ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
REBECCA GEBHART, Acting 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

March 29, 2016

Neil & Linda Mussallem
PO Box 66
Gilroy, CA 95020

Griffin Capital Investors LLC
c/o Julie Treinen
6601-6603 Shellmound Street
Emeryville, CA 94608
(sent via electronic mail to:
jtreinen@griffincapital.com)

SAP (Sybase Inc.)
c/o Dwain Christensen
3410 Hillview Avenue
Palo Alto, CA 94304
(sent via electronic mail to:
dwain.christensen@sap.com)

Wintzen Inc.
c/o Jacon Warren
6601 Shellmound Street

Griffin Capital (The Atrium) Investor 20
2321 Rosecrans, Suite 3290
El Segundo, CA 90245
Emeryville, CA 94608

Subject: Case Closure for Fuel Leak Case No. RO0000042 and Geotracker Global ID T0600100825, Mussallem / Sybase, 6601 Bay (Shellmound) Street, Emeryville, CA 94608

Dear Ladies and Gentlemen:

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
Acting Director

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
REBECCA GEBHART, Acting Director

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

March 29, 2016

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PO Box 66
Gilroy, CA 95020

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Subject: Case Closure for Fuel Leak Case No. RO0000042 and Geotracker Global ID T0600100825, Mussallem / Sybase, 6601 Bay (Shellmound) Street, Emeryville, CA 94608

Dear 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 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 Alameda County Department of Environmental Health 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. Site Management Requirements are further described in the Site Management Requirements section of the attached Case Closure Summary.

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

Sincerely,

Dilan Roe

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

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

Cc w/enc.:

City of Emeryville, Public Works Department, 1333 Park Avenue, Emeryville CA 94608
(sent via electronic mail to: mroberts@emeryville.org)

Rob Hansen, Sybase, One Sybase Drive, Dublin, CA 94568
(sent via electronic mail to robert.hansen@sybase.com

Brad McInroy, Sybase, One Sybase Drive, Dublin, CA 94568
(sent via electronic mail to brad@sybase.com)

Paul Mahoney, Sybase, One Sybase Drive, Dublin, CA 94568
(sent via electronic mail to Paul.Mahoney@sybase.com

Todd Maiden, Esq., Reed Smith LLP, 101 Second Street, Suite 1800, San Francisco, CA 94105
(sent via electronic mail to tmaiden@reedsmith.com)

Michelle King, Erler & Kalinowski, Inc, 1870 Ogden Drive, Burlingame, CA 94010
(sent via electronic mail to mkking@ekiconsult.com)

Jeff Shaw, Erler & Kalinowski, Inc, 1870 Ogden Drive, Burlingame, CA 94010
(sent via electronic mail to jshaw@ekiconsult.com)

Ms. Denise Pingston, TMG Partners, 100 Bush St. #2600, San Francisco, CA 94104
(sent via electronic mail to dpingston@tmgpartners.com)

Chris Baldassari, PES Environmental, Inc, 1682 Novato Blvd, Suite 100, Novato, CA 94947
(sent via electronic mail to cbaldassari@pesenv.com)

Robert Creps PES Environmental, Inc, 1682 Novato Blvd, Suite 100, Novato, CA 94947
(sent via electronic mail to RCreps@pesenv.com)

Dilan Roe, ACDEH, (sent via electronic mail to dilan.roe@acgov.org)
Mark Detterman, ACDEH, (sent via electronic mail to mark.detterman@acgov.org)
Geotracker, Electronic File

Underground Storage Tank
Case Closure Summary Form

Agency Information

Date: February 18, 2016

Alameda County 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: Mussallem / Sybase		
Facility Address: 6601 Bay (Shellmound) Street, Emeryville, CA 94608		
Regional Water Board LUSTIS Case No: 01-0896	Former ACDEH Case No.: 3696	Current LUST Case No.: RO0000042
Unauthorized Release Form Filing Date: 8/30/1989	State Water Board GeoTracker Global ID: T0600100825	
Assessor Parcel Number: 49-1490-3	Current Land Use: Commercial	
Responsible Party(s):	Address:	Phone:
Neil & Linda Mussallem	PO Box 66 Gilroy, CA 95020	----
Griffin Capital Investors, LLC c/o Julie Treinen	6601 – 6603 Shellmound Street Emeryville, CA 94608	----
SAP America, Inc. (Sybase, Inc.) c/o Dwain Christensen	3410 Hillview Avenue Palo Alto, CA 94304	----
Wintzen Inc c/o Jacon Warren	6601 Shellmound Street Emeryville, CA 94608	----

Tank Information

Tank No.	Size (gal)	Contents	Closed in-Place / Removed	Date
---	6,000-gallon	Diesel	Removed	October 10, 1989

Underground Storage Tank
Case Closure Summary Form

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 for the current commercial land use scenario.

Case closure is granted for the current commercial land use.

Refer to Attachments 1 through 5 for analysis details.

Site Management Requirements

Case closure is granted for the current commercial land use.

Due to residual subsurface contamination remaining at the site (elevated soil contamination and pockets of free phase in soil and non-mobile in groundwater), if any redevelopment occurs, including building footprint modifications, or if a 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 Emeryville Permit Tracking System due to the residual contamination on site.

Institutional Controls

See above.

Engineering Controls

Not Applicable

Underground Storage Tank
Case Closure Summary Form

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 Emeryville	City of Emeryville Planning Division 1333 Park Avenue Emeryville, CA 94608
Public Works Agency	City of Emeryville	Michael Roberts City of Emeryville Public Works Division 1333 Park Avenue Emeryville, CA 94608
Owners and Occupants of Property and Adjacent Parcels	See List in Attachment 7	----

Local Agency Signatures

Case Worker: Mark Detterman	Title: Senior Hazardous Materials Specialist
Signature:	Date:
Program Manager: Dilan Roe	Title: LOP and SCP Program Manager
Signature:	Date:

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.

Geotracker Conceptual Site Model (Attachment 1, 1 page)

Geotracker LTCP Checklist (Attachment 2, 1 page)

Groundwater Evaluation and Data (Attachment 3, 20 pages)

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

Soil Evaluation and Data (Attachment 5, 15 pages)

Responsible Party Information (Attachment 6, 10 pages)

Case Closure Public Notification Information (Attachment 7, 2 pgs)

ATTACHMENT 1

CSM Report Go

GEOTRACKER HOME | MANAGE PROJECTS | REPORTS | SEARCH | LOGOUT

MUSSALLEM / SYBASE (T0600100825) - MAP THIS SITE

OPEN - ELIGIBLE FOR CLOSURE

6601 BAY STREET
EMERYVILLE , CA 94608
ALAMEDA COUNTY

VIEW PRINTABLE CASE SUMMARY FOR THIS SITE

ACTIVITIES REPORT

PUBLIC WEBPAGE

CLEANUP OVERSIGHT AGENCIES
ALAMEDA COUNTY LOP (LEAD) - CASE #: RO0000042
CASEWORKER: MARK DETTERMAN - SUPERVISOR: DILAN ROE
SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 01-0896
CASEWORKER: Regional Water Board - SUPERVISOR: NONE SPECIFIED

CR Site ID #: N

THERE ARE 2 OTHER CASES ASSOCIATED WITH THIS CASE - SHOW

THIS PROJECT WAS LAST MODIFIED BY MARK DETTERMAN ON 3/29/2016 6:05:29 PM - HISTORY

THIS SITE HAS SUBMITTALS. CLICK HERE TO OPEN A NEW WINDOW WITH THE SUBMITTAL APPROVAL PAGE FOR THIS SITE.

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
7737	B	N.P. & LINDA MUSSALLEM P O BOX 66, GILROY CA 95021-0066	6601 BAY ST EMERYVILLE, CA 94608								

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

SITE NAME / ADDRESS	STATUS	STATUS DATE	RELEASE REPORT DATE	AGE OF CASE	CLEANUP OVERSIGHT AGENCIES
MUSSALLEM / SYBASE (Global ID: T0600100825) 6601 BAY STREET EMERYVILLE, CA 94608	Open - Eligible for Closure	6/12/2015	8/30/1989	27	ALAMEDA COUNTY LOP (LEAD) - CASE #: RO0000042 CASEWORKER: MARK DETTERMAN - SUPERVISOR: DILAN ROE SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 01-0896 CASEWORKER: Regional Water Board - SUPERVISOR: NONE SPECIFIED

STAFF NOTES (INTERNAL)
Not all historic documents for the fuel leak case may be available on GeoTracker. A complete case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp.

SITE HISTORY
Not all historic documents for the fuel leak case may be available on GeoTracker. A complete case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp.

Prior to the 1930's the site was in the San Francisco Bay; until the early 1950's the site was a part of the City of Emeryville municipal waste landfill. The site has been a commercial facility since at least the 1960's. Three adjacent USTs were removed between August and October 1989 (one diesel in August, two gasoline USTs in October); black petroleum product is reported to have flowed from the south wall of the excavation adjacent to the diesel UST. An estimated 2,000 gallons of product was removed from the excavations. Limited overexcavation may have occurred between August 1989 and February 1990 when the excavations were backfilled; the records are unclear. Impacts to soil and groundwater have been characterized as oil and grease, extractable hydrocarbons (TPHd), purgeable hydrocarbons (TPHg), and BTEX. In January 1990 seven bores were installed (B-1 to B-7). Two offsite wells (adjacent property; MW-5 and MW-7; 50 to 75 feet distant) have been used since 1989 in an attempt to help define groundwater. The wells were sampled regularly between November 1989 and June 1997. In June 1996 six soil bores (SB-1 to SB-6) were installed. Preferential pathway and sensitive receptor surveys were conducted in May 2010. Soil bores SB-7 to SB-9 were also installed to collect soil samples, and soil bores GGW-1 to GGW-4 were installed to collect grab groundwater samples. In December 2011 four sub-slab vapor points were installed and sampled beneath the building located at the site, and at the offsite downgradient building. An additional sub-slab vapor was collected approximately six months later in May 2012 beneath the downgradient building. A third vapor monitoring round at the downgradient building was conducted in December 2014.

The site appears eligible for closure under the LTCP. It meets all General Criteria. The site qualifies for closure under Class 5 of the Groundwater Media Specific Criteria due to the presence of free product in pockets in soil in the vicinity of the former USTs. Additionally, based on grab groundwater sample concentrations free product (LNAPL) may also be present in limited qualities in groundwater on- and offsite in close proximity to the former UST locations. This LNAPL does not appear to be mobile based on analytical concentrations in wells MW-5 and MW-7 that are located between the former UST excavation and the downgradient offsite building. Consequently a commercial / industrial land use restriction has been placed on the subject property. Additionally a pre-existing commercial / industrial land use restriction was placed on the adjacent downgradient property at the time of the closure of that UST case (Emery Bay Plaza, RO0000440; T0600100511) and is expected to manage contamination at that offsite downgradient location. The site meets the Vapor Intrusion Media Specific Criteria by Class 2c, controlling exposure by use of mitigation measures and institutional controls. The site also meets the Direct Contact and Outdoor Air Criteria by meeting the concentrations contained in Table 1 of the LTCP.

Not all historic documents for the fuel leak case may be available on GeoTracker. A complete case file for this site is located on the Alameda County Environmental Health website at: http://ehgis.acgov.org/dehpublic/dehpublic.jsp.

RESPONSIBLE PARTIES

NAME	ORGANIZATION	ADDRESS	CITY	EMAIL
DWAIN CHRISTENSEN	SAP AMERICA, INC.	3410 HILLVIEW AVENUE	PALO ALTO	
JACON WARREN	WINTZEN INC	6601 SHELLMOUND ST	EMERYVILLE	
JULIE TREINEN	GRIFFIN CAPITAL INVESTORS LLC	6601-6603 SHELLMOUND	EMERYVILLE	
NEIL & LINDA MUSSALLEM	NONE	PO BOX 66	GILROY	

CLEANUP ACTION INFO

ACTION TYPE	BEGIN DATE	END DATE	PHASE	CONTAMINANT MASS REMOVED	DESCRIPTION
UNKNOWN	8/23/1989	8/30/1989	Soil		

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	Commercial	GW - Municipal and Domestic Supply		8/30/1989	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	NO	EBMUD	8/26/2015	12/15/2015	1/6/2015		

CDPH WELLS WITHIN 1500 FEET OF THIS SITE
NONE

CALCULATED FIELDS (BASED ON LATITUDE / LONGITUDE)

APN	GW BASIN NAME	WATERSHED NAME
049 149000300	Santa Clara Valley - East Bay Plain (2-9.04)	Bay Bridges - Berkeley (203.30)

COUNTY: Alameda

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

MOST RECENT CONCENTRATIONS OF PETROLEUM CONSTITUENTS IN GROUNDWATER - HIDE | VIEW ESI SUBMITTALS

FIELD PT NAME	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	MTBE	TBA
GGW-1	3/6/2010		56 UG/L	2.7 UG/L	2.2 UG/L	OTHER	1.4 UG/L	11 UG/L
GGW-2	3/6/2010		0.9 UG/L	ND	ND	OTHER	ND	ND
GGW-3	3/6/2010		2.1 UG/L	ND	ND	OTHER	ND	ND
GGW-4	4/9/2010		ND	ND	ND	OTHER	ND	ND

MOST RECENT CONCENTRATIONS OF PETROLEUM CONSTITUENTS IN SOIL - HIDE | VIEW ESI SUBMITTALS

FIELD PT NAME	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	MTBE	TBA
SB-7	4/9/2010		12 UG/KG	ND	14 UG/KG		ND	ND
SB-8	4/9/2010		ND	ND	ND		ND	ND
SB-9	4/9/2010		7.7 UG/KG	ND	ND		ND	ND

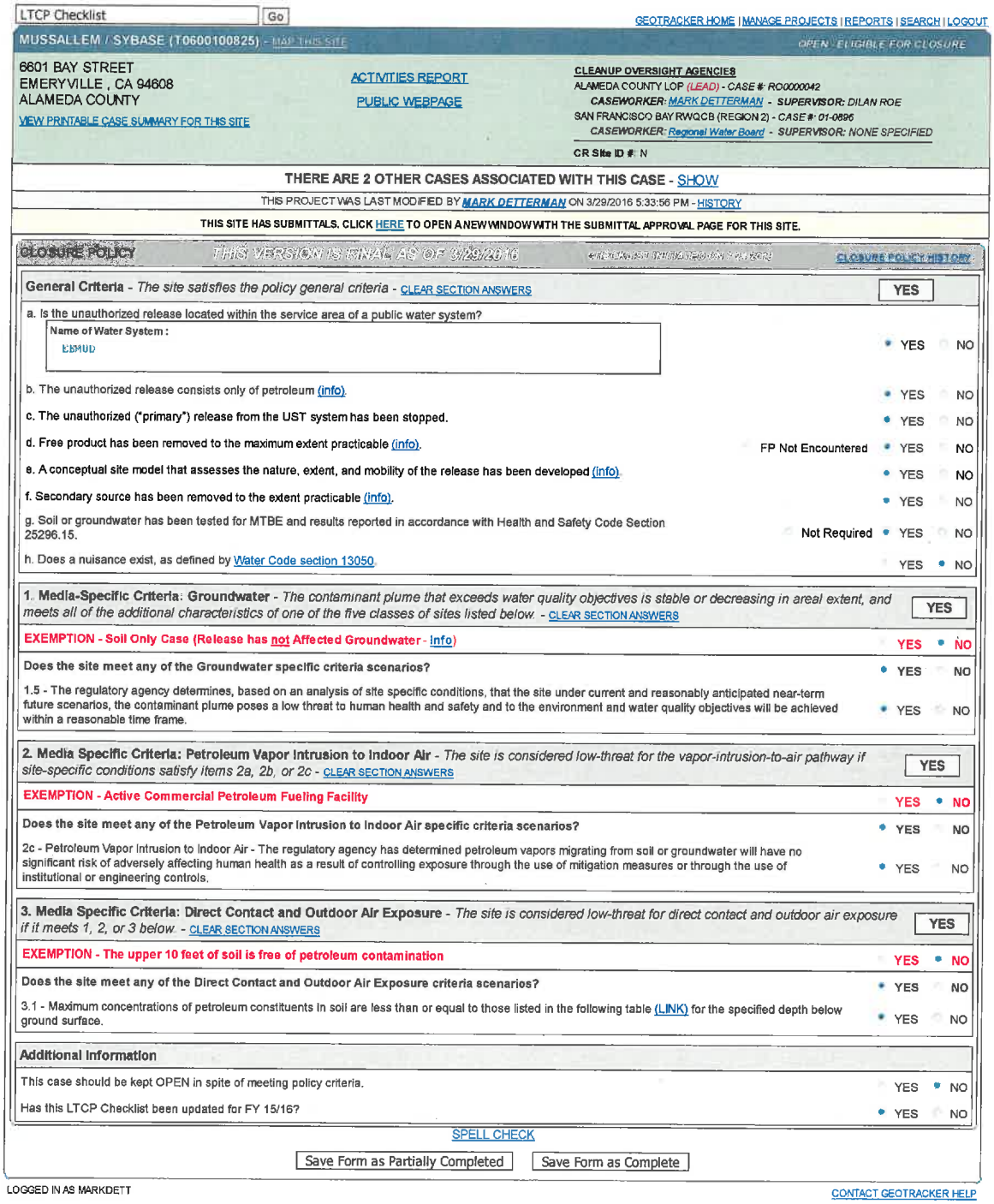
MOST RECENT GEO_WELL DATA - HIDE | VIEW ESI SUBMITTALS

NO GEO_WELL DATA HAS BEEN SUBMITTED TO GEOTRACKER ESI FOR THIS SITE

LOGGED IN AS MARKDETT

CONTACT GEOTRACKER HELP

ATTACHMENT 2



LTCP Checklist Go

GEOTRACKER HOME | MANAGE PROJECTS | REPORTS | SEARCH | LOGOUT

MUSSALLEM / SYBASE (T0600100825) - MAP THIS SITE — OPEN - ELIGIBLE FOR CLOSURE

6601 BAY STREET
EMERYVILLE , CA 94608
ALAMEDA COUNTY
VIEW PRINTABLE CASE SUMMARY FOR THIS SITE

ACTIVITIES REPORT
PUBLIC WEBPAGE

CLEANUP OVERSIGHT AGENCIES
ALAMEDA COUNTY LOP (LEAD) - CASE #: RO0000042
CASEWORKER: MARK DETTERMAN - SUPERVISOR: DILAN ROE
SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: 01-0696
CASEWORKER: Regional Water Board - SUPERVISOR: NONE SPECIFIED
CR Site ID #: N

THERE ARE 2 OTHER CASES ASSOCIATED WITH THIS CASE - SHOW

THIS PROJECT WAS LAST MODIFIED BY MARK DETTERMAN ON 3/29/2016 5:33:56 PM - HISTORY

THIS SITE HAS SUBMITTALS. CLICK HERE TO OPEN A NEW WINDOW WITH THE SUBMITTAL APPROVAL PAGE FOR THIS SITE.

