



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

REMEDIAL ACTION COMPLETION CERTIFICATION

February 17, 2011

Mr. James Soutter (*Sent via E-mail to: James_Soutter@equityoffice.com*)
Equity Office Properties
2655 Campus Drive, Suite 100
San Mateo, CA 94403

Mr. Francis J. Meynard
700 Independent Road LP
104 Caledonia Street, Suite C
Sausalito, CA 94965

Subject: Case Closure for Fuel Leak Case No. RO0002900 and GeoTracker Global ID T0600165110,
SPK Industrial Property, 700 Independent Road, Oakland, CA 94621

Dear Mr. Soutter and Mr. Meynard:

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25296.10 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ariu Levi', written over a white background.

Ariu Levi
Director
Alameda County Environmental Health



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700 Independent Road LP
104 Caledonia Street, Suite C
Sausalito, CA 94965

Subject: Case Closure for Fuel Leak Case No. RO0002900 and GeoTracker Global ID T0600165110, SPK Industrial Property, 700 Independent Road, Oakland, CA 94621

Dear Mr. Soutter and Mr. Meynard:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed. This case closure letter and the case closure summary can also be viewed on the State Water Resources Control Board's Geotracker website (<http://geotracker.swrcb.ca.gov>) and the Alameda County Environmental Health website (<http://www.acgov.org/aceh/index.htm>).

SITE INVESTIGATION AND CLEANUP SUMMARY

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

- Total Petroleum Hydrocarbons as gasoline remain in soil at concentrations up to 750 ppm.
- Total Petroleum Hydrocarbons as gasoline remain in groundwater at concentrations up to 20,000 ppb.
- As described in section IV of the attached Case Closure Summary, the case was closed with Site Management Requirements that limit future land use to commercial land use only

If you have any questions, please call Jerry Wickham at (510) 567-6791. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Donna L. Drogos".

Donna L. Drogos, P.E.
Division Chief

Enclosures:

1. Remedial Action Completion Certification
2. Case Closure Summary

cc:

Leroy Griffin (w/enc)
Oakland Fire Department
250 Frank H. Ogawa Plaza, Ste. 3341
Oakland, CA 94612-2032
(Sent via E-mail to: lgriffin@oaklandnet.com)

Closure Unit (w/enc)
State Water Resources Control Board
UST Cleanup Fund
P.O. Box 944212
Sacramento, CA 94244-2120
(uploaded to GeoTracker)

Charles Almestad
Kleinfelder West, Inc.
1970 Broadway, Suite 710
Oakland, CA 94612
(Sent via E-mail to: CAlmestad@kleinfelder.com)

Donna Drogos, ACEH (Sent via E-mail to: donna.drogos@acgov.org)
Jerry Wickham, ACEH (Sent via E-mail to: jerry.wickham@acgov.org)

GeoTracker (w/enc)
File (w/orig enc)

**CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM**

I. AGENCY INFORMATION

Date: August 16, 2010

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6791
Responsible Staff Person: Mr. Jerry Wickham	Title: Senior Hazardous Materials Specialist

II. CASE INFORMATION

Site Facility Name: SPK Industrial Property		
Site Facility Address: 700 Independent Road, Oakland, CA 94621		
RB Case No.: ---	STID No.: ---	LOP Case No.: RO0002900
URF Filing Dates: 11/01/2005	Geotracker ID: T0600165110	APN: 41-3910-13

Responsible Parties	Addresses	Phone Numbers
James Soutter, Equity Office Properties	2655 Campus Drive, Suite 100, San Mateo, CA 94403	650-372-3500
Francis J. Meynard 700 Independent Road LP	104 Caledonia Street, Suite C Sausalito, CA 94965	No phone number
---	---	---

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	1,100	Gasoline	Removed	08/17/2005
Piping			Removed	08/17/2005

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: A release or releases appear to have occurred from the UST and possibly the dispensers. During removal, the UST was observed to be rusty and stained with many holes. The soil surrounding the UST was visibly stained and had a petroleum odor. Soil from the former dispenser location contained TPHd at a concentration of 246 ppm.		
Site characterization complete? Yes	Date Approved By Oversight Agency? ---	
Monitoring wells installed? Yes	Number: 5	Proper screened interval? ---
Highest GW Depth Below Ground Surface: 4.2 feet bgs	Lowest Depth: 6.2 feet bgs	Flow Direction: Generally towards south southeast but variable with periodic outward radial flow in area of former tank pit.
Most Sensitive Current Use: Potential drinking water source.		

Summary of Production Wells in Vicinity: No active water supply wells are located within 2,000 feet of the site. A 610-foot deep water supply located approximately 1,400 feet east of the site was decommissioned in November 1984. Based on the distance from the site, the decommissioned well is not expected to be a receptor for the site.	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest SW Name: Damon Slough is approximately 750 feet southeast of the site.
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health and City of Oakland Fire Department.

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	1 tank	One 1,100-gallon UST was transported to Ecology Control Industries in Richmond, CA for disposal.	08/17/2005
Piping	Not reported	Piping associated with the UST was transported to Ecology Control Industries in Richmond, CA for disposal	08/17/2005
Free Product	---	---	---
Soil	---	---	---
Groundwater	---	---	---

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP
 (Please see Attachments 1-6 for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	3,000	750	54,000	20,000
TPH (Diesel)	5,090	264	7,400	624
TPH (Motor Oil)	Not Analyzed	Not Analyzed	<358	<358
Benzene	16	3	20,500	7,600
Toluene	54	1.2	210	15
Ethylbenzene	46	<1	100	370
Xylenes	180	44	95	300
Heavy Metals (Cd, Cr, Pb, Ni, Zn)	56(1)	56(1)	0.02(2)	0.02(2)
MTBE	<0.2(3)	<0.2(3)	12(4)	<0.5(5)
Other (8240/8270)	Not detected at various detection limits	Not detected at various detection limits	Not detected at various detection limits	Not detected at various detection limits

Footnotes:

- (1) Lead = 56 ppm; nickel = 66 ppm; chromium = 61 ppm; zinc = 93 ppm; and cadmium <1.0 ppm.
- (2) Lead = 0.02 ppb; chromium = 0.057 ppb; copper = 0.13 ppb; and cadmium <0.25 ppb.
- (3) MTBE <0.2 ppm; TBA <1 ppm; DIPE <1 ppm; ETBE <1 ppm; TAME <1 ppm; EDB <1 ppm; and EDC <1 ppm.
- (4) MTBE = 12 ppb; TBA = 9 ppb; DIPE <0.5 ppb; ETBE <0.5 ppb; TAME <0.5 ppb; EDB <10.5 ppb and EDC = 586 ppb.
- (5) MTBE <0.5 ppb; TBA = 9 ppb; DIPE <0.5 ppb; ETBE <0.5 ppb; TAME <0.5 ppb; EDB <10.5 ppb; and EDC = 586 ppb.

Site History and Description of Corrective Actions:

The site is currently occupied by a one-story warehouse and parking lot. Surrounding land use is industrial and commercial. During a Phase I environmental site assessment and limited soil and groundwater investigation in 2004, petroleum hydrocarbons were detected in soil and groundwater samples collected from boring B8, which was located near the loading dock on the property. On March 16, 2005, a geophysical survey was conducted in the area of boring B8 and a suspected fill pipe. The geophysical survey concluded that a UST was present with product lines extending beneath the building between the UST and a former dispenser location inside the building.

The UST and associated piping was removed on August 17, 2005. The 1,100-gallon UST was rusted and stained with many holes. The surrounding soil had odors and visible staining. Four soil samples collected from the excavation contained TPHg and TPHd at concentrations up to 877 ppm and 5,090 ppm, respectively. An additional soil sample collected from the former dispenser location contained 246 ppm of TPHd and 0.185 ppm of TPHg.

On July 24 and 25 and August 10, 2006, direct push soil borings were advanced to depths of 16 to 24 feet bgs at eleven locations. Two borings were advanced to 32 feet bgs to assess the vertical extent of contamination. In addition, the floor of the block building was cored in two locations to collect soil samples from a depth of 4 feet bgs along the product pipeline. Depth to first encountered groundwater in the borings ranged from 5.5 to 19 feet bgs. Total petroleum hydrocarbons as gasoline (TPHg) and benzene were detected in soil samples from the borings at concentrations up to 810 and 3 ppm, respectively. TPHg and benzene were detected in groundwater samples from the borings at concentrations up to 42,000 and 13,800 ppb, respectively.

Between March 4 and 7, 2007, subsurface soil, soil vapor, and groundwater samples were collected and three monitoring wells (MW-1 through MW-3) were installed. The highest concentrations of petroleum hydrocarbons were reported in soil boring K-19 and in monitoring well MW-2, both located in the immediate vicinity of the former UST. Elevated concentrations of petroleum hydrocarbons were also detected in soil and groundwater samples from monitoring well (MW-1) and boring (K-18), located approximately 70 to 90-feet east from the former UST location.

Between January 21 and 31, 2010, five soil borings (K-21 to K-25) were advanced and two additional groundwater monitoring wells (MW-4 and MW-5) were installed to further characterize the vertical and horizontal extent of contamination. A pilot test was conducted in December 2008 to assess the effectiveness of in situ chemical oxidation to treat petroleum hydrocarbons in the subsurface and obtain design parameters for the potential implementation of full scale chemical oxidation treatment at the site. The pilot test consisted of injecting modified Fenton's reagent (containing hydrogen peroxide and an iron catalyst) into the subsurface. Using direct push technology, reagent injection was performed at 11 locations in the vicinity of the UST's former location. A second round of in-situ chemical oxidation injection was performed between May 27 and June 4, 2009.

Since March 2007, quarterly groundwater monitoring at the site has been conducted in MW-1, MW-2, and MW-3, and since January 2008 monitoring wells MW-4 and MW-5 have also been monitored. Reported Total Dissolved Solids levels have ranged from 8,600,000 to 17,000,000 milligrams per liter (mg/L).

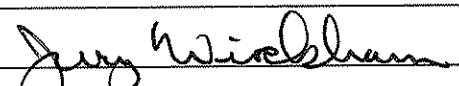
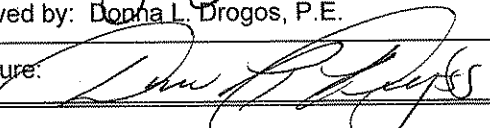
IV. CLOSURE

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: Case closure for the fuel leak site is granted for the current commercial land use only. If a change in land use to any residential or other conservative land use scenario occurs at this site, Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2. ACEH will re-evaluate the case upon receipt of approved development/construction plans.		
Excavation or construction activities in the areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities. The site is to be entered into the City of Oakland Permit Tracking System due to the residual contamination on site.		
Should corrective action be reviewed if land use changes? Yes.		
Was a deed restriction or deed notification filed? No		Date Recorded: --
Monitoring Wells Decommissioned: No	Number Decommissioned: 0	Number Retained: 5
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: --		

V. ADDITIONAL COMMENTS, DATA, ETC.

<p>Considerations and/or Variances:</p> <p>None</p> <p>Conclusion:</p> <p>Alameda County Environmental Health staff believe that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment based upon the information available in our files to date. No further investigation or cleanup is necessary. ACEH staff recommend case closure for this site.</p>
--

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Jerry Wickham	Title: Senior Hazardous Materials Specialist
Signature: 	Date: 10/27/10
Approved by: Donna L. Drogos, P.E.	Title: Division Chief
Signature: 	Date: 10/28/10

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
Notification Date: 10/28/10	

VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH: 10/28/10	Date of Well Decommissioning Report: 02/10/11	
All Monitoring Wells Decommissioned: Yes	Number Decommissioned: 5	Number Retained: 0
Reason Wells Retained: NA		
Additional requirements for submittal of groundwater data from retained wells: None		
ACEH Concurrence - Signature: <i>Jay Wichlman</i>	Date: 02/17/11	

Attachments:

1. Site Vicinity Map (1 pp)
2. Site Plans and Cross Sections (4 pp)
3. Groundwater Elevation Contour and Chemical Concentration Maps (4 pp)
4. Soil and Soil Vapor Analytical Data (11 pp)
5. Groundwater Analytical Data (7 pp)
6. Boring Logs (55 pp)

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.

Wickham, Jerry, Env. Health

From: Cherie McCaulou [CMccaulou@waterboards.ca.gov]
Sent: Thursday, October 28, 2010 4:26 PM
To: Wickham, Jerry, Env. Health
Subject: Re: Notification of case closures

Jerry - thank you for updating me on the status of these projects. The Regional Board has no objection to the ACEH's recommendation for case closure, considering the site conditions.

Sincerely,

Cherie McCaulou
Engineering Geologist
San Francisco Bay Regional Water Quality Control Board
cmccaulou@waterboards.ca.gov
510-622-2342

>>> "Wickham, Jerry, Env. Health" <jerry.wickham@acgov.org> 10/28/2010 3:58 PM >>>
Hi Cherie,

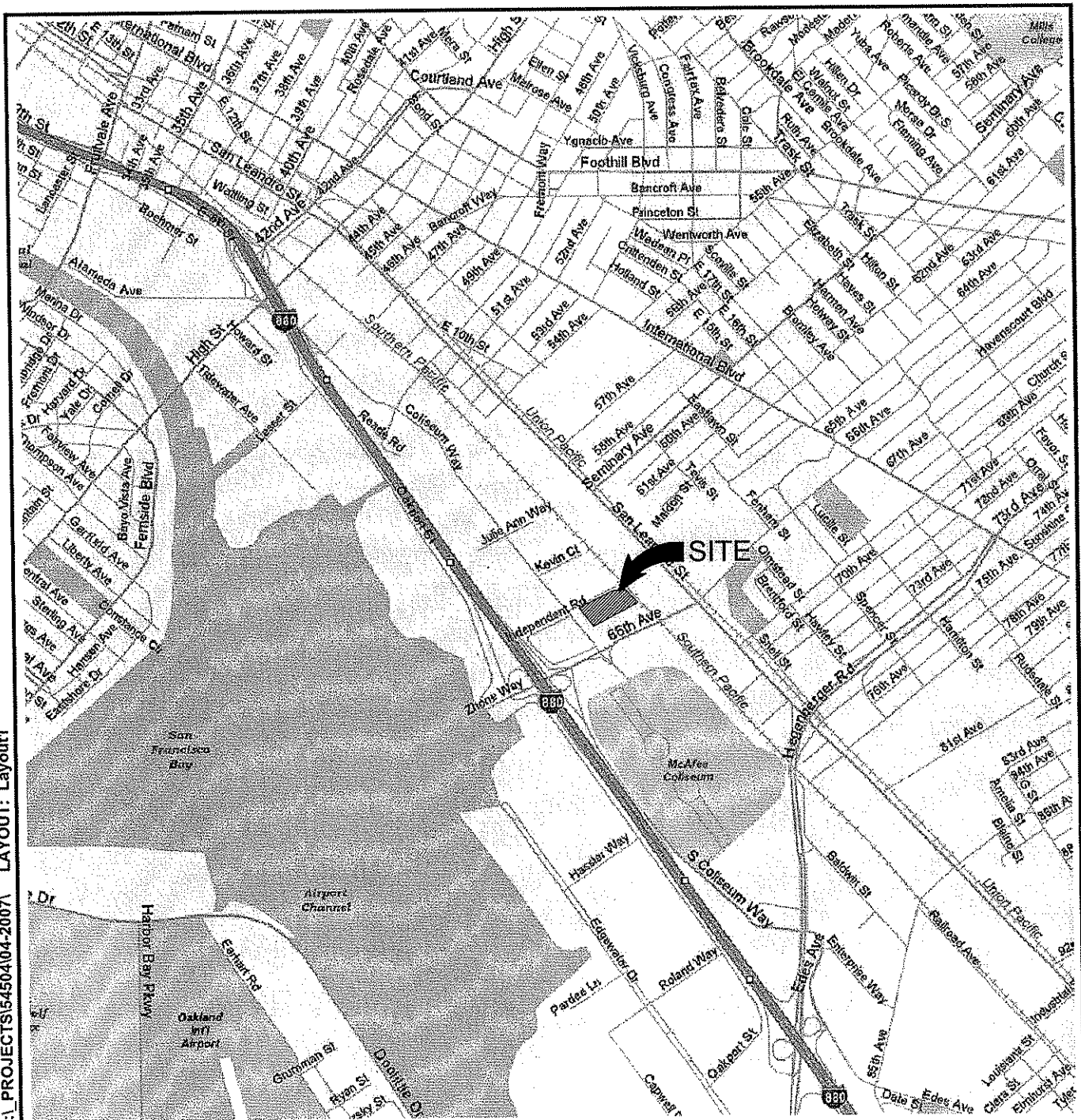
This message provides notification of the following pending case closures:

RO0508 Omega Termite, 807 75th Avenue, Oakland
RO2900 SPK Industrial Property, 700 Independent Road, Oakland

Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
phone: 510-567-6791
jerry.wickham@acgov.org

ATTACHED IMAGES: Images: VIC-MAP.jpg
 ATTACHED XREFS: XRef: TB_A-port
 FILE: L:\2007\07PROJ

D:\PROJECTS\154504\04-2007\ LAYOUT: Layout1



KLEINFELDER

1970 Broadway, Suite 710
 Oakland, CA 94612-2212
 PH. 510-628-9000 FAX. 510-628-9009
 www.kleinfelder.com

SITE VICINITY MAP

700 INDEPENDENT ROAD
 OAKLAND, CALIFORNIA

DRAWN BY: LGS
 REVISED BY:
 CHECKED BY: AD
 PLATE

1

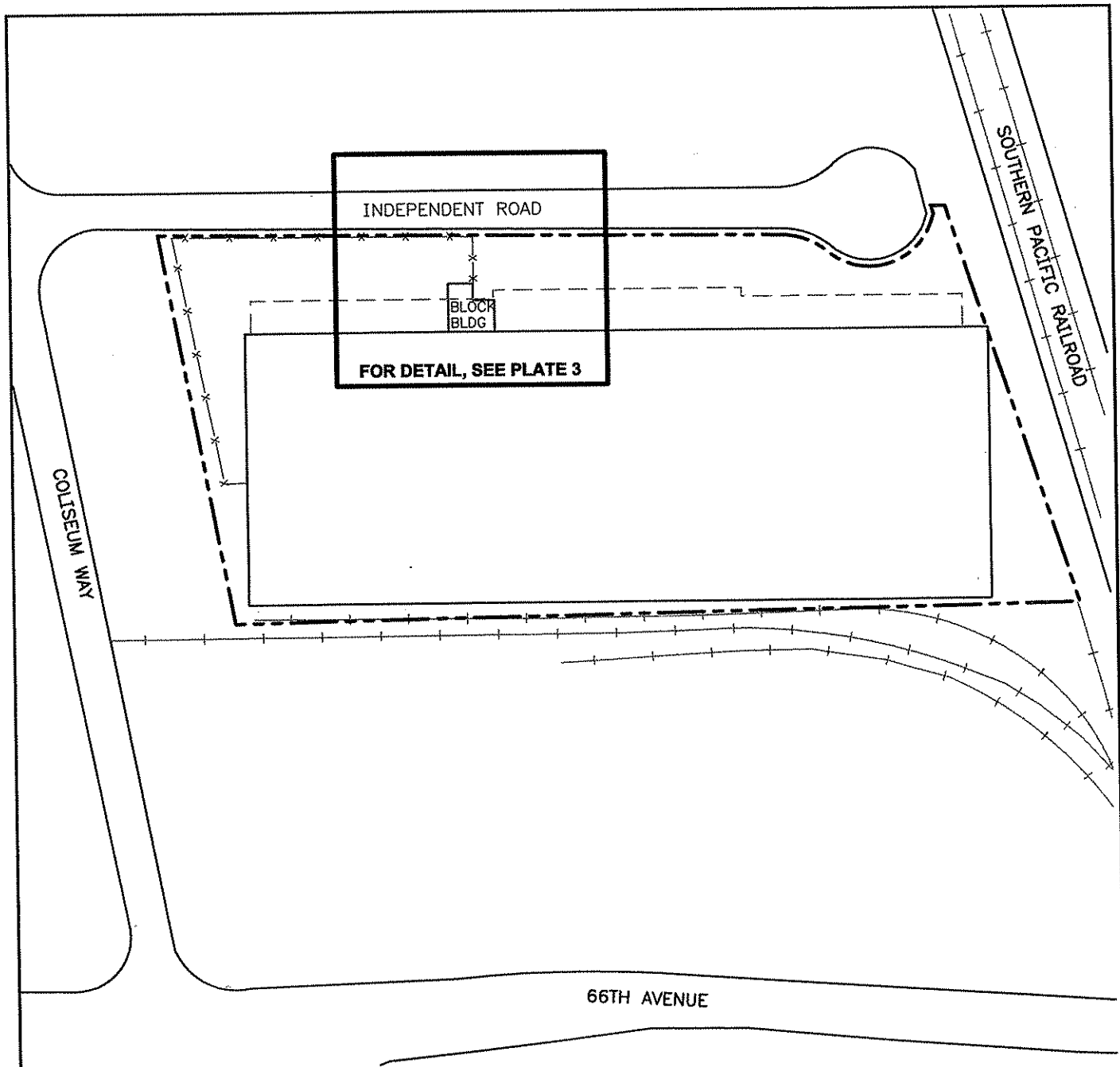
DRAWN: MAY 2007

APPROVED BY: _____

PROJECT NO. 54504

FILE NAME SITE-VIC.dwg

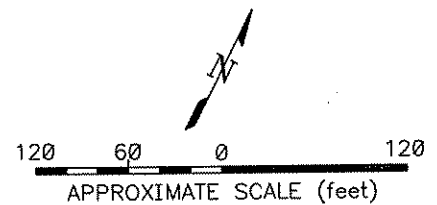
ATTACHMENT 1



LEGEND

- PROPERTY BOUNDARY
- *-x-x- FENCE LINE
- - - LIMITS OF BUILDING OVERHANG

NOTE: Locations are approximate.



