

PRELIMINARY INVESTIGATIONS OF SUBMERGED AREAS

Delivery Order Number 024 Date 11/11/04
Project Aransas Wildlife Refuge

Location ID Number J-32 Tide Staff Readings:
Coordinates: X 2633154 Time Reading
Y 13232857
Water Depth 4.2 Morning _____
Pipe Length 15 Mid-Day _____
Evening _____

Push No. 1 Time 9:21
Weight of Pipe Penetration (WOP) 6.4 Comment Soft + CL
One-Hand Push (40-lb) Depth 8.7 Comments 11.11

One-Hand Push (70-lb) Depth 10.2 Comments SA Layer soft to firm CL shell frag.

Two-Hand Push to Refusal - Depth 11.0 Comments SA Layer firm CL
Fig 12.2 CL shell frag.

Push No. 2 Time 9:32
Weight of Pipe Penetration (WOP) 6.2 Comment Soft + CL
One-Hand Push (40-lb) Depth 8.4 Comments Soft CL shell frag?

One-Hand Push (70-lb) Depth 9.7 Comments SA CL soft to firm shell frag

Two-Hand Push to Refusal - Depth 11.3 Comments SA CL
Fig 12.6 firm CL/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: 024
Project: Arany Wildlife Refuge

Date: 11/11/04

Location ID Number J-32
Time 9:41

Weight of Proving Ring _____
Weight of Rod Section _____

Weight of Rod Penetration 6.9
Comments _____

Number of Rods 4

<u>End</u> <u>Depth</u>	<u>Dial</u>	<u>No.</u> <u>Rods</u>	<u>Comment</u>
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<u>End</u>	<u>Dial</u>	<u>No.</u>	<u>Comment</u>
<u>Depth</u>		<u>Rods</u>	

2.0 31 50ft CL w/ 40

7.3 27 11 11

7.9 44 11 11

40 41 42 43

4.3 53 Soft FIRE cl

8-6-39 11-11

9.3 91 11 11

9.6 52 " "

9.9 78 11 11

10.0 161 SW CL Shell Feam

10.6 153 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

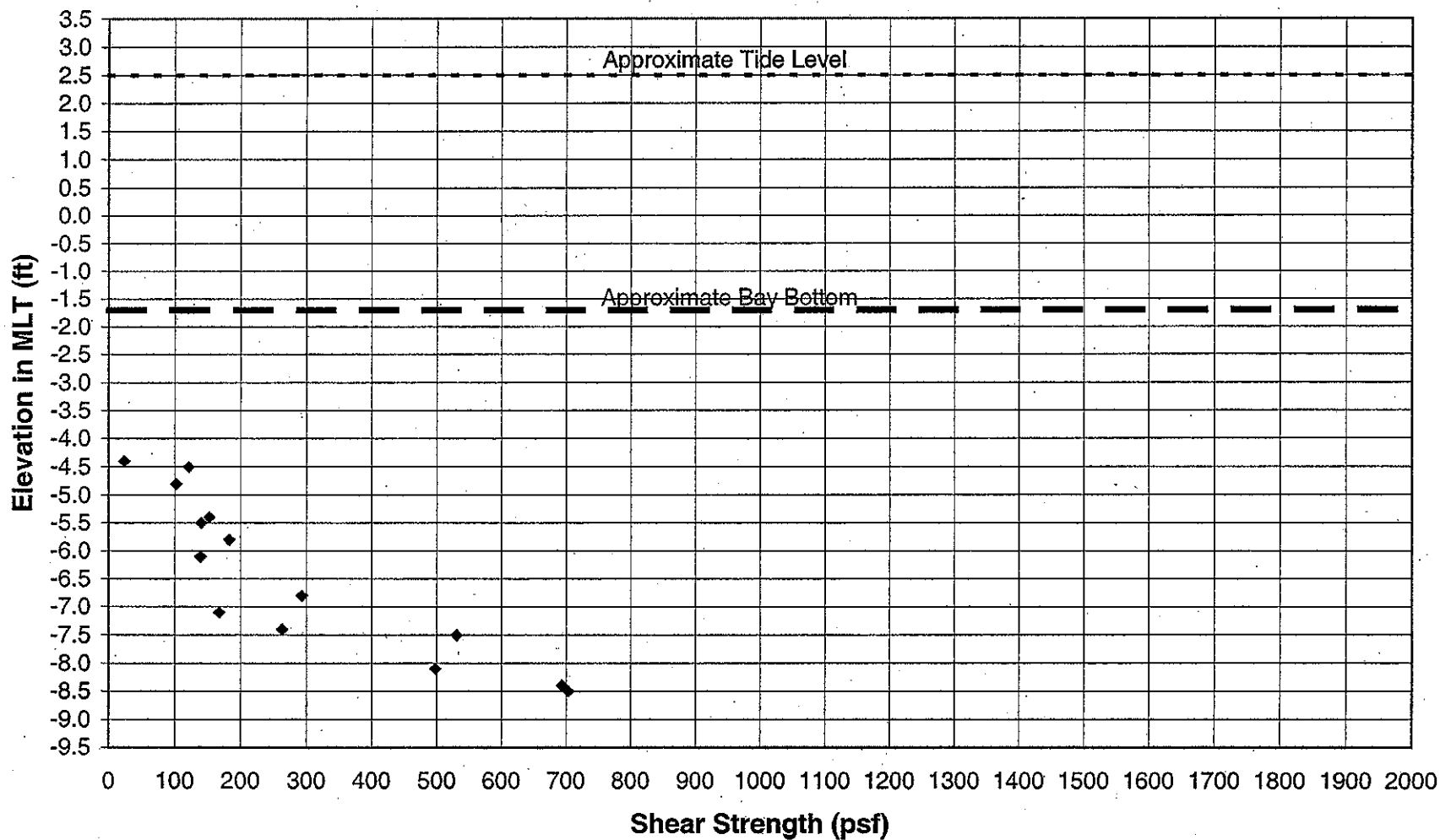
10.9 210 10.9 210

11.0 213 CC w/ shell layers

Comments

Depth Vs. Shear Strength

♦ J32



Hand Cone Penetrometer Test and Analysis:

RTB 12/07/04

Project: Aransas National Wildlife Ref. - BUS Site "J"
Location: Dunham Bay located outside of Rockport, TX
Delivery Order #: 0024
Date of Testing: 11/10/04 - 11/11/04

Probing Results

Resistance	Depth 1	Depth 2	MLT1'	MLT2'	Average
Weight of Pipe	6.4	6.2	-3.9	-3.7	-3.8
1 HP (40lbs)	8.7	8.4	-6.2	-5.9	-6.1
1 HP (70lbs)	10.2	9.7	-7.7	-7.2	-7.5
2 Hand Refusal	11	11.3	-8.5	-8.8	-8.7

[illegible]