

DEPARTMENT OF THE ARMY DIVISION <u>Southwestern</u>			HOLE NO. <u>6ST-10</u>		SHEET <u> </u> OF <u> </u>	
INSTALLATION <u>Galv Dist. Eng Div</u>			1. PROJECT <u>Port Aransas-Corpus Christi</u>			
DRILLING LOG			2. LOCATION (Coordinates or Station) <u>Tide 0.9 @ 6:30 AM Sta. 24750</u>			
4. HOLE NO. (As shown on drawing title and file No.) <u>6ST-10</u>			3. DRILLING AGENCY <u>U. S. Army Corps of Engineers</u>			
6. DIRECTION OF HOLE ☐ VERTICAL ☐ INCLINED DEGREES WITH VERTICAL <u> </u>			5. NAME OF DRILLER <u>Smith</u> <u>South Jetty</u>			
10. SIZE AND TYPE OF BIT <u>Shelby Tube - 6"</u>		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)		7. THICKNESS OF OVER-BURDEN		
13. TOTAL NO. OF OVERBURDEN SAMPLES TAKEN DISTURBED <u>9 Jars</u> UNDISTURBED <u> </u>		14. TOTAL NO. CORE BOXES		8. DEPTH DRILLED INTO ROCK		
17. ELEV. TOP OF HOLE		18. TOTAL CORE RECOVERY FOR BORING (%)		9. TOTAL DEPTH OF HOLE <u>71.0</u>		
15. ELEV. GROUND WATER		16. DATE HOLE STARTED <u>26 June</u> COMPLETED <u>27 June 1962</u>		12. MANUFACTURER'S DESIGNATION OF DRILL		
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	20.5		Water			
20.5	22.5		20.5-21.0 No count 21.0-21.5 2 blows 21.5-22.0 4 blows 22.0-22.5 No count			No sample
22.5	25.0		Washed, same as below			
25.0	27.0		25.0-25.5 No count 25.5-26.0 54 blows 26.0-26.5 Refusal Gray sand, fine, w/shell frag			Jar 1
27.0	30.0		Same as above, w/shell small			No sample
30.0	32.0		Gray shell small w/sand			Jar 2
32.0	35.0		Same as below			Washed
35.0	37.0		35.0-35.5 No count 35.5-36.0 34 blows 36.0-36.5 67 blows Gray sand fine trace of shell fragments			Jar 3
37.0	40.0		Same as above			Washed
40.0	41.0		Same as above, sand w/shell			No sample
41.0	43.0		Gray clay v/stiff sand, w/sand pockets			Cont. 1 Top 1.5 Bottom 3.75
43.0	45.0		Gray sand, trace of clay (d.s.?)			No recovery
45.0	47.0		Gray sand fine w/shell frag			Jar 4
47.0	49.0		47.0-47.5 No count 47.5-48.5 Refusal Gray sand fine w/trace of limestone nodules			Jar 5
49.0	53.0		Same as below			Washed
53.0	55.0		Gray and brown sand, fine dense, 53.0-53.5 No count 53.5-54.0 49 blows 54.0-54.2 65 blows			Jar 6
55.0	58.0		Same as above			Washed
58.0	60.0		58.0-58.5 No count 58.5-59.0 39 blows 59.0-59.5 63 blows Brown sand w/shell frag dense			Jar 7

DEPARTMENT OF THE ARMY
DIVISION
INSTALLATION

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

1. PROJECT
Pt. Aransas Corpus Christi

2. LOCATION (Coordinates or Station)

3. DRILLING AGENCY

5. NAME OF DRILLER

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
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)
60.0	64.0		Washed, same as above			No sample
64.0	66.0		Gray sand very fine dense 64.0-64.5 No count 64.5-65.0 40 blows 65.0-65.5 49 blows			Jar 8
66.0	69.0		Same as above,			Washed
69.0	71.0		69.0-69.5 No count 69.5-70.0 69 blows 70.0- Refusal Gray sand v/fine dense Bottomed in above Weight of hammer 140 Drop Distance - 30" Water 20.5			Jar 9

Plate No. 11

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 %	19.0	18.8	18.6	18.7
Dry Density Lbs/Cu Ft	111	111	111	111
Void Ratio, e_0	.506	.503	.506	.504
Saturation, S_0 %	100	100	98	99
W.C. after Saturation, W_s %				
Saturation, S %				
Consol Pressure T/Sq Ft				
W.C. after Consol, W_c %				
Void Ratio after Consol e_c				
Maj Prin Stress, σ_1 T/Sq Ft	3.79	6.19	7.05	10.66
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	12	22	26	18

DEVIATOR STRESS, TONS/SQ FT

VOLUMETRIC STRAIN, PERCENT

AXIAL STRAIN, PERCENT

Test 1

DEVIATOR STRESS, TONS/SQ FT

APPLIED PRINCIPAL STRESSES, TONS/SQ FT

Remarks:
Q test

Type of Test *Q*
Constant strain, 0.03 in/min.
Control
Un Consolidated, Un Drained

Type of Specimen *Undisturbed*
 $\phi = 5.8^\circ$ Tan $\phi = .102$ $c = 1.3$ T/Sq Ft
Classification *Sandy CLAY (CL)*
LL 39 G 2.67
PL 11 D_{10}

Project *Port Aransas - Corpus Christi*

Foundation Material

Area *GALVESTON DISTRICT*

Boring No. *6ST-10*

Sample No. *S-13,605*

Elev or Depth *41.0-43.0*

Date *SEP 6 2*

TRIAXIAL COMPRESSION TEST REPORT

ENG FORM 2089
1 DEC 51

(EM 1110-2-1803)

(Translucent)

SWDGL Report No. 8007