3.00

U.S. ARMY CORPS OF ENGINEERS

BORING NO. 92-57 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 sta: 30+00
ELEVATION OF HOLE
MANUFACTURER'S DESIGNATION OF DRILL RIG Ardco Failing Buggy
GROUNDWATER: DEPTH 12.00 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	CONSIS-TENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0		1	4.5+	DK. Gray	clay	Hard		-w/roots
		2	1.25	Gray	clay	stiff		-w/calc nod
5		3	1.75	Yellowish gray & gray	clay	stiff	sand	-w/calc nod & Fest
		4	2.50	Gray & Yellowish Brown	clay	V. stiff	sand	-w/calc nod & Fest
		5	3.25	Yellowish Brown	clay	V. stiff	Sand	-w/calc nod & Fest
10		6	2.50	Yellowish gray	clay	V. stiff	Sand	-w/calc nod & Fest
		7	NA	Yellowish Brown	silt	NA	sand	
15		8	3.50	Yellowish gray & gray	clay	V. stiff	sand	-w/ calc nod & Fest
		9	4.00	Yellowish gray & gray	clay	V. stiff	Sand	-w/calc nod
	X	10	8/11/14	Yellowish gray & gray	clay	V. stiff	Sand	-NR w/ Tube 18-20 -w/calc nod
20								Bottom of 92-57 @ 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. 92-57

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	15.3			46								
2	2-4	2.50		Gray,Clay,Very stiff,w/calcareous nodules	C H	23.5											
3	4-6	1.00		Gray&Yellowish gray,Clay,Stiff,w/calcareous nodules ferrous stains and sand pockets	C H	25.2	100.2	125.5	54	23	100.0	98.7	96.8	92.8	92.6		1.07
4	6-8	3.00		Yellowish gray,Clay,Very stiff,w/calcareous nodules ferrous stains & sand seams,Slickensided	C H	24.5											
5	8-10	3.00		Yellowish gray,Clay,Very stiff,Silty,w/calcareous nodules and ferrous stains	C L	20.4											
6	10-12	3.25		Yellowish gray,Clay,Very stiff,Silty,w/calcareous nodules ferrous stains and blocky structure	C L	20.1											
7	12-14			Yellowish gray,Silt,loose,Sandy,w/calcareous nodules	M L	22.7											
8	14-16	3.25		Yellowish gray,Clay,Very stiff,Silty,w/calcareous nodules and sand seams	C L	19.2											
9	16-18	3.50		Yellowish gray,Clay,Very stiff,Silty,w/calcareous nodules and ferrous stains	C L	23.5											
10	18.5-20	3.25	25	Yellowish gray,Clay,Very stiff,Sandy,w/calcareous nodules	C L	21.2											

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 8/12/92

PROJECT Proposed Disposal area for Channel to Victoria Project

AREA near Seadrift, Texas

BORING NO. 92-57 SAMPLE NO. 3 DEPTH 4-6 ft

SPECIMEN NO. 1

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

Tare No.	KL-2	Height	5.595 in.
Tare plus Wet Specimen	536.40 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	437.12 gm	Initial Area	6.290 sq in.
Water Weight	99.28 gm	Volume	35.194 cu in.
Tare Weight	42.30 gm	Volume of Solids	cu in.
Wet Specimen	1159.02 gm	Void Ratio	
Dry Specimen	926.14 gm	Saturation	%
Water Content	25.15 %	Dry Density	100.2 lb/cu ft
Specific Gravity of Solids			

