

Pacific Gas and Electric Company

Environmental Services  
P.O. Box 7640  
San Francisco, CA 94120  
415/973-7000  
Direct Dial 415/973-  
Telecopy 415/973-9201

September 16, 1997

ENVIRONMENTAL  
PROTECTION  
97 SEP 23 AM 11:03



Mr. Kevin Tinsley  
Alameda County Health Department  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577

5051 / Colleen

# 6207

~~STID 67~~

RE: Site No. STID 6207/~~5084~~  
PG&E Substation J, Coliseum Way and 50th Street, Oakland  
Subject: Submittal of Soil and Groundwater Investigation Report

Dear Mr. Tinsley:

Enclosed please find two copies of the soil boring and shallow groundwater investigation report prepared by Geomatrix Consultant, Inc. The investigation was performed in accordance with a work plan approved by Mr. Dale Klettke, formerly of your department.

PG&E concurs with the conclusions presented by Geomatrix in the report; that is, that no additional remediation at the Station J property is warranted. Please call me at (415) 973-1116 if you would like to discuss the enclosed report.

Sincerely,

Yvonne J. Meeks  
Site Remediation Manager

cc: Sumadhu Arigala (w/ enclosure)  
California Regional Water Quality Control Board  
San Francisco Bay Region  
2101 Webster Street, Suite 500  
Oakland, CA 94612

100 Pine Street, 10th Floor  
San Francisco, CA 94111  
(415) 434-9400 • FAX (415) 434-1365

ENVIRONMENTAL  
PROTECTION  
97 SEP 26 AM 11:00  
**GEOMATRIX**

26 March 1997  
Project 2906

Ms. Yvonne Meeks  
Pacific Gas & Electric Company  
77 Beale Street  
San Francisco, California 94106

Subject: Soil Boring and Shallow Groundwater Investigation  
PG&E Substation "J"  
Oakland, California

Dear Ms. Meeks:

This letter report presents the results of the Geomatrix Consultants, Inc. (Geomatrix), soil and shallow groundwater investigation performed at Pacific Gas & Electric's (PG&E) Substation J property at Coliseum Way and 50th Street in Oakland, California. The investigation was performed in accordance with our 3 December 1996 work plan which was approved by Alameda County Department of Health Services (ACDHS). The current site configuration is shown on Figure 1, overlaying a 1950 aerial photograph of the site and its vicinity. The photo indicates that material containing elevated metals observed at the 5051 Coliseum Way property (Site Characterization Report, 5051 Coliseum Way, prepared by Geomatrix in July 1996 and submitted to the ACDHS) may also occur under a corner of the Substation J property. The objectives of the current investigation were to evaluate the possible presence of this material at the Substation J site and its potential impacts.

#### **FIELD AND LABORATORY PROGRAM**

Geomatrix advanced a total of two soil borings and two probes on 10 December 1996 at the Substation J site (Figure 1). Drilling locations are extremely limited at the Substation J site due to the presence of high-voltage transformers and electrical lines. In fact, four of the six boring locations identified in the work plan were not accessible. Prior to drilling, the soil boring locations were cleared by a private underground utility locator and by notifying USA. In addition, soil boring permits (Attachment A) were obtained from the Alameda County Flood Control and Water Conservation District, Zone 7. The borings and probes were advanced using a hydraulically driven core barrel and drive sampler at each sampling location to approximately 5 feet below the water table at boring locations SBJ-1 and SBJ-2 and to the top of Bay Mud at probes SBJ-2D and SBJ-2D2. A continuous core of the subsurface material was collected, examined, and logged at each boring location; the core was collected and examined

**Geomatrix Consultants, Inc.**  
Engineers, Geologists, and Environmental Scientists

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at the probe locations. Following completion of the borings and probes, the boreholes were filled with grout.

Soil samples were collected at boring locations SBJ-1 and SBJ-2 for chemical analysis at approximately 2 feet below ground surface; in the soil immediately above the Bay Mud; approximately 1 to 2 feet below the top of the Bay Mud; and at the bottom of the boring. Samples of the material immediately above the Bay Mud were collected at probes SBJ-2D and SBJ-2D2. Soil samples were collected in brass sleeves and sealed with Teflon sheets, end caps, and tape.

Grab groundwater samples were collected from borings SBJ-1 and SBJ-2. A 1-inch-diameter PVC well screen and casing were installed in each boring and when sufficient groundwater had entered the screen, a groundwater sample was collected using a clean Teflon bailer. The groundwater samples were tested in the field for pH and conductivity. Samples for metals analysis were filtered using a 0.45 micron filter prior to placement in the sample bottles. The samples for metals analysis were also acidified with nitric acid to pH less than 2. All groundwater samples were placed in United States Environmental Protection Agency (EPA) approved sample containers.

Soil and groundwater samples were stored in an ice cooled chest and delivered to a state-certified analytical laboratory under Geomatrix chain-of-custody procedures. Soil samples were analyzed for CAM 17 metals by EPA Method Series 6000/7000 and pH by EPA Method 9045. Groundwater samples were analyzed for CAM 17 metals by EPA Method Series 6000/7000 and for total dissolved solids by EPA Method 160.1.

## RESULTS

The observed stratigraphy and the chemical analytical results for soil and groundwater are summarized in the following sections. The investigation program is shown on Figure 1. The logs of boring for SBJ-1 and SBJ-2 are presented on Figures 2 and 3. The chemical analytical results are summarized on Tables 1 and 2; the data are included as Attachment B.

### Stratigraphy

The stratigraphy at the site consists of fill over Bay Mud. The fill was typically dark brown clayey sand with gravel and some debris, 5 to 6 feet thick. The Bay Mud unit included very dark gray lean clay and greenish gray lean clay with sand. At borings SBJ-2, SBJ-2D, and SBJ-2D2 a clay layer less than 6 inches in thickness was encountered immediately above the

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Bay Mud. The clay layer typically consisted of a lean clay and varied in color from gray to black.

#### **Analytical Results on Soil**

The analytical results on soil are summarized on Table 2. The data indicate that barium in the lean clay sample from SBJ-2D and zinc in the lean clay samples from SBJ-2 and SBJ-2D2 exceeded the total threshold limit concentrations (TTLCs; California Code of Regulations, Title 22). These samples were collected in the area where, based on the aerial photos, wastes were disposed by the adjacent lithopone manufacturing facility. Cadmium and zinc exceeded their respective TTLCs in the upper Bay Mud sample at SBJ-1. This boring is located in the former drainage channel. The data also indicate that lead concentrations in two of the three fill samples slightly exceeded the TTLC; these conditions are not uncommon in Bay Area fill.

