ALAMEDA COUNTY HEALTH CARE SERVICES



Alex Briscoe, Agency Director

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

March 1, 2010

Mr. Sean Svendson Pacific Shops Inc. 1801 Clement Avenue Alameda, CA 94501

Subject: Fuel Leak Case No. RO0002951 (Geotracker ID #T0619711981), Pacific Shops Inc, 1815 Clement Avenue, Alameda, CA 64501 - Case Closure

Dear Mr. Svendson:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). 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.swrcb.ca.gov) and the Alameda County Environmental Health website (http://geotracker.swrcb.ca.gov) and the Alameda County Environmental Health website (http://www.acgov.org/aceh/index.htm).

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

The following petroleum hydrocarbons contamination remain in soil at concentrations up to 320 ppm TPH kerosene, 5.4 ppm TPH diesel and 9.1 ppm TPH bunker oil.

If you have any questions, please call Steven Plunkett 510-383-1767. Thank you.

Sincerely.

Donna L. Drogos, P.E.

Division Chief

Enclosures:

- Remedial Action Completion Certification
- Case Closure Summary

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY



Alex Briscoe, Agency Director

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

March 1, 2010

Mr. Sean Svendson Pacific Shops Inc. 1801 Clement Avenue Alameda, CA 94501

Subject: Fuel Leak Case No. RO0002951 (Geotracker ID #T0619711981), Pacific Shops Inc, 1815 Clement Avenue, Alameda, CA 64501 - Case Closure

Dear Mr. Svendson:

REMEDIAL ACTION COMPLETION CERTIFICATE

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 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code.

Please contact our office if you have any questions regarding this matter.

Sincerely,

Ariu Levi Director

Alameda County Environmental Health

CASE CLOSURE SUMMARY LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM

I. AGENCY INFORMATION

Date: February 26, 2010

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 383-1767
Responsible Staff Person: Steven Plunkett	Title: Hazardous Materials Specialist

II. CASE INFORMATION

, CACL IN CHILATION							
Site Facility Name: Pacific Shops, Inc.							
Site Facility Address: 1815 Clement Avenue, Alameda CA 94501							
RB Case No.: NA Local Case No.: LOP Case No.: R000002951							
URF Filing Date: 3/7/2007	Global ID No.: T0619711981	: 71-288-1-2					
Responsible Parties	Addresses	Addresses					
Sean Svendsen	1801 Clement Street, Alameda, CA 94501		510-521-1133				
X ¹							

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
UST #2	1,200-gallon	Bunker Oil	Removed	3/6/2007
UST#3	860-gallon	Diesel	Removed	3/6/2007
UST #4	500-gallon Bunker Oil		Removed	3/6/2007
	Piping	Closed In Place	3/6/2007	

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown: USTs appeared intact upon removal.							
Site characterization complete? Yes Date Approved By Oversight Agency:							
Monitoring wells installed? No		Number:	Proper screened interval?				
Highest GW Depth Below Ground Surface: 2.4	12	Lowest Depth: 3.82	Flow Direction: Northwest				
Most Sensitive Current Use: Potential drinking water source.							

Summary of Production Wells in Vicinity: A well survey was completed for a nearby site at 2332 Blanding Avenue.
California Department of Water Resources and Alameda County Department of Public Works report no groundwater production wells are located within ½ mile radius of this site.

Are drinking water wells affected? No

Aquifer Name: East Bay Plain

Is surface water affected? No

Nearest SW Name: San Francisco Bay is adjacent to the site.

Off-Site Beneficial Use Impacts (Addresses/Locations): None

Reports on file? Yes

Where are reports filed? Alameda County Environmental Health

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL									
Material	Amount (Include Units)								
Tanks	1-1200 gallon Chem Waste Management, Kettleman, CA 1-860 gallon Ecology Control Industries, Richmond, CA 1-550 gallon Ecology Control Industries, Richmond, CA		Tanks 1-860 gallon Ecology Control Industries, Richmond, CA		3/7/2007				
Piping	Not Reported	Not Reported	Not Reported						
Free Product	None Reported								
Soil	100 cubic yards	Forward Landfill, 9999 S. Austin Rd, Manteca, CA	3/29/2007						
Groundwater									

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP (Please see Attachments for additional information on contaminant locations and concentrations)

0	Soil	(ppm)	Water (ppb)			
Contaminant	Before	After	Before	After		
TPH (Gasoline)	<1.0	<1.0	Not Analyzed	Not Analyzed		
TPH (Kerosene)	320	320	28,000	28,000		
TPH (Diesel)	330	5.4	33,000	<51		
TPH (Bunker Oil)	430	9.1	37,000	<510		
TPH (Motor Oil)	Not Analyzed	Not Analyzed	<300	<300		
Benzene	Not Analyzed	<0.005	Not Analyzed	Not Analyzed		
Toluene	Not Analyzed	<0.005	Not Analyzed	Not Analyzed		
Ethylbenzene	Not Analyzed	<0.005	Not Analyzed	Not Analyzed		
Xylenes	Not Analyzed	<0.015	Not Analyzed	Not Analyzed		
MTBE	Not Analyzed	<0.012 ²	Not Analyzed	<0.5		
PCB	<0.12	<0.12	Not Analyzed	<0.5		
Heavy Metals ¹	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed		

⁽¹⁾ Heavy Metals data collected from stockpiled soil: <1.5 mg/kg Cadmium, 44 mg/kg chromium, 82 mg/kg lead, 19 mg/kg nickel, 110 mg/kg zinc

⁽²⁾ Fuel Oxygenates (Soil): <5 ppb ETBE, <5 ppb EDB, <5 ppb EDC, <5 ppb DIPE, <50 ppb TBA, <5 ppb TAME

Site History and Description of Corrective Actions:

The site has a long history of commercial and industrial activity including warehouse and office complex, naval boatyard and marina. The site is located in an area composed of commercial and light industrial development in the City of Alameda.

During a Phase 1 completed in 2006, Treadwell & Rollo documented the presence of three unknown USTs. Treadwell & Rollo determined that the UST #2 and UST #4 were used as heating oil tanks, were installed in the early 1940's and had not been in use since the 1960's. Treadwell & Rollo also established that UST #3 was used to store diesel fuel and had not been in use since the 1970's. In addition, monitoring wells MW-1 through MW-3 are associated with ACEH spills, leaks investigation and cleanup case (SLIC) ID # RO0002624, and are not considered part of this closure.

March 2007 – Three USTs were removed and approximately 100 yd³ of contaminated soil was excavated and removed during the UST excavations. Confirmation soil samples collected from UST #3 and UST #4 did not detect hydrocarbon contamination above laboratory reporting limits. Confirmation soil samples from UST #2 detected 330 ppm TPHd, 320 ppm TPH kerosene and 430 ppm TPH boiler oil. However, grab groundwater samples collected from former UST #4 detected 28,000 ppb TPH kerosene, 33,000 TPH diesel and 37,000 TPH boiler oil. Approximately 7 days after the original grab groundwater samples were collected a second grab groundwater sample was collected from the open UST #4 tank pit. During the second sampling event, no petroleum hydrocarbon contamination was detected above laboratory reporting limits.

