

Quality Control Statistical Summary

Onshore Grab Sample: CH-02-BB

Sample Taken By: D. Phelps
 Sample Taken On: 12/15/09
 County: Charlotte

Latitude: 26° 55' 53.6"
 Longitude: 82° 21' 56.8"
 Datum: WGS 84

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	1.5458	phi (0.3425 mm)	1.4316	phi (0.3707 mm)
Standard Dev:	1.0296	phi-units (0.4899 mm)	1.0949	phi-units (0.4682 mm)
Skewness:	-0.1510	dimensionless	-0.1154	dimensionless
Kurtosis:	1.8759	dimensionless	1.8174	dimensionless
5th Moment:	-0.7681	dimensionless	-0.5361	dimensionless
6th Moment:	4.7512	dimensionless	4.3609	dimensionless
RARD*:	0.6660	dimensionless	0.7648	dimensionless
Median:	1.4671	phi (0.3617 mm)	1.3508	phi (0.3921 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	0.8269	phi (0.5638 mm)	0.6475	phi (0.6384 mm)
Standard Dev:	0.8974	phi-units (0.5369 mm)	0.8521	phi-units (0.554 mm)
Skewness:	0.6128	dimensionless	0.4834	dimensionless
Kurtosis:	2.6569	dimensionless	2.4663	dimensionless
5th Moment:	3.5148	dimensionless	2.8046	dimensionless
6th Moment:	10.5910	dimensionless	10.5931	dimensionless
RARD*:	1.0853	dimensionless	1.3161	dimensionless
Median:	0.5947	phi (0.6622 mm)	0.4197	phi (0.7476 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	1.8791	phi (0.2719 mm)	1.8694	phi (0.2737 mm)
Standard Dev:	0.9194	phi-units (0.5287 mm)	0.9782	phi-units (0.5076 mm)
Skewness:	-0.4688	dimensionless	-0.5550	dimensionless
Kurtosis:	2.2181	dimensionless	2.2578	dimensionless
5th Moment:	-2.3848	dimensionless	-2.7138	dimensionless
6th Moment:	7.4175	dimensionless	7.4381	dimensionless
RARD*:	0.4893	dimensionless	0.5232	dimensionless
Median:	1.9296	phi (0.2625 mm)	1.9666	phi (0.2559 mm)

Additional Data	
Total Fines	
Original:	0.1 %
Duplicate:	0.12 %
Total Carbonates	
Original:	35.19 %
Duplicate:	31.6 %

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 $mm = 2^{\sqrt{-\phi}}$	
* 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)

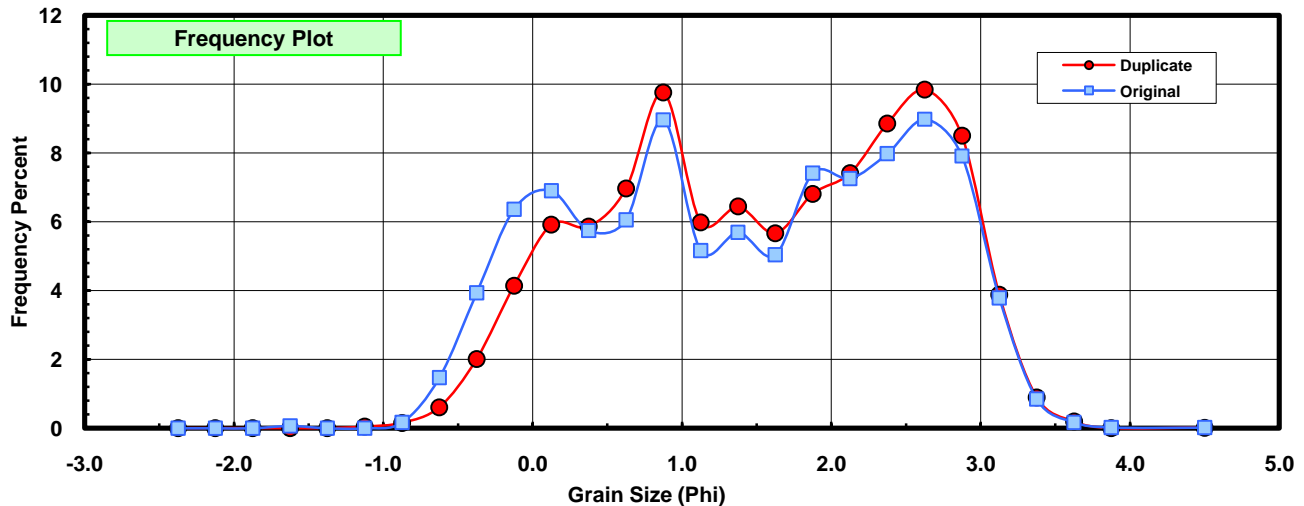
Pre-Digestion Grain Size Distribution

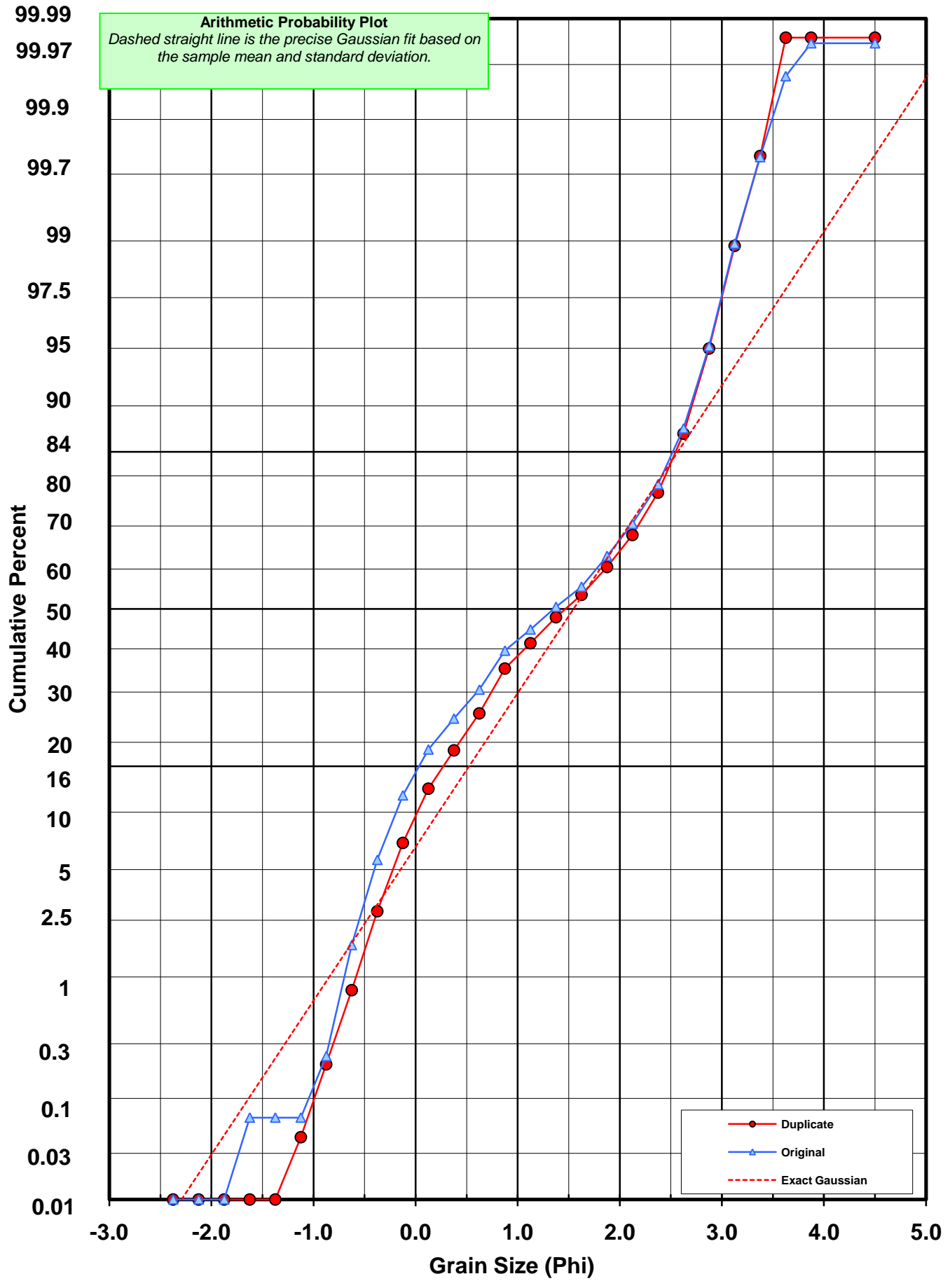
Onshore Grab Sample: CH-02-BB

Total Duplicate Sample Mass: 56.342 grams

Total Original Sample Mass: 69.783 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	0.047	0.067	0.067
-1.25	-1.375	0.000	0.000	0.000	0.000	0.000	0.067
-1.00	-1.125	0.025	0.044	0.044	0.000	0.000	0.067
-0.75	-0.875	0.087	0.154	0.199	0.116	0.166	0.234
-0.50	-0.625	0.344	0.611	0.809	1.028	1.473	1.707
-0.25	-0.375	1.135	2.014	2.824	2.748	3.938	5.645
0.00	-0.125	2.336	4.146	6.970	4.443	6.367	12.012
0.25	0.125	3.335	5.919	12.889	4.818	6.904	18.916
0.50	0.375	3.304	5.864	18.753	4.010	5.746	24.662
0.75	0.625	3.927	6.970	25.723	4.229	6.060	30.722
1.00	0.875	5.498	9.758	35.482	6.256	8.965	39.687
1.25	1.125	3.371	5.983	41.465	3.606	5.167	44.855
1.50	1.375	3.633	6.448	47.913	3.976	5.698	50.552
1.75	1.625	3.193	5.667	53.580	3.518	5.041	55.594
2.00	1.875	3.840	6.816	60.395	5.175	7.416	63.010
2.25	2.125	4.176	7.412	67.807	5.067	7.261	70.271
2.50	2.375	4.991	8.858	76.666	5.571	7.983	78.254
2.75	2.625	5.549	9.849	86.515	6.270	8.985	87.239
3.00	2.875	4.790	8.502	95.016	5.522	7.913	95.152
3.25	3.125	2.186	3.880	98.896	2.642	3.786	98.938
3.50	3.375	0.505	0.896	99.792	0.593	0.850	99.788
3.75	3.625	0.109	0.193	99.986	0.120	0.172	99.960
4.00	3.875	0.000	0.000	99.986	0.016	0.023	99.983
5.00	4.500	0.008	0.014	100.000	0.012	0.017	100.000



