

Onshore Grab Sample

Sample: PI-41-BB
Sample Taken By: D. Phelps
Sample Collected On: 12/1/09
Splits? N/A

County: Pinellas
Latitude: 27° 41' 52.6"
Longitude: 82° 44' 15.9"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight 51.858 grams
Total Fines in Sample 0.394 grams
Total Percent Fines 0.75 %

Dry Sieving Summary

Total Sample Weight 51.509 grams
Total Digested Weight 41.780 grams
Total Carbonate Weight 9.729 grams
Total Silica % 81.11 %
Total Carbonate % 18.89 %
Carbonate/Silica Ratio 0.233

General Comments:

None

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: PI-41-BB

Total Sample Mass: 51.509 grams

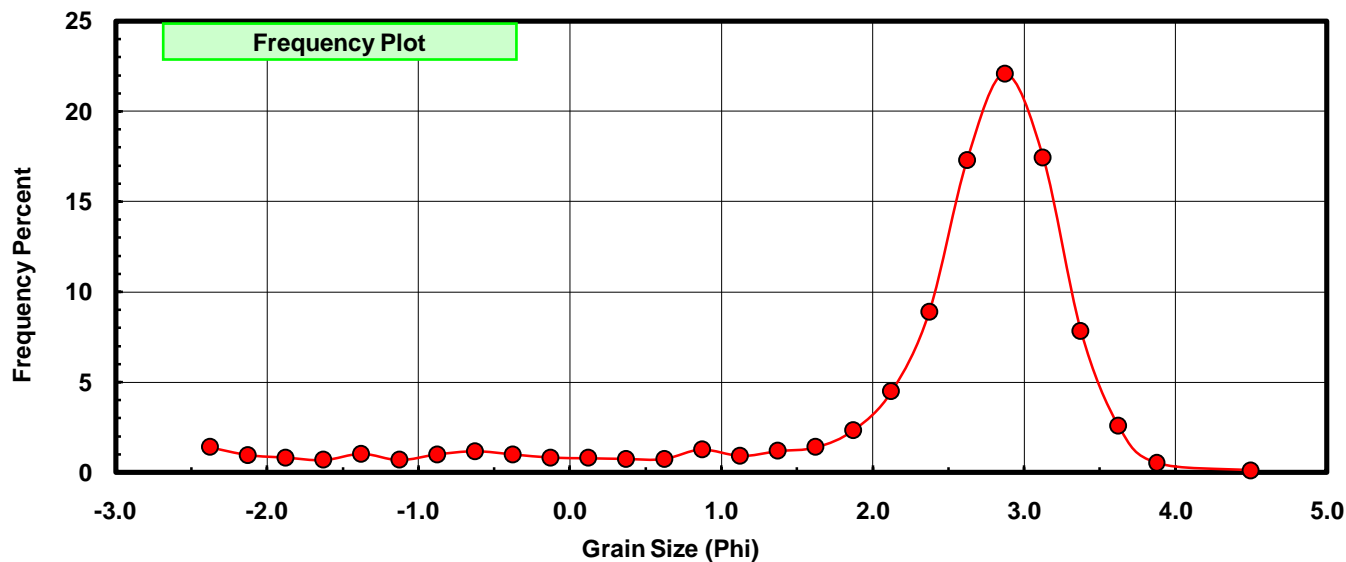
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.717 | 1.392 | 1.392 |
| -2.00 | -2.125 | 0.487 | 0.945 | 2.337 |
| -1.75 | -1.875 | 0.415 | 0.806 | 3.143 |
| -1.50 | -1.625 | 0.351 | 0.681 | 3.825 |
| -1.25 | -1.375 | 0.527 | 1.023 | 4.848 |
