

# Quality Control Statistical Summary

Onshore Grab Sample: BV-41-BB

Sample Taken By: D. Phelps  
 Sample Taken On: 10/28/08  
 County: Brevard

Latitude: 28° 19' 55.3"  
 Longitude: 80° 36' 25.1"  
 Datum: WGS 84

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	1.5884	phi (0.3325 mm)	1.6003	phi (0.3298 mm)
Standard Dev:	0.4983	phi-units (0.708 mm)	0.4673	phi-units (0.7233 mm)
Skewness:	-1.5220	dimensionless	-0.4945	dimensionless
Kurtosis:	13.6630	dimensionless	6.2565	dimensionless
5th Moment:	-79.8073	dimensionless	-11.9509	dimensionless
6th Moment:	622.3894	dimensionless	98.6243	dimensionless
RARD*:	0.3137	dimensionless	0.2920	dimensionless
Median:	1.4884	phi (0.3564 mm)	1.4943	phi (0.355 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	1.3625	phi (0.3889 mm)	1.4063	phi (0.3773 mm)
Standard Dev:	0.6740	phi-units (0.6268 mm)	0.5819	phi-units (0.6681 mm)
Skewness:	-2.0915	dimensionless	-0.8648	dimensionless
Kurtosis:	11.7431	dimensionless	5.2806	dimensionless
5th Moment:	-54.2390	dimensionless	-11.4035	dimensionless
6th Moment:	291.2733	dimensionless	58.3557	dimensionless
RARD*:	0.4947	dimensionless	0.4138	dimensionless
Median:	1.3184	phi (0.401 mm)	1.3235	phi (0.3996 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	1.6646	phi (0.3154 mm)	1.6653	phi (0.3153 mm)
Standard Dev:	0.4098	phi-units (0.7527 mm)	0.4106	phi-units (0.7523 mm)
Skewness:	0.2872	dimensionless	0.2655	dimensionless
Kurtosis:	4.9255	dimensionless	4.6660	dimensionless
5th Moment:	7.8864	dimensionless	4.6941	dimensionless
6th Moment:	68.3196	dimensionless	47.9351	dimensionless
RARD*:	0.2462	dimensionless	0.2465	dimensionless
Median:	1.5393	phi (0.344 mm)	1.5376	phi (0.3445 mm)

Additional Data	
<b>Total Fines</b>	
Original:	0.17 %
Duplicate:	0.19 %
<b>Total Carbonates</b>	
Original:	25.11 %
Duplicate:	25.02 %

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)

