

Boring Designation VB-MCSP07-19

| DRILLING LOG | | DIVISION South Atlantic | | INSTALLATION Jacksonville District | | SHEET 1 OF 2 SHEETS | |
|---|--|---|--|--|--|---|--|
| 1. PROJECT MARTIN COUNTY OFFSHORE INVESTIGATIONS Offshore Borrow Area | | | | 9. SIZE AND TYPE OF BIT See Remarks | | | |
| 2. BORING DESIGNATION VB-MCSP07-19 | | LOCATION COORDINATES X = 948,450 Y = 1,077,350 | | 10. COORDINATE SYSTEM/DATUM State Plane, FLE (U.S. Ft.) | | HORIZONTAL NAD83 | |
| 3. DRILLING AGENCY Challenge Engineering & Testing, Inc. | | CONTRACTOR FILE NO. 2007D32 | | 11. MANUFACTURER'S DESIGNATION OF DRILL Alpine Vibracore Unit | | <input checked="" type="checkbox"/> AUTO HAMMER <input type="checkbox"/> MANUAL HAMMER | |
| 4. NAME OF DRILLER Alpine Ocean Seismic, Inc. | | | | 12. TOTAL SAMPLES 4 | | UNDISTURBED (UD) 0 | |
| 5. DIRECTION OF BORING <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED | | | | 13. TOTAL NUMBER CORE BOXES 1 | | 14. ELEVATION GROUND WATER Tidal | |
| 6. THICKNESS OF OVERBURDEN N/A | | | | 15. DATE BORING 08-12-07 | | COMPLETED 08-12-07 | |
| 7. DEPTH DRILLED INTO ROCK N/A | | | | 16. ELEVATION TOP OF BORING -49.4 Ft. | | 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 |
|-------|-------|--------|--|--------|---------------|-----------|-----------|-------------|---------|
| -49.4 | 0.0 | | | | | | -49.4 | | |
| | | | SHELL, mostly angular shell up to 1/2", some subangular fine to medium-grained sand-sized quartz, trace angular fine to medium-grained sand-sized organic matter, weak reaction with HCl, moist, 10YR 7/2 light gray | 667 | | | Vibracore | | |
| | | | | NR | 1 | | -52.4 | | |
| | | | | | | | -52.9 | | |
| | | | | NR | | | | | |
| -54.7 | 5.3 | | | | | | | | |
| | | | SAND, poorly-graded, mostly subangular fine to medium-grained sand-sized quartz, some angular shell up to 1/2", weak reaction with HCl, moist, 10YR 5/3 brown (SP) | NR | 2 | | -55.4 | | |
| | | | | | | | -55.9 | | |
| | | | | NR | | | | | |
| -58.4 | 9.0 | | | | | | -58.4 | | |
| | | | SAND, silty, mostly subrounded fine to medium-grained sand-sized carbonate, little angular shell up to 1/2", strong reaction with HCl, moist, 10YR 5/1 gray (SM) | NR | 3 | | -58.9 | | |
| | | | | NR | | | | | |
| -60.4 | 11.0 | | | | | | -60.4 | | |
| | | | SAND, poorly-graded, mostly subrounded fine to medium-grained sand-sized carbonate, little angular shell up to 1/2", strong reaction with HCl, moist, 10YR 5/1 gray (SP) | NR | 4 | | -60.9 | | |
| | | | | 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 = 948,450 Y = 1,077,350 | | | ELEVATION TOP OF BORING -49.4 Ft. | | | | | | | | | | | | | | | | | | | | |
| ELEV. | DEPTH | LEGEND | CLASSIFICATION OF MATERIALS | % REC. | BOX OR SAMPLE | RQD UP DOWN | REMARKS | BLOWS/ 1 FT. | N-VALUE | | | | | | | | | | | | | | |
| -65.1 | 15.7 | | SHELL, mostly angular shell up to 1-1/2", some subangular fine to medium-grained sand-sized quartz, weak reaction with HCl, moist, 10YR 5/1 gray | NR | | | | | | | | | | | | | | | | | | | |
| -69.4 | 20.0 | | | | | | | | | | | | | | | | | | | | | | |
| NOTES: 1. Soils are field visually classified in accordance with the Unified Soils Classification System. 2. Laboratory Testing Results <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>3.0/3.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>6.0/6.5</td> <td>SP*</td> </tr> <tr> <td>3</td> <td>9.0/9.5</td> <td>SM*</td> </tr> <tr> <td>4</td> <td>11.0/11.5</td> <td>SP*</td> </tr> </tbody> </table> *Lab visual classification based on gradation curve. No Atterberg limits. | | | SAMPLE ID | SAMPLE DEPTH | LABORATORY CLASSIFICATION | 1 | 3.0/3.5 | SP* | 2 | 6.0/6.5 | SP* | 3 | 9.0/9.5 | SM* | 4 | 11.0/11.5 | SP* | | | Abbreviations: NR = Not Recorded. | | | |
| SAMPLE ID | SAMPLE DEPTH | LABORATORY CLASSIFICATION | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3.0/3.5 | SP* | | | | | | | | | | | | | | | | | | | | | |
| 2 | 6.0/6.5 | SP* | | | | | | | | | | | | | | | | | | | | | |
| 3 | 9.0/9.5 | SM* | | | | | | | | | | | | | | | | | | | | | |
| 4 | 11.0/11.5 | SP* | | | | | | | | | | | | | | | | | | | | | |

Penetration Graph for Core No. VB-MCSP07-19, Run 1

Date: 8/12/2007
Start Time: 1:21:54 PM
End Time: 1:27:03 PM

Penetration: 19.61 ft
Recovery: 20
W. D. Corrected: 49.4
W. D. Raw: 49.6

Easting: 948450
Northing: 1077350
Coord. System: FL East

Lat: 27d 17.6819' N
Long: 80d 6.0025' W
Datum: NAD-83

Comment:

