ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
REBECCA GEBHART, Interim Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP)
For Hazardous Materials Releases
1131 HARBOR BAY PARKWAY, SUITE 250
ALAMEDA, CA 94502
(510) 567-6700
FAX (510) 337-9335

May 10, 2017

Oakland Housing Investors, LC
3 E. Stow Road, Suite 100
Attn: Mr. Michael Boettger
Marlton, NJ 08053
(*Sent via E-mail to: mboettger@themichaelsorg.com*)

Oakland Housing Investors, LC
c/o National Affordable Communities, Inc.
Attn: Mr. Darren Berberian
4299 MacArthur Blvd, Suite 215,
Newport Beach, CA 92660

1396 5th Street LLC
Attn: Mr. Curtis Eisenberger
1357 5th Street, Oakland, CA 94607

Subject: Case Closure for Site Cleanup Program Case No. RO0002896 and GeoTracker Global ID T06019794669, Red Star Yeast/1396 Fifth Street LLC, 1396 5th Street, Oakland, CA 94607

Dear Mr. Boettger, Mr. Berberian, and Mr. Eisenberger:

This letter confirms the completion of site investigation and remedial actions for the soil and groundwater investigation at the above referenced site. We are also transmitting the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported releases at the subject site with the provision that the information provided to this agency was accurate and representative of existing conditions. The subject Site Cleanup Program (SCP) case is closed. This case closure letter and the case closure summary can also be viewed on the State Water Resources Control Board's Geotracker website (http://geotracker.swrcb.ca.gov) and the Alameda County Department of Environmental Health website (http://www.acgov.org/aceh/index.htm).

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that areas of residual contamination are present at this site above environmental screening levels. Case closure for this site is granted for the current commercial land use as a vacant lot only.

If you have any questions, please call Dilan Roe at (510) 567-6767.

Sincerely,

Dilan Roe, P.E.
Chief, Land Water Division

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

cc with enclosure:

Harvey Fernebok, Red Star-Michaels LLC, 2010 Main Street, Suite 1250, Irvine, CA 92614 *(sent via E-mail to: HFernebok@themichaelsorg.com)*

Mark Drollinger, Citadel Environmental Services Inc., 1725 Victory Boulevard, Suite 200, Glendale, CA 91201 (*Sent via E-mail to: mdrollinger@CitadelEnvironmental.com*)

Mark Johannes Arniola, City of Oakland Public Works Environmental Services, 250 Frank H. Ogawa Plaza, Ste. 5301, Oakland, CA 94612 (*Sent via e-mail to: marniola@oaklandnet.com*)

Laurent Meillier, SF- Regional Water Quality Control Board, 1515 Clay Street, Suite 1400, Oakland, CA 94612, (sent via electronic mail to L.Meillier@waterboards.ca.gov)

Dilan Roe, ACDEH (*Sent via e-mail to: dilan.roe@acgov.org*)

Paresh Khatri, ACDEH (*Sent via E-mail to: paresh.khatri@acgov.org*)

Case Electronic File, GeoTracker

Case Closure Summary Form

Agency Information

Date: May 10, 2017

Alameda County Department of Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6764
Case Worker: Dilan Roe	Title: Chief Land Water Division

Case Information

Facility Name: Red Star Yeast/1396 Fifth Street LLC		
Facility Address: 1396 5th Street, Oakland, CA 94607		
Regional Water Board LUSTIS Case No: NA	Former Case No.: NA	Current Site Cleanup Case No.: RO0002896
Unauthorized Release Form Filing Date: NA	State Water Board GeoTracker Global ID: T06019794669	
Assessor Parcel Number: 4-69-4	Current Land Use: Commercial (vacant lot)	
Responsible Party(s):	Address:	Phone:
Oakland Housing Investors, LP Attn: Michael Boettger	3 E. Stow Road, Suite 100 Marlton, NJ 08053	---
Oakland Housing Investors, LP c/o National Affordable Communities, Inc. Attn Mr. Darren Berberian	4299 MacArthur Blvd, Suite 215, Newport Beach, CA 92660	---
1396 5th Street LLC Attn: Curtis Eisenberger	1357 5th Street, Oakland, CA 94607	---

Tank Information

Tank No.	Size (gal)	Contents	Closed in-Place / Removed	Date
---	3000-gallon	Diesel	Removed	10/04/2006
---	250-gallon	Unknown	Removed	11/30/2011
---	2,500-gallon	Unknown	Removed	11/30/2011
---	10,000-gallon	Unknown	Closed-in-Place	11/30/2011

Case Closure Summary Form

Site History

Site Land-Use

The subject property (APN 4-69-4) is located at 1396 5th Street, between Mandela Parkway and Kirkham Street, in the northwest portion of the City of Oakland. The case was opened by Alameda County Department of Environmental Health (ACDEH) in 2005 in conjunction with a proposed residential redevelopment of the former Red Star Yeast Company manufacturing plant which operated at the site from approximately 1902 until 2003. Extensive excavation of metal impacted soil was conducted in conjunction with site redevelopment which began in 2011, however in 2012 a fire occurred during the construction phase and significantly damaged the site structure and surrounding properties. The remaining structure from the fire consisted of a concrete podium which was removed in April 2016. Additional investigation activities were conducted in 2016 to (1) assess data gaps in the confirmation sampling of the previously excavated areas of the site and assess fill material used to backfill the remedial excavation; and (2) assess soil and groundwater conditions in the vicinity of underground storage tanks discovered in the sidewalk during site development in 2011 as well as the potential for upgradient off-site sources of petroleum contamination. At the time of this case closure, there are no plans to redevelop the property and the site is a vacant dirt lot surrounded by a chain-linked fence and thus the case was closed to the site's current commercial land-use scenario.

Future Site Management Requirements

Due to residual contamination at the site and due to the current owner not planning further redevelopment, the site is closed to its commercial land use as a vacant lot with site management requirements. If there is a proposed change in land use to any residential, or conservative land use, or if any redevelopment occurs, ACDEH must be notified as required by Government Code Section 65850.2.2. ACDEH will re-evaluate the site relative to the proposed redevelopment. Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities.

Historic Land-Use / Site Investigation/ Remediation Activities

The primary constituents of concern identified during site assessments conducted from 2004 to 2016 include metals in artificial fill material and low levels of petroleum hydrocarbons in soil and groundwater. A summary of previous site investigation is provided below.

The site historically operated as a brewery, a yeast and vinegar manufacturing facility from approximately 1900 until 1965, and then solely as a yeast manufacturing plant from approximately 1965 until 2003. As of June 2000, according to a Phase I report, the site had the following: two cooling towers; many different-sized above ground storage tanks (ASTs); storage buildings for new and used oil; a transformer, where no polychlorinated biphenyl's (PCBs) were detected; a propane forklift and five electric forklifts; an elevator with hydraulic equipment that used soluble oil since 1978; two boilers; a 3,000-gallon diesel underground storage tank (UST) which fueled two former boilers at the site that was closed in place in 1989; and various sewer pipes, sumps, and drains. In addition, according to a 1902 Sanborn map, a UST for oil was located under a building in the central area of the site. During a sewer replacement in 1996, mercury was found in the soil around a floor drain, and flowed into the drain and through a crack in the sewer pipe. Soil and groundwater were reportedly removed during the cleanup. However, there is lack of documentation of the investigation, analytical results, and verification of regulatory closure.

Remaining structures were removed or demolished by 2004. The site was planned for redevelopment as four stories of residential units above a podium garage. Between August 2004 and May 2007, 27 boreholes were advanced, and 39 shallow soil samples and 10 grab groundwater samples were collected, which were analyzed for the following: Total Petroleum Hydrocarbons as gasoline (TPH-g), diesel (TPH-d), and motor oil (TPH-mo); benzene, toluene, ethylbenzenes and total xylenes (BTEX); methyl tert-butyl ether (MTBE); metals; volatile organize compounds (VOCs) and semi-VOCs; and polycyclic aromatic hydrocarbons (PAHs). Analytical results showed elevated TPH-d and TPH-mo in groundwater, and elevated lead in soil likely from imported fill placed throughout the site.

In 2006 the closed-in-place 3,000-gallon diesel UST was removed. Twenty yards of soil were excavated and 6,300 gallons of groundwater pumped from the tank pit. One soil sidewall sample and one grab groundwater sample were collected. Analytical results showed TPH-d at 180 µg/L in groundwater. The case was closed under the oversight of the City of Oakland Fire Department.

In January 2011 a geophysical survey was performed. Pits were excavated around identified structures which were removed. The removed structures included the following: a properly decommissioned water supply well; an elevator piston, a sewer system connection; and structural pilings. Confirmation sampling was performed in each pit, showing elevated lead above the screening level, which required additional excavation.

Case Closure Summary Form

In March 2011 further characterization was performed with the goal of obtaining closure with unrestricted land use. Fifteen soil borings and five temporary monitoring wells were advanced at the site. Sixty shallow soil samples were collected and analyzed for the following: TPH-g, TPH-mo, TPH-d, and metals; and 5 groundwater samples were collected and analyzed for TPH-g, TPH-mo, TPH-d, volatile organic compounds (VOCs), and semi-VOCs. Results showed lead contamination both in the fill and in the native soil below the fill. Groundwater results showed 2400 µg/L of TPH-mo at the northern area of the site.

In August 2011, remedial excavation occurred and confirmation samples were collected and analyzed for TPH and metals. The final excavation depths were as follows: 5 feet below ground surface at the northwest area of the property; between 6 and 7 feet bgs at the western half of the property into native soil; 3 feet bgs into native soil at the central eastern portion; and 4 feet bgs at targeted areas of the easternmost area of the site. Most of the deepestConfirmation samples in the western half had lead above the residential San Francisco Bay Regional Water Quality Control Board's Environmental Screening Level (ESL) of 80 mg/kg. One sample in the eastern portion had lead above the residential ESL.

In September 2011 during the excavation activities, 3 USTs, one 250-gallon, one 2,500-gallon, and one 10,000-gallon, were discovered in the sidewalk at the southern edge of the property along 5th Street. In November 2011, the 10,000-gallon UST at the corner of Mandela Parkway and 5th Street was left in place and the other two tanks removed under Oakland Fire Department oversight. A Tank Removal and Closure Report was submitted, but contained inconsistencies.

In addition, during excavation activities, a substance that appeared to be oil was found seeping from the north sidewall in the northwest area of the site. Oil and contaminated soil were reportedly removed from on-site.

During August and September 2011, approximately 7,000 tons of imported aggregate/sand mix was put in place as fill, after which development began. In June 2012, a fire destroyed the project during construction, leaving a concrete podium, which was removed in April 2016.

In June 2016, 9 boreholes were advanced across the site and a total of 27 soil samples and 2 grab groundwater samples were collected and analyzed to address the following data gaps: the lack of documentation of the source and types of quality control used in backfilling the excavation; the need for further characterization of lead in native soil below the fill; and the need for further characterization of soil and groundwater at the areas of the oil seepage from the north sidewall and the former location of temporary monitoring well MW-5 to evaluate for the potential for off-site source of contamination.

The aggregate fill was analyzed for PCBs, PAHs, TPH and lead. The analytical results for the fill showed that some PAHs were elevated above the ESLs for residential land use, but PAHs were below commercial land use ESLs. Residual PAHs were likely secondary to the fire that occurred at the site. Lead was not found to be elevated above the commercial or residential ESLs in both fill and native soil samples.

Soil samples collected in the vicinity of the north wall seepage were analyzed for TPH, and groundwater samples collected were analyzed for TPH, BTEX, MTBE, and other oxygenates and VOCs. Soil samples showed concentrations of TPH below residential and commercial Direct Exposure Human Health Risk Levels. Groundwater samples collected in the northern portion of the site at locations upgradient of the former UST locations were analyzed for TPH-g, TPH-d, TPH-mo, BTEX, and VOCs. Groundwater results indicate that there is TPH-g, TPH-d, BTEX and TBA impacts to groundwater in the norther portion of the site. The most likely source of this contamination is the railroad right-of-way immediately north of the site or the former service station located approximately 175 feet north of the site.

Three borings were advanced and 6 soil samples collected and 3 grab groundwater samples collected in the areas of the former locations of the two removed USTs and the closed-in-place UST to further characterize these areas for potential contamination. Soil and groundwater samples collected adjacent to the former USTs were low or non-detect.

Potential Exposure to Chemicals of Concern

There is no potential exposure to chemicals of concern for the current commercial land use as a vacant lot.

Case Closure Summary Form

Institutional Controls

Not Applicable

Engineering Controls

Not Applicable

Case Closure Public Notification Information

Agency Type	Agency Name	Contact Information
Regional Water Board	San Francisco Bay	Laurent Meillier 1515 Clay Street, Suite 1400, Oakland, CA 94612
Municipal and County Water Districts	East Bay Municipal Utility District	EBMUD Utility Discharge Section P.O. Box 24055, MS 702 Oakland, CA 94623 Attn.: Chandra Johannesson
Water Replenishment Districts	Not Applicable	----
Groundwater Basin Managers	Not Applicable	----
Planning Agency	City of Oakland	City of Oakland Planning and Building 250 Frank H. Ogawa Plaza, Suite 2114 Oakland, CA 94612 Attn.: Dave Harlan
Public Works Agency	City of Oakland	City of Oakland Public Works Environmental Services 250 Frank H. Ogawa Plaza, Suite 5301 Oakland, CA 94612 Attn.: Mark Arniola

Local Agency Signatures

Chief: Dilan Roe	Title: Chief, Land Water Division
Signature: Dilan Roe	Date: MAY 10, 2017

This Case Closure Summary along with the Case Closure Transmittal letter and the Remedial Action Completion Certification provides documentation of the case closure. 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. The Conceptual Site Model may not contain all available data. Additional information on the case can be viewed in the online case file. The entire case file can be viewed over the Internet on the Alameda County Department of Environmental Health (ACDEH) website (http://www.acgov.org/aceh/lop/ust.htm) or the State of California Water Resources Control Board GeoTracker website (http://geotracker.waterboards.ca.gov). Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the ACDEH website.

Case Closure Summary Form

GeoTracker Conceptual Site Model (Attachment 1, 2 pages)

Soil Evaluation and Data (Attachment 2, 27 pages)

Groundwater Evaluation and Data (Attachment 3, 12 pages)

Responsible Party Identification (Attachment 4, 2 pages)

Public Notification of Potential Case Closure (Attachment 5, 2 pages)

ATTACHMENT 1

RED STAR YEAST / 1396 FIFTH STREET LLC (T06019794669) - MAP THIS SITE

1396 5TH
OAKLAND , CA 94607
ALAMEDA COUNTY
CLEANUP PROGRAM SITE
STATUS: COMPLETED - CASE CLOSED

CLEANUP OVERSIGHT AGENCIES
ALAMEDA COUNTY LOP *(LEAD)* - *CASE #: RO0002898* - *DILAN ROE*
SAN FRANCISCO BAY RWQCB (REGION 2) - *CASE #: NA*

Activities Report | Documents / Data | Environmental Conditions | Admin | Funding | Case Reviews

THIS PROJECT WAS LAST MODIFIED BY *DILAN ROE* ON 5/11/2017 1:06:18 PM - HISTORY

CSM REPORT - VIEW PUBLIC NOTICING VERSION OF THIS REPORT

UST CLEANUP FUND CLAIM INFORMATION (DATA PULLED FROM SCUFIIS)

CLAIM NO	PRIORITY	CLAIMANT	SITE ADDRESS	AMT REIMB TO DATE	AGE OF LOC	IMPACTED WELLS?	FIVE YEAR REVIEW INFORMATION: REVIEW NUM	REVIEWER	FUND RECOMMENDATION	TO OVERSIGHT DATE	TO CLAIM

PROJECT INFORMATION (DATA PULLED FROM GEOTRACKER) - MAP THIS SITE

SITE NAME / ADDRESS	STATUS	STATUS DATE	RELEASE REPORT DATE	AGE OF CASE	CLEANUP OVERSIGHT AGENCIES
RED STAR YEAST / 1396 FIFTH STREET LLC (Global ID: T06019794669) 1396 5TH OAKLAND, CA 94607	Completed - Case Closed	5/10/2017	6/15/2005	12	ALAMEDA COUNTY LOP *(LEAD)* - *CASE #: RO0002* *CASEWORKER: DILAN ROE* - *SUPERVISOR: NO SPECIFIED* SAN FRANCISCO BAY RWQCB (REGION 2) - *CASE #*

STAFF NOTES (INTERNAL)
<NO STAFF NOTES ENTERED>

SITE HISTORY

Site Land-Use: The subject property (APN 4-69-4) is located at 1396 5th Street, between Mandela Parkway and Kirkham Street, in the northwest portion of the City of Oakland. The case was opened by Alamed Department of Environmental Health (ACDEH) in 2005 in conjunction with a proposed residential redevelopment of the former Red Star Yeast Company manufacturing plant which operated at the site from approximately 1902 until 2003. Extensive excavation of metal impacted soil was conducted in conjunction with site redevelopment which began in 2011, however in 2012 a fire occurred during the constructio and significantly damaged the site structure and surrounding properties. The remaining structure from the fire consisted of a concrete podium which was removed in April 2016. Additional investigation activit conducted in 2016 to (1) assess data gaps in the confirmation sampling of the previously excavated areas of the site and assess fill material used to backfill the remedial excavation; and (2) assess soil and g conditions in the vicinity of underground storage tanks discovered in the sidewalk during site development in 2011 as well as the potential for upgradient off-site sources of petroleum contamination. At the tir case closure, there are no plans to redevelop the property and the site is a vacant dirt lot surrounded by a chain-linked fence and thus the case was closed to the site's current commercial land-use scenario.

