

# Quality Control Statistical Summary

Onshore Grab Sample: BV-51-BB

Sample Taken By: D. Phelps  
 Sample Taken On: 09/25/08  
 County: Brevard

Latitude: 28° 12' 1.7"  
 Longitude: 80° 35' 42.5"  
 Datum: NAD83

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	1.1980	phi (0.4359 mm)	1.1731	phi (0.4435 mm)
Standard Dev:	0.7082	phi-units (0.6121 mm)	0.7654	phi-units (0.5883 mm)
Skewness:	-1.0510	dimensionless	-1.1778	dimensionless
Kurtosis:	5.5056	dimensionless	5.6064	dimensionless
5th Moment:	-12.1755	dimensionless	-13.3519	dimensionless
6th Moment:	55.1409	dimensionless	55.4552	dimensionless
RARD*:	0.5911	dimensionless	0.6525	dimensionless
Median:	1.1817	phi (0.4408 mm)	1.1797	phi (0.4415 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	0.7119	phi (0.6105 mm)	0.6479	phi (0.6382 mm)
Standard Dev:	0.8899	phi-units (0.5397 mm)	0.9764	phi-units (0.5082 mm)
Skewness:	-0.6921	dimensionless	-0.6555	dimensionless
Kurtosis:	2.8273	dimensionless	2.7628	dimensionless
5th Moment:	-4.0307	dimensionless	-3.5606	dimensionless
6th Moment:	14.0315	dimensionless	12.9040	dimensionless
RARD*:	1.2500	dimensionless	1.5071	dimensionless
Median:	0.7909	phi (0.578 mm)	0.7441	phi (0.5971 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	1.4056	phi (0.3775 mm)	1.4140	phi (0.3753 mm)
Standard Dev:	0.4973	phi-units (0.7084 mm)	0.5024	phi-units (0.7059 mm)
Skewness:	0.2428	dimensionless	0.2300	dimensionless
Kurtosis:	4.8159	dimensionless	4.8419	dimensionless
5th Moment:	4.0435	dimensionless	3.1436	dimensionless
6th Moment:	50.4490	dimensionless	49.4544	dimensionless
RARD*:	0.3538	dimensionless	0.3553	dimensionless
Median:	1.2744	phi (0.4134 mm)	1.2845	phi (0.4105 mm)

Additional Data	
<b>Total Fines</b>	
Original:	0.41 %
Duplicate:	0.43 %
<b>Total Carbonates</b>	
Original:	31.37 %
Duplicate:	29.91 %

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)

