

PRELIMINARY INVESTIGATIONS OF SUBMERGED AREAS

Delivery Order Number 023 Date 10/21/04
Project ANW Refuge

Location ID Number J-10
Coordinates: X 2637271
Y 13234596
Water Depth 2.5
Pipe Length 18 13/65

Tide Staff Readings:
Time Reading
Morning _____
Mid-Day _____
Evening _____

Push No. 1 Time 12:59
Weight of Pipe Penetration (WOP) 3.0 Comment SA CL
One-Hand Push (40-lb) Depth 3.5 Comments SA CL

One-Hand Push (70-lb) Depth 4.8 Comments SA CL w/shell frag.
shell on Bottom

Two-Hand Push to Refusal - Depth 7.2 Comments SA CL w/shell frag.
Fig 7.5 shell shell on Bottom

Push No. 2 Time 1:16
Weight of Pipe Penetration (WOP) 4.0 Comment SA CL
One-Hand Push (40-lb) Depth 4.8 Comments SA CL

One-Hand Push (70-lb) Depth 5.1 Comments SA CL shell on Bottom

Two-Hand Push to Refusal - Depth 7.2 Comments SA CL w/shell frag.
Fig 7.5 SA

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

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

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	3	4.0	-1.1	-2.1	-1.6
1 HP (40lbs)	3.5	4.8	-1.6	-2.9	-2.3
1 HP (70lbs)	4.8	5.1	-2.9	-3.2	-3.1
2 Hand Refusal	7.2	7.2	-5.3	-5.3	-5.3

[illegible]

Depth Vs. Shear Strength

♦ J10

