

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY



DAVID J. KEARS, Agency Director

STID 4450

October 17, 1996

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

REMEDIAL ACTION COMPLETION CERTIFICATION

Mr. Hillel Narin
c/o HNS Partners
2190 Washington #603
San Francisco, CA 94109

Neil Werner
c/o Port of Oakland
530 Water Street
Oakland, CA 94604-2064

RE: SUNSET WHOLESALE SITE, 105 EMBARCADERO, OAKLAND, CA 94607

Dear Mr. Narin:

This letter confirms the completion of site investigation and remedial action for one 8000-gallon gasoline underground storage tank at the above described location. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including current land use, and with provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to the regulation contained in Title 23, Division 3, Chapter 16, Section 2721 (e) of the California Code of Regulations. **(If a change in land use is proposed, the owner must promptly notify this agency.)**

Please contact Dale Klettke at (510) 567-6880 if you have any questions regarding this matter.

Sincerely,

A handwritten signature in cursive script that reads "Mee Ling Tung".

Mee Ling Tung
Director, Department of Environmental Health

enclosure

c: Dan Schoenholz, Port of Oakland, 530 Water Street, Oakland, CA 94607
Chuck Snell, c/o Dames & Moore, 221 Main Street, Suite 600, San Francisco, CA
94105-1917
Steven Kay of Kay & Merkle, 100 The Embarcadero, 3rd Floor, San Francisco, CA
94105-1217
Thomas Peacock, LOP Manager--files

Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount (include units)</u>	<u>Action (Treatment or Disposal w/destination)</u>	<u>Date</u>
Tank	8000-gallons	disposal/H & H Environmental S. San Francisco, CA	3/31/93
Piping	50-pounds	disposal/Schnitzer Steel Oakland, CA	8/9/93
Free Product Soil	206,220-pounds	treatment/Port Costa Materials Port Costa, CA	10/25/93
Groundwater	1800-gallons	recycling/PRC Patterson, Inc. Patterson, CA	6/30/93

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

<u>Contaminant</u>	<u>Soil (ppm)</u>		<u>Water (ppb)</u>	
	<u>Before¹</u>	<u>After²</u>	<u>Before³</u>	<u>After⁴</u>
TPH (Gas)	41	0.3	10,000	<50
TPH (Diesel)	NA	NA	NA	NA
Benzene	0.31	0.006	870	1.6
Toluene	0.062	<0.005	380	<0.0005
Ethyl benzene	0.11	<0.005	130	<0.0005
Xylenes	0.17	<0.005	570	0.82
Heavy metals - Lead	11.3	NA	NA	12
Other				

NA=Not Analyzed

Comments (Depth of Remediation, etc.):

On March 31, 1993, one (1) 8,000-gallon underground storage tank (UST) which previously contained gasoline, was removed from the site. Following the tank removal, several holes were found in the tank and a seam along the west end of the tank was completely deteriorated.

¹"Before" results were obtained from soil samples collected at the time of UST removal (3/31/93). See Figure 2.

²"After" results were obtained from soil samples collected on 7/1/93 after over-excavation of affected soils in the vicinity of previous soil sample #4, and removal of the fuel dispenser and associated piping. Contaminated soils in the vicinity of initial soil samples #2 and #3 were not over-excavated.

³"Before" results were obtained from the groundwater sample collected on 3/31/93, from water which had entered the UST excavation.

⁴"After" results were obtained from "grab" groundwater samples collected during a rapid site assessment performed on 5/10/96.

Standard RWQCB interface samples were collected from native soil at points corresponding to both ends of each underground storage tank. Sample #1 was collected from subsurface water collected from the tank pit. The depth to water in the tank pit was 10.1' below ground surface (bgs). Sample #2 was collected at the end opposite the fill pipe, at a depth of 12.5' bgs. Sample #3 was a standard interface sample taken at the fill pipe end at a depth of 10.8' bgs. Sample #4 was collected from the sidewall of the end opposite the fill pipe at a depth of 5.3' bgs (See Figure 2).

Confirmation soil samples collected from the excavation after the initial UST removal exhibited up to 41 ppm-TPHg and 0.31 ppm-benzene. The water sample collected from the UST excavation exhibited 10 ppm-TPHg and 0.87 ppm-benzene (See Figure 2). Low concentrations (7.5 to 11.3 mg/kg of total lead were also detected in the soil samples.

Due to the close proximity of the UST excavation to the warehouse building, the excavation was backfilled with stockpiled soils obtained from the UST removal, along with additional clean fill.

Between June 30, 1993 and July 15, 1993, soils which were reintroduced into the UST excavation were removed. In addition, product piping which connected the former UST and former dispenser were removed. The product piping was encountered at approximately 2 feet bgs. Signs of corrosion and several small holes were observed in the product piping at the time of removal.

