

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
FAX (510) 337-9335

June 24, 2009

Ms. Danielle Bogni  
U. S. General Services Administration  
450 Golden Gate Avenue, 3<sup>rd</sup> Floor  
San Francisco, CA 94102

Subject: Subject: SLIC Case RO0002903 (Geotracker ID# SL0600100090), Alameda Federal Center, Former Motor Pool Building #4, 620 Central Avenue, Alameda, CA 94501-7815 – No Further Action

Dear Ms. Bogni:

This letter confirms the completion of a site investigation and remedial activities for soil and groundwater investigations at the above referenced location. We are also transmitting the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site with the provision that the information provided to this agency was accurate and representative of existing conditions.

Based on information in the above-referenced file this agency finds that the site investigation and corrective action carried out at your facility is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and the subject Spill, Leaks, Investigation, and Cleanup (SLIC) case is closed.

#### SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- Elevated levels of total petroleum hydrocarbon as hydraulic oil remains in soil at concentrations of up to 190 ppm.
- Residual metals pollution remains in soil at concentrations up to 2.9 ppm arsenic, 28 ppm chromium and 25 ppm vanadium.
- Residual dissolved metals pollution remains in groundwater at concentrations of up to 6.8 ppb lead and 30 ppb vanadium.

If you have any questions, please call Mr. Steven Plunkett at (510) 383-1767. Thank you.

Please contact our office if you have any questions regarding this matter.

Sincerely,

Donna L. Drogos, P.E.  
LOP and SLIC Program Manager

Danielle Bogni  
RO0002903  
June 23, 2009  
Page 2

Enclosures: SLIC Case Closure Summary

cc: Ms. Cherie McCaulou (w/enc)  
SF- Regional Water Quality Control Board  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

Steven Plunkett (w/orig enc), D. Drogos (w/enc), M. Hyunh (w/enc)

**CASE CLOSURE SUMMARY  
SPILLS, LEAKS, INVESTIGATION AND CLEAUP PROGRAM**

**I. AGENCY INFORMATION**

Date: March 25, 2009

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 383-1767
Responsible Staff Person: Steven Plunkett	Title: Hazardous Materials Specialist

**II. CASE INFORMATION**

Site Facility Name: Alameda Federal Center, Former Motor Pool Building #4		
Site Facility Address: 620 Central Avenue, Alameda, CA 94501-7815		
RB Case No.: ---	RB Case No.: ---	LOP Case No.: RO0002903
URF Filing Date: ---	Global ID No.: SL0600100090	APN: 074-1305-026-00

Responsible Parties	Addresses	Phone Numbers
U.S. General Services Administration (GSA) Contact: Ms. Danielle Bogni	450 Golden Gate Avenue, 3 <sup>rd</sup> Floor San Francisco, CA 94102	(415) 522-3396

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
NA*	NA	NA	NA	NA
Piping			NA	NA

*\*The USTs at this site were removed and the related fuel leak case (RO0000048) was closed in August 2003. This SLIC case was opened based on a release from hydraulic lifts and the detection of Total Petroleum Hydrocarbons (TPH) as hydraulic oil in soil and shallow groundwater.*

### III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Historical activities associated with the use and operation of hydraulic lifts.		
Site characterization complete? Yes	Date Approved By Oversight Agency: --	
Monitoring wells installed? No	Number: NA	Proper screen interval? NA
Highest GW Depth Below Ground Surface: 2.78 feet bgs.	Lowest Depth: 5.71 feet bgs.	Flow Direction: South, based on data from former ACEH site #RO0000048
Most Sensitive Current Use: Potential drinking water source		

Summary of Production Wells in Vicinity: There are no water supply or groundwater production wells within a 0.5 mile radius of the site.	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest SW Name: San Francisco Bay, approximately 500 feet south
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	NA	---	---
Piping	NA	---	---
Free Product	NA	---	---
Soil	NA	---	---
Groundwater	NA	---	---

**MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP**  
(Please see Attachments for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After <sup>(1)</sup>
TPH (Gas)	Not Analyzed	NA	Not Analyzed	Not Analyzed
TPH (Diesel)	Not Analyzed	NA	Not Analyzed	Not Analyzed
TEPH Hydraulic-Oil	190	190	2,600	<500
Benzene	<0.0050	<0.0050	<0.5	<0.5
Toluene	<0.0050	<0.0050	<0.5	<0.5
Ethyl benzene	<0.0050	<0.0050	<0.5	<0.5
Xylenes	<0.0050	<0.0050	<1	<1
Antimony	<2.0	<2.0	<5.0	<5.0
Arsenic (As)	2.9	2.9	50	6.8
Barium (Ba)	68	68	140	29
Beryllium (Be)	<0.5	<0.5	<5.0	<5.0
Cadmium (Cd)	1.4	1.4	<2.0	<2.0
Chromium (Cr)	28	28	9.8	9.8
Cobalt (Co)	8.6	8.6	<5.0	<5.0
Copper (Cu)	14	14	45	<5.0
Lead (Pb)	6.4	6.4	6.8	6.8
Molybdenum (Mo)	<1.0	<1.0	65	8.5
Nickel (Ni)	31	31	7.1	7.1
Selenium (Se)	<2.0	<2.0	<5.0	<5.0
Silver (Ag)	<1.0	<1.0	<5.0	<5.0
Thallium (Tl)	<1.0	<1.0	5.7	<5.0
Vanadium (V)	25	25	75	30
Zinc (Zn)	23	23	58	<10
Mercury (Hg)	<0.05	<0.05	<0.20	<0.20
MTBE	<0.005	<0.005	<5.0	<5.0
Other: HVOCs (8260)	<0.005 <sup>(2)</sup>	<0.005	<0.5 <sup>(2)</sup>	ND <sup>(2)</sup>

(1) Confirmatory Geo Probe samples collected in 2007.

(2) Volatile organics Compounds (VOCs) or halogenated volatile organics (HVOCs) were not detected above laboratory reporting limits.

## SITE HISTORY AND DESCRIPTION OF CORRECTIVE ACTIONS:

The Alameda Federal Center is 7.5 acres site located in a mixed commercial and residential area, with a campus of 18 buildings, landscaping, and asphalt parking. The subject site, Building #4, was a motor pool used by General Services Administration (GSA) for car maintenance and repair. A Phase I Environmental Site assessment completed in 2002 describes a hydraulic lift and an associated sump that were believed to exist inside the building. Building #4 was demolished in early 2007. The present location of the former building is vacant unpaved land.

In November 2002, Kleinfelder conducted a Phase I Environmental Site Assessment (ESA) at the subject site. Findings of the Phase I site assessment revealed the existence of a hydraulic lift and an associated sump inside building #4. Kleinfelder recommended conducting an investigation to assess the subsurface conditions beneath of the lift and sump area. In March 2003, two soil borings were installed adjacent to the hydraulic lift and two soil borings were installed adjacent to the subsurface sump/tank, associated with the hydraulic lift. All four soil borings extended to 15 feet below ground surface (bgs), with soil samples collected at 2.5', 5', 10', and 15' bgs. Soil samples were analyzed for Total Extractable Petroleum Hydrocarbons as Hydraulic Oil (TEPH-HO), Volatile Organic Compounds (VOCs), and CAM 17 Metals. "Grab" groundwater samples were collected from the soil borings at 15' bgs and analyzed for the same constituents as soil.

### 2003 Soil Results

- Composite soil samples collected adjacent to the hydraulic lift did not detect concentrations of TEPH-hydraulic oil above laboratory reporting limits
- A soil sample (SB4-2.5') collected adjacent to the hydraulic system tank/sump had a detectable concentration of 190 mg/Kg TEPH-hydraulic oil
- Composite soil sample collected from 10' and 15' bgs, adjacent to the hydraulic system sump/tank did not detect concentration of TEPH- hydraulic oil above laboratory reporting limits
- VOCs were not detected in any of the soil boring composite soil samples
- CAM 17 metal concentrations detected in soil were above Environmental Screening Levels (ESLs). Arsenic, Chromium, and Vanadium were detected at concentrations up to 2.9 ppm Arsenic, 28 ppm Chromium and 25 ppm vanadium.

### 2003 Groundwater Results

- Geoprobe groundwater sample SB1-GW, collected adjacent to the hydraulic lift, did not have detectable concentrations of TEPH- hydraulic oil
- Geoprobe groundwater sample SB3-GW, collected adjacent to the hydraulic system tank/sump detected 2,600 ppb TEPH- hydraulic oil
- No BTEX or HVOCs were detected in the two (2) Geoprobe boring groundwater samples
- Dissolved metals were detected in groundwater above the ESLs for groundwater that is a current or potential drinking water source at concentrations of up to 45 ppb copper, 65 ppb molybdenum and 5.7 ppb thallium.

To evaluate potential groundwater contamination beneath the site GSA contracted APSI and Vironex to drill a total of four hydropunch borings and collect confirmation groundwater samples. The objective of the groundwater sampling and analysis was to verify the presence or absence TEPH-hydraulic oil, volatile organic compounds and dissolved metals in shallow groundwater. The soil borings were advanced within 5 feet of the previous borings installed in 2003. Soil borings AFC 1, AFC 2, AFC 3, and AFC 4, which were installed in 2007, correspond to the same locations of borings SB1, SB2, SB3, and SB4, installed in 2003.

### 2007 Groundwater Results

- TEPH concentrations detected were below 500 ug/l in the four (4) Geoprobe boring groundwater samples;
- VOCs were not detected above laboratory reporting limits in the four (4) soil boring "grab" groundwater samples.
- Dissolved metals were detected in groundwater above the ESLs for groundwater that is a current or potential drinking water source at concentrations of up to 6.8 ppb lead and 30 ppb vanadium.

