

Quality Control Statistical Summary

Onshore Grab Sample: SJ-21-BB

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

Latitude: 29° 58' 33.3"
 Longitude: 81° 18' 38.7"
 Datum: WGS 84

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	1.1758	phi (0.4426 mm)	1.4673	phi (0.3617 mm)
Standard Dev:	1.0717	phi-units (0.4757 mm)	1.0067	phi-units (0.4977 mm)
Skewness:	-0.7874	dimensionless	-1.1871	dimensionless
Kurtosis:	3.3478	dimensionless	4.7323	dimensionless
5th Moment:	-6.1228	dimensionless	-12.4066	dimensionless
6th Moment:	19.1200	dimensionless	42.0589	dimensionless
RARD*:	0.9115	dimensionless	0.6861	dimensionless
Median:	1.1935	phi (0.4372 mm)	1.5311	phi (0.346 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	0.0515	phi (0.9649 mm)	0.2177	phi (0.8599 mm)
Standard Dev:	1.0333	phi-units (0.4886 mm)	1.1540	phi-units (0.4494 mm)
Skewness:	-0.0753	dimensionless	-0.3593	dimensionless
Kurtosis:	2.5958	dimensionless	2.3749	dimensionless
5th Moment:	0.0400	dimensionless	-1.8042	dimensionless
6th Moment:	10.1441	dimensionless	7.7552	dimensionless
RARD*:	20.0697	dimensionless	5.2998	dimensionless
Median:	-0.0428	phi (1.0301 mm)	0.2180	phi (0.8598 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	1.6198	phi (0.3254 mm)	1.7872	phi (0.2897 mm)
Standard Dev:	0.7031	phi-units (0.6143 mm)	0.6700	phi-units (0.6285 mm)
Skewness:	-0.3178	dimensionless	-0.4511	dimensionless
Kurtosis:	3.0411	dimensionless	3.2883	dimensionless
5th Moment:	-3.4829	dimensionless	-5.4600	dimensionless
6th Moment:	18.9020	dimensionless	26.5767	dimensionless
RARD*:	0.4340	dimensionless	0.3749	dimensionless
Median:	1.5363	phi (0.3448 mm)	1.7280	phi (0.3019 mm)

Additional Data	
Total Fines	
Original:	0.15 %
Duplicate:	0.18 %
Total Carbonates	
Original:	19.89 %
Duplicate:	28.24 %

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)

