

Quality Control Statistical Summary

Onshore Grab Sample: BV-21-BB

Sample Taken By: D. Phelps
 Sample Taken On: 03/18/09
 County: Brevard

Latitude: 28° 32' 58.1"
 Longitude: 80° 33' 56.9"
 Datum: WGS 84

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	1.7364	phi (0.3001 mm)	1.8408	phi (0.2792 mm)
Standard Dev:	0.4729	phi-units (0.7205 mm)	0.4983	phi-units (0.7079 mm)
Skewness:	0.4239	dimensionless	0.3705	dimensionless
Kurtosis:	3.2934	dimensionless	2.6971	dimensionless
5th Moment:	2.8143	dimensionless	2.1690	dimensionless
6th Moment:	20.5590	dimensionless	12.2870	dimensionless
RARD*:	0.2723	dimensionless	0.2707	dimensionless
Median:	1.5582	phi (0.3396 mm)	1.6571	phi (0.3171 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	1.5638	phi (0.3383 mm)	1.5796	phi (0.3346 mm)
Standard Dev:	0.5078	phi-units (0.7033 mm)	0.5114	phi-units (0.7016 mm)
Skewness:	0.1278	dimensionless	0.5738	dimensionless
Kurtosis:	3.1619	dimensionless	3.1006	dimensionless
5th Moment:	0.6209	dimensionless	4.6295	dimensionless
6th Moment:	19.5773	dimensionless	19.9193	dimensionless
RARD*:	0.3247	dimensionless	0.3237	dimensionless
Median:	1.4366	phi (0.3694 mm)	1.3563	phi (0.3906 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	1.7676	phi (0.2937 mm)	1.8836	phi (0.271 mm)
Standard Dev:	0.4681	phi-units (0.7229 mm)	0.4900	phi-units (0.712 mm)
Skewness:	0.5479	dimensionless	0.4027	dimensionless
Kurtosis:	3.3315	dimensionless	2.7209	dimensionless
5th Moment:	4.9774	dimensionless	2.8830	dimensionless
6th Moment:	25.7702	dimensionless	14.9747	dimensionless
RARD*:	0.2649	dimensionless	0.2601	dimensionless
Median:	1.5801	phi (0.3345 mm)	1.6981	phi (0.3082 mm)

Additional Data	
Total Fines	
Original:	0.12 %
Duplicate:	0.08 %
Total Carbonates	
Original:	13.89 %
Duplicate:	14.99 %

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)

