

U.S. ARMY CORPS OF ENGINEERS

| DEPTH, FEET |    | SAMPLE | SAMPLE NO.    | PEN./TORVANE | SPT.-BLOW COUNT        | BORING NO. <u>91-282</u> DATE: BEGIN <u>12/31/91</u> PAGE <u>111</u><br>JOB NO. <u>14C-531</u> COMPLETE <u>12/31/91</u> Thin Walled Tube<br>PROJECT <u>GIWW</u> <input checked="" type="checkbox"/> 3" <input type="checkbox"/> 6"<br>LOCATION <u>Sargent Branch Sta 125+50</u><br>ELEVATION OF HOLE _____<br>MANUFACTURER'S DESIGNATION OF DRILL RIG <u>Failing CFD2</u><br>GROUNDWATER: DEPTH <u>1</u> ft., ELEV. _____ ft., at end of Drilling<br>WEATHER <u>cool cloudy</u><br>DRILLER <u>D. Carson</u> LOGGER <u>D. Grawe II</u> |                     |  |  |  |
|-------------|----|--------|---------------|--------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--|--|--|
|             |    | COLOR  | MATERIAL TYPE | CONSISTENCY  | SECONDARY CONSTITUENTS | STRUCTURAL FEATURES AND COMMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |  |  |  |
| 0           | 1  | 0.25   | Tan           | silt         | loose                  | clay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | w/Roots             |  |  |  |
|             | 2  | 0.75   | Gray          | clay         | M/stiff                | silt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | w/Roots             |  |  |  |
| -5          | 3  | 1.0    | Gray          | clay         | stiff                  | silt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Tan                 |  |  |  |
|             | 4  | 0.75   | Tan           | clay         | M/stiff                | silt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Gray                |  |  |  |
|             | 5  | 1.0    | Gray          | clay         | stiff                  | silt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Tan                 |  |  |  |
| -10         | 6  | 1.5    | Tan           | clay         | stiff                  | silt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Gray                |  |  |  |
|             | 7  | 1.0    | Gray          | clay         | stiff                  | silt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Tan                 |  |  |  |
| -15         | 8  | 1.5    | Tan           | clay         | stiff                  | silt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Gray                |  |  |  |
|             | 9  | 1.5    | Tan           | clay         | stiff                  | silt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Gray                |  |  |  |
|             | 10 | 1.5    | Tan           | clay         | stiff                  | silt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Gray                |  |  |  |
| -20         | 11 | 0.50   | Tan           | clay         | M/stiff                | silt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Gray                |  |  |  |
|             | 12 | 1.0    | Tan           | clay         | stiff                  | silt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Gray                |  |  |  |
| -25         | 13 | 0.50   | Tan           | clay         | M/stiff                | silt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Gray                |  |  |  |
|             |    |        |               |              |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Bottom 91-282 @ 26' |  |  |  |
| -30         |    |        |               |              |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                     |  |  |  |
| -35         |    |        |               |              |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                     |  |  |  |

Project : Gulf Intracoastal Waterway, near Sargent Beach, Texas  
Contract No. DACW64-92-D-0001 Delivery No. 0005

**SUMMARY OF LABORATORY TEST RESULTS**

Boring No. 91-282

| S # | Depth<br>(ft) | P P<br>(tsf) | SPT<br>Blows<br>per<br>Foot | Visual<br>Classification                         | U S C | M c<br>(%) | Dry<br>Unit<br>Wt<br>(pcf) | Wet<br>Unit<br>Wt<br>(pcf) | LL<br>(%) | P L<br>(%) | Mechanical Analysis<br>% Passing |       |       |      |      | Torvane<br>Shear<br>Strength<br>(tsf) | q u<br>(tsf) |
|-----|---------------|--------------|-----------------------------|--------------------------------------------------|-------|------------|----------------------------|----------------------------|-----------|------------|----------------------------------|-------|-------|------|------|---------------------------------------|--------------|
|     |               |              |                             |                                                  |       |            |                            |                            |           |            | #4                               | #10   | #40   | #100 | #200 |                                       |              |
| 1   | 0-2           | 2.25         |                             | Redish brown,Clay,Very stiff,Silty,w/sand pocket | CL    | 26.4       |                            |                            | 36        | 17         | 100.0                            | 100.0 | 100.0 | 99.7 | 91.1 |                                       |              |
| 2   | 2-4           | 1.00         |                             | Dark gray,Clay,Stiff                             | CH    | 32.9       |                            |                            |           |            |                                  |       |       |      |      |                                       |              |
| 3   | 4-6           | 1.25         |                             | Dark gray,Clay,Stiff,w/silt pockets              | CH    | 39.7       |                            |                            |           |            |                                  |       |       |      |      |                                       |              |
| 4   | 6-8           | 1.00         |                             | Dark brown,Clay,Stiff,slickensided               | CH    | 40.7       |                            |                            |           |            |                                  |       |       |      |      |                                       |              |
| 5   | 8-10          | 1.50         |                             | Dark brown,Clay,Stiff,slickensided               | CH    | 41.0       |                            |                            | 78        | 29         |                                  |       |       |      |      |                                       |              |
| 6   | 10-12         | 1.50         |                             | Dark brown,Clay,Stiff,slickensided               | CH    | 36.0       |                            |                            |           |            |                                  |       |       |      |      |                                       |              |
| 7   | 12-14         | 1.25         |                             | Brown,Clay,Stiff,slickensided                    | CH    | 34.4       |                            |                            |           |            |                                  |       |       |      |      |                                       |              |
| 8   | 14-16         | 0.75         |                             | Red,Clay,Medium stiff                            | CH    | 48.7       |                            |                            |           |            |                                  |       |       |      |      |                                       |              |
| 9   | 16-18         | 1.25         |                             | Red,Clay,Stiff,slickensided                      | CH    | 37.3       |                            |                            |           |            |                                  |       |       |      |      |                                       |              |
| 10  | 18-20         | 0.75         |                             | Red,Clay,Medium stiff,w/silt parting             | CH    | 46.5       |                            |                            |           |            |                                  |       |       |      |      |                                       |              |
| 11  | 20-22         | 0.75         |                             | Redish brown,Clay,Medium stiff,w/silt pockets    | CH    | 50.1       |                            |                            | 72        | 27         |                                  |       |       |      |      |                                       |              |
| 12  | 22-24         | 0.75         |                             | Redish brown,Clay,Medium stiff                   | CH    | 37.4       |                            |                            |           |            |                                  |       |       |      |      |                                       |              |
| 13  | 24-26         | 0.75         |                             | Redish brown,Clay,Medium stiff                   | CH    | 45.2       |                            |                            |           |            |                                  |       |       |      |      |                                       |              |
|     |               |              |                             |                                                  |       |            |                            |                            |           |            |                                  |       |       |      |      |                                       |              |
|     |               |              |                             |                                                  |       |            |                            |                            |           |            |                                  |       |       |      |      |                                       |              |
|     |               |              |                             |                                                  |       |            |                            |                            |           |            |                                  |       |       |      |      |                                       |              |
|     |               |              |                             |                                                  |       |            |                            |                            |           |            |                                  |       |       |      |      |                                       |              |

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