October 2009 – Three soil borings were advanced near UST #4 and UST #2 to a maximum depth of 15 feet bgs. Results from the investigation detected TPHd in soil at concentration of up to 3 mg/kg, no other hydrocarbon contamination was detected in soil. Grab groundwater samples collected from the borings detected hydrocarbon contamination at <510 ppb. However, the depth of grab groundwater samples collected from the soil borings was not reported.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes

Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.

Site Management Requirements: Case closure for this fuel leak site is granted for the current industrial land use only. If a change in land use to any residential or other conservative land use scenario occurs at this site, Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2. ACEH will reevaluate the case upon receipt of approved development/construction plans.

Should corrective action be reviewed if land use changes? Yes

ite Recorded:	/as a deed restriction or deed notification filed? No			
ımber Retained: 0	Number Decommissioned: 0	Monitoring Wells Decommissioned: NA Number Decommissioned:		
		List Enforcement Actions Taken: None		
		List Enforcement Actions Taken: None List Enforcement Actions Rescinded:		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

- Analysis for BTEX was not performed on contaminated soil during the UST removal.
- No analysis for BTEX and fuel oxygenates in groundwater other than MTBE were performed.
- Analysis for naphthalene was not performed.
- Depth of grab groundwater samples was not reported.

Conclusion:

Alameda County Environmental Health staff believe that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment under the current industrial land use based upon the information available in our files to date. No further investigation or cleanup for the fuel leak case is necessary at this time. However, as specified re-evaluation of this case may be required if land use changes to any residential or other conservative land use scenario. ACEH staff recommend closure for this site.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Steven Plunkett	Title: Hazardous Materials Specialist						
Signature: Sour Pot	Date: 2/26/2010						
Approved by: Donna L. Drogos, P.E.	Title: Chief						
Signature:	Date: 02/24/10						

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.

VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Cherie M	cCaulou	Title: Engineering Geologist
Date Submitted to Regional Board:	2/26/20	0

VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH: NA Date of Well Decommissioning Report: NA								
All Monitoring Wells Decommissioned: NA	Number Decommissioned: 0	Number Retained: 0						
Reason Wells Retained: NA								
Additional requirements for submittal of groundwater data from retained wells: NA								
ACEH Concurrence - Signature:	a	Date: 3/1/2010						

Attachments:

- 1. Site Vicinity Map
- 2. Site Plan Map
- 3. Site Plans Showing Tank Pit Sample Locations with Analytical data (3 pages)
- 4. Site Plan Showing Soil Boring Locations with Analytical data
- 5. Soil Analytical Data (4 Pages)
- 6. Groundwater Analytical Data (2 pages)
- 7. Soil Boring Logs (3 pages)

This document and the related CASE CLOSURE LETTER and REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.

Plunkett, Steven, Env. Health

From:

Cherie MCcaulou [CMccaulou@waterboards.ca.gov]

Sent:

Friday, February 26, 2010 4:49 PM

To: Cc: Plunkett, Steven, Env. Health Drogos, Donna, Env. Health

Subject:

RE: Closure RO2951

Steven - I reviewed the case closure packet for Case No. RO2951, and have no objection to your agency's recommendation for case closure. Thank you.

Sincerely,

Cherie McCaulou Engineering Geologist San Francisco Bay Regional Water Quality Control Board cmccaulou@waterboards.ca.gov 510-622-2342

>>> "Plunkett, Steven, Env. Health" <<u>steven.plunkett@acgov.org</u>>
>>> 2/26/2010 12:34 PM >>>
Oops,

Here is the correct closure summary

Regards, Steven Plunkett Hazardous Materials Specialist Alameda County Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502-6577

Phone: (510) 383-1767 Fax: (510) 337-9335

Email: mailto:steven.plunkett@acgov.org

Online case files are available at the website below http://ehgis.acgov.org/dehpublic/dehpublic.jsp

"The bicycle is a curious invention, The passenger is also its engine."

----Original Message----

From: Cherie MCcaulou [mailto:CMccaulou@waterboards.ca.gov]

Sent: Friday, February 26, 2010 12:12 PM

To: Plunkett, Steven, Env. Health

Subject: Re: Closure RO2951

Steven - you accidentally sent me a work plan for the site. Please resend the case closure package. Thanks

Sincerely,

Cherie McCaulou Engineering Geologist San Francisco Bay Regional Water Quality Control Board cmccaulou@waterboards.ca.gov 510-622-2342

>>> "Plunkett, Steven, Env. Health" <<u>steven.plunkett@acgov.org</u>> 2/26/2010 11:39 AM >>> Hello Cherie,

I am submitting a closure for RO0002951. As this site has some special circumstances, anything you can do to help expedite the closure review would be greatly appreciated.

Thank you for your time.

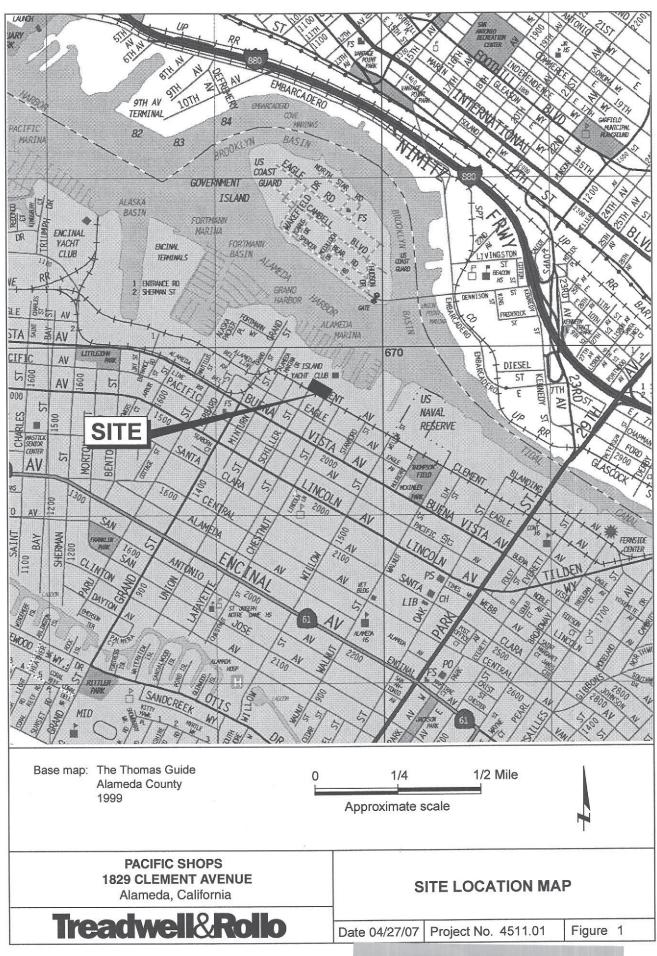
Sincerely, Steven Plunkett Hazardous Materials Specialist Alameda County Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502-6577

