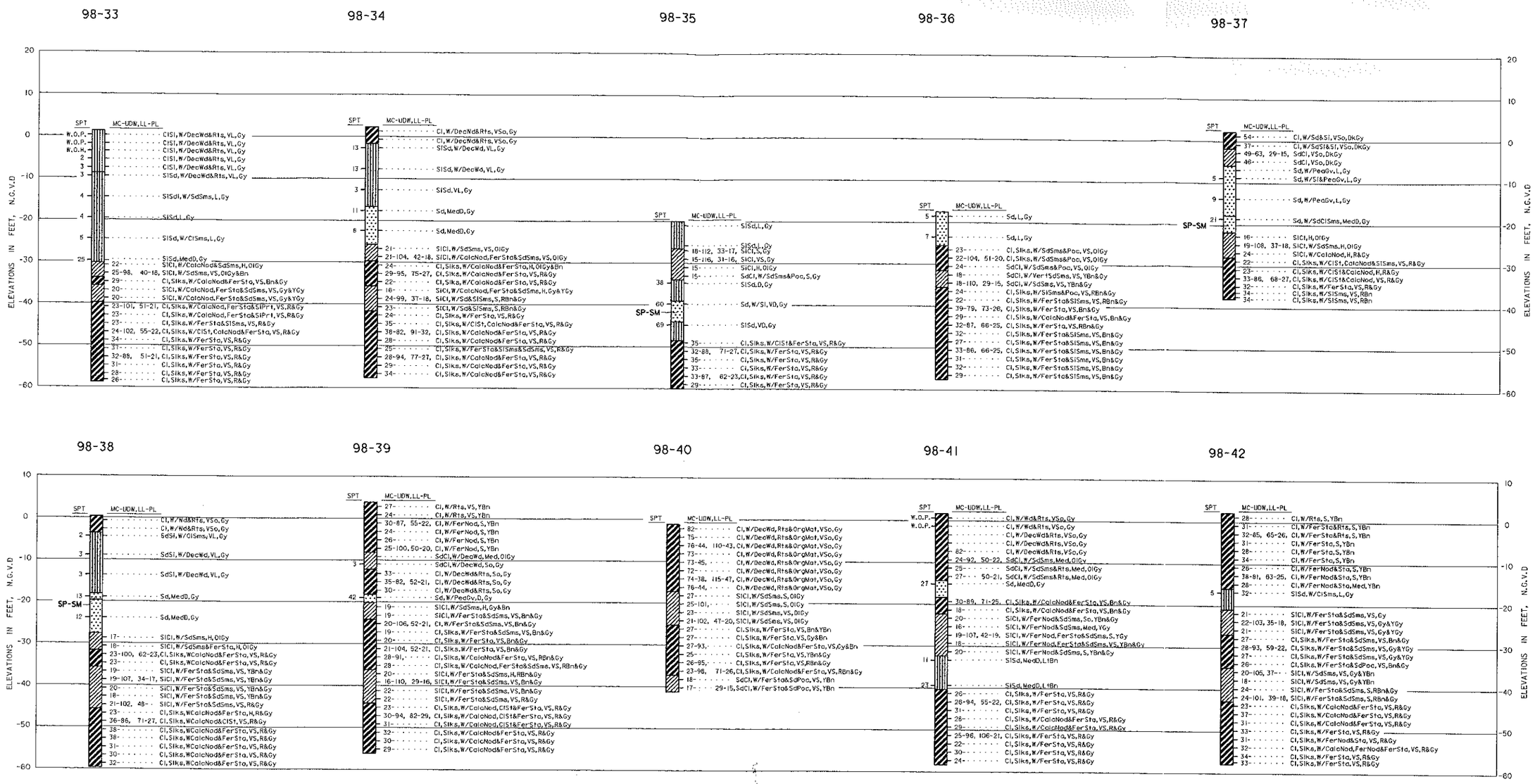
## SUMMARY OF UNCONFINED COMPRESSION TEST RESULTS
## NECHES RIVER SALT WATER BARRIER
## BEAUMONT, TEXAS
## TABLE-

