

Onshore Grab Sample

Sample: PI-01
Sample Taken By: D. Phelps
Sample Collected On: 11/3/09
Splits? N/A

County: Pinellas
Latitude: 28° 07' 43.8"
Longitude: 82° 50' 5.5"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

| | |
|-----------------------|--------------|
| Total Sample Weight | 87.036 grams |
| Total Fines in Sample | 1.087 grams |
| Total Percent Fines | 1.23 % |

Dry Sieving Summary

| | |
|------------------------|--------------|
| Total Sample Weight | 85.890 grams |
| Total Digested Weight | 85.393 grams |
| Total Carbonate Weight | 0.497 grams |
| Total Silica % | 99.42 % |
| Total Carbonate % | 0.58 % |
| Carbonate/Silica Ratio | 0.006 |

General Comments:

None

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: PI-01

Total Sample Mass: 85.890 grams

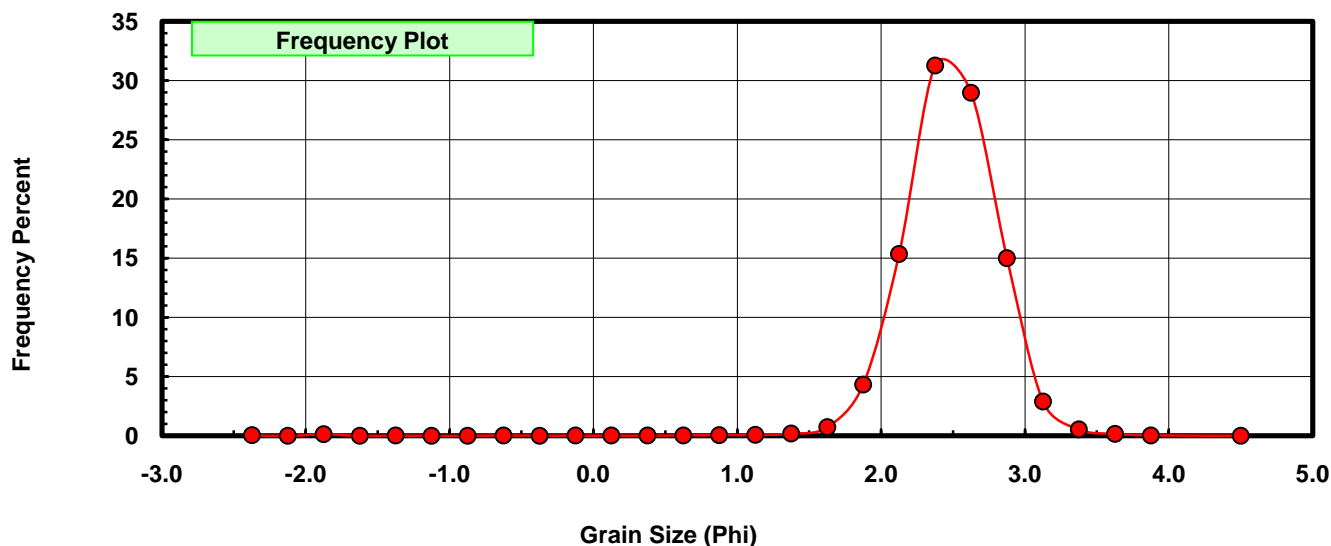
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.039 | 0.045 | 0.045 |
| -2.00 | -2.125 | 0.000 | 0.000 | 0.045 |
| -1.75 | -1.875 | 0.107 | 0.125 | 0.170 |