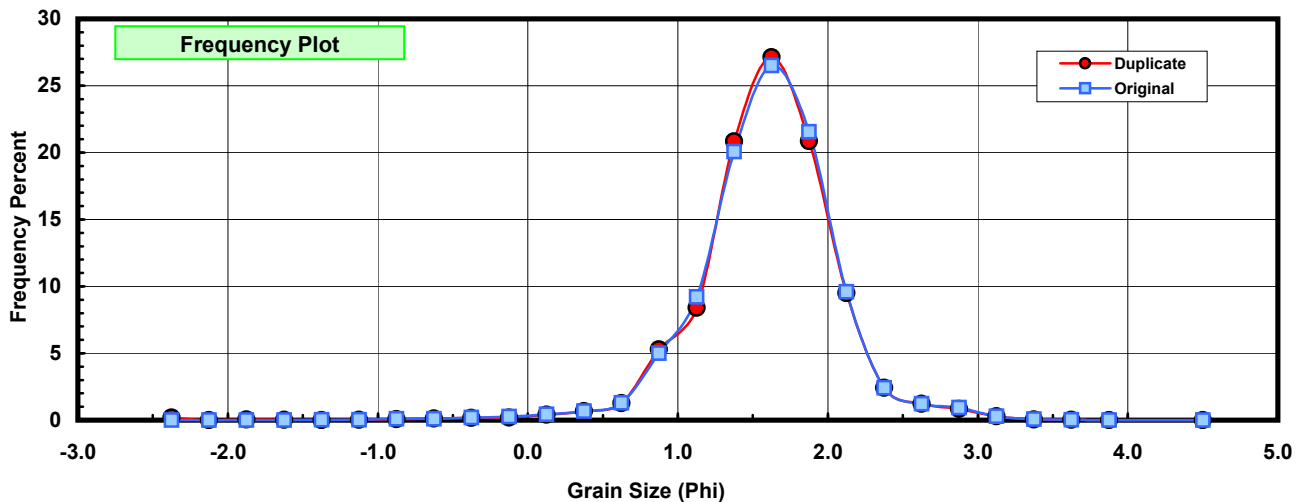
# Pre-Digestion Grain Size Distribution

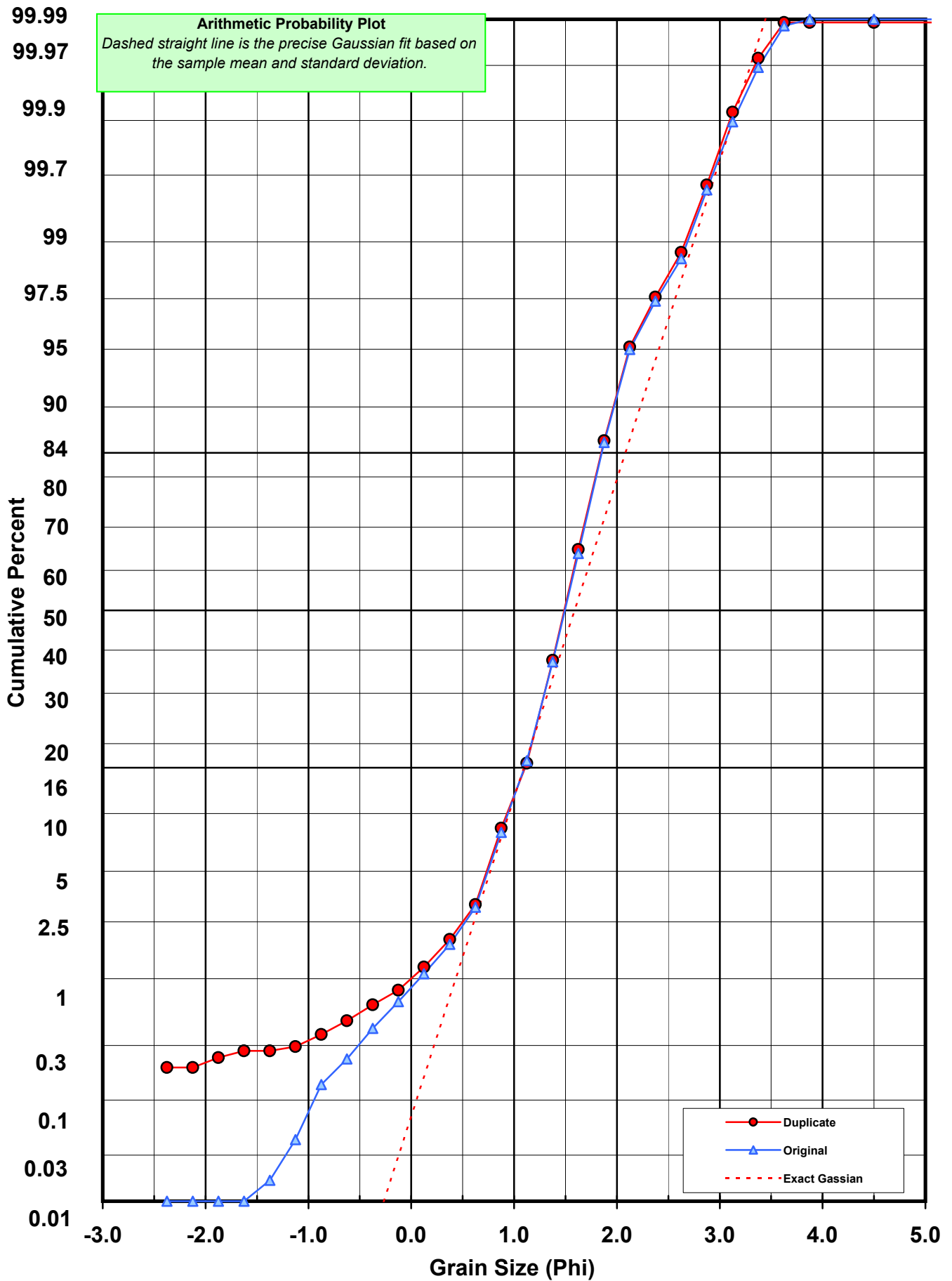
Onshore Grab Sample: BV-41-BB

Total Duplicate Sample Mass: 54.467 grams

Total Original Sample Mass: 52.554 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	0.105	0.193	0.193	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.193	0.000	0.000	0.000
-1.75	-1.875	0.023	0.042	0.235	0.000	0.000	0.000
-1.50	-1.625	0.018	0.033	0.268	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.268	0.008	0.015	0.015
-1.00	-1.125	0.013	0.024	0.292	0.015	0.029	0.044
-0.75	-0.875	0.042	0.077	0.369	0.049	0.093	0.137
-0.50	-0.625	0.060	0.110	0.479	0.048	0.091	0.228
-0.25	-0.375	0.089	0.163	0.643	0.098	0.186	0.415
0.00	-0.125	0.103	0.189	0.832	0.139	0.265	0.679
0.25	0.125	0.219	0.402	1.234	0.223	0.424	1.104
