

Quality Control Statistical Summary

Onshore Grab Sample: CR-43-BB

Sample Taken By: D. Phelps
 Sample Taken On: 01/26/10
 County: Collier

Latitude: 25° 52' 17.9"
 Longitude: 81° 41' 54.4"
 Datum: WGS 84

| Statistical Results: Pre-CaCO3 | | |
|--------------------------------|------------------------------|------------------------------|
| | Duplicate | Original |
| Mean: | 2.4981 phi (0.177 mm) | 2.4688 phi (0.1806 mm) |
| Standard Dev: | 0.4846 phi-units (0.7147 mm) | 0.4103 phi-units (0.7525 mm) |
| Skewness: | -3.3609 dimensionless | -1.8456 dimensionless |
| Kurtosis: | 27.0780 dimensionless | 13.8671 dimensionless |
| 5th Moment: | ##### dimensionless | -90.7366 dimensionless |
| 6th Moment: | ##### dimensionless | 725.0479 dimensionless |
| RARD*: | 0.1940 dimensionless | 0.1662 dimensionless |
| Median: | 2.4456 phi (0.1836 mm) | 2.3968 phi (0.1899 mm) |

| Statistical Results: CaCO3 | | |
|----------------------------|------------------------------|------------------------------|
| | Duplicate | Original |
| Mean: | 1.9517 phi (0.2585 mm) | 2.0599 phi (0.2398 mm) |
| Standard Dev: | 1.3480 phi-units (0.3928 mm) | 0.8519 phi-units (0.5541 mm) |
| Skewness: | -1.6909 dimensionless | -1.4772 dimensionless |
| Kurtosis: | 4.9823 dimensionless | 6.6344 dimensionless |
| 5th Moment: | -13.0950 dimensionless | -18.9672 dimensionless |
| 6th Moment: | 36.4867 dimensionless | 72.8899 dimensionless |
| RARD*: | 0.6907 dimensionless | 0.4135 dimensionless |
| Median: | 2.3019 phi (0.2028 mm) | 2.0065 phi (0.2489 mm) |

| Statistical Results: Post-CaCO3 | | |
|---------------------------------|------------------------------|------------------------------|
| | Duplicate | Original |
| Mean: | 2.5314 phi (0.173 mm) | 2.5019 phi (0.1765 mm) |
| Standard Dev: | 0.3693 phi-units (0.7741 mm) | 0.3533 phi-units (0.7828 mm) |
| Skewness: | -0.7069 dimensionless | -0.7207 dimensionless |
| Kurtosis: | 4.2599 dimensionless | 4.8873 dimensionless |
| 5th Moment: | -8.9775 dimensionless | -12.4173 dimensionless |
| 6th Moment: | 48.6720 dimensionless | 71.7377 dimensionless |
| RARD*: | 0.1459 dimensionless | 0.1412 dimensionless |
| Median: | 2.4530 phi (0.1826 mm) | 2.4166 phi (0.1873 mm) |

| Additional Data | |
|-------------------------|--------|
| Total Fines | |
| Original: | 0.23 % |
| Duplicate: | 0.2 % |
| Total Carbonates | |
| Original: | 5.57 % |
| Duplicate: | 4.85 % |

| 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 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) |