CLOSURE POLICY — THIS VERSION IS FINAL AS OF 3/29/2016 — CLOSURE POLICY HISTORY

General Criteria - *The site satisfies the policy general criteria* - CLEAR SECTION ANSWERS — YES

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). — • 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 - The regulatory agency has determined petroleum vapors migrating from soil or groundwater 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 or engineering controls. — • 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

3.1 - Maximum concentrations of petroleum constituents in soil are less than or equal to those listed in the following table (LINK) for the specified depth below ground surface. — • YES ○ NO

Additional Information

This case should be kept OPEN in spite of meeting policy criteria. — ○ YES • NO

Has this LTCP Checklist been updated for FY 15/16? — • YES ○ NO

SPELL CHECK

Save Form as Partially Completed | Save Form as Complete

LOGGED IN AS MARKDETT — CONTACT GEOTRACKER HELP

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**						
Evaluation Criteria: Shading indicates criteria met						
Site Specific Data		**Scenario 1**	**Scenario 2**	**Scenario 3**	**Scenario 4**	**Scenario 5**
Plume Length	~ 500 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)	> 1,700 feet (DWR / ACPWA) >2,000 (GAMA)	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet	
Distance to Nearest Surface Water Body (from plume boundry)	Downgradient: 660 feet Cross Gradient: 1,700 feet Upgradient: 1,900 feet	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet	
Benzene Concentrations (µg/l)	Historic Max: <50,000 (grab) Current Max: <1.0	No criteria	<3,000	<1,000	<1,000	
MTBE Concentrations (µg/l)	Historic Max: 15 Current Max: <1.0	No criteria	<1,000	<1,000	<1,000	
Property Owner Willing to Accept a Land Use Restriction	Yes	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	Defined to water quality objectives by wells MW-3, MW-5, and MW-7. Contaminant plume that exceeds water quality objectives is approximately 500 feet in length.
Free Product	Appears to be present in pockets in soil in the vicinity of the former USTs; however, based on grab groundwater sample concentrations free product may also be present in limited qualities in groundwater on- and offsite in close proximity to the former UST locations. This LNAPL does not appear to be mobile based on analytical concentrations in wells MW-5 and MW-7 that are located between the former UST excavation and the downgradient offsite building. A commercial / industrial land use restriction has been placed on the property due to the presence of elevated hydrocarbon concentrations in soil, free product in pockets of soil beneath the site, and in groundwater in close proximity to the former UST locations. 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.
Plume Stability	Plume is stable in aerial extent based on a number of years of monitoring, including recent concentration trends. (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 and irrigation wells within 1,700 feet of the plume boundary. 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 site is on developed lands within the historic former margin of the San Francisco Bay. San Francisco Bay is approximately 660 feet downgradient to the southwest of the defined plume edge. The former outlet of Derby Creek to San Francisco Bay is approximately 1,700 feet crossgradient to the southeast. Derby Creek is also approximately 1,900 feet upgradient to the east.

Notes:

1. All locations are approximate.

0 2500 5000

(Approximate Scale in Feet)

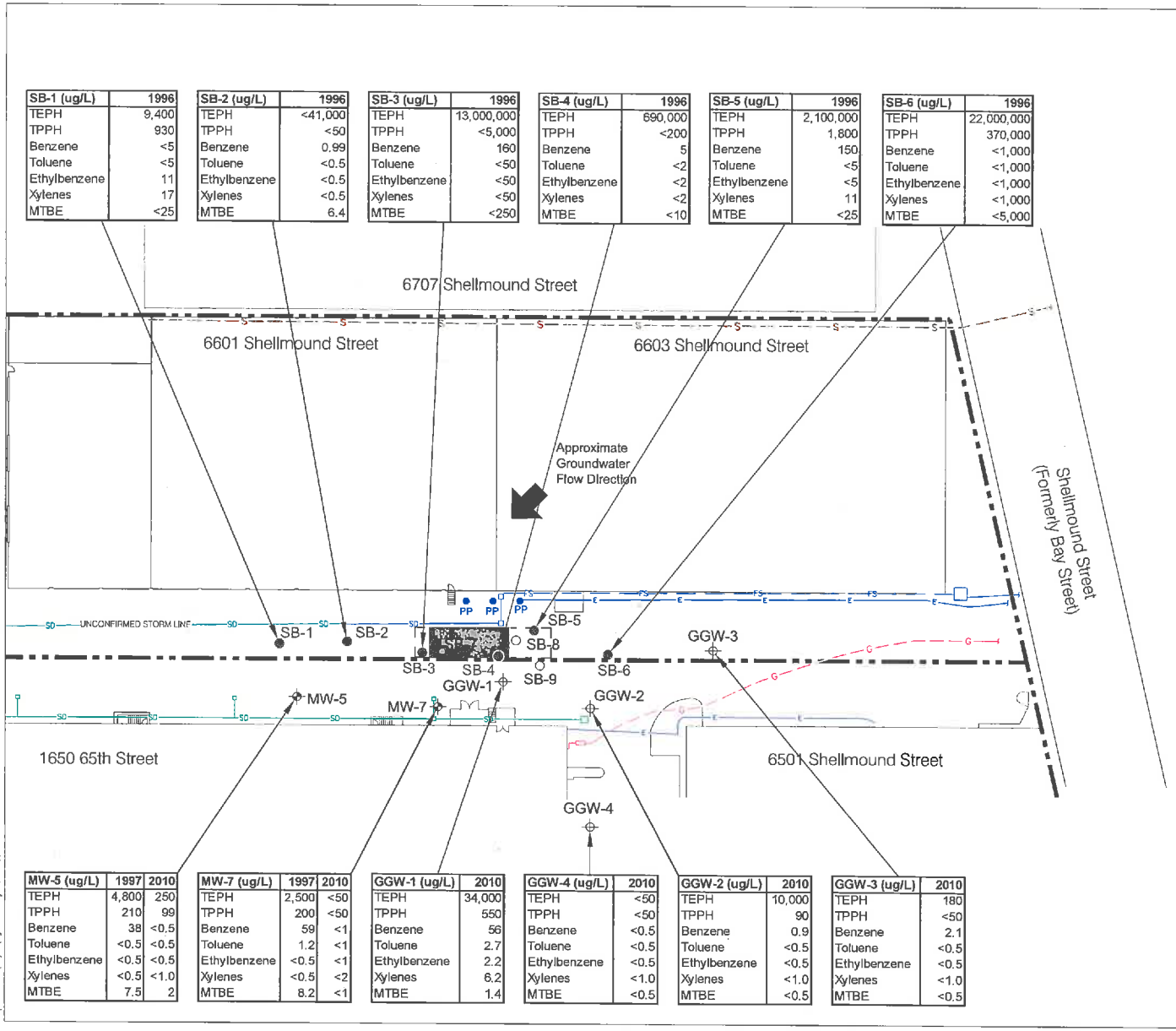
N

Erler & Kalinowski, Inc.

Site Location Map

6601/6603 Shellmound Street
Emeryville, CA
July 2012
EKI 950074.05

Figure 1



0 50 100
(Approximate Scale in Feet)

N

Legend:

- Property Boundary
- Approximate Tank Area
- Approximate Excavation Area (as depicted in Dubovsky and Petite, 1990)
- Off-Site Monitoring Well Location
- Soil Boring Location (1996)
- Soil Boring Location (2010)
- Grab Groundwater Sampling Location (2010)
- Power Pole (PP)
- Storm Drain Line
- Fire Service Line
- Sanitary Sewer Line
- Electrical Line
- Gas Line

Abbreviations:

ug/L = micrograms per Liter
MTBE = Methyl Tertiary Butyl Ether
TEPH = Total Extractable Petroleum Hydrocarbons
TPPH = Total Purgeable Petroleum Hydrocarbons

Notes:

1. All locations are approximate.
2. Basemap source: Digitized from Alta Land Survey Title Map (undated).
3. Posted groundwater data are from the 6 March 2010 and 9 April 2010 sampling event. Previous groundwater investigation were conducted in 1996 and 1997.

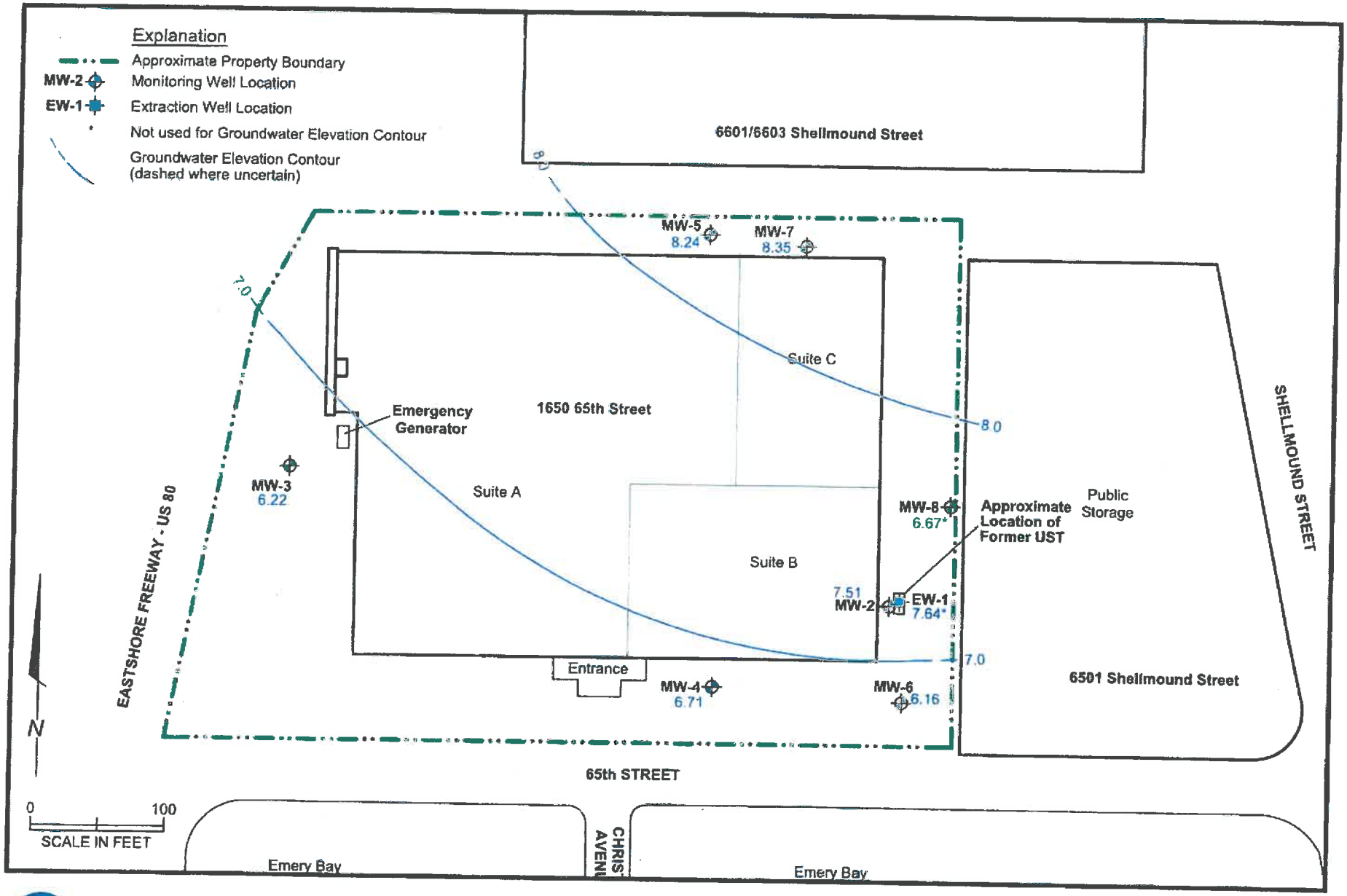
Erler & Kalinowski, Inc.

Groundwater Sampling Results

6601/6603 Shellmound Street
Emeryville, CA
May 2010
EKI 950074.05

Figure 2

G:\950074.05\Vasy10\Figure 02.dwg 5-14-10



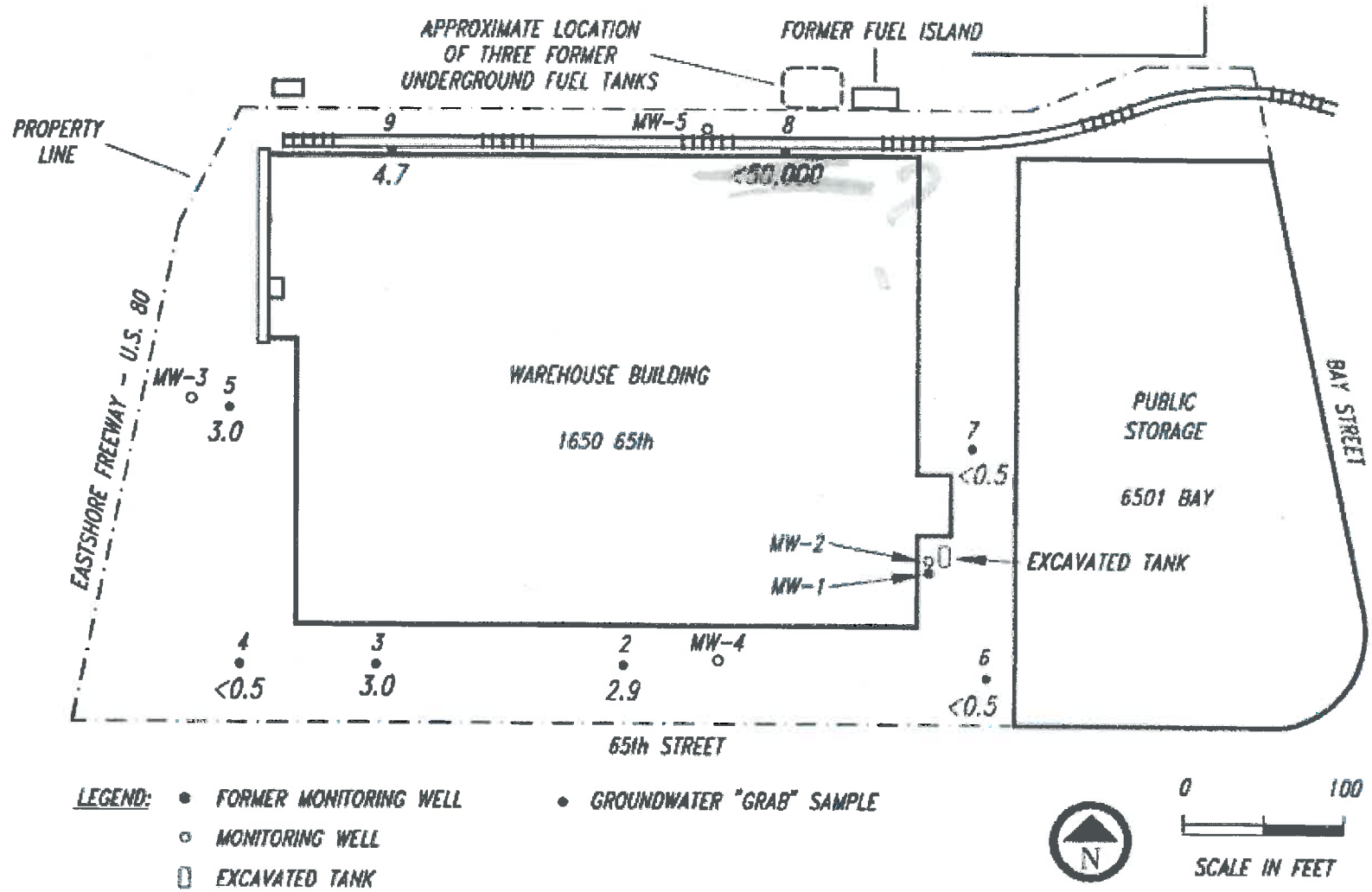
PES Environmental, Inc.
Engineering & Environmental Services

Groundwater Elevation Contours on November 17, 2011
1650 65th Street
Emeryville, California

PLATE 3

1211.001.01.003	121100101003_11Q4_1-4	CJB	1/12
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

BENZENE CONCENTRATIONS
GROUNDWATER "GRAB" SAMPLE SURVEY
1650 65th Street Property
10 NOVEMBER 1989(ug/L)



C107-06.R2 11/20/88

ENGINEERING–SCIENCE

FIGURE 2.3

TABLE 2.1

GROUNDWATER "GRAB" SAMPLE ANALYTICAL RESULTS
1650 65th Street Property
10 November 1989

Sample Location	Depth (Feet)	Gasoline (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Total Xylenes (µg/L)	Ethylbenzene (µg/L)
GW-1	Drill Refusal at 9.5'	NS	NS	NS	NS	NS
GW-2	10-11	<0.05	2.9	0.8	<1.0	<0.5
GW-3	10-11	0.1	3.0	0.9	<1.0	2.1
GW-4	9.5 - 10.5	<0.05	<0.5	<0.5	<1.0	<0.5
GW-5	8-9	0.12	3.0	0.8	1.6	2.4
GW-6	9-10	<0.05	<0.5	<0.5	2.3	<0.5
GW-7	9-10	<0.05	<0.5	<0.5	<1.0	<0.5
GW-8[1]	7.5-8.5	94,000	<50,000	<50,000	<100,000	<50,000
GW-9	8-9	0.17	4.7	<0.5	<1.0	5.1

[1] Collected free product sample.
NS = Not Sampled

Table 6
Historical Water-Levels in Monitoring Wells MW-3, MW-5, and MW-7
6601/6603 Shellmound St., Emeryville, California
(EKI 950074.05)

Well	Date	Top of Casing Elevation (ft NAVD88)	Depth to Water (ft bTOC)	Top of Screen Depth (ft bgs)	Top of Screen Elevation [a] (ft NAVD88)	Groundwater Elevation (ft NAVD88)	Field Data Source
MW-3	21-Feb-90	14.92	9.18	6.6	8.82	5.74	ES
	25-May-90	14.92	9.25	6.6	8.82	5.67	ES
	29-Aug-90	14.92	9.50	6.6	8.82	5.42	ES
	28-May-91	14.92	9.03	6.6	8.82	5.89	ES
	1-Aug-91	14.92	NA	6.6	8.82	-	ES
	27-Jan-92	14.92	9.44	6.6	8.82	5.48	PES
	28-Feb-92	14.92	8.80	6.6	8.82	6.12	PES
	28-May-92	14.92	8.80	6.6	8.82	6.12	PES
	27-Aug-92	14.92	9.18	6.6	8.82	5.74	PES
	10-Nov-92	14.92	9.44	6.6	8.82	5.48	PES
	18-Feb-93	14.92	7.59	6.6	8.82	7.33	PES
	20-May-93	14.92	8.21	6.6	8.82	6.71	PES
	19-Aug-93	14.92	8.71	6.6	8.82	6.21	PES
	15-Nov-93	14.92	9.09	6.6	8.82	5.83	PES
	14-Feb-94	14.92	8.84	6.6	8.82	6.08	PES
	16-May-94	14.92	8.18	6.6	8.82	6.74	PES
	10-Aug-94	14.92	8.72	6.6	8.82	6.20	PES
	3-Nov-94	14.92	8.13	6.6	8.82	6.79	PES
	9-Feb-95	14.92	6.86	6.6	8.82	8.06	PES
	9-May-95	14.92	7.16	6.6	8.82	7.76	PES
	10-Aug-95	14.92	8.00	6.6	8.82	6.92	PES
	13-Nov-95	14.92	8.44	6.6	8.82	6.48	PES
	2-Mar-96	14.92	7.31	6.6	8.82	7.61	PES
	9-May-96	14.92	7.72	6.6	8.82	7.20	PES
	8-Aug-96	14.92	8.22	6.6	8.82	6.70	PES
	11-Nov-96	14.92	8.67	6.6	8.82	6.25	PES
	14-Feb-97	14.92	7.18	6.6	8.82	7.74	PES
	14-May-97	14.92	8.03	6.6	8.82	6.89	PES
	12-Aug-97	14.92	7.39	6.6	8.82	7.53	PES
	12-Nov-97	14.92	8.53	6.6	8.82	6.39	PES
	4-Feb-98	14.92	7.39	6.6	8.82	7.53	PES
	18-May-98	14.92	7.31	6.6	8.82	7.61	PES
	11-Aug-98	14.92	7.95	6.6	8.82	6.97	PES
	17-Dec-98	14.92	8.58	6.6	8.82	6.34	PES
	7-Oct-99	14.92	8.25	6.6	8.82	6.67	PES
	12-Oct-00	14.92	8.22	6.6	8.82	6.70	PES
	6-Oct-10	14.92	8.41	6.6	8.82	6.51	PES
	26-May-11	14.92	7.72	6.6	8.82	7.20	PES
	17-Nov-11	14.92	8.70	6.6	8.82	6.22	PES
	1-Dec-11	14.92	8.70	6.6	8.82	6.22	EKI
	23-May-12	14.92	8.29	6.6	8.82	6.63	PES
	21-Nov-12	14.92	8.36	6.6	8.82	6.56	PES

