ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

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

September 10, 2010

Charles Carmel (*Sent via E-mail to: charles.carmel@bp.com*)
Atlantic Richfield Corporation
P.O. Box 1257
San Ramon, CA 94583

Subject: Fuel Leak Case No. RO0000239 and Geotracker Global ID T0600100919, BP #11124, 3315 High Street, Oakland, CA 94619

Dear Mr. Carmel:

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.

SITE INVESTIGATION AND CLEANUP SUMMARY

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

- Residual soil contamination consisting of 970 mg/kg TPH-g and 150 mg/kg TPH-d remains at the site.
- Residual groundwater contamination consisting of 760 µg/LTPH-d and 830 µg/L MTBE remains at the site.

If you have any questions, please call Paresh Khatri at (510) 777-2478. Thank you.

Sincerely,

Donna L. Drogos, P.E.
Division Chief

Enclosures: 1. Remedial Action Completion Certificate
2. Case Closure Summary

cc:

Ms. Cherie McCaulou (w/enc)
SF- Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612
(Sent via E-mail to:
CMccaulou@waterboards.ca.gov)

Closure Unit (w/enc)
State Water Resources Control Board
UST Cleanup Fund
P.O. Box 944212
Sacramento, CA 94244-2120
(*Sent via E-mail*)

Paresh Khatri (w/orig enc), D. Drogos (w/enc), T. Le-Khan (w/enc)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
OFFICE OF THE DIRECTOR
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502
(510) 567-6777
FAX (510) 337-9135

September 10, 2010

Charles Carmel (*Sent via E-mail to: charles.carmel@bp.com*)
Atlantic Richfield Corporation
P.O. Box 1257
San Ramon, CA 94583

REMEDIAL ACTION COMPLETION CERTIFICATE

Subject: Fuel Leak Case No. RO0000239 and Geotracker Global ID T0600100919, BP #11124, 3315 High Street, Oakland, CA 94619

Dear Mr. Carmel:

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 25299.37 of the Health and Safety Code.

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

Sincerely,

Ariu Levi
Director
Alameda County Environmental Health

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

I. AGENCY INFORMATION

Date: June 21, 2010

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 777-2478
Responsible Staff Person: Paresh Khatri	Title: Hazardous Materials Specialist

II. CASE INFORMATION

Site Facility Name: BP #11124		
Site Facility Address: 3315 High Street, Oakland, California 94619		
RB Case No.: 01-0996	STID No.: 1075	LOP Case No.: RO0000239
URF Filing Date: ---	Global ID No.: T0600100919	APN: 32-2032-36

Responsible Parties	Addresses	Phone Numbers
Atlantic Richfield Company c/o Charles Carmel	P.O. Box 1257, San Ramon, CA 94583	(925) 275-3801

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	1 x 10,000-gallon	Gasoline	Removed	April 9, 1986
2	1 x 8,000-gallon	Gasoline	Removed	April 9, 1986
3	1 x 6,000-gallon	Gasoline	Removed	April 9, 1986
4	1 x 250-gallon	Waste Oil	Removed	April 9, 1986
5	1 x 12,000-gallon	Gasoline	Removed	December 2, 2004
6	1 x 10,000-gallon	Gasoline	Removed	December 2, 2004
7	1 x 10,000-gallon	Gasoline	Removed	December 2, 2004
8	1 x 1,000-gallon	Waste Oil	Removed	December 2, 2004
Piping			Removed	December 2, 2004

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Exact release source is unknown; likely it was a steel 6,000-gallon steel UST. Tank tightness test conducted in March 1986 indicated that this UST was leaking and released an unknown quantity of super unleaded gasoline. USTs were reported intact during the 2004 removals.		
Site characterization complete? Yes	Date Approved By Oversight Agency: ---	
Monitoring wells installed? Yes	Number: 5	Proper screened interval? Yes
Highest GW Depth Below Ground Surface: 12.10 ft bgs	Lowest Depth: 6.42 ft bgs	Flow Direction: Southwest
Most Sensitive Current Use: Potential drinking water source.		

Summary of Production wells in vicinity: A 2,000 foot radius well survey conducted at the site did not identify any water producing well in the vicinity of the subject site.	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain Groundwater Basin
Is surface water affected? No	Nearest SW Name: 39th Ave Reservoir located approximately 1 mile northeast of the site.
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health & City of Oakland Fire Prevention Bureau

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	One 10,000-gallon UST One 8,000-gallon UST One 6,000-gallon UST One 250-gallon UST One 12,000-gallon UST Two 10,000-gallon USTs One 1,000-gallon UST	Disposal to unreported location Disposal to unreported location Disposal to unreported location Disposal to unreported location Disposal to unreported location Disposal to unreported location Disposal to unreported location	4/9/1986 4/9/1986 4/9/1986 4/9/1986 12/2/2004 12/2/2004 12/2/2004
Piping	Unknown	Disposal, unknown location	4/9/1986 & 12/2/2004
Free Product	NA	---	---
Soil	145	Forward Landfill, Manteca, California	6/2005
Groundwater	80,000-gallons	ConocoPhillips Refinery, Rodeo, California	12/2/2004

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

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	970 (OWS-1,0.5', 12/12/1996)	970 (OWS-1,0.5', 12/12/1996)	1,300 µg/L (SB-2, 2/20/2006)	760 (MW-3, 9/3/1999)
TPH (Diesel)	150 (OWS-1,2', 12/12/1996)	150 (OWS-1,2', 12/12/1996)	870 µg/L (MW-2, 2/29/2008)	<50 (10/28/2009)
TPH (Motor Oil)	814 (H-2@6, 12/2/2004)	814 (H-2@6, 12/2/2004)	NA	NA
Benzene	0.011 (SB4-10, 4/21/2004)	0.011 (SB4-10, 4/21/2004)	60 (SB-2, 2/20/2006)	<0.5 (10/28/2009)
Toluene	0.8 (OWS-1,0.5', 12/12/1996)	0.8 (OWS-1,0.5', 12/12/1996)	<1.0 (SB-2, 2/20/2006)	<0.5 (10/28/2009)
Ethylbenzene	20 (OWS-1,0.5', 12/12/1996)	20 (OWS-1,0.5', 12/12/1996)	63 (SB-2, 2/20/2006)	<0.5 (10/28/2009)
Xylenes	90 (OWS-1,0.5', 12/12/1996)	90 (OWS-1,0.5', 12/12/1996)	79 (SB-2, 2/20/2006)	<1.0 (10/28/2009)
Heavy Metals (Cd, Cr, Pb, Ni, Zn)	8.3 (OWS-1,0.5', 12/12/1996)	8.3 (OWS-1,0.5', 12/12/1996)	NA	NA
MTBE	0.034[4] (SB4-10', 4/21/2004)	0.034[3] (SB4-10', 4/21/2004)	1,600[2] (MW-5, 08/07/2007)	830[1] (MW-5, 10/28/2009)
Other (8240/8270)	NA	NA	NA	NA

[1] Other VOCs analyzed (groundwater µg/L after cleanup): 830 µg/L MtBE, <10 µg/L TBA, <0.5 µg/L DIPE, <0.50 µg/L ETBE, <0.50 µg/L TAME, <0.50 µg/L EDB, <0.50 µg/L 1.2-DCA, <300 µg/L EtOH.
[2] Other VOCs analyzed (groundwater ppb before cleanup): 1,600 µg/L MtBE, <20 µg/L TBA, <0.5 µg/L DIPE, <0.50 µg/L ETBE, <0.50 µg/L TAME, <0.50 µg/L EDB, <0.50 µg/L 1.2-DCA, <300 µg/L EtOH.
[3] Other VOCs (Soil mg/kg after cleanup): 0.034 mg/kg MtBE, < 0.0050 mg/kg to <25 mg/kg TBA; DIPE, ETBE, TAME, EDB, 1.2-DCA, and EtOH not analyzed;
[4] Other VOCs analyzed (Soil mg/kg before cleanup): 0.034 mg/kg MtBE; TBA, DIPE, ETBE, TAME, EDB, 1.2-DCA and EtOH not analyzed;
NA - Not Analyzed

Site History and Description of Corrective Actions:

The site is a former service station located on the southwest corner of the intersection of High and Porter Streets in Oakland, California (**Figure 1**). The service station consisted of a station building and two pump islands with a concrete drive slab and a canopy. Two generations of underground storage tanks (USTs) are reported to have operated on site and were subsequently removed. The site was operated as a Mobil brand service station from at least 1968 (the exact date is unknown) to 1989, when it was transferred to BP. BP operated the site as a service station until it was transferred to TOSCO in 1994, then ConocoPhillips, which operated the site as a 76-branded service station until 2004. The site is currently non-operational. However, according to satellite imagery, the vacant station building and dispenser island canopy appear to be present.

The site is located in a mixed commercial/residential area (**Figure 2**). Nearby properties consist of residential units southwest and northwest of the site. A drug store, Oakland Fire Department engine house and a recreation center are located southeast of the site across High Street. A retail strip mall is located northeast of the site across Porter Street.

Prior to April 1986, the site contained four steel USTs, which included one 10,000-gallon UST, one 8,000-gallon UST and one 6,000-gallon UST used for storing gasoline and one 280-gallon waste oil UST. Tank tightness tests conducted at the site in March 1986 indicated that the 6,000-gallon UST containing Mobile branded super unleaded gasoline was leaking. An unknown volume of fuel was released from this tank. Appropriate tightness was reported in the remaining three tanks tested.

The four steel USTs were subsequently removed from the site under the oversight of Kaprealian Engineering, Inc. (KEI) in 1986. During removal activities, sheen was noted on the groundwater present within the UST excavation and a petroleum odor was reported in the excavated soil. The UST cavities were dewatered prior to installation of the new USTs within the same pit. Information regarding the condition of removed USTs, limits and volumes of UST excavations, stockpile soil quality data, or waste destinations were not reported. One composite soil sample was collected from three of the excavation sidewalls and were analyzed for Total Petroleum Hydrocarbons (TPH). TPH was not detected in the soil

sample collected from the excavation area. Soil samples were not collected from the bottom of the excavation pit. Four double-walled fiberglass USTs were installed in April 1986 including one 12,000-gallon gasoline UST, two 10,000-gallon gasoline USTs, and one 1,000-gallon waste oil UST.

KEI conducted a subsurface investigation at the site in July and August 1986 that consisted of installing three soil borings to depths ranging from 30 to 35 feet below ground surface (bgs), converting these borings into monitoring wells (MW-1, MW-2 and MW-3) and collecting soil and groundwater samples. The wells were installed near the gasoline UST complex (MW-1), the south corner of the site (MW-2) and near the waste oil tank (MW-3). Soil samples were collected from each boring at 15.5 to 16 feet bgs and analyzed for TPH. Concentrations of TPH in the soil samples were not detected above laboratory reporting limits (see **Table 1**). Groundwater samples were collected from each of the newly installed wells and analyzed for TPH-g and BTEX, which were not detected above the laboratory reporting limits in each of the groundwater samples (see **Table 3 and Figure 3**).

In July 1990, the dispenser islands and product piping were replaced. Four soil samples were analyzed from beneath the dispensers at depths ranging from 3 to 4 feet bgs. Concentrations, reported in milligrams per liter of TPH-g (maximum of 120 milligrams per liter [mg/L]) and BTEX (benzene maximum of 1 mg/L, toluene maximum of 0.8 mg/L, ethylbenzene maximum of 2.6 mg/L and xylene maximum of 3 mg/L) were detected above laboratory reporting limits in the soil samples collected.

In November 1990 sludge was detected at the bottom of MW-3 with a limited volume of water present at the time of the sludge appearance. MW-3 was subsequently abandoned on May 13, 1991 by over-drilling the well and backfilling the boring with a cement/bentonite slurry. Following the abandonment, MW-4 was installed approximately 12 feet north of the former MW-3 location. Additional subsurface investigation included installing soil borings B-2b and B-3 in the vicinity of the waste oil tank to total depths of 18.5 and 17.5 feet bgs, respectively. Soil samples were collected from each of the borings at depths ranging from 5 to 17 feet bgs. Analytical results indicated that concentrations of petroleum hydrocarbons and oil and grease were present below laboratory detection limits. Analytical results are summarized on Table 2.

In 1991, Resna installed soil borings and collected six discrete soil samples from depths ranging from 5 to 17 feet bgs. Oil and grease detections were observed above laboratory reporting limits at a maximum of 120 milligrams per kilogram (mg/kg) at a depth of 10 feet bgs in the west corner of the site. In September 1994 EMCON conducted three cone penetrometer tests (CPTs) (THP-1 through THP-3) to approximately 40 feet bgs. THP-1 was advanced near the UST complex, THP-2 was advanced in the vicinity of the pump islands and THP-3 was advanced adjacent to the station building near the service bays. CPT equipment was used to collect soil samples from each boring at the following depths: 21 to 21.5 feet bgs for THP-1 (soil sample ID 11124-HP1-S-21-21.5), 11 to 11.5 feet bgs for THP-2 (soil sample ID 11124-HP2-S-11-11.5) and 21 to 21.5 feet bgs at THP-3 (soil sample ID 11124-HP3-S-21-21.5). Grab groundwater samples were collected from each boring using a HydroPunch. Analytical results are summarized on **Tables 1 and 2**.

One soil sample was collected from beneath the oil/water separator (OWS-1) in 1996 by Pacific Environmental Group, Inc. (PEG) following the separator's removal. TPH-g concentrations were detected at a maximum of 970 mg/kg at approximately 0.5 feet below the bottom of the excavation (see **Table 1 and Figure 4**). However, the depth of the bottom of the excavation was not reported.

SECOR International, Inc. (SECOR) oversaw the installation of four soil borings on April 21, 2004 (SB-1 through SB-4). SB-1, SB-2 and SB-3 were located around the north and southwest perimeter of the dispenser islands and USTs; SB-4 was located directly southwest of the on-site station building. Concentrations of TPH-g were detected at a maximum concentration of 99 mg/kg in boring SB-3 at 5 feet bgs. Benzene was detected above the laboratory reporting limit in boring SB-4 at 10 feet bgs at a concentration of 0.011 mg/kg. MTBE was reported at a maximum concentration of 0.034 mg/kg in boring SB-4 in the sample collected from 10 feet bgs (**see Table 1 and Figure 3**).

On December 2, 2004, SECOR oversaw the excavation and removal of the facility structures (one 12,000-gallon and two 10,000-gallon gasoline USTs, one 1,000-gallon waste-oil UST, three hydraulic lifts, one clarifier, four fuel dispensers, and associated product lines) by Fuller Excavating of Sacramento, California. The USTs and product lines were reported to be in good condition, with no holes or cracks observed during removal. Approximately 80,000 gallons of groundwater was removed from the UST excavations as part of dewatering activities during the facility removal. Dewatered fluids were taken to the ConocoPhillips refinery in Rodeo, California for treatment and disposal. Approximately 145 tons of soil removed during the excavation and removal activities was transported to Forward Landfill in Manteco, California for disposal in June 2005.

Several soil samples collected during the excavation detected petroleum hydrocarbons and fuel oxygenates up to 6 feet bgs. Soil samples were collected from numerous locations with the excavation areas (**see Figure 3**). TPH-g was detected at a concentration of 160 mg/kg in boring PL-4 at 4 feet bgs. Benzene concentrations reached a maximum of 0.033 mg/kg in boring PL-3 at 4 feet bgs. Concentrations of MTBE were reported in the sample collected at 5.5 feet bgs in boring SW-4 at 0.0096 mg/kg (see **Table 1 and Figure 3**).

URS Corporation, Inc. conducted a subsurface investigation in February 2006. Soil and groundwater samples were collected from five soil borings (SB-1 through SB-5). TPHg was detected at a maximum concentration of 62 mg/kg in SB-2 at 15 feet bgs. Benzene was detected at a maximum concentration of 0.11 mg/kg in SB-3 at 15 feet bgs. MTBE was detected at a maximum concentration of 0.09 mg/kg in SB-1 at 23.5 feet bgs (see **Table 1 and Figure 3**). For the groundwater samples collected from SB-2 at 8.8 feet bgs, TPH-g, benzene and MTBE were detected at maximum concentrations of 1,300 µg/L, 60 µg/L and 120 µg/L, respectively. TPH-d was only analyzed for in samples collected from SB-5 at 10.7 feet bgs, with a result of 72 µg/L.

In December 2006, Stratus Environmental installed two monitoring wells (MW-5 and MW-6) to evaluate the extent of contamination down-gradient and to the south-southeast from the UST complex and dispenser islands. Monitoring wells MW-5 and MW-6 were drilled to a total depth of 30 feet bgs. Soil samples collected from MW-6 at 11 feet bgs detected TPH-g, TPH-d, benzene and xylenes at concentrations of 56 mg/kg, 9.5 mg/kg, 0.41 mg/kg and 5.2 mg/kg, respectively. MTBE was detected in soil samples collected from MW-5 at 11 and 21 feet bgs at concentrations of 0.22 mg/kg and 0.073 mg/kg, respectively.

Groundwater monitoring has been conducted at the site since August 1986. To date, six wells (MW-1 through MW-6) have been installed at the site with one well (MW-3) destroyed in November 1990. MTBE has consistently been detected in wells MW-5 and MW-6 since the initiation of groundwater sampling in these wells (2007); concentrations of MTBE are below laboratory detection limits in MW-1, MW-2 and MW-4. TPH-g concentrations had been below laboratory detection limits (or slightly above as seen at MW-5 in May 2009) since February 2008 in all wells until the fourth quarter 2009 sampling event, where it was detected in MW-5 and MW-6. BTEX constituents have not been detected above the ESLs in any monitoring wells on site.

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 significant risk to human health based upon current land use and conditions.		
Site Management Requirements: Case closure for this fuel leak site is granted for the current commercial land use only. If a change in land use to any other commercial, residential or other conservative land use scenario is proposed at this site, Alameda County Environmental Health (AECH) 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 areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party (or current property owner/developer) prior to and during excavation and construction activities. This 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: 1	Number Retained: 5
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: --		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:
None

Conclusion:
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 environmental under the current commercial land use based upon the information available in our files to date. No further investigation or cleanup for the fuel leak case is necessary unless a change in land use to any residential or other conservative land use scenario occurs at the site. ACEH staff recommend case closure for the site.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Paresh Khatri	Title: Hazardous Materials Specialist
Signature:	Date: June 21, 2010
Approved by: Donna L. Drogos, P.E.	Title: Division Chief
Signature:	Date: 06/23/10

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: JUNE 24, 2010	

VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH: 7/1/2010	Date of Well Decommissioning Report: 9/1/2010	
All Monitoring Wells Decommissioned: YES	Number Decommissioned: 6	Number Retained: 0
Reason Wells Retained: NA		
Additional requirements for submittal of groundwater data from retained wells: None		
ACEH Concurrence - Signature:		Date: 9/10/10

Attachments:
1. Site Figures 1-12
2. Analytical Tables 1-6
3. Boring Logs (28 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.

Khatri, Paresh, Env. Health

From: Cherie MCcaulou [CMccaulou@waterboards.ca.gov]
Sent: Wednesday, June 30, 2010 11:05 AM
To: Khatri, Paresh, Env. Health
Subject: Re: Fwd: RO0000239; Closure Summary for BP #11124 (T0600100919)

Paresh - Thanks for the notification. We have no objection to ACEH's recommendation for case closure of Case #RO00239 (BP #11124).

Sincerely,

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

>>> Cleet Carlton 6/24/2010 4:30 PM >>>
I have no cases in the vicinity.

Cleet Carlton, P.G.
Engineering Geologist
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612
(510) 622-2374

>>> Cherie MCcaulou 6/24/2010 4:04 PM >>>
Do you have any objection to closing a UST case at 3315 High Street?

Sincerely,

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

>>> "Khatri, Paresh, Env. Health" <paresh.khatri@acgov.org> 6/24/2010 8:36 AM >>>
Hello Cherie,

Attached is a closure summary for RO0000239; BP #11124 located at 3315 High Street in Oakland to comply with the RWQCB's 30-day review period. If no comments from the RWQCB are received within the 30-day review period, ACEH's will proceed with case closure.

Please contact me should you have any comments or questions regarding the subject site.

Sincerely,

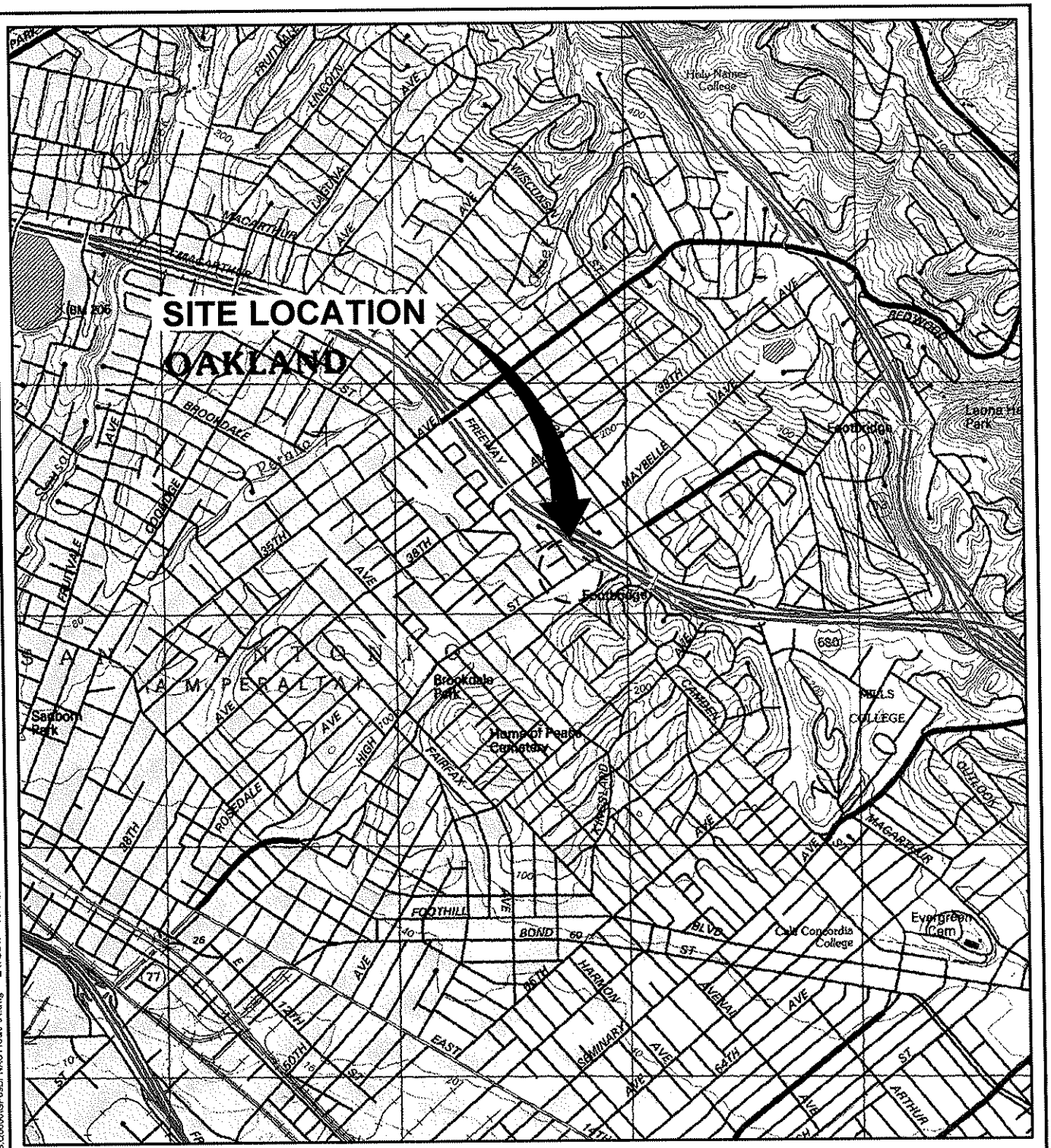
Paresh C. Khatri

Hazardous Materials Specialist
Alameda County Environmental Health
Local Oversight Program
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Phone: (510) 777-2478
Fax: (510) 337-9335

E-mail: Paresh.Khatri@acgov.org

http://www.acgov.org/aceh/lop/lop.htm



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., SAN LEANDRO, CALIFORNIA, 1993, PHOTOREVISED 1996.

0 2000' 4000'

Approximate Scale: 1 in. = 2000 ft.

FORMER ARCO STATION #11124
3315 HIGH STREET
OAKLAND, CALIFORNIA

CASE CLOSURE SUMMARY REPORT

SITE LOCATION MAP

ARCADIS

FIGURE
1

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS LD:— PIC:— PM: H. PHILLIPS TM: J. PETERSON LYR:(Opt)ON=*;OFF=*REF*
C:\Documents and Settings\jharris\Desktop\CAD\GP09BPNA,C113,Q0000\GP09BPNAC113-02.dwg LAYOUT: 2SAVED: 2/2/2010 6:41 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: SETUP2PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 2/2/2010 6:49 PM BY: HARRIS, JESSICA
XREFS: IMAGES: PROJECTNAME:
USES:

FORMER ARCO STATION #11124
3315 HIGH STREET
OAKLAND, CALIFORNIA

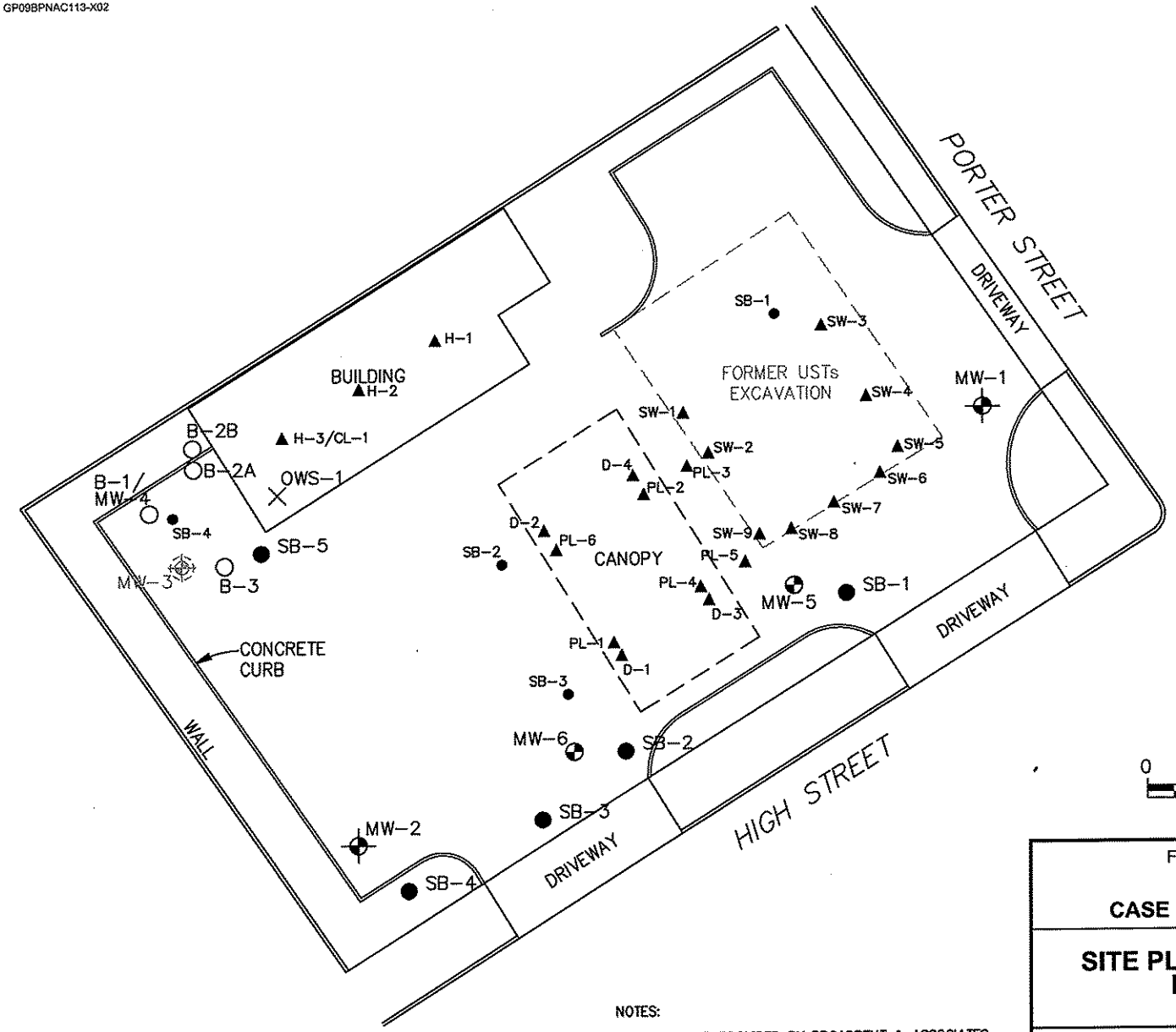
CASE CLOSURE SUMMARY REPORT

SITE VICINITY MAP

ARCADIS

FIGURE
2

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS LD:--- PIC:--- PM: H. PHILLIPS TM: J. PETERSON LYR:(Opt)ON=*;OFF=*REF*
C:\Documents and Settings\jharris\Desktop\CAD\GP09BPNA.C113.Q0000\GP09BPNAC113-03.dwg LAYOUT: 3 SAVED: 2/2/2010 5:58 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 2/2/2010 6:19 PM BY: HARRIS, JESSICA
XREFS: IMAGES: PROJECTNAME: ---
GP09BPNAC113-X01
GP09BPNAC113-X02



LEGEND

- MONITORING WELL KAPREALIAN ENGINEERING (7/1986)
- ABANDONED MONITORING WELL KAPREALIAN ENGINEERING (7/1986)
- SOIL BORING RESNA, INC. (5/1991)
- OIL/WATER SEPARATOR SAMPLE PACIFIC ENVIRONMENTAL (12/1996)
- SOIL BORING SECOR (4/2004)
- UST SIDEWALL SAMPLE SECOR (12/2004)
- SOIL BORING URS CORPORATION (2/2006)
- MONITORING WELL STRATUS ENVIRONMENTAL (12/2006)

0 30' 60'

GRAPHIC SCALE

NOTES:

1. BASE MAP PROVIDED BY BROADBENT & ASSOCIATES, INC., DATED 2/15/07, AT A SCALE OF 1"=30'.
2. FORMER UST EXCAVATION AREA (1986) IS THE SAME AS THE CURRENT UST EXCAVATION AREA (2004).

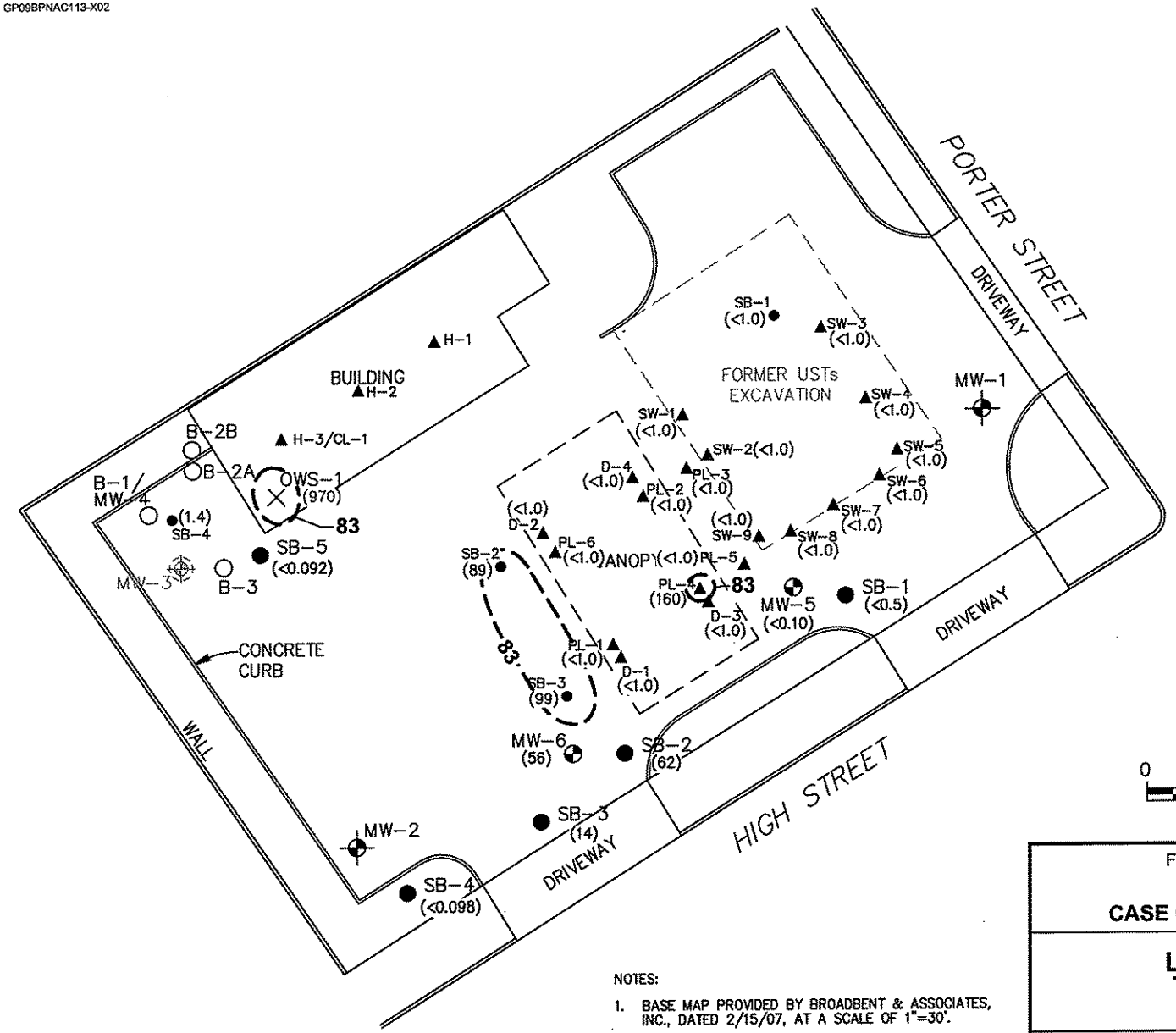
FORMER ARCO STATION #11124
3315 HIGH STREET
OAKLAND, CALIFORNIA
CASE CLOSURE SUMMARY REPORT

SITE PLAN WITH HISTORICAL SOIL BORING LOCATIONS

ARCADIS

FIGURE
3

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS LD:— PIC:— PM: H. PHILLIPS TM: J. PETERSON LYR:(Opt)ON=*;OFF=*REF*
C:\Documents and Settings\jharris\Desktop\CAD\GP09BPNA.C113.Q0000\GP09BPNAC113-04.dwg LAYOUT: 4 SAVED: 2/3/2010 7:34 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 2/19/2010 9:32 AM BY: HARRIS, JESSICA
XREFS: IMAGES: PROJECTNAME: —
GP09BPNAC113-X01
GP09BPNAC113-X02



LEGEND

- MONITORING WELL KAPREALIAN ENGINEERING (7/1986)
- ABANDONED MONITORING WELL KAPREALIAN ENGINEERING (7/1986)
- SOIL BORING RESNA, INC. (5/1991)
- OIL/WATER SEPARATOR SAMPLE PACIFIC ENVIRONMENTAL (12/1996)
- SOIL BORING SECOR (4/2004)
- HOIST AND CLARIFIER SAMPLE SECOR (12/2004)
- SOIL BORING URS CORPORATION (2/2006)
- MONITORING WELL STRATUS ENVIRONMENTAL (12/2006)
- TPHg ISOCONCENTRATION CONTOUR (mg/kg)
- (62) TPHg CONCENTRATION (mg/kg) IN 2006
- (160) TPHg CONCENTRATION (mg/kg) IN 2004
- (970) TPHg CONCENTRATION (mg/kg) IN 1996
- TPHg TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- mg/kg MILLIGRAMS PER KILOGRAM

0 30' 60'

GRAPHIC SCALE

NOTES:

1. BASE MAP PROVIDED BY BROADBENT & ASSOCIATES, INC., DATED 2/15/07, AT A SCALE OF 1"=30'.
2. FORMER UST EXCAVATION AREA (1986) IS THE SAME AS THE CURRENT UST EXCAVATION AREA (2004).
3. 83 mg/kg = ENVIRONMENTAL SCREENING LEVEL FOR TPHg IN SHALLOW AND DEEP SOIL.

