

JOB NO. 94G783-4

DATE 9/1/94

PROJECT Houston-Galveston Navigation
Channel

AREA Houston, Texas

BORING NO. 93-100

SAMPLE NO. 5

DEPTH 14-16 ft

SPECIMEN NO. 1

CLASSIFICATION

Gray, Clay, Very soft, w/ shell fragments

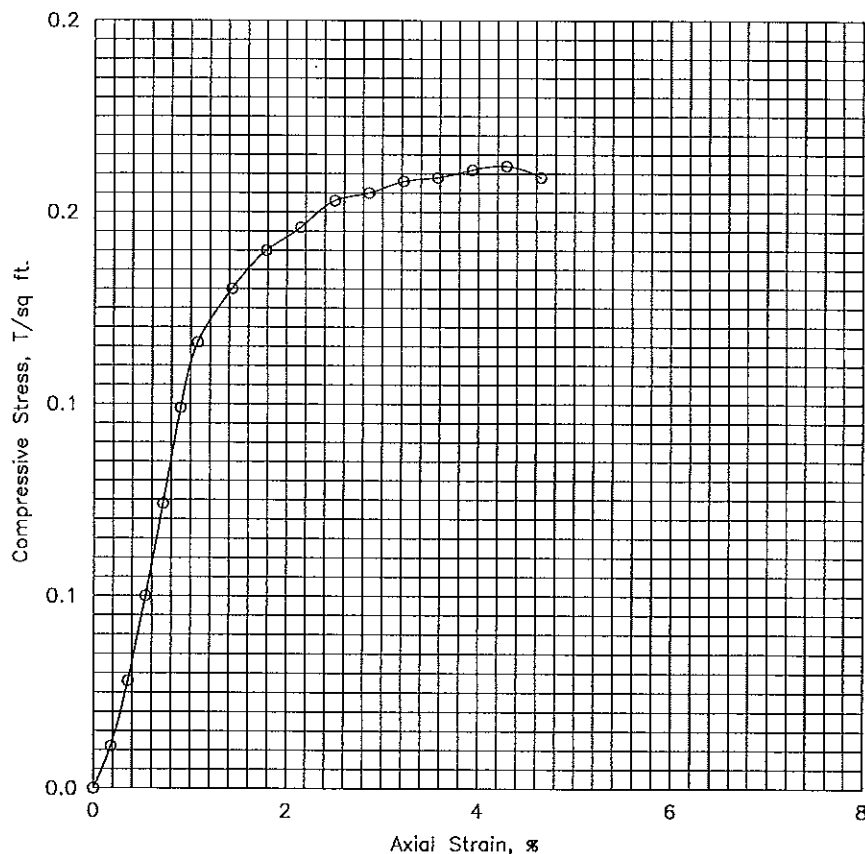
Tare No.	W-16	Height	5.595 in.
Tare plus Wet Specimen	336.67 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	245.72 gm	Initial Area	6.290 sq in.
Water Weight	90.95 gm	Volume	35.194 cu in.
Tare Weight	42.57 gm	Volume of Solids	cu in.
Wet Specimen	1039.46 gm	Void Ratio	
Dry Specimen	718.01 gm	Saturation	%
Water Content	44.77 %	Dry Density	77.7 lb/cu ft
Specific Gravity of Solids			
LL = 68	PL = 27	PI = 41	

Proving Ring No. 17015

Proving Ring Constant, K = .311 lbs/div.

Elapsed Time min.	Dial Reading 0.001"	Cumulative Change in.	Proving Ring Dial Reading	Axial Load lb	Axial Strain	Area Corr. sq in.	Compr. Stress tsf
.0	0.	.000	.0	.0	.000	6.29	.000
.2	10.	.010	3.0	.9	.002	6.30	.011
.3	20.	.020	8.0	2.5	.004	6.31	.028
.5	30.	.030	14.0	4.3	.005	6.32	.050
.7	40.	.040	21.0	6.5	.007	6.34	.074
.8	50.	.050	28.0	8.7	.009	6.35	.099
1.0	60.	.060	33.0	10.2	.011	6.36	.116
1.3	80.	.080	37.0	11.5	.014	6.38	.130
1.7	100.	.100	40.0	12.4	.018	6.40	.140
2.1	120.	.120	42.0	13.0	.021	6.43	.146
2.5	140.	.140	44.0	13.7	.025	6.45	.153
2.8	160.	.160	45.0	14.0	.029	6.48	.155
3.2	180.	.180	46.0	14.3	.032	6.50	.158
3.5	200.	.200	46.5	14.4	.036	6.52	.159
3.8	220.	.220	47.0	14.6	.039	6.55	.161
4.1	240.	.240	47.5	14.8	.043	6.57	.162
4.4	260.	.260	47.0	14.6	.046	6.60	.159

