



March 31, 2003

Mr. Robert Weston  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway  
Alameda, California 94502

Alameda County  
APR 04 2003  
Environmental Health

**Subject: Request for Site Review**  
16660 East 14<sup>th</sup> Street  
San Leandro, California  
AEI Project No. 6360

Dear Mr. Weston:

AEI Consultants (AEI) was retained by United Commercial Bank to conduct a Phase I Environmental Site Assessment (ESA) for the property located at 16672-16690 East 14<sup>th</sup> Street in the City of San Leandro, Alameda County, California. The report was issued by AEI on July 22, 2002.

The subject property is located on the northeast corner of East 14<sup>th</sup> Street and 167<sup>th</sup> Avenue in a commercial area of unincorporated San Leandro. The subject property totals approximately 28,500 square feet and is improved with two commercial buildings. A multi-tenant building is situated on the east side of the parcel, and a gas station building, equipped with one 10,000-gallon gasoline UST and two 5,000-gallon gasoline USTs, is located in the southwest corner of the parcel. The gas station building and USTs were constructed/installed in 2000.

Based on a review of historical sources, the subject property was formerly occupied by a Texaco station, addressed as 16660 East 14<sup>th</sup> Street, from 1966 until 1985 when the three fuel USTs and the waste oil UST were removed. Due to the former presence of USTs onsite, a subsurface investigation was performed at the subject property in 1994 by Environmental Bio-Systems, Inc. The investigation included four soil borings advanced to a maximum depth of 20 feet below ground surface (bgs). Samples from three of the borings were analyzed for Total Petroleum Hydrocarbons as gasoline (TPH-g) and benzene, toluene, ethylbenzene, and xylenes (BTEX). Samples from the fourth boring were analyzed for Total Oil & Grease (TOG).

None of the analyzed samples were found to contain detectable concentrations of the selected constituents. However, samples from two of the borings collected at 5 feet bgs were found to contain very low concentrations of Total Petroleum Hydrocarbons as motor oil (TPH-mo). Based on the minimal concentrations detected, no further action regarding the former USTs appears to be warranted. However, the results were apparently not submitted to the Alameda County Health Care Services Agency (ACHCSA), and no formal UST closure letter was issued.

As we discussed last year, I am enclosing a copy of the 1994 investigation for your review. Please advise whether further investigation at this site is likely to be required by your agency. If

no further action is required, will a "no further action" letter be issued? If not, please indicate how these types of sites are viewed by your agency in terms of regulatory status. Thank you for your time!

Please call me at (925) 283-6000 ext. 112 if you have any questions.

Sincerely,

  
Holly Gannaway, REA  
Project Manager



**SUBSURFACE EXPLORATION**  
**PROJECT #090-292-01B**

**CHIEF AUTO PLAZA**  
**16660 E. 14TH STREET**  
**SAN LEANDRO, CALIFORNIA**

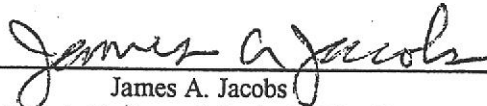
**PREPARED BY ENVIRONMENTAL BIO-SYSTEMS, INC.**  
**FOR**  
**THOMAS D. MEEK, M.D.**



Dave A. Sadoff

Project Manager, Registered Environmental Assessor No. 03642

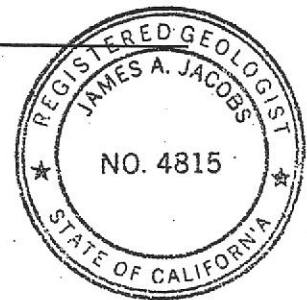
Reviewed by:



James A. Jacobs

California Registered Geologist No. 4815

8 April 1994



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16660 E. 14th Street  
San Leandro, California

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CUSTODY DOCUMENTATION



## **ENVIRONMENTAL BIO-SYSTEMS, INC.**

Innovative Solutions for a Better Environment

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### **1. INTRODUCTION**

Environmental Bio-Systems, Inc. (EBS) provides this report describing subsurface soil and ground water exploration performed for Thomas D. Meek, M.D. (the client) at 16660 E. 14th Street, San Leandro, CA (the site). The principal site contacts are:

**Client Contact** - Thomas D. Meek, M.D., Commercial Property Services, 2345 50th Street, Suite 100, Lubbock, Texas 79407, (806) 763-8004.

**Consultant** - Environmental Bio-Systems, Inc., 30028 Industrial Parkway Southwest, Suite C, Hayward, CA 94544, (510) 429-9988. Mr. Dave A. Sadoff - Project Manager

### **2. PURPOSE AND SCOPE OF WORK**

This report describes the installation and sampling of 4 exploratory boreholes at the site. The scope of work described below has been composed to evaluate subsurface conditions associated with former underground storage tanks (USTs) reported to have been present during the previous tenure of a former Texaco service station at the site.

Chief Auto Plaza  
16660 E. 14th Street  
San Leandro, California

An itemized list of tasks performed and outlined in this report includes:

- Geophysical survey of accessible portions of the property (i.e. portions not covered by structures).
- Preparation of site specific work and safety plans.
- Procurement of permits.
- Drilling of 4 exploratory boreholes, one boring at each of the following locations:
  - S1- The former fuel UST location.
  - S2- The former fueling island along E. 14th Street.
  - S3- The former fueling island along 167th Avenue.
  - S4- The former waste oil UST location.
- Logging of subsurface conditions by an EBS project geologist.
- Collection of soil samples at 5-foot intervals from surface to the depth at which ground water was encountered and at the soil/ground water interface.
- Field screening of collected soil samples will be performed using a portable organic vapor meter (OVM).
- Laboratory analysis of 2 soil samples from each boring.
- Analysis of four soil samples for one or more of the following analytes:
  - 1- Total petroleum hydrocarbons as gasoline (TPHg) with distinction for benzene, toluene, ethylbenzene, and xylenes (BTEX) using Environmental Protection Agency (EPA) Methods 5030, and modified Methods 8015 and 8020.
  - 2- Total petroleum hydrocarbons as diesel (TPHd) using EPA Methods 3550 and modified 8015.
  - 3- Total oil and grease (TOG) using Standard Method 5520B&F.
- Containment of all soil drill cuttings in Department of Transportation (DOT) approved 55-gallon drums.
- Containment of all waste water (from decontamination and well purging) in DOT approved 55-gallon drums.

### **3. SITE LOCATION AND DESCRIPTION**

The site is located at 16660 E. 14th Street in San Leandro, California. This location lies within an un-incorporated section of Alameda County. A site location map is included in this report as Figure 1.

The Alameda County Public Works Agency well survey shows the site to be located in 40-acre parcel C, Section 8, Township 3 south, Range 2 west of the San Mount Diablo Base and Meridian. The subject site is situated approximately 17,200-feet east of San Francisco Bay's east shoreline, and lies at an elevation of approximately 48-feet above mean sea level. The topography of the site dips gently to the west.

Figure 2 shows a general overview of the property on which the site is located. The site encompasses approximately 28,500-square feet, and is bounded to the southwest by E. 14th Street, to the northwest by Carl Kuper Motors, to the northeast by Bayfair Manor Apartments, and to the southeast by 167th Avenue. The site is currently occupied by a Chief Auto Parts store, the Old South BBQ, and Raja Markets.

A 7,800-square foot single-story structure, located on the northeast property border, houses the three businesses operating at the site. The remainder of the site is primarily asphalt-paved parking area with the exception of several planter areas.