#### **Analytical Results on Groundwater**

The groundwater analytical data are summarized on Table 2. These data indicate that only antimony at location SBJ-2 exceeds federal or California maximum contaminant levels (MCLs) for drinking water.

### **DISCUSSION AND CONCLUSIONS**

The observations in the borings and probes and the analytical results on soil indicate that a thin layer (less than 6 inches in thickness) of waste which contains levels of barium and/or zinc above their respective TTLCs occurs in the immediate vicinity of SBJ-2. The waste was not observed at SBJ-1, approximately 50 feet northwest of SBJ-2. Based on aerial photographs and an estimated thickness of less than 6 inches, the volume under the Substation J property is less than 65 cubic yards.

Elevated levels of cadmium and zinc were reported in the upper foot of the Bay Mud at SBJ-1; this boring is located in a former drainage channel. In addition, concentrations of lead in fill samples above its TTLC were reported; these levels are typical of fill elsewhere in the Bay Area.

The analytical data on groundwater from SBJ-1 and SBJ-2 do not indicate a significant impact on groundwater from site soils. All metals concentrations except antimony are below federal and California MCLs for drinking water. Antimony at SBJ-2 slightly exceeded its MCL; however, antimony is not elevated in site soils. Barium, cadmium, zinc, and lead (which are elevated in site soils) do not exceed MCLs in groundwater. It is important to note that

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groundwater at the site is unlikely to represent a potential drinking water source. Six out of eight wells at the adjacent property (5051 Coliseum Way) had total dissolved solids concentrations well above the secondary drinking water limit of 3000 milligrams per liter. These data, together with the very small amount of water which could be produced (as discussed below), indicate that the site groundwater would not be classified as a potential drinking water resource.

Because of the limitations on site access, we were not able to directly measure the direction of groundwater flow at the site. However, based on work performed at adjacent properties, we anticipate that overall groundwater flow at the site is westerly toward San Leandro Bay, with possibly a minor component of flow toward the adjacent stormwater drainage channel. Overall groundwater flow at the site is expected to be very low due to the absence of upgradient recharge sources and the very limited infiltration from rainfall (as indicated below, the site is effectively capped).

The Substation J property is entirely paved in the area where elevated metals concentrations occur. In addition to the pavement, there are the concrete foundations of the buses for transmission of electricity which overlie portions of the waste. There are also numerous overhead lines carrying up to 100 kilovolts of electricity. Any remediation in this area would require temporary or permanent relocation of these structures. The costs associated with these relocations would be extremely high and could disrupt electrical service reliability in the East Bay Area.

Based on the data present in the report we conclude the following:

- A small volume (less than 65 cubic yards) of waste may occur under a corner of the substation property;
- There is no significant impact on groundwater due to chemicals in site soils;
- Site groundwater has limited beneficial use;
- Groundwater flow from the site is very low due to limited recharge;
- Pavement and/or concrete foundations effectively cap the area of the site where elevated metals were observed in soil;


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- Pavement and/or concrete foundations effectively cap the area of the site where elevated metals were observed in soil;
- Preparation of the site for any additional remediation would be extremely expensive and could result in disruptions in electrical service to the community.

Taking into consideration all of these factors, we conclude that no additional remediation at the Substation J property is warranted.

Sincerely,

GEOMATRIX CONSULTANTS, INC.



Sally E. Goodin  
Principal Geologist

SEG:mdg  
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Attachments: Table 1, Soil Analytical Results  
Table 2, Groundwater Analytical Results  
Figure 1, Investigation Layout, 1950 Photo  
Figure 2, Log of Boring SBJ-1  
Figure 3, Log of Boring SBJ-2  
Attachment A, Drilling Permit  
Attachment B, Laboratory Reports

**TABLE 1**  
**SOIL ANALYTICAL RESULTS<sup>1</sup>**  
PG&E Substation J  
Oakland, California

Concentrations in milligrams per kilogram (mg/kg)

Boring	TTL <sup>2</sup>		500	500	10,000	75	100	8000	2500	2500	20	3500	2000	1000	500	100	700	2400	5000	-
	Sample Date	Sample Depth	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg	Mo	Ni	Pb	Sb	Se	Tl	V	Zn	pH
SBJ-1	12/10/96	2.0	1.1	24	1600	<0.1	11	7.5	43	210	2.4	1.3	71	1500	5	<1	7	60	3700	9.2
SBJ-1	12/10/96	6.5	0.1	4.3	750	<0.1	1.8	6.2	26	59	0.26	0.9	33	180	<1	<1	<1	26	350	9.5
SBJ-1	12/10/96	7.5	0.1	2.0	160	0.2	400	7.1	68	35	0.18	<0.2	110	24	<1	<1	7	21	6300	7.7
SBJ-1	12/10/96	9.0	0.2	<0.5	1300	0.3	0.9	8.1	41	17	0.15	<0.2	80	36	<1	<1	6	24	1900	10.5
SBJ-2	12/10/96	2.0	1.0	20	1700	0.3	12	11	32	150	1.5	1.4	54	1300	15	<1	7	21	2200	8.7
SBJ-2	12/10/96	6.0	<0.1	6.9	130	<0.1	<0.2	5.6	33	10	<0.06	1.3	32	5	<1	<1	2	25	5100	6.3
SBJ-2	12/10/96	7.0	<0.1	12	50	0.2	<0.2	3.8	27	9.2	<0.06	0.4	21	5	<1	<1	2	12	3200	6.5
SBJ-2	12/10/96	9.0	0.2	0.9	67	0.2	<0.2	11	43	13	<0.06	<0.2	67	4	<1	<1	5	20	28	8.5
SBJ-2D	12/10/96	5.0	1.2	1.7	69,000	<0.1	2.6	<0.2	6.2	41	<0.06	<0.2	110	22	<1	<1	<1	230	2100	11.2
SBJ-2D2	12/10/96	5.0	3	3.7	280	<1	20	12	8	58	0.12	1.1	180	30	<10	<1	<10	230	32,000	8.4

Notes:

1. Metals [silver (Ag), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), cobalt (Co), chromium (Cr), copper (Cu), mercury (Hg), molybdenum (Mo), nickel (Ni), lead (Pb), antimony (Sb), selenium (Se), thallium (Tl), vanadium (V), and zinc (Zn)], and pH analyzed by American Environmental Network of Pleasant Hill, California. Laboratory reports detailing the analyses performed, method detection limits for each constituent, and analytical results are included in Attachment B.
2. TTL<sup>2</sup> = total threshold limit concentration based on California Code of Regulations Title 22.

