A·C·C
ENVIRONMENTAL
CONSULTANTS

June 22, 1993

Mr. Steve Chrissanthos
Alameda Cellars
1702 Lincoln Avenue
Alameda, CA 94501

RE: Results of Additional Investigation at
2425 Encinal, Alameda, California

Dear Mr. Chrissanthos:

The attached report describes the materials and procedures used during additional investigation for the property located at 2425 Encinal, Alameda, California.

ACC's investigative approach was to drill nine borings and collect samples to evaluate the extent of petroleum hydrocarbons in the soil and groundwater both on and off site.

Soil samples collected during drilling were submitted to ChromaLab for petroleum hydrocarbon analyses, in accordance with the "Tri Regional Guidelines for Underground Storage Tank Sites.

The results of the chemical analysis indicated detectable concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline and benzene, toluene, ethylbenzene, and total xylenes (BTEX) in some of the samples analyzed. Analysis of other samples indicated below detectable levels of constituents (non-detect). The samples with non-detect levels define the extent of impact in the areas that the samples were collected.

If you have any comments regarding this report, please call me.

Sincerely,

Misty C. Kaltreider

Misty C. Kaltreider
Geologist

cc: Mr. Richard Hiett - Regional Water Quality Control Board
Ms. Juliet Shin - Alameda County Health Care Services - Division of Hazardous Materials

1000 Atlantic Avenue, Suite 110 •Alameda, CA 94501 •(510) 522-8188 •FAX: (510) 865-5731

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ADDITIONAL INVESTIGATION

2425 ENCINAL
ALAMEDA, CALIFORNIA

June 1993

Prepared for:
Mr. Steve Chrissanthos
Alameda Cellars
1702 Lincoln Avenue
Alameda, CA 94501

Prepared by:

Misty Kaltreider,
Project Geologist

Reviewed by:

Elizabeth Herbert, R.G.
Registered Geologist

REGISTERED GEOLOGIST
ELIZABETH
HERBERT
4819
STATE OF CALIFORNIA

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A·C·C ENVIRONMENTAL CONSULTANTS

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TABLES

ATTACHMENTS

1.0 INTRODUCTION

This report presents the procedures and findings of the additional subsurface investigation conducted by ACC Environmental Consultants, Inc., ("ACC") on behalf of Mr. Steve Chrissanthos and Alameda Cellars, site owner at 2425 Encinal, Alameda, California. The project objective is to further evaluate the extent of soil and groundwater contamination.

During the field investigation, nine borings were drilled both on and off-site to evaluate the lateral extent of hydrocarbon impact in the soil and groundwater. During drilling, groundwater was encountered between 9 to 10 feet below present grade. Locations of the borings are illustrated on Figure 2.

2.0 BACKGROUND

The site is presently occupied by Alameda Cellars, a commercial liquor store. The property is owned by Mr. Steve Chrissanthos. On March of 1990, two 10,000-gallon fuel tanks were removed from the above referenced site. Analysis of the soil samples collected from beneath the two gasoline tanks indicated up to 710 parts per million (ppm) of Total Petroleum Hydrocarbons (TPH) as gasoline. Soil samples collected from beneath the diesel tank indicated less than detectable levels of TPH as diesel.

In December 1992, five borings were drilled on-site. Three of the borings were converted into monitoring wells MW-1, MW-2a, and MW-3. Analytical results of the soil collected during drilling and soil sampling indicated a maximum soil concentration of Total Petroleum Hydrocarbons (TPH) as gasoline as 1,365 ppm. Benzene concentration was 18.9 ppm in the same sample.

Initial groundwater samples collected in January 1993, from the monitoring wells indicated a maximum TPH-gasoline concentration of 5,680 ppb (MW-2a) and a maximum benzene concentration of 1,560 ppb (MW-1).

Per request of Alameda County Health Care Services Agency - Hazardous Materials Division, this site investigation was conducted to evaluate the extent of soil contamination from gasoline releases on-site.

3.0 FIELD PROCEDURES

Borings S1 through S9 were drilled on May 11, 1993. The drilling method used a precision sampling tool equipped with 5-foot sections of 3/4-inch inside diameter galvanized steel probe pipe. The probe pipe was connected to a 1-foot long galvanized steel soil core tube. Stainless steel insert rods were placed through the probe pipe and sampling core tube. The probe pipe, soil core tube and insert rods were together pneumatically driven using a percussion hammer to the depth desired. The insert rods were removed and the probe pipe and core tube were driven one foot to obtain a soil sample. The probe pipe, insert rods, and sampling core tube were all pre-cleaned prior to use and between sample drives by washing with trisodium phosphate (TSP) and potable water solution, a potable water rinse, and distilled water rinse.

Soil samples were collected every five feet, at any noted changes in lithology, and at the approximate soil/groundwater interface. The samples were pre-screened with an HNu photoionization detector (PID) calibrated for Hexane. The soil samples were logged by Ms. Misty Kaltreider, ACC geologist, during drilling and sampling in accordance with the Unified Soil Classification System. Lithologic logs of the borings and the Unified Soil Classification System are attached in Exhibit A.

Upon collection, each end of the probe pipe was covered with Teflon tape and plastic caps, and labeled. All samples were stored in an ice-filled cooler and transported under chain of custody to ChromaLab, a Cal/EPA certified laboratory.

4.0 FINDINGS

4.1 Subsurface Conditions

During drilling and sampling activities, the site was observed to be covered with a baserock/asphalt cap. Below the cap, the subsurface soils consisted of brown fine grained sand to an explored depth of 12 feet. The sand is part of the Merritt Sand.

A report by the Alameda County Flood Control and Water Conservation District Geohydrology and Groundwater - Quality Overview, East Bay Plain Area, Alameda County, California, 205 (J) Report, June 1988, describes the Merritt Sand as consisting of loose, well-sorted, fine to medium grained sand and silt, with lenses of sandy clay and clay. The sand was a wind and water deposited beach and near-shore deposit and is exposed only in the Alameda and Oakland areas.

During drilling and sampling field evidence of volatile organic compounds (i.e. discoloration and odor) was detected in only two of the borings drilled. Table 1 below summarizes the intervals in each boring where volatile organic compounds were observed.