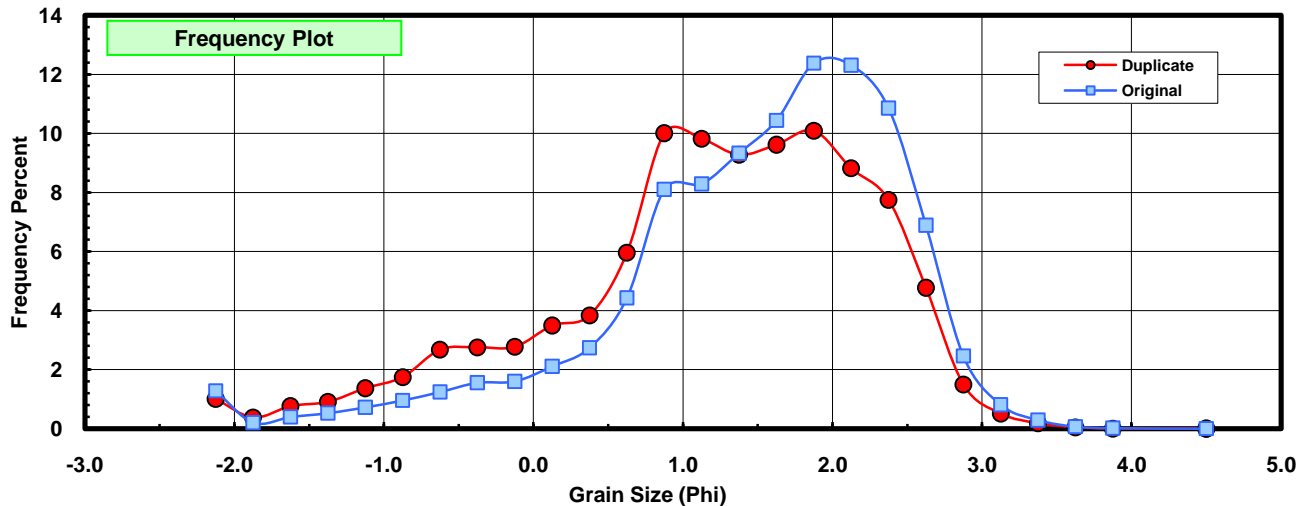
Pre-Digestion Grain Size Distribution

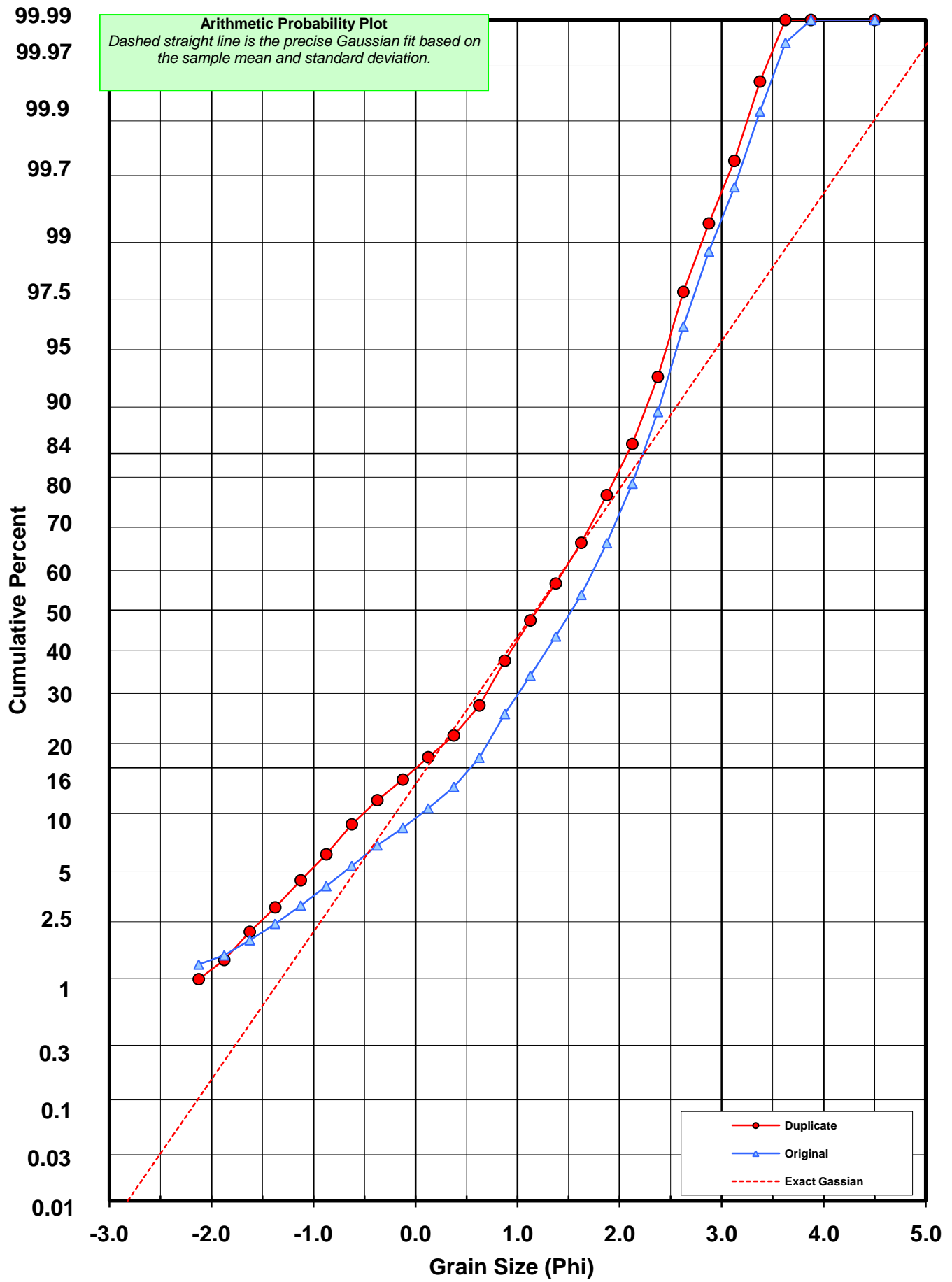
Onshore Grab Sample: SJ-21-BB

Total Duplicate Sample Mass: 91.132 grams

Total Original Sample Mass: 86.056 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	0.914	1.003	1.003	1.101	1.279	1.279
-1.75	-1.875	0.340	0.373	1.376	0.175	0.203	1.483
-1.50	-1.625	0.693	0.760	2.136	0.340	0.395	1.878
-1.25	-1.375	0.824	0.904	3.041	0.451	0.524	2.402
-1.00	-1.125	1.246	1.367	4.408	0.621	0.722	3.124
-0.75	-0.875	1.591	1.746	6.154	0.822	0.955	4.079
-0.50	-0.625	2.438	2.675	8.829	1.068	1.241	5.320
-0.25	-0.375	2.510	2.754	11.583	1.339	1.556	6.876
0.00	-0.125	2.522	2.767	14.351	1.378	1.601	8.477
0.25	0.125	3.182	3.492	17.842	1.817	2.111	10.589
0.50	0.375	3.497	3.837	21.680	2.356	2.738	13.326
0.75	0.625	5.428	5.956	27.636	3.812	4.430	17.756
1.00	0.875	9.119	10.006	37.642	6.976	8.106	25.863
1.25	1.125	8.945	9.815	47.458	7.133	8.289	34.151
1.50	1.375	8.451	9.273	56.731	8.029	9.330	43.481
1.75	1.625	8.763	9.616	66.347	8.984	10.440	53.921
2.00	1.875	9.195	10.090	76.436	10.653	12.379	66.301
2.25	2.125	8.034	8.816	85.252	10.593	12.310	78.610
2.50	2.375	7.061	7.748	93.000	9.343	10.857	89.467
2.75	2.625	4.348	4.771	97.771	5.927	6.887	96.355
3.00	2.875	1.364	1.497	99.268	2.118	2.461	98.816
3.25	3.125	0.464	0.509	99.777	0.698	0.811	99.627
3.50	3.375	0.163	0.179	99.956	0.250	0.291	99.917
3.75	3.625	0.039	0.043	99.999	0.057	0.066	99.984
4.00	3.875	0.000	0.000	99.999	0.014	0.016	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	0.001	0.001	100.001



