U.S. ARMY CORPS OF ENGINEERS

BORING NO. 91-226 DATE: BEGIN 12-11-91 PAGE 1 / 2
JOB NO. 146582 COMPLETE 12-11-91 Thin Walled Tube
PROJECT Victoria Channel ☑ 3" ☐ 6"
LOCATION " " West Bank - STA ≈ 730 + 00
ELEVATION OF HOLE
MANUFACTURER'S DESIGNATION OF DRILL RIG Mayhew 200
GROUNDWATER: DEPTH 2'4" ft., ELEV. ft., at end of Drilling
WEATHER Cloudy - Cool - Foggy
DRILLER S. Ward LOGGER J. Berg

DEPTH, FEET	SAMPLE	SAMPLE NO.	PEN./TORVANE SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0		1	.75	Gray + Tan	Clay	Medium stiff	Silt	w/shell frag
		2	.5	"	"	"	"	w/ " " Rotten odor
5		3	.5	Gray	"	"	"	w/ Roots + Shell frag
		4	WOH	Gray	Silt	very Loose	Clay	w/shell frag - Cl. Si. at 6"
IAR		5	WOH	"	"	"	"	w/ " "
IAR 10								
		6	1-17" / 1	"	"	"	"	w/shell frag
IAR 15								
		7	WOH	"	"	"	"	w/shell frag.
IAR 20								
		8	WOH	"	"	"	"	w/shell frag.
IAR 25								
		9	1/1/2	"	silt	Loose	clay	Si. Cl. at 29'
IAR 30		10	.25	Gray	clay	Soft	silt	w/shell frag
		11	1/1/2	Gray	Sand	Loose	silt	w/ shell frag
IAR		12	2/2/3	"		"	"	w/shell frag
IAR 35								

U.S. ARMY CORPS OF ENGINEERS

BORING NO. 91-226 DATE: BEGIN 12-11-91 PAGE 2 / 2
JOB NO. 14G532 COMPLETE 12-11-91 Thin Walled Tube
PROJECT VICTORIA CHANNEL ☑ 3" ☐ 6"
LOCATION " " WEST BANK - STA. # 730+00
ELEVATION OF HOLE
MANUFACTURER'S DESIGNATION OF DRILL RIG Mayhew 200
GROUNDWATER: DEPTH 2'4" ft., ELEV. ft., at end of Drilling
WEATHER Cloudy Cool - Foggy
DRILLER S. WARD LOGGER J. BERG

DEPTH, FEET	SAMPLE	SAMPLE NO.	PEN./TORVANE SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSIS-TENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
35								
	X	13	1 1/2	GRAY	Sand	VERY Loose	Silt	w/shell Frag
JAR								
	X	14	3/4/2	GRAY	Sand	Loose	Silt	w/shell Frag
JAR								Bottom of 91.223 40'
40								
45								
50								
55								
60								
65								
70								

JOB NO. 14G536 DATE 3/2/92

PROJECT Channel to Victoria. Victoria, Texas

BORING NO. 91-226 SAMPLE NO. 2 DEPTH 2-4 ft

SPECIMEN NO. 1

CLASSIFICATION
Gray,Clay,Soft,w/sand pkts shell fragments&organic material

Tare No.	P-227	Height	5.595 in.
Tare plus Wet Specimen	459.23 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	301.04 gm	Initial Area	6.290 sq in.
Water Weight	158.19 gm	Volume	35.194 cu in.
Tare Weight	42.40 gm	Volume of Solids	cu in.
Wet Specimen	924.78 gm	Void Ratio	
Dry Specimen	573.82 gm	Saturation	%
Water Content	61.16 %	Dry Density	62.1 lb/cu ft

