

Quality Control Statistical Summary

Onshore Grab Sample: VO-44-SS

Sample Taken By: J. Ladner Latitude: 28° 55' 27.90'
 Sample Taken On: 12/03/03 Longitude: 80° 49' 13.86'
 County: Volusia Datum: NAD 83

Statistical Results: Pre-CaCO3		
	Duplicate	Original
Mean:	1.0144 phi (0.4951 mm)	1.0939 phi (0.4685 mm)
Standard Dev:	0.9735 phi-units (0.5093 mm)	0.9505 phi-units (0.5175 mm)
Skewness:	0.4121 dimensionless	0.3609 dimensionless
Kurtosis:	1.9640 dimensionless	1.9809 dimensionless
5th Moment:	1.5004 dimensionless	1.3628 dimensionless
6th Moment:	5.0611 dimensionless	5.2282 dimensionless
RARD*:	0.9597 dimensionless	0.8689 dimensionless
Median:	0.6500 phi (0.6373 mm)	0.7436 phi (0.5973 mm)

Statistical Results: CaCO3		
	Duplicate	Original
Mean:	0.4685 phi (0.7227 mm)	0.5509 phi (0.6826 mm)
Standard Dev:	0.6035 phi-units (0.6582 mm)	0.6233 phi-units (0.6492 mm)
Skewness:	0.5556 dimensionless	0.7109 dimensionless
Kurtosis:	3.3192 dimensionless	4.0801 dimensionless
5th Moment:	4.9771 dimensionless	8.8938 dimensionless
6th Moment:	18.8583 dimensionless	35.5165 dimensionless
RARD*:	1.2881 dimensionless	1.1315 dimensionless
Median:	0.2993 phi (0.8126 mm)	0.4032 phi (0.7562 mm)

Statistical Results: Post-CaCO3		
	Duplicate	Original
Mean:	1.7024 phi (0.3073 mm)	1.7193 phi (0.3037 mm)
Standard Dev:	0.9220 phi-units (0.5278 mm)	0.8805 phi-units (0.5432 mm)
Skewness:	-0.4904 dimensionless	-0.4368 dimensionless
Kurtosis:	1.8953 dimensionless	1.9232 dimensionless
5th Moment:	-1.8663 dimensionless	-1.6453 dimensionless
6th Moment:	5.3479 dimensionless	5.3791 dimensionless
RARD*:	0.5415 dimensionless	0.5121 dimensionless
Median:	1.9149 phi (0.2652 mm)	1.8648 phi (0.2746 mm)

Additional Data	
Total Fines	
Original:	0.56 %
Duplicate:	0.7 %
Total Carbonates	
Original:	53.47 %
Duplicate:	55.3 %

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 $mm = 2^{\sqrt{-\phi}}$	
* 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)