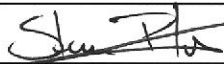
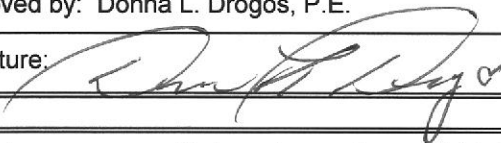
**IV. CLOSURE**

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.		
Site Management Requirements: None		
Should corrective action be reviewed if land use changes? No		
Was a deed restriction or deed notification filed? No		Date Recorded: --
Monitoring Wells Decommissioned: NA	Number Decommissioned: 0	Number Retained: 0
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: --		

**V. ADDITIONAL COMMENTS, DATA, ETC.**

<p>Considerations and/or Variances:</p> <ul style="list-style-type: none"> <li>• Residual TEPH-hydraulic oil pollution remains in soil at concentrations of up to 190 ppm.</li> <li>• Residual metal pollution remains in soil above the ESLs. Arsenic, Chromium, and Vanadium were detected at concentrations of up to 2.9 ppm Arsenic, 28 ppm Chromium and 25 ppm vanadium.</li> <li>• Soil samples collected during the removal of the hydraulic hoist were composited.</li> </ul> <p>Conclusion:</p> <p>Alameda County Environmental Health staff believe that the residual levels of contamination do not pose a significant threat to water resources, public health and safety, and the environment based on the information available in our files to date. No further investigation or cleanup is necessary. ACEH staff recommends case closure for this site.</p>
---

**VI. LOCAL AGENCY REPRESENTATIVE DATA**


Prepared by: Steven Plunkett	Title: Hazardous Materials Specialist
Signature: 	Date: 3/25/09
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature: 	Date: 3/25/09

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.
---

**VII. REGIONAL BOARD NOTIFICATION**

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB:
Signature:	Date:

**VIII. MONITORING WELL DECOMMISSIONING**

Date Requested by ACEH:	Date of Well Decommissioning Report: NA	
All Monitoring Wells Decommissioned: NA	Number Decommissioned: 0	Number Retained: 0
Reason Wells Retained: NA		
Additional requirements for submittal of groundwater data from retained wells: NA		
ACEH Concurrence - Signature: 	Date: 6/25/09	

**Attachments:**

1. Site Location Map
2. Site Plan Map
3. Soil and Groundwater Sampling Locations, March 10, 2003
4. Groundwater Sampling Locations, August 22, 2007
5. Soil Analytical Data (7 pages)
6. Groundwater Analytical Data (22 pages)
7. Boring Logs (14 pages)

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.



VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB:
Signature: <i>Ch McCaulou</i> *	Date: 6/19/09

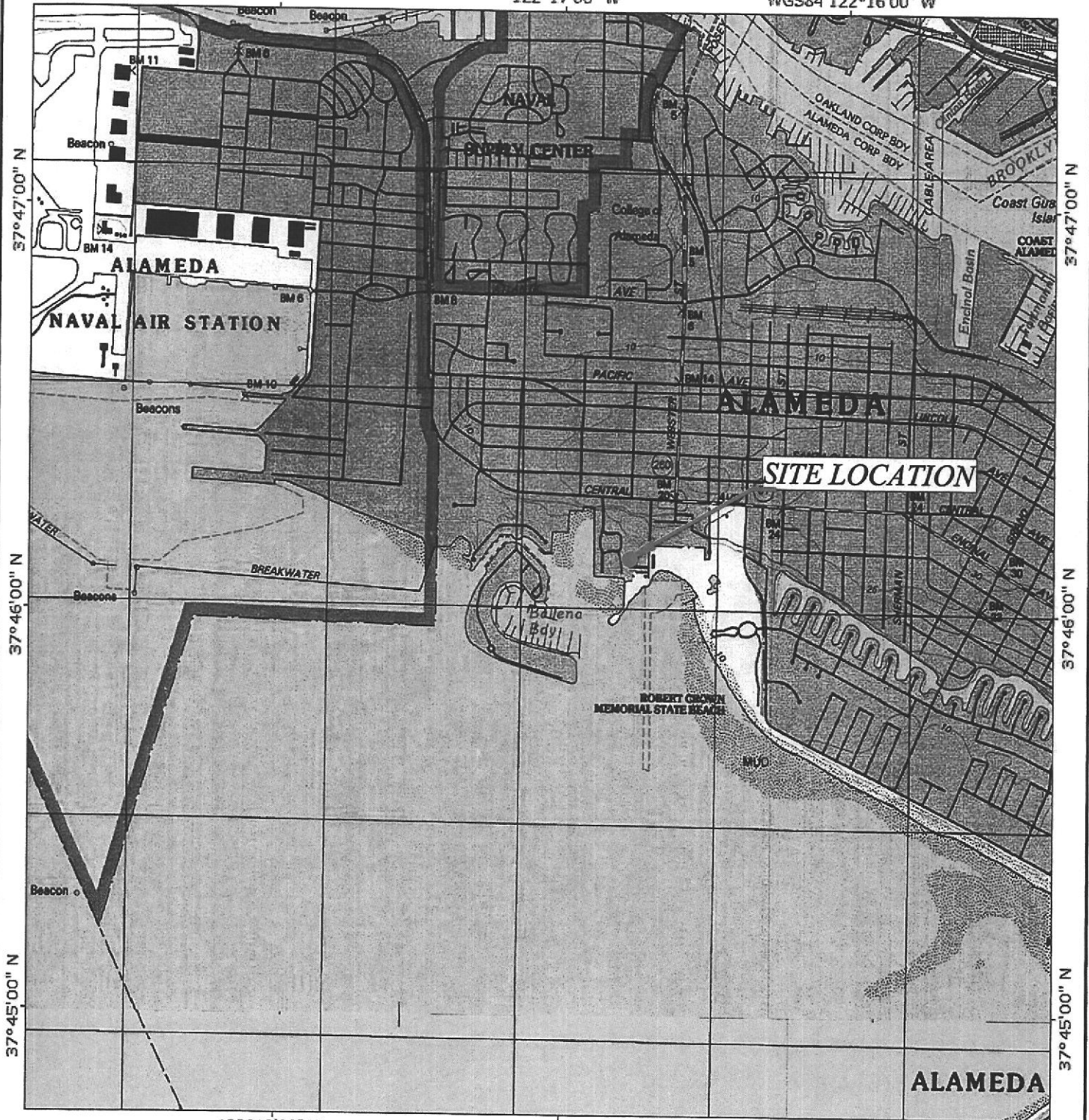
VIII. MONITORING WELL DECOMMISSIONING *\* LOP agency to update required fields in GeoTracker Database.*

Date Requested by ACEH:	Date of Well Decommissioning Report: NA	
All Monitoring Wells Decommissioned: NA	Number Decommissioned: 0	Number Retained: 0
Reason Wells Retained: NA		
Additional requirements for submittal of groundwater data from retained wells: NA		
ACEH Concurrence - Signature:		Date:

Attachments:

1. Site Location Map
2. Site Plan Map
3. Soil and Groundwater Sampling Locations, March 10, 2003
4. Groundwater Sampling Locations, August 22, 2007
5. Soil Analytical Data (7 pages)
6. Groundwater Analytical Data (22 pages)
7. Boring Logs (14 pages)

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.



122°18'00" W 122°17'00" W WGS84 122°16'00" W



Printed from TOPO! ©2000 National Geographic Holdings (www.topo.com)

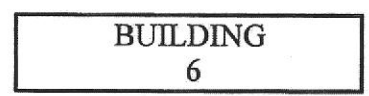
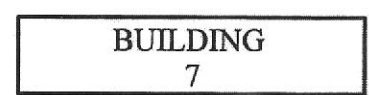
Alameda Federal Center  
620 Central Avenue  
Alameda, CALIFORNIA

# ATTACHMENT 1

SITE LOCATION

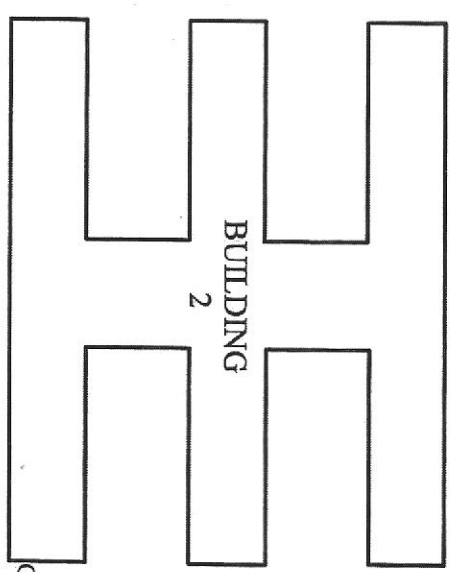
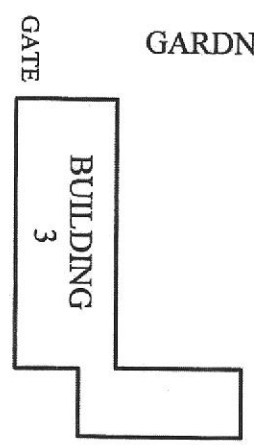


