

Quality Control Statistical Summary

Onshore Grab Sample: SJ-33-SS

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

Latitude: 29° 48' 25.9"
 Longitude: 81° 15' 38.2"
 Datum: WGS 84

Statistical Results: Pre-CaCO3		
	Duplicate	Original
Mean:	2.6498 phi (0.1593 mm)	2.6508 phi (0.1592 mm)
Standard Dev:	0.2916 phi-units (0.817 mm)	0.3021 phi-units (0.8111 mm)
Skewness:	-0.1084 dimensionless	-0.2542 dimensionless
Kurtosis:	4.8174 dimensionless	6.7523 dimensionless
5th Moment:	-13.0135 dimensionless	-41.7313 dimensionless
6th Moment:	165.6749 dimensionless	551.9871 dimensionless
RARD*:	0.1100 dimensionless	0.1140 dimensionless
Median:	2.5221 phi (0.1741 mm)	2.5242 phi (0.1738 mm)

Statistical Results: CaCO3		
	Duplicate	Original
Mean:	2.7984 phi (0.1437 mm)	2.5229 phi (0.174 mm)
Standard Dev:	0.3756 phi-units (0.7708 mm)	0.5985 phi-units (0.6604 mm)
Skewness:	-1.0596 dimensionless	-1.3787 dimensionless
Kurtosis:	10.2492 dimensionless	10.4454 dimensionless
5th Moment:	-68.9570 dimensionless	-57.6256 dimensionless
6th Moment:	640.5193 dimensionless	354.8138 dimensionless
RARD*:	0.1342 dimensionless	0.2372 dimensionless
Median:	2.7442 phi (0.1492 mm)	2.2376 phi (0.212 mm)

Statistical Results: Post-CaCO3		
	Duplicate	Original
Mean:	2.6428 phi (0.1601 mm)	2.6539 phi (0.1589 mm)
Standard Dev:	0.2894 phi-units (0.8182 mm)	0.2928 phi-units (0.8163 mm)
Skewness:	-0.3392 dimensionless	0.0452 dimensionless
Kurtosis:	6.9124 dimensionless	3.7537 dimensionless
5th Moment:	-31.4821 dimensionless	0.2898 dimensionless
6th Moment:	332.7823 dimensionless	41.0011 dimensionless
RARD*:	0.1095 dimensionless	0.1103 dimensionless
Median:	2.5159 phi (0.1748 mm)	2.5258 phi (0.1736 mm)

Additional Data	
Total Fines	
Original:	0.87 %
Duplicate:	1.16 %
Total Carbonates	
Original:	1.37 %
Duplicate:	1.5 %

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)

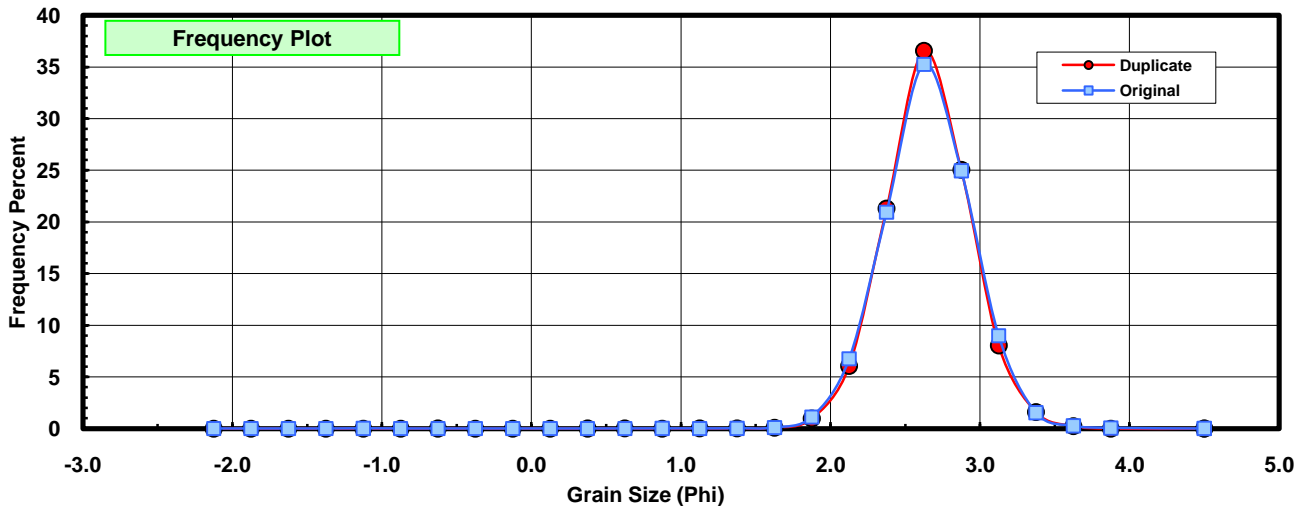
Pre-Digestion Grain Size Distribution

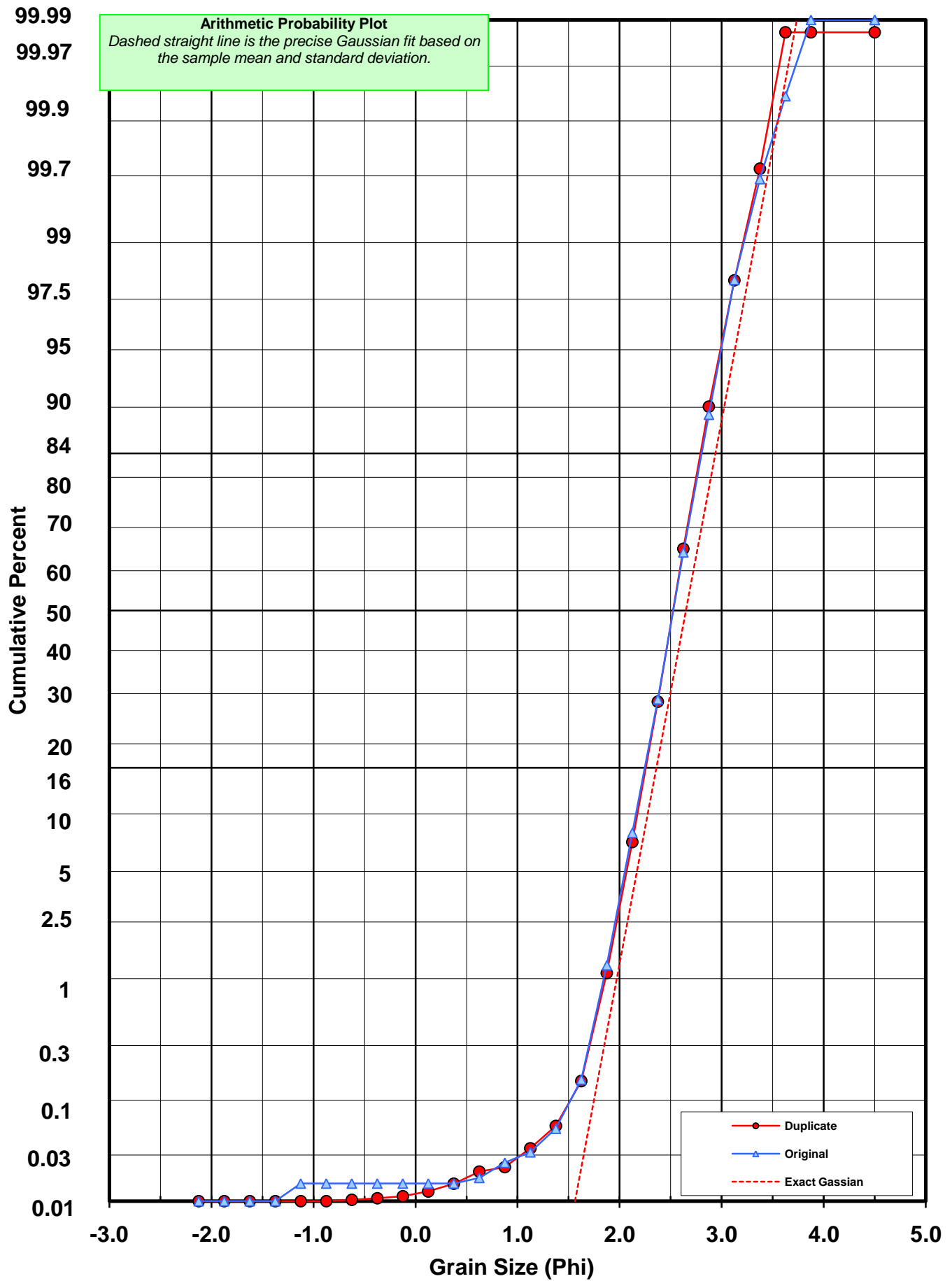
Onshore Grab Sample: SJ-33-SS

Total Duplicate Sample Mass: 74.928 grams

Total Original Sample Mass: 66.763 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	0.000	0.000	0.000	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000	0.009	0.013	0.013
-0.75	-0.875	0.000	0.000	0.000	0.000	0.000	0.013
-0.50	-0.625	0.003	0.004	0.004	0.000	0.000	0.013
-0.25	-0.375	0.001	0.001	0.005	0.000	0.000	0.013
0.00	-0.125	0.001	0.001	0.007	0.000	0.000	0.013
0.25	0.125	0.002	0.003	0.009	0.000	0.000	0.013
0.50	0.375	0.003	0.004	0.013	0.000	0.000	0.013
0.75	0.625	0.005	0.007	0.020	0.002	0.003	0.016
1.00	0.875	0.002	0.003	0.023	0.006	0.009	0.025
1.25	1.125	0.010	0.013	0.036	0.005	0.007	0.033
1.50	1.375	0.017	0.023	0.059	0.015	0.022	0.055
1.75	1.625	0.066	0.088	0.147	0.064	0.096	0.151
2.00	1.875	0.726	0.969	1.116	0.747	1.119	1.270
2.25	2.125	4.546	6.067	7.183	4.507	6.751	8.022
2.50	2.375	15.955	21.294	28.477	13.977	20.937	28.959
2.75	2.625	27.403	36.572	65.049	23.531	35.249	64.207
3.00	2.875	18.758	25.035	90.084	16.654	24.947	89.155
3.25	3.125	6.032	8.050	98.134	5.999	8.986	98.141
3.50	3.375	1.203	1.606	99.740	1.028	1.540	99.681
3.75	3.625	0.187	0.250	99.989	0.173	0.259	99.940
4.00	3.875	0.000	0.000	99.989	0.040	0.060	100.000
5.00	4.500	0.000	0.000	99.989	0.000	0.000	100.000
5.00	4.500	0.008	0.011	100.000	0.006	0.009	100.009



