2-30

U.S. ARMY CORPS OF ENGINEERS

BORING NO. 92-56 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 40+00
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 Fray 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		
5		3	0.75	Gray	clay	M.stiff		-w/calc nod & Fe st
		4	1.75	Gray & Y. Brown	Clay	Stiff	Sand	-w/calc nod & Fe st
		5	1.50	Gray & Yellowish Brown	clay	stiff	Sand	-w/calc nod
10		6	2.50	Gray & Yellowish Brown	Clay	V.stiff	Sand	-w/calc nod & Fe st
		7	3.50	Gray & Y Brown	clay	V.stiff	Sand	-w/calc nod & Fe st
15		8	4.5+	Gray & Y Brown	Clay	Hard	Sand	-w/calc nod & Fe st
		9	4.5+	Yellowish Brown & Gray	clay	Hard	Sand	-w/calc nod & Fe st
		10	4.5+	Yellowish Brown & Gray	clay	Hard	Sand	-w/calc nod & Fe st
20								Bottom of 92-56 @ 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. 92-56

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	12.4											
2	2-4	1.25		Gray,Clay,Stiff,w/calcareous nodules and ferrous stains and sand pockets	C H	29.9	92.9	120.7	59	23	99.8	99.2	98.2	96.7	93.6		1.04
3	4-6	1.25		Gray&Yellowish gray,Clay,Stiff,w/calcareous nodules and ferrous stains	C H	29.8											
4	6-8	1.75		Yellowish gray,Clay,Stiff,Sandy,w/calcareous nodules	C L	19.0											
5	8-10	2.00		Yellowish brown,Clay,Very stiff,Sandy,w/calcareous nodules and ferrous stains	C L	20.9											
6	10-12	2.50		Yellowish brown,Clay,Very stiff,Sandy,w/calcareous nodules and ferrous stains	C L	19.9	110.2	132.1	44								
7	12-14	4.5+		Yellowish brown,Clay,Hard,Sandy,w/calcareous nodules and ferrous stains	C L	23.1											
8	14-16	4.5+		Yellowish brown,Clay,Hard,Silty,w/calcareous nodules ferrous stains & sand seams,Slickensided	C L	20.2											
9	16-18	4.5+		Yellowish brown,Clay,Hard,Silty,w/calcareous nodules ferrous stains and sand seams	C L	20.0											
10	18-20	4.5+		Yellowish brown,Clay,Hard,Silty,w/calcareous nodules ferrous stains and sand seams	C L	22.0											

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. 92-56 **SAMPLE NO.** 2 **DEPTH** 2-4 ft

SPECIMEN NO. 1

CLASSIFICATION
Gray,Clay,stiff,w/calcareous nodules ferrous stains and sand pockets

Tare No.	P20	Height	5.595 in.
Tare plus Wet Specimen	498.88 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	393.91 gm	Initial Area	6.290 sq in.
Water Weight	104.97 gm	Volume	35.194 cu in.
Tare Weight	42.54 gm	Volume of Solids	cu in.
Wet Specimen	1115.06 gm	Void Ratio	
Dry Specimen	858.57 gm	Saturation	%
Water Content	29.87 %	Dry Density	92.9 lb/cu ft
Specific Gravity of Solids			

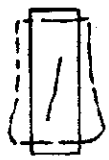
LL = 59 PL = 23 PI = 36

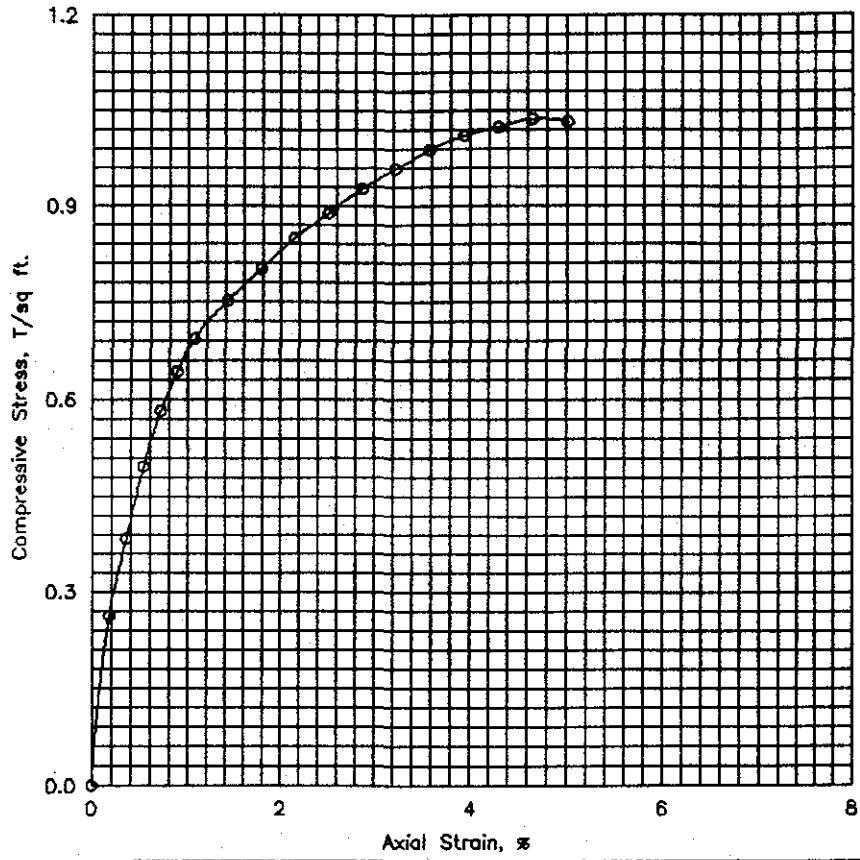
Proving Ring No. 10170
Proving Ring Constant, K = .766 lbs/div.

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	30.0	23.0	.002	6.30	.263
.4	20.	.020	44.0	33.7	.004	6.31	.384
.6	30.	.030	57.0	43.7	.005	6.32	.497
.8	40.	.040	67.0	51.3	.007	6.34	.583
.9	50.	.050	74.0	56.7	.009	6.35	.643
1.1	60.	.060	80.0	61.3	.011	6.36	.694
1.4	80.	.080	87.0	66.6	.014	6.38	.752
1.7	100.	.100	93.0	71.2	.018	6.40	.801
2.1	120.	.120	99.0	75.8	.021	6.43	.849
2.4	140.	.140	104.0	79.7	.025	6.45	.889
2.7	160.	.160	109.0	83.5	.029	6.48	.928
3.0	180.	.180	113.0	86.6	.032	6.50	.959
3.3	200.	.200	117.0	89.6	.036	6.52	.989
3.6	220.	.220	120.0	91.9	.039	6.55	1.011
3.9	240.	.240	122.0	93.5	.043	6.57	1.024
4.2	260.	.260	124.0	95.0	.046	6.60	1.037
4.5	280.	.280	124.0	95.0	.050	6.62	1.033

Job No. 14G599

Failure Sketches





☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_o	29.9 %	%	%	%
	Void ratio	e_o				
	Saturation	S_o	%	%	%	%
	Dry density, lb/cu ft	γ_d	92.9			
Time to failure, min		t_f	4.18			
Unconfined compressive strength, T/sq ft		q_u	1.04			
Undrained shear strength, T/sq ft		S_u	.52			
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/calcareous nodules ferrous stains 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. 92-56 | Sample No. 2

Depth El 2-4 ft | Date 8/12/92

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 3659

PLATE XI-2

Geotest Engineering, Inc.

PLATE