Groundwater was encountered at approximately 5 feet bgs in the open excavation. During excavation activities, water was removed to the depth of the excavation, approximately 12.5 feet below grade, using a vacuum truck. Approximately 1800 gallons of water was removed from the excavation during dewatering activities. After the excavation was dewatered and allowed to recharge slightly, a grab ground-water sample was collected, which exhibited levels of TPHg and benzene at concentrations of 1,500 and 320 ppb, respectively.

During excavation activities, soils were monitored using a field photo ionization detector (PID) and through visual observation. Suspected gasoline-contaminated soils were excavated from beneath the former dispenser and the product piping, and from the area near Blaine Tech Services previous soil sampling location 4, which is where the product piping entered the tank excavation (See Figure 3 for soil analytical results and sample locations). Approximately 60 cubic yards of excavated soils were removed from the excavation and were thermally treated at Port Costa Materials in Post Costa, California.

See Section VII, Additional Comments, etc...

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? **YES**
Site management requirements: **None**
Should corrective action be reviewed if land use changes? **YES**
Monitoring wells Decommissioned: **None**
Number Decommissioned: **N/A** Number Retained: **N/A**
List enforcement actions taken: **NOV letters sent 3/1/96**
List enforcement actions rescinded: **In compliance as of 4/25/96.**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Dale Klettke** Title: **Hazardous Materials Specialist**

Signature: *Dale Klettke* Date: *9/10/96*

Reviewed by

Name: **Barney Chan** Title: **Hazardous Materials Specialist**

Signature: *Barney Chan* Date: *9/11/96*

Name: **Thomas Peacock** Title: **LOP Manager**

Signature: *Thomas Peacock* Date: *9-11-96*

VI. RWQCB NOTIFICATION

Date Submitted to RB:

RB Response: *Approved*

RWQCB Staff Name: **Kevin Graves**

Title: **AWRCE**

Signature: *Kevin Graves*

Date: *10-10-96*

VII. ADDITIONAL COMMENTS, DATA, ETC.

On May 10, 1996, four (4) exploratory boring were advanced to depths of between 4 and 8 feet bgs using rapid site assessment techniques. One soil boring (B-1) was located approximately 10 feet northeast of the former UST location to determine groundwater quality up gradient of the former UST. The other three borings (B-2, B-3 and B-4) were located in the presumed down gradient direction of the former UST (See Figure 4).

Soil and groundwater samples were collected and analyzed for TPHg, BTEX, methyl-tert-butyl ether (MTBE) and total lead. Laboratory results of soil and groundwater analyses are summarized in Tables 1 and 2.

Case closure is warranted for this site as a "Low-Risk Groundwater Case" for the following reasons.

- a) The source has been sufficiently removed or has been remediated.

Laboratory analysis of verification soil samples collected from the gasoline UST and piping excavations indicate that soil containing elevated levels of TPHg were removed. Laboratory analysis of verification soil samples collected from the UST excavation detected maximum levels of TPHg and BTEX at concentrations of 13.0, 0.050, 0.062, 0.11 and 0.17 ppm, respectively. Laboratory analysis of verification soil samples collected from the piping excavation detected maximum levels of TPHg and BTEX at concentrations of 0.3, 0.006, <0.005, <0.005 and <0.005 ppm, respectively.

- b) The site has been adequately characterized.

Laboratory analysis of soil and groundwater samples collected during site investigations document that the previous release is small in extent and appears to be limited to soils remaining in place surrounding samples #2 and #3.

- c) The dissolved hydrocarbon plume appears to be stable and is not migrating.

