Project: Sabine Lake North Disposal Area No.11
Near Port Arthur , Texas
Contract No. DACW64-93-D-0005 Delivery Order No. 0014

SUMMARY OF LABORATORY TEST RESULTS

Boring No. 94-84

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 #4	#10	#40	#100	#200	Torvane Shear Strength (tsf)	q u (tsf)
1	0 - 2	2.75		Dark gray,Clay,Very stiff,Sandy,w/sand pockets	C L	31.6											
2	2 - 4	1.25		Dark gray,Clay,Stiff,Sandy,w/sand pockets	C L	27.0											
3	4 - 6	1.00		Dark gray,Clay,Stiff,w/sand pockets	C H	34.9	88.8	119.7	61	24	100.0	99.6	98.2	94.1	92.6		1.25
4	6 - 8	0.25		Dark gray,Clay,Soft,w/sand parting	C H	40.8											
5	8 - 10	1.25		Yellowish gray,Clay,Stiff,w/calcareous nodules	C H	36.4											
6	10 - 12	2.75		Olive gray,Clay,Very stiff,Sandy,w/ferrous nodules	C L	24.1	104.5	129.7	42	20							
7	12 - 14	1.25		Olive gray,Clay,Stiff,Sandy,w/sand pockets	C L	20.8											
8	14 - 16	2.50		Yellowish gray,Clay,Very stiff,Sandy	C L	20.8											
9	16-17.5		28	Gray,Sand,Medium dense,Silty	S M												
10	21-22.5		27	Gray,Sand,Medium dense,Silty	S M												
11	23.5-25		24	Gray,Sand,Medium dense,Silty	S M												

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

JOB NO. 14G727-14 DATE 5/17/94

PROJECT Sabine Lake North Disposal Area
No. 11

AREA Near Port Arthur, Texas

BORING NO. 94-84 SAMPLE NO. 3 DEPTH 4-6 ft

SPECIMEN NO. 1

CLASSIFICATION
Dark gray,Clay,Siff,w/sand pockets

Tare No.	K1-32	Height	5.595 in.
Tare plus Wet Specimen	353.06 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	272.82 gm	Initial Area	6.290 sq in.
Water Weight	80.24 gm	Volume	35.194 cu in.
Tare Weight	42.62 gm	Volume of Solids	cu in.
Wet Specimen	1106.10 gm	Void Ratio	
Dry Specimen	820.20 gm	Saturation	%
Water Content	34.86 %	Dry Density	88.8 lb/cu ft

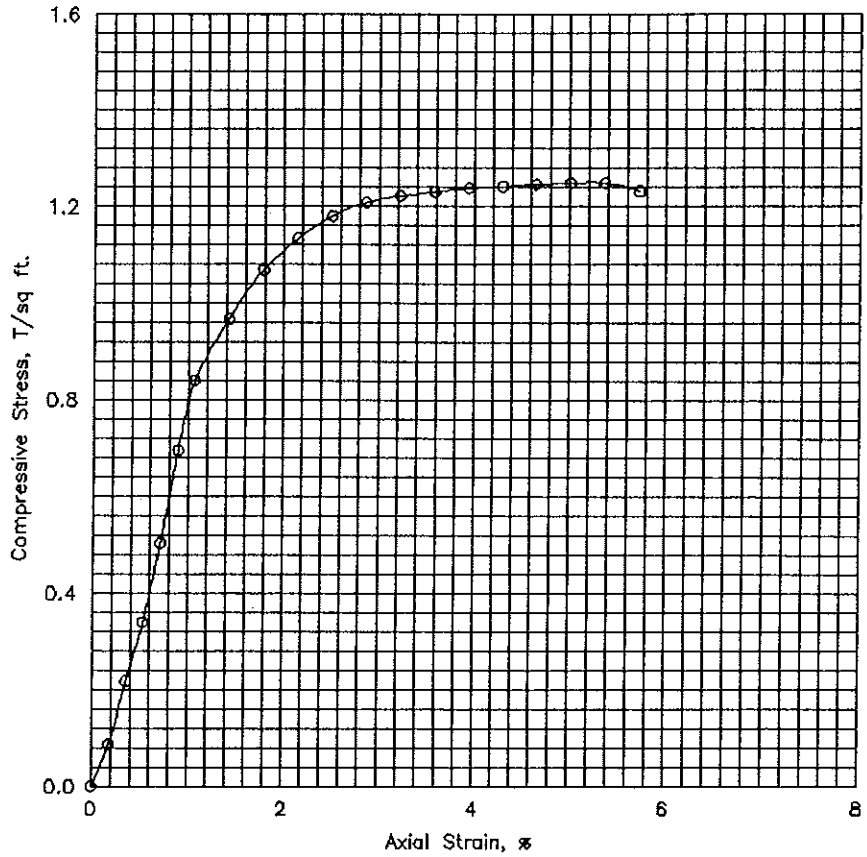
Specific Gravity of Solids
LL = 61 PL = 24 PI = 37

