

Granularmetric Report

Depths and elevations based on measured values



715-E North Dr.
Melbourne, Fl. 32934
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Gulf County Supplemental

Sample Name: C-301 #1

Analysis Date: 08-08-06

Analyzed By: AP

| | | | |
|-------------------------------|------------------------------|---|----------------------------------|
| Easting (ft): 1,674,805.55 | Northing (ft): 258,431.26 | Coordinate System: Florida State Plane North | Elevation (ft): -34.3 NAVD 88 |
|-------------------------------|------------------------------|---|----------------------------------|

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|-------------|----------------------------|-----------|
| USCS: SP | Munsell: Wet - 10YR-8/1 | Comments: |
|-------------|----------------------------|-----------|

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|---------------------------|------------------|---------------------------|-----------------|--|---------------|-----------------|-------------|
| Dry Weight (g): 108.11 | Wash Weight (g): | Pan Retained (g): 0.02 | Sieve Loss (%): | Fines (%): #200 - 0.03 #230 - 0.03 | Organics (%): | Carbonates (%): | Shells (%): |
|---------------------------|------------------|---------------------------|-----------------|--|---------------|-----------------|-------------|

| Sieve Number | Sieve Size (Phi) | Sieve Size (Millimeters) | Grams Retained | % Weight Retained | Cum. Grams Retained | C. % Weight Retained |
|--------------|------------------|--------------------------|----------------|-------------------|---------------------|----------------------|
| 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3.5 | -2.50 | 5.66 | 0.14 | 0.13 | 0.14 | 0.13 |
| 4 | -2.25 | 4.76 | 0.00 | 0.00 | 0.14 | 0.13 |
| 5 | -2.00 | 4.00 | 0.10 | 0.09 | 0.24 | 0.22 |
| 7 | -1.50 | 2.83 | 0.39 | 0.36 | 0.63 | 0.58 |
| 10 | -1.00 | 2.00 | 0.30 | 0.28 | 0.93 | 0.86 |
| 14 | -0.50 | 1.41 | 0.54 | 0.50 | 1.47 | 1.36 |
| 18 | 0.00 | 1.00 | 0.63 | 0.58 | 2.10 | 1.94 |
| 25 | 0.50 | 0.71 | 1.50 | 1.39 | 3.60 | 3.33 |
| 35 | 1.00 | 0.50 | 5.87 | 5.43 | 9.47 | 8.76 |
| 45 | 1.50 | 0.35 | 20.79 | 19.23 | 30.26 | 27.99 |
| 60 | 2.00 | 0.25 | 42.91 | 39.69 | 73.17 | 67.68 |
| 80 | 2.50 | 0.18 | 26.62 | 24.62 | 99.79 | 92.30 |
| 120 | 3.00 | 0.13 | 7.70 | 7.12 | 107.49 | 99.42 |
| 170 | 3.50 | 0.09 | 0.59 | 0.55 | 108.08 | 99.97 |
| 200 | 3.75 | 0.07 | 0.00 | 0.00 | 108.08 | 99.97 |
| 230 | 4.00 | 0.06 | 0.00 | 0.00 | 108.08 | 99.97 |

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|-------|--------|--------|--------|--------|--------|--------|
| Phi 5 | Phi 16 | Phi 25 | Phi 50 | Phi 75 | Phi 84 | Phi 95 |
| 2.69 | 2.33 | 2.15 | 1.78 | 1.42 | 1.19 | 0.65 |

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|-------------------|----------|---------|---------|----------|----------|
| Moment Statistics | Mean Phi | Mean mm | Sorting | Skewness | Kurtosis |
| | 1.73 | 0.30 | 0.66 | -1.7 | 10.22 |

GRANULARMETRIC REPORT GULF COUNTY SUPPLEMENTAL.GPJ FL DEP ROSS.GDT 12/5/07

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715-E North Dr.
Melbourne, Fl. 32934
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Gulf County Supplemental

Sample Name: C-301 #2

Analysis Date: 08-08-06

Analyzed By: AP

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|-------------------------------|------------------------------|---|----------------------------------|
| Easting (ft): 1,674,805.55 | Northing (ft): 258,431.26 | Coordinate System: Florida State Plane North | Elevation (ft): -37.8 NAVD 88 |
|-------------------------------|------------------------------|---|----------------------------------|

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|-------------|----------------------------|-----------|
| USCS: SP | Munsell: Wet - 10YR-8/1 | Comments: |
|-------------|----------------------------|-----------|