| -1.50 | -1.625 | 0.000 | 0.000 | 0.170 |
| -1.25 | -1.375 | 0.018 | 0.021 | 0.191 |
| -1.00 | -1.125 | 0.000 | 0.000 | 0.191 |
| -0.75 | -0.875 | 0.005 | 0.006 | 0.197 |
| -0.50 | -0.625 | 0.030 | 0.035 | 0.232 |
| -0.25 | -0.375 | 0.011 | 0.013 | 0.244 |
| 0.00 | -0.125 | 0.016 | 0.019 | 0.263 |
| 0.25 | 0.125 | 0.014 | 0.016 | 0.279 |
| 0.50 | 0.375 | 0.016 | 0.019 | 0.298 |
| 0.75 | 0.625 | 0.033 | 0.038 | 0.336 |
| 1.00 | 0.875 | 0.051 | 0.059 | 0.396 |
| 1.25 | 1.125 | 0.068 | 0.079 | 0.475 |
| 1.50 | 1.375 | 0.157 | 0.183 | 0.658 |
| 1.75 | 1.625 | 0.625 | 0.728 | 1.385 |
| 2.00 | 1.875 | 3.721 | 4.332 | 5.718 |
| 2.25 | 2.125 | 13.199 | 15.367 | 21.085 |
| 2.50 | 2.375 | 26.872 | 31.287 | 52.372 |
| 2.75 | 2.625 | 24.899 | 28.989 | 81.361 |
| 3.00 | 2.875 | 12.879 | 14.995 | 96.356 |
| 3.25 | 3.125 | 2.484 | 2.892 | 99.248 |
| 3.50 | 3.375 | 0.469 | 0.546 | 99.794 |
| 3.75 | 3.625 | 0.134 | 0.156 | 99.950 |
| 4.00 | 3.875 | 0.036 | 0.042 | 99.992 |
| 5.00 | 4.50 | 0.007 | 0.008 | 100.000 |