TABLE 1 - Field Evidence of Volatile Organic Compounds

Boring No.	Total Depth Feet (bgs)	Odor	Discoloration	Depth Observed
S1	12	none	no	Not Observed
S2	12	none	no	Not Observed
S3	12	none	no	Not Observed
S4	12	none	yes	9 to 10 feet
S5	12	moderate	yes	9 to 10 feet
S6	12	moderate	yes	4 to 10 feet
S7	12	none	no	Not Observed
S8	12	none	no	Not Observed
S9	12	none	no	Not Observed

Note: bgs = below ground surface

4.2 Analytical Results - Soil

One soil sample was selected from each boring at the soil/groundwater interface and submitted to ChromaLab for analysis according to the "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites", August 10, 1990. The soil samples were analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline by EPA Test Method 8015 with benzene, toluene, ethylbenzene, and total xylenes by EPA Test Method 8020. Results of the soil sample analysis are illustrated in Table 2 and in Figure 3.

TABLE 2 - Analytical Results, Soil

Boring No.	Sample Number	Depth (feet)	TPH-g (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)
S1	S1-7	7	<1.0	<0.005	<0.005	<0.005	<0.005
S2	S2-10	10	<1.0	<0.005	<0.005	<0.005	<0.005
S3	S3-10	10	<1.0	<0.005	<0.005	<0.005	<0.005
S4	S4-10	10	<1.0	<0.005	<0.005	<0.005	<0.005
S5	S5-10	10	<1.0	0.130	<0.005	<0.005	<0.005
S6	S6-10	10	8.7	<0.005	<0.005	0.020	0.024
S7	S7-10	10	<1.0	<0.005	<0.005	<0.005	<0.005
S8	S8-10	10	<1.0	<0.005	<0.005	<0.005	<0.005
S9	S9-10	10	<1.0	<0.005	<0.005	<0.005	<0.005

Notes: TPH-g = Total Petroleum Hydrocarbons as gasoline
ppm = parts per million

4.3 Analytical Results - Groundwater

How was this determined?

Grab groundwater samples were collected from each boring. Samples with indications of volatile organic constituents in the water were chosen for analysis. The water samples selected for analysis were collected from borings S1, S4, S5, and S6. These samples had some indication (i.e. odor) of volatile organics in the water and were also located downgradient of the former tank excavation. The samples were submitted to ChromaLab for analysis of TPH as gasoline with benzene, toluene, ethylbenzene, and total xylenes by EPA Test Method 5030/602. Analysis results from the groundwater samples are summarized in Table 3 and illustrated in Figure 4. Copies of the analytical results are provided in Exhibit B.

TABLE 3 - Analytical Results, Groundwater

Boring No.	Sample Number	TPH-g (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
S1	S1-H20	1,000	200	25	93	56
S4	S4-H20	710	230	2.7	7.8	3.4
S5	S5-H20	74	1.2	0.9	<0.5	1.4
S6	S6-H20	18,000	<5.0	58	120	150

Notes: ppb = parts per billion
TPH-g = Total Petroleum Hydrocarbons as gasoline

5.0 SUMMARY AND CONCLUSION

The maximum soil concentration of Total Petroleum Hydrocarbons (TPH) as gasoline was 8.7 ppm collected at the soil/groundwater interface level in boring S6. No benzene was reported in the same sample. In soil sample S5 collected at 10 feet below ground surface, the benzene concentration was 0.130 ppm. Gasoline, toluene, ethylbenzene, and xylenes concentrations were below detectable limits in sample S5-10.

The lateral extent of hydrocarbon impacted soil does not appear to extend beyond the property boundaries along the northern, western, and eastern sides (beyond borings S1, S2, S3, S4, S7, S8, and S9). However, along the southern side, the impacted soil appears to extend into Park and Encinal Avenues. Indications of impacted soil were not observed below the soil/groundwater interface level of approximately 10 feet below ground surface. The vertical limit of hydrocarbons in the soil appears to be the top of the present groundwater table.

Field observations of the soil and sample analysis indicates that the soil hydrocarbon plume is primarily around the former tank excavation and the former dispenser island.

During drilling, groundwater was encountered at approximately 10 feet below ground surface. Grab groundwater samples collected from borings S1, S4, S5, and S6 had an odor of gasoline. Laboratory analysis of the water samples indicated detectable levels of TPH as gasoline with BTEX. The maximum concentration of gasoline was reported in sample S6-H20 at 18,000 parts per billion (ppb). Concentrations of benzene at 230 and 200 ppb were reported in samples S4-H20 and S1-H20, respectively. Lower levels of toluene, ethylbenzene, and total xylenes were reported in samples S4-H20 and S1-H20.

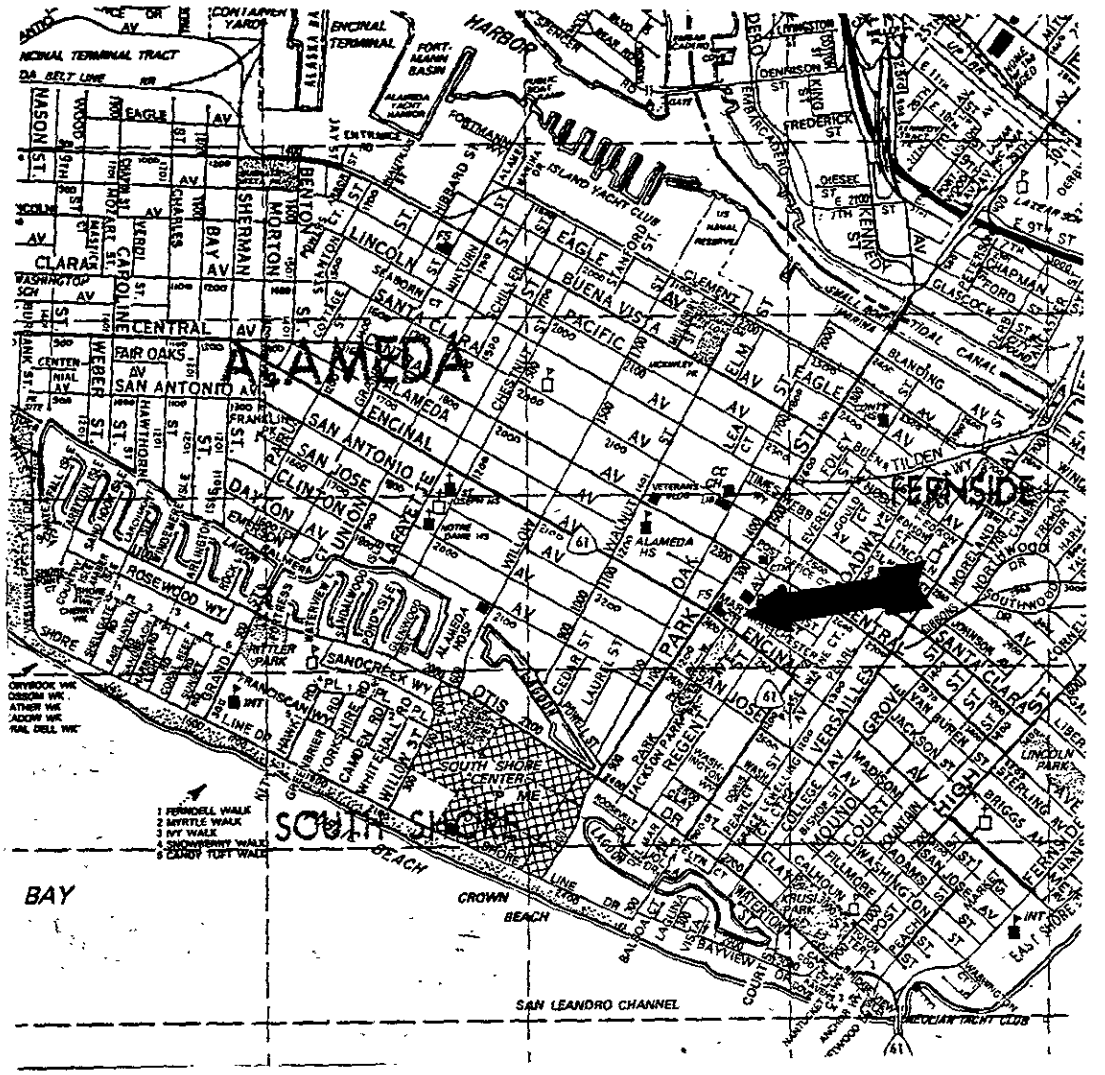
Recent groundwater monitoring of the three monitoring wells located on-site indicates that the direction of groundwater flow is west to southwest towards Encinal Avenue. Due to the relatively high transmissivity of the underlying soil, residual hydrocarbons from the former tank excavation and dispenser island appear to be migrating off-site via the groundwater.

