

Quality Control Statistical Summary

Onshore Grab Sample: MT-14-BB

Sample Taken By: D. Phelps Latitude: 27° 06' 34.3"
 Sample Taken On: 12/17/08 Longitude: 80° 08' 17.6"
 County: Martin Datum: WGS 84

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	0.4443	phi (0.7349 mm)	0.3283	phi (0.7965 mm)
Standard Dev:	1.1892	phi-units (0.4385 mm)	1.2207	phi-units (0.4291 mm)
Skewness:	-0.1903	dimensionless	-0.3164	dimensionless
Kurtosis:	2.4457	dimensionless	2.7150	dimensionless
5th Moment:	-1.1407	dimensionless	-1.5760	dimensionless
6th Moment:	8.8271	dimensionless	10.7323	dimensionless
RARD*:	2.6765	dimensionless	3.7189	dimensionless
Median:	0.4129	phi (0.7511 mm)	0.3485	phi (0.7854 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	0.0796	phi (0.9463 mm)	-0.0218	phi (1.0152 mm)
Standard Dev:	1.0974	phi-units (0.4674 mm)	1.1289	phi-units (0.4573 mm)
Skewness:	-0.0141	dimensionless	-0.2798	dimensionless
Kurtosis:	2.5709	dimensionless	2.6012	dimensionless
5th Moment:	-0.0933	dimensionless	-1.3263	dimensionless
6th Moment:	9.4465	dimensionless	9.3617	dimensionless
RARD*:	13.7883	dimensionless	51.8465	dimensionless
Median:	-0.0669	phi (1.0475 mm)	-0.0646	phi (1.0458 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	1.5308	phi (0.3461 mm)	1.4722	phi (0.3604 mm)
Standard Dev:	0.7041	phi-units (0.6138 mm)	0.7417	phi-units (0.5981 mm)
Skewness:	0.1015	dimensionless	0.4619	dimensionless
Kurtosis:	3.1371	dimensionless	3.7915	dimensionless
5th Moment:	1.2198	dimensionless	5.2465	dimensionless
6th Moment:	16.8514	dimensionless	27.1212	dimensionless
RARD*:	0.4600	dimensionless	0.5038	dimensionless
Median:	1.3946	phi (0.3803 mm)	1.3062	phi (0.4044 mm)

Additional Data	
Total Fines	
Original:	0.3 %
Duplicate:	0.27 %
Total Carbonates	
Original:	76.34 %
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)

