

# Quality Control Statistical Summary

Onshore Grab Sample: SJ-26-MB

Sample Taken By: J. Ladner  
 Sample Taken On: 12/01/03  
 County: St. Johns

Latitude: 29° 54' 11.4"  
 Longitude: 81° 16' 36.5"  
 Datum: WGS 84

Statistical Results: Pre-CaCO3		
	Duplicate	Original
Mean:	2.5353 phi (0.1725 mm)	2.5489 phi (0.1709 mm)
Standard Dev:	0.3542 phi-units (0.7823 mm)	0.3366 phi-units (0.7919 mm)
Skewness:	-1.4672 dimensionless	0.1780 dimensionless
Kurtosis:	21.2050 dimensionless	6.2113 dimensionless
5th Moment:	##### dimensionless	-2.2674 dimensionless
6th Moment:	##### dimensionless	142.1284 dimensionless
RARD*:	0.1397 dimensionless	0.1321 dimensionless
Median:	2.4201 phi (0.1868 mm)	2.4270 phi (0.186 mm)

Statistical Results: CaCO3		
	Duplicate	Original
Mean:	2.5262 phi (0.1736 mm)	2.3654 phi (0.1941 mm)
Standard Dev:	0.9164 phi-units (0.5298 mm)	0.5648 phi-units (0.676 mm)
Skewness:	-2.5490 dimensionless	-0.1833 dimensionless
Kurtosis:	11.1777 dimensionless	5.8609 dimensionless
5th Moment:	-45.1612 dimensionless	-8.9041 dimensionless
6th Moment:	189.9621 dimensionless	77.5631 dimensionless
RARD*:	0.3628 dimensionless	0.2388 dimensionless
Median:	2.6718 phi (0.1569 mm)	2.1735 phi (0.2217 mm)

Statistical Results: Post-CaCO3		
	Duplicate	Original
Mean:	2.5405 phi (0.1719 mm)	2.5533 phi (0.1704 mm)
Standard Dev:	0.3320 phi-units (0.7944 mm)	0.3295 phi-units (0.7958 mm)
Skewness:	-0.0636 dimensionless	0.1896 dimensionless
Kurtosis:	10.1700 dimensionless	6.6380 dimensionless
5th Moment:	-44.4462 dimensionless	-7.2216 dimensionless
6th Moment:	662.7962 dimensionless	208.5834 dimensionless
RARD*:	0.1307 dimensionless	0.1290 dimensionless
Median:	2.4210 phi (0.1867 mm)	2.4304 phi (0.1855 mm)

Additional Data	
<b>Total Fines</b>	
Original:	0.21 %
Duplicate:	0.32 %
<b>Total Carbonates</b>	
Original:	2.51 %
Duplicate:	2.49 %

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)

