

Quality Control Statistical Summary

Onshore Grab Sample: VO-26-BB

Sample Taken By: J. Ladner Latitude: 29° 07' 2.64"
 Sample Taken On: 12/03/03 Longitude: 80° 56' 56.04'
 County: Volusia Datum: NAD 83

Statistical Results: Pre-CaCO3		
	Duplicate	Original
Mean:	2.6744 phi (0.1567 mm)	2.6433 phi (0.1601 mm)
Standard Dev:	0.3003 phi-units (0.8121 mm)	0.3178 phi-units (0.8023 mm)
Skewness:	-0.1311 dimensionless	0.3459 dimensionless
Kurtosis:	7.3162 dimensionless	6.8671 dimensionless
5th Moment:	-27.9257 dimensionless	-2.8102 dimensionless
6th Moment:	380.5691 dimensionless	177.4302 dimensionless
RARD*:	0.1123 dimensionless	0.1202 dimensionless
Median:	2.5427 phi (0.1716 mm)	2.5068 phi (0.1759 mm)

Statistical Results: CaCO3		
	Duplicate	Original
Mean:	2.9589 phi (0.1286 mm)	2.5058 phi (0.1761 mm)
Standard Dev:	0.3413 phi-units (0.7894 mm)	0.6010 phi-units (0.6593 mm)
Skewness:	-5.1209 dimensionless	0.7967 dimensionless
Kurtosis:	52.0162 dimensionless	5.2650 dimensionless
5th Moment:	##### dimensionless	0.1220 dimensionless
6th Moment:	##### dimensionless	46.7779 dimensionless
RARD*:	0.1153 dimensionless	0.2399 dimensionless
Median:	2.8226 phi (0.1414 mm)	2.2681 phi (0.2076 mm)

Statistical Results: Post-CaCO3		
	Duplicate	Original
Mean:	2.6603 phi (0.1582 mm)	2.6591 phi (0.1583 mm)
Standard Dev:	0.3030 phi-units (0.8106 mm)	0.3101 phi-units (0.8066 mm)
Skewness:	0.2202 dimensionless	0.4745 dimensionless
Kurtosis:	6.1556 dimensionless	6.1826 dimensionless
5th Moment:	-5.1169 dimensionless	4.7892 dimensionless
6th Moment:	167.9359 dimensionless	132.7220 dimensionless
RARD*:	0.1139 dimensionless	0.1166 dimensionless
Median:	2.5250 phi (0.1737 mm)	2.5204 phi (0.1743 mm)

Additional Data	
Total Fines	
Original:	0.38 %
Duplicate:	0.53 %
Total Carbonates	
Original:	2.7 %
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 $mm = 2^{-(\phi)}$	
* 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)

