



Boring Designation VB-MCSP07-7

| DRILLING LOG | | DIVISION | | INSTALLATION | | SHEET 1 | | | |
|---|-------|-----------------------------|---|--|---------------|--|-----------|--------------|---------|
| | | South Atlantic | | Jacksonville District | | OF 2 SHEETS | | | |
| 1. PROJECT | | | | 9. SIZE AND TYPE OF BIT See Remarks | | | | | |
| MARTIN COUNTY OFFSHORE INVESTIGATIONS Offshore Borrow Area | | | | 10. COORDINATE SYSTEM/DATUM HORIZONTAL VERTICAL | | | | | |
| | | | | State Plane, FLE (U.S. Ft.) NAD83 MLLW | | | | | |
| 2. BORING DESIGNATION | | LOCATION COORDINATES | | 11. MANUFACTURER'S DESIGNATION OF DRILL <input checked="" type="checkbox"/> AUTO HAMMER | | | | | |
| VB-MCSP07-7 | | X = 946,223 Y = 1,073,495 | | Alpine Vibracore Unit <input type="checkbox"/> MANUAL HAMMER | | | | | |
| 3. DRILLING AGENCY | | CONTRACTOR FILE NO. | | 12. TOTAL SAMPLES | | DISTURBED UNDISTURBED (UD) | | | |
| Challenge Engineering & Testing, Inc. | | 2007D32 | | 4 | | 0 | | | |
| 4. NAME OF DRILLER | | | | 13. TOTAL NUMBER CORE BOXES 1 | | | | | |
| Alpine Ocean Seismic, Inc. | | | | 14. ELEVATION GROUND WATER Tidal | | | | | |
| 5. DIRECTION OF BORING | | DEG. FROM VERTICAL | | 15. DATE BORING | | STARTED COMPLETED | | | |
| <input checked="" type="checkbox"/> VERTICAL | | | | 08-09-07 | | 08-09-07 | | | |
| <input type="checkbox"/> INCLINED | | | | | | | | | |
| 6. THICKNESS OF OVERBURDEN N/A | | | | 16. ELEVATION TOP OF BORING -56.2 Ft. | | | | | |
| 7. DEPTH DRILLED INTO ROCK N/A | | | | 17. TOTAL RECOVERY FOR BORING 100 % | | | | | |
| 8. TOTAL DEPTH OF BORING 20.0 Ft. | | | | 18. SIGNATURE AND TITLE OF INSPECTOR | | | | | |
| | | | | Eric Guarino, Geologist | | | | | |
| ELEV. | DEPTH | LEGEND | CLASSIFICATION OF MATERIALS | % REC. | BOX OR SAMPLE | RQD OR UD | REMARKS | BLOWS/ 1 FT. | N-VALUE |
| -56.2 | 0.0 | | | | | | -56.2 | | |
| -57.3 | 1.1 | | SHELL, mostly angular shell up to 1/4", some subangular quartz, weak reaction with HCl, moist, 10YR 7/2 light gray | 1000 | | | Vibracore | | |
| | | | SAND, poorly-graded with silt, mostly subrounded fine to medium-grained sand-sized quartz, little angular shell up to 1/4", weak reaction with HCl, moist, 10YR 4/1 dark gray (SP-SM) | NR | 1 | | -58.2 | | |
| | | | | NR | | | -58.7 | | |
| | | | | NR | | | | | |
| -61.2 | 5.0 | | At El. -60.6 Ft., some angular shell up to 1-1/2", strong reaction with HCl, moist, 10YR 6/1 gray | NR | 2 | | -61.2 | | |
| | | | SAND, silty, mostly subangular fine to medium-grained sand-sized carbonate, some angular shell up to 1/4", weak reaction with HCl, moist, 10YR 7/1 light gray (SM) | NR | | | -61.7 | | |
| | | | | NR | | | | | |
| | | | | NR | | | | | |
| -67.2 | 11.0 | | | NR | 3 | | -67.2 | | |
| | | | SAND, poorly-graded with silt, mostly subangular fine to medium-grained sand-sized carbonate, some angular shell up to 1/4", weak reaction with HCl, moist, 10YR 7/1 light gray (SP-SM) | NR | | | -67.7 | | |
| | | | | NR | | | -69.2 | | |
| | | | | NR | 4 | | -69.7 | | |
| | | | | NR | | | | | |

| DRILLING LOG (Cont. Sheet) | | | INSTALLATION Jacksonville District | | | SHEET 2 OF 2 SHEETS | | | | | | | | | | | | | | | | | | |
|---|--------------|---|--|-----------|---------------------|---------------------------|---------|-----------------|---------|---|---------|-----|---|-----------|--------|---|-----------|-----|--|--|--|--|--|--|
| PROJECT MARTIN COUNTY OFFSHORE INVESTIGATIONS | | | COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.) | | HORIZONTAL NAD83 | VERTICAL MLLW | | | | | | | | | | | | | | | | | | |
| LOCATION COORDINATES X = 946,223 Y = 1,073,495 | | | ELEVATION TOP OF BORING -56.2 Ft. | | | | | | | | | | | | | | | | | | | | | |
| ELEV. | DEPTH | LEGEND | CLASSIFICATION OF MATERIALS | % REC. | BOX OR SAMPLE | ROD OR UD | REMARKS | BLOWS/ 1 FT. | N-VALUE | | | | | | | | | | | | | | | |
| -73.9 | 17.7 |  | | NR | | | | | | | | | | | | | | | | | | | | |
| -76.2 | 20.0 |  | CLAY, fat, low plasticity, mostly carbonate, trace angular shell up to 1/4", strong reaction with HCl, moist, weak cementation, 10YR 8/4 very pale brown (CH) | | | | -76.2 | | | | | | | | | | | | | | | | | |
| | | | <p>NOTES:</p> <p>1. Soils are field visually classified in accordance with the Unified Soils Classification System.</p> <p>2. Laboratory Testing Results</p> <table border="1"> <thead> <tr> <th>SAMPLE ID</th> <th>SAMPLE DEPTH</th> <th>LABORATORY CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2.0/2.5</td> <td>SP-SM*</td> </tr> <tr> <td>2</td> <td>5.0/5.5</td> <td>SM*</td> </tr> <tr> <td>3</td> <td>11.0/11.5</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>13.0/13.5</td> <td>SP*</td> </tr> </tbody> </table> <p>*Lab visual classification based on gradation curve. No Atterberg limits.</p> | SAMPLE ID | SAMPLE DEPTH | LABORATORY CLASSIFICATION | 1 | 2.0/2.5 | SP-SM* | 2 | 5.0/5.5 | SM* | 3 | 11.0/11.5 | SP-SM* | 4 | 13.0/13.5 | SP* | | | | <p>Abbreviations: NR = Not Recorded.</p> | | |
| SAMPLE ID | SAMPLE DEPTH | LABORATORY CLASSIFICATION | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2.0/2.5 | SP-SM* | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 5.0/5.5 | SM* | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 11.0/11.5 | SP-SM* | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 13.0/13.5 | SP* | | | | | | | | | | | | | | | | | | | | | | |

Penetration Graph for Core No. VB-MCSP07-7, Run 1

Date: 8/9/2007
Start Time: 3:41:32 PM
End Time: 3:44:47 PM

Penetration: 19.37 ft
Recovery: 20
W. D. Corrected: 56.2
W. D. Raw: 58.2

Easting: 946223
Northing: 1073495
Coord. System: FL East

Lat: 27d 17.0480' N
Long: 80d 6.4137' W
Datum: NAD-83

Comment:

