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# BORING NUMBER 13-B189

PAGE 1 OF 1

**CLIENT** USACE-Galveston District **PROJECT NAME** Sabine Neches Placement Area 8  
**PROJECT NUMBER** W912HY-13-D-0001-DY05 **PROJECT LOCATION** Port Arthur, TX  
**DATE STARTED** 10/15/2013 10:20:00 AM **COMPLETED** 10/15/2013 1:35:00 PM **GROUND ELEVATION** 10.1841 ft **HOLE SIZE** 8.25 inches  
**DRILLING CONTRACTOR** QRI **NORTHING** 13875712.63 ft **EASTING** 3575087.183 ft  
**DRILLING METHOD** Hollow Stem Auger **DRILLING RIG MAKE/MODEL** Geoprobe 6620  
**LOGGED BY** Terri Russin **TOTAL DEPTH** 16 ft **GROUND WATER LEVEL** ▽ AT TIME OF DRILLING 11.00 ft / Elev -0.82 ft  
**WEATHER** partly cloudy, 80s, breezy, humid **▽ 15 MINUTES AFTER DRILLING** 9.60 ft / Elev 0.58 ft

| GRAPHIC LOG | USCS SYMBOL | MATERIAL DESCRIPTION                                                                                                                                                                  | DEPTH (ft) | SAMPLE TYPE | RECOVERY (in) | SPT BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | FIELD TORVANE (tsf) | DRY UNIT WT. (pcf) | MOISTURE CONTENT (%) | ATTERBERG LIMITS | MINUS #200 SIEVE CONTENT (%) | COMPRESSION STRENGTH (tsf) | FAILURE STRAIN (%) | CONFINING PRESSURE (psi) |
|-------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|---------------|---------------------------|-------------------|---------------------|--------------------|----------------------|------------------|------------------------------|----------------------------|--------------------|--------------------------|
|             | CH          | Fat CLAY, light brown to yellow orange, very soft, water at surface, not much silt, with plant roots and leaves and small amount of caliche/shell soft, laminated, with iron staining | 0          | ST          | 16.5          |                           | 0                 | 2.8                 |                    | 34                   |                  |                              |                            |                    |                          |
|             |             | light brown and light gray olive gray with many shell fragments 4.6'-7'                                                                                                               | 5          | ST          | 21            |                           | 0.25              | 2.9                 | 83                 | 40                   |                  | 97                           | 0.34                       | 4                  |                          |
|             |             | light gray, with iron staining light brown, very soft, with a pocket of sand near the bottom                                                                                          |            | ST          | 17            |                           | 0.25              | 4.0                 |                    | 42                   |                  |                              |                            |                    |                          |
|             |             |                                                                                                                                                                                       |            | ST          | 14            |                           | 0                 | 2.4                 | 79                 | 42                   | 62               | 20                           | 42                         | 72                 |                          |
|             | SP-SM       | SAND with SILT, olive gray, cracked, very loose, with small shell fragments 8'-11.7'                                                                                                  | 10         | ST          | 17            |                           | 0.7               | -                   |                    | 21                   |                  | 8                            |                            |                    |                          |
|             |             | flowing                                                                                                                                                                               |            | ST          | 23            |                           | 0/0               | 0.2/0.5             |                    | 41                   |                  |                              |                            |                    |                          |
|             | CH          | CLAY, dark gray, very soft, full of plant remains dark gray to black, little silt, cracked 12'-14'                                                                                    |            | ST          | 21            |                           | 0/0               | 0.2/1.3             |                    | 85                   | 105              | 31                           | 74                         |                    |                          |
|             |             |                                                                                                                                                                                       | 15         | ST          | 21            |                           | 0                 | 0.2                 |                    | 96                   |                  |                              |                            |                    |                          |

Bottom of borehole at 16.0 feet.