

Onshore Grab Sample

Sample: VO-24-SS
Sample Taken By: J. Ladner
Sample Collected On: 12/3/03
Splits? Yes

County: Volusia
Latitude: 29° 08' 26.04"
Longitude: 80° 57' 44.22"
Datum: NAD 83
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight 55.784 grams
Total Fines in Sample 0.761 grams
Total Percent Fines 1.35 %

Dry Sieving Summary

Total Sample Weight 55.131 grams
Total Digested Weight 52.941 grams
Total Carbonate Weight 2.190 grams
Total Silica % 96.03 %
Total Carbonate % 3.97 %
Carbonate/Silica Ratio 0.041

General Comments:

None

Description

Worked By: M. Lachance

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-24-SS

Total Sample Mass: 55.131 grams

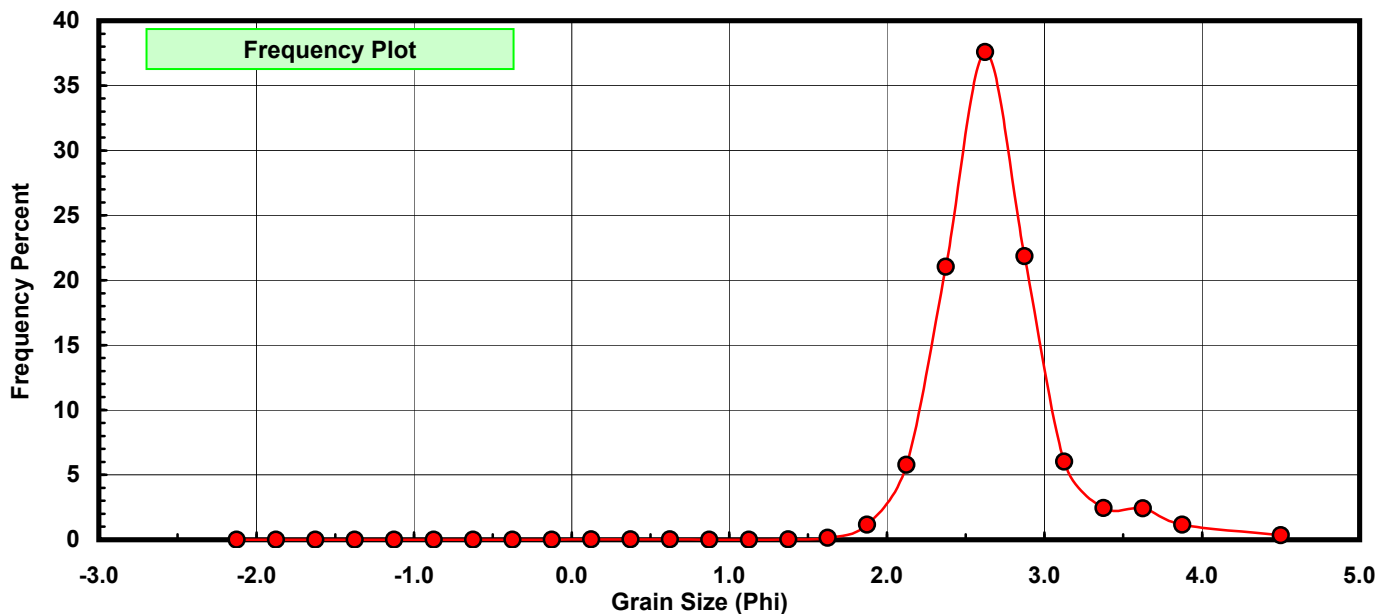
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 0.000 | 0.000 |
| -1.50 | -1.625 | 0.000 | 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 | 0.015 | 0.027 | 0.027 |
| 0.50 | 0.375 | 0.010 | 0.018 | 0.045 |
| 0.75 | 0.625 | 0.010 | 0.018 | 0.063 |
| 1.00 | 0.875 | 0.001 | 0.002 | 0.065 |
| 1.25 | 1.125 | 0.001 | 0.002 | 0.067 |
| 1.50 | 1.375 | 0.015 | 0.027 | 0.094 |
| 1.75 | 1.625 | 0.075 | 0.136 | 0.230 |
| 2.00 | 1.875 | 0.635 | 1.152 | 1.382 |
| 2.25 | 2.125 | 3.175 | 5.759 | 7.141 |
| 2.50 | 2.375 | 11.597 | 21.035 | 28.177 |
| 2.75 | 2.625 | 20.726 | 37.594 | 65.771 |
| 3.00 | 2.875 | 12.047 | 21.852 | 87.622 |
| 3.25 | 3.125 | 3.311 | 6.006 | 93.628 |
| 3.50 | 3.375 | 1.342 | 2.434 | 96.062 |
| 3.75 | 3.625 | 1.335 | 2.422 | 98.484 |
| 4.00 | 3.875 | 0.643 | 1.166 | 99.650 |
| 5.00 | 4.500 | 0.193 | 0.350 | 100.000 |