| -1.00 | -1.125 | 0.357 | 0.693 | 5.541 |
| -0.75 | -0.875 | 0.507 | 0.984 | 6.525 |
| -0.50 | -0.625 | 0.598 | 1.161 | 7.686 |
| -0.25 | -0.375 | 0.511 | 0.992 | 8.678 |
| 0.00 | -0.125 | 0.420 | 0.815 | 9.493 |
| 0.25 | 0.125 | 0.403 | 0.782 | 10.276 |
| 0.50 | 0.375 | 0.381 | 0.740 | 11.016 |
| 0.75 | 0.625 | 0.383 | 0.744 | 11.759 |
| 1.00 | 0.875 | 0.651 | 1.264 | 13.023 |
| 1.25 | 1.125 | 0.467 | 0.907 | 13.930 |
| 1.50 | 1.375 | 0.609 | 1.182 | 15.112 |
| 1.75 | 1.625 | 0.714 | 1.386 | 16.498 |
| 2.00 | 1.875 | 1.199 | 2.328 | 18.826 |
| 2.25 | 2.125 | 2.305 | 4.475 | 23.301 |
| 2.50 | 2.375 | 4.576 | 8.884 | 32.185 |
| 2.75 | 2.625 | 8.912 | 17.302 | 49.486 |
| 3.00 | 2.875 | 11.371 | 22.076 | 71.562 |
| 3.25 | 3.125 | 8.979 | 17.432 | 88.994 |
| 3.50 | 3.375 | 4.032 | 7.828 | 96.822 |
| 3.75 | 3.625 | 1.317 | 2.557 | 99.379 |
| 4.00 | 3.875 | 0.272 | 0.528 | 99.907 |
| 5.00 | 4.50 | 0.048 | 0.093 | 100.000 |

