

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

ALEX BRISCOE, Director



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

September 9, 2014

John Schroeder  
East Bay Municipal Utility District  
Environmental Compliance Section  
375 Eleventh Street MS #704  
Oakland, CA 94607-4240

Subject: Case Closure for Fuel Leak Case No. RO0002735 (Global ID T0600190987), EBMUD South Area Service Center, 589 East Lewelling Blvd, San Lorenzo, CA 94580

Dear Mr. Schroeder:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25296.10[g]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed. This case closure letter and the case closure summary can also be viewed on the State Water Resources Control Board's Geotracker website (<http://geotracker.waterboards.ca.gov>) and the Alameda County Environmental Health website (<http://www.acgov.org/aceh/index.htm>).

If you have any questions, please call Matthew Soby at (510) 567-6725. Thank you.

Sincerely,

A handwritten signature in blue ink that reads "Dilan Roe". The signature is fluid and cursive, with the first name "Dilan" and the last name "Roe" clearly distinguishable.

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

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

Cc w/enc.:

Cherie McCaulou, San Francisco Bay Regional Water Quality Control Board, Region 2. 1515 Clay Street, Suite 1400, Oakland, CA 94612 (sent via email [cmccaulou@waterboards.ca.gov](mailto:cmccaulou@waterboards.ca.gov))

Ken Minn, East Bay Municipal Utility District, P.O. Box 24055, Oakland, CA 94623 (sent via e-mail to [kminn@ebmud.com](mailto:kminn@ebmud.com))

Leroy Griffin, City of Oakland Fire Department, 150 Frank Ogawa Plaza, Suite 5301, Oakland, CA 94612 (sent via e-mail to [lgriffin@oaklandnet.com](mailto:lgriffin@oaklandnet.com))

Mark Gomez, Oakland Public Works, 250 Frank Ogawa Plaza, Suite 5301, Oakland, CA 94612 (sent via e-mail to [mmgomez@oaklandnet.com](mailto:mmgomez@oaklandnet.com))

Responsible Parties

RO0002735

September 9, 2014 Page 2

Kwablah Attiogbe, Alameda County Public Works Agency, 399 Elmhurst Street, Hayward, CA 94544 (sent via e-mail to [kwablah@acpwa.org](mailto:kwablah@acpwa.org))

Sandra Rivera, Alameda County Planning Dept., Community Development Agency, 224 West Winton Ave, Room 111, Hayward, CA 94544 (sent via e-mail to [sandra.rivera@acgov.org](mailto:sandra.rivera@acgov.org))

Case Worker (sent via electronic mail to [matthew.soby@acgov.org](mailto:matthew.soby@acgov.org))

e-File, GeoTracker

ALAMEDA COUNTY  
**HEALTH CARE SERVICES  
AGENCY**

ALEX BRISCOE, Agency Director



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

**REMEDIAL ACTION COMPLETION CERTIFICATION**

September 9, 2014

John Schroeder  
East Bay Municipal Utility District  
Environmental Compliance Section  
375 Eleventh Street MS #704  
Oakland, CA 94607-4240

Subject: Case Closure Fuel Leak Case No. RO0002735 and GeoTracker Global ID T0600190987, EBMUD South Area Service Center, 589 East Lewelling Blvd, San Lorenzo, CA 94580

Dear Responsible Party:

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

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

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

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

Sincerely,

Ariu Levi  
Director

# UST Case Closure Summary Form

## Agency Information

Date: September 9, 2014

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6772
Staff Person: Matthew Soby	Title: Hazardous Materials Technician

## Case Information

Facility Name: EBMUD South Area Service Center		
Facility Address: 589 East Lewelling Blvd, San Lorenzo, CA 94580		
RB LUSTIS Case No.: ----	Local Case No.: ----	LOP Case No.: RO0002735
URF Filing Date: ----	Sweeps No.: ----	
GeoTracker Global ID: T0600190987	APN: 413-35-1-6	
Current Land Use: Commercial		
Responsible Party(s):	Address:	Phone:
John Schroeder, EBMUD Environmental Compliance Section	375 Eleventh Street, MS #704	----

## Tank Information

Tank No.	Size (gal)	Contents	Closed in-Place/ Removed/Active	Date
----	2,050	Diesel	Removed	Aug 1990
----	2,000	Gasoline	Removed	Aug 1990

**LTCP Groundwater Specific Criteria** (Attachment 1)

**LTCP Vapor Specific Criteria** (Attachment 2)

**LTCP Direct Contact and Outdoor Air Exposure Criteria** (Attachment 3)

**Conceptual Site Model** (GeoTracker CSM Report Attachment 4)

**Closure Criteria Met** (GeoTracker LTCP Checklist Attachment 5)

## Site Map and Attachments:

- Attachment 6      Site Vicinity Map and Aerial Photo (2 pp)
- Attachment 7      Soil Sample Location Maps (2009, 2004, 1990, and 1988) (4 pp)
- Attachment 8      Boring logs (1988 Geotechnical, 2009 UST-related) (6 pp)

## Analytical Data

- Attachment 9      Soil and Groundwater Analytical Data (2009, 2004, and 1990) (14 pp)



## UST Case Closure Summary Form

**Additional Information:**

**Water Supply Wells in Vicinity:**

There are zero California Department of Public Health supply wells within 0.5 miles of this site.

Historically there were municipal supply wells in the San Leandro and San Lorenzo groundwater sub-area; Hayward has emergency supply wells in the San Lorenzo sub-area.

Alameda County Public Works shows there is one domestic supply and 38 irrigation wells within a 2,000 foot radius of the site.

**Site Management Requirements:**

NO RESTRICTIONS

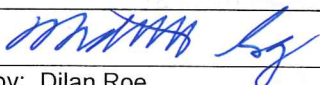

This fuel leak case has been evaluated for closure consistent with the State Water Resource Control Board (SWRCB) Low-Threat Underground Storage Tank Closure Policy (LTCP). Based on this evaluation, no site management requirements appear to be necessary. However, excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities.

**RWQCB Notification**

Notification Date: December 20, 2013

RWQCB Staff Name: Cherie McCaulou	Title: Engineering Geologist
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**Local Agency Representative**

Prepared by: Matthew Soby	Title: Hazardous Materials Technician
Signature: 	Date: 09/08/2014
Approved by: Dilan Roe	Title: LOP and SCP Program Manager
Signature: 	Date: 9/8/2014

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

# ATTACHMENT 1

# UST Case Closure Summary Form

## Attachment 1

LTCP GROUNDWATER SPECIFIC CRITERIA						
LTCP Groundwater Specific Scenario under which case was closed: <b>Scenario 5. Site has not affected groundwater per April 2009 GeoProbe grab groundwater analytical results.</b>						
Site Data		LTCP Scenario 1 Criteria	LTCP Scenario 2 Criteria	LTCP Scenario 3 Criteria	LTCP Scenario 4 Criteria	
Plume Length	< 100 feet.	<100 feet	<250 feet	<250 feet	<1,000 feet	
Free Product	No free product	No free product	No free product	Removed to maximum extent practicable	No free product	
Plume Stable or Decreasing	----	Stable or decreasing	Stable or decreasing	Stable or decreasing for minimum of 5 Years	Stable or decreasing	
Distance to Nearest Water Supply Well	Irrigation well 870 feet southwest. Domestic well 1,735 feet northwest.	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet	
Distance to Nearest Surface Water and Direction	San Lorenzo Creek approximately 150 feet south. The Creek is concrete-lined. Groundwater flow direction is likely southwest based on site data from RO0000498 located approximately 3,400 feet west.	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet	
Property Owner Willing to Accept a Land Use Restriction?	----	Not applicable	Not applicable	Yes	Not applicable	
Groundwater flow direction not established. Based on adjacent sites and topography, groundwater generally flows west toward the San Francisco Bay.						
GROUNDWATER CONCENTRATIONS						
Constituent	Historic Site Maximum (ppb)	Current Site Maximum (ppb)	LTCP Scenario 1 Criteria (ug/L)	LTCP Scenario 2 Criteria (ug/L)	LTCP Scenario 3 Criteria (ug/L)	LTCP Scenario 4 Criteria (ug/L)
Benzene	----	----	No criteria	3,000	No criteria	1,000
MTBE	----	----	No criteria	1,000	No criteria	1,000
Naphthalene	----	<0.21				
TPH-D	----	<20				
TPH-MO	----	<260				
Scenario 5: If the site does not meet scenarios 1 through 4, has a <u>determination been made</u> that under current and reasonably expected future scenarios, the contaminant plume poses a low threat to human health and safety and			<b>Scenario 5.</b> Historical soil samples showed no benzene or methyl-tert butyl ether (MTBE) concentrations that could leach to groundwater as results were below Method Detection Limits (MDLs). Historical grab groundwater samples from			

# UST Case Closure Summary Form

to the environment and water quality objectives will be achieved within a reasonable time frame?

April 2009 do not indicate a groundwater-impacted plume (all results of tested analytes for total petroleum hydrocarbons as diesel (TPH-D), total petroleum hydrocarbons as motor oil (TPH-MO) and naphthalene are below MDLs). Surface water and water supply well receptors are not at risk as impacted soil is delineated and groundwater has not been impacted by this release.

## COMMENTS:

In August 1990, two 2,000 gallon underground storage tanks (USTs) (one diesel and one unleaded gasoline) were removed from the site. Both USTs were noted to be in good condition with no holes and no leaks observed. Soil within the excavation had no stain and no odor within the UST excavation except for some soil staining at the fill end of the diesel UST. Soil analytical results showed TPH-D, total petroleum hydrocarbons as gasoline (TPH-G), TPH-MO, and benzene were below laboratory method reporting limits (MRLs); only toluene was detected at the highest concentration of 0.1 mg/kg near the gasoline UST excavation. In October 1990, limited over-excavation was conducted in the former diesel UST pit. Confirmatory soil samples showed no detections of volatile organic hydrocarbons (VOCs) (notably benzene, toluene, ethylbenzene, and xylenes (BTEX)) and the poly-aromatic hydrocarbon (PAH) naphthalene (MTBE was not analyzed) above MRLs. The UST excavation case was closed in November 1992.

In early May 2004, upgrades were made to the secondary containment systems under the gas and diesel dispensers. Soil samples were collected from 2.0 and 3.0 feet below ground surface (bgs). Maximum soil TPH-D concentration was 1,400 mg/kg at 3.0 feet bgs. In soil, BTEX, naphthalene, MTBE, and TPH-G were not detected above MRLs. Limited over-excavation of impacted soil beneath the diesel fuel dispenser was performed in mid-May 2004. Confirmatory soil sampling at 5.5 feet bgs showed TPH-D concentration of 11 mg/kg. BTEX, naphthalene, and MTBE constituents were not detected above MRLs. The stockpiled soil sample contained 430 mg/kg of TPH-D; the soil and groundwater report does not document the fate of excavated soil.

A subsequent investigation was performed in April 2009 in response to an ACEH request to document the lateral and vertical extent of soil and groundwater potential contamination. Two soil borings were advanced with six soil samples collected at 6, 11, and 17 feet bgs and two grab groundwater samples were collected via GeoProbe at the maximum depth explored, 24 feet bgs. Concentrations of constituents of concern did not exceed MRLs for TPH-D, TPH-MO, or naphthalene in soil or groundwater.

During the May 2004 investigation, the soil matrix was observed to be comprised of a sand / gravel fill from ground surface to 2 feet bgs underlain by native silt / clay encountered to 5.5 feet bgs maximum depth explored. In the April 2009 soil borings, the soil matrix was observed to be sandy silt to silty clay from ground surface to the total boring depth of 24 feet with a distinct silty sand / silty gravel horizon from 17 to 22 feet bgs.

Groundwater was encountered between 27.5 to 28 feet bgs in three June 1988 geotechnical soil borings. Groundwater was encountered between 18.5 to 19 feet bgs in the April 2009 soil borings.

Lateral and vertical delineation demonstrate that groundwater is not affected and residual soil contamination is localized.



# ATTACHMENT 2

# UST Case Closure Summary Form

## Attachment 2

LTCP VAPOR SPECIFIC CRITERIA							
LTCP Vapor Specific Scenario under which case was closed: <b>Active fueling station exempt from vapor specific criteria.</b>							
Active Fueling Station	Active as of: <u>Currently active</u> with two 12,000 gallon USTs per Certified Unified Program Agency records.						
Site Data	LTCP Scenario 1 Criteria	LTCP Scenario 2 Criteria	LTCP Scenario 3A Criteria	LTCP Scenario 3B Criteria	LTCP Scenario 3C Criteria	LTCP Scenario 4 Criteria	
Unweathered NAPL	No NAPL	LNAPL in groundwater	LNAPL in soil	No NAPL	No NAPL	No NAPL	No criteria
Thickness of Bioattenuation Zone Beneath Foundation	3 feet <sup>a</sup>	≥30 feet	≥30 feet	≥5 feet	≥10 feet	≥5 feet	≥5 feet
Total TPH (soil) in Bioattenuation Zone	1,400 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg
Maximum Current Benzene Concentration in Groundwater	Not analyzed <sup>b</sup>	No criteria	No criteria	<100 ug/L	≥100 and <1,000 ug/L	<1,000 ug/L	No criteria
Oxygen Data within Bioattenuation Zone	No oxygen data	No criteria	No criteria	No oxygen data or <4%	No oxygen data or <4%	≥4% at lower end of zone	≥4% at lower end of zone
Depth of soil vapor measurement beneath foundation	Not analyzed	No criteria	No criteria	No criteria	No criteria	No criteria	≥5 feet
SCENARIO 4 DIRECT MEASUREMENT OF SOIL VAPOR CONCENTRATIONS							
Site Soil Vapor Data			No Bioattenuation Zone		Bioattenuation Zone		
Constituent	Historic Maximum (µg/m <sup>3</sup> )	Current Maximum (µg/m <sup>3</sup> )	Residential	Commercial	Residential	Commercial	
Benzene	----	----	<85	<280	<85,000	<280,000	
Ethylbenzene	----	----	<1,100	<3,600	<1,100,000	<3,600,000	
Naphthalene	----	----	<93	<310	<93,000	<310,000	
If the site does not meet scenarios 1 through 4, does a <u>site-specific risk assessment</u> for the vapor intrusion pathway demonstrate that human health is protected?							----
If the site does not meet scenarios 1 through 4, has a <u>determination been made</u> that petroleum vapors from soil or groundwater will have no significant risk of adversely affecting human health?							----
<b>COMMENTS:</b>							
<sup>a</sup> Bioattenuation zone thickness based on May 2004 dispenser upgrade soil samples (2, 3, 5.5 feet bgs) results (maximum 1,400 mg/kg TPH-D concentration) and April 2009 confirmatory soil bore samples at 6, 11, 17 feet bgs results (concentrations below MDLs for TPH-D, naphthalene). No TPH-G or benzene concentrations exceeded MDLs in soil samples from October 1990 soil over-excavation samples and May 2004 dispenser upgrade soil samples.							

## UST Case Closure Summary Form

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<sup>b</sup> Benzene in groundwater was not analyzed during the April 2009 sampling event. Utilizing TPH-D groundwater concentrations (<20 ug/L) and maximum benzene concentration (0.1%) in fresh diesel from the 2012 California State Water Resources Control Board Leaking Underground Fuel Tank manual, the theoretical maximum benzene in groundwater could be 0.2 ug/L, two orders of magnitude less than LTCP criteria.

# ATTACHMENT 3

# UST Case Closure Summary Form

## Attachment 3

LTCP DIRECT CONTACT AND OUTDOOR AIR EXPOSURE CRITERIA						
LTCP Direct Contact and Outdoor Air Exposure Specific Scenario under which case was closed: <b>Maximum concentrations of petroleum hydrocarbons are less than or equal to those in Table 1 below.</b>						
Are maximum concentrations less than those in Table 1 below?				<u>Yes</u>		
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	< 0.0012 <sup>b</sup>	< 0.10 <sup>a</sup>	< 0.0012 <sup>b</sup>	< 0.10 <sup>a</sup>	< 0.0012 <sup>b</sup>
LTCP Criteria	Benzene	≤1.9	≤2.8	≤8.2	≤12	≤14
Site Maximum	Ethylbenzene	< 0.0020 <sup>b</sup>	< 0.10 <sup>a</sup>	< 0.0020 <sup>b</sup>	< 0.10 <sup>a</sup>	< 0.0020 <sup>b</sup>
LTCP Criteria	Ethylbenzene	≤21	≤32	≤89	≤134	≤314
Site Maximum	Naphthalene	----	< 0.021 <sup>c</sup>	----	< 0.021 <sup>c</sup>	< 0.021 <sup>c</sup>
LTCP Criteria	Naphthalene	≤9.7	≤9.7	≤45	≤45	≤219
Site Maximum	PAHs	----	----	----	----	----
LTCP Criteria	PAHs	≤0.063	NA	≤0.68	NA	≤4.5
If maximum concentrations are greater than those in Table 1, are they less than levels from a <u>site-specific risk assessment</u> ?				----		
If maximum concentrations are greater than those in Table 1, has a <u>determination been made</u> 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?				----		
<b>COMMENTS:</b>						
<sup>a</sup> Data from August & October 1990 analytical results <sup>b</sup> Data from May 2004 analytical results <sup>c</sup> Data from April 2009 analytical results  Petroleum hydrocarbon impacted soil appears localized to the area under the fuel dispensers and laterally delineated by the April 2009 soil borings. Maximum TPH-D concentrations are 1,400 mg/kg at 3.0 feet bgs noted during the dispenser secondary containment upgrade.						



# UST Case Closure Summary Form

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## Site Management Requirements:

### **NO RESTRICTIONS**

This fuel leak case has been evaluated for closure consistent with the State Water Resource Control Board Low-Threat Underground Storage Tank Closure Policy (LTCP). Based on this evaluation, no site management requirements appear to be necessary. However, excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities.

# ATTACHMENT 4

CSM Report

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**EBMUD SOUTH AREA SERVICE CENTER (T0600190987) - [MAP THIS SITE](#)**

OPEN - ELIGIBLE FOR CLOSURE

589 EAST LEWELLING BLVD  
SAN LORENZO, CA 94580  
ALAMEDA COUNTY

[ACTIVITIES REPORT](#)

[PUBLIC WEBPAGE](#)

[VIEW PRINTABLE CASE SUMMARY FOR THIS SITE](#)

**CLEANUP OVERSIGHT AGENCIES**

ALAMEDA COUNTY LOP (**LEAD**) - CASE #: RO0002735

**CASEWORKER:** [MATTHEW SOBY](#) - **SUPERVISOR:** DILAN ROE

SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: NA

**CASEWORKER:** [Cherie McCaulou](#) - **SUPERVISOR:** Cheryl L. Prowell

THIS PROJECT WAS LAST MODIFIED BY [MATTHEW SOBY](#) ON 9/2/2014 4:59:40 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 SCUFIS)**

FIVE YEAR REVIEW INFORMATION

CLAIM NO	PRIORITY	CLAIMANT	SITE ADDRESS	AMT REIMB TO DATE	AGE OF LOC	IMPACTED WELLS?	REVIEW NUM	REVIEWER	FUND RECOMMENDATION	TO OVERSIGHT DATE	TO CLAIMANT DATE
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**PROJECT INFORMATION (DATA PULLED FROM GEOTRACKER) - [MAP THIS SITE](#)**

SITE NAME / ADDRESS	STATUS	STATUS DATE	RELEASE REPORT DATE	AGE OF CASE	CLEANUP OVERSIGHT AGENCIES
EBMUD SOUTH AREA SERVICE CENTER (Global ID: T0600190987) 589 EAST LEWELLING BLVD SAN LORENZO, CA 94580	Open - Eligible for Closure	8/11/2013	6/14/2004	10	ALAMEDA COUNTY LOP ( <b>LEAD</b> ) - CASE #: RO0002735 <b>CASEWORKER:</b> <a href="#">MATTHEW SOBY</a> - <b>SUPERVISOR:</b> DILAN ROE SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: NA <b>CASEWORKER:</b> <a href="#">Cherie McCaulou</a> - <b>SUPERVISOR:</b> Cheryl L. Prowell

**STAFF NOTES (INTERNAL)**

<NO STAFF NOTES ENTERED>

**SITE HISTORY**

In August 1990 two 2,000-gallon (one diesel and one unleaded gasoline) USTs were removed from the site. Soil samples indicated concentrations of toluene, total xylenes, and in the stockpile, TPHg. TPHd was non-detectable. In October 1990 limited overexcavation was conducted; all confirmation soil samples appear to have been below the limits of detection. The case was closed in November 1992. In May 2004 during the installation of secondary containment systems under two fuel dispensers (one gas and one diesel) soil samples were collected that indicated a release beneath the diesel dispenser; concentrations of concern were encountered. Limited overexcavation occurred the following week and achieved a reduction in TPHd concentrations. Two soil bores were installed in April 2009 to investigate the lateral extent of soil and groundwater impact. No additional work has been requested.

