

Onshore Grab Sample

Sample: VO-16-SS
Sample Taken By: J. Ladner
Sample Collected On: 12/3/03
Splits? N/A

County: Volusia
Latitude: 29° 14' 10.74"
Longitude: 81° 00' 39.36"
Datum: NAD 83
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight 109.695 grams
Total Fines in Sample 1.215 grams
Total Percent Fines 1.10 %

Dry Sieving Summary

Total Sample Weight 108.704 grams
Total Digested Weight 99.014 grams
Total Carbonate Weight 9.690 grams
Total Silica % 91.09 %
Total Carbonate % 8.91 %
Carbonate/Silica Ratio 0.098

General Comments:

None

Description

Worked By: M. Lachance

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-16-SS

Total Sample Mass: 108.704 grams

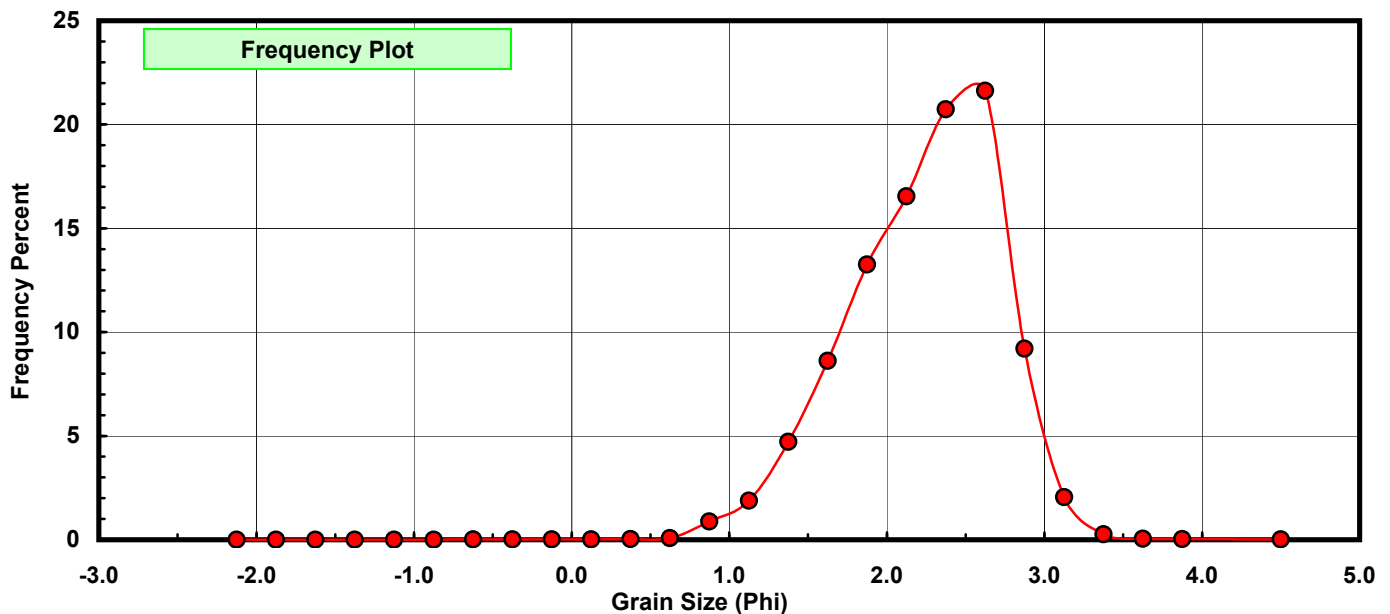
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 0.000 | 0.000 |
| -1.50 | -1.625 | 0.000 | 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 | 0.009 | 0.008 | 0.008 |
| -0.25 | -0.375 | 0.011 | 0.010 | 0.018 |
| 0.00 | -0.125 | 0.014 | 0.013 | 0.031 |
| 0.25 | 0.125 | 0.017 | 0.016 | 0.047 |
| 0.50 | 0.375 | 0.040 | 0.037 | 0.084 |
| 0.75 | 0.625 | 0.084 | 0.077 | 0.161 |
| 1.00 | 0.875 | 0.956 | 0.879 | 1.040 |
| 1.25 | 1.125 | 2.048 | 1.884 | 2.924 |
| 1.50 | 1.375 | 5.130 | 4.719 | 7.644 |
| 1.75 | 1.625 | 9.371 | 8.621 | 16.264 |
| 2.00 | 1.875 | 14.401 | 13.248 | 29.512 |
| 2.25 | 2.125 | 17.971 | 16.532 | 46.044 |
| 2.50 | 2.375 | 22.542 | 20.737 | 66.781 |
| 2.75 | 2.625 | 23.501 | 21.619 | 88.401 |
| 3.00 | 2.875 | 9.999 | 9.198 | 97.599 |
| 3.25 | 3.125 | 2.229 | 2.051 | 99.650 |
| 3.50 | 3.375 | 0.287 | 0.264 | 99.914 |
| 3.75 | 3.625 | 0.055 | 0.051 | 99.964 |
| 4.00 | 3.875 | 0.029 | 0.027 | 99.991 |
| 5.00 | 4.500 | 0.010 | 0.009 | 100.000 |

