

Quality Control Statistical Summary

Onshore Grab Sample: VO-39-SS

Sample Taken By: J. Ladner **Latitude:** 28° 58' 40.80'
 Sample Taken On: 12/03/03 **Longitude:** 80° 51' 27.54'
 County: Volusia **Datum:** NAD 83

Statistical Results: Pre-CaCO3				
	Duplicate		Original	
Mean:	1.4802	phi (0.3585 mm)	1.4828	phi (0.3578 mm)
Standard Dev:	0.8362	phi-units (0.5601 mm)	0.8614	phi-units (0.5504 mm)
Skewness:	-0.1927	dimensionless	-0.1631	dimensionless
Kurtosis:	1.9378	dimensionless	1.8933	dimensionless
5th Moment:	-1.0593	dimensionless	-0.8272	dimensionless
6th Moment:	5.6786	dimensionless	5.5486	dimensionless
RARD*:	0.5650	dimensionless	0.5809	dimensionless
Median:	1.3870	phi (0.3823 mm)	1.3872	phi (0.3823 mm)

Statistical Results: CaCO3				
	Duplicate		Original	
Mean:	0.8286	phi (0.5631 mm)	0.7816	phi (0.5817 mm)
Standard Dev:	0.6135	phi-units (0.6536 mm)	0.6255	phi-units (0.6482 mm)
Skewness:	0.2860	dimensionless	0.6603	dimensionless
Kurtosis:	2.8528	dimensionless	4.0377	dimensionless
5th Moment:	1.9387	dimensionless	8.2465	dimensionless
6th Moment:	11.7195	dimensionless	37.5126	dimensionless
RARD*:	0.7404	dimensionless	0.8002	dimensionless
Median:	0.6985	phi (0.6162 mm)	0.6083	phi (0.656 mm)

Statistical Results: Post-CaCO3				
	Duplicate		Original	
Mean:	1.9350	phi (0.2615 mm)	1.9508	phi (0.2587 mm)
Standard Dev:	0.6580	phi-units (0.6338 mm)	0.6585	phi-units (0.6335 mm)
Skewness:	-0.7739	dimensionless	-0.7607	dimensionless
Kurtosis:	2.7628	dimensionless	2.7428	dimensionless
5th Moment:	-3.8644	dimensionless	-3.7389	dimensionless
6th Moment:	12.2541	dimensionless	12.2812	dimensionless
RARD*:	0.3400	dimensionless	0.3376	dimensionless
Median:	1.9912	phi (0.2515 mm)	2.0105	phi (0.2482 mm)

Additional Data	
Total Fines	
Original:	1.06 %
Duplicate:	1.04 %
Total Carbonates	
Original:	39.48 %
Duplicate:	39.1 %

