

Quality Control Statistical Summary

Onshore Grab Sample: SL-21-BB

Sample Taken By: D. Phelps
 Sample Taken On: 12/16/08
 County: St. Lucie

Latitude: 27° 17' 54.2"
 Longitude: 80° 12' 58.1"
 Datum: WGS 84

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	0.1904	phi (0.8764 mm)	0.5726	phi (0.6724 mm)
Standard Dev:	1.3548	phi-units (0.391 mm)	1.0585	phi-units (0.4801 mm)
Skewness:	-0.3631	dimensionless	-0.8560	dimensionless
Kurtosis:	1.8926	dimensionless	3.5103	dimensionless
5th Moment:	-1.2224	dimensionless	-6.0744	dimensionless
6th Moment:	4.7316	dimensionless	19.2722	dimensionless
RARD*:	7.1164	dimensionless	1.8486	dimensionless
Median:	0.4303	phi (0.7421 mm)	0.6396	phi (0.6419 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	-0.2916	phi (1.224 mm)	0.2127	phi (0.8629 mm)
Standard Dev:	1.2818	phi-units (0.4113 mm)	1.0564	phi-units (0.4808 mm)
Skewness:	0.0250	dimensionless	-0.6956	dimensionless
Kurtosis:	1.7347	dimensionless	2.9345	dimensionless
5th Moment:	0.2786	dimensionless	-4.1587	dimensionless
6th Moment:	3.9444	dimensionless	12.4735	dimensionless
RARD*:	4.3956	dimensionless	4.9675	dimensionless
Median:	-0.3932	phi (1.3133 mm)	0.2896	phi (0.8182 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	1.4085	phi (0.3767 mm)	1.3276	phi (0.3984 mm)
Standard Dev:	0.6136	phi-units (0.6536 mm)	0.5861	phi-units (0.6661 mm)
Skewness:	0.4062	dimensionless	0.3132	dimensionless
Kurtosis:	4.2389	dimensionless	4.1782	dimensionless
5th Moment:	6.0402	dimensionless	6.3100	dimensionless
6th Moment:	33.8283	dimensionless	37.5427	dimensionless
RARD*:	0.4356	dimensionless	0.4415	dimensionless
Median:	1.2929	phi (0.4081 mm)	1.2251	phi (0.4278 mm)

Additional Data	
Total Fines	
Original:	0.3 %
Duplicate:	0.41 %
Total Carbonates	
Original:	67.28 %
Duplicate:	70.78 %

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)

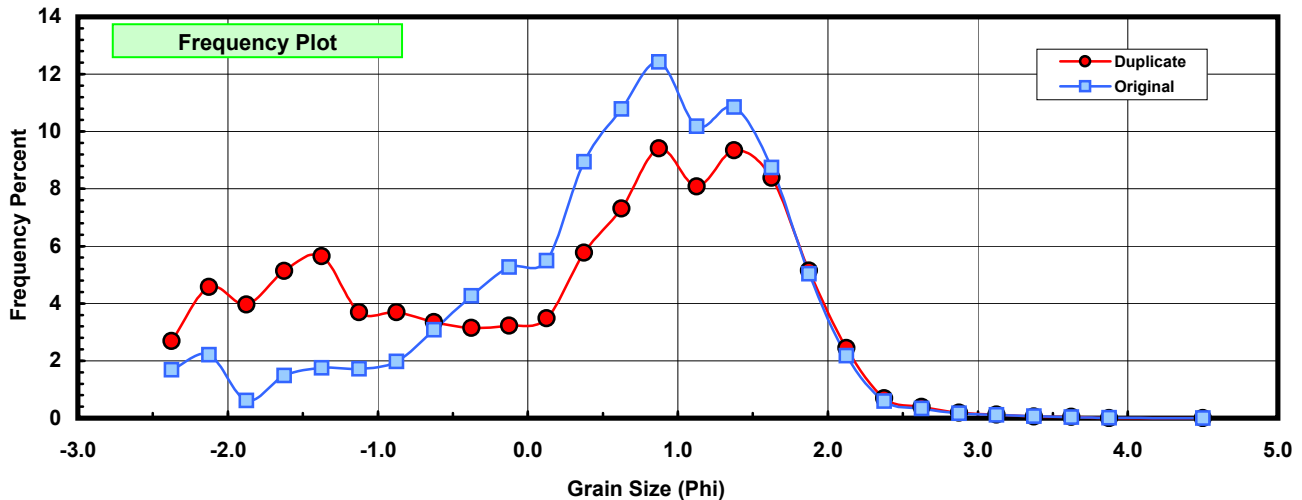
Pre-Digestion Grain Size Distribution

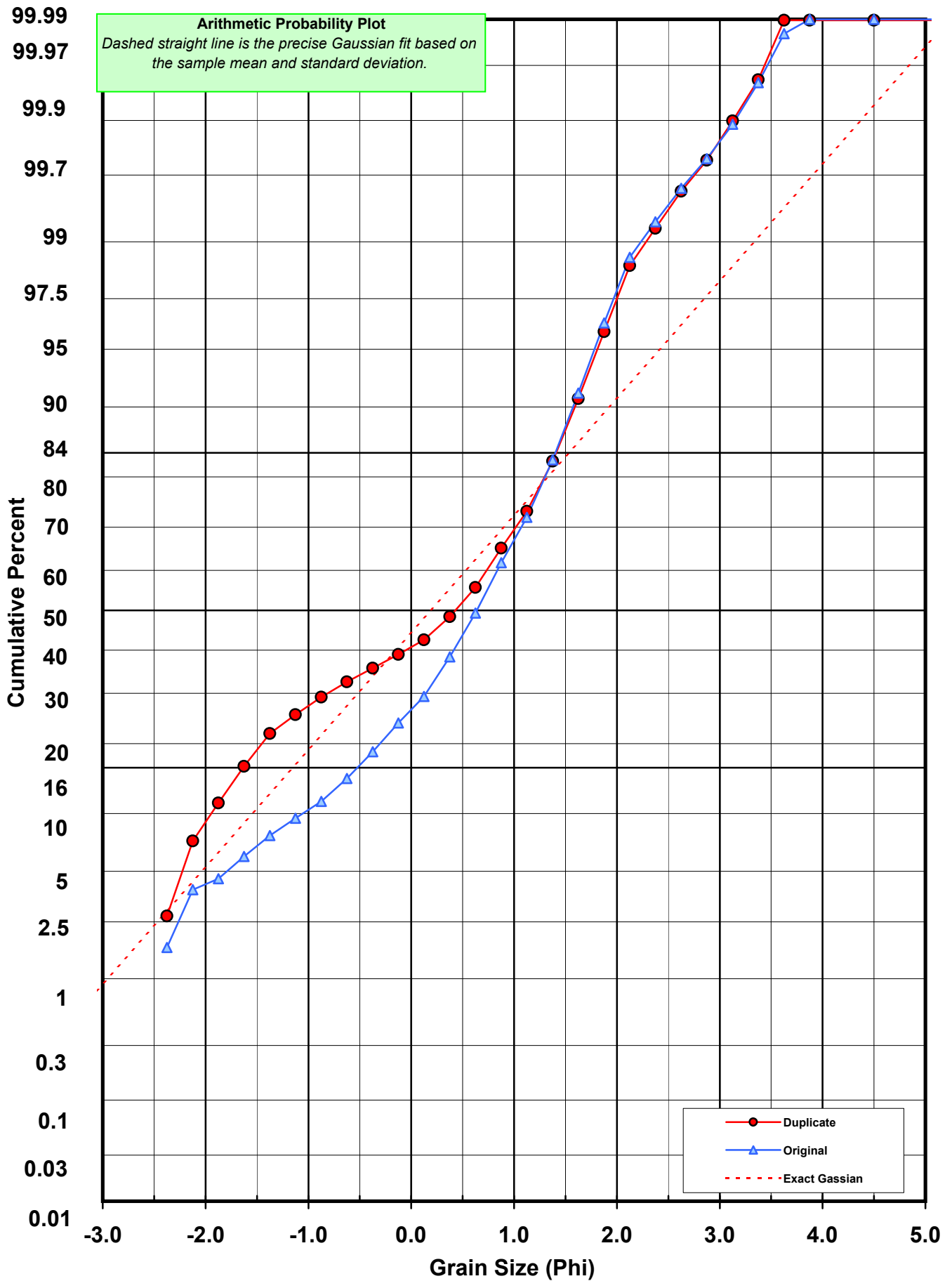
Onshore Grab Sample: SL-21-BB

Total Duplicate Sample Mass: 58.566 grams

Total Original Sample Mass: 59.262 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	1.578	2.694	2.694	0.996	1.681	1.681
-2.00	-2.125	2.680	4.576	7.270	1.310	2.211	3.891
-1.75	-1.875	2.322	3.965	11.235	0.366	0.618	4.509
-1.50	-1.625	3.008	5.136	16.371	0.882	1.488	5.997
-1.25	-1.375	3.309	5.650	22.021	1.037	1.750	7.747
-1.00	-1.125	2.161	3.690	25.711	1.021	1.723	9.470
-0.75	-0.875	2.162	3.692	29.403	1.170	1.974	11.444
-0.50	-0.625	1.962	3.350	32.753	1.825	3.080	14.524
-0.25	-0.375	1.842	3.145	35.898	2.527	4.264	18.788
0.00	-0.125	1.889	3.225	39.123	3.121	5.266	24.054
0.25	0.125	2.041	3.485	42.608	3.257	5.496	29.550
