ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

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

December 22, 2014

Kenneth Beeson and Gloria Zarifa
Kenneth Beeson and Gloria Zarifa Trust
5700 McFarland Road, Sebastopol, CA 95472
Sent via E-mail to: kbeesen@yahoo.com

Piyanartr Sakarindr
c/o: D. Ames Estate of Prasitte Sakarindr
2691 March Avenue, Chicago, IL 60611

Subject: Case Closure for Fuel Leak Case No. RO0003045 (Global ID T0600101219), Shattuck Imports, 6562 Shattuck Ave., Oakland, CA 94609

Ladies and Gentlemen:

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

Site management requirements do not appear to be necessary. However, 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.

If a change in land use to any residential, commercial other than as a former fueling station, or conservative land use, or if any redevelopment occurs, Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2.

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

If you have any questions, please call Karel Detterman at (510) 567-6708. Thank you.

Sincerely,

Dilan Roe, P.E.
LOP and SCP Program Manager

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

cc with enclosures:

Ann Clevenger, Planner III, City of Oakland Planning and Building Department, 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, CA 94612 (sent via e-mail to: aclevenger@oaklandnet.com)

Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3354, Oakland, CA 94612 (sent via e-mail to lgriffin@oaklandnet.com)

Dilan Roe, ACEH, (sent via e-mail to: dilan.roe@acgov.org)
Karel Detterman, ACEH, (sent via electronic mail to karel.detterman@acgov.org)
e-File, GeoTracker

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Agency Director

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

REMEDIAL ACTION COMPLETION CERTIFICATION

December 22, 2014

Kenneth Beeson and Gloria Zarifa
Kenneth Beeson and Gloria Zarifa Trust
5700 McFarland Road, Sebastopol, CA 95472
Sent via E-mail to: kbeesen@yahoo.com

Piyanartr Sakarindr
c/o: D Ames Estate of Prasitte Sakarindr
2691 March Avenue, Chicago, IL 60611

Subject: Case Closure for Fuel Leak Case No. RO0003045 (Global ID T0600101219), Shattuck Imports, 6562 Shattuck Ave., Oakland, CA 94609

Dear Responsible Parties:

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,

Ariu Levi
Director

UST Case Closure Summary Form

Agency Information Date: December 22, 2014

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: 510-567-6708
Staff Person: Karel Detterman, P.G.	Title: Hazardous Materials Specialist

Case Information

Facility Name: Shattuck Imports		
Facility Address: 6562 Shattuck Ave, Oakland, CA 94609		
RB LUSTIS Case No:01-1324	Local Case No.: ----	LOP Case No.: RO0003045
URF Filing Date: ----	GeoTracker Global ID: T0600101219	
APN: 16-1425-19	Current Land Use: Commercial	
Responsible Party(s):	Address:	Phone:
Kenneth Beeson and Gloria Zarifa Kenneth Beeson and Gloria Zarifa Trust	5700 McFarland Road, Sebastopol, CA 95472	----
Piyanartr Sakarindr c/o: D Ames Estate of Prasitte Sakarindr	2691 March Avenue, Chicago, IL 60611	**----**

Tank Information

Tank No.	Size (gal)	Contents	Closed in-Place/ Removed/Active	Date
1	1,000	Gasoline	Removed	May 22, 1985
2	550	Gasoline	Removed	May 22, 1985

Conceptual Site Model (Attachment 1, 1 pages) (GeoTracker CSM Report)

Closure Criteria Met (Attachment 2, 2 pages) (GeoTracker LTCP Checklist)

LTCP Groundwater Specific Criteria (Attachment 3, 2 pages)

LTCP Vapor Specific Criteria (Attachment 4, 1 page)

LTCP Direct Contact and Outdoor Air Exposure Criteria (Attachment 5, 1 page)

Site maps (Attachment 6, 4 pages)

Analytical Data (Attachment 7, 4 pages)

UST Case Closure Summary Form

Additional Information:

Site Management Requirements: This fuel leak case has been evaluated for closure consistent with the State Water Resources Control Board Low-Threat Underground Storage Tank Closure Policy (LTCP). Based on this evaluation, no site management requirements appear to be necessary. However, 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.

If a change in land use to any residential, commercial other than as a former fueling station, or conservative land use, or if any redevelopment occurs, Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2.

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

RWQCB Notification

Notification Date: August 22, 2014

RWQCB Staff Name: Cherie McCaulou	Title: Engineering Geologist

Local Agency Representative

Prepared by: Karel Detterman, P.G.	Title: Hazardous Materials Specialist
Signature: Karel Detterman	Date: 12/22/2014
Approved by: Dilan Roe, P.E.	Title: LOP and SCP Program Manager
Signature: Dilan Roe	Date: 12/22/2014

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 Environmental Health (ACEH) 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 ACEH website.