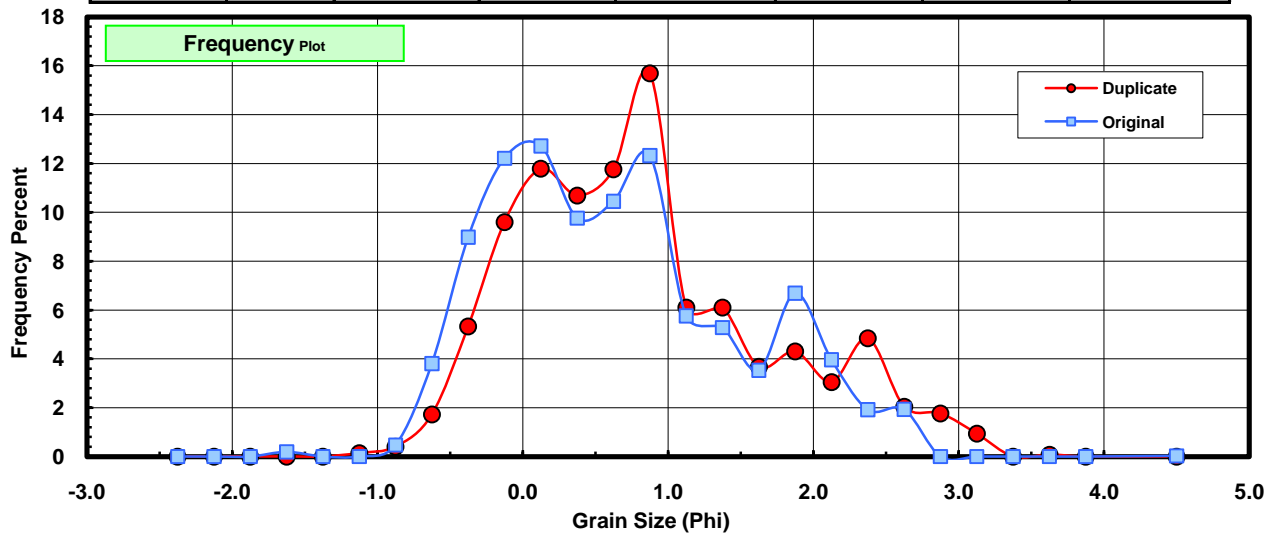


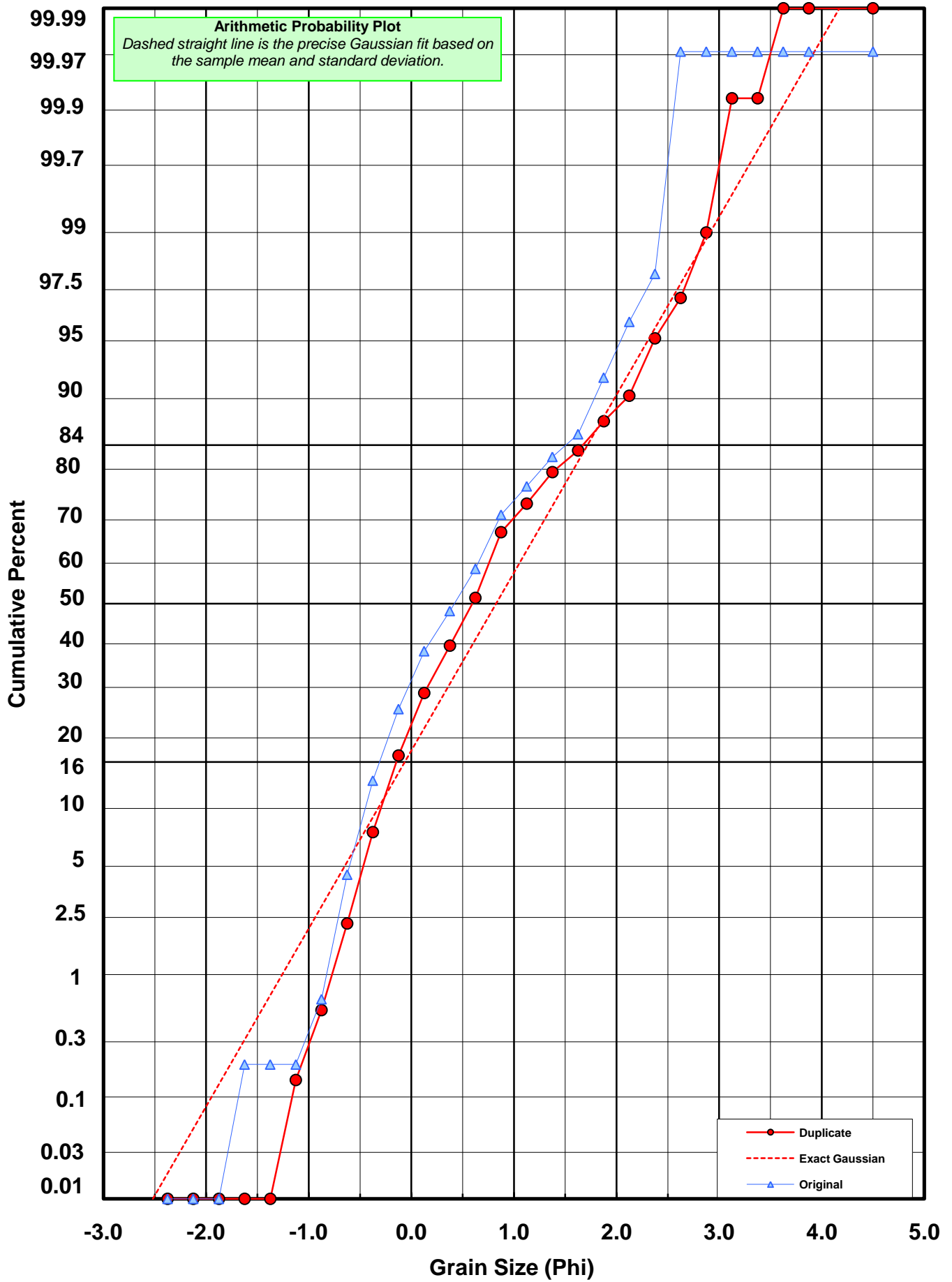
Carbonate Grain Size Distribution

Onshore Grab Sample: CH-02-BB

Total Duplicate Carbonate Mass: 17.811 grams
% Carbonate in Duplicate: 31.6 %
Total Original Carbonate Mass: 24.560 grams
% Carbonate in Original: 35.2 %

