



Quaternary Resource Investigations, LLC
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BORING NUMBER 13-B199

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CLIENT USACE-Galveston District
PROJECT NUMBER W912HY-13-D-0001-DY05
DATE STARTED 1/12/2014 12:10:00 PM **COMPLETED** 1/12/2014 5:15:00 PM
DRILLING CONTRACTOR QRI
DRILLING METHOD Hollow Stem Auger
LOGGED BY Pete Herold **TOTAL DEPTH** 50 ft
WEATHER clear to cloudy, 50s to 60s, light wind to windy

PROJECT NAME Sabine Neches Placement Area 8
PROJECT LOCATION Port Arthur, TX
GROUND ELEVATION 5.3875 ft **HOLE SIZE** 8.25 inches
NORTHING 13877380.67 ft **EASTING** 3575586.804 ft
DRILLING RIG MAKE/MODEL Mobile B57 on Gemco Articulated Platform
GROUND WATER LEVEL **AT TIME OF DRILLING** 9.20 ft / Elev -3.81 ft
 15 MINUTES AFTER DRILLING 8.40 ft / Elev -3.01 ft

COPY OF PEGGY LAKE GEOTECH BH - PEGGY LAKE TEMPLATE GDT - 7/15/14 13:13 - 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 (%)	COMPRESSION STRENGTH (tsf)	FAILURE STRAIN (%)	CONFINING PRESSURE (psi)
	CL	CLAY with SAND, light brown and dark gray mottled, very stiff, with shell fragments 2'-4'	0	ST	13		3.75		90	32					
		hard		ST	15		>4.5			29					
	CH	Fat CLAY with SAND, greenish gray, soft, with sand seams, cracks shell fragments 4'-6'	5	ST	11		2.5		109	21	50	16	34	47	0.30 4
				ST	14		2.5			23					
				ST	18		2.1		100	28					
			10	ST	19		1.5			37					
		dark gray, very soft		ST	19		0.9								
			15	ST	18		0.9		86	41	46	18	28	53	0.10 14 13
		less sand, greenish gray and light brown mottled, soft, trace of shell fragments 16'-18'		ST	18		1.8								
		transition to lean CLAY, stiff		ST	17		3.0								
			20	ST	16		3.5		106	23				80	1.21 4
		SAND with SILT, fine grained, greenish gray, loose, with clay seam		ST	14		0.75								
	SM	medium dense	25	SS	16	5-10-7 (17)	1.5			19		41			
	CL	CLAY with SAND, light brown, stiff, with sand seams 26'-28' and cracks 26'-36'		ST	15		2.1								
		less sand		ST	19		2.9			31					
		very stiff	30	ST	19		3.1								
		firm		ST	19		1.6		94	30			0.99	4	
		stiff													
			35												

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											LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
	CL	CLAY with SAND, light brown, stiff, with sand seams 26'-28' and cracks 26'-36' (continued) light brown and greenish gray mottled very stiff, cracks 38'-40'	35	ST	20		2.6			34								
				ST	19		2.2											
				ST	18		3.1		94	29								
				40	ST	18		3.5										
					ST	18		3.3		39								
				45	ST	18		2.5										
					ST	18		2.75										
					ST	20		2.7		52								
				50														

Bottom of borehole at 50.0 feet.