

Grain Size Analysis - Mechanical

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|----------------------------|------------------------------|
| Project | USACE- Jacksonville District |
| Laboratory Name | Dames & Moore - Atlanta |
| Visual Description of Soil | Poorly Graded Sand |
| Reaction to HCL | Strong |
| Tested By: | MA |

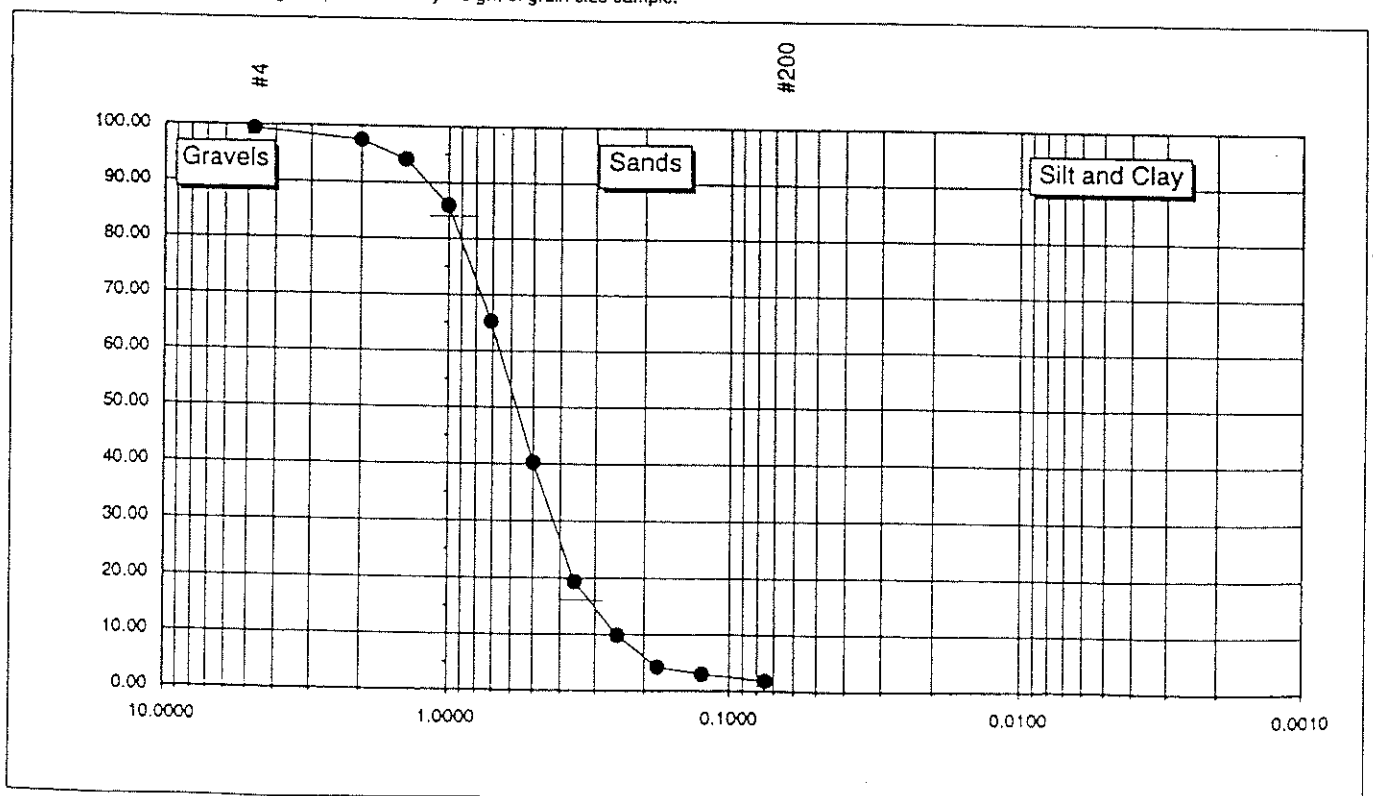
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|------------------------|---------------|
| Location | Martin County |
| Boring No. | CBMC99 |
| Sample No. | 1 |
| Depth of Sample (ft.): | 31.5 - 32.0 |
| Date of Testing: | 17-Nov-9 |
| Est. Percent Shell: | 25% |

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|-----------------------------------|--------|
| Weight of Soil and Dish: | 351.40 |
| Dry Weight Soil and Dish: | 301.34 |
| Weight Dish: | 86.62 |
| Total Weight: | 214.72 |
| Weight Soil & Dish after Washing: | 297.62 |
| Weight of Oven Dry after Washing | 211.00 |

