AGENCY





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, 3rd 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

Ms. Cherie McCaulou (w/enc) CC:

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.: LOP Case No.: R00002903					
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 rd 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
			7	
	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 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	1-1-1				
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)

Soil (ppm)		Water (ppb)		
Contaminant	Before	After	Before	After (1)
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 (TI)	<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 (2)	<0.005	<0.5 (2)	ND ⁽²⁾

Confirmatory Geo Probe samples collected in 2007.
 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

V. ADDITIONAL COMMENTS, DATA, ETC.

List Enforcement Actions Rescinded: --

Considerations and/or Variances:

- Residual TEPH-hydraulic oil pollution remains in soil at concentrations of up to 190 ppm.
- 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.
- Soil samples collected during the removal of the hydraulic hoist were composited.

Conclusion:

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.

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: 6/25/0					

Attachments:

- 1. Site Location Map
- 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

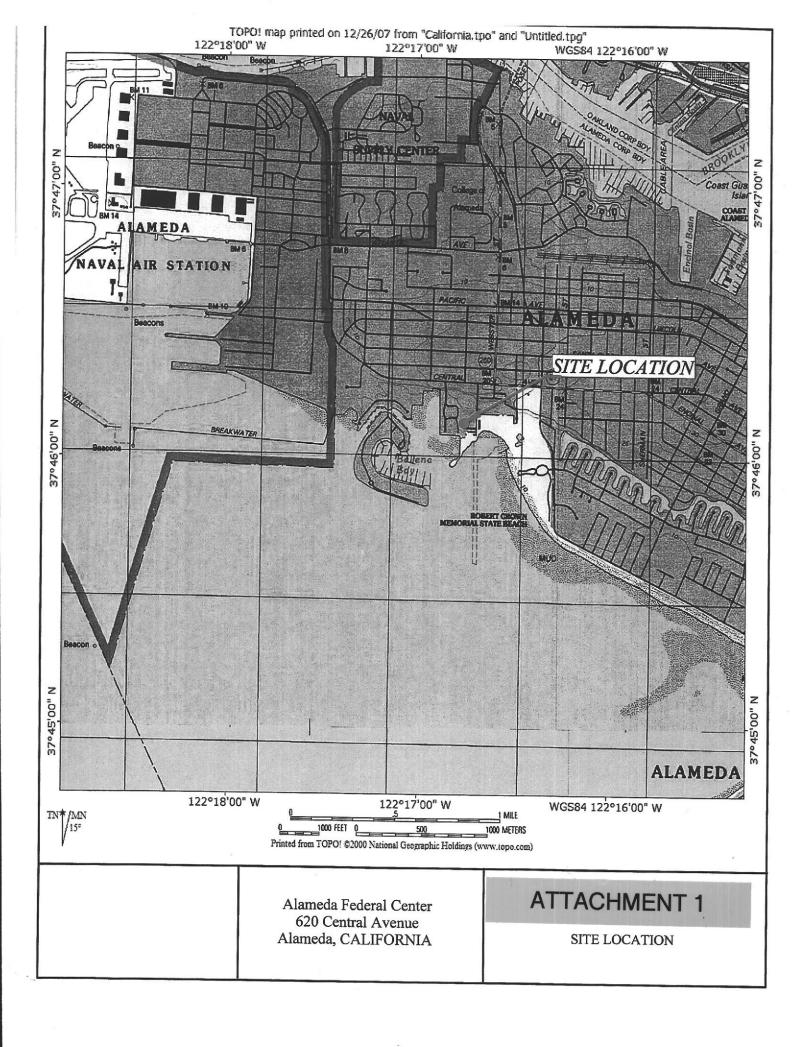
Regional Board Staff Name: Cherie McCaulou		Title: Engineering Geologist	
RB Response: Concur, based solely upon information contained in this case closure summary.		Date Submitted to RB:	
Signature: Ch Meland *		Date: 6/19/09	
/III. MONITORING WELL DECOMMISSIONING	* LOP 600	agency to upda Tracker Data b	te required fields
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	L	Collision of State of Addition of Addition and Addition a	
Additional requirements for submittal of grounds	water data	from retained wells: NA	A SECTION AND ADDRESS OF THE PROPERTY OF THE P
ACEH Concurrence - Signature:			Date:

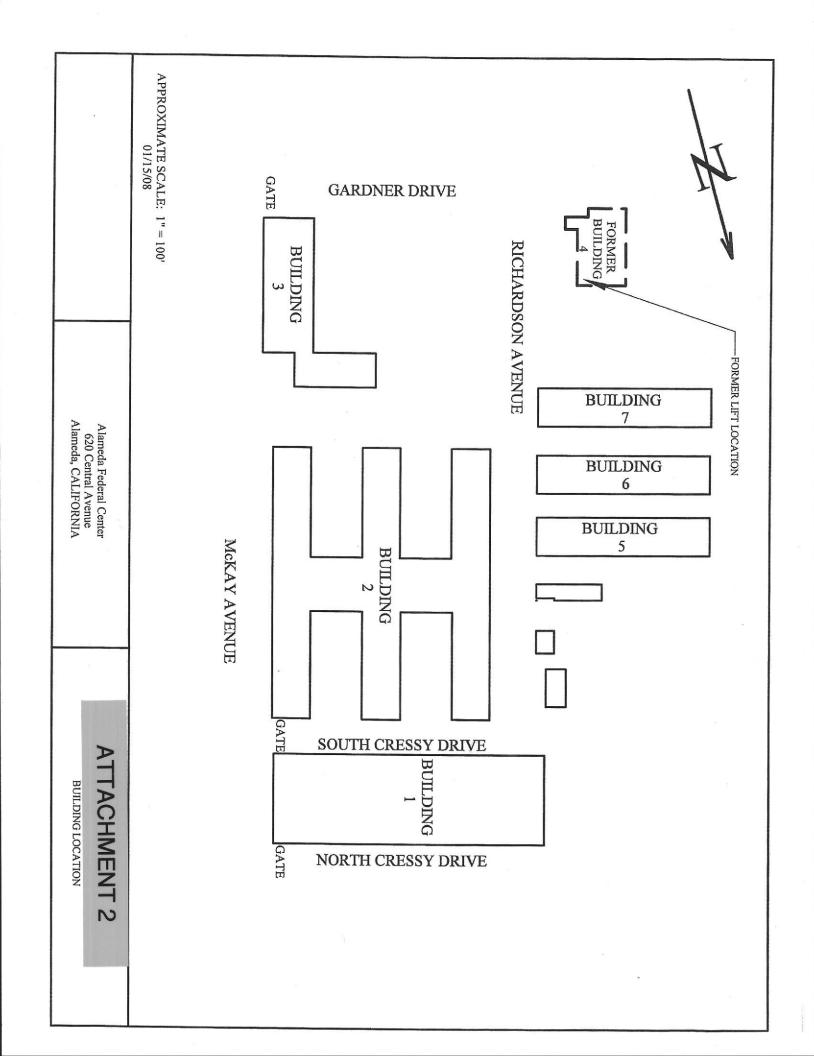
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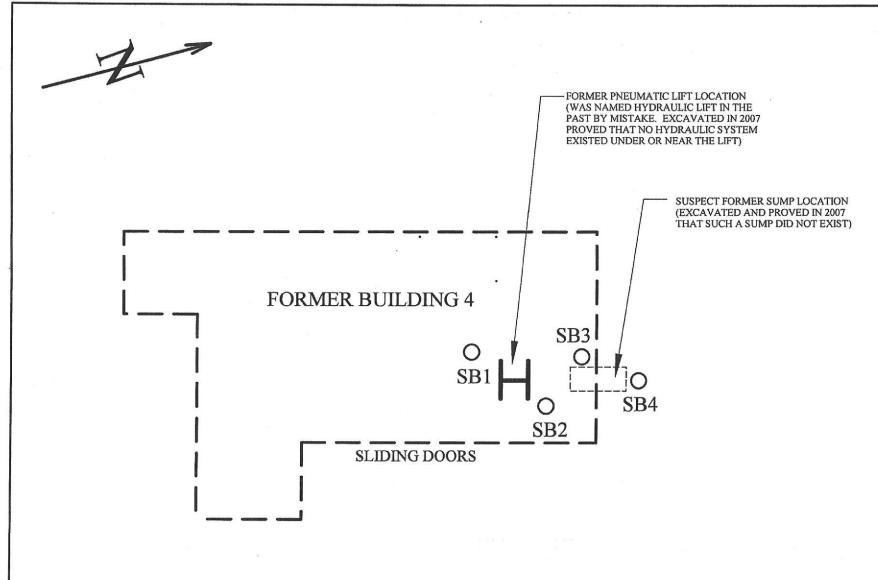
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RO002903 Closure Summary 690 Central Cov. Alam







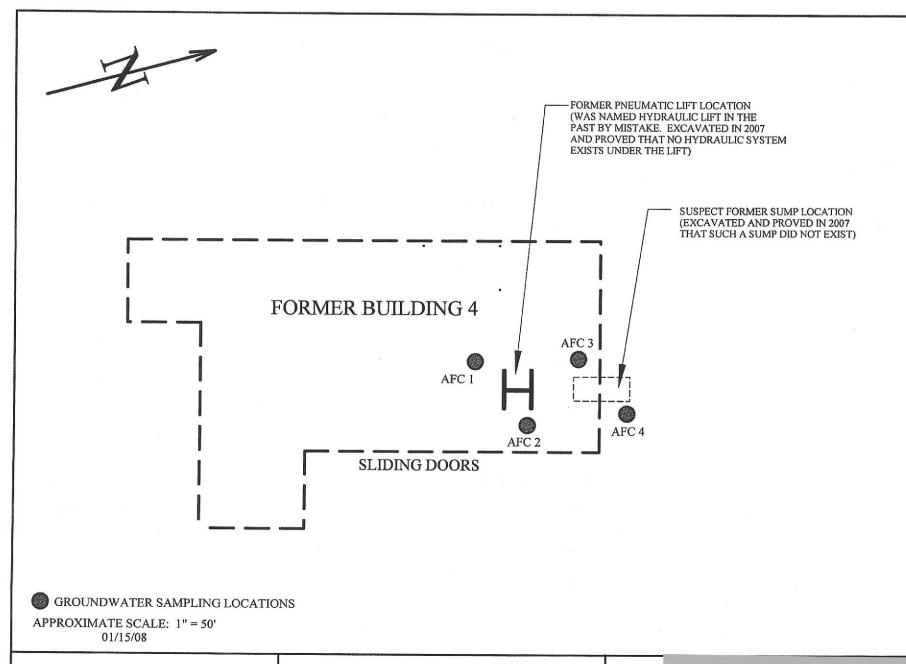
O DRILLING AND SAMPLING LOCATIONS

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



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)

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	Acetone	Benzene	Bromodichloromethane	Bromobenzene	Bromochloromethane	Bromoform	Bromomethare	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

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	2-Chlorotoluene	4-Chlorotoluene	Dibromochloromethane	1,2-Dibromo-3-chloropropane	1.2-Dibromoethane	Dibromomethane	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene
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	Dichlorodifluoromethane	1,1-Dichloropropene	1,3-Dichloropropane	2.2-Dichloropropane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene
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

{mg/Kg}

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	1,2-Dichloropropane	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethylbenzene	Hexachlorobutadiene	2-Hexanone	Isopropylbenzene	p-isopropyitoluene	Methylene Chloride
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	4-Methyl-2-pentanone (MIBK)	MTBE	<u>Naphthalene</u>	n-Propylbenzen <u>e</u>	<u>Styrene</u>	1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	
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)	

STL-SF: Severn Trent Services - San Francisco

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	Trichlorotrifluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
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	Vinyl Acetate	Vinyl Chloroide	Total Xylenes	
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)	de de la companya de

