

U.S. ARMY CORPS OF ENGINEERS

BORING NO. 91-225 DATE: BEGIN 12-17-91 PAGE 1 / 1
 JOB NO. 146532 COMPLETE 12-17-91 Thin Walled Tube
 PROJECT Victoria Channel ☒ 3" ☐ 6"
 LOCATION " " West Bank. Sta. # 740+00
 ELEVATION OF HOLE _____
 MANUFACTURER'S DESIGNATION OF DRILL RIG mayhew -200
 GROUNDWATER: DEPTH 2 ft., ELEV. _____ ft., at end of Drilling
 WEATHER Cloudy - Cool - Rain
 DRILLER Sward LOGGER J. Berg

DEPTH, FEET	SAMPLE NO.	PEN./TORVANE SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0	1	.25	Gray	Clay	soft	Silt	w/Roots
	2	.5	"	"	medium stiff	"	w/ "
5	3	.25	"	"	soft	"	
JAR	X 4	woh	"	Silt	very loose	clay	Si. at 6'
JAR	X 5	woh	"	"	"	"	w/shell frag.
10							
JAR	X 6	woh	"	Silt	"		w/ " "
15							
JAR	X 7	1-12"	"	"	"		w/shell frag.
20							
JAR	X 8	woh	"	"	"		w/ " " + roots
25							
JAR	X 9	1-12"	"	"	"		w/shell frag + roots
30							Bottom of 91-225 30'
35							

JOB NO. 14G536

DATE 3/2/92

PROJECT Channel to Victoria. Victoria, Texas

BORING NO. 91-225

SAMPLE NO. 3

DEPTH 4-6 ft

SPECIMEN NO. 1

CLASSIFICATION

Gray, Clay, Very soft, Sandy, w/shell fragments

Tare No.	P3	Height	5.595 in.
Tare plus Wet Specimen	524.87 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	392.27 gm	Initial Area	6.290 sq in.
Water Weight	132.60 gm	Volume	35.194 cu in.
Tare Weight	42.57 gm	Volume of Solids	cu in.
Wet Specimen	1045.37 gm	Void Ratio	
Dry Specimen	757.96 gm	Saturation	%
Water Content	37.92 %	Dry Density	82.0 lb/cu ft
Specific Gravity of Solids			
LL = 39	PL = 17	PI = 22	