0.50	0.375	3.382	5.775	48.383	5.300	8.943	38.493
0.75	0.625	4.280	7.308	55.691	6.390	10.783	49.276
1.00	0.875	5.511	9.410	65.101	7.365	12.428	61.704
1.25	1.125	4.733	8.081	73.182	6.035	10.184	71.888
1.50	1.375	5.470	9.340	82.522	6.431	10.852	82.739
1.75	1.625	4.911	8.385	90.908	5.178	8.737	91.477
2.00	1.875	3.017	5.151	96.059	2.983	5.034	96.510
2.25	2.125	1.430	2.442	98.501	1.292	2.180	98.691
2.50	2.375	0.407	0.695	99.196	0.351	0.592	99.283
2.75	2.625	0.232	0.396	99.592	0.197	0.332	99.615
3.00	2.875	0.109	0.186	99.778	0.100	0.169	99.784
3.25	3.125	0.071	0.121	99.899	0.064	0.108	99.892
3.50	3.375	0.034	0.058	99.957	0.037	0.062	99.954
3.75	3.625	0.023	0.039	99.997	0.020	0.034	99.988
4.00	3.875	0.000	0.000	99.997	0.007	0.012	100.000
5.00	4.500	0.002	0.003	100.000	0.000	0.000	100.000