The lighter and more mobile fraction of gasoline (benzene) migrates more quickly than ethylbenzene, toluene, or xylene. Evidence of higher levels of benzene compared to xylenes in samples S1-H20 and S4-H20 indicate the preferred path of contaminate migration and just behind the leading edge of the contaminate plume within the groundwater.

6.0 RECOMMENDATIONS

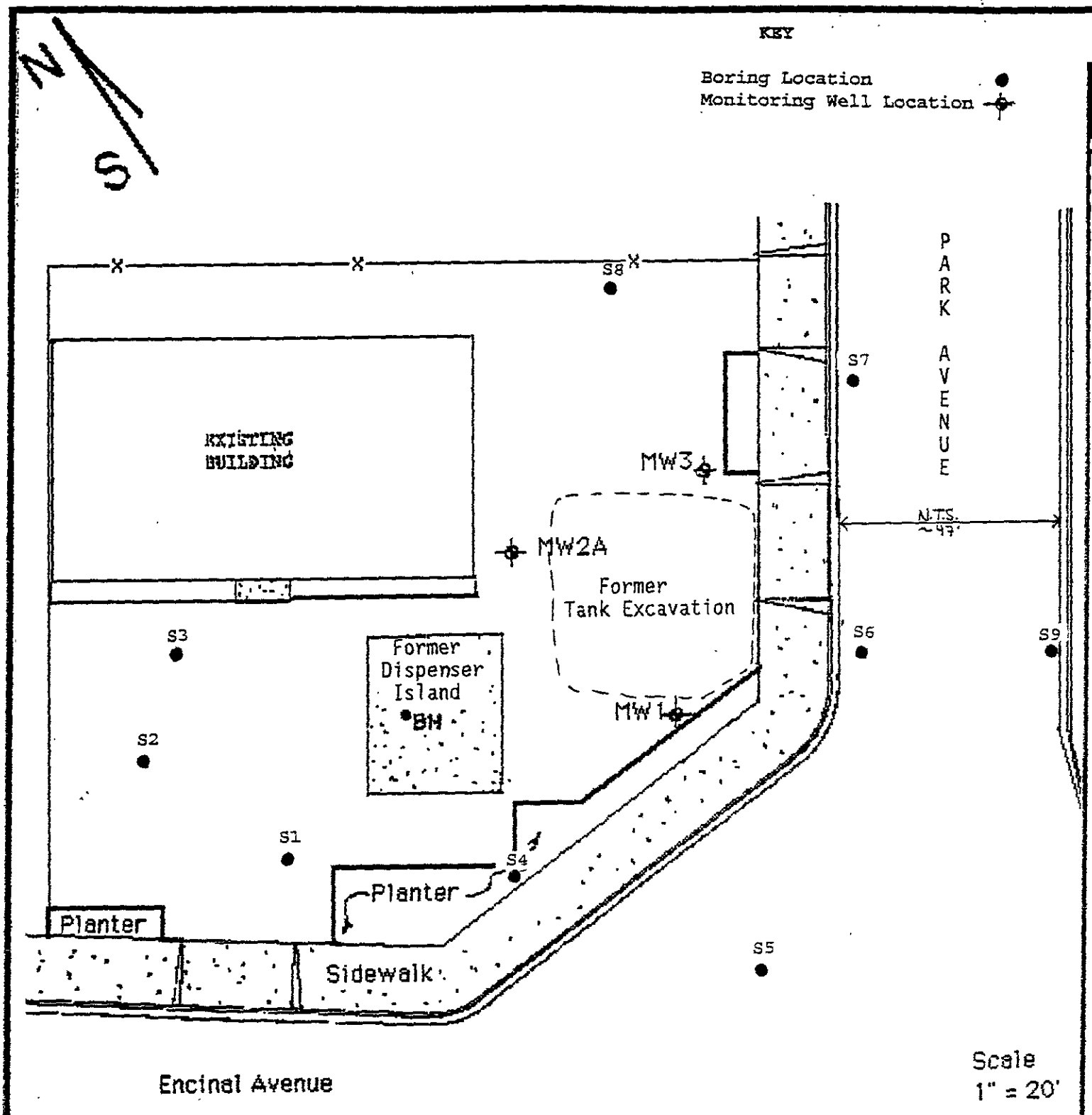
Pursuant to the Tri-Regional Board guidelines, groundwater sampling and monitoring of the on-site wells should continue on a quarterly basis. Further sampling and analysis of the groundwater will help in establishing the preferred path of groundwater and plume migration.

