

Quality Control Statistical Summary

Onshore Grab Sample: BW-14-BB

Sample Taken By: D. Phelps
 Sample Taken On: 01/27/09
 County: Broward

Latitude: 26° 08' 32.0"
 Longitude: 80° 06' 08.0"
 Datum: WGS 84

Statistical Results: Pre-CaCO3		
	Duplicate	Original
Mean:	1.1745 phi (0.443 mm)	1.1914 phi (0.4379 mm)
Standard Dev:	0.7101 phi-units (0.6113 mm)	0.6859 phi-units (0.6216 mm)
Skewness:	-1.6560 dimensionless	-1.6459 dimensionless
Kurtosis:	9.0027 dimensionless	9.2957 dimensionless
5th Moment:	-36.3325 dimensionless	-38.9428 dimensionless
6th Moment:	179.3781 dimensionless	200.9511 dimensionless
RARD*:	0.6046 dimensionless	0.5757 dimensionless
Median:	1.1543 phi (0.4493 mm)	1.1680 phi (0.445 mm)

Statistical Results: CaCO3		
	Duplicate	Original
Mean:	1.0032 phi (0.4989 mm)	1.0316 phi (0.4892 mm)
Standard Dev:	0.8045 phi-units (0.5726 mm)	0.7768 phi-units (0.5837 mm)
Skewness:	-1.5552 dimensionless	-1.5848 dimensionless
Kurtosis:	7.4134 dimensionless	7.7840 dimensionless
5th Moment:	-25.4811 dimensionless	-28.3930 dimensionless
6th Moment:	107.1283 dimensionless	123.4544 dimensionless
RARD*:	0.8019 dimensionless	0.7530 dimensionless
Median:	0.9905 phi (0.5033 mm)	1.0218 phi (0.4925 mm)

Statistical Results: Post-CaCO3		
	Duplicate	Original
Mean:	1.4203 phi (0.3736 mm)	1.4136 phi (0.3754 mm)
Standard Dev:	0.4678 phi-units (0.7231 mm)	0.4642 phi-units (0.7249 mm)
Skewness:	0.1575 dimensionless	0.0154 dimensionless
Kurtosis:	3.8382 dimensionless	4.0336 dimensionless
5th Moment:	5.0831 dimensionless	3.1369 dimensionless
6th Moment:	36.8454 dimensionless	41.4884 dimensionless
RARD*:	0.3294 dimensionless	0.3284 dimensionless
Median:	1.3085 phi (0.4037 mm)	1.3076 phi (0.404 mm)

Additional Data	
Total Fines	
Original:	0.2 %
Duplicate:	0.48 %
Total Carbonates	
Original:	58.16 %
Duplicate:	58.78 %

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)

