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

July 31, 2017

Arkansas Bandag Corporation
PO Box 10048
Fort Smith AR 72917

Mr. Mike Rogers
ABF Freight Systems, Inc.
PO Box 10048
Fort Smith AR 72917
(Sent via electronic mail to: mkrogers@arkbest.com)

Subject: Case Closure for Fuel Leak Case No. RO0003033 and GeoTracker Global ID T0600100018, ABF Freight Systems, 4575 Tidewater Avenue, Oakland, CA 94601

Dear Mr. Rogers:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25296.10[g]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Department of Environmental Health (ACDEH) is required to use this case closure letter for all UST leak sites.

We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed. This case closure letter and the case closure summary can also be viewed on the State Water Resources Control Board's Geotracker website (http://geotracker.waterboards.ca.gov) and the ACDEH website (http://www.acgov.org/aceh/index.htm).

Due to residual contamination, the site was closed with Site Management Requirements that limit future land use to the current commercial land use as a trucking facility. Site Management Requirements are further described in Additional Information of the attached Case Closure Summary.

If you have any questions, please call Mark Detterman at (510) 567- 6876. Thank you.

Sincerely,

Dilan Roe, P.E.
Chief

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

Cc w/enc.: Mark Johannes Arniola, City of Oakland Public Works, 250 Frank H. Ogawa Plaza, Suite 5301, Oakland, CA 94612 (Sent via electronic mail to: marniola@oaklandnet.com)

Dave Harlan, City of Oakland, Planning and Building Division, 250 Frank H. Ogawa, Plaza, Suite 2114, Oakland, CA 94612 (Sent via electronic mail to: dharlan@oaklandnet.com)

Debra Moser, Trinity Source Group, Inc, 500 Chestnut Street, Suite 225, Santa Cruz, CA 95060; (Sent via electronic mail to: djm@tsgcorp.net)

Eric Choi, Trinity Source Group, Inc, 500 Chestnut Street, Suite 225, Santa Cruz, CA 95060; (Sent via electronic mail to: ejc@tsgcorp.net)

Dilan Roe, ACDEH, (Sent via electronic mail to: dilan.roe@acgov.org)
Paresh Khatri, ACDEH; (Sent via electronic mail to: paresh.khatri@acgov.org)
Mark Detterman, ACDEH, (Sent via electronic mail to: mark.detterman@acgov.org)
Electronic File, GeoTracker

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For Hazardous Materials Releases
1131 HARBOR BAY PARKWAY, SUITE 250
ALAMEDA, CA 94502
(510) 567-6700
FAX (510) 337-9335

REMEDIAL ACTION COMPLETION CERTIFICATION

July 31, 2017

Arkansas Bandag Corporation
PO Box 10048
Fort Smith AR 72917

Mr. Mike Rogers
ABF Freight Systems, Inc.
PO Box 10048
Fort Smith AR 72917
(Sent via electronic mail to: mkrogers@arkbest.com)

Subject: Case Closure for Fuel Leak Case No. RO0003033 and GeoTracker Global ID T0600100018, ABF Freight Systems, 4575 Tidewater Avenue, Oakland, CA 94601

Dear Mr. Rogers:

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.

Please be aware that claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund more than 365 days after the date of this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

- Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or
- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required for closure that will result in the submission of claims beyond that time period, or that under the circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

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

Sincerely,

Ronald Browder
Director

Underground Storage Tank
Case Closure Summary Form

Agency Information

Date: July 27, 2017

Alameda County Department of Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6876
Case Worker: Mark Detterman	Title: Senior Hazardous Materials Specialist

Case Information

Facility Name: ABF Freight Systems		
Facility Address: 4575 Tidewater Avenue, Oakland, CA 94601		
Regional Water Board LUSTIS Case No: 01-0022	Former ACDEH Case No.: ----	Current LOP Case No.: RO0003033
Unauthorized Release Form Filing Date: 6/30/1986	State Water Board GeoTracker Global ID: T0600100018	
Assessor Parcel Number: 34-2300-13-5	Current Land Use: Commercial	
Responsible Party(s):	Address:	Phone:
Arkansas Bandag Corporation	PO Box 10048 Fort Smith AR 72917	----
ABF Freight Systems, Inc. c/o Mr. Mike Rogers	PO Box 10048 Fort Smith AR 72917	----

Tank Information

Tank No.	Size (gal)	Contents	Closed in-Place / Removed	Date
---	10,000-gallon	Diesel / Gasoline	Removed	January 8, 1987
---	10,000-gallon	Diesel	Removed	July 1, 1987
---	800-gallon	Waste Oil	Removed	June 30, 1986
---	800-gallon	New Oil	Removed	June 30, 1986

Site History

Current Land-use at time of Case Closure

The subject property (APN 34-2300-13-5) is located 4575 Tidewater Avenue, in the western portion of the City of Oakland adjacent to San Francisco bay. The 6.7 acre site, where the four underground storage tanks (USTs) were removed is situated between Tidewater Avenue and the water channel extending north from San Leandro Bay, separating the cities of Alameda and Oakland. At the time of this case closure, the site is used as a trucking terminal with a maintenance building located near the western property boundary and accordingly this case is closed to the current commercial land-use risk scenario, consisting

of a maintenance structure developed at the site. Due to residual contamination, the site was closed with site management requirements that include notifying Alameda County Department of Environmental Health (ACDEH) of a proposed change in land use to any residential or conservative land use, or if any redevelopment or building alteration is proposed that affect or disturb the existing subsurface conditions at the site.

Adjacent Property(ies) Land-use at Time of Case Closure

At the time of this case closure, no potential off-site contamination was identified. However, should off-site redevelopment occur, ACDEH recommends evaluating the redevelopment site(s) for chemicals of concern identified on this site.

Historic Land-use / Site Investigation

Four USTs once operated at the site until the late 1980's. In June of 1986, two investigations were performed consisting of tank integrity testing and soil and groundwater sampling along with additional soil and groundwater sampling. Based on tank integrity testing results two waste oil USTs and one diesel or formerly gasoline UST were removed. Soil borings and groundwater monitoring wells were installed to determine whether the USTs have contaminated soil and groundwater beneath the site. In July of 1987, the remaining diesel or formerly gasoline UST was removed.

In 1999, approximately 80 tons of stockpiled soil generated from the UST removals were disposed under non-hazardous waste manifest to Forward Landfill in Manteca, California.

In 2012 soil borings were installed to collected soil and groundwater samples. Additionally, soil vapor samples were also collected. In 2014, passive soil vapor sampling probes were installed to delineate PCE detected in soil vapor. In 2015, sewer lines and drain pipes were cleared to perform a video survey to determine whether floor drains and sewer lines are potential sources of light non-aqueous phase liquid (LNAPL) detected at the site.

Discovery of the PCE vapor contamination and petroleum Light Non Aqueous Phased Liquids (LNAPL) beneath the maintenance building delayed closure under the State Water Resource Control Board Low Threat Underground Storage Tank Closure Policy (LTCP) in 2014.

No other investigation or cleanup was performed in relation to the USTs.

Investigation of the PCE contamination has been referred to another environmental case (RO0003134 and T10000005825).

Potential Exposure to Chemicals of Concern

The USTs that were used to store used oil, motor oil, diesel and gasoline are believed to be the source of the contamination discovered at the site. The main chemicals of concern (COCs) associated with the USTs and detected at the site were TPH-d, TPH-g, BTEX, and PCE. Inhalation and ingestion appear to have been the most likely potential routes of exposure to these COCs.

Remediation Activities

Source removal of the UST was performed at the site. No additional corrective actions were performed at the site.

Case Closure & Future Site Management Requirements

This fuel leak case has been evaluated for closure consistent with the LTCP. The site fails the LTCP groundwater criteria as the nearest surface water body is less than 250 feet from the release, however plume concentrations in the downgradient well are below ESLs for the protection of estuary habitats. The site also fails the LTCP vapor intrusion criteria due to the presence of limited LNAPL beneath the

maintenance building, the presence of groundwater at a depth of approximately 3.3 feet which precludes the collection of a soil vapor sample at a depth of 5 feet below the foundation (estimated at 6.5 feet below grade surface), the lack of a 5 foot bioattenuation zone, and the presence of TPH concentrations greater than 100 milligrams per kilogram (mg/kg) in the 0 to 5 foot depth interval. Based on the collection of sub-slab petroleum hydrocarbon vapor samples ACDEH has concluded that petroleum vapors migrating from soil or groundwater will not have a significant risk of adversely affecting human health as a result of controlling the exposure through the use of an institutional land use control. Finally, the case does not meet the Direct Contact and Outdoor Air criteria due to non-detectable PAHs above LTCP Table 1 values in the 0 to 5 foot depth interval. However, ACDEH has made the determination that there is a low potential threat to human health and safety and to the environment and water quality objectives will be achieved within a reasonable time frame.

Due to residual contamination at the site, the site is closed as a commercial 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.

Site Closure Evaluation Summary

This UST release case has been evaluated for closure consistent with the State Water Resource Control Board Low-Threat Underground Storage Tank Closure Policy (LTCP) for petroleum related contaminants.

Refer to Attachments 1 through 5 for analysis details.

Site Management Requirements

Case closure is granted for the current commercial land use as a trucking facility.

Due to residual subsurface contamination remaining at the site, if any redevelopment occurs, or if a proposed change in land use to residential, or other conservative land use, Alameda County Department of Environmental Health (ACDEH) must be notified as required by Government Code Section 65850.2.

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.

This site is to be entered into the City of Oakland Permit Tracking System due to the residual contamination on site.

Underground Storage Tank
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	Chandra Johannesson P.O. Box 24055, MS 702 Oakland, CA 94623
Water Replenishment Districts	Not Applicable	----
Groundwater Basin Managers	Not Applicable	----
Planning Agency	City of Oakland	Dave Harlan City of Oakland Planning and Building Division 250 Frank H. Ogawa Plaza, Suite 2114 Oakland, CA 94612
Public Works Agency	City of Oakland	Mark Johannes Arniola City of Oakland Public Works Division 250 Frank H. Ogawa Plaza, Suite 4314 Oakland, CA 94612
Owners and Occupants of Property and Adjacent Parcels	See List in Attachment 7	----

Underground Storage Tank
Case Closure Summary Form

Monitoring Wells Status

Monitoring Wells (MW) Onsite: Four groundwater Three sub-slab vapor	MWs Destroyed: Four and three, respectively
No MWs Destroyed: Four and three, respectively	No. MWs Retained: None

Local Agency Signatures

Case Worker: Mark Detterman	Title: Senior Hazardous Materials Specialist
Signature: Mark E.	Date: 7/31/2017
Paresh Khatri	Title: LOP Supervisor
Signature: Paresh Khatri	Date: JULY 31, 2017
Program Manager: Dilan Roe	Title: Chief
Signature: Dilan Roe	Date: JULY 31, 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.

Geotracker Conceptual Site Model (Attachment 1, 2 page)

Geotracker LTCP Checklist (Attachment 2, 1 page)

Groundwater Evaluation and Data (Attachment 3, 21 pages)

Vapor Intrusion Evaluation and Data (Attachment 4, 5 pages)

Soil Evaluation and Data (Attachment 5, 10 pages)

Responsible Party Information (Attachment 6, 6 pages)

Case Closure Public Notification Information (Attachment 7, 5 pages)

ATTACHMENT 1

GEOTRACKER | Regulator Tools | Reports | Other Tools | GAMA | Contact | Logout | Quick Search

ABF FREIGHT SYSTEMS (T0600100018) - MAP THIS SITE

PUBLIC PAGE

4575 TIDEWATER AVE
OAKLAND , CA 94601
ALAMEDA COUNTY
LUST CLEANUP SITE
STATUS: COMPLETED - CASE CLOSED

CLEANUP OVERSIGHT AGENCIES
ALAMEDA COUNTY LOP (LEAD) - CASE #: RO0003033 - MARK DETTERMAN
SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 01-0022 - Regional Water Board

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

THERE ARE 1 OTHER CASES ASSOCIATED WITH THIS CASE - SHOW

THIS PROJECT WAS LAST MODIFIED BY MARK DETTERMAN ON 8/1/2017 10:31:43 AM - 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 CLAIMANT DATE

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

SITE NAME / ADDRESS	STATUS	STATUS DATE	RELEASE REPORT DATE	AGE OF CASE	CLEANUP OVERSIGHT AGENCIES
ABF FREIGHT SYSTEMS (Global ID: T0600100018) 4575 TIDEWATER AVE OAKLAND, CA 94601	Completed - Case Closed	7/31/2017	7/3/1986	31	ALAMEDA COUNTY LOP (LEAD) - CASE #: RO0003033 CASEWORKER: MARK DETTERMAN - SUPERVISOR: DILAN ROE SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 01-0022 CASEWORKER: Regional Water Board - SUPERVISOR: NONE SPECIFIED

STAFF NOTES (INTERNAL)

SITE HISTORY

Current Land-use at time of Case Closure

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Due to residual contamination at the site, the site is closed as a commercial 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.

RESPONSIBLE PARTIES

NAME	ORGANIZATION	ADDRESS	CITY	EMAIL
MIKE ROGERS	ABF FREIGHT SYSTEMS, INC.	3801 OLD GREENWOOD ROAD, PO BOX 10048	FORT SMITH	
MIKE ROGERS	Arkansas Bandag Corporation	PO BOX 10048	FORT SMITH	

CLEANUP ACTION INFO

NO CLEANUP ACTIONS HAVE BEEN REPORTED

RISK INFORMATION — VIEW LTCP CHECKLIST | VIEW PATH TO CLOSURE PLAN | VIEW CASE REVIEWS

CONTAMINANTS OF CONCERN	CURRENT LAND USE	BENEFICIAL USE	DISCHARGE SOURCE	DATE REPORTED	STOP METHOD	NEARBY / IMPACTED WELLS
Diesel, Gasoline, Other Petroleum, Waste Oil / Motor / Hydraulic / Lubricating	Commercial	GW - Municipal and Domestic Supply	Other	7/3/1986	Close and Remove Tank	0

FREE PRODUCT	OTHER CONSTITUENTS	NAME OF WATER SYSTEM	LAST REGULATORY ACTIVITY	LAST ESI UPLOAD	LAST EDF UPLOAD	EXPECTED CLOSURE DATE	MOST RECENT CLOSURE REQUEST
NO	YES	EBMUD	7/19/2017	7/19/2017	5/27/2015	9/30/2017	

CDPH WELLS WITHIN 1500 FEET OF THIS SITE

NONE

CALCULATED FIELDS (BASED ON LATITUDE / LONGITUDE)

APN	GW BASIN NAME	WATERSHED NAME
034 230001305	Santa Clara Valley - East Bay Plain (2-9.04)	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 SUBMITTALS

MOST RECENT CONCENTRATIONS OF PETROLEUM CONSTITUENTS IN SOIL - SHOW	VIEW ESI SUBMITTALS
MOST RECENT GEO_WELL DATA - SHOW	VIEW ESI SUBMITTALS

ATTACHMENT 2

GeoTracker | Regulator Tools | Reports | Other Tools | GAMA | Contact | Logout | Quick Search

ABF FREIGHT SYSTEMS (T0600100018) - MAP THIS SITE — PUBLIC PAGE

4575 TIDEWATER AVE
OAKLAND , CA 94601
LUST CLEANUP SITE
STATUS OPEN - ELIGIBLE FOR CLOSURE

CLEANUP OVERSIGHT AGENCIES
ALAMEDA COUNTY LOP (LEAD) - CASE #: RO0003033 - MARK DETTERMAN
SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 01-0022 - Regional Water Board

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

THERE ARE 1 OTHER CASES ASSOCIATED WITH THIS CASE - SHOW

THIS PROJECT WAS LAST MODIFIED BY MARK DETTERMAN ON 11/2/2016 4:49:59 PM - HISTORY

CLOSURE POLICY — *THIS VERSION IS FINAL AS OF 11/2/2016* — CHECKLIST INITIATED ON 7/26/2013 — CLOSURE POLICY HISTORY

General Criteria - *The site satisfies the policy general criteria* - CLEAR SECTION ANSWERS — NO

a. Is the unauthorized release located within the service area of a public water system?
Name of Water System : EBMUD — ◉ YES ○ NO

b. The unauthorized release consists only of petroleum (info).
Contaminants : ☐ Chlorobenzene ☑ PCE ☐ TCE ☐ Chloroform ☐ Vinyl Chloride ☐ Bromoform
☑ Other: Referred PCE contamination to case RO0003134 (T10000005825). — ○ YES ◉ NO

c. The unauthorized ("primary") release from the UST system has been stopped. — ◉ YES ○ NO

d. Free product has been removed to the maximum extent practicable (info). — ○ FP Not Encountered ◉ YES ○ NO

e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed (info). — ◉ YES ○ NO

f. Secondary source has been removed to the extent practicable (info). — ◉ YES ○ NO

g. Soil or groundwater has been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15. — ○ Not Required ◉ YES ○ NO

h. Does a nuisance exist, as defined by Water Code section 13050 — ○ YES ◉ NO

1. Media-Specific Criteria: Groundwater - *The contaminant plume that exceeds water quality objectives is stable or decreasing in areal extent, and meets all of the additional characteristics of one of the five classes of sites listed below.* - CLEAR SECTION ANSWERS — YES

EXEMPTION - Soil Only Case (Release has not Affected Groundwater - Info) — ○ YES ◉ NO

Does the site meet any of the Groundwater specific criteria scenarios? — ◉ YES ○ NO

1.5 - The regulatory agency determines, based on an analysis of site specific conditions, that the site under current and reasonably anticipated near-term 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. — ◉ YES ○ NO

2. Media Specific Criteria: Petroleum Vapor Intrusion to Indoor Air - *The site is considered low-threat for the vapor-intrusion-to-air pathway if site-specific conditions satisfy items 2a, 2b, or 2c* - CLEAR SECTION ANSWERS — YES

EXEMPTION - Active Commercial Petroleum Fueling Facility — ○ YES ◉ NO

Does the site meet any of the Petroleum Vapor Intrusion to Indoor Air specific criteria scenarios? — ◉ YES ○ NO

2c - Petroleum Vapor Intrusion to Indoor Air - As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, the regulatory agency determines that petroleum vapors migrating from soil or groundwater will have no significant risk of adversely affecting human health. — ◉ YES ○ NO

3. Media Specific Criteria: Direct Contact and Outdoor Air Exposure - *The site is considered low-threat for direct contact and outdoor air exposure if it meets 1, 2, or 3 below.* - CLEAR SECTION ANSWERS — YES

EXEMPTION - The upper 10 feet of soil is free of petroleum contamination — ○ YES ◉ NO

Does the site meet any of the Direct Contact and Outdoor Air Exposure criteria scenarios? — ◉ YES ○ NO

3(c) - As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, the regulatory agency determines that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health. — ◉ YES ○ NO

Additional Information

Should this case be closed in spite of NOT meeting policy criteria?
Explain: Refer PCE contamination to case RO0003134 (T10000005825) — ◉ YES ○ NO

Has this LTCP Checklist been updated for FY 16/17? — ◉ YES ○ NO

SPELL CHECK

Save Form as Partially Completed | Save Form as Complete

ATTACHMENT 3

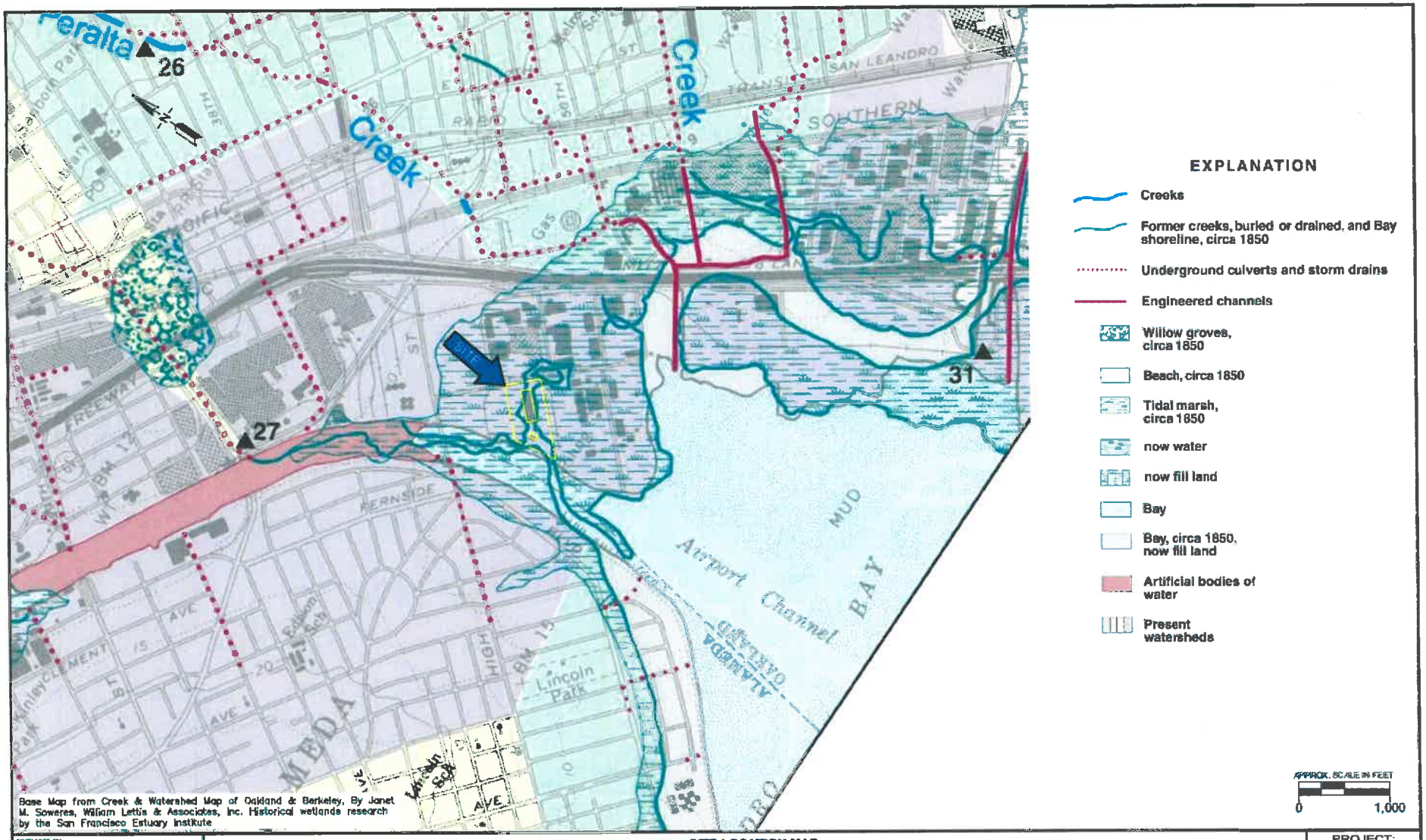
Attachment 3 – Groundwater Evaluation and Data

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						
Shading indicates Site Specific Data and Bold Text indicates Evaluation Criteria						
Site Specific Data		**Scenario 1**	**Scenario 2**	**Scenario 3**	**Scenario 4**	**Scenario 5**
Plume Length	100 – 250 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	Removed to maximum extent practicable	No free product	No free product	Removed to maximum extent practicable	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)	~ 1,560 feet upgradient (DWR / ACPWA) >2,000 feet (GAMA)	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet	
Distance to Nearest Surface Water Body (from plume boundry)	Downgradient: 300 feet Cross Gradient: 250 feet Upgradient: 5,390 feet	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet	
Benzene Concentrations (µg/l)	Historic Max: 1,590 Current Max: 2.7	No criteria	<3,000	<1,000	<1,000	
MTBE Concentrations (µg/l)	Historic Max: 2.1 Current Max: 1.2	No criteria	<1,000	<1,000	<1,000	
Property Owner Willing to Accept a Land Use Restriction	Not applicable	Not applicable	Not applicable	Yes	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	The property overlies filled bay marshland. Therefore, the groundwater plume was defined to salt water aquatic habitat goals. (Contaminant plume that exceeds water quality objectives is approximately 100 – 250 feet in length.)
Free Product	Observed at site as isolated pocket at soil bore SB-4. It was removed and did not return to the soil bore. Thus it was removed to maximum extent practicable.
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 indicate no public water supply wells, irrigation wells within 1,320 feet of the site. The well survey results from the GeoTracker Groundwater Ambient Monitoring Assessment (GAMA) website indicates there are no public water supply wells, irrigation wells, California Department of Public Health wells, Department of Pesticide Regulation wells located within a 2,000 foot radius of the site.
Surface Water Bodies	The Alameda – Oakland Estuary is downgradient to the south of the release at an approximate distance of 300 feet. It is also cross gradient at an approximate distance of 250 feet to the west. A daylighted portion of Peralta Creek is 5,390 feet upgradient.



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SITE LOCATION MAP

ABF Freight System Facility
4575 Tidewater Ave.
Oakland, California

PROJECT:
154.009.005

FIGURE:
1

REF. 154_001\154.008.001 fig1.dwg

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SITE MAP

ABF Freight System Facility
4575 Tidewater Ave.
Oakland, California

PROJECT:
154.004.001

FIGURE:
2

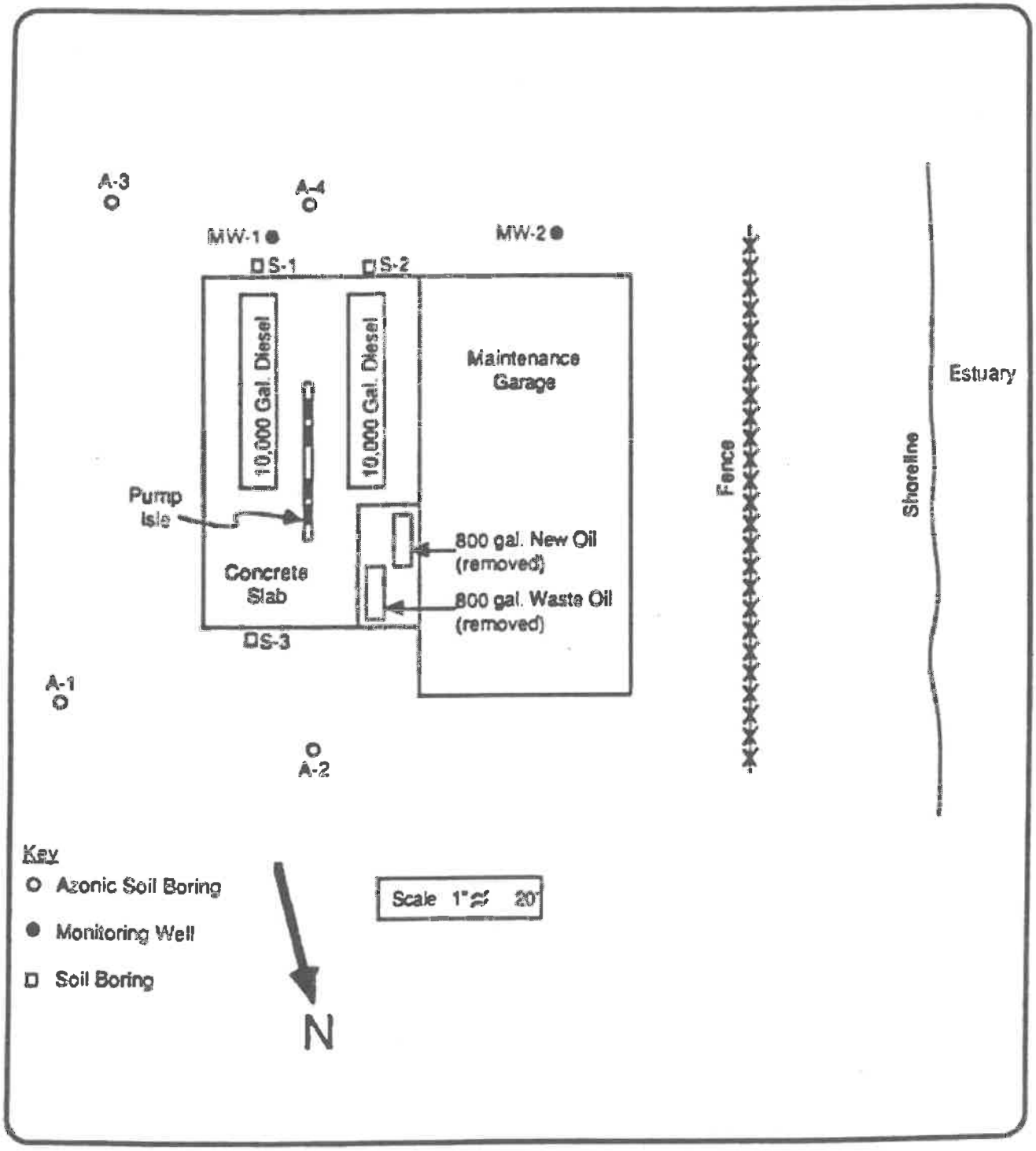
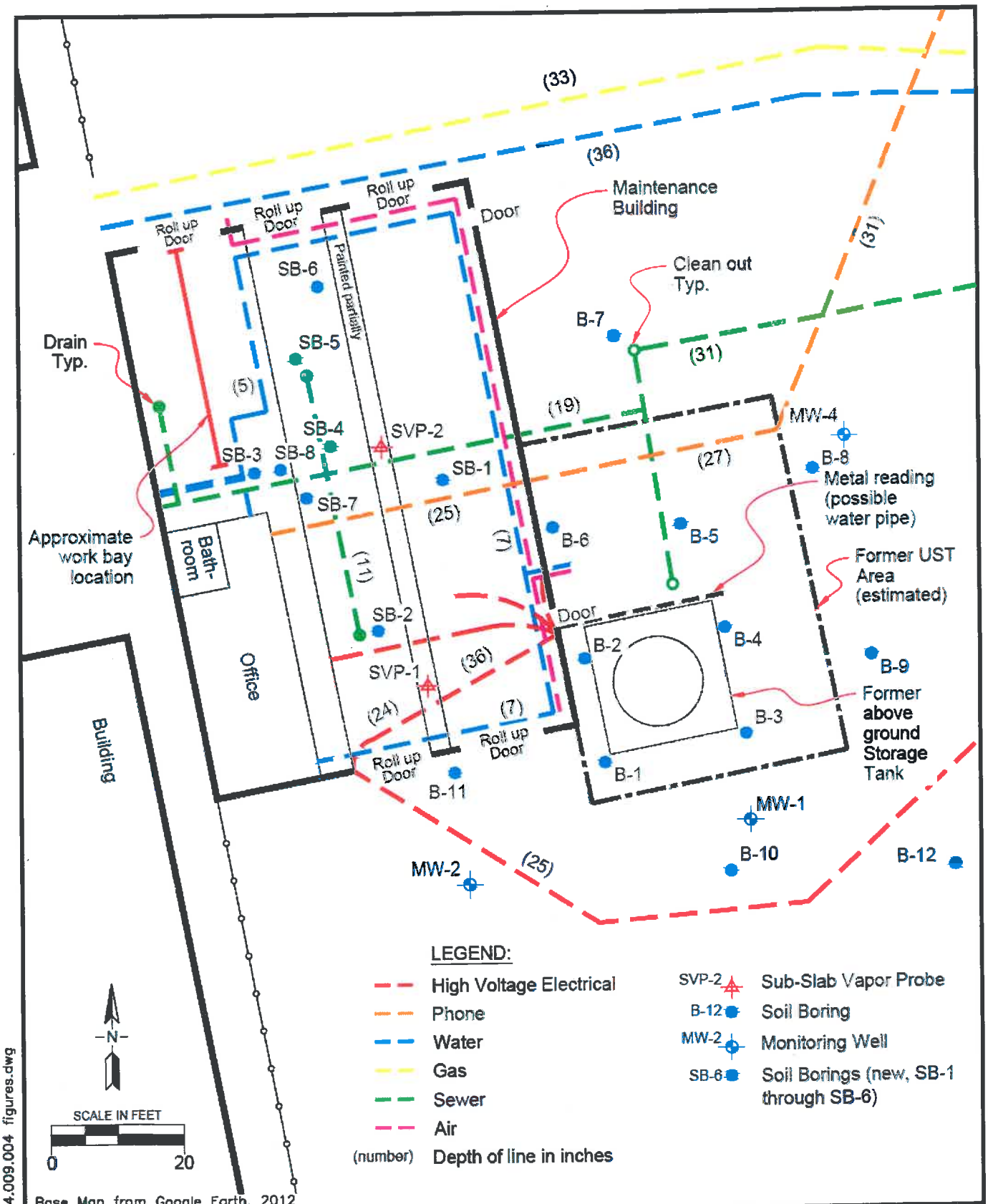


Figure 2. Location of Monitoring Wells and Soil Borings



REF. 154_001\154.009.004 figures.dwg

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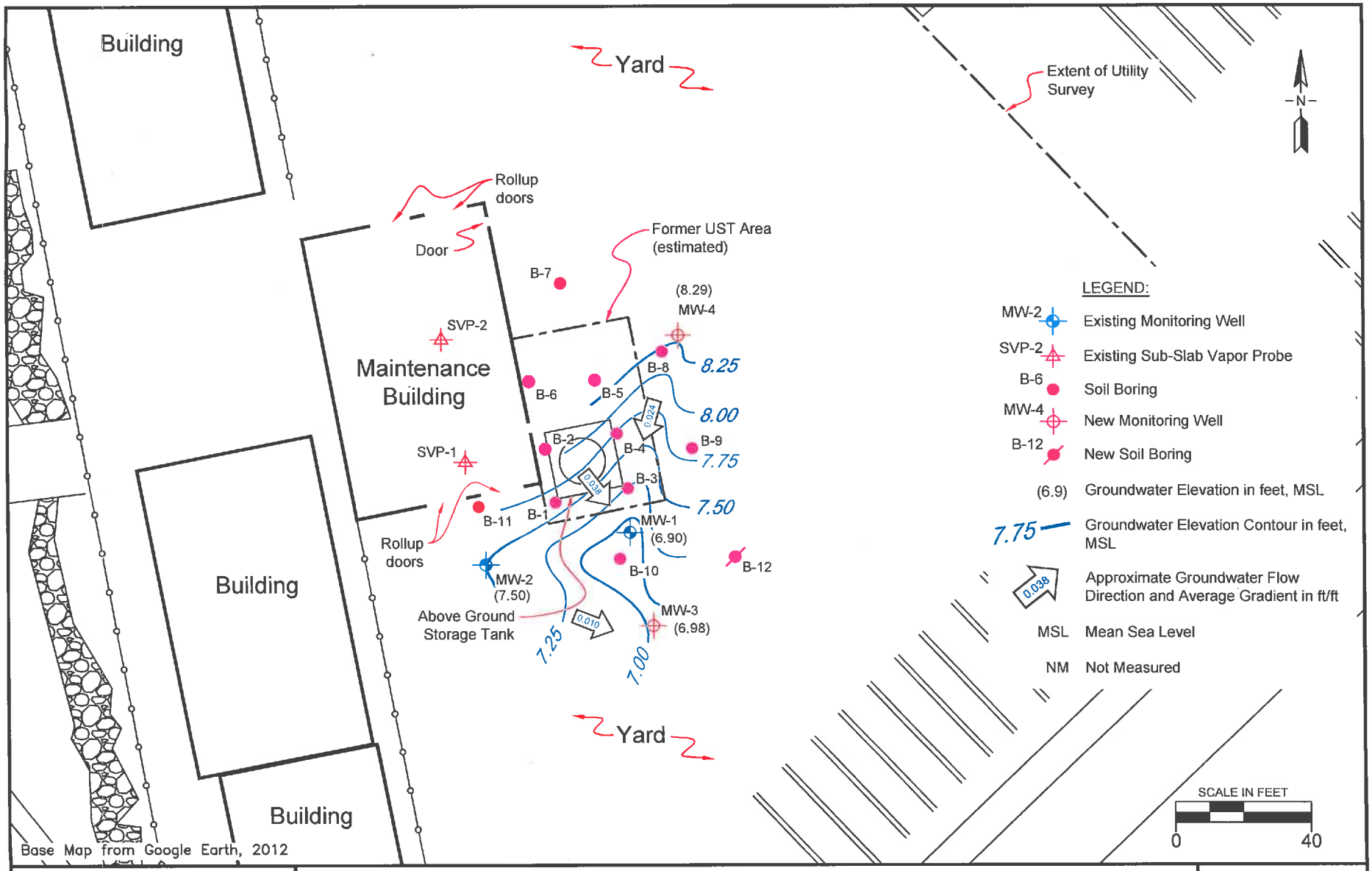
SOIL BORINGS, SUB-SLAB VAPOR PROBE, UTILITIES LOCATION MAP