Future Site Management Requirements: Due to residual contamination at the site and due to the current owner not planning further redevelopment, the site is closed to its commercial land use as a vacant lot management requirements. If there is a proposed change in land use to any residential, or conservative land use, or if any redevelopment occurs, ACDEH must be notified as required by Government Code Sec 65850.2.2. ACDEH will re-evaluate the site relative to the proposed redevelopment. Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate safety procedures by the responsible party prior to and during excavation and construction activities.

Historic Land-Use / Site Investigation/ Remediation Activities: The primary constituents of concern identified during site assessments conducted from 2004 to 2016 include metals in artificial fill material and of petroleum hydrocarbons in soil and groundwater. A summary of previous site investigation is provided below.

The site historically operated as a brewery, a yeast and vinegar manufacturing facility from approximately 1900 until 1965, and then solely as a yeast manufacturing plant from approximately 1965 until 2003. 2000, according to a Phase I report, the site had the following: two cooling towers; many different-sized above ground storage tanks (ASTs); storage buildings for new and used oil; a transformer, where no polychlorinated biphenyl's (PCBs) were detected; a propane forklift and five electric forklifts; an elevator with hydraulic equipment that used soluble oil since 1978; two boilers; a 3,000-gallon diesel undergrour tank (UST) which fueled two former boilers at the site that was closed in place in 1989; and various sewer pipes, sumps, and drains. In addition, according to a 1902 Sanborn map, a UST for oil was located un building in the central area of the site. During a sewer replacement in 1996, mercury was found in the soil around a floor drain, and flowed into the drain and through a crack in the sewer pipe. Soil and groundw reportedly removed during the cleanup. However, there is lack of documentation of the investigation, analytical results, and verification of regulatory closure.

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In 2006 the closed-in-place 3,000-gallon diesel UST was removed. Twenty yards of soil were excavated and 6,300 gallons of groundwater pumped from the tank pit. One soil sidewall sample and one grab grou sample were collected. Analytical results showed TPH-d at 180 µg/L in groundwater. The case was closed under the oversight of the City of Oakland Fire Department.

In January 2011 a geophysical survey was performed. Pits were excavated around identified structures which were removed. The removed structures included the following: a properly decommissioned water well; an elevator piston, a sewer system connection; and structural pilings. Confirmation sampling was performed in each pit, showing elevated lead above the screening level, which required additional excava

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In August 2011, remedial excavation occurred and confirmation samples were collected and analyzed for TPH and metals. The final excavation depths were as follows: 5 feet below ground surface at the nort of the property; between 6 and 7 feet bgs at the western half of the property into native soil; 3 feet bgs into native soil at the central eastern portion; and 4 feet bgs at targeted areas of the easternmost area of Most of the deepestConfirmation samples in the western half had lead above the residential San Francisco Bay Regional Water Quality Control Board's Environmental Screening Level (ESL) of 80 mg/kg. One s the eastern portion had lead above the residential ESL.

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Potential Exposure to Chemicals of Concern:There is no potential exposure to chemicals of concern for the current commercial land use as a vacant lot.

RESPONSIBLE PARTIES

NAME	ORGANIZATION	ADDRESS	CITY	EMAIL
MICHAEL BOETTGER	Oakland Housing Investors LP	3 E STOW ROAD	MARLTON	mboettger@themichaelsorg.com

CLEANUP ACTION INFO

ACTION TYPE	BEGIN DATE	END DATE	PHASE	CONTAMINANT MASS REMOVED	DESCRIPTION
EXCAVATION	8/17/2011	8/29/2011	Soil	12,900 Tons	

RISK INFORMATION

VIEW CA

CONTAMINANTS OF CONCERN	CURRENT LAND USE	BENEFICIAL USE	DISCHARGE SOURCE	DATE REPORTED	STOP METHOD	NEARBY / IMI WELL
Lead, Mercury (elemental), Nickel, Other Metal, Gasoline, Total Petroleum Hydrocarbons (TPH)	Commercial, Industrial	GW - Municipal and Domestic Supply		6/15/2005	Other Means	0

FREE PRODUCT	OTHER CONSTITUENTS	NAME OF WATER SYSTEM	LAST REGULATORY ACTIVITY	LAST ESI UPLOAD	LAST EDF UPLOAD	EXPECTED CLOSURE DATE	MOST RECENT CLOSURE RE

	11/22/2016	2/23/2017	12/7/2016

CDPH WELLS WITHIN 1500 FEET OF THIS SITE

NONE

CALCULATED FIELDS (BASED ON LATITUDE / LONGITUDE)

APN
004 006900400

GW BASIN NAME
Santa Clara Valley - East Bay Plain (2-9.04)

WATERSHED NAME
South Bay - East Bay Cities (204.20)

COUNTY
Alameda

PUBLIC WATER SYSTEM(S)
- **EAST BAY MUD** - 375 ELEVENTH STREET, OAKLAND, CA 94607

MOST RECENT CONCENTRATIONS OF PETROLEUM CONSTITUENTS IN GROUNDWATER - SHOW VIEW ESI S

MOST RECENT CONCENTRATIONS OF PETROLEUM CONSTITUENTS IN SOIL - SHOW VIEW ESI S

MOST RECENT GEO_WELL DATA - SHOW VIEW ESI S

ATTACHMENT 2

Attachment 2 – Direct Contact Evaluation and Data

LTCP DIRECT CONTACT AND OUTDOOR AIR EXPOSURE CRITERIA

Closure Scenario

__ Exemption (no petroleum hydrocarbons in upper 10 feet), __ Maximum concentrations of petroleum hydrocarbons are less than or equal to those in Table 1 below, __ Site-specific risk assessment, **_X_ A determination has been made that the concentrations of petroleum in soil will have no significant risk of adversely affecting human health**, __ A determination has been made that the concentrations of petroleum in soil will have no significant risk of adversely affecting human health as a result of controlling exposure through the use of mitigation measures or through the use of institutional controls, __ This case should be closed in spite of not meeting the direct contact and outdoor air specific media criteria.

Evaluation Criteria: Bold indicates criteria met.

Are maximum concentrations less than those in Table 1 below?		No				
Constituent		Residential		Commercial/Industrial		Utility Worker
		0 to 5 feet bgs (mg/kg)	Volatilization to outdoor air (5 to 10 feet bgs) mg/kg	0 to 5 feet bgs (mg/kg)	Volatilization to outdoor air (5 to 10 feet bgs) mg/kg	0 to 10 feet bgs (mg/kg)
Site Maximum	Benzene	**<0.005**	**< 0.001**	**< 0.005**	**<0.001**	**< 0.005**
LTCP Criteria	Benzene	≤1.9	≤2.8	≤8.2	≤12	≤14
Site Maximum	Ethylbenzene	**<0.005**	**< 0.001**	**< 0.005**	**< 0.001**	**< 0.005**
LTCP Criteria	Ethylbenzene	≤21	≤32	≤89	≤134	≤314
Site Maximum	Naphthalene	**0.015**	---	**0.015**	---	0.015 (0 to 5 ft)
LTCP Criteria	Naphthalene	≤9.7	≤9.7	≤45	≤45	≤219
Site Maximum	PAHs	0.21	---	**0.21**	---	0.21 (0 to 5 ft)
LTCP Criteria	PAHs	≤0.063	NA	≤0.68	NA	≤4.5

Direct Contact and Outdoor Air Analysis

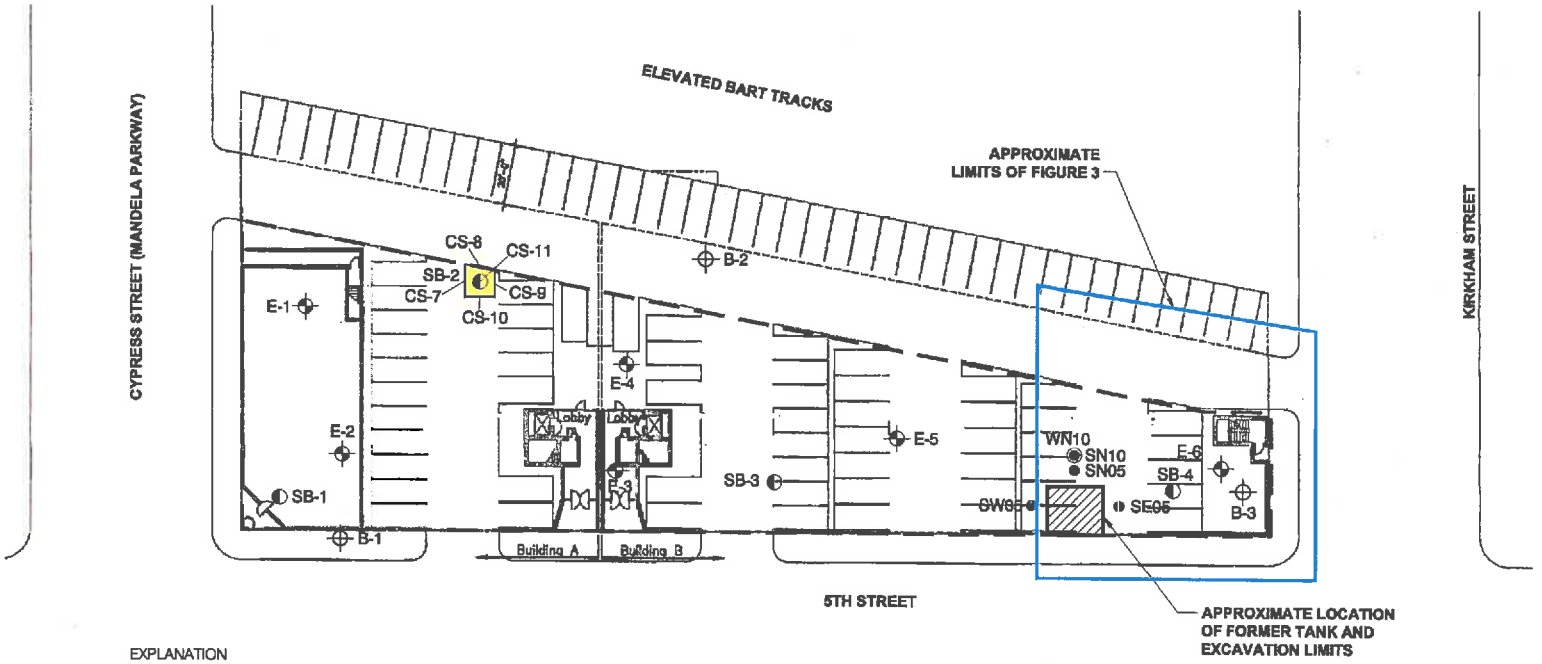
This site meets the Commercial/Industrial criteria with the following exceptions: 1) the lack of analysis in soil between 5 and 10 feet for PAHs and naphthalene in the area of the UST for oil that was located under a building in the central area of the site according to a 1902 Sanborn map; and 2) the lack of analysis in soil between 5 and 10 for benzene and ethylbenzene in the areas of the two removed USTs and the one closed-in-place UST that were found in the sidewalk at the southern edge of the property;

Due to residual contamination at the site, the site is closed as a commercial vacant site with site management requirements. If there is a proposed change in land use to any residential, or conservative land use, or if any redevelopment occurs, ACDEH must be notified as required by Government Code Section 65850.2.2. ACDEH will re-evaluate the site relative to the proposed redevelopment. Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities

Attachment 2 – Direct Contact Evaluation and Data

DIRECT CONTACT – NON-PETROLEUM				
Closure Guidance				
San Francisco Bay Regional Water Quality Control Board's *Environmental Screening Level* Tables, in conjunction with *User's Guide: Derivation and Application of Environmental Screening Levels*, and, revised in December 2013.				
Closure Scenario				
_X_ **Maximum concentrations of contaminants are less than or equal to those in Table 1 below**, __ Site-specific risk assessment, __ A determination has been made that the concentrations of contaminants in soil will have no significant risk of adversely affecting human health as a result of controlling exposure through the use of mitigation measures or through the use of institutional controls.				
Evaluation Criteria: Bold indicates criteria met.				
Are maximum concentrations less than those in Table 1 below?			Yes	
Constituent		Residential	Commercial / Industrial	Utility Worker
		0 to 10 feet bgs (mg/kg)	0 to 10 feet bgs (mg/kg)	0 to 10 feet bgs (mg/kg)
Site Maximum	Mercury	**0.29**	**0.29**	**0.29**
Direct Contact ESL	Mercury	13	190	44
Site Maximum	Lead	93	**93**	**93**
Direct Contact ESL	Lead	80	320	160
Site Maximum	PCBs	**< 0.084**	**< 0.084**	**< 0.084**
Direct Contact ESL	PCBs	0.25	1.0	5.6

Direct Contact Analysis	
Pollutant Sources are Identified and Evaluated	Yes. Native soil; imported fill
Site is Adequately Characterized	Yes. The native soil, fill material placed at the site in the 1800s and the fill material used to backfill the remedial excavation in 2011 has been adequately characterized
Exposure Pathways, Receptors, and Potential Risks, Threats, and Other Environmental Concerns are Identified and Assessed	The site is currently a vacant dirt lot that is fenced to restrict access.
Are maximum soil concentrations less than relevant screening criteria?	With the exception of one soil sample collected at 3 feet below ground surface the site meets both residential and commercial/industrial direct exposure human health risk levels.



EXPLANATION

CS-7	Approximate location of confirmatory soil sample by Treadwell & Rollo, Inc., May 2007
	Approximate excavation area for confirmation sampling for total lead. Sample CS-7 West, CS-8 North, CS-9 East, CS-10 South, collected from west, north, east, and south excavation sidewalls, respectively. Sample CS-11 Bot Collected from excavation bottom (2.5 feet bgs).
E-1	Approximate location of boring by Treadwell & Rollo, Inc., April 2006
B-1	Approximate location of boring by Treadwell & Rollo, Inc., March 2005
SB-1	Approximate location of boring by Remediation Services, Inc., August 2004
SN05	Grab soil sample location, by Treadwell & Rollo, Inc., November 2006 , May 2007
WN10	Grab groundwater sample location, by Treadwell & Rollo, Inc November 2006

Note: Unless noted, soil samples collected 5 feet below ground surface, groundwater sample collected 6 feet below ground surface.

0 20 40 Feet

Approximate scale

Reference: Ground Floor Plan - Option A by Philip Banta & Associates Architects, dated 11/03/04.

