1000	ug/L	EPA 8260B	8/27/2004
1,2-Dichloroethane	< 10	10	ug/L	EPA 8260B	8/27/2004
1,2-Dibromoethane	< 10	10	ug/L	EPA 8260B	8/27/2004
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	8/27/2004
4-Bromofluorobenzene (Surr)	94.8		% Recovery	EPA 8260B	8/27/2004
Dibromofluoromethane (Surr)	100		% Recovery	EPA 8260B	8/27/2004
1,2-Dichloroethane-d4 (Surr)	97.9		% Recovery	EPA 8260B	8/27/2004
TPH as Diesel	< 400	400	ug/L	M EPA 8015	8/27/2004
Octacosane (Diesel Surrogate)	99.6		% Recovery	M EPA 8015	8/27/2004

Approved By:

Joel Kiff



Report Number : 39758

Date : 8/30/2004

Project Name : ALBANY HILL

Project Number :

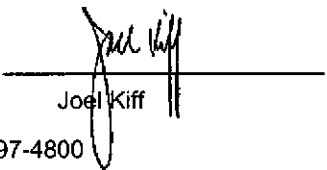
Sample : BH-H 23'-25'

Matrix : Water

Lab Number : 39758-04

Sample Date :8/20/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	44	2.5	ug/L	EPA 8260B	8/26/2004
Toluene	86	2.5	ug/L	EPA 8260B	8/26/2004
Ethylbenzene	79	2.5	ug/L	EPA 8260B	8/26/2004
Total Xylenes	340	2.5	ug/L	EPA 8260B	8/26/2004
Methyl-t-butyl ether (MTBE)	1400	2.5	ug/L	EPA 8260B	8/26/2004
Diisopropyl ether (DIPE)	< 2.5	2.5	ug/L	EPA 8260B	8/26/2004
Ethyl-t-butyl ether (ETBE)	< 2.5	2.5	ug/L	EPA 8260B	8/26/2004
Tert-amyl methyl ether (TAME)	< 2.5	2.5	ug/L	EPA 8260B	8/26/2004
Tert-Butanol	< 25	25	ug/L	EPA 8260B	8/26/2004
TPH as Gasoline	2300	250	ug/L	EPA 8260B	8/26/2004
1,2-Dichloroethane	< 2.5	2.5	ug/L	EPA 8260B	8/26/2004
1,2-Dibromoethane	< 2.5	2.5	ug/L	EPA 8260B	8/26/2004
Toluene - d8 (Surr)	97.9		% Recovery	EPA 8260B	8/26/2004
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	8/26/2004
Dibromofluoromethane (Surr)	98.6		% Recovery	EPA 8260B	8/26/2004
1,2-Dichloroethane-d4 (Surr)	94.8		% Recovery	EPA 8260B	8/26/2004
TPH as Diesel	< 300	300	ug/L	M EPA 8015	8/27/2004
Octacosane (Diesel Surrogate)	96.2		% Recovery	M EPA 8015	8/27/2004

Approved By:  Joel Kiff



Report Number : 39758

Date : 8/30/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-H 32'-34'

Matrix : Water

Lab Number : 39758-05

Sample Date :8/20/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	13	5.0	ug/L	EPA 8260B	8/27/2004
Toluene	12	5.0	ug/L	EPA 8260B	8/27/2004
Ethylbenzene	< 5.0	5.0	ug/L	EPA 8260B	8/27/2004
Total Xylenes	7.2	5.0	ug/L	EPA 8260B	8/27/2004
Methyl-t-butyl ether (MTBE)	1900	5.0	ug/L	EPA 8260B	8/27/2004
Diisopropyl ether (DIPE)	< 5.0	5.0	ug/L	EPA 8260B	8/27/2004
Ethyl-t-butyl ether (ETBE)	< 5.0	5.0	ug/L	EPA 8260B	8/27/2004
Tert-amyl methyl ether (TAME)	< 5.0	5.0	ug/L	EPA 8260B	8/27/2004
Tert-Butanol	< 50	50	ug/L	EPA 8260B	8/27/2004
TPH as Gasoline	< 500	500	ug/L	EPA 8260B	8/27/2004
1,2-Dichloroethane	< 5.0	5.0	ug/L	EPA 8260B	8/27/2004
1,2-Dibromoethane	< 5.0	5.0	ug/L	EPA 8260B	8/27/2004
Toluene - d8 (Surr)	98.8		% Recovery	EPA 8260B	8/27/2004
4-Bromofluorobenzene (Surr)	92.9		% Recovery	EPA 8260B	8/27/2004
Dibromofluoromethane (Surr)	98.5		% Recovery	EPA 8260B	8/27/2004
1,2-Dichloroethane-d4 (Surr)	96.1		% Recovery	EPA 8260B	8/27/2004
TPH as Diesel	120	50	ug/L	M EPA 8015	8/30/2004
Octacosane (Diesel Surrogate)	114		% Recovery	M EPA 8015	8/30/2004

Approved By:

Joel Kiff



Report Number : 39758

Date : 8/30/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-F 23'-25'

Matrix : Water

Lab Number : 39758-06

Sample Date :8/23/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	210	2.5	ug/L	EPA 8260B	8/28/2004
Toluene	320	2.5	ug/L	EPA 8260B	8/28/2004
Ethylbenzene	90	2.5	ug/L	EPA 8260B	8/28/2004
Total Xylenes	480	2.5	ug/L	EPA 8260B	8/28/2004
Methyl-t-butyl ether (MTBE)	1500	2.5	ug/L	EPA 8260B	8/28/2004
Diisopropyl ether (DIPE)	< 2.5	2.5	ug/L	EPA 8260B	8/28/2004
Ethyl-t-butyl ether (ETBE)	< 2.5	2.5	ug/L	EPA 8260B	8/28/2004
Tert-amyl methyl ether (TAME)	750	2.5	ug/L	EPA 8260B	8/28/2004
Tert-Butanol	41 J	25	ug/L	EPA 8260B	8/28/2004
TPH as Gasoline	5400	250	ug/L	EPA 8260B	8/28/2004
1,2-Dichloroethane	< 2.5	2.5	ug/L	EPA 8260B	8/28/2004
1,2-Dibromoethane	< 2.5	2.5	ug/L	EPA 8260B	8/28/2004
Toluene - d8 (Surr)	93.3		% Recovery	EPA 8260B	8/28/2004
4-Bromofluorobenzene (Surr)	97.3		% Recovery	EPA 8260B	8/28/2004
Dibromofluoromethane (Surr)	112		% Recovery	EPA 8260B	8/28/2004
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	8/28/2004
TPH as Diesel	< 800	800	ug/L	M EPA 8015	8/27/2004
Octacosane (Diesel Surrogate)	107		% Recovery	M EPA 8015	8/27/2004

Approved By:

Joel Kiff

Report Number : 39758

Date : 8/30/2004

**QC Report : Method Blank Data**

Project Name : **ALBANY HILL**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	8/26/2004
Octacosane (Diesel Surrogate)	96.0		%	M EPA 8015	8/26/2004
TPH as Diesel	< 50	50	ug/L	M EPA 8015	8/30/2004
Octacosane (Diesel Surrogate)	113		%	M EPA 8015	8/30/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	8/26/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	8/26/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	8/26/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	8/26/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	8/26/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	8/26/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	8/26/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	8/26/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	8/26/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	8/26/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	8/26/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	8/26/2004
Toluene - d8 (Surr)	99.1		%	EPA 8260B	8/26/2004
4-Bromofluorobenzene (Surr)	103		%	EPA 8260B	8/26/2004
Dibromofluoromethane (Surr)	97.9		%	EPA 8260B	8/26/2004
1,2-Dichloroethane-d4 (Surr)	98.7		%	EPA 8260B	8/26/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	8/27/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	8/27/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Toluene - d8 (Surr)	98.1		%	EPA 8260B	8/27/2004
4-Bromofluorobenzene (Surr)	92.6		%	EPA 8260B	8/27/2004
Dibromofluoromethane (Surr)	98.2		%	EPA 8260B	8/27/2004
1,2-Dichloroethane-d4 (Surr)	95.8		%	EPA 8260B	8/27/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	8/27/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	8/27/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	8/27/2004
Toluene - d8 (Surr)	90.6		%	EPA 8260B	8/27/2004
4-Bromofluorobenzene (Surr)	96.3		%	EPA 8260B	8/27/2004
Dibromofluoromethane (Surr)	119		%	EPA 8260B	8/27/2004
1,2-Dichloroethane-d4 (Surr)	104		%	EPA 8260B	8/27/2004

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 39758

Date : 8/30/2004

**QC Report : Method Blank Data**

Project Name : **ALBANY HILL**

Project Number :

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
Benzene	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	8/28/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	8/28/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	8/28/2004
Toluene - dB (Surr)	104		%	EPA 8260B	8/28/2004
4-Bromofluorobenzene (Surr)	96.0		%	EPA 8260B	8/28/2004
Dibromofluoromethane (Surr)	101		%	EPA 8260B	8/28/2004
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	8/28/2004

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
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Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800



Report Number : 39758

Date : 8/30/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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 as Diesel	Blank	<50	1000	1000	860	926	ug/L	M EPA 8015	8/26/04	86.0	92.6	7.49	70-130	25
TPH as Diesel	Blank	<50	1000	1000	1030	963	ug/L	M EPA 8015	8/30/04	103	96.3	6.39	70-130	25
Benzene	39761-19	<0.50	40.0	39.4	41.4	40.2	ug/L	EPA 8260B	8/26/04	104	102	1.63	70-130	25
Toluene	39761-19	<0.50	40.0	39.4	41.5	39.8	ug/L	EPA 8260B	8/26/04	104	101	2.94	70-130	25
Tert-Butanol	39761-19	<5.0	200	197	200	207	ug/L	EPA 8260B	8/26/04	100	105	4.63	70-130	25
Methyl-t-Butyl Ether	39761-19	<0.50	40.0	39.4	39.3	38.6	ug/L	EPA 8260B	8/26/04	98.2	97.8	0.386	70-130	25
Benzene	39774-03	<0.50	40.0	40.0	41.3	40.4	ug/L	EPA 8260B	8/27/04	103	101	2.12	70-130	25
Toluene	39774-03	<0.50	40.0	40.0	40.6	39.5	ug/L	EPA 8260B	8/27/04	101	98.8	2.66	70-130	25
Tert-Butanol	39774-03	<5.0	200	200	204	204	ug/L	EPA 8260B	8/27/04	102	102	0.209	70-130	25
Methyl-t-Butyl Ether	39774-03	<0.50	40.0	40.0	44.4	45.5	ug/L	EPA 8260B	8/27/04	111	114	2.41	70-130	25
Benzene	39809-01	<0.50	40.0	40.0	40.0	39.6	ug/L	EPA 8260B	8/27/04	99.9	99.0	0.918	70-130	25
Toluene	39809-01	<0.50	40.0	40.0	38.7	39.0	ug/L	EPA 8260B	8/27/04	96.9	97.6	0.702	70-130	25
Tert-Butanol	39809-01	<5.0	200	200	204	198	ug/L	EPA 8260B	8/27/04	102	98.8	3.51	70-130	25
Methyl-t-Butyl Ether	39809-01	<0.50	40.0	40.0	38.3	39.6	ug/L	EPA 8260B	8/27/04	95.7	98.9	3.31	70-130	25
Benzene	39825-06	<0.50	40.0	40.0	45.0	43.1	ug/L	EPA 8260B	8/28/04	113	108	4.48	70-130	25
Toluene	39825-06	<0.50	40.0	40.0	40.8	40.6	ug/L	EPA 8260B	8/28/04	102	102	0.356	70-130	25
Tert-Butanol	39825-06	<5.0	200	200	191	190	ug/L	EPA 8260B	8/28/04	95.6	94.8	0.921	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 39758

Date : 8/30/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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	39825-06	<0.50	40.0	40.0	38.0	37.7	ug/L	EPA 8260B	8/28/04	95.0	94.3	0.673	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By: Joe Kiff



Report Number : 39758

Date : 8/30/2004

QC Report : Laboratory Control Sample (LCS)

Project Name : **ALBANY HILL**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	8/26/04	103	70-130
Toluene	40.0	ug/L	EPA 8260B	8/26/04	104	70-130
Tert-Butanol	200	ug/L	EPA 8260B	8/26/04	98.6	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	8/26/04	96.8	70-130
Benzene	40.0	ug/L	EPA 8260B	8/27/04	91.3	70-130
Toluene	40.0	ug/L	EPA 8260B	8/27/04	88.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	8/27/04	86.6	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	8/27/04	101	70-130
Benzene	40.0	ug/L	EPA 8260B	8/27/04	103	70-130
Toluene	40.0	ug/L	EPA 8260B	8/27/04	104	70-130
Tert-Butanol	200	ug/L	EPA 8260B	8/27/04	108	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	8/27/04	98.4	70-130
Benzene	40.0	ug/L	EPA 8260B	8/28/04	106	70-130
Toluene	40.0	ug/L	EPA 8260B	8/28/04	103	70-130
Tert-Butanol	200	ug/L	EPA 8260B	8/28/04	97.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	8/28/04	93.2	70-130

KIFF ANALYTICAL, LLC

Approved By:

Joe Kiff

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800



2795 2nd Street, Suite 300  
 Davis, CA 95616  
 Lab: 530.297.4800  
 Fax: 530.297.4808

Lab No. 39758 Page 1 of 1

Project Contact (Hardcopy or PDF To):  
Rob Kiff

California EDF Report?  Yes  No

**Chain-of-Custody Record and Analysis Request**

Company/Address:  
ADVA SUCRO

Recommended but not mandatory to complete this section:  
 Sampling Company Log Code: \_\_\_\_\_

Phone No.:  
125-820-9351

FAX No.: \_\_\_\_\_

Global ID: \_\_\_\_\_

Project Number: \_\_\_\_\_

P.O. No.: \_\_\_\_\_

EDF Deliverable To (Email Address): \_\_\_\_\_

Project Name:  
ALBANY HILL

Sampler Signature:

Project Address:  
500 SAN PABLO

Sampling

Container

Preservative

Matrix

**Analysis Request**

TAT

For Lab Use Only

Sample Designation

Date Time

40 ml VOA

SLEEVE

HCl

HNO<sub>3</sub>

ICE

NONE

WATER

SOIL

BTEX (8021B)

BTEX/TPH Gas/MTBE (8021B/MB015)

TPH as Diesel (MB015)

TPH as Motor Oil (MB015)

TPH Gas/BTEX/MTBE (8260B)

5 Oxygenates/TPH Gas/BTEX (8260B)

7 Oxygenates/TPH Gas/BTEX (8260B)

5 Oxygenates (8260B)

7 Oxygenates (8260B)

Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)

EPA 8260B (Full List)

Volatile Halocarbons (EPA 8260B)

Lead (7421239.2) TOTAL (X) W.E.T. (X)

12 hr/24 hr/48 hr/72 hr

-01  
-02  
-03  
-04  
-05  
-06

Sample Designation	Date	Time	40 ml VOA	SLEEVE	HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL	BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/MB015)	TPH as Diesel (MB015)	TPH as Motor Oil (MB015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421239.2) TOTAL (X) W.E.T. (X)	TAT	For Lab Use Only	
BH-B 23'-25'	8/22/04	0845	S		X				X		X	X			X				X							
BH-B 22'-35'	8/22/04	1311	S								X	X			X				X							-01
BH-G 23'-25'	8/22/04	1525	S								X	X			X				X							-02
BH-H 23'-25'	8/22/04	1619	S								X	X			X				X							-03
BH-H 32'-34'	8/22/04	1430	S								X	X			X				X							-04
BH-F 23'-25'	8/23/04	1020	S								X	X			X				X							-05
<del>_____</del>																										

Relinquished by:

Date Time  
8/23/04 1340

Received by: \_\_\_\_\_

Remarks:  
VIALS WITHOUT DEPTH LABEL ARE 23'-25'

Relinquished by: \_\_\_\_\_

Date Time

Received by: \_\_\_\_\_

Relinquished by: \_\_\_\_\_

Date Time  
082304 1340

Received by Laboratory: Kiff Analytical  
B.A.B.

Bill to:



Report Number : 39759

Date : 08/30/2004

Robert Kitay  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 4 Soil Samples  
Project Name : ALBANY HILL  
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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff



Report Number : 39759

Date : 08/30/2004

Subject : 28 Soil Samples  
Project Name : ALBANY HILL  
Project Number :

## Case Narrative

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for samples BH-B 11.5', BH-G 14.5, BH-H 14.5' and BH-F 14.0'.

Matrix Spike/Matrix Spike Duplicate Results associated with samples BH-B 11.5', BH-G 14.5, BH-H 14.5', BH-F 14.0' for the analyte TPH as Diesel were affected by the analyte concentrations already present in the un-spiked sample.

Approved By:



Joel Kiff

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800



Report Number : 39759

Date : 08/30/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-B 11.5'

Matrix : Soil

Lab Number : 39759-03

Sample Date :08/19/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.14	0.025	mg/Kg	EPA 8260B	08/28/2004
Toluene	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Ethylbenzene	3.8	0.025	mg/Kg	EPA 8260B	08/28/2004
Total Xylenes	4.9	0.025	mg/Kg	EPA 8260B	08/28/2004
Methyl-t-butyl ether (MTBE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Diisopropyl ether (DIPE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Tert-amyl methyl ether (TAME)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Tert-Butanol	< 0.15	0.15	mg/Kg	EPA 8260B	08/28/2004
TPH as Gasoline	240	2.5	mg/Kg	EPA 8260B	08/28/2004
1,2-Dichloroethane	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
1,2-Dibromoethane	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	08/28/2004
4-Bromofluorobenzene (Surr)	96.3		% Recovery	EPA 8260B	08/28/2004
Dibromofluoromethane (Surr)	95.7		% Recovery	EPA 8260B	08/28/2004
1,2-Dichloroethane-d4 (Surr)	89.2		% Recovery	EPA 8260B	08/28/2004
TPH as Diesel	22	1.0	mg/Kg	M EPA 8015	08/27/2004
1-Chlorooctadecane (Diesel Surrogate)	101		% Recovery	M EPA 8015	08/27/2004

Approved By:

Joel Kiff



Report Number : 39759

Date : 08/30/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-G 14.5

Matrix : Soil

Lab Number : 39759-12

Sample Date :08/20/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	2.7	0.025	mg/Kg	EPA 8260B	08/28/2004
Toluene	7.8	0.025	mg/Kg	EPA 8260B	08/28/2004
Ethylbenzene	3.1	0.025	mg/Kg	EPA 8260B	08/28/2004
Total Xylenes	16	0.050	mg/Kg	EPA 8260B	08/28/2004
Methyl-t-butyl ether (MTBE)	0.060	0.025	mg/Kg	EPA 8260B	08/28/2004
Diisopropyl ether (DIPE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Tert-amyl methyl ether (TAME)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Tert-Butanol	< 0.25	0.25	mg/Kg	EPA 8260B	08/28/2004
TPH as Gasoline	170	5.0	mg/Kg	EPA 8260B	08/28/2004
1,2-Dichloroethane	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
1,2-Dibromoethane	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	08/28/2004
4-Bromofluorobenzene (Surr)	95.3		% Recovery	EPA 8260B	08/28/2004
Dibromofluoromethane (Surr)	95.8		% Recovery	EPA 8260B	08/28/2004
1,2-Dichloroethane-d4 (Surr)	93.9		% Recovery	EPA 8260B	08/28/2004
TPH as Diesel	25	1.0	mg/Kg	M EPA 8015	08/28/2004
1-Chlorooctadecane (Diesel Surrogate)	115		% Recovery	M EPA 8015	08/28/2004

Approved By:

Joel Kiff





Report Number : 39759

Date : 08/30/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-H 14.5'

Matrix : Soil

Lab Number : 39759-19

Sample Date :08/20/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.28	0.025	mg/Kg	EPA 8260B	08/28/2004
Toluene	0.39	0.025	mg/Kg	EPA 8260B	08/28/2004
Ethylbenzene	0.74	0.025	mg/Kg	EPA 8260B	08/28/2004
Total Xylenes	3.0	0.050	mg/Kg	EPA 8260B	08/28/2004
Methyl-t-butyl ether (MTBE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Diisopropyl ether (DIPE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Tert-amyl methyl ether (TAME)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Tert-Butanol	< 0.25	0.25	mg/Kg	EPA 8260B	08/28/2004
TPH as Gasoline	45	5.0	mg/Kg	EPA 8260B	08/28/2004
1,2-Dichloroethane	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
1,2-Dibromoethane	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	08/28/2004
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	08/28/2004
Dibromofluoromethane (Surr)	97.3		% Recovery	EPA 8260B	08/28/2004
1,2-Dichloroethane-d4 (Surr)	94.0		% Recovery	EPA 8260B	08/28/2004
TPH as Diesel	51	5.0	mg/Kg	M EPA 8015	08/28/2004
1-Chlorooctadecane (Diesel Surrogate)	92.3		% Recovery	M EPA 8015	08/28/2004

