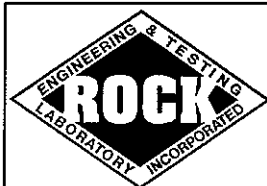


## LOG OF BORING B-2

SHEET 1 of 1



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Corpus Christi, TX 78405  
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CLIENT: HDR/Shiner Moseley and Associates, Inc.  
PROJECT: New East Jetty: Mouth of Colorado River  
LOCATION: Matagorda County, TX  
NUMBER: G207487

DATE(S) DRILLED: 07/24/07 - 07/24/07

DRILLING METHOD(S):

Hollow Stem Auger

GROUNDWATER INFORMATION:

SURFACE ELEVATION: EL + 1.0 NAVD' 88

DESCRIPTION OF STRATUM

WATER DEPTH= 12.5'

SILTY SAND, brown and gray, wet, loose. (SM)

CLAYEY SAND, with numerous shells, greenish gray, saturated, soft.

Same as above, very soft.

Same as above, with clay layers. (SC)

SANDY FAT CLAY, brown, very moist, very soft.

SANDY LEAN CLAY, gray, very moist, stiff. (CL)

Same as above, gray and brown, very stiff. (CL)

POORLY GRADED SAND, with silt shell fragments, grayish brown, wet, loose. (SP-SM)

Total Depth of Boring= 45' Below Water Level

N - STANDARD PENETRATION TEST RESISTANCE  
P - POCKET PENETROMETER RESISTANCE  
T - POCKET TORVANE SHEAR STRENGTH

REMARKS:

Boring location was determined by RETL. Boring operations were performed by a drilling sub-contractor to RETL.  
Coordinates: N 28 35 25.2, W 95 59 03.9

LOG OF BORING G207487 NEW JETTY GPJ ROCK ETL GDT 8/28/07

The soil conditions encountered at the boring locations have been summarized and soil properties including plasticity, strength, grain size and classification are provided in Tables 3 through 7. The following terms and acronyms are used in these tables:

EL = Approximate depth in feet referenced to water surface elevation.  
LL = Liquid Limit, %  
PI = Plasticity Index  
C = Soil Cohesion, psf (undrained)  
 $\phi$  = Angle of Internal Friction, deg. (undrained)  
 $\gamma_e$  = Effective soil unit weight, pcf  
-#200 = % silt and clay size particles  
N = Standard Penetration Value range  
P = Hand Penetrometer range, tsf  
NP = Non plastic material

**TABLE 3: SOIL PROFILE FOR BORINGS B-1 AND B-3**

| EL         | Description                       | LL    | PI    | C    | $\phi$ | $\gamma_e$ | -#200 | N or P     |
|------------|-----------------------------------|-------|-------|------|--------|------------|-------|------------|
| -8 to -32  | Silty SAND/<br>Poorly Graded SAND | NP    | NP    | 0    | 29     | 55         | 4-16  | N=4-21     |
| -32 to -42 | Fat CLAY                          | 51-59 | 33-38 | 1500 | 0      | 60         | 72-78 | P=2.5      |
| -42 to -47 | Clayey SAND                       | 33    | 17    | 1500 | 0      | 60         | 31-40 | P=1.75-2.5 |
| -47 to -67 | Poorly Graded SAND                | NP    | NP    | 0    | 35     | 60         | 5-7   | N=7-72     |
| -67 to -75 | Fat CLAY                          | 69    | 42    | 1000 | 0      | 55         | 88-90 | N=4-7      |

**TABLE 4: SOIL PROFILE FOR BORING B-2**

| EL         | Description        | LL    | PI    | C    | $\phi$ | $\gamma_e$ | -#200 | N or P |
|------------|--------------------|-------|-------|------|--------|------------|-------|--------|
| -12 to -16 | Silty SAND         | NP    | NP    | 0    | 28     | 55         | 13    | N=8    |
| -16 to -27 | Clayey SAND        | 47    | 31    | 300  | 0      | 55         | 36-45 | N=2-3  |
| -27 to -32 | Sandy Fat CLAY     | ---   | ---   | 200  | 0      | 55         | ---   | N=2    |
| -32 to -42 | Sandy Lean CLAY    | 38-47 | 23-31 | 2000 | 0      | 60         | 59-68 | P=4.25 |
| -42 to -45 | Poorly Graded SAND | NP    | NP    | 0    | 30     | 55         | 7     | N=7    |