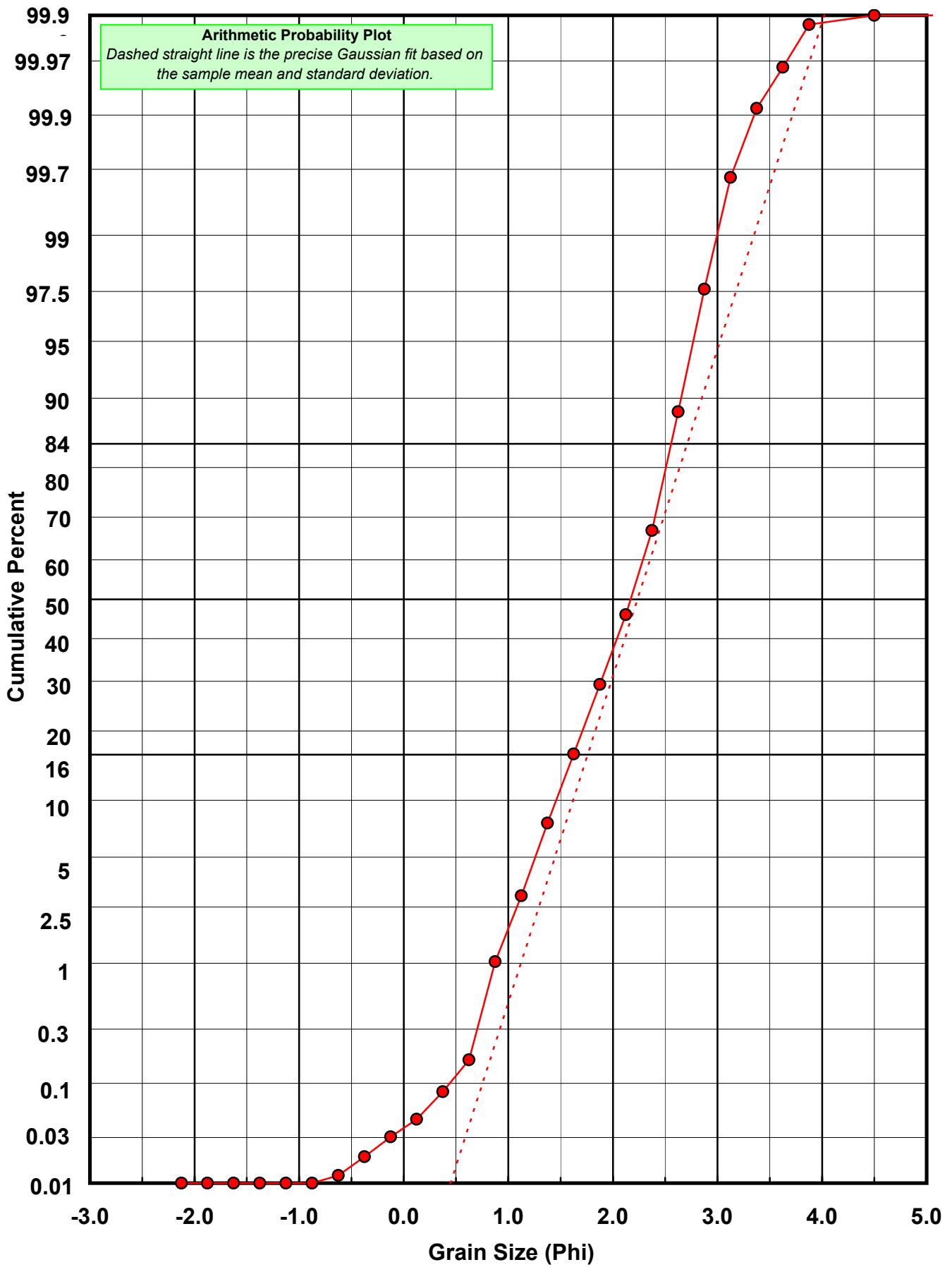
| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | 2.2348 | phi | (0.2124 mm) |
| Standard Dev: | 0.4799 | phi-units | (0.717 mm) |
| Skewness: | -0.5186 | dimensionless | |
| Kurtosis: | 3.2293 | dimensionless | |
| 5th Moment: | -4.9102 | dimensionless | |
| 6th Moment: | 24.8785 | dimensionless | |
| RARD * | 0.2147 | dimensionless | |
| Median | 2.1727 | phi | (0.2218 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-16-SS

