

**Onshore Grab Sample**

**Sample:** BV-24-BB  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 3/18/09  
**Splits?** N/A

**County:** Brevard  
**Latitude:** 28° 30' 36.1"  
**Longitude:** 80° 33' 10.0"  
**Datum:** WGS 84  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 66.674 grams  
Total Fines in Sample 0.083 grams  
Total Percent Fines 0.12 %

**Dry Sieving Summary**

Total Sample Weight 66.565 grams  
Total Digested Weight 52.899 grams  
Total Carbonate Weight 13.666 grams  
Total Silica % 79.47 %  
Total Carbonate % 20.53 %  
Carbonate/Silica Ratio 0.258

**General Comments:**

None

**Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: BV-24-BB

Total Sample Mass: 66.565 grams

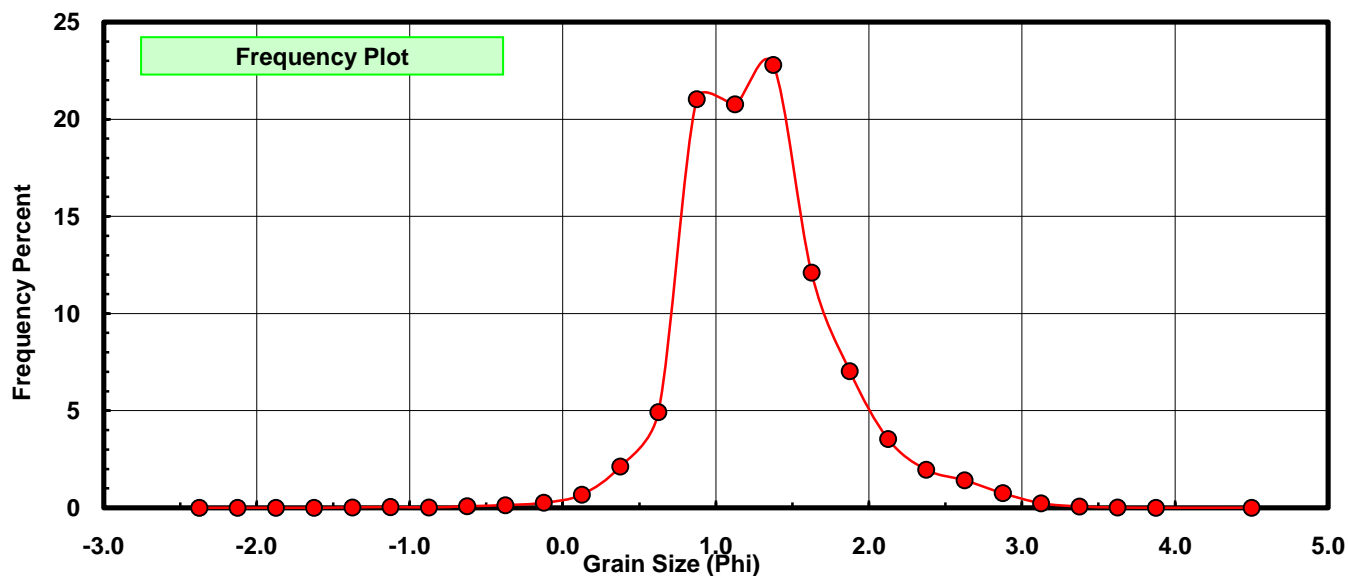
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25            | -2.375            | 0.000          | 0.000         | 0.000               |
| -2.00            | -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            | 0.013          | 0.020         | 0.020               |
| -1.00            | -1.125            | 0.027          | 0.041         | 0.060               |
| -0.75            | -0.875            | 0.010          | 0.015         | 0.075               |
| -0.50            | -0.625            | 0.052          | 0.078         | 0.153               |
| -0.25            | -0.375            | 0.092          | 0.138         | 0.291               |
| 0.00             | -0.125            | 0.170          | 0.255         | 0.547               |
| 0.25             | 0.125             | 0.452          | 0.679         | 1.226               |
| 0.50             | 0.375             | 1.411          | 2.120         | 3.346               |
| 0.75             | 0.625             | 3.282          | 4.931         | 8.276               |
| 1.00             | 0.875             | 14.004         | 21.038        | 29.314              |
| 1.25             | 1.125             | 13.823         | 20.766        | 50.080              |
| 1.50             | 1.375             | 15.172         | 22.793        | 72.873              |
| 1.75             | 1.625             | 8.059          | 12.107        | 84.980              |
| 2.00             | 1.875             | 4.685          | 7.038         | 92.018              |
| 2.25             | 2.125             | 2.355          | 3.538         | 95.556              |
| 2.50             | 2.375             | 1.301          | 1.954         | 97.511              |
| 2.75             | 2.625             | 0.943          | 1.417         | 98.927              |
| 3.00             | 2.875             | 0.499          | 0.750         | 99.677              |
| 3.25             | 3.125             | 0.156          | 0.234         | 99.911              |
| 3.50             | 3.375             | 0.045          | 0.068         | 99.979              |
| 3.75             | 3.625             | 0.011          | 0.017         | 99.995              |
| 4.00             | 3.875             | 0.001          | 0.002         | 99.997              |
| 5.00             | 4.50              | 0.002          | 0.003         | 100.000             |

