U.S. ARMY CORPS OF ENGINEERS

BORING NO. 92-47 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 Troy Mostamand

DEPTH, FEET	SAMPLE	SAMPLE NO.	PEN./TORVANE SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0		1	3.50	DK-Gray	clay	V-stiff	sand	-w/roots
		2	2.00	Light Brown	clay	V.stiff		-w/calc nod
5		3	1.50	Light Brown	clay	Stiff		-w/calc nod & Fest
		4	1.75	Light Brown & gray	clay	stiff		-w/calc nod & Fest
		5	2.75	Light Brown & gray	clay	V.stiff		-w/calc nod & Fest
10		6	3.00	Light Brown & gray	clay	V.stiff		-w/calc nod & Fest
		7	3.50	Yellowish Brown & gray	clay	V.stiff		-w/calc nod & Fest, sand seams & Slickensided 12-14'
15		8	3.25	Yellowish Brown & gray	clay	V.stiff	sand	-w/calc nod & Fest & sand layer at 16'
	X	9	3/4/5	Gray & Yellowish Gray	Sand	loose	silt	
	X	10	2/2/4	"	Sand	loose	silt	
20								Bottom of 92_47(a) 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. 92-47

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	2.25		Dark gray,Clay,Very stiff,Sandy,w/roots	C L	26.9											
2	2-4	2.00		Gray,Clay,Very stiff,w/calcareous nodules	C H	29.2											
3	4-6	1.50		Yellowish gray,Clay,Stiff,w/calcareous nodules and ferrous stains	C H	25.8	100.2	126.0	64	26	100.0	99.7	99.1	98.0	97.8		1.33
4	6-8	2.50		Yellowish gray,Clay,Very stiff,w/calcareous nodules ferrous stains and blocky structure	C H	24.4											
5	8-10	2.00		Yellowish gray,Clay,Very stiff,w/calcareous nodules ferrous stains and blocky structure	C H	30.9											
6	10-12	3.00		Gray&Yellowish gray,Clay,Very stiff,w/calcareous nodules and ferrous stains	C H	26.2											
7	12-14	3.25		Olive gray,Clay,Very stiff,w/calcareous nodules and ferrous stains,Slickensided	C H	26.5			61								
8	14-16	3.00		Gray&Yellowish brown,Clay,Very stiff,Sandy,w/calcareous nodules and ferrous stains	C L	19.0											
9	16.5-18		9	Yellowish gray,Sand,Loose,Silty	S M												
10	18.5-20		6	Yellowish gray,Sand,Loose,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 8/7/92

PROJECT Proposed Disposal area for Channel to Victoria Project

AREA near Seadrift, Texas

BORING NO. 92-47 **SAMPLE NO.** 3 **DEPTH** 4-6 ft

SPECIMEN NO. 1

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

Tare No.	K1-17	Height	5.595 in.
Tare plus Wet Specimen	635.40 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	513.69 gm	Initial Area	6.290 sq in.
Water Weight	121.71 gm	Volume	35.194 cu in.
Tare Weight	42.34 gm	Volume of Solids	cu in.
Wet Specimen	1164.17 gm	Void Ratio	
Dry Specimen	925.25 gm	Saturation	%
Water Content	25.82 %	Dry Density	100.2 lb/cu ft
Specific Gravity of Solids			