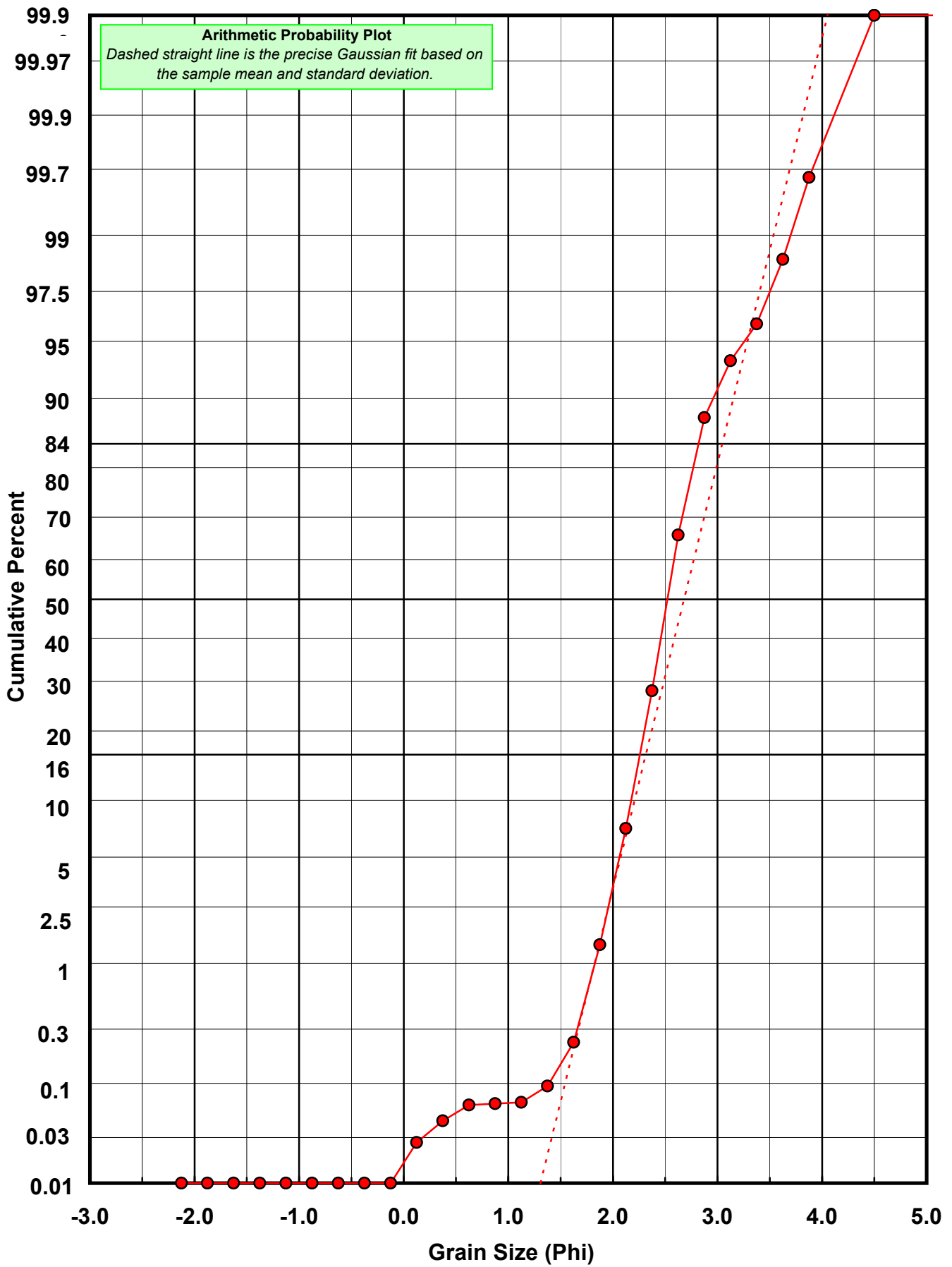
| Statistical Results | | | |
|---------------------|----------|---------------|-------------|
| Mean: | 2.6800 | phi | (0.156 mm) |
| Standard Dev: | 0.3685 | phi-units | (0.7746 mm) |
| Skewness: | 0.8938 | dimensionless | |
| Kurtosis: | 6.8873 | dimensionless | |
| 5th Moment: | 9.4028 | dimensionless | |
| 6th Moment: | 124.9871 | dimensionless | |
| RARD * | 0.1375 | dimensionless | |
| Median | 2.5201 | phi | (0.1743 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: VO-24-SS

