Project : Pelican Island Disposal Area
Galveston, Texas
Contract No. DACW64-92-D-0005 Delivery order No. 0023

**SUMMARY OF LABORATORY TEST RESULTS**

Boring No. 93-206

260400
15.15

| S # | Depth (ft) | P P (tsf) | SPT Blows per Foot | Visual Classification | U S C | M c (%) | Dry Unit Wt (pcf) | Wet Unit Wt (pcf) | L L (%) | P L (%) | Mechanical Analysis % Passing #4 | #10 | #40 | #100 | #200 | Torvane Shear Strength (tsf) | q u (tsf) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 - 2 | 2.75 | | Gray,Clay,Very stiff | CH | 61.6 | | | | | | | | | | 1.25 | |
| 2 | 2 - 4 | 0.25 | | Gray,Clay,Soft,w/organic material | CH | 55.2 | | | | | | | | | | 0.15 | |
| 3 | 4 - 6 | 0.25 | | Gray,Clay,Soft,w/organic material | CH | 66.8 | 58.6 | 97.8 | 86 | 29 | 100.0 | 100.0 | 99.8 | 99.4 | 98.5 | 0.14 | 0.30 |
| 4 | 6 - 8 | 0.00 | | Gray,Clay,Very soft,w/organic material& hydrocarbon | CH | 55.2 | | | | | | | | | | 0.09 | |
| 5 | 8 - 10 | 0.25 | | Gray,Clay,Soft,w/organic material&hydrocarbon | CH | 54.7 | 65.4 | 101.1 | | | | | | | | 0.13 | 0.29 |
| 6 | 10 - 12 | 0.00 | | Dark gray,Clay,Very soft,w/organic material | CH | 61.4 | | | | | | | | | | 0.08 | |
| 7 | 12 - 14 | 0.00 | | Dark gray,Clay,Very soft,w/organic material& hydrocarbon | CH | 55.6 | 65.2 | 101.5 | 108 | 38 | 100.0 | 100.0 | 99.9 | 99.7 | 99.2 | 0.08 | 0.16 |
| 8 | 14 -16 | 0.00 | | Gray,Clay,Very soft,w/hydrocarbon | CH | 52.2 | | | | | | | | | | 0.07 | |
| 9 | 16 - 18 | 0.00 | | Dark gray,Clay,Very soft,w/organic material& hydrocarbon | CH | 63.4 | | | | | | | | | | 0.08 | |
| 10 | 18 - 20 | 0.00 | | Gray,Clay,Very soft,Sandy | CL | 26.1 | | | | | | | | | | 0.07 | |
| 11 | 20 - 22 | 0.00 | | Gray,Clay,Very soft,Sandy | CL | 24.2 | 97.1 | 120.6 | 38 | 19 | 100.0 | 100.0 | 97.6 | 81.1 | 59.1 | 0.06 | 0.13 |
| 12 | 22 - 24 | | | Gray,Sand,Medium dense,Silty,w/shell fragments | SM | 23.9 | | | | | | | | | | | |
| 13 | 24 - 25.5 | | 21 | Gray,Sand,Medium dense,Silty,w/shell fragments | SM | | | | | | | | | | | | |
| 14 | 28 - 30 | 0.00 | | Gray,Clay,Very soft,w/sand pockets&shell fragments | CH | 38.5 | 82.7 | 114.5 | 56 | 23 | 100.0 | 100.0 | 95.8 | 93.5 | 90.1 | 0.08 | |
| 15 | 30 - 32 | 0.00 | | Gray,Clay,Very soft,w/sand pockets&shell fragments | CH | 34.0 | 82.7 | 110.8 | | | | | | | | 0.08 | 0.18 |
| 16 | 32 - 33.5 | | 27 | Gray,Sand,Medium dense,Silty,w/shell fragments | SM | | | | | | | | | | | | |
| 17 | 37 - 39 | 0.25 | | Gray,Clay,Soft,Sandy,w/sand pockets | CL | 27.2 | 96.5 | 122.8 | 46 | 20 | 100.0 | 99.7 | 97.2 | 82.8 | 63.3 | 0.16 | 0.33 |

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.***

Project : Pelican Island Disposal Area
Galveston, Texas
Contract No. DACW64-92-D-0005 Delivery order No. 0023