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

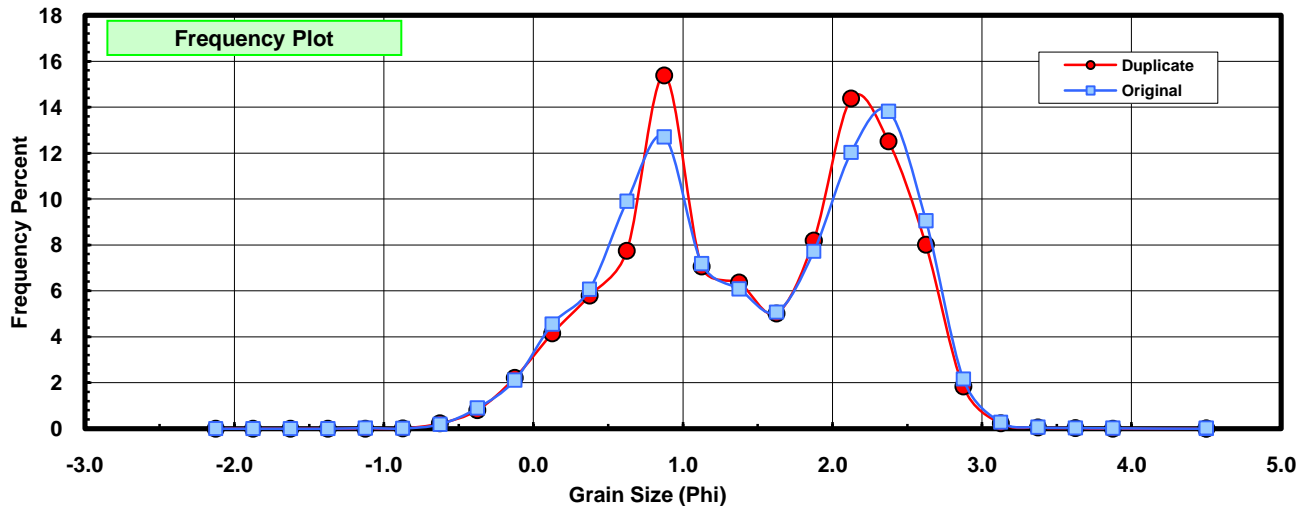
Pre-Digestion Grain Size Distribution

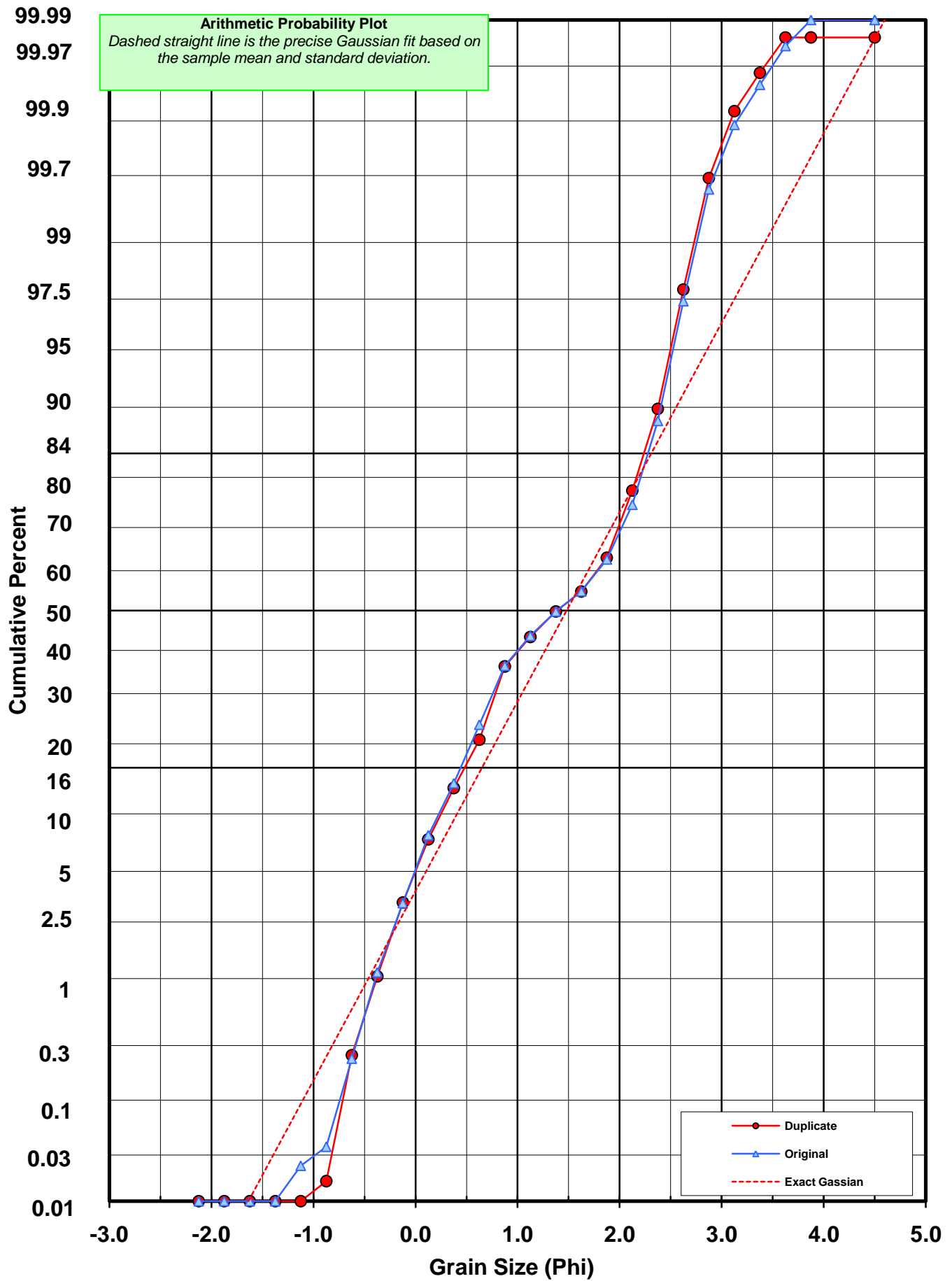
Onshore Grab Sample: VO-39-SS

Total Duplicate Sample Mass: 74.717 grams

Total Original Sample Mass: 72.184 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	0.017	0.024	0.024
-0.75	-0.875	0.011	0.015	0.015	0.010	0.014	0.037
-0.50	-0.625	0.173	0.232	0.246	0.139	0.193	0.230
-0.25	-0.375	0.604	0.808	1.055	0.649	0.899	1.129
0.00	-0.125	1.655	2.215	3.270	1.526	2.115	3.244
0.25	0.125	3.097	4.145	7.415	3.285	4.552	7.796
0.50	0.375	4.326	5.790	13.204	4.378	6.067	13.863
0.75	0.625	5.788	7.747	20.951	7.150	9.908	23.771
1.00	0.875	11.496	15.386	36.337	9.171	12.709	36.479
1.25	1.125	5.271	7.055	43.392	5.189	7.191	43.670
1.50	1.375	4.757	6.367	49.758	4.390	6.083	49.753
1.75	1.625	3.747	5.015	54.773	3.661	5.073	54.827
2.00	1.875	6.122	8.194	62.967	5.572	7.721	62.548
2.25	2.125	10.738	14.372	77.338	8.680	12.028	74.576
2.50	2.375	9.343	12.505	89.843	9.975	13.823	88.399
2.75	2.625	5.983	8.008	97.851	6.531	9.050	97.449
3.00	2.875	1.373	1.838	99.688	1.560	2.162	99.611
3.25	3.125	0.172	0.230	99.918	0.203	0.281	99.892
3.50	3.375	0.034	0.046	99.964	0.044	0.061	99.953
3.75	3.625	0.017	0.023	99.987	0.021	0.029	99.982
4.00	3.875	0.000	0.000	99.987	0.013	0.018	100.000
5.00	4.500	0.000	0.000	99.987	0.000	0.000	100.000
5.00	4.500	0.010	0.013	100.000	0.020	0.028	100.028



