

Quality Control Statistical Summary

Onshore Grab Sample: FG-11-SS

Sample Taken By: J. Ladner **Latitude:** 29° 32' 13.7"
Sample Taken On: 12/03/03 **Longitude:** 29° 09' 17.5"
County: Flagler **Datum:** NAD 83

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	0.1012	phi (0.9323 mm)	0.0761	phi (0.9486 mm)
Standard Dev:	0.8864	phi-units (0.541 mm)	0.9070	phi-units (0.5333 mm)
Skewness:	0.9597	dimensionless	0.8864	dimensionless
Kurtosis:	3.6903	dimensionless	3.5003	dimensionless
5th Moment:	7.0987	dimensionless	6.0537	dimensionless
6th Moment:	22.1705	dimensionless	19.3548	dimensionless
RARD*:	8.7617	dimensionless	11.9228	dimensionless
Median:	-0.2331	phi (1.1754 mm)	-0.2634	phi (1.2003 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	-0.1995	phi (1.1483 mm)	-0.2306	phi (1.1733 mm)
Standard Dev:	0.5825	phi-units (0.6678 mm)	0.6109	phi-units (0.6548 mm)
Skewness:	0.4427	dimensionless	0.4769	dimensionless
Kurtosis:	3.8085	dimensionless	4.0554	dimensionless
5th Moment:	4.4372	dimensionless	4.5929	dimensionless
6th Moment:	27.6299	dimensionless	29.9442	dimensionless
RARD*:	2.9194	dimensionless	2.6493	dimensionless
Median:	-0.3879	phi (1.3085 mm)	-0.4187	phi (1.3368 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	1.3403	phi (0.3949 mm)	1.3726	phi (0.3862 mm)
Standard Dev:	0.8577	phi-units (0.5518 mm)	0.8711	phi-units (0.5467 mm)
Skewness:	-0.1776	dimensionless	-0.1691	dimensionless
Kurtosis:	2.2714	dimensionless	2.2539	dimensionless
5th Moment:	-1.0020	dimensionless	-0.9051	dimensionless
6th Moment:	7.0929	dimensionless	7.1288	dimensionless
RARD*:	0.6400	dimensionless	0.6346	dimensionless
Median:	1.2484	phi (0.4209 mm)	1.2802	phi (0.4117 mm)

Additional Data	
Total Fines	
Original:	0.1 %
Duplicate:	0.86 %
Total Carbonates	
Original:	79.9 %
Duplicate:	80.4 %

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)

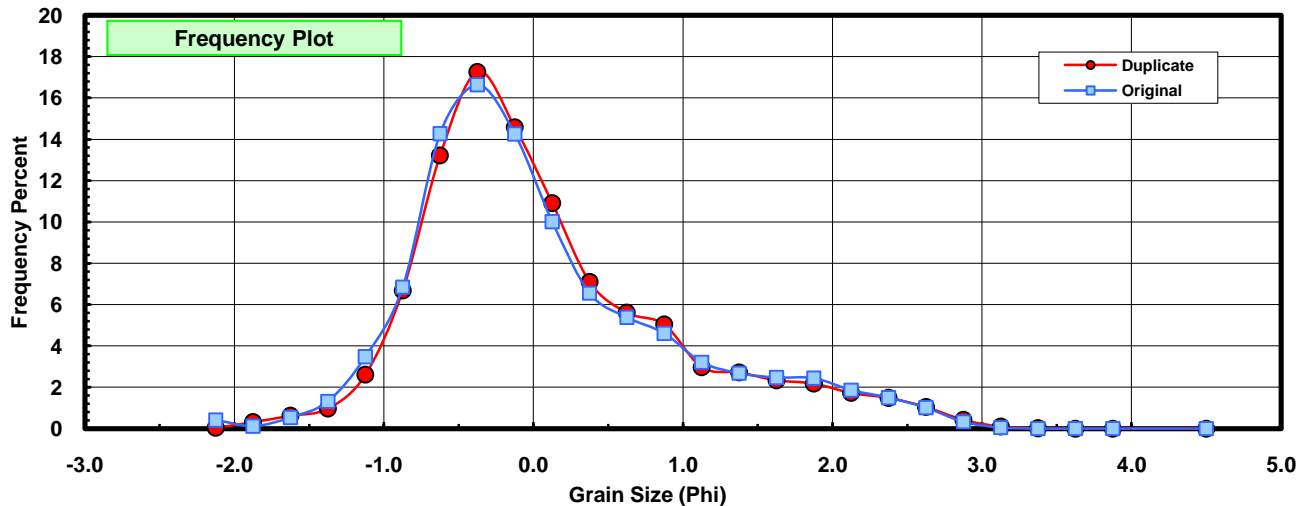
Pre-Digestion Grain Size Distribution

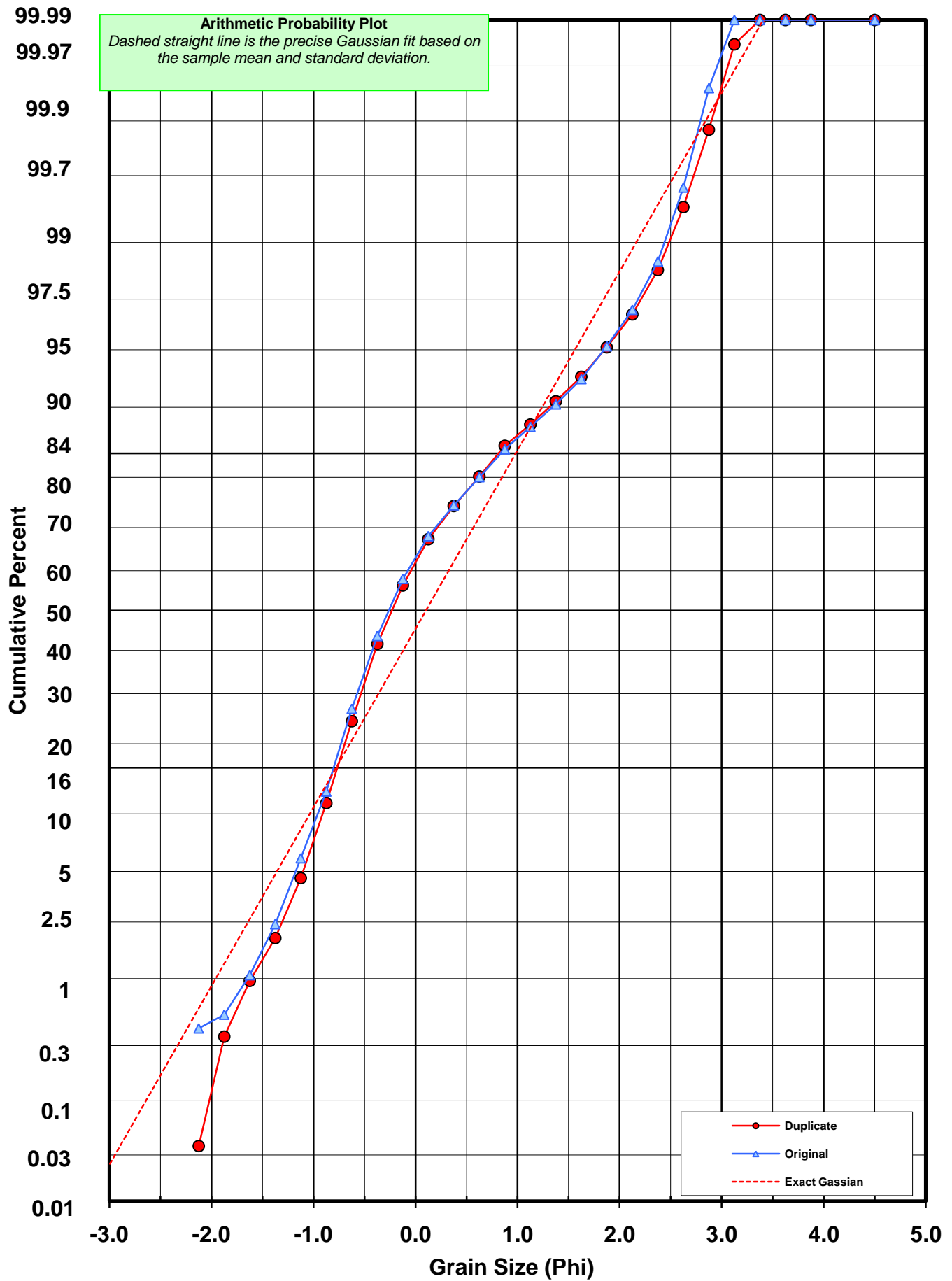
Onshore Grab Sample: FG-11-SS

Total Duplicate Sample Mass: 158.228 grams

Total Original Sample Mass: 94.957 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	0.060	0.038	0.038	0.394	0.415	0.415
-1.75	-1.875	0.501	0.317	0.355	0.116	0.122	0.537
-1.50	-1.625	0.989	0.625	0.980	0.514	0.541	1.078
-1.25	-1.375	1.533	0.969	1.948	1.253	1.320	2.398
-1.00	-1.125	4.124	2.606	4.555	3.306	3.482	5.880
-0.75	-0.875	10.571	6.681	11.236	6.501	6.846	12.726
-0.50	-0.625	20.918	13.220	24.456	13.555	14.275	27.001
-0.25	-0.375	27.321	17.267	41.723	15.798	16.637	43.638
0.00	-0.125	23.074	14.583	56.305	13.535	14.254	57.891
0.25	0.125	17.273	10.917	67.222	9.508	10.013	67.904
0.50	0.375	11.244	7.106	74.328	6.223	6.553	74.458
