

U.S. ARMY CORPS OF ENGINEERS

BORING NO. 91-224 DATE: BEGIN 12-10-91 PAGE 1 / 1
 JOB NO. 144537 COMPLETE _____ Thin Walled Tube
 PROJECT VICTORIA Channel ☒ 3" ☐ 6"
 LOCATION West Bank - STA # 750+00
 ELEVATION OF HOLE _____
 MANUFACTURER'S DESIGNATION OF DRILL RIG Mayhew-200
 GROUNDWATER: DEPTH Surface ft., ELEV. _____ ft., at end of Drilling
 WEATHER Cloudy - Cool - Windy
 DRILLER S. Ward LOGGER J. Beeg

DEPTH, FEET	SAMPLE NO.	PEN./TORVANE SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSIS- TENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0	1	.5	GRAY	CLAY	Medium stiff		w/roots
	2	.25	GRAY TAN		soft		
5	3	.25	GRAY	CLAY	"	Silt	w/shell frag
	4	.25	"	"	"	"	w/ " "
	5	?	"	Silt	Very loose	CLAY	w/shell frag STA # 8'
10							
15	X 6	W OH	GRAY	Silt	Very loose	CLAY	w/shell frag
20	X 7	W OH	"	"	"	"	w/ " "
25	X 8	W OH	"	"	"	"	w/shell frag
30	X 9	1 1/2	"	"	"	"	w/shell frag
35							Bottom of 91-224 30

JOB NO. 14G536

DATE 2/27/92

PROJECT Channel to Victoria. Victoria, Texas

BORING NO. 91-224

SAMPLE NO. 3

DEPTH 4-6 ft

SPECIMEN NO. 1

CLASSIFICATION

Gray, Clay, Very soft, Sandy, w/sand pockets & shell fragments

Tare No.	P14	Height	5.595 in.
Tare plus Wet Specimen	449.60 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	351.91 gm	Initial Area	6.290 sq in.
Water Weight	97.69 gm	Volume	35.194 cu in.
Tare Weight	42.47 gm	Volume of Solids	cu in.
Wet Specimen	1087.64 gm	Void Ratio	
Dry Specimen	826.66 gm	Saturation	%
Water Content	31.57 %	Dry Density	89.5 lb/cu ft
Specific Gravity of Solids			
LL = 36	PL = 16	PI = 20	

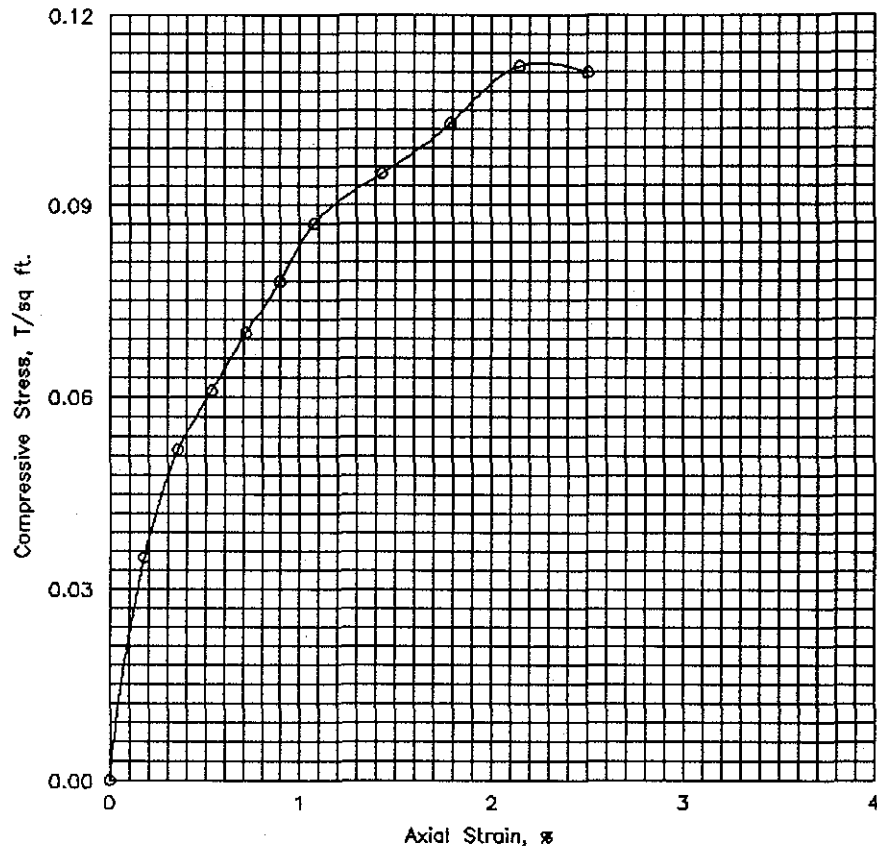
Proving Ring No. 10170

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	4.0	3.1	.002	6.30	.035
.3	20.	.020	6.0	4.6	.004	6.31	.052
.5	30.	.030	7.0	5.4	.005	6.32	.061
.6	40.	.040	8.0	6.1	.007	6.34	.070
.8	50.	.050	9.0	6.9	.009	6.35	.078
1.0	60.	.060	10.0	7.7	.011	6.36	.087
1.3	80.	.080	11.0	8.4	.014	6.38	.095
1.6	100.	.100	12.0	9.2	.018	6.40	.103
1.9	120.	.120	13.0	10.0	.021	6.43	.112
2.3	140.	.140	13.0	10.0	.025	6.45	.111

Job No. 14G536

Failure Sketches



- ☐ Controlled stress
☒ Controlled strain

Test No.		1			
Type of Specimen		Undisturbed			
Initial	Water content	w_0	31.6 %	%	%
	Void ratio	e_0			
	Saturation	S_0	%	%	%
	Dry density, lb/cu ft	γ_d	89.5		
Time to failure, min		t_f	1.93		
Unconfined compressive strength, T/sq ft		q_u	.11		
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/sand pockets & shell fragments					
LL	36	PL	16	PI	20
				C_u	
Remarks			Project Channel to Victoria		
			Area Victoria, Texas		
			Boring No. 91-224	Sample No. 3	
			Depth 4-6 ft	Date 2/27/92	
			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. 91-224

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	0.75		Gray,Clay,Medium stiff,Sandy,w/roots & shell fragments	CL	23.8										0.35	
2	2-4	0.50		Gray,Clay,Medium stiff,Sandy,w/sand pockets & shell fragments	CL	27.9										0.25	
3	4-6	0.00		Gray,Clay,Very soft,Sandy,w/sand pockets & shell fragments	CL	31.6	89.5	117.7	36	16	100.0	99.1	97.6	88.1	57.1	0.08	0.11
4	6-8	0.25		Gray,Clay,Soft,Sandy,w/sand pockets & shell fragments	CL	36.6										0.12	
5	8-10	0.25		Gray,Clay,Soft,Silty,w/shell fragments	CL	35.6											
6	13.5-15		W.O.P	Gray,Silt,Very loose,Sandy,w/shell fragments & clay seams	M L	41.1											
7	18.5-20		W.O.P	Gray,Silt,Very loose,Sandy,w/shell fragments & clay seams	ML-CL	36.5			24	17	97.9*	96.6*	95.5	87.6	58.3		
8	23.5-25		W.O.P	Gray,Silt,Very loose,Sandy,w/shell fragments & clay seams	M L	43.8											
9	28.5-30		2	Gray,Silt,Very loose,Sandy,w/shell fragments & clay seams	M L	43.1											

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

* :Material Retained are Shell fragments

Geotest Engineering, Inc.