

Quality Control Statistical Summary

Onshore Grab Sample: VO-06-BB

Sample Taken By: J. Ladner Latitude: 29° 21' 22.02'
 Sample Taken On: 12/03/03 Longitude: 81° 04' 10.92'
 County: Volusia Datum: NAD 83

Statistical Results: Pre-CaCO3			
	Duplicate		Original
Mean:	1.6528	phi (0.318 mm)	1.6883 phi (0.3103 mm)
Standard Dev:	0.5734	phi-units (0.672 mm)	0.4856 phi-units (0.7142 mm)
Skewness:	-0.1756	dimensionless	0.0061 dimensionless
Kurtosis:	3.0402	dimensionless	3.0353 dimensionless
5th Moment:	-1.4054	dimensionless	0.0799 dimensionless
6th Moment:	17.3822	dimensionless	15.5435 dimensionless
RARD*:	0.3469	dimensionless	0.2876 dimensionless
Median:	1.5543	phi (0.3405 mm)	1.5653 phi (0.3379 mm)

Statistical Results: CaCO3			
	Duplicate		Original
Mean:	1.1656	phi (0.4458 mm)	1.2996 phi (0.4062 mm)
Standard Dev:	0.5377	phi-units (0.6889 mm)	0.4605 phi-units (0.7267 mm)
Skewness:	-0.0577	dimensionless	0.1737 dimensionless
Kurtosis:	2.6757	dimensionless	3.2560 dimensionless
5th Moment:	-1.1859	dimensionless	3.0225 dimensionless
6th Moment:	11.6732	dimensionless	22.8223 dimensionless
RARD*:	0.4613	dimensionless	0.3544 dimensionless
Median:	1.0377	phi (0.4871 mm)	1.1890 phi (0.4386 mm)

Statistical Results: Post-CaCO3			
	Duplicate		Original
Mean:	1.8262	phi (0.282 mm)	1.8014 phi (0.2869 mm)
Standard Dev:	0.4991	phi-units (0.7076 mm)	0.4359 phi-units (0.7392 mm)
Skewness:	0.1261	dimensionless	0.2151 dimensionless
Kurtosis:	2.9446	dimensionless	2.9311 dimensionless
5th Moment:	2.0931	dimensionless	2.2472 dimensionless
6th Moment:	17.7446	dimensionless	14.9323 dimensionless
RARD*:	0.2733	dimensionless	0.2420 dimensionless
Median:	1.7006	phi (0.3077 mm)	1.6674 phi (0.3148 mm)

Additional Data	
Total Fines	
Original:	0.15 %
Duplicate:	0.32 %
Total Carbonates	
Original:	22.43 %
Duplicate:	24.19 %

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)

