

U.S. ARMY CORPS OF ENGINEERS

DEPTH, FEET		SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	BORING NO. 9135	DATE: BEGIN 12-14-91	PAGE 12
					JOB NO. 146531	COMPLETE 12-14-91	Thin Walled Tube
					PROJECT GIWW		12 5" 6"
					LOCATION SARGENT BEACH	Sta 397+00	
					ELEVATION OF HOLE		
					MANUFACTURER'S DESIGNATION OF DRILL RIG ARDCO		
					GROUNDWATER: DEPTH 3 ft., ELEV.	ft., at end of Drilling	
					WEATHER MOSTLY CLOUDY WINDY + COLD		
					DRILLER Douglas Mitchell	LOGGER John A. Harting	
		COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS	
0	1	0.25	BROWN	CLAY	SOFT		-w/ROOTS 0'-1'
	2	1.0	GRAY	CLAY	STIFF		
5	3	1.25	GRAY	CLAY	STIFF		
	4	1.25	GRAY	CLAY	STIFF		
	5	0.25	GRAY	CLAY	SOFT		-w/ SHELL FRAGMENTS 8'-14'
10	6	0	GRAY	CLAY	VERY SOFT		
	7	0.25	GRAY	CLAY	SOFT		
	8	1.5	GRAY	CLAY	STIFF		* BROWN 14'-20'
15	9	2.0	GRAY	CLAY	STIFF		-w/ Ferrous 16'
	10	2.5	GRAY	CLAY	STIFF		-w/ CALAREOCS 18'
20	11	2.75	REDISH BROWN	CLAY	STIFF		* LIGHT GRAY 20'
	12	2.75	REDISH BROWN	CLAY	STIFF		* BROWN 24-28
25	13	3.75	GRAY	CLAY	STIFF		-w/ SAND LAYERS SEAM 24'-28'
	14	2.5	GRAY	CLAY	STIFF		* REDISH BROWN 28'
	15	4.5	GRAY	CLAY	HARD		-w/ SAND POCKETS 28'
30	16	1.25	REDISH BROWN	CLAY	STIFF	SILTY	-w/ SILT SAND LAYERS 30'-34'
	17	1.5	REDISH BROWN	CLAY	STIFF	SILTY	
35	18	2.0	REDISH BROWN	CLAY	STIFF		SHORT SAMPLE 34'-36'
							-w/ SILTY CLAY LAYER

U.S. ARMY CORPS OF ENGINEERS

DEPTH, FEET		SAMPLE	SAMPLE NO.	PEN./TORVANE SPT.-BLOW COUNT	BORING NO. <u>91315</u>	DATE: BEGIN <u>12-14-91</u>	PAGE <u>2</u> of <u>2</u>
					JOB NO. <u>146831</u>	COMPLETE <u>12-14-91</u> Thin Walled Tube	
					PROJECT <u>CZWW</u>	☒ 5" ☐ 6"	
					LOCATION <u>SARGENT BEACH STA 397 +00</u>		
					ELEVATION OF HOLE _____		
					MANUFACTURER'S DESIGNATION OF DRILL RIG <u>ARCO</u>		
					GROUNDWATER: DEPTH <u>3</u> ft., ELEV. _____ ft., at end of Drilling		
					WEATHER <u>MDSTLY CLOUD WINDY + COLD</u>		
					DRILLER <u>Douglas Mitchell</u> LOGGER <u>John A. Bentley</u>		
		COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS	
35	19	2.0	REDISH BROWN CLAY	VERY STIFF			
	20	2.25	LIGHT GRAY CLAY	VERY STIFF		* BROWN 38'-40' w/ SAND POCKETS + SILT LAYER 38'-40'	
40	21	2.5	LIGHT GRAY CLAY	VERY STIFF		* REDISH BROWN 40'-42' LOST CIRCULATION	
	22	1.0	BROWN CLAY	STIFF	SILTY		
45	23	1.75	BROWN CLAY	STIFF	SILTY	w/ SAND STREAKS + LAYERS	
	24	1.25	BROWN CLAY	STIFF	SILTY		
	25	1.25	BROWN CLAY	STIFF	SILTY	Below 44'	
50							
55							
60							
65							
70							