**RESPONSIBLE PARTIES**

NAME	ORGANIZATION	ADDRESS	CITY	EMAIL
JOHN SCHROEDER	EBMUD	375 11TH ST, MAIL STOP 704	Oakland	

**CLEANUP ACTION INFO**

ACTION TYPE	BEGIN DATE	END DATE	PHASE	CONTAMINANT MASS REMOVED	DESCRIPTION
UNKNOWN	9/9/9999	9/9/9999			

**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, Napthalene	Commercial	GW - Municipal and Domestic Supply	Dispenser	6/14/2004	Other Means	0

FREE PRODUCT	OTHER CONTITUENTS	NAME OF WATER SYSTEM	LAST REGULATORY ACTIVITY	LAST ESI UPLOAD	LAST EDF UPLOAD	EXPECTED CLOSURE DATE	MOST RECENT CLOSURE REQUEST
NO	NO	EBMUD	11/27/2013	6/17/2009			

**CDPH WELLS WITHIN 1500 FEET OF THIS SITE**

NONE

**CALCULATED FIELDS (BASED ON LATITUDE / LONGITUDE)**

APN	GW BASIN NAME	WATERSHED NAME
413 003500106	Santa Clara Valley - East Bay Plain (2-9.04)	South Bay - East Bay Cities (20420)

<b>COUNTY</b> Alameda	<b>PUBLIC WATER SYSTEM(S)</b> <ul style="list-style-type: none"> <li>• <b>CITY OF HAYWARD</b> - 777 B STREET, HAYWARD, CA 94545</li> <li>• <b>EAST BAY MUD</b> - 375 ELEVENTH STREET, OAKLAND, CA 94607</li> </ul>
<b>MOST RECENT CONCENTRATIONS OF PETROLEUM CONSTITUENTS IN GROUNDWATER - <a href="#">HIDE</a></b>	
<a href="#">VIEW ESI SUBMITTALS</a>	
NO GROUNDWATER DATA HAS BEEN SUBMITTED TO GEOTRACKER ESI FOR THIS SITE	
<b>MOST RECENT CONCENTRATIONS OF PETROLEUM CONSTITUENTS IN SOIL - <a href="#">HIDE</a></b>	
<a href="#">VIEW ESI SUBMITTALS</a>	
NO SOIL DATA HAS BEEN SUBMITTED TO GEOTRACKER ESI FOR THIS SITE	
<b>MOST RECENT GEO_WELL DATA - <a href="#">HIDE</a></b>	
<a href="#">VIEW ESI SUBMITTALS</a>	
NO GEO_WELL DATA HAS BEEN SUBMITTED TO GEOTRACKER ESI FOR THIS SITE	

LOGGED IN AS MATTSOBY

[CONTACT GEOTRACKER HELP](#)

# ATTACHMENT 5



LTCP Checklist

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OPEN - ELIGIBLE FOR CLOSURE

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**CLEANUP OVERSIGHT AGENCIES**

ALAMEDA COUNTY LOP (LEAD) - CASE #: RO0002735  
CASEWORKER: [MATTHEW SOBY](#) - SUPERVISOR: [DILAN ROE](#)  
SAN FRANCISCO BAY RWQCB (REGION 2) - CASE #: NA  
CASEWORKER: [Cherie McCaulou](#) - SUPERVISOR: [Cheryl L. Prowell](#)

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**CLOSURE POLICY**

*THIS VERSION IS IN PROGRESS AS OF 9/3/2014*

CHECKLIST INITIATED ON 5/17/2013

[CLOSURE POLICY HISTORY](#)

**General Criteria** - *The site satisfies the policy general criteria* - [CLEAR SECTION ANSWERS](#)

a. Is the unauthorized release located within the service area of a public water system?

Name of Water System :

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](#)

**EXEMPTION - Soil Only Case (Release has not Affected Groundwater - [Info](#))**

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](#)

**EXEMPTION - Active Commercial Petroleum Fueling Facility**

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](#)

**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 14/15?

YES  NO

[SPELL CHECK](#)

LOGGED IN AS MATTSOBY

[CONTACT GEOTRACKER HELP](#)

# ATTACHMENT 6





Google earth

feet  
meters



RO2735, Image date 02/22/2014







EBMUD South Area Service Center

**FIGURE 1**

SITE VICINITY MAP

EBMUD South Area Service Center

589 E. Lewelling Blvd.  
San Lorenzo, California

Alisto Project No.  
10-654-42

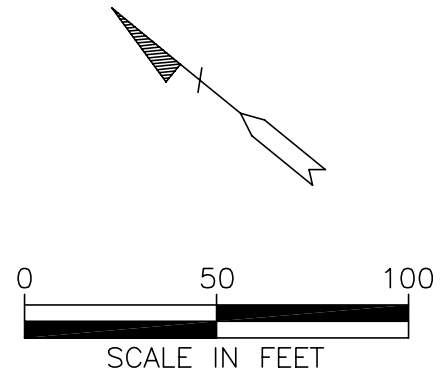
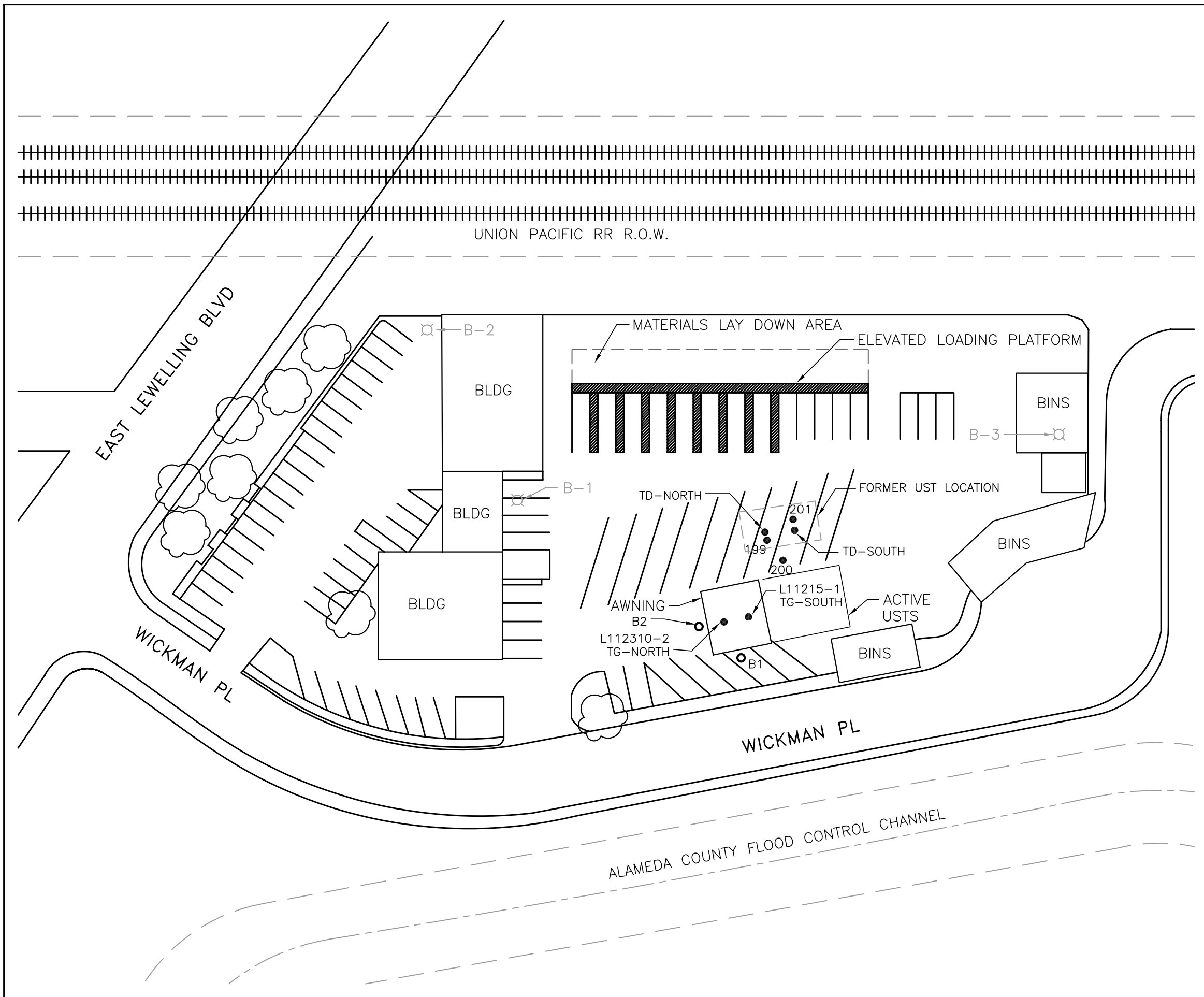
© 2009 Tele Atlas

Google™



# ATTACHMENT 7





**LEGEND**

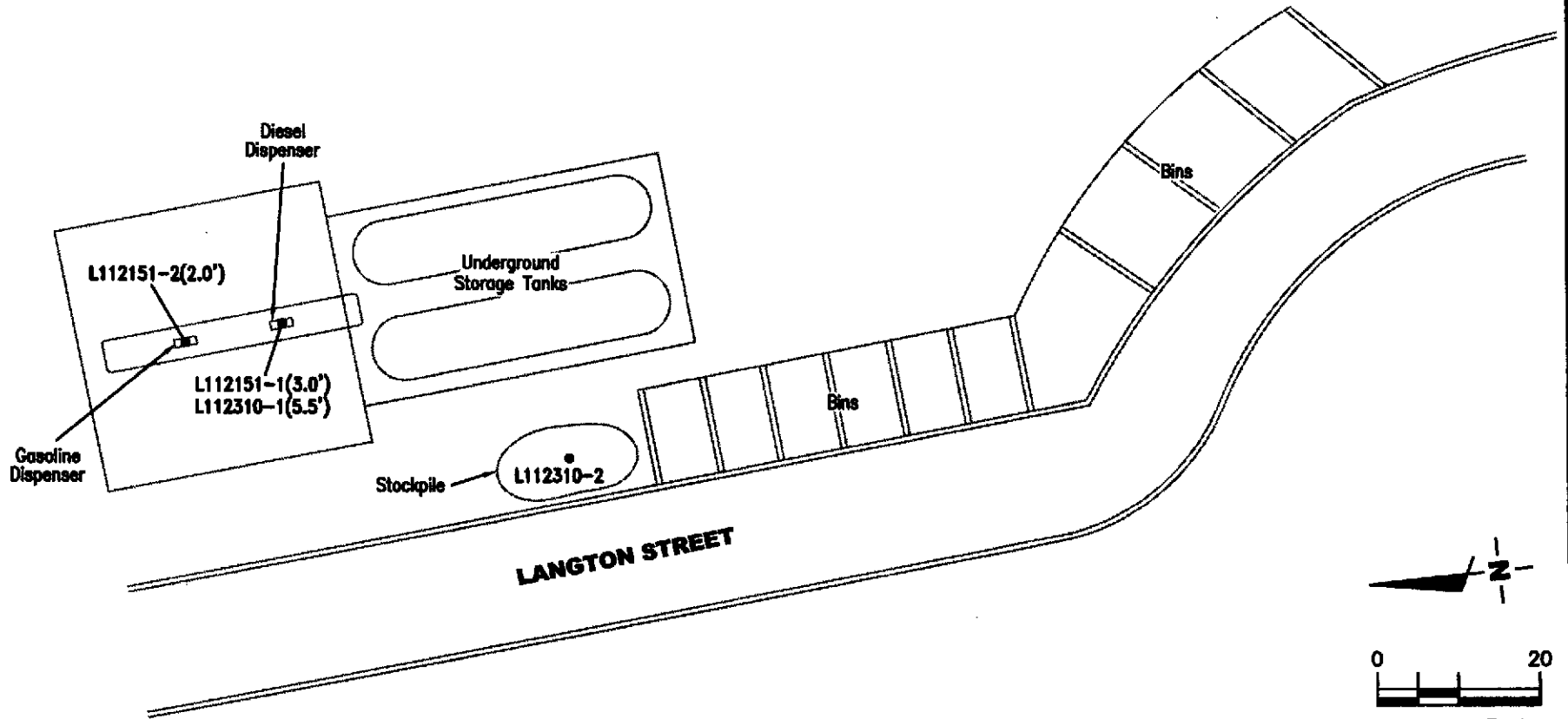
- ⊗ GEOTECHNICAL BORING (1988)
- 201 SOIL SAMPLE & ID NO.
- B1 SOIL BORING (2009)
- ☁ TREE
- APPROXIMATE EASEMENT BOUNDARY

**FIGURE 2**  
**SITE PLAN**  
 EAST BAY MUNICIPAL UTILITY DISTRICT  
 SOUTH AREA SERVICE CENTER  
 589 E. LEWELLING BLVD.  
 SAN LORENZO, CA  
 PROJECT NO. 10-654-42

2004 dispenser secondary containment upgrade soil sample locations

**EXPLANATION**

- Soil sample location



Source: Figure modified from drawing provided by EBMUD Dwg. No. 9191-G-2.05 (dated 3/30/90).

