

Quality Control Statistical Summary

Onshore Grab Sample: FG-02-SS

Sample Taken By: J. Ladner **Latitude:** 29° 38' 51.8"
Sample Taken On: 12/03/03 **Longitude:** 81° 12' 11.7"
County: Flagler **Datum:** NAD 83

Statistical Results: Pre-CaCO3		
	Duplicate	Original
Mean:	0.5220 phi (0.6964 mm)	0.4870 phi (0.7135 mm)
Standard Dev:	0.9014 phi-units (0.5354 mm)	0.8717 phi-units (0.5465 mm)
Skewness:	0.0986 dimensionless	0.1194 dimensionless
Kurtosis:	2.7548 dimensionless	2.8801 dimensionless
5th Moment:	0.8791 dimensionless	1.1678 dimensionless
6th Moment:	11.8039 dimensionless	13.5753 dimensionless
RARD*:	1.7270 dimensionless	1.7899 dimensionless
Median:	0.4277 phi (0.7435 mm)	0.3844 phi (0.7661 mm)

Statistical Results: CaCO3		
	Duplicate	Original
Mean:	0.0995 phi (0.9334 mm)	0.1348 phi (0.9108 mm)
Standard Dev:	0.7216 phi-units (0.6064 mm)	0.7289 phi-units (0.6034 mm)
Skewness:	-0.0249 dimensionless	0.0188 dimensionless
Kurtosis:	2.7557 dimensionless	2.8041 dimensionless
5th Moment:	-0.0115 dimensionless	0.0210 dimensionless
6th Moment:	14.3575 dimensionless	13.8759 dimensionless
RARD*:	7.2560 dimensionless	5.4065 dimensionless
Median:	-0.0419 phi (1.0294 mm)	-0.0117 phi (1.0082 mm)

Statistical Results: Post-CaCO3		
	Duplicate	Original
Mean:	1.2736 phi (0.4136 mm)	1.2296 phi (0.4264 mm)
Standard Dev:	0.6891 phi-units (0.6202 mm)	0.6859 phi-units (0.6216 mm)
Skewness:	0.2676 dimensionless	0.4225 dimensionless
Kurtosis:	2.9750 dimensionless	3.0547 dimensionless
5th Moment:	1.3731 dimensionless	2.7178 dimensionless
6th Moment:	14.7116 dimensionless	14.5964 dimensionless
RARD*:	0.5411 dimensionless	0.5578 dimensionless
Median:	1.0806 phi (0.4728 mm)	1.0125 phi (0.4957 mm)

Additional Data	
Total Fines	
Original:	0.33 %
Duplicate:	0.34 %
Total Carbonates	
Original:	67.16 %
Duplicate:	63.62 %

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)