ABF Freight System Facility
4575 Tidewater Ave.
Oakland, California

PROJECT: 154.009.005

FIGURE: 2



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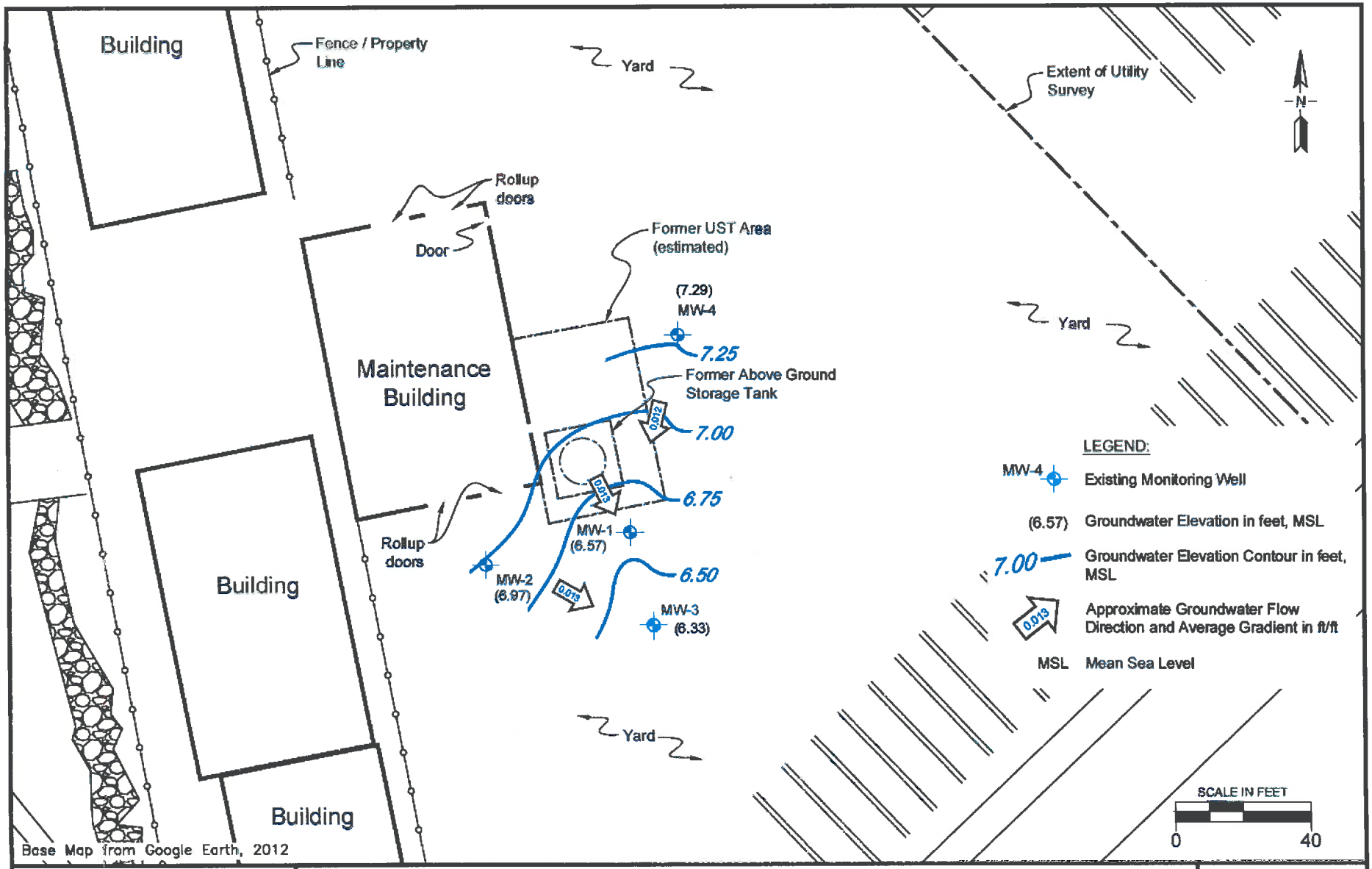
GROUNDWATER ELEVATION CONTOUR MAP, FEBRUARY 8, 2013

ABF Freight System Facility
4575 Tidewater Avenue
Oakland, California

PROJECT: 154.004.008

FIGURE: 3

REF. 154_001\154.004.008 fig2.dwg



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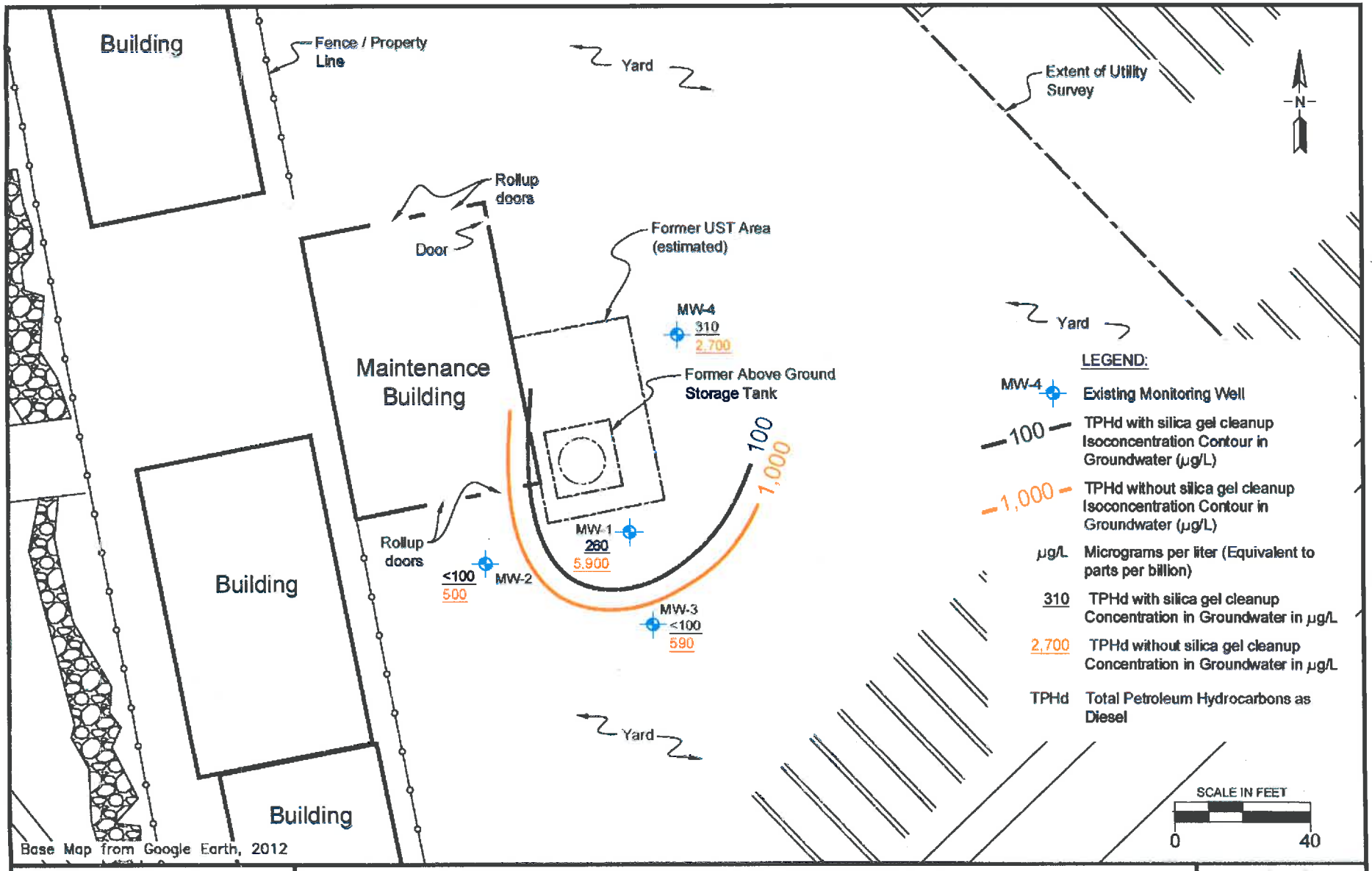
GROUNDWATER ELEVATION CONTOUR MAP,
MARCH 26, 2015
ABF Freight System Facility
4575 Tidewater Avenue
Oakland, California

PROJECT:
154.010.005

FIGURE:
3

REF. 154_001\154.010.005 20150326 figures.dwg



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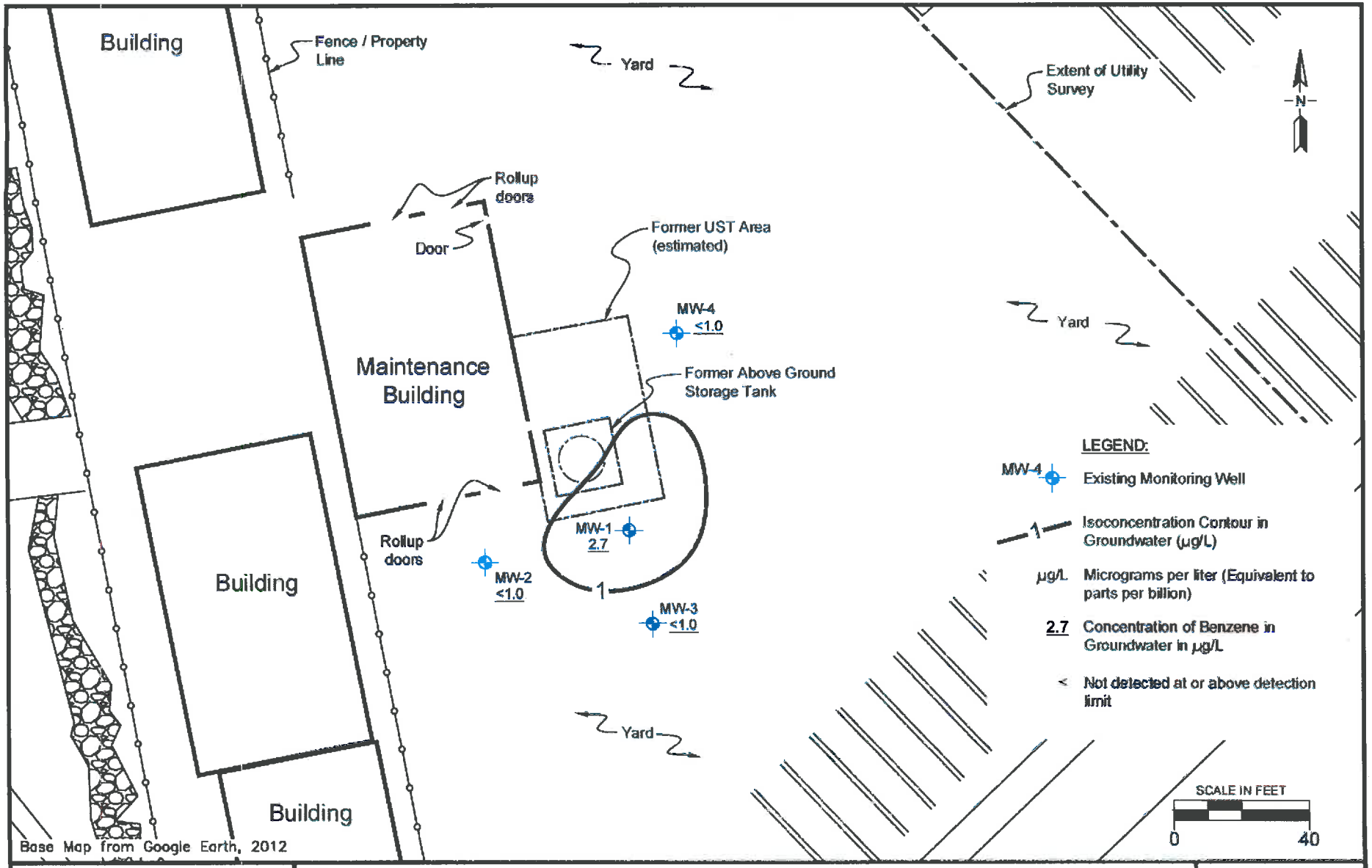
TPHd ISOCONCENTRATION CONTOUR MAP,
MARCH 26, 2015
ABF Freight System Facility
4575 Tidewater Avenue
Oakland, California

PROJECT: 154.010.005

FIGURE: 4

REF. 154_001\154.010.005 20150326 figures.dwg



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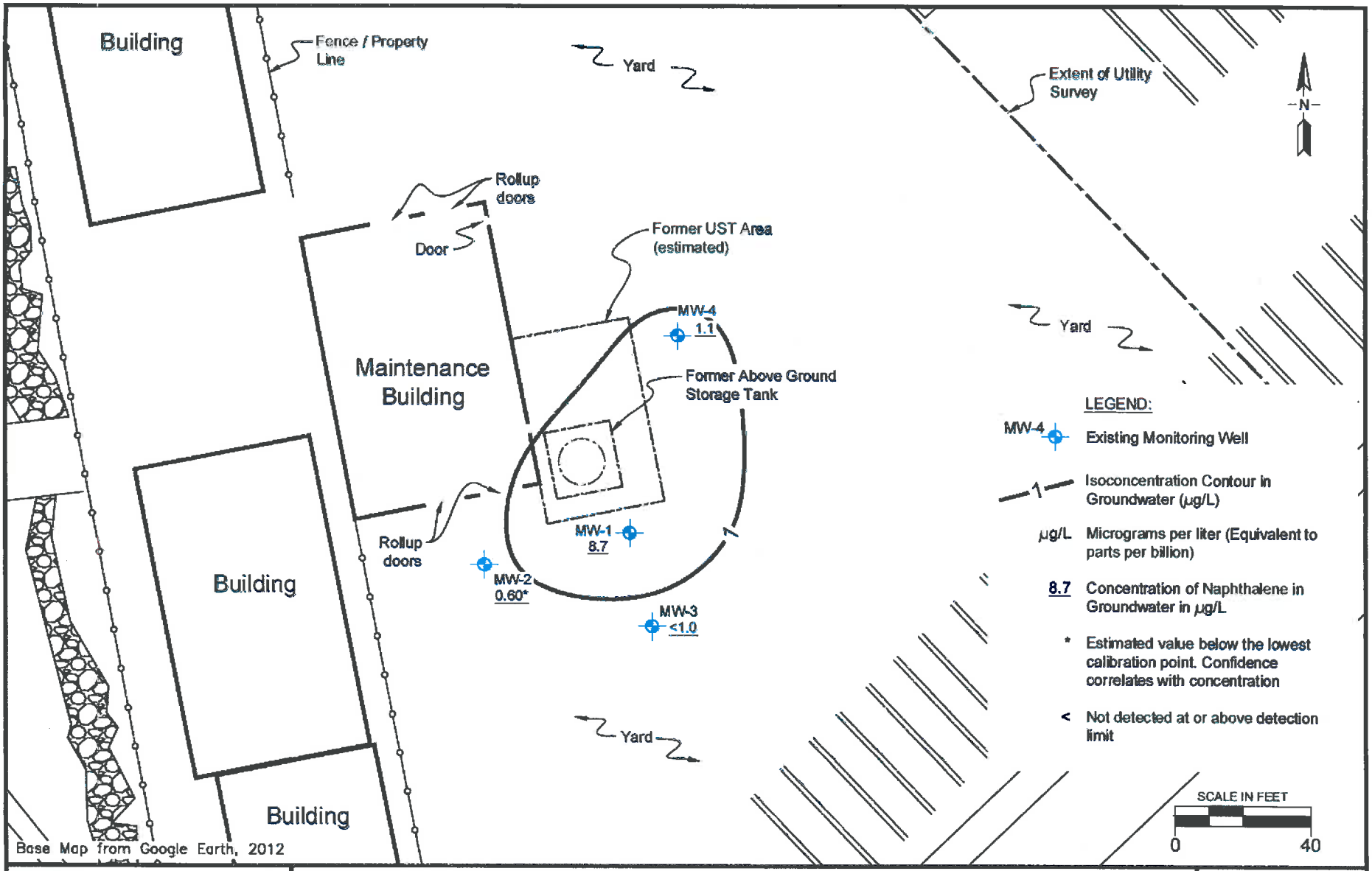
BENZENE ISOCONCENTRATION CONTOUR MAP, MARCH 26, 2015

ABF Freight System Facility
4575 Tidewater Avenue
Oakland, California

PROJECT: 154.010.005

FIGURE: 5

REF. 154_001\154.010.005 20150326 figures.dwg



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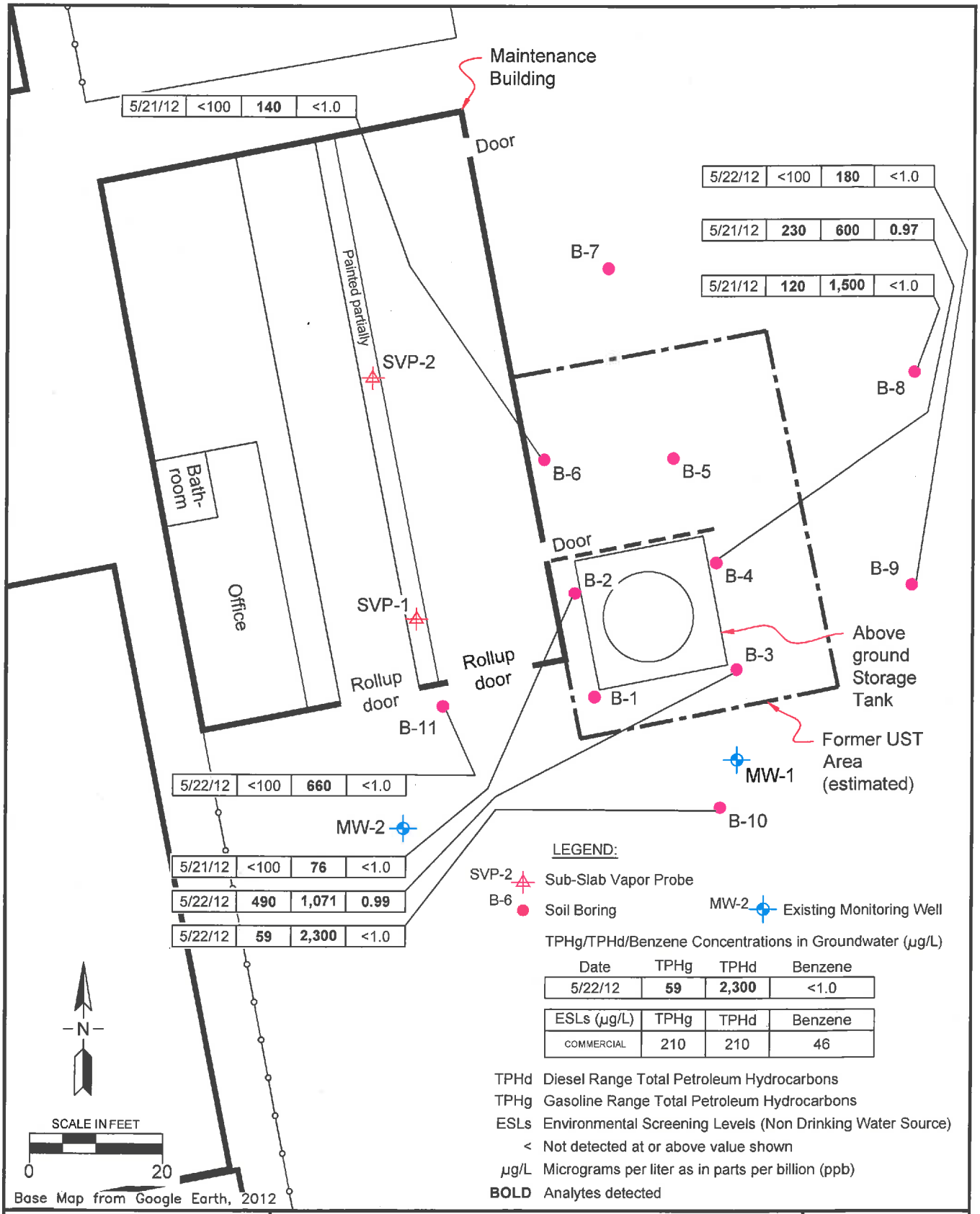
NAPHTHALENE ISOCONCENTRATION CONTOUR MAP, MARCH 26, 2015

