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. 94-72

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	1.00		Gray,Clay,Stiff,w/calcareous nodules and sand seams	C H	32.3											
2	2 - 4	1.25		Gray,Clay,Stiff,w/calcareous nodules and sand seams	C H	41.3	80.2	113.3	86	31	100.0	100.0	99.3	98.2	97.7		1.22
3	4 - 6	1.25		Gray,Clay,Stiff,w/calcareous nodules and sand seams	C H	44.3											
4	6 - 8	0.00		Brown & gray,Clay,Very soft	C H	35.8										0.08	
5	8 - 10	0.25		Gray,Clay,Soft,w/sand pockets	C H	45.4	75.3	109.4	88	30	100.0	99.9	98.8	98.4	97.8	0.13	
6	10-11.5		6	Gray,Sand,Loose,Silty	S M												
7	12 - 14	0.25		Gray,Clay,Soft,Sandy	C L	28.5											
8	14 - 16	0.25		Gray,Clay,Soft,Sandy	C L	25.7											
9	16-17.5		10	Gray,Sand,Medium dense,Silty	S M												
10	21-23	1.25		Olive gray,Clay,Stiff	C H	28.5											
11	23-25	1.50		Yellowish gray,Clay,Stiff	C H	27.1											

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 5/16/94

PROJECT Sabine Lake North Disposal Area
No. 11

AREA Near Port Arthur, Texas

BORING NO. 94-72 SAMPLE NO. 2 DEPTH 2-4 ft

SPECIMEN NO. 1

CLASSIFICATION
Gray,Clay,Stiff,w/calcareous nodules & sand seams

Tare No.	K1-2	Height	5.595 in.
Tare plus Wet Specimen	466.52 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	342.52 gm	Initial Area	6.290 sq in.
Water Weight	124.00 gm	Volume	35.194 cu in.
Tare Weight	42.33 gm	Volume of Solids	cu in.
Wet Specimen	1046.83 gm	Void Ratio	
Dry Specimen	740.82 gm	Saturation	%
Water Content	41.31 %	Dry Density	80.2 lb/cu ft
Specific Gravity of Solids			

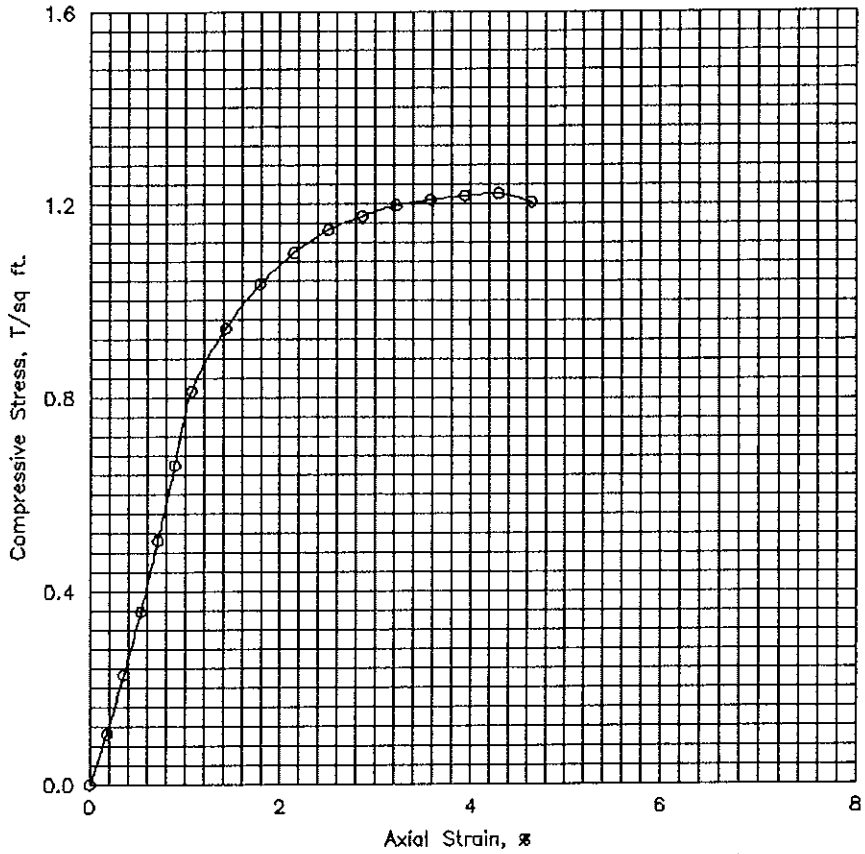
LL = 86 PL = 31 PI = 55

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	12.0	9.2	.002	6.30	.105
.3	20.	.020	26.0	19.9	.004	6.31	.227
.5	30.	.030	41.0	31.4	.005	6.32	.358
.7	40.	.040	58.0	44.4	.007	6.34	.505
.9	50.	.050	76.0	58.2	.009	6.35	.660
1.0	60.	.060	94.0	72.0	.011	6.36	.815
1.4	80.	.080	109.0	83.5	.014	6.38	.942
1.7	100.	.100	120.0	91.9	.018	6.40	1.033
2.0	120.	.120	128.0	98.0	.021	6.43	1.098
2.3	140.	.140	134.0	102.6	.025	6.45	1.146
2.7	160.	.160	138.0	105.7	.029	6.48	1.175
3.0	180.	.180	141.0	108.0	.032	6.50	1.197
3.3	200.	.200	143.0	109.5	.036	6.52	1.209
3.6	220.	.220	144.5	110.7	.039	6.55	1.217
3.9	240.	.240	145.5	111.5	.043	6.57	1.221
4.3	260.	.260	144.0	110.3	.046	6.60	1.204