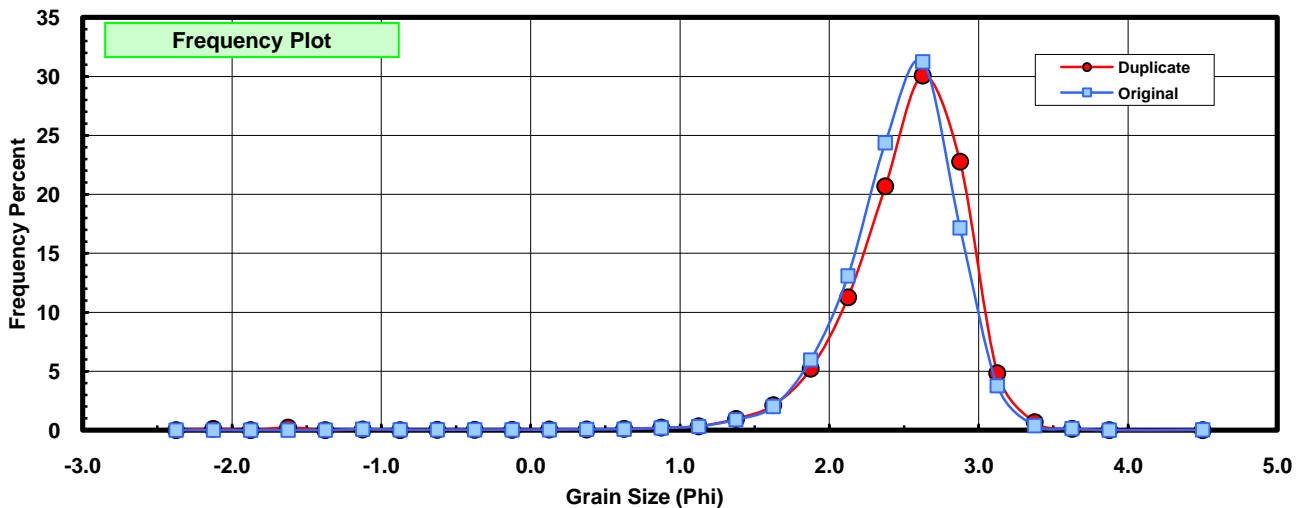
Pre-Digestion Grain Size Distribution

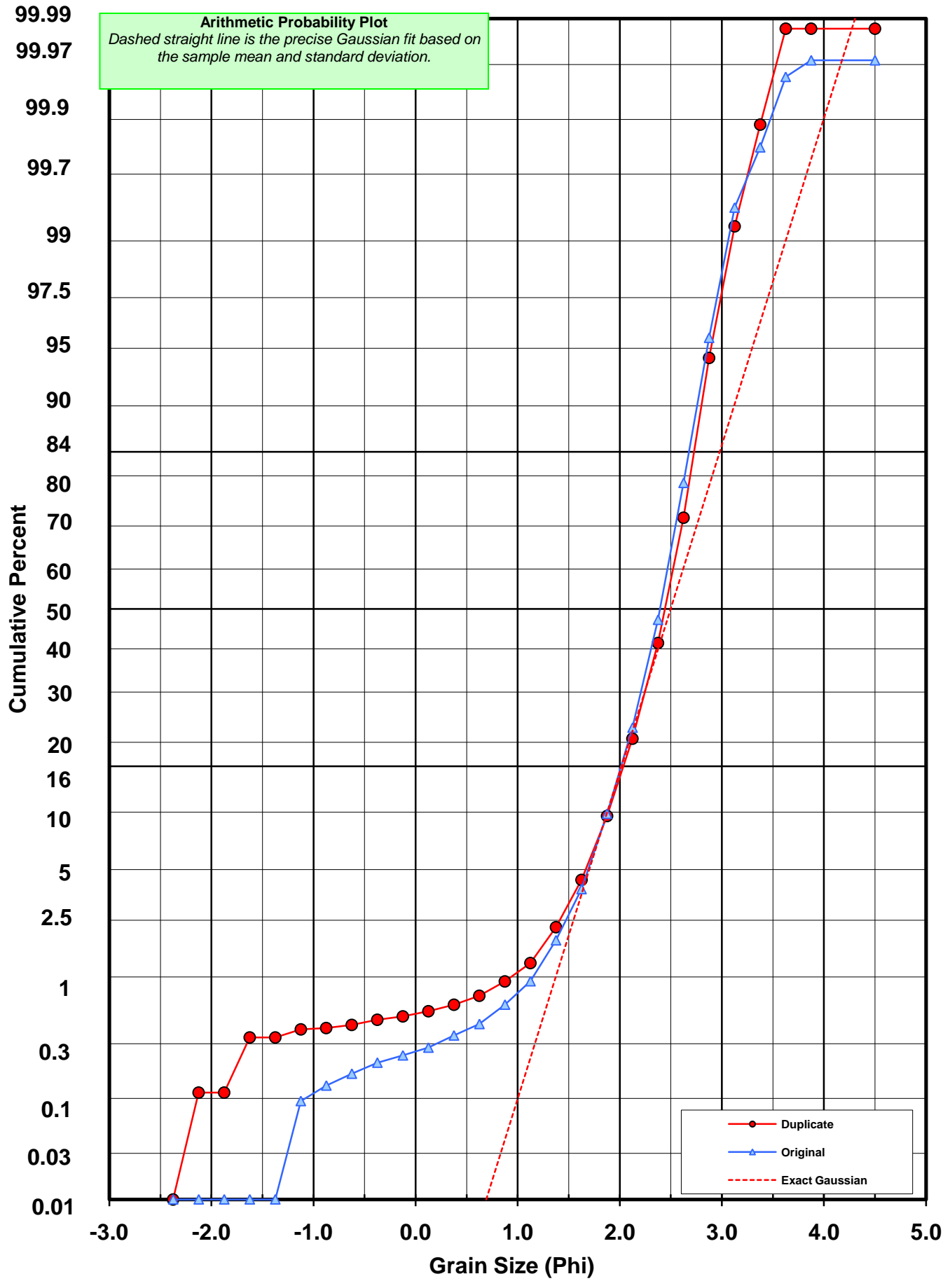
Onshore Grab Sample: CR-43-BB

Total Duplicate Sample Mass: 63.197 grams

Total Original Sample Mass: 68.755 grams

| Sieve Size (phi) | Sieve Midpt (phi) | Weight of Dupl (grams) | Freq Weight % | Cumulative Weight % | Weight of Original (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|------------------------|---------------|---------------------|----------------------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.071 | 0.112 | 0.112 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 0.000 | 0.112 | 0.000 | 0.000 | 0.000 |
| -1.50 | -1.625 | 0.142 | 0.225 | 0.337 | 0.000 | 0.000 | 0.000 |
| -1.25 | -1.375 | 0.000 | 0.000 | 0.337 | 0.000 | 0.000 | 0.000 |
| -1.00 | -1.125 | 0.036 | 0.057 | 0.394 | 0.065 | 0.095 | 0.095 |
| -0.75 | -0.875 | 0.007 | 0.011 | 0.405 | 0.024 | 0.035 | 0.129 |
| -0.50 | -0.625 | 0.015 | 0.024 | 0.429 | 0.024 | 0.035 | 0.164 |
| -0.25 | -0.375 | 0.028 | 0.044 | 0.473 | 0.028 | 0.041 | 0.205 |
| 0.00 | -0.125 | 0.019 | 0.030 | 0.503 | 0.022 | 0.032 | 0.237 |
| 0.25 | 0.125 | 0.032 | 0.051 | 0.554 | 0.027 | 0.039 | 0.276 |
| 0.50 | 0.375 | 0.045 | 0.071 | 0.625 | 0.051 | 0.074 | 0.351 |
| 0.75 | 0.625 | 0.069 | 0.109 | 0.734 | 0.059 | 0.086 | 0.436 |
| 1.00 | 0.875 | 0.132 | 0.209 | 0.943 | 0.130 | 0.189 | 0.625 |
| 1.25 | 1.125 | 0.212 | 0.335 | 1.279 | 0.220 | 0.320 | 0.945 |
| 1.50 | 1.375 | 0.608 | 0.962 | 2.241 | 0.612 | 0.890 | 1.836 |
| 1.75 | 1.625 | 1.334 | 2.111 | 4.351 | 1.380 | 2.007 | 3.843 |
| 2.00 | 1.875 | 3.291 | 5.208 | 9.559 | 4.100 | 5.963 | 9.806 |
| 2.25 | 2.125 | 7.125 | 11.274 | 20.833 | 9.001 | 13.091 | 22.897 |
| 2.50 | 2.375 | 13.067 | 20.677 | 41.510 | 16.762 | 24.379 | 47.277 |
| 2.75 | 2.625 | 19.008 | 30.077 | 71.587 | 21.480 | 31.241 | 78.518 |
| 3.00 | 2.875 | 14.396 | 22.780 | 94.367 | 11.793 | 17.152 | 95.670 |
| 3.25 | 3.125 | 3.061 | 4.844 | 99.210 | 2.590 | 3.767 | 99.437 |
| 3.50 | 3.375 | 0.429 | 0.679 | 99.889 | 0.267 | 0.388 | 99.825 |
| 3.75 | 3.625 | 0.064 | 0.101 | 99.991 | 0.092 | 0.134 | 99.959 |
| 4.00 | 3.875 | 0.000 | 0.000 | 99.991 | 0.009 | 0.013 | 99.972 |
| 5.00 | 4.500 | 0.006 | 0.009 | 100.000 | 0.019 | 0.028 | 100.000 |



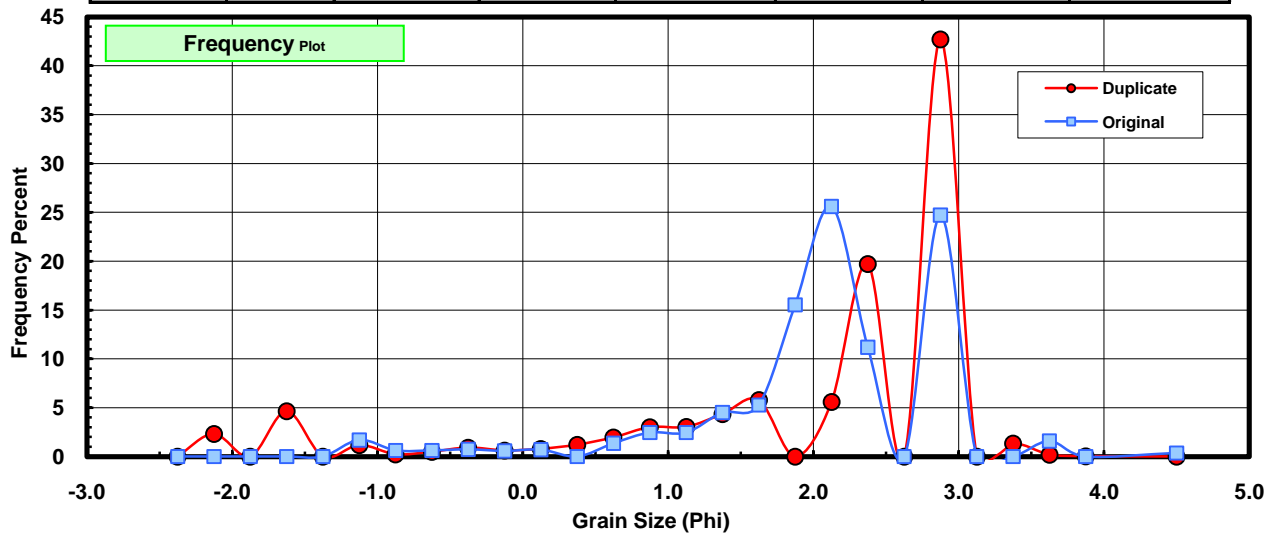


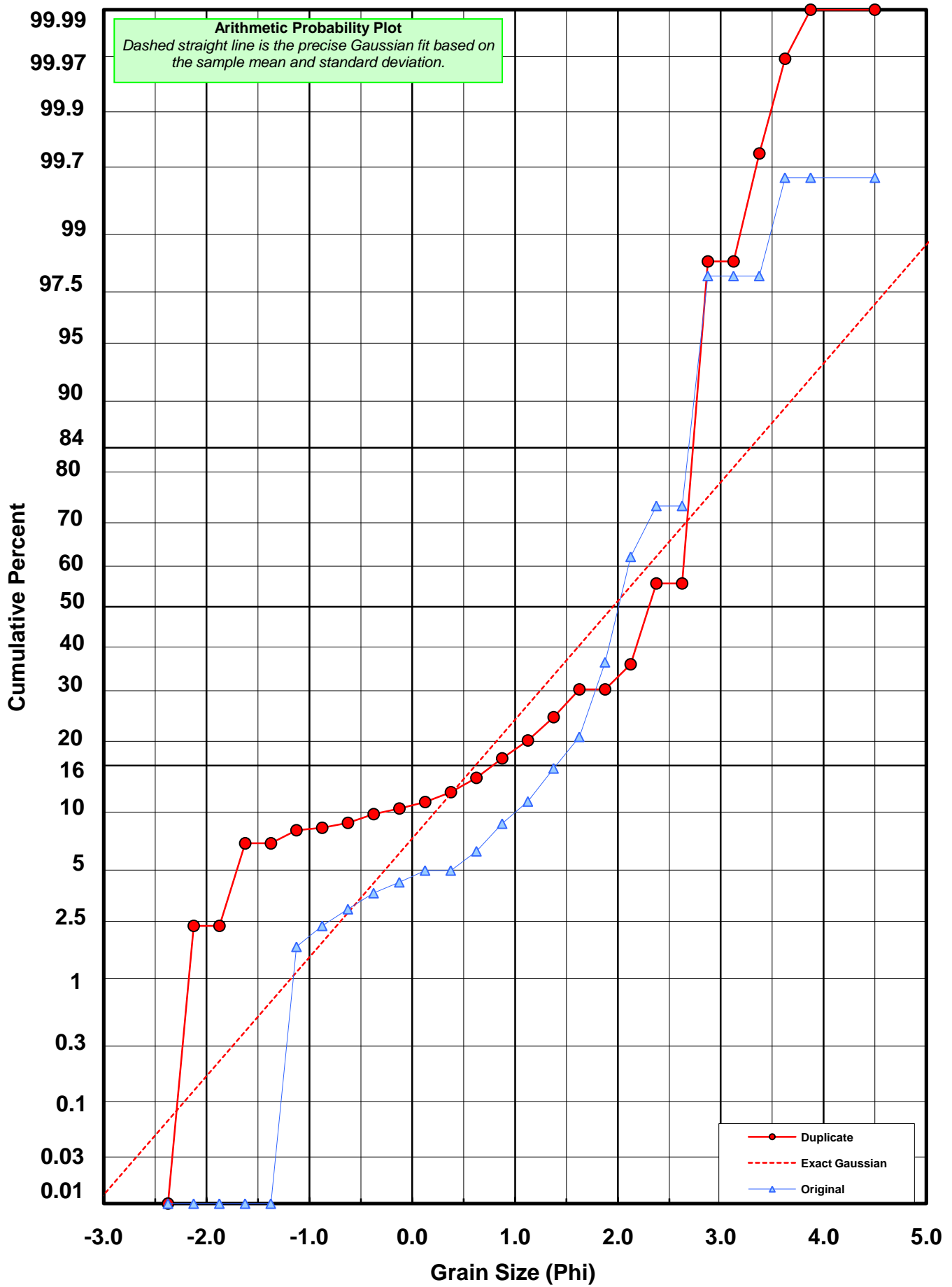
Carbonate Grain Size Distribution

Onshore Grab Sample: CR-43-BB

Total Duplicate Carbonate Mass: 3.065 grams
% Carbonate in Duplicate: 4.8 %
Total Original Carbonate Mass: 3.832 grams
% Carbonate in Original: 5.6 %

| Sieve Size (phi) | Sieve Midpt (phi) | Weight of Dupl (grams) | Freq Weight % | Cumulative Weight % | Weight of Original (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|------------------------|---------------|---------------------|----------------------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.071 | 2.316 | 2.316 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 0.000 | 2.316 | 0.000 | 0.000 | 0.000 |
| -1.50 | -1.625 | 0.142 | 4.633 | 6.949 | 0.000 | 0.000 | 0.000 |
| -1.25 | -1.375 | 0.000 | 0.000 | 6.949 | 0.000 | 0.000 | 0.000 |
| -1.00 | -1.125 | 0.036 | 1.175 | 8.124 | 0.065 | 1.696 | 1.696 |
| -0.75 | -0.875 | 0.007 | 0.228 | 8.352 | 0.024 | 0.626 | 2.323 |
| -0.50 | -0.625 | 0.015 | 0.489 | 8.842 | 0.024 | 0.626 | 2.949 |
| -0.25 | -0.375 | 0.028 | 0.914 | 9.755 | 0.028 | 0.731 | 3.680 |
| 0.00 | -0.125 | 0.019 | 0.620 | 10.375 | 0.022 | 0.574 | 4.254 |