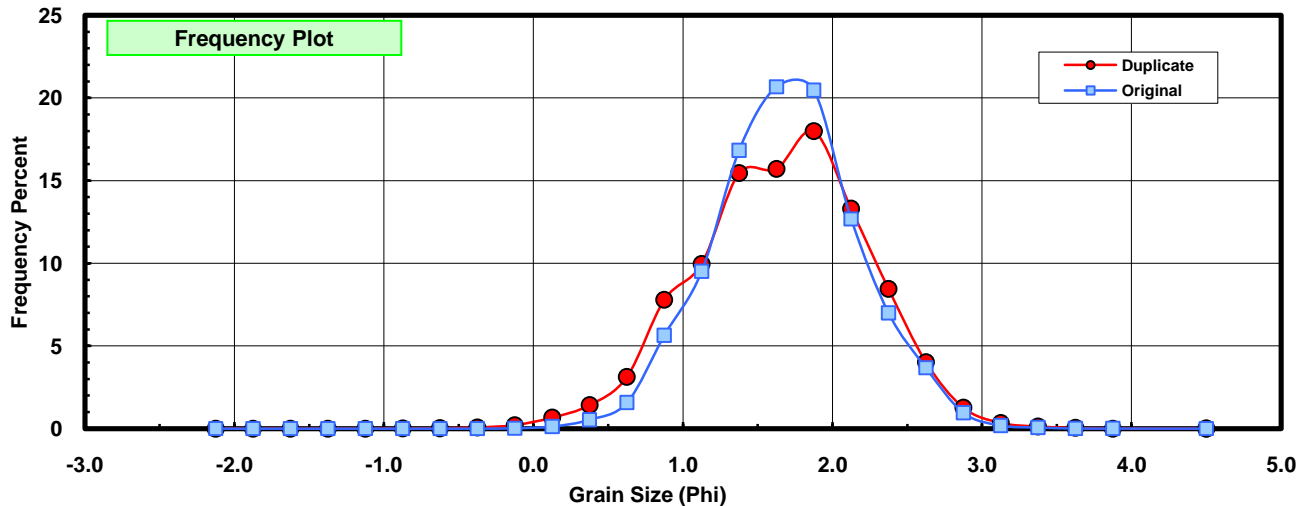
Pre-Digestion Grain Size Distribution

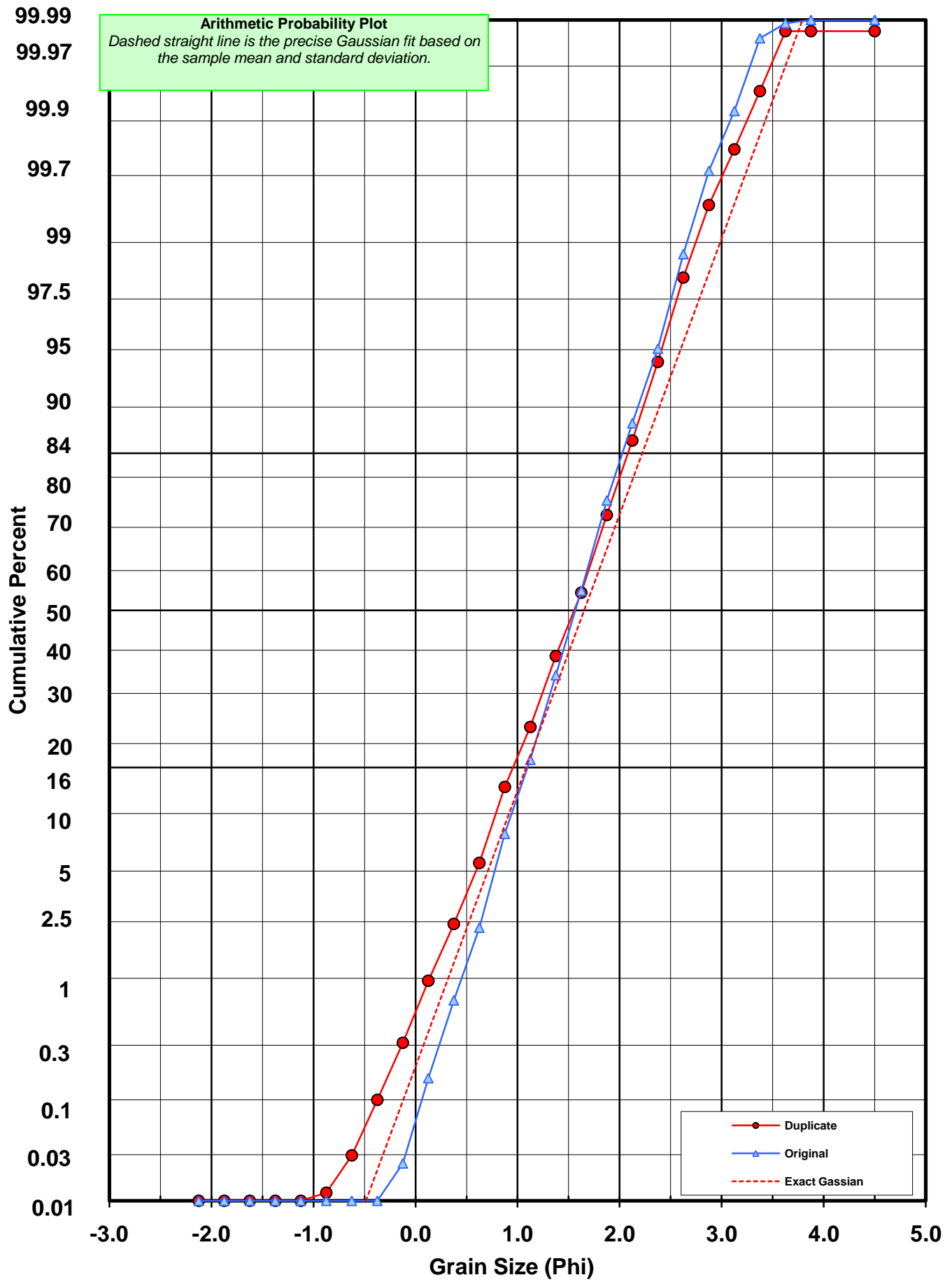
Onshore Grab Sample: VO-06-BB

Total Duplicate Sample Mass: 59.277 grams

Total Original Sample Mass: 72.413 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	0.005	0.008	0.008	0.000	0.000	0.000
-0.50	-0.625	0.013	0.022	0.030	0.000	0.000	0.000
-0.25	-0.375	0.041	0.069	0.100	0.001	0.001	0.001
0.00	-0.125	0.126	0.213	0.312	0.017	0.023	0.025
0.25	0.125	0.394	0.665	0.977	0.094	0.130	0.155
0.50	0.375	0.840	1.417	2.394	0.390	0.539	0.693
0.75	0.625	1.855	3.129	5.523	1.141	1.576	2.269
1.00	0.875	4.619	7.792	13.315	4.087	5.644	7.913
1.25	1.125	5.909	9.968	23.284	6.891	9.516	17.429
1.50	1.375	9.161	15.455	38.738	12.190	16.834	34.263
1.75	1.625	9.308	15.703	54.441	14.970	20.673	54.936
2.00	1.875	10.662	17.987	72.428	14.827	20.476	75.412
2.25	2.125	7.884	13.300	85.728	9.182	12.680	88.092
2.50	2.375	5.011	8.454	94.182	5.066	6.996	95.088
2.75	2.625	2.387	4.027	98.208	2.663	3.678	98.765
3.00	2.875	0.752	1.269	99.477	0.697	0.963	99.728
3.25	3.125	0.205	0.346	99.823	0.138	0.191	99.919
3.50	3.375	0.073	0.123	99.946	0.049	0.068	99.986
3.75	3.625	0.026	0.044	99.990	0.006	0.008	99.994
4.00	3.875	0.000	0.000	99.990	0.004	0.006	100.000
5.00	4.500	0.000	0.000	99.990	0.000	0.000	100.000
5.00	4.500	0.006	0.010	100.000	0.000	0.000	100.000



