

BORING LOG NO. B-18

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

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

BORING LOCATION: **N: 13842764.16
E: 3032403.749**

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, %
Approx. Surface Elevation: 80.9 feet																
▽	SANDY SILTY CLAY light gray and tan, stiff to very stiff, low plasticity, moist, with ferrous stains	27														
▽	28.0	28	SS		16	15				17		21	15	6	62	
	SILTY SAND light gray and tan, medium dense, non-plastic, fine-grained, wet	29	SM		7	48				16					17	
	30	31	SS		12	26				17					28	
	32.0	32	CL													
	LEAN CLAY w/ SAND light gray and tan, very stiff, medium plasticity, moist, with sand and silt seams	33			12	24				21						
	34.0	34	CH													
	FAT CLAY reddish brown and light gray, stiff to very stiff, high plasticity, moist, with calcareous nodules and slickensides	35			12		2.0									
	36	36														
	37	37	ST		10		3.5		26							
	38.0	38														
	LEAN CLAY w/ SAND light gray, tan, and reddish brown, very stiff, medium plasticity, moist, with sand and silt pockets	39	CL		13		3.0		19	114	42	16	26			
	40	40														
	41	41	ST		14		4.5		19							
	42	42														
	43	43	ST		12		4.0		21							
	44	44														
	45	45	ST		11		3.5		23							
	46.0	46														
	SILTY CLAY reddish brown, hard, low plasticity, moist, with sand seams and calcareous nodules	47	CL-ML		14	38			21		26	22	4			
	48.0	48	SM													
	SILTY SAND reddish brown, dense to very dense, non-plastic, fine-grained, wet	49			2	41			18							
	50	50														
	51	51	SS		8	74			21							
	52	52														

Continued Next Page

STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES. IN SITU, THE TRANSITION BETWEEN STRATA MAY BE MORE GRADUAL.

REMARKS: Dry augered to 27 feet; wet rotary thereafter.

WATER LEVEL OBSERVATIONS

▽ 27 ft WD	▽ 23 ft at 5 min
▽ 21.5 ft at 10 min	▽ 19.5 ft at 15 min



DATE DRILLED

6/8/2012

PROJECT NUMBER

92125125

Page 2 of 4

B-18

EXHIBIT A-44

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Approx. Surface Elevation: 80.9 feet																		
	SILTY SAND reddish brown, dense to very dense, non-plastic, fine-grained, wet - with clay pockets and calcareous nodules 50 to 52 feet - with clay seams 53 to 54 feet - with clay and cemented sand seams 56 to 58 feet	53	SS	13	39			27										
		54																
		55																
		56																
		57																
		58																
		59																
		60																
		61																
		62																
	FAT CLAY light gray and reddish brown, stiff to very stiff, high plasticity, moist	61	CH	14	28			23										
		62																
		63																
		64																
		65																
	LEAN CLAY light gray and reddish brown, very stiff, medium plasticity, moist, with silt pockets	67	ST	13	3.5			18										
		68																
		69																
		70																
	FAT CLAY reddish brown and light gray, very stiff, high plasticity, moist, with slickensides and calcareous nodules	71	CL	7	4.5			18	116	31	16	15						
		72																
		73																
		74																
		75																
		76																
		77																
78																		

Continued Next Page

STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES. IN SITU, THE TRANSITION BETWEEN STRATA MAY BE MORE GRADUAL.

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∇ 27 ft WD ∇ 23 ft at 5 min	
∇ 21.5 ft at 10 min ∇ 19.5 ft at 15 min	



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Page 3 of 4

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Approx. Surface Elevation: 80.9 feet																		
	FAT CLAY reddish brown and light gray, very stiff, high plasticity, moist, with slickensides and calcareous nodules - with ferrous nodules 76 to 78 feet - with ferrous stains 80 to 86 feet - with scattered gravel 82 to 86 feet	79	ST	14		4.5												
		80																
		81	ST	14		4.5		23										
		82																
		83	ST	10		4.0												
		84																
		85	ST	13		3.75		22		55	19	36						
	-5.1	86.0	86	CL														
		LEAN CLAY reddish brown and light gray, very stiff, medium plasticity, moist, with silt seams and calcareous and ferrous nodules - with sand pockets 88 to 90 feet - with scattered gravel 90 to 92 feet	87	ST	12.5		4.5											
			88															
		89	ST	12		4.5		17										
		90																
		91	ST	11		4.5												
		92																
-13.1	94.0	93	ST	8.5		4.5		17	115									
	SILTY CLAY light gray and reddish brown, very stiff to hard, low plasticity, moist, with calcareous nodules - with silt and sand pockets 94 to 98 feet - with cemented silt seams 96 to 98 feet - with scattered gravel below 96 feet	94	CL-ML															
		95	ST	10		4.5												
		96																
		97	ST	11		4.25		16										
		98																
-19.1	100.0	99	SS	17	47													
		100																
Boring terminated at 100 feet.																		

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Page 4 of 4

B-18

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