

Onshore Grab Sample

Sample: PB-40-BB
Sample Taken By: D. Phelps
Sample Collected On: 1/8/09
Splits? N/A

County: Palm Beach
Latitude: 26° 24' 15.0"
Longitude: 80° 03' 52.5"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

| | |
|-----------------------|--------------|
| Total Sample Weight | 57.972 grams |
| Total Fines in Sample | 0.097 grams |
| Total Percent Fines | 0.17 % |

Dry Sieving Summary

| | |
|------------------------|--------------|
| Total Sample Weight | 57.902 grams |
| Total Digested Weight | 27.647 grams |
| Total Carbonate Weight | 30.255 grams |
| Total Silica % | 47.75 % |
| Total Carbonate % | 52.25 % |
| Carbonate/Silica Ratio | 1.094 |

General Comments:

None

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: PB-40-BB

Total Sample Mass: 57.902 grams

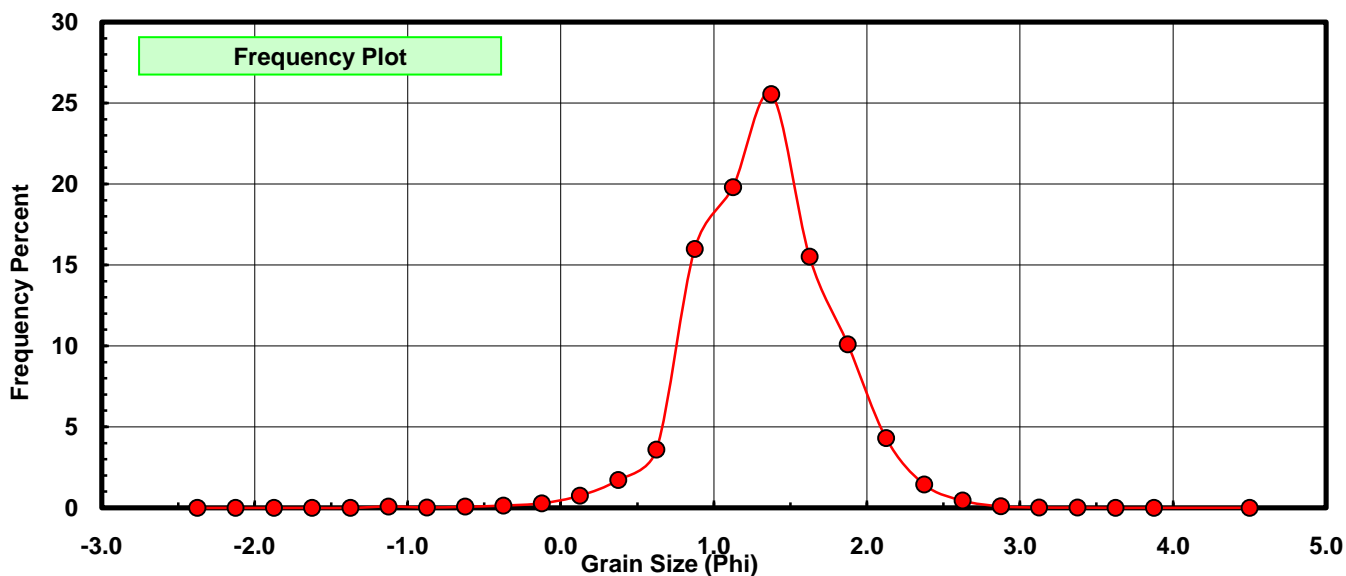
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 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 | 0.050 | 0.086 | 0.086 |
