

Quality Control Statistical Summary

Onshore Grab Sample: SJ-11-BB

Sample Taken By: J. Ladner
 Sample Taken On: 12/02/03
 County: St. Johns

Latitude: 30° 07' 0.60"
 Longitude: 81° 20' 41.1"
 Datum: WGS 84

Statistical Results: Pre-CaCO3		
	Duplicate	Original
Mean:	1.0775 phi (0.4739 mm)	0.8006 phi (0.5741 mm)
Standard Dev:	0.9693 phi-units (0.5107 mm)	1.0020 phi-units (0.4993 mm)
Skewness:	-0.5104 dimensionless	-0.2829 dimensionless
Kurtosis:	3.0508 dimensionless	2.8262 dimensionless
5th Moment:	-4.4383 dimensionless	-2.6946 dimensionless
6th Moment:	17.1542 dimensionless	13.6630 dimensionless
RARD*:	0.8996 dimensionless	1.2516 dimensionless
Median:	1.0259 phi (0.4911 mm)	0.7383 phi (0.5995 mm)

Statistical Results: CaCO3		
	Duplicate	Original
Mean:	0.2530 phi (0.8392 mm)	0.0979 phi (0.9344 mm)
Standard Dev:	0.8621 phi-units (0.5501 mm)	0.8361 phi-units (0.5602 mm)
Skewness:	-0.1842 dimensionless	-0.1577 dimensionless
Kurtosis:	3.1132 dimensionless	3.3498 dimensionless
5th Moment:	-1.7922 dimensionless	-1.5683 dimensionless
6th Moment:	16.4042 dimensionless	18.6972 dimensionless
RARD*:	3.4079 dimensionless	8.5411 dimensionless
Median:	0.1338 phi (0.9114 mm)	-0.0563 phi (1.0398 mm)

Statistical Results: Post-CaCO3		
	Duplicate	Original
Mean:	1.5480 phi (0.342 mm)	1.3905 phi (0.3814 mm)
Standard Dev:	0.6732 phi-units (0.6271 mm)	0.7096 phi-units (0.6115 mm)
Skewness:	-0.1351 dimensionless	-0.0573 dimensionless
Kurtosis:	2.7586 dimensionless	2.5680 dimensionless
5th Moment:	-1.0533 dimensionless	-0.5466 dimensionless
6th Moment:	13.2820 dimensionless	10.3180 dimensionless
RARD*:	0.4349 dimensionless	0.5103 dimensionless
Median:	1.4405 phi (0.3684 mm)	1.2561 phi (0.4187 mm)

Additional Data	
Total Fines	
Original:	0.14 %
Duplicate:	0.13 %
Total Carbonates	
Original:	45.59 %
Duplicate:	36.19 %

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)

