

# U.S. ARMY CORPS OF ENGINEERS

| DEPTH, FEET |    | SAMPLE | SAMPLE NO.    | PEN./TORVANE<br>SPT.-BLOW COUNT | BORING NO. <u>92-148</u> DATE: BEGIN <u>8-2-92</u> PAGE <u>1 1 1</u><br>JOB NO. <u>146548</u> COMPLETE <u>8-2-92</u> Thin Walled Tube<br>PROJECT <u>DISPOSAL AREA #5</u> <input checked="" type="checkbox"/> 4" <input type="checkbox"/> 6"<br>LOCATION <u>BROWNSVILLE SHIP CHANNEL</u><br>ELEVATION OF HOLE _____<br>MANUFACTURER'S DESIGNATION OF DRILL RIG <u>C-1000 Marsh Buggy</u><br>GROUNDWATER: DEPTH <u>2</u> ft., ELEV. _____ ft., at end of Drilling<br>WEATHER <u>PARTLY CLOUDY HOT &amp; WINDY</u><br>DRILLER <u>SCOTT</u> LOGGER <u>JOHN</u> |                                  |  |  |  |
|-------------|----|--------|---------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--|--|--|
|             |    | COLOR  | MATERIAL TYPE | CONSISTENCY                     | SECONDARY CONSTITUENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | STRUCTURAL FEATURES AND COMMENTS |  |  |  |
| 0           | 1  | 1.5    | BROWN         | CLAY                            | STIFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                  |  |  |  |
|             | 2  | 0.5    | "             | "                               | MEDIUM STIFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                  |  |  |  |
| 5           | 3  | 0.5    | BROWN         | CLAY                            | MEDIUM STIFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                  |  |  |  |
|             | 4  | 1.0    | BROWN         | CLAY                            | STIFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | + GRAY 6'-14'                    |  |  |  |
|             | 5  | 0.5    | BROWN         | CLAY                            | MEDIUM STIFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | - w/ Si SACS 8'-14'              |  |  |  |
| 10          | 6  | 0.5    | "             | "                               | "                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                  |  |  |  |
|             | 7  | 0.5    | BROWN         | CLAY                            | MEDIUM STIFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                  |  |  |  |
| 15          | 8  | 0.00   | BROWN         | CLAY                            | VERY SOFT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | SILTY                            |  |  |  |
|             | 9  | 1.0    | GRAY          | CLAY                            | STIFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | + BROWN below 16'                |  |  |  |
|             | 10 | 2.5    | "             | "                               | VERY STIFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                  |  |  |  |
| 20          |    |        |               |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |  |  |  |
|             |    |        |               |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |  |  |  |
| 25          |    |        |               |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |  |  |  |
|             |    |        |               |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |  |  |  |
| 30          |    |        |               |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |  |  |  |
|             |    |        |               |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |  |  |  |
| 35          |    |        |               |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                  |  |  |  |

Project : Disposal area site adjacent to the Brownsville Ship channel for the  
 Brazos Island Harbor project near Brownsville, Texas  
 Contract No. DACW64-92-D-0001 Delivery order No. 0025

# SUMMARY OF LABORATORY TEST RESULTS

Boring No. 92-148

| 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           | 1.75         |                             | Brown,Clay,Stiff,Silty                   | CL    | 24.0       |                            |                            |           |            |                                  |     |     |      |      |                                       |              |
| 2   | 2-4           | 0.75         |                             | Brown,Clay,Medium stiff                  | CH    | 34.2       | 85.9                       | 115.3                      | 51        | 20         |                                  |     |     |      |      | 0.35                                  | 0.65         |
| 3   | 4-6           | 1.00         |                             | Brown,Clay,Stiff                         | CH    | 31.8       |                            |                            |           |            |                                  |     |     |      |      | 0.55                                  |              |
| 4   | 6-8           | 1.25         |                             | Brown,Clay,Stiff,w/ferrous stains        | CH    | 35.6       |                            |                            |           |            |                                  |     |     |      |      | 0.55                                  |              |
| 5   | 8-10          | 0.25         |                             | Brown,Clay,Soft,w/ferrous stains         | CH    | 33.8       | 86.7                       | 116.0                      | 52        | 21         |                                  |     |     |      |      | 0.20                                  | 0.42         |
| 6   | 10-12         | 0.50         |                             | Brown,Clay,Medium stiff                  | CH    | 41.2       |                            |                            |           |            |                                  |     |     |      |      | 0.25                                  |              |
| 7   | 12-14         | 0.75         |                             | Brown,Clay,Medium stiff,w/ferrous stains | CH    | 31.2       |                            |                            |           |            |                                  |     |     |      |      | 0.30                                  |              |
| 8   | 14-16         | 0.75         |                             | Brown,Clay,Medium stiff,w/ferrous stains | CH    | 33.5       |                            |                            |           |            |                                  |     |     |      |      | 0.35                                  |              |
| 9   | 16 - 18       | 1.50         |                             | Brown,Clay,Stiff                         | CH    | 31.7       |                            |                            |           |            |                                  |     |     |      |      |                                       |              |
| 10  | 18 - 20       | 2.25         |                             | Brown,Clay,Very stiff,w/ferrous stains   | CH    | 28.0       |                            |                            | 54        |            |                                  |     |     |      |      |                                       |              |
|     |               |              |                             |                                          |       |            |                            |                            |           |            |                                  |     |     |      |      |                                       |              |
|     |               |              |                             |                                          |       |            |                            |                            |           |            |                                  |     |     |      |      |                                       |              |
|     |               |              |                             |                                          |       |            |                            |                            |           |            |                                  |     |     |      |      |                                       |              |
|     |               |              |                             |                                          |       |            |                            |                            |           |            |                                  |     |     |      |      |                                       |              |
|     |               |              |                             |                                          |       |            |                            |                            |           |            |                                  |     |     |      |      |                                       |              |
|     |               |              |                             |                                          |       |            |                            |                            |           |            |                                  |     |     |      |      |                                       |              |
|     |               |              |                             |                                          |       |            |                            |                            |           |            |                                  |     |     |      |      |                                       |              |
|     |               |              |                             |                                          |       |            |                            |                            |           |            |                                  |     |     |      |      |                                       |              |
|     |               |              |                             |                                          |       |            |                            |                            |           |            |                                  |     |     |      |      |                                       |              |
|     |               |              |                             |                                          |       |            |                            |                            |           |            |                                  |     |     |      |      |                                       |              |

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

Geotest Engineering, Inc.