### **3.1. REGIONAL GEOLOGY**

The site is located in the East Bay Plain Area of the San Francisco Bay drainage basin. The Hayward Fault lies approximately 1,000-feet east-northeast of the site.

The flat, alluviated lowlands of this area are bounded to the north by the San Pablo Bay, to the east by the Hayward Fault and the Coast Range foothills, and to the south and west by the San Francisco Bay. Older alluvium in the area consists of Pliocene and Pleistocene clay, silt, sand, and gravel. These sediments were derived mainly from the hills to the east and southeast, and represent successive coalescing alluvial fans.

### **3.2. HYDROGEOLOGICAL SETTING**

The subject site is situated above the San Lorenzo Cone sub-area, which consists of various sand and gravel strata within the older alluvium. Three shallow (to 400-feet bgs) aquifers have been identified for this area. These aquifers are correlative to the Niles cone sub-area Newark, Centerville, and Fremont aquifers (shallowest to deepest). Well yields from these aquifers range from a few tens of gallons per minute to over one thousand-gallons per minute.

### **3.3. METEOROLOGICAL SETTING**

The site is located within the San Francisco Bay Area, which is considered a "Mediterranean" type climate. Warm to hot, dry summers, along with cool, wet winters are typical for this area. Mean annual precipitation in the form of rainfall near this site is approximately 13.7-inches. The prevailing wind at the site in general is from the northwest.

### **4. PREVIOUS ENVIRONMENTAL WORK**

EBS performed a Phase I Environmental Audit of the site in a report dated 11 March 1994. The limited documentation found regarding past environmental work performed at the site is discussed and referenced in the Phase I report.

### **5. PROCEDURES**

Drilling of four exploratory boreholes, sampling, and field screening of soil samples was performed on 4 March 1994. The borings were designated as S1 through S4. A site diagram displaying the locations of the boreholes is presented as Figure 2.

### **5.1. DRILLING OF EXPLORATORY BOREHOLES**

Four soil borings were drilled by Bayland Drilling of Menlo Park, California (C-57 license #374152). The boreholes were drilled using a truck mounted CME 75 drill rig equipped with 8-inch diameter hollow stem augers. The logs of soil borings and well construction details are presented in Appendix A.

Soil lithologies encountered in the four borings were similar. Conditions encountered included clayey silty sand to approximately eight-feet bgs underlain by fine to medium and coarse sand. A stiff black clay was found at approximately 19-feet bgs in borings EB1 and EB3.

Exploratory borings S1 through S4 were drilled to total depths of 20, 15, 20, and 20-feet bgs, respectively. Appendix A contains the logs of soil borings with descriptions of subsurface conditions encountered.

#### **5.1.1. Field Screening of Soil Samples**

Soil samples were field screened using a portable Thermo Environmental Instruments organic vapor meter (OVM) Model OVM 580B at each sampling interval. Approximately 50 to 100-grams of soil were placed into a sampling chamber consisting of a brass sampling tube with a plastic cap fitted over one end. A plastic cap, with a hole through which the OVM intake tube could be inserted, was then placed over the open end of the tube. The sample tube was then shaken for approximately 30-seconds before inserting the OVM intake tube into the sample chamber and

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recording the maximum value attained as parts per million (ppm) soil vapor.

An OVM reading was taken from the empty sampling chamber prior to each soil sample. The chamber and plastic caps were replaced if background concentrations were found.

The results of OVM field screening of soil were recorded in the field and are displayed in Table 1. None of the field screened samples yielded positive results.

#### **5.1.2. Soil Sample Collection**

Soil samples were collected from the borings at 5-foot intervals using a California modified split-spoon sampler. For collection, the sampler was driven 18-inches (the total sampler length) into the soil by a 140-pound weight falling a distance of approximately 30-inches. The number of blows required to drive the sampler each 6-inches was counted as an indicator of the relative density of the soil.

Soil samples were removed from the sampler as soon as it was opened. The ends of all tubes submitted to the laboratory were covered with Teflon<sup>®</sup> sheets and sealed with plastic end caps. The sample tubes were labeled, stored in a cooler on crushed ice, and transported to American Environmental Network (AEN) of Pleasant Hill, California. AEN is certified by the State of California to perform the stated analyses.

## 5.2. DECONTAMINATION PROCEDURES

The California modified split-spoon sampler was washed with Alqinox detergent and triple rinsed with distilled water between the collection of soil cores and samples. The augers used to drill the borings were steam cleaned prior to, and after each boring.

## 5.3. CONTAINMENT OF DRILL CUTTINGS AND DECONTAMINATION WATER

Soil from the exploratory borings and water generated from the decontamination of equipment was contained in 55-gallon drums approved by the Department of Transportation (DOT) for this use. The drums were labeled, and placed against the southern wall of the garbage dumpster bay.

## 6. SAMPLE ANALYSIS AND RESULTS

Selected soil samples collected from borings S1, S2, and S4 were analyzed for TPHg and BTEX using EPA Method 5030, and modified Methods 8015 and 8020 and TPHd using EPA Methods 3550 and modified 8015. Soil samples collected from boring S3 were analyzed for TOG using Standard Method 5520F. Table 2 displays the results of analyses performed on soil samples.

None of the analyzed samples were found to contain detectable concentrations of the selected analytes. Samples S2-5' and S4-5' were reported by the laboratory to contain concentrations of a

compound heavier than diesel. The compound was identified by the laboratory to be TPH as motor oil (TPHmo), and was found in these samples at 8 and 9-mg/kg, respectively.

## 7. CONCLUSIONS

1. Soils encountered during the drilling of the exploratory borings typically included clayey silty sand to approximately eight-foot bgs underlain by fine to medium and coarse sand. A stiff black clay was found at approximately 19-foot bgs in borings S1 and S3.
2. Screening of soil samples using an OVM showed no detectable concentrations of organic vapor.
3. None of the analyzed samples were found to contain reportable concentrations of the chosen analytes.
4. Samples S2-5' and S4-5' were reported by the laboratory to contain concentrations of a compound heavier than diesel. The compound was identified by the laboratory to be TPHmo and was found in these samples at 8 and 9-mg/kg, respectively.

## **8. LIMITATIONS**

The recommendations in this report were developed in accordance with generally accepted standards of current environmental practice in California. These recommendations are time-dependent and should not be considered valid after a 1-year period from the issue of this report. After 1-year from the issue of this report, site conditions and recommendations contained within this report should be reviewed.

This study was performed solely for the purpose of evaluating environmental conditions of the site subsurface relative to hydrocarbon impact at the subject site. No engineering or geotechnical references are implied or should be inferred.

Evaluation of the condition of the site, for the purpose of this study, was made from a limited number of observation points. Subsurface conditions may deviate away from these points. Additional work, including further study of the subsurface, can reduce the inherent uncertainties associated with this type of work.

This study was performed, and the report was prepared for the sole use of our client, Thomas D. Meek, M.D. This report and the findings contained herein shall not be disclosed to nor used by any other party without the prior written consent of Environmental Bio-Systems, Inc. It is the responsibility of the client to convey these recommendations to regulatory agencies and other parties, as appropriate.

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Chief Auto Plaza  
16660 E. 14th Street  
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The recommendations herein are professional opinions that our firm has endeavored to provide with competence and reasonable care. We are not able to eliminate the risks associated with environmental work. No guarantees or warrants, express or implied, are provided regarding our recommendations



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Chief Auto Plaza  
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## 9. REFERENCES

Alameda County Flood Control and Water Conservation District  
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Professional Paper 943, Flatland Deposits - Their Geology and  
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Planning, 1979.

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Climatology of the United States Number 81, Monthly Station  
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Degree Days 1961-1990, January 1992.