**GETTLER - RYAN INC.**  
 6747 Sierra Court, Suite J  
 Dublin, CA 94568 (925) 551-7555

589 **SITE PLAN**  
 EBMUD South Area Service Center  
 375 East Lewelling Boulevard  
 San Lorenzo, California

FIGURE  
**1**

PROJECT NUMBER  
 052092.2

REVIEWED BY

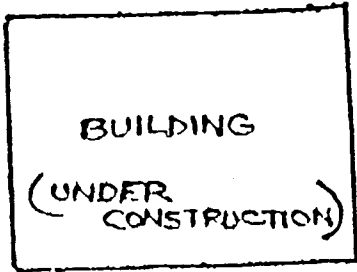
DATE  
 5/04

REVISED DATE

FILE NAME: P:\Enviro\EBMUD\375\A04-375.dwg | Layout Tab: Sampling 5-04

SOIL SAMPLES TAKEN FOR MINTER + FAHY CONST. - 8/23/90

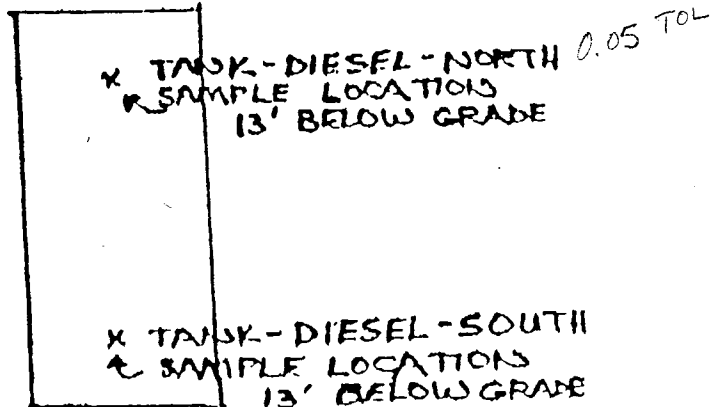
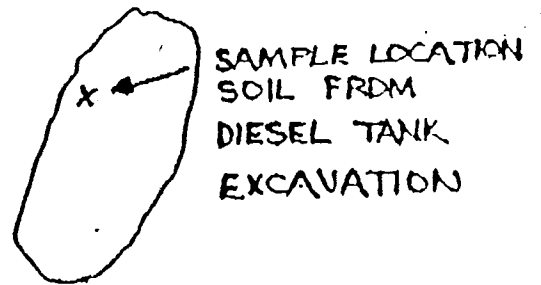
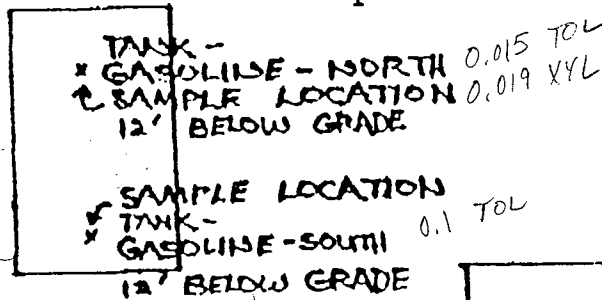
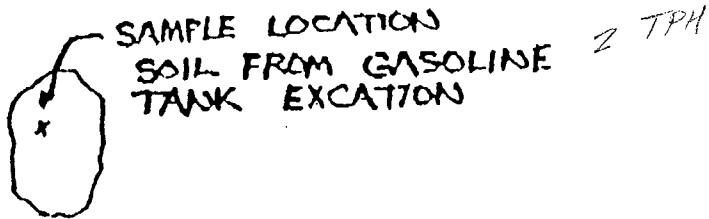
LEWELLING BLVD.



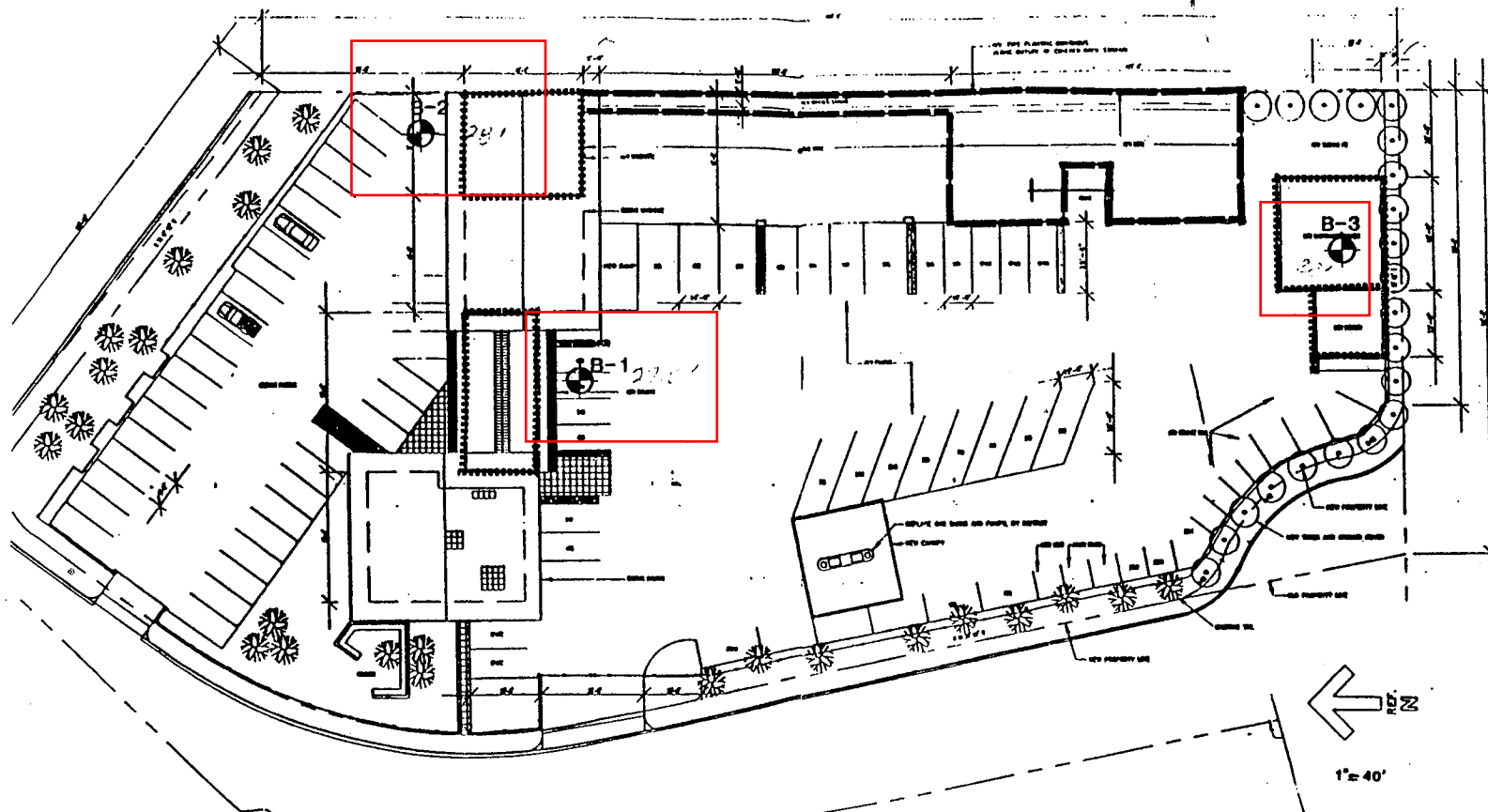
EBMUD  
589 E. LEWELLING BLVD.  
SAN LORENZO, CA



WICKMAN CT.




