

Quality Control Statistical Summary

Onshore Grab Sample: BW-04-BB

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

Latitude: 26° 16' 28.1"
 Longitude: 80° 04' 45.1"
 Datum: WGS 84

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	1.2869	phi (0.4098 mm)	1.2515	phi (0.42 mm)
Standard Dev:	0.5075	phi-units (0.7034 mm)	0.5671	phi-units (0.675 mm)
Skewness:	-0.7604	dimensionless	-1.3726	dimensionless
Kurtosis:	4.9992	dimensionless	8.1775	dimensionless
5th Moment:	-15.5054	dimensionless	-36.3918	dimensionless
6th Moment:	86.9501	dimensionless	206.8438	dimensionless
RARD*:	0.3944	dimensionless	0.4532	dimensionless
Median:	1.2169	phi (0.4302 mm)	1.2016	phi (0.4348 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	1.1563	phi (0.4487 mm)	1.1064	phi (0.4645 mm)
Standard Dev:	0.5542	phi-units (0.681 mm)	0.6378	phi-units (0.6427 mm)
Skewness:	-0.7264	dimensionless	-1.3378	dimensionless
Kurtosis:	4.7029	dimensionless	7.3172	dimensionless
5th Moment:	-13.8605	dimensionless	-28.8518	dimensionless
6th Moment:	69.5166	dimensionless	140.7654	dimensionless
RARD*:	0.4793	dimensionless	0.5765	dimensionless
Median:	1.0809	phi (0.4727 mm)	1.0549	phi (0.4813 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	1.4481	phi (0.3665 mm)	1.4328	phi (0.3704 mm)
Standard Dev:	0.4252	phi-units (0.7447 mm)	0.4210	phi-units (0.7469 mm)
Skewness:	0.2330	dimensionless	-0.0274	dimensionless
Kurtosis:	4.5228	dimensionless	4.0191	dimensionless
5th Moment:	9.4315	dimensionless	4.7173	dimensionless
6th Moment:	62.1918	dimensionless	50.2448	dimensionless
RARD*:	0.2936	dimensionless	0.2938	dimensionless
Median:	1.3429	phi (0.3942 mm)	1.3320	phi (0.3972 mm)

Additional Data	
Total Fines	
Original:	0.26 %
Duplicate:	0.32 %
Total Carbonates	
Original:	54.92 %
Duplicate:	53.74 %

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)

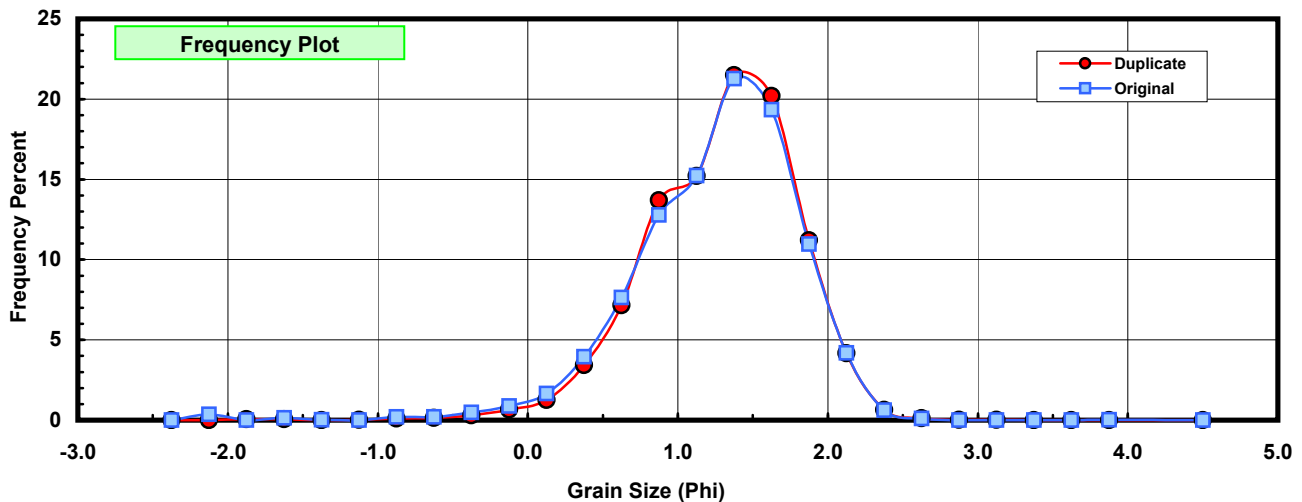
Pre-Digestion Grain Size Distribution

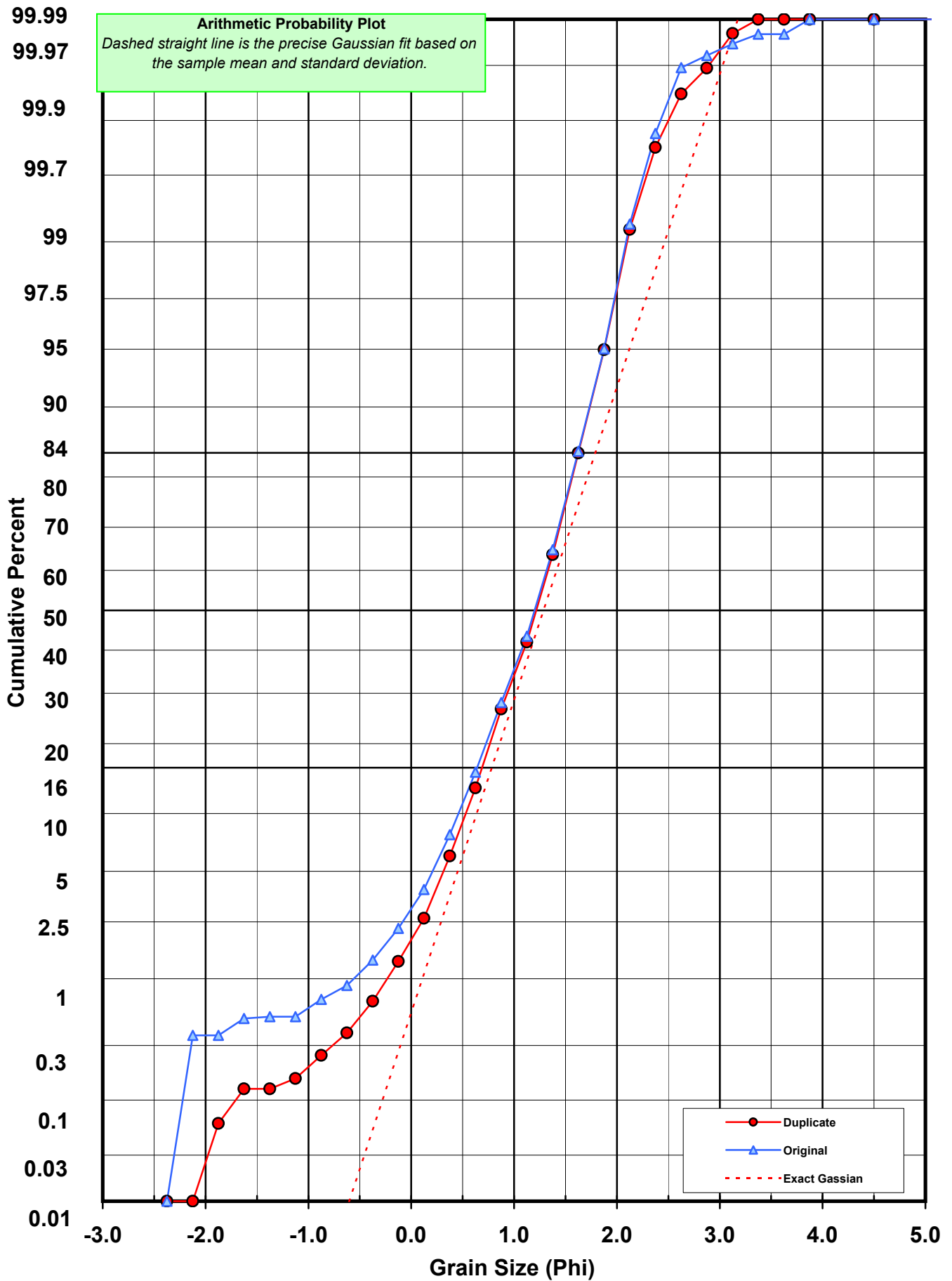
Onshore Grab Sample: BW-04-BB

Total Duplicate Sample Mass: 51.719 grams

Total Original Sample Mass: 58.446 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	0.000	0.000	0.000	0.212	0.363	0.363
-1.75	-1.875	0.032	0.062	0.062	0.000	0.000	0.363
-1.50	-1.625	0.033	0.064	0.126	0.080	0.137	0.500
-1.25	-1.375	0.000	0.000	0.126	0.010	0.017	0.517
-1.00	-1.125	0.015	0.029	0.155	0.000	0.000	0.517
-0.75	-0.875	0.047	0.091	0.246	0.111	0.190	0.707
-0.50	-0.625	0.070	0.135	0.381	0.116	0.198	0.905
-0.25	-0.375	0.157	0.304	0.684	0.276	0.472	1.377
0.00	-0.125	0.344	0.665	1.350	0.508	0.869	2.247
0.25	0.125	0.650	1.257	2.606	0.969	1.658	3.904
