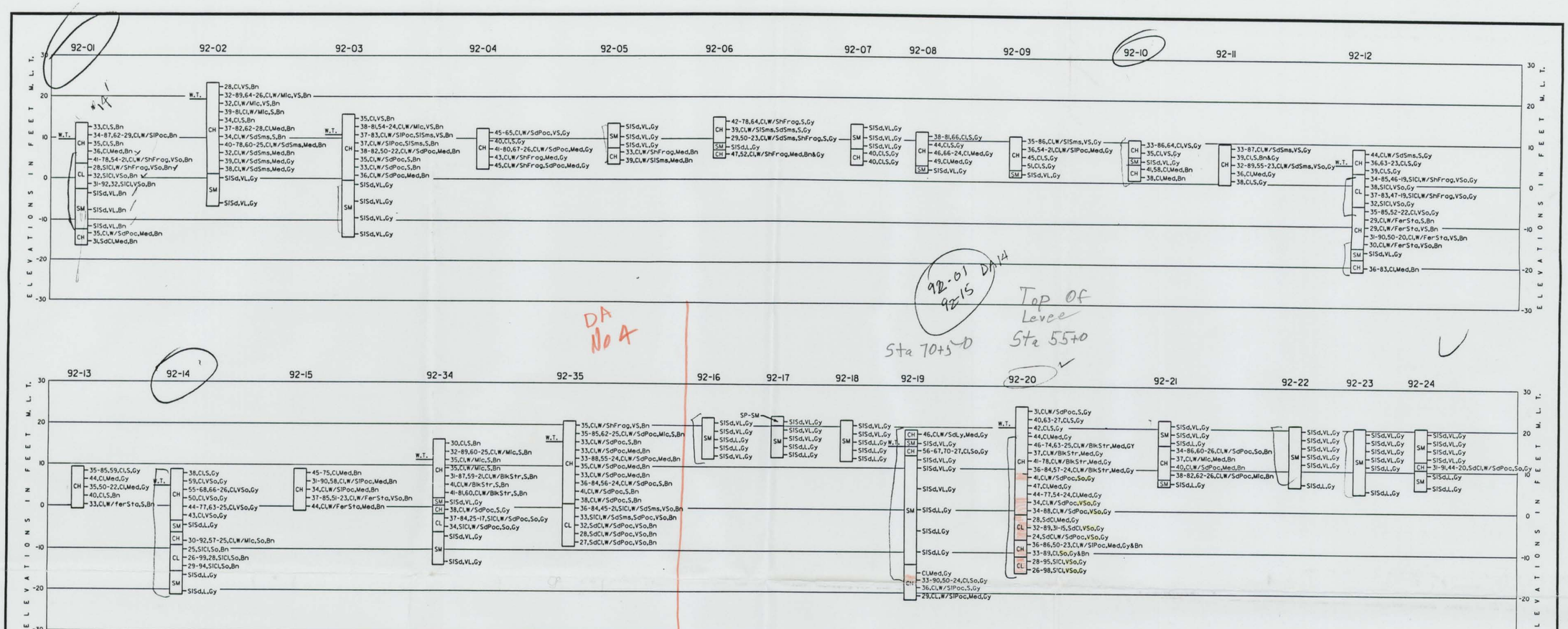
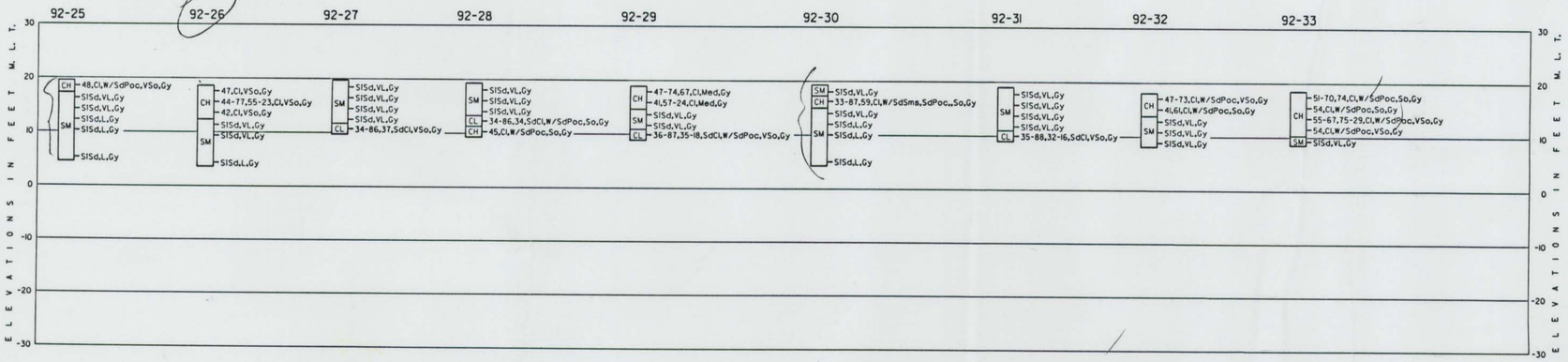