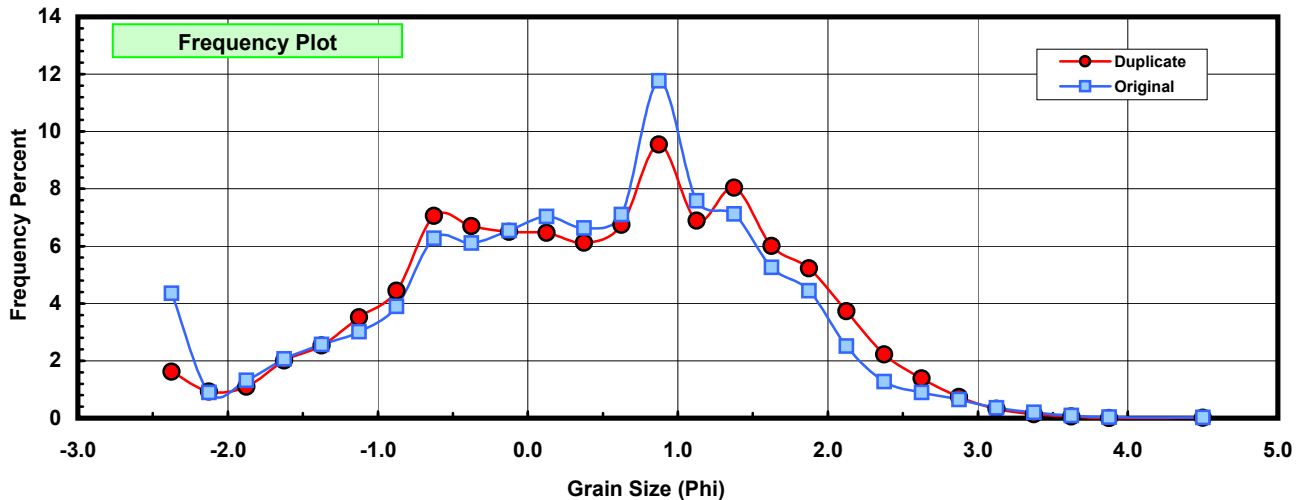
Pre-Digestion Grain Size Distribution

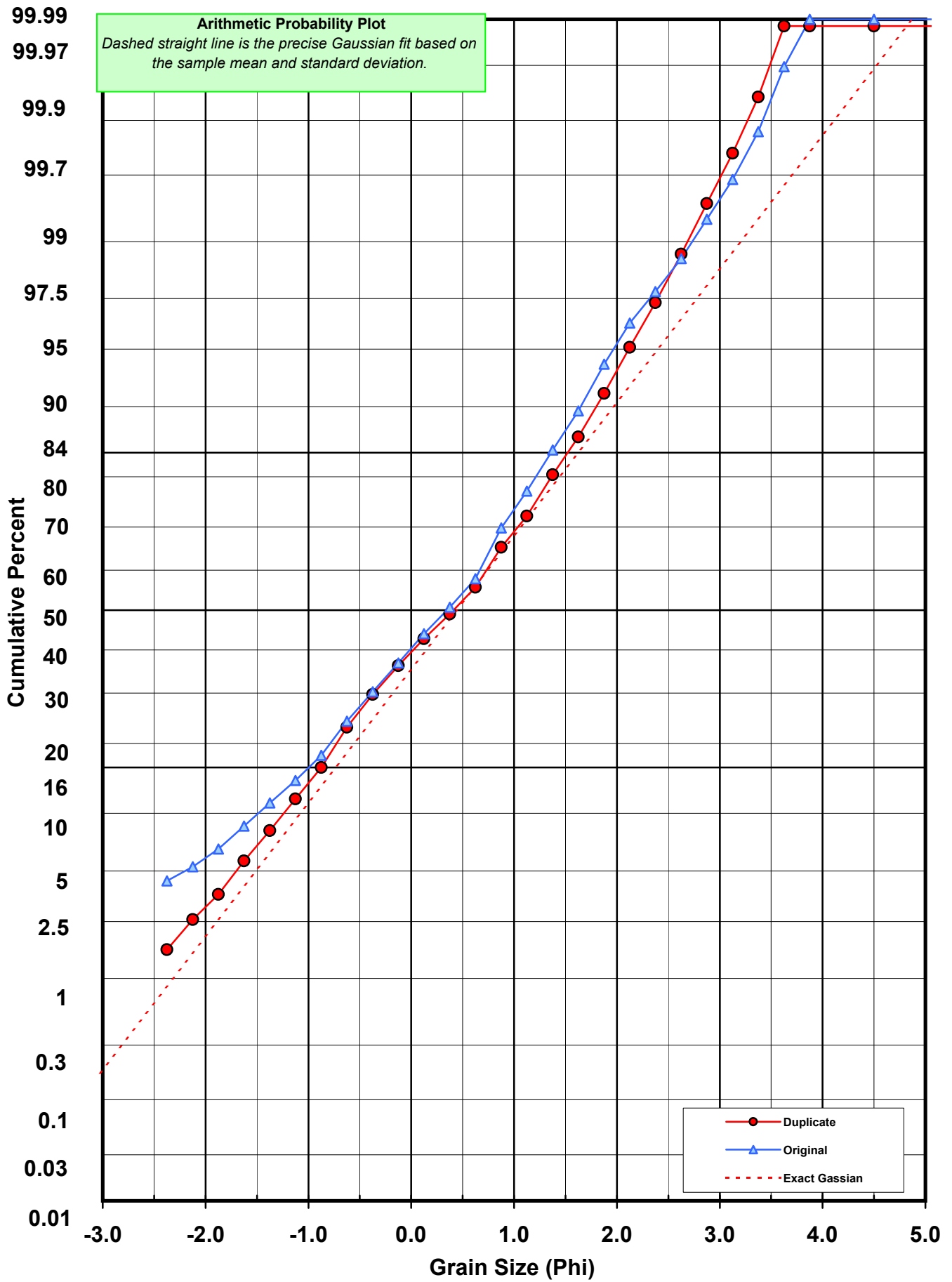
Onshore Grab Sample: MT-14-BB

Total Duplicate Sample Mass: 51.703 grams

Total Original Sample Mass: 56.672 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	0.838	1.621	1.621	2.469	4.358	4.358
-2.00	-2.125	0.480	0.928	2.549	0.506	0.893	5.251
-1.75	-1.875	0.565	1.093	3.642	0.744	1.313	6.564
-1.50	-1.625	1.039	2.010	5.652	1.171	2.067	8.631
-1.25	-1.375	1.313	2.540	8.191	1.455	2.568	11.199
-1.00	-1.125	1.817	3.514	11.705	1.706	3.011	14.210
-0.75	-0.875	2.299	4.447	16.152	2.208	3.897	18.107
-0.50	-0.625	3.646	7.052	23.204	3.557	6.278	24.384
-0.25	-0.375	3.465	6.702	29.905	3.458	6.103	30.488
0.00	-0.125	3.358	6.495	36.400	3.709	6.546	37.034
0.25	0.125	3.341	6.462	42.862	3.987	7.037	44.071