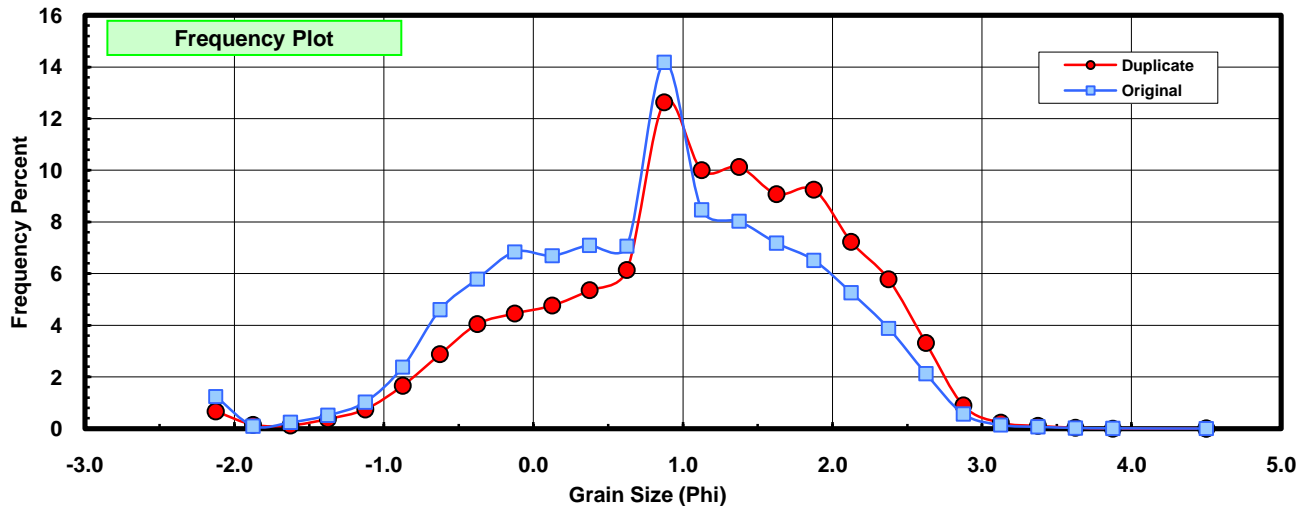
Pre-Digestion Grain Size Distribution

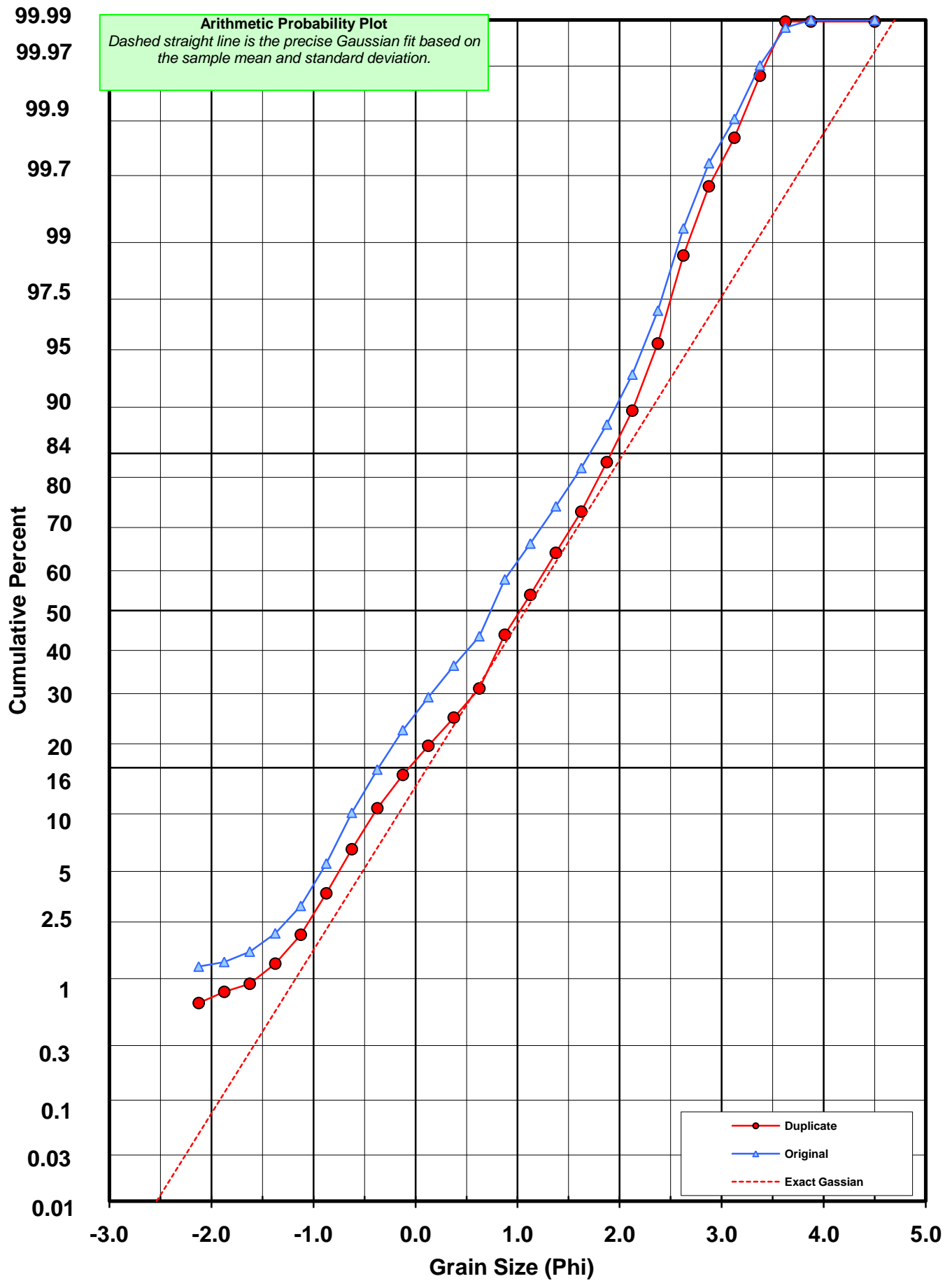
Onshore Grab Sample: SJ-11-BB

Total Duplicate Sample Mass: 95.871 grams

Total Original Sample Mass: 85.721 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	0.637	0.664	0.664	1.064	1.241	1.241
-1.75	-1.875	0.140	0.146	0.810	0.084	0.098	1.339
-1.50	-1.625	0.117	0.122	0.933	0.205	0.239	1.578
-1.25	-1.375	0.357	0.372	1.305	0.440	0.513	2.092
-1.00	-1.125	0.714	0.745	2.050	0.879	1.025	3.117
-0.75	-0.875	1.593	1.662	3.711	2.041	2.381	5.498
-0.50	-0.625	2.758	2.877	6.588	3.945	4.602	10.100
-0.25	-0.375	3.875	4.042	10.630	4.961	5.787	15.888
0.00	-0.125	4.270	4.454	15.084	5.864	6.841	22.729
0.25	0.125	4.564	4.761	19.844	5.736	6.692	29.420
0.50	0.375	5.136	5.357	25.202	6.082	7.095	36.515
