



DEPTH, FT	WATER LEVEL SYMBOL SAMPLES	BLOWS PER FOOT	LOCATION: See Plate 2 COORDINATES: 29° 43' 52" N 95° 03' 05" W SURFACE EL.: -8.0' (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
			CLAY, gray												
5		15	SAND, medium dense, fine-grained, gray, with silt pockets	3.0		20									
			SANDY CLAY, soft, gray, with silt seams and silt pockets	6.0			28								
10															
15															
20			- firm below 18'			49	49	68	15	53					
25															
30			- with shell fragments below 28'												
35							57								
			SILTY CLAY, very stiff, gray, with sandy silt pockets	37.0											
					113		18	33	14	19					3.8

NOTES:

1. Water depth was 8' at time of drilling.
2. Terms and symbols defined on Plate A-32a and A-32b.
3. Coordinates were obtained by our field technician with a hand held GPS device.

DATE: April 28, 2011
TOTAL DEPTH: 90'
CAVED DEPTH: Not Applicable
DRY AUGER: Not Applicable
WET ROTARY: Mudine to 90'
BACKFILL: Cuttings and Drilling Mud
LOGGER: T. Mireles

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-15
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' 52" N 95° 03' 05" W SURFACE EL.: -8.0' (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				
			SILTY CLAY, very stiff, gray	41.0											
			SAND, medium dense, fine-grained, gray, with silt pockets												
45		12				10									
			CLAY, very stiff, brown and gray, slickensided - with silt seams and silt pockets to 51'	45.5											
50															
			- brown and gray below 53'												
55															
			- with silt pockets, 58' to 60'												
60					112		19								
65															
70															
			SILTY CLAY, very stiff, gray and brown, with silt pockets	71.5											
75															
			- gray, with silt seams and silt stone nodules at 78'												
					108		20								
NOTES:					DATE: April 28, 2011 TOTAL DEPTH: 90' CAVED DEPTH: Not Applicable DRY AUGER: Not Applicable WET ROTARY: Mudine to 90' BACKFILL: Cuttings and Drilling Mud LOGGER: T. Mireles										
1. Water depth was 8' at time of drilling.															
2. Terms and symbols defined on Plate A-32a and A-32b.															
3. Coordinates were obtained by our field technician with a hand held GPS device.															

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

LOG OF BORING NO. B-15
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' 52" N 95° 03' 05" W SURFACE EL.: -8.0' (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				
85			SILTY CLAY, very stiff, gray and brown - brown and gray below 83'												□ ⁺
			SANDY SILT, gray	86.0											
				88.5											
90		15	SILTY CLAY, stiff, gray, with silt pockets and silt seams	90.0			38								
95															
100															
105															
110															
115															
NOTES:					DATE: April 28, 2011 TOTAL DEPTH: 90' CAVED DEPTH: Not Applicable DRY AUGER: Not Applicable WET ROTARY: Mudine to 90' BACKFILL: Cuttings and Drilling Mud LOGGER: T. Mireles										
1. Water depth was 8' at time of drilling.															
2. Terms and symbols defined on Plate A-32a and A-32b.															
3. Coordinates were obtained by our field technician with a hand held GPS device.															

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-15
DOCKS, BRIDGE, AND BARNES ISLAND IMPROVEMENTS
BATTLEGROUND OIL SPECIALTY TERMINAL COMPANY
HARRIS COUNTY, TEXAS

