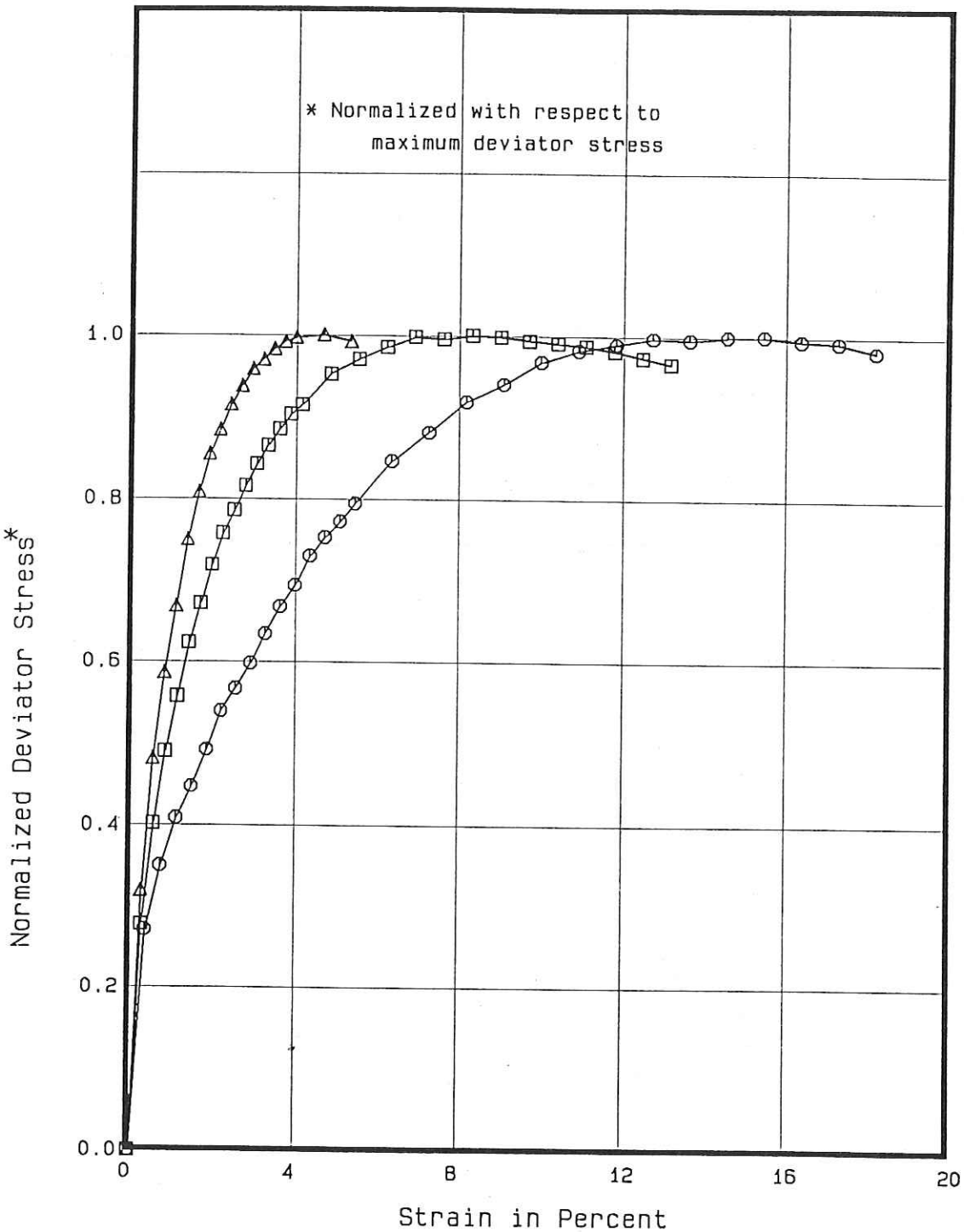
Summary of Test Results
GALVESTON DISTRICT, CORPS OF ENGINEERS
BROWNSVILLE ENTRANCE CHANNEL
BROWNSVILLE, TEXAS

