

Quality Control Statistical Summary

Onshore Grab Sample: PB-19-BB

Sample Taken By: D. Phelps
 Sample Taken On: 01/07/09
 County: Palm Beach

Latitude: 26° 42' 42.5"
 Longitude: 80° 01' 59.3"
 Datum: WGS 84

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	1.6081	phi (0.328 mm)	1.6591	phi (0.3166 mm)
Standard Dev:	0.5769	phi-units (0.6704 mm)	0.5813	phi-units (0.6684 mm)
Skewness:	-0.5929	dimensionless	-0.6879	dimensionless
Kurtosis:	4.1721	dimensionless	4.3383	dimensionless
5th Moment:	-7.6408	dimensionless	-8.1471	dimensionless
6th Moment:	38.2350	dimensionless	39.3324	dimensionless
RARD*:	0.3587	dimensionless	0.3504	dimensionless
Median:	1.5317	phi (0.3459 mm)	1.6009	phi (0.3297 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	1.4659	phi (0.362 mm)	1.5195	phi (0.3488 mm)
Standard Dev:	0.6739	phi-units (0.6268 mm)	0.6982	phi-units (0.6164 mm)
Skewness:	-0.4949	dimensionless	-0.5055	dimensionless
Kurtosis:	3.3722	dimensionless	3.2444	dimensionless
5th Moment:	-5.1297	dimensionless	-4.6917	dimensionless
6th Moment:	21.8623	dimensionless	19.1476	dimensionless
RARD*:	0.4597	dimensionless	0.4595	dimensionless
Median:	1.3786	phi (0.3846 mm)	1.4368	phi (0.3694 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	1.7233	phi (0.3028 mm)	1.7698	phi (0.2933 mm)
Standard Dev:	0.4690	phi-units (0.7224 mm)	0.4528	phi-units (0.7306 mm)
Skewness:	-0.0223	dimensionless	-0.1409	dimensionless
Kurtosis:	3.7316	dimensionless	4.2426	dimensionless
5th Moment:	1.8114	dimensionless	0.7752	dimensionless
6th Moment:	33.0204	dimensionless	40.8704	dimensionless
RARD*:	0.2722	dimensionless	0.2558	dimensionless
Median:	1.6220	phi (0.3249 mm)	1.6719	phi (0.3138 mm)

Additional Data	
Total Fines	
Original:	0.17 %
Duplicate:	0.19 %
Total Carbonates	
Original:	43.99 %
Duplicate:	44.54 %

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)

