



DEPTH, FT	WATER LEVEL SYMBOL	SAMPLES	BLOWS PER FOOT	LOCATION: See Plate 2 COORDINATES: 29° 43' 42" N 95° 03' 01" W SURFACE EL.: 10.0'	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
5				CLAY, stiff to very stiff, red and dark gray, with roots - with fine-grained sand pockets and shell fragments		104		23 20	53	13	40					
10						104		26 19	46	12	34					
12.0			17	SILTY SAND, medium-dense, fine-grained, gray, with shell fragments			6									
15			16				6									
18.0			13	SANDY CLAY, medium-dense, fine-grained, gray			73									
20																
25			17													
25.0																
30																
35																

NOTES:

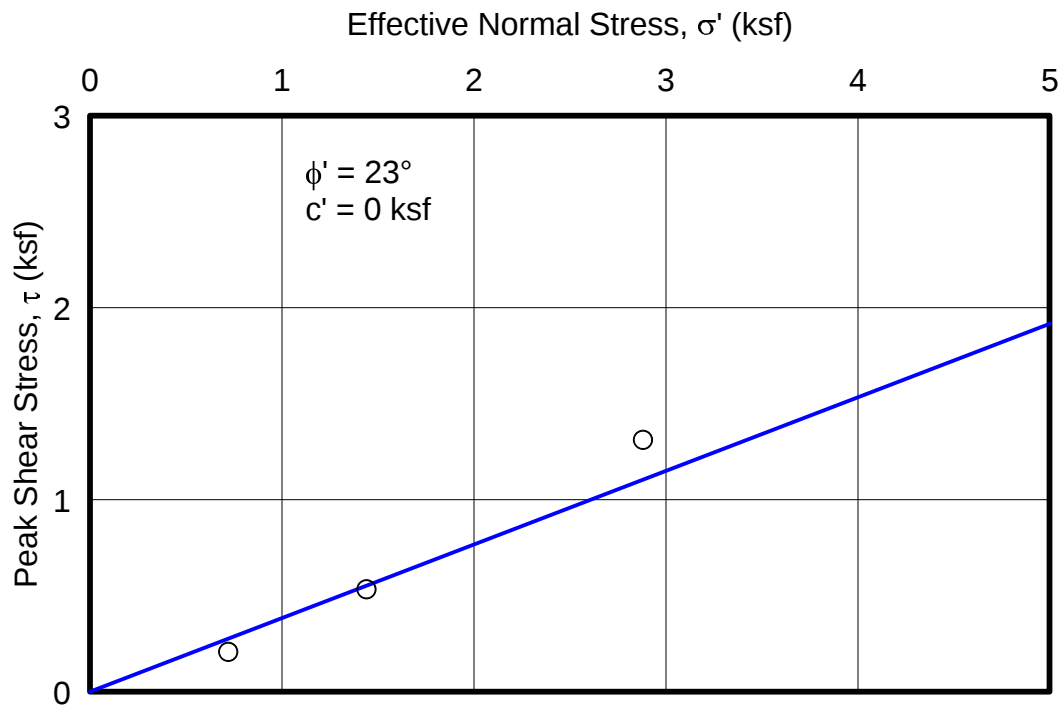
- ▽: Water First Noticed. ▼: Depth To Water after 15 minutes.
- Terms and symbols defined on Plates A-32a and A-32b.
- Coordinates obtained from handheld GPS.

DATE: March 21, 2011
TOTAL DEPTH: 25'
CAVED DEPTH: Not Applicable
DRY AUGER: Surface to 25'
WET ROTARY: Not Applicable
BACKFILL: Cement-Bentonite Grout
LOGGER: B. Burkett