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|--------------------------|-------|
| 10% Passing - D10 | 0.250 |
| 30% Passing - D30 | 0.420 |
| 60% Passing - D60 | 0.670 |
| Coef. Of Uniformity - Cu | 2.68 |
| Coef. Of Curvature - Cc | 1.05 |
| Classification: | SP |

| Sieve No. | Size (mm) | Individual Weight Retained | Cumulative Weight Retained | Cumulative Percent Retained | Cumulative Percent Finer Passing |
|-----------|-----------|----------------------------|----------------------------|-----------------------------|----------------------------------|
| #4 | 4.7500 | 1.39 | 1.39 | 0.65 | 99.35 |
| #10 | 2.0000 | 4.04 | 5.43 | 2.53 | 97.47 |
| #14 | 1.4000 | 7.29 | 12.72 | 5.92 | 94.08 |
| #18 | 1.0000 | 17.53 | 30.25 | 14.09 | 85.91 |
| #25 | 0.7100 | 44.33 | 74.58 | 34.73 | 65.27 |
| #35 | 0.5000 | 53.77 | 128.35 | 59.78 | 40.22 |
| #45 | 0.3550 | 44.97 | 173.32 | 80.72 | 19.28 |
| #60 | 0.2500 | 20.24 | 193.56 | 90.15 | 9.85 |
| #80 | 0.1800 | 12.10 | 205.66 | 95.78 | 4.22 |
| #120 | 0.1250 | 2.68 | 208.34 | 97.03 | 2.97 |
| #200 | 0.0750 | 2.48 | 210.82 | 98.18 | 1.82 |
| Pan | | 0.20 | 214.74 | 100.00 | 0.00 |

- Notes:
1. All weights in grams.
 2. Total weight equals oven dry weight of grain size sample.



Grain Size Analysis - Mechanical

| | |
|----------------------------|------------------------------|
| Project | USACE- Jacksonville District |
| Laboratory Name | Dames & Moore - Atlanta |
| Visual Description of Soil | Poorly Graded Sand with Silt |
| Reaction to HCL | Strong |
| Tested By: | MA |

| | |
|------------------------|---------------|
| Location | Martin County |
| Boring No. | CBMC99-8 |
| Sample No. | 2 |
| Depth of Sample (ft.): | 35.0 - 35.5 |
| Date of Testing: | 17-Nov-99 |
| Est. Percent Shell: | 3-5% |

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|-----------------------------------|--------|
| Weight of Soil and Dish: | 348.27 |
| Dry Weight Soil and Dish: | 302.71 |
| Weight Dish: | 87.39 |
| Total Weight: | 215.32 |
| Weight Soil & Dish after Washing: | 289.36 |
| Weight of Oven Dry after Washing | 201.97 |

| | |
|--------------------------|-------|
| 10% Passing - D10 | 0.076 |
| 30% Passing - D30 | 0.090 |
| 60% Passing - D60 | 0.130 |
| Coef. Of Uniformity - Cu | 1.71 |
| Coef. Of Curvature - Cc | 0.82 |
| Classification: | SP-SM |

| Sieve No. | Size (mm) | Individual Weight Retained | Cumulative Weight Retained | Cumulative Percent Retained | Cumulative Percent Finer Passing |
|-----------|-----------|----------------------------|----------------------------|-----------------------------|----------------------------------|
| #4 | 4.7500 | 2.85 | 2.85 | 1.32 | 98.68 |
| #10 | 2.0000 | 3.69 | 6.54 | 3.04 | 96.96 |
| #14 | 1.4000 | 2.78 | 9.32 | 4.33 | 95.67 |
| #18 | 1.0000 | 4.31 | 13.63 | 6.33 | 93.67 |
| #25 | 0.7100 | 8.12 | 21.75 | 10.10 | 89.90 |
| #35 | 0.5000 | 8.40 | 30.15 | 14.00 | 86.00 |
| #45 | 0.3550 | 8.52 | 38.67 | 17.96 | 82.04 |
| #60 | 0.2500 | 5.53 | 44.20 | 20.53 | 79.47 |
| #80 | 0.1800 | 5.26 | 49.46 | 22.97 | 77.03 |
| #120 | 0.1250 | 17.65 | 67.11 | 31.17 | 68.83 |
| #200 | 0.0750 | 126.81 | 193.92 | 90.06 | 9.94 |
| Pan | | 7.89 | 215.16 | 99.93 | 0.07 |

- Notes:
1. All weights in grams.
 2. Total weight equals oven dry weight of grain size sample.

