

**Onshore Grab Sample**

**Sample:** DU-05-MB  
**Sample Taken By:** J. Ladner  
**Sample Collected On:** 12/4/02  
**Splits?** N/A

**County:** Duval  
**Latitude:** 30° 19' 58.3"  
**Longitude:** 81° 23' 42.3"  
**Datum:** WGS 84  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 53.792 grams  
Total Fines in Sample 0.417 grams  
Total Percent Fines 0.77 %

**Dry Sieving Summary**

Total Sample Weight 53.284 grams  
Total Digested Weight 52.610 grams  
Total Carbonate Weight 0.674 grams  
Total Silica % 98.74 %  
Total Carbonate % 1.26 %  
Carbonate/Silica Ratio 0.013

**General Comments:**

None

**Description**

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

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: DU-05-MB

Total Sample Mass: 53.284 grams

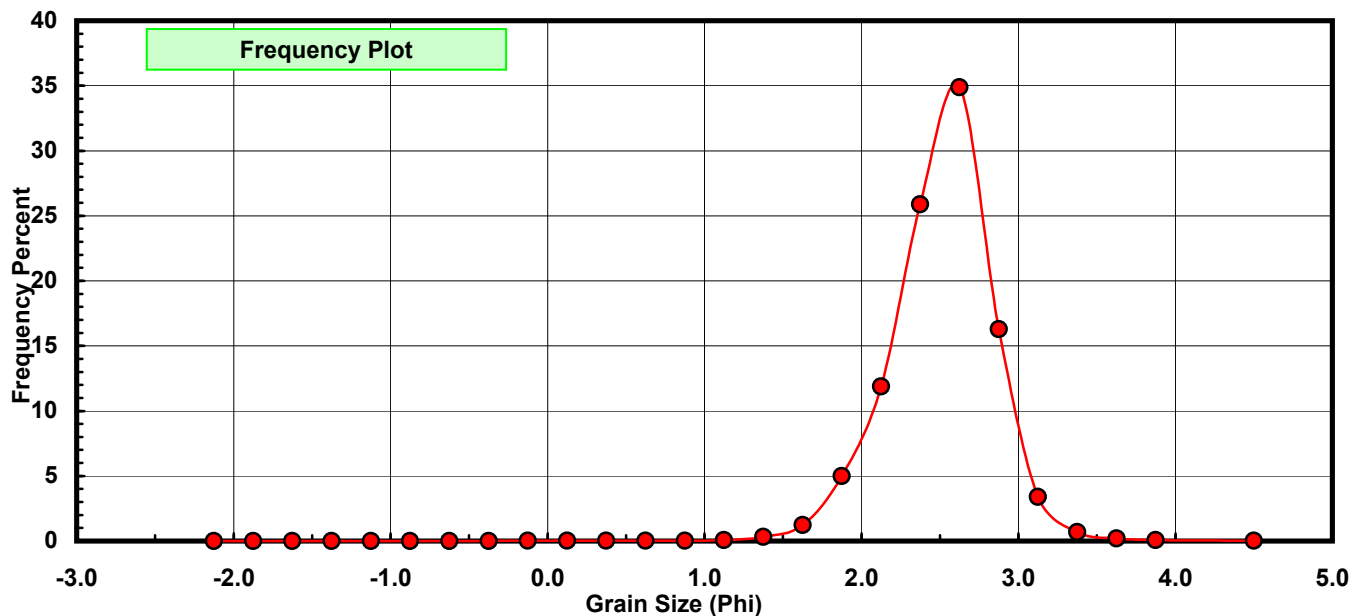
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.00            | -2.125            | 0.000          | 0.000         | 0.000               |
| -1.75            | -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            | 0.010          | 0.019         | 0.019               |
| 0.25             | 0.125             | 0.009          | 0.017         | 0.036               |
| 0.50             | 0.375             | 0.011          | 0.021         | 0.056               |
| 0.75             | 0.625             | 0.010          | 0.019         | 0.075               |
| 1.00             | 0.875             | 0.011          | 0.021         | 0.096               |
| 1.25             | 1.125             | 0.036          | 0.068         | 0.163               |
| 1.50             | 1.375             | 0.166          | 0.312         | 0.475               |
| 1.75             | 1.625             | 0.658          | 1.235         | 1.710               |
| 2.00             | 1.875             | 2.666          | 5.003         | 6.713               |
| 2.25             | 2.125             | 6.325          | 11.870        | 18.583              |
| 2.50             | 2.375             | 13.793         | 25.886        | 44.469              |
| 2.75             | 2.625             | 18.587         | 34.883        | 79.352              |
| 3.00             | 2.875             | 8.679          | 16.288        | 95.640              |
| 3.25             | 3.125             | 1.807          | 3.391         | 99.032              |
| 3.50             | 3.375             | 0.362          | 0.679         | 99.711              |
| 3.75             | 3.625             | 0.106          | 0.199         | 99.910              |
| 4.00             | 3.875             | 0.038          | 0.071         | 99.981              |
| 5.00             | 4.500             | 0.010          | 0.019         | 100.000             |