ATTACHMENT 1

SHATTUCK IMPORTS (T0600101219) - MAP THIS SITE

OPEN - ELIGIBLE FOR CLOSURE

6562 SHATTUCK AVE
OAKLAND , CA 94609
ALAMEDA COUNTY

VIEW PRINTABLE CASE SUMMARY FOR THIS SITE

ACTIVITIES REPORT

PUBLIC WEBPAGE

CLEANUP OVERSIGHT AGENCIES
ALAMEDA COUNTY LOP *(LEAD)* - *CASE #: RO0003045*
CASEWORKER: KAREL DETTERMAN - ***SUPERVISOR:*** *DILAN ROE*
SAN FRANCISCO BAY RWQCB (REGION 2) - *CASE #: 01-1324*
CASEWORKER: Cherie McCaulou - ***SUPERVISOR:*** *Cheryl L. Prowell*

CR Site ID #: NOT SPECIFIED

THIS PROJECT WAS LAST MODIFIED BY ***KAREL DETTERMAN*** ON 12/23/2014 10:25:25 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
SHATTUCK IMPORTS (Global ID: T0600101219) 6562 SHATTUCK AVE OAKLAND, CA 94609	Open - Eligible for Closure	7/15/2014	6/2/1985	30	ALAMEDA COUNTY LOP *(LEAD)* - *CASE #: RO0003045* ***CASEWORKER:*** KAREL DETTERMAN - ***SUPERVISOR:*** *DILAN ROE* SAN FRANCISCO BAY RWQCB (REGION 2) - *CASE #: 01-1324* ***CASEWORKER:*** Cherie McCaulou - ***SUPERVISOR:*** *Cheryl L. Prowell*

STAFF NOTES (INTERNAL)
<NO STAFF NOTES ENTERED>

SITE HISTORY

UST removed from the site. Tank Removal Report indicates minor TPH impact to soil.

A total of three soil samples were taken during the May 1985 UST removal: one beneath each of the two USTs and one below the product piping. Each soil sample was analyzed only for the volatile organic compounds (VOCs): benzene, toluene, and xylenes (BTX). Benzene was detected in all three soil samples, up to a maximum of 0.47 mg/kg, exceeding the benzene residential and commercial Environmental Screening Levels (ESLs) of 0.044 milligrams per kilogram (mg/kg) (San Francisco Bay Regional Water Quality Control Board, Table A ESLs for Shallow Soil, Groundwater is Current or Potential Source of Drinking Water, December 2013). Toluene and total xylenes detections for the UST samples were less than the ESLs. Xylenes were detected in the product piping soil sample up to 26 mg/kg exceeding the ESL of 2.3 mg/kg.

Depth to groundwater ranged from approximately 2.9 to 8.6 feet below ground surface (bgs) in groundwater monitoring wells at neighboring Fuel Leak Case RO0003066. During the UST removal, groundwater was observed at 95 inches (7.9 feet) bgs and rising in the UST pit. Similarly, during the UST removal at neighboring Fuel Leak Case RO0003066, groundwater was observed in the UST pit at 11 feet bgs. Holes were observed in the product piping, but the USTs appeared to be intact and no odors or sheen were observed in the UST pit water. The primary source (two USTs and product piping) was removed and impacted soils aerated onsite for two weeks to reduce potential concentrations.

MTBE was not an analyte during the UST removal. However, analytical results from three groundwater monitoring wells at neighboring downgradient Fuel Leak Case RO0003066, 330 feet southwest of the site, were historically non-detect for TPHg, BTEX, and MTBE, suggesting a lack of impact from a potential contaminant plume emanating from RO0003045.

The UST and product piping removal (source removal), the lack of VOCs detected during the source removal, the onsite aeration of backfill, and the lack of downgradient off-site impact to neighboring Fuel Leak Case RO0003066 are lines of evidence that support probable low residual source mass and low potential impact to groundwater and vapor intrusion to indoor air.

The primary source (two USTs and product piping) was removed and excavated backfill was aerated onsite for two weeks to reduce potential concentrations prior to use as UST backfill in addition with clean fill material.

Volatiles (benzene, toluene, and xylenes) in the three soil samples do not support the presence of a source mass with adequate magnitude or lateral extent to suspect a vapor intrusion risk.

Ethylbenzene was not analyzed in soil for the tank removal. Ethylbenzene concentrations theoretically would be less than benzene concentrations based on average weight percent composition of gasoline. The State Water Resource Control Board's Leaking Underground Fuel Tank Guidance Manual CA LUFT (September 2012) indicates that fresh gasoline contains an average of 1.7% by weight of ethylbenzene and an average of 2.0% by weight of benzene. Because benzene concentrations did not exceed the LTCP Table 1 Criteria, it is expected that ethylbenzene concentrations, if present, would similarly not exceed the LTCP Table 1 Criteria.

Naphthalene was not included in the analysis of soil samples collected at the site. This apparent data gap can be addressed using the published relative concentrations of naphthalene and benzene in gasoline. This approach has been used by SWRCB staff in recent Closure Orders pursuant to the Policy (e.g., SWRCB WQ Order 2013-0003): Gasoline mixtures contain an average of approximately 2% benzene and 0.25% naphthalene (Potter and Simmons 1998); therefore, benzene concentrations can be directly substituted for naphthalene concentrations with a safety factor of about 10. The maximum benzene concentrations from the Site are less than the naphthalene criteria in Table 1 of the Policy. Therefore, the estimated naphthalene concentrations at the Site meet the Policy criteria for direct contact by a factor of about 10. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the Policy criteria. Soil samples were not analyzed for PAHs as there was no waste oil UST.

