

Onshore Grab Sample

Sample: IR-11-BB
Sample Taken By: D. Phelps
Sample Collected On: 10/29/08
Splits? N/A

County: Indian River
Latitude: 27° 44' 07.0"
Longitude: 80° 22' 54.6"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight 51.842 grams
Total Fines in Sample 0.717 grams
Total Percent Fines 1.36 %

Dry Sieving Summary

Total Sample Weight 51.235 grams
Total Digested Weight 37.243 grams
Total Carbonate Weight 13.992 grams
Total Silica % 72.69 %
Total Carbonate % 27.31 %
Carbonate/Silica Ratio 0.376

General Comments:

None

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-11-BB

Total Sample Mass: 51.235 grams

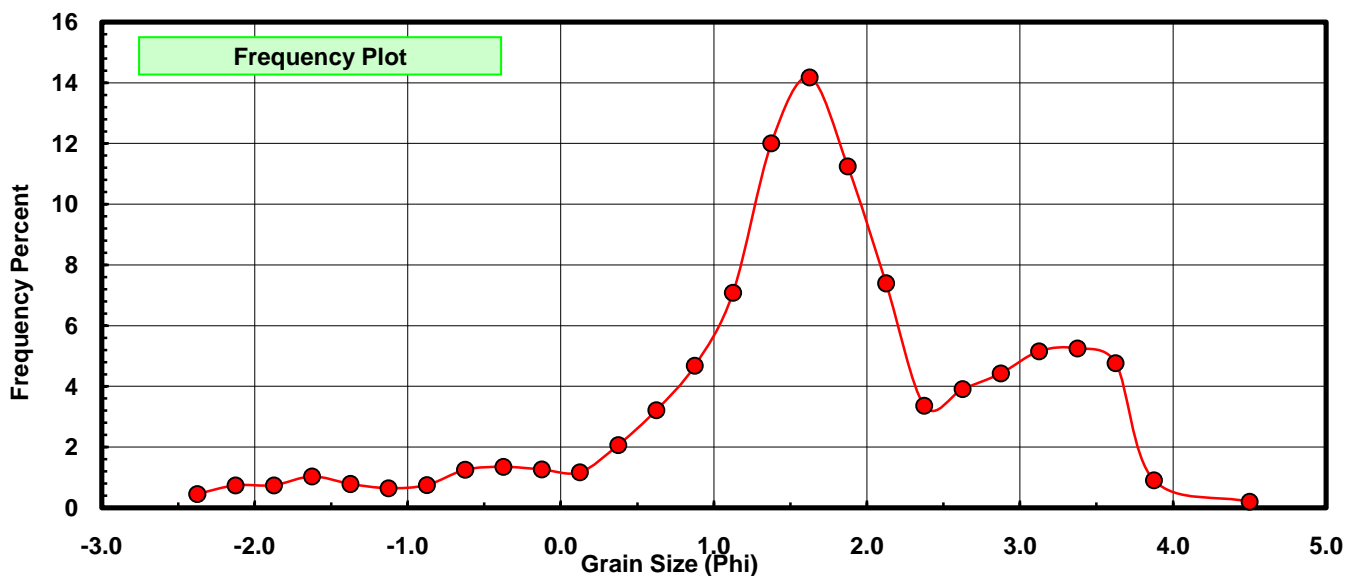
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.232 | 0.453 | 0.453 |
| -2.00 | -2.125 | 0.378 | 0.738 | 1.191 |
| -1.75 | -1.875 | 0.380 | 0.742 | 1.932 |
| -1.50 | -1.625 | 0.528 | 1.031 | 2.963 |
| -1.25 | -1.375 | 0.402 | 0.785 | 3.747 |