1988 Geotechnical Soil Bore Locations

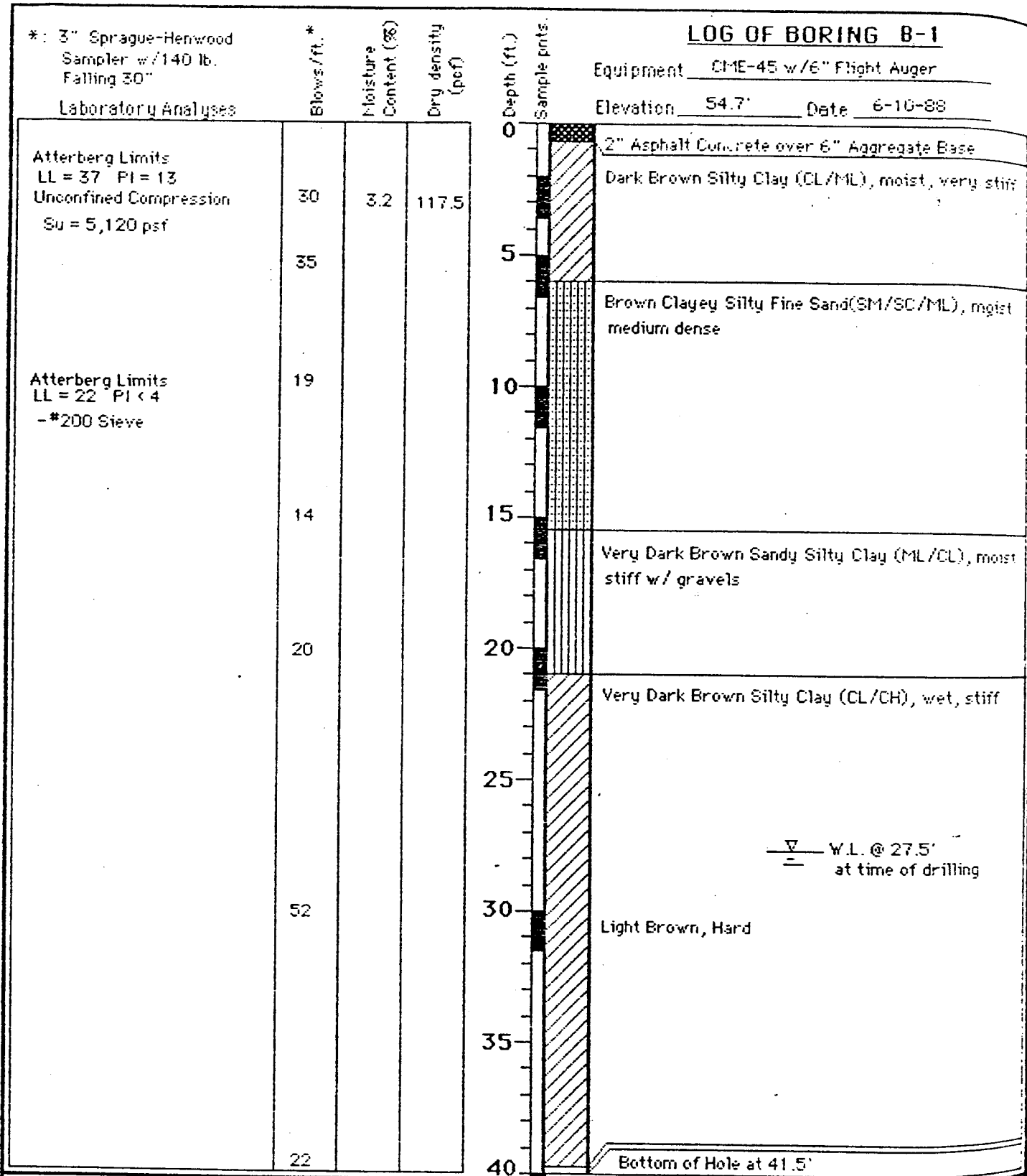


- : Proposed New Building
- : Proposed New Dock
- ⊙ : Test Boring

REF: Site plan provided by Jong & Jong dated 5-13-88

 <p><b>Geo/Resource Consultants, Inc.</b>          GEOTECHNICAL ENGINEERS / ENVIRONMENTAL SCIENTISTS          851 HARRISON STREET, SAN FRANCISCO, CALIFORNIA 94107</p>	<p>SITE PLAN</p>		<p>FIGURE 2</p>
	<p><b>EAST BAY MUNICIPAL UTILITY DISTRICT</b>  <b>SOUTH AREA SERVICE CENTER</b>  <b>SAN LORENZO, CALIFORNIA</b></p>		
<p>Job No. 1400-00    Appr. <i>APC</i>    Date 8-22-88</p>			

# ATTACHMENT 8



**Geo/Resource Consultants, Inc.**  
 Geologists, Engineers, Environmental Scientists

Job No. 1400-00 Appr: MDC Date 6-21-88

**LOG OF BORING B-1**  
**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**SOUTH AREA SERVICE CENTER**  
**SAN LORENZO, CALIFORNIA**

FIGURE  
3

\* A L U U Jo

\*: 3" Sprague-Henwood  
Sampler w/140 lb.  
Falling 30"

### LOG OF BORING B-2

Equipment CME-45 w/6" Flight Auger

Laboratory Analyses

Elevation 54.0' Date 6-10-88

Laboratory Analyses	Blows/ft.*	Moisture Content (%)	Dry density (pcf)	Depth (ft.)	Sample pnts.	Soil Description
Atterberg Limits LL=41 PI=16 Unconfined Compression Su = 950 psf	19	24.2	91.2	0	0-1	2" Asphalt Concrete over 6" Aggregate Base
	15	13.0	100.2	5	4-5	Dark Brown Silty Sandy Clay (CL), moist, stiff
Unconfined Compression Su = 970 psf	18			10	9-10	Brown
	21	25.7	93.2	15	14-15	
LL=53 PI=28	33			20	19-20	Very Dark Brown Silty Clay (CL/CH), wet very stiff
	52	24.1	98.7	30	29-30	Light Grey, saturated, hard
				30	30	W.L. @ 28' at time of drilling



Geo/Resource Consultants, Inc.  
Geologists, Engineers, Environmental  
Scientists

LOG OF BORING B-2  
EAST BAY MUNICIPAL UTILITY DISTRICT  
SOUTH AREA SERVICE CENTER  
SAN LORENZO, CALIFORNIA

FIGURE

4

Job No. 1400-00 Appr: MDC Date 6-21-88

**LOG OF BORING B-2 (Cont'd)**

\* 3" Sprague-Henwood  
Sampler w/140 lb.  
Falling 30"  
Laboratory Analyses

Blows/ft. \*  
Moisture  
Content (%)  
Dry density  
(pcf)

Depth (ft.)  
Sample pts.

Equipment CME-45 w/6" Flight Auger

Elevation \_\_\_\_\_ Date 6-10-88

Blows/ft. *	Moisture Content (%)	Dry density (pcf)	Depth (ft.)	Sample pts.	Description
29			40		Light Brown Silty Clay (CL/CH), saturated very stiff
54			50		
			50		hard
			51.5		Bottom of Hole @ 51.5'
			55		
			60		
			65		
			70		
			75		
			80		



Geo/Resource Consultants, Inc.  
Geologists, Engineers, Environmental  
Scientists

Job No. 1400-00 Appr: ADC Date 6-21-88

**LOG OF BORING B-2**  
**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**SOUTH AREA SERVICE CENTER**  
**SAN LORENZO, CALIFORNIA**

FIGURE

4a



n/d

\*: 3" Sprague-Henwood  
Sampler w/140 lb.  
Falling 30"

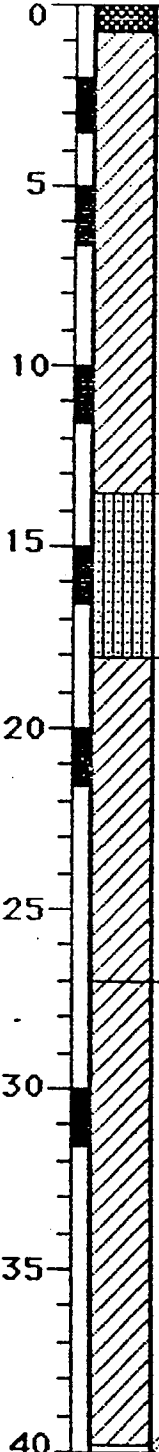
Laboratory Analyses

Atterberg Limits  
LL=29 PI=9  
Unconfined Compression  
Su = 1,000 psf

Blows/ft.\*  
Moisture Content (%)  
Dry density (pcf)

Blows/ft.*	Moisture Content (%)	Dry density (pcf)
11	16.3	103.0
17		
16	14.8	99.7
34		
26		
26		
21		

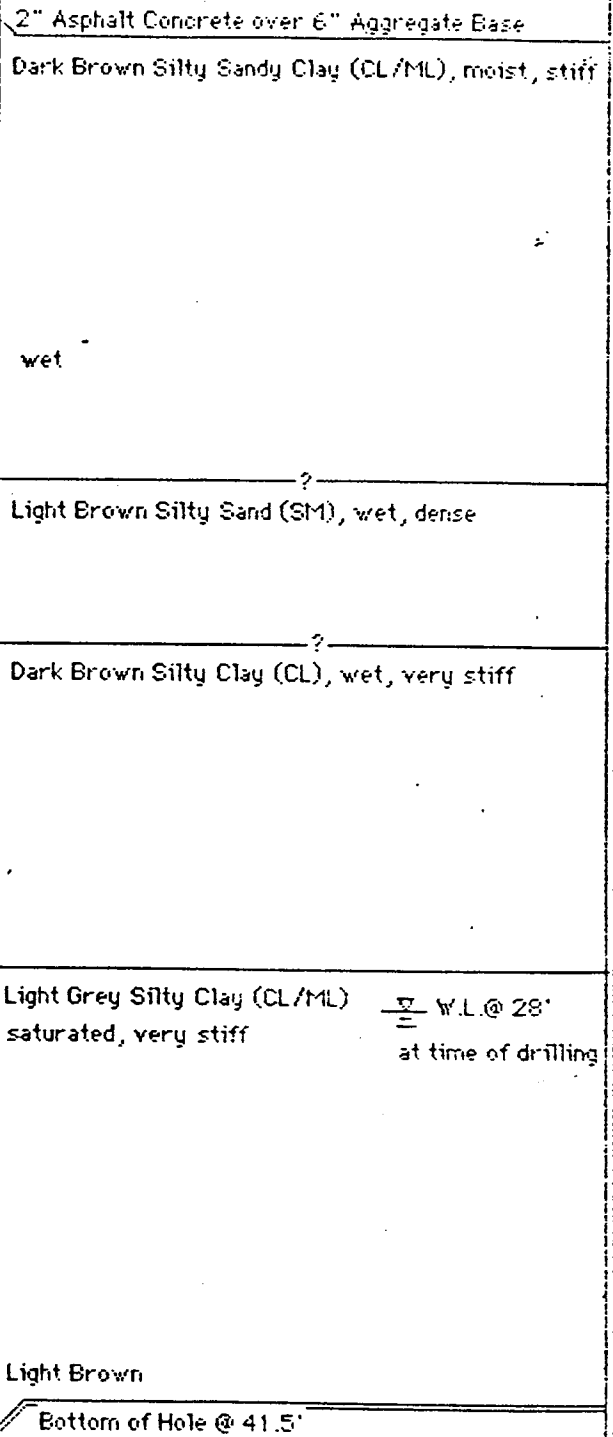
Depth (ft.)  
Sample pnts.