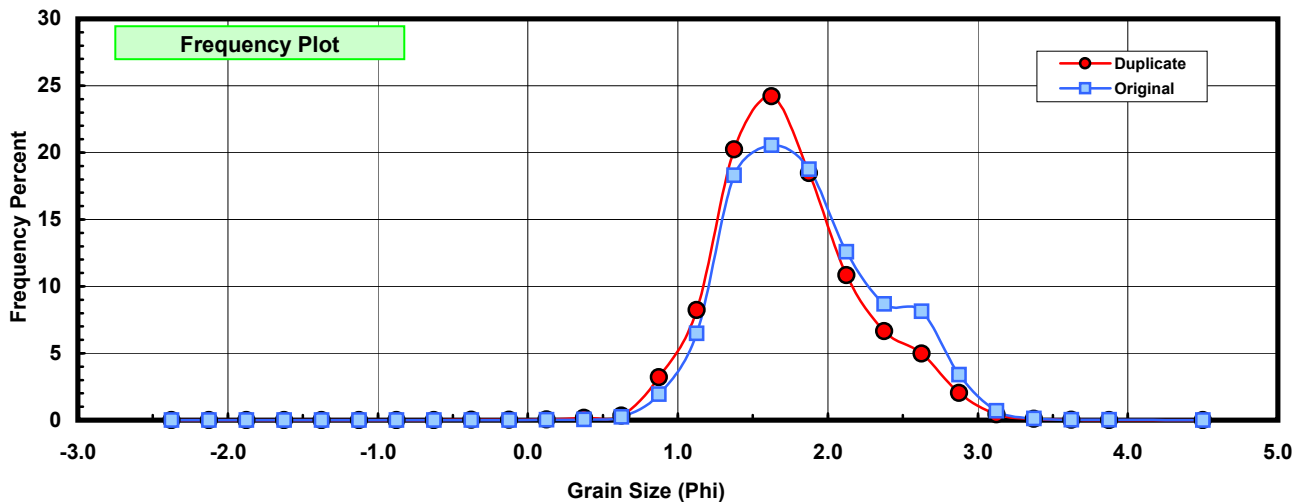
Pre-Digestion Grain Size Distribution

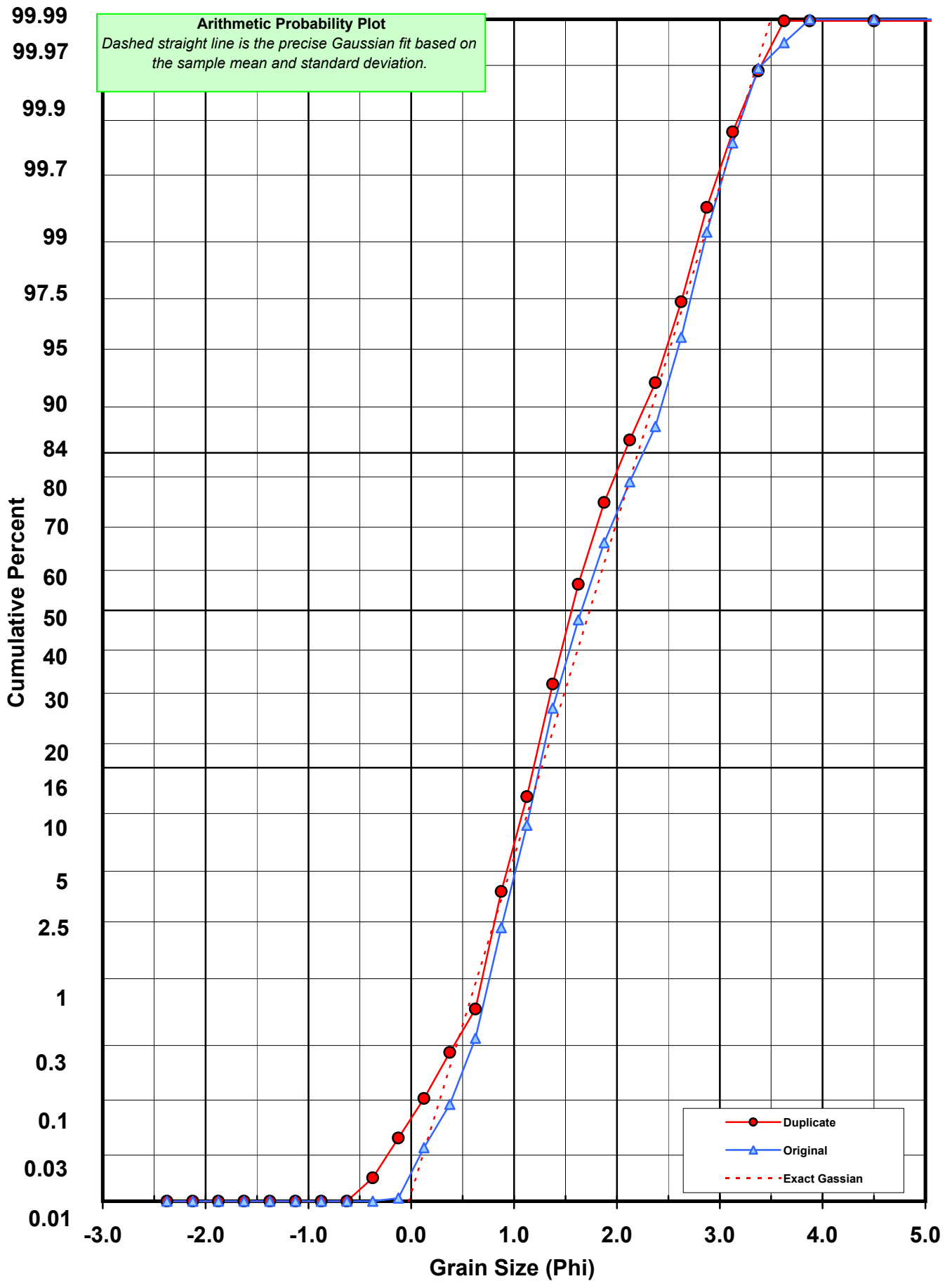
Onshore Grab Sample: BV-21-BB

Total Duplicate Sample Mass: 48.447 grams

Total Original Sample Mass: 54.591 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	0.000	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	0.008	0.017	0.017	0.000	0.000	0.000
0.00	-0.125	0.014	0.029	0.045	0.003	0.005	0.005
0.25	0.125	0.028	0.058	0.103	0.017	0.031	0.037
0.50	0.375	0.076	0.157	0.260	0.030	0.055	0.092
0.75	0.625	0.162	0.334	0.594	0.137	0.251	0.343
1.00	0.875	1.551	3.201	3.796	1.053	1.929	2.271
1.25	1.125	3.987	8.230	12.026	3.536	6.477	8.749
1.50	1.375	9.804	20.237	32.262	9.985	18.291	27.040
1.75	1.625	11.729	24.210	56.472	11.221	20.555	47.595
2.00	1.875	8.948	18.470	74.942	10.236	18.751	66.345
2.25	2.125	5.254	10.845	85.787	6.872	12.588	78.934
2.50	2.375	3.226	6.659	92.445	4.741	8.685	87.619
2.75	2.625	2.406	4.966	97.412	4.439	8.132	95.750
3.00	2.875	0.987	2.037	99.449	1.851	3.391	99.141
3.25	3.125	0.206	0.425	99.874	0.383	0.702	99.842
3.50	3.375	0.044	0.091	99.965	0.068	0.125	99.967
3.75	3.625	0.015	0.031	99.996	0.009	0.016	99.984
4.00	3.875	0.000	0.000	99.996	0.009	0.016	100.000
5.00	4.500	0.002	0.004	100.000	0.001	0.002	100.002