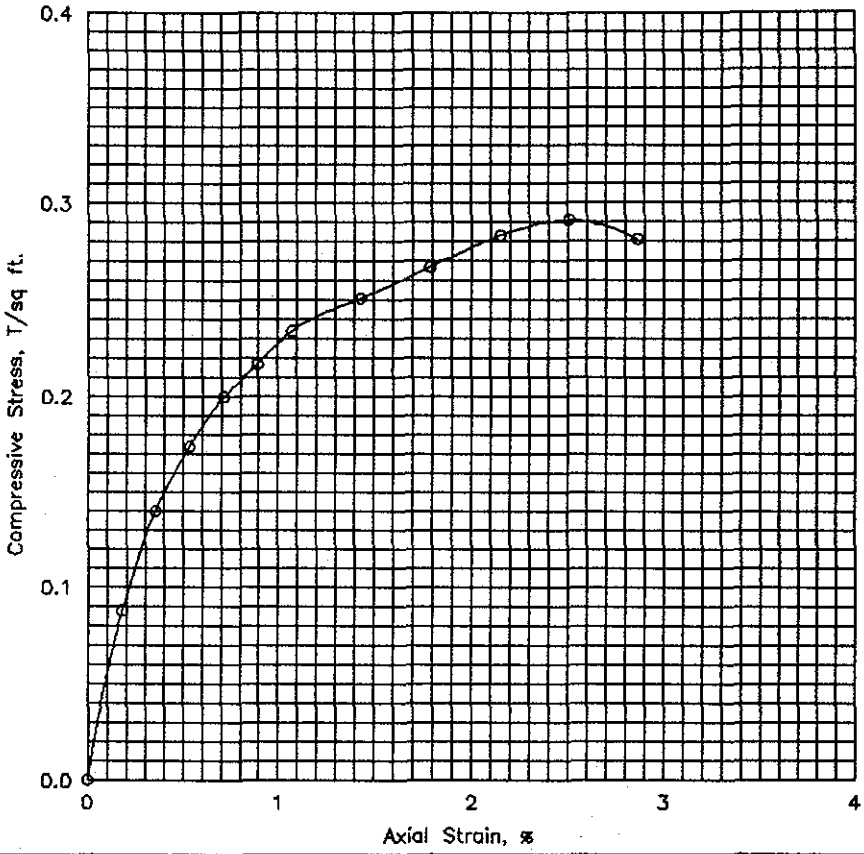
Specific Gravity of Solids
LL = 112 PL = 46 PI = 66

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	10.0	7.7	.002	6.30	.088
.4	20.	.020	16.0	12.3	.004	6.31	.140
.6	30.	.030	20.0	15.3	.005	6.32	.174
.7	40.	.040	23.0	17.6	.007	6.34	.200
.9	50.	.050	25.0	19.1	.009	6.35	.217
1.0	60.	.060	27.0	20.7	.011	6.36	.234
1.4	80.	.080	29.0	22.2	.014	6.38	.251
1.7	100.	.100	31.0	23.7	.018	6.40	.267
2.0	120.	.120	33.0	25.3	.021	6.43	.283
2.3	140.	.140	34.0	26.0	.025	6.45	.291
2.6	160.	.160	33.0	25.3	.029	6.48	.281

Job No. 14G536

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_o	61.2 %	%	%	%
	Void ratio	e_o				
	Saturation	S_o	%	%	%	%
	Dry density, lb/cu ft	γ_d	62.1			
Time to failure, min		t_f	2.32			
Unconfined compressive strength, T/sq ft		q_u	.29			
Undrained shear strength, T/sq ft		S_u	.15			
Sensitivity ratio		S_t				
Initial specimen diameter, in.		D_o	2.830			
Initial specimen height, in.		H_o	5.595			

Classification Gray,Clay,Soft,w/sand pkts shell fragments&organic material

LL	112	PL	46	PI	66	G_s	

Remarks

Project Channel to Victoria

Area Victoria, Texas

Boring No. 91-226 Sample No. 2

Depth 2-4 ft Date 3/2/92
El

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 3659
1 JUN 65

PLATE XI-2

Geotest Engineering, Inc.

PLATE

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

SUMMARY OF LABORATORY TEST RESULTS

Boring No. 91-226

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)	L L (%)	P L (%)	Mechanical Analysis % Passing					Torvane Shear Strength (tsf)	q u (tsf)
											#4	#10	#40	#100	#200		
1	0-2	0.75		Yellowish gray,Clay,Medium stiff,Silty,w/sand pockets & shell fragments	C L	26.0										0.40	
2	2-4	0.25		Gray,Clay,Soft,w/sand pockets shell fragments & organic material	O H	61.2	62.1	100.1	112	46	100.0	99.5	97.7	95.9	90.7	0.12	0.29
3	4-6	0.25		Dark gray,Clay,Soft,w/organic material	O H	93.7										0.12	
4	6.5-8	0.00	W.O.H	Gray,Clay,Very soft,Silty	C L	58.8											
5	8.5-10	0.00	W.O.H	Gray,Clay,Very soft,Silty	C L	39.8											
6	13.5-15		1	Gray,Silt,Very loose,Sandy,w/shell fragments & clay seams	M L	33.2											
7	18.5-20		W.O.H	Gray,Silt,Very loose,Sandy,w/shell fragments & clay seams	M L	34.6											
8	23.5-25		W.O.H	Gray,Silt,Very loose,Sandy,w/shell fragments & clay seams	M L	32.8											
9	28.5-30		6	Gray,Silt,Loose,Sandy,w/clay layer	M L	46.9											
10	30-32	0.00		Gray,Clay,Very soft,w/sand pockets & shell fragments	C H	47.3											
11	32.5-34		4	Gray,Sand,Loose,Silty,w/shell fragments	S M												
12	34.5-36		5	Gray,Sand,Loose,Silty,w/shell fragments	S M												
13	36.5-38		3	Gray,Sand,Very loose,Silty,w/shell fragments	S M						97.5*	92.5	91.0	52.5	21.9		
14	38.5-40		4	Gray,Sand,Loose,Silty,w/shell fragments	S M												

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