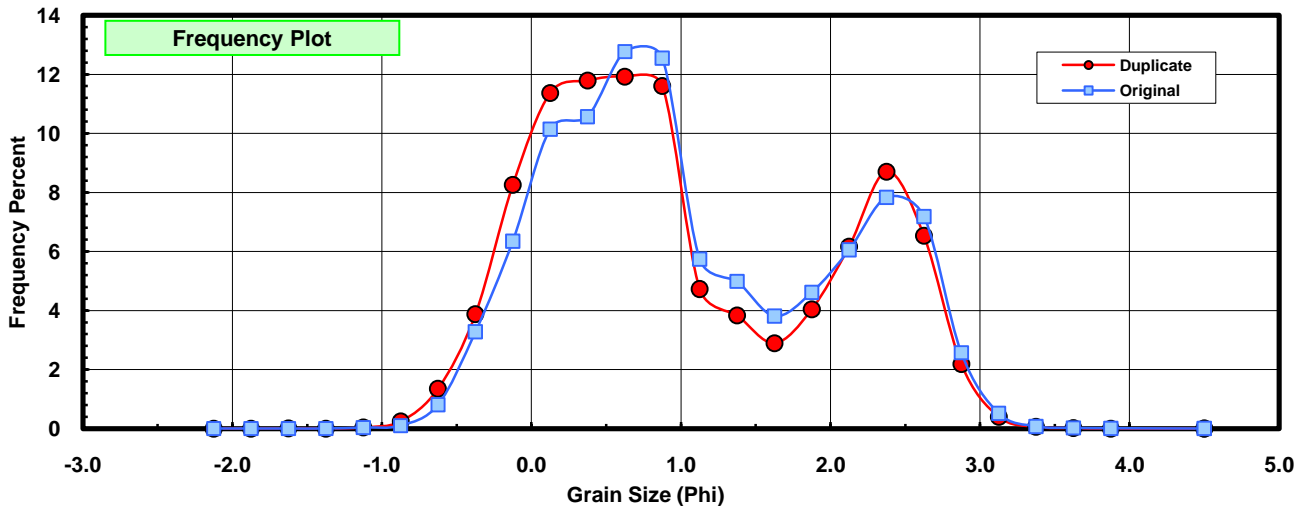
Pre-Digestion Grain Size Distribution

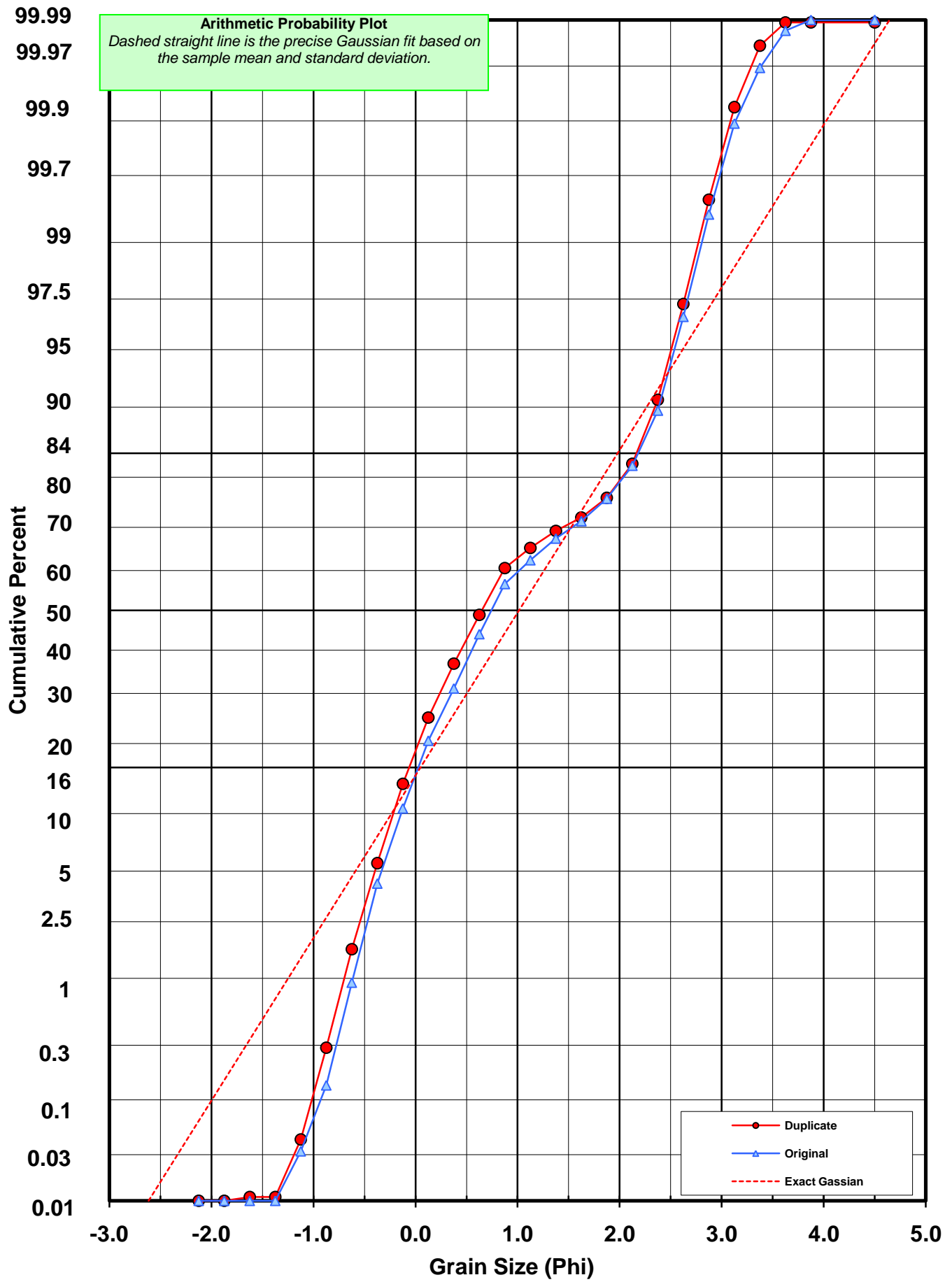
Onshore Grab Sample: VO-44-SS

Total Duplicate Sample Mass: 101.014 grams

Total Original Sample Mass: 80.728 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	0.006	0.006	0.006	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.006	0.000	0.000	0.000
-1.00	-1.125	0.038	0.038	0.044	0.027	0.033	0.033
-0.75	-0.875	0.243	0.241	0.284	0.081	0.100	0.134
-0.50	-0.625	1.364	1.350	1.634	0.655	0.811	0.945
-0.25	-0.375	3.912	3.873	5.507	2.645	3.277	4.222
0.00	-0.125	8.337	8.253	13.760	5.126	6.350	10.572
0.25	0.125	11.481	11.366	25.126	8.188	10.143	20.716
0.50	0.375	11.911	11.791	36.918	8.528	10.565	31.280
0.75	0.625	12.043	11.922	48.840	10.308	12.770	44.050
1.00	0.875	11.721	11.603	60.443	10.127	12.546	56.595
1.25	1.125	4.775	4.727	65.170	4.633	5.739	62.335
1.50	1.375	3.876	3.837	69.007	4.025	4.986	67.321
1.75	1.625	2.921	2.892	71.899	3.075	3.809	71.131
2.00	1.875	4.081	4.040	75.939	3.723	4.612	75.743
2.25	2.125	6.230	6.167	82.106	4.885	6.052	81.794
2.50	2.375	8.793	8.705	90.811	6.321	7.831	89.625
2.75	2.625	6.597	6.531	97.342	5.798	7.183	96.808
3.00	2.875	2.207	2.185	99.527	2.074	2.569	99.377
3.25	3.125	0.402	0.398	99.925	0.418	0.518	99.895
3.50	3.375	0.058	0.057	99.982	0.059	0.073	99.968
3.75	3.625	0.013	0.013	99.995	0.018	0.022	99.990
4.00	3.875	0.000	0.000	99.995	0.008	0.010	100.000
5.00	4.500	0.000	0.000	99.995	0.000	0.000	100.000
5.00	4.500	0.005	0.005	100.000	0.006	0.007	100.007



