

Onshore Grab Sample

Sample: VO-47-SS
Sample Taken By: J. Ladner
Sample Collected On: 12/3/03
Splits? Yes

County: Volusia
Latitude: 28° 53' 21.78"
Longitude: 80° 47' 47.16"
Datum: NAD 83
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight 76.67 grams
Total Fines in Sample 0.494 grams
Total Percent Fines 0.64 %

Dry Sieving Summary

Total Sample Weight 76.223 grams
Total Digested Weight 32.553 grams
Total Carbonate Weight 43.670 grams
Total Silica % 42.71 %
Total Carbonate % 57.29 %
Carbonate/Silica Ratio 1.342

General Comments:

None

Description

Worked By: M. Lachance

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-47-SS

Total Sample Mass: 76.223 grams

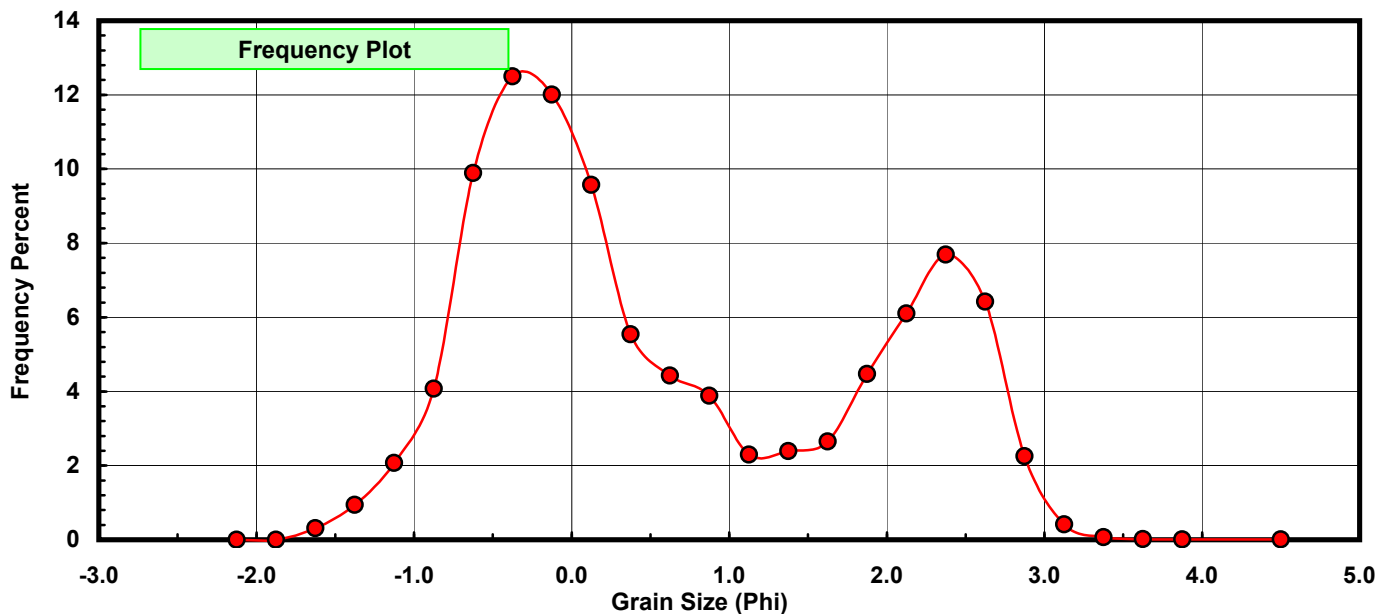
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 0.000 | 0.000 |
| -1.50 | -1.625 | 0.236 | 0.310 | 0.310 |
| -1.25 | -1.375 | 0.714 | 0.937 | 1.246 |
| -1.00 | -1.125 | 1.578 | 2.070 | 3.317 |
| -0.75 | -0.875 | 3.108 | 4.078 | 7.394 |
| -0.50 | -0.625 | 7.538 | 9.889 | 17.283 |
| -0.25 | -0.375 | 9.524 | 12.495 | 29.778 |
| 0.00 | -0.125 | 9.150 | 12.004 | 41.783 |
| 0.25 | 0.125 | 7.297 | 9.573 | 51.356 |
| 0.50 | 0.375 | 4.225 | 5.543 | 56.899 |
| 0.75 | 0.625 | 3.378 | 4.432 | 61.331 |
| 1.00 | 0.875 | 2.960 | 3.883 | 65.214 |
| 1.25 | 1.125 | 1.750 | 2.296 | 67.510 |
| 1.50 | 1.375 | 1.825 | 2.394 | 69.904 |
| 1.75 | 1.625 | 2.019 | 2.649 | 72.553 |
| 2.00 | 1.875 | 3.407 | 4.470 | 77.023 |
| 2.25 | 2.125 | 4.650 | 6.101 | 83.123 |
| 2.50 | 2.375 | 5.859 | 7.687 | 90.810 |
| 2.75 | 2.625 | 4.892 | 6.418 | 97.228 |
| 3.00 | 2.875 | 1.719 | 2.255 | 99.483 |
| 3.25 | 3.125 | 0.318 | 0.417 | 99.900 |
| 3.50 | 3.375 | 0.050 | 0.066 | 99.966 |
| 3.75 | 3.625 | 0.012 | 0.016 | 99.982 |
| 4.00 | 3.875 | 0.009 | 0.012 | 99.993 |
| 5.00 | 4.500 | 0.005 | 0.007 | 100.000 |

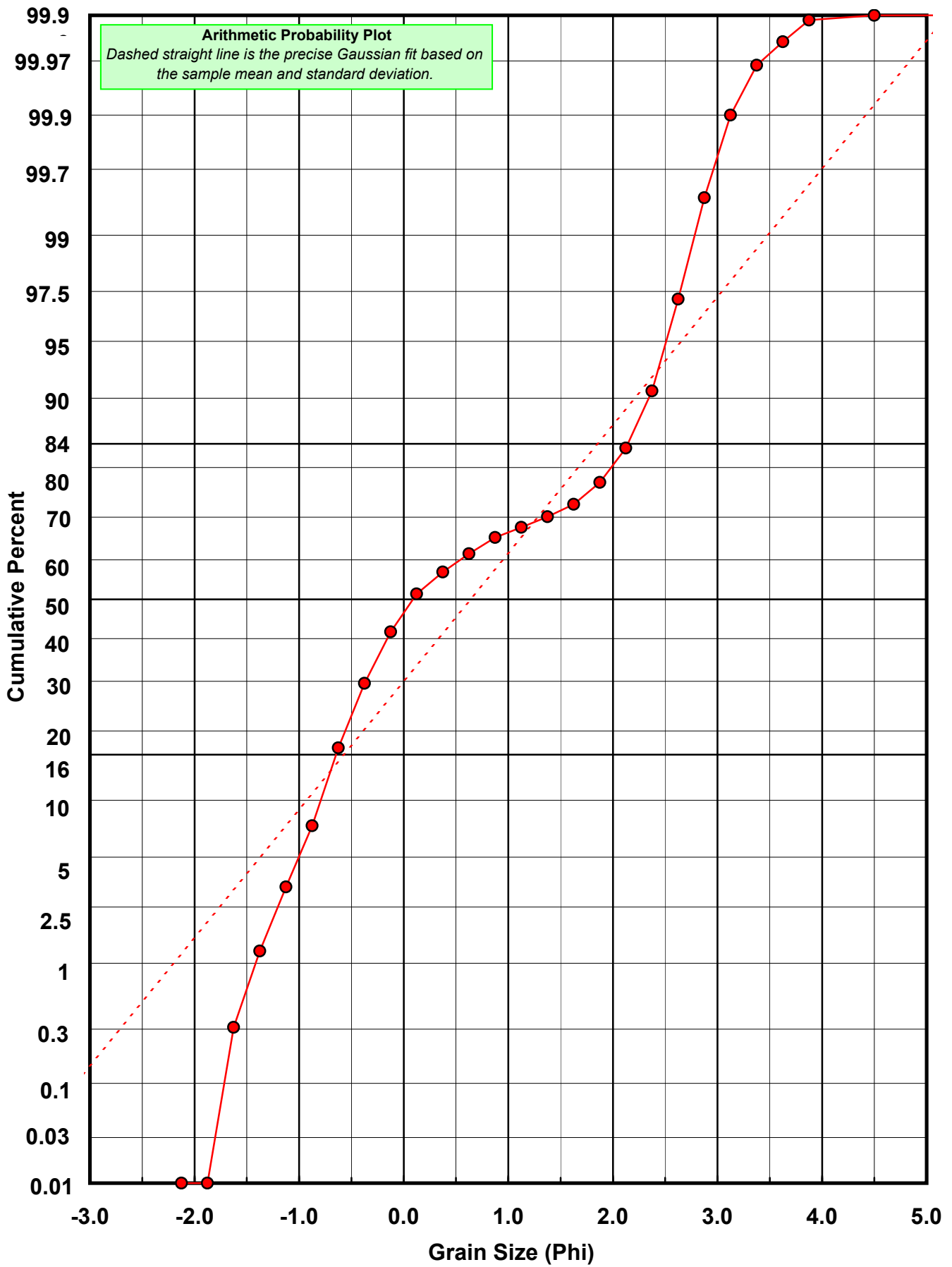
| Statistical Results | | | |
|---------------------|--------|---------------|-------------|
| Mean: | 0.6416 | phi | (0.641 mm) |
| Standard Dev: | 1.2240 | phi-units | (0.4281 mm) |
| Skewness: | 0.4380 | dimensionless | |
| Kurtosis: | 1.8083 | dimensionless | |
| 5th Moment: | 1.4668 | dimensionless | |
| 6th Moment: | 4.2449 | dimensionless | |
| RARD * | 1.9079 | dimensionless | |
| Median | 0.0896 | phi | (0.9398 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-47-SS

