

# Quality Control Statistical Summary

Onshore Grab Sample: DU-08-MB

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

Latitude: 30° 17' 21.7"  
 Longitude: 81° 23' 16.8"  
 Datum: WGS 84

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	2.4002	phi (0.1894 mm)	2.3205	phi (0.2002 mm)
Standard Dev:	0.4189	phi-units (0.748 mm)	0.4668	phi-units (0.7236 mm)
Skewness:	-0.5157	dimensionless	-0.4431	dimensionless
Kurtosis:	4.1782	dimensionless	3.4318	dimensionless
5th Moment:	-5.7312	dimensionless	-2.4949	dimensionless
6th Moment:	45.9107	dimensionless	23.2856	dimensionless
RARD*:	0.1745	dimensionless	0.2012	dimensionless
Median:	2.3238	phi (0.1997 mm)	2.2588	phi (0.2089 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	2.1929	phi (0.2187 mm)	2.3029	phi (0.2027 mm)
Standard Dev:	0.5935	phi-units (0.6627 mm)	0.6591	phi-units (0.6333 mm)
Skewness:	0.3079	dimensionless	-0.8032	dimensionless
Kurtosis:	4.5859	dimensionless	3.1831	dimensionless
5th Moment:	-3.9900	dimensionless	-4.8583	dimensionless
6th Moment:	49.0177	dimensionless	20.3671	dimensionless
RARD*:	0.2707	dimensionless	0.2862	dimensionless
Median:	1.9399	phi (0.2606 mm)	2.4236	phi (0.1864 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	2.4097	phi (0.1882 mm)	2.3200	phi (0.2003 mm)
Standard Dev:	0.4141	phi-units (0.7505 mm)	0.4595	phi-units (0.7272 mm)
Skewness:	-0.4417	dimensionless	-0.3959	dimensionless
Kurtosis:	4.2184	dimensionless	3.3669	dimensionless
5th Moment:	-3.1032	dimensionless	-1.8090	dimensionless
6th Moment:	37.6984	dimensionless	21.2473	dimensionless
RARD*:	0.1718	dimensionless	0.1981	dimensionless
Median:	2.3305	phi (0.1988 mm)	2.2527	phi (0.2098 mm)

Additional Data	
<b>Total Fines</b>	
Original:	0.98 %
Duplicate:	1.29 %
<b>Total Carbonates</b>	
Original:	2.06 %
Duplicate:	2.1 %

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)