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ATTACHED XREFS: XRef: TB_A-part
ATTACHED IMAGES: Images: AERIAL.jpg

<p>1970 Broadway, Suite 710 Oakland, CA 94612-2212 TEL: (510) 628-9000 FAX: (510) 628-9009</p>		SITE PLAN: OVERALL		PLATE
		700 INDEPENDENT ROAD OAKLAND, CALIFORNIA		2
DRAFTED BY: L. Sue	CHECKED BY: E. Harris	PROJECT NO. 54504		
DATE: 10/10/05	REVISION DATE:			

ATTACHED IMAGES: Xref: TB_B-size
 ATTACHED XREFS: Xref: CAD FILE: D:\PROJECTS\154504\04-2007\ LAYOUT: STEERPLAN
 File: L15007\07\PROJ

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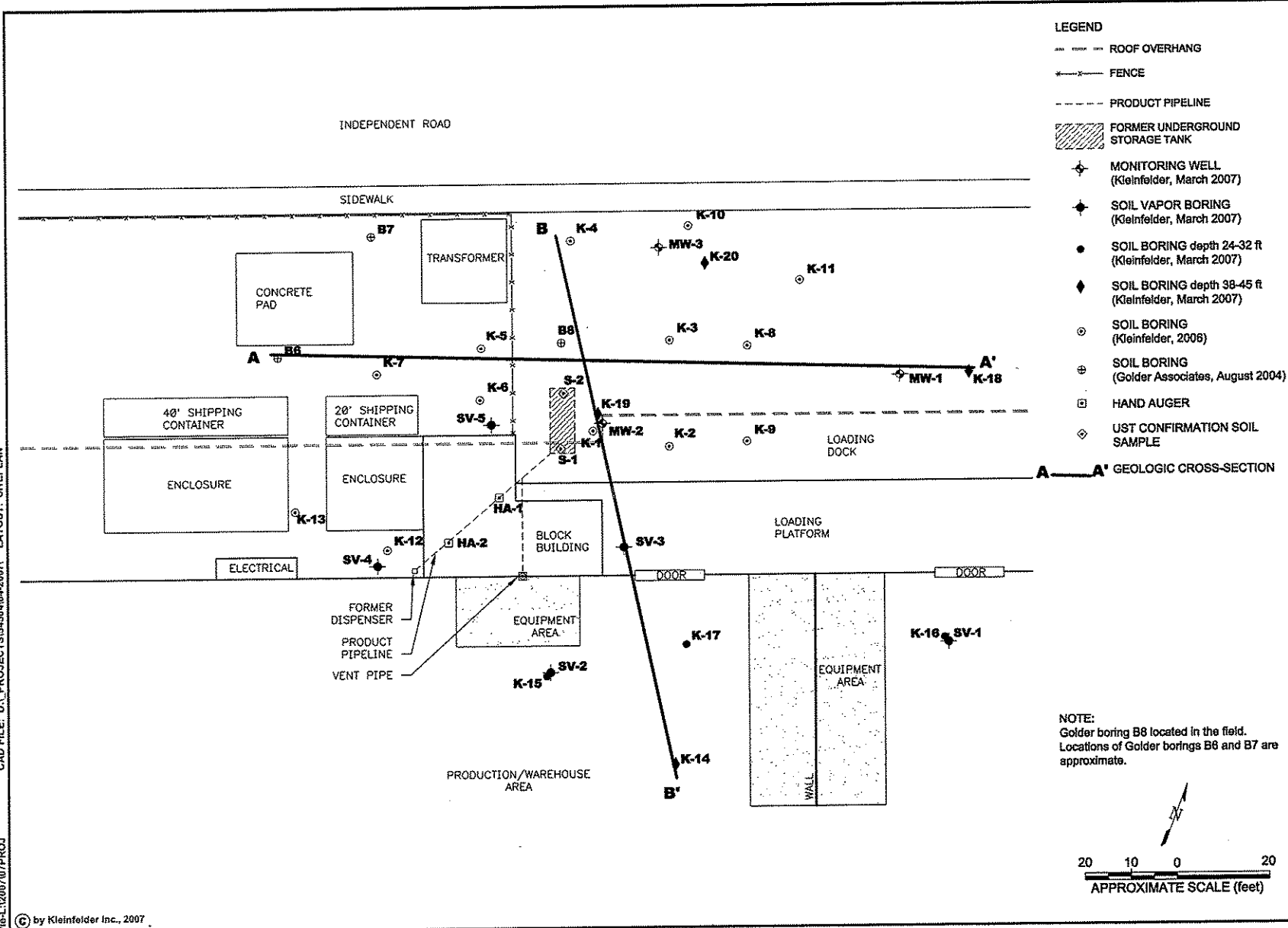
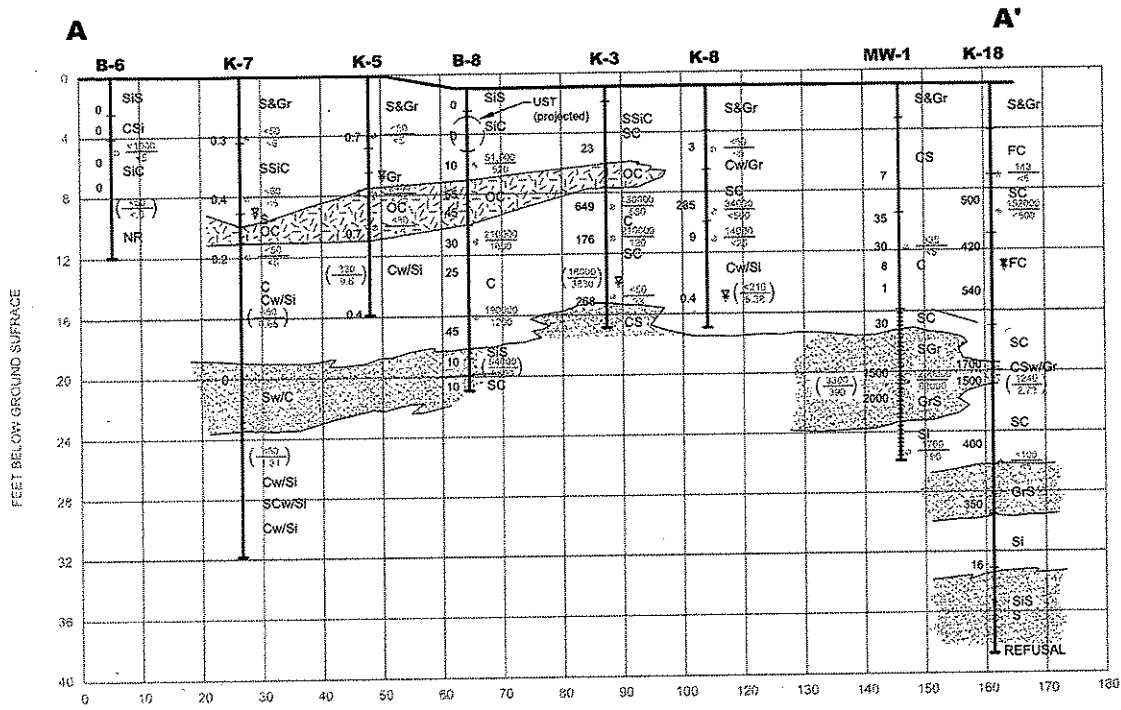


PLATE 3	
KLEINFELDER	
1979 Broadway, Suite 710 Oakland, CA 94612-2212 PH. (510) 828-9000 FAX. (510) 828-0089 www.kleinfelder.com	
SOIL BORING LOCATIONS	
DRAWN BY: L. Sus	CHECKED BY: C. Almaraz
REVISOR BY:	APPROVED BY:
DATE: MAY 2007	DATE: MAY 2007
700 INDEPENDENT ROAD OAKLAND, CALIFORNIA	
PROJECT NO. 54504	
FILE NAME: SB_LOCATION.dwg	

ATTACHED IMAGES: XREF: TB_P-3178
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 FILE: L:\2007\07\PROJ

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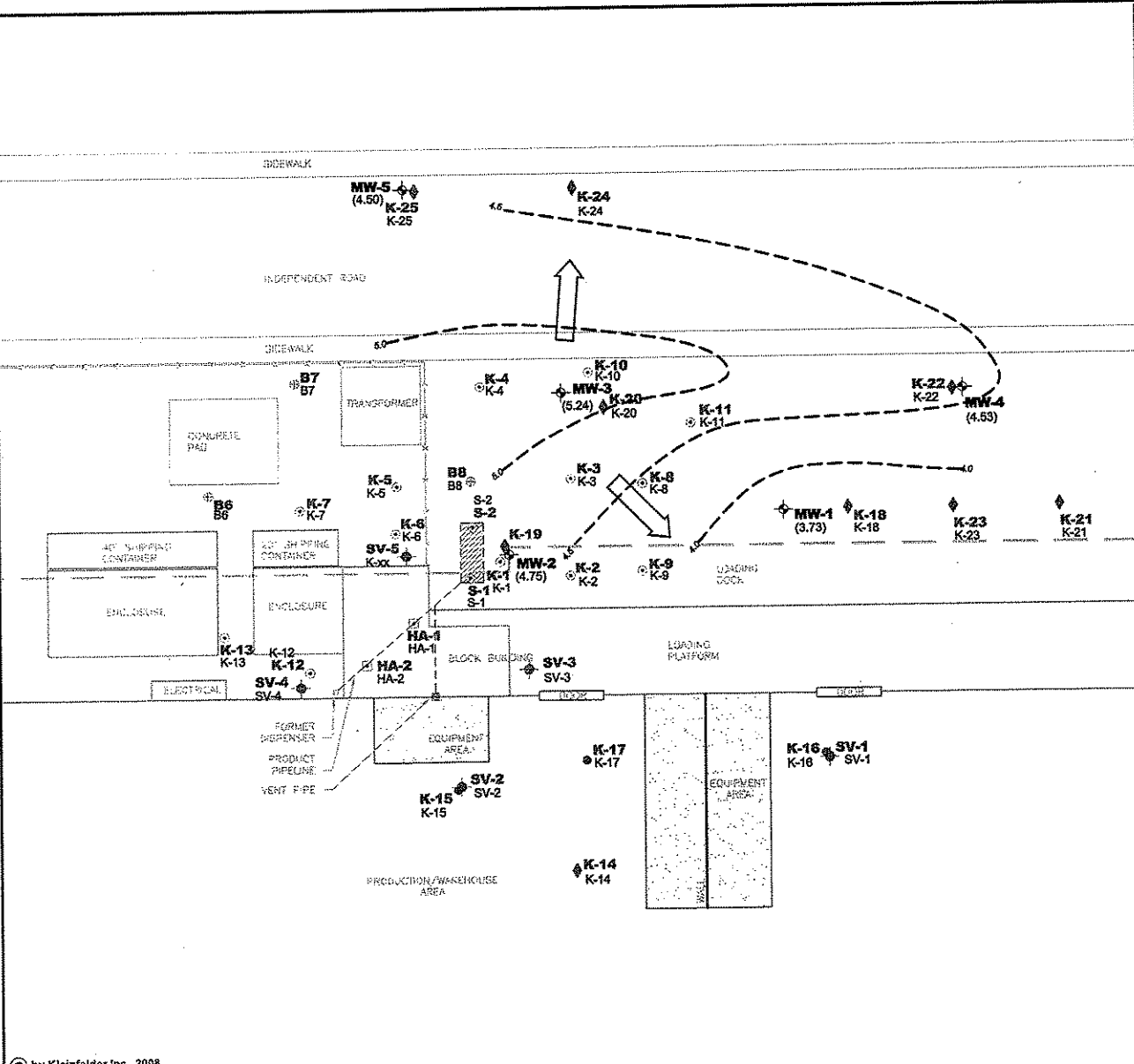
LEGEND

- C CLAY
- Si SILT
- S SAND
- Gr GRAVEL
- OC ORGANIC CLAY
- Sw/C SAND WITH CLAY
- NR NO RECOVERY
- UST UNDERGROUND STORAGE TANK
- TPH-g (µg/Kg) IN SOIL
- B (µg/Kg) IN SOIL
- TPH-g (µg/L) IN GROUNDWATER
- B (µg/L) IN GROUNDWATER
- TPH-g TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- B BENZENE
- ψ INITIAL WATER LEVEL
- * STABILIZED WATER LEVEL
- SCREENING ZONE IN MONITORING WELL
- ORGANIC VAPOR METER (PID) MEASUREMENT (ppm)

NOTE: Locations are approximate.

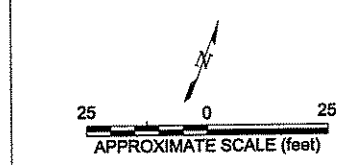
PLATE <h1 style="margin: 0;">4</h1>	
<h2 style="margin: 0;">KLEINFELDER</h2>	
1978 Broadway, Suite 710 Oakland, CA 94612-2212 PH. (910) 628-9000 FAX. (910) 628-9009 www.kleinfelder.com	
<h3 style="margin: 0;">GEOLOGIC CROSS-SECTION A-A'</h3>	
DRAWN BY: J. Sala REVISIONS BY:	CHECKED BY: C. Almsstead DATE: APPROVED BY: MAY 2007
PROJECT NO. 54504 FILE NAME: X-SECTIONS.dwg	

ATTACHED IMAGES: Images: contours, Page_1.jpg Images: contours_Page_2.jpg
 ATTACHED VIEWS: XREF: SITE PLAN; XREF: TB; B-Size
 PLOT: D:\PROJECTS\5450403-2008\ LAYOUT: GW contours



LEGEND

- ROOF OVERHANG
- FENCE
- PRODUCT PIPELINE
- FORMER UNDERGROUND STORAGE TANK
- ◆ MONITORING WELL (Kleinfelder, March 2007)
- ◆ SOIL VAPOR BORING (Kleinfelder, March 2007)
- ◆ SOIL BORING depth 24-32 ft (Kleinfelder, March 2007)
- ◆ SOIL BORING depth 38-45 ft (Kleinfelder, March 2007 and February 2008)
- ◆ SOIL BORING (Kleinfelder, 2006)
- ◆ SOIL BORING (Golder Associates, August 2004)
- HAND AUGER
- ◆ UST CONFIRMATION SOIL SAMPLE
- (4.75) GROUNDWATER ELEVATION (feet, msl)
- GROUNDWATER ELEVATION CONTOURS (feet, msl)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW

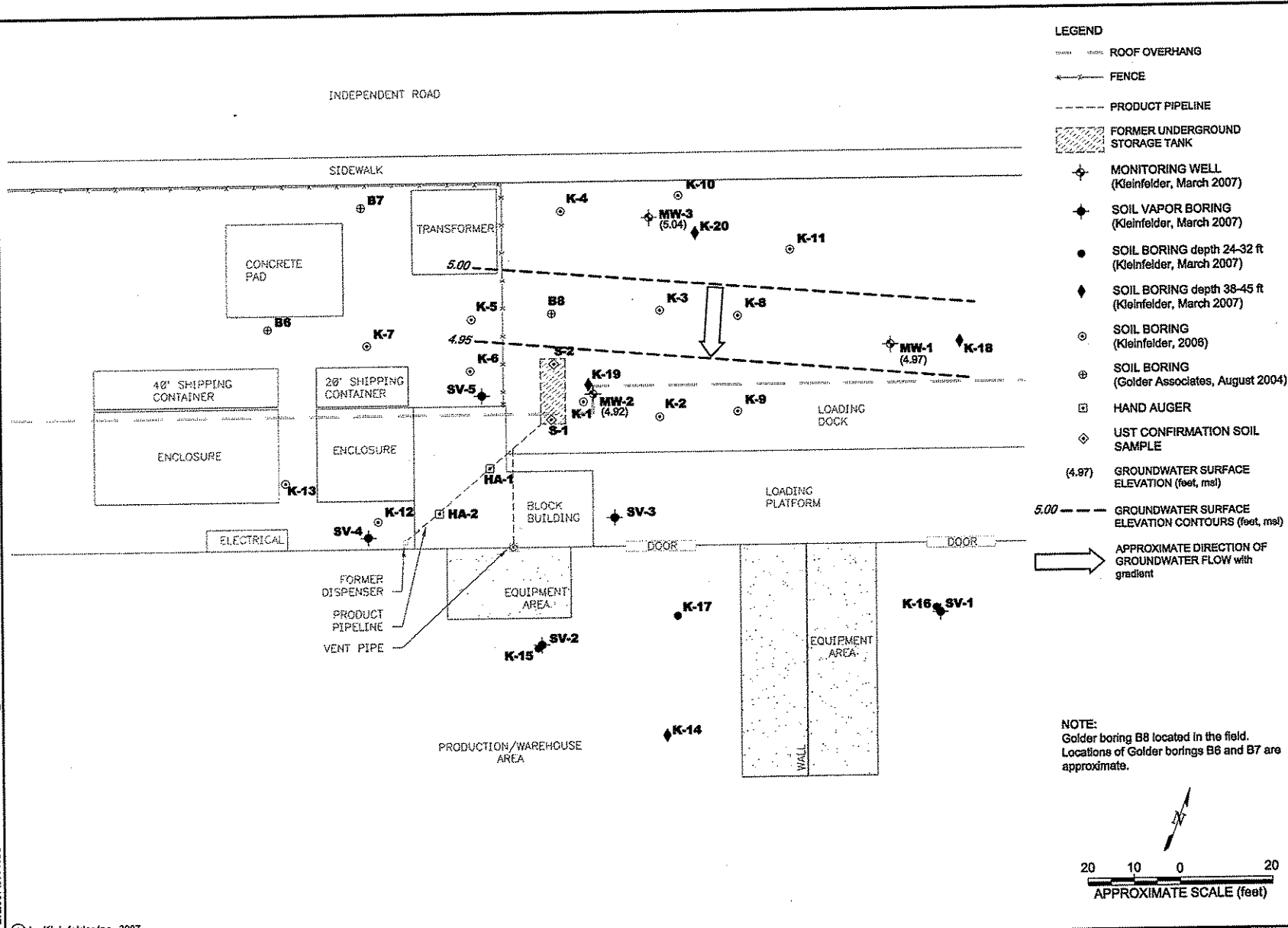


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PLATE 6	
KLEINFELDER	
1970 Broadway, Suite 710 Oakland, CA 94612-2212 PH: (510) 628-9000 FAX: (510) 628-9009 www.kleinfelder.com	
INFERRED GROUND WATER SURFACE ELEVATIONS FEBRUARY 18, 2008	
DRAWN BY: LGS	CHECKED BY: CHA
REVISED BY:	APPROVED BY:
DATE: MAR 2008	DATE: MAR 2008
PROJECT NO. 54504 700 INDEPENDENT ROAD OAKLAND, CALIFORNIA FILE NAME: SAMP5_03-2008.dwg	

ATTACHMENT 3

ATTACHED IMAGES: XREF: SITEPLAN; XREF: TR_Bldgs
 FILE: 110717.DWG
 PLOT DATE: 5/13/2007 10:17:00
 LAYOUT: GW contours



- LEGEND**
- ROOF OVERHANG
 - FENCE
 - PRODUCT PIPELINE
 - FORMER UNDERGROUND STORAGE TANK
 - ◆ MONITORING WELL (Kleinfelder, March 2007)
 - ◆ SOIL VAPOR BORING (Kleinfelder, March 2007)
 - SOIL BORING depth 24-32 ft (Kleinfelder, March 2007)
 - ◆ SOIL BORING depth 38-45 ft (Kleinfelder, March 2007)
 - SOIL BORING (Kleinfelder, 2008)
 - ⊕ SOIL BORING (Golder Associates, August 2004)
 - ⊠ HAND AUGER
 - ◆ UST CONFIRMATION SOIL SAMPLE
 - (4.97) GROUNDWATER SURFACE ELEVATION (feet, msl)
 - 5.00 --- GROUNDWATER SURFACE ELEVATION CONTOURS (feet, msl)
 - ➔ APPROXIMATE DIRECTION OF GROUNDWATER FLOW with gradient

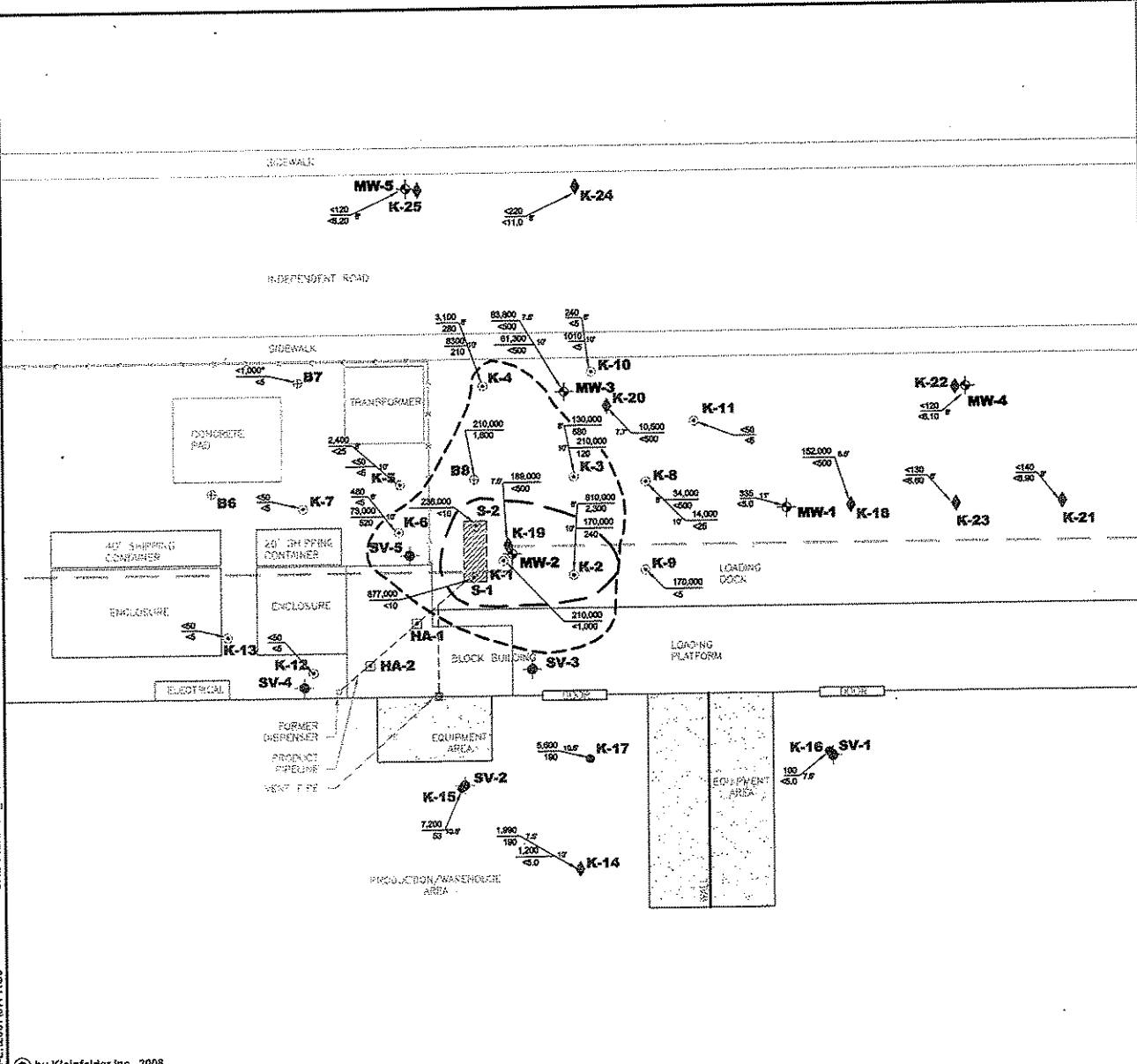
NOTE:
 Golder boring B8 located in the field.
 Locations of Golder borings B6 and B7 are approximate.

20 10 0 20
 APPROXIMATE SCALE (feet)

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PLATE	6
KLEINFELDER	
1970 Broadway, Suite 710 Oakland, CA 94612-2212 PH. (510) 628-9009 FAX (510) 628-9009 www.kleinfelder.com	
GROUND WATER SURFACE ELEVATIONS AND ESTIMATED GROUND WATER FLOW APRIL 13, 2007	
DRAWN BY: J. Sala REVISID BY: CHECKED BY: C. Amesland DATE: MAY 2007	700 INDEPENDENT ROAD OAKLAND, CALIFORNIA PROJECT NO. 54504 FILE NAME: GW-CONT_4-2007.dwg

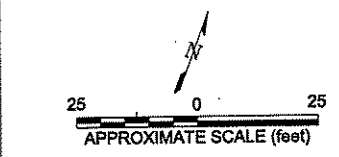
ATTACHED IMAGES: Images: pcscouts, Page_1.jpg Images: contours, Page_2.jpg
 ATTACHED VIEWS: XREF: SITE PLAN, XREF: T6, B6, B7
 PLOT: 12/07/07PROJ CAD FILE: D:\PROJECTS\4540403-2008\ LAYOUT: SOIL_7 TO 11 FT



LEGEND

- ROOF OVERHANG
- FENCE
- PRODUCT PIPELINE
- FORMER UNDERGROUND STORAGE TANK
- MONITORING WELL (Kleinfelder, March 2007)
- SOIL VAPOR BORING (Kleinfelder, March 2007)
- SOIL BORING depth 24-32 ft (Kleinfelder, March 2007)
- SOIL BORING depth 38-45 ft (Kleinfelder, March 2007 and February 2008)
- SOIL BORING (Kleinfelder, 2006)
- SOIL BORING (Golder Associates, August 2004)
- HAND AUGER
- UST CONFIRMATION SOIL SAMPLE
- APPROXIMATE LIMIT OF TPH-g, CONCENTRATIONS EXCEEDING LOWEST ESL IN SOIL
- APPROXIMATE LIMIT OF BENZENE CONCENTRATIONS EXCEEDING LOWEST ESL IN SOIL
- TPH-g (µg/Kg) SOIL SAMPLES COLLECTED AT 7-11 FEET BELOW GROUND SURFACE
- BENZENE (µg/Kg) SOIL SAMPLES COLLECTED AT 7-11 FEET BELOW GROUND SURFACE
- TPH-g TOTAL PETROLEUM HYDROCARBONS AS GASOLINE MICROGRAMS PER KILOGRAM

NOTES:
 Golder boring B8 located on the field. Locations of Golder borings B6 and B7 are approximate.