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|---------------------------|------------------|---------------------------|-----------------|--|-----------------------|-------------------------|-------------|
| Dry Weight (g): 100.36 | Wash Weight (g): | Pan Retained (g): 0.01 | Sieve Loss (%): | Fines (%): #200 - 0.01 #230 - 0.00 | Organics (%): 0.50 | Carbonates (%): 2.80 | Shells (%): |
|---------------------------|------------------|---------------------------|-----------------|--|-----------------------|-------------------------|-------------|

| Sieve Number | Sieve Size (Phi) | Sieve Size (Millimeters) | Grams Retained | % Weight Retained | Cum. Grams Retained | C. % Weight Retained |
|--------------|------------------|--------------------------|----------------|-------------------|---------------------|----------------------|
| 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3.5 | -2.50 | 5.66 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4 | -2.25 | 4.76 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | -2.00 | 4.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | -1.50 | 2.83 | 0.24 | 0.24 | 0.24 | 0.24 |
| 10 | -1.00 | 2.00 | 0.51 | 0.51 | 0.75 | 0.75 |
| 14 | -0.50 | 1.41 | 0.86 | 0.86 | 1.61 | 1.61 |
| 18 | 0.00 | 1.00 | 0.95 | 0.95 | 2.56 | 2.56 |
| 25 | 0.50 | 0.71 | 1.03 | 1.03 | 3.59 | 3.59 |
| 35 | 1.00 | 0.50 | 1.50 | 1.49 | 5.09 | 5.08 |
| 45 | 1.50 | 0.35 | 3.34 | 3.33 | 8.43 | 8.41 |
| 60 | 2.00 | 0.25 | 23.26 | 23.18 | 31.69 | 31.59 |
| 80 | 2.50 | 0.18 | 39.77 | 39.63 | 71.46 | 71.22 |
| 120 | 3.00 | 0.13 | 26.84 | 26.74 | 98.30 | 97.96 |
| 170 | 3.50 | 0.09 | 1.97 | 1.96 | 100.27 | 99.92 |
| 200 | 3.75 | 0.07 | 0.07 | 0.07 | 100.34 | 99.99 |
| 230 | 4.00 | 0.06 | 0.01 | 0.01 | 100.35 | 100.00 |

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|-------|--------|--------|--------|--------|--------|--------|
| Phi 5 | Phi 16 | Phi 25 | Phi 50 | Phi 75 | Phi 84 | Phi 95 |
| 2.94 | 2.74 | 2.57 | 2.23 | 1.86 | 1.66 | 0.97 |

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|-------------------|----------|---------|---------|----------|----------|
| Moment Statistics | Mean Phi | Mean mm | Sorting | Skewness | Kurtosis |
| | 2.14 | 0.23 | 0.69 | -2.19 | 10.5 |

GRANULARMETRIC REPORT GULF COUNTY SUPPLEMENTAL.GPJ FL DEP ROSS.GDT 12/5/07

Granularmetric Report

Depths and elevations based on measured values



715-E North Dr.
Melbourne, Fl. 32934
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Gulf County Supplemental

Sample Name: C-301 #3

Analysis Date: 08-08-06

Analyzed By: AP

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|-------------------------------|------------------------------|---|----------------------------------|
| Easting (ft): 1,674,805.55 | Northing (ft): 258,431.26 | Coordinate System: Florida State Plane North | Elevation (ft): -39.3 NAVD 88 |
|-------------------------------|------------------------------|---|----------------------------------|

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|-------------|----------------------------|-----------|
| USCS: SP | Munsell: Wet - 10YR-8/1 | Comments: |
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|--------------------------|------------------|---------------------------|-----------------|--|---------------|-----------------|-------------|
| Dry Weight (g): 90.66 | Wash Weight (g): | Pan Retained (g): 0.15 | Sieve Loss (%): | Fines (%): #200 - 0.22 #230 - 0.18 | Organics (%): | Carbonates (%): | Shells (%): |
|--------------------------|------------------|---------------------------|-----------------|--|---------------|-----------------|-------------|

| Sieve Number | Sieve Size (Phi) | Sieve Size (Millimeters) | Grams Retained | % Weight Retained | Cum. Grams Retained | C. % Weight Retained |
|--------------|------------------|--------------------------|----------------|-------------------|---------------------|----------------------|
| 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3.5 | -2.50 | 5.66 | 0.09 | 0.10 | 0.09 | 0.10 |
| 4 | -2.25 | 4.76 | 0.00 | 0.00 | 0.09 | 0.10 |
| 5 | -2.00 | 4.00 | 0.00 | 0.00 | 0.09 | 0.10 |
| 7 | -1.50 | 2.83 | 0.28 | 0.31 | 0.37 | 0.41 |
| 10 | -1.00 | 2.00 | 0.43 | 0.47 | 0.80 | 0.88 |
| 14 | -0.50 | 1.41 | 1.41 | 1.56 | 2.21 | 2.44 |
| 18 | 0.00 | 1.00 | 1.19 | 1.31 | 3.40 | 3.75 |
| 25 | 0.50 | 0.71 | 1.52 | 1.68 | 4.92 | 5.43 |
| 35 | 1.00 | 0.50 | 2.54 | 2.80 | 7.46 | 8.23 |
| 45 | 1.50 | 0.35 | 5.77 | 6.36 | 13.23 | 14.59 |
| 60 | 2.00 | 0.25 | 17.47 | 19.27 | 30.70 | 33.86 |
| 80 | 2.50 | 0.18 | 33.93 | 37.43 | 64.63 | 71.29 |
| 120 | 3.00 | 0.13 | 22.92 | 25.28 | 87.55 | 96.57 |
| 170 | 3.50 | 0.09 | 2.82 | 3.11 | 90.37 | 99.68 |
| 200 | 3.75 | 0.07 | 0.09 | 0.10 | 90.46 | 99.78 |
| 230 | 4.00 | 0.06 | 0.04 | 0.04 | 90.50 | 99.82 |

