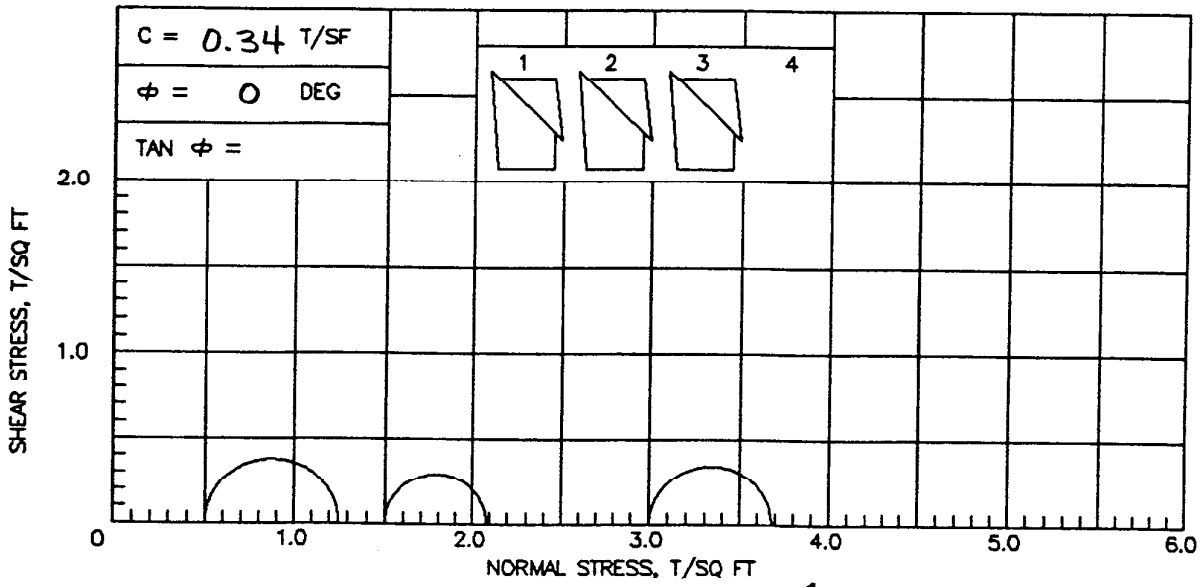
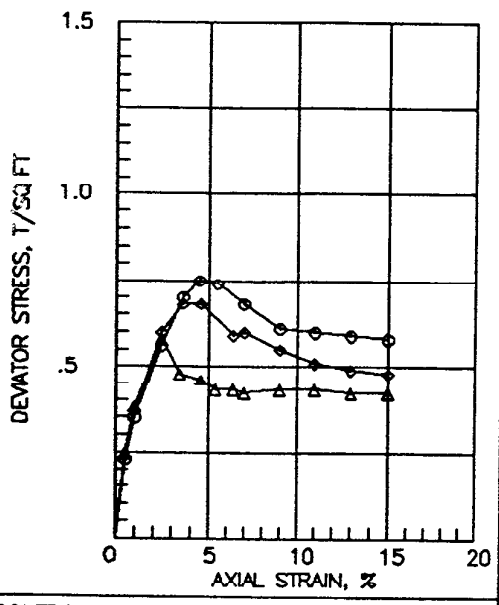



$\gamma_w$ = 112.2 PCF




| SPECIMEN NO. | | ○ 1 | △ 2 | ◇ 3 | 4 |
|---|---|---|---|---|---|
| INITIAL | WATER CONTENT, % | 38.1 | 42.7 | 43.8 | |
| | DRY DENSITY, PCF | 83.0 | 78.0 | 76.7 | |
| | SATURATION, % | 99.9 | 99.2 | 98.9 | |
| | VOID RATIO | 1.031 | 1.161 | 1.197 | |
| BEFORE SHEAR | WATER CONTENT, % | | | | |
| | DRY DENSITY, PCF | | | | |
| | SATURATION, % | | | | |
| | VOID RATIO | | | | |
| | BACK PRESSURE, TSF | | | | |
| CHAMBER PRESSURE, TSF | | .50 | 1.50 | 3.00 | |
| MAX. DEV. STRESS, TSF | | .75 | .58 | .68 | |
| TIME TO FAILURE, MIN. | | 9 | 12 | 19 | |
| STRAIN RATE INCR., % | | | 5 | 6 | |
| INITIAL DIAMETER, IN. | | 1.36 | 1.37 | 1.36 | |
| INITIAL HEIGHT, IN. | | 3.00 | 3.00 | 3.00 | |

CONTROLLED-STRAIN TEST

DESCRIPTION OF SPECIMENS: CLAY (CH), GRAY; SILT SEAMS

| LL 47 | PL 18 | PI 29 | GS 2.70 (ESTIMATED) | UNDISTURBED SPECIMEN | Q TEST |
|---|---|---|---|---|---|

REMARKS:

LIMITS ON MIXTURE OF MATERIALS

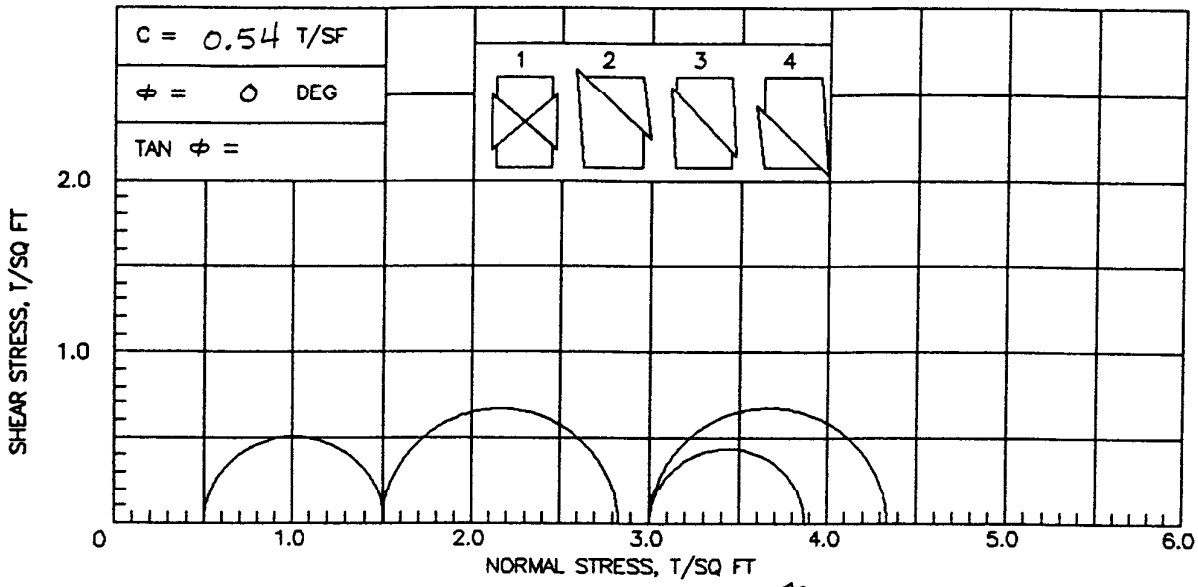
PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF CLAIBORNE, NEW ORLEANS

BORING NO. NC-2U | SAMPLE NO. 14B

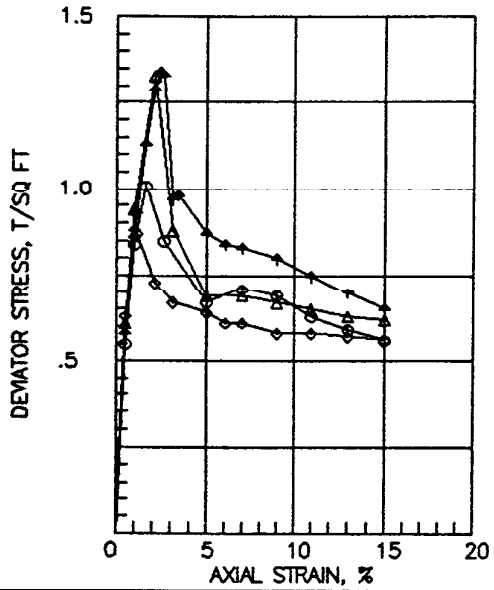
DEPTH/ELEV 66.8/-99.3 | TECH. JH

LABORATORY USAE WES - STF/GL | DATE 10 JUL 92

TRIAXIAL COMPRESSION TEST REPORT




$\gamma_w$ = 106.8 PCF




| SPECIMEN NO. | | ○ 1 | △ 2 | ◇ 3 | + 4 |
|---|---|---|---|---|---|
| INITIAL | WATER CONTENT, % | 51.9 | 51.6 | 51.3 | 51.3 |
| | DRY DENSITY, PCF | 70.3 | 70.3 | 70.8 | 70.4 |
| | SATURATION, % | 100+ | 99.7 | 100+ | 99.4 |
| | VOID RATIO | 1.397 | 1.397 | 1.382 | 1.394 |
| BEFORE SHEAR | WATER CONTENT, % | | | | |
| | DRY DENSITY, PCF | | | | |
| | SATURATION, % | | | | |
| | VOID RATIO | | | | |
| | BACK PRESSURE, TSF | | | | |
| CHAMBER PRESSURE, TSF | | .50 | 1.50 | 3.00 | 3.00 |
| MAX. DEV. STRESS, TSF | | 1.01 | 1.33 | .87 | 1.34 |
| TIME TO FAILURE, MIN. | | 3 | 13 | 9 | 19 |
| STRAIN RATE INCR., % | | | 5 | 6 | 3 |
| INITIAL DIAMETER, IN. | | 1.37 | 1.37 | 1.37 | 1.37 |
| INITIAL HEIGHT, IN. | | 3.00 | 3.00 | 3.00 | 3.00 |

CONTROLLED-STRAIN TEST

DESCRIPTION OF SPECIMENS: CLAY (CH), GRAY; SILT SEAMS

| LL 76 | PL 20 | PI 56 | GS 2.70 (ESTIMATED) | UNDISTURBED SPECIMEN | Q TEST |
|---|---|---|---|---|---|

REMARKS:

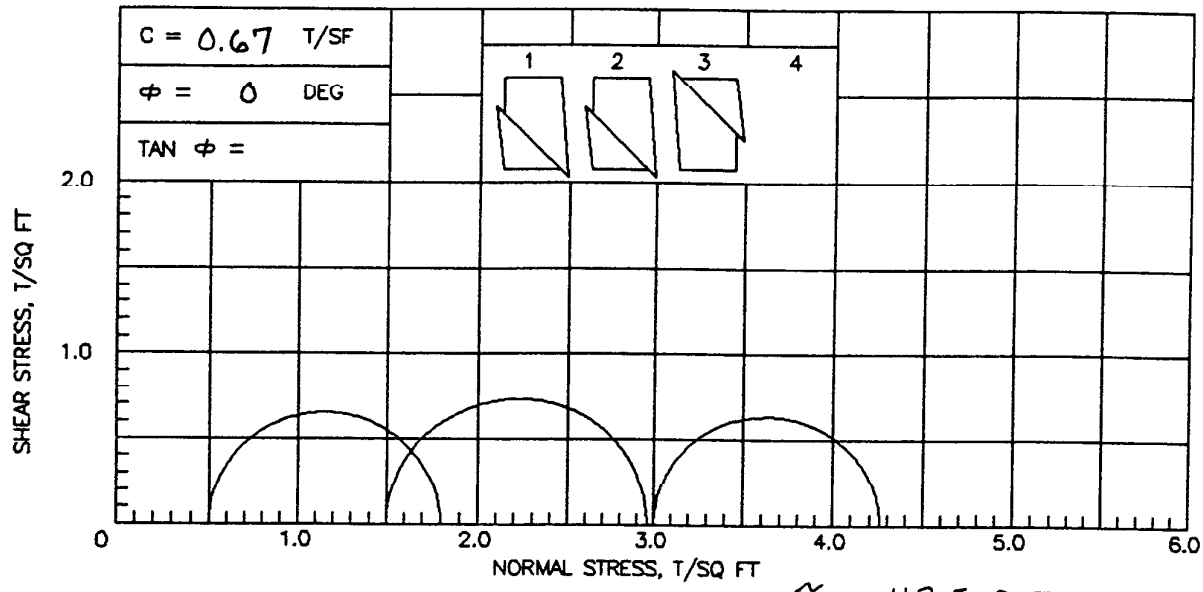
PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF CLAIBORNE, NEW ORLEANS

BORING NO. NC-2U | SAMPLE NO. 17B

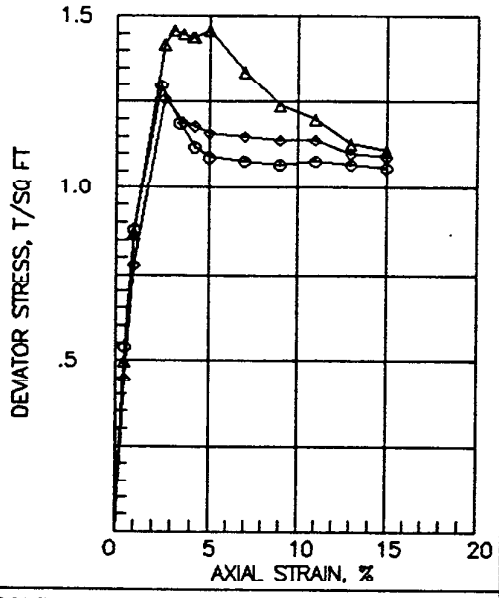
DEPTH/ELEV 78.5/-111.0 | TECH. JH

LABORATORY USAE WES - STF/GL | DATE 10 JUL 92

TRIAXIAL COMPRESSION TEST REPORT




$\gamma_w$ = 113.5 PCF




| SPECIMEN NO. | | ◇ 1 | △ 2 | ◇ 3 | 4 |
|---|---|---|---|---|---|
| INITIAL | WATER CONTENT, % | 36.8 | 36.1 | 38.6 | |
| | DRY DENSITY, PCF | 83.4 | 83.5 | 81.2 | |
| | SATURATION, % | 97.2 | 95.8 | 97.0 | |
| | VOID RATIO | 1.021 | 1.018 | 1.075 | |
| BEFORE SHEAR | WATER CONTENT, % | | | | |
| | DRY DENSITY, PCF | | | | |
| | SATURATION, % | | | | |
| | VOID RATIO | | | | |
| | BACK PRESSURE, TSF | | | | |
| CHAMBER PRESSURE, TSF | | .50 | 1.50 | 3.00 | |
| MAX. DEV. STRESS, TSF | | 1.30 | 1.46 | 1.26 | |
| TIME TO FAILURE, MIN. | | 5 | 33 | 19 | |
| STRAIN RATE INCR., % | | | 4 | | |
| INITIAL DIAMETER, IN. | | 1.37 | 1.38 | 1.37 | |
| INITIAL HEIGHT, IN. | | 3.00 | 3.00 | 3.00 | |

CONTROLLED-STRAIN TEST

DESCRIPTION OF SPECIMENS: CLAY (CH), GRAY; SILT SEAMS

| LL 55 | PL 21 | PI 34 | GS 2.70 (ESTIMATED) | UNDISTURBED SPECIMEN | Q TEST |
|---|---|---|---|---|---|

REMARKS:

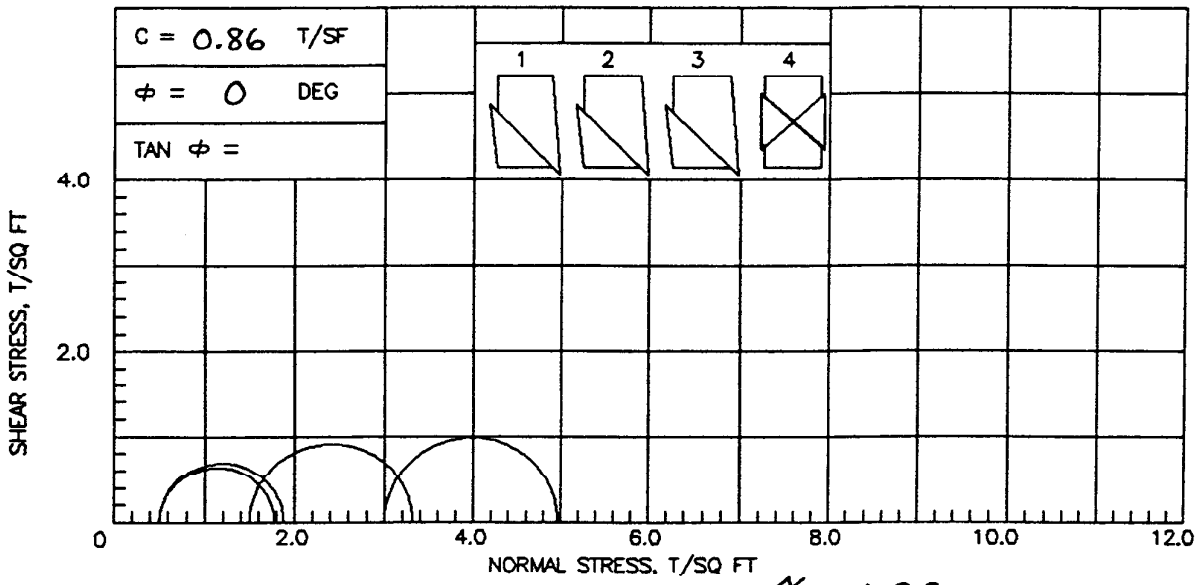
PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF CLAIBORNE, NEW ORLEANS