ABF Freight System Facility
4575 Tidewater Avenue
Oakland, California

PROJECT: 154.010.005

FIGURE: 6

REF. 154_001\154.010.005 20150326 figures.dwg



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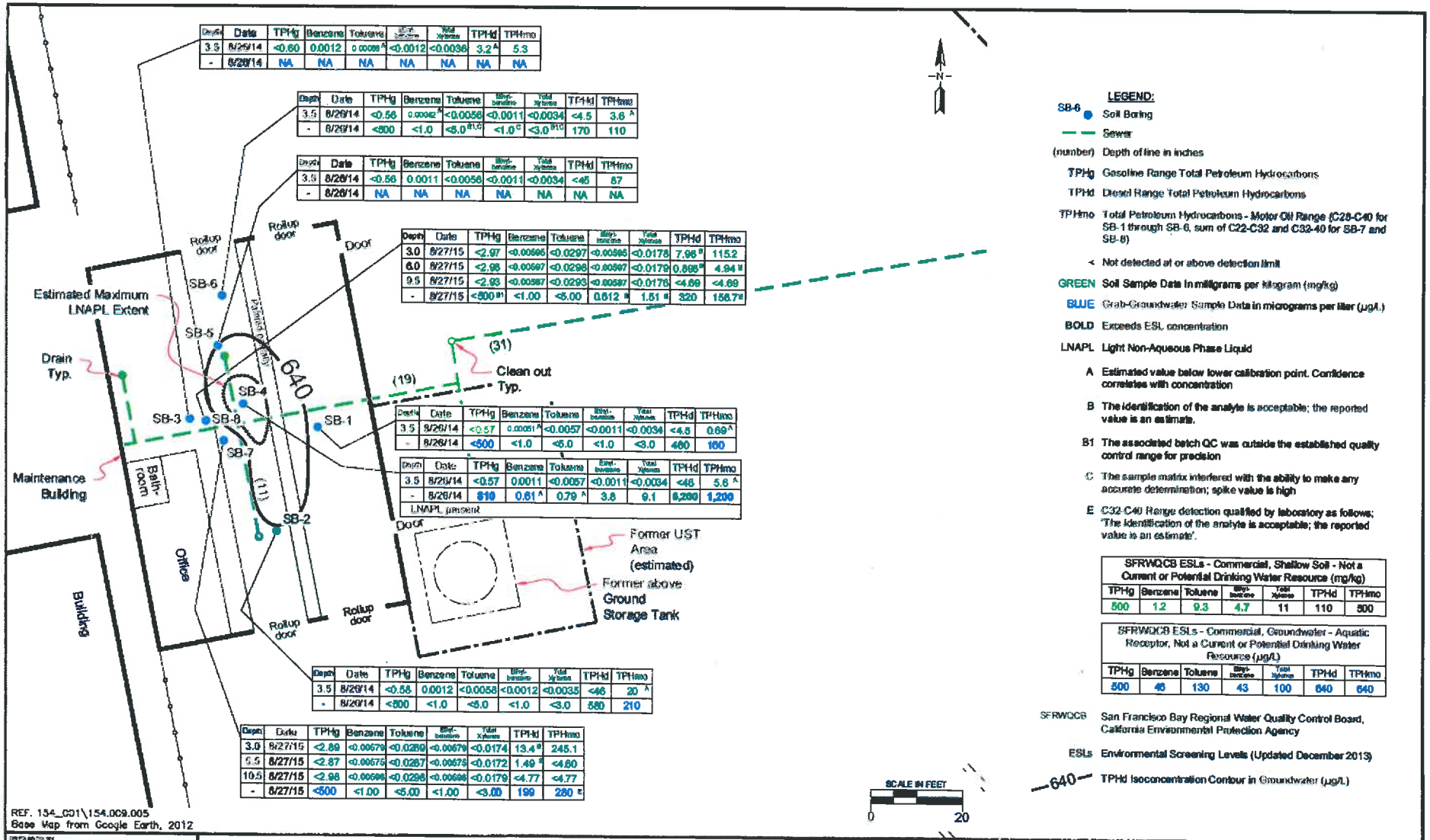
SHALLOW GRAB-GROUNDWATER ANALYTICAL DATA MAP

ABF Freight Systems Facility
4575 Tidewater Avenue
Oakland, California

PROJECT: 154.004.005

FIGURE: 5

REF. 154_001\154.004.005 figures.dwg



Depth	Date	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHd	TPHmo
3.5	8/26/14	<0.60	0.0012	0.00068 A	<0.0012	<0.0036	3.2 A	5.3
-	8/26/14	NA	NA	NA	NA	NA	NA	NA

Depth	Date	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHd	TPHmo
3.5	8/26/14	<0.56	0.00062 A	<0.0056	<0.0011	<0.0034	<4.5	3.6 A
-	8/26/14	<500	<1.0	<5.0 B1,C	<1.0 C	<3.0 B1C	170	110

Depth	Date	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHd	TPHmo
3.5	8/26/14	<0.56	0.0011	<0.0056	<0.0011	<0.0034	<45	87
-	8/26/14	NA	NA	NA	NA	NA	NA	NA

Depth	Date	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHd	TPHmo
3.0	8/27/15	<2.97	<0.00595	<0.0297	<0.00595	<0.0178	7.96 B	115.2
6.0	8/27/15	<2.98	<0.00597	<0.0298	<0.00597	<0.0179	0.595 B	4.94 B
9.5	8/27/15	<2.93	<0.00587	<0.0293	<0.00587	<0.0176	<4.69	<4.69
-	8/27/15	<500 B1	<1.00	<5.00	0.612 B	1.51 B	320	156.7 B

Depth	Date	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHd	TPHmo
3.5	8/26/14	<0.57	0.00051 A	<0.0057	<0.0011	<0.0034	<4.5	0.69 A
-	8/26/14	<500	<1.0	<5.0	<1.0	<3.0	460	160

Depth	Date	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHd	TPHmo
3.5	8/26/14	<0.57	0.0011	<0.0057	<0.0011	<0.0034	<46	5.6 A
-	8/26/14	810	0.61 A	0.79 A	3.8	9.1	6,200	1,200
LNAPL present								

Depth	Date	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHd	TPHmo
3.5	8/26/14	<0.56	0.0012	<0.0056	<0.0012	<0.0035	<46	20 A
-	8/26/14	<500	<1.0	<5.0	<1.0	<3.0	580	210

Depth	Date	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHd	TPHmo
3.0	8/27/15	<2.89	<0.00579	<0.0289	<0.00579	<0.0174	13.4 B	245.1
9.5	8/27/15	<2.87	<0.00575	<0.0287	<0.00575	<0.0172	1.49 B	<4.60
10.5	8/27/15	<2.98	<0.00596	<0.0298	<0.00596	<0.0179	<4.77	<4.77
-	8/27/15	<500	<1.00	<5.00	<1.00	<3.00	199	280 B

LEGEND:

- SB-6 ● Soil Boring
- Sewer
- (number) Depth of line in inches
- TPHg Gasoline Range Total Petroleum Hydrocarbons
- TPHd Diesel Range Total Petroleum Hydrocarbons
- TPHmo Total Petroleum Hydrocarbons - Motor Oil Range (C28-C40 for SB-1 through SB-6, sum of C22-C32 and C32-40 for SB-7 and SB-8)
- < Not detected at or above detection limit
- GREEN Soil Sample Data in milligrams per kilogram (mg/kg)
- BLUE Grab-Groundwater Sample Data in micrograms per liter (µg/L)
- BOLD Exceeds ESL concentration
- LNAPL Light Non-Aqueous Phase Liquid
- A Estimated value below lower calibration point. Confidence correlates with concentration
- B The identification of the analyte is acceptable; the reported value is an estimate.
- B1 The associated batch QC was outside the established quality control range for precision
- C The sample matrix interfered with the ability to make any accurate determination; spike value is high
- E C32-C40 Range detection qualified by laboratory as follows; 'The identification of the analyte is acceptable; the reported value is an estimate'.

SFRWQCB ESLs - Commercial, Shallow Soil - Not a Current or Potential Drinking Water Resource (mg/kg)						
TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHd	TPHmo
500	1.2	9.3	4.7	11	110	500

SFRWQCB ESLs - Commercial, Groundwater - Aquatic Receptor, Not a Current or Potential Drinking Water Resource (µg/L)						
TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHd	TPHmo
500	46	130	43	100	640	640

- SFRWQCB San Francisco Bay Regional Water Quality Control Board, California Environmental Protection Agency
- ESLs Environmental Screening Levels (Updated December 2013)
- —640— TPHd Isoconcentration Contour in Groundwater (µg/L)

REF. 154_C01\154.009.005
Base Map from Google Earth, 2012

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SOIL AND GRAB-GROUNDWATER ANALYTICAL DATA MAP

ABF Freight System Facility
4575 Tidewater Ave.
Oakland, California

PROJECT: 154.009.005

FIGURE: 3

Table 1

RESULTS OF SOIL AND WATER SAMPLING

Water Samples

Well No.	Sample Date/Time	Sample Depth, ft	Motor Fuel (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Xylene (mg/l)	Fuel Type
MW-1	9/15 11:30 am	5-10	4.52	1.59	0.012	1.0	Gasoline
MW-2	9/15 11:45 am	5-10	<0.05	0.009	<0.001	<0.001	Gasoline

Soil Samples

Well No.	Sample Date/Time	Sample Depth, ft	Motor Fuel (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Xylene (mg/l)	Fuel Type
MW-1	9/12	4.5-5	<0.05	<0.001	<0.001	<0.001	Gasoline
MW-2	9/12	4.5-5	<0.05	<0.001	<0.001	<0.001	Gasoline
MW-2	9/12	9.5-10	<0.05	<0.001	<0.001	<0.001	Gasoline
S-1	9/12	4.5-10	<0.05	<0.001	<0.001	0.022	Gasoline
S-2	9/12	4.5-5	0.44	<0.001	<0.001	<0.001	Aged Gas
S-3	9/12	4.5-5	34	0.012	0.010	0.056	Aged Gas
	Detection Limit		0.050	0.001	0.001	0.001	Gasoline

Laboratory analytical methods were EPA 5020/8015 for total motor fuel and fuel type and EPA 8020 for benzene, toluene and xylene.

WESTON

SECTION 3.0

SAMPLING AND ANALYSIS

3.1 Sampling

Prior to excavation cleaning efforts, two soil samples were taken by a registered civil engineer above the water table. These two samples were taken from each side of the tank approximately three feet from the corroded southerly end of the tank. Soil was placed directly into the container without utilizing a sampling trowel. In addition one set of VOA vials were taken for water analysis also at the southerly end of the tank. Both soil and water were examined for total petroleum hydrocarbons (EPA Method 418.7) and BTX (EPA Method 8020). The samples were immediately placed into an ice chest and were shipped to WESTON's Stockton, California Laboratory as recorded on the chain-of-custody form.

3.2 Analysis

Laboratory analysis results are summarized below:

	Sample ID		
Parameter	SPU-01/02	SPU-03	SPU-04
Matrix	Water	Soil	Soil
Total Petroleum Hydrocarbon (TPH)	721 mg/l	681 mg/kg	108 mg/kg
Benzene	2ND	10ND	10ND
Toluene	2ND	10ND	10ND
Ethylbenzene	2ND	10ND	10ND
o - xylene	2ND	10ND	10ND
m - xylene	2ND	10ND	10ND
p - xylene	2ND	10ND	10ND

ND: Not detected at detection limit preceding ND in ug/l.

Additional testing was performed by WESTON's laboratory and found that the sediments within the water sample were the source of TPH contamination. Therefore, while petroleum hydrocarbons are present in the water, their source appears to be aged sources; probably oil and aged gas from previous leakage.

PREVIOUS SITE INVESTIGATION

Field work performed by Azonic Technology included the following activities:

- Removal of two 800 gallon tanks and removal of sludge beneath the leaking tank
- Drilling of 4 soil borings
- Collection of soil samples from each boring and analysis for total hydrocarbons
- Collection of water samples from the bottom of each boring and analysis for total hydrocarbons.

The location of the soil borings (A1-A4) drilled by Azonic are shown in Figure 2. The total hydrocarbon levels in the soil samples ranged from less than 10 mg/Kg to 14 mg/Kg. The total hydrocarbon levels in grab water samples taken from the bottom of the soil borings ranged from 0.7 mg/l to 100 mg/l. No information was available regarding the methods used to collect or preserve the samples.

All four tanks were precision tested. The two 800 gallon oil tanks underlying the northwest corner of the concrete slab were found to have leaked and were excavated and removed by Azonic. Upon excavation, sludge was found underlying the tank site which was also removed by Azonic.

PRESENT SITE INVESTIGATION

Objectives

The objectives of the present field investigation were to determine if hydrocarbons were present in the shallow groundwater underlying the site, and if so, the extent of contamination.

Description of Field Work Conducted

On September 12, 1986, two shallow groundwater monitoring wells were installed and three shallow soil borings were drilled. An eight-inch hollow

Table 1
Groundwater Analytical Data
ABF Freight System, Inc.
4575 Tidewater Avenue
Oakland, California

Sample ID	Sample Date	TOC Well Elevation (feet, MSL)	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	EPA Method: 1664A — TPH Oil & Grease (µg/L)	8015B/G — TPHg (µg/L)	3511/8015 — TPHd without silica gel cleanup (µg/L)	3511/8015 — TPHmo without silica gel cleanup (µg/L)	3511/8015 — TPHd with silica gel cleanup (µg/L)	3511/8015 — TPHmo with silica gel cleanup (µg/L)	Volatile Organics: 8260B — Acetone (µg/L)	Benzene (µg/L)	Ethyl-benzene (µg/L)	Naph-thalene (µg/L)	Toluene (µg/L)	Total Xylenes (µg/L)	Other Detections
MW-1	9/15/1986[a]		NM		NA	4,520	NA	NA	NA	NA	NA	1,590	NA	NA	12	1,000	
	10/17/11	11.12	4.56	6.56	<1,300	660	6,680	110	4,520	33	8.4	11	0.93	56	1.1	3.3	A
	2/8/13	11.12	4.22	6.90	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	5/7/13	11.12	4.28	6.84	NA	690	NA	NA	3,000	NA	NA	19	0.60 b	NA	1.0 b	3.1	None
	8/1/13	11.12	5.23	5.89	NA	540	NA	NA	4,700	NA	NA	9.6	0.49 b	NS	0.63 b	2.8 b	None
	2/5/14	11.12	5.58	5.54	NA	360	NA	NA	6,300	NA	NA	1.7	<1.0	51	<5.0	2.6 b	None
	3/26/15	11.12	4.55	6.57	NA	330	5,900	NA	260	NA	NA	2.7	<1.0	8.7	<5.0	2.2 b	B
MW-2	9/15/1986[a]		NM		NA	<50	NA	NA	NA	NA	NA	9	NA	NA	<1	<1	
	10/17/11	11.17	3.87	7.30	1,700	<40	730	84	600	59	11	<0.10	<0.11	1.0	<0.15	<0.50	None
	2/8/13	11.17	3.67	7.50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	5/7/13	11.17	4.10	7.07	NA	<100	NA	NA	93 b	NA	NA	<1.0	<1.0	NA	<5.0	<3.0	None
	8/1/13	11.17	4.83	6.34	NS	<100	NA	NA	440	NA	NA	<1.0	<1.0	NA	<5.0	<3.0	none
	2/5/14	11.17	5.15	6.02	NA	<100	NA	NA	370	NA	NA	<1.0	<1.0	2.5 b	<5.0	<3.0	None
	3/26/15	11.17	4.20	6.97	NA	<100	500	NA	<100	NA	NA	<1.0	<1.0	0.60 b	<5.0	<3.0	None
MW-3	1/7/13	10.96	3.68	7.28	<10,000	43	NA	NA	300	NA	NA	<1.0	<1.0	NA	<5.0	<3.0	None
	2/8/13	10.96	3.98	6.98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	5/7/13	10.96	4.56	6.40	NA	<100	NA	NA	550	NA	NA	<1.0	<1.0	NA	<5.0	<3.0	None
	8/1/13	10.96	5.24	5.72	NA	<100	NA	NA	700	NA	NA	<1.0	<1.0	NA	<5.0	<3.0	None
	2/5/14	10.96	5.59	5.37	NA	<100	NA	NA	730	NA	NA	<1.0	<1.0	<1.0	<5.0	<3.0	None
	3/26/15	10.96	4.63	6.33	NA	<100	590	NA	<100	NA	NA	<1.0	<1.0	<1.0	<5.0	<3.0	None
MW-4	1/7/13	11.60	3.91	7.69	<10,000	<100	NA	NA	540	NA	NA	<1.0	<1.0	NA	<5.0	<3.0	MTBE = 2.1
	2/8/13	11.60	3.31	8.29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	5/7/13	11.60	3.20	8.40	NA	31 b	NA	NA	2,400	NA	NA	2.5	<1.0	NA	<5.0	<3.0	MTBE= 1.2
	8/1/13	11.60	4.53	7.07	NA	<100	NA	NA	1,500	NA	NA	1.9	<1.0	NA	<5.0	<3.0	MTBE= 1.2
	2/5/14	11.60	4.85	6.75	NA	<100	NA	NA	1,200	NA	NA	<1.0	<1.0	<5.0	<5.0	<3.0	None
	3/26/15	11.60	4.31	7.29	NA	<100	2,700	NA	310	NA	NA	<1.0	<1.0	1.1	<5.0	<3.0	C
	3/26/15		ESL (Industrial Land Use, Non-Drinking Water Source, Aquatic Habitat Protection)		640	500	640	640	640	640	1,500	46	43	24	130	100	

Sample ID	Sample Date		Depth to Groundwater (ft)	Polynuclear Aromatic Hydrocarbons - EPA METHOD 8270C: Acenaphthene (µg/L)	Acenaph-thylene (µg/L)	Benzo (a) anthracene (µg/L)	Anthracene (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	Naphthalene (µg/L)	1-Methyl naphthalene (µg/L)	2-Methyl naphthalene (µg/L)	Phenan-threne (µg/L)	Pyrene (µg/L)	Other Detections
MW-1	10/17/11		4.56	0.69	0.20	ND	0.056	0.049	1.5	31	13	13	0.29	0.041	None
	5/7/13		4.26	0.82	0.24	<0.050	0.065	<0.050	1.5	36	15	14	<0.25	0.029 b	None
	8/1/13		5.23	1.1	0.28	<0.050	0.086	0.058	1.9	56	19	17	0.42	0.059	None
	2/5/14		5.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None
	3/26/15		4.55	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None
MW-2	10/17/11		3.87	0.097	<0.011	ND	<0.013	<0.016	0.022	0.57	0.096	0.068	<0.018	0.021	None
	5/7/13		4.10	0.17	<0.050	<0.050	0.0089 b	<0.050	0.016 b	2.6	0.20 b	0.11 b	<0.050	<0.050	None
	8/1/13		4.83	0.021 b	<0.050	<0.050	<0.050	<0.050	<0.050	<0.25	0.010 b	0.010 b	0.0091 b	0.014 b	None
	2/5/14		5.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None
	3/26/15		4.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None

Table 1
Groundwater Analytical Data
ABF Freight System, Inc.
4575 Tidewater Avenue
Oakland, California