Table 6
Historical Water-Levels in Monitoring Wells MW-3, MW-5, and MW-7
6601/6603 Shellmound St., Emeryville, California
(EKI 950074.05)

Well	Date	Top of Casing Elevation (ft NAVD88)	Depth to Water (ft bTOC)	Top of Screen Depth (ft bgs)	Top of Screen Elevation [a] (ft NAVD88)	Groundwater Elevation (ft NAVD88)	Field Data Source
MW-5	21-Feb-90	15.34	6.91	6.7	9.14	8.43	ES
	25-May-90	15.34	7.58	6.7	9.14	7.76	ES
	29-Aug-90	15.34	7.75	6.7	9.14	7.59	ES
	29-Nov-90	15.34	8.17	6.7	9.14	7.17	ES
	1-Mar-91	15.34	8.11	6.7	9.14	7.23	ES
	28-May-91	15.34	7.39	6.7	9.14	7.95	ES
	1-Aug-91	15.34	NA	6.7	9.14	-	ES
	27-Jan-92	15.34	7.90	6.7	9.14	7.44	PES
	28-Feb-92	15.34	7.73	6.7	9.14	7.61	PES
	28-May-92	15.34	7.18	6.7	9.14	8.16	PES
	27-Aug-92	15.34	7.54	6.7	9.14	7.80	PES
	10-Nov-92	15.34	7.90	6.7	9.14	7.44	PES
	18-Feb-93	15.34	6.58	6.7	9.14	8.76	PES
	20-May-93	15.34	6.29	6.7	9.14	9.05	PES
	19-Aug-93	15.34	6.89	6.7	9.14	8.45	PES
	15-Nov-93	15.34	7.43	6.7	9.14	7.91	PES
	14-Feb-94	15.34	7.16	6.7	9.14	8.18	PES
	16-May-94	15.34	6.50	6.7	9.14	8.84	PES
	10-Aug-94	15.34	6.98	6.7	9.14	8.36	PES
	3-Nov-94	15.34	7.36	6.7	9.14	7.98	PES
	9-Feb-95	15.34	5.68	6.7	9.14	9.66	PES
	9-May-95	15.34	5.36	6.7	9.14	9.98	PES
	10-Aug-95	15.34	6.29	6.7	9.14	9.05	PES
	13-Nov-95	15.34	6.89	6.7	9.14	8.45	PES
	2-Mar-96	15.34	7.26	6.7	9.14	8.08	PES
	9-May-96	15.34	6.00	6.7	9.14	9.34	PES
	15-Jun-96	15.34	6.20	6.7	9.14	9.14	EKI
	8-Aug-96	15.34	6.67	6.7	9.14	8.67	PES
	11-Nov-96	15.34	6.69	6.7	9.14	8.65	PES
	27-Dec-96	15.34	6.53	6.7	9.14	8.81	EKI
	14-Feb-97	15.34	5.88	6.7	9.14	9.46	PES
	14-May-97	15.34	6.25	6.7	9.14	9.09	PES
	19-Jun-97	15.34	6.54	6.7	9.14	8.80	EKI
	12-Aug-97	15.34	6.77	6.7	9.14	8.57	PES
	12-Nov-97	15.34	7.21	6.7	9.14	8.13	PES
	4-Feb-98	15.34	6.81	6.7	9.14	8.53	PES
	18-May-98	15.34	4.81	6.7	9.14	10.53	PES
	11-Aug-98	15.34	6.38	6.7	9.14	8.96	PES
	17-Dec-98	15.34	7.00	6.7	9.14	8.34	PES
	7-Oct-99	15.34	7.23	6.7	9.14	8.11	PES
	12-Oct-00	15.34	7.30	6.7	9.14	8.04	PES
	6-Mar-10	15.34	6.81	6.7	9.14	8.53	EKI
	6-Oct-10	15.34	6.83	6.7	9.14	8.51	PES
	26-May-11	15.34	6.45	6.7	9.14	8.89	PES
	17-Nov-11	15.34	7.10	6.7	9.14	8.24	PES
	1-Dec-11	15.34	7.20	6.7	9.14	8.14	EKI
	23-May-12	15.34	6.91	6.7	9.14	8.43	PES
	21-Nov-12	15.34	7.71	6.7	9.14	7.63	PES

Table 6
Historical Water-Levels in Monitoring Wells MW-3, MW-5, and MW-7
6601/6603 Shellmound St., Emeryville, California
(EKI 950074.05)

Well	Date	Top of Casing Elevation (ft NAVD88)	Depth to Water (ft bTOC)	Top of Screen Depth (ft bgs)	Top of Screen Elevation [a] (ft NAVD88)	Groundwater Elevation (ft NAVD88)	Field Data Source
MW-7	1-Mar-91	15.45	7.51	6.7	9.25	7.94	ES
	28-May-91	15.45	7.07	6.7	9.25	8.38	ES
	1-Aug-91	15.45	NA	6.7	9.25	-	ES
	27-Jan-92	15.45	7.28	6.7	9.25	8.17	PES
	28-Feb-92	15.45	7.04	6.7	9.25	8.41	PES
	28-May-92	15.45	6.81	6.7	9.25	8.64	PES
	27-Aug-92	15.45	7.12	6.7	9.25	8.33	PES
	10-Nov-92	15.45	7.80	6.7	9.25	7.65	PES
	18-Feb-93	15.45	6.54	6.7	9.25	8.91	PES
	20-May-93	15.45	6.17	6.7	9.25	9.28	PES
	19-Aug-93	15.45	6.60	6.7	9.25	8.85	PES
	15-Nov-93	15.45	6.89	6.7	9.25	8.56	PES
	14-Feb-94	15.45	6.50	6.7	9.25	8.95	PES
	17-May-94	15.45	6.07	6.7	9.25	9.38	PES
	10-Aug-94	15.45	6.34	6.7	9.25	9.11	PES
	3-Nov-94	15.45	6.18	6.7	9.25	9.27	PES
	9-Feb-95	15.45	5.57	6.7	9.25	9.88	PES
	9-May-95	15.45	5.15	6.7	9.25	10.30	PES
	10-Aug-95	15.45	5.72	6.7	9.25	9.73	PES
	13-Nov-95	15.45	5.98	6.7	9.25	9.47	PES
	2-Mar-96	15.45	6.02	6.7	9.25	9.43	PES
	9-May-96	15.45	6.11	6.7	9.25	9.34	PES
	16-Jun-96	15.45	6.11	6.7	9.25	9.34	EKI
	8-Aug-96	15.45	6.87	6.7	9.25	8.58	PES
	11-Nov-96	15.45	6.39	6.7	9.25	9.06	PES
	27-Dec-96	15.45	5.94	6.7	9.25	9.51	EKI
	14-Feb-97	15.45	5.97	6.7	9.25	9.48	PES
	14-May-97	15.45	5.89	6.7	9.25	9.56	PES
	19-Jun-97	15.45	6.32	6.7	9.25	9.13	EKI
	12-Aug-97	15.45	6.56	6.7	9.25	8.89	PES
	12-Nov-97	15.45	6.76	6.7	9.25	8.69	PES
	4-Feb-98	15.45	5.94	6.7	9.25	9.51	PES
	6-Mar-10	15.45	5.46	6.7	9.25	9.99	EKI
	6-Oct-10	15.45	5.78	6.7	9.25	9.67	PES
	26-May-11	15.45	5.80	6.7	9.25	9.65	PES
	17-Nov-11	15.45	7.10	6.7	9.25	8.35	PES
	1-Dec-11	15.45	6.23	6.7	9.25	9.22	EKI
	23-May-12	15.45	5.97	6.7	9.25	9.48	PES
	21-Nov-12	15.45	4.44	6.7	9.25	11.01	PES

Notes
(a) Ground surface elevation not available; assumed depth to top of casing is 0.5 ft bgs.
(b) Field Data Sources other than EKI: PES = PES Environmental, Inc.; ES = Engineering Science, Inc.

Table 1

Summary of Analytical Results for Groundwater Samples from Monitoring Wells[a]

6601/6603 Shellmound Street, Emeryville, California

Well Number	Sample Date	Chemical Concentration (ug/L)						
		TPPH	TEPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE
MW-3	Nov 89	130	NA	2.2	ND	ND	3	NA
	Feb 90	ND[b]	NA	2.5	ND	ND	ND	NA
	May 90	ND	ND	2	ND	ND	ND	NA
	Aug 90	ND	800	4.4	2.9	ND	5.4	NA
	Nov 90	900	800	3.4	ND	ND	ND	NA
	Mar 91	ND	ND	25	25	5.3	320	NA
	May 91	ND	ND	2.6	ND	ND	ND	NA
	Aug 91	ND	ND	1.9	ND	ND	ND	NA
	29 Jan 92	92	NA	2.4	<0.3	0.6	<0.3	NA
	28 Feb 92	160	NA	2.8	<0.3	0.7	0.5	NA
	28 May 92	<50	NA	2.5	<0.5	<0.5	<0.5	NA
	27 Aug 92	370	NA	4	<1	<0.5	<0.5	NA
	10 Nov 92	240	<100	4.2	<0.3	<0.3	<0.6	NA
	18 Feb 93	140	NA	1.8	<0.5	<0.5	<0.5	NA
	20 May 93	72	NA	3.1	<0.5	<0.5	<0.5	NA
	19 Aug 93	<50	NA	3.2	<0.5	<0.5	0.7	NA
	15 Nov 93	70	NA	2.3	0.7	<0.5	1.5	NA
	14 Feb 94	120	NA	5.3	2.3	1.2	4.2	NA
	16 May 94	120	NA	3.1	<0.5	<0.4	1.7	NA
	10 Aug 94	100	NA	3	<0.5	0.5	<2	NA
	3 Nov 94	100	NA	3	<0.5	<0.5	<2	NA
	9 Feb 95	100	NA	2	<0.5	<0.5	<2	NA
	9 May 95	100	NA	3	<0.5	0.5	<2	NA
	10 Aug 95	100	NA	3	<0.5	<0.5	<2	NA
	13 Nov 95	<50	NA	3	<0.5	<0.5	<2	NA
	1 Dec 11	73	<50	2.8	<0.5	<0.5	<0.5	1.5
MW-5	Nov 89	ND	NA	74	ND	ND	4.2	NA
	Feb 90	ND	NA	200	ND	ND	ND	NA
	May 90	ND	ND	110	ND	ND	ND	NA
	Aug 90	ND	700	66	2.2	ND	3.8	NA
	Nov 90	600	900	69	ND	ND	ND	NA
	Mar 91	ND	1100	66	2.3	ND	ND	NA
	May 91	ND	ND	110	ND	ND	ND	NA
	Aug 91	ND	ND	78	2.1	ND	ND	NA
	29 Jan 92	190	NA	90	0.5	<0.3	0.6	NA
	28 Feb 92	230	NA	110	0.9	<0.3	0.5	NA
	28 May 92	130	NA	100	<0.5	<0.5	<0.5	NA
	27 Aug 92	520	NA	83	2	<0.5	<0.5	NA
	10 Nov 92	240	<100	74	1	<0.3	<0.6	NA
	18 Feb 93	190	NA	56	0.6	<0.5	<0.5	NA
	20 May 93	<200	NA	56	<2	<2	<2	NA
	19 Aug 93	170	NA	50	0.7	<0.5	<0.5	NA
	15 Nov 93	220	NA	49	1	<1	<1	NA
	14 Feb 94	140	NA	62	<0.5	<0.5	<0.5	NA
	16 May 94	310	NA	140	3	<3	<3	NA
	12 Aug 94	500	NA	95	34	4	14	NA
	3 Nov 94	400	NA	79	0.6	<0.5	<2	NA
	9 Feb 95	300	NA	74	0.8	<0.5	<2	NA
	9 May 95	200	NA	47	0.5	<0.5	<2	NA
	10 Aug 95	200	NA	46	0.5	<0.5	<2	NA
	13 Nov 95	300	NA	48	0.7	<0.5	<2	NA
	15 Jun 96	180	<40,000	39	<0.5	<0.5	<0.5	8.1
	27 Dec 96	220	4,500	54	0.5	<0.5	<0.5	15
	19 Jun 97	210	4,800	38	<0.5	<0.5	<0.5	7.5
	6 Mar 10	99	250	<0.5	<0.5	<0.5	<1	2
	1 Dec 11	180	250	<0.5	<0.5	<0.5	<1	2.2

Table 1

Summary of Analytical Results for Groundwater Samples from Monitoring Wells[a]

6601/6603 Shellmound Street, Emeryville, California

Well Number	Sample Date	Chemical Concentration (ug/L)						
		TPPH	TEPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE
MW-7	May 90	NA	600	240	ND	ND	ND	NA
	Aug 90	ND	ND	81	1.8	ND	ND	NA
	Nov 90	ND	800	54	ND	ND	ND	NA
	Mar 91	ND	ND	100	3.6	ND	ND	NA
	May 91	ND	ND	120	2.7	ND	ND	NA
	Aug 91	ND	ND	74	3.3	ND	ND	NA
	29 Jan 92	270	NA	25	0.5	<0.3	0.8	NA
	28 Feb 92	100	NA	33	0.7	<0.3	0.7	NA
	28 May 92	150	NA	21	<0.5	<0.5	<0.5	NA
	27 Aug 92	440	NA	11	1	<0.5	<0.5	NA
	10 Nov 92	370	<100	31	1.2	<0.3	1.2	NA
	18 Feb 93	270	NA	77	1.3	<0.5	1.4	NA
	20 May 93	300	NA	150	3	<2	3	NA
	19 Aug 93	110	NA	40	1	<0.5	1.1	NA
	15 Nov 93	120	NA	15	0.6	<0.5	2.3	NA
	14 Feb 94	120	NA	38	<0.5	<0.5	<0.5	NA
	17 May 94	<300	NA	61	<3	<3	<3	NA
	10 Aug 94	100	NA	9	<0.5	<0.5	<2	NA
	3 Nov 94	100	NA	3	<0.5	<0.5	<2	NA
	9 Feb 95	200	NA	50	0.6	<0.5	<2	NA
	9 May 95	300	NA	120	1	<0.5	<2	NA
	10 Aug 95	<50	NA	7	<0.5	<0.5	<2	NA
	13 Nov 95	90	NA	3	<0.5	<0.5	<2	NA
	16 Jun 96	<50	1,000	47	0.87	<0.5	0.8	6.5
	27 Dec 96	110	2,300	35	0.88	<0.5	0.79	5
	19 Jun 97	200	2,500	59	1.2	<0.5	<0.5	8.2
	6 Mar 10	<50	<50	<1	<1	<1	<2	<1
	1 Dec 11	<50	<50	<1	<1	<1	<2	<1
Groundwater ESL, Commercial / Industrial[b]		n/a	n/a	1,800	530,000	170,000	160,000	80,000

Abbreviations:

TPPH = total purgeable petroleum hydrocarbons quantified as gasoline
TEPH = total extractable petroleum hydrocarbons quantified as diesel
MTBE = methyl tert-butyl ether
NA = not analyzed
n/a = not applicable
ND = not detected; historical data with unknown laboratory reporting limit.
ug/L = micrograms per liter
< *X* = analyte not detected above the indicated laboratory reporting limit of *X* ug/L.

Notes:

(a) Samples collected from 1996 to 2011 by Erler & Kalinowski, Inc. Samples from 2011 were analyzed for TPPH and TEPH by EPA Method 8015 and for VOCs and fuel oxygenates using EPA Method 8260. The 2011 data only shows detected analytes (no halogenated VOCs were detected). Samples collected prior to 1992 by Engineering Science. All other data are from PES Environmental, Inc. (December 1995).

(b) Detection limits were not published in PES (1995), thus reporting limits are not shown for samples from this source.

(c) In addition to the analytes listed, isopropylbenzene and sec-butylbenzene were detected at 0.6 ug/L each in the December 2011 sample from well MW-3.

(d) In addition to the analytes listed, isopropylbenzene was detected at 2.4 ug/L, sec-butylbenzene was detected at 0.9 ug/L, and n-propylbenzene was detected at 3.3 ug/L in the December 2011 sample from well MW-5.

Table 2
Summary of Grab Groundwater Analytical Data from the Spring 2010 Investigation
6601/6603 Shellmound Street, Emeryville, California

Sample Location	Collection Date	Petroleum Compounds (ug/L)[a,b]		Volatile Organic Compounds (ug/L)[a,c]										PAHs[a,d]	TDS (mg/L)
		TEPH	TPPH	Benzene	Toluene	Ethyl-benzene	Xylenes (m&p)	Xylene (o)	Diiso-propyl ether	MTBE	Tert-butyl alcohol	1,2-Dibromo-ethane	1,2-Dichloro-ethane		
GGW-1	3/6/2010	**34,000**	**550**	**56**	2.7	2.2	**4**	2.2	<0.5	1.4	11	<0.5	<0.5	ND	**1,420**
GGW-2	3/6/2010	**10,000**	90[e]	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<0.5	ND	**700**
GGW-3	3/6/2010	**180**[e]	<50	**2.1**	<0.5	<0.5	<0.5	<0.5	2.4	<0.5	<10	<0.5	<0.5	ND	**1,530**
GGW-4	4/9/2010	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<0.5	ND	**690**
MW-5	3/6/2010	**250**[e]	99[e]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2	<10	<0.5	<0.5	ND	**1,290**
MW-7	3/6/2010	<50	<50	<1	<1	<1	<1	<1	<1	<1	<20	<1	<1	ND	**780**
ESL for drinking water consumption		*210*	*210*	*1*	*150*	*300*	*1800*		-	*13*	*12*	*0.05*	*0.5*	-	*500 to 1,500*
ESL for Commercial/ Industrial vapor intrusion		-	-	*1,800*	*530,000*	*170,000*	*160,000*		-	*80,000*	-	*510*	*690*	-	-
ESL for gross contamination, in drinking water		*100*	*100*	*170*	*40*	*30*	*20*		-	*5*	*50,000*	*50,000*	*7,000*	-	-
ESL for gross contamination, in non-drinking water		*2,500*	*5,000*	*20,000*	*400*	*300*	*5,300*		-	*1,800*	*50,000*	*50,000*	*50,000*	-	-
San Francisco Bay Basin Plan (see Reference 2)		-	-	*1*	*150*	*300*	*1750*		-	*13*	-	*0.05*	*0.5*	-	*3,000*

Abbreviations:
"C/I" = commercial/industrial land use
"ESL" = Environmental Screening Level (see Reference 1)
"MCL" = Maximum Contaminant Level
"ND" = not detected above laboratory reporting limits
"MTBE" = Methyl-tert-Butyl Ether
"PAHs" = polycyclic aromatic hydrocarbons
"TEPH" = total extractable petroleum hydrocarbons, quantified as diesel
"TPPH" = total purgeable petroleum hydrocarbons, quantified as gasoline
"ug/L" = micrograms per liter
"VOCs" = volatile organic compounds

Notes:
(a) Concentrations exceeding at least one of the screening criteria are shown in bold text.
(b) TEPH and TPPH were analyzed using EPA Method 8015M.
(c) VOCs were analyzed using EPA Method 8260B. This table only includes detected analytes.
(d) PAHs were analyzed using EPA Method 8270. No PAHs were detected in the groundwater samples.
(e) Sample exhibits a chromatographic pattern which does not resemble the standard.

References:

1. *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, California Regional Water Quality Control Board, San Francisco Bay Region, revised May 2008.
2. *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)*, California Regional Water Quality Control Board, San Francisco Bay Region, January 2007.