0.50	0.375	3.162	6.116	48.978	3.757	6.631	50.702
0.75	0.625	3.484	6.738	55.716	4.025	7.104	57.805
1.00	0.875	4.934	9.543	65.259	6.669	11.770	69.576
1.25	1.125	3.564	6.893	72.152	4.294	7.579	77.155
1.50	1.375	4.155	8.036	80.189	4.036	7.123	84.278
1.75	1.625	3.106	6.007	86.196	2.979	5.258	89.536
2.00	1.875	2.700	5.222	91.418	2.519	4.446	93.982
2.25	2.125	1.930	3.733	95.151	1.422	2.510	96.491
2.50	2.375	1.148	2.220	97.372	0.723	1.276	97.767
2.75	2.625	0.714	1.381	98.752	0.507	0.895	98.662
3.00	2.875	0.379	0.733	99.486	0.370	0.653	99.315
3.25	3.125	0.166	0.321	99.807	0.204	0.360	99.675
3.50	3.375	0.068	0.132	99.938	0.113	0.199	99.875
3.75	3.625	0.028	0.054	99.992	0.053	0.094	99.968
4.00	3.875	0.000	0.000	99.992	0.018	0.032	100.000
5.00	4.500	0.004	0.008	100.000	0.013	0.023	100.023



