



Quaternary Resource Investigations, LLC
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BORING NUMBER 13-B153

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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 11/24/2013 10:00:00 AM **COMPLETED** 11/25/2013 8:53:00 AM **GROUND ELEVATION** 17.6597 ft **HOLE SIZE** 8.25 inches
DRILLING CONTRACTOR QRI **NORTHING** 13893529.77 ft **EASTING** 3572844.457 ft
DRILLING METHOD Hollow Stem Auger **DRILLING RIG MAKE/MODEL** Mobile B57 on Gemco Articulated Platform
LOGGED BY Pete Herold **TOTAL DEPTH** 80 ft **GROUND WATER LEVEL AT TIME OF DRILLING** ---
WEATHER cloudy, 40s and 50s, windy, some rain **15 MINUTES AFTER DRILLING** 12.60 ft / Elev 5.06 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 (%)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	MINUS #200 SIEVE CONTENT (%)	COMPRESSION STRENGTH (tsf)	FAILURE STRAIN (%)	CONFINING PRESSURE (psi)
	CL	Lean CLAY with SAND, light brown, stiff, with sand seams 0'-4' and cracks 0'-4'	0	ST	14		2.75		93	27							
		firm		ST	9		1.0				22	13	9				
	SC	Clayey SAND, light brown, medium dense	5	ST	10		1.6			16				43			
	SM	SAND with SILT, fine grained, greenish gray, medium dense		SS	22	6-7-6-7 (13)				19				43			
				SS	14	3-6-7-9 (13)				27							
			10	NR													
	CL	Lean CLAY with SAND, dark gray, very soft, with sand seams 12'-15'	15	SS	13	2-2-4 (6)	0	3.1		48	29	15	14	98			
	SC	Clayey SAND, fine grained, greenish gray, very loose		ST	10		0	1.0		26				49			
				NR													
			20	SS	18	2-2-1 (3)				30							
	CL	Lean CLAY with SAND, dark gray/greenish gray, very soft, with sand seams 20'-38'		ST	16		0	1.9	87	35	34	19	15	75			
				NR													
		less sand, greenish gray, stiff, with shell fragments 23'-28'	25	ST	15		2.25		98	28							
				NR													
		with cracks 28'-30'	30	ST	17		2.25		102	25				85	1.62	15	17
				NR													
			35	ST	16		1.7			25							

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PROJECT LOCATION Port Arthur, TX

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	CL	Lean CLAY with SAND, dark gray/greenish gray, very soft, with sand seams 20'-38' (continued)	35	○ NR													
		Fat CLAY, greenish gray and light brown mottled, stiff	40	■ ST	17		1.0		88	34				99	1.02	3	
		firm	45	○ NR													
			45	■ ST	19		1.0		91	33					0.60	10	24
		stiff	50	○ NR													
			50	■ ST	19		1.25			41							
			55	○ NR													
			55	■ ST	20		1.2		71	52	79	26	53	100	1.39	6	
	CH		60	○ NR													
			60	■ ST	19		1.3			53							
			65	○ NR													
			65	■ ST	19		1.5		82	40							
			70	○ NR													
			70	■ ST	19		1.3			48							
		with shell fragments 73'-78'	75	○ NR													
			75	■ ST	19		2.4		90	31							

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	CH	Fat CLAY, greenish gray and light brown mottled, stiff (continued)	75	○ NR													
			80	■ ST	19		2.2			38							

Bottom of borehole at 80.0 feet.