

U.S. ARMY CORPS OF ENGINEERS

DEPTH, FEET		SAMPLE NO.	SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	BORING NO. <u>91210</u>	DATE: BEGIN <u>07-09-91</u>	PAGE <u>112</u>	
						JOB NO. <u>146490</u>	COMPLETE <u>7-9-91</u>	Thin Walled Tube	
						PROJECT <u>GIWW</u>		☐ 3" ☒ 6"	
						LOCATION <u>SARGENT BEACH</u>			
						ELEVATION OF HOLE			
						MANUFACTURER'S DESIGNATION OF DRILL RIG <u>F-3L</u>			
						GROUNDWATER: DEPTH <u>2</u> ft., ELEV. <u> </u> ft., at end of Drilling			
						WEATHER <u>PARTLY CLOUDY + SUNNY</u>			
						DRILLER <u>Robert Tankersley</u>	LOGGER <u>John A. Heston</u>		
						COLOR	MATERIAL TYPE	CONSISTENCY	
								SECONDARY CONSTITUENTS	
								STRUCTURAL FEATURES AND COMMENTS	
	0								
	1			0.75		BROWN	CLAY	MEDIUM STIFF	W/ROOTS (FILL 0'-8'), -NR W/6" Tube 2-4'
	2			N/R					
	3			0.25		GRAY	"	SOFT	-W/Sand + SHELL LAYERS -W/WOOD 5'-6'
	4			1.2		BROWN	SAND	VERY LOOSE	-W/SHELL
	5			1.2		GRAY	CLAY	SOFT	-W/SHELL 8'-10'
	6			1.2		"	"	SOFT	
	7			0.25		BROWN	CLAY	SOFT	-NR W/6" Tube 12-14'
	8			N/R					GRAY
	9			N/A		GRAY	SAND		-NR W/6" Tube 16-18'
	10								FINE
	11			1.25		BROWN	CLAY	STIFF	
	12			N/R					-NR W/6" Tube 25-27'
	13			0.5		BROWN	CLAY	MEDIUM STIFF	-W/SILT SEAMS 27-29'
	14			N/R					GRAY
	15			0.75		BROWN	CLAY	MEDIUM STIFF	-NR W/6" Tube 29-31'
	16			N/R					-W/SILT POCKETS + SEAMS
	17			1.0		"	"		31-33'
	18								-NR W/6" Tube 33-35'
	19								"

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DEPTH, FEET		SAMPLE NO.	PEN./TORVANE	SPT.-BLOW COUNT	BORING NO.	DATE: BEGIN	PAGE	THIN WALLED TUBE
					91216	07-09-91	212	
					146490	COMPLETE 07-9-91		
					GIWW			
					SARGENT BEACH			
					ELEVATION OF HOLE			
					MANUFACTURER'S DESIGNATION OF DRILL RIG	F-36		
					GROUNDWATER: DEPTH	3 ft.,	ELEV.	
					WEATHER	PARTLY CLOUDY & SUNNY		
					DRILLER	ROBERT TANKERSLEY	LOGGER	JOHN A. GENTRY
		COLOR	MATERIAL TYPE	CONSISTENCY	SECONDARY CONSTITUENTS	STRUCTURAL FEATURES AND COMMENTS		
PUSH 3"	35	BROWN	CLAY	STIFF		*GRAY - w/ SILK SEAMS		
N/R 6"						-NR w/6" Tube 37-39'		
PUSH 3"	40	DARK GRAY	CLAY	STIFF		-NR w/6" Tube 41-43'		
N/R 6"								
PUSH 3"	45	DARK GRAY	CLAY	VERY STIFF		-NR w/6" Tube 45-47'		
N/R 6"								
PUSH 3"	50	LIGHT GRAY	CLAY	HARD	SAND	-w/ SAND SEAMS 47-49'		
N/R 6"						-NR w/6" Tube 49-51'		
PUSH 3"	55	LIGHT GRAY	CLAY	HARD	SAND	-w/ SAND ROCKETS 51-53'		
N/R 6"						-NR w/6" Tube 53-55'		
PUSH 3"	60	LIGHT GRAY	SAND	CLAY		-w/ SAND LAYER		
N/R 6"								
PUSH 3"	65	LIGHT GRAY	SAND	CLAY		w/ SILT STONES Below 60'		
N/R 6"						BOTTOM 65'		

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. 91-210

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	0.50		Brown, Clay, Medium stiff, w/Roots <i>Soft</i>	CH	43.2	79.0	113.2	71	28	99.8	99.6	98.4		96.6	0.30	0.35
	2-3 <i>4</i>			No recovery													
2	→ 3-4 <i>4-5</i>			Gray, Sand, Very loose, Silty, w/Shell & shell fragments	S M	21.8											
3	4-5 <i>5-6</i>	0.25		Gray, Clay, Soft, w/Sand pockets & Roots	CH	52.4											
4	6-8 <i>6.5-8.5</i>		3	Brown, Clay, Very soft, w/Shell & shell fragments	CH												
5	8.5-10		3	Gray, Clay, Very soft, w/Shell & shell fragments	CH	56.7											
6	10.5-12		3	Brown, Clay, Very soft, w/Shell & shell fragments	CH	51.9											
	12-14			No recovery													
7	14-16 <i>14.25</i>	0.25		Brown & gray, Clay, Soft <i>SWD</i>	CH	<i>67.2</i>	<i>58</i>		<i>87</i>	<i>27</i>					<i>100</i>		
	16-18			No recovery													
8	18-20			Gray, Sand, Loose, Silty	S M												
9	23.5-25		5	Brown, Clay, Medium stiff <i>Soft</i>	CH	44.9											
	25-27			No recovery													
10	27-29	0.50		Brown, Clay, Medium stiff, w/Silt seams <i>Soft</i>	CH	41.5	79.2	112.1	51	19	100.0	100.0	100.0		100.0	0.30	0.37
	29-31	<i>0.25</i>		No recovery													
11	31-33	0.75 <i>0.25</i>		Brown, Clay, Medium Stiff, w/Silt pockets & seams <i>SWD</i>	CH	<i>42.1</i>	<i>81</i>		<i>59</i>	<i>19</i>					<i>90</i>		<i>0.22</i>
	33-35			No recovery													

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

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											#4	#10	#40	#100	#200		
12	35-37	0.75		Brown, Clay, Medium stiff	CH	41.0	80.4	113.4	74	28	100.0	100.0	100.0		98.4		0.32
	37-39			No recovery													
13	39-41	1.75 <i>1.00</i>		Dark gray, Clay, Stiff	CH	<i>35.1</i>	<i>87</i>		<i>57</i>	<i>18</i>	<i>100</i>				<i>84</i>		
	41-43			No recovery													
14	43-45	2.00 <i>1.75</i>		Dark gray, Clay, Very stiff	CH	<i>31.6</i>	<i>92</i>		<i>66</i>	<i>20</i>	<i>100</i>				<i>90</i>		
	45-47			No recovery													
15	47-49	2.50		Gray, Clay, Very stiff, Sandy	CL	17.8	111.1	130.9	27	16	100.0	99.6	99.1		61.9		0.96
	49-51			No recovery													
16	51-53	4.5+		Light gray, Clay, Hard, Sandy, w/Sand seams	<i>CL</i> <i>SC</i>	<i>16.3</i>	<i>115</i>		<i>29</i>	<i>17</i>	<i>97</i>				<i>38</i>		
	53-55			No recovery													
17	55-57	0.75		Light gray, Clay, Medium stiff , Sandy	CL	24.0											
18	58.5-60		22	Light gray, Sand, Medium dense, Clayey	SC												

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