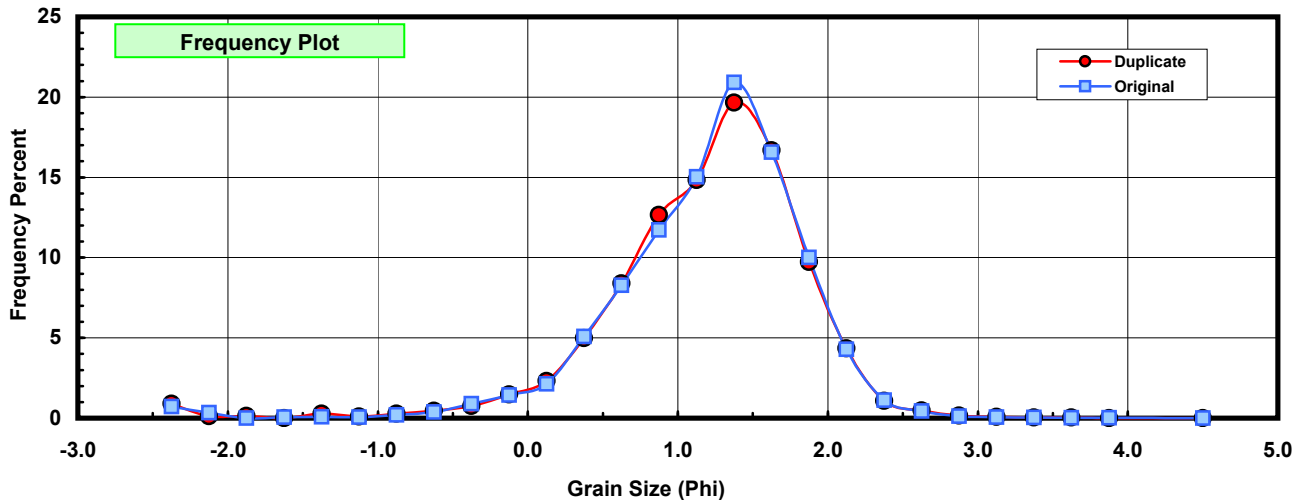
Pre-Digestion Grain Size Distribution

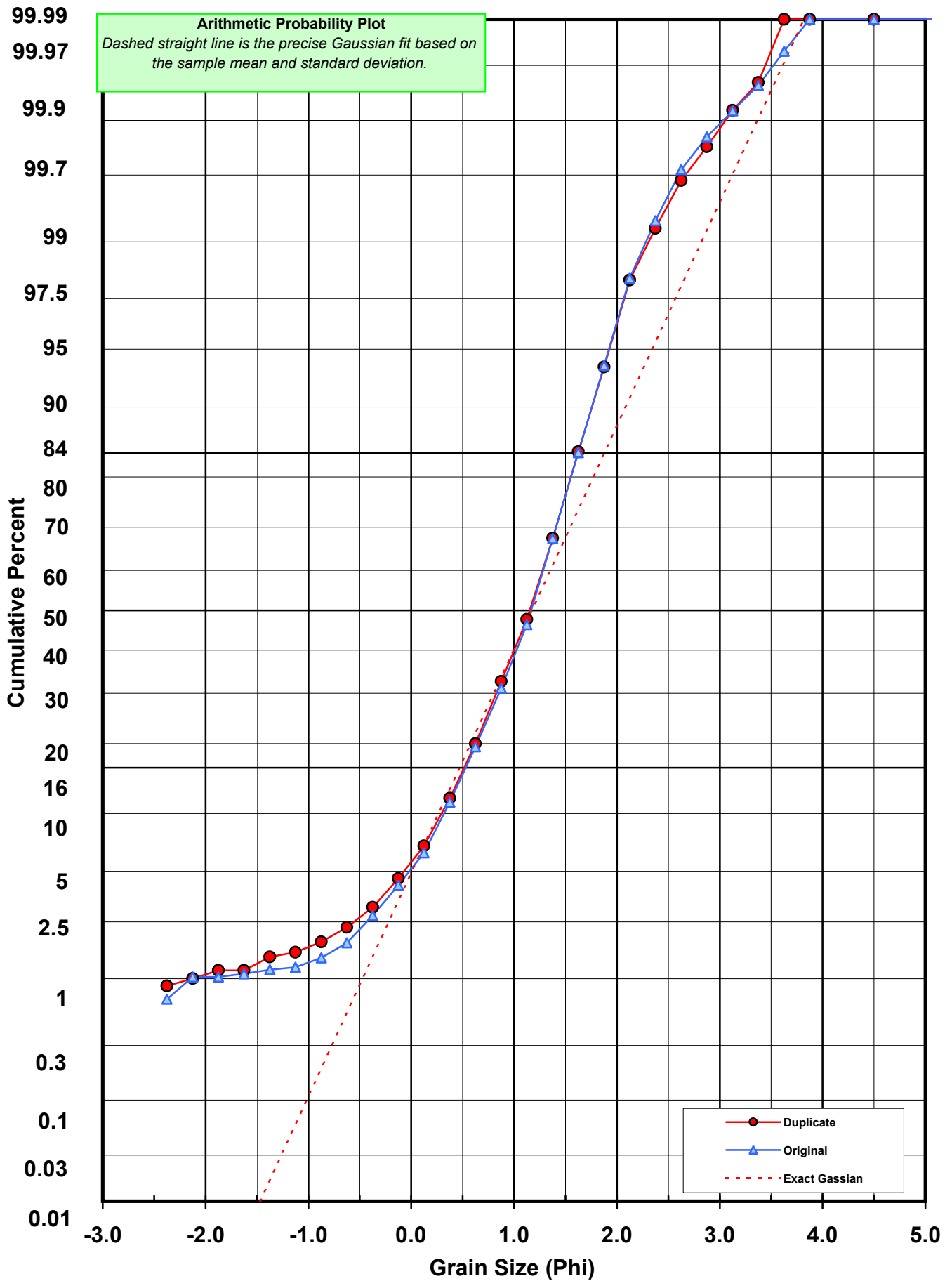
Onshore Grab Sample: BW-14-BB

Total Duplicate Sample Mass: 52.927 grams

Total Original Sample Mass: 56.021 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	0.475	0.897	0.897	0.398	0.710	0.710
-2.00	-2.125	0.064	0.121	1.018	0.188	0.336	1.046
-1.75	-1.875	0.078	0.147	1.166	0.000	0.000	1.046
-1.50	-1.625	0.000	0.000	1.166	0.031	0.055	1.101
-1.25	-1.375	0.152	0.287	1.453	0.043	0.077	1.178
-1.00	-1.125	0.057	0.108	1.561	0.028	0.050	1.228
-0.75	-0.875	0.145	0.274	1.835	0.113	0.202	1.430
-0.50	-0.625	0.241	0.455	2.290	0.214	0.382	1.812
-0.25	-0.375	0.403	0.761	3.051	0.503	0.898	2.710
0.00	-0.125	0.779	1.472	4.523	0.800	1.428	4.138
0.25	0.125	1.223	2.311	6.834	1.200	2.142	6.280
