

Quality Control Statistical Summary

Onshore Grab Sample: MT-25-BB

Sample Taken By: D. Phelps
 Sample Taken On: 12/18/08
 County: Martin

Latitude: 26° 59' 0.5"
 Longitude: 80° 05' 5.1"
 Datum: WGS 84

Statistical Results: Pre-CaCO3		
	Duplicate	Original
Mean:	0.7253 phi (0.6049 mm)	0.5754 phi (0.6711 mm)
Standard Dev:	0.7235 phi-units (0.6056 mm)	0.8410 phi-units (0.5583 mm)
Skewness:	-2.1481 dimensionless	-1.8635 dimensionless
Kurtosis:	10.0250 dimensionless	7.1529 dimensionless
5th Moment:	-38.6007 dimensionless	-22.2037 dimensionless
6th Moment:	167.9575 dimensionless	78.6424 dimensionless
RARD*:	0.9976 dimensionless	1.4616 dimensionless
Median:	0.7227 phi (0.606 mm)	0.6645 phi (0.6309 mm)

Statistical Results: CaCO3		
	Duplicate	Original
Mean:	0.6361 phi (0.6434 mm)	0.4640 phi (0.725 mm)
Standard Dev:	0.7834 phi-units (0.581 mm)	0.8977 phi-units (0.5367 mm)
Skewness:	-2.0583 dimensionless	-1.7111 dimensionless
Kurtosis:	8.5054 dimensionless	5.9681 dimensionless
5th Moment:	-30.1828 dimensionless	-16.9768 dimensionless
6th Moment:	115.6393 dimensionless	53.3438 dimensionless
RARD*:	1.2315 dimensionless	1.9350 dimensionless
Median:	0.6760 phi (0.6259 mm)	0.5909 phi (0.6639 mm)

Statistical Results: Post-CaCO3		
	Duplicate	Original
Mean:	1.0313 phi (0.4893 mm)	1.0247 phi (0.4915 mm)
Standard Dev:	0.5175 phi-units (0.6986 mm)	0.5525 phi-units (0.6818 mm)
Skewness:	1.9146 dimensionless	2.0601 dimensionless
Kurtosis:	11.2228 dimensionless	11.3360 dimensionless
5th Moment:	53.4745 dimensionless	50.7341 dimensionless
6th Moment:	299.3670 dimensionless	262.0272 dimensionless
RARD*:	0.5018 dimensionless	0.5392 dimensionless
Median:	0.8439 phi (0.5571 mm)	0.8313 phi (0.562 mm)

Additional Data	
Total Fines	
Original:	0.18 %
Duplicate:	0.26 %
Total Carbonates	
Original:	77.67 %
Duplicate:	74.79 %

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)