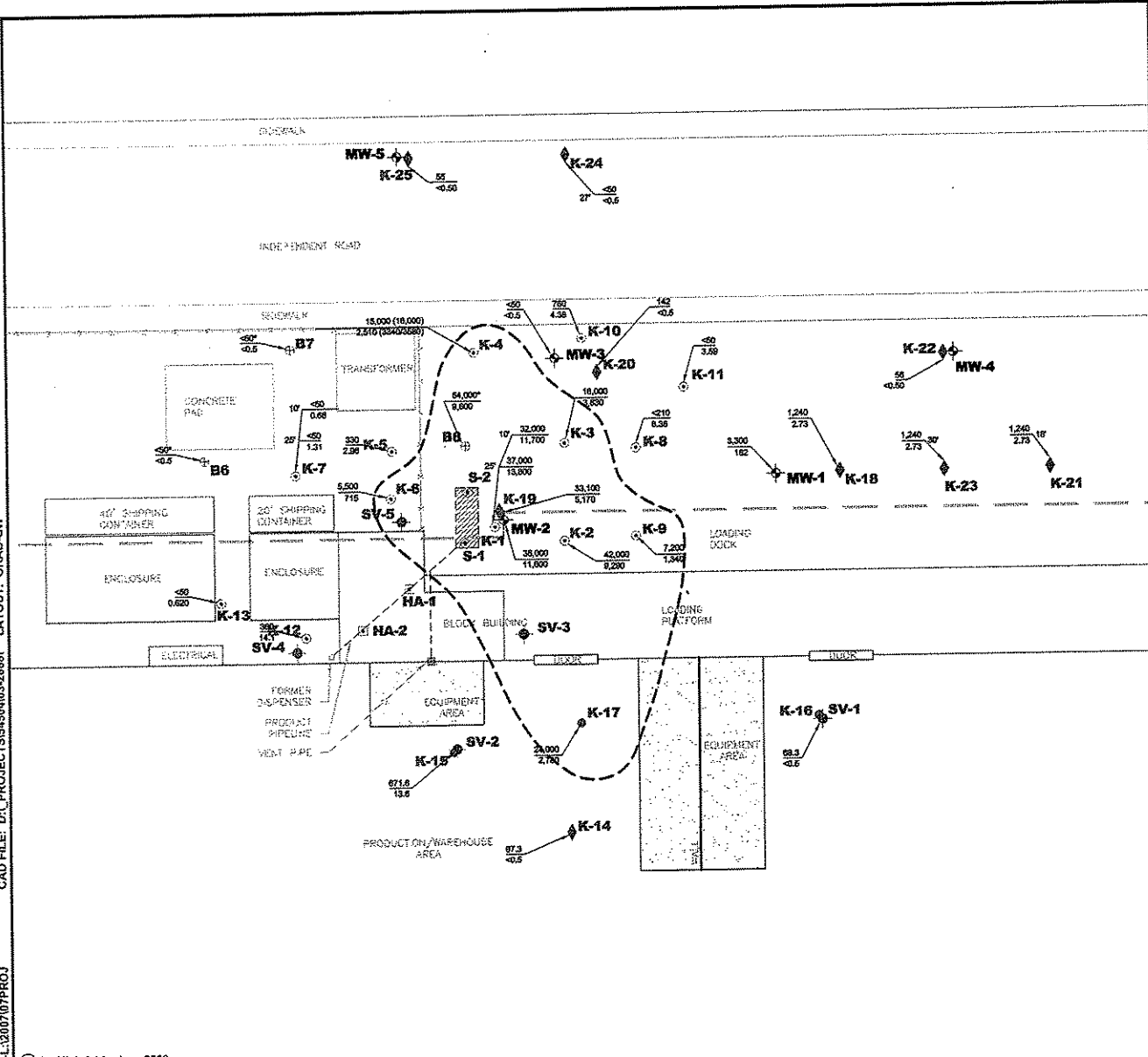


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PLATE	7	KLEINFELDER
1970 Broadway, Suite 710 Oakland, CA 94612-2212 PH: (510) 628-9000 FAX: (510) 628-9009 www.kleinfelder.com		
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND BENZENE IN SOIL AT 7' to 11' BELOW GROUND SURFACE		
DRAWN BY:	LGS	
REVISED BY:		
CHECKED BY:	CHA	
DATE:	APPROVED BY:	
MAR 2008		
PROJECT NO. 54904 FILE NAME: SAMP5_03-2008.dwg		

ATTACHED IMAGES: Images: contours, Page_1.tif Images: contours, Page_2.jpg
 ATTACHED XREFS: XRef: SITEPLAN XRef: TO 03-2008
 FIG-L: 03/07/PROJ CAD FILE: D:\PROJECT\SIS\4504\03-2008\ LAYOUT: GRAB-GW

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LEGEND

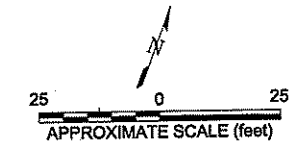
- ROOF OVERHANG
- x-x- FENCE
- - - PRODUCT PIPELINE
- ▨ FORMER UNDERGROUND STORAGE TANK
- ◆ MONITORING WELL (Kleinfelder, March 2007)
- ◆ SOIL VAPOR BORING (Kleinfelder, March 2007)
- SOIL BORING depth 24-32 ft (Kleinfelder, March 2007)
- ◆ SOIL BORING depth 38-45 ft (Kleinfelder, March 2007 and February 2008)
- ⊙ SOIL BORING (Kleinfelder, 2006)
- ⊙ SOIL BORING (Golder Associates, August 2004)
- ⊕ HAND AUGER
- ⬇ UST CONFIRMATION SOIL SAMPLE
- - - APPROXIMATE LIMIT OF BENZENE AND TPH-g CONCENTRATIONS IN GROUND WATER EXCEEDING LOWEST ESL

TPH-g (µg/L) GRAB SAMPLES COLLECTED AT BENZENE (µg/L) FIRST GROUND WATER, UNLESS OTHERWISE NOTED

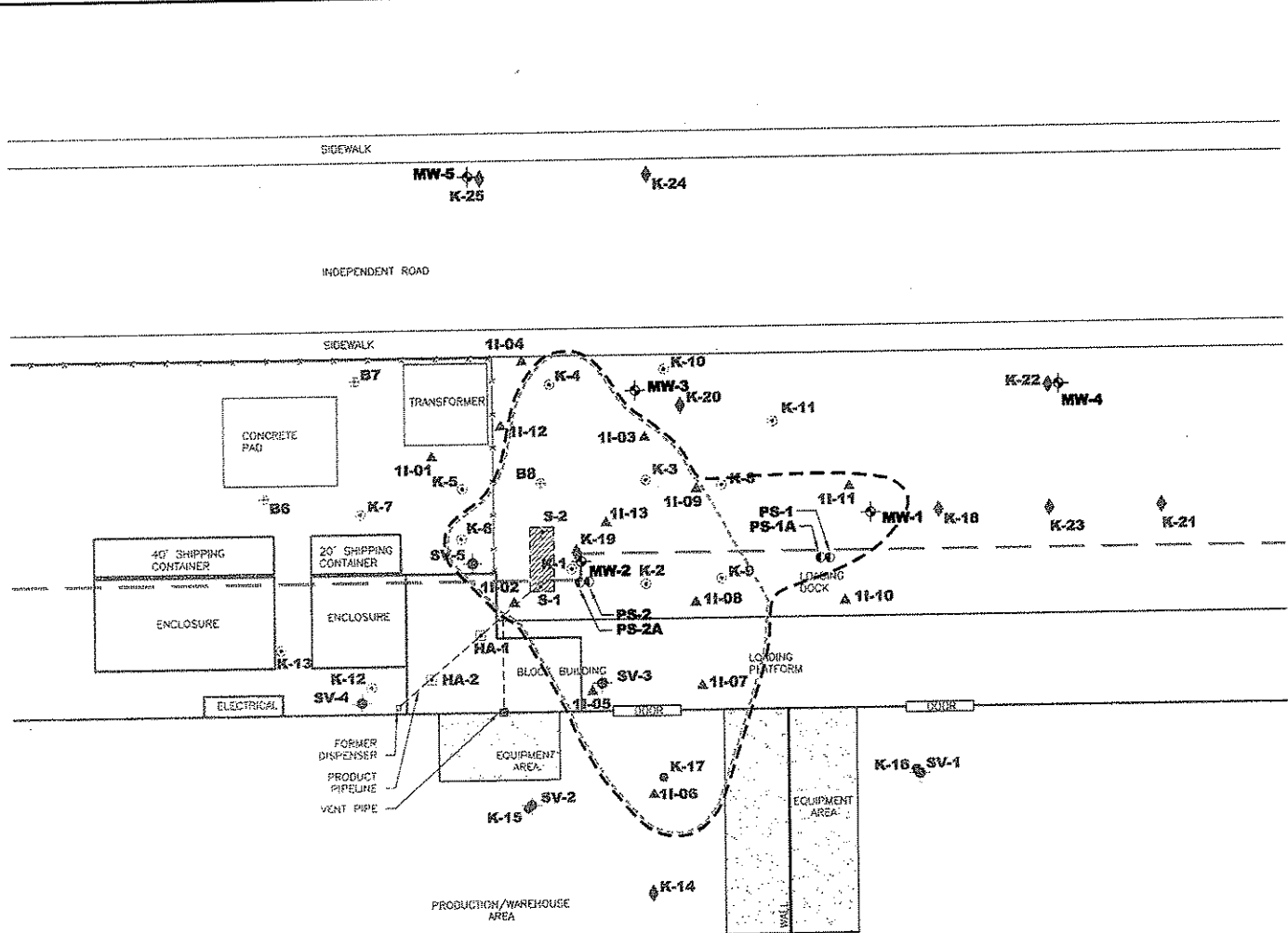
TPH-g (µg/L) TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

µg/L MICROGRAMS PER LITER

NOTES:
 Golder boring BB located on the field. Locations of Golder borings BB and B7 are approximate.
 * Results from sample collected on August 17, 2004.



KLEINFELDER		PLATE 9
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE AND BENZENE IN GROUND WATER SAMPLES		1970 Broadway, Suite 710 Oakland, CA 94612-2212 PH: (510) 628-9000 FAX: (510) 628-9009 www.kleinfelder.com
DRAWN BY: LGS	CHECKED BY: CJA	APPROVED BY: MAR 2008
700 INDEPENDENT ROAD OAKLAND, CALIFORNIA		PROJECT NO. 54504 FILE NAME: SAMP5_03-2008.dwg



- LEGEND**
- ROOF OVERHANG
 - x-x- FENCE
 - - - - PRODUCT PIPELINE
 - ▨ FORMER UNDERGROUND STORAGE TANK
 - ⊕ MONITORING WELL (Kleinfelder, March 2007)
 - ⊙ SOIL BORING (Kleinfelder, December 2008 and January 2009)
 - ⊕ SOIL VAPOR BORING (Kleinfelder, March 2007)
 - ⊙ SOIL BORING depth 24-32 ft (Kleinfelder, March 2007)
 - ⊕ SOIL BORING depth 38-45 ft (Kleinfelder, March 2007 and February 2008)
 - ⊕ SOIL BORING (Kleinfelder, 2008)
 - ⊕ SOIL BORING (Golder Associates, August 2004)
 - ⊕ HAND AUGER
 - ⊙ UST CONFIRMATION SOIL SAMPLE
 - ▲ IN SITU CHEMICAL OXIDATION (ISCO) INJECTION LOCATION
 - - - - APPROXIMATE PROPOSED LIMIT OF ISCO PILOT TEST TREATMENT AREA
 - - - - APPROXIMATE PROPOSED LIMIT OF ISCO FULL SCALE TREATMENT AREA

NOTES: Locations are approximate.



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<p>KLEINFELDER Bright People. Right Solutions. www.kleinfelder.com</p>	PROJECT NO. 54504	<p>ISCO PILOT TEST AND FULL SCALE TREATMENT AREAS, ISCO INJECTION LOCATIONS AND SOIL BORING SAMPLING LOCATIONS</p> <p>700 INDEPENDENT ROAD OAKLAND, CALIFORNIA</p>	PLATE
	DRAWN: FEB 2009		<p>4</p>
	DRAWN BY: JDS		
	CHECKED BY: SD		
FILE NAME: Task7_P-04.dwg			

**Table 1
Soil Analytical Results
700 Independent Road
Oakland, California**

Boring Number Sample Depth (feet bgs)	K-1			K-2			K-3			K-4			Lowest ESL*	Vapor Emissions to Indoor Air ESL*
	8	10	19	4	8	10	8	10	14	4	8	10		
Date Collected	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006		
TPH as Gasoline (mg/kg)	210	220	420	<0.050	810	170	130	210	<0.050	2.2	3.1	8.3	400f	na
TPH as Diesel (mg/kg)	9.8b	8.6b	10.5b	12b	18b	5.7b	6.3b	3.3b	<2.0	<2.0	<2.0	<2.0	500f,l	na
1,2 Dibromoethane (EDB) (ug/kg)	<1000	<50	<1000	<5.0	<2000	<25	<500	<25	<5.0	<25	<25	<50	20j	20
1,2 Dichloroethane(EDC) (ug/kg)	<1000	<50	<1000	<5.0	<2000	<25	<500	<25	<5.0	<25	<25	<50	70j	70
Benzene (ug/kg)	<1000	250	3000	<5.0	2300	240	580	120	33	27	280	210	380h	510
Ethylbenzene (ug/kg)	5400	1900	7100	<5.0	17000	510	2600	410	10	<25	28	210	32000f	390000
Methyl tert butyl ether (MTBE) (ug/kg)	<2000	<100	<2000	<10	<4000	<50	<1000	<50	<10	<50	<50	<100	5600j	5600
Toluene (ug/kg)	<1000	54	<1000	5.3	2400	<25	<500	<25	<5.0	<25	<25	<50	9300f	310000
Xylenes, total (ug/kg)	4500	2900	17000	<15	33000	560	3400	360	<15	<75	<75	<150	11000f	420000
Cadmium (mg/kg)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	7.4h	na
Chromium (mg/kg)	40	43	61	25	33	37	37	40	43	15	25	52	2500i	na
Lead (mg/kg)	8	6.8	9.2	14	6.4	6	6.2	5.7	6.6	11	4.6	8.6	750h	na
Nickel (mg/kg)	30	42	63	26	27	44	36	66	53	22	20	28	150k	na
Zinc (mg/kg)	33	35	52	63	28	33	29	34	50	32	21	27	600k	na

Notes:

- a - Atypical gasoline (weathered)
 - b - Sample chromatogram does not resemble typical diesel pattern. Hydrocarbons within the diesel range quantified as diesel. Sample appears to be weathered gasoline.
 - c - Sample chromatogram does not resemble typical diesel pattern. Diesel result is carry over from heavier end hydrocarbons present. Hydrocarbons within the diesel range quantified as diesel.
 - d - Sample chromatogram does not resemble typical diesel pattern; possibly weathered diesel. Hydrocarbons within the diesel range quantified as diesel.
 - e - Sample chromatogram does not resemble typical diesel pattern; possibly weathered diesel. Hydrocarbons within the diesel range quantified as diesel.
 - * ESL - Environmental Screening Levels assume non drinking water, industrial setting, shallow soil. ESLs from SFRWQCB ESL Surfer, October 2005.
- Where the lowest ESL has been exceeded, sample result in bold. Below are notes which identify what each of the listed lowest ESLs represent:
- f Leaching ESL
 - g Aquatic habitat ESL
 - h Direct exposure ESL
 - i Gross contamination ESL
 - j Vapor emissions to indoor air ESL
 - k Terrestrial ecological impacts ESL

Table 1 (continued)
Soil Analytical Results
700 Independent Road
Oakland, California

Boring Number Sample Depth (feet bgs)	K-5			K-6			K-7			K-8			Lowest ESL*	Vapor Emissions to Indoor Air ESL*
	4	8	10	4	8	10	4	8	12	4	8	10		
Date Collected	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006		
TPH as Gasoline (mg/kg)	<0.050	2.4a	<0.050	<0.050	0.48a	73	<0.050	<0.050	<0.050	<0.050	34a	14	400f	na
TPH as Diesel (mg/kg)	<2.0	13c	<2.0	<2.0	62c	12b	<2.0	<2.0	<2.0	<2.0	8.4b	<2.0	500f,i	na
1,2 Dibromoethane (EDB) (ug/kg)	<5.0	<25	<5.0	<5.0	<5.0	<500	<5.0	<5.0	<5.0	<5.0	<500	<25	20j	20
1,2 Dichloroethane(EDC) (ug/kg)	<5.0	<25	<5.0	<5.0	<5.0	<500	<5.0	<5.0	<5.0	<5.0	<500	<25	70j	70
Benzene (ug/kg)	<5.0	<25	<5.0	<5.0	<5.0	520	<5.0	<5.0	<5.0	<5.0	<500	<25	380h	510
Ethylbenzene (ug/kg)	<5.0	<25	<5.0	<5.0	<5.0	3000	<5.0	<5.0	<5.0	<5.0	<500	85	32000f	390000
Methyl tert butyl ether (MTBE) (ug/kg)	<10.0	<50	<10.0	<10.0	<10.0	<1000	<10.0	<10.0	<10.0	<10.0	<1000	<50	5600j	5600
Toluene (ug/kg)	<5.0	<25	<5.0	<5.0	<5.0	<500	<5.0	<5.0	<5.0	<5.0	<500	<25	9300f	310000
Xylenes, total (ug/kg)	<15.0	<75	<15.0	<15.0	<15.0	1600	<15.0	<15.0	<15.0	<15.0	<1500	<75	11000f	420000
Cadmium (mg/kg)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	7.4h	na
Chromium (mg/kg)	<5.0	28	22	50	5.4	34	28	15	30	33	19	36	2500i	na
Lead (mg/kg)	4.2	30	3.8	19	5.8	6.9	10	4.3	6.5	32	4.1	5.2	750h	na
Nickel (mg/kg)	<5.0	25	16	41	9.8	49	18	15	25	52	20	35	150k	na
Zinc (mg/kg)	39	34	19	110	14	32	32	31	29	70	20	33	600k	na

Notes:

- a - Atypical gasoline (weathered)
- b - Sample chromatogram does not resemble typical diesel pattern. Hydrocarbons within the diesel range quantified as diesel. Sample appears to be weathered gasoline.
- c - Sample chromatogram does not resemble typical diesel pattern. Diesel result is carry over from heavier end hydrocarbons present. Hydrocarbons within the diesel range quantified as diesel.
- d - Sample chromatogram does not resemble typical diesel pattern; possibly weathered diesel. Hydrocarbons within the diesel range quantified as diesel.
- * ESL - Environmental Screening Levels assume non drinking water, industrial setting, shallow soil. ESLs from SFRWQCB ESL Surfer, October 2005.

Where the lowest ESL has been exceeded, sample result in bold. Below are notes which identify what each of the listed lowest ESLs represent:

- f Leaching ESL
- g Aquatic habitat ESL
- h Direct exposure ESL
- i Gross contamination ESL
- j Vapor emissions to indoor air ESL
- k Terrestrial ecological impacts ESL

**Table 1 (continued)
Soil Analytical Results
700 Independent Road
Oakland, California**

Boring Number Sample Depth (feet bgs)	K-9		K-10		K-11		K-12		K-13		HA-1	HA-2	Lowest ESL*	Vapor Emissions to Indoor Air ESL*
	4	8	8	10	4	8	4	8	4	8	7/25/2006	7/25/2006		
Date Collected	8/10/2006	8/10/2006	8/10/2006	8/10/2006	8/10/2006	8/10/2006	8/10/2006	8/10/2006	8/10/2006	8/10/2006	7/25/2006	7/25/2006		
TPH as Gasoline (mg/kg)	0.270a	170a	0.240a	1.01a	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	400f	na
TPH as Diesel (mg/kg)	<2.0	7.9b	<2.0	<2.0	<2.0	<2.0	2.8b	<2.0	<2.0	<2.0	5.48	3.4c	500f,i	na
1,2 Dibromoethane (EDB) (ug/kg)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	20j	20
1,2 Dichloroethane(EDC) (ug/kg)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	70j	70
Benzene (ug/kg)	7.2	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	380h	510
Ethylbenzene (ug/kg)	<5.0	3,600	<5.0	10	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	32000f	390000
Methyl tert butyl ether (MTBE) (ug/kg)	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	5600j	5600
Toluene (ug/kg)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	9300f	310000
Xylenes, total (ug/kg)	24	<15.0	<15.0	<15.0	<15.0	<15.0	<15.0	<15.0	<15.0	<15.0	<15.0	<15.0	11000f	420000
Cadmium (mg/kg)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	7.4h	na
Chromium (mg/kg)	18	30	20	42	33	29	41	25	12	16	<5.0	20	2500i	na
Lead (mg/kg)	14	6.0	8.0	6.8	56	6.9	10	110	6.2	4.6	3.8	6.6	750h	na
Nickel (mg/kg)	30	24	24	33	55	26	26	37	11	11	<5.0	21	150k	na
Zinc (mg/kg)	70	26	26	37	93	24	54	88	54	42	57	43	600k	na

Notes:

- a - Atypical gasoline (weathered)
- b - Sample chromatogram does not resemble typical diesel pattern. Hydrocarbons within the diesel range quantified as diesel. Sample appears to be weathered gasoline.
- c - Sample chromatogram does not resemble typical diesel pattern. Diesel result is carry over from heavier end hydrocarbons present. Hydrocarbons within the diesel range quantified as diesel.
- d - Sample chromatogram does not resemble typical diesel pattern; possibly weathered diesel. Hydrocarbons within the diesel range quantified as diesel.
- * ESL - Environmental Screening Levels assume non drinking water, industrial setting, shallow soil. ESLs from SFRWQCB ESL Surfer, October 2005.

Where the lowest ESL has been exceeded, sample result in bold. Below are notes which identify what each of the listed lowest ESLs represent:

- f Leaching ESL
- g Aquatic habitat ESL
- h Direct exposure ESL
- i Gross contamination ESL
- j Vapor emissions to indoor air ESL
- k Terrestrial ecological impacts ESL

Appendix A, Table 1
 Golder Associates Soil Sample Analytical Data
 700 Independent Road
 Oakland, California

Boring Number Sample Depth (feet bgs)	B-6 5	B-7 5	B-7 10	B-8 5	B-8 10	B-8 15	Lowest ESL	Vapor Emissions to Indoor Air ESL
Date Collected	8/17/2004	8/17/2004	8/17/2004	8/17/2004	8/17/2004	8/17/2004		
TPH as Gasoline (mg/kg)	<1.0	2.1e	<1.0	51a,f	210a,f	190a,f	400	na
TPH as Diesel (mg/kg)	15c	3.2c	<1	5.9d	25d,b	25d,b	500	na
1,2 Dibromoethane (EDB) (ug/kg)	<5	<5	<5	<5	<200	<5	20	20
1,2 Dichloroethane(EDC) (ug/kg)	<5	<5	<5	<5	<200	<5	70	70
Benzene (ug/kg)	<5	<5	<5	520	1600	1200	380	510
Ethylbenzene (ug/kg)	<5	<5	<5	57	1600	1100	32000	390000
Methyl tert butyl ether (MTBE) (ug/kg)	<5	<5	<5	<5	<200	<5	5600	5600
Toluene (ug/kg)	<5	<5	<5	28	<200	<5	9300	310000
Xylenes, total (ug/kg)	<5	<5	<5	98	1600	1000	11000	420000
t-butyl alcohol (ug/kg)	<25	<25	<25	<25	<1000	<25	110000	na
1,2,4 Trimethylbenzene (ug/kg)	<5	<5	<5	<5	2700	2100	na	na
Naphthalene (ug/kg)	<5	<5	<5	52	650	630	1500	1500
n-Propyl benzene (ug/kg)	<5	<5	<5	460	500	330	na	na
1,3,5 Trimethylbenzene (ug/kg)	<5	<5	<5	39	750	540	na	na
n Butyl benzene	<5	<5	<5	160	400	290	na	na
Isopropylbenzene	<5	<5	<5	120	<200	98	na	na
sec-Butyl benzene	<5	<5	<5	46	<200	<5	na	na
4-Isopropyl toluene	<5	<5	<5	<5	<200	71	na	na

- a - Unmodified or weakly modified gasoline is significant,
- b - Diesel range compounds are significant, no recognizable pattern.
- c - Oil range compounds are significant.
- d - Gasoline range compounds are significant.
- na - Not available
- e - Strongly aged gasoline and diesel range compounds significant
- f - No recognizable pattern

ESL - Environmental Screening Levels assume non drinking water, industrial setting, shallow soil. ESLs from SFRWQCB ESL Surfer, October 2005.
 Where lowest ESL exceeded, sample result in bold.