RED STAR YEAST SITE
Oakland, California

SITE PLAN

Date 05/30/07	Project No. 4068.01	Figure 2

Treadwell&Rollo

\\TNR2\vol1\Graphics\Tgraphics\4000's\4068.01\4068.01 SITE PLAN-2007.dwg 5/30/07

Table 5
Soil Analytical Results for Petroleum Hydrocarbons and Total Lead
Red Star Yeast
Oakland, California

DEPTH	Sample ID	Date Sample	TPHg	TPHd	MTBE	Benzene	Toluene	Ethlybenzene	Xylenes	Lead
			mg/kg							
	ST-1	26-Sep-06	< 1.0	< 1.0	< 0.5	< 0.005	< 0.005	< 0.005	< 0.005	< 5.0
5 FT	SE 05 (14Nov06)	14-Nov-06	< 1.0	1.3	NM	< 0.005	< 0.005	< 0.005	< 0.005	NM
5 FT	SW 05 (14Nov06)	14-Nov-06	< 1.0	< 1.0	NM	< 0.005	< 0.005	< 0.005	< 0.005	NM
5 FT	SN 05 (14Nov06)	14-Nov-06	< 1.0	2.0	NM	< 0.005	< 0.005	< 0.005	< 0.005	NM
5 FT	SN 10 (14Nov06)	14-Nov-06	< 1.0	< 1.0	NM	< 0.005	< 0.005	< 0.005	< 0.005	NM

Notes:
All results are reported in milligrams per kilogram (mg/kg)
TPHg - Total Petroleum Hydrocarbons as Gasoline, EPA Method 8015M
TPHd - Total Petroleum Hydrocarbons as Diesel Range (C10-C23), EPA Method 8015M
MTBE - Methyl Tert Butyl Ether
<1.0 - Analyte was not detected above the laboratory reporting limit (1.0 mg/kg)
NM - Not Measured

Table 2
Soil Analytical Results for Metals
Red Star Yeast
1396 Fifth Street
Oakland, California

Sample ID	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	STLC Lead	TCLP Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/L)	(mg/L)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
E-1-1.5	4/14/2006	--	--	--	--	< 1.5	20	--	--	180	11	<0.2	--	--	25	--	--	--	--	280
E-1-2.5	4/14/2006	1.8	6.8	1,100	0.9	< 0.25	16	7.7	38	27	--	--	0.12	1.4	18	< 0.5	< 0.5	< 0.5	48	41
E-2-1.5	4/14/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
E-2-2.5	4/14/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
E-3-1.5	4/14/2006	< 0.5	5.1	--	--	--	< 0.5	--	--	< 0.5	--	--	--	--	7.3	--	--	--	--	< 5.0
E-3-2.5	4/14/2006	--	--	--	--	< 1.5	24	--	--	140	6.7	<0.2	--	--	22	--	--	--	--	370
E-4-1.5	4/14/2006	--	--	--	--	< 1.5	47	--	--	43	--	--	--	--	43	--	--	--	--	67
E-4-2.5	4/14/2006	< 0.5	1.7	130	< 0.5	< 0.25	23	3.5	13	15	--	--	< 0.05	< 0.5	18	< 0.5	< 0.5	< 0.5	22	34
E-5-1.5	4/14/2006	< 0.5	3.1	140	< 0.5	0.36	34	6.5	19	5.6	--	--	< 0.05	< 0.5	32	< 0.5	< 0.5	< 0.5	39	49
E-5-2.5	4/14/2006	--	--	--	--	< 1.5	29	--	--	34	--	--	--	--	22	--	--	--	--	200
E-6-1.5	4/14/2006	< 0.5	4.3	190	< 0.5	< 0.25	31	7.9	18	76	3.4	<0.2	0.16	0.5	40	< 0.5	< 0.5	< 0.5	45	92
E-6-2.5	4/14/2006	--	--	--	--	< 1.5	50	--	--	< 5.0	--	--	--	--	41	--	--	--	--	25

Notes:
mg/kg - milligrams per kilograms
< 5.0 - Analyte was not detected above the laboratory reporting limit (5.0 mg/kg).
-- Not analyzed

SOIL OVEREXCAVATED DURING REMEDIAL EXCAVATION IN 2011

Table 1
Soil Analytical Results for Petroleum Hydrocarbons
Red Star Yeast
1396 Fifth Street
Oakland, California

Sample ID	Date Sample	TPHg	TPHd	TPHmo	MTBE	Benzene	Toluene	Ethlybenzene	Xylenes	VOCs	SVOCs
		mg/kg									
E-1-1.5	4/14/2006	< 1.0	3.7	19	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	--	--
E-1-2.5	4/14/2006	< 1.0	< 1.0	< 1.0	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	ND	ND
E-2-1.5	4/14/2006	< 1.0	< 1.0	< 1.0	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	--	--
E-2-2.5	4/14/2006	< 1.0	< 1.0	< 1.0	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	--	--
E-3-1.5	4/14/2006	< 1.0	2.6	12	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	--	--
E-3-2.5	4/14/2006	< 1.0	< 1.0	< 1.0	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	ND	--
E-4-1.5	4/14/2006	< 1.0	5.6	38	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	--	--
E-4-2.5	4/14/2006	< 1.0	< 1.0	< 1.0	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	--	--
E-5-1.5	4/14/2006	< 1.0	1.4	6.0	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	ND	--
E-5-2.5	4/14/2006	< 1.0	3.2	20	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	--	--
E-6-1.5	4/14/2006	< 1.0	7.8	43	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	--	--
E-6-2.5	4/14/2006	< 1.0	< 1.0	< 1.0	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	ND	--

Notes:
TPHg - Total Petroleum Hydrocarbons as Gasoline, EPA Method 8015M
TPHd - Total Petroleum Hydrocarbons as Diesel Range (C10-C23), EPA Method 8015M
TPHmo - Total Petroleum Hydrocarbons as Motor Oil (C10-C23), EPA Method 8015M
MTBE - Methyl Tert Butyl Ether
VOCs - Volatile Organic Compounds, EPA 8260B
SVOCs - Semi volatile organic compounds, EPA Method 8270
All results are reported in milligrams per kilogram (mg/kg)
< 0.005 - Analyte was not detected above the laboratory reporting limit (0.005 mg/kg)
-- Not Analyzed
ND - Not detected at or above the laboratory reporting limit

Table 3

Summary of Analytical Data

Parameter	Method	Units	SB-1	GR-1	SB-2	GR-2	SB-3	SB-4
TPH (Diesel)	SW8015B	mg/Kg or mg/L	ND	ND	ND	ND	ND	ND
TPH (Gasoline)	SW8015B	mg/Kg or mg/L	ND	ND	ND	ND	ND	ND
VOCs	SW8260B	µg/Kg or µg/L	ND	ND	ND	ND	ND	ND
pH	SW9045C	pH units	7.24	6.61	8.6	6.88	8.16	8.09
PAHs	SW8270C	mg/Kg or mg/L		ND	0.52*, 0.58**	ND	ND	
Cadmium ***	SW6010B	mg/Kg or mg/L		ND	3.3	ND	1.4	
Chromium ***	SW6010B	mg/Kg or mg/L		ND	39	ND	28	
Lead ***	SW6010B	mg/Kg or mg/L		ND	2700	ND	29	
Mercury ***	SW7471A	mg/Kg or mg/L		ND	0.17	ND	ND	
Nickel ***	SW6010B	mg/Kg or mg/L		ND	42	ND	22	
Zinc ***	SW6010B	mg/Kg or mg/L		ND	1700	ND	34	
TDS	E160.1	mg/L		2400		1800		

* Result is for Fluoranthene

** Result is for Pyrene

*** SOIL OVEREXCAVATED DURING REMEDIAL EXCAVATION IN 2011

Table 1
Soil Analytical Results for Total Lead
Red Star Yeast
Oakland, CA
Project: 4068.01

Sample ID	Depth (feet)	Date Sampled	Lead
			(mg/kg)
CS-7-WEST	1.5	5/17/2007	180 *
CS-8-NORTH	1.5	5/17/2007	130 *
CS-9-EAST	1.5	5/17/2007	190 *
CS-10-SOUTH	1.5	5/17/2007	110 *
CS-11-BOT	2.5	5/17/2007	94 *

Notes:
mg/kg - milligrams per kilograms

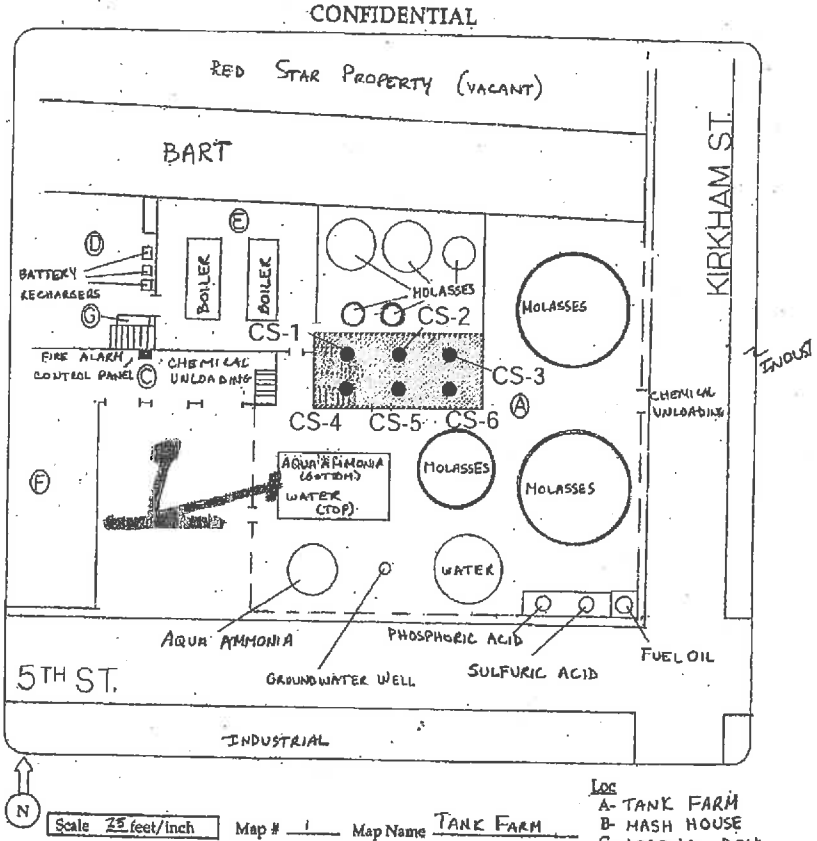
* SOIL OVEREXCAVATED DURING REMEDIAL EXCAVATION IN 2011

Alameda County Department of Environmental Health

HAZARDOUS MATERIALS MANAGEMENT PLAN
Facility Map - Storage Detail

Facility Name RED STAR YEAST Facility ID 3889

CONFIDENTIAL



Scale 25 feet/inch Map # 1 Map Name TANK FARM

Today's Date 2/28/92

Loc
A- TANK FARM
B- HASH HOUSE
C- LOADING DOCK
D- WARE HOUSE
E- BOILER ROOM
F- COOLER
G- OFFICE

NOTE: -MSDS's STORED IN OFFICES.
-ALL INTERIOR DRAINS ARE SEWER DRAINS

EXPLANATION

Approximate area where mercury spill reportedly occurred in 1996

● Approximate location of soil sample collected for confirmatory mercury sample

CS-1 Confirmation sample collected at depths of 0-6 inches and 6-12 inches

Reference: Alameda County Department of Environmental Health.

0 15 30 Feet
Approximate scale

RED START YEAST SITE
Oakland, California

PROPOSED SOIL CONFIRMATION SAMPLE LOCATIONS

Treadwell&Rollo

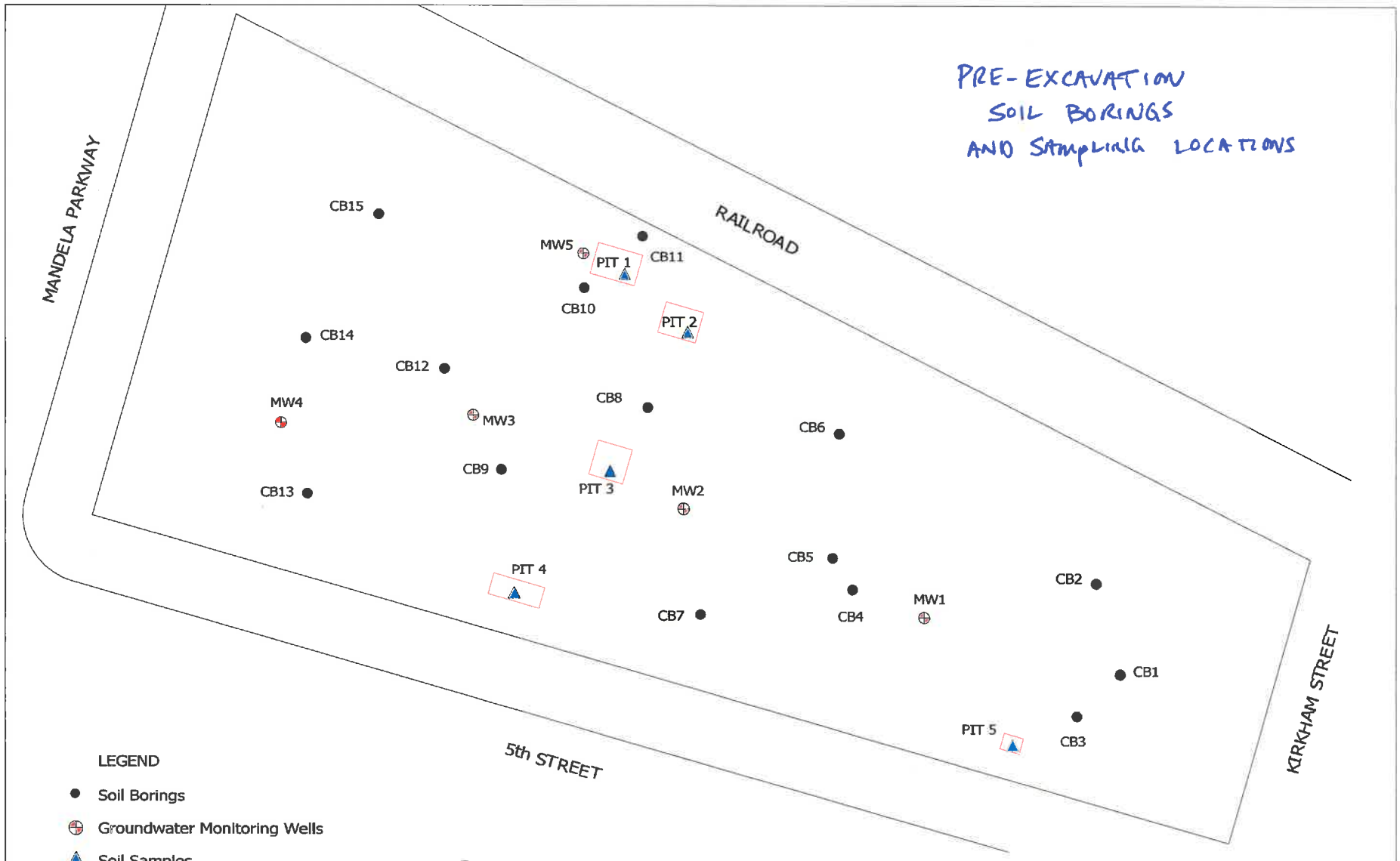
Date 05/23/07 | Project No. 4068.01 | Figure 3

\\TNR2\vol1\Graphics\Trgraphics\4000's\4068.01\4068.01 Proposed Soil Sample Location.dwg 5/23/07

Table 2
Soil Analytical Results for Total Mercury
Red Star Yeast
Oakland, CA
Project: 4068.01
PRE-EXCAVATION

Sample ID	Depth (feet)	Date Sampled	Mercury
			(mg/kg)
CS-1-0	0.5	5/17/2007	1.1
CS-1-6	1	5/17/2007	0.11
CS-2-0	0.5	5/17/2007	3
CS-2-6	1	5/17/2007	0.56
CS-3-0	0.5	5/17/2007	5.8
CS-3-6	1	5/17/2007	0.28
CS-4-0	0.5	5/17/2007	0.72
CS-4-6	1	5/17/2007	0.14
CS-5-0	0.5	5/17/2007	1.3
CS-5-6	1	5/17/2007	0.093
CS-6-0	0.5	5/17/2007	1.4
CS-6-6	1	5/17/2007	0.58

Notes:
mg/kg - milligrams per kilograms



SCALE	APPROXIMATE SCALE IN FEET 0 40 80		NORTH
DRAWN BY	J. NICOLICH	3/7/11	
CHECKED BY	D. LOUKS	3/9/11	
REVISED BY			

CITADEL
ENVIRONMENTAL SERVICES, INC.

FIGURE 1
GENERAL SITE PLAN
COMMERCIAL PROPERTY
1396 5th Street
Oakland, California

PRE-EXCAVATION

Table 1: Summary of Soil Sampling Results (mg/Kg)

Sampled March 4 and 5, 2011

Sample ID	C5-C12 Hc	C13-C24 Hc	C25-C40 Hc
CB1-1	<0.1	<1	47
CB1-2	<0.1	<1	<5
CB1-3	<0.1	<1	44
CB1-4	<0.1	<1	52
CB2-1	<0.1	<1	<5
CB2-2	<0.1	<1	<5
CB2-3	<0.1	<1	<5
CB2-4	<0.1	<1	<5
CB3-1	<0.1	<1	<5
CB3-2	<0.1	<1	33
CB3-3	<0.1	<1	<5
CB3-4	<0.1	<1	37
CB4-1	<0.1	<1	<5
CB4-2	<0.1	<1	38
CB4-3	<0.1	<1	<5
CB4-4	<0.1	<1	<5
CB5-1	<0.1	<1	<5
CB5-2	<0.1	<1	<5
CB5-3	<0.1	<1	<5
CB5-4	<0.1	<1	<5
CB6-1	<0.1	<1	<5
CB6-2	<0.1	<1	51
CB6-3	<0.1	<1	<5
CB6-4	<0.1	<1	<5
CB7-1	<0.1	<1	<5
CB7-2	<0.1	<1	<5
CB7-3	<0.1	<1	<5
CB7-4	<0.1	<1	<5
CB8-1	<0.1	<1	<5
CB8-2	<0.1	<1	<5
CB8-3	<0.1	<1	<5
CB8-4	<0.1	<1	<5
CB8-6	<0.1	<1	<5
ESL	***100***	***100***	***100***

PRE-EXCAVATION

Table 1 – continued: Summary of Soil Sampling Results (mg/Kg)
Sampled March 4 and 5, 2011

Sample ID	C5-C12 Hc	C13-C24 Hc	C25-C40 Hc
CB9-1	<0.1	<1	>5
CB9-2	<0.1	<1	>5
CB9-3	<0.1	<1	>5
CB9-4	<0.1	82	**190**
CB9-6	<0.1	37	96
CB10-1	<0.1	17	58
CB10-2	<0.1	<1	>5
CB10-3	<0.1	**200**	**470**
CB10-4	<0.1	12	54
CB10-6	<0.1	<1	>5
CB11-1	<0.1	<1	57
CB11-2	<0.1	62	140
CB11-3	<0.1	<1	69
CB11-4	<0.1	<1	>5
CB11-6	<0.1	<1	>5
CB12-1	<0.1	<1	58
CB12-2	<0.1	48	**290**
CB12-3	<0.1	96	**460**
CB12-4	<0.1	**160**	**740**
CB12-6	<0.1	<1	88
CB13-1	<0.1	<1	68
CB13-2	<0.1	<1	>5
CB13-3	<0.1	<1	>5
CB13-4	<0.1	<1	>5
CB14-1	<0.1	17	>5
CB14-2	<0.1	<1	>5
CB14-3	<0.1	<1	>5
CB14-4	<0.1	<1	>5
CB15-1	<0.1	<1	>5
CB15-2	<0.1	<1	66
CB15-3	<0.1	<1	87
CB15-4	<0.1	<1	>5
ESL	***100***	***100***	***100***

PRE-EXCAVATION

Table 1 – continued: Summary of Soil Sampling Results (mg/Kg)

Sampled March 5 and 6, 2011

Sample ID	C5-C12 Hc	C13-C24 Hc	C25-C40 Hc
MW1-6	<0.1	<1	<5
MW2-6	<0.1	<1	<5
MW3-6	<0.1	<1	130
MW4-6	<0.1	<1	<5
MW5-6	<0.1	<1	<5
Pit 1-6	<0.1	<1	<5
Pit 2-6	<0.1	140	440
Pit 3-6	<0.1	<1	73
Pit 4-6	<0.1	<1	<5
ESL	***100***	***100***	***100***

Notes: VOC - volatile organic compounds analyzed by EPA Method 8260B. SVOC -semi volatile organic compounds analyzed by EPA Method 8270C. Environmental Screening Levels (ESLs) developed by SFRWQCB as health risk and protective based guideline values for shallow soil (<10 feet and groundwater is not usable for drinking supply). Taken from Table B - Residential Use. Please refer to lab report for complete results.

CITADEL
ENVIRONMENTAL SERVICES, INC.

CITADEL PROJECT NO. 0222.1001.0

SOIL CLOSURE REPORT
FORMER RED STAR YEAST COMPANY
1396 FIFTH STREET
OAKLAND, CALIFORNIA
AUGUST 21, 2012,
REVISED MARCH 21, 2013

PRE-EXCAVATION

Table 1A: Summary of Heavy Metal Results (mg/Kg)

Sampled March 4 and 5, 2011

Sample ID	Barium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Vanadium	Zinc
CB1-1	150	1.2	42	13	51	28	0.081	49	43	78
CB1-2	180	1.2	53	18	61	33	0.095	58	68	100
CB1-3	330	1.5	68	20	80	**94**	0.19	69	66	150
CB1-4	310	1.3	50	**64**	120	47	0.083	60	47	120
CB2-1	120	1.2	50	15	48	**740**	0.75	97	40	54
CB2-2	190	1.4	78	**23**	62	19	0.091	79	60	84
CB2-3	120	<1	40	11	48	<1	<0.05	50	37	57
CB2-4	180	1.3	41	9.8	56	**110**	0.074	50	74	120
CB3-1	320	1.4	52	16	76	49	0.052	61	62	140
CB3-2	340	3.3	42	15	58	39	0.061	96	47	87
CB3-3	160	<1	43	10	45	41	0.063	45	44	66
CB3-4	160	<1	80	11	44	8.7	0.059	76	75	65
CB4-1	170	1.9	41	14	55	11	0.077	50	44	70
CB4-2	230	<1	62	17	58	56	0.11	130	100	75
CB4-3	140	<1	48	12	52	12	0.053	45	50	67
CB4-4	160	<1	46	11	53	40	0.064	46	56	84
CB5-1	260	<1	22	15	64	23	0.066	35	60	100
CB5-2	180	1.5	38	12	54	3.6	<0.05	46	42	57
CB5-3	120	<1	50	10	45	<1	<0.05	40	44	30
CB5-4	120	<1	37	9.7	45	<1	<0.05	37	43	44
CB6-1	300	1.5	30	20	77	56	0.078	44	74	120
CB6-2	170	1.5	41	15	65	13	0.058	63	42	75
CB6-3	160	<1	43	10	44	<1	<0.05	36	47	38
CB6-4	140	<1	52	10	47	<1	<0.05	48	47	32
CB7-1	140	1.4	41	16	65	<1	0.064	69	33	59
CB7-2	180	1.6	37	13	60	2.4	0.089	54	39	60
CB7-3	89	<1	47	10	41	<1	<0.05	36	47	20
CB7-4	190	<1	54	16	62	<1	<0.05	62	50	59
CB8-1	170	1.7	54	16	66	35	0.12	63	53	91
CB8-2	550	1.4	20	8.4	87	**98**	0.36	32	44	82
CB8-3	460	<1	25	11	81	**830**	0.87	32	41	380
CB8-4	810	<1	16	7.4	96	**170**	0.34	20	45	110
CB8-6	400	1.7	43	7.6	120	**530**	0.62	33	51	150
ESL	***750***	***12***	***1,000***	***23***	***230***	***80***	***6.7***	***150***	***200***	***600***

PRE-EXCAVATION

Table 1A – continued: Summary of Heavy Metal Results (mg/Kg)
Sampled March 4 and 5, 2011

Sample ID	Barium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Vanadium	Zinc
CB9-1	180	1.6	41	15	70	46	0.093	55	45	98
CB9-2	290	1.4	66	18	120	**180**	0.29	**110**	120	160
CB9-3	320	1.5	51	20	**300**	**590**	1.1	**180**	**240**	270
CB9-4	**1,100**	1.4	20	15	96	**160**	0.49	32	110	68
CB9-6	430	ND	42	10	63	**2,400**	0.80	31	72	98
CB10-1	360	<1	35	17	73	25	0.064	48	84	100
CB10-2	290	<1	31	16	90	**110**	0.084	43	69	160
CB10-3	860	1.8	27	15	98	**95**	0.24	40	110	83
CB10-4	350	<1	50	18	55	20	0.21	44	77	26
CB10-6	120	<1	36	8.0	42	12	0.074	25	39	38
CB11-1	320	2.0	47	16	140	**300**	1.3	57	68	300
CB11-2	500	2.6	51	13	**360**	**710**	2.8	59	74	530
CB11-3	180	<1	46	8.8	51	**120**	0.75	31	48	82
CB11-4	100	<1	42	8.0	39	**110**	0.37	29	42	27
CB11-6	200	<1	46	8.4	81	**150**	0.52	33	47	76
CB12-1	280	1.5	28	17	75	54	0.074	39	70	140
CB12-2	200	<1	49	10	120	**120**	0.44	41	50	110
CB12-3	170	<1	42	11	81	**96**	0.17	54	59	99
CB12-4	520	<1	33	12	110	**180**	0.29	54	67	210
CB12-6	**890**	1.4	81	12	79	25	0.097	17	98	31
CB13-1	220	<1	57	14	77	34	0.083	55	51	99
CB13-2	190	<1	41	13	67	42	0.066	51	48	96
CB13-3	220	<1	31	15	68	40	0.079	42	57	99
CB13-4	110	<1	48	7.3	43	53	0.057	28	43	120
CB14-1	200	1.7	49	11	69	**340**	0.39	40	50	140
CB14-2	280	<1	49	12	75	**190**	0.16	40	53	120
CB14-3	300	<1	24	9.2	83	**270**	0.23	26	72	86
CB14-4	100	<1	34	7.1	44	**84**	0.073	25	39	37
CB15-1	220	<1	40	12	86	**830**	1.7	47	55	230
CB15-2	170	<1	49	14	87	**140**	0.12	49	58	170
CB15-3	130	<1	44	11	140	28	0.089	38	81	62
CB15-4	600	<1	39	9.7	60	61	0.082	35	59	100
ESL	***750***	***12***	***1,000***	***23***	***230***	***200***	***6.7***	***150***	***200***	***600***

PRE-EXCAVATION

Table 1A – continued: Summary of Heavy Metal Results (mg/Kg)

Sampled March 5 and 6, 2011

Sample ID	Barium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Nickel	Vanadium	Zinc
MW1-6	84	<1	55	11	40	<1	0.053	51	52	34
MW2-6	90	<1	39	8.5	41	<1	<0.05	30	39	24
MW3-6	120	<1	36	7.0	41	53	0.066	25	36	41
MW4-6	140	<1	22	7.7	52	**260**	0.25	24	34	78
MW5-6	25	<1	<1	<1	13	<1	<0.05	<1	<1	12
Pit 1-6	77	<1	40	6.6	37	<1	0.069	24	39	21
Pit 2-6	710	<1	18	18	100	**130**	0.13	34	110	44
Pit 3-6	280	<1	36	9.9	130	**300**	0.22	37	47	160
Pit 4-6	190	<1	54	7.3	53	**650**	0.38	28	44	130
ESL	***750***	***12***	***1,000***	***23***	***230***	***80***	***6.7***	***150***	***200***	***600***

Notes: Environmental Screening Levels (ESLs) developed by SFRWQCB as health risk and protective based guideline values for shallow soil (<10 feet and groundwater is not usable for drinking supply). Taken from Table B - Residential Use. Please refer to lab report for complete results.

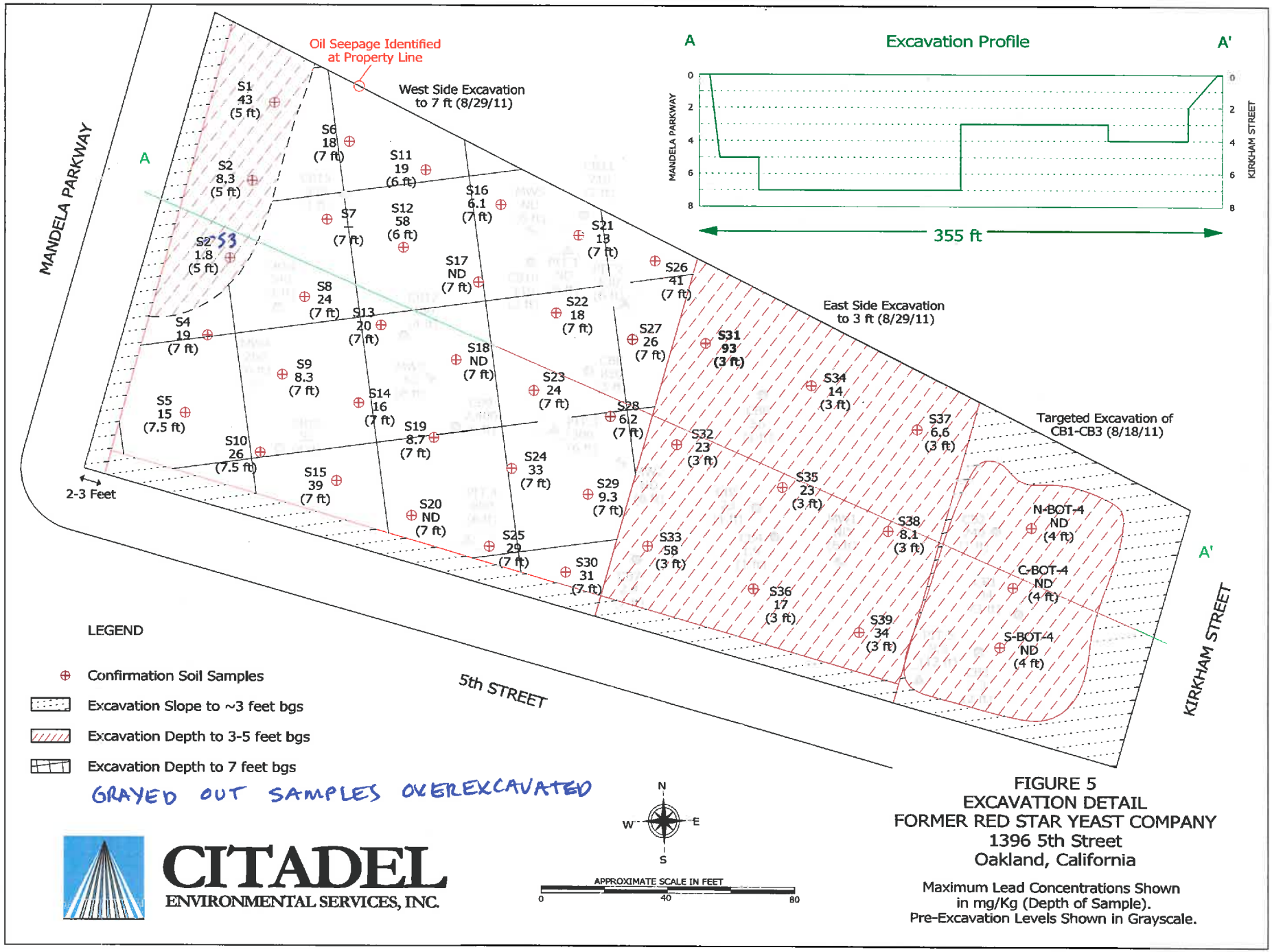


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FIGURE 5
EXCAVATION DETAIL
FORMER RED STAR YEAST COMPANY
1396 5th Street
Oakland, California

Maximum Lead Concentrations Shown in mg/Kg (Depth of Sample).
Pre-Excavation Levels Shown in Grayscale.

Table 2: Summary of Final Confirmation Soil Sampling Results (mg/Kg)

Sample ID	Cadmium	Lead	Mercury	C5-C12 Hc	C13-C24 Hc	C25-C40 Hc
West Side Confirmation Samples - Sampled August 29, 2011						
S1-5	<1	43	<0.05	<0.1	<1	39
S2-5	<1	8.3	<0.05	<0.1	<1	18
S3-5	<1	1.8	<0.05	<0.1	<1	<5
S4-7	<1	19	<0.05	<0.1	<1	<5
S5-7.5	<1	15	<0.05	<0.1	<1	<5
S6-7	<1	18	<0.05	<0.1	<1	<5
S8-7	<1	24	<0.05	<0.1	<1	<5
S9-7	<1	8.3	<0.05	<0.1	<1	<5
S10-7.5	<1	26	<0.05	<0.1	<1	<5
S11-6	<1	19	<0.05	<0.1	<1	<5
S12-6	<1	58	<0.05	<0.1	<1	<5
S13-7	<1	20	<0.05	<0.1	<1	<5
S14-7	<1	16	<0.05	<0.1	<1	<5
S15-7	<1	39	<0.05	<0.1	<1	22
S16-7	<1	6.1	<0.05	<0.1	<1	<5
S17-7	<1	<1	<0.05	<0.1	<1	<5
S18-7	<1	<1	<0.05	<0.1	<1	<5
S19-7	<1	8.7	<0.05	<0.1	<1	<5
S20-7	<1	ND	<0.05	<0.1	<1	<5
S21-7	<1	13	<0.05	<0.1	<1	<5
S22-7	<1	18	<0.05	<0.1	<1	<5
S23-7	<1	24	<0.05	<0.1	<1	<5
S24-7	<1	33	<0.05	<0.1	<1	<5
S25-7	<1	29	<0.05	<0.1	<1	<5
S26-7	<1	41	<0.05	<0.1	<1	<5
S27-7	<1	26	<0.05	<0.1	<1	<5
S28-7	<1	6.2	<0.05	<0.1	<1	<5
S29-7	<1	9.3	<0.05	<0.1	<1	<5
S30-7	<1	31	<0.05	<0.1	<1	<5
Cleanup Goal	***1.7***	***80***	***18***	***100***	***100***	***370***

Notes – No final sample collected from node S7, excavated to 7 feet below grade. Cleanup goals for heavy metals are Soil Screening Levels (SSLs) developed by OEHHA as health risk based guideline values based on total exposure to contaminated soil including inhalation, ingestion and dermal absorption in both residential and Industrial settings. The cleanup goals for hydrocarbons are the Environmental Screening Levels (ESLs) developed by SFRWQCB as health risk and protective based guideline values for shallow soil (<10 feet and groundwater is not usable for drinking supply). Taken from Table B1 - Residential Use. Please refer to lab report for complete results.

Table 2-Contd.: Summary of Final Confirmation Soil Sampling Results (mg/Kg)

Sample ID	Cadmium	Lead	Mercury	C5-C12 Hc	C13-C24 Hc	C25-C40 Hc
East Side Confirmation Samples - Sampled August 29, 2011						
S31-3	<1	93	<0.05	<0.1	<1	<5
S32-3	<1	23	<0.05	<0.1	<1	<5
S33-3	<1	58	<0.05	<0.1	<1	<5
S34-3	<1	14	<0.05	<0.1	<1	<5
S35-3	<1	23	<0.05	<0.1	<1	<5
S36-3	<1	17	<0.05	<0.1	<1	<5
S37-3	<1	6.6	<0.05	<0.1	<1	<5
S38-3	<1	8.1	<0.05	<0.1	<1	<5
S39-3	<1	34	<0.05	<0.1	<1	<5
N-BOT-4	<1	<1	---	<0.1	<1	<5
C-BOT-4	<1	<1	---	<0.1	<1	<5
S-BOT-4	<1	<1	---	<0.1	<1	<5
Cleanup Goal	***1.7***	***80***	***18***	***100***	***100***	***370***

Notes – Cleanup goals for heavy metals are Soil Screening Levels (SSLs) developed by OEHHA as health risk based guideline values based on total exposure to contaminated soil including inhalation, ingestion and dermal absorption in both residential and Industrial settings. The cleanup goals for hydrocarbons are the Environmental Screening Levels (ESLs) developed by SFRWQCB as health risk and protective based guideline values for shallow soil (<10 feet and groundwater is not usable for drinking supply). Taken from Table B1 - Residential Use. Please refer to lab report for complete results.