STL-SF: Severn Trent Services - San Francisco

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	Additional Spirit	ASSETUCIAS)	Bainnta	Bedjintille	Çadrium (Çd)	Chicatinalica	cottatt.col	coppet (Cu)	Jaad [PD]
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
ESL*					6.1	0.38	750	4.0	1.7	0.000001	40	230	200
Background Levels	**				æ	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
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Table C METALS MARCH 10, 2003 SOIL RESULTS Building 4 - Hydraulic Lift Alameda Federal Center (EPA Methods 3050b/7471A/6010B) {mg/Kg}

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Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	Ha-Mercury	Mahaderum	Michel IMI	5glgtjutt 15g	Silver day	Tighing (II)	Yanadum D	Line (In)
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
ESL*					1.0	40	150	10	20	1.2	15	600
Background Levels	**										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	2.600

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	Acetone	Benzene	Bromodichloromethane	Bromobenzene	Bromochloromethane	Bromoform	Bromomethare	2-Butanone (MEK)	n-Butylbenzene
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)

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	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	2-Chloroethylvinyl ether	Chloroform	Chloromethane
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)

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	2-Chlorotoluene	4-Chlorotoluene	<u>Dibromochloromethane</u>	1,2-Dibromo-3-chloropropane	1.2-Dibromoethane	<u>Dibromomethane</u>	1.2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene
SB1-GW	3/10/2003	15'	Water	STI-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)
351-377	3/10/2003					50.8889						**************************************	
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)

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	Dichlorodifluoromethane	1,1-Dichloropropene	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene
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)

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	1,2-Dichloropropane	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Ethylbenzene	Hexachlorobutadiene	2-Hexanone	Isopropylbenzene	p-isopropyitoluene	Methylene Chloride
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)

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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)

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichlorofluoromethane	Trichlorotrifluoroethane	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
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)

Sample I.D.	Sampling Date	Sampling Depth (ft.)	Matrix	Lab	Vinyl Acetate	Vinyl Chloroide	Total Xylenes
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)

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	Ashirody Sal	Asserie des	Egiun Ega	Berding Lee	s cadrium co	Stranium (Capatical	ÇQQQET, ÇU	Lead Ph
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)

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. Matcurk	Mandagum	May Michal Mil	şaladılırı (şa	a Silver (Asa)	Trailling	yaradum d	ine Ita
SB1-GW SB3-GW	3/10/2003	15' 15'	Water		ND (0.00020) ND (0.00020)	0.014 0.065	0.0052 ND (0.0050)	ND (0.0050) ND (0.0050)	ND (0.0050) ND (0.0050)	0.0057 ND (0.0050)	ND (0.0050)	0.058 ND (0.010)

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	ТЕРН
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

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)

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)

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)

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)

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.

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)

									etha				
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-Trifluoro	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Acetate	Vinyl Chloroide
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.

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)

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	Adjudaty	Arsenic (As)	Baium Bai	Berlindige	Castrium Ca	Sittedium (S	copatical	CONTRE! COM	Landler	Metchel
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 QualityControl Board, San Francisco Region, Interim Final - November 2007."

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	Montdeeluningo	Hickellai	Spletium Se	Silver (ASA)	Traillingth	Yatadumid	incila
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 QualityControl Board, San Francisco Region, Interim Final - November 2007."

1				_ BLI	BLDG. 1					BORING LOG AMW-1
WALL		♦ Al	VM-3	i —		L			2	16-08
		_	LIMIT OF ~	4	+					-16-98 Sheet 1 OF 1
RETAINING		_	EXCAVATION	N I	HTRON					AMEDA FED. CNTR. Project No. 2403C.24
- RET		' 		ا BLDG.			Drilling			
1			HED		² \					8" O.D. in. Drive Weight 140 LB Drop 30 in.
			ocation Sket	ch		<u>U:</u>	Surfac	e Ele	vatio	n (msl) Top of Casing Elevation (msl)
	We	n Co	nstruction	Somples						Logged by:Bill Millar
50					l a	Sec	وَ	v2	음숙	Reviewed by:
(Feet)	Cosing Detail	Backfill	Sample ID.	Time	Interval Blown Par	9	Graphle Leg	NSCS	OVA/PID (PPM)	SOIL/GEOLOGIC DESCRIPTION
-		นั้			H	-				3" of asphalt
1-		25. 15. 15. 15. 15. 15. 15. 15. 15. 15. 1			H		1.7			Pea gravel fill material, excavation.
2-	1	CONC			Ħ	ı		GW	모	fill
3—		888	BENTONTE		日		//			
4	BLANK	200	PELLETS		H	1	, ,			H
-	65	*		0845	H		1	Δ44		No Bossess wet loose
5-	-		NO RECOVERY	0845	M	6	1.1	GW	U	No Recovery, wet, loose.
6-						2	1			A
7-	-	AC.			Ħ		1:1			ļ
8		Ъ.			H		1			
9—	-道-	2			Н		1			
10-	- S -	2	NO	0858	H	11	11	G₩	0	@10'-Dark yellowish brown (10YR 4/2), sandy gravel, wet,
11—	-6-	3.57	RECOVERY		X	4	1			medium — dense, no hydro carbon odor, no recovery no soil sample collected.
12-	8				H	•	1. 1			no recovery no son sumple conceted.
13-	-6-	3.2			日					
14		4			Н		1			@15'-Dark yellowish brown (10YR 4/2), sandy gravel, wet, medium — dense, no hydrocarbon odor,
-	}_	4.5	NO	0904	H		1.1	GW	0	no recovery, no soil sample collected, geotextile in
15 -			RECOVERY	0904	V	3				shoe of sampler.
16	1				Di	6				F
17—					H		1			5 7
18	1				H					NOTE: Installing the filter pack was diffcult. The gravel caved into
19-	1				H					the boring as the augers were removed.
20	1		14.		Н					·
21-	1				H					
22-	j				H					
23-	1				日	3	1			
24	1	21		7-10-10-10-10-10-10-10-10-10-10-10-10-10-	日	14				
25	1				H					
L3-	-				H	•	1			
26-					日					
27-	1	į	8		目					
28-					\exists					
23-	-				\mathbb{H}				1	
1:0	1_		·			_	1	1		

LEGENO 3GS - Betow Ground Surface 10 - Yorld Depth BGS 8 - Bentonite Chics 3/8" BCG - Bentonite Grout PCC - Portland Cement Concrete

NOTE. This log of subsurrace 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.

l L				- BL	.0G. 1				BORING LOG	AMW-2
WELL		<u></u>		i	.	Date		2-	-16-98	Sheet 1 OF 1
RETAINING WALL		 	LIMIT OF ~	4	1					Project No. 2403C.24
TAIN		 	EXCAVATIO	N)	NORTH					Type of Rig B-61
ľ			W-2	J Brdc.	2				8" O.D. in. Drive Wei	ght 140 LB Drop 30 in
,		1 5	HED ocation Sket	ch		Surfac	e Ele	evatio	on (msl) Top of C	asing Elevation (ms
Г	We	ell Co	nstruction	Samples	5	T			Logged by: Bill Millar	
6					7 2 2	و	10	₽ <u></u>	Reviewed by:	
Dept	Cosing	ckfill	Sample ID.	Ттө	Interval Blows Per 6 Interval	Graphic Løg	USCS	OVA/PID (PPM)		
	88	85	'n	-	<u>=</u>	5			SOIL/GEOLOGIC	DESCRIPTION
		56			H	777			4" asphalt 6" base	
1-	10	SES.			H	16/		卫		
2-	PVC	00	BENTONTE		H	1/1				
3-	BLANK	883	PELLETS		H	11/				
4-	1 %			4070	Ħ					
5-	\vdash	1.5	AMW2-5' Grab	1030	M_{Λ}^4		GC	0	@5'-Moderate yellowish brown (10 w/sand, grab soil sample fro	om augers, no recover
6-	丰	ν.	Sample		A 5				in sampler, wet, firm, no hy	drocarbon odor.
7-		Š	16		H	19 311			- G	
8-	1 _z -	E.			H				an and an analysis of the second	
9-	二二二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十	三.			H	H				
10-	- Z	NA.	AMW210' Grab Sample	1037	X 5 5 3	HH	SM	0	@10'-Light olive gray (5Y 5/2), organics, wet, stiff, no hydro	gravely fine sand with
11-	[일-	2	Sample		Δž	-2-51.V			observed in soil sample, ara	b sample collected from
12-	10	13			Ħ				augers, no recovery in samp	oler.
13-					Ħ	2017			045' 01' (5) 7/0) 6	
14-	-				Ħ		SP	0	@15'-Olive gray (5Y 3/2), fine somedium-dense, no hydrocart	oon odor, oily sheen
15-	十一	N _B - i	AMW2-15' Grab	1045	M12				observed in sample.	
16-	1		Sample		X 7				-	
17~	1	-			H	;				2 101
18-	1				H	ļ.,				
19-	1				H					
20-	1				日					
21-	1	-			Ħ					
22-	‡				H			İ		
23-	1				H			-	The state of the s	
24-	_				H			-	nada yeng	
25-	1				Н					
26-	1	1			H				No.	
27-	-				H					
28-	-				Н	ŀ		1		*
29-	-				H			•	1	
30	L_		<u></u>	1	<u> </u>		_			MALES AND

LECEND

265 - Below Ground Surface

7D - Total Depth 865

5 - Bentance Chips 3/8"

565 - Bentance Grout

PUC - Partland Cement Concrete

NOTE. This tag of subsurface conditions is a simplification of acti-conditions encountered it applies at the location and time of drifti Subsurface conditions may biter at other locations and times.

L				_ BL	DG.	1				BORING LOG AMW-3	
WALL				i	ı		Date		2-	-16-98 Sheet 1 OF 1	
NG -	\dashv		LIMIT OF ~	T	Ŧ					AMEDA FED. CNTR. Project No. 2403C.24	
RETAINING	_	<u> </u>	EXCAVATIO	"	NORI	н	Drilling				6
2		-	AMW-3 *	BLDG.	2					8" O.D. in. Drive Weight 140 LB Drop 30 in.	
1			HED .ocation Sket	tch		V				on (msl) Top of Casing Elevation (msl)	
	We	II Co	nstruction	Samples	s			_			7
					Т	10 A	607			Logged by: Bill Millar	l
Dapth (Feet)	ing air	₹ E	ple .	Time	Na.	Blows Per 6" Interval	Grophic Log	nscs	OVA/PID (PPM)	Reviewed by:	4
	Casing Detail	80	Sample ID,	į į	Interval		ę,		60	SOIL/GEOLOGIC DESCRIPTION	
1-		탏			E					3" asphalt	1
2-	O	RS S	,		E		19/		又	1	1
3-	PVC	, 6	BENTONTE		H		1//				1
-	BLANK	788	PELLETS		F						7
4 5	8	10	A1007 E	1220	F		1			(4) 7	1
-	-	4 4 4	AMW3-5' GRAB	1220	1	4	1/1	GC	0	@5'-Moderate yellowish brown (10YR 5/4), clayey gravel, wet, firm, no hydrocarbon odor, no sheen observed,	1
6-		Ţ.	SAMPLE		E	2	300			grab soil sample from augers, no recover in sampler.	1
7-		P.			F						1
8-	-2-	6					3.3				1
9-	- 22-	己:			E						1
10	-8-	3	AMW3-10° GRAB	1228	1	2		SW	0	@10'-Olive gray (5Y 3/2), fine sand, wet, loose, no	1
11—	9	. C	SAMPLE		E	4 5	200			hydrocarbon odor, no sheen observed in soil sample, grab sample collected from augers, no recovery in	1
12-	0	53			E					sampler, sea shells in sand.	1
13—	-0-	****			F					2 22	-
14					F		4	CW	_	@15'-Light olive gray (5Y 5/2), fine grained sand, wet,	7
15		<u> </u>	AMW3-15*	1235		12	1990	SW	0	medium-dense, no hydrocarbon odor, no sheen	7
16—					F	12 10				observed in sample.	7
17—					F						1
18-					-						1
19										*	1
- 20—											1
21—					E						1
22-											1
23~					E					* . <u> </u>	1
-					-					. }	-
24-					F					F	1
25-					F		To the same of the				1
26		l	'		F	1				ļ	1
27— -					F					· · · · · · · · · · · · · · · · · · ·	1
28—					F					ļ	1
23-									ĺ	!	1
10 10	ENC	لحد		1			1		J		-

<u>LEGEND</u>
BOO - Below Ground Surface
TD - Total Depth BGS
B - Bentonite Chips 3/8"
BOO - Bentonite Grout
POO - Portland Chimont Concrete

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

L)G. 1	1			BORING LOG AB-1	
WALL			AB-1 	1	1	Data		2-	-16-98 Sheet 1 OF 1	
		_	LIMIT OF ~	۲	Ŧ				AMEDA FED. CNTR. Project No. 2403C,24	-
RETAINING	\neg		EXCAVATIO	" '	HTROI	Drilling	a Co.	GI	REGG Type of Rig B-61	_
2		_		J BLDG.	2	Hole	Diame	eter_	8" O.D. in. Drive Weight 140 LB Drop N/A i	
1		I SI	nEØ ocation Sket	ch	1	Surfo	ce Ele	evotio	on (msl) Top of Casing Elevation (m	si)
Γ	We	II Co	nstruction	Somples	-	T			Logged by: Bill Millar	\neg
		T			Ta	E 3	10	운습	Reviewed by:	
Depth (Feet)	Casing Detail	Sto.	Sample ID.	Time	Interval	6" Interval Graphic Log	nscs	OVA/PID (PPM)		
	Sã	80	ស្ដ	–	= =	6 6			SOIL/GEOLOGIC DESCRIPTION	
-					H	777			4" asphalt	\mathbb{H}
1-		4.			Ħ	1/4/	1	모	, a	H
2-		4.			Ħ	1/1			,	H
3-		**		į.	H					H
4-		1			H		1		CSV E (6) county along little pand	\blacksquare
5-			AB-1-5'	1500	7 :	4 ///	GC	0	@5'-Light olive brown (5Y 5/6), gravely clay little sand, moist, firm (?), no hydrocarbon odor, no sheen.	H
6-					4	Z				H
7-	1	200			H		v		H ₂	H
8-	1	8			H	37.			*	H
9-	1	1,0,			H				* a	H
10-	1		AB-1-10'	1505	7 .	< 33	SW	0	@10'-Grayish olive (10Y 4/2), sand, wet, medium-dense (?)	H
1 1-		٠.			H	Z S			no hydrocarbon odor, no sheen, sea shells in sand.	H
12-	1	4;		1	H	75.				H
13-	1				Н					H
14-	1				H		SW	0	@15 -Moderate olive brown (5Y 4/4), sand trace gravel, wet, medium-dense (?), no hydrocarbon odor,	H
15-	_	-	AB-1-15'	1515		<	9	ľ	no sheen, sea shells in sand.	H
16-	1				H	N N			,	H
17-	}				H				A v	Ħ
18-					H					H
19-	}				Н				NOTE:	H
20-	7			5	Н				Winch on rig malfuncting no reliable drop distance, no blow counts.	H
21-	-				\Box				blow counts.	H
22-	-				H					H
23-	}				H					H
24	-				H					. 日
25-	-				H					日
26-	-				H				The second secon	日
27-	1	-			H					日
28-	1			ŀ		1	}	1		
25	<u>-</u> -				F.			r.		\exists
30		<u></u>			<u>i-:</u>			_!		<u></u>
	CENT		10000000							-

LEGEND

BGS — Below Ground Surface

TD — Total Depth 1995

B — Bentonite Chips 3/8"

BCG — Bentonite Grout

PCC — Portland Gement 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 ocation Sket	ch Somples	Pr Di Hi	Date _MAY 17, 1995 Sheet _1 OF _1 Project _GSA _ ALAMEDA FEDERAL CENTER Project No. 2403C.16 Drilling CoWEST HAZMAT Type of Rig _MOBILE B=5 Hole Diameter _8" O.D. 10" REAMin. Drive Weight N.A Drop_N. Surface Elevation _N.A (msl) Top of Cosing Elevation _8.27 Logged by: _KEN PITCHFORD. CEG Approved by: _KEN PITCHFORD. CEG							
Depth (Feet)	Detall	Remarks	Q	Blows Per 6 Interval	Graphle Log	nscs	(PPM)	Approved by: KEN PITCHFORD, CEG SOIL/GEOLOGIC DESCRIPTION				
1	BLANK	PCC BP FILTER SCREEN	NO SAMPLES COLLECTED		NA NA	NA NA		NOTES: 1. TID=15 FT. 2. THIS BORING DRILLED THROUGH EXISTING MW-2 WELL, TO DESTROY AND REPLACE. 3. 8" DIA INITIAL PILOT HOLE, 10" DIA. REAM. 4. CASING OBSTRUCTION © — 3.5 FT. = ~ 10 DEGREE BEND IN ORIGINAL WELL PVC (2" DIA.) BLANK © JOINT THREAD. 5. MWZ-R REPLACEMENT WELL COMPLETION DETAILS IN COLUMN (LEFT) THIS LOG. 6. SWL=4.72 FT. (T.O.C.) 5/16/95 © 15:00 HRS. 7. WELL CASING=4" NOMINAL DIA. SCH. 40 PVC. 8. WELL SCREEN=4" NOMINAL DIA. SCH. 40 PVC 0.020" MILL SLOT. 9. FILTER PACK=MONTEREY NO.3 WASHED, GRADED HIGH-SILICA SAND. 10. HYDRATED BENTONITE PELLET SURFACE SEAL ("BAROID" 3/8" DIA.) 11. PORTLAND CEMENT CONCRETE MONUMENT WITH TRAFFICABLE AT—GRADE COVER. 12. WELL PRE—DEVELOPED BY VENTED SURGE BLOCK AND BAILER. 13. 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.				
	<u>,,</u> +	ORE-LOG\WW	-LOG2R DWG	;				NOTE This log of subsurface conditions is a simplification of action conditions encountered it applies at the location and time of draftic Subsurface conditions may differ at other locations and times				

BORING LOG	MW-4	
- AFNTER	Sheet1 OF1_	

				1				
		erc			Date _	MAY	17.	1995 Sheet 1 OF 1
		SEE FIGURE 3		1	Projec	t _G	SA -	ALAMEDA FEDERAL CENTER Project No. 2403C.16
				1	Drilling	Co.	WES	ST HAZMAT Type of Rig MOBILE B-57 HSA
					Hole [omoic	eter _	8" O.D in. Drive Weight 140# Drop_30_ in.
L	1	ocation Ske	tch		Surfac	e Ele	evatio	on N.A. (msl) Top of Casing Elevation 8.53 (msl
	Well Co	onstruction	Somples				П	Logged by: KEN PITCHFORD, CEG
				7	[69]		90	Approved by: KEN PITCHFORD, CEG
Depth (Feet)	Detail	Remarks	٥	Blows Par 6 Interval	Grophic Log	USGS	OVA/PID (PPH)	SOIL/GEOLOGIC DESCRIPTION
1	-4-			╁	مها و ا	AÇ		6" ROLLED ASPHALTIC CONCRETE SURFACE
1-	BLANK	PCC		H		SP		MEDIUM GRAY—BROWN POORLY GRADED FINE <u>SAND</u> WITH TRACE SILT, MEDIUM SAND AND ROOTS, SHELL FRAGMENTS. @ 5 FT. DAMP TO WET OR SATURATED. NO STAIN OR ODOR.
2-		BP		Н				WET OR SATURATED. NO STAIN OR ODOR.
3-				H	1,120			
4-	- 1%		TW/MW	H			3.4	
-	1=43		4-4	H76				*
-	日书》			8	430			a a second
6-	1-1-7			H		1		
7-				H	THE PARTY NAMED IN			
8-	1-12	-SCREEN		H				·
9-	-		1	H		1		
10-	日卡湾		TW/MW	H ₈				
11-	1- 1:::		4-10	H 14		SM	7.5	MEDITIM GRAY FINE SILTY SAND WITH SHELL FRAGMENTS AND TRACE
-	1-1:3			130] "	/.0	MEDIUM GRAY FINE <u>SILTY SAND</u> WITH SHELL FRAGMENTS AND TRACE CLAY, LOOSE, SATURATED, NO SHEEN, STAIN OR ODOR.
1.2	1-43			H		1	1	
13-				H		-		•
14-	1 /			H			11.3	
15-	HS		TW/MW 4-15	F 20	,	-	-	MOTTLED MEDIUM GRAY TO MEDIUM SROWN SILTY-CLAYEY FINE SAND.
16-	} }	and the same of th	1 4-15	H30		SW		DAMP. MODERATELY COHESIVE. NO STAIN OR ODOR.
17-								
18-	1							NOTES:
19	-							1. TD=16.5 FT.
.	-							2. SWL=4.53 FT. (5/18/95 @ 07:50 HRS.). 3. WELL CONSTRUCTION:
20-	7							CASING=NOMINAL 4" DIA. SCH. 40 PVC.
21-	1			•				FILTER=MONTERFY No.3 WASHED, GRADED HIGH-SILICA SAND.
22-	-							SURFACE SEAL=HYDRATED BENTONITE PELLETS. SURFACE MONUMENT=TRAFFICABLE AT-GRADE COVER IN TYPE I-II
23-	7							NEAT PORTLAND CEMENT CONCRETE.
1 .	-							f .

TOTAL DEPTH TD FT SWL SCH PCC BP N.A HS TOTAL DEPTH
FEET
STATIC WATER LEVEL
SCHEDULE
TYPE I—II NEAT PORTLAND CEMENT CONCRETE
HYDRATED BENTONITE PELLET SEAL
NOT APPLICABLE
HEAVING SAND

2403C-16\BCRE-LGG\MW-LOG4 DWG

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

LEGEND

							BORING LOG TW/MW-5
	SEE FIGURE 3			Project Drilling	Co.	WES	Sheet _ 1 OF _ 1
Lo	ocation Sket	ch		Surfac	e Ele	vatio	
Well Cor	struction	Samples	_				Logged by: KEN PITCHFORD, CEG
Detall	Remarks	2	Interval Blows Por	Graphic Log	USCS	OVA/PID (PPM)	Approved by: KEN PITCHFORD, CEG SOIL/GEOLOGIC DESCRIPTION
	· -		出		AC		6" ROLLED ASPHALTIC CONCRETE SURFACE
1 I BLANK	PCC BP	TW/MW			SM	0.0	MOTTLED MEDIUM BROWN TO MEDIUM GRAY FINE TO MEDIUM SAND WITH SOME COARSE SAND AND FINE GRAVEL. DAMP TO MOIST. LOOSE. NO STAIN OR ODOR.
	— FILTER	5-4		456	SP		MEDIUM GRAY POORLY GRADED MEDIUM SAND WITH ABUNDANT STEEL FRAGMENTS (REWORKED BEACH SAND) WET TO SATURATED. LOOSE. NO SHEEN, STAIN OR ODOR.
	-SCREEN	TW/MW 5-10	5 1	7 30 33			SAME AS ABOVE. BUT LESS SHELL FRAGMENTS. SOME THIN (~3"-6" THICK PLASTIC CLAY LAYERS IN 10 TO 12 FT. DEPTH INTERVAL).
1-1	4	TW/MV 5-13		18 30		6.	5 SAME AS ABOVE.
HS HS 2 2 2 2 2 2 2 3 3 3 4 4 4 4 4 4 4 4 4 4				40			NOTES: 1. TD=14.5 FT. 2. SWL=4.27 FT. (5/18/95 © 07:50 HRS.). 3. CASING SILTED WITH ENTRAINED FORMATION SEDIMENT © - 8.0 FT.; WILL REQUIRE JETTING/DEVELOPMENT TO CLEAR. 4. WELL CONSTRUCTION: CASING=NOMINAL 2" DIA. SCH. 4D PVC. SCREEN=0.020" MILL SLOT. FILTER=MONTEREY No.3 WASHED, GRADED HIGH—SILICA SAND. SURFACE SEAL=HYDRATED BENTONITE PELLETS. 5. NO DEVELOPMENT RECORD OR WELL SAMPLING LOG HAS BEEN PREPARED. A WATER SAMPLE WAS COLLECTED BY HAND BAILER FOR LAB ANALYSIS. SEE PROJECT FILE FOR DETAILS. LEGEND TD TOTAL DEPTH FT FEET SWL STATIC WATER LEVEL SCH SCHEDULE PCC TYPE I—II NEAT PORTLAND CEMENT CONCRETE BP HYDRATED BENTONITE PELLET SEAL NA NOT APPLICABLE HS HEAVING SAND
2403C-16\	BORE-LOG\TW	-LOG5 DWG					NOTE This log of subsurface conditions is a simplification of actual conditions encountered it applies at the location and time of druking subsurface conditions may differ at other locations and times