| -0.75 | -0.875 | 0.015 | 0.026 | 0.112 |
| -0.50 | -0.625 | 0.040 | 0.069 | 0.181 |
| -0.25 | -0.375 | 0.084 | 0.145 | 0.326 |
| 0.00 | -0.125 | 0.165 | 0.285 | 0.611 |
| 0.25 | 0.125 | 0.437 | 0.755 | 1.366 |
| 0.50 | 0.375 | 0.997 | 1.722 | 3.088 |
| 0.75 | 0.625 | 2.078 | 3.589 | 6.677 |
| 1.00 | 0.875 | 9.262 | 15.996 | 22.673 |
| 1.25 | 1.125 | 11.469 | 19.808 | 42.480 |
| 1.50 | 1.375 | 14.790 | 25.543 | 68.024 |
| 1.75 | 1.625 | 8.982 | 15.512 | 83.536 |
| 2.00 | 1.875 | 5.850 | 10.103 | 93.639 |
| 2.25 | 2.125 | 2.497 | 4.312 | 97.952 |
| 2.50 | 2.375 | 0.835 | 1.442 | 99.394 |
| 2.75 | 2.625 | 0.261 | 0.451 | 99.845 |
| 3.00 | 2.875 | 0.057 | 0.098 | 99.943 |
| 3.25 | 3.125 | 0.013 | 0.022 | 99.965 |
| 3.50 | 3.375 | 0.012 | 0.021 | 99.986 |
| 3.75 | 3.625 | 0.001 | 0.002 | 99.988 |
| 4.00 | 3.875 | 0.003 | 0.005 | 99.993 |
| 5.00 | 4.50 | 0.004 | 0.007 | 100.000 |

| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | 1.3254 | phi | (0.399 mm) |
| Standard Dev: | 0.4566 | phi-units | (0.7287 mm) |
| Skewness: | -0.1405 | dimensionless | |
| Kurtosis: | 4.6110 | dimensionless | |
| 5th Moment: | -4.3637 | dimensionless | |
| 6th Moment: | 60.1632 | dimensionless | |
| RARD * | 0.3445 | dimensionless | |
| Median | 1.1986 | phi | (0.4357 mm) |

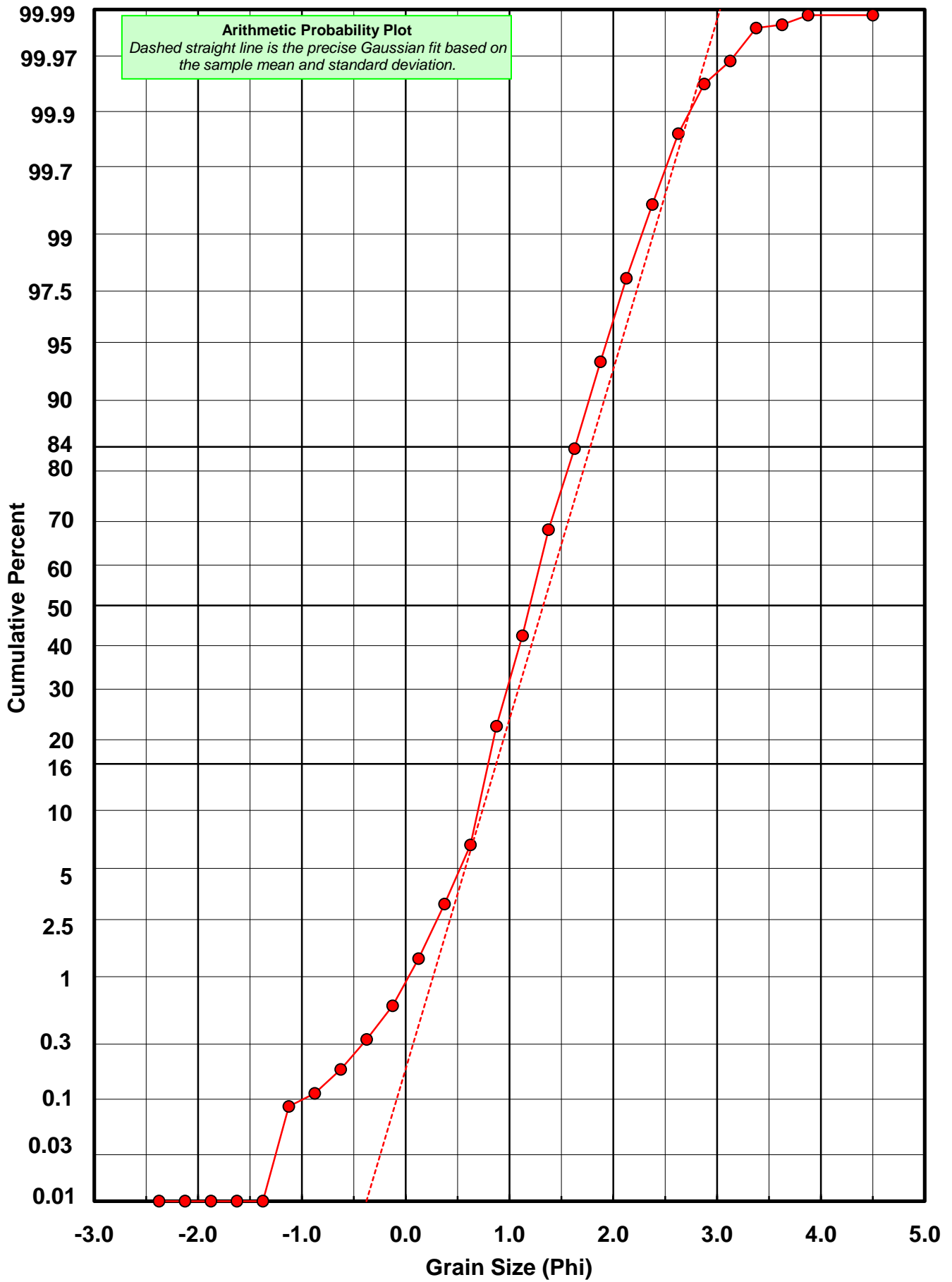
* RARD = reciprocal absolute relative dispersion (see below)

| 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) |



PB-40-BB



Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: PB-40-BB

Total Carbonate Mass: 30.290 grams

% Carbonate: 52.3 %

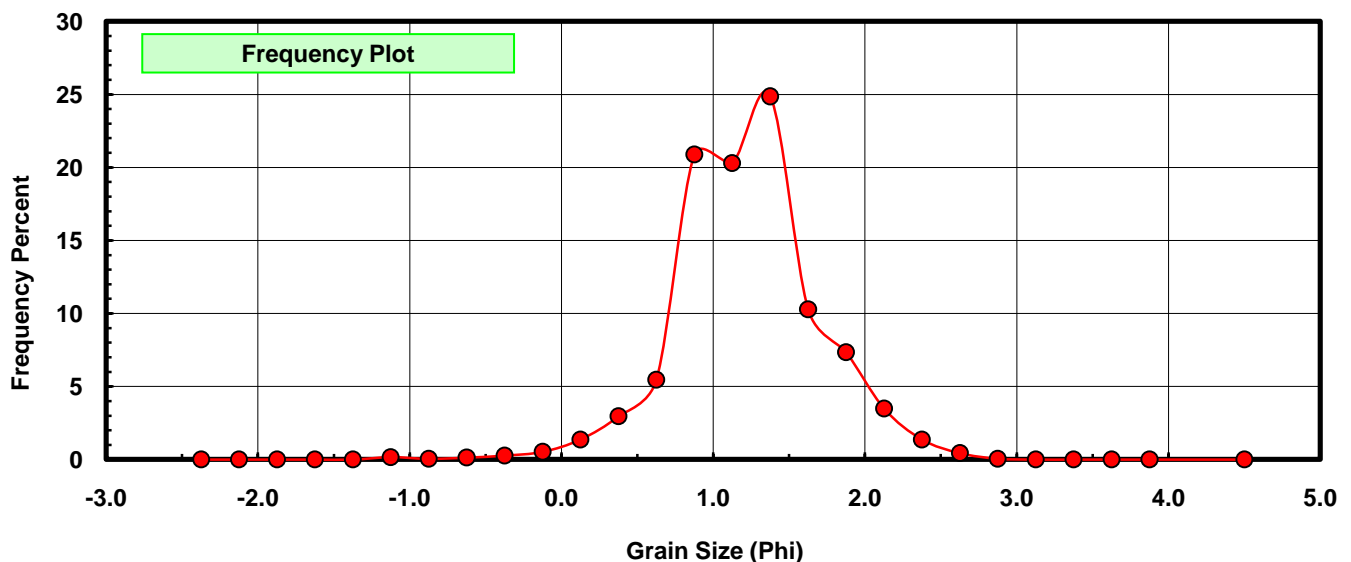
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 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 | 0.050 | 0.165 | 0.165 |
| -0.75 | -0.875 | 0.015 | 0.050 | 0.215 |
| -0.50 | -0.625 | 0.040 | 0.132 | 0.347 |
| -0.25 | -0.375 | 0.082 | 0.271 | 0.617 |
| 0.00 | -0.125 | 0.160 | 0.528 | 1.146 |
| 0.25 | 0.125 | 0.416 | 1.373 | 2.519 |
| 0.50 | 0.375 | 0.896 | 2.958 | 5.477 |
| 0.75 | 0.625 | 1.655 | 5.464 | 10.941 |
| 1.00 | 0.875 | 6.326 | 20.885 | 31.826 |
| 1.25 | 1.125 | 6.149 | 20.300 | 52.126 |
| 1.50 | 1.375 | 7.533 | 24.870 | 76.996 |
| 1.75 | 1.625 | 3.114 | 10.281 | 87.276 |
| 2.00 | 1.875 | 2.227 | 7.352 | 94.629 |
| 2.25 | 2.125 | 1.060 | 3.500 | 98.128 |
| 2.50 | 2.375 | 0.416 | 1.373 | 99.501 |
| 2.75 | 2.625 | 0.133 | 0.439 | 99.941 |
| 3.00 | 2.875 | 0.018 | 0.059 | 100.000 |
| 3.25 | 3.125 | 0.000 | 0.000 | 100.000 |
| 3.50 | 3.375 | 0.000 | 0.000 | 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: | 1.2204 | phi | (0.4292 mm) |
| Standard Dev: | 0.4850 | phi-units | (0.7145 mm) |
| Skewness: | -0.2173 | dimensionless | |
| Kurtosis: | 4.4885 | dimensionless | |
| 5th Moment: | -6.3764 | dimensionless | |
| 6th Moment: | 46.5523 | dimensionless | |
| RARD * | 0.3974 | dimensionless | |
| Median | 1.0988 | phi | (0.4669 mm) |