0.50	0.375	1.774	3.430	6.036	2.302	3.939	7.843
0.75	0.625	3.698	7.150	13.187	4.459	7.629	15.472
1.00	0.875	7.083	13.695	26.882	7.468	12.778	28.250
1.25	1.125	7.871	15.219	42.101	8.905	15.236	43.486
1.50	1.375	11.118	21.497	63.598	12.433	21.273	64.759
1.75	1.625	10.446	20.198	83.795	11.303	19.339	84.098
2.00	1.875	5.798	11.211	95.006	6.410	10.967	95.066
2.25	2.125	2.159	4.174	99.180	2.449	4.190	99.256
2.50	2.375	0.335	0.648	99.828	0.359	0.614	99.870
2.75	2.625	0.059	0.114	99.942	0.057	0.098	99.967
3.00	2.875	0.013	0.025	99.967	0.005	0.009	99.976
3.25	3.125	0.011	0.021	99.988	0.004	0.007	99.983
3.50	3.375	0.005	0.010	99.998	0.003	0.005	99.988
3.75	3.625	0.001	0.002	100.000	0.000	0.000	99.988
4.00	3.875	0.000	0.000	100.000	0.007	0.012	100.000
5.00	4.500	0.000	0.000	100.000	0.000	0.000	100.000