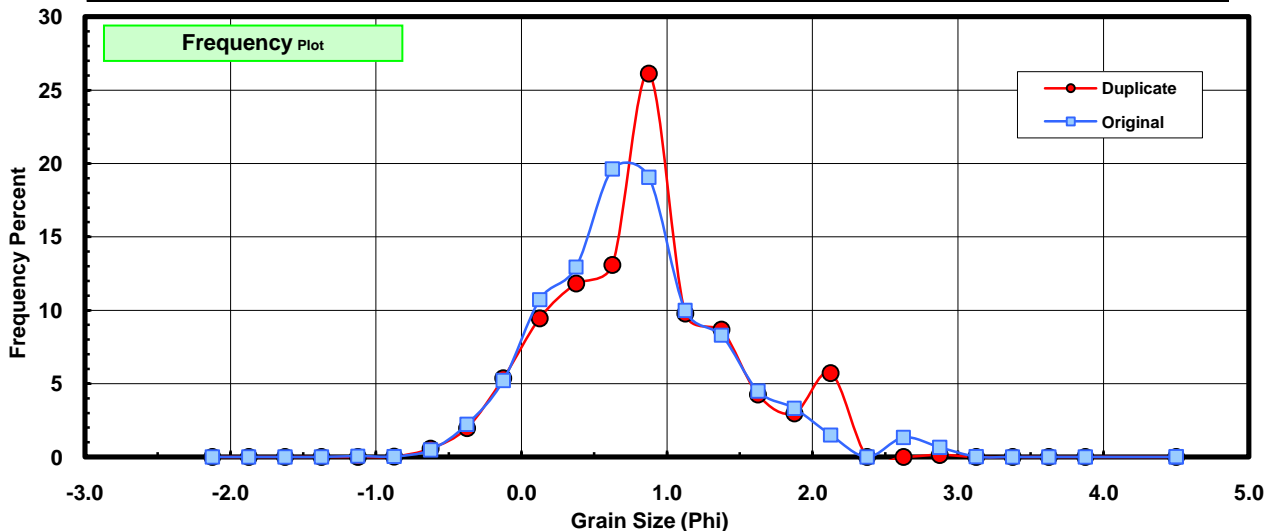


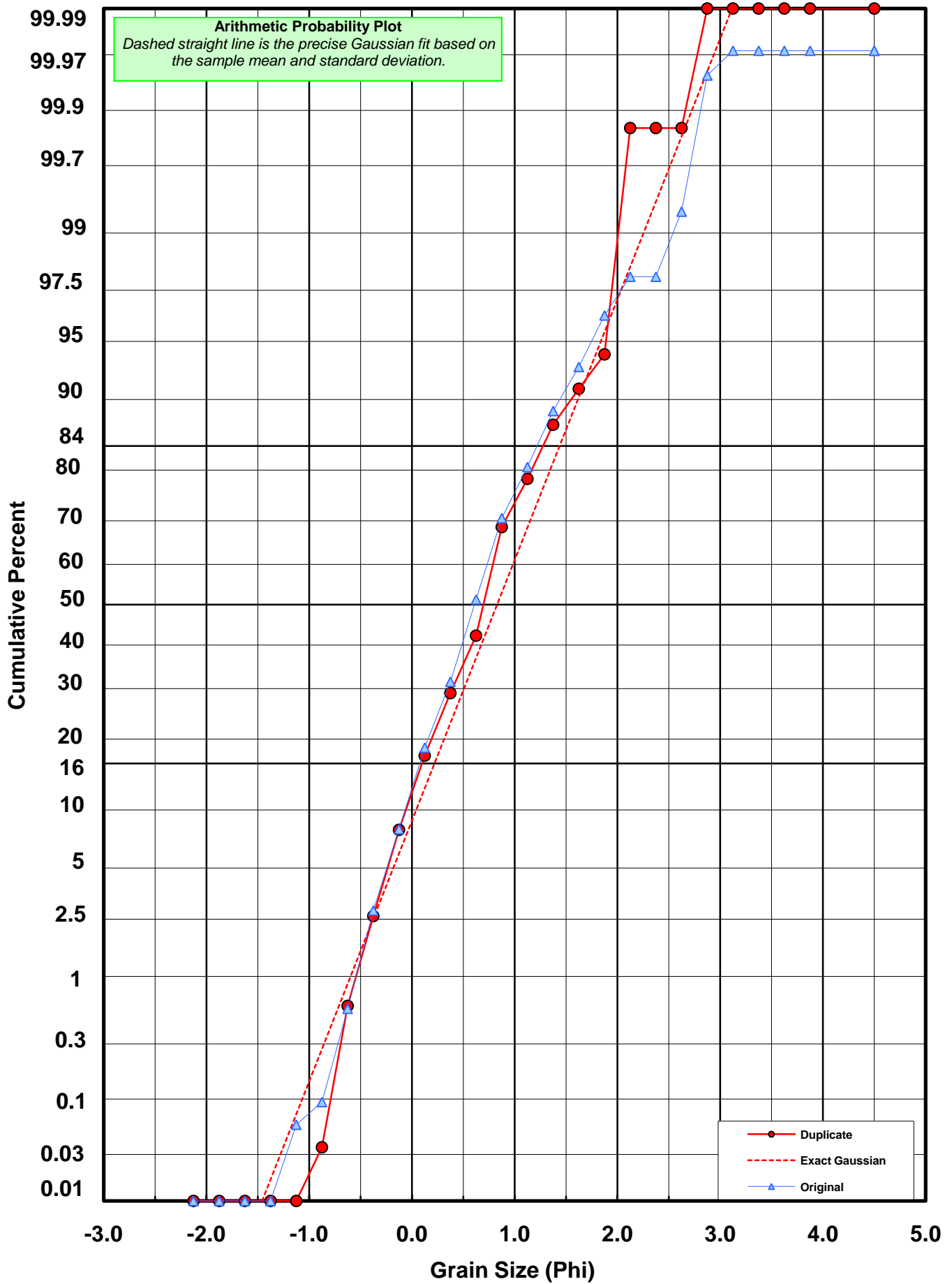
Carbonate Grain Size Distribution

Onshore Grab Sample: VO-39-SS

Total Duplicate Carbonate Mass: 30.255 grams
% Carbonate in Duplicate: 39.1 %
Total Original Carbonate Mass: 28.779 grams
% Carbonate in Original: 39.5 %

