

# BORING LOG NO. A-1

CLIENT: **United States Army Corps of Engineers  
Galveston, Texas**

PROJECT: **Contract W912HY-09-D-0021  
Addicks and Barker Dams, TO-14**

BORING LOCATION: **N: 13854395.94  
E: 3038891.725**

SITE: **Addicks and Barker Reservoirs  
Houston, Texas**

Graphic Log	DESCRIPTION	DEPTH, FEET	SAMPLES						TESTS								
			USCS SYMBOL	TYPE	RECOVERY, IN	SPT, BLOWS/FT	CALIBRATED HAND PENETROM., TSF	TORVANE, TSF	MOISTURE CONTENT, %	DRY DENSITY, PCF	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	MINUS #200 SIEVE, %	COMPRESSIVE STRENGTH, TSF	FAILURE STRAIN, %	CONFINING PRESSURE, PSI
<b>Approx. Surface Elevation: 93.1 feet</b>																	
	<b>SANDY FAT CLAY</b> yellowish brown and light gray, soft to stiff, high plasticity, uniform, dry - with brown sandy silt 0 to 4 inches - with sand pockets 4 inches to 2 feet - very stiff 4 to 6 feet	87.1	6.0	CH													
		1		SS	17	3			21								
		2															
		3		ST	11		2.0		20	109	59	17	42				
		4															
		5		ST	9		4.5		15					69			
		6															
		7		CL	ST	13		4.5		12		44	14	30	68		
		8															
		9		CL	ST	11		4.0		15				77			
	10																
	10																

STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES. IN SITU, THE TRANSITION BETWEEN STRATA MAY BE MORE GRADUAL. REMARKS: Dry augered to 10 feet.

WATER LEVEL OBSERVATIONS		DATE DRILLED 9/27/2012	Page 1 of 1
▽ ▽ FREE WATER WAS NOT OBSERVED DURING DRY DRILLING OPERATIONS		PROJECT NUMBER 92125125	A-1
			<b>EXHIBIT A-4</b>