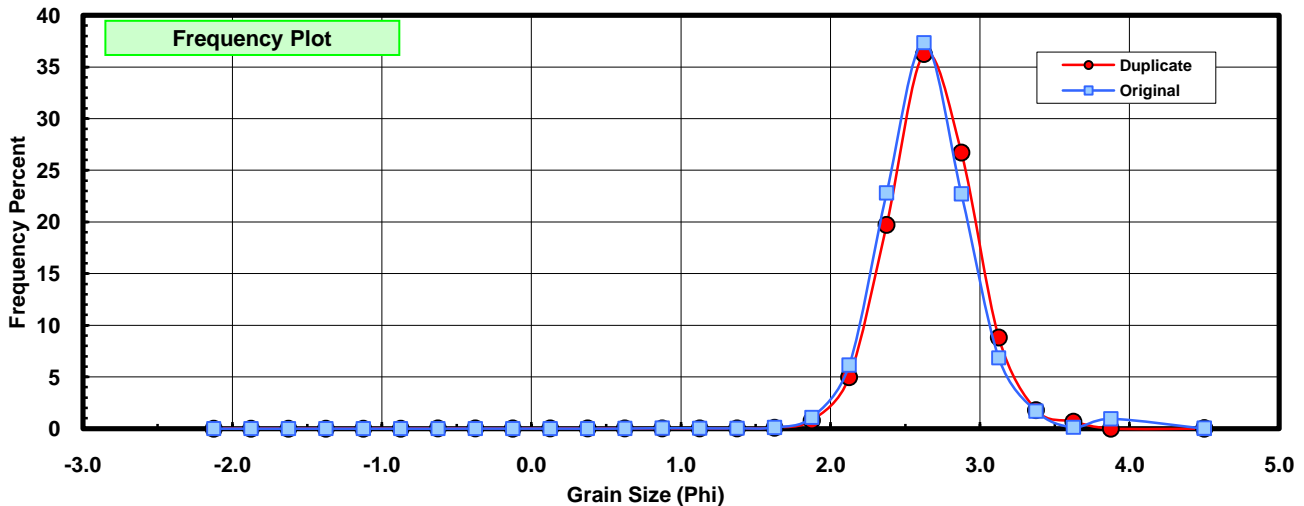
Pre-Digestion Grain Size Distribution

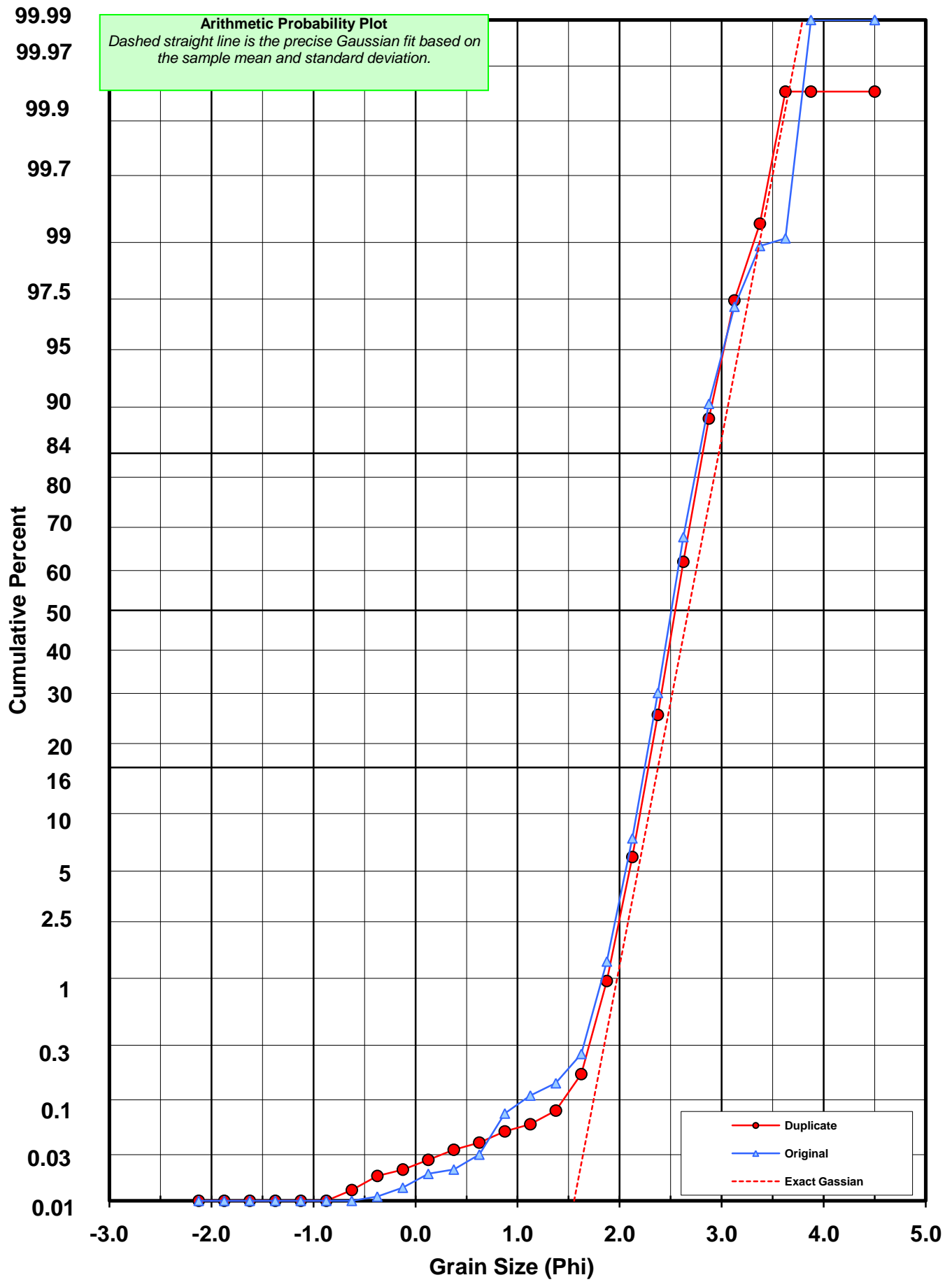
Onshore Grab Sample: VO-26-BB

Total Duplicate Sample Mass: 81.040 grams

Total Original Sample Mass: 80.910 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	0.008	0.010	0.010	0.000	0.000	0.000
-0.25	-0.375	0.006	0.007	0.017	0.005	0.006	0.006
0.00	-0.125	0.003	0.004	0.021	0.004	0.005	0.011
0.25	0.125	0.005	0.006	0.027	0.006	0.007	0.019
0.50	0.375	0.006	0.007	0.035	0.002	0.002	0.021
0.75	0.625	0.005	0.006	0.041	0.008	0.010	0.031
1.00	0.875	0.009	0.011	0.052	0.036	0.045	0.075
1.25	1.125	0.007	0.009	0.060	0.027	0.033	0.109
1.50	1.375	0.016	0.020	0.080	0.025	0.031	0.140
1.75	1.625	0.071	0.088	0.168	0.090	0.111	0.251
2.00	1.875	0.651	0.803	0.971	0.883	1.092	1.343
2.25	2.125	4.040	4.985	5.956	4.971	6.147	7.490
2.50	2.375	15.972	19.709	25.665	18.452	22.817	30.307
2.75	2.625	29.392	36.269	61.934	30.204	37.350	67.657
3.00	2.875	21.662	26.730	88.664	18.381	22.730	90.387
3.25	3.125	7.142	8.813	97.477	5.536	6.846	97.233
3.50	3.375	1.451	1.790	99.267	1.365	1.688	98.920
3.75	3.625	0.550	0.679	99.946	0.106	0.131	99.052
4.00	3.875	0.000	0.000	99.946	0.767	0.948	100.000
5.00	4.500	0.000	0.000	99.946	0.000	0.000	100.000
5.00	4.500	0.044	0.054	100.000	0.042	0.052	100.052