0.50	0.375	0.366	0.672	1.906	0.350	0.666	1.770
0.75	0.625	0.690	1.267	3.173	0.673	1.281	3.050
1.00	0.875	2.881	5.289	8.462	2.629	5.003	8.053
1.25	1.125	4.578	8.405	16.867	4.843	9.216	17.269
1.50	1.375	11.344	20.827	37.694	10.551	20.078	37.347
1.75	1.625	14.775	27.127	64.821	13.935	26.518	63.865
2.00	1.875	11.356	20.849	85.670	11.331	21.562	85.427
2.25	2.125	5.175	9.501	95.171	5.037	9.585	95.012
2.50	2.375	1.310	2.405	97.577	1.271	2.419	97.431
2.75	2.625	0.661	1.214	98.790	0.647	1.231	98.662
3.00	2.875	0.462	0.848	99.638	0.494	0.940	99.602
3.25	3.125	0.151	0.277	99.916	0.155	0.295	99.897
3.50	3.375	0.032	0.059	99.974	0.037	0.070	99.968
3.75	3.625	0.011	0.020	99.994	0.013	0.025	99.992
4.00	3.875	0.000	0.000	99.994	0.004	0.008	100.000
5.00	4.500	0.003	0.006	100.000	0.004	0.008	100.008