Table 1A: Summary of Other Heavy Metal Results (mg/Kg)

Sample ID	Barium	Chromium	Cobalt	Copper	Nickel	Vanadium	Zinc
West Side Confirmation Samples, Excavation of CB9 - Sampled August 17, 2011							
E-SW-6	170	44	3.7	29	16	46	71
W-SW-6	150	38	2.3	29	12	41	57
N-SW-6	280	40	2.7	41	13	48	120
S-SW-6	140	38	2.5	26	19	51	42
BOT-6	45	37	7.1	22	25	55	32
West Side Confirmation Samples - Sampled August 18, 2011							
S1-5	140	38	1.7	27	12	28	41
S2-5	92	39	1.9	21	11	35	33
S3-5	71	46	5.8	22	19	43	34
★ S4-5	340	42	6.7	58	28	61	180
★ S5-5	120	45	2.7	25	5.9	43	37
★ S6-5	250	32	3.6	59	24	38	160
★ S7-5	150	26	3.6	34	22	35	67
★ S8-5	150	27	1.6	37	18	32	76
★ S9-5	220	86	8.9	41	71	49	70
★ S10-5	190	41	4.4	43	34	47	120
Cleanup Goal	***5,200***	***100,000***	***660***	***3,000***	***1,600***	***530***	***23,000***

Notes – Cleanup goals for heavy metals are Soil Screening Levels (SSLs) developed by OEHHA as health risk based guideline values based on total exposure to contaminated soil including inhalation, ingestion and dermal absorption in both residential and Industrial settings. The cleanup goals for hydrocarbons are the Environmental Screening Levels (ESLs) developed by SFRWQCB as health risk and protective based guideline values for shallow soil (<10 feet and groundwater is not usable for drinking supply). Taken from Table B1 - Residential Use. Please refer to lab report for complete results.

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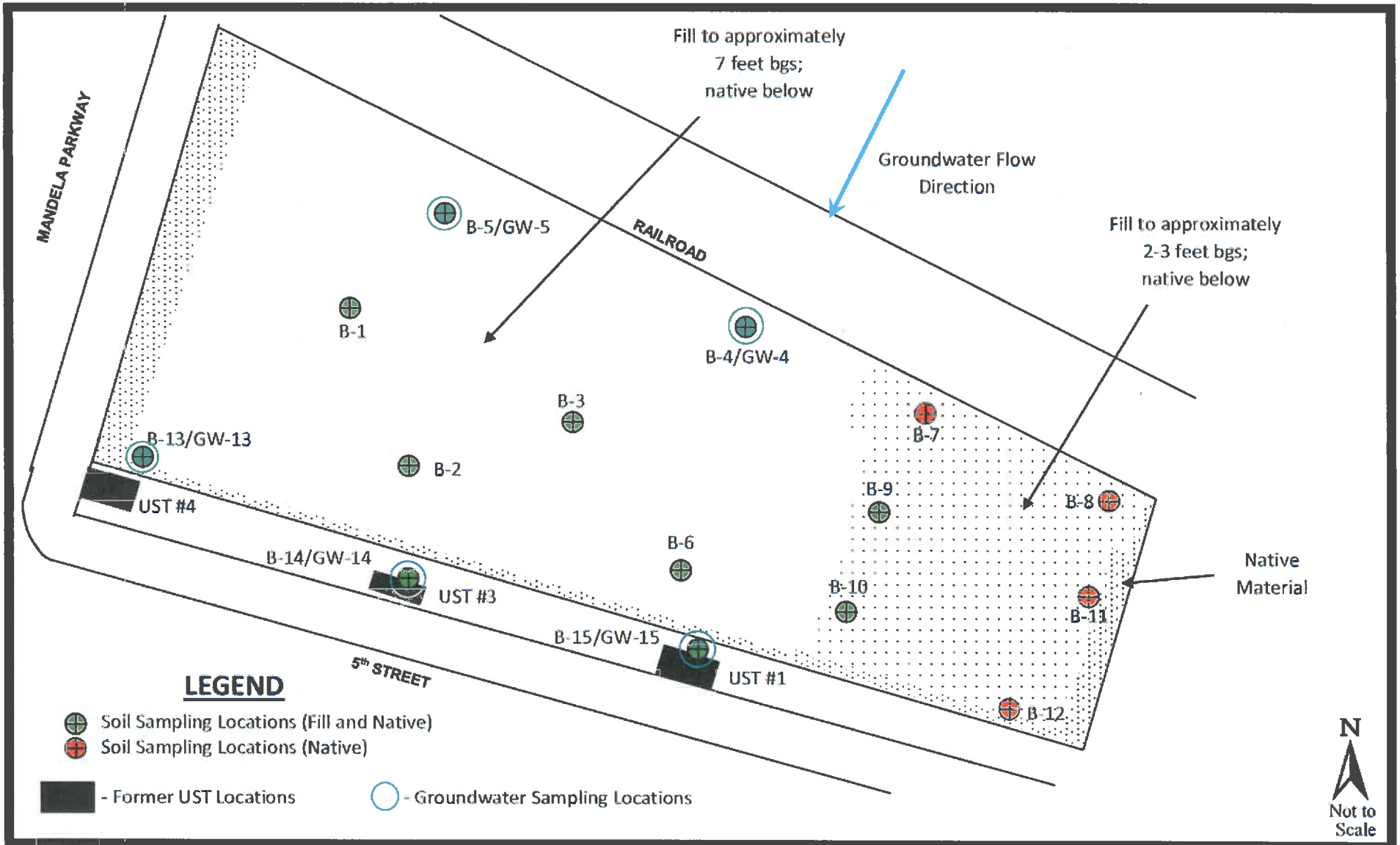


CITADEL
ENVIRONMENTAL SERVICES, INC.

Former Red Star Yeast Company
1396 5th Street
Oakland, California

Figure 2

PROJECT NO: 0849.1001.0

DATE: JULY 2016

Site Plan with Sampling Locations
2016 DATA GAP INVESTIGATION

Table 1. Petroleum Hydrocarbons, Oxygenates and Volatile Organic Compounds (VOCs) in Soil
Former Red Star Senior Living Apartments Development
Michaels Development
1396 Fith Street, Oakland, California

2016 SOIL BORINGS TO ADDRESS DATA GAPS IN SOIL EXCAVATION BACKFILL MATERIAL AND PETROLEUM HYDROCARBONS IN SOIL

Boring ID	Sample Depth (feet)	Date Sampled	TPHg mg/kg	TPHd mg/kg	TPHo mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl-benzene mg/kg	Total xylenes mg/kg	MTBE mg/kg	ETBE mg/kg	DIPE mg/kg	TAME mg/kg	TBA mg/kg	Isopropyl-benzene mg/kg	N-Propyl-benzene mg/kg	Styrene mg/kg	1,2,4-Trimethyl-benzene mg/kg	1,3,5-Trimethyl-benzene mg/kg	Comments
B-5	1	6/30/2016	ND<0.070	16	120	ND<0.001	ND<0.001	ND<0.001	ND<0.002	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.01	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.001	Backfill
B-5	3	6/30/2016	ND<0.070	5.7	38	ND<0.001	ND<0.001	ND<0.001	ND<0.002	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.01	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.001	Backfill
B-5	5	6/30/2016	ND<0.069	8.2	39	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.002	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.0099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	Backfill
B-5	7	6/30/2016	ND<0.069	7.5	39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Native Soil
B-7	1	6/30/2016	ND<0.069	9.9	54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B-7	3	6/30/2016	ND<0.070	15	29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Native Soil
B-7	5	6/30/2016	ND<0.069	ND<5.2	24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Native Soil
B-8	1	6/30/2016	ND<0.070	18	83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B-8	3	6/30/2016	ND<0.069	28	310	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B-10	1	6/30/2016	ND<0.070	13	61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B-10	3	6/30/2016	ND<0.070	ND<5.3	ND<5.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Native Soil
B-10	5	6/30/2016	ND<0.068	ND<5.2	ND<5.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Native Soil
B-11	1	6/30/2016	ND<0.069	11	47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B-11	3	6/30/2016	ND<0.070	6.5	31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B-11	5	6/30/2016	0.100	ND<2.5	7.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Native Soil
B-11	7	6/30/2016	ND<0.070	ND<2.5	ND<2.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Native Soil
B-12	1	6/30/2016	ND<0.070	5.7	46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B-12	3	6/30/2016	ND<0.070	ND<5.2	ND<5.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Native Soil
B-12	5	6/30/2016	0.070 J	ND<11	ND<11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Native Soil
B-12	7	6/30/2016	ND<0.070	ND<10	ND<10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Native Soil
B-13	10	6/30/2016	ND<0.070	6.3 J	12	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.002	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.0099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	Native Soil
B-13	15	6/30/2016	ND<0.070	28	130	ND<0.001	ND<0.001	ND<0.001	ND<0.002	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.01	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.001	Native Soil
B-14	10	6/30/2016	ND<0.070	ND<5.3	ND<5.3	ND<0.001	ND<0.001	ND<0.001	ND<0.002	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.01	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.001	Native Soil
B-14	15	6/30/2016	ND<0.070	ND<5.0	9.2 J	ND<0.001	ND<0.001	ND<0.001	ND<0.002	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.01	ND<0.001	ND<0.001	ND<0.001	ND<0.001	ND<0.001	Native Soil
B-15	10	6/30/2016	ND<0.069	ND<5.3	ND<5.3	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.002	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.0099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	Native Soil
B-15	15	6/30/2016	ND<0.069	ND<5.0	ND<5.0	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.002	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.0099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	ND<0.00099	Native Soil
SFRWQCB Tier 1 ESL			100	230	5,100	0.044	2.9	1.4	2.3	0.023	--	--	--	0.075	--	--	1.5	--	--	

Notes:

mg/kg = Milligrams per Kilogram
ND = Not detected
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B
TPHd = Total petroleum hydrocarbons as diesel by EPA Method 8015B
TPHo = Total petroleum hydrocarbons as oil by EPA Method 8015B
Volatile Organic Compounds (VOCs) analyzed by EPA Method 8260B
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B
ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B
DIPE = Di-isopropyl ether analyzed by EPA Method 8260B
TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B
J = denotes value between method detection limit and detection limit for reporting purposes
Detected concentrations are shown in bold type
Isopropylbenzene, N-Propylbenzene, Styrene, 1,2,4-Trimethylbenzene, and 1,3,5-Trimethylbenzene were detected in groundwater samples from these borings, but were Non-Detect in all soil samples
All other VOCs were Non-Detect
SFRWQCB Tier 1 ESL = San Francisco Regional Water Quality Control Board Tier 1 Environmental Screening Level
-- = No ESL Established
— = Not Analyzed

2016 SOIL BORINGS TO ADDRESS DATA GAPS IN SOIL EXCAVATION BACKFILL MATERIAL & NATIVE SOIL

Table 2. Polycyclic Aromatic Hydrocarbons (PAHs) in Soil
Former Red Star Senior Living Apartments Development
Michaels Development
1396 Fifth Street, Oakland, California

Boring ID	Sample Depth (feet)	Date Sampled	Acenaph-thene mg/kg	Anthracene mg/kg	Benzo[a]-anthracene mg/kg	Benzo[a]-pyrene mg/kg	Benzo[b]-fluoran-thene mg/kg	Benzo-[g,h,i]-perylene mg/kg	Benzo[k]-fluoran-thene mg/kg	Chrysene mg/kg	Dibenz(a,h)-anthracene mg/kg	Fluoran-thene mg/kg	Fluorene mg/kg	Indeno-[1,2,3-cd]-pyrene mg/kg	Naphtha-lene mg/kg	Phenan-threne mg/kg	Pyrene mg/kg	Comments
B-1	1	6/30/2016	ND<0.004	ND<0.004	0.011 J	0.011 J	0.015 J	0.0059 J	0.0049 J	0.020 J	ND<0.004	0.030	ND<0.0040	0.0051 J	ND<0.004	0.034	0.031	Backfill
B-1	3	6/30/2016	ND<0.0039	0.0058 J	0.015 J	0.012 J	0.019 J	0.0072 J	0.0067 J	0.023 J	ND<0.0039	0.046	ND<0.0039	0.0064 J	0.0073 J	0.047	0.042	Backfill
B-1	5	6/30/2016	ND<0.0039	0.0053 J	0.017 J	0.016 J	0.024 J	0.0089 J	0.0082 J	0.027 J	ND<0.0039	0.039	ND<0.0039	0.0088 J	0.0043 J	0.039	0.041	Backfill
B-2	1	6/30/2016	ND<0.004	0.0071 J	0.027 J	0.027 J	0.037	0.016 J	0.014 J	0.037	ND<0.004	0.061	ND<0.0040	0.013 J	0.0047 J	0.048	0.057	Backfill
B-2	3	6/30/2016	ND<0.0072	ND<0.0072	0.014 J	0.013 J	0.018 J	0.015 J	0.0072 J	0.021 J	ND<0.0072	0.032 J	ND<0.0072	0.012 J	ND<0.0072	0.034 J	0.030 J	Backfill
B-2	5	6/30/2016	ND<0.0083	0.011 J	0.038 J	0.035 J	0.050 J	0.013 J	0.016 J	0.055 J	ND<0.0083	0.075	ND<0.0083	0.013 J	ND<0.0083	0.089	0.072	Backfill
B-3	1	6/30/2016	ND<0.0039	0.0051 J	0.018 J	0.016 J	0.023 J	0.0087 J	0.0081 J	0.027 J	ND<0.0039	0.040	ND<0.0039	0.0079 J	0.0063 J	0.043	0.040	Backfill
B-3	3	6/30/2016	ND<0.0075	ND<0.0075	0.012 J	0.012 J	0.017 J	0.0094 J	ND<0.0075	0.018 J	ND<0.0075	0.029 J	ND<0.0075	0.0092 J	ND<0.0075	0.029 J	0.028 J	Backfill
B-4	1	6/30/2016	0.0047 J	0.012 J	0.035	0.028 J	0.035	0.017 J	0.015 J	0.048	ND<0.0039	0.083	ND<0.0039	0.013 J	ND<0.0039	0.076	0.080	Backfill
B-4	3	6/30/2016	ND<0.0084	ND<0.0084	0.015 J	0.026 J	0.025 J	0.026 J	0.0094 J	0.020 J	ND<0.0084	0.035 J	ND<0.0084	0.019 J	ND<0.0084	0.026 J	0.043 J	Native Soil
B-5	1	6/30/2016	ND<0.0039	0.0087 J	0.014 J	0.014 J	0.018 J	0.011 J	0.006 J	0.023 J	ND<0.0039	0.034	ND<0.0039	0.0083 J	ND<0.0039	0.027 J	0.037	Backfill
B-5	3	6/30/2016	0.0061 J	0.018 J	0.170	0.150	0.200	0.086	0.078	0.160	0.017 J	0.200	ND<0.0041	0.081	ND<0.0041	0.065	0.180	Backfill
B-5	5	6/30/2016	0.0053 J	0.0046 J	0.012 J	0.011 J	0.014 J	0.0089 J	0.0052 J	0.018 J	ND<0.004	0.031	ND<0.0040	0.0065 J	0.0057 J	0.038	0.029 J	Backfill
B-6	1	6/30/2016	ND<0.004	0.0064 J	0.022 J	0.030	0.039	0.021 J	0.014 J	0.034	0.0058 J	0.055	ND<0.0040	0.018 J	0.0094 J	0.045	0.057	Backfill
B-6	3	6/30/2016	ND<0.0085	ND<0.0085	0.024 J	0.032 J	0.042 J	0.010 J	0.015 J	0.036 J	ND<0.0085	0.060 J	ND<0.0085	0.015 J	0.011 J	0.045 J	0.064	Backfill
B-9	1	6/30/2016	0.018 J	0.020 J	0.035 J	0.032 J	0.046 J	ND<0.0085	0.017 J	0.048 J	ND<0.0085	0.092	0.012 J	0.0091 J	0.015 J	0.140	0.084	Backfill
B-9	3	6/30/2016	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	Native Soil
B-10	1	6/30/2016	0.0088 J	0.018 J	0.037	0.032	0.043	0.013 J	0.016 J	0.051	ND<0.0039	0.089	ND<0.0039	0.011 J	0.0051 J	0.120	0.082	Backfill
SFRWQCB Tier 1 ESL			16	2.8	0.16	0.016	0.16	2.5	1.6	3.8	0.016	60	8.9	0.16	0.033	11	85	