0.50	0.375	2.636	4.980	11.814	2.843	5.075	11.355
0.75	0.625	4.437	8.383	20.198	4.639	8.281	19.635
1.00	0.875	6.701	12.661	32.858	6.571	11.730	31.365
1.25	1.125	7.852	14.836	47.694	8.424	15.037	46.402
1.50	1.375	10.401	19.652	67.346	11.719	20.919	67.321
1.75	1.625	8.834	16.691	84.037	9.277	16.560	83.881
2.00	1.875	5.154	9.738	93.774	5.605	10.005	93.886
2.25	2.125	2.303	4.351	98.126	2.405	4.293	98.179
2.50	2.375	0.566	1.069	99.195	0.627	1.119	99.298
2.75	2.625	0.251	0.474	99.669	0.243	0.434	99.732
3.00	2.875	0.085	0.161	99.830	0.072	0.129	99.861
3.25	3.125	0.047	0.089	99.919	0.032	0.057	99.918
3.50	3.375	0.019	0.036	99.955	0.019	0.034	99.952
3.75	3.625	0.024	0.045	100.000	0.015	0.027	99.979
4.00	3.875	0.000	0.000	100.000	0.012	0.021	100.000
5.00	4.500	0.000	0.000	100.000	0.000	0.000	100.000