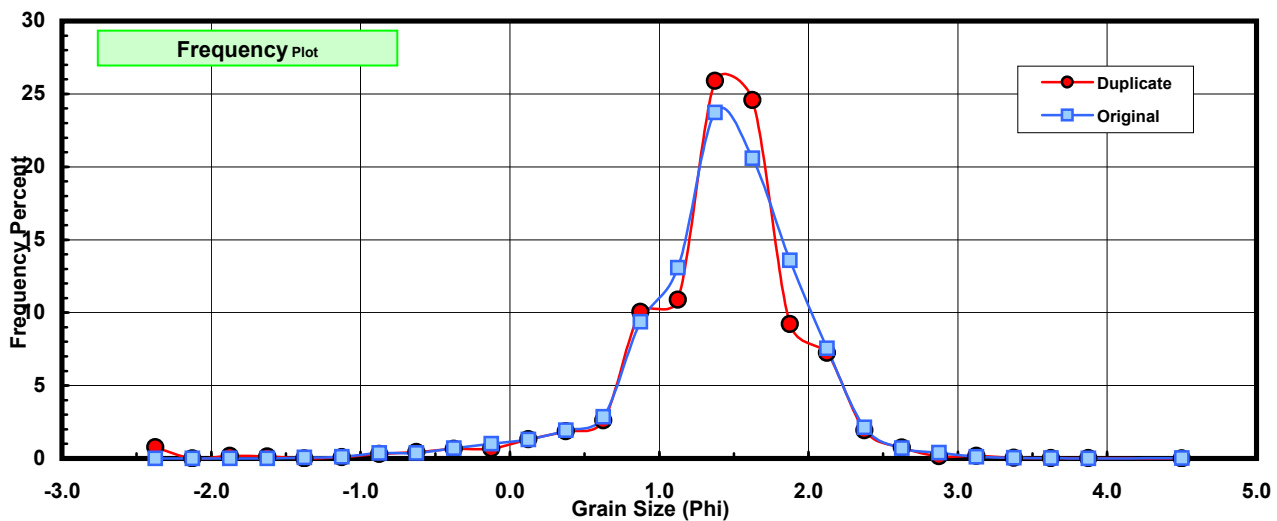


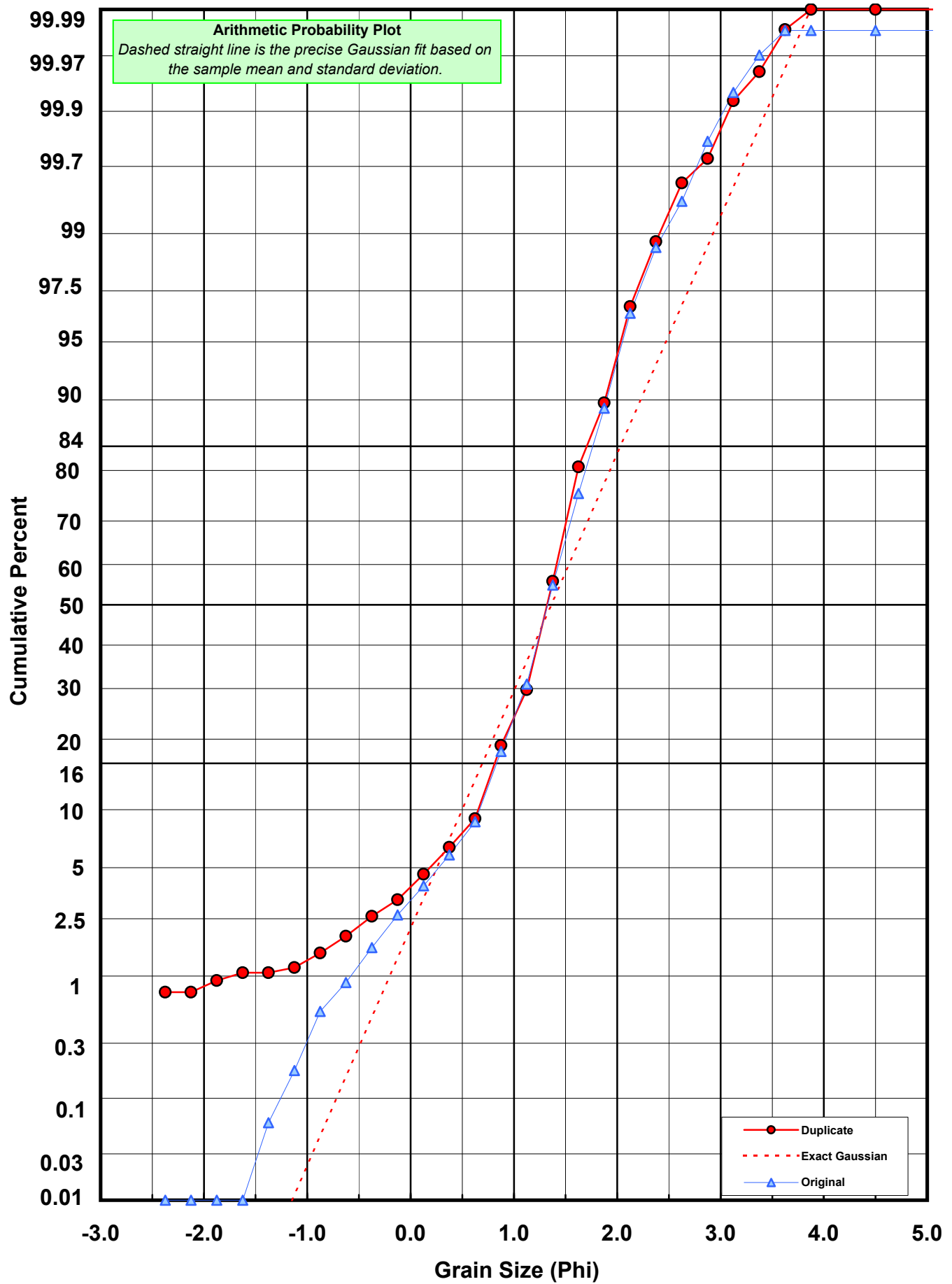
# Carbonate Grain Size Distribution

Onshore Grab Sample: BV-41-BB

**Total Duplicate Carbonate Mass:** 13.640 grams  
**% Carbonate in Duplicate:** 25.0 %  
**Total Original Carbonate Mass:** 13.198 grams  
**% Carbonate in Original:** 25.1 %

