

PRELIMINARY INVESTIGATIONS OF SUBMERGED AREAS

Delivery Order Number 023

Date 10/21/04

Project ANW Refuge

Location ID Number J-30

Tide Staff Readings:

Coordinates: X-2634278.

Time Reading

Y-13231831.

Morning 6:45A 2:25

Water Depth 3.4

Mid-Day

Pipe Length 15 - 13/6s

Evening 6:25 2.0

Push No. 1 Time 7:25

Weight of Pipe Penetration (WOP) 3.9

Comment 2" SA Layer

One-Hand Push (40-lb) Depth 7.5

Comments soft CL

One-Hand Push (70-lb) Depth 8.0

Comments SA Layers

Two-Hand Push to Refusal - Depth 8.3

Comments SA & shell

Jig 9.0 SA + shell

Push No. 2 Time 7:39

Weight of Pipe Penetration (WOP) 5.1

Comment

One-Hand Push (40-lb) Depth 5.2

Comments

5.2 to 5.4 SA Layer

One-Hand Push (70-lb) Depth 8.4

Comments

5.4 to 8.4 soft CL

Two-Hand Push to Refusal - Depth 8.4

Comments

Jig 9.0 CL w/ shell

Hand Proving Ring Penetrometer Test? yes

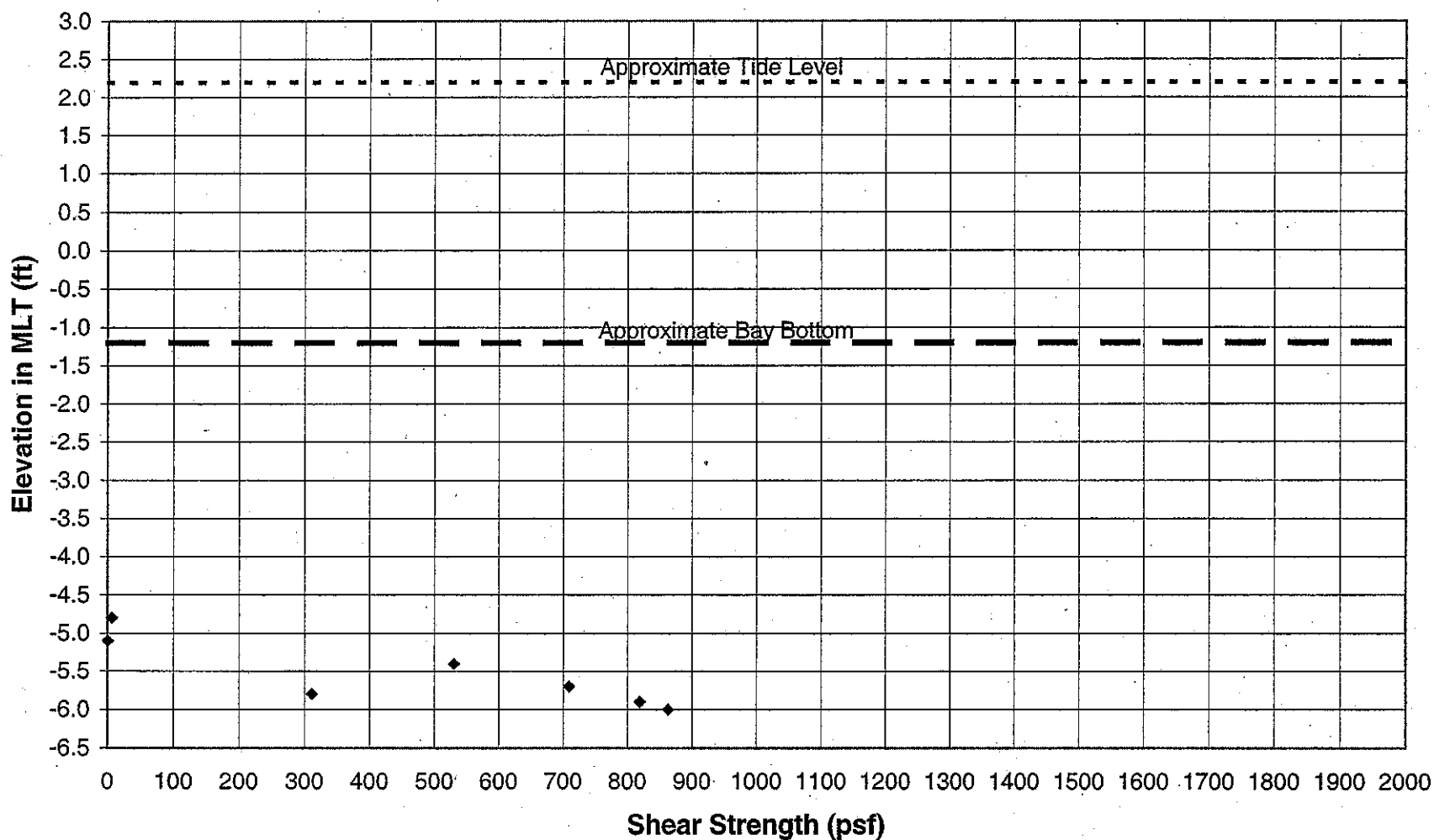
Hand Vane Shear Test?

Technician (Probe Handler) mike A.

Recorder Gary L.

Depth Vs. Shear Strength

♦ J30



RTB 11/8/4

Probing Results					
Resistance	Depth 1	Depth 1	MLT1'	MLT2'	Average
Weight of Pipe	3.9	5.1	-1.7	-2.9	-2.3
1 HP (40lbs)	7.5	5.2	-5.3	-3.0	-4.2
1 HP (70lbs)	8	8.4	-5.8	-6.2	-6.0
2 Hand Refusal	8.3	8.4	-6.1	-6.2	-6.2

[illegible]