

U.S. ARMY CORPS OF ENGINEERS

DEPTH, FEET		SAMPLE NO.	SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	BORING NO. <u>90-200</u> DATE: BEGIN <u>4-23-91</u> PAGE <u>1 / 1</u>				
						JOB NO. <u>146437</u> COMPLETE <u>4-25-91</u> Thin Walled Tube ☐ 3" ☐ 6"				
PROJECT <u>Victoria Channel</u>						☐ 3" ☐ 6"				
LOCATION <u>Ten Drift</u>						ELEVATION OF HOLE _____				
MANUFACTURER'S DESIGNATION OF DRILL RIG <u>Facing-36</u>						GROUNDWATER: DEPTH <u>6'8"</u> ft., ELEV. _____ ft., at end of Drilling				
WEATHER <u>Cloudy, Cool</u>						DRILLER <u>D. Mitchell</u> LOGGER <u>J. Berg</u>				
		COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS				
0										
	3.5	Gray	Clay	Very stiff		w/Roots				
	4.5	"	"	hard						
	4.5	"	"	"						
5	4.5	"	"	"						
	4.5	Tan	Clay	"	SAND					
10	5 1/4	Tan	SAND	medium Dense		5' at 8'				
	6 5/8	Tan	"	"						
	7 1/2	Tan	"	"						
20	8 1/4	Tan	SAND	"		Bottom of 90-200 (25')				
25										
30										
35										

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

SUMMARY OF LABORATORY TEST RESULTS

Boring No. 90-200

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 (%)	P L (%)	Mechanical Analysis % Passing					Torvane Shear Strength (tsf)	q u (tsf)
											#4	#10	#40	#100	#200		
1	0-2	3.00		Dark gray, Clay, Very stiff, Sandy	CL	15.0											
2	2-4	3.00		Dark gray, Clay, Very stiff, Sandy, w/sand seams	CL	12.4											
3	4-6	4.5+		Dark gray, Clay, Hard, Sandy	CL	8.1	110.8	119.8	32	16	100.0	99.7	99.4		51.4		2.80
4	6-8	4.5+		Yellowish brown, Clay, Hard, Sandy	CL	8.8											
5	8.5-10		13	Yellowish brown, Sand, Medium dense, Clayey	SM SC						100.0	100.0	99.9		25.9		
6	13.5-15		16	Yellowish brown, Sand, Medium dense, Silty	SM												
7	18.5-20		30	Yellowish brown, Sand, Dense, w/silt	SP-SM						100.0	100.0	99.9		5.9		
8	23.5-25		26	Yellowish brown, Sand, Medium dense, Silty	SM												

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 5/30/91

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

Boring NO. 90-200

SAMPLE NO. 3

DEPTH 4-6 ft

SPECIMEN NO. 1

CLASSIFICATION

Dark gray, clay, hard, sandy

Tare No.	P-22	Height	5.595 in.
Tare plus Wet Specimen	489.34 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	455.92 gm	Initial Area	6.290 sq in.
Water Weight	33.42 gm	Volume	35.194 cu in.
Tare Weight	42.78 gm	Volume of Solids	cu in.
Wet Specimen	1101.00 gm	Void Ratio	
Dry Specimen	1018.60 gm	Saturation	%
Water Content	8.09 %	Dry Density	110.3 lb/cu ft
Specific Gravity of Solids			
LL = 32	PL = 16	PI = 16	

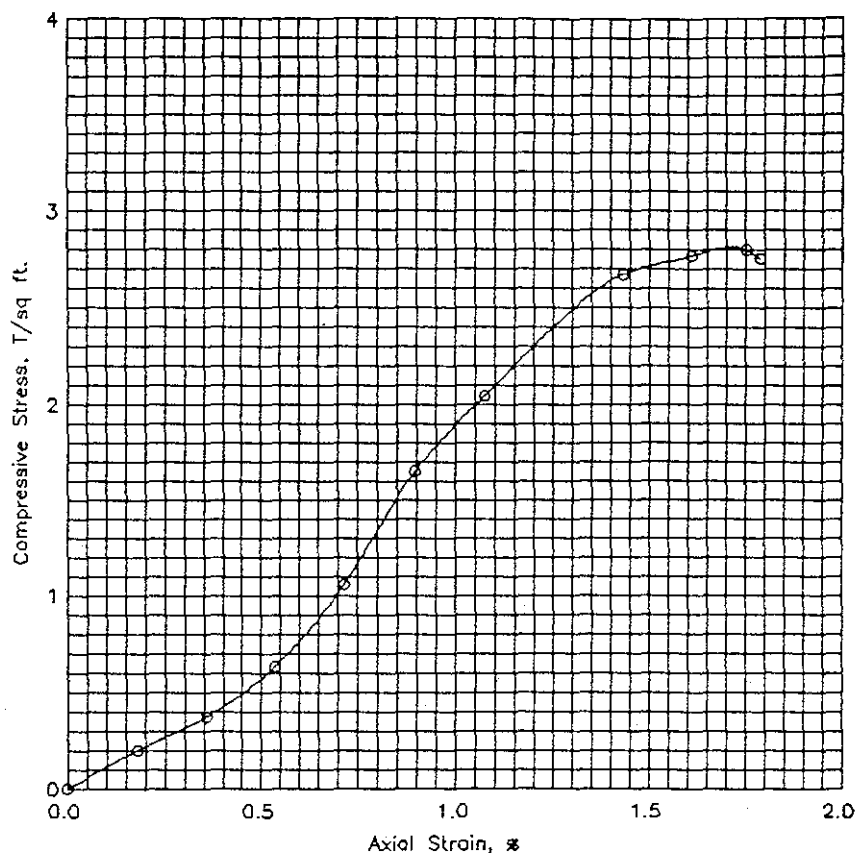
Proving Ring No. 10170

Proving Ring Constant, K = .766 lbs/div.

Elapsed Time in.	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	23.0	17.6	.002	6.30	.201
.5	20.	.020	43.0	32.9	.004	6.31	.376
.7	30.	.030	73.0	55.9	.005	6.32	.637
.9	40.	.040	122.0	93.5	.007	6.34	1.062
1.2	50.	.050	190.0	145.5	.009	6.35	1.651
1.5	60.	.060	236.0	180.8	.011	6.36	2.047
1.9	80.	.080	309.0	236.7	.014	6.38	2.671
2.0	90.	.090	321.0	245.9	.016	6.39	2.769
2.1	98.	.098	325.0	248.9	.018	6.40	2.800
2.2	100.	.100	320.0	245.1	.018	6.40	2.756

Job No. 14G475

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.		1			
Type of Specimen		Undisturbed			
Initial	Water content	w_0	8.1 %	%	%
	Void ratio	e_0			
	Saturation	S_0	%	%	%
	Dry density, lb/cu ft	γ_d	110.3		
Time to failure, min		t_f	2.12		
Unconfined compressive strength, T/sq ft		q_u	2.80		
Undrained shear strength, T/sq ft		S_u	1.40		
Sensitivity ratio		S_t			
Initial specimen diameter, in.		D_0	2.830		
Initial specimen height, in.		H_0	5.595		
Classification Dark gray, clay, hard, sandy					
LL	32	PL	16	PI	16
Remarks		Project DISPOSAL AREA B, CHANNEL TO VICTORIA			
		Area Near Seadrift, Texas			
		Boring No. 90-200		Sample No. 3	
		Depth 4-6 ft		Date 5/30/91	
		UNCONFINED COMPRESSION TEST REPORT			