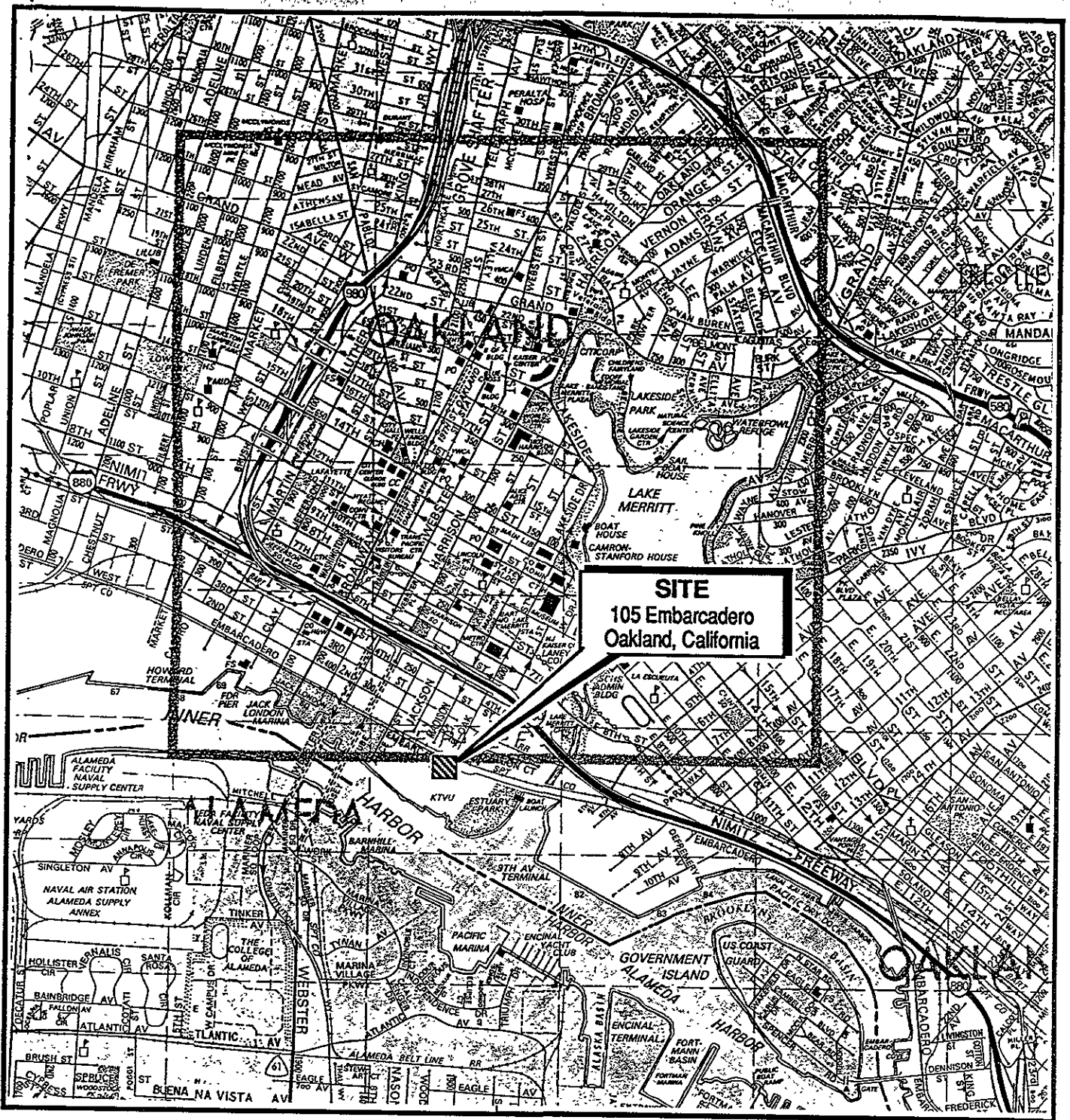
Only benzene at a concentration of 1.6 ug/L and total xylenes at a concentration of 0.82 ug/L were detected in the "grab" groundwater samples collected during the May 1996 Geoprobe investigation.*

- d) No water walls, deeper drinking water wells, surface water or other sensitive receptors are likely to be impacted.

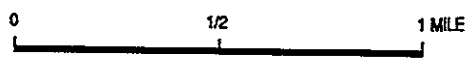
The petroleum hydrocarbon groundwater contamination appears to be localized in the vicinity of the gasoline UST excavations. The benzene and xylene concentrations which were detected in the "grab" groundwater samples should not impact the quality of groundwater down gradient of the site.

- e) The site presents no significant risk to human health or the environment.

The benzene concentration detected in the "grab" groundwater sample collected from boring B-1 slightly exceeds the maximum contaminant level (MCL) of 1 ppb. However, the benzene concentration detected in the groundwater sample collected from boring B1 does not exceed the ASTM RBCA CA-modified Tier 1 Risk-Based Screening Level (RSBL) of 21 ug/L for the exposure pathway "Groundwater-Vapor Intrusion from Groundwater to Building", for a commercial/industrial receptor scenario, with a target level of 1E-06 (1 in 1,000,000 excess cancer risk). In addition, the maximum benzene concentration detected in the final confirmation soil samples (sample #2 at 50 ug/L) barely exceeds the RSBL value (0.049 ppm) for Soil-Vapor Intrusion from Soil to Buildings", for a commercial/industrial receptor scenario, with a target level of 1E-05 (1 in 100,000 excess cancer risk).



