



58 APR 13 1993

March 31, 1993

Ms. Juliet Shin
Alameda County Health Care Services Agency
Department of Environmental Health
UST Local Oversight Program
80 Swan Way, Room 200
Oakland, CA 94621

RE: Phase II Subsurface Investigation
2425 Encinal, Alameda, CA
STID 3952

Dear Ms. Shin:

Enclosed, please find the workplan for Phase II Subsurface Investigation to further delineate the extent of impacted soil and groundwater at the above referenced site.

If you have any question regarding this workplan, please do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script, reading 'Misty Kaltreider', is written over the typed name.

Misty Kaltreider
Geologist

cc: Mr. Richard Hiett - Regional Water Quality Control Board
Mr. Steve Chrissanthos - Alameda Cellars

Encl.

PHASE II SUBSURFACE INVESTIGATION
ALAMEDA CELLARS
2425 ENCINAL AVENUE
ALAMEDA, CALIFORNIA

Prepared for:

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

March 1993

Prepared by:


Misty Kaltreider
Geologist

Reviewed by:



Elizabeth Herbert, RG
Registered Geologist



TABLE OF CONTENTS

	Page
1.0 Introduction.....	1
2.0 Background.....	1
3.0 Scope of Work.....	1
4.0 Drilling	2
5.0 Health and Safety Plan.....	3
6.0 Technical Reports.....	3

FIGURES

- Figure 1: Vicinity Map
- Figure 2: Site Plan

APPENDICES

- Appendix A: Soil Sampling in Boreholes and During Construction of Monitoring Wells
- Appendix B: Site Specific Health and Safety Plan

**PHASE II SUBSURFACE INVESTIGATION
ALAMEDA CELLARS - 2425 ENCINAL AVENUE**

1.0 INTRODUCTION

ACC Environmental Consultants, Inc. ("ACC") has prepared this work plan for Phase II subsurface investigation for 2425 Encinal Avenue, Alameda, California (Figure 1). The property is owned by Alameda Cellars. The scope and purpose of the project is to further evaluate the extent of impacted soil and groundwater by drilling using a pneumatic precision sampling tool.

2.0 BACKGROUND

In March 1990, two 10,000 gallon underground gasoline storage tanks were removed from 2425 Encinal Avenue. Up to 1,500 parts per million (ppm) Total Petroleum Hydrocarbons as gasoline (TPHg) were reported in samples collected from the walls of the tank excavation.

ACC Environmental Consultants Inc. conducted a preliminary site investigation in December of 1992 including installation of three monitoring wells. Analysis of soil samples collected from a boring drilled on-site indicated up to 1,365 ppm of TPHg and 18.9 ppm of benzene. Analysis of groundwater samples collected from the on-site wells indicated up to 5,680 parts per billion (ppb) of TPHg and 1,560 ppb benzene.

Per request of Alameda County Health Care Services - Hazardous Materials Division, further delineation of the soil and groundwater impacted with hydrocarbons is requested.

3.0 SCOPE OF WORK

ACC will drill six to eight borings both on and off-site using a pneumatic precision sampling tool. The borings will be drilled in locations on-site and in adjacent street areas which are anticipated to provide the most information on lateral and vertical extent of contamination. Figure 2 shows the proposed boring locations.

During drilling, undisturbed soil samples will be obtained for chemical analysis and geotechnical classification at five-foot intervals, distinct lithologic changes and at the soil/groundwater interface. Sampling will begin at five feet below grade and continue to the bottom of the boring (see Appendix A, "Soil Sampling in Boreholes and During Construction of Monitoring Wells").

Soil samples will be submitted to a CAL-EPA certified accredited analytical testing laboratory for analysis of Total Petroleum Hydrocarbons as gasoline using EPA Modified Test Method 8015, and benzene, toluene, ethylbenzene and total xylenes (BTEX) by EPA Test Method 8020.

4.0 DRILLING

Drilling permits will be obtained from the Alameda County Water Conservation and Flood Control District - Zone 7 prior to drilling and sampling activities. The locations of the proposed borings will be marked with white paint. The District, Alameda County Health Department-Environmental Health Division, and Underground Service Alert (USA) will be notified at least 48 hours prior to commencing work.

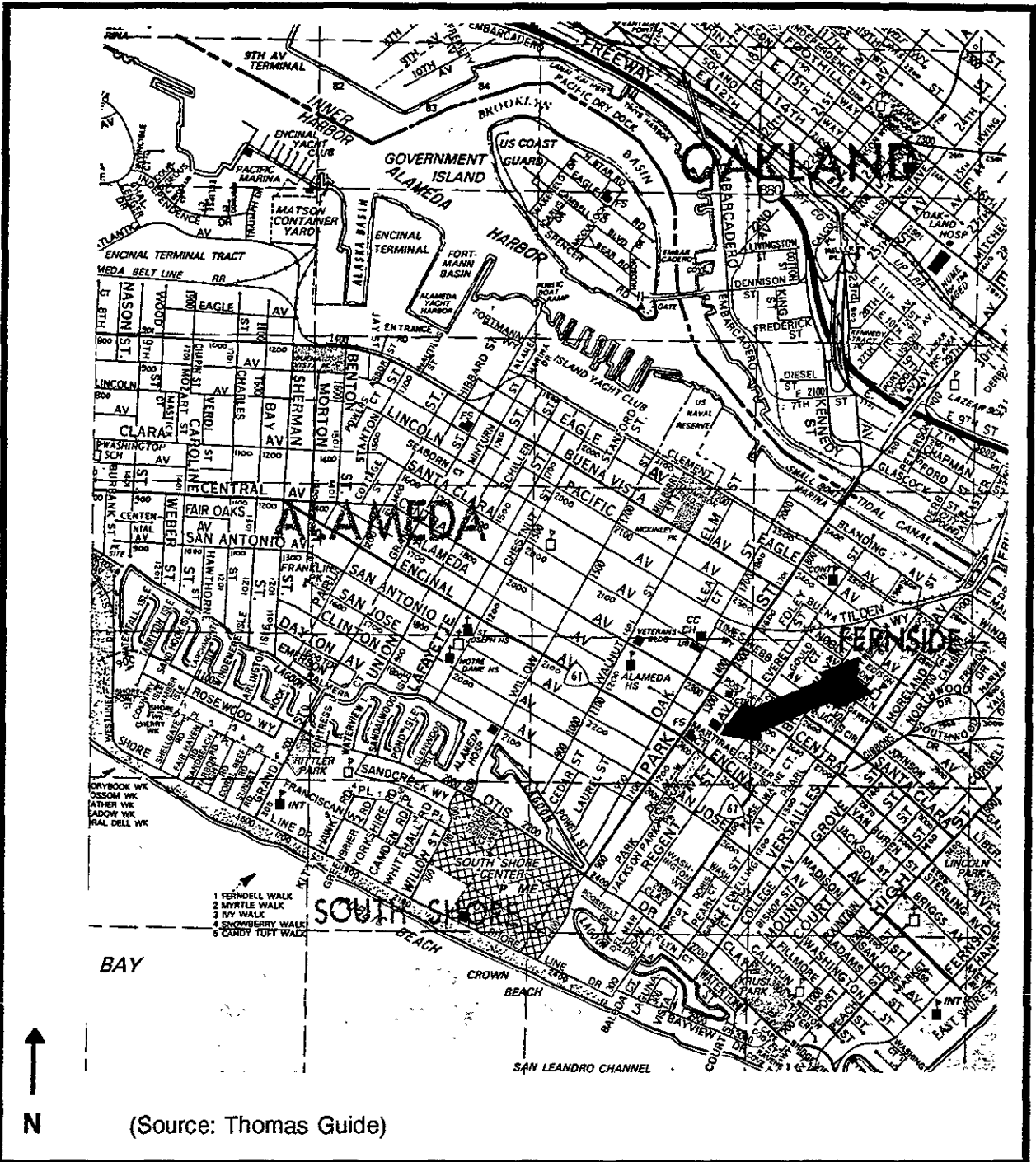
At least two soil samples collected from each boring will be analyzed. During drilling, cuttings will be placed in capped drums, labeled and left on-site pending the analytical results.

5.0 HEALTH AND SAFETY PLAN

A site health and safety plan which encompasses the proposed work at the site and complies with the requirements of 29 CFR Part 1910.120 is presented in Appendix B. The plan will be present on-site during drilling operations and will be stored at the office of ACC.

