

28 Jan 1965

PROJECT: Galveston Harbor and Channel

LOCATION: Galveston, Texas

### TEST DATA SUMMARY

BORING NO. 35T-67

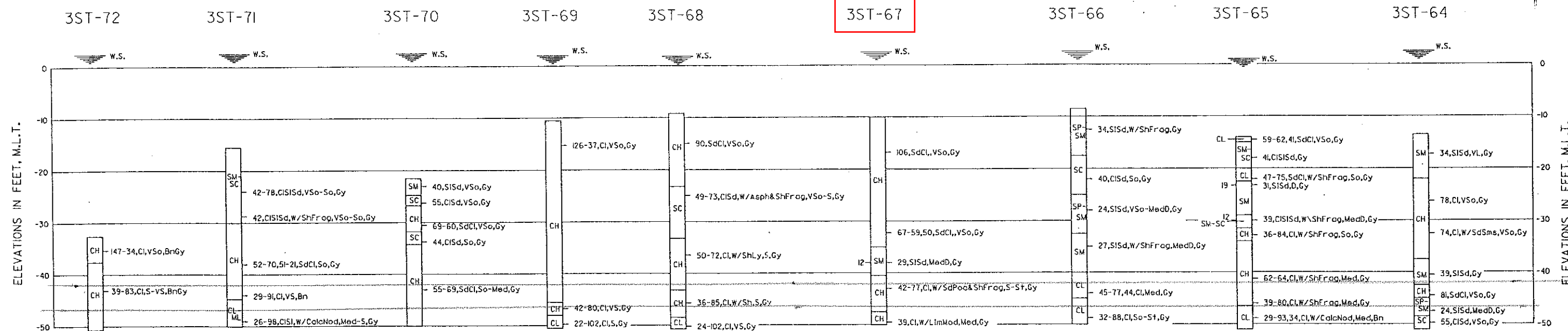
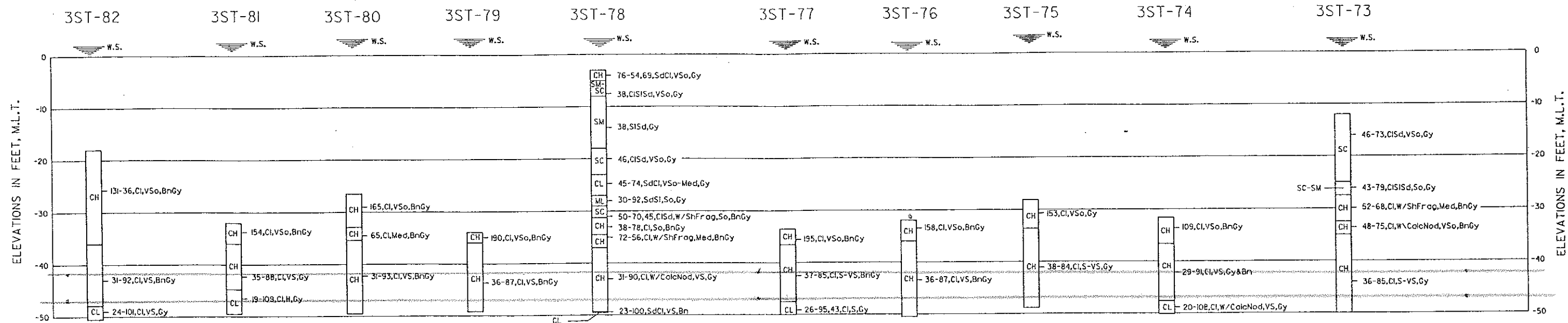
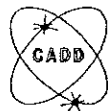
DATE DRILLED

[illegible]

| KEY: CONSISTENCY - COHESIVE SOILS |      |        |       |            |      |            |       |              |       | CONSISTENCY - NONCOHESIVE SOILS |  |  |  |  |  |  |  |  |  | <div> <div>(1) Tons/Sq.Ft. Unconfined Compressive Strength</div> <div>(2) Split Barrel Sampler</div> <div>(3) Acc't. Wt. Stud ÷ Init. Wt. x 100 = %</div> </div> |
|-----------------------------------|------|--------|-------|------------|------|------------|-------|--------------|-------|---------------------------------|--|--|--|--|--|--|--|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VS                                | S    | M      | ST    | VST        | H    | VL         | L     | M            | D     | VD                              |  |  |  |  |  |  |  |  |  |                                                                                                                                                                  |
| Very Soft                         | Soft | Medium | Stiff | Very Stiff | Hard | Very Loose | Loose | Medium Dense | Dense | Very Dense                      |  |  |  |  |  |  |  |  |  |                                                                                                                                                                  |