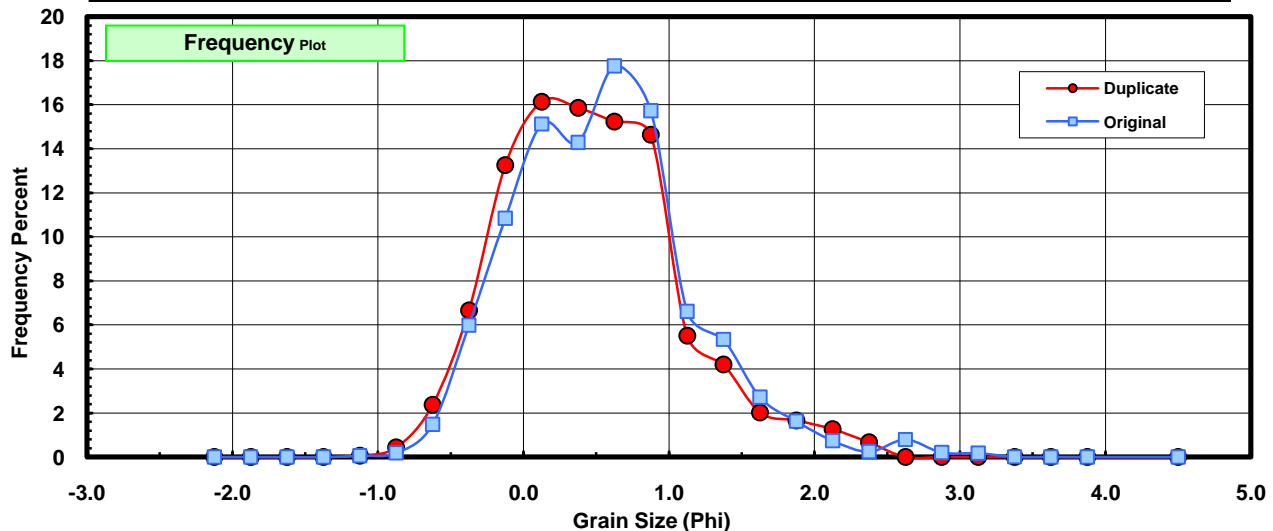


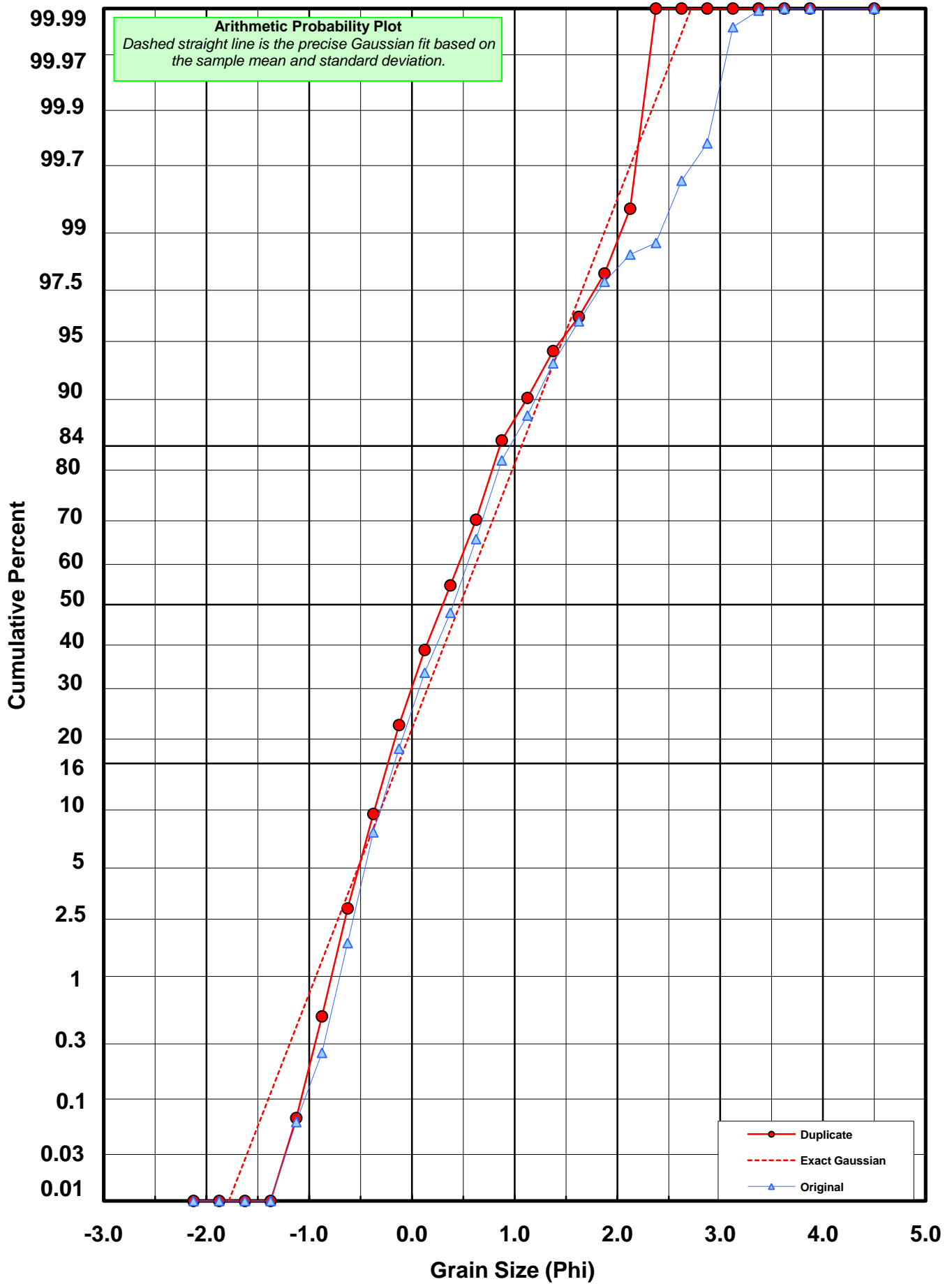
Carbonate Grain Size Distribution

Onshore Grab Sample: VO-44-SS

Total Duplicate Carbonate Mass: 56.093 grams
% Carbonate in Duplicate: 55.3 %
Total Original Carbonate Mass: 43.180 grams
% Carbonate in Original: 53.5 %

