U.S. ARMY CORPS OF ENGINEERS

BORING NO. 95-135 DATE: BEGIN 6-3-95 PAGE 1 / 1
JOB NO. 94G799-15 COMPLETE 6-3-95 Thin Walled Tube
PROJECT Channel To Victoria ■ 3" □ 6"
LOCATION Disposal Area NO. 6
ELEVATION OF HOLE
MANUFACTURER'S DESIGNATION OF DRILL RIG Ardco K4X4, C-1000, Marsh Buggy
GROUNDWATER: DEPTH 0 ft., ELEV. ft., at end of Drilling
WEATHER Sunny & Hot
DRILLER Scott Gregurek 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	1.25	DK-gray	clay	stiff		-w/roots
		2	1.75	DK-gray	clay	stiff		
5		3	4.5+	Yellowish gray	clay	Hard		-w/calc nod & Fest
		4	4.5+	Yellowish gray	clay	Hard		-w/calc nod & Fest & Sas
		5	4.0	Yellowish Brown	clay	V. stiff		-w/calc nod & Fest, slickensided
10		6	2.75	Yellowish Brown	clay	V. stiff		-w/calc nod & Fest, SLS
		7	2.00	Yellowish Brown	clay	V. stiff		-w/silt layer, slickensided
15		8	2.75	Yellowish Brown	clay	V. stiff	silty	-w/Fest & sand sms
		9	4.00	Yellowish Brown	clay	V. stiff	silty	-w/Fest & Sa sms
		10	4.5+	Yellowish Brown	clay	Hard	silty	-w/calc nod & Fest, sa sms
20		11	4.5+	Yellowish Brown	clay	Hard	silty	-w/calc nod & Fest
		12	4.5+	Yellowish Brown	clay	Hard	silty	-w/silt layer
25		13	4.5+	Yellowish Brown	clay	Hard	silty	-w/calc nod & silt layer
30								
35								

GEOTEST ENGINEERING, INC.

Project: Channel to Victoria

Seadrift, Texas

Contract No. DACW64-94-D-0015 Delivery Order No. 0018

SUMMARY OF LABORATORY TEST RESULTS

Boring No. 95-135

S #	Depth (ft)	P P (tsf)	SPT Blows per Foot	Visual Classification	U S C	Mc (%)	Dry Unit Wt (pcf)	Wet Unit Wt (pcf)	L L (%)	PL (%)	Mechanical Analysis % Passing					Torvane Shear Strength (tsf)	q u (tsf)
											#4	#10	#40	#100	#200		
1	0 - 2	1.25		Clay,w/roots,Stiff,Dark gray	CH	21.1											
2	2 - 4	1.75		Clay,Stiff,Dark gray	CH	17.5	111.7	131.2	57.0	21.0	100.0	99.2	96.3	91.0	90.2		1.15
3	4 - 6	4.5+		Clay,w/calcareous nodules & ferrous stains, Hard,Yellowish gray	CH	17.7											
4	6 - 8	4.5+		Clay,w/calcareous nodules & ferrous stains & sand seams,Hard,Yellowish gray	CH	14.4											
5	8 - 10	4.00		Clay,w/calcareous nodules & ferrous stains, slickensided,Very stiff,Yellowish brown	CH	18.2	110.1	130.1	53.0	23.0							
6	10 - 12	2.75		Clay,w/calcareous nodules & ferrous stains, slickensided,Very stiff,Yellowish brown	CH	22.6											
7	12 - 14	2.00		Clay,w/silt layer,slickensided,Very stiff, Yellowish brown	CH	20.4			54.0	23.0							
8	14 - 16	2.75		Silty Clay,w/ferrous stains & sand seams, Very stiff,Yellowish brown	CL	18.7											
9	16 - 18	4.00		Silty Clay,w/ferrous stains & sand seams, Very stiff,Yellowish brown	CL	18.9											
10	18 - 20	4.5+		Silty Clay,w/calcareous nodules & ferrous stains & sand seams,Hard,Yellowish brown	CL	14.8			38.0	18.0							
11	20 - 22	4.5+		Silty Clay,w/calcareous nodules & ferrous stains,Hard,Yellowish brown	CL	15.1											
12	22 - 24	4.5+		Silty Clay,w/silt layer,Hard,Yellowish brown	CL	16.0											
13	24 - 26	4.5+		Silty Clay,w/calcareous nodules & silt layer, Hard,Yellowish brown	CL	16.8											

S # : Sample Number, P P : Pocket Penetrometer Reading, U S C : Unified Soil Classifcation, M c : Moisture Content
q u : Unconfined Compressive Strength, W O H : Weight of hammer, W O P : Weight of Pipe