FORMER LIFT LOCATION



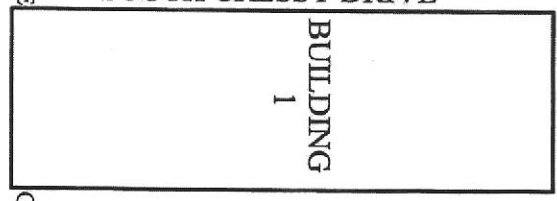
RICHARDSON AVENUE

GARDNER DRIVE



McKAY AVENUE

SOUTH CRESSY DRIVE



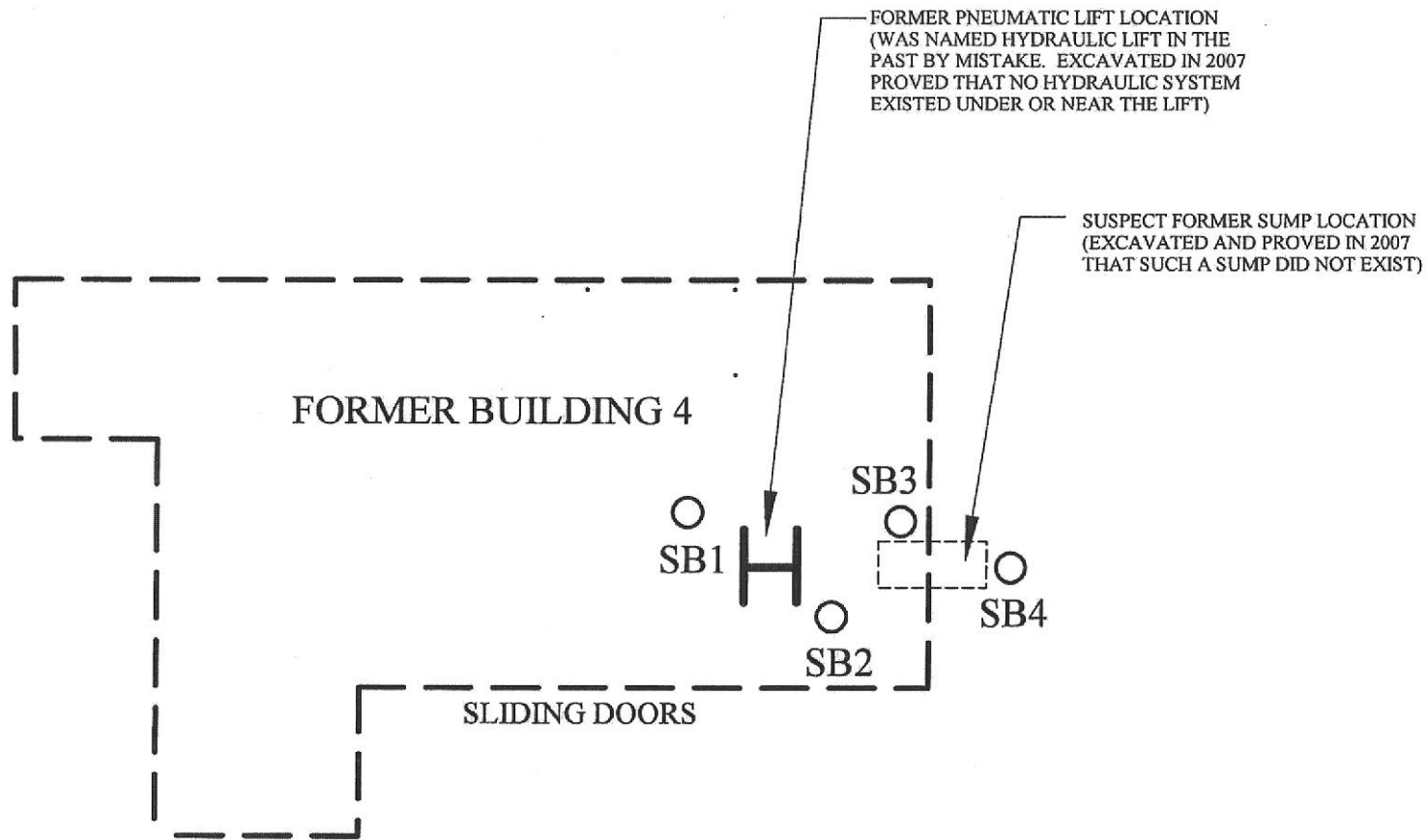
NORTH CRESSY DRIVE

APPROXIMATE SCALE: 1" = 100'  
01/15/08

Alameda Federal Center  
620 Central Avenue  
Alameda, CALIFORNIA

# ATTACHMENT 2

BUILDING LOCATION



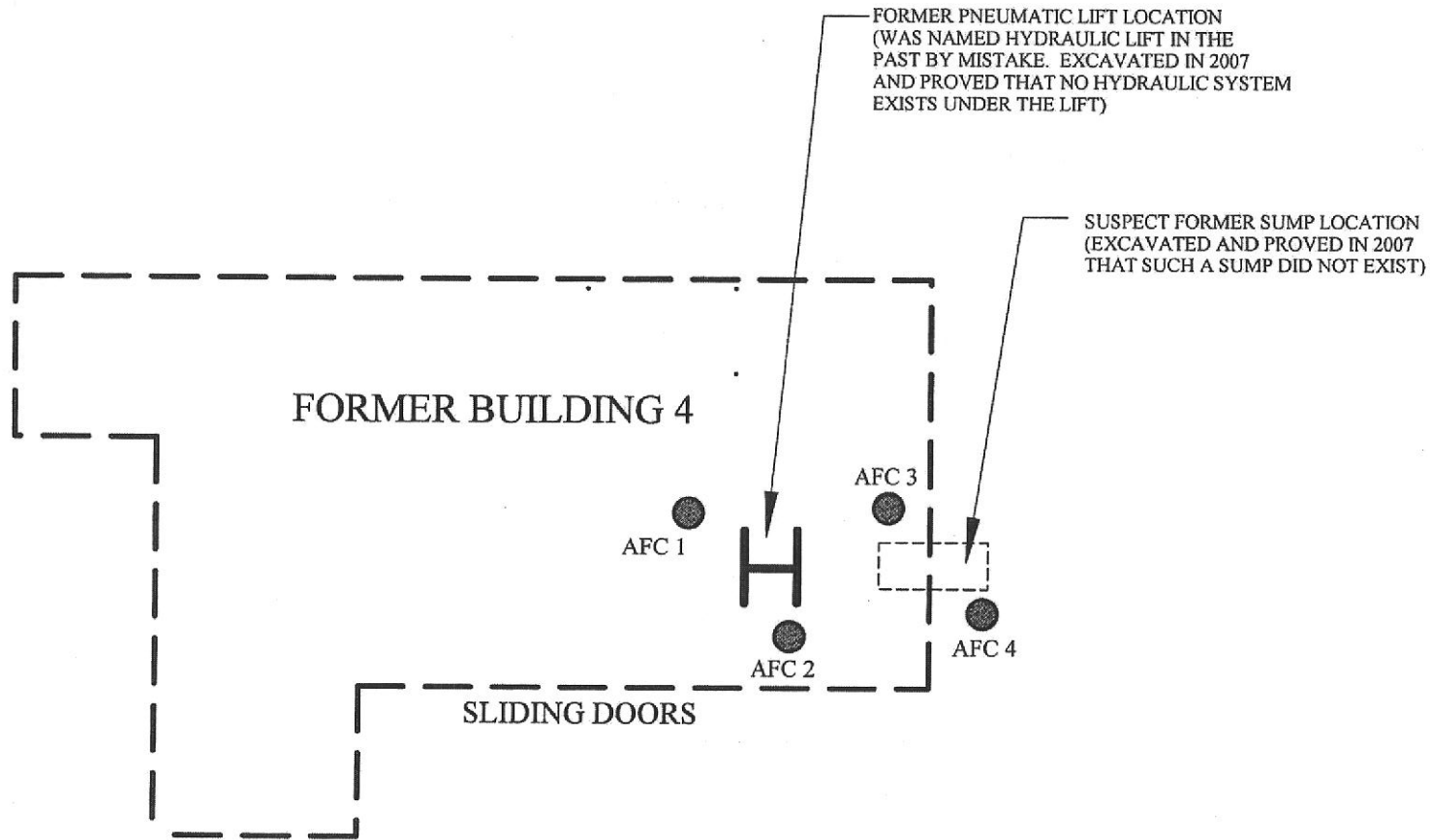
○ DRILLING AND SAMPLING LOCATIONS

APPROXIMATE SCALE: 1" = 50'  
01/15/08

Alameda Federal Center  
620 Central Avenue  
Alameda, CALIFORNIA

### ATTACHMENT 3

SOIL AND GROUNDWATER SAMPLING LOCATIONS  
MARCH 10, 2003



● GROUNDWATER SAMPLING LOCATIONS

APPROXIMATE SCALE: 1" = 50'

01/15/08

Alameda Federal Center  
620 Central Avenue  
Alameda, CALIFORNIA

## ATTACHMENT 4

GROUNDWATER SAMPLING LOCATIONS  
AUGUST 22, 2007

**Table A**  
**TEPH AS HYDRAULIC OIL**  
**MARCH 10, 2003 SOIL RESULTS**  
**Building 4 - Hydraulic Lift**  
**Alameda Federal Center**  
**(EPA Methods 8015M)**  
**{mg/Kg}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	TEPH-Hydraulic Oil
SB1+SB2-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (50)
SB1+SB2-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (50)
SB3+SB4-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	53
SB3+SB4-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (50)
SB3-2.5'	3/10/2003	2.5'	Soil	STL-SF	ND (50)
SB3-5'	3/10/2003	5'	Soil	STL-SF	ND (50)
SB4-2.5'	3/10/2003	2.5'	Soil	STL-SF	190
SB4-5'	3/10/2003	5'	Soil	STL-SF	ND (50)

notes:

TEPH: Total Extractable Petroleum Hydrocarbons  
 ND(10) = Not detected above the reporting limit.

Attachment%20B%20-%20Data%20Summa

**ATTACHMENT 5**

**Table B**  
**VOLATILE ORGANIC COMPOUNDS**  
**MARCH 10, 2003 SOIL RESULTS**  
**Building 4 - Hydraulic Lift - Alameda Federal Center**  
**(EPA Method 8260B)**  
**(mg/Kg)**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	Acetone	Benzene	Bromodichloromethane	Bromobenzene	Bromochloromethane	Bromoform	Bromomethane	2-Butanone (MEK)	n-Butylbenzene
SB1+SB2-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.020)	ND (0.0050)	ND (0.010)	ND (0.050)	ND (0.0050)
SB1+SB2-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.020)	ND (0.0050)	ND (0.010)	ND (0.050)	ND (0.0050)
SB3+SB4-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.020)	ND (0.0050)	ND (0.010)	ND (0.050)	ND (0.0050)
SB3+SB4-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.020)	ND (0.0050)	ND (0.010)	ND (0.050)	ND (0.0050)

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	2-Chloroethylvinyl ether	Chloroform	Chloromethane
SB1+SB2-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.010)	ND (0.050)	ND (0.0050)	ND (0.010)
SB1+SB2-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.010)	ND (0.050)	ND (0.0050)	ND (0.010)
SB3+SB4-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.010)	ND (0.050)	ND (0.0050)	ND (0.010)
SB3+SB4-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.010)	ND (0.050)	ND (0.0050)	ND (0.010)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table B**  
**VOLATILE ORGANIC COMPOUNDS**  
**MARCH 10, 2003 SOIL RESULTS**  
**Building 4 - Hydraulic Lift - Alameda Federal Center**  
**(EPA Method 8260B)**  
**{mg/Kg}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	<u>2-Chlorotoluene</u>	<u>4-Chlorotoluene</u>	<u>Dibromochloromethane</u>	<u>1,2-Dibromo-3-chloropropane</u>	<u>1,2-Dibromoethane</u>	<u>Dibromomethane</u>	<u>1,2-Dichlorobenzene</u>	<u>1,3-Dichlorobenzene</u>	<u>1,4-Dichlorobenzene</u>
SB1+SB2-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.050)	ND (0.010)	ND (0.010)	ND (0.0050)	ND (0.0050)	ND (0.0050)
SB1+SB2-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.050)	ND (0.010)	ND (0.010)	ND (0.0050)	ND (0.0050)	ND (0.0050)
SB3+SB4-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.050)	ND (0.010)	ND (0.010)	ND (0.0050)	ND (0.0050)	ND (0.0050)
SB3+SB4-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.050)	ND (0.010)	ND (0.010)	ND (0.0050)	ND (0.0050)	ND (0.0050)

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	<u>Dichlorodifluoromethane</u>	<u>1,1-Dichloropropene</u>	<u>1,3-Dichloropropane</u>	<u>2,2-Dichloropropane</u>	<u>1,1-Dichloroethane</u>	<u>1,2-Dichloroethane</u>	<u>1,1-Dichloroethene</u>	<u>cis-1,2-Dichloroethene</u>	<u>trans-1,2-Dichloroethene</u>
SB1+SB2-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.010)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
SB1+SB2-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.010)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
SB3+SB4-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.010)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
SB3+SB4-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.010)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.