Total Carbonate Mass: 43.679 grams

% Carbonate: 57.3 %

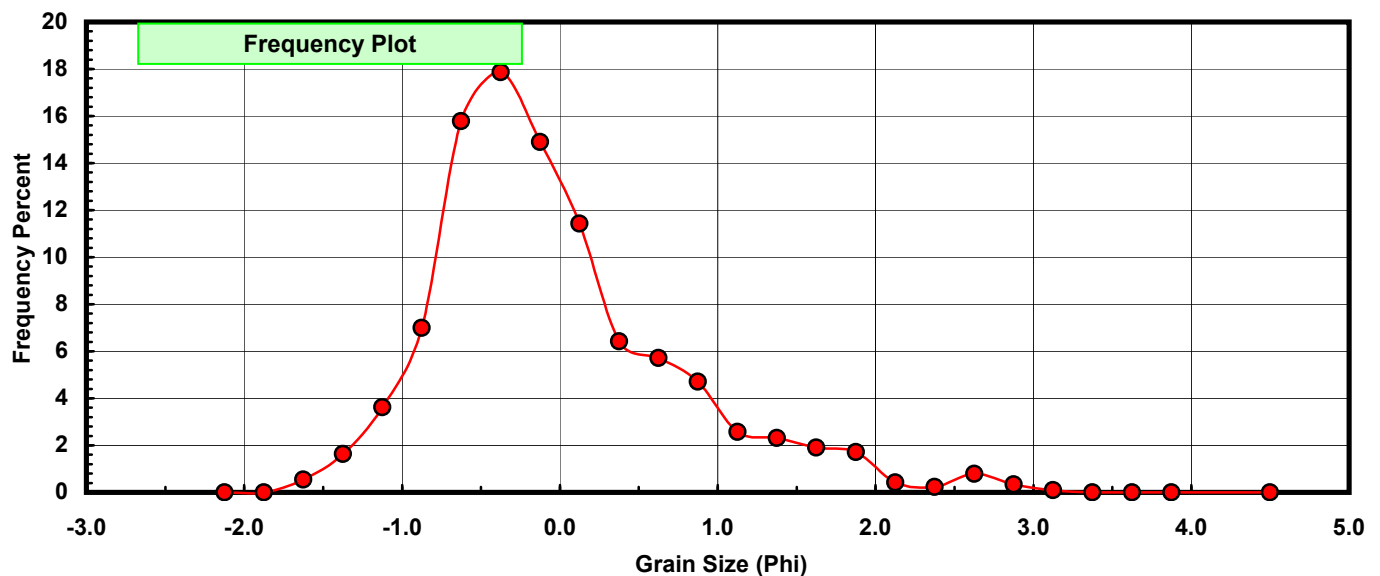
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 0.000 | 0.000 |
| -1.50 | -1.625 | 0.236 | 0.540 | 0.540 |
| -1.25 | -1.375 | 0.714 | 1.635 | 2.175 |
| -1.00 | -1.125 | 1.578 | 3.613 | 5.788 |
| -0.75 | -0.875 | 3.055 | 6.994 | 12.782 |
| -0.50 | -0.625 | 6.896 | 15.788 | 28.570 |
| -0.25 | -0.375 | 7.801 | 17.860 | 46.430 |
| 0.00 | -0.125 | 6.508 | 14.900 | 61.329 |
| 0.25 | 0.125 | 4.994 | 11.433 | 72.763 |
| 0.50 | 0.375 | 2.807 | 6.426 | 79.189 |
| 0.75 | 0.625 | 2.495 | 5.712 | 84.901 |
| 1.00 | 0.875 | 2.055 | 4.705 | 89.606 |
| 1.25 | 1.125 | 1.122 | 2.569 | 92.175 |
| 1.50 | 1.375 | 1.013 | 2.319 | 94.494 |
| 1.75 | 1.625 | 0.830 | 1.900 | 96.394 |
| 2.00 | 1.875 | 0.749 | 1.715 | 98.109 |
| 2.25 | 2.125 | 0.185 | 0.424 | 98.532 |
| 2.50 | 2.375 | 0.100 | 0.229 | 98.761 |
| 2.75 | 2.625 | 0.346 | 0.792 | 99.554 |
| 3.00 | 2.875 | 0.149 | 0.341 | 99.895 |
| 3.25 | 3.125 | 0.044 | 0.101 | 99.995 |
| 3.50 | 3.375 | 0.002 | 0.005 | 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 |

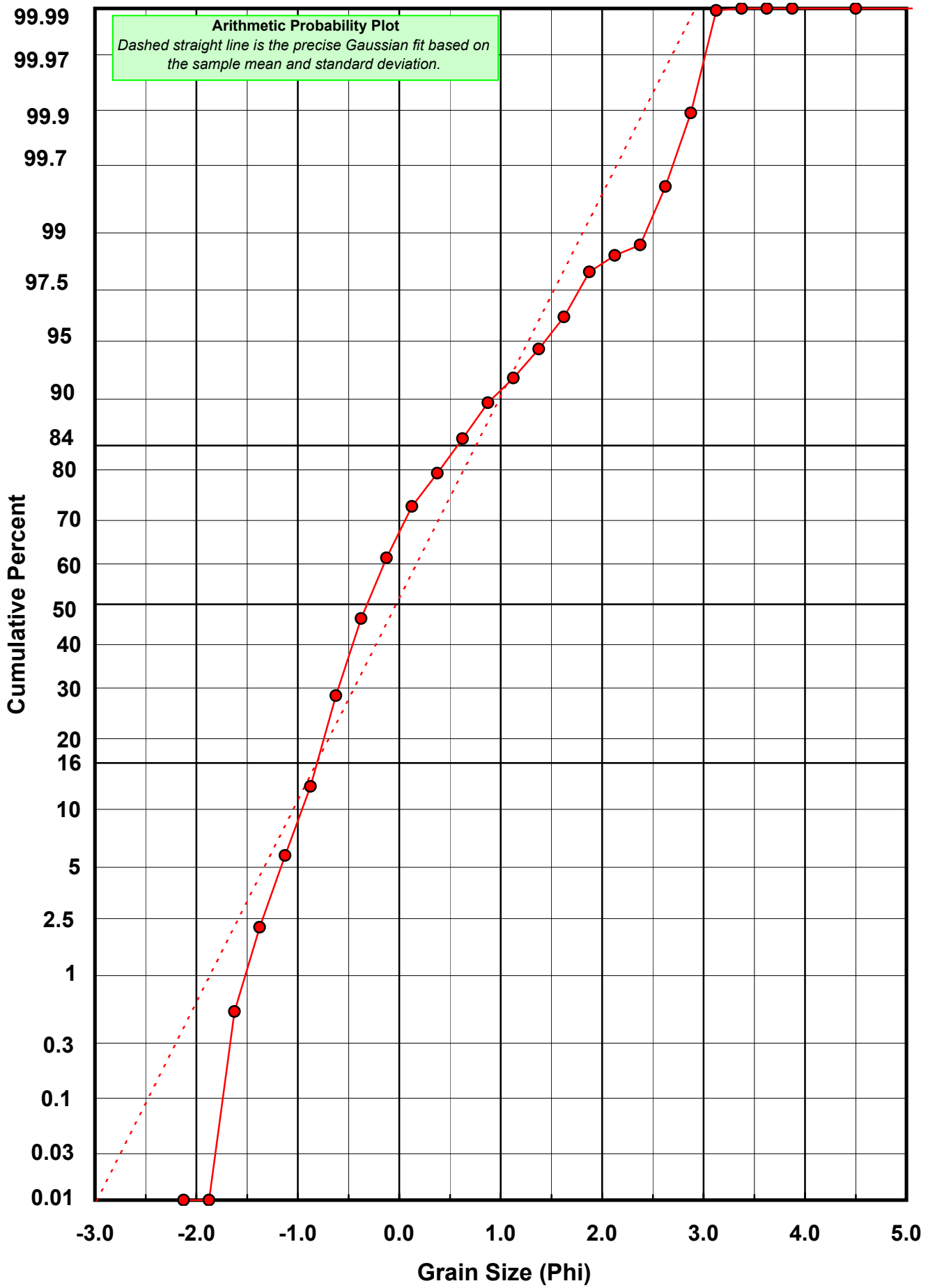
| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | -0.0300 | phi | (1.021 mm) |
| Standard Dev: | 0.7926 | phi-units | (0.5773 mm) |
| Skewness: | 1.0516 | dimensionless | |
| Kurtosis: | 4.2974 | dimensionless | |
| 5th Moment: | 10.2151 | dimensionless | |
| 6th Moment: | 35.1590 | dimensionless | |
| RARD * | 26.4600 | dimensionless | |
| Median | -0.3151 | phi | (1.2441 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-47-SS

Total Digested Mass: 32.547 grams

% Silica: 42.7 %

| 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 | 0.053 | 0.163 | 0.163 |
| -0.50 | -0.625 | 0.642 | 1.973 | 2.135 |
| -0.25 | -0.375 | 1.723 | 5.294 | 7.429 |
| 0.00 | -0.125 | 2.642 | 8.117 | 15.547 |
| 0.25 | 0.125 | 2.303 | 7.076 | 22.623 |
| 0.50 | 0.375 | 1.418 | 4.357 | 26.979 |
| 0.75 | 0.625 | 0.883 | 2.713 | 29.692 |
| 1.00 | 0.875 | 0.905 | 2.781 | 32.473 |
| 1.25 | 1.125 | 0.628 | 1.930 | 34.403 |
| 1.50 | 1.375 | 0.812 | 2.495 | 36.897 |
| 1.75 | 1.625 | 1.189 | 3.653 | 40.551 |
| 2.00 | 1.875 | 2.658 | 8.167 | 48.717 |
| 2.25 | 2.125 | 4.465 | 13.719 | 62.436 |
| 2.50 | 2.375 | 5.759 | 17.694 | 80.130 |
| 2.75 | 2.625 | 4.546 | 13.967 | 94.098 |
| 3.00 | 2.875 | 1.570 | 4.824 | 98.922 |
| 3.25 | 3.125 | 0.274 | 0.842 | 99.763 |
| 3.50 | 3.375 | 0.048 | 0.147 | 99.911 |
| 3.75 | 3.625 | 0.019 | 0.058 | 99.969 |
| 4.00 | 3.875 | 0.010 | 0.031 | 100.000 |
| 5.00 | 4.500 | 0.000 | 0.000 | 100.000 |

| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | 1.5429 | phi | (0.3432 mm) |
| Standard Dev: | 1.1226 | phi-units | (0.4593 mm) |
| Skewness: | -0.5845 | dimensionless | |
| Kurtosis: | 1.7950 | dimensionless | |
| 5th Moment: | -1.9533 | dimensionless | |
| 6th Moment: | 4.2807 | dimensionless | |
| RARD * | 0.7276 | dimensionless | |
| Median | 1.8984 | phi | (0.2682 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) |

