

LOG OF BORING B-10

STARVATION COVE MARSH RESTORATION (TUBE EXTENSION)
GALVESTON, TEXAS

TYPE OF BORING: AIR BOAT MOUNTED RIG

PSI Project No.: 286-271

DEPTH, FT.	SOIL TYPE	USCS SYMBOL	SAMPLES	COORDINATE (X) OR EASTING: 3265012.43 COORDINATE (Y) OR NORTHING: 13654765.11 APPROXIMATE SURFACE ELEVATION: -0.5 feet LATITUDE: 29° 13' 58.48 N LONGITUDE: 94° 56' 01.82 W	N-BLOWS/FT.	% PASSING No. 200 SIEVE	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	MOISTURE CONTENT (%)	SHEAR STRENGTH (tons/square foot)						UNIT WEIGHT (pcf)
				SOIL DESCRIPTION							○ HP ● UC △ TV ▲ UU 0.0 0.5 1.0 1.5 2.0 2.5						
											LL	PL	PI				
		SC	✕	CLAYEY SAND (SC), VERY LOOSE, GRAY	WOH					31							
5		CL	✕ ✕ ✕	SANDY LEAN CLAY (CL), VERY SOFT, GRAY	WOH	60				28							
					WOH					26							
					WOH					25							
10		CL	✕ ✕	LEAN CLAY WITH SAND (CL), VERY SOFT, GRAY	WOH					49							
					4					43							
20			✕		8	84	44	16	28	32							
25																	
30																	
35																	
40																	
45																	
50																	
DEPTH OF BORING: 20 FEET					GROUND WATER DURING DRILLING (FT): 0.5 FT ABOVE MUDLINE												
DATE DRILLED: 3/26/10					GROUND WATER												
NOTES:					DELAYED GROUND WATER (FT):												

DEPTH OF BORING: 20 FEET

DATE DRILLED: 3/26/10

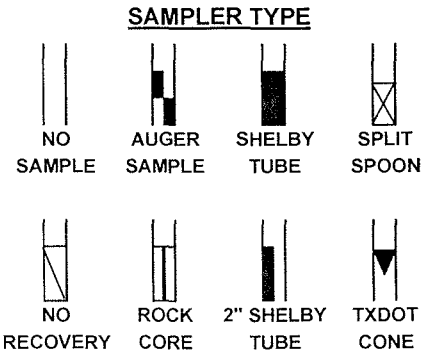
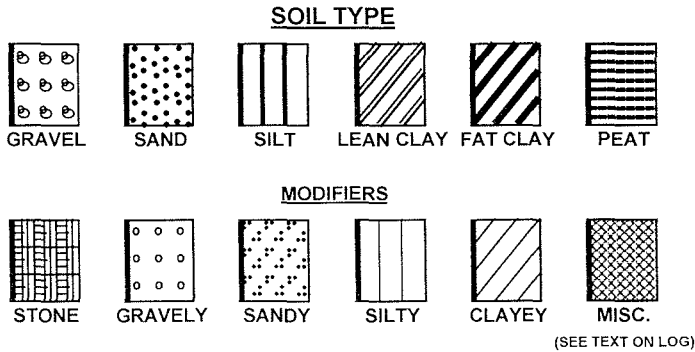
GROUND WATER DURING DRILLING (FT): 0.5 FT ABOVE MUDLINE

GROUND WATER

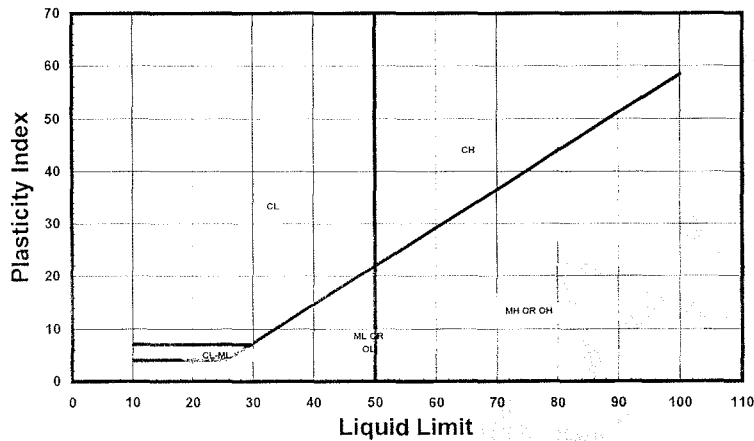
DELAYED GROUND WATER (FT):