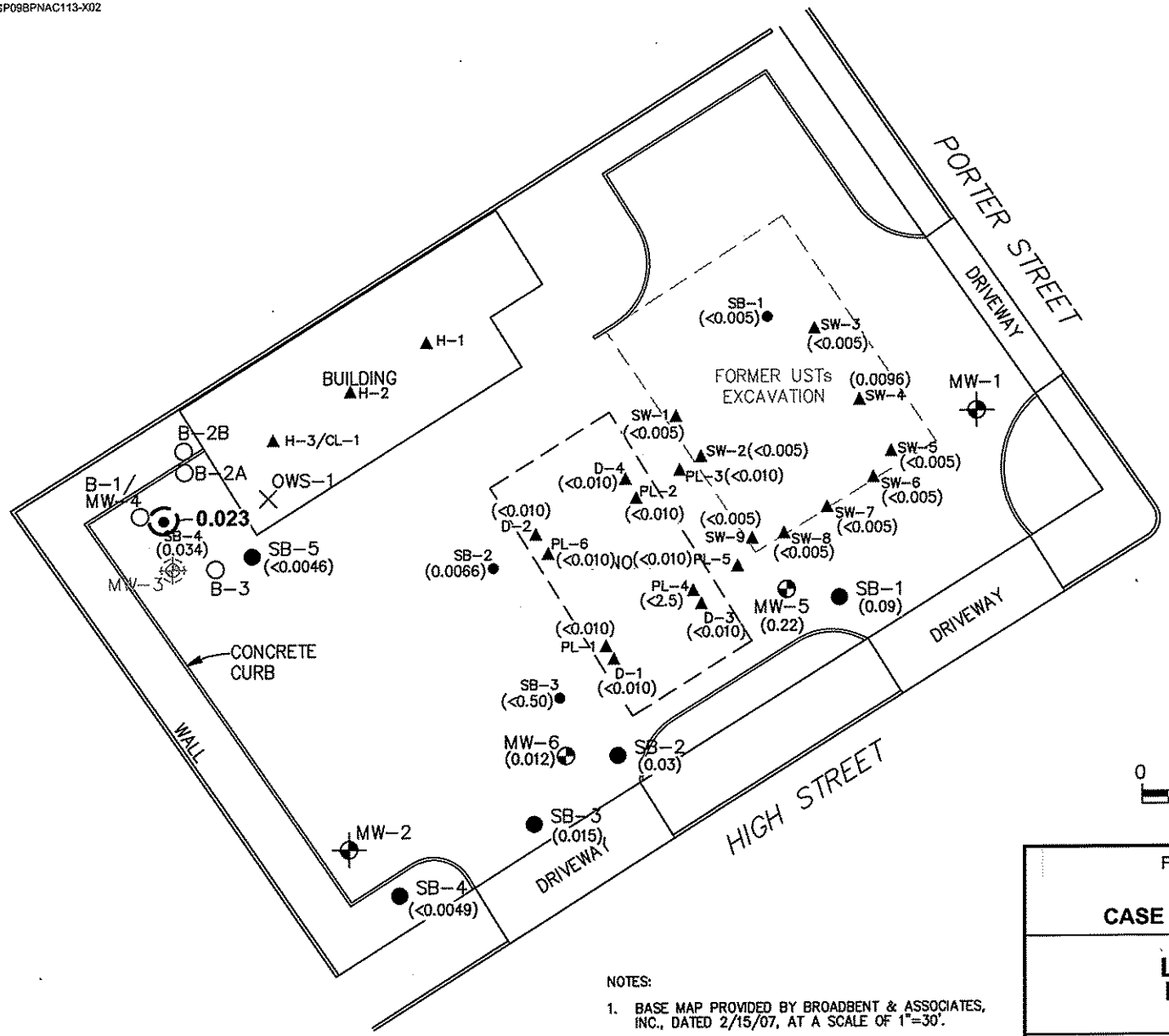
FORMER ARCO STATION #11124
3315 HIGH STREET
OAKLAND, CALIFORNIA

CASE CLOSURE SUMMARY REPORT

LATERAL EXTENT OF TPHg SOIL IMPACTS

ARCADIS

FIGURE 4



LEGEND

- MONITORING WELL KAPREALIAN ENGINEERING (7/1986)
- ABANDONED MONITORING WELL KAPREALIAN ENGINEERING (7/1986)
- SOIL BORING RESNA, INC. (5/1991)
- OIL/WATER SEPARATOR SAMPLE PACIFIC ENVIRONMENTAL (12/1996)
- SOIL BORING SECOR (4/2004 AND 12/2004)
- HOIST AND CLARIFIER SAMPLE SECOR (12/2004)
- SOIL BORING URS CORPORATION (2/2006)
- MONITORING WELL STRATUS ENVIRONMENTAL (12/2006)
- MTBE ISOCONCENTRATION CONTOUR (mg/kg)
- (0.22) MTBE CONCENTRATION (mg/kg) IN 2006
- (0.034) MTBE CONCENTRATION (mg/kg) IN 2004
- MTBE METHYL TERT-BUTYL ETHER
- mg/kg MILLIGRAMS PER KILOGRAM

0 30' 60'

GRAPHIC SCALE

NOTES:

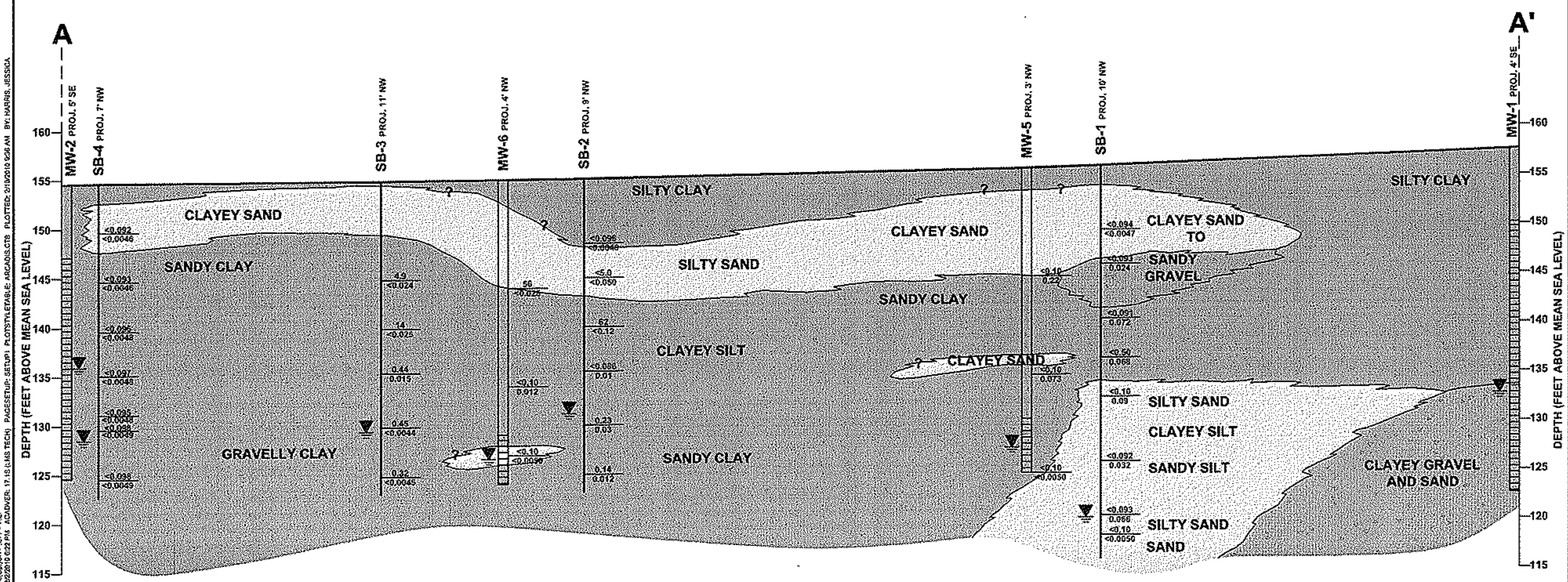
1. BASE MAP PROVIDED BY BROADBENT & ASSOCIATES, INC., DATED 2/15/07, AT A SCALE OF 1"=30'.
2. FORMER UST EXCAVATION AREA (1986) IS THE SAME AS THE CURRENT UST EXCAVATION AREA (2004).
3. 0.023 mg/kg = ENVIRONMENTAL SCREENING LEVEL FOR MTBE IN SHALLOW AND DEEP SOIL.

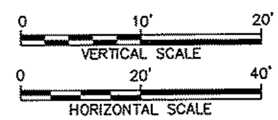
FORMER ARCO STATION #11124
3315 HIGH STREET
OAKLAND, CALIFORNIA
CASE CLOSURE SUMMARY REPORT

LATERAL EXTENT OF MTBE SOIL IMPACTS

ARCADIS

FIGURE
5





LEGEND

TPHg / MTBE — LABORATORY ANALYZED SOIL SAMPLE IN MILLIGRAMS PER KILOGRAM (mg/kg)

83 / 0.023 — TPHg ENVIRONMENTAL SCREENING LEVEL (mg/kg) / MTBE ENVIRONMENTAL SCREENING LEVEL (mg/kg)

WATER LEVEL DURING DRILLING

WELL SCREEN

TPHg TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

MTBE METHYL TERT-BUTYL ETHER

FORMER ARCO STATION #11124
3315 HIGH STREET
OAKLAND, CALIFORNIA
CASE CLOSURE SUMMARY REPORT

VERTICAL EXTENT OF TPHg AND MTBE SOIL IMPACTS

ARCADIS

FIGURE
6

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS LD:— PIC:— PM: H. PHILLIPS TM: J. PETERSON LYR:(Opt)ON=*;OFF=*REF*
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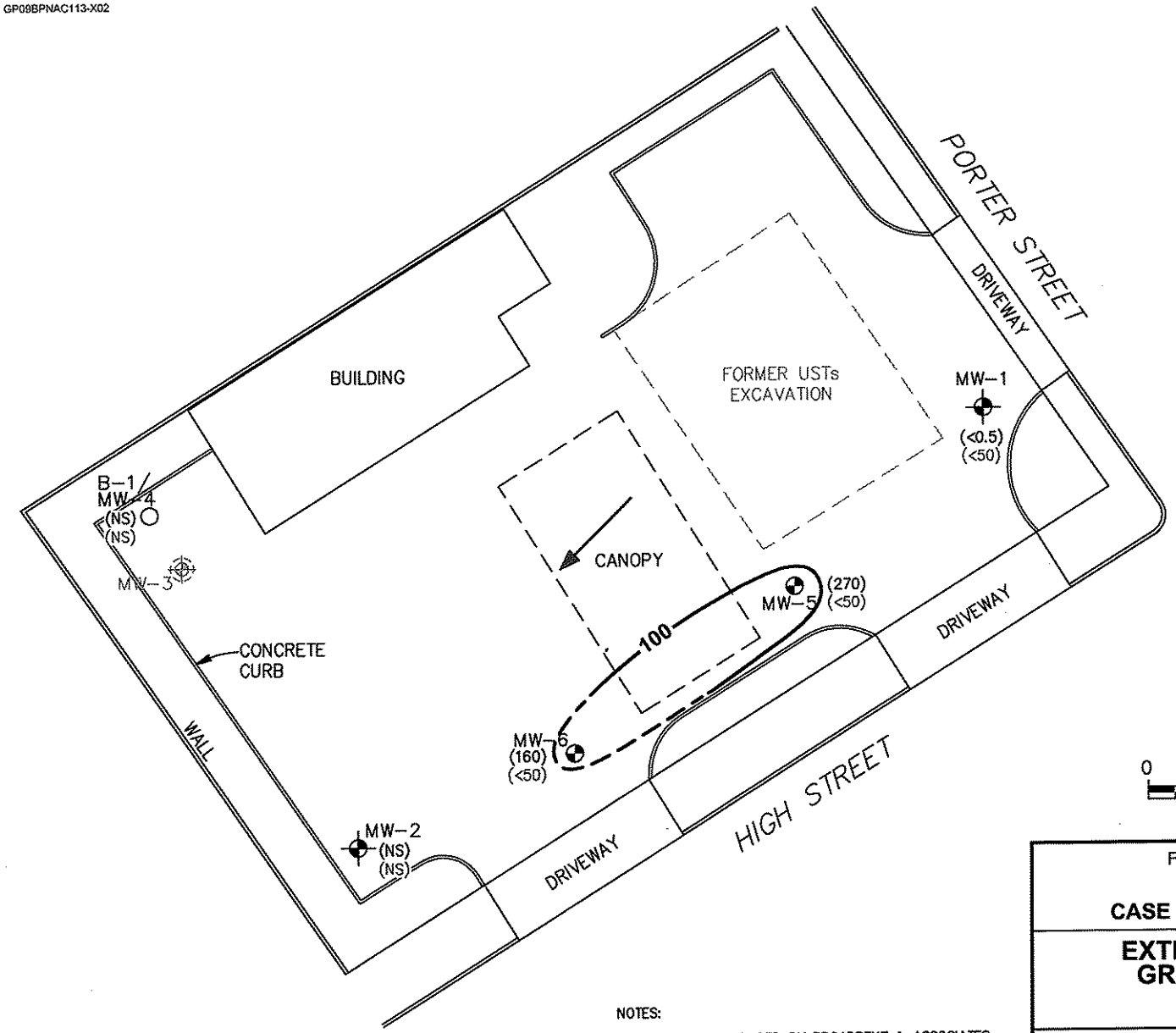
XREFS: IMAGES: PROJECTNAME: —
GP09BPNAC113-X01
GP09BPNAC113-X02



LEGEND

- MONITORING WELL KAPREALIAN ENGINEERING (7/1986)
- SOIL BORING RESNA, INC. (5/1991)
- MONITORING WELL STRATUS ENVIRONMENTAL (12/2006)
- MTBE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED) (µg/L)
- (270) MTBE CONCENTRATION (µg/L)
- (<50) TPHg CONCENTRATION (µg/L)
- GROUNDWATER FLOW DIRECTION
- MTBE METHYL TERT-BUTYL ETHER
- TPHg TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- µg/L MICROGRAMS PER LITER
- NS NOT SAMPLED

0 30' 60'
GRAPHIC SCALE

NOTES:

1. BASE MAP PROVIDED BY BROADBENT & ASSOCIATES, INC., DATED 2/15/07, AT A SCALE OF 1"=30'.
2. FORMER UST EXCAVATION AREA (1986) IS THE SAME AS THE CURRENT UST EXCAVATION AREA (2004).

FORMER ARCO STATION #11124
3315 HIGH STREET
OAKLAND, CALIFORNIA

CASE CLOSURE SUMMARY REPORT

EXTENT OF TPHg AND MTBE GROUNDWATER IMPACTS FEBRUARY 2009

ARCADIS

FIGURE
7

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS LD:— PIC:— PM: H. PHILLIPS TM: J. PETERSON LYR:(Opt)ON=*;OFF=*REF*
C:\Documents and Settings\jharris\Desktop\CAD\GP09BPNA.C113.Q0000\GP09BPNAC113Q0-08.dwg LAYOUT: 8 SAVED: 2/2/2010 6:24 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 2/19/2010 9:40 AM BY: HARRIS, JESSICA
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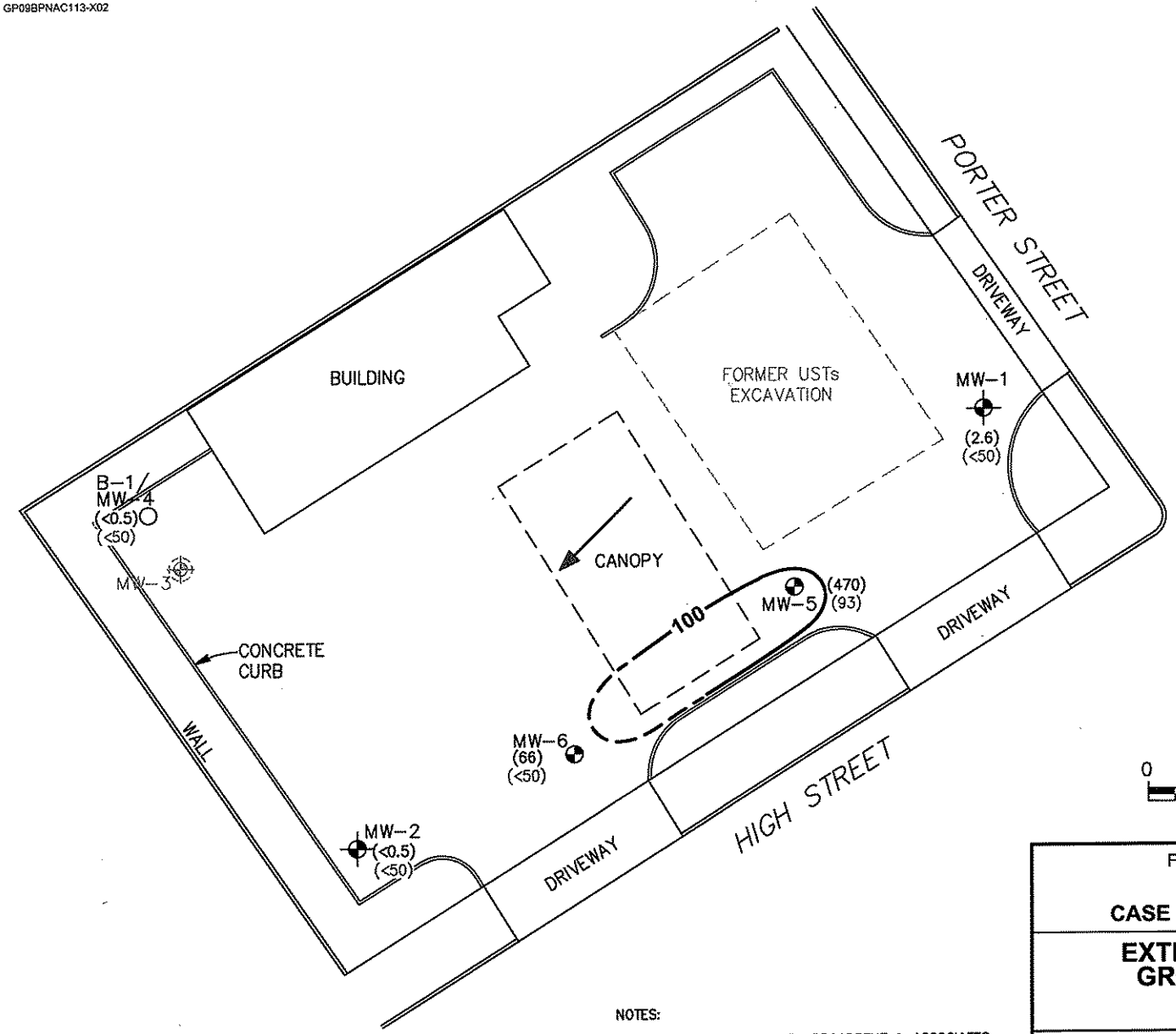
GP09BPNAC113-X02



LEGEND

- MONITORING WELL KAPREALIAN ENGINEERING (7/1986)
- SOIL BORING RESNA, INC. (5/1991)
- MONITORING WELL STRATUS ENVIRONMENTAL (12/2006)
- MTBE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED) (µg/L)
- (470) MTBE CONCENTRATION (µg/L)
- (93) TPHg CONCENTRATION (µg/L)
- GROUNDWATER FLOW DIRECTION
- MTBE METHYL TERT-BUTYL ETHER
- TPHg TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- µg/L MICROGRAMS PER LITER

0 30' 60'
GRAPHIC SCALE

NOTES:

1. BASE MAP PROVIDED BY BROADBENT & ASSOCIATES, INC., DATED 2/15/07, AT A SCALE OF 1"=30'.
2. FORMER UST EXCAVATION AREA (1986) IS THE SAME AS THE CURRENT UST EXCAVATION AREA (2004).

