

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. 93-117

SAMPLE NO. 4

DEPTH 9-11 ft

SPECIMEN NO. 1

CLASSIFICATION

Gray, Clay, Very soft, Sandy, w/ shell fragments

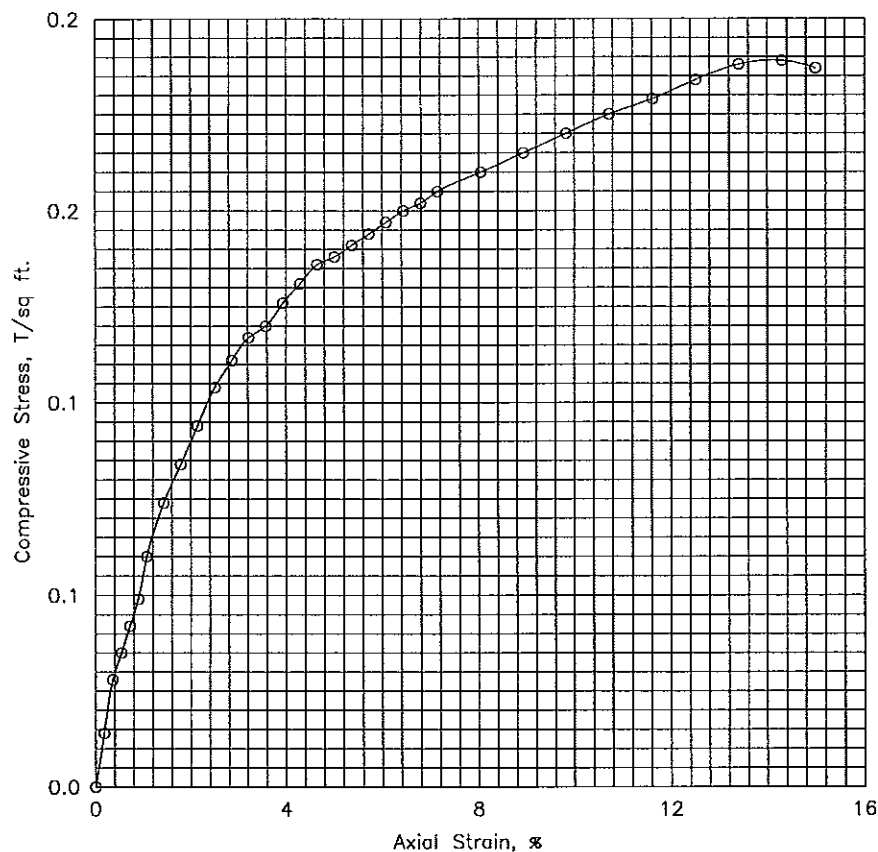
Tare No.	P-1	Height	5.595 in.
Tare plus Wet Specimen	418.88 gm	Average Diameter	2.830 in.
Tare plus Dry Specimen	347.99 gm	Initial Area	6.290 sq in.
Water Weight	70.89 gm	Volume	35.194 cu in.
Tare Weight	42.48 gm	Volume of Solids	cu in.
Wet Specimen	1165.61 gm	Void Ratio	
Dry Specimen	946.08 gm	Saturation	%
Water Content	23.20 %	Dry Density	102.4 lb/cu ft
Specific Gravity of Solids			
LL = 26	PL = 15	PI = 11	

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	4.0	1.2	.002	6.30	.014
.4	20.	.020	8.0	2.5	.004	6.31	.028
.5	30.	.030	10.0	3.1	.005	6.32	.035
.7	40.	.040	12.0	3.7	.007	6.34	.042
.9	50.	.050	14.0	4.3	.009	6.35	.049
1.1	60.	.060	17.0	5.3	.011	6.36	.060
1.4	80.	.080	21.0	6.5	.014	6.38	.074
1.8	100.	.100	24.0	7.5	.018	6.40	.084
2.1	120.	.120	27.0	8.4	.021	6.43	.094
2.4	140.	.140	30.0	9.3	.025	6.45	.104
2.7	160.	.160	32.0	9.9	.029	6.48	.111
3.0	180.	.180	34.0	10.6	.032	6.50	.117
3.3	200.	.200	35.0	10.9	.036	6.52	.120
3.7	220.	.220	37.0	11.5	.039	6.55	.126
4.1	240.	.240	38.5	12.0	.043	6.57	.131
4.3	260.	.260	40.0	12.4	.046	6.60	.136
4.7	280.	.280	41.0	12.7	.050	6.62	.138
4.9	300.	.300	42.0	13.0	.054	6.65	.141
5.3	320.	.320	43.0	13.4	.057	6.67	.144
5.6	340.	.340	44.0	13.7	.061	6.70	.147
5.9	360.	.360	45.0	14.0	.064	6.72	.150
6.2	380.	.380	46.0	14.3	.068	6.75	.152
6.6	400.	.400	47.0	14.6	.071	6.77	.155
7.3	450.	.450	49.0	15.2	.080	6.84	.160
8.1	500.	.500	51.0	15.8	.089	6.91	.165

Failure Sketches



Test No.		1			
Type of Specimen		Undisturbed			
Initial	Water content	w_0	23.2 %	%	%
	Void ratio	e_0			
	Saturation	S_0	%	%	%
	Dry density, lb/cu ft	γ_d	102.4		
Time to failure, min		t_f	13.07		
Unconfined compressive strength, T/sq ft		q_u	.19		
Undrained shear strength, T/sq ft		S_u	.09		
Sensitivity ratio		S_t			
Initial specimen diameter, in.		D_0	2.830		
Initial specimen height, in.		H_0	5.595		
Classification Gray, Clay, Very soft, Sandy, w/ shell fragments					
LL	26	PL	15	PI	11
Remarks		Project Houston-Galveston Navigation Channel Area Houston, Texas Boring No. 93-117 Sample No. 4 Depth 9-11 ft Date 10/19/94			
UNCONFINED COMPRESSION TEST REPORT					

9.0	550.	.550	53.0	16.5	.098	6.98	.170
9.8	600.	.600	55.0	17.1	.107	7.05	.175
10.7	650.	.650	57.0	17.7	.116	7.12	.179
11.4	700.	.700	59.0	18.3	.125	7.19	.184
12.3	750.	.750	61.0	18.9	.134	7.26	.188
13.1	800.	.800	62.0	19.3	.143	7.34	.189
13.8	839.	.839	62.0	19.3	.150	7.40	.187

Project: Houston-Galveston Navigation Channel

SUMMARY OF LABORATORY TEST RESULTS

Contract No. DACW64-94-C-0040

Boring No. 93-117

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			Gray,Sand,Medium dense,Silty,w/shell fragments	S M												
2	2-3.5		19	Gray,Sand,Medium dense,Silty,w/shell fragments	SP-SM						99.5*	97.8*	94.8*	64.0	9.6		
3	7-9.5		16	Gray,Sand,Medium dense,Silty,w/shell fragments	S M												
4	9-11	0.00		Gray,Clay,Very soft,Sandy,w/shell fragments	C L	23.2	102.4	126.2	26.0	15.0	91.4*	91.1*	88.1*	65.5	54.5		0.19
5	11-12.5		5	Gray,Sand,Loose,Silty,w/shell fragments	S M												
6	16-17.5		12	Gray,Sand,Medium dense,Silty,w/shell fragments	S M						99.5*	97.9*	96.2*	73.0	32.1		
7	21-22.5		11	Gray,Sand,Medium dense,Silty,w/shell	S M												
8	26-27.5		15	Gray,Sand,Medium dense,Silty,w/shell	S M												
9	28-30	0.00		Gray,Clay,Very soft,Sandy,w/shell fragments	C L	23.3											
10	30-32			Gray,Sand,Losse,Silty	S M												
11	32-33.5		9	Gray,Sand,Losse,Silty	S M												
12	37-38.5		9	Gray,Sand,Losse,Silty	S M												
13	38.5-40		12	Gray,Sand,Losse,Silty Med Dense	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

U.S. ARMY CORPS OF ENGINEERS

DEPTH, FEET	SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	BORING NO. <u>93-117</u> DATE: BEGIN <u>8-8-94</u> PAGE <u>2 / 2</u> JOB NO. <u>946783.1</u> COMPLETE <u>8-9-94</u> Thin Walled Tube PROJECT <u>Houston-Galveston Navigation Channel</u> ☒ 3" ☐ 6" LOCATION <u>DISPOSAL AREA 116</u> ELEVATION OF HOLE _____ MANUFACTURER'S DESIGNATION OF DRILL RIG <u>Ardco K4X4, C-1000 Marsh Buggy</u> GROUNDWATER: DEPTH <u>0</u> ft., ELEV. _____ ft., at end of Drilling WEATHER <u>CLOUDY / WARM / RAIN</u> DRILLER <u>DAVID GRESUREK</u> LOGGER <u>RUSTY TEEMAN / Willie Barnes</u>					
				COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS	
-35-									
	X 12			GRAY	SAND	LOOSE	SILTY	-W/SHELL FRAGMENTS	
	X 13			GRAY	SAND	MEDIUM DENSE	SILTY	-W/SHELL FRAGMENTS	
-40-								Torvane Multiplier 0.2	
								J: Jar Sample	
-45-									
-50-									
-55-									
-60-									
-65-									
-70-									

U.S. ARMY CORPS OF ENGINEERS

DEPTH, FEET		SAMPLE NO.	PEN./TORVANE	SPT. - BLOW COUNT	COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
BORING NO. <u>93-117</u> DATE: BEGIN <u>8-8-94</u> PAGE <u>1 / 2</u> JOB NO. <u>946783-1</u> COMPLETE <u>8-9-94</u> Thin Walled Tube PROJECT <u>HOUSTON-GALVESTON Navigation Channel</u> ☒ 3" ☐ 6" LOCATION <u>DISPOSAL AREA 16</u> ELEVATION OF HOLE _____ MANUFACTURER'S DESIGNATION OF DRILL RIG <u>Arco K4x4, C-1000 Marsh Buggy</u> GROUNDWATER: DEPTH <u>8</u> ft., ELEV. _____ ft., at end of Drilling WEATHER <u>CLOUDY / WARM / RAIN</u> DRILLER <u>DAVID GREGOREK</u> LOGGER <u>RUSTY TEETAN / Willie Barnes</u>									
Torvane Reading									
0		J 1			LIGHT GRAY	SAND	MEDIUM DENSE	SILTY	- Jar Sample 0-2'
		X 2	6 1/8	11	GRAY	SAND	MEDIUM DENSE	SILTY	w/ SHELL FRAGMENTS
5									
		X 3	3 1/6	10	GRAY	SAND	MEDIUM DENSE		w/ SHELL FRAGMENTS
0.05		X 4	0.00	0.01	GRAY	CLAY	Very Soft	Sandy	w/ shell fragments, sand at bottom of sample
		X 5	2 1/2	3	GRAY	SAND	LOOSE	SILTY	w/ SHELL FRAGMENTS
15									
		X 6	3 1/5	7	GRAY	SAND	MEDIUM DENSE	SILTY	w/ SHELL FRAGMENTS
20									
		X 7	3 1/4	7	GRAY	SAND	MEDIUM DENSE	SILTY	w/ SHELL FRAGMENTS AND WOOD FRAGMENT
25									
		X 8	3 1/6	9	GRAY	SAND	MEDIUM DENSE	SILTY	- w/ SHELL FRAGMENTS clay @ 28'
0.1		X 9	0.00	0.02	GRAY	CLAY	Very Soft	Sandy	w/ SHELL FRAGMENTS
30		J 10			GRAY	SAND	LOOSE	SILTY	- Jar sample 30-32 w/ shell fragments
		X 11	2 1/4	15	GRAY	SAND	LOOSE	SILTY	- w/ SHELL fragments
35									