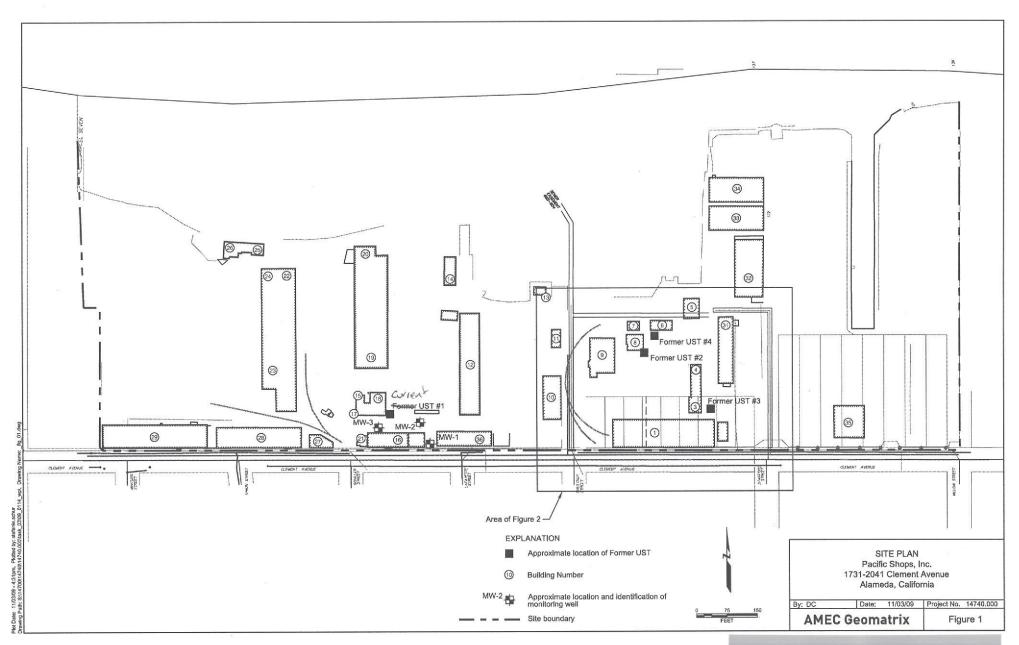
Phone: (510) 383-1767 Fax: (510) 337-9335

Email: mailto:steven.plunkett@acgov.org

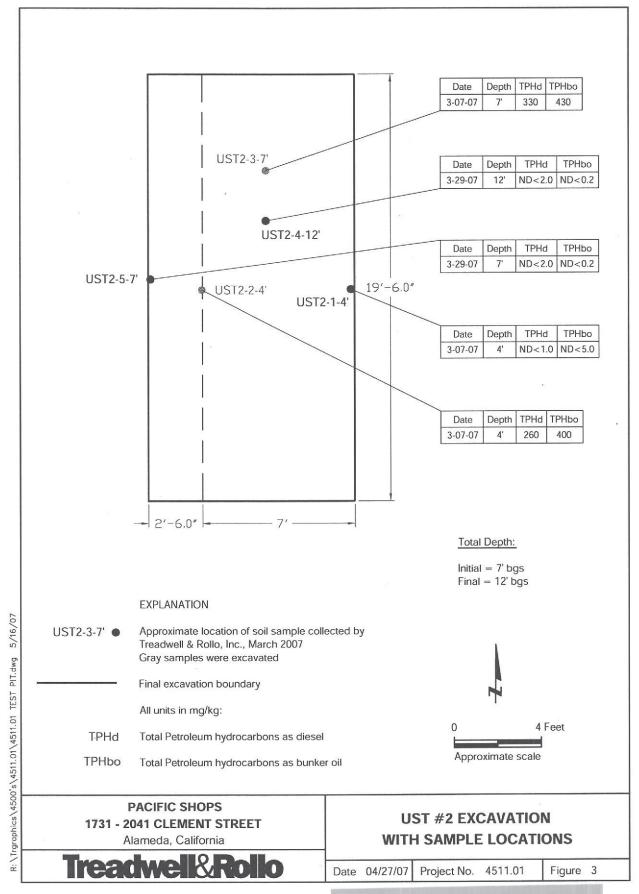
Online case files are available at the website below http://ehgis.acgov.org/dehpublic/dehpublic.jsp

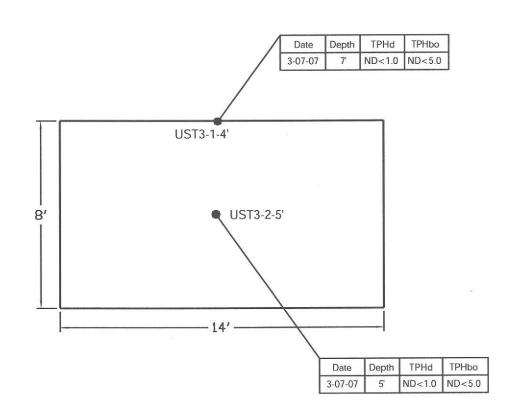
"The bicycle is a curious invention, The passenger is also its engine."





ATTACHMENT 2





Total Depth = 5' bgs

EXPLANATION

UST3-1-4' Approximate location of soil sample collected by Treadwell & Rollo, Inc., March 2007

Final excavation boundary

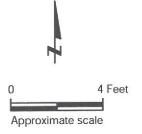
All units in mg/kg:

TPHd

Total Petroleum hydrocarbons as diesel

TPHbo

Total Petroleum hydrocarbons as bunker oil



PACIFIC SHOPS 1731 - 2041 CLEMENT STREET Alameda, California

Treadwell&Rollo

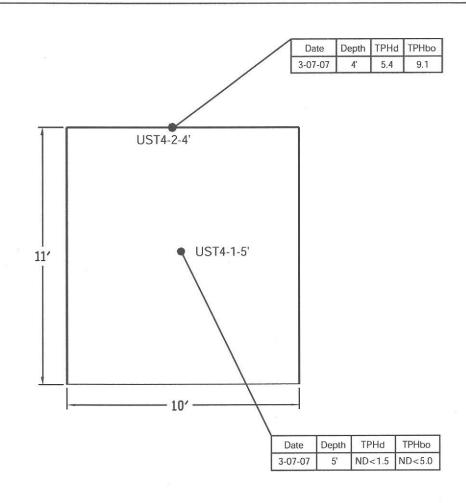
UST #3 EXCAVATION
WITH SAMPLE LOCATIONS

Date 04/27/07

Project No.