Notes:
Polycyclic Aromatic Hydrocarbons (PAHs) analyzed by EPA Method 8270C SIM
mg/kg = Milligrams per Kilogram
ND = Not detected
J = denotes value between method detection limit and detection limit for reporting purposes
Detected concentrations are shown in bold type
SFRWQCB Tier 1 ESL = San Francisco Regional Water Quality Control Board Tier 1 Environmental Screening Level
— = Not Analyzed

2016 SOIL BORINGS TO ADDRESS DATA GAPS IN SOIL EXCAVATION BACKFILL MATERIAL

Table 3. Polychlorinated Biphenyls (PCBs) in Soil
Former Red Star Senior Living Apartments Development
Michaels Development
1396 Fith Street, Oakland, California

Boring ID	Sample Depth (feet)	Date Sampled	Aroclor 1016 (mg/kg)	Aroclor 1221 (mg/kg)	Aroclor 1232 (mg/kg)	Aroclor 1242 (mg/kg)	Aroclor 1248 (mg/kg)	Aroclor 1254 (mg/kg)	Aroclor 1260 (mg/kg)	Comments
B-1	1	6/30/2016	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	Backfill
B-1	3	6/30/2016	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	Backfill
B-1	5	6/30/2016	ND<0.035	ND<0.035	ND<0.035	ND<0.035	ND<0.035	ND<0.035	ND<0.035	Backfill
B-2	1	6/30/2016	ND<0.035	ND<0.035	ND<0.035	ND<0.035	ND<0.035	ND<0.035	ND<0.035	Backfill
B-2	3	6/30/2016	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	Backfill
B-2	5	6/30/2016	ND<0.035	ND<0.035	ND<0.035	ND<0.035	ND<0.035	ND<0.035	ND<0.035	Backfill
B-3	1	6/30/2016	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	Backfill
B-3	3	6/30/2016	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	Backfill
B-4	1	6/30/2016	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	Backfill
B-4	3	6/30/2016	ND<0.084	ND<0.084	ND<0.084	ND<0.084	ND<0.084	ND<0.084	ND<0.084	Native Soil
B-5	1	6/30/2016	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	Backfill
B-5	3	6/30/2016	ND<0.034	ND<0.034	ND<0.034	ND<0.034	ND<0.034	ND<0.034	ND<0.034	Backfill
B-5	5	6/30/2016	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	Backfill
B-6	1	6/30/2016	ND<0.017	ND<0.017	ND<0.017	ND<0.017	ND<0.017	ND<0.017	ND<0.017	Backfill
B-6	3	6/30/2016	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	ND<0.036	Backfill
B-9	1	6/30/2016	ND<0.017	ND<0.017	ND<0.017	ND<0.017	ND<0.017	ND<0.017	ND<0.017	Backfill
B-9	3	6/30/2016	ND<0.017	ND<0.017	ND<0.017	ND<0.017	ND<0.017	ND<0.017	ND<0.017	Native Soil
B-10	1	6/30/2016	ND<0.017	ND<0.017	ND<0.017	ND<0.017	ND<0.017	ND<0.017	ND<0.017	Backfill
SFRWQCB Tier 1 ESL			0.25	0.25	0.25	0.25	0.25	0.25	0.25	

Notes:
Polychlorinated Byphenyls (PCBs) analysed by EPA Method 8082
mg/kg = Milligrams per Kilogram
ND = Not detected
SFRWQCB Tier 1 ESL = San Francisco Regional Water Quality Control Board Tier 1 Environmental Screening Level

2016 SOIL BORINGS TO ADDRESS DATA GAPS IN SOIL EXCAVATION BACKFILL MATERIAL AND UNEXCAVATED SOIL

Table 4. Metals in Soil
Former Red Star Senior Living Apartments Development
Michaels Development
1396 Fifth Street, Oakland, California

Boring ID	Sample Depth (feet)	Date Sampled	Lead mg/kg	Mercury mg/kg	Antimony mg/kg	Arsenic mg/kg	Barium mg/kg	Beryllium mg/kg	Cadmium mg/kg	Chromium mg/kg	Cobalt mg/kg	Copper mg/kg	Molyb-denum mg/kg	Nickel mg/kg	Selenium mg/kg	Silver mg/kg	Thallium mg/kg	Vanadium mg/kg	Zinc mg/kg	Comments
B1	1	6/30/2016	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B1	3	6/30/2016	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B1	5	6/30/2016	8.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B2	1	6/30/2016	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B2	3	6/30/2016	9.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B2	5	6/30/2016	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B3	1	6/30/2016	31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B3	3	6/30/2016	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B3	1	6/30/2016	8.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B4	3	6/30/2016	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Native Soil
B5	1	6/30/2016	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B5	3	6/30/2016	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B5	5	6/30/2016	9.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B-6	1	6/30/2016	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B-6	3	6/30/2016	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B-7	1	6/30/2016	10	0.200	ND<0.27	3.7	110	0.21 J	ND<0.25	37	5.8	15	ND<0.5	34	0.57 J	ND<0.10	ND<0.25	40	38	Backfill
B-7	3	6/30/2016	6.3	0.021	ND<0.27	2.3	73	ND<0.15	ND<0.25	46	5.1	8.9	0.97 J	35	0.31 J	ND<0.10	ND<0.25	30	25	Native Soil
B-7	5	6/30/2016	9.1	0.086	ND<0.27	3.0	200	0.32	ND<0.25	34	6.2	22	1.1	33	0.49 J	ND<0.099	ND<0.25	44	33	Native Soil
B-8	1	6/30/2016	16	0.150	ND<0.27	4.0	190	0.35	0.26 J	45	6.5	23	1.2	42	0.72 J	ND<0.099	ND<0.25	58	49	Backfill
B-8	3	6/30/2016	16	0.120	0.42 J	4.6	180	0.34	ND<0.25	41	7.3	26	1.4	39	0.65 J	ND<0.10	ND<0.25	56	58	Backfill
B-9	1	6/30/2016	43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Backfill
B-9	3	6/30/2016	3.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Native Soil
B-10	1	6/30/2016	18	0.120	0.38 J	5.7	280	0.5	0.35 J	54	8.4	36	1.8	55	0.81 J	ND<0.099	ND<0.25	81	120	Backfill
B-10	3	6/30/2016	5.4	0.096	ND<0.27	3.7	85	0.31	ND<0.25	58	7.1	12	ND<0.5	45	0.62 J	ND<0.10	ND<0.25	43	32	Native Soil
B-10	5	6/30/2016	3.0	0.024	ND<0.27	2.9	55	0.15J	ND<0.25	65	4.9	8.1	ND<0.5	34	0.37 J	ND<0.099	ND<0.25	33	22	Native Soil
B-11	1	6/30/2016	13	0.120	ND<0.27	4.5	180	0.21 J	ND<0.25	39	6.1	20	0.98J	42	0.58 J	ND<0.099	ND<0.25	52	48	Backfill
B-11	3	6/30/2016	11	0.110	ND<0.26	3.7	130	0.29	ND<0.25	37	5.8	21	1.1	39	0.56 J	ND<0.098	ND<0.25	48	43	Backfill
B-11	5	6/30/2016	3.1	0.023	ND<0.26	2.6	68	0.23 J	ND<0.25	45	5.0	7.8	ND<0.49	33	0.38 J	ND<0.099	ND<0.25	30	22	Native Soil
B-11	7	6/30/2016	2.5	0.057	ND<0.27	2.8	54	0.20 J	ND<0.25	35	4.5	6.9	0.61 J	27	0.26 J	ND<0.10	ND<0.25	28	22	Native Soil
B-12	1	6/30/2016	18	0.110	ND<0.27	3.6	160	0.26 J	ND<0.25	43	8.9	27	0.66 J	42	0.45 J	ND<0.10	ND<0.25	46	54	Backfill
B-12	3	6/30/2016	3.1	0.028	ND<0.27	2.6	58	0.3	ND<0.25	31	5.4	7.6	ND<0.5	31	0.29 J	ND<0.099	ND<0.25	27	21	Native Soil
B-12	5	6/30/2016	3.0	0.120	ND<0.27	2.5	65	0.23 J	ND<0.25	37	5.4	7.9	ND<0.49	32	0.46 J	ND<0.099	ND<0.25	29	23	Native Soil
B-12	7	6/30/2016	2.6	0.097	ND<0.27	2.2	66	0.21 J	ND<0.25	53	6	7.8	ND<0.5	38	0.42 J	ND<0.099	ND<0.25	40	28	Native Soil
SFRWQCB Tier 1 ESL			80	13	31	0.067	2,000	42	39	--	23	3,100	390	86	390	390	0.78	390	23,000	

All metals except mercury analyzed by EPA Method 6020
Mercury analyzed by EPA Method 7471A
mg/kg = Milligrams per Kilogram
ND = Not detected
J = denotes value between method detection limit and detection limit for reporting purposes
SFRWQCB Tier 1 ESL = San Francisco Regional Water Quality Control Board Tier 1 Environmental Screening Level
-- = No ESL Established
--- = Not Analyzed
J = denotes value between method detection limit and detection limit for reporting purposes
Detected concentrations are shown in bold type

Benzo(a)pyrene Conversion Table

For Direct Exposure Soil Cleanup Target Levels

Facility/Site Name: Red Star Yeast/1396 fifth Street LLC
Location: 1396 5th Street, Oakland, CA 94607
Facility/Site ID No.: RO0002896

Soil Sample No. B-1 through B-10
Sample Date 6/30/2016
Location:
Depth (ft): 1, 3 or 5 feet

INSTRUCTIONS: Calculate Total Benzo(a)pyrene Equivalents if at least one of the carcinogenic PAHs is detected in the sample at a concentration equal to or higher than the Method Detection Limit (MDL), whether quantified with certainty (the concentration reported has no qualifier) or estimated (the concentration reported has a "J", "T" or "I" qualifier). Enter the contaminant concentrations (in mg/kg) for all seven carcinogenic PAHs in the yellow boxes using the following criteria (and see table below):

1. If quantified with certainty, or estimated and has the "J" qualifier, enter the reported value;
2. If not detected at the MDL (the concentration reported is the MDL followed by the "U" qualifier) enter 1/2 of the reported value;
3. If detected at a concentration lower than the MDL and the concentration is estimated (has the "T" qualifier) enter the estimated value;
4. If detected at a concentration equal to or higher than the MDL but lower than the Practical Quantitation Limit (PQL) and the concentration is estimated (has the "I" qualifier) enter the estimated value;
5. If detected at a concentration equal to or higher than the MDL but lower than the PQL and it is not estimated (the concentration reported is the PQL followed by the "M" qualifier) enter 1/2 of the reported value.

Contaminant	Concentration (mg/kg)	Toxic Equivalency Factor	Benzo(a)pyrene Equivalents
Benzo(a)pyrene	0.150	1.0	0.1500
Benzo(a)anthracene	0.170	0.1	0.0170
Benzo(b)fluoranthene	0.200	0.1	0.0200
Benzo(k)fluoranthene	0.078	0.10	0.0078
Chrysene	0.160	0.010	0.0016
Dibenz(a,h)anthracene	0.017	0.34	0.0058
Indeno(1,2,3-cd)pyrene	0.081	0.1	0.0081

DE Residential = 0.1 mg/kg; DE Industrial = 0.7 mg/kg

Total Benzo(a)pyrene Equivalents = 0.21

The concentration shown EXCEEDS the Residential Direct Exposure SCTL of 0.1 mg/kg.

The concentration shown does not exceed the Industrial Direct Exposure SCTL of 0.7 mg/kg.

Summary Criteria for Table Entries			
Detection	**Concentration Reported**	**Data Qualifier**	**Enter**
Various	Quantified with certainty	None	reported value
Various	Estimated	J	reported (estimated) value
ND at MDL	MDL	U	1/2 reported value
< MDL	Estimated	T	reported (estimated) value
≥ MDL but < PQL	Estimated	I	reported (estimated) value
≥ MDL but < PQL	PQL	M	1/2 reported value

ATTACHMENT 3

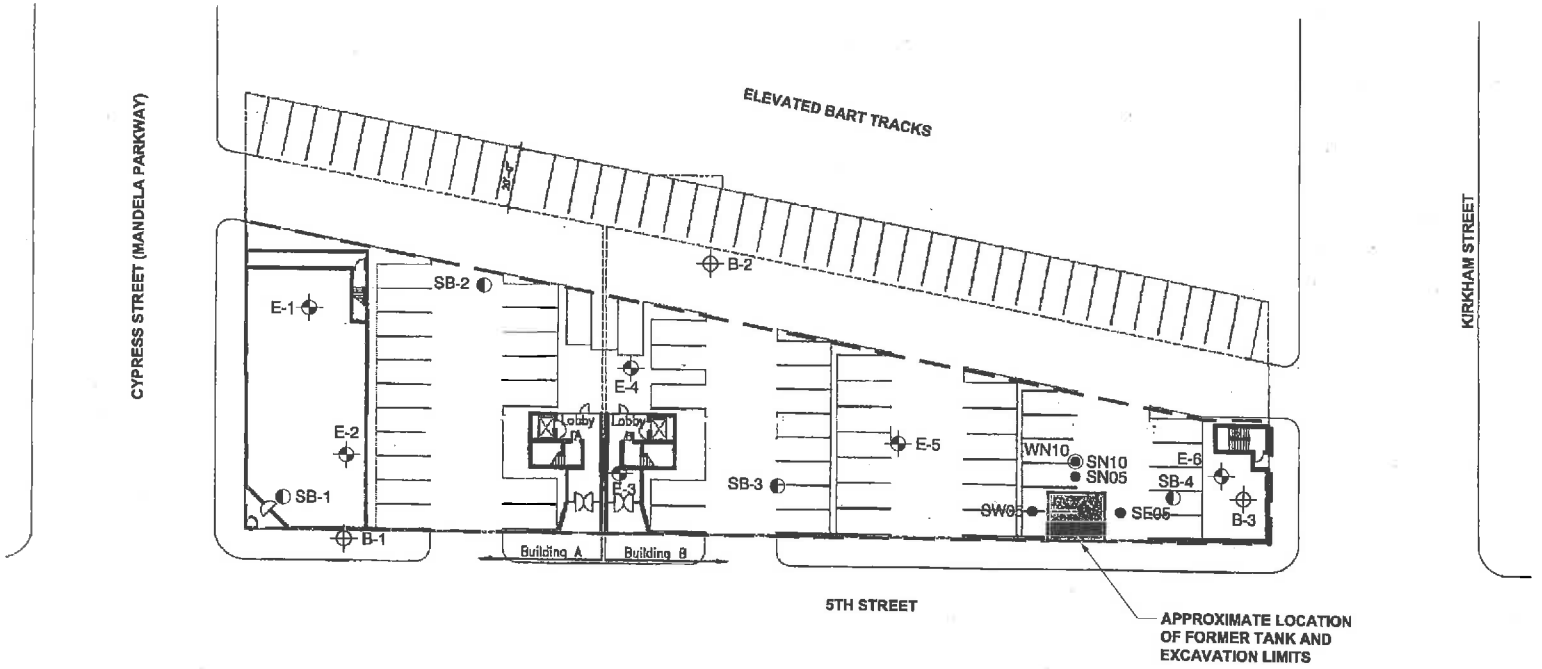
Attachment 3 – Groundwater Evaluation and Data

LTCP GROUNDWATER SPECIFIC CRITERIA - PETROLEUM						
Closure Scenario						
__ Site has not affected groundwater; __ Scenario 1; __ Scenario 2; __ Scenario 3; __ Scenario 4; X **Scenario 5**; __ This case should be closed in spite of not meeting the groundwater specific media criteria						
Evaluation Criteria: Shading indicates criteria met						
Site Specific Data		**Scenario 1**	**Scenario 2**	**Scenario 3**	**Scenario 4**	**Scenario 5**
Plume Length	<100 feet	<100 feet	<250 feet	<1,000 feet	<1,000 feet	**The site does not meet scenarios 1 through 4; however, a determination been made that under current and reasonably expected future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment and water quality objectives will be achieved within a reasonable time frame.**
Free Product	No free product	No free product	No free product	No free product	No free product	
Plume Stable or Decreasing	Stable or decreasing	Stable or decreasing	Stable or decreasing	Stable or decreasing for minimum of 5 years	Stable or decreasing	
Distance to Nearest Water Supply Well (from plume boundary)	No documentation from DWR or ACPWA indicating that one on-site water supply well was decommissioned (DWR / ACPWA) Indicates two water supply wells on the site; DWR and ACPWA records indicate that one of these wells was decommissioned. (GAMA)	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet	
Distance to Nearest Surface Water Body (from plume boundary)	Down gradient: 3,050 feet Cross Gradient: 7,600 feet Up gradient: 7,500 feet	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet	
Benzene Concentrations (µg/l)	Historic Max: 1.1 Current Max: 1.1	No criteria	<3,000	<1,000	<1,000	
MTBE Concentrations (µg/l)	Historic Max: < 0.5 Current Max: < 0.5	No criteria	<1,000	<1,000	<1,000	
Property Owner Willing to Accept a Land Use Restriction	Yes	Not applicable	Not applicable	Not applicable	Not applicable	

Notes: DWR = Department of Water Resources
ACPWA = Alameda County Public Works Agency
GAMA = Groundwater Ambient Monitoring Assessment (GeoTracker)

Attachment 3 – Groundwater Evaluation and Data

Analysis	
Plume Length	Defined to water quality objectives. (Contaminant plume that exceeds water quality objectives is less than 100 feet)
Free Product	Not observed at site.
Plume Stability	Plume is stable in aerial extent. (The contaminant mass has expanded to its maximum extent defined as the distance from the release where attenuation exceeds migration.)
Water Supply Wells	An Alameda County Public Works Agency (ACPWA) and the Department of Water Resources (DWR) well survey that the site had two water supply wells, one located at the eastern area of site at the southern edge of the property along 5th Street and the other older well at the southwest corner of the site. Documentation exists for the proper decommissioning of the well at the eastern area, but no permit record or documentation indicating that the other water supply well was properly decommissioned. Well survey results from the GeoTracker Groundwater Ambient Monitoring Assessment (GAMA) website indicates the two wells discussed above.
Surface Water Bodies	San Antonio Creek (Oakland Inner Harbor) is downgradient to the south at an approximate distance of 3050 feet from the plume boundary. San Francisco Bay is approximately 7600 feet cross-gradient to the west. San Francisco Bay is 7,500 feet up-gradient.