| BORING NO. | DEPTH (FT.) | DENSITY DATA Moisture Cont. % | DENSITY DATA Dry Wt (pcf) | MECHANICAL ANALYSIS Gvl. | MECHANICAL ANALYSIS Sand | MECHANICAL ANALYSIS Fine | ATTERBURG LIMITS L.L. | ATTERBURG LIMITS P.L. | % STRAIN @ MAX. STRESS | UNCON. COMP. STR (pcf) | CLASSIFICATION |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 98-21 | 24-26 | 18.2 | 106.6 | 0 | 18 | 82 | 24.0 | 13.0 | 3.9 | 630 | Sandy Clay, Medium stiff, Gray |
| 98-21 | 30-32 | 18.9 | 105.0 | 0 | 16 | 84 | 32.0 | 16.0 | 4.6 | 2090 | Sandy Clay, Very stiff, Gray & yellowish gray |
| 98-22 | 24-26 | 16.9 | 110.0 | 0 | 16 | 84 | 31.0 | 16.0 | 6 | 1980 | Silty Clay, W / silt & sand seams,Very stiff, Gray & yellowish gray |
| 98-23 | 16-18 | 27.9 | 84.9 | 0 | 14 | 86 | 47.0 | 24.0 | 4.3 | 1270 | Silty Clay, W / sand seams & sand pockets, Stiff, Gray |
| 98-24 | 10-12 | 41.7 | 77.8 | 0 | 1 | 99 | 134.0 | 47.0 | 3.6 | 90 | Clay, W / decayed wood & roots, Very soft, Gray |
| 98-24 | 28-30 | 14.7 | 114.1 | 0 | 8 | 92 | 25.0 | 14.0 | 10.5 | 2170 | Silty Clay, W / sand seams, Very stiff, Gray |
| 98-24 | 44.5-46 | 17.0 | 107.0 | 0 | 12 | 88 | 39.0 | 18.0 | 7.5 | 2000 | Silty Clay, W / sand seams, Very stiff, Red & Gray |
| 98-25 | 32-34 | 19.0 | 104.8 | - | - | - | 65.0 | 24.0 | 3.2 | 2220 | Clay, W / calc nod & fer stains, slks, Very stiff, Brown & gray |
| 98-25 | 40-42 | 15.3 | 111.4 | - | - | - | - | - | 3.4 | 3660 | Clay, W / calc nod, fer stains, & sd sms, Very stiff, Reddish brown & gray |
| 98-26 | 25-27 | 19.5 | 104.4 | 0 | 2 | 98 | 25.0 | 15.0 | 5 | 560 | Silty Clay, W / sand seams, Medium stiff, Gray |
| 98-26 | 35-37 | 16.8 | 106.6 | 0 | 7 | 93 | 41.0 | 18.0 | 4 | 2010 | Silty Clay, W / sand seams, stiff, Gray |
| 98-35 | 6.5-8 | 17.5 | 111.7 | - | - | - | 33.0 | 17.0 | 6.8 | 1370 | Silty Clay, Stiff, Gray |
| 98-40 | 14-16 | 76.4 | 43.9 | - | - | - | - | - | 2.1 | 70 | Clay, W / decayed wood roots & organic material, Very soft, Gray |
| 98-40 | 22-24 | 20.5 | 102.2 | 0 | 3 | 97 | 47.0 | 20.0 | 3.6 | 2030 | Silty Clay, W / sand seams, Very stiff, Olive gray |
| 98-40 | 32-34 | 25.5 | 94.5 | - | - | - | - | - | 3.3 | 2190 | Clay, W / fer stains, slks,Very stiff, Reddish brown & gray |
| 98-42 | 14-16 | 37.6 | 81.0 | 0 | 4 | 95 | 63.0 | 25.0 | 2.5 | 1060 | Clay, W / fer nod & fer stains, Stiff,Yellowish brown |

DESIGN FILE: $DGN$SPECIFICATION$$$




NOTES;