NOTE: SEE DRAWING NUMBER F-6 FOR SOILS NOTES .

REVISION	DATE	DESCRIPTION	BY

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

DRAWN BY: P.B.S.
TRACED BY:
CHECKED BY: J.T.F.
SUBMITTED BY: David D. Campbell, CHIEF, SOILS DESIGN SECTION
APPROVED: David D. Campbell, CHIEF, GEOTECH. & SURVEYS BRANCH
APPROVED: for CHIEF ENGINEERING DIVISION
DATE: MAY 1992
SCALE: AS SHOWN
SPEC. DATE:
DRAWING NUMBER: F-7
SHEET 14 OF 17 FILE NO. RIO 901-240

BRAZOS ISLAND HARBOR, TEXAS
BROWNSVILLE CHANNEL
DREDGING INSHORE REACH No. 1
DISPOSAL AREAS Nos. 2 & 4
BORING LOGS

Prepared under the direction of
Brink P. Miller, Col., C.E.,
District Engineer

78.6

U.S. ARMY CORPS OF ENGINEERS

BORING NO. 92-27 DATE: BEGIN 3-18-92 PAGE 1 / 1
JOB NO. 146535 COMPLETE 3-18-92 Thin Walled Tube ☒ 3" ☐ 6"
PROJECT Brownsville Disp. Area #2
LOCATION " Ship Channel
ELEVATION OF HOLE
MANUFACTURER'S DESIGNATION OF DRILL RIG ARDCO-C-1000
GROUNDWATER: DEPTH Dry ft., ELEV. ____ ft., at end of Drilling
WEATHER Cloudy - Warm - Showers
DRILLER D. Mitchell LOGGER T. Berg

DEPTH, FEET	SAMPLE	SAMPLE NO.	PEN./TORVANE SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0	X	1	1-12"/1	Tan	Sand	very loose		Sa at Surface
	X	2	1/1-12"	"	"	"		
5	X	3	1/1/1	Gray	Sand	"		
	X	4	1/1/1	"	"	"		
	■	5	0.25	Gray	Clay	Soft	Sand	Sa. cl. at 8'
10								Bottom of 81-27 10'
15								
20								
25								
30								
35								

Project : Disposal Areas Nos.2 and 4 for Brownsville Ship Channel
Brownsville, Texas
Contract No. DACW64-92-D-0001 Delivery order No. 0008

SUMMARY OF LABORATORY TEST RESULTS

Boring No. 92-27 El. 19.7

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					Torvane Shear Strength (tsf)	q u (tsf)
											#4	#10	#40	#100	#200		
1	0.5-2		1-12"/1	Gray,Sand,Very loose,silty	S M												
2	2.5-4		1/1-12"	Gray,Sand,Very loose,silty	S M						100.0	100.0	99.8	86.8	33.9		
3	4.5-6		2	Gray,Sand,Very loose,silty	S M						100.0	100.0	100.0	90.3	22.1		
4	6.5-8		2	Gray,Sand,Very loose,silty	S M												
5	8-10	0.00		Gray,Clay,Very soft,sandy	C L	33.8	85.9	114.9	37							0.06	0.11

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

Geotest Engineering, Inc.

JOB NO. 14G538 DATE 4/9/92

PROJECT Disposal Areas Nos.2 and 4 for Brownsvill Ship Channel,Brown

BORING NO. 92-27 SAMPLE NO. 5 DEPTH 8-10 ft

SPECIMEN NO. 1

CLASSIFICATION
Gray,Clay,Very soft,Sandy

Tare No.	P-211	Height	5.595 in.
Tare plus Wet Specimen	373.64 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	290.10 gm	Initial Area	6.290 sq in.
Water Weight	83.54 gm	Volume	35.194 cu in.
Tare Weight	42.67 gm	Volume of Solids	cu in.
Wet Specimen	1061.19 gm	Void Ratio	
Dry Specimen	793.34 gm	Saturation	%
Water Content	33.76 %	Dry Density	85.9 lb/cu ft