**TABLE 2**  
**GROUNDWATER ANALYTICAL RESULTS<sup>1</sup>**  
 PG&E Substation J  
 Oakland, California

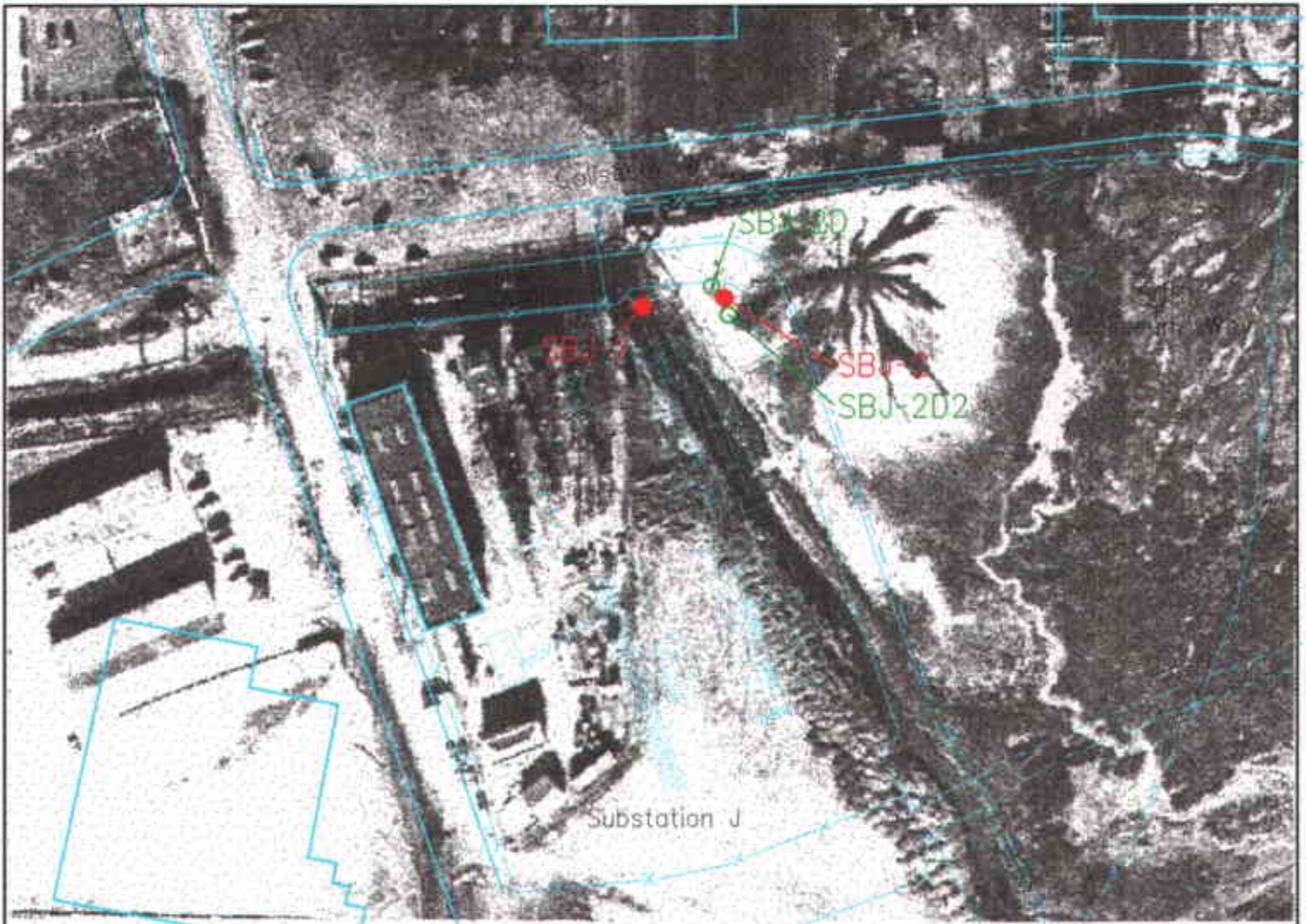
Concentrations in milligrams per liter (mg/l)

MCL <sup>2</sup>		---	0.05	1	0.004	0.005	---	0.05	1	0.002	---	0.1	0.05	0.006	0.01	0.002	---	5	---	---
Well Name	Sample Date	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Hg	Mo	Ni	Pb	Sb	Se	Tl	V	Zn	pH	TDS
SBJ-1	12/10/96	<0.005	0.038	0.7	<0.002	<0.005	<0.005	<0.01	<0.01	<0.0002	0.04	<0.01	<0.04	<0.02	<0.004	<0.05	0.09	0.04	8.6	2300
SBJ-2	12/10/96	<0.005	0.008	0.08	<0.002	<0.005	0.006	<0.01	<0.01	<0.0002	0.04	<0.01	<0.04	0.03	<0.004	<0.05	<0.05	1.6	7.5	810

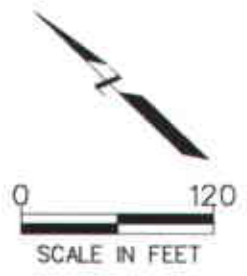
Notes:

1. Metals [silver (Ag), arsenic (As), barium (Ba), beryllium (Be), cadmium (Cd), cobalt (Co), chromium (Cr), copper (Cu), mercury (Hg), molybdenum (Mo), nickel (Ni), lead (Pb), antimony (Sb), selenium (Se), thallium (Tl), vanadium (V), and zinc (Zn)], pH and total dissolved solids (TDS) analyzed by American Environmental Network of Pleasant Hill, California. Laboratory reports detailing the analyses performed, method detection limits for each constituent, and analytical results are included in Attachment B.
2. MCL = maximum contaminant level based on federal and California drinking water standards, 1995.





North Bound Interstate 880  
 South Bound Interstate 880



EXPLANATION

- ◆ Boring location (GW spb too)
- Probe location



INVESTIGATION LAYOUT  
 1950 PHOTO  
 PG&E Substation "J"  
 Oakland, California

Figure  
 1  
 Project No.  
 2906

07-MAR-19  
 F:\2000-2006\2906\2906\1950\1950\1950.dgn  
 MAP\_WT14.ppt  
 CHECKED: [signature]  
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 geomtr.s.ctb

PROJECT: PG&E COLISEUM WAY  
Oakland, California

# Log of Boring No. SBJ-1

BORING LOCATION: Substation J

ELEVATION AND DATUM:  
---

DRILLING CONTRACTOR: Gregg Drilling and Testing, Inc.

