

# Quality Control Statistical Summary

Onshore Grab Sample: DU-16-MB

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

Latitude: 30° 26' 4.1"  
 Longitude: 81° 24' 26.7"  
 Datum: WGS 84

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	2.9594	phi (0.1286 mm)	2.9737	phi (0.1273 mm)
Standard Dev:	0.3255	phi-units (0.798 mm)	0.3343	phi-units (0.7932 mm)
Skewness:	0.5014	dimensionless	0.7393	dimensionless
Kurtosis:	6.9204	dimensionless	5.3485	dimensionless
5th Moment:	-2.6368	dimensionless	9.0969	dimensionless
6th Moment:	195.2200	dimensionless	73.4922	dimensionless
RARD*:	0.1100	dimensionless	0.1124	dimensionless
Median:	2.7984	phi (0.1437 mm)	2.8040	phi (0.1432 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	3.0290	phi (0.1225 mm)	3.0995	phi (0.1167 mm)
Standard Dev:	0.4297	phi-units (0.7424 mm)	0.3699	phi-units (0.7738 mm)
Skewness:	-1.1131	dimensionless	-0.5101	dimensionless
Kurtosis:	12.8400	dimensionless	10.1892	dimensionless
5th Moment:	-50.6219	dimensionless	-9.8405	dimensionless
6th Moment:	399.4001	dimensionless	168.9870	dimensionless
RARD*:	0.1419	dimensionless	0.1194	dimensionless
Median:	2.9560	phi (0.1289 mm)	2.9928	phi (0.1256 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	2.9735	phi (0.1273 mm)	2.9536	phi (0.1291 mm)
Standard Dev:	0.3406	phi-units (0.7897 mm)	0.3307	phi-units (0.7952 mm)
Skewness:	0.7510	dimensionless	0.8830	dimensionless
Kurtosis:	5.3869	dimensionless	4.9108	dimensionless
5th Moment:	5.2106	dimensionless	10.5045	dimensionless
6th Moment:	93.8884	dimensionless	61.4680	dimensionless
RARD*:	0.1145	dimensionless	0.1120	dimensionless
Median:	2.7993	phi (0.1437 mm)	2.7821	phi (0.1454 mm)

Additional Data	
<b>Total Fines</b>	
Original:	0.69 %
Duplicate:	1.46 %
<b>Total Carbonates</b>	
Original:	3.91 %
Duplicate:	4.23 %

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 $mm = 2^{\sqrt{-\phi}}$	
<b>* Reciprocal Absolute Relative Dispersion (RARD) Scale</b>	
< 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)

