

Quality Control Statistical Summary

Onshore Grab Sample: DU-10-BB

Sample Taken By: J. Ladner
 Sample Taken On: 12/04/02
 County: Duval

Latitude: 30° 15' 36.3"
 Longitude: 81° 22' 56.5"
 Datum: WGS 84

Statistical Results: Pre-CaCO3		
	Duplicate	Original
Mean:	2.4709 phi (0.1804 mm)	2.3962 phi (0.19 mm)
Standard Dev:	0.4278 phi-units (0.7434 mm)	0.4818 phi-units (0.7161 mm)
Skewness:	-0.7097 dimensionless	-0.8461 dimensionless
Kurtosis:	5.3476 dimensionless	6.5430 dimensionless
5th Moment:	-11.2912 dimensionless	-28.9693 dimensionless
6th Moment:	81.7235 dimensionless	249.4444 dimensionless
RARD*:	0.1731 dimensionless	0.2011 dimensionless
Median:	2.4056 phi (0.1887 mm)	2.3508 phi (0.196 mm)

Statistical Results: CaCO3		
	Duplicate	Original
Mean:	2.6159 phi (0.1631 mm)	2.6093 phi (0.1639 mm)
Standard Dev:	0.5655 phi-units (0.6757 mm)	0.7565 phi-units (0.5919 mm)
Skewness:	-2.2223 dimensionless	-3.0920 dimensionless
Kurtosis:	10.7418 dimensionless	16.3420 dimensionless
5th Moment:	-49.6437 dimensionless	-89.5326 dimensionless
6th Moment:	253.8716 dimensionless	515.0074 dimensionless
RARD*:	0.2162 dimensionless	0.2899 dimensionless
Median:	2.6492 phi (0.1594 mm)	2.7101 phi (0.1528 mm)

Statistical Results: Post-CaCO3		
	Duplicate	Original
Mean:	2.4669 phi (0.1809 mm)	2.3866 phi (0.1912 mm)
Standard Dev:	0.4270 phi-units (0.7438 mm)	0.4661 phi-units (0.7239 mm)
Skewness:	-0.5430 dimensionless	-0.6482 dimensionless
Kurtosis:	5.0435 dimensionless	5.0877 dimensionless
5th Moment:	-6.3458 dimensionless	-13.5369 dimensionless
6th Moment:	58.6136 dimensionless	118.1855 dimensionless
RARD*:	0.1731 dimensionless	0.1953 dimensionless
Median:	2.3959 phi (0.19 mm)	2.3324 phi (0.1986 mm)

Additional Data	
Total Fines	
Original:	0.16 %
Duplicate:	0.22 %
Total Carbonates	
Original:	2.55 %
Duplicate:	2.66 %

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)