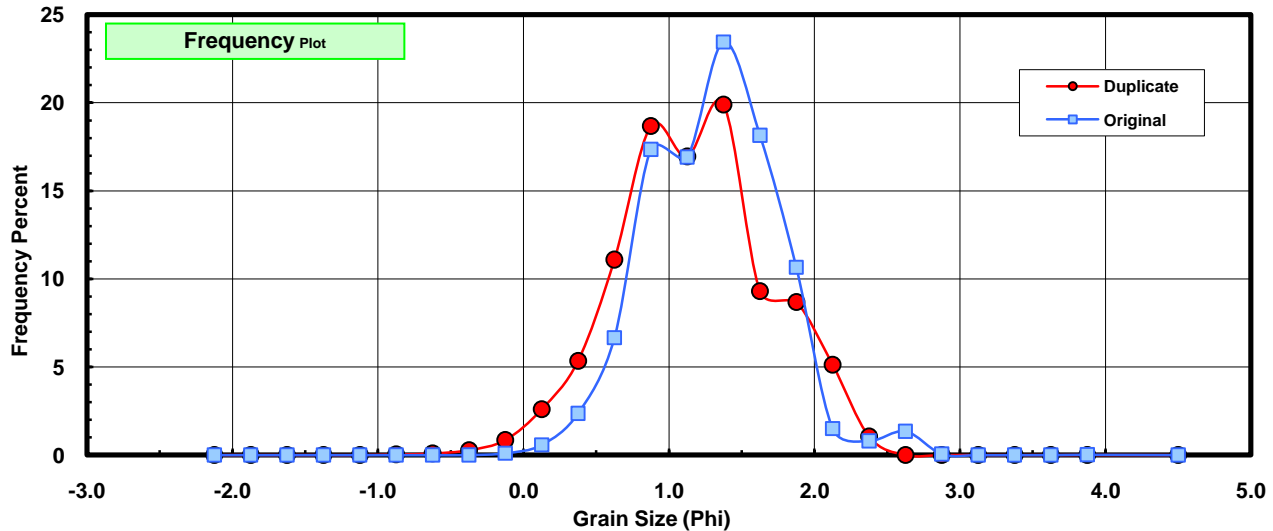


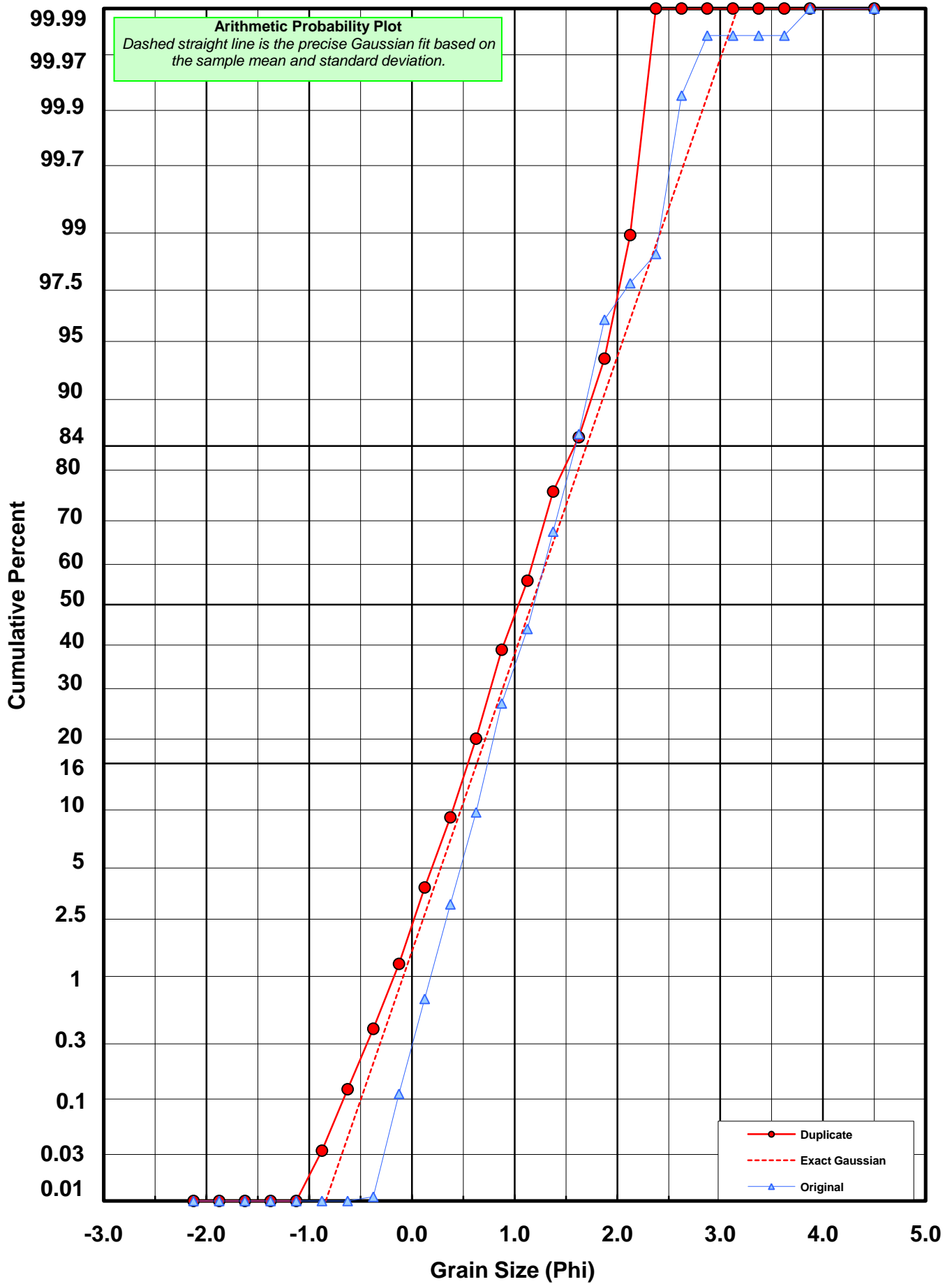
Carbonate Grain Size Distribution

Onshore Grab Sample: VO-06-BB

Total Duplicate Carbonate Mass: 14.842 grams
% Carbonate in Duplicate: 24.2 %
Total Original Carbonate Mass: 16.258 grams
% Carbonate in Original: 22.4 %

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	0.005	0.034	0.034	0.000	0.000	0.000
-0.50	-0.625	0.013	0.088	0.121	0.000	0.000	0.000
-0.25	-0.375	0.041	0.276	0.398	0.001	0.006	0.006
0.00	-0.125	0.126	0.849	1.246	0.017	0.105	0.111
0.25	0.125	0.386	2.601	3.847	0.094	0.578	0.689
0.50	0.375	0.794	5.350	9.197	0.385	2.368	3.057
0.75	0.625	1.647	11.097	20.294	1.083	6.661	9.718
1.00	0.875	2.772	18.677	38.970	2.822	17.358	27.076
1.25	1.125	2.516	16.952	55.922	2.751	16.921	43.997
1.50	1.375	2.954	19.903	75.825	3.813	23.453	67.450
1.75	1.625	1.381	9.305	85.130	2.952	18.157	85.607
2.00	1.875	1.290	8.692	93.822	1.733	10.659	96.266
2.25	2.125	0.761	5.127	98.949	0.244	1.501	97.767
2.50	2.375	0.156	1.051	100.000	0.131	0.806	98.573
2.75	2.625	0.000	0.000	100.000	0.220	1.353	99.926
3.00	2.875	0.000	0.000	100.000	0.009	0.055	99.982
3.25	3.125	0.000	0.000	100.000	0.000	0.000	99.982
3.50	3.375	0.000	0.000	100.000	0.000	0.000	99.982
3.75	3.625	0.000	0.000	100.000	0.000	0.000	99.982
4.00	3.875	0.000	0.000	100.000	0.003	0.018	100.000
5.00	4.500	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: VO-06-BB

Total Duplicate Digested Mass: 44.943 grams
% Silica in Duplicate: 75.8 %
Total Original Digested Mass: 56.172 grams
% Silica in Original: 77.6 %

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	0.000	0.000	0.000	0.000	0.000	0.000
0.25	0.125	0.008	0.018	0.018	0.000	0.000	0.000
0.50	0.375	0.046	0.102	0.120	0.005	0.009	0.009
0.75	0.625	0.208	0.463	0.583	0.058	0.103	0.112
1.00	0.875	1.847	4.110	4.693	1.265	2.252	2.364
1.25	1.125	3.393	7.550	12.242	4.140	7.370	9.734
1.50	1.375	6.207	13.811	26.053	8.377	14.913	24.648
1.75	1.625	7.927	17.638	43.691	12.018	21.395	46.043
2.00	1.875	9.372	20.853	64.544	13.094	23.311	69.353
2.25	2.125	7.123	15.849	80.393	8.938	15.912	85.265
2.50	2.375	4.855	10.803	91.196	4.935	8.786	94.050
2.75	2.625	2.754	6.128	97.323	2.443	4.349	98.400
3.00	2.875	0.840	1.869	99.192	0.688	1.225	99.624
3.25	3.125	0.226	0.503	99.695	0.139	0.247	99.872
3.50	3.375	0.080	0.178	99.873	0.057	0.101	99.973
3.75	3.625	0.036	0.080	99.953	0.014	0.025	99.998
4.00	3.875	0.014	0.031	99.984	0.001	0.002	100.000
5.00	4.500	0.000	0.000	99.984	0.000	0.000	100.000
5.00	4.500	0.007	0.016	100.000	0.000	0.000	100.000

