U.S. ARMY CORPS OF ENGINEERS

BORING NO. 92-48 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 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	4.5T	DK. Gray	clay	Hard		-w/roots
		2	0.75	Gray	clay	M.stiff		-w/calc nod
5		3	0.50	Gray & Brown	clay	M.stiff		-w/calc nod & Fe st
		4	1.00	Gray & Y. Brown	clay	stiff		-w/calc nod & Fe st, slickensided
		5	1.75	Gray & Y. Brown	clay	stiff		-w/calc nod & Fe st, slickensided
10		6	2.00	Yellowish Brown	clay	V-stiff		-w/calc nod & Fe st, slickensided
		7	NA	Gray	Sand		silt	
15	X	8	6/8/11	Gray	Sand	M.Dense	silt	
	X	9	8/12/14	Gray	Sand	M.Dense	silt	
20								Bottom of 92-48 @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. 92-48

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 #4	#10	#40	#100	#200	Torvane Shear Strength (tsf)	qu (tsf)
1	0-2	4.5+		Dark gray,Clay,Hard,w/roots	C H	19.5											
2	2-4	1.25		Gray,Clay,Stiff,w/calcareous nodules and roots	C H	39.3										0.65	
3	4-6	0.50		Gray,Clay,Medium stiff,w/calcareous & ferrous nodules	C H	44.3	76.5	110.4	85	30	99.8	98.5	97.5	97.2	97.1	0.30	0.49
4	6-8	1.50		Olive gray,Clay,Stiff,w/calcareous nodules and ferrous stains,Slickensided	C H	39.6										0.75	
5	8-10	2.25		Olive gray,Clay,Very stiff,w/calcareous nodules and ferrous stains,Slickensided	C H	31.1											
6	10-12	2.75		Olive gray,Clay,Very stiff,w/calcareous nodules and ferrous stains,Slickensided	C H	25.3											
7	12-14			Gray,Sand,Medium dense,Silty	S M												
8	14.5-16		19	Gray,Sand,Medium dense,Silty	S M												
9	18.5-20		26	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. 92-48 SAMPLE NO. 3 DEPTH 4-6 ft

SPECIMEN NO. 1

CLASSIFICATION
Gray,Clay,Medium stiff,w/calc nod & fe nod

Tare No.	P215	Height	5.595 in.
Tare plus Wet Specimen	613.67 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	438.20 gm	Initial Area	6.290 sq in.
Water Weight	175.47 gm	Volume	35.194 cu in.
Tare Weight	42.44 gm	Volume of Solids	cu in.
Wet Specimen	1020.54 gm	Void Ratio	
Dry Specimen	707.05 gm	Saturation	%
Water Content	44.34 %	Dry Density	76.5 lb/cu ft
Specific Gravity of Solids			

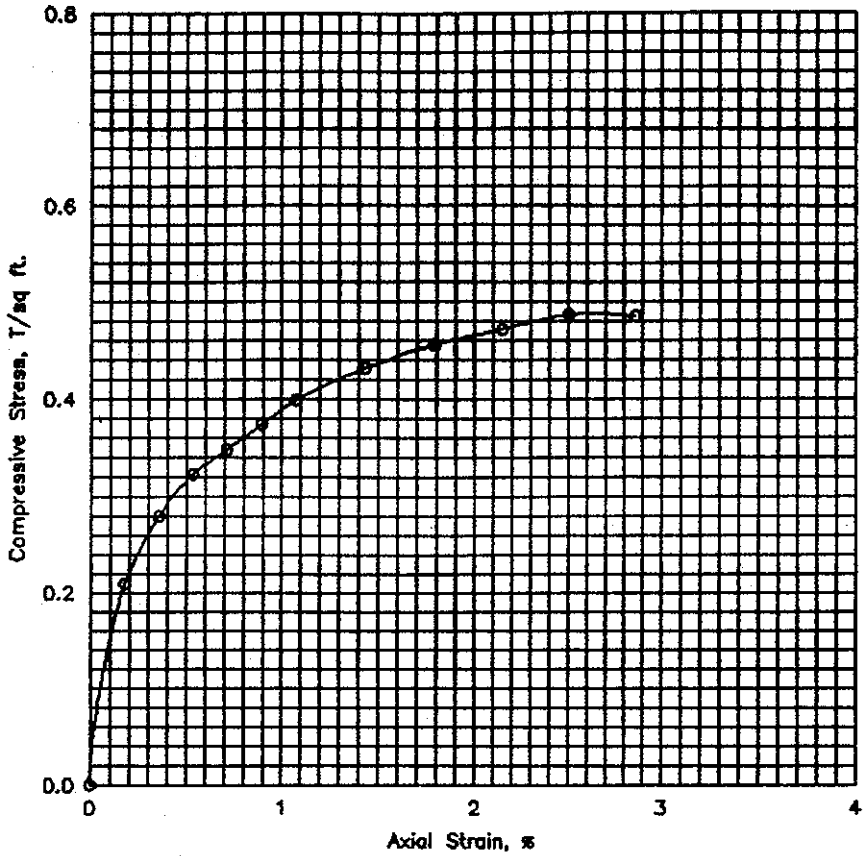
LL = 85 PL = 30 PI = 55

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	24.0	18.4	.002	6.30	.210
.3	20.	.020	32.0	24.5	.004	6.31	.280
.5	30.	.030	37.0	28.3	.005	6.32	.323
.7	40.	.040	40.0	30.6	.007	6.34	.348
.8	50.	.050	43.0	32.9	.009	6.35	.374
1.0	60.	.060	46.0	35.2	.011	6.36	.399
1.3	80.	.080	50.0	38.3	.014	6.38	.432
1.6	100.	.100	53.0	40.6	.018	6.40	.456
1.9	120.	.120	55.0	42.1	.021	6.43	.472
2.2	140.	.140	57.0	43.7	.025	6.45	.487
2.5	160.	.160	57.0	43.7	.029	6.48	.485

Job No. 14G599

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_o	44.3 %	%	%	%
	Void ratio	e_o				
	Saturation	S_o	%	%	%	%
	Dry density, lb/cu ft	γ_d	76.5			
Time to failure, min		t_f	2.23			
Unconfined compressive strength, T/sq ft		q_u	.49			
Undrained shear strength, T/sq ft		S_u	.24			
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/calc nod & fe nod

LL	85	PL	30	PI	55	G_s	

Remarks

Project Proposed Disposal area for Channel to Victoria Project

Area near Seadrift, Texas

Boring No. 92-48 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