Failure Sketches



Test No.		1			
Type of Specimen		Undisturbed			
Initial	Water content	w_0	44.8 %	%	%
	Void ratio	e_0			
	Saturation	S_0	%	%	%
	Dry density, lb/cu ft	γ_d	77.7		
Time to failure, min		t_f	4.07		
Unconfined compressive strength, T/sq ft		q_u	.16		
Undrained shear strength, T/sq ft		S_u	.08		
Sensitivity ratio		S_t			
Initial specimen diameter, in.		D_0	2.830		
Initial specimen height, in.		H_0	5.595		
Classification Gray, Clay, Very soft, w/ shell fragments					
LL	68	PL	27	PI	41
Remarks		Project Houston-Galveston Navigation Channel Area Houston, Texas Boring No. 93-100 Depth 14-16 ft Sample No. 5 Date 9/1/94			
UNCONFINED COMPRESSION TEST REPORT					

U.S. ARMY CORPS OF ENGINEERS

DEPTH, FEET		SAMPLE	SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	BORING NO. <u>93-100</u> DATE: BEGIN <u>7-19-94</u> PAGE <u>1 12</u> JOB NO. <u>946783-1</u> COMPLETE <u>7-19-94</u> Thin Walled Tube PROJECT <u>HOUSTON-GALVESTON Navigation Channel</u> ☒ 3" ☐ 6" LOCATION <u>Disposal Area NO. 16</u> ELEVATION OF HOLE _____ MANUFACTURER'S DESIGNATION OF DRILL RIG <u>Arco H4X4, C-1000 Marsh Buggy</u> GROUNDWATER: DEPTH <u>0</u> ft., ELEV. <u>1</u> ft., at end of Drilling WEATHER <u>Hot, sunny 98°</u> DRILLER <u>Scott Gregorick</u> LOGGER <u>Willie Barnes</u>				
						COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0		X	1			Gray	Sand	M. dense	Silty	w/ roots & shell fragments
1		X	2	13 3/4		Gray	Sand	M. dense	Silty	w/ shell fragments
5		X	3	2 3/4		Gray & Brown	Sand	V. loose	Silty fine	w/ roots & shell fragments & clay seams
10		X	4	3 3/4		Brown	Sand	M. dense	Silty fine	w/ shell fragments & clay 2 1/4'
15		X	5	0 1/2	0.08	Gray	clay	V. soft		w/ sand layer & shell fragments
18		X	6	0 1/2	0.06	Gray	clay	V. soft		Sand 18'
20		X	7	4 2/3		Gray	Sand	loose	Silty	w/ shell fragments
25		X	8	4 2/3		Gray	Sand	loose	Silty	w/ shell fragments
30		X	9	1 1/2		Gray	Sand	V. loose	Silty	w/ shell fragments
35		X	10	2 1/2		Gray	sand	V. loose	Silty	w/ shell fragments

Torrane test

4X0.2=0.08
13X0.2=0.06

U.S. ARMY CORPS OF ENGINEERS

DEPTH, FEET	SAMPLE	SAMPLE NO.	PEN./TORVANE SPT.-BLOW COUNT	BORING NO. <u>93-100</u> DATE: BEGIN <u>7-19-94</u> PAGE <u>2 / 2</u> JOB NO. <u>946783.1</u> COMPLETE <u>7-19-94</u> Thin Walled Tube PROJECT <u>Houston-Galveston Navigation Channel</u> ☒ 3" ☐ 6" LOCATION <u>Disposal Area No. 16</u> ELEVATION OF HOLE _____ MANUFACTURER'S DESIGNATION OF DRILL RIG <u>Ardeo K4x4, C-1000 Marsh Buggy</u> GROUNDWATER: DEPTH <u>0</u> ft., ELEV. _____ ft., at end of Drilling WEATHER <u>sunny & Hot 98°</u> DRILLER <u>Scott</u> LOGGER _____						
				COLOR	MATERIAL TYPE	CONSIS- TENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS		
-35-										
-40-	X	11	13	Gray	Sand	Loose	Silty	w/ shell frag msh		
								Torque Multiplier 0.2		
-45-										
-50-										
-55-										
-60-										
-65-										
-70-										

Project: Houston-Galveston Navigation Channel

SUMMARY OF LABORATORY TEST RESULTS

Contract No. DACW64-94-C-0040

Boring No. 93-100

[illegible]

S # : Sample Number, P P : Pocket Penetrometer Reading, U S C : Unified Soil Classification, M c : Moisture Content

q u : Uncogined Compressive Strength, W O H : Weight of hammer, W O P : Weight of Pipe

* : Material retained are shell fragments