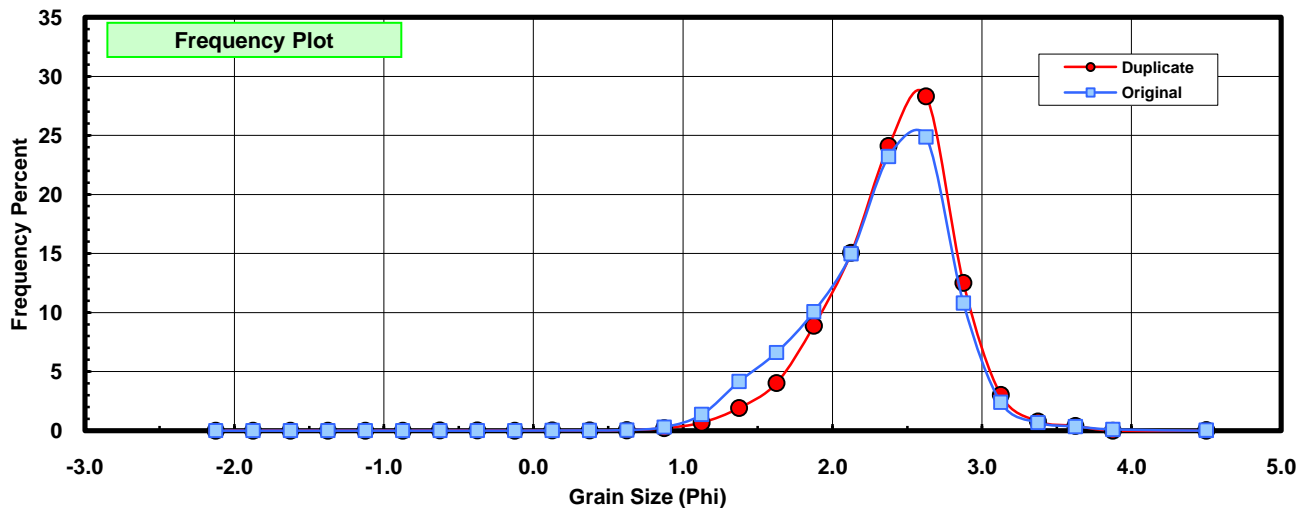
# Pre-Digestion Grain Size Distribution

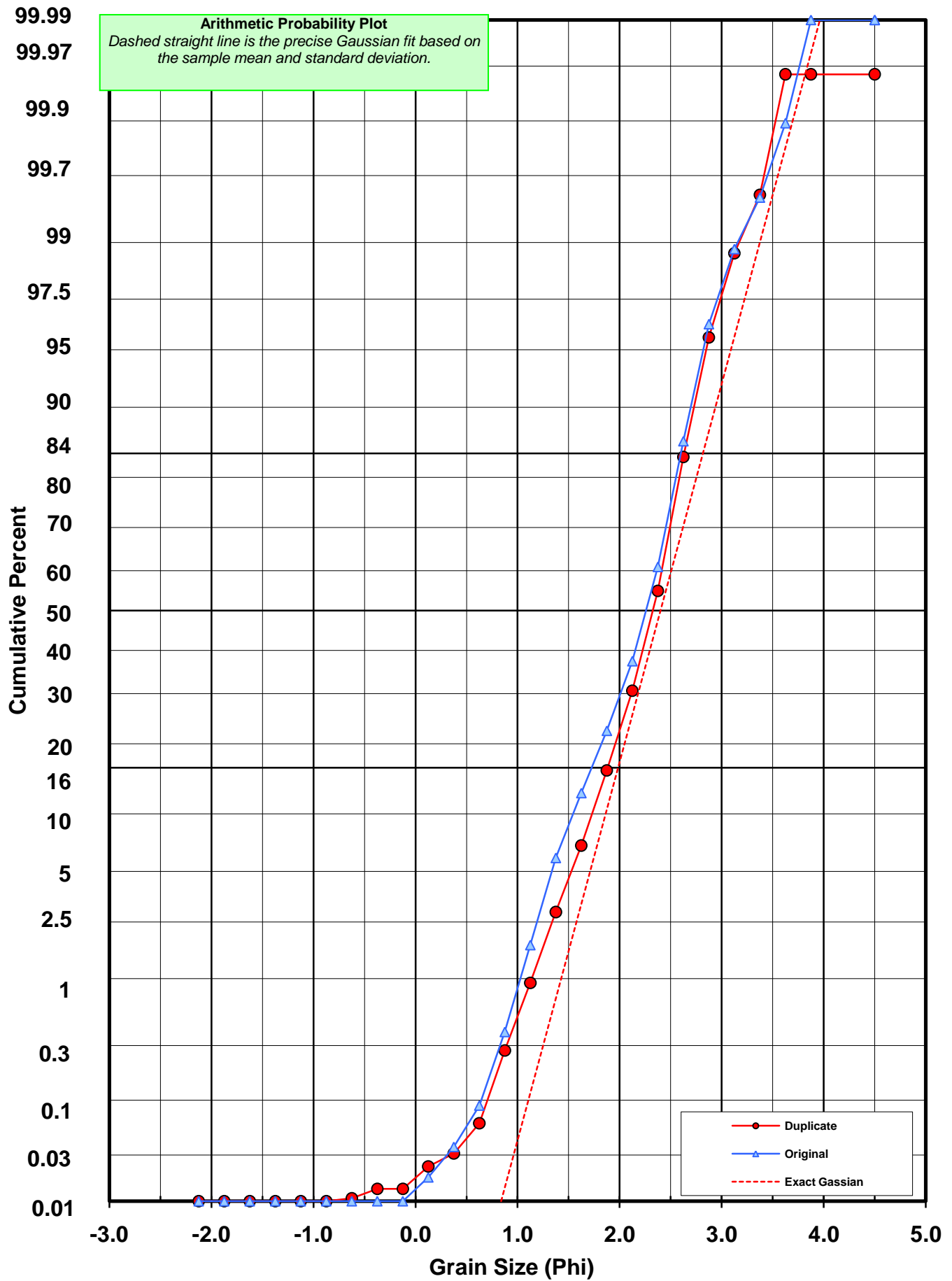
Onshore Grab Sample: DU-08-MB

Total Duplicate Sample Mass: 56.343 grams

Total Original Sample Mass: 53.658 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	0.003	0.005	0.005	0.000	0.000	0.000
-0.25	-0.375	0.003	0.005	0.011	0.000	0.000	0.000
0.00	-0.125	0.000	0.000	0.011	0.000	0.000	0.000
0.25	0.125	0.007	0.012	0.023	0.009	0.017	0.017
0.50	0.375	0.005	0.009	0.032	0.011	0.021	0.037
0.75	0.625	0.017	0.030	0.062	0.028	0.052	0.089
1.00	0.875	0.117	0.208	0.270	0.160	0.298	0.388
1.25	1.125	0.380	0.674	0.944	0.731	1.363	1.751
1.50	1.375	1.079	1.915	2.859	2.229	4.156	5.906
1.75	1.625	2.269	4.027	6.886	3.550	6.618	12.524
2.00	1.875	5.005	8.883	15.769	5.406	10.078	22.603
2.25	2.125	8.488	15.065	30.834	8.028	14.967	37.570
2.50	2.375	13.583	24.108	54.942	12.455	23.220	60.790
2.75	2.625	15.956	28.319	83.261	13.342	24.874	85.663
3.00	2.875	7.047	12.507	95.769	5.797	10.807	96.471
3.25	3.125	1.700	3.017	98.786	1.284	2.394	98.865
3.50	3.375	0.441	0.783	99.569	0.365	0.680	99.545
3.75	3.625	0.222	0.394	99.963	0.188	0.350	99.896
4.00	3.875	0.000	0.000	99.963	0.056	0.104	100.000
5.00	4.500	0.000	0.000	99.963	0.000	0.000	100.000
5.00	4.500	0.021	0.037	100.000	0.019	0.035	100.035



