



DEPTH, FT	WATER LEVEL SYMBOL	SAMPLES	BLOWS PER FOOT	LOCATION: See Plate 2 COORDINATES: 29° 43' 45" N 95° 03' 08" W SURFACE EL.: 5.0'	STRATUM DEPTH, FT	CLASSIFICATION						SHEAR STRENGTH				
				STRATUM DESCRIPTION		UNIT DRY WT, POF	PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	KIPS PER SQ FT				
												□ Penetrometer Unconfined ▼ ◇ Torvane Triaxial ● ○ Remolded Miniature Vane ▲ M.Vane				
												0.5	1.0	1.5	2.0	2.5
				SANDY CLAY, stiff, brown, with calcareous nodules and roots				12	27	9	18					
				CLAYEY SAND, gray	4.0	111		13								
5							30									
			7	SAND, loose, fine-grained, gray, with silt seams	7.0											
10			9				11									
			2	- very loose, brown below 11'												
			4	CLAY, firm, gray	13.0											
15			7	SILTY CLAY, firm, gray, with fine-grained sand pockets	15.0			25	19	13	6					
			2	SILTY SAND, very loose, fine-grained, gray	17.0		20									
20																
			WOH	SILTY CLAY, very soft, gray, with sand pockets	23.0			28	21	13	8					
25																
			5	SAND, loose, fine-grained, dark gray, with shell fragments and silt seams	28.0		14									
30																
			5	- with clay pockets below 33'			8									
35																
			20	CLAY, stiff to very stiff, yellowish-brown	38.0											

NOTES:

- ▽: Water First Noticed. ▼: Depth To Water after 15 minutes.
- Terms and symbols defined on Plates A-32a and A-32b.
- Coordinates obtained from handheld GPS.
- WOH - Weight of Hammer

DATE: March 16, 2011
TOTAL DEPTH: 75'
CAVED DEPTH: Not Applicable
DRY AUGER: Surface to 8'
WET ROTARY: Below 8'
BACKFILL: Cement-Bentonite Grout
LOGGER: C. Alvarado

R:041202011 PROJECTS\0001-0099\0412-11-0003\DRAWING\0412-11-0003.GPJ FUGRO_SO (LAB DATA)_INDUSTRIAL (WIR_MV) 6/2/2011

LOG OF BORING NO. B-26
DOCKS, BRIDGE, AND BARNES ISLAND IMPROVEMENTS
BATTLEGROUND OIL SPECIALTY TERMINAL COMPANY
HARRIS COUNTY, TEXAS





DEPTH, FT	WATER LEVEL SYMBOL	SAMPLES	BLOWS PER FOOT	LOCATION: See Plate 2 COORDINATES: 29° 43' 45" N 95° 03' 08" W SURFACE EL.: 5.0'	STRATUM DEPTH, FT	CLASSIFICATION						SHEAR STRENGTH				
				STRATUM DESCRIPTION		UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	KIPS PER SQ FT				
				CLAY, stiff to very stiff, yellowish-brown - slickensided at 43'												
45																
50																
55																
60						100		25	77	20	57					
65																
70								19								
75					75.0											

NOTES:

1. ▽: Water First Noticed. ▼: Depth To Water after 15 minutes.
2. Terms and symbols defined on Plates A-32a and A-32b.
3. Coordinates obtained from handheld GPS.
4. WOH - Weight of Hammer

DATE: March 16, 2011

TOTAL DEPTH: 75'

CAVED DEPTH: Not Applicable

DRY AUGER: Surface to 8'

WET ROTARY: Below 8'