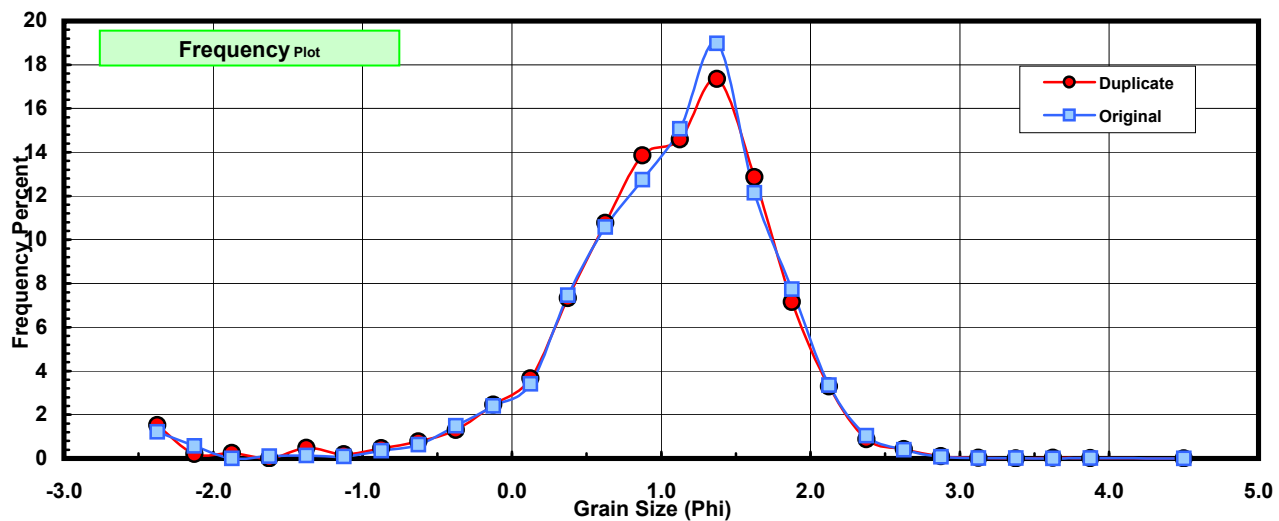


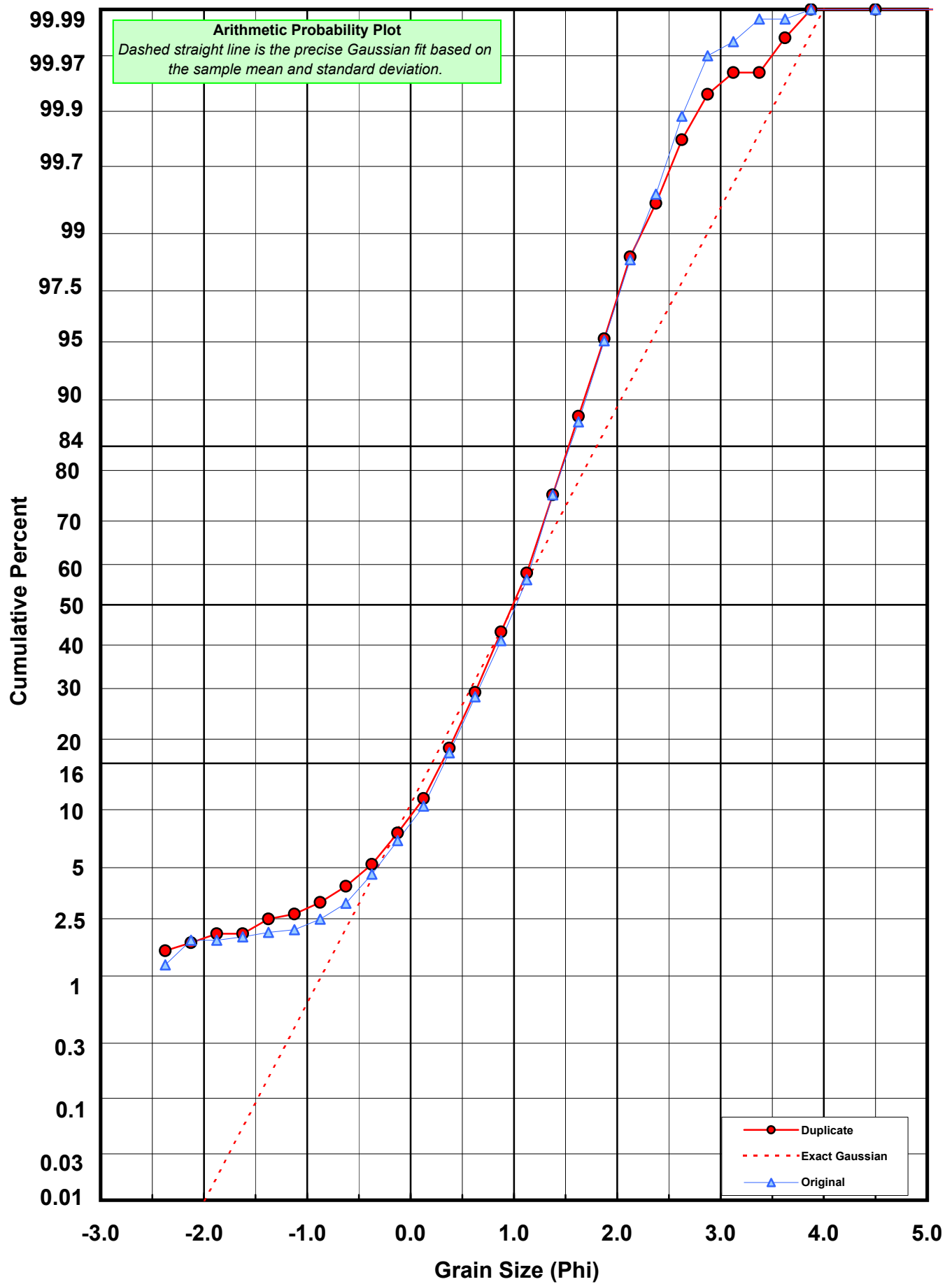
Carbonate Grain Size Distribution

Onshore Grab Sample: BW-14-BB

Total Duplicate Carbonate Mass: 31.119 grams
% Carbonate in Duplicate: 58.8 %
Total Original Carbonate Mass: 32.584 grams
% Carbonate in Original: 58.2 %