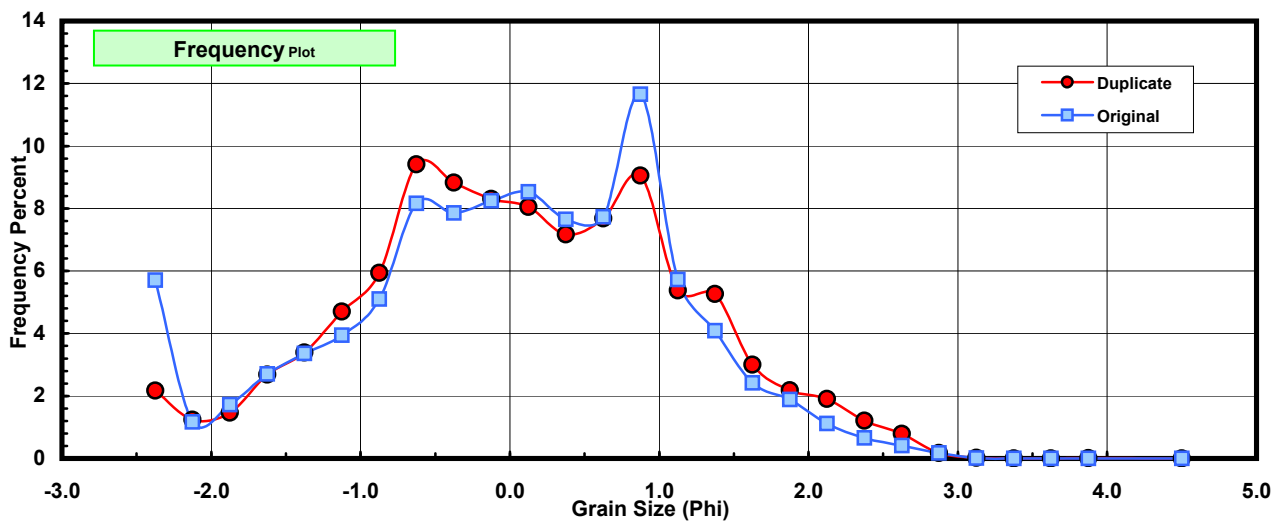


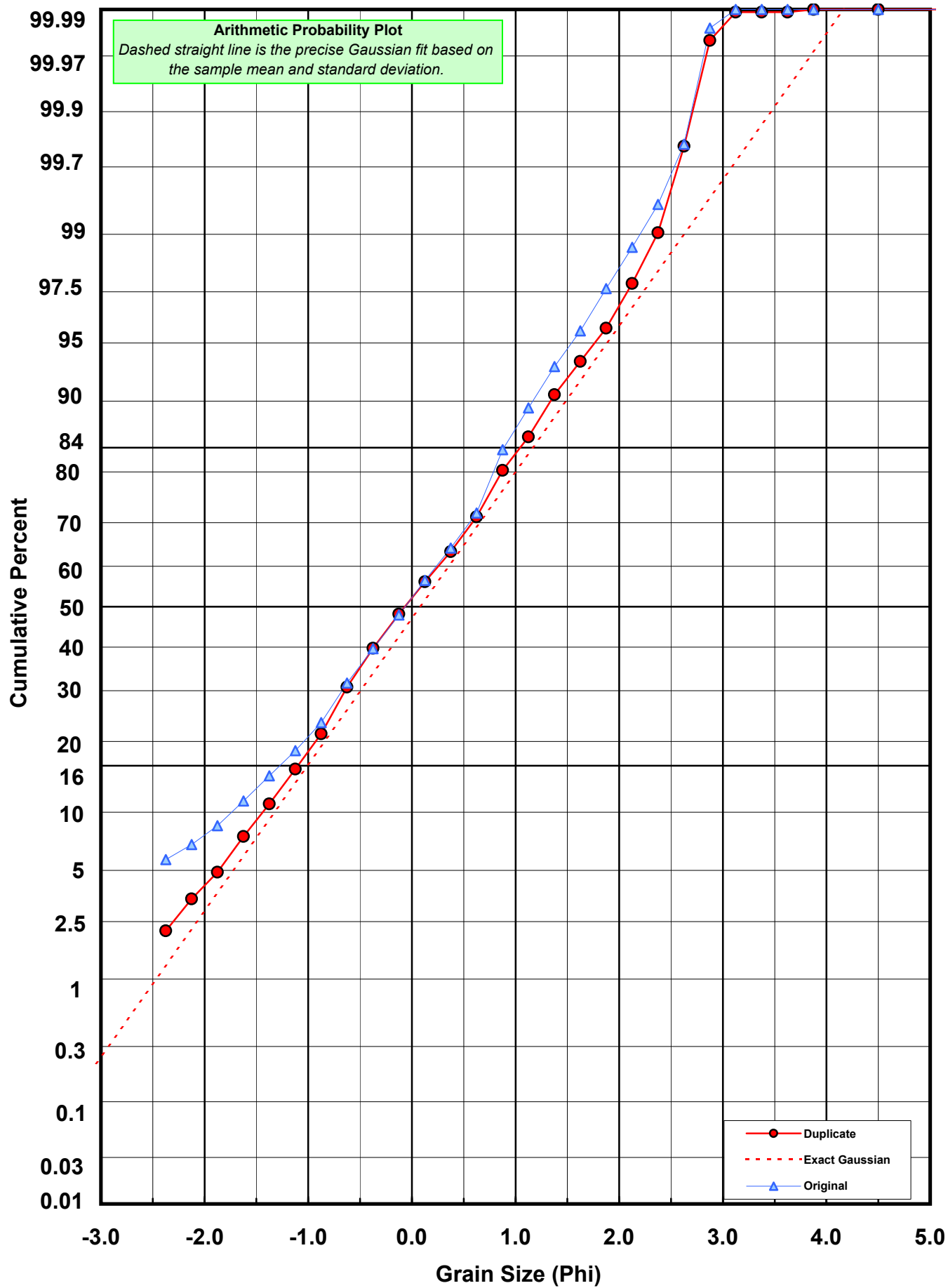
Carbonate Grain Size Distribution

Onshore Grab Sample: MT-14-BB

Total Duplicate Carbonate Mass: 38.684 grams
% Carbonate in Duplicate: 74.8 %
Total Original Carbonate Mass: 43.313 grams
% Carbonate in Original: 76.3 %