BORING NO. NC-2U | SAMPLE NO. 21B

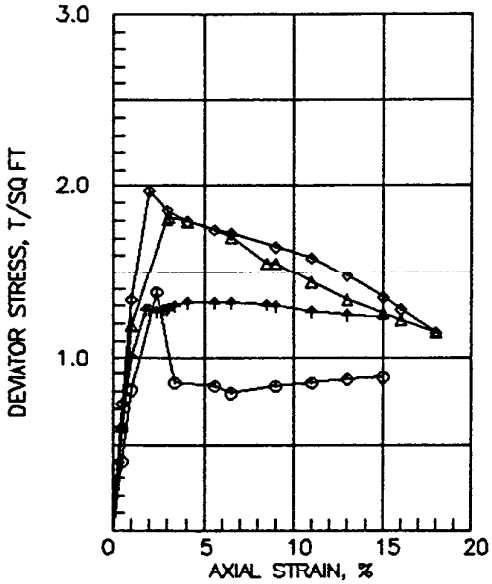
DEPTH/ELEV 94.7/-127.2 | TECH. JH

LABORATORY USAE WES - STF/GL | DATE 13 JUL 92

TRIAXIAL COMPRESSION TEST REPORT




$\gamma_w$ = 113.9 PCF



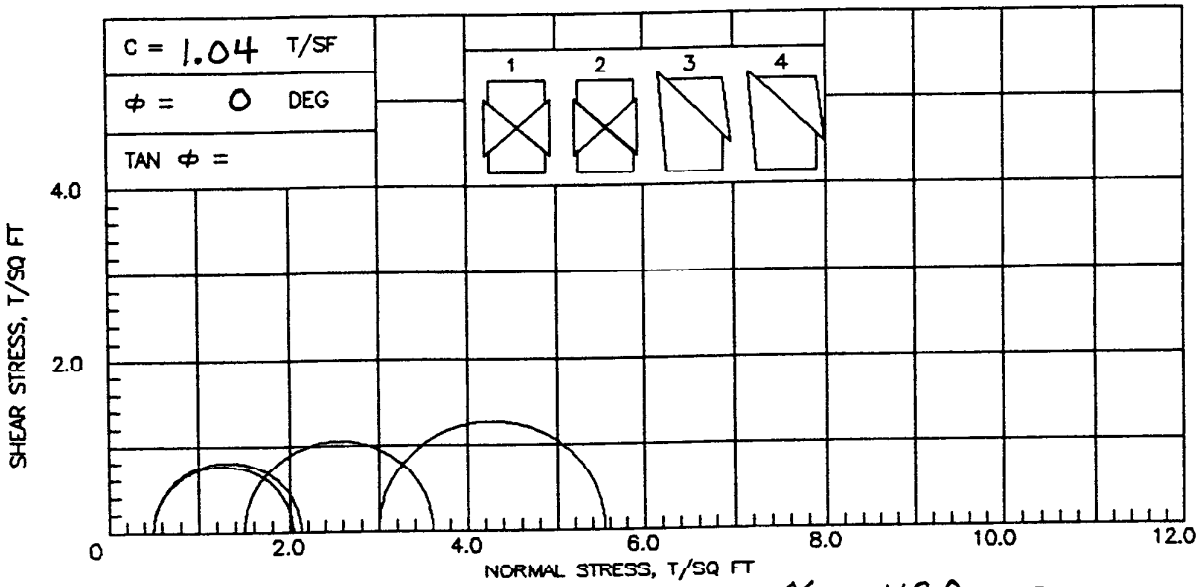

| SPECIMEN NO. | | ○ 1 | △ 2 | ◇ 3 | + 4 |
|---|---|---|---|---|---|
| INITIAL | WATER CONTENT, % | 35.5 | 36.2 | 36.4 | 36.6 |
| | DRY DENSITY, PCF | 84.1 | 83.5 | 83.7 | 82.8 |
| | SATURATION, % | 95.5 | 95.8 | 96.9 | 95.4 |
| | VOID RATIO | 1.004 | 1.020 | 1.014 | 1.037 |
| BEFORE SHEAR | WATER CONTENT, % | | | | |
| | DRY DENSITY, PCF | | | | |
| | SATURATION, % | | | | |
| | VOID RATIO | | | | |
| | BACK PRESSURE, TSF | | | | |
| CHAMBER PRESSURE, TSF | | .50 | 1.50 | 3.00 | .50 |
| MAX. DEV. STRESS, TSF | | 1.38 | 1.82 | 1.97 | 1.28 |
| TIME TO FAILURE, MIN. | | 5 | 24 | 15 | 13 |
| STRAIN RATE INCR., % | | | 8 | 5 | |
| INITIAL DIAMETER, IN. | | 1.37 | 1.37 | 1.37 | 1.37 |
| INITIAL HEIGHT, IN. | | 3.00 | 3.00 | 3.00 | 3.00 |

CONTROLLED-STRAIN TEST

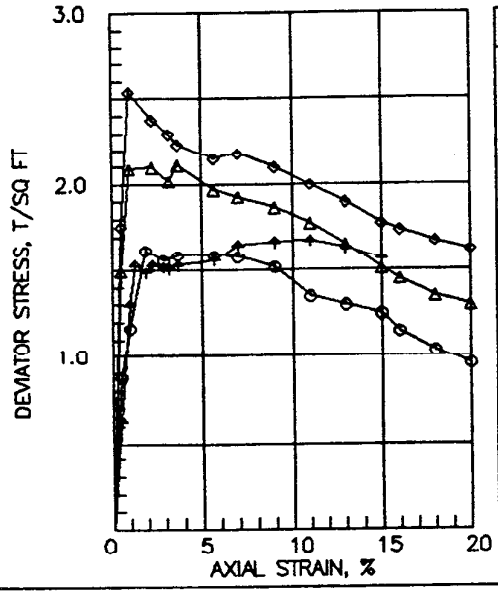
DESCRIPTION OF SPECIMENS: CLAY (CH), GRAY; SILT SEAMS & LENSES

| LL 50 | PL 17 | PI 33 | GS 2.70 (ESTIMATED) | UNDISTURBED SPECIMEN | Q TEST |
|---|---|---|---|---|---|

| | | |
|---|---|---|
| REMARKS: | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF | |
| | CLAIBORNE, NEW ORLEANS | |
| | BORING NO. NC-2U | SAMPLE NO. 26C |
| | DEPTH/ELEV 115.5/-148.0 | TECH. JH |
| | LABORATORY USAE WES - STF/GL | DATE 14 JUL 92 |
| | TRIAXIAL COMPRESSION TEST REPORT | |




$\gamma_w$ = 112.9 PCF



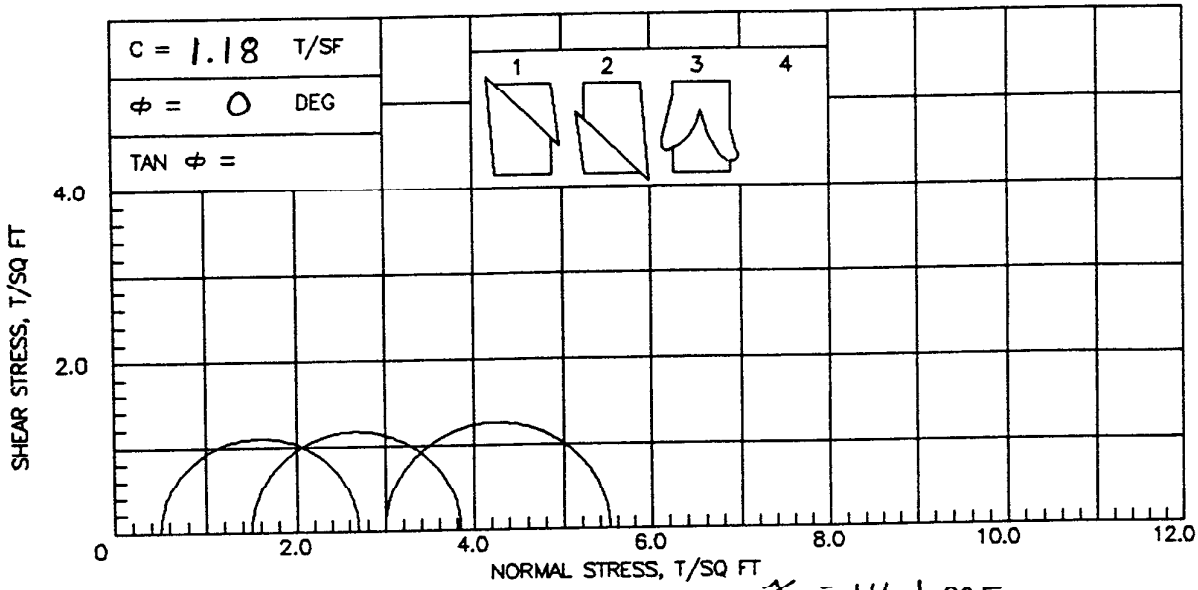

| SPECIMEN NO. | | ○ 1 | △ 2 | ◇ 3 | + 4 |
|---|---|---|---|---|---|
| INITIAL | WATER CONTENT, % | 39.0 | 39.6 | 38.8 | 38.1 |
| | DRY DENSITY, PCF | 81.2 | 81.0 | 81.3 | 80.8 |
| | SATURATION, % | 98.0 | 98.8 | 97.6 | 94.5 |
| | VOID RATIO | 1.075 | 1.081 | 1.073 | 1.087 |
| BEFORE SHEAR | WATER CONTENT, % | | | | |
| | DRY DENSITY, PCF | | | | |
| | SATURATION, % | | | | |
| | VOID RATIO | | | | |
| | BACK PRESSURE, TSF | | | | |
| CHAMBER PRESSURE, TSF | | .50 | 1.50 | 3.00 | .50 |
| MAX. DEV. STRESS, TSF | | 1.62 | 2.10 | 2.54 | 1.53 |
| TIME TO FAILURE, MIN. | | 4 | 18 | 8 | 10 |
| STRAIN RATE INCR., % | | | 3 | 5 | 5 |
| INITIAL DIAMETER, IN. | | 1.36 | 1.36 | 1.37 | 1.37 |
| INITIAL HEIGHT, IN. | | 3.00 | 3.00 | 3.00 | 3.00 |

CONTROLLED-STRAIN TEST

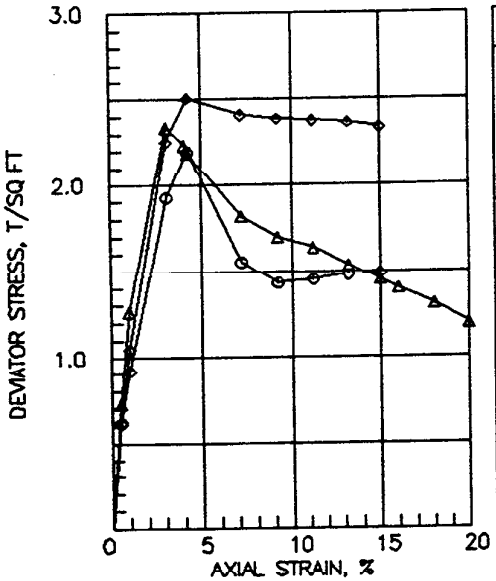
DESCRIPTION OF SPECIMENS: CLAY (CH), GRAY; SLICKENSIDED

| LL 76 | PL 19 | PI 57 | GS 2.70 (ESTIMATED) | UNDISTURBED SPECIMEN | Q TEST |
|---|---|---|---|---|---|

| | | |
|---|---|---|
| REMARKS: | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF | |
| | CLAIBORNE, NEW ORLEANS | |
| | BORING NO. NC-2U | SAMPLE NO. 33C |
| | DEPTH/ELEV 143.5/-176.0 | TECH. JH |
| | LABORATORY USAE WES - STF/GL | DATE 14 JUL 92 |
| | TRIAXIAL COMPRESSION TEST REPORT | |




$\gamma_w$ = 116.1 PCF




| SPECIMEN NO. | | ◇ 1 | △ 2 | ◇ 3 | 4 |
|---|---|---|---|---|---|
| INITIAL | WATER CONTENT, % | 32.6 | 33.8 | 31.9 | |
| | DRY DENSITY, PCF | 87.3 | 87.3 | 87.8 | |
| | SATURATION, % | 94.6 | 97.9 | 93.5 | |
| | VOID RATIO | .931 | .931 | .921 | |
| BEFORE SHEAR | WATER CONTENT, % | | | | |
| | DRY DENSITY, PCF | | | | |
| | SATURATION, % | | | | |
| | VOID RATIO | | | | |
| | BACK PRESSURE, TSF | | | | |
| CHAMBER PRESSURE, TSF | | .50 | 1.50 | 3.00 | |
| MAX. DEV. STRESS, TSF | | 2.20 | 2.34 | 2.51 | |
| TIME TO FAILURE, MIN. | | 8 | 13 | 29 | |
| STRAIN RATE INCR., % | | | | | |
| INITIAL DIAMETER, IN. | | 1.36 | 1.37 | 1.37 | |
| INITIAL HEIGHT, IN. | | 3.00 | 3.00 | 3.00 | |

CONTROLLED-STRAIN TEST

DESCRIPTION OF SPECIMENS: CLAY (CH), GRAY; SILT LENSES

| LL 59 | PL 19 | PI 40 | GS 2.70 (ESTIMATED) | UNDISTURBED SPECIMEN | Q TEST |
|---|---|---|---|---|---|

REMARKS:

PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF CLAIBORNE, NEW ORLEANS

BORING NO. NC-2U | SAMPLE NO. 38C

DEPTH/ELEV 163.6/-196.1 | TECH. JH

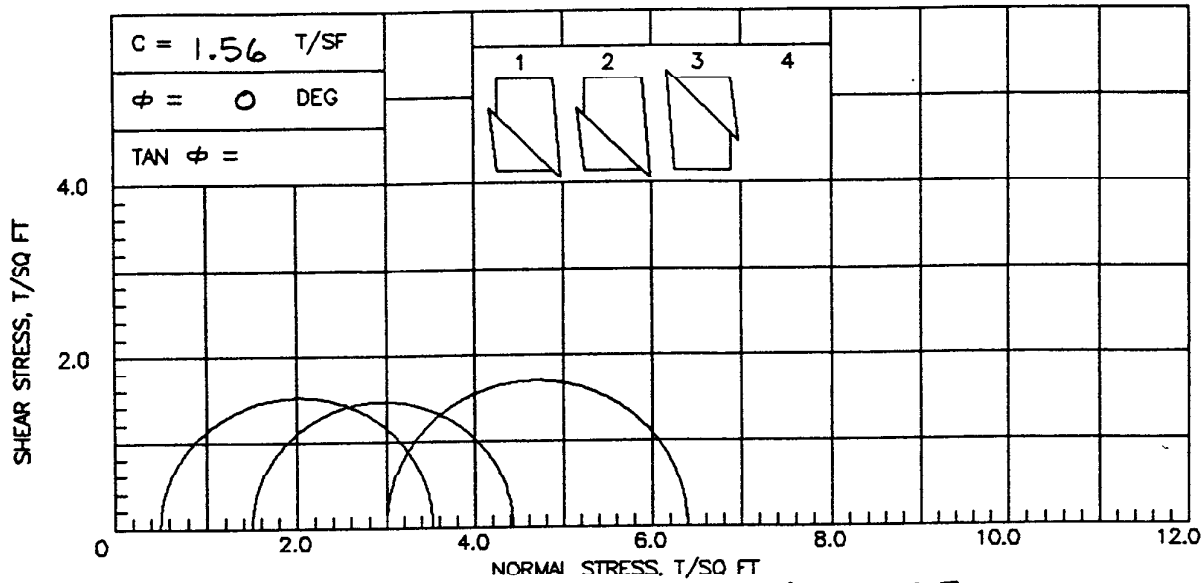
LABORATORY USAE WES - STF/GL | DATE 15 JUL 92

TRIAXIAL COMPRESSION TEST REPORT

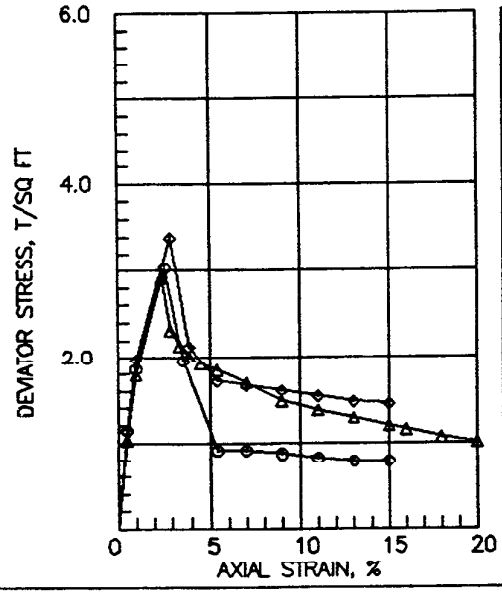
C = 1.56 T/SF

$\phi$ = 0 DEG

TAN $\phi$ =




$\gamma_w$ = 112.7 PCF



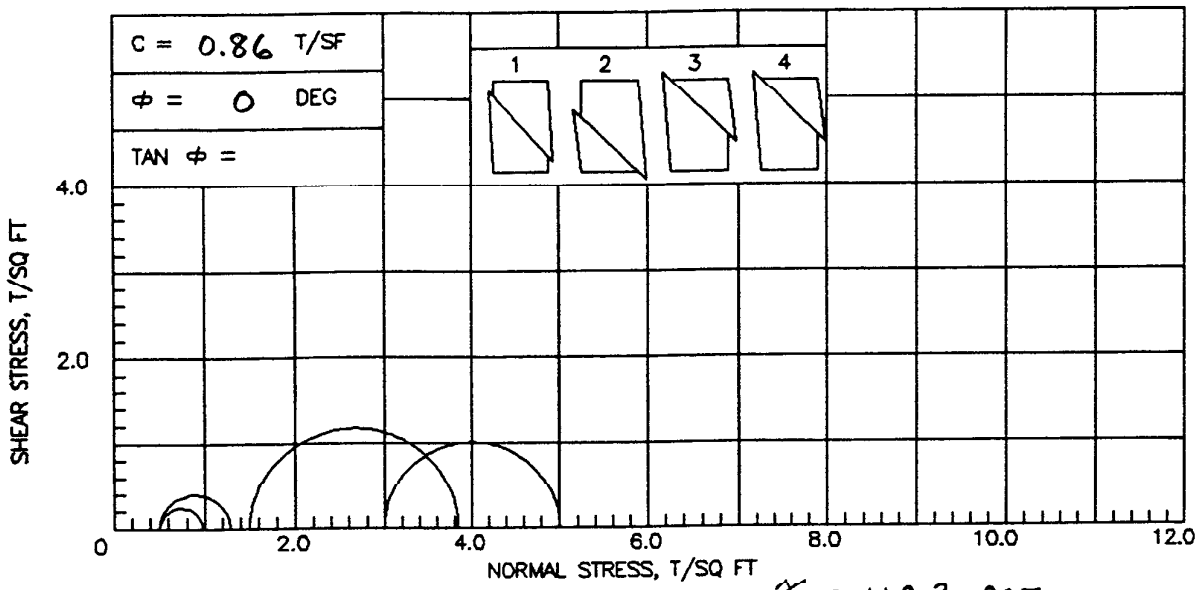

| SPECIMEN NO. | | ○ 1 | △ 2 | ◇ 3 | 4 |
|---|---|---|---|---|---|
| INITIAL | WATER CONTENT, % | 42.6 | 40.5 | 40.3 | |
| | DRY DENSITY, PCF | 78.4 | 80.3 | 80.7 | |
| | SATURATION, % | 100+ | 99.7 | 100+ | |
| | VOID RATIO | 1.149 | 1.098 | 1.088 | |
| BEFORE SHEAR | WATER CONTENT, % | | | | |
| | DRY DENSITY, PCF | | | | |
| | SATURATION, % | | | | |
| | VOID RATIO | | | | |
| | BACK PRESSURE, TSF | | | | |
| CHAMBER PRESSURE, TSF | | .50 | 1.50 | 3.00 | |
| MAX. DEV. STRESS, TSF | | 3.03 | 2.92 | 3.39 | |
| TIME TO FAILURE, MIN. | | 5 | 14 | 23 | |
| STRAIN RATE INCR., % | | | 4 | 5 | |
| INITIAL DIAMETER, IN. | | 1.37 | 1.37 | 1.37 | |
| INITIAL HEIGHT, IN. | | 3.00 | 3.00 | 3.00 | |