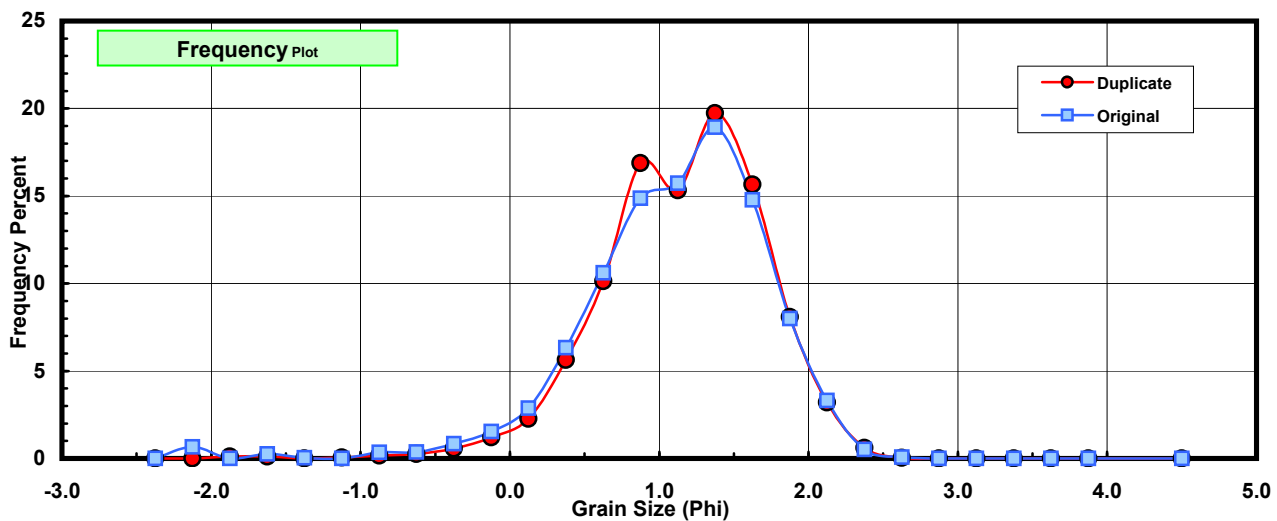


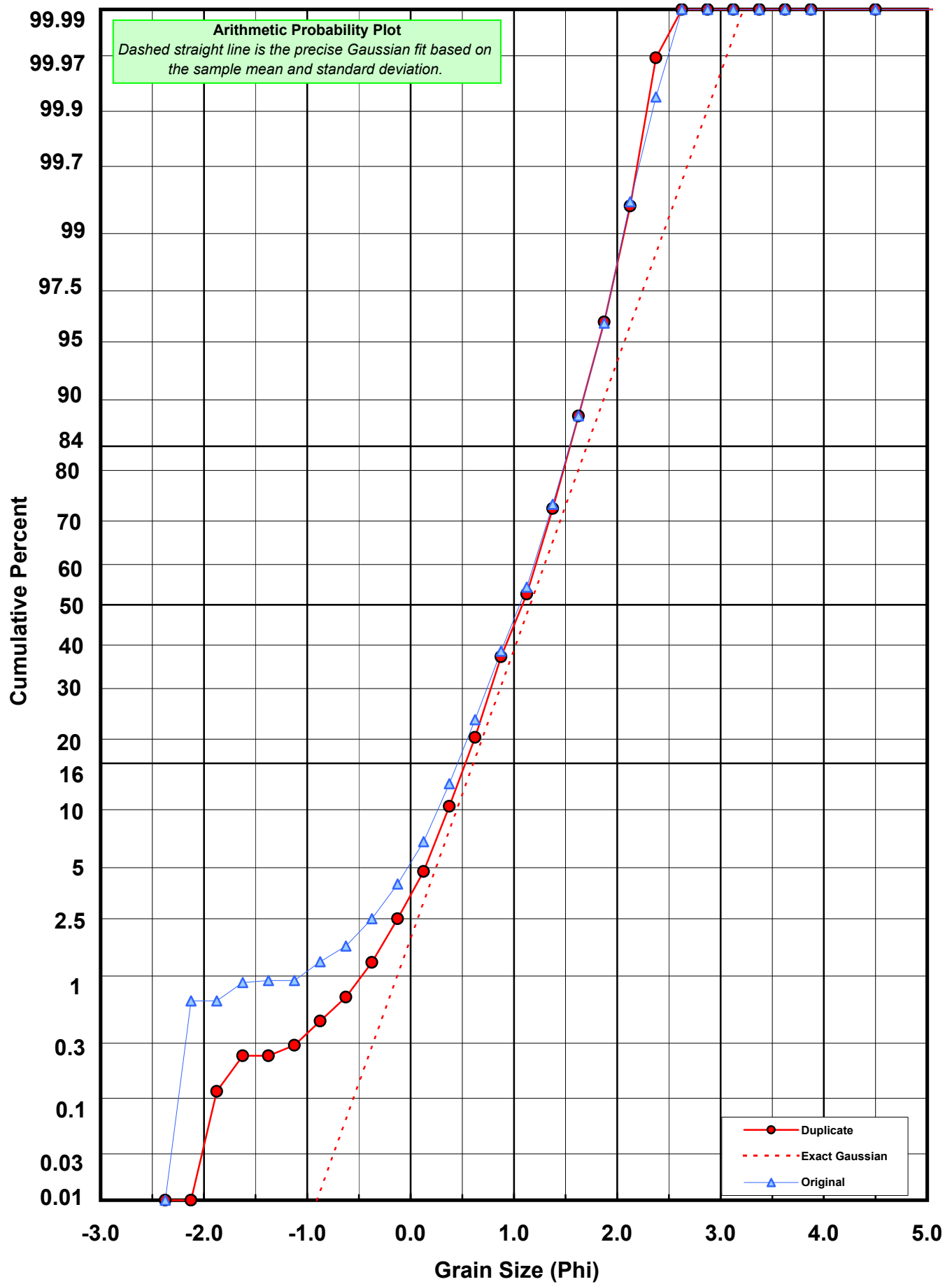
Carbonate Grain Size Distribution

Onshore Grab Sample: BW-04-BB

Total Duplicate Carbonate Mass: 27.897 grams
% Carbonate in Duplicate: 53.7 %
Total Original Carbonate Mass: 32.154 grams
% Carbonate in Original: 54.9 %