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

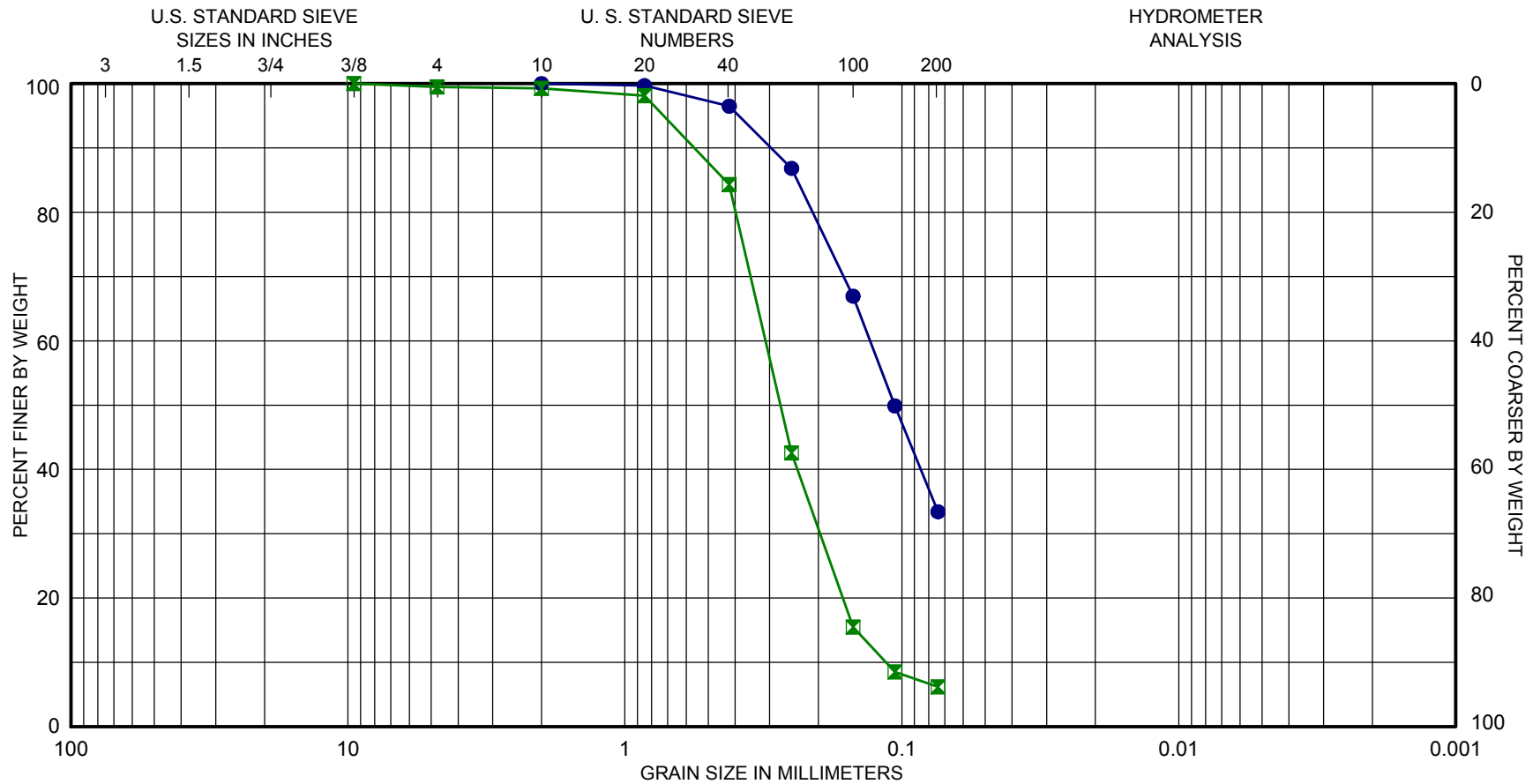
LOG OF BORING NO. B-40
DOCKS, BRIDGE, AND BARNES ISLAND IMPROVEMENTS
BATTLEGROUND OIL SPECIALTY TERMINAL COMPANY
HARRIS COUNTY, TEXAS





MATERIAL: SILTY SAND, brown
INITIAL WATER CONTENT: 16%
INITIAL WET UNIT WEIGHT: 106 pcf
INITIAL DRY UNIT WEIGHT: 91 pcf
INITIAL VOID RATIO: 0.826
SPECIFIC GRAVITY: 2.68 (assumed)

DIRECT SHEAR TEST RESULTS
BORING B-40, 15.5-FOOT DEPTH
DOCKS, BRIDGE, AND BARNES ISLAND IMPROVEMENTS
BATTLGROUNDOIL SPECIALTY TERMINAL COMPANY
HARRIS COUNTY, TEXAS



GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

SYMBOL	BORING	DEPTH, FT	CLASSIFICATION
●	B-39	15.5	Silty Sand, loose, fine-grained, gray
■	B-40	13.5	Silty Sand, medium-dense, fine-grained, gray, with shell fragments
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○			

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