Total Carbonate Mass: 3.109 grams

% Carbonate: 4.0 %

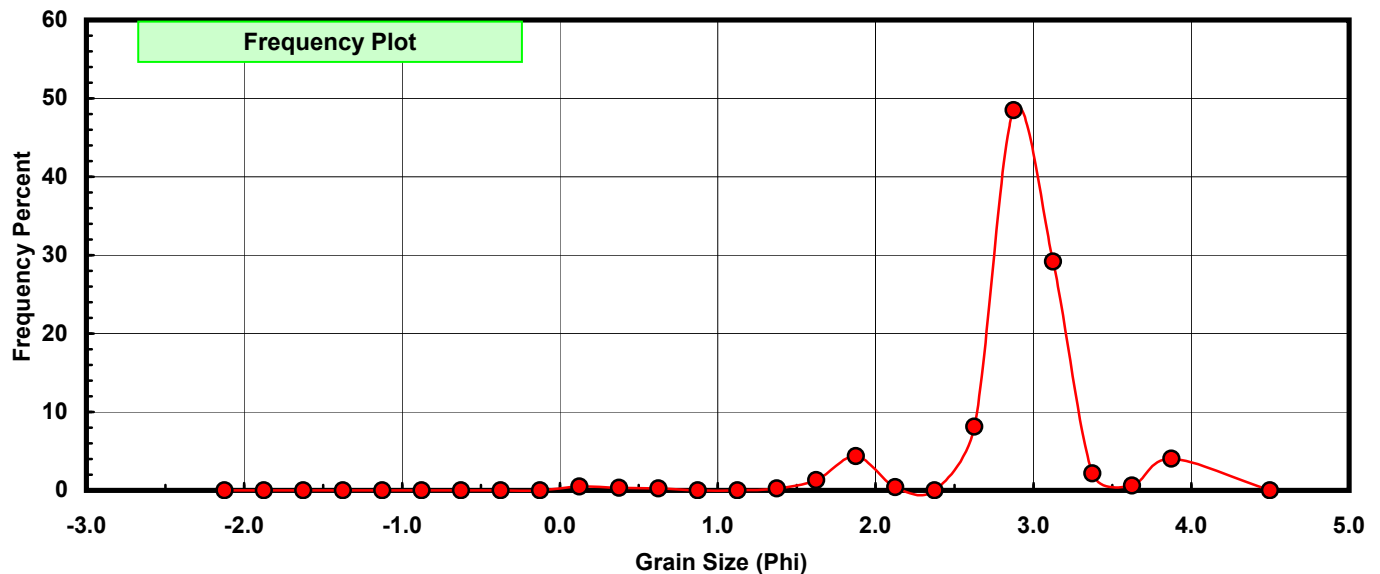
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 0.000 | 0.000 |
| -1.50 | -1.625 | 0.000 | 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 | 0.015 | 0.482 | 0.482 |
| 0.50 | 0.375 | 0.010 | 0.322 | 0.804 |
| 0.75 | 0.625 | 0.008 | 0.257 | 1.061 |
| 1.00 | 0.875 | 0.000 | 0.000 | 1.061 |
| 1.25 | 1.125 | 0.000 | 0.000 | 1.061 |
| 1.50 | 1.375 | 0.008 | 0.257 | 1.319 |
| 1.75 | 1.625 | 0.041 | 1.319 | 2.638 |
| 2.00 | 1.875 | 0.136 | 4.374 | 7.012 |
| 2.25 | 2.125 | 0.013 | 0.418 | 7.430 |
| 2.50 | 2.375 | 0.000 | 0.000 | 7.430 |
| 2.75 | 2.625 | 0.252 | 8.106 | 15.536 |
| 3.00 | 2.875 | 1.508 | 48.504 | 64.040 |
| 3.25 | 3.125 | 0.907 | 29.173 | 93.213 |
| 3.50 | 3.375 | 0.067 | 2.155 | 95.368 |
| 3.75 | 3.625 | 0.019 | 0.611 | 95.979 |
| 4.00 | 3.875 | 0.125 | 4.021 | 100.000 |
| 5.00 | 4.500 | 0.000 | 0.000 | 100.000 |