DATE STARTED:  
12/10/96

DATE FINISHED:  
12/10/96

DRILLING METHOD: Direct push

TOTAL DEPTH:  
10 feet

MEASURING POINT:  
---

DRILLING EQUIPMENT: Geoprobe

DEPTH TO WATER:

FIRST  
4 feet

COMPL.  
---

SAMPLING METHOD: 4-foot and 2-foot core barrel

LOGGED BY:  
M.R. Keim

HAMMER WEIGHT: ---

DROP: ---

RESPONSIBLE PROFESSIONAL:  
Sally Goodin

REG. NO.  
3743

DEPTH (feet)	SAMPLES			OVM Reading (ppm)	DESCRIPTION <small>NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter.</small>	REMARKS
	Sample No.	Sample	Blows/ Foot			
1	SBJ1-2				CLAYEY SAND with GRAVEL (SC) [FILL] Dark brown (10YR 3/3), moist, 60% fine to coarse sand, 25% medium plasticity fines, 15% gravels, firm	
2						
3						
4						
5					Concrete	ATD ▽
6	SBJ1-6.5					
7	SBJ1-7.5				LEAN CLAY (CL) [BAY MUD] Very dark gray (5Y 3/1), moist, 95% fines, 5% fine sand, medium plasticity, soft	
8						
9	SBJ1-9				LEAN CLAY with SAND (CL) Greenish gray (5G 5/2), moist, 70% fines, 25% fine to coarse sand, 5% fine gravel, medium plasticity, firm	
10					Bottom of boring at 10 feet.	
11						
12						
13						
14						
15						

PROJECT: PG&E COLISEUM WAY  
Oakland, California

# Log of Boring No. SBJ-2

BORING LOCATION: Substation J

ELEVATION AND DATUM:  
---

DRILLING CONTRACTOR: Gregg Drilling and Testing, Inc.

DATE STARTED:  
12/10/96

DATE FINISHED:  
12/10/96

DRILLING METHOD: Direct push

TOTAL DEPTH:  
9 feet

MEASURING POINT:  
---

DRILLING EQUIPMENT: Geoprobe

DEPTH TO WATER: FIRST 4 feet COMPL. ---

SAMPLING METHOD: 4-foot and 2-foot core barrel

LOGGED BY:  
M.R. Keim

HAMMER WEIGHT: ---

DROP: ---

RESPONSIBLE PROFESSIONAL:  
Sally Goodin

REG. NO.  
3743

DEPTH (feet)	SAMPLES			OVM Reading (ppm)	DESCRIPTION NAME (USCS Symbol): color, moist, % by weight, plast., consistency, structure, cementation, react. w/HCl, geo. inter.  Surface Elevation: ---	REMARKS
	Sample No.	Sample	Blows/ Foot			
1	SBJ2-2				CLAYEY SAND with GRAVEL (SC) [FILL] Dark brown (10YR 3/3), moist, 60% fine to coarse sand, 25% medium plasticity fines, 15% gravels, firm	
2						
3						
4						ATD $\nabla$
5	SBJ2-6				LEAN CLAY with SAND (CL) Gray, 70% fines, 30% fine sand, medium plasticity, soft	
6						
7	SBJ2-7				LEAN CLAY (CL) [BAY MUD] Very dark gray (5Y 3/1), moist, 95% fines, 5% fine sand, medium plasticity, soft	
8	SBJ2-9				LEAN CLAY with SAND (CL) Greenish gray (5G 5/2), moist, 70% fines, 25% fine to coarse sand, 5% gravel, medium plasticity, firm	
9						
10						
11						
12						
13						
14						
15					Bottom of boring at 9 feet.	

B-1 (12/95)

**ATTACHMENT A**

**DRILLING PERMIT**



# ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE, PLEASANTON, CALIFORNIA 94588-6127 PHONE (510) 484-2600 X235  
FAX (510) 462-3914

## DRILLING PERMIT APPLICATION

### FOR APPLICANT TO COMPLETE

### FOR OFFICE USE

LOCATION OF PROJECT PG+E Substation "J"  
corner of 50<sup>th</sup> and Coliseum way  
Oakland, California

California Coordinates Source \_\_\_\_\_ ft. Accuracy ± \_\_\_\_\_ ft.  
CCN \_\_\_\_\_ ft. CCE \_\_\_\_\_ ft.  
APN \_\_\_\_\_

CLIENT Name PG+E  
Address 77 Geary St. Phone 415-973-1116  
City San Francisco Zip 94106

APPLICANT Name Mike Keim  
Geomatrix Consultants Fax 415-434-1365  
Address 100 Divisadero Street Phone 415-434-9400  
City San Francisco Zip 94111

#### TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input checked="" type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input type="checkbox"/>

#### PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other _____	<input type="checkbox"/>

#### DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input checked="" type="checkbox"/>	- Direct Push	

DRILLER'S LICENSE NO. 636387

#### WELL PROJECTS

Drill Hole Diameter	<u>8</u> in.	Maximum	
Casing Diameter	<u>—</u> in.	Depth	<u>5</u> ft.
Surface Seal Depth	<u>—</u> ft.	Number	<u>6</u>

#### GEO TECHNICAL PROJECTS

Number of Borings	<u>6</u>	Maximum	
Hole Diameter	<u>2</u> in.	Depth	<u>15</u> ft.

ESTIMATED STARTING DATE 12/4/96

ESTIMATED COMPLETION DATE 12/4/96

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Mike Keim Date 11/27/96

PERMIT NUMBER \_\_\_\_\_

WELL NUMBER \_\_\_\_\_

APN \_\_\_\_\_

#### PERMIT CONDITIONS

Circled Permit Requirements Apply

#### A. GENERAL

1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permit work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling log and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

#### B. WATER SUPPLY WELLS

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

#### C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

#### D. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. Areas of known or suspected contamination, tremie cement grout shall be used in place of compacted cuttings.