JOB NO. 94G799-18 DATE 6/27/95

PROJECT Channel to Victoria

AREA Seadrift, Texas

BORING NO. 95-135 SAMPLE NO. 2 DEPTH 2-4 ft

SPECIMEN NO. 1

CLASSIFICATION
Clay,Stiff,Dark gray

Tare No.	56F	Height	5.595 in.
Tare plus Wet Specimen	116.36 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	103.38 gm	Initial Area	6.290 sq in.
Water Weight	12.98 gm	Volume	35.194 cu in.
Tare Weight	29.01 gm	Volume of Solids	cu in.
Wet Specimen	1212.41 gm	Void Ratio	
Dry Specimen	1032.25 gm	Saturation	%
Water Content	17.45 %	Dry Density	111.7 lb/cu ft

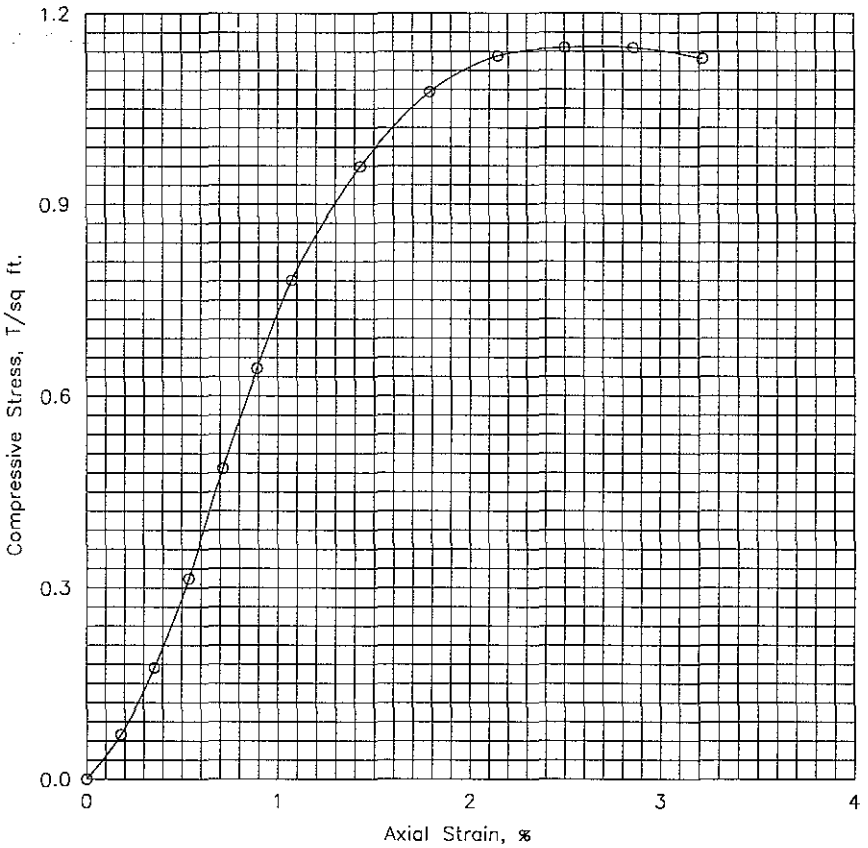
Specific Gravity of Solids
LL = 57 PL = 21 PI = 36

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	8.0	6.1	.002	6.30	.070
.4	20.	.020	20.0	15.3	.004	6.31	.175
.6	30.	.030	36.0	27.6	.005	6.32	.314
.8	40.	.040	56.0	42.9	.007	6.34	.487
.9	50.	.050	74.0	56.7	.009	6.35	.643
1.1	60.	.060	90.0	68.9	.011	6.36	.781
1.5	80.	.080	111.0	85.0	.014	6.38	.959
1.8	100.	.100	125.0	95.8	.018	6.40	1.076
2.1	120.	.120	132.0	101.1	.021	6.43	1.133
2.5	140.	.140	134.0	102.6	.025	6.45	1.146
2.8	160.	.160	134.5	103.0	.029	6.48	1.146
3.1	180.	.180	133.0	101.9	.032	6.50	1.129

Job No. 94G799-18

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_0	17.5 %	%	%	%
	Void ratio	e_0				
	Saturation	S_0	%	%	%	%
	Dry density, lb/cu ft	γ_d	111.7			
Time to failure, min		t_f	2.80			
Unconfined compressive strength, T/sq ft		q_u	1.15			
Undrained shear strength, T/sq ft		S_u	.57			
Sensitivity ratio		S_t				
Initial specimen diameter, in.		D_0	2.830			
Initial specimen height, in.		H_0	5.595			

Classification Clay,Stiff,Dark gray

LL	57	PL	21	PI	36	G_s	

Remarks

Project Channel to Victoria

Area Seadrift, Texas

Boring No. 95-135 | Sample No. 2

Depth El 2-4 ft | Date 6/27/95

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 3659
1 JUN 65

PLATE XI-2