Pursuit to the CCR Title 23, Chapter 16, Articles 5, 7, and 11 of the Underground Storage Tank regulations a Corrective Action Plan shall be drafted to determine the method of cleanup. A Corrective Action Plan for the purpose of identifying and evaluating the appropriate corrective actions at 2425 Encinal Avenue is being drafted

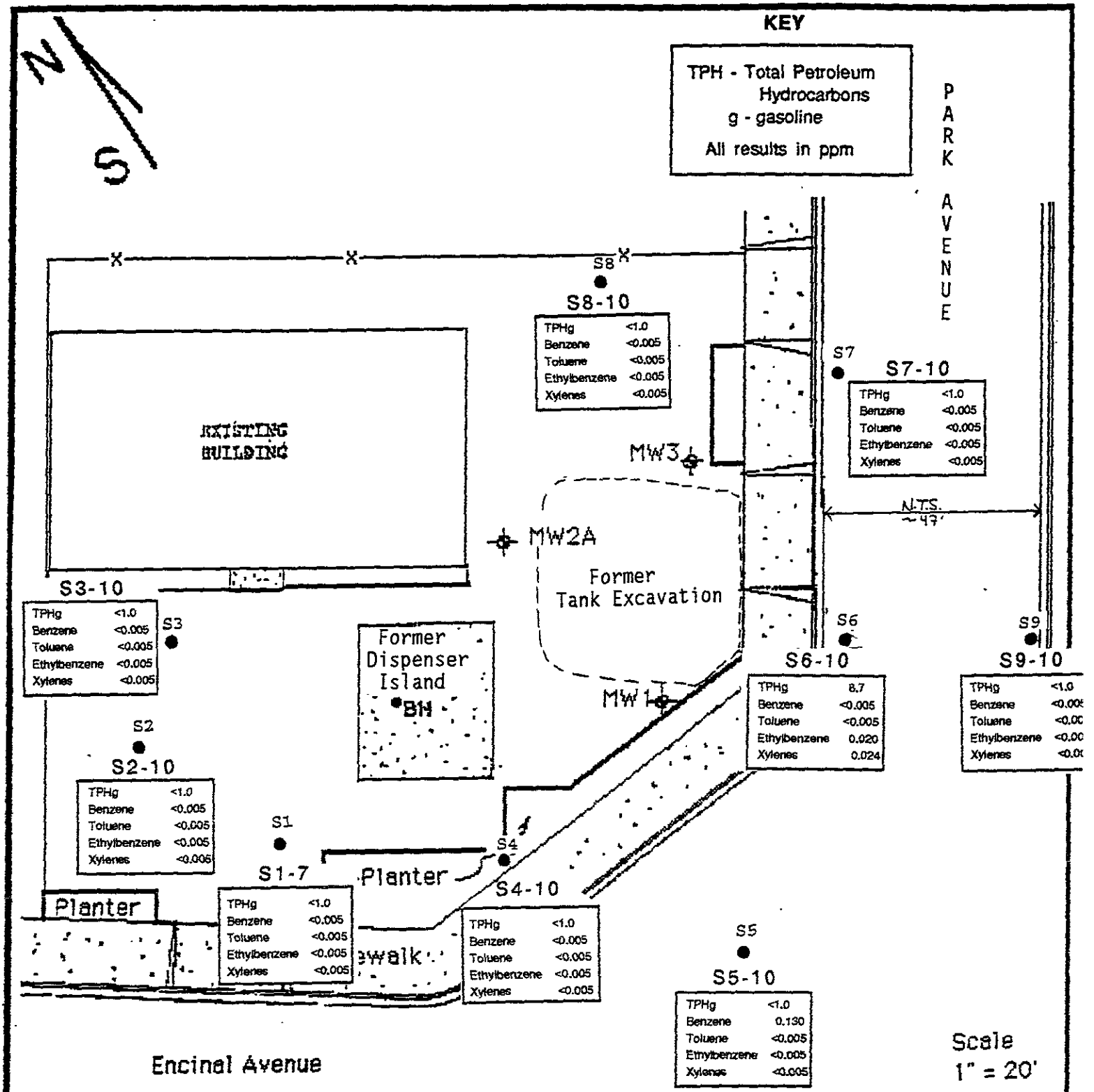


Source: Thomas Brothers

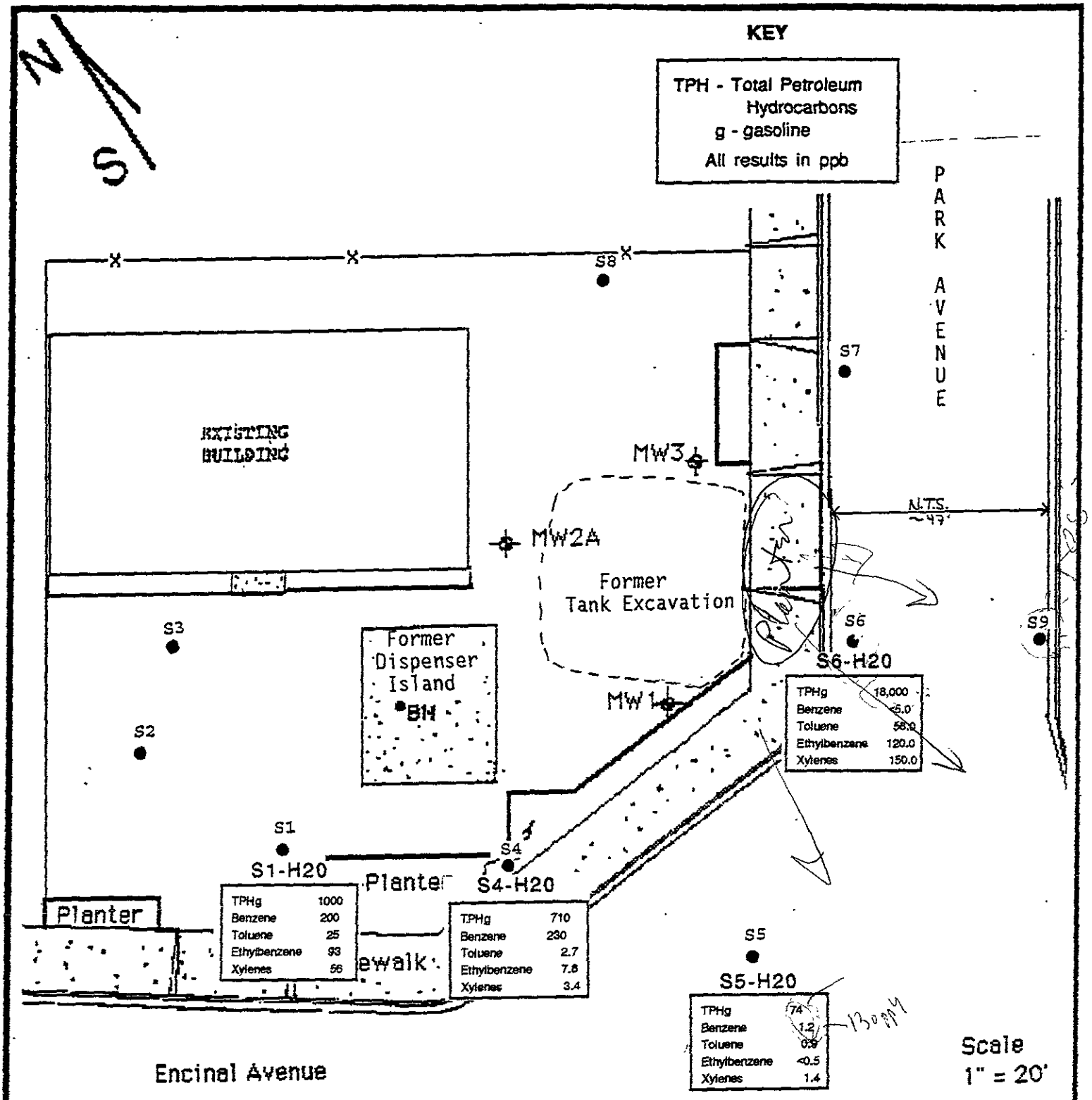
ACC Environmental Consultants, Inc. 1000 Atlantic Avenue, Suite 110 Alameda, California 94501		Location Map 2425 Encinal Avenue Alameda, California	
Project No. 6039-3	Date: 4/12/93	Dn by: MCK	Figure 1