Total Carbonate Mass: 9.761 grams

% Carbonate: 8.9 %

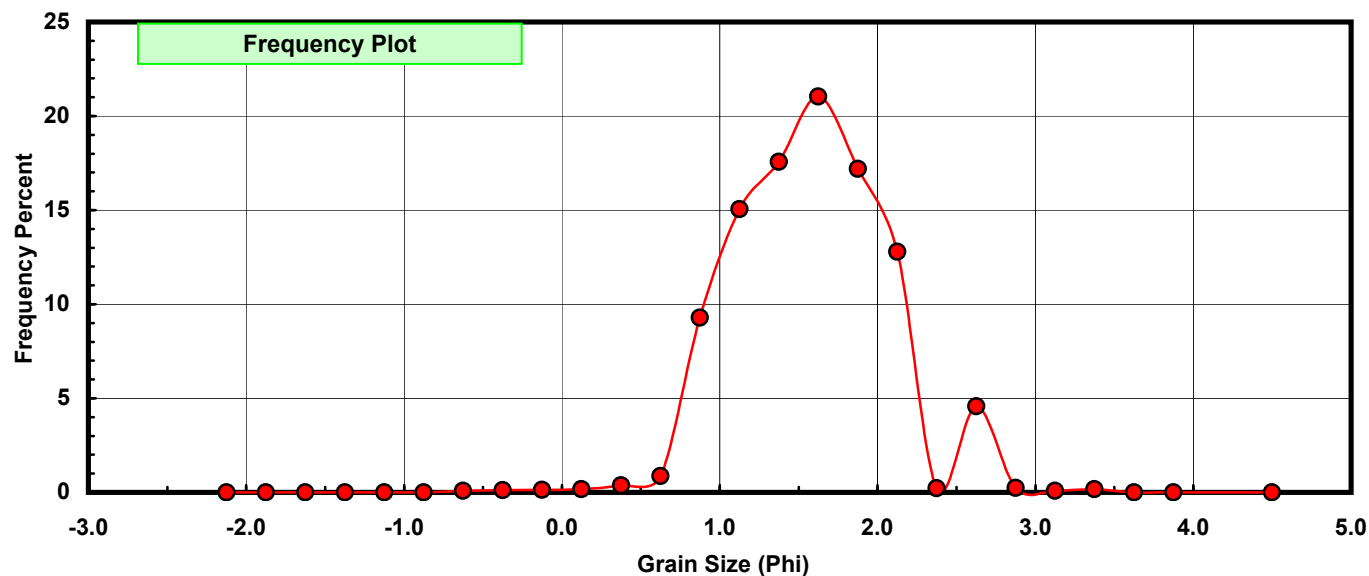
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 0.000 | 0.000 |
| -1.50 | -1.625 | 0.000 | 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 | 0.009 | 0.092 | 0.092 |
| -0.25 | -0.375 | 0.011 | 0.113 | 0.205 |
| 0.00 | -0.125 | 0.014 | 0.143 | 0.348 |
| 0.25 | 0.125 | 0.017 | 0.174 | 0.522 |
| 0.50 | 0.375 | 0.037 | 0.379 | 0.902 |
| 0.75 | 0.625 | 0.084 | 0.861 | 1.762 |
| 1.00 | 0.875 | 0.906 | 9.282 | 11.044 |
| 1.25 | 1.125 | 1.469 | 15.050 | 26.094 |
| 1.50 | 1.375 | 1.714 | 17.560 | 43.653 |
| 1.75 | 1.625 | 2.054 | 21.043 | 64.696 |
| 2.00 | 1.875 | 1.679 | 17.201 | 81.897 |
| 2.25 | 2.125 | 1.249 | 12.796 | 94.693 |
| 2.50 | 2.375 | 0.022 | 0.225 | 94.919 |
| 2.75 | 2.625 | 0.447 | 4.579 | 99.498 |
| 3.00 | 2.875 | 0.024 | 0.246 | 99.744 |
| 3.25 | 3.125 | 0.008 | 0.082 | 99.826 |
| 3.50 | 3.375 | 0.017 | 0.174 | 100.000 |
| 3.75 | 3.625 | 0.000 | 0.000 | 100.000 |
| 4.00 | 3.875 | 0.000 | 0.000 | 100.000 |
| 5.00 | 4.500 | 0.000 | 0.000 | 100.000 |

