U.S. ARMY CORPS OF ENGINEERS

BORING NO. 92-54 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 Texas, sta 60+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 Iraj 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	1.00	Gray	Clay	Stiff		
5		3	1.25	Gray & Brown	Clay	Stiff		-w/calc nod
		4	1.50	Yellowish Gray	Clay	Stiff	Sand, Silt	-w/calc nod
		5	0.25	Yellowish Gray	Clay	Stiff	Sand, Silt	-w/sand pokets & sand seams
10		6	NA	Gray	Sand		Silt	*Encounter water @ 10'
	X	7	8/8/9	Gray	Sand	M. Dens	Silt	
15								
	X	8	9/8/8	Gray	Sand	M. Dense	Silt	
20	X	9	6/7/8	Gray	Sand	M. Dens	Silt	
								Bottom of 92-54 @ 21'
								-water level @ End of Drilling -6'
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. 92-54

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	12.9											
2	2-4	0.50		Gray,Clay,Medium stiff,w/calcareous nodules and sand pockets	C H	35.4	85.4	115.6	62	25	100.0	99.3	98.8	98.4	97.8		0.44
3	4-6	1.25		Gray&Yellowish gray,Clay,Stiff,w/calcareous nodules and ferrous stains	C H	28.0											
4	6-8	3.00		Yellowish gray,Clay,Very stiff,Silty,w/calcareous nodules and ferrous stains	C L	21.4			49								
5	8-10	0.25		Yellowish gray,Clay,Soft,Silty,w/soft calcareous nodules and sand pockets	C L	25.3											
6	10-12			Yellowish gray,Sand,Medium dense,Silty,w/clay seams	S M												
7	12.5-14		17	Yellowish gray,Sand,Medium dense,Silty	S M						100.0	99.9	99.9	76.1	28.1		
8	17.5-19		16	Yellowish gray,Sand,Medium dense,Silty	S M												
9	19.5-21		15	Yellowish gray,Sand,Medium 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 8/12/92

PROJECT Proposed Disposal area for Channel to Victoria Project

AREA near Seadrift, Texas

BORING NO. 92-54 **SAMPLE NO.** 2 **DEPTH** 2-4 ft

SPECIMEN NO. 1

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

Tare No.	P222	Height	5.595 in.
Tare plus Wet Specimen	608.68 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	460.70 gm	Initial Area	6.290 sq in.
Water Weight	147.98 gm	Volume	35.194 cu in.
Tare Weight	42.73 gm	Volume of Solids	cu in.
Wet Specimen	1068.34 gm	Void Ratio	
Dry Specimen	789.00 gm	Saturation	%
Water Content	35.40 %	Dry Density	85.4 lb/cu ft
Specific Gravity of Solids			

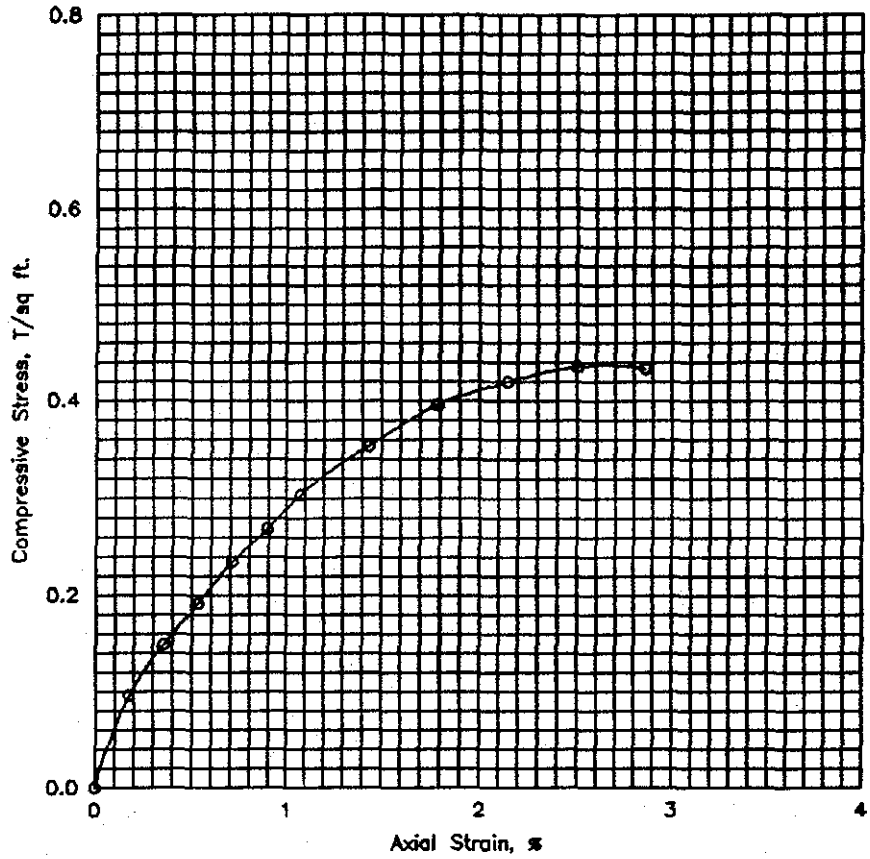
LL = 62 PL = 25 PI = 37

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	11.0	8.4	.002	6.30	.096
.4	20.	.020	17.0	13.0	.004	6.31	.149
.5	30.	.030	22.0	16.9	.005	6.32	.192
.7	40.	.040	27.0	20.7	.007	6.34	.235
1.9	50.	.050	31.0	23.7	.009	6.35	.269
1.1	60.	.060	35.0	26.8	.011	6.36	.304
1.4	80.	.080	41.0	31.4	.014	6.38	.354
1.6	100.	.100	46.0	35.2	.018	6.40	.396
1.9	120.	.120	49.0	37.5	.021	6.43	.420
2.2	140.	.140	51.0	39.1	.025	6.45	.436
2.5	160.	.160	51.0	39.1	.029	6.48	.434

Job No. 14G599

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_o	35.4 %	%	%	%
	Void ratio	e_o				
	Saturation	S_o	%	%	%	%
	Dry density, lb/cu ft	γ_d	85.4			
Time to failure, min		t_f	2.23			
Unconfined compressive strength, T/sq ft		q_u	.44			
Undrained shear strength, T/sq ft		S_u	.22			
Sensitivity ratio		S_t				
Initial specimen diameter, in.		D_o	2.830			
Initial specimen height, in.		H_o	5.595			

Classification Gray,Clay,Medium stiff,w/calcareous nodules and sand pockets

LL	62	PL	25	PI	37	G_s	

Remarks

Project Proposed Disposal area for Channel to Victoria Project

Area near Seadrift, Texas

Boring No. 92-54 | Sample No. 2

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

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 3659

Geotest Engineering, Inc.

PLATE XI-2

PLATE