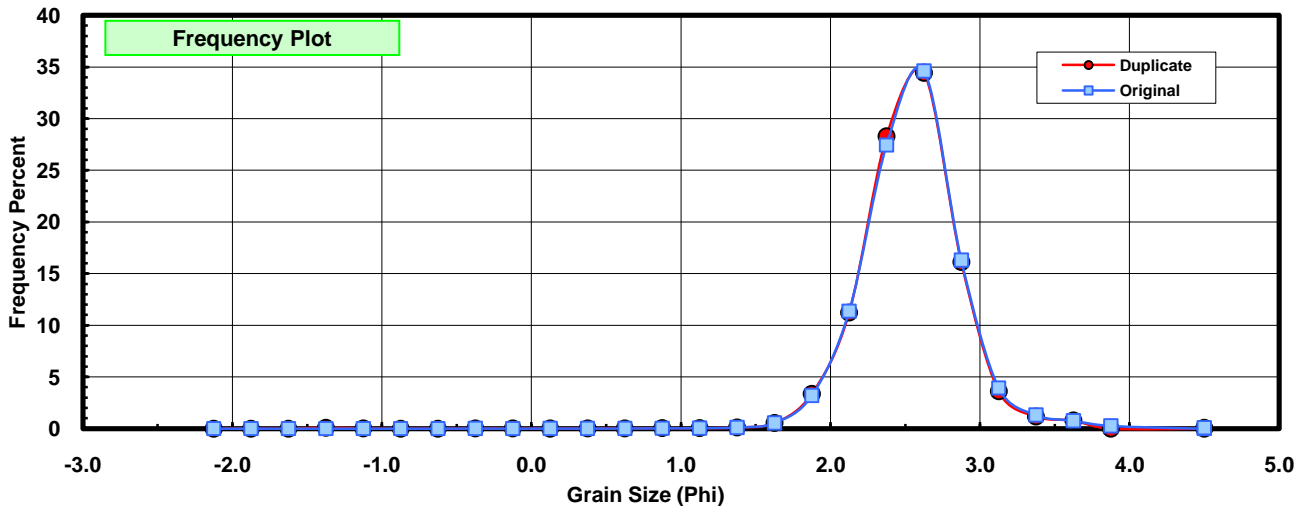
# Pre-Digestion Grain Size Distribution

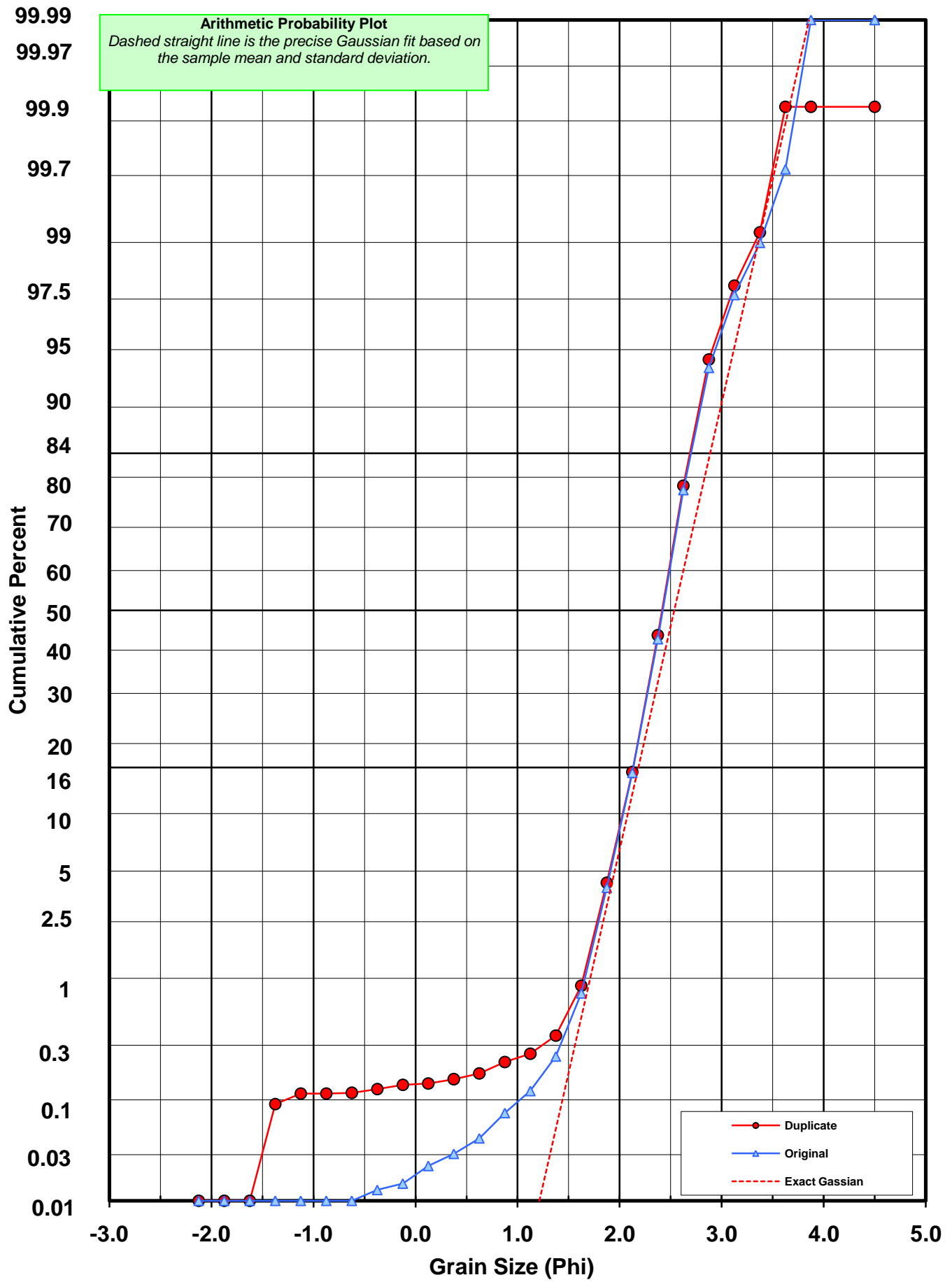
Onshore Grab Sample: SJ-26-MB

Total Duplicate Sample Mass: 54.779 grams

Total Original Sample Mass: 60.405 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	0.000	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	0.050	0.091	0.091	0.000	0.000	0.000
-1.00	-1.125	0.012	0.022	0.113	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.113	0.000	0.000	0.000
-0.50	-0.625	0.001	0.002	0.115	0.000	0.000	0.000
-0.25	-0.375	0.005	0.009	0.124	0.006	0.010	0.010
0.00	-0.125	0.006	0.011	0.135	0.002	0.003	0.013
0.25	0.125	0.002	0.004	0.139	0.006	0.010	0.023
0.50	0.375	0.007	0.013	0.152	0.005	0.008	0.031
0.75	0.625	0.010	0.018	0.170	0.008	0.013	0.045
1.00	0.875	0.024	0.044	0.214	0.019	0.031	0.076
1.25	1.125	0.021	0.038	0.252	0.026	0.043	0.119
1.50	1.375	0.059	0.108	0.360	0.072	0.119	0.239
1.75	1.625	0.294	0.537	0.896	0.329	0.545	0.784
2.00	1.875	1.844	3.366	4.263	1.936	3.207	3.991
2.25	2.125	6.154	11.234	15.497	6.864	11.372	15.363
2.50	2.375	15.498	28.292	43.789	16.565	27.444	42.806
2.75	2.625	18.867	34.442	78.231	20.890	34.609	77.416
3.00	2.875	8.833	16.125	94.356	9.848	16.315	93.731
3.25	3.125	1.982	3.618	97.974	2.375	3.935	97.666
3.50	3.375	0.642	1.172	99.146	0.791	1.310	98.976
3.75	3.625	0.427	0.779	99.925	0.459	0.760	99.737
4.00	3.875	0.000	0.000	99.925	0.159	0.263	100.000
5.00	4.500	0.000	0.000	99.925	0.000	0.000	100.000
5.00	4.500	0.041	0.075	100.000	0.045	0.075	100.075