0.75	0.625	5.882	6.135	31.337	6.054	7.063	43.578
1.00	0.875	12.107	12.628	43.965	12.151	14.175	57.753
1.25	1.125	9.587	10.000	53.965	7.256	8.465	66.218
1.50	1.375	9.712	10.130	64.096	6.882	8.028	74.246
1.75	1.625	8.699	9.074	73.169	6.153	7.178	81.424
2.00	1.875	8.865	9.247	82.416	5.583	6.513	87.937
2.25	2.125	6.932	7.231	89.647	4.509	5.260	93.198
2.50	2.375	5.537	5.775	95.422	3.325	3.879	97.077
2.75	2.625	3.180	3.317	98.739	1.822	2.126	99.202
3.00	2.875	0.857	0.894	99.633	0.484	0.565	99.767
3.25	3.125	0.218	0.227	99.860	0.118	0.138	99.904
3.50	3.375	0.097	0.101	99.961	0.056	0.065	99.970
3.75	3.625	0.033	0.034	99.996	0.019	0.022	99.992
4.00	3.875	0.000	0.000	99.996	0.007	0.008	100.000
5.00	4.500	0.000	0.000	99.996	0.000	0.000	100.000
5.00	4.500	0.004	0.004	100.000	0.001	0.001	100.001