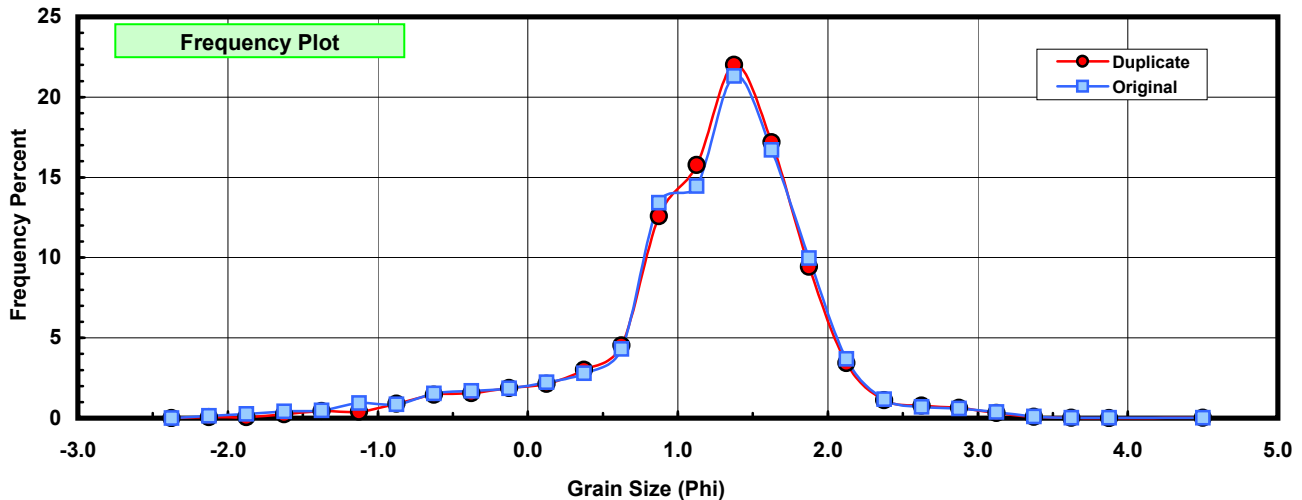
# Pre-Digestion Grain Size Distribution

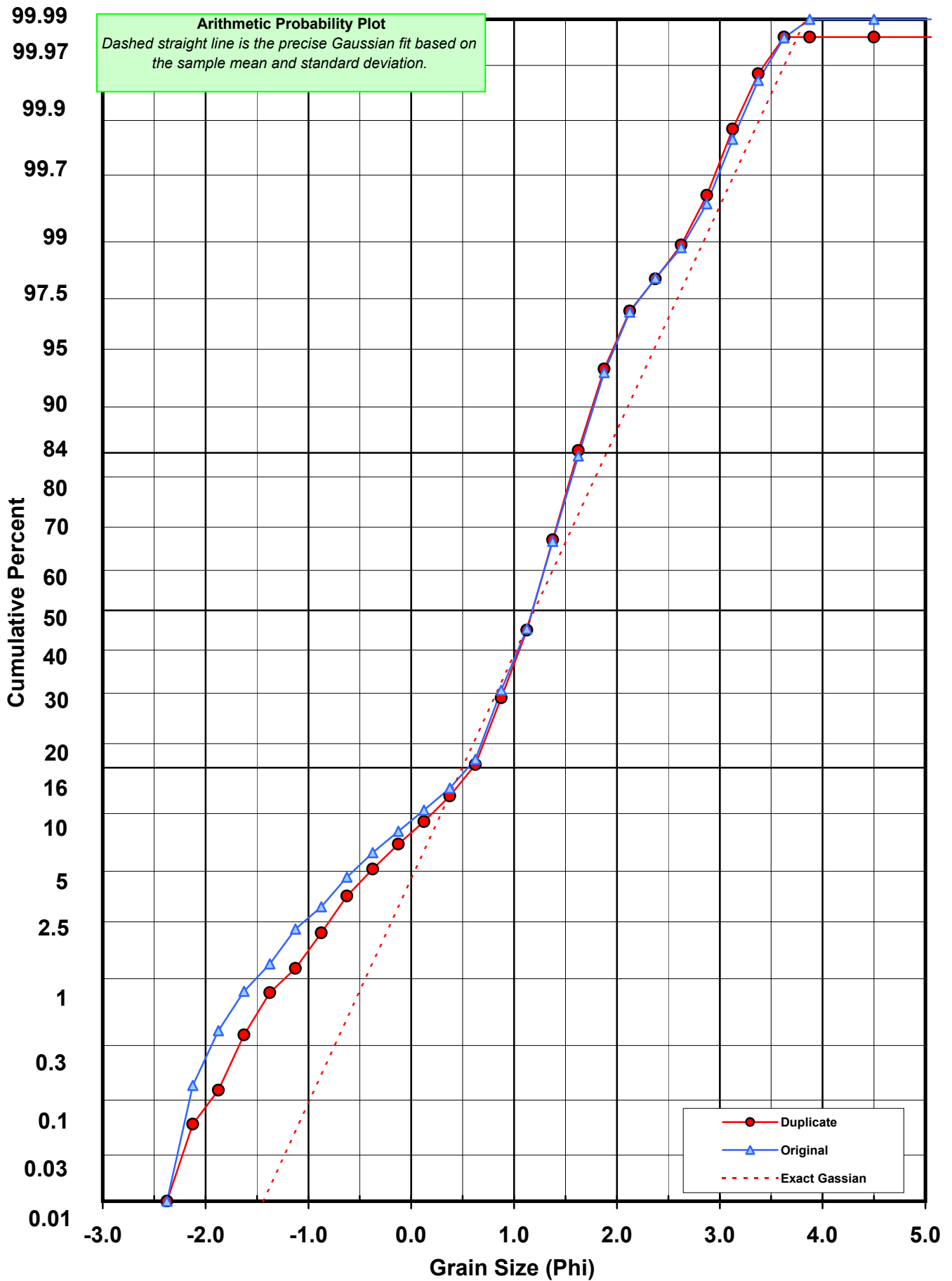
Onshore Grab Sample: BV-51-BB

Total Duplicate Sample Mass: 58.942 grams

Total Original Sample Mass: 50.611 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	0.000	0.000	0.000	0.000	0.000	0.000
-2.00	-2.125	0.036	0.061	0.061	0.068	0.134	0.134
-1.75	-1.875	0.036	0.061	0.122	0.133	0.263	0.397
-1.50	-1.625	0.144	0.244	0.366	0.213	0.421	0.818
-1.25	-1.375	0.254	0.431	0.797	0.243	0.480	1.298
-1.00	-1.125	0.240	0.407	1.205	0.471	0.931	2.229
-0.75	-0.875	0.531	0.901	2.105	0.429	0.848	3.077
-0.50	-0.625	0.862	1.462	3.568	0.775	1.531	4.608
-0.25	-0.375	0.914	1.551	5.119	0.856	1.692	6.300
0.00	-0.125	1.103	1.871	6.990	0.939	1.856	8.155
0.25	0.125	1.256	2.131	9.121	1.127	2.227	10.382