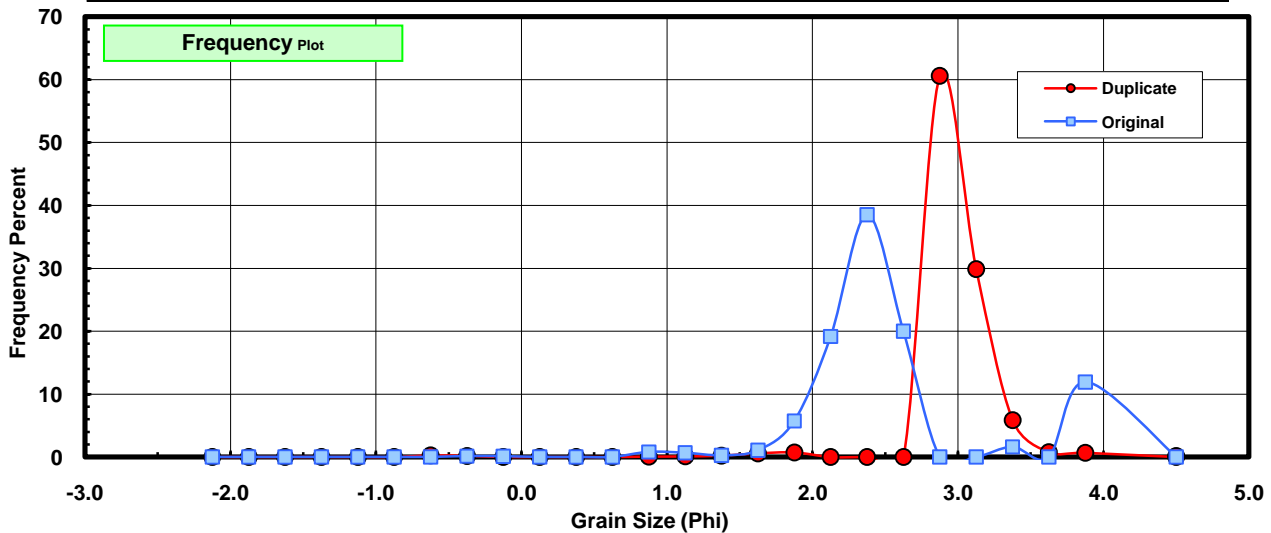


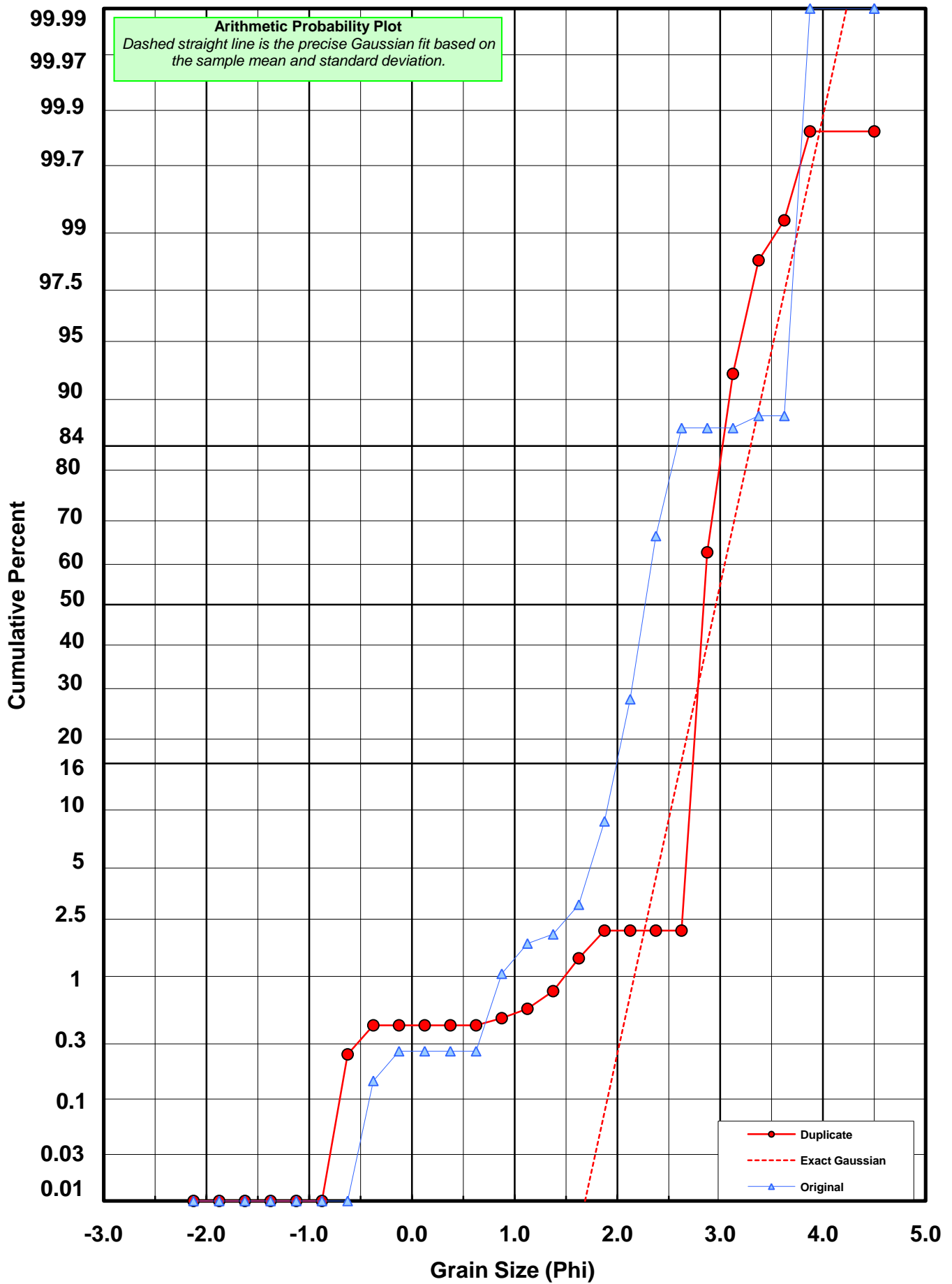
Carbonate Grain Size Distribution

Onshore Grab Sample: VO-26-BB

Total Duplicate Carbonate Mass: 3.296 grams
% Carbonate in Duplicate: 2.1 %
Total Original Carbonate Mass: 3.486 grams
% Carbonate in Original: 2.7 %

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	0.008	0.243	0.243	0.000	0.000	0.000
-0.25	-0.375	0.006	0.182	0.425	0.005	0.143	0.143
0.00	-0.125	0.000	0.000	0.425	0.004	0.115	0.258
0.25	0.125	0.000	0.000	0.425	0.000	0.000	0.258
0.50	0.375	0.000	0.000	0.425	0.000	0.000	0.258
0.75	0.625	0.000	0.000	0.425	0.000	0.000	0.258
1.00	0.875	0.002	0.061	0.485	0.028	0.803	1.061
1.25	1.125	0.003	0.091	0.576	0.023	0.660	1.721
1.50	1.375	0.007	0.212	0.789	0.009	0.258	1.979
1.75	1.625	0.019	0.576	1.365	0.037	1.061	3.041
2.00	1.875	0.024	0.728	2.093	0.200	5.737	8.778
2.25	2.125	0.000	0.000	2.093	0.668	19.162	27.940
2.50	2.375	0.000	0.000	2.093	1.343	38.526	66.466
2.75	2.625	0.000	0.000	2.093	0.697	19.994	86.460
3.00	2.875	1.998	60.619	62.712	0.000	0.000	86.460
3.25	3.125	0.984	29.854	92.567	0.000	0.000	86.460
3.50	3.375	0.193	5.856	98.422	0.056	1.606	88.067
3.75	3.625	0.025	0.758	99.181	0.000	0.000	88.067
4.00	3.875	0.022	0.667	99.848	0.416	11.933	100.000