**LOG OF BORING B-3**

Equipment CME-45 w/6" Flight Auger

Elevation 55.0' Date 6-10-88



GURE

48



Geo/Resource Consultants, Inc.  
Geologists, Engineers, Environmental  
Scientists


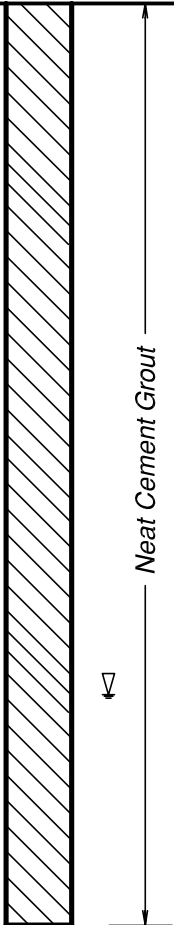



Job No. 1400-00 Appr: MDC Date 6-21-88

**LOG OF BORING B-3**

**EAST BAY MUNICIPAL UTILITY DISTRICT  
SOUTH AREA SERVICE CENTER  
SAN LORENZO, CALIFORNIA**

FIGURE

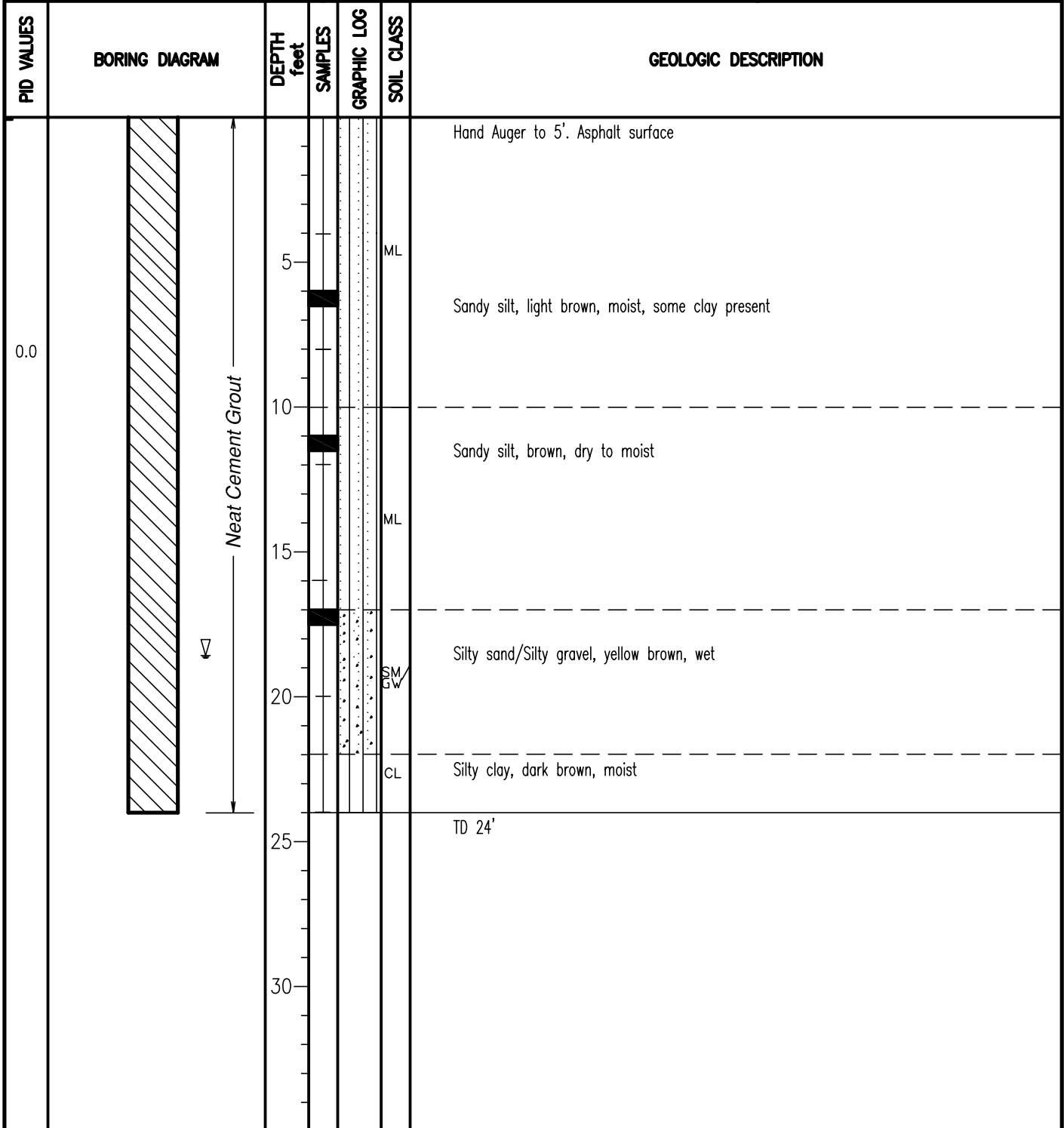
5

 ALISTO ENGINEERING GROUP WALNUT CREEK, CALIFORNIA		LOG OF BORING B-1			Page 1 of 1	
<b>BORING LOCATION:</b> SEE SITE PLAN		<b>ALISTO PROJECT NO:</b> 10-654-42		<b>DATE DRILLED:</b> 04/17/09		
		<b>CLIENT:</b> EBMUD		<b>BOREHOLE DIAMETER:</b> 2.25'		
		<b>LOCATION:</b> 589 E. Lewelling, San Lorenzo		<b>BOREHOLE DEPTH:</b> 24'		
		<b>DRILLING METHOD:</b> GeoProbe		<b>CASING DIAMETER:</b> N/A		
		<b>DRILLING COMPANY:</b> EnProb		<b>CASING MATERIAL:</b> N/A		
		<b>LOGGED BY:</b> S. Parker		<b>APPROVED BY:</b> Al Sevilla		
PID VALUES	BORING DIAGRAM	DEPTH feet	SAMPLES	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
0.0					CL SM ML/CL SW CL	Hand Auger to 5'. Asphalt surface  Easy push 5' - 8' Sandy clay, dark brown, moist  Silty sand, light brown, moist  Silty clay/Clayey silt, dark brown, moist  Silty sand with some gravel, yellow brown, wet Water @ 18'  Silty clay, dark brown, moist to wet, some organics  TD 24'



# LOG OF BORING B-2

<b>BORING LOCATION:</b> SEE SITE PLAN	<b>ALISTO PROJECT NO:</b> 10-654-42	<b>DATE DRILLED:</b> 04/17/09
	<b>CLIENT:</b> EBMUD	<b>BOREHOLE DIAMETER:</b> 2.25'
	<b>LOCATION:</b> 589 E. Lewelling, San Lorenzo	<b>BOREHOLE DEPTH:</b> 24'
	<b>DRILLING METHOD:</b> GeoProbe	<b>CASING DIAMETER:</b> N/A
	<b>DRILLING COMPANY:</b> EnProb	<b>CASING MATERIAL:</b> N/A
	<b>LOGGED BY:</b> S. Parker	<b>APPROVED BY:</b> Al Sevilla



# ATTACHMENT 9

# EBMUD Laboratory

## Analytical Report

**EAST BAY MUNICIPAL UTILITY DISTRICT**  
**Laboratory Services Division**  
**PO Box 24055, MS 59, Oakland, CA 94623**  
**Phone (510)287-1432 Fax (510)465-5462**

**California Environmental Laboratory Accreditation Program Certificate Number 1060**

**Laboratory Report - L151437**

**LSR # - B793-9512-1 Project Title: TRENCH SPOILS PROGRAM**

**Report generated on: Jun 01, 2009 07:59 am**

**8 - Samples received by the lab on: Apr 22 2009, 09:22 am**

**0 - Lost Analyses**

**0 - Hold Time Exceedences**

**Turn-around-time met**

**Client PM: JOHN WALTER**

**Lab PM: KENNETH GERSTMAN**

**This is an electronic transmittal of a Laboratory Analytical Report**

Samples included in this report:

Sample	Type Collected	Site	Locator	ClientID
L151437-1	GRAB 17-Apr-2009 08:50	SOUTH YARD	MISC	B1 6ft
L151437-2	GRAB 17-Apr-2009 08:55	SOUTH YARD	MISC	B1 11ft
L151437-3	GRAB 17-Apr-2009 09:00	SOUTH YARD	MISC	B1 17ft
L151437-4	GRAB 17-Apr-2009 09:45	SOUTH YARD	MISC	B2 6ft
L151437-5	GRAB 17-Apr-2009 09:50	SOUTH YARD	MISC	B2 11ft
L151437-6	GRAB 17-Apr-2009 10:00	SOUTH YARD	MISC	B2 17ft
L151437-7	GRAB 17-Apr-2009 09:30	SOUTH YARD	MISC	B1W
L151437-8	GRAB 17-Apr-2009 10:30	SOUTH YARD	MISC	B2W

Legend to the laboratory qualifiers used in this report:

U - Analyte not detected

Qualifiers for subcontract work - See textvalue for description

RESULTS IN THIS REPORT ARE REPORTED IN ACCORDANCE WITH TITLE 22, SECTION 64819

EAST BAY MUNICIPAL UTILITY DISTRICT  
 Laboratory Services Division  
 PO Box 24055, MS 59, Oakland, CA 94623  
 Phone (510)287-1432 Fax (510)465-5462  
**Analytical Results Report**

LSR#: B793-9512-1 TRENCH SPOILS PROGRAM

Site: SOUTH YARD South Area Service Center  
 Locator: MISC Miscellaneous sample, see sample comments for location  
 ClientID: B1 6ft  
 Lab ID: L151437-1 (P153643-1)  
 Sample Type: GRAB (Instantaneous Grab)  
 Date Collected: Apr 17 2009, 08:50am Sample collector: SParker/Alisto  
 Date Received: Apr 22 2009, 09:22am Sample receiver: DNG  
 Sample Comments: Analyst Note: DIESEL GC/MS report DIESEL only; 8270 report NAPHTHALENE only.

Method Reference	Qualifier	Result	Units	Dilution	MDL	Matrix	Tag
Parameter						RL/ML	
Method: CALIFORNIA LUFT MANUAL - Diesel:ASE:GC/MS						Soil	
<i>TARGET ANALYTES</i>							
DIESEL	U	1.5	mg/kg	1	1.5		
MOTOR OIL COMPOSITE (C21-C32)	U	18	mg/kg	1	18		
<i>INTERNAL STANDARD</i>							
5-A-ANDROSTANE		168	% recovery	1			
Run ID: R183225 / Work Group No.: WG154137							
Prep Date1: 30-APR-09 Prep Date2: 06-MAY-09 Analyzed 06-May-09 20:11							
Method: EPA 8270C - Semivolatile Organics: GC/MS						Soil	
<i>TARGET ANALYTES</i>							
NAPHTHALENE	U	0.021	mg/kg	1	0.021		
<i>INTERNAL STANDARD</i>							
D8-NAPHTHALENE		91.7	% recovery	1	1		
<i>SURROGATE</i>							
2-FLUOROBIPHENYL		73	% recovery	1			
Run ID: R183102 / Work Group No.: WG153981							
Prep Date1: 29-APR-09 Prep Date2: 05-MAY-09 Analyzed 06-May-09 02:13							

RL is either the client requested or regulatory mandated Reporting Limit. ML is the regulatory mandated Minimum Level

EAST BAY MUNICIPAL UTILITY DISTRICT  
 Laboratory Services Division  
 PO Box 24055, MS 59, Oakland, CA 94623  
 Phone (510)287-1432 Fax (510)465-5462  
**Analytical Results Report**

LSR#: B793-9512-1 TRENCH SPOILS PROGRAM

Site: SOUTH YARD South Area Service Center  
 Locator: MISC Miscellaneous sample, see sample comments for location  
 ClientID: B1 11ft  
 Lab ID: L151437-2 (P153643-2)  
 Sample Type: GRAB (Instantaneous Grab)  
 Date Collected: Apr 17 2009, 08:55am Sample collector: SParker/Alisto  
 Date Received: Apr 22 2009, 09:22am Sample receiver: DNG  
 Sample Comments: Analyst Note: DIESEL GC/MS report DIESEL only; 8270 report NAPHTHALENE only.