0.75	0.625	8.880	5.612	79.940	5.111	5.382	79.840
1.00	0.875	7.974	5.040	84.980	4.377	4.609	84.450
1.25	1.125	4.702	2.972	87.952	3.047	3.209	87.659
1.50	1.375	4.304	2.720	90.672	2.545	2.680	90.339
1.75	1.625	3.700	2.338	93.010	2.347	2.472	92.810
2.00	1.875	3.452	2.182	95.192	2.317	2.440	95.250
2.25	2.125	2.730	1.725	96.917	1.768	1.862	97.112
2.50	2.375	2.355	1.488	98.405	1.423	1.499	98.611
2.75	2.625	1.662	1.050	99.456	0.962	1.013	99.624
3.00	2.875	0.673	0.425	99.881	0.309	0.325	99.949
3.25	3.125	0.161	0.102	99.983	0.047	0.049	99.999
3.50	3.375	0.027	0.017	100.000	0.001	0.001	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
5.00	4.500	0.000	0.000	100.000	0.000	0.000	100.000





Carbonate Grain Size Distribution

Onshore Grab Sample: FG-11-SS

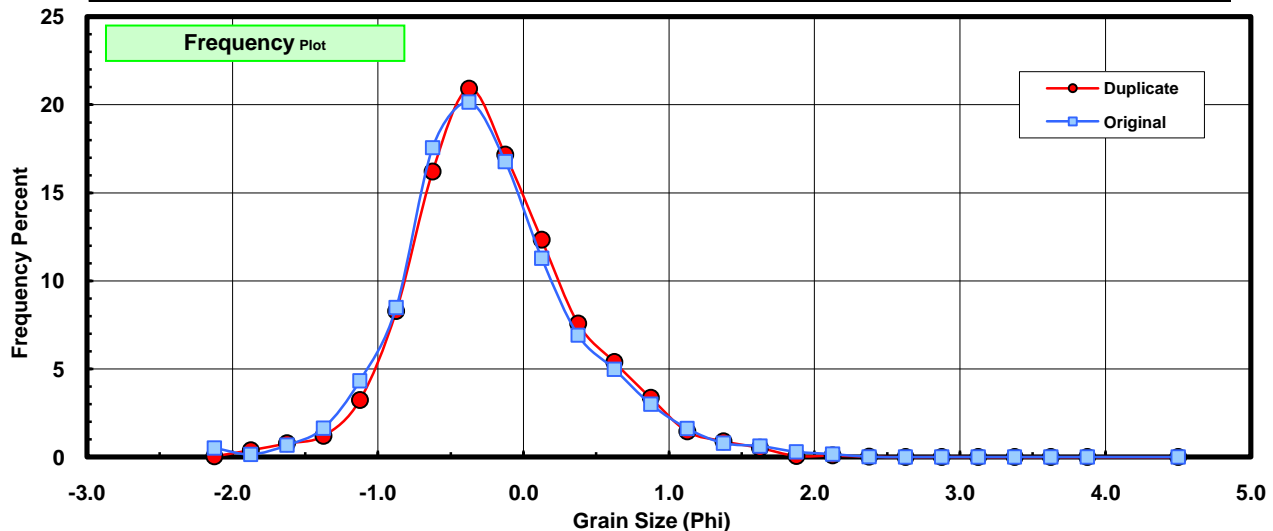
Total Duplicate Carbonate Mass: 127.266 grams