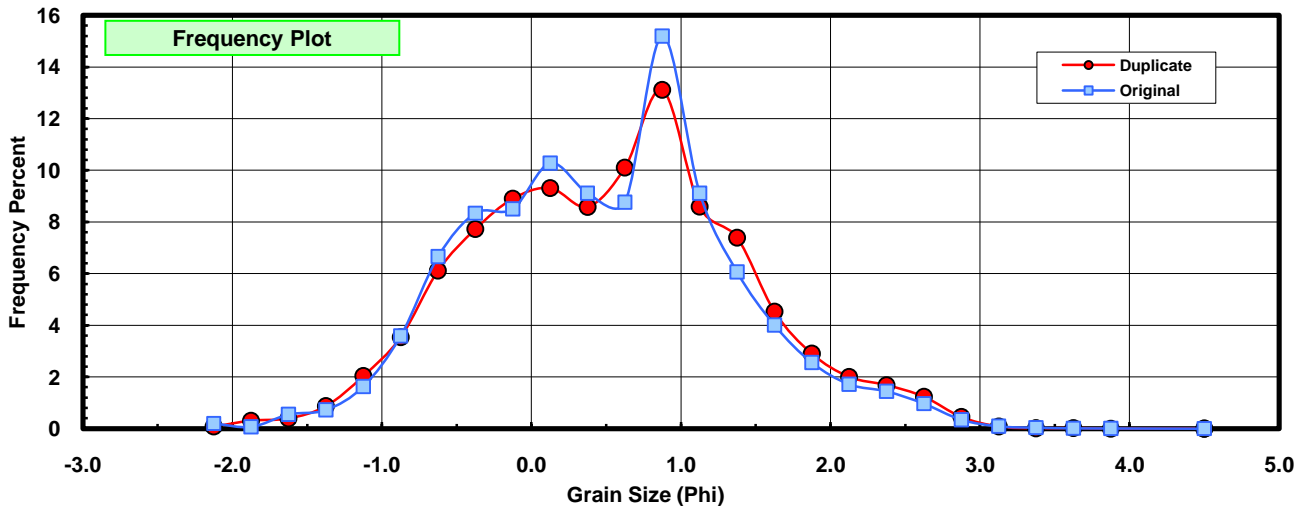
Pre-Digestion Grain Size Distribution

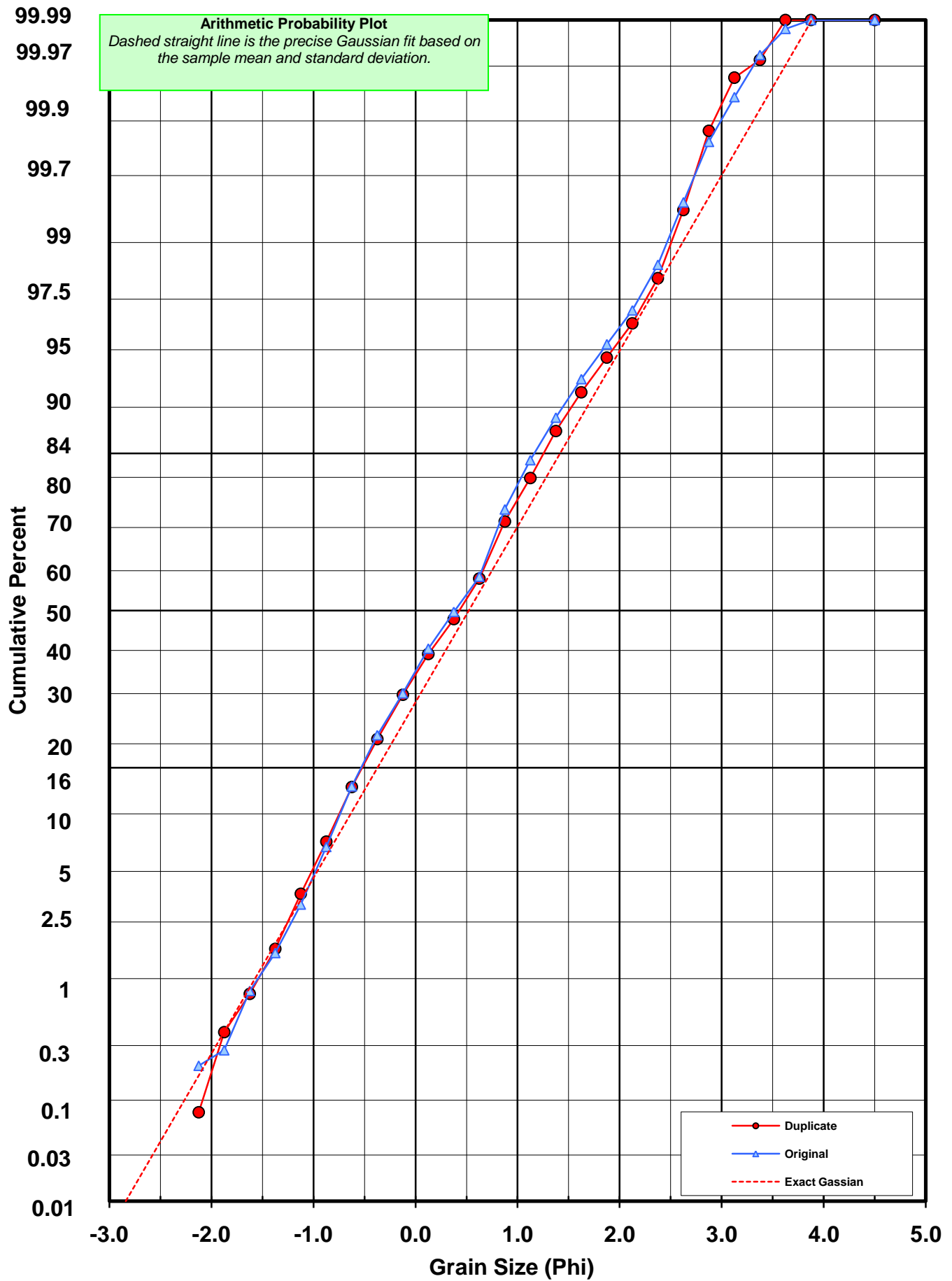
Onshore Grab Sample: FG-02-SS

Total Duplicate Sample Mass: 79.619 grams

Total Original Sample Mass: 90.045 grams

Sieve Size (phi)	Sieve Midpt (phi)	Weight of Dupl (grams)	Freq Weight %	Cumulative Weight %	Weight of Original (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.062	0.078	0.078	0.180	0.200	0.200
-1.75	-1.875	0.246	0.309	0.387	0.065	0.072	0.272
-1.50	-1.625	0.315	0.396	0.782	0.497	0.552	0.824
-1.25	-1.375	0.692	0.869	1.652	0.652	0.724	1.548
-1.00	-1.125	1.622	2.037	3.689	1.472	1.635	3.183
-0.75	-0.875	2.819	3.541	7.229	3.234	3.592	6.774
-0.50	-0.625	4.870	6.117	13.346	5.998	6.661	13.436
-0.25	-0.375	6.150	7.724	21.070	7.510	8.340	21.776
0.00	-0.125	7.088	8.902	29.973	7.658	8.505	30.280
0.25	0.125	7.415	9.313	39.286	9.251	10.274	40.554