FORMER ARCO STATION #11124
3315 HIGH STREET
OAKLAND, CALIFORNIA

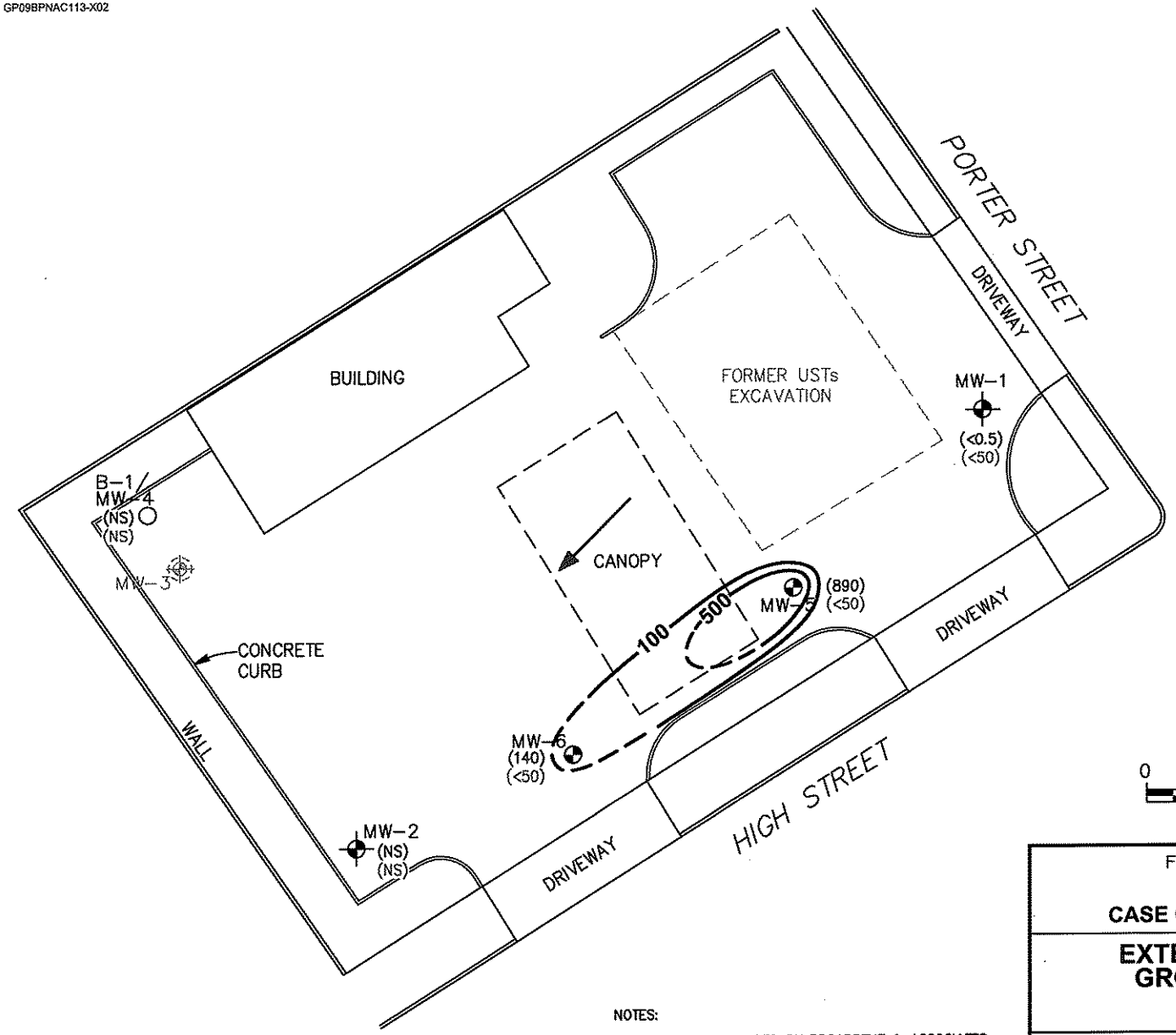
CASE CLOSURE SUMMARY REPORT

EXTENT OF TPHg AND MTBE GROUNDWATER IMPACTS MAY 2009

ARCADIS

FIGURE
8

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS LD:— PIC:— PM: H. PHILLIPS TM: J. PETERSON LYR:(Opt)ON=*;OFF=*REF*
C:\Documents and Settings\jharris\Desktop\CAD\GP09BPNA.C113.Q0000\GP09BPNAC113Q0-09.dwg LAYOUT: 9 SAVED: 2/2/2010 6:24 PM ACADVER: 17.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 2/19/2010 9:41 AM BY: HARRIS, JESSICA
XREFS: IMAGES: PROJECTNAME: —
GP09BPNAC113-X01
GP09BPNAC113-X02



LEGEND

- MONITORING WELL KAPREALIAN ENGINEERING (7/1986)
- SOIL BORING RESNA, INC. (5/1991)
- MONITORING WELL STRATUS ENVIRONMENTAL (12/2006)
- MTBE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED) (µg/L)
- (890) MTBE CONCENTRATION (µg/L)
- (<50) TPHg CONCENTRATION (µg/L)
- GROUNDWATER FLOW DIRECTION
- MTBE METHYL TERT-BUTYL ETHER
- TPHg TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- µg/L MICROGRAMS PER LITER
- NS NOT SAMPLED

0 30' 60'

GRAPHIC SCALE

NOTES:

1. BASE MAP PROVIDED BY BROADBENT & ASSOCIATES, INC., DATED 2/15/07, AT A SCALE OF 1"=30'.
2. FORMER UST EXCAVATION AREA (1986) IS THE SAME AS THE CURRENT UST EXCAVATION AREA (2004).

FORMER ARCO STATION #11124
3315 HIGH STREET
OAKLAND, CALIFORNIA

CASE CLOSURE SUMMARY REPORT

EXTENT OF TPHg AND MTBE GROUNDWATER IMPACTS AUGUST 2009

ARCADIS

FIGURE
9

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS LD:— PIC:— PM: H. PHILLIPS TM: J. PETERSON LYR:(Opt)ON=*;OFF=*REF*
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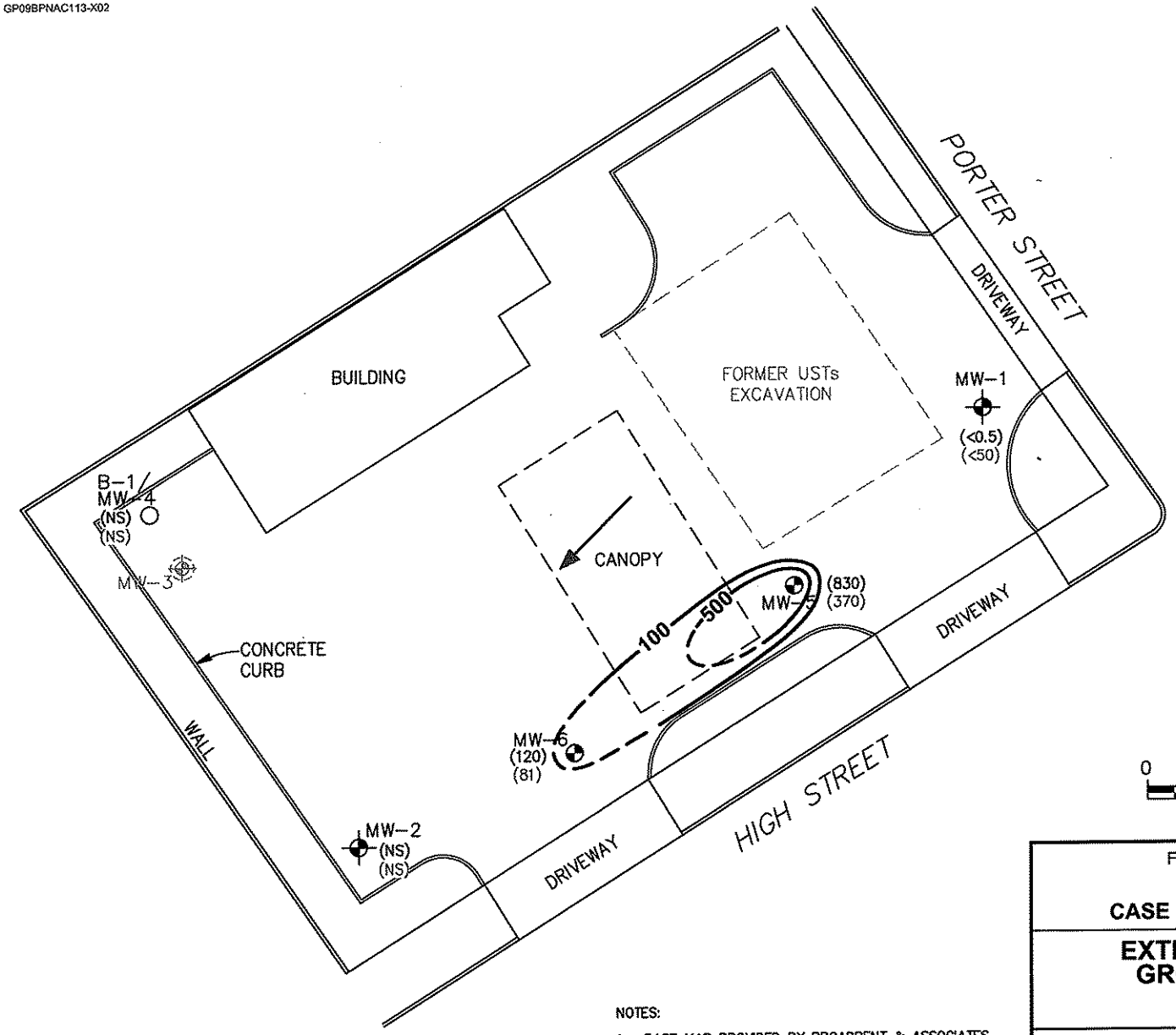
GP09BPNAC113-X01
GP09BPNAC113-X02



LEGEND

- MONITORING WELL KAPREALIAN ENGINEERING (7/1986)
- SOIL BORING RESNA, INC. (5/1991)
- MONITORING WELL STRATUS ENVIRONMENTAL (12/2006)
- MTBE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED) (µg/L)
- (890) MTBE CONCENTRATION (µg/L)
- (<50) TPHg CONCENTRATION (µg/L)
- GROUNDWATER FLOW DIRECTION
- MTBE METHYL TERT-BUTYL ETHER
- TPHg TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- µg/L MICROGRAMS PER LITER
- NS NOT SAMPLED

0 30' 60'
GRAPHIC SCALE

NOTES:

1. BASE MAP PROVIDED BY BROADBENT & ASSOCIATES, INC., DATED 2/15/07, AT A SCALE OF 1"=30'.
2. FORMER UST EXCAVATION AREA (1986) IS THE SAME AS THE CURRENT UST EXCAVATION AREA (2004).

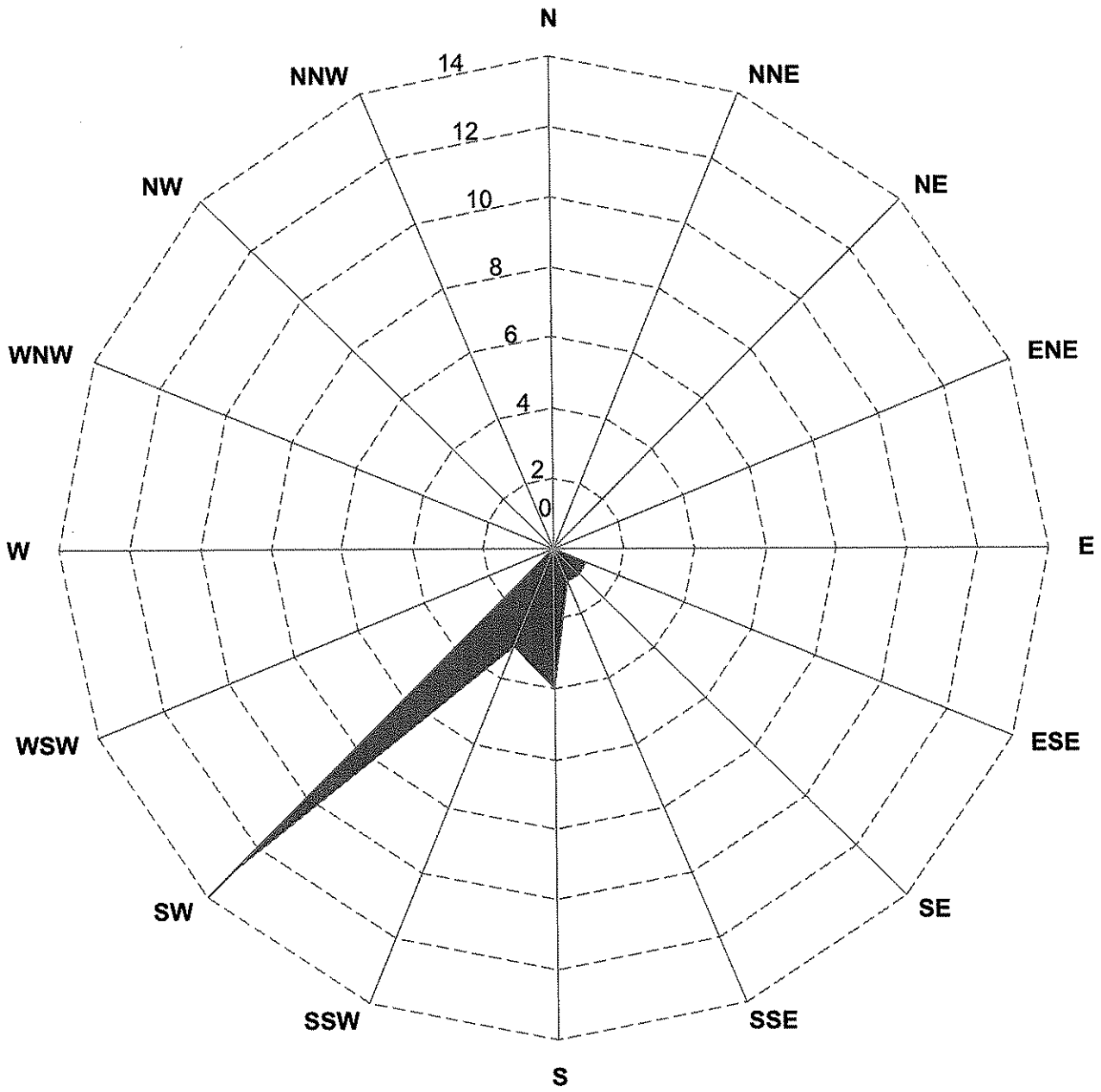
FORMER ARCO STATION #11124
3315 HIGH STREET
OAKLAND, CALIFORNIA

CASE CLOSURE SUMMARY REPORT

EXTENT OF TPHg AND MTBE GROUNDWATER IMPACTS OCTOBER 2009

ARCADIS

FIGURE
10



FORMER ARCO STATION #11124
3315 HIGH STREET
OAKLAND, CALIFORNIA
CASE CLOSURE SUMMARY REPORT

HISTORICAL GROUNDWATER FLOW DIRECTION

ARCADIS

FIGURE
11

CITY: PETALUMA, CA DIV/GROUP: ENV DB: J. HARRIS LD:— PIC:— PM: H. PHILLIPS TM: J. PETERSON LYR:(Opt)ON=*;OFF=*REF*
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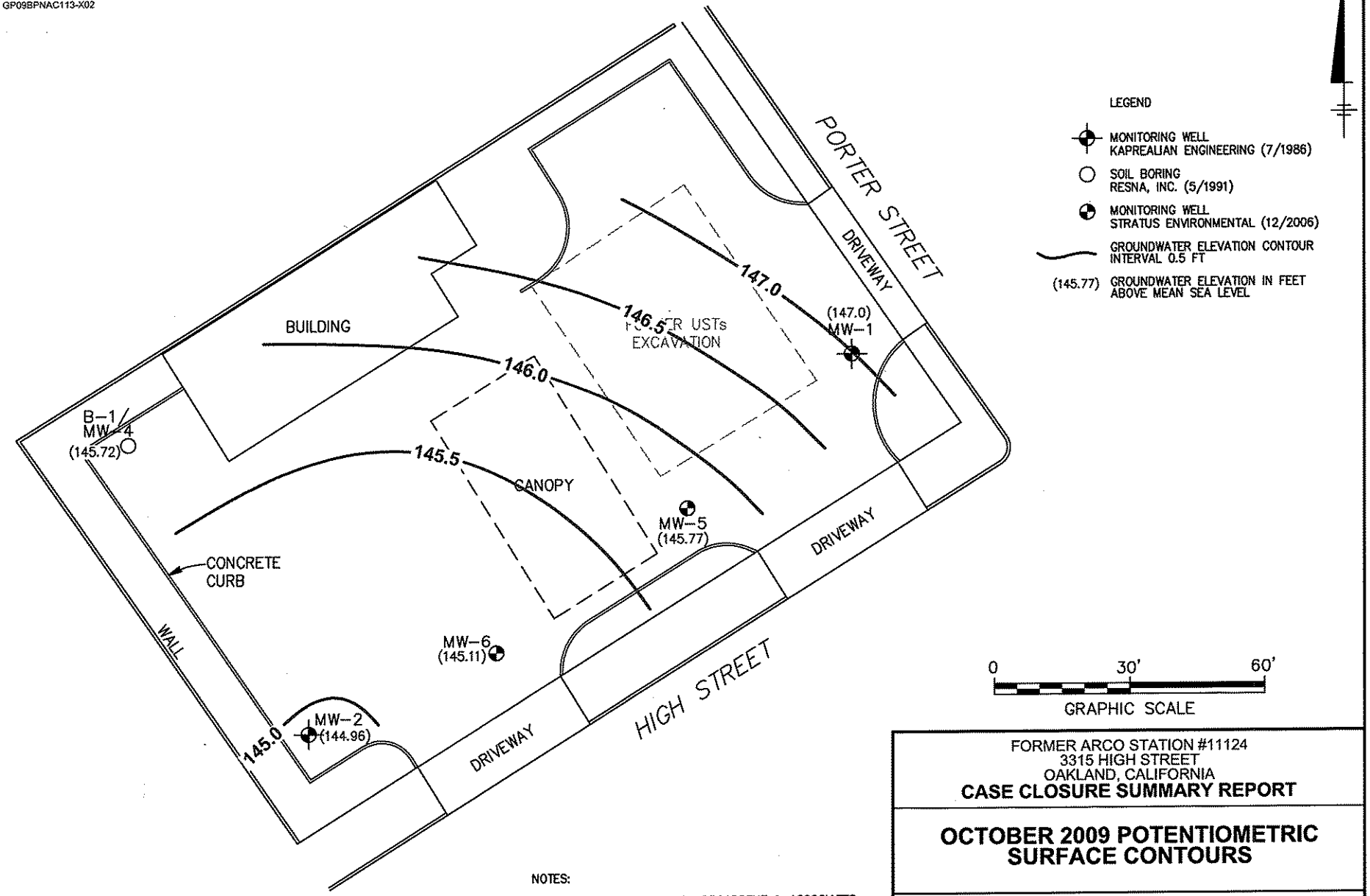
XREFS: IMAGES: PROJECTNAME: —
GP09BPNAC113-X01
GP09BPNAC113-X02



LEGEND

- MONITORING WELL KAPREALIAN ENGINEERING (7/1986)
- SOIL BORING RESNA, INC. (5/1991)
- MONITORING WELL STRATUS ENVIRONMENTAL (12/2006)
- GROUNDWATER ELEVATION CONTOUR INTERVAL 0.5 FT
- (145.77) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL

0 30' 60'

GRAPHIC SCALE

NOTES:

1. BASE MAP PROVIDED BY BROADBENT & ASSOCIATES, INC., DATED 2/15/07, AT A SCALE OF 1"=30'.
2. FORMER UST EXCAVATION AREA (1986) IS THE SAME AS THE CURRENT UST EXCAVATION AREA (2004).