| Statistical Results | | | |
|---------------------|----------|---------------|-------------|
| Mean: | 2.3115 | phi | (0.2015 mm) |
| Standard Dev: | 1.3475 | phi-units | (0.393 mm) |
| Skewness: | -2.0429 | dimensionless | |
| Kurtosis: | 6.4293 | dimensionless | |
| 5th Moment: | -19.0748 | dimensionless | |
| 6th Moment: | 59.7346 | dimensionless | |
| RARD * | 0.5829 | dimensionless | |
| Median | 2.6308 | phi | (0.1615 mm) |

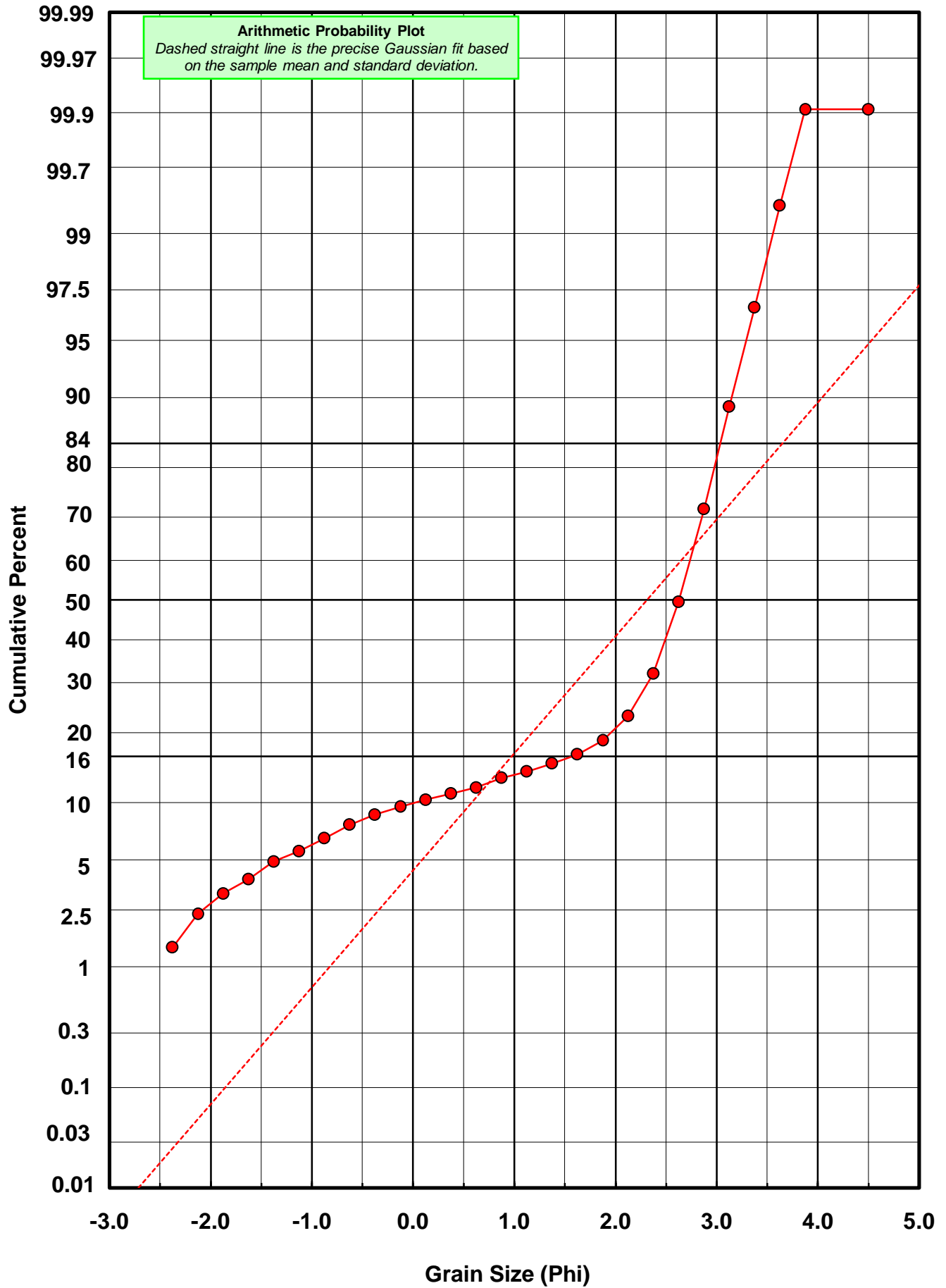
* RARD = reciprocal absolute relative dispersion (see below)