Job No. 14G727-14

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.			1			
Type of Specimen			Undisturbed			
Initial	Water content	w_0	41.3 %	%	%	%
	Void ratio	e_0				
	Saturation	S_0	%	%	%	%
	Dry density, lb/cu ft	γ_d	80.2			
Time to failure, min		t_f	3.92			
Unconfined compressive strength, T/sq ft		q_u	1.22			
Undrained shear strength, T/sq ft		S_u	.61			
Sensitivity ratio		S_t				
Initial specimen diameter, in.		D_0	2.830			
Initial specimen height, in.		H_0	5.595			

Classification Gray,Clay,Stiff,w/calcareous nodules & sand seams

LL	86	PL	31	PI	55	G_s	

Remarks

Project Sabine Lake North Disposal Area
No. 11
Area Near Port Arthur, Texas
Boring No. 94-72 | Sample No. 2
Depth 2-4 ft | Date 5/16/94
El

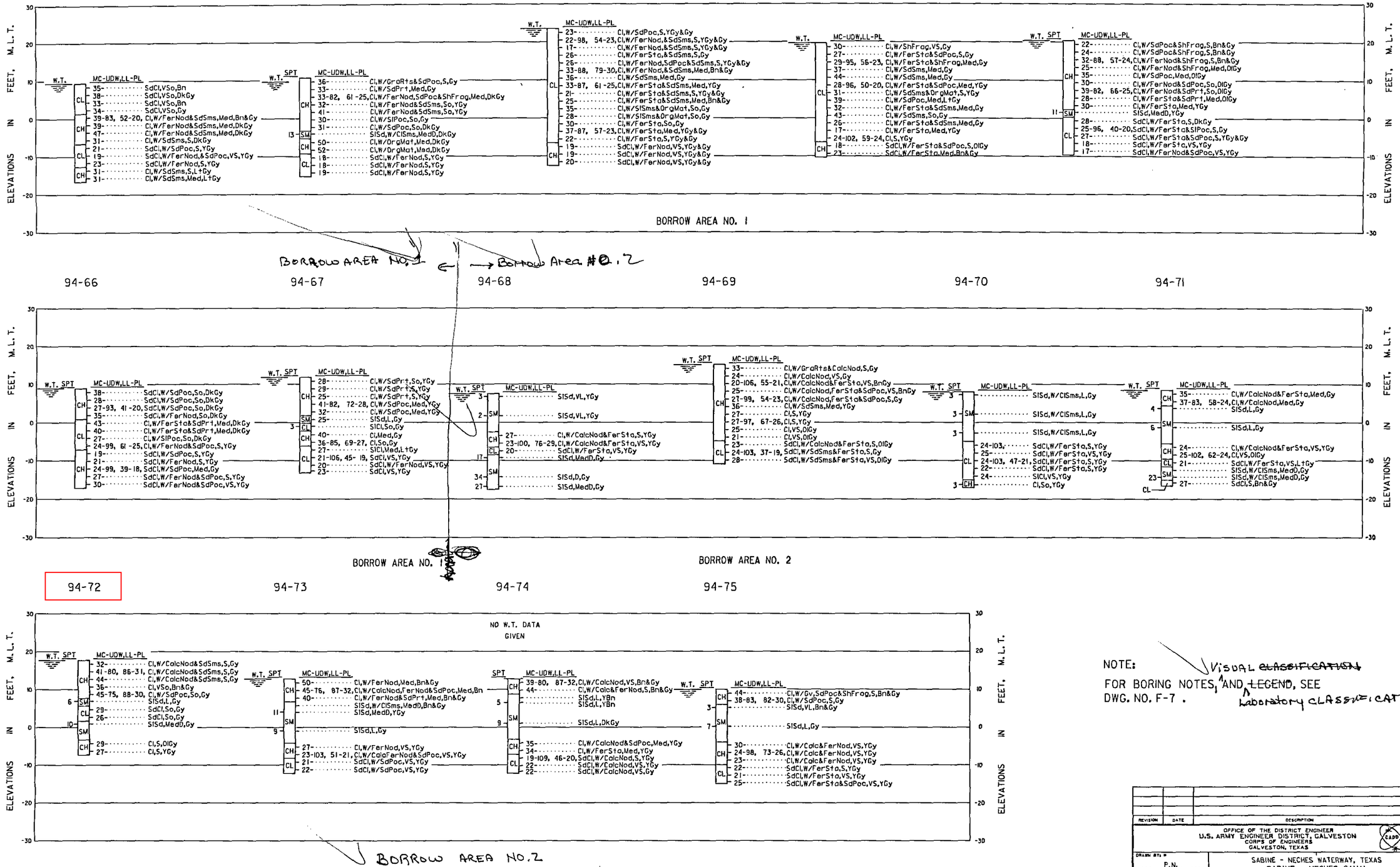
UNCONFINED COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 3659

PLATE XI-2

Geotest Engineering, Inc.

PLATE



NOTE:
FOR BORING NOTES, VISUAL ~~CLASSIFICATION~~ AND ~~LEGEND~~ Laboratory CLASSIFICATION, SEE 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

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

BORING LOGS
BORROW AREAS NOS. 1 & 2

DATE: JULY 1995
1" = AS REQUIRED BY ENGINEER (CIRCULAR NO. 80-1-952)
SCALE: AS SHOWN
SPEC. DATE:

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

DRAWING NUMBER
F-5
SHEET 27 OF 32 FILE NO. SN 103-338