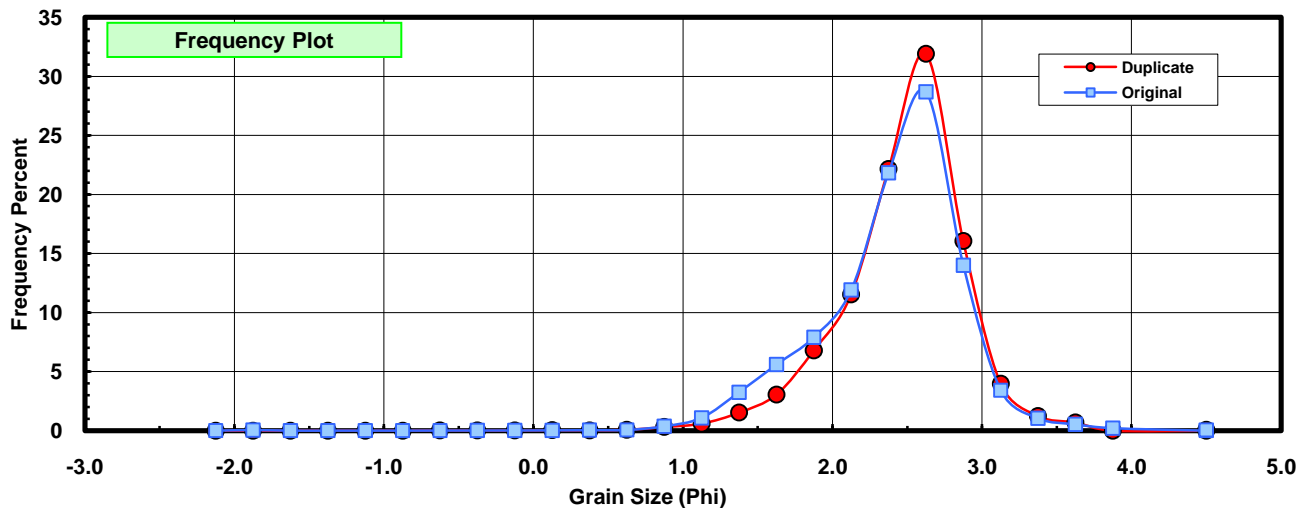
Pre-Digestion Grain Size Distribution

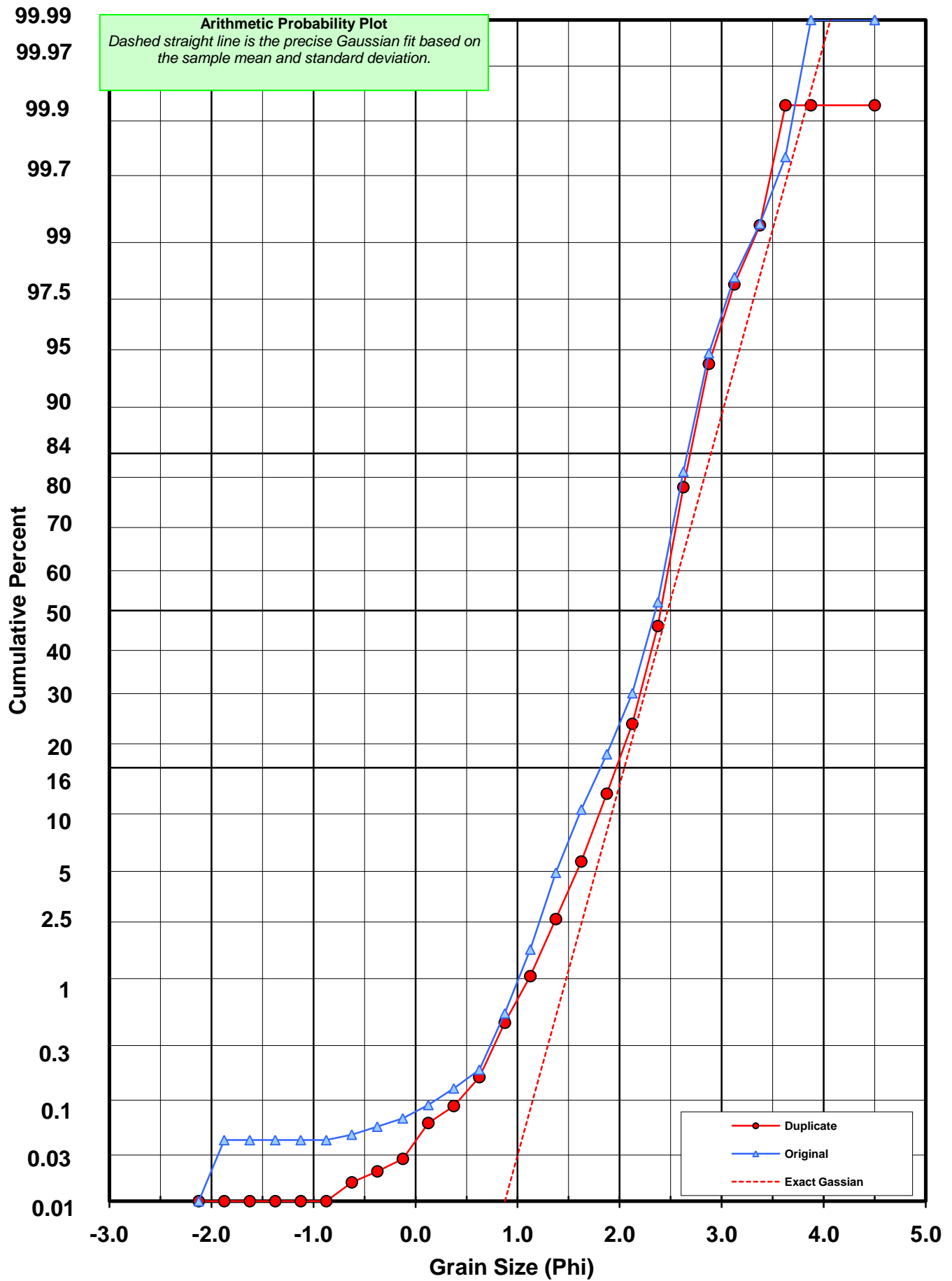
Onshore Grab Sample: DU-10-BB

Total Duplicate Sample Mass: 49.756 grams

Total Original Sample Mass: 55.312 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	0.024	0.043	0.043
-1.50	-1.625	0.000	0.000	0.000	0.000	0.000	0.043
-1.25	-1.375	0.000	0.000	0.000	0.000	0.000	0.043
-1.00	-1.125	0.000	0.000	0.000	0.000	0.000	0.043
-0.75	-0.875	0.000	0.000	0.000	0.000	0.000	0.043
-0.50	-0.625	0.007	0.014	0.014	0.003	0.005	0.049
-0.25	-0.375	0.003	0.006	0.020	0.005	0.009	0.058
0.00	-0.125	0.004	0.008	0.028	0.006	0.011	0.069
0.25	0.125	0.017	0.034	0.062	0.012	0.022	0.090
0.50	0.375	0.013	0.026	0.088	0.020	0.036	0.127
0.75	0.625	0.035	0.070	0.159	0.032	0.058	0.185
1.00	0.875	0.151	0.303	0.462	0.202	0.365	0.550
1.25	1.125	0.297	0.597	1.059	0.599	1.084	1.634
1.50	1.375	0.758	1.523	2.583	1.797	3.251	4.884
1.75	1.625	1.520	3.055	5.638	3.094	5.597	10.481
2.00	1.875	3.381	6.795	12.433	4.370	7.905	18.386
2.25	2.125	5.733	11.522	23.955	6.581	11.905	30.291
2.50	2.375	11.018	22.144	46.099	12.064	21.823	52.115
2.75	2.625	15.872	31.900	77.999	15.854	28.679	80.794
3.00	2.875	7.986	16.050	94.049	7.741	14.003	94.797
3.25	3.125	1.971	3.961	98.010	1.891	3.421	98.218
3.50	3.375	0.614	1.234	99.244	0.578	1.046	99.264
3.75	3.625	0.340	0.683	99.928	0.293	0.530	99.794
4.00	3.875	0.000	0.000	99.928	0.114	0.206	100.000
5.00	4.500	0.000	0.000	99.928	0.000	0.000	100.000
5.00	4.500	0.036	0.072	100.000	0.032	0.058	100.058