BORING NO. 3st-67

| DRILLING LOG                                                                                                      |            | DIVISION<br>Southwestern |                                                                                                     | INSTALLATION<br>Galv Dist, Eng Div         |                              | SHEET<br>OF SHEETS                                                                        |                          |
|-------------------------------------------------------------------------------------------------------------------|------------|--------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------|------------------------------|-------------------------------------------------------------------------------------------|--------------------------|
| 1. PROJECT<br>Galveston Harbor and Channel                                                                        |            |                          |                                                                                                     | 10. SIZE AND TYPE OF BIT                   |                              |                                                                                           |                          |
| 2. LOCATION (Coordinates or Station)<br>Galveston, Texas                                                          |            |                          |                                                                                                     | 11. DATUM FOR ELEVATION SHOWN (TBM or MSL) |                              |                                                                                           |                          |
| 3. DRILLING AGENCY<br>U. S. Army Corps of Engineers                                                               |            |                          |                                                                                                     | 12. MANUFACTURER'S DESIGNATION OF DRILL    |                              |                                                                                           |                          |
| 4. HOLE NO. (As shown on drawing title and file number)<br>3ST-67                                                 |            |                          |                                                                                                     | 13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN |                              | DISTURBED<br>7 Jars                                                                       | UNDISTURBED<br>6 Cont    |
| 5. NAME OF DRILLER<br>Watts                                                                                       |            |                          |                                                                                                     | 14. TOTAL NUMBER CORE BOXES                |                              |                                                                                           |                          |
| 6. DIRECTION OF HOLE<br><input type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED _____ DEG. FROM VERT. |            |                          |                                                                                                     | 16. DATE HOLE                              |                              | STARTED<br>17 Dec                                                                         | COMPLETED<br>17 Dec 1965 |
| 7. THICKNESS OF OVERBURDEN                                                                                        |            |                          |                                                                                                     | 17. ELEVATION TOP OF HOLE                  |                              |                                                                                           |                          |
| 8. DEPTH DRILLED INTO ROCK                                                                                        |            |                          |                                                                                                     | 18. TOTAL CORE RECOVERY FOR BORING %       |                              |                                                                                           |                          |
| 9. TOTAL DEPTH OF HOLE<br>52.5                                                                                    |            |                          |                                                                                                     | 19. SIGNATURE OF INSPECTOR                 |                              |                                                                                           |                          |
| ELEVATION<br>a                                                                                                    | DEPTH<br>b | LEGEND<br>c              | CLASSIFICATION OF MATERIALS<br>(Description)<br>d                                                   | % CORE<br>RECOV-<br>ERY<br>e               | BOX OR<br>SAMPLE<br>NO.<br>f | REMARKS<br>(Drilling time, water loss, depth of<br>weathering, etc., if significant)<br>g |                          |
| 0.0                                                                                                               | 12.5       |                          | Water                                                                                               |                                            |                              |                                                                                           |                          |
| 12.5                                                                                                              | 18.0       |                          | Gray clay, v/soft<br>Two rods, 1 tube, no resistance                                                |                                            | Jar 1                        | 0.0                                                                                       |                          |
| 18.0                                                                                                              | 20.0       |                          | Same as above, no recovery                                                                          |                                            |                              |                                                                                           |                          |
| 20.0                                                                                                              | 22.5       |                          | Gray clay, v/soft                                                                                   |                                            | Jar 2                        | 0.0                                                                                       |                          |
| 22.5                                                                                                              | 25.0       |                          | Same as above, no recovery                                                                          |                                            |                              |                                                                                           |                          |
| 25.0                                                                                                              | 27.5       |                          | Gray clay, v/soft                                                                                   |                                            | Jar 3                        | 0.0                                                                                       |                          |
| 27.5                                                                                                              | 30.0       |                          | Gray clay, v/soft                                                                                   |                                            | Jar 4                        | 0.0                                                                                       |                          |
| 30.0                                                                                                              | 32.5       |                          | Gray clay, v/soft                                                                                   |                                            | Jar 5                        | 0.0                                                                                       |                          |
| 32.5                                                                                                              | 35.0       |                          | Gray clay w/sand layers<br>v/soft                                                                   |                                            | Cont. 1                      | 0.0                                                                                       |                          |
| 35.0                                                                                                              | 37.5       |                          | Gray clay w/sand layers<br>v/soft                                                                   |                                            | Cont. 2                      | 0.0                                                                                       |                          |
| 37.5                                                                                                              | 40.0       |                          | Gray sand                                                                                           |                                            | Jar 6                        |                                                                                           |                          |
| 40.0                                                                                                              | 42.0       |                          | Gray sand<br>40.0-40.5 Seat pent<br>40.5-41.0 5 blows<br>41.0-41.5 7 blows<br>41.5-42.0 Hold sample |                                            | Jar 7                        |                                                                                           |                          |
| 42.0                                                                                                              | 43.0       |                          | Same as above, no recovery                                                                          |                                            |                              |                                                                                           |                          |
| 43.0                                                                                                              | 45.0       |                          | Gray clay, w/shell frag<br>v/soft                                                                   |                                            | Cont. 3                      | 0.0                                                                                       |                          |
| 45.0                                                                                                              | 47.5       |                          | Gray clay w/shell frag<br>v/soft                                                                    |                                            | Cont. 4                      | 0.0                                                                                       |                          |
| 47.5                                                                                                              | 50.0       |                          | Gray clay, v/soft                                                                                   |                                            | Cont. 5                      | 0.0                                                                                       |                          |
| 50.0                                                                                                              | 52.5       |                          | Gray silty clay w/limonites<br>v/hard                                                               |                                            | Cont. 6                      | 4.50                                                                                      |                          |
|                                                                                                                   |            |                          | BOTTOMED                                                                                            |                                            |                              |                                                                                           |                          |
|                                                                                                                   |            |                          | Tide +2.5                                                                                           |                                            |                              |                                                                                           |                          |



