



Quaternary Resource Investigations, LLC
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BORING NUMBER 13-B164

PAGE 1 OF 2

CLIENT USACE-Galveston District
PROJECT NUMBER W912HY-13-D-0001-DY05
DATE STARTED 1/7/2014 9:40:00 AM **COMPLETED** 1/7/2014 2:00:00 PM
DRILLING CONTRACTOR QRI
DRILLING METHOD Hollow Stem Auger
LOGGED BY Pete Herold **TOTAL DEPTH** 70 ft
WEATHER partly cloudy, windy, 20s to 30s

PROJECT NAME Sabine Neches Placement Area 8
PROJECT LOCATION Port Arthur, TX
GROUND ELEVATION 17.7106 ft **HOLE SIZE** 8.25 inches
NORTHING 13881910.5 ft **EASTING** 3576362.095 ft
DRILLING RIG MAKE/MODEL Mobile B57 on Gemco Articulated Platform
GROUND WATER LEVEL ▽ AT TIME OF DRILLING 29.20 ft / Elev -11.49 ft
▽ 15 MINUTES AFTER DRILLING 20.90 ft / Elev -3.19 ft

COPY OF PEGGY LAKE GEOTECH BH - PEGGY LAKE TEMPLATE.GDT - 7/15/14 13:11 - 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	CLAY, light brown and greenish gray, stiff, with shell fragments 0'-6'	0	ST	6		2.7		92	32				83	1.36	5	
				ST	4		2.2			24							
			5	ST	8		2.2			26							
	CL	Fat CLAY with SAND, dark gray, firm, with sand seams 8'-15' less sand, trace of organics 8'-10', stiff		ST	15		2.1		94	32	38	15	23	73	0.82	11	6
			10	ST	15		2.75			26							
				○ NR													
	ML	SILT, light brown and greenish gray, firm, with sand seams 15'-18' and cracks 15'-28'		ST	9		1.0		88	34							
			15	ST	10		1.1		100	21	NP	NP	NP	54			
				○ NR													
	CH	CLAY, light brown and greenish gray mottled, stiff, with a trace of shell fragments 18'-20' ▽ dark gray and light brown, with sand seams 23'-28', soft greenish gray and light brown mottled, very stiff ▽	20	ST	15		1.75			32							
				○ NR													
				ST	18		1.0		102	25				57	0.43	15	19
			25	ST	17		3.7			22							
				○ NR													
			30	ST	14		2.6		104	22				87	0.50	4	
				○ NR													
	CL	Lean CLAY with SILT, greenish gray and light brown mottled, firm, with sand seams 33'-38' and crack 33'-38'	35	ST	14												

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	CL	Lean CLAY with SILT, greenish gray and light brown mottled, firm, with sand seams 33'-38' and crack 33'-38' (continued)	35	○	NR												
		stiff	40	■	ST	19	2.4		97	28							
				○	NR												
		light brown, with sand seams 43'-53' and cracks 43'-53'	45	■	ST	18	1.8			30							
	CH			○	NR												
		Fat CLAY, light brown, stiff	50	■	ST	18	1.4		84	40	60	23	37	99	1.56	6	
				○	NR												
		light brown and dark gray	55	■	ST	19	2.3			48							
				○	NR												
		dark gray	60	■	ST	19	1.5			56				100			
				○	NR												
		firm	65	■	ST	19	1.4		91	31							
				○	NR												
		dark gray and greenish gray	70	■	ST	19	1.4			32							

Bottom of borehole at 70.0 feet.