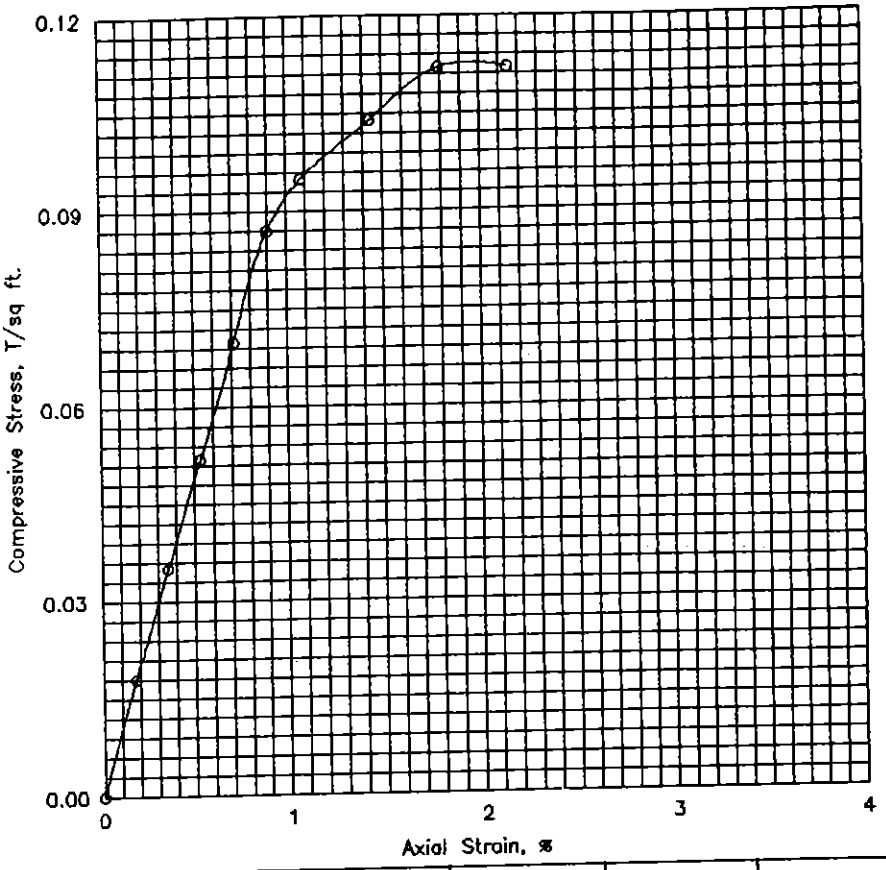
Specific Gravity of Solids
LL = 37 PL = PI =

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	2.0	1.5	.002	6.30	.018
.4	20.	.020	4.0	3.1	.004	6.31	.035
.5	30.	.030	6.0	4.6	.005	6.32	.052
.7	40.	.040	8.0	6.1	.007	6.34	.070
.9	50.	.050	10.0	7.7	.009	6.35	.087
1.0	60.	.060	11.0	8.4	.011	6.36	.095
1.4	80.	.080	12.0	9.2	.014	6.38	.104
1.6	100.	.100	13.0	10.0	.018	6.40	.112
1.9	120.	.120	13.0	10.0	.021	6.43	.112

Job No. 14G538

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.		1			
Type of Specimen		Undisturbed			
Initial: Water content	w_o	33.8 %	%	%	%
Initial: Void ratio	e_o				
Initial: Saturation	S_o	%	%	%	%
Initial: Dry density, lb/cu ft	γ_d	85.9			
Time to failure, min	t_f	1.65			
Unconfined compressive strength, T/sq ft	q_u	.11			
Undrained shear strength, T/sq ft	S_u	.06			
Sensitivity ratio	S_t				
Initial specimen diameter, in.	D_o	2.830			
Initial specimen height, in.	H_o	5.595			

Classification Gray,Clay,Very soft,Sandy

LL	PL	PI	G_s
37			

Remarks

Project Disposal Areas Nos. 2 and 4 for Brownsville

Area Ship Channel, Brownsville, Texas

Boring No. 92-27 | Sample No. 5

Depth El 8-10 ft | Date 4/9/92

UNCONFINED COMPRESSION TEST REPORT

PLATE XI-2

ENG FORM 3659
1 JUN 65

Geotest Engineering, Inc.

PLATE