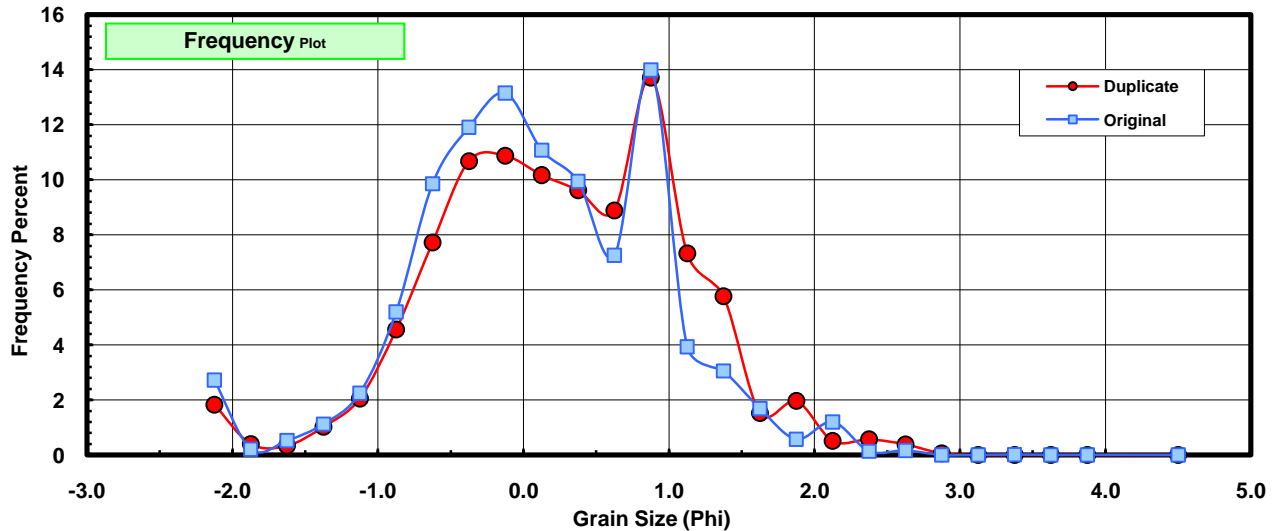


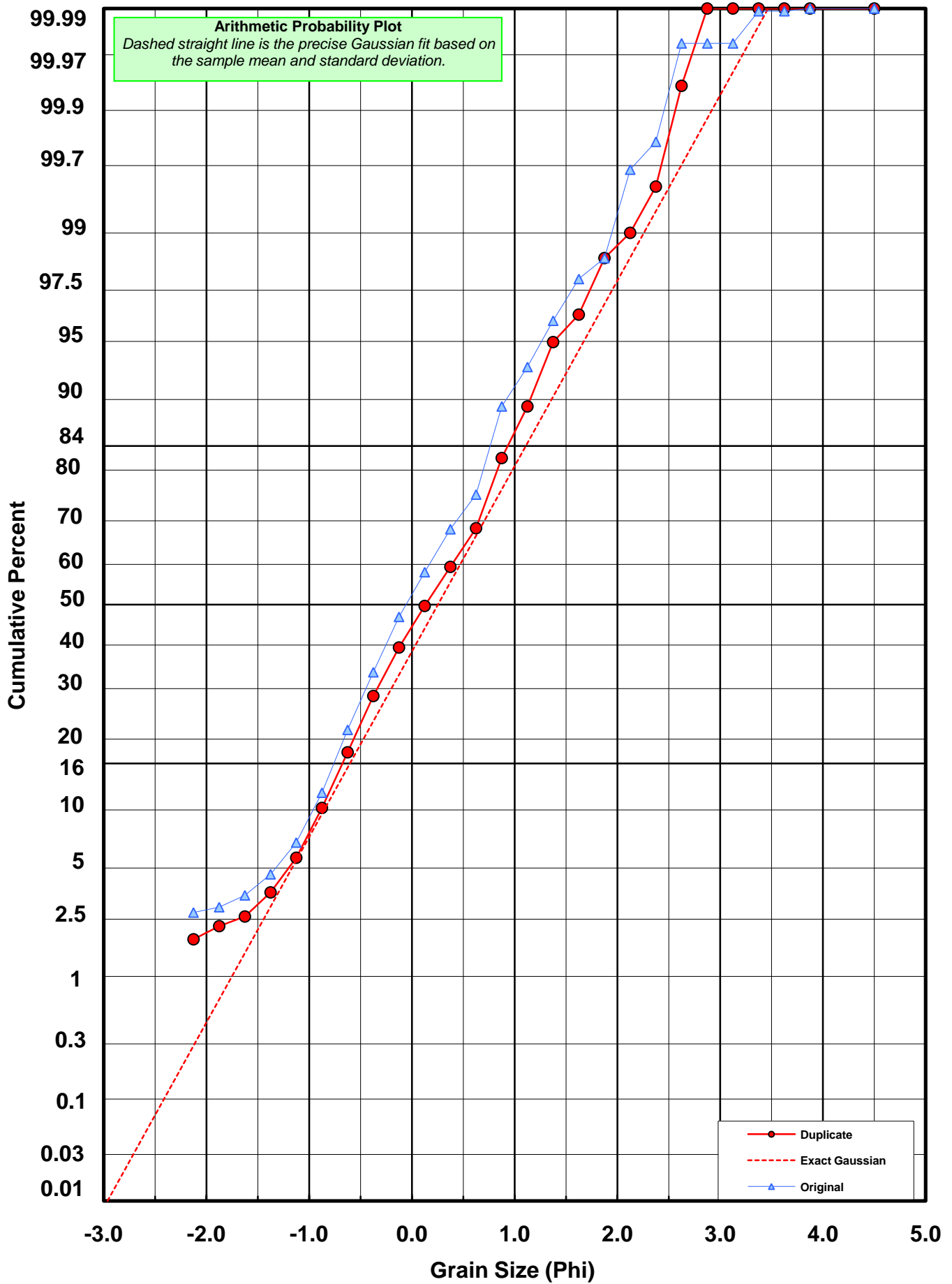
Carbonate Grain Size Distribution

Onshore Grab Sample: SJ-11-BB

Total Duplicate Carbonate Mass: 34.743 grams
% Carbonate in Duplicate: 36.2 %
Total Original Carbonate Mass: 39.097 grams
% Carbonate in Original: 45.6 %

