

U.S. ARMY CORPS OF ENGINEERS

DEPTH, FEET		SAMPLE NO.		PEN./TORVANE		SPT.-BLOW COUNT		BORING NO. <u>90-202</u> DATE: BEGIN <u>4-25-57</u> PAGE <u>1 / 1</u> JOB NO. <u>146437</u> COMPLETE <u>4-25-57</u> Thin Walled Tube PROJECT <u>Victoria Channel</u> ☒ 3" ☐ 6" LOCATION <u>Sea Drift</u> ELEVATION OF HOLE _____ MANUFACTURER'S DESIGNATION OF DRILL RIG <u>Failing-36</u> GROUNDWATER: DEPTH <u>8'</u> ft., ELEV. _____ ft., at end of Drilling WEATHER <u>Cloudy, warm</u> DRILLER <u>D. Mitchell</u> LOGGER <u>J. Berg</u>				
		COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS						
0												
	1	4.5	Tan	clay	hard	Sand						
	2	4.5	"	"	"	"						
5	3	4.5	"	"	"	"						
	4	4.5	"	"	"	Sand						
	5	4.5	"	"	"	Sand						
10	6	4 1/2	Tan	Sand	medium dense			Sand at 10'				
	7	5 1/4	Tan	Sand	"							
15												
	8	6 1/2	Tan	Sand	"			clay at 20.5'				
20	9	2.5	Tan Gray	clay	very stiff	Sand		w/calc. Pockets				
	10	2.25	"	"	"	"		w/calc. Nodds				
	11	2.5	"	"	"	"		w/calc.				
25												
30												
35												

Bottom at 90-202 (26')

Project : Disposal Area B, Channel to Victoria near Seadrift, Texas

SUMMARY OF LABORATORY TEST RESULTS

Boring No. 90-202

Contract No. DACW64-91-D-0001 Delivery Order No. 0013

S #	Depth (ft)	P P (tsf)	SPT Blows per Foot	Visual Classification	U S C	M c (%)	Dry Unit Wt (pcf)	Wet Unit Wt (pcf)	LL (%)	PL (%)	Mechanical Analysis % Passing					Torvane Shear Strength (tsf)	q u (tsf)
											#4	#10	#40	#100	#200		
1	0-2	4.5+		Olive gray, Clay, Hard, Sandy, w/sand seams	CL	18.0											
2	2-4	4.5+		Yellowish brown & gray, Clay, Hard, Sandy	CL	15.4											
3	4-6	4.5+		Yellowish brown, Clay, Hard, Sandy	CL	14.8			37	19							
4	6-8	4.5+		Yellowish brown, Clay, Hard, Sandy	CL	13.2											
5	8-10	4.5+		Yellowish brown, Clay, Hard, Sandy	CL	9.3	112.1	122.5	27	14	100.0	100.0	99.8		69.4		2.41
6	10.5-12		12	Yellowish brown, Sand, Medium dense, Silty	S M												
7	13.5-15		20	Yellowish brown, Sand, Medium dense, Silty	S M						100.0	99.4	98.4		20.5		
8	18.5-20		25	Yellowish brown, Sand, Medium dense, Silty	S M												
9	20-22	1.50		Yellowish brown, Clay, Stiff, Sandy	CL	19.7			26								
10	22-24	1.50		Gray & yellowish brown, Clay, Stiff, Sandy	CL	16.9											
11	24-26	1.50		Gray, Clay, Stiff, Sandy, w/calcareous nodules	CL	17.1											

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

q u : Unconfined Compressive Strength, W O H : Weight of hammer, W O P : Weight of pipe