Table 1
 Chemical Analytical Data for Soil and Ground Water Samples
 700 Independent Road
 Oakland, California

	Soil Sample Location				Soil Boring B8 (Golder Associates, 8/04)				Soil ESL
	South End of Tank (S1)	North End of Tank (S2)	Dispenser	Stockpile Four-Point Composite	Soil	Soil	Soil	Ground water (mg/L)	
Depth (feet)	8	8	1	--	5	10	15		
Petroleum Hydrocarbons									
TPHg	877	236	0.185	0.104	51 a,m	210 a,m	190 a,m	54 a	400
TPHd	5090	9.46	246	236	5.9 d	25 d,b	25 d,b	7.4 d	500
Aromatic Compounds									
Benzene	<0.010	<0.010	<0.010	<0.010	0.52	1.6	1.2	9.8	0.38
Ethylbenzene	3.8	2.8	<0.010	<0.010	0.057	1.6	1.1	1.5	32
Toluene	<0.010	<0.010	<0.010	<0.010	0.028	<0.200	<0.050	0.93	9.3
Xylenes	<0.010	2.9	<0.010	0.018	0.098	1.6	1	3.1	11
MTBE	<0.010	<0.010	<0.010	<0.010	<0.020	<0.200	<0.050	<0.100	5.6
Metals									
Cadmium	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	7.4
Chromium	28	46	23	57	NA	NA	NA	NA	58
Lead	7.0	6.2	15	19	NA	NA	NA	NA	750
Nickel	21	44	28	26	NA	NA	NA	NA	150
Zinc	31	38	67	54	NA	NA	NA	NA	600
Other Volatile Organics									
n-Butyl benzene	NA	NA	NA	NA	0.16	0.4	0.29	<0.100	
Isopropylbenzene	NA	NA	NA	NA	0.12	<0.200	0.98	<0.100	
1,2,4 Trimethylbenzene	NA	NA	NA	NA	<0.020	2.7	2.1	0.93	
sec-Butyl benzene	NA	NA	NA	NA	0.046	<0.200	<0.050	<0.100	
4-Isopropyl toluene	NA	NA	NA	NA	<0.020	<0.200	0.071	<0.100	
Naphthalene	NA	NA	NA	NA	0.052	0.65	0.63	0.19	1.5
n Propyl benzene	NA	NA	NA	NA	0.46	0.5	0.33	0.12	
1,3,5 Trimethylbenzene	NA	NA	NA	NA	0.039	0.75	0.54	0.3	

Notes:

- Samples "S1," "S2," "Dispenser," and "Stockpile Four-Point Composite" collected by Kleinfelder on August 17, 2005
- Sample "B8" collected by Golder on August 17, 2004
- All soil sample results in mg/kg, ground water sample in mg/L.
- TPHg = total petroleum hydrocarbons as gasoline
- TPHd = total petroleum hydrocarbons as diesel
- MTBE = methyl tert butyl ether
- ESL (Environmental Screening Level) for non drinking water, industrial site, soil < 10 feet
- NA = not analyzed
- a - unmodified or weakly modified gasoline is significant
- b - diesel range compounds are significant, no recognizable pattern
- d - gasoline range compounds are significant
- m - no recognizable pattern
- Chemicals detected in concentrations above screening levels are inbold.



Table 3
Total Petroleum Hydrocarbons and Volatile Organics in Soil
EOP - 700 Independent Road, Oakland, California

Sample Location Sample ID	ESL		Pilot Test Event (First ISCO Treatment Event)							
			PS-1/PS-1A				PS-2/PS-2A			
			PS-1-3 (Shallow Soil)	PS-1A-10 (Shallow Soil)	PS-1-20 (Deep Soil)**	PS-1A-20 (Deep Soil)**	PS-2-16 (Deep Soil)**	PS-2A-10 (Shallow Soil)	PS-2-19 (Deep Soil)**	PS-2A-20 (Deep Soil)**
Date Sampled	Commercial Industrial (Shallow Soil)	Commercial Industrial (Deep Soil)**	12/12/2008	1/12/2009	12/12/2008	1/12/2009	12/12/2008	1/12/2009	12/12/2008	1/12/2009
TPHd	180	180	<2.00	<2.00	<2.00	<2.00	78.1 a	18.1 b	143 a	<2.00
TPHg	180	180	330 a	<0.100	<0.100	0.120 a	1,500	260 bc	430	10 b
Benzene	0.27	2	<1	<0.001	<0.001	<0.001	16	2.2	2.5	0.16
Ethylbenzene	4.7	4.7	<1	<0.001	<0.001	<0.001	46	4.5	5.6	0.64
Toluene	9.3	9.3	<1	<0.001	<0.001	<0.001	<10	<1	1.0	<0.050
Xylenes, total	11	11	<1.5	<0.0015	<0.0015	<0.0015	40	4.1	9.4	0.80

Sample Location Sample ID	ESL		Second ISCO Treatment Event															
			2PS-1/2PS-1A				2PS-2/2PS-2A				2PS-3/2PS-3A							
			2PS-1-10 (Shallow Soil)	2PS-1A-10 (Shallow Soil)	2PS-1-20 (Deep Soil)**	2PS-1A-20 (Deep Soil)**	2PS-2-7 (Shallow Soil)	2PS-2A-7 (Shallow Soil)	2PS-2-11 (Deep Soil)**	2PS-2A-11 (Deep Soil)**	2PS-2-15 (Deep Soil)**	2PS-2A-15 (Deep Soil)**	2PS-2-20 (Deep Soil)**	2PS-2A-20 (Deep Soil)**	2PS-3-10 (Shallow Soil)	2PS-3A-10 (Shallow Soil)	2PS-3-21 (Deep Soil)**	2PS-3A-21 (Deep Soil)**
Date Sampled	Commercial Industrial (Shallow Soil)	Commercial Industrial (Deep Soil)**	5/26/2009	6/23/2009	5/25/2009	6/23/2009	5/26/2009	6/23/2009	5/26/2009	6/23/2009	5/26/2009	6/23/2009	5/26/2009	6/23/2009	5/26/2009	6/23/2009	5/26/2009	6/23/2009
TPHd	180	180	<2.0	<2.0	<2.0	<2.0	23.7d	15.2d	9.16d	129d	51.7d	264d	206d	11.7d	<2.0	3.45d	5.48d	18.7d
TPHg	180	180	<0.1	<0.1	<0.1	<0.1	1,200ab	190ab	53ab	750ab	1,700ab	180ab	3,000ab	250ab	8.2ab	37ab	64ab	170ab
Benzene	0.27	2	<0.01	<0.01	<0.01	<0.01	3.1	3	0.88	<1	3.6	<1	12	<1	0.16	<1	<1	<1
Ethylbenzene	4.7	4.7	<0.01	<0.01	<0.01	<0.01	8.6	<1	0.75	<1	7.4	<1	45	<1	0.094	<1	1.5	<1
Toluene	9.3	9.3	<0.01	<0.01	<0.01	<0.01	2.8	1.2	<0.050	<1	<1	<1	54	5.9	<0.05	<1	<1	2.6
Xylenes, total	11	11	<0.015	<0.015	<0.015	<0.015	19	4.7	0.31	12	8.8	3.1	180	44	<0.075	<1.5	2.1	8.4

Notes:

All results in milligrams per kilogram (mg/kg). Values in bold exceed corresponding ESLs.

a - Sample chromatogram does not resemble gasoline standard pattern.

b - Although TPH as Gasoline are present, reported value is significantly elevated due to the presence of heavy end hydrocarbons within C5-C12 quantitation range for Gasoline (possibly aged gasoline or carry over from fuel heavier than gasoline)

c - Estimated value

d - Sample chromatogram does not resemble typical diesel pattern (possibly fuel lighter than diesel). Lighter end hydrocarbons and hydrocarbon peaks within the diesel range quantified as diesel.

NE - Not established

NA - Not analyzed

* ESL - Environmental Screening Levels from San Francisco Regional Water Quality Control Board, Interim Final - November 2007 (revised May 2008). Lowest level reported from Table B. Environmental Screening Levels. Shallow Soils (less or equal to 3 meters below ground surface). Groundwater IS NOT a current or potential drinking water source.

** ESL - Environmental Screening Levels from San Francisco Regional Water Quality Control Board, Interim Final - November 2007 (revised May 2008). Lowest level reported from Table D. Environmental Screening Levels. Deep Soils (greater than 3 meters below ground surface). Groundwater IS NOT a current or potential drinking water source.

Acronyms:

TPHd - Total Petroleum Hydrocarbons as diesel

TPHg - Total Petroleum Hydrocarbons as gasoline

Table 4
Reported Volatile Organic Compounds and Total Petroleum Hydrocarbons in Soil
 EOP - 700 Independent Road
 Oakland, California

Sample ID	Depth (ft. bgs)	VOC (µg/Kg)							TPH-g (µg/Kg)	TPH-d (µg/Kg)
		Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	EDB	EDC		
K-1	8	< 1,000	< 1,000	5,400	4,500	< 2,000	< 1,000	< 1,000	210,000	9,800b
	10.0	250	54.0	1,900	2,900	< 100	< 50.0	< 50.0	220,000	8,600b
	19.0	3,000	< 1,000	7,100	17,000	< 2,000	< 1,000	< 1,000	420,000	10,500b
K-2	4.0	< 5.00	5,300	< 5.00	< 15.0	< 100	< 0.005	< 5.00	< 50.0	12,000b
	8.0	2,300	2,400	17,000	33,000	< 4,000	< 2,000	< 2,000	810,000	18,000b
	10.0	240	< 25.0	510	560	< 50.0	< 25.0	< 25.0	170,000	5,700b
K-3	8.0	580	< 500	2,600	3,400	< 1,000	< 500	< 500	130,000	6,300b
	10.0	120	< 25.0	410	360	< 50.0	< 25.0	< 25.0	210,000	3,300b
	14.0	33.0	< 5.00	10.0	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	< 200
K-4	4.0	27.0	< 25.0	< 25.0	< 75.0	< 50.0	< 25.0	< 25.0	2,200	< 200
	8.0	280	< 25.0	28.0	< 75.0	< 50.0	< 25.0	< 25.0	3,100	< 200
	10.0	210	< 50.0	210	< 150	< 1,000	< 50.0	< 50.0	8,300	< 200
K-5	4.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	< 200
	8.0	< 25.0	< 25.0	< 25.0	< 75.0	< 50.0	< 25.0	< 25.0	2,400a	13,000c
	10.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	< 200
K-6	4.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	< 200
	8.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	480a	62,000c
	10.0	520	< 500	3,000	1,600	< 1,000	< 500	< 500	73,000	12,000b
K-7	4.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	< 200
	8.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	< 200
	12.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	< 200
K-8	4.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	32,000d
	8.0	< 500	< 500	< 500	< 1,500	< 1,000	< 500	< 500	34,000a	8,400b
	10.0	< 25.0	< 25.0	85.0	< 75.0	< 50.0	< 25.0	< 25.0	14,000	< 200
K-9	4.0	7.20	< 5.00	< 5.00	24.0	< 10.0	< 5.00	< 5.00	270a	< 200
	8.0	< 5.00	< 5.00	3,600	< 15.0	< 10.0	< 5.00	< 5.00	170,000a	7,900b
K-10	8.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	240a	< 200
	10.0	< 5.00	< 5.00	10.0	< 15.0	< 10.0	< 5.00	< 5.00	1,010a	< 200
K-11	4.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	< 200
	8.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	< 200
K-12	4.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	2,800b
	8.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	< 200
K-13	4.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	< 200
	8.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	< 200
HA-1		< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	5,480
HA-2		< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 50.0	3,400c
ESL-TB		260	29,000	33,000	100,000	8,400	42.0	480	450,000	150,000
ESL-TD		11,000	29,000	33,000	420,000	8,400	1,000	1,800	4,200,000	150,000

Table 4 (cont.)
Reported Volatile Organic Compounds and Total Petroleum Hydrocarbons In Soil
EOP - 700 Independent Road
Oakland, California

Sample ID	Depth (ft. bgs)	VOC (µg/Kg)							TPH-g (µg/Kg)	TPH-d (µg/Kg)
		Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	EDB	EDC		
K-14	5.5	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 100	< 200
	7.5	190	15.0	< 5.00	22.0	< 10.0	< 5.00	< 5.00	1,990b	18,000f
	10.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	1,200	< 200
	17.5	< 5.00	< 5.00	< 5.00	70.0	< 10.0	< 5.00	< 5.00	< 100	< 200
K-15	10.5	53.0	< 5.00	< 5.00	170	< 10.0	< 5.00	< 5.00	7,200	< 200
	15.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 100	< 200
	17.5	220	< 25.0	910	1,100	< 10.0	< 25.0	< 25.0	50,000	4,800d
K-16	7.5	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 100	3,700g
	11.5	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 100	< 200
	19.5	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 100	< 200
K-17	10.5	190	< 25.0	< 25.0	150	< 50.0	< 25.0	< 25.0	5,600	12,700d
	19.5	920	< 500	3,600	2,000	< 100	< 500	< 500	30,000	7,300d
	23.0	380	190	400	670	< 50.0	< 25.0	< 25.0	13,000	114,000d
	27.5	7.20	< 5.00	7.80	< 15.0	< 10.0	< 5.00	< 5.00	176	2,300d
K-18	6.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	143	< 200
	8.5	< 500	< 500	720	< 1,500	< 100	< 500	< 500	152,000h	18,700d
	25.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 100	2,300d
K-19	7.5	< 500	< 500	4,600	5,800	< 100	< 500	< 500	189,000j	17400d
	18.0	11,000	26,000	33,000	170,000	< 10,000	< 5,000	< 5,000	1,900,000j	200,000d
	25.5	760	140	400	1,900	< 50.0	< 25.0	78.0	29,000j	9,890d
	31.5	160	< 12.5	13.0	49.0	< 25.0	< 12.5	32.0	780	< 200
K-20	7.7	< 500	< 500	< 500	< 1,500	< 100	< 500	< 500	10,500m	< 200
	14.0	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 100	< 200
	23.5	< 5.00	< 5.00	< 5.00	< 15.0	< 10.0	< 5.00	< 5.00	< 100	< 200
K-21	8.0	< 6.90	< 6.90	< 6.90	< 21.0	< 14.0	NA	NA	< 140	< 2,750
	20.0	< 5.70	< 5.70	< 5.70	< 17.0	< 11.0	NA	NA	< 110	< 2,260
	31.0	< 6.60	< 6.60	< 6.60	< 20.0	< 13.0	NA	NA	< 130	< 2,650
K-22	8.0	< 6.10	< 6.10	< 6.10	< 18.0	< 12.0	NA	NA	< 120	< 2,450
	21.0	< 6.00	< 6.00	< 6.00	< 18.0	< 12.0	NA	NA	< 120	< 2,410
	29.0	< 6.20	< 6.20	< 6.20	< 18.0	< 12.0	NA	NA	< 120	< 2,470
	40.0	< 5.90	< 5.90	< 5.90	< 18.0	< 12.0	NA	NA	< 120	< 2,360
K-23	8.0	< 6.60	< 6.60	< 6.60	< 20.0	< 13.0	NA	NA	< 130	< 2,640
	20.0	< 5.90	< 5.90	< 5.90	< 18.0	< 12.0	NA	NA	< 120	< 2,360
	27.0	< 5.90	< 5.90	< 5.90	< 18.0	< 12.0	NA	NA	< 120	< 2,340
	40.0	< 6.50	< 6.50	< 6.50	< 20.0	< 13.0	NA	NA	< 130	< 2,620
K-24	8.0	< 11.0	< 11.0	< 11.0	< 34.0	< 22.0	NA	NA	< 220	< 4,470
	20.0	< 5.90	< 5.90	< 5.90	< 18.0	< 12.0	NA	NA	< 120	< 2,370
	30.0	< 5.60	< 5.60	< 5.60	< 17.0	< 11.0	NA	NA	< 110	< 2,240
K-25	8.0	< 6.20	< 6.20	< 6.20	< 19.0	< 12.0	NA	NA	< 120	< 2,490
	20.0	< 5.90	< 5.90	< 5.90	< 18.0	< 12.0	NA	NA	< 120	< 2,350
	31.0	< 5.70	< 5.70	< 5.70	< 17.0	< 11.0	NA	NA	< 110	< 2,290
MW-3	7.5	< 500	< 500	< 500	< 1,500	< 100	< 500	< 500	83,800m	< 200
	10.0	< 500	< 500	< 500	< 1,500	< 100	< 500	< 500	61,300m	10,600d
	15.5	< 5.00	< 500	< 500	< 15.0	< 10.0	< 5.00	< 5.00	< 100	< 200
ESL - Table B		260	29,000	33,000	100,000	8,400	42.0	480	450,000	150,000
ESL-Table D		11,000	29,000	33,000	420,000	8,400	1,000	1,800	4,200,000	150,000

Table 4 (cont.)

Volatile Organic Compounds and Total Petroleum Hydrocarbons In Soil

EOP - 700 Independent Road
Oakland, California

Notes:

- a - Does not match typical gasoline pattern. TPH value due to presence of non-target compounds within the TPH-g quantitation range.
 - b - Although TPH-g compounds are present, the reported result is elevated due to the presence of non-target compounds within the TPH-g quantitation range.
 - c - While TPH-g compounds are present, the pattern does not match typical gasoline pattern. TPH value includes significant amount of non-target compounds.
 - d - Sample chromatogram does not resemble typical diesel pattern. Lighter end hydrocarbons within the diesel range quantitated as diesel.
 - e - Does not match typical pattern. TPH value due to presence of non-target compounds within the TPH-g quantitation range (light end).
 - f - Sample chromatogram does not resemble typical diesel pattern (discrete peaks). Unidentified hydrocarbon peaks within the diesel range quantitated as diesel.
 - g - Sample chromatogram does not resemble typical diesel pattern. Diesel result is carry over from TPH as motor oil quantitation range. Hydrocarbons and hydrocarbon peak within the diesel range quantitated as diesel.
 - h - Not typical gasoline. TPH value does not include typical gasoline compounds.
 - j - Although TPH-g compounds are present, the reported value is elevated due to significant amount of heavy end hydrocarbons not typical of gasoline but within the TPH-g quantitation range.
 - k - Two fuels present. The first fuel is lighter than diesel. The second is heavier than diesel but lighter than motor oil. Hydrocarbons within the diesel range quantitated as diesel.
 - m - Not typical gasoline. TPH value does not include any target compounds.
 - * ESL-Table B - Environmental Screening Levels from San Francisco Regional Water Quality Control Board, November 2007, Table B. Shallow Soils (\leq 3 meters bgs), Commercial/Industrial land use only. Groundwater is NOT a current or potential source of drinking water.
 - * ESL-Table D - Environmental Screening Levels from San Francisco Regional Water Quality Control Board, November 2007, Table D. Deep Soils ($>$ 3 meters bgs), Commercial/Industrial land use only. Groundwater is NOT a current or potential source of drinking water.
- Bold** - Corresponding ESL has been exceeded.

Samples from K-1 through K-13 collected: July 24, 25, and August 10, 2006
 Samples from K-14 through K20, MW-1 and MW-3 collected March 4 - 6, 2007

Acronyms

bgs	below ground surface	MTBE	Methyl tert butyl ether
EDB	1,2 Dibromoethane (EDB)	TPH-g	Total Petroleum Hydrocarbons - gasoline
EDC	1,2 Dichloroethane (EDC)	TPH-d	Total Petroleum Hydrocarbons - diesel
ESL	Environmental screening level	mg/Kg	Milligrams per Kilogram
HA	Hand Auger sample collected along former dispenser line	μ g/Kg	Micrograms per Kilogram
		VOC	Volatile Organic Compound
NE	Not established	NA	Not analyzed

 McC Campbell Analytical, Inc.	110 2nd Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 Website: www.mcccampbell.com E-mail: nlab@mcccampbell.com	
	Client Project ID: #7000,2013; Independent Road Warehouse	

Client Contact: Kin Leung Client P.O.: #1279	Date Sampled: 08/17/04
	Date Received: 08/18/04
	Date Extracted: 08/18/04
	Date Analyzed: 08/18/04

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel*

Extraction method: SW3550C

Analytical method: SW8015C

Work Order: 0408243

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0408243-001A	B1-1-5	S	11,g	5	94.8
0408243-002A	B1-2-15	S	ND	1	105
0408243-003A	B2-1-5	S	4.8,g	1	104
0408243-004A	B2-2-10	S	10,g	5	96.6
0408243-005A	B3-1-5	S	12,g,b	5	99.4
0408243-006A	B3-2-10	S	2.1,g	1	103
0408243-007A	B4-1-5	S	38,g,b	2	104
0408243-008A	B4-2-10	S	2.0,b	1	103
0408243-009A	B5-1-5	S	3.5,g,b	2	105
0408243-010A	B5-2-10	S	4.5,d,b,g	2	95.2
0408243-011A	B6-1-5	S	15,g	5	97.1
0408243-012A	B7-1-5	S	3.2,g	1	101
0408243-013A	B7-2-10	S	ND	1	99.5
0408243-014A	B8-1-5	S	5.9,d	1	108
0408243-015A	B8-2-10	S	25,d,b	1	105
0408243-016A	B8-3-15	S	25,d,b	1	117

Reporting Limit for DF = 1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	1.0	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McC Campbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel is significant; d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; l) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; j) bunker oil; m) fuel oil; n) standard solvent/mineral spirit.

DHS Certification No. 1644



 Angela Rydelius, Lab Manager

Table 4
Reported Volatile Organic Compounds and Gasoline in Soil Vapor
 EOP - 700 Independent Road, Oakland, California

Analytes ($\mu\text{g}/\text{m}^3$)	SV-1	SV-2	SV-3	SV-4	SV-5	ESL
Benzene	< 1.8	< 1.8	< 1.8	5.9	NC	290
Toluene	< 1.9	< 1.9	< 1.9	33	NC	180,000
Ethyl Benzene	< 2.2	< 2.2	< 2.2	6.2	NC	1,200,000
m,p-Xylene	< 4.0	< 4.0	< 4.0	27	NC	NE
o-Xylene	< 2.2	< 2.2	6.40	10	NC	NE
Xylenes, total	ND	ND	6.40	37	NC	410,000
MTBE	< 1.8	< 1.8	< 1.8	< 1.8	NC	31,000
Isopropanol	< 4.0	< 4.0	< 4.0	34	NC	NE
TPH-g	< 8,800	< 35,000	< 350	38,600j	NC	72,000

Notes:

* ESL - Environmental Screening Levels from San Francisco Regional Water Quality Control Board, October 2005, Table E. Shallow Soil Gas Screening Levels (≤ 3 meters bgs).

NC = No soil vapor collected in canister after 4 hours.

NE = Not established

ND = Not detected, reporting limits provided above.

j = Although the TPH as gasoline compounds are present, the reported value is elevated due to significant amount of heavy end hydrocarbons not typical of gasoline but within the TPH as gasoline quantitation range.