Sample ID	Sample Date		Depth to Groundwater (ft)	Polynuclear Aromatic Hydrocarbons - EPA METHOD 8270C											
				Acenaphthene (µg/L)	Acenaph-thylene (µg/L)	Benzo (a) anthracene (µg/L)	Anthracene (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	Naphthalene (µg/L)	1-Methyl naphthalene (µg/L)	2-Methyl naphthalene (µg/L)	Phenan-threne (µg/L)	Pyrene (µg/L)	Other Detections
MW-3	1/7/13		3.68	0.18	<0.25	0.092	<0.25	<0.25	0.32	4.3	2.2	1.2	0.12	<0.25	None
	5/7/13		4.56	0.068	0.014 b	<0.050	0.025 b	<0.050	0.13	0.61	0.62	0.27	0.034 b	<0.050	None
	8/1/13		5.24	0.073	0.015 b	<0.050	0.019 b	<0.050	0.12	0.91	0.65	0.28	0.031 b	<0.050	None
	2/5/14		5.59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None
	3/26/15		4.63	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None
MW-4	1/7/13		3.91	0.37	<0.25	0.095	<0.25	<0.25	0.26	1.2	2.1	0.76	0.069	<0.25	None
	5/7/13		3.20	6.5	0.066	<0.050	0.16	0.059	2.4	3.5	18	3.0	2.7	0.051	None
	8/1/13		4.53	4.4	0.24	<0.050	0.10	0.050	3.0	5.8	12	3.3	1.7	0.042 b	None
	2/5/14		4.85	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None
	3/26/15		4.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	None
			ESL	23	30	0.027	0.73	8.0	3.9	24	NLE	2.1	4.6	2.0	
			(Industrial Land Use, Non-Drinking Water Source, Aquatic Habitat Protection)												

Notes:

Note: Please reference lab report for all qualifers and notes.
Bold = Most current laboratory data
ID = Identification
TOC = top of casing
MSL = mean sea level
EPA = Environmental Protection Agency
TPHg = Total Petroleum Hydrocarbons, gasoline-range organics
TPHd = Total Petroleum Hydrocarbons, diesel-range organics (sum of C10-C22 and C22-C32 hydrocarbons)
TPHmo = Total Petroleum Hydrocarbons, motor-oil range organics (C32-C40 hydrocarbons)
MTBE = methyl-tert-butyl-ether
ESL = Environmental Screening Level (ESL) listed in *Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater* (December, 2013), San Francisco Bay Regional Water Quality Control Board, California EPA, http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/esl.shtml, updated December 2013
NM = Not measured
NS = Not sampled
NA = Not analyzed
MW = Monitoring Well
µg/L = micrograms per liter (equivalent to parts per billion)
< = not detected at above detection limit
MDL = Minimum detection limit
TPH = Total petroleum hydrocarbons
A = The following analytes were detected above MDL: n-Butylbenzene 2.6 µg/L, sec-Butylbenzene 1.9 µg/L, tert-Butylbenzene 14 µg/L, n-Hexane 7.9 µg/L, Isopropylbenzene 11 µg/L, n-Propylbenzene 21 µg/L, and 1,2,3-trimethylbenzene 1.2 µg/L
B = The following analyte was detected above MDL: chloroform 0.56 µg/L
C = The following analytes were detected above MDL: 1,2-Dichlorobenzene 0.65 µg/L with a "b" note
NLE = No level established
a = Data reported in Weston report dated February 25, 1987, analysis by EPA Methods 5020/8015/8020; Weston report listed "Motor Fuel" analysis which Trinity is reporting under TPHg
b = Estimated value below the lowest calibration point. Confidence correlates with concentration.
c = The sample matrix interfered with the ability to make any accurate determination; spike value is high

Table 2
Grab-Groundwater Analytical Data

ABF Freight System Facility
4575 Tidewater Avenue
Oakland, California

Sample ID#	Sample Date	TPHg (µg/L)	Diesel Range Organics* C10-C22 (µg/L)	C22-C32 (µg/L)	C32-C40 (µg/L)	Total TPHd (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (Total) (µg/L)	MTBE	Naphthalene (µg/L)	Other VOCs (µg/L)
B-2	5/21/2012	<100	**76**	<100	<100	**76**	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	ND
B-3	5/22/2012	**490**	**1,000**	**71[a]**	**60[a]**	**1,131**	**0.99[a]**	<5.0	<1.0	<3.0	<1.0	**13**	Acetone = 24, n-Butylbenzene = 3.7, sec-Butylbenzene = 1.3, tert-Butylbenzene = 5.4, Carbon disulfide = 0.36, n-Propylbenzene = 6.0
B-4	5/21/2012	**230**	**600**	<100	<100	**600**	**0.97**	**0.31[a]**	**0.51**	<3.0	<1.0	**7.6**	n-Butylbenzene = 0.48, sec-Butylbenzene = 0.35, tert-Butylbenzene = 1.1, n - Propylbenzene = 2.2, 1,2,4-Trimethylbenzene = 0.61
B-6	5/21/2012	<100	**140**	<100	<100	**140**	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	ND
B-8	5/21/2012	**120**	**1400**	**100**	<100	**1,500**	<1.0	<5.0	<1.0	<3.0	**3.1**	**1.6**	Acetone = 29, sec-Butylbenzene = 0.73 tert-Butylbenzene = 0.82
B-9	5/22/2012	<100	**180[b]**	<100	<100	**180**	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	Acetone = 30
B-10	5/22/2012	**59[a]**	**2,300[b]**	**100**	<100	**2,400**	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	tert-Butylbenzene = 1.0, n-Propylbenzene = 0.42
B-11	5/22/2012	<100	**660[b]**	<100	<100	**660**	<1.0	<5.0	<1.0	<3.0	<1.0	<5.0	ND
B-12	12/17/2012	**44[a]**	**440**	NA	NA	**440**	<1.0	<5.0	**0.63[a]**	**1.9[a]**	<1.0	**11**	ND**
SFRWQCB ESLs (µg/L) Non Drinking Water Source Commercial Property Use													
		640				640	46	130	43	100	1,800	24	

Notes:

* = Silica gel cleanup was completed on diesel-range organics analysis
** = Additional VOCs analyzed included MTBE, di-isopropyl ether, ethanol, ethyl tert-butyl ether, tert-butyl alcohol, tert-amyl methyl ether, 1,2-dibromoethane and 1,2-dichloroethane
< = less than indicated reported detection limit
µg/L = micrograms per Liter (µg/L), also equivalent to parts per billion (ppb)
ND = Not Detected
NA = Not Analyzed
TPHg = Total Petroleum Hydrocarbons - Gasoline
TPHd = Total Petroleum Hydrocarbons - Diesel
MTBE = Methyl Tertiary-Butyl Ether
VOCs = Volatile Organic Compounds
a = Estimated value below the lowest calibration point. Confidence correlates with concetration
b = This sample has responded in the Diesel range, however it does not appear to be a hydrocarbon product
ESL = Environmental Screening Level
SFBRWQCB = San Francisco Bay Regional Water Quality Control Board, California EPA, http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/esl.shtml (February 2013)

Table 1
Soil Analytical Data

ABF Freight System, Inc.
4575 Tidewater Avenue
Oakland, California

Sample ID	Sample Date	Sample Depth (Feet)	EPA Analytical Test Method												
			8260B (mg/kg)											8015 (mg/kg)	
			TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	1,1-DCE	cis-1,2-DCE	PCE	TCE	Vinyl Chloride	Carbon Tetrachloride	Other Compounds	TPHd	TPHmo
SB-1	8/26/2014	3.5	<0.57	0.00051[A]	<0.0057	<0.0011	<0.0034	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	ND	<4.5	0.89[A]
SB-2	8/26/2014	3.5	<0.58	<0.0012	<0.0058	<0.0012	<0.0035	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	ND	<46	20[A]
SB-3	8/26/2014	3.5	<0.60	<0.0012	0.00086[A]	<0.0012	<0.0036	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	ND	3.2[A]	5.3
SB-4	8/26/2014	3.5	<0.57	<0.0011	<0.0057	<0.0011	<0.0034	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	ND	<46	5.6[A]
SB-5	8/26/2014	3.5	<0.56	<0.0011	<0.0056	<0.0011	<0.0034	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	ND	<45	87
SB-6	8/26/2014	3.5	<0.56	0.00042[A]	<0.0056	<0.0011	<0.0034	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	ND	<4.5	3.6[A]
SB-7	8/27/2015	3.0	<2.89	<0.00579	<0.0289	<0.00579	<0.0174	<0.00579	<0.00579	<0.00579	<0.00579	<0.00579	<0.00579	C	13.4[B]	245.1
		5.5	<2.87	<0.00575	<0.0287	<0.00575	<0.0172	<0.00575	<0.00575	<0.00575	<0.00575	<0.00575	<0.00575	ND	1.49[B]	<4.60
		10.5	<2.98	<0.00596	<0.0298	<0.00596	<0.0179	<0.00596	<0.00596	<0.00596	<0.00596	<0.00596	<0.00596	ND	<4.77	<4.77
SB-8	8/27/2015	3.0	<2.97	<0.00595	<0.0297	<0.00595	<0.0178	<0.00595	<0.00595	<0.00595	<0.00595	<0.00595	<0.00595	ND	7.96[B]	115.2
		6.0	<2.98	<0.00597	<0.0298	<0.00597	<0.0179	<0.00597	<0.00597	<0.00597	<0.00597	<0.00597	<0.00597	ND	0.896[B]	4.94[B]
		9.5	<2.93	<0.00587	<0.0293	<0.00587	<0.0176	<0.00587	<0.00587	<0.00587	<0.00587	<0.00587	<0.00587	ND	<4.69	<4.69
Commercial SFRWQCB ESLs - Shallow Soil Screening Levels - Not a Current or Potential Drinking Water Resource																
			500	1.2	9.3	4.7	11	1.9	18	2.6	8.3	0.16	0.58	NLE	110	500

Notes:

EPA = Environmental Protection Agency
SB = Soil Boring
TPHg = Total Petroleum Hydrocarbons - Gasoline Range
1,1-DCE = 1,1-dichloroethene
cis-1,2-DCE = cis-1,2-dichloroethene
PCE = Tetrachloroethene
TCE = Trichloroethene
TPHd = Total Petroleum Hydrocarbons - Diesel Range (C10-C28 for SB-1 through SB-6, C12-C22 for SB-7 and SB-8)
TPHmo = Total Petroleum Hydrocarbons - Motor Oil Range (C28-C40 for SB-1 through SB-6, sum of C22-32 and C32-C40 for SB-7 and SB-8)
mg/kg = Milligrams per kilogram
< = Not detected at or above detection limit
Bold = Exceeds ESL concentration
ND = Not detected at or above laboratory detection limits
NLE = No limit established
A = Estimated value below the lowest calibration point. Confidence correlates with concentration.
B = The identification of the analyte is acceptable; the reported value is an estimate.
C = 1,2,3-Trichlorobenzene detected at a concentration of 0.00246[B] mg/kg. There is no Environmental Screening Level established for 1,2,3-Trichlorobenzene.
SFRWQCB = San Francisco Bay Regional Water Quality Control Board, California EPA, December 2013, http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/esl.shtml.
ESLs = Environmental Screening Levels (Updated December 2013)

Table 2
Grab-Groundwater Analytical Data

ABF Freight System, Inc.
4575 Tidewater Avenue
Oakland, California

Sample ID	Sample Date	EPA Analytical Test Method												
		8260B (µg/L)											8015 (µg/L)	
		TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	1,1-DCE	cis-1,2-DCE	PCE	TCE	Vinyl Chloride	Carbon Tetrachloride	Other Compounds	TPHd	TPHmo
Grab Groundwater Samples Collected From Soil Borings														
SB-1	9/29/2014	<500	<1.0	<5.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND	460	180
SB-2	9/29/2014	<500	<1.0	<5.0	<1.0	<3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND	580	210
SB-3	9/29/2014	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND	NA	NA
SB-4	9/29/2014	810	0.61[A]	0.79[A]	3.0	9.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND	6,200	1,200
SB-5	9/29/2014	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND	NA	NA
SB-6	9/29/2014	<500	<1.0	<5.0[B,C]	<1.0[C]	<3.0[B,C]	<1.0[B,C]	<1.0	<1.0[C]	<1.0[B]	<1.0	<1.0[B]	ND	170	110
SB-7	9/27/2015	<500	<1.00	<5.00	<1.00	<3.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	ND	199	280[E]
SB-8	9/27/2015	<500[B]	<1.00	<5.00	0.612[D]	1.51[D]	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	F	320	156.7[E]
Commercial SFRWQCB ESLs - Groundwater Screening Levels - Aquatic Receptor, Not a Current or Potential Drinking Water Resource															
		500	46	130	43	100	25	590	120	360	780	9.6	NLE	640	640

Notes:

EPA = Environmental Protection Agency
SB = Soil Boring
TPHg = Total Petroleum Hydrocarbons - Gasoline Range
1,1-DCE = 1,1-dichloroethene
cis-1,2-DCE = cis-1,2-dichloroethene
PCE = Tetrachloroethene
TCE = Trichloroethene
TPHd = Total Petroleum Hydrocarbons - Diesel Range (C10-C28 for SB-1 through SB-6, C12-C22 for SB-7 and SB-8)
TPHmo = Total Petroleum Hydrocarbons - Motor Oil Range (C28-C40 for SB-1 through SB-6, sum of C22-C32 and C32-40 for SB-7 and SB-8). Indicated detections are sum of reported detections for C22-C32 and C32-C40 for SB-7 and SB-8.
µg/L = Micrograms per liter
< = Not detected at or above detection limit
NA = Not analyzed
ND = Not detected at or above detection limit
A = Estimated value below the lowest calibration point. Confidence correlates with concentration.
B = The associated batch QC was outside the established quality control range for precision.
C = The sample matrix interfered with the ability to make any accurate determination; spike value is high.
D = The identification of the analyte is acceptable; the reported value is an estimate.
E = C32-C40 Range detection qualified by laboratory as follows: 'The identification of the analyte is acceptable; the reported value is an estimate'.
F = Other compounds detected include tert-Butylbenzene at a concentration of 0.975[D] µg/L, Isopropylbenzene at a concentration of 0.563[D] µg/L, p-Isopropyltoluene at a concentration of 0.787[D] µg/L, n-Propylbenzene at a concentration of 0.948[D] µg/L, 1,2,4-Trimethylbenzene at a concentration 7.15 µg/L, 1,2,3-Trimethylbenzene at a concentration of 0.490[D] µg/L, and 1,3,5-Trimethylbenzene at a concentration of 3.39 µg/L. There are no ESLs established for the above listed compounds.
SFRWQCB = San Francisco Bay Regional Water Quality Control Board, California EPA, December 2013, http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/esl.shtml
ESLs = Environmental Screening Levels
NLE = No limit established
Bold = Exceeds ESL concentration

ATTACHMENT 4

Attachment 4 – Vapor Intrusion Evaluation and Data

LTCP VAPOR SPECIFIC CRITERIA - PETROLEUM

Closure Scenario

Exemption: __ Active fueling station exempt from vapor specific criteria; Active as of date: _____

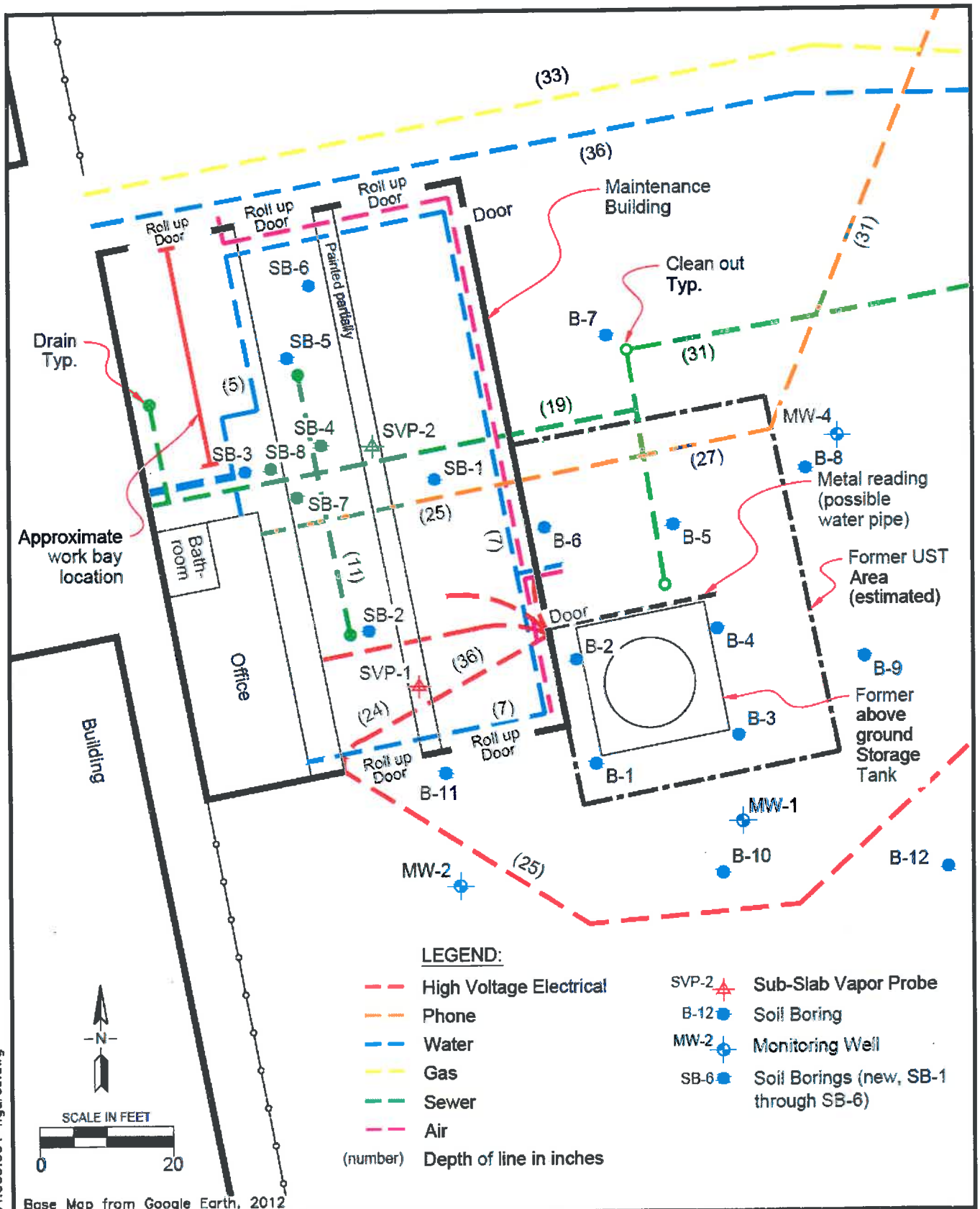
__ Scenario 1; __ Scenario 2; __ Scenario 3a; __ Scenario 3b; __ Scenario 4a without bioattenuation zone;
__ Scenario 4b with bioattenuation zone; __ Site specific risk assessment demonstrates human health is protected;
__ Exposure controlled through use of mitigation measures or institutional controls;
_X_ **Case closed in spite of not meeting the vapor specific media criteria**

