U.S. ARMY CORPS OF ENGINEERS

BORING NO. 92-42 DATE: BEGIN 7-30-92 PAGE 1 / 1
JOB NO. 146549 COMPLETE _____ 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 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	Sand	-w/roots
		2	1.50	Brown	clay	stiff	Sand	-w/calc nod & Fest
5		3	1.25	Brown	clay	stiff	Sand	-w/calc nod & Fest
		4	1.50	Brown	clay	M. stiff	Sand	-w/calc nod & Fest
		5		Gray & Brown	sand		clay	-w/sand at bottom of sample
10	X	6	2/3/3	Gray & Brown	Sand	loose	silt	
15	X	7	4/5/6	Gray & Y Gray	Sand	M. Dense	silt	-w/sand stone
	X	8	6/11/10	Gray	Sand	M. Dens.	silt	
20								Bottom of 92-42 @ 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. 92-42

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	7.1											
2	2-4	3.75		Yellowish gray,Clay,Very stiff,Sandy,w/calcareous nodules and and ferrous stains	C L	16.9											
3	4-6	1.50		Yellowish gray,Clay,Stiff,Sandy,w/calcareous nodules and ferrous stains	C L	21.4	105.3	127.8	40	18	100.0	99.0	98.0	96.4	77.2		1.17
4	6-8	0.50		Yellowish gray,Clay,Medium stiff,Sandy,w/calc-reous nodules and ferrous stains	C L	23.5											
5	8-10			Yellowish gray,Sand,Loose,Silty	S M												
6	10.5-12		6	Yellowish gray,Sand,Loose,Silty	S M						100.0	99.2	97.9	84.4	34.1		
7	13.5-15		11	Yellowish gray,Sand,Medium dense,Silty	S M												
8	18.5-20		21	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 8/7/92

PROJECT Proposed Disposal area for Channel to Victoria Project

AREA near Seadrift, Texas

BORING NO. 92-42 **SAMPLE NO.** 3 **DEPTH** 4-6 ft

SPECIMEN NO. 1

CLASSIFICATION
Yellowish gray,Clay,Stiff,Sandy,w/calcareous nodules&ferrous stains

Tare No.	K1-5	Height	5.595 in.
Tare plus Wet Specimen	650.20 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	543.12 gm	Initial Area	6.290 sq in.
Water Weight	107.08 gm	Volume	35.194 cu in.
Tare Weight	42.47 gm	Volume of Solids	cu in.
Wet Specimen	1180.80 gm	Void Ratio	
Dry Specimen	972.75 gm	Saturation	%
Water Content	21.39 %	Dry Density	105.3 lb/cu ft
Specific Gravity of Solids			

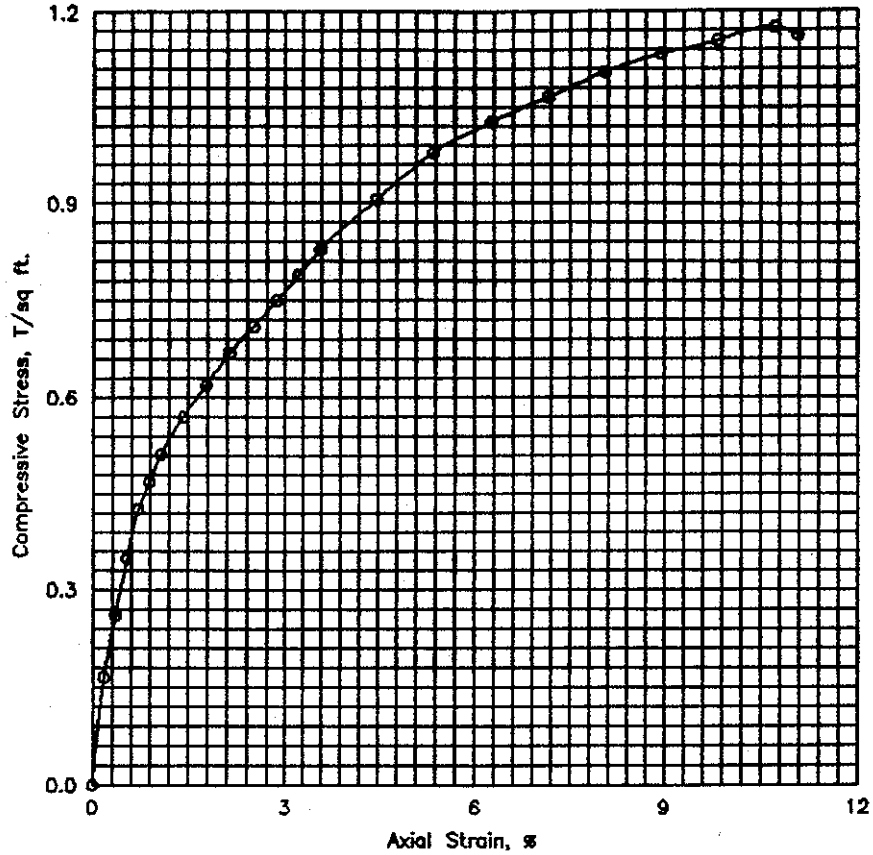
LL = 40 PL = 18 PI = 22

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	19.0	14.6	.002	6.30	.166
.4	20.	.020	30.0	23.0	.004	6.31	.262
.6	30.	.030	40.0	30.6	.005	6.32	.349
.8	40.	.040	49.0	37.5	.007	6.34	.427
.9	50.	.050	54.0	41.4	.009	6.35	.469
1.1	60.	.060	59.0	45.2	.011	6.36	.512
1.5	80.	.080	66.0	50.6	.014	6.38	.570
1.8	100.	.100	72.0	55.2	.018	6.40	.620
2.1	120.	.120	78.0	59.7	.021	6.43	.669
2.5	140.	.140	83.0	63.6	.025	6.45	.710
2.8	160.	.160	88.0	67.4	.029	6.48	.750
3.1	180.	.180	93.0	71.2	.032	6.50	.789
3.5	200.	.200	98.0	75.1	.036	6.52	.829
4.3	250.	.250	108.0	82.7	.045	6.58	.905
5.2	300.	.300	118.0	90.4	.054	6.65	.979
5.9	350.	.350	125.0	95.8	.063	6.71	1.027
6.7	400.	.400	131.0	100.3	.071	6.77	1.066
7.5	450.	.450	137.0	104.9	.080	6.84	1.105
8.3	500.	.500	142.0	108.8	.089	6.91	1.134
9.1	550.	.550	146.0	111.8	.098	6.98	1.154
9.9	600.	.600	150.0	114.9	.107	7.05	1.174
10.3	620.	.620	149.0	114.1	.111	7.07	1.162

Job No. 140599

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_0	21.4 %	%	%	%
	Void ratio	e_0				
	Saturation	S_0	%	%	%	%
	Dry density, lb/cu ft	γ_d	105.3			
Time to failure, min		t_f	9.88			
Unconfined compressive strength, T/sq ft		q_u	1.17			
Undrained shear strength, T/sq ft		S_u	.59			
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,Sandy,w/calcareous nodules&ferrous stains

LL	40	PL	18	PI	22	G_s	

Remarks

Project Proposed Disposal area for Channel to Victoria Project

Area near Seadrift, Texas

Boring No. 92-42 | Sample No. 3

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

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 3659

PLATE XI-2

Geotest Engineering, Inc.

PLATE