

DEPTH, FEET	SAMPLE	SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	BORING NO. <u>91-54</u> DATE: BEGIN <u>3-26-91</u> PAGE <u>1 / 1</u> JOB NO. <u>146446</u> COMPLETE <u>3-26-91</u> Thin Walled Tube ☒ 3" ☐ 6" PROJECT <u>VICTORIA Channel</u> LOCATION <u>VICTORIA Channel</u> ELEVATION OF HOLE _____ MANUFACTURER'S DESIGNATION OF DRILL RIG <u>7A1113-36</u> GROUNDWATER: DEPTH <u>2'6"</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	1.5	Gray	Clay	stiff		w/roots	
		2	1.5	"	"	"			
5		3	1.5	"	"	"		Sandy clay at 6'	
	X	4	1 1/2	Gray	Sand	Loose	Clay		
	X	5	2 1/3	Gray	Sand	"	"		
10									
	X	6	4 1/2	Gray	Sand	Very Loose	Clay		
15									
	X	7	1 1/2	Gray	Sand	Loose	Clay		
20									
	X	8	1 1/2	"	"	Very Loose	"	w/shell fragments	
25								clay at 27 1/2'	
		9	4.54	Gray Tan	clay	hard			
30								Bottom of 91-54 (30')	
35									

Project : Channel enlargement channel to Victoria, Victoria, Texas

SUMMARY OF LABORATORY TEST RESULTS

Boring No. 91-54 EL. 3.5' NGVD

Boring No. 91-54

Contract No. DACW64-91-D-0001 Delivery Order No.0009

[illegible]

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

q_u : Unconfined Compressive Strength, W_{OH} : Weight of hammer, W_{OP} : Weight of pipe

*Material coarser than No.40 sieve are shell fragments

JOB NO. 14G459

DATE 4/28/91

PROJECT CHANNEL ENLARGEMENT, CHANNEL TO VICTORIA, TEXAS

BORING NO. 91-54

SAMPLE NO. 2

DEPTH 2-4 ft

SPECIMEN NO. 1

CLASSIFICATION

Yellowish gray, Clay, Stiff, Silty

Tare No.	P-10	Height	5.595 in.
Tare plus Wet Specimen	704.17 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	565.24 gm	Initial Area	6.290 sq in.
Water Weight	138.93 gm	Volume	35.194 cu in.
Tare Weight	42.40 gm	Volume of Solids	cu in.
Wet Specimen	1116.01 gm	Void Ratio	
Dry Specimen	881.72 gm	Saturation	%
Water Content	26.57 %	Dry Density	95.4 lb/cu ft
Specific Gravity of Solids			
LL = 44	PL = 20	PI = 24	

Proving Ring No. 10170

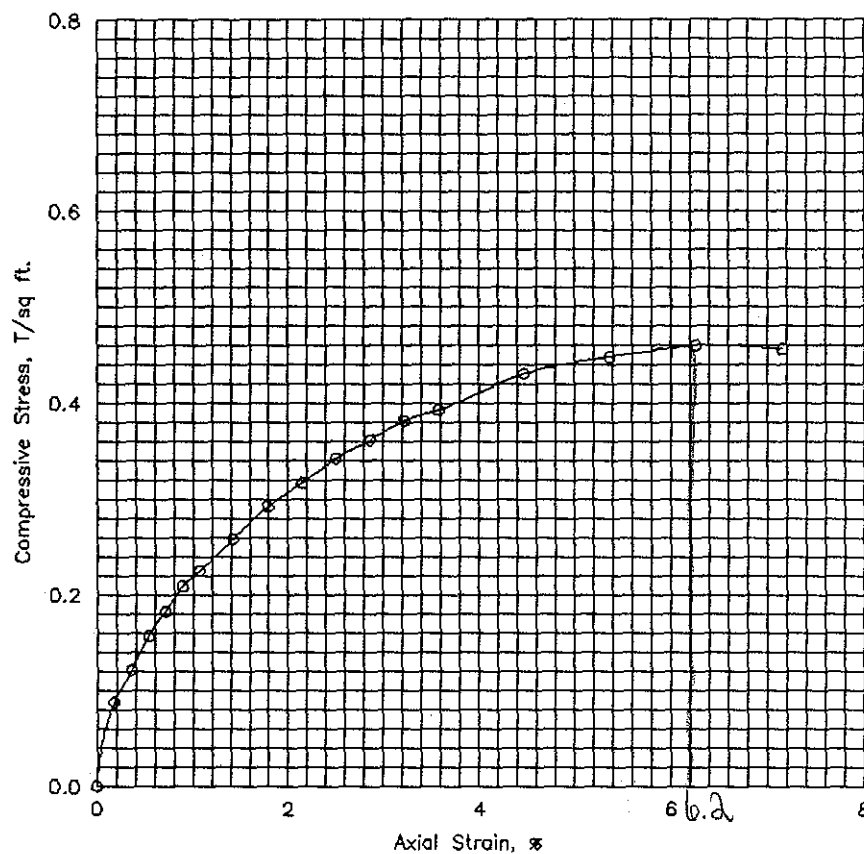
Proving Ring Constant, K = .766 lbs/div.

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	10.0	7.7	.002	6.30	.088
.5	20.	.020	14.0	10.7	.004	6.31	.122
.8	30.	.030	18.0	13.8	.005	6.32	.157
1.0	40.	.040	21.0	16.1	.007	6.34	.183
1.3	50.	.050	24.0	18.4	.009	6.35	.209
1.5	60.	.060	26.0	19.9	.011	6.36	.226
1.7	80.	.080	30.0	23.0	.014	6.38	.259
2.2	100.	.100	34.0	26.0	.018	6.40	.293
2.8	120.	.120	37.0	28.3	.021	6.43	.317
3.2	140.	.140	40.0	30.6	.025	6.45	.342
3.6	160.	.160	42.5	32.6	.029	6.48	.362
4.1	180.	.180	45.0	34.5	.032	6.50	.382
4.5	200.	.200	46.5	35.6	.036	6.52	.393
5.0	250.	.250	51.5	39.4	.045	6.58	.431
5.0	300.	.300	54.0	41.4	.054	6.65	.448
5.9	350.	.350	56.0	42.9	.063	6.71	.460
6.8	400.	.400	56.0	42.9	.071	6.77	.456

Job No. 14G459

EM 1110-2-1906
Appendix XI
30 Nov 70

Failure Sketches


☐ Controlled stress
☒ Controlled strain

Test No.		1			
Type of Specimen		Undisturbed			
Initial	Water content	w_0	26.6 %	%	%
	Void ratio	e_0			
	Saturation	S_0	%	%	%
	Dry density, lb/cu ft	γ_d	95.4		
Time to failure, min		t_f	5.90		
Unconfined compressive strength, T/sq ft		q_u	.46		
Undrained shear strength, T/sq ft		S_u	.23		
Sensitivity ratio		S_t			
Initial specimen diameter, in.		D_0	2.830		
Initial specimen height, in.		H_0	5.595		
Classification Yellowish gray, Clay, Stiff, Silty					
LL	44	PL	20	PI	24
				G_s	
Remarks		Project CHANNEL ENLARGEMENT, CHANNEL TO VICTORIA			
		Area Victoria, Texas			
		Boring No. 91-54		Sample No. 2	
		Depth 2-4 ft		Date 4/28/91	
		UNCONFINED COMPRESSION TEST REPORT			

ENG FORM 3659
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Geotest Engineering, Inc.

PLATE XI-2

PLATE