

## BORING LOG NO. B- 5

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

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

BORING LOCATION: **N: 13845271.408  
E: 3029312.002**

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>SANDY LEAN CLAY</b> dark gray, light gray, and tan, very stiff, medium plasticity, dry - with sand seams 0 to 2 feet - with ferrous stains and calcareous nodules 2 to 6 feet	1	CL	ST	12	4.5	13					58						
		2																
		3		ST	8	4.5	12											
		4																
	83.5	6.0	5		ST	11	3.75	14					54					
			6															
	81.5	8.0	7	SC	ST	8	4.25	10	129	48	28	20	34					
			8															
	79.5	10.0	9	CL	ST	12	2.25	16										
			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**

▽	▽
▽	▽

FREE WATER WAS NOT OBSERVED DURING DRY DRILLING OPERATIONS



**DATE DRILLED**

7/5/2012

**PROJECT NUMBER**

92125125

Page 1 of 1

**B- 5**

**EXHIBIT A-31**