Table 4
Groundwater Sample Analytical Results for Naphthalene
6601/6603 Shellmound St., Emeryville, California

Sample ID	Sample Date	Naphthalene [a] (ug/L)
SB-6	6/15/1996	<100000
GGW-1	3/6/2010	<98
GGW-2	3/6/2010	<9.9
GGW-3	3/6/2010	<9.4
GGW-4	4/9/2010	<9.9
2013 RWQCB Commercial/Industrial Land Use Groundwater ESL [b]		***1,600***
2013 RWQCB Residential Land Use Groundwater ESL [b]		***160***

Abbreviations:

<9.4: compound not detected at or above the laboratory reporting limit of 9.4 ug/L

ESL: Environmental Screening Level (RWQCB, December 2013)

ug/L - micrograms per liter

RWQCB: California Regional Water Quality Control Board, San Francisco Bay Region

Notes:

(a) Samples collected in 2010 were analyzed by Curtis & Tompkins, Ltd., of Berkeley, California using EPA method 8270C. Sample collected on 1996 was analyzed by Sequoia Analytical of Sacramento, California using EPA method 8100.

(b) Naphthalene groundwater ESLs for commercial/industrial and residential land uses, assuming fine / coarse mixed soils are from Table E-1, *Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion (volatile chemicals only)*, RWQCB (2013).

References

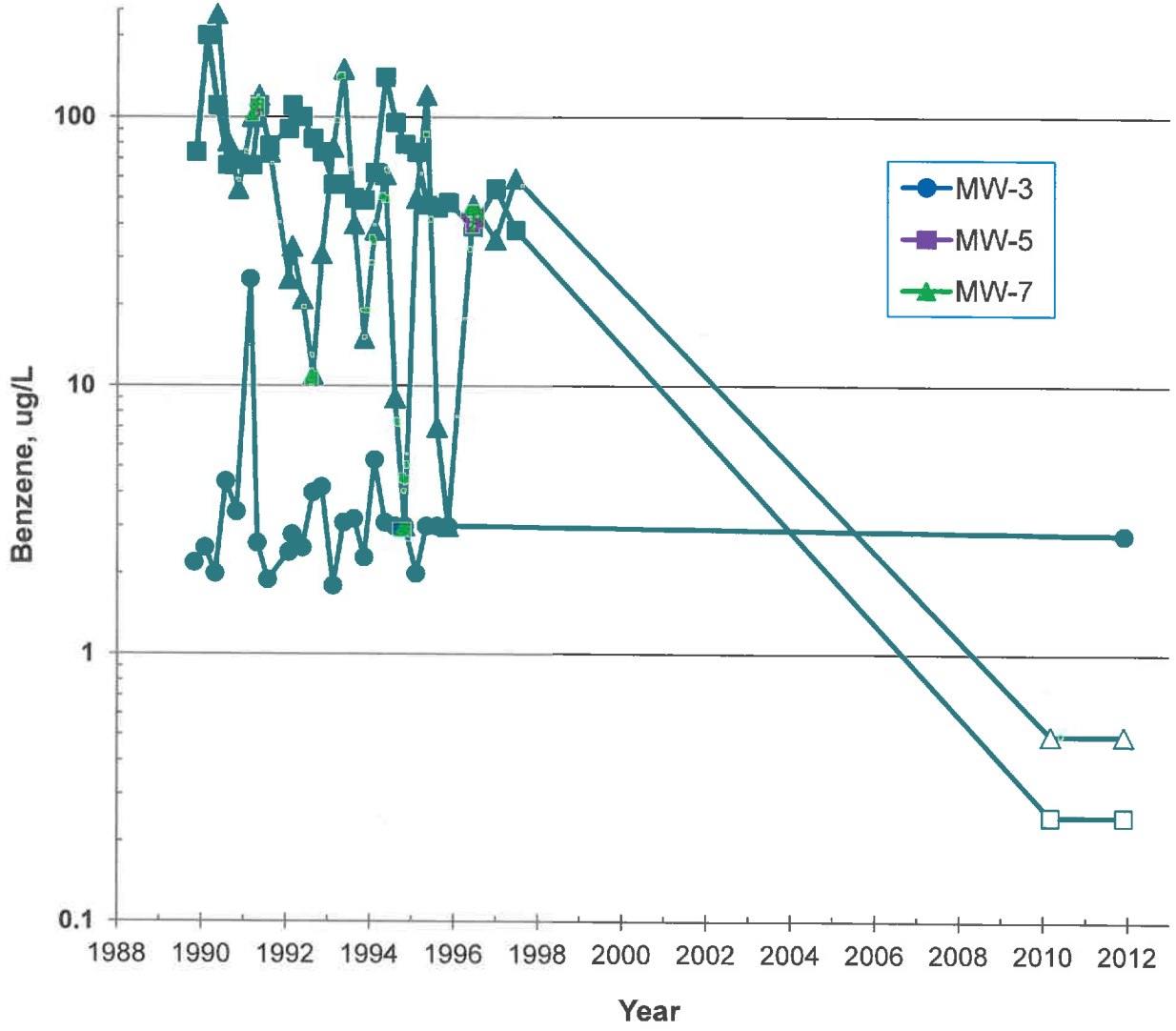
RWQCB, 2013. *San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels.* Interim Final, December 2013.

Table 6
Concentrations of Petroleum Hydrocarbon-Related Compounds
in Groundwater Samples (a)
6601 and 6603 Bay Street
Sybase, Inc.
Emeryville, California
(EKI 950074.03)

Sample ID (b)	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	PAHs	
						Acenaph-thene (ug/L)	Fluorene (ug/L)
SB-1	<5	<5	11	17	<25	NA	NA
SB-2	0.99	<0.5	<0.5	<0.5	6.4	NA	NA
SB-3	160	<50	<50	<50	<250	NA	NA
SB-4	5.0	<2	<2	<2	<10	NA	NA
SB-5	150	<5	<5	11	<25	NA	NA
SB-6	<1,000	<1,000	<1,000	<1,000	<5,000	12,000-42,000 (c)	25,000-96,000 (c)
MW-5	39	<0.5	<0.5	<0.5	8.1	NA	NA
MW-7	47	0.87	<0.5	0.8	6.5	NA	NA
PRG (d)	0.39	720	1,300	1,400	180	370	240
MCL (e)	1	150	700	1,750	- (f)	-	-

Notes:
(a) Groundwater samples collected by Erler & Kalinowski, Inc. on 15 and 16 June 1996.
(b) Sampling locations corresponding to Sample ID are shown in Figure 2.
(c) Laboratory indicated that results may be artificially high due to presence of unknown, interfering hydrocarbon. PAHs are most likely associated with free product present in groundwater sample. Therefore, the reported concentrations are likely to be greater than actual aqueous concentrations. Sample analyzed after hold time.
(d) U.S. EPA Preliminary Remediation Goals ("PRGs") for drinking water (U.S. EPA, 1 September 1995).
(e) Maximum Contaminant Levels ("MCLs") for drinking water.
(f) Hyphen indicates that an MCL is not availabe for this compound.

Abbreviations:
MTBE = Methyl tertiary butyl ether
PAHs = Polycyclic Aromatic Hydrocarbons
NA = Not analyzed



Note:
Open symbols denote non-detections, plotted at one-half the reporting limit.

Erler & Kalinowski, Inc.

Benzene Concentrations Over Time in Groundwater Monitoring Wells

6601/6603 Shellmound Street
Emeryville, California

July 2012
EKI 950074.05
Figure 5

Table 5
Results of Trend Analysis
Benzene Concentrations in Groundwater, 1989 - 2011
6601/6603 Shellmound Street, Emeryville, California

Well	Number of Analyses	Sample Period	Benzene (ug/L)		Kendall's Tau	Mann-Kendall S	Standard Normal Transform of S (Z)	Standard Normal Percentile at P = 95%	Trend Interpretation[a]
			Min	Max					
MW-3	26	1989-2011	1.8	25	⇨ 0.034	11	0.244	1.96	No Trend / Stable
MW-5	30	1989-2011	< 0.5	200	↘ -0.533	-232	4.25	1.96	Decreasing
MW-7	28	1990-2011	< 1.0	240	↘ -0.384	-145	2.88	1.96	Decreasing
Groundwater ESL, Commercial / Industrial[b]				*1,800*					

Notes

(a) Trend interpretation is based on a Mann-Kendall test, using a two-tailed 95% confidence interval after USEPA (2009), and the "Kendall's Tau" statistic, a rank correlation coefficient that may be used to estimate the strength of a monotonic relationship between two variables, in this case, concentration and time (Helsel & Hirsch, 2002). A positive Tau indicates an increasing trend, and a negative Tau indicates a decreasing trend. A correlation is considered "strong" where the absolute value of Tau is 0.7 or more. For purposes of this analysis, Tau values between -0.35 and 0.35 (i.e., 50% of 0.7) are considered indeterminate. Helsel & Hirsch (2002) note that Tau can be applied to censored datasets, is resistant to outliers, and measures all monotonic correlations, linear and nonlinear.

(b) From RWQCB (2008), Table E-1. Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns (volatile chemicals only).

Table 7
Results of Trend Analysis for Groundwater Data from Wells MW-5 and MW-7 (a)
6601 and 6603 Bay Street
Sybase, Inc.
Emeryville, California
(EKI 950074.03)

Statistical Parameters	Well MW-5				Well MW-7			
	TPPH	Benzene	Toluene	Total Xylenes	TPPH	Benzene	Toluene	Total Xylenes
n (b)	18	26	18	18	18	26	18	18
S (c)	14	-135	-18	21	-61	-96	-22	2
Mann-Kendall Probability (d)	0.313	NA (e)	NA (e)	0.227	NA (e)	NA (e)	NA (e)	0.485
Significance Level (f)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Result (g)	No upward trend	No upward trend	No upward trend	No upward trend	No upward trend	No upward trend	No upward trend	No upward trend

Notes:

(a) The data from Table 1 were evaluated using the Mann-Kendall test. A value equal to half the detection limit was used for concentrations reported to be less than laboratory method detection limits. Because detection limit values were not available for data prior to 1992, only the data from 29 January 1992 to 16 June 1996 were used in the analyses for all compounds except benzene. All historical data for benzene were used because the benzene concentrations were above detection limits. A statistical evaluation of ethylbenzene concentrations was not performed because ethylbenzene concentrations were less than detection limits in all but one sample.

(b) "n" is the number of sampling events.

(c) "S" is the Mann-Kendall statistic calculated using the methodology described in Gilbert (1987).

(d) Mann-Kendall probability is related to the values of S and n, and is obtained from Table A21 in Hollaender and Wolfe (1973).

(e) A negative S value indicates that the data are clearly not increasing and a Mann-Kendall probability is not applicable ("NA").

(f) A significance level of 0.05 is recommended by U.S. EPA (1994).

(g) A negative S value or a Mann-Kendall probability greater than the significance level indicates that there is no upward trend in the data (Gilbert, 1987).

Abbreviations:

TPPH = Total Purgeable Petroleum Hydrocarbons quantified as gasoline

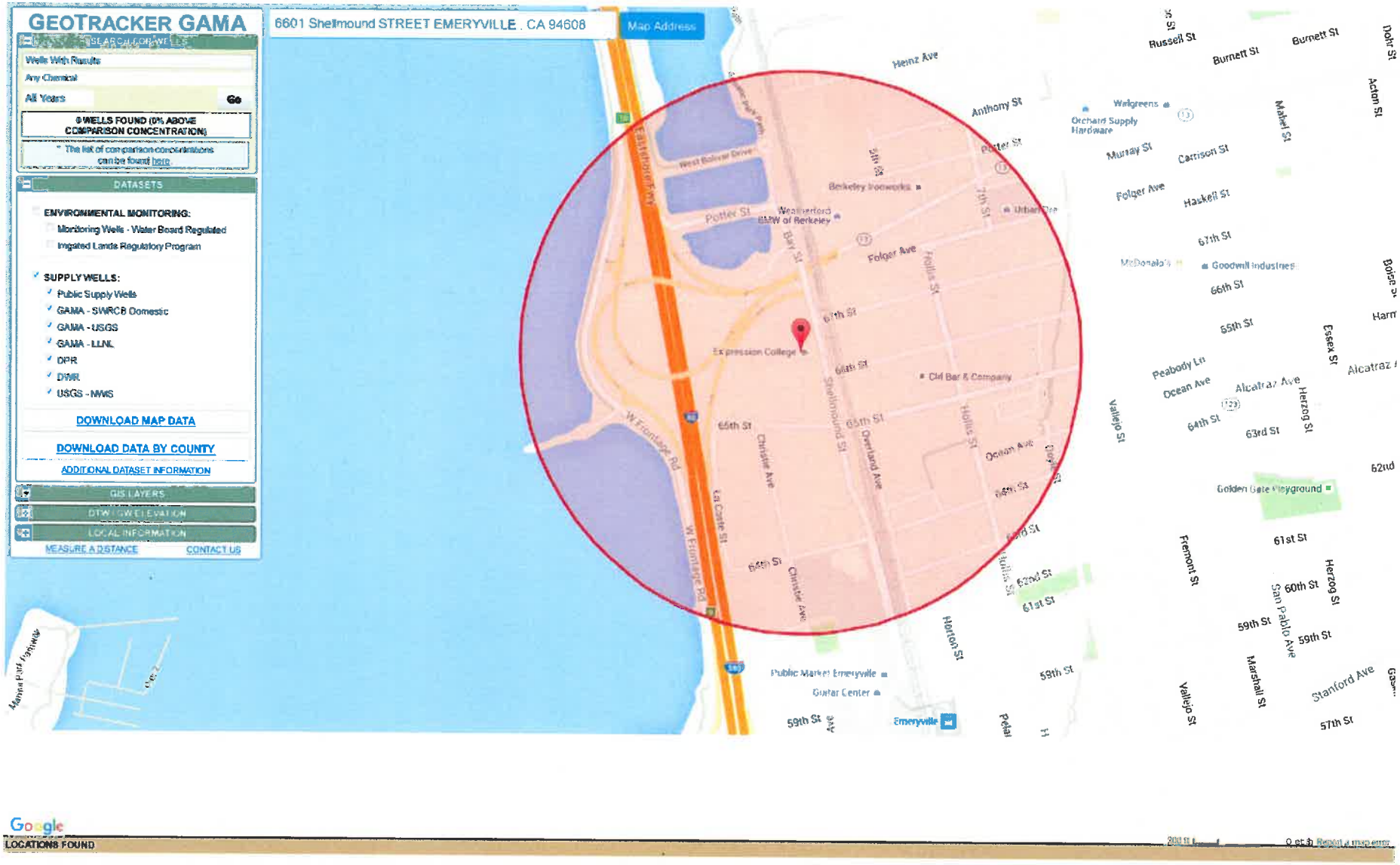

GEOTRACKER GAMA
6601 Shellmound STREET EMERYVILLE , CA 94608
Map Address
Wells With Results
Any Chemical
All Years
Go
0 WELLS FOUND (0% ABOVE COMPARISON CONCENTRATION)
DATASETS
ENVIRONMENTAL MONITORING:
Monitoring Wells - Water Board Regulated
Irrigated Lands Regulatory Program
SUPPLY WELLS:
Public Supply Wells
GAMA - SWRCB Domestic
GAMA - USGS
GAMA - LLNL
DPR
DWR
USGS - NWIS
DOWNLOAD MAP DATA
DOWNLOAD DATA BY COUNTY
ADDITIONAL DATASET INFORMATION
GIS LAYERS
DTW / GWE / ELEVATION
LOCAL INFORMATION
MEASURE A DISTANCE
CONTACT US
Heinz Ave
Anthony St
Potter St
Murray St
Carrison St
Folger Ave
Haskell St
67th St
66th St
55th St
Peabody Ln
Ocean Ave
Alcatraz Ave
64th St
63rd St
62nd
61st St
60th St
59th St
57th St
Russell St
Burnett St
Acton St
Mabel St
Walgreens
Orchard Supply Hardware
Berkeley Iron Works
Urban Ore
Bay St
Hollis St
Shellmound St
Overland Ave
Christie Ave
Horton St
Fremont St
San Pablo Ave
Marshall St
Stanford Ave
Vallejo St
Herzog St
Essex St
Golden Gate Playground
Expression College
Old Bar & Company
Public Market Emeryville
Guitar Center
Emeryville
Google
LOCATIONS FOUND

Table 3

Summary of Surrounding Wells within 500 Feet of the Site

6601/6603 Shellmound Street, Emeryville, California

Address	Owner's Well Number	State Well Number	Well Type	Installation	Abandonment	Total Depth (ft bgs)	Screen Interval (ft bgs)
6707 Bay Street	MW-7	15/4W 15D1	Monitoring	1/1990	-	22	7 - 22
	MW-8	15/4W 15D2	Monitoring	1/1990	-	21.5	7 - 21.5
1650 65th Street	MW-1	15/4W 15E1	Monitoring	7/1987	1/1988	30	9 - 30
	MW-3	15/4W 15E6	Monitoring	11/1989	-	22	6.6 - 18
	MW-4	15/4W 15E7	Monitoring	11/1989	-	19	6.1 - 15.8
	MW-5	15/4W 15E8	Monitoring	11/1989	-	21.5	6.7 - 17.9
	MW-6	15/4W 15E11/18	Monitoring	3/1990	-	22.1	7.1 - 21.8
	MW-7	15/4W 15E12/19	Monitoring	3/1990	-	19	6.7 - 18.7
	EW-1	15/4W 15E13	Extraction	3/1990	-	30	8.3 - 28.9

Abbreviations:
"ft bgs" = feet below ground surface

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; _X_ **Exposure controlled through use of mitigation measures or institutional controls**; __ Case closed in spite of not meeting the vapor specific media criteria								
Evaluation Criteria: Shading indicates criteria met.								
Site Specific Data		**Scenario 1**	**Scenario 2**	**Scenario 3A**	**Scenario 3B**	**Scenario 3C**	**Scenario 4a**	**Scenario 4b**
Unweathered LNAPL	LNAPL in soil and groundwater	LNAPL in gw	LNAPL in soil	No LNAPL	No LNAPL	No LNAPL	No criteria	No criteria
Thickness of Bioattenuation Zone Beneath Foundation	~ 3 feet	≥30 feet	≥30 feet	≥5 feet	≥10 feet	≥5 feet	No criteria	≥ 5 feet
Depth to Shallowest Groundwater	4.44 feet	≥30 feet	≥30 feet	≥5 feet	≥10 feet	≥ 5 feet	≥ 5 feet	≥ 5 feet
Total TPHg & TPHd in Soil in Bioattenuation Zone	900 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	<1.0 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	No oxygen data	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	Not Collected; (Sub-slab collected)	No criteria	No criteria	No criteria	No criteria	No criteria	5 feet	5 feet
Benzene Concentrations ($\mu g/m^3$)	Historic Max: Not Analyzed Current Max: Not Analyzed	No criteria	No criteria	No criteria	No criteria	No criteria	Res: < 85; Com: < 280	Res: < 85K; Com: < 280K
Ethylbenzene Concentrations ($\mu g/m^3$)	Historic Max: Not Analyzed Current Max: Not Analyzed	No criteria	No criteria	No criteria	No criteria	No criteria	Res: < 1,100; Com: < 3,600	Res: < 1,100K; Com: < 3,600K
Naphthalene Concentrations ($\mu g/m^3$)	Historic Max: Not Analyzed Current Max: Not Analyzed	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 the shallow depth to groundwater and the inability to install vapor wells to a depth of five feet below the foundations of the existing onsite building in accordance with the Low Threat Closure Policy, sub-slab vapor points were installed and sub-slab vapor samples were collected at the site. The highest onsite sub-slab vapor benzene concentration was 1.82 µg/m^3, which is less than the calculated commercial / industrial sub-slab Environmental Screening Level (ESL) of 8.4 µg/m^3. The calculated sub-slab ESL is derived by dividing the allowable indoor air ESL for a commercial / industrial facility by an attenuation factor of 0.05 (or multiplied by 20). The ESLs are promulgated by the San Francisco Bay Regional Water Quality Control Board (December 2013).
Offsite	Due to the shallow depth to groundwater and the inability to install vapor wells to a depth of five feet below the foundations of the existing onsite building as indicated by the Low Threat Closure Policy, sub-slab vapor points were installed and sub-slab vapor samples were also collected offsite at the downgradient building. Three rounds of sub-slab vapor samples were collected beneath the downgradient building. The highest downgradient sub-slab vapor benzene concentration was 5.21 µg/m^3 which is less than the calculated commercial / industrial sub-slab ESL of 8.4 µg/m^3. The calculated sub-slab ESL is derived by dividing the allowable indoor air ESL for a commercial / industrial facility by an attenuation factor of 0.05 (or multiplied by 20). The ESLs are promulgated by the San Francisco Bay Regional Water Quality Control Board (December 2013).