### NOTES:

- SOILS HAVE BEEN CLASSIFIED IN ACCORDANCE WITH MILITARY STANDARD 619B 'UNIFIED SOIL CLASSIFICATION SYSTEM FOR ROADS, AIRFIELDS, EMBANKMENTS AND FOUNDATIONS.' CONSISTENCY OF SOILS SUCH AS SOFT, MEDIUM, HARD, LOOSE, DENSE, ETC., ARE RELATIVE TERMS BASED ON ESTIMATED UNDISTURBED SHEAR STRENGTH OF THE MATERIAL AS DETERMINED BY VISUAL CLASSIFICATION, POCKET PENETROMETER TESTS AND PENETRATION RESISTANCE DURING SAMPLING.
- FIGURES TO THE RIGHT OF BORING LOGS ARE WATER CONTENTS IN PERCENT OF THE DRY WEIGHT, DRY DENSITY, LIQUID LIMIT, PLASTIC LIMIT, AND BAR LINEAR SHRINKAGE. (MC-UDW), (LL-PL), (B.L.S.) FIGURES TO THE LEFT OF BORING LOGS ARE BLOWS PER FOOT OF PENETRATION FROM STANDARD PENETRATION TESTING.
- BORINGS WERE DRILLED USING WET ROTARY DRILLING TECHNIQUES AND UNDISTURBED SAMPLES WERE RECOVERED WITH A 3-INCH DIAMETER THIN WALL SAMPLER WHERE COHESIVE MATERIALS WERE ENCOUNTERED. WHERE COHESIONLESS MATERIALS WERE ENCOUNTERED, DISTURBED SAMPLES WERE TAKEN WITH A SPLIT SPOON SAMPLER DURING PERFORMANCE OF STANDARD PENETRATION TESTING.

### VISUAL CLASSIFICATIONS

Bn Brownish  
Calc Calcareous  
Cl Clayey  
D Dense  
Frag Fragmental  
Gy Grayish  
H Hard  
L Loose  
Nod Nodules

Med Medium  
S Stiff  
Sd Sandy  
Sh Shelly  
SI Silty  
So Soft  
V Very  
W With  
W.S. Water Surface

### LABORATORY CLASSIFICATION

CH INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS.  
CL INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, LEAN CLAYS.  
ML INORGANIC SILTS AND VERY FINE SANDS, WITH SLIGHT PLASTICITY.  
SC CLAYEY SANDS, SAND-CLAY MIXTURES.  
SM SILTY SANDS, SAND-SILT MIXTURES.  
SP POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES.

NOTE: BORINGS DRILLED DECEMBER 1965  
LOCATIONS OF BORINGS SHOWN ON PLATE FD-38

HOUSTON-GALVESTON NAVIGATION CHANNELS, TEXAS

### GALVESTON CHANNEL BORING LOGS

U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS

TO ACCOMPANY ENGINEERING SUPPLEMENT  
TO LIMITED REEVALUATION REPORT  
DATED: X