Table 4
Total Petroleum Hydrocarbons, Volatile Organics and Total Dissolved Solids in Groundwater
EOP - 700 Independent Road, Oakland, California

Sample Location	Date Sampled	TPH	TPHg	Benzene	Benzene (Lec)	1,2-Dichlorobenzene (EDC)	1,2,4-Trichlorobenzene	1,2,4,6-Tetrachlorobenzene (K)	Naphthalene	Propylbenzene (P)	Toluene	Triethylbenzene (TEB)	Triethylbenzene (1,2,4)	Triethylbenzene (1,2,3)	Xylene (Tot)	Methyl tert-butyl ether (MTBE)	Total Dissolved Solids (TDS)	Comments
MW-1	3/19/2007	390a	3,300	162	NA	<1.1	60.2	NA	NA	NA	205	NA	NA	391	<1.1	NA		
	9/10/2007	315a	1,700b	145	0.9	<0.500	72.2	11.6	2.42	7.69	20.8	56.1	94.6	17.1	197	<500	NA	
	12/17/2007	186a	1,510b	204	2.41	<0.500	78.8	9.98	1.69	4.35	19	15.1	67	6.12	56.7	<0.500	14,000,000	baseline - pre first ISCO treatment
	3/28/2008	<100	12,000	1,020	NA	NA	161	NA	NA	NA	19.1	19.1	NA	NA	60.0	<1.10	NA	1 month post first ISCO treatment
	6/11/2008	235a	4,700	721	<4.40	<4.40	160	18.9	NA	<52.8	<4.40	84.8	132	11.0	126	1.7	NA	
	12/1&2/2008	484f	2,900	295	<4.40	<4.40	137	35.7	NA	298	88.4	27.1	501	35.1	218	12	14,000,000	baseline - pre first ISCO treatment
	1/12/2009	264f	3,300	380	NA	NA	91	NA	NA	NA	NA	NA	84	NA	174	NA	14,000,000	1 month post first ISCO treatment
	3/12/2009	504	7,700	488	NA	NA	235	NA	NA	NA	NA	NA	144	NA	455	<4.40	NA	pre second ISCO treatment
	5/19/2009	152f	2,900	340	4.6	<4.4	79	19	<4.4	9.7	30	50	100	<4.4	62	<4.4	NA	1 month post second ISCO treatment
	6/30/2009	<100	870	99	NA	NA	33	NA	NA	NA	NA	15	NA	NA	34	NA	NA	
MW-2	3/19/2007	940a	36,000	11,600	NA	226	588	NA	NA	NA	NA	274	NA	NA	2,880	<13.2	NA	
	9/10/2007	1690a	52,100b	15,800	<22.0	611	1,120	69.1	<22.0	231	143	552	1,270	650	5,420	<22.0	NA	
	12/17/2007	3,770a	30,900b	13,300	<22.0	568	1,350	73	<22.0	227	118	172	1,230	352	2,330	<22.0	17,000,000	baseline - pre first ISCO treatment
	3/28/2008	300c	47,000	12,600	NA	NA	619	NA	NA	NA	NA	67.3	NA	NA	1,040	<22.0	NA	1 month post first ISCO treatment
	6/11&2/2008	1,030a	31,000	19,700	<44.0	542	1,090	<88.0	NA	<52.8	<44.0	81.0	154	731	1,410	<44.0	NA	
	12/1&2/2008	965f	53,000	20,500	<44.0	466	1,240	<88.0	NA	198	125	<44.0	1,200	66.9	1,180	<44.0	17,000,000	1 month post first ISCO treatment
	1/12/2009	2,500f	35,000	15,300	NA	NA	1,030	NA	NA	NA	NA	62.5	NA	NA	1,050	NA	13,000,000	
	3/12/2009	862	40,000	10,300	NA	NA	1,050	NA	NA	NA	NA	91.5	NA	NA	980	<44.0	NA	pre second ISCO treatment
	3/12/2009 Dup	NA	42,000	10,900	NA	NA	1,030	NA	NA	NA	NA	95.9	NA	NA	995	<44.0	NA	1 month post second ISCO treatment
	5/19/2009	2,670f	31,000	10,000	<88	180	1,100	<88	<44	130	120	92	750	110	730	<44	NA	
MW-3	3/19/2007	<100	<50	<0.500	NA	<0.500	<0.500	NA	NA	NA	NA	<0.500	NA	NA	<1.5	<0.500	NA	
	9/10/2007	<100	<50	<0.500	<0.500	<0.500	<0.500	<1.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.5	<0.500	8,600,000	baseline - pre first ISCO treatment
	12/17/2007	<100	<50	<0.500	<0.500	<0.500	<0.500	<1.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.5	<0.500	NA	1 month post first ISCO treatment
	3/28/2008	<100	<50	<0.500	NA	NA	<0.500	NA	NA	NA	NA	<0.500	NA	NA	<1.50	<0.500	NA	
	6/11/2008	<100	<50	<0.500	<0.500	<0.500	<0.500	<1.00	NA	<6.00	<0.500	<0.500	<0.500	<0.500	<1.50	<0.500	7,700,000	1 month post first ISCO treatment
	12/1&2/2008	<100	<50	<0.500	<0.500	<0.500	<0.500	<1.00	NA	<1.00	<0.500	<0.500	NA	NA	<1.50	NA	8,800,000	
	1/12/2009	<100	<50	<0.500	NA	NA	<0.500	NA	NA	NA	NA	<0.500	NA	NA	<1.50	<0.500	NA	pre second ISCO treatment
	3/12/2009	<100	<50	<0.500	NA	NA	<0.500	NA	NA	NA	NA	<0.500	NA	NA	<1.50	<0.500	NA	1 month post second ISCO treatment
	5/19/2009	<100	<50	<0.500	<0.500	<0.500	<0.500	<1.0	<0.500	<1.0	<0.500	<0.500	<0.500	<0.500	<1.5	<0.500	NA	
	6/30/2009	<100	<50	<0.500	NA	NA	<0.500	NA	NA	NA	NA	<0.500	NA	NA	<1.5	NA	NA	
MW-4	1/31/2008	<100	56.0e	<0.500	NA	NA	<0.500	NA	NA	NA	NA	<0.500	NA	NA	<1.50	<0.500	NA	
	3/28/2008	<100	61d	<0.500	NA	NA	<0.500	NA	NA	NA	NA	<0.500	NA	NA	<1.50	<0.500	NA	
	6/11/2008	<100	<50	<0.500	<0.500	<0.500	<0.500	<1.00	NA	<6.00	<0.500	<0.500	<0.500	<0.500	<1.50	<0.500	NA	
	12/1&2/2008	<100	<50	<0.500	<0.500	<0.500	<0.500	<1.00	NA	<1.00	<0.500	<0.500	<0.500	<0.500	<1.50	<0.500	NA	
	3/12/2009	<100	<50	<0.500	NA	NA	<0.500	NA	NA	NA	NA	<0.500	NA	NA	<1.50	<0.500	NA	
	6/29/2009	<100	<50	<0.500	NA	NA	<0.500	NA	NA	NA	NA	<0.500	NA	NA	<1.50	<0.500	NA	
MW-5	1/31/2008	544f	55.0e	<0.500	NA	NA	<0.500	NA	NA	NA	NA	<0.500	NA	NA	<1.50	<0.500	NA	
	3/28/2008	<100	57d	<0.500	NA	NA	<0.500	NA	NA	NA	NA	<0.500	NA	NA	<1.50	<0.500	NA	
	6/11/2008	<100	<50	<0.500	<0.500	<0.500	<0.500	<1.00	NA	<6.00	<0.500	<0.500	<0.500	<0.500	<1.50	<0.500	NA	
	12/1&2/2008	<100	<50	<0.500	<0.500	<0.500	<0.500	<1.00	NA	<1.00	<0.500	<0.500	<0.500	<0.500	<1.50	<0.500	NA	
	3/12/2009	<100	<50	<0.500	NA	NA	<0.500	NA	NA	NA	NA	<0.500	NA	NA	<1.50	<0.500	NA	
ESL*		210	210	46	NE	200	43	NE	NE	24	NE	130	NE	NE	100	1,800	NE	

Notes:
 All results in micrograms per liter (ug/l). Values in bold exceed corresponding ESL.
 a - Sample chromatogram does not resemble typical diesel pattern (possibly fuel lighter than diesel). Lighter end hydrocarbons and hydrocarbon peaks within the diesel range quantified as diesel.
 b - Although TPH as gasoline is present, result is elevated due to the presence of non-target compounds within the gasoline quantitative range.
 c - Although TPH as Gasoline constituents are present, results are elevated due to the presence of non-target compounds within range of C5-C12 quantified as Gasoline.
 d - Does not match typical gasoline pattern. TPH value contains only non-target compounds within gasoline quantitative range.
 e - Does not match typical gasoline pattern. Reported values are the result of presence of non-gasoline compounds within the gasoline quantitation range.
 f - Sample chromatogram does not resemble typical diesel pattern. Hydrocarbons within the diesel range quantified as diesel.
 NE - Not established
 NA - Not analyzed
 * ESL - Environmental Screening Levels from San Francisco Regional Water Quality Control Board, Interim Final - November 2007 (revised May 2008). Lowest level reported from:
 Table B, Environmental Screening Levels. Groundwater IS NOT a current or potential drinking water source.
 Acronyms:
 TPHd - Total Petroleum Hydrocarbons as diesel
 TPHg - Total Petroleum Hydrocarbons as gasoline

ATTACHMENT 5

Table 5
Reported Volatile Organic Compounds and Total Petroleum Hydrocarbons in Ground Water
 EOP - 700 Independent Road
 Oakland, California

Boring Number	K-1A	K-1B	K-2	K-3	K-4	K-4	K-5	K-6	K-7A	K-7B	K-8	K-9	K-10	K-11	K-12	K-13	K-14	K-15	ESL	
Total Boring Depth (feet)	16.0	32.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	32.0	16.0	16.0	20.0	16.0	24.0	24.0	45.0	24.0		
Sample Depth (bgs)	10.0	25.0	--	--	--	(duplicate)	--	--	10.0	25.0	--	--	--	--	--	--	--	--		
Date Sample Collected	7/25/2006	7/25/2006	7/24/2006	7/24/2006	7/24/2006	7/24/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	8/10/2006	8/10/2006	8/10/2006	8/10/2006	8/10/2006	8/10/2006	3/4/2007	3/4/2007	5,000
TPH-g (µg/L)	32,000	37,000	42,000	16,000	15,000	16,000	330	5,500	< 50.0	< 50.0	< 210	7,200	760	< 50.0	360	< 50.0	67.3a	671.6b	2,500	
TPH-d (µg/L)	655b	4,190b	400b	<222	1,100b	670b	< 159	< 143	< 182	< 118	452b	371b	< 115	< 179	< 137	NA	< 100	< 100	2,500	
TPH-mo (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 264	< 230	< 358	< 274	NA	NA	NA	540	
Benzene (µg/L)	11,700	13,800	9,290	3,830	2,510	3,580 / 3,340	2.96	715	0.66	1.31	6.38	1,340	4.38	3.59	14.1	0.62	< 0.50	13.6	400	
Toluene (µg/L)	88.0	584	929	148	62.4 / <105	< 42.0 / < 4.20	2.08	19.2	< 0.50	< 0.50	< 4.2	23.6	2.20	3.15	1.55	2.38	< 0.50	3.69	300	
Ethylbenzene (µg/L)	1,230	757	2,810	620	1,050 / 346	597 / 580	< 1.00	389	< 0.50	< 0.50	39.6	355	22.8	1.28	19.7	0.88	< 0.50	7.43	300	
Xylenes, total (µg/L)	788	2,500	3,140	305	59.6 / <315	< 126.0 / 26.6	< 3.00	34.7	< 1.50	< 1.50	< 12.6	130	3.70	4.35	21.1	2.79	< 1.50	21.4	1,800	
MTBE (µg/L)	< 10.5	< 10.5	< 42.0	< 4.20	< 10.5 / <105	< 42.0 / 27.5	< 1.00	< 4.20	< 0.50	< 0.50	< 4.20	< 2.10	< 0.50	< 1.05	< 0.50	< 0.50	< 0.50	< 0.50	150	
EDB (µg/L)	< 10.5	< 10.5	< 42.0	< 4.20	< 10.5 / <105	< 42.0 / < 4.20	< 1.00	< 4.20	< 0.50	< 0.50	< 4.20	< 2.10	< 0.50	< 1.05	< 0.50	< 0.50	< 0.50	< 0.50	200	
EDC (µg/L)	206	586	71.4	< 4.20	< 10.5 / <105	< 42.0 / < 4.20	< 1.00	< 4.20	< 0.50	< 0.50	< 4.20	< 2.10	< 0.50	< 1.05	< 0.50	< 0.50	< 0.50	< 0.50		

Boring Number	K-16	K-17	K-18	K-19	K-20	K-21	K-22	K-23	K-24	K-25	MW-1	MW-2	MW-3	MW-4	MW-5	ESL			
Total Boring Depth (feet)	24.0	32.0	38.0	38.0	38.0	40.0	40.0	40.0	40.0	40.0	25.0	25.0	25.0	25.0	28.0				
Sample Depth (bgs)	--	--	--	--	--	18.0	40.0	24.0	30.0	27.0	35.0	--	--	--	--				
Date Sample Collected	3/4/2007	3/4/2007	3/5/2007	3/6/2007	3/6/2007	1/22/2008	1/22/2008	1/22/2008	1/23/2008	1/23/2008	1/23/2008	1/23/2008	1/23/2008	3/19/2007	3/19/2007	3/19/2007	1/31/2008	1/31/2008	5,000
TPH-g (µg/L)	68.3a	24,000	1,240c	33,100b	142e	< 60.0	< 50.0	< 50.0	< 63.0	< 50.0	< 50.0	< 69.0	< 50.0	3,300	38,000	< 50.0	56.0n	55.0n	2,500
TPH-d (µg/L)	< 112	530d	150	370d	< 100	< 123	< 109	< 111	< 116	< 111	< 115	< 130	< 115	390d	940d	< 100	< 100	< 100	2,500
TPH-mo (µg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	540
Benzene (µg/L)	< 0.50	2,780	2.73	5,170	< 0.50	< 0.595	< 0.50	< 0.50	< 0.63	< 0.50	< 0.50	< 0.69	< 0.50	162	11,600	< 0.50	< 0.50	< 0.50	400
Toluene (µg/L)	< 0.50	150	1.15	235	< 0.50	< 0.595	< 0.50	< 0.50	< 0.63	< 0.50	< 0.50	< 0.69	< 0.50	205	274	< 0.50	< 0.50	< 0.50	300
Ethylbenzene (µg/L)	< 0.50	774	28.8	1,010	< 0.50	< 0.595	< 0.50	< 0.50	< 0.63	< 0.50	< 0.50	< 0.69	< 0.50	60.2	588	< 0.50	< 0.50	< 0.50	300
Xylenes, total (µg/L)	< 1.50	563	14.1	955	< 1.50	< 1.79	< 1.50	< 1.50	< 1.89	< 1.50	< 1.50	< 2.07	< 1.50	351	2,880	< 1.50	< 1.50	< 1.50	1,800
MTBE (µg/L)	1.03	< 0.50	< 0.50	< 4.40	< 0.50	< 0.595	< 0.50	< 0.50	< 0.63	< 0.50	< 0.50	< 0.69	< 0.50	< 1.10	< 4.40	< 0.50	NA	NA	150
EDB (µg/L)	< 0.50	< 0.50	< 0.50	< 4.40	< 0.50	NA	NA	NA	NA	NA	NA	NA	NA	< 1.10	< 4.40	< 0.50	NA	NA	200
EDC (µg/L)	< 0.50	< 0.50	< 0.50	37.8	< 0.50	NA	NA	NA	NA	NA	NA	NA	NA	< 1.10	226	< 0.50	NA	NA	

- Notes:**
- a - Does not match typical gasoline pattern. TPH value due to presence of non-target compounds within the TPH-g quantitation range.
 - b - Although TPH-g compounds are present, the reported result is elevated due to the presence of non-target compounds within the TPH-g quantitation range.
 - c - While TPH-g compounds are present, the pattern does not match typical gasoline pattern. TPH value includes significant amount of non-target compounds.
 - d - Sample chromatogram does not resemble typical diesel pattern. Lighter end hydrocarbons within the diesel range quantitated as diesel.
 - e - Does not match typical pattern. TPH value due to presence of non-target compounds within the TPH-g quantitation range (light end).
 - f - Sample chromatogram does not resemble typical diesel pattern (discrete peaks). Unidentified hydrocarbon peaks within the diesel range quantitated as diesel.
 - g - Sample chromatogram does not resemble typical diesel pattern. Diesel result is carry over from TPH as motor oil quantitation range. Hydrocarbons and hydrocarbon peak within the diesel range quantitated as diesel.
 - h - Not typical gasoline. TPH value does not include typical gasoline compounds.
 - i - Although TPH-g compounds are present, the reported value is elevated due to significant amount of heavy end hydrocarbons not typical of gasoline but within the TPH-g quantitation range.
 - k - Two fuels present. The first fuel is lighter than diesel. The second is heavier than diesel but lighter than motor oil. Hydrocarbons within the diesel range quantitated as diesel.
 - m - Not typical gasoline. TPH value does not include any target compounds.
 - n - Does not match typical gasoline pattern. Reported values are the result of presence of non-gasoline compounds within the gasoline quantitation range.
 - p - Sample chromatogram does not resemble typical diesel pattern. Hydrocarbons within the diesel range quantitated as diesel.
- * ESL - Environmental Screening Levels from San Francisco Regional Water Quality Control Board, November 2007.
- Table D. Deep Soils (> 3 meters bgs). Groundwater is NOT a current or potential source of drinking water.
- Bold:** Reported concentration exceeds respective ESL

Acronyms

EDB	1,2 Dibromoethane
EDC	1,2 Dichloroethane
ESL	Environmental Screening Level
mg/L	Milligrams per Liter
MTBE	Methyl tert butyl ether
bgs	below ground surface
NA	Not Analyzed
TPH-g	Total Petroleum Hydrocarbons - gasoline
TPH-d	Total Petroleum Hydrocarbons - diesel
TPH-mo	Total Petroleum Hydrocarbons - motor oil
µg/L	Micrograms per Liter

**Table 2
Ground Water Analytical Results
700 Independent Road
Oakland, California**

Boring Number	K-1A	K-1B	K-2	K-3	K-4	K-4	K-5	K-6	K-7A	K-7B	K-8	K-9	K-10	K-11	K-12	K-13	Lowest ESL*	Vapor Emissions to Indoor Air ESL*
Total Boring Depth (feet)	16	32	16	16	16	16	16	16	16	32	16	16	20	16	24	24		
Depth to First (Free) Water (feet)	8.5		9.5	13	6		6.5	8	9	25	14	5.5	18.5	13	18			
Sample Depth (feet)	10	25				duplicate			10	25								
Date Sample Collected	7/25/2006	7/25/2006	7/24/2006	7/24/2006	7/24/2006	7/24/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	7/25/2006	8/10/2006	8/10/2006	8/10/2006	8/10/2006	8/10/2006		
TPH as Gasoline (mg/L)	32	37	42	16	15	16	0.33	5.5	<0.050	<0.05	<0.210	7.2	0.76	<0.050	0.36	<0.050	0.5g	na
TPH as Diesel (mg/L)	0.655b	4.19b	0.4b	<0.222	1.1b	0.67b	<0.159	<0.143	<0.182	<0.118	0.452b	0.371b	<0.115	<0.179	<0.137	NA	0.54g	na
TPH as Motor Oil (mg/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.264	<0.230	<0.358	<0.274	NA	0.64g	na
1,2 Dibromoethane (ug/L)	<10.5	<10.5	<42.0	<4.2	<10.5 / <105	<42.0 / <4.20	<1.0	<4.2	<0.5	<0.5	<4.2	<2.10	<0.5	<1.05	<0.5	<0.5	510j	510
1,2 Dichloroethane (ug/L)	206	586	71.4	<4.2	<10.5 / <105	<42.0 / <4.20	<1.0	<4.2	<0.5	<0.5	<4.2	<2.10	<0.5	<1.05	<0.5	<0.5	690j	690
Benzene (ug/L)	11700	13800	9290	3830	2510	3580 / 3340	2.96	715	0.86	1.31	6.38	1,340	4.38	3.59	14.1	0.620	46g	1800
Ethylbenzene (ug/L)	1230	757	2810	620	1050 / 346	597 / 580	<1.0	389	<0.5	<0.5	39.6	355	22.8	1.28	19.7	0.880	290g	170000
Methyl tert butyl ether (MTBE) (ug/L)	<10.5	<10.5	<42.0	<4.2	<10.5 / <105	<42.0 / 27.5	<1.0	<4.2	<0.5	<0.5	<4.2	<2.10	<0.5	<1.05	<0.5	<0.5	1800i	80000
Toluene (ug/L)	88	584	929	148	62.4 / <105	<42.0 / <4.20	2.08	19.2	<0.5	<0.5	<4.2	23.5	2.20	3.15	1.55	2.38	130g	530000
Xylenes, total (ug/L)	788	2500	3140	305	59.6 / <315	<126.0 / 26.6	<3.0	34.7	<1.5	<1.5	<12.6	130	3.70	4.35	21.1	2.79	100g	160000
Cadmium (mg/L)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	1.1g	na
Chromium (mg/L)	<0.005	0.009	<0.005	0.042	0.007	0.007	<0.005	<0.005	0.016	<0.005	0.009	<0.005	<0.005	<0.005	<0.005	<0.005	0.18g	na
Lead (mg/L)	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.008	<0.015	<0.015	<0.015	<0.015	<0.015	0.0025g	na
Nickel (mg/L)	0.018	0.071	0.027	0.12	0.035	0.045	<0.010	<0.010	0.018	0.037	0.019	0.030	0.040	0.014	0.016	0.029	0.0082g	na
Zinc (mg/L)	0.01	0.039	0.006	0.061	0.02	0.005	<0.005	0.038	0.04	<0.005	0.082	0.022	0.086	0.0064	0.013	0.0086	0.081g	na

Notes:

- a - Atypical gasoline (weathered)
- b - Sample chromatogram does not resemble typical diesel pattern. Hydrocarbons within the diesel range quantified as diesel. Sample appears to be weathered gasoline.
- c - Sample chromatogram does not resemble typical diesel pattern. Diesel result is carry over from heavier end hydrocarbons present. Hydrocarbons within the diesel range quantified as diesel.
- d - Sample chromatogram does not resemble typical diesel pattern, possibly weathered diesel. Hydrocarbons within the diesel range quantified as diesel.
- * ESL - Environmental Screening Levels assume non drinking water, industrial setting, shallow soil. ESLs from SFRWQCB ESL Surfer, October 2005. Where the lowest ESL has been exceeded, sample result in bold. Below are notes which identify what each of the listed lowest ESLs represent:
 - f Leaching ESL
 - g Aquatic habitat ESL
 - h Direct exposure ESL
 - i Gross contamination ESL
 - j Vapor emissions to indoor air ESL
 - k Terrestrial ecological impacts ESL
- na - Not available
- NA - Not Analyzed

Appendix A, Table 2
 Golder Associates Grab Ground Water Analytical Results
 700 Independent Road
 Oakland, California

Boring Number	B-6	B-7	B-8	Lowest ESL	Vapor Emission to Indoor Air ESL
Total Boring Depth (feet)	12	16	20		
Depth to First (Free) Water (feet)	7	8.5	na		
Sample Depth (feet)	na	na	na		
Date Collected	8/17/2004	8/17/2004	8/17/2004		
TPH as Gasoline (mg/L)	<0.050	<0.050	54a	0.5	na
TPH as Diesel (mg/L)	0.22b,c	<50	7.4d	0.64	na
1,2 Dibromoethane (ug/L)	<0.5	<0.5	<0.5	510	510
1,2 Dichloroethane (ug/L)	<0.5	<0.5	<0.5	690	690
Benzene (ug/L)	<0.5	<0.5	9800	46	1800
Ethylbenzene (ug/L)	<0.5	<0.5	1500	290	170000
Methyl tert butyl ether (MTBE) (ug/L)	<0.5	<0.5	<0.5	1800	80000
Toluene (ug/L)	0.62	<0.5	930	130	530000
Xylenes, total (ug/L)	<0.5	<0.5	3100	100	160000
t-butyl alcohol (ug/L)	<0.5	9	<0.5	18000	na
1,2,4 Trimethylbenzene (ug/L)	<0.5	<0.5	930	na	na
Naphthalene (ug/L)	<0.5	<0.5	190	24	11000
n-Propyl benzene (ug/L)	<0.5	<0.5	120	na	na
1,3,5 Trimethylbenzene (ug/L)	<0.5	<0.5	300	na	na

a - Unmodified or weakly modified gasoline is significant,

b - Diesel range compounds are significant, no recognizable pattern.

c - Oil range compounds are significant.

d - Gasoline range compounds are significant.

ESL - Environmental Screening Levels assume non drinking water, industrial setting, shallow soil.

ESLs from SFRWQCB ESL Surfer, October 2005.

Where lowest ESL exceeded, sample result in bold. Lowest ESL is generally for aquatic habitats.

na - Not available

Table 6
Other Organic and Inorganic Compounds in Groundwater
 EOP - 700 Independent Road, Oakland, California

Sample Location Date Sampled	MW-1		MW-2		MW-3		ESL*
	12/1/2008	1/12/2009g	12/2/2008	1/12/2009g	12/2/2008	1/12/2009g	
Arsenic	<0.010	<0.5	0.031	<0.5	<0.010	<0.5	50,000
Barium	0.098	<0.5	0.130	<0.5	0.140	<0.5	50,000
Cadmium	<0.0050	<0.25	<0.0050	<0.25	<0.0050	<0.25	50,000
Calcium	100	190	220	240	110	120	NE
Chromium (Total)	<0.0050	<0.25	0.045	<0.25	0.057	<0.25	NE
Copper	<0.010	<0.5	0.13	<0.5	0.11	<0.5	50,000
Iron	2.2	9.4	29	24	39	15	NE
Lead	<0.0050	<0.25	0.02	<0.25	0.006	<0.25	50,000
Magnesium	210	350	300	320	120	130	NE
Potassium	34	<50	18	<50	10	<50	NE
Selenium	<0.010	<0.5	<0.010	<0.5	<0.010	<0.5	50,000
Sodium	5,700	4,700	7,100	4,000	3,300	2,700	NE
Total Organic Carbon	8.7	11	540	55	16	8.3	NE
Alkalinity as CaCO3	1,100	1,400	1,800	1,800	2,000	2,000	NE
Ferrous Iron	<0.10	0.29	2.9	<0.10	<0.10	<0.10	NE
Hexavalent Chromium	<2.5	<5.0	<2.5	<5.0	<2.5	<5.0	50,000

Notes:

All results in micrograms per liter (ug/l). Values in bold exceed corresponding ESLs.

NE - Not established

NA - Not analyzed

* ESL - Environmental Screening Levels from San Francisco Regional Water Quality Control Board, Interim Final - November 2007 (revised May 2008). Lowest level reported from: Table B. Environmental Screening Levels. Groundwater IS NOT a current or potential drinking water source.