| 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-41-BB



Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: PI-41-BB

Total Carbonate Mass: 10.789 grams

% Carbonate: 18.9 %

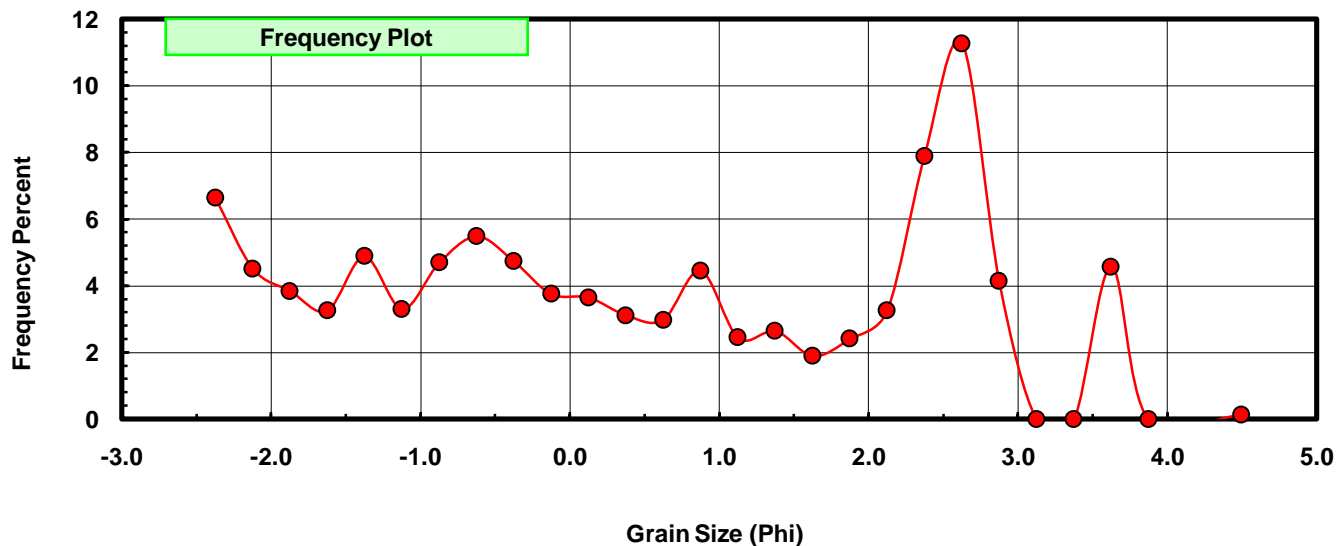
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.717 | 6.646 | 6.646 |
| -2.00 | -2.125 | 0.487 | 4.514 | 11.160 |
| -1.75 | -1.875 | 0.415 | 3.847 | 15.006 |
| -1.50 | -1.625 | 0.351 | 3.253 | 18.259 |
| -1.25 | -1.375 | 0.527 | 4.885 | 23.144 |
| -1.00 | -1.125 | 0.357 | 3.309 | 26.453 |
| -0.75 | -0.875 | 0.507 | 4.699 | 31.152 |
| -0.50 | -0.625 | 0.592 | 5.487 | 36.639 |
| -0.25 | -0.375 | 0.511 | 4.736 | 41.375 |
| 0.00 | -0.125 | 0.405 | 3.754 | 45.129 |
| 0.25 | 0.125 | 0.394 | 3.652 | 48.781 |
| 0.50 | 0.375 | 0.336 | 3.114 | 51.895 |
| 0.75 | 0.625 | 0.321 | 2.975 | 54.871 |
| 1.00 | 0.875 | 0.481 | 4.458 | 59.329 |
| 1.25 | 1.125 | 0.264 | 2.447 | 61.776 |
| 1.50 | 1.375 | 0.286 | 2.651 | 64.427 |
| 1.75 | 1.625 | 0.205 | 1.900 | 66.327 |
| 2.00 | 1.875 | 0.260 | 2.410 | 68.737 |
| 2.25 | 2.125 | 0.352 | 3.263 | 71.999 |
| 2.50 | 2.375 | 0.851 | 7.888 | 79.887 |
| 2.75 | 2.625 | 1.216 | 11.271 | 91.158 |
| 3.00 | 2.875 | 0.447 | 4.143 | 95.301 |
| 3.25 | 3.125 | 0.000 | 0.000 | 95.301 |
| 3.50 | 3.375 | 0.000 | 0.000 | 95.301 |
| 3.75 | 3.625 | 0.493 | 4.569 | 99.870 |
| 4.00 | 3.875 | 0.000 | 0.000 | 99.870 |
| 5.00 | 4.500 | 0.014 | 0.130 | 100.000 |

| Statistical Results | | | |
|---------------------|--------|---------------|-------------|
| Mean: | 0.4760 | phi | (0.719 mm) |
| Standard Dev: | 1.9292 | phi-units | (0.2626 mm) |
| Skewness: | 0.0311 | dimensionless | |
| Kurtosis: | 1.5395 | dimensionless | |
| 5th Moment: | 0.1150 | dimensionless | |
| 6th Moment: | 2.8976 | dimensionless | |
| RARD * | 4.0529 | dimensionless | |
| Median | 0.2228 | phi | (0.8569 mm) |