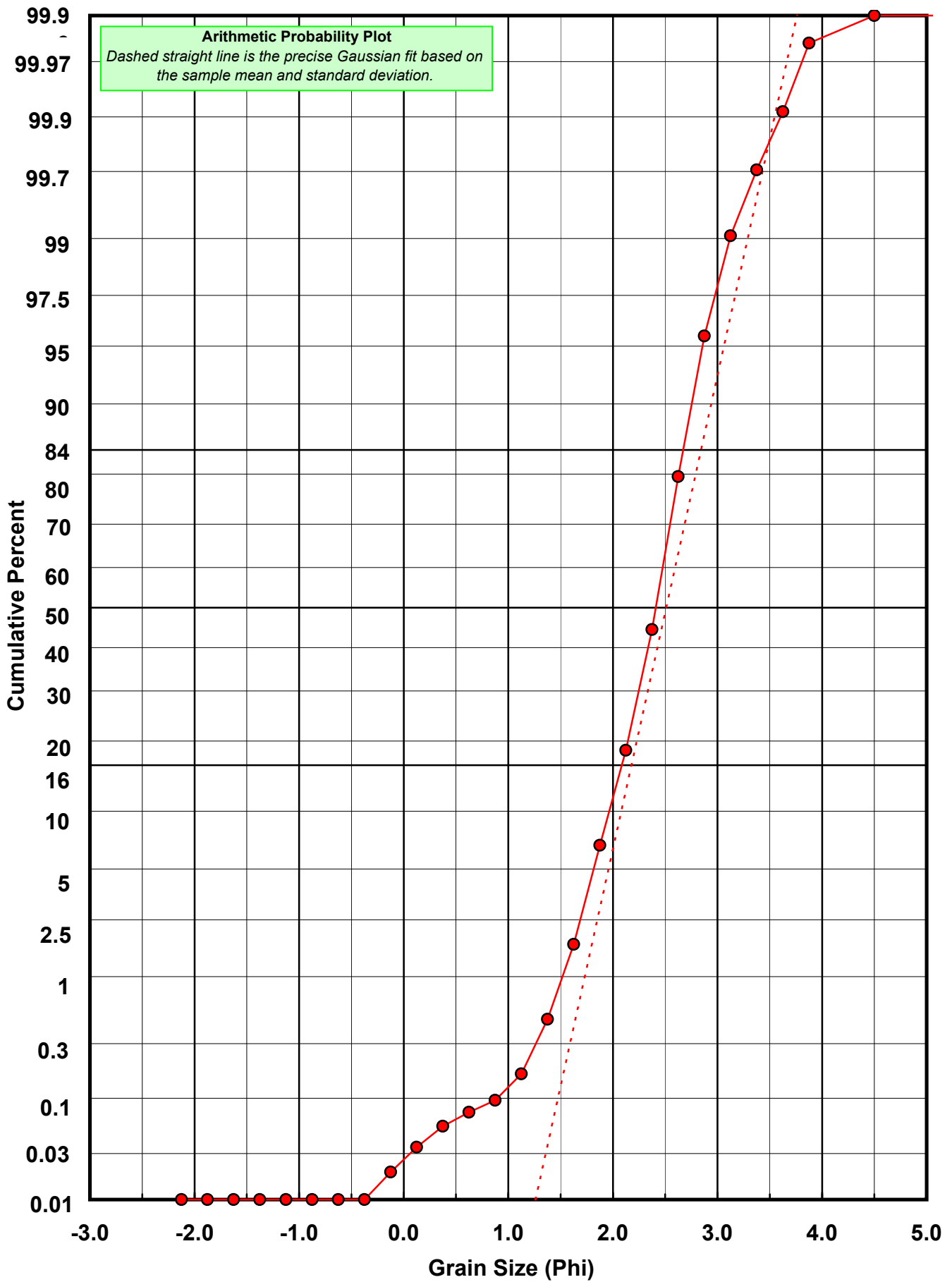
| Statistical Results |          |               |             |
|---------------------|----------|---------------|-------------|
| Mean:               | 2.5100   | phi           | (0.1756 mm) |
| Standard Dev:       | 0.3358   | phi-units     | (0.7923 mm) |
| Skewness:           | -0.4909  | dimensionless |             |
| Kurtosis:           | 5.5135   | dimensionless |             |
| 5th Moment:         | -13.1500 | dimensionless |             |
| 6th Moment:         | 122.2161 | dimensionless |             |
| RARD *              | 0.1338   | dimensionless |             |
| Median              | 2.4146   | phi           | (0.1876 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-05-MB