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	0.105	0.770	0.770	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.770	0.000	0.000	0.000
-1.75	-1.875	0.023	0.169	0.938	0.000	0.000	0.000
-1.50	-1.625	0.018	0.132	1.070	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	1.070	0.008	0.061	0.061
-1.00	-1.125	0.013	0.095	1.166	0.015	0.114	0.174
-0.75	-0.875	0.042	0.308	1.474	0.049	0.371	0.546
-0.50	-0.625	0.060	0.440	1.913	0.048	0.364	0.909
-0.25	-0.375	0.089	0.652	2.566	0.092	0.697	1.606
0.00	-0.125	0.093	0.682	3.248	0.133	1.008	2.614
0.25	0.125	0.180	1.320	4.567	0.172	1.303	3.917
0.50	0.375	0.255	1.870	6.437	0.256	1.940	5.857
0.75	0.625	0.355	2.603	9.040	0.376	2.849	8.706
1.00	0.875	1.370	10.044	19.084	1.238	9.380	18.086
1.25	1.125	1.484	10.880	29.963	1.725	13.070	31.156
1.50	1.375	3.533	25.902	55.865	3.132	23.731	54.887
1.75	1.625	3.353	24.582	80.447	2.717	20.586	75.474
2.00	1.875	1.258	9.223	89.670	1.793	13.585	89.059
2.25	2.125	0.987	7.236	96.906	0.995	7.539	96.598
2.50	2.375	0.264	1.935	98.842	0.281	2.129	98.727
2.75	2.625	0.102	0.748	99.589	0.092	0.697	99.424
3.00	2.875	0.021	0.154	99.743	0.052	0.394	99.818
3.25	3.125	0.024	0.176	99.919	0.015	0.114	99.932
3.50	3.375	0.005	0.037	99.956	0.005	0.038	99.970
3.75	3.625	0.004	0.029	99.985	0.002	0.015	99.985
4.00	3.875	0.002	0.015	100.000	0.000	0.000	99.985
5.00	4.500	0.000	0.000	100.000	0.002	0.015	100.000





# Post-Digestion Grain Size Distribution

Onshore Grab Sample: BV-41-BB

**Total Duplicate Digested Mass:** 40.839 grams  
**% Silica in Duplicate:** 75.0 %  
**Total Original Digested Mass:** 39.356 grams  
**% Silica in Original:** 74.9 %

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	0.000	0.000	0.000	0.006	0.015	0.015
0.00	-0.125	0.010	0.024	0.024	0.006	0.015	0.030
0.25	0.125	0.039	0.095	0.120	0.051	0.130	0.160
0.50	0.375	0.111	0.272	0.392	0.094	0.239	0.399
0.75	0.625	0.335	0.820	1.212	0.297	0.755	1.154
1.00	0.875	1.511	3.700	4.912	1.391	3.534	4.688
1.25	1.125	3.094	7.576	12.488	3.118	7.923	12.611
1.50	1.375	7.811	19.126	31.614	7.419	18.851	31.462
1.75	1.625	11.422	27.968	59.583	11.218	28.504	59.965
2.00	1.875	10.098	24.726	84.309	9.538	24.235	84.201
2.25	2.125	4.188	10.255	94.564	4.042	10.270	94.471
2.50	2.375	1.046	2.561	97.125	0.990	2.515	96.986
2.75	2.625	0.559	1.369	98.494	0.555	1.410	98.397
3.00	2.875	0.441	1.080	99.574	0.442	1.123	99.520
3.25	3.125	0.127	0.311	99.885	0.140	0.356	99.875
3.50	3.375	0.027	0.066	99.951	0.032	0.081	99.957
3.75	3.625	0.007	0.017	99.968	0.011	0.028	99.985
4.00	3.875	0.001	0.002	99.971	0.004	0.010	99.995
5.00	4.500	0.012	0.029	100.000	0.002	0.005	100.000