FORMER ARCO STATION #11124
3315 HIGH STREET
OAKLAND, CALIFORNIA

CASE CLOSURE SUMMARY REPORT

OCTOBER 2009 POTENTIOMETRIC SURFACE CONTOURS

ARCADIS

FIGURE
12

Table 1: Historical Soil Results
BP # 11124
3315 High Street, Oakland, CA
Local Case # RO0000239

Location	Sample Depth (ft bgs)	Sample Date	TPHg		TPHd		Benzene		Toluene		Ethylbenzene		Xylene		MTBE		Total O & G		Total Hydrocarbons		Methylene chloride		Cadmium		Chromium		Lead		Nickel		Zinc	
MW-1	15.5	7/10/1986	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<1	mg/L	--	--	--	--	--	--	--	--	--	--
MW-2	15.5	7/10/1986	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<1	mg/L	--	--	--	--	--	--	--	--	--	--
MW-3	15.5	7/10/1986	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<1	mg/L	--	--	--	--	--	--	--	--	--	--
S-5-B1	5	5/13/1991	<1	mg/L	<10	mg/L	<0.005	mg/L	<0.005	mg/L	<0.005	mg/L	<0.005	mg/L	--	--	<50	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
S-15-B1	15	5/13/1991	<1	mg/L	<10	mg/L	<0.005	mg/L	<0.005	mg/L	<0.005	mg/L	<0.005	mg/L	--	--	<50	mg/L	--	--	--	--	--	--	--	--	--	--	--	--
S-10-B2	10	5/14/1991	<1	mg/L	<10	mg/L	<0.005	mg/L	0.011	mg/L	<0.005	mg/L	<0.005	mg/L	--	--	120	mg/L	--	--	--	--	16	mg/L	23	mg/L	16	mg/L	65	mg/L	55	mg/L
S-18-B2	18	5/14/1991	<1	mg/L	<10	mg/L	<0.005	mg/L	0.006	mg/L	<0.005	mg/L	<0.005	mg/L	--	--	<50	mg/L	--	--	--	--	15	mg/L	27	mg/L	16	mg/L	57	mg/L	51	mg/L
S-10-B3	10	5/14/1991	<1	mg/L	<10	mg/L	<0.005	mg/L	0.01	mg/L	<0.005	mg/L	<0.005	mg/L	--	--	<50	mg/L	--	--	--	--	11	mg/L	24	mg/L	10	mg/L	41	mg/L	48	mg/L
S-17-B3	17	5/14/1991	<1	mg/L	<10	mg/L	<0.005	mg/L	0.007	mg/L	<0.005	mg/L	<0.005	mg/L	--	--	<50	mg/L	--	--	--	--	11	mg/L	22	mg/L	11	mg/L	52	mg/L	43	mg/L
11124-HP1-S-21-21.5	21	9/29/1994	<1	mg/kg	--	--	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11124-HP2-S-11-11.5	11	9/29/1994	160	mg/kg	--	--	1.5	mg/kg	<0.4	mg/kg	3.3	mg/kg	12	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11124-HP3-S-21-21.5	21	9/29/1994	<1	mg/kg	--	--	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OWS-1.0.5'	0.5	12/12/1996	970	mg/kg	45	mg/kg	ND	mg/kg	0.8	mg/kg	20	mg/kg	90	mg/kg	--	--	--	--	--	--	8.3	mg/kg	8.3	mg/kg	8.3	mg/kg	8.3	mg/kg	8.3	mg/kg	8.3	mg/kg
OWS-1.2'	2	12/12/1996	750	mg/kg	150	mg/kg	ND	mg/kg	0.6	mg/kg	16	mg/kg	73	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB1-5' [1]	5	4/21/2004	<1.0	mg/kg	--	--	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB1-14' [1]	14	4/21/2004	<1.0	mg/kg	--	--	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB2-5' [1]	5	4/21/2004	<1.0	mg/kg	--	--	<0.50	mg/kg	<0.50	mg/kg	<0.50	mg/kg	<0.50	mg/kg	<0.50	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB2-10' [1]	10	4/21/2004	89	mg/kg	--	--	<0.50	mg/kg	<0.50	mg/kg	<0.50	mg/kg	<0.50	mg/kg	0.0066	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB3-5' [1]	5	4/21/2004	99	mg/kg	--	--	<0.50	mg/kg	<0.50	mg/kg	<0.50	mg/kg	0.62	mg/kg	<0.50	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB3-10' [1]	10	4/21/2004	<1.0	mg/kg	--	--	<0.50	mg/kg	<0.50	mg/kg	<0.50	mg/kg	<0.50	mg/kg	<0.50	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB4-5' [1]	5	4/21/2004	<1.0	mg/kg	--	--	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<50	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB4-10' [1]	10	4/21/2004	1.4	mg/kg	--	--	0.011	mg/kg	<0.0050	mg/kg	0.005	mg/kg	0.011	mg/kg	0.034	mg/kg	<50	mg/kg	--	--	--	--	--	--	--	--	11	mg/kg	--	--	--	--
WO-1-4' [1]	4	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<50	mg/kg	--	--	--	--	--	--	--	--	5.6	mg/kg	--	--	--	--
WO-2-4' [1]	4	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<50	mg/kg	--	--	--	--	--	--	--	--	6.0	mg/kg	--	--	--	--
SW-1-5.5' [1]	5.5	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	--	--	--	--	--	--	--	--	--	--	7.9	mg/kg	--	--	--	--
SW-2-5.5' [1]	5.5	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	0.0056	mg/kg	0.021	mg/kg	<0.005	mg/kg	0.014	mg/kg	<0.005	mg/kg	--	--	--	--	--	--	--	--	--	--	2.2	mg/kg	--	--	--	--
SW-3-5.5' [1]	5.5	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	--	--	--	--	--	--	--	--	--	--	6.0	mg/kg	--	--	--	--
SW-4-5.5' [1]	5.5	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	0.0096	mg/kg	--	--	--	--	--	--	--	--	--	--	3.0	mg/kg	--	--	--	--
SW-4-5.5' [1]	5.5	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	--	--	--	--	--	--	--	--	--	--	5.2	mg/kg	--	--	--	--
SW-6-5.5' [1]	5.5	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	--	--	--	--	--	--	--	--	--	--	6.9	mg/kg	--	--	--	--
SW-7-5.5' [1]	5.5	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	--	--	--	--	--	--	--	--	--	--	4.0	mg/kg	--	--	--	--
SW-8-5.5' [1]	5.5	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	--	--	--	--	--	--	--	--	--	--	8.0	mg/kg	--	--	--	--
SW-9-5.5' [1]	5.5	12/2/2004	<1.0	mg/kg	22	mg/kg	<0.005	mg/kg	0.11	mg/kg	0.059	mg/kg	0.29	mg/kg	<0.005	mg/kg	--	--	--	--	--	--	--	--	--	--	4.8	mg/kg	--	--	--	--
PL-1-3' [1]	3	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.010	mg/kg	--	--	--	--	--	--	--	--	--	--	4.4	mg/kg	--	--	--	--
PL-2-4' [1]	4	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	0.0097	mg/kg	0.0056	mg/kg	0.021	mg/kg	<0.010	mg/kg	--	--	--	--	--	--	--	--	--	--	7.4	mg/kg	--	--	--	--
PL-3-4' [1]	4	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	0.033	mg/kg	0.12	mg/kg	0.031	mg/kg	0.073	mg/kg	<0.010	mg/kg	--	--	--	--	--	--	--	--	--	--	6.3	mg/kg	--	--	--	--
PL-4-4' [1]	4	12/2/2004	160	mg/kg	3.3	mg/kg	<0.50	mg/kg	<0.50	mg/kg	<0.50	mg/kg	<0.50	mg/kg	<2.5	mg/kg	--	--	--	--	--	--	--	--	--	--	2.9	mg/kg	--	--	--	--
PL-5-5.5' [1]	5.5	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.010	mg/kg	--	--	--	--	--	--	--	--	--	--	5.0	mg/kg	--	--	--	--
PL-6-5.5' [1]	5.5	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.010	mg/kg	--	--	--	--	--	--	--	--	--	--	5.2	mg/kg	--	--	--	--
D-1-3' [1]	3	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.010	mg/kg	--	--	--	--	--	--	--	--	--	--	5.0	mg/kg	--	--	--	--
D-2-3' [1]	3	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.010	mg/kg	--	--	--	--	--	--	--	--	--	--	5.2	mg/kg	--	--	--	--
D-3-3' [1]	3	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.005	mg/kg	<0.010	mg/kg	--	--	--	--	--	--	--	--	--	--	7.4	mg/kg	--	--	--	--
D-4-4.5' [1]	4.5	12/2/2004	<1.0	mg/kg	<1.0	mg/kg	0.0063	mg/kg	0.011	mg/kg	0.0072	mg/kg	0.039	mg/kg	<0.010	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
H-1-6' [1]	6	12/2/2004	--	--	--	--	--	--	--	--	--	--	--	--	--	--	136	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
H-2-6' [1]	6	12/2/2004	--	--	--	--	--	--	--	--	--	--	--	--	--	--	814	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
H-3/CL-3-6' [1]	6	12/2/2004	--	--	--	--	--	--	--	--	--	--	--	--	--	--	168	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--

Table 1: Historical Soil Results
BP # 11124
3315 High Street, Oakland, CA
Local Case # RO0000239

Location	Sample Depth (ft bgs)	Sample Date	TPHg		TPHd		Benzene		Toluene		Ethylbenzene		Xylene		MTBE		Total O & G		Total Hydrocarbons		Methylene chloride		Cadmium		Chromium		Lead		Nickel		Zinc	
SB-1 (6.5-7.0') [2]	6.5	2/20/2006	<0.094	mg/kg	NA	--	<0.0047	mg/kg	<0.0047	mg/kg	<0.0047	mg/kg	<0.0047	mg/kg	<0.0047	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1 (10-10.5') [2]	10	2/20/2006	<0.093	mg/kg	NA	--	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	0.024	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1 (15.5-16') [2]	15.5	2/20/2006	<0.091	mg/kg	NA	--	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	0.072	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1 (19.5-20') [2]	19.5	2/20/2006	<0.50	mg/kg	NA	--	<0.025	mg/kg	<0.025	mg/kg	<0.025	mg/kg	<0.025	mg/kg	0.068	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1 (23.5-24') [2]	23.5	2/20/2006	<0.10	mg/kg	NA	--	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	0.09	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1 (30-30.5') [2]	30	2/20/2006	<0.092	mg/kg	NA	--	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	0.032	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1 (35.5-36') [2]	35.5	2/20/2006	<0.093	mg/kg	NA	--	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	0.066	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1 (37.5-38') [2]	37.5	2/20/2006	<0.10	mg/kg	NA	--	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2 (6.5-7.0') [2]	6.5	2/20/2006	<0.096	mg/kg	NA	--	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2 (10-10.5') [2]	10	2/20/2006	<5.0	mg/kg	NA	--	<0.10	mg/kg	<0.10	mg/kg	<0.10	mg/kg	<0.10	mg/kg	<0.050	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2 (15-15.5') [2]	15	2/20/2006	62	mg/kg	NA	--	<0.25	mg/kg	<0.25	mg/kg	0.69	mg/kg	1.7	mg/kg	<0.12	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2 (19.5-20') [2]	19.5	2/20/2006	<0.086	mg/kg	NA	--	<0.0043	mg/kg	<0.0043	mg/kg	0.0045	mg/kg	0.0091	mg/kg	0.01	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2 (25-25.5') [2]	25	2/20/2006	0.23	mg/kg	NA	--	0.0068	mg/kg	<0.0047	mg/kg	0.0096	mg/kg	0.022	mg/kg	0.03	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-2 (30-30.5') [2]	30	2/20/2006	0.14	mg/kg	NA	--	<0.0042	mg/kg	<0.0042	mg/kg	0.0047	mg/kg	0.012	mg/kg	0.012	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-3 (10-10.5') [2]	10	2/20/2006	4.9	mg/kg	NA	--	<0.024	mg/kg	<0.024	mg/kg	<0.024	mg/kg	<0.024	mg/kg	<0.024	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-3 (15-15.5') [2]	15	2/20/2006	14	mg/kg	NA	--	0.11	mg/kg	<0.050	mg/kg	0.13	mg/kg	0.45	mg/kg	<0.025	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-3 (19.5-20') [2]	19.5	2/20/2006	0.44	mg/kg	NA	--	0.0053	mg/kg	<0.0044	mg/kg	0.013	mg/kg	0.027	mg/kg	0.015	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-3 (25-25.5') [2]	25	2/20/2006	0.45	mg/kg	NA	--	0.013	mg/kg	<0.0044	mg/kg	0.021	mg/kg	0.062	mg/kg	<0.0044	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-3 (30-30.5') [2]	30	2/20/2006	0.32	mg/kg	NA	--	<0.0045	mg/kg	<0.0045	mg/kg	0.013	mg/kg	0.039	mg/kg	<0.0045	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-4 (5-5.5') [2]	5	2/21/2006	<0.092	mg/kg	NA	--	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-4 (10-10.5') [2]	10	2/21/2006	<0.093	mg/kg	9.5	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<5.0	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
SB-4 (15-15.5') [2]	15	2/21/2006	<0.096	mg/kg	<1.0	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<5.0	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
SB-4 (19.5-20') [2]	19.5	2/21/2006	<0.097	mg/kg	NA	--	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-4 (23.5-24') [2]	23.5	2/21/2006	<0.095	mg/kg	1.9	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<5.0	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
SB-4 (25-25.5') [2]	25	2/21/2006	<0.098	mg/kg	NA	--	<0.0049	mg/kg	<0.0049	mg/kg	<0.0049	mg/kg	<0.0049	mg/kg	<0.0049	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-4 (30-30.5') [2]	30	2/21/2006	<0.098	mg/kg	NA	--	<0.0049	mg/kg	<0.0049	mg/kg	<0.0049	mg/kg	<0.0049	mg/kg	<0.0049	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-5 (6-6.5') [2]	6	2/21/2006	<0.092	mg/kg	26	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<5.0	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
SB-5 (10-10.5') [2]	10	2/21/2006	<0.093	mg/kg	9.5	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<0.0046	mg/kg	<5.0	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
SB-5 (15-15.5') [2]	15	2/21/2006	<0.096	mg/kg	<1.0	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<5.0	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
SB-5 (23.5-24') [2]	23.5	2/21/2006	<0.095	mg/kg	1.9	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<0.0048	mg/kg	<5.0	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--
MW-5-11' [2]	11	12/12/2006	<0.10	mg/kg	1.7	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	0.22	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-5-21' [2]	21	12/12/2006	<0.10	mg/kg	1.6	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	0.073	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-5-31' [2]	31	12/12/2006	<0.10	mg/kg	1.4	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6-11' [2]	11	12/12/2006	56	mg/kg	9.5	mg/kg	0.41	mg/kg	<0.0050	mg/kg	0.92	mg/kg	5.2	mg/kg	<0.025	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6-21' [2]	21	12/12/2006	<0.10	mg/kg	1.3	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	0.012	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6-28' [2]	28	12/12/2006	<0.10	mg/kg	1.4	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	<0.0050	mg/kg	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
DRO = Diesel Range Organics
ft bgs = feet below ground surface
TPHg = Total Petroleum Hydrocarbons as Gasoline
TPHd = Total Petroleum Hydrocarbons as Diesel
mg/kg = milligrams per kilogram
mg/L = milligrams per liter
MTBE = Methyl tert-butyl ether
- = not analyzed
< = analyte not detected, result is less than value provided
1 = Secor soil samples
2 = URS soil samples
Original laboratory results for samples OWS-1,0.5' and OWS-1,2' are reported as mg/kg (ppm)

Table 2: Metal Concentrations of 1991 Soil Borings
BP # 11124
3315 High Street, Oakland, CA
Local Case # RO0000239

Sample ID	Sample Depth (feet bgs)	Sample Date	Cadmium	Chromium	Lead	Nickel	Zinc
			mg/L				
S-B1	5	5/13/1991	NA	NA	NA	NA	NA
S-B1	15	5/13/1991	NA	NA	NA	NA	NA
S-B2a	10	5/14/1991	16	23	16	65	55
S-B2b	18.5	5/14/1991	15	27	16	57	51
S-B3	10	5/14/1991	11	24	10	41	48
S-B3	17.5	5/14/1991	11	22	11	52	43

Notes:
ft bgs = feet below ground surface
NA = analysis not requested

Table 3: Historical Groundwater Results
BP # 11124
3315 High Street, Oakland, CA
Local Case # RO0000239

Location	Sample Date	Notes	TOC Elevation (ft)	DTW (ft btoc)	Product Thickness (ft)	Water Level Elevation (ft)	TPH g	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	TPHd
							µg/L						
THP-1[1]	9/29/2004		--	--	--	--	<50	<0.5	<0.5	<0.5	2.4	--	<50
THP-2[2]	9/29/2004		--	--	--	--	95	3.9	5.0	4.4	19	--	<50
THP-3[3]	9/29/2004		--	--	--	--	<50	<0.5	<0.5	<0.5	0.7	--	870
SB-1 @ 19.4[4]	2/20/2006		--	--	--	--	120	<1.0	<1.0	<1.0	<1.0	110	--
SB-2 @ 8.8[5]	2/20/2006		--	--	--	--	1300	60	<1.0	63	79	120	--
SB-3 @ 19.2[6]	2/20/2006		--	--	--	--	450	30	<0.5	42	66	<0.5	--
SB-4 @ 13.2[7]	2/20/2006		--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
SB-5 @ 10.7[8]	2/20/2006		--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	72
MW-1	10/19/2004	P	154.99	10.5	--	144.49	<50	<0.50	<0.50	<0.50	<0.50	14	--
MW-1	1/13/2005	P	154.99	9	--	145.99	<50	<0.50	<0.50	<0.50	<0.50	33	--
MW-1	2/24/2006	P	154.99	10.42	--	144.57	55	<0.50	<0.50	<0.50	<0.50	51	--
MW-1	5/30/2006	P	154.99	10.94	--	144.05	50	<0.50	<0.50	<0.50	<0.50	58	--
MW-1	8/28/2006	P	154.99	10.61	--	144.38	50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-1	11/2/2006	P	154.99	10.83	--	144.16	<50	<0.50	<0.50	<0.50	<0.50	9.8	--
MW-1	2/6/2007	P	157.34	9.88	--	147.46	<50	<0.50	<0.50	<0.50	<0.50	1.1	--
MW-1	3/13/2007	P	157.34	9.62	--	147.72	--	--	--	--	--	--	<48
MW-1	5/8/2007	P	157.34	9.62	--	147.72	<50	<0.50	<0.50	<0.50	<0.50	19	<49
MW-1	8/7/2007	P	157.34	10.82	--	146.52	<50	<0.50	<0.50	<0.50	<0.50	5	<49
MW-1	11/13/2007	--	157.34	10.52	--	146.82	--	--	--	--	--	--	<48
MW-1	12/20/2007	NP	157.34	10.47	--	146.87	<50	<0.50	<0.50	<0.50	<0.50	10	--
MW-1	2/29/2008	P	157.34	9.32	--	148.02	<50	<0.50	<0.50	<0.50	<0.50	7.4	<50
MW-1	5/23/2008	P	157.34	10.73	--	146.61	<50	<0.50	<0.50	<0.50	<0.50	1.9	<50
MW-1	8/20/2008	P	157.34	11.35	--	145.99	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<50
MW-1	11/13/2008	P	157.34	10.73	--	146.61	<50	<0.50	<0.50	<0.50	<0.50	0.92	--
MW-1	2/5/2009	P	157.34	10.43	--	146.91	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-1	5/14/2009	NP	157.34	9.77	--	147.57	<50	<0.50	<0.50	<0.50	<0.50	2.6	--
MW-1	8/4/2009	P	157.34	11.31	--	146.03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-1	10/28/2009	P	157.34	10.34	--	147	<50	<0.5	<0.5	<0.5	<1.0	<0.50	--

Table 3: Historical Groundwater Results
BP # 11124
3315 High Street, Oakland, CA
Local Case # RO0000239

Location	Sample Date	Notes	TOC Elevation (ft)	DTW (ft btoc)	Product Thickness (ft)	Water Level Elevation (ft)	TPH g	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	TPHd
							µg/L						
MW-2	10/19/2004	--	152.02	9.45	9.45	142.57	--	--	--	--	--	--	--
MW-2	1/13/2005	P	152.02	6.43	--	145.59	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-2	2/24/2006	P	152.02	7.88	--	144.14	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-2	5/30/2006	P	152.02	7.98	--	144.04	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-2	8/28/2006	P	152.02	9.38	--	142.64	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-2	11/2/2006	--	152.02	9.85	--	142.17	--	--	--	--	--	--	--
MW-2	2/6/2007	P	154.35	8.4	--	145.95	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-2	3/13/2007	P	154.35	7.55	--	146.8	--	--	--	--	--	--	52
MW-2	5/8/2007	P	154.35	7.7	--	146.65	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<48
MW-2	8/7/2007	P	154.35	9.77	--	144.58	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<47
MW-2	11/13/2007	--	154.35	9.3	--	145.05	--	--	--	--	--	--	<48
MW-2	12/20/2007	NP	154.35	9.34	--	145.01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-2	2/29/2008	P	154.35	7.35	--	147	<50	<0.50	<0.50	<0.50	<0.50	<0.50	64
MW-2	5/23/2008	P	154.35	9.28	--	145.07	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<50
MW-2	8/20/2008	P	154.35	10.74	--	143.61	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<50
MW-2	11/13/2008	P	154.35	10.11	--	144.24	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-2	2/5/2009	--	154.35	9.41	--	144.94	--	--	--	--	--	--	--
MW-2	5/14/2009	NP	154.35	8.52	--	145.83	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-2	8/4/2009	--	154.35	10.58	--	143.77	--	--	--	--	--	--	--
MW-2	10/28/2009	--	154.35	9.39	--	144.96	--	--	--	--	--	--	--

Table 3: Historical Groundwater Results
BP # 11124
3315 High Street, Oakland, CA
Local Case # RO0000239