United States Geological Survey Topographical Map, Hayward,  
California 7.5-Minute Series Quadrangle, 1959, photorevised  
1980.

**TABLE 1: OVM FIELD SCREENING OF SOIL  
SAMPLES**

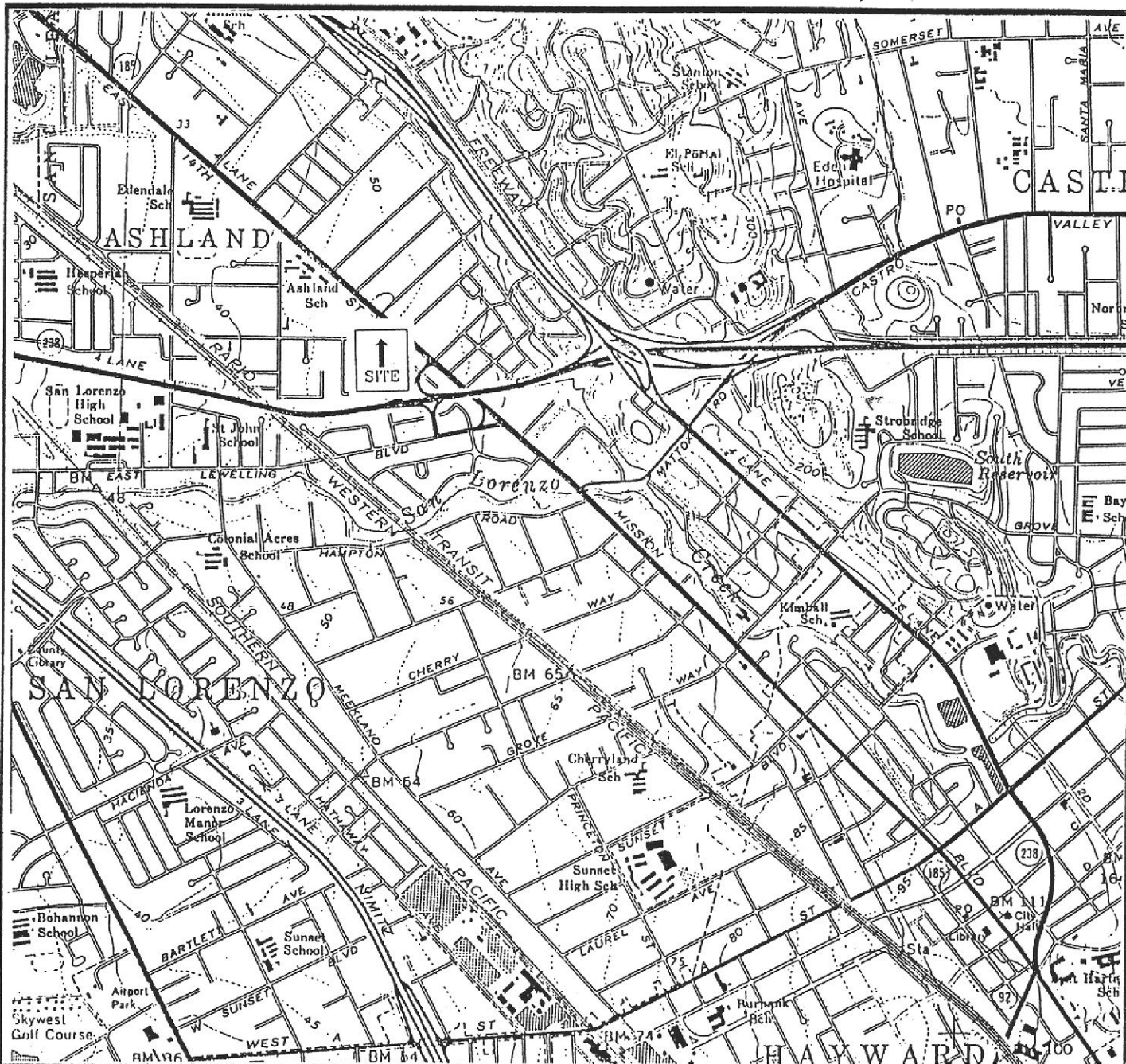
BORING #	DEPTH (FEET)	SOIL VAPOR (ppm) <sup>1</sup>
S1	5	0
	10	0
	15	0
	20	0
S2	2	0
	5	0
	10	0
	15	0
S3	4	0
	5	0
	10	0
	15	0
	20	0
S4	5	0
	10	0
	15	0
	20	0

ppm<sup>1</sup>- Parts per million.

**TABLE 2: RESULTS OF SOIL SAMPLE ANALYSES**

Sample #	TPHg (mg/Kg)	TPHd (mg/Kg)	TPHmo (mg/Kg)
S1-10'	ND	ND	ND
S1-15'	ND	ND	ND
S2-5'	ND	ND	8
S2-10'	ND	ND	ND
S3-10'	ND	ND	ND
S3-15'	ND	ND	ND
S4-5'	ND	ND	9
S4-10'	ND	ND	ND

**Legend:****ND:** Analyte not detected above stated laboratory detection limits.**Note:** See laboratory reports for individual analyte detection limits used.



Source: USGS Topographic Map, Hayward Quadrangle



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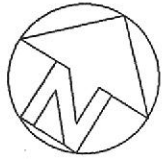
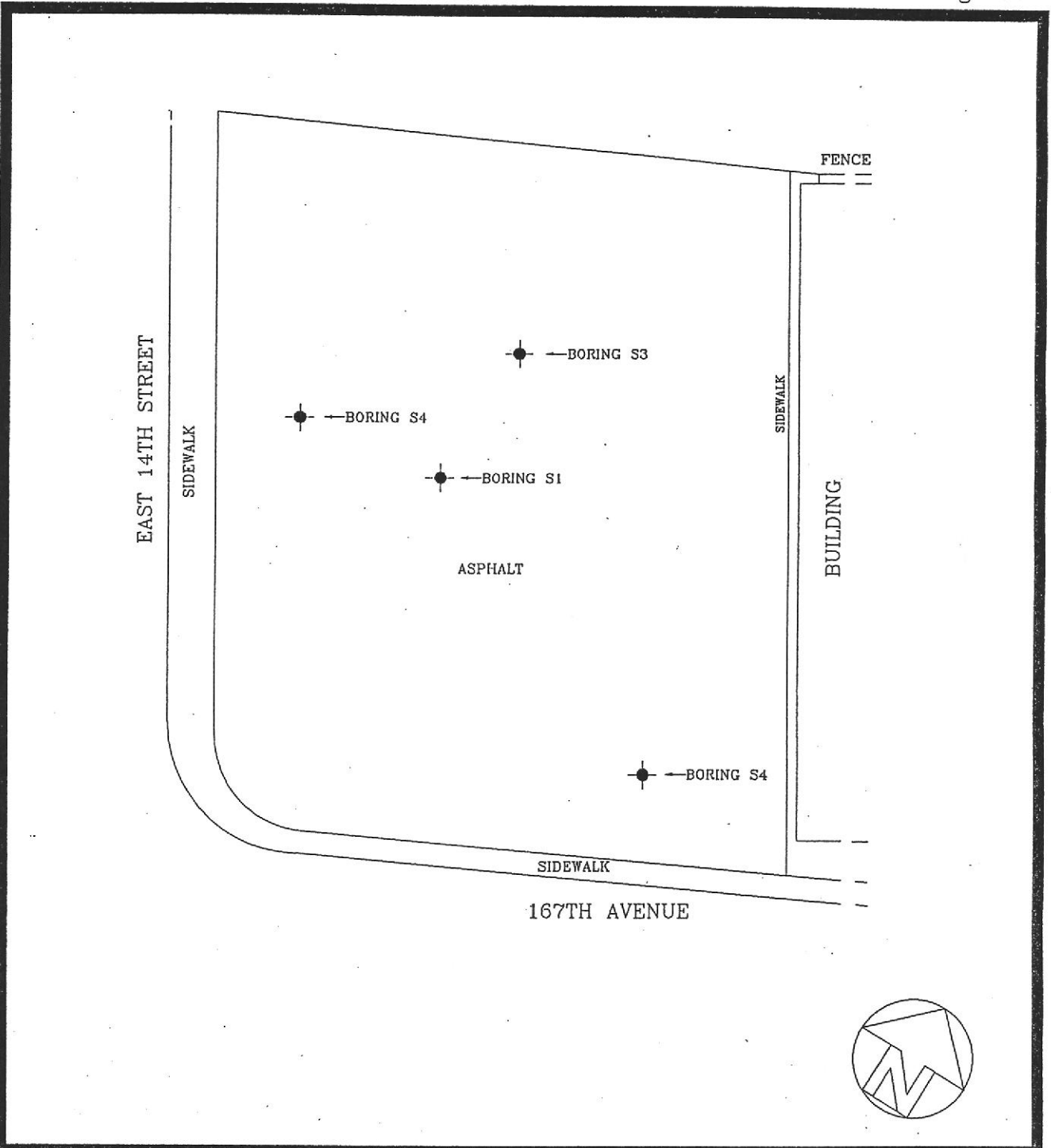
DATE:  
4/8/94


