U.S. ARMY CORPS OF ENGINEERS

BORING NO. 92-43 DATE: BEGIN 7-30-92 PAGE 1 / 1
JOB NO. 146549 COMPLETE 7-30-92 Thin Walled Tube
PROJECT Disposal Area For channel to Victoria ☒ 3" ☐ 6"
LOCATION Near Seadrift, Tx
ELEVATION OF HOLE
MANUFACTURER'S DESIGNATION OF DRILL RIG Ardco Failing Buggy
GROUNDWATER: DEPTH 10.00 ft., ELEV. ____ ft., at end of Drilling
WEATHER Sunny & Hot
DRILLER Mark Thornton LOGGER Iraj Mostamand

DEPTH, FEET	SAMPLE	SAMPLE NO.	PEN./TORVANE SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0		1	4.5+	DK. Gray	Clay	Hard		-w/roots
		2	1.25	Gray	Clay	Stiff		
5		3	1.25	Yellowish Gray	Clay	Stiff		-w/Fe stains
		4	3.00	Yellowish Gray	Clay	V.stiff		-w/calc nod & Fe stains
		5	1.25	Yellowish Gray	Clay	Stiff	silt	w/calc Nod & Fe st
10		6	3.00	Yellowish Brown	Clay	V.stiff		w/calc nod & Fe st & silt -layer
		7	2.75	Yellowish Brown & Gray	Clay	V.stiff		-w/calc nod & Fe st, slickensided
15		8	2.50	Yellowish Brown & Gray	Clay	V.stiff		-w/Fe stains, slickensided
		9	2.75	Yellowish Brown & Gray	Clay	V.stiff		-w/Fe stains, slickensided
		10	2.50	Gray & Yellowish Brown	Clay	V.stiff		-w/Fe st, sand seams, slickensided
20								Bottom of 92-43 @ 20'
25								
30								
35								

GEOTEST ENGINEERING, INC.

SUMMARY OF LABORATORY TEST RESULTS

Project: Proposed new Disposal area for channel to victoria project, near Seadrift, Texas
Contract No. DACW64-92-D-0001 Delivery Order No. 0023

Boring No. 92-43

S#	Depth (ft.)	PP (tsf)	SPT Blows per foot	Visual Classification	U S C	M C (%)	Dry Unit Wt. (pcf)	Wet Unit Wt. (pcf)	LL (%)	PL (%)	Mechanical Analysis % passing					Torvane Shear Strength (tsf)	qu (tsf)
											#4	#10	#40	#100	#200		
1	0-2	4.5+		Dark gray,Clay,Hard,Sandy,w/roots	C L	21.0											
2	2-4	1.50		Gray,Clay,Stiff,w/sand seams	C H	30.1											
3	4-6	1.50		Yellowish gray,Clay,Stiff,w/calcareous nodules ferrous stains and blocky structure	C H	32.3	90.7	120.0	67	24	100.0	99.7	99.3	98.5	98.4		1.13
4	6-8	2.75		Yellowish gray,Clay,Very stiff,w/calcareous nodules ferrous stains and blocky structure	C H	27.4											
5	8-10	2.00		Yellowish gray,Clay,Very stiff,Silty,w/calcareous nodules ferrous stains and sand pockets	C L	21.9											
6	10-12	2.00		Yellowish gray,Clay,Very stiff,w/ferrous stains and silt layer,Slickensided	C H	31.6											
7	12-14	2.50		Yellowish gray,Clay,Very stiff,w/ferrous stains, Slickensided	C H	39.3			93								
8	14-16	2.25		Gray & yellowish brown,Clay,Very stiff,w/calcareous nod fe stains and sand seams,Slickensided	C H	37.6											
9	16-18	3.00		Gray & yellowish brown,Clay,Very stiff,w/ferrous stains,Slickensided	C H	33.0											
10	18-20	2.75		Gray & yellowish brown,Clay,Very stiff,w/ferrous stains & silt parting,Slickensided	C H	33.3											

S#: Sample Number, PP: Pocket Penetrometer Reading, USC: Unified Soil Classification, MC: Moisture Content
qu: Unconfined Compressive Strength, WOH: Weight of Hammer, WOP: Weight of Pipe

GEOTEST ENGINEERING, INC.