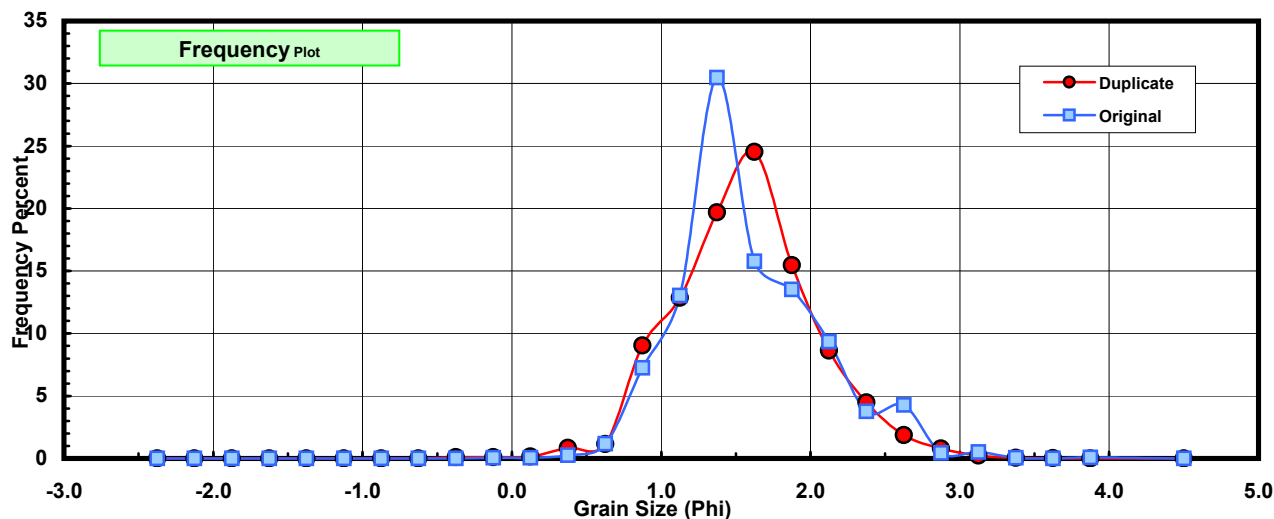


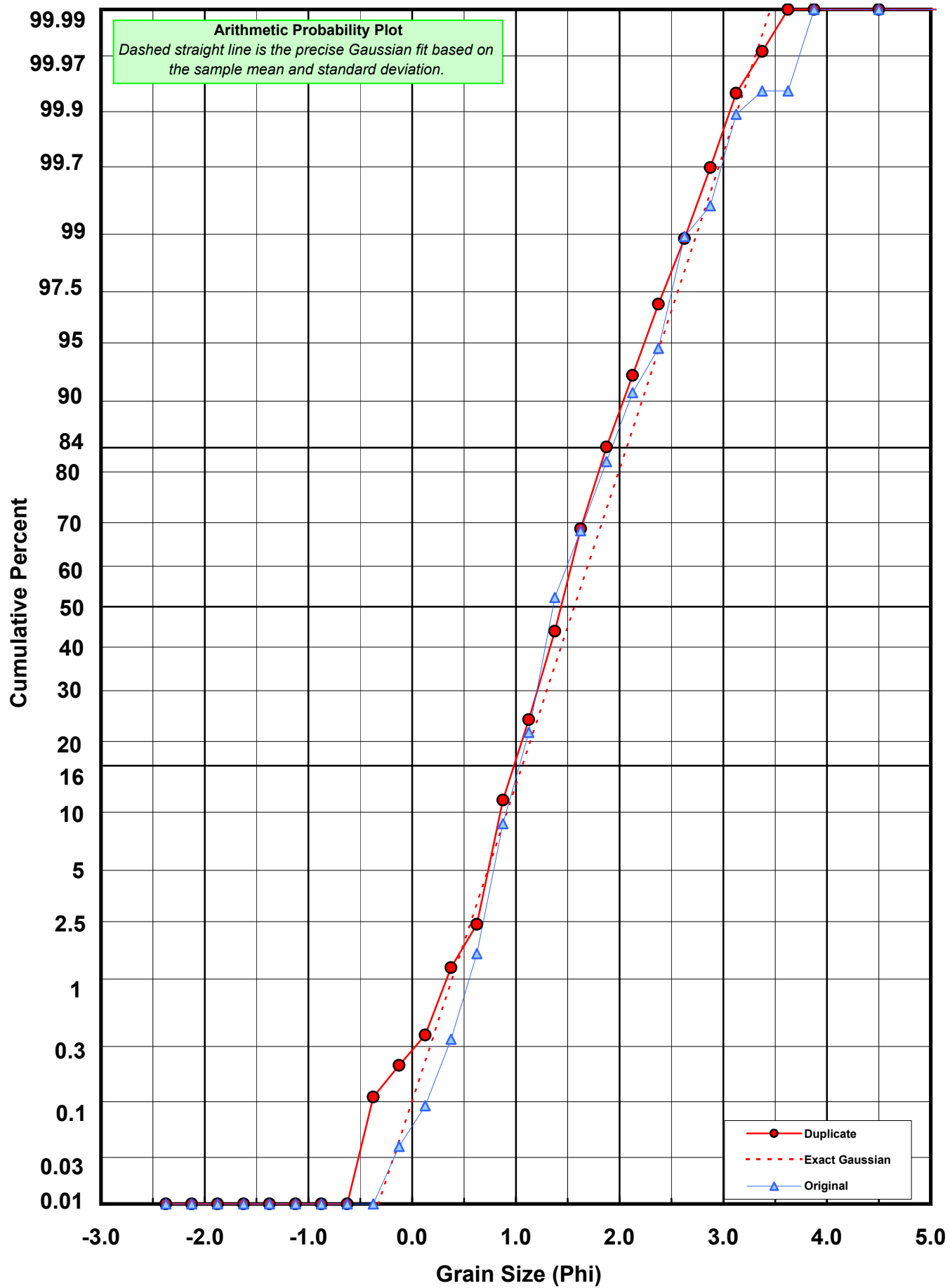
Carbonate Grain Size Distribution

Onshore Grab Sample: BV-21-BB

Total Duplicate Carbonate Mass: 7.271 grams
% Carbonate in Duplicate: 15.0 %
Total Original Carbonate Mass: 7.594 grams
% Carbonate in Original: 13.9 %

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	0.000	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	0.008	0.110	0.110	0.000	0.000	0.000
0.00	-0.125	0.007	0.096	0.206	0.003	0.040	0.040
0.25	0.125	0.012	0.165	0.371	0.004	0.053	0.092
0.50	0.375	0.062	0.853	1.224	0.019	0.250	0.342
0.75	0.625	0.084	1.155	2.379	0.090	1.185	1.528
1.00	0.875	0.657	9.036	11.415	0.550	7.243	8.770
1.25	1.125	0.934	12.846	24.261	0.990	13.037	21.807
1.50	1.375	1.432	19.695	43.955	2.314	30.471	52.278
1.75	1.625	1.783	24.522	68.478	1.198	15.776	68.054
2.00	1.875	1.124	15.459	83.936	1.027	13.524	81.578
2.25	2.125	0.628	8.637	92.573	0.709	9.336	90.914
2.50	2.375	0.325	4.470	97.043	0.285	3.753	94.667
2.75	2.625	0.136	1.870	98.913	0.325	4.280	98.947
3.00	2.875	0.057	0.784	99.697	0.033	0.435	99.381
3.25	3.125	0.017	0.234	99.931	0.039	0.514	99.895
3.50	3.375	0.003	0.041	99.972	0.003	0.040	99.934
3.75	3.625	0.002	0.028	100.000	0.000	0.000	99.934