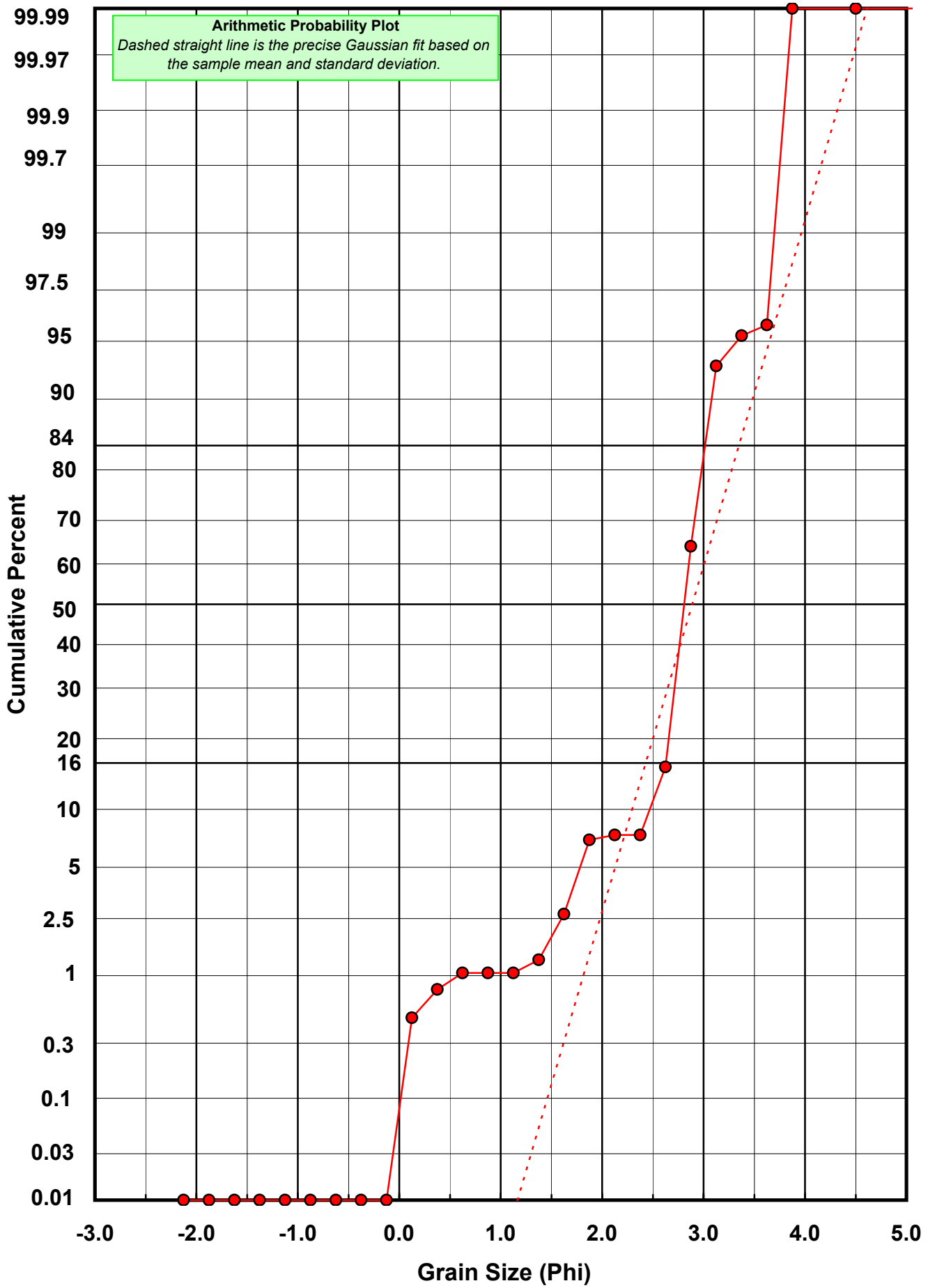
| Statistical Results | | | |
|---------------------|----------|---------------|-------------|
| Mean: | 2.8889 | phi | (0.135 mm) |
| Standard Dev: | 0.4629 | phi-units | (0.7255 mm) |
| Skewness: | -2.2188 | dimensionless | |
| Kurtosis: | 13.3930 | dimensionless | |
| 5th Moment: | -62.3947 | dimensionless | |
| 6th Moment: | 353.9329 | dimensionless | |
| RARD * | 0.1602 | dimensionless | |
| Median | 2.8026 | phi | (0.1433 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: VO-24-SS