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	10.0	7.7	.002	6.30	.088
.4	20.	.020	25.0	19.1	.004	6.31	.218
.6	30.	.030	39.0	29.9	.005	6.32	.340
.7	40.	.040	58.0	44.4	.007	6.34	.505
.9	50.	.050	80.0	61.3	.009	6.35	.695
1.1	60.	.060	97.0	74.3	.011	6.36	.841
1.4	80.	.080	112.0	85.8	.014	6.38	.968
1.7	100.	.100	124.0	95.0	.018	6.40	1.068
2.1	120.	.120	132.0	101.1	.021	6.43	1.133
2.4	140.	.140	138.0	105.7	.025	6.45	1.180
2.7	160.	.160	142.0	108.8	.029	6.48	1.209
3.0	180.	.180	144.0	110.3	.032	6.50	1.222
3.3	200.	.200	145.5	111.5	.036	6.52	1.230
3.7	220.	.220	147.0	112.6	.039	6.55	1.238
4.0	240.	.240	148.0	113.4	.043	6.57	1.242
4.3	260.	.260	149.0	114.1	.046	6.60	1.246
4.6	280.	.280	150.0	114.9	.050	6.62	1.249
4.9	300.	.300	150.5	115.3	.054	6.65	1.249
5.2	320.	.320	149.0	114.1	.057	6.67	1.232

Job No. 14G727-14

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_o	34.9 %	%	%	%
	Void ratio	e_o				
	Saturation	S_o	%	%	%	%
	Dry density, lb/cu ft	γ_d	88.8			
Time to failure, min		t_f	4.60			
Unconfined compressive strength, T/sq ft		q_u	1.25			
Undrained shear strength, T/sq ft		S_u	.62			
Sensitivity ratio		S_t				
Initial specimen diameter, in.		D_o	2.830			
Initial specimen height, in.		H_o	5.595			

Classification Dark gray,Clay,Siff,w/sand pockets

LL	61	PL	24	PI	37	G_s	

Remarks

Project Sabine Lake North Disposal Area
No. 11
Area Near Port Arthur, Texas
Boring No. 94-84 Sample No. 3
Depth El 4-6 ft Date 5/17/94