DRAWN BY:  
DAS

SCALE:  
1"=2,000'

FIGURE 1:  
SITE LOCATION MAP

Chief Auto Plaza  
16660 E. 14th Street  
San Leandro, California



 <p>ENVIRONMENTAL BIO-SYSTEMS, INC</p>	<p>DATE: 4/8/94</p>	<p>FIGURE 2: SITE DIAGRAM</p>
	<p>DRAWN BY: TMB</p>	
	<p>SCALE: 1"=20' (approx.)</p>	<p>16660 East 14th Street San Leandro, California</p>

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16660 E. 14th Street  
San Leandro, California

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**APPENDIX A:**

**LOGS OF SOIL BORINGS**

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16660 E. 14th Street  
San Leandro, California

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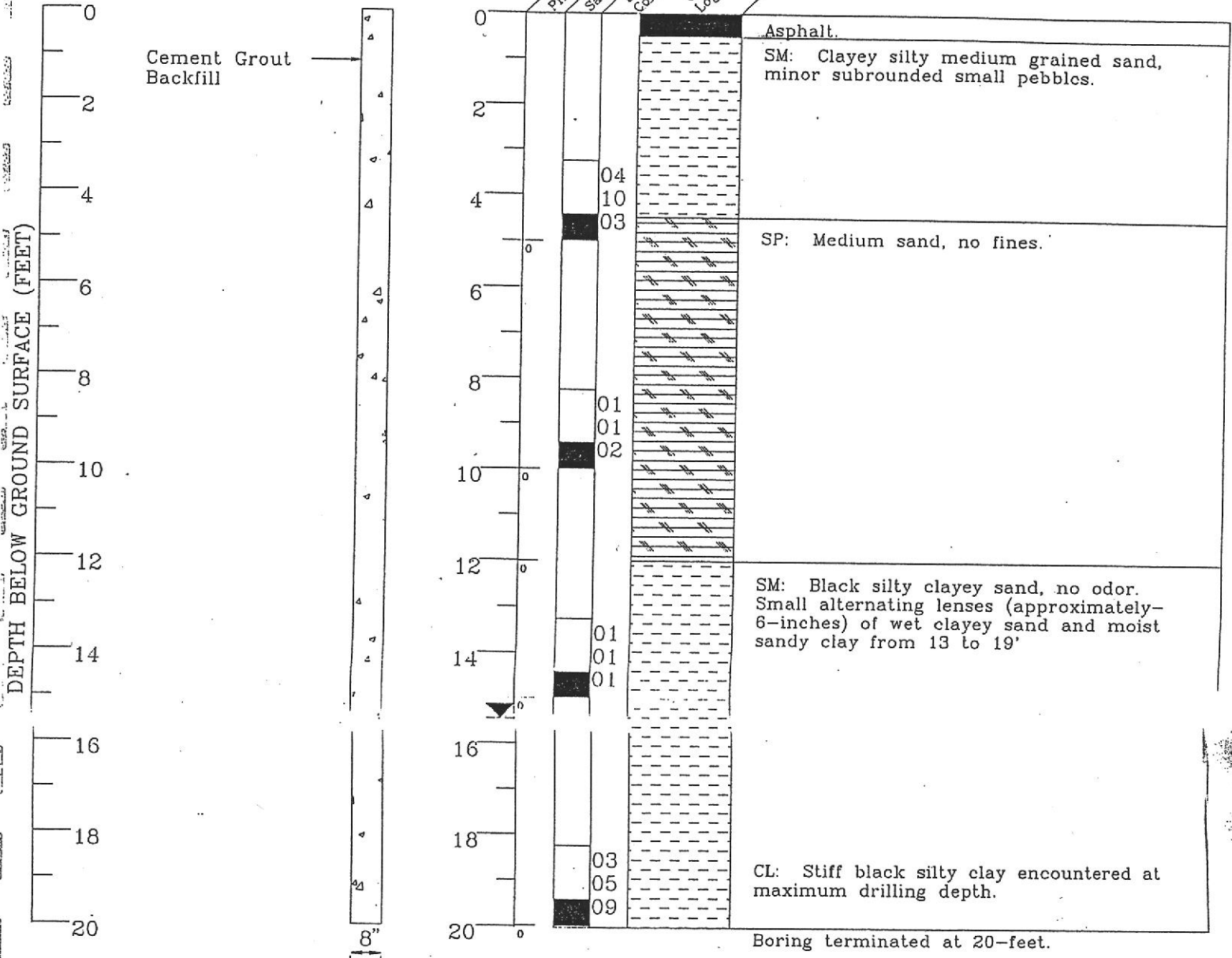
**APPENDIX B:**

**LABORATORY REPORTS AND  
CHAIN OF CUSTODY DOCUMENTATION**

# LOG OF SOIL BORING S1

## WELL CONSTRUCTION DETAILS

## SOIL DESCRIPTION



Logged by: Dave Sadoff      Drilling Contractor: Bayland      Sanitary Seal/Backfill: Cement Grout  
 Inspector: N/A              Drilling Method: Hollow Stem      Sampler Type: Split Spoon  
 Date: 3/4/94                  Driller: Adam                      Total Boring Depth: 20-feet



### EXPLANATION

water level during drilling	gradational
potentiometric water level	NR no recovery
drill sample	CONTACTS:
chemical analysis sample	— certain
sieve sample	- - - approximate
grab sample	— uncertain

