

SUMMARY OF QUESTIONABLE
ERRONEOUS OR MISSING DATA
FOR

CONTRACT NO. DACW64-94-C-0040

PROJECT: SOILS TESTING, HOUSTON-GALVESTON NAVIGATION CHANNEL

BORING NO.	SAMPLE NO.	COMMENTS ON DRILLING RESULTS
93-101	2	Test order on sample 4 performed on sample 2
93-103	5	Unconfined results given as 28 on lab summary, 27 given on test report
93-105	2	footnote(*) states that material retained are shell fragments, classification does not include this description
93-112	7	footnote(*) states that material retained are shell fragments, classification does not include this description
93-113	5	Mech Ana does not suggest SP-SM, amount passing not between 5-12
93-115	5	footnote(*) states that material retained are shell fragments, classification does not include this description
93-117	13	Blow counts indicate med dense instead of loose

(corrected on my copies)

JJA 2/17/95
JB 3/13/95

JOB NO. 94G783-4

DATE 10/19/94

PROJECT Houston-Galveston Navigation
Channel

AREA Houston, Texas

BORING NO. 93-112

SAMPLE NO. 3

DEPTH 2-4 ft

SPECIMEN NO. 1

CLASSIFICATION

Brown, Clay, Very soft, Sandy

Tare No.	P222	Height	5.595 in.
Tare plus Wet Specimen	327.10 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	266.24 gm	Initial Area	6.290 sq in.
Water Weight	60.86 gm	Volume	35.194 cu in.
Tare Weight	42.63 gm	Volume of Solids	cu in.
Wet Specimen	1099.44 gm	Void Ratio	
Dry Specimen	864.22 gm	Saturation	%
Water Content	27.22 %	Dry Density	93.5 lb/cu ft
Specific Gravity of Solids			
LL = 47	PL = 17	PI = 30	