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	0.838	2.166	2.166	2.469	5.700	5.700
-2.00	-2.125	0.480	1.241	3.407	0.506	1.168	6.869
-1.75	-1.875	0.565	1.461	4.868	0.744	1.718	8.586
-1.50	-1.625	1.039	2.686	7.554	1.171	2.704	11.290
-1.25	-1.375	1.313	3.394	10.948	1.455	3.359	14.649
-1.00	-1.125	1.817	4.697	15.645	1.706	3.939	18.588
-0.75	-0.875	2.299	5.943	21.588	2.208	5.098	23.686
-0.50	-0.625	3.639	9.407	30.995	3.534	8.159	31.845
-0.25	-0.375	3.416	8.831	39.825	3.402	7.854	39.699
0.00	-0.125	3.213	8.306	48.131	3.569	8.240	47.939
0.25	0.125	3.113	8.047	56.178	3.697	8.536	56.475
0.50	0.375	2.774	7.171	63.349	3.315	7.654	64.129
0.75	0.625	2.971	7.680	71.029	3.350	7.734	71.863
1.00	0.875	3.503	9.055	80.085	5.046	11.650	83.513
1.25	1.125	2.079	5.374	85.459	2.479	5.723	89.236
1.50	1.375	2.036	5.263	90.722	1.772	4.091	93.328
1.75	1.625	1.162	3.004	93.726	1.048	2.420	95.747
2.00	1.875	0.843	2.179	95.905	0.816	1.884	97.631
2.25	2.125	0.736	1.903	97.808	0.482	1.113	98.744
2.50	2.375	0.466	1.205	99.013	0.283	0.653	99.397
2.75	2.625	0.305	0.788	99.801	0.178	0.411	99.808
3.00	2.875	0.069	0.178	99.979	0.077	0.178	99.986
3.25	3.125	0.006	0.016	99.995	0.006	0.014	100.000
3.50	3.375	0.000	0.000	99.995	0.000	0.000	100.000
3.75	3.625	0.000	0.000	99.995	0.000	0.000	100.000
4.00	3.875	0.002	0.005	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-14-BB

Total Duplicate Digested Mass: 13.035 grams
% Silica in Duplicate: 25.2 %
Total Original Digested Mass: 13.409 grams
% Silica in Original: 23.7 %

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	0.007	0.054	0.054	0.023	0.172	0.172
-0.25	-0.375	0.049	0.376	0.430	0.056	0.418	0.589
0.00	-0.125	0.145	1.112	1.542	0.140	1.044	1.633
0.25	0.125	0.228	1.749	3.291	0.290	2.163	3.796
0.50	0.375	0.388	2.977	6.268	0.442	3.296	7.092
0.75	0.625	0.513	3.936	10.203	0.675	5.034	12.126
1.00	0.875	1.431	10.978	21.181	1.623	12.104	24.230
1.25	1.125	1.485	11.392	32.574	1.815	13.536	37.766
1.50	1.375	2.119	16.256	48.830	2.264	16.884	54.650
1.75	1.625	1.944	14.914	63.744	1.931	14.401	69.051
2.00	1.875	1.857	14.246	77.990	1.703	12.700	81.751
2.25	2.125	1.194	9.160	87.150	0.940	7.010	88.761
2.50	2.375	0.682	5.232	92.382	0.440	3.281	92.043
2.75	2.625	0.409	3.138	95.520	0.329	2.454	94.496
3.00	2.875	0.310	2.378	97.898	0.293	2.185	96.681
3.25	3.125	0.160	1.227	99.125	0.198	1.477	98.158
3.50	3.375	0.076	0.583	99.708	0.124	0.925	99.083
3.75	3.625	0.028	0.215	99.923	0.063	0.470	99.553
4.00	3.875	0.004	0.031	99.954	0.033	0.246	99.799
5.00	4.500	0.006	0.046	100.000	0.027	0.201	100.000