0.50	0.375	1.770	3.003	12.124	1.411	2.788	13.171
0.75	0.625	2.669	4.528	16.652	2.177	4.302	17.473
1.00	0.875	7.418	12.585	29.237	6.790	13.418	30.890
1.25	1.125	9.295	15.770	45.007	7.313	14.451	45.341
1.50	1.375	12.976	22.015	67.022	10.780	21.302	66.644
1.75	1.625	10.125	17.178	84.200	8.452	16.702	83.346
2.00	1.875	5.553	9.421	93.621	5.046	9.971	93.317
2.25	2.125	2.017	3.422	97.043	1.862	3.679	96.996
2.50	2.375	0.659	1.118	98.161	0.597	1.180	98.176
2.75	2.625	0.453	0.769	98.929	0.357	0.705	98.882
3.00	2.875	0.372	0.631	99.561	0.305	0.603	99.484
3.25	3.125	0.189	0.321	99.881	0.187	0.370	99.854
3.50	3.375	0.048	0.081	99.963	0.052	0.103	99.957
3.75	3.625	0.014	0.024	99.986	0.015	0.030	99.986
4.00	3.875	0.000	0.000	99.986	0.007	0.014	100.000
5.00	4.500	0.008	0.014	100.000	0.006	0.012	100.012