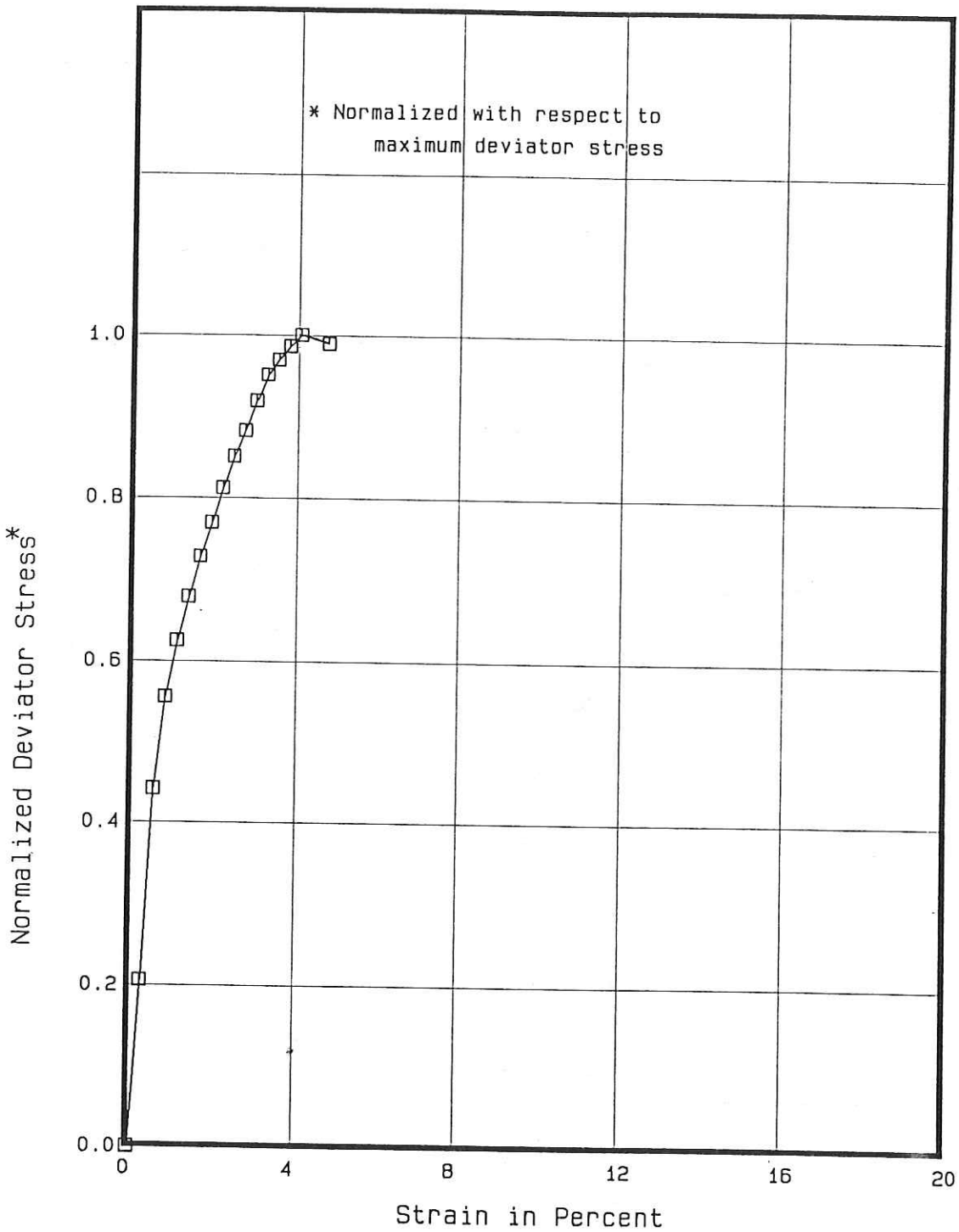
El. -37.9

| Boring Number | Sample Number | Sample Depth (Feet) | Visual Classification | MC (%) | UDW (PCF) | LL | PL | PI | Gradation, Percent Passing Sieve No. 4 | 10 | 40 | 100 | 200 | UNC SU (KSF) | TV SU (KSF) | USCS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 89-29 | 1 | 0.0- 2.0 | FIRM GRAY CLAY with silt pockets and partings and trace of shell fragments | 55 | 68 | | | | | | | | | | 0.58 | CH |
| 89-29 | 2 | 2.0- 4.0 | FIRM GRAY CLAY with silt pockets and occasional shell fragments | 44 | 76 | | | | | | | | | | 0.64 | CH |
| 89-29 | 3 | 4.0- 6.0 | FIRM GRAY CLAY with silt pockets and trace of shell fragments | 43 | 77 | 61 | 25 | 36 | 100 | 100 | 99 | 99 | 93 | 0.69 | 0.98 | CH |
| 89-29 | 4 | 6.0- 8.0 | FIRM GRAY CLAY with silt pockets and trace of shell fragments | 46 | 76 | | | | | | | | | | 0.58 | CH |
| 89-29 | 5 | 8.0-10.0 | SOFT GRAY CLAY with silt pockets and shell fragments | 45 | 74 | 71 | 28 | 43 | 100 | 100 | 100 | 99 | 98 | 0.36 | 0.48 | CH |
| 89-29 | 6 | 10.0-12.0 | VERY STIFF BROWN AND GRAY CLAY,blocky, with silt pockets,trace of organic matter | 36 | 87 | | | | | | | | | | 2.15 | CH |
| 89-29 | 7 | 12.0-14.0 | STIFF GRAY CLAY with silt pockets and trace of shell fragments | 36 | 87 | | | | | | | | | | 1.80 | CH |
| 89-29 | 8 | 14.0-16.0 | FIRM GRAY CLAY,blocky, with silt pockets and seams | 43 | 78 | | | | | | | | | | | CH |
| 89-29 | 9 | 16.0-18.0 | STIFF BROWN AND GRAY CLAY with silt pockets and trace of shell fragments | 42 | 78 | 82 | 30 | 52 | 100 | 100 | 100 | 99 | 99 | 1.68 | 1.55 | CH |
| 89-29 | 10 | 18.0-20.0 | STIFF GRAY AND BROWN CLAY, with trace of silt pockets,organic matter and shell | 40 | 76 | | | | | | | | | | | CH |
| 89-29 | 11 | 20.0-22.0 | VERY STIFF GRAY CLAY with sand pockets and trace of shell fragments | 26 | 96 | | | | | | | | | | 3.30 | CH |
| 89-29 | 12 | 22.0-24.0 | STIFF GRAY CLAY with sand p[oackets and trace of shell fragments | 28 | 92 | | | | | | | | | | | CH |
| 89-29 | 13 | 24.0-26.0 | STIFF GRAY CLAY with sand and trace of calcareous nodules | 26 | 97 | 57 | 23 | 34 | 99 | 98 | 98 | 91 | 82 | 1.93 | 3.15 | CH |