Table 1
Summary of Analytical Results for Sub-Slab Vapor Samples[(a)]
6601/6603 Shellmound Street, Emeryville, California
(EKI 950074.05)

Sample Name	Location / Building	Date	VOCs (ug/m³)					Major Gases (% volume)			
			Benzene	Toluene	Ethyl benzene	Xylenes	TVH (C2-C10)	Methane	Oxygen	Carbon Dioxide	Nitrogen
SSVP6601-1	6601 Shellmound	12/23/2011	<1.6	5.84	<4.34	<4.34	--	<0.100%	18.4%	<0.100%	81.6%
SSVP6603-2[(b)]	6603 Shellmound	12/23/2011	<1.6	<3.77	7.34	<4.34	--	<0.100%	19.4%	<0.100%	80.6%
SSVP1650-3	1650 65th St.	12/23/2011	1.82	<3.77	<4.34	<4.34	--	<0.100%	19.4%	<0.100%	80.6%
		5/2/2012	<1.60	<3.77	<4.34	<4.34	<586	<0.100%	18.4%	0.452%	81.1%
		12/26/2014	<1.60	<3.77	<4.34	<4.34	--	--	--	--	--
SSVP1650-4[(c,d)]	1650 65th St.	12/23/2011	5.21	6.07	<4.34	<4.34	--	<0.100%	19.4%	<0.100%	80.6%
		5/2/2012	<1.60/ <1.60	<3.77/ <3.77	<4.34/ <4.34	<4.34/ <4.35	<586/ <586	<0.100%/ <0.100%	17.5%/ 18.2%	<0.100%	82.4%/ 81.7%
		12/26/2014	<1.60/ <1.60	<3.77/ <3.77	<4.34/ <4.34	<4.34/ <4.34	--	--	--	--	--
AMBIENT-20111223	Outside in alley	12/23/2011	1.79	<3.77	<4.34	<4.34	--	--	--	--	--
AMBIENT-20120502		5/2/2012	<1.60	<3.77	<4.34	<4.34	<586	--	--	--	--
AMBIENT-20141226		12/26/2014	<0.799	<1.86	<2.17	<2.17	--	--	--	--	--
2013 Commercial/Industrial Subslab Vapor Screening Levels [(f)]			*8.4*	*26,000*	*98*	*8,800*	*50,000*	*n/a*	*n/a*	*n/a*	*n/a*
2013 Residential Subslab Vapor Screening Levels [(f)]			*1.7*	*6,200*	*19*	*2,000*	*12,000*	*n/a*	*n/a*	*n/a*	*n/a*

Abbreviations:

< X = Analyte not detected above the indicated laboratory reporting limit of X ug/L.
BTEX = benzene, toluene, ethylbenzene, xylenes
n/a = Not applicable
-- = Sample not analyzed for the indicated compound
ug/m³ = Micrograms per cubic meter
ppmv = Parts per million.

Notes:

(a) Samples were collected in stainless-steel batch-certified Summa canisters and analyzed by KPrime, Inc. of Santa Rosa, California, for BTEX compounds using EPA Method TO-15. Samples collected in 2011 and 2012 also were analyzed for major gases using ASTM D 1946.

(b) Sample SSVP6603-2 (collected 12/23/2011) contained a 1,1,1,2-tetrafluoroethane ("TeFA") concentration of 16.6 parts per million volumetric ("ppmv"). TeFA was analyzed by EPA Method TO-3, and was used as a leak-detection compound during sampling. Analytical results for the shroud outside the sampling apparatus indicate a TeFA concentration of approximately 10,400 ppmv. The 16.6 ppmv concentration detected in sample SSVP6603-2 thus indicates a minor leak in that particular vapor sample, resulting in a very small potential sample dilution of approximately 0.16%.

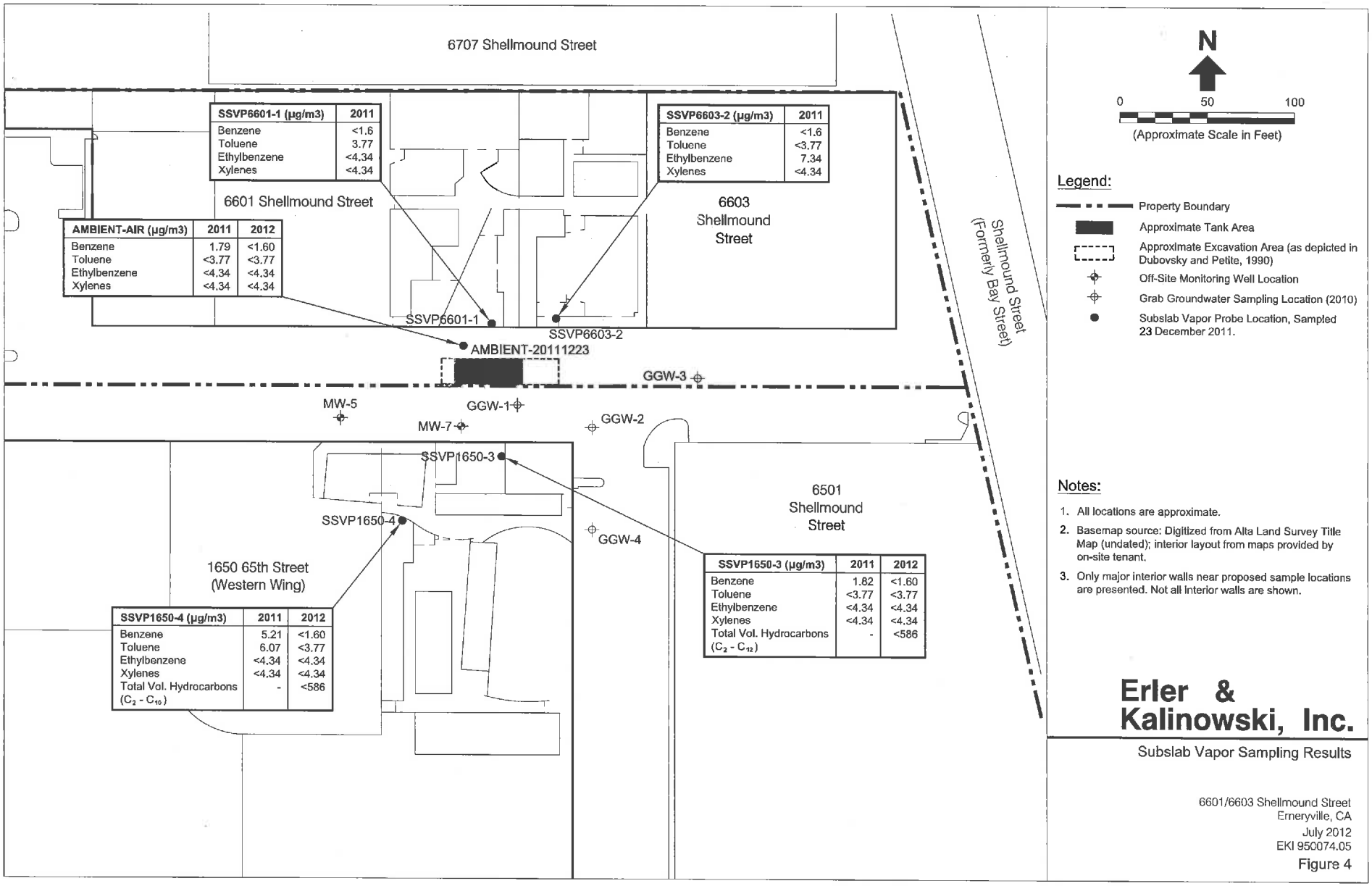
(c) Sample SSVP1650-4 (collected 05/02/2012) contained TeFA concentration of 10.0 ppmv. TeFA was analyzed by EPA Method TO-3. Analytical results for the shroud outside the sampling apparatus indicate a TeFA concentration of approximately 14,600 ppmv. The 10 ppmv concentration detected in sample SSVP1650-4 thus indicates a very minor leak in that particular vapor sample, resulting in a negligable potential sample dilution of approximately 0.068%.

(d) For the 2012 and 2014 sampling events, blind duplicate samples were collected from this location and subjected to the same suite of analytical tests as the primary sample.

(e) San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels ("ESLs"), Table E-2, Soil Gas Screening Levels for Evaluation of Potential Vapor Intrusion (volatile chemicals only), Commercial/Industrial Land Use. California Regional Water Quality Control Board - San Francisco Bay Region ("RWQCB"), Interim Final, December 2013.

(f) In accordance with the California EPA Department of Toxic Substances Control Vapor Intrusion Guidance (October 2011), subslab soil vapor screening levels are calculated as the indoor air screening level (e.g., ESL) divided by an attenuation factor of 0.05 (i.e., multiplied by 20).

(g) San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels ("ESLs"), Table E-3, Ambient and Indoor Air Screening Levels (volatile chemicals only), Commercial/Industrial Land Use. RWQCB, Interim Final, December 2013. These values are not applicable to subslab sampling results, but are used to calculate sub-slab soil vapor screening levels [see Note (f)]. ESL for TPH-gasoline listed as surrogate for TVH (C2-C10).



SSVP6601-1 (µg/m3)	2011
Benzene	<1.6
Toluene	3.77
Ethylbenzene	<4.34
Xylenes	<4.34

SSVP6603-2 (µg/m3)	2011
Benzene	<1.6
Toluene	<3.77
Ethylbenzene	7.34
Xylenes	<4.34

AMBIENT-AIR (µg/m3)	2011	2012
Benzene	1.79	<1.60
Toluene	<3.77	<3.77
Ethylbenzene	<4.34	<4.34
Xylenes	<4.34	<4.34

SSVP1650-3 (µg/m3)	2011	2012
Benzene	1.82	<1.60
Toluene	<3.77	<3.77
Ethylbenzene	<4.34	<4.34
Xylenes	<4.34	<4.34
Total Vol. Hydrocarbons (C_2 - C_{12})	-	<586

SSVP1650-4 (µg/m3)	2011	2012
Benzene	5.21	<1.60
Toluene	6.07	<3.77
Ethylbenzene	<4.34	<4.34
Xylenes	<4.34	<4.34
Total Vol. Hydrocarbons (C_2 - C_{10})	-	<586

Notes:

1. All locations are approximate.
2. Basemap source: Digitized from Alta Land Survey Title Map (undated); interior layout from maps provided by on-site tenant.
3. Only major interior walls near proposed sample locations are presented. Not all interior walls are shown.

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Subslab Vapor Sampling Results

6601/6603 Shellmound Street
Emeryville, CA
July 2012
EKI 950074.05
Figure 4

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

Evaluation Criteria: Shading indicates criteria met.

Are maximum concentrations less than those in Table 1 below?		Yes - Commercial / Industrial only				
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	< 0.0058	0.012	< 0.0058	0.012	0.012
LTCP Criteria	Benzene	≤1.9	≤2.8	≤8.2	≤12	≤14
Site Maximum	Ethylbenzene	< 0.058	<1.5	< 0.058	<1.5	<1.5
LTCP Criteria	Ethylbenzene	≤21	≤32	≤89	≤134	≤314
Site Maximum	Naphthalene	<25	<1.9	<25	<1.9	<25
LTCP Criteria	Naphthalene	≤9.7	≤9.7	≤45	≤45	≤219
Site Maximum	PAHs	0.207	0.147	0.207	0.147	0.207
LTCP Criteria	PAHs	≤0.063	NA	≤0.68	NA	≤4.5

Direct Contact and Outdoor Air Analysis

Onsite	Although the site did not contain a waste oil UST, PAH analytical data indicates PAHs are present in the subsurface. Under the current land use scenario (commercial), the subject site meets the commercial / industrial criteria for Direct Contact and Outdoor Air. It does not meet the residential land use criteria. 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.
Offsite	The petroleum hydrocarbon plume extends offsite. An existing land use restriction was placed on the offsite parcel at the time of the closure of the former underground storage tank (UST) case (Emery Bay Plaza, RO0000440; T0600100511) due to the presence of a former UST at that site, and prior documentation of sporadic parcel-wide contamination that has been stated to be related to previous land filling operations in the vicinity as land was created along the San Francisco Bay margin. As with the subject site, under the current land use scenario (commercial), the offsite parcel meets the commercial / industrial criteria for Direct Contact and Outdoor Air. It does not meet the residential land use criteria. 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 is currently managed with a land use restriction, and requires 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.

TABLE A-1

SUMMARY OF ANALYTICAL RESULTS

SAMPLE I.D./ DATE	SAMPLE LOCATION	SAMPLE DEPTH, FT	SOIL AND WATER IN PPB BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	TPH as DIESEL	TPH as GASOLINE	OIL & GREASE
			6601 AND 6603 BAY STREET, EMERYVILLE						
#1 8/23/89	Tank 1-E Bottom	12.5 Soil	ND < 2 ppm	ND < 2	ND < 2	ND < 2	2,400 ppm	n/a	n/a
#2 8/23/89	Tank 1-W Bottom	12.5 Soil	ND < 2 ppm	ND < 2	ND < 2	ND < 2	2,400 ppm	n/a	n/a
Tank Pit 9/12/89	Tank 1 Pit	13 Water	8 ppb	ND < 0.5	ND < 0.5	6	n/a	1,400 ppb	n/a
Tank Pit N. 9/12/89	Tank 1 N Wall @ E 1/4	7.5 Soil	ND < 0.02 ppm	ND < 0.02	ND < 0.02	ND < 0.02	1,400 ppm	n/a	na/
Tank Pit S. 9/12/89	Tank 1 E Wall @ Middle	7.5 Soil	ND < 0.02 ppm	ND < 0.02	ND < 0.02	ND < 0.02	1,500 ppm	n/a	n/a
Tank Pit E. 9/12/89	Tank 1 S Wall @ E 1/4	7.5 Soil	ND < 0.02 ppm	ND < 0.02	ND < 0.02	ND < 0.02	300 ppm	n/a	n/a
001 10/10/89	Tank 1 N Wall @ E 1/4	7.5 Soil	n/a	n/a	n/a	n/a	170 ppm	n/a	2,000 ppm
002 10/10/89	Tank 1 E Wall @ Middle	7.5 Soil	n/a	n/a	n/a	n/a	2,300 ppm	n/a	540 ppm
003 10/10/89	Tank 1 S Wall @ E 1/4	7.5 Soil	n/a	n/a	n/a	n/a	2,700 ppm	n/a	3,400 ppm
001 10/10/89	Tank 2 S Wall	7.5 Soil	0.180 ppm	0.007	ND <0.005	0.013	n/a	ND < 1 ppm	n/a
002 10/10/89	Tank 3 W Wall	7.5 Soil	0.640 ppm	ND <0.010	ND <0.010	21	n/a	2.5 ppm	n/a
003 10/10/89	Tank 2 N Wall	7.5 Soil	0.760 ppm	1.200	0.480	1.9	n/a	270 ppm	n/a
004 10/10/89	Tank 3 Pit	8 Water	400 ppb	180	38	290	n/a	6,300 ppb	n/a
#1 01/25/90	Tank 2 Pit	4 Water	ND < 5	ND < 5	ND < 5	ND < 5	520 ppb	n/a	n/a

ANALYTICAL TESTING METHODS:

BTEX: Modified Method 8020
TPH as Diesel: GCFID following either EPA Method 3510 or 3550
TPH as Gasoline: GCFID following EPA Method 3550
Oil and Grease: Standard Method 503E

TABLE 3.1

SOIL SAMPLING ANALYTICAL RESULTS
Groundwater Monitoring Wells MW-3, MW-4, and MW-5
1650 65th Street Property
14, 15, and 16 November 1989

Contaminant	MW-3 (4.5 ft.)	MW-4 (5.5 ft.)	MW-5 (5.5 ft.)
Organics			
Gasoline (mg/Kg)	<10	<10	<10
Benzene (μg/Kg)	<5	<5	<5
Toluene (μg/Kg)	<5	10	<5
Total Xylenes (μg/Kg)	<5	10	<5
Ethylbenzene (μg/Kg)	<5	<5	<5
Inorganics			
Lead (mg/Kg)	NA	NA	25

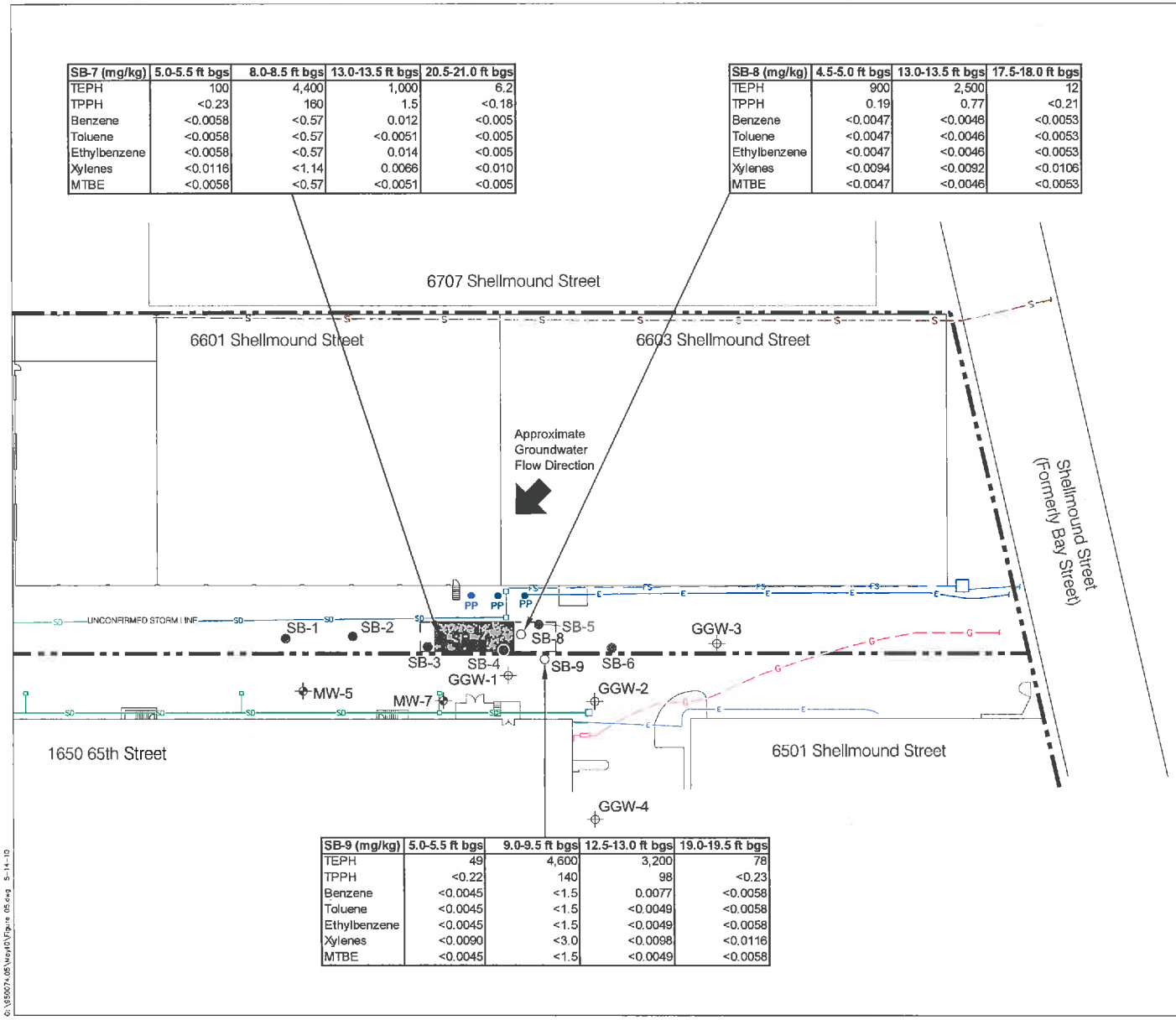
NA = Not Analyzed

all three wells were analyzed by modified EPA Method 8015 for TPH (as gasoline) and by EPA Method 8020 for BTXE. The soil sample from Well MW-5 was also analyzed by EPA Method 8010 for purgeable halocarbons and by EPA Method 7420/7421 for lead. Appendix B contains the soil sampling analytical results and chain-of-custody records.