SITE
105 Embarcadero
Oakland, California



MAP SOURCE:
 Thomas Bros. Map
 Alameda and Contra Costa Counties
 EDITION: 1992

Figure 1: SITE VICINITY MAP

Project No. 2941

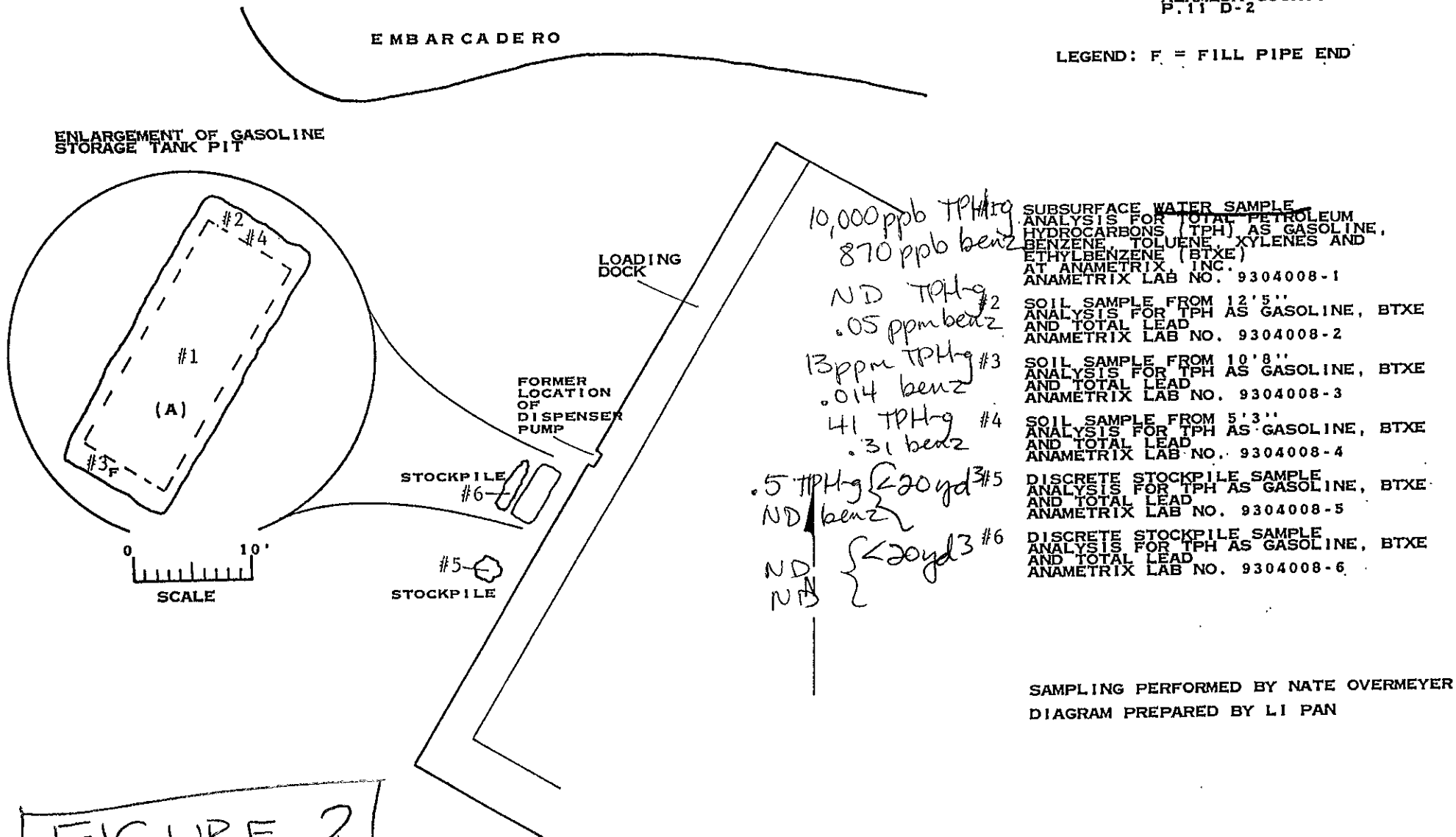
LEVINE•FRICKE
 ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