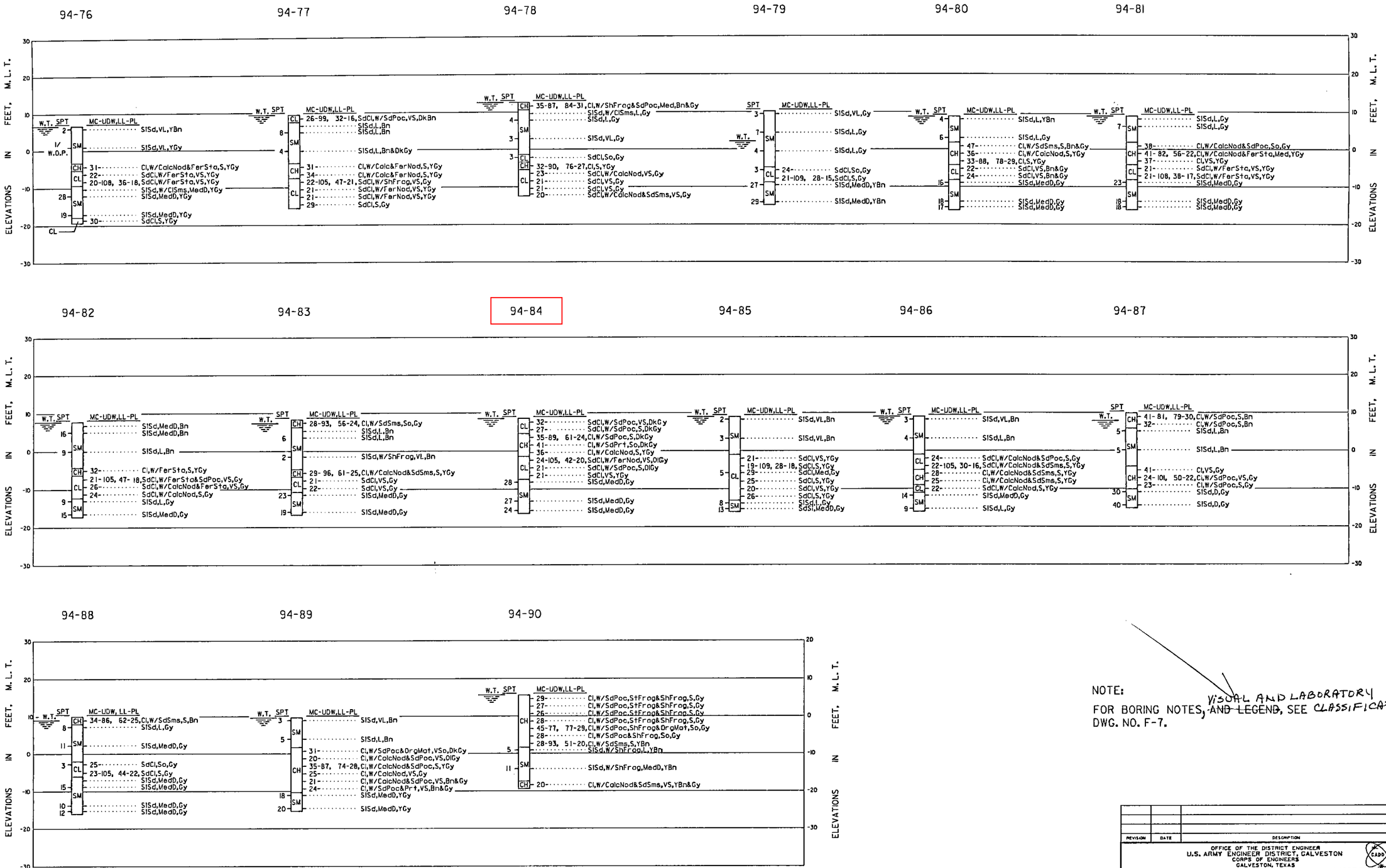
UNCONFINED COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 3659

PLATE XI-2

Geotest Engineering, Inc.

PLATE



NOTE:
FOR BORING NOTES, ~~AND LEGEND~~, SEE VISUAL AND LABORATORY CLASSIFICATIONS DWG. NO. F-7.

REVISION	DATE	DESCRIPTION	BY

OFFICE OF THE DISTRICT ENGINEER
U.S. ARMY ENGINEER DISTRICT, GALVESTON
CORPS OF ENGINEERS
GALVESTON, TEXAS

DRAWN BY: * P.N.
DESIGNED BY: * G.M.
CHECKED BY: * G.M./L.A.A.
SUBMITTED BY: *
CHIEF, GEOTECH & SURVEYS SECTION
APPROVED: *
CHIEF, DESIGN BRANCH
APPROVED: *
CHIEF, ENGINEERING DIVISION
DATE: JULY 1995
* AS REQUIRED BY ENGINEER CIRCULAR NO. 80-1-152)
SCALE: AS SHOWN
SPEC. DATE:

SABINE - NECHES WATERWAY, TEXAS
SABINE - NECHES CANAL
REHABILITATION OF PLACEMENT AREA NO. 11

BORING LOGS
BORROW AREA NO. 2

Prepared under the direction of
Robert B. Gatlin, Col., C.E.,
District Engineer

DRAWING NUMBER F-6
SHEET 28 OF 32 FILE NO. SN 103-336