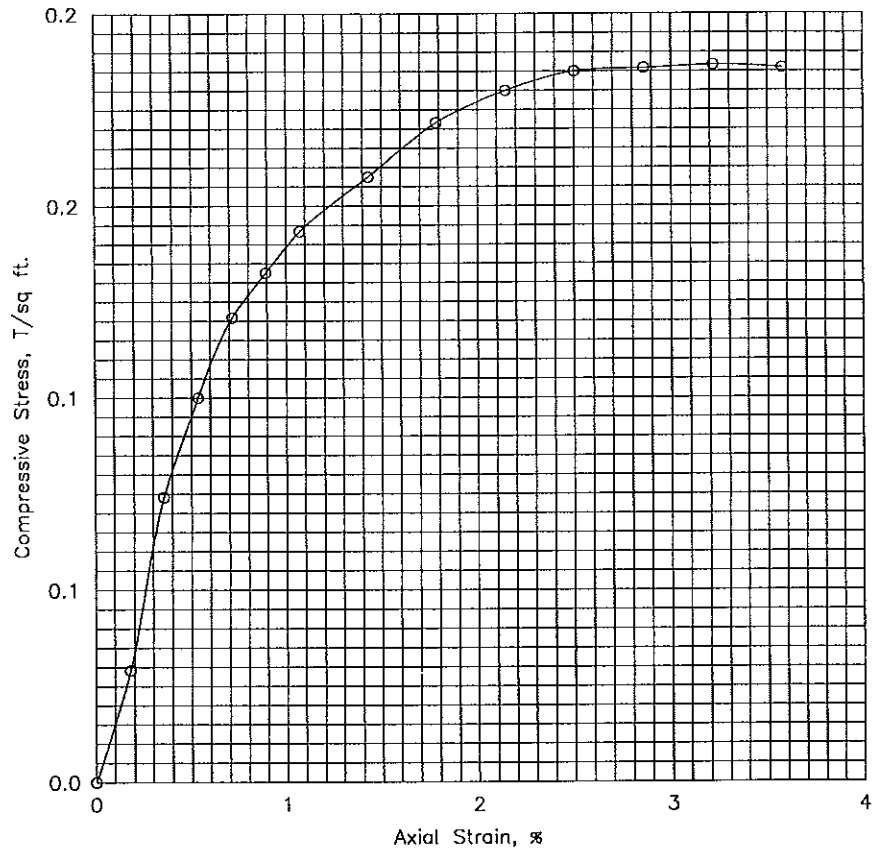
Proving Ring No. 17015

Proving Ring Constant, K = .311 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	3.1	.002	6.30	.035
.4	20.	.020	25.0	7.8	.004	6.31	.089
.5	30.	.030	34.0	10.6	.005	6.32	.120
.7	40.	.040	41.0	12.7	.007	6.34	.145
.8	50.	.050	45.0	14.0	.009	6.35	.159
1.1	60.	.060	49.0	15.2	.011	6.36	.172
1.4	80.	.080	54.0	16.8	.014	6.38	.189
1.7	100.	.100	59.0	18.3	.018	6.40	.206
2.0	120.	.120	62.0	19.3	.021	6.43	.216
2.3	140.	.140	64.0	19.9	.025	6.45	.222
2.7	160.	.160	64.5	20.0	.029	6.48	.223
3.0	180.	.180	65.0	20.2	.032	6.50	.224
3.3	200.	.200	65.0	20.2	.036	6.52	.223

Job No. 94G783-4

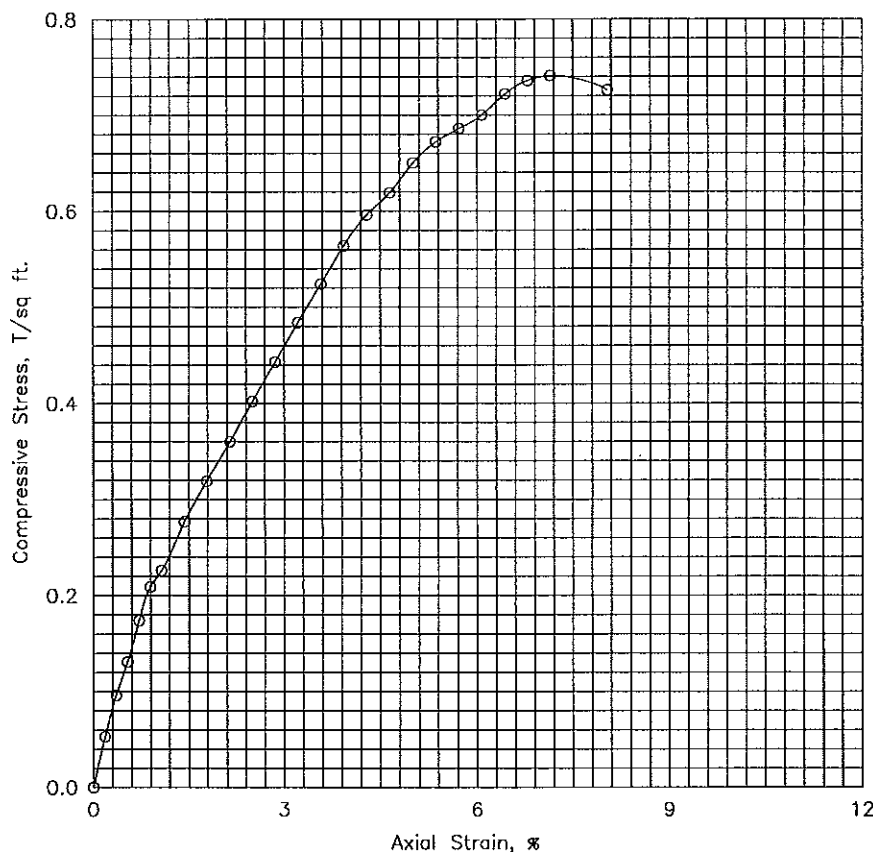
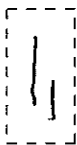
Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.		1			
Type of Specimen		Undisturbed			
Initial	Water content	w_0	27.2 %	%	%
	Void ratio	e_0			
	Saturation	S_0	%	%	%
	Dry density, lb/cu ft	γ_d	93.5		
Time to failure, min		t_f	2.97		
Unconfined compressive strength, T/sq ft		q_u	.22		
Undrained shear strength, T/sq ft		S_u	.11		
Sensitivity ratio		S_t			
Initial specimen diameter, in.		D_0	2.830		
Initial specimen height, in.		H_0	5.595		
Classification Brown, Clay, Very soft, Sandy					
LL	47	PL	17	PI	30
				C_u	
Remarks		Project Houston-Galveston Navigation			
		Channel			
		Area Houston, Texas			
		Boring No. 93-112		Sample No. 3	
		Depth 2-4 ft		Date 10/19/94	
		UNCONFINED COMPRESSION TEST REPORT			