| Statistical Results |         |               |             |
|---------------------|---------|---------------|-------------|
| Mean:               | 1.2880  | phi           | (0.4095 mm) |
| Standard Dev:       | 0.5039  | phi-units     | (0.7052 mm) |
| Skewness:           | 0.5228  | dimensionless |             |
| Kurtosis:           | 4.6715  | dimensionless |             |
| 5th Moment:         | 4.0544  | dimensionless |             |
| 6th Moment:         | 46.2314 | dimensionless |             |
| RARD *              | 0.3913  | dimensionless |             |
| Median              | 1.1240  | phi           | (0.4588 mm) |

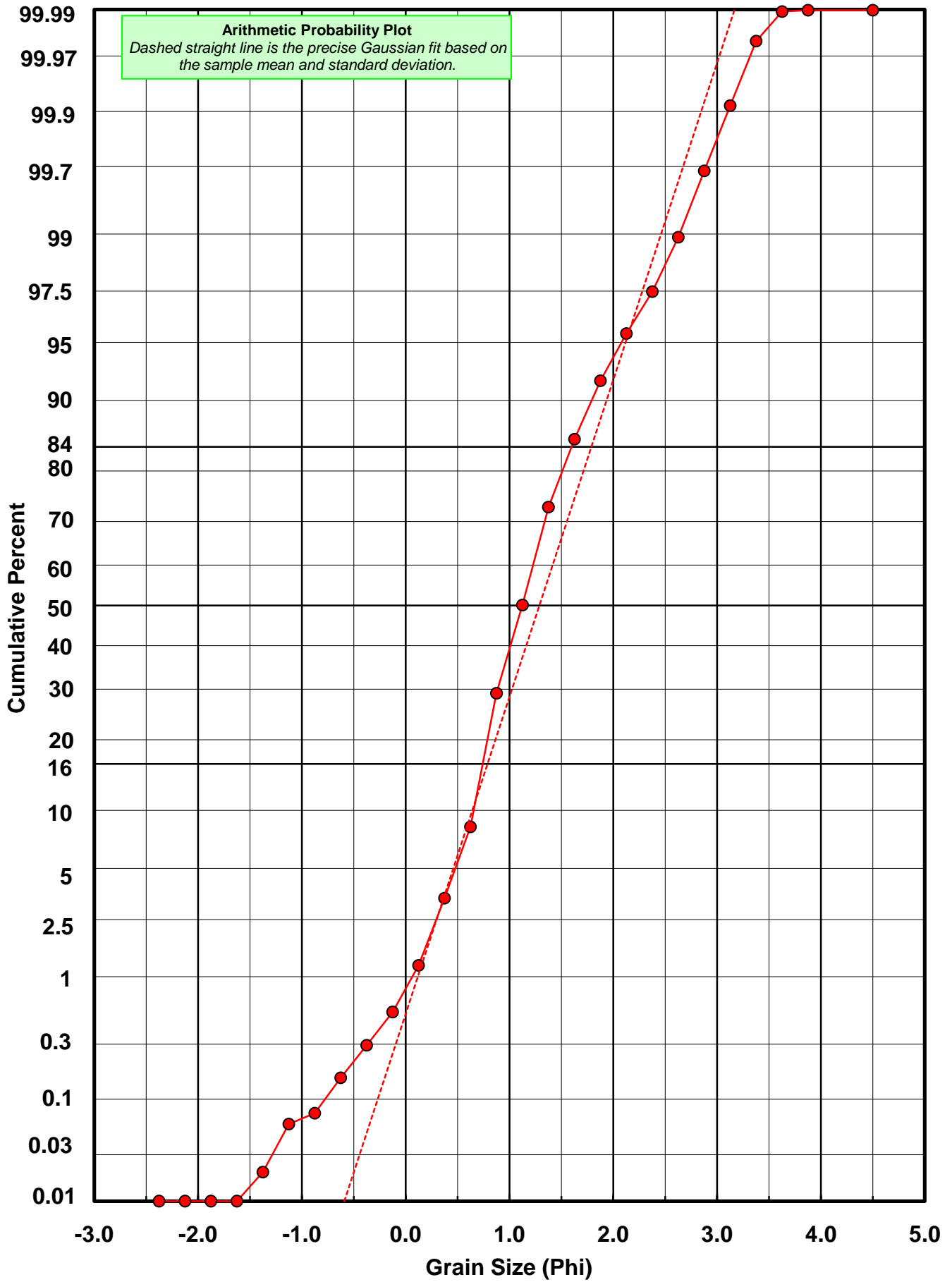
\* RARD = reciprocal absolute relative dispersion (see below)