Location	Sample Date	Notes	TOC Elevation (ft)	DTW (ft btoc)	Product Thickness (ft)	Water Level Elevation (ft)	TPH g	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	TPHd
							µg/L						
MW-4	10/19/2004	P	152.77	9.55	--	143.22	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-4	1/13/2005	--	152.77	--	--	--	--	--	--	--	--	--	--
MW-4	2/24/2006	P	152.77	7.86	--	144.91	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-4	5/30/2006	P	152.77	8.04	--	144.73	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-4	8/28/2006	P	152.77	9.36	--	143.41	<50	<0.50	<0.50	<0.50	<0.50	16	--
MW-4	11/2/2006	P	152.77	9.92	--	142.85	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-4	2/6/2007	P	155.1	8.4	--	146.7	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-4	3/13/2007	P	155.1	7.56	--	147.54	--	--	--	--	--	--	<49
MW-4	5/8/2007	P	155.1	7.68	--	147.42	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<48
MW-4	8/7/2007	P	155.1	9.83	--	145.27	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<48
MW-4	11/13/2007	--	155.1	9.28	--	145.82	--	--	--	--	--	--	<48
MW-4	12/20/2007	NP	155.1	9.23	--	145.87	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-4	2/29/2008	P	155.1	7.27	--	147.83	<50	<0.50	<0.50	<0.50	<0.50	1.5	<50
MW-4	5/23/2008	P	155.1	9.32	--	145.78	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<50
MW-4	8/20/2008	P	155.1	10.86	--	144.24	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<50
MW-4	11/13/2008	P	155.1	10.23	--	144.87	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-4	2/5/2009	--	155.1	9.32	--	145.78	--	--	--	--	--	--	--
MW-4	5/14/2009	NP	155.1	8.4	--	146.7	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW-4	8/4/2009	--	155.1	10.61	--	144.49	--	--	--	--	--	--	--
MW-4	10/28/2009	--	155.1	9.38	--	145.72	--	--	--	--	--	--	--

Table 3: Historical Groundwater Results
BP # 11124
3315 High Street, Oakland, CA
Local Case # RO0000239

Location	Sample Date	Notes	TOC Elevation (ft)	DTW (ft btoc)	Product Thickness (ft)	Water Level Elevation (ft)	TPH g	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	TPHd
							µg/L						
MW-5	3/13/2007	P	155.45	8.72	--	146.73	880	<0.50	<0.50	<0.50	<0.50	1,400	<48
MW-5	5/8/2007	P	155.45	8.42	--	147.03	920	<5.0	<5.0	<5.0	<5.0	1,300	<48
MW-5	8/7/2007	P	155.45	9.88	--	145.57	1,300	<10	<10	<10	<10	1,600	<48
MW-5	11/13/2007	P	155.45	9.68	--	145.77	950	<10	<10	<10	<10	1,400	<48
MW-5	2/29/2008	P	155.45	8.15	--	147.3	<50	<0.50	<0.50	<0.50	<0.50	1,100	<50
MW-5	5/23/2008	P	155.45	9.8	--	145.65	<50	<20	<20	<20	<20	1,200	<50
MW-5	8/20/2008	P	155.45	10.88	--	144.57	<50	<20	<20	<20	<20	1,200	<50
MW-5	11/13/2008	P	155.45	12.1	--	143.35	<50	<20	<20	<20	<20	1,100	--
MW-5	2/5/2009	P	155.45	9.64	--	145.81	<50	<20	<20	<20	<20	270	--
MW-5	5/14/2009	P	155.45	9.07	--	146.38	93	<10	<10	<10	<10	470	--
MW-5	8/4/2009	P	155.45	9.61	--	145.84	<50	<20	<20	<20	<20	890	--
MW-5	10/28/2009	P	155.45	9.68	--	145.77	370	<0.5	<0.5	<0.5	<1.0	830	--
MW-6	3/13/2007	P	154.59	7.82	--	146.77	86	<0.50	<0.50	<0.50	<0.50	88	<48
MW-6	5/8/2007	P	154.59	7.92	--	146.67	88	<0.50	<0.50	<0.50	<0.50	120	<48
MW-6	8/7/2007	P	154.59	9.85	--	144.74	67	<0.50	<0.50	<0.50	<0.50	85	<47
MW-6	11/13/2007	P	154.59	9.71	--	144.88	67	<1.0	<1.0	<1.0	<1.0	98	<48
MW-6	2/29/2008	P	154.59	8.86	--	145.73	<50	<0.50	<0.50	<0.50	<0.50	130	<50
MW-6	5/23/2008	P	154.59	9.98	--	144.61	<50	<2.5	<2.5	<2.5	<2.5	150	<50
MW-6	8/20/2008	P	154.59	10.98	--	143.61	<50	<2.5	<2.5	<2.5	<2.5	140	<50
MW-6	11/13/2008	P	154.59	10.7	--	143.89	<50	<2.5	<2.5	<2.5	<2.5	160	--
MW-6	2/5/2009	P	154.59	10.85	--	143.74	<50	<2.5	<2.5	<2.5	<2.5	160	--
MW-6	5/14/2009	P	154.59	8.61	--	145.98	<50	<1.0	<1.0	<1.0	<1.0	66	--
MW-6	8/4/2009	P	154.59	10.37	--	144.22	<50	<2.5	<2.5	<2.5	<2.5	140	--
MW-6	10/28/2009	P	154.59	9.48	--	145.11	81	<0.5	<0.5	<0.5	<1.0	120	--

Table 3: Historical Groundwater Results
BP # 11124
3315 High Street, Oakland, CA
Local Case # RO0000239

Location	Sample Date	Notes	TOC Elevation (ft)	DTW (ft btoc)	Product Thickness (ft)	Water Level Elevation (ft)	TPHg	Benzene	Toluene	Ethylbenzene	Xylene	MTBE	TPHd
							µg/L						

Notes:
P = well purged prior to sampling
NP = well not purged prior to sampling
TOC = Top of Casing
DTW = Depth to Water
ft = feet
TPHg = Total Petroleum Hydrocarbons as Gasoline
MTBE = Methyl tert-butyl ether
TPHd = Total Petroleum Hydrocarbons as Diesel
µg/L = micrograms per liter
- = not analyzed
< = analyte not detected, result is less than value provided
[1] = sample ID is 11124-HP1-W; collected at 35 to 35.5 feet bgs; additional analyte results include mineral spirits <50 µg/L, jet fuel <50 µg/L, kerosene <50 µg/L, and hydraulic oil <250 µg/L.
[2] = sample ID is 11124-HP2-W; collected at 35 to 35.5 feet bgs; additional analyte results include mineral spirits <50 µg/L, jet fuel <50 µg/L, kerosene <50 µg/L, and hydraulic oil <250 µg/L.
[3] = sample ID is 11124-HP3-W; collected at 35 to 35.5 feet bgs; additional analyte results include mineral spirits <50 µg/L, jet fuel <50 µg/L, kerosene <50 µg/L, and hydraulic oil <250 µg/L.
[4] = additional analyte results include TBA <40 µg/L
[5] = additional analyte results include TBA <40 µg/L
[6] = additional analyte results include TBA <20 µg/L
[7] = additional analyte results include TBA <20 µg/L
[8] = additional analyte results include TBA <20 µg/L and Oil and Grease <1,100 µg/L

Table 4: Historical Groundwater Flow Directions and Gradients
BP # 11124
3315 High Street, Oakland, CA
Local Case # RO0000239

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient (ft/ft)
7/15/1991	Southwest	0.0174
10/15/1991	Southwest	0.0182
1/15/1992	South-southwest	0.014
4/17/1992	South	0.014
9/30/1992	South-southwest	0.018
12/17/1992	North	0.01
3/15/1993	South	0.007
10/19/2004	South-southwest	0.022
2/24/2006	Southeast	0.01
5/30/2006	East-southeast	0.007
8/28/2006	South	0.012
11/2/2006	South	0.013
3/13/2007	Southwest	0.006
5/8/2007	South-southeast	0.009
8/7/2007	Southwest	0.01
12/20/2007	Southwest	0.01
2/29/2008	Southwest	0.009
5/23/2008	Southwest	0.01
8/20/2008	Southwest	0.02
11/13/2008	Southwest	0.09
2/5/2009	Southwest	0.01
5/14/2009	Southwest	0.01
8/4/2009	Southwest	0.02
10/28/2009	Southwest	0.01

Table 5: Most Recent Maximum Concentration of Contaminants Detected in Soil and Groundwater
BP # 11124
3315 High Street, Oakland, CA
Local Case # RO0000239

Analyte	Soil [1]							Groundwater				
	Most Recent Concentration Observed (mg/kg)	Sample Depth (feet bgs)	Sample Date	Maximum Concentration Observed (mg/kg)	Sample Depth (feet bgs)	Sample Date	Commercial ESL (mg/kg)	Most Recent Concentration Observed (µg/L)	Sample Date	Maximum Concentration Observed (µg/L)	Sample Date	Commerical ESL (µg/L)
TPHg	56 (MW-6-11)	11	12/12/2006	**970** (OWS-1-0.5')	0.5	12/12/1996	83	**370** (MW-5)	10/28/2009	**1,300** (MW-5)	8/7/2007	100
Benzene	**0.41** (MW-6-11)	11	12/12/2006	0.033 (PL-3@4)	4.0	12/2/2004	0.044	ND	--	ND	--	1.0
Toluene	ND	--	12/12/2006	0.8 (OWS-1-0.5')	0.5	12/12/1996	2.9	ND	--	ND	--	40
Ethylbenzene	0.92 (MW-6-11)	11	12/12/2006	**20** (OWS-1-0.5')	0.5	12/12/1996	3.3	ND	--	ND	--	30
Xylenes	**5.2** (MW-6-11)	11	12/12/2006	**90** (OWS-1-0.5')	0.5	12/12/1996	2.3	ND	--	ND	--	20
MTBE	**0.22** (MW-5-11)	11	12/12/2006	**0.034** (SB4-10)	10	4/21/2004	0.023	**830** (MW-5)	10/28/2009	**1,600** (MW-5)	8/7/2007	5.0
TPHd	**9.5** (MW-6-11)	11	12/12/2006	**150** (OWS-1,2')	2.0	12/12/1996	0.83	ND	--	64 (MW-2)	2/29/2008	100

[1] Soil results are reported from the vadose zone, which does not exceed 12 feet bgs
Bold = exceedances of commercial ESL
TPHg = Total Petroleum Hydrocarbons as Gasoline
MTBE = methyl tert-butyl ether
TPHd = Total Petroleum Hydrocarbons as Diesel
mg/kg = milligrams per kilogram
µg/L = micrograms per liter
bgs = below ground surface
ND = non-detect, below laboratory detection limits
GRO Commerical ESL values are listed as TPH (gasolines) in Table A of *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*
DRO Commercial ESL values are listed as TPH (middle distillates) in Table A of Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater

Table 6: Summary of Statistical Analysis
BP # 11124
3315 High Street, Oakland, CA
Local Case # RO0000239

		Range (µg/L)			Linear Regression Analysis							
Well	Constituent	Minimum	Maximum	ESL	Start	End	Correlation Coefficient, R^2	p-value of Correlation	Trend Direction	Significant Trend?	Projected Year to Cleanup Goal	% of data as detects
MW-5												
	MTBE	270	1,600	5	3/13/2007	10/28/2009	0.40	0.03	Downward	yes	9/3/2022	100
	TPHg	<50	1,300	100	3/13/2007	10/28/2009	0.39	0.03	Downward	yes	1/5/2009**	50
MW-6												
	MTBE	66	160	5	3/13/2007	10/28/2009	ernible trend, so trend analysis cannot be used to predict time to ren					100
	TPHg	<50	88	100	3/13/2007	10/28/2009	Maximum historical concentration already below ESL					42

Notes:
TPHg = Total Petroleum Hydrocarbons as Gasoline
MTBE = methyl tert-butyl ether
µg/L = Micrograms per liter
ESL - Environmental Screening Level
<< = Substantially less than
NA = Not applicable
** = The trend analysis indicated that MCL has been reached, recent data exceeded ESL, but the trend predicts that the well should be in compliance in a relatively short period of time.

DRILL RIG Hollow Stem	SURFACE ELEVATION -----	LOGGED BY JCW
DEPTH TO GROUNDWATER As noted	BORING DIAMETER 8"	DATE DRILLED 7/29/86

DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE	DEPTH (FEET)	SAMPLER	UNCONFINED COMPRESSIVE STRENGTH (KSF)	WATER CONTENT (%)	DRY DENSITY (PCF)	PENETRATION RESISTANCE (BLOWS/FT.)
ASPHALT, BASE ROCK AND FILL									
SILTY CLAY with rock fragments; dry	tan	stiff	CL						
Cobbles; damp				5					
Grading to clayey gravel; damp	tan to brown		CL GC	10			▽		
GRAVELLY CLAY, with some fine sand; damp to moist No product odor	tan to light brown	stiff	CL						
Increasing clay at 17 feet, moist; no product odor				15					
				20					

EXPLORATORY BORING LOG

MOBIL OIL CORPORATION
HIGH STREET, OAKLAND

PROJECT NO.	DATE	BORING NO.
H182-21	8/86	MW-1

DRILL RIG	Hollow Stem	SURFACE ELEVATION	----	LOGGED BY	JCW
DEPTH TO GROUNDWATER	As Noted	BORING DIAMETER	8"	DATE DRILLED	7/29/86

DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE	DEPTH (FEET)	SAMPLER	UNCONFINED COMPRESSIVE STRENGTH (KSF)	WATER CONTENT (%)	DRY DENSITY (PCF)	PENETRATION RESISTANCE (BLOWS/FT.)
GRAVELLY CLAY (CONTD)	light brown	stiff to very stiff	CL						
CLAYEY GRAVEL; wet, no product odor	light brown	dense	GC	25					
CLAYEY SAND; grading to sandy clay	light brown	medium dense	SC	30					
TOTAL DEPTH = 35.0 feet				35					

EXPLORATORY BORING LOG

MOBIL OIL CORPORATION
HIGH STREET, OAKLAND

PROJECT NO.	DATE	BORING NO.
H182-21	8/86	MW-1

MOBIL OIL CORPORATION

OAKLAND, CALIFORNIA

MW-1

Well completed to 35.0 feet in depth with 2-inch Class 160 PVC casing, flush-threaded joints. Screen (.020-inch slot) set from 7.0 to 35.0 feet. 6 X 12 Monterey sand placed from 5.5 to 35.0 feet, bentonite pellets placed from 5.0 to 5.5 feet, and concrete seal placed from 0 to 5.0 feet.

DRILL RIG Hollow Stem	SURFACE ELEVATION ---	LOGGED BY JCW
DEPTH TO GROUNDWATER As Noted	BORING DIAMETER 8"	DATE DRILLED 7/30/86

DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE	DEPTH (FEET)
ASPHALT AND BASE ROCK				
SILTY CLAY with rock fragments; dry	tan	stiff	CL	
Large rock fragments				5
Damp; no product odor	motld tan to gray to brown			
Decreasing rock fragments				10
Slightly sandy No product odor			CL SC	15
CLAYEY GRAVEL	light brown	dense	GC	20

SAMPLER | UNCONFINED COMPRESSIVE STRENGTH (KSF) | WATER CONTENT (%) | DRY DENSITY (PCF) | PENETRATION RESISTANCE (BLOWS/FT.)

▽

EXPLORATORY BORING LOG

MOBIL OIL CORPORATION
HIGH STREET, OAKLAND

PROJECT NO.	DATE	BORING NO.
H182-21	8/86	MW-2

DRILL RIG Hollow Stem	SURFACE ELEVATION ----	LOGGED BY JCW
DEPTH TO GROUNDWATER As Noted	BORING DIAMETER 8"	DATE DRILLED 7/30/86

DESCRIPTION AND CLASSIFICATION				DEPTH (FEET)	SAMPLER	UNCONFINED COMPRESSIVE STRENGTH (KSF)	WATER CONTENT (%)	DRY DENSITY (PCF)	PENETRATION RESISTANCE (BLOWS/FT.)
DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE						
CLAYEY GRAVEL (CONTD)	light brown to tan	dense	GC						
Large gravel		dense to very dense		25					
TOTAL DEPTH = 30.0 feet				30					

EXPLORATORY BORING LOG

MOBIL OIL CORPORATION
HIGH STREET, OAKLAND

PROJECT NO.	DATE	BORING NO.
H182-21	8/86	MW-2

MOBIL OIL CORPORATION

OAKLAND, CALIFORNIA

MW-2

Well completed to 30.0 feet in depth with 2-inch Class 160 PVC casing, flush-threaded joints. Screen (.020-inch slot) set from 7.0 to 30.0 feet. 6 X 12 Monterey sand placed from 5.0 to 30.0 feet, bentonite pellets placed from 4.5 to 5.0 feet, and concrete seal placed from 0 to 4.5 feet.

DRILL RIG	Hollow Stem	SURFACE ELEVATION	----	LOGGED BY	JCW
DEPTH TO GROUNDWATER	As Noted	BORING DIAMETER	8"	DATE DRILLED	7/30/86

DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE	DEPTH (FEET)	SAMPLER	UNCONFINED COMPRESSIVE STRENGTH (KSF)	WATER CONTENT (%)	DRY DENSITY (PCF)	PENETRATION RESISTANCE (BLOWS/FT.)
ASPHALT AND BASE ROCK									
SILTY CLAY with rock fragments; dry	tan to brown	stiff	CL-						
Large rock fragments			CL-GC	5					
Decreasing rock fragments									
SILTY CLAY, damp No product odor	tan to gray	stiff	CL	10					
		very stiff		15					
Wet; no product odor				20			▽		

EXPLORATORY BORING LOG

MOBIL OIL CORPORATION
HIGH STREET, OAKLAND

PROJECT NO.	DATE	BORING NO.
H182-21	8/86	MW-3

DRILL RIG Hollow Stem	SURFACE ELEVATION -----	LOGGED BY JCW
DEPTH TO GROUNDWATER As Noted	BORING DIAMETER 8"	DATE DRILLED 7/30/86

DESCRIPTION AND CLASSIFICATION				DEPTH (FEET)	SAMPLER	UNCONFINED COMPRESSIVE STRENGTH (KSF)	WATER CONTENT (%)	DRY DENSITY (PCF)	PENETRATION RESISTANCE (BLOWS/FT.)
DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE						
SILTY CLAY (CONTD)	tan to gray	very stiff	CL						
			GC						
CLAYEY GRAVEL; wet	light brown								
				25					
SILTY CLAY	light brown	very stiff to hard	CL						
CLAYEY GRAVEL	light brown	dense to very dense	GC						
				30					
TOTAL DEPTH = 30.0 feet									

EXPLORATORY BORING LOG

MOBIL OIL CORPORATION
HIGH STREET, OAKLAND

PROJECT NO.	DATE	BORING NO.
H182-21	8/86	MW-3

MOBIL OIL CORPORATION

OAKLAND, CALIFORNIA

MW-3

Well completed to 30.0 feet in depth with 2-inch Class 160 PVC casing, flush-threaded joints. Screen (.020-inch slot) set from 7.0 to 30.0 feet. 6 X 12 Monterey sand placed from 5.0 to 30.0 feet, bentonite pellets placed from 4.5 to 5.0 feet, and concrete seal placed from 0 to 4.5 feet.