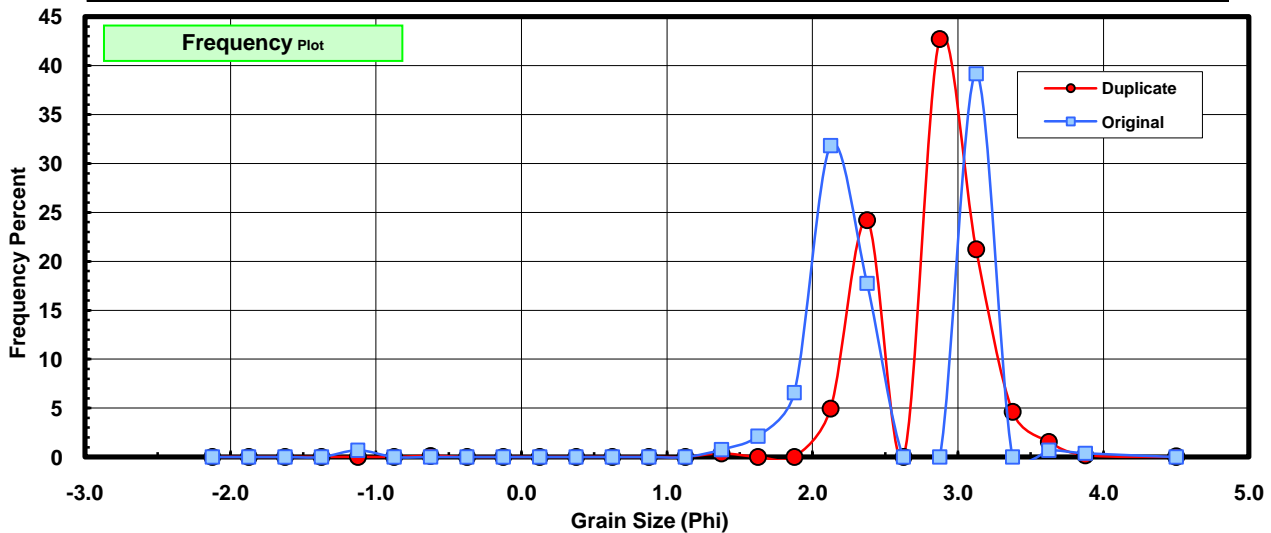


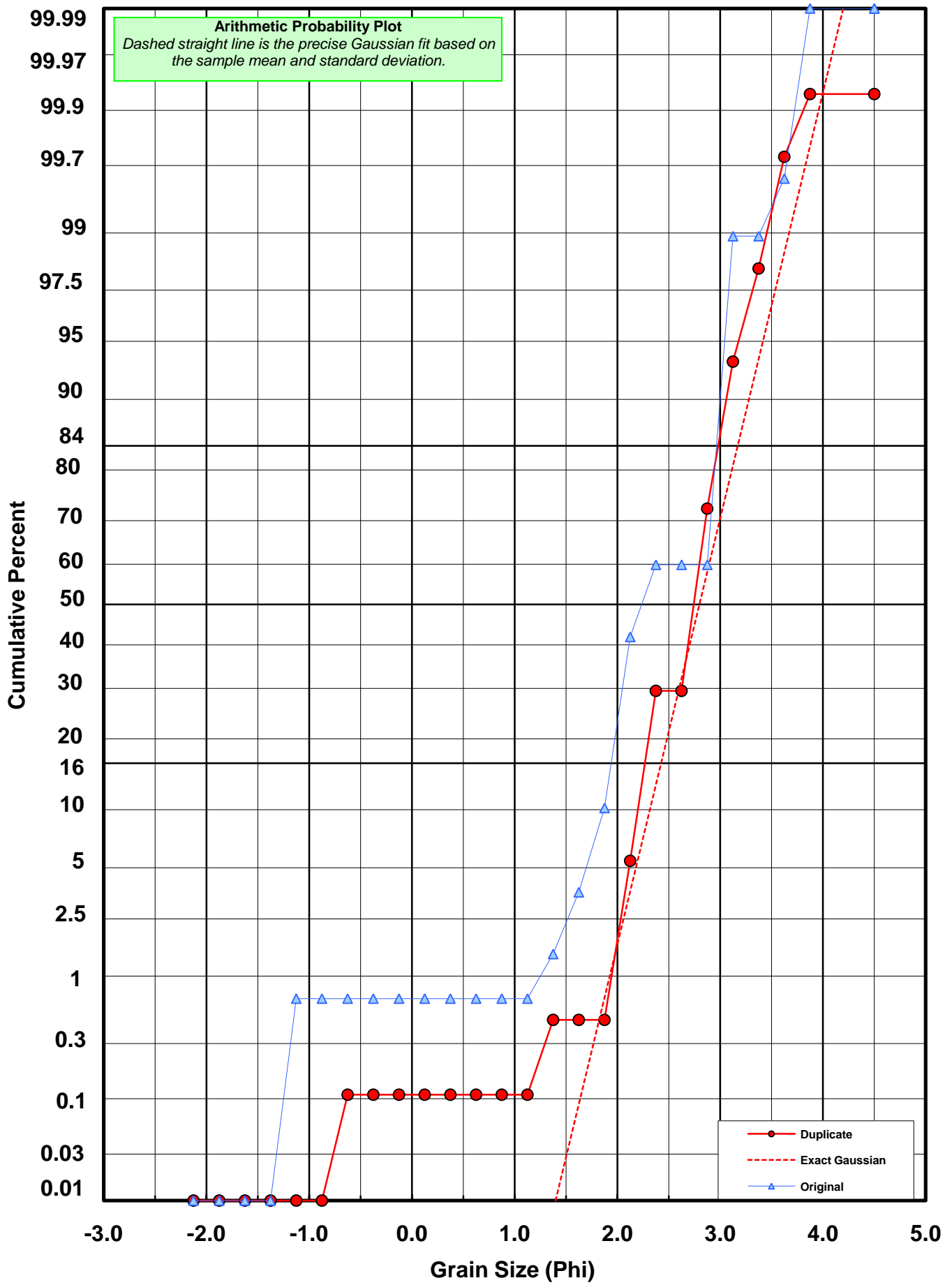
Carbonate Grain Size Distribution

Onshore Grab Sample: SJ-33-SS

Total Duplicate Carbonate Mass: 2.784 grams
% Carbonate in Duplicate: 1.5 %
Total Original Carbonate Mass: 1.307 grams
% Carbonate in Original: 1.4 %