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	0.000	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	0.047	0.191	0.191
-1.25	-1.375	0.000	0.000	0.000	0.000	0.000	0.191
-1.00	-1.125	0.025	0.140	0.140	0.000	0.000	0.191
-0.75	-0.875	0.072	0.404	0.545	0.116	0.472	0.664
-0.50	-0.625	0.307	1.724	2.268	0.935	3.807	4.471
-0.25	-0.375	0.949	5.328	7.596	2.205	8.978	13.449
0.00	-0.125	1.710	9.601	17.197	2.999	12.211	25.660
0.25	0.125	2.098	11.779	28.976	3.122	12.712	38.371
0.50	0.375	1.904	10.690	39.666	2.397	9.760	48.131
0.75	0.625	2.094	11.757	51.423	2.567	10.452	58.583
1.00	0.875	2.794	15.687	67.110	3.026	12.321	70.904
1.25	1.125	1.087	6.103	73.213	1.414	5.757	76.661
1.50	1.375	1.086	6.097	79.311	1.297	5.281	81.942
1.75	1.625	0.654	3.672	82.982	0.868	3.534	85.476
2.00	1.875	0.766	4.301	87.283	1.642	6.686	92.162
2.25	2.125	0.543	3.049	90.332	0.973	3.962	96.124
2.50	2.375	0.862	4.840	95.172	0.471	1.918	98.042
2.75	2.625	0.364	2.044	97.215	0.474	1.930	99.971
3.00	2.875	0.315	1.769	98.984	0.000	0.000	99.971
3.25	3.125	0.167	0.938	99.921	0.000	0.000	99.971
3.50	3.375	0.000	0.000	99.921	0.000	0.000	99.971
3.75	3.625	0.014	0.079	100.000	0.000	0.000	99.971
4.00	3.875	0.000	0.000	100.000	0.000	0.000	99.971
5.00	4.500	0.000	0.000	100.000	0.007	0.029	100.000





Post-Digestion Grain Size Distribution

Onshore Grab Sample: CH-02-BB

Total Duplicate Digested Mass: 38.551 grams
% Silica in Duplicate: 68.4 %
Total Original Digested Mass: 45.671 grams
% Silica in Original: 65.4 %

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	0.015	0.039	0.039	0.000	0.000	0.000
-0.50	-0.625	0.037	0.096	0.135	0.093	0.204	0.204
-0.25	-0.375	0.186	0.482	0.617	0.543	1.189	1.393
0.00	-0.125	0.626	1.624	2.241	1.444	3.162	4.554
0.25	0.125	1.237	3.209	5.450	1.696	3.714	8.268
0.50	0.375	1.400	3.632	9.081	1.613	3.532	11.800
0.75	0.625	1.833	4.755	13.836	1.662	3.639	15.439
1.00	0.875	2.704	7.014	20.850	3.230	7.072	22.511
1.25	1.125	2.284	5.925	26.775	2.192	4.800	27.311
1.50	1.375	2.547	6.607	33.382	2.679	5.866	33.176
1.75	1.625	2.539	6.586	39.968	2.650	5.802	38.979
2.00	1.875	3.074	7.974	47.942	3.533	7.736	46.715
2.25	2.125	3.633	9.424	57.366	4.094	8.964	55.679
2.50	2.375	4.129	10.710	68.076	5.100	11.167	66.845
2.75	2.625	5.185	13.450	81.526	5.796	12.691	79.536
3.00	2.875	4.475	11.608	93.134	5.786	12.669	92.205
3.25	3.125	2.019	5.237	98.371	2.660	5.824	98.029
3.50	3.375	0.507	1.315	99.686	0.745	1.631	99.661
3.75	3.625	0.095	0.246	99.933	0.133	0.291	99.952
4.00	3.875	0.018	0.047	99.979	0.017	0.037	99.989
5.00	4.500	0.008	0.021	100.000	0.005	0.011	100.000