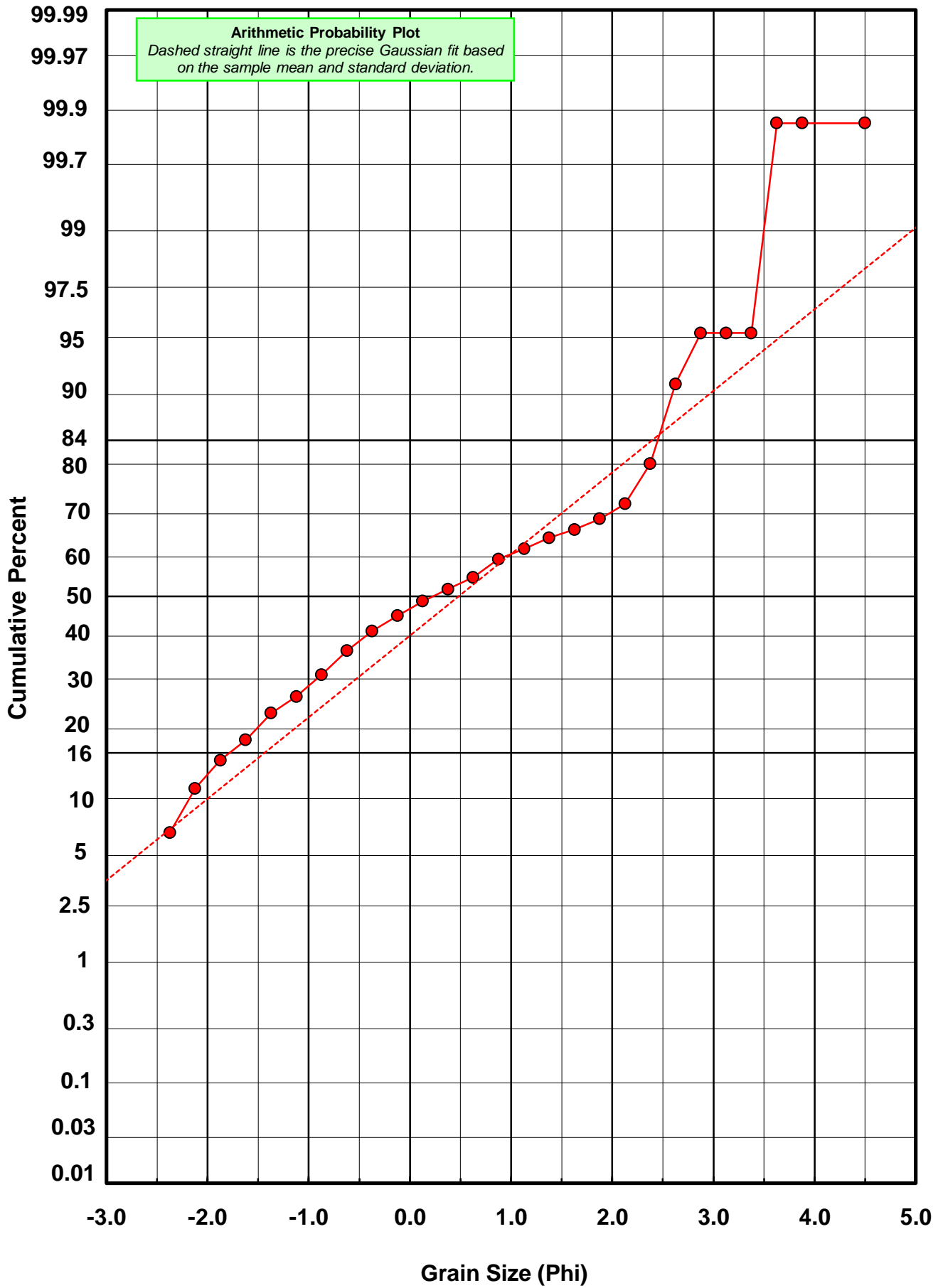
* RARD = reciprocal absolute relative dispersion (see below)