**Table B**  
**VOLATILE ORGANIC COMPOUNDS**  
**MARCH 10, 2003 SOIL RESULTS**  
**Building 4 - Hydraulic Lift - Alameda Federal Center**  
**(EPA Method 8260B)**  
**{mg/Kg}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	<u>1,2-Dichloropropane</u>	<u>cis-1,3-Dichloropropene</u>	<u>trans-1,3-Dichloropropene</u>	<u>Ethylbenzene</u>	<u>Hexachlorobutadiene</u>	<u>2-Hexanone</u>	<u>Isopropylbenzene</u>	<u>p-Isopropyltoluene</u>	<u>Methylene Chloride</u>
SB1+SB2-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.050)	ND (0.0050)	ND (0.0050)	ND (0.010)
SB1+SB2-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.050)	ND (0.0050)	ND (0.0050)	ND (0.010)
SB3+SB4-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.050)	ND (0.0050)	ND (0.0050)	ND (0.010)
SB3+SB4-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.050)	ND (0.0050)	ND (0.0050)	ND (0.010)

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	<u>4-Methyl-2-pentanone (MIBK)</u>	<u>MTBE</u>	<u>Naphthalene</u>	<u>n-Propylbenzene</u>	<u>Styrene</u>	<u>1,1,1,2-Tetrachloroethane</u>	<u>1,1,2,2-Tetrachloroethane</u>	<u>Tetrachloroethene</u>	<u>Toluene</u>
SB1+SB2-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.050)	ND (0.0050)	ND (0.010)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
SB1+SB2-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.050)	ND (0.0050)	ND (0.010)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
SB3+SB4-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.050)	ND (0.0050)	ND (0.010)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
SB3+SB4-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.050)	ND (0.0050)	ND (0.010)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table B**  
**VOLATILE ORGANIC COMPOUNDS**  
**MARCH 10, 2003 SOIL RESULTS**  
**Building 4 - Hydraulic Lift - Alameda Federal Center**  
**(EPA Method 8260B)**  
**{mg/Kg}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	<u>1,2,3-Trichlorobenzene</u>	<u>1,2,4-Trichlorobenzene</u>	<u>1,1,1-Trichloroethane</u>	<u>1,1,2-Trichloroethane</u>	<u>Trichloroethene</u>	<u>Trichlorofluoromethane</u>	<u>Trichlorotrifluoroethane</u>	<u>1,2,4-Trimethylbenzene</u>	<u>1,3,5-Trimethylbenzene</u>
SB1+SB2-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
SB1+SB2-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
SB3+SB4-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)
SB3+SB4-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	<u>Vinyl Acetate</u>	<u>Vinyl Chloroide</u>	<u>Total Xylenes</u>
SB1+SB2-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.050)	ND (0.0050)	ND (0.0050)
SB1+SB2-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.050)	ND (0.0050)	ND (0.0050)
SB3+SB4-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.050)	ND (0.0050)	ND (0.0050)
SB3+SB4-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.050)	ND (0.0050)	ND (0.0050)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table C**  
**METALS**  
**MARCH 10, 2003 SOIL RESULTS**  
**Building 4 - Hydraulic Lift**  
**Alameda Federal Center**  
**(EPA Methods 3050b/7471A/6010B)**  
**{mg/Kg}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	Antimony (Sb)	Arsenic (As)	Barium (Ba)	Beryllium (Be)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Lead (Pb)
SB1+SB2-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (2.0)	2.2	68	ND (0.50)	1.4	28	8.6	14	1.8
SB1+SB2-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (2.0)	1.4	27	ND (0.50)	0.79	27	3.8	4.7	1.6
SB3+SB4-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (2.0)	2.9	28	ND (0.50)	0.94	21	4.3	7.6	6.4
SB3+SB4-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (2.0)	1.7	22	ND (0.50)	0.61	20	3.2	3.6	1.4
<b>ESL*</b>					6.1	0.38	750	4.0	1.7	0.000001	40	230	200
<b>Background Levels**</b>						3.5				122			

ESL\* = Environmental Screening Level for shallow soil (less or equal to 3 meters below surface grade) for residential land use (potentially contaminated groundwater is a current or potential drinking water resource) Table A-1, "Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, California Regional Water Quality Control Board, San Francisco Region, November 2007."

Background Concentrations of Trace and Major Elements in California Soils  
 Kearny foundation of Soil Science Division of Agriculture and Natural Resources, University of California, March 1996

**Table C**  
**METALS**  
**MARCH 10, 2003 SOIL RESULTS**  
**Building 4 - Hydraulic Lift**  
**Alameda Federal Center**  
**(EPA Methods 3050b/7471A/6010B)**  
**{mg/Kg}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	Hg - Mercury	Molybdenum (Mo)	Nickel (Ni)	Selenium (Se)	Silver (Ag)	Thallium (Tl)	Vanadium (V)	Zinc (Zn)
SB1+SB2-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.050)	ND (1.0)	31	ND (2.0)	ND (1.0)	ND (1.0)	25	23
SB1+SB2-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.050)	ND (1.0)	23	ND (2.0)	ND (1.0)	ND (1.0)	14	15
SB3+SB4-2.5'+5'	3/10/2003	2.5' & 5'	Soil	STL-SF	ND (0.050)	ND (1.0)	20	ND (2.0)	ND (1.0)	ND (1.0)	15	20
SB3+SB4-10'+15'	3/10/2003	10' & 15'	Soil	STL-SF	ND (0.050)	ND (1.0)	18	ND (2.0)	ND (1.0)	ND (1.0)	12	12
<b>ESL*</b>					1.0	40	150	10	20	1.2	15	600
<b>Background Levels**</b>											112	

ESL\* = Environmental Screening Level for shallow soil (less or equal to 3 meters below surface grade) for residential land use (potentially contaminated groundwater is a current or potential drinking water resource) Table A-1, "Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, California Regional Water Quality Control Board, San Francisco Region, November 2007."

Background Concentrations of Trace and Major Elements in California Soils  
 Kearny foundation of Soil Science Division of Agriculture and Natural Resources, University of California, March 1996

**Table D**  
**TEPH AS HYDRAULIC OIL**  
**MARCH 10, 2003 GROUNDWATER RESULTS**  
**Building 4 - Hydraulic Lift**  
**Alameda Federal Center**  
**(EPA Methods 8015M)**  
**{mg/L}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	TEPH-Hydraulic Oil
SB1-GW	3/10/2003	15'	Water	STL-SF	ND (0.500)
SB3-GW	3/10/2003	15'	Water	STL-SF	<b>2.600</b>

notes:

TEPH: Total Extractable Petroleum Hydrocarbons  
 ND(10) = Not detected above the reporting limit.

Attachment%20B%20-%20Data%20Su

**ATTACHMENT 6**

**Table E**  
**VOLATILE ORGANIC COMPOUNDS**  
**MARCH 10, 2003 GROUNDWATER RESULTS**  
**Building 4 - Hydraulic Lift**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{mg/L}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	<u>Acetone</u>	<u>Benzene</u>	<u>Bromodichloromethane</u>	<u>Bromobenzene</u>	<u>Bromochloromethane</u>	<u>Bromoform</u>	<u>Bromomethane</u>	<u>2-Butanone (MEK)</u>	<u>n-Butylbenzene</u>
SB1-GW	3/10/2003	15'	Water	STL-SF	ND (0.050)	ND (0.00050)	ND (0.00050)	ND (0.0010)	ND (0.0010)	ND (0.00050)	ND (0.0010)	ND (0.050)	ND (0.0010)
SB3-GW	3/10/2003	15'	Water	STL-SF	ND (0.050)	ND (0.00050)	ND (0.00050)	ND (0.0010)	ND (0.0010)	ND (0.00050)	ND (0.0010)	ND (0.050)	ND (0.0010)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table E**  
**VOLATILE ORGANIC COMPOUNDS**  
**MARCH 10, 2003 GROUNDWATER RESULTS**  
**Building 4 - Hydraulic Lift**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{mg/L}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	<u>sec-Butylbenzene</u>	<u>tert-Butylbenzene</u>	<u>Carbon disulfide</u>	<u>Carbon tetrachloride</u>	<u>Chlorobenzene</u>	<u>Chloroethane</u>	<u>2-Chloroethylvinyl ether</u>	<u>Chloroform</u>	<u>Chloromethane</u>
SB1-GW	3/10/2003	15'	Water	STL-SF	ND (0.0010)	ND (0.0010)	ND (0.0050)	ND (0.00050)	ND (0.00050)	ND (0.0010)	ND (0.0050)	ND (0.0010)	ND (0.0010)
SB3-GW	3/10/2003	15'	Water	STL-SF	ND (0.0010)	ND (0.0010)	ND (0.0050)	ND (0.00050)	ND (0.00050)	ND (0.0010)	ND (0.0050)	ND (0.0010)	ND (0.0010)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table E**  
**VOLATILE ORGANIC COMPOUNDS**  
**MARCH 10, 2003 GROUNDWATER RESULTS**  
**Building 4 - Hydraulic Lift**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{mg/L}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	<u>2-Chlorotoluene</u>	<u>4-Chlorotoluene</u>	<u>Dibromochloromethane</u>	<u>1,2-Dibromo-3-chloropropane</u>	<u>1,2-Dibromoethane</u>	<u>Dibromomethane</u>	<u>1,2-Dichlorobenzene</u>	<u>1,3-Dichlorobenzene</u>	<u>1,4-Dichlorobenzene</u>
SB1-GW	3/10/2003	15'	Water	STL-SF	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.0010)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)
SB3-GW	3/10/2003	15'	Water	STL-SF	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.0010)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.



**Table E**  
**VOLATILE ORGANIC COMPOUNDS**  
**MARCH 10, 2003 GROUNDWATER RESULTS**  
**Building 4 - Hydraulic Lift**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{mg/L}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	<u>Dichlorodifluoromethane</u>	<u>1,1-Dichloropropene</u>	<u>1,3-Dichloropropane</u>	<u>2,2-Dichloropropane</u>	<u>1,1-Dichloroethane</u>	<u>1,2-Dichloroethane</u>	<u>1,1-Dichloroethene</u>	<u>cis-1,2-Dichloroethene</u>	<u>trans-1,2-Dichloroethene</u>
SB1-GW	3/10/2003	15'	Water	STL-SF	ND (0.00050)	ND (0.00050)	ND (0.0010)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)
SB3-GW	3/10/2003	15'	Water	STL-SF	ND (0.00050)	ND (0.00050)	ND (0.0010)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table E**  
**VOLATILE ORGANIC COMPOUNDS**  
**MARCH 10, 2003 GROUNDWATER RESULTS**  
**Building 4 - Hydraulic Lift**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{mg/L}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	<u>1,2-Dichloropropane</u>	<u>cis-1,3-Dichloropropene</u>	<u>trans-1,3-Dichloropropene</u>	<u>Ethylbenzene</u>	<u>Hexachlorobutadiene</u>	<u>2-Hexanone</u>	<u>Isopropylbenzene</u>	<u>p-Isopropyltoluene</u>	<u>Methylene Chloride</u>
SB1-GW	3/10/2003	15'	Water	STL-SF	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.0010)	ND (0.050)	ND (0.00050)	ND (0.0010)	ND (0.0050)
SB3-GW	3/10/2003	15'	Water	STL-SF	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.0010)	ND (0.050)	ND (0.00050)	ND (0.0010)	ND (0.0050)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table E**  
**VOLATILE ORGANIC COMPOUNDS**  
**MARCH 10, 2003 GROUNDWATER RESULTS**  
**Building 4 - Hydraulic Lift**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{mg/L}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	4-Methyl-2-pentanone (MIBK)	MTBE	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene
SB1-GW	3/10/2003	15'	Water	STL-SF	ND (0.050)	ND (0.0050)	ND (0.0010)	ND (0.0010)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)
SB3-GW	3/10/2003	15'	Water	STL-SF	ND (0.050)	ND(0.0050)	ND (0.0010)	ND (0.0010)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.00050)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table E**  
**VOLATILE ORGANIC COMPOUNDS**  
**MARCH 10, 2003 GROUNDWATER RESULTS**  
**Building 4 - Hydraulic Lift**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{mg/L}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	<u>1,2,3-Trichlorobenzene</u>	<u>1,2,4-Trichlorobenzene</u>	<u>1,1,1-Trichloroethane</u>	<u>1,1,2-Trichloroethane</u>	<u>Trichloroethene</u>	<u>Trichlorofluoromethane</u>	<u>Trichlorotrifluoroethane</u>	<u>1,2,4-Trimethylbenzene</u>	<u>1,3,5-Trimethylbenzene</u>
SB1-GW	3/10/2003	15'	Water	STL-SF	ND (0.0010)	ND (0.0010)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.0010)	ND (0.00050)	ND (0.00050)	ND (0.00050)
SB3-GW	3/10/2003	15'	Water	STL-SF	ND (0.0010)	ND (0.0010)	ND (0.00050)	ND (0.00050)	ND (0.00050)	ND (0.0010)	ND (0.00050)	ND (0.00050)	ND (0.00050)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table E**  
**VOLATILE ORGANIC COMPOUNDS**  
**MARCH 10, 2003 GROUNDWATER RESULTS**  
**Building 4 - Hydraulic Lift**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{mg/L}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	<u>Vinyl Acetate</u>	<u>Vinyl Chloroide</u>	<u>Total Xylenes</u>
SB1-GW	3/10/2003	15'	Water	STL-SF	ND (0.025)	ND (0.00050)	ND (0.0010)
SB3-GW	3/10/2003	15'	Water	STL-SF	ND (0.025)	ND (0.00050)	ND (0.0010)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table F**  
**METALS**  
**MARCH 10, 2003 GROUNDWATER RESULTS**  
**Building 4 - Hydraulic Lift**  
**Alameda Federal Center**  
**(EPA Methods 3050b/7471A/6010B)**  
**{mg/L}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	Antimony (Sb)	Arsenic (As)	Barium (Ba)	Beryllium (Be)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Lead (Pb)
SB1-GW	3/10/2003	15'	Water	STL-SF	ND (0.0050)	0.011	0.14	ND (0.0050)	ND (0.0020)	ND (0.0050)	ND (0.0050)	0.045	ND (0.0050)
SB3-GW	3/10/2003	15'	Water	STL-SF	ND (0.0050)	0.050	0.11	ND (0.0050)	ND (0.0020)	ND (0.0050)	ND (0.0050)	0.029	ND (0.0050)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table F  
METALS  
MARCH 10, 2003 GROUNDWATER RESULTS  
Building 4 - Hydraulic Lift  
Alameda Federal Center  
(EPA Methods 3050b/7471A/6010B)  
{mg/L}**

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	Hg - Mercury	Molybdenum (Mo)	Nickel (Ni)	Selenium (Se)	Silver (Ag)	Thallium (Tl)	Vanadium (V)	Zinc (Zn)
SB1-GW	3/10/2003	15'	Water	STL-SF	ND (0.00020)	<b>0.014</b>	<b>0.0052</b>	ND (0.0050)	ND (0.0050)	<b>0.0057</b>	ND (0.0050)	<b>0.058</b>
SB3-GW	3/10/2003	15'	Water	STL-SF	ND (0.00020)	<b>0.065</b>	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	<b>0.075</b>	ND (0.010)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table 1**  
**AUGUST 22, 2007 TEPH GROUNDWATER RESULTS**  
**Building 4 - Hydraulic Lift**  
**Alameda Federal Center**  
**(EPA Methods 8015B)**  
**{ug/L}**

Sample I.D.	Sampling Date	Matrix	Lab	TEPH
AFC 1	8/22/2007	Water	Test America	ND <500
AFC 2	8/22/2007	Water	Test America	ND <500
AFC 3	8/22/2007	Water	Test America	ND <500
AFC 4	8/22/2007	Water	Test America	ND <500

notes:

TEPH: Total Extractable Petroleum Hydrocarbons  
 ND = Not detected above the reporting limit.



**Table 2**  
**VOLATILE ORGANIC COMPOUNDS**  
**AUGUST 22, 2007 GROUNDWATER RESULTS**  
**Building 4**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{ug/L}**

Sample I.D.	Sampling Date	Matrix	Lab	Methyl tert-butyl ether	Acetone	Benzene	Dichlorobromomethane	Bromobenzene	Chlorobromomethane	Bromoform	Bromomethane	Methyl Ethyl Ketone
AFC 1	8/22/2007	Water	Test America	ND (5.0)	ND (50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (50)
AFC 2	8/22/2007	Water	Test America	ND (5.0)	ND (50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (50)
AFC 3	8/22/2007	Water	Test America	ND (5.0)	ND (50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (50)
AFC 4	8/22/2007	Water	Test America	ND (5.0)	ND (50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (50)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table 2**  
**VOLATILE ORGANIC COMPOUNDS**  
**AUGUST 22, 2007 GROUNDWATER RESULTS**  
**Building 4**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{ug/L}**

Sample I.D.	Sampling Date	Matrix	Lab	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane
AFC 1	8/22/2007	Water	Test America	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (0.50)	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)
AFC 2	8/22/2007	Water	Test America	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (0.50)	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)
AFC 3	8/22/2007	Water	Test America	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (0.50)	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)
AFC 4	8/22/2007	Water	Test America	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (0.50)	ND (0.50)	ND (1.0)	ND (1.0)	ND (1.0)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table 2**  
**VOLATILE ORGANIC COMPOUNDS**  
**AUGUST 22, 2007 GROUNDWATER RESULTS**  
**Building 4**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{ug/L}**

Sample I.D.	Sampling Date	Matrix	Lab	2-Chlorotoluene	4-Chlorotoluene	Chlorodibromomethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	1,3-Dichloropropane	1,1-Dichloropropene	1,2-Dibromo-3-Chloropropane
AFC 1	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (0.50)	ND (1.0)
AFC 2	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (0.50)	ND (1.0)
AFC 3	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (0.50)	ND (1.0)
AFC 4	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (0.50)	ND (1.0)

notes:  
 STL-SF: Severn Trent Services - San Francisco  
 ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table 2**  
**VOLATILE ORGANIC COMPOUNDS**  
**AUGUST 22, 2007 GROUNDWATER RESULTS**  
**Building 4**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{ug/L}**

Sample I.D.	Sampling Date	Matrix	Lab	Ethylene Dibromide	Dibromomethane	Dichlorodifluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene
AFC 1	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.050)	ND (0.50)	ND (0.50)
AFC 2	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.050)	ND (0.50)	ND (0.50)
AFC 3	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.050)	ND (0.50)	ND (0.50)
AFC 4	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.050)	ND (0.50)	ND (0.50)

notes:  
 STL-SF: Severn Trent Services - San Francisco  
 ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table 2**  
**VOLATILE ORGANIC COMPOUNDS**  
**AUGUST 22, 2007 GROUNDWATER RESULTS**  
**Building 4**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{ug/L}**