| 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)      |



# BV-24-BB



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: BV-24-BB

Total Carbonate Mass: 13.673 grams

% Carbonate: 20.5 %

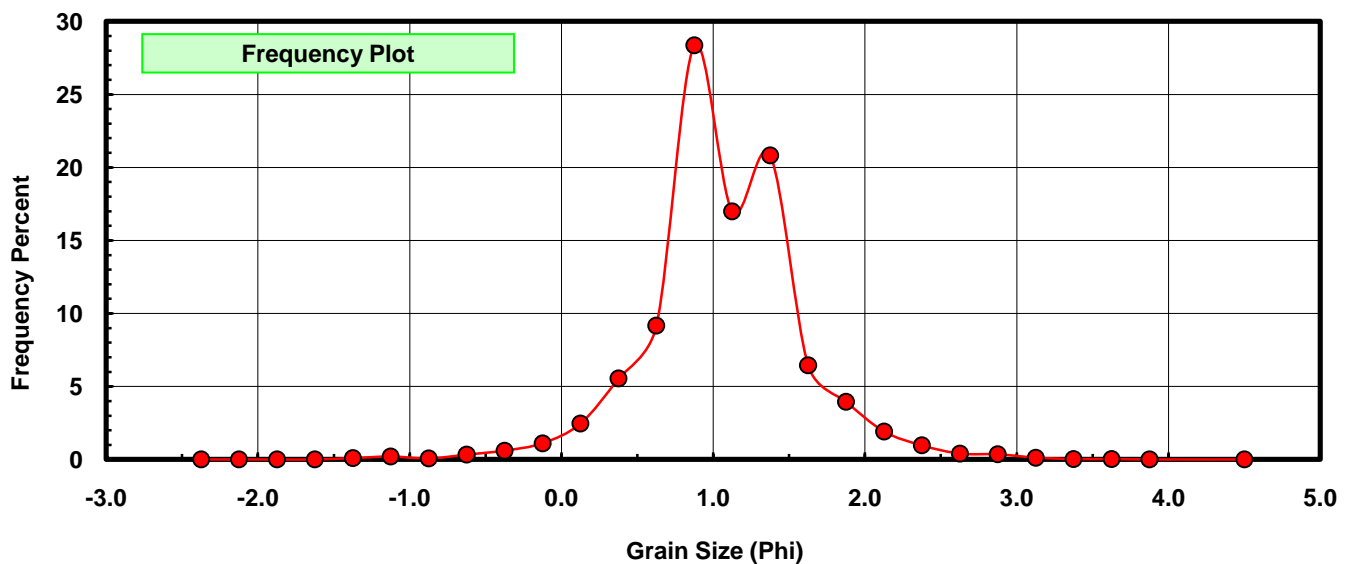
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25            | -2.375            | 0.000          | 0.000         | 0.000               |
| -2.00            | -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            | 0.013          | 0.095         | 0.095               |
| -1.00            | -1.125            | 0.027          | 0.197         | 0.293               |
| -0.75            | -0.875            | 0.010          | 0.073         | 0.366               |
| -0.50            | -0.625            | 0.045          | 0.329         | 0.695               |
| -0.25            | -0.375            | 0.083          | 0.607         | 1.302               |
| 0.00             | -0.125            | 0.152          | 1.112         | 2.414               |
| 0.25             | 0.125             | 0.337          | 2.465         | 4.878               |
| 0.50             | 0.375             | 0.758          | 5.544         | 10.422              |
| 0.75             | 0.625             | 1.253          | 9.164         | 19.586              |
| 1.00             | 0.875             | 3.878          | 28.362        | 47.949              |
| 1.25             | 1.125             | 2.324          | 16.997        | 64.946              |
| 1.50             | 1.375             | 2.848          | 20.829        | 85.775              |
| 1.75             | 1.625             | 0.881          | 6.443         | 92.218              |
