

**Onshore Grab Sample**

**Sample:** DU-18-BB  
**Sample Taken By:** J. Ladner  
**Sample Collected On:** 12/4/02  
**Splits?** N/A

**County:** Duval  
**Latitude:** 30° 24' 20.2"  
**Longitude:** 81° 24' 12.1"  
**Datum:** WGS 84  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 51.538 grams  
Total Fines in Sample 0.071 grams  
Total Percent Fines 0.14 %

**Dry Sieving Summary**

Total Sample Weight 51.317 grams  
Total Digested Weight 50.721 grams  
Total Carbonate Weight 0.596 grams  
Total Silica % 98.84 %  
Total Carbonate % 1.16 %  
Carbonate/Silica Ratio 0.012

**General Comments:**

None

**Description**

Worked By: C. Fischler  
Reviewed and Edited By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: DU-18-BB

Total Sample Mass: 51.317 grams

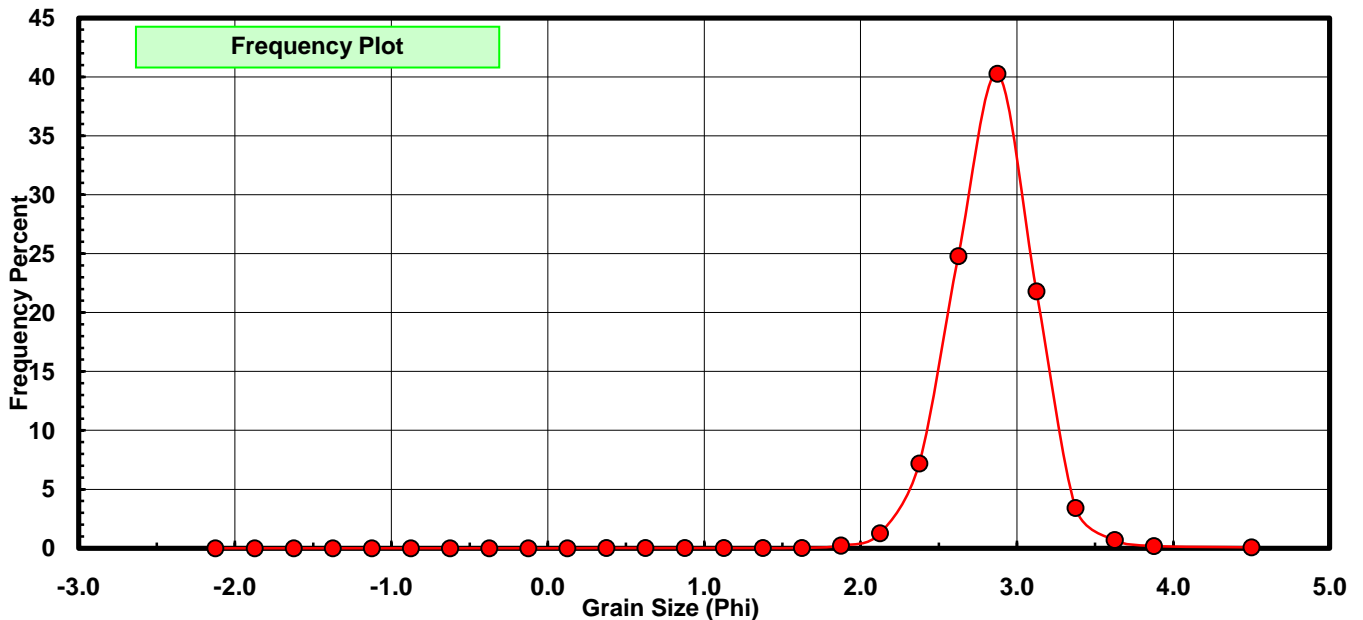
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.00            | -2.125            | 0.000          | 0.000         | 0.000               |
| -1.75            | -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            | 0.000          | 0.000         | 0.000               |
| -0.25            | -0.375            | 0.000          | 0.000         | 0.000               |
| 0.00             | -0.125            | 0.000          | 0.000         | 0.000               |
| 0.25             | 0.125             | 0.000          | 0.000         | 0.000               |
| 0.50             | 0.375             | 0.008          | 0.016         | 0.016               |
| 0.75             | 0.625             | 0.007          | 0.014         | 0.029               |
| 1.00             | 0.875             | 0.007          | 0.014         | 0.043               |
| 1.25             | 1.125             | 0.007          | 0.014         | 0.057               |
| 1.50             | 1.375             | 0.007          | 0.014         | 0.070               |
| 1.75             | 1.625             | 0.014          | 0.027         | 0.097               |
| 2.00             | 1.875             | 0.114          | 0.222         | 0.320               |
| 2.25             | 2.125             | 0.650          | 1.267         | 1.586               |
| 2.50             | 2.375             | 3.687          | 7.185         | 8.771               |
| 2.75             | 2.625             | 12.717         | 24.781        | 33.552              |
| 3.00             | 2.875             | 20.660         | 40.260        | 73.812              |
| 3.25             | 3.125             | 11.188         | 21.802        | 95.614              |
| 3.50             | 3.375             | 1.758          | 3.426         | 99.039              |
| 3.75             | 3.625             | 0.356          | 0.694         | 99.733              |
| 4.00             | 3.875             | 0.099          | 0.193         | 99.926              |
| 5.00             | 4.500             | 0.038          | 0.074         | 100.000             |