Approved By:

Joel Kiff



Report Number : 39759

Date : 08/30/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-F 14.0'

Matrix : Soil

Lab Number : 39759-26

Sample Date :08/23/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	2.7	0.025	mg/Kg	EPA 8260B	08/28/2004
Toluene	14	0.025	mg/Kg	EPA 8260B	08/28/2004
Ethylbenzene	4.7	0.025	mg/Kg	EPA 8260B	08/28/2004
Total Xylenes	24	0.050	mg/Kg	EPA 8260B	08/28/2004
Methyl-t-butyl ether (MTBE)	0.026	0.025	mg/Kg	EPA 8260B	08/28/2004
Diisopropyl ether (DIPE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Tert-amyl methyl ether (TAME)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Tert-Butanol	< 0.25	0.25	mg/Kg	EPA 8260B	08/28/2004
TPH as Gasoline	210	5.0	mg/Kg	EPA 8260B	08/28/2004
1,2-Dichloroethane	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
1,2-Dibromoethane	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Toluene - d8 (Surr)	97.3		% Recovery	EPA 8260B	08/28/2004
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	08/28/2004
Dibromofluoromethane (Surr)	97.0		% Recovery	EPA 8260B	08/28/2004
1,2-Dichloroethane-d4 (Surr)	95.7		% Recovery	EPA 8260B	08/28/2004
TPH as Diesel	69	20	mg/Kg	M EPA 8015	08/28/2004
1-Chlorooctadecane (Diesel Surrogate)	Diluted Out		% Recovery	M EPA 8015	08/28/2004

Approved By:

Joel Kiff

Report Number : 39759

Date : 08/30/2004

**QC Report : Method Blank Data**

Project Name : **ALBANY HILL**

Project Number :

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	08/27/2004
1-Chlorooctadecane (Diesel Surrogate)	97.6		%	M EPA 8015	08/27/2004
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	08/27/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Toluene - d8 (Surr)	102		%	EPA 8260B	08/27/2004
4-Bromofluorobenzene (Surr)	97.5		%	EPA 8260B	08/27/2004
Dibromofluoromethane (Surr)	112		%	EPA 8260B	08/27/2004
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	08/27/2004

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
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Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 39759

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 08/30/2004

Project Name : **ALBANY HILL**

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 as Diesel	39759-03	22	20.0	20.0	695	1320	mg/Kg	M EPA 8015	8/27/04	1640	3120	62.2	60-140	25
Benzene	39802-01	<0.0050	0.0400	0.0398	0.0346	0.0344	mg/Kg	EPA 8260B	8/27/04	86.4	86.2	0.205	70-130	25
Toluene	39802-01	<0.0050	0.0400	0.0398	0.0346	0.0342	mg/Kg	EPA 8260B	8/27/04	86.5	85.8	0.755	70-130	25
Tert-Butanol	39802-01	<0.0050	0.200	0.199	0.164	0.161	mg/Kg	EPA 8260B	8/27/04	82.1	80.8	1.61	70-130	25
Methyl-t-Butyl Ether	39802-01	<0.0050	0.0400	0.0398	0.0339	0.0345	mg/Kg	EPA 8260B	8/27/04	84.7	86.6	2.30	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:  Joel Kiff

Report Number : 39759

QC Report : Laboratory Control Sample (LCS)

Date : 08/30/2004

Project Name : **ALBANY HILL**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	8/27/04	97.6	70-130
Benzene	0.0398	mg/Kg	EPA 8260B	8/27/04	93.6	70-130
Toluene	0.0398	mg/Kg	EPA 8260B	8/27/04	94.6	70-130
Tert-Butanol	0.199	mg/Kg	EPA 8260B	8/27/04	91.2	70-130
Methyl-t-Butyl Ether	0.0398	mg/Kg	EPA 8260B	8/27/04	96.9	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

  
Joe Kiff







2795 2nd Street, Suite 300  
 Davis, CA 95616  
 Lab: 530.297.4800  
 Fax: 530.297.4808

Lab No. 39759 Page 3 of 3

Project Contact (Hardcopy or PDF To):  
ROB KITAY

Company/Address:  
AQUA SCIENCE

Phone No.: \_\_\_\_\_ FAX No.: \_\_\_\_\_

Project Number: \_\_\_\_\_ P.O. No.: \_\_\_\_\_

Project Name:  
ALBANY HRC

Project Address:  
800 SAN PABLO

Global ID: \_\_\_\_\_

EDF Deliverable To (Email Address): \_\_\_\_\_

Sampler Signature:

California EDF Report?  Yes  No

**Chain-of-Custody Record and Analysis Request**

Analysis Request														TAT																
Sample Designation	Date	Time	40 ml VOA	SLEEVE	Container	Preservative				Matrix		BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/8015)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 ED6 - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421239-2)	TOTAL (X) W.E.T. (X)	12 hr/24 hr/48 hr/72 hr/1 wk	For Lab Use Only			
BH-A 22.5'	8/20/04	1020		X																										
BH-B 24.5'	8/24/04	1006																												-21
BH-C 29.5'	8/24/04	1143																												-22
BH-D 4.5'	8/24/04	0134																												-23
BH-E 9.5'		0943																												-24
BH-F 14.0'		0853																												-25
BH-G 19.5'		1001																												-26
BH-H 27.0'		1200																												-27
																														-28

Relinquished by:   
 Date: 8/23/04 Time: 1340

Received by: \_\_\_\_\_

Relinquished by: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: \_\_\_\_\_

Relinquished by: \_\_\_\_\_  
 Date: 08/30/04 Time: 1340

Received by Laboratory: Bica. B  
K. H. Analytical

Remarks: \_\_\_\_\_

Bill to: \_\_\_\_\_





Report Number : 39778

Date : 08/31/2004

Robert Kitay  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 3 Water Samples  
Project Name : ALBANY HILL  
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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff



Report Number : 39778

Date : 08/31/2004

Subject : 3 Water Samples  
Project Name : ALBANY HILL  
Project Number :

## Case Narrative

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample BH-A 20'-22'.

Approved By:

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800



Report Number : 39778

Date : 08/31/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-A 20'-22'

Matrix : Water

Lab Number : 39778-01

Sample Date :08/24/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	5.3	0.50	ug/L	EPA 8260B	08/31/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Ethylbenzene	9.9	0.50	ug/L	EPA 8260B	08/31/2004
Total Xylenes	16	0.50	ug/L	EPA 8260B	08/31/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Tert-Butanol	8.1	5.0	ug/L	EPA 8260B	08/31/2004
TPH as Gasoline	290	50	ug/L	EPA 8260B	08/31/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Toluene - d8 (Surr)	97.2		% Recovery	EPA 8260B	08/31/2004
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	08/31/2004
Dibromofluoromethane (Surr)	96.6		% Recovery	EPA 8260B	08/31/2004
1,2-Dichloroethane-d4 (Surr)	99.7		% Recovery	EPA 8260B	08/31/2004
TPH as Diesel	120	50	ug/L	M EPA 8015	08/27/2004
Octacosane (Diesel Surrogate)	109		% Recovery	M EPA 8015	08/27/2004

Approved By:

Joel Kiff



Report Number : 39778

Date : 08/31/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-C 25'-27'

Matrix : Water

Lab Number : 39778-02

Sample Date :08/24/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	18	5.0	ug/L	EPA 8260B	08/31/2004
Toluene	< 5.0	5.0	ug/L	EPA 8260B	08/31/2004
Ethylbenzene	< 5.0	5.0	ug/L	EPA 8260B	08/31/2004
Total Xylenes	< 5.0	5.0	ug/L	EPA 8260B	08/31/2004
Methyl-t-butyl ether (MTBE)	2000	5.0	ug/L	EPA 8260B	08/31/2004
Diisopropyl ether (DIPE)	< 5.0	5.0	ug/L	EPA 8260B	08/31/2004
Ethyl-t-butyl ether (ETBE)	< 5.0	5.0	ug/L	EPA 8260B	08/31/2004
Tert-amyl methyl ether (TAME)	7.5	5.0	ug/L	EPA 8260B	08/31/2004
Tert-Butanol	< 50	50	ug/L	EPA 8260B	08/31/2004
TPH as Gasoline	< 500	500	ug/L	EPA 8260B	08/31/2004
1,2-Dichloroethane	< 5.0	5.0	ug/L	EPA 8260B	08/31/2004
1,2-Dibromoethane	< 5.0	5.0	ug/L	EPA 8260B	08/31/2004
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	08/31/2004
4-Bromofluorobenzene (Surr)	90.5		% Recovery	EPA 8260B	08/31/2004
Dibromofluoromethane (Surr)	101		% Recovery	EPA 8260B	08/31/2004
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	08/31/2004
TPH as Diesel	110	50	ug/L	M EPA 8015	08/27/2004
Octacosane (Diesel Surrogate)	108		% Recovery	M EPA 8015	08/27/2004

Approved By:

Joel Kiff



Report Number : 39778

Date : 08/31/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-G 28'-30'

Matrix : Water

Lab Number : 39778-03

Sample Date :08/23/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	47	10	ug/L	EPA 8260B	08/31/2004
Toluene	30	10	ug/L	EPA 8260B	08/31/2004
Ethylbenzene	< 10	10	ug/L	EPA 8260B	08/31/2004
Total Xylenes	10	10	ug/L	EPA 8260B	08/31/2004
Methyl-t-butyl ether (MTBE)	4800	10	ug/L	EPA 8260B	08/31/2004
Diisopropyl ether (DIPE)	< 10	10	ug/L	EPA 8260B	08/31/2004
Ethyl-t-butyl ether (ETBE)	< 10	10	ug/L	EPA 8260B	08/31/2004
Tert-amyl methyl ether (TAME)	14	10	ug/L	EPA 8260B	08/31/2004
Tert-Butanol	< 100	100	ug/L	EPA 8260B	08/31/2004
TPH as Gasoline	< 1000	1000	ug/L	EPA 8260B	08/31/2004
1,2-Dichloroethane	< 10	10	ug/L	EPA 8260B	08/31/2004
1,2-Dibromoethane	< 10	10	ug/L	EPA 8260B	08/31/2004
Toluene - d8 (Surr)	98.9		% Recovery	EPA 8260B	08/31/2004
4-Bromofluorobenzene (Surr)	90.4		% Recovery	EPA 8260B	08/31/2004
Dibromofluoromethane (Surr)	100		% Recovery	EPA 8260B	08/31/2004
1,2-Dichloroethane-d4 (Surr)	96.6		% Recovery	EPA 8260B	08/31/2004
TPH as Diesel	160	50	ug/L	M EPA 8015	08/27/2004
Octacosane (Diesel Surrogate)	108		% Recovery	M EPA 8015	08/27/2004

Approved By:

Joel Kiff

Report Number : 39778

Date : 08/31/2004

**QC Report : Method Blank Data**

Project Name : **ALBANY HILL**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	08/26/2004
Octacosane (Diesel Surrogate)	98.2		%	M EPA 8015	08/26/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	08/30/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	08/30/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Toluene - d8 (Surr)	101		%	EPA 8260B	08/30/2004
4-Bromofluorobenzene (Surr)	93.5		%	EPA 8260B	08/30/2004
Dibromofluoromethane (Surr)	99.5		%	EPA 8260B	08/30/2004
1,2-Dichloroethane-d4 (Surr)	99.9		%	EPA 8260B	08/30/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	08/31/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	08/31/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Toluene - d8 (Surr)	97.0		%	EPA 8260B	08/31/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
4-Bromofluorobenzene (Surr)	105		%	EPA 8260B	08/31/2004
Dibromofluoromethane (Surr)	98.3		%	EPA 8260B	08/31/2004
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	08/31/2004

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 39778


Date : 08/31/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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 as Diesel	Blank	<50	1000	1000	844	884	ug/L	M EPA 8015	8/26/04	84.4	88.4	4.58	70-130	25
Benzene	39827-01	<0.50	40.0	40.0	41.5	41.1	ug/L	EPA 8260B	8/30/04	104	103	0.974	70-130	25
Toluene	39827-01	<0.50	40.0	40.0	41.4	40.5	ug/L	EPA 8260B	8/30/04	103	101	2.14	70-130	25
Tert-Butanol	39827-01	<5.0	200	200	204	205	ug/L	EPA 8260B	8/30/04	102	102	0.263	70-130	25
Methyl-t-Butyl Ether	39827-01	17	40.0	40.0	64.1	63.4	ug/L	EPA 8260B	8/30/04	118	116	1.57	70-130	25
Benzene	39844-01	<0.50	40.0	40.0	41.4	40.7	ug/L	EPA 8260B	8/31/04	103	102	1.52	70-130	25
Toluene	39844-01	<0.50	40.0	40.0	37.8	37.0	ug/L	EPA 8260B	8/31/04	94.6	92.5	2.24	70-130	25
Tert-Butanol	39844-01	<5.0	200	200	197	194	ug/L	EPA 8260B	8/31/04	98.6	96.8	1.80	70-130	25
Methyl-t-Butyl Ether	39844-01	87	40.0	40.0	128	128	ug/L	EPA 8260B	8/31/04	102	102	0.307	70-130	25

Approved By:  Joe Kiff

Report Number : 39778

Date : 08/31/2004

QC Report : Laboratory Control Sample (LCS)

Project Name : **ALBANY HILL**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	8/30/04	101	70-130
Toluene	40.0	ug/L	EPA 8260B	8/30/04	101	70-130
Tert-Butanol	200	ug/L	EPA 8260B	8/30/04	103	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	8/30/04	116	70-130
Benzene	40.0	ug/L	EPA 8260B	8/31/04	98.8	70-130
Toluene	40.0	ug/L	EPA 8260B	8/31/04	95.9	70-130
Tert-Butanol	200	ug/L	EPA 8260B	8/31/04	96.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	8/31/04	103	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joel Kiff







2795 2nd Street, Suite 300  
 Davis, CA 95616  
 Lab: 530.297.4800  
 Fax: 530.297.4808

Lab No. 39778 Page 1 of 1

Project Contact (Hardcopy or PDF To): ROB KITAY  
 Company/Address: AGVA SCIENCE  
 Phone No.: \_\_\_\_\_ FAX No.: \_\_\_\_\_  
 Project Number: \_\_\_\_\_ P.O. No.: \_\_\_\_\_  
 Project Name: ALBANY HILL  
 Project Address: 800 SAN PABLO

California EDF Report?  Yes  No

Recommended but not mandatory to complete this section:  
 Sampling Company Log Code: \_\_\_\_\_  
 Global ID: \_\_\_\_\_  
 EDF Deliverable To (Email Address): \_\_\_\_\_  
 Sampler Signature:

**Chain-of-Custody Record and Analysis Request**

Sample Designation	Sampling		Container		Preservative				Matrix		Analysis Request										TAT	For Lab Use Only					
	Date	Time	40 ml VOA SLEEVE		HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL	BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/MB015)	TPH as Diesel (MB015)	TPH as Motor Oil (MB015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)		Volatile Halocarbons (EPA 8260E)	Lead (7421/239.2)	TOTAL (X) W.E.T. (X)	12 hr/24 hr/48 hr/72 hr	
BH-A 2 <sup>1</sup> -22 <sup>1</sup>	8/24/04	1145	X		X	X			X		X	X			X					X							01
BH-C 25 <sup>1</sup> -27 <sup>1</sup>	8/24/04	1155	X		X	X			X		X	X			X					X							02
BH-G 28 <sup>1</sup> -30 <sup>1</sup>	8/23/04	1405	X		X	X			X		X	X			X					X							03

Relinquished by: Date: 8/24/04 Time: 1210 Received by: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: 08/24/04 Time: 1210 Received by Laboratory: [Signature] KIFF ANALYTICAL

Remarks: \_\_\_\_\_

Bill to: \_\_\_\_\_



Report Number : 39779

Date : 09/13/2004

Robert Kitay  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 4 Soil Samples  
Project Name : ALBANY HILL  
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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff



Report Number : 39779

Date : 09/13/2004

Subject : 10 Soil Samples  
Project Name : ALBANY HILL  
Project Number :

## Case Narrative

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for samples BH-A 13' and BH-C 14.5'.

Approved By:

A handwritten signature in black ink, appearing to read "Joe Kiff", is written over the printed name "Joe Kiff".

Joe Kiff



Report Number : 39779

Date : 09/13/2004

Project Name : ALBANY HILL

Project Number :


Sample : BH-A 13'

Matrix : Soil

Lab Number : 39779-03

Sample Date :08/24/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.051	0.025	mg/Kg	EPA 8260B	08/28/2004
Toluene	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Ethylbenzene	2.8	0.025	mg/Kg	EPA 8260B	08/28/2004
Total Xylenes	4.7	0.050	mg/Kg	EPA 8260B	08/28/2004
Methyl-t-butyl ether (MTBE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Diisopropyl ether (DIPE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Tert-amyl methyl ether (TAME)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Tert-Butanol	< 0.25	0.25	mg/Kg	EPA 8260B	08/28/2004
TPH as Gasoline	180	5.0	mg/Kg	EPA 8260B	08/28/2004
1,2-Dichloroethane	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
1,2-Dibromoethane	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	08/28/2004
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	08/28/2004
Dibromofluoromethane (Surr)	98.2		% Recovery	EPA 8260B	08/28/2004
1,2-Dichloroethane-d4 (Surr)	92.5		% Recovery	EPA 8260B	08/28/2004
TPH as Diesel	3.1	1.0	mg/Kg	M EPA 8015	08/31/2004
1-Chlorooctadecane (Diesel Surrogate)	94.0		% Recovery	M EPA 8015	08/31/2004

Approved By:  Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800



Report Number : 39779

Date : 09/13/2004

Project Name : ALBANY HILL

Project Number :


Sample : BH-A 16.5'

Matrix : Soil

Lab Number : 39779-04

Sample Date :08/24/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Tert-Butanol	< 0.015	0.015	mg/Kg	EPA 8260B	09/05/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/05/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Toluene - d8 (Surr)	98.7		% Recovery	EPA 8260B	09/05/2004
4-Bromofluorobenzene (Surr)	93.0		% Recovery	EPA 8260B	09/05/2004
Dibromofluoromethane (Surr)	99.9		% Recovery	EPA 8260B	09/05/2004
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	09/05/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	09/07/2004
1-Chlorooctadecane (Diesel Surrogate)	96.2		% Recovery	M EPA 8015	09/07/2004

Approved By:  Joel Kiff



Report Number : 39779

Date : 09/13/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-C 14.5'

Matrix : Soil

Lab Number : 39779-09

Sample Date :08/24/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.052	0.025	mg/Kg	EPA 8260B	08/28/2004
Toluene	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Ethylbenzene	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Total Xylenes	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Methyl-t-butyl ether (MTBE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Diisopropyl ether (DIPE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Tert-amyl methyl ether (TAME)	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Tert-Butanol	< 0.15	0.15	mg/Kg	EPA 8260B	08/28/2004
TPH as Gasoline	400	5.0	mg/Kg	EPA 8260B	08/31/2004
1,2-Dichloroethane	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
1,2-Dibromoethane	< 0.025	0.025	mg/Kg	EPA 8260B	08/28/2004
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	08/28/2004
4-Bromofluorobenzene (Surr)	93.4		% Recovery	EPA 8260B	08/28/2004
Dibromofluoromethane (Surr)	99.9		% Recovery	EPA 8260B	08/28/2004
1,2-Dichloroethane-d4 (Surr)	97.4		% Recovery	EPA 8260B	08/28/2004
TPH as Diesel	71	1.0	mg/Kg	M EPA 8015	08/31/2004
1-Chlorooctadecane (Diesel Surrogate)	100		% Recovery	M EPA 8015	08/31/2004

Approved By:

Joel Kiff



Report Number : 39779

Date : 09/13/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-C 23.5'

