

North Jetty 6ST-6

DEPARTMENT OF THE ARMY

DIVISION Southwestern

INSTALLATION Galveston District

1. PROJECT PACC WW

Port Aransas Jetties

SHEET 1 OF 1

2. LOCATION (Coordinates or Station)

3. DRILLING AGENCY

U. S. Army Corps of Engineers

4. HOLE NO. (As shown on drawing title and file No.)

6ST-6 8

5. NAME OF DRILLER

Eck

6. DIRECTION OF HOLE

☐ VERTICAL

☐ INCLINED

DEGREES WITH VERTICAL

7. THICKNESS OF OVERBURDEN

8. DEPTH DRILLED INTO ROCK

9. TOTAL DEPTH OF HOLE

10. SIZE AND TYPE OF BIT

11. DATUM FOR ELEVATION SHOWN (TBM or MSL)

12. MANUFACTURER'S DESIGNATION OF DRILL

13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN

DISTURBED

UNDISTURBED

14. TOTAL NO. CORE BOXES

15. ELEV. GROUND WATER

16. DATE HOLE

STARTED

22 Jun 62

COMPLETED

17. ELEV. TOP OF HOLE

18. TOTAL CORE RECOVERY FOR BORING (%)

19. SIGNATURE OF INSPECTOR

ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BOX OR SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
0.0	43.0		Water			
43.0	45.0		Washed			No sample
45.0	46.5		Gray to red clay, sandy, v/stiff, Dry			Cont 1 3.50
46.5	48.5		Gray, clay, v/stiff, w/powdered lime, st, pocket			Cont 2 2.75 Q-Trial ✓
48.5	50.0		Gray & tan clay v/stiff sandy			Cont 3 3.00
50.0	52.0		Gray clay v/stiff, shelly w/some sand			Cont 4 2.50
52.0	54.0		Gray and tan clay, v/stiff tra sand			Cont 5 3.00
54.0	56.0		Gray and tan clay, v/stiff sandy			Cont 6 3.00
56.0	58.0		Gray and tan clay, v/stiff			Cont 7 2.50
58.0	60.0		Gray and tan clay, stiff to gray sand, clayey, med at Bottom			Cont 8 Top 2.00 Bot 0.75
60.0	62.0		Gray sand, silty, tra clay			Jar 1
62.0	65.0		Washed, same as above			no sample
65.0	67.0		65.0-65.4 100 blows 65.4-67.0 refusal Gray sand med. fine			Jar 2
			Hole discontinued due to rough sea conditions			
			Tide 1.5' @ 8:20 AM Water table 43.0' Weight of hammer 140# Drop distance 30"			

Plate No. 10

U.S. STANDARD SIEVE SIZE

3 IN. 3/4 IN. NO. 4 NO. 10 NO. 40 NO. 200

PERCENT FINER BY WEIGHT

100 80 60 40 20 0

1000 100 10 1.0 0.1 0.01 0.001

GRAIN SIZE IN MILLIMETERS

COBBLES GRAVEL SAND SILT OR CLAY

C F C M F

Test No.	1	2	3	4
Water Content, W_0 %	33.0	31.4	33.5	32.7
Dry Density Lbs/Cu Ft	90	91	88	90
Void Ratio, e_0	.899	.868	.925	.888
Saturation, S_0 %	100	98	99	100
W.C. after Saturation, W_s %				
Saturation, S %				
Consol Pressure T/Sq Ft				
W.C. after Consol, W_c %				
Voic Ratio after Consol e_c				
Maj Prin Stress, σ_1 T/Sq Ft	2.77	3.41	5.62	9.07
Min Prin Stress, σ_3 T/Sq Ft	0.5	1.5	3.0	6.0
Water Content, W_f %				
Void Ratio, e_f				
Specimen Diameter Inches	1.4	1.4	1.4	1.4
Initial Height Inr	3.0	3.0	3.0	3.0
Test Time to Failure Min	22	4	21	14

COBBLES

GRAVEL

SAND

SILT OR CLAY

C

F

C

M

F

DEVIATOR STRESS, TONS/SQ FT

4 3 2 1 0

0 8 16 24

AXIAL STRAIN, PERCENT

VOLUMETRIC STRAIN, PERCENT

0 1 2 3 4

Type of Test - Q

Constant strain, 0.03 in/min.

Control

Un Consolidated, Un Drained

Type of Specimen

Undisturbed

$\phi = 3.5^\circ$ Tan $\phi = .061$ c = 0.9 T/Sq Ft

Classification CLAY (CH)

LL 74 G 2.72

PL 18 D₁₀

SHEAR STRESS, TONS/SQ FT

5 4 3 2 1 0

0 1 2 3 4 5 6 7

APPLIED PRINCIPAL STRESSES, TONS/SQ FT

Remarks:

Q test

Project

Port Aransas - Corpus Christi

Foundation Material

Area

GALVESTON DISTRICT

Boring No.

6 ST - 8

Sample No.

S - 13,604

Elev or Depth

46.5 - 48.5

Date

SEP 62

TRIAXIAL COMPRESSION TEST REPORT

SWDGL Report No. 8007

ENG FORM 1 DEC 51 2089

(EM 1110-2-1803)

(Translucent)