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|--|------------------|--------------------------|-----------------|--|---------------------|----------------------|-------------|
| Granularmetric Report Depths and elevations based on measured values | | | | Scientific Environmental Applications 5575 Willoughby Drive Melbourne, FL 32934 ph 321 254-2708 fax 321 254-2708 | | | |
| Project Name: Palm Beach County Vibracore 2004 | | | | | | | |
| Sample Name: SI04-11 #1.0 | | | | | | | |
| Analysis Date: 07-01-04 | | | | | | | |
| Analyzed By: SEA Inc. | | | | | | | |
| Easting (ft): | | Northing (ft): | | Coordinate System: | | Elevation (ft): | |
| 974,242 | | 895,996 | | Florida State Plane East | | -36.5 NAVD 88 | |
| USCS: | | Munsell: | | Comments: | | | |
| SP | | | | | | | |
| Dry Weight (g): | Wash Weight (g): | Pan Retained (g): | Sieve Loss (%): | Fines (%): | Organics (%): | Carbonates (%): | Shells (%): |
| 63.78 | 63.42 | | -0.13 | #200 - 0.68 #230 - 0.43 | | 26.86 | |
| Sieve Number | Sieve Size (Phi) | Sieve Size (Millimeters) | Grams Retained | % Weight Retained | Cum. Grams Retained | C. % Weight Retained | |
| 3.5 | -2.50 | 5.66 | 0.06 | 0.10 | 0.06 | 0.10 | |
| 7 | -1.50 | 2.83 | 0.01 | 0.01 | 0.07 | 0.11 | |
| 10 | -1.00 | 2.00 | 0.04 | 0.07 | 0.11 | 0.18 | |
| 14 | -0.50 | 1.41 | 0.06 | 0.10 | 0.18 | 0.28 | |
| 18 | 0.00 | 1.00 | 0.15 | 0.23 | 0.32 | 0.50 | |
| 25 | 0.50 | 0.71 | 0.32 | 0.49 | 0.64 | 1.00 | |
| 35 | 1.00 | 0.50 | 0.66 | 1.04 | 1.30 | 2.04 | |
| 45 | 1.50 | 0.35 | 1.32 | 2.07 | 2.62 | 4.11 | |
| 60 | 2.00 | 0.25 | 2.39 | 3.75 | 5.01 | 7.86 | |
| 80 | 2.50 | 0.18 | 4.30 | 6.73 | 9.31 | 14.59 | |
| 120 | 3.00 | 0.13 | 23.37 | 36.65 | 32.68 | 51.24 | |
| 170 | 3.50 | 0.09 | 28.98 | 45.43 | 61.65 | 96.67 | |
| 200 | 3.75 | 0.07 | 1.69 | 2.65 | 63.34 | 99.32 | |
| 230 | 4.00 | 0.06 | 0.16 | 0.25 | 63.50 | 99.57 | |
| | | | | | | | |
| Phi 5 | Phi 16 | Phi 25 | Phi 50 | Phi 75 | Phi 84 | Phi 95 | |
| 3.48 | 3.36 | 3.26 | 2.98 | 2.64 | 2.52 | 1.62 | |
| Moment | Mean Phi | Mean mm | Sorting | Skewness | Kurtosis | | |
| Statistics | 2.85 | 0.14 | 0.59 | -2.29 | 10.73 | | |

GRANULARMETRIC REPORT SINGER_IS.GPJ FL DEP ROSS.GDT 4/28/08

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|--|------------------|--------------------------|-----------------|--|---------------------|----------------------|-------------|
| Granularmetric Report Depths and elevations based on measured values | | | | Scientific Environmental Applications 5575 Willoughby Drive Melbourne, FL 32934 ph 321 254-2708 fax 321 254-2708 | | | |
| Project Name: Palm Beach County Vibracore 2004 | | | | | | | |
| Sample Name: SI04-11 #4.0 | | | | | | | |
| Analysis Date: 07-01-04 | | | | | | | |
| Analyzed By: SEA Inc. | | | | | | | |
| Easting (ft): | | Northing (ft): | | Coordinate System: | | Elevation (ft): | |
