

U.S. ARMY CORPS OF ENGINEERS

DEPTH, FEET		SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	BORING NO.	DATE: BEGIN	PAGE	THIN WALLED TUBE
					90-194	4-25-77	1 / 1	
					146437	COMPLETE		
					Victoria Channel			☒ 3" ☐ 6"
					Sea Drift			
					ELEVATION OF HOLE			
					MANUFACTURER'S DESIGNATION OF DRILL RIG	Trailing-36		
					GROUNDWATER: DEPTH	6'4" ft.,	ELEV.	ft., at end of Drilling
					WEATHER	Cloudy, warm		
					DRILLER	D. Mitchell	LOGGER	J. Berg
		COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS		
0		1	4.5'	GRAY	CLAY	hard		
JAR		2	4.5'	"	"	very stiff		unable to push TUBE Drive Spoon
		3	0.5'	GRAY TAN	"	hard		
5		4	4.5'	"	"	"		TAND AT 8'
JAR		5	7/11	TAN	Sand	medium Dense		
10								
JAR		6	6/10/14	TAN	"	"		
15								
JAR		7	8/11/16	"	"	medium Dense		w/CLAY BALLS + Calc. Nods.
20								
		8	3.5'	GRAY TAN	clay	very stiff		CLAY AT 22'
25		9	3.0'	TAN GRAY	clay	very stiff		w/CALC. NODS.
								Bottom of 90-194 (26')
30								
35								

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

SUMMARY OF LABORATORY TEST RESULTS

Boring No. 90-194

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)	LL (%)	P L (%)	Mechanical Analysis % Passing					Torvane Shear Strength (tsf)	q u (tsf)
											#4	#10	#40	#100	#200		
1	0-2	4.5+		Gray, Clay, Hard, Sandy	CL	15.8											
2	2-4	4.5+		Gray, Clay, Hard, Sandy	CL	15.0											
3	4-6	4.5+		Yellowish gray, Clay, Hard, Sandy, w/calcareous nodules	CL	13.3	113.3	128.3	36	18	100.0	99.9	99.9		59.4		4.43
4	6-8	4.5+		Yellowish gray, Clay, Hard, Sandy, w/calcareous nodules	CL	10.5											
5	8.5-10		20	Yellowish gray, Sand, Medium dense, Silty	S M						100.0	100.0	100.0		14.5		
6	13.5-15		24	Yellowish gray, Sand, Medium dense, Silty	S M												
7	18.5-20		27	Yellowish gray, Sand, Medium dense, Silty	S M						98.7	98.5	97.5		15.7		
8	22-24	3.25		Yellowish gray, Clay, Very stiff, Sandy, w/calcareous nodules	CL	19.4			34								
9	24-26	2.75		Yellowish gray, Clay, Very stiff, Sandy, w/calcareous nodules	CL	19.6											

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 5/29/91

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

RING NO. 90-194

SAMPLE NO. 3

DEPTH 4-6 ft

SPECIMEN NO. 1

CLASSIFICATION

Yellowish gray, clay, hard, sandy, w/ calcareous nodules

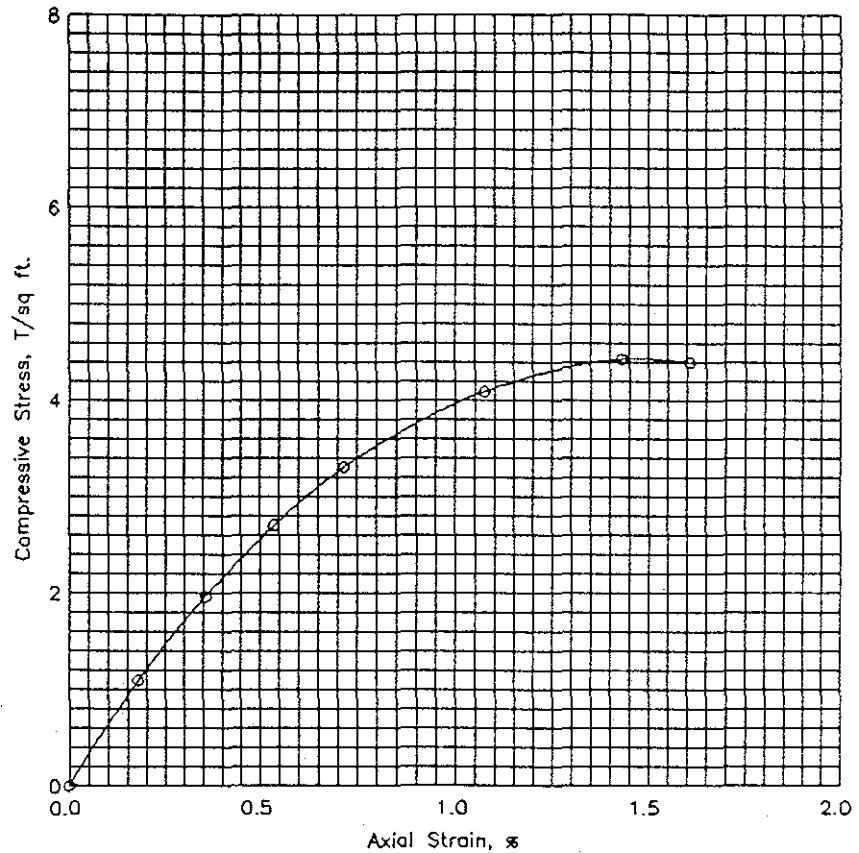
Tare No.	GE-10	Height	5.595 in.
Tare plus Wet Specimen	511.75 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	456.87 gm	Initial Area	6.290 sq in.
Water Weight	54.88 gm	Volume	35.194 cu in.
Tare Weight	42.68 gm	Volume of Solids	cu in.
Wet Specimen	1185.64 gm	Void Ratio	
Dry Specimen	1046.92 gm	Saturation	%
Water Content	13.25 %	Dry Density	113.3 lb/cu ft
Specific Gravity of Solids			
LL = 36	PL = 18	PI = 18	

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	125.0	95.8	.002	6.30	1.094
.8	20.	.020	225.0	172.3	.004	6.31	1.966
1.1	30.	.030	310.0	237.5	.005	6.32	2.703
1.4	40.	.040	380.0	291.1	.007	6.34	3.308
1.8	60.	.060	472.0	361.6	.011	6.36	4.094
2.2	80.	.080	513.0	393.0	.014	6.38	4.434
2.4	90.	.090	510.0	390.7	.016	6.39	4.400

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.		1			
Type of Specimen		Undisturbed			
Initial	Water content	w_0	13.2 %	%	%
	Void ratio	e_0			
	Saturation	S_0	%	%	%
	Dry density, lb/cu ft	γ_0	113.3		
Time to failure, min		t_f	2.23		
Unconfined compressive strength, T/sq ft		q_u	4.43		
Undrained shear strength, T/sq ft		S_u	2.22		
Sensitivity ratio		S_t			
Initial specimen diameter, in.		D_0	2.830		
Initial specimen height, in.		H_0	5.595		
Classification Yellowish gray, clay, hard, sandy, w/ calcareous nodules					
LL	36	PL	18	PI	18
				C_u	
Remarks		Project DISPOSAL AREA B, CHANNEL TO VICTORIA			
		Area Near Seadrift, Texas			
		Boring No. 90-194		Sample No. 3	
		Depth 4-6 ft		Date 5/29/91	
		UNCONFINED COMPRESSION TEST REPORT			