4511.01

Figure 4



Total Depth = 5' bgs

EXPLANATION

UST4-2-4' Approximate location of soil sample collected by Treadwell & Rollo, Inc., March 2007

Final excavation boundary

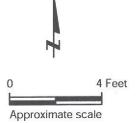
All units in mg/kg:

TPHd

Total Petroleum hydrocarbons as diesel

TPHbo

Total Petroleum hydrocarbons as bunker oil



PACIFIC SHOPS

1731 - 2041 CLEMENT STREET

Alameda, California

Treadwell&Rollo

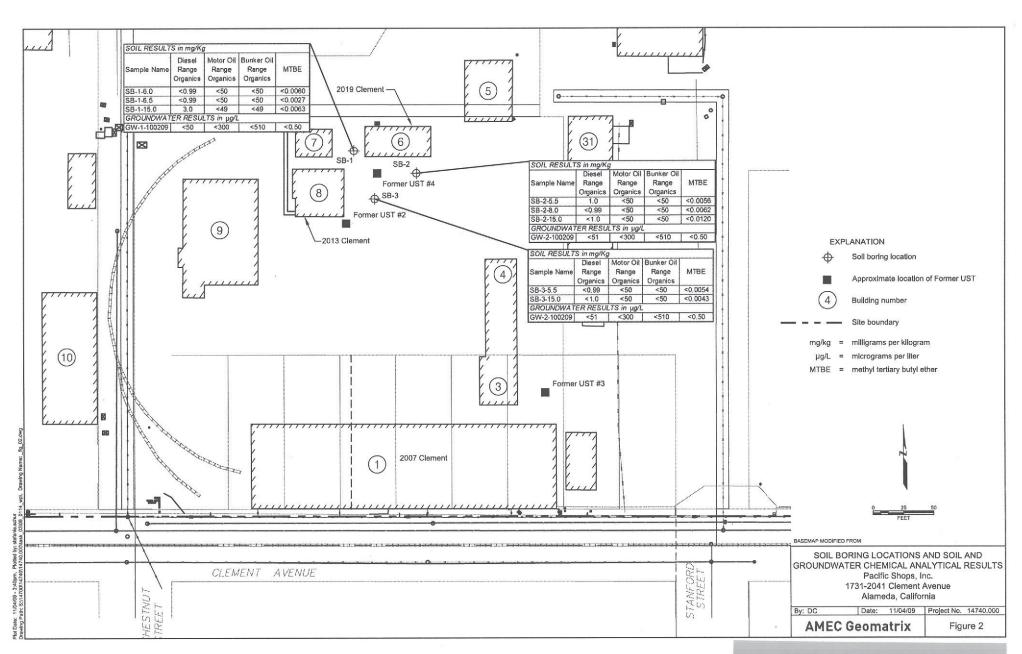
UST #4 EXCAVATION
WITH SAMPLE LOCATIONS

Date 04/27/07

Project No.

4511.01

Figure 5



ATTACHMENT 4



TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS¹

Pacific Shops Inc. 1815 Clement Avenue Alameda, California

Sample ID	Sample Date	Sample Depth (feet bgs)	Diesel Range Organics (mg/Kg)	Motor Oil Range Organics (mg/kg)	Bunker Oil Range Organics (mg/Kg)	MTBE (μg/Kg)
SB-1-6.0	10/2/2009	6.0	<0.99	<50	<50	<6.0
SB-1-6.5	10/2/2009	6.5	<0.99	<50	<50	<2.7
SB-1-15.0	10/2/2009	15.0	3.0	<49	<49	<6.3
SB-2-5.5	10/2/2009	5.5	1.0	<50	<50	<5.6
SB-2-8.0	10/2/2009	8.0	< 0.99	<50	<50	<6.2
SB-2-15.0	10/2/2009	15.0	<1.0	<50	<50	<12
SB-3-5.5	10/2/2009	5.5	<0.99	<50	<50	<5.4
SB-3-15.0	10/2/2009	15.0	<1.0	<50	<50	<4.3

Notes

- Samples were collected by AMEC Geomatrix on October 2, 2009 and analyzed by TestAmerica, Inc., of Pleasanton, California using U.S. Environmental Protection Agency Methods 8260B and 8015B.
- 2. Detected concentrations are shown in bold.

Abbreviations

bgs = below ground surface

MTBE = methyl-tert-butyl-ether

mg/Kg = milligrams per kilogram

μg/Kg = micrograms per kilogram

"<" indicates constituent was not detected at a concentration equal to or greater than the laboratory reporting limit shown.

Table 1 UST Removal Soil Sample Analytical Results Pacific Shops 1815 Clement Avenue Alameda, CA

					TPH As Gasoline C ₆ -C ₁₁ mg/kg	TPH As Kerosene C ₅ -C ₁₈ mg/kg	TPH As Diesel C ₁₀ -C ₂₃ mg/kg	TPH As Bunker Oil C ₁₈₊ mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Total Xylenes mg/kg	Cadmium mg/kg	Chromium mg/kg	Lead mg/kg	STLC Lead mg/L	Nickel mg/kg	Zine mg/kg	PCBs mg/kg	Other Oxygenates mg/kg
				Analytical Method	8260B	8015M ²	8015M ²	8015M ²	8260B	8260B	8260B	8260B	6010	6010	6010	6010	6010	6010	8010	8260
UST Area	Sample Name	Sample Date	Sample Depth (feet)	Location of Sample																
UST #2																				
	UST2-1-4'	3/7/2007	4.0	East Sidewall	-	ND<1.0	ND<1.0	ND<5.0		**		-					-		ND<0.025	
	UST2-2-4	3/7/2007	4.0	West Sidewall		170	260, c, g	400	-		-			-			••		ND<0.12	
	UST2-3-7	1/7/2007	7.0	Bottom	-	320	330, 1/m	430	-	-	-							-	ND-40,12	-
	UST2-4-12'	3/29/2007	12	Bottom after over- excavation	-	-	ND<2.0	ND<0.2	ND<0.005	ND<0.005	ND<0.005	ND<0.015		C==	-	255			ND<0.1	ND
	UST2-5-7'	3/29/2007	7.0	West Sidewall after over-excavation	-	-	ND<2.0	ND<0.2	ND<0.005	ND<0.005	ND<0.005	ND<0.015	-		-	-	-	-	ND<0.1	ND
UST#3																				
200400000000000000000000000000000000000	UST3-1-4'	3/7/2007	4.0	North Sidewall	ND<1.0	ND<1.0	ND<1.0	ND<5.0	ND<0.005		ND<0.005	ND<0.005	-							-
	UST3-2-5'	3/7/2007	5.0	Bottom	ND<1.0	ND<1.0	ND<1.0	ND<5.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	-		-					-
UST#4																				
1	UST4-1-5'	3/7/2007	5.0	Bottom		ND<1.0	1.5, c	ND<5.0	-		-	-								
	UST4-2-4'	3/7/2007	4.0	North Sidewall		4.0	5.4, m	9.1												-
tockpile San	aples																			
UST #2	Stock-1-1-1-2	3/7/2007	0.5	Stockpile 1 (composite)	**	2,900	2,900, l/m	3,100		-	-	877	ND<1.5	44	82	3.7	19	110	ND<0.025	-
UST #2	Stock-1-3-1-4	3/7/2007	0.5	Stockpile 1 (composite)	-	110	150, l/m	240	-			-	-	**	-	-	=8	-	-	-
UST #3 & UST #4	Stock-2-3-2-4	3/7/2007	0.5	Stockpile 2 (composite)	ND<1.0	3.4	24, g, b	210	ND<0.005	ND<0.005	ND<0.005	ND<0 005	-		-	-	-	-	-	-