Sample I.D.	Sampling Date	Matrix	Lab	1,2-Dichloropropane	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethylbenzene	Hexachlorobutadiene	2-Hexanone	Isopropylbenzene	4-Isopropyltoluene	Methylene Chloride
AFC 1	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (50)	ND (0.50)	ND (1.0)	ND (5.0)
AFC 2	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (50)	ND (0.50)	ND (1.0)	ND (5.0)
AFC 3	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (50)	ND (0.50)	ND (1.0)	ND (5.0)
AFC 4	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (50)	ND (0.50)	ND (1.0)	ND (5.0)

notes:  
 STL-SF: Severn Trent Services - San Francisco  
 ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table 2**  
**VOLATILE ORGANIC COMPOUNDS**  
**AUGUST 22, 2007 GROUNDWATER RESULTS**  
**Building 4**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{ug/L}**

Sample I.D.	Sampling Date	Matrix	Lab	4-Methyl-2-pentanone (MIBK)	Naphthalene	n-Propylbenzene	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene
AFC 1	8/22/2007	Water	Test America	ND (50)	ND (1.0)	ND (1.0)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (1.0)
AFC 2	8/22/2007	Water	Test America	ND (50)	ND (1.0)	ND (1.0)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (1.0)
AFC 3	8/22/2007	Water	Test America	ND (50)	ND (1.0)	ND (1.0)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (1.0)
AFC 4	8/22/2007	Water	Test America	ND (50)	ND (1.0)	ND (1.0)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (1.0)

notes:

STL-SF: Severn Trent Services - San Francisco

ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table 2**  
**VOLATILE ORGANIC COMPOUNDS**  
**AUGUST 22, 2007 GROUNDWATER RESULTS**  
**Building 4**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{ug/L}**

Sample I.D.	Sampling Date	Matrix	Lab	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	1,2,3-Trichloropropane	1,1,2-Trichloro-1,2,2-Trifluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Acetate	Vinyl Chloride
AFC 1	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (50)	ND (0.50)
AFC 2	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (50)	ND (0.50)
AFC 3	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (50)	ND (0.50)
AFC 4	8/22/2007	Water	Test America	ND (0.50)	ND (0.50)	ND (0.50)	ND (1.0)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (50)	ND (0.50)

notes:  
 STL-SF: Severn Trent Services - San Francisco  
 ND(10) = Not detected above the laboratory reporting limit in parentheses.

**Table 2**  
**VOLATILE ORGANIC COMPOUNDS**  
**AUGUST 22, 2007 GROUNDWATER RESULTS**  
**Building 4**  
**Alameda Federal Center**  
**(EPA Method 8260B)**  
**{ug/L}**

Sample I.D.	Sampling Date	Matrix	Lab	Total Xylenes	2,2-Dichloropropane
AFC 1	8/22/2007	Water	Test America	ND (1.0)	ND (0.50)
AFC 2	8/22/2007	Water	Test America	ND (1.0)	ND (0.50)
AFC 3	8/22/2007	Water	Test America	ND (1.0)	ND (0.50)
AFC 4	8/22/2007	Water	Test America	ND (1.0)	ND (0.50)

notes:

STL-SF: Severn Trent Services - San Francisco  
 ND(10) = Not detected above the laboratory reporting limit in parentheses.



**Table 3  
METALS  
AUGUST 22, 2007 GROUNDWATER RESULTS  
Building 4  
Alameda Federal Center  
(EPA Methods 6010B/3005A  
{mg/L})**

Sample I.D.	Sampling Date	Matrix	Lab	Antimony (Sb)	Arsenic (As)	Barium (Ba)	Beryllium (Be)	Cadmium (Cd)	Chromium (Cr)	Cobalt (Co)	Copper (Cu)	Lead (Pb)	Mercury
AFC-1	8/22/2007	Water	Test America	ND (0.0050)	0.0068	0.029	ND (0.0050)	ND (0.0020)	0.0098	ND (0.0050)	ND (0.0050)	0.0068	ND (0.00020)
AFC-2	8/22/2007	Water	Test America	ND (0.0050)	ND (0.0050)	0.026	ND (0.0050)	ND (0.0020)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.00020)
AFC-3	8/22/2007	Water	Test America	ND (0.0050)	ND (0.0050)	0.028	ND (0.0050)	ND (0.0020)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.00020)
AFC-4	8/22/2007	Water	Test America	ND (0.0050)	ND (0.0050)	0.024	ND (0.0050)	ND (0.0020)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.00020)
Final ESL*				0.006	0.05	1.0	0.004	0.005	0.05	0.14	1.0	0.015	0.002

\* Final ESL = Final Environmental Screening Levels from Table F-1a, where groundwater is a current or potential drinking water resource  
"Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater,  
California Regional Water Quality Control Board, San Francisco Region, Interim Final - November 2007."

notes:  
STL-SF: Severn Trent Services - San Francisco  
ND(10) = Not detected above the laboratory reporting limit in parentheses.

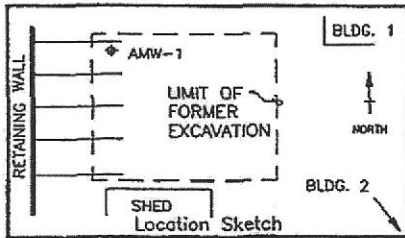
**Table 3**  
**METALS**  
**AUGUST 22, 2007 GROUNDWATER RESULTS**  
**Building 4**  
**Alameda Federal Center**  
**(EPA Methods 6010B/3005A**  
**{mg/L})**

Sample I.D.	Sampling Date	Matrix	Lab	Molybdenum (Mo)	Nickel (Ni)	Selenium (Se)	Silver (Ag)	Thallium (Tl)	Vanadium (V)	Zinc (Zn)
AFC-1	8/22/2007	Water	Test America	0.0085	0.0071	ND (0.0050)	ND (0.0050)	ND (0.0050)	0.030	ND (0.010)
AFC-2	8/22/2007	Water	Test America	0.0054	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.010)
AFC-3	8/22/2007	Water	Test America	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.010)
AFC-4	8/22/2007	Water	Test America	0.0051	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.0050)	ND (0.010)
Final ESL*				0.035	0.1	0.05	0.035	0.002	0.015	5.0

\* Final ESL = Final Environmental Screening Levels from Table F-1a, where groundwater is a current or potential drinking water resource  
 \*Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater,  
 California Regional Water Quality Control Board, San Francisco Region, Interim Final - November 2007."

notes:  
 STL-SF: Severn Trent Services - San Francisco  
 ND(10) = Not detected above the laboratory reporting limit in parentheses.

# BORING LOG AMW-1



Date 2-16-98 Sheet 1 OF 1  
 Project ALAMEDA FED. CNTR. Project No. 2403C.24  
 Drilling Co. GREGG Type of Rig B-61  
 Hole Diameter 8" O.D. in. Drive Weight 140 LB Drop 30 in.  
 Surface Elevation \_\_\_\_\_ (msl) Top of Casing Elevation \_\_\_\_\_ (msl)

Depth (Feet)	Well Construction		Samples		Interval	Blows Per 6" Interval	Graphic Log	USCS	OVA/PID (PPM)	SOIL/GEOLOGIC DESCRIPTION
	Casing Detail	Backfill Detail	Sample ID.	Time						
1										3" of asphalt Pea gravel fill material, excavation. fill
2	BLANK PVC							GW	2	
3		BENTONITE PELLETS								
4										
5			NO RECOVERY	0845		6 4 2		GW	0	No Recovery, wet, loose.
6										
7										
8										
9	0.01" SLOT SCREEN									
10			NO RECOVERY	0858		11 4 4		GW	0	@10' - Dark yellowish brown (10YR 4/2), sandy gravel, wet, medium - dense, no hydro carbon odor, no recovery no soil sample collected.
11										
12										
13										
14										
15			NO RECOVERY	0904		8 12 16		GW	0	@15' - Dark yellowish brown (10YR 4/2), sandy gravel, wet, medium - dense, no hydrocarbon odor, no recovery, no soil sample collected. geotextile in shoe of sampler.
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

Logged by: Bill Millar  
 Reviewed by: \_\_\_\_\_

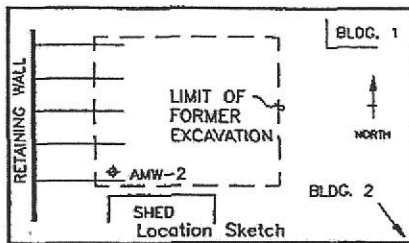
LEGEND  
 BGS - Below Ground Surface  
 TD - Total Depth BGS  
 B - Bentonite Chips 3/8"  
 BCG - Bentonite Grout  
 PCC - Portland Cement Concrete

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

CAPE ENVIRONMENTAL MANAGEMENT INC.

ATTACHMENT 7

# BORING LOG AMW-2



Date 2-16-98 Sheet 1 OF 1  
 Project ALAMEDA FED. CNTR. Project No. 2403C.24  
 Drilling Co. GREGG Type of Rig B-61  
 Hole Diameter 8" O.D. in. Drive Weight 140 LB Drop 30 in  
 Surface Elevation \_\_\_\_\_ (msl) Top of Casing Elevation \_\_\_\_\_ (ms)

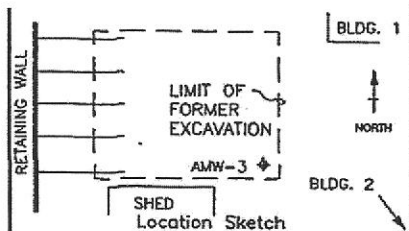
Depth (feet)	Well Construction			Samples		Blows Per Interval	Graphic Log	USCS	OVA/PID (PPM)	SOIL/GEOLOGIC DESCRIPTION
	Casing Detail	Backfill Detail	Sample ID.	Time	Interval					
1										4" asphalt 6" base
2	BLANK PVC	GROUT CONCRETE						GC	0	
3		BENTONITE PELLETS								
4										
5			AMW2-5' Grab Sample	1030	4-5					@5'-Moderate yellowish brown (10YR 5/4) gravelly clay w/sand, grab soil sample from augers, no recover in sampler, wet, firm, no hydrocarbon odor.
6										
7										
8										
9	0.01" SLOT SCREEN	10 SAND FILTER PACK								
10			AMW2-10' Grab Sample	1037	5-6			SM	0	@10'-Light olive gray (5Y 5/2), gravelly fine sand with organics, wet, stiff, no hydrocarbon odor, oily sheen observed in soil sample, grab sample collected from augers, no recovery in sampler.
11										
12										
13										
14										
15			AMW2-15' Grab Sample	1045	12-13			SP	0	@15'-Olive gray (5Y 3/2), fine sand with organics, wet, medium-dense, no hydrocarbon odor, oily sheen observed in sample.
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

Logged by: Bill Millar  
 Reviewed by: \_\_\_\_\_

- LEGEND:**  
 BGS - Below Ground Surface  
 TD - Total Depth BGS  
 S - Bentonite Chips 3/8"  
 GCS - Bentonite Grout  
 PCS - Portland Cement Concrete

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drill. Subsurface conditions may differ at other locations and times.