1. SOILS HAVE BEEN CLASSIFIED IN ACCORDANCE WITH ASTM 2487-93 "CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES (UNIFIED SOILS CLASSIFICATION SYSTEM)". CONSISTENCY OF SOILS SUCH AS SOFT, MEDIUM, HARD, LOOSE, DENSE, ETC., ARE RELATIVE TERMS BASED ON ESTIMATED UNDISTURBED SHEAR STRENGTH OF THE MATERIAL AS DETERMINED BY VISUAL CLASSIFICATION POCKET PENETROMETER TESTS AND PENETRATION RESISTANCE DURING SAMPLING.
2. FIGURES TO THE RIGHT OF BORING LOGS ARE WATER CONTENTS IN PERCENT OF THE DRY WEIGHT, DRY DENSITY, LIQUID LIMIT, PLASTIC LIMIT, AND BAR LINEAR SHRINKAGE. (MC-UDW),(LL-PL),(B.L.S.)* FIGURES TO THE LEFT OF BORING LOGS ARE BLOWS PER FOOT OF PENETRATION FROM STANDARD PENETRATION TESTING.
3. BORINGS WERE DRILLED USING WET ROTARY DRILLING TECHNIQUES AND UNDISTURBED SAMPLES WERE RECOVERED WITH A 3-INCH DIAMETER THIN WALL SAMPLER WHERE COHESIVE MATERIALS WERE ENCOUNTERED.WHERE COHESIONLESS MATERIALS WERE ENCOUNTERED, DISTURBED SAMPLES WERE TAKEN WITH A SPLIT SPOON SAMPLER DURING PERFORMANCE OF STANDARD PENETRATION TESTING.
4. WATER TABLE LEVELS SHOWN ON BORING LOGS WERE DETERMINED AFTER DRILLING BORINGS BY MEASURING THE TOP OF FLUID LEVELS IN THE BORINGS. INASMUCH AS WET ROTARY DRILLING TECHNIQUES AND DRILLING MUD WERE USED TO DRILL THE HOLES, THE LEVEL OF DRILLING FLUIDS IN THE BORE HOLES MAY NOT HAVE STABILIZED TO THE LEVEL OF THE ACTUAL WATER TABLE. ADDITIONALLY, WATER TABLES IN THE FIELD ARE LIKELY TO FLUCTUATE DEPENDING ON WEATHER CONDITIONS. THEREFORE, SOME VARIATION SHOULD BE ANTICIPATED BETWEEN WATER TABLES INDICATED AND WATER TABLES ENCOUNTERED IN THE FIELD.

VISUAL CLASSIFICATIONS:

| | | |
|---|---|---|
| Blk Blackey | Org Organic | Wd Wood(en) |
| Bn Brown(ish) | Ol Olive | W/ With |
| Calc Calcareous | Pea Pea | W.O.H. |
| Cl Clay(ey) | Poc Pockets | W.O.P. |
| D Dense | R Red(dish) | Y Yellow(ish) |
| Dec Decay(ed) | Rts Root(s) | |
| Dk Dark | S Stiff | |
| Gv Gravel(ly) | Sd Sand(y) | |
| Gy Gray(ish) | Sh Shell(y) | |
| H Hard | Sl Silty | |
| L Loose | Sms Seams | |
| Ly Layer(s) | So Soft | |
| Lt Light | St Stone(s) | |
| Mat Material | Str Structure | |
| Med Medium | V Very | |
| Nod Nodules | Vert Vertical | |

LABORATORY CLASSIFICATIONS:

CH INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS.

CL INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, LEAN CLAYS.

ML INORGANIC SILTS AND VERY FINE SANDS, WITH SLIGHT PLASTICITY.

SC CLAYEY SANDS, SAND-CLAY MIXTURES.

SM SILTY SANDS, SAND-SILT MIXTURES.

SP POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES.

NOTES:
SEE PLATE _____ FOR BORING LOCATIONS.
SEE PLATE _____ FOR BORING NOTES AND LEGEND.

| REVISION | DATE | DESCRIPTION | BY |
|---|---|---|---|

OFFICE OF THE DISTRICT ENGINEER
U.S. ARMY ENGINEER DISTRICT, GALVESTON
CORPS OF ENGINEERS
GALVESTON, TEXAS

DRAWN BY: * P.N.
DESIGNED BY: * P.N.
CHECKED BY: * I.S.
SUBMITTED BY: *
CHIEF,
APPROVED: *
CHIEF,
APPROVED: *
CHIEF, ENGINEERING DIVISION
DATE: X
* AS REQUIRED BY ENGINEER REGULATION NO. 1110-1-8021

**NECHES RIVER SALT WATER BARRIER, TEXAS**
**X**
**X**
# LOGS OF BORINGS
**X**

SCALE: AS SHEET
SPEC. DATE:
DRAWING NUMBER: X
SHEET X OF X FILE NO. X

Prepared under the direction of Nicholas J. Buechler, Lt. Col. (P), C.E., District Engineer

**EXHIBIT**

DESIGN FILE: #DOMSPECIFICATIONS
CREATED BY: #USERNAME#
DWG: #MONTH#DAY#
PTS: #TIME#

..\user\p_norm\netch\bore3_98.dgn Apr. 06, 1999 12:54:25