Notes
TPH - Total petroleum hydrocarbons
PCBs - Polychlorinated Biphenyla
C₀-C₁₂ - Carbon Range C₀to C₁₂
C₂-C₁₄ - Carbon Rance C₀ to C₁₄

C₁₀-C₂₅ - Carbon Range C₁₀ to C₂₅ C₁₈ - Abuve Carbon Range C₁₈

mg/kg - milligrams per kilogram

mg/L - milligrams per liter
1-Other Oxygenates include. 1,2-Dibromoschane (EDB), 1,2-Dichloroethane (EDC), Ethanol, Ethyl terr-butyl ether (ETBE), Isopropyl ether (DIPE), Methyl terr-butyl ether (MTBE), I-Dutyl alcehol (I-Butanol), test-Amyl methyl ether (TAME)

2-using silica gel cleanup feet - feet below ground surface

- not analyzed

ND<1.0 - not detected above laboratory reporting limit

Laboratory Qualifiers

b - diesel range compounds are significant; no recognizable pattern c - aged diesel? is significant

g - oil range compounds are significant I - bunker oil

m - fuel oil



TORRENT LABORATORY, INC.

483 Sinclair Frontage Road • Milpitas, CA • Phone: (408) 263-5258 • Fax: (408) 263-8293

Visit us at www.torrentlab.com email: analysis@torrentlab.com

Report prepared for: John Murphy

TEC Accutite

Date Received: 3/29/2007

Date Reported: 3/29/2007

Client Sample ID: Sample Location:

UST2-4-12'

Pacific Shops

Lab Sample ID: 0703133-001

Sample Matrix:

SOIL

Date Prepared: 3/29/2007

Date/Time Sampled

3/29/2007 10:50:00 AM

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	3/29/2007	2	1	2.00	ND	mg/Kg	R12270
Surr: Pentacosane	SW8015B	3/29/2007	0	1	53.5-127	101	%REC	R12270
Note: No Bunker Oil present. See o	case narrative for details	s.						
Aroclor 1016	SW8082	3/29/2007	0.1	ī	0.100	ND	mg/Kg	R12273
Aroclor 1221	SW8082	3/29/2007	0.2	1	0.200	ND	mg/Kg	R12273
Aroclor 1232	SW8082	3/29/2007	0.1	1	0.100	ND	mg/Kg	R12273
Aroclor 1242	SW8082	3/29/2007	0.1	1	0.100	ND	mg/Kg	R12273
Aroclor 1248	SW8082	3/29/2007	0.1	1	0.100	ND	mg/Kg	R12273
Aroclor 1254	SW8082	3/29/2007	0.1	1	0.100	ND	mg/Kg	R12273
Aroclor 1260	SW8082	3/29/2007	0.1	1	0.100	ND	mg/Kg	R12273
Surr: Decachlorobiphenyl	SW8082	3/29/2007	0	1	63.7-126	116	%REC	R12273
Surr: Tetrachloro-m-xylene	SW8082	3/29/2007	0	1	51.7-128	101	%REC	R12273
1,2-Dibromoethane (EDB)	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
1,2-Dichloroethane (EDC)	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
Benzene	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
Ethanol	SW8260B	3/29/2007	100	1	100	ND	μg/Kg	R12272
Ethyl tert-butyl ether (ETBE)	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
Ethylbenzene	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
Isopropyl ether (DIPE)	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
Methyl tert-butyl ether (MTBE)	SW8260B	3/29/2007	10	1	10	ND	μg/Kg	R12272
t-Butyl alcohol (t-Butanol)	SW8260B	3/29/2007	50	1	50	ND	μg/Kg	R12272
tert-Amyl methyl ether (TAME)	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
Toluene	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
Xylenes, Total	SW8260B	3/29/2007	15	1	15	ND	μg/Kg	R12272
Surr: 4-Bromofluorobenzene	SW8260B	3/29/2007	0	1	55.8-141	105	%REC	R12272
Surr: Dibromofluoromethane	SW8260B	3/29/2007	0	1	59.8-148	106	%REC	R12272
Surr: Toluene-d8	SW8260B	3/29/2007	0	1	55.2-133	103	%REC	R12272

Report prepared for: John Murphy

TEC Accutite

Date Received: 3/29/2007

Date Reported: 3/29/2007

Client Sample ID:

UST2-5-7'

Sample Location:

Pacific Shops

Sample Matrix:

SOIL

Date/Time Sampled

Lab Sample ID: 0703133-002

Date Prepared: 3/29/2007

3/29/2007 11:05:00 AM

Parameters	Analysis Method	Date Analyzed	RL	Dilution Factor	MRL	Result	Units	Analytical Batch
TPH (Diesel)	SW8015B	3/29/2007	2	1	2.00	ND	mg/Kg	R12270
Surr: Pentacosane	SW8015B	3/29/2007	0	1	53.5-127	92.1	%REC	R12270
Note: No Bunker Oil present. See ca	ase narrative for details	S.						
Aroclor 1016	SW8082	3/29/2007	0.1	1	0.100	ND	mg/Kg	R12273
Aroclor 1221	SW8082	3/29/2007	0.2	1	0.200	ND	mg/Kg	R12273
Aroclor 1232	SW8082	3/29/2007	0.1	1	0.100	ND	mg/Kg	R12273
Aroclor 1242	SW8082	3/29/2007	0.1	1	0.100	ND	mg/Kg	R12273
Aroclor 1248	SW8082	3/29/2007	0.1	1	0.100	ND	mg/Kg	R12273
Aroclor 1254	SW8082	3/29/2007	0.1	1	0.100	ND	mg/Kg	R12273
Aroclor 1260	SW8082	3/29/2007	0.1	1	0.100	ND	mg/Kg	R12273
Surr: Decachlorobiphenyl	SW8082	3/29/2007	0	1	63.7-126	129	%REC	R12273
Surr: Tetrachloro-m-xylene	SW8082	3/29/2007	0	1	51.7-128	111	%REC	R12273
1,2-Dibromoethane (EDB)	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
1,2-Dichloroethane (EDC)	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
Benzene	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
Ethanol	SW8260B	3/29/2007	100	1	100	ND	μg/Kg	R12272
Ethyl tert-butyl ether (ETBE)	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
Ethylbenzene	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
Isopropyl ether (DIPE)	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
Methyl tert-butyl ether (MTBE)	SW8260B	3/29/2007	10	1	10	ND	μg/Kg	R12272
t-Butyl alcohol (t-Butanol)	SW8260B	3/29/2007	50	1	50	ND	μg/Kg	R12272
tert-Amyl methyl ether (TAME)	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
Toluene	SW8260B	3/29/2007	5	1	5.0	ND	μg/Kg	R12272
Xylenes, Total	SW8260B	3/29/2007	15	1	15	ND	μg/Kg	R12272
Surr: 4-Bromofluorobenzene	SW8260B	3/29/2007	0	1	55.8-141	106	%REC	R12272
Surr: Dibromofluoromethane	SW8260B	3/29/2007	0	1	59.8-148	112	%REC	R12272
Surr: Toluene-d8	SW8260B	3/29/2007	0	1	55.2-133	101	%REC	R12272