Total Carbonate Mass: 2.185 grams

% Carbonate: 1.3 %

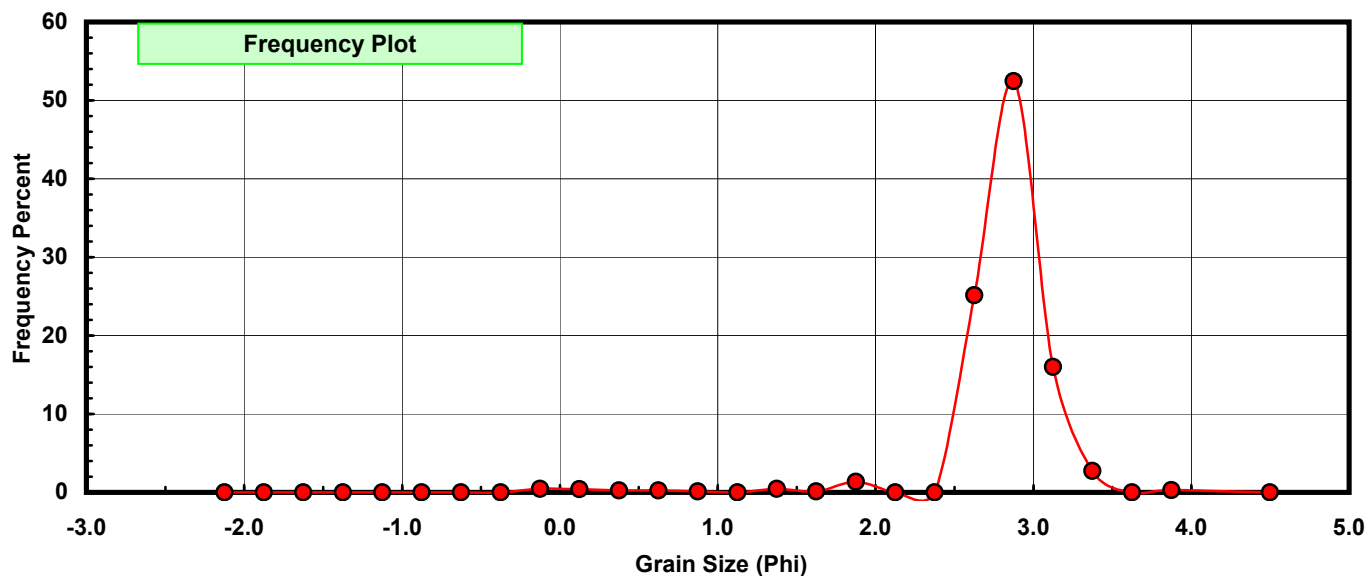
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.00            | -2.125            | 0.000          | 0.000         | 0.000               |
| -1.75            | -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            | 0.010          | 0.458         | 0.458               |
| 0.25             | 0.125             | 0.009          | 0.412         | 0.870               |
| 0.50             | 0.375             | 0.005          | 0.229         | 1.098               |
| 0.75             | 0.625             | 0.005          | 0.229         | 1.327               |
| 1.00             | 0.875             | 0.003          | 0.137         | 1.465               |
| 1.25             | 1.125             | 0.000          | 0.000         | 1.465               |
| 1.50             | 1.375             | 0.010          | 0.458         | 1.922               |
| 1.75             | 1.625             | 0.003          | 0.137         | 2.059               |
| 2.00             | 1.875             | 0.029          | 1.327         | 3.387               |
| 2.25             | 2.125             | 0.000          | 0.000         | 3.387               |
| 2.50             | 2.375             | 0.000          | 0.000         | 3.387               |
| 2.75             | 2.625             | 0.549          | 25.126        | 28.513              |
| 3.00             | 2.875             | 1.146          | 52.449        | 80.961              |
| 3.25             | 3.125             | 0.350          | 16.018        | 96.979              |
| 3.50             | 3.375             | 0.060          | 2.746         | 99.725              |
| 3.75             | 3.625             | 0.000          | 0.000         | 99.725              |
| 4.00             | 3.875             | 0.006          | 0.275         | 100.000             |
| 5.00             | 4.500             | 0.000          | 0.000         | 100.000             |