Shading indicates Site Specific Data and Bold Text indicates Evaluation Criteria

Site Specific Data		**Scenario 1**	**Scenario 2**	**Scenario 3A**	**Scenario 3B**	**Scenario 3C**	**Scenario 4a**	**Scenario 4b**
Unweathered LNAPL	LNAPL in gw	LNAPL in gw	LNAPL in soil	No LNAPL	No LNAPL	No LNAPL	No criteria	No criteria
Thickness of Bioattenuation Zone Beneath Foundation	≥ 3.31 feet	≥30 feet	≥30 feet	≥5 feet	≥10 feet	≥5 feet	No criteria	≥ 5 feet
Depth to Shallowest Groundwater	3.31 feet	≥30 feet	≥30 feet	≥5 feet	≥10 feet	≥ 5 feet	≥ 5 feet	≥ 5 feet
Total TPHg & TPHd in Soil in Bioattenuation Zone	660 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg	No criteria	<100 mg/kg
Maximum Current Benzene Concentration in Groundwater	2.7 µg/L	No criteria	No criteria	<100 µg/L	≥100 and <1,000 µg/L	<1,000 µg/L	No criteria	No criteria
Oxygen Data in Bioattenuation Zone	17.1 – 20 %	No criteria	No criteria	No oxygen data or <4%	No oxygen data or <4%	≥4%	No criteria	≥4% at bottom of zone
Soil Vapor Depth Beneath Foundation	NA (sub-slab)	No criteria	No criteria	No criteria	No criteria	No criteria	5 feet	5 feet
Benzene Concentrations (µg/m^3)	Historic Max: < 6.5 Current Max: < 6.5	No criteria	No criteria	No criteria	No criteria	No criteria	Res: < 85; Com: < 280	Res: < 85K; Com: < 280K
Ethylbenzene Concentrations (µg/m^3)	Historic Max: 20 Current Max: 9.6	No criteria	No criteria	No criteria	No criteria	No criteria	Res: < 1,100; Com: < 3,600	Res: < 1,100K; Com: < 3,600K
Naphthalene Concentrations (µg/m^3)	Historic Max: 3.4 Current Max: 2.0	No criteria	No criteria	No criteria	No criteria	No criteria	Res: < 93; Com: < 310	Res: < 93K; Com: < 310K

Attachment 4 – Vapor Intrusion Evaluation and Data

LTCP VAPOR SPECIFIC CRITERIA – PETROLEUM (cont.)	
Vapor Intrusion to Indoor Air Analysis	
Onsite	Due to very shallow groundwater a vapor point could not be installed to a depth of five feet below the depth of the foundation of the building. Therefore, the site does not meet the Low Threat Closure Policy for vapor. However, sub-slab vapor samples were collected beneath the adjacent maintenance shop building and all volatile hydrocarbon contaminant concentrations are below Environmental Screening Levels promulgated by the San Francisco Bay Regional Water Quality Control Board (RWQCB). While not apparently necessary, it should be noted that the building is a maintenance shop with two roll-up doors that provide substantial ventilation. Future exposure will be controlled a commercial land use restriction to the existing development.
Offsite	The petroleum hydrocarbon plume does not extend offsite.



REF. 154_001\154.009.004 figures.dwg

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SOIL BORINGS, SUB-SLAB VAPOR PROBE, UTILITIES LOCATION MAP

ABF Freight System Facility
4575 Tidewater Ave.
Oakland, California

PROJECT: 154.009.005

FIGURE: 2

Table 4
Sub-Slab Vapor Analytical Data

ABF Freight System Facility
4575 Tidewater Avenue
Oakland, California

Sample ID	Sample Date	Analytical Test Methods																
		ASTM D-1946				EPA TO-15											EPA TO-17	
		Carbon Dioxide (%)	Methane (%)	Oxygen (%)	Helium (%)	PCE (µg/m³)	1,1,2-TCA (µg/m³)	1,2,4 - TMB (µg/m3)	TPHg (µg/m³)	Benzene (µg/m³)	Toluene (µg/m³)	Ethyl Benzene (µg/m³)	Ethyl Acetate (µg/m³)	Total Xylenes (µg/m³)	Ethanol (µg/m³)	Other VOCs	(µg/m³)	Naphthalene (µg/m³)	TPHd (µg/m3)
SVP-1	6/20/2012	2.2	<0.0001	16	0.049	**60**	<11	<10	<1,800	<2.8	<7.7	<8.8	**20**	<27	**180**	ND		<2.0	
SVP-1	12/17/2012				8.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<0.6	<125
SVP-1	1/17/2013	0.8	<0.0002	20	0.23	**16**	<11	<10	**1,300**	<6.5	<7.7	**9.6**	**33**	**77**	**290**	**Acetone, 340**		**2.0**	
SVP-2	6/20/2012	0.22	0.00018	18	<0.005	**530**	**38**	**13**	**1,900**	**2.9**	**11**	**20**	**19**	**160**	**100**	**Acetone, 230**		**3.4**	
SVP-2	12/17/2012				1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			<0.6	<125
SVP-2	1/17/2013				40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA				
SVP-2	2/5/2013	1.21	<0.0009	17.1	NA	**901**	<0.03	**0.02**	NA	**0.03**	**0.02**	<0.02	<0.02	**0.04**	NA	**Acetone, 20.4 1,1-DFE, 12.5 (leak check) Others as listed on Certified Analytical Report**			
SVP-2 (QC Sample)	2/5/2013	1.22	<0.001	17.3	NA	**971**	<0.03	**0.064**	**450***	**0.15**	**0.21**	<0.02	<0.02	**0**	**NA**	**Acetone, 67.1 1,1-DFE, 426 (leak check) Others as listed on Certified Analytical Report**			
	ESLs for Commercial Indoor Air	2.1	0.77	NA	3,100	0.42	1,300	4.9	NA	440	NA	NA		0.36	
	Attenuated Commercial Indoor Air[a]	42	15.4	NA	62,000	8.4	26,000	98	NA	8800	NA	NA		7.2	

Notes:

ID = Identification
% = Percentage
µg/m³ = micrograms per meter cubed
PCE = Tetracholoroethene
2 - TCA = 1,1,2 - Trichloroethane
4 - TMB = 1,2,4 - Trimethylbenzene
TPHg = Total Petroleum Hydrcarbongs as Gasoline
1,1-DFE = 1,1-Difluoroethane
ASTM = American Society for Testing Materials

Table 4
Sub-Slab Vapor Analytical Data

ABF Freight System Facility
4575 Tidewater Avenue
Oakland, California

< =	Not detected at or above detection limit
ND =	Not detected
NA =	Not applicable
Bold =	data detected above laboratory detection limits
*	Duplicate sampled was analyzed for TPHg; result of 450 ($\mu g/m^3$) was attributed to single discrete peak (PCE).
ESLs =	Environmental Screening Levels (February 2013)
RWQCB =	San Francisco Bay Regional Water Quality Control Board, California EPA
	http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/esl.shtml (February 2013)
a=	Attenuation factor for existing commercial building sub-slab from the DTSC-CEPA Vapor Intrusion Guidance (2011) is 0.05

ATTACHMENT 5

Attachment 5 – Direct Contact Evaluation and Data

LTCP DIRECT CONTACT AND OUTDOOR AIR EXPSURE 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.

Shading indicates Site Specific Data and Bold Text indicates Evaluation Criteria

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	< 0.0062	< 0.13	< 0.0062	< 0.13	< 0.13
LTCP Criteria	Benzene	≤1.9	≤2.8	≤8.2	≤12	≤14
Site Maximum	Ethylbenzene	< 0.0062	< 0.0085	< 0.0062	< 0.0085	< 0.0085
LTCP Criteria	Ethylbenzene	≤21	≤32	≤89	≤134	≤314
Site Maximum	Naphthalene	< 0.030	<0.50	< 0.030	<0.50	<0.50
LTCP Criteria	Naphthalene	≤9.7	≤9.7	≤45	≤45	≤219
Site Maximum	PAHs	----	< 0.0071	----	< 0.0071	----
LTCP Criteria	PAHs	≤0.063	NA	≤0.68	NA	≤4.5

Direct Contact and Outdoor Air Analysis

Onsite	This site does not meet this LTCP criterion due to the lack of analysis in soil for poly-aromatic hydrocarbons (PAHs) between 0 and 5 feet below grade surface (bgs). Available data indicates that outside of the former UST excavation area, contaminant migration occurred through groundwater migration. Depth to groundwater is documented to have ranged between 3.31 and 5.59 feet bgs over the period of investigation (approximately 3.5 years). ACDEH concludes that the potential for residual PAH soil contamination to be present beneath the site at concentrations over the LTCP media-specific numeric values listed above is unlikely. Additionally, under the current land use, most of the site is paved with minor landscaped areas near the site boundaries resulting in a low potential for direct contact exposure under the current land use. Excavation or construction activities in areas of potential residual contamination will be managed with a land use restriction, and require planning and implementation of appropriate health and safety procedures by the responsible party, or current property owner, prior to and during excavation and construction activities.
Offsite	The petroleum hydrocarbon plume does not extend offsite.

WESTON

SECTION 3.0

SAMPLING AND ANALYSIS

3.1 Sampling

Prior to excavation cleaning efforts, two soil samples were taken by a registered civil engineer above the water table. These two samples were taken from each side of the tank approximately three feet from the corroded southerly end of the tank. Soil was placed directly into the container without utilizing a sampling trowel. In addition one set of VOA vials were taken for water analysis also at the southerly end of the tank. Both soil and water were examined for total petroleum hydrocarbons (EPA Method 418.7) and BTX (EPA Method 8020). The samples were immediately placed into an ice chest and were shipped to WESTON's Stockton, California Laboratory as recorded on the chain-of-custody form.

3.2 Analysis

Laboratory analysis results are summarized below:

	Sample ID		
Parameter	SPU-01/02	SPU-03	SPU-04
Matrix	Water	Soil	Soil
Total Petroleum Hydrocarbon (TPH)	721 mg/l	681 mg/kg	108 mg/kg
Benzene	2ND	10ND	10ND
Toluene	2ND	10ND	10ND
Ethylbenzene	2ND	10ND	10ND
o - xylene	2ND	10ND	10ND
m - xylene	2ND	10ND	10ND
p - xylene	2ND	10ND	10ND

ND: Not detected at detection limit preceding ND in ug/l.

Additional testing was performed by WESTON's laboratory and found that the sediments within the water sample were the source of TPH contamination. Therefore, while petroleum hydrocarbons are present in the water, their source appears to be aged sources; probably oil and aged gas from previous leakage.

Table 1

RESULTS OF SOIL AND WATER SAMPLING

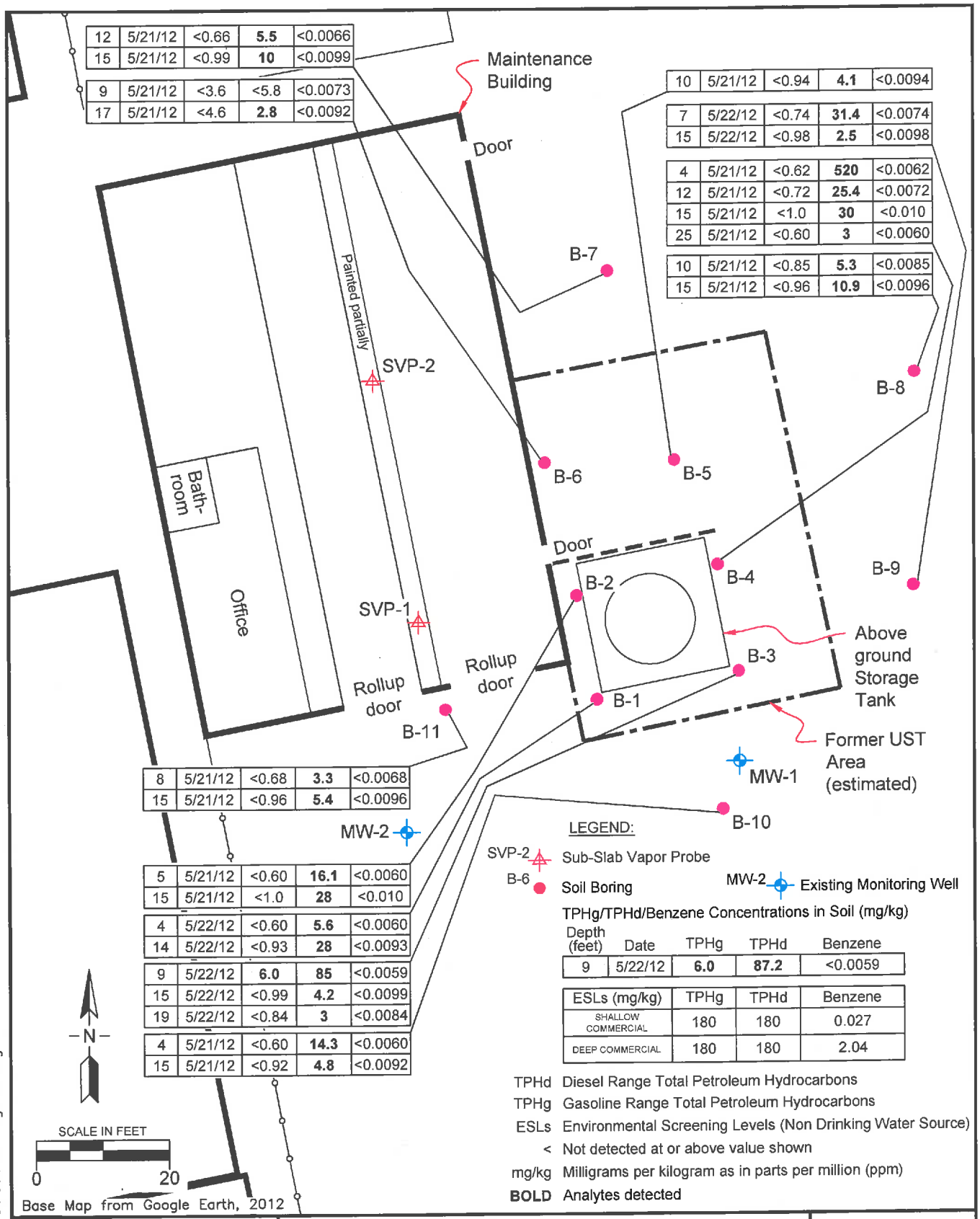
Water Samples

Well No.	Sample Date/Time	Sample Depth, ft	Motor Fuel (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Xylene (mg/l)	Fuel Type
MW-1	9/15 11:30 am	5-10	4.52	1.59	0.012	1.0	Gasoline
MW-2	9/15 11:45 am	5-10	<0.05	0.009	<0.001	<0.001	Gasoline

Soil Samples

Well No.	Sample Date/Time	Sample Depth, ft	Motor Fuel (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Xylene (mg/l)	Fuel Type
MW-1	9/12	4.5-5	<0.05	<0.001	<0.001	<0.001	Gasoline
MW-2	9/12	4.5-5	<0.05	<0.001	<0.001	<0.001	Gasoline
MW-2	9/12	9.5-10	<0.05	<0.001	<0.001	<0.001	Gasoline
S-1	9/12	4.5-10	<0.05	<0.001	<0.001	0.022	Gasoline
S-2	9/12	4.5-5	0.44	<0.001	<0.001	<0.001	Aged Gas
S-3	9/12	4.5-5	34	0.012	0.010	0.056	Aged Gas
	Detection Limit		0.050	0.001	0.001	0.001	Gasoline

Laboratory analytical methods were EPA 5020/8015 for total motor fuel and fuel type and EPA 8020 for benzene, toluene and xylene.



REF. 154_001\154.004.005 figures.dwg

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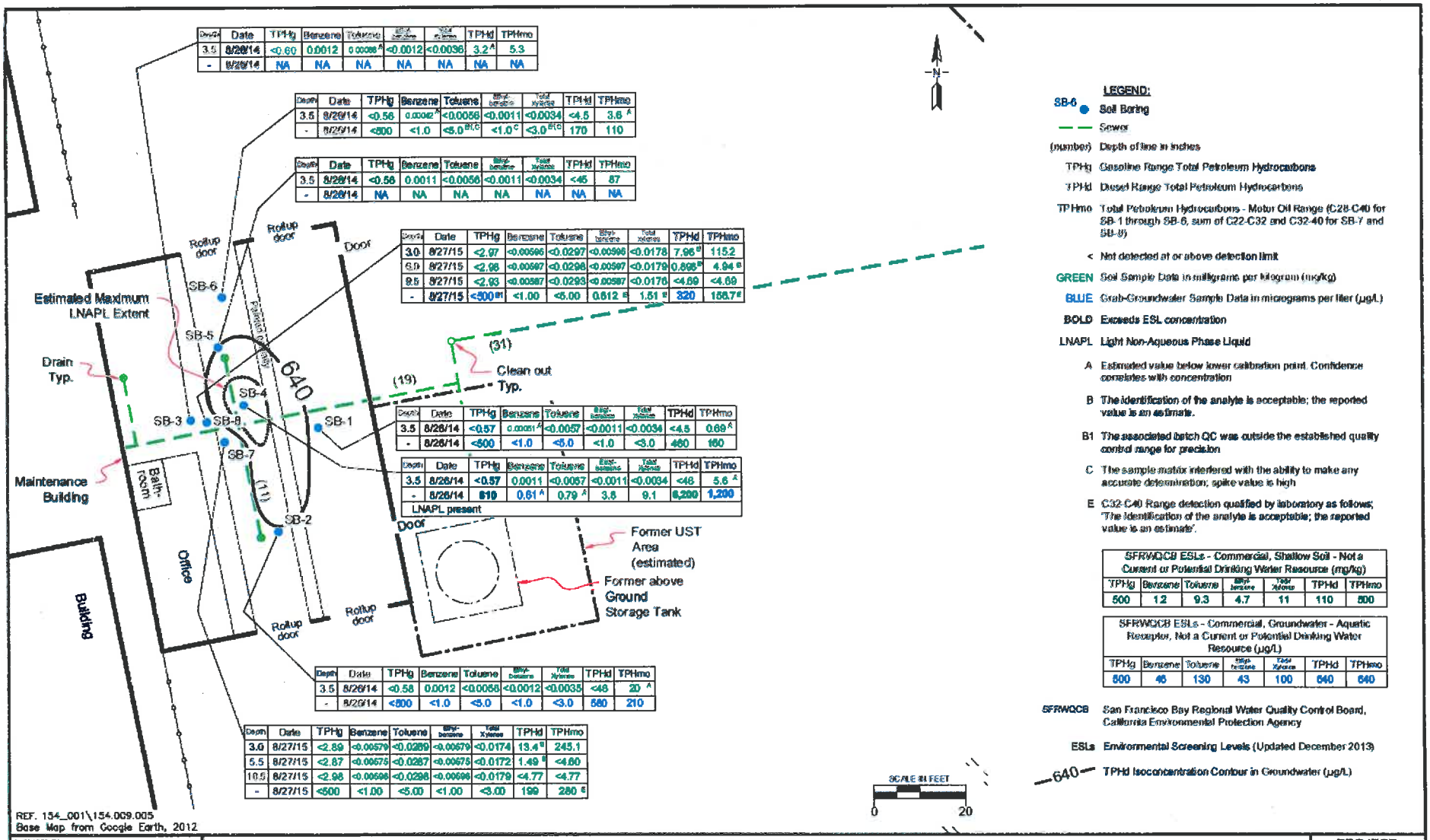
SOIL ANALYTICAL DATA MAP

