

| DRILLING LOG  |       | DIVISION<br>South Atlantic                        |  | INSTALLATION<br>Jacksonville District                            |               | SHEET 1<br>OF 2 SHEETS  |           |             |         |
|---|-------|---|--|--|---------------|---|-----------|-------------|---------|
| 1. PROJECT<br>MARTIN COUNTY OFFSHORE INVESTIGATIONS<br>Offshore Borrow Area                                 |       |   |  | 9. SIZE AND TYPE OF BIT See Remarks                              |               |   |           |             |         |
| 2. BORING DESIGNATION<br>VB-MCSP07-16   |       | LOCATION COORDINATES<br>X = 946,706 Y = 1,075,577 |  | 10. COORDINATE SYSTEM/DATUM<br>State Plane, FLE (U.S. Ft.)       |               | HORIZONTAL<br>NAD83   |           |             |         |
| 3. DRILLING AGENCY<br>Challenge Engineering & Testing, Inc.   |       | CONTRACTOR FILE NO.<br>2007D32                    |  | 11. MANUFACTURER'S DESIGNATION OF DRILL<br>Alpine Vibracore Unit |               | <input checked="" type="checkbox"/> AUTO HAMMER<br><input type="checkbox"/> MANUAL HAMMER |           |             |         |
| 4. NAME OF DRILLER<br>Alpine Ocean Seismic, Inc.  |       |   |  | 12. TOTAL SAMPLES<br>4   |               | DISTURBED<br>0  |           |             |         |
| 5. DIRECTION OF BORING<br><input checked="" type="checkbox"/> VERTICAL<br><input type="checkbox"/> INCLINED |       |   |  | 13. TOTAL NUMBER CORE BOXES<br>1                                 |               | 14. ELEVATION GROUND WATER<br>Tidal   |           |             |         |
| 6. THICKNESS OF OVERBURDEN<br>N/A   |       |   |  | 15. DATE BORING<br>08-10-07                                      |               | STARTED<br>08-10-07   |           |             |         |
| 7. DEPTH DRILLED INTO ROCK<br>N/A   |       |   |  | 16. ELEVATION TOP OF BORING<br>-55.6 Ft.                         |               | COMPLETED<br>08-10-07   |           |             |         |
| 8. TOTAL DEPTH OF BORING<br>20.0 Ft.  |       |   |  | 17. TOTAL RECOVERY FOR BORING<br>93 %                            |               |   |           |             |         |
|   |       |   |  | 18. SIGNATURE AND TITLE OF INSPECTOR<br>Eric Guarino, Geologist  |               |   |           |             |         |
| ELEV.   | DEPTH | LEGEND  | CLASSIFICATION OF MATERIALS  | % REC.   | BOX OR SAMPLE | RQD OR UD   | REMARKS   | BLOWS/1 FT. | N-VALUE |
| -55.6   | 0.0   |   |  |  |               |   | -55.6     |             |         |
| -56.8   | 1.2   |   | SHELL, mostly angular shell up to 1/4", some subangular fine to medium-grained sand-sized quartz, trace angular fine-grained sand-sized organic matter, weak reaction with HCl, moist, 10YR 7/2 light gray | 930  |               |   | Vibracore |             |         |
|   |       |   | SAND, poorly-graded, mostly subangular fine-grained sand-sized carbonate, little angular shell up to 1/4", strong reaction with HCl, moist, 10YR 5/1 gray (SP)   | NR   | 1             |   | -57.6     |             |         |
|   |       |   |  | NR   |               |   | -58.1     |             |         |
| -59.6   | 4.0   |   |  | NR   | 2             |   | -59.6     |             |         |
|   |       |   | SAND, silty, mostly subangular fine-grained sand-sized carbonate, little angular shell up to 1/4", strong reaction with HCl, moist, 10YR 5/1 gray (SM)   | NR   |               |   | -60.1     |             |         |
|   |       |   |  | NR   | 3             |   | -61.6     |             |         |
|   |       |   |  | NR   |               |   | -62.1     |             |         |
| -63.6   | 8.0   |   |  | NR   | 4             |   | -63.6     |             |         |
|   |       |   | SAND, poorly-graded with silt, mostly subangular fine-grained sand-sized carbonate, little angular shell up to 1/4", strong reaction with HCl, moist, 10YR 5/1 gray (SP-SM)                                | NR   |               |   | -64.1     |             |         |
|   |       |   |  | NR   |               |   |           |             |         |

