

Onshore Grab Sample

Sample: MN-03-BB
Sample Taken By: D. Phelps
Sample Collected On: 12/2/09
Splits? N/A

County: Manatee
Latitude: 27° 31' 7.8"
Longitude: 82° 43' 47.2"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight 55.757 grams
Total Fines in Sample 0.112 grams
Total Percent Fines 0.20 %

Dry Sieving Summary

Total Sample Weight 55.189 grams
Total Digested Weight 30.831 grams
Total Carbonate Weight 24.358 grams
Total Silica % 55.86 %
Total Carbonate % 44.14 %
Carbonate/Silica Ratio 0.790

General Comments:

Spilt some sample at 2.50 phi.

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: MN-03-BB

Total Sample Mass: 55.189 grams

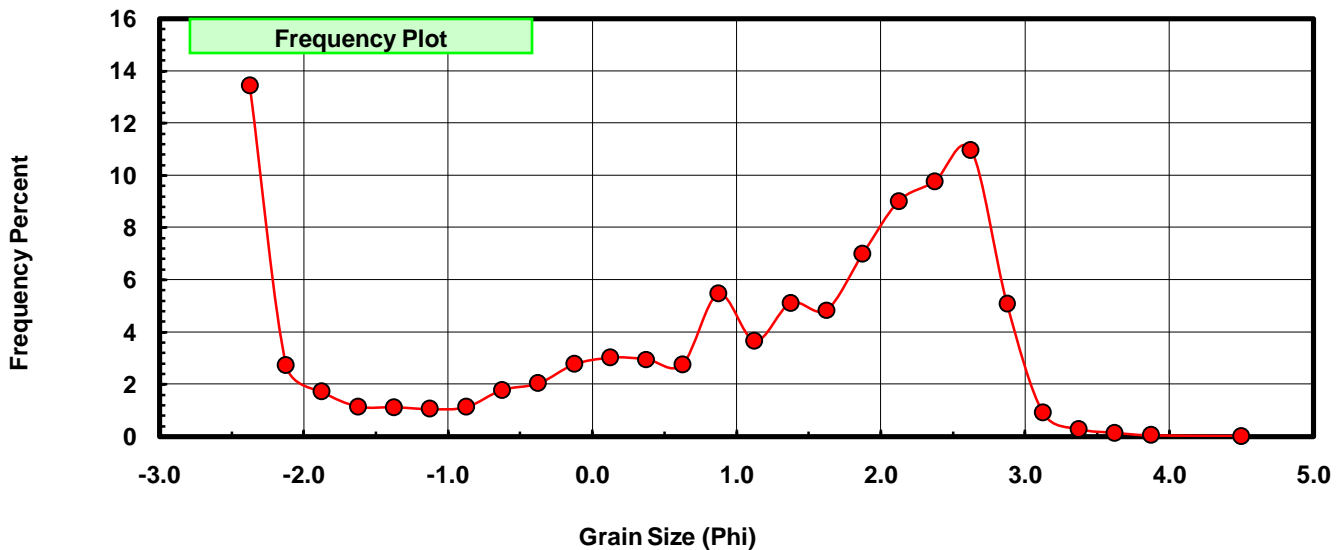
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 7.413 | 13.432 | 13.432 |
| -2.00 | -2.125 | 1.502 | 2.722 | 16.154 |
| -1.75 | -1.875 | 0.949 | 1.720 | 17.873 |
| -1.50 | -1.625 | 0.630 | 1.142 | 19.015 |
| -1.25 | -1.375 | 0.616 | 1.116 | 20.131 |
| -1.00 | -1.125 | 0.583 | 1.056 | 21.187 |
| -0.75 | -0.875 | 0.624 | 1.131 | 22.318 |
| -0.50 | -0.625 | 0.982 | 1.779 | 24.097 |
| -0.25 | -0.375 | 1.126 | 2.040 | 26.137 |
| 0.00 | -0.125 | 1.530 | 2.772 | 28.910 |
| 0.25 | 0.125 | 1.668 | 3.022 | 31.932 |
| 0.50 | 0.375 | 1.635 | 2.963 | 34.895 |
| 0.75 | 0.625 | 1.523 | 2.760 | 37.654 |
| 1.00 | 0.875 | 3.016 | 5.465 | 43.119 |
| 1.25 | 1.125 | 2.025 | 3.669 | 46.788 |
| 1.50 | 1.375 | 2.819 | 5.108 | 51.896 |
| 1.75 | 1.625 | 2.676 | 4.849 | 56.745 |
| 2.00 | 1.875 | 3.860 | 6.994 | 63.739 |
| 2.25 | 2.125 | 4.974 | 9.013 | 72.752 |
| 2.50 | 2.375 | 5.391 | 9.768 | 82.520 |
| 2.75 | 2.625 | 6.051 | 10.964 | 93.484 |
| 3.00 | 2.875 | 2.809 | 5.090 | 98.574 |
| 3.25 | 3.125 | 0.512 | 0.928 | 99.502 |
| 3.50 | 3.375 | 0.158 | 0.286 | 99.788 |
| 3.75 | 3.625 | 0.079 | 0.143 | 99.931 |
| 4.00 | 3.875 | 0.028 | 0.051 | 99.982 |
| 5.00 | 4.50 | 0.010 | 0.018 | 100.000 |

| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | 0.8187 | phi | (0.567 mm) |
| Standard Dev: | 1.8098 | phi-units | (0.2852 mm) |
| Skewness: | -0.6795 | dimensionless | |
| Kurtosis: | 2.0466 | dimensionless | |
| 5th Moment: | -2.5458 | dimensionless | |
| 6th Moment: | 5.3600 | dimensionless | |
| RARD * | 2.2106 | dimensionless | |
| Median | 1.2822 | phi | (0.4112 mm) |

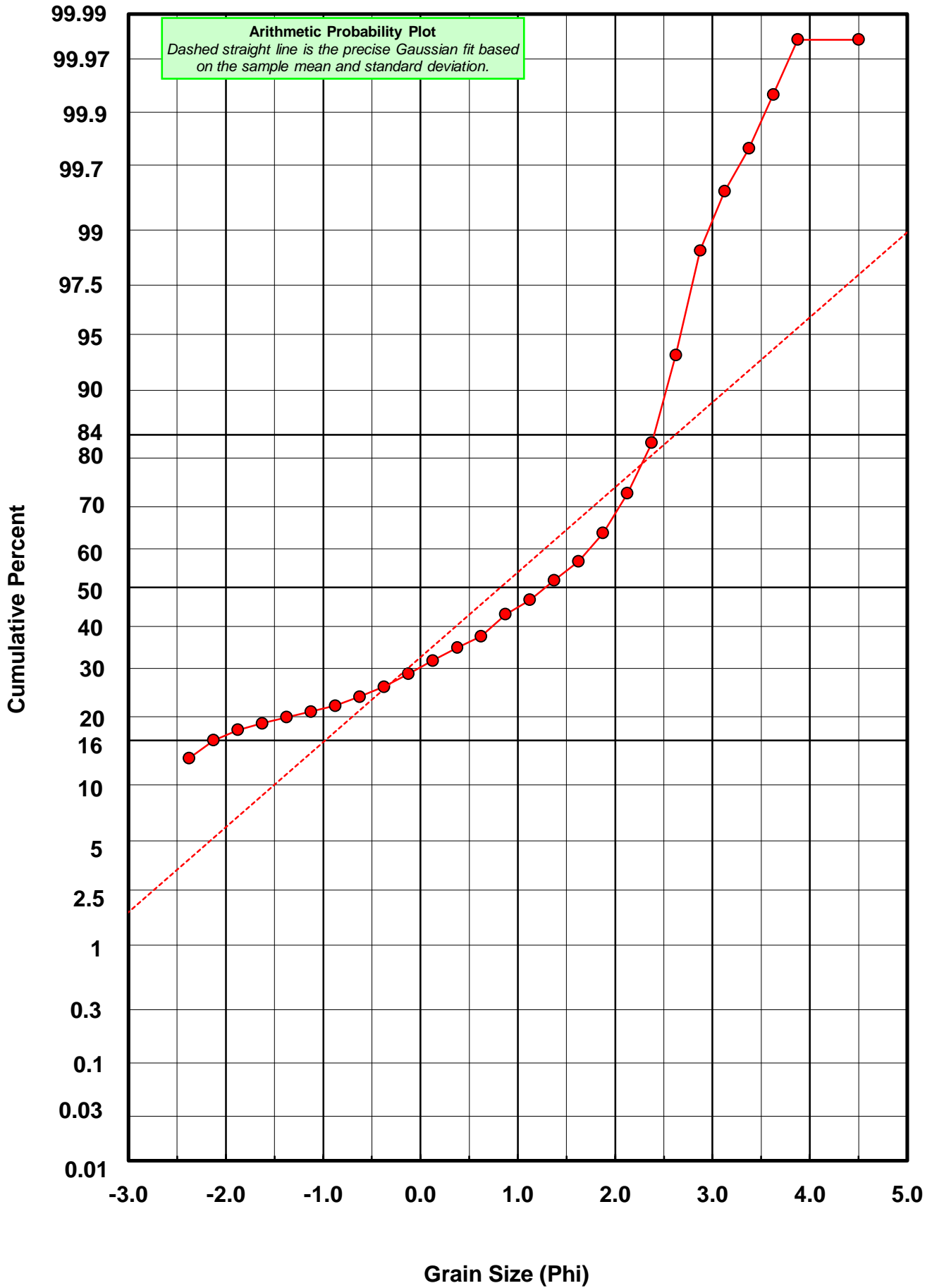
* RARD = reciprocal absolute relative dispersion (see below)