#### E. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

#### F. WELL DESTRUCTION. See attached.

#### G. SPECIAL CONDITIONS

Approved \_\_\_\_\_ Date \_\_\_\_\_

**ATTACHMENT B**

**LABORATORY REPORTS**

## GEOMATRIX CONSULTANTS

SAMPLE ID: SBJ2-2  
 AEN LAB NO: 9612148-01  
 AEN WORK ORDER: 9612148  
 CLIENT PROJ. ID: 2906

DATE SAMPLED: 12/10/96  
 DATE RECEIVED: 12/10/96  
 REPORT DATE: 12/13/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Soil pH measured in water	EPA 9045A	8.7		S.U.	12/10/96
#Digestion, Metals by GFAA	EPA 3050	-		Prep Date	12/10/96
#Digestion, Metals AA/ICP	EPA 3050	-		Prep Date	12/10/96
CCR 17 Metals					
Silver	EPA 6010	1.0 *	0.1	mg/kg	12/11/96
Arsenic	EPA 7060	20 *	0.5	mg/kg	12/11/96
Barium	EPA 6010	1,700 *	1	mg/kg	12/11/96
Beryllium	EPA 6010	0.3 *	0.1	mg/kg	12/11/96
Cadmium	EPA 6010	12 *	0.2	mg/kg	12/11/96
Cobalt	EPA 6010	11 *	0.2	mg/kg	12/11/96
Chromium	EPA 6010	32 *	0.5	mg/kg	12/11/96
Copper	EPA 6010	150 *	0.5	mg/kg	12/11/96
Mercury	EPA 7471	1.5 *	0.06	mg/kg	12/12/96
Molybdenum	EPA 6010	1.4 *	0.2	mg/kg	12/11/96
Nickel	EPA 6010	54 *	1	mg/kg	12/11/96
Lead	EPA 6010	1,300 *	1	mg/kg	12/11/96
Antimony	EPA 6010	15 *	1	mg/kg	12/11/96
Selenium	EPA 7740	ND	1	mg/kg	12/11/96
Thallium	EPA 6010	7 *	1	mg/kg	12/11/96
Vanadium	EPA 6010	24 *	0.5	mg/kg	12/11/96
Zinc	EPA 6010	2,200 *	1	mg/kg	12/11/96

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit

GEOMATRIX CONSULTANTS

SAMPLE ID: SBJ2-6  
 AEN LAB NO: 9612148-02  
 AEN WORK ORDER: 9612148  
 CLIENT PROJ. ID: 2906

DATE SAMPLED: 12/10/96  
 DATE RECEIVED: 12/10/96  
 REPORT DATE: 12/13/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Soil pH measured in water	EPA 9045A	6.3		S.U.	12/10/96
#Digestion, Metals by GFAA	EPA 3050	-		Prep Date	12/10/96
#Digestion, Metals AA/ICP	EPA 3050	-		Prep Date	12/10/96
CCR 17 Metals					
Silver	EPA 6010	ND	0.1	mg/kg	12/11/96
Arsenic	EPA 7060	6.9 *	0.5	mg/kg	12/11/96
Barium	EPA 6010	130 *	1	mg/kg	12/11/96
Beryllium	EPA 6010	ND	0.1	mg/kg	12/11/96
Cadmium	EPA 6010	ND	0.2	mg/kg	12/11/96
Cobalt	EPA 6010	5.6 *	0.2	mg/kg	12/11/96
Chromium	EPA 6010	33 *	0.5	mg/kg	12/11/96
Copper	EPA 6010	10 *	0.5	mg/kg	12/11/96
Mercury	EPA 74/1	ND	0.06	mg/kg	12/12/96
Molybdenum	EPA 6010	1.3 *	0.2	mg/kg	12/11/96
Nickel	EPA 6010	32 *	1	mg/kg	12/11/96
Lead	EPA 6010	5 *	1	mg/kg	12/11/96
Antimony	EPA 6010	ND	1	mg/kg	12/11/96
Selenium	EPA 7740	ND	1	mg/kg	12/11/96
Thallium	EPA 6010	2 *	1	mg/kg	12/11/96
Vanadium	EPA 6010	25 *	0.5	mg/kg	12/11/96
Zinc	EPA 6010	5,100 *	1	mg/kg	12/12/96

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit



## GEOMATRIX CONSULTANTS

SAMPLE ID: SBJ2-7  
 AEN LAB NO: 9612148-03  
 AEN WORK ORDER: 9612148  
 CLIENT PROJ. ID: 2906

DATE SAMPLED: 12/10/96  
 DATE RECEIVED: 12/10/96  
 REPORT DATE: 12/13/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Soil pH measured in water	EPA 9045A	6.5		S.U.	12/10/96
#Digestion, Metals by GFAA	EPA 3050	-		Prep Date	12/10/96
#Digestion, Metals AA/ICP	EPA 3050	-		Prep Date	12/10/96
CCR 17 Metals					
Silver	EPA 6010	ND	0.1 mg/kg		12/11/96
Arsenic	EPA 7060	12 *	0.5 mg/kg		12/11/96
Barium	EPA 6010	50 *	1 mg/kg		12/11/96
Beryllium	EPA 6010	0.2 *	0.1 mg/kg		12/11/96
Cadmium	EPA 6010	ND	0.2 mg/kg		12/11/96
Cobalt	EPA 6010	3.8 *	0.2 mg/kg		12/11/96
Chromium	EPA 6010	27 *	0.5 mg/kg		12/11/96
Copper	EPA 6010	9.2 *	0.5 mg/kg		12/11/96
Mercury	EPA 7471	ND	0.06 mg/kg		12/12/96
Molybdenum	EPA 6010	0.4 *	0.2 mg/kg		12/11/96
Nickel	EPA 6010	21 *	1 mg/kg		12/11/96
Lead	EPA 6010	5 *	1 mg/kg		12/11/96
Antimony	EPA 6010	ND	1 mg/kg		12/11/96
Selenium	EPA 7740	ND	1 mg/kg		12/11/96
Thallium	EPA 6010	2 *	1 mg/kg		12/11/96
Vanadium	EPA 6010	12 *	0.5 mg/kg		12/11/96
Zinc	EPA 6010	3,200 *	1 mg/kg		12/11/96

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit

## GEOMATRIX CONSULTANTS

SAMPLE ID: SBJ2-9  
 AEN LAB NO: 9612148-04  
 AEN WORK ORDER: 9612148  
 CLIENT PROJ. ID: 2906

DATE SAMPLED: 12/10/96  
 DATE RECEIVED: 12/10/96  
 REPORT DATE: 12/17/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Soil pH measured in water	EPA 9045A	8.5		S.U.	12/13/96
#Digestion. Metals by GFAA	EPA 3050	-		Prep Date	12/13/96
#Digestion. Metals AA/ICP	EPA 3050	-		Prep Date	12/13/96
CCR 17 Metals					
Silver	EPA 6010	0.2 *	0.1 mg/kg		12/16/96
Arsenic	EPA 7060	0.9 *	0.5 mg/kg		12/16/96
Barium	EPA 6010	67 *	1 mg/kg		12/16/96
Beryllium	EPA 6010	0.2 *	0.1 mg/kg		12/16/96
Cadmium	EPA 6010	ND	0.2 mg/kg		12/16/96
Cobalt	EPA 6010	11 *	0.2 mg/kg		12/16/96
Chromium	EPA 6010	43 *	0.5 mg/kg		12/16/96
Copper	EPA 6010	13 *	0.5 mg/kg		12/16/96
Mercury	EPA 7471	ND	0.06 mg/kg		12/16/96
Molybdenum	EPA 6010	ND	0.2 mg/kg		12/16/96
Nickel	EPA 6010	67 *	1 mg/kg		12/16/96
Lead	EPA 6010	4 *	1 mg/kg		12/16/96
Antimony	EPA 6010	ND	1 mg/kg		12/16/96
Selenium	EPA 7740	ND	1 mg/kg		12/16/96
Thallium	EPA 6010	5 *	1 mg/kg		12/16/96
Vanadium	EPA 6010	20 *	0.5 mg/kg		12/16/96
Zinc	EPA 6010	28 *	1 mg/kg		12/16/96