Acronyms:

TPH-d - Total Petroleum Hydrocarbons - diesel

TPH-g - Total Petroleum Hydrocarbons - gasoline

Date Completed: 7/24/06 Drilling method: Direct Push

Logged By: J. Williams

Total Depth: 32.0 ft Notes: _____ Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT - approximately 6 inches thick	
2							Medium SAND (SP) - dark yellowish-brown, wet, loose, poorly graded, clasts 0.5 to 1.0cm	
3							SAND and GRAVEL (SW) - dark yellowish-brown, dry, loose, well-graded	
4	K1-4'			75	1.2		SILTY CLAY (CL) - dark olive-gray, moist, soft, with stone fragments	
5							ORGANIC CLAY (OL) - very dark brown, moist, hydrocarbon odor	
6								
7								
8	K1-8'			100	351		CLAY with SILT (CL) - dark greenish-gray, moist, stiff, heavy hydrocarbon odor	▽
9							ORGANIC CLAY (OL) - very dark brown, wet, soft, hydrocarbon odor	
10	K1-10'				359		CLAY with SILT (CL) - dark greenish-gray, moist, soft, hydrocarbon odor	
11							SILTY CLAY (CL) - olive-brown, moist, stiff	
12				100				
13								
14								
15								
16				100				Boring Part A Terminated at 16 feet below ground surface
17								Dual Tube Boring to 32 feet
18								

LOG OF BORING NO. K1

KLEINFELDER

PROJECT NO. 54504-3

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

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8/11/2006 7:38:28 AM

Date Completed: 7/24/06
 Logged By: J. Williams
 Total Depth: 32.0 ft

Sampler: _____
 Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
20	K1-19'			100	1510		Medium SAND with CLAY (SC) - olive-gray, wet, loose, poorly graded, heavy hydrocarbon odor	
							- increasing grain size	
	K1-22'				2.2		SILTY CLAY (CL) - olive-brown with gray lenses, moist, soft, hydrocarbon odor	
25	K1-25'			100	66.1			
				100				
30								
				100				
35							Boring terminated at approximately 32 feet.	

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PROJECT NO. 54504-3

LOG OF BORING NO. K1

700 INDEPENDENT ROAD
 OAKLAND, CALIFORNIA

PLATE

(cont'd)

8/11/2006 7:38:28 AM


Drilling method: **Direct Push**

Date Completed: 7/24/06

Logged By: J. Williams

Total Depth: 16.0 ft Notes: _____ Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT - approximately 12 inches thick	
2							Fine SAND with GRAVEL (SP) - light gray, dry, dense, poorly graded, clasts 0.2 to 1.0cm	
3							CLAYEY SAND (SC) - dark yellowish-brown, dry, loose, well graded	
4	K2-4'			100	0.0		CLAY (CH) - very dark gray, moist, medium stiff, with stone fragments, hydrocarbon odor	
5							CLAY (CL) - dark gray, moist, soft	
6							SANDY CLAY (CL) - very dark brown, wet, soft, heavy hydrocarbon odor	
7					108		SANDY CLAY (CL) - dark gray, wet, soft, hydrocarbon odor	
8	K2-8'			100	22.5			
9								
10	K2-10'				347		CLAY (CH) - dark olive-gray, moist, stiff, heavy hydrocarbon odor	
11								
12				100				
13								
14								
15							CLAYEY SAND (SC) - olive-brown, moist, dense, poorly graded	
16				100			Boring terminated at approximately 16 feet.	
17								
18								



KLEINFELDER

PROJECT NO. **54504-3**

LOG OF BORING NO. K2

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

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8/7/2006 7:38:36 AM

Date Completed: 7/24/06

Drilling method: Direct Push

Logged By: J. Williams

Total Depth: 16.0 ft

Notes: Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1					23.3		ASPHALT - approximately 6 inches thick	
2							SAND and GRAVEL (SP) - gray, dry, loose, poorly graded, clasts 0.5 to 2.0cm	
3							SANDY SILTY CLAY (CL) - dark yellowish-brown, dry, loose, with stone fragments	
4	K3-4'			100	23.3		SANDY CLAY (CL) - dark olive-gray, with stone fragments 0.5-1.5 cm, hydrocarbon odor	
5							CLAY (OL) - very dark brown, moist, soft, with organic material, heavy hydrocarbon odor	
6							CLAY (CL) - olive-gray, wet, soft, with stone fragments smaller than 0.25cm, hydrocarbon odor	
7								
8	K3-8'			75	649			
9								
10	K3-10'				176		SANDY CLAY (CL) - olive-brown, moist, hard	
11								
12				100				
13								
14	K3-14'				26B		SANDY CLAY (CL) - very dark brown, wet, soft, heavy hydrocarbon odor	
15							CLAYEY SAND (SC) - olive-brown, wet, dense, well-graded	
16				100			Boring terminated at approximately 16 feet.	
17								
18								

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PROJECT NO. 54504-3

LOG OF BORING NO. K3

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

8/11/2006 7:38:37 AM

Date Completed: 7/24/06

Drilling method: Direct Push

Logged By: J. Williams

Total Depth: 16.0 ft

Notes: _____ Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT - approximately 6 inches thick	
2							SAND with GRAVEL (SP) - light olive-brown, dry, loose, poorly graded, clasts 0.25 to 1.5cm	
3							CLAY (CL) - very dark greenish-gray, moist, soft, with rock fragments 0.5 to 2cm	
4	K4-4'			100	1.0		SAND and GRAVEL (SW) - dark yellowish-brown, dry, loose, well-graded SANDY CLAY (CL) - dark brown, moist, hard	
5								
6							SAND and GRAVEL (SW) - light olive-brown, dry, loose, well-graded ORGANIC SILTY CLAY (OL) - very dark brown, wet, soft, hydrocarbon odor	∇
7								
8	K4-8'			75	4.7			
9							- heavy hydrocarbon odor - saturated	
10	K4-10'				158			
11							SILTY CLAY (CL) - olive-brown, wet, hard	
12				100				
13							CLAY (CL) - light olive-brown, moist, hard	
14								
15								
16				100			Boring terminated at approximately 16 feet.	
17								
18								

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PROJECT NO. 54504-3

LOG OF BORING NO. K4

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

9/11/2006 7:38:38 AM

Date Completed: 7/25/06

Drilling method: Direct Push

Logged By: J. Williams

Total Depth: 16.0 ft

Notes: Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT - approximately 6 inches thick	
2							Medium SAND and GRAVEL (SP) - light olive-brown, dry, loose, poorly graded, with clasts 0.5 to 2.0cm	
3							Medium SAND and GRAVEL (SP) - dark yellowish-brown, damp, loose, poorly graded, clasts 0.5 to 2.0cm	
4	K5-4'			75	0.7			
5							SANDY CLAY (CL) - dark reddish-brown, moist, medium stiff, with stone fragments 0.5 to 1.5cm	
6								
7							GRAVEL with fines (GP) - very dark brown, wet, loose, some fines, clasts 0.5 to 5.0cm, hydrocarbon odor	∇
8	K5-8'			88	1.0		ORGANIC CLAY (OL) - black, wet, soft, with root material, hydrocarbon odor	
9								
10	K5-10'				0.7			
11							CLAY with SILT (CL) - light olive-brown with bluish mottling, wet, medium stiff	
12				75				
13							CLAY with SILT (CL) - light brown, wet, medium stiff	
14								
15								
16	K5-16			88	0.4		Boring terminated at approximately 16 feet.	
17								
18								

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LOG OF BORING NO. K5

PLATE

PROJECT NO. 54504-3

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

9/11/2006 7:39:39 AM

Date Completed: 7/25/06

Drilling method: Direct Push

Logged By: J. Williams

Total Depth: 16.0 ft

Notes: _____ Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	CVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT - approximately 6 inches thick	
2							Medium SAND and GRAVEL (SP) - light olive-brown, dry, loose, clasts 0.5 to 2.0cm, poorly graded	
3							SAND and GRAVEL (SP) - dark yellowish-brown, damp, loose, clasts 0.5 to 2.0cm	
4	K6-4'			75	0.7		SANDY CLAY (CL) - dark olive-brown, with rock fragments 0.5 to 1.5cm	
5							SANDY CLAY (CL) - dark reddish-brown, with rock fragments 0.5 to 1.0cm	
6							GRAVEL with fines (GP) - very dark brown, dry, loose, clasts 0.5 to 3.0cm, hydrocarbon odor	
7							SANDY CLAY (CL) - olive-brown, wet, soft	
8	K6-8'			100	1.5		SANDY CLAY (CL) - very dark brown, wet, soft, hydrocarbon odor	
9							SANDY CLAY (CL) - gray, wet, soft, hydrocarbon-stained, heavy hydrocarbon odor	
10	K6-10'				108		CLAY with SILT (CL) - light olive-brown with blue mottles, moist, medium stiff	
11							CLAY with SILT (CL) - light brown, moist, medium stiff	
12				88				
13								
14								
15								
16				100			Boring terminated at approximately 16 feet.	
17								
18								

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PROJECT NO. 54504-3

LOG OF BORING NO. K6

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

8/11/2006 7:38:40 AM

Date Completed: 7/25/06 Drilling method: Direct Push

Logged By: J. Williams

Total Depth: 32.0 ft Notes: _____ Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT - approximately 6 inches thick	
2							SAND and GRAVEL (SP) - light olive-brown, dry, loose, poorly graded, clasts 0.5 to 2.0cm	
3							SAND and GRAVEL (SP) - dark yellowish-brown, damp, loose, poorly graded, clasts 0.5 to 2.0cm	
4	K7-4'			88	0.3			
5							SANDY SILTY CLAY (CL) - very dark greenish-gray, moist, soft, coarse grains	
6								
7								
8	K7-8'			100	0.4			
9							Coarse SAND (SW) - brown, wet, loose, well-graded	▽
10							SANDY SILTY ORGANIC CLAY (OL) - black, wet, soft	
11							CLAY (CL) - gray, moist, medium soft	
12	K7-12'			100	0.2			
13								
14							CLAY with SILT (CL) - light olive-brown with blue mottles, wet, soft	
15								
16				100			CLAY (CL) - light brown, moist, stiff	Boring K7-A terminated at 16 feet; K7-B begins at 16 feet
17								
18								

KLEINFELDER

PROJECT NO. 54504-3

LOG OF BORING NO. K7

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

8/11/2006 7:38:41 AM

Date Completed: 7/25/06

Sampler: _____

Logged By: J. Williams

Total Depth: 32.0 ft

Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
20	K7-20'			100	0.0		CLAY (CL) - continued	
							Coarse SAND with CLAY (SW) - light brown, wet, loose, well-graded	
25				100			CLAY with SILT (CL) - olive-brown with blue mottles, moist, medium stiff	
							SANDY CLAY with SILT (CL) - dark brown, wet, soft	
30				100			CLAY with SILT (CL) - olive-gray, wet, soft	
35				100			Boring terminated at approximately 32 feet.	

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PROJECT NO. 54504-3

LOG OF BORING NO. K7

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE


(cont'd)

9/11/2006 7:38:42 AM

Date Completed: 7/25/06 Drilling method: Direct Push
 Logged By: J. Williams
 Total Depth: 16.0 ft Notes: _____ Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT - approximately 6 inches thick	
2							SAND and GRAVEL (SP) - gray, dry, loose, poorly graded, clasts up to 1.5cm	
3							SAND and GRAVEL (SP) - dark yellowish-brown, damp, loose, poorly graded, 0.5 to 1.5cm	
4	K8-4'			88	2.7		CLAY with GRAVEL (CL) - dark greenish-gray, moist, soft, clasts 0.5 to 2.0cm, hydrocarbon odor	
5								
6							SANDY CLAY (CL) - black, organic material	
7							SANDY CLAY (CL) - black, moist, soft, with, slight hydrocarbon odor	
8	K8-8'			88	285		SANDY CLAY (CL) - gray, wet, soft, heavy hydrocarbon odor	
9							CLAY with SILT (CL) - olive gray, moist, soft	
10	K8-10'				9.2		CLAY with SILT (CL) - light brown, moist, stiff	
11								
12				100				
13								
14	K8-14'				0.4			▽
15								
16				80			Boring terminated at approximately 16 feet.	
17								
18								

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 PROJECT NO. 54504-3	LOG OF BORING NO. K8	PLATE
	700 INDEPENDENT ROAD OAKLAND, CALIFORNIA	

9/11/2006 7:38:43 AM

Date Completed: 8/10/06
 Logged By: J. Williams
 Total Depth: 16.0 ft

Drilling method: Direct Push
 Notes: _____ Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT - approximately 6 inches thick	
2							SAND and GRAVEL (SW) - brown, damp, loose, well-graded, clasts 0.2 to 0.5cm	
3							SILTY medium SAND with CLAY (SM) - strong brown, moist, loose, well-graded	
4	K9-4'			100	0.1		SAND and GRAVEL (SP) - dark olive gray, damp, loose, clasts 0.2 to 0.5cm	
5							CLAY with SAND (CL) - dark gray, moist, soft	
6							Black decomposed organic material	
7							ORGANIC CLAY (OL) -black, saturated, soft	∇
8	K9-8'			100	1013		SANDY CLAY (CL) - gray, wet, soft, hydrocarbon-stained, hydrocarbon odor	
9								
10							CLAY (CL) - olive-brown, moist, medium soft, hydrocarbon odor	
11								
12				100			- increasing sand content	
13							CLAY (CL) - olive-brown, moist, medium soft	
14								
15								
16				100			Boring terminated at approximately 16 feet.	
17								
18								

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PROJECT NO. 54504-3

LOG OF BORING NO. K9

700 INDEPENDENT ROAD
 OAKLAND, CALIFORNIA

PLATE

9/11/2006 7:36:44 AM

Date Completed: 8/10/06

Drilling method: Direct Push

Logged By: J. Williams

Total Depth: 20.0 ft

Notes: _____ Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT - approximately 6 inches thick	
2							Medium SAND (SW) - yellowish-brown, dry, loose, well-graded	
3							CLAY with GRAVEL (CL) - dark olive-gray, moist, medium soft, clasts 0.2 to 1.0cm	
4	K10-4'			100	0.6		SAND and GRAVEL with CLAY (SW) - olive-brown, dry, loose, well-graded	
5							CLAY (CL) - dark gray with blue mottles, moist, soft	
6								
7							- hydrocarbon odor	
8	K10-8'			88	14.5		ORGANIC CLAY (OL) - black, wet, soft	
9							CLAY (CL) - olive-brown, moist, soft, with hydrocarbon staining, hydrocarbon odor	
10	K10-10'				671			
11								
12				75				
13							CLAY (CL) - very dark gray, saturated, very soft	
14							CLAY (CL) - brown, moist, medium stiff	
15								
16				100				
17								
18								

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PROJECT NO. **54504-3**

LOG OF BORING NO. K10

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

8/11/2006 7:38:30 AM

Date Completed: 8/10/06

Sampler: _____

Logged By: J. Williams

Total Depth: 20.0 ft

Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
20				100			CLAY (CL) - continued medium SAND (SW) - brown, wet, loose, well-graded	▽
							Boring terminated at approximately 20 feet.	
25								
30								
35								

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PROJECT NO. 54504-3

LOG OF BORING NO. K10

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

(cont'd)

9/11/2006 7:38:30 AM

Date Completed: 8/10/06 Drilling method: Direct Push

Logged By: J. Williams

Total Depth: 16.0 ft Notes: _____ Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT - approximately 6 inches thick	
2							Medium SAND (SW) - light brown, dry, loose, well-graded	
3							CLAY with GRAVEL (CL) - yellowish-brown, moist, medium stiff, clasts 0.2 to 0.5cm	
4	K11-4'			100			SILTY CLAY (CL) - dark gray, moist, soft	
5							SILTY CLAY with GRAVEL (CL) - dark gray, moist, medium stiff, clasts 0.2 to 0.5cm	
6							SILTY CLAY (CL) - gray, moist, soft	
7							ORGANIC CLAY (OL) - black, wet, soft	
8	K11-8'			100	0.3			
9								
10								
11							CLAY (CL) - olive-brown, moist, soft	
12	K11-12'			100	0.1			
13							CLAYEY SAND (SC) - dark brown, saturated, loose	▽
14								
15								
16				100			Boring terminated at approximately 16 feet.	
17								
18								

KLEINFELDER LOG OF BORING NO. K11 PLATE

PROJECT NO. 54504-3 700 INDEPENDENT ROAD OAKLAND, CALIFORNIA

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9/11/2006 7:38:31 AM

Date Completed: 8/10/06

Drilling method: Direct Push

Logged By: J. Williams

Total Depth: 24.0 ft

Notes: _____ Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT - approximately 6 inches thick	
2							AGGREGATE BASEROCK - approximately 30 inches thick, olive-brown	
3							CLAYEY SILTY coarse SAND with GRAVEL (SC) - strong brown, moist, loose, well-graded, clasts 0.2 to 1.0cm	
4	K12-4'			63	0.6		CLAY with GRAVEL (CL) - very dark olive-gray, moist, soft, clasts 0.5 to 1.0cm	
5							CLAY (CL) - dark brown, moist, soft	
6							CLAYEY SAND with GRAVEL (SC) - greenish-gray, dry, loose, well-graded	
7							ORGANIC CLAY (OL) - black, moist, soft	
8	K12-8'			88	0.1		Black organic decomposed material	
9							ORGANIC CLAY (OL) - black, moist, very soft	
10							CLAY (CL) - gray, moist, soft	
11							CLAY (CL) - gray, moist, soft	
12	K12-12'			75	0.0		SILTY CLAY (CL) - olive-brown, moist, soft	
13							CLAY (CL) - brown, moist, soft	
14	K12-14'				0.0		CLAY (CL) - brown, moist, soft	
15							CLAY (CL) - brown, moist, soft	
16				100			CLAY (CL) - brown, moist, soft	
17							CLAY (CL) - brown, moist, soft	
18							CLAY (CL) - brown, moist, soft	

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PROJECT NO. 54504-3

LOG OF BORING NO. K12

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

9/11/2006 7:36:32 AM

Date Completed: 8/10/06 Sampler: _____
 Logged By: J. Williams _____
 Total Depth: 24.0 ft Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
20				100			CLAY (CL) - continued	
							Coarse SAND (SW) - brown, wet, loose, well-graded	
							- increasing clay content	
				100			SAND (SW) - gray, wet, loose, well-graded, hydrocarbon-stained	
25							Boring terminated at approximately 24 feet.	
30								
35								

KLEINFELDER
 PROJECT NO. 54504-3

LOG OF BORING NO. K12
 700 INDEPENDENT ROAD
 OAKLAND, CALIFORNIA

PLATE
 (cont'd)

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8/11/2006 7:38:32 AM


Drilling method: Direct Push

Date Completed: 8/10/06

Logged By: J. Williams

Total Depth: 24.0 ft Notes: _____ Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT - approximately 6 inches thick	
2							SAND with GRAVEL (SW) - light brown	
3							SANDY CLAY with GRAVEL (SC) - strong brown, moist, soft, clasts 0.2 to 1.0cm	
4	K13-4'			88	0.1			
5							CLAY with SAND (CL) - brown, moist, soft	
6								
7								
8	K13-8'			88	0.0		Coarse SAND with GRAVEL (SP) - dark gray, wet, loose, clasts 0.2 to 0.5cm	
9								
10							ORGANIC CLAY (OL) - mottled black, moist, soft, with organic material	
11							CLAY (CL) - gray, moist, soft	
12	K13-12'			63	0.0			
13								
14							CLAY (CL) - light olive-brown, moist, medium soft	
15								
16	K13-16'			100	0.0			
17								
18							SANDY CLAY (CL) - brown, moist, medium stiff	

	LOG OF BORING NO. K13	PLATE
	700 INDEPENDENT ROAD OAKLAND, CALIFORNIA	
PROJECT NO. 54504-3		

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9/11/2006 7:38:34 AM

Date Completed: 8/10/06

Sampler: _____

Logged By: J. Williams

Total Depth: 24.0 ft

Hammer Wt: None

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
20				100			SANDY CLAY (CL) - continued	▽
							Coarse SAND (SW) - brown, wet, loose, well-graded	
							CLAYEY fine SAND (SC) - brown, wet, loose, well-graded	
25				100			Boring terminated at approximately 24 feet.	
30								
35								

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PROJECT NO. 54504-3

LOG OF BORING NO. K13

700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

(cont'd)

9/11/2006 7:38:34 AM

Date Completed: 3/4/07 Drilling method: Direct Push
 Logged By: A. Dominguez Hammer Wt: None
 Total Depth: 45.0 ft Notes: _____

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							NO RECOVERY		
2							SILTY SAND (SM) - yellow-brown, angular gravels up to 1" diameter		
3									
4									
5						1	SANDY SILT (ML) - olive-brown, with small gravel		
6		X					- dark gray, hydrocarbon odor		
7							CLAY (CH) - olive-brown, plastic		
8							NO RECOVERY		
9									
10		X				3	SILTY CLAY (CL) - dark gray - black, hydrocarbon odor		
11						0	SILTY CLAY (CL) - black, moist - gravelly silts	▼	
12									
13						0	CLAY (CH) - olive, low moisture, medium plasticity		
14						0			
15						0			
16						0			
17						0			
18						0			
19						0			
20						0			
21						0			
22						0	POORLY GRADED SAND (SP) - yellow-brown, moist to wet	▼	
23									
24						0			
25							SILTY CLAY (CL) - olive		
26									
27						0	- gray-brown, plastic		
28		X							

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KLEINFELDER	LOG OF BORING NO. K-14	PLATE
	EOP - INDEPENDENT ROAD 700 INDEPENDENT ROAD OAKLAND, CALIFORNIA	B-1
PROJECT NO. 54504-4		

5/11/2007 10:53:17 AM

Date Completed: 3/4/07 Sampler: Direct Push
 Logged By: A. Dominguez Hammer Wt: None
 Total Depth: 45.0 ft Notes: _____

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
29					0		CLAY (CH) - gray-brown, plastic		
30									
31									
32					0			- occasional coarse sand	
33									
34									
35					0		SILTY CLAY (CL) - olive gray, slight plasticity		
36									
37									
38					0				
39									
40							SILTY SAND (SM) - brown, some small gravels		
41							CLAY (CL) - olive, stiff		
42					0				
43									
44									
45							Boring terminated at approximately 45 feet.		
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									

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KLEINFELDER	LOG OF BORING NO. K-14	PLATE
	EOP - INDEPENDENT ROAD 700 INDEPENDENT ROAD OAKLAND, CALIFORNIA	B-1 (cont'd)
PROJECT NO. 54504-4		

5/11/2007 10:53:17 AM

Date Completed: 3/4/07
 Logged By: A. Dominguez
 Total Depth: 24.0 ft

Drilling method: Direct Push
 Hammer Wt: None
 Notes: _____

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							NO RECOVERY		
2									
3							GRAVELLY SAND (SP) - yellow-brown, with angular 1 inch gravel		
4							GRAVELLY SAND (SP) - olive-brown		
5									
6									
7							CLAYEY SAND (SC) - black, hydrocarbon odor		
8		X			8				
9									
10		X			40				
11							CLAY (CH) - gray, plastic		
12									
13									
14									
15		X					- stiff		
16							NO RECOVERY		
17									
18							SILTY SAND (SM) - olive		
19					8				
20							POORLY GRADED SAND (SP) - olive, strong hydrocarbon odor		
21									
22		X			460				
23					180		SILTY SAND (SM) - gray		
24					5				
25							Boring terminated at approximately 24 feet.		
26									
27									
28									

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KLEINFELDER	LOG OF BORING NO. K-15	PLATE
	EOP - INDEPENDENT ROAD 700 INDEPENDENT ROAD OAKLAND, CALIFORNIA	B-2
PROJECT NO. 54504-4		

5/11/2007 10:53:17 AM

Date Completed: 3/4/07
 Logged By: A. Dominguez
 Total Depth: 24.0 ft

Drilling method: Direct Push
 Hammer Wt: None
 Notes: _____

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							NO RECOVERY		
2					0.1		POORLY GRADED (GM) - yellow-brown, silt-sand-gravel mix		
3							NO RECOVERY		
4							NO RECOVERY		
5							NO RECOVERY		
6					0		POORLY GRADED GRAVELLY SAND (SP) - dark brown		
7							NO RECOVERY		
8							NO RECOVERY		
9							NO RECOVERY		
10							NO RECOVERY		
11							POORLY GRADED SAND (SP)		
12							NO RECOVERY		
13							NO RECOVERY		
14							NO RECOVERY		
15					0		CLAYEY SAND (SC) - gray, low plasticity		
16							NO RECOVERY		
17							NO RECOVERY		
18					0		CLAY (CL) - gray-brown, with occasional fine gravel		
19							NO RECOVERY		
20							NO RECOVERY		
21							NO RECOVERY		
22							NO RECOVERY		
23					0		SANDY CLAY (CL) - gray-brown		
24							Boring terminated at approximately 24 feet.		
25									
26									
27									
28									

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KLEINFELDER	LOG OF BORING NO. K-16	PLATE
	EOP - INDEPENDENT ROAD 700 INDEPENDENT ROAD OAKLAND, CALIFORNIA	B-3
PROJECT NO. 54504-4		