CONTROLLED-STRAIN TEST

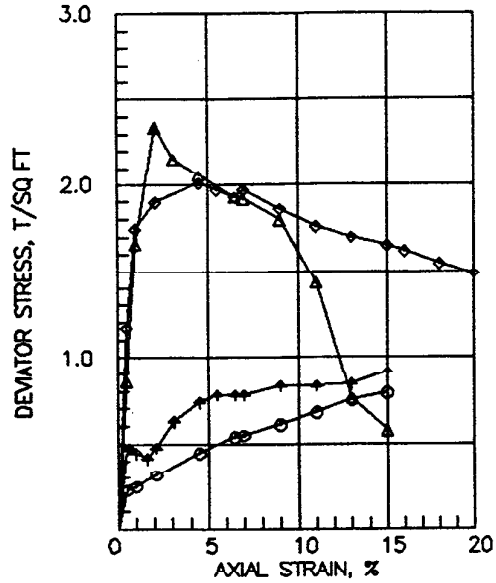
DESCRIPTION OF SPECIMENS: CLAY (CH), GRAY; SILT LENSES

| LL 73 | PL 20 | PI 53 | GS 2.70 (ESTIMATED) | UNDISTURBED SPECIMEN | Q TEST |
|---|---|---|---|---|---|

| | | |
|---|---|---|
| REMARKS: | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF CLAIBORNE, NEW ORLEANS | |
| | BORING NO. NC-2U | SAMPLE NO. 42C |
| | DEPTH/ELEV 179.8/-212.3 | TECH. JH |
| | LABORATORY USAE WES - STF/GL | DATE 16 JUL 92 |
| | TRIAXIAL COMPRESSION TEST REPORT | |




$\gamma_w$ = 110.2 PCF



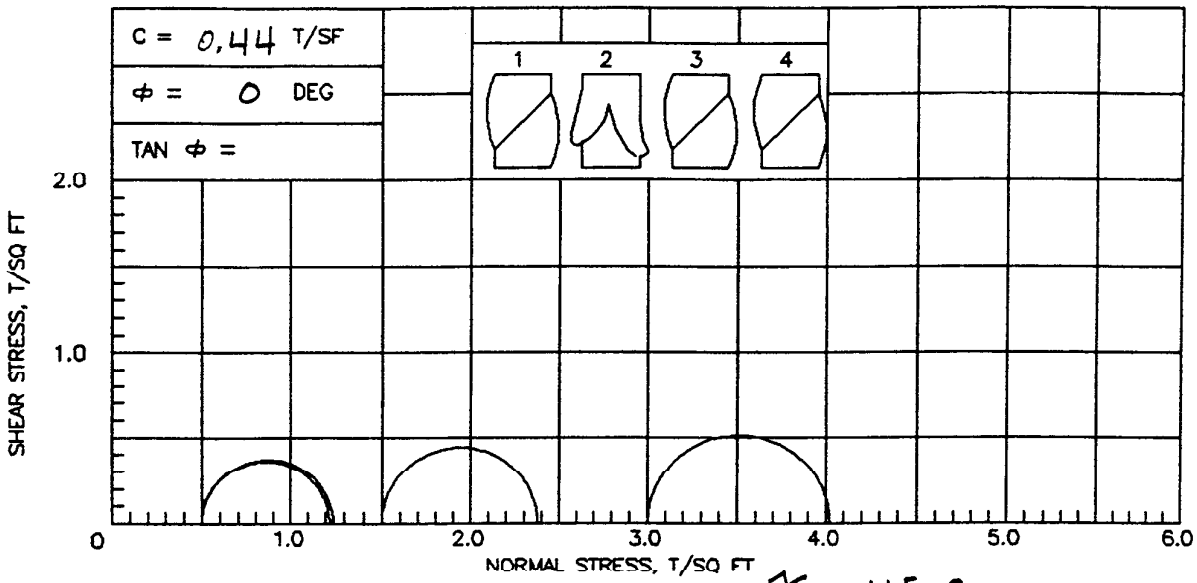

| SPECIMEN NO. | | ○ 1 | △ 2 | ◇ 3 | + 4 |
|---|---|---|---|---|---|
| INITIAL | WATER CONTENT, % | 45.6 | 44.9 | 44.6 | 44.7 |
| | DRY DENSITY, PCF | 75.4 | 76.2 | 76.2 | 76.2 |
| | SATURATION, % | 99.8 | 100+ | 99.5 | 99.7 |
| | VOID RATIO | 1.235 | 1.213 | 1.212 | 1.211 |
| BEFORE SHEAR | WATER CONTENT, % | | | | |
| | DRY DENSITY, PCF | | | | |
| | SATURATION, % | | | | |
| | VOID RATIO | | | | |
| | BACK PRESSURE, TSF | | | | |
| CHAMBER PRESSURE, TSF | | .50 | 1.50 | 3.00 | .50 |
| MAX. DEV. STRESS, TSF | | .79 | 2.34 | 2.01 | .48 |
| TIME TO FAILURE, MIN. | | 30 | 4 | 37 | 5 |
| STRAIN RATE INCR., % | | | | 6 | |
| INITIAL DIAMETER, IN. | | 1.37 | 1.37 | 1.37 | 1.37 |
| INITIAL HEIGHT, IN. | | 3.00 | 3.00 | 3.00 | 3.00 |

CONTROLLED-STRAIN TEST

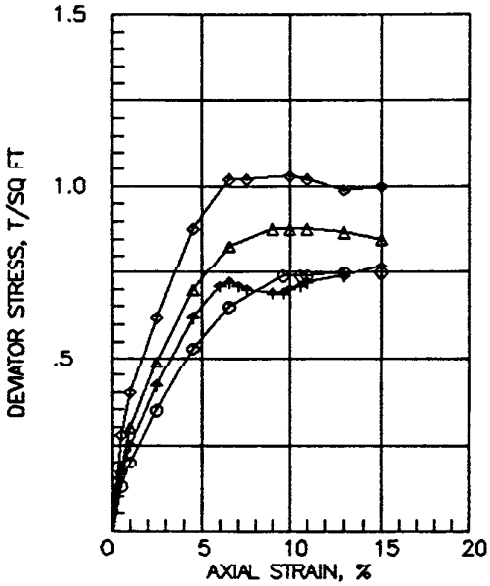
DESCRIPTION OF SPECIMENS: CLAY (CH), GRAY; SLICKENSIDED

| LL 80 | PL 20 | PI 60 | GS 2.70 (ESTIMATED) | UNDISTURBED SPECIMEN | Q TEST |
|---|---|---|---|---|---|

| | | |
|---|---|---|
| REMARKS: | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF | |
| | CLAIBORNE, NEW ORLEANS | |
| | BORING NO. NC-2U | SAMPLE NO. 45B |
| | DEPTH/ELEV 190.8/-223.3 | TECH. JH |
| | LABORATORY USAE WES - STF/GL | DATE 16 JUL 92 |
| | TRIAXIAL COMPRESSION TEST REPORT | |




$\gamma_w$ = 115.0 PCF




| SPECIMEN NO. | | ○ 1 | △ 2 | ◇ 3 | + 4 |
|---|---|---|---|---|---|
| INITIAL | WATER CONTENT, % | 30.6 | 31.7 | 31.3 | 29.8 |
| | DRY DENSITY, PCF | 88.3 | 88.0 | 86.6 | 89.4 |
| | SATURATION, % | 90.9 | 93.6 | 89.1 | 91.1 |
| | VOID RATIO | .908 | .915 | .947 | .885 |
| BEFORE SHEAR | WATER CONTENT, % | | | | |
| | DRY DENSITY, PCF | | | | |
| | SATURATION, % | | | | |
| | VOID RATIO | | | | |
| | BACK PRESSURE, TSF | | | | |
| CHAMBER PRESSURE, TSF | | .50 | 1.50 | 3.00 | .50 |
| MAX. DEV. STRESS, TSF | | .74 | .88 | 1.02 | .72 |
| TIME TO FAILURE, MIN. | | 19 | 18 | 13 | 23 |
| STRAIN RATE INCR., % | | | | | |
| INITIAL DIAMETER, IN. | | 1.39 | 1.37 | 1.39 | 1.36 |
| INITIAL HEIGHT, IN. | | 3.00 | 3.00 | 3.00 | 3.00 |

CONTROLLED-STRAIN TEST

DESCRIPTION OF SPECIMENS: CLAY (CL), GRAY; FINE SAND POCKETS

| LL 34 | PL 16 | PI 18 | GS 2.70 (ESTIMATED) | UNDISTURBED SPECIMEN | Q TEST |
|---|---|---|---|---|---|

REMARKS:

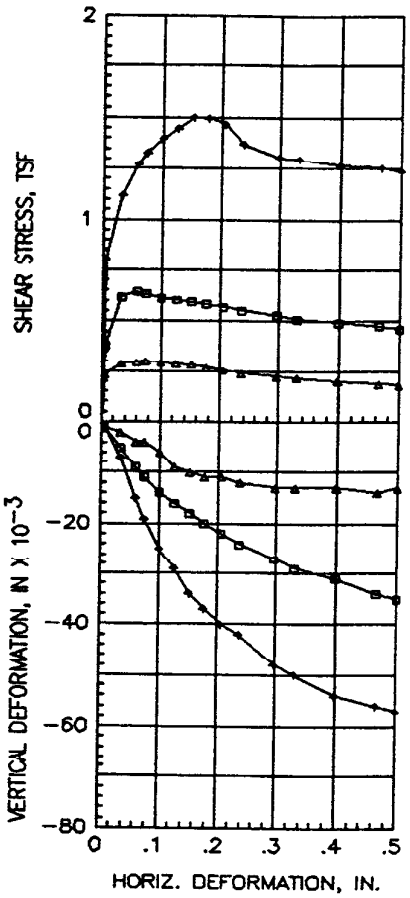
PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF CLAIBORNE, NEW ORLEANS

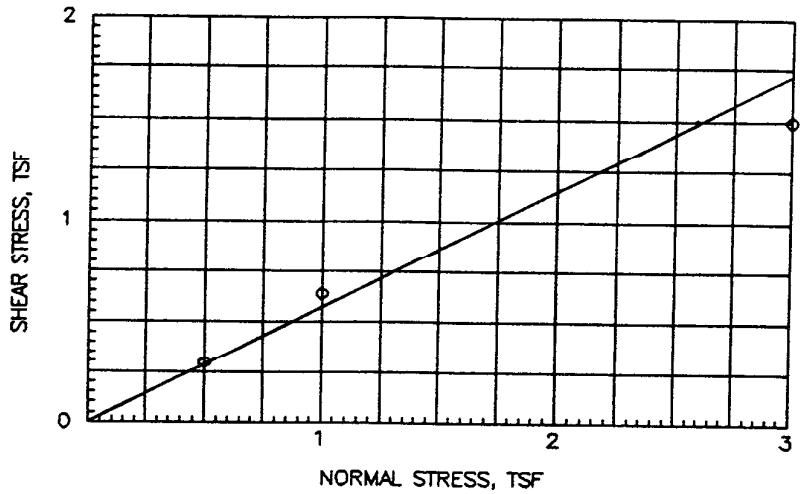
BORING NO. NC-2U | SAMPLE NO. 49C

DEPTH/ELEV 207.5/-240.0 | TECH. JH

LABORATORY USAE WES - STF/GL | DATE 17 JUL 92

TRIAXIAL COMPRESSION TEST REPORT




$\phi$ = 30.1 DEG

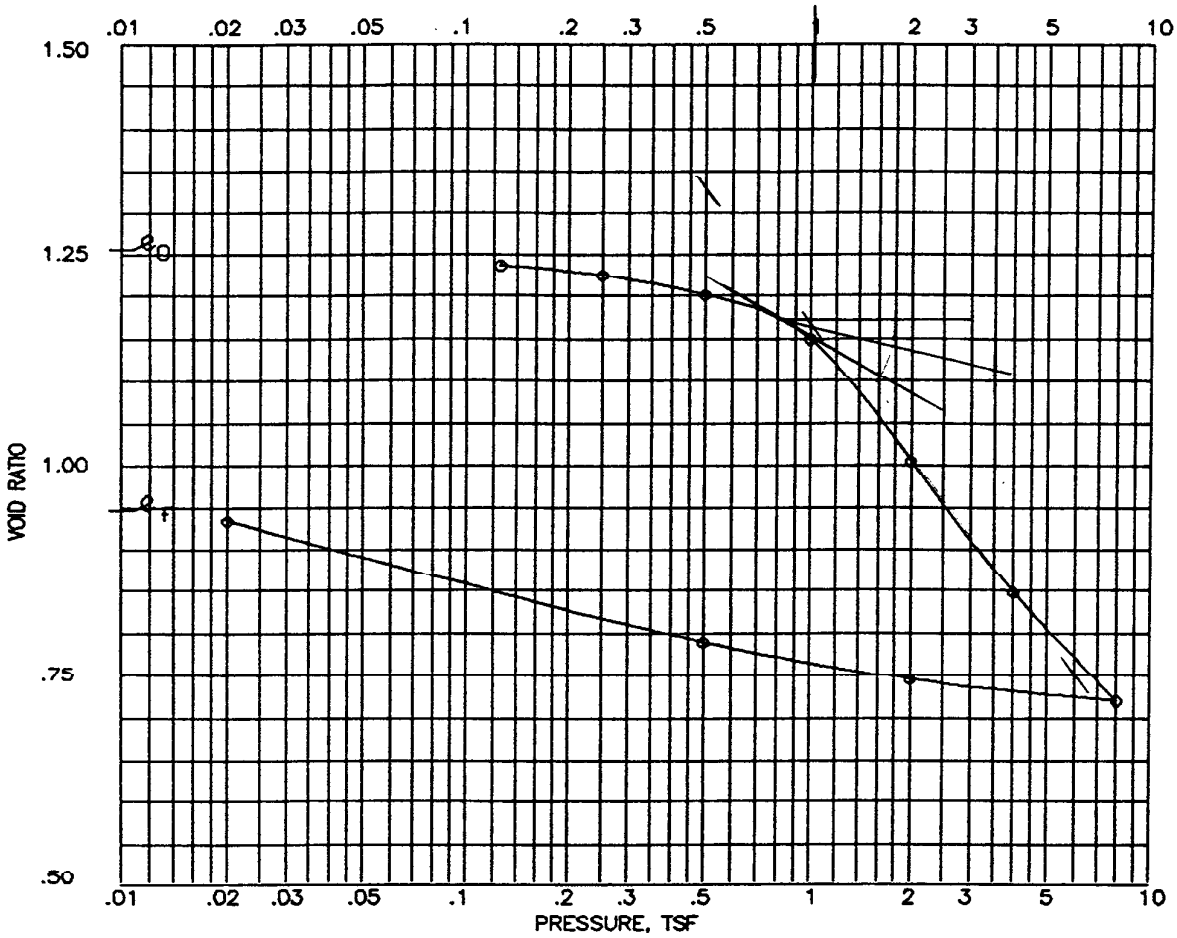
TAN $\phi$ = 0.580

C = 0 T/SF

| | TEST NO. | 1 ▲ | 2 □ | 3 + | |
|---|---|---|---|---|---|
| INITAL | WATER CONTENT, % | 40.8 | 46.6 | 46.8 | |
| | VOID RATIO | 1.152 | 1.282 | 1.327 | |
| | SATURATION, % | 95.6 | 98.1 | 95.3 | |
| | DRY DENSITY, PCF | 78.3 | 73.8 | 72.4 | |
| VOID RATIO AFTER CONSOL | | | | | |
| FIFTY PERCENT CONSOL, MIN | | < 1 | < 1 | < 1 | |
| FINAL | WATER CONTENT, % | 46.2 | 50.8 | 45.1 | |
| | VOID RATIO | | | | |
| | SATURATION, % | | | | |
| NORMAL STRESS, TSF | | .50 | 1.00 | 3.00 | |
| MAXIMUM SHEAR STRESS, TSF | | .30 | .64 | 1.50 | |
| TIME TO FAILURE, MIN | | 414 | 331 | 834 | |
| RATE OF STRAIN, IN/MIN | | .00018 | .00018 | .00018 | |
| ULTIMATE SHEAR STRESS, TSF | | | | | |

| | | | |
|---|---|---|---|
| TYPE SPECIMEN | UNDISTURBED | 3.00 IN. SQUARE | .552 IN. THICK |
| CLASSIFICATION | CLAY (CH), GRAY | | |
| LL 70 | PL 19 | PI 51 | GS 2.70 (EST) |

| | | |
|---|---|---|
| REMARKS; | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF | |
| | CLAIBORNE, NEW ORLEANS | |
| | BORING NO. NC-2U | SAMPLE 208 |
| | DEPTH/ELEV 91.0/-123.5 | TECH. US |
| | LABORATORY USAE WES - STF/GL | DATE 11 AUG 92 |
| | DIRECT SHEAR TEST REPORT | |