ABF Freight Systems Facility
4575 Tidewater Avenue
Oakland, California

PROJECT: 154.004.005

FIGURE: 4



Depth	Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHd	TPHmo
3.5	8/26/14	<0.60	0.0012	0.00058 A	<0.0012	<0.0036	3.2 A	5.3
-	8/26/14	NA	NA	NA	NA	NA	NA	NA

Depth	Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHd	TPHmo
3.5	8/26/14	<0.56	0.00062 A	<0.0056	<0.0011	<0.0034	<4.5	3.6 A
-	8/26/14	<500	<1.0	<5.0 B1,C	<1.0 C	<3.0 B1,C	170	110

Depth	Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHd	TPHmo
3.5	8/26/14	<0.56	0.0011	<0.0056	<0.0011	<0.0034	<4.5	87
-	8/26/14	NA	NA	NA	NA	NA	NA	NA

Depth	Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHd	TPHmo
3.0	8/27/15	<2.97	<0.00595	<0.0297	<0.00595	<0.0178	7.95 B	115.2
6.0	8/27/15	<2.98	<0.00597	<0.0298	<0.00597	<0.0179	0.698 B	4.94 B
9.5	8/27/15	<2.93	<0.00587	<0.0293	<0.00587	<0.0176	<4.69	<4.69
-	8/27/15	<500 B1	<1.00	<5.00	0.612 B	1.51 B	320	158.7 E

Depth	Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHd	TPHmo
3.5	8/26/14	<0.57	0.0031 A	<0.0057	<0.0011	<0.0034	<4.5	0.69 A
-	8/26/14	<500	<1.0	<5.0	<1.0	<3.0	460	160

Depth	Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHd	TPHmo
3.5	8/26/14	<0.57	0.0011	<0.0057	<0.0011	<0.0034	<46	5.6 A
-	8/26/14	810	0.61 A	0.79 A	3.8	9.1	6,200	1,200
LNAPL present								

Depth	Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHd	TPHmo
3.5	8/26/14	<0.58	0.0012	<0.0058	<0.0012	<0.0035	<46	20 A
-	8/26/14	<500	<1.0	<5.0	<1.0	<3.0	580	210

Depth	Date	TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPHd	TPHmo
3.0	8/27/15	<2.89	<0.00579	<0.0289	<0.00579	<0.0174	13.4 B	245.1
5.5	8/27/15	<2.87	<0.00575	<0.0287	<0.00575	<0.0172	1.49 B	<4.60
10.5	8/27/15	<2.96	<0.00596	<0.0298	<0.00596	<0.0179	<4.77	<4.77
-	8/27/15	<500	<1.00	<5.00	<1.00	<3.00	199	280 E

REF. 154_001\154.009.005
Base Map from Google Earth, 2012

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SOIL AND GRAB-GROUNDWATER ANALYTICAL DATA MAP

ABF Freight System Facility
4575 Tidewater Ave.
Oakland, California

PROJECT:
154.009.005

FIGURE:
3

Table 1
Soil Analytical Data

ABF Freight System Facility
4575 Tidewater Avenue
Oakland, California

Sample ID#	Sample Date	Sample Depth (ft)	TPHg (mg/kg)	Diesel Range Organics* C10-C22 (mg/kg)	C22-C32 (mg/kg)	C32-C40 (mg/kg)	Total TPHd (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (Total) (mg/kg)	Naphthalene (mg/kg)	Other VOCs (mg/kg)	PAHs (mg/kg)
Soil Borings - May 2012														
B-1	5/22/2012	4	<0.60	**5.6**[d]	<4.8	<4.8	**5.6**	<0.0060	<0.030	<0.0060	<0.018	<0.030	ND	NA
B-1	5/22/2012	14	<0.93	**15**	**13**	<7.4	**28**	<0.0093	<0.046	<0.0093	<0.028	<0.046	ND	NA
B-2	5/21/2012	5	<0.60	**11**[c,d]	**5.1**[e]	<4.8	**16.1**	<0.0060	<0.030	<0.0060	<0.018	<0.030	ND	NA
B-2	5/21/2012	15	<1.0	**14**[d]	**14**[e]	<8.1	**28**	<0.010	<0.050	<0.010	<0.030	<0.050	ND	NA
B-3	5/22/2012	9	**6.0**	**71**	**14**	**2.2**[a]	**87.2**	<0.0059	<0.030	<0.0059	<0.018	<0.030	n-Propylbenzene = 0.0022[a]	NA
B-3	5/22/2012	15	<0.99	**4.2**[a]	<8.0	<8.0	**4.2**	<0.0099	**0.0034**[a]	<0.0099	<0.030	<0.050	ND	NA
B-3	5/22/2012	19	<0.84	**3.0**[a]	<6.7	<6.7	**3.0**	<0.0084	<0.042	<0.0084	<0.025	<0.042	ND	NA
B-4	5/21/2012	4	<0.62	**180**	**340**	**140**	**660**	<0.0062	<0.031	<0.0062	<0.018	<0.031	ND	NA
B-4	5/21/2012	12	<0.72	**23**[d]	**2.4**[a]	<5.8	**25.4**	<0.0072	<0.036	**0.017**	**0.0034**[a]	**0.0052**[a]	Isopropylbenzene = 0.0024[a]	NA
B-4	5/21/2012	15	<1.0	**16**[d]	**14**[e]	<8.0	**30**	<0.010	<0.050	<0.010	<0.030	**0.0076**[a]	n-Propylbenzene = 0.0034[a]	NA
B-4	5/21/2012	25	<0.60	**3.0**[a]	<4.8	<4.8	**3.0**	<0.0060	<0.030	<0.0060	<0.018	<0.030	ND	NA
B-5	5/21/2012	10	<0.94	**4.1**[a]	<7.5	**3.7**[a]	**7.8**	<0.0094	<0.047	<0.0094	<0.028	<0.047	ND	NA
B-6	5/21/2012	9	<3.6	<5.8[af]	<5.8[f]	<5.8[f]	<5.8	<0.0073	<0.036	<0.0073	<0.022	<0.036 (EPA Method 8270C) **0.0079** (EPA Method 8260B)	ND	Benzo(a)anthracene = 0.0022, Benzo (a) pyrene = 0.0012, Fluoranthene = 0.0030, Fluorene = 0.0013, Phenanthrene = 0.0033, Pyrene = 0.0032, 1-Methylnaphthalene = 0.0026, 2-Methylnaphthalene = 0.0035 "a" note on all of the above
B-6	5/21/2012	17	<4.6	**2.8**[f]	<7.4[f]	<7.4[f]	**2.8**	<0.0092	<0.046	<0.0092	<0.028	<0.046 (EPA Method 8270C) **0.0040** (EPA Method 8260B)	ND	Anthracene = 0.0017, Phenanthrene = 0.0044, Pyrene = 0.0020, 2-Methylnaphthalene = 0.0024 "a" note on all of the above

Table 1
Soil Analytical Data

ABF Freight System Facility
4575 Tidewater Avenue
Oakland, California

Sample ID#	Sample Date	Sample Depth (ft)	TPHg (mg/kg)	Diesel Range Organics* C10-C22 (mg/kg)	C22-C32 (mg/kg)	C32-C40 (mg/kg)	Total TPHd (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (Total) (mg/kg)	Naphthalene (mg/kg)	Other VOCs (mg/kg)	PAHs (mg/kg)
B-7	5/21/2012	12	<0.66	**5.5**	<5.2	<5.2	**5.5**	<0.0066	<0.033	<0.0066	<0.020	<0.033	2-Butanone = 0.025[a], tert-Butyl alcohol = 0.094	NA
B-7	5/21/2012	15	<0.99	**10**[d]	<7.9	<7.9	**10**	<0.0099	<0.050	<0.0099	<0.030	<0.050		NA
B-8	5/21/2012	10	<0.85	**5.3**[a]	<6.8	<6.8	**5.3**	<0.0085	<0.042	<0.0085	<0.026	<0.042	ND	NA
B-8	5/21/2012	15	<0.96	**6.9**[a,d]	**4.0**[a]	<7.7	**10.9**	<0.0096	<0.048	<0.0096	<0.029	<0.048	ND	NA
B-9	5/22/2012	7	<0.74	**25**	**6.4**	<5.9	**31.4**	<0.0074	<0.037	<0.0074	<0.022	<0.037	2-Butanone = 0.034[a]	NA
B-9	5/22/2012	15	<0.98	**2.5**[a]	<7.8	<7.8	**2.5**	<0.0098	**0.0041**[a]	<0.0098	**0.010**[a]	<0.049	ND	NA
B-10	5/21/2012	4	<0.60	**11**[d]	**3.3**[a]	<4.8	**14.3**	<0.0060	<0.030	<0.0060	<0.018	<0.030	ND	NA
B-10	5/21/2012	15	<0.92	**4.8**[a]	<7.3	<7.3	**4.8**	<0.0092	<0.046	<0.0092	<0.027	<0.046	2-Butanone = 0.033[a]	NA
B-11	5/22/2012	8	<0.68	**3.3**[a]	<5.5	<5.5	**3.3**	<0.0068	<0.034	<0.0068	<0.020	<0.034	ND	NA
B-11	5/22/2012	15	<0.96	**5.4**[a]	<7.7	<7.7	**5.4**	<0.0096	<0.048	<0.0096	<0.29	<0.048	ND	NA
Soil Boring and Monitoring Well Installation - December 2012														
B-12	12/17/2012	3	**0.28**[a]	<23[f]	NA	NA	<23[f]	<0.0058	<0.029	<0.0058	<0.017	<0.029	ND**	NA
B-12	12/17/2012	6	<0.69	<1,100[f]	NA	NA	<1,100[f]	<0.0069	<0.034	<0.0069	<0.021	<0.034	ND**	NA
MW-3	12/17/2012	3	<0.59	<24[f]	NA	NA	<24[f]	<0.0059	<0.030	<0.0059	<0.018	<0.030	ND**	NA
MW-3	12/17/2012	7	<0.62	**8.1**	NA	NA	**8.1**	<0.0062	<0.031	<0.0062	<0.019	<0.031	ND**	NA
MW-4	12/17/2012	**3**	<0.58	**5.4**[a]	NA	NA	**5.4**[a]	<0.0058	<0.029	<0.0058	<0.018	<0.029	ND**	NA
MW-4	12/17/2012	**10**	**41**	**48**	NA	NA	**48**	<0.13	<0.65	<0.13	<0.39	**0.50**[a]	ND**	NA
SFRWQCB ESLs (mg/kg) Non Drinking Water Source Commercial Property Use - Shallow Soils														
420							500	1.2	9.3	4.7	11	4.8		
SFRWQCB ESLs (mg/kg) Non Drinking Water Source Commercial Property Use - Deep Soils														
420							530	1.2	9.3	4.7	11	4.8		

Table 1
Soil Analytical Data

ABF Freight System Facility
4575 Tidewater Avenue
Oakland, California

Sample ID#	Sample Date	Sample Depth (ft)	TPHg (mg/kg)	Diesel Range Organics* C10-C22 (mg/kg)	C22-C32 (mg/kg)	C32-C40 (mg/kg)	Total TPHd (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (Total) (mg/kg)	Naphthalene (mg/kg)	Other VOCs (mg/kg)	PAHs (mg/kg)

Notes:

* = Silica gel cleanup was completed on diesel-range organics analysis
** = Additional VOCs analyzed included MTBE, di-isopropyl ether, ethanol, ethyl tert-butyl ether, tert-butyl alcohol, tert-amyl methyl ether, 1,2-dibromoethane and 1,2-dichloroethane
MTBE = Methyl Tertiary-Butyl Ether
TPH = Total Petroleum Hydrocarbons
Elev. = elevation
ft = feet
< = less than indicated detection level
mg/kg = milligrams per kilogram
ND = Not Detected
NA = Not Analyzed
TPHg = Total Petroleum Hydrocarbons - Gasoline
TPHd = Total Petroleum Hydrocarbons - Diesel
VOC = Volatile Organic Compound
PAH = Poly-Aromatic Hydrocarbons
a = The lab noted, estimated value below the lower calibration point. Confidence correlates with concentration.
b = The lab noted, surrogate recovery limits have been exceeded; values are outside lower control limits.
c = The lab noted, the sample matrix interfered with the ability to make any accurate dtermination; spike value is low.
d = The lab noted, this sample has responded in the Diesel range, however it does not appear to be hydrocarbon product.
e = The lab noted, this sample has responded in the Oil range, however it does not appear to be a hydrocarbon product.
f = The lab noted, sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
ESL = Environmental Screening Level
SFBRWQCB = San Francisco Bay Regional Water Quality Control Board, California EPA, http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/esl.shtml (February 2013)

Table 1
Soil Analytical Data

ABF Freight System, Inc.
4575 Tidewater Avenue
Oakland, California

Sample ID	Sample Date	Sample Depth (Feet)	EPA Analytical Test Method												
			8260B (mg/kg)											8015 (mg/kg)	
			TPHg	Benzene	Toluene	Ethylbenzene	Total Xylenes	1,1-DCE	cis-1,2-DCE	PCE	TCE	Vinyl Chloride	Carbon Tetrachloride	Other Compounds	TPHd	TPHmo
SB-1	6/26/2014	3.5	<0.57	0.00051[A]	<0.0057	<0.0011	<0.0034	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	ND	<4.5	0.68[A]
SB-2	6/26/2014	3.5	<0.58	<0.0012	<0.0058	<0.0012	<0.0035	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	ND	<46	20[A]
SB-3	6/26/2014	3.5	<0.60	<0.0012	0.00066[A]	<0.0012	<0.0036	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	ND	3.2[A]	5.3
SB-4	6/26/2014	3.5	<0.57	<0.0011	<0.0057	<0.0011	<0.0034	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	ND	<46	5.6[A]
SB-5	6/26/2014	3.5	<0.56	<0.0011	<0.0056	<0.0011	<0.0034	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	ND	<45	87
SB-6	6/26/2014	3.5	<0.56	0.00042[A]	<0.0056	<0.0011	<0.0034	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	ND	<4.5	3.6[A]
SB-7	8/27/2015	3.0	<2.89	<0.00579	<0.0289	<0.00579	<0.0174	<0.00579	<0.00579	<0.00579	<0.00579	<0.00579	<0.00579	C	13.4[B]	245.1
		5.5	<2.87	<0.00575	<0.0287	<0.00575	<0.0172	<0.00575	<0.00575	<0.00575	<0.00575	<0.00575	<0.00575	ND	1.49[B]	<4.80
		10.5	<2.98	<0.00596	<0.0298	<0.00596	<0.0179	<0.00596	<0.00596	<0.00596	<0.00596	<0.00596	<0.00596	ND	<4.77	<4.77
SB-8	8/27/2015	3.0	<2.97	<0.00595	<0.0297	<0.00595	<0.0178	<0.00595	<0.00595	<0.00595	<0.00595	<0.00595	<0.00595	ND	7.96[B]	115.2
		6.0	<2.98	<0.00597	<0.0298	<0.00597	<0.0179	<0.00597	<0.00597	<0.00597	<0.00597	<0.00597	<0.00597	ND	0.898[B]	4.94[B]
		9.5	<2.93	<0.00587	<0.0293	<0.00587	<0.0176	<0.00587	<0.00587	<0.00587	<0.00587	<0.00587	<0.00587	ND	<4.69	<4.69
Commercial SFRWQCB ESLs - Shallow Soil Screening Levels - Not a Current or Potential Drinking Water Resource																
			500	1.2	9.3	4.7	11	1.9	18	2.6	8.3	0.16	0.58	NLE	110	500

Notes:

EPA = Environmental Protecton Agency
SB = Soil Boring
TPHg = Total Petroleum Hydrocarbons - Gasoline Range
1,1-DCE = 1,1-dichloroethene
cis-1,2-DCE = cis-1,2-dichloroethene
PCE = Tetrachloroethene
TCE = Trichloroethene
TPHd = Total Petroleum Hydrocarbons - Diesel Range (C10-C28 for SB-1 through SB-6, C12-C22 for SB-7 and SB-8)
TPHmo = Total Petroleum Hydrocarbons - Motor Oil Range (C28-C40 for SB-1 through SB-6, sum of C22-32 and C32-C40 for SB-7 and SB-8)
mg/kg = Milligrams per kilogram
< = Not detected at or above detection limit
Bold = Exceeds ESL concentration
ND = Not detected at or above laboratory detection limits
NLE = No limit established
A = Estimated value below the lowest calibration point. Confidence correlates with concentration.
B = The identification of the analyte is acceptable; the reported value is an estimate.
C = 1,2,3-Trichlorobenzene detected at a concentration of 0.00246[B] mg/kg. There is no Environmental Screening Level established for 1,2,3-Trichlorobenzene.
SFRWQCB = San Francisco Bay Regional Water Quality Control Board, California EPA, December 2013, http://www.waterboards.ca.gov/rwqcb2/water_issues/programs/esl.shtml.
ESLs = Environmental Screening Levels (Updated December 2013)

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Cora Olson
Trinity Source Group - Santa Cruz,
500 Chestnut Street, Ste. 225
Santa Cruz, CA 95060

June 14,2012

ESC Sample # : L576962-15

Date Received : May 24, 2012
Description : ABF Freight System Facility - Oakland, CA

Site ID :

Sample ID : B-6 9FT

Project # :

Collected By : Cara Olson
Collection Date : 05/21/12 10:20

Parameter	Dry Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
4-Bromofluorobenzene	103.			% Rec.		8260B	05/25/12	5
Polynuclear Aromatic Hydrocarbons								
Anthracene	U	0.00076	0.0087	mg/kg		8270C-SI	05/28/12	1
Acenaphthene	U	0.00071	0.0087	mg/kg		8270C-SI	05/28/12	1
Acenaphthylene	U	0.00057	0.0087	mg/kg		8270C-SI	05/28/12	1
Benzo(a)anthracene	0.0022	0.00092	0.0087	mg/kg	J	8270C-SI	05/28/12	1
Benzo(a)pyrene	0.0012	0.00062	0.0087	mg/kg	J	8270C-SI	05/28/12	1
Benzo(b)fluoranthene	U	0.00082	0.0087	mg/kg		8270C-SI	05/28/12	1
Benzo(g,h,i)perylene	U	0.0012	0.0087	mg/kg		8270C-SI	05/28/12	1
Benzo(k)fluoranthene	U	0.0013	0.0087	mg/kg		8270C-SI	05/28/12	1
Chrysene	U	0.0011	0.0087	mg/kg		8270C-SI	05/28/12	1
Dibenz(a,h)anthracene	U	0.0011	0.0087	mg/kg		8270C-SI	05/28/12	1
Fluoranthene	0.0030	0.0010	0.0087	mg/kg	J	8270C-SI	05/28/12	1
Fluorene	0.0013	0.00055	0.0087	mg/kg	J	8270C-SI	05/28/12	1
Indeno(1,2,3-cd)pyrene	U	0.0012	0.0087	mg/kg		8270C-SI	05/28/12	1
Naphthalene	0.0079	0.00065	0.0087	mg/kg	J	8270C-SI	05/28/12	1
Phenanthrene	0.0033	0.00074	0.0087	mg/kg	J	8270C-SI	05/28/12	1
Pyrene	0.0032	0.00059	0.0087	mg/kg	J	8270C-SI	05/28/12	1
1-Methylnaphthalene	0.0026	0.00079	0.0087	mg/kg	J	8270C-SI	05/28/12	1
2-Methylnaphthalene	0.0035	0.00059	0.0087	mg/kg	J	8270C-SI	05/28/12	1
2-Chloronaphthalene	U	0.00060	0.0087	mg/kg		8270C-SI	05/28/12	1
Surrogate Recovery								
Nitrobenzene-d5	74.8			% Rec.		8270C-SI	05/28/12	1
2-Fluorobiphenyl	78.5			% Rec.		8270C-SI	05/28/12	1
p-Terphenyl-d14	104.			% Rec.		8270C-SI	05/28/12	1

Results listed are dry weight basis.
U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:

The reported analytical results relate only to the sample submitted
Reported: 06/14/12 17:12 Printed: 06/14/12 17:15

ATTACHMENT 6

COUNTY OF ALAMEDA
Assessor's Office
Property Value System

Help

New Query

History | Value | Transfer | Map | Glossary

Parcel Number:34-2300-13-6 Inactive:N Lien Date:01/01/2011 Owner:ARKANSAS BANDAG CORPORATION
Property Address: 4576 TIDEWATER AVE, OAKLAND, CA 94601-3917
Parcel History

Mailing Name		Historical Mailing Address	Document Date	Document Number	Value From Trans Tax	Parcel Count	Use
ARKANSAS BANDAG CORPORATION	List Owners	PO BOX 10048 , FORT SMITH, AR 72917-0048	10/10/1979	1979-203004	3	4800	

All information on this site is to be assumed accurate for property assessment purposes only, and is based upon the Assessor's knowledge of each property. Caution is advised for use other than its intended purpose.