ACC Environmental Consultants, Inc. 1000 Atlantic Avenue, Suite 110 Alameda, California 94501		Boring Locations Alameda Cellars 2425 Encinal Avenue Alameda, California	
Project No. 6039-4	Date: 6/11/93	Dn by: CM	Figure 2



ACC Environmental Consultants, Inc. 1000 Atlantic Avenue, Suite 110 Alameda, California 94501		Sample Results - Soil Alameda Cellars 2425 Encinal Avenue Alameda, California	
Project No. 6039-4	Date: 6/11/93	Dn by: CM	Figure 3



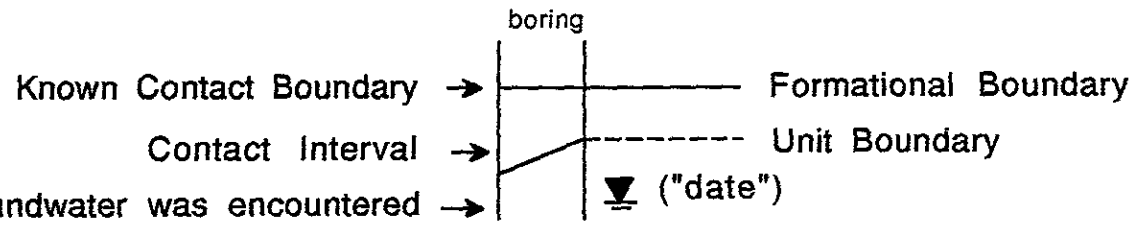
ACC Environmental Consultants, Inc. 1000 Atlantic Avenue, Suite 110 Alameda, California 94501		Sample Results - Water Alameda Cellars 2425 Encinal Avenue Alameda, California	
Project No. 6039-4	Date: 6/11/93	Dn by: CM	Figure 4

EXHIBIT A

UNIFIED SOIL CLASSIFICATION SYSTEM

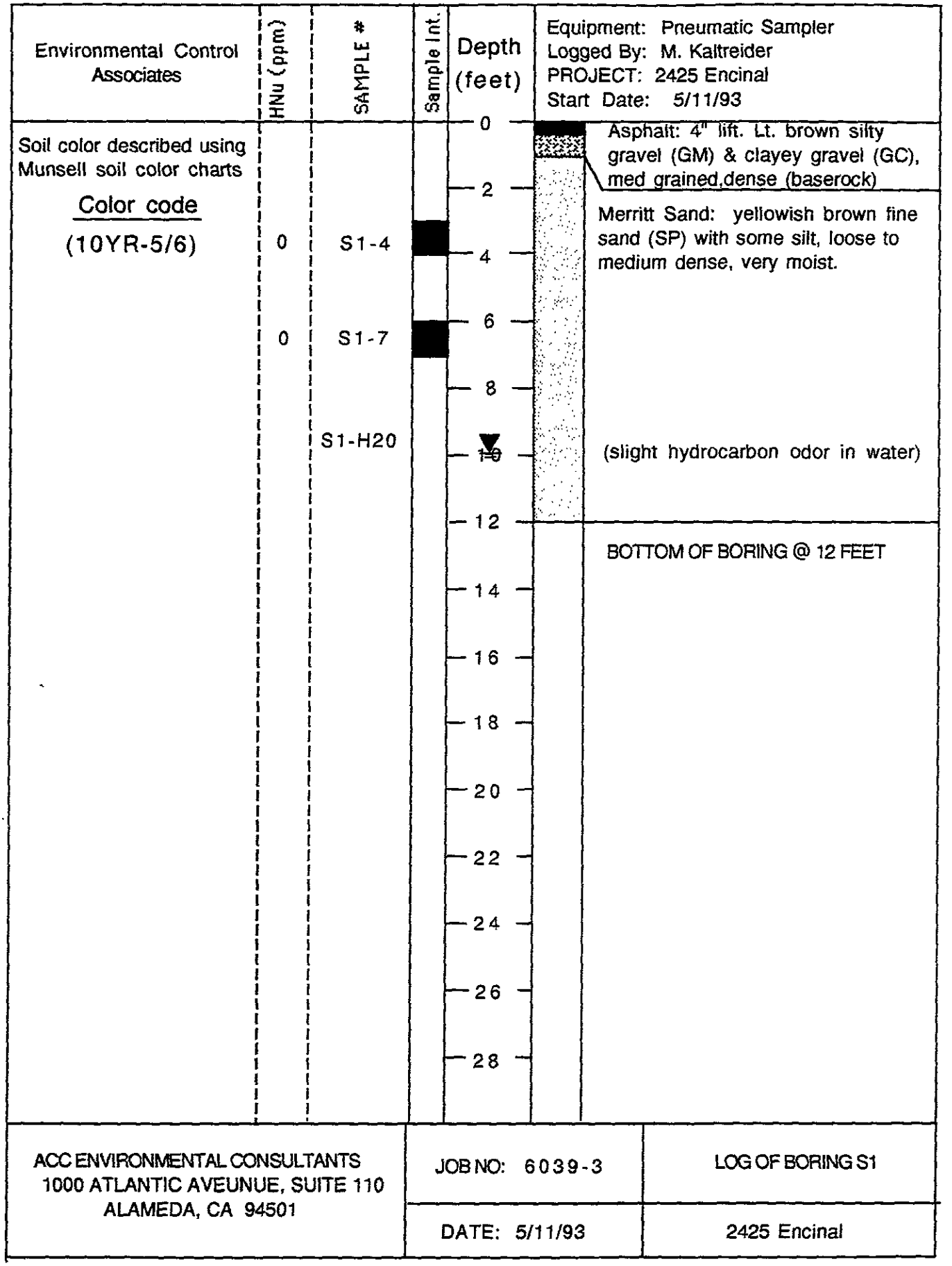
	MAJOR DIVISIONS				TYPICAL NAMES
COARSE GRAINED SOILS more than half > #200 sieve	GRAVELS more than half coarse fraction is larger than No. 4 sieve	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW		well graded gravels, gravel-sand mixtures
			GP		poorly graded gravels, gravel-sand mixtures
		GRAVELS WITH OVER 12% FINES	GM		silty gravels, poorly graded gravel-sand silt mixtures
			GC		clayey gravels, poorly graded gravel-sand clay mixtures
	SANDS more than half coarse fraction is smaller than No. 4 sieve	CLEAN SANDS WITH LITTLE OR NO FINES	SW		well graded sands, gravelly sands
			SP		poorly graded sands, gravelly sands
		SANDS WITH OVER 12% FINES	SM		silty sands, poorly graded sand-silt mixtures
			SC		clayey sands, poorly graded sand-clay mixtures
FINE GRAINED SOILS more than half < #200 sieve	SILTS AND CLAYS liquid limit less than 50		ML		inorg. silts and v.fine sands, rock flour silty or clayey sands, or clayey silts w/sl. plasticity
			CL		inorg. clays of low-med plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL		organic clays and organic silty clays of low plasticity
	SILTY AND CLAYS liquid limit greater than 50		MH		inorganic silty, micaceous or diatomacious fine sandy or silty soils, elastic silts
			CH		inorganic clays of high plasticity, fat clays
			OH		organic clays of medium to high plasticity organic silts
	HIGHLY ORGANIC SOILS		Pt		peat and other highly organic soils