Matrix : Soil

Lab Number : 39779-10

Sample Date :08/24/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Methyl-t-butyl ether (MTBE)	0.16	0.0050	mg/Kg	EPA 8260B	09/05/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Tert-Butanol	< 0.015	0.015	mg/Kg	EPA 8260B	09/05/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/05/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Toluene - d8 (Surr)	98.9		% Recovery	EPA 8260B	09/05/2004
4-Bromofluorobenzene (Surr)	95.7		% Recovery	EPA 8260B	09/05/2004
Dibromofluoromethane (Surr)	99.9		% Recovery	EPA 8260B	09/05/2004
1,2-Dichloroethane-d4 (Surr)	99.4		% Recovery	EPA 8260B	09/05/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	09/07/2004
1-Chlorooctadecane (Diesel Surrogate)	98.5		% Recovery	M EPA 8015	09/07/2004

Approved By:

Joel Kiff

Report Number : 39779

Date : 09/13/2004

**QC Report : Method Blank Data**

Project Name : **ALBANY HILL**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	08/31/2004
1-Chlorooctadecane (Diesel Surrogate)	97.3		%	M EPA 8015	08/31/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	09/07/2004
1-Chlorooctadecane (Diesel Surrogate)	103		%	M EPA 8015	09/07/2004
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	08/27/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/27/2004
Toluene - d8 (Surr)	102		%	EPA 8260B	08/27/2004
4-Bromofluorobenzene (Surr)	97.5		%	EPA 8260B	08/27/2004
Dibromofluoromethane (Surr)	112		%	EPA 8260B	08/27/2004
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	08/27/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/04/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Toluene - d8 (Surr)	101		%	EPA 8260B	09/04/2004
4-Bromofluorobenzene (Surr)	94.5		%	EPA 8260B	09/04/2004
Dibromofluoromethane (Surr)	99.8		%	EPA 8260B	09/04/2004
1,2-Dichloroethane-d4 (Surr)	107		%	EPA 8260B	09/04/2004

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800



Report Number : 39779


Date : 09/13/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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 Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	39779-03	3.1	20.0	20.0	20.0	22.6	mg/Kg	M EPA 8015	8/31/04	86.4	97.5	12.1	60-140	25
TPH as Diesel	39779-04	<1.0	20.0	20.0	19.7	19.5	mg/Kg	M EPA 8015	9/7/04	98.6	97.6	1.11	60-140	25
Benzene	39802-01	<0.0050	0.0400	0.0398	0.0346	0.0344	mg/Kg	EPA 8260B	8/27/04	86.4	86.2	0.205	70-130	25
Toluene	39802-01	<0.0050	0.0400	0.0398	0.0346	0.0342	mg/Kg	EPA 8260B	8/27/04	86.5	85.8	0.755	70-130	25
Tert-Butanol	39802-01	<0.0050	0.200	0.199	0.164	0.161	mg/Kg	EPA 8260B	8/27/04	82.1	80.8	1.61	70-130	25
Methyl-t-Butyl Ether	39802-01	<0.0050	0.0400	0.0398	0.0339	0.0345	mg/Kg	EPA 8260B	8/27/04	84.7	86.6	2.30	70-130	25
Benzene	39932-03	<0.0050	0.0399	0.0398	0.0382	0.0378	mg/Kg	EPA 8260B	9/4/04	95.6	94.9	0.744	70-130	25
Toluene	39932-03	<0.0050	0.0399	0.0398	0.0382	0.0374	mg/Kg	EPA 8260B	9/4/04	95.6	94.0	1.68	70-130	25
Tert-Butanol	39932-03	<0.0050	0.200	0.199	0.196	0.184	mg/Kg	EPA 8260B	9/4/04	98.0	92.6	5.72	70-130	25
Methyl-t-Butyl Ether	39932-03	<0.0050	0.0399	0.0398	0.0435	0.0414	mg/Kg	EPA 8260B	9/4/04	109	104	4.75	70-130	25

Approved By:  \_\_\_\_\_  
 Joel Kiff

Report Number : 39779

QC Report : Laboratory Control Sample (LCS)

Date : 09/13/2004

Project Name : **ALBANY HILL**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	8/31/04	110	70-130
TPH as Diesel	20.0	mg/Kg	M EPA 8015	9/7/04	96.4	70-130
Benzene	0.0398	mg/Kg	EPA 8260B	8/27/04	93.6	70-130
Toluene	0.0398	mg/Kg	EPA 8260B	8/27/04	94.6	70-130
Tert-Butanol	0.199	mg/Kg	EPA 8260B	8/27/04	91.2	70-130
Methyl-t-Butyl Ether	0.0398	mg/Kg	EPA 8260B	8/27/04	96.9	70-130
Benzene	0.0400	mg/Kg	EPA 8260B	9/4/04	98.2	70-130
Toluene	0.0400	mg/Kg	EPA 8260B	9/4/04	100	70-130
Tert-Butanol	0.200	mg/Kg	EPA 8260B	9/4/04	105	70-130
Methyl-t-Butyl Ether	0.0400	mg/Kg	EPA 8260B	9/4/04	113	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

  
Joe Kiff





Report Number : 39800

Date : 09/13/2004

Robert Kitay  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 3 Soil Samples and 2 Water Samples  
Project Name : ALBANY HILL  
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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink that reads "Joel Kiff".

Joel Kiff



Report Number : 39800

Date : 09/13/2004

Subject : 2 Water Samples and 4 Soil Samples  
Project Name : ALBANY HILL  
Project Number :

## Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for sample BH-D 10'-12'.

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample BH-A 25'-27'.

Matrix Spike/Matrix Spike Duplicate Results associated with sample BH-D 6.5' for the analyte TPH as Diesel were affected by the analyte concentrations already present in the un-spiked sample.

Matrix Spike/Matrix Spike Duplicate Results associated with sample BH-A 25'-27' for the analyte Methyl-t-butyl ether were affected by the analyte concentrations already present in the un-spiked sample.

The recovery for surrogate compound Dibromofluoromethane for sample BH-D 6.5' for test method EPA 8260B was outside of control limits. This usually indicates that the sample has a high pH.

Approved By:

  
Joe Kiff



Report Number : 39800

Date : 09/13/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-D 6.5'

Matrix : Soil

Lab Number : 39800-02

Sample Date :08/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.0070	0.0050	mg/Kg	EPA 8260B	09/01/2004
Toluene	0.020	0.0050	mg/Kg	EPA 8260B	09/01/2004
Ethylbenzene	0.0064	0.0050	mg/Kg	EPA 8260B	09/01/2004
Total Xylenes	0.058	0.0050	mg/Kg	EPA 8260B	09/01/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/01/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/01/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/01/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/01/2004
Tert-Butanol	0.047	0.025	mg/Kg	EPA 8260B	09/01/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/01/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/01/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/01/2004
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	09/01/2004
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	09/01/2004
Dibromofluoromethane (Surr)	7.96		% Recovery	EPA 8260B	09/01/2004
1,2-Dichloroethane-d4 (Surr)	105		% Recovery	EPA 8260B	09/01/2004
TPH as Diesel	130	1.0	mg/Kg	M EPA 8015	08/27/2004
1-Chlorooctadecane (Diesel Surrogate)	99.2		% Recovery	M EPA 8015	08/27/2004

Approved By:

Joel Kiff



Report Number : 39800

Date : 09/13/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-D 14.5'

Matrix : Soil

Lab Number : 39800-03

Sample Date :08/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.033	0.0060	mg/Kg	EPA 8260B	09/07/2004
Toluene	0.052	0.0060	mg/Kg	EPA 8260B	09/07/2004
Ethylbenzene	< 0.0060	0.0060	mg/Kg	EPA 8260B	09/07/2004
Total Xylenes	0.024	0.0060	mg/Kg	EPA 8260B	09/07/2004
Methyl-t-butyl ether (MTBE)	0.026	0.0060	mg/Kg	EPA 8260B	09/07/2004
Diisopropyl ether (DIPE)	< 0.0060	0.0060	mg/Kg	EPA 8260B	09/07/2004
Ethyl-t-butyl ether (ETBE)	< 0.0060	0.0060	mg/Kg	EPA 8260B	09/07/2004
Tert-amyl methyl ether (TAME)	< 0.0060	0.0060	mg/Kg	EPA 8260B	09/07/2004
Tert-Butanol	< 0.030	0.030	mg/Kg	EPA 8260B	09/07/2004
TPH as Gasoline	34	1.0	mg/Kg	EPA 8260B	09/07/2004
1,2-Dichloroethane	< 0.0060	0.0060	mg/Kg	EPA 8260B	09/07/2004
1,2-Dibromoethane	< 0.0060	0.0060	mg/Kg	EPA 8260B	09/07/2004
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	09/07/2004
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	09/07/2004
Dibromofluoromethane (Surr)	105		% Recovery	EPA 8260B	09/07/2004
1,2-Dichloroethane-d4 (Surr)	97.4		% Recovery	EPA 8260B	09/07/2004
TPH as Diesel	66	1.0	mg/Kg	M EPA 8015	09/07/2004
1-Chlorooctadecane (Diesel Surrogate)	92.7		% Recovery	M EPA 8015	09/07/2004

Approved By:

Joel Kiff



Report Number : 39800

Date : 09/13/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-A 24.5'

Matrix : Soil

Lab Number : 39800-04

Sample Date :08/24/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/07/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	09/07/2004
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	09/07/2004
Dibromofluoromethane (Surr)	101		% Recovery	EPA 8260B	09/07/2004
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	09/07/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	09/07/2004
1-Chlorooctadecane (Diesel Surrogate)	98.5		% Recovery	M EPA 8015	09/07/2004

Approved By:

Joel Kiff





Report Number : 39800

Date : 09/13/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-A 25'-27'

Matrix : Water

Lab Number : 39800-05

Sample Date :08/24/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	18	0.50	ug/L	EPA 8260B	08/31/2004
Toluene	1.1	0.50	ug/L	EPA 8260B	08/31/2004
Ethylbenzene	29	0.50	ug/L	EPA 8260B	08/31/2004
Total Xylenes	50	0.50	ug/L	EPA 8260B	08/31/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Tert-Butanol	7.1	5.0	ug/L	EPA 8260B	08/31/2004
TPH as Gasoline	420	50	ug/L	EPA 8260B	08/31/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	08/31/2004
Toluene - d8 (Surr)	97.3		% Recovery	EPA 8260B	08/31/2004
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	08/31/2004
Dibromofluoromethane (Surr)	100		% Recovery	EPA 8260B	08/31/2004
1,2-Dichloroethane-d4 (Surr)	97.9		% Recovery	EPA 8260B	08/31/2004
TPH as Diesel	920	50	ug/L	M EPA 8015	08/27/2004
Octacosane (Diesel Surrogate)	98.4		% Recovery	M EPA 8015	08/27/2004

Approved By:

Joel Kiff



Report Number : 39800

Date : 09/13/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-D 10'-12'

Matrix : Water

Lab Number : 39800-06

Sample Date :08/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	1600	7.0	ug/L	EPA 8260B	09/01/2004
Toluene	2300	7.0	ug/L	EPA 8260B	09/01/2004
Ethylbenzene	190	7.0	ug/L	EPA 8260B	09/01/2004
Total Xylenes	1500	7.0	ug/L	EPA 8260B	09/01/2004
Methyl-t-butyl ether (MTBE)	87	7.0	ug/L	EPA 8260B	09/01/2004
Diisopropyl ether (DIPE)	< 7.0	7.0	ug/L	EPA 8260B	09/01/2004
Ethyl-t-butyl ether (ETBE)	< 7.0	7.0	ug/L	EPA 8260B	09/01/2004
Tert-amyl methyl ether (TAME)	< 7.0	7.0	ug/L	EPA 8260B	09/01/2004
Tert-Butanol	210	40	ug/L	EPA 8260B	09/01/2004
TPH as Gasoline	12000	700	ug/L	EPA 8260B	09/01/2004
1,2-Dichloroethane	< 7.0	7.0	ug/L	EPA 8260B	09/01/2004
1,2-Dibromoethane	< 7.0	7.0	ug/L	EPA 8260B	09/01/2004
Toluene - d8 (Surr)	93.8		% Recovery	EPA 8260B	09/01/2004
4-Bromofluorobenzene (Surr)	111		% Recovery	EPA 8260B	09/01/2004
Dibromofluoromethane (Surr)	95.9		% Recovery	EPA 8260B	09/01/2004
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	09/01/2004
TPH as Diesel	< 80000	80000	ug/L	M EPA 8015	08/31/2004
Octacosane (Diesel Surrogate)	123		% Recovery	M EPA 8015	08/31/2004

Approved By:

Joel Kiff

Report Number : 39800

Date : 09/13/2004

**QC Report : Method Blank Data**

Project Name : **ALBANY HILL**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	08/27/2004
1-Chlorooctadecane (Diesel Surrogate)	88.3		%	M EPA 8015	08/27/2004
TPH as Diesel	< 50	50	ug/L	M EPA 8015	08/26/2004
Octacosane (Diesel Surrogate)	104		%	M EPA 8015	08/26/2004
TPH as Diesel	< 50	50	ug/L	M EPA 8015	08/31/2004
Octacosane (Diesel Surrogate)	114		%	M EPA 8015	08/31/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	09/07/2004
1-Chlorooctadecane (Diesel Surrogate)	103		%	M EPA 8015	09/07/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	08/30/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	08/30/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	08/30/2004
Toluene - d8 (Surr)	96.1		%	EPA 8260B	08/30/2004
4-Bromofluorobenzene (Surr)	94.6		%	EPA 8260B	08/30/2004
Dibromofluoromethane (Surr)	106		%	EPA 8260B	08/30/2004
1,2-Dichloroethane-d4 (Surr)	103		%	EPA 8260B	08/30/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/31/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/31/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/31/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/31/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/31/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/31/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/31/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/31/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/31/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	08/31/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/31/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/31/2004
Toluene - d8 (Surr)	97.3		%	EPA 8260B	08/31/2004
4-Bromofluorobenzene (Surr)	99.2		%	EPA 8260B	08/31/2004
Dibromofluoromethane (Surr)	96.7		%	EPA 8260B	08/31/2004
1,2-Dichloroethane-d4 (Surr)	93.1		%	EPA 8260B	08/31/2004
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/07/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Toluene - d8 (Surr)	103		%	EPA 8260B	09/07/2004
4-Bromofluorobenzene (Surr)	98.0		%	EPA 8260B	09/07/2004
Dibromofluoromethane (Surr)	103		%	EPA 8260B	09/07/2004
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	09/07/2004

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 39800

Date : 09/13/2004

**QC Report : Method Blank Data**

Project Name : **ALBANY HILL**


Project Number :

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/01/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/01/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/01/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/01/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/01/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/01/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/01/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/01/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/01/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/01/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/01/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/01/2004
Toluene - dB (Surr)	94.9		%	EPA 8260B	09/01/2004
4-Bromofluorobenzene (Surr)	108		%	EPA 8260B	09/01/2004
Dibromofluoromethane (Surr)	99.9		%	EPA 8260B	09/01/2004
1,2-Dichloroethane-d4 (Surr)	105		%	EPA 8260B	09/01/2004

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
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KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:  Joel Kiff

Report Number : 39800

Date : 09/13/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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 as Diesel	39800-02	130	20.0	20.0	121	53.8	mg/Kg	M EPA 8015	8/27/04	82.7	36.8	76.9	60-140	25
TPH as Diesel	Blank	<50	1000	1000	943	936	ug/L	M EPA 8015	8/26/04	94.3	93.6	0.703	70-130	25
TPH as Diesel	Blank	<50	1000	1000	1110	1060	ug/L	M EPA 8015	8/31/04	111	106	4.24	70-130	25
TPH as Diesel	39779-04	<1.0	20.0	20.0	19.7	19.5	mg/Kg	M EPA 8015	9/7/04	98.6	97.6	1.11	60-140	25
Benzene	39804-04	<0.50	39.5	39.8	43.7	44.4	ug/L	EPA 8260B	8/30/04	111	112	1.06	70-130	25
Toluene	39804-04	<0.50	39.5	39.8	42.7	43.8	ug/L	EPA 8260B	8/30/04	108	110	2.00	70-130	25
Tert-Butanol	39804-04	<5.0	198	199	205	212	ug/L	EPA 8260B	8/30/04	104	106	2.53	70-130	25
Methyl-t-Butyl Ether	39804-04	180	39.5	39.8	205	198	ug/L	EPA 8260B	8/30/04	65.6	49.2	28.6	70-130	25
Benzene	39790-01	<0.0050	0.0395	0.0378	0.0416	0.0403	mg/Kg	EPA 8260B	8/31/04	105	107	1.29	70-130	25
Toluene	39790-01	<0.0050	0.0395	0.0378	0.0403	0.0390	mg/Kg	EPA 8260B	8/31/04	102	103	1.12	70-130	25
Tert-Butanol	39790-01	<0.0050	0.198	0.189	0.187	0.177	mg/Kg	EPA 8260B	8/31/04	94.7	93.4	1.39	70-130	25
Methyl-t-Butyl Ether	39790-01	<0.0050	0.0395	0.0378	0.0286	0.0287	mg/Kg	EPA 8260B	8/31/04	72.5	75.9	4.55	70-130	25
Benzene	39970-01	<0.0050	0.0680	0.0690	0.0595	0.0636	mg/Kg	EPA 8260B	9/7/04	87.4	92.2	5.37	70-130	25
Toluene	39970-01	<0.0050	0.0680	0.0690	0.0641	0.0658	mg/Kg	EPA 8260B	9/7/04	94.3	95.4	1.18	70-130	25
Tert-Butanol	39970-01	<0.0050	0.340	0.345	0.285	0.296	mg/Kg	EPA 8260B	9/7/04	83.8	86.0	2.63	70-130	25
Methyl-t-Butyl Ether	39970-01	<0.0050	0.0680	0.0690	0.0597	0.0618	mg/Kg	EPA 8260B	9/7/04	87.8	89.6	2.01	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 39800

Date : 09/13/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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	39882-01	<0.50	40.0	40.0	40.5	40.4	ug/L	EPA 8260B	9/1/04	101	101	0.225	70-130	25
Toluene	39882-01	<0.50	40.0	40.0	37.0	36.9	ug/L	EPA 8260B	9/1/04	92.5	92.2	0.365	70-130	25
Tert-Butanol	39882-01	<5.0	200	200	198	202	ug/L	EPA 8260B	9/1/04	98.9	101	2.36	70-130	25
Methyl-t-Butyl Ether	39882-01	15	40.0	40.0	55.2	55.9	ug/L	EPA 8260B	9/1/04	100	102	1.82	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:  Joel Kiff

Report Number : 39800

Date : 09/13/2004

QC Report : Laboratory Control Sample (LCS)

Project Name : **ALBANY HILL**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	8/27/04	96.4	70-130
TPH as Diesel	20.0	mg/Kg	M EPA 8015	9/7/04	96.4	70-130
Benzene	40.0	ug/L	EPA 8260B	8/30/04	106	70-130
Toluene	40.0	ug/L	EPA 8260B	8/30/04	105	70-130
Tert-Butanol	200	ug/L	EPA 8260B	8/30/04	91.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	8/30/04	100	70-130
Benzene	0.0392	mg/Kg	EPA 8260B	8/31/04	103	70-130
Toluene	0.0392	mg/Kg	EPA 8260B	8/31/04	108	70-130
Tert-Butanol	0.196	mg/Kg	EPA 8260B	8/31/04	95.9	70-130
Methyl-t-Butyl Ether	0.0392	mg/Kg	EPA 8260B	8/31/04	98.0	70-130
Benzene	0.0391	mg/Kg	EPA 8260B	9/7/04	99.6	70-130
Toluene	0.0391	mg/Kg	EPA 8260B	9/7/04	108	70-130
Tert-Butanol	0.195	mg/Kg	EPA 8260B	9/7/04	102	70-130
Methyl-t-Butyl Ether	0.0391	mg/Kg	EPA 8260B	9/7/04	104	70-130
Benzene	40.0	ug/L	EPA 8260B	9/1/04	98.8	70-130
Toluene	40.0	ug/L	EPA 8260B	9/1/04	93.0	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joel Kiff



Report Number : 39800

Date : 09/13/2004

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

Project Name : **ALBANY HILL**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Tert-Butanol	200	ug/L	EPA 8260B	9/1/04	94.9	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/1/04	94.0	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joel Kiff









Report Number : 39800

Date : 9/1/2004

Robert Kitay  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 1 Soil Sample and 2 Water Samples  
Project Name : ALBANY HILL  
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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff



Report Number : 39800

Date : 9/1/2004

Subject : 2 Water Samples and 4 Soil Samples  
Project Name : ALBANY HILL  
Project Number :

## Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for sample BH-D 10'-12'.