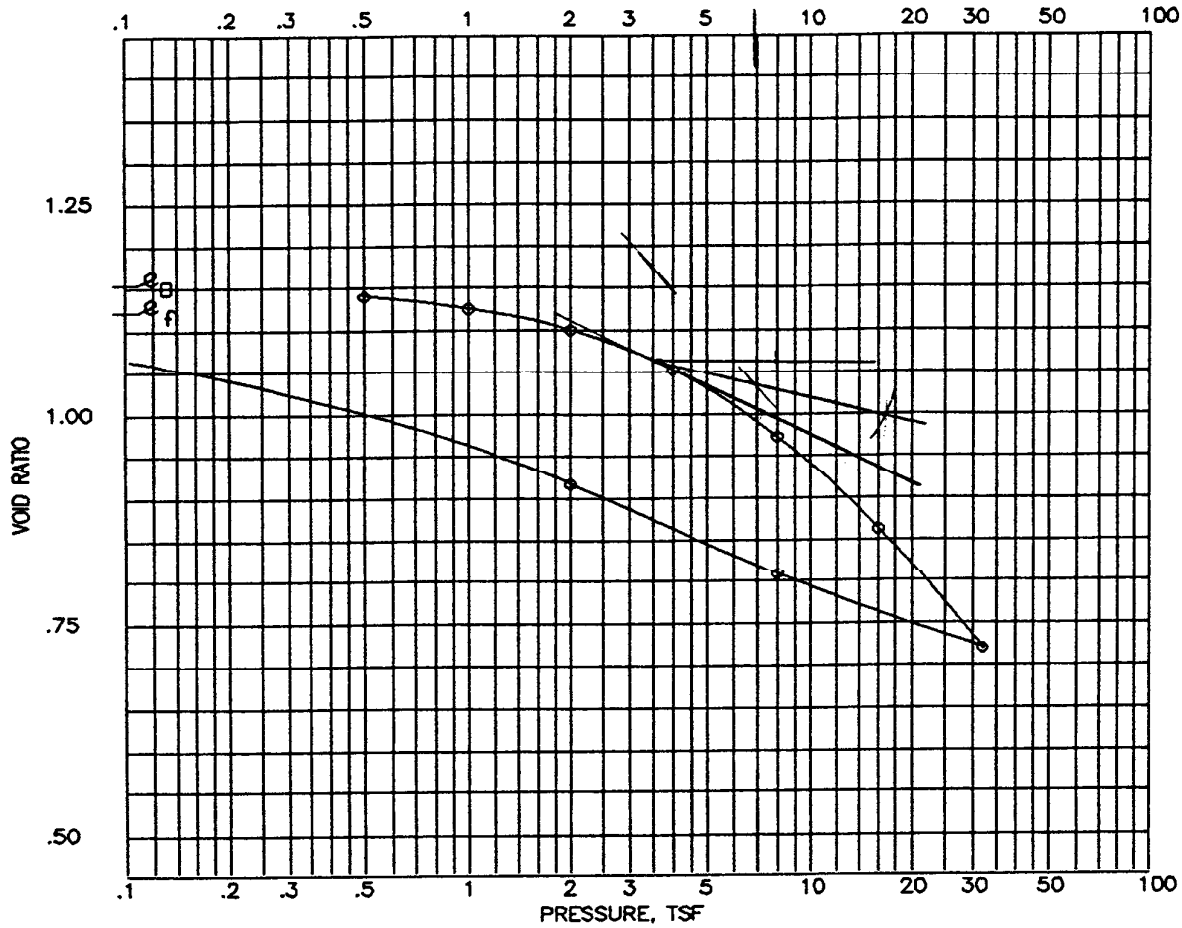

$\gamma_w$ = 101.1 PCF

| | | | BEFORE TEST | AFTER TEST |
|---|---|---|---|---|
| OVERBURDEN PRESSURE, TSF | | WATER CONTENT, % | 35.3 | 34.9 |
| PRECONSOL. PRESSURE, TSF | 1.0 | DRY DENSITY, PCF | 74.7 | 86.7 |
| COMPRESSION INDEX | 0.58 | SATURATION, % | 75.9 | 99.8 |
| TYPE SPECIMEN | UNDISTURBED | VOID RATIO | 1.255 | .945 |
| DIA. IN 4.44 | HT. IN 1.124 | BACK PRESSURE, TSF | | |

CLASSIFICATION CLAY (CL), GRAY; FINE SAND POCKETS

| | | | |
|---|---|---|---|
| LL 46 | PL 18 | PI 28 | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF |
| GS 2.70 (EST) | $D_{10}$ | | CLAIBORNE, NEW ORLEANS |
| REMARKS: | | | BORING NO. NC-2U / SAMPLE NO. 2B |
| | | | DEPTH/ELEV 19.0/-51.5 / TECH. US |
| | | | LABORATORY USAE WES – STF/GL / DATE 18 AUG 92 |
| | | | CONSOLIDATION TEST REPORT |

SHEET 1 OF 12

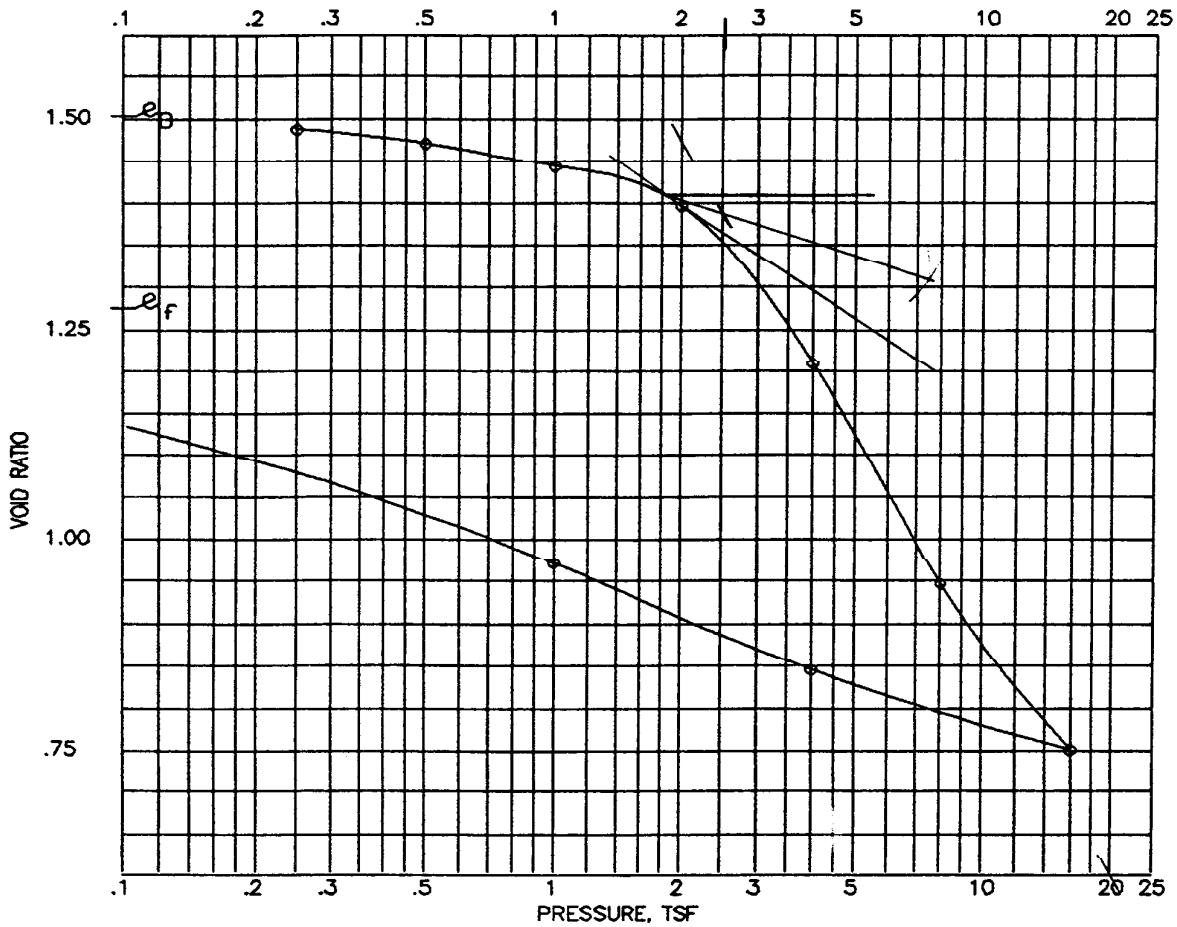



$\gamma_w$ = 111.4 pcf

| | | | BEFORE TEST | AFTER TEST |
|---|---|---|---|---|
| OVERBURDEN PRESSURE, TSF | | WATER CONTENT, % | 42.3 | 43.2 |
| PRECONSOL. PRESSURE, TSF | 5.9 | DRY DENSITY, PCF | 78.3 | 79.5 |
| COMPRESSION INDEX | 0.44 | SATURATION, % | 99.1 | 100 + |
| TYPE SPECIMEN | UNDISTURBED | VOID RATIO | 1.153 | 1.119 |
| DIA. IN 4.44 | HT. IN 1.124 | BACK PRESSURE, TSF | | |

| | | | |
|---|---|---|---|
| CLASSIFICATION | CLAY (CH), GRAY | | |
| LL 82 | PL 16 | PI 66 | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF |
| GS 2.70 (EST) | $D_{10}$ | | CLAIBORNE, NEW ORLEANS |
| REMARKS: | | | BORING NO. NC-2U / SAMPLE NO. 8B |
| | | | DEPTH/ELEV 42.8/-75.3 / TECH. US |
| | | | LABORATORY USAE WES – STF/GL / DATE 18 AUG 92 |
| | | | CONSOLIDATION TEST REPORT |

SHEET 1 OF 12



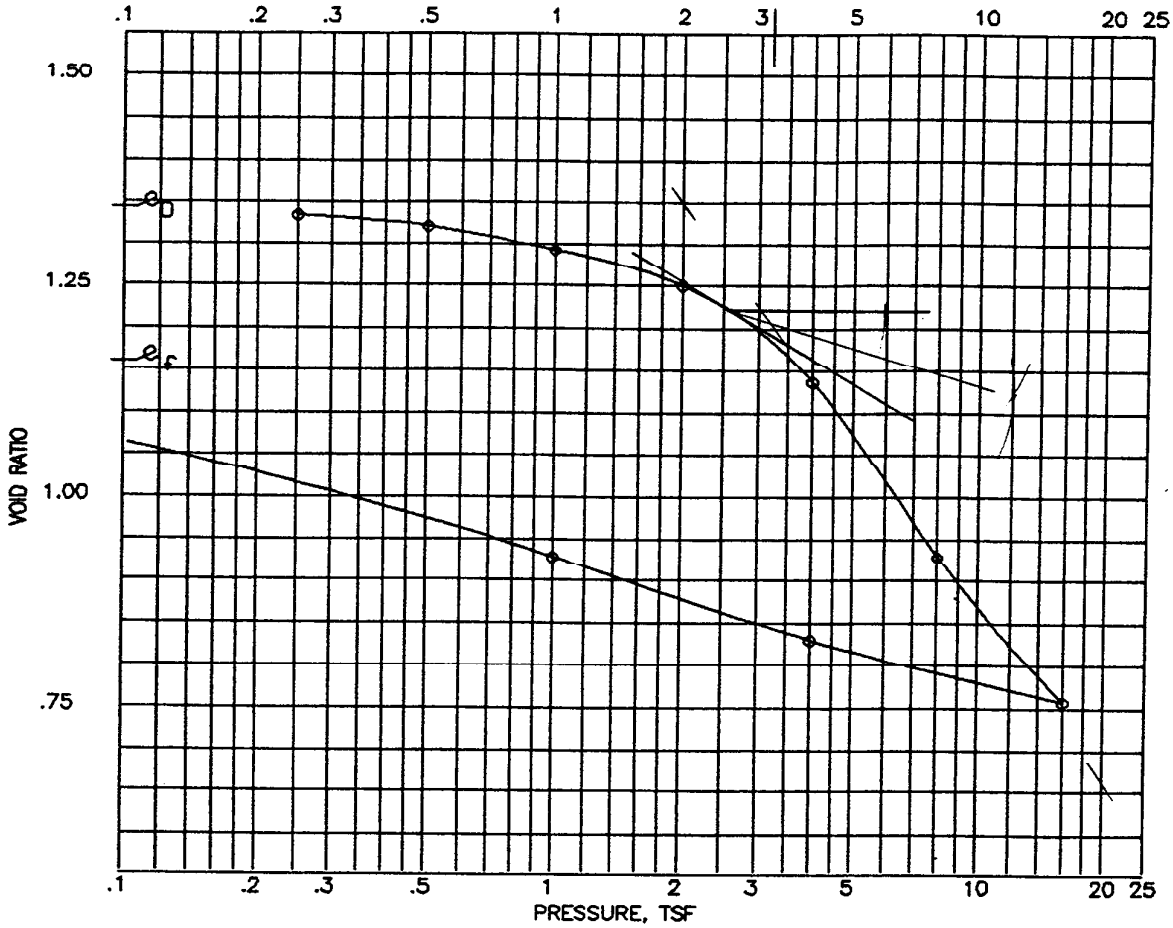

$\gamma_w$ = 105.2 PCF

| | | | BEFORE TEST | AFTER TEST |
|---|---|---|---|---|
| OVERBURDEN PRESSURE, TSF | | WATER CONTENT, % | 56.1 | 49.8 |
| PRECONSOL. PRESSURE, TSF | 2.5 | DRY DENSITY, PCF | 67.4 | 74.1 |
| COMPRESSION INDEX | 0.87 | SATURATION, % | 100 + | 100 + |
| TYPE SPECIMEN | UNDISTURBED | VOID RATIO | 1.501 | 1.274 |
| DIA. IN 4.44 | HT. IN 1.122 | BACK PRESSURE, TSF | | |

CLASSIFICATION CLAY (CH), GRAY; FINE SAND LENSES

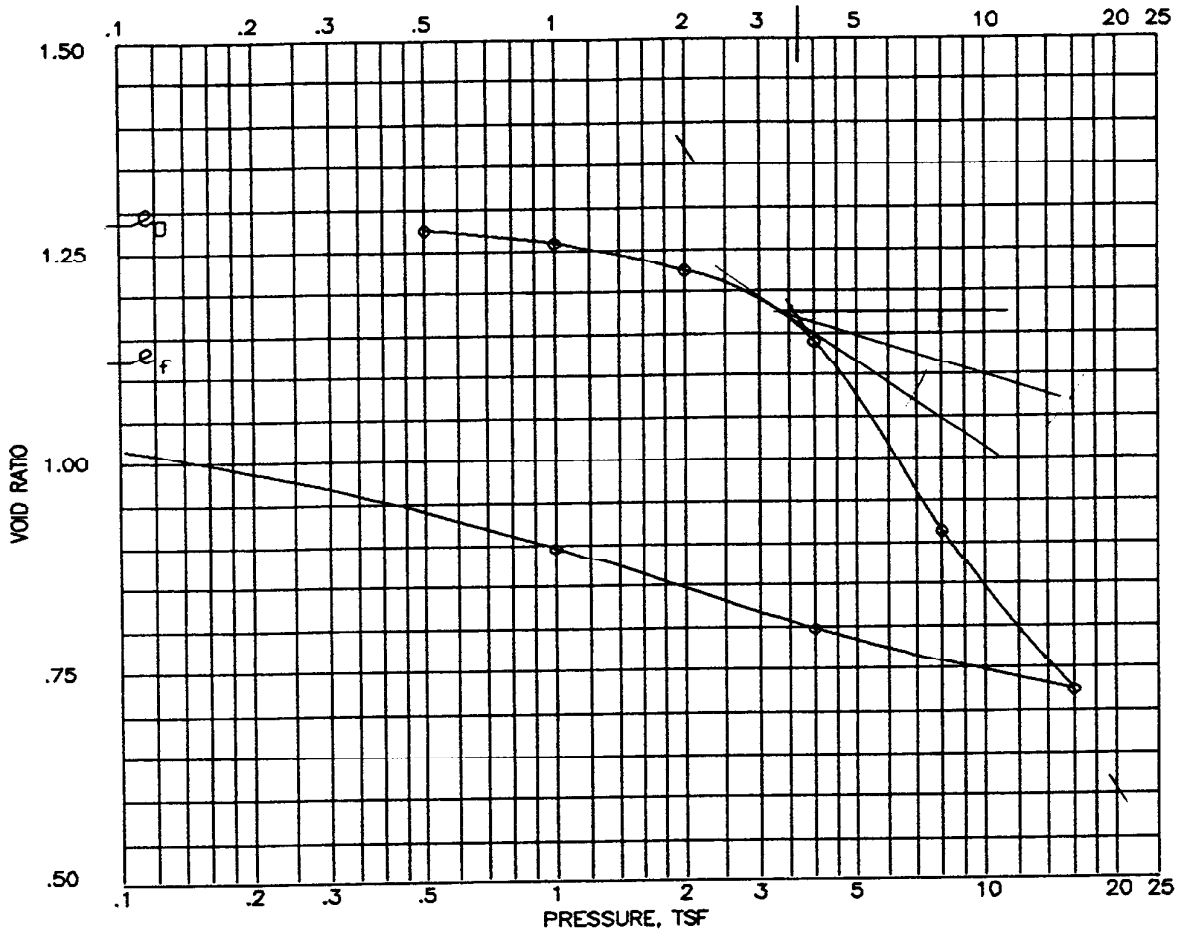
| | | | |
|---|---|---|---|
| LL 75 | PL 19 | PI 56 | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF |
| GS 2.70 (EST) | $D_{10}$ | | CLAIBORNE, NEW ORLEANS |
| REMARKS: | | | BORING NO. NC-2U / SAMPLE NO. 11C |
| | | | DEPTH/ELEV 55.6/-88.1 / TECH. US |
| | | | LABORATORY USAE WES - STF/GL / DATE 26 AUG 92 |

