



Quaternary Resource Investigations, LLC
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BORING NUMBER 13-B154

PAGE 1 OF 2

CLIENT USACE-Galveston District **PROJECT NAME** Sabine Neches Placement Area 8
PROJECT NUMBER W912HY-13-D-0001-DY05 **PROJECT LOCATION** Port Arthur, TX
DATE STARTED 11/19/2013 11:30:00 AM **COMPLETED** 11/20/2013 2:30:00 PM **GROUND ELEVATION** 16.4487 ft **HOLE SIZE** 8.25 inches
DRILLING CONTRACTOR QRI **NORTHING** 13894400.28 ft **EASTING** 3573487.317 ft
DRILLING METHOD Hollow Stem Auger **DRILLING RIG MAKE/MODEL** Mobile B57 on Gemco Articulated Platform
LOGGED BY Pete Herold **TOTAL DEPTH** 70 ft **GROUND WATER LEVEL** ▽ AT TIME OF DRILLING 15.30 ft / Elev 1.15 ft
WEATHER cloudy, 50s, windy to clear, 60s, breezy **▽ 15 MINUTES AFTER DRILLING** 13.70 ft / Elev 2.75 ft

COPY OF PEGGY LAKE GEOTECH BH - PEGGY LAKE TEMPLATE.GDT - 7/15/14 13:10 - C:\USERS\PUBLIC\DOCUMENTS\BENTLEY\GINT\PROJECTS\SABINE NECHES PA 8 FINAL EDITED.GPJ

GRAPHIC LOG	USCS SYMBOL	MATERIAL DESCRIPTION	DEPTH (ft)	SAMPLE TYPE	RECOVERY (in)	SPT BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	FIELD TORVANE (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS				MINUS #200 SIEVE CONTENT (%)	COMPRESSIVE STRENGTH (tsf)	FAILURE STRAIN (%)	CONFINING PRESSURE (psi)			
											LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX								
	CH	Fat CLAY, light brown, stiff, with trace roots and shell fragments 0'-4' and cracks 0'-8'	0	ST	10		1.5		96	27	55	20	35		1.35	7					
				ST	11		2.3		103	20											
	CL	Lean CLAY with SAND, light brown, stiff more sand, light brown to dark gray, firm, with sand seams 6'-8'	5	ST	13		3.2		98	21					97	1.64	3	4			
				ST	13		1.3			26											
	CH	Fat CLAY, light brown to dark gray, firm, with sand seams 43'-45' less sand more sand less sand stiff firm	10	ST	10		1.6		94	28						79	0.86	3			
				ST	20		0.75		1.25							24					
				○	NR																
			15	ST	21		1.0		87	35					54	20	34	96	0.70	12	12
				○	NR																
			20	ST	7		1.1			26											
				ST	16	0.75	3.75	89	35												
				○	NR																
			25	ST	19	1.0	91	32	73	20	53	97									
				○	NR																
			30	ST	20	1.8		26													
				○	NR																
						35	ST	19	1.2			27									

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	CH	Fat CLAY, light brown to dark gray, firm, with sand seams 43'-45' (continued)	35	○ NR													
		more sand, light brown, stiff		■ ST	19		1.8			33							
		less sand, very stiff	40	■ ST	17		1.7		89	31	64	21	43	99	2.10	5	
		with cracks 43'-45', firm		○ NR													
				■ ST	20		1.4			33							
			45	○ NR													
		light brown and greenish gray		■ ST	20		1.2		84	38							
			50	○ NR													
		greenish gray		■ ST	20		0.75	1.3		37							
			55	○ NR													
		less sand, stiff		■ ST	19		1.3		73	51				100	1.48	7	
			60	○ NR													
		firm		■ ST	19		1.2			53							
			65	○ NR													
		dark gray		■ ST	15		1.2			42							
			70														

Bottom of borehole at 70.0 feet.