Gasoline was not detected (<10 mg/Kg) in the three soil samples. Low concentrations of toluene (10 μg/Kg) and total xylenes (10 μg/Kg) were detected in the soil sample collected from Well MW-4. A concentration of 25 mg/Kg lead was detected in the soil sample collected from Well MW-5. This concentration of lead is probably indicative of the composition of the local fill materials and may not represent contamination associated with leakage from a UFST.

GROUNDWATER SAMPLING AND ANALYSIS

On 20 and 21 November 1989 the quarterly groundwater monitoring program was initiated for the newly installed wells (MW-2, MW-3, MW-4, and MW-5). Well MW-2 was previously sampled on 2 and 16 October 1989 (Reference 4). The quarterly



SB-7 (mg/kg)	5.0-5.5 ft bgs	8.0-8.5 ft bgs	13.0-13.5 ft bgs	20.5-21.0 ft bgs
TEPH	100	4,400	1,000	6.2
TPPH	<0.23	160	1.5	<0.18
Benzene	<0.0058	<0.57	0.012	<0.005
Toluene	<0.0058	<0.57	<0.0051	<0.005
Ethylbenzene	<0.0058	<0.57	0.014	<0.005
Xylenes	<0.0116	<1.14	0.0066	<0.010
MTBE	<0.0058	<0.57	<0.0051	<0.005

SB-8 (mg/kg)	4.5-5.0 ft bgs	13.0-13.5 ft bgs	17.5-18.0 ft bgs
TEPH	900	2,500	12
TPPH	0.19	0.77	<0.21
Benzene	<0.0047	<0.0048	<0.0053
Toluene	<0.0047	<0.0046	<0.0053
Ethylbenzene	<0.0047	<0.0046	<0.0053
Xylenes	<0.0094	<0.0092	<0.0106
MTBE	<0.0047	<0.0046	<0.0053

SB-9 (mg/kg)	5.0-5.5 ft bgs	9.0-9.5 ft bgs	12.5-13.0 ft bgs	19.0-19.5 ft bgs
TEPH	49	4,600	3,200	78
TPPH	<0.22	140	98	<0.23
Benzene	<0.0045	<1.5	0.0077	<0.0058
Toluene	<0.0045	<1.5	<0.0049	<0.0058
Ethylbenzene	<0.0045	<1.5	<0.0049	<0.0058
Xylenes	<0.0090	<3.0	<0.0098	<0.0116
MTBE	<0.0045	<1.5	<0.0049	<0.0058

N

0 50 100

(Approximate Scale in Feet)

Legend:

- Property Boundary
- Approximate Tank Area
- Approximate Excavation Area (as depicted in Dubovsky and Petite, 1990)
- Off-Site Monitoring Well Location
- Soil Boring Location (1996)
- Soil Boring Location (2010)
- Grab Groundwater Sampling Location (2010)
- Power Pole (PP)
- Storm Drain Line
- Fire Service Line
- Sanitary Sewer Line
- Electrical Line
- Gas Line

Abbreviations:

ft bgs = feet below ground surface
mg/kg = milligrams per kilogram
MTBE = Methyl Tertiary Butyl Ether
TEPH = Total Extractable Petroleum Hydrocarbons
TPPH = Total Purgeable Petroleum Hydrocarbons

Notes:

1. All locations are approximate.
2. Basemap source: Digitized from Alta Land Survey Title Map (undated).
3. Posted soil data are from 9 April 2010 sampling event.

Erler & Kalinowski, Inc.

Soil Sampling Results

6601/6603 Shellmound Street
Emeryville, CA
May 2010
EKI 950074.05
Figure 5

G:\950074.05\Word\Figure 05.dwg 5-14-10

Table 4

Summary of Soil Analytical Data from the Spring 2010 Investigation

6601/6603 Shellmound Street, Emeryville, California

Sample Location	Sample Depth (feet bgs)	Collection Date	Petroleum Compounds (mg/kg) (a,b)		Volatile Organic Compounds (mg/kg) (a,c)							PAHs (mg/kg) (a,d)									
			TEPH	TPPH	Benzene	Toluene	Ethylbenzene	Xylenes, m- & p-	Xylene, o-	1,2-Dibromoethane	1,2-Dichloroethane	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Fluoranthene	Fluorene	Phenanthrene	Pyrene
SB-7	5.0 - 5.5	4/9/2010	**100**	<0.23	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092	<0.092
	8.0 - 8.5	4/9/2010	**4,400**	**160**	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9
	13.0 - 13.5	4/9/2010	**1,000**	1.5	0.012	<0.0051	0.014	0.0066	<0.0051	<0.0051	<0.0051	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	0.16	0.24	0.08
	20.5 - 21.0	4/9/2010	6.2	<0.18	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.078	<0.078	<0.078	<0.078	<0.078	<0.078	<0.078	<0.078	<0.078	<0.078
SB-8	4.5 - 5.0	4/9/2010	**900**	0.19	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	0.099	0 15	**0.16**	0.23	0.076	0.18	0.41	<0.075	0.26	0.39
	13.0 - 13.5	4/9/2010	**2,500**	0.77	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.08	<0.08	0.13	0.16	<0.08	0.11	0 38	0.14	0.49	0.46
	17.5 - 18.0	4/9/2010	12	<0.21	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083	<0.083
SB-9	5.0 - 5.5	4/9/2010	49	<0.22	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.076	<0.076	<0.076	<0.076	<0.076	<0.076	<0.076	<0.076	<0.076	<0.076
	9.0 - 9.5	4/9/2010	**4,600**	**140**	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<0.77	<0.77	<0.77	<0.77	<0.77	<0.77	1.6	0.9	2.8	2.6
	12.5 - 13.0	4/9/2010	**3,200**	**98**	0.0077	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	0.49	<0.4	1.1	0.65
	19.0 - 19.5	4/9/2010	78	<0.23	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.086	<0.086	<0.086	<0.086	<0.086	<0.086	<0.086	<0.086	<0.086	<0.086
ESL for C/I direct exposure (shallow soil)			450	450	0 27	210	5	100		0.044	0.48	26,000	1 3	0.13	1.3	1.3	210	4,400	2,800	3,300	6,600
ESL for C/I direct exposure (deep soil)			4,200	4,200	12	650	210	420		1.7	21	100,000	15	1.5	15	15	2,400	14,000	12,000	11,000	21,000
ESL for groundwater protection of drinking water resource			83	83	0.044	2.9	3.3	2.3		0.00033	0.00045	2.8	12	130	46	2.7	23	60	8.9	11	85
ESL for groundwater protection of non-drinking water resource			180	180	2	9.3	4.7	11		1	1.8	2.8	12	130	46	37	23	60	8.9	11	85

Abbreviations:
"C/I" = commercial/industrial land use
"ESL" = Environmental Screening Level (see Reference 1)
"feet bgs" = feet below ground surface
"mg/kg" = milligrams per kilogram
"PAHs" = polycyclic aromatic hydrocarbons
"TEPH" = total extractable petroleum hydrocarbons, quantified as diesel
"TPPH" = total purgeable petroleum hydrocarbons, quantified as gasoline
"VOCs" = volatile organic compounds

Notes:
(a) Soil concentrations are reported on a dry-weight basis. Concentrations exceeding at least one of the screening critera are shown in bold text.
(b) TEPH and TPPH were analyzed using EPA Method 8015M.
(c) VOCs were analyzed using EPA Method 8260B. This table only includes detected analytes.
(d) PAHs were analyzed using EPA Method 8270C. This table only includes detected analytes

References:
1. *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater* , California Regional Water Quality Control Board, San Francisco Bay Region, revised May 2008.

Table 3
Soil Sample Analytical Results for Naphthalene
6601/6603 Shellmound St., Emeryville, California
(EKI 950074.05)

Location	Sample ID	Sample Date	Depth (ft bgs)	Naphthalene (mg/kg) [a]
SB-3	SB3-5	6/15/1996	4.5-5	<5.0
SB-4	SB4-5	6/15/1996	4.5-5	<25
SB-7	SB-7-5-5.5	4/9/2010	5-5.5	<0.092
	SB-7-8-8.5	4/9/2010	8-8.5	<1.9
	SB-7-13-13.5	4/9/2010	13-13.5	<0.080
	SB-7-20.5-21	4/9/2010	20.5-21	<0.078
SB-8	SB-8-4.5-5	4/9/2010	4.5-5	<0.075
	SB-8-13-13.5	4/9/2010	13-13.5	<0.080
	SB-8-17.5-18	4/9/2010	17.5-18	<0.083
SB-9	SB-9-5-5.5	4/9/2010	5-5.5	<0.076
	SB-9-9-9.5	4/9/2010	9-9.5	<0.77
	SB-9-12.5-13	4/9/2010	12.5-13	<0.04
	SB-9-19-19.5	4/9/2010	19-19.5	<0.086
No Significant Risk Threshold Concentration, LTCP Commercial/Industrial Land Use, (0-10 feet bgs) [b]				***45***
No Significant Risk Threshold Concentration, LTCP Residential Land Use, (0-10 feet bgs) [b]				***9.7***

Abbreviations:

<5.0: compound not detected at or above the laboratory reporting limit of 5.0 mg/kg
ESL: Environmental Screening Level (RWQCB, December 2013)
ft bgs: feet below ground surface
LTCP: Low-Threat Closure Policy
mg/kg: milligrams per kilogram
RWQCB: California Regional Water Quality Control Board, San Francisco Bay Region
SWRCB: State Water Resources Control Board

Notes:

(a) Samples collected in 2010 were analyzed by Curtis & Tompkins, Ltd., of Berkeley, California using EPA method 8270C. Sample collected in 1996 was analyzed by Sequoia Analytical of Redwood City, California using EPA method 8100.

(b) From SWRCB (2012), *Low-Threat Underground Storage Tank Case Closure Policy (Table 1)*. The listed threshold concentration (45 mg/kg) addresses commercial/ industrial land-use exposure pathways through direct contact as well as through volatilization to outdoor air. The corresponding residential land-use threshold concentration is 9.7 mg/kg.

(c) Commercial/Industrial Shallow soil Environmental Screening Level ("ESL") from RWQCB (2013) - *Table A-2. Shallow Soil Screening Levels (<3m bgs), Commercial/Industrial Land Use, (groundwater is a current or potential drinking water resource)*

References

RWQCB, 2013. *San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels*. Interim Final, December 2013.

SWRCB, 2012. *Low-Threat Underground Storage Tank Case Closure Policy; Table 1- Concentrations of Petroleum Constituents in Soil That Will Have No Significant Risk of Adversely Affecting Human Health*. California State Water Resources Control Board, 1 May 2012.

Table 5

Summary of B(a)P Equivalents for Carcinogenic PAHs Detected in Soil Samples[a]

6601/6603 Shellmound Street, Emeryville, California

(EKI 950074.05)

Sample Location	Sample Depth (ft bgs)	Analyte	Results (mg/kg)	Potency Equivalency Factor	B(a)P Equivalent Concentration	Total B(a)P Equivalents [b,c] (mg/kg)
SB-7	5 - 5.5	Benz(a)anthracene	< 0.092	0.1	0	0
		Benzo(a)pyrene	< 0.092	1	0	
		Benzo(b)fluoranthene	< 0.092	0.1	0	
		Benzo(k)fluoranthene	< 0.092	0.1	0	
		Chrysene	< 0.092	0.01	0	
		Dibenz(a,h)anthracene	< 0.092	0.34	0	
		Indeno(1,2,3-cd)pyrene	< 0.092	0.1	0	
	8 - 8.5	Benz(a)anthracene	< 1.9	0.1	0	0
		Benzo(a)pyrene	< 1.9	1	0	
		Benzo(b)fluoranthene	< 1.9	0.1	0	
		Benzo(k)fluoranthene	< 1.9	0.1	0	
		Chrysene	< 1.9	0.01	0	
		Dibenz(a,h)anthracene	< 1.9	0.34	0	
		Indeno(1,2,3-cd)pyrene	< 1.9	0.1	0	
	13 - 13.5	Benz(a)anthracene	< 0.08	0.1	0	0
		Benzo(a)pyrene	< 0.08	1	0	
		Benzo(b)fluoranthene	< 0.08	0.1	0	
		Benzo(k)fluoranthene	< 0.08	0.1	0	
		Chrysene	< 0.08	0.01	0	
		Dibenz(a,h)anthracene	< 0.08	0.34	0	
		Indeno(1,2,3-cd)pyrene	< 0.08	0.1	0	
SB-8	4.5 - 5	Benz(a)anthracene	**0.15**	0.1	0.015	0.207
		Benzo(a)pyrene	**0.16**	1	0.16	
		Benzo(b)fluoranthene	**0.23**	0.1	0.023	
		Benzo(k)fluoranthene	**0.076**	0.1	0.0076	
		Chrysene	**0.18**	0.01	0.0018	
		Dibenz(a,h)anthracene	< 0.075	0.34	0	
		Indeno(1,2,3-cd)pyrene	< 0.075	0.1	0	
	13 - 13.5	Benz(a)anthracene	< 0.08	0.1	0	0.147
		Benzo(a)pyrene	**0.13**	1	0.13	
		Benzo(b)fluoranthene	**0.16**	0.1	0.016	
		Benzo(k)fluoranthene	< 0.08	0.1	0	
		Chrysene	**0.11**	0.01	0.0011	
		Dibenz(a,h)anthracene	< 0.08	0.34	0	
		Indeno(1,2,3-cd)pyrene	< 0.08	0.1	0	
	17.5 - 18	Benz(a)anthracene	< 0.083	0.1	0	0
		Benzo(a)pyrene	< 0.083	1	0	
		Benzo(b)fluoranthene	< 0.083	0.1	0	
		Benzo(k)fluoranthene	< 0.083	0.1	0	
		Chrysene	< 0.083	0.01	0	
		Dibenz(a,h)anthracene	< 0.083	0.34	0	
		Indeno(1,2,3-cd)pyrene	< 0.083	0.1	0	

Table 5

Summary of B(a)P Equivalents for Carcinogenic PAHs Detected in Soil Samples[a]

6601/6603 Shellmound Street, Emeryville, California

(EKI 950074.05)

Sample Location	Sample Depth (ft bgs)	Analyte	Results (mg/kg)	Potency Equivalency Factor	B(a)P Equivalent Concentration	Total B(a)P Equivalents [b,c] (mg/kg)
SB-9	5 - 5.5	Benz(a)anthracene	< 0.076	0.1	0	0
		Benzo(a)pyrene	< 0.076	1	0	
		Benzo(b)fluoranthene	< 0.076	0.1	0	
		Benzo(k)fluoranthene	< 0.076	0.1	0	
		Chrysene	< 0.076	0.01	0	
		Dibenz(a,h)anthracene	< 0.076	0.34	0	
		Indeno(1,2,3-cd)pyrene	< 0.076	0.1	0	
	9 - 9.5	Benz(a)anthracene	< 0.77	0.1	0	0
		Benzo(a)pyrene	< 0.77	1	0	
		Benzo(b)fluoranthene	< 0.77	0.1	0	
		Benzo(k)fluoranthene	< 0.77	0.1	0	
		Chrysene	< 0.77	0.01	0	
		Dibenz(a,h)anthracene	< 0.77	0.34	0	
		Indeno(1,2,3-cd)pyrene	< 0.77	0.1	0	

Notes

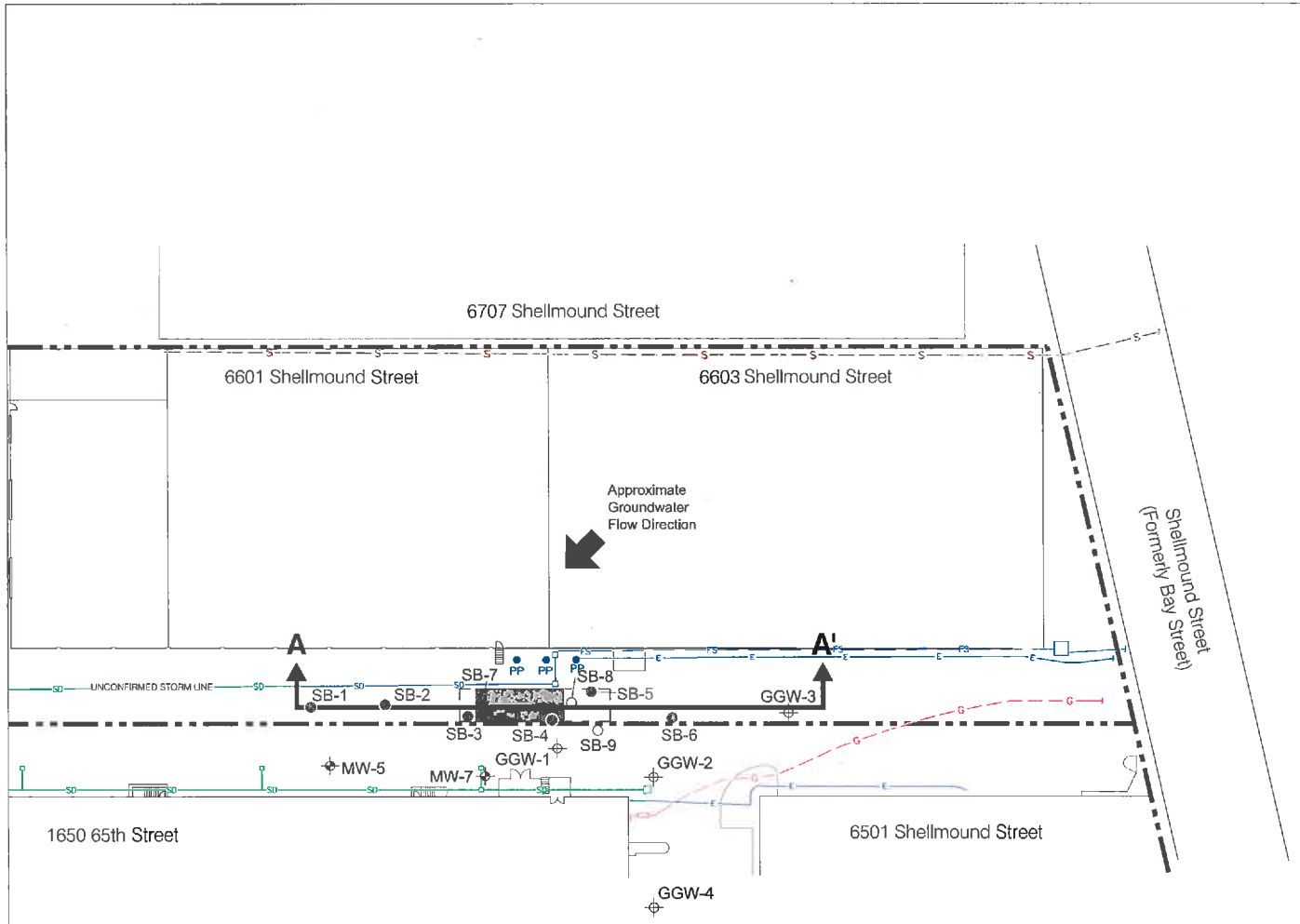
(a) B(a)P Equivalents were calculated for the seven carcinogenic PAHs in accordance with the 2012 California Office of Health Hazard Assessment ("OEHHA") guidance document *Technical Justification for Soil Screening Levels for Direct Contact and Outdoor Air Exposure Pathways (Final 03-15-2012)*, p.4.

(b) The 2012 SWRCB document *Low-Threat Underground Storage Tank Case Closure Policy* (SWRCB, 2012) lists **maximum total B(a)P equivalent soil concentrations of 0.68 mg/kg** (0-5 feet below ground surface, commercial / industrial worker) and 4.5 mg/kg (0-10 ft bgs, utility worker). Site soil PAH (B(a)P equivalent) concentrations are well below these levels, based on the available data (above). Refer to SWRCB (2012), *Table 1 - Concentrations of Petroleum Constituents in Soil That Will Have No Significant Risk of Adversely Affecting Human Health.*

(c) Maximum total B(a)P equivalent soil concentrations are listed in SWRCB (2012) as **0.063 mg/kg for residential land use** (0-5 feet below ground surface). **Site soil PAH concentrations (B(a)P equivalents) exceed this residential land-use threshold in one location (SB-8), based on the available data**, listed above. Refer to SWRCB (2012), *Table 1 - Concentrations of Petroleum Constituents in Soil That Will Have No Significant Risk of Adversely Affecting Human Health.*

Abbreviations

B(a)P = Benzo(a)pyrene
PAHs = Polycyclic Aromatic Hydrocarbons



N

0 50 100

(Approximate Scale in Feet)

Legend:

- Property Boundary
- Approximate Tank Area
- Approximate Excavation Area (as depicted in Dubovsky and Petite, 1990)
- Off-Site Monitoring Well Location
- Soil Boring Location (1996)
- Soil Boring Location (2010)
- Grab Groundwater Sampling Location (2010)
- Power Pole (PP)
- Storm Drain Line
- Fire Service Line
- Sanitary Sewer Line
- Electrical Line
- Gas Line
- Cross-Section Location (See Figure 4)

Notes:

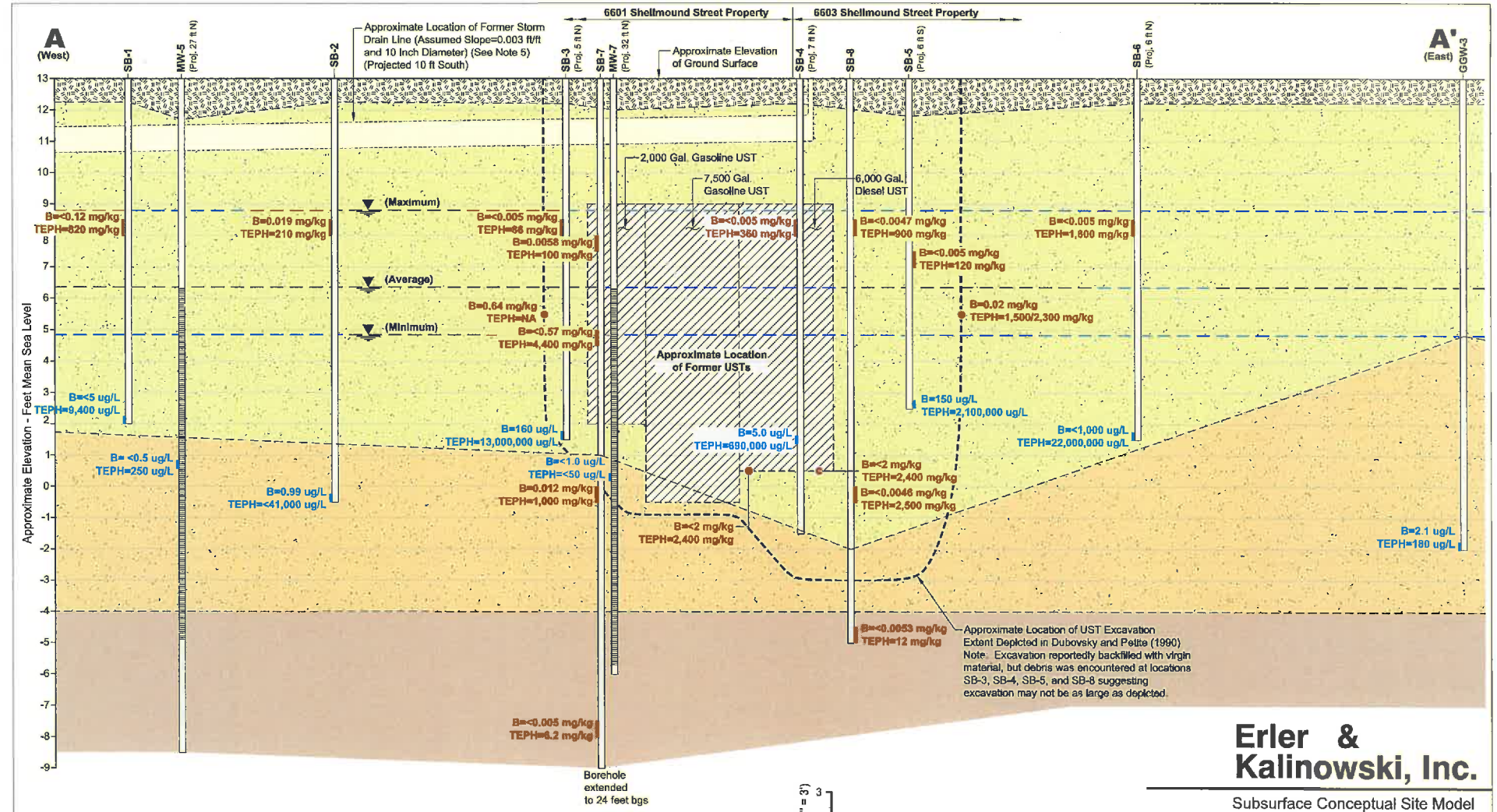
1. All locations are approximate.
2. Basemap source: Digitized from Alta Land Survey Title Map (undated).

Erler & Kalinowski, Inc.

Location of Utilities and Cross-Section

6601/6603 Shellmound Street
Emeryville, CA
May 2010
EKI 950074.05
Figure 3

G:\950074.05\Work\Figure 03.dwg 5-14-10



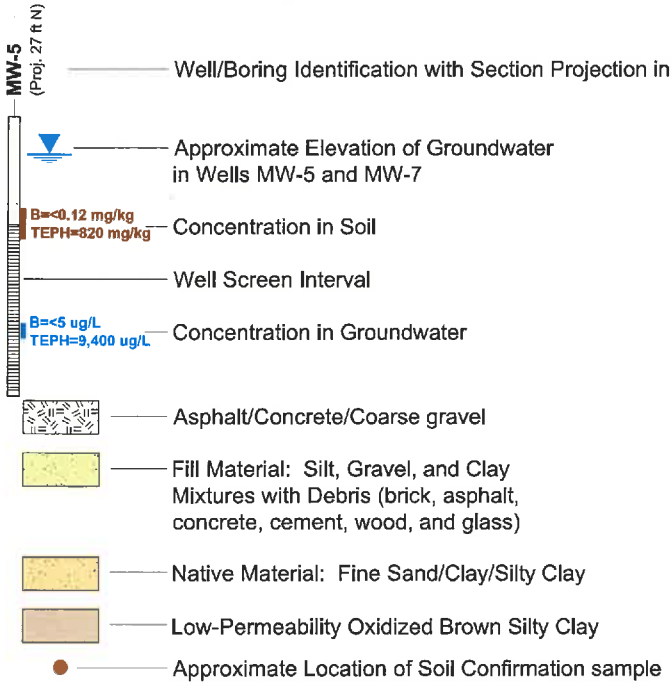
Notes:

1. For Legend, Abbreviations, References and Notes, See Figure 4A.

Erler & Kalinowski, Inc.

Subsurface Conceptual Site Model
in the Vicinity of Former USTs
Cross-Section A - A'
6601/6603 Shellmound Street
Emeryville, CA
May 2010
EKI 950074.05
Figure 4

Legend:



Abbreviations:

<	= not detected above stated reporting limit
B	= benzene
ft	= feet
Gal.	= gallon
MSL	= mean sea level
mg/kg	= milligrams per kilogram
ug/L	= micrograms per liter
NA	= not analyzed
TEPH	= total extractable petroleum hydrocarbons
USTs	= underground storage tanks

References:

a) Dubovsky and Petite, 1990. *Environmental Report, 6601 and 6603 Bay Street, Emeryville, California,* William Dubovsky Environmental and D. Larry Petite, July 1990.

b) Engineering-Science, Inc., 1989. *Groundwater Contamination Investigation, 1650 65th Street Property, Emeryville, California,* Engineering-Science, Inc., November 1989.

c) Engineering-Science, Inc., 1990. *Evaluation of Groundwater Alternatives and Remedial Action Plan, 65th Street Property, Emeryville, California,* Engineering-Science, Inc., November 1990.

d) EKI, 1996. *Results of Soil and Groundwater Investigation at 6601 and 6603 Bay Street, Emeryville, California,* Erler & Kalinowski, Inc., 23 August 1996.

e) EKI, 1997. *Closure Report, Three Former Underground Storage Tanks at 6601 and 6603 Bay Street, Emeryville, California,* Erler & Kalinowski, Inc., 18 August 1997.

Notes:

1. All locations are approximate.
2. The data displayed at each location is projected up to approximately 32 feet from either side of the cross-section.
3. Data presented on this figure for soil and groundwater are from Dubovsky and Petite, 1990, EKI, 1996, EKI, 1997, and this investigation (2010).
4. Geologic information presented on this figure is from Engineering-Science, Inc., 1989 and 1990, EKI, 1996, and this investigation (2010).
5. According to construction drawings from 1994, plans were in place to remove, backfill, and compact this storm drain line during improvements and seismic upgrades at the site.

Erler & Kalinowski, Inc.

Legend, Abbreviations, References and Notes

6601/6603 Shellmound Street
Emeryville, CA
May 2010
EKI 950074.05

Figure 4A

G:\950074.05\May10\Figure 04.dwg 5-14-10

Table 4
Concentrations of Petroleum Hydrocarbon-Related Compounds in Soil Samples (a)
6601 and 6603 Bay Street
Sybase, Inc.
Emeryville, California
(EKI 950074.03)

Sample ID (b)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	PAHs (mg/kg)
SB-1-5	<0.12	<0.12	0.29	2.8	<0.62	NA
SB-2-5	0.019	<0.005	<0.005	0.0092	<0.025	NA
SB-3-5	<0.005	<0.005	<0.005	<0.005	<0.025	ND
SB-4-5	<0.005	0.0094	<0.005	0.015	<0.025	ND
SB-5-6	<0.005	0.0062	<0.005	0.021	<0.025	NA
SB-6-5	<0.005	<0.005	<0.005	0.026	<0.025	NA
PRG (c)	3.2	2,800	690	990	3,400	

Notes:
(a) Soil samples collected by Erler & Kalinowski, Inc. on 15 June 1996.
(b) Sampling locations corresponding to Sample ID are shown in Figure 2.
(c) U.S. EPA Preliminary Remediation Goals ("PRGs") for Industrial soils (U.S. EPA, 1 September 1995).

Abbreviations:
MTBE = Methyl tertiary butyl ether
PAHs = Polycyclic Aromatic Hydrocarbons
NA = Not analyzed
ND = No compounds detected above laboratory method detection limits (See Appendix E for laboratory data sheets

Table 2
Summary of Soil and Groundwater Sampling Depths and Analyses (a)
6601 and 6603 Bay Street
Sybase, Inc.
Emeryville, California
(EKI 950074.03)

Sample ID (b)	Sample Location	Sample Depth (feet bgs) (c)	TPPH as gasoline / BTEX & MTBE (EPA 8015 and 8020)	TEPH as diesel (EPA 8015)	TEPH and Fuel Fingerprint (d)	PAHs (EPA Method 8100)
Soil						
SB-1-5	SB-1	4.5-5	x	x		
SB-2-5	SB-2	4.5-5	x	x		
SB-3-5	SB-3	4.5-5	x	x		x
SB-4-5	SB-4	4.5-5	x	x		x
SB-5-6	SB-5	5.5-6	x	x		
SB-6-5	SB-6	4.5-5	x	x		
Groundwater						
Travel Blank	-	-	x			
SB-1	SB-1	11.0	x	x		
SB-2	SB-2	13.5	x	x		
SB-3	SB-3	11.5	x		x	
SB-4	SB-4	11.5	x	x		
SB-5	SB-5	10.5	x		x	
SB-6	SB-6	11.5	x		x	x
MW-5	MW-5	18.0 (e)	x	x		
MW-7	MW-7	6.7-18.7 (e)	x	x		

Notes:

(a) Soil and grab groundwater samples collected by Erler & Kalinowski, Inc. on 15 June 1996 and 16 June 1996.

(b) See Figure 2 for sampling locations corresponding to Sample ID.

(c) "feet bgs" denotes feet below ground surface. Grab groundwater samples were collected through the hollow stem augers in borings drilled to the depth indicated.

(d) For a fuel fingerprint analysis, the laboratory attempts to match the sample chromatogram with that of various hydrocarbon standards. The analysis includes the entire extractable range, i.e. from carbon chain lengths C9 to C40.

(e) Sample depth for the monitoring wells are indicated by the screened interval of the well. For well MW-5, only the bottom depth of the screened interval is known.

Abbreviations:

TPPH = Total Purgeable Petroleum Hydrocarbons
BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes
MTBE = Methyl tertiary butyl ether
TEPH = Total Extractable Petroleum Hydrocarbons
PAHs = Polycyclic Aromatic Hydrocarbons

Table 3
Total Petroleum Hydrocarbon Concentrations in Soil Samples (a)
6601 and 6603 Bay Street
Sybase, Inc.
Emeryville, California
(EKI 950074.03)

	Total Purgeable Petroleum Hydrocarbons			Total Extractable Petroleum Hydrocarbons		
Sample ID (b)	Conc. as gas (c) (mg/kg)	Laboratory Description of Chromatogram Pattern	Additional Comments (d)	Conc. as diesel (e) (mg/kg)	Laboratory Description of Chromatogram Pattern	Additional Comments (c)
SB-1-5	200	Unidentifiable pattern of hydrocarbons in C8-C12 range.	Mound centered at 17 min. (not observed in other soil samples).	820	Unidentifiable pattern of hydrocarbons in C9-C24 range.	Mound in less than C12 range (not observed in other soil samples). Mound centered at C28.
SB-2-5	1.1	Pattern characteristic of weathered gasoline in C8-C12 range.	Mound centered at 23 min.	210	Unidentifiable pattern of hydrocarbons in C9-C24 range.	Mound centered at C30.
SB-3-5	<1.0	Not detected.	Mound centered at 23 min.	86	Unidentifiable pattern of hydrocarbons in C9-C24 range.	Mound centered at C30.
SB-4-5	4.2	Unidentifiable pattern of hydrocarbons greater than C9.	Mound centered at 23 min.	360	Unidentifiable pattern of hydrocarbons in C10-C24 range.	Mound centered at C30.
SB-5-6	7.3	Unidentifiable pattern of hydrocarbons greater than C8.	Mound centered at 23 min.	120	Unidentifiable pattern of hydrocarbons in C9-C24 range.	Some small peaks in less than C12 range. Mound centered at C30.
SB-6-5	2.5	Unidentifiable pattern of hydrocarbons in C8-C12 range.	Mound centered at 23 min. Also several peaks centered at 17 min.	1,800	Unidentifiable pattern of hydrocarbons in C9-C40 range.	Very different pattern from other soil samples. Discrete peaks at C14, C17, C20, C24, and C28.

Notes:

(a) Soil samples collected by Erler & Kalinowski, Inc. on 15 June 1996.

(b) Sampling locations corresponding to Sample ID are shown in Figure 3.

(c) Concentration quantified as gasoline (includes C6 to C12 compounds).

(d) Appendix G contains chromatograms from laboratory analysis of soil samples and, for comparison, petroleum hydrocarbon and n-alkane standards.

(e) Concentration quantified as diesel (includes C9 to C24 compounds).

Table 5
Total Petroleum Hydrocarbon Concentrations in Groundwater Samples (a)
6601 and 6603 Bay Street
Sybase, Inc.
Emeryville, California
(EKI 950074.03)

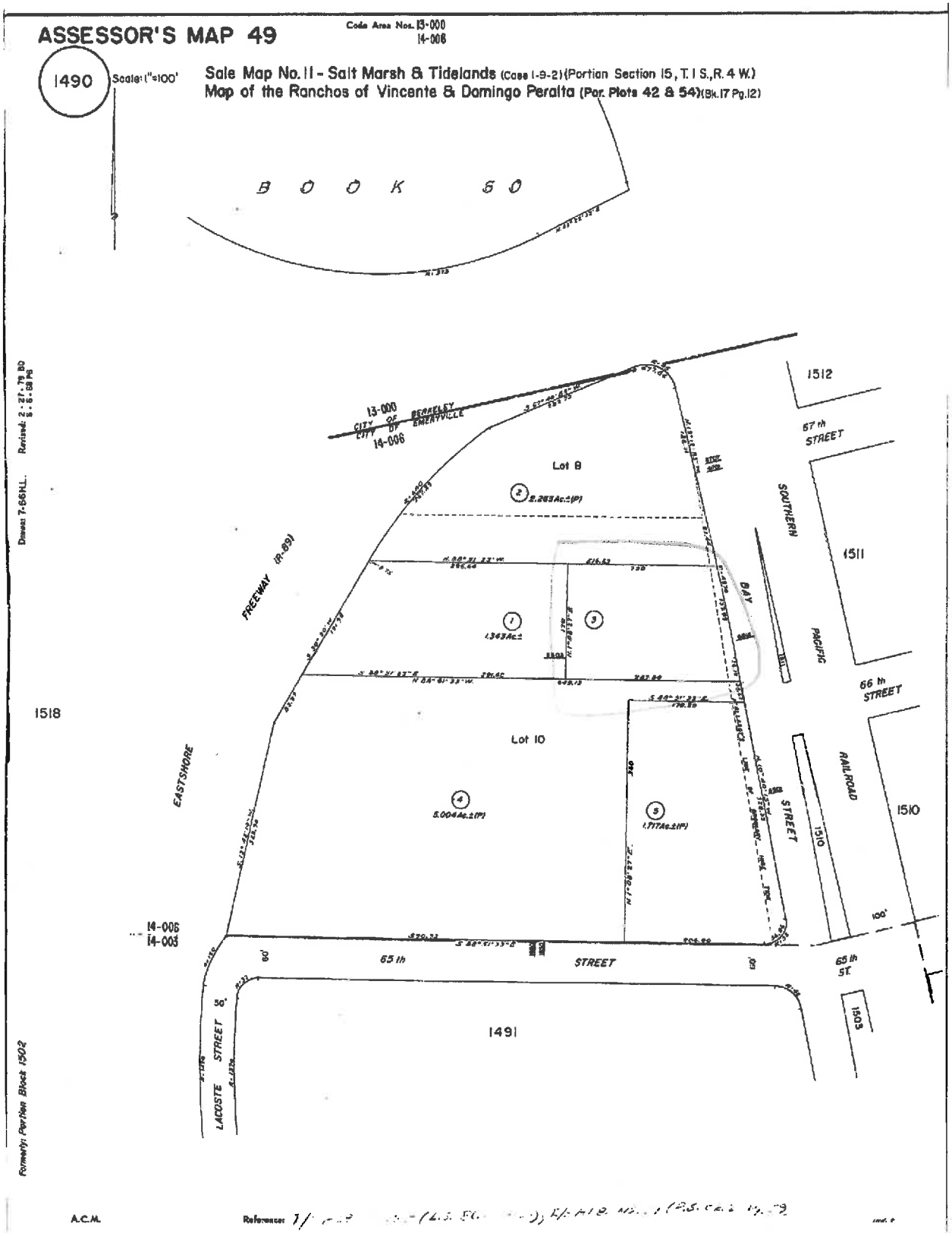
	Total Purgeable Petroleum Hydrocarbons			Total Extractable Petroleum Hydrocarbons		
Sample ID (b)	Conc. as gas (c) (ug/L)	Laboratory Description of Chromatogram Pattern	Additional Comments (c)	Conc. (d) (ug/L)	Laboratory Description of Chromatogram Pattern	Additional Comments (c)
SB-1	930	Unidentifiable pattern of hydrocarbons greater than C8.	Discrete peaks in 12-20 min. range.	9,400 (as diesel)	Unidentifiable pattern of hydrocarbons in C9-C24 range.	Mound in less than C12 range.
SB-2	<50	Not detected.	Small mound centered at 24 min.	<41,000 (as diesel)	Not detected.	No peaks visible.
SB-3	<5000	Not detected.	Mound centered at 24 min.	13,000,000 (total extract.)	Pattern characteristic of diesel and unidentifiable pattern of hydrocarbons in C25-C36 range.	Mound centered at C17 with some discrete peaks.
SB-4	<200	Not detected.	Small mound centered at 24 min.	690,000 (as diesel)	Pattern characteristic of weathered diesel.	Mound centered at C17 with some discrete peaks.
SB-5	1,800	Unidentifiable pattern of hydrocarbons greater than C11 and discrete peak in C6-C7 range.	Mound centered at 24 min.	2,100,000 (total extract.)	Pattern characteristic of diesel.	Mound centered at C17.
SB-6	370,000	Unidentifiable pattern of hydrocarbons greater than C11.	Mound centered at 24 min.	22,000,000 (total extract.)	Pattern characteristic of diesel.	Mound centered at C17.
MW-5	180	Pattern characteristic of weathered gasoline in C6-C12 range.	Discrete peaks in 16-23 min. range.	<40,000 (as diesel)	Not detected.	No peaks visible.
MW-7	<50	Not detected.	No peaks or mounds.	1,000 (as diesel)	Unidentifiable pattern of hydrocarbons in C9-C24 range.	Mound centered at C24 (not observed in other groundwater samples).

Notes:

(a) Groundwater samples collected by Erler & Kalinowski, Inc. on 15 and 16 June 1996.
(b) Sampling locations corresponding to Sample ID are shown in Figure 2.
(c) Concentration quantified as gasoline (includes C6 to C12 compounds).
(d) Appendix G contains chromatograms from laboratory analysis of samples and, for comparison, petroleum hydrocarbon and n-alkane standards.
(e) Concentration quantified either as diesel (includes C9 to C24 compounds) or as total extractable petroleum hydrocarbons (includes C9 to C40 compounds).

ATTACHMENT 6

For Assessment Use Only



ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director

R042

RAFAT A. SHAHID, DIRECTOR

Certified Mail # P 072 565 861
11/08/95 - STID# 3696

DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6777

Notice of Requirement to Reimburse

Ms. Megan Mchugh
Sybase, Incorporated
6475 Christie Avenue
Emeryville, California 94608

Responsible Party #1
Property Owner

Neil Mussalem And
Linda Mussalem
P O Box 66
Gilroy, California 95020

Responsible Party #2
Former Property Owner

Vacant Facility
6601 Bay St
Emeryville, CA 94608

SITE

Date First Reported 08/23/89
Substance: Gasoline
Petroleum: (X)Yes
Source: F

The federal Petroleum Leaking Underground Storage Tank Trust Fund (Federal Trust Fund) provides funding to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks. The legislature has authorized funds to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks. The direct and indirect costs of overseeing site investigation or remedial action at the above site are funded, in whole or in part, from the Federal Trust Fund. The above individual(s) or entity(ies) have been identified as the party or parties responsible for investigation and cleanup of the above site. **YOU ARE HEREBY NOTIFIED** that pursuant to Title 42 of the United States Code, Section 6991b(h)(6) and Section 25297.1 of the California Health and Safety Code, the above Responsible Party or Parties must reimburse the State Water Resources Control Board (SWRCB) not more than 150 percent of the total amount of site specific oversight costs actually incurred while overseeing the cleanup of the above referenced underground storage tank site, and the above Responsible Party or Parties must make full payment of such costs within 30 days of receipt of a detailed invoice from the SWRCB.

Any action or inaction by this local agency associated with corrective action, including responsible party identification, is subject to petition to the SWRCB. Petitions must be filed within 30 days from the date of the action/inaction. To obtain petition procedures, please fax your request to Roni Riley at the SWRCB at (916) 227-4349 or telephone (916) 227-4408 Please contact Susan HUGO, Hazardous Materials Specialist at this office if you have any questions concerning this matter.

Gordon Coleman, Acting Chief
Contract Project Director

c: Mike Harper, SWRCB

Please Circle One: Add Delete (Change)

Reason: Change of Ownership

Standard Form UST03(6/93) ; Report: ReimbRP 5/95

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director

R042
RAFAT A. SHAHID, DIRECTOR

Certified Mail # P 368 729 476
11/08/95 - STID# 3696

DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6777

Notice of Requirement to Reimburse

Ms. Megan Mchugh
Sybase, Incorporated
6475 Christie Avenue
Emeryville, California 94608

Responsible Party #1
Property Owner

Neil Mussalem And
Linda Mussalem
P O Box 66
Gilroy, California 95020

Responsible Party #2
Former Property Owner

Vacant Facility
6601 Bay St
Emeryville, CA 94608

SITE

Date First Reported 08/23/89
Substance: Gasoline
Petroleum: (X)Yes
Source: F

The federal Petroleum Leaking Underground Storage Tank Trust Fund (Federal Trust Fund) provides funding to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks. The legislature has authorized funds to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks. The direct and indirect costs of overseeing site investigation or remedial action at the above site are funded, in whole or in part, from the Federal Trust Fund. The above individual(s) or entity(ies) have been identified as the party or parties responsible for investigation and cleanup of the above site. **YOU ARE HEREBY NOTIFIED** that pursuant to Title 42 of the United States Code, Section 6991b(h)(6) and Section 25297.1 of the California Health and Safety Code, the above Responsible Party or Parties must reimburse the State Water Resources Control Board (SWRCB) not more than 150 percent of the total amount of site specific oversight costs actually incurred while overseeing the cleanup of the above referenced underground storage tank site, and the above Responsible Party or Parties must make full payment of such costs within 30 days of receipt of a detailed invoice from the SWRCB.

Any action or inaction by this local agency associated with corrective action, including responsible party identification, is subject to petition to the SWRCB. Petitions must be filed within 30 days from the date of the action/inaction. To obtain petition procedures, please fax your request to Roni Riley at the SWRCB at (916) 227-4349 or telephone (916) 227-4408 Please contact Susan HUGO, Hazardous Materials Specialist at this office if you have any questions concerning this matter.

for Gordon Coleman, Acting Chief
Contract Project Director

c: Mike Harper, SWRCB

Please Circle One: Add Delete (Change)

Reason: Change of Ownership

Standard Form UST03(6/93) ; Report: ReimbRP 5/95

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program

R042

RAFAT A. SHAHID, Assistant Agency Director

certified mailer #P 367 603 965

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

February 27, 1992
STID# 3696

Notice of Requirement to Reimburse

Neil Mussalem
Linda Mussalem
P.O. Box 66
Gilroy, CA 95020

Responsible Party
Contact Person
Property Owner

6601 Bay Street
Emeryville, CA 94608

SITE

Date First Reported 8/23/89
Substance:gasoline , diesel
Petroleum (X)Yes

The federal Petroleum Leaking Underground Storage Tank Trust Fund (Federal Trust Fund) provides funding to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks. The legislature has authorized funds to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks. The direct and indirect costs of overseeing removal or remedial action at the above site are funded, in whole or in part, from the Federal Trust Fund. The above individual(s) or entity(ies) have been identified as the party or parties responsible for investigation and cleanup of the above site. **YOU ARE HEREBY NOTIFIED** that pursuant to Title 42 of the United States Code, Section 6991b(h)(6) and Sections 25297.1 and 25360 of the California Health and Safety Code, the above Responsible Party or Parties must reimburse the State Water Resources Control Board not more than 150 percent of the total amount of site specific oversight costs actually incurred while overseeing the cleanup of the above underground storage tank site, and the above Responsible Party or Parties must make full payment of such costs within 30 days of receipt of a detailed invoice from the State Water Resources Control Board.

If you have any questions concerning this matter please contact Susan L. Hugo, Senior Hazardous Material Specialist, at (510) 271-4530.

Sincerely,

Edgar B Howell

Edgar B. Howell, III, Chief
Contract Project Director

cc: Sandra Malos, SWRCB

SWRCB Use : add: X Reason: New case

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
ALEX BRISCOE, Agency Director

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 4359 8761

August 4, 2015

NOTICE OF RESPONSIBILITY

Site Name & Address:
MUSSALLEM / SYBASE
6601 BAY (SHELLMOUND) STREET
EMERYVILLE, CA 94608

Local ID: RO0000042
Related ID: NA
RWQCB ID: NA
Global ID: T0600100825

Responsible Party:

GRIFFIN CAPITAL (SHELLMOUND)
INVESTORS LLC. ET AL
ATTEN: JULIE TREINEN
6601 - 6603 BAY STREET
EMERYVILLE, CA 94608

Date First Reported: 10/10/1989

Substance:
- 8006619 Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
- 12034 Diesel fuel oil & additives (Nos. 1-D, 2-D, 2-4)

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 GRIFFEN CAPITAL (SHELLMOUND) INVESTORS LLC, ET AL 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 MARK DETTERMAN at this office at (510) 567-6876 if you have questions regarding your site.

Ronald Browder Date: 08-04-15

RONALD BROWDER, Acting Director
Contract Project Director

Action: ADD
Reason: ADD

Attachment A: Responsible Parties Data Sheet

cc: Cindy Davis, SWRCB (email: cindy.davis@waterboards.ca.gov) | Dilan Roe (email: dilan.roe@acgov.org), File

ALAMEDA COUNTY ENVIRONMENTAL HEALTH
LUFT LOCAL OVERSIGHT PROGRAM

ATTACHMENT A - RESPONSIBLE PARTIES DATA SHEET

August 4, 2015

Site Name & Address:
MUSSALLEM / SYBASE
6601 BAY (SHELLMOUND) STREET
EMERYVILLE, CA 94608

Local ID: RO0000042
Related ID: NA
RWQCB ID: NA
Global ID: T0600100825

All Responsible Parties

RP has been named a Primary RP – NEIL AND LINDA MUSSALLEM
P.O. BOX 66 | GILROY, CA 95020 | No Phone Number Listed

RP has been named a Primary RP – SYBASE, INC. (SAP)
ATTN: DWAIN CHRISTENSEN
3410 HILLVIEW AVENUE | PALO ALTO, CA 94304 | No Phone Number Listed

RP has been named a Primary RP – WINTZEN, INC
ATTN: JACON WARREN
6601 SHELLMOUND STREET | EMERYVILLE, CA 94608 | No Phone Number Listed

RP has been named a Primary RP – GRIFFIN CAPITAL (SHELLMOUND) INVESTORS LLC ET AL
ATTN: JULIE TREINEN
6601 – 6603 SHELLMOUND STREET | EMERYVILLE, CA 94608 | No Phone Number Listed

ATTACHMENT A - RESPONSIBLE PARTIES DATA SHEET (Continued)

August 4, 2015

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."

Existence of Unauthorized Release

One approximately 6,000-gallon underground storage tank (UST) that stored diesel was excavated and removed from the site on October 10, 1989. No holes were reported. Pit water was described as brown, with scum floating on water. Three confirmation soil samples were collected from the sidewalls at the center point of the tank at a depth of 7.5 feet below surface grade. Concentrations up to 2,700 milligrams per kilogram (mg/kg) TPH as diesel and 3,400 mg/kg Total Oil and Grease (TOG) were documented. Total Petroleum Hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) were not analyzed for. These data indicate that an unauthorized release had occurred.

Responsible Party Identification

Neil and Linda Mussallem are former property owners associated with the underground storage tank (UST). Neil and Linda Mussallem are responsible parties for the site because they owned a UST used for the storage of a hazardous substance (Definition 1), owned the property associated with an unauthorized release (Definition 3), and had control of a UST following an unauthorized release of a hazardous substance (Definition 4).

Sybase, Inc, (currently SAP) purchased or received the property in February 1994, and is a former property owner associated with the UST. Sybase, Inc. is a responsible party for the site because it owned the property associated with an unauthorized release (Definition 3).

Wintzen, Inc, purchased or received the property in June 1998, and is a former property owner associated with the UST. Wintzen, Inc. is a responsible party for the site because it owned the property associated with an unauthorized release (Definition 3).

Griffin Capital (Shellmound) Investors LLC and Griffin Capital (Shellmound) Investors LLC et al purchased or received the property in May 2006, and is a former property owner associated with the UST. Griffin Capital (Shellmound) Investors LLC and Griffin Capital (Shellmound) Investors LLC et al are responsible parties for the site because they owned the property associated with an unauthorized release (Definition 3).

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
ALEX BRISCOE, Agency Director

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 4359 8754

August 4, 2015

NOTICE OF RESPONSIBILITY

Site Name & Address:
MUSSALLEM / SYBASE
6601 BAY (SHELLMOUND) STREET
EMERYVILLE, CA 94608

Local ID: RO0000042
Related ID: NA
RWQCB ID: NA
Global ID: T0600100825

Responsible Party:

WINTZEN, INC.
ATTN.: JACON WARREN
6601 SHELLMOUND STREET
EMERYVILLE, CA 94608

Date First Reported: 10/10/1989

Substance:
- 8006619 Gasoline-Automotive (motor gasoline and additives), leaded & unleaded
- 12034 Diesel fuel oil & additives (Nos. 1-D, 2-D, 2-4)

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

Ronald Browder Date: 08-04-15

RONALD BROWDER, Acting Director
Contract Project Director

Action: ADD
Reason: ADD

Attachment A: Responsible Parties Data Sheet

cc: Cindy Davis, SWRCB (email: cindy.davis@waterboards.ca.gov) | Dilan Roe (email: dilan.roe@acgov.org), File

ALAMEDA COUNTY ENVIRONMENTAL HEALTH
LUFT LOCAL OVERSIGHT PROGRAM

ATTACHMENT A - RESPONSIBLE PARTIES DATA SHEET

August 4, 2015

Site Name & Address:

MUSSALLEM / SYBASE
6601 BAY (SHELLMOUND) STREET
EMERYVILLE, CA 94608

Local ID:	**RO0000042**
Related ID:	**NA**
RWQCB ID:	**NA**
Global ID:	**T0600100825**

All Responsible Parties

RP has been named a Primary RP – NEIL AND LINDA MUSSALLEM
P.O. BOX 66 | GILROY, CA 95020 | No Phone Number Listed

RP has been named a Primary RP – SYBASE, INC. (SAP)
ATTN: DWAIN CHRISTENSEN
3410 HILLVIEW AVENUE | PALO ALTO, CA 94304 | No Phone Number Listed

RP has been named a Primary RP – WINTZEN, INC
ATTN: JACON WARREN
6601 SHELLMOUND STREET | EMERYVILLE, CA 94608 | No Phone Number Listed

RP has been named a Primary RP – GRIFFIN CAPITAL (SHELLMOUND) INVESTORS LLC ET AL
ATTN: JULIE TREINEN
6601 – 6603 SHELLMOUND STREET | EMERYVILLE, CA 94608 | No Phone Number Listed

ATTACHMENT A - RESPONSIBLE PARTIES DATA SHEET (Continued)

August 4, 2015

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."

Existence of Unauthorized Release

One approximately 6,000-gallon underground storage tank (UST) that stored diesel was excavated and removed from the site on October 10, 1989. No holes were reported. Pit water was described as brown, with scum floating on water. Three confirmation soil samples were collected from the sidewalls at the center point of the tank at a depth of 7.5 feet below surface grade. Concentrations up to 2,700 milligrams per kilogram (mg/kg) TPH as diesel and 3,400 mg/kg Total Oil and Grease (TOG) were documented. Total Petroleum Hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) were not analyzed for. These data indicate that an unauthorized release had occurred.

Responsible Party Identification

Neil and Linda Mussallem are former property owners associated with the underground storage tank (UST). Neil and Linda Mussallem are responsible parties for the site because they owned a UST used for the storage of a hazardous substance (Definition 1), owned the property associated with an unauthorized release (Definition 3), and had control of a UST following an unauthorized release of a hazardous substance (Definition 4).

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Wintzen, Inc, purchased or received the property in June 1998, and is a former property owner associated with the UST. Wintzen, Inc. is a responsible party for the site because it owned the property associated with an unauthorized release (Definition 3).

Griffin Capital (Shellmound) Investors LLC and Griffin Capital (Shellmound) Investors LLC et al purchased or received the property in May 2006, and is a former property owner associated with the UST. Griffin Capital (Shellmound) Investors LLC and Griffin Capital (Shellmound) Investors LLC et al are responsible parties for the site because they owned the property associated with an unauthorized release (Definition 3).

ATTACHMENT 7

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, 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

Mussallem / Sybase
and
Richardson / Sybase
6601 and 6603 Shellmound (Bay) Street
FUEL LEAK CASES RO0000042 and RO0000043
GEOTRACKER GLOBAL IDS T0600100825 and T0600100470

June 12, 2015

The above referenced site is a fuel leak case that is under the regulatory oversight of the Alameda County Environmental Health (ACEH) 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, ACEH is considering closure of the fuel leak case. Due to the residual contamination on site, the site would be closed with site management requirements that require further evaluation if the site is to be redeveloped in the future.

The public is invited to review and comment on the potential closure of the fuel leak case. This notice is being sent to the current occupants and landowners of the site and adjacent properties and other known interested parties. The entire case file can be viewed over the Internet on the 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). Please send written comments to Mark Detterman at the address below; all comments will be forwarded to the responsible parties. Comments **received by August 18, 2015** 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 ACEH caseworker, Mark Detterman at 510-567-6876 or by email at mark.detterman@acgov.org. Please refer to ACEH cases RO0000042 andRO0000043 in any correspondence.

Parcel_APN	Name	StreetAddress	Unit	City	Zip
49-1490-3	GRIFFIN CAPITAL (SHELLMOUND) IN\	6601-6603 SHELLMOUND		EMERYVILLE CA	94608
49-1490-1	GRIFFIN CAPITAL (SHELLMOUND) IN\	6601-6603 SHELLMOUND		EMERYVILLE CA	94608
49-1490-4	GRIFFIN CAPITAL ATRIUM INVESTOR	P.O. BOX 543185		DALLAS TX	75354
49-1510-2-2	MACH I 66TH STREET LLC	111 SUTTER ST	800	SAN FRANCISCO C.	94104
49-1490-2	NADY JOHN TR	11 GLEN ALPINE RD		PIEDMONT CA	94611
49-1490-3	OCCUPANT	6601 BAY ST		EMERYVILLE CA	94608
49-1490-2	OCCUPANT	6707 BAY ST		EMERYVILLE CA	94608
49-1490-1	OCCUPANT	6603 BAY ST		EMERYVILLE CA	94608
49-1490-4	OCCUPANT	1690 65TH ST		EMERYVILLE CA	94608
49-1490-5	OCCUPANT	6501 BAY ST		EMERYVILLE CA	94608
49-1511-16	OCCUPANT	66TH ST		EMERYVILLE CA	94608
49-1510-4	OCCUPANT	65TH ST		EMERYVILLE CA	94608
49-1510-2-2	OCCUPANT	1501 66TH ST		EMERYVILLE CA	94608
49-1490-5	PUBLIC STORAGE INSTITUTIONAL FU	PO BOX 25025		GLENDALE CA	91221
49-1510-4	S P CO 872-1-9F-18	PO BOX 2500		BROOMFIELD CO	80038
49-1511-16	S P CO 872-1-9F-20	PO BOX 2500		BROOMFIELD CO	80038