| Statistical Explanation | |
|---|--|
| Calculations based on the Method of Moments | |
| Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0 | |
| Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0 | |
| For Further Explanation, See Basille et al. 2002 | |
| Millimeter data calculated by $mm = 2^{-(\phi)}$ | |

| Reciprocal Absolute Relative Dispersion (RARD) Scale | |
|--|---------------------------------------|
| < 0.5 | Excellent homogeneity (e.g., beaches) |
| 0.5 to 1.0 | Good homogeneity |
| 1.0 to 1.33 | Fair homogeneity |
| > 1.33 | Poor homogeneity (e.g., glacial) |



MN-03-BB



Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: MN-03-BB

Total Carbonate Mass: 24.485 grams

% Carbonate: 44.1 %

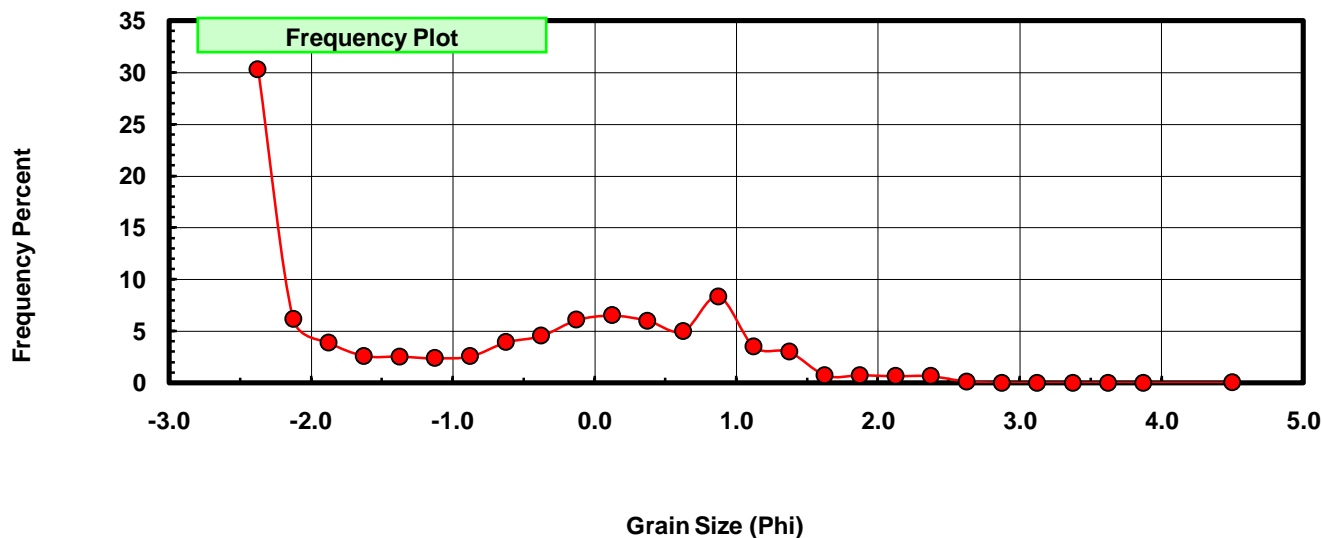
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 7.413 | 30.276 | 30.276 |
| -2.00 | -2.125 | 1.502 | 6.134 | 36.410 |
| -1.75 | -1.875 | 0.949 | 3.876 | 40.286 |
| -1.50 | -1.625 | 0.630 | 2.573 | 42.859 |
| -1.25 | -1.375 | 0.616 | 2.516 | 45.375 |
| -1.00 | -1.125 | 0.583 | 2.381 | 47.756 |
| -0.75 | -0.875 | 0.624 | 2.548 | 50.304 |
| -0.50 | -0.625 | 0.961 | 3.925 | 54.229 |
| -0.25 | -0.375 | 1.113 | 4.546 | 58.775 |
| 0.00 | -0.125 | 1.486 | 6.069 | 64.844 |
| 0.25 | 0.125 | 1.594 | 6.510 | 71.354 |
| 0.50 | 0.375 | 1.465 | 5.983 | 77.337 |
| 0.75 | 0.625 | 1.220 | 4.983 | 82.320 |
| 1.00 | 0.875 | 2.043 | 8.344 | 90.664 |
| 1.25 | 1.125 | 0.850 | 3.472 | 94.135 |
| 1.50 | 1.375 | 0.732 | 2.990 | 97.125 |
| 1.75 | 1.625 | 0.176 | 0.719 | 97.844 |
| 2.00 | 1.875 | 0.181 | 0.739 | 98.583 |
| 2.25 | 2.125 | 0.157 | 0.641 | 99.224 |
| 2.50 | 2.375 | 0.156 | 0.637 | 99.861 |
| 2.75 | 2.625 | 0.030 | 0.123 | 99.984 |
| 3.00 | 2.875 | 0.000 | 0.000 | 99.984 |
| 3.25 | 3.125 | 0.000 | 0.000 | 99.984 |
| 3.50 | 3.375 | 0.000 | 0.000 | 99.984 |
| 3.75 | 3.625 | 0.000 | 0.000 | 99.984 |
| 4.00 | 3.875 | 0.000 | 0.000 | 99.984 |
| 5.00 | 4.500 | 0.004 | 0.016 | 100.000 |

| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | -0.8236 | phi | (1.7698 mm) |
| Standard Dev: | 1.4242 | phi-units | (0.3726 mm) |
| Skewness: | 0.2485 | dimensionless | |
| Kurtosis: | 1.6227 | dimensionless | |
| 5th Moment: | 1.3805 | dimensionless | |
| 6th Moment: | 4.2204 | dimensionless | |
| RARD * | 1.7292 | dimensionless | |
| Median | -0.9048 | phi | (1.8723 mm) |