RESPONSIBLE PARTIES

NAME	ORGANIZATION	ADDRESS	CITY	EMAIL
KENNETH E BEESEN	KENNETH E BEESEN & GLORIA ZARIFA TRS	5700 MCFARLAND RD	SEBASTOPOL	

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
Gasoline	Commercial	GW - Municipal and Domestic Supply	Other	6/2/1985	Other Means	0

FREE PRODUCT	OTHER CONSTITUENTS	NAME OF WATER SYSTEM	LAST REGULATORY ACTIVITY	LAST ESI UPLOAD	LAST EDF UPLOAD	EXPECTED CLOSURE DATE	MOST RECENT CLOSURE REQUEST
NO	NO	EBMUD	8/14/2014				

CDPH WELLS WITHIN 1500 FEET OF THIS SITE

NONE

CALCULATED FIELDS (BASED ON LATITUDE / LONGITUDE)

APN
016 142501900

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

WATERSHED NAME
Bay Bridges - Berkeley (20330)

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

SHATTUCK IMPORTS (T0600101219) - MAP THIS SITE

OPEN - ELIGIBLE FOR CLOSURE

6562 SHATTUCK AVE
OAKLAND , CA 94609
ALAMEDA COUNTY

VIEW PRINTABLE CASE SUMMARY FOR THIS SITE

ACTIVITIES REPORT

PUBLIC WEBPAGE

CLEANUP OVERSIGHT AGENCIES
ALAMEDA COUNTY LOP *(LEAD)* - *CASE #: RO0003045*
CASEWORKER: *KAREL DETTERMAN* - ***SUPERVISOR:*** *DILAN ROE*
SAN FRANCISCO BAY RWQCB (REGION 2) - *CASE #: 01-1324*
CASEWORKER: *Cherie McCaulou* - ***SUPERVISOR:*** *Cheryl L. Prowell*

CR Site ID #: NOT SPECIFIED

THIS PROJECT WAS LAST MODIFIED BY ***KAREL DETTERMAN*** ON 12/23/2014 10:35:23 AM - HISTORY

CLOSURE POLICY

THIS VERSION IS FINAL AS OF 12/23/2014

CHECKLIST INITIATED ON 7/30/2013

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? — ◉ YES ○ NO

Name of Water System : EBMUD

b. The unauthorized release consists only of petroleum (info). — ◉ 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 — **NO**

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

ADDITIONAL QUESTIONS - Please indicate only those conditions that do not meet the policy criteria:

Plume Length (That Exceeds Water Quality Objectives) :
○ ≥ 100 Feet and < 250 Feet ○ ≥ 250 Feet and < 1,000 Feet ○ ≥ 1,000 Feet ◉ Unknown

Plume is Stable or Decreasing in AREAL Extent :
○ No ◉ Unknown

Free Product in Groundwater :
○ Yes ○ No ◉ Unknown

Free Product Has Been Removed to the Maximum Extent Practicable :
○ No ○ Unknown

For sites with free product, the Plume Has Been Stable or Decreasing for 5-Years (info) :
○ No ○ Unknown

For sites with free product, owner Willing to Accept a Land Use Restriction (if required) :
○ No ○ Unknown

Free Product Extends Offsite :
○ Yes ◉ Unknown

Benzene Concentration :
○ ≥ 1,000 µg/l and < 3,000 µg/l ○ ≥ 3,000 µg/l ◉ Unknown

MTBE Concentration :
○ ≥ 1,000 µg/l ◉ Unknown

Nearest Supply Well (From Plume Boundary) :
○ ≤ 250 Feet ○ > 250 Feet and ≤ 1,000 Feet ○ Unknown

Nearest Surface Water Body (From Plume Boundary) :
○ ≤ 250 Feet ○ > 250 Feet and ≤ 1,000 Feet ○ Unknown

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 — **NO**

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

ADDITIONAL QUESTIONS - Please indicate only those conditions that do not meet the policy criteria:

Soil Gas Samples :
○ No Soil Gas Samples ○ Taken Incorrectly

Exposure Type :
○ Residential ◉ Commercial

Free Product :
○ In Groundwater ○ In Soil ○ Unknown

TPH in the Bioattenuation Zone :
○ ≥ 100 mg/kg ○ Unknown ○ Soil samples not taken at two depths within 5 ft. zone (only for Scenario 4 with BioZone)

Bioattenuation Zone Thickness :
◉ < 5 Feet (No BioZone) ○ ≥ 5 Feet and < 10 Feet ○ ≥ 10 Feet and < 30 Feet ○ ≥ 30 Feet ○ 30ft BioZone Compromised TPH > 100mg/kg ○ Unknown

O2 Data in Bioattenuation Zone :
◉ No O_2 Data ○ O_2 < 4% ○ O_2 ≥ 4%

Benzene in Groundwater :
○ ≥ 100 µg/l and < 1,000 µg/l ○ ≥ 1,000 µg/l ◉ Unknown

Soil Gas Benzene :

○ ≥ 85 µg/m^3 and < 280 µg/m^3 ○ ≥ 280 µg/m^3 and < 85,000 µg/m^3 ○ ≥ 85,000 µg/m^3 and < 280,000 µg/m^3 ○ ≥ 280,000 µg/m^3 ○ Unknown

Soil Gas EthylBenzene :

○ ≥ 1,100 µg/m^3 and < 3,600 µg/m^3 ○ ≥ 3,600 µg/m^3 and < 1,100,000 µg/m^3 ○ ≥ 1,100,000 µg/m^3 and < 3,600,000 µg/m^3 ○ ≥ 3,600,000 µg/m^3 ○ Unknown

Soil Gas Naphthalene :

○ ≥ 93 µg/m^3 and < 310 µg/m^3 ○ ≥ 310 µg/m^3 and < 93,000 µg/m^3 ○ ≥ 93,000 µg/m^3 and < 310,000 µg/m^3 ○ ≥ 310,000 µg/m^3 ○ Unknown

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 **NO**

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

ADDITIONAL QUESTIONS - Please indicate only those conditions that do not meet the policy criteria:

Exposure Type :

○ Residential ◉ Commercial ○ Utility Worker

Petroleum Constituents in Soil :

○ ≤ 5 Feet bgs ○ >5 Feet bgs and ≤10 Feet bgs ○ Unknown

Soil Concentrations of Benzene :