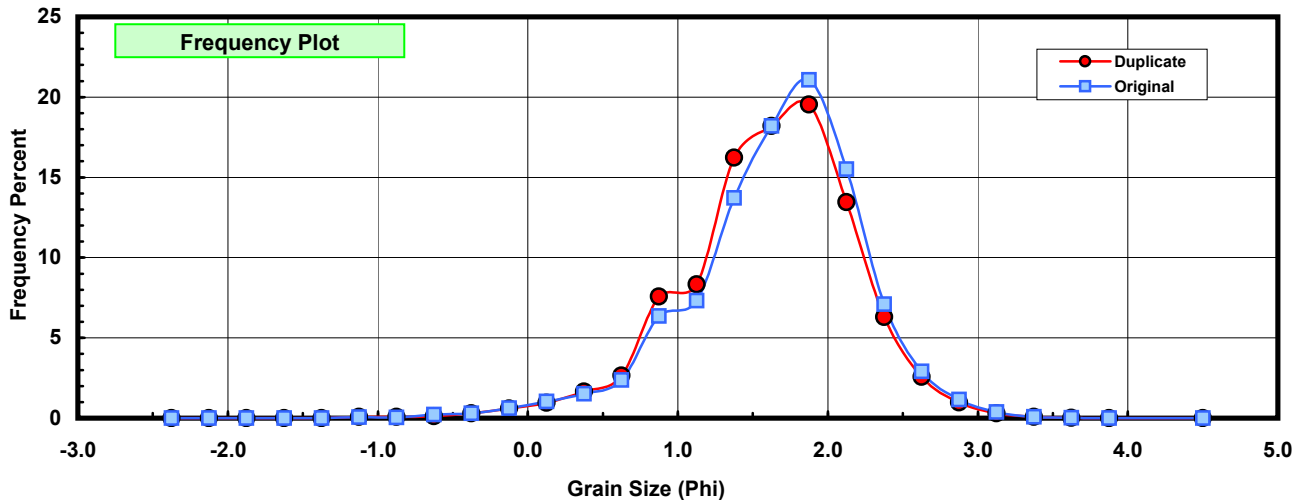
Pre-Digestion Grain Size Distribution

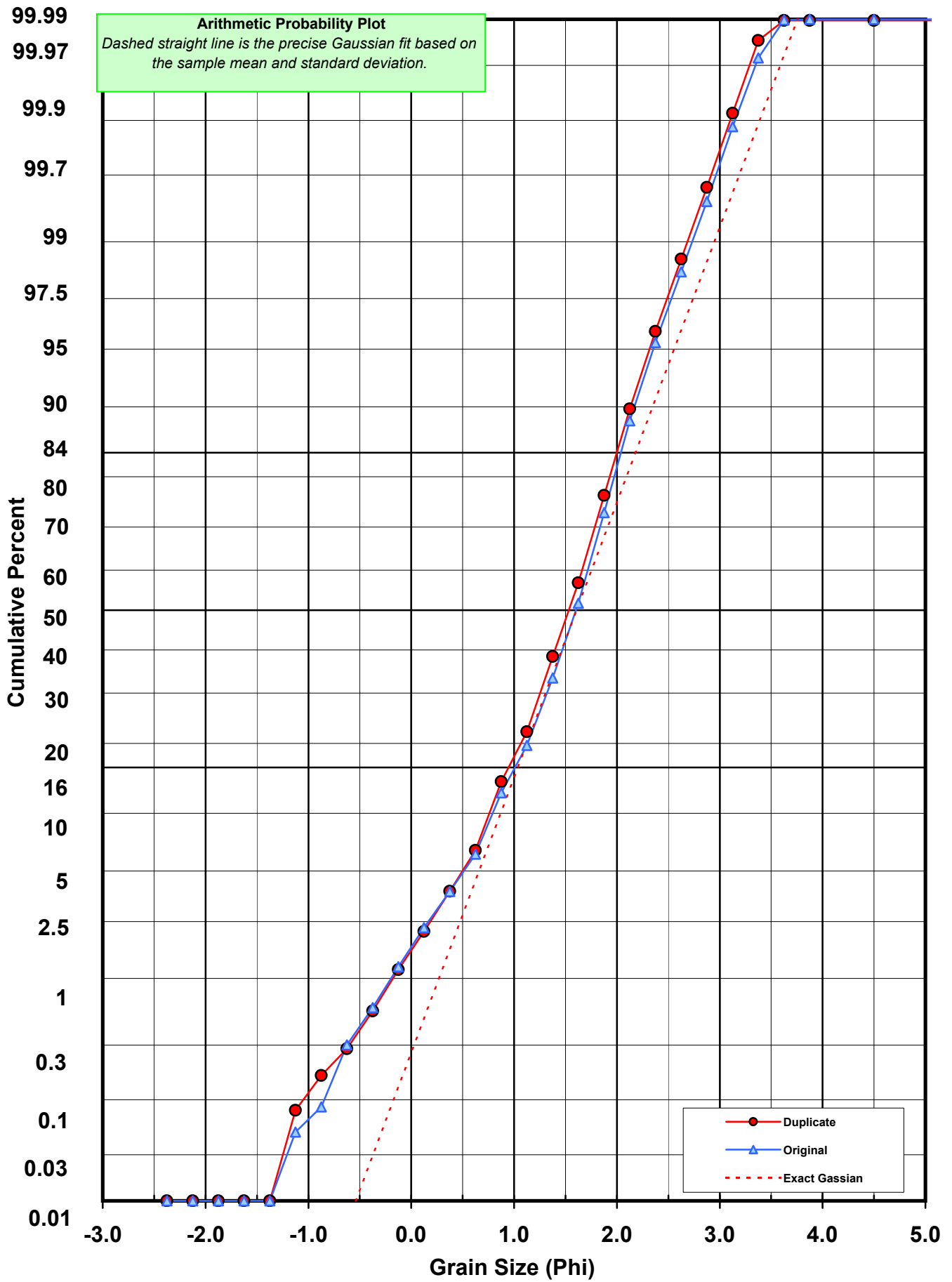
Onshore Grab Sample: PB-19-BB

Total Duplicate Sample Mass: 52.180 grams

Total Original Sample Mass: 62.564 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	0.042	0.080	0.080	0.032	0.051	0.051
-0.75	-0.875	0.043	0.082	0.163	0.022	0.035	0.086
-0.50	-0.625	0.060	0.115	0.278	0.133	0.213	0.299
-0.25	-0.375	0.153	0.293	0.571	0.193	0.309	0.607
0.00	-0.125	0.315	0.604	1.175	0.391	0.625	1.232
0.25	0.125	0.502	0.962	2.137	0.648	1.036	2.268
0.50	0.375	0.866	1.660	3.796	0.947	1.514	3.782
0.75	0.625	1.386	2.656	6.453	1.485	2.374	6.156
1.00	0.875	3.952	7.574	14.026	3.973	6.351	12.507
1.25	1.125	4.345	8.327	22.353	4.581	7.323	19.829
1.50	1.375	8.472	16.236	38.589	8.584	13.721	33.551
1.75	1.625	9.502	18.210	56.800	11.390	18.207	51.758
2.00	1.875	10.190	19.529	76.328	13.183	21.073	72.830
2.25	2.125	7.017	13.448	89.776	9.702	15.509	88.339
2.50	2.375	3.287	6.299	96.075	4.440	7.097	95.436
2.75	2.625	1.343	2.574	98.649	1.821	2.911	98.347
3.00	2.875	0.507	0.972	99.621	0.724	1.157	99.504
3.25	3.125	0.153	0.293	99.914	0.239	0.382	99.887
3.50	3.375	0.037	0.071	99.985	0.055	0.088	99.974
3.75	3.625	0.006	0.011	99.996	0.014	0.022	99.997
4.00	3.875	0.000	0.000	99.996	0.002	0.003	100.000
5.00	4.500	0.002	0.004	100.000	0.005	0.008	100.008