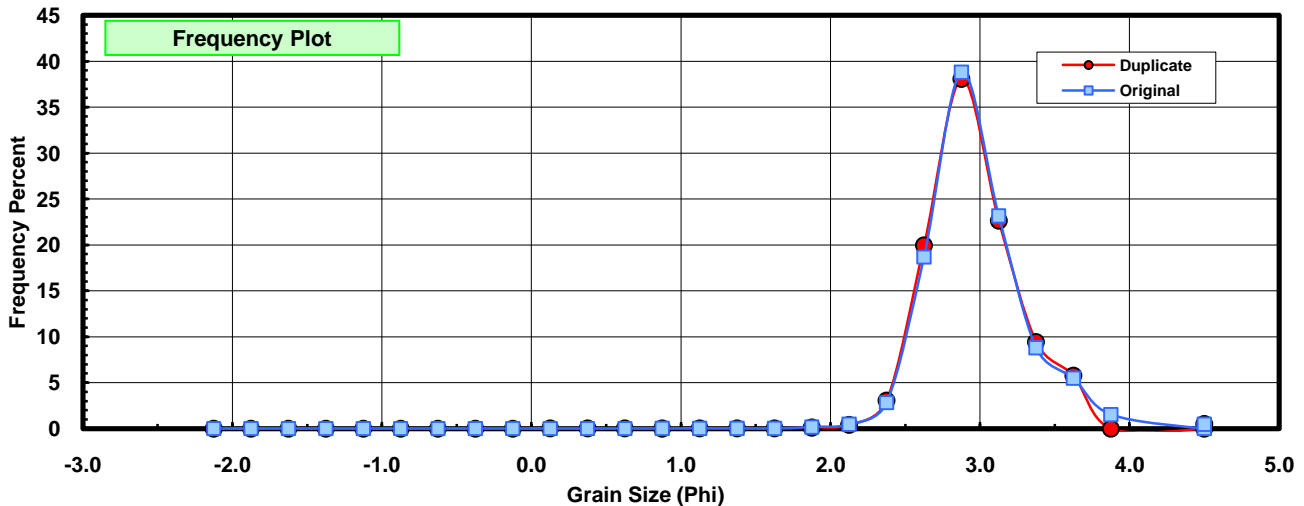
# Pre-Digestion Grain Size Distribution

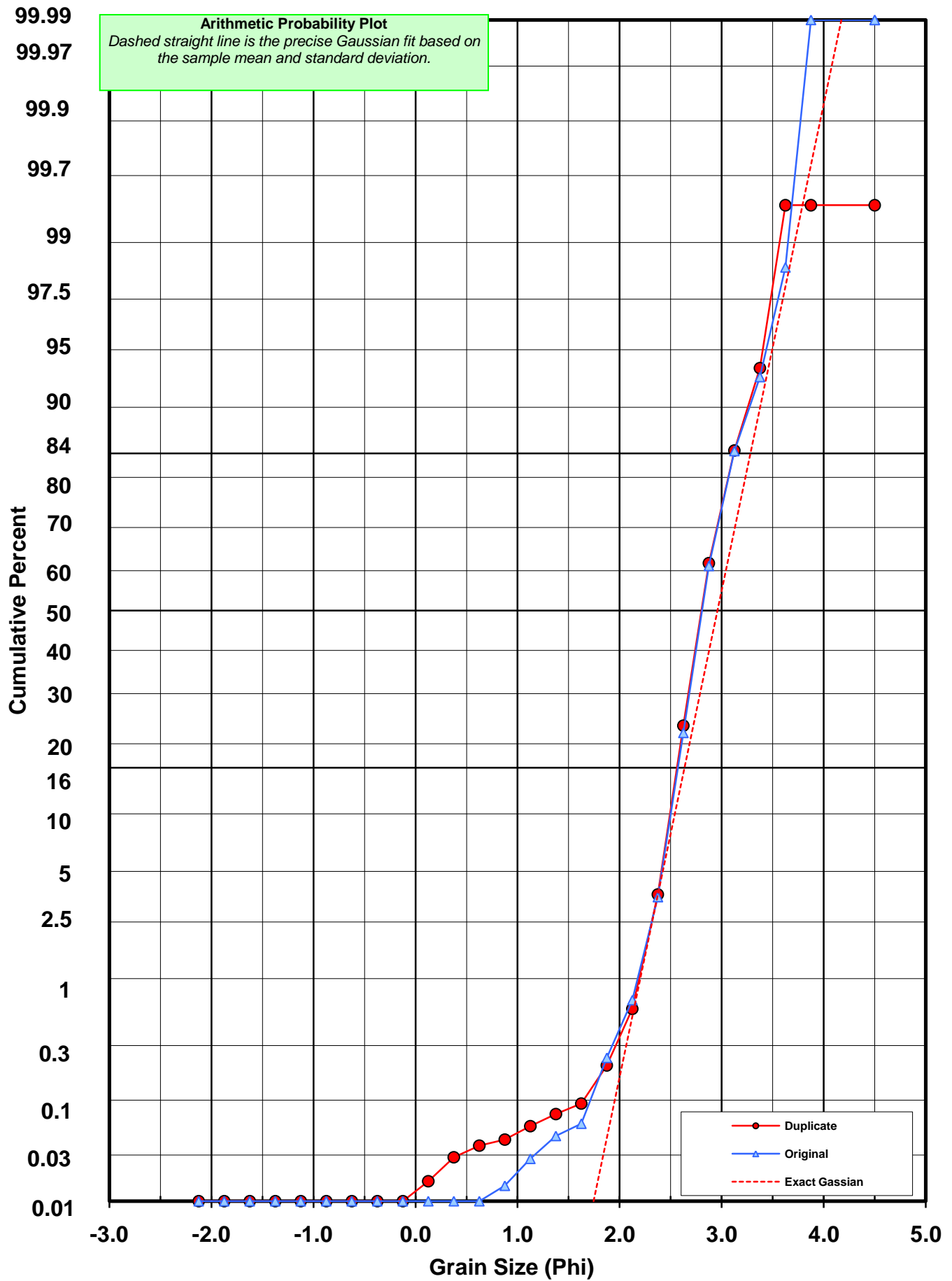
Onshore Grab Sample: DU-16-MB

Total Duplicate Sample Mass: 54.708 grams

Total Original Sample Mass: 57.141 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	0.000	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	0.000	0.000	0.000	0.000	0.000	0.000
0.00	-0.125	0.000	0.000	0.000	0.000	0.000	0.000
0.25	0.125	0.008	0.015	0.015	0.000	0.000	0.000
0.50	0.375	0.008	0.015	0.029	0.000	0.000	0.000
0.75	0.625	0.005	0.009	0.038	0.000	0.000	0.000
1.00	0.875	0.003	0.005	0.044	0.007	0.012	0.012
1.25	1.125	0.008	0.015	0.058	0.009	0.016	0.028
1.50	1.375	0.009	0.016	0.075	0.011	0.019	0.047
1.75	1.625	0.010	0.018	0.093	0.008	0.014	0.062
2.00	1.875	0.059	0.108	0.201	0.098	0.172	0.234
2.25	2.125	0.217	0.397	0.598	0.265	0.466	0.700
2.50	2.375	1.670	3.053	3.650	1.607	2.826	3.526
2.75	2.625	10.909	19.940	23.591	10.622	18.679	22.205
3.00	2.875	20.829	38.073	61.664	22.070	38.811	61.015
3.25	3.125	12.375	22.620	84.284	13.175	23.169	84.184
3.50	3.375	5.161	9.434	93.718	5.008	8.807	92.991
3.75	3.625	3.150	5.758	99.475	3.117	5.481	98.472
4.00	3.875	0.000	0.000	99.475	0.869	1.528	100.000
5.00	4.500	0.000	0.000	99.475	0.000	0.000	100.000
5.00	4.500	0.287	0.525	100.000	0.275	0.484	100.484