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	0.000	0.000	0.000	0.017	0.059	0.059
-0.75	-0.875	0.011	0.036	0.036	0.010	0.035	0.094
-0.50	-0.625	0.173	0.572	0.608	0.139	0.483	0.577
-0.25	-0.375	0.598	1.977	2.585	0.640	2.224	2.801
0.00	-0.125	1.624	5.368	7.952	1.499	5.209	8.009
0.25	0.125	2.859	9.450	17.402	3.086	10.723	18.732
0.50	0.375	3.578	11.826	29.228	3.726	12.947	31.679
0.75	0.625	3.962	13.095	42.324	5.650	19.632	51.312
1.00	0.875	7.905	26.128	68.451	5.486	19.063	70.374
1.25	1.125	2.955	9.767	78.218	2.876	9.993	80.368
1.50	1.375	2.627	8.683	86.901	2.389	8.301	88.669
1.75	1.625	1.286	4.251	91.152	1.292	4.489	93.158
2.00	1.875	0.902	2.981	94.133	0.954	3.315	96.473
2.25	2.125	1.732	5.725	99.858	0.431	1.498	97.971
2.50	2.375	0.000	0.000	99.858	0.000	0.000	97.971
2.75	2.625	0.000	0.000	99.858	0.382	1.327	99.298
3.00	2.875	0.043	0.142	100.000	0.188	0.653	99.951
3.25	3.125	0.000	0.000	100.000	0.006	0.021	99.972
3.50	3.375	0.000	0.000	100.000	0.000	0.000	99.972
3.75	3.625	0.000	0.000	100.000	0.000	0.000	99.972
4.00	3.875	0.000	0.000	100.000	0.000	0.000	99.972
5.00	4.500	0.000	0.000	100.000	0.000	0.000	99.972
5.00	4.500	0.000	0.000	100.000	0.008	0.028	100.000





Post-Digestion Grain Size Distribution

Onshore Grab Sample: VO-39-SS

Total Duplicate Digested Mass: 45.509 grams
% Silica in Duplicate: 60.9 %
Total Original Digested Mass: 43.688 grams
% Silica in Original: 60.5 %

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	0.000	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	0.006	0.013	0.013	0.009	0.021	0.021
0.00	-0.125	0.031	0.068	0.081	0.027	0.062	0.082
0.25	0.125	0.238	0.523	0.604	0.199	0.456	0.538
0.50	0.375	0.748	1.644	2.248	0.652	1.492	2.030
0.75	0.625	1.826	4.012	6.260	1.500	3.433	5.464
1.00	0.875	3.591	7.891	14.151	3.685	8.435	13.899
1.25	1.125	2.316	5.089	19.240	2.313	5.294	19.193
1.50	1.375	2.130	4.680	23.921	2.001	4.580	23.773
1.75	1.625	2.461	5.408	29.328	2.369	5.423	29.196
2.00	1.875	5.220	11.470	40.799	4.618	10.570	39.766
2.25	2.125	9.006	19.789	60.588	8.249	18.882	58.648
2.50	2.375	10.332	22.703	83.291	10.245	23.450	82.098
2.75	2.625	6.002	13.189	96.480	6.149	14.075	96.173
3.00	2.875	1.330	2.922	99.402	1.372	3.140	99.313
3.25	3.125	0.179	0.393	99.796	0.197	0.451	99.764
3.50	3.375	0.044	0.097	99.892	0.047	0.108	99.872
3.75	3.625	0.023	0.051	99.943	0.027	0.062	99.934
4.00	3.875	0.016	0.035	99.978	0.017	0.039	99.973
5.00	4.500	0.000	0.000	99.978	0.000	0.000	99.973
5.00	4.500	0.010	0.022	100.000	0.012	0.027	100.000

