

Quality Control Statistical Summary

Onshore Grab Sample: CR-06-BB

Sample Taken By: D. Phelps
 Sample Taken On: 11/05/09
 County: Collier

Latitude: 26° 16' 23.6"
 Longitude: 81° 49' 40.8"
 Datum: WGS 84

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	1.5121	phi (0.3506 mm)	1.5813	phi (0.3342 mm)
Standard Dev:	0.9414	phi-units (0.5207 mm)	0.8080	phi-units (0.5712 mm)
Skewness:	-1.2591	dimensionless	-1.8287	dimensionless
Kurtosis:	5.1893	dimensionless	9.2138	dimensionless
5th Moment:	-14.6988	dimensionless	-36.1794	dimensionless
6th Moment:	54.0318	dimensionless	164.3121	dimensionless
RARD*:	0.6226	dimensionless	0.5110	dimensionless
Median:	1.5226	phi (0.3481 mm)	1.5022	phi (0.353 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	0.3473	phi (0.786 mm)	0.6490	phi (0.6377 mm)
Standard Dev:	1.1897	phi-units (0.4384 mm)	1.4114	phi-units (0.3759 mm)
Skewness:	-0.2931	dimensionless	-0.6939	dimensionless
Kurtosis:	2.4099	dimensionless	2.4290	dimensionless
5th Moment:	-1.7397	dimensionless	-3.2540	dimensionless
6th Moment:	8.7650	dimensionless	8.1722	dimensionless
RARD*:	3.4253	dimensionless	2.1749	dimensionless
Median:	0.3589	phi (0.7797 mm)	0.8196	phi (0.5666 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	1.7933	phi (0.2885 mm)	1.7372	phi (0.2999 mm)
Standard Dev:	0.6275	phi-units (0.6473 mm)	0.5362	phi-units (0.6896 mm)
Skewness:	-0.2983	dimensionless	0.1131	dimensionless
Kurtosis:	3.1407	dimensionless	3.0050	dimensionless
5th Moment:	-2.8206	dimensionless	0.4063	dimensionless
6th Moment:	18.8936	dimensionless	17.8964	dimensionless
RARD*:	0.3499	dimensionless	0.3086	dimensionless
Median:	1.6928	phi (0.3093 mm)	1.5764	phi (0.3353 mm)

Additional Data	
Total Fines	
Original:	0.18 %
Duplicate:	0.24 %
Total Carbonates	
Original:	14.23 %
Duplicate:	19.07 %

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)