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit

## GEOMATRIX CONSULTANTS

SAMPLE ID: SBJ2-5D  
 AEN LAB NO: 9612148.05  
 AEN WORK ORDER: 9612148  
 CLIENT PROJ. ID: 2906

DATE SAMPLED: 12/10/96  
 DATE RECEIVED: 12/10/96  
 REPORT DATE: 12/13/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Soil pH measured in water	EPA 9045A	11.2		S.U.	12/10/96
#Digestion, Metals by GFAA	EPA 3050	-		Prep Date	12/10/96
#Digestion, Metals AA/ICP	EPA 3050	-		Prep Date	12/10/96
CCR 17 Metals					
Silver	EPA 6010	1.2 *	0.1 mg/kg		12/11/96
Arsenic	EPA 7060	1.7 *	0.5 mg/kg		12/11/96
Barium	FPA 6010	69,000 *	1 mg/kg		12/12/96
Beryllium	EPA 6010	ND	0.1 mg/kg		12/11/96
Cadmium	EPA 6010	2.6 *	0.2 mg/kg		12/11/96
Cobalt	EPA 6010	ND	0.2 mg/kg		12/11/96
Chromium	EPA 6010	6.2 *	0.5 mg/kg		12/11/96
Copper	EPA 6010	41 *	0.5 mg/kg		12/11/96
Mercury	EPA 7471	ND	0.06 mg/kg		12/12/96
Molybdenum	EPA 6010	ND	0.2 mg/kg		12/11/96
Nickel	EPA 6010	110 *	1 mg/kg		12/11/96
Lead	EPA 6010	22 *	1 mg/kg		12/11/96
Antimony	FPA 6010	ND	1 mg/kg		12/11/96
Selenium	EPA 7740	ND	1 mg/kg		12/11/96
Thallium	EPA 6010	ND	1 mg/kg		12/11/96
Vanadium	EPA 6010	230 *	0.5 mg/kg		12/11/96
Zinc	EPA 6010	2,100 *	1 mg/kg		12/11/96

ND = Not detected at or above the reporting limit

\* = Value at or above reporting limit

## GEOMATRIX CONSULTANTS

SAMPLE ID: SBJ2-5D2  
 AEN LAB NO: 9612148-06  
 AEN WORK ORDER: 9612148  
 CLIENT PROJ. ID: 2906

DATE SAMPLED: 12/10/96  
 DATE RECEIVED: 12/10/96  
 REPORT DATE: 12/13/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Soil pH measured in water	EPA 9045A	8.4		S.U.	12/10/96
#Digestion, Metals by GFAA	EPA 3050	-		Prep Date	12/10/96
#Digestion, Metals AA/ICP	EPA 3050	-		Prep Date	12/10/96
CCR 17 Metals					
Silver	EPA 6010	3 *		1 mg/kg	12/12/96
Arsenic	EPA 7060	3.7 *	0.5	mg/kg	12/11/96
Barium	EPA 6010	280 *		1 mg/kg	12/11/96
Beryllium	EPA 6010	ND		1 mg/kg	12/12/96
Cadmium	EPA 6010	20 *		2 mg/kg	12/12/96
Cobalt	EPA 6010	12 *		2 mg/kg	12/12/96
Chromium	EPA 6010	8 *		5 mg/kg	12/12/96
Copper	EPA 6010	58 *		5 mg/kg	12/12/96
Mercury	EPA 7471	0.12 *	0.06	mg/kg	12/12/96
Molybdenum	EPA 6010	1.1 *	0.2	mg/kg	12/12/96
Nickel	EPA 6010	180 *		10 mg/kg	12/12/96
Lead	EPA 6010	30 *		10 mg/kg	12/12/96
Antimony	EPA 6010	ND		10 mg/kg	12/12/96
Selenium	EPA 7740	ND		1 mg/kg	12/11/96
Thallium	EPA 6010	ND		10 mg/kg	12/12/96
Vanadium	EPA 6010	230 *		5 mg/kg	12/12/96
Zinc	EPA 6010	32.000 *		10 mg/kg	12/12/96

Elevated reporting limits for metals due to matrix interference.

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit

## GEOMATRIX CONSULTANTS

SAMPLE ID: SBJ-2  
 AEN LAB NO: 9612148-07  
 AEN WORK ORDER: 9612148  
 CLIENT PROJ. ID: 2906

DATE SAMPLED: 12/10/96  
 DATE RECEIVED: 12/10/96  
 REPORT DATE: 12/13/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	12/11/96
pH	EPA 150.1	7.5		S.U.	12/10/96
Total Dissolved Solids	EPA 160.1	810 *	10	mg/L	12/11/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	12/11/96
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	12/11/96
CCR 17 Metals					
Ag Silver	EPA 6010	ND	0.005	mg/L	12/12/96
As Arsenic	EPA 7060	0.008 *	0.002	mg/L	12/11/96
Ba Barium	EPA 6010	0.08 *	0.01	mg/L	12/12/96
Be Beryllium	EPA 6010	ND	0.002	mg/L	12/12/96
Cd Cadmium	EPA 6010	ND	0.005	mg/L	12/12/96
Co Cobalt	EPA 6010	0.006 *	0.005	mg/L	12/12/96
Cr Chromium	EPA 6010	ND	0.01	mg/L	12/12/96
Cu Copper	EPA 6010	ND	0.01	mg/L	12/12/96
Hg Mercury	EPA 7470	ND	0.0002	mg/L	12/12/96
Mo Molybdenum	EPA 6010	0.04 *	0.01	mg/L	12/12/96
Ni Nickel	EPA 6010	ND	0.01	mg/L	12/12/96
Pb Lead	EPA 6010	ND	0.04	mg/L	12/12/96
Sb Antimony	EPA 6010	0.03 *	0.02	mg/L	12/12/96
Se Selenium	EPA 7740	ND	0.004	mg/L	12/11/96
Tl Thallium	EPA 6010	ND	0.05	mg/L	12/12/96
V Vanadium	EPA 6010	ND	0.005	mg/L	12/12/96
Zn Zinc	EPA 6010	1.6 *	0.01	mg/L	12/12/96