5/11/2007 10:53:17 AM

Date Completed: 3/4/07 Drilling method: Direct Push
 Logged By: A. Dominguez Hammer Wt: None
 Total Depth: 32.0 ft Notes: _____

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							NO RECOVERY		
2							POORLY GRADED SAND with GRAVEL (SP) - yellow-brown		
3									
4							POORLY GRADED SILTY SAND (SM)- gray		
5							NO RECOVERY		
6					5		POORLY GRADED GRAVELLY SAND (SP)		
7						11	SAND (SM)- sand-gravel mix		
8							GRAVELLY CLAY (CL) - dark gray		
9							NO RECOVERY		
10							SILTY SAND with GRAVEL (SM)- black, moist, strong hydrocarbon odor		
11							CLAY (CH) - gray, plastic		
12							CLAY (CH) - gray, plastic		
13									
14									
15							- stiff		
16							CLAY (CH) - gray, stiff, strong hydrocarbon odor		
17					400				
18									
19							- olive, clay stiff		
20					30				
21							GRAVEL SAND (GC) - olive, heavy hydrocarbon odor, gravel-sand-mix		
22					500				
23									
24							POORLY GRADED GRAVELLY SAND (SP)- gray, moist to wet, strong hydrocarbon odor		
25									
26					900				
27							CLAY (CH) - olive, stiff		
28					8				

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KLEINFELDER	LOG OF BORING NO. K-17	PLATE
	EOP - INDEPENDENT ROAD 700 INDEPENDENT ROAD OAKLAND, CALIFORNIA	B-4
PROJECT NO. 54504-4		

5/11/2007 10:53:18 AM

Date Completed: 3/4/07

Sampler: Direct Push

Logged By: A. Dominguez

Hammer Wt: None

Total Depth: 32.0 ft

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
29							CLAY (CH) - gray, stiff		
30		X		0.8					
31							Boring terminated at approximately 32 feet.		
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									

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KLEINFELDER

LOG OF BORING NO. K-17

PLATE

PROJECT NO. 54504-4

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

B-4

(cont'd)

5/11/2007 10:53:18 AM

Date Completed: 3/5/07
 Logged By: A. Dominguez
 Total Depth: 38.0 ft

Drilling method: Direct Push
 Hammer Wt: None
 Notes: _____

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							ASPHALT- approximately 6 inches thick		
2							GRAVELLY SAND (SP)- olive, poorly graded		
3							FAT CLAY (CH) - gray-brown, stiff		
4							- soft clay, slight hydrocarbon odor		
5							- black, moist		
6		X					SANDY CLAY (CL) - black, with coarse sand particles		
7							- gray		
8		X					- gray, moist, strong hydrocarbon odor		
9					500		FAT CLAY (CH) - gray		
10							- gray brown		
11							- stiff	▼	
12							SANDY CLAY (CL)		
13									
14									
15									
16									
17									
18							CLAYEY SAND (SC) - olive, clayey sand-gravel mix		
19							SANDY CLAY (CL) - slightly plastic		
20									
21									
22									
23							- olive, moderate plasticity		
24									
25		X							
26									
27							POORLY GRADED GRAVELLY SAND (SP)- wet		
28									

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KLEINFELDER

PROJECT NO. **54504-4**

LOG OF BORING NO. K-18

EOP - INDEPENDENT ROAD
 700 INDEPENDENT ROAD
 OAKLAND, CALIFORNIA

PLATE

B-5

5/11/2007 10:53:18 AM

Date Completed: 3/5/07

Sampler: Direct Push

Logged By: A. Dominguez

Hammer Wt: None

Total Depth: 38.0 ft

Notes: _____

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
29							POORLY GRADED GRAVELLY SAND (SP) continued		
30							SILT (ML) - non plastic, stiff		
31							- stiff		
32									
33							SILTS SAND (SM) - fine sand with gravels		
34							- poorly graded, fine sands		
35									
36									
37							CLAY (CL) - stiff, slight plasticity		
38							Boring terminated at approximately 38 feet.		
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									

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KLEINFELDER	LOG OF BORING NO. K-18	PLATE
	EOP - INDEPENDENT ROAD 700 INDEPENDENT ROAD OAKLAND, CALIFORNIA	B-5 (cont'd)
PROJECT NO. 54504-4		

5/11/2007 10:53:18 AM

Date Completed: 3/5/07

Drilling method: Direct Push

Logged By: A. Dominguez

Hammer Wt: None

Total Depth: 38.0 ft

Notes: _____

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							ASPHALT - approximately 6 inches thick		
2							POORLY GRADED CLAYEY SAND GRAVEL (SC) - yellow-brown		
3									
4							- gray		
5							NO RECOVERY		
6							GRAVELLY SAND CLAY (SC) wet, strong hydrocarbon odor		
7									
8					500		- black, moist, fine grained sand, hydrocarbon odor		
9							SILTY CLAY (CL) - gray, dry, hydrocarbon odor		
10					2500				
11									
12					420				
13					87				
14									
15					540				
16							NO RECOVERY		
17					50		SILTY SAND (SC) - yellow-brown, fine grained sand, hydrocarbon odor		
18							- gray-brown		
19					750		SAND (SP) - green, hydrocarbon odor		
20					1700		CLAYEY SAND (SC) - fine grained sand		
21					150		GRAVELLY SAND (SP) - green, heavy hydrocarbon odor		
22					1500				
23					500		SILTY SAND (ML) - yellow-brown, fine grained sand, hydrocarbon odor		
24							LEAN CLAY (CL) - gray, medium plasticity, hydrocarbon odor		
25					400				
26					20				
27					170				
28					350				

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KLEINFELDER

PROJECT NO. **54504-4**

LOG OF BORING NO. K-19

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

B-6

5/11/2007 10:53:18 AM

Date Completed: 3/5/07

Sampler: Direct Push

Logged By: A. Dominguez

Hammer Wt: None

Total Depth: 38.0 ft

Notes: _____

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
29							LEAN CLAY (CL) - continued - coarse sand particle		
30							- stiff		
31							SILTY CLAY (CL)		
32		⊗			16		CLAY (CL) - olive-gray, slight plasticity, expansive		
33									
34					0		SILTY SAND (ML) - gray-brown, moist, fine grained sand		
35					0				
36									
37		⊗			0		- dry		
38							Boring terminated at approximately 38 feet.		
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									

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KLEINFELDER

PROJECT NO. **54504-4**

LOG OF BORING NO. K-19

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

B-6

(cont'd)

5/11/2007 10:53:19 AM

Date Completed: 3/16/07

Drilling method: Direct Push

Logged By: A. Dominguez

Hammer Wt: None

Total Depth: 38.0 ft

Notes: _____

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							ASPHALT - approximately 6 inches thick		
2					0		POORLY GRADED GRAVELLY SAND (SP)		
3							CLAYEY SAND (SC) - coarse sand mix		
4					0		- with gravel		
5							ORGANIC CLAY (OL) - black, strong hydrocarbon odor		
6					1.5				
7							SILTY CLAY (CL) - olive-brown, slight plasticity		
8									
9									
10									
11					0				
12									
13									
14					0		- very stiff		
15							- sandy clay		
16							- very stiff		
17					0				
18							POORLY GRADED GRAVEL SANDS (SP) - olive, moist		
19					0				
20							SILTY CLAY (CL) - gray-brown, stiff		
21							POORLY GRADED GRAVEL SANDS (SP) - wet		
22					0				
23									
24							SILTY SAND (ML) - yellow-brown, dry, fine grained sand		
25									
26									
27									
28									

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<h1 style="margin: 0;">KLEINFELDER</h1>	LOG OF BORING NO. K-20	PLATE
	EOP - INDEPENDENT ROAD 700 INDEPENDENT ROAD OAKLAND, CALIFORNIA	<h2 style="margin: 0;">B-7</h2>
PROJECT NO. 54504-4		

5/11/2007 10:53:19 AM

Date Completed: 3/6/07

Sampler: Direct Push

Logged By: A. Dominguez

Hammer Wt: None

Total Depth: 38.0 ft

Notes: _____

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
29							SILTY SAND (ML) - continued - wet	▽	
30					0	- dry			
31							LEAN CLAY (CL) - olive-brown, medium plasticity, stiff		
32					0				
33							- fine sand		
34					0				
35							- very stiff		
36					0				
37							Boring terminated at approximately 38 feet.		
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									

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KLEINFELDER

PROJECT NO. **54504-4**

LOG OF BORING NO. K-20

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

B-7

(cont'd)

5/11/2007 10:53:19 AM

Date Completed: 1/22/08

Drilling method: Direct Push - Dual Tube

Logged By: J. Williams

AMS Powerprobe 9630 PRO-D

RSI Drilling

Total Depth: 40.0 ft

Hammer Wt: None

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							ASPHALT- 4 inches thick		
2							FINE SAND with CLAY and GRAVEL (SP) - dark yellowish-brown (10YR 4/6), moist, loose, poorly graded		
3							CLAY (CL) - very dark gray (2.5Y 3/1), moist, soft		
4	K-21-4			75	0.4		- blue mottles		
5									
6							ORGANIC CLAY (OL) - very dark gray, wet, very soft, contains organic material		
7									
8	K-21-8			50	0.3		CLAY (CL) - olive-gray (5Y 4/2), moist, soft		
9									
10									
11									
12	K-21-12			100	0.2		SANDY CLAY (CL) - light olive-brown (2.5Y 5/4), moist, soft		
13							CLAY (CH) - light olive-brown (2.5Y 5/4), moist, medium stiff		
14									
15									
16	K-21-16			100	0.4				
17									
18							MEDIUM SAND with CLAY (SW) - olive-brown (2.5Y 4/4), wet, loose, well graded	▽ K-21-GW-18	
19									
20	K-21-20			75	0.6		COARSE SAND (SW) - olive-brown (2.5Y 4/4), saturated, loose, well graded		
21									
22									
23									
24	K-21-24			63					
25									

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KLEINFELDER

PROJECT NO. 54504-5A

LOG OF BORING NO. K-21

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

2/21/2008 8:31:15 AM

Date Completed: 1/22/08

Drilling method: Direct Push - Dual Tube

Logged By: J. Williams

AMS Powerprobe 9630 PRO-D

RSI Drilling

Total Depth: 40.0 ft

Hammer Wt: None

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
26									
27									
28	K-21-28			100	0.9		- sample liner cracked		
29									
30									
31	K-21-31			100	1.0		CLAY (CL) - brown (10YR 5/3), moist, stiff		
32									
33							CLAY (CL) - brown (10YR 5/3), saturated, very soft		
34	K-21-34			100	0.9		SAND with CLAY (SP) - dark yellowish-brown (10YR 4/6), loose, moist, poorly graded		
35									
36	K-21-36			100	0.9		CLAY (CL) - olive-brown (2.5Y 4/4), wet, stiff		
37									
38									
39							FINE SAND (SP) - olive-brown (2.5Y 4/4), wet, loose, poorly graded		
40	K-21-40			100	1.0		Boring terminated at 40 feet below ground surface. Backfilled with neat cement.	K-21-GW-40	
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									

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KLEINFELDER

PROJECT NO. 54504-5A

LOG OF BORING NO. K-21

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

(cont'd)

2/21/2008 8:31:15 AM

Date Completed: 1/22/08

Drilling method: Direct Push - Dual Tube

Logged By: J. Williams

AMS Powerprobe 9630 PRO-D

Total Depth: 40.0 ft

Hammer Wt: None

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							ASPHALT - 4 inches thick		Traffic - rated well box
2							SAND (SP) - light olive-brown (2.5Y 5/6), dry, loose, poorly graded		
3							CLAY with GRAVEL (CL) - dark olive-gray (5Y 3/2), moist, soft		
4	K-22-4			75	0.6		FINE SAND (SP) - very dark grayish-green (5G 2.5/2), moist, loose, poorly graded		
5							CLAY (CL) - very dark greenish-gray (5G 3/1), moist, soft		Blank 2" SCH40 PVC
6							- concrete fragment		
7							ORGANIC CLAY (OL) - black, wet, very soft		Neat Cement Grout
8	K-22-8			75	0.9		FAT CLAY (CH) - dark olive gray (5Y 3/2), moist, soft		
9									
10									
11									
12	K-22-12			100	0.7		CLAY (CL) - olive-brown (2.5Y 4/4), moist, medium stiff		
13									
14									Bentonite Chips
15	K-22-15			83	0.7		CLAY with SAND (CL) - brown (10YR 5/3), moist, medium stiff		#3 Sand
16									
17									
18	K-22-18			100	0.7				
19							MEDIUM SAND (SW) - dark yellowish-brown (10YR 4/4), saturated, loose, well graded		
20									Screened 2" 0.020 Slot SCH40 PVC
21	K-22-21			83	0.8		COARSE SAND (SW) - brown (10YR 4/3), saturated, loose, well graded		
22									
23									
24	K-22-24			67	0.8				
25									

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KLEINFELDER

PROJECT NO. 54504-5A

LOG OF BORING NO. K-22

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

2/21/2008 8:31:16 AM

Date Completed: 1/22/08

Drilling method: Direct Push - Dual Tube

Logged By: J. Williams

AMS Powerprobe 9630 PRO-D

RSI Drilling

Total Depth: 40.0 ft

Hammer Wt: None

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
26	K-22-26			100	0.8		FINE SAND with FINES (SP) - light olive-brown (2.5Y 5/6), saturated, loose, poorly graded		
27									
28							SAND with CLAY (SC) - light olive-brown (2.5Y 5/4), saturated, loose, poorly graded		
29	K-22-29			87	0.9				
30							- coarse sand lens		
31									
32	K-22-32			100	0.9				
33							CLAY (CH) - light olive-brown (2.5Y 5/4), wet, stiff (expansive)		
34									
35	K-22-35			100	0.8				
36							FAT CLAY (CH) - olive-brown (2.5Y 4/3), moist, hard (expansive)		
37	K-22-37			100	0.9				
38									
39									
40	K-22-40			100	0.9				
41							Boring terminated at 40 feet below ground surface.		
42							Backfilled with neat cement.		
43							Set well MW-4 using 8" hollow stem auger on 1/24/08.		
44									
45									
46									
47									
48									
49									
50									

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KLEINFELDER

PROJECT NO. 54504-5A

LOG OF BORING NO. K-22

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

(cont'd)

2/21/2008 8:31:16 AM

Date Completed: 1/23/08

Drilling method: Direct Push - Dual Tube

Logged By: J. Williams

AMS Powerprobe 9630 PRO-D

RSI Drilling

Total Depth: 40.0 ft

Hammer Wt: None

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							ASPHALT- 4 inches thick		
2							SANDY GRAVEL (GW) - light olive-brown (2.5Y 5/3), dry, loose, well graded		
3							SILTY CLAY (CL) - very dark gray (2.5Y 3/1), moist, soft		
4	K-23-4			50	0.0		ORGANIC CLAY (OL) - dark olive brown (2.5Y 3/3), wet, soft, organic material		
5									
6									
7									
8	K-23-8			50	0.0		SANDY CLAY (CL) - very dark gray (2.5Y 3/1), moist, soft		
9									
10									
11									
12	K-23-12			100	0.0		SANDY CLAY (CL) - olive-brown (2.5Y 4/4), moist, medium stiff		
13									
14									
15									
16	K-23-16			100	0.0		CLAY with SAND (CH) - yellowish-brown (10YR 5/4), moist, stiff		
17							- increasing sand content		
18									
19							COARSE SAND with fines (SW) - dark yellowish-brown (10YR 4/4), wet, loose, well graded		
20	K-23-20			100	0.0		SANDY CLAY (CL) - light olive-brown (2.5Y 5/4), moist, soft, with oxidation		
21									
22							CLAYEY SAND (SC) - light olive-brown (2.5Y 5/4), wet, loose, poorly graded		
23	K-23-23			100	0.0		FINE SAND with CLAY (SP) - light olive-brown (2.5Y 5/4), wet, loose, poorly graded		
24									
25				100	0.0		- increasing gravel content		

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<h1 style="margin: 0;">KLEINFELDER</h1> <p style="margin: 0;">PROJECT NO. 54504-5A</p>	<h2 style="margin: 0;">LOG OF BORING NO. K-23</h2> <p style="margin: 0;">EOP - INDEPENDENT ROAD 700 INDEPENDENT ROAD OAKLAND, CALIFORNIA</p>	<p style="margin: 0;">PLATE</p>
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2/21/2008 8:31:16 AM

Date Completed: 1/23/08

Drilling method: Direct Push - Dual Tube

Logged By: J. Williams

AMS Powerprobe 9630 PRO-D

RSI Drilling

Total Depth: 40.0 ft

Hammer Wt: None

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
26							SANDY CLAY (CL) - olive-brown (2.5Y 4/4), moist, medium stiff - increasing sand content		
27	K-23-27			100	0.0		MEDIUM SAND with FINES (SW) - olive-brown (2.5Y 4/4), saturated, loose, well graded		
28									
29									
30	K-23-30			100			SANDY CLAY (CL) - olive-brown (2.5Y 4/4), moist, stiff - increasing sand content	K-23-GW-30	
31									
32									
33	K-23-33			100	0.0				
34									
35									
36									
37				100	0.0				
38									
39									
40	K-23-40			100	0.0				
41							Boring terminated at 40 feet below ground surface. Backfilled with neat cement.		
42									
43									
44									
45									
46									
47									
48									
49									
50									

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KLEINFELDER

PROJECT NO. 54504-5A

LOG OF BORING NO. K-23

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

(cont'd)

2/21/2008 8:31:16 AM

Date Completed: 1/23/08

Drilling method: Direct Push - Dual Tube

Logged By: J. Williams

AMS Powerprobe 9630 PRO-D

RSI Drilling

Total Depth: 40.0 ft

Hammer Wt: None

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							ASPHALT- 4 inches thick		
2							GRAVELLY SAND (SW) - dark yellowish-brown (10YR 4/4), moist, loose, well graded		
3							CLAY (CL) - grayish green (5G 4/2), moist, stiff		
4	K-24-4			50	0.0				
5							CLAY with SAND (CL) - very dark greenish-gray (5G 3/1), moist, soft		
6									
7							ORGANIC CLAY (OL) - black, moist, soft, organic material		
8	K-24-8			100	0.0				
9							CLAY (CL) - olive-gray (5Y 4/2), moist, soft		
10									
11									
12	K-24-12			100	0.0		SANDY CLAY (CL) - dark greenish-gray (10GY 4/1), moist, medium stiff		
13							CLAY (CL) - olive-brown (2.5Y 4/4), moist, stiff		
14				100	0.0				
15							SANDY CLAY (CL) - olive-brown (2.5Y 4/4), moist, soft		
16	K-24-16			100	0.0				
17									
18									
19									
20	K-24-20			63	0.0		MEDIUM SAND with GRAVEL (SW) - yellowish-brown (10YR 5/6), wet, loose, well graded		
21							SANDY CLAY (CL) - yellowish-brown (10YR 5/6), moist, medium soft		
22									
23	K-24-23			100	0.0		SAND with CLAY (SC) - yellowish-brown (10YR 5/6), moist, loose, poorly graded		
24							MEDIUM SAND (SP) - yellowish-brown (10YR 5/4), saturated, loose, poorly graded	▽	
25									

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KLEINFELDER

PROJECT NO. 54504-5A

LOG OF BORING NO. K-24

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

2/21/2008 8:31:17 AM

Date Completed: 1/23/08

Drilling method: Direct Push - Dual Tube

Logged By: J. Williams

AMS Powerprobe 9630 PRO-D

RSI Drilling

Total Depth: 40.0 ft

Hammer Wt: None

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
26									
27	K-24-27			87	0.1			K-24-GW-27	
28									
29							COARSE SAND (SW) - yellowish-brown (10YR 5/8), saturated, loose, well graded		
30	K-24-30			100	0.0				
31							GRAVEL (GW) - yellowish-brown (10YR 5/4), saturated, loose, well graded		
32									
33							SANDY CLAY with GRAVEL (CL) - light olive-brown (2.5Y 5/4), wet, soft		
34	K-24-34			87	0.0				
35							FINE SAND (SP) - light olive-brown (2.5Y 5/4), saturated, loose, poorly graded	K-24-GW-35	
36									
37				67	0.0		CLAY (CH) - light olive-brown (2.5Y 5/4), moist, stiff		
38									
39									
40	K-24-40			100	0.0				
41							Boring terminated at 40 feet below ground surface.		
42							Backfilled with neat cement.		
43									
44									
45									
46									
47									
48									
49									
50									

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KLEINFELDER

PROJECT NO. 54504-5A

LOG OF BORING NO. K-24

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

(cont'd)

2/21/2008 8:31:17 AM

Date Completed: 1/23/08

Drilling method: Direct Push - Dual Tube

Logged By: J. Williams

AMS Powerprobe 9630 PRO-D

Total Depth: 40.0 ft

Hammer Wt: None

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							ASPHALT - 4 inches thick		Traffic rated well box
2							GRAVELLY CLAY (CL) - olive-brown (2.5Y 4/3), moist, stiff		
3							GRAVELLY SAND with FINES (SW) - very dark gray (2.5Y 3/1), moist, loose, well graded		
4	K-25-4			75	0.0		CLAY (CL) - very dark greenish-gray (10Y 3/1), moist, medium soft		
5							CLAY (CL) - very dark gray (2.5Y 3/1), wet, soft		Blank 2" SCH40 PVC
6							- slight hydrocarbon odor		
7							ORGANIC CLAY (OL) - black, moist, soft		Neat Cement Grout
8	K-25-8			75	0.0		CLAY (CL) - dark greenish-gray (10GY 4/1), moist, soft		
9									
10									
11									
12	K-25-12			100	0.0				
13									
14									
15							CLAY (CL) - brown (10YR 4/3), moist, medium stiff		
16	K-25-16			100	0.0				Bentonite Chips
17							COARSE SAND (SW) - brown (10YR 4/3), wet, loose, well graded		# 3 Sand
18									
19									
20	K-25-20			100	0.0				
21							CLAY with SAND (CL) - brown (10YR 4/3), moist, medium stiff		
22									
23	K-25-23			100	0.0		FINE SAND with FINES (SP) - brown (10YR 4/3), moist, loose, poorly graded		Screened 2" 0.020 Slot SCH40 PVC
24				100					
25									

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KLEINFELDER

PROJECT NO. 54504-5A

LOG OF BORING NO. K-25

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

2/21/2008 8:31:17 AM

Date Completed: 1/23/08

Drilling method: Direct Push - Dual Tube

Logged By: J. Williams

AMS Powerprobe 9630 PRO-D

RSI Drilling

Total Depth: 40.0 ft

Hammer Wt: None

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
26									
27								▽	
28	K-25-28			87	0.0		MEDIUM SAND with FINES (SW)- light olive-brown (2.5Y 5/6), saturated, loose, well graded	K-25-GW-28	
29									
30									
31	K-25-31			100	0.0				
32									
33									
34	K-25-34			100	0.0		SANDY CLAY (CL) - light olive-brown (2.5Y 5/3), saturated, soft		
35							CLAY (CL) - light olive-brown (2.5Y 5/3), wet, stiff		
36							- increasing sand content		
37	K-25-37			100	0.0		MEDIUM SAND (SW) - light olive-brown (2.5Y 5/3), saturated, loose, well graded	K-25-GW-36	
38							- increasing clay content		
39							CLAY (CH) - olive-brown (2.5Y 4/4), moist, stiff		
40	K-25-40			100	0.0				
41							Boring terminated at 40 feet below ground surface.		
42							Backfilled with neat cement.		
43							Set well MW-5 using 8" hollow stem auger on 1/24/08.		
44									
45									
46									
47									
48									
49									
50									

<h1 style="margin: 0;">KLEINFELDER</h1>	LOG OF BORING NO. K-25	PLATE
	EOP - INDEPENDENT ROAD 700 INDEPENDENT ROAD OAKLAND, CALIFORNIA	(cont'd)
PROJECT NO. 54504-5A		

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2/21/2008 8:31:17 AM

Environmental Soil Sampling/Boring Log

Hole No.
B-1

Date: 8/17/04
Logged By: Leung

Rig Type: MARC TECH 2.5 DP
Drilling Co.: Gregg Drilling

Borehole Dia.: 2"
Borehole Depth: 16'