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	0.000	0.000	0.000	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000	0.009	0.689	0.689
-0.75	-0.875	0.000	0.000	0.000	0.000	0.000	0.689
-0.50	-0.625	0.003	0.108	0.108	0.000	0.000	0.689
-0.25	-0.375	0.000	0.000	0.108	0.000	0.000	0.689
0.00	-0.125	0.000	0.000	0.108	0.000	0.000	0.689
0.25	0.125	0.000	0.000	0.108	0.000	0.000	0.689
0.50	0.375	0.000	0.000	0.108	0.000	0.000	0.689
0.75	0.625	0.000	0.000	0.108	0.000	0.000	0.689
1.00	0.875	0.000	0.000	0.108	0.000	0.000	0.689
1.25	1.125	0.000	0.000	0.108	0.000	0.000	0.689
1.50	1.375	0.010	0.359	0.467	0.010	0.765	1.454
1.75	1.625	0.000	0.000	0.467	0.028	2.142	3.596
2.00	1.875	0.000	0.000	0.467	0.086	6.580	10.176
2.25	2.125	0.138	4.957	5.424	0.416	31.829	42.005
2.50	2.375	0.674	24.210	29.634	0.232	17.751	59.755
2.75	2.625	0.000	0.000	29.634	0.000	0.000	59.755
3.00	2.875	1.189	42.708	72.342	0.000	0.000	59.755
3.25	3.125	0.591	21.228	93.570	0.512	39.174	98.929
3.50	3.375	0.129	4.634	98.204	0.000	0.000	98.929
3.75	3.625	0.043	1.545	99.749	0.009	0.689	99.617
4.00	3.875	0.005	0.180	99.928	0.005	0.383	100.000
5.00	4.500	0.000	0.000	99.928	0.000	0.000	100.000
5.00	4.500	0.002	0.072	100.000	0.000	0.000	100.000





Post-Digestion Grain Size Distribution

Onshore Grab Sample: SJ-33-SS

Total Duplicate Digested Mass: 73.835 grams
% Silica in Duplicate: 98.5 %
Total Original Digested Mass: 65.848 grams
% Silica in Original: 98.6 %

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	0.000	0.000	0.000	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000	0.000	0.000	0.000
-0.25	-0.375	0.010	0.014	0.014	0.000	0.000	0.000
0.00	-0.125	0.005	0.007	0.020	0.000	0.000	0.000
0.25	0.125	0.005	0.007	0.027	0.000	0.000	0.000
0.50	0.375	0.006	0.008	0.035	0.000	0.000	0.000
0.75	0.625	0.009	0.012	0.047	0.004	0.006	0.006
1.00	0.875	0.018	0.024	0.072	0.006	0.009	0.015
1.25	1.125	0.012	0.016	0.088	0.006	0.009	0.024
1.50	1.375	0.007	0.009	0.098	0.005	0.008	0.032
1.75	1.625	0.072	0.098	0.195	0.036	0.055	0.087
2.00	1.875	0.729	0.987	1.182	0.661	1.004	1.090
2.25	2.125	4.408	5.970	7.152	4.091	6.213	7.303
2.50	2.375	15.281	20.696	27.849	13.745	20.874	28.177
2.75	2.625	29.014	39.296	67.144	23.824	36.180	64.357
3.00	2.875	17.569	23.795	90.939	16.699	25.360	89.717
3.25	3.125	5.441	7.369	98.308	5.487	8.333	98.050
3.50	3.375	1.074	1.455	99.763	1.076	1.634	99.684
3.75	3.625	0.144	0.195	99.958	0.164	0.249	99.933
4.00	3.875	0.025	0.034	99.992	0.035	0.053	99.986
5.00	4.500	0.000	0.000	99.992	0.000	0.000	99.986
5.00	4.500	0.006	0.008	100.000	0.009	0.014	100.000