LEGEND FOR BORING LOGS



ACC ENVIRONMENTAL CONSULTANTS 1000 ATLANTIC AVENUE, SUITE 110 ALAMEDA, CA 94501	Soil Classification System

Project No. 6039-2	Date: 6/9/93	DRN: MCK	2425 Encinal


Environmental Control Associates
HNu (ppm)
SAMPLE #
Sample Int.
Depth (feet)
Equipment: Pneumatic Sampler
Logged By: M. Kaltreider
PROJECT: 2425 Encinal
Start Date: 5/11/93
Soil color described using Munsell soil color charts
Color code
(10YR-5/6)
0
S1-4
0
S1-7
S1-H20
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
Asphalt: 4" lift. Lt. brown silty gravel (GM) & clayey gravel (GC), med grained,dense (baserock)
Merritt Sand: yellowish brown fine sand (SP) with some silt, loose to medium dense, very moist.
(slight hydrocarbon odor in water)
BOTTOM OF BORING @ 12 FEET
ACC ENVIRONMENTAL CONSULTANTS
1000 ATLANTIC AVEUNUE, SUITE 110
ALAMEDA, CA 94501
JOB NO: 6039-3
LOG OF BORING S1
DATE: 5/11/93
2425 Encinal

Environmental Control Associates	HNu (ppm)	SAMPLE #	Sample Int.	Depth (feet)	Equipment: Pneumatic Sampler Logged By: M. Kaltreider PROJECT: 2425 Encinal Start Date: 5/11/93
Soil color described using Munsell soil color charts Color code				0	Asphalt: 4" lift. Lt. brown silty gravel (GM) & clayey gravel (GC), med grained,dense (baserock)
				2	Merritt Sand: yellowish brown mottled red, very fine sand (SP) with some silt, loose, very moist.
(10YR-5/6)	0	S2-5		4	
				6	
				8	
(10YR/5/3)	0	S2-10 S2-H20		10 ▼	Same as above, saturated
				12	BOTTOM OF BORING @ 12 FEET
				14	
				16	
				18	
				20	
				22	
				24	
				26	
				28	

ACC ENVIRONMENTAL CONSULTANTS 1000 ATLANTIC AVEUNUE, SUITE 110 ALAMEDA, CA 94501	JOB NO: 6039-3	LOG OF BORING S2
	DATE: 5/11/93	2425 Encinal

Environmental Control Associates	HNu (ppm)	SAMPLE #	Sample Int.	Depth (feet)	Equipment: Pneumatic Sampler Logged By: M. Kaltreider PROJECT: 2425 Encinal Start Date: 5/11/93
Soil color described using Munsell soil color charts Color code				0	Asphalt: 4" lift. Lt. brown silty gravel (GM) & clayey gravel (GC), med grained,dense (baserock)
(10YR-5/4)	0	S3-5		2 4	Merritt Sand: yellowish brown silty sand (SM), medium dense to loose, very moist.
(10YR-5/3)	0	S3-10 S3-H20		6 8 10	Same as above, saturated
				12	BOTTOM OF BORING @ 12 FEET
				14 16 18 20 22 24 26 28	

ACC ENVIRONMENTAL CONSULTANTS 1000 ATLANTIC AVEUNUE, SUITE 110 ALAMEDA, CA 94501	JOB NO: 6039-3	LOG OF BORING S3
	DATE: 5/11/93	2425 Encinal

Environmental Control Associates	HNu (ppm)	SAMPLE #	Sample Int.	Depth (feet)	Equipment: Pneumatic Sampler Logged By: M. Kaltreider PROJECT: 2425 Encinal Start Date: 5/11/93
Soil color described using Munsell soil color charts Color code				0	Asphalt: 4" lift. Lt. brown silty gravel (GM) & clayey gravel (GC), med grained,dense (baserock)
(10YR-5/4)	0	S4-5		2 4	Merritt Sand: yellowish brown mottled red, silty sand (SM) to very fine sand (SP) with some silt, medium dense, very moist.
(5G-4/1)	0	S4-10 S4-H20		6 8 10	Dark greenish grey very fine sand (SM to SP) with some silt, medium dense, saturated. Very slight hydrocarbon odor in water.
				12	BOTTOM OF BORING @ 12 FEET
				14 16 18 20 22 24 26 28	

ACC ENVIRONMENTAL CONSULTANTS 1000 ATLANTIC AVEUNUE, SUITE 110 ALAMEDA, CA 94501	JOB NO: 6039-3	LOG OF BORING S4
	DATE: 5/11/93	2425 Encinal

