U.S. ARMY CORPS OF ENGINEERS

BORING NO. 92-51 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 8.00 ft., ELEV. ____ ft., at end of Drilling
WEATHER Sunny & Hot
DRILLER Mark Thornton LOGGER Fray Mostamand

DEPTH, FEET	SAMPLE	SAMPLE NO.	PEN./TORVANE SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0		1	0.5t	DK-Gray	clay	Hard		-w/roots
		2	0.50	Gray	clay	M-stiff		-w/calenod
5		3	0.50	Gray	clay	M-stiff		-w/calenod
		4	1.00	Gray & Y Brown	clay	stiff	sand	-w/calenod & Fe st, Sand @ bottom of sample
10	X	5	1/2/2	Gray	Sand	loose	silt	
15	X	6	5/7/8	Gray	Sand	M. Dense	silt	
20	X	7	19/21/24	Gray	Sand	V. Dense	silt	
								Bottom of 92-51
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. 92-51

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	3.75		Dark gray,Clay,Very stiff,w/roots	C H	20.1											
2	2-4	0.50		Gray,Clay,Medium stiff,w/calcareous and ferrous nodules and sand pockets	C H	36.0	84.9	115.4	66	26	100.0	98.6	96.7	94.4	94.3	0.30	0.54
3	4-6	1.25		Gray,Clay,Stiff,w/calcareous nodules and ferrous stains	C H	33.2										0.60	
4	6-8	1.50		Gray&Yellowish gray,Clay,Stiff,Sandy,w/calc-areous nodules and ferrous stains	C L	21.0											
5	8.5-10		4	Gray,Sand,Loose,Silty	S M						100.0	99.9	99.3	47.2	19.7		
6	13.5-15		15	Gray,Sand,Medium dense,Silty	S M												
7	18.5-20		56	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. 92-51 SAMPLE NO. 2 DEPTH 2-4 ft

SPECIMEN NO. 1

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

Tare No.	P222	Height	5.595 in.
Tare plus Wet Specimen	541.32 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	409.28 gm	Initial Area	6.290 sq in.
Water Weight	132.04 gm	Volume	35.194 cu in.
Tare Weight	42.73 gm	Volume of Solids	cu in.
Wet Specimen	1066.45 gm	Void Ratio	
Dry Specimen	784.03 gm	Saturation	%
Water Content	36.02 %	Dry Density	84.9 lb/cu ft
Specific Gravity of Solids			

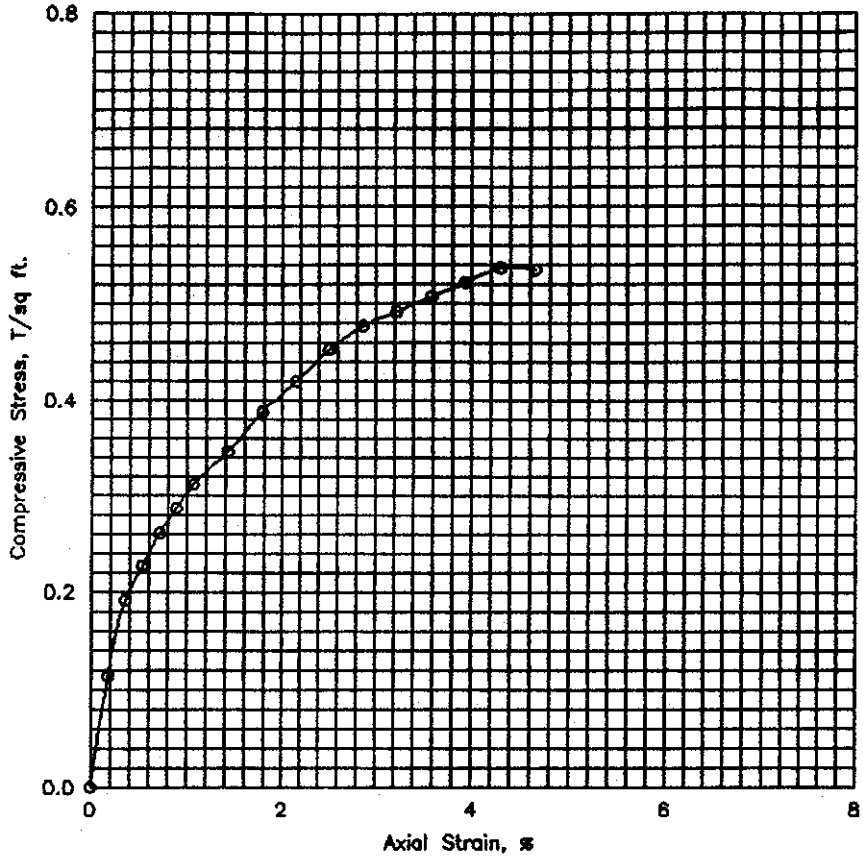
LL = 66 PL = 26 PI = 40

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	26.0	19.9	.005	6.32	.227
.7	40.	.040	30.0	23.0	.007	6.34	.261
.9	50.	.050	33.0	25.3	.009	6.35	.287
1.0	60.	.060	36.0	27.6	.011	6.36	.312
1.4	80.	.080	40.0	30.6	.014	6.38	.346
1.7	100.	.100	45.0	34.5	.018	6.40	.388
2.0	120.	.120	49.0	37.5	.021	6.43	.420
2.3	140.	.140	53.0	40.6	.025	6.45	.453
2.6	160.	.160	56.0	42.9	.029	6.48	.477
2.8	180.	.180	58.0	44.4	.032	6.50	.492
3.2	200.	.200	60.0	46.0	.036	6.52	.507
3.4	220.	.220	62.0	47.5	.039	6.55	.522
3.7	240.	.240	64.0	49.0	.043	6.57	.537
4.0	260.	.260	64.0	49.0	.046	6.60	.535

Job No. 14G599

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_0	36.0 %	%	%	%
	Void ratio	e_0				
	Saturation	S_0	%	%	%	%
	Dry density, lb/cu ft	γ_d	84.9			
Time to failure, min		t_f	3.70			
Unconfined compressive strength, T/sq ft		q_u	.54			
Undrained shear strength, T/sq ft		S_u	.27			
Sensitivity ratio		S_t				
Initial specimen diameter, in.		D_0	2.830			
Initial specimen height, in.		H_0	5.595			

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

LL	66	PL	26	PI	40	G_s	

Remarks

Project Proposed Disposal area for Channel to Victoria Project

Area near Seadrift, Texas

Boring No. 92-51 | Sample No. 2

Depth El 2-4 ft | Date 8/11/92

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 3659

Geotest Engineering, Inc.

PLATE XI-2

PLATE