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|-------|--------|--------|--------|--------|--------|--------|
| Phi 5 | Phi 16 | Phi 25 | Phi 50 | Phi 75 | Phi 84 | Phi 95 |
| 2.97 | 2.75 | 2.57 | 2.22 | 1.77 | 1.54 | 0.37 |

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|-------------------|----------|---------|---------|----------|----------|
| Moment Statistics | Mean Phi | Mean mm | Sorting | Skewness | Kurtosis |
| | 2.06 | 0.24 | 0.81 | -1.91 | 8.12 |

GRANULARMETRIC REPORT GULF COUNTY SUPPLEMENTAL.GPJ FL DEP ROSS.GDT 12/5/07

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Depths and elevations based on measured values



715-E North Dr.
Melbourne, Fl. 32934
Phone (321) 751-1135
Fax (321) 751-2343

Project Name: Gulf County Supplemental

Sample Name: C-301 #4

Analysis Date: 08-08-06

Analyzed By: JV

| | | | |
|-------------------------------|------------------------------|---|----------------------------------|
| Easting (ft): 1,674,805.55 | Northing (ft): 258,431.26 | Coordinate System: Florida State Plane North | Elevation (ft): -41.8 NAVD 88 |
|-------------------------------|------------------------------|---|----------------------------------|

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|-------------|----------------------------|-----------|
| USCS: SW | Munsell: Wet - 10YR-7/1 | Comments: |
|-------------|----------------------------|-----------|

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|---------------------------|------------------|---------------------------|-----------------|--|---------------|-----------------|-------------|
| Dry Weight (g): 111.66 | Wash Weight (g): | Pan Retained (g): 0.03 | Sieve Loss (%): | Fines (%): #200 - 0.01 #230 - 0.01 | Organics (%): | Carbonates (%): | Shells (%): |
|---------------------------|------------------|---------------------------|-----------------|--|---------------|-----------------|-------------|

| Sieve Number | Sieve Size (Phi) | Sieve Size (Millimeters) | Grams Retained | % Weight Retained | Cum. Grams Retained | C. % Weight Retained |
|--------------|------------------|--------------------------|----------------|-------------------|---------------------|----------------------|
| 5/8" | -4.00 | 16.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11/16" | -3.50 | 11.31 | 0.59 | 0.53 | 0.59 | 0.53 |
| 5/16" | -3.00 | 8.00 | 2.57 | 2.30 | 3.16 | 2.83 |
| 3.5 | -2.50 | 5.66 | 2.31 | 2.07 | 5.47 | 4.90 |
| 4 | -2.25 | 4.76 | 1.23 | 1.10 | 6.70 | 6.00 |
| 5 | -2.00 | 4.00 | 1.55 | 1.39 | 8.25 | 7.39 |
| 7 | -1.50 | 2.83 | 2.20 | 1.97 | 10.45 | 9.36 |
| 10 | -1.00 | 2.00 | 3.72 | 3.33 | 14.17 | 12.69 |
| 14 | -0.50 | 1.41 | 4.26 | 3.82 | 18.43 | 16.51 |
| 18 | 0.00 | 1.00 | 4.10 | 3.67 | 22.53 | 20.18 |
| 25 | 0.50 | 0.71 | 7.90 | 7.08 | 30.43 | 27.26 |
| 35 | 1.00 | 0.50 | 16.51 | 14.79 | 46.94 | 42.05 |
| 45 | 1.50 | 0.35 | 18.83 | 16.86 | 65.77 | 58.91 |
| 60 | 2.00 | 0.25 | 15.06 | 13.49 | 80.83 | 72.40 |
| 80 | 2.50 | 0.18 | 13.62 | 12.20 | 94.45 | 84.60 |
| 120 | 3.00 | 0.13 | 16.11 | 14.43 | 110.56 | 99.03 |
| 170 | 3.50 | 0.09 | 1.06 | 0.95 | 111.62 | 99.98 |
| 200 | 3.75 | 0.07 | 0.01 | 0.01 | 111.63 | 99.99 |
| 230 | 4.00 | 0.06 | 0.00 | 0.00 | 111.63 | 99.99 |

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|-------|--------|--------|--------|--------|--------|--------|
| Phi 5 | Phi 16 | Phi 25 | Phi 50 | Phi 75 | Phi 84 | Phi 95 |
| 2.86 | 2.48 | 2.11 | 1.24 | 0.34 | -0.57 | -2.48 |

| | | | | | |
|-------------------|----------|---------|---------|----------|----------|
| Moment Statistics | Mean Phi | Mean mm | Sorting | Skewness | Kurtosis |
| | 0.96 | 0.51 | 1.55 | -1.05 | 3.62 |

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