○ > 1.9 mg/kg and ≤ 2.8 mg/kg ○ > 2.8 mg/kg and ≤ 8.2 mg/kg ○ > 8.2 mg/kg and ≤ 12 mg/kg ○ > 12 mg/kg and ≤ 14 mg/kg ○ > 14 mg/kg ○ Unknown

Soil Concentrations of EthylBenzene :

○ > 21 mg/kg and ≤ 32 mg/kg ○ > 32 mg/kg and ≤ 89 mg/kg ○ > 89 mg/kg and ≤ 134 mg/kg ○ > 134 mg/kg and ≤ 314 mg/kg ○ > 314 mg/kg ◉ Unknown

Soil Concentrations of Naphthalene :

○ > 9.7 mg/kg and ≤ 45 mg/kg ○ > 45 mg/kg and ≤ 219 mg/kg ○ > 219 mg/kg ○ Unknown

Soil Concentrations of PAH :

○ > 0.063 mg/kg and ≤ 0,68 mg/kg ○ > 0.68 mg/kg and ≤ 4.5 mg/kg ○ > 4.5 mg/kg ○ Unknown

Area of Impacted Soil :

○ Area of Impacted Soil > 82 by 82 Feet ○ Unknown

Additional Information

Should this case be closed in spite of NOT meeting policy criteria? ◉ YES ○ NO

Explain:

Please see Site History Section of the CSM.

Has this LTCP Checklist been updated for FY 14/15? ◉ YES ○ NO

SPELL CHECK

Save Form as Partially Completed | Save Form as Complete

LOGGED IN AS KDETTERMAN

CONTACT GEOTRACKER HELP

ATTACHMENT 3
LTCP GROUNDWATER SPECIFIC CRITERIA

LTCP Groundwater Specific Scenario under which case was closed*:* Scenario 5

Site Data		LTCP Scenario 1 Criteria	LTCP Scenario 2 Criteria	LTCP Scenario 3 Criteria	LTCP Scenario 4 Criteria
Plume Length	<330 feet	<100 feet	<250 feet	<250 feet	<1,000 feet
Free Product	----	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 for minimum of 5 Years	Stable or decreasing
Distance to Nearest Water Supply Well	>1,300 feet	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet
Distance to Nearest Surface Water and Direction	Claremont Creek is 950 feet upgradient	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet
Property Owner Willing to Accept a Land Use Restriction?	----	Not applicable	Not applicable	Yes	Not applicable

GROUNDWATER CONCENTRATIONS

Constituent	Historic Site Maximum (µg/L)	Current Site Maximum (µg/L)	LTCP Scenario 1 Criteria (µg/L)	LTCP Scenario 2 Criteria (µg/L)	LTCP Scenario 3 Criteria (µg/L)	LTCP Scenario 4 Criteria (µg/L)
Benzene	----	----	No criteria	3,000	No criteria	1,000
MTBE	----	----	No criteria	1,000	No criteria	1,000
List other chemicals of specific concern	----	----				

Scenario 5: If the site does not meet scenarios 1 through 4, has 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?	Yes

Attachment 3 Comments:

Groundwater flow direction at the site is estimated to be to the southwest based on data from neighboring Fuel Leak Case (RO0003066) at 6501 Shattuck Ave, Oakland, located approximately 330 feet southwest and downgradient.

Depth to water in groundwater monitoring wells at neighboring Fuel Leak Case (RO0003066) located at 6501 Shattuck Ave, Oakland was found to fluctuate between 2.94 feet to 8.60 feet below ground surface (bgs).

Water Supply Wells in Vicinity:

No sensitive receptor survey has been performed for the site. However, a sensitive receptor survey conducted for nearby Fuel Leak Case (RO0000078) located at 6407 Telegraph Ave, Oakland indicated one irrigation well was located at 3215 Adeline Street, Berkeley, a distance of approximately 1,300 feet down gradient from the site. Based on the non-detect contaminant levels, this irrigation well is not expected to be a receptor for the site. No other supply wells were identified within 2,000 feet of the site.

A total of three soil samples were taken during the May 1985 UST removal: one beneath each of the two USTs and one below the product piping. Each soil sample was analyzed only for the volatile organic compounds (VOCs): benzene, toluene, and xylenes (BTX). Benzene was detected in all three soil samples, up to a maximum of 0.47 mg\kg, exceeding the benzene residential and commercial Environmental Screening Levels (ESLs) of 0.044 milligrams per kilogram (mg/kg) (San Francisco Bay Regional Water Quality Control Board, *Table A ESLs for Shallow Soil, Groundwater is Current or Potential Source of Drinking Water, December 2013)*. Toluene and total xylenes detections for the UST samples were less than the ESLs. Xylenes were detected in the product piping soil sample up to 26 mg/kg exceeding the ESL of 2.3 mg/kg.

Depth to groundwater ranged from approximately 2.9 to 8.6 feet bgs in groundwater monitoring wells at neighboring Fuel Leak Case (RO0003066). During the UST removal, groundwater was observed at 95 inches (7.9 feet) bgs and rising in the UST pit. Similarly, during the UST removal at neighboring Fuel Leak Case RO0003066, groundwater was observed in the UST pit at 11 feet bgs. Holes were observed in the product piping, but the USTs appeared to be intact and no odors or sheen were observed in the UST pit water. The primary source (two USTs and product piping) was removed and impacted soils aerated onsite for two weeks to reduce potential concentrations.

MTBE was not an analyte during the UST removal. However, analytical results from three groundwater monitoring wells at neighboring downgradient Fuel Leak Case RO0003066, 330 feet southwest of the site, were historically non-detect for TPHg, BTEX, and MTBE, suggesting a lack of impact from a potential contaminant plume emanating from RO0003045.