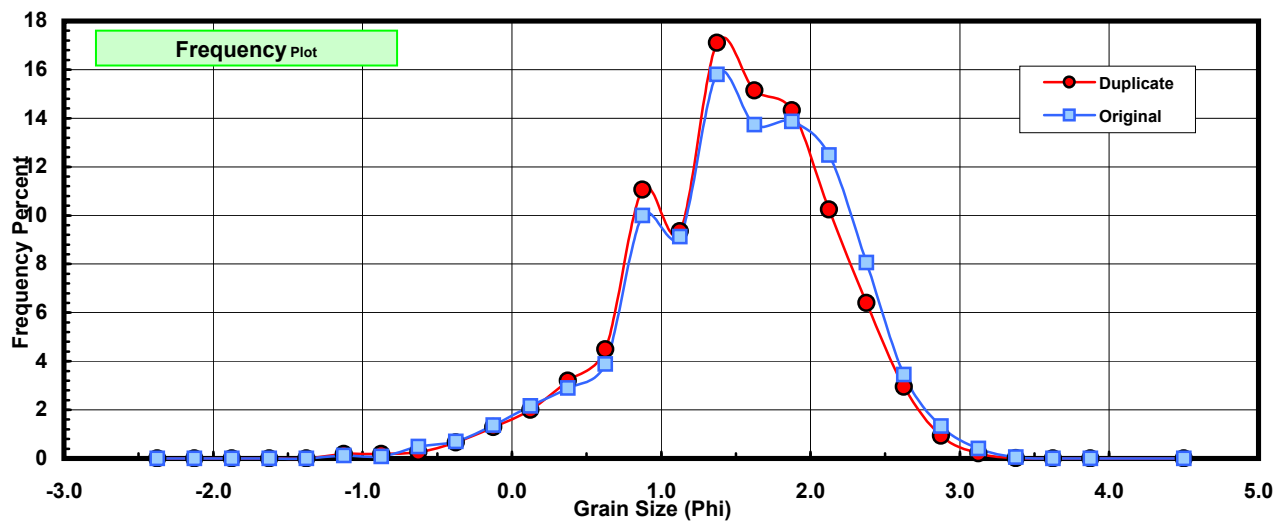


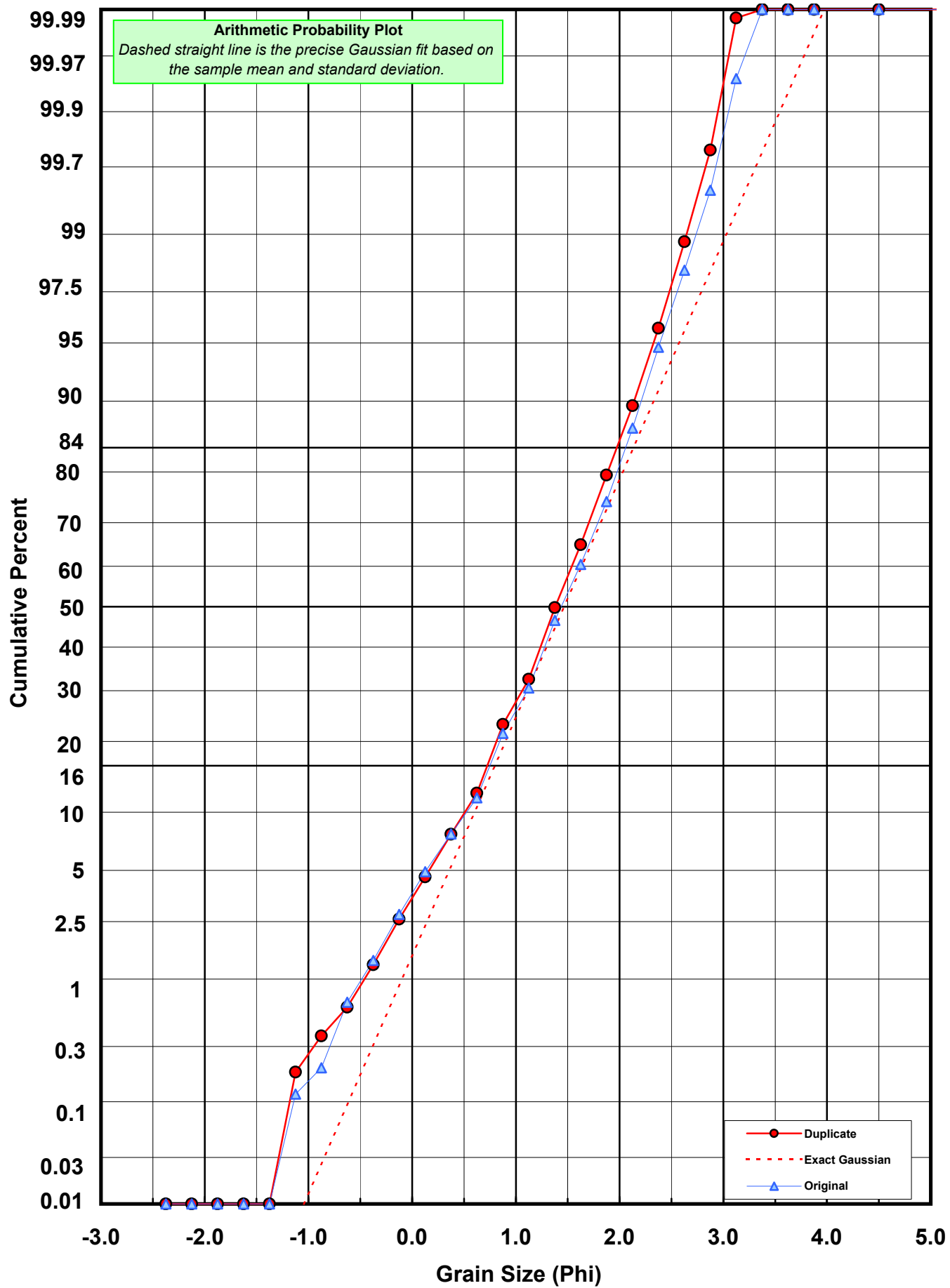
Carbonate Grain Size Distribution

Onshore Grab Sample: PB-19-BB

Total Duplicate Carbonate Mass: 23.250 grams
% Carbonate in Duplicate: 44.5 %
Total Original Carbonate Mass: 27.538 grams
% Carbonate in Original: 44.0 %

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	0.042	0.181	0.181	0.032	0.116	0.116
-0.75	-0.875	0.043	0.185	0.366	0.022	0.080	0.196
-0.50	-0.625	0.060	0.258	0.624	0.133	0.483	0.679
-0.25	-0.375	0.153	0.658	1.282	0.192	0.697	1.376
0.00	-0.125	0.299	1.286	2.568	0.376	1.365	2.742
0.25	0.125	0.465	2.000	4.568	0.593	2.153	4.895
0.50	0.375	0.745	3.204	7.772	0.796	2.891	7.786
0.75	0.625	1.045	4.495	12.267	1.070	3.886	11.671
1.00	0.875	2.572	11.062	23.329	2.753	9.997	21.668
1.25	1.125	2.174	9.351	32.680	2.514	9.129	30.797
1.50	1.375	3.977	17.105	49.785	4.353	15.807	46.605
1.75	1.625	3.520	15.140	64.925	3.781	13.730	60.335
2.00	1.875	3.331	14.327	79.252	3.820	13.872	74.207
2.25	2.125	2.382	10.245	89.497	3.436	12.477	86.684
2.50	2.375	1.489	6.404	95.901	2.220	8.062	94.745
2.75	2.625	0.687	2.955	98.856	0.951	3.453	98.199
3.00	2.875	0.216	0.929	99.785	0.368	1.336	99.535
3.25	3.125	0.048	0.206	99.991	0.114	0.414	99.949