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	0.038	0.068	0.068	0.027	0.063	0.063
-0.75	-0.875	0.243	0.433	0.501	0.081	0.188	0.250
-0.50	-0.625	1.334	2.378	2.879	0.641	1.484	1.735
-0.25	-0.375	3.738	6.664	9.543	2.588	5.994	7.728
0.00	-0.125	7.438	13.260	22.803	4.683	10.845	18.573
0.25	0.125	9.053	16.139	38.942	6.533	15.130	33.703
0.50	0.375	8.896	15.859	54.802	6.173	14.296	47.999
0.75	0.625	8.544	15.232	70.034	7.673	17.770	65.769
1.00	0.875	8.209	14.635	84.668	6.793	15.732	81.501
1.25	1.125	3.091	5.510	90.179	2.856	6.614	88.115
1.50	1.375	2.355	4.198	94.377	2.308	5.345	93.460
1.75	1.625	1.136	2.025	96.402	1.177	2.726	96.186
2.00	1.875	0.935	1.667	98.069	0.704	1.630	97.816
2.25	2.125	0.709	1.264	99.333	0.321	0.743	98.560
2.50	2.375	0.374	0.667	100.000	0.106	0.245	98.805
2.75	2.625	0.000	0.000	100.000	0.344	0.797	99.602
3.00	2.875	0.000	0.000	100.000	0.089	0.206	99.808
3.25	3.125	0.000	0.000	100.000	0.077	0.178	99.986
3.50	3.375	0.000	0.000	100.000	0.004	0.009	99.995
3.75	3.625	0.000	0.000	100.000	0.002	0.005	100.000
4.00	3.875	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
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-44-SS

Total Duplicate Digested Mass: 45.162 grams
% Silica in Duplicate: 44.7 %
Total Original Digested Mass: 37.561 grams
% Silica in Original: 46.5 %

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	0.006	0.013	0.013	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.013	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.013	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.013	0.000	0.000	0.000
-0.50	-0.625	0.030	0.066	0.080	0.014	0.037	0.037
-0.25	-0.375	0.174	0.385	0.465	0.057	0.152	0.189
0.00	-0.125	0.899	1.991	2.456	0.443	1.179	1.368
0.25	0.125	2.428	5.376	7.832	1.655	4.406	5.775
0.50	0.375	3.015	6.676	14.508	2.355	6.270	12.044
0.75	0.625	3.499	7.748	22.255	2.635	7.015	19.060
1.00	0.875	3.512	7.776	30.032	3.334	8.876	27.936
1.25	1.125	1.684	3.729	33.761	1.777	4.731	32.667
1.50	1.375	1.521	3.368	37.129	1.717	4.571	37.238
1.75	1.625	1.785	3.952	41.081	1.898	5.053	42.291
2.00	1.875	3.146	6.966	48.047	3.019	8.038	50.329
2.25	2.125	5.521	12.225	60.272	4.564	12.151	62.480
2.50	2.375	8.419	18.642	78.914	6.215	16.546	79.026
2.75	2.625	6.711	14.860	93.774	5.454	14.520	93.546
3.00	2.875	2.291	5.073	98.846	1.985	5.285	98.831
3.25	3.125	0.407	0.901	99.748	0.341	0.908	99.739
3.50	3.375	0.067	0.148	99.896	0.055	0.146	99.886
3.75	3.625	0.020	0.044	99.940	0.016	0.043	99.928
4.00	3.875	0.015	0.033	99.973	0.014	0.037	99.965
5.00	4.500	0.000	0.000	99.973	0.000	0.000	99.965
5.00	4.500	0.012	0.027	100.000	0.013	0.035	100.000