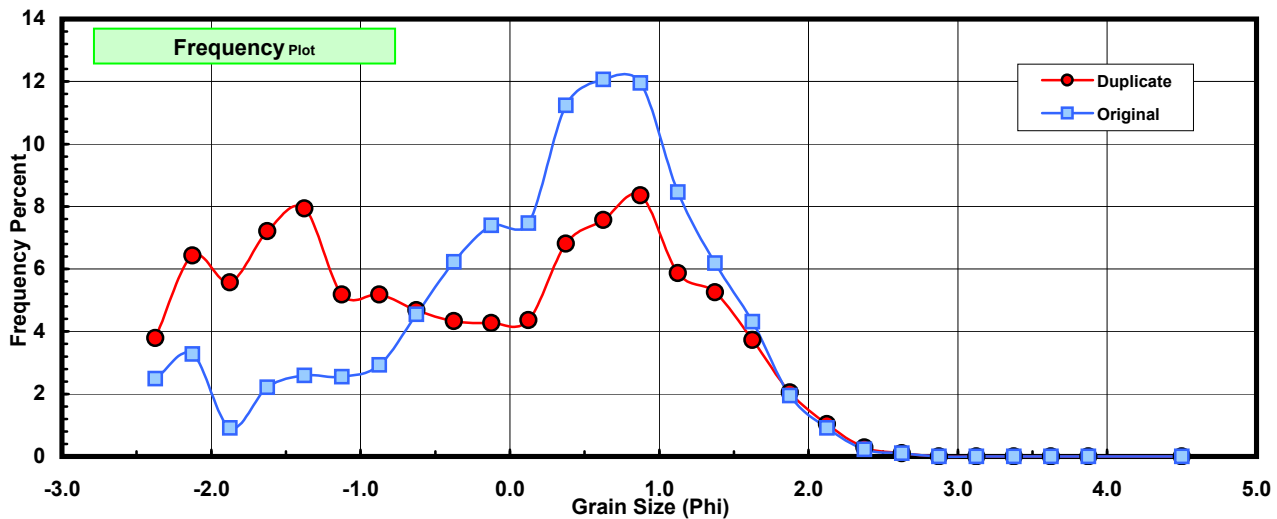


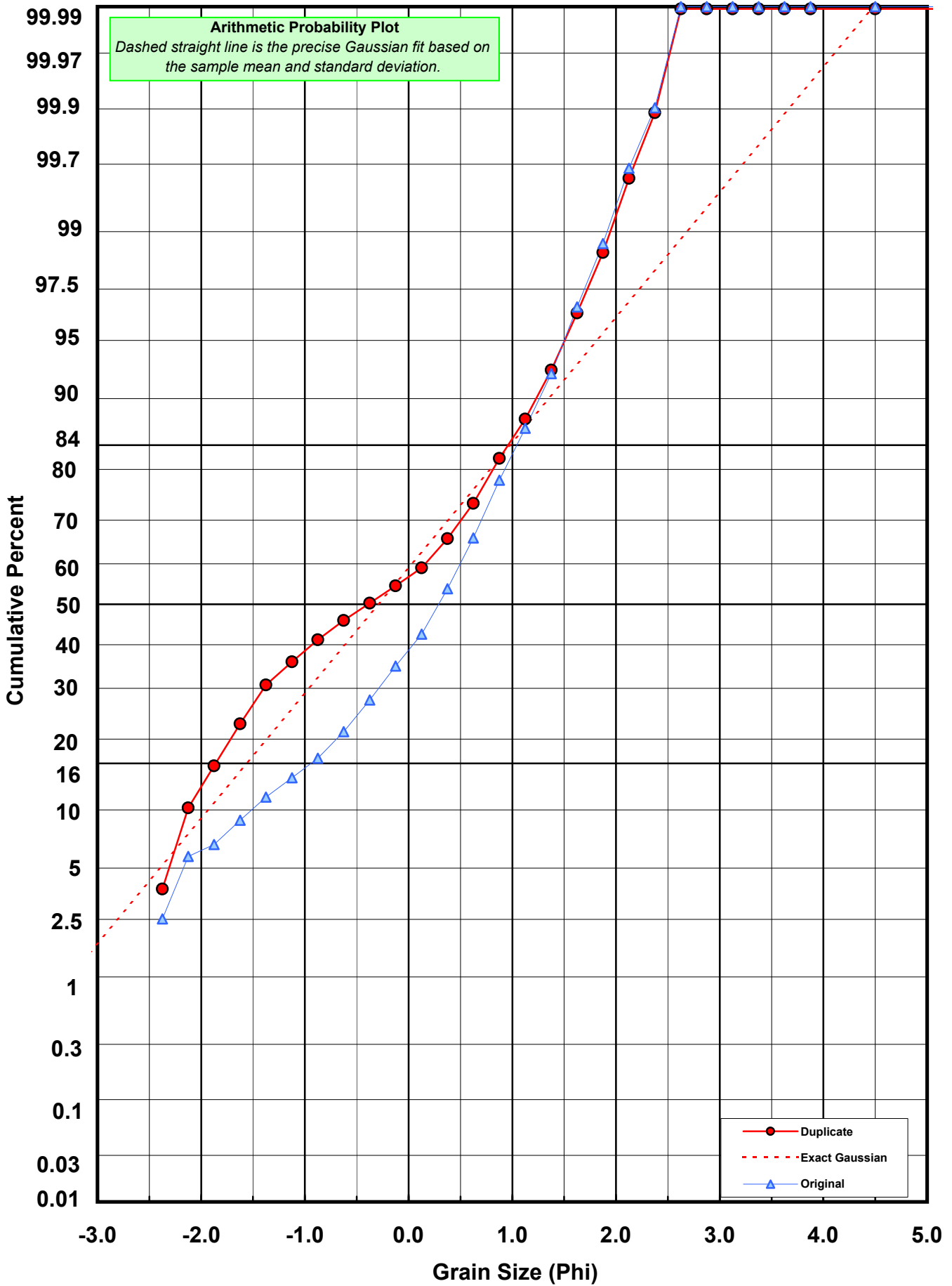
Carbonate Grain Size Distribution

Onshore Grab Sample: SL-21-BB

Total Duplicate Carbonate Mass: 41.695 grams
% Carbonate in Duplicate: 70.8 %
Total Original Carbonate Mass: 39.961 grams
% Carbonate in Original: 67.3 %