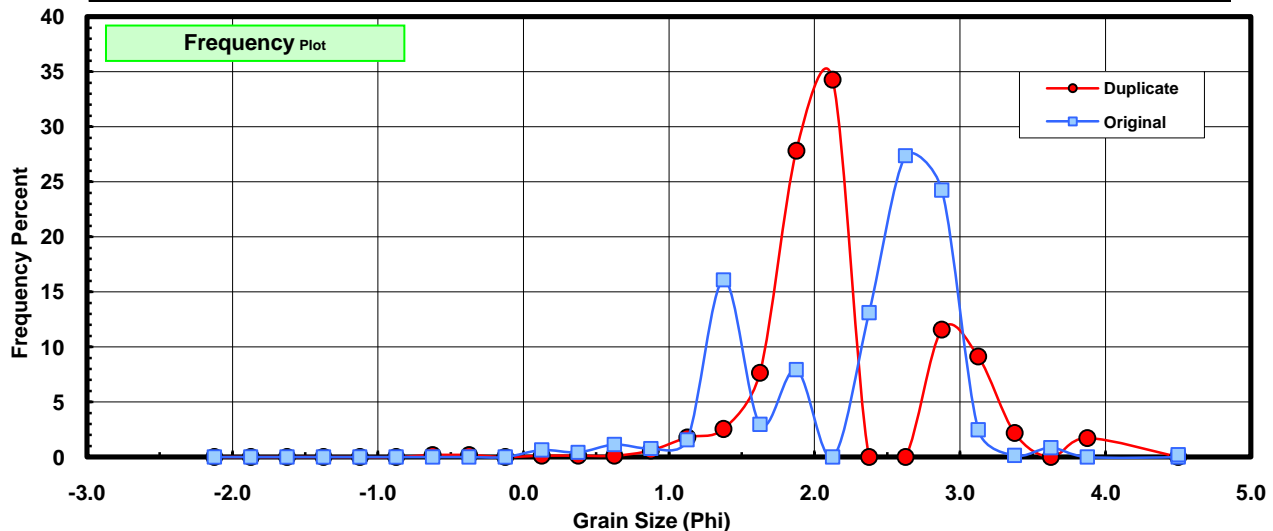


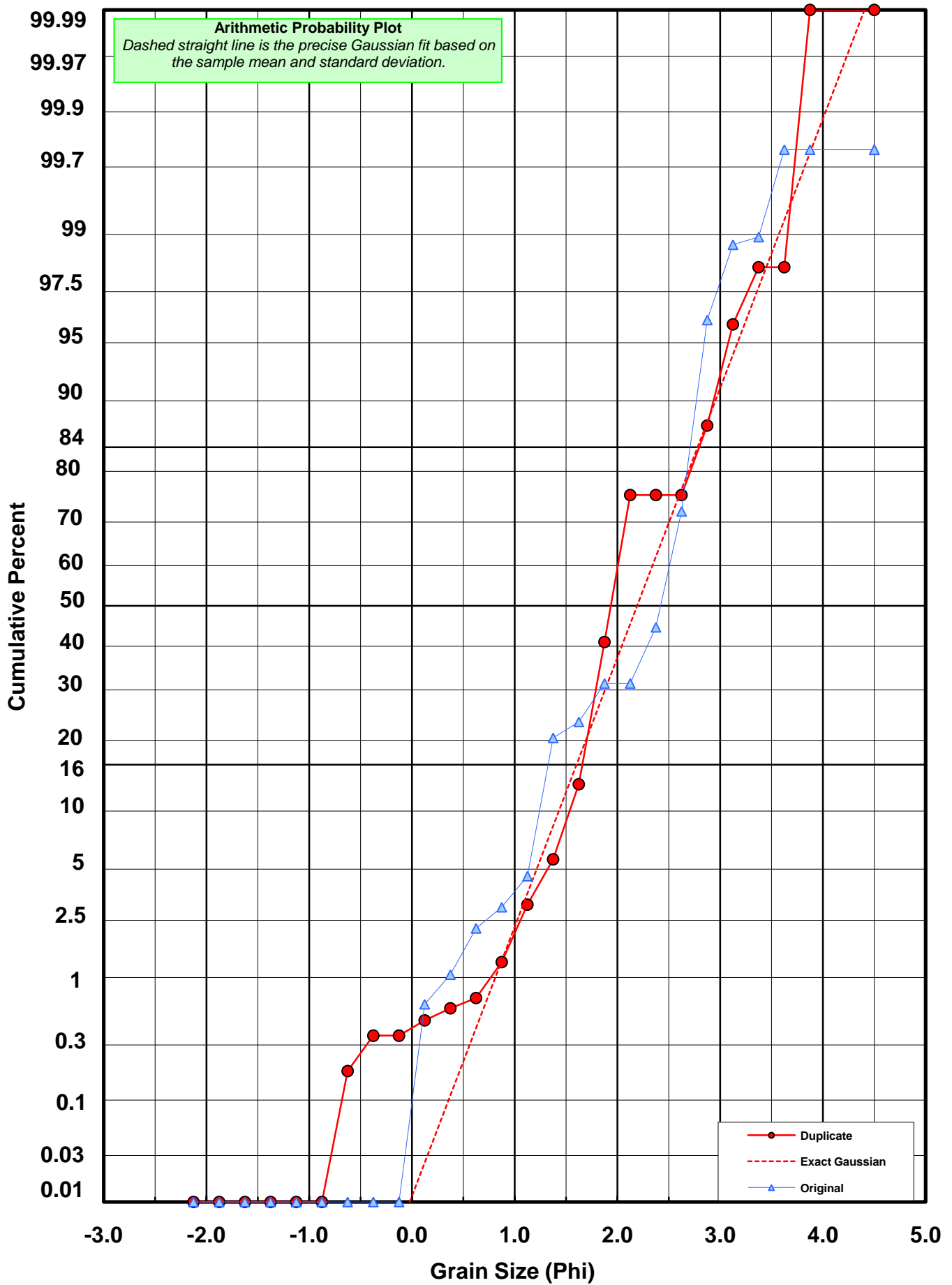
# Carbonate Grain Size Distribution

Onshore Grab Sample: DU-08-MB

**Total Duplicate Carbonate Mass:** 1.686 grams  
**% Carbonate in Duplicate:** 2.1 %  
**Total Original Carbonate Mass:** 1.410 grams  
**% Carbonate in Original:** 2.1 %

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	0.003	0.178	0.178	0.000	0.000	0.000
-0.25	-0.375	0.003	0.178	0.356	0.000	0.000	0.000
0.00	-0.125	0.000	0.000	0.356	0.000	0.000	0.000
0.25	0.125	0.002	0.119	0.474	0.009	0.638	0.638
0.50	0.375	0.002	0.119	0.593	0.006	0.426	1.064
0.75	0.625	0.002	0.119	0.712	0.016	1.135	2.199
1.00	0.875	0.010	0.593	1.305	0.011	0.780	2.979
1.25	1.125	0.030	1.779	3.084	0.022	1.560	4.539
1.50	1.375	0.043	2.550	5.635	0.227	16.099	20.638
1.75	1.625	0.129	7.651	13.286	0.042	2.979	23.617
2.00	1.875	0.469	27.817	41.103	0.112	7.943	31.560
2.25	2.125	0.578	34.282	75.386	0.000	0.000	31.560
2.50	2.375	0.000	0.000	75.386	0.185	13.121	44.681
2.75	2.625	0.000	0.000	75.386	0.386	27.376	72.057
3.00	2.875	0.195	11.566	86.951	0.342	24.255	96.312
3.25	3.125	0.154	9.134	96.085	0.035	2.482	98.794
3.50	3.375	0.037	2.195	98.280	0.002	0.142	98.936
3.75	3.625	0.000	0.000	98.280	0.012	0.851	99.787
4.00	3.875	0.029	1.720	100.000	0.000	0.000	99.787
5.00	4.500	0.000	0.000	100.000	0.000	0.000	99.787
5.00	4.500	0.000	0.000	100.000	0.003	0.213	100.000





# Post-Digestion Grain Size Distribution

Onshore Grab Sample: DU-08-MB

**Total Duplicate Digested Mass:** 55.265 grams  
**% Silica in Duplicate:** 97.9 %  
**Total Original Digested Mass:** 52.555 grams  
**% Silica in Original:** 97.9 %

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	0.005	0.009	0.009	0.000	0.000	0.000
0.50	0.375	0.003	0.005	0.014	0.005	0.010	0.010
0.75	0.625	0.015	0.027	0.042	0.012	0.023	0.032
1.00	0.875	0.107	0.194	0.235	0.149	0.284	0.316
1.25	1.125	0.350	0.633	0.869	0.709	1.349	1.665
1.50	1.375	1.036	1.875	2.743	2.002	3.809	5.474
1.75	1.625	2.140	3.872	6.615	3.508	6.675	12.149
2.00	1.875	4.536	8.208	14.823	5.294	10.073	22.222
2.25	2.125	7.910	14.313	29.136	8.329	15.848	38.071
2.50	2.375	14.029	25.385	54.521	12.270	23.347	61.418
2.75	2.625	15.996	28.944	83.465	12.956	24.652	86.070
3.00	2.875	6.852	12.398	95.864	5.455	10.380	96.449
3.25	3.125	1.546	2.797	98.661	1.249	2.377	98.826
3.50	3.375	0.404	0.731	99.392	0.363	0.691	99.517
3.75	3.625	0.235	0.425	99.817	0.176	0.335	99.852
4.00	3.875	0.078	0.141	99.958	0.062	0.118	99.970
5.00	4.500	0.000	0.000	99.958	0.000	0.000	99.970
5.00	4.500	0.023	0.042	100.000	0.016	0.030	100.000