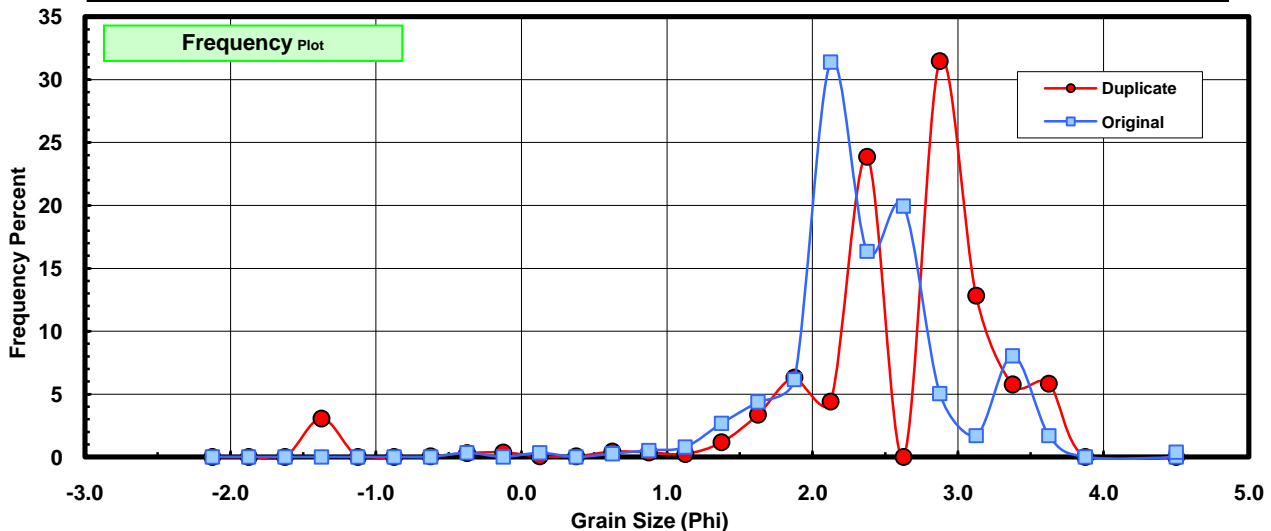


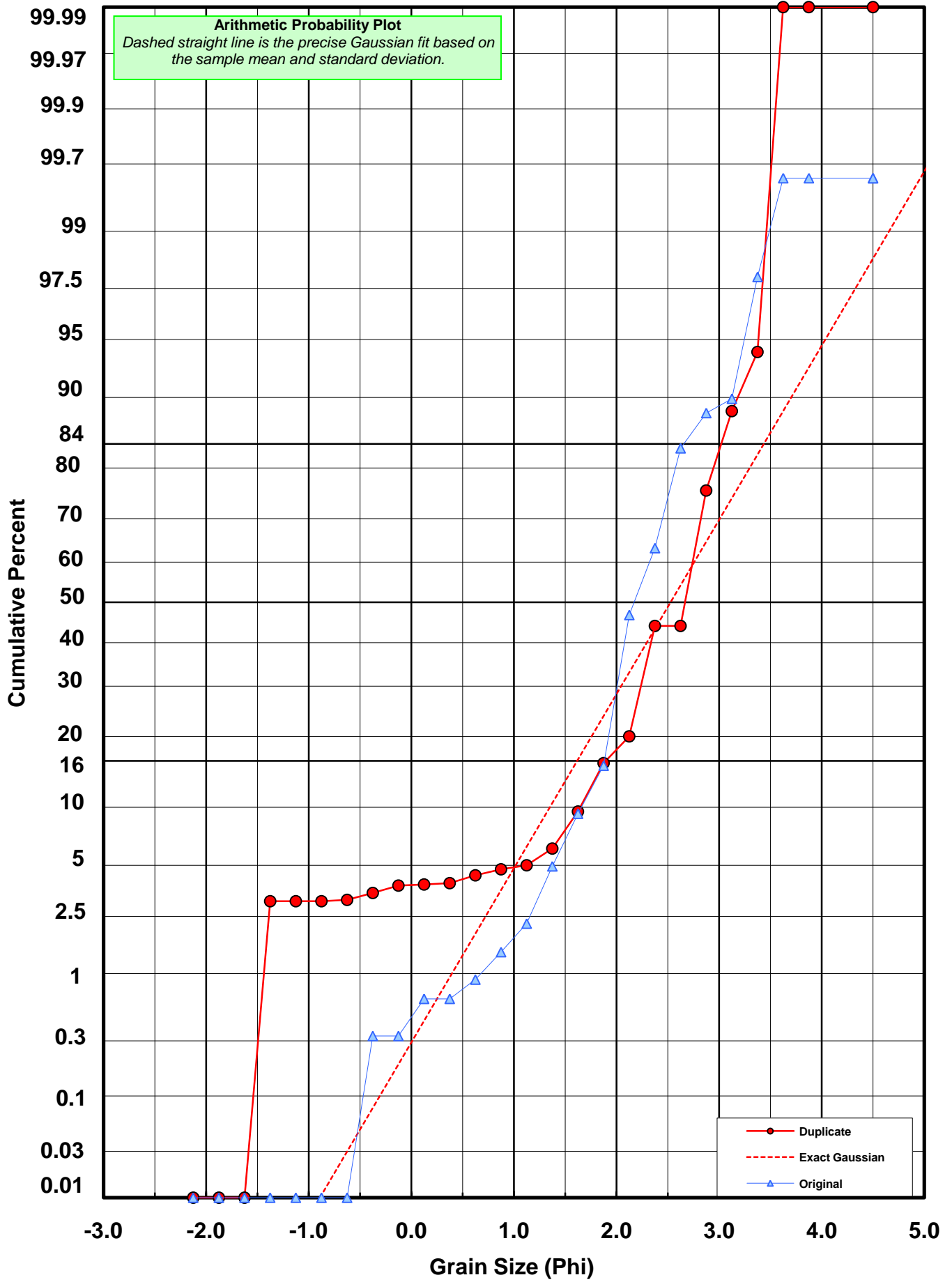
# Carbonate Grain Size Distribution

Onshore Grab Sample: SJ-26-MB

Total Duplicate Carbonate Mass: 1.630 grams  
 % Carbonate in Duplicate: 2.5 %  
 Total Original Carbonate Mass: 1.529 grams  
 % Carbonate in Original: 2.5 %

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	0.000	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	0.050	3.067	3.067	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	3.067	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	3.067	0.000	0.000	0.000
-0.50	-0.625	0.001	0.061	3.129	0.000	0.000	0.000
-0.25	-0.375	0.005	0.307	3.436	0.005	0.327	0.327
0.00	-0.125	0.006	0.368	3.804	0.000	0.000	0.327
0.25	0.125	0.001	0.061	3.865	0.005	0.327	0.654
0.50	0.375	0.001	0.061	3.926	0.000	0.000	0.654
0.75	0.625	0.007	0.429	4.356	0.004	0.262	0.916
1.00	0.875	0.006	0.368	4.724	0.008	0.523	1.439
1.25	1.125	0.004	0.245	4.969	0.012	0.785	2.224
1.50	1.375	0.019	1.166	6.135	0.041	2.681	4.905
1.75	1.625	0.055	3.374	9.509	0.067	4.382	9.287
2.00	1.875	0.103	6.319	15.828	0.094	6.148	15.435
2.25	2.125	0.072	4.417	20.245	0.480	31.393	46.828
2.50	2.375	0.389	23.865	44.110	0.250	16.351	63.179
2.75	2.625	0.000	0.000	44.110	0.305	19.948	83.126
3.00	2.875	0.513	31.472	75.583	0.077	5.036	88.162
3.25	3.125	0.209	12.822	88.405	0.026	1.700	89.863
3.50	3.375	0.094	5.767	94.172	0.123	8.044	97.907
3.75	3.625	0.095	5.828	100.000	0.026	1.700	99.608
4.00	3.875	0.000	0.000	100.000	0.000	0.000	99.608
5.00	4.500	0.000	0.000	100.000	0.000	0.000	99.608
5.00	4.500	0.000	0.000	100.000	0.006	0.392	100.000





# Post-Digestion Grain Size Distribution

Onshore Grab Sample: SJ-26-MB

**Total Duplicate Digested Mass:** 53.561 grams  
**% Silica in Duplicate:** 97.5 %  
**Total Original Digested Mass:** 58.889 grams  
**% Silica in Original:** 97.5 %

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	0.016	0.030	0.030	0.000	0.000	0.000
-0.75	-0.875	0.001	0.002	0.032	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.032	0.008	0.014	0.014
-0.25	-0.375	0.000	0.000	0.032	0.001	0.002	0.015
0.00	-0.125	0.000	0.000	0.032	0.002	0.003	0.019
0.25	0.125	0.001	0.002	0.034	0.001	0.002	0.020
0.50	0.375	0.006	0.011	0.045	0.006	0.010	0.031
0.75	0.625	0.003	0.006	0.050	0.004	0.007	0.037
1.00	0.875	0.018	0.034	0.084	0.011	0.019	0.056
1.25	1.125	0.017	0.032	0.116	0.014	0.024	0.080
1.50	1.375	0.040	0.075	0.190	0.031	0.053	0.132
1.75	1.625	0.239	0.446	0.637	0.262	0.445	0.577
2.00	1.875	1.741	3.250	3.887	1.842	3.128	3.705
2.25	2.125	6.082	11.355	15.242	6.384	10.841	14.546
2.50	2.375	15.109	28.209	43.451	16.315	27.705	42.251
2.75	2.625	19.083	35.629	79.080	20.585	34.956	77.206
3.00	2.875	8.320	15.534	94.614	9.771	16.592	93.799
3.25	3.125	1.773	3.310	97.924	2.349	3.989	97.787
3.50	3.375	0.548	1.023	98.947	0.668	1.134	98.922
3.75	3.625	0.332	0.620	99.567	0.433	0.735	99.657
4.00	3.875	0.188	0.351	99.918	0.163	0.277	99.934
5.00	4.500	0.000	0.000	99.918	0.000	0.000	99.934
5.00	4.500	0.044	0.082	100.000	0.039	0.066	100.000