# BORING LOG AMW-3



Date 2-16-98 Sheet 1 OF 1  
 Project ALAMEDA FED. CNTR. Project No. 2403C.24  
 Drilling Co. GREGG Type of Rig B-61  
 Hole Diameter 8" O.D. in. Drive Weight 140 LB Drop 30 in.  
 Surface Elevation \_\_\_\_\_ (msl) Top of Casing Elevation \_\_\_\_\_ (msl)

Depth (feet)	Well Construction		Samples		Blows Per 6" Interval	Graphic Log	USCS	OVA/PID (PPM)	SOIL/GEOLOGIC DESCRIPTION
	Casing Detail	Backfill Detail	Sample ID.	Time					
1								3" asphalt	
2									
3	BLANK PVC	GROUT CONCRETE	BENTONITE PELLETS						
4									
5			AMW3-5' GRAB SAMPLE	1220	4 2 2		GC	0	@5'-Moderate yellowish brown (10YR 5/4), clayey gravel, wet, firm, no hydrocarbon odor, no sheen observed, grab soil sample from augers, no recover in sampler.
6									
7									
8									
9									
10	0.01" SLOT SCREEN	1/2" SAND FILTER PACK	AMW3-10' GRAB SAMPLE	1228	2 4 5		SW	0	@10'-Olive gray (5Y 3/2), fine sand, wet, loose, no hydrocarbon odor, no sheen observed in soil sample, grab sample collected from augers, no recovery in sampler, sea shells in sand.
11									
12									
13									
14									
15			AMW3-15'	1235	12 12 10		SW	0	@15'-Light olive gray (5Y 5/2), fine grained sand, wet, medium-dense, no hydrocarbon odor, no sheen observed in sample.
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

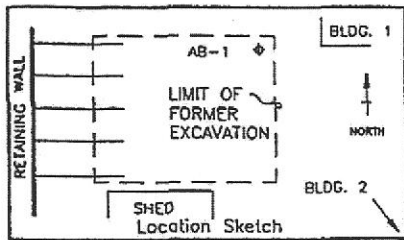
**LEGEND**

- BGS - Below Ground Surface
- ID - Total Depth BGS
- B - Bentonite Chips 3/8"
- GR - Bentonite Grout
- PC - Portland Cement Concrete

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies only to the location and time of drilling. Subsurface conditions may differ at other locations and times.

CAPE ENVIRONMENTAL MANAGEMENT INC.

# BORING LOG AB-1



Date 2-16-98 Sheet 1 OF 1  
 Project ALAMEDA FED. CNTR. Project No. 2403C.24  
 Drilling Co. GREGG Type of Rig B-61  
 Hole Diameter 8" O.D. in. Drive Weight 140 LB Drop N/A in.  
 Surface Elevation \_\_\_\_\_ (msl) Top of Casing Elevation \_\_\_\_\_ (msl)

Depth (Feet)	Well Construction		Sample ID.	Time	Interval Blows Per 6" Interval	Graphic Log	USCS	OVA/PIU (PPM)	SOIL/GEOLOGIC DESCRIPTION
	Casing Detail	Backfill Detail							
1								4" asphalt	
2									
3									
4									
5			AB-1-5'	1500	N/A		GC	0	@5'-Light olive brown (5Y 5/6), gravely clay little sand, moist, firm (?), no hydrocarbon odor, no sheen.
6									
7									
8									
9									
10			AB-1-10'	1505	N/A		SW	0	@10'-Grayish olive (10Y 4/2), sand, wet, medium-dense (?), no hydrocarbon odor, no sheen, sea shells in sand.
11									
12									
13									
14									
15			AB-1-15'	1515	N/A		SW	0	@15'-Moderate olive brown (5Y 4/4), sand trace gravel, wet, medium-dense (?), no hydrocarbon odor, no sheen, sea shells in sand.
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

NOTE:  
 Winch on rig malfunctioning no reliable drop distance, no blow counts.

- LEGEND**  
 BGS - Below Ground Surface  
 TD - Total Depth BGS  
 B - Bentonite Chips 3/8"  
 BCG - Bentonite Grout  
 PCC - Portland Cement Concrete

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

# BORING LOG MW2-R

SEE  
FIGURE 3

Location Sketch

Date MAY 17, 1995 Sheet 1 OF 1  
 Project GSA - ALAMEDA FEDERAL CENTER Project No. 2403C.16  
 Drilling Co. WEST HAZMAT Type of Rig MOBILE B-57 HSA  
 Hole Diameter 8" O.D., 10" REAM in. Drive Weight N.A. Drop N.A. in.  
 Surface Elevation N.A. (msl) Top of Casing Elevation 8.27 (msl)

Depth (Feet)	Well Construction		Samples		Blows Per Interval	Graphic Log	USGS	CWA/PPD (PPM)	Logged by: <u>KEN PITCHFORD, CEG</u> Approved by: <u>KEN PITCHFORD, CEG</u>
	Detail	Remarks	ID	Interval					
1		PCC	NO SAMPLES COLLECTED					<p>NOTES:</p> <ol style="list-style-type: none"> <li>TD=15 FT.</li> <li>THIS BORING DRILLED THROUGH EXISTING MW-2 WELL, TO DESTROY AND REPLACE.</li> <li>8" DIA. INITIAL PILOT HOLE, 10" DIA. REAM.</li> <li>CASING OBSTRUCTION @ - 3.5 FT. = ~ 10 DEGREE BEND IN ORIGINAL WELL PVC (2" DIA.) BLANK @ JOINT THREAD.</li> <li>MW2-R REPLACEMENT WELL COMPLETION DETAILS IN COLUMN (LEFT) THIS LOG.</li> <li>SWL=4.72 FT. (T.O.C.) 5/16/95 @ 15:00 HRS.</li> <li>WELL CASING=4" NOMINAL DIA. SCH. 40 PVC.</li> <li>WELL SCREEN=4" NOMINAL DIA. SCH. 40 PVC 0.020" MILL SLOT.</li> <li>FILTER PACK=MONTEREY No.3 WASHED, GRADED HIGH-SILICA SAND.</li> <li>HYDRATED BENTONITE PELLET SURFACE SEAL ("BAROID" 3/8" DIA.)</li> <li>PORTLAND CEMENT CONCRETE MONUMENT WITH TRAFFICABLE AT-GRADE COVER.</li> <li>WELL PRE-DEVELOPED BY VENTED SURGE BLOCK AND BAILER.</li> <li>WELL CONSTRUCTION : CASING=4" NOMINAL DIA. SCH. 40 PVC. SCREEN=0.020" MILL SLOT. FILTER=MONTEREY No.3 WASHED, GRADED HIGH-SILICA SAND. SURFACE SEAL=HYDRATED BENTONITE PELLETS. SURFACE MONUMENT=TRAFFICABLE AT-GRADE COVER IN TYPE I-II NEAT PORTLAND CEMENT CONCRETE.</li> </ol>	
2		BLANK							BP
3									
4									
5									
6									
7		FILTER							
8		SCREEN							
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

2403C-1E\BORE-LOG\MW-LOG2R.DWG

NOTE This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

# BORING LOG MW-4

SEE  
FIGURE 3

Location Sketch

Date MAY 17, 1995 Sheet 1 OF 1  
 Project GSA - ALAMEDA FEDERAL CENTER Project No. 2403C.16  
 Drilling Co. WEST HAZMAT Type of Rig MOBILE B-57 HSA  
 Hole Diameter 8" O.D. in. Drive Weight 140# Drop 30 in.  
 Surface Elevation N.A. (msl) Top of Casing Elevation 8.53 (msl)

Depth (Feet)	Well Construction		Samples		Interval	Blows Per Interval	Graphic Log	USCS	CVA/SP (PPM)	Logged by: <u>KEN PITCHFORD, CEG</u>
	Detail	Remarks	ID	Interval						Approved by: <u>KEN PITCHFORD, CEG</u>
<b>SOIL/GEOLOGIC DESCRIPTION</b>										
1	BLANK	PCC						AC		6" ROLLED ASPHALTIC CONCRETE SURFACE
2		BP						SP		MEDIUM GRAY-BROWN POORLY GRADED FINE SAND WITH TRACE SILT, MEDIUM SAND AND ROOTS, SHELL FRAGMENTS. @ 5 FT. DAMP TO WET OR SATURATED. NO STAIN OR ODOR.
3									3.4	
4			TW/MW 4-4		76					
5					76					
6					8					
7										
8		FILTER								
9		SCREEN								
10			TW/MW 4-10		8			SM	7.6	MEDIUM GRAY FINE SILTY SAND WITH SHELL FRAGMENTS AND TRACE CLAY. LOOSE. SATURATED. NO SHEEN, STAIN OR ODOR.
11					14					
12					30					
13										
14									11.3	
15			TW/MW 4-15		20			SW		MOTTLED MEDIUM GRAY TO MEDIUM BROWN SILTY-CLAYEY FINE SAND. DAMP. MODERATELY COHESIVE. NO STAIN OR ODOR.
16	HS				30			SC		
17					50					
18	<p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>TD=16.5 FT.</li> <li>SWL=4.53 FT. (5/18/95 @ 07:50 HRS.).</li> <li>WELL CONSTRUCTION:                      CASING=NOMINAL 4" DIA. SCH. 40 PVC.                      SCREEN=0.020" MILL SLOT.                      FILTER=MONTEREY No.3 WASHED, GRADED HIGH-SILICA SAND.                      SURFACE SEAL=HYDRATED BENTONITE PELLETS.                      SURFACE MONUMENT=TRAFFICABLE AT-GRADE COVER IN TYPE I-II NEAT PORTLAND CEMENT CONCRETE.</li> </ol> <p><b>LEGEND</b></p> <p>TD TOTAL DEPTH                      FT FEET                      SWL STATIC WATER LEVEL                      SCH SCHEDULE                      PCC TYPE I-II NEAT PORTLAND CEMENT CONCRETE                      BP HYDRATED BENTONITE PELLET SEAL                      N.A NOT APPLICABLE                      HS HEAVING SAND</p>									
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

2403C-16\BORG-LOG\MW-LOG4.DWG

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.