The UST and product piping removal (source removal), the lack of VOCs detected during the source removal, the onsite aeration of backfill, and the lack of downgradient off-site impact to neighboring Fuel Leak Case RO0003066 are lines of evidence that support probable low residual source mass and low potential impact to groundwater.

ATTACHMENT 4
LTCP VAPOR SPECIFIC CRITERIA

LTCP Vapor Specific Scenario under which case was closed: 3A

Not an Active Fueling Station	Active as of: ----

Site Data		LTCP Scenario 1 Criteria	LTCP Scenario 2 Criteria	LTCP Scenario 3A Criteria	LTCP Scenario 3B Criteria	LTCP Scenario 3C Criteria	LTCP Scenario 4 Criteria
Unweathered LNAPL	No LNAPL	LNAPL in groundwater	LNAPL in soil	No LNAPL	No LNAPL	No LNAPL	No criteria
Thickness of Bioattenuation Zone Beneath Foundation	<5 feet*	≥30 feet	≥30 feet	≥5 feet	≥10 feet	≥5 feet	≥5 feet
Total TPH in Soil in Bioattenuation Zone	----	<100 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg
Maximum Current Benzene Concentration in Groundwater	----	No criteria	No criteria	<100 µg/L	≥100 and <1,000 µg/L	<1,000 µg/L	No criteria
Oxygen Data within Bioattenuation Zone	No oxygen data	No criteria	No criteria	No oxygen data or <4%	No oxygen data or <4%	≥4% at lower end of zone	≥4% at lower end of zone
Depth of soil vapor measurement beneath foundation	----	No criteria	No criteria	No criteria	No criteria	No criteria	≥5 feet

SCENARIO 4 DIRECT MEASUREMENT OF SOIL VAPOR CONCENTRATIONS

Site Soil Vapor Data			No Bioattenuation Zone		Bioattenuation Zone	
Constituent	Historic Maximum ($\mu g/m^3$)	Current Maximum ($\mu g/m^3$)	Residential	Commercial	Residential	Commercial
Benzene	----	----	<85	<280	<85,000	<280,000
Ethylbenzene	----	----	<1,100	<3,600	<1,100,000	<3,600,000
Naphthalene	----	----	<93	<310	<93,000	<310,000

If the site does not meet scenarios 1 through 4, does a site-specific risk assessment for the vapor intrusion pathway demonstrate that human health is protected?	----
If the site does not meet scenarios 1 through 4, has a determination been made that petroleum vapors from soil or groundwater will have no significant risk of adversely affecting human health?	Yes

* Based on data for neighboring downgradient Fuel Leak Case RO0003066 located 330 feet southwest of the site.

The primary source (two USTs and product piping) was removed and excavated backfill was aerated onsite for two weeks to reduce potential concentrations prior to use as UST backfill in addition with clean fill material. Volatiles (benzene, toluene, and xylenes) in the three soil samples do not support the presence of a source mass with adequate magnitude or lateral extent to suspect a vapor intrusion risk.

ATTACHMENT 5
LTCP DIRECT CONTACT AND OUTDOOR AIR EXPOSURE CRITERIA

LTCP Direct Contact and Outdoor Air Exposure Specific Scenario under which case was closed:
A determination has been made that the concentrations of petroleum in soil will have no significant risk of adversely affecting human health.

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	----	----	0.47	0.25	0.47
LTCP Criteria	Benzene	≤1.9	≤2.8	≤8.2	≤12	≤14
Site Maximum	Ethylbenzene	----	----	---- *	---- *	---- *
LTCP Criteria	Ethylbenzene	≤21	≤32	≤89	≤134	≤314
Site Maximum	Naphthalene	----	----	---- *	---- *	---- *
LTCP Criteria	Naphthalene	≤9.7	≤9.7	≤45	≤45	≤219
Site Maximum	PAHs	----	----	---- *	---- *	---- *
LTCP Criteria	PAHs	≤0.063	NA	≤0.68	NA	≤4.5
If maximum concentrations are greater than those in Table 1, are they less than levels from a site-specific risk assessment?		----				
If maximum concentrations are greater than those in Table 1, has a determination 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?		----				

*Ethylbenzene was not analyzed in soil for the tank removal. Ethylbenzene concentrations theoretically would be less than benzene concentrations based on average weight percent composition of gasoline. The State Water Resource Control Board's *Leaking Underground Fuel Tank Guidance Manual* CA LUFT (September 2012) indicates that fresh gasoline contains an average of 1.7% by weight of ethylbenzene and an average of 2.0% by weight of benzene. Because benzene concentrations did not exceed the LTCP Table 1 Criteria, it is expected that ethylbenzene concentrations, if present, would similarly not exceed the LTCP Table 1 Criteria.