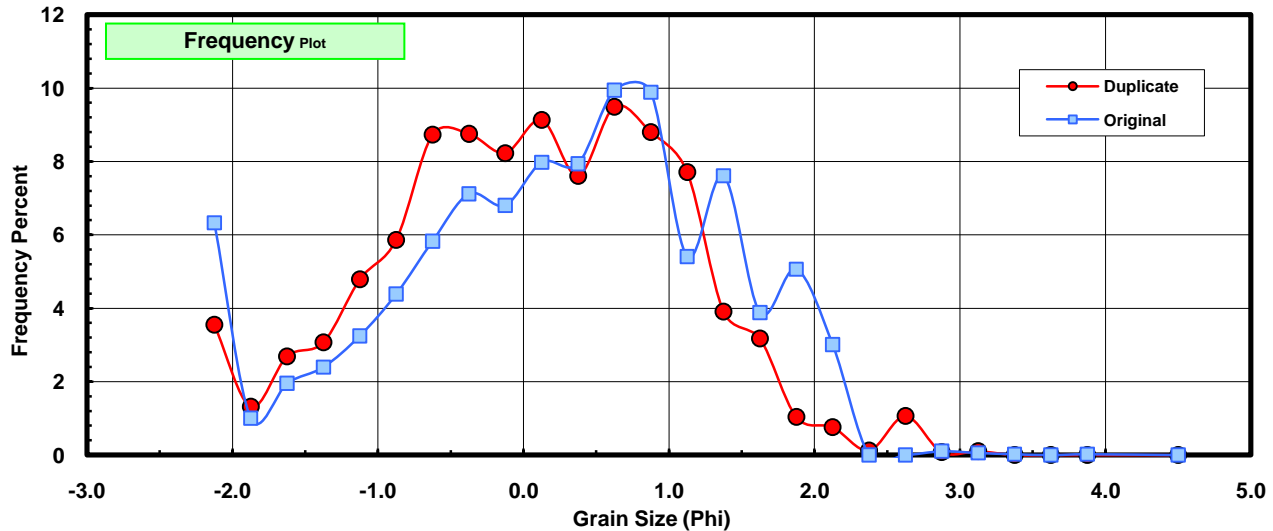


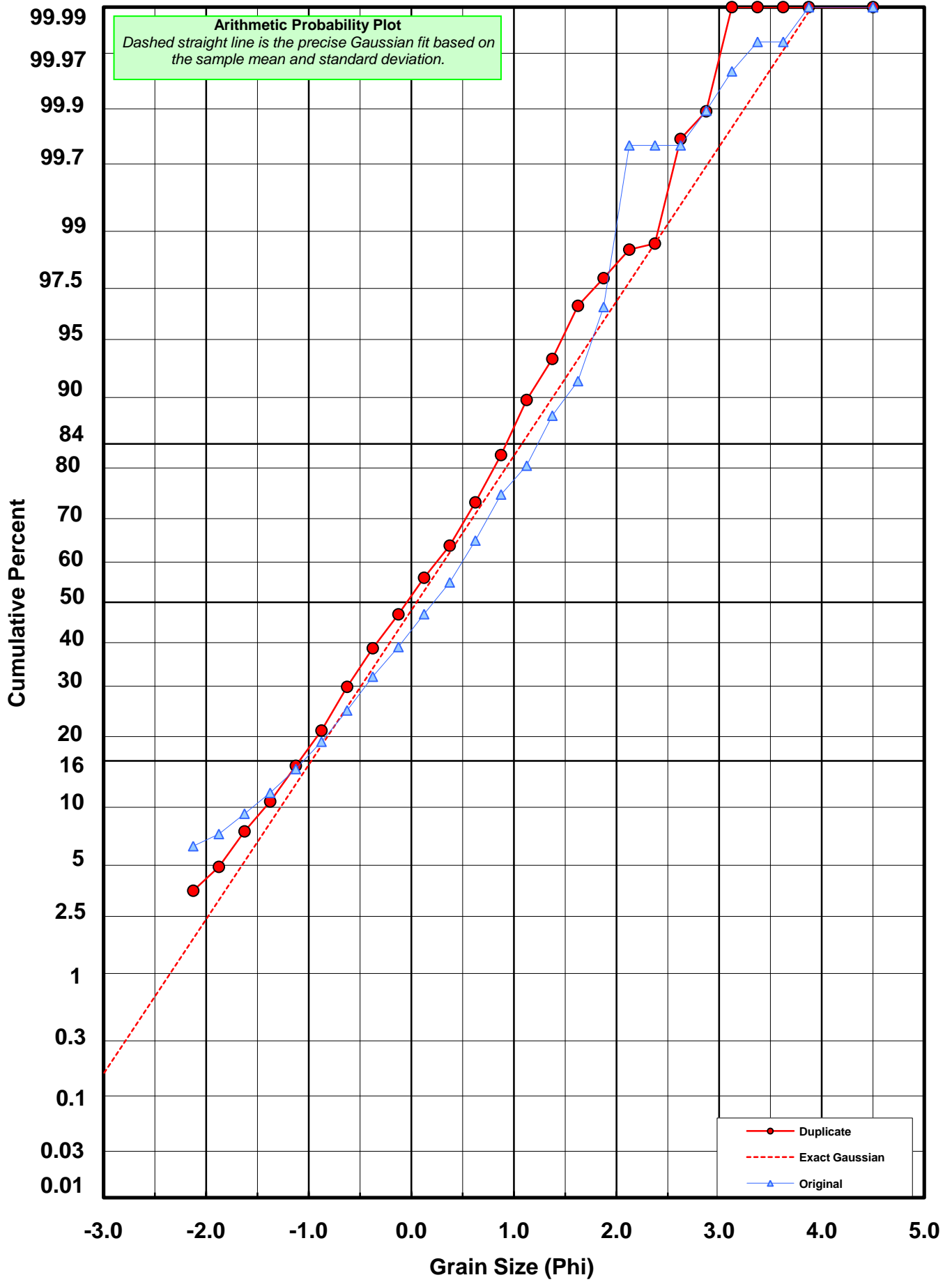
Carbonate Grain Size Distribution

Onshore Grab Sample: SJ-21-BB

Total Duplicate Carbonate Mass: 25.760 grams
% Carbonate in Duplicate: 28.2 %
Total Original Carbonate Mass: 17.397 grams
% Carbonate in Original: 19.9 %