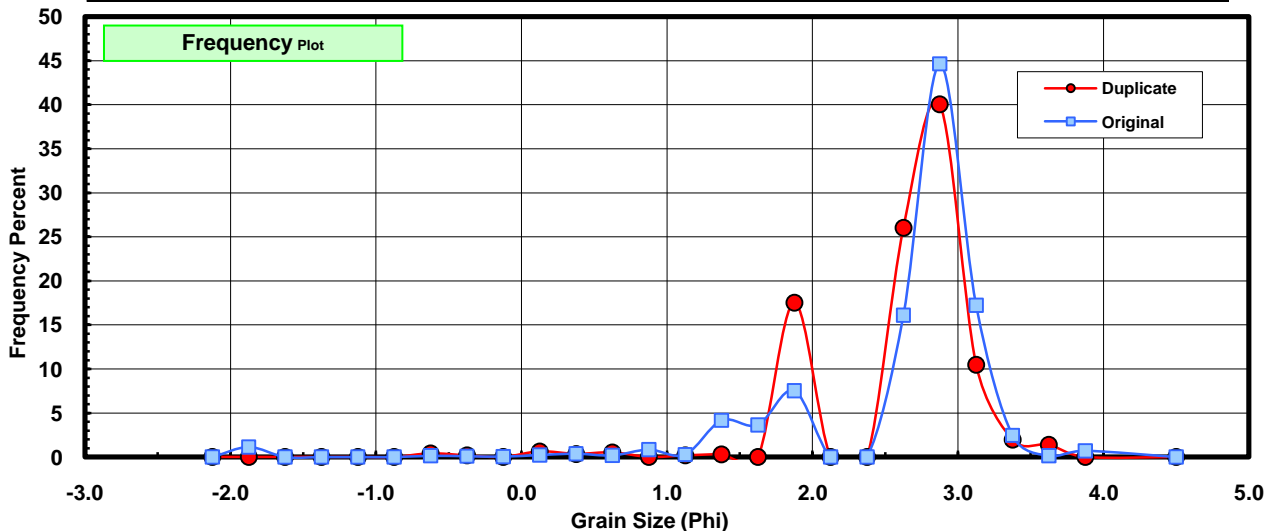


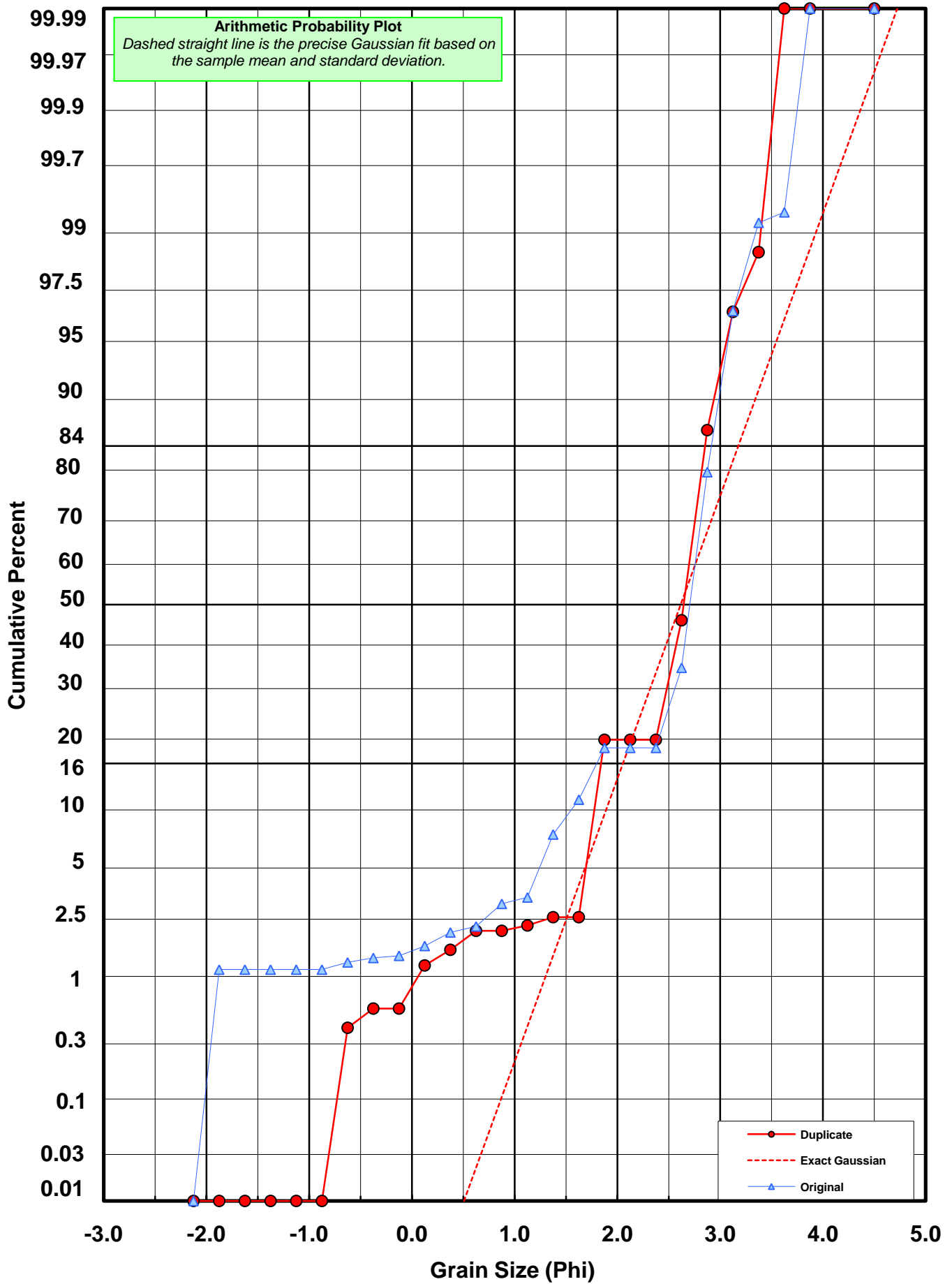
Carbonate Grain Size Distribution

Onshore Grab Sample: DU-10-BB

Total Duplicate Carbonate Mass: 1.728 grams
% Carbonate in Duplicate: 2.7 %
Total Original Carbonate Mass: 2.112 grams
% Carbonate in Original: 2.6 %