Method Reference	Qualifier	Result	Units	Dilution	MDL	Matrix	Tag
Parameter						RL/ML	
Method: CALIFORNIA LUFT MANUAL - Diesel:ASE:GC/MS						Soil	
<i>TARGET ANALYTES</i>							
DIESEL	U	1.5	mg/kg	1	1.5		
MOTOR OIL COMPOSITE (C21-C32)	U	18	mg/kg	1	18		
<i>INTERNAL STANDARD</i>							
5-A-ANDROSTANE		136	% recovery	1			
Run ID: R183225 / Work Group No.: WG154137							
Prep Date1: 30-APR-09 Prep Date2: 06-MAY-09 Analyzed 06-May-09 20:37							
Method: EPA 8270C - Semivolatile Organics: GC/MS						Soil	
<i>TARGET ANALYTES</i>							
NAPHTHALENE	U	0.021	mg/kg	1	0.021		
<i>INTERNAL STANDARD</i>							
D8-NAPHTHALENE		91.9	% recovery	1	1		
<i>SURROGATE</i>							
2-FLUOROBIPHENYL		74	% recovery	1			
Run ID: R183102 / Work Group No.: WG153981							
Prep Date1: 29-APR-09 Prep Date2: 05-MAY-09 Analyzed 06-May-09 02:58							

RL is either the client requested or regulatory mandated Reporting Limit. ML is the regulatory mandated Minimum Level

EAST BAY MUNICIPAL UTILITY DISTRICT  
 Laboratory Services Division  
 PO Box 24055, MS 59, Oakland, CA 94623  
 Phone (510)287-1432 Fax (510)465-5462  
**Analytical Results Report**

LSR#: B793-9512-1 TRENCH SPOILS PROGRAM

Site: SOUTH YARD South Area Service Center  
 Locator: MISC Miscellaneous sample, see sample comments for location  
 ClientID: B1 17ft  
 Lab ID: L151437-3 (P153643-3)  
 Sample Type: GRAB (Instantaneous Grab)  
 Date Collected: Apr 17 2009, 09:00am Sample collector: SParker/Alisto  
 Date Received: Apr 22 2009, 09:22am Sample receiver: DNG  
 Sample Comments: Analyst Note: DIESEL GC/MS report DIESEL only; 8270 report NAPHTHALENE only.

Method Reference							Matrix	Tag
Parameter	Qualifier	Result	Units	Dilution	MDL		RL/ML	

Method: CALIFORNIA LUFT MANUAL - Diesel:ASE:GC/MS

Soil

**TARGET ANALYTES**

DIESEL	U	1.5	mg/kg	1		1.5
MOTOR OIL COMPOSITE (C21-C32)	U	18	mg/kg	1		18

**INTERNAL STANDARD**

5-A-ANDROSTANE		159	% recovery	1		
----------------	--	-----	------------	---	--	--

Run ID: R183225 / Work Group No.: WG154137

Prep Date1: 30-APR-09 Prep Date2: 06-MAY-09 Analyzed 06-May-09 21:03

Method: EPA 8270C - Semivolatile Organics: GC/MS

Soil

**TARGET ANALYTES**

NAPHTHALENE	U	0.021	mg/kg	1		0.021
-------------	---	-------	-------	---	--	-------

**INTERNAL STANDARD**

D8-NAPHTHALENE		87.8	% recovery	1		1
----------------	--	------	------------	---	--	---

**SURROGATE**

2-FLUOROBIPHENYL		75	% recovery	1		
------------------	--	----	------------	---	--	--

Run ID: R183102 / Work Group No.: WG153981

Prep Date1: 29-APR-09 Prep Date2: 05-MAY-09 Analyzed 06-May-09 03:43

RL is either the client requested or regulatory mandated Reporting Limit. ML is the regulatory mandated Minimum Level



EAST BAY MUNICIPAL UTILITY DISTRICT  
 Laboratory Services Division  
 PO Box 24055, MS 59, Oakland, CA 94623  
 Phone (510)287-1432 Fax (510)465-5462  
**Analytical Results Report**

LSR#: B793-9512-1 TRENCH SPOILS PROGRAM

Site: SOUTH YARD South Area Service Center  
 Locator: MISC Miscellaneous sample, see sample comments for location  
 ClientID: B2 6ft  
 Lab ID: L151437-4 (P153643-4)  
 Sample Type: GRAB (Instantaneous Grab)  
 Date Collected: Apr 17 2009, 09:45am Sample collector: SParker/Alisto  
 Date Received: Apr 22 2009, 09:22am Sample receiver: DNG  
 Sample Comments: Analyst Note: DIESEL GC/MS report DIESEL only; 8270 report NAPHTHALENE only.

Method Reference	Qualifier	Result	Units	Dilution	MDL	Matrix	Tag
Method: CALIFORNIA LUFT MANUAL - Diesel:ASE:GC/MS						Soil	
<i>TARGET ANALYTES</i>							
DIESEL	U	1.5	mg/kg	1	1.5		
MOTOR OIL COMPOSITE (C21-C32)	U	18	mg/kg	1	18		
<i>INTERNAL STANDARD</i>							
5-A-ANDROSTANE		144	% recovery	1			
Run ID: R183225 / Work Group No.: WG154137							
Prep Date1: 30-APR-09 Prep Date2: 06-MAY-09 Analyzed 06-May-09 21:29							
Method: EPA 8270C - Semivolatile Organics: GC/MS						Soil	
<i>TARGET ANALYTES</i>							
NAPHTHALENE	U	0.021	mg/kg	1	0.021		
<i>INTERNAL STANDARD</i>							
D8-NAPHTHALENE		85.6	% recovery	1	1		
<i>SURROGATE</i>							
2-FLUOROBIPHENYL		74	% recovery	1			
Run ID: R183102 / Work Group No.: WG153981							
Prep Date1: 29-APR-09 Prep Date2: 05-MAY-09 Analyzed 06-May-09 04:29							

RL is either the client requested or regulatory mandated Reporting Limit. ML is the regulatory mandated Minimum Level

EAST BAY MUNICIPAL UTILITY DISTRICT  
 Laboratory Services Division  
 PO Box 24055, MS 59, Oakland, CA 94623  
 Phone (510)287-1432 Fax (510)465-5462  
**Analytical Results Report**

LSR#: B793-9512-1 TRENCH SPOILS PROGRAM

Site: SOUTH YARD South Area Service Center  
 Locator: MISC Miscellaneous sample, see sample comments for location  
 ClientID: B2 11ft  
 Lab ID: L151437-5 (P153643-5)  
 Sample Type: GRAB (Instantaneous Grab)  
 Date Collected: Apr 17 2009, 09:50am Sample collector: SParker/Alisto  
 Date Received: Apr 22 2009, 09:22am Sample receiver: DNG  
 Sample Comments: Analyst Note: DIESEL GC/MS report DIESEL only; 8270 report NAPHTHALENE only.

Method Reference	Qualifier	Result	Units	Dilution	MDL	Matrix	Tag
Method: CALIFORNIA LUFT MANUAL - Diesel:ASE:GC/MS						Soil	
<b>TARGET ANALYTES</b>							
DIESEL	U	1.5	mg/kg	1	1.5		
MOTOR OIL COMPOSITE (C21-C32)	U	18	mg/kg	1	18		
<b>INTERNAL STANDARD</b>							
5-A-ANDROSTANE		141	% recovery	1			
Run ID: R183225 / Work Group No.: WG154137							
Prep Date1: 30-APR-09 Prep Date2: 06-MAY-09 Analyzed 06-May-09 21:55							
Method: EPA 8270C - Semivolatile Organics: GC/MS						Soil	
<b>TARGET ANALYTES</b>							
NAPHTHALENE	U	0.021	mg/kg	1	0.021		
<b>INTERNAL STANDARD</b>							
D8-NAPHTHALENE		95.7	% recovery	1	1		
<b>SURROGATE</b>							
2-FLUOROBIPHENYL		67	% recovery	1			
Run ID: R183102 / Work Group No.: WG153981							
Prep Date1: 29-APR-09 Prep Date2: 05-MAY-09 Analyzed 06-May-09 05:15							

RL is either the client requested or regulatory mandated Reporting Limit. ML is the regulatory mandated Minimum Level

EAST BAY MUNICIPAL UTILITY DISTRICT  
 Laboratory Services Division  
 PO Box 24055, MS 59, Oakland, CA 94623  
 Phone (510)287-1432 Fax (510)465-5462  
**Analytical Results Report**

LSR#: B793-9512-1 TRENCH SPOILS PROGRAM

Site: SOUTH YARD South Area Service Center  
 Locator: MISC Miscellaneous sample, see sample comments for location  
 ClientID: B2 17ft  
 Lab ID: L151437-6 (P153643-6)  
 Sample Type: GRAB (Instantaneous Grab)  
 Date Collected: Apr 17 2009, 10:00am Sample collector: SParker/Alisto  
 Date Received: Apr 22 2009, 09:22am Sample receiver: DNG  
 Sample Comments: Analyst Note: DIESEL GC/MS report DIESEL only; 8270 report NAPHTHALENE only.

Method Reference	Qualifier	Result	Units	Dilution	MDL	Matrix	Tag
Parameter						RL/ML	

Method: CALIFORNIA LUFT MANUAL - Diesel:ASE:GC/MS

TARGET ANALYTES

DIESEL	U	1.5	mg/kg	1	1.5		
MOTOR OIL COMPOSITE (C21-C32)	U	18	mg/kg	1	18		

INTERNAL STANDARD

5-A-ANDROSTANE		148	% recovery	1			
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Run ID: R183225 / Work Group No.: WG154137

Prep Date1: 30-APR-09 Prep Date2: 06-MAY-09 Analyzed 06-May-09 22:20

Method: EPA 8270C - Semivolatile Organics: GC/MS

TARGET ANALYTES

NAPHTHALENE	U	0.021	mg/kg	1	0.021		
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INTERNAL STANDARD

D8-NAPHTHALENE		87.0	% recovery	1	1		
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SURROGATE

2-FLUOROBIPHENYL		78	% recovery	1			
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Run ID: R183102 / Work Group No.: WG153981

Prep Date1: 29-APR-09 Prep Date2: 05-MAY-09 Analyzed 06-May-09 06:00

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**Analytical Results Report**

LSR#: B793-9512-1 TRENCH SPOILS PROGRAM

Site: SOUTH YARD South Area Service Center  
 Locator: MISC Miscellaneous sample, see sample comments for location  
 ClientID: B1W  
 Lab ID: L151437-7 (P153643-7)  
 Sample Type: GRAB (Instantaneous Grab)  
 Date Collected: Apr 17 2009, 09:30am Sample collector: SParker/Alisto  
 Date Received: Apr 22 2009, 09:22am Sample receiver: DNG  
 Sample Comments: Analyst Note: DIESEL GC/MS report DIESEL only; 8270 report NAPHTHALENE only.