0.50	0.375	6.836	8.586	47.872	8.209	9.117	49.671
0.75	0.625	8.045	10.104	57.976	7.893	8.766	58.436
1.00	0.875	10.437	13.109	71.085	13.683	15.196	73.632
1.25	1.125	6.842	8.593	79.678	8.204	9.111	82.743
1.50	1.375	5.888	7.395	87.073	5.460	6.064	88.807
1.75	1.625	3.607	4.530	91.604	3.609	4.008	92.815
2.00	1.875	2.309	2.900	94.504	2.303	2.558	95.372
2.25	2.125	1.594	2.002	96.506	1.546	1.717	97.089
2.50	2.375	1.342	1.686	98.191	1.301	1.445	98.534
2.75	2.625	0.984	1.236	99.427	0.872	0.968	99.502
3.00	2.875	0.359	0.451	99.878	0.311	0.345	99.848
3.25	3.125	0.065	0.082	99.960	0.082	0.091	99.939
3.50	3.375	0.011	0.014	99.974	0.034	0.038	99.977
3.75	3.625	0.020	0.025	99.999	0.013	0.014	99.991
4.00	3.875	0.000	0.000	99.999	0.008	0.009	100.000
5.00	4.500	0.000	0.000	99.999	0.000	0.000	100.000
5.00	4.500	0.001	0.001	100.000	0.000	0.000	100.000