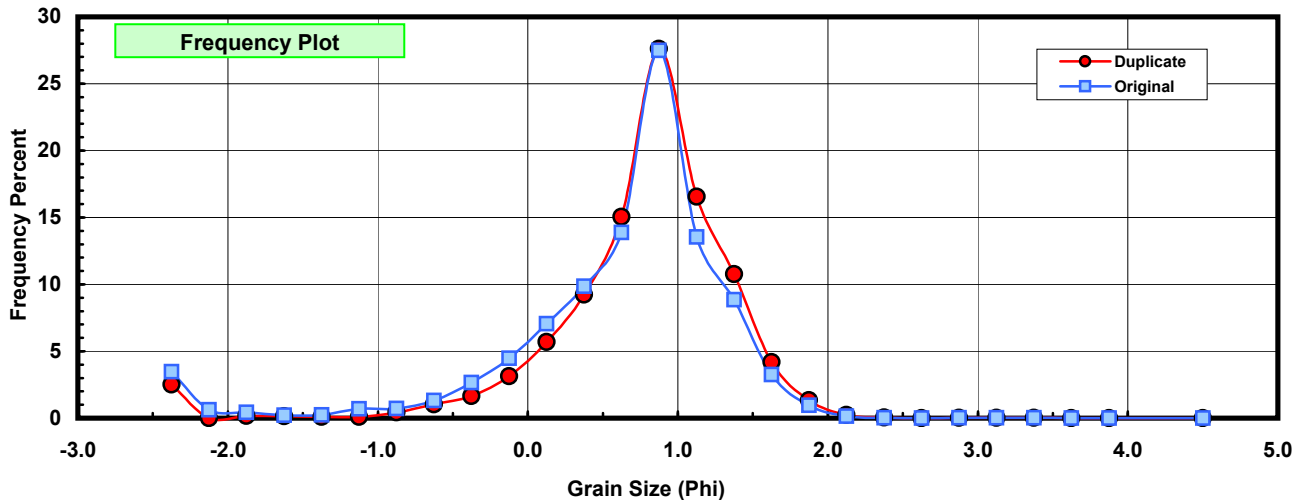
Pre-Digestion Grain Size Distribution

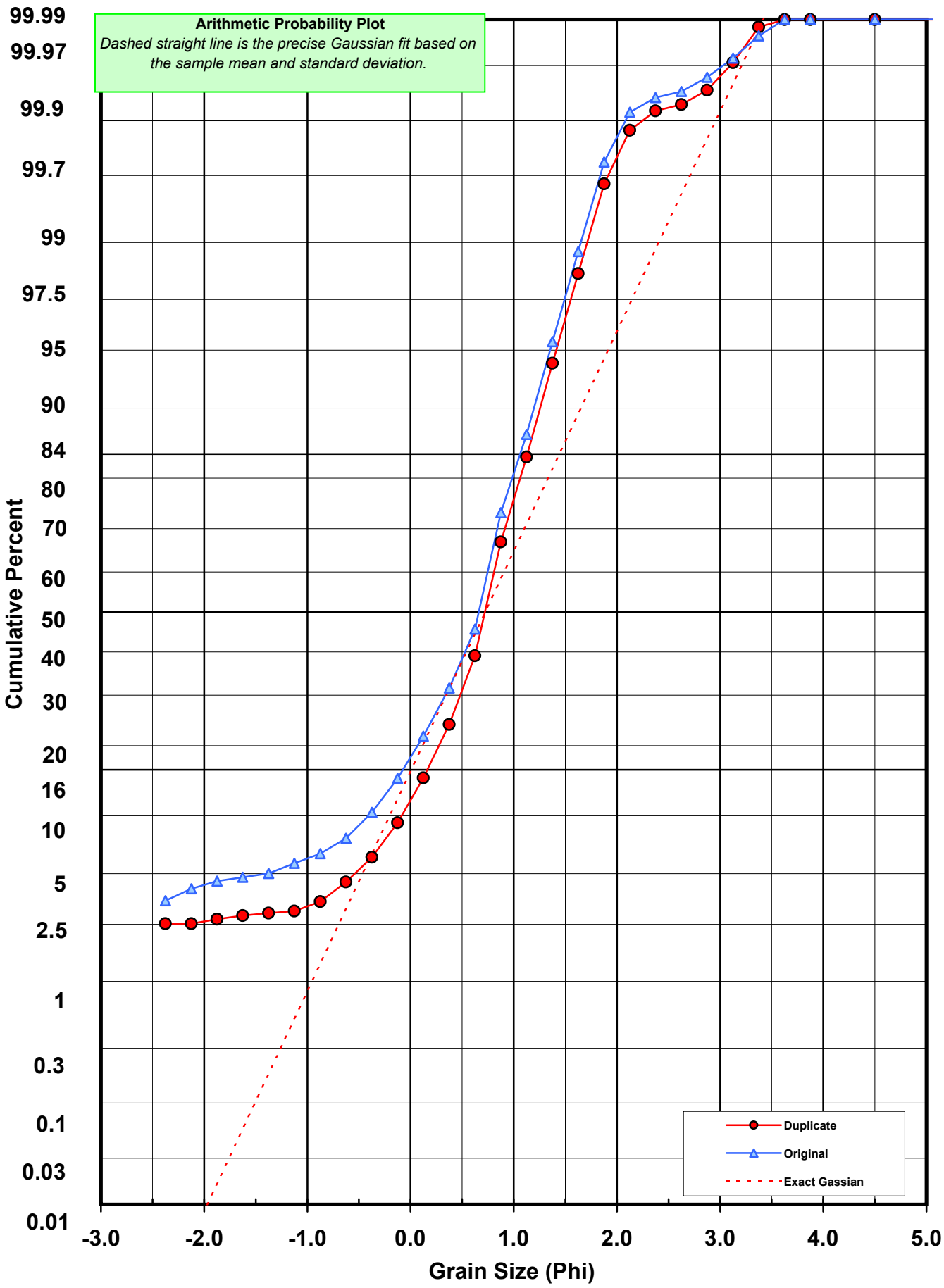
Onshore Grab Sample: MT-25-BB

Total Duplicate Sample Mass: 48.864 grams

Total Original Sample Mass: 54.731 grams

Sieve Size (phi)	Sieve Midpt (phi)	Weight of Dupl (grams)	Freq Weight %	Cumulative Weight %	Weight of Original (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	1.223	2.503	2.503	1.897	3.466	3.466
-2.00	-2.125	0.000	0.000	2.503	0.334	0.610	4.076
-1.75	-1.875	0.082	0.168	2.671	0.240	0.439	4.515
-1.50	-1.625	0.069	0.141	2.812	0.121	0.221	4.736
-1.25	-1.375	0.049	0.100	2.912	0.134	0.245	4.981
-1.00	-1.125	0.041	0.084	2.996	0.382	0.698	5.679
-0.75	-0.875	0.208	0.426	3.422	0.392	0.716	6.395
-0.50	-0.625	0.508	1.040	4.461	0.724	1.323	7.718
-0.25	-0.375	0.808	1.654	6.115	1.453	2.655	10.373
0.00	-0.125	1.531	3.133	9.248	2.449	4.475	14.847