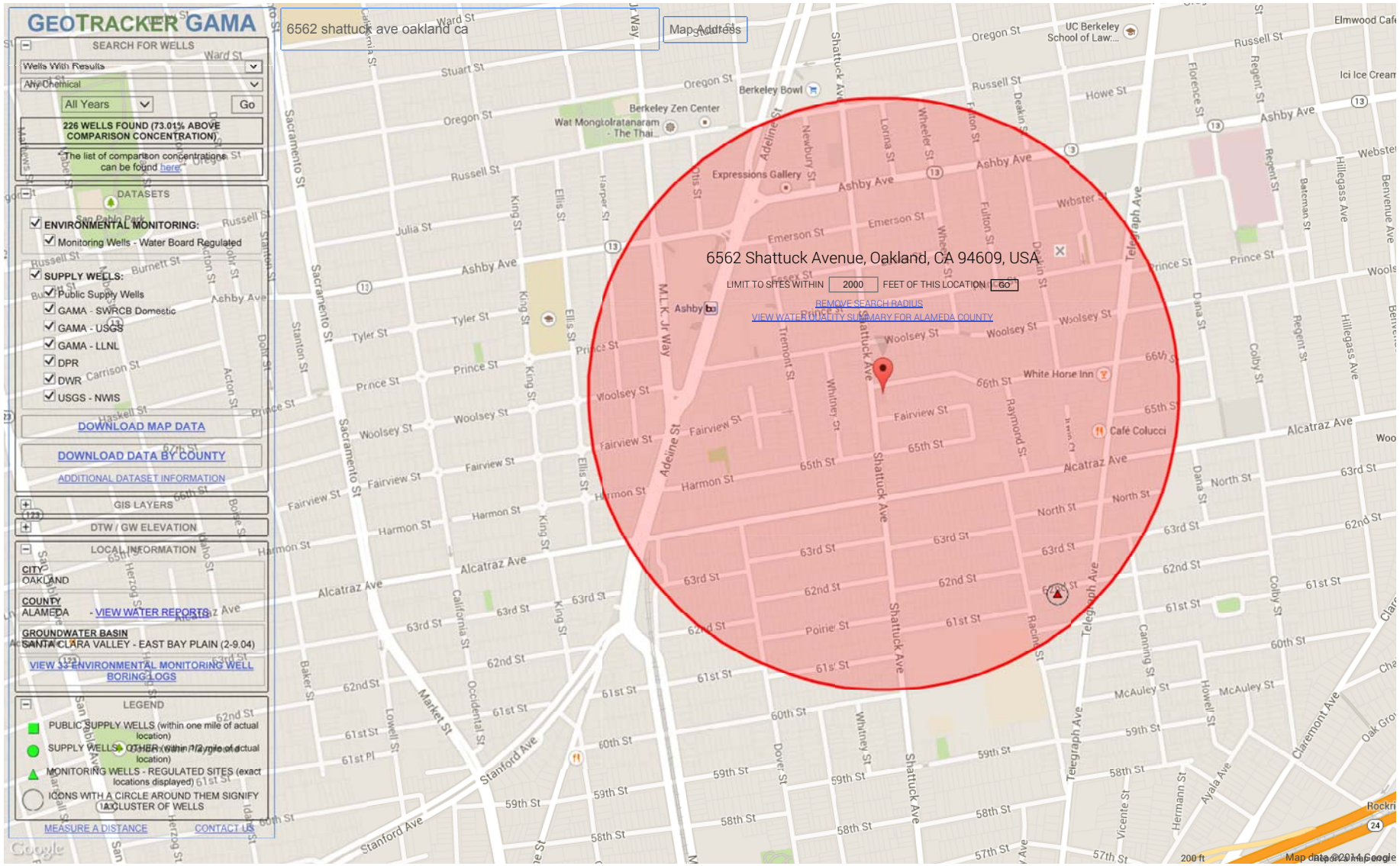
Naphthalene was not included in the analysis of soil samples collected at the site. This apparent data gap can be addressed using the published relative concentrations of naphthalene and benzene in gasoline. This approach has been used by SWRCB staff in recent Closure Orders pursuant to the Policy (e.g., SWRCB WQ Order 2013-0003): Gasoline mixtures contain an average of approximately 2% benzene and 0.25% naphthalene (Potter and Simmons 1998); therefore, benzene concentrations can be directly substituted for naphthalene concentrations with a safety factor of about 10. The maximum benzene concentrations from the Site are less than the naphthalene criteria in Table 1 of the Policy. Therefore, the estimated naphthalene concentrations at the Site meet the Policy criteria for direct contact by a factor of about 10. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the Policy criteria. Soil samples were not analyzed for PAHs as there was no waste oil UST.

ATTACHMENT 6

Google earth

feet 400
meters 100

Image date 6/2014



LOCATIONS FOUND

▲ 226 WELL CLUSTER [ZOOM IN ON LOCATION] [VIEW WELLS IN CLUSTER]