| 974,242 | | 895,996 | | Florida State Plane East | | -39.5 NAVD 88 | |
| USCS: | | Munsell: | | Comments: | | | |
| SP | | | | | | | |
| Dry Weight (g): | Wash Weight (g): | Pan Retained (g): | Sieve Loss (%): | Fines (%): | Organics (%): | Carbonates (%): | Shells (%): |
| 73.37 | 73.26 | 0.00 | 0.23 | #200 - 0.38 #230 - 0.37 | | 56.20 | |
| Sieve Number | Sieve Size (Phi) | Sieve Size (Millimeters) | Grams Retained | % Weight Retained | Cum. Grams Retained | C. % Weight Retained | |
| 7 | -1.50 | 2.83 | 0.26 | 0.36 | 0.26 | 0.36 | |
| 10 | -1.00 | 2.00 | 0.34 | 0.46 | 0.60 | 0.82 | |
| 14 | -0.50 | 1.41 | 1.64 | 2.24 | 2.24 | 3.06 | |
| 18 | 0.00 | 1.00 | 3.53 | 4.81 | 5.77 | 7.87 | |
| 25 | 0.50 | 0.71 | 6.91 | 9.41 | 12.68 | 17.28 | |
| 35 | 1.00 | 0.50 | 11.30 | 15.41 | 23.98 | 32.69 | |
| 45 | 1.50 | 0.35 | 13.40 | 18.26 | 37.38 | 50.95 | |
| 60 | 2.00 | 0.25 | 14.27 | 19.45 | 51.65 | 70.41 | |
| 80 | 2.50 | 0.18 | 12.23 | 16.67 | 63.89 | 87.08 | |
| 120 | 3.00 | 0.13 | 6.92 | 9.43 | 70.80 | 96.51 | |
| 170 | 3.50 | 0.09 | 2.17 | 2.96 | 72.97 | 99.47 | |
| 200 | 3.75 | 0.07 | 0.11 | 0.15 | 73.09 | 99.62 | |
| | 4.00 | 0.06 | 0.01 | 0.01 | 73.09 | 99.63 | |
| | | | | | | | |
| Phi 5 | Phi 16 | Phi 25 | Phi 50 | Phi 75 | Phi 84 | Phi 95 | |
| 2.92 | 2.41 | 2.14 | 1.47 | 0.75 | 0.43 | -0.30 | |
| Moment | Mean Phi | Mean mm | Sorting | Skewness | Kurtosis | | |
| Statistics | 1.42 | 0.37 | 0.94 | -0.26 | 2.61 | | |

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|--|------------------|--------------------------|-----------------|--|---------------------|----------------------|-------------|
| Granularmetric Report Depths and elevations based on measured values | | | | Scientific Environmental Applications 5575 Willoughby Drive Melbourne, FL 32934 ph 321 254-2708 fax 321 254-2708 | | | |
| Project Name: Palm Beach County Vibracore 2004 | | | | | | | |
| Sample Name: SI04-11 #8.0 | | | | | | | |
| Analysis Date: 07-01-04 | | | | | | | |
| Analyzed By: SEA Inc. | | | | | | | |
| Easting (ft): | | Northing (ft): | | Coordinate System: | | Elevation (ft): | |
| 974,242 | | 895,996 | | Florida State Plane East | | -43.5 NAVD 88 | |
| USCS: | | Munsell: | | Comments: | | | |
| SP | | | | | | | |
| Dry Weight (g): | Wash Weight (g): | Pan Retained (g): | Sieve Loss (%): | Fines (%): | Organics (%): | Carbonates (%): | Shells (%): |
| 66.36 | 65.99 | 0.00 | 0.09 | #200 - 0.68 #230 - 0.64 | | 70.44 | |
| Sieve Number | Sieve Size (Phi) | Sieve Size (Millimeters) | Grams Retained | % Weight Retained | Cum. Grams Retained | C. % Weight Retained | |
| 5/16" | -3.00 | 8.00 | 1.12 | 1.69 | 1.12 | 1.69 | |
| 7 | -1.50 | 2.83 | 0.09 | 0.14 | 1.21 | 1.83 | |
| 10 | -1.00 | 2.00 | 0.38 | 0.57 | 1.59 | 2.40 | |
| 14 | -0.50 | 1.41 | 1.11 | 1.67 | 2.70 | 4.07 | |
| 18 | 0.00 | 1.00 | 3.03 | 4.56 | 5.72 | 8.63 | |
| 25 | 0.50 | 0.71 | 7.35 | 11.07 | 13.07 | 19.70 | |