0.25	0.125	2.778	5.685	14.933	3.869	7.069	21.917
0.50	0.375	4.512	9.234	24.167	5.398	9.863	31.780
0.75	0.625	7.351	15.044	39.211	7.595	13.877	45.657
1.00	0.875	13.494	27.615	66.826	15.050	27.499	73.155
1.25	1.125	8.088	16.552	83.378	7.417	13.552	86.707
1.50	1.375	5.257	10.758	94.137	4.847	8.856	95.564
1.75	1.625	2.045	4.185	98.322	1.782	3.256	98.820
2.00	1.875	0.649	1.328	99.650	0.521	0.952	99.772
2.25	2.125	0.112	0.229	99.879	0.079	0.144	99.916
2.50	2.375	0.019	0.039	99.918	0.012	0.022	99.938
2.75	2.625	0.005	0.010	99.928	0.004	0.007	99.945
3.00	2.875	0.009	0.018	99.947	0.008	0.015	99.960
3.25	3.125	0.012	0.025	99.971	0.008	0.015	99.974
3.50	3.375	0.010	0.020	99.992	0.007	0.013	99.987
3.75	3.625	0.003	0.006	99.998	0.006	0.011	99.998
4.00	3.875	0.000	0.000	99.998	0.001	0.002	100.000
5.00	4.500	0.001	0.002	100.000	0.001	0.002	100.002



