



**Harlan  
Tait  
Associates**

*Consulting Engineers and Geologists*

June 24, 1992  
Project No. 653.052

Ms. Susan Hugo  
Alameda County Health Agency  
Department of Environmental Health  
80 Swan Way, Room 200  
Oakland, CA 94621

SUBJECT: CONTAMINATION ASSESSMENT WORKPLAN  
ALBANY LIBRARY AND COMMUNITY CENTER  
1247 Marin Avenue, Albany, California

Dear Ms. Hugo:

On behalf of the City of Albany, Harlan Tait Associates (HTA) is pleased to submit for your review and approval the enclosed Contamination Assessment Workplan for evaluation of soil and groundwater contamination at the subject site in Albany, California. This document is being submitted because discolored and odorous soil was encountered in the area of an old elevator sump during demolition of an old hospital building at the subject site. Upon receipt of your written approval, HTA will implement the Workplan.

The City of Albany is very interested in defining and resolving any problem at the site expeditiously. The City plans on awarding a contract for construction of the library and community center during the first half of August 1992, and would like to have any soil contamination at the site remediated by then.

Conclusions and recommendations for remediation will be provided in the preliminary investigation report submitted at the completion of the Workplan. However, at this time the City envisions that if no groundwater contamination is found and soil contamination is less than 100 ppm TPH, the site soils would not be removed from the site, but aerated until the start of building construction. If soil concentrations range between 100 and about 1000 ppm, then the affected soils would be removed from the site and disposed of at a Class 3 Landfill or, if feasible, bio-remediated on-site. If soil concentrations are greater than about 1000 ppm, then the soil would be taken to a Class 1 Landfill or to a disposal company for treatment.

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If you have any questions or require additional information, please call the undersigned or Jason Baker at the City of Albany, (510) 528-5760. Your prompt review of the Workplan would be appreciated.

Very truly yours,

HARLAN TAIT ASSOCIATES



David H. Connell  
Civil Engineer 24634  
Exp. 12/31/93

Enc: Contamination Assessment Workplan

cc: City of Albany, ATT: Jason Baker

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5760

dhc:gb

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**CONTAMINATION ASSESSMENT WORKPLAN**  
**ALBANY LIBRARY AND COMMUNITY CENTER**

I. INTRODUCTION

This document presents the site contamination workplan for evaluation of soil and groundwater contamination at the planned library and community center site. The site is located at 1247 Marin Avenue between Masonic and Evelyn Avenues. The site plan and vicinity map are on Figure 1. The owner of the site is the City of Albany. The contact person for the City is Jason Baker, 1000 San Pablo Avenue, Albany, California, (510) 528-5760. The lead Investigating Agency is the Alameda County Health Agency, Department of Environmental Health.

During demolition of the old Alta Bates Albany Hospital building during the first part of June 1992, a sump and cylinder for an old hydraulic elevator were removed. During this process, soil contamination from what appears to be hydraulic fluid was found in the soils below the basement slab in the area of the sump. The location of the sump is shown on Figure 1.

The purpose of this study is to evaluate the vertical and lateral extent of any soil contamination in the sump area and test a groundwater sample to evaluate if the groundwater has been affected. An underground heating oil tank was removed from the site on June 17, 1992, under the observation of Larry Seto of Environmental Health. The location of the tank is shown on Figure 1. Two discrete soil samples from below the tank and one composite sample of soil removed from below the tank were obtained for testing by SEMCO, the tank remover. The test results are not yet available on these samples. Further studies in the tank area are not planned at this time.

A new library and community center building is planned at the site. In the old sump area, a 15-foot-deep basement will be constructed. This will require excavation of an additional 7 feet of soil for the subgrade.

## II. SITE DESCRIPTION

An old hospital building that was used by the City of Albany between 1988 and 1991 as a community center was demolished and all foundations including basement walls and slabs were removed from the site in early June 1992. The site is presently bare and left as-is after demolition. The locations of the removed elevator sump and tank are shown on Figure 1.

The site is approximately 200 feet square and is bordered on three sides by city streets and on the north side by residences. An old irrigation well is located on the site as shown on Figure 1. The City of Albany is in the process of getting a permit to abandon the well from the Alameda County Flood Control District, Zone 7.

## III. PHYSICAL SETTING

The site is located on an alluvial plane east of the San Francisco Bay and west of the Berkeley Hills. The site is underlain by older alluvial fan deposits derived from the hills to the east and the deposits are believed to be in excess of 200 feet thick. The ground surface slopes gently to the west and the site is at about Elevation 60 feet (MSL). A geologic map of the site area is shown on Figure 2.

Based on a geotechnical investigation performed by Harlan Tait Associates for the planned Library and Community Center dated January 30, 1991, the site has a surficial layer of about 3 to 4 feet of dark brown silty clay underlain by brown gravelly sandy clay with zones of clayey gravel to depths exceeding 22 feet. Shallow groundwater was measured at depths of about 17 to 18 feet during the investigation.

The uppermost groundwater gradient generally flows to the west towards the San Francisco Bay. Groundwater is estimated to vary seasonally at depths between 10 and 20 feet. The well on the site contains silt and a groundwater level could not be measured accurately. The nearest drainage channel is Codornices Creek located about 2000 feet south of the site.

#### IV. PREVIOUS SOIL SAMPLING AND ANALYSIS

One near-surface soil sample was obtained from the basement subgrade in the area of the elevator sump by SEMCO during the time of the tank removal. The sample was tested for TPH as gasoline and diesel and BTEX. TPH as gas was not detected, TPH as diesel was 140 mg/kg, benzene and ethylbenzene were not detected, and toluene and xylenes were detected at 4 and 12 ug/kg, respectively. The laboratory results are attached.

Two soil samples from beneath the removed heating oil tank and one composite sample were obtained and submitted for TPH (D) and BTEX testing. The results are not available as of this date. During tank removal, a small amount of soil with an odor and discoloration was observed immediately below the tank. This soil was excavated and relocated on the site and covered with plastic. Disposal method will be determined when test results are available.

#### V. SOIL AND GROUNDWATER CONTAMINATION EVALUATION

##### A. Soil Sampling

On about a 10 foot square pattern centered around the old basement sump and elevator hydraulic cylinder, obtain soil samples for analytical testing at various depths using a backhoe and hand auger. Using a PID tester (HNU 101), measure the hydrocarbon levels in each soil sample. The sampling will extend to a depth of no detectable hydrocarbons using the PID, and no observations of odor or discoloration or to the water table. Spoils from the sampling will be left on-site adjacent to sample location.

Samples will be collected using a slide hammer fitted with a core barrel containing a minimum 1-inch diameter by 3-inch long brass liner. Samples will be collected after hand augering to the desired depth or after removing approximately 3 inches of soil from the backhoe surface area where the sample is to be taken using a small spade. The core barrel and liner will then be driven sufficiently so that no headspace is present in the liner when the core barrel is removed. Following removal of the liner, both ends of the liner will be covered with aluminum foil and plastic end caps, sealed with tape, labeled, logged on a chain-of-custody

form, and placed in an ice chest to be kept at 4°C during transport to the analytical laboratory.

Prior to initial and between subsequent use, all soil and groundwater sampling equipment will be field decontaminated by washing in a mixture of Alconox and clear water, rinsing in clear water, rinsing in distilled water, and being allowed to air dry.

**B. Groundwater Sampling**

In one of the holes or pits excavated for soil sampling in the sump area, obtain a grab sample of groundwater. The sample will be collected utilizing a teflon bailer. The sample will be transferred to sample containers by filling completely with no headspace. Following transference, each sample container will be labeled, logged on a chain-of-custody form, and placed in an ice chest to be kept at 4°C during transport to the analytical laboratory.

**C. Analytical Testing**

Based on the reading of the PID and observations for odor and discoloration of each sample, selected samples will be tested for the following:

Total Petroleum Hydrocarbons (TPH) as diesel (EPA 8015)

Oil and Grease (EPA 413, SM5520F)

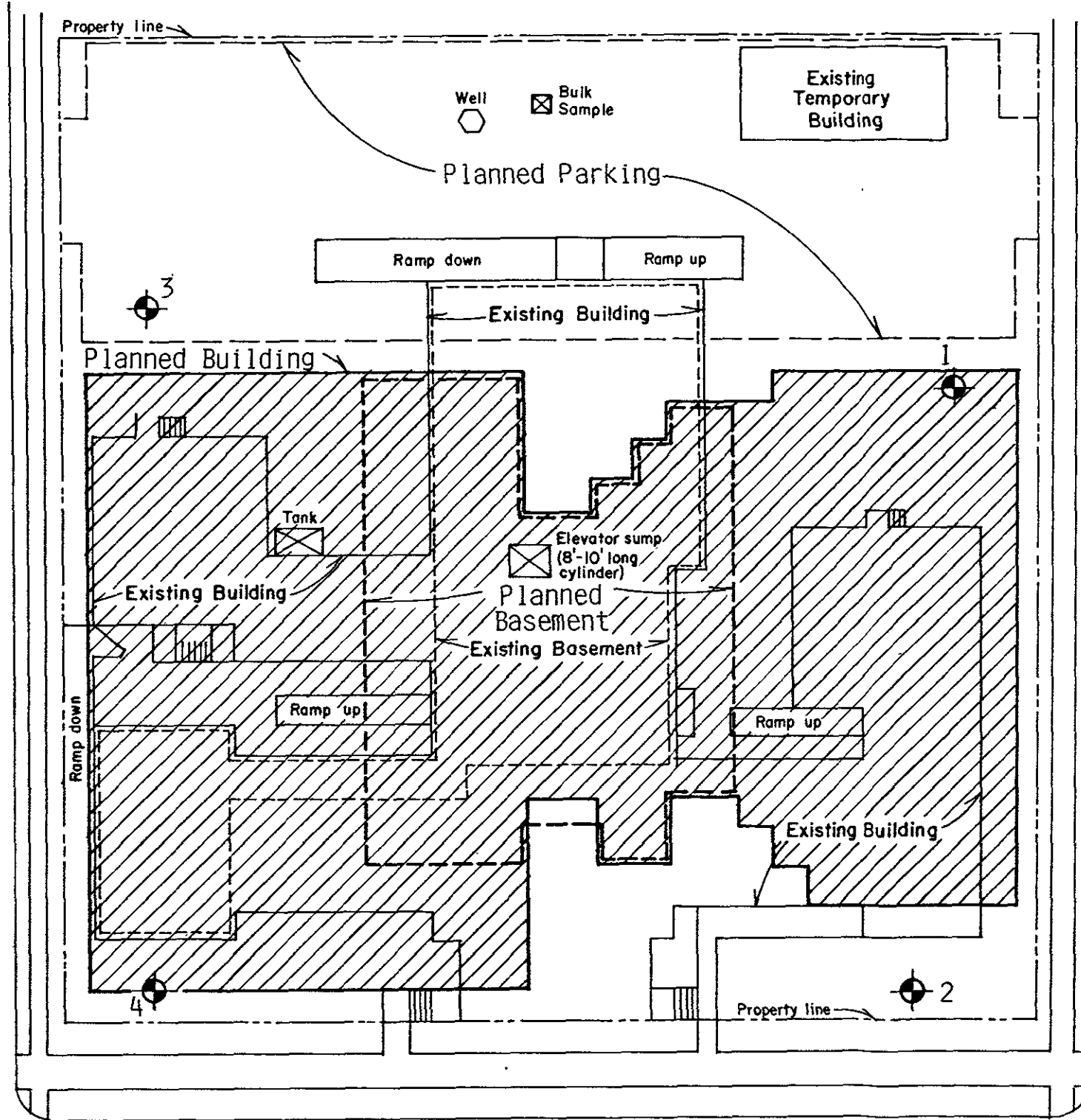
BTEX (EPA 8020)

Minimum detection limits as specified by the LUFT manual will be requested.

**VI. PRELIMINARY INVESTIGATION REPORT**

A preliminary investigation report will be prepared summarizing the field and laboratory results, conclusions and recommendations. The report will include recommendations for further assessment work, if necessary, and/or recommendations for soil and/or groundwater remediation.

Att: Figures 1 and 2, and Laboratory Test Results

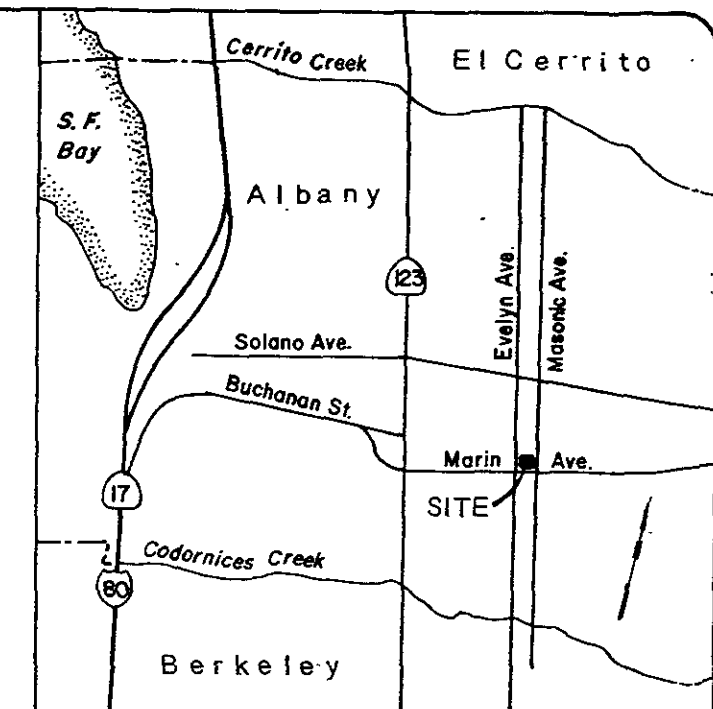


Evelyn Avenue

Masonic Avenue

Marin Avenue

SITE PLAN



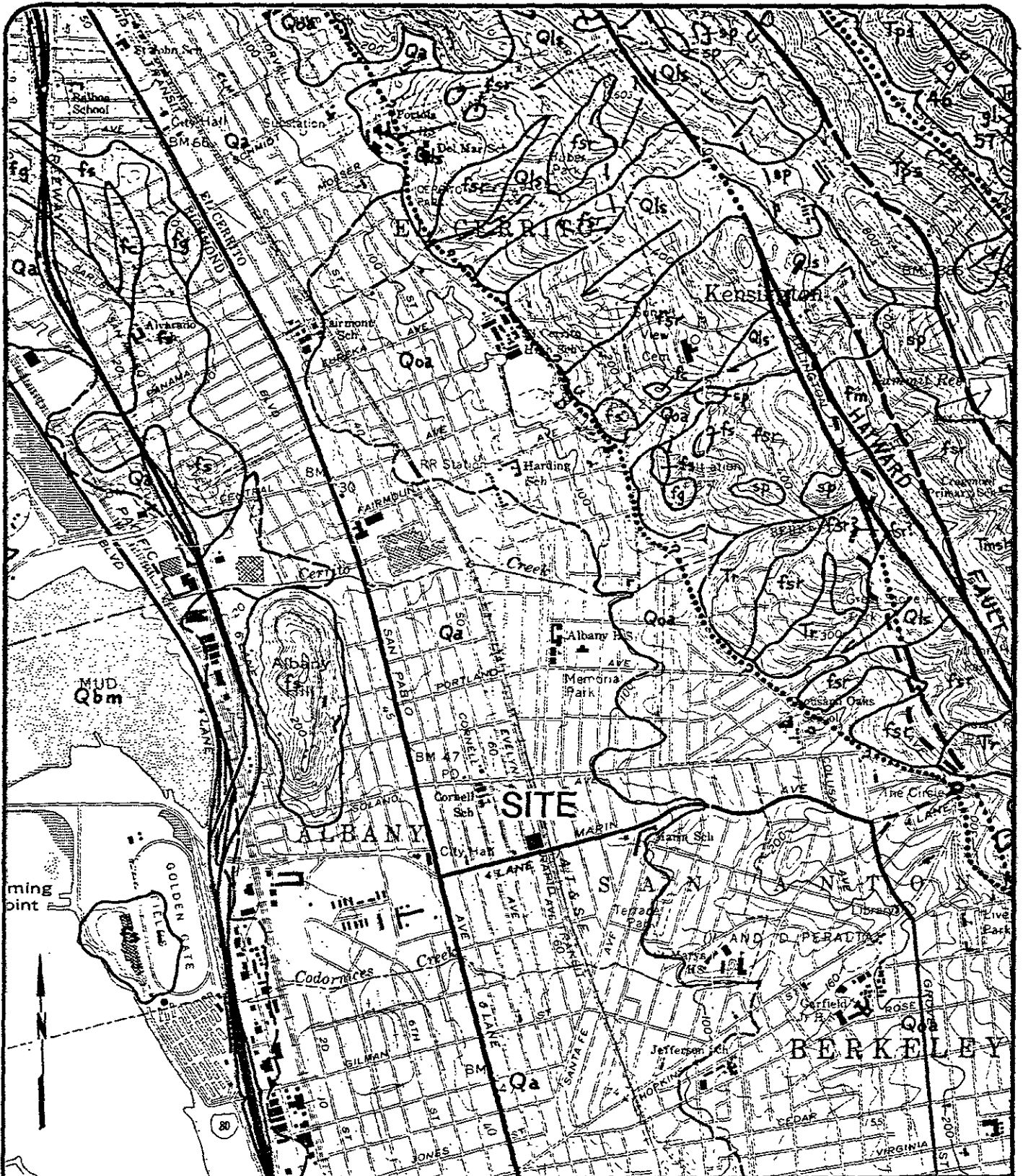
VICINITY MAP

LEGEND  
 4 Approximate location of test boring

Reference:  
 Existing and Planned Building Plans,  
 Marquis Associates, Dec., 1980.

0 30 60 feet

SITE PLAN & VICINITY MAP		Proj. No: 653.052
Albany Library and Community Center 1247 Marin Avenue Albany, California		Date: 6/23/92
		App'd by: 
<b>HTA Harlan Tait Associates</b>		FIGURE
Consulting Engineers and Geologists		1



Reference: Preliminary Geologic Map of the Richmond Quadrangle,  
Alameda and Contra Costa Counties, California,  
Thomas W. Dibblee, Jr., USGS, 1980.



**HTA** Harlan  
Tait  
Associates

Consulting Engineers and Geologists

**GEOLOGIC MAP**

Albany Library and Community Center  
127 Marin Avenue  
Albany, California

**FIGURE**

**2**

Proj. No: 653.052

Date: 6/23/92

App'd by: **DHC**



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SUPERIOR LAB

P.02



# Superior Precision Analytical, Inc.

1555 Burke, Unit 1 • San Francisco, California 94174 • (415) 647 7081 / fax (415) 821-7123

## C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 54980  
 CLIENT: SEMCO  
 CLIENT JOB NO.: CITY OF ALBANY

DATE RECEIVED: 06/17/92  
 DATE REPORTED: 06/18/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS  
 by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/kg) Diesel Range
1	#1-ELEV	140*

\* - Diesel range concentration. The pattern observed in the chromatogram was not typical of diesel.  
 mg/kg - parts per million (ppm)

Minimum Detection Limit for Diesel in Soil: 10mg/kg

### QAQC Summary:

Daily Standard run at 200mg/L: %DIFF Diesel = <15%  
 MS/MSD Average Recovery = 77%: Duplicate RPD = 9%

Richard Srna, Ph.D.

*Cecilia G. Joaquin (for)*  
 Laboratory Director



# Superior Precision Analytical, Inc.

1555 Burke, Unit 1 • San Francisco, California 94124 • [415] 647-2081 / fax [415] 821-1123

## C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 54980  
CLIENT: SEMCO  
CLIENT JOB NO.: CITY OF ALBANY

DATE RECEIVED: 06/17/92  
DATE REPORTED: 06/18/92

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES  
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration(ug/kg)			
		Benzene	Toluene	Ethyl Benzene	Xylenes
1	#1-ELEV	ND<3	4	ND<3	12

ug/kg - parts per billion (ppb)

Method Detection Limit in Soil: 3 ug/kg

### QAQC Summary:

Daily Standard run at 20ug/L: %Diff 8020 = <15%  
MS/MSD Average Recovery =91%: Duplicate RPD = 3.8%

Richard Srna, Ph.D.

*Cecilia Jorgensen (for)*  
Laboratory Manager



# Superior Precision Analytical, Inc.

1555 Burke, Unit 1 • San Francisco, California 94124 • (415) 647-7081 / fax (415) 871-7123

## C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 54980  
 CLIENT: SEMCO  
 CLIENT JOB NO.: CITY OF ALBANY

DATE RECEIVED: 06/17/92  
 DATE REPORTED: 06/18/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS  
 by Modified EPA SW-846 Method 5030 and 8015

LAB #	Sample Identification	Concentration (mg/kg) Gasoline Range
1	#1-ELEV	ND<1

mg/kg - parts per million (ppm)

Method Detection Limit for Gasoline in Soil: 1 mg/kg

### QAQC Summary:

Daily Standard run at 2mg/L: %Diff Gasoline = <15  
 MS/MSD Recovery = 91%; Duplicate RPD = 4%

Richard Srna, Ph.D.

*Cecilia G. Jorgensen*  
 Laboratory Manager

Section I

# CHAIN OF CUSTODY AND ANALYSIS REQUEST

LAB NO. \_\_\_\_\_

Consultant Name SEMCO  
 Office Location 1741 Leslie Rd. San Mateo, CA 94402  
 Fax No. (415) 872-9734  
 Project Manager CHUCK KIPER  
 Phone (415) 872 8033

TURN AROUND TIME  
 (Circle One)  
 Same Day \_\_\_\_\_  
 24 Hrs \_\_\_\_\_  
 48 Hrs \_\_\_\_\_  
 72 Hrs \_\_\_\_\_  
 5 Day 5 Day

**SUPERIOR ANALYTICAL, INC.**  
 Martinez San Francisco  
 415/229-1512 415/647-2081

Send Coolers to : Modesto  San Mateo   
 Project No. / P.O. No. CITY OF ALBANY

Sampler M. TAVAKOLI  
 Regulatory Agency ALAMEDA CO. ENV. HEALTH

Section II		Analysis Request										Section III		Sample Information		
Sample Identification	S=Soil W=Water Matrix	TPH - G & D	TPH - Low Level D	TPH - G	BTXE	O&G	B010	S240	Metals	Others * Subject to Subcontracting	Date	Time	Containers		Sampling Remarks	
													Quantity	Pres.	Bioremediation	Contamination
<u>#1-ELEV</u>	<u>S</u>	<u>X</u>			<u>X</u>						<u>6/15/93</u>		<u>1</u>			
2																
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11																
12																

Relinquished by [Signature]  
 Organization SEMCO

Date/Time 6-15-93 1140

Received by [Signature]  
 Organization EXPRESS-IT

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 Organization \_\_\_\_\_

Date/Time \_\_\_\_\_

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 Organization \_\_\_\_\_

Relinquished by \_\_\_\_\_  
 Organization \_\_\_\_\_

Date/Time \_\_\_\_\_

Received by \_\_\_\_\_  
 Organization \_\_\_\_\_

Please Initial AMS  
 Samples Stored in Ice V/S  
 Appropriate Containers [Signature]  
 Samples Preserved [Signature]  
 VOA's without Headspaces AMS  
 Comments \_\_\_\_\_