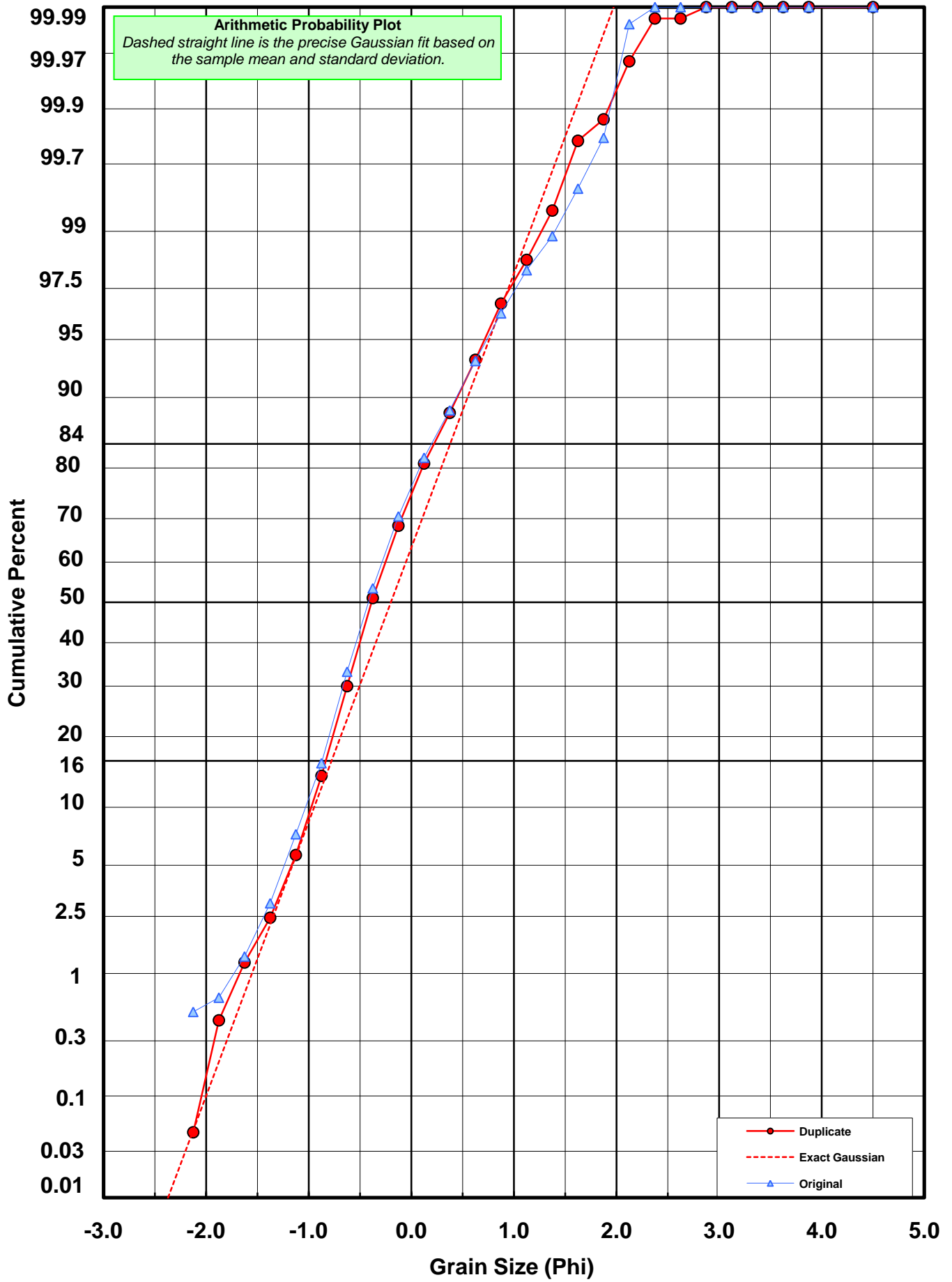
% Carbonate in Duplicate: 80.4 %

Total Original Carbonate Mass: 76.344 grams

% Carbonate in Original: 79.9 %

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	0.060	0.047	0.047	0.394	0.516	0.516
-1.75	-1.875	0.501	0.394	0.441	0.116	0.152	0.668
-1.50	-1.625	0.989	0.777	1.218	0.514	0.673	1.341
-1.25	-1.375	1.533	1.205	2.422	1.253	1.641	2.983
-1.00	-1.125	4.124	3.240	5.663	3.306	4.330	7.313
-0.75	-0.875	10.549	8.289	13.952	6.486	8.496	15.809
-0.50	-0.625	20.636	16.215	30.167	13.409	17.564	33.373
-0.25	-0.375	26.613	20.911	51.078	15.386	20.154	53.526
0.00	-0.125	21.845	17.165	68.243	12.802	16.769	70.295
0.25	0.125	15.715	12.348	80.591	8.621	11.292	81.587
0.50	0.375	9.656	7.587	88.178	5.280	6.916	88.503
0.75	0.625	6.861	5.391	93.569	3.805	4.984	93.487
1.00	0.875	4.276	3.360	96.929	2.289	2.998	96.486
1.25	1.125	1.856	1.458	98.388	1.241	1.626	98.111
1.50	1.375	1.147	0.901	99.289	0.602	0.789	98.900
1.75	1.625	0.664	0.522	99.811	0.476	0.623	99.523
2.00	1.875	0.084	0.066	99.877	0.228	0.299	99.822
2.25	2.125	0.110	0.086	99.963	0.126	0.165	99.987
2.50	2.375	0.034	0.027	99.990	0.010	0.013	100.000
2.75	2.625	0.000	0.000	99.990	0.000	0.000	100.000
3.00	2.875	0.013	0.010	100.000	0.000	0.000	100.000
3.25	3.125	0.000	0.000	100.000	0.000	0.000	100.000
3.50	3.375	0.000	0.000	100.000	0.000	0.000	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