Sheet 1 of 1

Elev.	Depth (feet)	Geologic Description (soil type, color, grain, moisture, density, odor, etc.)	USCS Symbol	OVAPID (ppm)	Analytical Sample Number	Comments
		D-3" Asphalt				
		Silty sand w/ gravel; light brown; medium dense; dry; no odor	SM	0.0		
	5	Silty clay; olive gray; medium stiff; moist; no odor	ML CL	0.0	B1-1-5	Static water level at 4.45'
		Silty clay; olive gray; medium stiff; wet; no odor concrete debris w/ sand; wet; no odor		0.0		
		Silty clay; olive gray; medium stiff; moist; no odor		0.0		
	10					
		Silty clay w/ sand; gray; medium stiff; wet; no odor		0.0		
	15	Silty clay; light brown; stiff; moist; no odor		0.0	B1-2-15	
	20					
	25					
	30					

Project name: 700 Independent Road, Oakland, CA
Project Number: 07000.2013

MECA Consulting, Inc.
620 Contra Costa Blvd., Ste. 102
Pleasant Hill, CA 94523

Environmental Soil Sampling/Boring Log

Hole No.
B-2

Date: 8/17/04
Logged By: Leung

Rig Type: MARC TECH 2.5 DP
Drilling Co.: Gregg Drilling

Borehole Dia.: 2"
Borehole Depth: 12'

Sheet 1 of 1

Elev.	Depth (feet)	Geologic Description (soil type, color, grain, moisture, density, odor, etc.)	USCS Symbol	OVA/PID (ppm)	Analytical Sample Number	Comments
	0-3'	Asphalt				
		Clayey silt; brown; soft; dry; no odor	ML CL	0.0		
		Sand w/ gravels; yellowish orange; medium dense; dry; no odor		0.0		
		Silty clay; dark gray; stiff; moist; no odor		0.0		
	5	Silty clay; greenish gray; medium stiff; moist; no odor		0.0	B2-1-5	Static water level at 5.30'
		Silty clay; olive gray; medium stiff; wet; no odor		0.0		1st water at 8'
	10	Silty clay; black; medium stiff; wet; no odor		0.0	B2-2-10	
		Silty clay; gray; medium stiff; wet; no odor		0.0		
	15					
	20					
	25					
	30					

Project name: 700 Independent Road, Oakland, CA
Project Number: 07000.2013

MECA Consulting, Inc.
820 Contra Costa Blvd., Ste. 102
Pleasant Hill, CA 94523

Environmental Soil Sampling/Boring Log

Hole No.
B-3

Date: 8/17/04
Logged By: Leung

Rig Type: MARC TECH 2.5 DP
Drilling Co.: Gregg Drilling

Borehole Dia.: 2"
Borehole Depth: 20'

Sheet 1 of 1

Elev.	Depth (feet)	Geologic Description (soil type, color, grain, moisture, density, odor, etc.)	USCS Symbol	OV/APID (ppm)	Analytical Sample Number	Comments
	0-3"	Asphalt				
		Silty sand w/ gravels; light brown; medium dense; dry; no odor	SM	0.0		
		Silty clay; brown; medium stiff; dry; no odor	ML	0.0		
		Silty clay; olive gray; medium stiff; dry; no odor	CL	0.0		
	5	Silty clay; gray; stiff; Dry; no odor		0.0	B3-1-5	
		Sand w/ gravels; light gray; soft; moist; no odor	SM	0.0		
		Silty clay; dark gray; stiff; moist; no odor	ML	0.0		
	10		CL		B3-2-10	
		Clay; olive gray; stiff; moist; no odor		0.0		
		Silty clay; dark gray; stiff; moist; no odor		0.0		
		Clay; greenish gray; stiff; moist; no odor	CH	0.0		
	15		OH			
		Clay; yellowish orange; stiff; moist; no odor		0.0		
	20					
	25					
	30					

Project name: 700 Independent Road, Oakland, CA
Project Number: 07000.2013

MECA Consulting, Inc.
620 Contra Costa Blvd., Ste. 102
Pleasant Hill, CA 94523

Environmental Soil Sampling/Boring Log

Hole No.
B-4

Date: 8/17/04

Rig Type: MARC TECH 2.6 DP

Borehole Dia.: 2"

Logged By: Leung

Drilling Co.: Gregg Drilling

Borehole Depth: 20'

Sheet 1 of 1

Elev.	Depth (feet)	Geologic Description (soil type, color, grain, moisture, density, odor, etc.)	USCS Symbol	OVA/PIB (ppm)	Analytical Sample Number	Comments
		0-3" Asphalt				
		Silty sand w/ gravels; light brown; medium dense; dry; no odor	SM	0.0		
		Silty clay; brown; medium stiff; dry; no odor	ML CL	0.0		
	5	Silty clay; olive gray; stiff; dry; no odor		0.0	B4-1-5	
		Silty clay; greenish gray; medium stiff; moist; no odor		0.0		
		Silty clay; greenish gray; medium stiff; wet; no odor		0.0		
	10	Silty clay; dark gray; medium stiff; moist; no odor		0.0	B4-2-10	Static water level at 8.54'
		Clay; black; stiff; moist; no odor	CH OH	0.0		
		Clay; dark gray; stiff; moist; no odor		0.0		
	15	Clay; greenish gray; stiff; moist; no odor		0.0		
		Clay; gray; medium stiff; wet; no odor		0.0		1st water at 16'
	20					
	25					
	30					

Project name: 700 Independent Road, Oakland, CA

Project Number: 07000.2013

MECA Consulting, Inc.
620 Contra Costa Blvd., Ste. 102
Pleasant Hill, CA 94523

Environmental Soil Sampling/Boring Log

Hole No.
B-5

Date: 8/17/04
Logged By: Leung

Rig Type: MARC TECH 2.5 DP
Drilling Co.: Gregg Drilling

Borehole Dia.: 2"
Borehole Depth: 20'

Sheet 1 of 1

Elev.	Depth (feet)	Geologic Description (soil type, color, grain, moisture, density, odor, etc.)	USCS Symbol	OVAPID (ppm)	Analytical Sample Number	Comments
	0-3"	Asphalt				
		Silty sand w/ gravels; light gray; soft; dry; no odor	SM	0.0		
		Silty sand w/ gravel; brown; soft; dry; no odor		0.0		
		Silty clay; olive gray; medium stiff; dry; no odor	ML	0.0	B5-1-5	
	5	Silty clay; light brown; medium stiff; moist; no odor	CL	0.0		
		Silty clay; brown; medium stiff; moist; no odor		0.0		
	10	Clay; dark gray; medium stiff; moist; no odor	CH	0.0	B5-2-10	Static water level at 11.2'
		Clay; olive green; stiff; moist; no odor	OH	0.0		
		Clay; black; stiff; moist; no odor		0.0		
	15	Clay; brown; stiff; moist; no odor		0.0		
		Silty Clay w/ gravels; yellowish orange; stiff; moist; no odor		0.0		
	20					
	25					
	30					

Project name: 700 Independent Road, Oakland, CA
Project Number: 07000.2013

MECA Consulting, Inc.
620 Contra Costa Blvd., Ste. 102
Pleasant Hill, CA 94523

Environmental Soil Sampling/Boring Log

Hole No.
B-6

Date: 8/17/04
Logged By: Leung

Rig Type: MARC TECH 2.5 DP
Drilling Co.: Gregg Drilling

Borehole Dia.: 2"
Borehole Depth: 12'

Sheet 1 of 1

Elev.	Depth (feet)	Geologic Description (soil type, color, grain, moisture, density, odor, etc.)	USCS Symbol	OV/APID (ppm)	Analytical Sample Number	Comments
	0-3"	Asphalt				
		Silty sand w/ gravels; light gray; soft; dry; no odor	SM	0.0		
		Clayey silt; brown; medium stiff; moist; no odor	ML CL	0.0		
	5	Silty clay; gray; medium stiff; moist; no odor		0.0	B6-1-6	Static water level at 5.6'
		Silty clay; gray; medium stiff; wet; no odor		0.0		1st water at 7'
		No Recovery				
	10					
	15					
	20					
	25					
	30					

Project name: 700 Independent Road, Oakland, CA
Project Number: 07000.2013

MECA Consulting, Inc.
620 Contra Costa Blvd., Ste. 102
Pleasant Hill, CA 94523

Environmental Soil Sampling/Boring Log

Hole No.
B-7

Date: 8/17/04
Logged By: Leung

Rig Type: MARC TECH 2.5 DP
Drilling Co.: Gregg Drilling

Borehole Dia.: 2"
Borehole Depth: 12'

Sheet 1 of 1

Elev.	Depth (feet)	Geologic Description (soil type, color, grain, moisture, density, odor, etc.)	USCS Symbol	OVA/PID (ppm)	Analytical Sample Number	Comments
		0-3" Asphalt				
		Silty sand w/ gravels; light gray; soft; dry; no odor	SM	0.0		
		Sandy silt; brown; medium stiff; dry; no odor		0.0		
		Silty clay; greenish gray; stiff; moist; no odor	ML CL	0.0		
	5	Silty clay; olive gray; stiff; moist; no odor		0.0	B7-1-5	
		Clay; greenish gray; stiff; moist; no odor	CH CR	0.0		
		Clay w/ humus; dark gray; medium stiff; wet; no odor		0.0		
		Silty sand w/ gravels; brown; medium dense; dry; no odor		0.0		1st water at 8.5' Static water level at 8.6'
	10	Clay; black; stiff; moist; no odor		0.0	B7-2-10	
		Clay; gray; stiff; moist; no odor		0.0		
		Clay; greenish gray; stiff; moist; no odor		0.0		
		Silty clay; brown; medium stiff; moist; no odor		0.0		
		Clay; greenish gray; stiff; moist; no odor		0.0		
		Clay; black; stiff; moist; no odor		0.0		
		Clay; greenish gray; stiff; moist; no odor		0.0		
	15	Silty clay; gray; medium stiff; moist; no odor		0.0		
	20					
	25					
	30					

Project name: 700 Independent Road, Oakland, CA
Project Number: 07000.2013

MECA Consulting, Inc.
620 Contra Costa Blvd., Ste. 102
Pleasant Hill, CA 94623

Environmental Soil Sampling/Boring Log

Hole No.
B-8

Date: 8/17/04
Logged By: Leung

Rig Type: MARC TECH 2.5 DP
Drilling Co.: Gregg Drilling

Borehole Dia.: 2"
Borehole Depth: 20'

Sheet 1 of 1

Elev.	Depth (feet)	Geologic Description (soil type, color, grain, moisture, density, odor, etc.)	USCS Symbol	OVA/PID (ppm)	Analytical Sample Number	Comments
	0-3"	Asphalt				
		Silty sand w/ gravels; light brown; soft; dry; no odor	SM	0.0		
		Silty clay; olive gray; stiff; moist; no odor	ML CL	0.0		
		Silty clay w/ gravels; olive gray; medium stiff; moist; no odor		0.0		
		Silty clay w/ gravels; gray; medium stiff; moist; no odor		0.0		
	5	Clay; dark gray; stiff; moist; petroleum odor	CH OH	10.0	B8-1-5	
		Clay; greenish gray; stiff; moist; petroleum odor		55.0		
		Clay; dark gray; stiff; moist; petroleum odor		45.0		
	10	Clay; light gray; stiff; moist; petroleum odor		30.0	B8-2-10	
		Clay; light brown; stiff; moist; petroleum odor		25.0		
	15	Clay; greenish gray; stiff; moist; petroleum odor		20.0	B8-3-15	
		Clay; dark gray; medium stiff; wet; petroleum odor		45.0		
		Clay; olive gray; medium stiff; moist; petroleum odor		20.0		
		Clay; greenish gray; medium stiff; moist; petroleum odor		15.0		
		Silty sand; brown; soft; wet; petroleum odor	ML	10.0		
	20	Silty clay; olive gray; stiff; moist; petroleum odor	CL	10.0		
	25					
	30					

Project name: 700 Independent Road, Oakland, CA

Project Number: 07000.2013

MECA Consulting, Inc.
620 Contra Costa Blvd., Ste. 102
Pleasant Hill, CA 94523

Date Completed: 12/1/08

Drilling method: Direct Push - Dual Tube

Logged By: J. Williams

Hammer Wt: None

Total Depth: 24.0 ft

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT CONCRETE - approximately 6-inches thick	
2							AGGREGATE BASEROCK - olive brown (2.5Y 4/3), loose, moist, well graded	
3							POORLY GRADED (CL) - very dark yellowish brown (10YR 4/6), moist, loose, fine sand	
4	PS-1-4			100			GRAVELLY CLAY (CL) - very dark grayish brown (2.5Y 3/2), moist, soft, low plasticity, petroleum hydrocarbon odor	
5							ORGANIC SILT with CLAY (OL) - black, wet, soft, trace organic material	
6								
7								
8	PS-1-8			75			SANDY CLAY with SILT (CL) - dark greenish gray (5G 4/1), wet, soft	
9							FAT CLAY (CH) - olive brown (2.5Y 4/4), moist, soft, high plasticity	
10								
11								
12				100				
13								
14								
15								
16	PS-1-16			100			WELL GRADED MEDIUM SAND (SW) - brown (10YR 4/3), moist, medium dense	
17							- wet	▽
18								
19								
20	PS-1-20			100			- increasing fines	
21								
22								
23								
24				50				
25							Boring terminated at approximately 24 feet below ground surface.	

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PROJECT NO. 54504-5A

LOG OF BORING NO. PS-1

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

2

Date Completed: 1/12/09

Drilling method: Direct Push - Dual Tube

Logged By: J. Gravesen

Hammer Wt: None

Total Depth: 24.0 ft

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT CONCRETE - approximately 3-inches thick	
2							AGGREGATE BASEROCK - approximately 3-inches thick	
3							WELL GRADED SAND with GRAVEL (SW) - olive brown, dry, dense	
4				100			CLAY with COARSE SAND (CL) - very dark gray, moist, stiff, well graded	
5							CLAY with GRAVEL (CL) - very dark gray, moist, medium stiff	
6							CLAY (CH) - dark grayish brown & dark olive brown, moist, stiff, petroleum hydrocarbon odor, calcification with coarse sand & gravel	
7							CLAY (CH) - dark grayish brown, wet, soft, with coarse sand & gravel, petroleum hydrocarbon odor	
8				75			CLAY (CH) - dark olive brown, moist, stiff, with coarse sand and gravel, strong petroleum hydrocarbon odor	
9							CLAY with COARSE SAND (CL) - olive, moist, medium stiff	
10	PS-1A-10						CLAY (CH) - brown, moist, stiff	
11								
12				100				
13							CLAY with GRAVEL (CL) - yellowish brown, moist, stiff, with dark brown nodules	
14								
15							WELL GRADED with CALCITE SAND with GRAVEL (SC) - yellowish brown, moist, stiff	
16				100				
17							- wet	
18								
19							WELL GRADED SAND with CLAY and GRAVEL (SW-SC) - yellowish brown, wet, loose	
20	PS-1A-20			100			WELL GRADED CLAYEY SAND with GRAVEL (SC) - moist, dense	
21							WELL GRADED SAND with CLAY (SC) - dark reddish brown (5YR 3/3)	
22							WELL GRADED CLAYEY SAND with GRAVEL (SC) - reddish brown (5YR 4/3), moist, stiff	
23								
24				100			CLAY (CL) - brown (7.5YR 5/3), moist, stiff	
25							Boring terminated at approximately 24 feet below ground surface.	

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PROJECT NO. 54504-5A

LOG OF BORING NO. PS-1A

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

3

Date Completed: **12/1/08**

Drilling method: **Direct Push - Dual Tube**

Logged By: **J. Williams**

Hammer Wt: **None**

Total Depth: **24.0 ft**

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT CONCRETE - approximately 3-inches thick	
2							AGGREGATE BASEROCK - olive brown (2.5Y 4/3), slightly moist, well graded	
3							POORLY GRADED FINE SAND (SP)- dark yellowish brown (10YR 4/6) dry, loose	
4				87			CLAY with SILT (CL) - very dark grayish brown (2.5Y 3/2), moist, soft, low plasticity	
5							ORGANIC MATERIAL (OL)- black	
6							FAT CLAY (CH) - very dark gray (2.5Y 3/1), moist, medium stiff	
7							ORGANIC CLAY with SILT and SAND (OL)- black, wet, soft	
8	PS-2-8			75			CLAY (CH) - very dark greenish gray (10Y 3/1), moist, soft	
9							- heavy petroleum hydrocarbon odor	
10				100			CLAY (CH) - olive brown, moist, medium soft	
11							CLAY with SILT (CH) - olive gray (5Y 4/2), moist, medium stiff, petroleum hydrocarbon odor	
12							CLAY (CH) - olive brown (2.5Y 4/4), moist, stiff	
13							CLAY (CH) - greenish black (10GY 2.5/1), moist, soft	
14								
15								
16	PS-2-16			100				
17								
18							POORLY GRADED FINE SAND (SP)- olive brown (2.5Y 4/3), wet, loose	
19	PS-2-19							
20							CLAY (CH) - light olive brown (2.5Y 5/3), moist, stiff, high plasticity	
21								
22								
23								
24							Boring terminated at approximately 24 feet below ground surface.	
25								

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PROJECT NO. 54504-5A

LOG OF BORING NO. PS-2

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

4

Date Completed: 1/12/09

Drilling method: Direct Push - Dual Tube

Logged By: J. Gravesen

Hammer Wt: None

Total Depth: 24.0 ft

Notes:

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID	USCS	Description	Remarks
1							ASPHALT CONCRETE - approximately 3-inches thick	
2							AGGREGATE BASEROCK - approximately 3-inches thick	
3							WELL GRADED SAND with GRAVEL (SW) - olive brown, dry, dense	
4				100			SANDY CLAY with GRAVEL (CL) - brown (7.5YR 4/3), moist, stiff, gravel up to 1/2 inch, well graded	
5							CLAY with COARSE SAND (CL) - very dark gray (7.5Y 3/1), moist, medium stiff	
6							- organic material soft, petroleum hydrocarbon odor	
7							CLAY with FIBROUS ORGANIC MATERIAL (OH) black, wet, soft, 5% organic material, petroleum hydrocarbon odor	
8				75			CLAY (CH) - olive gray, with organic material ~10%, petroleum hydrocarbon odor	
9								
10	PS-2A-10							
11							CLAY (CH) - brown (10YR 4/3), moist, stiff, no petroleum hydrocarbon odor	
12				100				
13								
14								
15							- with calcification	
16				100				▽
17							POORLY GRADED FINE SAND with CLAY (SP) dark yellowish brown, loose, petroleum hydrocarbon odor	
18								
19							- dark yellowish brown & olive green, strong petroleum hydrocarbon odor	
20	PS-2A-20			100			CLAY (CH) - dark yellowish brown, moist, soft, petroleum hydrocarbon odor	
21								
22								
23								
24				100				
25							Boring terminated at approx. approximately 24 feet below ground surface.	

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LOG OF BORING NO. PS-2A

PLATE

PROJECT NO. 54504-5A

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

5

Table 1
Monitoring Well Construction Details
 EOP - 700 Independent Road
 Oakland, California

Construction Details by Depth Intervals (Feet Below Ground Surface)								Survey I		
Well Identification	Installation Date	Boring Depth	Solid Casing	Screen Interval	Sand Pack	Bentonite Seal	Grout Seal	Top of Casing Elevation (Feet)	Vault Elevation (Feet)	Lot
MW-1	3/5/2007	25.0	0.25-15	15-25	13-25	11-13	0.75-11	9.64	9.96	-12'
MW-2	3/5/2007	25.0	0.25-10	10-20	8-20	6-8 / 20-25	0.75-6	9.53	9.85	-12'
MW-3	3/5/2007	25.0	0.25-13	13-23	11-24	9-11	0.75-9	10.79	11.10	-12'
MW-4	1/23/2008	25.0	0.25-15	15-25	14-25	13-14	0.75-13	9.61	10.35	-12'
MW-5	1/23/2008	28.0	0.25-18	18-28	17-28	16-17	0.75-16	9.75	10.06	-12'

Notes:

Survey elevations North American Vertical Datum of 1988 (NAVD88), horizontal NAD 83.
 Survey of MW-1, MW-2 and MW-3 by PLS Surveys, Inc., April 4, 2007
 Survey of MW-4 and MW-5 by PLS Surveys, Inc., February 14, 2008

Date Completed: 3/5/07
 Logged By: A. Dominguez
 Total Depth: 25.0 ft

Drilling method: Direct Push
 Hammer Wt: None
 Notes: _____

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							ASPHALT- approximately 6 inches thick		
2							POORLY GRADED SAND (SP)- olive, small gravel		
3							CLAYEY SAND (SC)- dark gray, wet, some gravel, gravel-clay mix		
4							NO RECOVERY		
5									
6							CLAYEY SAND (SC)- black, wet, some gravel, sand-gravel mix		Blank 2" casing
7					7		- gray		Neat cement grout
8									
9							CLAY (CH)- gray, stiff, plastic, hydrocarbon odor		
10					35				
11					30				
12					8		- very stiff		Bentonite
13									
14					1				Sand 2/12
15							SANDY CLAY (CL)- red		
16					30		GRAVELLY SAND (SP)- gray		
17									
18							SAND-GRAVEL (SP)- wet, strong hydrocarbon odor		
19					1500				
20							SAND-GRAVEL-CLAY (SC)		Screened 2" casing
21					2000		- free product in water		
22							SILT (ML)- olive, low plasticity		
23					0				
24					0				
25							Boring terminated at approximately 25 feet.		
26									
27									
28									

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KLEINFELDER	LOG OF BORING NO. MW-1	PLATE
PROJECT NO. 54504-4	EOP - INDEPENDENT ROAD 700 INDEPENDENT ROAD OAKLAND, CALIFORNIA	B-8

5/11/2007 10:53:19 AM

Date Completed: 3/6/07

Drilling method: Direct Push

Logged By: A. Dominguez

Hammer Wt: None

Total Depth: 25.0 ft

Notes: Stratigraphy taken from K-19

Depth (feet)	Sample Number	Sample Type	Blows/Foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							ASPHALT - approximately 6 inches thick		
2							POORLY GRADED CLAY SAND GRAVEL (SC) - yellow-brown		
3									Blank 2" casing Neat cement grout
4							- gray		
5							NO RECOVERY		
6							GRAVELLY SANDY CLAY (SC) wet, strong hydrocarbon odor		Bentonite
7							- black, moist, fine grained sand, hydrocarbon odor		
8									Sand 2/12
9							SILTY CLAY (CL) - gray, dry, hydrocarbon odor		
10									
11									
12									
13									
14									Screened 2" casing
15							NO RECOVERY		
16							SILTY SAND (ML) - yellow-brown, fine grained sand, hydrocarbon odor		
17							- gray-brown		
18									
19							SAND (SP) - green, hydrocarbon odor		
20							CLAYEY SAND (SC) - fine grained sand		
21							GRAVELLY SAND (SP) - green, heavy hydrocarbon odor		
22							SILTY SAND (ML) - yellow-brown, fine grained sand, hydrocarbon odor		Bentonite
23									
24							LEAN CLAY (CL) - gray, medium plasticity, hydrocarbon odor		
25							Boring terminated at approximately 25 feet.		
26									
27									
28									

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KLEINFELDER

PROJECT NO. 54504-4

LOG OF BORING NO. MW-2

EOP - INDEPENDENT ROAD
700 INDEPENDENT ROAD
OAKLAND, CALIFORNIA

PLATE

B-9

3/11/2007 10:53:20 AM

Date Completed: 3/6/07
 Logged By: A. Dominguez
 Total Depth: 25.0 ft

Drilling method: Direct Push
 Hammer Wt: None
 Notes: _____

Depth (feet)	Sample Number	Sample Type	Blows/foot	Recovery (%)	OVA (ppm) PID/FID	USCS	Description	Remarks	Well Construction
1							ASPHALT - approximately 6 inches thick		
2							GRAVELLY SAND (SP)- olive		
3									
4							CLAYEY SAND (SC)- dark gray		
5					11		- gray		Neat cement grout Blank 2" casing
6									
7					4		CLAY (CH)- black, plastic, hydrocarbon odor		
8		X					NO RECOVERY		
9									
10		X			500		FAT CLAY (CH)- gray, plastic, hydrocarbon odor		Bentonite
11									
12					5		CLAYEY SILT (ML)- olive, slight plasticity		Sand 2/12
13									
14					0				
15									
16		X			0				
17					0		CLAY/SILT (CL/ML)- moist, medium plasticity		
18					0		SAND (SC)- yellow-brown, moist, fine grained		Screened 2" casing
19					0		NO RECOVERY		
20									
21					0		SAND (ML)- fine grained		
22							CLAYEY SILT (ML)		
23							LEAN CLAY (CL)- olive		
24									
25									
26							Boring terminated at approximately 25 feet.		
27									
28									

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KLEINFELDER	LOG OF BORING NO. MW-3	PLATE
	EOP - INDEPENDENT ROAD 700 INDEPENDENT ROAD OAKLAND, CALIFORNIA	B-10
PROJECT NO. 54504-4		

5/11/2007 10:53:20 AM