TRIAXIAL and Direct Shear

SUMMARY OF ~~UNCONFINED~~ COMPRESSION TEST DATA
on UNDISTURBED SAMPLES
"S" Tests TABLE

| Boring No. | Depth Ft. | Density Data M.C. % | Density Data U.D.W. P.C.F. | Gradation Gr | Gradation Sa | Gradation Fines | L.L. | P.L. | Shear Data Φ | Shear Data C P.S.F | Classification |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 83-393 | 10 - 12 | 21.7 | 102 | | 5 | 95 | 21 | 12 | 33.5 | 400 | Light Grey Sandy Clay (CL), Soft |
| 83-393 | 14 - 16 | 27.7 | 95. | | 39 | 60 | 32 | 16 | 30.3 | 500 | Grey Sandy Clay (CL), Very Soft |
| 83-387 | 2 - 4 | 71.6 | 56. | | 5 | 95 | 81 | 26 | 14.0 | 140 | Grey Clay (CH), Soft |
| 83-402 | 10 - 12 | 28.9 | 94 | | 15 | 65 | 29 | 20 | 29.3 | 0 | Light Grey and Tan Sandy Clay (CL), Soft |
| | | | | | | "R" Tests | | | | | |
| 83-387 | 4 - 6 | 71.6 | 57 | | 5 | 95 | 61 | 28 | 5.0 | 200 | Grey Clay (CH), Very Soft |
| 83-402 | 8 - 10 | 23.5 | 101. | | 34 | 66 | 28 | 18 | 13.5 | 480 | Grey Silty Clay (CL), Soft |
| | | | | | | "Q" Tests | | | | | |
| 83-394 | 12 - 14 | 42.3 | 78 | | 24 | 76 | 58 | 18 | 0 | 400 | Grey Clay (CH), Soft |
| 83-392 | 16 - 18 | 32.7 | 90 | 3 | 57 | 40 | 66. | 21 | 0 | 200 | Grey Clayey Sand (SC). Very Soft |
| 83-393 | 12 - 14 | 22.0 | 100 | | 29 | 71 | 20 | 14 | 19.8 | 720 | Grey Sandy Clay (CL), Soft |
| 83-401 | 10 - 12 | 33.0 | 89 | 1 | 30 | 69 | 52 | 19 | 0 | 400 | Grey Clay (CH), Very Soft |
| 83-406 | 14-16 | 18.3 | 104 | 1 | 50 | 49 | 31 | 13 | 13 | 200 | Grey Sandy Clay (CL), Soft. |

.42

Reach 3, Sta 49+00

83-388

Sfc. El. 1.4

| Lyr No | Depth | w | $\gamma_d$ | $e_o$ | $\gamma$ | $\gamma_b$ | Surcharge | $H_z$ | $\Delta z$ | $\bar{\sigma}_o$ | $\bar{\sigma}_f$ | MC | LL | C Cr | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0-2 | 50 | 72 | 1.298 | 108 | 46 | 1345 | 1 | 1345 | 46 | 1391 | | | *.11 | .110 |
| 2 | 2-4 | 72 | 56 | 1.954 | 96 | 34 | | 1 | | 125 | 1470 | | 81 | *.2 | .124 |
| 3 | 4-6 | 72 | 57 | 1.902 | 98 | 36 | | 1 | | 195 | 1540 | | 61 | .46 | .285 |
| 4 | 6-8 | 75 | 60 | 1.757 | 105 | 43 | | .99 | 1332 | 273 | 1604 | | 65 | .5 | .279 |
| 5 | 8-13 | 21 | 93 | .798 | 111 | 49 | | .96 | 1291 | 438 | 1729 | | | .2 | .332 |
| 6 | 13-15 | 84 | 51 | 2.244 | 94 | 31 | | .94 | 1264 | 592 | 1856 | | 97 | .83 | .254 |
| 7 | 15-17 | 83 | 50 | 2.309 | 92 | 29 | | .92 | 1237 | 652 | 1890 | | | .83 | .232 |
| 8 | 17-20 | 27 | 90 | .838 | 114 | 52 | | .9 | 1211 | 759 | 1969 | | | .18 | .122 |
| 9 | 20-30 | | | | | | | .85 | 1143 | 1096 | 2239 | | | .18 | .304 |
| | | | | | | | | | | ~~Total~~ | | | | | ~~3.02'~~ |
| 10 | 30-40 | | | | | | | .77 | 1036 | 1615 | 2650 | | | .10 | .117 |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | 2.2' |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

