

U.S. ARMY CORPS OF ENGINEERS

DEPTH, FEET		SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	BORING NO. <u>91214</u> DATE <u>7-26-91</u> PAGE <u>11</u>					
					JOB NO. <u>146490</u> COMPLETE <u>7-26-91</u> Thin Walled Tube					
					PROJECT <u>2-WW</u> ☒ 3" ☒ 6"					
					LOCATION <u>SARGENT BEACH</u> Surface Ground too Soft To Push 6" Sample					
					ELEVATION OF HOLE _____					
					MANUFACTURER'S DESIGNATION OF DRILL RIG <u>ARDC Buggy</u>					
					GROUNDWATER: DEPTH _____ ft., ELEV. _____ ft., at end of Drilling					
					WEATHER <u>PARTLY CLOUDY</u>					
					DRILLER <u>ROBERT TANKERSLOTT</u> <u>JOHN A GENTRY</u>					
		COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS				
0	1	0.5	BROWN	CLAY	MEDIUM STIFF		w/ SAND LAYER 0-2'			
	2	1.0	BROWN	CLAY	STIFF		+ GRAY			
-5-	3	1.0	GRAY	CLAY	STIFF					
	4	1.0	GRAY	CLAY	STIFF		+ BROWN 6'-14'			
-10-	5	1.5	GRAY	CLAY	STIFF					
	6	1.0	GRAY	CLAY	STIFF					
	7	1.0	GRAY	CLAY	STIFF					
-15-	8	0.25	GRAY	CLAY	SOFT					
	9	0.25	GRAY	CLAY	SOFT					
-20-	10	0.25	GRAY	CLAY	SOFT					
	11	0.25	GRAY	CLAY	SOFT		w/ SILT SEAMS			
	12	2.25	GRAY	CLAY	VERY STIFF		w/ CALCAREOUS + SHELL FRAGMENTS			
-25-	13	3.75	BROWN	CLAY	VERY STIFF		+ LIGHT GRAY - w/ CALCAREOUS			
	14	2.5	BROWN	CLAY	VERY STIFF		w/ SHELL FRAGMENTS			
	15	2.5	REDISH BROWN	CLAY	VERY STIFF					
30	16	2.5	GRAY	CLAY	VERY STIFF		+ BROWN TAN 30'			
	17	2.5	GRAY	CLAY	VERY STIFF					
-35-	18	2.5	GRAY	CLAY	VERY STIFF					

U.S. ARMY CORPS OF ENGINEERS

DEPTH, FEET		SAMPLE	SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	BORING NO. <u>91214</u> DATE: BEGIN <u>7-26-91</u> PAGE <u>211</u> JOB NO. <u>146490</u> COMPLETE <u>7-26-91</u> Thin Walled Tube PROJECT <u>G E W W</u> ☒ 3" ☐ 6" LOCATION <u>SARIENT BEACH</u> Surface Ground too soft to push 6" sampler ELEVATION OF HOLE _____ MANUFACTURER'S DESIGNATION OF DRILL RIG <u>ARPCO BUCY</u> GROUNDWATER: DEPTH <u>1</u> ft., ELEV. _____ ft., at end of Drilling WEATHER <u>PARTLY CLOUDY</u> DRILLER <u>ROBERT TANKER</u> - LOGGER <u>JOHN A. JEFFER</u>				
		COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS				
35	19	3.0	GRAY CLAY	VERY STIFF		BROWN & TAN 30-40				
	20	3.25	GRAY CLAY	VERY STIFF		-w/ CALCAREOUS & FERRUGIN 36'-40'				
40	21	3.75	REDISH BROWN CLAY	VERY STIFF		+ LIGHT GRAY - w/ CALCAREOUS 40'-44'				
	22	3.75	REDISH BROWN CLAY	VERY STIFF						
45	23	4.5	REDISH BROWN CLAY	HARD						
	24	4.5	REDISH BROWN CLAY	HARD						
	25	4.0	REDISH BROWN CLAY	HARD						
50	26	4.0	BROWN CLAY	HARD						
	27	4.0	BROWN CLAY	HARD						
55	28	3.5	BROWN CLAY	VERY STIFF		-w/ SILT LAYER 54'-58'				
	29	3.75	BROWN CLAY	VERY STIFF						
60	30	4.5	BROWN CLAY		SILTY	+ LIGHT GRAY BROWN				
						BOTTOM OF 91214				
Surface ground too soft to support drilling. Buggy and water buggy 6" samples could not be obtained.										