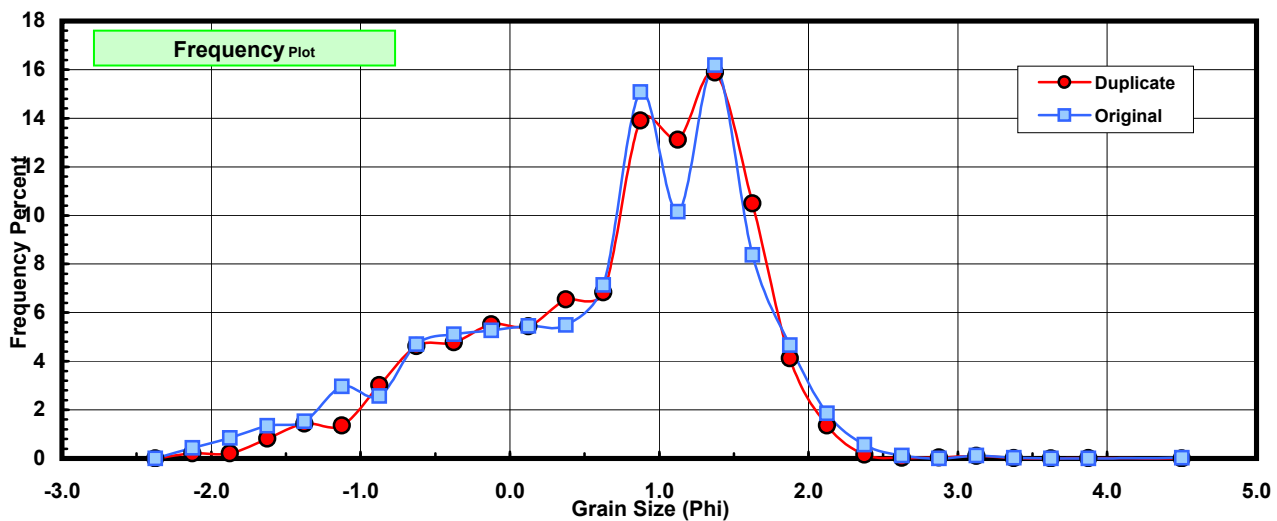


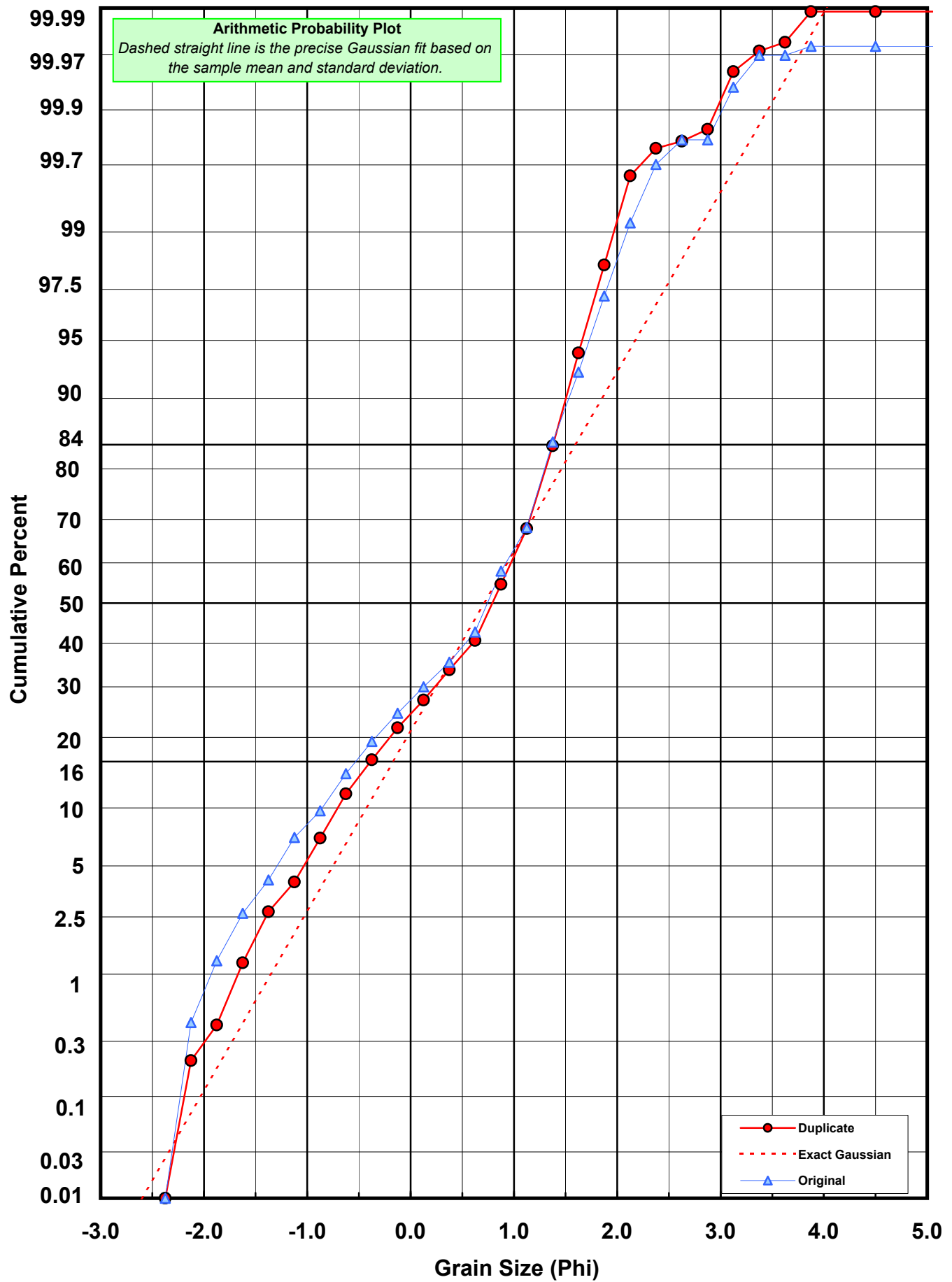
# Carbonate Grain Size Distribution

Onshore Grab Sample: BV-51-BB

**Total Duplicate Carbonate Mass:** 17.629 grams  
**% Carbonate in Duplicate:** 29.9 %  
**Total Original Carbonate Mass:** 15.889 grams  
**% Carbonate in Original:** 31.4 %