Google earth

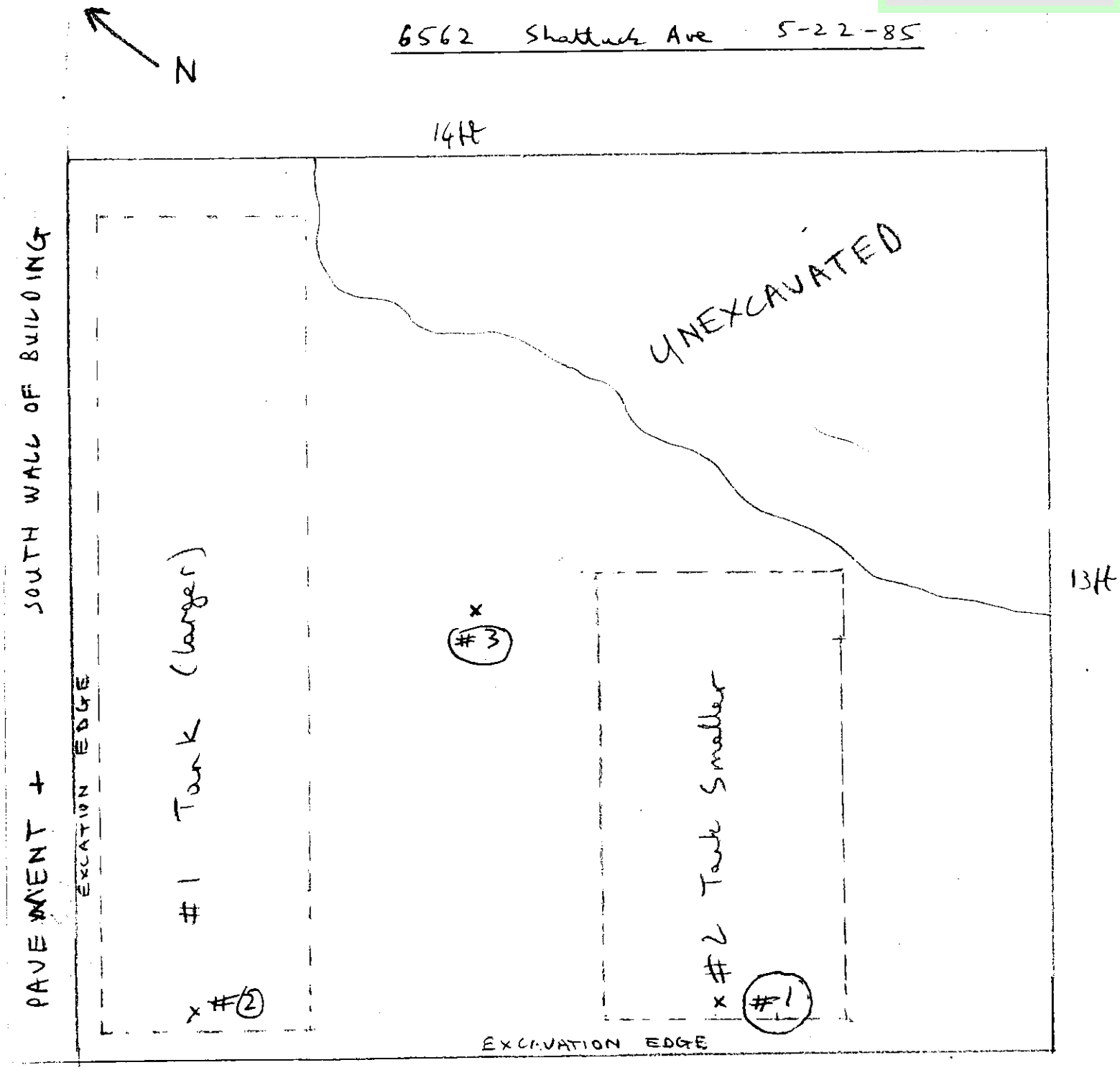
feet 10

meters 5

Image date 4/2011

SAMPLING SKETCH

6562 Shattuck Ave 5-22-85



Bottom of #1 tank 83" below grade (1000 gal)
Bottom of #2 tank 88" below grade (550 gal)

Sample #1 90" below grade
Sample #2 88" " "
Sample #3 48" " " } in undisturbed ground

Drawn by Trevor Pitts of Zero Waste Systems Inc On-site

ATTACHMENT 7

WALKER'S HYDRAULICS

250 KEATS CIRCLE / PLEASANT HILL, CA 94523 / 935-5518

July 3, 1985

Mr. Ken Beesen
Shattuck Import Service
6562 Shattuck Ave.
Oakland, Ca. 94609

Re: Removal of gasoline storage tanks.

Dear Mr. Beesen,

The following is a list of procedures we followed on removal of your gasoline storage tank as requested by the City of Oakland Fire Dept.:

1.. Notified city Fire Marshall and obtained permit.
2. At the time of excavation , we found several holes in the gasoline product lines allowing product to go into backfill area. We notified Mr. Gordon Gullett of Oakland Fire Dept and Mr. Dale Bowyer of the Regioal Water Resources Board. They asked that soil samples be taken.
3. Tanks were removed and disposed of. Soil samples (see attached sampling sketch) were taken (see lab report).
4. During the 2 week wait for the lab report, we spread the excavated backfill around the lot to evaporate and dry. The soil was stirred every other day and spread at a depth of 12-16 in.
5. Lab report showed a max. of 42 P.P.M.
6. Upon receiving lab report, I contacted Mr. Peter Johnson of the Regional Water Board. He said that the above measures were adequate and to go ahead and fill the excavated site and pour a slab.