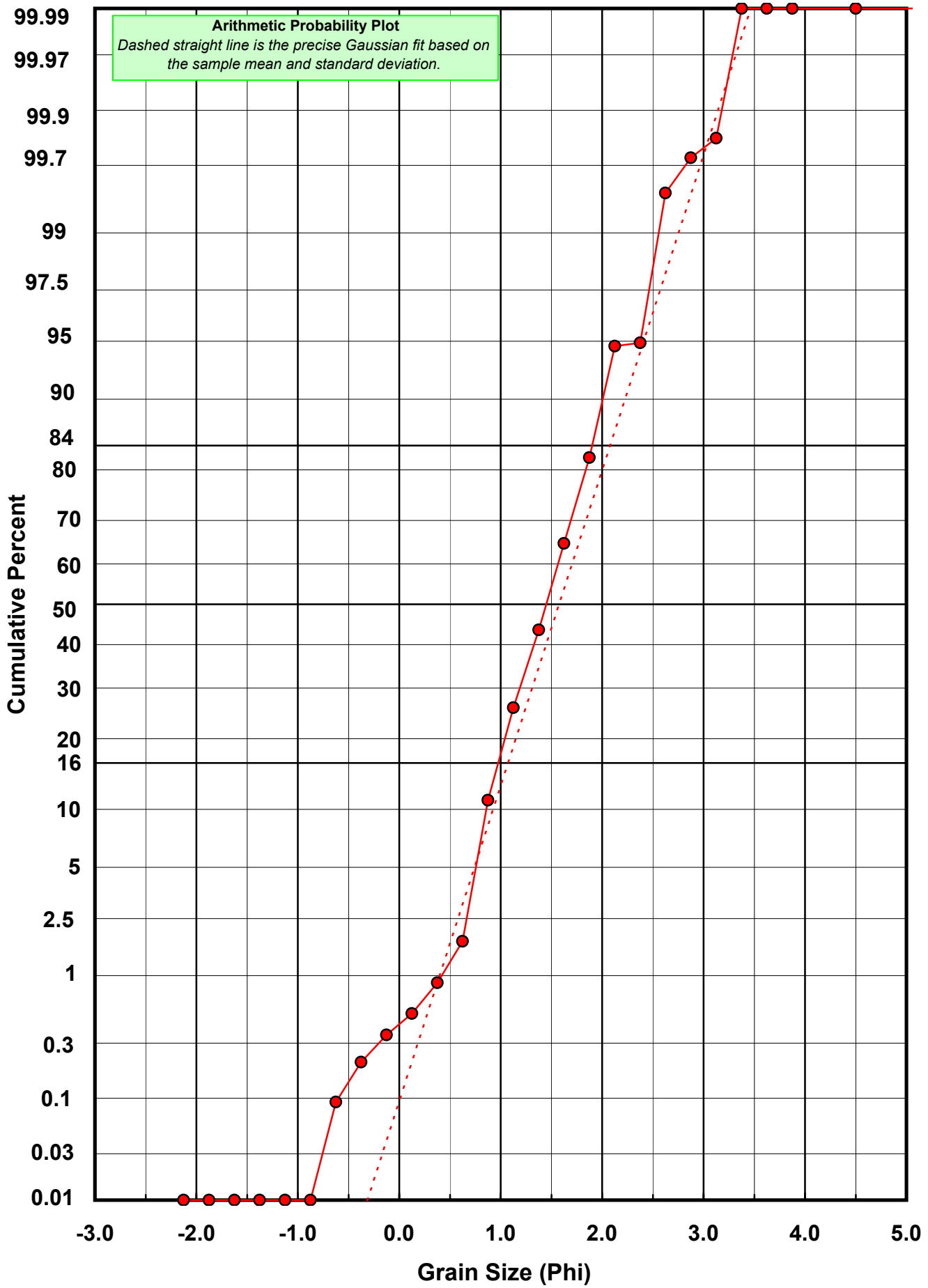
| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | 1.5753 | phi | (0.3356 mm) |
| Standard Dev: | 0.5075 | phi-units | (0.7034 mm) |
| Skewness: | 0.0609 | dimensionless | |
| Kurtosis: | 3.3741 | dimensionless | |
| 5th Moment: | -0.9992 | dimensionless | |
| 6th Moment: | 25.7757 | dimensionless | |
| RARD * | 0.3222 | dimensionless | |
| Median | 1.4504 | phi | (0.3659 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-16-SS