COMPUTATION SHEET

PROJECT | FEATURE | DATE | DATE | BY | CHKD BY | DETAILS | SHEET ___ OF ___

SWD Form 521-R
Rev 24 Feb 81

SWGED-FG
SUBJECT: Wallisville Lake, Texas - Staking Request

TO: Soils Design Sec FROM: SWGED-FG DATE: 4 Jan 84 CMT 2
ATTN: John M. Cleveland

Subject request for boring stake-outs has been completed as of this date. The following are coordinates and elevations for the respective borings:

| Boring No. | X | Y | STA. | Elevation | | |
|---|---|---|---|---|---|---|
| 83-368 | | | | 3.8 | | |
| 83-369 | | | | 3.6 | | |
| 83-370 | | | | 2.4 | | |
| 83-371 | | | | 7.0 | | |
| 83-372 | | | | 8.3 | | |
| 83-373 | | | | 8.5 | | |
| 83-374 | | | | 6.4 | | |
| 83-375 | | | | 8.9 | | |
| 83-376 | | | | 6.5 | | |
| 83-377 | | | | 7.9 | | |
| 83-378 | 3,342,098.78 | 752,430.13 | 5+00 | 5.4 | ✓ | 5+00 2.7 |
| 83-379 | 3,342,216.23 | 752,006.10 | 10+00 | 8.5 | ✓ | 10+00 4.3 |
| 83-380 | 3,342,462.07 | 751,575.25 | 15+00 | 1.9 | ✓ | 15+00 1.0 |
| 83-381 | 3,342,760.45 | 751,309.32 | 19+00 | 2.3 | ✓ | 1.2 |
| 83-382 | 3,343,141.70 | 750,985.83 | 24+00 | 3.9 | ✓ | 1.8 |
| 83-383 | 3,343,522.95 | 750,662.34 | 29+00 | 4.0 | ✓ | 2.0 |
| 83-384 | 3,343,904.21 | 750,338.85 | 34+00 | 4.1 | ✓ | 2.0 |
| 83-385 | 3,344,285.46 | 750,015.36 | 39+00 | 3.3 | ✓ | 1.6 |
| 83-386 | 3,344,666.72 | 749,691.87 | 44+00 | 2.1 | ✓ | 1.0 |
| 83-387 | 3,345,047.97 | 749,368.39 | 49+00 | 1.4 | ✓ | |

SWG FL 24
26 Nov 68

# SUMMARY OF LABORATORY TEST DATA

**PROJECT** Corp of Engineers/Wallisville
83-431P

**DATE**

| BORING NO. | DEPTH IN FEET | TYPE OF MATERIAL | MOISTURE CONTENT % | DRY DENSITY pcf | ATTERBERG LIMITS LL | PL | PI | COMPRESSION TEST: COMPRESSION tsf | STRAIN % | LATERAL PRESSURE psi | TYPE FAILURE | Sieve Analysis % Passing #4 | #10 | #40 | #200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 387 1 | 0-2 | Gray clay with roots (CH) | 50 | 72 | | | | .5 | | | | | | | |
| 2 | 2-4 | Gray clay with sand lenses and shell (CH) | 71.6 | 56.3 | 81 | 26 | 55 | .5 | | | | TV = 0.10 TSF - | - | 100 | 95 |
| 3 | 4-6 | Gray clay (CH) | 71.6 | 57 | 61 | 28 | 33 | .25 | | | | TV = 0.10 TSF - | - | 100 | 95 |
| 4 | 6-8 | Gray clay with sand seams and clay seams (CH) | 75 | 60 | 65 | 28 | 37 | .12 .25 | 4.7 | 0 | BULGE | TV = 0.1 TSF - | - | 100 | 89 |
| 5 | 8-9.5 | No Recovery Sl | | | | | | | | | | | | | |
| 6 | 13-15 | Gray clay, fissured (CH) | 84 | 51 | 97 | 38 | 59 | .25 .19 | 4.2 | 0 | SHEAR | TV = 0.1 TSF - | - | 100 | 100 |
| 7 | 15-17 | Gray clay (CH) | 83 | 50 | | | | .25 | | | | | | | |
| 8 | 18.5-20 | Gray sandy clay with clay pockets (CL) | 27 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| 388 | 0-2 | Gray clay with roots, slickensided (CH) | 38 | 83 | | | | 1.5 | | | | | | | |
| | 2-4 | Gray and tan clay with sandy silt partings, pockets and ferrous nodules (CH) | 61 | 72 | 80 | 17 | 63 | 1.0 | | | | - | - | 100 | 88 |
| | 4-6 | Gray sandy clay with silt pockets (CL) | 18 | | | | | | | | | # 10 100 | 30 98 | 50 54 | 80 26 100 26 200 16 |
| | 6-7.5 | Gray sandy clay with silt pockets (CL) | 21 | | | | | | | | | | | | |
| | 12-14 | Gray and tan clay with sand pockets and roots, slickensided (CH) | 64 | 64 | | | | 1.0 | | | | | | | |
| | 14-16 | Gray clay with sand pockets and ferrous nodules (CH) | 60 | 66 | | | | .75 | | | | | | | |