2941MJS25JUN93 RYL



MAP REF: THOMAS BROS.
ALAMEDA COUNTY
P.11 D-2

LEGEND: F = FILL PIPE END



SAMPLING PERFORMED BY NATE OVERMEYER
DIAGRAM PREPARED BY LI PAN

FIGURE 2

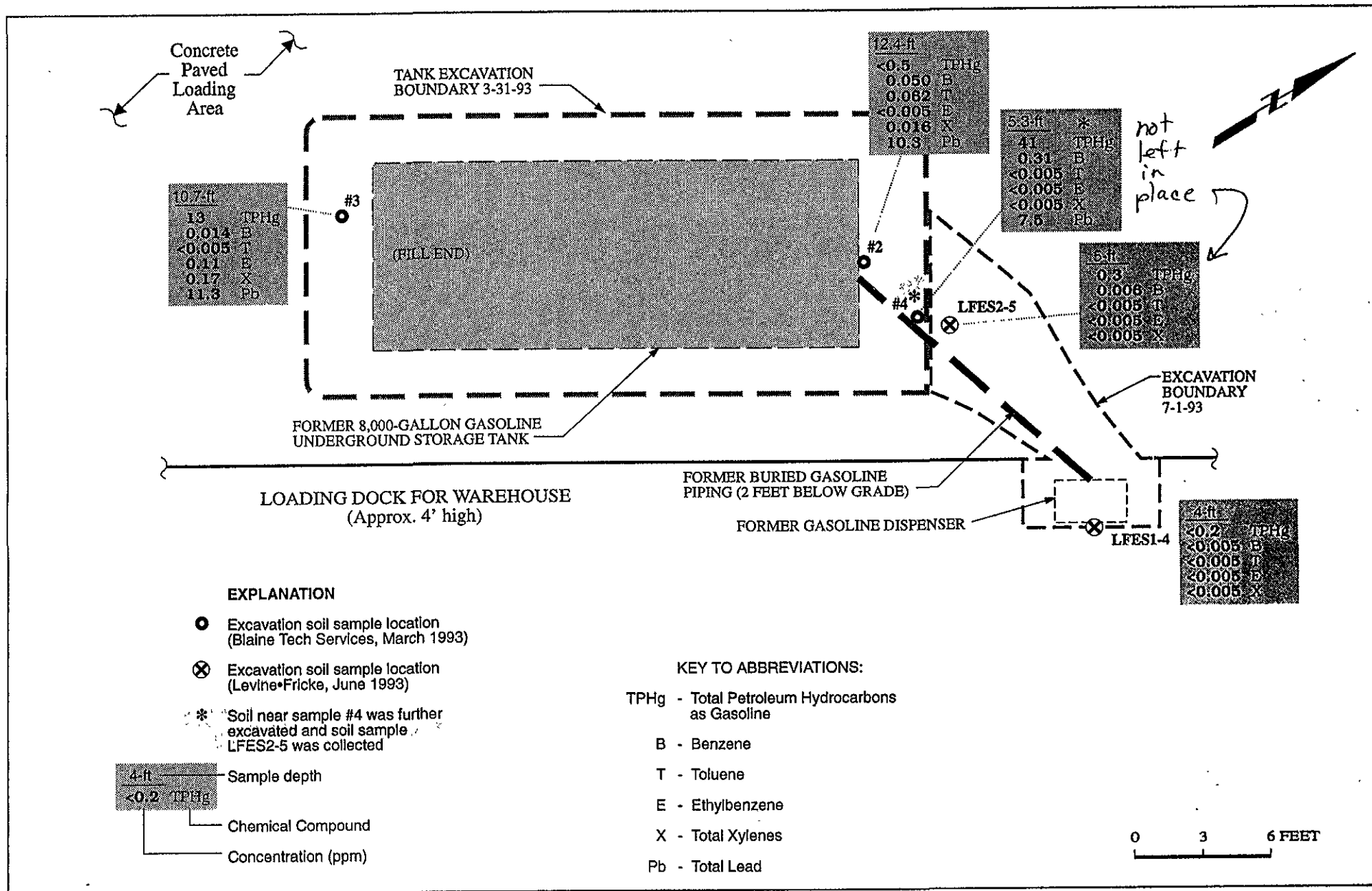
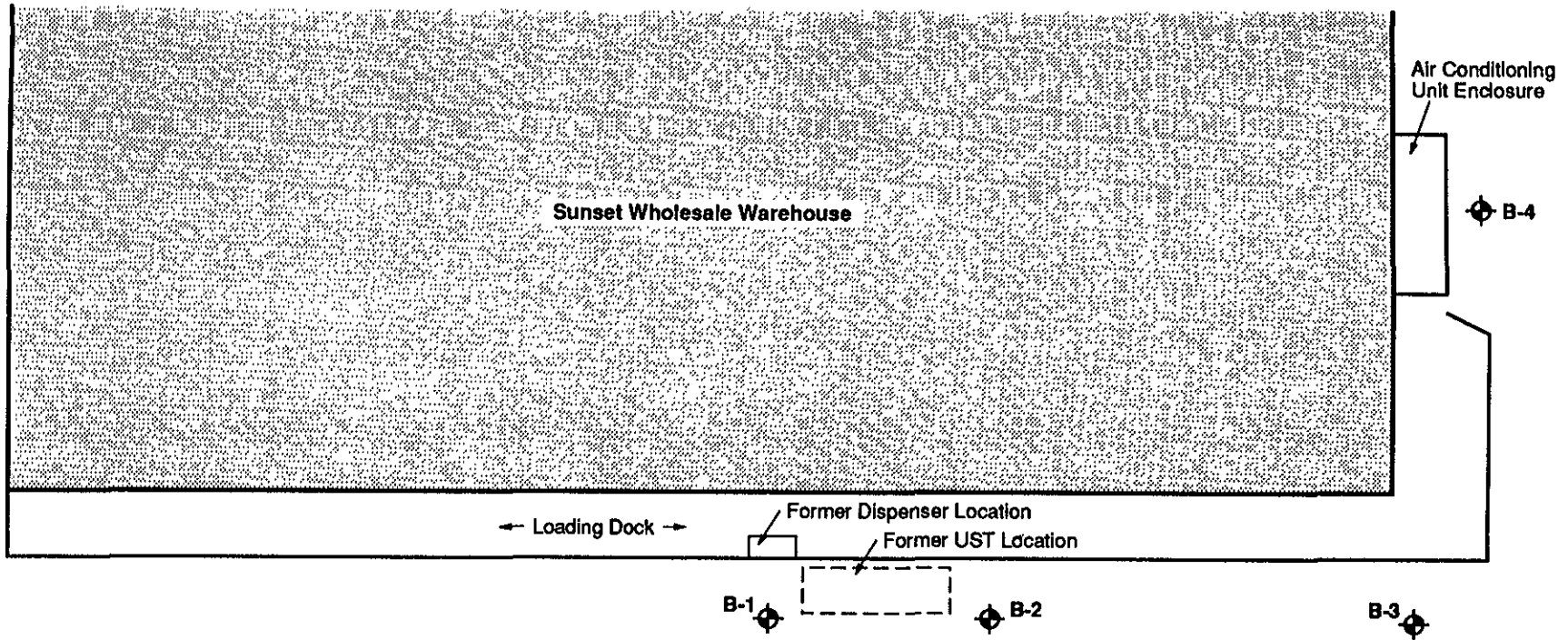
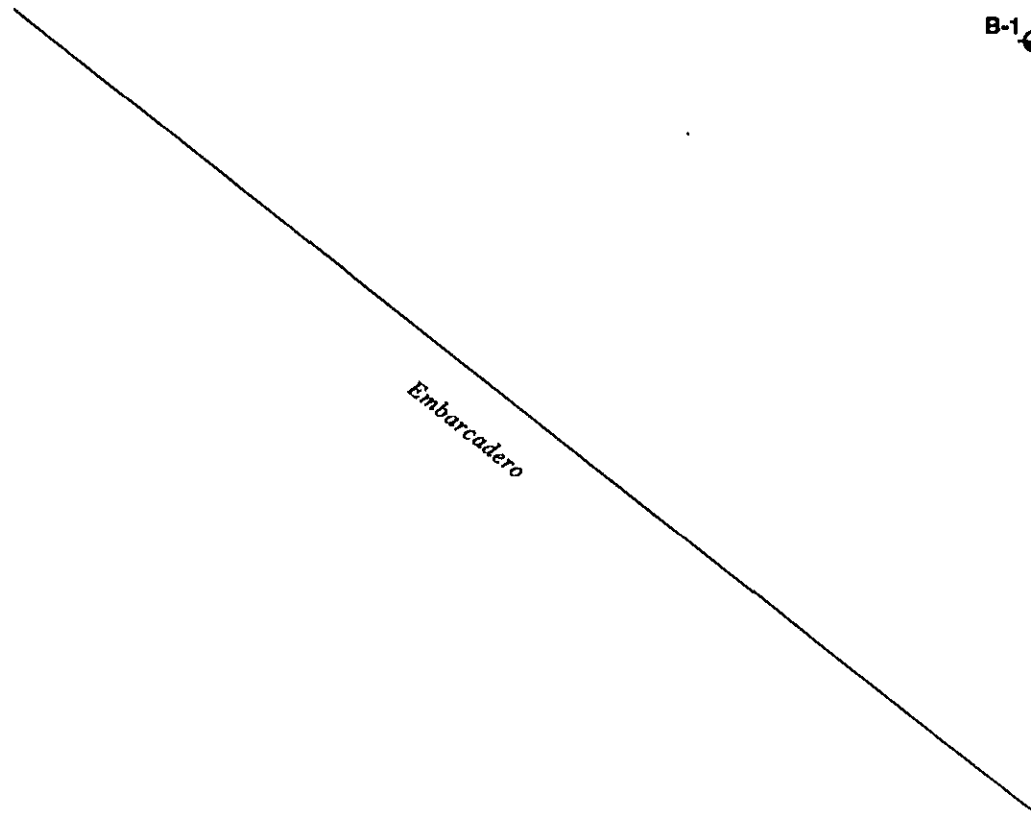
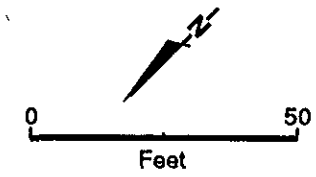


Figure : SITE PLAN SHOWING CHEMICAL ANALYSIS RESULTS FOR EXCAVATION SOIL SAMPLES, JUNE 1993



KEY

B-1 Boring Location



SITE PLAN WITH BORING LOCATIONS

June 1996
32293-001-043

HNS Partners
Sunset Wholesale
Oakland, California

DAMES & MOORE

FIGURE

4

**TABLE 1
SUMMARY OF SOIL CHEMICAL ANALYSES
SUNSET WHOLESALE
OAKLAND, CALIFORNIA**

		Boring Number:	B1	B2	B3	B4
		Depth (feet):	3.5	6.0	3.5	6.0
Method	Constituent	Detection Limit				
6010	Lead	5.0	110	8.2	9.9	210
8015M	TPH-gasoline	1.0	*	*	*	*
8020	Benzene	0.005	*	0.0079	*	*
	Toluene	0.005	*	*	*	*
	Ethylbenzene	0.005	*	*	*	*
	Total Xylenes	0.005	*	*	*	*
	MTBE	0.3	*	*	*	*

**TABLE 2
SUMMARY OF GROUNDWATER CHEMICAL ANALYSES
SUNSET WHOLESALE
OAKLAND, CALIFORNIA**

		Boring Number:	B1	B2	B3	B4
		Depth (feet):	3.5	3.5	3.5	3.5
Analytical Method	Constituent	Detection Limit				
7421	Lead	2	12	*	*	*
8015M	TPH-gasoline	50	*	*	*	*
8020	Benzene	0.5	1.6	*	*	*
	Toluene	0.5	*	*	*	*
	Ethylbenzene	0.5	*	*	*	*
	Total Xylenes	0.5	*	*	0.82	*
8240	MTBE ⁽²⁾	1	*	*	*	*

Notes: * Not detected

- (1) All concentrations are reported in micrograms per liter (µg/L).
- (2) Methyl-tertiary-butyl ether was the only volatile organic compound analyzed by EPA Method 8240.

BORING B-1

SAMPLING

DEPTH IN FEET	INCHES DRIVEN / RECOVERED	PID READING (parts per million)
0		
48/30		
2		1
4	24/24	
6		1
8		
10		
12		
14		

SAMPLES



SYMBOL	DESCRIPTION
	6" Concrete
SW	LIGHT BROWN MEDIUM SAND with fine to coarse gravel [FILL]
SC	GREENISH GRAY CLAYEY SAND with reddish gray rock fragments [FILL]
SP	BLACK TO GRAY FINE TO MEDIUM SAND with medium to coarse gravel (wet) [FILL]
SM	LIGHT GRAY SILTY FINE TO MEDIUM SAND with wood fragments. Strong hydrocarbon odor (wet) [FILL]

Notes:

1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
2. For an explanation of terms, see the Soils Classification Chart and Key to Test Data, Plate A-5.

Job No: 32993-001-043 Pt. ID: HNS / B-1	Dames & Moore, Inc.	Log of Boring
Date Completed: 5/10/96 Boring Depth: 6.5 ft.	Surface Elev: Coordinates:	Location: Oakland, CA

BORING B-2

SAMPLING	
DEPTH IN FEET	PID READING (parts per million)
0	
48/24	
2	6
4	
48/48	
6	11
8	
10	
12	
14	

SAMPLES



SYMBOL	DESCRIPTION
	6" Concrete
SP	DARK BROWN TO YELLOWISH BROWN GRAVELLY SILTY SAND, fine to medium, with wood fragments (moist) [FILL]
	Grades with less silt gray discoloration at approx. 3-4' bgs. color changes to brown
SW	LIGHT GRAY GRAVELLY COARSE SAND, fine to medium gravel [FILL]
SP	BLACK FINE SAND with wood fragments, hydrocarbon odor (wet) [FILL]
	Color changes to greenish gray wood chips and fragments (wet)
CL	DARK GRAY CLAY (soft) (wet)

Notes:

1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
2. For an explanation of terms, see the Soils Classification Chart and Key to Test Data, Plate A-5.

Job No: 32993-001-043 Pt. ID: HNS / B-2	Dames & Moore, Inc.	Log of Boring
Date Completed: 5/10/96 Boring Depth: 8.5 ft.	Surface Elev: Coordinates:	Location: Oakland, CA

BORING B-3

SAMPLING	
DEPTH IN FEET	PID READING (parts per million)
0	
48/36	
2	
	2.1
4	
6	
8	
10	
12	
14	

SAMPLES

SYMBOL	DESCRIPTION
	4" Asphalt
SP	LIGHT BROWN, RED, AND GRAY GRAVELLY SILTY SAND, fine to coarse (moist) [FILL]
	Grades with decreasing gravel, slight hydrocarbon odor, color changing to dark brown-black, with wood fragments

Notes:

1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
2. For an explanation of terms, see the Soils Classification Chart and Key to Test Data, Plate A-5.