| -1.00 | -1.125 | 0.330 | 0.644 | 4.392 |
| -0.75 | -0.875 | 0.383 | 0.748 | 5.139 |
| -0.50 | -0.625 | 0.640 | 1.249 | 6.388 |
| -0.25 | -0.375 | 0.690 | 1.347 | 7.735 |
| 0.00 | -0.125 | 0.647 | 1.263 | 8.998 |
| 0.25 | 0.125 | 0.598 | 1.167 | 10.165 |
| 0.50 | 0.375 | 1.059 | 2.067 | 12.232 |
| 0.75 | 0.625 | 1.649 | 3.219 | 15.450 |
| 1.00 | 0.875 | 2.395 | 4.675 | 20.125 |
| 1.25 | 1.125 | 3.628 | 7.081 | 27.206 |
| 1.50 | 1.375 | 6.149 | 12.002 | 39.208 |
| 1.75 | 1.625 | 7.264 | 14.178 | 53.385 |
| 2.00 | 1.875 | 5.763 | 11.248 | 64.634 |
| 2.25 | 2.125 | 3.788 | 7.393 | 72.027 |
| 2.50 | 2.375 | 1.722 | 3.361 | 75.388 |
| 2.75 | 2.625 | 2.002 | 3.907 | 79.295 |
| 3.00 | 2.875 | 2.267 | 4.425 | 83.720 |
| 3.25 | 3.125 | 2.643 | 5.159 | 88.879 |
| 3.50 | 3.375 | 2.691 | 5.252 | 94.131 |
| 3.75 | 3.625 | 2.443 | 4.768 | 98.899 |
| 4.00 | 3.875 | 0.464 | 0.906 | 99.805 |
| 5.00 | 4.50 | 0.100 | 0.195 | 100.000 |

| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | 1.6820 | phi | (0.3116 mm) |
| Standard Dev: | 1.2447 | phi-units | (0.422 mm) |
| Skewness: | -0.7384 | dimensionless | |
| Kurtosis: | 3.9630 | dimensionless | |
| 5th Moment: | -7.4059 | dimensionless | |
| 6th Moment: | 25.4775 | dimensionless | |
| RARD * | 0.7400 | dimensionless | |
| Median | 1.5653 | phi | (0.3379 mm) |

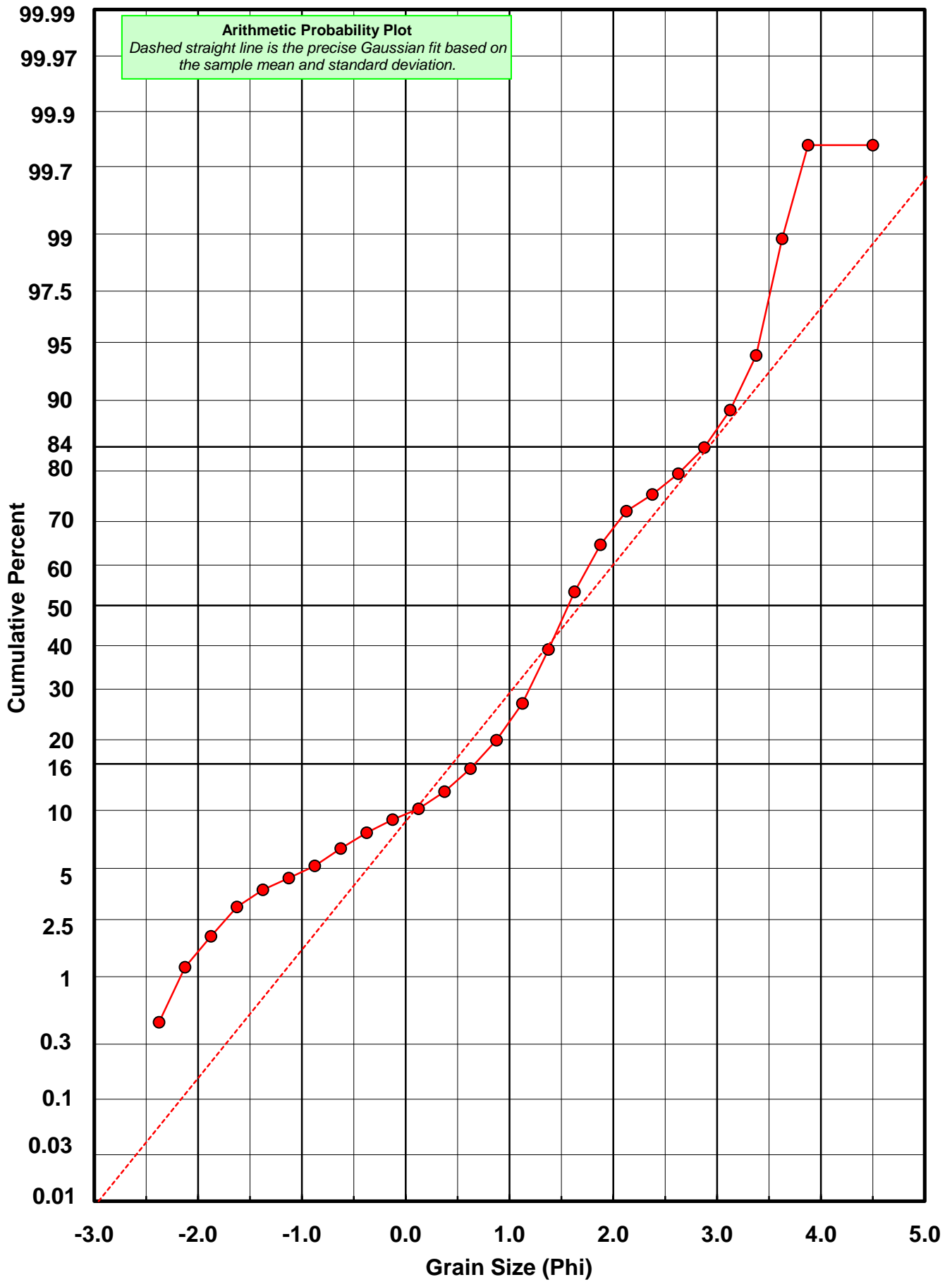
* RARD = reciprocal absolute relative dispersion (see below)