3.50	3.375	0.002	0.009	100.000	0.014	0.051	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: PB-19-BB

Total Duplicate Digested Mass: 28.942 grams
% Silica in Duplicate: 55.5 %
Total Original Digested Mass: 35.041 grams
% Silica in Original: 56.0 %

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	0.001	0.003	0.003
0.00	-0.125	0.016	0.055	0.055	0.015	0.043	0.046
0.25	0.125	0.037	0.128	0.183	0.055	0.157	0.203
0.50	0.375	0.121	0.418	0.601	0.151	0.431	0.634
0.75	0.625	0.341	1.178	1.779	0.415	1.184	1.818
1.00	0.875	1.380	4.768	6.548	1.220	3.482	5.300
1.25	1.125	2.171	7.501	14.049	2.067	5.899	11.198
1.50	1.375	4.495	15.531	29.580	4.231	12.074	23.273
1.75	1.625	5.982	20.669	50.249	7.609	21.715	44.987
2.00	1.875	6.859	23.699	73.948	9.363	26.720	71.707
2.25	2.125	4.635	16.015	89.963	6.266	17.882	89.589
2.50	2.375	1.798	6.212	96.175	2.220	6.335	95.925
2.75	2.625	0.656	2.267	98.442	0.870	2.483	98.408
3.00	2.875	0.291	1.005	99.447	0.356	1.016	99.424
3.25	3.125	0.105	0.363	99.810	0.125	0.357	99.780
3.50	3.375	0.035	0.121	99.931	0.041	0.117	99.897
3.75	3.625	0.011	0.038	99.969	0.016	0.046	99.943
4.00	3.875	0.002	0.007	99.976	0.013	0.037	99.980
5.00	4.500	0.007	0.024	100.000	0.007	0.020	100.000