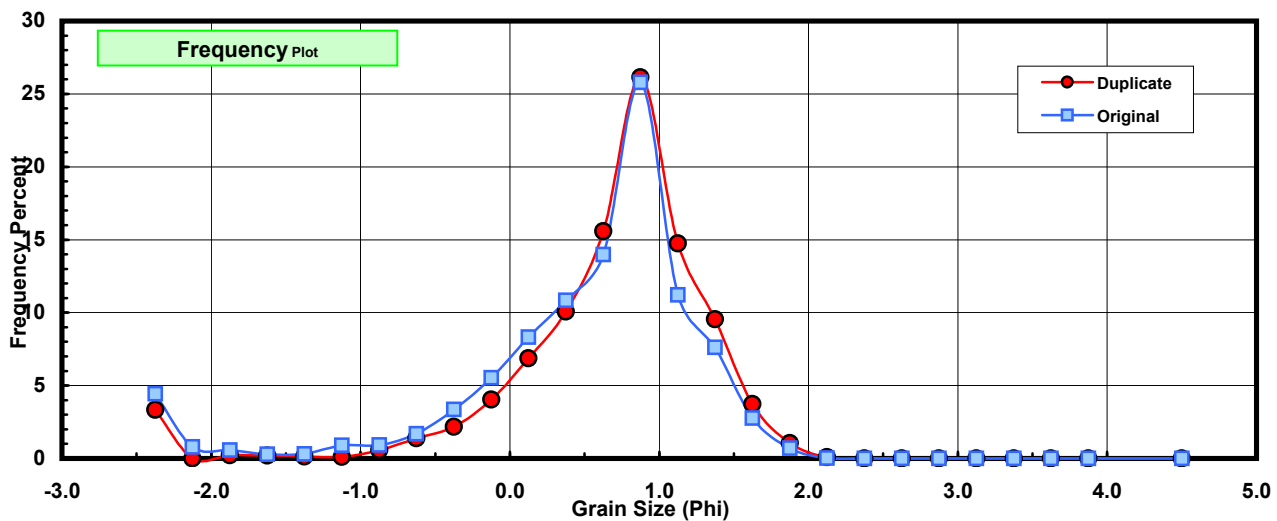


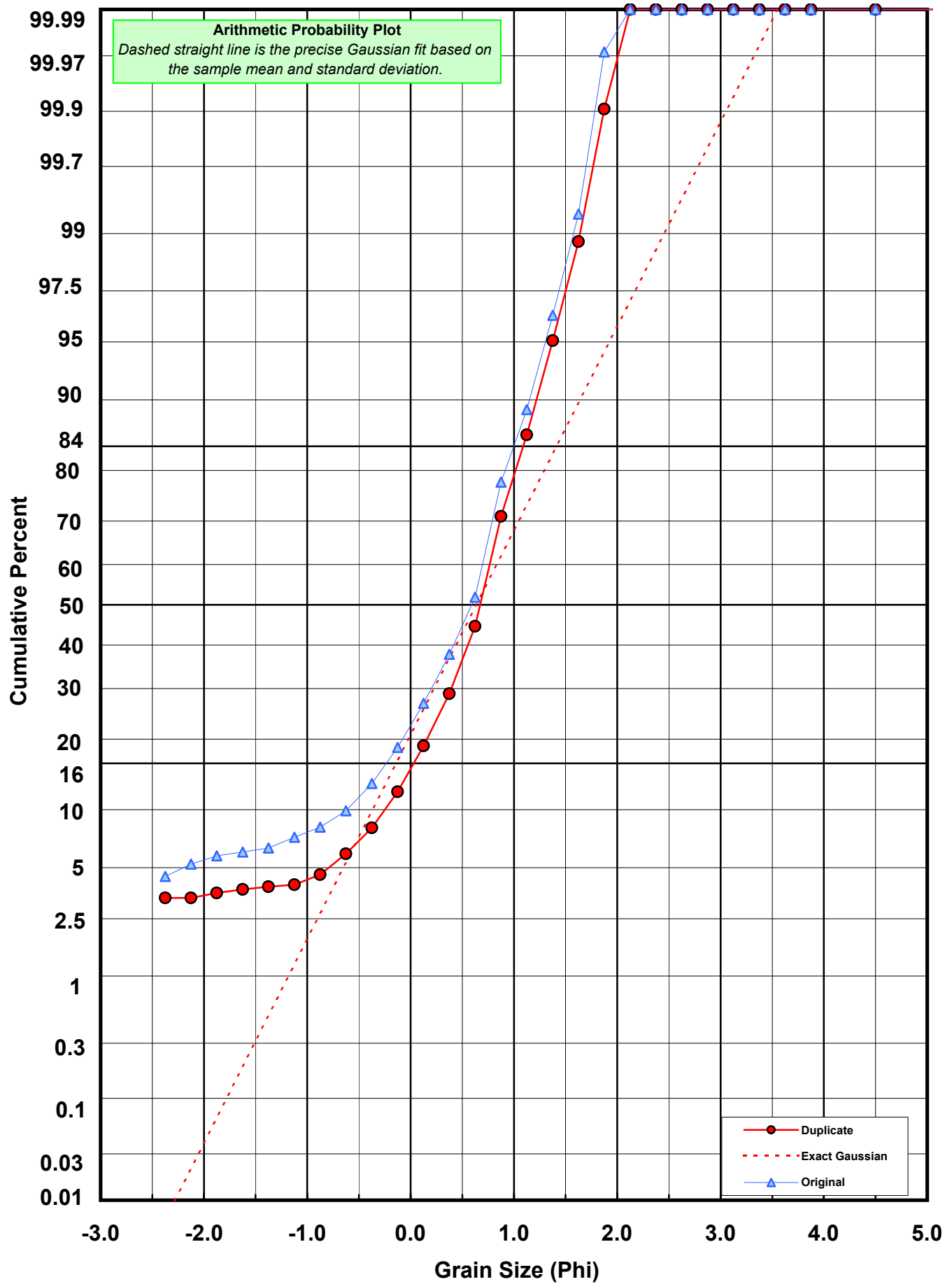
Carbonate Grain Size Distribution

Onshore Grab Sample: MT-25-BB

Total Duplicate Carbonate Mass: 36.735 grams
% Carbonate in Duplicate: 74.8 %
Total Original Carbonate Mass: 42.768 grams
% Carbonate in Original: 77.7 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight of Dupl (grams)	Freq Weight %	Cumulative Weight %	Weight of Original (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	1.223	3.329	3.329	1.897	4.436	4.436
-2.00	-2.125	0.000	0.000	3.329	0.334	0.781	5.217
-1.75	-1.875	0.082	0.223	3.552	0.240	0.561	5.778
-1.50	-1.625	0.069	0.188	3.740	0.121	0.283	6.061
-1.25	-1.375	0.049	0.133	3.874	0.134	0.313	6.374
-1.00	-1.125	0.041	0.112	3.985	0.382	0.893	7.267
-0.75	-0.875	0.208	0.566	4.552	0.392	0.917	8.184
-0.50	-0.625	0.508	1.383	5.934	0.724	1.693	9.877
-0.25	-0.375	0.800	2.178	8.112	1.438	3.362	13.239
0.00	-0.125	1.481	4.032	12.144	2.361	5.520	18.759
0.25	0.125	2.524	6.871	19.015	3.556	8.315	27.074
0.50	0.375	3.701	10.075	29.089	4.638	10.845	37.919
0.75	0.625	5.724	15.582	44.671	5.982	13.987	51.906
1.00	0.875	9.601	26.136	70.807	11.024	25.776	77.682
1.25	1.125	5.417	14.746	85.553	4.796	11.214	88.896
1.50	1.375	3.510	9.555	95.108	3.255	7.611	96.507
1.75	1.625	1.372	3.735	98.843	1.184	2.768	99.275
2.00	1.875	0.390	1.062	99.905	0.298	0.697	99.972
2.25	2.125	0.035	0.095	100.000	0.012	0.028	100.000
2.50	2.375	0.000	0.000	100.000	0.000	0.000	100.000
2.75	2.625	0.000	0.000	100.000	0.000	0.000	100.000