6.0 TECHNICAL REPORTS

A technical report discussing the drilling and sampling event at the site will be submitted to Alameda Cellars. Following review and acknowledgment, the report will be sent to Alameda County Health Service Agency and the Regional Water Quality Control Board. Additional reports detailing groundwater monitoring activities of the on-site wells and sampling results will be submitted on a quarterly basis thereafter.



ACC Environmental Consultants, Inc.
1000 Atlantic Avenue, Suite 110
Alameda, California 94501

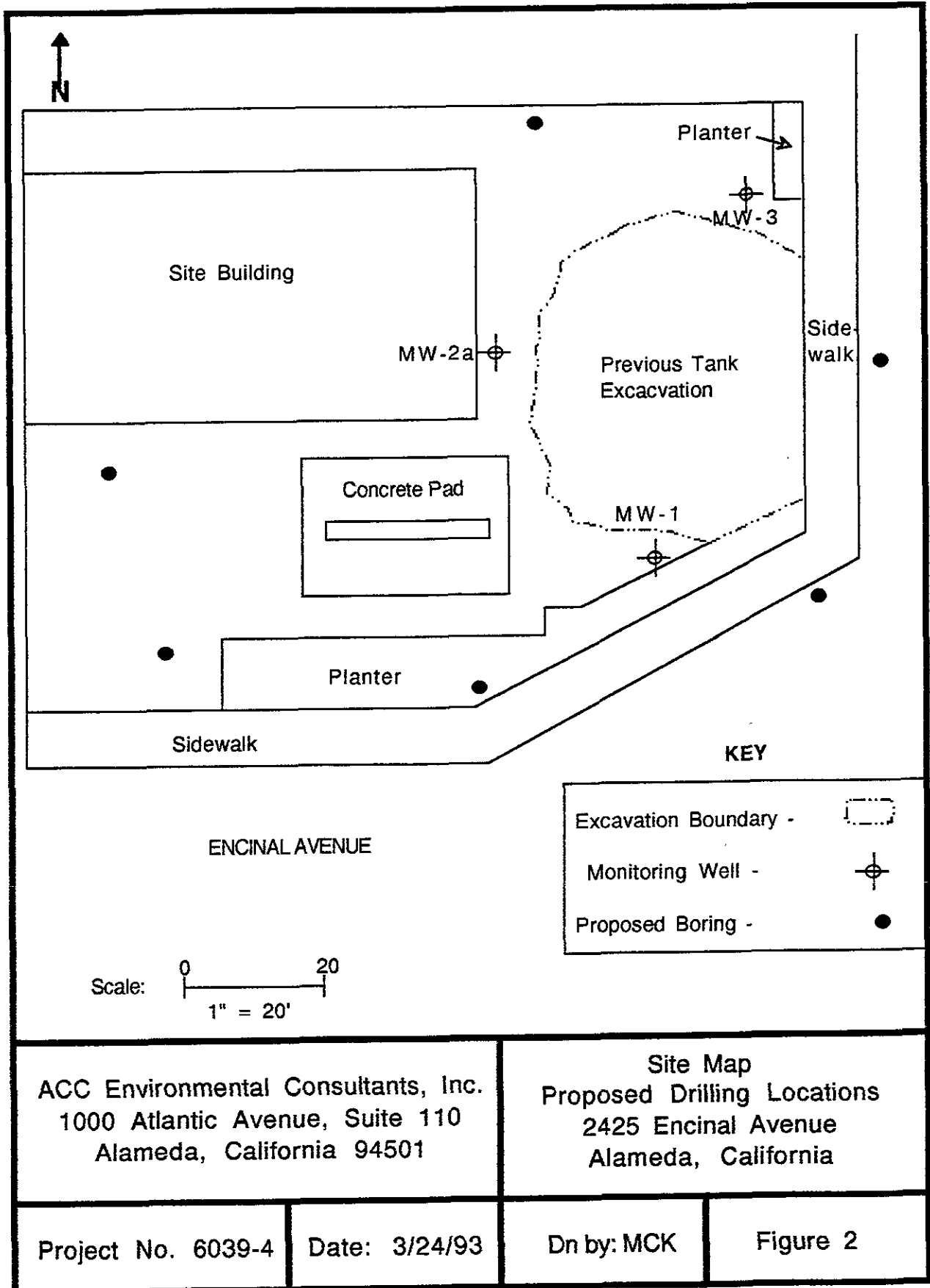
Location Map
2425 Encinal Avenue
Alameda, California