**SITE:**  
 CHIEF AUTO PLAZA  
 16660 EAST 14TH STREET  
 SAN LEANDRO, CA

**PROJECT #:** 090-292-01B

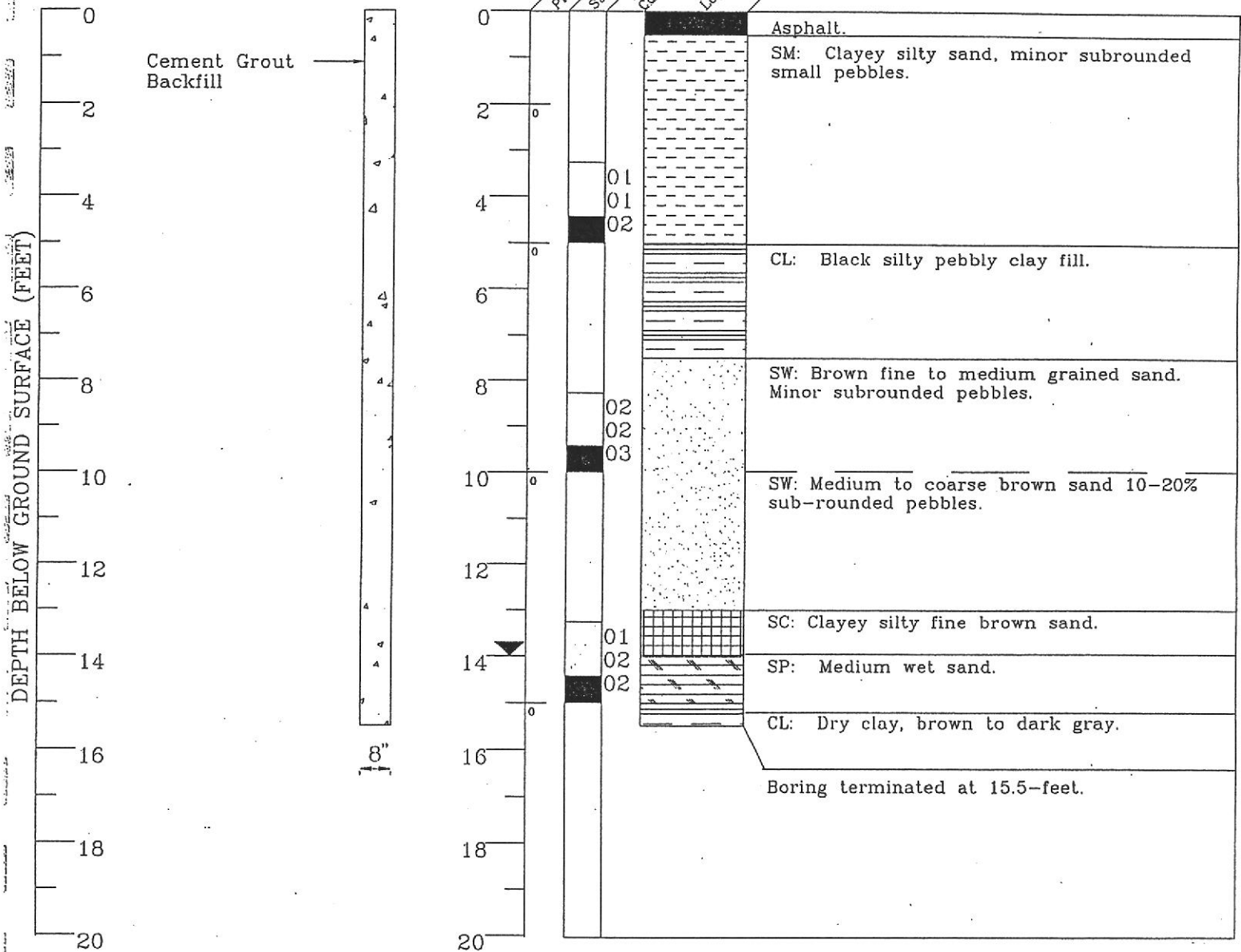
**CLIENT:**  
 Thomas D. Meek, M.D.  
 Commercial Property Svcs.



# LOG OF SOIL BORING S2

## WELL CONSTRUCTION DETAILS

## SOIL DESCRIPTION



Logged by: Dave Sadoff      Drilling Contractor: Bayland      Sanitary Seal/Backfill: Cement Grout  
 Inspector: N/A                  Drilling Method: Hollow Stem      Sampler Type: Split Spoon  
 Date: 3/4/94                      Driller: Adam                          Total Boring Depth: 15.5-feet



EXPLANATION	
water level during drilling	gradational
potentiometric water level	NR no recovery
drill sample	CONTACTS:
chemical analysis sample	— certain
sieve sample	- - - approximate
grab sample	— uncertain