| DRILLING LOG (Cont. Sheet)                        |              |                           | INSTALLATION<br>Jacksonville District   |           |                     | SHEET 2<br>OF 2 SHEETS    |         |                 |         |   |         |     |   |         |     |   |         |        |  |  |  |                                      |  |  |
|---|--------------|---------------------------|---|-----------|---------------------|---------------------------|---------|-----------------|---------|---|---------|-----|---|---------|-----|---|---------|--------|--|--|--|--------------------------------------|--|--|
| PROJECT<br>MARTIN COUNTY OFFSHORE INVESTIGATIONS  |              |                           | COORDINATE SYSTEM/DATUM<br>State Plane, FLE (U.S. Ft.)  |           | HORIZONTAL<br>NAD83 | VERTICAL<br>MLLW          |         |                 |         |   |         |     |   |         |     |   |         |        |  |  |  |                                      |  |  |
| LOCATION COORDINATES<br>X = 946,706 Y = 1,075,577 |              |                           | ELEVATION TOP OF BORING<br>-55.6 Ft.  |           |                     |                           |         |                 |         |   |         |     |   |         |     |   |         |        |  |  |  |                                      |  |  |
| ELEV.   | DEPTH        | LEGEND                    | CLASSIFICATION OF MATERIALS   | %<br>REC. | BOX OR<br>SAMPLE    | RQD<br>OR<br>UD           | REMARKS | BLOWS/<br>1 FT. | N-VALUE |   |         |     |   |         |     |   |         |        |  |  |  |                                      |  |  |
| -74.2   | 18.5         |                           |   | NR        |                     |                           |         |                 |         |   |         |     |   |         |     |   |         |        |  |  |  |                                      |  |  |
| -75.6   | 20.0         | NR                        | CLAY, lean, mostly rounded clay, some angular shell up to 2", few silt, weak reaction with HCl, moist, 10YR 5/1 gray (CL)   |           |                     |                           |         |                 |         |   |         |     |   |         |     |   |         |        |  |  |  |                                      |  |  |
|   |              |                           | NOTES:<br><br>1. Soils are field visually classified in accordance with the Unified Soils Classification System.<br><br>2. Laboratory Testing Results<br><br><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*</td> </tr> <tr> <td>2</td> <td>4.0/4.5</td> <td>SM*</td> </tr> <tr> <td>3</td> <td>6.0/6.5</td> <td>SM*</td> </tr> <tr> <td>4</td> <td>8.0/8.5</td> <td>SP-SM*</td> </tr> </tbody> </table><br>*Lab visual classification based on gradation curve. No Atterberg limits. | SAMPLE ID | SAMPLE DEPTH        | LABORATORY CLASSIFICATION | 1       | 2.0/2.5         | SP*     | 2 | 4.0/4.5 | SM* | 3 | 6.0/6.5 | SM* | 4 | 8.0/8.5 | SP-SM* |  |  |  | Abbreviations:<br>NR = Not Recorded. |  |  |
| SAMPLE ID   | SAMPLE DEPTH | LABORATORY CLASSIFICATION |   |           |                     |                           |         |                 |         |   |         |     |   |         |     |   |         |        |  |  |  |                                      |  |  |
| 1   | 2.0/2.5      | SP*                       |   |           |                     |                           |         |                 |         |   |         |     |   |         |     |   |         |        |  |  |  |                                      |  |  |
| 2   | 4.0/4.5      | SM*                       |   |           |                     |                           |         |                 |         |   |         |     |   |         |     |   |         |        |  |  |  |                                      |  |  |
| 3   | 6.0/6.5      | SM*                       |   |           |                     |                           |         |                 |         |   |         |     |   |         |     |   |         |        |  |  |  |                                      |  |  |
| 4   | 8.0/8.5      | SP-SM*                    |   |           |                     |                           |         |                 |         |   |         |     |   |         |     |   |         |        |  |  |  |                                      |  |  |

## Penetration Graph for Core No. VB-MCSP07-16, Run 1

Date: 8/9/2007  
Start Time: 9:56:46 AM  
End Time: 9:59:47 AM

Penetration: 19.49 ft  
Recovery: 18.6  
W. D. Corrected: 55.6  
W. D. Raw: 56.8

Easting: 946706  
Northing: 1075577  
Coord. System: FL East

Lat: 27d 17.3891' N  
Long: 80d 6.3221' W  
Datum: NAD-83

Comment:

