

Onshore Grab Sample

Sample: PB-17
Sample Taken By: D. Phelps
Sample Collected On: 1/7/09
Splits? N/A

County: Palm Beach
Latitude: 26° 44' 34.8"
Longitude: 80° 02' 6.5"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight 56.393 grams
Total Fines in Sample 0.297 grams
Total Percent Fines 0.52 %

Dry Sieving Summary

Total Sample Weight 56.112 grams
Total Digested Weight 29.958 grams
Total Carbonate Weight 26.154 grams
Total Silica % 53.39 %
Total Carbonate % 46.61 %
Carbonate/Silica Ratio 0.873

General Comments:

None

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: PB-17

Total Sample Mass: 56.112 grams

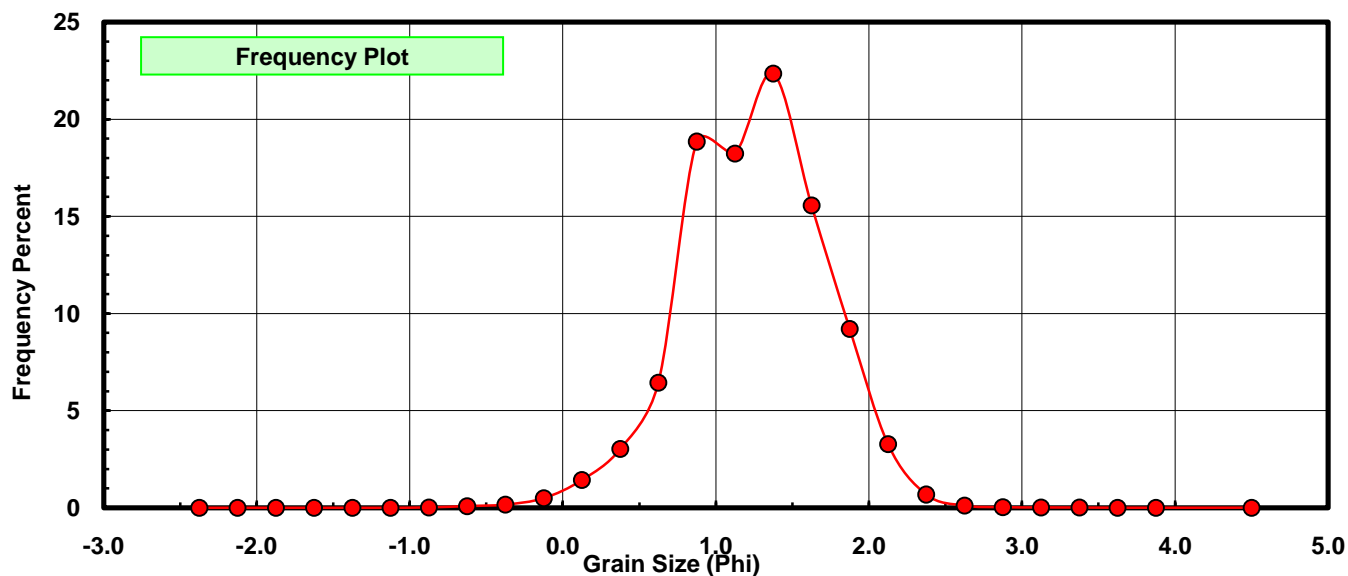
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 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 | 0.000 | 0.000 | 0.000 |
| -0.75 | -0.875 | 0.011 | 0.020 | 0.020 |
| -0.50 | -0.625 | 0.049 | 0.087 | 0.107 |
| -0.25 | -0.375 | 0.093 | 0.166 | 0.273 |
| 0.00 | -0.125 | 0.276 | 0.492 | 0.765 |
| 0.25 | 0.125 | 0.800 | 1.426 | 2.190 |
| 0.50 | 0.375 | 1.697 | 3.024 | 5.215 |
| 0.75 | 0.625 | 3.616 | 6.444 | 11.659 |
| 1.00 | 0.875 | 10.576 | 18.848 | 30.507 |
| 1.25 | 1.125 | 10.233 | 18.237 | 48.744 |
| 1.50 | 1.375 | 12.540 | 22.348 | 71.092 |
| 1.75 | 1.625 | 8.736 | 15.569 | 86.661 |
| 2.00 | 1.875 | 5.163 | 9.201 | 95.862 |
| 2.25 | 2.125 | 1.835 | 3.270 | 99.132 |
| 2.50 | 2.375 | 0.383 | 0.683 | 99.815 |
| 2.75 | 2.625 | 0.063 | 0.112 | 99.927 |
| 3.00 | 2.875 | 0.017 | 0.030 | 99.957 |
| 3.25 | 3.125 | 0.010 | 0.018 | 99.975 |
| 3.50 | 3.375 | 0.007 | 0.012 | 99.988 |
| 3.75 | 3.625 | 0.002 | 0.004 | 99.991 |
| 4.00 | 3.875 | 0.002 | 0.004 | 99.995 |
| 5.00 | 4.50 | 0.003 | 0.005 | 100.000 |

| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | 1.2453 | phi | (0.4218 mm) |
| Standard Dev: | 0.4662 | phi-units | (0.7239 mm) |
| Skewness: | -0.1895 | dimensionless | |
| Kurtosis: | 3.5492 | dimensionless | |
| 5th Moment: | -1.5064 | dimensionless | |
| 6th Moment: | 31.0936 | dimensionless | |
| RARD * | 0.3744 | dimensionless | |
| Median | 1.1391 | phi | (0.4541 mm) |

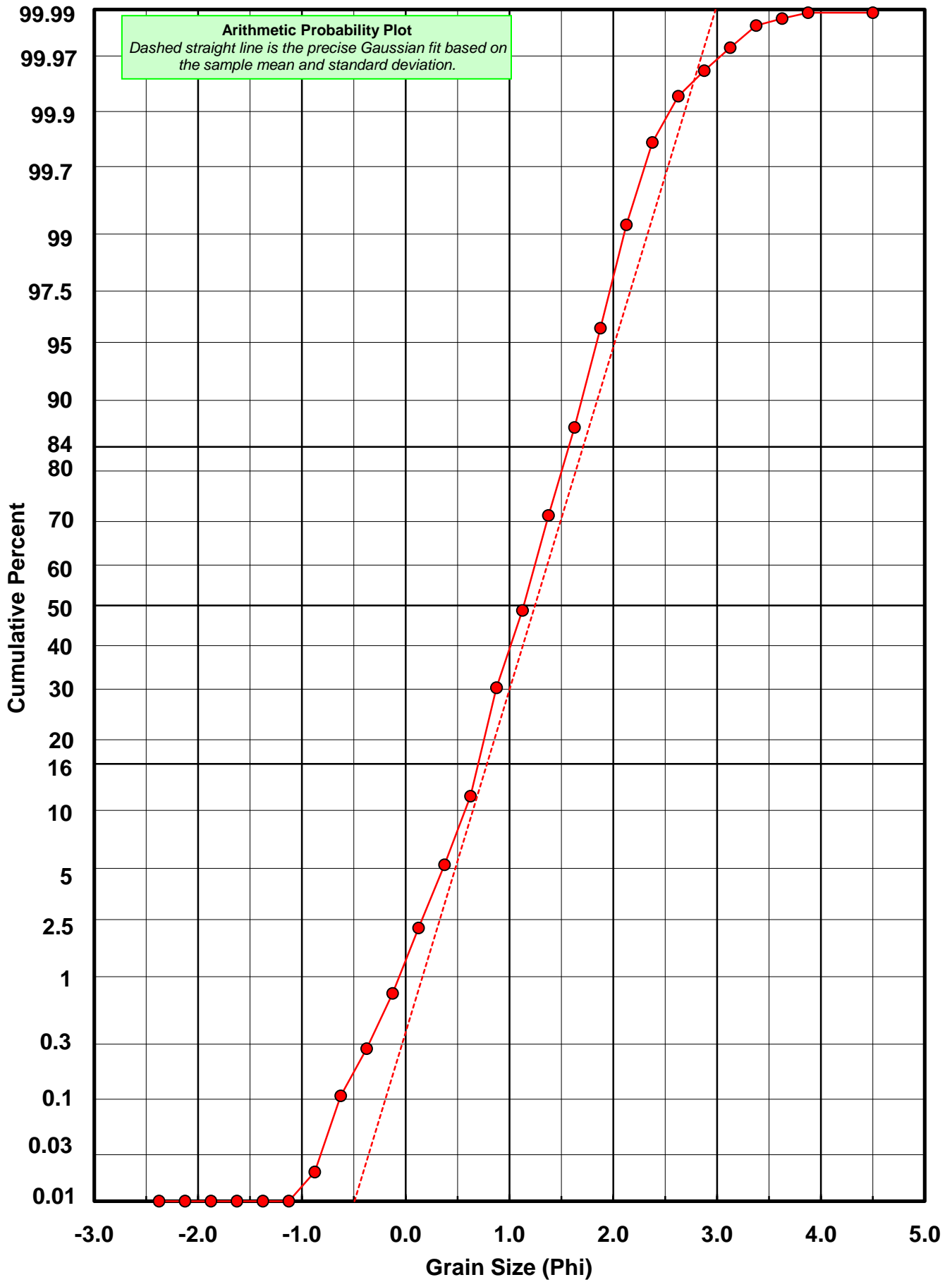
* RARD = reciprocal absolute relative dispersion (see below)

| 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-17



Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: PB-17

Total Carbonate Mass: 26.196 grams

% Carbonate: 46.6 %

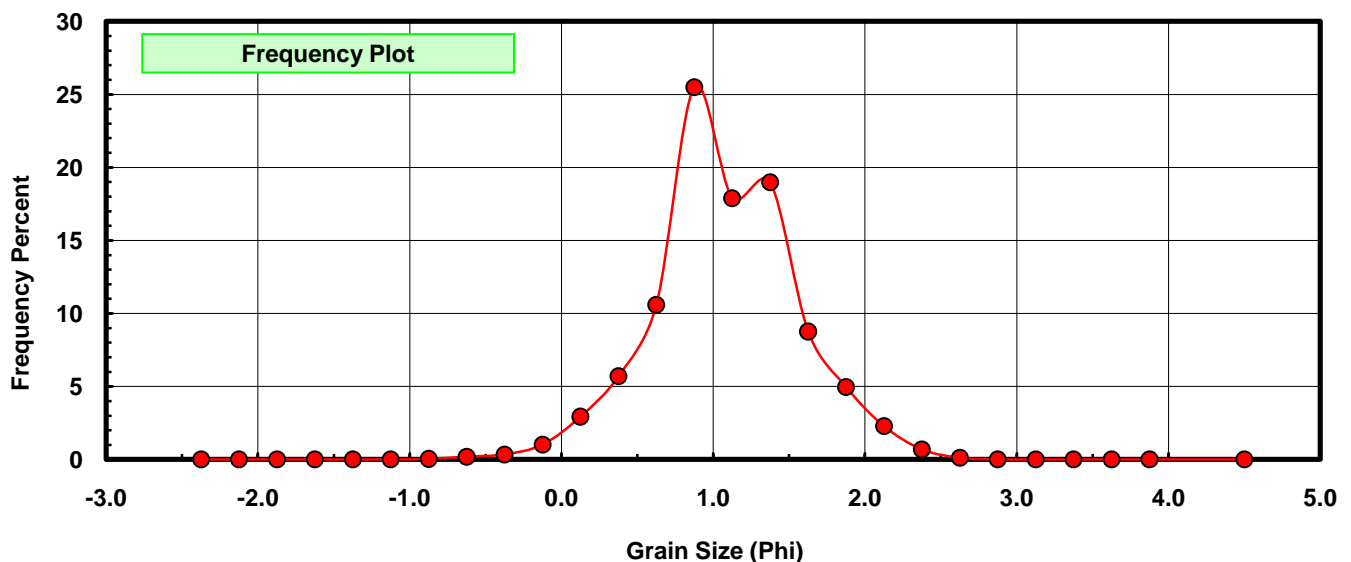
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 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 | 0.011 | 0.042 | 0.042 |
| -0.50 | -0.625 | 0.049 | 0.187 | 0.229 |
| -0.25 | -0.375 | 0.090 | 0.344 | 0.573 |
| 0.00 | -0.125 | 0.266 | 1.015 | 1.588 |
| 0.25 | 0.125 | 0.769 | 2.936 | 4.524 |
| 0.50 | 0.375 | 1.493 | 5.699 | 10.223 |
| 0.75 | 0.625 | 2.775 | 10.593 | 20.816 |
| 1.00 | 0.875 | 6.679 | 25.496 | 46.312 |
| 1.25 | 1.125 | 4.688 | 17.896 | 64.208 |
| 1.50 | 1.375 | 4.972 | 18.980 | 83.188 |
| 1.75 | 1.625 | 2.296 | 8.765 | 91.953 |
| 2.00 | 1.875 | 1.302 | 4.970 | 96.923 |
| 2.25 | 2.125 | 0.597 | 2.279 | 99.202 |
| 2.50 | 2.375 | 0.180 | 0.687 | 99.889 |
| 2.75 | 2.625 | 0.029 | 0.111 | 100.000 |
| 3.00 | 2.875 | 0.000 | 0.000 | 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: | 1.0758 | phi | (0.4744 mm) |
| Standard Dev: | 0.4892 | phi-units | (0.7124 mm) |
| Skewness: | -0.0579 | dimensionless | |
| Kurtosis: | 3.3395 | dimensionless | |
| 5th Moment: | -1.3031 | dimensionless | |
| 6th Moment: | 19.3080 | dimensionless | |
| RARD * | 0.4547 | dimensionless | |
| Median | 0.9265 | phi | (0.5261 mm) |

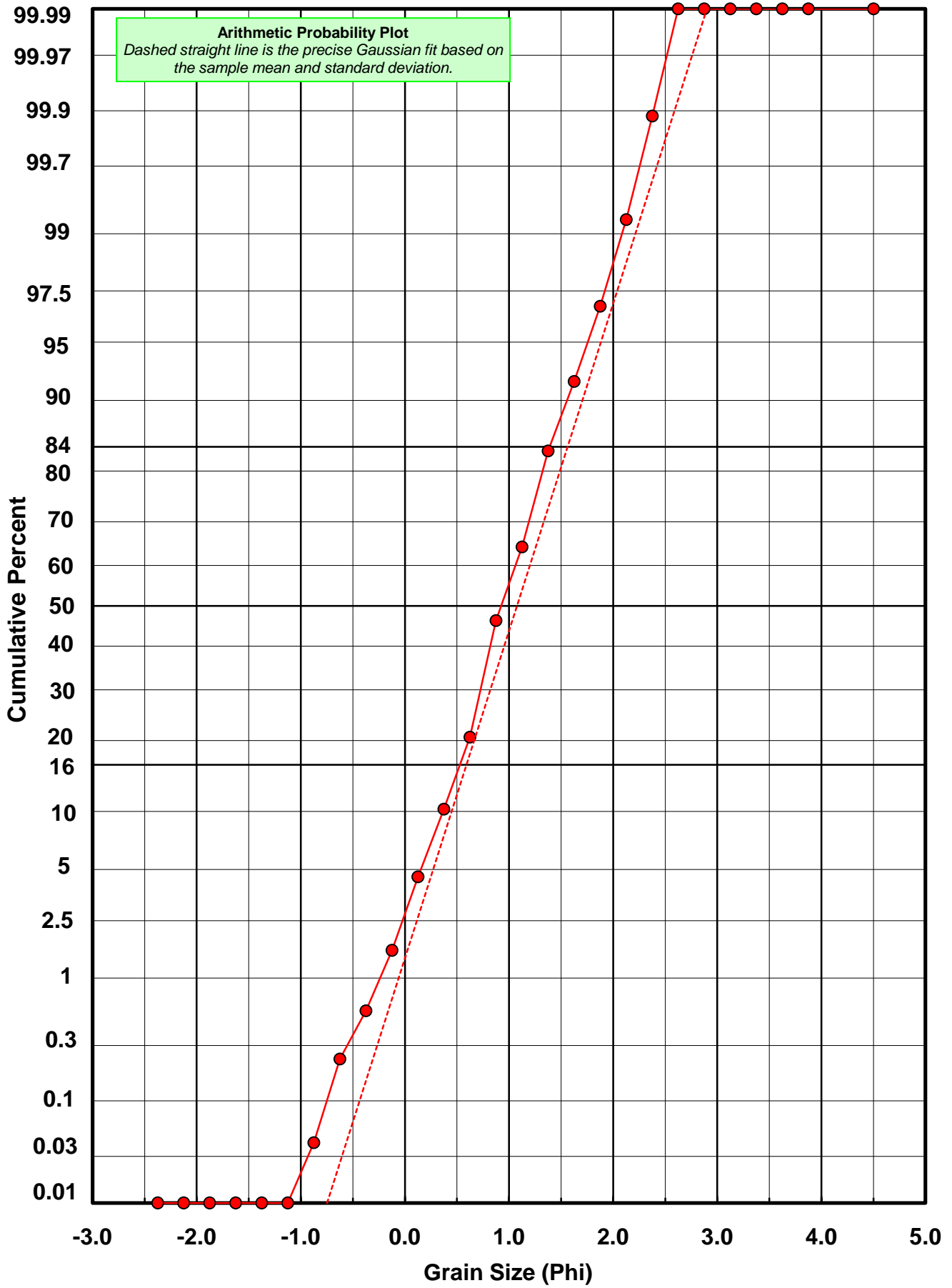
* RARD = reciprocal absolute relative dispersion (see below)

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|---|--|
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| Millimeter data calculated by $mm = 2^{(-\phi)}$ | |

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| 1.0 to 1.33 | Fair homogeneity |
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PB-17



Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: PB-17

Total Digested Mass: 29.958 grams

% Silica: 53.4 %

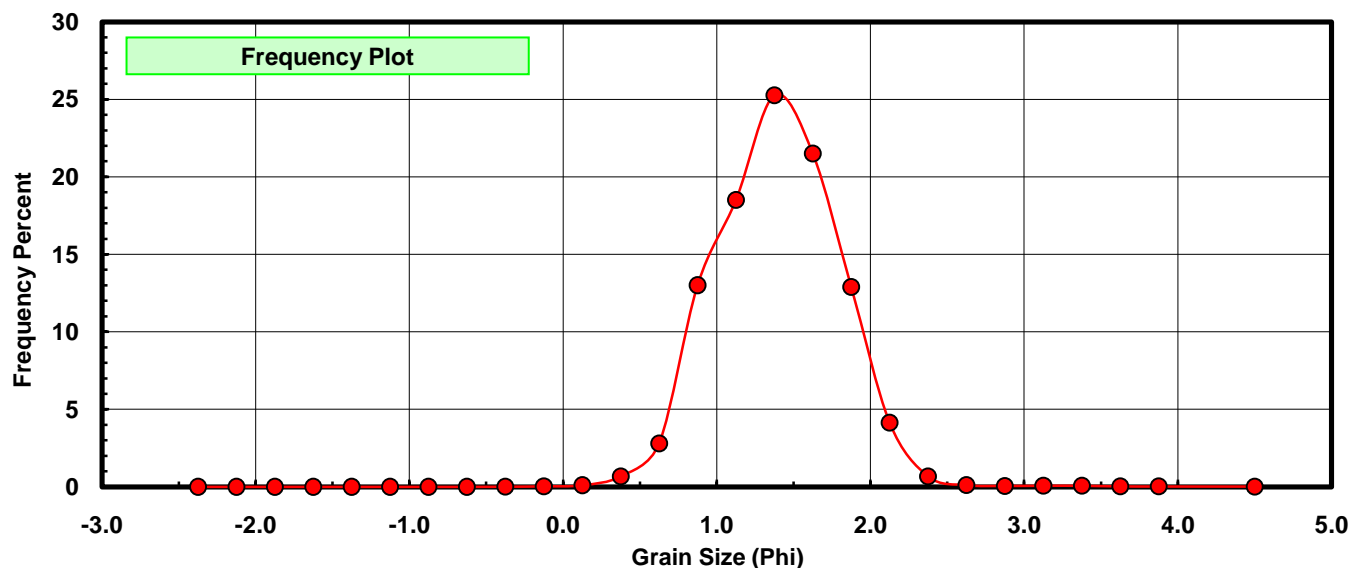
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
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| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 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 | 0.003 | 0.010 | 0.010 |
| 0.00 | -0.125 | 0.010 | 0.033 | 0.043 |
| 0.25 | 0.125 | 0.031 | 0.103 | 0.147 |
| 0.50 | 0.375 | 0.204 | 0.681 | 0.828 |
| 0.75 | 0.625 | 0.841 | 2.807 | 3.635 |
| 1.00 | 0.875 | 3.897 | 13.008 | 16.643 |
| 1.25 | 1.125 | 5.545 | 18.509 | 35.153 |
| 1.50 | 1.375 | 7.568 | 25.262 | 60.415 |
| 1.75 | 1.625 | 6.440 | 21.497 | 81.911 |
| 2.00 | 1.875 | 3.861 | 12.888 | 94.799 |
| 2.25 | 2.125 | 1.238 | 4.132 | 98.932 |
| 2.50 | 2.375 | 0.203 | 0.678 | 99.609 |
| 2.75 | 2.625 | 0.034 | 0.113 | 99.723 |
| 3.00 | 2.875 | 0.018 | 0.060 | 99.783 |
| 3.25 | 3.125 | 0.022 | 0.073 | 99.856 |
| 3.50 | 3.375 | 0.021 | 0.070 | 99.927 |
| 3.75 | 3.625 | 0.009 | 0.030 | 99.957 |
| 4.00 | 3.875 | 0.007 | 0.023 | 99.980 |
| 5.00 | 4.500 | 0.006 | 0.020 | 100.000 |

| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | 1.3967 | phi | (0.3798 mm) |
| Standard Dev: | 0.4039 | phi-units | (0.7558 mm) |
| Skewness: | 0.2966 | dimensionless | |
| Kurtosis: | 4.5175 | dimensionless | |
| 5th Moment: | 12.0696 | dimensionless | |
| 6th Moment: | 91.3287 | dimensionless | |
| RARD * | 0.2892 | dimensionless | |
| Median | 1.2719 | phi | (0.4141 mm) |

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