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	0.000	0.000	0.000	0.212	0.659	0.659
-1.75	-1.875	0.032	0.115	0.115	0.000	0.000	0.659
-1.50	-1.625	0.033	0.118	0.233	0.080	0.249	0.908
-1.25	-1.375	0.000	0.000	0.233	0.010	0.031	0.939
-1.00	-1.125	0.015	0.054	0.287	0.000	0.000	0.939
-0.75	-0.875	0.047	0.168	0.455	0.111	0.345	1.284
-0.50	-0.625	0.070	0.251	0.706	0.116	0.361	1.645
-0.25	-0.375	0.157	0.563	1.269	0.268	0.833	2.479
0.00	-0.125	0.337	1.208	2.477	0.494	1.536	4.015
0.25	0.125	0.632	2.265	4.742	0.924	2.874	6.889
0.50	0.375	1.570	5.628	10.370	2.033	6.323	13.211
0.75	0.625	2.825	10.127	20.497	3.409	10.602	23.814
1.00	0.875	4.708	16.876	37.373	4.781	14.869	38.683
1.25	1.125	4.276	15.328	52.701	5.058	15.731	54.413
1.50	1.375	5.506	19.737	72.438	6.088	18.934	73.347
1.75	1.625	4.365	15.647	88.085	4.749	14.770	88.117
2.00	1.875	2.255	8.083	96.168	2.571	7.996	96.112
2.25	2.125	0.894	3.205	99.373	1.063	3.306	99.418
2.50	2.375	0.166	0.595	99.968	0.163	0.507	99.925
2.75	2.625	0.009	0.032	100.000	0.024	0.075	100.000
3.00	2.875	0.000	0.000	100.000	0.000	0.000	100.000
3.25	3.125	0.000	0.000	100.000	0.000	0.000	100.000
3.50	3.375	0.000	0.000	100.000	0.000	0.000	100.000
3.75	3.625	0.000	0.000	100.000	0.000	0.000	100.000
4.00	3.875	0.000	0.000	100.000	0.000	0.000	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-04-BB

Total Duplicate Digested Mass: 23.927 grams
% Silica in Duplicate: 46.3 %
Total Original Digested Mass: 26.346 grams
% Silica in Original: 45.1 %

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	0.008	0.030	0.030
0.00	-0.125	0.007	0.029	0.029	0.014	0.053	0.084
0.25	0.125	0.018	0.075	0.104	0.045	0.171	0.254
0.50	0.375	0.204	0.853	0.957	0.269	1.021	1.275
0.75	0.625	0.873	3.649	4.606	1.050	3.985	5.261
1.00	0.875	2.375	9.926	14.532	2.687	10.199	15.460
1.25	1.125	3.595	15.025	29.557	3.847	14.602	30.061
1.50	1.375	5.612	23.455	53.011	6.345	24.083	54.145
1.75	1.625	6.081	25.415	78.426	6.554	24.877	79.021
2.00	1.875	3.543	14.808	93.234	3.839	14.571	93.593
2.25	2.125	1.265	5.287	98.520	1.386	5.261	98.854
2.50	2.375	0.169	0.706	99.227	0.196	0.744	99.598
2.75	2.625	0.050	0.209	99.436	0.033	0.125	99.723
3.00	2.875	0.032	0.134	99.570	0.015	0.057	99.780
3.25	3.125	0.044	0.184	99.753	0.020	0.076	99.856
3.50	3.375	0.026	0.109	99.862	0.016	0.061	99.916
3.75	3.625	0.022	0.092	99.954	0.009	0.034	99.951
4.00	3.875	0.011	0.046	100.000	0.013	0.049	100.000
5.00	4.500	0.000	0.000	100.000	0.000	0.000	100.000