| Statistical Results | | | |
|---------------------|----------|---------------|-------------|
| Mean: | 2.4714 | phi | (0.1803 mm) |
| Standard Dev: | 0.3831 | phi-units | (0.7668 mm) |
| Skewness: | -3.4316 | dimensionless | |
| Kurtosis: | 39.9118 | dimensionless | |
| 5th Moment: | -432.007 | dimensionless | |
| 6th Moment: | 4985.374 | dimensionless | |
| RARD * | 0.1550 | dimensionless | |
| Median | 2.3560 | phi | (0.1953 mm) |

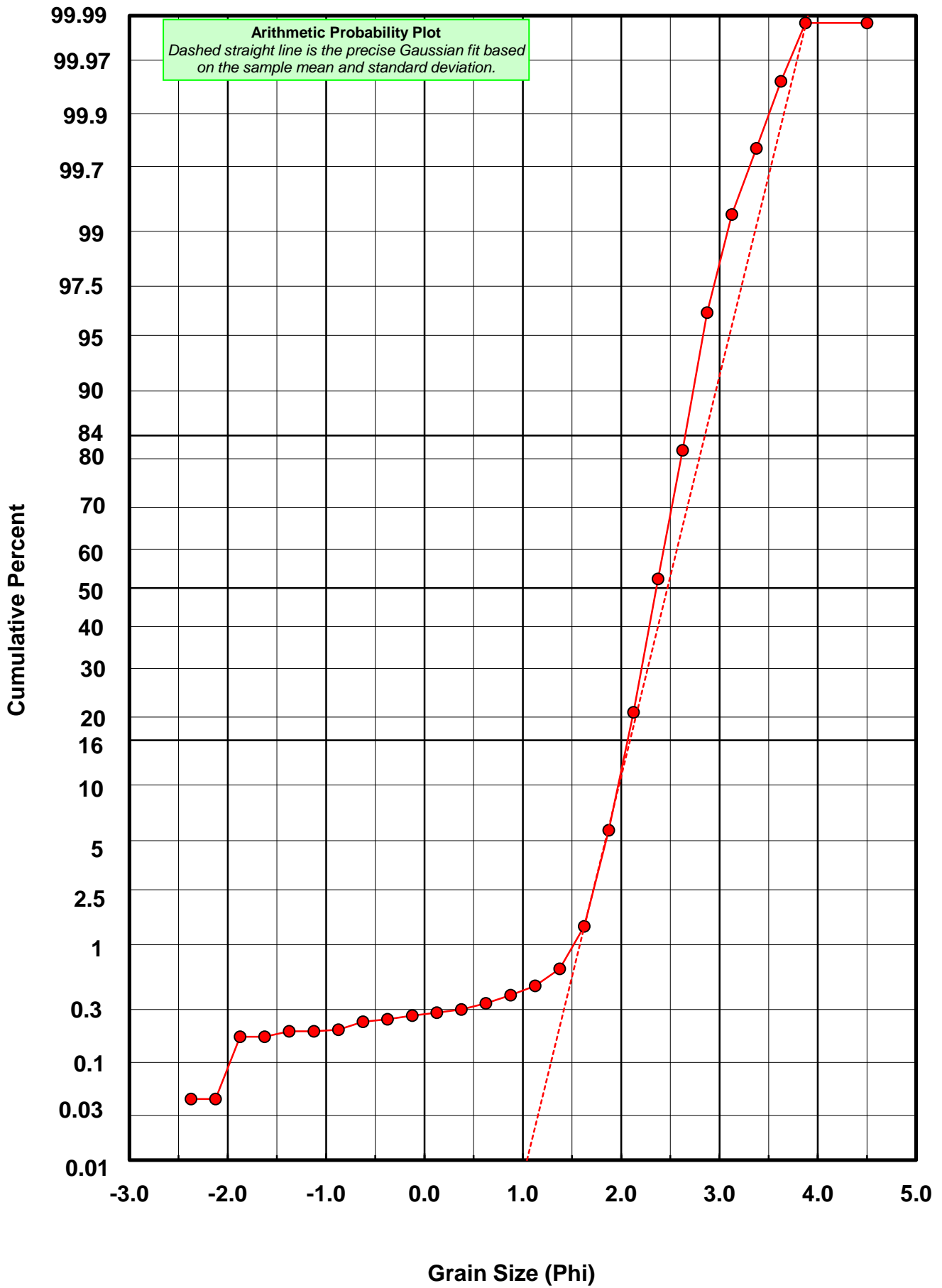
* RARD = reciprocal absolute relative dispersion (see below)