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	1.578	3.785	3.785	0.996	2.492	2.492
-2.00	-2.125	2.680	6.428	10.212	1.310	3.278	5.771
-1.75	-1.875	2.322	5.569	15.781	0.366	0.916	6.687
-1.50	-1.625	3.008	7.214	22.996	0.882	2.207	8.894
-1.25	-1.375	3.309	7.936	30.932	1.037	2.595	11.489
-1.00	-1.125	2.161	5.183	36.115	1.021	2.555	14.044
-0.75	-0.875	2.162	5.185	41.300	1.170	2.928	16.972
-0.50	-0.625	1.951	4.679	45.979	1.819	4.552	21.523
-0.25	-0.375	1.808	4.336	50.315	2.487	6.224	27.747
0.00	-0.125	1.779	4.267	54.582	2.954	7.392	35.139
0.25	0.125	1.819	4.363	58.945	2.983	7.465	42.604
0.50	0.375	2.839	6.809	65.754	4.490	11.236	53.840
0.75	0.625	3.157	7.572	73.325	4.820	12.062	65.902
1.00	0.875	3.486	8.361	81.686	4.775	11.949	77.851
1.25	1.125	2.446	5.866	87.552	3.382	8.463	86.314
1.50	1.375	2.192	5.257	92.810	2.473	6.189	92.503
1.75	1.625	1.553	3.725	96.534	1.724	4.314	96.817
2.00	1.875	0.852	2.043	98.578	0.779	1.949	98.766
2.25	2.125	0.430	1.031	99.609	0.364	0.911	99.677
2.50	2.375	0.118	0.283	99.892	0.090	0.225	99.902
2.75	2.625	0.043	0.103	99.995	0.039	0.098	100.000
3.00	2.875	0.000	0.000	99.995	0.000	0.000	100.000
3.25	3.125	0.000	0.000	99.995	0.000	0.000	100.000
3.50	3.375	0.000	0.000	99.995	0.000	0.000	100.000
3.75	3.625	0.000	0.000	99.995	0.000	0.000	100.000
4.00	3.875	0.000	0.000	99.995	0.000	0.000	100.000
5.00	4.500	0.002	0.005	100.000	0.000	0.000	100.000





Post-Digestion Grain Size Distribution

Onshore Grab Sample: SL-21-BB

Total Duplicate Digested Mass: 17.112 grams
% Silica in Duplicate: 29.2 %
Total Original Digested Mass: 19.389 grams
% Silica in Original: 32.7 %

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	0.011	0.064	0.064	0.006	0.031	0.031
-0.25	-0.375	0.034	0.199	0.263	0.040	0.206	0.237
0.00	-0.125	0.110	0.643	0.906	0.167	0.861	1.099
0.25	0.125	0.222	1.297	2.203	0.274	1.413	2.512
0.50	0.375	0.543	3.173	5.376	0.810	4.178	6.689
0.75	0.625	1.123	6.563	11.939	1.570	8.097	14.787
1.00	0.875	2.025	11.834	23.773	2.590	13.358	28.145
1.25	1.125	2.287	13.365	37.138	2.653	13.683	41.828
1.50	1.375	3.278	19.156	56.294	3.958	20.414	62.241
1.75	1.625	3.358	19.624	75.917	3.454	17.814	80.056
2.00	1.875	2.165	12.652	88.569	2.204	11.367	91.423
2.25	2.125	1.000	5.844	94.413	0.928	4.786	96.209
2.50	2.375	0.289	1.689	96.102	0.261	1.346	97.555
2.75	2.625	0.189	1.104	97.207	0.158	0.815	98.370
3.00	2.875	0.144	0.842	98.048	0.105	0.542	98.912
3.25	3.125	0.166	0.970	99.018	0.083	0.428	99.340
3.50	3.375	0.081	0.473	99.492	0.060	0.309	99.649
3.75	3.625	0.067	0.392	99.883	0.041	0.211	99.861
4.00	3.875	0.020	0.117	100.000	0.027	0.139	100.000
5.00	4.500	0.000	0.000	100.000	0.000	0.000	100.000