5.00	4.500	0.000	0.000	99.848	0.000	0.000	100.000
5.00	4.500	0.005	0.152	100.000	0.000	0.000	100.000





Post-Digestion Grain Size Distribution

Onshore Grab Sample: VO-26-BB

Total Duplicate Digested Mass: 79.608 grams
% Silica in Duplicate: 97.9 %
Total Original Digested Mass: 78.726 grams
% Silica in Original: 97.3 %

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	0.005	0.006	0.006	0.000	0.000	0.000
0.25	0.125	0.008	0.010	0.016	0.007	0.009	0.009
0.50	0.375	0.009	0.011	0.028	0.009	0.011	0.020
0.75	0.625	0.012	0.015	0.043	0.009	0.011	0.032
1.00	0.875	0.007	0.009	0.052	0.008	0.010	0.042
1.25	1.125	0.004	0.005	0.057	0.004	0.005	0.047
1.50	1.375	0.009	0.011	0.068	0.016	0.020	0.067
1.75	1.625	0.052	0.065	0.133	0.053	0.067	0.135
2.00	1.875	0.627	0.788	0.921	0.683	0.868	1.002
2.25	2.125	4.430	5.565	6.486	4.303	5.466	6.468
2.50	2.375	16.763	21.057	27.542	17.109	21.732	28.200
2.75	2.625	29.788	37.418	64.961	29.507	37.481	65.681
3.00	2.875	19.664	24.701	89.662	19.058	24.208	89.889
3.25	3.125	6.158	7.735	97.397	5.538	7.035	96.924
3.50	3.375	1.258	1.580	98.977	1.309	1.663	98.586
3.75	3.625	0.525	0.659	99.637	0.691	0.878	99.464
4.00	3.875	0.250	0.314	99.951	0.351	0.446	99.910
5.00	4.500	0.000	0.000	99.951	0.000	0.000	99.910
5.00	4.500	0.039	0.049	100.000	0.071	0.090	100.000