| 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 Basille et al. 2002 |
| 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) |



PI-01



Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: PI-01

Total Carbonate Mass: 1.450 grams

% Carbonate: 0.6 %

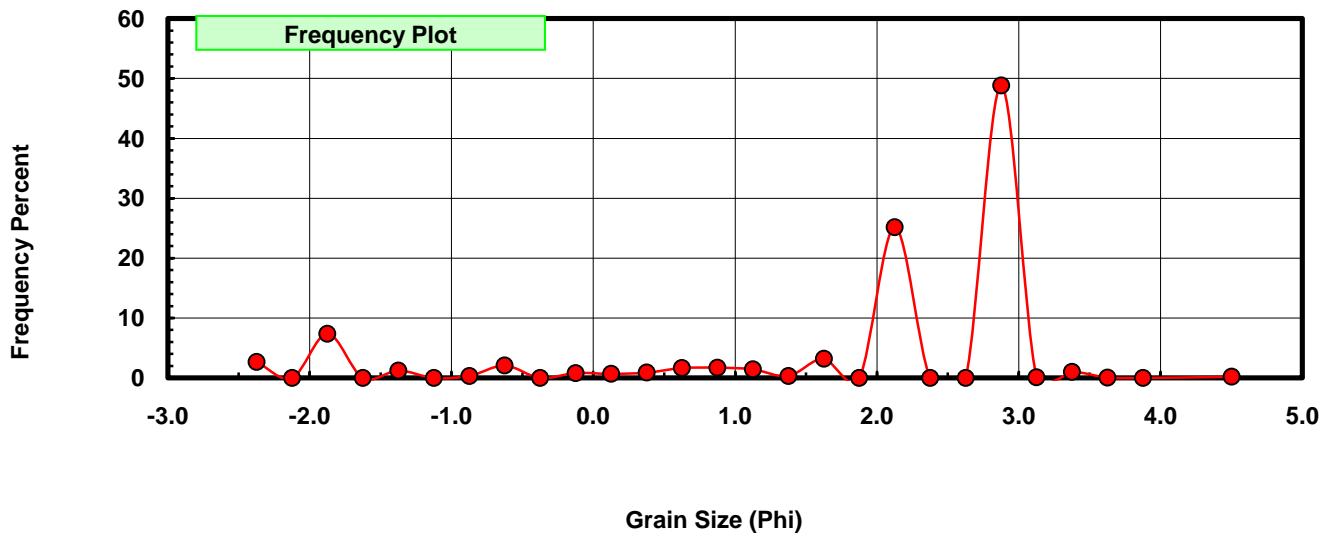
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.039 | 2.690 | 2.690 |
| -2.00 | -2.125 | 0.000 | 0.000 | 2.690 |
| -1.75 | -1.875 | 0.107 | 7.379 | 10.069 |
| -1.50 | -1.625 | 0.000 | 0.000 | 10.069 |
| -1.25 | -1.375 | 0.018 | 1.241 | 11.310 |
| -1.00 | -1.125 | 0.000 | 0.000 | 11.310 |
| -0.75 | -0.875 | 0.005 | 0.345 | 11.655 |
| -0.50 | -0.625 | 0.030 | 2.069 | 13.724 |
| -0.25 | -0.375 | 0.000 | 0.000 | 13.724 |
| 0.00 | -0.125 | 0.012 | 0.828 | 14.552 |
| 0.25 | 0.125 | 0.010 | 0.690 | 15.241 |
| 0.50 | 0.375 | 0.013 | 0.897 | 16.138 |
| 0.75 | 0.625 | 0.024 | 1.655 | 17.793 |
| 1.00 | 0.875 | 0.025 | 1.724 | 19.517 |
| 1.25 | 1.125 | 0.021 | 1.448 | 20.966 |
| 1.50 | 1.375 | 0.005 | 0.345 | 21.310 |
| 1.75 | 1.625 | 0.047 | 3.241 | 24.552 |
| 2.00 | 1.875 | 0.000 | 0.000 | 24.552 |
| 2.25 | 2.125 | 0.365 | 25.172 | 49.724 |
| 2.50 | 2.375 | 0.000 | 0.000 | 49.724 |
| 2.75 | 2.625 | 0.000 | 0.000 | 49.724 |
| 3.00 | 2.875 | 0.708 | 48.828 | 98.552 |
| 3.25 | 3.125 | 0.002 | 0.138 | 98.690 |
| 3.50 | 3.375 | 0.015 | 1.034 | 99.724 |
| 3.75 | 3.625 | 0.001 | 0.069 | 99.793 |
| 4.00 | 3.875 | 0.000 | 0.000 | 99.793 |
| 5.00 | 4.500 | 0.003 | 0.207 | 100.000 |

| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | 1.8568 | phi | (0.2761 mm) |
| Standard Dev: | 1.5761 | phi-units | (0.3354 mm) |
| Skewness: | -1.5992 | dimensionless | |
| Kurtosis: | 4.2545 | dimensionless | |
| 5th Moment: | -9.9071 | dimensionless | |
| 6th Moment: | 24.5603 | dimensionless | |
| RARD * | 0.8488 | dimensionless | |
| Median | 2.6264 | phi | (0.1619 mm) |