**SITE:**  
 CHIEF AUTO PLAZA  
 16660 EAST 14TH STREET  
 SAN LEANDRO, CA

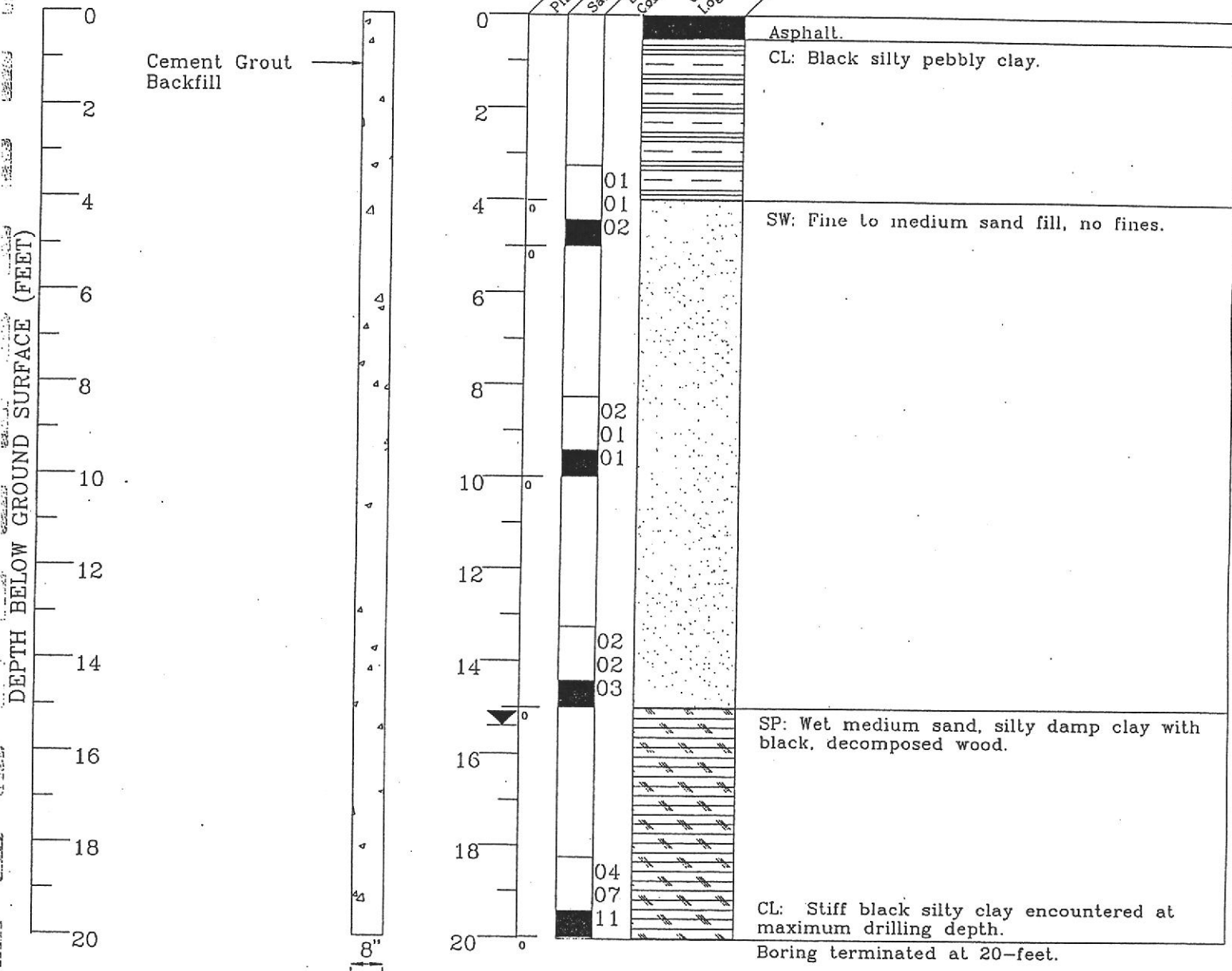
**PROJECT #:** 090-292-01B

**CLIENT:**  
 Thomas D. Meek, M.D.  
 Commercial Property Svcs.

# LOG OF SOIL BORING S3

## WELL CONSTRUCTION DETAILS

## SOIL DESCRIPTION



Logged by: Dave Sadoff  
 Inspector: N/A  
 Date: 3/4/94

Drilling Contractor: Bayland  
 Drilling Method: Hollow Stem  
 Driller: Adam

Sanitary Seal/Backfill: Cement Grout  
 Sampler Type: Split Spoon  
 Total Boring Depth: 20-feet



ENVIRONMENTAL  
 BIO-SYSTEMS, INC.

### EXPLANATION

- water level during drilling
  - potentiometric water level
  - drill sample
  - chemical analysis sample
  - sieve sample
  - grab sample
  - gradational
  - NR no recovery
- CONTACTS:
- certain
  - approximate
  - uncertain

SITE:  
 CHIEF AUTO PLAZA  
 16660 EAST 14TH STREET  
 SAN LEANDRO, CA

PROJECT #: 090-292-01B

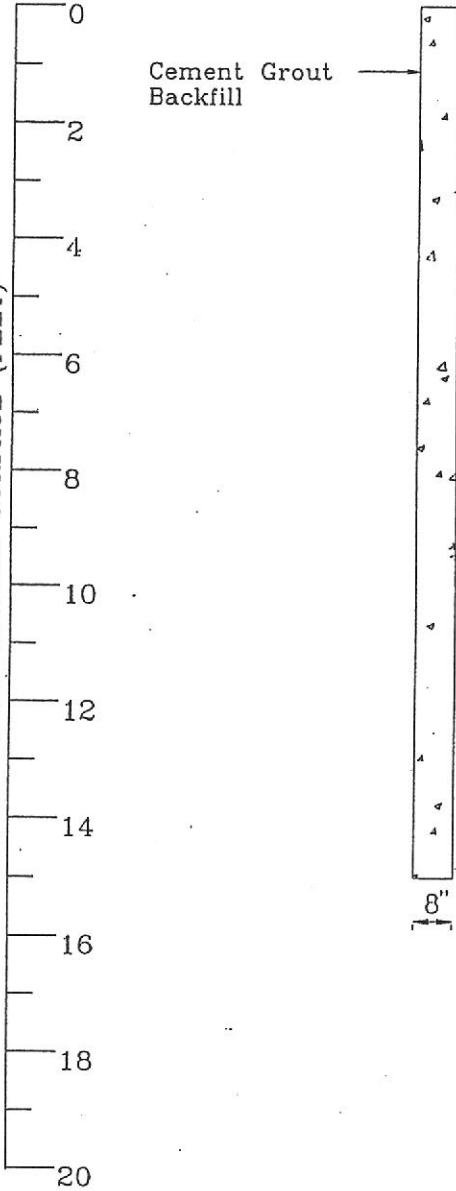
CLIENT:  
 Thomas D. Meek, M.D.  
 Commercial Property Svcs.

# LOG OF SOIL BORING S4

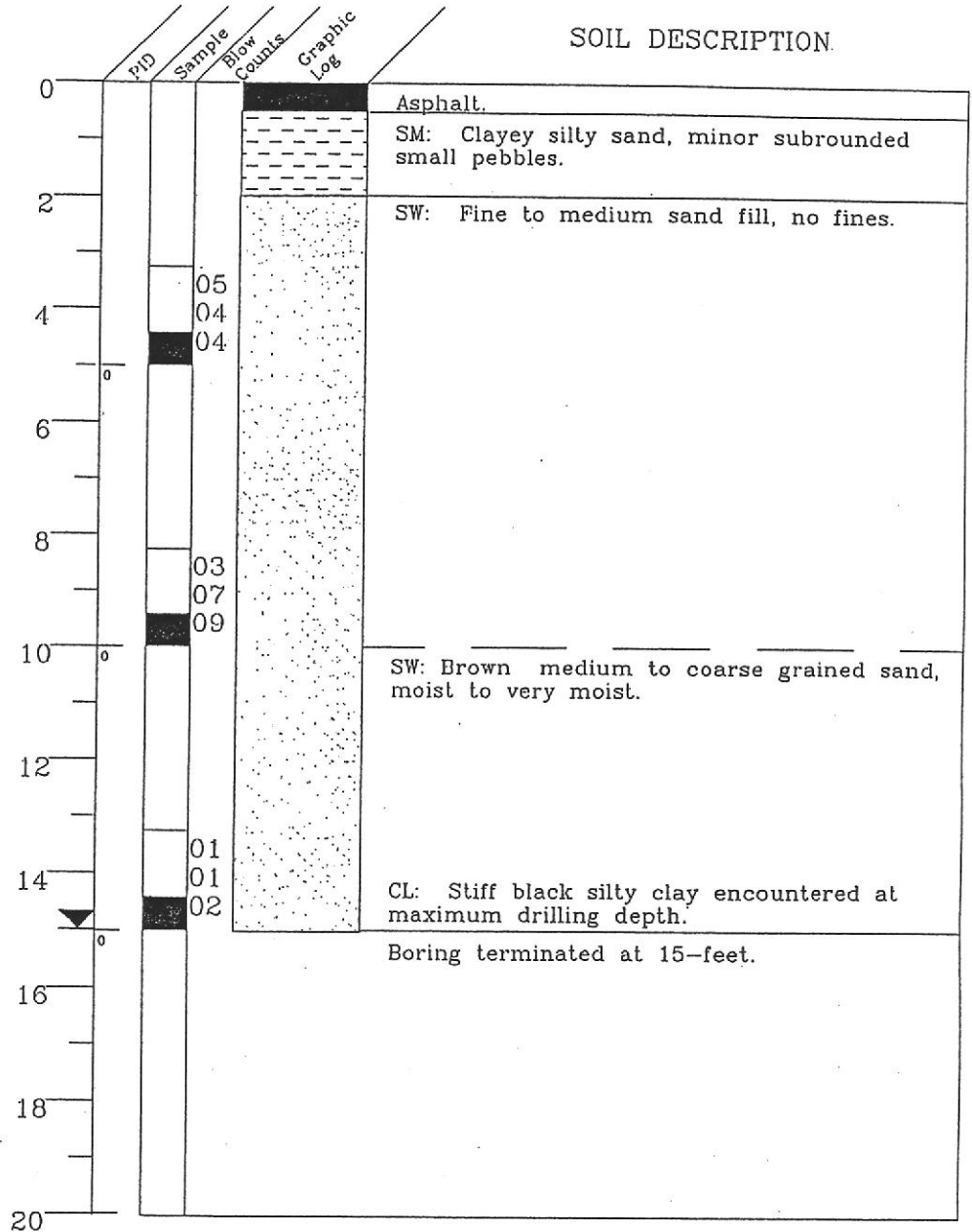
## WELL CONSTRUCTION DETAILS

Cement Grout Backfill

DEPTH BELOW GROUND SURFACE (FEET)



## SOIL DESCRIPTION



Logged by: Dave Sadoff  
Inspector: N/A  
Date: 3/4/94

Drilling Contractor: Bayland  
Drilling Method: Hollow Stem  
Driller: Adam

Sanitary Seal/Backfill: Cement Grout  
Sampler Type: Split Spoon  
Total Boring Depth: 15-feet



ENVIRONMENTAL  
BIO-SYSTEMS, INC.