NOTES:

KEY TO TERMS AND SYMBOLS USED ON LOGS



UNIFIED SOIL CLASSIFICATION SYSTEM - ASTM D 2487



CONSISTENCY OF COHESIVE SOILS

CONSISTENCY	SHEAR STRENGTH IN TONS/FT ²
VERY SOFT	0 TO 0.125
SOFT	0.125 TO 0.25
FIRM	0.25 TO 0.5
STIFF	0.5 TO 1.0
VERY STIFF	1.0 TO 2.0
HARD	> 2.0 OR 2.0+

RELATIVE DENSITY - GRANULAR SOILS

CONSISTENCY	N-VALUE (BLOWS/FOOT)
VERY LOOSE	0 TO 4
LOOSE	5 TO 9
MEDIUM DENSE	10 TO 29
DENSE	30 TO 50
VERY DENSE	> 50 OR 50+

DEGREE OF PLASTICITY OF COHESIVE SOILS

DEGREE OF PLASTICITY	PLASTICITY INDEX	SWELL POTENTIAL
NONE OR SLIGHT	0 TO 4	NONE
LOW	4 TO 20	LOW
MEDIUM	20 TO 30	MEDIUM
HIGH	30 TO 40	HIGH
VERY HIGH	> 40	VERY HIGH

MOISTURE CONDITION COHESIVE SOILS

DESCRIPTION	CONDITION
Absence of moisture, dusty, dry to touch	DRY
Damp but no visible water	MOIST
Visible free water	WET

CONSISTENCY OF COHESIVE SOILS AFTER TERZAGHI (1948)

CONSISTENCY	N-VALUE (BLOWS/FOOT)
VERY SOFT	< 2
SOFT	2 TO 4
FIRM	4 TO 8
STIFF	8 TO 15
VERY STIFF	15 TO 30
HARD	> 30

ABBREVIATIONS

HP - HAND PENETROMETER UC - UNCONFINED COMPRESSION TEST
 TV - TORVANE UU - UNCONSOLIDATED UNDRAINED TRIAXIAL
 MV - MINIATURE VANE CU - CONSOLIDATED UNDRAINED

NOTE: PLOT INDICATES SHEAR STRENGTH AS OBTAINED BY ABOVE TESTS

 FINAL GROUND WATER LEVEL
 INITIAL GROUND WATER LEVEL

CLASSIFICATION OF GRANULAR SOILS

U.S. STANDARD SIEVE SIZE(S)							
6"	3"	3/4"	4	10	40	200	
BOULDERS	COBBLES	GRAVEL		SAND			SILT OR CLAY
		COARSE	FINE	COARSE	MEDIUM	FINE	
152	76.2	19.1	4.76	2.0	0.42	0.074	0.002
GRAIN SIZE IN MM							



Geotechnical Consulting Services
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STRATIGRAPHY & GW - A SIZE - PSIHOUSTON.GDT - 4/29/10 17:01 - P:\286 REPORTS\286 2010 REPORTS\286-271 STARVATION GAP MARSH RESTORATION, GALVESTON, TX\286-271 LOGS - TUBE



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SUBSURFACE DIAGRAM

PROJECT NAME: STARVATION COVE MARSH RESTORATION (TUBE EXTENSION)

PROJECT NUMBER: 286-271

PROJECT LOCATION: GALVESTON, TEXAS