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	0.637	1.833	1.833	1.064	2.721	2.721
-1.75	-1.875	0.140	0.403	2.236	0.084	0.215	2.936
-1.50	-1.625	0.117	0.337	2.573	0.205	0.524	3.461
-1.25	-1.375	0.357	1.028	3.601	0.440	1.125	4.586
-1.00	-1.125	0.714	2.055	5.656	0.879	2.248	6.834
-0.75	-0.875	1.583	4.556	10.212	2.034	5.202	12.037
-0.50	-0.625	2.684	7.725	17.937	3.854	9.858	21.894
-0.25	-0.375	3.711	10.681	28.619	4.656	11.909	33.803
0.00	-0.125	3.777	10.871	39.490	5.142	13.152	46.955
0.25	0.125	3.534	10.172	49.662	4.331	11.078	58.033
0.50	0.375	3.342	9.619	59.281	3.887	9.942	67.975
0.75	0.625	3.088	8.888	68.169	2.837	7.256	75.231
1.00	0.875	4.765	13.715	81.884	5.470	13.991	89.222
1.25	1.125	2.546	7.328	89.212	1.538	3.934	93.155
1.50	1.375	2.003	5.765	94.977	1.195	3.057	96.212
1.75	1.625	0.532	1.531	96.509	0.661	1.691	97.903
2.00	1.875	0.684	1.969	98.477	0.224	0.573	98.476
2.25	2.125	0.177	0.509	98.987	0.470	1.202	99.678
2.50	2.375	0.197	0.567	99.554	0.053	0.136	99.813
2.75	2.625	0.134	0.386	99.940	0.064	0.164	99.977
3.00	2.875	0.021	0.060	100.000	0.000	0.000	99.977
3.25	3.125	0.000	0.000	100.000	0.000	0.000	99.977
3.50	3.375	0.000	0.000	100.000	0.007	0.018	99.995
3.75	3.625	0.000	0.000	100.000	0.000	0.000	99.995
4.00	3.875	0.000	0.000	100.000	0.002	0.005	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-11-BB

Total Duplicate Digested Mass: 61.184 grams
% Silica in Duplicate: 63.8 %
Total Original Digested Mass: 46.645 grams
% Silica in Original: 54.4 %

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	0.010	0.016	0.016	0.007	0.015	0.015
-0.50	-0.625	0.074	0.121	0.137	0.091	0.195	0.210
-0.25	-0.375	0.164	0.268	0.405	0.305	0.654	0.864
0.00	-0.125	0.493	0.806	1.211	0.722	1.548	2.412
0.25	0.125	1.030	1.683	2.895	1.405	3.012	5.424
0.50	0.375	1.794	2.932	5.827	2.195	4.706	10.130
0.75	0.625	2.794	4.567	10.393	3.217	6.897	17.026
1.00	0.875	7.342	12.000	22.393	6.681	14.323	31.350
1.25	1.125	7.041	11.508	33.901	5.718	12.259	43.608
1.50	1.375	7.709	12.600	46.501	5.687	12.192	55.800
1.75	1.625	8.167	13.348	59.849	5.492	11.774	67.574
2.00	1.875	8.181	13.371	73.220	5.359	11.489	79.063
2.25	2.125	6.755	11.040	84.261	4.039	8.659	87.722
2.50	2.375	5.340	8.728	92.988	3.272	7.015	94.737
2.75	2.625	3.046	4.978	97.967	1.758	3.769	98.506
3.00	2.875	0.836	1.366	99.333	0.499	1.070	99.576
3.25	3.125	0.221	0.361	99.694	0.123	0.264	99.839
3.50	3.375	0.109	0.178	99.873	0.049	0.105	99.944
3.75	3.625	0.049	0.080	99.953	0.020	0.043	99.987
4.00	3.875	0.024	0.039	99.992	0.005	0.011	99.998
5.00	4.500	0.000	0.000	99.992	0.000	0.000	99.998
5.00	4.500	0.005	0.008	100.000	0.001	0.002	100.000