Environmental Control Associates	HNu (ppm)	SAMPLE #	Sample Int.	Depth (feet)	Equipment: Pneumatic Sampler Logged By: M. Kaltreider PROJECT: 2425 Encinal Start Date: 5/11/93
Soil color described using Munsell soil color charts Color code				0	Asphalt: 4" lift. Lt. brown silty gravel (GM) & clayey gravel (GC), med grained,dense (baserock)
				2	
(10YR-4/4)	0	S5-5		4	Merritt Sand: dark yellowish brown/ mottled red clayey sand (SC) with trace silt, medium dense, very moist.
				6	
				8	
(5GY-4/1)	10	S5-10 S5-H20		10 ▼	Dark greenish grey very fine sand (SP) with some silt, loose, saturated, moderate hydrocarbon odor.
				12	BOTTOM OF BORING @ 12 FEET
				14	
				16	
				18	
				20	
				22	
				24	
				26	
				28	

ACC ENVIRONMENTAL CONSULTANTS 1000 ATLANTIC AVEUNUE, SUITE 110 ALAMEDA, CA 94501	JOB NO: 6039-3	LOG OF BORING S5
	DATE: 5/11/93	2425 Encinal

Environmental Control Associates	HNu (ppm)	SAMPLE #	Sample Int.	Depth (feet)	Equipment: Pneumatic Sampler Logged By: M. Kaltreider PROJECT: 2425 Encinal Start Date: 5/11/93
Soil color described using Munsell soil color charts Color code				0	Asphalt: 4" lift. Lt. brown silty gravel (GM) & clayey gravel (GC), med grained,dense (baserock)
(5GY-4/1)	10	S6-5		2 4	Merritt Sand: dark greenish grey silty sand (SM), medium dense, very moist, moderate hydrocarbon odor.
(5GY-4/1)	50	S6-10 S6-H20		6 8 10	Same as above, strong hydrocarbon odor, saturated.
				12	BOTTOM OF BORING @ 12 FEET
				14 16 18 20 22 24 26 28	

ACC ENVIRONMENTAL CONSULTANTS 1000 ATLANTIC AVEUNUE, SUITE 110 ALAMEDA, CA 94501	JOB NO: 6039-3	LOG OF BORING S6
	DATE: 5/11/93	2425 Encinal

Environmental Control Associates	HNu (ppm)	SAMPLE #	Sample Int.	Depth (feet)	Equipment: Pneumatic Sampler Logged By: M. Kaltreider PROJECT: 2425 Encinal Start Date: 5/11/93
Soil color described using Munsell soil color charts Color code				0	Asphalt: 4" lift. Lt. brown silty gravel (GM) & clayey gravel (GC), med grained,dense (baserock)
(10YR-4/5)	0	S7-5		2 4	Merritt Sand: yellowish brown silty sand (SM), medium dense to loose, very moist.
(10YR-4/5)	0	S7-10 S7-H20		6 8 ▼ 10	Same as above, saturated
				12	BOTTOM OF BORING @ 12 FEET
				14 16 18 20 22 24 26 28	

ACC ENVIRONMENTAL CONSULTANTS 1000 ATLANTIC AVEUNUE, SUITE 110 ALAMEDA, CA 94501	JOB NO: 6039-3	LOG OF BORING S7
	DATE: 5/11/93	2425 Encinal

Environmental Control Associates	HNu (ppm)	SAMPLE #	Sample Int.	Depth (feet)	Equipment: Pneumatic Sampler Logged By: M. Kaltreider PROJECT: 2425 Encinal Start Date: 5/11/93
Soil color described using Munsell soil color charts Color code				0	Asphalt: 4" lift. Lt. brown silty gravel (GM) & clayey gravel (GC), med grained,dense (baserock)
(10YR-3/4)	0	S8-5		2 4	Merritt Sand: dark yellowish brown mottled black silty sand (SM), medium dense, very moist.
(10YR-3/4)	0	S8-10 S8-H20		6 8 ▼ 10	Same as above, saturated
				12	BOTTOM OF BORING @ 12 FEET
				14 16 18 20 22 24 26 28	

ACC ENVIRONMENTAL CONSULTANTS 1000 ATLANTIC AVEUNUE, SUITE 110 ALAMEDA, CA 94501	JOB NO: 6039-3	LOG OF BORING S8
	DATE: 5/11/93	2425 Encinal

Environmental Control Associates	HNu (ppm)	SAMPLE #	Sample Int.	Depth (feet)	Equipment: Pneumatic Sampler Logged By: M. Kaltreider PROJECT: 2425 Encinal Start Date: 5/11/93
Soil color described using Munsell soil color charts Color code (10YR-3/3)	0	S9-5		0 2 4 6 8	Asphalt: 4" lift. Lt. brown silty gravel (GM) & clayey gravel (GC), med grained,dense (baserock) Merritt Sand: dark brown sand (SP), medium dense, very moist.
(10YR-4/5)	0	S9-10 S9-H20		10 ▼ 12	Yellowish brown silty sand (SM), medium dense, saturated BOTTOM OF BORING @ 12 FEET
				14 16 18 20 22 24 26 28	

ACC ENVIRONMENTAL CONSULTANTS 1000 ATLANTIC AVEUNUE, SUITE 110 ALAMEDA, CA 94501	JOB NO: 6039-3	LOG OF BORING S9
	DATE: 5/11/93	2425 Encinal

EXHIBIT B

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

June 4, 1993

ChromaLab File No.: 0593135
Submission #: 9305000331

ACC ENVIRONMENTAL CONSULTANTS

Attn: Misty Kaltreider

RE: Four water samples for Gasoline and BTEX analysis

Project Name: 2425 ENCINAL
Project Number: 6039-4
Date Sampled: May 12, 1993 Date Submitted: May 27, 1993
Date Analyzed: June 4, 1993

RESULTS:

Sample I.D.	Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Total Xylenes (µg/L)
B1-H2O	1000	200	25	93	56
B4-H2O	710	230	2.7	7.8	3.4
B5-H2O	74	1.2	0.9	N.D.	1.4
B6-H2O	18000	N.D.*	58	120	150
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	92%	104%	103%	103%	105%
DUP SPIKE RECOVERY	----	103%	105%	106%	108%
DETECTION LIMIT	50	0.5	0.5	0.5	0.5
METHOD OF ANALYSIS	5030/8015	602	602	602	602

*Detection limit = 5 µg/l due to dilution needed.

ChromaLab, Inc.