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	0.000	0.000	0.000	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000	0.024	1.136	1.136
-1.50	-1.625	0.000	0.000	0.000	0.000	0.000	1.136
-1.25	-1.375	0.000	0.000	0.000	0.000	0.000	1.136
-1.00	-1.125	0.000	0.000	0.000	0.000	0.000	1.136
-0.75	-0.875	0.000	0.000	0.000	0.000	0.000	1.136
-0.50	-0.625	0.007	0.405	0.405	0.003	0.142	1.278
-0.25	-0.375	0.003	0.174	0.579	0.002	0.095	1.373
0.00	-0.125	0.000	0.000	0.579	0.001	0.047	1.420
0.25	0.125	0.011	0.637	1.215	0.005	0.237	1.657
0.50	0.375	0.006	0.347	1.563	0.008	0.379	2.036
0.75	0.625	0.009	0.521	2.083	0.004	0.189	2.225
1.00	0.875	0.000	0.000	2.083	0.018	0.852	3.078
1.25	1.125	0.003	0.174	2.257	0.006	0.284	3.362
1.50	1.375	0.005	0.289	2.546	0.088	4.167	7.528
1.75	1.625	0.000	0.000	2.546	0.077	3.646	11.174
2.00	1.875	0.303	17.535	20.081	0.159	7.528	18.703
2.25	2.125	0.000	0.000	20.081	0.000	0.000	18.703
2.50	2.375	0.000	0.000	20.081	0.000	0.000	18.703
2.75	2.625	0.450	26.042	46.123	0.340	16.098	34.801
3.00	2.875	0.692	40.046	86.169	0.943	44.650	79.451
3.25	3.125	0.181	10.475	96.644	0.364	17.235	96.686
3.50	3.375	0.034	1.968	98.611	0.052	2.462	99.148
3.75	3.625	0.024	1.389	100.000	0.003	0.142	99.290
4.00	3.875	0.000	0.000	100.000	0.015	0.710	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: DU-10-BB

Total Duplicate Digested Mass: 48.537 grams
% Silica in Duplicate: 97.3 %
Total Original Digested Mass: 53.899 grams
% Silica in Original: 97.4 %

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	0.011	0.020	0.020
-1.25	-1.375	0.000	0.000	0.000	0.000	0.000	0.020
-1.00	-1.125	0.000	0.000	0.000	0.000	0.000	0.020
-0.75	-0.875	0.000	0.000	0.000	0.000	0.000	0.020
-0.50	-0.625	0.000	0.000	0.000	0.000	0.000	0.020
-0.25	-0.375	0.000	0.000	0.000	0.003	0.006	0.026
0.00	-0.125	0.011	0.023	0.023	0.005	0.009	0.035
0.25	0.125	0.006	0.012	0.035	0.007	0.013	0.048
0.50	0.375	0.007	0.014	0.049	0.012	0.022	0.071
0.75	0.625	0.026	0.054	0.103	0.028	0.052	0.122
1.00	0.875	0.156	0.321	0.424	0.184	0.341	0.464
1.25	1.125	0.294	0.606	1.030	0.593	1.100	1.564
1.50	1.375	0.753	1.551	2.582	1.709	3.171	4.735
1.75	1.625	1.571	3.237	5.818	3.017	5.598	10.332
2.00	1.875	3.078	6.342	12.160	4.211	7.813	18.145
2.25	2.125	5.749	11.845	24.004	6.643	12.325	30.470
2.50	2.375	11.331	23.345	47.349	12.688	23.540	54.010
2.75	2.625	15.422	31.774	79.123	15.514	28.783	82.794
3.00	2.875	7.294	15.028	94.151	6.798	12.612	95.406
3.25	3.125	1.790	3.688	97.839	1.527	2.833	98.239
3.50	3.375	0.580	1.195	99.034	0.526	0.976	99.215
3.75	3.625	0.316	0.651	99.685	0.290	0.538	99.753
4.00	3.875	0.117	0.241	99.926	0.099	0.184	99.937
5.00	4.500	0.000	0.000	99.926	0.000	0.000	99.937
5.00	4.500	0.036	0.074	100.000	0.034	0.063	100.000