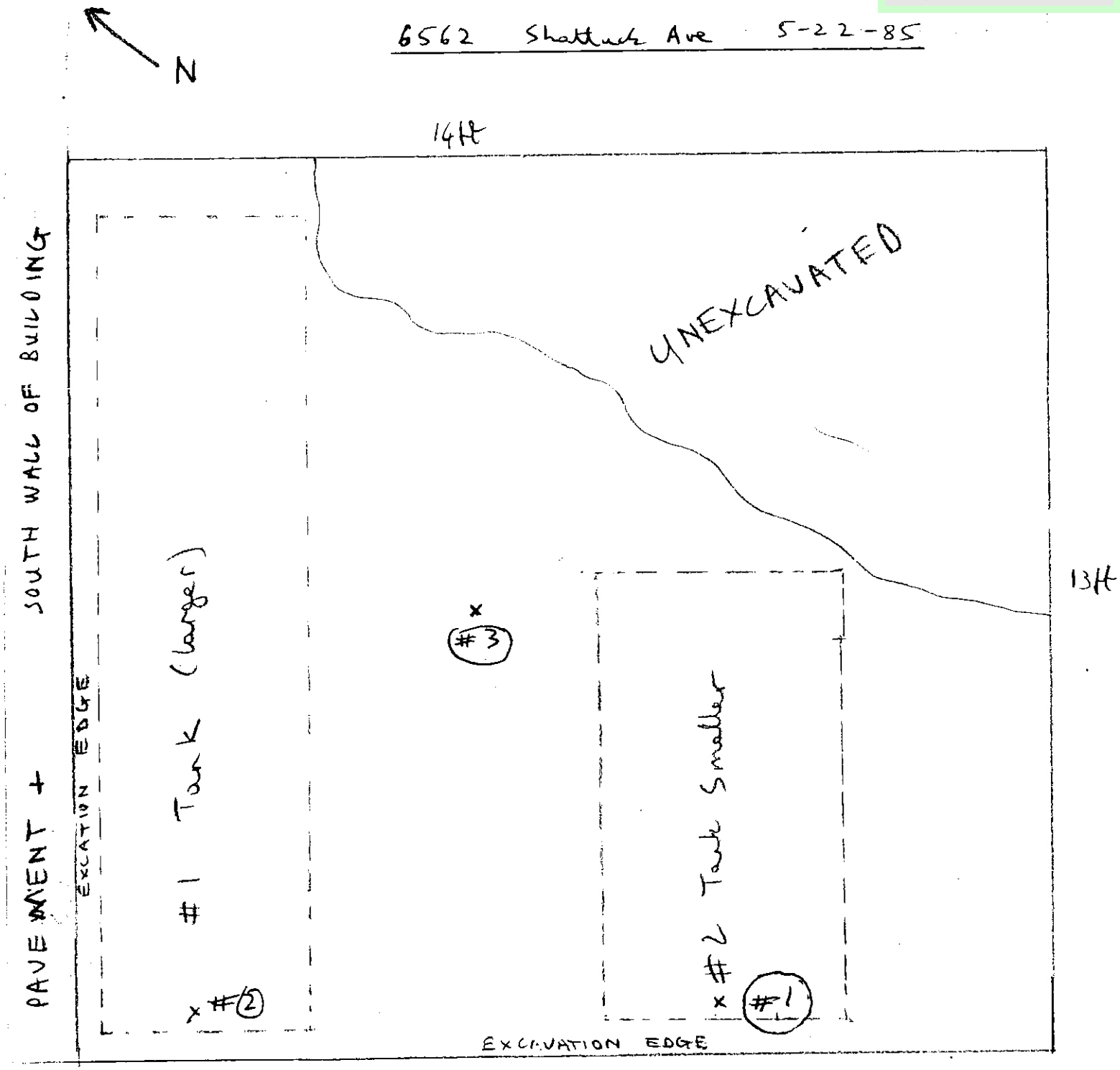
Thank you for your patience with us on this project.

Sincerely,

Raymond E. Walker

SAMPLING SKETCH

6562 Shattuck Ave 5-22-85



Bottom of #1 tank 83" below grade (1000 gal)
Bottom of #2 tank 88" below grade (550 gal)

Sample #1 90" below grade
Sample #2 88" " "
Sample #3 48" " " } in undisturbed ground

Drawn by Trevor Pitts of Zero Waste Systems Inc On-site

BROWN AND CALDWELL

ANALYTICAL LABORATORIES

LOG NO: E85-05-348

Received: 22 MAY 85
Reported: 07 JUN 85

Trevor Pitts
Zero Waste
2928 Poplar Street
Oakland, California 94608

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, SOIL SAMPLES	DATE SAMPLED
05-348-1	#1 Bottom	22 MAY 85
05-348-2	#2 Bottom	22 MAY 85
05-348-3	#3 Bottom	22 MAY 85

PARAMETER	05-348-1	05-348-2	05-348-3	
Fuel Aromatics/Hydrocarbons				
Benzene, mg/kg	0.25	<0.08	0.47	
Total Fuel Hydrocarbons, mg/kg	1.2	0.3	42	
Toluene, mg/kg	0.18	0.13	1.6	
Total Xylene Isomers, mg/kg	0.5	<0.2	26	

James Hatfield, Laboratory Director

ZERO WASTE SYSTEMS, Inc.
2928 Poplar St. • Oakland, CA 94608
(415) 893-8257

ANALYSIS AND CHAIN OF CUSTODY FORM

Source of material: Shattuck Import Service 652-1397 Excavation - underground tanks
6562 Shattuck Ave Oakland 94609

Owner or generator:
Kenneth Beesen

Who will be billed? Include billing address.
Kenneth Beesen

Comments: Two tanks removed. Water level in excavation about 95" below grade + rising. Samples capped + refrigerated immediately. Odor + information from excavators indicated leaks in pipework at the west end of the tanks. Samples chosen to be "worst case". Ground water shows no gasoline sheen or odor.

Expected material:
Gasoline in soil (see sketch)

Sample Code or ID
#1, #2, #3

Actual material: (Attach any documentation or printouts to this form.)

Sampled by: TREVOR PITTS (ZWS)

Date: 5-22-85

Time: 4.30 pm

From: (type of container or area) See Sketch

Sampling method: Core sample of soil - core hammer

Released by: (owner signature and print name)
Kenneth E. Beesen
KENNETH E. BEESEN

To custody of: (signature and print name)
Trevor
TREVOR PITTS

Moved where? To Brown + Caldwell Emeryville

Date: 5-22-85

Time: 4.50 pm left site

Route or shipper: ZWS

To custody of: Brown + Caldwell

Comments: Fuel BTX analysis

Signature and print name Hedy J. Ficklin HEDY J. FICKLIN 5/22-85 511PM

Moved where?

Date:

Time:

Route or shipper:

To custody of:

Comments:

Signature and print name