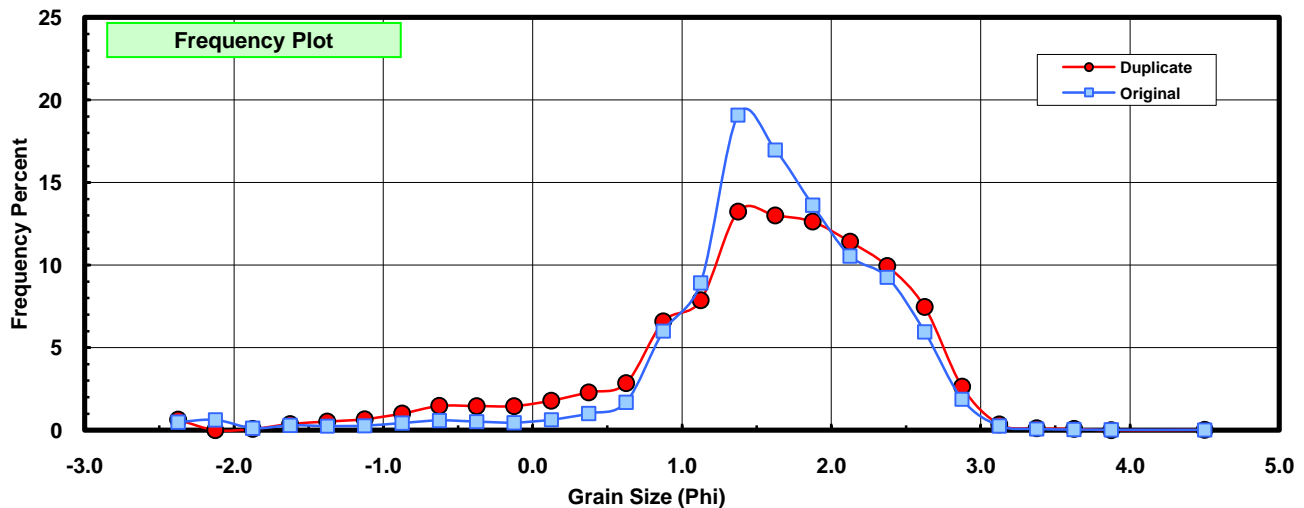
Pre-Digestion Grain Size Distribution

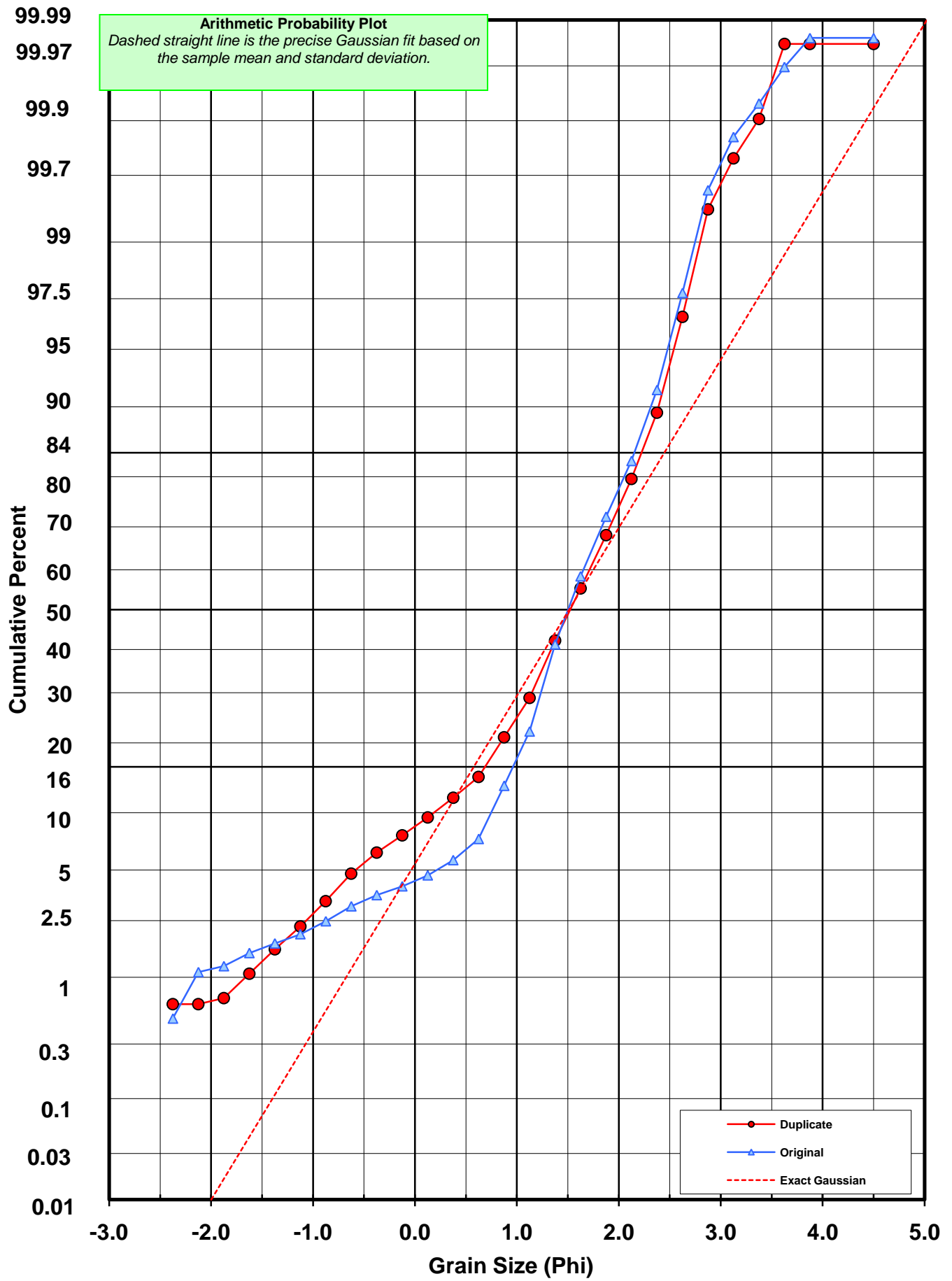
Onshore Grab Sample: CR-06-BB

Total Duplicate Sample Mass: 53.182 grams

Total Original Sample Mass: 73.002 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	0.338	0.636	0.636	0.355	0.486	0.486
-2.00	-2.125	0.000	0.000	0.636	0.454	0.622	1.108
-1.75	-1.875	0.038	0.071	0.707	0.084	0.115	1.223
-1.50	-1.625	0.199	0.374	1.081	0.211	0.289	1.512
-1.25	-1.375	0.278	0.523	1.604	0.180	0.247	1.759
-1.00	-1.125	0.355	0.668	2.271	0.195	0.267	2.026
-0.75	-0.875	0.536	1.008	3.279	0.314	0.430	2.456
-0.50	-0.625	0.781	1.469	4.748	0.430	0.589	3.045
-0.25	-0.375	0.779	1.465	6.213	0.376	0.515	3.560
0.00	-0.125	0.777	1.461	7.674	0.332	0.455	4.015
0.25	0.125	0.954	1.794	9.467	0.462	0.633	4.648
0.50	0.375	1.223	2.300	11.767	0.737	1.010	5.657
0.75	0.625	1.513	2.845	14.612	1.237	1.694	7.352
1.00	0.875	3.504	6.589	21.201	4.383	6.004	13.356
1.25	1.125	4.186	7.871	29.072	6.514	8.923	22.279
1.50	1.375	7.046	13.249	42.321	13.931	19.083	41.362
1.75	1.625	6.919	13.010	55.331	12.392	16.975	58.337
2.00	1.875	6.719	12.634	67.965	9.946	13.624	71.961
2.25	2.125	6.071	11.416	79.380	7.703	10.552	82.513
2.50	2.375	5.292	9.951	89.331	6.760	9.260	91.773
2.75	2.625	3.967	7.459	96.790	4.347	5.955	97.727
3.00	2.875	1.404	2.640	99.430	1.369	1.875	99.603
3.25	3.125	0.190	0.357	99.788	0.189	0.259	99.862
3.50	3.375	0.062	0.117	99.904	0.050	0.068	99.930
3.75	3.625	0.042	0.079	99.983	0.028	0.038	99.968
4.00	3.875	0.000	0.000	99.983	0.013	0.018	99.986
5.00	4.500	0.009	0.017	100.000	0.010	0.014	100.000



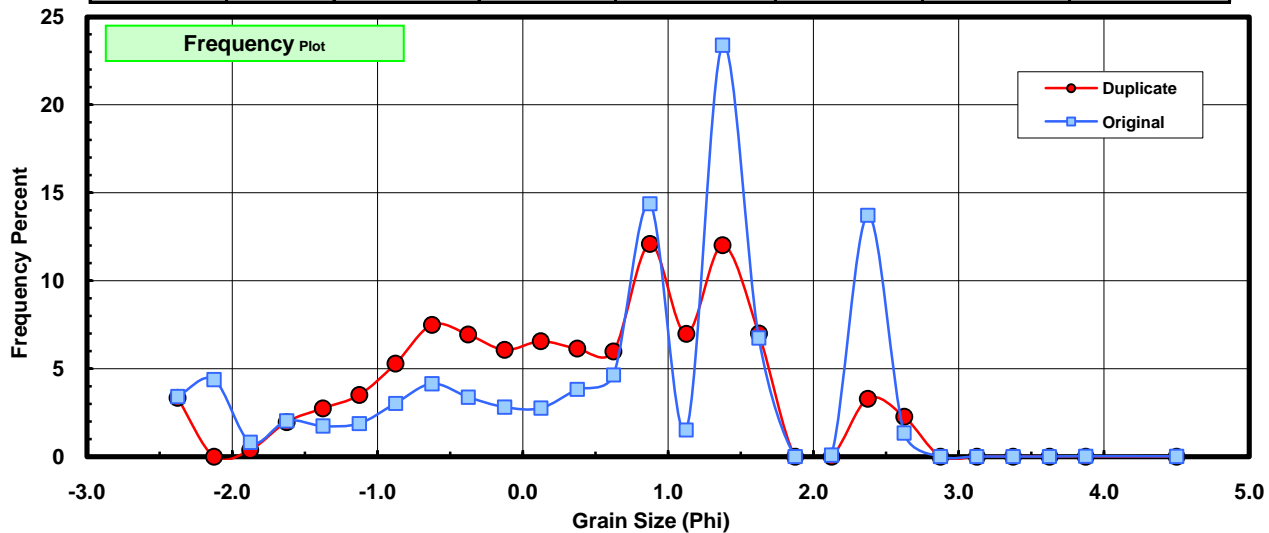


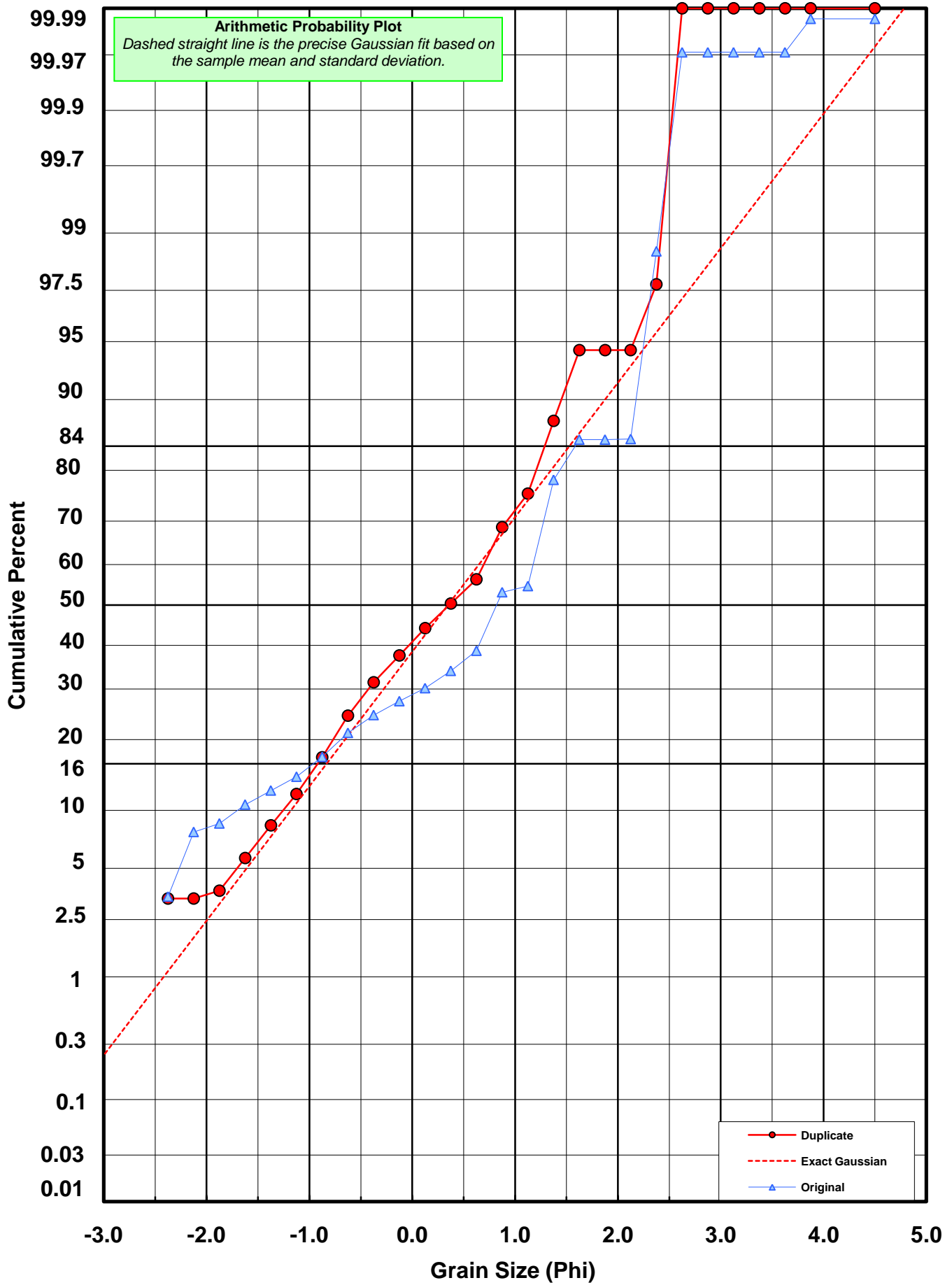
Carbonate Grain Size Distribution

Onshore Grab Sample: CR-06-BB

Total Duplicate Carbonate Mass: 10.142 grams
% Carbonate in Duplicate: 19.1 %
Total Original Carbonate Mass: 10.386 grams
% Carbonate in Original: 14.2 %