Table 2 UST Removal Groundwater Analytical Results

Pacific Shops 1815 Clement Avenue

Alameda, CA

All results reported in micrograms per liter (µg/L)

					TPH as Gasoline C ₆ -C ₁₂	TPH as Kerosene C ₉ -C ₁₈	TPH as Diesel C ₁₀ -C ₂₃	TPH as Bunker Oil C ₁₈₊	PCBs µg/L
				Analytical Method	8260B	8015M ¹	8015M ¹	8015M ¹	8010
UST Area	Sample Name	Sample Date	Sample Depth (feet)	Location of Sample					
UST #4	UST4-GW	3/7/2007	5.0	Water in Excavation		28,000	33,000, a, g, i	37,000	
UST #4	UST4-GW2	3/14/2007	5.0	Water in Excavation		ND<50	ND<50	ND<250	
UST #2	UST2-W	3/22/2007	7.0	Water in Excavation	-		250, a/m	390	ND<0.5

Notes

TPH - Total petroleum hydrocarbons

PCBs - Polychlorinated Biphenyls

µg/L - micrograms per liter

C6-C12 - Carbon Range C6 to C12

C9-C-18 - Carbon Rance C9 to C18

C10-C23 - Carbon Range C10 to C23

C₁₈ - Above Carbon Range C₁₈

1-using silica gel cleanup

feet - feet below ground surface

-- not analyzed

ND<50 - not detected above laboratory reporting limit

Laboratory Qualifiers

- a unmodified or weakly modified diesel is significant
- g oil range compounds are significant
- i liquid sample that contains greater than ${\sim}1$ vol. % sediment
- m fuel oil



TABLE 2

GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS¹

Pacific Shops Inc. 1815 Clement Avenue Alameda, California

Results reported in micrograms per liter (µg/L)

Sample ID	Sample Date	Diesel Range Organics	Motor Oil Range Organics	Bunker Oil Range Organics	MTBE
GW-1-100209	10/2/2009	<51	<300	<510	<0.50
GW-2-100209	10/2/2009	<51	<300	<510	<0.50
GW-3-100209	10/2/2009	<51	<300	<510	<0.50

Notes

 Samples were collected by AMEC Geomatrix on October 2, 2009 and analyzed by TestAmerica, Inc., of Pleasanton, California using U.S. Environmental Protection Agency Methods 8260B and 8015B.

Abbreviations

MTBE = methyl-tert-butyl-ether

µg/L = micrograms per liter

"<" indicates constituent was not detected at a concentration equal to or greater than the laboratory reporting limit shown.

		rnia	Log of Bo	oring No. SB-1				
BURING LUCATI	BORING LOCATION: Approx. 8' W, 5' N of SW corner of bldg 6							
	ON: Approx.	8' W, 5' N of SW corner of bldg 6	Not surveyed; datum					
DRILLING CONTI	RACTOR: RS	Drilling Inc	DATE STARTED:	DATE FINISHED:				
2.3.2.2.110 001111		Drining, IIIC.	10/2/09	10/2/09				
DRILLING METHO	DD: Direct	push	TOTAL DEPTH (ft.): 15.0	MEASURING POINT: Ground surface				
	100000000000000000000000000000000000000			FIRST COMPL.				
ORILLING EQUIP	MENT: Geopi	robe 6620 DT	DEPTH TO WATER (ft.)	NA 7.2				
SAMPLING METH	IOD: Geoprob	pe DT21 dual-tube sampling system [4' x 1.125"]	LOGGED BY: T. Klitzke					
HAMMER WEIGH	IT: NA	DROP: NA	RESPONSIBLE PROFESS D. Croteau	SIONAL: REG. NO. PG 7495				
SAMPLE E ⊕ ⊕ □	S g	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. d	ensity structure	REMARKS				
(feet) Sample No.	Foot COVM (PDM)	cementation, react. w/HCl, geo. in	ter.	100,0,000 - 3,000 code, (499,0 a) of 140 code)				
	n	Surface Elevation: ASPHALTIC CONCRETE						
4		<u> </u>	ded beauty /7.51/5	OVM = MiniRAE 2000 PID				
1-		SANDY LEAN CLAY with GRAVEL (CL): very 2.5/3), moist, 50% fines, 30% fine sand, 20% finesticity [FILL]		calibrated with 100 ppm isobutylene standard.				
2-	0.2			Hand augered to 5 feet				
-			-	bgs.				
3-			-	-				
-				-				
4-			-	_				
-	0.3		-	-				
5-1 8 -	0	contains brick fragments	-	Grab groundwater sample				
SB-1-6.0		CLAYEY SAND (SC): greenish black (5GY 2.	5/1) wet 80% fine to	- GW-1-100209 collected				
6-	0	medium sand, 20% low plasticity fines	5/1), wet, 66/0 into to	through 10 feet of 2-inch OD Sch. 40 PVC screen				
-1 6.5		SANDY LEAN CLAY (CL): dark grayish brown		_ (0.010-inch slot size) placed in borehole from 5				
7- 8 \		70% fines, 30% fine to medium sand, medium	piasticity	to 15 feet bgs.				
] X			_	_				
/ \								
8-	0.1							
-	0.1		_	_				
9-				_				
	0			_				
10			Ēl .					
10-								
11-	0	mottled with dark yellowish brown (10YR 3/6)	-	-				
-		moded with dark yellowish blown (1017C3/0)	-	_				
12-				_				
_	0.1			_				
42								
13-	0			Borehole destroyed using				
111		Type I-II neat ceme						
	0	POORLY-GRADED SAND with CLAY (SP-SC 4/3), moist, 90% medium sand, 10% low plast		grout placed from total depth to ground surface				
14- 0:	1		1	with a tremie pipe.				
14-15.0	0.1		ŀ	_ with a treffile pipe.				
14 - 0.31-1-5.0	0.1 0	Bottom of boring at 15.0 feet		OAKBOREV (REV. 6/2008)				