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample BH-A 25'-27'.

Matrix Spike/Matrix Spike Duplicate Results associated with sample BH-D 6.5' for the analyte TPH as Diesel were affected by the analyte concentrations already present in the un-spiked sample.

Matrix Spike/Matrix Spike Duplicate Results associated with sample BH-A 25'-27' for the analyte Methyl-t-butyl ether were affected by the analyte concentrations already present in the un-spiked sample.

The recovery for surrogate compound Dibromofluoromethane for sample BH-D 6.5' for test method EPA 8260B was outside of control limits. This usually indicates that the sample has a high pH.

Approved By:



Joel Kiff



Report Number : 39800

Date : 9/1/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-D 6.5'

Matrix : Soil

Lab Number : 39800-02

Sample Date :8/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.0070	0.0050	mg/Kg	EPA 8260B	9/1/2004
Toluene	0.020	0.0050	mg/Kg	EPA 8260B	9/1/2004
Ethylbenzene	0.0064	0.0050	mg/Kg	EPA 8260B	9/1/2004
Total Xylenes	0.058	0.0050	mg/Kg	EPA 8260B	9/1/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
Tert-Butanol	0.047	0.025	mg/Kg	EPA 8260B	9/1/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/1/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	9/1/2004
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	9/1/2004
Dibromofluoromethane (Surr)	7.96		% Recovery	EPA 8260B	9/1/2004
1,2-Dichloroethane-d4 (Surr)	105		% Recovery	EPA 8260B	9/1/2004
TPH as Diesel	130	1.0	mg/Kg	M EPA 8015	8/27/2004
1-Chlorooctadecane (Diesel Surrogate)	99.2		% Recovery	M EPA 8015	8/27/2004

Approved By:

Joel Kiff



Report Number : 39800

Date : 9/1/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-A 25'-27'

Matrix : Water

Lab Number : 39800-05

Sample Date : 8/24/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	18	0.50	ug/L	EPA 8260B	8/31/2004
Toluene	1.1	0.50	ug/L	EPA 8260B	8/31/2004
Ethylbenzene	29	0.50	ug/L	EPA 8260B	8/31/2004
Total Xylenes	50	0.50	ug/L	EPA 8260B	8/31/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	8/31/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	8/31/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	8/31/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	8/31/2004
Tert-Butanol	7.1	5.0	ug/L	EPA 8260B	8/31/2004
TPH as Gasoline	420	50	ug/L	EPA 8260B	8/31/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	8/31/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	8/31/2004
Toluene - d8 (Surr)	97.3		% Recovery	EPA 8260B	8/31/2004
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	8/31/2004
Dibromofluoromethane (Surr)	100		% Recovery	EPA 8260B	8/31/2004
1,2-Dichloroethane-d4 (Surr)	97.9		% Recovery	EPA 8260B	8/31/2004
TPH as Diesel	920	50	ug/L	M EPA 8015	8/27/2004
Octacosane (Diesel Surrogate)	98.4		% Recovery	M EPA 8015	8/27/2004

Approved By:

Joel Kiff



Report Number : 39800

Date : 9/1/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-D 10'-12'

Matrix : Water

Lab Number : 39800-06

Sample Date :8/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	1600	7.0	ug/L	EPA 8260B	9/1/2004
Toluene	2300	7.0	ug/L	EPA 8260B	9/1/2004
Ethylbenzene	190	7.0	ug/L	EPA 8260B	9/1/2004
Total Xylenes	1500	7.0	ug/L	EPA 8260B	9/1/2004
Methyl-t-butyl ether (MTBE)	87	7.0	ug/L	EPA 8260B	9/1/2004
Diisopropyl ether (DIPE)	< 7.0	7.0	ug/L	EPA 8260B	9/1/2004
Ethyl-t-butyl ether (ETBE)	< 7.0	7.0	ug/L	EPA 8260B	9/1/2004
Tert-amyl methyl ether (TAME)	< 7.0	7.0	ug/L	EPA 8260B	9/1/2004
Tert-Butanol	210	40	ug/L	EPA 8260B	9/1/2004
TPH as Gasoline	12000	700	ug/L	EPA 8260B	9/1/2004
1,2-Dichloroethane	< 7.0	7.0	ug/L	EPA 8260B	9/1/2004
1,2-Dibromoethane	< 7.0	7.0	ug/L	EPA 8260B	9/1/2004
Toluene - d8 (Surr)	93.8		% Recovery	EPA 8260B	9/1/2004
4-Bromofluorobenzene (Surr)	111		% Recovery	EPA 8260B	9/1/2004
Dibromofluoromethane (Surr)	95.9		% Recovery	EPA 8260B	9/1/2004
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	9/1/2004
TPH as Diesel	< 80000	80000	ug/L	M EPA 8015	8/31/2004
Octacosane (Diesel Surrogate)	123		% Recovery	M EPA 8015	8/31/2004

Approved By:

Joel Kiff

Report Number : 39800

Date : 9/1/2004

**QC Report : Method Blank Data**

Project Name : **ALBANY HILL**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	8/27/2004
1-Chlorooctadecane (Diesel Surrogate)	88.3		%	M EPA 8015	8/27/2004
TPH as Diesel	< 50	50	ug/L	M EPA 8015	8/26/2004
Octacosane (Diesel Surrogate)	104		%	M EPA 8015	8/26/2004
TPH as Diesel	< 50	50	ug/L	M EPA 8015	8/31/2004
Octacosane (Diesel Surrogate)	114		%	M EPA 8015	8/31/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	8/30/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	8/30/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	8/30/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	8/30/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	8/30/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	8/30/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	8/30/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	8/30/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	8/30/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	8/30/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	8/30/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	8/30/2004
Toluene - d8 (Surr)	96.1		%	EPA 8260B	8/30/2004
4-Bromofluorobenzene (Surr)	94.6		%	EPA 8260B	8/30/2004
Dibromofluoromethane (Surr)	106		%	EPA 8260B	8/30/2004
1,2-Dichloroethane-d4 (Surr)	103		%	EPA 8260B	8/30/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/31/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/31/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/31/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/31/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/31/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/31/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/31/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/31/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/31/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	8/31/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/31/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/31/2004
Toluene - d8 (Surr)	97.3		%	EPA 8260B	8/31/2004
4-Bromofluorobenzene (Surr)	99.2		%	EPA 8260B	8/31/2004
Dibromofluoromethane (Surr)	96.7		%	EPA 8260B	8/31/2004
1,2-Dichloroethane-d4 (Surr)	93.1		%	EPA 8260B	8/31/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/1/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/1/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Toluene - d8 (Surr)	94.9		%	EPA 8260B	9/1/2004
4-Bromofluorobenzene (Surr)	108		%	EPA 8260B	9/1/2004
Dibromofluoromethane (Surr)	99.9		%	EPA 8260B	9/1/2004
1,2-Dichloroethane-d4 (Surr)	105		%	EPA 8260B	9/1/2004

Approved By: Joel Kiff



KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 39800


Date : 9/1/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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 as Diesel	39800-02	130	20.0	20.0	121	53.8	mg/Kg	M EPA 8015	8/27/04	82.7	36.8	76.9	60-140	25
TPH as Diesel	Blank	<50	1000	1000	943	936	ug/L	M EPA 8015	8/26/04	94.3	93.6	0.703	70-130	25
TPH as Diesel	Blank	<50	1000	1000	1110	1060	ug/L	M EPA 8015	8/31/04	111	106	4.24	70-130	25
Benzene	39804-04	<0.50	39.5	39.8	43.7	44.4	ug/L	EPA 8260B	8/30/04	111	112	1.06	70-130	25
Toluene	39804-04	<0.50	39.5	39.8	42.7	43.8	ug/L	EPA 8260B	8/30/04	108	110	2.00	70-130	25
Tert-Butanol	39804-04	<5.0	198	199	205	212	ug/L	EPA 8260B	8/30/04	104	106	2.53	70-130	25
Methyl-t-Butyl Ether	39804-04	180	39.5	39.8	205	198	ug/L	EPA 8260B	8/30/04	65.6	49.2	28.6	70-130	25
Benzene	39790-01	<0.0050	0.0395	0.0378	0.0416	0.0403	mg/Kg	EPA 8260B	8/31/04	105	107	1.29	70-130	25
Toluene	39790-01	<0.0050	0.0395	0.0378	0.0403	0.0390	mg/Kg	EPA 8260B	8/31/04	102	103	1.12	70-130	25
Tert-Butanol	39790-01	<0.0050	0.198	0.189	0.187	0.177	mg/Kg	EPA 8260B	8/31/04	94.7	93.4	1.39	70-130	25
Methyl-t-Butyl Ether	39790-01	<0.0050	0.0395	0.0378	0.0286	0.0287	mg/Kg	EPA 8260B	8/31/04	72.5	75.9	4.55	70-130	25
Benzene	39882-01	<0.50	40.0	40.0	40.5	40.4	ug/L	EPA 8260B	9/1/04	101	101	0.225	70-130	25
Toluene	39882-01	<0.50	40.0	40.0	37.0	36.9	ug/L	EPA 8260B	9/1/04	92.5	92.2	0.365	70-130	25
Tert-Butanol	39882-01	<5.0	200	200	198	202	ug/L	EPA 8260B	9/1/04	98.9	101	2.36	70-130	25
Methyl-t-Butyl Ether	39882-01	15	40.0	40.0	55.2	55.9	ug/L	EPA 8260B	9/1/04	100	102	1.82	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800



Report Number : 39800

Date : 9/1/2004

QC Report : Laboratory Control Sample (LCS)

Project Name : **ALBANY HILL**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	8/27/04	96.4	70-130
Benzene	40.0	ug/L	EPA 8260B	8/30/04	106	70-130
Toluene	40.0	ug/L	EPA 8260B	8/30/04	105	70-130
Tert-Butanol	200	ug/L	EPA 8260B	8/30/04	91.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	8/30/04	100	70-130
Benzene	0.0392	mg/Kg	EPA 8260B	8/31/04	103	70-130
Toluene	0.0392	mg/Kg	EPA 8260B	8/31/04	108	70-130
Tert-Butanol	0.196	mg/Kg	EPA 8260B	8/31/04	95.9	70-130
Methyl-t-Butyl Ether	0.0392	mg/Kg	EPA 8260B	8/31/04	98.0	70-130
Benzene	40.0	ug/L	EPA 8260B	9/1/04	98.8	70-130
Toluene	40.0	ug/L	EPA 8260B	9/1/04	93.0	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/1/04	94.9	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/1/04	94.0	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joel Kiff





2795 2nd Street, Suite 300  
 Davis, CA 95616  
 Lab: 530.297.4800  
 Fax: 530.297.4808

Lab No. 39800 Page 1 of 1

Project Contact (Hardcopy or PDF To): Rob V. ITAY  
 Company/Address: AQUA SCIENCE  
 Phone No.: \_\_\_\_\_ FAX No.: \_\_\_\_\_  
 Project Number: \_\_\_\_\_ P.O. No.: \_\_\_\_\_  
 Project Name: ALBANY HILL  
 Project Address: ECO SAN PABLO

California EDF Report?  Yes  No  
 Recommended but not mandatory to complete this section:  
 Sampling Company Log Code: \_\_\_\_\_  
 Global ID: \_\_\_\_\_  
 EDF Deliverable To (Email Address): \_\_\_\_\_  
 Sampler Signature: [Signature]

**Chain-of-Custody Record and Analysis Request**

Analysis Request											TAT															
Sample Designation	Date	Time	40 ml VOA	SLEEVE	HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL	BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/M8015)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/239.2) TOTAL (X) W.E.T. (X)	12 hr/24 hr/48 hr/72 hr (1 wk)	For Lab Use Only	
BH-D 4.5'	8/25/04	0636	X				X			X														X	01	
BH-D 6.5'	8/25/04	0245	X				X			X		XX						X		X						02
BH-D 14.5'	8/25/04	0855	X				X			X														XX		03
BH-A 24.5'	8/24/04	1527	X				X			X														XX		04
BH-A 25'-27'	8/24/04	1425	X		X		X		X	X		XX						X		X						05
BH-D 16'-2'	8/25/04	0900	X		X	X			X			XX						X		X						06

Relinquished by: [Signature] Date: 8/25/04 Time: 0950  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: 8/25/04 Time: 0950  
 Received by Laboratory: KIFF ANALYTICAL

Remarks: \_\_\_\_\_  
 Bill to: \_\_\_\_\_



Report Number : 39819

Date : 9/3/2004

Robert Kitay  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 3 Water Samples  
Project Name : ALBANY HILL  
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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff



Report Number : 39819

Date : 9/3/2004

Subject : 4 Water Samples  
Project Name : ALBANY HILL  
Project Number :

## Case Narrative

Tert-Butanol results for sample BH-D 23'-25' may be biased slightly high and are flagged with a 'J'. A fraction of MtBE (typically less than 1%) converts to Tert-Butanol during the analysis of water samples. We consider this conversion effect to be mathematically significant in samples that contain MtBE/Tert-Butanol in ratios of over 20:1.

Approved By:

A handwritten signature in black ink, appearing to read "Jcei Kiff".

Jcei Kiff



Report Number : 39819

Date : 9/3/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-D 23'-25'

Matrix : Water

Lab Number : 39819-01

Sample Date :8/26/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	5.2	0.90	ug/L	EPA 8260B	9/2/2004
Toluene	8.8	0.90	ug/L	EPA 8260B	9/2/2004
Ethylbenzene	1.2	0.90	ug/L	EPA 8260B	9/2/2004
Total Xylenes	6.9	0.90	ug/L	EPA 8260B	9/2/2004
Methyl-t-butyl ether (MTBE)	620	0.90	ug/L	EPA 8260B	9/2/2004
Diisopropyl ether (DIPE)	< 0.90	0.90	ug/L	EPA 8260B	9/2/2004
Ethyl-t-butyl ether (ETBE)	< 0.90	0.90	ug/L	EPA 8260B	9/2/2004
Tert-amyl methyl ether (TAME)	2.0	0.90	ug/L	EPA 8260B	9/2/2004
Tert-Butanol	15 J	5.0	ug/L	EPA 8260B	9/2/2004
TPH as Gasoline	170	90	ug/L	EPA 8260B	9/2/2004
1,2-Dichloroethane	< 0.90	0.90	ug/L	EPA 8260B	9/2/2004
1,2-Dibromoethane	< 0.90	0.90	ug/L	EPA 8260B	9/2/2004
Toluene - d8 (Surr)	94.3		% Recovery	EPA 8260B	9/2/2004
4-Bromofluorobenzene (Surr)	115		% Recovery	EPA 8260B	9/2/2004
Dibromofluoromethane (Surr)	100		% Recovery	EPA 8260B	9/2/2004
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	9/2/2004
TPH as Diesel	51	50	ug/L	M EPA 8015	8/30/2004
Octacosane (Diesel Surrogate)	110		% Recovery	M EPA 8015	8/30/2004

Approved By:

Joel Kiff



Report Number : 39819

Date : 9/3/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-E 20'-22'

Matrix : Water

Lab Number : 39819-02

Sample Date :8/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 7.0	7.0	ug/L	EPA 8260B	9/2/2004
Toluene	< 7.0	7.0	ug/L	EPA 8260B	9/2/2004
Ethylbenzene	< 7.0	7.0	ug/L	EPA 8260B	9/2/2004
Total Xylenes	< 7.0	7.0	ug/L	EPA 8260B	9/2/2004
Methyl-t-butyl ether (MTBE)	3300	7.0	ug/L	EPA 8260B	9/2/2004
Diisopropyl ether (DIPE)	< 7.0	7.0	ug/L	EPA 8260B	9/2/2004
Ethyl-t-butyl ether (ETBE)	< 7.0	7.0	ug/L	EPA 8260B	9/2/2004
Tert-amyl methyl ether (TAME)	21	7.0	ug/L	EPA 8260B	9/2/2004
Tert-Butanol	< 40	40	ug/L	EPA 8260B	9/2/2004
TPH as Gasoline	< 700	700	ug/L	EPA 8260B	9/2/2004
1,2-Dichloroethane	< 7.0	7.0	ug/L	EPA 8260B	9/2/2004
1,2-Dibromoethane	< 7.0	7.0	ug/L	EPA 8260B	9/2/2004
Toluene - d8 (Surr)	93.0		% Recovery	EPA 8260B	9/2/2004
4-Bromofluorobenzene (Surr)	114		% Recovery	EPA 8260B	9/2/2004
Dibromofluoromethane (Surr)	99.9		% Recovery	EPA 8260B	9/2/2004
1,2-Dichloroethane-d4 (Surr)	106		% Recovery	EPA 8260B	9/2/2004
TPH as Diesel	78	50	ug/L	M EPA 8015	8/30/2004
Octacosane (Diesel Surrogate)	108		% Recovery	M EPA 8015	8/30/2004

Approved By:

Joel Kiff



Report Number : 39819

Date : 9/3/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-I 25'-27'

Matrix : Water

Lab Number : 39819-04

Sample Date : 8/26/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/3/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/3/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	9/3/2004
4-Bromofluorobenzene (Surr)	98.0		% Recovery	EPA 8260B	9/3/2004
Dibromofluoromethane (Surr)	113		% Recovery	EPA 8260B	9/3/2004
1,2-Dichloroethane-d4 (Surr)	98.6		% Recovery	EPA 8260B	9/3/2004
TPH as Diesel	< 50	50	ug/L	M EPA 8015	8/30/2004
Octacosane (Diesel Surrogate)	120		% Recovery	M EPA 8015	8/30/2004

Approved By:

Joel Kiff

Report Number : 39819

Date : 9/3/2004

QC Report : Method Blank Data

Project Name : **ALBANY HILL**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	8/30/2004
Octacosane (Diesel Surrogate)	113		%	M EPA 8015	8/30/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/2/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/2/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Toluene - d8 (Surr)	102		%	EPA 8260B	9/2/2004
4-Bromofluorobenzene (Surr)	98.8		%	EPA 8260B	9/2/2004
Dibromofluoromethane (Surr)	111		%	EPA 8260B	9/2/2004
1,2-Dichloroethane-d4 (Surr)	98.5		%	EPA 8260B	9/2/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/1/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/1/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	9/1/2004
Toluene - d8 (Surr)	91.8		%	EPA 8260B	9/1/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
4-Bromofluorobenzene (Surr)	110		%	EPA 8260B	9/1/2004
Dibromofluoromethane (Surr)	96.8		%	EPA 8260B	9/1/2004
1,2-Dichloroethane-d4 (Surr)	105		%	EPA 8260B	9/1/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/2/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/2/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Toluene - d8 (Surr)	93.7		%	EPA 8260B	9/2/2004
4-Bromofluorobenzene (Surr)	114		%	EPA 8260B	9/2/2004
Dibromofluoromethane (Surr)	98.6		%	EPA 8260B	9/2/2004
1,2-Dichloroethane-d4 (Surr)	106		%	EPA 8260B	9/2/2004

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800



Report Number : 39819

Date : 9/3/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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 as Diesel	Blank	<50	1000	1000	1030	963	ug/L	M EPA 8015	8/30/04	103	96.3	6.39	70-130	25
Benzene	39842-01	<0.50	37.2	38.2	37.4	38.6	ug/L	EPA 8260B	9/2/04	100	101	0.587	70-130	25
Toluene	39842-01	<0.50	37.2	38.2	36.8	38.1	ug/L	EPA 8260B	9/2/04	98.9	99.7	0.812	70-130	25
Tert-Butanol	39842-01	<5.0	186	191	186	187	ug/L	EPA 8260B	9/2/04	99.9	98.0	1.86	70-130	25
Methyl-t-Butyl Ether	39842-01	18	37.2	38.2	52.7	53.0	ug/L	EPA 8260B	9/2/04	92.5	91.1	1.46	70-130	25
Benzene	39924-01	<0.50	40.0	40.0	41.2	39.0	ug/L	EPA 8260B	9/1/04	103	97.6	5.43	70-130	25
Toluene	39924-01	<0.50	40.0	40.0	36.6	34.5	ug/L	EPA 8260B	9/1/04	91.6	86.2	6.04	70-130	25
Tert-Butanol	39924-01	<5.0	200	200	195	199	ug/L	EPA 8260B	9/1/04	97.6	99.7	2.06	70-130	25
Methyl-t-Butyl Ether	39924-01	<0.50	40.0	40.0	40.3	40.1	ug/L	EPA 8260B	9/1/04	101	100	0.510	70-130	25
Benzene	39840-06	<0.50	40.0	40.0	41.0	40.2	ug/L	EPA 8260B	9/2/04	102	100	1.79	70-130	25
Toluene	39840-06	<0.50	40.0	40.0	37.9	37.6	ug/L	EPA 8260B	9/2/04	94.8	94.1	0.771	70-130	25
Tert-Butanol	39840-06	<5.0	200	200	200	200	ug/L	EPA 8260B	9/2/04	100	100	0.155	70-130	25
Methyl-t-Butyl Ether	39840-06	<0.50	40.0	40.0	39.8	40.2	ug/L	EPA 8260B	9/2/04	99.4	100	0.973	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 39819

Date : 9/3/2004

QC Report : Laboratory Control Sample (LCS)

Project Name : **ALBANY HILL**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	9/2/04	100	70-130
Toluene	40.0	ug/L	EPA 8260B	9/2/04	101	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/2/04	103	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/2/04	100	70-130
Benzene	40.0	ug/L	EPA 8260B	9/1/04	101	70-130
Toluene	40.0	ug/L	EPA 8260B	9/1/04	93.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/1/04	99.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/1/04	92.2	70-130
Benzene	40.0	ug/L	EPA 8260B	9/2/04	98.8	70-130
Toluene	40.0	ug/L	EPA 8260B	9/2/04	92.1	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/2/04	97.0	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/2/04	92.6	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

  
Joel Kiff





Report Number : 39820

Date : 9/2/2004

Robert Kitay  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 2 Soil Samples  
Project Name : ALBANY HILL  
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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff



Report Number : 39820

Date : 9/2/2004

Subject : 19 Soil Samples  
Project Name : ALBANY HILL  
Project Number :

## Case Narrative

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample BH-E 18.5'.

