

U.S. ARMY CORPS OF ENGINEERS

BORING NO. 91215 DATE: BEGIN 07-29-91 PAGE 1 12
 JOB NO. 146490 COMPLETE 07-30-91 Thin Walled Tube
 PROJECT GIWW ☒ 3" ☐ 6"
 LOCATION SARGENT BEACH
 ELEVATION OF HOLE _____
 MANUFACTURER'S DESIGNATION OF DRILL RIG F-36
 GROUNDWATER: DEPTH _____ ft., ELEV. _____ ft., at end of Drilling
 WEATHER PARTLY CLOUDY & HOT dur. Thunder & Lightning
 DRILLER Robert Tankard LOGGER John A. Newton

DEPTH, FEET	SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS
0	1	N/A	N/A	TAN	SAND	LOOSE		*SHELL
5	2	D		GRAY	CLAY	VERY SOFT	SANDY	*VERY - w/ SAND LAYER & SHELL FRAGMENTS
	3	D		GRAY	CLAY	VERY SOFT	SANDY	-w/ SAND LAYER 6'-10'
10	4	D		GRAY	CLAY	VERY SOFT	SANDY	
	5	D		GRAY	CLAY	VERY SOFT		
	6	0.25		GRAY	CLAY	SOFT		-w/ SAND LAYERS
15	7	0.25		BROWN	CLAY	SOFT		
20	8	1.22		BROWN	SAND	LOOSE	SILTY	*FINE
25	9	4.44		BROWN	SAND	"	SILTY	*FINE
30	10	6.66		BROWN	SAND	MEDIUM DENSE	SILTY	*FINE
35	11	2.25		BROWN	CLAY	VERY STIFF		*GRAY - w/ SAND LAYER 32'-32.5'
	12	3.25		BROWN	CLAY	VERY STIFF		-w/ CALcareous Nod

JAR

DEPTH. FEET		SAMPLE	SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	BORING NO. <u>91215</u>	DATE: BEGIN <u>07.29.91</u>	PAGE <u>2</u> of <u>12</u>
						JOB NO. <u>14G 490</u>	COMPLETE <u>7-30-91</u>	Thin Walled Tube
						PROJECT <u>GZWW</u>	☒ 3"	☐ 6"
						LOCATION <u>SARGENT BEACH</u>		
						ELEVATION OF HOLE _____		
						MANUFACTURER'S DESIGNATION OF DRILL RIG <u>F 36</u>		
						GROUNDWATER: DEPTH <u>1</u> ft., ELEV. _____ ft., at end of Drilling		
						WEATHER <u>Partly Cloudy</u>		
						DRILLER <u>Robert Janderly</u>	LOGGER <u>John A. Herby</u>	
COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS				
35	13 3.25 BROWN CLAY	VERY STIFF		* LIGHT GRAY - w/CALCAREOUS NO. 1				
	3.25 BROWN CLAY	VERY STIFF		- w/SAND LAYER				
40	14 10.4 BROWN SAND	MEDIUM DENS.		- w/ CLAY LAYERS				
	15 3.5 BROWN CLAY	VERY STIFF		* GRAF 142' - 54'				
45	16 3.5 BROWN CLAY	VERY STIFF						
	18 3.25 BROWN CLAY	VERY STIFF						
	19 3.0 BROWN CLAY	VERY STIFF						
50	20 2.5 BROWN CLAY	VERY STIFF						
	21 2.5 BROWN CLAY	VERY STIFF						
55	22 4.0 BROWN CLAY	HARD		w/SILT LAYERS & SEAMS 54'-56'				
	23 4.5 BROWN CLAY	HARD						
60	24 4.5 BROWN CLAY	HARD						
						BOTTOM OF 91215		

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. 91-215

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			Tan,Sand,Loose,Silty,w/Shell	S M	10.9											
	2-4			No recovery													
2	4-6	0.00		Gray,Clay,Very soft,Sandy,w/Shell fragments	CL	41.0	80.4	113.3	43	22	100.0	100.0	99.8		86.0	0.01	0.11
3	6-8	0.00		Gray,Clay,Very soft,Sandy,w/Shell fragments	CL	35.9										0.01	
4	8-10	0.00		Gray,Clay,Very soft,Sandy	CL	34.3										0.01	
5	10-12	0.00		Gray,Clay,Very soft,Sandy,w/Shell fragments	CL	31.6	88.8	116.8	32	16	99.8	99.8	99.5		73.3	0.01	0.12
6	12-14	0.00		Gray,Clay,Very soft,Sandy,w/Shell fragments	CL	31.4										0.03	
7	14-16	0.00		Gray,Clay,Very soft,Sandy,w/Shell fragments	CL	33.7	89.3	119.4	33	17	100.0	99.9	99.7		69.0	0.04	0.09
8	18.5-20		4	Tan,Sandy,Loose,Silty	S M						100.0	100.0	100.0		48.0		
9	23.5-25		8	Tan,Sand,Loose,Silty	S M						100.0	94.4	90.0		43.2		
10	28.5-30		12	Tan,Sand,Medium dense,Silty	S M												
11	32-34	2.50		Olive gray & brown,Clay,Very stiff,w/Calcareous nodules	CH	30.3											
12	34-36	2.50		Olive gray & brown,Clay,Very stiff,w/Calcareous nodules	CH	30.4											
13	36-38	3.00		Red & gray,Clay,Very stiff,w/Calcareous nodules	CH	25.8	99.3	124.9	63	25	100.0	98.9	98.5		98.4		2.15
14	38-40	3.00		Red & gray,Clay,Very stiff,w/Calcareous nodules & Ferrous stains	CH	27.6											
15	40.5-42		24	Tan,Sand,Medium dense,Silty	S M												
16	42-44	3.25		Red & gray,Clay,Very stiff,w/silt seams	CH	29.5											

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. 91-215

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		
17	44-46	3.50		Red & gray, Clay, Very stiff, w/Silt seams	CH	28.2											
18	46-48	3.75		Red & gray, Clay, Very stiff, w/Calcareous nodules	CH	27.2	96.4	122.7	64	26	100.0	100.0	99.4		99.0		2.71
19	48-50	3.50		Red & gray, Clay, Very stiff	CH	27.7											
20	50-52	3.50		Red & gray, Clay, Very stiff	CH	23.7											
21	52-54	3.00		Red & gray, Clay, Very stiff	CH	30.9	93.7	122.7	58	23	100.0	100.0	100.0		100.0		2.30
22	54-56	3.50		Red & gray, Clay, Very stiff	CH	22.4											
23	56-58	3.00		Red & gray, Clay, Very stiff, w/Silt pockets and seams	CH	23.5											
24	58-60	4.50		Red & gray, Clay, Hard, w/Calcareous nodules	CH	26.8											

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