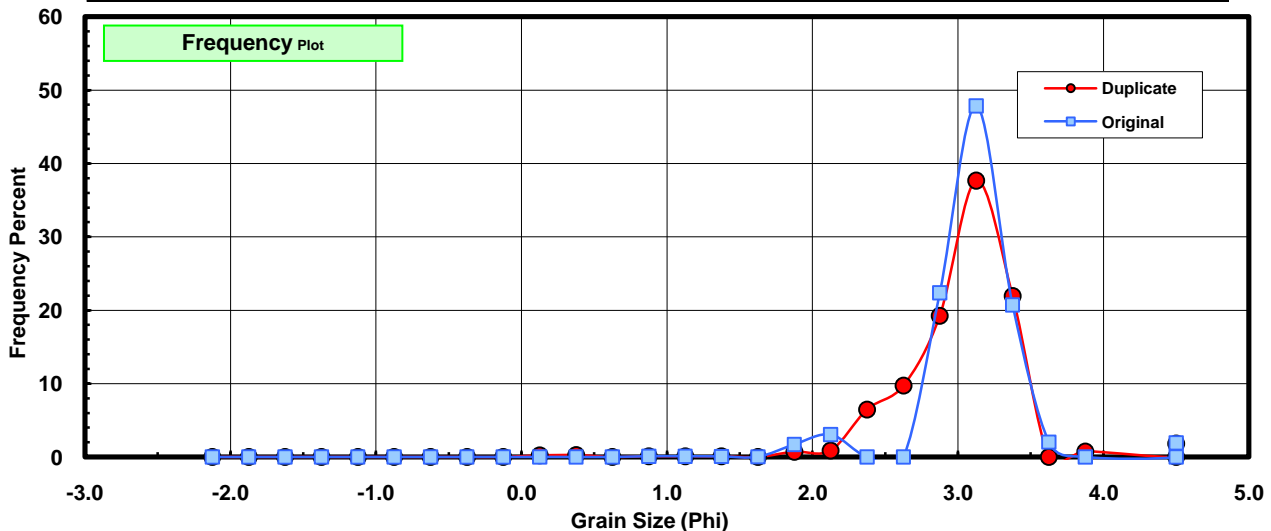


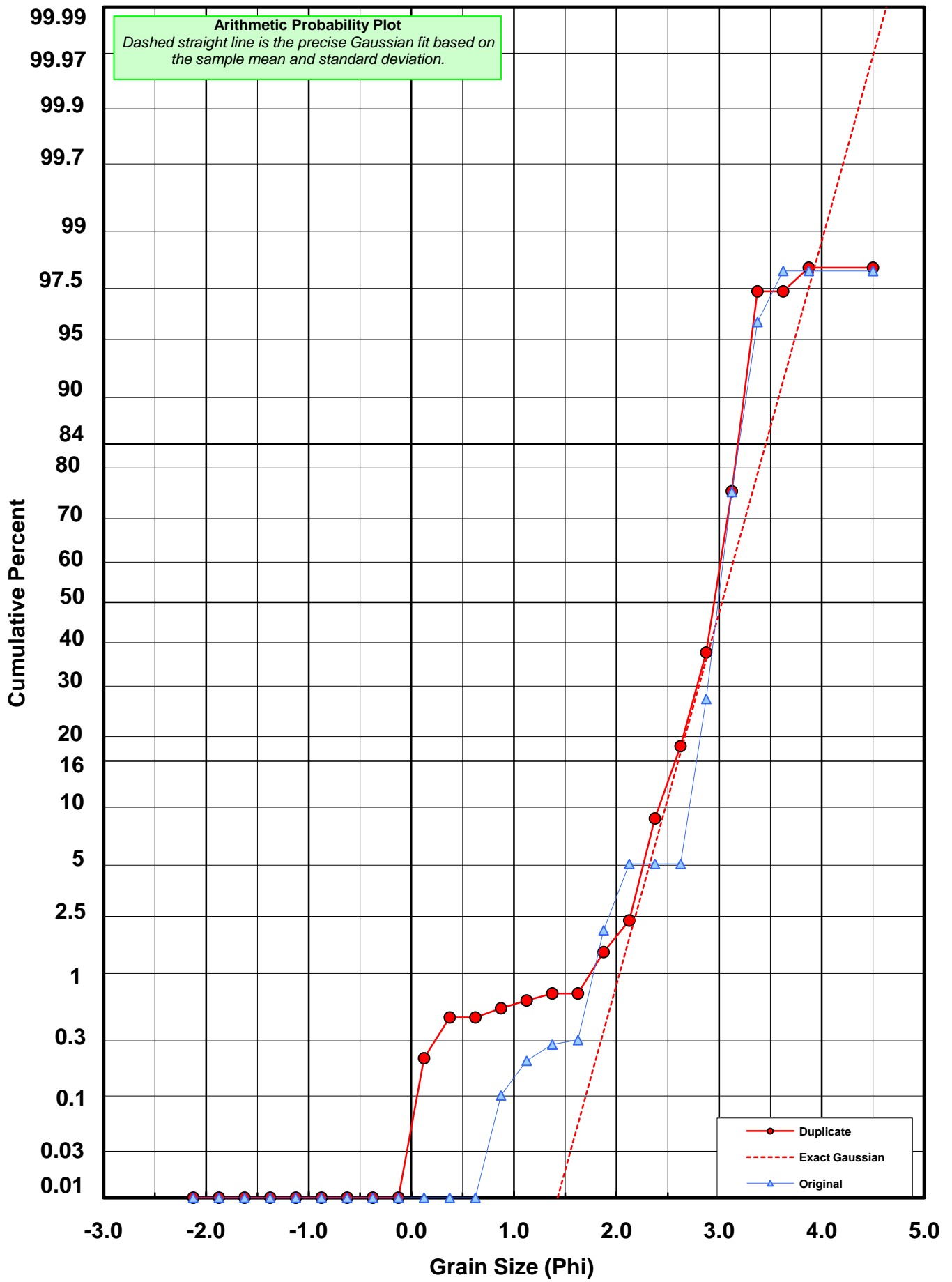
# Carbonate Grain Size Distribution

Onshore Grab Sample: DU-16-MB

**Total Duplicate Carbonate Mass:** 2.363 grams  
**% Carbonate in Duplicate:** 4.2 %  
**Total Original Carbonate Mass:** 3.970 grams  
**% Carbonate in Original:** 3.9 %