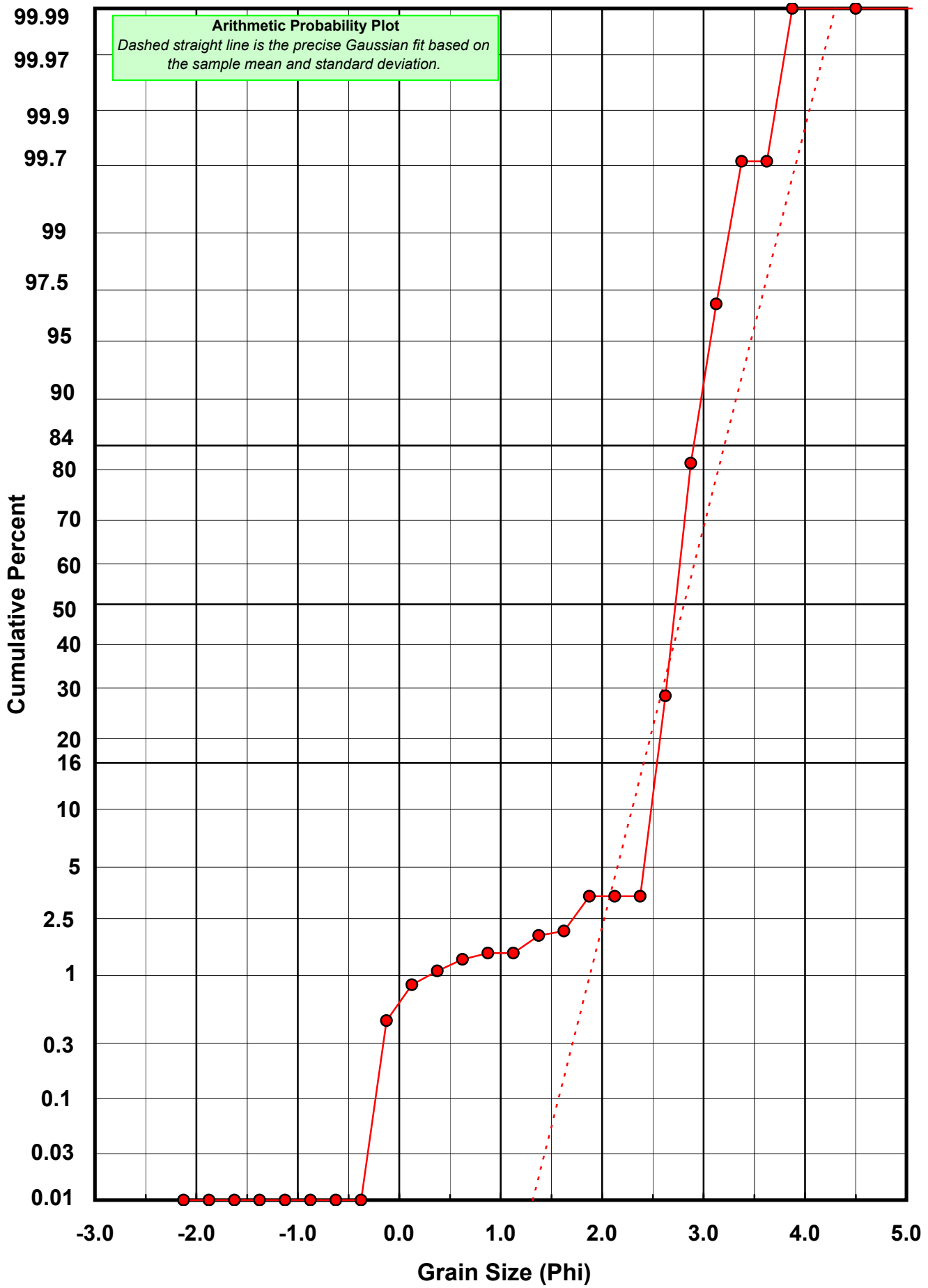
| Statistical Results |           |               |             |
|---------------------|-----------|---------------|-------------|
| Mean:               | 2.8082    | phi           | (0.1428 mm) |
| Standard Dev:       | 0.4004    | phi-units     | (0.7577 mm) |
| Skewness:           | -4.3045   | dimensionless |             |
| Kurtosis:           | 28.9556   | dimensionless |             |
| 5th Moment:         | -189.2276 | dimensionless |             |
| 6th Moment:         | 1287.6170 | dimensionless |             |
| RARD *              | 0.1426    | dimensionless |             |
| Median              | 2.7274    | 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)      |





# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: DU-05-MB

Total Digested Mass: 52.600 grams

% Silica: 98.7 %

| 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          | 0.011         | 0.011               |
| 0.75             | 0.625             | 0.005          | 0.010         | 0.021               |
| 1.00             | 0.875             | 0.008          | 0.015         | 0.036               |
| 1.25             | 1.125             | 0.039          | 0.074         | 0.110               |
| 1.50             | 1.375             | 0.156          | 0.297         | 0.407               |
| 1.75             | 1.625             | 0.655          | 1.245         | 1.652               |
| 2.00             | 1.875             | 2.637          | 5.013         | 6.665               |
| 2.25             | 2.125             | 6.786          | 12.901        | 19.567              |
| 2.50             | 2.375             | 14.840         | 28.213        | 47.779              |
| 2.75             | 2.625             | 18.038         | 34.293        | 82.072              |
| 3.00             | 2.875             | 7.533          | 14.321        | 96.394              |
| 3.25             | 3.125             | 1.457          | 2.770         | 99.163              |
| 3.50             | 3.375             | 0.302          | 0.574         | 99.738              |
| 3.75             | 3.625             | 0.106          | 0.202         | 99.939              |
| 4.00             | 3.875             | 0.032          | 0.061         | 100.000             |
| 5.00             | 4.500             | 0.000          | 0.000         | 100.000             |

| Statistical Results |         |               |             |
|---------------------|---------|---------------|-------------|
| Mean:               | 2.4911  | phi           | (0.1779 mm) |
| Standard Dev:       | 0.3231  | phi-units     | (0.7994 mm) |
| Skewness:           | -0.3157 | dimensionless |             |
| Kurtosis:           | 4.2113  | dimensionless |             |
| 5th Moment:         | -4.2558 | dimensionless |             |
| 6th Moment:         | 44.2452 | dimensionless |             |
| RARD *              | 0.1297  | dimensionless |             |
| Median              | 2.3912  | phi           | (0.1906 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 |                                       |
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| > 1.33   | Poor homogeneity (e.g., glacial)      |