The Alameda County Intranet site is best viewed in Internet Explorer Version 5.5 or later.
Click here for more information regarding supported browsers.

ASSESSOR'S MAP 34

Code Area Nos.
17-032

2300 Pg.2

Scale: 1" = 200'

RANCHO SAN ANTONIO (A.M. PERALTA et. al.)(Pat.Bk.A Pg.669)

Drawn: 2-65 S.Y.
Corrected: 6-12-75 WM.
7-14-82 PB
9-28-82 CS
4-18-96 RG
2-10-09 ZC
5-19-09 ZC

45th AVE.
46th AVE.
2291
2291
COLISEUM WAY
50th AVENUE
2295 Pg.2
2295 Pg.3
2295 Pg.4
STATE HIGHWAY ROUTE 69
OAKPORT STREET
2295 Pg.1
2295 Pg.2
2342
JENSEN ST.
JENSEN ST
(15-1) STATE
872-1-1080-10
S.P.R.R. CO. (Easement)
(15-2)
2299 Pg.2
2304
MALAT ST.
ST.
2304
2299 Pg.3
2304
LESSER
60
14.325± Ac. (P)
(14)
135-1-39F - Por.1
Rem. on Bk. 3904 Pg. 41
Easement known as TIDEWATER AVE.
2300 Pg.1
(13-5)
6.45Ac.±(P)
(13-3)
1.88Ac.±(P)
(13-4)
1.632 Ac.±
2300 Pg.3
EAST SLOUGH
CREEK
41
BOOK
UNITED STATES TIDAL CANAL
BOOK
69
Ref. R/S ARB. NO. 12 (L.S. BK.1 Pg.12)
HPN 18

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

ENVIRONMENTAL HEALTH DEPARTMENT
OFFICE OF THE DIRECTOR
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

Certified Mail #: 7009 2820 0001 4372 7741

August 15, 2011

NOTICE OF RESPONSIBILITY

Site Name & Address:
ABF FREIGHT SYSTEMS
4575 TIDEWATER AVE
OAKLAND, CA 94601

Local ID: RO0003033
Related ID: NA
RWQCB ID: 01-0022
Global ID: T0600100018

Responsible Party:

ARKANSAS BANDAG CORPORATION
PO BOX 10048
FORT SMITH AR 72917-0048

Date First Reported: 7/3/1986
Substance: 12031,12034,12035 Multiple Releases
Funding for Oversight: LOPS - LOP State Fund
Multiple RPs?: Yes

Pursuant to sections 25297.1 and 25297.15 of the Health and Safety Code, you are hereby notified that the above site has been placed in the Local Oversight Program and the individual(s) or entity(ies) shown above, or on the attached list, has (have) been identified as the party(ies) responsible for investigation and cleanup of the above site. Section 25297.15 further requires the primary or active Responsible Party to notify all current record owners of fee title before the local agency considers cleanup or site closure proposals or issues a closure letter. For purposes of implementing section 25297.15, this agency has identified ARKANSAS BANDAG CORPORATION as the primary or active Responsible Party. It is the responsibility of the primary or active Responsible Party to submit a letter to this agency, within 20 calendar days of receipt of this notice that identifies all current record owners of fee title. It is also the responsibility of the primary or active Responsible Party to certify to the local agency that the required notifications have been made at the time a cleanup or site closure proposal is made or before the local agency makes a determination that no further action is required. If property ownership changes in the future, you must notify this local agency within 20 calendar days from when you are informed of the change.

Any action or inaction by this local agency associated with corrective action, including responsible party identification, is subject to petition to the State Water Resources Control Board. Petitions must be filed within 30 days from the date of the action/inaction. To obtain petition procedures, please FAX your request to the State Water Board at (916) 341-5808 or telephone (916) 341-5752.

Pursuant to section 25296.10(c)(6) of the Health and Safety Code, a responsible party may request the designation of an administering agency when required to conduct corrective action. Please contact this office for further information about the designation process.

Please contact your caseworker DETTERMAN, MARK, at this office at (510)567-6876 if you have questions regarding your site.

Date: 8/16/2011

ARIU LEVI, Director
Contract Project Director

Action: Add
Reason: New Case

Attachment A: Responsible Parties Data Sheet

cc: Jenniffer Jorden, SWRCB, D. Drogos (Sent via electronic mail to donna.drogos@acgov.org), File

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

ENVIRONMENTAL HEALTH DEPARTMENT
OFFICE OF THE DIRECTOR
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

Certified Mail #: 7009 2820 0001 4372 7567

August 15, 2011

NOTICE OF RESPONSIBILITY

Site Name & Address:
ABF FREIGHT SYSTEMS
4575 TIDEWATER AVE
OAKLAND, CA 94601

Local ID: RO0003033
Related ID: NA
RWQCB ID: 01-0022
Global ID: T0600100018

Responsible Party:

MIKE ROGERS
ABF FREIGHT SYSTEMS
PO BOX 10048
FORT SMITH AR 72917-0048

Date First Reported: 7/3/1986
Substance: 12031,12034,12035 Multiple Releases
Funding for Oversight: LOPS - LOP State Fund
Multiple RPs?: Yes

Pursuant to sections 25297.1 and 25297.15 of the Health and Safety Code, you are hereby notified that the above site has been placed in the Local Oversight Program and the individual(s) or entity(ies) shown above, or on the attached list, has (have) been identified as the party(ies) responsible for investigation and cleanup of the above site. Section 25297.15 further requires the primary or active Responsible Party to notify all current record owners of fee title before the local agency considers cleanup or site closure proposals or issues a closure letter. For purposes of implementing section 25297.15, this agency has identified ARKANSAS BANDAG CORPORATION as the primary or active Responsible Party. It is the responsibility of the primary or active Responsible Party to submit a letter to this agency, within 20 calendar days of receipt of this notice that identifies all current record owners of fee title. It is also the responsibility of the primary or active Responsible Party to certify to the local agency that the required notifications have been made at the time a cleanup or site closure proposal is made or before the local agency makes a determination that no further action is required. If property ownership changes in the future, you must notify this local agency within 20 calendar days from when you are informed of the change.

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Pursuant to section 25296.10(c)(6) of the Health and Safety Code, a responsible party may request the designation of an administering agency when required to conduct corrective action. Please contact this office for further information about the designation process.

Please contact your caseworker DETTERMAN, MARK, at this office at (510)567-6876 if you have questions regarding your site.

Date 8/16/2011

ARIU LEVI, Director
Contract Project Director

Action: Add
Reason: New Case

Attachment A: Responsible Parties Data Sheet

cc: Jenniffer Jorden, SWRCB, D. Drogos (Sent via electronic mail to donna.drogos@acgov.org), File

ALAMEDA COUNTY ENVIRONMENTAL HEALTH
LUFT LOCAL OVERSIGHT PROGRAM

ATTACHMENT A - RESPONSIBLE PARTIES DATA SHEET

August 15, 2011

Site Name & Address:
ABF FREIGHT SYSTEMS
4575 TIDEWATER AVE
OAKLAND, CA 94601

Local ID:	**RO0003033**
Related ID:	**NA**
RWQCB ID:	**01-0022**
Global ID:	**T0600100018**

All Responsible Parties

RP has been named a Primary RP -
ARKANSAS BANDAG CORPORATION
PO BOX 10048 | FORT SMITH, AR 72917-0048 | Phone No Phone Number Listed

RP has been named a Primary RP - MIKE ROGERS
ABF FREIGHT SYSTEMS
PO BOX 10048 | FORT SMITH, AR 72917-0048 | Phone (501) 785-6000

Responsible Party Identification Background

Alameda County Environmental Health (ACEH) names a "Responsible Party," as defined under 23 C.C.R Sec. 2720. Section 2720 defines a responsible party 4 ways. An RP can be:

1. "Any person who owns or operates an underground storage tank used for the storage of any hazardous substance."
2. "In the case of any underground storage tank no longer in use, any person who owned or operated the underground storage tank immediately before the discontinuation of its use."
3. "Any owner of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred."
4. "Any person who had or has control over an underground storage tank at the time of or following an unauthorized release of a hazardous substance."

ACEH has named the responsible parties for this site as detailed below.

ATTACHMENT A - RESPONSIBLE PARTIES DATA SHEET (Continued)

August 15, 2011

Responsible Party Identification

Responsible Party Identification

Existence of Unauthorized Release

In June 1986 a site investigation was conducted to investigate the condition of existing tanks at the subject site. Two 10,000-gallon diesel, one 800-gallon motor oil, and one 800-gallon waste oil USTs were present; one of the 10,000-gallon USTs is reported to have previously held gasoline until approximately 1983. A leak in the gas product lines had been discovered and previously repaired. Part of the work included removal of the two 800-gallon USTs, removal of sludge beneath the leaking UST (undefined), installation of bores A1 to A4 and the collection of soil and groundwater samples; contamination was documented in soil and groundwater. In September 1986 wells MW-1 and MW-2 and bores S-1 to S-3 were installed. Concentrations up to 34 mg/kg "Motor Fuel" in soil; and 452,000 µg/l "Motor Fuel" and 1,590 µg/l benzene were documented in groundwater collected from well MW-1. On January 8, 1987 one 10,000-gallon UST was removed. The status of the second 10,000-gallon UST is not known. Concentrations of up to 681 TPH in soil and up to 721,000 µg/l TPH in tank pit water were documented at the time of the tank removal.

Responsible Party Identification

ABF Freight System, Inc. is a property tenant associated with the UST. ABF Freight System, Inc. is a responsible party for site because it owned an UST used for the storage of a hazardous substance (Definition 1), owned the UST immediately before the discontinuation of its use (Definition 2), and had control over the UST at a time following an unauthorized release of a hazardous substance (Definition 4).

The Arkansas Bandag Corporation is the current owner associated with the underground storage tank (UST). The Arkansas Bandag Corporation is a responsible party for the site because it owned the property where an unauthorized release has occurred (Definition 3).

ATTACHMENT 7

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
REBECCA GEBHART, Acting Director

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

INVITATION TO COMMENT – POTENTIAL CASE CLOSURE

ABF Freight Systems
4575 Tidewater Avenue, Oakland, 94601
FUEL LEAK CASE RO0003033
GEOTRACKER GLOBAL ID T0600100018

April 27, 2016

The above referenced site is a fuel leak case that is under the regulatory oversight of the Alameda County Department of Environmental Health (ACDEH) Local Oversight Program for the investigation and cleanup of a release of petroleum hydrocarbons from an underground storage tank system. Site investigation and cleanup activities have been completed and the site has been evaluated in accordance with the State Water Resources Control Board Low-Threat Closure Policy. The site appears to meet all of the criteria in the Low-threat Closure Policy. Therefore, ACDEH is considering closure of the fuel leak case.

Due to an inadvertent error, this is the second notification of potential closure of the site. As indicated below, this notification extends the public comment period until June 8, 2016. As before, this notice is being sent to the current landowner in compliance with Health and Safety Code Section 25295.40. It is also being sent to the current occupants and landowners of adjacent properties and known interested parties for this site.

The public is invited to review and comment on the potential closure of the fuel leak 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.swrcb.ca.gov). Please send written comments to Mark Detterman at the address below; all comments will be forwarded to the responsible parties. **Comments received by June 8, 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, Mark Detterman at 510-567-6876 or by email at mark.detterman@acgov.org. Please refer to ACDEH case RO0003033 in any correspondence.

430 LESSER STREET LLC
PARCEL #: 34-2304-14-2
430 LESSOR ST
OAKLAND CA 94601-4902

ARKANSAS BANDAG CORPORATION
PARCEL #: 34-2300-13-5
PO BOX 10048
FORT SMITH AR 72917-0048

EAST BAY REGIONAL PARK DISTRICT
PARCEL #: 34-2300-13-4
PO BOX 5381
OAKLAND CA 94605-0381

EGGEN NORMAN J & MARGARET M TRS
PARCEL #: 34-2300-20
PO BOX 1883
ORINDA CA 94563-6883

FIGUEROA JUAN D & MARIA D
PARCEL #: 34-2304-10-1
1224 LOZANO CT
PLEASANTON CA 94566-2237

HOME DOCK PROPERTIES
PARCEL #: 34-2300-13-3
PO BOX 52427
ATLANTA GA 30355-0427

HOME DOCK PROPERTIES
PARCEL #: 34-2300-5
PO BOX 52427
ATLANTA GA 30355-0427

HOME DOCK PROPERTIES
PARCEL #: 34-2300-4
PO BOX 52427
ATLANTA GA 30355-0427

JMDH REAL ESTATE OAKLAND LLC
PARCEL #: 34-2299-10-3
15-24 132ND ST
COLLEGE POINT NY 11356-2440

KRIEGER HARRY & ANNA
PARCEL #: 34-2300-1
535 EDDY ST
SAN FRANCISCO CA 94109-8017

OCCUPANT
PARCEL #: 34-2300-13-5
4575 TIDEWATER AVE
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2300-13-3
TIDEWATER AVE
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2300-5
4501 TIDEWATER AVE
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2300-4
4501 TIDEWATER AVE
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2300-2-1
344 HIGH ST
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2300-13-4
TIDEWATER AVE
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2300-24
4703 TIDEWATER AVE
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2300-23
TIDEWATER AVE
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2300-22
TIDEWATER AVE
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2300-20
TIDEWATER AVE
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2300-21
TIDEWATER AVE
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2304-14-2
430 LESSER ST
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2304-10-1
417 LESSER ST
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2304-9
4500 TIDEWATER AVE
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2304-16-1
TIDEWATER AVE
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2299-10-3
400 HIGH ST
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2300-1
4501 TIDEWATER AVE
OAKLAND CA 94601

OCCUPANT
PARCEL #: 34-2304-9
4500 TIDEWATER AV
OAKLAND 94601

OCCUPANT
PARCEL #: 34-2299-10-3
4440 TIDEWATER AV
OAKLAND 94601

OCCUPANT
PARCEL #: 34-2299-10-3
440 HIGH ST
OAKLAND 94601

OCCUPANT
PARCEL #: 34-2300-24
4703 TIDEWATER AV
OAKLAND 94601

OCCUPANT
PARCEL #: 34-2300-13-5
4575 TIDEWATER AV
OAKLAND 94601

OCCUPANT
PARCEL #: 34-2300-1
4501 TIDEWATER AV
OAKLAND 94601

OCCUPANT
PARCEL #: 34-2299-10-3
4440 TIDEWATER AV
OAKLAND 94601

OCCUPANT
PARCEL #: 34-2300-19
4723 TIDEWATER AV
OAKLAND 94601

OCCUPANT
PARCEL #: 34-2300-5
4501 TIDEWATER AV
OAKLAND 94601

OCCUPANT
PARCEL #: 34-2300-4
4501 TIDEWATER AV
OAKLAND 94601

OLIVER DE SILVA INC
PARCEL #: 34-2300-2-1
11555 DUBLIN BLVD
DUBLIN CA 94568-2854

OLIVER DE SILVA INC
PARCEL #: 34-2304-9
11555 DUBLIN BLVD
DUBLIN CA 94568-2854

SCHMITT WILLIAM W & JACQULINE M TRS &
PARCEL #: 34-2300-24
1569 PEBBLEBROOK CT
WALNUT CREEK CA 94596-6457

TIDEWATER GROUP LLC
PARCEL #: 34-2300-23
1840 EMBARCADERO
OAKLAND CA 94606-5220

TIDEWATER GROUP LLC
PARCEL #: 34-2300-22
1840 EMBARCADERO
OAKLAND CA 94606-5220

TIDEWATER GROUP LLC
PARCEL #: 34-2300-21
1840 EMBARCADERO
OAKLAND CA 94606-5220

TRIN 2015 REAL ESTATE INC
PARCEL #: 34-2300-19
4723 TIDEWATER AVE
OAKLAND CA 94601

WESTERN DOOR & SASH CO
PARCEL #: 34-2304-16-1
PO BOX 20287
OAKLAND CA 94620-0287

Z SQUARE PROPERTIES CO LLC
PARCEL #: 34-2304-15
414 LESSER ST
OAKLAND CA 94601

East Bay Municipal Utility District
Chandra Johannesson
P.O. Box 24055,
Oakland, CA 94623

cjohanne@ebmud.com

City Of Oakland Public Works Environmental Services
Mark Johannes Arniola and Gopal Nair
150 Frank H. Ogawa Plaza, Suite 5301
Oakland CA 94612

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City Of Oakland Planning & Building
Dave Harlan
150 Frank H. Ogawa Plaza, Suite 2114
Oakland CA 94612

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Laurent Meillier
Engineering Geologist
Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay St, Ste 1400
Oakland, CA 94612

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COUNTY OF ALAMEDA

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Parcel Number:**34-2300-13-5** Inactive:**N** Lien Date:**01/01/2016** Owner:**ARKANSAS BANDAG CORPORATION**

Property Address: **4575 TIDEWATER AVE, OAKLAND, CA 94601-3917**

Parcel History

Mailing Name		Historical Mailing Address	Document Date	Document Number	Value From Trans Tax	Parcel Count	Use
ARKANSAS BANDAG CORPORATION	List Owners	PO BOX 10048 , FORT SMITH, AR 72917-0048	10/10/1979	1979-203004		3	4800

All information on this site is to be assumed accurate for property assessment purposes only, and is based upon the
Assessor's knowledge of each property. Caution is advised for use other than its intended purpose.

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