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	0.000	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	0.000	0.000	0.000	0.000	0.000	0.000
0.00	-0.125	0.000	0.000	0.000	0.000	0.000	0.000
0.25	0.125	0.005	0.212	0.212	0.000	0.000	0.000
0.50	0.375	0.006	0.254	0.466	0.000	0.000	0.000
0.75	0.625	0.000	0.000	0.466	0.000	0.000	0.000
1.00	0.875	0.002	0.085	0.550	0.004	0.101	0.101
1.25	1.125	0.002	0.085	0.635	0.004	0.101	0.202
1.50	1.375	0.002	0.085	0.719	0.003	0.076	0.277
1.75	1.625	0.000	0.000	0.719	0.001	0.025	0.302
2.00	1.875	0.017	0.719	1.439	0.068	1.713	2.015
2.25	2.125	0.021	0.889	2.328	0.121	3.048	5.063
2.50	2.375	0.153	6.475	8.802	0.000	0.000	5.063
2.75	2.625	0.230	9.733	18.536	0.000	0.000	5.063
3.00	2.875	0.455	19.255	37.791	0.889	22.393	27.456
3.25	3.125	0.890	37.664	75.455	1.900	47.859	75.315
3.50	3.375	0.519	21.964	97.419	0.823	20.730	96.045
3.75	3.625	0.000	0.000	97.419	0.081	2.040	98.086
4.00	3.875	0.018	0.762	98.180	0.000	0.000	98.086
5.00	4.500	0.000	0.000	98.180	0.000	0.000	98.086
5.00	4.500	0.043	1.820	100.000	0.076	1.914	100.000





# Post-Digestion Grain Size Distribution

Onshore Grab Sample: DU-16-MB

**Total Duplicate Digested Mass:** 53.348 grams  
**% Silica in Duplicate:** 95.8 %  
**Total Original Digested Mass:** 54.909 grams  
**% Silica in Original:** 96.1 %

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	0.000	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	0.000	0.000	0.000	0.000	0.000	0.000
0.00	-0.125	0.000	0.000	0.000	0.000	0.000	0.000
0.25	0.125	0.003	0.006	0.006	0.000	0.000	0.000
0.50	0.375	0.002	0.004	0.009	0.000	0.000	0.000
0.75	0.625	0.005	0.009	0.019	0.000	0.000	0.000
1.00	0.875	0.001	0.002	0.021	0.003	0.005	0.005
1.25	1.125	0.006	0.011	0.032	0.005	0.009	0.015
1.50	1.375	0.007	0.013	0.045	0.008	0.015	0.029
1.75	1.625	0.011	0.021	0.066	0.007	0.013	0.042
2.00	1.875	0.042	0.079	0.144	0.030	0.055	0.097
2.25	2.125	0.196	0.367	0.512	0.144	0.262	0.359
2.50	2.375	1.517	2.844	3.355	1.708	3.111	3.469
2.75	2.625	10.679	20.018	23.373	12.237	22.286	25.755
3.00	2.875	20.374	38.191	61.564	21.181	38.575	64.330
3.25	3.125	11.485	21.528	83.092	11.275	20.534	84.864
3.50	3.375	4.642	8.701	91.794	4.185	7.622	92.486
3.75	3.625	3.156	5.916	97.709	3.036	5.529	98.015
4.00	3.875	0.978	1.833	99.543	0.891	1.623	99.638
5.00	4.500	0.000	0.000	99.543	0.000	0.000	99.638
5.00	4.500	0.244	0.457	100.000	0.199	0.362	100.000