JOB NO. 14G599 DATE 8/7/92

PROJECT Proposed Disposal area for Channel to Victoria Project

AREA near Seadrift, Texas

BORING NO. 92-43 SAMPLE NO. 3 DEPTH 4-6 ft

SPECIMEN NO. 1

CLASSIFICATION
Yellowish gray,Clay,Stiff,w/calc nod fe st & Blocky structure

Tare No.	K1-30	Height	5.595 in.
Tare plus Wet Specimen	490.19 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	381.01 gm	Initial Area	6.290 sq in.
Water Weight	109.18 gm	Volume	35.194 cu in.
Tare Weight	42.67 gm	Volume of Solids	cu in.
Wet Specimen	1107.82 gm	Void Ratio	
Dry Specimen	837.55 gm	Saturation	%
Water Content	32.27 %	Dry Density	90.7 lb/cu ft
Specific Gravity of Solids			

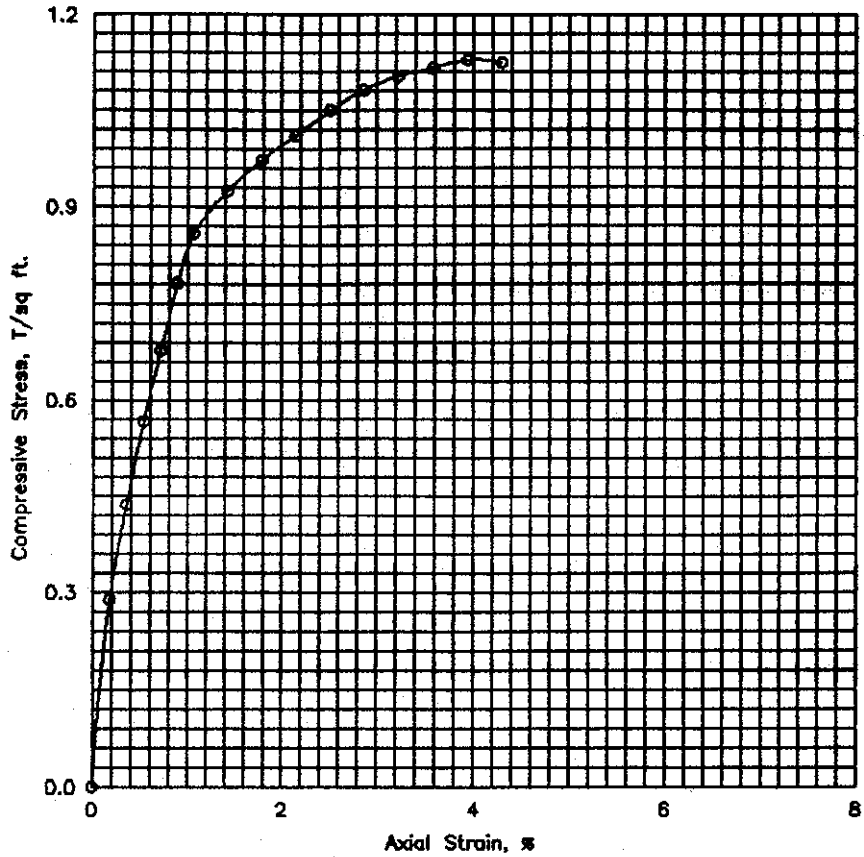
LL = 67 PL = 24 PI = 43

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	33.0	25.3	.002	6.30	.289
.4	20.	.020	50.0	38.3	.004	6.31	.437
.6	30.	.030	65.0	49.8	.005	6.32	.567
.8	40.	.040	78.0	59.7	.007	6.34	.679
.9	50.	.050	90.0	68.9	.009	6.35	.782
1.1	60.	.060	99.0	75.8	.011	6.36	.859
1.4	80.	.080	107.0	82.0	.014	6.38	.925
1.7	100.	.100	113.0	86.6	.018	6.40	.973
2.0	120.	.120	118.0	90.4	.021	6.43	1.012
2.3	140.	.140	123.0	94.2	.025	6.45	1.051
2.7	160.	.160	127.0	97.3	.029	6.48	1.082
3.0	180.	.180	130.0	99.6	.032	6.50	1.103
3.3	200.	.200	132.0	101.1	.036	6.52	1.116
3.5	220.	.220	134.0	102.6	.039	6.55	1.129
3.8	240.	.240	134.0	102.6	.043	6.57	1.125

Job No. 14G599

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_0	32.3 %	%	%	%
	Void ratio	e_0				
	Saturation	S_0	%	%	%	%
	Dry density, lb/cu ft	γ_d	90.7			
Time to failure, min		t_f	3.52			
Unconfined compressive strength, T/sq ft		q_u	1.13			
Undrained shear strength, T/sq ft		S_u	.56			
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,w/calc nod fe st & Blocky structure

LL 67	PL 24	PI 43	G_s

Remarks

Project Proposed Disposal area for Channel to Victoria Project

Area near Seadrift, Texas

Boring No. 92-43 | Sample No. 3

Depth El 4-6 ft | Date 8/7/92

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 3659

PLATE XI-2

Geotest Engineering, Inc.

PLATE