| 35 | 1.00 | 0.50 | 12.43 | 18.74 | 25.50 | 38.43 | |
| 45 | 1.50 | 0.35 | 12.33 | 18.58 | 37.83 | 57.02 | |
| 60 | 2.00 | 0.25 | 8.51 | 12.83 | 46.35 | 69.84 | |
| 80 | 2.50 | 0.18 | 6.10 | 9.19 | 52.44 | 79.03 | |
| 120 | 3.00 | 0.13 | 8.53 | 12.85 | 60.97 | 91.88 | |
| 170 | 3.50 | 0.09 | 4.68 | 7.05 | 65.65 | 98.93 | |
| 200 | 3.75 | 0.07 | 0.26 | 0.38 | 65.91 | 99.32 | |
| | 4.00 | 0.06 | 0.03 | 0.04 | 65.93 | 99.36 | |
| | | | | | | | |
| Phi 5 | Phi 16 | Phi 25 | Phi 50 | Phi 75 | Phi 84 | Phi 95 | |
| 3.22 | 2.69 | 2.28 | 1.31 | 0.64 | 0.33 | -0.40 | |
| Moment | Mean Phi | Mean mm | Sorting | Skewness | Kurtosis | | |
| Statistics | 1.43 | 0.37 | 1.05 | 0.01 | 2.44 | | |

GRANULARMETRIC REPORT SINGER_IS.GPJ FL DEP ROSS.GDT 4/28/08

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|--|--|--|--|--|---------------------|---|-------------|
| Granularmetric Report Depths and elevations based on measured values | | | | Scientific Environmental Applications 5575 Willoughby Drive Melbourne, FL 32934 ph 321 254-2708 fax 321 254-2708 | | | |
| Project Name: Palm Beach County Vibracore 2004 | | | | | | | |
| Sample Name: SI04-11 #12.0 | | | | | | | |
| Analysis Date: 07-01-04 | | | | | | | |
| Analyzed By: SEA Inc. | | | | | | | |
| Easting (ft): <div style="text-align: center;">974,242</div> | | Northing (ft): <div style="text-align: center;">895,996</div> | | Coordinate System: <div style="text-align: center;">Florida State Plane East</div> | | Elevation (ft): <div style="text-align: center;">-47.5 NAVD 88</div> | |
| USCS: <div style="text-align: center;">SP</div> | | Munsell: | | Comments: | | | |
| Dry Weight (g): <div style="text-align: center;">69.14</div> | Wash Weight (g): <div style="text-align: center;">68.66</div> | Pan Retained (g): <div style="text-align: center;">0.00</div> | Sieve Loss (%): <div style="text-align: center;">0.53</div> | Fines (%): #200 - 1.29 #230 - 1.22 | Organics (%): | Carbonates (%): <div style="text-align: center;">69.67</div> | Shells (%): |
| Sieve Number | Sieve Size (Phi) | Sieve Size (Millimeters) | Grams Retained | % Weight Retained | Cum. Grams Retained | C. % Weight Retained | |
| 11/16" | -3.50 | 11.31 | 1.55 | 2.24 | 1.55 | 2.24 | |
| 5/16" | -3.00 | 8.00 | 0.66 | 0.95 | 2.21 | 3.19 | |
| 3.5 | -2.50 | 5.66 | 0.45 | 0.65 | 2.65 | 3.84 | |
| 5 | -2.00 | 4.00 | 0.57 | 0.82 | 3.22 | 4.66 | |
| 7 | -1.50 | 2.83 | 0.43 | 0.62 | 3.65 | 5.27 | |
| 10 | -1.00 | 2.00 | 0.35 | 0.50 | 3.99 | 5.78 | |
| 14 | -0.50 | 1.41 | 1.18 | 1.71 | 5.18 | 7.49 | |
| 18 | 0.00 | 1.00 | 3.10 | 4.48 | 8.27 | 11.96 | |
| 25 | 0.50 | 0.71 | 6.77 | 9.80 | 15.04 | 21.76 | |
| 35 | 1.00 | 0.50 | 10.67 | 15.43 | 25.72 | 37.20 | |
| 45 | 1.50 | 0.35 | 11.39 | 16.47 | 37.10 | 53.66 | |
| 60 | 2.00 | 0.25 | 8.38 | 12.13 | 45.48 | 65.79 | |
| 80 | 2.50 | 0.18 | 6.79 | 9.82 | 52.28 | 75.61 | |