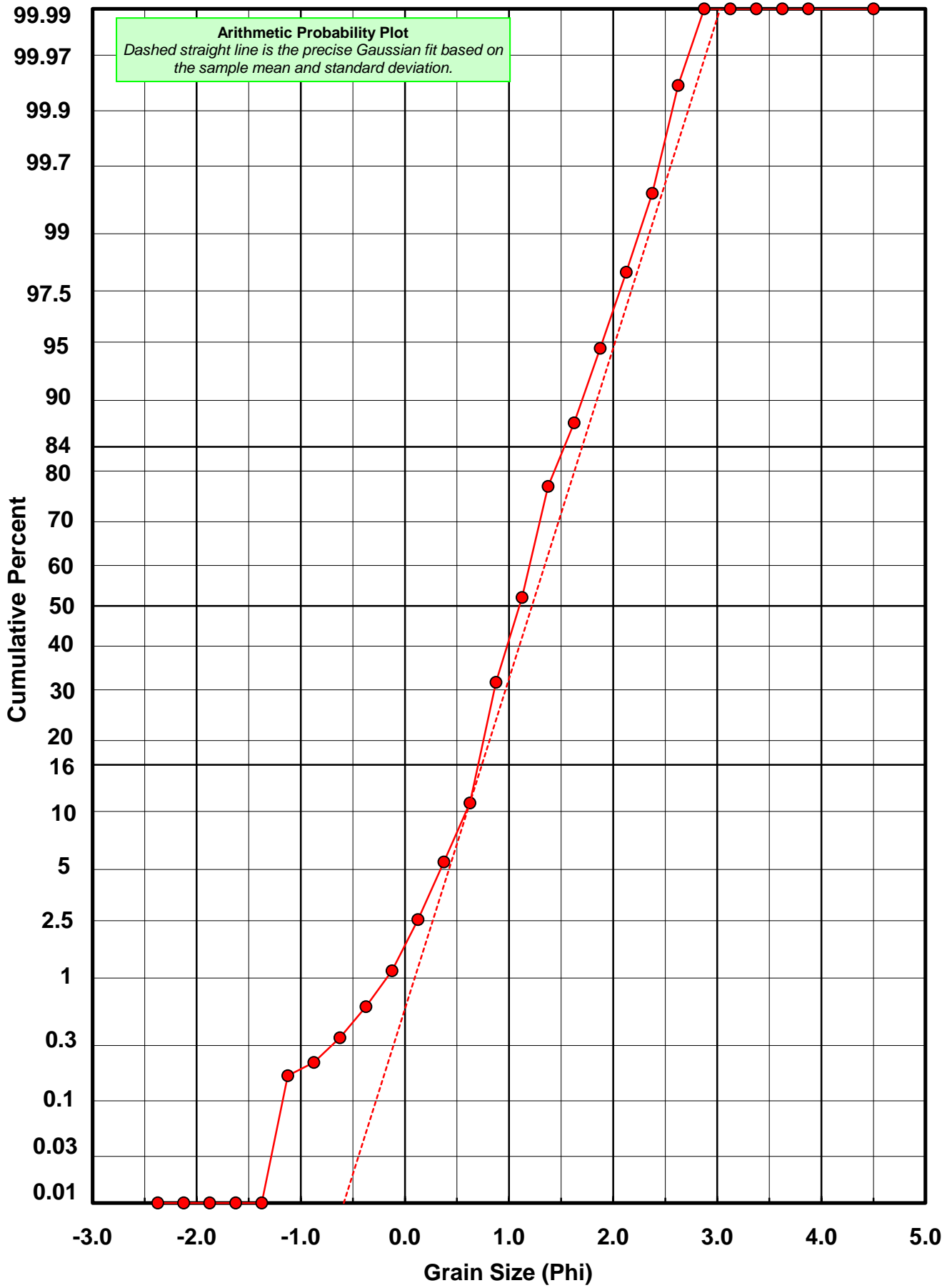
* RARD = reciprocal absolute relative dispersion (see below)

| 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 |
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PB-40-BB



Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: PB-40-BB

Total Digested Mass: 27.647 grams

% Silica: 47.7 %

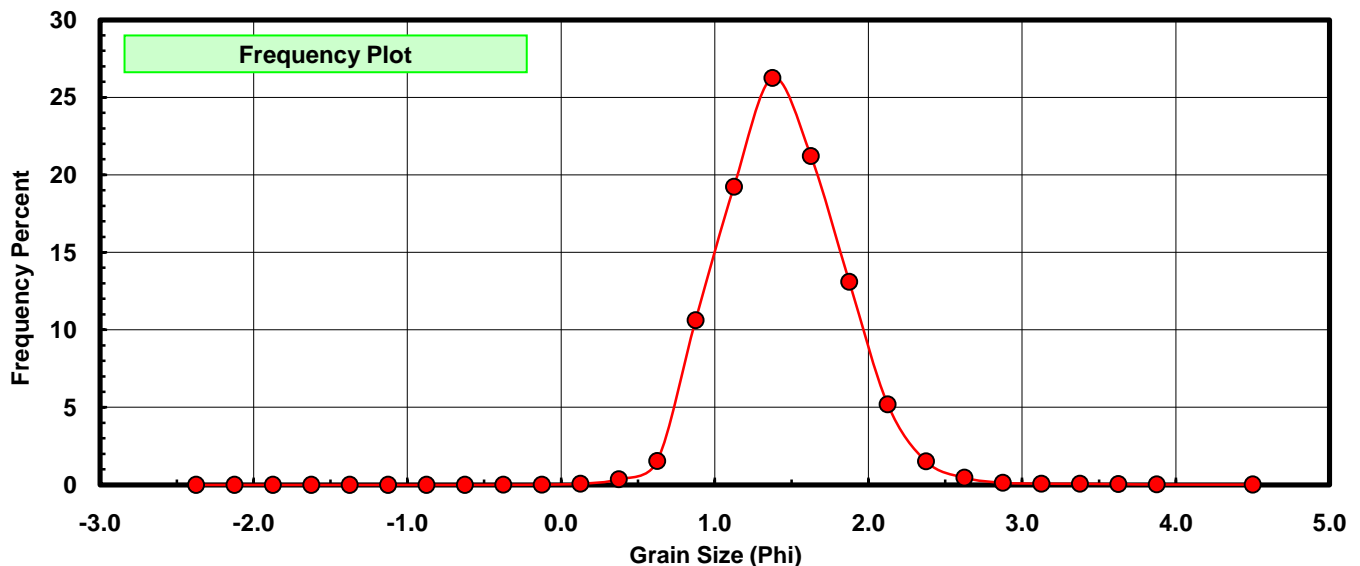
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 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 | 0.002 | 0.007 | 0.007 |
| 0.00 | -0.125 | 0.005 | 0.018 | 0.025 |
| 0.25 | 0.125 | 0.021 | 0.076 | 0.101 |
| 0.50 | 0.375 | 0.101 | 0.365 | 0.467 |
| 0.75 | 0.625 | 0.423 | 1.530 | 1.997 |
| 1.00 | 0.875 | 2.936 | 10.620 | 12.616 |
| 1.25 | 1.125 | 5.320 | 19.243 | 31.859 |
| 1.50 | 1.375 | 7.257 | 26.249 | 58.108 |
| 1.75 | 1.625 | 5.868 | 21.225 | 79.332 |
| 2.00 | 1.875 | 3.623 | 13.104 | 92.437 |
| 2.25 | 2.125 | 1.437 | 5.198 | 97.634 |
| 2.50 | 2.375 | 0.419 | 1.516 | 99.150 |
| 2.75 | 2.625 | 0.128 | 0.463 | 99.613 |
| 3.00 | 2.875 | 0.039 | 0.141 | 99.754 |
| 3.25 | 3.125 | 0.022 | 0.080 | 99.834 |
| 3.50 | 3.375 | 0.020 | 0.072 | 99.906 |
| 3.75 | 3.625 | 0.013 | 0.047 | 99.953 |
| 4.00 | 3.875 | 0.007 | 0.025 | 99.978 |
| 5.00 | 4.500 | 0.006 | 0.022 | 100.000 |

| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | 1.4432 | phi | (0.3678 mm) |
| Standard Dev: | 0.4077 | phi-units | (0.7538 mm) |
| Skewness: | 0.5298 | dimensionless | |
| Kurtosis: | 4.7349 | dimensionless | |
| 5th Moment: | 13.6779 | dimensionless | |
| 6th Moment: | 90.2192 | dimensionless | |
| RARD * | 0.2825 | dimensionless | |
| Median | 1.2978 | phi | (0.4068 mm) |

* RARD = reciprocal absolute relative dispersion (see below)

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