



Quaternary Resource Investigations, LLC
 13588 Florida Blvd
 Baton Rouge, LA 70819
 Telephone: 225-292-1400
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BORING NUMBER 13-B117

CLIENT _____ PROJECT NAME Peggy Lake Placement Area
 PROJECT NUMBER W912HY-13-D-0001; Task Order 0002 PROJECT LOCATION La Porte, Texas
 DATE STARTED 4/15/2013 2:30:00 PM COMPLETED 4/16/2013 12:00:00 PM GROUND ELEVATION 19.0535 ft HOLE SIZE 8.25 inches
 DRILLING CONTRACTOR Quaternary Resource Investigations, LLC NORTHING 13837674.33 ft EASTING 3216207.285 ft
 DRILLING METHOD Hollow Stem Auger DRILLING RIG MAKE/MODEL Mobile B57 on Gemco Articulated Platform
 LOGGED BY Terri Russin TOTAL DEPTH 60 ft GROUND WATER LEVEL _____
 WEATHER partly cloudy, 60s - 70s, windy ∇ AT TIME OF DRILLING 8.00 ft / Elev 11.05 ft 4/15/2013 3:21:00 PM

COPY OF PEGG E GEOTECH BH - PEGGY LAKE TEMPLATE.GDT - 10/2/13 10:39 - C:\DOCUMENTS AND SETTINGS\TRU...KTO\PEGGY LAKE PLACEMENT AREA 3. 9-27-13.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)
											LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
	CL	Silty CLAY, yellow orange multi-colored, slightly moist to moist (increasing with depth), medium to high plasticity, with caliche and rootlets	0	ST	7		>4.5/1.5											
			1	ST	13		2.0/>4.5		105	21	63	18	45		2.08	1.8	0	
			5	ST	10		>4.5/3.0				24							
			8	ST	8		2.5/1.9				31							
	SP	SAND, light brown, medium grained, wet, no plasticity, with shell fragments, and small pebbles and no laminations	10	SS	22	7-14-9-4 (23)	0	0		10				30				
	CH	CLAY, yellow orange (with light gray mottles), moist, medium to high plasticity, with caliche	15	SS	15	2-2-4-5 (6)	1.0			27								
	CL	Silty CLAY, yellow orange, moist, medium to high plasticity, with a little caliche	15	ST	11		0.8/0.5		108	19	51	16	35	85	1.39	4.2	0	
			17	ST	17		1.4/0.5				27							
			20	ST	13		0.4/0.3				36							
	CH	CLAY, dark gray to black, moist, medium to high plasticity, hydrocarbon odor	21	ST	21		0.5/1.6		91	33	76	22	54	99	0.69	2.2	6.9	
			25	ST	18		0.3/0	--/3.6			55							
			25	ST	22		0.3/0			59	69	103	28	75	99			
			29	ST	19		0/0	1.8/2.5			69							
			30	ST	19		0/0.2	1.0/1.4										
	ML	Clayey SILT, olive gray, very moist to wet, little to no plasticity, hydrocarbon odor to about 35' laminated	30	ST	22		0/0	0.7/2.1		70								
			35	ST	20		0/0.75	0.7/--			85							
			35				1-1-0-1											

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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)
											LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX					
	ML	Clayey SILT, olive gray, very moist to wet, little to no plasticity, hydrocarbon odor to about 35' (continued)	35	SS	24	(1)	0	1.2		28								
			ST	21			0	1.2		27						23		
	ML	Clayey SILT, olive gray, wet, low plasticity, with many large shells, laminated	40	SS	24	4-4-5-5 (9)	0/0.7	0.3/--		22								
			ST	21			0.3		19									
			ST	19			0	2.2										
	ML	Clayey SILT, olive gray, wet, low plasticity, with a few shell fragments and pebbles	45	ST	21		0/1.0	0/--		24								
			SS	24	9-4-6-7 (10)	0/0.3	0.3/--		22									
			SS	24	0-0-0 (0)	0	0.4		21									
	ML		55	SS	24	0-0-0 (0)	0/0.5	0/--		33	32	13	19	71				
			ST	22			0/0.3	0.1/--										

Bottom of borehole at 60.0 feet.

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