



**LABORATORY CLASSIFICATION**

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

**VISUAL CLASSIFICATIONS:**

- Calc Calcareous
- Cl Clayey
- D Dense
- Dep Deposit(s)
- Fer Ferrous
- Frag Fragment(s)
- Gy Gray(ish)
- Hsh Hash
- L Loose
- Ly Layer(s)
- Lt Light
- Mat Material
- Med Medium
- Nod Nodules
- Odr Odor
- Org Organic
- Ol Olive
- Part Particle(s)
- Pet Petroleum
- Poc Pocket(s)
- Rts Root(s)
- S Shff
- Sd Sandy
- Sh Shelly
- Sl Silty
- Sls Silts
- Sms Seams
- So Soft
- Tn Tan(ish)
- Tr Trace(s)
- V Very
- Wa Waste
- W.T. Water Table
- W With
- Y Yellow(ish)

**NOTES:**

1. SOILS HAVE BEEN CLASSIFIED IN ACCORDANCE WITH ASTM 2487-93 "CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES (UNIFIED SOILS CLASSIFICATION SYSTEM)". CONSISTENCY OF SOILS SUCH AS SOFT, MEDIUM, HARD, RELATIVE TERMS BASED ON ESTIMATED UNDISTURBED 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.
2. 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), (LL-PL)
3. 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.
4. WATER TABLE LEVELS SHOWN ON BORING LOGS WERE DETERMINED AFTER DRILLING BORINGS BY MEASURING THE TOP OF FLUID LEVELS IN THE BORINGS. INASMUCH AS WET ROTARY DRILLING TECHNIQUES AND DRILLING MUD WERE USED TO DRILL THE HOLES, THE LEVEL OF DRILLING FLUIDS IN THE BORE HOLES MAY NOT HAVE STABILIZED TO THE LEVEL OF THE ACTUAL WATER TABLE. ADDITIONALLY, WATER TABLES IN THE FIELD ARE LIKELY TO FLUCTUATE, DEPENDING ON WEATHER CONDITIONS. THEREFORE, SOME VARIATION SHOULD BE ANTICIPATED BETWEEN WATER TABLES INDICATED AND WATER TABLES ENCOUNTERED IN THE FIELD.

REVISION	DATE	DESCRIPTION	BY

OFFICE OF THE DISTRICT ENGINEER  
U.S. ARMY ENGINEER DISTRICT, GALVESTON  
CORPS OF ENGINEERS  
GALVESTON, TEXAS

**HOUSTON-GALVESTON NAVIGATION CHANNELS, TX  
SAN JACINTO PLACEMENT AREA**

**LOGS OF BORINGS**

DESIGNED BY: X	DATE: X
CHECKED BY: X	SCALE: AS SHOWN
SUBMITTED BY: X	SPEC. DATE: X
APPROVED BY: X	CHIEF, ENGINEERING DIVISION

Prepared under the direction of  
Robert B. Gattin, Col., C.E.,  
District Engineer

SHEET X OF X FILE NO. X

DATE: 12-10-1968  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]  
 SUBMITTED BY: [Name]  
 APPROVED BY: [Name]