| 120 | 3.00 | 0.13 | 10.08 | 14.58 | 62.36 | 90.20 | |
| 170 | 3.50 | 0.09 | 5.49 | 7.94 | 67.85 | 98.14 | |
| 200 | 3.75 | 0.07 | 0.39 | 0.57 | 68.24 | 98.71 | |
| | 4.00 | 0.06 | 0.05 | 0.07 | 68.29 | 98.78 | |
| | | | | | | | |
| Phi 5 | Phi 16 | Phi 25 | Phi 50 | Phi 75 | Phi 84 | Phi 95 | |
| 3.30 | 2.79 | 2.47 | 1.39 | 0.60 | 0.21 | -1.72 | |
| Moment | Mean Phi | Mean mm | Sorting | Skewness | Kurtosis | | |
| Statistics | 1.4 | 0.38 | 1.28 | -0.83 | 4.35 | | |

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|--|--|--|--|--|---------------------|---|-------------|
| Granularmetric Report Depths and elevations based on measured values | | | | Scientific Environmental Applications 5575 Willoughby Drive Melbourne, FL 32934 ph 321 254-2708 fax 321 254-2708 | | | |
| Project Name: Palm Beach County Vibracore 2004 | | | | | | | |
| Sample Name: SI04-11 #Comp | | | | | | | |
| Analysis Date: 07-01-04 | | | | | | | |
| Analyzed By: SEA Inc. | | | | | | | |
| Easting (ft): <div style="text-align: center;">974,242</div> | | Northing (ft): <div style="text-align: center;">895,996</div> | | Coordinate System: <div style="text-align: center;">Florida State Plane East</div> | | Elevation (ft): <div style="text-align: center;">-54.5 NAVD 88</div> | |
| USCS: <div style="text-align: center;">SP</div> | | Munsell: | | Comments: | | | |
| Dry Weight (g): <div style="text-align: center;">91.21</div> | Wash Weight (g): <div style="text-align: center;">90.65</div> | Pan Retained (g): <div style="text-align: center;">0.00</div> | Sieve Loss (%): <div style="text-align: center;">0.05</div> | Fines (%): #200 - 0.78 #230 - 0.66 | Organics (%): | Carbonates (%): <div style="text-align: center;">54.24</div> | 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 | 1.71 | 1.87 | 1.71 | 1.87 | |
| 3.5 | -2.50 | 5.66 | 0.47 | 0.52 | 2.18 | 2.39 | |
| 5 | -2.00 | 4.00 | 0.09 | 0.10 | 2.26 | 2.48 | |
| 7 | -1.50 | 2.83 | 0.63 | 0.69 | 2.90 | 3.18 | |
| 10 | -1.00 | 2.00 | 0.80 | 0.88 | 3.69 | 4.05 | |
| 14 | -0.50 | 1.41 | 1.96 | 2.15 | 5.66 | 6.20 | |
| 18 | 0.00 | 1.00 | 3.25 | 3.56 | 8.90 | 9.76 | |
| 25 | 0.50 | 0.71 | 5.35 | 5.87 | 14.26 | 15.63 | |
| 35 | 1.00 | 0.50 | 7.32 | 8.02 | 21.57 | 23.65 | |
| 45 | 1.50 | 0.35 | 7.67 | 8.41 | 29.24 | 32.06 | |
| 60 | 2.00 | 0.25 | 9.27 | 10.17 | 38.51 | 42.23 | |
| 80 | 2.50 | 0.18 | 12.05 | 13.21 | 50.56 | 55.44 | |
| 120 | 3.00 | 0.13 | 21.76 | 23.86 | 72.32 | 79.29 | |
| 170 | 3.50 | 0.09 | 17.02 | 18.66 | 89.34 | 97.96 | |
| 200 | 3.75 | 0.07 | 1.15 | 1.26 | 90.50 | 99.22 | |
| | 4.00 | 0.06 | 0.11 | 0.12 | 90.61 | 99.34 | |
| | | | | | | | |
| Phi 5 | Phi 16 | Phi 25 | Phi 50 | Phi 75 | Phi 84 | Phi 95 | |
| 3.42 | 3.13 | 2.91 | 2.29 | 1.08 | 0.52 | -0.78 | |
| Moment | Mean Phi | Mean mm | Sorting | Skewness | Kurtosis | | |
| Statistics | 1.95 | 0.26 | 1.25 | -1.1 | 4.09 | | |