

PRELIMINARY INVESTIGATIONS OF SUBMERGED AREAS

Delivery Order Number 023
Project A N W Refuge

Date 10/21/04

Location ID Number J-9
Coordinates: X 2636972
Y 13234195

Water Depth 2.2
Pipe Length 15 - 13/6s

Tide Staff Readings:	
Time	Reading
Morning	
Mid-Day	
Evening	

Push No. 1 Time 8:04
Weight of Pipe Penetration (WOP) 4.0
One-Hand Push (40-lb) Depth 4.5

Comment SA CL
Comments SA CL

One-Hand Push (70-lb) Depth 4.9 Comments SA CL w/ shell

Two-Hand Push to Refusal - Depth 6.1 Comments shell w/ CL mix
Fig 8.5 6.1 to 6.5 Shell Layer
6.5 to 8.5 CL

Push No. 2 Time 8:17
Weight of Pipe Penetration (WOP) 2.9
One-Hand Push (40-lb) Depth 4.9

Comment SA CL
Comments SA CL w SA Layer 1" thick

One-Hand Push (70-lb) Depth 5.3 Comments CL + shell

Two-Hand Push to Refusal - Depth 5.3 Comments shell
Fig 6.2 shell

Hand Proving Ring Penetrometer Test? yes
Hand Vane Shear Test?

Technician (Probe Handler) mike A. Recorder GARY L.

HAND CONE PENETRATION TEST (CPT)

Delivery Order Number 023
Project A N W Refuge

Date 10/21/04

Location ID Number J-9
Time 8:26

Weight of Proving Ring _____
Weight of Rod Section 13.65

Weight of Rod Penetration 3.0
Comments _____

Number of Rods 3

End Depth	Dial	No. Rods	Comment	End Depth	Dial	No. Rods	Comment
3.3	121						
3.6	87						
4.0	97						
4.6	117						
4.9	64						
5.0	98						
5.3	78						
5.6	110						
5.9	68						
6.0	62						
6.3	152						
6.6	49						
6.9	81						
7.0	104						
7.3	158						
7.6	155						
7.9	100						
8.0	100						
8.3	78						
8.6	89						
8.9	193						
9.0	219						
9.2	286						

Comments SAC L with shell frag. from 3.3 to 8.6

8.6 to 9.2 shell

Hand Cone Penetrometer Test and Analysis:

RTB 11/8/4

Project: Aransas National Wildlife Ref. - BUS Site "J"
Location: Dunham Bay located outside of Rockport, TX
Delivery Order #: 0023
Date of Testing: 10/20/04 to 10/22/04

Probing Results

Resistance	Depth1'	Depth2'	MLT1'	MLT2'	Average
Weight of Pipe	4	2.9	-2.0	-0.9	-1.5
1 HP (40lbs)	4.5	4.9	-2.5	-2.9	-2.7
1 HP (70lbs)	4.9	5.3	-2.9	-3.3	-3.1
2 Hand Refusal	6.1	5.3	-4.1	-3.3	-3.7

[illegible]

Depth Vs. Shear Strength

♦ J9