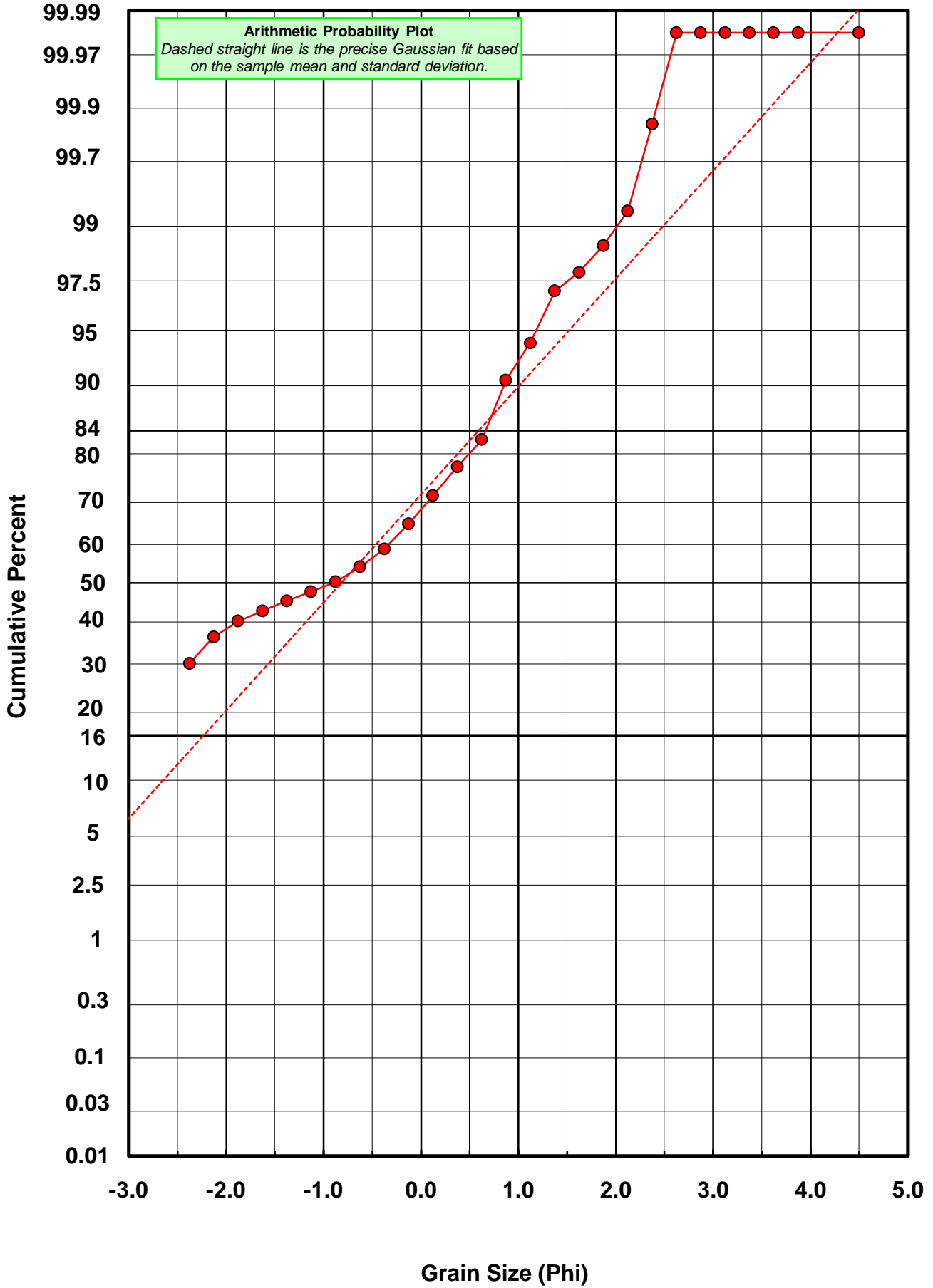
* RARD = reciprocal absolute relative dispersion (see below)

| Statistical Explanation | |
|---|--|
| Calculations based on the Method of Moments | |
| Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0 | |
| Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0 | |
| For Further Explanation, See Basille et al. 2002 | |
| Millimeter data calculated by $mm = 2^{-(\phi)}$ | |

| Reciprocal Absolute Relative Dispersion (RARD) Scale | |
|--|---------------------------------------|
| < 0.5 | Excellent homogeneity (e.g., beaches) |
| 0.5 to 1.0 | Good homogeneity |
| 1.0 to 1.33 | Fair homogeneity |
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MN-03-BB



Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: MN-03-BB

Total Digested Mass: 30.831 grams

% Silica: 55.9 %

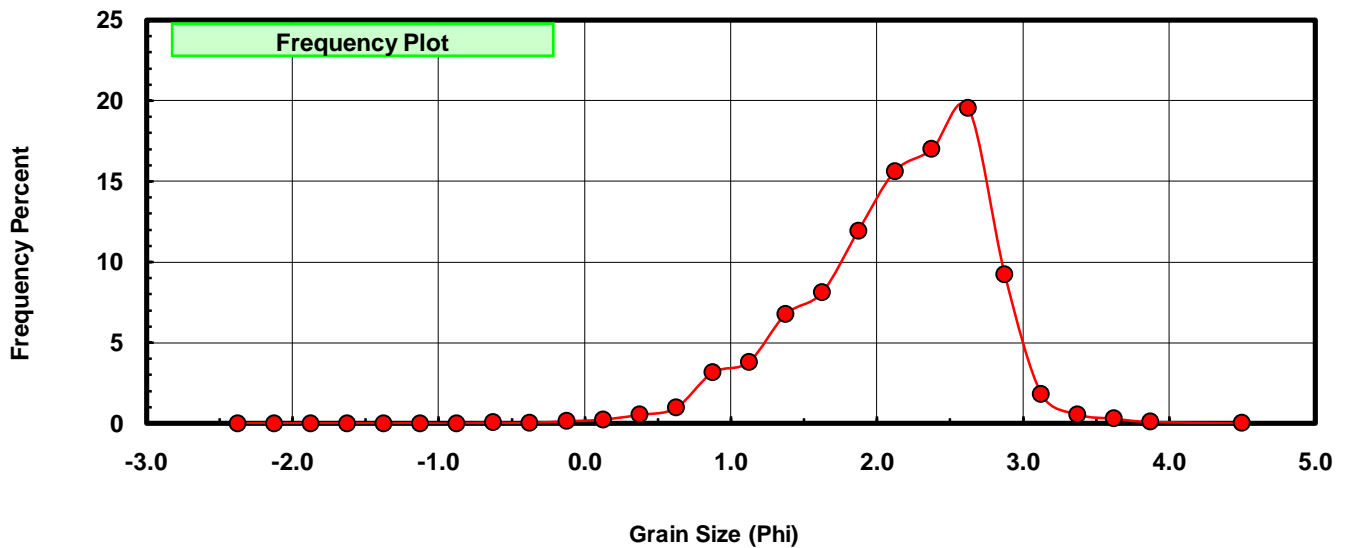
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 0.000 | 0.000 |
| -1.50 | -1.625 | 0.000 | 0.000 | 0.000 |
| -1.25 | -1.375 | 0.000 | 0.000 | 0.000 |
| -1.00 | -1.125 | 0.000 | 0.000 | 0.000 |
| -0.75 | -0.875 | 0.000 | 0.000 | 0.000 |
| -0.50 | -0.625 | 0.021 | 0.068 | 0.068 |
| -0.25 | -0.375 | 0.013 | 0.042 | 0.110 |
| 0.00 | -0.125 | 0.044 | 0.143 | 0.253 |
| 0.25 | 0.125 | 0.074 | 0.240 | 0.493 |
| 0.50 | 0.375 | 0.170 | 0.551 | 1.044 |
| 0.75 | 0.625 | 0.303 | 0.983 | 2.027 |
| 1.00 | 0.875 | 0.973 | 3.156 | 5.183 |
| 1.25 | 1.125 | 1.175 | 3.811 | 8.994 |
| 1.50 | 1.375 | 2.087 | 6.769 | 15.763 |
| 1.75 | 1.625 | 2.500 | 8.109 | 23.872 |
| 2.00 | 1.875 | 3.679 | 11.933 | 35.805 |
| 2.25 | 2.125 | 4.817 | 15.624 | 51.429 |
| 2.50 | 2.375 | 5.235 | 16.980 | 68.408 |
| 2.75 | 2.625 | 6.021 | 19.529 | 87.937 |
| 3.00 | 2.875 | 2.844 | 9.224 | 97.162 |
| 3.25 | 3.125 | 0.566 | 1.836 | 98.998 |
| 3.50 | 3.375 | 0.174 | 0.564 | 99.562 |
| 3.75 | 3.625 | 0.095 | 0.308 | 99.870 |
| 4.00 | 3.875 | 0.034 | 0.110 | 99.981 |
| 5.00 | 4.500 | 0.006 | 0.019 | 100.000 |

| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | 2.1327 | phi | (0.228 mm) |
| Standard Dev: | 0.6156 | phi-units | (0.6527 mm) |
| Skewness: | -0.6795 | dimensionless | |
| Kurtosis: | 3.4892 | dimensionless | |
| 5th Moment: | -6.1278 | dimensionless | |
| 6th Moment: | 25.8855 | dimensionless | |
| RARD * | 0.2887 | dimensionless | |
| Median | 2.1021 | phi | (0.2329 mm) |

* RARD = reciprocal absolute relative dispersion (see below)

| Statistical Explanation | |
|---|--|
| Calculations based on the Method of Moments | |
| Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0 | |
| Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0 | |
| For Further Explanation, See Basille et al. 2002 | |
| Millimeter data calculated by $mm = 2^{-(\phi)}$ | |

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