### EXPLANATION

- water level during drilling
  - potentiometric water level
  - drill sample
  - chemical analysis sample
  - sieve sample
  - grab sample
  - gradational
  - NR no recovery
- CONTACTS:
- certain
  - approximate
  - uncertain

SITE:  
CHIEF AUTO PLAZA  
16660 EAST 14TH STREET  
SAN LEANDRO, CA

PROJECT #: 090-292-01B

CLIENT:  
Thomas D. Meek, M.D.  
Commercial Property Svcs.

# American Environmental Network

## Certificate of Analysis

DOHS Certification: 1172

AHIA Accreditation: 11134

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RECEIVED

MAR 15 1994

Ans'd.....

ENVIRONMENTAL BIO-SYSTEMS, INC.  
30028 INDUSTRIAL PKWY., S.W., STE. C  
HAYWARD, CA 94544

REPORT DATE: 03/14/94

DATE SAMPLED: 03/04/94  
DATE RECEIVED: 03/04/94

ATTN: DAVE SADOFF

ADDITIONAL ANALYSIS  
REQUESTED: 03/08/94

CLIENT PROJ. ID: 090-292-01B  
PROJ. NAME: THOMAS MEEK, M.D.

AEN JOB NO: 9403047

### PROJECT SUMMARY:

On March 4, 1994, this laboratory received thirteen (13) soil samples.

Client requested eight (8) samples be analyzed for organic parameters. Five (5) samples were placed on hold. On March 8, 1994, client requested one (1) sample be taken off hold and be analyzed for organic parameters. Four (4) samples remain on hold. Sample identification, methodologies, results, and dates analyzed are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

If you have any questions, please contact Client Services at (510) 930-9090.

  
Larry Klein  
General Manager

## ENVIRONMENTAL BIO-SYSTEMS

SAMPLE ID: S1-10'  
 AEN LAB NO: 9403047-01  
 AEN WORK ORDER: 9403047  
 CLIENT PROJ. ID: 090-292-01B

DATE SAMPLED: 03/04/94  
 DATE RECEIVED: 03/04/94  
 REPORT DATE: 03/14/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	5	ug/kg	03/04/94
Toluene	108-88-3	ND	5	ug/kg	03/04/94
Ethylbenzene	100-41-4	ND	5	ug/kg	03/04/94
Xylenes, Total	1330-20-7	ND	5	ug/kg	03/04/94
Purgeable HCs as Gasoline	5030/GCFID	ND	0.2	mg/kg	03/04/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	03/04/94
TPH as Diesel	GC-FID	ND	1	mg/kg	03/06/94

ND = Not detected

\* = Indicates value above reporting limit

## ENVIRONMENTAL BIO-SYSTEMS

SAMPLE ID: S1-15'  
 AEN LAB NO: 9403047-02  
 AEN WORK ORDER: 9403047  
 CLIENT PROJ. ID: 090-292-01B

DATE SAMPLED: 03/04/94  
 DATE RECEIVED: 03/04/94  
 REPORT DATE: 03/14/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	5	ug/kg	03/04/94
Toluene	108-88-3	ND	5	ug/kg	03/04/94
Ethylbenzene	100-41-4	ND	5	ug/kg	03/04/94
Xylenes, Total	1330-20-7	ND	5	ug/kg	03/04/94
Purgeable HCs as Gasoline	5030/GCFID	ND	0.2	mg/kg	03/04/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	03/04/94
TPH as Diesel	GC-FID	ND	1	mg/kg	03/06/94

ND = Not detected

\* = Indicates value above reporting limit

## ENVIRONMENTAL BIO-SYSTEMS

SAMPLE ID: S2-5'  
 AEN LAB NO: 9403047-03  
 AEN WORK ORDER: 9403047  
 CLIENT PROJ. ID: 090-292-01B

DATE SAMPLED: 03/04/94  
 DATE RECEIVED: 03/04/94  
 REPORT DATE: 03/14/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	5	ug/kg	03/05/94
Toluene	108-88-3	ND	5	ug/kg	03/05/94
Ethylbenzene	100-41-4	ND	5	ug/kg	03/05/94
Xylenes, Total	1330-20-7	ND	5	ug/kg	03/05/94
Purgeable HCs as Gasoline	5030/GCFID	ND	0.2	mg/kg	03/05/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	03/04/94
TPH as Diesel	GC-FID	ND	1	mg/kg	03/06/94
TPH as Oil	GC-FID	8 *	5	mg/kg	03/06/94

ND = Not detected

\* = Indicates value above reporting limit

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Ans'd.....

## ENVIRONMENTAL BIO-SYSTEMS

SAMPLE ID: S2-10'  
 AEN LAB NO: 9403047-04  
 AEN WORK ORDER: 9403047  
 CLIENT PROJ. ID: 090-292-01B

DATE SAMPLED: 03/04/94  
 DATE RECEIVED: 03/04/94  
 REPORT DATE: 03/14/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	5	ug/kg	03/05/94
Toluene	108-88-3	ND	5	ug/kg	03/05/94
Ethylbenzene	100-41-4	ND	5	ug/kg	03/05/94
Xylenes, Total	1330-20-7	ND	5	ug/kg	03/05/94
Purgeable HCs as Gasoline	5030/GCFID	ND	0.2	mg/kg	03/05/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	03/04/94
TPH as Diesel	GC-FID	ND	1	mg/kg	03/06/94

ND = Not detected

\* = Indicates value above reporting limit



## ENVIRONMENTAL BIO-SYSTEMS

SAMPLE ID: S3-10'  
AEN LAB NO: 9403047-05  
AEN WORK ORDER: 9403047  
CLIENT PROJ. ID: 090-292-01B

DATE SAMPLED: 03/04/94  
DATE RECEIVED: 03/04/94  
REPORT DATE: 03/14/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Soil Extrn for O&G/HCs	SM 5520EF	-		Extrn Date	03/08/94
Hydrocarbons by IR	SM 5520F	ND	10	mg/kg	03/08/94

ND = Not detected

\* = Indicates value above reporting limit

## ENVIRONMENTAL BIO-SYSTEMS

SAMPLE ID: S3-15'  
AEN LAB NO: 9403047-06  
AEN WORK ORDER: 9403047  
CLIENT PROJ. ID: 090-292-01B

DATE SAMPLED: 03/04/94  
DATE RECEIVED: 03/04/94  
REPORT DATE: 03/14/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Soil Extn for O&G/HCs	SM 5520EF	-		Extrn Date	03/08/94
Hydrocarbons by IR	SM 5520F	ND	10	mg/kg	03/08/94

ND = Not detected

\* = Indicates value above reporting limit

## ENVIRONMENTAL BIO-SYSTEMS

SAMPLE ID: S4-5'  
 AEN LAB NO: 9403047-07  
 AEN WORK ORDER: 9403047  
 CLIENT PROJ. ID: 090-292-01B

DATE SAMPLED: 03/04/94  
 DATE RECEIVED: 03/04/94  
 REPORT DATE: 03/14/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	5	ug/kg	03/05/94
Toluene	108-88-3	ND	5	ug/kg	03/05/94
Ethylbenzene	100-41-4	ND	5	ug/kg	03/05/94
Xylenes, Total	1330-20-7	ND	5	ug/kg	03/05/94
Purgeable HCs as Gasoline	5030/GCFID	ND	0.2	mg/kg	03/05/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	03/04/94
TPH as Diesel	GC-FID	ND	1	mg/kg	03/06/94
TPH as Oil	GC-FID	9 *	5	mg/kg	03/06/94