3.00	2.875	0.000	0.000	100.000	0.000	0.000	100.000
3.25	3.125	0.000	0.000	100.000	0.000	0.000	100.000
3.50	3.375	0.000	0.000	100.000	0.000	0.000	100.000
3.75	3.625	0.000	0.000	100.000	0.000	0.000	100.000
4.00	3.875	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: MT-25-BB

Total Duplicate Digested Mass: 12.318 grams
% Silica in Duplicate: 25.2 %
Total Original Digested Mass: 12.224 grams
% Silica in Original: 22.3 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %	Weight of Original (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000	0.000	0.000	0.000
-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	0.008	0.065	0.065	0.015	0.123	0.123
0.00	-0.125	0.050	0.406	0.471	0.088	0.720	0.843
0.25	0.125	0.254	2.062	2.533	0.313	2.561	3.403
0.50	0.375	0.811	6.584	9.117	0.760	6.217	9.620
0.75	0.625	1.627	13.208	22.325	1.613	13.195	22.816
1.00	0.875	3.893	31.604	53.929	4.026	32.935	55.751
1.25	1.125	2.671	21.684	75.613	2.621	21.441	77.192
1.50	1.375	1.747	14.182	89.795	1.592	13.024	90.216
1.75	1.625	0.673	5.464	95.259	0.598	4.892	95.108
2.00	1.875	0.259	2.103	97.362	0.223	1.824	96.932
2.25	2.125	0.077	0.625	97.987	0.067	0.548	97.480
2.50	2.375	0.026	0.211	98.198	0.025	0.205	97.685
2.75	2.625	0.020	0.162	98.360	0.021	0.172	97.857
3.00	2.875	0.034	0.276	98.636	0.035	0.286	98.143
3.25	3.125	0.049	0.398	99.034	0.056	0.458	98.601
3.50	3.375	0.049	0.398	99.432	0.065	0.532	99.133
3.75	3.625	0.038	0.308	99.740	0.055	0.450	99.583
4.00	3.875	0.014	0.114	99.854	0.034	0.278	99.861
5.00	4.500	0.018	0.146	100.000	0.017	0.139	100.000