Failure Sketches



☐ Controlled stress
☒ Controlled strain

Test No.		1			
Type of Specimen		Undisturbed			
Initial	Water content	w_0	36.6 %	%	%
	Void ratio	e_0			
	Saturation	S_0	%	%	%
	Dry density, lb/cu ft	γ_d	82.9		
Time to failure, min		t_f	6.65		
Unconfined compressive strength, T/sq ft		q_u	.74		
Undrained shear strength, T/sq ft		S_u	.37		
Sensitivity ratio		S_t			
Initial specimen diameter, in.		D_0	2.830		
Initial specimen height, in.		H_0	5.595		

Classification Brown, Clay, Medium stiff, Sandy

LL 67

PL 27

PI 40

 G_s

Remarks

Project Houston-Galveston Navigation

Channel

Area Houston, Texas

Boring No. 93-112

Sample No. 7

Depth 10-12 ft
El

Date 10/19/94

UNCONFINED COMPRESSION TEST REPORT

JOB NO. 94G783-4

DATE 10/19/94

PROJECT Houston-Galveston Navigation
Channel

AREA Houston, Texas

BORING NO. 93-112

SAMPLE NO. 7

DEPTH 10-12 ft

SPECIMEN NO. 1

CLASSIFICATION

Brown, Clay, Medium stiff, Sandy

Tare No.	KL-35	Height	5.595 in.
Tare plus Wet Specimen	359.13 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	274.31 gm	Initial Area	6.290 sq in.
Water Weight	84.82 gm	Volume	35.194 cu in.
Tare Weight	42.70 gm	Volume of Solids	cu in.
Wet Specimen	1046.35 gm	Void Ratio	
Dry Specimen	765.87 gm	Saturation	%
Water Content	36.62 %	Dry Density	82.9 lb/cu ft
Specific Gravity of Solids			
LL = 67	PL = 27	PI = 40	

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
.3	10.	.010	6.0	4.6	.002	6.30	.053
.4	20.	.020	11.0	8.4	.004	6.31	.096
.6	30.	.030	15.0	11.5	.005	6.32	.131
.8	40.	.040	20.0	15.3	.007	6.34	.174
.9	50.	.050	24.0	18.4	.009	6.35	.209
1.1	60.	.060	26.0	19.9	.011	6.36	.226
1.4	80.	.080	32.0	24.5	.014	6.38	.277
1.7	100.	.100	37.0	28.3	.018	6.40	.319
2.1	120.	.120	42.0	32.2	.021	6.43	.360
2.4	140.	.140	47.0	36.0	.025	6.45	.402
2.7	160.	.160	52.0	39.8	.029	6.48	.443
3.0	180.	.180	57.0	43.7	.032	6.50	.484
3.4	200.	.200	62.0	47.5	.036	6.52	.524
3.8	220.	.220	67.0	51.3	.039	6.55	.564
4.0	240.	.240	71.0	54.4	.043	6.57	.596
4.4	260.	.260	74.0	56.7	.046	6.60	.619
4.7	280.	.280	78.0	59.7	.050	6.62	.650
5.0	300.	.300	81.0	62.0	.054	6.65	.672
5.3	320.	.320	83.0	63.6	.057	6.67	.686
5.7	340.	.340	85.0	65.1	.061	6.70	.700
6.0	360.	.360	88.0	67.4	.064	6.72	.722
6.3	380.	.380	90.0	68.9	.068	6.75	.736
6.7	400.	.400	91.0	69.7	.071	6.77	.741
7.4	450.	.450	90.0	68.9	.080	6.84	.726