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PI-41-BB



Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: PI-41-BB

Total Digested Mass: 41.780 grams

% Silica: 81.1 %

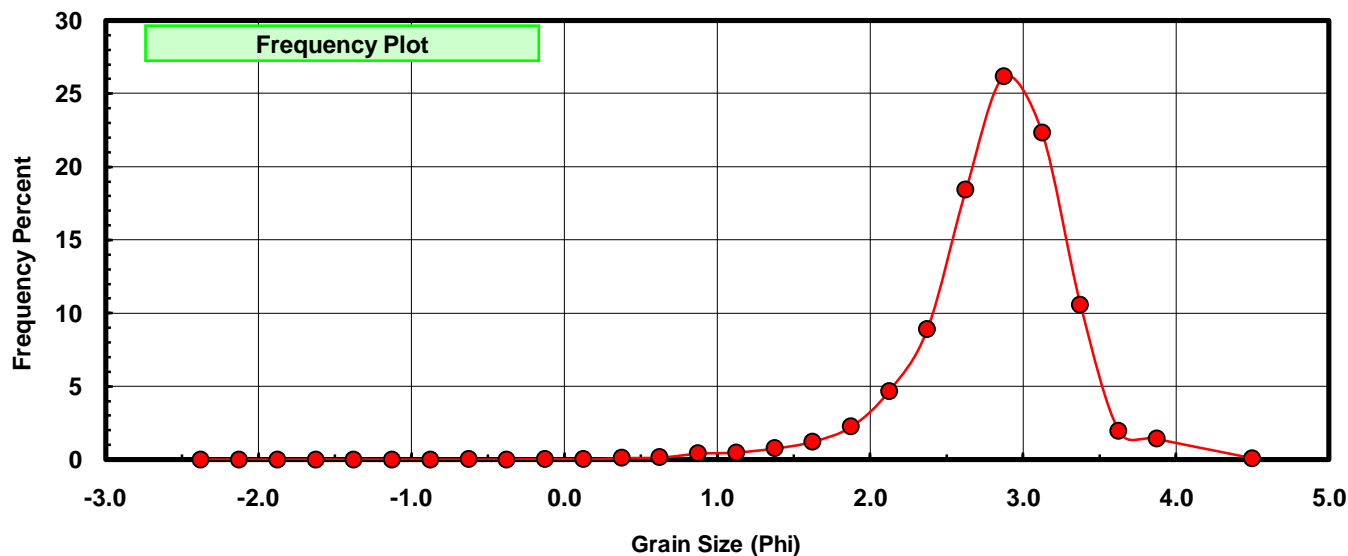
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 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 | 0.006 | 0.014 | 0.014 |
| -0.25 | -0.375 | 0.000 | 0.000 | 0.014 |
| 0.00 | -0.125 | 0.015 | 0.036 | 0.050 |
| 0.25 | 0.125 | 0.009 | 0.022 | 0.072 |
| 0.50 | 0.375 | 0.045 | 0.108 | 0.180 |
| 0.75 | 0.625 | 0.062 | 0.148 | 0.328 |
| 1.00 | 0.875 | 0.170 | 0.407 | 0.735 |
| 1.25 | 1.125 | 0.203 | 0.486 | 1.221 |
| 1.50 | 1.375 | 0.323 | 0.773 | 1.994 |
| 1.75 | 1.625 | 0.509 | 1.218 | 3.212 |
| 2.00 | 1.875 | 0.939 | 2.247 | 5.460 |
| 2.25 | 2.125 | 1.953 | 4.674 | 10.134 |
| 2.50 | 2.375 | 3.725 | 8.916 | 19.050 |
| 2.75 | 2.625 | 7.696 | 18.420 | 37.470 |
| 3.00 | 2.875 | 10.924 | 26.146 | 63.617 |
| 3.25 | 3.125 | 9.332 | 22.336 | 85.953 |
| 3.50 | 3.375 | 4.414 | 10.565 | 96.517 |
| 3.75 | 3.625 | 0.824 | 1.972 | 98.490 |
| 4.00 | 3.875 | 0.597 | 1.429 | 99.919 |
| 5.00 | 4.500 | 0.034 | 0.081 | 100.000 |

| Statistical Results | | | |
|---------------------|----------|---------------|-------------|
| Mean: | 2.8142 | phi | (0.1422 mm) |
| Standard Dev: | 0.4909 | phi-units | (0.7116 mm) |
| Skewness: | -1.1505 | dimensionless | |
| Kurtosis: | 6.3913 | dimensionless | |
| 5th Moment: | -20.9282 | dimensionless | |
| 6th Moment: | 105.5831 | dimensionless | |
| RARD * | 0.1744 | dimensionless | |
| Median | 2.7448 | phi | (0.1492 mm) |

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| Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0 | |
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