

## Boring Designation CB-DUC04-39

| DRILLING LOG  |       | DIVISION<br>South Atlantic                        |  | INSTALLATION<br>Jacksonville District   |               | SHEET 1<br>OF 2 SHEETS   |         |             |         |
|---|-------|---|--|---|---------------|--|---------|-------------|---------|
| 1. PROJECT<br>Duval County FL BEC<br>Borrow Area B1   |       |   |  | 9. SIZE AND TYPE OF BIT See Remarks   |               |  |         |             |         |
| 2. BORING DESIGNATION<br>CB-DUC04-39  |       | LOCATION COORDINATES<br>X = 413,204 Y = 2,180,250 |  | 10. COORDINATE SYSTEM/DATUM<br>State Plane, FLE (U.S. Ft.)                                      |               | HORIZONTAL<br>NAD27  |         |             |         |
| 3. DRILLING AGENCY<br>Alpine Ocean Seismic Survey, Inc.   |       | CONTRACTOR FILE NO.                               |  | 11. MANUFACTURER'S DESIGNATION OF DRILL<br>Vibracore  |               | <input type="checkbox"/> AUTO HAMMER<br><input type="checkbox"/> MANUAL HAMMER |         |             |         |
| 4. NAME OF DRILLER<br>James F. Cole   |       |   |  | 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>04-18-04   |               | STARTED<br>04-18-04  |         |             |         |
| 7. DEPTH DRILLED INTO ROCK<br>N/A   |       |   |  | 16. ELEVATION TOP OF BORING<br>-50.7 Ft.  |               | COMPLETED<br>04-18-04  |         |             |         |
| 8. TOTAL DEPTH OF BORING<br>19.0 Ft.  |       |   |  | 17. TOTAL RECOVERY FOR BORING<br>100 %  |               |  |         |             |         |
|   |       |   |  | 18. SIGNATURE AND TITLE OF INSPECTOR<br>William H. Brenner, Geologist <i>William H. Brenner</i> |               |  |         |             |         |
| ELEV.   | DEPTH | LEGEND  | CLASSIFICATION OF MATERIALS  | % REC.  | BOX OR SAMPLE | RQD OR UD  | REMARKS | BLOWS/1 FT. | N-VALUE |
| -50.7   | 0.0   |   | SAND, poorly-graded, mostly fine-grained sand-sized quartz, few silt, trace angular shell up to 1-1/2", trace fine-grained sand-sized carbonate, weak reaction with HCl, wet, N 7/ light gray (SP) | 100   |               |  | -50.7   |             | 0       |
|   |       |   |  | 100   | 1             |  | -53.2   |             |         |
|   |       |   |  | 100   |               |  | -54.2   |             |         |
| -55.6   | 4.9   |   | SHELL, mostly angular medium to coarse-grained sand-sized shell up to 1", little clay, trace fine-grained sand-sized carbonate, trace silt, trace clay, wet, N 7/ light gray                       | 100   | 2             |  | -56.2   |             | 5       |
|   |       |   |  | 100   |               |  | -57.2   |             |         |
| -58.2   | 7.5   |   | SAND, poorly-graded, mostly subangular fine-grained sand-sized carbonate, some angular shell up to 1", little silt, strong reaction with HCl, wet, N 8/ white (SP)                                 | 100   |               |  |         |             |         |
| -60.7   | 10.0  |   | SAND, poorly-graded with silt, mostly fine-grained sand-sized quartz, little silt, little angular shell up to 3/4", weak reaction with HCl, wet, 10Y 5/1 greenish gray (SP-SM)                     | 100   | 3             |  | -61.7   |             | 10      |
|   |       |   |  | 100   |               |  | -62.7   |             |         |
|   |       |   |  | 100   |               |  |         |             |         |
|   |       |   | At El. -64.7 Ft., weak cementation   |   |               |  |         |             | 15      |

| DRILLING LOG (Cont. Sheet)                        |              |                           | INSTALLATION<br>Jacksonville District   |           |                     | SHEET 2<br>OF 2 SHEETS    |           |                 |         |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |
|---|--------------|---------------------------|---|-----------|---------------------|---------------------------|-----------|-----------------|---------|---|---------|--------|---|-----------|--------|---|-----------|--------|--|--|--|--|--|--|
| PROJECT<br>Duval County FL BEC                    |              |                           | COORDINATE SYSTEM/DATUM<br>State Plane, FLE (U.S. Ft.)  |           | HORIZONTAL<br>NAD27 | VERTICAL<br>MLLW          |           |                 |         |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |
| LOCATION COORDINATES<br>X = 413,204 Y = 2,180,250 |              |                           | ELEVATION TOP OF BORING<br>-50.7 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 |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |
| -69.7   | 19.0         |                           |   | 100       |                     |                           | Vibracore |                 |         |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |
|   |              |                           |   | 100       | 4                   |                           | Vibracore |                 |         |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |
|   |              |                           |   | 100       |                     |                           | Vibracore |                 |         |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |
|   |              |                           |   |           |                     |                           |           |                 |         |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |
|   |              |                           | 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>2.5/3.5</td> <td>SP*</td> </tr> <tr> <td>2</td> <td>5.5/6.5</td> <td>SP-SM*</td> </tr> <tr> <td>3</td> <td>11.0/12.0</td> <td>SP-SM*</td> </tr> <tr> <td>4</td> <td>16.0/17.0</td> <td>SP-SM*</td> </tr> </tbody> </table> | SAMPLE ID | SAMPLE DEPTH        | LABORATORY CLASSIFICATION | 1         | 2.5/3.5         | SP*     | 2 | 5.5/6.5 | SP-SM* | 3 | 11.0/12.0 | SP-SM* | 4 | 16.0/17.0 | SP-SM* |  |  |  |  |  |  |
| SAMPLE ID   | SAMPLE DEPTH | LABORATORY CLASSIFICATION |   |           |                     |                           |           |                 |         |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |
| 1   | 2.5/3.5      | SP*                       |   |           |                     |                           |           |                 |         |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |
| 2   | 5.5/6.5      | SP-SM*                    |   |           |                     |                           |           |                 |         |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |
| 3   | 11.0/12.0    | SP-SM*                    |   |           |                     |                           |           |                 |         |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |
| 4   | 16.0/17.0    | SP-SM*                    |   |           |                     |                           |           |                 |         |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |
|   |              |                           | *Lab visual classification based on gradation curve. No Atterberg limits.   |           |                     |                           |           |                 |         |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |
|   |              |                           | 3. Additional Laboratory Testing  |           |                     |                           |           |                 |         |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |
|   |              |                           | 2 Specific Gravity  |           |                     |                           |           |                 |         |   |         |        |   |           |        |   |           |        |  |  |  |  |  |  |