CONSOLIDATION TEST REPORT




$\gamma_w = 108.1$ pcf

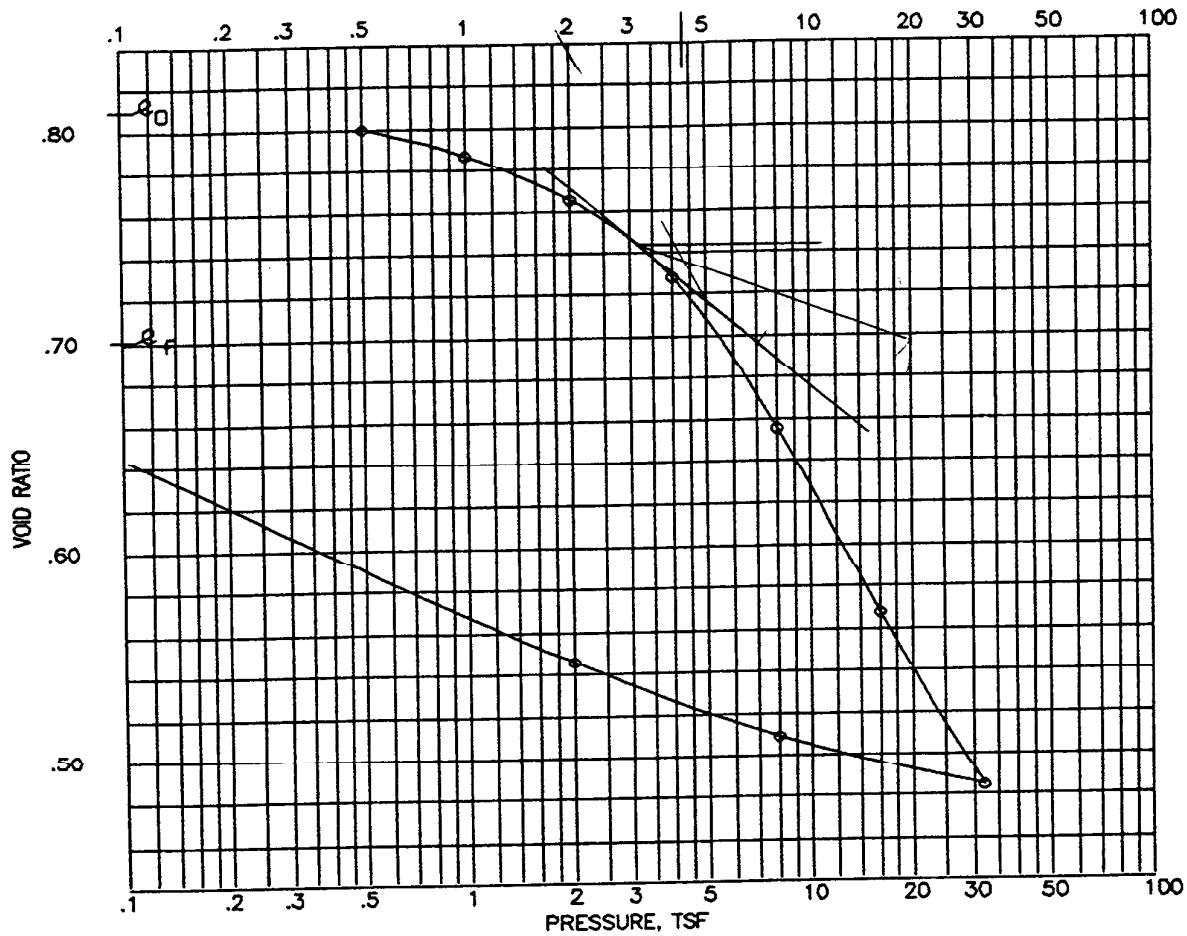
| | | | BEFORE TEST | AFTER TEST |
|---|---|---|---|---|
| OVERBURDEN PRESSURE, TSF | | WATER CONTENT, % | 50.2 | 44.3 |
| PRECONSOL. PRESSURE, TSF | 3.2 | DRY DENSITY, PCF | 72.0 | 78.1 |
| COMPRESSION INDEX | 0.69 | SATURATION, % | 100 + | 100 + |
| TYPE SPECIMEN | UNDISTURBED | VOID RATIO | 1.340 | 1.158 |
| DIA. IN 4.44 | HT. IN 1.117 | BACK PRESSURE, TSF | | |
| CLASSIFICATION | CLAY (CH), GRAY | | | |
| LL 50 | PL 18 | PI 32 | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF | |
| GS 2.70 (EST) | $D_{10}$ | | CLAIBORNE, NEW ORLEANS | |
| REMARKS: | | | BORING NO. NC-2U | SAMPLE NO. 16B |
| | | | DEPTH/ELEV 74.9/-107.4 | TECH. US |
| | | | LABORATORY USAE WES — STF/GL | DATE 26 AUG 92 |
| | | | CONSOLIDATION TEST REPORT | |




$\gamma_w = 108.0$ pcf

| | | | BEFORE TEST | AFTER TEST |
|---|---|---|---|---|
| OVERBURDEN PRESSURE, TSF | | WATER CONTENT, % | 46.3 | 42.7 |
| PRECONSOL. PRESSURE, TSF | 3.7 | DRY DENSITY, PCF | 73.8 | 79.5 |
| COMPRESSION INDEX | 0.77 | SATURATION, % | 97.2 | 100 + |
| TYPE SPECIMEN | UNDISTURBED | VOID RATIO | 1.285 | 1.121 |
| DIA. IN 4.44 | HT. IN 1.118 | BACK PRESSURE, TSF | | |

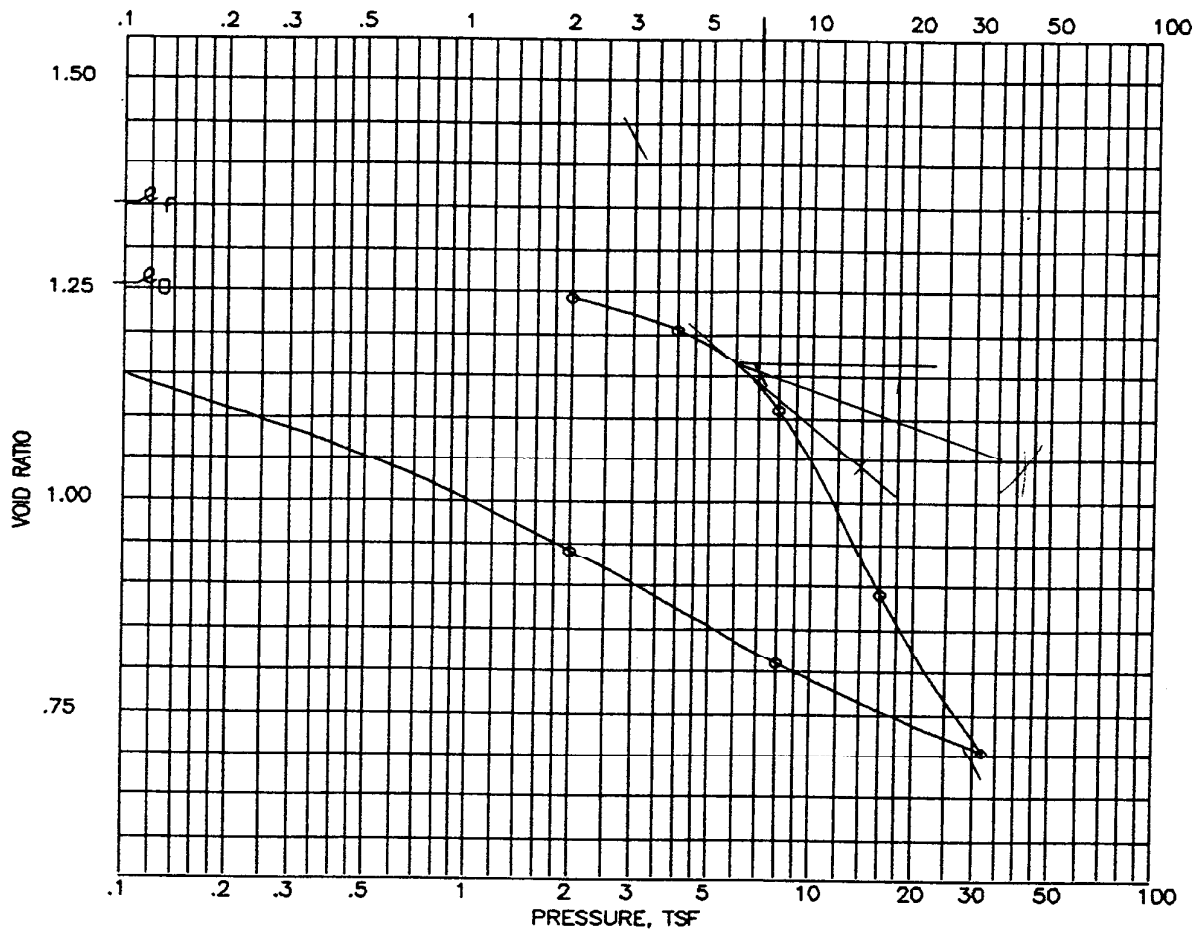
| | | | |
|---|---|---|---|
| CLASSIFICATION | CLAY (CH), GRAY | | |
| LL 64 | PL 19 | PI 45 | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF |
| GS 2.70 (EST) | $D_{10}$ | | CLAIBORNE, NEW ORLEANS |
| REMARKS: | | | BORING NO. NC-2U / SAMPLE NO. 22C |
| | | | DEPTH/ELEV 99.5/-132.0 / TECH. US |
| | | | LABORATORY USAE WES - SIF/GL / DATE 01 SEP 92 |
| | | | CONSOLIDATION TEST REPORT |




$\gamma_w = 120.0$ pcf

| | | | BEFORE TEST | AFTER TEST |
|---|---|---|---|---|
| OVERBURDEN PRESSURE, TSF | | WATER CONTENT, % | 28.8 | 26.2 |
| PRECONSOL. PRESSURE, TSF | 4.3 | DRY DENSITY, PCF | 93.2 | 99.1 |
| COMPRESSION INDEX | 0.30 | SATURATION, % | 96.2 | 100 + |
| TYPE SPECIMEN | UNDISTURBED | VOID RATIO | .809 | .700 |
| DIA. IN 4.44 | HT. IN 1.111 | BACK PRESSURE, TSF | | |

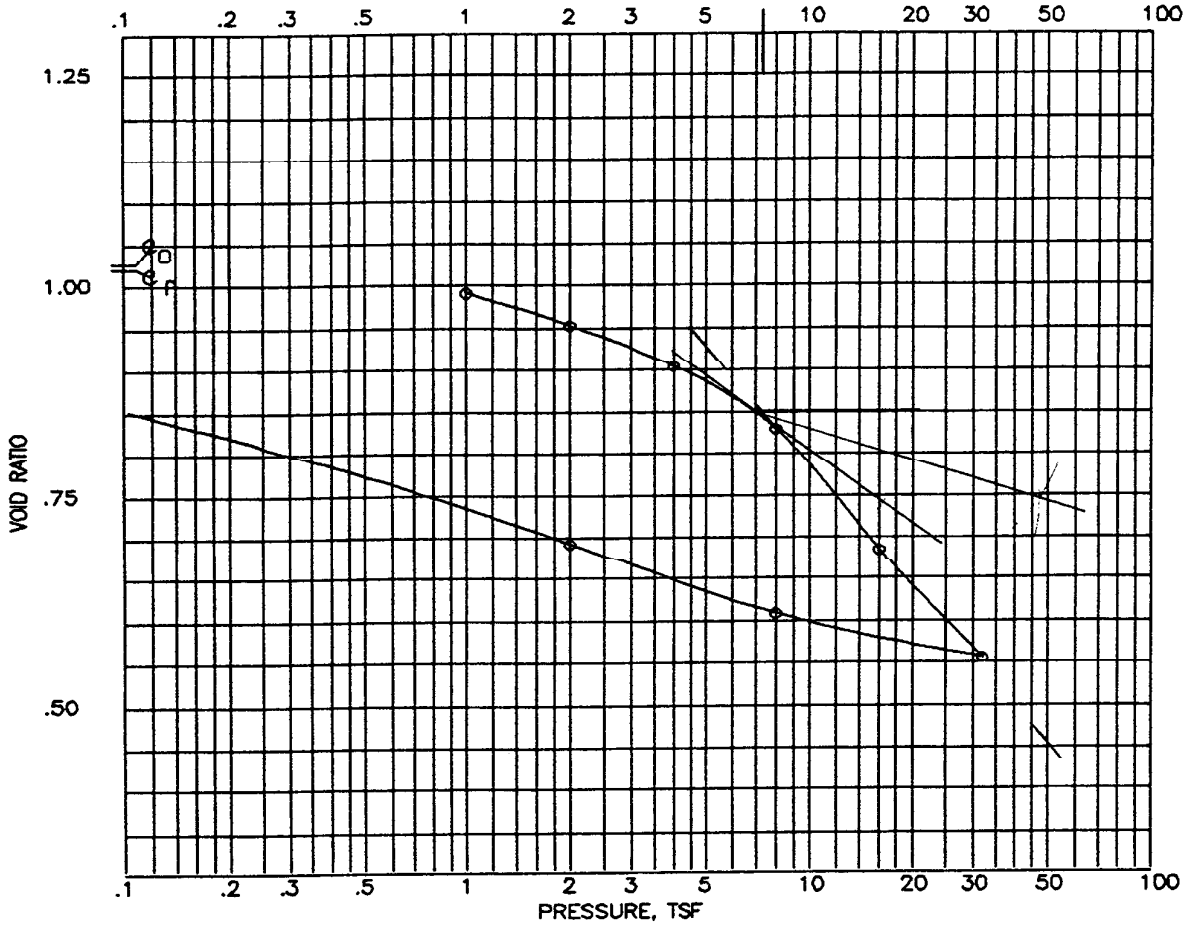
| | | | | |
|---|---|---|---|---|
| CLASSIFICATION | CLAY (CL), GRAY | | | |
| LL 39 | PL 17 | PI 22 | PROJECT | I.H.N.C. NEW SHIPLOCK NORTH OF |
| GS 2.70 (EST) | $D_{10}$ | | | CLAIBORNE, NEW ORLEANS |
| REMARKS: | | | BORING NO. NC-2U | SAMPLE NO. 28B |
| | | | DEPTH/ELEV 122.1/-154.6 | TECH. US |
| | | | LABORATORY USAE WES - STF/GL | DATE 18 AUG 92 |
| | | | CONSOLIDATION TEST REPORT | |




$\gamma_w$ = 109.2 PCF

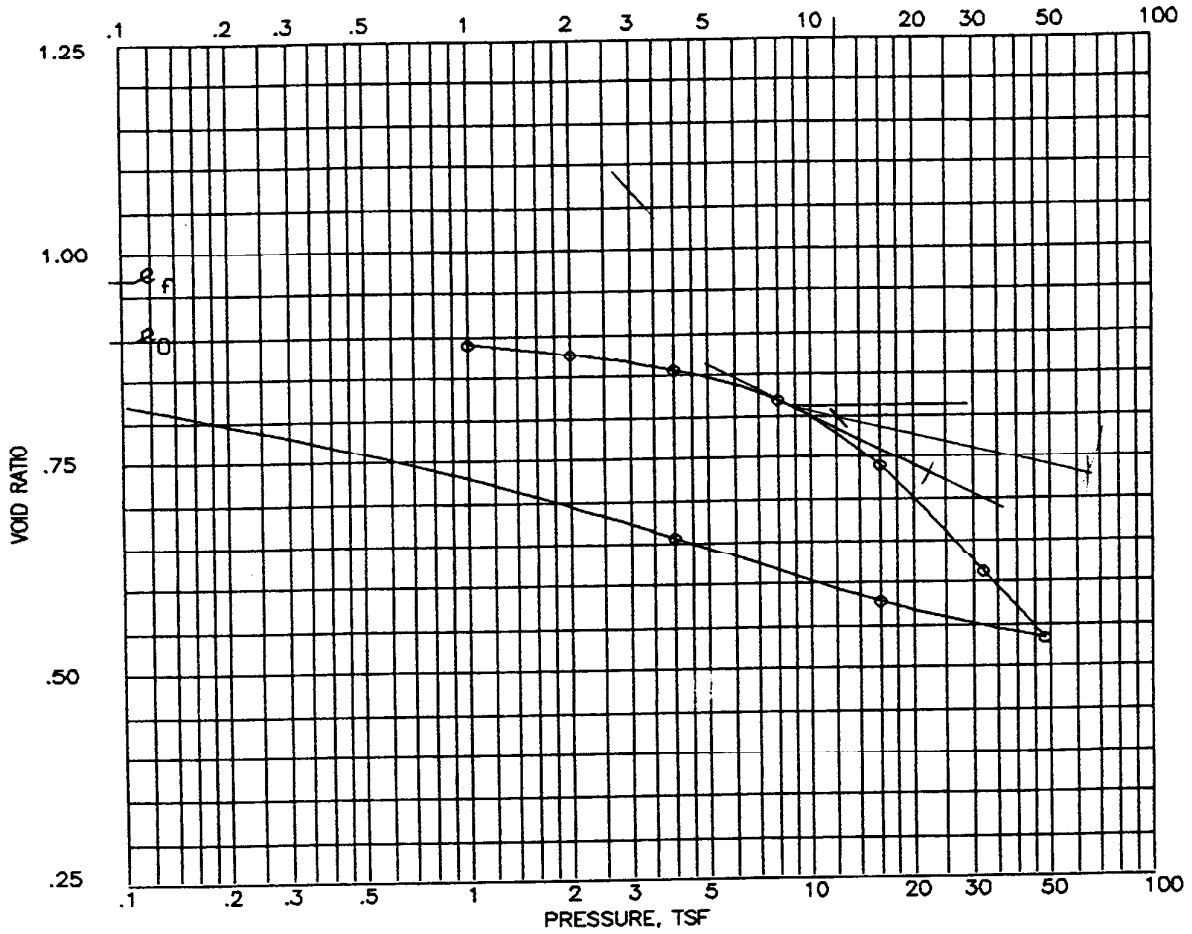
| | | | BEFORE TEST | AFTER TEST |
|---|---|---|---|---|
| OVERBURDEN PRESSURE, TSF | | WATER CONTENT, % | 46.0 | 50.9 |
| PRECONSOL. PRESSURE, TSF | 7.0 | DRY DENSITY, PCF | 74.8 | 71.7 |
| COMPRESSION INDEX | 0.74 | SATURATION, % | 99.1 | 100 + |
| TYPE SPECIMEN | UNDISTURBED | VOID RATIO | 1.254 | 1.350 |
| DIA. IN 4.44 | HT. IN 1.123 | BACK PRESSURE, TSF | | |
| CLASSIFICATION | CLAY (CH), GRAY | | | |
| LL 79 | PL 19 | PI 60 | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF | |
| GS 2.70 (EST) | $D_{10}$ | | CLAIBORNE, NEW ORLEANS | |
| REMARKS: | | | BORING NO. NC-2U | SAMPLE NO. 44C |
| | | | DEPTH/ELEV 187.5/-220.0 | TECH. US |
| | | | LABORATORY USAE WES - STF/GL | DATE 01 SEP 92 |
| | | | CONSOLIDATION TEST REPORT | |

SHEET 1 OF 10




$\gamma_w$ = 114.1 PCF

| | | | BEFORE TEST | AFTER TEST |
|---|---|---|---|---|
| OVERBURDEN PRESSURE, TSF | | WATER CONTENT, % | 37.0 | 37.9 |
| PRECONSOL. PRESSURE, TSF | 7.2 | DRY DENSITY, PCF | 83.3 | 83.5 |
| COMPRESSION INDEX | 0.48 | SATURATION, % | 97.7 | 100 + |
| TYPE SPECIMEN | UNDISTURBED | VOID RATIO | 1.024 | 1.018 |
| DIA. IN 4.44 | HT. IN 1.111 | BACK PRESSURE, TSF | | |
| CLASSIFICATION | CLAY (CH), GRAY; SILT LENSES | | | |
| LL 56 | PL 16 | PI 40 | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF | |
| GS 2.70 (EST) | $D_{10}$ | | CLAIBORNE, NEW ORLEANS | |
| REMARKS: | | | BORING NO. NC-2U | SAMPLE NO. 50B |
| | | | DEPTH/ELEV 210.8/-243.3 | TECH. US |
| | | | LABORATORY USAE WES - STF/GL | DATE 18 AUG 92 |
| | | | CONSOLIDATION TEST REPORT | |

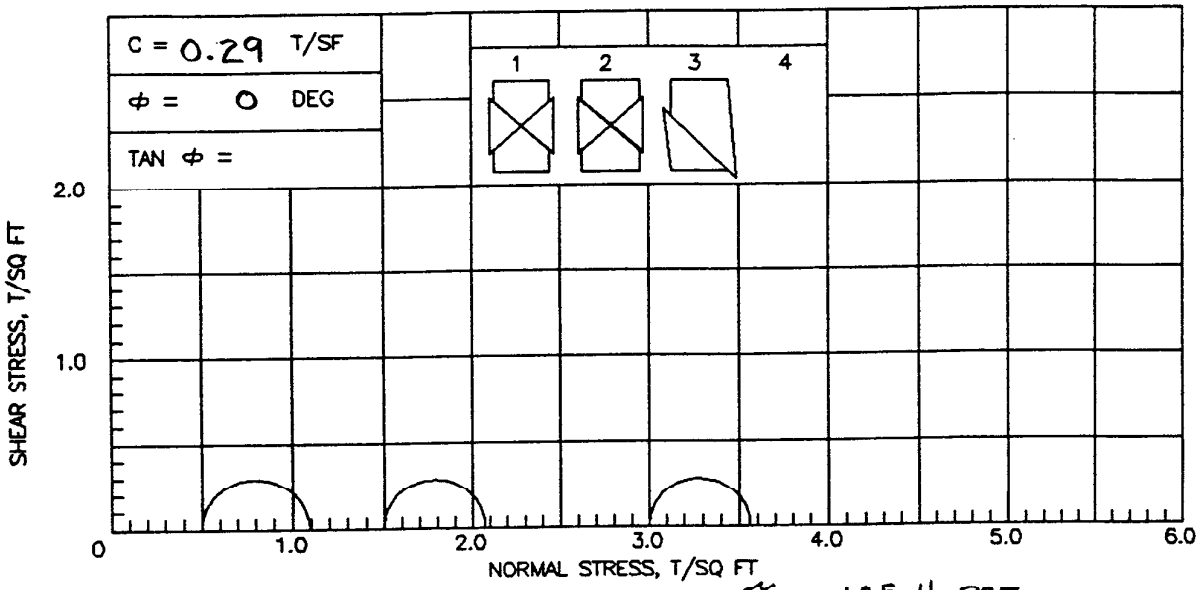



$\gamma_w = 118.9$

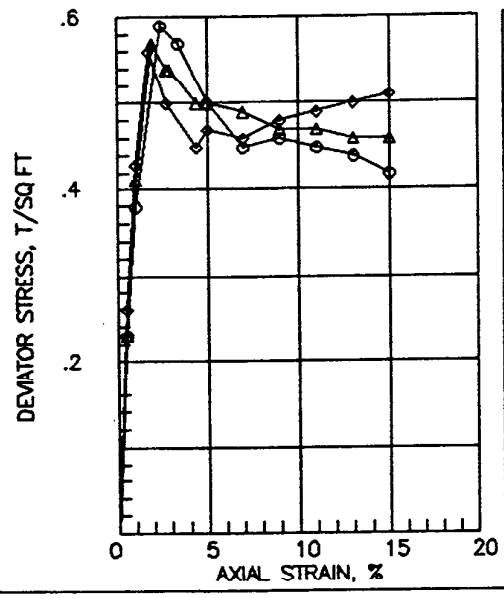
| | | | BEFORE TEST | AFTER TEST |
|---|---|---|---|---|
| OVERBURDEN PRESSURE, TSF | | WATER CONTENT, % | 33.9 | 37.1 |
| PRECONSOL. PRESSURE, TSF | 12.0 | DRY DENSITY, PCF | 88.8 | 85.7 |
| COMPRESSION INDEX | 0.48 | SATURATION, % | 100 + | 100 + |
| TYPE SPECIMEN | UNDISTURBED | VOID RATIO | .897 | .967 |
| DIA. IN 4.44 | HT. IN 1.122 | BACK PRESSURE, TSF | | |

CLASSIFICATION CLAY (CH), GRAY; FRIABLE

| | | | |
|---|---|---|---|
| LL 64 | PL 20 | PI 44 | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF |
| $G_S$ 2.70 (EST) | $D_{10}$ | | CLAIBORNE, NEW ORLEANS |
| REMARKS: | | | BORING NO. NC-2U / SAMPLE NO. 33B |
| | | | DEPTH/ELEV 142.7/-175.2 / TECH. US |
| | | | LABORATORY USAE WES - STF/GL / DATE 31 AUG 92 |
| | | | CONSOLIDATION TEST REPORT |




$\gamma_w$ = 105.4 PCF




| | SPECIMEN NO. | ○ 1 | △ 2 | ◇ 3 | 4 |
|---|---|---|---|---|---|
| INITIAL | WATER CONTENT, % | 52.3 | 51.7 | 51.0 | |
| | DRY DENSITY, PCF | 68.7 | 69.7 | 70.1 | |
| | SATURATION, % | 97.2 | 98.4 | 98.0 | |
| | VOID RATIO | 1.453 | 1.419 | 1.406 | |
| BEFORE SHEAR | WATER CONTENT, % | | | | |
| | DRY DENSITY, PCF | | | | |
| | SATURATION, % | | | | |
| | VOID RATIO | | | | |
| | BACK PRESSURE, TSF | | | | |
| | CHAMBER PRESSURE, TSF | .50 | 1.50 | 3.00 | |
| | MAX. DEV. STRESS, TSF | .59 | .57 | .56 | |
| | TIME TO FAILURE, MIN. | 5 | 11 | 16 | |
| | STRAIN RATE INCR., % | | | 4 | |
| | INITIAL DIAMETER, IN. | 1.38 | 1.36 | 1.37 | |
| | INITIAL HEIGHT, IN. | 3.00 | 3.00 | 3.00 | |

CONTROLLED-STRAIN TEST

DESCRIPTION OF SPECIMENS: CLAY (CH), GRAY; SILT SEAMS

| LL 57 | PL 17 | PI 40 | GS 2.70 (ESTIMATED) | UNDISTURBED SPECIMEN | Q TEST |
|---|---|---|---|---|---|

REMARKS:

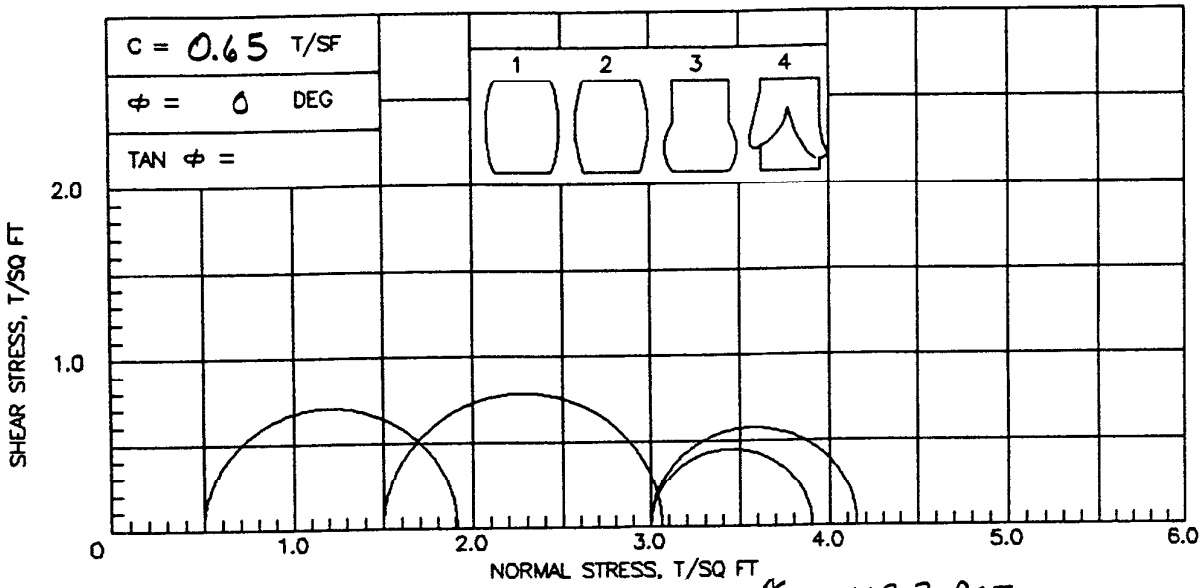
PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF CLAIBORNE, NEW ORLEANS

BORING NO. NC-3U | SAMPLE NO. 4B

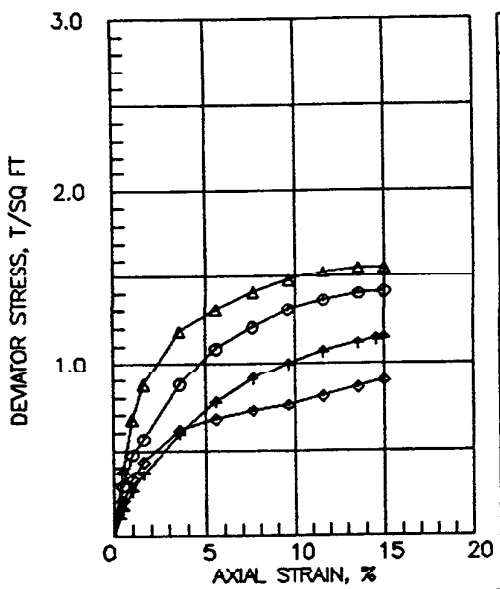
DEPTH/ELEV 23.0/-54.0 | TECH. JH

LABORATORY USAE WES - STF/GL | DATE 20 JUL 92

TRIAXIAL COMPRESSION TEST REPORT




$\gamma_w$ = 119.3 PCF




| SPECIMEN NO. | | ○ 1 | △ 2 | ◇ 3 | ↑ 4 |
|---|---|---|---|---|---|
| INITIAL | WATER CONTENT, % | 27.8 | 28.0 | 28.5 | 27.6 |
| | DRY DENSITY, PCF | 93.9 | 92.4 | 93.0 | 95.2 |
| | SATURATION, % | 94.6 | 91.7 | 94.7 | 96.8 |
| | VOID RATIO | .794 | .825 | .812 | .770 |
| BEFORE SHEAR | WATER CONTENT, % | | | | |
| | DRY DENSITY, PCF | | | | |
| | SATURATION, % | | | | |
| | VOID RATIO | | | | |
| | BACK PRESSURE, TSF | | | | |
| CHAMBER PRESSURE, TSF | | .50 | 1.50 | 3.00 | 3.00 |
| MAX. DEV. STRESS, TSF | | 1.41 | 1.56 | .90 | 1.15 |
| TIME TO FAILURE, MIN. | | 30 | 27 | 30 | 60 |
| STRAIN RATE INCR., % | | | | | |
| INITIAL DIAMETER, IN. | | 1.38 | 1.38 | 1.36 | 1.37 |
| INITIAL HEIGHT, IN. | | 3.00 | 3.00 | 3.00 | 3.00 |

CONTROLLED-STRAIN TEST

DESCRIPTION OF SPECIMENS: CLAY (CL), GRAY

| LL 31 | PL 14 | PI 17 | GS 2.70 (ESTIMATED) | UNDISTURBED SPECIMEN | Q TEST |
|---|---|---|---|---|---|

REMARKS:

CHECK TEST TAKEN

FROM DIFFERENT LIFT

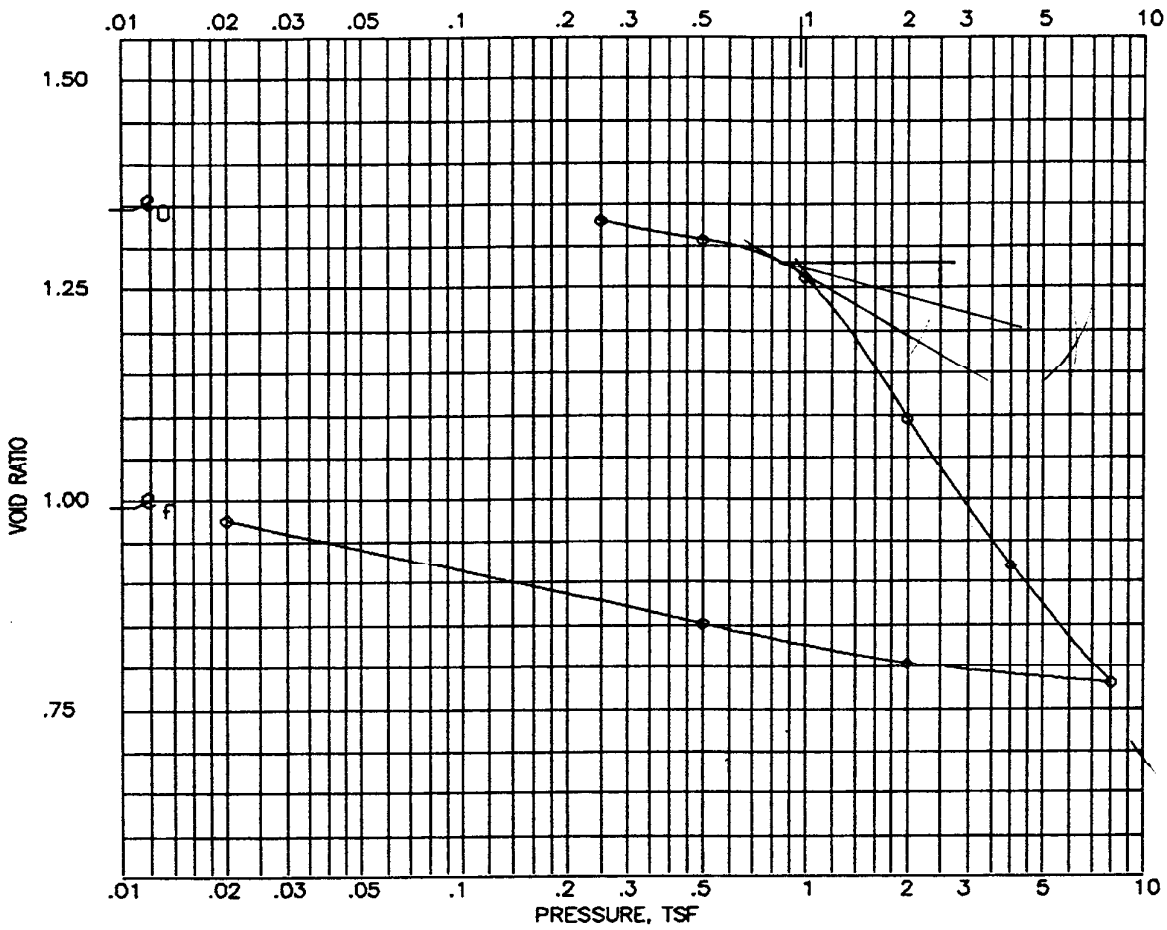
PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF CLAIBORNE, NEW ORLEANS

BORING NO. NC-3U | SAMPLE NO. 7C

DEPTH/ELEV 36.0/-67.0 | TECH. JH

LABORATORY USAE WES - STF/GL | DATE 21 JUL 92

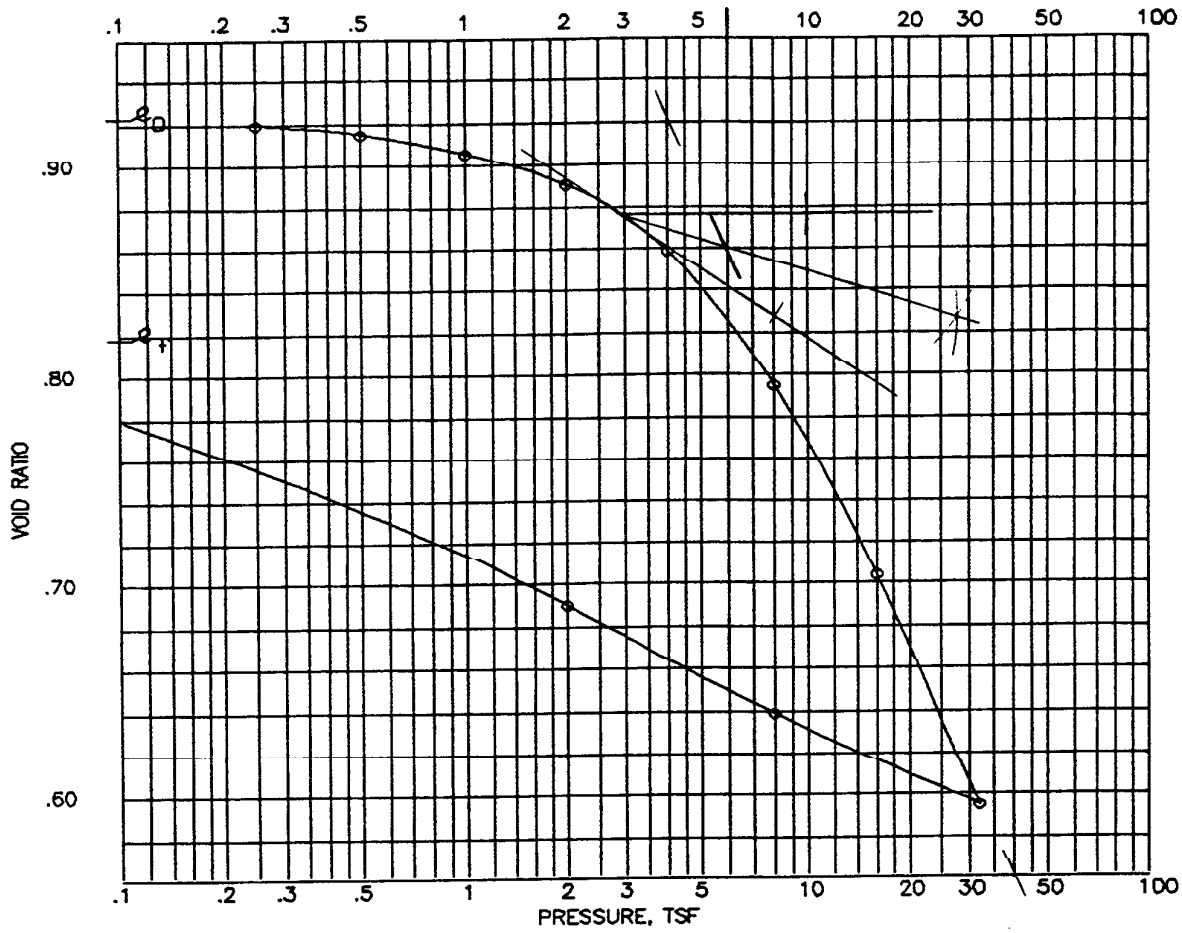
TRIAXIAL COMPRESSION TEST REPORT




$\gamma_w$ = 107.3 PCF

| | | | BEFORE TEST | AFTER TEST |
|---|---|---|---|---|
| OVERBURDEN PRESSURE, TSF | | WATER CONTENT, % | 49.3 | 36.1 |
| PRECONSOL. PRESSURE, TSF | 0.97 | DRY DENSITY, PCF | 71.9 | 84.7 |
| COMPRESSION INDEX | 0.57 | SATURATION, % | 99.1 | 98.4 |
| TYPE SPECIMEN | UNDISTURBED | VOID RATIO | 1.344 | .990 |
| DIA. IN 4.44 | HT. IN 1.108 | BACK PRESSURE, TSF | | |
| CLASSIFICATION | CLAY (CH), GRAY; SILT POCKETS | | | |
| LL 53 | PL 17 | PI 36 | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF | |
| GS 2.70 (EST) | $D_{10}$ | | CLAIBORNE, NEW ORLEANS | |
| REMARKS: | | | BORING NO. NC-3U | SAMPLE NO. 3C |
| | | | DEPTH/ELEV 20.0/-51.0 | TECH. US |
| | | | LABORATORY USAE WES – STF/GL | DATE 04 SEP 92 |
| | | | CONSOLIDATION TEST REPORT | |

SHEET 1 OF 11

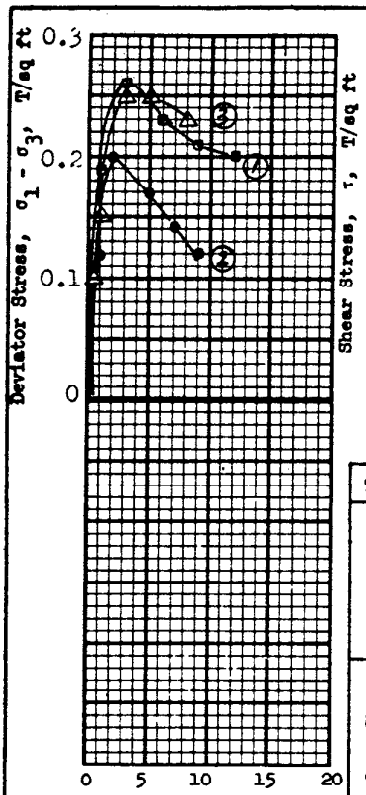


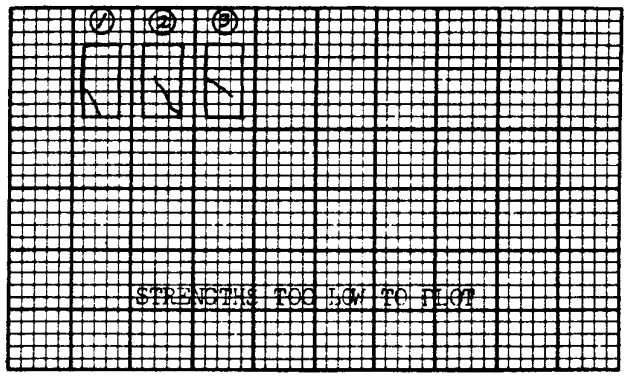

$\gamma_w$ = 117.6 PCF

| | | | BEFORE TEST | AFTER TEST |
|---|---|---|---|---|
| OVERBURDEN PRESSURE, TSF | | WATER CONTENT, % | 34.0 | 31.3 |
| PRECONSOL. PRESSURE, TSF | 6.0 | DRY DENSITY, PCF | 87.7 | 92.7 |
| COMPRESSION INDEX | 0.36 | SATURATION, % | 99.7 | 100 + |
| TYPE SPECIMEN | UNDISTURBED | VOID RATIO | .922 | .817 |
| DIA. IN 4.44 | HT. IN 1.111 | BACK PRESSURE, TSF | | |

CLASSIFICATION CLAY (CL), GRAY; FRIABLE

| | | | |
|---|---|---|---|
| LL 48 | PL 17 | PI 31 | PROJECT I.H.N.C. NEW SHIPLOCK NORTH OF |
| GS 2.70 (EST) | $D_{10}$ | | CLAIBORNE, NEW ORLEANS |
| REMARKS: | | | BORING NO. NC-3U / SAMPLE NO. 8C |
| | | | DEPTH/ELEV 40.0/-71.0 / TECH. US |
| | | | LABORATORY USAE WES - STF/GL / DATE 19 AUG 92 |
| | | | CONSOLIDATION TEST REPORT |




Normal Stress, $\sigma$, T/sq ft

| Test No. | | | 1 | 2 | 3 | |
|---|---|---|---|---|---|---|
| Initial | Water content | $w_o$ | 82.0 % | 80.9% | 94.3% | % |
| | Void ratio | $e_o$ | 2.17 | 2.11 | 2.50 | |
| | Saturation | $S_o$ | 100+ % | 100+% | 100+% | % |
| | Dry density, lb/cu ft | $\gamma_d$ | 52.4 | 53.4 | 47.5 | |
| Before Shear | Water content | $w_c$ | % | % | % | % |
| | Void ratio | $e_c$ | | | | |
| | Saturation | $S_c$ | % | % | % | % |
| | Final back pressure, T/sq ft | $u_o$ | | | | |
| Final | Water content | $w_f$ | % | % | % | % |
| | Void ratio | $e_f$ | | | | |
| Minor principal stress, T/sq ft | | $\sigma_3$ | 0.5 | 1.5 | 3.0 | |
| Max deviator stress, T/sq ft | | $(\sigma_1-\sigma_3)_{max}$ | 0.26 | 0.20 | 0.25 | |
| Time to failure, min | | $t_f$ | 7 | 11 | 38 | |
| Rate of strain, percent/min | | | 0.43 | 0.18 | 0.08 | |
| | | | | | | |
| Ult deviator stress, T/sq ft | | $(\sigma_1-\sigma_3)_{ult}$ | | | | |
| Initial diameter, in. | | $D_o$ | 1.40 | 1.40 | 1.40 | |
| Initial height, in. | | $H_o$ | 3.00 | 3.00 | 3.00 | |

**Shear Strength Parameters**

$\phi$ = 0 °

tan $\phi$ = 0

c = 0.12 T/sq ft

Method of saturation _____

☐ Controlled stress

☒ Controlled strain

Type of test Q | Type of specimen UNDISTURBED

Classification PLASTIC CLAY (CH), gray, contains organic matter and *

LL 109 | PL 35 | PI 74 | $G_s$ 2.66

Remarks *decayed root 1/4" in diameter

Specimen 3 contained excessive amount of organic matter

Project MISS. RIVER - GULF OUTLET - GDM 1968 - NEW SHIP LOCK

Area

Boring No. 2-UL | Sample No. 7-D

Depth 15.0 | Date 7 AUGUST 1968

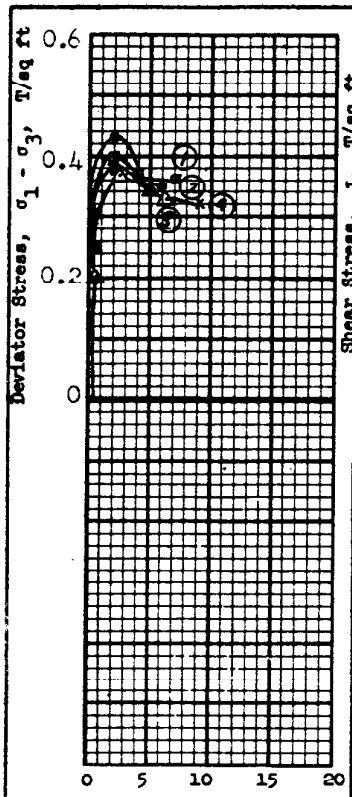
EAK

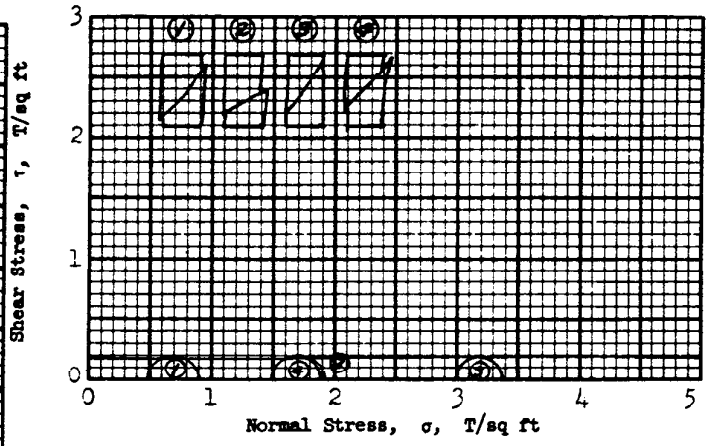
TRIAXIAL COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 2089 (EM 1110-2-1902) PREVIOUS EDITIONS ARE OBSOLETE

TRANSLUCENT

USAEWES SOILS TEST SECT




| Test No. | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|
| Initial | Water content | $w_o$ | 67.3 % | 69.3 % | 66.9 % | 67.4% |
| | Void ratio | $e_o$ | 1.83 | 1.86 | 1.84 | 1.84 |
| | Saturation | $S_o$ | 99.7 % | 100+ % | 98.5 % | 99.3% |
| | Dry density, lb/cu ft | $\gamma_d$ | 59.8 | 59.1 | 59.6 | 59.5 |
| Before Shear | Water content | $w_c$ | % | % | % | % |
| | Void ratio | $e_c$ | | | | |
| | Saturation | $S_c$ | % | % | % | % |
| | Final back pressure, T/sq ft | $u_o$ | | | | |
| Final | Water content | $w_f$ | % | % | % | % |
| | Void ratio | $e_f$ | | | | |
| Minor principal stress, T/sq ft | | $\sigma_3$ | 0.5 | 1.5 | 3.0 | 1.5 |
| Max deviator stress, T/sq ft | | $(\sigma_1-\sigma_3)_{max}$ | 0.40 | 0.43 | 0.37 | 0.38 |
| Time to failure, min | | $t_f$ | 10 | 14 | 31 | 20 |
| Rate of strain, percent/min | | | 0.19 | 0.14 | 0.08 | 0.10 |
| | | | | | | |
| Ult deviator stress, T/sq ft | | $(\sigma_1-\sigma_3)_{ult}$ | | | | |
| Initial diameter, in. | | $D_o$ | 1.40 | 1.40 | 1.40 | 1.40 |
| Initial height, in. | | $H_o$ | 3.00 | 3.00 | 3.00 | 3.00 |

**Shear Strength Parameters**

$\phi$ = 0 °

tan $\phi$ = 0

c = 0.19 T/sq ft

Method of saturation _____

☐ Controlled stress

☒ Controlled strain

Type of test Q | Type of specimen UNDISTURBED

Classification PLASTIC CLAY (CH), gray

LL 79 | PL 26 | PI 53 | $G_s$ 2.71

Remarks _____

Project MISS. RIVER - GULF OUTLET - GDM 1968 - NEW SHIP LOCK

Area

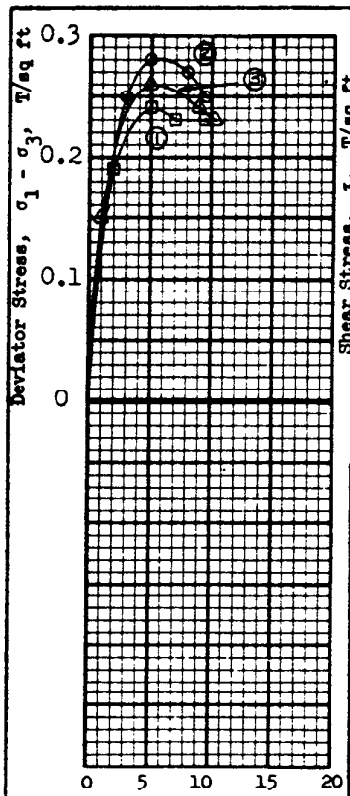
Boring No. 2-UL | Sample No. 10-B

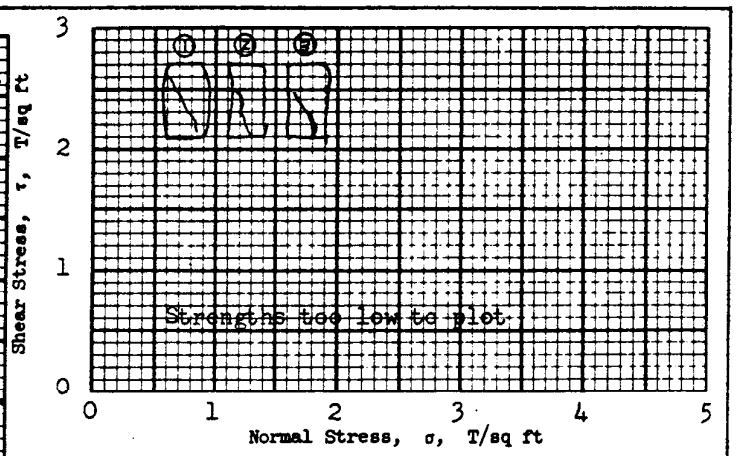
Depth El 25.1 | Date 8 AUGUST 1968

GDA TRIAXIAL COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 2089 (EM 1110-2-1902) PREVIOUS EDITIONS ARE OBSOLETE

TRANSLUCENT USAEWES SOILS TEST SECTION




| Test No. | | | 1 | 2 | 3 | |
|---|---|---|---|---|---|---|
| Initial | Water content | $w_o$ | 68.1 % | 68.0 % | 68.0 % | % |
| | Void ratio | $e_o$ | 1.88 | 1.89 | 1.84 | |
| | Saturation | $S_o$ | 98.2 % | 97.5 % | 100+ % | % |
| | Dry density, lb/cu ft | $\gamma_d$ | 58.8 | 58.6 | 59.5 | |
| Before Shear | Water content | $w_c$ | % | % | % | % |
| | Void ratio | $e_c$ | | | | |
| | Saturation | $S_c$ | % | % | % | % |
| | Final back pressure, T/sq ft | $u_o$ | | | | |
| Final | Water content | $w_f$ | % | % | % | % |
| | Void ratio | $e_f$ | | | | |
| Minor principal stress, T/sq ft | | $\sigma_3$ | 0.5 | 1.5 | 3.0 | |
| Max deviator stress, T/sq ft | | $(\sigma_1-\sigma_3)_{max}$ | 0.24 | 0.28 | 0.26 | |
| Time to failure, min | | $t_f$ | 33 | 38 | 36 | |
| Rate of strain, percent/min | | | 0.15 | 0.13 | 0.14 | |
| | | | | | | |
| Ult deviator stress, T/sq ft | | $(\sigma_1-\sigma_3)_{ult}$ | | | | |
| Initial diameter, in. | | $D_o$ | 1.39 | 1.40 | 1.39 | |
| Initial height, in. | | $H_o$ | 3.00 | 3.00 | 3.00 | |

**Shear Strength Parameters**

$\phi$ = 0 °

tan $\phi$ = 0

c = 0.13 T/sq ft

Method of saturation _____

☐ Controlled stress

☒ Controlled strain

| | | | |
|---|---|---|---|
| Type of test Q | Type of specimen UNDISTURBED | | |
| Classification PLASTIC CLAY (CH), gray, fissured | | | |
| LL 91 | PL 25 | PI 66 | $G_s$ 2.71 |