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit

## GEOMATRIX CONSULTANTS

SAMPLE ID: SBJ1-2  
 AEN LAB NO: 9612148-08  
 AEN WORK ORDER: 9612148  
 CLIENT PROJ. ID: 2906

DATE SAMPLED: 12/10/96  
 DATE RECEIVED: 12/10/96  
 REPORT DATE: 12/13/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Soil pH measured in water	EPA 9045A	9.2		S.U.	12/10/96
#Digestion, Metals by GFAA	EPA 3050	-		Prep Date	12/10/96
#Digestion, Metals AA/ICP	EPA 3050	-		Prep Date	12/10/96
CCR 17 Metals					
Silver	EPA 6010	1.1 *	0.1	mg/kg	12/11/96
Arsenic	EPA 7060	24 *	0.5	mg/kg	12/11/96
Barium	EPA 6010	1,600 *	1	mg/kg	12/11/96
Beryllium	EPA 6010	ND	0.1	mg/kg	12/11/96
Cadmium	EPA 6010	11 *	0.2	mg/kg	12/11/96
Cobalt	EPA 6010	7.5 *	0.2	mg/kg	12/11/96
Chromium	EPA 6010	43 *	0.5	mg/kg	12/11/96
Copper	EPA 6010	210 *	0.5	mg/kg	12/11/96
Mercury	EPA 7471	2.4 *	0.06	mg/kg	12/12/96
Molybdenum	EPA 6010	1.3 *	0.2	mg/kg	12/11/96
Nickel	EPA 6010	71 *	1	mg/kg	12/11/96
Lead	EPA 6010	1,500 *	1	mg/kg	12/11/96
Antimony	EPA 6010	5 *	1	mg/kg	12/11/96
Selenium	EPA 7740	ND	1	mg/kg	12/11/96
Thallium	EPA 6010	7 *	1	mg/kg	12/11/96
Vanadium	EPA 6010	60 *	0.5	mg/kg	12/11/96
Zinc	EPA 6010	3,700 *	1	mg/kg	12/11/96

ND = Not detected at or above the reporting limit

\* = Value at or above reporting limit

GEOMATRIX CONSULTANTS

SAMPLE ID: SBJ1-6.5  
 AEN LAB NO: 9612148.09  
 AEN WORK ORDER: 9612148  
 CLIENT PROJ. ID: 2906

DATE SAMPLED: 12/10/96  
 DATE RECEIVED: 12/10/96  
 REPORT DATE: 12/13/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Soil pH measured in water	EPA 9045A	9.5		S.U.	12/10/96
#Digestion. Metals by GFAA	EPA 3050	-		Prep Date	12/10/96
#Digestion. Metals AA/ICP	EPA 3050	-		Prep Date	12/10/96
CCR 17 Metals					
Silver	EPA 6010	0.1 *	0.1 mg/kg		12/11/96
Arsenic	EPA 7060	4.3 *	0.5 mg/kg		12/11/96
Barium	EPA 6010	750 *	1 mg/kg		12/11/96
Beryllium	EPA 6010	ND	0.1 mg/kg		12/11/96
Cadmium	EPA 6010	1.8 *	0.2 mg/kg		12/11/96
Cobalt	EPA 6010	6.2 *	0.2 mg/kg		12/11/96
Chromium	EPA 6010	26 *	0.5 mg/kg		12/11/96
Copper	EPA 6010	59 *	0.5 mg/kg		12/11/96
Mercury	EPA 7471	0.26 *	0.06 mg/kg		12/12/96
Molybdenum	EPA 6010	0.9 *	0.2 mg/kg		12/11/96
Nickel	EPA 6010	33 *	1 mg/kg		12/11/96
Lead	EPA 6010	180 *	1 mg/kg		12/11/96
Antimony	EPA 6010	ND	1 mg/kg		12/11/96
Selenium	EPA 7740	ND	1 mg/kg		12/11/96
Thallium	EPA 6010	ND	1 mg/kg		12/11/96
Vanadium	EPA 6010	26 *	0.5 mg/kg		12/11/96
Zinc	EPA 6010	350 *	1 mg/kg		12/11/96

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit

## GEOMATRIX CONSULTANTS

SAMPLE ID: SBJ1-7.5  
 AEN LAB NO: 9612148-10  
 AEN WORK ORDER: 9612148  
 CLIENT PROJ. ID: 2906

DATE SAMPLED: 12/10/96  
 DATE RECEIVED: 12/10/96  
 REPORT DATE: 12/13/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Soil pH measured in water	EPA 9045A	7.7		S.U.	12/10/96
#Digestion. Metals by GFAA	EPA 3050			Prep Date	12/10/96
#Digestion. Metals AA/ICP	EPA 3050	-		Prep Date	12/10/96
CCR 17 Metals					
Silver	EPA 6010	0.1 *	0.1	mg/kg	12/11/96
Arsenic	EPA 7060	2.0 *	0.5	mg/kg	12/11/96
Barium	EPA 6010	160 *	1	mg/kg	12/11/96
Beryllium	EPA 6010	0.2 *	0.1	mg/kg	12/11/96
Cadmium	EPA 6010	400 *	0.2	mg/kg	12/11/96
Cobalt	EPA 6010	7.1 *	0.2	mg/kg	12/11/96
Chromium	EPA 6010	68 *	0.5	mg/kg	12/11/96
Copper	EPA 6010	35 *	0.5	mg/kg	12/11/96
Mercury	EPA 7471	0.18 *	0.06	mg/kg	12/12/96
Molybdenum	EPA 6010	ND	0.2	mg/kg	12/11/96
Nickel	EPA 6010	110 *	1	mg/kg	12/11/96
Lead	EPA 6010	24 *	1	mg/kg	12/11/96
Antimony	EPA 6010	ND	1	mg/kg	12/11/96
Selenium	EPA 7740	ND	1	mg/kg	12/11/96
Thallium	EPA 6010	7 *	1	mg/kg	12/11/96
Vanadium	EPA 6010	21 *	0.5	mg/kg	12/11/96
Zinc	EPA 6010	6,300 *	1	mg/kg	12/12/96