U.S. ARMY CORPS OF ENGINEERS

DEPTH, FEET		SAMPLE NO.	SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	BORING NO. <u>93-112</u> DATE: BEGIN <u>8-1-93</u> PAGE <u>1 / 1</u> JOB NO. <u>946783-1</u> COMPLETE <u>8-1-93</u> Thin Walled Tube PROJECT <u>HOUSTON-GALVESTON Navigation Channel</u> ☒ 3" ☐ 6" LOCATION <u>LEVEE BETWEEN DISPOSAL AREA #15 & 16</u> ELEVATION OF HOLE _____ MANUFACTURER'S DESIGNATION OF DRILL RIG <u>Adco K4x4, C-1000 Marsh Buggy</u> GROUNDWATER: DEPTH <u>0</u> ft., ELEV. _____ ft., at end of Drilling WEATHER <u>Sunny and Hot 93°</u> DRILLER <u>David Gregurek</u> LOGGER <u>Willie Barnes</u>				
						COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0		1	0.5			Brown	Clay	M. Stiff	Sandy	-w/ shell fragments
		2				Brown	Sand	Loose	Silty	Jar sample 1'-2'
U		3	0.75			Reddish Brown	Clay	M. Stiff	Sandy	
5		4	0.75			Reddish Brown	Clay	M. Stiff	Sandy	
		5	0.75			Reddish Brown	Clay	M. Stiff	Sandy	
		6	0.5			Reddish Brown To Gray	Clay	M. Stiff	Sandy	
10		7	0.5			Reddish Brown	Clay	M. Stiff	Sandy	
		8	0.5			Reddish Brown	Clay	M. Stiff	Sandy	
15		9	0.5			Reddish Brown	Clay	M. Stiff	Sandy	
		X 10	2 1/4			Gray	Sand	Loose	Silty	
20		X 11	3 1/6			Gray	Sand	Loose	Silty	w/ shell fragments 21'-30'
25		X 12	3 3/4			Gray	Sand	Loose	Silty	
30		X 13	4 3/4			Gray	Sand	Loose	Silty	
35										

Project: Houston-Galveston Navigation Channel

SUMMARY OF LABORATORY TEST RESULTS

Contract No. DACW64-94-C-0040

Boring No. 93-112

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 (%)	P L (%)	Mechanical Analysis % Passing					Torvane Shear Strength (tsf)	q u (tsf)
											#4	#10	#40	#100	#200		
1	0-1	0.75		Brown, Clay, Medium stiff, Sandy	C L	25.6											
2	1-2			Brown, Sand, Loose, Silty	S M												
3	2-4	0.00		Brown, Clay, Very soft, Sandy	C L	27.2	93.5	119.0	47.0	17.0	100.0	100.0	99.1	92.1	76.0		0.22
4	4-6	0.25		Brown, Clay, Soft	C H	41.3											
5	6-8	0.25		Brown, Clay, Soft	C H	38.0											
6	8-10	0.75		Gray, Clay, Medium stiff	C H	34.5											
7	10 -12	0.75		Brown, Clay, Medium stiff w/ sh frags	C H	36.6	82.9	113.3	67.0	27.0	99.1*	97.5*	95.3*	92.2	91.1		0.74
8	12-14	0.00		Gray, Clay, Very soft	C H	42.7											
9	14-16	0.00		Gray, Clay, Very soft	C H	42.7											
10	16-17.5		6	Gray, Sand, Loose, Silty, w/shell fragments	S M												
11	21-22.5		9	Gray, Sand, Loose, Silty, w/shell fragments	S M						100.0	99.8*	97.0*	69.2	38.8		
12	26-27.5		6	Gray, Sand, Loose, Silty, w/shell fragments	S M												
13	28.5-30		7	Gray, Sand, Loose, Silty, w/shell fragments	S M												

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

q u : Uncogined Compressive Strength, W O H : Weight of hammer, W O P : Weight of Pipe

* : Material retained are shell fragments

Geotest Engineering, Inc.