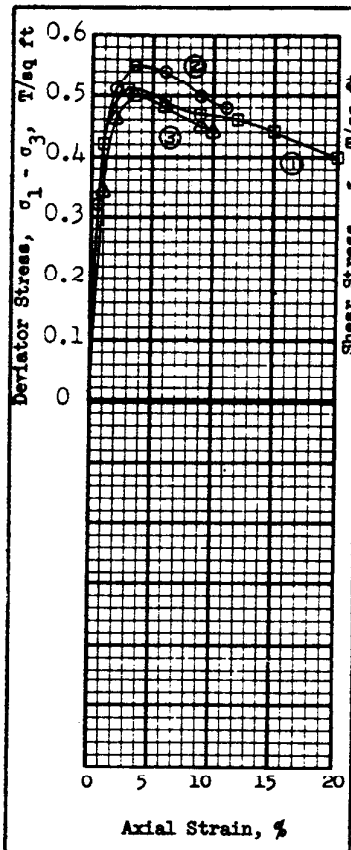
Remarks _____

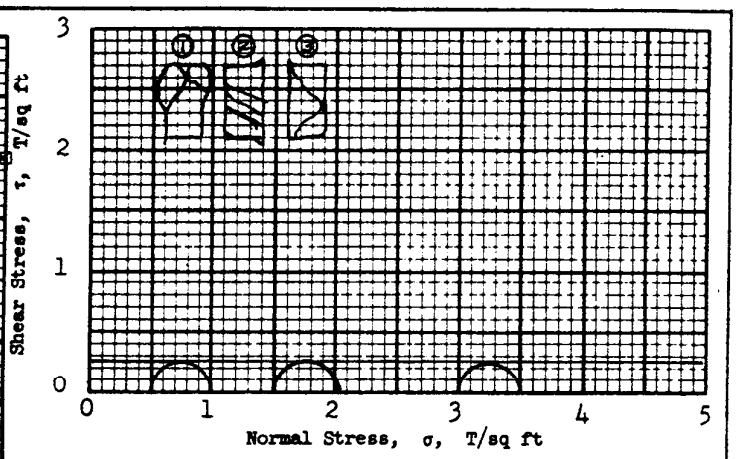
| | |
|---|---|
| Project MISS. RIVER - GULF OUTLET -GDM | |
| 1968 - NEW SHIP LOCK | |
| Area | |
| Boring No. 2-UL | Sample No. 12 D |
| Depth ~~El~~ 35.0 | Date 8 AUG. 1968 |
| EAK TRIAXIAL COMPRESSION TEST REPORT | |

ENG FORM 1 JUN 65 2089 *(EM 1110-2-1902)* PREVIOUS EDITIONS ARE OBSOLETE

*TRANSLUCENT*

USAEWES SOILS TEST SECTION




| Test No. | | | 1 | 2 | 3 | |
|---|---|---|---|---|---|---|
| Initial | Water content | $w_o$ | 64.2 % | 63.8 % | 63.4 % | % |
| | Void ratio | $e_o$ | 1.77 | 1.77 | 1.76 | |
| | Saturation | $S_o$ | 98.6 % | 98.0 % | 98.0 % | % |
| | Dry density, lb/cu ft | $\gamma_d$ | 61.3 | 61.2 | 61.4 | |
| Before Shear | Water content | $w_c$ | % | % | % | % |
| | Void ratio | $e_c$ | | | | |
| | Saturation | $S_c$ | % | % | % | % |
| | Final back pressure, T/sq ft | $u_o$ | | | | |
| Final | Water content | $w_f$ | % | % | % | % |
| | Void ratio | $e_f$ | | | | |
| Minor principal stress, T/sq ft | | $\sigma_3$ | 0.5 | 1.5 | 3.0 | |
| Max deviator stress, T/sq ft | | $(\sigma_1-\sigma_3)_{max}$ | 0.51 | 0.55 | 0.50 | |
| Time to failure, min | | $t_f$ | 23 | 29 | 32 | |
| Rate of strain, percent/min | | | 0.13 | 0.12 | 0.11 | |
| | | | | | | |
| Ult deviator stress, T/sq ft | | $(\sigma_1-\sigma_3)_{ult}$ | | | | |
| Initial diameter, in. | | $D_o$ | 1.40 | 1.41 | 1.40 | |
| Initial height, in. | | $H_o$ | 3.00 | 3.00 | 3.00 | |

**Shear Strength Parameters**

$\phi$ = 0 °

tan $\phi$ = 0

c = 0.26 T/sq ft

Method of saturation _____

☐ Controlled stress

☒ Controlled strain

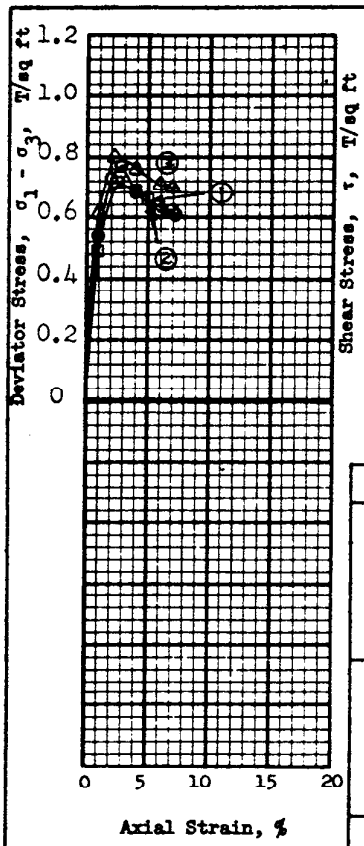
| | | | | |
|---|---|---|---|---|
| Type of test Q | Type of specimen UNDISTURBED | | | |
| Classification PLASTIC CLAY (CH), grey, homogeneous | | | | |
| LL 87 | PL 26 | PI 61 | | $G_s$ 2.72 |

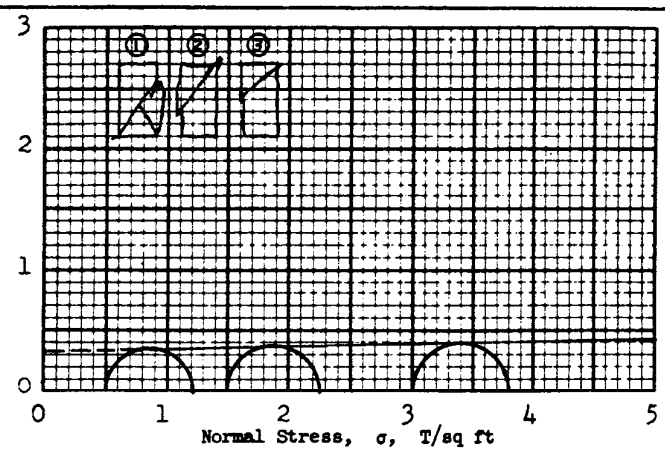
Remarks _____

| | |
|---|---|
| Project MISS. RIVER - GULF OUTLET- GDM | |
| 1968 - NEW SHIP LOCK | |
| Area | |
| Boring No. 2-UL | Sample No. 14-B |
| Depth ~~El~~ 40.8 | Date 8 AUG. 1968 |
| FAM TRIAXIAL COMPRESSION TEST REPORT | |

ENG FORM 1 JUN 65 2089 *(EM 1110-2-1902)* PREVIOUS EDITIONS ARE OBSOLETE

*TRANSLUCENT* USAEWES SOILS TEST SECTION




| Test No. | | | 1 | 2 | 3 | |
|---|---|---|---|---|---|---|
| Initial | Water content | $w_o$ | 49.0 % | 53.1% | 50.1% | % |
| | Void ratio | $e_o$ | 1.40 | 1.47 | 1.42 | |
| | Saturation | $S_o$ | 94.2 % | 97.2% | 94.9 % | % |
| | Dry density, lb/cu ft | $\gamma_d$ | 70.1 | 68.1 | 69.4 | |
| Before Shear | Water content | $w_c$ | % | % | % | % |
| | Void ratio | $e_c$ | | | | |
| | Saturation | $S_c$ | % | % | % | % |
| | Final back pressure, T/sq ft | $u_o$ | | | | |
| Final | Water content | $w_f$ | % | % | % | % |
| | Void ratio | $e_f$ | | | | |
| Minor principal stress, T/sq ft | | $\sigma_3$ | 0.5 | 1.5 | 3.0 | |
| Max deviator stress, T/sq ft | | $(\sigma_1-\sigma_3)_{max}$ | 0.71 | 0.77 | 0.80 | |
| Time to failure, min | | $t_f$ | 16 | 28 | 21 | |
| Rate of strain, percent/min | | | 0.16 | 0.10 | 0.11 | |
| | | | | | | |
| Ult deviator stress, T/sq ft | | $(\sigma_1-\sigma_3)_{ult}$ | | | | |
| Initial diameter, in. | | $D_o$ | 1.42 | 1.41 | 1.41 | |
| Initial height, in. | | $H_o$ | 3.00 | 3.00 | 3.00 | |

**Shear Strength Parameters**

$\phi$ = 1 °

tan $\phi$ = 0.018

c = 0.94 T/sq ft

Method of saturation _____

☐ Controlled stress

☒ Controlled strain

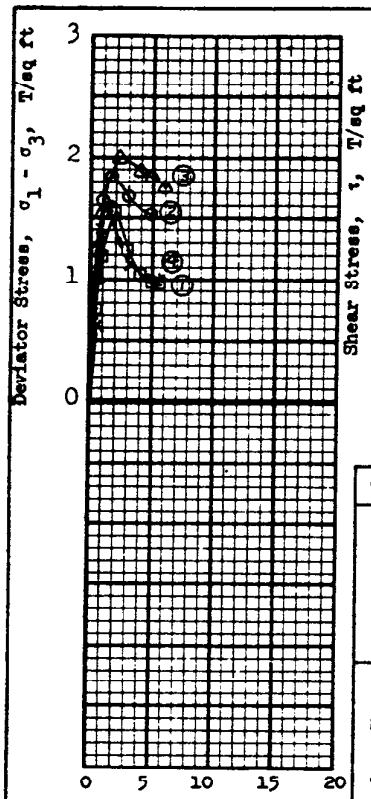
| | | | |
|---|---|---|---|
| Type of test Q | Type of specimen UNDISTURBED | | |
| Classification PLASTIC CLAY (CH), gray, contains sand seams | | | |
| LL 61 | PL 21 | PI 40 | $G_s$ 2.69 |

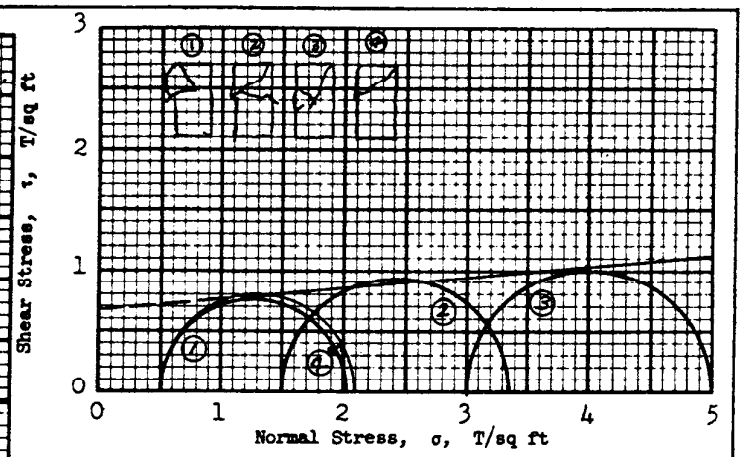
Remarks _____

| | |
|---|---|
| Project MISS. RIVER - GULF OUTLET -GDM | |
| 1968- NEW SHIP LOCK | |
| Area | |
| Boring No. 2-UL | Sample No. 16-C, |
| Depth ~~El~~ 50.2 | Date 8 AUG. 1968 |
| GDA TRIAXIAL COMPRESSION TEST REPORT | |

ENG FORM 1 JUN 65 2089 *(EM 1110-2-1902)* PREVIOUS EDITIONS ARE OBSOLETE

*TRANSLUCENT* USAEWES SOILS TEST SECTION




| Test No. | | | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|---|
| Initial | Water content | $w_o$ | 38.4 % | 36.8 % | 36.9 % | 35.2 % |
| | Void ratio | $e_o$ | 1.08 | 1.02 | 1.03 | 0.980 |
| | Saturation | $S_o$ | 97.4 % | 98.8 % | 98.2 % | 98.4 % |
| | Dry density, lb/cu ft | $\gamma_d$ | 82.1 | 84.5 | 84.1 | 86.4 |
| Before Shear | Water content | $w_c$ | % | % | % | % |
| | Void ratio | $e_c$ | | | | |
| | Saturation | $S_c$ | % | % | % | % |
| | Final back pressure, T/sq ft | $u_o$ | | | | |
| Final | Water content | $w_f$ | % | % | % | % |
| | Void ratio | $e_f$ | | | | |
| Minor principal stress, T/sq ft | | $\sigma_3$ | 0.5 | 1.5 | 3.0 | 0.5 |
| Max deviator stress, T/sq ft | | $(\sigma_1-\sigma_3)_{max}$ | 1.53 | 1.85 | 2.00 | 1.59 |
| Time to failure, min | | $t_f$ | 25 | 28 | 33 | 23 |
| Rate of strain, percent/min | | | 0.08 | 0.06 | 0.07 | 0.06 |
| | | | | | | |
| Ult deviator stress, T/sq ft | | $(\sigma_1-\sigma_3)_{ult}$ | | | | |
| Initial diameter, in. | | $D_o$ | 1.40 | 1.40 | 1.39 | 1.39 |
| Initial height, in. | | $H_o$ | 3.00 | 3.00 | 3.00 | 3.00 |

**Shear Strength Parameters**

$\phi$ = 5 °

tan $\phi$ = 0.088

c = 0.69 T/sq ft

Method of saturation _____

☐ Controlled stress

☒ Controlled strain

Type of test Q | Type of specimen UNDISTURBED

Classification PLASTIC CLAY (CH), gray w/brown spots, contains 1/16" silty *

LL 60 | PL 22 | PI 38 | $G_s$ 2.74

Remarks * sand seam

Project MISS. RIVER - GULF OUTLET - GDM

1968 - NEW SHIP LOCK

Area

Boring No. 2-UL | Sample No. 23-D

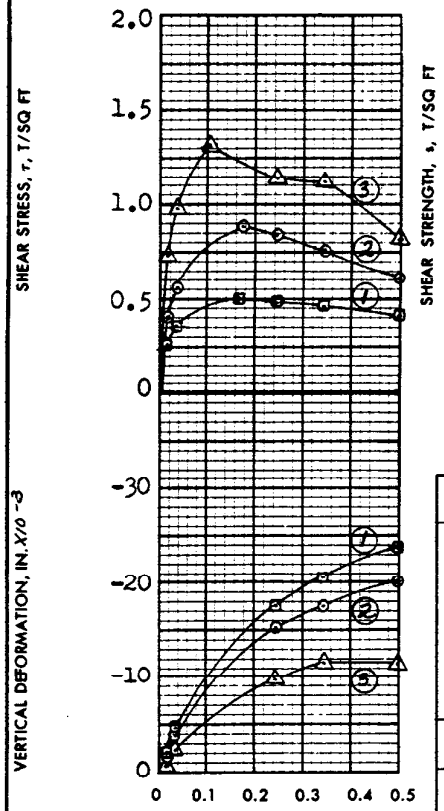
Depth ~~El~~ 78.7 | Date 8 AUG. 1968

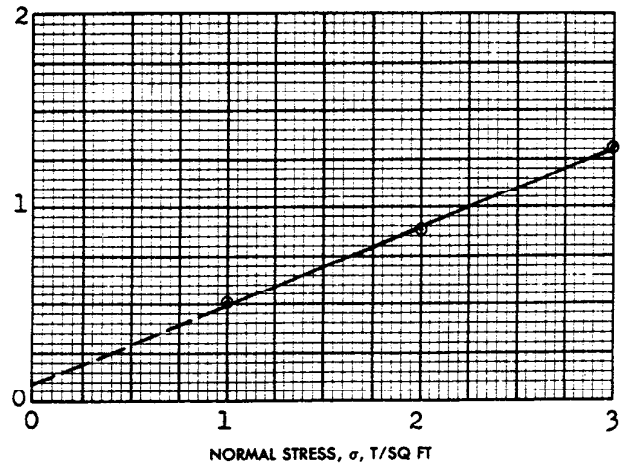
JMS TRIAXIAL COMPRESSION TEST REPORT

ENG FORM 1 JUN 65 2089 (EM 1110-2-1902) PREVIOUS EDITIONS ARE OBSOLETE

TRANSLUCENT

USAEWES SOILS TEST SECTION




| TEST NO. | | | 1 | 2 | 3 | |
|---|---|---|---|---|---|---|
| INITIAL | WATER CONTENT | $w_o$ | 69.9 % | 69.4 % | 69.8 % | % |
| | VOID RATIO | $e_o$ | 1.89 | 1.91 | 1.91 | |
| | SATURATION | $S_o$ | 99.5 % | 97.7 % | 98.3 % | % |
| | DRY DENSITY, LB/CU FT | $\gamma_d$ | 58.2 | 57.7 | 57.7 | |
| VOID RATIO AFTER CONSOLIDATION | | $e_c$ | | | | |
| TIME FOR 50 PERCENT CONSOLIDATION, MIN | | $t_{50}$ | 9 | 9 | 4 | |
| FINAL | WATER CONTENT | $w_f$ | 53.2 % | 46.9 % | 43.0 % | % |
| | VOID RATIO | $e_f$ | | | | |
| | SATURATION | $S_f$ | % | % | % | % |
| NORMAL STRESS, T/SQ FT | | $\sigma$ | 1.0 | 2.0 | 3.0 | |
| MAXIMUM SHEAR STRESS, T/SQ FT | | $\tau_{max}$ | 0.50 | 0.88 | 1.31 | |
| ACTUAL TIME TO FAILURE, MIN | | $t_f$ | 960 | 1050 | 690 | |
| RATE OF STRAIN, IN./MIN | | | .00019 | .00019 | .00019 | |
| ULTIMATE SHEAR STRESS, T/SQ FT | | $\tau_{ult}$ | | | | |

SHEAR STRENGTH PARAMETERS

$\phi'$ = 22°

TAN $\phi'$ = 0.404

$c'$ = 0.10 T/SQ FT

☐ CONTROLLED STRESS

☒ CONTROLLED STRAIN

TYPE OF SPECIMEN UNDISTURBED 3.00 IN. SQUARE 0.551 IN. THICK

CLASSIFICATION PLASTIC CLAY (CH), gray, homogeneous

LL 85 PL 25 PI 60 G. 2.69

REMARKS

PROJECT MISS. RIVER GULF OUTLET - GDM

1968 - NEW SHIP LOCK

AREA

BORING NO. 2-UL SAMPLE NO. 13-B

DEPTH 37.1 DATE 13 August 1968

JHMc **DIRECT SHEAR TEST REPORT**

ENG FORM 1 JUN 65 **2092** *(EM 1110-2-1906)* PREVIOUS EDITIONS ARE OBSOLETE *(TRANSLUCENT)* GPO : 1966 OF—214-945 PLATE IX-3

USAEWES SOILS TEST SECTION