BORING	LOG	MW-6	3
			_

SEE FIGURE 3

Location Sketch

Date MAY 18, 1995	Sheet1_ OF1
Project GSA - ALAMEDA FEDERAL CENTER	Project No. 2403C.16
Drilling Co. WEST HAZMAT	Type of Rig MOBILE B-57 HSA
Hole Diometer 8" O.D. in.	Drive Weight 140# Drop 30 in.
Surface Elevation N.A. (msl)	Top of Casina Elevation 8.61 (msl)

П	Well Cor	struction	Samples			Г			\neg
	Well Col	istroction	Sumples	_1	Leg		_	Logged by: KEN PITCHFORD, CEG	
Peeth (Feet)	_	2		ows Per Interval	1 %	USCS	OVA/PID (PPIN)	Approved by: KEN PITCHFORD, CEG	4
ar.	Detail	Remorks	Ω.	Intervol Blows 6, tnt	Graphie	ä	88	SOIL/GEOLOGIC DESCRIPTION	
-	A:-	PCC		H	مها در ا	AC		4" ROLLED ASPHALTIC CONCRETE SURFACE	H
1-	BLANK BLANK	BP		H		SP		MEDIUM GRAY—BROWN POORLY GRADED MEDIUM <u>SAND</u> WITH TRACE SHELL FRAGMENTS. DAMP TO WET. LOOSE. NO SHEEN, STAIN OR	H
2-		O.F		H				ODOR.	Ħ
3-	-133			Н				5	H
4-	2十3年		MW 6-4'	H 6				*	H
5-	-13		0-4	H ¹⁹			50.0	r.	Н
6-	- 1::1			H	1		68.2	N.	H
7-	二十二	- FILTER		H				9 0	H
8-	-1/			H					耳
9_	-	-SCREEN		Н		SM		MEDIUM TO DARK GRAY SILTY-CLAYEY FINE TO MEDIUM SAND WITH SOME SHELL FRAGMENTS. WET TO SATURATED. LOOSE, TO SLIGHTLY	日
-	-133		MW-	H		sc		PLASTIC. VERY DARK GRAY TO BLACK SOIL MATERIAL @ 11 TO 12 FT. INTERVAL, WITH POSSIBLE FAINT DECAYED HC ODOR.	Н
10-	<u> </u>		6-10	14 16	-		95	INTERVAL, WITH POSSIBLE PART BEOTHER TO SECTION	Н
11	- 1:			14					H
12-				Ħ					H
13-			MW- 6-13'	H ₁₇ 25		SP	128	MOTTLED MEDIUM BROWN-GRAY SAND WITH TRACE SILT. NO SHELL FRAGMENTS, WET, LOOSE, NO STAIN, POSSIBLE VERY FAINT DECAYED	Ħ
14-	HS			120	1.33			HC ODOR.	耳
15									Ħ
16-									H
17								NOTES:	H
18-								1. TD=14.5 FT. 2. SWL=	H
19								VERY SLOW WATER LEVEL RECOVERY NOTED DURING DEVELOPMENT.	H
20-								4. WELL CONSTRUCTION: CASING=NOMINAL 4" DIA. SCH. 40 PVC.	H
21_								SCREEN=0.020" MILL SLOTTED. FILTER=MONTEREY No.3 WASHED, GRADED HIGH-SILICA SAND.	H
22-								SURFACE SEAL=HYDRATED BENTONITE PELLETS.	,H
23-								SURFACE MONUMENT=TRAFFICABLE AT-GRADE COVER IN TYPE I-II NEAT PORTLAND CEMENT CONCRETE.	日
-									H
-				-				LEGEND	H
25-								TD TOTAL DEPTH FT FEET	H
26								SWL STATIC WATER LEVEL	H
27—								SCH SCHEDULE PCC TYPE I-II NEAT PORTLAND CEMENT CONCRETE	H
28								BP HYDRATED BENTONITE PELLET SEAL HC HYDROCARBON	H
29								N A NOT APPLICABLE HS HEAVING SAND	H
30			CE DWC						1
2403	C-16\20Pt	E-LCG/MW-LO	OO DWG					NOTE This log of subsurface concisions is a simplification of act	luol

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: FILTER PACK: #3 Sand SLOT SIZE: .020" FIELD NO. READ. REMARKS SOIL DESCRIPTION WELL Street Box ASPHALT BASE_ROCK Bentonite/Cement CLAYEY GRAVEL GC Brown Grout Bentonite Pellet SILTY SAND SM Brown Seal SAND SP 5' to 6.5' clean green B1-5 18 PPM 3 SPT sand, with shells, mod. N.C. 4 6odor, loose 3 SAND SP 8-10-Filter Pack 10.5 100 2 SPT CLAY CH 2 2 SAND SP 12. CLAYEY SAND SC-SM Loose, no shells End Cap 9 SPT 14.5 ND SILTY_SAND_SH-SC 14' to 15' 16 GSA ALAMEDA Fig. 1 TKS ___ TKS Consulting, Ltd. Sheet 1 of 2 LOG OF MW-1 / BI PROJECT NO.

