



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

BORING NUMBER 13-B169

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 1/11/2014 7:30:00 AM **COMPLETED** 1/11/2014 10:00:00 AM **GROUND ELEVATION** 18.1246 ft **HOLE SIZE** 8.25 inches
DRILLING CONTRACTOR QRI **NORTHING** 13872581.82 ft **EASTING** 3573871.732 ft
DRILLING METHOD Hollow Stem Auger **DRILLING RIG MAKE/MODEL** Mobile B57 on Gemco Articulated Platform
LOGGED BY Pete Herold **TOTAL DEPTH** 40 ft **GROUND WATER LEVEL** ▽ AT TIME OF DRILLING 26.90 ft / Elev -8.78 ft
WEATHER cloudy, windy, 60s **▽ 15 MINUTES AFTER DRILLING** 25.20 ft / Elev -7.08 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	Fat CLAY, dark gray and light brown mottled, firm, with sand seams and cracks 0'-2' and shell fragments 0'-8' stiff	0	ST	12		1.1										
				ST	15		1.9										
			5	ST	13		1.75										
		greenish gray and light brown mottled		ST	11		2.1			25							
		dark gray and greenish gray, soft, with organics 8'-14' stiff	10	ST	16		1.2		66	60	102	30	72	92	0.31	5	
				ST	13		1.5			50							
		firm		ST	16		1.6		70	53							
			15	ST	11		1.2			50							
				ST	19		1.1		70	52	33	20	13	59	0.33	3	14
		Lean CLAY with SILT, dark gray, soft, with sand seams 16'-20' and shell fragments 20'-24' firm	20	ST	16		1.4										
	CH			ST	19		1.1		58	70							
				ST	19		1.5										
		▽ Fat CLAY, dark gray, very soft, with sand seams 24'-30' with organic odor 24-26'	25	ST	18		0.9		55	80				99	0.21	10	
				ST	18		0.9										
		with abundant shell fragments 28'-30'	30	ST	18		1.0			60							
				ST	19		1.1										
	CH	greenish gray and light brown mottled, stiff		ST	19		2.2			25							
		very stiff	35														

(Continued Next Page)



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

BORING NUMBER 13-B169

PAGE 2 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

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)
	CH	Fat CLAY, dark gray, very soft, with sand seams 24'-30' (continued) stiff	35	ST	19		3.0				23						
				ST	18		2.1										
			40	ST	18		2.6										

Bottom of borehole at 40.0 feet.