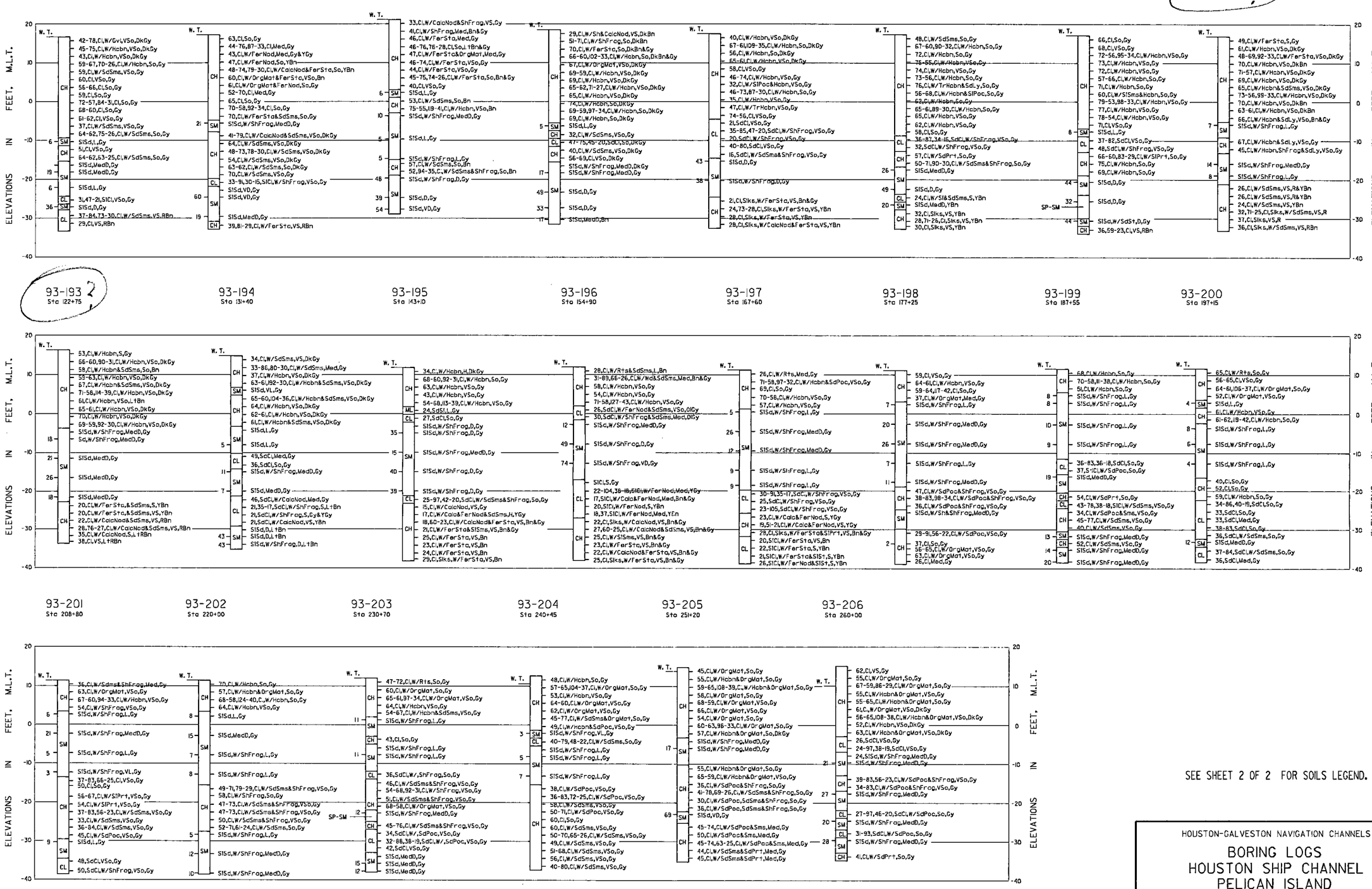
**SUMMARY OF LABORATORY TEST RESULTS**

Boring No. 93-206

| S # | Depth (ft) | P P (tsf) | SPT Blows per Foot | Visual Classification | U S C | M c (%) | Dry Unit Wt (pcf) | Wet Unit Wt (pcf) | L L (%) | P L (%) | Mechanical Analysis % Passing #4 | #10 | #40 | #100 | #200 | Torvane Shear Strength (tsf) | q u (tsf) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | 39 - 40.5 | | 20 | Gray,Sand,Medium dense,Silty,w/shell fragements | SM | | | | | | | | | | | | |
| 19 | 42 - 44 | 0.25 | | Gray,Clay,Soft,Sandy,w/sand pockets | CL | 31.2 | 92.5 | 121.4 | | | | | | | | 0.15 | 0.33 |
| 20 | 44 - 45.5 | | 28 | Gray Sand,Medium dense,Silty,w/shell fragments | SM | | | | | | | | | | | | |
| 21 | 48 - 50 | 0.25 | | Gray,Clay,Soft,w/sand parting | OH | 41.0 | | | | | | | | | | 0.14 | |

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.***




SEE SHEET 2 OF 2 FOR SOILS LEGEND.

HOUSTON-GALVESTON NAVIGATION CHANNELS

# BORING LOGS
# HOUSTON SHIP CHANNEL
# PELICAN ISLAND

U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS

SHEET 1 OF 2

EXHIBIT F-

| Bor. No. | Elev | Depth | Y/So | So. | MED. | ST./X/ST. |
|---|---|---|---|---|---|---|
| 93-204 | 9.65 | 2'-4' (12.65) | | 260 | | |
| | 6.65 | 6'-8' | 130 | | | |
| | 1.65 | 10'-12' | | 260 | | |
| | -4.35 | 16'-18' | | 280 | | |
| | -18.35 | 30'-32' | 200 | | | |
| | -20.35 | 34'-36' | 150 | | | |
| | -28.35 | 40'-42' | 230 | | | |
| | -32.35 | 44'-46' | 220 | | | |
| | -36.35 | 48'-50' | 210 | | | |
| 93-205 | 10' | 4'-6' (~~14.8~~ 15) | | 270 | | |
| | 7' | 8'-10' | 110 | | | |
| | 0' | 14'-16' | | 260 | | |
| | -13' | 27'-29 | 160 | | | |
| | -17' | 31'-33' | 270 | | | |
| | -26' | 40-42' | | | 630 | |
| | -30' | 44'-46' | | | 650 | |
| 93-206 | 10' | 4'-6' (15.15) | | 300 | | |
| | 6' | 8'-10' | | 290 | | |
| | 2' | 12-14' | 160 | | | |
| | -6' | 20-22' | 130 | | | |
| | -16' | 30-32' | 180 | | | |
| | -23' | 37-39' | | 330 | | |
| | -28 | 42-44' | | 330 | | |