Jack Kelly
Analytical Chemist

Eric Tam
Laboratory Director

cc

2239 Omega Road,#1 • San Ramon, California 94583
(510) 831-1788 • Facsimile (510) 831-8798
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

May 20, 1993

ChromaLab File No.: 0593135
Submission #: 9305000152

ACC ENVIRONMENTAL CONSULTANTS

Attn: MISTY KALTREIDER

RE: Nine soil samples for Gasoline and BTEX analysis

Project Name: 2425 ENCINAL
Project Number: 6039-4
Date Sampled: May 12, 1993 Date Submitted: May 13, 1993
Date Analyzed: May 17, 1993

RESULTS:

Sample I.D.	Gasoline (mg/Kg)	Benzene (µg/Kg)	Toluene (µg/Kg)	Ethyl Benzene (µg/Kg)	Total Xylenes (µg/Kg)
S1-7	N.D.	N.D.	N.D.	N.D.	N.D.
S2-10	N.D.	N.D.	N.D.	N.D.	N.D.
S3-10	N.D.	N.D.	N.D.	N.D.	N.D.
S4-10	N.D.	N.D.	N.D.	N.D.	N.D.
S5-10	N.D.	130	N.D.	N.D.	N.D.
S6-10	8.7	N.D.	N.D.	20	24
S7-10	N.D.	N.D.	N.D.	N.D.	N.D.
S8-10	N.D.	N.D.	N.D.	N.D.	N.D.
S9-10	N.D.	N.D.	N.D.	N.D.	N.D.
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	96%	94%	96%	100%	97%
DUP SPIKE RECOVERY	---	102%	101%	104%	103%
DETECTION LIMIT	1.0	5.0	5.0	5.0	5.0
METHOD OF ANALYSIS	5030/8015	8020	8020	8020	8020

ChromaLab, Inc.

Billy Thach
Analytical Chemist

Eric Tam
Laboratory Director

do

2239 Omega Road,#1 • San Ramon, California 94583
(510) 831-1788 • Facsimile (510) 831-8798
Federal ID #68-0140157

CHROMALAB, INC.

DOHS 1094

CHROMALAB FILE # 593135
ORDER # 11682

4583

93-5-152-/6552-6578

Chain of Custody

DATE 5/13/93 PAGE 1 OF 3

PROJ. MGR. Misty Kaltreider
COMPANY ACC Environmental
ADDRESS 1000 Atlantic Ave. Suit 110
Alameda, CA 94558

SAMPLERS (SIGNATURE) Misty Kaltreider

(PHONE NO.) (510) 522-8182

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)			HOLD	NUMBER OF CONTAINERS
S1-4'	5/12/93		Soil																					X	1
S1-7'						X																			1
S2-5'																								X	1
S2-10'						X																			1
S3-5'																								X	1
S3-10'						X																			1
S4-5'																								X	1
S4-10'						X																			1
S5-5'																								X	1

PROJECT INFORMATION

PROJECT NAME: 2425 Encinal
PROJECT NUMBER: 6039-4
P.O. # 6039-4
TAT: STANDARD 5-DAY | 24 | 48 | 72 | OTHER

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	9
HEAD SPACE	-
REC'D GOOD CONDITION/COLD	Y
CONFORMS TO RECORD	Y

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) Misty Kaltreider (TIME) 5/13/93	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) Misty Kaltreider (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY) ACC Environmental	(COMPANY)	(COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3.**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 16:00 (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) J. MONETTE 5.13.93 (DATE)
(COMPANY)	(COMPANY)	(COMPANY) CHROMALAB

QXB

CHROMALAB, INC.

DOHS 1094

2239 Omega Road, #1 • San Ramon, California 94583
510/831-1788 • Facsimile 510/831-8798

Chain of Custody

DATE 5/13/93 PAGE 2 OF 3

PROJ. MGR. Misty Kaltreider
COMPANY ACC Environmental
ADDRESS 1000 Atlantic Ave. Sui 110
Alameda, CA 94558

SAMPLERS (SIGNATURE) Misty Kaltreider (510) 522-8188 (PHONE NO.)

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)			HOLD	NUMBER OF CONTAINERS
S5-10	5/12/93		Soil			X																			1
S6-5'																								X	1
S6-10						X																			1
S7-5'																								X	1
S7-10'						X																			1
S8-5'																								X	1
S8-10						X																			1
S9-5																								X	1
S9-10						X																			1

PROJECT INFORMATION

PROJECT NAME: 2425 Encinal
PROJECT NUMBER: 6039-4
P.O. # 6039-4

TAT: STANDARD 5-DAY | 24 | 48 | 72 | OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	9
HEAD SPACE	—
REC'D GOOD CONDITION/COLD	Y
CONFORMS TO RECORD	Y

RELINQUISHED BY 1.
Misty Kaltreider (SIGNATURE) (TIME)
Misty Kaltreider 5/13/93 (PRINTED NAME) (DATE)
ACC Environmental (COMPANY)

RELINQUISHED BY 2.
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RELINQUISHED BY 3.
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RECEIVED BY 1.
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RECEIVED BY 2.
(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)
(COMPANY)

RECEIVED BY (LABORATORY) 3.
Gene Wyatt 16:00 (SIGNATURE) (TIME)
T. MOUETTE 5-13-93 (PRINTED NAME) (DATE)
CHROMALAB (LAB)

CHROMALAB, INC.

DOHS 1094

2239 Omega Road, #1 • San Ramon, California 94583
510/831-1788 • Facsimile 510/831-8798

Chain of Custody

DATE 5/13/93 PAGE 3 OF 3

PROJ. MGR. Misty Kaltreider
COMPANY ACC Environmental
ADDRESS 1000 Atlantic Ave., Suite 110
Alameda, CA, 94558

SAMPLERS (SIGNATURE) Misty Kaltreider (PHONE NO.) (510) 522-8188

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)		METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)			Hold	NUMBER OF CONTAINERS
S1-H2O	5/12/93		Water			X																		X	3
S2-H2O																								X	3
S3-H2O																								X	3
S4-H2O						X																		X	3
S5-H2O						X																		X	3
S6-H2O						X																		X	3
S7-H2O																								X	3
S8-H2O																								X	3
S9-H2O																								X	3

PROJECT INFORMATION

PROJECT NAME: 2425 Encinal
PROJECT NUMBER: 10039-4
P.O. # 10039-4

TAT: STANDARD 5-DAY (Hold) | 24 | 48 | 72 | OTHER

SPECIAL INSTRUCTIONS/COMMENTS:

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	27
HEAD SPACE	NO
REC'D GOOD CONDITION/COLD	Y
CONFORMS TO RECORD	Y

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
Misty Kaltreider (SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
Misty Kaltreider 5/13/93 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
ACC Environmental (COMPANY)	(COMPANY)	(COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3.**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	16:00 (SIGNATURE) (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	T. MONETTE, 5.13.93 (PRINTED NAME) (DATE)
(COMPANY)	(COMPANY)	Chromalab (LAB)