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-11-SS

Total Duplicate Digested Mass: 31.017 grams
% Silica in Duplicate: 19.6 %
Total Original Digested Mass: 19.085 grams
% Silica in Original: 20.1 %

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	0.000	0.000	0.000	0.000	0.000	0.000
-0.75	-0.875	0.022	0.071	0.071	0.015	0.079	0.079
-0.50	-0.625	0.282	0.909	0.980	0.146	0.765	0.844
-0.25	-0.375	0.708	2.283	3.263	0.412	2.159	3.002
0.00	-0.125	1.229	3.962	7.225	0.733	3.841	6.843
0.25	0.125	1.558	5.023	12.248	0.887	4.648	11.491
0.50	0.375	1.588	5.120	17.368	0.943	4.941	16.432
0.75	0.625	2.019	6.509	23.877	1.306	6.843	23.275
1.00	0.875	3.698	11.922	35.800	2.088	10.941	34.215
1.25	1.125	2.846	9.176	44.975	1.806	9.463	43.678
1.50	1.375	3.157	10.178	55.154	1.943	10.181	53.859
1.75	1.625	3.036	9.788	64.942	1.871	9.804	63.663
2.00	1.875	3.368	10.859	75.800	2.089	10.946	74.608
2.25	2.125	2.620	8.447	84.247	1.642	8.604	83.212
2.50	2.375	2.321	7.483	91.730	1.413	7.404	90.616
2.75	2.625	1.667	5.374	97.105	1.107	5.800	96.416
3.00	2.875	0.660	2.128	99.233	0.502	2.630	99.046
3.25	3.125	0.192	0.619	99.852	0.138	0.723	99.769
3.50	3.375	0.046	0.148	100.000	0.032	0.168	99.937
3.75	3.625	0.000	0.000	100.000	0.008	0.042	99.979
4.00	3.875	0.000	0.000	100.000	0.003	0.016	99.995
5.00	4.500	0.000	0.000	100.000	0.000	0.000	99.995
5.00	4.500	0.000	0.000	100.000	0.001	0.005	100.000