EXPLANATION

- E-1 ⊕ — Approximate location of boring by Treadwell & Rollo, Inc., April 2006
- B-1 ⊕ — Approximate location of boring by Treadwell & Rollo, Inc.
- SB-1 ◐ — Approximate location of boring by Remediation Services, Inc., August 2004
- SN05 ● — Grab soil sample location
- WN10 ◉ — Grab groundwater sample location

Note: Soil samples collected 5 feet below ground surface, groundwater sample collected 6 feet below ground surface.

N

0 20 40 Feet

Approximate scale

Reference: Ground Floor Plan - Option A by Philip Banta & Associates Architects, dated 11/03/04.

RED STAR YEAST SITE
Oakland, California

SITE PLAN

Date 12/13/06	Project No. 4068.01	Figure 2

Treadwell&Rollo

R:\Graphics\4000's\4068.01\4068.01 SITE PLAN-Dec 2006.dwg 12/13/06

Table 3

Summary of Analytical Data

Parameter	Method	Units	SB-1	GR-1	SB-2	GR-2	SB-3	SB-4
TPH (Diesel)	SW8015B	mg/Kg or mg/L	ND	ND	ND	ND	ND	ND
TPH (Gasoline)	SW8015B	mg/Kg or mg/L	ND	ND	ND	ND	ND	ND
VOCs	SW8260B	µg/Kg or µg/L	ND	ND	ND	ND	ND	ND
pH	SW9045C	pH units	7.24	6.61	8.6	6.88	8.16	8.09
PAHs	SW8270C	mg/Kg or mg/L		ND	0.52*, 0.58**	ND	ND	
Cadmium	SW6010B	mg/Kg or mg/L		ND	3.3	ND	1.4	
Chromium	SW6010B	mg/Kg or mg/L		ND	39	ND	28	
Lead	SW6010B	mg/Kg or mg/L		ND	2700	ND	29	
Mercury	SW7471A	mg/Kg or mg/L		ND	0.17	ND	ND	
Nickel	SW6010B	mg/Kg or mg/L		ND	42	ND	22	
Zinc	SW6010B	mg/Kg or mg/L		ND	1700	ND	34	
TDS	E160.1	mg/L		2400		1800		

* Result is for Fluoranthene

** Result is for Pyrene

Table 3
Groundwater Analytical Results for Petroleum Hydrocarbons
Red Star Yeast
1396 Fifth Street
Oakland, California

Sample ID	Date Sample	TPHg	TPHd	TPHmo	MTBE	Benzene	Toluene	Ethlybenzene	Xylenes	VOCs	SVOCs
		µg/L									
E-1-W	4/14/2006	< 1.0	< 1.0	< 1.0	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	ND	ND
E-2-W	4/14/2006	< 1.0	320	1,500	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	--	--
E-3-W	4/14/2006	< 1.0	570	2,000	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	ND	ND
E-4-W	4/14/2006	< 1.0	580	1,900	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	--	--
E-5-W	4/14/2006	< 1.0	54	< 1.0	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	ND	ND
E-6-W	4/14/2006	< 1.0	< 1.0	< 1.0	< 0.05	< 0.005	< 0.005	< 0.005	< 0.005	ND	ND

Notes:
TPHg - Total Petroleum Hydrocarbons as Gasoline, EPA Method 8015M
TPHd - Total Petroleum Hydrocarbons as Diesel Range (C10-C23), EPA Method 8015M
TPHmo - Total Petroleum Hydrocarbons as Motor Oil (C10-C23), EPA Method 8015M
MTBE - Methyl Tert Butyl Ether
VOCs - Volatile Organic Compounds, EPA 8260B
SVOCs - Semi volatile organic compounds, EPA Method 8270
All results are reported in micrograms per liter (µg/L)
< 1.0 - Analyte was not detected above the laboratory reporting limit (0.005 mg/kg)
-- Not Analyzed
ND - Not detected at or above the laboratory reporting limit

Table 4
Groundwater Analytical Results for Total Metals
Red Star Yeast
1396 Fifth Street
Oakland, California

Sample ID	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
E-1-W	4/14/2006	< 0.5	3.4	180	< 0.5	< 0.25	< 0.5	0.96	0.94	< 0.5	< 0.5	4.1	3.7	< 0.5	< 0.19	< 0.5	0.67	< 0.5
E-2-W	4/14/2006	--	--	--	--	< 0.25	< 0.5	--	--	--	--	--		--	--	--	--	--
E-3-W	4/14/2006	0.58	4.7	320	< 0.5	< 0.25	< 0.5	3.1	< 0.5	< 0.5	< 0.012	12	8.1	< 0.5	< 0.19	< 0.5	2.9	12
E-4-W	4/14/2006	--	--	--	--	< 0.25	< 0.5	--	--	< 0.5	--	--	5.8	--	--	--	--	< 5.0
E-5-W	4/14/2006	< 0.5	< 0.5	170	< 0.5	< 0.25	< 0.5	1.9	0.54	< 0.5	0.013	1.0	11	< 0.5	< 0.19	< 0.5	1.9	< 5.0
E-6-W	4/14/2006	< 0.5	< 0.5	150	< 0.5	< 0.25	< 0.5	3.0	1.5	< 0.5	< 0.012	1.3	7.7	< 0.5	< 0.19	< 0.5	1.7	< 5.0

Notes:

µg/L - microgram per liter

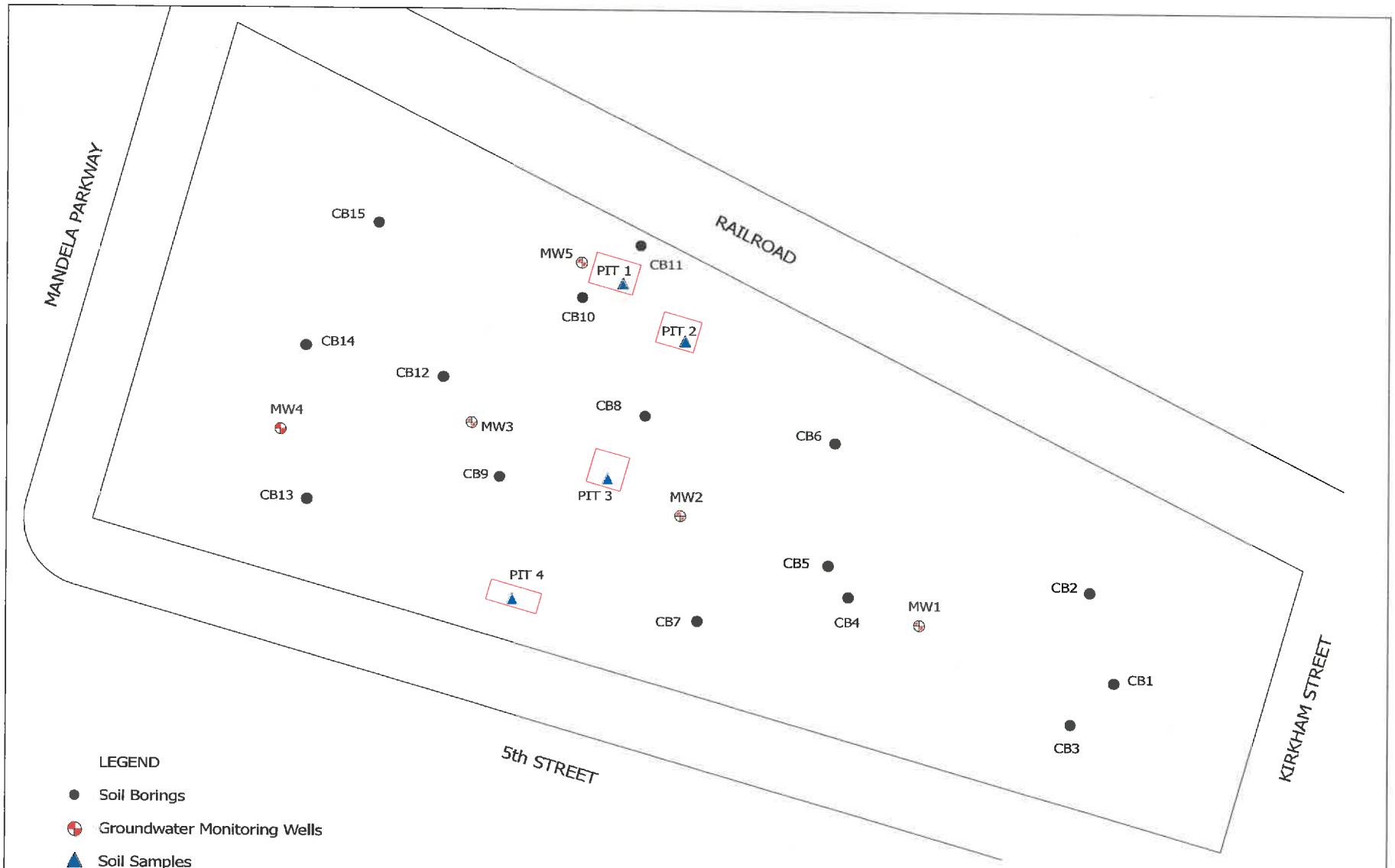
< 0.5 - Analyte was not detected above the laboratory reporting limit (0.5 µg/L).

-- Not analyzed

Table 6
Groundwater Analytical Results for Petroleum Hydrocarbons
Red Start Yeast
Oakland, California

Sample ID	Date Sampled	TPHg	TPHd	MTBE	Benzene	Toluene	Ethlybenzene	Xylenes
		µg/L						
GRAB	3-Oct-06	< 50	180	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5
WN10 (14Nov06)	14-Nov-06	270	< 50	NM	< 0.5	< 0.5	< 0.5	< 0.5

Notes:
All results are reported in micrograms per Liter (µg/L)
TPHg - Total Petroleum Hydrocarbons as Gasoline, EPA Method 8015M
TPHd - Total Petroleum Hydrocarbons as Diesel Range (C10-C23), EPA Method 8015M
MTBE - Methyl Tert Butyl Ether
< 50 - Analyte was not detected above the laboratory reporting limit (50 µg/L)
NM - Not measured



SCALE	APPROXIMATE SCALE IN FEET 0 40 80		NORTH
DRAWN BY	J. NICOLICH	3/7/11	
CHECKED BY	D. LOUKS	3/9/11	
REVISED BY			

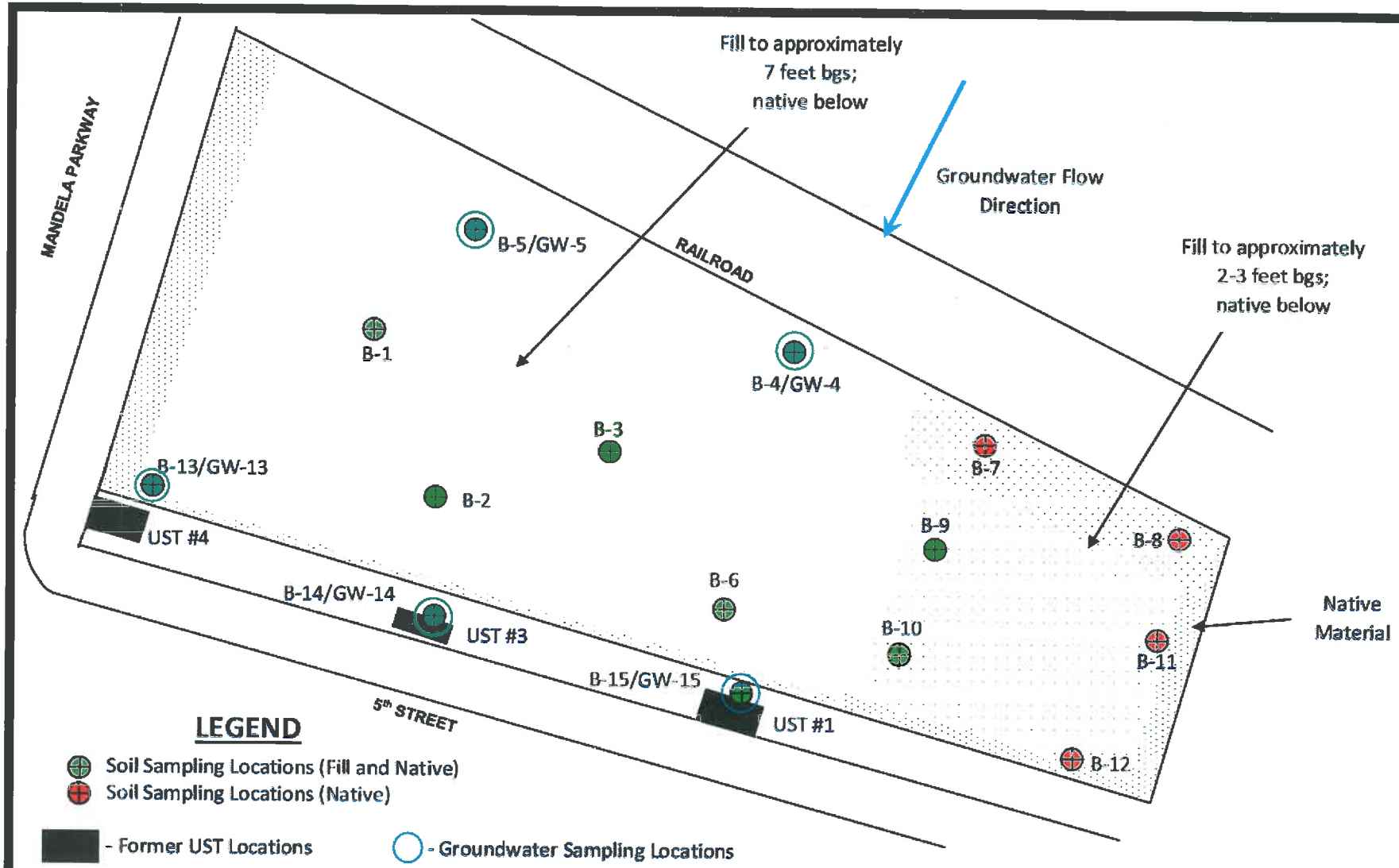
CITADEL
ENVIRONMENTAL SERVICES, INC.

FIGURE 1
GENERAL SITE PLAN
COMMERCIAL PROPERTY
1396 5th Street
Oakland, California

TABLE 2: Summary of Groundwater Sampling Results (µg/L)

Sample ID	VOC	SVOC	C5-C12 Hc	C13-C24 Hc	C25-C40 Hc
Sampled March 5, 2011					
MW1	ND	---	<50	<1,000	<1,000
MW2	ND	---	<50	<1,000	<1,000
MW3	ND	---	<50	<1,000	<1,000
MW4	ND	ND	<50	<1,000	<1,000
MW5	ND	ND	<50	<1,000	2,400
ESL	**--**	**--**	***100***	***100***	***100***

Notes: Environmental Screening Levels (ESLs) developed by SFRWQCB as health risk and protective based guideline values when groundwater is not a potential drinking water source (Table B). Please refer to lab report for complete results.



CITADEL
ENVIRONMENTAL SERVICES, INC.