ND = Not detected

\* = Indicates value above reporting limit

## ENVIRONMENTAL BIO-SYSTEMS

SAMPLE ID: S4-10'  
 AEN LAB NO: 9403047-08  
 AEN WORK ORDER: 9403047  
 CLIENT PROJ. ID: 090-292-01B

DATE SAMPLED: 03/04/94  
 DATE RECEIVED: 03/04/94  
 REPORT DATE: 03/14/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	5	ug/kg	03/05/94
Toluene	108-88-3	ND	5	ug/kg	03/05/94
Ethylbenzene	100-41-4	ND	5	ug/kg	03/05/94
Xylenes, Total	1330-20-7	ND	5	ug/kg	03/05/94
Purgeable HCs as Gasoline	5030/GCFID	ND	0.2	mg/kg	03/05/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	03/04/94
TPH as Diesel	GC-FID	ND	1	mg/kg	03/06/94

ND = Not detected

\* = Indicates value above reporting limit

## ENVIRONMENTAL BIO-SYSTEMS

SAMPLE ID: S1-20'  
 AEN LAB NO: 9403047-10  
 AEN WORK ORDER: 9403047  
 CLIENT PROJ. ID: 090-292-01B

DATE SAMPLED: 03/04/94  
 DATE RECEIVED: 03/04/94  
 REPORT DATE: 03/14/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	5	ug/kg	03/08/94
Toluene	108-88-3	ND	5	ug/kg	03/08/94
Ethylbenzene	100-41-4	ND	5	ug/kg	03/08/94
Xylenes, Total	1330-20-7	ND	5	ug/kg	03/08/94
Purgeable HCs as Gasoline	5030/GCFID	ND	0.2	mg/kg	03/08/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	03/08/94
TPH as Diesel	GC-FID	ND	1	mg/kg	03/08/94
#Soil Extrn for O&G/HCs	SM 5520EF	-		Extrn Date	03/09/94
Hydrocarbons by IR	SM 5520F	ND	10	mg/kg	03/09/94

ND = Not detected

\* = Indicates value above reporting limit

AEN (CALIFORNIA)  
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9403047

CLIENT PROJECT ID: 090-292-01B

Quality Control Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

The following abbreviations are found throughout the QC report:

- ND = Not Detected
- RPD = Relative Percent Difference
- < = Less Than

## QUALITY CONTROL DATA

DATE EXTRACTED: 03/04/94  
DATE ANALYZED: 03/05/94  
CLIENT PROJ. ID: 090-292-01B

AEN JOB NO: 9403047  
SAMPLE SPIKED: 9403013-02  
INSTRUMENT: IR

IR DETERMINATION FOR OIL & GREASE/HYDROCARBONS  
MATRIX SPIKE RECOVERY SUMMARY  
(SOIL MATRIX)

ANALYTE	Spike Added (mg/kg)	Average Percent Recovery	RPD
Oil	226	87	5

## CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Oil	(70-118)	18

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

QUALITY CONTROL DATA

DATE EXTRACTED: 03/03/94  
 DATE ANALYZED: 03/04/94  
 CLIENT PROJ. ID: 090-292-01B

AEN JOB NO: 9403047  
 SAMPLE SPIKED: 9403033-08  
 INSTRUMENT: C

MATRIX SPIKE RECOVERY SUMMARY  
 TPH EXTRACTABLE SOIL  
 METHOD: EPA 3550 GCFID

ANALYTE	Spike Added (mg/kg)	Average Percent Recovery	RPD
Diesel	41.9	65	7

CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Diesel	(44-105)	18

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.



QUALITY CONTROL DATA

CLIENT PROJ. ID: 090-292-01B

AEN JOB NO: 9403047

INSTRUMENT: H

SURROGATE STANDARD RECOVERY SUMMARY  
 METHOD: EPA 8020, 5030 GCFID  
 (SOIL MATRIX)

Date Analyzed	SAMPLE IDENTIFICATION		SURROGATE RECOVERY (PERCENT)
	Client Id.	Lab Id.	Fluorobenzene
03/04/94	S1-10'	01	101
03/04/94	S1-15'	02	101
03/05/94	S2-5'	03	105
03/05/94	S2-10'	04	101
03/05/94	S4-5'	07	101
03/05/94	S4-10'	08	100
03/08/94	S1-20'	10	101

CURRENT QC LIMITS

<u>ANALYTE</u>	<u>PERCENT RECOVERY</u>
Fluorobenzene	(78-114)

## QUALITY CONTROL DATA

DATE ANALYZED: 03/04/94  
CLIENT PROJ. ID: 090-292-01B

AEN JOB NO: 9403047  
SAMPLE SPIKED: LCS  
INSTRUMENT: H

LABORATORY CONTROL SAMPLE  
METHOD: EPA 8020, 5030 GCFID  
(SOIL MATRIX)

---

ANALYTE	Spike Added (ug/kg)	Percent Recovery
Benzene	19.1	98
Toluene	70.7	97
Gasoline	1000	117

---

## CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>
Benzene	(65-122)
Toluene	(67-124)
Gasoline	(60-125)

Daily method blanks for all associated analytical runs showed no contamination over the reporting limit.

\*\*\* END OF REPORT \*\*\*



# ENVIRONMENTAL BIO-SYSTEMS, INC.

Innovative Solutions for a Better Environment

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Suite C

Hayward, CA 94544

R-7, S-I

## CHAIN OF CUSTODY

9403047

ALL SAMPLES TO BE ANALYZED USING METHODS AND DETECTION LIMITS ESTABLISHED BY REGION OF THE STATE WATER RESOURCES CONTROL BOARD.

### INSTRUCTIONS:

Samples also rec'd not listed on C.O.C.:  
S1-5' (09A)  
S1-20' (10A)  
S2-15' (11A)  
S3-6' (12A)  
S4-15' (13A)

PROJECT NUMBER	090-292-01B
CLIENT	Thomas Mook M.D.
SITE	Choir Auto Plaza
	11660 E. 19 <sup>th</sup>
	San Leandro, CA

SAMPLE I.D.	MATRIX	NUMBER OF CONTAINERS	COMPOSITE	ANALYSIS					TURNAROUND	SAMPLE CONDITION	LAB SAMPLE#
				TPH gas BTEX	TPH disolved	TOG (SSZOF)					
S1-10'	soil	1		X	X				48 hrs	acid	01A
S1-15'		1		X	X						02A
S2-5'		1		X	X						03A
S2-10'		1		X	X						04A
S3-10'		1				X					05A
S2-15'		1				X					06A
S4-5'		1		X	X						07A
S4-10'		1		X	X						08A
S1-20'	2" h.w.	3/2/14		X	X	X					
		24 15' TAT									

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY		
	3/4/94	16:30	(1) Dave Sandoz (2) Tim Babcock		
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<i>[Signature]</i>	3/4/94	16:30	<i>[Signature]</i>	3/4/94	16:30
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<i>[Signature]</i>	3/4/94	17:45	<i>[Signature]</i>	3-4-94	1745
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
SHIPPED VIA	DATE SENT	TIME SENT	COOLER #		
AEN Courier	3/4/94				