DATE STARTED: 1/6/94

SURFACE CONDITIONS: A/C Pavement

DATE COMPLETED: 1/6/94

SURFACE ELEVATION:

DRILLING EQUIPMENT: IR A-700

COORDINATES:

DRILLING CONTRACTOR: Hunt

GROUNDWATER CONDITIONS: Heavy

LOGGED BY: T. Smith

TOTAL DEPTH: 15.5

CASING DEPTH: 13' 7"

BORING DIAMETER: 8"


FILTER PACK: #3 Sand SLOT SIZE: .020"

REMARKS	FIELD					DEPTH (feet)	USCS CLASS.	SOIL DESCRIPTION
	WELL	SAMP. NO.	FIELD READ.	BLOCS / 6"	SAMP. TYPE			
Street Box							ASPHALT	
Bentonite/Cement Grout							BOSE ROCK	
Bentonite Pellet Seal						2	CLAYEY GRAVEL GC Brown	
						4	SILTY SAND SM Brown	
		B1-5	18 PPM	3	SPT	5	SAND SP 5' to 6.5' clean green sand, with shells, mod. N.C. odor, loose	
				4		6		
				3		6		
						8	SAND SP	
Filter Pack		10.5	100	2	SPT	10	CLAY CH	
				2		11	SAND SP	
				2		11		
						12	CLAYEY SAND SC-SM Loose, no shells	
End Cap		14.5	ND	9	SPT	14		
				16		14	SILTY SAND SW-SC 14' to 15'	

TKS  
TKS Consulting, Ltd.  
PROJECT NO.

GSA  
ALAMEDA  
LOG OF MW-1 / B1

Fig. 1  
Sheet 1 of 2

REMARKS	FIELD					DEPTH (feet)	USCS CLASS.	SOIL DESCRIPTION
	WELL	SAMP. NO.	FIELD READ.	BLOWS / 6"	SAMP. TYPE			
				3		16	 silty sand, fine, mod. light <del>STILTY SAND SW-SC</del> 15' TO 15.5' loose, fine sand .M=SW-SC T=2 A=10 <del>SAND SW-SI</del> Loose fine sand Bottom of MW-1 at 14'	
						18		
						20		
						22		
						24		
						26		
						28		
						30		
						32		
						34		
						36		
						38		

TKS  
TKS Consulting, Ltd.  
PROJECT NO.

GSA  
ALAMEDA  
LOG OF MW-1 / 01

Fig. 2  
Sheet 2 of 2

DATE STARTED: 1/6/94

SURFACE CONDITIONS:

DATE COMPLETED: 1/6/94

SURFACE ELEVATION:

DRILLING EQUIPMENT: IR A-200

COORDINATES:

DRILLING CONTRACTOR: Hunt Drilling

GROUNDWATER CONDITIONS:

LOGGED BY: Tim Smith

TOTAL DEPTH: 9.5

CASING DEPTH:

BORING DIAMETER: 8"

FILTER PACK:

SLOT SIZE:

REMARKS	FIELD					DEPTH (feet)	USCS CLASS.	SOIL DESCRIPTION
	WELL	SAMP. NO.	FIELD READ.	BLOWS / 6"	SAMP TYPE			
Boring Grouted with Neat Cement	W	B2-8.590	PPM	2 3 1	SPT	0	ASPHALT	CLAYEY GRAVEL GC
						2	SANDY GRAVEL GP	
						4	SAND SM Hydrocarbon odor	
						6	SAND SP Hydrocarbon odor	
						8	SAND SM Fine, gray green, with shells, loose	
						10	Bottom of Boring at 9.5'	
						12		
						14		

TKS

TKS Consulting, Ltd.

PROJECT NO.

GSA  
ALAMEDA

LOG OF B-2

Fig. 1

Sheet 1 of 1

DATE STARTED: 1/6/94 SURFACE CONDITIONS:  
 DATE COMPLETED: 1/6/94 SURFACE ELEVATION:  
 DRILLING EQUIPMENT: IR A-200 COORDINATES:  
 DRILLING CONTRACTOR: Hunt Drilling GROUNDWATER CONDITIONS:  
 LOGGED BY: Tim Smith  
 TOTAL DEPTH: 11.5 CASING DEPTH:  
 BORING DIAMETER: 8" FILTER PACK: SLOT SIZE:

REMARKS	FIELD					DEPTH (feet)	USCS CLASS.	SOIL DESCRIPTION
	WELL	SAMP. NO.	FIELD READ.	BLDG'S 6' SAMP TYPE				
Boring Grouted with Neat Cement	∇	B3-5'	ND	1	SPT	0	ASPHALT	
				1			CLAYEY GRAVEL GC	
						2		
						4	SAND SP-SH Med. sand	
						6	Gray sand starts at 5', no odor	
						8	SAND SP Loose sand, ND in core tube	
			5 PPM	2	SPT	10	SILTY SAND SM	
				4			SAND with CLAY SW-SH	
				1		12	Bottom of B-3 at 10', sample to 11.5'	
						14		

TKS Consulting, Ltd.	GSA ALAMEDA	Fig. 2
PROJECT NO.	LOG OF B-3	Sheet 1 of 1

DATE STARTED: 1/6/94

SURFACE CONDITIONS:

DATE COMPLETED: 1/6/94

SURFACE ELEVATION:

DRILLING EQUIPMENT: IR A-200

COORDINATES:

DRILLING CONTRACTOR: Hunt Drilling

GROUNDWATER CONDITIONS:

LOGGED BY: Tim Smith

TOTAL DEPTH: 11.5

CASING DEPTH:

BORING DIAMETER: 8"

FILTER PACK:

SLOT SIZE:

REMARKS	FIELD					DEPTH (feet)	USCS CLASS.	SOIL DESCRIPTION
	WELL	SAMP. NO.	FIELD READ.	BLOWS / 6"	SAMP. TYPE			
Boring Grouted with Neat Cement	▽	B4-5'	ND	1	SPT	0	ASPHALT	
				2		CLAYEY GRAVEL GC		
						2	SAND SP	
						4	SAND with SILT SP-SH	
						6		
						8		
						10	SAND with SILT SH-SH	
		90 PPM				12	CLAY	
						12	CLAYEY SAND SC	
						14		

TKS

TKS Consulting, Ltd.

GSA  
ALAMEDA

LOG OF B-4

Fig. 3

Sheet 1 of 1

PROJECT NO.

DATE STARTED: 1/6/94

SURFACE CONDITIONS: A/C Pavement

DATE COMPLETED: 1/6/94

SURFACE ELEVATION:

DRILLING EQUIPMENT: IR A-200

COORDINATES:

DRILLING CONTRACTOR: Hunt Drilling

GROUNDWATER CONDITIONS: Heavy

LOGGED BY: Tim Smith

TOTAL DEPTH: 14.0

CASING DEPTH: 13' 4"

BORING DIAMETER: 8"

FILTER PACK: #3 Sand SLOT SIZE: .020"

REMARKS	FIELD					DEPTH (feet)	USCS CLASS.	SOIL DESCRIPTION
	WELL	SAMP. NO.	FIELD READ.	BLOWS / 8"	SAMP TYPE			
Street Box							ASPHALT	
Bentonite/Cement Grout Bentonite Pellet Seal						2	CLAYEY GRAVEL GC	
		B5-5'	ND	1	SPT	4	SAND with SILT SP-SY	
				2		6	SAND Gray, with shells	
						8	SAND with SILT SP-SM Fine, flowing	
Filter Pack		10.5'	15 PPM	1	SPT	10	CLAY Gray	
				2		12	SAND with SILT	
End Cap						14	Bottom of MW-2 at 14'	

TKS  
TKS Consulting, Ltd.  
PROJECT NO.

GSA  
ALAMEDA  
LOG OF MW-2 / B 5

Fig. 1  
Sheet 1 of 1



DATE STARTED: 1/7/94

SURFACE CONDITIONS: A/C Pavement

DATE COMPLETED: 1/7/94

SURFACE ELEVATION:

DRILLING EQUIPMENT: IR A-200

COORDINATES:

DRILLING CONTRACTOR: Hunt Drilling

GROUNDWATER CONDITIONS: Heavy

LOGGED BY: Tim Smith

TOTAL DEPTH: 15.5

CASING DEPTH: 13' 6"

BORING DIAMETER: 8"

FILTER PACK: #3 Sand SLOT SIZE: .020"

REMARKS	FIELD					DEPTH (feet)	USCS CLASS.	SOIL DESCRIPTION
	WELL	SAMP. NO.	FIELD READ.	BLOWS / 6"	SAMP. TYPE			
Street Box								ASPHALT
Bentonite/Cement Grout Bentonite Pellet Seal						2		CLAYEY GRAVEL GC
		B6-5'	28 PPM	2	SPT	4		CLAY CL-ML Brown
				1		6		
				2		8		CLAYEY GRAVEL GC Gray, with oil pockets, black, mod. odor, OVA 6 ppm in auger, some shells
Filter Pack				2		10		
				3		12		
				4		14		SILTY SAND SM Brown, poorly sorted
End Cap		14.5'	ND	4	SPT	14		Heaving Sand on Bottom Bottom of MW-3 at 14'
				3				

TKS  
TKS Consulting, Ltd.  
PROJECT NO.

GSA  
ALAMEDA  
LOG OF MW-3 / 06

Fig. 2  
Sheet 1 of 2

REMARKS	FIELD					DEPTH (feet)	USCS CLASS.	SOIL DESCRIPTION
	WELL	SAMP. NO.	FIELD READ.	BLOWS 6"	SAMP TYPE			
						16		
						18		
						20		
						22		
						24		
						26		
						28		
						30		
						32		
						34		
						36		
						38		

TKS \_\_\_\_\_  
TKS Consulting, Ltd.  
PROJECT NO. \_\_\_\_\_

GSA  
ALAMEDA  
LOG OF MW-3 / B6

Fig. 3  
Sheet 2 of 2