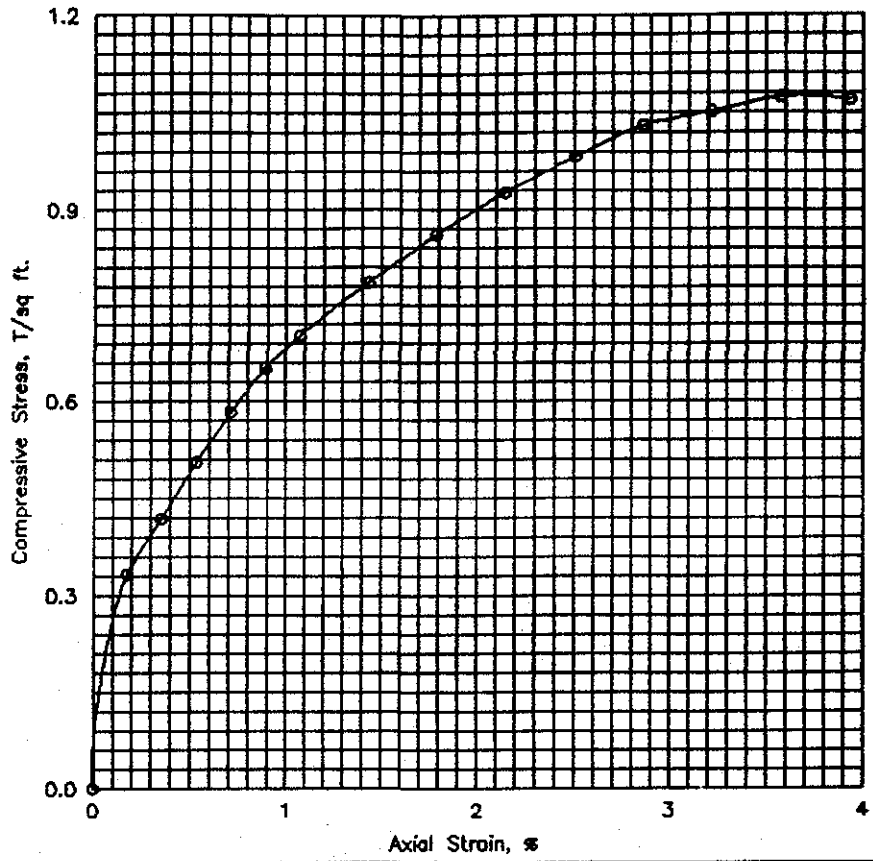
LL = 54 PL = 23 PI = 31

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	38.0	29.1	.002	6.30	.333
.4	20.	.020	48.0	36.8	.004	6.31	.419
.6	30.	.030	58.0	44.4	.005	6.32	.506
.7	40.	.040	67.0	51.3	.007	6.34	.583
.9	50.	.050	75.0	57.4	.009	6.35	.652
1.0	60.	.060	81.0	62.0	.011	6.36	.703
1.4	80.	.080	91.0	69.7	.014	6.38	.786
1.7	100.	.100	100.0	76.6	.018	6.40	.861
2.1	120.	.120	108.0	82.7	.021	6.43	.927
2.4	140.	.140	115.0	88.1	.025	6.45	.983
2.7	160.	.160	121.0	92.7	.029	6.48	1.031
3.0	180.	.180	124.0	95.0	.032	6.50	1.052
3.3	200.	.200	127.0	97.3	.036	6.52	1.074
3.6	220.	.220	127.0	97.3	.039	6.55	1.070

Job No. 14G599

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_0	25.1 %	%	%	%
	Void ratio	e_0				
	Saturation	S_0	%	%	%	%
	Dry density, lb/cu ft	γ_d	100.2			
Time to failure, min		t_f	3.32			
Unconfined compressive strength, T/sq ft		q_u	1.07			
Undrained shear strength, T/sq ft		S_u	.54			
Sensitivity ratio		S_t				
Initial specimen diameter, in.		D_0	2.830			
Initial specimen height, in.		H_0	5.595			

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

LL	54	PL	23	PI	31	G_s	

Remarks

Project Proposed Disposal area for Channel to Victoria Project

Area near Seadrift, Texas

Boring No. 92-57 | Sample No. 3

Depth El 4-6 ft | Date 8/12/92

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 3659

Geotest Engineering, Inc.