
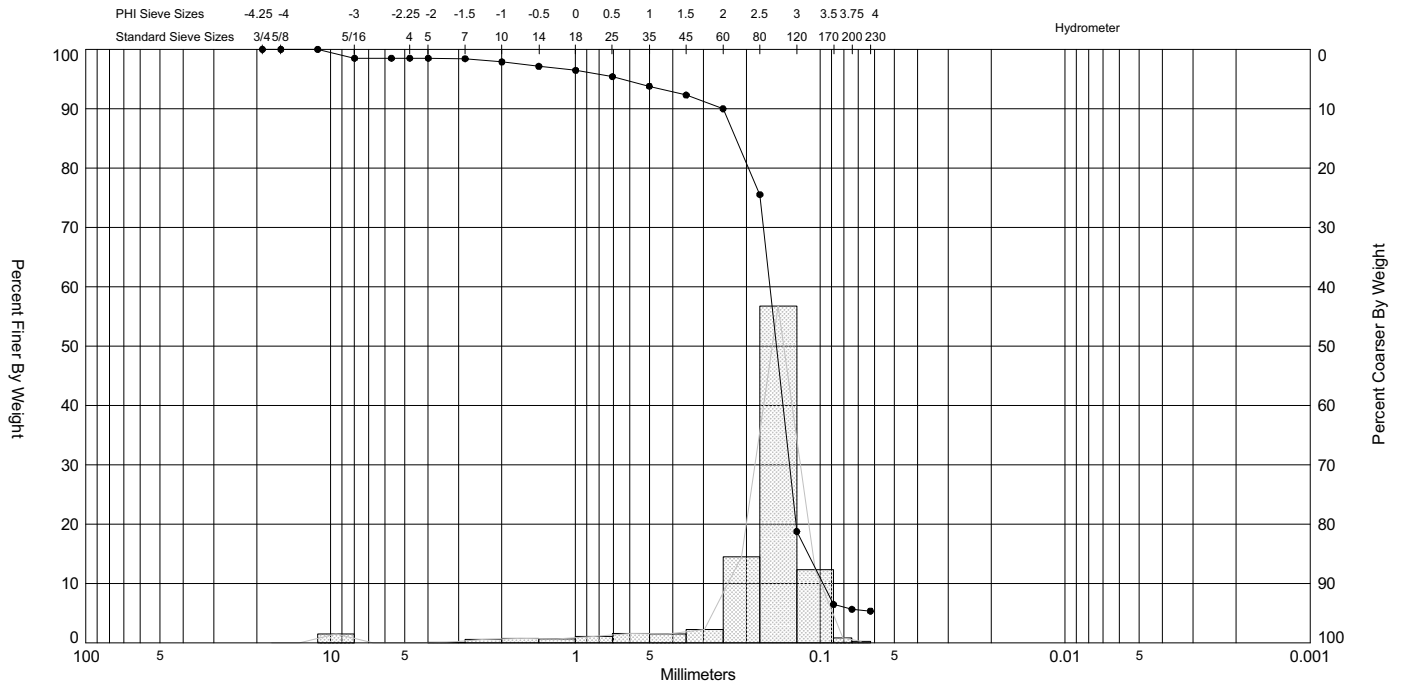



|  |  |  |  |   |                     |   |  |
|--|--|--|--|---|---------------------|---|--|
| <b>Granularmetric Report</b><br>Depths and elevations based on measured values |  |  |  | <br>Coastal Planning & Engineering<br>2481 NW Boca Raton Blvd, Boca Raton<br>FL 33431<br>ph (561) 391-8102<br>fax (561) 391-9116 |                     |   |  |
| Project Name: Anna Maria Island  |  |  |  |   |                     |   |  |
| Sample Name: AMVC-05-11 #6   |  |  |  |   |                     |   |  |
| Analysis Date: 03-07-05  |  |  |  |   |                     |   |  |
| Analyzed By: CPE   |  |  |  |   |                     |   |  |
| Easting (ft):<br><div style="text-align: center;">413,677</div>                |  | Northing (ft):<br><div style="text-align: center;">1,156,316</div> |  | Coordinate System:<br><div style="text-align: center;">Florida State Plane West</div>   |                     | Elevation (ft):<br><div style="text-align: center;">-29.6 NAVD 88</div> |  |
| USCS:<br><div style="text-align: center;">SP-SM</div>                          |  | Munsell: Wet - 5Y-8/1<br>Dry - 5Y-7/1<br>Washed - 5Y-7/1           |  | Comments:   |                     |   |  |
| Dry Weight (g):<br><div style="text-align: center;">73.09</div>                | Wash Weight (g):<br><div style="text-align: center;">69.56</div> | Pan Retained (g):<br><div style="text-align: center;">0.16</div>   | Sieve Loss (%):<br><div style="text-align: center;">0.31</div> | Fines (%):<br>#200 - 5.65<br>#230 - 5.36  | Organics (%):       | Carbonates (%):   | Shell Hash (%):<br><div style="text-align: center;">13</div> |
| Sieve Number   | Sieve Size (Phi)   | Sieve Size (Millimeters)   | Grams Retained   | % Weight Retained   | Cum. Grams Retained | C. % Weight Retained  |  |
| 3/4"   | -4.25  | 19.03  | 0.00   | 0.00  | 0.00                | 0.00  |  |
| 5/8"   | -4.00  | 16.00  | 0.00   | 0.00  | 0.00                | 0.00  |  |
| 11/16"   | -3.50  | 11.31  | 0.00   | 0.00  | 0.00                | 0.00  |  |
| 5/16"  | -3.00  | 8.00   | 1.08   | 1.48  | 1.08                | 1.48  |  |
| 3.5  | -2.50  | 5.66   | 0.00   | 0.00  | 1.08                | 1.48  |  |
| 4  | -2.25  | 4.76   | 0.00   | 0.00  | 1.08                | 1.48  |  |
| 5  | -2.00  | 4.00   | 0.00   | 0.00  | 1.08                | 1.48  |  |
| 7  | -1.50  | 2.83   | 0.06   | 0.08  | 1.14                | 1.56  |  |
| 10   | -1.00  | 2.00   | 0.40   | 0.55  | 1.54                | 2.11  |  |
| 14   | -0.50  | 1.41   | 0.55   | 0.75  | 2.09                | 2.86  |  |
| 18   | 0.00   | 1.00   | 0.50   | 0.68  | 2.59                | 3.54  |  |
| 25   | 0.50   | 0.71   | 0.77   | 1.05  | 3.36                | 4.60  |  |
| 35   | 1.00   | 0.50   | 1.18   | 1.61  | 4.54                | 6.21  |  |
| 45   | 1.50   | 0.35   | 1.09   | 1.49  | 5.63                | 7.70  |  |