Method Reference	Qualifier	Result	Units	Dilution	MDL	Matrix	Tag
Parameter						RL/ML	
Method: CALIFORNIA LUFT MANUAL - Diesel:L/L:GCMS						GroundH2O	
<i>TARGET ANALYTES</i>							
DIESEL	U	20	ug/L	1	20		
MOTOR OIL COMPOSITE (C21-C32)	U	260	ug/L	1	260		
<i>INTERNAL STANDARD</i>							
5-A-ANDROSTANE		152	% recovery	1			
Run ID: R183227 / Work Group No.: WG154138							
Prep Date1: 23-APR-09 Prep Date2: 06-MAY-09 Analyzed 06-May-09 22:46							
Method: EPA 8270C - Semivolatile Organics: GC/MS						GroundH2O	
<i>TARGET ANALYTES</i>							
NAPHTHALENE	U	0.21	ug/L	1.04	0.21		
<i>INTERNAL STANDARD</i>							
D8-NAPHTHALENE		82.2	% recovery	1	1		
<i>SURROGATE</i>							
2-FLUOROBIPHENYL		82	% recovery	1			
Run ID: R183108 / Work Group No.: WG153982							
Prep Date1: 23-APR-09 Prep Date2: 05-MAY-09 Analyzed 06-May-09 06:46							

RL is either the client requested or regulatory mandated Reporting Limit. ML is the regulatory mandated Minimum Level

EAST BAY MUNICIPAL UTILITY DISTRICT  
 Laboratory Services Division  
 PO Box 24055, MS 59, Oakland, CA 94623  
 Phone (510)287-1432 Fax (510)465-5462  
**Analytical Results Report**

LSR#: B793-9512-1 TRENCH SPOILS PROGRAM

Site: SOUTH YARD South Area Service Center  
 Locator: MISC Miscellaneous sample, see sample comments for location  
 ClientID: B2W  
 Lab ID: L151437-8 (P153643-8)  
 Sample Type: GRAB (Instantaneous Grab)  
 Date Collected: Apr 17 2009, 10:30am Sample collector: SParker/Alisto  
 Date Received: Apr 22 2009, 09:22am Sample receiver: DNG  
 Sample Comments: Analyst Note: DIESEL GC/MS report DIESEL only; 8270 report NAPHTHALENE only.

Method Reference	Qualifier	Result	Units	Dilution	MDL	Matrix	Tag
Parameter						RL/ML	
Method: CALIFORNIA LUFT MANUAL - Diesel:L/L:GCMS						GroundH2O	
<i>TARGET ANALYTES</i>							
DIESEL	U	20	ug/L	1	20		
MOTOR OIL COMPOSITE (C21-C32)	U	260	ug/L	1	260		
<i>INTERNAL STANDARD</i>							
5-A-ANDROSTANE		142	% recovery	1			
Run ID: R183227 / Work Group No.: WG154138							
Prep Date1: 23-APR-09 Prep Date2: 06-MAY-09 Analyzed 06-May-09 23:12							
Method: EPA 8270C - Semivolatile Organics: GC/MS						GroundH2O	
<i>TARGET ANALYTES</i>							
NAPHTHALENE	U	0.21	ug/L	1.06	0.21		
<i>INTERNAL STANDARD</i>							
D8-NAPHTHALENE		85.8	% recovery	1	1		
<i>SURROGATE</i>							
2-FLUOROBIPHENYL		83	% recovery	1			
Run ID: R183108 / Work Group No.: WG153982							
Prep Date1: 23-APR-09 Prep Date2: 05-MAY-09 Analyzed 06-May-09 07:31							

RL is either the client requested or regulatory mandated Reporting Limit. ML is the regulatory mandated Minimum Level

2004 dispenser secondary containment upgrade soil sample analytical data

**Table 1**  
 Soil Chemical Analytical Results  
 EBMUD South Area Service Center  
 589 ~~375~~ East Lewelling Boulevard  
 San Lorenzo, California

Sample ID	Sample Depth (ft)	Sample Date	TPHd (mg/kg)	Lead (mg/kg)	TPHg (mg/kg)	BTEX (mg/kg)	8260B Compounds	Comments
L112151-1	3.0	5/5/04	1,400	5.71	<1.0	ND <sup>1</sup>	*	South dispenser at 3.0 ft bgs
L112151-2	2.0	5/5/04	11	8.78	<1.0	ND <sup>1</sup>	*	North dispenser at 2.0 ft bgs
L112310-1	5.5	5/11/04	3.5 <sup>1</sup>	3.69	NA	ND <sup>1</sup>	*	South dispenser at 5.5 ft bgs
L112310-2	--	5/11/04	430 <sup>1</sup>	1.66	NA	ND <sup>1</sup>	*	Stock Pile Sample

**Explanation:**

bgs = below ground surface

ft = feet

mg/kg = milligrams per kilogram

TPHg = Total Petroleum Hydrocarbons as gasoline

TPHd = Total Petroleum Hydrocarbons as diesel

BTEX = benzene, toluene, ethylbenzene, and total xylenes

NA = not analyzed

-- = not applicable

ND<sup>1</sup> = analyte not detected at or above the reporting limits; see lab report for specific reported method detection limits.

**Notes:**

<sup>1</sup> Sample had unidentifiable interfering peaks eluting between diesel and motor oil.

\* See laboratory reports for detectable compounds

**Analytical Laboratory:**

EBMUD Laboratory (ELAP #1060)

**Analytical Methods:**

TPHd by California LUFT Manual - Diesel:ASE:GC/MS

TPHg by California LUFT Manual - Gasoline: MeOH Ext.:GC/MS

BTEX and 8260B compounds by EPA Method 8260B

Lead by EPA Method 6010B

1990 Gas & Diesel UST excavation/over-excavation and 2004 dispenser secondary containment upgrade soil sample results

TABLE 1 - SUMMARY OF RESULTS OF SOIL SAMPLING  
 EBMUD South Area Service Center  
 589 Lewelling Boulevard  
 San Lorenzo, California  
 ALISTO PROJECT NO. 10-654-42

BORING ID	DATE OF SAMPLING	DEPTH (Feet)	TPH-D (mg/kg)	TPH-MO (mg/kg)	TPH-G (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)	MTBE (mg/kg)	LEAD (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	EDB (mg/kg)	TAME (mg/kg)
L112151-1	5/5/2004	3.0	1400	ND<2000	ND<1.0	ND<0.0012	ND<0.0018	ND<0.0020	ND<0.0083	ND<0.013	5.71	ND<0.25	ND<0.013	ND<0.013	ND<0.0025	ND<0.013
L112151-2	5/5/2004	2.0	11	ND<100	ND<1.0	ND<0.0012	ND<0.0018	ND<0.0020	ND<0.0083	ND<0.013	8.78	ND<0.25	ND<0.013	ND<0.013	ND<0.0025	ND<0.013
L112310-1	5/11/2004	5.5	3.5	ND<100	ND<1.0	ND<0.0024	ND<0.0036	ND<0.0040	ND<0.0166	ND<0.026	3.69	ND<0.50	ND<0.026	ND<0.026	ND<0.005	ND<0.026
TD-SOUTH	8/23/1990	13.0	---	---	ND<10	ND<0.005	ND<0.005	ND<0.005	ND<0.015	---	---	---	---	---	---	---
TD-NORTH	8/23/1990	13.0	---	---	ND<10	ND<0.005	0.05	ND<0.005	ND<0.015	---	---	---	---	---	---	---
TG-SOUTH	8/23/1990	12.0	---	---	ND<1	ND<0.005	0.1	ND<0.005	ND<0.015	---	---	---	---	---	---	---
TG-NORTH	8/23/1990	12.0	---	---	ND<1	ND<0.005	0.015	ND<0.005	0.019	---	---	---	---	---	---	---
90 10 12 195	10/12/1990	12	---	---	---	ND<0.010	ND<0.010	ND<0.010	ND<0.010	---	---	---	---	---	ND<0.050	---
90 10 12 196	10/12/1990	12	---	---	---	ND<0.010	ND<0.010	ND<0.010	ND<0.010	---	---	---	---	---	ND<0.050	---
90 10 12 197	10/12/1990	9	---	---	---	ND<0.010	ND<0.010	ND<0.010	ND<0.010	---	---	---	---	---	ND<0.050	---
90 10 12 198	10/12/1990	10	---	---	---	ND<0.010	ND<0.010	ND<0.010	ND<0.010	---	---	---	---	---	ND<0.050	---
90 10 12 199	10/12/1990	14	53	---	---	ND<0.010	ND<0.010	ND<0.010	ND<0.010	---	---	---	---	---	ND<0.050	---
90 10 12 200	10/12/1990	9	ND	---	---	ND<0.010	ND<0.010	ND<0.010	ND<0.010	---	---	---	---	---	ND<0.050	---
90 10 12 201	10/12/1990	9	---	---	---	ND<0.010	ND<0.010	ND<0.010	ND<0.010	---	---	---	---	---	ND<0.050	---

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons in gasoline range	ETBE	Ethyl tert-Butyl Ether
TPH-D	Total petroleum hydrocarbons in diesel range	TAME	tert-Amyl Methyl Ether
TPH-MO	Total petroleum hydrocarbons in motor oil range	DIPE	Diisopropyl ethyl ether
B	Benzene	MTBE	Methyl tert-butyl ether
T	Toluene	EDB	Ethylene Dibromide
E	Ethylbenzene		
X	Total xylenes		
mg/kg	Milligrams per kilogram		
ND	Not detected above reported detection limit		
---	Not analyzed/applicable/measured		

Client Number: SFB-566-0089.72  
 Project ID: 589 E. Lewelling  
 San Lorenzo, CA  
 Work Order Number: CO-08-660

**Table 1**  
**ANALYTICAL RESULTS**  
**Aromatic Volatile Organics in Soil**  
**EPA Methods 5030 and 8020a**

GTEL Sample Number		01	02	03	04
Client Identification		TD-South	TD-North	Soil-Gas Tank	Soil-Diesel Tank
Date Sampled		08/23/90	08/23/90	08/23/90	08/23/90
Date Extracted		08/31/90	08/31/90	08/31/90	08/31/90
Date Analyzed		08/31/90	08/31/90	08/31/90	08/31/90
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
		01	02	03	04
Benzene	0.005	<0.005	<0.005	<0.005	<0.005
Toluene	0.005	<0.005	0.05	<0.005	<0.005
Ethylbenzene	0.005	<0.005	<0.005	<0.005	<0.005
Xylene, total	0.015	<0.015	<0.015	<0.015	<0.015
BTEX, total	--	--	0.05	--	--
Detection Limit Multiplier		1	1	1	1

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986



Client Number: SFB-568-0089.72  
 Project ID: 589 E. Lewelling  
 San Lorenzo, CA  
 Work Order Number: CO-08-660

**Table 1 (Continued)**  
**ANALYTICAL RESULTS**  
**Aromatic Volatile Organics in Soil**  
**EPA Methods 5030 and 8020<sup>a</sup>**

GTEL Sample Number		05	06		
Client Identification		Tank-Gas-South	Tank-Gas-North		
Date Sampled		08/23/90	08/23/90		
Date Extracted		08/31/90	08/31/90		
Date Analyzed		08/31/90	09/07/90		
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Benzene	0.005	<0.005	<0.005		
Toluene	0.005	0.1	0.015		
Ethylbenzene	0.005	<0.005	<0.005		
Xylene, total	0.015	<0.015	0.019		
BTEX, total	-	0.1	0.034		
Detection Limit Multiplier		1	1		

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986.