

Project: Port of Galveston Navigation Channel

SUMMARY OF LABORATORY TEST RESULTS

Contract No. DACW64-94-C-0040Boring No. 93-87

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 - 2	4.50		Gray, Clay, Hard, w/shell fragments and roots	C H	24.8											
2	2 - 4	1.25		Gray, Clay, Stiff	C H	23.1											
3	4 - 6	1.25		Brown & gray, Clay, Stiff, w/sand seams	C H	32.5	86.8	115.0	54	22	99.9	97.7	95.1	91.8	88.9		1.22
4	6 - 8	1.75		Brown & gray, Clay, Stiff See SWD report 16162	C H	32.6	88		69	19							
5	8 - 10	1.25		Brown & gray, Clay, Stiff	C H	37.4											
6	10 - 12	0.25		Gray, Clay, Soft, Sandy	CL	27.1	100.0	127.1	24	15	99.8	99.6	99.1	90.2	60.1		0.30
7	12 - 14	0.00		Gray, Clay, Very soft, w/sand seams See SWD report 16162	C H	51.3	70		71	16						0.06	
8	14 - 16	0.00		Gray, Clay, Very soft, w/sand seams See SWD report 16162	C H	47.9	75		57	16						0.04	
9	16 - 18	0.00		Gray, Clay, Very soft, w/sand seams See SWD report 16162	C H	47.6	73		65	18						0.04	
10	18 - 20	0.25		Gray, Clay, Soft, Sandy	CL	34.4											
11	20 - 22	0.25		Gray, Clay, Soft, Sandy	CL	35.6	84.3	114.3	27	15	100.0	99.9	99.4	95.4	65.6		0.29
12	22 - 24	0.25		Gray, Clay, Soft, Sandy	CL	25.4											
13	24 - 26	0.25		Gray, Clay, Soft, Sandy	CL	30.6											
14	26 - 28	0.25		Gray, Clay, Soft, Sandy	CL	27.9											
15	28 - 30	0.25		Gray, Clay, Soft, Sandy	CL	24.0	97.7	121.1	27	17	99.9	98.9	97.8	89.6	58.6		0.48
16	30-31.5		20	Gray, Sand, Medium dense, Silty	S M												
17	34-36	2.75		Brown, Clay, Very stiff	C H	35.4											
18	36-38	3.00		Brown, Clay, Very stiff	C H	28.5											
19	38-40	3.75		Brown, Clay, Very stiff	C H	23.4											

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

DEPTH, FEET		SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
BORING NO. <u>93-87</u> DATE: BEGIN <u>7-21-94</u> PAGE <u>2 1 2</u> JOB NO. <u>946783.1</u> COMPLETE <u>7-21-94</u> Thin Walled Tube PROJECT <u>Houston-Galveston Navigation Channel</u> ☒ 3" ☐ 6" LOCATION <u>DISPOSAL AREA #15</u> ELEVATION OF HOLE _____ MANUFACTURER'S DESIGNATION OF DRILL RIG <u>Ardea K44, C-1000 Marsh Buggy</u> GROUNDWATER: DEPTH <u>0</u> ft., ELEV. _____ ft., at end of Drilling WEATHER <u>SUNNY + HOT</u> DRILLER <u>SCOTT GREGUREK</u> LOGGER <u>JOHN A. GENTRY</u>									
-35-		18	2.7		BROWN	CLAY	VERY STIFF		+CLAY 36'-40
-40-		19	3.25		BROWN	CLAY	VERY STIFF		
-45-									Torvane Multiplier 0.2
-50-									
-55-									
-60-									
-65-									
-70-									

U.S. ARMY CORPS OF ENGINEERS

BORING NO. 93-87 DATE: BEGIN 7-21-94 PAGE 1 1 3
 JOB NO. 946783-1 COMPLETE Thin Walled Tube
 PROJECT HANSTON-GALVESTON Navigation Channel ☒ 3" ☐ 6"
 LOCATION DJS POSAL AREA # 15
 ELEVATION OF HOLE _____
 MANUFACTURER'S DESIGNATION OF DRILL RIG Arko K4X4, C-1000 Marsh Buggy
 GROUNDWATER: DEPTH 0 ft., ELEV. _____ ft., at end of Drilling
 WEATHER SUNNY HOT
 DRILLER SCOTT GREGURIK LOGGER JOHN A. CANTRY

Torvane Reading

DEPTH, FEET	SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0								
1	4.5			DARK GRAY	CLAY	HARD		- W/ GRASS ROOTS 0'-1'
2	1.5			GRAY	CLAY	STIFF		+ BROWN 2'-4
3	1.25			BROWN	CLAY	STIFF		+ GRAY 4'-10
4	1.5			BROWN	CLAY	STIFF		
5	2.0			BROWN	CLAY	STIFF		
6	0.07			GRAY	CLAY	VERY SOFT		- W/ SAND LAYER 10'-12.5
7	0.004			GRAY	CLAY	VERY SOFT		- W/ SAND SEAMS 12'-19
8	0.004			GRAY	CLAY	VERY SOFT		
9	0.004			GRAY	CLAY	VERY SOFT		
10	0.004			GRAY	CLAY	VERY SOFT		- W/ SAND LAYER 18-19
11	0.002			GRAY	CLAY	VERY SOFT	SANDY	
12	0.004			GRAY	CLAY	VERY SOFT	"	
13	0.004			GRAY	CLAY	VERY SOFT	"	
14	0.004			GRAY	CLAY	VERY SOFT	"	
15	0.005			GRAY	CLAY	VERY SOFT	"	SAND @ 30'
16	0.004			GRAY	SAND	MEDIUM DENSE	SILTY	+ BROWN 30'-34'
17	2.5			BROWN	CLAY	VERY STIFF		+ GRAY