Total Digested Mass: 52.809 grams

% Silica: 96.0 %

| 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 | 0.000 | 0.000 | 0.000 |
| 0.75 | 0.625 | 0.002 | 0.004 | 0.004 |
| 1.00 | 0.875 | 0.002 | 0.004 | 0.008 |
| 1.25 | 1.125 | 0.006 | 0.011 | 0.019 |
| 1.50 | 1.375 | 0.007 | 0.013 | 0.032 |
| 1.75 | 1.625 | 0.034 | 0.064 | 0.097 |
| 2.00 | 1.875 | 0.499 | 0.945 | 1.041 |
| 2.25 | 2.125 | 3.162 | 5.988 | 7.029 |
| 2.50 | 2.375 | 12.571 | 23.805 | 30.834 |
| 2.75 | 2.625 | 20.474 | 38.770 | 69.604 |
| 3.00 | 2.875 | 10.539 | 19.957 | 89.560 |
| 3.25 | 3.125 | 2.404 | 4.552 | 94.113 |
| 3.50 | 3.375 | 1.275 | 2.414 | 96.527 |
| 3.75 | 3.625 | 1.316 | 2.492 | 99.019 |
| 4.00 | 3.875 | 0.518 | 0.981 | 100.000 |
| 5.00 | 4.500 | 0.000 | 0.000 | 100.000 |

| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | 2.6553 | phi | (0.1587 mm) |
| Standard Dev: | 0.3398 | phi-units | (0.7901 mm) |
| Skewness: | 0.9290 | dimensionless | |
| Kurtosis: | 4.9936 | dimensionless | |
| 5th Moment: | 9.8632 | dimensionless | |
| 6th Moment: | 44.4289 | dimensionless | |
| RARD * | 0.1280 | dimensionless | |
| Median | 2.4986 | phi | (0.1769 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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