



DEPTH, FT	WATER LEVEL SYMBOL	SAMPLES	BLOWS PER FOOT	LOCATION: See Plate 2 COORDINATES: 29° 43' 47" N 95° 03' 08" W SURFACE EL.: -6.0' (Assumed)	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				
												0.5	1.0	1.5	2.0	2.5
			PUSH	SILTY SAND, gray			20									
5			8	CLAY, soft to firm, dark gray, with organic material and sand pockets	3.5											
10					11.0	93	86	24	33	12	21					
			2	SILTY SAND, very loose, fine-grained, gray												
15																
20			3				13									
25			4	- with clay pockets below 23'												
30			WOH	SANDY CLAY, soft, gray, with sand seams and shell fragments	28.5			28								
35				- stiff to very stiff below 33'												
					38.0	111		18	19	17	2					
				CLAY, stiff, red and gray, slickensided												
<b>NOTES:</b> 1. Water depth was 6' at time of drilling. 2. Terms and symbols defined on Plates A-32a and A-32b. 3. Coordinates were obtained by our field technician with a hand held GPS device. 4. WOH - Weight of Hammer 5. PUSH - Split Barrel Sampler was advanced hydraulically.												DATE: April 24, 2011 TOTAL DEPTH: 75' CAVED DEPTH: Not Applicable DRY AUGER: Not Applicable WET ROTARY: Mudline to 75' BACKFILL: Cuttings and Drilling Mud LOGGER: E. Schulak				

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-18**  
**DOCKS, BRIDGE, AND BARNES ISLAND IMPROVEMENTS**  
**BATTLEGROUND OIL SPECIALTY TERMINAL COMPANY**  
**HARRIS COUNTY, TEXAS**



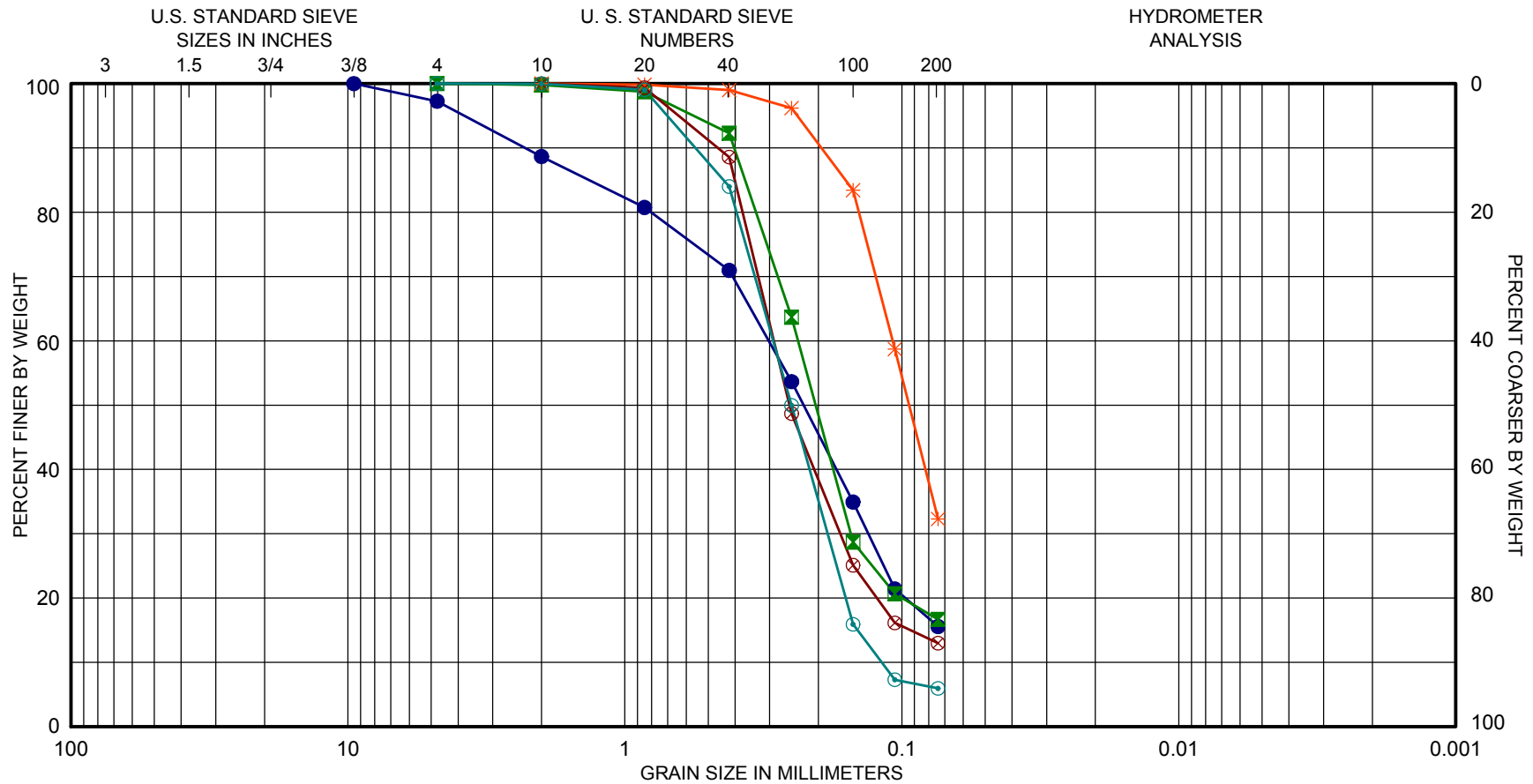


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				CLAY, stiff, red and gray								0.5	1.0	1.5	2.0	2.5
45				- tan and gray, with pockets of silt at 43'												
50				- red, tan and gray, 48' to 53'		116		17	42	12	30					□ <sup>+</sup> 3.7 ●
55				- red and gray, 53' to 68'												□ <sup>+</sup>
60				- very stiff below 58' - with sand seams, 58' to 60'												□ <sup>+</sup>
65								19								□ <sup>+</sup>
70				- reddish brown and gray below 68'												□ <sup>+</sup>
75					75.0											□
NOTES:						DATE: April 24, 2011 TOTAL DEPTH: 75' CAVED DEPTH: Not Applicable DRY AUGER: Not Applicable WET ROTARY: Mudline to 75' BACKFILL: Cuttings and Drilling Mud LOGGER: E. Schulak										
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GRAVEL		SAND			SILT or CLAY
Coarse	Fine	Coarse	Medium	Fine	

SYMBOLBORING

B-10  
B-12  
B-13  
B-18  
B-23

DEPTH, FT

5  
15  
15  
20  
30

CLASSIFICATION

Silty Sand, loose, fine-grained, gray, with shell fragments  
Sand, very loose, fine-grained, gray  
Clayey Sand, loose, fine-grained, gray  
Silty Sand, very loose, fine-grained, gray  
Sand, medium-dense, fine-grained, dark brown, with silt seams

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