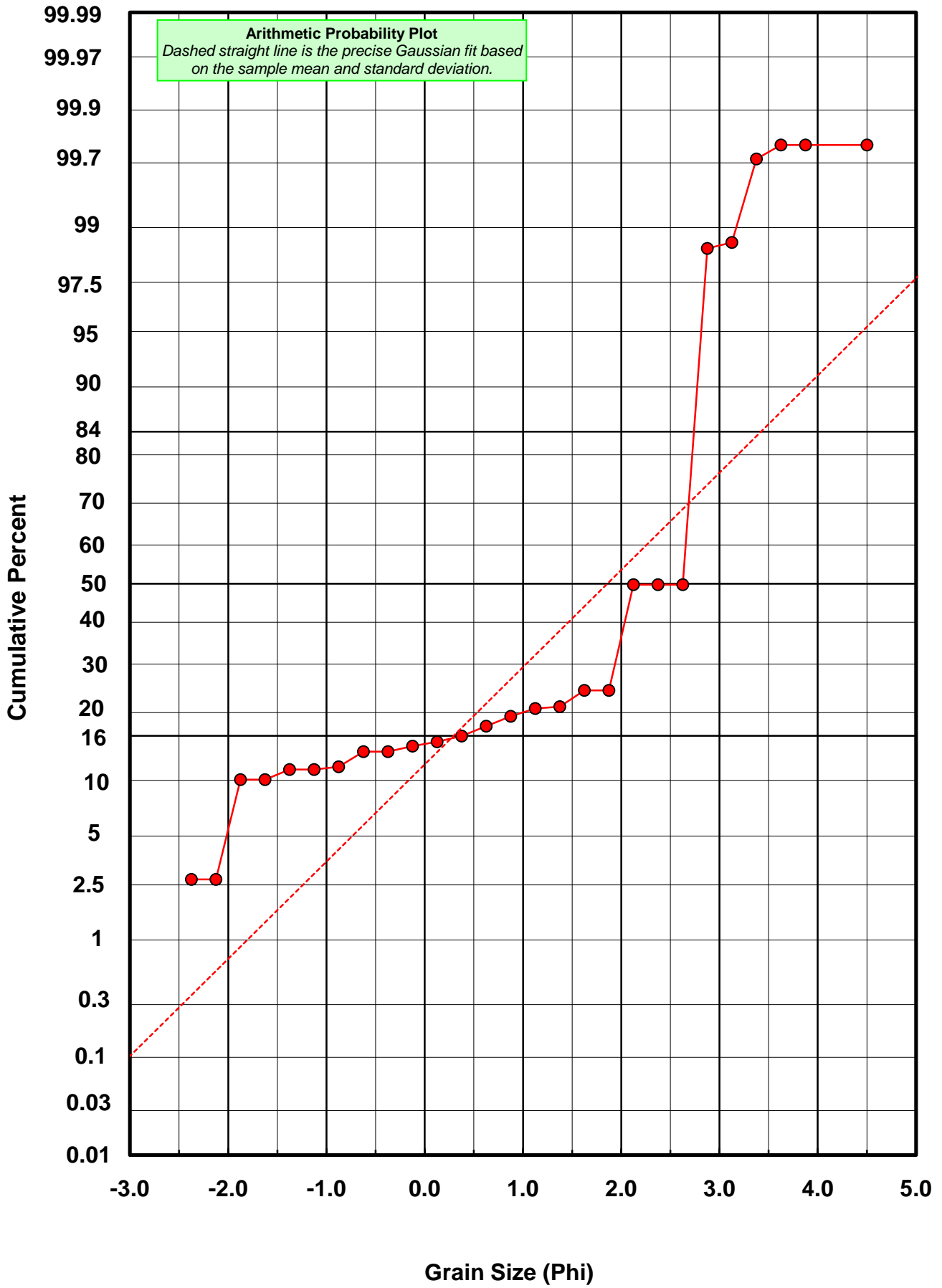
* RARD = reciprocal absolute relative dispersion (see below)

| 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 Basille et al. 2002 | |
| 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) |