DEX	-		TELD	14.0		王全	တတ်			
REMARKS	WELL	SAMP.	FIELD READ.	10 P	SAMP	DEPTH (feet)	USCS CLASS.	SOIL DESCRIPTION		
				3		16-		silty sand, fine, m STLTY SAND SW-SC 1 loose, fine sand A=10	5' TO 15.5'	
						18-		SAND SH-SM Loose fir Bottom of MW-		
						20-				
						22-				
3 -						24-				
						26~				
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	KS				ŧ			GSA ALAMEDA	Fig. 2	
TKS Consul	ting, L	td.					LO	G OF MW-1 / 81	Sheet 2 of a	

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: FILTER PACK: SLOT SIZE: FIELD REMARKS SAMP. FIELD 第一是出 NO. READ. 图 SE SOIL DESCRIPTION WELL ASPHALT CLAYEY GRAVEL GC SANDY GRAVEL GPS SAND SM Hydrocarbon odor ∇ Boring Grouted with Neat Cement SAND SP Hydrocarbon odor 82-8.590 PPM 2 SPT 3 SAND SW Fine, gray green, with 1 shells, loose Bottom of Boring at 9.5 10-12-14 GSA TKS ____ ALAMEDA Fig. 1 TKS Consulting, Ltd. Sheet 1 of 1 LOG OF B-2 PROJECT NO.

DATE STARTED: 1/	6/94					•	SURFAC	E CONDITIONS:	
DATE COMPLETED:	1/6/	94					SURFAC	E ELEVATION:	
DRILLING EQUIPMENT	:	IR A-2	:00			(COORDI	NATES:	
DRILLING CONTRACTO	R:	Hunt	Drill	ling	9	(ROUND	WATER CONDITIONS:	
LOGGED BY: Tim Sm	i th	~							
TOTAL DEPTH: 11.5						t	CASING	DEPTH:	
BORING DIAMETER:	8"					F	ILTER	PACK: SLOT SIZE:	
		F)	CELD			工介	(CIÀ		
REMARKS	WELL	SAMP. NO.	FIELD READ.	BLOAS BLOAS	SAMP	OEPTH (feet)	USCS	SOIL DESCRIPTION	
						_		ASPHALI CLAYEY GRAVEL GC	-ir
						2-			
,						_		SAND SP-SM Med. sand	
Boring Grouted	고					4-			
with Neat Cement		83-5	ND	1	SPT	8-		Gray sand starts at 5', no odor	
* *						-		SAND SP Loose sand, ND in core	
H &						8-		tube	
***			5 PPM	2	SPT	10-		OH TV DAIN ON	
				4	1		111	SILTY SAND SM	^
Ī				1		1		SAND with CLAY SH-SH	
The state of the s	9					12~		Bottom of 8-3 at 10', sample to	,-
		and with the second				14			
		l		I	[<u></u>			GSA	
TK	S			1				ALAMEDA Fig. 2	
TKS Consult		Ltd.		-				OG OF B-3 Sheetlof	
PROJECT NO.			-	1		<u>e</u> :		·	

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: FILTER PACK: SLOT SIZE: FIELD REMARKS SAMP. FIELD 등 문법 NO. READ. 금 등 SOIL DESCRIPTION WELL ASPHALT CLAYEY GRAVEL GC SAND with STLT SP-SM $\overline{\Delta}$ Boring Grouted with Neat Cement B4-5' ND 1 SPT 6 2 SAND with SILT SH-SM 10-PPM PPM CLAY CLAYEY SAND SC 12 14-GSA ______ TKS _____ ALAMEDA Fig. 3 TKS Consulting, Ltd. LOG OF B-4 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: FILTER PACK: #3 Sand SLOT SIZE: .020" FIELD SAMP. FIELD ON EACH USCS CLASS. REMARKS SOIL DESCRIPTION WELL Street Box ASPHALT CLAYEY GRAVEL GC Bentonite/Cement 2 Grout Bentonite Pellet Seal SAND with SILT SP-SM B5-5' ND 1 SPT 2 **SAND** Gray, with shells SAND with STLT SP-SM Fine, flowing 10-Filter Pack 10.5'15 PPM 1 SPT 2 CLAY Gray 12 SAND_with SILT End Cap Bottom of MW-2 at 14 GSA TKS ____ ALAMEDA Fig. 1 TKS Consulting, Ltd. Sheet 1 of 1 LOG OF MW-2/85 PROJECT NO.

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: FILTER PACK: #3 Sand SLOT SIZE: .020" FIELD REMARKS SAMP. FIELD SOIL DESCRIPTION WELL NO. READ. Street Box **ASPHOLT** Bentonite/Cement Grout Bentonite Pellet Seal CLAYEY GRAVEL GC CLAY CL-HL Brown B6-5'28 PPM 2 SPT 1 2 CLAYEY GRAVEL GC Gray, with oil pockets, black, mod. odor, OVA 6 ppm in auger, some shells 10 Filter Pack 2 3 12. SILTY SAND ST Brown, poorly sorted End Cap 14-14.5 ND 4 SPT Heaving Sand on Bottom 3 Bottom of MW-3 at 14' GSA TKS ____ ALAMEDA Fig. 2 TKS Consulting, Ltd. LOG OF MW-3/86 Sheet1 of2 PROJECT NO.

Strategy at an American			ELD	100	\Box	프우	တတ်		
REMARKS	HELL	SAMP.	FIELD READ.	3 SHOWS	TYPE	(feet)	USCS CLASS.	SOIL DESCRIP	LION
				3	1				
						16-			
					-	4		e d 5	
					- Contraction of the Contraction	18-			
					And the Party of t	-			
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				-7 L	_]_]			Γ
	TKS							GSA ALAMEDA	Fig. 3
TKS Consu	Iting,	Lfd.					1 1	OC DE MILE 464	Sheet 2 of 2
DJECT NO.							E	OG OF MW-3 /86	