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	0.914	3.548	3.548	1.101	6.329	6.329
-1.75	-1.875	0.340	1.320	4.868	0.175	1.006	7.335
-1.50	-1.625	0.693	2.690	7.558	0.340	1.954	9.289
-1.25	-1.375	0.792	3.075	10.633	0.417	2.397	11.686
-1.00	-1.125	1.233	4.786	15.419	0.565	3.248	14.934
-0.75	-0.875	1.511	5.866	21.285	0.763	4.386	19.319
-0.50	-0.625	2.249	8.731	30.016	1.014	5.829	25.148
-0.25	-0.375	2.255	8.754	38.769	1.238	7.116	32.264
0.00	-0.125	2.120	8.230	46.999	1.184	6.806	39.070
0.25	0.125	2.352	9.130	56.130	1.388	7.978	47.048
0.50	0.375	1.960	7.609	63.738	1.381	7.938	54.986
0.75	0.625	2.445	9.491	73.230	1.730	9.944	64.931
1.00	0.875	2.267	8.800	82.030	1.720	9.887	74.817
1.25	1.125	1.986	7.710	89.740	0.941	5.409	80.226
1.50	1.375	1.007	3.909	93.649	1.324	7.611	87.837
1.75	1.625	0.819	3.179	96.828	0.675	3.880	91.717
2.00	1.875	0.268	1.040	97.869	0.881	5.064	96.781
2.25	2.125	0.196	0.761	98.630	0.524	3.012	99.793
2.50	2.375	0.032	0.124	98.754	0.000	0.000	99.793
2.75	2.625	0.274	1.064	99.818	0.000	0.000	99.793
3.00	2.875	0.020	0.078	99.895	0.018	0.103	99.897
3.25	3.125	0.027	0.105	100.000	0.010	0.057	99.954
3.50	3.375	0.000	0.000	100.000	0.004	0.023	99.977
3.75	3.625	0.000	0.000	100.000	0.000	0.000	99.977
4.00	3.875	0.000	0.000	100.000	0.004	0.023	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: SJ-21-BB

Total Duplicate Digested Mass: 65.401 grams
% Silica in Duplicate: 71.8 %
Total Original Digested Mass: 68.943 grams
% Silica in Original: 80.1 %

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	0.032	0.049	0.049	0.034	0.049	0.049
-1.00	-1.125	0.013	0.020	0.069	0.056	0.081	0.131
-0.75	-0.875	0.080	0.122	0.191	0.059	0.086	0.216
-0.50	-0.625	0.189	0.289	0.480	0.054	0.078	0.294
-0.25	-0.375	0.255	0.390	0.870	0.101	0.146	0.441
0.00	-0.125	0.402	0.615	1.485	0.194	0.281	0.722
0.25	0.125	0.830	1.269	2.754	0.429	0.622	1.345
0.50	0.375	1.537	2.350	5.104	0.975	1.414	2.759
0.75	0.625	2.983	4.561	9.665	2.082	3.020	5.779
1.00	0.875	6.852	10.477	20.142	5.256	7.624	13.402
1.25	1.125	6.959	10.641	30.782	6.192	8.981	22.384
1.50	1.375	7.444	11.382	42.164	6.705	9.725	32.109
1.75	1.625	7.944	12.147	54.311	8.309	12.052	44.161
2.00	1.875	8.927	13.650	67.961	9.772	14.174	58.335
2.25	2.125	7.838	11.985	79.945	10.069	14.605	72.940
2.50	2.375	7.029	10.748	90.693	9.435	13.685	86.625
2.75	2.625	4.074	6.229	96.922	6.114	8.868	95.493
3.00	2.875	1.344	2.055	98.977	2.100	3.046	98.539
3.25	3.125	0.437	0.668	99.645	0.688	0.998	99.537
3.50	3.375	0.172	0.263	99.908	0.246	0.357	99.894
3.75	3.625	0.041	0.063	99.971	0.060	0.087	99.981
4.00	3.875	0.014	0.021	99.992	0.010	0.015	99.996
5.00	4.500	0.000	0.000	99.992	0.000	0.000	99.996
5.00	4.500	0.005	0.008	100.000	0.003	0.004	100.000