PI-01



Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: PI-01

Total Digested Mass: 85.393 grams

% Silica: 99.4 %

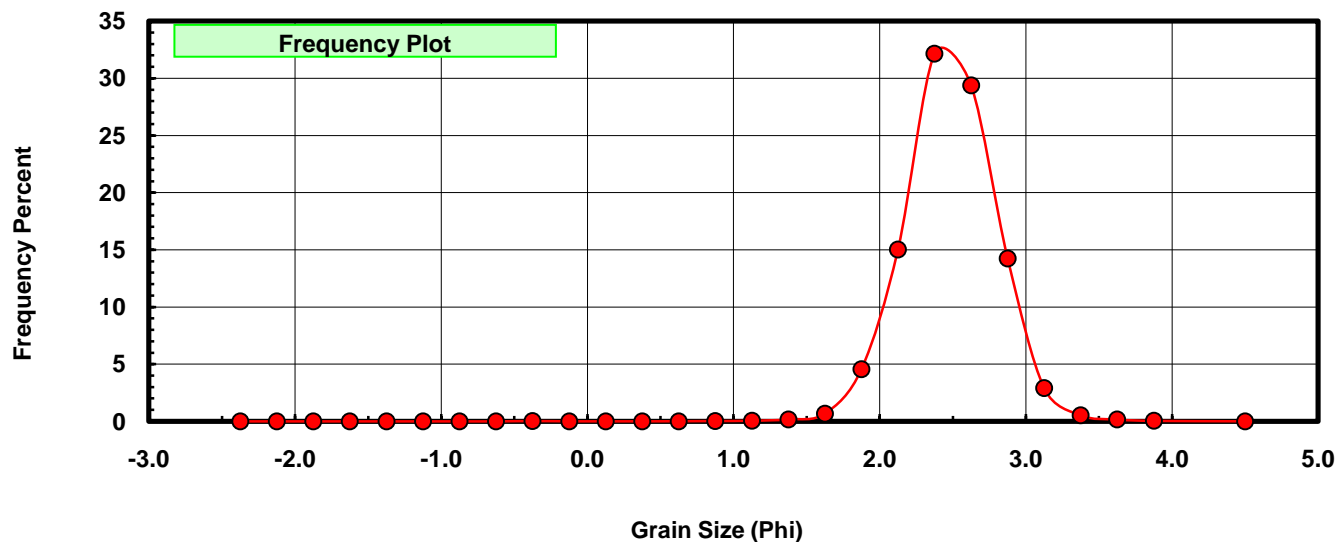
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 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 | 0.024 | 0.028 | 0.028 |
| 0.00 | -0.125 | 0.004 | 0.005 | 0.033 |
| 0.25 | 0.125 | 0.004 | 0.005 | 0.037 |
| 0.50 | 0.375 | 0.003 | 0.004 | 0.041 |
| 0.75 | 0.625 | 0.009 | 0.011 | 0.052 |
| 1.00 | 0.875 | 0.026 | 0.030 | 0.082 |
| 1.25 | 1.125 | 0.047 | 0.055 | 0.137 |
| 1.50 | 1.375 | 0.152 | 0.178 | 0.315 |
| 1.75 | 1.625 | 0.578 | 0.677 | 0.992 |
| 2.00 | 1.875 | 3.898 | 4.565 | 5.557 |
| 2.25 | 2.125 | 12.834 | 15.029 | 20.586 |
| 2.50 | 2.375 | 27.444 | 32.138 | 52.724 |
| 2.75 | 2.625 | 25.088 | 29.379 | 82.104 |
| 3.00 | 2.875 | 12.171 | 14.253 | 96.357 |
| 3.25 | 3.125 | 2.482 | 2.907 | 99.263 |
| 3.50 | 3.375 | 0.454 | 0.532 | 99.795 |
| 3.75 | 3.625 | 0.133 | 0.156 | 99.951 |
| 4.00 | 3.875 | 0.038 | 0.045 | 99.995 |
| 5.00 | 4.500 | 0.004 | 0.005 | 100.000 |

| Statistical Results | | | |
|---------------------|----------|---------------|-------------|
| Mean: | 2.4799 | phi | (0.1793 mm) |
| Standard Dev: | 0.3171 | phi-units | (0.8027 mm) |
| Skewness: | -0.3235 | dimensionless | |
| Kurtosis: | 6.0140 | dimensionless | |
| 5th Moment: | -21.3781 | dimensionless | |
| 6th Moment: | 213.5943 | dimensionless | |
| RARD * | 0.1279 | dimensionless | |
| Median | 2.3538 | phi | (0.1956 mm) |

* RARD = reciprocal absolute relative dispersion (see below)

| Statistical Explanation | |
|---|--|
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| Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0 | |
| Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0 | |
| For Further Explanation, See Basille et al. 2002 | |
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