Approved By:

A handwritten signature in black ink, appearing to read "Joel Kiff", is written over the printed name "Joel Kiff".

Joel Kiff



Report Number : 39820

Date : 9/2/2004

Project Name : ALBANY HILL

Project Number :


Sample : BH-E 18.5'

Matrix : Soil

Lab Number : 39820-06

Sample Date :8/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/29/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/29/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/29/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/29/2004
Methyl-t-butyl ether (MTBE)	0.086	0.0050	mg/Kg	EPA 8260B	8/29/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/29/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/29/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/29/2004
Tert-Butanol	< 0.025	0.025	mg/Kg	EPA 8260B	8/29/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	8/29/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/29/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/29/2004
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	8/29/2004
4-Bromofluorobenzene (Surr)	95.0		% Recovery	EPA 8260B	8/29/2004
Dibromofluoromethane (Surr)	108		% Recovery	EPA 8260B	8/29/2004
1,2-Dichloroethane-d4 (Surr)	105		% Recovery	EPA 8260B	8/29/2004
TPH as Diesel	1.4	1.0	mg/Kg	M EPA 8015	9/1/2004
1-Chlorooctadecane (Diesel Surrogate)	97.5		% Recovery	M EPA 8015	9/1/2004

Approved By:  Joel Kiff



Report Number : 39820

Date : 9/2/2004

Project Name : ALBANY HILL

Project Number :


Sample : BH-I 24.5'

Matrix : Soil

Lab Number : 39820-13

Sample Date :8/26/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	8/28/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Toluene - d8 (Surr)	97.9		% Recovery	EPA 8260B	8/28/2004
4-Bromofluorobenzene (Surr)	93.4		% Recovery	EPA 8260B	8/28/2004
Dibromofluoromethane (Surr)	109		% Recovery	EPA 8260B	8/28/2004
1,2-Dichloroethane-d4 (Surr)	107		% Recovery	EPA 8260B	8/28/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	9/1/2004
1-Chlorooctadecane (Diesel Surrogate)	107		% Recovery	M EPA 8015	9/1/2004

Approved By:  Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 39820

Date : 9/2/2004

**QC Report : Method Blank Data**

Project Name : **ALBANY HILL**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	9/1/2004
1-Chlorooctadecane (Diesel Surrogate)	105		%	M EPA 8015	9/1/2004
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	8/28/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	8/28/2004
Toluene - d8 (Surr)	98.0		%	EPA 8260B	8/28/2004
4-Bromofluorobenzene (Surr)	95.5		%	EPA 8260B	8/28/2004
Dibromofluoromethane (Surr)	99.2		%	EPA 8260B	8/28/2004
1,2-Dichloroethane-d4 (Surr)	107		%	EPA 8260B	8/28/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:  Joel Kiff



Report Number : 39820

Date : 9/2/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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 as Diesel	39820-06	1.4	20.0	20.0	20.2	19.9	mg/Kg	M EPA 8015	9/1/04	94.7	93.1	1.78	60-140	25
Benzene	39820-13	<0.0050	0.0367	0.0370	0.0356	0.0366	mg/Kg	EPA 8260B	8/28/04	97.1	98.8	1.70	70-130	25
Toluene	39820-13	<0.0050	0.0367	0.0370	0.0349	0.0361	mg/Kg	EPA 8260B	8/28/04	95.1	97.6	2.58	70-130	25
Tert-Butanol	39820-13	<0.0050	0.183	0.185	0.148	0.150	mg/Kg	EPA 8260B	8/28/04	80.4	80.8	0.548	70-130	25
Methyl-t-Butyl Ether	39820-13	<0.0050	0.0367	0.0370	0.0346	0.0355	mg/Kg	EPA 8260B	8/28/04	94.4	95.9	1.59	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:  Joel Kiff

Report Number : 39820

Date : 9/2/2004

QC Report : Laboratory Control Sample (LCS)

Project Name : **ALBANY HILL**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	9/1/04	88.9	70-130
Benzene	0.0373	mg/Kg	EPA 8260B	8/28/04	101	70-130
Toluene	0.0373	mg/Kg	EPA 8260B	8/28/04	102	70-130
Tert-Butanol	0.186	mg/Kg	EPA 8260B	8/28/04	89.3	70-130
Methyl-t-Butyl Ether	0.0373	mg/Kg	EPA 8260B	8/28/04	95.8	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

  
Joe Kiff



2795 2nd Street, Suite 300  
 Davis, CA 95616  
 Lab: 530.297.4800  
 Fax: 530.297.4808

Lab No. 39820 Page 1 of 2

Project Contact (Hardcopy or PDF To): Rob VENTAY California EDF Report?  Yes  No

**Chain-of-Custody Record and Analysis Request**

Company/Address: ADENA SERVICE  
 Phone No.: 925 8209391 FAX No.:  
 Project Number: P.O. No.:  
 Project Name: ALSTON HILL  
 Project Address: 800 SAN PABLO

Recommended but not mandatory to complete this section:  
 Sampling Company Log Code:  
 Global ID:  
 EDF Deliverable To (Email Address):  
 Sampler Signature: [Signature]

**Analysis Request**

BTEX (8021B)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/239-2) TOTAL (X) W.E.T. (X)	TAT
<u>[Signature]</u>										<u>Hold</u>	

Sample Designation	Date	Time	Container		Preservative				Matrix	
			40 ml VOA	SLEEVE	HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL

Sample Designation	Date	Time	40 ml VOA	SLEEVE	HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL	BTEX (8021B)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/239-2) TOTAL (X) W.E.T. (X)	12 hr/24 hr/48 hr/72 hr	For Lab Use Only
BH-D 19.5'	8/25/04	1100		X			X			X											X		1001
BH-D 23.5'	8/25/04	1130		X			X			X											X		0102
BH-E 4.5'	8/25/04	1205		X			X			X											X		1203
BH-E 9.5'	8/25/04	1212		X			X			X											X		1304
BH-E 13.5'	8/25/04	1217		X			X			X											X		1405
BH-E 18.5'	8/25/04	1232		X			X			X		X		X			X				X		1506
BH-E 21.5'	8/24/04	1242		X			X			X											X		1607
BH-I 4.5'	8/26/04	0850		X			X			X											X		1708
BH-I 9.5'	8/26/04	0852		X			X			X											X		1809
BH-I 13.5'	8/26/04	0941		X			X			X											X		1910

Relinquished by: [Signature] Date: 8/26/04 Time: 1245 Received by: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: 082604 Time: 1245 Received by Laboratory: [Signature] KIFF ANALYTICAL Bill to: \_\_\_\_\_





Report Number : 39820

Date : 09/13/2004

Robert Kitay  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 4 Soil Samples  
Project Name : ALBANY HILL  
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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff



Report Number : 39820

Date : 09/13/2004

Subject : 19 Soil Samples  
Project Name : ALBANY HILL  
Project Number :

## Case Narrative

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample BH-E 18.5'.

Approved By:

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800



Report Number : 39820

Date : 09/13/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-D 19.5'

Matrix : Soil

Lab Number : 39820-01

Sample Date :08/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Methyl-t-butyl ether (MTBE)	0.0067	0.0050	mg/Kg	EPA 8260B	09/05/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Tert-Butanol	0.0066	0.0050	mg/Kg	EPA 8260B	09/05/2004
TPH as Gasoline	1.1	1.0	mg/Kg	EPA 8260B	09/05/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/05/2004
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	09/05/2004
4-Bromofluorobenzene (Surr)	95.9		% Recovery	EPA 8260B	09/05/2004
Dibromofluoromethane (Surr)	101		% Recovery	EPA 8260B	09/05/2004
1,2-Dichloroethane-d4 (Surr)	111		% Recovery	EPA 8260B	09/05/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	09/07/2004
1-Chlorooctadecane (Diesel Surrogate)	99.9		% Recovery	M EPA 8015	09/07/2004

Approved By:

Joel Kiff



Report Number : 39820

Date : 09/13/2004

Project Name : ALBANY HILL

Project Number :


Sample : BH-E 18.5'

Matrix : Soil

Lab Number : 39820-06

Sample Date :08/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/29/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/29/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/29/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/29/2004
Methyl-t-butyl ether (MTBE)	0.086	0.0050	mg/Kg	EPA 8260B	08/29/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/29/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/29/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/29/2004
Tert-Butanol	< 0.025	0.025	mg/Kg	EPA 8260B	08/29/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	08/29/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/29/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/29/2004
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	08/29/2004
4-Bromofluorobenzene (Surr)	95.0		% Recovery	EPA 8260B	08/29/2004
Dibromofluoromethane (Surr)	108		% Recovery	EPA 8260B	08/29/2004
1,2-Dichloroethane-d4 (Surr)	105		% Recovery	EPA 8260B	08/29/2004
TPH as Diesel	1.4	1.0	mg/Kg	M EPA 8015	09/01/2004
1-Chlorooctadecane (Diesel Surrogate)	97.5		% Recovery	M EPA 8015	09/01/2004

Approved By:  Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800





Report Number : 39820

Date : 09/13/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-E 13.5'

Matrix : Soil

Lab Number : 39820-05

Sample Date :08/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Methyl-t-butyl ether (MTBE)	0.0058	0.0050	mg/Kg	EPA 8260B	09/07/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/07/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	09/07/2004
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	09/07/2004
Dibromofluoromethane (Surr)	102		% Recovery	EPA 8260B	09/07/2004
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	09/07/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	09/07/2004
1-Chlorooctadecane (Diesel Surrogate)	98.8		% Recovery	M EPA 8015	09/07/2004

Approved By:

Joel Kiff



Report Number : 39820

Date : 09/13/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-I 24.5'

Matrix : Soil

Lab Number : 39820-13

Sample Date :08/26/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	08/28/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Toluene - d8 (Surr)	97.9		% Recovery	EPA 8260B	08/28/2004
4-Bromofluorobenzene (Surr)	93.4		% Recovery	EPA 8260B	08/28/2004
Dibromofluoromethane (Surr)	109		% Recovery	EPA 8260B	08/28/2004
1,2-Dichloroethane-d4 (Surr)	107		% Recovery	EPA 8260B	08/28/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	09/01/2004
1-Chlorooctadecane (Diesel Surrogate)	107		% Recovery	M EPA 8015	09/01/2004

Approved By:

Joel Kiff

Report Number : 39820

Date : 09/13/2004

QC Report : Method Blank Data

Project Name : ALBANY HILL

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	09/01/2004
1-Chlorooctadecane (Diesel Surrogate)	105		%	M EPA 8015	09/01/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	09/07/2004
1-Chlorooctadecane (Diesel Surrogate)	103		%	M EPA 8015	09/07/2004
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	08/28/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	08/28/2004
Toluene - d8 (Surr)	98.0		%	EPA 8260B	08/28/2004
4-Bromofluorobenzene (Surr)	95.5		%	EPA 8260B	08/28/2004
Dibromofluoromethane (Surr)	99.2		%	EPA 8260B	08/28/2004
1,2-Dichloroethane-d4 (Surr)	107		%	EPA 8260B	08/28/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/04/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/04/2004
Toluene - d8 (Surr)	101		%	EPA 8260B	09/04/2004
4-Bromofluorobenzene (Surr)	94.5		%	EPA 8260B	09/04/2004
Dibromofluoromethane (Surr)	99.8		%	EPA 8260B	09/04/2004
1,2-Dichloroethane-d4 (Surr)	107		%	EPA 8260B	09/04/2004
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	09/07/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	09/07/2004
Toluene - d8 (Surr)	103		%	EPA 8260B	09/07/2004
4-Bromofluorobenzene (Surr)	98.0		%	EPA 8260B	09/07/2004
Dibromofluoromethane (Surr)	103		%	EPA 8260B	09/07/2004
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	09/07/2004

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 39820

Date : 09/13/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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 as Diesel	39820-06	1.4	20.0	20.0	20.2	19.9	mg/Kg	M EPA 8015	9/1/04	94.7	93.1	1.78	60-140	25
TPH as Diesel	39779-04	<1.0	20.0	20.0	19.7	19.5	mg/Kg	M EPA 8015	9/7/04	98.6	97.6	1.11	60-140	25
Benzene	39820-13	<0.0050	0.0367	0.0370	0.0356	0.0366	mg/Kg	EPA 8260B	8/28/04	97.1	98.8	1.70	70-130	25
Toluene	39820-13	<0.0050	0.0367	0.0370	0.0349	0.0361	mg/Kg	EPA 8260B	8/28/04	95.1	97.6	2.58	70-130	25
Tert-Butanol	39820-13	<0.0050	0.183	0.185	0.148	0.150	mg/Kg	EPA 8260B	8/28/04	80.4	80.8	0.548	70-130	25
Methyl-t-Butyl Ether	39820-13	<0.0050	0.0367	0.0370	0.0346	0.0355	mg/Kg	EPA 8260B	8/28/04	94.4	95.9	1.59	70-130	25
Benzene	39932-03	<0.0050	0.0399	0.0398	0.0382	0.0378	mg/Kg	EPA 8260B	9/4/04	95.6	94.9	0.744	70-130	25
Toluene	39932-03	<0.0050	0.0399	0.0398	0.0382	0.0374	mg/Kg	EPA 8260B	9/4/04	95.6	94.0	1.68	70-130	25
Tert-Butanol	39932-03	<0.0050	0.200	0.199	0.196	0.184	mg/Kg	EPA 8260B	9/4/04	98.0	92.6	5.72	70-130	25
Methyl-t-Butyl Ether	39932-03	<0.0050	0.0399	0.0398	0.0435	0.0414	mg/Kg	EPA 8260B	9/4/04	109	104	4.75	70-130	25
Benzene	39970-01	<0.0050	0.0680	0.0690	0.0595	0.0636	mg/Kg	EPA 8260B	9/7/04	87.4	92.2	5.37	70-130	25
Toluene	39970-01	<0.0050	0.0680	0.0690	0.0641	0.0658	mg/Kg	EPA 8260B	9/7/04	94.3	95.4	1.18	70-130	25
Tert-Butanol	39970-01	<0.0050	0.340	0.345	0.285	0.296	mg/Kg	EPA 8260B	9/7/04	83.8	86.0	2.63	70-130	25
Methyl-t-Butyl Ether	39970-01	<0.0050	0.0680	0.0690	0.0597	0.0618	mg/Kg	EPA 8260B	9/7/04	87.8	89.6	2.01	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 39820

Date : 09/13/2004

QC Report : Laboratory Control Sample (LCS)

Project Name : **ALBANY HILL**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	9/1/04	88.9	70-130
TPH as Diesel	20.0	mg/Kg	M EPA 8015	9/7/04	96.4	70-130
Benzene	0.0373	mg/Kg	EPA 8260B	8/28/04	101	70-130
Toluene	0.0373	mg/Kg	EPA 8260B	8/28/04	102	70-130
Tert-Butanol	0.186	mg/Kg	EPA 8260B	8/28/04	89.3	70-130
Methyl-t-Butyl Ether	0.0373	mg/Kg	EPA 8260B	8/28/04	95.8	70-130
Benzene	0.0400	mg/Kg	EPA 8260B	9/4/04	98.2	70-130
Toluene	0.0400	mg/Kg	EPA 8260B	9/4/04	100	70-130
Tert-Butanol	0.200	mg/Kg	EPA 8260B	9/4/04	105	70-130
Methyl-t-Butyl Ether	0.0400	mg/Kg	EPA 8260B	9/4/04	113	70-130
Benzene	0.0391	mg/Kg	EPA 8260B	9/7/04	99.6	70-130
Toluene	0.0391	mg/Kg	EPA 8260B	9/7/04	108	70-130
Tert-Butanol	0.195	mg/Kg	EPA 8260B	9/7/04	102	70-130
Methyl-t-Butyl Ether	0.0391	mg/Kg	EPA 8260B	9/7/04	104	70-130

KIFF ANALYTICAL, LLC

Approved By:

Joel Kiff

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800





2795 2nd Street, Suite 300  
 Davis, CA 95616  
 Lab: 530.297.4800  
 Fax: 530.297.4808

Lab No. 39820 Page 22 of 2

Project Contact (Hardcopy or PDF To): Rob Kray California EDF Report?  Yes  No

Company/Address: Aqua Sciences Recommended but not mandatory to complete this section:  
 Sampling Company Log Code: . . . . .

Phone No.: 925-820-9351 FAX No.: Global ID: . . . . .