Project No. 6039-4

Date: 3/04/93

Dn by: MRD

Figure 1



ACC Environmental Consultants, Inc.
 1000 Atlantic Avenue, Suite 110
 Alameda, California 94501

Site Map
 Proposed Drilling Locations
 2425 Encinal Avenue
 Alameda, California

Project No. 6039-4

Date: 3/24/93

Dn by: MCK

Figure 2

APPENDIX A

**SOIL SAMPLING IN BOREHOLES AND DURING CONSTRUCTION OF
MONITORING WELLS**

SOIL SAMPLING IN BOREHOLES AND DURING CONSTRUCTION OF MONITORING WELLS

U.S. Environmental Protection Agency standards serve as the foundation for all field sampling operations performed by ACC. EPA SW 846 is the primary publication from which procedures are derived. While some aspects of field and laboratory work may be delegated to the CAL EPA-Department of Toxic Substances Control (DTSC), the Bay Area Regional Water Quality Control Board, and the Health Services Agency - Department of Environmental Health establish the general and specific criteria for sampling.

SAMPLE INTERVALS

Undisturbed soil samples will be obtained for chemical analysis and geotechnical classification at five-foot intervals or at distinct lithologic changes, beginning at five feet below grade.

COLLECTION DEVICES

Samples will be collected using a 2-inch or 2.5-inch inside diameter Modified California Split Spoon Sampler containing three six-inch-long brass tubes or two three-inch-long tubes between two six-inch-long brass tubes. The sample collection device and tubes will be decontaminated before and after each use by steam cleaning or by an Alconox solution wash, tap water rinse and deionized water rinse. The sampler will be driven ahead of the auger using a 140-pound drop hammer. The average blow counts required to drive the sampler the last 12 inches will be recorded on the boring logs.

PRESERVATION AND HANDLING

After collection, sample tubes will be labeled, sealed at each end with Teflon sheeting and PVC end caps, placed in ziplock bags and stored in an ice filled cooler to be delivered under chain-of-custody to a State-certified laboratory by the next business day.

SOILS CLASSIFICATION

Soil exposed at the ends of each brass tube will be examined by a geologist for obvious signs of contamination and classified according to the Unified Soil Classification System. These observations will be recorded in the boring logs.

Selection of samples for laboratory analysis will be based primarily on headspace readings using a Photo-ionization device (PID) and position within the boring. In general, samples with headspace readings over 50 ppm or that have visual or olfactory indications of contamination will be submitted for analysis. One sample will also be selected from one or two sampling intervals below the apparent lower limit of contamination to obtain a "zero line" value. In addition, the sample closest to the depth of the storage tank invert will be submitted for analysis. If the water table is above the tank invert, the sample closest to the water table will

be selected.

SAMPLE LABELING AND CHAIN OF CUSTODY

Samples selected for analysis will be labeled with self-adhesive, pre-printed labels indicating project name (or number), sample number, boring/well number, sample depth, date and time of sample collection, and required analyses. The same information will be recorded on the chain of custody.

APPENDIX B

**SITE SPECIFIC
HEALTH AND SAFETY PLAN**

Physical Hazards:

Overhead [] Confined Space [] Below Grade [] Trip/ Fall [X]

Puncture [] Burn [] Cut [] Splash [] Noise []

Other: Hazards with Drilling

Site History/Description and Unusual Features:

Drilling and Sampling within the Vicinity of former Tank Excavations.

Locations of Chemicals/Waste: In soil

Estimated Volume of Chemicals/Waste: Unknown

Site Currently in Operation: Yes [X] No []

C. HAZARD EVALUATION

List and Evaluate Hazards By Task (ie. sampling/ drilling)

Physical Hazard Evaluation Anticipated Level of Protection

Task 1. Drilling D

Task 2. Sampling D

Task 3.

Task 4.

Modifications: _____

Chemical Hazard Evaluation:

Compound	PEL/TWA	Route of Exposure	Acute Symptoms	Odor Threshold/Desc.
gasoline	300 ppm	inhalation dermal, ingestion	skin blisters, nausea, central nervous system	Characteristic odor disorder

D. SITE SAFETY AND WORK PLAN

Site Control: Attach map of the site.