4.00	3.875	0.000	0.000	100.000	0.005	0.066	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: BV-21-BB

Total Duplicate Digested Mass: 41.187 grams
% Silica in Duplicate: 85.0 %
Total Original Digested Mass: 47.010 grams
% Silica in Original: 86.1 %

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	0.000	0.000	0.000
0.00	-0.125	0.007	0.017	0.017	0.000	0.000	0.000
0.25	0.125	0.016	0.039	0.056	0.013	0.028	0.028
0.50	0.375	0.014	0.034	0.090	0.011	0.023	0.051
0.75	0.625	0.078	0.189	0.279	0.047	0.100	0.151
1.00	0.875	0.894	2.171	2.450	0.503	1.070	1.221
1.25	1.125	3.053	7.413	9.862	2.546	5.416	6.637
1.50	1.375	8.372	20.327	30.189	7.671	16.318	22.955
1.75	1.625	9.946	24.148	54.338	10.023	21.321	44.276
2.00	1.875	7.824	18.996	73.334	9.209	19.589	63.865
2.25	2.125	4.626	11.232	84.566	6.163	13.110	76.975
2.50	2.375	2.901	7.043	91.609	4.456	9.479	86.454
2.75	2.625	2.270	5.511	97.120	4.114	8.751	95.205
3.00	2.875	0.930	2.258	99.378	1.818	3.867	99.073
3.25	3.125	0.189	0.459	99.837	0.344	0.732	99.804
3.50	3.375	0.041	0.100	99.937	0.065	0.138	99.943
3.75	3.625	0.013	0.032	99.968	0.015	0.032	99.974
4.00	3.875	0.004	0.010	99.978	0.004	0.009	99.983
5.00	4.500	0.009	0.022	100.000	0.008	0.017	100.000