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	0.475	1.526	1.526	0.398	1.221	1.221
-2.00	-2.125	0.064	0.206	1.732	0.188	0.577	1.798
-1.75	-1.875	0.078	0.251	1.983	0.000	0.000	1.798
-1.50	-1.625	0.000	0.000	1.983	0.031	0.095	1.894
-1.25	-1.375	0.152	0.488	2.471	0.043	0.132	2.026
-1.00	-1.125	0.057	0.183	2.654	0.028	0.086	2.111
-0.75	-0.875	0.145	0.466	3.120	0.113	0.347	2.458
-0.50	-0.625	0.241	0.774	3.895	0.205	0.629	3.087
-0.25	-0.375	0.403	1.295	5.190	0.486	1.492	4.579
0.00	-0.125	0.765	2.458	7.648	0.780	2.394	6.973
0.25	0.125	1.138	3.657	11.305	1.111	3.410	10.382
0.50	0.375	2.282	7.333	18.638	2.430	7.458	17.840
0.75	0.625	3.350	10.765	29.403	3.448	10.582	28.422
1.00	0.875	4.312	13.856	43.260	4.150	12.736	41.158
1.25	1.125	4.540	14.589	57.849	4.908	15.063	56.221
1.50	1.375	5.402	17.359	75.208	6.185	18.982	75.203
1.75	1.625	4.000	12.854	88.062	3.957	12.144	87.347
2.00	1.875	2.228	7.160	95.222	2.524	7.746	95.093
2.25	2.125	1.026	3.297	98.519	1.094	3.357	98.450
2.50	2.375	0.275	0.884	99.402	0.340	1.043	99.494
2.75	2.625	0.131	0.421	99.823	0.129	0.396	99.890
3.00	2.875	0.033	0.106	99.929	0.026	0.080	99.969
3.25	3.125	0.008	0.026	99.955	0.003	0.009	99.979
3.50	3.375	0.000	0.000	99.955	0.004	0.012	99.991
3.75	3.625	0.008	0.026	99.981	0.000	0.000	99.991
4.00	3.875	0.006	0.019	100.000	0.003	0.009	100.000
5.00	4.500	0.000	0.000	100.000	0.000	0.000	100.000





Post-Digestion Grain Size Distribution

Onshore Grab Sample: BW-14-BB

Total Duplicate Digested Mass: 21.821 grams
% Silica in Duplicate: 41.2 %
Total Original Digested Mass: 23.437 grams
% Silica in Original: 41.8 %

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	0.009	0.038	0.038
-0.25	-0.375	0.000	0.000	0.000	0.017	0.073	0.111
0.00	-0.125	0.014	0.064	0.064	0.020	0.085	0.196
0.25	0.125	0.085	0.390	0.454	0.089	0.380	0.576
0.50	0.375	0.354	1.622	2.076	0.413	1.762	2.338
0.75	0.625	1.087	4.981	7.057	1.191	5.082	7.420
1.00	0.875	2.389	10.948	18.006	2.421	10.330	17.750
1.25	1.125	3.312	15.178	33.184	3.516	15.002	32.752
1.50	1.375	4.999	22.909	56.093	5.534	23.612	56.364
1.75	1.625	4.834	22.153	78.246	5.320	22.699	79.063
2.00	1.875	2.926	13.409	91.655	3.081	13.146	92.209
2.25	2.125	1.277	5.852	97.507	1.311	5.594	97.803
2.50	2.375	0.291	1.334	98.841	0.287	1.225	99.027
2.75	2.625	0.120	0.550	99.390	0.114	0.486	99.514
3.00	2.875	0.052	0.238	99.629	0.046	0.196	99.710
3.25	3.125	0.039	0.179	99.808	0.029	0.124	99.834
3.50	3.375	0.019	0.087	99.895	0.015	0.064	99.898
3.75	3.625	0.016	0.073	99.968	0.015	0.064	99.962
4.00	3.875	0.007	0.032	100.000	0.009	0.038	100.000
5.00	4.500	0.000	0.000	100.000	0.000	0.000	100.000