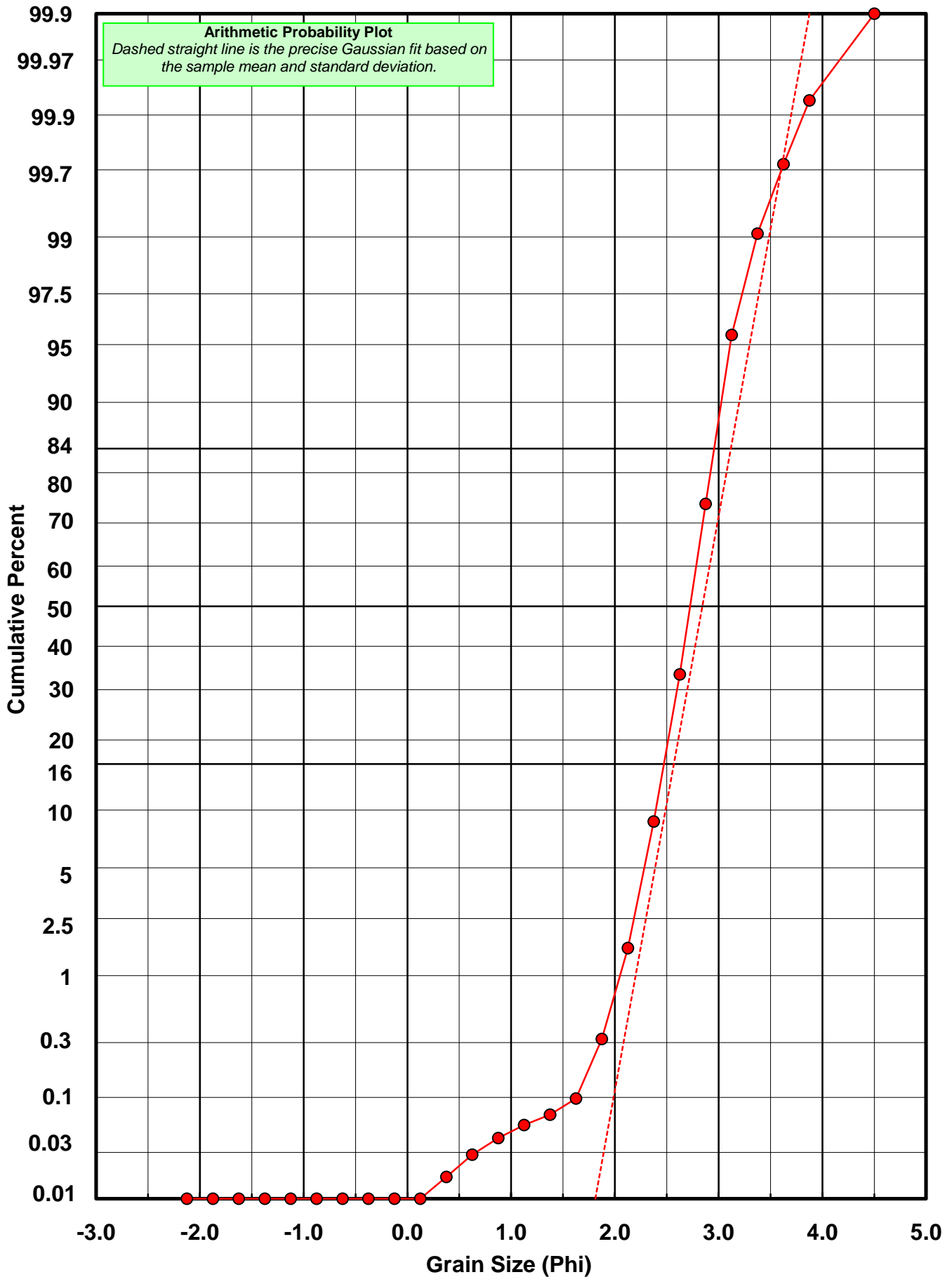
| Statistical Results |          |               |             |
|---------------------|----------|---------------|-------------|
| Mean:               | 2.8436   | phi           | (0.1393 mm) |
| Standard Dev:       | 0.2768   | phi-units     | (0.8254 mm) |
| Skewness:           | -0.2112  | dimensionless |             |
| Kurtosis:           | 6.4890   | dimensionless |             |
| 5th Moment:         | -12.6026 | dimensionless |             |
| 6th Moment:         | 203.2074 | dimensionless |             |
| RARD *              | 0.0974   | dimensionless |             |
| Median              | 2.7271   | phi           | (0.151 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 Calculation Sheets   |  |
| 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)      |





# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: DU-18-BB

Total Carbonate Mass: 1.501 grams

% Carbonate: 1.2 %

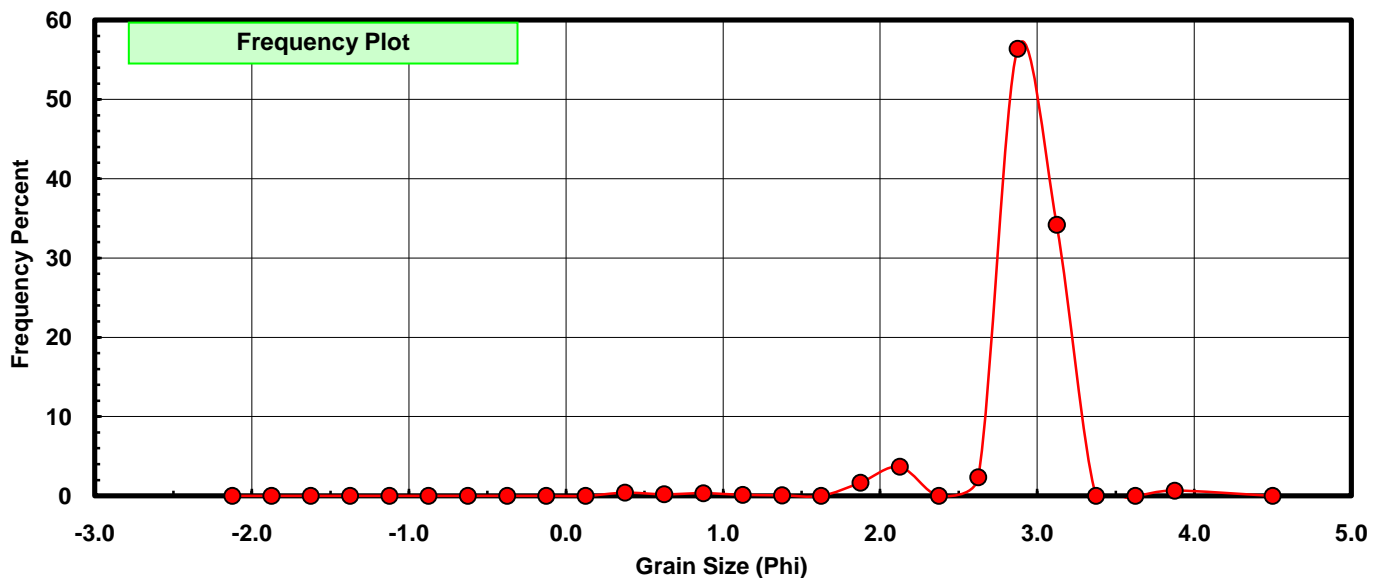
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.00            | -2.125            | 0.000          | 0.000         | 0.000               |
| -1.75            | -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            | 0.000          | 0.000         | 0.000               |
| -0.25            | -0.375            | 0.000          | 0.000         | 0.000               |
| 0.00             | -0.125            | 0.000          | 0.000         | 0.000               |
| 0.25             | 0.125             | 0.000          | 0.000         | 0.000               |
| 0.50             | 0.375             | 0.006          | 0.400         | 0.400               |
| 0.75             | 0.625             | 0.003          | 0.200         | 0.600               |
| 1.00             | 0.875             | 0.005          | 0.333         | 0.933               |
| 1.25             | 1.125             | 0.002          | 0.133         | 1.066               |
| 1.50             | 1.375             | 0.001          | 0.067         | 1.133               |
| 1.75             | 1.625             | 0.000          | 0.000         | 1.133               |
| 2.00             | 1.875             | 0.025          | 1.666         | 2.798               |
| 2.25             | 2.125             | 0.055          | 3.664         | 6.462               |
| 2.50             | 2.375             | 0.000          | 0.000         | 6.462               |
| 2.75             | 2.625             | 0.035          | 2.332         | 8.794               |
| 3.00             | 2.875             | 0.846          | 56.362        | 65.157              |
| 3.25             | 3.125             | 0.513          | 34.177        | 99.334              |
| 3.50             | 3.375             | 0.000          | 0.000         | 99.334              |
| 3.75             | 3.625             | 0.000          | 0.000         | 99.334              |
| 4.00             | 3.875             | 0.010          | 0.666         | 100.000             |
| 5.00             | 4.500             | 0.000          | 0.000         | 100.000             |