Perimeter identified? [Y] Site secured? [Y] Work areas identified? [Y]

Zone(s) of contamination identified? [N]

Air Monitoring:

Contaminant of Interest	Type of Sample	Monitoring Equipment	Frequency of Sampling
Gasoline	air	HNu	Continuous - as needed

Decontamination procedures and solutions:

Tri-sodium phosphate and water, triple rinsed

Special Site Equipment: (Sanitary facilities, lighting, etc)

None anticipated

Site Entry Procedures and Special Considerations

Underground Services Alert (USA) notified to avoid underground utilities

Work Limitations (time of day, weather conditions, etc.)

None anticipated

General Spill Control, if applicable: **N/A**

Investigation-Derived Material Disposal (expendables, cuttings, etc.)

Drum cuttings and rinsate water in covered, labeled 55-gallon DOT certified drums.

Sample Handling Procedures:

Soil samples collected in brass tubes, teflon tape and plastic end caps taped to each end. All samples will be placed in ice-filled coolers until pick-up by laboratory.

E. EMERGENCY INFORMATION

Ambulance **911**

Hospital Emergency Room **(510) 523-4357**

Directions to Hospital (attach map) **Alameda Hospital -
2070 Clinton Avenue.**

Poison Control Center **911**

Police **911**

Fire Department **911**

Laboratory **ChromaLab Analytical**

UPS/Fed. Express **N/A**

Client Contact **Mr. Steve Chrissanthos (707) 522-2145**

Site Contact **Mr. Steve Chrissanthos (707) 522-2145**

SITE RESOURCES

Water Supply Source **On-site**

Telephone **On-site**

Cellular Phone, if available ---

Other ---

EQUIPMENT CHECKLIST

<u>Protective Gear</u>	<u>Quantity</u>	<u>Instrumentation</u>	<u>Quantity</u>
Respirator	[]	O2/Explosimeter	[]
Cartridges(type)	[]	PID (HNU)	[1]
Protective Suit type: Tyvek	[1]	Draeger Pump (tubes)	[]
Gloves (pr) type: Nitrile	[1]	Heat Stress Monitor	[]
Steel Toed Boots	[1]	Personal Sampling Pumps	[]

Hard Hat	[1]	First Aid Equipment	Quantity
Safety Glasses	[1]	-----	-----
Ear Plugs	[1]	First Aid Kit	[]
		Portable eye wash	[]
		Blood pressure monitor	[]
		Fire extinguisher	[]

<u>Miscellaneous</u>	<u>Quantity</u>	<u>Sampling Equipment</u>	<u>Quantity</u>
Surveyor's tape	[1]	Liter bottles	[6]
Fiberglass tape	[]	Half gallon bottles	[]
Rope/string (100')	[3]	VOA bottles	[6]
Surveying Flags	[]	String	[]
Camera/film	[1]	Hand bailers	[3]
Banner tape	[]	Spoons	[]
Coolers	[1]	Personal sampling pump supplies	[]
Teflon tape (roll)	[1]	Shovel	[]
Bottle labels (set)	[1]		
Baggies (set)	[1]		
Custody seals	[]		
Chain of custody forms	[1]		
Federal Express forms	[]		
Bubble wrap	[]		
Trash bags	[1]		
Paper towels (roll)	[1]		
Detergent/TSP (box)	[1]		
Buckets	[3]		
Brushes	[2]		

SITE SAFETY REVIEW

General Information

Date _____ Time _____ Project No. **6039-4**

Site **Alameda Cellars**

Location **2425 Encinal Avenue, Alameda, California**

Client Contact **Mr. Steve Chrissanthos (707) 522-2145**

Objectives **Soil Borings**

Types of Chemicals Anticipated **Gasoline**

Topics Discussed

Physical Hazards **Typical Hazards associated with drilling**

Chemical Hazards **Gasoline**

Personal Protection **Level D, modified as required**

Decontamination **Equipment to be decontaminated after each boring.
Rinsate water will be drummed**

Special Site Considerations **None anticipated**

ATTENDEES

Name Printed

Signature



- 1 STORYBOOK WK
- 2 SLOSSOM WK
- 3 HEATHER WK
- 4 MEADOW WK
- 5 CORRAL DELL WK

- 1 FERDELL WALK
- 2 MYRTLE WALK
- 3 DRY WALK
- 4 SNOWBERRY WALK
- 5 CANDY TUFT WALK

HOSPITAL LOCATION MAP