



Quaternary Resource Investigations, LLC
13588 Florida Boulevard
Baton Rouge, LA 70820
Telephone: 225-292-1400
Fax: 225-292-1404

BORING NUMBER 13-B149

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 11/11/2013 12:00:00 PM **COMPLETED** 11/12/2013 9:20:00 AM **GROUND ELEVATION** 11.9277 ft **HOLE SIZE** 8.25 inches
DRILLING CONTRACTOR QRI **NORTHING** 13889930.42 ft **EASTING** 3571706.431 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 13.20 ft / Elev -1.27 ft
WEATHER clear, 60s to partly cloudy, 50s, breezy **▽ 15 MINUTES AFTER DRILLING** 8.60 ft / Elev 3.33 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 (%)	ATTERBERG LIMITS				MINUS #200 SIEVE CONTENT (%)	COMPRESSIVE STRENGTH (tsf)	FAILURE STRAIN (%)	CONFINING PRESSURE (psi)
			0								LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
	CH	Fat CLAY, light brown, stiff		ST	12		0.7	4.3	92	33	58	20	38	92	1.02	5		
		with a trace of roots, firm		ST	8		1.2				31							
		greenish gray and light brown mottled	5	ST	16		1.2				30							
		greenish gray		ST	14		1.0		83	41	52	19	33	93	0.86	6	7	
		▽	10	ST	16		1.6		87	33								
		▽ very soft		NR														
			15	ST	9.5		0	2.1	87	36	57	19	38	91				
				NR														
		firm		ST	20.5		1.25		90	30	66	18	48	96				
			20															
				NR														
		with cracks 23'-28', stiff	25	ST	19		1.5				26							
				NR														
		more sand, greenish gray and light brown mottled, sand seams 28'-63'	30	ST	18.5		1.75		98	27								
		light brown		ST	18.5		2.25											
				NR														
			35	ST	19.5		1.75			91	31					1.07	3	

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											LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
	CH	Fat CLAY, light brown, stiff (continued)	35	○ NR														
	CL	Fat CLAY with SAND, light brown, stiff less sand	40	■ ST	19.5		1.5		91	31	48	19	29	100	1.12	5	19	
				○ NR														
			45	■ ST	18.5		2.25			38								
				○ NR														
	CH	Fat CLAY, greenish gray, stiff very stiff stiff with a trace of shell fragments 58'-70'	50	■ ST	19		1.75			46								
				■ ST	19		1.3		70	52				100	2.30	2		
				○ NR														
			55	■ ST	20		1.7			42								
				○ NR														
			60	⊗ SS	22	4-5-10-12 (15)	1.3		41									
	CL	CLAY with sand, greenish gray, stiff		○ NR														
65			■ ST	15		1.7		94	28									
			■ ST	18		2.75			29									
			○ NR															
			70	■ ST	21		2.4			18								

Bottom of borehole at 70.0 feet.