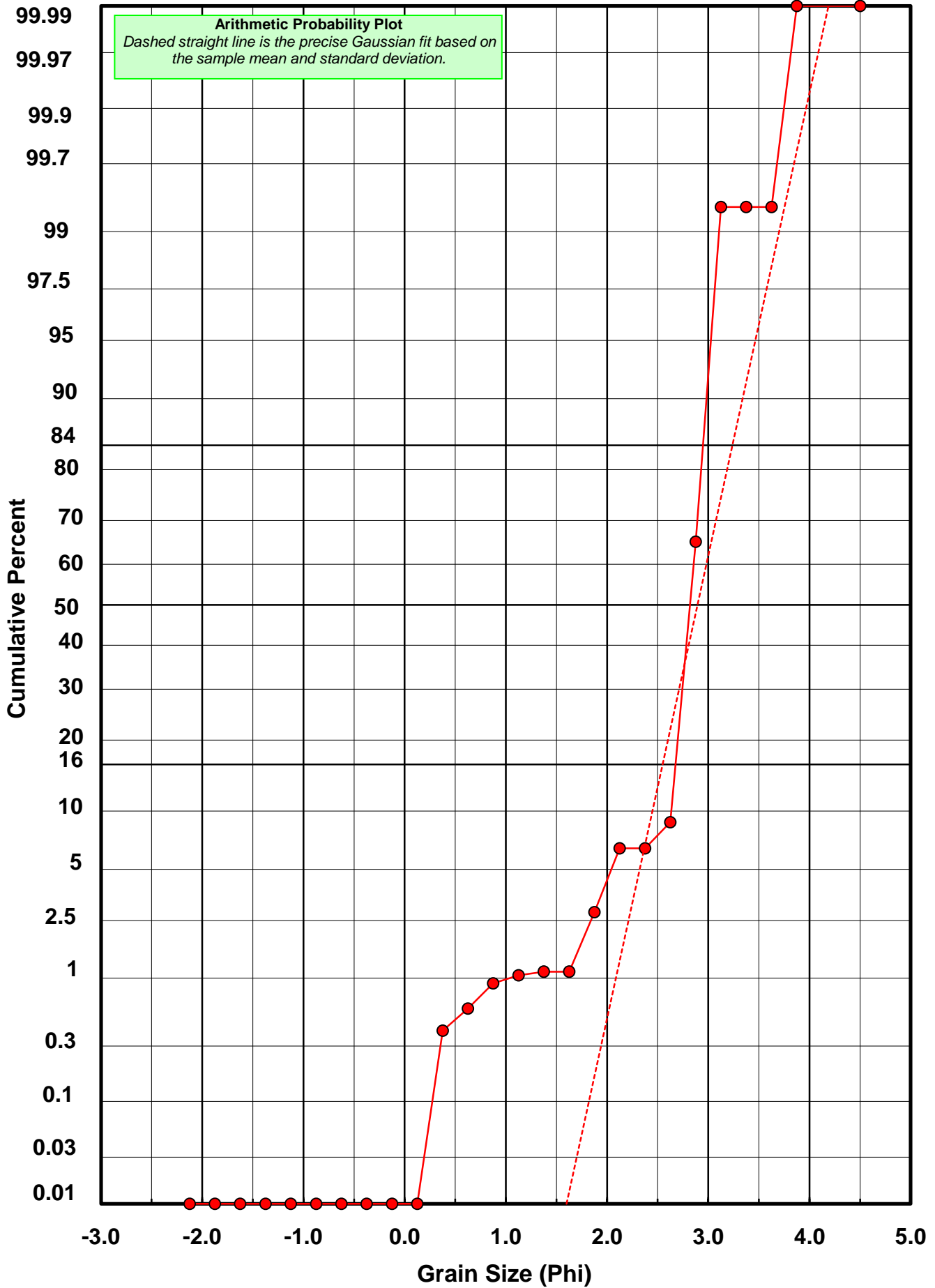
| Statistical Results |           |               |             |
|---------------------|-----------|---------------|-------------|
| Mean:               | 2.8927    | phi           | (0.1347 mm) |
| Standard Dev:       | 0.3470    | phi-units     | (0.7862 mm) |
| Skewness:           | -3.5437   | dimensionless |             |
| Kurtosis:           | 22.2741   | dimensionless |             |
| 5th Moment:         | -136.1839 | dimensionless |             |
| 6th Moment:         | 913.1224  | dimensionless |             |
| RARD *              | 0.1200    | dimensionless |             |
| Median              | 2.8078    | phi           | (0.1428 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 Calculation Sheets   |  |
| 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)      |





# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: DU-18-BB

Total Digested Mass: 50.687 grams

% Silica: 98.8 %

| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -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            | 0.000          | 0.000         | 0.000               |
| -0.25            | -0.375            | 0.000          | 0.000         | 0.000               |
| 0.00             | -0.125            | 0.000          | 0.000         | 0.000               |
| 0.25             | 0.125             | 0.000          | 0.000         | 0.000               |
| 0.50             | 0.375             | 0.002          | 0.004         | 0.004               |
| 0.75             | 0.625             | 0.004          | 0.008         | 0.012               |
| 1.00             | 0.875             | 0.002          | 0.004         | 0.016               |
| 1.25             | 1.125             | 0.005          | 0.010         | 0.026               |
| 1.50             | 1.375             | 0.006          | 0.012         | 0.037               |
| 1.75             | 1.625             | 0.015          | 0.030         | 0.067               |
| 2.00             | 1.875             | 0.089          | 0.176         | 0.243               |
| 2.25             | 2.125             | 0.595          | 1.174         | 1.417               |
| 2.50             | 2.375             | 3.860          | 7.615         | 9.032               |
| 2.75             | 2.625             | 12.682         | 25.020        | 34.052              |
| 3.00             | 2.875             | 19.814         | 39.091        | 73.143              |
| 3.25             | 3.125             | 10.675         | 21.061        | 94.204              |
| 3.50             | 3.375             | 2.467          | 4.867         | 99.071              |
| 3.75             | 3.625             | 0.382          | 0.754         | 99.824              |
| 4.00             | 3.875             | 0.089          | 0.176         | 100.000             |
| 5.00             | 4.500             | 0.000          | 0.000         | 100.000             |

| Statistical Results |         |               |             |
|---------------------|---------|---------------|-------------|
| Mean:               | 2.8471  | phi           | (0.139 mm)  |
| Standard Dev:       | 0.2774  | phi-units     | (0.8251 mm) |
| Skewness:           | -0.1356 | dimensionless |             |
| Kurtosis:           | 4.3061  | dimensionless |             |
| 5th Moment:         | -7.1220 | dimensionless |             |
| 6th Moment:         | 77.2890 | dimensionless |             |
| RARD *              | 0.0974  | dimensionless |             |
| Median              | 2.7270  | phi           | (0.151 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 Calculation Sheets   |  |
| Millimeter data calculated by $mm = 2^{(-phi)}$   |  |

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

