U.S. ARMY CORPS OF ENGINEERS

BORING NO. 90-201 DATE: BEGIN [illegible] PAGE 1 / 1
JOB NO. 146437 COMPLETE [illegible] Thin Walled Tube
PROJECT Victoria Channel ☑ 3" ☐ 6"
LOCATION Sea Drift
ELEVATION OF HOLE
MANUFACTURER'S DESIGNATION OF DRILL RIG Failing 36
GROUNDWATER: DEPTH 6' ft., ELEV. ____ ft., at end of Drilling
WEATHER Clear, Warm
DRILLER D. Mitchell LOGGER J. Berg

DEPTH, FEET	SAMPLE	SAMPLE NO.	PEN./TORVANE SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0		1	4.5+	GRAY	CLAY	hard	Sand	w/Roots
		2	4.5+	"	"	"		
5		3	4.5+	"	"	"	Sand	
		4	4.5+	TAN	CLAY	"	"	
		5	4.5+	TAN & GRAY	"	"	"	
10								Sand at 10.5'
JAR	X	6	7/11/15	TAN	Sand	Medium Dense		
JAR	X	7	9/14/19	"	"	Dense		
15								
JAR	X	8	7/12/17	TAN	Sand	Medium Dense		
20								
								Clay at 21.5'
		9	2.25	GRAY + TAN	CLAY	Very Stiff	Sand	w/calc Nod.
25		10	4.0	"	"	"		w/ " "
								Bottom of 90-201 (26')
30								
35								

Project : Disposal Area B, Channel to Victoria near Seadrift, Texas

SUMMARY OF LABORATORY TEST RESULTS

Boring No. 90-201

Contract No. DACW64-91-D-0001 Delivery Order No. 0013

S #	Depth (ft)	P P (tsf)	SPT Blows per Foot	Visual Classification	U S C	M c (%)	Dry Unit Wt (pcf)	Wet Unit Wt (pcf)	L L (%)	P L (%)	Mechanical Analysis % Passing #4	#10	#40	#100	#200	Torvane Shear Strength (tsf)	q u (tsf)
1	0-2	4.5+		Dark gray,Clay,Hard,Sandy	CL	13.9											
2	2-4	4.5+		Dark gray,Clay,Hard	CH	17.4			56	24							
3	4-6	4.5+		Gray,Clay,Hard,Sandy,w/sand pockets	CL	21.1											
4	6-8	4.5+		Yellowish brown,Clay,Hard,Sandy,w/ferrous stains	CL	13.4	114.8	130.3	35	18	100.0	100.0	93.4		66.4		4.67
5	8-10	4.5+		Yellowish brown,Clay,Hard,Sandy,w/ferrous nodules	CL	20.6											
6	10.5-12		26	Yellowish brown,Sand,Medium dense,Silty	S M						100.0	100.0	100.0		39.0		
7	13.5-15		33	Yellowish brown,Sand,Dense,Silty	S M												
8	18.5-20		29	Yellowish brown,Sand,Medium dense,Silty	S M												
9	22-24	1.50		Yellowish brown,Clay,Stiff,Sandy,w/calcareous nodules	CL	19.1			27								
10	24-26	2.00		Yellowish brown,Clay,Very stiff,Sandy,w/calcareos nodules	CL	18.8											

S # : Sample Number, P P : Pocket Penetrometer Reading, U S C : Unified Soil Classification, M c : Moisture Content

q u : Unconfined Compressive Strength, W O H : Weight of hammer, W O P : Weight of pipe

JOB NO. 14G475 DATE 5/31/91

PROJECT DISPOSAL AREA B, CHANNEL TO VICTORIA, NEAR SEADRIFT, TX

BORING NO. 90-201 SAMPLE NO. 4 DEPTH 6-8 ft

SPECIMEN NO. 1

CLASSIFICATION
Yellowish brown, clay, hard, sandy, w/ ferrous stains

Tare No.	P-12	Height	5.595 in.
Tare plus Wet Specimen	527.17 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	469.77 gm	Initial Area	6.290 sq in.
Water Weight	57.40 gm	Volume	35.194 cu in.
Tare Weight	42.65 gm	Volume of Solids	cu in.
Wet Specimen	1203.43 gm	Void Ratio	
Dry Specimen	1060.86 gm	Saturation	%
Water Content	13.44 %	Dry Density	114.8 lb/cu ft
Specific Gravity of Solids			