| 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) |



IR-11-BB



Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: IR-11-BB

Total Carbonate Mass: 13.992 grams

% Carbonate: 27.3 %

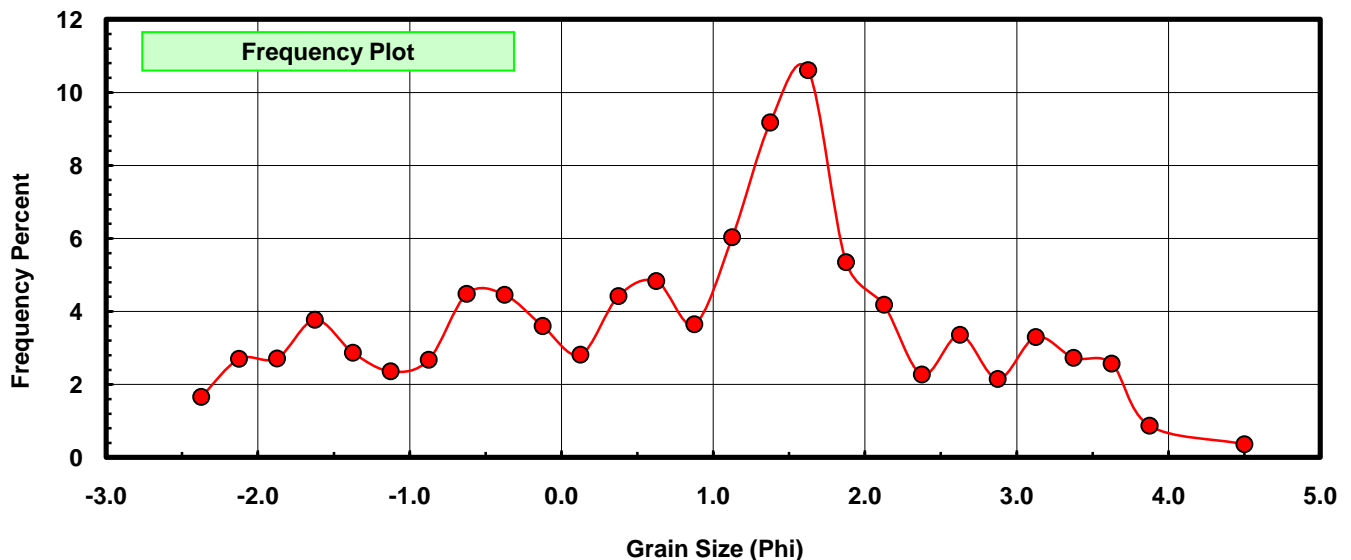
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.232 | 1.658 | 1.658 |
| -2.00 | -2.125 | 0.378 | 2.702 | 4.360 |
| -1.75 | -1.875 | 0.380 | 2.716 | 7.075 |
| -1.50 | -1.625 | 0.528 | 3.774 | 10.849 |
| -1.25 | -1.375 | 0.402 | 2.873 | 13.722 |
| -1.00 | -1.125 | 0.330 | 2.358 | 16.081 |
| -0.75 | -0.875 | 0.375 | 2.680 | 18.761 |
| -0.50 | -0.625 | 0.627 | 4.481 | 23.242 |
| -0.25 | -0.375 | 0.624 | 4.460 | 27.702 |
| 0.00 | -0.125 | 0.504 | 3.602 | 31.304 |
| 0.25 | 0.125 | 0.394 | 2.816 | 34.119 |
| 0.50 | 0.375 | 0.619 | 4.424 | 38.543 |
| 0.75 | 0.625 | 0.676 | 4.831 | 43.375 |
| 1.00 | 0.875 | 0.511 | 3.652 | 47.027 |
| 1.25 | 1.125 | 0.844 | 6.032 | 53.059 |
| 1.50 | 1.375 | 1.284 | 9.177 | 62.236 |
| 1.75 | 1.625 | 1.484 | 10.606 | 72.842 |
| 2.00 | 1.875 | 0.749 | 5.353 | 78.195 |
| 2.25 | 2.125 | 0.585 | 4.181 | 82.376 |
| 2.50 | 2.375 | 0.318 | 2.273 | 84.648 |
| 2.75 | 2.625 | 0.470 | 3.359 | 88.007 |
| 3.00 | 2.875 | 0.301 | 2.151 | 90.159 |
| 3.25 | 3.125 | 0.462 | 3.302 | 93.461 |
| 3.50 | 3.375 | 0.382 | 2.730 | 96.191 |
| 3.75 | 3.625 | 0.360 | 2.573 | 98.764 |
| 4.00 | 3.875 | 0.122 | 0.872 | 99.636 |
| 5.00 | 4.500 | 0.051 | 0.364 | 100.000 |

| Statistical Results | | | |
|---------------------|---------|---------------|-------------|
| Mean: | 0.8329 | phi | (0.5614 mm) |
| Standard Dev: | 1.6474 | phi-units | (0.3192 mm) |
| Skewness: | -0.1731 | dimensionless | |
| Kurtosis: | 2.0989 | dimensionless | |
| 5th Moment: | -0.5529 | dimensionless | |
| 6th Moment: | 5.6297 | dimensionless | |
| RARD * | 1.9780 | dimensionless | |
| Median | 0.9982 | phi | (0.5006 mm) |