Project Number: P.O. No.: EDF Deliverable To (Email Address):

Project Name: ALBAZC HILL Sampler Signature: [Signature]

Project Address: 500 SAN PABLO

**Chain-of-Custody Record and Analysis Request**

**Analysis Request**

Sample Designation	Sampling		Container		Preservative				Matrix		BTEX (8021B)	BTEX/TPH Gas/MDBE (8022) (M8015)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/239.2) TOTAL (X)	W.E.T. (X)	TAT	For Lab Use Only			
	Date	Time	40 ml VOA	SLEEVE	HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL																			
BH-I 14.5'	8/26/04	0101	X				X			X																			01
BH-I 22.0'	8/26/04	0125	X				X			X																			02
BH-I 24.5'	8/26/04	0138	X				X			X			X		X														03
BH-I 27.5'	8/26/04	0147	X				X			X																			04
BH-U 4.5'	8/26/04	1140	X				X			X																			05
BH-U 9.5'	8/26/04	1145	X				X			X																			06
BH-U 13.5'	8/26/04	1155	X				X			X																			07
BH-U 21.5'	8/26/04	1230	X				X			X																			08
BH-U 26.5'	8/26/04	1252	X				X			X																			09

Relinquished by: [Signature] Date: 8/26/04 Time: 1245 Received by: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: 082604 Time: 1245 Received by Laboratory: KIFF ANALYTICAL Bill to: \_\_\_\_\_



Report Number : 39846

Date : 9/3/2004

Robert Kitay  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 2 Soil Samples  
Project Name : ALBANY HILL  
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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff





Report Number : 39846

Date : 9/3/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-K 23.5'

Matrix : Soil

Lab Number : 39846-06

Sample Date :8/26/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/3/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	9/3/2004
4-Bromofluorobenzene (Surr)	96.7		% Recovery	EPA 8260B	9/3/2004
Dibromofluoromethane (Surr)	101		% Recovery	EPA 8260B	9/3/2004
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	9/3/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	9/3/2004
1-Chlorooctadecane (Diesel Surrogate)	110		% Recovery	M EPA 8015	9/3/2004

Approved By:

Joel Kiff



Report Number : 39846

Date : 9/3/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-L 23.5'

Matrix : Soil

Lab Number : 39846-13

Sample Date :8/27/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/3/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/3/2004
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	9/3/2004
4-Bromofluorobenzene (Surr)	98.9		% Recovery	EPA 8260B	9/3/2004
Dibromofluoromethane (Surr)	102		% Recovery	EPA 8260B	9/3/2004
1,2-Dichloroethane-d4 (Surr)	97.8		% Recovery	EPA 8260B	9/3/2004
TPH as Diesel	1.4	1.0	mg/Kg	M EPA 8015	9/3/2004
1-Chlorooctadecane (Diesel Surrogate)	112		% Recovery	M EPA 8015	9/3/2004

Approved By:

Joel Kiff

Report Number : 39846

Date : 9/3/2004

**QC Report : Method Blank Data**

Project Name : **ALBANY HILL**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	9/2/2004
1-Chlorooctadecane (Diesel Surrogate)	106		%	M EPA 8015	9/2/2004
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/1/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/1/2004
Toluene - d8 (Surr)	98.1		%	EPA 8260B	9/1/2004
4-Bromofluorobenzene (Surr)	96.6		%	EPA 8260B	9/1/2004
Dibromofluoromethane (Surr)	107		%	EPA 8260B	9/1/2004
1,2-Dichloroethane-d4 (Surr)	99.4		%	EPA 8260B	9/1/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By: Joel Kiff



Report Number : 39846

Date : 9/3/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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 as Diesel	39764-03	74	20.0	20.0	81.2	85.5	mg/Kg	M EPA 8015	9/3/04	86.0	90.6	5.17	60-140	25
Benzene	39800-02	0.0069	0.175	0.183	0.193	0.200	mg/Kg	EPA 8260B	9/1/04	106	106	0.629	70-130	25
Toluene	39800-02	0.014	0.175	0.183	0.198	0.200	mg/Kg	EPA 8260B	9/1/04	104	101	3.48	70-130	25
Tert-Butanol	39800-02	0.043	0.877	0.917	0.836	0.849	mg/Kg	EPA 8260B	9/1/04	90.4	87.8	2.95	70-130	25
Methyl-t-Butyl Ether	39800-02	<0.0050	0.175	0.183	0.193	0.189	mg/Kg	EPA 8260B	9/1/04	110	103	6.50	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:  Joel Kiff

QC Report : Laboratory Control Sample (LCS)

Report Number : 39846

Date : 9/3/2004

Project Name : **ALBANY HILL**


Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	9/2/04	104	70-130
Benzene	0.0382	mg/Kg	EPA 8260B	9/1/04	100	70-130
Toluene	0.0382	mg/Kg	EPA 8260B	9/1/04	100	70-130
Tert-Butanol	0.191	mg/Kg	EPA 8260B	9/1/04	88.7	70-130
Methyl-t-Butyl Ether	0.0382	mg/Kg	EPA 8260B	9/1/04	100	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

  
Joel Kiff



2795 2nd Street, Suite 300  
 Davis, CA 95616  
 Lab: 530.297.4800  
 Fax: 530.297.4808

Lab No. 39846 Page 1 of 2

Project Contact (Hardcopy or PDF To):  
ROB KITAY

California EDF Report?  Yes  No

**Chain-of-Custody Record and Analysis Request**

Company/Address:  
ADVA SURVE

Recommended but not mandatory to complete this section:  
 Sampling Company Log Code: . . . . .

Phone No.:  
925-820-9391

FAX No.:

Global ID:

Project Number:

P.O. No.:

EDF Deliverable To (Email Address):

Project Name:  
ALBARK HILL

Sampler Signature:

Project Address:  
800 SAN PABLO

Sampling		Container	Preservative	Matrix
Date	Time	40 ml VOA SLEEVE	HCl HNO <sub>3</sub> ICE NONE	WATER SOIL

Analysis Request												TAT	
BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/M8015)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/239,2) TOTAL (X) W.E.T. (X)	12 hr/24 hr/48 hr/72 hr/1 wk
													For Lab Use Only

**Sample Designation**

Sample Designation	Date	Time	40 ml VOA SLEEVE	HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL
BH-K 4.5'	8/26/01	1402	X		X				X
BH-K 9.5'		1407	X		X				X
BH-K 12.5'		1412	X		X				X
BH-K 15.5'		1422	X		X				X
BH-K 20.5'		1430	X		X				X
BH-K 23.5'		1440	X		X				X
BH-K 27.5'	↓	1452	X		X				X
BH-L 4.5'	8/27/01	0834	X		X				X
BH-L 8.5'	↓	0835	X		X				X
BH-L 13.5'	↓	0847	X		X				X

Relinquished by:

Date: 8/27/01 Time: 1200

Received by: \_\_\_\_\_

Remarks:

Relinquished by: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: \_\_\_\_\_

Relinquished by: \_\_\_\_\_

Date: 082704 Time: 1200

Received by Laboratory: KIFF ANALYTICAL

Bill to: \_\_\_\_\_





Report Number : 39847

Date : 9/3/2004

Robert Kitay  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 3 Water Samples  
Project Name : ALBANY HILL  
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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff





Report Number : 39847

Date : 9/3/2004

Subject : 3 Water Samples  
Project Name : ALBANY HILL  
Project Number :

## Case Narrative

Hydrocarbons reported as TPH as Gasoline do not exhibit a typical Gasoline chromatographic pattern for sample BH-L 25'-27'.

Approved By:

A handwritten signature in black ink, appearing to read "Jde Kiff", is written over the printed name.

Jde Kiff



Report Number : 39847

Date : 9/3/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-J 25'-27'

Matrix : Water

Lab Number : 39847-01

Sample Date :8/26/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/2/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/2/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	9/2/2004
4-Bromofluorobenzene (Surr)	97.2		% Recovery	EPA 8260B	9/2/2004
Dibromofluoromethane (Surr)	112		% Recovery	EPA 8260B	9/2/2004
1,2-Dichloroethane-d4 (Surr)	98.8		% Recovery	EPA 8260B	9/2/2004
TPH as Diesel	< 50	50	ug/L	M EPA 8015	8/31/2004
Octacosane (Diesel Surrogate)	106		% Recovery	M EPA 8015	8/31/2004

Approved By:

Joel Kiff



Report Number : 39847

Date : 9/3/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-K 25'-27'

Matrix : Water

Lab Number : 39847-02

Sample Date :8/26/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/3/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/3/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	9/3/2004
4-Bromofluorobenzene (Surr)	96.6		% Recovery	EPA 8260B	9/3/2004
Dibromofluoromethane (Surr)	113		% Recovery	EPA 8260B	9/3/2004
1,2-Dichloroethane-d4 (Surr)	99.8		% Recovery	EPA 8260B	9/3/2004
TPH as Diesel	100	50	ug/L	M EPA 8015	8/31/2004
Octacosane (Diesel Surrogate)	111		% Recovery	M EPA 8015	8/31/2004

Approved By:

Joel Kiff



Report Number : 39847

Date : 9/3/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-L 25'-27'

Matrix : Water

Lab Number : 39847-03

Sample Date :8/27/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Toluene	0.60	0.50	ug/L	EPA 8260B	9/3/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/3/2004
TPH as Gasoline	320	50	ug/L	EPA 8260B	9/3/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	9/3/2004
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	9/3/2004
4-Bromofluorobenzene (Surr)	99.2		% Recovery	EPA 8260B	9/3/2004
Dibromofluoromethane (Surr)	98.4		% Recovery	EPA 8260B	9/3/2004
1,2-Dichloroethane-d4 (Surr)	91.3		% Recovery	EPA 8260B	9/3/2004
TPH as Diesel	70	50	ug/L	M EPA 8015	9/1/2004
Octacosane (Diesel Surrogate)	122		% Recovery	M EPA 8015	9/1/2004

Approved By:

Joel Kiff

Report Number : 39847

Date : 9/3/2004


**QC Report : Method Blank Data**

Project Name : **ALBANY HILL**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	8/31/2004
Octacosane (Diesel Surrogate)	117		%	M EPA 8015	8/31/2004
TPH as Diesel	< 50	50	ug/L	M EPA 8015	9/1/2004
Octacosane (Diesel Surrogate)	120		%	M EPA 8015	9/1/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/2/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/2/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	9/2/2004
Toluene - dB (Surr)	101		%	EPA 8260B	9/2/2004
4-Bromofluorobenzene (Surr)	97.1		%	EPA 8260B	9/2/2004
Dibromofluoromethane (Surr)	110		%	EPA 8260B	9/2/2004
1,2-Dichloroethane-d4 (Surr)	97.8		%	EPA 8260B	9/2/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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Approved By:  Joel Kiff

Report Number : 39847

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 9/3/2004

Project Name : **ALBANY HILL**

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 as Diesel	Blank	<50	1000	1000	1110	1160	ug/L	M EPA 8015	8/31/04	111	116	4.15	70-130	25
TPH as Diesel	Blank	<50	1000	1000	731	741	ug/L	M EPA 8015	9/1/04	73.1	74.1	1.36	70-130	25
Benzene	39847-01	<0.50	39.1	39.5	35.0	35.6	ug/L	EPA 8260B	9/2/04	89.7	90.0	0.297	70-130	25
Toluene	39847-01	<0.50	39.1	39.5	35.2	35.5	ug/L	EPA 8260B	9/2/04	90.1	89.9	0.309	70-130	25
Tert-Butanol	39847-01	<5.0	195	198	175	174	ug/L	EPA 8260B	9/2/04	89.7	88.2	1.72	70-130	25
Methyl-t-Butyl Ether	39847-01	<0.50	39.1	39.5	32.4	33.6	ug/L	EPA 8260B	9/2/04	83.0	85.1	2.45	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:  Joel Kiff

Report Number : 39847

QC Report : Laboratory Control Sample (LCS)

Date : 9/3/2004

Project Name : **ALBANY HILL**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	9/2/04	90.0	70-130
Toluene	40.0	ug/L	EPA 8260B	9/2/04	90.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/2/04	89.5	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/2/04	84.4	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

  
Joe Kiff



2795 2nd Street, Suite 300  
 Davis, CA 95616  
 Lab: 530.297.4800  
 Fax: 530.297.4808

Lab No. 39847 Page 1 of 1

Project Contact (Hardcopy or PDF To): Rob Vitale California EDF Report?  Yes  No Chain-of-Custody Record and Analysis Request

Company/Address: Adva Science Recommended but not mandatory to complete this section: Sampling Company Log Code: \_\_\_\_\_

Phone No.: 925 820 9391 FAX No.: \_\_\_\_\_ Global ID: \_\_\_\_\_  
 Project Number: \_\_\_\_\_ P.O. No.: \_\_\_\_\_ EDF Deliverable To (Email Address): \_\_\_\_\_

Project Name: ALGANY HILL Sampler Signature: [Signature]

Project Address: 800 SAN PABLO

Sample Designation	Sampling		Container		Preservative				Matrix		Analysis Request											TAT	For Lab Use Only				
	Date	Time	40 ml VOA	SLEEVE	HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL	BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/MB015)	TPH as Diesel (MB015)	TPH as Motor Oil (MB015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)			Volatiles Halocarbons (EPA 8260B)	Lead (7421/239.2) TOTAL (X) W.E.T. (X)		
BH-V 25-27	8/25/04	1300	X		X		X					X	X							X						X	01
BH-K 25-27	8/25/04	1600	X		X		X					X	X							X						X	02
BH-L 25-27	8/27/04	0700	X		X		X					X	X							X						X	03

Sample Designation	Sampling		Container		Preservative				Matrix		Analysis Request											TAT	For Lab Use Only				
	Date	Time	40 ml VOA	SLEEVE	HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL	BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/MB015)	TPH as Diesel (MB015)	TPH as Motor Oil (MB015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)			Volatiles Halocarbons (EPA 8260B)	Lead (7421/239.2) TOTAL (X) W.E.T. (X)		
BH-V 25-27	8/25/04	1300	X		X		X					X	X							X						X	01
BH-K 25-27	8/25/04	1600	X		X		X					X	X							X						X	02
BH-L 25-27	8/27/04	0700	X		X		X					X	X							X						X	03

Relinquished by: [Signature] Date: 8/27 Time: 1150 Received by: \_\_\_\_\_ Remarks: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: 082704 Time: 1150 Received by Laboratory: [Signature] KIFF ANALYTICAL Bill to: \_\_\_\_\_





Report Number : 40088

Date : 09/20/2004

Robert Kitay  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 10 Water Samples  
Project Name : ALBANY HILL  
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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Jeff Dahl



Report Number : 40088

Date : 09/20/2004

Subject : 10 Water Samples  
Project Name : ALBANY HILL  
Project Number :

## Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for samples MW-7 and MW-9.

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample BH-M 22'-24'. These hydrocarbons are higher boiling than typical diesel fuel.

Tert-Butanol results for samples MW-1 and MW-3 may be biased slightly high and are flagged with a 'J'. A fraction of MtBE (typically less than 1%) converts to Tert-Butanol during the analysis of water samples. We consider this conversion effect to be mathematically significant in samples that contain MtBE/Tert-Butanol in ratios of over 20:1.

Matrix Spike/Matrix Spike Duplicate Results associated with samples MW-1, BH-M 22'-24', MW-5, MW-4, MW-9 for the analyte Benzene were affected by the analyte concentrations already present in the un-spiked sample.

Sample MW-7 was analyzed by EPA Method 8260B using a bottle that contained a headspace bubble greater than 1/4 inch in diameter.

Approved By:



Jeff Dahl



Report Number : 40088

Date : 09/20/2004

Project Name : ALBANY HILL

Project Number :

Sample : MW-1

Matrix : Water

Lab Number : 40088-01

Sample Date :09/10/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	210	0.50	ug/L	EPA 8260B	09/16/2004
Toluene	8.4	0.50	ug/L	EPA 8260B	09/16/2004
Ethylbenzene	52	0.50	ug/L	EPA 8260B	09/16/2004
Total Xylenes	23	0.50	ug/L	EPA 8260B	09/16/2004
Methyl-t-butyl ether (MTBE)	220	0.50	ug/L	EPA 8260B	09/16/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Tert-Butanol	5.1 J	5.0	ug/L	EPA 8260B	09/16/2004
TPH as Gasoline	900	50	ug/L	EPA 8260B	09/16/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Toluene - d8 (Surr)	111		% Recovery	EPA 8260B	09/16/2004
4-Bromofluorobenzene (Surr)	98.0		% Recovery	EPA 8260B	09/16/2004
Dibromofluoromethane (Surr)	91.7		% Recovery	EPA 8260B	09/16/2004
1,2-Dichloroethane-d4 (Surr)	95.5		% Recovery	EPA 8260B	09/16/2004
TPH as Diesel	82	50	ug/L	M EPA 8015	09/15/2004
Octacosane (Diesel Surrogate)	105		% Recovery	M EPA 8015	09/15/2004

Approved By:

Jeff Dahl



Report Number : 40088

Date : 09/20/2004

Project Name : ALBANY HILL

Project Number :

Sample : MW-2

Matrix : Water

Lab Number : 40088-02

Sample Date :09/10/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	1.6	1.0	ug/L	EPA 8260B	09/17/2004
Toluene	< 1.0	1.0	ug/L	EPA 8260B	09/17/2004
Ethylbenzene	< 1.0	1.0	ug/L	EPA 8260B	09/17/2004
Total Xylenes	< 1.0	1.0	ug/L	EPA 8260B	09/17/2004
Methyl-t-butyl ether (MTBE)	620	1.0	ug/L	EPA 8260B	09/17/2004
Diisopropyl ether (DIPE)	< 1.0	1.0	ug/L	EPA 8260B	09/17/2004
Ethyl-t-butyl ether (ETBE)	< 1.0	1.0	ug/L	EPA 8260B	09/17/2004
Tert-amyl methyl ether (TAME)	< 1.0	1.0	ug/L	EPA 8260B	09/17/2004
Tert-Butanol	< 10	10	ug/L	EPA 8260B	09/17/2004
TPH as Gasoline	< 100	100	ug/L	EPA 8260B	09/17/2004
1,2-Dichloroethane	< 1.0	1.0	ug/L	EPA 8260B	09/17/2004
1,2-Dibromoethane	< 1.0	1.0	ug/L	EPA 8260B	09/17/2004
Toluene - d8 (Surr)	99.1		% Recovery	EPA 8260B	09/17/2004
4-Bromofluorobenzene (Surr)	99.0		% Recovery	EPA 8260B	09/17/2004
Dibromofluoromethane (Surr)	97.6		% Recovery	EPA 8260B	09/17/2004
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	09/17/2004
TPH as Diesel	72	50	ug/L	M EPA 8015	09/15/2004
Octacosane (Diesel Surrogate)	103		% Recovery	M EPA 8015	09/15/2004

Approved By:

Jeff Dahl



Report Number : 40088

Date : 09/20/2004

Project Name : ALBANY HILL

Project Number :

Sample : MW-3

Matrix : Water

Lab Number : 40088-03

Sample Date :09/10/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	110	10	ug/L	EPA 8260B	09/17/2004
Toluene	< 10	10	ug/L	EPA 8260B	09/17/2004
Ethylbenzene	< 10	10	ug/L	EPA 8260B	09/17/2004
Total Xylenes	21	10	ug/L	EPA 8260B	09/17/2004
Methyl-t-butyl ether (MTBE)	4400	10	ug/L	EPA 8260B	09/17/2004
Diisopropyl ether (DIPE)	< 10	10	ug/L	EPA 8260B	09/17/2004
Ethyl-t-butyl ether (ETBE)	< 10	10	ug/L	EPA 8260B	09/17/2004
Tert-amyl methyl ether (TAME)	20	10	ug/L	EPA 8260B	09/17/2004
Tert-Butanol	200 J	100	ug/L	EPA 8260B	09/17/2004
TPH as Gasoline	< 1000	1000	ug/L	EPA 8260B	09/17/2004
1,2-Dichloroethane	< 10	10	ug/L	EPA 8260B	09/17/2004
1,2-Dibromoethane	< 10	10	ug/L	EPA 8260B	09/17/2004
Toluene - d8 (Surr)	98.6		% Recovery	EPA 8260B	09/17/2004
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	09/17/2004
Dibromofluoromethane (Surr)	95.4		% Recovery	EPA 8260B	09/17/2004
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	09/17/2004
TPH as Diesel	140	50	ug/L	M EPA 8015	09/15/2004
Octacosane (Diesel Surrogate)	103		% Recovery	M EPA 8015	09/15/2004

Approved By:

Jeff Dahl



Report Number : 40088

Date : 09/20/2004

Project Name : ALBANY HILL

Project Number :

Sample : MW-4

Matrix : Water

Lab Number : 40088-04

Sample Date :09/10/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	370	1.0	ug/L	EPA 8260B	09/17/2004
Toluene	6.5	1.0	ug/L	EPA 8260B	09/17/2004
Ethylbenzene	68	1.0	ug/L	EPA 8260B	09/17/2004
Total Xylenes	93	1.0	ug/L	EPA 8260B	09/17/2004
Methyl-t-butyl ether (MTBE)	13	1.0	ug/L	EPA 8260B	09/17/2004
Diisopropyl ether (DIPE)	1.1	1.0	ug/L	EPA 8260B	09/17/2004
Ethyl-t-butyl ether (ETBE)	< 1.0	1.0	ug/L	EPA 8260B	09/17/2004
Tert-amyl methyl ether (TAME)	< 1.0	1.0	ug/L	EPA 8260B	09/17/2004
Tert-Butanol	10	10	ug/L	EPA 8260B	09/17/2004
TPH as Gasoline	1600	100	ug/L	EPA 8260B	09/17/2004
1,2-Dichloroethane	< 1.0	1.0	ug/L	EPA 8260B	09/17/2004
1,2-Dibromoethane	< 1.0	1.0	ug/L	EPA 8260B	09/17/2004
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	09/17/2004
4-Bromofluorobenzene (Surr)	90.5		% Recovery	EPA 8260B	09/17/2004
Dibromofluoromethane (Surr)	115		% Recovery	EPA 8260B	09/17/2004
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	09/17/2004
TPH as Diesel	180	50	ug/L	M EPA 8015	09/16/2004
Octacosane (Diesel Surrogate)	103		% Recovery	M EPA 8015	09/16/2004

Approved By:

  
Jeff Dahl



Report Number : 40088

Date : 09/20/2004

Project Name : ALBANY HILL

Project Number :