Project : Gulf Intracoastal Waterway near Sargeant Beach, Texas
Contract No. DACW64-91-D-001, Delivery Order No. 0022

SUMMARY OF LABORATORY TEST RESULTS

Boring No. 91-214

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)	LL (%)	P L (%)	Mechanical Analysis % Passing					Torvane Shear Strength (tsf)	q u (tsf)
											#4	#10	#40	#100	#200		
1	0-2	0.25		Gray, Clay, Soft, w/Roots & sand layers	CH	49.8											
2	2-4	0.50		Gray, Clay, Medium stiff w/Roots <i>Soft</i>	CH	36.9											
3	4-6	1.00		Gray, Clay, Stiff	CH	26.9											
4	6-8	1.50		Gray, Clay, Stiff, w/Sand pockets	CH	29.7											
5	8-10	1.25		Brown & gray, Clay, Stiff, w/Calcareous nodules	CH	32.5	90.0	119.2	59	24	100.0	99.5	97.5		96.2		0.87
6	10-12	1.00 <i>1.00</i>		Gray, Clay, Stiff <i>SWD</i>	CH	29.8	93		57	18					99		
7	12-14	0.75		Gray, Clay, Medium stiff	CH	36.3											
8	14-16	0.25 <i>0.25</i>		Gray, Clay, Soft <i>SWD</i>	CH	48.3	70		61	19					99		
9	16-18	0.25		Gray, Clay, Soft <i>SWD</i>	CH	53.9	73		61	20					99		
10	18-20	0.25		Gray, Clay, Soft <i>SWD</i>	CH	52.6	69		71	22					99		
11	20-22	0.25		Gray, Clay, Soft	CH	48.9	72.0	107.2	64	26	100.0	100.0	99.4		97.0		0.17
12	22-24	0.50		Olive gray, Clay, Medium stiff w/Shell fragments <i>Soft</i>	CH	25.9											
13	24-26	1.75		Olive gray, Clay, Stiff, w/Calcareous nodules, Slickensided	CH	24.7											
14	26-28	1.25		Brown & gray, Clay, Stiff, w/Shell fragments	CH	30.8											
15	28-30	2.50 <i>3.5</i>		Reddish brown, Clay, Very stiff <i>SWD</i>	CH	27.6	94		71	21					94		
16	30-32	2.25		Brown & gray, Clay, Very stiff, Slickensided	CH	34.7											
17	32-34	1.50		Gray & brown, Clay, Stiff, w/Blocky structure	CH	38.5	83.4	115.5	81	31	100.0	100.0	98.9		97.5		1.07

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

Project : Gulf Intracoastal Waterway near Sargeant Beach, Texas
Contract No. DACW64-91-D-001, Delivery Order No. 0022

SUMMARY OF LABORATORY TEST RESULTS

Boring No. 91-214

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		
18	34-36	2.00		Gray & brown, Clay, Very stiff, w/Calcareous nodules	CH	34.7											
19	36-38	2.75		Gray & brown, Clay, Very stiff, w/Calcareous nodules	CH	28.1											
20	38-40	2.50		Gray & brown, Clay, Very stiff, w/Calcareous nodules	CH	27.2											
21	40-42	3.75		Red & gray, Clay, Very stiff, w/Calcareous nodules & ferrous stains	CH	25.8											
22	42-44	3.75		Red & gray, Clay, Very stiff, w/Calcareous nodules & ferrous stains	CH	21.1											
23	44-46	4.5+		Red & gray, Clay, Hard, w/Calcareous nodules & ferrous stains	CH	24.7											
24	46-48	4.5+		Red & gray, Clay, Hard, w/Ferrous stains	CH	26.6	98.4	124.5	68	24	100.0	100.0	99.3		99.0		3.48
25	48-50	4.25		Red & gray, Clay, Hard, w/Ferrous stains, Slickensided	CH	27.9											
26	50-52	3.75		Red & gray, Clay, Very stiff, w/Ferrous stains, Slickensided	CH	28.9											
27	52-54	3.50		Red & gray, Clay, Very stiff, w/Ferrous stains, Slickensided	CH	27.5											
28	54-56	3.50		Red & gray, Clay, Very stiff, w/Calcareous nodules	CH	27.2											
29	56-58	3.50		Red & gray, Clay, Very stiff, w/Calcareous nodules	CH	20.9											
30	58-60	2.50		Brown & gray, Clay, Very stiff	CH	22.7											

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