SECOR
International Incorporated

Logged By:	Date Drilled:	Drilling Contractor	Project Name:	Method/Equipment:	Boring Number:
Robitalille	4/21/04	WDC	CONOCOPHILLIPS #11124 Oakland	Direct Push Cont. Core	SB-1

See "Legend to Logs" for sampling method, classifications and laboratory testing methods	Boring Diam.(in.):	Surface Elev.(ft.):	Groundwater Depth (ft.):	Total Depth (ft.):	Drive wt.(lbs.):	Drop Dist.(in.):
	1.5		Not Encountered	19.0		

Well Construction	Depth, (ft.)	Sample Type	Description	PID [PPM]	SAMPLE NAME
Grout Backfill	5		**Asphalt** **Fill** Coarse gravel and sand **Sandy Clay (CL):** Dark yellowish brown, moderatly hard, moist, trace gravels to 1.5" increasing in size and percentages with depth, sand fine to very coarse, poorly sorted (0, 20, 10, 70)	0.0	
			As Above: (15, 30, 0, 55)	0.0	SB-1 -5'
	10		**Sandy Clay (CL):** Dark yellowish brown, moderatly hard, moist, sand is poorly sorted, fine to very coarse, coarse grained sand is predominate (0, 40, 10, 50)	0.0	
			Grades light gray and dark yellowish brown mottled **Clay with gravel (CL):** Light grayish brown with dark yellow and black mottling, hard, moist to wet at 10.5', gravel is fine to very fine, sand is fine to coarse (25, 15, 10, 50)	0.0	SB-1 -10'
	15		**Clay (CL):** Grayish brown, moderately soft, wet, trace sand (0, 0, 10, 90) Grades wet	0.0	
			Clay (CL): Dark grayish brown, hard moist (0, 10, 10, 80) **Sandy Clay (CL):** Dark yellowish brown, moderatly hard, moist, sand is poorly sorted, fine to very coarse, coarse grained sand is predominate (0, 40, 10, 50) Grades dry	0.0	SB-1 -14'
	20		**Clay (CL):** Grayish brown, hard, dry, trace small gravel (0, 0, 0, 100)	0.0	
			Boring terminated at 19 feet below ground surface		

The substrata descriptions above are generalized representations and based upon visual/manual classification of cuttings and/or samples obtained during drilling. Predominant material types shown on the log may contain different materials and the change from one predominant material type to another could be different than indicated. Descriptions on this log apply only at the specific location at the time of drilling and may not be representative of subsurface conditions at other locations or times.

Project No. 77CP.60124.00.0003 Date 5/6/04 TMP

Log of Boring

SB1-5.GPJ
LOG OF BOREHOLE

Figure

SECOR
International Incorporated

Logged By:	Date Drilled:	Drilling Contractor	Project Name:	Method/Equipment:	Boring Number:
Robitaille	4/21/04	WDC	CONOCOPHILLIPS #11124 Oakland	Direct Push Cont. Core	SB-2

See "Legend to Logs" for sampling method, classifications and laboratory testing methods	Boring Diam.(in.):	Surface Elev.(ft.):	Groundwater Depth (ft.):	Total Depth (ft.):	Drive wt.(lbs.):	Drop Dist.(in.):
	1.5		Not Encountered	10.0		

Well Construction	Depth, (ft.)	Sample Type	Description	PID [PPM]	SAMPLE NAME
Grout Backfill			**Asphalt**		
			Fill Sand, gravel and silt Mixed clay and fill with cobbles	0.0	
			Sandy Clay with Gravel (CL): dark grayish brown to dark redish brown with dark yellow, dark red, and black mottling, vary hard, dry, sand is poorly sorted, very fine to very coarse, gravels to cobbles (15, 30, 10, 45)	0.0	
	5			0.0	SB-2 -5'
			Silty Clay (CL): grayish brown, medium hard, moist (0, 20, 30, 50)	0.0	
			Grades moist, dire gray, moderate petoleum (gas) odor	76	SB-2 -10'
	10		Boring terminated at 10' below ground surface		
	15				
	20				

The substrata descriptions above are generalized representations and based upon visual/manual classification of cuttings and/or samples obtained during drilling. Predominant material types shown on the log may contain different materials and the change from one predominant material type to another could be different than indicated. Descriptions on this log apply only at the specific location at the time of drilling and may not be representative of subsurface conditions at other locations or times.

Project No. 77CP.60124.00.0003 Date 5/6/04 TMP

Log of Boring

SB1-5.GPJ
LOG OF BOREHOLE

Figure

SECOR
International Incorporated

Logged By:	Date Drilled:	Drilling Contractor	Project Name:	Method/Equipment:	Boring Number:
Robitalille	4/21/04	WDC	CONOCOPHILLIPS #11124 Oakland	Direct Push Cont. Core	SB-3

See "Legend to Logs" for sampling method, classifications and laboratory testing methods	Boring Diam.(in.):	Surface Elev.(ft.):	Groundwater Depth (ft.):	Total Depth (ft.):	Drive wt.(lbs.):	Drop Dist.(in.):
	1.5		Not Encountered	12.0		

Well Construction	Depth, (ft.)	Sample Type	Description	PID [PPM]	SAMPLE NAME
Grout Backfill			**Asphalt**		
			Fill sand, gravel, silt		
			Sandy Clay with Gravel (CL): dark brown then dark brown at 1.5', hard, moist to dry (10, 40, 10, 40)	8	
	5		Moderate petroleum odor	513	SB-3 -5'
			Silty Clay (CL): Grayish brown and yellowish brown with red and black mottling, moderatly soft, moist, moderate petroleum odor (5, 20, 30, 45)	538	
				185	SB-3 -8'
	10		**Sandy Clay with Gravel (CL):** dark brown then dark brown at 1.5', hard, moist to dry (10, 40, 10, 40)	37	SB-3 -10'
			Boring terminated at 12' below ground surface.		
	15				
	20				

The substrata descriptions above are generalized representations and based upon visual/manual classification of cuttings and/or samples obtained during drilling. Predominant material types shown on the log may contain different materials and the change from one predominant material type to another could be different than indicated. Descriptions on this log apply only at the specific location at the time of drilling and may not be representative of subsurface conditions at other locations or times.

Project No. 77CP.60124.00.0003 Date 5/6/04 TMP

Log of Boring

SB1-5.GPJ
LOG OF BOREHOLE

Figure

SECOR
International Incorporated

Logged By:	Date Drilled:	Drilling Contractor	Project Name:	Method/Equipment:	Boring Number:
Robitalille	**4/22/04**	**WDC**	**CONOCOPHILLIPS #11124 Oakland**	**Direct Push Cont. Core**	**SB-4**

See "Legend to Logs" for sampling method, classifications and laboratory testing methods	Boring Diam.(in.):	Surface Elev.(ft.):	Groundwater Depth (ft.):	Total Depth (ft.):	Drive wt.(lbs.):	Drop Dist.(in.):
	1.5		**Not Encountered**	**10.0**		

Well Construction	Depth, (ft.)	Sample Type	Description	PID [PPM]	SAMPLE NAME
Grout Backfill			**Asphalt**		
			Fill gravel, sand and silt		
			Sandy Clay with Gravel (CL): Dark grayish brown and dark yellowish brown mottled, hard, moist to dry, very poorly sorted sand and gravel, fint very coarse with cobbles (15, 30, 10, 45)	0.0	
	5		No petroleum odor	6	SB-4 -5'
			Clayey Sand (SC): light grayish brown, hard dry, very poorly sorted fine to coarse sand, trace gravel (0, 40, 10, 50)	3	
			Sandy Clay with Gravel (CL): Dark grayish brown and dark yellowish brown mottled, hard, moist to dry, very poorly sorted sand and gravel, fint very coarse with cobbles (15, 30, 10, 45)	3	
	10		Boring terminated at 10' below ground surface	0.0	SB-4 -10'
	15				
	20				

The substrata descriptions above are generalized representations and based upon visual/manual classification of cuttings and/or samples obtained during drilling. Predominant material types shown on the log may contain different materials and the change from one predominant material type to another could be different than indicated. Descriptions on this log apply only at the specific location at the time of drilling and may not be representative of subsurface conditions at other locations or times.

Project No. **77CP.60124.00.0003** Date **5/6/04 TMP**

Log of Boring

SB1-5.GPJ
LOG OF BOREHOLE

Figure

URS

1333 Broadway, Suite 800
Oakland, California 94612

LOG OF BORING

Borehole ID: SB-1

Total Depth: 40 feet bgs.

PROJECT INFORMATION	DRILLING INFORMATION
Project: Former BP Site #11124	**Drilling Company:** Gregg Drilling and Testing, Inc.
Site Location: 3315 High Street, Oakland, CA	**Driller:** Paul Rogers
Project Manager: Lynelle Onishi	**Type of Drilling Rig:** Geoprobe
PG: Barbara Jakub	**Drilling Method:** 2" Direct Push
Geologist: Andrew Fowler	**Sampling Method:** Continuous
Job Number: 38487462.0013001	**Date(s) Drilled:** 2/20/2006
BORING INFORMATION	
Groundwater Depth: 19.4 feet bgs.	**Boring Location:** Adjacent to former UST cavity
Air Knife or Hand Auger Depth: 5.0 feet bgs.	**Boring Diameter:** 2"
Coordinates: X Y	**Boring Type:** Exploratory

Depth (ft bgs)	Symbol	Lithologic Description	USCS	PID (ppm)	Time & Sample ID	Recovery	Comments
0		ASPHALT: 4" Asphalt					
		SANDY CLAY: Dark grayish brown (2.5Y 4/2), stiff, dry, 55% clay, 40% medium to fine sand, 5% silt, medium plasticity.	CL				Boring grouted with neat Portland Cement. Top 3" finished to grade with cement.
2		CLAYEY SAND: Dark grayish brown (2.5Y 4/2), loose, dry, 45% fine to coarse sand, 30% clay, 20% fine to coarse angular gravel up to 25 mm diameter, 5% silt.	SP				
4							
6							Top 5' logged from hand auger / airknife cuttings.
				1.6	0930 SB-1 6.5'-7'		
8		SANDY CLAY: Light olive brown (2.5Y 5/3), soft, dry, 50% clay, 35% coarse angular quartz sand, 10% fine angular gravel, 5% silt, medium plasticity, iron staining.	CL				
		CLAYEY SILT: Light yellowish brown (10YR 6/4), soft, moist, 80% silt, 20% clay, medium plasticity.	ML				
10		SANDY GRAVEL: Dark yellowish brown (10YR 4/4), dense, dry to moist, 50% angular gravel, 35% coarse sand, 15% clay, iron staining.	GP	1.6	0945 SB-1 10'-10.5'		
12		@11 feet bgs: Drilling resistance encountered					
14							
		SANDY CLAY: Light olive brown (2.5Y 5/3), dense, dry, 50% clay, 35% coarse quartz sand, 15% silt, medium to high plasticity, iron staining.	CL	2.0	1000 SB-1 15.5'-16'		
16					1250 SB-1 19.4' water sample		
18		@18 feet bgs: Same as above with minor gravel. 50% clay, 35% fine to coarse sand, 10% silt, 5% fine gravel.					
				4.2	1015 SB-1 19.5'-20'		Static water level 19.40 feet bgs
20							
22		SILTY SAND: Light olive brown (2.5Y 5/3), soft, dry, 55% fine to medium sand, 30% silt, 15% clay, low plastcity, iron staining.	SM				

URS

LOG OF BORING

Borehole ID: SB-1

Depth (ft bgs)	Symbol	Lithologic Description	USCS	PID (ppm)	Time & Sample I.D.	Recovery	Comments
24				2.6	1020 SB-1 23.5'-24'		
26		CLAYEY SILT: Yellowish brown (10YR 5/4), stiff, dry to moist, 65% silt, 20% clay, 15% coarse rounded sand, medium plasticity, no iron staining.	ML				
28		SANDY SILT@28.5 feet bgs: Sand content increase. 60% silt, 25% coarse rounded sand, 15% clay.					
30				1.8	1040 SB-1 30'-30.5'		
32							
34		SANDY SILT: Yellowish brown (10YR 5/4), soft, wet, 65% silt, 25% fine to medium sand, 10% clay, low plasticity.					▽ First water encountered at 34.5 feet bgs during drilling
36					1050 SB-1 35.5'-36'		
38		SILTY SAND: Yellowish brown (10YR 5/4), soft, saturated, 55% sand, 30% silt, 15% clay.	SM	1.4	1110 SB-1 37.5'-38'		
40		SAND: Light yellowish brown (2.5Y 6/3), very dense, dry, 95% well sorted fine sand, 5% clay, low plasticity.	SP				

REGISTERED GEOLOGIST
BARBARA J JAKUB
No. 7304
STATE OF CALIFORNIA

URS

1333 Broadway, Suite 800
Oakland, California 94612

LOG OF BORING

Borehole ID: SB-2

Total Depth: 32 feet bgs

PROJECT INFORMATION	DRILLING INFORMATION
Project: Former BP Site #11124	**Drilling Company:** Gregg Drilling and Testing, Inc.
Site Location: 3315 High Street, Oakland, CA	**Driller:** Paul Rogers
Project Manager: Lynelle Onishi	**Type of Drilling Rig:** Geoprobe
PG: Barbara Jakub	**Drilling Method:** 2" Direct Push
Geologist: Andrew Fowler	**Sampling Method:** Continuous
Job Number: 38487462.0013001	**Date(s) Drilled:** 2/20/2006

BORING INFORMATION

Groundwater Depth: 8.8 feet bgs	**Boring Location:** Adjacent to former dispenser islands
Air Knife or Hand Auger Depth: 5.0 feet bgs.	**Boring Diameter:** 2"
Coordinates: X Y	**Boring Type:** Exploratory

Depth (ft bgs)	Symbol	Lithologic Description	USCS	PID (ppm)	Time & Sample ID	Recovery	Comments
0		ASPHALT: 4" Asphalt					
		SILTY CLAY: Dark greenish gray (Gley 1 4/10Y), hard, dry, 80% clay, 20% silt, low plasticity.	CL				Boring grouted with neat Portland Cement. Top 3" finished to grade with cement.
2							
		@ 3.5 feet bgs: 80% clay, 15% silt, <5% sand					
4							
		@5 feet bgs: 70% clay, 25% silt, 5% coarse angular sand					Top 5' logged from hand auger / airknife cuttings.
6							
		@7 feet bgs: 2-inch layer of coarse angular gravel		0.5	1135 SB-2 6.5'-7'		
		SILTY SAND: Dark yellowish brown (10YR 4/4), medium stiff, dry, 60% fine to medium angular sand, 30% silt, 10% clay, iron staining.	SM		1300 SB-2 8.8' water sample		Static water level 8.80 feet bgs
8							
10				29.4	1145 SB-2 10'-10.5'		
12		CLAYEY SILT: Yellowish brown (10YR 5/4), stiff, dry, 75% silt, 25% clay, medium plasticity.	ML				
14							
16				46.7	1150 SB-2 15'-15.5'		
18		SANDY SILT: Yellowish brown (10YR 5/4), very stiff, dry, 55% silt, 35% medium to coarse angular sand, 10% clay, medium to high plastcity.					
20				1.1	1200 SB-2 19.5'-20'		
22							

URS

LOG OF BORING

Borehole ID: SB-2

Depth (ft bgs)	Symbol	Lithologic Description	USCS	PID (ppm)	Time & Sample I.D.	Recovery	Comments
24		CLAYEY SILT: Yellowish brown (10YR 5/4), stiff, moist, 45%silt, 30% medium to coarse angular sand, 25% clay, medium to high plasticity. @24 feet bgs: 2-inch layer of coarse angular gravel up to 25mm diameter, moist.		1.0	1215 SB-2 25'-25.5'		First water encountered at 23 feet bgs during drilling
26		SANDY CLAY: Yellowish brown (10YR 5/4), stiff, dry, 55% clay, 35% coarse angular sand, 10% silt, medium plasticity.	CL				
28							
30				0.2	1220 SB-2 30'-30.5'		
32							

REGISTERED GEOLOGIST
BARBARA J JAKUB
No. 7304
STATE OF CALIFORNIA

URS 1333 Broadway, Suite 800 Oakland, California 94612

LOG OF BORING

Borehole ID: SB-3

Total Depth: 32 feet bgs

PROJECT INFORMATION	DRILLING INFORMATION
Project: Former BP Site #11124	**Drilling Company:** Gregg Drilling and Testing, Inc.
Site Location: 3315 High Street, Oakland, CA	**Driller:** Paul Rogers
Project Manager: Lynelle Onishi	**Type of Drilling Rig:** Geoprobe
PG: Barbara Jakub	**Drilling Method:** 2" Direct Push
Geologist: Andrew Fowler	**Sampling Method:** Continuous
Job Number: 38487462.0013001	**Date(s) Drilled:** 2/20/2006
BORING INFORMATION	
Groundwater Depth: 19.2 feet bgs	**Boring Location:** Adjacent to High Street property entrance
Air Knife or Hand Auger Depth: 5.0 feet bgs.	**Boring Diameter:** 2"
Coordinates: X Y	**Boring Type:** Exploratory

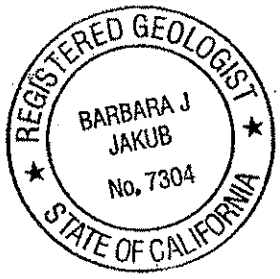
Depth (ft bgs)	Symbol	Lithologic Description	USCS	PID (ppm)	Time & Sample ID	Recovery	Comments
0		ASPHALT: 4" Asphalt					
2		SAND: Light olive brown (2.5Y 5/3), dry, 90% very fine sand, 10% clay, <1% silt, non plastic.	SP				Boring grouted with neat Portland Cement. Top 3" finished to grade with cement.
4		CLAYEY SAND @ 2.5 feet bgs: color change: Dark greenish gray (Gley 1 4/10Y), dry, 80% fine to coarse sand, 15% clay, 5% fine gravel, <1% silt, low plasticity. @ 3 feet bgs: 65% fine to coarse sand, 25% clay, 10% fine gravel, <1% silt, low plasticity.	SC				
6		@4.5 feet bgs: Cobbles, increased clay, fine to coarse sand, moderate odor. SANDY CLAY: Dark greenish gray (Gley 1 4/10Y), damp, 50% clay, 30% sand, 20% silt, medium plasticity, very strong odor, no cobbles.	CL				Top 5' logged from hand auger / airknife cuttings.
8		SANDY SILT: Dark yellowish brown (10YR 4/4), stiff, dry, 65% silt, 20% fine to medium sand, 15% clay, medium plasticity.	ML				
10		@10 to 14 feet bgs: moderate hydrocarbon odor.		89.6	1320 SB-3 10'-10.5'		
12							
14		SILTY CLAY: Dark yellowish brown (10YR 4/4), stiff, dry, 60% silt, 30% clay, 10% sand, medium to high plastcity.	CL	71.9	1330 SB-3 15'-15.5'		
16		No Recovery					
18		@17 feet bgs: Drilling resistance encountered.			1430 SB-3 19.2' water sample		▼
20		GRAVELLY CLAY: Yellowish brown (10YR 5/4), very stiff, dry, 40% clay, 25% fine angular gravel, 25% medium to coarse angular sand, 10% silt, medium plasticity.	CL	6.8	1340 SB-3 19.5'-20'		Static water level 19.20 feet bgs
22		CLAYEY SILT: Moist, clayey silt zone	ML				
		GRAVELLY CLAY: Yellowish brown (10YR 5/4), very stiff, dry, 40% clay, 25% fine angular gravel, 25% medium to coarse angular sand, 10% silt, medium plasticity.	CL				

URS

LOG OF BORING

Borehole ID: SB-3

Depth (ft bgs)	Symbol	Lithologic Description	USCS	PID (ppm)	Time & Sample I.D.	Recovery	Comments
24		@24.5 feet bgs: Wet.		4.8	1355 SB-3 25'-25.5'		▽ First water encountered at 24.5 feet bgs during drilling
26							
28		GRAVELLY CLAY: Yellowish brown (10YR 5/4), stiff, wet, 40% clay, 40% fine angular gravel, 15% silt, 5% sand, medium plasticity.					
30				0.6	1410 SB-3 30'-30.5'		
32							