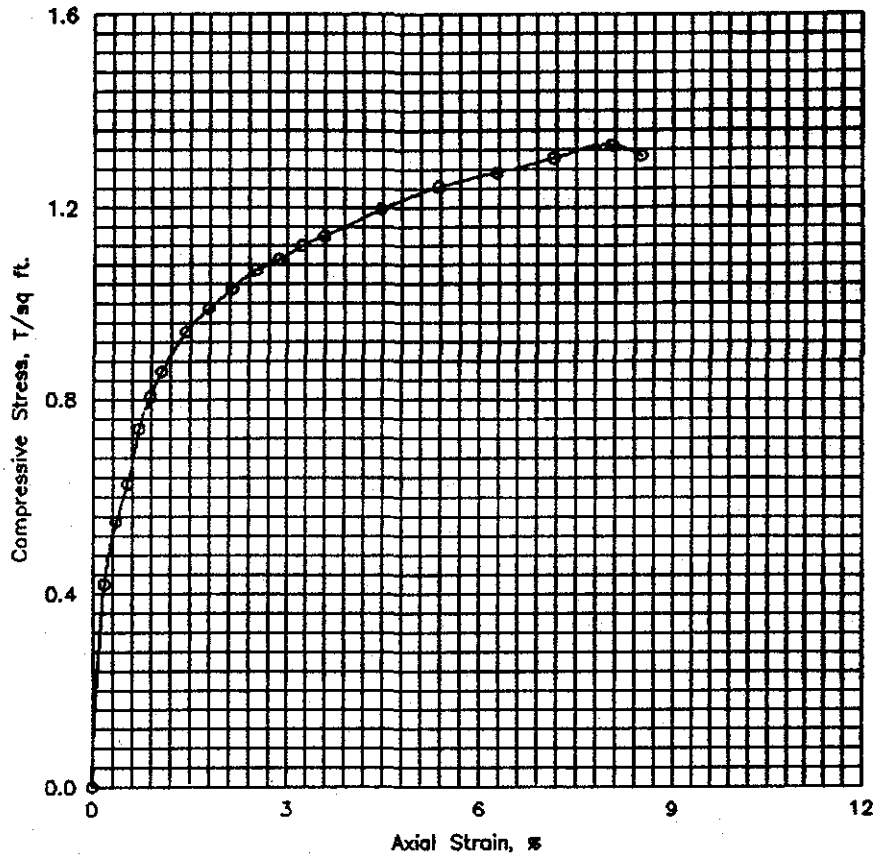
LL = 64 PL = 26 PI = 38

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	48.0	36.8	.002	6.30	.420
.5	20.	.020	63.0	48.3	.004	6.31	.550
.7	30.	.030	72.0	55.2	.005	6.32	.628
.8	40.	.040	85.0	65.1	.007	6.34	.740
1.0	50.	.050	93.0	71.2	.009	6.35	.808
1.1	60.	.060	99.0	75.8	.011	6.36	.859
1.5	80.	.080	109.0	83.5	.014	6.38	.942
1.8	100.	.100	115.0	88.1	.018	6.40	.990
2.2	120.	.120	120.0	91.9	.021	6.43	1.030
2.5	140.	.140	125.0	95.8	.025	6.45	1.069
2.8	160.	.160	128.0	98.0	.029	6.48	1.090
3.2	180.	.180	132.0	101.1	.032	6.50	1.120
3.5	200.	.200	135.0	103.4	.036	6.52	1.141
4.3	250.	.250	143.0	109.5	.045	6.58	1.198
5.1	300.	.300	150.0	114.9	.054	6.65	1.245
5.9	350.	.350	155.0	118.7	.063	6.71	1.274
6.7	400.	.400	160.0	122.6	.071	6.77	1.303
7.5	450.	.450	165.0	126.4	.080	6.84	1.330
7.9	475.	.475	163.0	124.9	.085	6.87	1.308

Job No. 14G599

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_0	25.8 %	%	%	%
	Void ratio	e_0				
	Saturation	S_0	%	%	%	%
	Dry density, lb/cu ft	γ_d	100.2			
Time to failure, min		t_f	7.53			
Unconfined compressive strength, T/sq ft		q_u	1.33			
Undrained shear strength, T/sq ft		S_u	.67			
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

LL	64	PL	26	PI	38	G_s	

Remarks

Project Proposed Disposal area for Channel to Victoria Project

Area near Seadrift, Texas

Boring No. 92-47 | Sample No. 3

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

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 3659

Geotest Engineering, Inc.