| 2.00             | 1.875             | 0.542          | 3.964         | 96.182              |
| 2.25             | 2.125             | 0.262          | 1.916         | 98.098              |
| 2.50             | 2.375             | 0.132          | 0.965         | 99.064              |
| 2.75             | 2.625             | 0.055          | 0.402         | 99.466              |
| 3.00             | 2.875             | 0.048          | 0.351         | 99.817              |
| 3.25             | 3.125             | 0.017          | 0.124         | 99.941              |
| 3.50             | 3.375             | 0.004          | 0.029         | 99.971              |
| 3.75             | 3.625             | 0.004          | 0.029         | 100.000             |
| 4.00             | 3.875             | 0.000          | 0.000         | 100.000             |
| 5.00             | 4.500             | 0.000          | 0.000         | 100.000             |

| Statistical Results |         |               |             |
|---------------------|---------|---------------|-------------|
| Mean:               | 1.0663  | phi           | (0.4775 mm) |
| Standard Dev:       | 0.5365  | phi-units     | (0.6895 mm) |
| Skewness:           | -0.0245 | dimensionless |             |
| Kurtosis:           | 4.9901  | dimensionless |             |
| 5th Moment:         | -1.4177 | dimensionless |             |
| 6th Moment:         | 51.4396 | dimensionless |             |
| RARD *              | 0.5031  | dimensionless |             |
| Median              | 0.9052  | phi           | (0.534 mm)  |