Sample : MW-5

Matrix : Water

Lab Number : 40088-05

Sample Date :09/10/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	2.4	0.50	ug/L	EPA 8260B	09/16/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Ethylbenzene	0.77	0.50	ug/L	EPA 8260B	09/16/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/16/2004
TPH as Gasoline	1300	50	ug/L	EPA 8260B	09/16/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Toluene - d8 (Surr)	92.6		% Recovery	EPA 8260B	09/16/2004
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	09/16/2004
Dibromofluoromethane (Surr)	97.8		% Recovery	EPA 8260B	09/16/2004
1,2-Dichloroethane-d4 (Surr)	99.3		% Recovery	EPA 8260B	09/16/2004
TPH as Diesel	150	50	ug/L	M EPA 8015	09/16/2004
Octacosane (Diesel Surrogate)	104		% Recovery	M EPA 8015	09/16/2004

Approved By:

Jeff Dahl



Report Number : 40088

Date : 09/20/2004

Project Name : ALBANY HILL

Project Number :

Sample : MW-6

Matrix : Water

Lab Number : 40088-06

Sample Date :09/10/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	2.7	0.50	ug/L	EPA 8260B	09/18/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Methyl-t-butyl ether (MTBE)	280	0.50	ug/L	EPA 8260B	09/18/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Tert-amyl methyl ether (TAME)	2.3	0.50	ug/L	EPA 8260B	09/18/2004
Tert-Butanol	48	5.0	ug/L	EPA 8260B	09/18/2004
TPH as Gasoline	1000	50	ug/L	EPA 8260B	09/18/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/18/2004
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	09/18/2004
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	09/18/2004
Dibromofluoromethane (Surr)	95.8		% Recovery	EPA 8260B	09/18/2004
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	09/18/2004
TPH as Diesel	390	50	ug/L	M EPA 8015	09/16/2004
Octacosane (Diesel Surrogate)	102		% Recovery	M EPA 8015	09/16/2004

Approved By:

Jeff Dahl





Report Number : 40088

Date : 09/20/2004

Project Name : ALBANY HILL

Project Number :

Sample : MW-7

Matrix : Water

Lab Number : 40088-07

Sample Date :09/10/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	640	1.5	ug/L	EPA 8260B	09/17/2004
Toluene	16	1.5	ug/L	EPA 8260B	09/17/2004
Ethylbenzene	250	1.5	ug/L	EPA 8260B	09/17/2004
Total Xylenes	490	1.5	ug/L	EPA 8260B	09/17/2004
Methyl-t-butyl ether (MTBE)	590	1.5	ug/L	EPA 8260B	09/17/2004
Diisopropyl ether (DIPE)	< 1.5	1.5	ug/L	EPA 8260B	09/17/2004
Ethyl-t-butyl ether (ETBE)	< 1.5	1.5	ug/L	EPA 8260B	09/17/2004
Tert-amyl methyl ether (TAME)	< 1.5	1.5	ug/L	EPA 8260B	09/17/2004
Tert-Butanol	31	20	ug/L	EPA 8260B	09/17/2004
TPH as Gasoline	4800	200	ug/L	EPA 8260B	09/17/2004
1,2-Dichloroethane	< 1.5	1.5	ug/L	EPA 8260B	09/17/2004
1,2-Dibromoethane	< 1.5	1.5	ug/L	EPA 8260B	09/17/2004
Toluene - d8 (Surr)	98.7		% Recovery	EPA 8260B	09/17/2004
4-Bromofluorobenzene (Surr)	96.5		% Recovery	EPA 8260B	09/17/2004
Dibromofluoromethane (Surr)	91.3		% Recovery	EPA 8260B	09/17/2004
1,2-Dichloroethane-d4 (Surr)	97.4		% Recovery	EPA 8260B	09/17/2004
TPH as Diesel	< 300	300	ug/L	M EPA 8015	09/16/2004
Octacosane (Diesel Surrogate)	109		% Recovery	M EPA 8015	09/16/2004

Approved By:

Jeff Dahl



Report Number : 40088

Date : 09/20/2004

Project Name : ALBANY HILL

Project Number :

Sample : MW-8

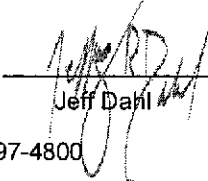
Matrix : Water

Lab Number : 40088-08

Sample Date :09/10/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	110	20	ug/L	EPA 8260B	09/17/2004
Toluene	< 20	20	ug/L	EPA 8260B	09/17/2004
Ethylbenzene	26	20	ug/L	EPA 8260B	09/17/2004
Total Xylenes	49	20	ug/L	EPA 8260B	09/17/2004
Methyl-t-butyl ether (MTBE)	8600	20	ug/L	EPA 8260B	09/17/2004
Diisopropyl ether (DIPE)	< 20	20	ug/L	EPA 8260B	09/17/2004
Ethyl-t-butyl ether (ETBE)	< 20	20	ug/L	EPA 8260B	09/17/2004
Tert-amyl methyl ether (TAME)	25	20	ug/L	EPA 8260B	09/17/2004
Tert-Butanol	< 200	200	ug/L	EPA 8260B	09/17/2004
TPH as Gasoline	< 2000	2000	ug/L	EPA 8260B	09/17/2004
1,2-Dichloroethane	< 20	20	ug/L	EPA 8260B	09/17/2004
1,2-Dibromoethane	< 20	20	ug/L	EPA 8260B	09/17/2004
Toluene - d8 (Surr)	94.8		% Recovery	EPA 8260B	09/17/2004
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	09/17/2004
Dibromofluoromethane (Surr)	96.9		% Recovery	EPA 8260B	09/17/2004
1,2-Dichloroethane-d4 (Surr)	98.6		% Recovery	EPA 8260B	09/17/2004
TPH as Diesel	200	50	ug/L	M EPA 8015	09/16/2004
Octacosane (Diesel Surrogate)	101		% Recovery	M EPA 8015	09/16/2004

Approved By:

  
Jeff Dahl



Report Number : 40088

Date : 09/20/2004

Project Name : ALBANY HILL

Project Number :

Sample : MW-9

Matrix : Water

Lab Number : 40088-09

Sample Date :09/10/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	890	5.0	ug/L	EPA 8260B	09/17/2004
Toluene	37	5.0	ug/L	EPA 8260B	09/17/2004
Ethylbenzene	280	5.0	ug/L	EPA 8260B	09/17/2004
Total Xylenes	2000	5.0	ug/L	EPA 8260B	09/17/2004
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	09/17/2004
Diisopropyl ether (DIPE)	< 5.0	5.0	ug/L	EPA 8260B	09/17/2004
Ethyl-t-butyl ether (ETBE)	< 5.0	5.0	ug/L	EPA 8260B	09/17/2004
Tert-amyl methyl ether (TAME)	< 5.0	5.0	ug/L	EPA 8260B	09/17/2004
Tert-Butanol	< 50	50	ug/L	EPA 8260B	09/17/2004
TPH as Gasoline	12000	500	ug/L	EPA 8260B	09/17/2004
1,2-Dichloroethane	< 5.0	5.0	ug/L	EPA 8260B	09/17/2004
1,2-Dibromoethane	< 5.0	5.0	ug/L	EPA 8260B	09/17/2004
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	09/17/2004
4-Bromofluorobenzene (Surr)	89.0		% Recovery	EPA 8260B	09/17/2004
Dibromofluoromethane (Surr)	110		% Recovery	EPA 8260B	09/17/2004
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	09/17/2004
TPH as Diesel	< 1500	1500	ug/L	M EPA 8015	09/16/2004
Octacosane (Diesel Surrogate)	104		% Recovery	M EPA 8015	09/16/2004

Approved By:

Jeff Dahl



Report Number : 40088

Date : 09/20/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-M 22'-24'

Matrix : Water

Lab Number : 40088-10

Sample Date :09/09/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	94	0.50	ug/L	EPA 8260B	09/15/2004
Toluene	4.0	0.50	ug/L	EPA 8260B	09/15/2004
Ethylbenzene	36	0.50	ug/L	EPA 8260B	09/15/2004
Total Xylenes	100	0.50	ug/L	EPA 8260B	09/15/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
Diisopropyl ether (DIPE)	1.4	0.50	ug/L	EPA 8260B	09/15/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/15/2004
TPH as Gasoline	730	50	ug/L	EPA 8260B	09/15/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	09/15/2004
4-Bromofluorobenzene (Surr)	96.8		% Recovery	EPA 8260B	09/15/2004
Dibromofluoromethane (Surr)	110		% Recovery	EPA 8260B	09/15/2004
1,2-Dichloroethane-d4 (Surr)	99.6		% Recovery	EPA 8260B	09/15/2004
TPH as Diesel	2000	250	ug/L	M EPA 8015	09/17/2004
Octacosane (Diesel Surrogate)	113		% Recovery	M EPA 8015	09/17/2004

Approved By:

Jeff Dahl

Report Number : 40088

Date : 09/20/2004

**QC Report : Method Blank Data**

Project Name : **ALBANY HILL**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	09/15/2004
Octacosane (Diesel Surrogate)	94.4		%	M EPA 8015	09/15/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/15/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/15/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/15/2004
Toluene - d8 (Surr)	101		%	EPA 8260B	09/15/2004
4-Bromofluorobenzene (Surr)	98.7		%	EPA 8260B	09/15/2004
Dibromofluoromethane (Surr)	109		%	EPA 8260B	09/15/2004
1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	09/15/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/16/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/16/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Toluene - d8 (Surr)	97.7		%	EPA 8260B	09/16/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
4-Bromofluorobenzene (Surr)	95.0		%	EPA 8260B	09/16/2004
Dibromofluoromethane (Surr)	94.8		%	EPA 8260B	09/16/2004
1,2-Dichloroethane-d4 (Surr)	99.5		%	EPA 8260B	09/16/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/17/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/17/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Toluene - d8 (Surr)	99.8		%	EPA 8260B	09/17/2004
4-Bromofluorobenzene (Surr)	96.4		%	EPA 8260B	09/17/2004
Dibromofluoromethane (Surr)	95.4		%	EPA 8260B	09/17/2004
1,2-Dichloroethane-d4 (Surr)	98.9		%	EPA 8260B	09/17/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/17/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/17/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/17/2004

Approved By:

*Jeff Dahl*  
 \_\_\_\_\_  
 Jeff Dahl

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 40088

Date : 09/20/2004

**QC Report : Method Blank Data**

Project Name : **ALBANY HILL**

Project Number :


Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Toluene - d8 (Surr)	98.5		%	EPA 8260B	09/17/2004
4-Bromofluorobenzene (Surr)	97.5		%	EPA 8260B	09/17/2004
Dibromofluoromethane (Surr)	94.5		%	EPA 8260B	09/17/2004
1,2-Dichloroethane-d4 (Surr)	100		%	EPA 8260B	09/17/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	09/16/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/16/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	09/16/2004
Toluene - d8 (Surr)	113		%	EPA 8260B	09/16/2004
4-Bromofluorobenzene (Surr)	95.4		%	EPA 8260B	09/16/2004
Dibromofluoromethane (Surr)	94.6		%	EPA 8260B	09/16/2004
1,2-Dichloroethane-d4 (Surr)	94.6		%	EPA 8260B	09/16/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

  
Jeff Dahl

Report Number : 40088

Date : 09/20/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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 as Diesel	Blank	<50	1000	1000	1220	1240	ug/L	M EPA 8015	9/15/04	122	124	1.71	70-130	25
Benzene	40088-10	94	39.6	39.0	125	121	ug/L	EPA 8260B	9/15/04	78.6	69.3	12.6	70-130	25
Toluene	40088-10	4.0	39.6	39.0	41.8	40.8	ug/L	EPA 8260B	9/15/04	95.5	94.2	1.36	70-130	25
Tert-Butanol	40088-10	<5.0	198	195	194	194	ug/L	EPA 8260B	9/15/04	97.7	99.6	1.94	70-130	25
Methyl-t-Butyl Ether	40088-10	<0.50	39.6	39.0	38.7	37.7	ug/L	EPA 8260B	9/15/04	97.7	96.8	0.981	70-130	25
Benzene	40095-01	<0.50	40.0	40.0	37.3	36.6	ug/L	EPA 8260B	9/17/04	93.3	91.5	1.92	70-130	25
Toluene	40095-01	<0.50	40.0	40.0	36.6	35.8	ug/L	EPA 8260B	9/17/04	91.5	89.4	2.33	70-130	25
Tert-Butanol	40095-01	<5.0	200	200	199	201	ug/L	EPA 8260B	9/17/04	99.3	100	1.07	70-130	25
Methyl-t-Butyl Ether	40095-01	<0.50	40.0	40.0	37.9	36.9	ug/L	EPA 8260B	9/17/04	94.9	92.3	2.73	70-130	25
Benzene	40140-07	<0.50	40.0	40.0	39.2	37.9	ug/L	EPA 8260B	9/17/04	97.9	94.7	3.34	70-130	25
Toluene	40140-07	<0.50	40.0	40.0	38.0	36.9	ug/L	EPA 8260B	9/17/04	95.1	92.3	3.06	70-130	25
Tert-Butanol	40140-07	<5.0	200	200	203	200	ug/L	EPA 8260B	9/17/04	101	99.8	1.52	70-130	25
Methyl-t-Butyl Ether	40140-07	<0.50	40.0	40.0	37.8	37.1	ug/L	EPA 8260B	9/17/04	94.5	92.9	1.76	70-130	25
Benzene	40148-05	<0.50	40.0	40.0	40.9	40.0	ug/L	EPA 8260B	9/17/04	102	100	2.21	70-130	25
Toluene	40148-05	<0.50	40.0	40.0	41.6	40.2	ug/L	EPA 8260B	9/17/04	104	100	3.45	70-130	25
Tert-Butanol	40148-05	11	200	200	216	214	ug/L	EPA 8260B	9/17/04	102	101	1.04	70-130	25
Methyl-t-Butyl Ether	40148-05	60	40.0	40.0	93.7	106	ug/L	EPA 8260B	9/17/04	83.5	113	30.2	70-130	25

Approved By:  Jeff Dah

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 40088

Date : 09/20/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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	40088-01	200	40.0	40.0	233	228	ug/L	EPA 8260B	9/16/04	68.6	55.8	20.6	70-130	25
Toluene	40088-01	8.4	40.0	40.0	53.1	50.3	ug/L	EPA 8260B	9/16/04	112	105	6.38	70-130	25
Tert-Butanol	40088-01	5.1	200	200	206	201	ug/L	EPA 8260B	9/16/04	100	97.8	2.71	70-130	25
Methyl-t-Butyl Ether	40088-01	220	40.0	40.0	257	254	ug/L	EPA 8260B	9/16/04	93.2	84.6	9.68	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:  Jeff Dahl



Report Number : 40088

Date : 09/20/2004

QC Report : Laboratory Control Sample (LCS)

Project Name : **ALBANY HILL**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	9/15/04	92.9	70-130
Toluene	40.0	ug/L	EPA 8260B	9/15/04	95.8	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/15/04	94.0	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/15/04	101	70-130
Benzene	40.0	ug/L	EPA 8260B	9/16/04	94.5	70-130
Toluene	40.0	ug/L	EPA 8260B	9/16/04	96.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/16/04	98.6	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/16/04	91.8	70-130
Benzene	40.0	ug/L	EPA 8260B	9/17/04	93.8	70-130
Toluene	40.0	ug/L	EPA 8260B	9/17/04	97.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/17/04	98.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/17/04	93.2	70-130
Benzene	40.0	ug/L	EPA 8260B	9/17/04	103	70-130
Toluene	40.0	ug/L	EPA 8260B	9/17/04	103	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/17/04	101	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/17/04	91.3	70-130
Benzene	40.0	ug/L	EPA 8260B	9/16/04	99.4	70-130

KIFF ANALYTICAL, LLC

Approved By:

Jeff Dahl

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 40088

Date : 09/20/2004

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

Project Name : **ALBANY HILL**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Toluene	40.0	ug/L	EPA 8260B	9/16/04	109	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/16/04	96.3	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/16/04	80.4	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

  
Jeff Dahl



2795 2nd Street, Suite 300  
 Davis, CA 95616  
 Lab: 530.297.4800  
 Fax: 530.297.4808

Lab No. 40088 Page 1 of 1

Project Contact (Hardcopy or PDF To): ROB KITAY  
 California EDF Report?  Yes  No

Company/Address: ADVANTAGE ENGINEERS  
 Recommended but not mandatory to complete this section:  
 Sampling Company Log Code: . . . . .

Phone No.: 925-820-9391 FAX No.:  
 Global ID: . . . . .

Project Number: P.O. No.:  
 EDF Deliverable To (Email Address):

Project Name: ALBANY HLC  
 Sample Signature: [Signature]

Project Address: PO SAN PABLO

**Chain-of-Custody Record and Analysis Request**

**Analysis Request**

Sample Designation	Date	Time	Sampling		Container				Preservative		Matrix		BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/MB015)	TPH as Diesel (MB015)	TPH as Motor Oil (MB015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1.2 DCA & 1.2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Hydrocarbons (EPA 8260B)	Lead (7421/239.2)	TOTAL (X) W.E.T. (X)	TAT	For Lab Use Only			
			40 ml VOA	SLEEVE	HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL																					
Mw-1	9/10/04	1725	X						X	X	X			X			X														01
Mw-2		1625																													02
Mw-3		1940																													03
Mw-4		1516																													04
Mw-5		1548																													05
Mw-6		1912																													06
Mw-7		1808																													07
Mw-8		1832																													08
Mw-9		1605																													09
PH-M #2'-24'	9/9/04	1145																													10

Relinquished by: [Signature] Date: 9/15/04 Time: 0930 Received by: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: 09/30/04 Time: 1057 Received by Laboratory: Robert C. Fiedel KIFF ANALYTICAL

Remarks: \_\_\_\_\_  
 Bill to: \_\_\_\_\_



Report Number : 40089

Date : 9/20/2004

Robert Kitay  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 2 Soil Samples  
Project Name : ALBANY HILL  
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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Dahl", is written over the typed name.

Jeff Dahl



Report Number : 40089

Date : 9/20/2004

Subject : 6 Soil Samples  
Project Name : ALBANY HILL  
Project Number :

## Case Narrative

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample BH-M 14.5'.

Approved By:

A handwritten signature in black ink, appearing to read "Jeff Dahl", is written over the printed name.

Jeff Dahl



Report Number : 40089

Date : 9/20/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-M 14.5'

Matrix : Soil

Lab Number : 40089-03

Sample Date :9/9/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	1.4	0.050	mg/Kg	EPA 8260B	9/17/2004
Toluene	0.19	0.050	mg/Kg	EPA 8260B	9/17/2004
Ethylbenzene	3.0	0.050	mg/Kg	EPA 8260B	9/17/2004
Total Xylenes	15	0.10	mg/Kg	EPA 8260B	9/17/2004
Methyl-t-butyl ether (MTBE)	< 0.050	0.050	mg/Kg	EPA 8260B	9/17/2004
Diisopropyl ether (DIPE)	< 0.050	0.050	mg/Kg	EPA 8260B	9/17/2004
Ethyl-t-butyl ether (ETBE)	< 0.050	0.050	mg/Kg	EPA 8260B	9/17/2004
Tert-amyl methyl ether (TAME)	< 0.050	0.050	mg/Kg	EPA 8260B	9/17/2004
Tert-Butanol	< 0.25	0.25	mg/Kg	EPA 8260B	9/17/2004
TPH as Gasoline	180	5.0	mg/Kg	EPA 8260B	9/17/2004
1,2-Dichloroethane	< 0.050	0.050	mg/Kg	EPA 8260B	9/17/2004
1,2-Dibromoethane	< 0.050	0.050	mg/Kg	EPA 8260B	9/17/2004
Toluene - d8 (Surr)	97.5		% Recovery	EPA 8260B	9/17/2004
4-Bromofluorobenzene (Surr)	97.1		% Recovery	EPA 8260B	9/17/2004
Dibromofluoromethane (Surr)	93.2		% Recovery	EPA 8260B	9/17/2004
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	9/17/2004
TPH as Diesel	61	1.0	mg/Kg	M EPA 8015	9/18/2004
1-Chlorooctadecane (Diesel Surrogate)	102		% Recovery	M EPA 8015	9/18/2004

Approved By:

Jeff Dahl



Report Number : 40089

Date : 9/20/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-M 20.5'

Matrix : Soil

Lab Number : 40089-05

Sample Date :9/9/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/16/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/16/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/16/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/16/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/16/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/16/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/16/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/16/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/16/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/16/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/16/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/16/2004
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	9/16/2004
4-Bromofluorobenzene (Surr)	98.8		% Recovery	EPA 8260B	9/16/2004
Dibromofluoromethane (Surr)	111		% Recovery	EPA 8260B	9/16/2004
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	9/16/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	9/19/2004
1-Chlorooctadecane (Diesel Surrogate)	104		% Recovery	M EPA 8015	9/19/2004

Approved By:

Jeff Dahl

Report Number : 40089

Date : 9/20/2004

**QC Report : Method Blank Data**

Project Name : **ALBANY HILL**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	9/17/2004
1-Chlorooctadecane (Diesel Surrogate)	93.2		%	M EPA 8015	9/17/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	9/18/2004
1-Chlorooctadecane (Diesel Surrogate)	94.3		%	M EPA 8015	9/18/2004
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/15/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/15/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/15/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/15/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/15/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/15/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/15/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/15/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/15/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/15/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/15/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/15/2004
Toluene - d8 (Surr)	102		%	EPA 8260B	9/15/2004
4-Bromofluorobenzene (Surr)	98.1		%	EPA 8260B	9/15/2004
Dibromofluoromethane (Surr)	110		%	EPA 8260B	9/15/2004
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	9/15/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/17/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/17/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/17/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/17/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/17/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/17/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/17/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/17/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/17/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/17/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/17/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/17/2004
Toluene - d8 (Surr)	102		%	EPA 8260B	9/17/2004
4-Bromofluorobenzene (Surr)	99.2		%	EPA 8260B	9/17/2004
Dibromofluoromethane (Surr)	112		%	EPA 8260B	9/17/2004
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	9/17/2004

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Jeff Dahl





Report Number : 40089

Date : 9/20/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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 as Diesel	40076-03	<1.0	20.0	20.0	17.7	20.0	mg/Kg	M EPA 8015	9/17/04	88.5	99.9	12.1	60-140	25
TPH as Diesel	40086-05	<1.0	20.0	20.0	18.8	19.3	mg/Kg	M EPA 8015	9/18/04	94.0	96.5	2.59	60-140	25
Benzene	40086-01	<0.0050	0.0405	0.0402	0.0344	0.0335	mg/Kg	EPA 8260B	9/15/04	84.9	83.5	1.65	70-130	25
Toluene	40086-01	<0.0050	0.0405	0.0402	0.0357	0.0350	mg/Kg	EPA 8260B	9/15/04	88.1	87.1	1.18	70-130	25
Tert-Butanol	40086-01	<0.0050	0.202	0.201	0.168	0.169	mg/Kg	EPA 8260B	9/15/04	83.1	84.0	1.11	70-130	25
Methyl-t-Butyl Ether	40086-01	<0.0050	0.0405	0.0402	0.0373	0.0359	mg/Kg	EPA 8260B	9/15/04	92.2	89.4	3.04	70-130	25
Benzene	40123-01	<0.0050	0.0384	0.0347	0.0330	0.0316	mg/Kg	EPA 8260B	9/17/04	86.0	91.2	5.97	70-130	25
Toluene	40123-01	<0.0050	0.0384	0.0347	0.0306	0.0300	mg/Kg	EPA 8260B	9/17/04	79.8	86.5	7.96	70-130	25
Tert-Butanol	40123-01	<0.0050	0.192	0.173	0.188	0.156	mg/Kg	EPA 8260B	9/17/04	98.1	89.7	8.92	70-130	25
Methyl-t-Butyl Ether	40123-01	<0.0050	0.0384	0.0347	0.0356	0.0307	mg/Kg	EPA 8260B	9/17/04	92.7	88.6	4.43	70-130	25

Approved By:  Jeff Dahl

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 40089

QC Report : Laboratory Control Sample (LCS)

Date : 9/20/2004

Project Name : **ALBANY HILL**

Project Number :

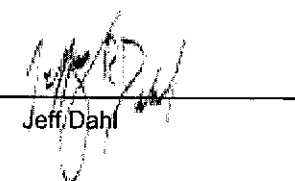
Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	9/17/04	90.4	70-130
TPH as Diesel	20.0	mg/Kg	M EPA 8015	9/18/04	90.0	70-130
Benzene	0.0393	mg/Kg	EPA 8260B	9/15/04	87.7	70-130
Toluene	0.0393	mg/Kg	EPA 8260B	9/15/04	91.9	70-130
Tert-Butanol	0.196	mg/Kg	EPA 8260B	9/15/04	88.0	70-130
Methyl-t-Butyl Ether	0.0393	mg/Kg	EPA 8260B	9/15/04	91.1	70-130
Benzene	0.0385	mg/Kg	EPA 8260B	9/17/04	87.9	70-130
Toluene	0.0385	mg/Kg	EPA 8260B	9/17/04	91.0	70-130
Tert-Butanol	0.192	mg/Kg	EPA 8260B	9/17/04	88.1	70-130
Methyl-t-Butyl Ether	0.0385	mg/Kg	EPA 8260B	9/17/04	91.9	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Jeff Dahl







Report Number : 40749

Date : 11/04/2004

Robert Kitay  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 3 Soil Samples and 4 Water Samples  
Project Name : ALBANY HILL  
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.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff



Report Number : 40749

Date : 11/04/2004

Subject : 4 Water Samples and 16 Soil Samples  
Project Name : ALBANY HILL  
Project Number :

## Case Narrative

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for samples BH-Q 7'-9' and BH-Q 25'-27'. These hydrocarbons are higher boiling than typical diesel fuel. Surrogate recovery for Method 8015, for sample BH-Q 7'-9' is above the control limits. This may indicate a bias in the analysis due to the sample's matrix or an interference with the surrogate from compounds present in the sample.

Hydrocarbons reported as TPH as Gasoline do not exhibit a typical Gasoline chromatographic pattern for sample BH-Q 25'-27'.

Matrix Spike/Matrix Spike Duplicate Results associated with samples BH-Q 25'-27', BH-N 26'-28' for the analyte Benzene were affected by the analyte concentrations already present in the un-spiked sample.

Approved By:



Jde Kiff



Report Number : 40749

Date : 11/04/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-P 21.5'

Matrix : Soil

Lab Number : 40749-08

Sample Date :10/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	10/30/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	10/30/2004
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	10/30/2004
Dibromofluoromethane (Surr)	118		% Recovery	EPA 8260B	10/30/2004
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	10/30/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	10/29/2004
1-Chlorooctadecane (Diesel Surrogate)	75.0		% Recovery	M EPA 8015	10/29/2004

Approved By:

Joel Kiff



Report Number : 40749

Date : 11/04/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-Q 4.5'

Matrix : Soil

Lab Number : 40749-10

Sample Date :10/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	10/30/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	10/30/2004
4-Bromofluorobenzene (Surr)	95.9		% Recovery	EPA 8260B	10/30/2004
Dibromofluoromethane (Surr)	97.3		% Recovery	EPA 8260B	10/30/2004
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	10/30/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	10/30/2004
1-Chlorooctadecane (Diesel Surrogate)	73.9		% Recovery	M EPA 8015	10/30/2004

Approved By:

  
Joel Kiff



Report Number : 40749

Date : 11/04/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-Q 18'

Matrix : Soil

Lab Number : 40749-13

Sample Date :10/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	10/30/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/30/2004
4-Bromofluorobenzene (Surr)	96.4		% Recovery	EPA 8260B	10/30/2004
Dibromofluoromethane (Surr)	103		% Recovery	EPA 8260B	10/30/2004
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	10/30/2004
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	10/30/2004
1-Chlorooctadecane (Diesel Surrogate)	80.6		% Recovery	M EPA 8015	10/30/2004

Approved By:

Joel Kiff





Report Number : 40749

Date : 11/04/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-N 26'-28'

Matrix : Water

Lab Number : 40749-17

Sample Date :10/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	15	10	ug/L	EPA 8260B	10/30/2004
Toluene	< 10	10	ug/L	EPA 8260B	10/30/2004
Ethylbenzene	< 10	10	ug/L	EPA 8260B	10/30/2004
Total Xylenes	< 10	10	ug/L	EPA 8260B	10/30/2004
Methyl-t-butyl ether (MTBE)	5300	10	ug/L	EPA 8260B	10/30/2004
Diisopropyl ether (DIPE)	< 10	10	ug/L	EPA 8260B	10/30/2004
Ethyl-t-butyl ether (ETBE)	< 10	10	ug/L	EPA 8260B	10/30/2004
Tert-amyl methyl ether (TAME)	36	10	ug/L	EPA 8260B	10/30/2004
Tert-Butanol	< 50	50	ug/L	EPA 8260B	10/30/2004
TPH as Gasoline	< 1000	1000	ug/L	EPA 8260B	10/30/2004
1,2-Dichloroethane	< 10	10	ug/L	EPA 8260B	10/30/2004
1,2-Dibromoethane	< 10	10	ug/L	EPA 8260B	10/30/2004
Toluene - d8 (Surr)	108		% Recovery	EPA 8260B	10/30/2004
4-Bromofluorobenzene (Surr)	91.8		% Recovery	EPA 8260B	10/30/2004
Dibromofluoromethane (Surr)	88.8		% Recovery	EPA 8260B	10/30/2004
1,2-Dichloroethane-d4 (Surr)	95.4		% Recovery	EPA 8260B	10/30/2004
TPH as Diesel	190	50	ug/L	M EPA 8015	11/03/2004
Octacosane (Diesel Surrogate)	114		% Recovery	M EPA 8015	11/03/2004

Approved By:

Joel Kiff



Report Number : 40749

Date : 11/04/2004

Project Name : ALBANY HILL

Project Number :

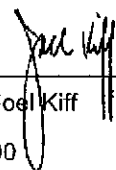
Sample : BH-P 23'-25'

Matrix : Water

Lab Number : 40749-18

Sample Date :10/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/28/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/28/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	10/28/2004
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	10/28/2004
Dibromofluoromethane (Surr)	119		% Recovery	EPA 8260B	10/28/2004
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	10/28/2004
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/03/2004
Octacosane (Diesel Surrogate)	122		% Recovery	M EPA 8015	11/03/2004

Approved By:  Joel Kiff



Report Number : 40749

Date : 11/04/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-Q 7'-9'

Matrix : Water

Lab Number : 40749-19

Sample Date :10/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/28/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/28/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Toluene - d8 (Surr)	99.3		% Recovery	EPA 8260B	10/28/2004
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	10/28/2004
Dibromofluoromethane (Surr)	96.6		% Recovery	EPA 8260B	10/28/2004
1,2-Dichloroethane-d4 (Surr)	97.6		% Recovery	EPA 8260B	10/28/2004
TPH as Diesel	420	50	ug/L	M EPA 8015	11/03/2004
Octacosane (Diesel Surrogate)	131		% Recovery	M EPA 8015	11/03/2004

Approved By:

Joel Kiff



Report Number : 40749

Date : 11/04/2004

Project Name : ALBANY HILL

Project Number :

Sample : BH-Q 25'-27'

Matrix : Water

Lab Number : 40749-20

Sample Date :10/25/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.58	0.50	ug/L	EPA 8260B	10/29/2004
Toluene	0.74	0.50	ug/L	EPA 8260B	10/29/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
Total Xylenes	0.62	0.50	ug/L	EPA 8260B	10/29/2004
Methyl-t-butyl ether (MTBE)	20	0.50	ug/L	EPA 8260B	10/29/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/2004
TPH as Gasoline	320	50	ug/L	EPA 8260B	10/29/2004
1,2-Dichloroethane	0.75	0.50	ug/L	EPA 8260B	10/29/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	10/29/2004
4-Bromofluorobenzene (Surr)	97.7		% Recovery	EPA 8260B	10/29/2004
Dibromofluoromethane (Surr)	95.1		% Recovery	EPA 8260B	10/29/2004
1,2-Dichloroethane-d4 (Surr)	97.6		% Recovery	EPA 8260B	10/29/2004
TPH as Diesel	500	50	ug/L	M EPA 8015	11/03/2004
Octacosane (Diesel Surrogate)	122		% Recovery	M EPA 8015	11/03/2004

Approved By:

Joel Kiff

Report Number : 40749

Date : 11/04/2004

QC Report : Method Blank Data

Project Name : ALBANY HILL

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	10/29/2004
1-Chlorooctadecane (Diesel Surrogate)	70.1		%	M EPA 8015	10/29/2004
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/03/2004
Octacosane (Diesel Surrogate)	120		%	M EPA 8015	11/03/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/28/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/28/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	10/28/2004
Toluene - d8 (Surr)	103		%	EPA 8260B	10/28/2004
4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	10/28/2004
Dibromofluoromethane (Surr)	118		%	EPA 8260B	10/28/2004
1,2-Dichloroethane-d4 (Surr)	98.8		%	EPA 8260B	10/28/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	10/30/2004
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/30/2004
Toluene - d8 (Surr)	101		%	EPA 8260B	10/30/2004
4-Bromofluorobenzene (Surr)	101		%	EPA 8260B	10/30/2004
Dibromofluoromethane (Surr)	116		%	EPA 8260B	10/30/2004
1,2-Dichloroethane-d4 (Surr)	101		%	EPA 8260B	10/30/2004
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/29/2004
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/29/2004
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	10/29/2004
Toluene - d8 (Surr)	108		%	EPA 8260B	10/29/2004
4-Bromofluorobenzene (Surr)	93.4		%	EPA 8260B	10/29/2004
Dibromofluoromethane (Surr)	93.1		%	EPA 8260B	10/29/2004
1,2-Dichloroethane-d4 (Surr)	98.2		%	EPA 8260B	10/29/2004

Approved By: Joel Kiff



KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 40749

Date : 11/04/2004

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **ALBANY HILL**

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 Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	40749-08	<1.0	20.0	20.0	16.6	17.6	mg/Kg	M EPA 8015	10/30/04	82.8	87.9	5.96	60-140	25
TPH as Diesel	Blank	<50	1000	1000	1020	955	ug/L	M EPA 8015	11/3/04	102	95.5	6.66	70-130	25
Benzene	40746-01	<0.50	39.5	38.4	37.3	36.0	ug/L	EPA 8260B	10/28/04	94.3	93.9	0.462	70-130	25
Toluene	40746-01	<0.50	39.5	38.4	38.1	36.6	ug/L	EPA 8260B	10/28/04	96.3	95.4	0.931	70-130	25
Tert-Butanol	40746-01	23	198	192	205	207	ug/L	EPA 8260B	10/28/04	91.9	96.0	4.38	70-130	25
Methyl-t-Butyl Ether	40746-01	6.6	39.5	38.4	44.9	44.8	ug/L	EPA 8260B	10/28/04	96.9	99.3	2.48	70-130	25
Benzene	40749-08	<0.0050	0.0394	0.0398	0.0348	0.0351	mg/Kg	EPA 8260B	10/30/04	88.3	88.2	0.128	70-130	25
Toluene	40749-08	<0.0050	0.0394	0.0398	0.0355	0.0364	mg/Kg	EPA 8260B	10/30/04	90.3	91.3	1.19	70-130	25
Tert-Butanol	40749-08	<0.0050	0.197	0.199	0.171	0.176	mg/Kg	EPA 8260B	10/30/04	86.8	88.4	1.82	70-130	25
Methyl-t-Butyl Ether	40749-08	<0.0050	0.0394	0.0398	0.0351	0.0362	mg/Kg	EPA 8260B	10/30/04	89.2	90.8	1.80	70-130	25
Benzene	40747-04	88	40.0	40.0	98.4	94.5	ug/L	EPA 8260B	10/29/04	25.7	16.0	46.5	70-130	25
Toluene	40747-04	0.75	40.0	40.0	37.6	35.9	ug/L	EPA 8260B	10/29/04	92.0	87.9	4.56	70-130	25
Tert-Butanol	40747-04	<5.0	200	200	192	196	ug/L	EPA 8260B	10/29/04	96.1	97.8	1.78	70-130	25
Methyl-t-Butyl Ether	40747-04	1.2	40.0	40.0	37.8	36.9	ug/L	EPA 8260B	10/29/04	91.5	89.1	2.71	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 40749

Date : 11/04/2004

QC Report : Laboratory Control Sample (LCS)

Project Name : **ALBANY HILL**

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	10/29/04	90.3	70-130
Benzene	40.0	ug/L	EPA 8260B	10/28/04	93.2	70-130
Toluene	40.0	ug/L	EPA 8260B	10/28/04	97.5	70-130
Tert-Butanol	200	ug/L	EPA 8260B	10/28/04	95.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	10/28/04	102	70-130
Benzene	0.0390	mg/Kg	EPA 8260B	10/30/04	88.8	70-130
Toluene	0.0390	mg/Kg	EPA 8260B	10/30/04	93.0	70-130
Tert-Butanol	0.195	mg/Kg	EPA 8260B	10/30/04	90.4	70-130
Methyl-t-Butyl Ether	0.0390	mg/Kg	EPA 8260B	10/30/04	94.4	70-130
Benzene	40.0	ug/L	EPA 8260B	10/29/04	100	70-130
Toluene	40.0	ug/L	EPA 8260B	10/29/04	96.7	70-130
Tert-Butanol	200	ug/L	EPA 8260B	10/29/04	94.9	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	10/29/04	94.4	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joe Kiff



Project Contact (Hardcopy or PDF To): ROB KOTAY California EDF Report?  Yes  No

Company/Address: AQUA SCIENCE Recommended but not mandatory to complete this section:  
 Sampling Company Log Code: \_\_\_\_\_

Phone No.: 925 820 4391 FAX No.: \_\_\_\_\_ Global ID: \_\_\_\_\_

Project Number: \_\_\_\_\_ P.O. No.: \_\_\_\_\_ EDF Deliverable To (Email Address): \_\_\_\_\_

Project Name: ALBANY HILL Sampler Signature: [Signature]

Project Address: 800 SAN RAFAEL

## Chain-of-Custody Record and Analysis Request

### Analysis Request

Sample Designation	Sampling		Container			Preservative				Matrix		BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/8015)	TPH as Diesel (8015)	TPH as Motor Oil (8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/289-2) TOTAL (X) W.E.T. (X)	TAT	For Lab Use Only					
	Date	Time	40 ml VOA	SLEEVE	JAR	HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL																				
BH-N 23.5'	10/25/04	1330	X	X	X			X																							
BH-N 29'		1340	X	X	X			X																							
BH-P 4.5'		0950	X	X	X			X																							
BH-P 9.5'		0955	X	X	X			X																							
BH-P 13.5'		1020	X	X	X			X																							
BH-P 16.5'		1034	X	X	X			X																							
BH-P 19.5'		1045	X	X	X			X																							
BH-P 21.5'		1053	X	X	X			X																							
BH-P 24.5'		1115	X	X	X			X																							
BH-P 46'		1515	X	X	X			X																							

Relinquished by: [Signature] Date: 10/27/04 Time: 0900 Received by: \_\_\_\_\_ Remarks: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: 10/27/04 Time: 1202 Received by Laboratory: [Signature] KIFF Analytical Bill to: \_\_\_\_\_



Project Contact (Hardcopy or PDF To): ROB VITAY  
 Company/Address: ADAM SCHUBERT  
 Phone No.: 925-920-4391 FAX No.:  
 Project Number: P.O. No.:  
 Project Name: AZSBANY HILL  
 Project Address: 800 SAN PABLO  
 California EDF Report?  Yes  No  
 Recommended but not mandatory to complete this section:  
 Sampling Company Log Code:  
 Global ID:  
 EDF Deliverable To (Email Address):  
 Sampler Signature: [Signature]

## Chain-of-Custody Record and Analysis Request

### Analysis Request

Sample Designation	Sampling		Container		Preservative				Matrix		BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/M8015)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/299.2)	TOTAL (X) W.E.T. (X)	TAT	For Lab Use Only			
	Date	Time	40 ml VOA SLEEVE	JAR	HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL																			
BH-Q 9.5'	10/25/04	1520	X																										
BH-Q 13.5'		1540	X																										-11
BH-Q 18'		1700	X																										-12
BH-Q 21.5'		1740	X											X	X														-13
BH-Q 24'		1750		X																									-14
BH-Q 26.5'		1805		X																									-15
BH-N 26.25'		1925	X			X	X			X				X	X														-16
BH-P 23'-25'		1128	X			X	X			X				X	X														-17
BH-Q 7'-9'		1533	X			X	X			X				X	X														-18
BH-Q 25'-27'		1840	X			X	X			X				X	X														-19
																													-20

Relinquished by: [Signature] Date: 10/26/04 Time: 0800  
 Received by: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: 10/27/04 Time: 1202  
 Received by Laboratory: [Signature] KIFF ANALYTICAL  
 Remarks: BH-P VOAS SHOULD BE LAB 260 23'-25'  
 Bill to: \_\_\_\_\_