| 0.25 | 0.125 | 0.024 | 0.783 | 11.158 | 0.027 | 0.705 | 4.958 |
| 0.50 | 0.375 | 0.037 | 1.207 | 12.365 | 0.000 | 0.000 | 4.958 |
| 0.75 | 0.625 | 0.060 | 1.958 | 14.323 | 0.052 | 1.357 | 6.315 |
| 1.00 | 0.875 | 0.092 | 3.002 | 17.325 | 0.094 | 2.453 | 8.768 |
| 1.25 | 1.125 | 0.093 | 3.034 | 20.359 | 0.094 | 2.453 | 11.221 |
| 1.50 | 1.375 | 0.133 | 4.339 | 24.698 | 0.173 | 4.515 | 15.736 |
| 1.75 | 1.625 | 0.177 | 5.775 | 30.473 | 0.202 | 5.271 | 21.007 |
| 2.00 | 1.875 | 0.000 | 0.000 | 30.473 | 0.595 | 15.527 | 36.534 |
| 2.25 | 2.125 | 0.171 | 5.579 | 36.052 | 0.981 | 25.600 | 62.135 |
| 2.50 | 2.375 | 0.604 | 19.706 | 55.759 | 0.429 | 11.195 | 73.330 |
| 2.75 | 2.625 | 0.000 | 0.000 | 55.759 | 0.000 | 0.000 | 73.330 |
| 3.00 | 2.875 | 1.308 | 42.675 | 98.434 | 0.947 | 24.713 | 98.043 |
| 3.25 | 3.125 | 0.000 | 0.000 | 98.434 | 0.000 | 0.000 | 98.043 |
| 3.50 | 3.375 | 0.041 | 1.338 | 99.772 | 0.000 | 0.000 | 98.043 |
| 3.75 | 3.625 | 0.006 | 0.196 | 99.967 | 0.061 | 1.592 | 99.635 |
| 4.00 | 3.875 | 0.001 | 0.033 | 100.000 | 0.000 | 0.000 | 99.635 |
| 5.00 | 4.500 | 0.000 | 0.000 | 100.000 | 0.014 | 0.365 | 100.000 |





Post-Digestion Grain Size Distribution

Onshore Grab Sample: CR-43-BB

Total Duplicate Digested Mass: 61.690 grams
% Silica in Duplicate: 97.6 %
Total Original Digested Mass: 67.049 grams
% Silica in Original: 97.5 %

| Sieve Size (phi) | Sieve Midpt (phi) | Weight (grams) | Freq Weight % | Cumulative Weight % | Weight of Original (grams) | Freq Weight % | Cumulative Weight % |
|------------------|-------------------|----------------|---------------|---------------------|----------------------------|---------------|---------------------|
| -2.25 | -2.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -2.00 | -2.125 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -1.75 | -1.875 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -1.50 | -1.625 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -1.25 | -1.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -1.00 | -1.125 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -0.75 | -0.875 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -0.50 | -0.625 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| -0.25 | -0.375 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 0.00 | -0.125 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 0.25 | 0.125 | 0.008 | 0.013 | 0.013 | 0.000 | 0.000 | 0.000 |
| 0.50 | 0.375 | 0.008 | 0.013 | 0.026 | 0.053 | 0.079 | 0.079 |
| 0.75 | 0.625 | 0.009 | 0.015 | 0.041 | 0.007 | 0.010 | 0.089 |
| 1.00 | 0.875 | 0.040 | 0.065 | 0.105 | 0.036 | 0.054 | 0.143 |
| 1.25 | 1.125 | 0.119 | 0.193 | 0.298 | 0.126 | 0.188 | 0.331 |
| 1.50 | 1.375 | 0.475 | 0.770 | 1.068 | 0.439 | 0.655 | 0.986 |
| 1.75 | 1.625 | 1.157 | 1.876 | 2.944 | 1.178 | 1.757 | 2.743 |
| 2.00 | 1.875 | 3.346 | 5.424 | 8.368 | 3.505 | 5.228 | 7.970 |
| 2.25 | 2.125 | 6.954 | 11.272 | 19.640 | 8.020 | 11.961 | 19.932 |
| 2.50 | 2.375 | 12.463 | 20.203 | 39.843 | 16.333 | 24.360 | 44.291 |
| 2.75 | 2.625 | 20.088 | 32.563 | 72.406 | 22.993 | 34.293 | 78.584 |
| 3.00 | 2.875 | 13.088 | 21.216 | 93.621 | 10.846 | 16.176 | 94.761 |
| 3.25 | 3.125 | 3.471 | 5.627 | 99.248 | 3.149 | 4.697 | 99.457 |
| 3.50 | 3.375 | 0.388 | 0.629 | 99.877 | 0.318 | 0.474 | 99.931 |
| 3.75 | 3.625 | 0.058 | 0.094 | 99.971 | 0.031 | 0.046 | 99.978 |
| 4.00 | 3.875 | 0.011 | 0.018 | 99.989 | 0.010 | 0.015 | 99.993 |
| 5.00 | 4.500 | 0.007 | 0.011 | 100.000 | 0.005 | 0.007 | 100.000 |