Project : Gulf Intracoastal Waterway, near Sargent Beach, Texas
Contract No. DACW64-92-D-0001

SUMMARY OF LABORATORY TEST RESULTS

Boring No. 91-315

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 (%)	PL (%)	Mechanical Analysis % Passing					Torvane Shear Strength (tsf)	q u (tsf)
											#4	#10	#40	#100	#200		
1	0-2	0.75		Brown, Clay, Medium stiff, w/sand parting & roots	CH	35.2										0.30	
2	2-4	1.50		Gray, Clay, Stiff, w/ferrous stains	CH	29.4	93.7	121.3	52	21	100.0	99.9	99.5	98.9	95.7	0.60	
3	4-6	1.25 1.75-1.25		Gray, Clay, Stiff <i>SWD</i>	CH CH	26.3 26.3	99 99		49 49	18 18					90		<i>c = 54</i>
4	6-8	0.75		Gray & brown, Clay, Medium stiff	CH	38.3										0.50	
5	8-10	0.25		Gray & brown, Clay, Soft, Sandy	CL	37.7	84.7	116.7	45	18	100.0	99.8	99.3	96.7	80.6	0.10	
6	10-12	0.00 0.25		Gray, Clay, Very soft, w/shell fragments <i>SWD</i>	CH CL	42.9 42.9	77 77		47 47	16 16					86		<i>c = 140</i>
7	12-14	0.00		Gray, Clay, Very soft, w/shell fragments	CH	51.7										0.09	
8	14-16	1.25		Gray & tan, Clay, Stiff	CH	37.5											
9	16-18	1.75		Gray & tan, Clay, Stiff	CH	39.8											
10	18-20	2.00		Gray & tan, Clay, Very stiff, w/calcareous nodules	CH	35.5	87.8	119.0	97		97.8*	96.4*	95.7	95.0	92.6		
11	20-22	3.00		Reddish brown, Clay, Very stiff, w/calcareous nodules	CH	32.5											
12	22-24	3.00		Reddish brown & gray, Clay, Very stiff	CH	33.5											
13	24-26	3.50		Gray & tan, Clay, Very stiff, Sandy, w/calcareous nodules	CL	19.6											
14	26-28	4.00		Gray & tan, Clay, Very stiff, Sandy, w/calcareous nodules	CL	19.0											
15	28-30	3.25		Gray & tan, Clay, Very stiff, Sandy, w/sand seams and calcareous nodules	CL	17.6	113.1	133.0	46		99.9	99.0	96.8	95.5	83.4		
16	30-32	2.00		Reddish brown, Clay, Very stiff, Sandy, w/silt seam	CL	19.5											
17	32-34	2.00		Reddish brown, Clay, Very stiff, Sandy, w/calcareous nodules	CL	21.7											

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

* : Material Retained are Calcareous Nodules

Project : Gulf Intracoastal Waterway, near Sargent Beach, Texas
Contract No. DACW64-92-D-0001

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Boring No. 91-315

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											#4	#10	#40	#100	#200		
18	34-36	2.50		Reddish brown,Clay,Very stiff,Sandy	CL	26.1											
19	36-38	3.00		Reddish brown,Clay,Very stiff	CH	31.4											
20	38-40	2.50		Gray & tan,Clay,Very stiff,Silty	CL	20.1	109.7	131.8	37		100.0	99.6	98.9	98.4	91.0		
21	40-42	2.50		Gray & tan,Clay,Very stiff,silty	CL	19.6											
22	42-44	2.25		Reddish brown,Clay,Very stiff,Silty,w/sand parting	CL	21.9											
23	44-46	2.50		Reddish brown,Clay,Very stiff,Silty,w/sand parting	CL	20.2											
24	46-48	2.75		Brown & tan,Clay,Very stiff,Silty,w/sand parting	CL	20.6											
25	48-50	3.00		Brown,Clay,Very stiff,Silty,w/sand parting	CL	15.4											

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