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit



## GEOMATRIX CONSULTANTS

SAMPLE ID: SBJ-1  
 AEN LAB NO: 9612148-12  
 AEN WORK ORDER: 9612148  
 CLIENT PROJ. ID: 2906

DATE SAMPLED: 12/10/96  
 DATE RECEIVED: 12/10/96  
 REPORT DATE: 12/13/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	12/11/96
pH	EPA 150.1	8.6		S.U.	12/10/96
Total Dissolved Solids	EPA 160.1	2.300 *	10	mg/L	12/11/96
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	12/11/96
#Digestion, Metals by ICP	EPA 3010	-		Prep Date	12/11/96
CCR 17 Metals					
Ag Silver	EPA 6010	ND	0.005	mg/L	12/12/96
As Arsenic	EPA 7060	0.038 *	0.002	mg/L	12/11/96
Ba Barium	EPA 6010	0.70 *	0.01	mg/L	12/12/96
Be Beryllium	EPA 6010	ND	0.002	mg/L	12/12/96
Cd Cadmium	EPA 6010	ND	0.005	mg/L	12/12/96
Co Cobalt	EPA 6010	ND	0.005	mg/L	12/12/96
Cr Chromium	EPA 6010	ND	0.01	mg/L	12/12/96
Cu Copper	EPA 6010	ND	0.01	mg/L	12/12/96
Hg Mercury	EPA 7470	ND	0.0002	mg/L	12/12/96
Mo Molybdenum	EPA 6010	0.04 *	0.01	mg/L	12/12/96
Ni Nickel	EPA 6010	ND	0.01	mg/L	12/12/96
Pb Lead	EPA 6010	ND	0.04	mg/L	12/12/96
Sb Antimony	EPA 6010	ND	0.02	mg/L	12/12/96
Se Selenium	EPA 7740	ND	0.004	mg/L	12/11/96
Tl Thallium	EPA 6010	ND	0.05	mg/L	12/12/96
V Vanadium	EPA 6010	0.009 *	0.005	mg/L	12/12/96
Zn Zinc	EPA 6010	0.04 *	0.01	mg/L	12/12/96

ND = Not detected at or above the reporting limit

\* = Value at or above reporting limit

## GEOMATRIX CONSULTANTS

SAMPLE ID: SBJ1 9  
 AEN LAB NO: 9612148-11  
 AEN WORK ORDER: 9612148  
 CLIENT PROJ. ID: 2906

DATE SAMPLED: 12/10/96  
 DATE RECEIVED: 12/10/96  
 REPORT DATE: 12/17/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Soil pH measured in water	EPA 9045A	10.5		S.U.	12/13/96
#Digestion, Metals by GFAA	EPA 3050	-		Prep Date	12/13/96
#Digestion, Metals AA/ICP	EPA 3050	-		Prep Date	12/13/96
CCR 17 Metals					
Silver	EPA 6010	0.2 *	0.1	mg/kg	12/16/96
Arsenic	EPA 7060	ND	0.5	mg/kg	12/16/96
Barium	EPA 6010	1.300 *	1	mg/kg	12/16/96
Beryllium	EPA 6010	0.3 *	0.1	mg/kg	12/16/96
Cadmium	EPA 6010	0.9 *	0.2	mg/kg	12/16/96
Cobalt	EPA 6010	8.1 *	0.2	mg/kg	12/16/96
Chromium	EPA 6010	41 *	0.5	mg/kg	12/16/96
Copper	EPA 6010	17 *	0.5	mg/kg	12/16/96
Mercury	EPA 7471	0.15 *	0.06	mg/kg	12/16/96
Molybdenum	EPA 6010	ND	0.2	mg/kg	12/16/96
Nickel	EPA 6010	80 *	1	mg/kg	12/16/96
Lead	EPA 6010	36 *	1	mg/kg	12/16/96
Antimony	EPA 6010	ND	1	mg/kg	12/16/96
Selenium	EPA 7740	ND	1	mg/kg	12/16/96
Thallium	EPA 6010	6 *	1	mg/kg	12/16/96
Vanadium	EPA 6010	24 *	0.5	mg/kg	12/16/96
Zinc	EPA 6010	1.900 *	1	mg/kg	12/16/96

ND = Not detected at or above the reporting limit

\* = Value at or above reporting limit

**CHAIN-OF-CUSTODY RECORD**

No 8635

Date: 12/10/96

Page 1 of 1

Project No.: 2906

**ANALYSES**

**REMARKS**

Samplers (Signatures):

*Mike Keim*

Date	Time	Sample Number	EPA Method 8010	EPA Method 8020	EPA Method 8020 (BTEX only)	EPA Method 8240	EPA Method 8270	TPH as gasoline	TPH as diesel	17 metals	PH	TDS	Cooled	Soil (S), Water (W) or Vapor (V)	Acidified	Number of containers	Additional Comments
12/10	915	SB52-2								X	X		Y	S	N	1	01A
	920	SB52-6								X	X			S		1	02A
	925	SB52-7								X	X			S		1	03A
	930	SB52-9								X	X			S		1	Hold 04A
	940	SB52-5D								X	X			S		1	05A
	950	SB52-5D2								X	X			S	V	1	06A
	1015	SB52-2								X	X	X		W	N	2	07A,B
	1030	SB52-2								X	X			S		1	08A
	1035	SB52-6.5								X	X			S		1	09A
	1040	SB52-7.5								X	X			S		1	10A
	1045	SB52-9								X	X			S		1	Hold 11A
✓	1100	SB5-1								X	X		N	W	V	2	12A,B

Turnaround time: 48 hr.

Results to: Mike Keim

Total No. of containers: 14

Relinquished by (signature):

*Mike Keim*

Date: 12/10

Relinquished by (signature):

Date:

Relinquished by (signature):

Date:

Method of Shipment:

Lab Courier

Printed Name:

Mike Keim

Time: 1515

Printed Name:

Time:

Printed Name:

Time:

Laboratory Comments and Log No.:

12/11/96 Per Mike Keim, filter metals prior to analysis. R. Bias

Company:

Geomatrix

Company:

Company:

Received by (signature):

*Luzanna Podkumarski*

Date: 12/10/96

Received by (signature):

Date:

Received by (signature):

Date:

PH Not on COC but on sample for SB5-1 so pH run

Printed Name:

Luzanna Podkumarski

Time: 18:00

Printed Name:

Time:

Printed Name:

Time:

Company:

AEN

Company:

Company:



**Geomatrix Consultants**  
100 Pine Street, 10th Floor  
San Francisco, California 94111  
415 434 9400

DEC-13-96 FRI 10:37 AEN CALIFORNIA FAX NO. 5109300256 P. 02/12

ID	Task Name	Duration	Mar 30, '97					Apr 6, '97					Apr 13, '97					Apr 20, '97					Apr 27, '97						
			M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	Cone Penetration (Harza)	5d	██████████																										
2	Offshore Borings (Gmx)	15d						██																					
3	Offshore Soil Probes (Gmx)	15d												██															
4	Backlands Borings (Harza)	5d												██████████															
5	UP Mole Borings (Gmx)	10d																		██									

Project: VISION 2000 FIELD SCHED Date: 3/26/97	Task	██████████	Summary	██████████	Rolled Up Progress	██████████
	Progress	██████████	Rolled Up Task	██████████		
	Milestone	◆	Rolled Up Milestone	◇		