URS 1333 Broadway, Suite 800 Oakland, California 94612

LOG OF BORING

Borehole ID: SB-4

Total Depth: 32 feet bgs

PROJECT INFORMATION	DRILLING INFORMATION
Project: Former BP Site #11124	**Drilling Company:** Gregg Drilling and Testing, Inc.
Site Location: 3315 High Street, Oakland, CA	**Driller:** Paul Rogers
Project Manager: Lynelle Onishi	**Type of Drilling Rig:** Geoprobe
PG: Barbara Jakub	**Drilling Method:** 2" Direct Push
Geologist: Jacob Henry	**Sampling Method:** Continuous
Job Number: 38487462.0013001	**Date(s) Drilled:** 2/21/2006
BORING INFORMATION	
Groundwater Depth: 13.2 feet bgs	**Boring Location:** SW corner of site.
Air Knife or Hand Auger Depth: 5.0 feet bgs.	**Boring Diameter:** 2"
Coordinates: X Y	**Boring Type:** Exploratory

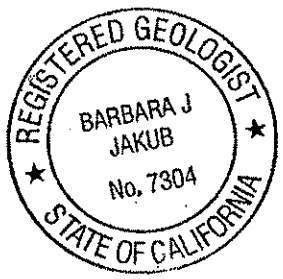
Depth (ft bgs)	Symbol	Lithologic Description	USCS	PID (ppm)	Time & Sample ID	Recovery	Comments
0		ASPHALT: 4" Asphalt					
		CLAY: Olive brown, dry, 90% clay, 10% silt, low plasticity.	CL				
2		SILTY CLAY: Olive brown, dry, 60% clay, 20% silt, 15% sand, 5% gravel, low plasticity.					Boring grouted with neat Portland Cement. Top 3" finished to grade with cement.
		CLAYEY SAND: Light olive brown (2.5Y 4/3), loose, dry, 65% fine to coarse sand, 30% clay, 10% silt, <5% sub-angular to sub-rounded gravel clasts up to 0.5" diameter.	SC				
4		@ 5 feet bgs: damp.					
				1.6	0841 SB-4 5'-5.5'		Top 5' logged from hand auger / airknife cuttings.
6							
		GRAVEL: Olive brown (2.5Y 4/3), loose, dry, fine subangular gravel, fine to coarse sand.	GP				
8							
		SANDY CLAY: Light olive brown (2.5Y 5/4), very dense, dry, very fine to medium sand, minor fine gravel, low to medium plastcity.	CL				
10				2.2	0845 SB-4 10'-10.5'		
12		@13 feet bgs: Decreased sand, no gravel.			0939 SB-4 13.2' water sample		▼
14		@14 feet bgs: Increased clay and silt content.					Static water level 13.20 feet bgs
		@15 feet bgs: Gray mottling (2.5Y 5/1)		1.7	0852 SB-4 15'-15.5'		
16							
18		@18 feet bgs: increase in very fine to medium sand content, minor decrease in clay, minor decrease in silt, fine gravels.					
20				1.9	0906 SB-4 20'-20.5'		
22		@21.5 feet bgs: Increased very fine to medium sand. @22 feet bgs: Color change to very dark brown (2.5Y 3/2)					

URS

LOG OF BORING

Borehole ID: SB-4

Depth (ft bgs)	Symbol	Lithologic Description	USCS	PID (ppm)	Time & Sample I.D.	Recovery	Comments
24		@23 feet bgs: Increased sand content (very fine to medium).					
26		@25 feet bgs: As above - damp, increasing coarse sand, coarse sand grains moist and sub-angular to sub-rounded.		1.4	0915 SB-4 25'-25.5'		▽ First water encountered at 25 feet bgs during drilling
28		@27 feet bgs: Increased sand (very fine to medium). Moist.					
30		@29 feet bgs: Sandy stringer (possibly SC). Wet.		1.2	0928 SB-4 30'-30.5'		
32		@31 feet bgs: Damp - very hard very fine to coarse sand, minor fine gravel.					



URS

1333 Broadway, Suite 800
Oakland, California 94612

LOG OF BORING

Borehole ID: SB-5

Total Depth: 25 feet bgs

PROJECT INFORMATION	DRILLING INFORMATION
Project: Former BP Site #11124	**Drilling Company:** Gregg Drilling and Testing, Inc.
Site Location: 3315 High Street, Oakland, CA	**Driller:** Paul Rogers
Project Manager: Lynelle Onishi	**Type of Drilling Rig:** Geoprobe
PG: Barbara Jakub	**Drilling Method:** 2" Direct Push
Geologist: Jacob Henry	**Sampling Method:** Continuous
Job Number: 38487462.0013001	**Date(s) Drilled:** 2/21/2006

BORING INFORMATION	
Groundwater Depth: 10.7 feet bgs.	**Boring Location:** Adjacent to former waste-oil tank
Air Knife or Hand Auger Depth: 5.0 feet bgs.	**Boring Diameter:** 2"
Coordinates: X Y	**Boring Type:** Exploratory

Depth (ft bgs)	Symbol	Lithologic Description	USCS	PID (ppm)	Time & Sample ID	Recovery	Comments
0		ASPHALT: 4" Asphalt					
		CLAY: Dark greenish gray, dry, 90% clay, 10% silt, low to medium plasticity.	CL				Boring grouted with neat Portland Cement. Top 3" finished to grade with cement.
2		SILTY CLAY: Dark greenish gray, dry, 70% clay, 25% silt, 5% very fine to fine sand, minor coarse sand.	ML				
4		CLAYEY SILT WITH SAND: Light olive brown, dry, 55% silt, 35% clay, 10% very fine to medium sand minor coarse sand, organc material, low plasticity.					
		SANDY CLAYEY SILT: Light olive brown, dry, 55% silt, 25% clay, 20% very fine to medium sand, minor sub-angular to angular coarse sand, organc material, low plasticity.	CL				Top 5' logged from hand auger / airknife cuttings.
6		CLAY: Light olive brown, very dense, dry, very fine to medium sand, black organic material, (2.5Y 5/6) mottling.		2.2	1003 SB-5 6'-6.5'		
8		@8 feet bgs: Increased coarse sand (sub-angular to sub-rounded) @8.5 feet bgs: Decreased coarse sand					
10				1.9	1014 SB-5 10'-10.5'		▼ Static water level 10.70 feet bgs
12		@ 12 feet bgs: Increase in silt content, lithology is crumbly			1100 SB-5 10.7' water sample		
14		@13 feet bgs: 2-inch wet zone					
16				3.5	1018 SB-5 15'-15.5'		
18		@16.5 feet bgs: Increased very fine to fine sand @17 feet bgs: 2-inch wet zone @17.5 feet bgs: Decreased sand content, very hard @18 feet bgs: Increased very fine to medium sub-angular sand @18.5 feet bgs: 2-inch wet zone @19 feet bgs: Decreased sand content @19.5 feet bgs: Dry, very hard.					
20		No Recovery					
22							
24		SANDY CLAY: Light olive brown (2.5Y 5/3), very hard, dry, very fine to coarse sand, low plastcity.	CL	2.8	1054 SB-5 23.5'-24'		

REGISTERED GEOLOGIST
BARBARA J JAKUB
No. 7304
STATE OF CALIFORNIA

SOIL BORING LOG **Boring No. MW-5** **Sheet 1 of 2**

Client	Former BP Station #11124	Date	12/12/2006
Address	3315 High Street	Drilling Company	Woodward Drilling — rig type: Mobile Drill B-57
	Oakland, California	Driller	Jason/Chris
Project No.	E-11124-01	Method	Hollow Stem Auger — hole diam.: 8"
Logged By:	Scott Bittinger		
Well Pack	sand: 23 ft. to 30 ft.	Well Construction	casing: PVC — screen interval: 25'-30'
	bent.: 20 ft. to 23 ft.		casing diam.: 2" — screen slot size: 0.02"
	grout: 0 ft. to 20 ft.	Depth to GW:	▽ first encountered groundwater — ▼ static groundwater

Sample Type	Sample No.	Blow Count	Sample Time	Sample Recov.	Well Construct.	Depth Scale	LITHO COLUMN	Descriptions of Materials and Conditions	PID (PPM)
						1		Asphalt surface	
						2			
						3		fine grained fill soil with construction debris (bricks, rocks, concrete)	
						4			
						5			
		3 3				6		CLAYEY SAND, strong brown, 65% fine to coarse grained sand, 35%	
S	MW5-6	8	10:26	90		7	SC	clayey fines, moist	1
					▼	8			
						9			
						10			
		4 14				11	SC	CLAYEY SAND, strong brown, 55% fine to coarse grained sand, 45% clayey fines, moist (10'-11')	2
S	MW5-11	11	10:36	100		12	CL	SANDY CLAY, light olive brown, 85% clayey fines, 15% predominately fine grained sand, trace coarse grained sand, dry (11'-11.5')	
						13			
						14			
						15			
		5 9				16			
S	MW5-16	13	10:53	100		17	CL	CLAY with SAND, dark yellowish brown, 85-90% clay, trace silt, 10-15% fine to coarse grained sand, dry	2
						18			
						19			
						20	SC		

Comments: Sampled to 31.5' bgs, drilled to 30' bgs to complete well.

STRATUS ENVIRONMENTAL, INC.

SOIL BORING LOG **Boring No. MW-5** **Sheet 2 of 2**

Client: Former BP Station #11124 Date: 12/12/2006
Address: 3315 High Street Drilling Company: Woodward Drilling rig type: Mobile Drill B-57
Oakland, California Driller: Jason/Chris
Project No.: E-11124-01 Method: Hollow Stem Auger hole diam.: 8"
Logged By: Scott Billinger

Sample Type	Sample No.	Blow Count	Sample Time	Sample Recov.	Well Construct.	Depth Scale	LITHO COLUMN	Descriptions of Materials and Conditions	PID (PPM)
		4 9				21	SC	CLAYEY SAND 20'-20.4', dark yellowish brown, 65% fine to coarse grained sand, 35% clayey fines, moist	
S	MW5-21	20	11:00	100		22	CL	CLAY, light olive brown with iron oxide stains, <4% fine to coarse grained sand, trace silt, moist (20.4'-21.5')	2
						23			
						24			
						25			
		7 10				26	CL	CLAY, dark yellowish brown, trace silt, <2% fine to coarse grained sand,	0
S	MW5-26	13	11:10	100		27		moist	
					▽	28			
						29			
						30			
		8 8				31	CL	CLAY, dark yellowish brown, trace silt, <2% fine to coarse grained sand, moist	0
S	MW5-31	12	11:35	100					

Comments: Groundwater first observed between 25' and 30' bgs. Prior to selecting screening interval, the augers used to advance the borehole were retracted from 30' to 26' bgs. Approximately 0.8' of groundwater recharge into the borehole wasmeasured within approximately 2 minutes; Stratus subsequently selected a screening interval of 25' to 30' bgs for the well.

SOIL BORING LOG Boring No. MW-6 Sheet 1 of 2

Client: Former BP Station #11124
Address: 3315 High Street, Oakland, California
Project No.: E-11124-01
Logged By: Scott Bittinger

Date: 12/12/2006
Drilling Company: Woodward Drilling rig type: Mobile Drill B-57
Driller: Jason/Chris
Method: Hollow Stem Auger hole diam.: 8"

Well Pack: sand: 23 ft. to 30 ft.; bent.: 20 ft. to 23 ft.; grout: 0 ft. to 20 ft.

Well Construction: casing: PVC screen interval: 25'-30'
casing diam.: 2" screen slot size: 0.02"
Depth to GW: ▽ first encountered groundwater ▼ static groundwater

Sample Type	Sample No.	Blow Count	Sample Time	Sample Recov.	Well Construct.	Depth Scale	LITHO COLUMN	Descriptions of Materials and Conditions	PID (PPM)
						1		Asphalt surface	
						2			
						3		fine grained fill soil with construction debris (bricks, rocks, concrete)	
						4			
						5			
		9 19				6	SC	CLAYEY SAND with GRAVEL, dark gray, 40% clayey fines, 50% fine to	
S	MW6-6	20	13:47	90		7		coarse grained sand, 10% gravel (pieces exceed 2" in diameter), moist	3
						8			
					▼	9			
						10			
		7 11				11	SC	CLAYEY SAND 10'-11.3', dark yellowish brown, 65-70% fine to coarse grained sand, 30-35% clayey fines, moist	
S	MW6-11	13	13:55	100		12	CL	CLAY with SAND 11.3'-11.5', dark yellowish brown, 90-95% clayey fines,	174
						13		5-10% fine to coarse grained sand, dry	
						14			
						15			
		12 12				16	CL	SANDY CLAY, dark yellowish brown, 85% clayey fines, 15% fine to coarse	1
S	MW6-16	14	14:00	70		17		grained sand, moist	
						18			
						19			
						20			

Comments: Sampled to 29' bgs, drilled to 30' bgs to complete well.

STRATUS ENVIRONMENTAL, INC.

SOIL BORING LOG **Boring No. MW-6** **Sheet 2 of 2**

Client: Former BP Station #11124
Address: 3315 High Street, Oakland, California
Project No.: E-11124-01
Logged By: Scott Bittinger

Date: 12/12/2006
Drilling Company: Woodward Drilling rig type: Mobile Drill B-57
Driller: Jason/Chris
Method: Hollow Stem Auger hole diam.: 8"

Sample Type	Sample No.	Blow Count	Sample Time	Sample Recov.	Well Construct.	Depth Scale	LITHO COLUMN	Descriptions of Materials and Conditions	PID (PPM)
		5 6				21	CL	CLAY with SAND, dark yellowish brown, 5-8% fine to medium grained	0
S	MW6-21	10	14:10	100		22		sand, trace silt, trace manganese oxide staining, moist	
						23			
						24			
						25			
		4 10				26	CL	SANDY CLAY, dark yellowish brown, 15-20% fine to coarse grained	0
S	MW6-26	15	14:20	100		27		sand, trace fine gravel, moist	
		3			▽	28		CLAYEY SAND 27.5'-28.6', 77% fine grained sand, 3% coarse grained	
		6					SC	sand, 20% clayey fines, damp	
S	MW6-28	16	14:30	100		29			0
							CL	CLAY 28.6'-29', dark yellowish brown, 3-5% fine to coarse grained sand,	
						30		moist	
						31			

WELL DETAILS

PROJECT NUMBER: U11124

PROJECT NAME: Former BP Station no. 11124

LOCATION: 3315 High Street, Oakland, California

WELL PERMIT NO.: W2006-1009

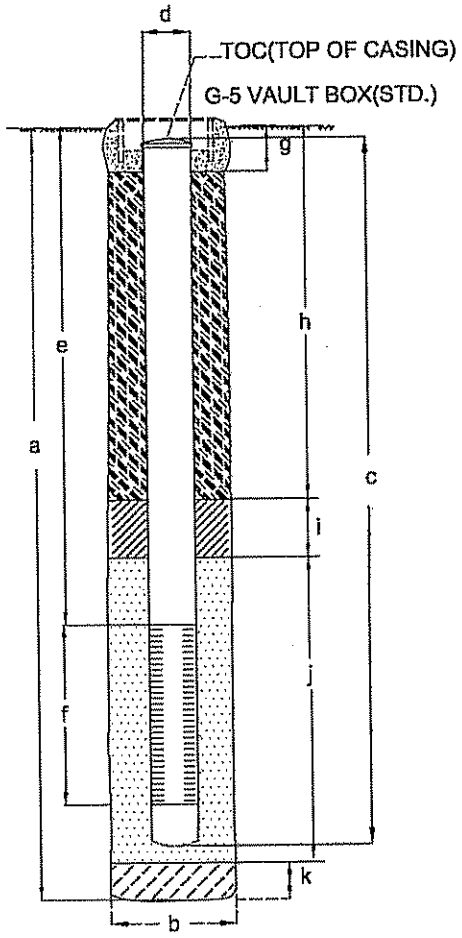
BORING/WELL NO.: MW-5

TOP OF CASING ELEV.:

GROUND SURFACE ELEV.:

DATUM:

INSTALLATION DATE: December 12, 2006



BENTONITE

CEMENT

CONCRETE

SAND

PERFORATION

NOT TO SCALE

EXPLORATORY BORING

a. TOTAL DEPTH 30 ft.

b. DIAMETER 8 in.

DRILLING METHOD Hollow stem auger

WELL CONSTRUCTION

c. TOTAL CASING LENGTH 30 ft.

MATERIAL Schedule 40 PVC

d. DIAMETER 2 in.

e. DEPTH TO TOP PERFORATIONS 25 ft.

f. PERFORATED

INTERVAL FROM 25 TO 30 ft.

PERFORATION TYPE Slotted Screen

PERFORATION SIZE 0.02 in.

g. SURFACE SEAL 0 to 1 ft.

SEAL MATERIAL Concrete

h. BACKFILL 1 to 20 ft.

BACKFILL MATERIAL Neat Cement

i. SEAL 20 to 23 ft.

SEAL MATERIAL Bentonite

j. FILTER PACK 23 to 30 ft.

FILTER PACK MATERIAL #3 Sand

k. BOTTOM SEAL ft.

SEAL MATERIAL NA

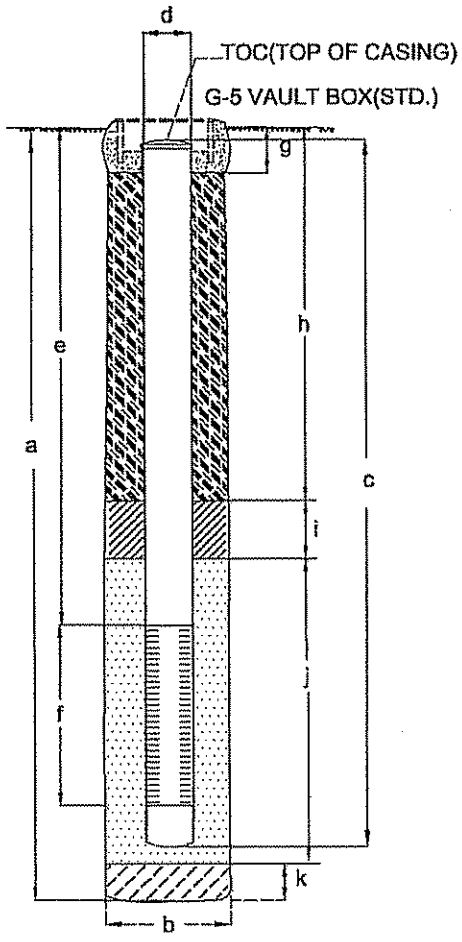
PREPARED BY _____ DATE _____

REVIEWED BY _____ DATE _____

WELL DETAILS

PROJECT NUMBER: U11124
PROJECT NAME: Former BP Station no. 11124
LOCATION: 3315 High Street, Oakland, California
WELL PERMIT NO.: W2006-1010

BORING/WELL NO.: MW-6
TOP OF CASING ELEV.:
GROUND SURFACE ELEV.:
DATUM:
INSTALLATION DATE: December 12, 2006



BENTONITE
CEMENT
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EXPLORATORY BORING

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DRILLING METHOD Hollow stem auger

WELL CONSTRUCTION

c. TOTAL CASING LENGTH 30 ft.
MATERIAL Schedule 40 PVC
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INTERVAL FROM 25 TO 30 ft.
PERFORATION TYPE Slotted Screen
PERFORATION SIZE 0.02 in.
g. SURFACE SEAL 0 to 1 ft.
SEAL MATERIAL Concrete
h. BACKFILL 1 to 20 ft.
BACKFILL MATERIAL Neat Cement
i. SEAL 20 to 23 ft.
SEAL MATERIAL Bentonite
j. FILTER PACK 23 to 30 ft.
FILTER PACK MATERIAL #3 Sand
k. BOTTOM SEAL ft.
SEAL MATERIAL NA

PREPARED BY _____ DATE _____

REVIEWED BY _____ DATE _____