# STRESS-STRAIN CURVES

| CURVE | BORING NO | TEST TYPE | DEPTH FT | CONFINING PRESSURE, KSF | MAXIMUM DEVIATOR STRESS, KSF |
|---|---|---|---|---|---|
| □——□ | 89-29 | U | 6.0 | 0.00 | 1.37 |
| ○——○ | 89-29 | U | 10.0 | 0.00 | 0.73 |
| △——△ | 89-29 | U | 18.0 | 0.00 | 3.36 |




# STRESS-STRAIN CURVES

| CURVE | BORING NO | TEST TYPE | DEPTH FT | CONFINING PRESSURE, KSF | MAXIMUM DEVIATOR STRESS, KSF |
|---|---|---|---|---|---|
| | 89-29 | U | 26.0 | 0.00 | 3.86 |

SE-666-89

JOB TITLE Drilling, Sampling
JOB NO. 9E-666-89

LOG OF BORING NO. 89-29 *Jetties

CLIENT Galveston District, Corps Of Engineers

LOCATION Brownsville Entrance Channel, TX COORDINATES X=2,443,154 Y=147,096 HEADING 290, offset = 2.56' 91'

DRILLING METHOD Rotary Wash

SAMPLER TYPE (S) 3" Thin-wall tube, split spoon

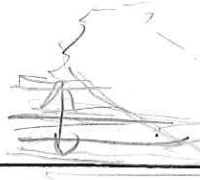
Mudline Elev. -37.9
Time Started 0130
Date Started 11-13-89
Time Completed 0320
Date Completed 11-13-89

Split barrel X
Thin-wall tube
Liner
No recovery

Weather Conditions: WINDY
Drill rig: Failing 1500
Driller: FRED Ketchum
Roughneck: D. Turney, K. Smith
Technician: MIKE HOOVER

Water Depth 38 Date 11-13-89 Time 0115

Tide Elev.: +0.10 MLT @ 0115 hrs.

| Sample Number | Depth | Type J/Q | Pen. / Tv. | Core From: | Core To: | Blow Counts Each 6" or Refusal | Depth Scale | Description: | Remarks: |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.0 | Q | .3 | 0 | 2 | | | So G CL | |
| | 2.0 | | | | 2 | | | -w/SH to | |
| 2 | 4.0 | Q | .4 | 2 | 4 | | | | |
| | 4.0 | | | | 4 | | | | |
| 3 | 6.0 | Q | .4 | 4 | 6 | UC | 5 | | UC |
| | 6.0 | | | | 6 | | | | |
| 4 | 8.0 | Q | .4 | 6 | 8 | | | | |
| | 8.0 | | | | | | | | |
| 5 | 10.0 | Qs | .4 | 8 | 10 | UC | | -w/SI PKts 8-10- | UC |
| | 10.0 | | | | | | | -w/SI Sms 10-12 | |
| 6 | 12.0 | Q | 1.8 | 10 | 12 | | 10 | | |
| | 12.0 | | | | | | | -ST 12- | |
| 7 | 14.0 | Q | 2.0 | 12 | 14 | | | -w/SI PKts 12-14 | |
| | 14.0 | | | | | | | -w/CALC Deps 12-14 | |
| 8 | 16.0 | Q | 1.2 | 14 | 16 | | 15 | -SI LYR 14-15 | |
| | 16.0 | | | | | | | | |
| 9 | 18.0 | Q | 2.25 | 16 | 18 | UC | | | UC |
| | 18.0 | | | | | | | -w/SI PKts 18-20 | |
| 10 | 20.0 | Q | 1.0 | 18 | 20 | | | -w/SA Sms 18-20 | |
| | 20 | | | | | | 20 | -VST 20- | |
| 11 | 22.0 | Q | 2.75 | 20 | 22 | | | -w/SH FRAGS 20-24 | |
| | 22 | | | | | | | | |
| 12 | 24.0 | Q | 1.75 | 22 | 24 | | | -w/CALC MODS 24- | |
| | 24 | | | | | | | | |
| 13 | 26.0 | Q | 3.3 | 24 | 26 | UC | 25 | | UC |
| | | | | | | TV | | | |

B.T. = 26'
= -63.9' MLT