Former Red Star Yeast Company
1396 5th Street
Oakland, California

Figure 2

PROJECT NO: 0849.1001.0

DATE: JULY 2016

Site Plan with Sampling Locations
2016 DATA GAP INVESTIGATION

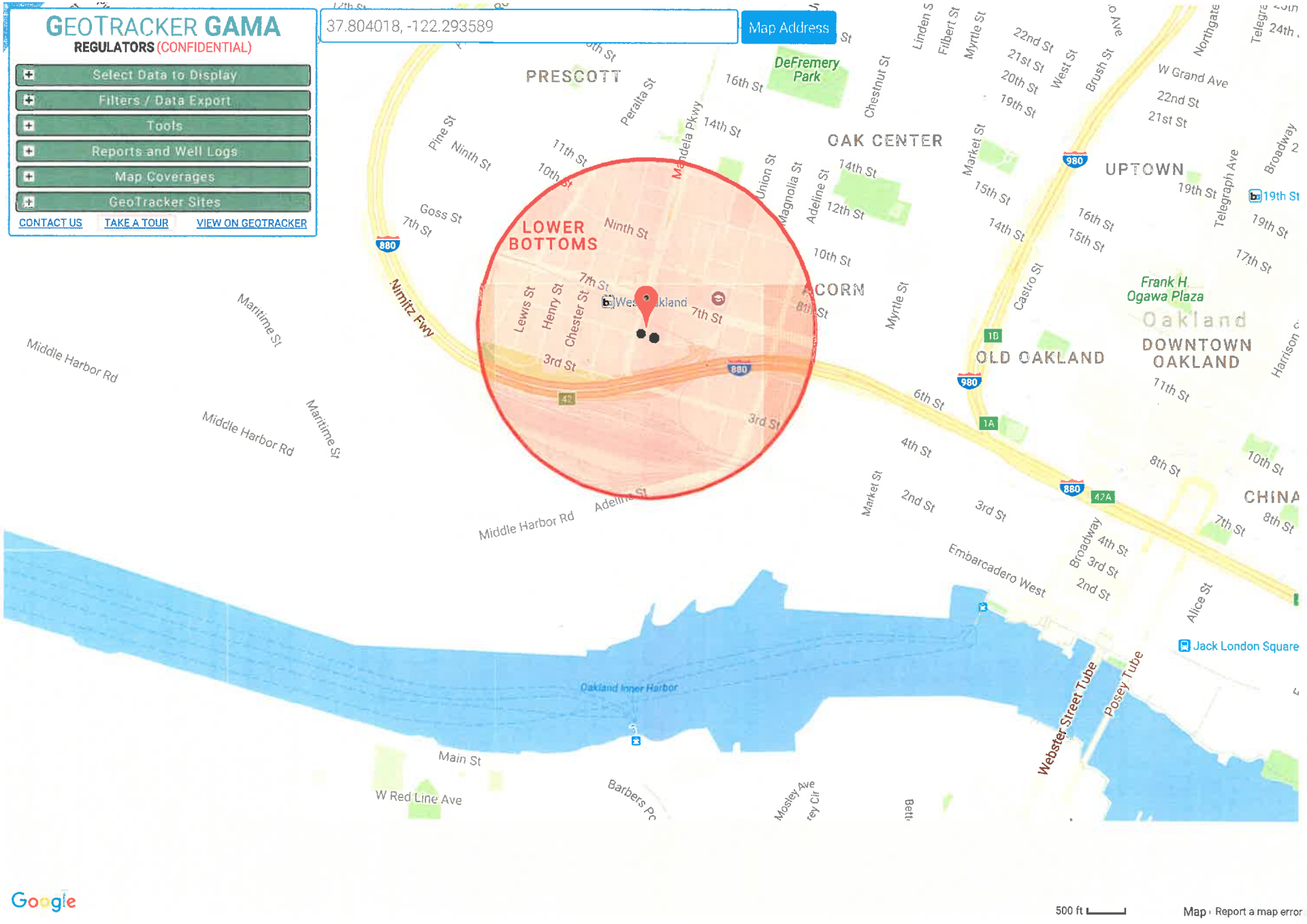
Table 5. Petroleum Hydrocarbons, Oxygenates and Volatile Organic Compounds (VOCs) in Groundwater
Former Red Star Senior Living Apartments Development
Michaels Development
1396 Fifth Street, Oakland, California

Boring ID	Date Sampled	TPHg (ug/L)	TPHd (ug/L)	TPHo (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	ETBE (ug/L)	DIPE (ug/L)	TAME (ug/L)	TBA (ug/L)	Isopropyl-benzene (ug/L)	N-Propyl-benzene (ug/L)	Styrene (ug/L)	1,2,4-Trimethyl-benzene (ug/L)	1,3,5-Trimethyl-benzene (ug/L)	Comments
GW-4	6/30/2016	**1,500**	**130 J**	**100 J**	ND<1.3	**230**	**3.6**	**25**	ND<1.3	ND<1.3	ND<1.3	ND<1.3	**70**	**2.4 J**	**7.7**	ND<1.3	**38**	**18**	
GW-5	6/30/2016	**380**	**200 J**	**210 J**	**1.1**	**38**	**0.89**	**7.3**	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**28**	**0.72**	**2.6**	**0.33 J**	**18**	**8.2**	
GW-13	6/30/2016	**41 J**	ND<150	ND<150	ND<0.25	ND<0.25	ND<0.25	ND<1.0	ND<0.25	ND<0.25	ND<0.25	ND<0.25	**13**	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	
GW-14	6/30/2016	ND<35	**130 J**	ND<110	ND<0.25	ND<0.25	ND<0.25	ND<1.0	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<10	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	
GW-15	6/30/2016	ND<35	ND<110	ND<110	ND<0.25	ND<0.25	ND<0.25	ND<1.0	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<10	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<0.25	
CA MCL		--	--	--	1.0	150	300	1,750	13	--	--	--	--	--	--	100	--	--	
SFRWQCB Tier 1 ESL		100	100	--	1.0	40	13	20	5	--	--	--	12	--	--	10	--	--	
SFRWQCB Tier 2 ESL		440	640	--	1.1	130	13	100	180	--	--	--	18,000	--	--	110	--	--	

Notes:

ug/L = Micrograms per liter
ND = Not detected
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B
TPHd = Total petroleum hydrocarbons as diesel by EPA Method 8015B
TPHo = Total petroleum hydrocarbons as oil by EPA Method 8015B
Volatile Organic Compounds (VOCs) analyzed by EPA Method 8260B
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B
ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B
DIPE = Di-isopropyl ether analyzed by EPA Method 8260B
TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B
Other VOCs analyzed by EPA Method 8260B
J = denotes value between method detection limit and detection limit for reporting purposes
CA MCL = California Maximum Contaminant Levels
SFRWQCB Tier 1 ESL = San Francisco Regional Water Quality Control Board Tier 1 Environmental Screening Level
Detected concentrations are shown in bold type
All other VOCs were Non-Detect
-- = No ESL or MCL Established
Tier 1 ESLs = Using conservative conceptual site model scenario
Tier 2 ESLs = Using site specific conceptual site model scenario
Residential land use, non-drinking water source, risk based screening levels, no building slab, shallow groundwater, sandy soil and shallow soil contamination

Case Number RO2896: 2000-foot radius water well survey in GAMA



ATTACHMENT 4

COUNTY OF ALAMEDA
Assessor's Office
Property Value System

Help

New Query

History | Value | Transfer | Map | Glossary

Parcel Number:**4-69-4** Inactive:**N** Lien Date:**01/01/2016** Owner:**OAKLAND HOUSING INVESTORS LP**
Property Address: **1396 5TH ST, OAKLAND, CA 94607-1800**
Current Mailing Address as of 10/26/2015: **OAKLAND HOUSING INVESTORS LP, 3 E STOW RD , MARLTON, NJ 08053-3188**

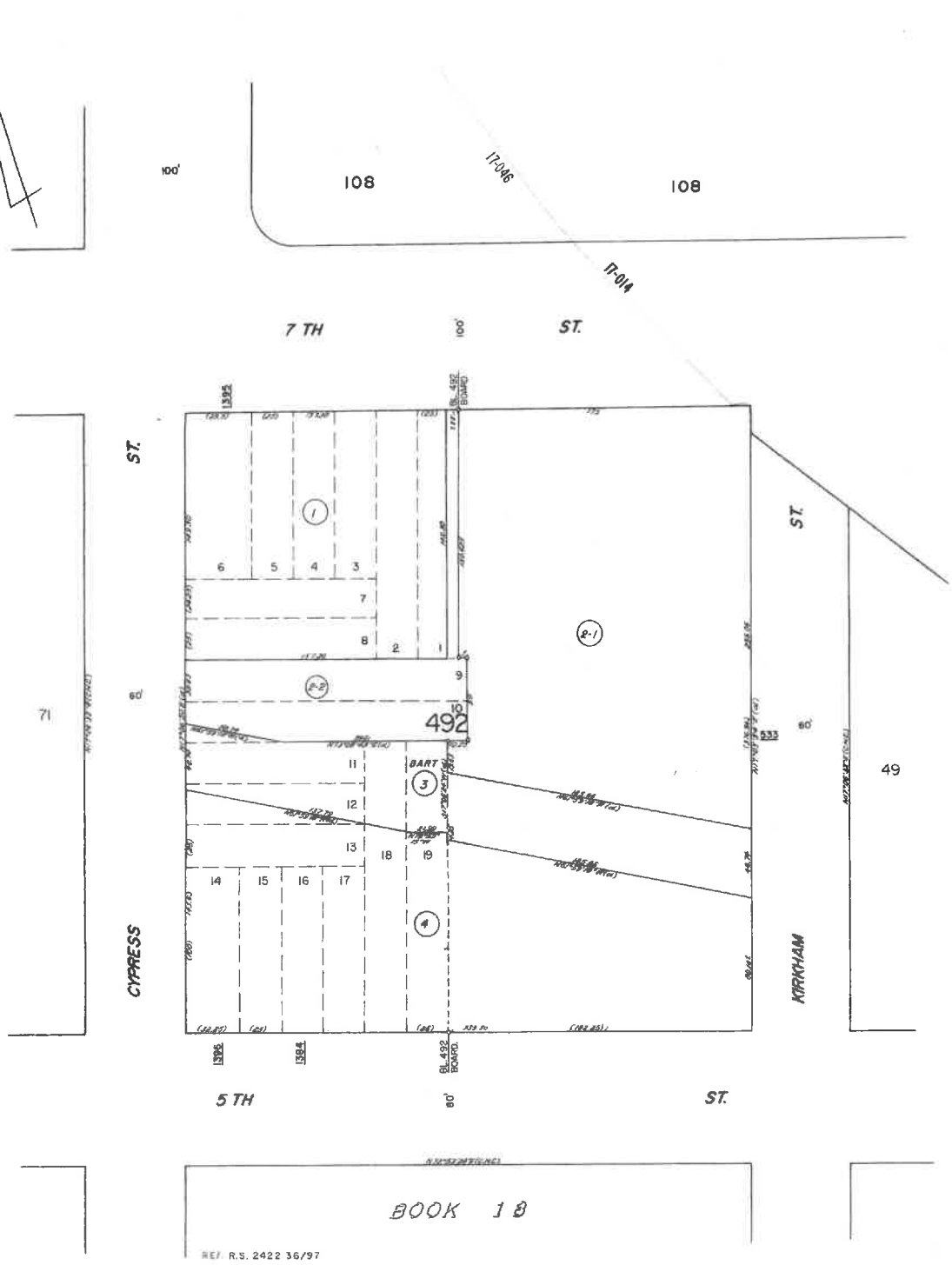
Mailing Name		Historical Mailing Address	Document Date	Document Number	Value From Trans Tax	Parcel Count	Use
OAKLAND HOUSING INVESTORS LP	List Owners	4299 MACARTHUR BLVD STE 215, NEWPORT BEACH, CA 92660-2020	11/19/2008	2008-334359		1	7000
NATIONAL AFFORDABLE COMMUNITIES INC	List Owners	4299 MACARTHUR BLVD # 215, NEWPORT BEACH, CA 92660	11/17/2008	2008-332499	$3,750,000	1	7000
PANAHI SADEGH S TR & EISENBERGER PTP ETAL	List Owners	P O BOX 22 , LARKSPUR, CA 94977-0022	10/19/2007	2007-370188		1	3000
1396 5TH STREET LLC & EISENBERGER PTP ETAL	List Owners	555 FLORIDA ST # 100, SAN FRANCISCO, CA 94110-1458	02/16/2005	2005-64746		1	3000
1396 5TH STREET LLC & EISENBERGER PTP ETAL	List Owners	555 FLORIDA ST # 100, SAN FRANCISCO, CA 94110	02/16/2005	2005-64745		1	3000
1396 5TH STREET LLC & EISENBERGER PTP ETAL	List Owners	1357 5TH ST , OAKLAND, CA 94607	12/22/2004	2004-564276	$1,892,000	1	3000
LESAFFRE YEAST CORPORATION c/o SENSIENT TECH CORP	List Owners	777 E WISCONSIN AVE , MILWAUKEE, WI 53202	09/22/2003	2003-558744	$1,060,000	1	3000
UNIVERSAL FOODS CORPORATION c/o CHEV USA PROP TAXES	List Owners	777 E WISCONSIN AV 11F , MILWAUKEE, WI 53202	04/13/1966	AY-47285		1	3000

ASSESSOR'S MAP 4

Code Area Nos. 17-046

69 Scale: 1" = 50'

OAKLAND AND VICINITY (BOARDMAN) (Bk. 17 Pg. 14)
WESTERLY PART OF BLOCK 492 (Bk. 1 Pg. 190)



ATTACHMENT 5

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
REBECCA GEBHART, Interim Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP)
For Hazardous Materials Releases
1131 HARBOR BAY PARKWAY, SUITE 250
ALAMEDA, CA 94502
(510) 567-6700
FAX (510) 337-9335

INVITATION TO COMMENT – POTENTIAL CASE CLOSURE

RED STAR YEAST / 1396 FIFTH STREET LLC
1396 5TH STREET
OAKLAND, CA 94607
SITE CLEANUP PROGRAM CASE RO0002896
GEOTRACKER GLOBAL ID T06019794669

OCTOBER 20, 2016

The above referenced site is a Site Cleanup Program (SCP) case that is under the regulatory oversight of Alameda County Department of Environmental Health (ACDEH) for the investigation of Total Petroleum Hydrocarbons and metals, including lead and mercury. The site is currently a vacant lot under commercial/industrial land use.

Site investigation activities have been completed and it appears that the residual contaminants do not pose a significant risk for the current land use. ADCEH is considering closure of the case with site management requirements which would require notifying ACDEH of residential or sensitive land use, or if any development occurs.

This notice is being sent to the current occupants and landowners of surrounding properties and known interested parties for this site. The public is invited to review and comment on the potential closure of the case. The entire case file can be viewed over the Internet on the ACDEH website (http://www.acgov.org/aceh/lop/ust.htm) or the State of California Water Resources Control Board GeoTracker website (http://geotracker.waterboards.ca.gov). Please send written comments to Anne Jurek at ACDEH, 1131 Harbor Bay Parkway, Alameda, CA 94502; all comments will be forwarded to the responsible parties. Comments **received by November 21, 2016** will be considered and responded to prior to a final determination on the proposed case closure.

If you have comments or questions regarding this site, please contact the ACDEH caseworker, Anne Jurek at 510-567-6721 or by email at anne.jurek@acgov.org. Please refer to ACDEH case RO0002896 in any correspondence.

=A1:E25Name	StreetAddress/unit	City	State	Zip
STATE OF CALIFORNIA	PO BOX 23440	OAKLAND	CA	94623-0440
SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT	1330 BROADWAY	OAKLAND	CA	94612-2503
STATE OF CALIFORNIA	PO BOX 7791	SAN FRANCISCO	CA	94120-7791
OCCUPANT	1304 5TH	OAKLAND	CA	94607
STATE OF CALIFORNIA	PO BOX 23440	OAKLAND	CA	94623-0440
OCCUPANT	500 KIRKHAM ST	OAKLAND	CA	94607
WEST OAKLAND DEVELOPMENT GROUP LLC	1532 9TH ST	OAKLAND	CA	94607-1910
KIRKHAM LLC	1625 CLAY ST UNIT 100	OAKLAND	CA	94612-1564
KIRKHAM LLC	1001 42ND ST UNIT 200	OAKLAND	CA	94608-3620
OCCUPANT	1533 KIRKHAM ST	OAKLAND	CA	94607
TRAN HUNG T & NGUYEN HONGHOA T TRS & TRAN TRUNG V	1604 PECAN CT	REDWOOD CITY	CA	2649-8500
OCCUPANT	1395 7TH ST	OAKLAND	CA	94607
SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT	300 LAKESIDE DR UNIT 22	OAKLAND	CA	94612-3534
NORMAN R HINCK TR	2133 CAMPTON CIR	GOLD RIVER	CA	95670-8305
OCCUPANT	1403 5TH ST	OAKLAND	CA	94607
CIVICORPS SCHOOLS	101 MYRTLE ST	OAKLAND	CA	94607-2543
OCCUPANT	1417 5TH ST	OAKLAND		94607
CIVICORPS SCHOOLS	101 MYRTLE ST	OAKLAND	CA	94607-2543
CIVICORPS JOB TRAINING CENTER	1425 5TH ST	OAKLAND	CA	94607
NORMAN R HINCK TR	2133 CAMPTON CIR	GOLD RIVER	CA	95670-8305
OCCUPANT	355 MANDELA PKWY	OAKLAND	CA	94607
SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT	300 LAKESIDE DR UNIT 22	OAKLAND	CA	94612-3534
STATE OF CALIFORNIA	PO BOX 23440	OAKLAND CA	CA	94623-0440