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	0.338	3.333	3.333	0.355	3.418	3.418
-2.00	-2.125	0.000	0.000	3.333	0.454	4.371	7.789
-1.75	-1.875	0.038	0.375	3.707	0.084	0.809	8.598
-1.50	-1.625	0.199	1.962	5.669	0.211	2.032	10.630
-1.25	-1.375	0.278	2.741	8.411	0.180	1.733	12.363
-1.00	-1.125	0.355	3.500	11.911	0.195	1.878	14.240
-0.75	-0.875	0.536	5.285	17.196	0.314	3.023	17.264
-0.50	-0.625	0.760	7.494	24.689	0.430	4.140	21.404
-0.25	-0.375	0.704	6.941	31.631	0.351	3.380	24.783
0.00	-0.125	0.615	6.064	37.695	0.292	2.811	27.595
0.25	0.125	0.665	6.557	44.252	0.286	2.754	30.349
0.50	0.375	0.623	6.143	50.394	0.397	3.822	34.171
0.75	0.625	0.607	5.985	56.379	0.482	4.641	38.812
1.00	0.875	1.227	12.098	68.478	1.493	14.375	53.187
1.25	1.125	0.707	6.971	75.449	0.157	1.512	54.699
1.50	1.375	1.218	12.009	87.458	2.429	23.387	78.086
1.75	1.625	0.709	6.991	94.449	0.700	6.740	84.826
2.00	1.875	0.000	0.000	94.449	0.000	0.000	84.826
2.25	2.125	0.000	0.000	94.449	0.009	0.087	84.912
2.50	2.375	0.333	3.283	97.732	1.425	13.720	98.633
2.75	2.625	0.230	2.268	100.000	0.139	1.338	99.971
3.00	2.875	0.000	0.000	100.000	0.000	0.000	99.971
3.25	3.125	0.000	0.000	100.000	0.000	0.000	99.971
3.50	3.375	0.000	0.000	100.000	0.000	0.000	99.971
3.75	3.625	0.000	0.000	100.000	0.000	0.000	99.971
4.00	3.875	0.000	0.000	100.000	0.002	0.019	99.990
5.00	4.500	0.000	0.000	100.000	0.001	0.010	100.000





Post-Digestion Grain Size Distribution

Onshore Grab Sample: CR-06-BB

Total Duplicate Digested Mass: 43.387 grams
% Silica in Duplicate: 81.6 %
Total Original Digested Mass: 63.010 grams
% Silica in Original: 86.3 %

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	0.021	0.048	0.048	0.000	0.000	0.000
-0.25	-0.375	0.075	0.173	0.221	0.025	0.040	0.040
0.00	-0.125	0.162	0.373	0.595	0.040	0.063	0.103
0.25	0.125	0.289	0.666	1.261	0.176	0.279	0.382
0.50	0.375	0.600	1.383	2.644	0.340	0.540	0.922
0.75	0.625	0.906	2.088	4.732	0.755	1.198	2.120
1.00	0.875	2.277	5.248	9.980	2.890	4.587	6.707
1.25	1.125	3.479	8.019	17.998	6.357	10.089	16.796
1.50	1.375	5.828	13.433	31.431	11.502	18.254	35.050
1.75	1.625	6.210	14.313	45.744	11.692	18.556	53.606
2.00	1.875	6.812	15.701	61.445	10.317	16.374	69.979
2.25	2.125	6.147	14.168	75.613	7.694	12.211	82.190
2.50	2.375	4.959	11.430	87.042	5.335	8.467	90.657
2.75	2.625	3.737	8.613	95.655	4.208	6.678	97.335
3.00	2.875	1.407	3.243	98.898	1.386	2.200	99.535
3.25	3.125	0.336	0.774	99.673	0.190	0.302	99.837
3.50	3.375	0.069	0.159	99.832	0.053	0.084	99.921
3.75	3.625	0.046	0.106	99.938	0.030	0.048	99.968
4.00	3.875	0.017	0.039	99.977	0.011	0.017	99.986
5.00	4.500	0.010	0.023	100.000	0.009	0.014	100.000