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	0.000	0.000	0.000	0.000	0.000	0.000
-2.00	-2.125	0.036	0.204	0.204	0.068	0.428	0.428
-1.75	-1.875	0.036	0.204	0.408	0.133	0.837	1.265
-1.50	-1.625	0.144	0.817	1.225	0.213	1.341	2.606
-1.25	-1.375	0.254	1.441	2.666	0.243	1.529	4.135
-1.00	-1.125	0.240	1.361	4.027	0.471	2.964	7.099
-0.75	-0.875	0.531	3.012	7.040	0.407	2.562	9.661
-0.50	-0.625	0.814	4.617	11.657	0.747	4.701	14.362
-0.25	-0.375	0.842	4.776	16.433	0.812	5.110	19.473
0.00	-0.125	0.973	5.519	21.952	0.837	5.268	24.740
0.25	0.125	0.958	5.434	27.387	0.867	5.457	30.197
0.50	0.375	1.154	6.546	33.933	0.872	5.488	35.685
0.75	0.625	1.205	6.835	40.768	1.134	7.137	42.822
1.00	0.875	2.452	13.909	54.677	2.395	15.073	57.895
1.25	1.125	2.311	13.109	67.786	1.614	10.158	68.053
1.50	1.375	2.799	15.877	83.663	2.572	16.187	84.241
1.75	1.625	1.850	10.494	94.157	1.331	8.377	92.618
2.00	1.875	0.727	4.124	98.281	0.740	4.657	97.275
2.25	2.125	0.238	1.350	99.631	0.295	1.857	99.131
2.50	2.375	0.027	0.153	99.784	0.091	0.573	99.704
2.75	2.625	0.005	0.028	99.813	0.018	0.113	99.817
3.00	2.875	0.007	0.040	99.853	0.000	0.000	99.817
3.25	3.125	0.018	0.102	99.955	0.019	0.120	99.937
3.50	3.375	0.003	0.017	99.972	0.005	0.031	99.969
3.75	3.625	0.001	0.006	99.977	0.000	0.000	99.969
4.00	3.875	0.003	0.017	99.994	0.001	0.006	99.975
5.00	4.500	0.001	0.006	100.000	0.004	0.025	100.000





# Post-Digestion Grain Size Distribution

Onshore Grab Sample: BV-51-BB

**Total Duplicate Digested Mass:** 41.317 grams  
**% Silica in Duplicate:** 70.1 %  
**Total Original Digested Mass:** 34.735 grams  
**% Silica in Original:** 68.6 %

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	0.022	0.063	0.063
-0.50	-0.625	0.048	0.116	0.116	0.028	0.081	0.144
-0.25	-0.375	0.072	0.174	0.290	0.044	0.127	0.271
0.00	-0.125	0.130	0.315	0.605	0.102	0.294	0.564
0.25	0.125	0.298	0.721	1.326	0.260	0.749	1.313
0.50	0.375	0.616	1.491	2.817	0.539	1.552	2.865
0.75	0.625	1.464	3.543	6.361	1.043	3.003	5.867
1.00	0.875	4.966	12.019	18.380	4.395	12.653	18.520
1.25	1.125	6.984	16.903	35.283	5.699	16.407	34.927
1.50	1.375	10.177	24.632	59.915	8.208	23.630	58.558
1.75	1.625	8.275	20.028	79.943	7.121	20.501	79.059
2.00	1.875	4.826	11.680	91.623	4.306	12.397	91.455
2.25	2.125	1.779	4.306	95.929	1.567	4.511	95.967
2.50	2.375	0.632	1.530	97.459	0.506	1.457	97.423
2.75	2.625	0.448	1.084	98.543	0.339	0.976	98.399
3.00	2.875	0.365	0.883	99.426	0.317	0.913	99.312
3.25	3.125	0.171	0.414	99.840	0.168	0.484	99.796
3.50	3.375	0.045	0.109	99.949	0.047	0.135	99.931
3.75	3.625	0.013	0.031	99.981	0.016	0.046	99.977
4.00	3.875	0.001	0.002	99.983	0.006	0.017	99.994
5.00	4.500	0.007	0.017	100.000	0.002	0.006	100.000