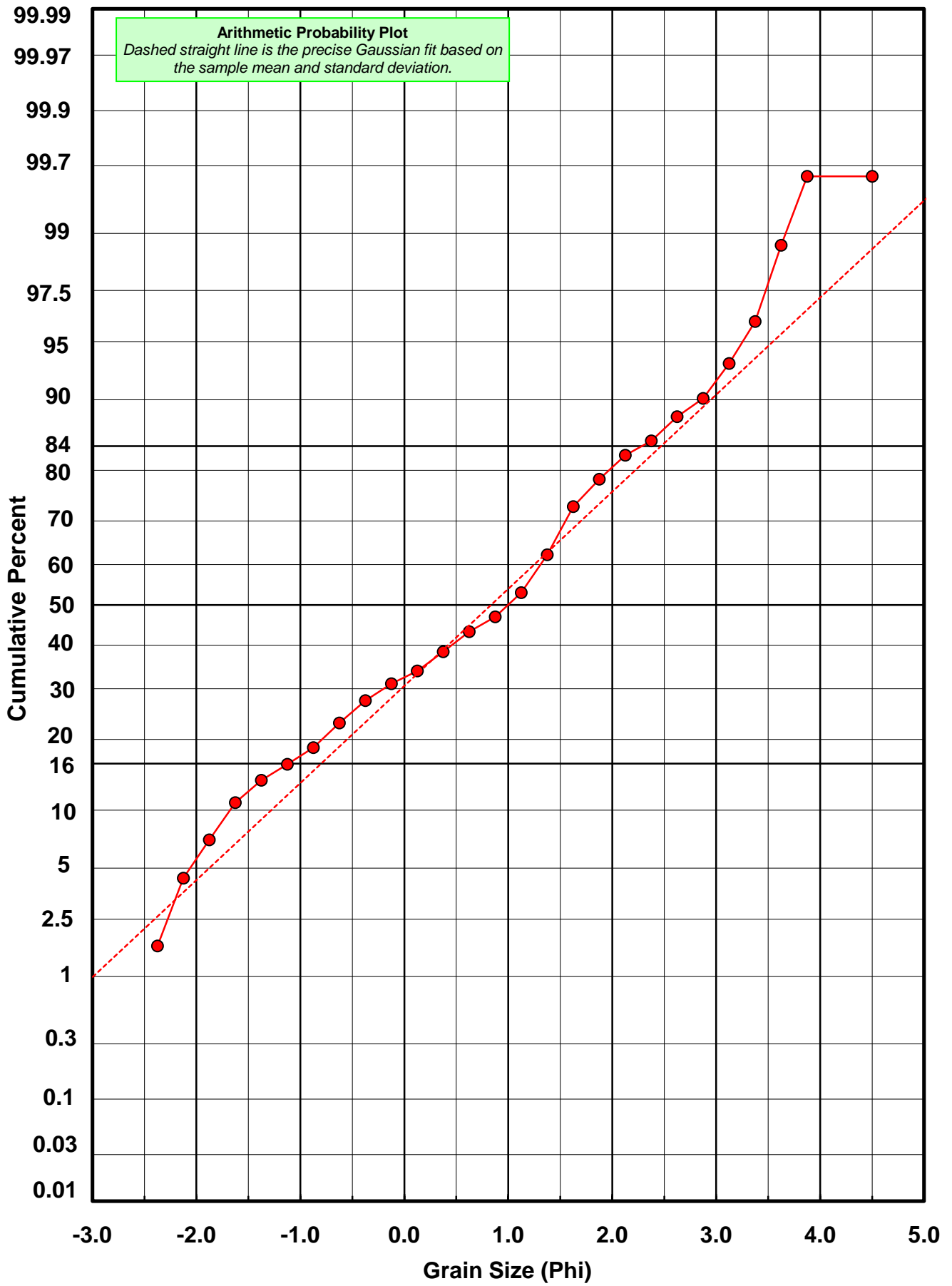
* RARD = reciprocal absolute relative dispersion (see below)

| 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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IR-11-BB



Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-11-BB

Total Digested Mass: 37.243 grams

% Silica: 72.7 %

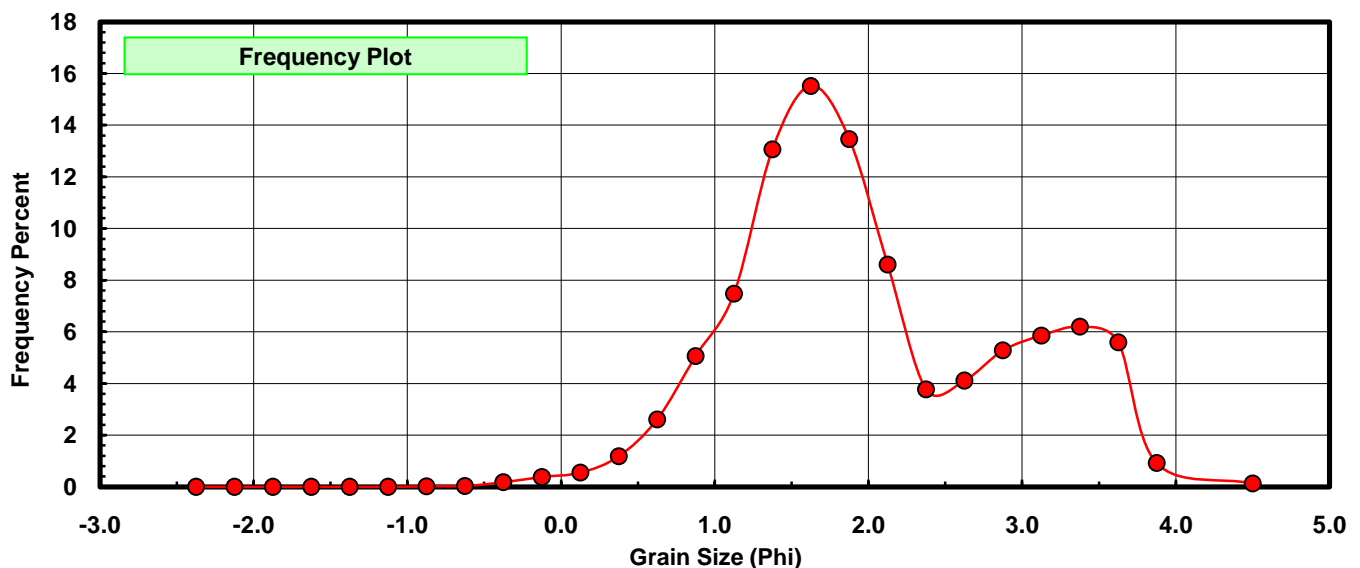
| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 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 | 0.008 | 0.021 | 0.021 |
| -0.50 | -0.625 | 0.013 | 0.035 | 0.056 |
| -0.25 | -0.375 | 0.066 | 0.177 | 0.234 |
| 0.00 | -0.125 | 0.143 | 0.384 | 0.618 |
| 0.25 | 0.125 | 0.204 | 0.548 | 1.165 |
| 0.50 | 0.375 | 0.440 | 1.181 | 2.347 |
| 0.75 | 0.625 | 0.973 | 2.613 | 4.959 |
| 1.00 | 0.875 | 1.884 | 5.059 | 10.018 |
| 1.25 | 1.125 | 2.784 | 7.475 | 17.493 |
| 1.50 | 1.375 | 4.865 | 13.063 | 30.556 |
| 1.75 | 1.625 | 5.780 | 15.520 | 46.076 |
| 2.00 | 1.875 | 5.014 | 13.463 | 59.539 |
| 2.25 | 2.125 | 3.203 | 8.600 | 68.139 |
| 2.50 | 2.375 | 1.404 | 3.770 | 71.909 |
| 2.75 | 2.625 | 1.532 | 4.114 | 76.022 |
| 3.00 | 2.875 | 1.966 | 5.279 | 81.301 |
| 3.25 | 3.125 | 2.181 | 5.856 | 87.157 |
| 3.50 | 3.375 | 2.309 | 6.200 | 93.357 |
| 3.75 | 3.625 | 2.083 | 5.593 | 98.950 |
| 4.00 | 3.875 | 0.342 | 0.918 | 99.868 |
| 5.00 | 4.500 | 0.049 | 0.132 | 100.000 |

| Statistical Results | | | |
|---------------------|--------|---------------|-------------|
| Mean: | 2.0010 | phi | (0.2498 mm) |
| Standard Dev: | 0.8897 | phi-units | (0.5397 mm) |
| Skewness: | 0.3235 | dimensionless | |
| Kurtosis: | 2.4025 | dimensionless | |
| 5th Moment: | 0.9048 | dimensionless | |
| 6th Moment: | 8.2785 | dimensionless | |
| RARD * | 0.4446 | dimensionless | |
| Median | 1.6979 | phi | (0.3082 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 | |
| Millimeter data calculated by $mm = 2^{(-\phi)}$ | |

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