Total Digested Mass: 99.006 grams

% Silica: 91.1 %

| 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 | 0.003 | 0.003 | 0.003 |
| 0.75 | 0.625 | 0.000 | 0.000 | 0.003 |
| 1.00 | 0.875 | 0.050 | 0.051 | 0.054 |
| 1.25 | 1.125 | 0.579 | 0.585 | 0.638 |
| 1.50 | 1.375 | 3.416 | 3.450 | 4.089 |
| 1.75 | 1.625 | 7.317 | 7.390 | 11.479 |
| 2.00 | 1.875 | 12.722 | 12.850 | 24.329 |
| 2.25 | 2.125 | 16.722 | 16.890 | 41.219 |
| 2.50 | 2.375 | 22.520 | 22.746 | 63.965 |
| 2.75 | 2.625 | 23.054 | 23.285 | 87.250 |
| 3.00 | 2.875 | 9.975 | 10.075 | 97.325 |
| 3.25 | 3.125 | 2.221 | 2.243 | 99.569 |
| 3.50 | 3.375 | 0.270 | 0.273 | 99.841 |
| 3.75 | 3.625 | 0.108 | 0.109 | 99.951 |
| 4.00 | 3.875 | 0.049 | 0.049 | 100.000 |
| 5.00 | 4.500 | 0.000 | 0.000 | 100.000 |

| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | 2.3007 | phi | (0.203 mm) |
| Standard Dev: | 0.4282 | phi-units | (0.7432 mm) |
| Skewness: | -0.3172 | dimensionless | |
| Kurtosis: | 2.7853 | dimensionless | |
| 5th Moment: | -1.6701 | dimensionless | |
| 6th Moment: | 12.9857 | dimensionless | |
| RARD * | 0.1861 | dimensionless | |
| Median | 2.2215 | phi | (0.2144 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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