BORING LOCATION: Approx. 24* E, 15* N of the SE corner of bldg 8 ORILLING CONTRACTOR: RSI Drilling, Inc. DRIESTARTED: DATE STARTED: 10/2/09 10/2/09 DRIESTARTED: 10/2/09 10/2/09 DRIESTARTED: 10/2/09 10/2/09 DRIESTARTED: 10/2/09 TOTAL DEPTH (ft.): G. Ground surface GROUND STARTED: 10/2/09 TOTAL DEPTH (ft.): G. GROUND SURFACE GROUND STARTED: 10/2/09 DRIESTARTED: 10/2/09 DATE STARTED: 10/2/09 TOTAL DEPTH (ft.): GROUND SURFACE GROUND SURFACE FIRST COMPET. NA DROP: NA RESPONSIBLE PROFESSIONAL: REG. N. F. KRIEVONSIBLE PROFESSIONAL: REG. N. F. KRIEVON	PROJE				C SHOPS		Log of Bo	ring No.	SB-3		
DRIELING CONTRACTOR: RSI Drilling, Inc. DATE STARTED: 10/2/09	BORIN					041 = 451N 611 OF 6111 O					
DRILLING METHOD: Direct push DRILLING METHOD: Direct push TOTAL DEPTH (ft.): MEASURING POINT: Ground Surface ISO, DEPTH TO WATER (ft.): MEASURING POINT: Ground Surface ISO, DEPTH TO WATER (ft.): MEASURING POINT: Ground Surface ISO, DEPTH TO WATER (ft.): MEASURING POINT: Ground Surface ISO, DEPTH TO WATER (ft.): MEASURING POINT: Ground Surface ISO, DEPTH TO WATER (ft.): MEASURING POINT: M	-					I D		DATE FINI	urrace SHED:		
DRILLING METHOD: Direct push DRILLING EQUIPMENT: Geoprobe 6620 DT SAMPLING METHOD: Geoprobe DT21 dual-tube sampling system [4' x 1.125'] SAMPLING METHOD: Geoprobe DT21 dual-tube sampling system [4' x 1.125'] T, Kiltzke LGGSED HY: T, Kiltzke T, Kiltzke T, Kiltzke RESPONSIBLE PROFESSIONAL: PG 74: D. Croteau REMARKS R	DRILLING CONTRACTOR: RSI Drilling, Inc. 10/2/09										
DRILLING EQUIPMENT: Geoprobe 6620 DT SAMPLING METHOD: Geoprobe DT21 dual-tube sampling system [4" x 1.125"] SAMPLING METHOD: Geoprobe DT21 dual-tube sampling system [4" x 1.125"] LOGGED BY: T. Kitcke RESPONSIBLE PROFESSIONAL: REG. N PG 74 REMARKS REM											
SAMPLING METHOD: Geoprobe DT21 dual-tube sampling system [4" x1.125"] T. Kitzke HAMMER WEIGHT: NA DROP: NA DROP: NA DESCRIPTION NAME (USCS): color, moist, % by wt., plast density, structure, cementation, react, wHCl, geo. inter. Surface Elevation: ASPHALTIC CONCRETE LEAN CLAY (CL): very dark greenish plack (5GY 2.5/1), wel, 80% fine to medium sand, 20% fow plasticity fines T. ASPHALTIC CONCRETE LEAN CLAY (CL): very dark greenish plack (5GY 2.5/1), wel, 80% fine to medium sand, 20% fow plasticity fines T. Wellowish brown (10YR 5/4), moist T. Wellowish brown (10YR 5/4), moist D. Croteau REMARKS											
AMMER WEIGHT: NA DROP: NA RESPONSIBLE PROFESSIONAL: REG. N PG 74! SAMPLES SUPPLIES	DRILLI	NG E	QUII	PMEN	IT: Geopr			NA	5.7		
ASMPLES SAMPLES SAMP	SAMPL	ING N	ИΕТ	HOD:	Geoprob	e DT21 dual-tube sampling system [4' x 1.125"]	. Klitzke	CIONAL	T BEC NO		
NAME (USCS): color, moist, % by wit, plast, density, structure, cementation; react, which, gea, inter. NAME (USCS): color, moist, % by wit, plast, density, structure, cementation; react, which, gea, inter. NAME (USCS): color, moist, % by wit, plast, density, structure, cementation; react, which, gea, inter. NAME (USCS): color, moist, % by wit, plast, density, structure, cementation; react, which, gea, inter. NAME (USCS): color, moist, % by wit, plast, density, structure, cementation; react, which, gea, inter. NAME (USCS): color, moist, % by wit, plast, density, structure, cementation; react, which, gea, inter. NAME (USCS): color, moist, % by wit, plast, density, structure, cementation; react, which, gea, inter. NAME (USCS): color, moist, % by wit, plast, density, structure, cementation; react, which, gea, inter. NAME (USCS): color, moist, % by wit, plast, density, gea, inter. NAME (USCS): color, moist, % by wit, plast, density, gea, inter. NAME (USCS): color, moist, which, gea, inter. NASPHALTIC CONCRETE LEAN CLAY (CL)	HAMM	ER W	EIG	HT:	NA	I DBOD: NA		SIONAL:	PG 7495		
ASPHALTIC CONCRETE LEAN CLAY (CL): very dark greenish gray (5GY 3/1), moist, 95% calibrated with 100 ppm isobutylene standard. 0.5 CLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines CLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines CLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines CLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines ODM = MiniRAE 2000 F calibrated with 100 ppm isobutylene standard. Hand augered to 5 feet bgs. Grab groundwater sam, GW-3-100209 collected through 10 feet of 2-inc OD Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from to 15 feet bgs. The mottled with dark yellowish brown (10YR 4/6) 13	EPTH feet)	_	_		OVM ADING ppm)	NAME (USCS): color, moist, % by wt., plast. density	, structure,	RI	EMARKS		
LEAN CLAY (CL): very dark greenish gray (5GY 3/1), moist, 95% fines, 5% fine to medium sand, medium plasticity 0.5 CLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines 0.4 Vellowish brown (10YR 5/4), moist 0.5 CLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines 0.5 OLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines 0.5 OLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines 0.5 OLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines 0.5 OLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines 0.5 OLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines 0.5 OLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines 0.5 OLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines 0.5 OLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines 0.5 OLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines 0.5 OLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines 0.5 OLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines 0.5 OLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines 0.5 OLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to	<u> </u>	Sar	Sar	용도	RE	Surface Elevation:					
LEAN CLAY (CL): very dark greenish gray (5GY 3/1), moist, 95% fines, 5% fine to medium sand, medium plasticity 0.5 CLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines CLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines CHAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines Grab groundwater sam GW-3-100209 collected through 10 feet of 2-incl of 20 Ds.h. 40 PVC screen (0.010-inch slot size) placed in borehole from to 15 feet bgs. The mottled with dark yellowish brown (10YR 4/6) SANDY LEAN CLAY (CL) POORLY-GRADED SAND with CLAY (SPSC): olive brown (2.5Y) Borehole destroyed using the calibrated with 100 ppm isobutylene standard. Borehole destroyed using the calibrated with 100 ppm isobutylene standard. Borehole destroyed using the calibrated with 100 ppm isobutylene standard.						ASPHALTIC CONCRETE		O) //\d = \\d\d	SPAE 2000 DID		
A- 5- 6- 0.5 CLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines O.4 yellowish brown (10YR 5/4), moist 0.3 0.4 yellowish brown (10YR 5/4), moist 0.5 CLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines Grab groundwater sam; GW-3-100209 collected through 10 feet of 2-incl. O.5 Sch. 4D PVC screen (0.010-inch slot size) placed in borehole from to 15 feet bgs. 13 0.9 SANDY LEAN CLAY (CL) FOORLY-GRADED SAND with CLAY (SP-SC): olive brown (2.5Y) Borehole destroyed usi Type I-Il neat cement Type I-Il ne	1- -					LEAN CLAY (CL): very dark greenish gray (5GY 3/ fines, 5% fine to medium sand, medium plasticity	/1), moist, 95%	calibrated v	vith 100 ppm		
O.5 CLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines O.4 yellowish brown (10YR 5/4), moist O.3 velowish brown (10YR 5/4), moist O.5 CLAYEY SAND (SC): greenish black (5GY 2.5/1), wet, 80% fine to medium sand, 20% low plasticity fines OD Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from to 15 feet bgs. O D Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from to 15 feet bgs. O D Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from to 15 feet bgs. O D Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from to 15 feet bgs. O D Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from to 15 feet bgs. O D Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from to 15 feet bgs.	2-				0.5		-	_	red to 5 feet		
Grab groundwater sam; GW-3-100209 collected through 10 feet of 2-incl OD Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from to 15 feet bgs. 10- 11- 12- 13- 1.8 CLAY EYRIND (20): greenist black (3GY 2.5/1), wet, 60% line to medium sand, 20% low plasticity fines Grab groundwater sam; GW-3-100209 collected through 10 feet of 2-incl OD Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from to 15 feet bgs. The mottled with dark yellowish brown (10YR 4/6) Borehole destroyed using Type I-II neat cement ground placed from total strong to the power of the property of the proper	-						- - -	-			
through 10 feet of 2-inc OD Sch. 40 PVC screen (0.010-inch slot size) placed in borehole from to 15 feet bgs. 10	5- -	38-3-5.5			0.5		wet, 80% fine to -				
10- 11- 12- 13- 10- 10- 10- 10- 10- 10- 10- 10- 10- 10	6-				0.4	yellowish brown (10YR 5/4), moist	-	through 10 feet of 2-inch OD Sch. 40 PVC screen (0.010-inch slot size)			
0 9- 10- 11- 11- 12- 13- 0.9 mottled with dark yellowish brown (10YR 4/6)	-		X		0.3		-				
11- 12- 13- 1.8 mottled with dark yellowish brown (10YR 4/6) 18 SANDY LEAN CLAY (CL) POORLY-GRADED SAND with CLAY (SP-SC): olive brown (2.5Y Borehole destroyed usi Type I-II neat cement grout placed from total	-				0			-			
13- 13- 13- 19- 19- 19- 10- 10- 10- 10- 10- 10- 10- 10- 10- 10	10- -	-			0.1		-	- - -			
O.9 SANDY LEAN CLAY (CL) POORLY-GRADED SAND with CLAY (SP-SC): olive brown (2.5Y Type I-II neat cement grout placed from total	-		X		1.8	mottled with dark yellowish brown (10YR 4/6)	-	-			
1/0\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	- 13 -				0.9		live brown (2.5Y	grout placed from total depth to ground surface			
	14-	B-3-15.0			0.4						
Bottom of boring at 15.0 feet	15-	SB				Bottom of boring at 15.0 feet			NAME OF THE OWNER OWNER OF THE OWNER		
AMEC Geomatrix Project No. 14740.000 Page 1 of 1	10					***	Bullion A.		DAKBOREV (REV. 6/2008)		