| 60   | 2.00   | 0.25   | 1.67   | 2.28  | 7.30                | 9.99  |  |
| 80   | 2.50   | 0.18   | 10.58  | 14.48   | 17.88               | 24.46   |  |
| 120  | 3.00   | 0.13   | 41.49  | 56.77   | 59.37               | 81.23   |  |
| 170  | 3.50   | 0.09   | 8.99   | 12.30   | 68.36               | 93.53   |  |
| 200  | 3.75   | 0.07   | 0.60   | 0.82  | 68.96               | 94.35   |  |
| 230  | 4.00   | 0.06   | 0.21   | 0.29  | 69.17               | 94.64   |  |
| Shell Hash calculated from visual estimate of shell <4.75mm and >2.8mm.        |  |  |  |   |                     |   |  |
| Phi 5  | Phi 16   | Phi 25   | Phi 50   | Phi 75  | Phi 84              | Phi 95  |  |
|  | 3.11   | 2.95   | 2.72   | 2.50  | 2.21                | 0.62  |  |
| Moment   | Mean Phi   | Mean mm  | Sorting  | Skewness  | Kurtosis            |   |  |
| Statistics   | 2.47   | 0.18   | 1.02   | -3.65   | 18.57               |   |  |

SIEVE ANALYSIS ANNA MARIA\_05 NAVD88.GPJ FL DEPROSS.GDT 10/30/08



| Gravel |      | Sand   |        |      | Silt and Clay |  |
|--------|------|--------|--------|------|---------------|--|
| Coarse | Fine | Coarse | Medium | Fine |               |  |

| Sample  | Symbol | Elev. (ft) | USCS  | % Fines                    | % Organics | % Carbonates                            | Median | Mean | Skew  | Kurt  | Sort | Sample Information |                   |
|---|--------|------------|-------|----------------------------|------------|---|--------|------|-------|-------|------|--------------------|-------------------|
| AMVC-05-11 #6   | —●—    | -29.6      | SP-SM | #200 - 5.65<br>#230 - 5.36 |            |   | 2.72   | 2.47 | -3.65 | 18.57 | 1.02 | Project Name:      | Anna Maria Island |
| Comments:   |        |            |       |                            |            |   |        |      |       |       |      | Analysis Date:     | 03-07-05          |
| Depths and elevations based on measured values                                      |        |            |       |                            |            |   |        |      |       |       |      | Analyzed By:       | CPE               |
|  |        |            |       |                            |            | Coastal Planning & Engineering          |        |      |       |       |      | Easting (X, ft):   | 413,677           |
|   |        |            |       |                            |            | 2481 NW Boca Raton Blvd, Boca Raton     |        |      |       |       |      | Northing (Y, ft):  | 1,156,316         |
|   |        |            |       |                            |            | FL 33431                                |        |      |       |       |      | Horizontal System: | NAD 1983          |
|   |        |            |       |                            |            | ph (561) 391-8102<br>fax (561) 391-9116 |        |      |       |       |      | Vertical System:   | NAVD 88           |