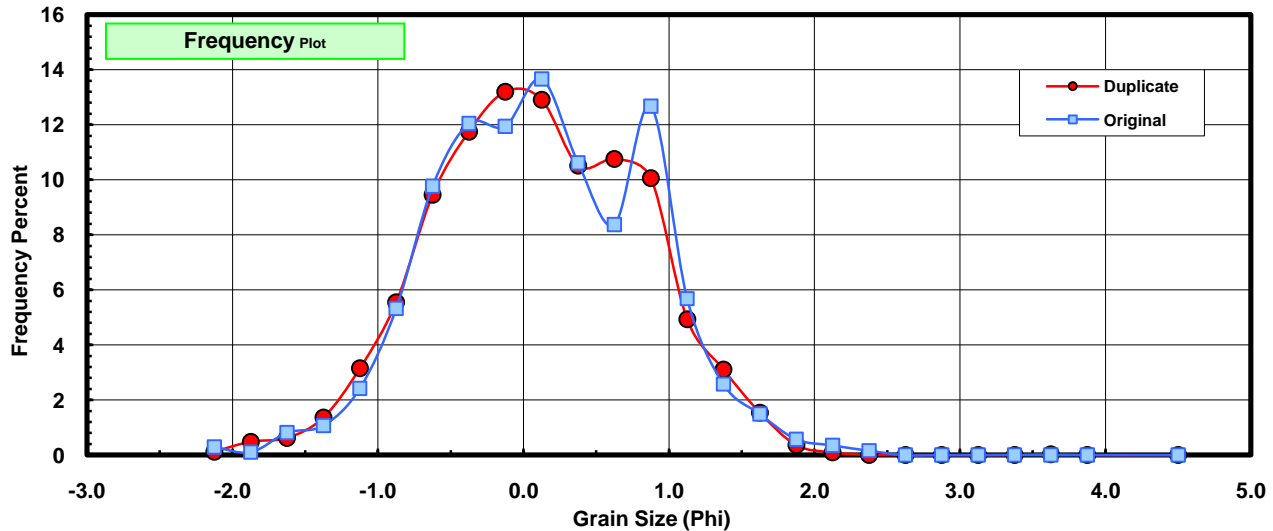


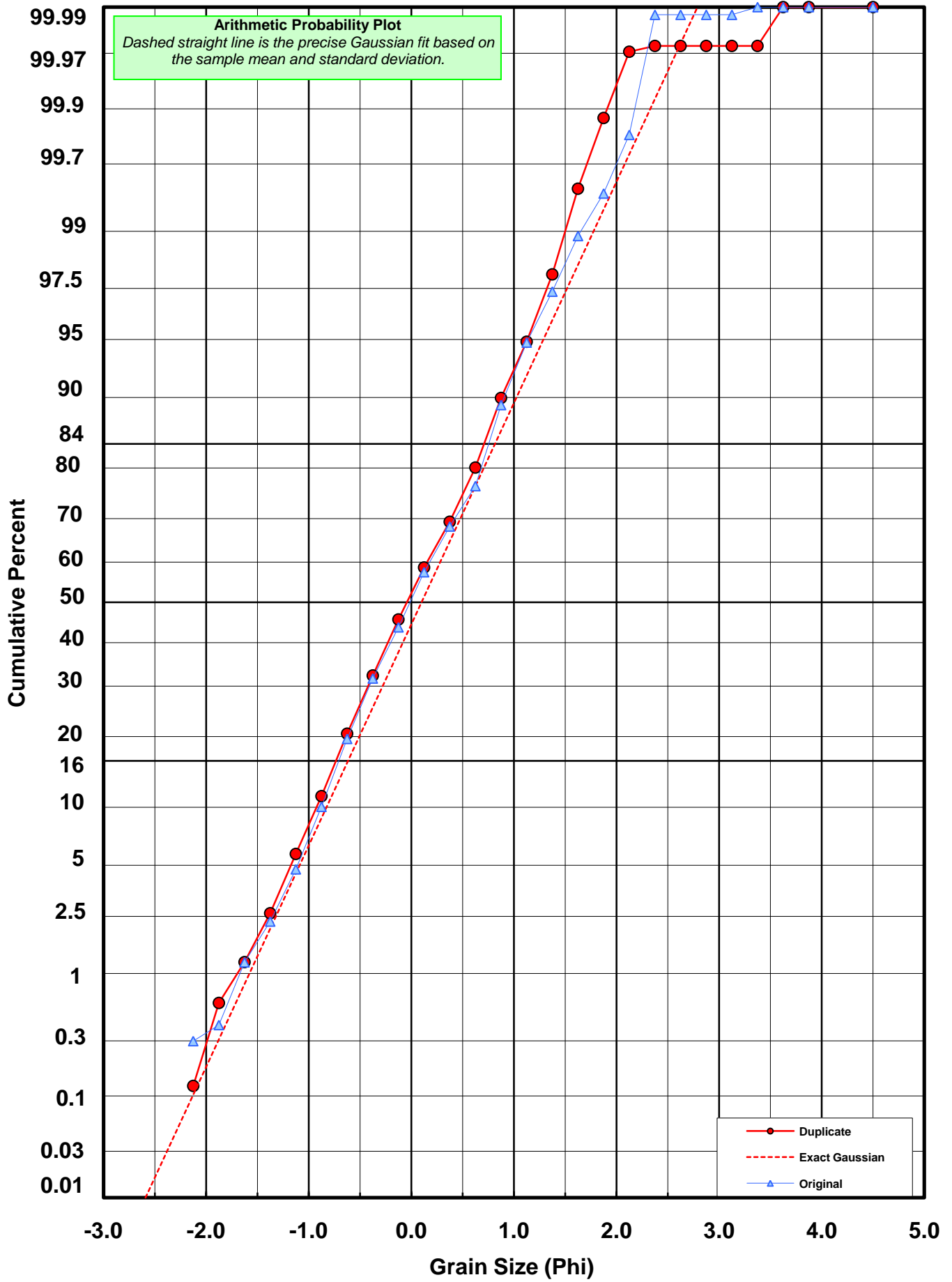
Carbonate Grain Size Distribution

Onshore Grab Sample: FG-02-SS

Total Duplicate Carbonate Mass: 50.787 grams
% Carbonate in Duplicate: 63.6 %
Total Original Carbonate Mass: 60.720 grams
% Carbonate in Original: 67.2 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight of Dupl (grams)	Freq Weight %	Cumulative Weight %	Weight of Original (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.062	0.122	0.122	0.180	0.296	0.296
-1.75	-1.875	0.246	0.484	0.606	0.065	0.107	0.403
-1.50	-1.625	0.315	0.620	1.227	0.497	0.819	1.222
-1.25	-1.375	0.692	1.363	2.589	0.652	1.074	2.296
-1.00	-1.125	1.599	3.148	5.738	1.472	2.424	4.720
-0.75	-0.875	2.819	5.551	11.288	3.234	5.326	10.046
-0.50	-0.625	4.804	9.459	20.747	5.931	9.768	19.814
-0.25	-0.375	5.969	11.753	32.500	7.316	12.049	31.863
0.00	-0.125	6.707	13.206	45.707	7.254	11.947	43.809
0.25	0.125	6.557	12.911	58.617	8.298	13.666	57.475
0.50	0.375	5.339	10.513	69.130	6.448	10.619	68.095
0.75	0.625	5.464	10.759	79.889	5.087	8.378	76.472
1.00	0.875	5.110	10.062	89.950	7.697	12.676	89.149
1.25	1.125	2.503	4.928	94.879	3.450	5.682	94.830
1.50	1.375	1.578	3.107	97.986	1.565	2.577	97.408
1.75	1.625	0.780	1.536	99.522	0.907	1.494	98.902
2.00	1.875	0.182	0.358	99.880	0.350	0.576	99.478
2.25	2.125	0.046	0.091	99.970	0.215	0.354	99.832
2.50	2.375	0.002	0.004	99.974	0.097	0.160	99.992
2.75	2.625	0.000	0.000	99.974	0.000	0.000	99.992
3.00	2.875	0.000	0.000	99.974	0.000	0.000	99.992
3.25	3.125	0.000	0.000	99.974	0.000	0.000	99.992
3.50	3.375	0.000	0.000	99.974	0.004	0.007	99.998