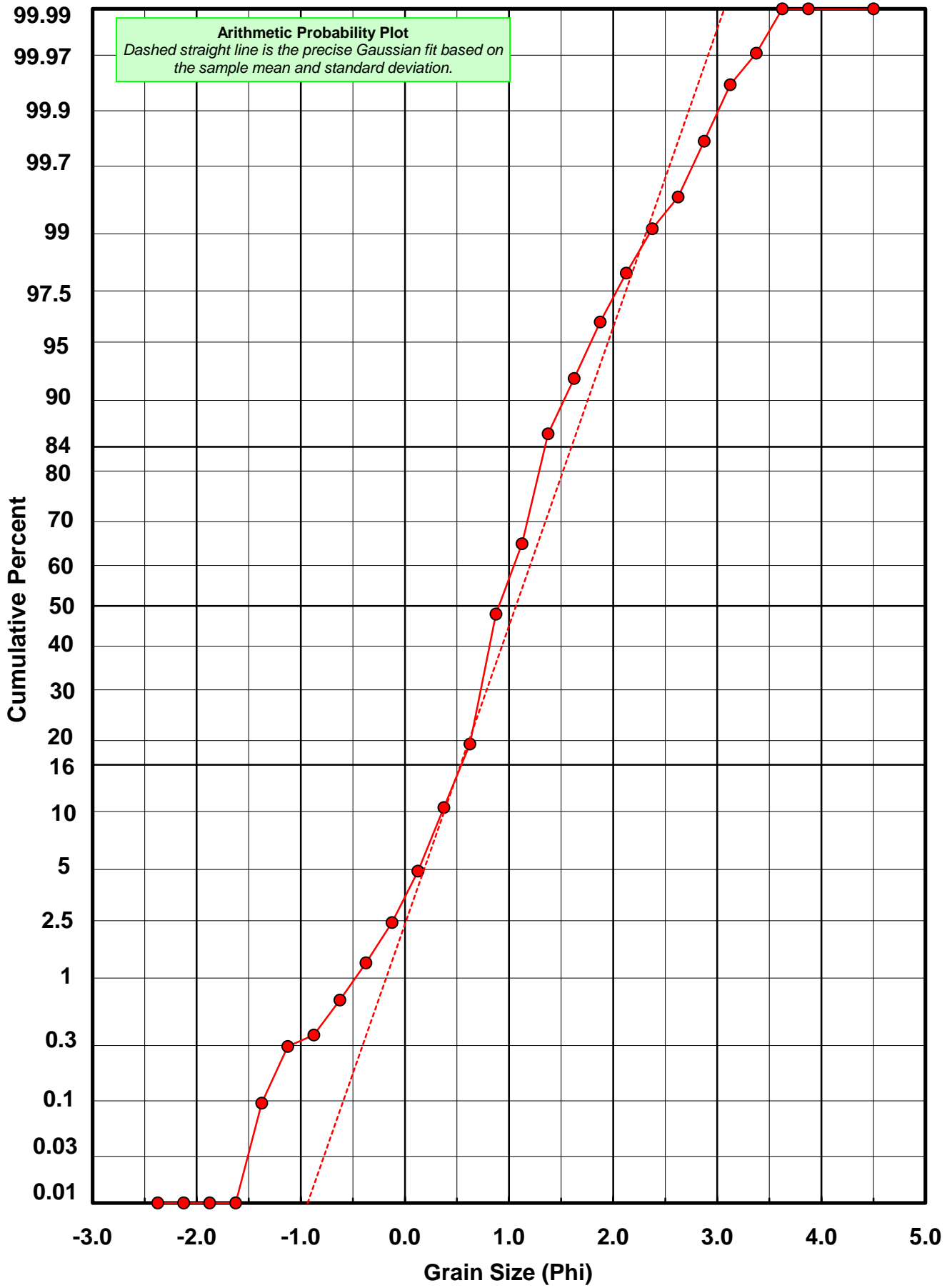
\* RARD = reciprocal absolute relative dispersion (see below)