JOB NO. 14G475

DATE 5/31/91

PROJECT DISPOSAL AREA B, CHANNEL TO VICTORIA, NEAR SEADRIFT, TX

RING NO. 90-202

SAMPLE NO. 5

DEPTH 8-10 ft

SPECIMEN NO. 1

CLASSIFICATION

Yellowish brown, clay, hard, sandy

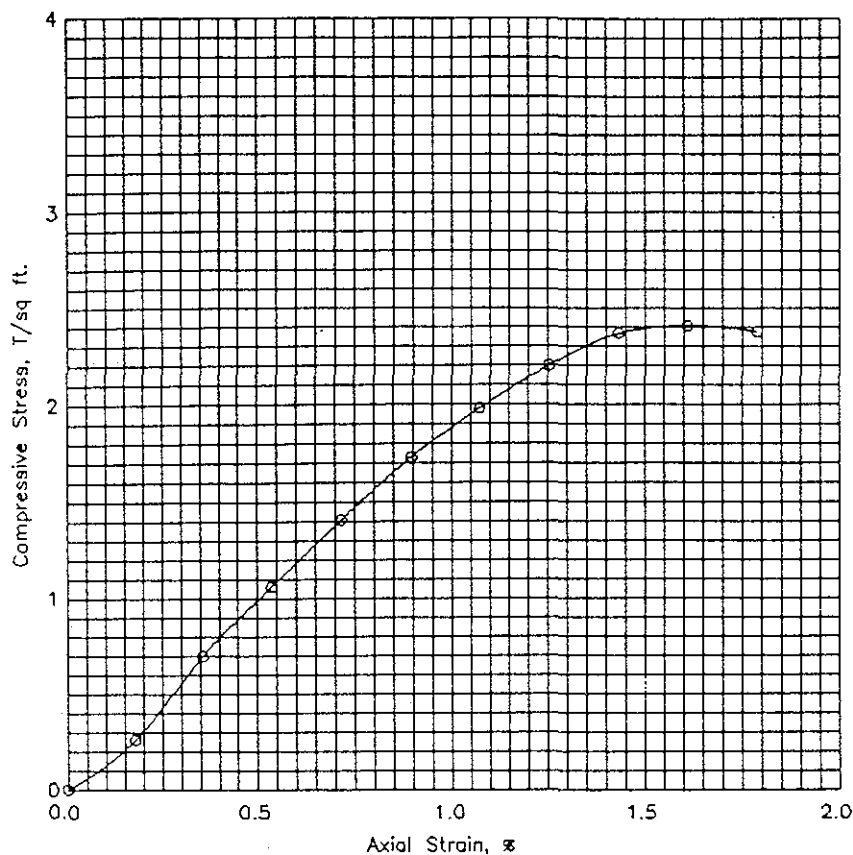
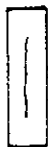
Tare No.	P-28	Height	5.595 in.
Tare plus Wet Specimen	426.73 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	394.20 gm	Initial Area	6.290 sq in.
Water Weight	32.53 gm	Volume	35.194 cu in.
Tare Weight	42.58 gm	Volume of Solids	cu in.
Wet Specimen	1131.51 gm	Void Ratio	
Dry Specimen	1035.69 gm	Saturation	%
Water Content	9.25 %	Dry Density	112.1 lb/cu ft
Specific Gravity of Solids			
LL = 27	PL = 14	PI = 13	

Proving Ring No. 10170

Proving Ring Constant, K = .766 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
.3	10.	.010	30.0	23.0	.002	6.30	.263
.6	20.	.020	80.0	61.3	.004	6.31	.699
.9	30.	.030	122.0	93.5	.005	6.32	1.064
1.1	40.	.040	162.0	124.1	.007	6.34	1.410
1.3	50.	.050	199.0	152.4	.009	6.35	1.729
1.5	60.	.060	228.0	174.6	.011	6.36	1.978
1.7	70.	.070	254.0	194.6	.013	6.37	2.199
1.9	80.	.080	274.0	209.9	.014	6.38	2.368
2.1	90.	.090	279.0	213.7	.016	6.39	2.407
2.2	100.	.100	276.0	211.4	.018	6.40	2.377

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.		1			
Type of Specimen		Undisturbed			
Initial	Water content	w_0	9.3 %	%	%
	Void ratio	e_0			
	Saturation	S_0	%	%	%
	Dry density, lb/cu ft	γ_d	112.1		
Time to failure, min		t_f	2.10		
Unconfined compressive strength, T/sq ft		q_u	2.41		
Undrained shear strength, T/sq ft		S_u	1.20		
Sensitivity ratio		S_t			
Initial specimen diameter, in.		D_0	2.830		
Initial specimen height, in.		H_0	5.595		
Classification Yellowish brown, clay, hard, sandy					
LL	27	PL	14	PI	13
				G_s	
Remarks		Project DISPOSAL AREA B, CHANNEL TO VICTORIA			
		Area Near Seadrift, Texas			
		Boring No. 90-202		Sample No. 5	
		Depth 8-10 ft		Date 5/31/91	
		UNCONFINED COMPRESSION TEST REPORT			