



Quaternary Resource Investigations, LLC
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BORING NUMBER 13-B140

PAGE 1 OF 3

CLIENT USACE-Galveston District
PROJECT NUMBER W912HY-13-D-0001-DY05
DATE STARTED 1/25/2014 1:30:00 PM **COMPLETED** 1/26/2014 1:45:00 PM
DRILLING CONTRACTOR QRI
DRILLING METHOD Hollow Stem Auger
LOGGED BY Pete Herold **TOTAL DEPTH** 80 ft
WEATHER clear to cloudy, windy to calm, 40s to 50s

PROJECT NAME Sabine Neches Placement Area 8
PROJECT LOCATION Port Arthur, TX
GROUND ELEVATION 16.2749 ft **HOLE SIZE** 8.25 inches
NORTHING 13869332.27 ft **EASTING** 3571454.788 ft
DRILLING RIG MAKE/MODEL Mobile B57 on Gemco Articulated Platform
GROUND WATER LEVEL **AT TIME OF DRILLING** 19.90 ft / Elev -3.63 ft
 15 MINUTES AFTER DRILLING 9.90 ft / Elev 6.37 ft

COPY OF PEGGY LAKE GEOTECH BH - PEGGY LAKE TEMPLATE.GDT - 7/15/14 13:09 - 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)
	CH	Fat CLAY with SAND, light brown and greenish gray mottled, stiff	0	ST	9		2.1		90	35							
		light brown and dark gray mottled, with shell fragments 2'-18', soft		ST	13		2.3		87	32	70	24	46	87	0.28	6	
			5	ST	9		2.2		85	36							
		dark gray, soft		ST	17		2.3		92	31					0.48	7	
		stiff		ST	11		1.6			37							
			10	NR													
		very soft		ST	13		1.6		84	37	61	21	40	72	0.25	7	10
			15	NR													
		sand seams, firm		ST	19		1.1		72	50							
			20	NR													
	CH			ST	20		1.2			77							
				NR													
		Lean CLAY with SAND, dark gray, firm, with sand seams 28'-30'	30	ST	19		0.8		77	45	33	20	13	45			
		Fat CLAY, dark gray, firm, with SAND		ST	20		0.9		82	40				61			
	CH			NR													
		shell fragments 33'-48'		ST	20		1.2			49							
			35														

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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

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 (%)	COMPRESSIVE STRENGTH (tsf)	FAILURE STRAIN (%)	CONFINING PRESSURE (psi)
	CH	Fat CLAY, dark gray, firm, with SAND (continued)	35	○ NR													
		less sand, organic odor 38-40'	40	■ ST	20		1.4		63	63							
		very soft	45	■ ST	20		1.3		60	72	88	26	62	98	0.19	6	22
		greenish gray, firm	50	■ ST	13		1.4			54							
			55	■ ST	19		1.6		99	26					0.17	14	
			60	■ ST	13		0.8			22	NP	NP	NP	46			
		SAND with SILT, fine grained, greenish gray, medium dense, with organic odor 50'-60'	60	■ ST	13		0.8			22	NP	NP	NP	46			
		Lean CLAY with fine-grained SAND, greenish gray, hard, sand seams 60'-63'	65	⊗ SS	18	11-27-28 (55)	2.25			25				56			
		greenish gray, very stiff	65	⊗ SS	18	6-8-17 (25)	2.75			24							
		firm	70	■ ST	20		2.5			24							
	CL		70	○ NR													
		very stiff	75	⊗ SS	18	4-8-9 (17)	2.1			22							

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											LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX				
	CL	Lean CLAY with fine-grained SAND, greenish gray, hard, sand seams 60'-63' (continued)	75		SS	22	22-14-16 (30)	3.1		27				67			
		less sand content			NR												
		greenish gray and light brown mottled, stiff	80		ST	19		2.8		22							

Bottom of borehole at 80.0 feet.