| 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)      |



# BV-24-BB



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: BV-24-BB

Total Digested Mass: 52.899 grams

% Silica: 79.5 %

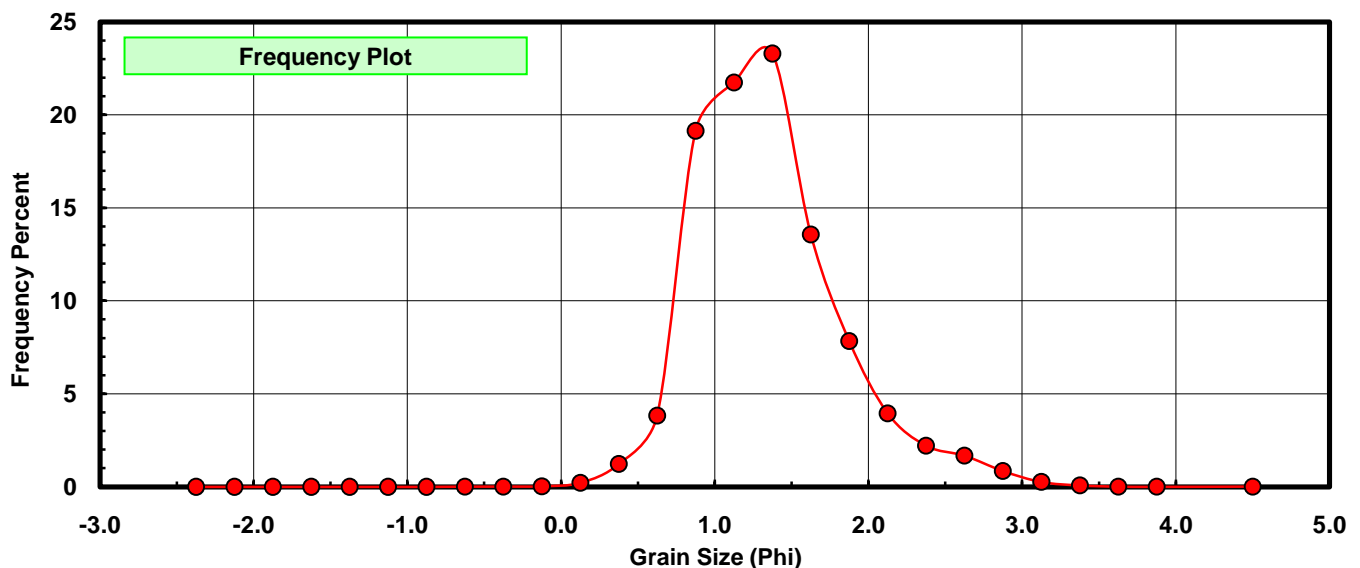
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25            | -2.375            | 0.000          | 0.000         | 0.000               |
| -2.00            | -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            | 0.007          | 0.013         | 0.013               |
| -0.25            | -0.375            | 0.009          | 0.017         | 0.030               |
| 0.00             | -0.125            | 0.018          | 0.034         | 0.064               |
| 0.25             | 0.125             | 0.115          | 0.217         | 0.282               |
| 0.50             | 0.375             | 0.653          | 1.234         | 1.516               |
| 0.75             | 0.625             | 2.029          | 3.836         | 5.352               |
| 1.00             | 0.875             | 10.126         | 19.142        | 24.494              |
| 1.25             | 1.125             | 11.499         | 21.738        | 46.231              |
| 1.50             | 1.375             | 12.324         | 23.297        | 69.529              |
| 1.75             | 1.625             | 7.178          | 13.569        | 83.098              |
| 2.00             | 1.875             | 4.143          | 7.832         | 90.930              |
| 2.25             | 2.125             | 2.093          | 3.957         | 94.886              |
| 2.50             | 2.375             | 1.169          | 2.210         | 97.096              |
| 2.75             | 2.625             | 0.888          | 1.679         | 98.775              |
| 3.00             | 2.875             | 0.451          | 0.853         | 99.628              |
| 3.25             | 3.125             | 0.139          | 0.263         | 99.890              |
| 3.50             | 3.375             | 0.041          | 0.078         | 99.968              |
| 3.75             | 3.625             | 0.007          | 0.013         | 99.981              |
| 4.00             | 3.875             | 0.001          | 0.002         | 99.983              |
| 5.00             | 4.500             | 0.009          | 0.017         | 100.000             |

| Statistical Results |         |               |             |
|---------------------|---------|---------------|-------------|
| Mean:               | 1.3457  | phi           | (0.3935 mm) |
| Standard Dev:       | 0.4854  | phi-units     | (0.7143 mm) |
| Skewness:           | 0.8617  | dimensionless |             |
| Kurtosis:           | 4.4030  | dimensionless |             |
| 5th Moment:         | 10.1631 | dimensionless |             |
| 6th Moment:         | 45.8944 | dimensionless |             |
| RARD *              | 0.3607  | dimensionless |             |
| Median              | 1.1654  | phi           | (0.4458 mm) |

\* RARD = reciprocal absolute relative dispersion (see below)

| Statistical Explanation                           |  |
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# BV-24-BB