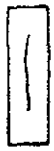
LL = 35 PL = 18 PI = 17

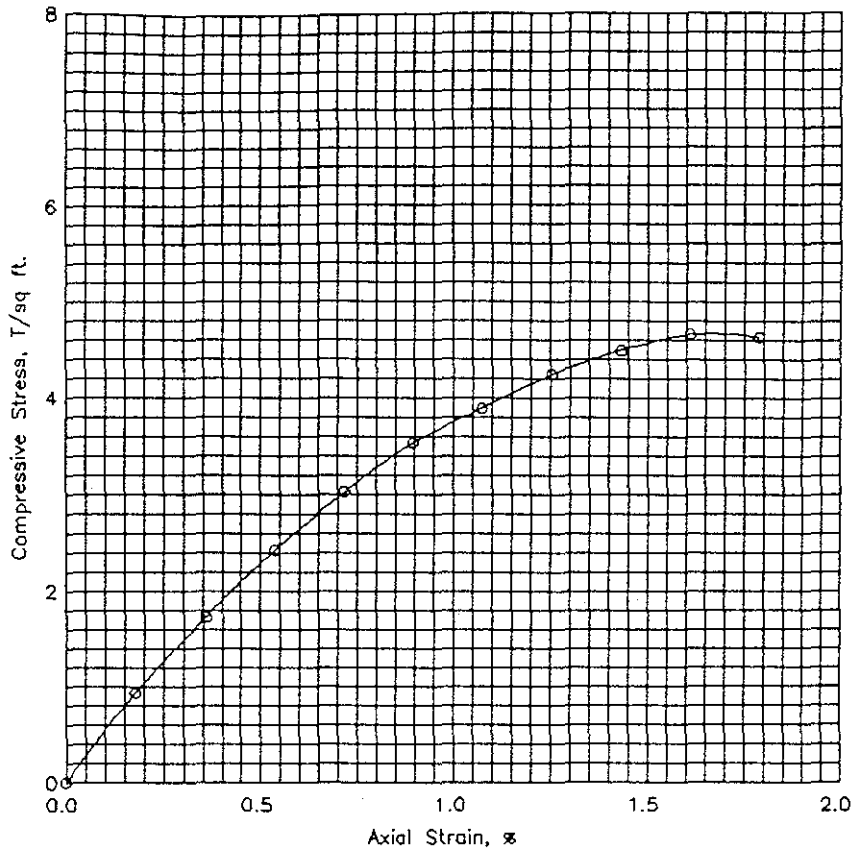
Proving Ring No. 10170
Proving Ring Constant, K = .766 lbs/div.

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
.5	10.	.010	107.0	82.0	.002	6.30	.936
.8	20.	.020	198.0	151.7	.004	6.31	1.730
1.1	30.	.030	279.0	213.7	.005	6.32	2.433
1.4	40.	.040	348.0	266.6	.007	6.34	3.029
1.6	50.	.050	407.0	311.8	.009	6.35	3.537
1.8	60.	.060	449.0	343.9	.011	6.36	3.895
2.0	70.	.070	490.0	375.3	.013	6.37	4.243
2.3	80.	.080	520.0	398.3	.014	6.38	4.494
2.4	90.	.090	541.0	414.4	.016	6.39	4.667
2.6	100.	.100	538.0	412.1	.018	6.40	4.633

Job No. 14G475

Failure Sketches





☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_o	13.4 %	%	%	%
	Void ratio	e_o				
	Saturation	S_o	%	%	%	%
	Dry density, lb/cu ft	γ_d	114.8			
Time to failure, min		t_f	2.42			
Unconfined compressive strength, T/sq ft		q_u	4.67			
Undrained shear strength, T/sq ft		S_u	2.33			
Sensitivity ratio		S_t				
Initial specimen diameter, in.		D_o	2.830			
Initial specimen height, in.		H_o	5.595			

Classification Yellowish brown, clay, hard, sandy, w/ ferrous stains

LL	35	PL	18	PI	17	G_s	

Remarks

Project DISPOSAL AREA B, CHANNEL TO VICTORIA

Area Near Seadrift, Texas

Boring No. 90-201 | Sample No. 4

Depth El 6-8 ft | Date 5/31/91

UNCONFINED COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 3659

PLATE XI-2

Geotest Engineering, Inc.

PLATE