3.75	3.625	0.013	0.026	100.000	0.000	0.000	99.998
4.00	3.875	0.000	0.000	100.000	0.001	0.002	100.000
5.00	4.500	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: FG-02-SS

Total Duplicate Digested Mass: 28.966 grams
% Silica in Duplicate: 36.4 %
Total Original Digested Mass: 29.573 grams
% Silica in Original: 32.8 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %	Weight of Original (grams)	Freq Weight %	Cumulative Weight %
-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	0.023	0.079	0.079	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.079	0.000	0.000	0.000
-0.50	-0.625	0.066	0.228	0.307	0.067	0.227	0.227
-0.25	-0.375	0.181	0.625	0.932	0.194	0.656	0.883
0.00	-0.125	0.381	1.315	2.247	0.404	1.366	2.249
0.25	0.125	0.858	2.962	5.210	0.953	3.223	5.471
0.50	0.375	1.497	5.168	10.378	1.761	5.955	11.426
0.75	0.625	2.581	8.910	19.288	2.806	9.488	20.914
1.00	0.875	5.327	18.391	37.679	5.986	20.241	41.156
1.25	1.125	4.339	14.980	52.658	4.754	16.075	57.231
1.50	1.375	4.310	14.880	67.538	3.895	13.171	70.402
1.75	1.625	2.827	9.760	77.298	2.702	9.137	79.539
2.00	1.875	2.127	7.343	84.641	1.953	6.604	86.143
2.25	2.125	1.548	5.344	89.985	1.331	4.501	90.643
2.50	2.375	1.340	4.626	94.611	1.204	4.071	94.715
2.75	2.625	1.057	3.649	98.260	0.960	3.246	97.961
3.00	2.875	0.390	1.346	99.606	0.443	1.498	99.459
3.25	3.125	0.079	0.273	99.879	0.110	0.372	99.831
3.50	3.375	0.020	0.069	99.948	0.030	0.101	99.932
3.75	3.625	0.007	0.024	99.972	0.013	0.044	99.976
4.00	3.875	0.005	0.017	99.990	0.007	0.024	100.000
5.00	4.500	0.000	0.000	99.990	0.000	0.000	100.000
5.00	4.500	0.003	0.010	100.000	0.000	0.000	100.000