BACKFILL: Cement-Bentonite Grout

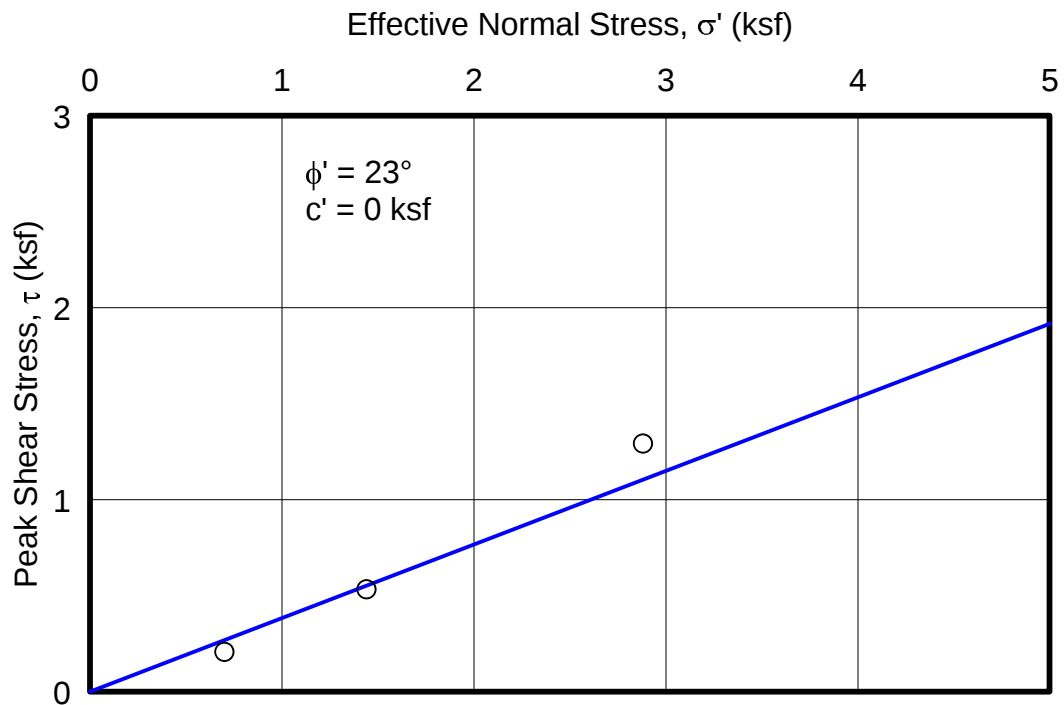
LOGGER: C. Alvarado

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LOG OF BORING NO. B-26

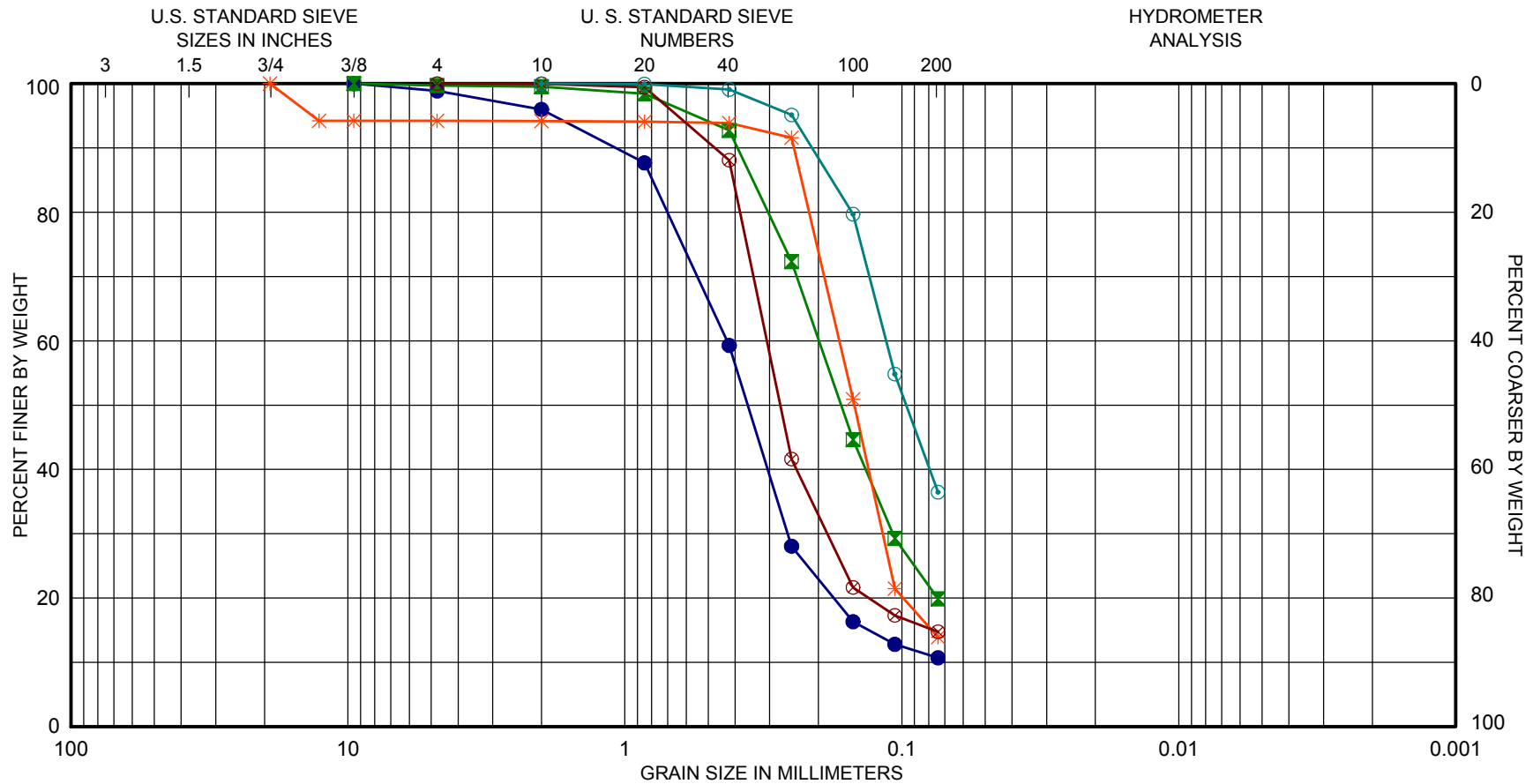
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HARRIS COUNTY, TEXAS





MATERIAL: SILTY SAND, gray
INITIAL WATER CONTENT: 15%
INITIAL WET UNIT WEIGHT: 106 pcf
INITIAL DRY UNIT WEIGHT: 92 pcf
INITIAL VOID RATIO: 0.812
SPECIFIC GRAVITY: 2.68 (assumed)

DIRECT SHEAR TEST RESULTS
BORING B-26, 18-FOOT DEPTH
DOCKS, BRIDGE, AND BARNES ISLAND IMPROVEMENTS
BATTLEGROUND OIL SPECIALTY TERMINAL COMPANY
HARRIS COUNTY, TEXAS



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	
<u>SYMBOL</u>	<u>BORING</u>	<u>DEPTH, FT</u>			<u>CLASSIFICATION</u>
●	B-26	10			Sand, loose, fine-grained, gray, with silt seams
■	B-26	18			Silty Sand, very loose, fine-grained, gray
✱	B-26	29			Sand, loose, fine-grained, dark gray, with shell fragments and silt seams
⊗	B-27	16			Silty Sand, very loose, fine-grained, gray
⊙	B-27	25			Silty Sand, loose, fine-grained, gray

GRAIN SIZE CURVES
DOCKS, BRIDGE, AND BARNES ISLAND IMPROVEMENTS
BATTLEGROUND OIL SPECIALTY TERMINAL COMPANY
HARRIS COUNTY, TEXAS