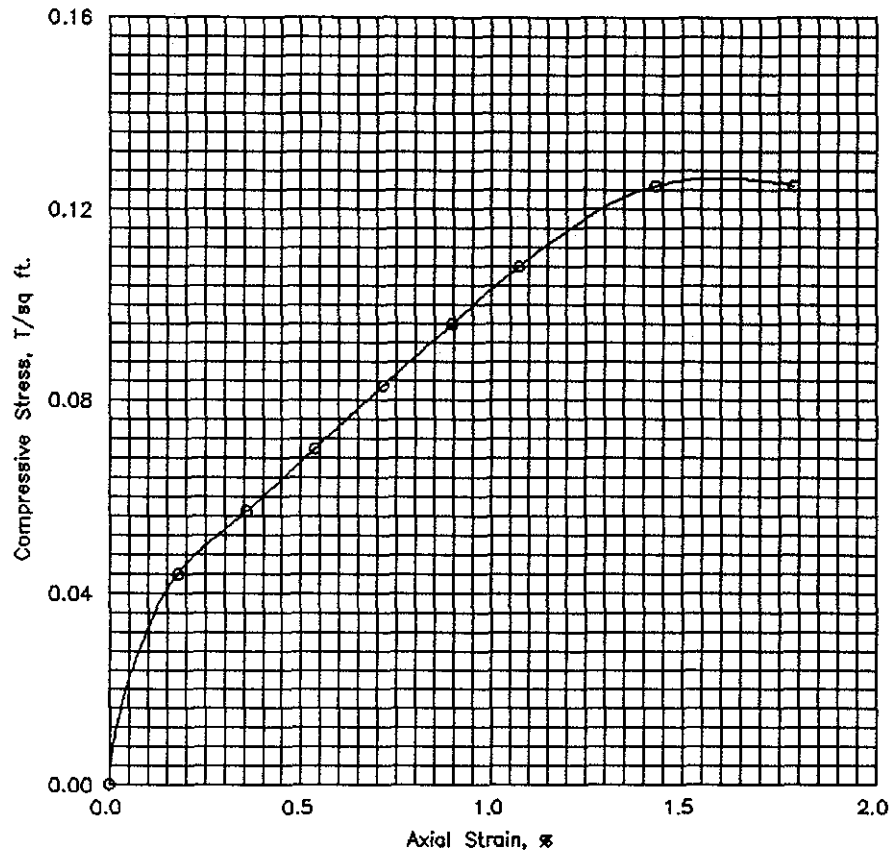
Proving Ring No. 10170

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
.2	10.	.010	5.0	3.8	.002	6.30	.044
.3	20.	.020	6.5	5.0	.004	6.31	.057
.5	30.	.030	8.0	6.1	.005	6.32	.070
.6	40.	.040	9.5	7.3	.007	6.34	.083
.8	50.	.050	11.0	8.4	.009	6.35	.096
1.0	60.	.060	12.5	9.6	.011	6.36	.108
1.3	80.	.080	14.5	11.1	.014	6.38	.125
1.6	100.	.100	14.5	11.1	.018	6.40	.125

Job No. 146536

Failure Sketches



- ☐ Controlled stress
☒ Controlled strain

Test No.	1			
Type of Specimen	Undisturbed			
Initial	Water content	w_0	37.9 %	%
	Void ratio	e_0		
	Saturation	S_0	%	%
	Dry density, lb/cu ft	γ_d	82.0	
	Time to failure, min	t_f	1.32	
	Unconfined compressive strength, T/sq ft	q_u	.13	
	Undrained shear strength, T/sq ft	S_u	.06	
	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, Sandy, w/shell fragments

LL	39	PL	17	PI	22	G_s
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Remarks	Project Channel to Victoria	
	Area Victoria, Texas	
	Boring No. 91-225	Sample No. 3
	Depth 4-6 ft	Date 3/2/92
	UNCONFINED COMPRESSION TEST REPORT	

Project : Channel to Victoria . Victoria, Texas
Contract No. DACW64-92-D-0001 Delivery order No. 0006

SUMMARY OF LABORATORY TEST RESULTS

Boring No. 91-225

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	0.50		Gray,Clay,Medium stiff,Silty,w/sand pockets & roots	CL	41.1										0.25	
2	2-4	0.00		Gray,Clay,Very soft,Silty,w/sand pockets & shell fragments	CL	33.8										0.10	
3	4-6	0.00		Gray,Clay,Very soft,Sandy,w/shell fragments	CL	37.9	82.0	113.2	39	17	100.0	99.5	98.4	91.9	63.3	0.08	0.13
4	6.5-8	0.00	W.O.H	Gray,Clay,Very soft,Silty,w/shell fragments	CL	42.6											
5	8.5-10	0.00	W.O.H	Gray,Clay,Very soft,Silty,w/shell fragments	CL	41.9											
6	13.5-15		W.O.H	Gray,Silt,Very loose,Sandy,w/shell fragments & clay seams	ML-CL	41.3			25	19	100.0	99.2	96.7	87.0	68.1		
7	18.5-20		1	Gray,Silt,Very loose,Sandy,w/shell fragments & clay seams	M L	27.3											
8	23.5-25		W.O.H	Gray,Silt,Very loose,Sandy,w/shell fragments & clay seams	M L	40.3											
9	28.5-30		1	Gray,Silt,Very loose,Sandy,w/shell fragments & clay seams	M L	38.1											

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

Geotest Engineering, Inc.