PROJE				C SHOPS a, Califor		Log of B	Bor	ing No.	SB-2	
BORING		-			nia 14' S, 11' W of SE corner of bldg 6	ELEVATION AND DATU	JM:			
						DATE STARTED:	DATE FINISHED:			
DRILLING CONTRACTOR: RSI Drilling, Inc. 10/2/09 TOTAL DEPTH (ft.):								10/2/09 MEASURING POINT:		
DRILLIN	DRILLING METHOD: Direct push 15.0								surface	
DRILLIN	NG EC	QUIF	MEN	T: Geopro	bbe 6620 DT	DEPTH TO WATER (ft.)		FIRST NA	COMPL. 5.1	
SAMPL	ING N	1ETI	HOD:	Geoprobe	e DT21 dual-tube sampling system [4' x 1.125"]	LOGGED BY: T. Klitzke				
HAMME	ER WI	EIGH	łΤ:	NA	DROP: NA	RESPONSIBLE PROFE D. Croteau	ESSI	ONAL:	REG. NO. PG 7495	
DEPTH (feet)	Sample No.	_	Blows/ S	OVM (ppm)	DESCRIPTION NAME (USCS): color, moist, % by wt., plast. o cementation, react. w/HCl, geo. i	lensity, structure, nter.		F	EMARKS	
	San	San	음띠	A H	Surface Elevation:					
		-			ASPHALTIC CONCRETE		-	O/M = M	niRAE 2000 PID	
1-				0.1	SANDY LEAN CLAY with GRAVEL (CL): ver 2.5/3), moist, 50% fines, 30% fine to medium medium plasticity	y dark brown (7.5YR sand, 20% fine gravel,	-	calibrated	with 100 ppm e standard.	
2-				0.2			-	Hand aug bgs.	ered to 5 feet	
3- - 4-					3		-	8		
- 5-	SB-2-5,5	48		0.7	CLAYEY SAND (SC): greenish black (5GY 2 medium sand, 20% low plasticity fines	.5/1), wet, 80% fine to	+	Grab grou	indwater sample	
6-	SB-3			1	9		-	through 19 OD Sch. 4	0209 collected 0 feet of 2-inch 40 PVC screen th slot size)	
7-	0			0.3			F	placed in to 15 feet	borehole from 5	
8-	SB-2-8.0			0.7	SANDY LEAN CLAY (CL): very dark greenis mottled with dark yellowish brown (10YR 3/6 30% fine to medium sand, medium plasticity	h gray (5GY 3/1), , moist, 70% fines,	-			
9-				0.1			_			
11-				0.1	POORLY-GRADED SAND (SP): dark yellow	sh brown (10YR 4/6)				
12-				0.2			-			
13-	5.0			0.3	POORLY-GRADED SAND with CLAY (SP-S brown (10YR 4/6), moist, 90% medium sand fines	C): dark yellowish 10% low plasticity	-	Type I-II of grout place depth to g	destroyed using neat cement ced from total ground surface	
_	SB-2-15.0			0.1			-	with a tre	mie pipe.	
15-	S				Bottom of boring at 15.0 feet			1	OAKBOREV (REV. 6/2008)	
	ΔN	IEC	Ge	omatrix		Project No. 1	474	0.000	Page 1 of 1	