U.S. ARMY CORPS OF ENGINEERS

BORING NO. 92-52 DATE: BEGIN 7-31-92 PAGE 1 / 1
JOB NO. 146549 COMPLETE 7-31-92 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 6.00 ft., ELEV. ____ ft., at end of Drilling
WEATHER Sunny & Hot
DRILLER Mack Thornton LOGGER Troy 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	0.75	Gray	clay	M-stiff		-w/calcnod
5		3	0.75	Gray	clay	M-stiff		-w/calc nod
		4	0.25	Gray & Y Brown	clay	Soft	sand	-w/calc nod & sa at bottom of sample
10	X	5	8/9/13	Gray	Sand	M. Dense	silt	
15	X	6	6/11/16	Gray	Sand	M. Dense		-w/calc nod
20	X	7	13/22/29	Gray	Sand	V. Dense		
								Bottom of 92-52 @ 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. 92-52

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,w/roots	C H	17.4											
2	2-4	0.75		Gray,Clay,Medium stiff,w/calcareous and ferrous nodules	C H	38.5										0.40	
3	4-6	0.75		Gray,Clay,Medium stiff,w/calcareous and ferrous nodules and sand pockets	C H	33.1	88.7	118.0	59	23	100.0	99.0	98.2	96.8	95.7	0.35	0.59
4	6-8	0.50		Gray&Yellowish gray,Clay,Medium stiff,Sandy,w/ calcareous nodules and ferrous stains	C L	23.7										0.25	
5	8.5-10		22	Gray,Sand,Medium dense,Silty	S P-S M						99.8	99.6	99.2	62.3	10.8		
6	13.5-15		27	Gray,Sand,Medium dense,Silty	S M												
7	18.5-20		52	Gray,Sand,Very dense,Silty	S M												

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 8/11/92

PROJECT Proposed Disposal area for Channel to Victoria Project

AREA near Seadrift, Texas

BORING NO. 92-52 SAMPLE NO. 3 DEPTH 4-6 ft

SPECIMEN NO. 1

CLASSIFICATION
Gray,Clay,stiff,w/calc & fe nod and sand pockets

Tare No.	KL-12	Height	5.595 in.
Tare plus Wet Specimen	514.93 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	397.38 gm	Initial Area	6.290 sq in.
Water Weight	117.55 gm	Volume	35.194 cu in.
Tare Weight	42.28 gm	Volume of Solids	cu in.
Wet Specimen	1090.12 gm	Void Ratio	
Dry Specimen	819.00 gm	Saturation	%
Water Content	33.10 %	Dry Density	88.7 lb/cu ft
Specific Gravity of Solids			

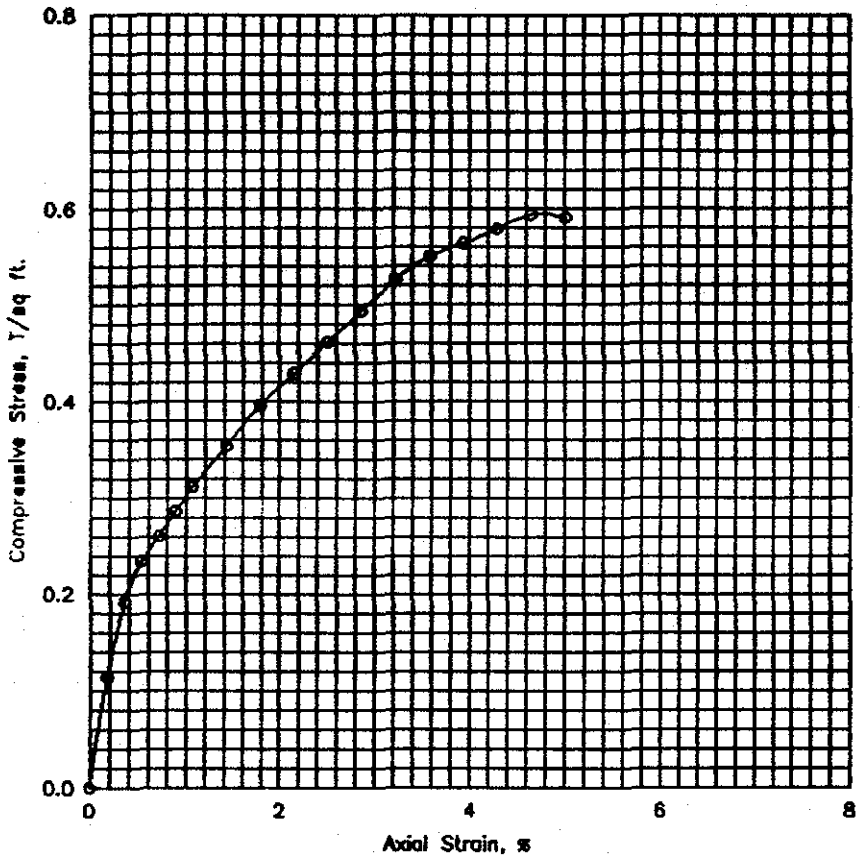
LL = 59 PL = 23 PI = 36

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	13.0	10.0	.002	6.30	.114
.3	20.	.020	22.0	16.9	.004	6.31	.192
.5	30.	.030	27.0	20.7	.005	6.32	.235
.7	40.	.040	30.0	23.0	.007	6.34	.261
.8	50.	.050	33.0	25.3	.009	6.35	.287
1.0	60.	.060	36.0	27.6	.011	6.36	.312
1.3	80.	.080	41.0	31.4	.014	6.38	.354
1.7	100.	.100	46.0	35.2	.018	6.40	.396
2.0	120.	.120	50.0	38.3	.021	6.43	.429
2.3	140.	.140	54.0	41.4	.025	6.45	.462
2.6	160.	.160	58.0	44.4	.029	6.48	.494
2.9	180.	.180	62.0	47.5	.032	6.50	.526
3.2	200.	.200	65.0	49.8	.036	6.52	.550
3.5	220.	.220	67.0	51.3	.039	6.55	.564
3.8	240.	.240	69.0	52.9	.043	6.57	.579
4.1	260.	.260	71.0	54.4	.046	6.60	.594
4.4	280.	.280	71.0	54.4	.050	6.62	.591

Job No. 14G599

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_o	33.1 %	%	%	%
	Void ratio	e_o				
	Saturation	S_o	%	%	%	%
	Dry density, lb/cu ft	γ_d	88.7			
Time to failure, min		t_f	4.07			
Unconfined compressive strength, T/sq ft		q_u	.59			
Undrained shear strength, T/sq ft		S_u	.30			
Sensitivity ratio		S_t				
Initial specimen diameter, in.		D_o	2.830			
Initial specimen height, in.		H_o	5.595			

Classification Gray,Clay,stiff,w/calc & fe nod and sand pockets

LL	59	PL	23	PI	36	G_s	

Remarks

Project Proposed Disposal area for Channel to Victoria Project

Area near Seadrift, Texas

Boring No. 92-52 | Sample No. 3

Depth 4-6 ft | Date 8/11/92

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 3659

PLATE XI-2

Geotest Engineering, Inc.

PLATE