Job No: 32993-001-043 Pt. ID: HNS / B-3	Dames & Moore, Inc.	Log of Boring
Date Completed: 5/10/96 Boring Depth: 4.5 ft.	Surface Elev: Coordinates:	Location: Oakland, CA

BORING B-4

SAMPLING		DEPTH IN FEET	SYMBOL	DESCRIPTION
INCHES DRIVEN / RECOVERED	PID READING (parts per million)			
		0		4" Asphalt
48/36		0 - 2	GM	BROWN SANDY SILTY FINE GRAVEL, angular sand is fine grained (dry) [FILL]
	0	2 - 4	SP	BROWNISH YELLOW FINE TO MEDIUM SAND (moist) [FILL] trace fine gravel color changes to brownish gray slightly greyish green
48/48		4 - 6	SC	BROWNISH YELLOW FINE TO MEDIUM SAND with clay and gravel [FILL]
		6 - 6.5	GM	YELLOWISH RED CLAYEY SILTY MEDIUM TO COARSE GRAVEL [FILL]
		6.5 - 8	SP	BROWN FINE TO MEDIUM SAND (wet) [FILL] color changes to dark brown
		8 - 10		
		10 - 12		
		12 - 14		

Notes:
 1. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
 2. For an explanation of terms, see the Soils Classification Chart and Key to Test Data, Plate A-5.

Job No: 32993-001-043 Pt. ID: HNS / B-4	Dames & Moore, Inc.	Log of Boring
Date Completed: 5/10/96 Boring Depth: 8.5 ft.	Surface Elev: Coordinates:	Location: Oakland, CA

SYMBOL	LETTER	DESCRIPTION	MAJOR DIVISIONS					
			CLEAN GRAVELS (LITTLE OR NO FINES)	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	CLEAN SANDS (LITTLE OR NO FINES)	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SILTS & CLAYS LIQUID LIMIT LESS THAN 50	SILTS & CLAYS LIQUID LIMIT GREATER THAN 50
	GW	WELL-GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	CLEAN GRAVELS (LITTLE OR NO FINES)	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SANDS (LITTLE OR NO FINES)	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	FINE-GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO.200 SIEVE SIZE THE NO.200 U.S. STANDARD SIEVE IS ABOUT THE SMALLEST PARTICLE VISIBLE TO THE NAKED EYE	HIGHLY ORGANIC SOILS
	GP	POORLY-GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES						
	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	FINE-GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO.200 SIEVE SIZE THE NO.200 U.S. STANDARD SIEVE IS ABOUT THE SMALLEST PARTICLE VISIBLE TO THE NAKED EYE	HIGHLY ORGANIC SOILS
	GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES						
	SW	WELL-GRADED SAND OR GRAVELLY SANDS, LITTLE OR NO FINES	CLEAN SANDS (LITTLE OR NO FINES)	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SANDS (LITTLE OR NO FINES)	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	FINE-GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO.200 SIEVE SIZE THE NO.200 U.S. STANDARD SIEVE IS ABOUT THE SMALLEST PARTICLE VISIBLE TO THE NAKED EYE	HIGHLY ORGANIC SOILS
	SP	POORLY-GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES						
	SM	SILTY SANDS, SAND-SILT MIXTURES	CLEAN SANDS (LITTLE OR NO FINES)	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	FINE-GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO.200 SIEVE SIZE THE NO.200 U.S. STANDARD SIEVE IS ABOUT THE SMALLEST PARTICLE VISIBLE TO THE NAKED EYE	HIGHLY ORGANIC SOILS
	SC	CLAYEY SANDS, SAND-CLAY MIXTURES						
	ML	INORGANIC SILTS, VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY	CLEAN SANDS (LITTLE OR NO FINES)	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	FINE-GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO.200 SIEVE SIZE THE NO.200 U.S. STANDARD SIEVE IS ABOUT THE SMALLEST PARTICLE VISIBLE TO THE NAKED EYE	HIGHLY ORGANIC SOILS
	CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS						
	OL	ORGANIC SILTS AND ORGANIC SILT-CLAYS OF LOW PLASTICITY						
	MH	ORGANIC SILTS AND ORGANIC SILT-CLAYS OF HIGH PLASTICITY	CLEAN SANDS (LITTLE OR NO FINES)	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	FINE-GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO.200 SIEVE SIZE THE NO.200 U.S. STANDARD SIEVE IS ABOUT THE SMALLEST PARTICLE VISIBLE TO THE NAKED EYE	HIGHLY ORGANIC SOILS
	CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS						
	OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS						
	PT	PEAT AND OTHER HIGHLY ORGANIC SOILS	CLEAN SANDS (LITTLE OR NO FINES)	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)	FINE-GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO.200 SIEVE SIZE THE NO.200 U.S. STANDARD SIEVE IS ABOUT THE SMALLEST PARTICLE VISIBLE TO THE NAKED EYE	HIGHLY ORGANIC SOILS

KEY TO SAMPLES

- Geoprobe DPT Sampler
- Geoprobe DPT Sampler with no recovery

UNIFIED SOIL CLASSIFICATION CHART AND KEY TO TEST DATA

Dames & Moore

ENVIRONMENTAL
PROTECTION

96 OCT 16 PM 3:23