

Quality Control Statistical Summary

Onshore Grab Sample: IR-01-BB

Sample Taken By: D. Phelps
 Sample Taken On: 10/29/08
 County: Indian River

Latitude: 27° 51' 30.6"
 Longitude: 80° 26' 47.4"
 Datum: WGS 84

Statistical Results: Pre-CaCO3		
	Duplicate	Original
Mean:	1.1265 phi (0.458 mm)	1.1529 phi (0.4497 mm)
Standard Dev:	0.8670 phi-units (0.5483 mm)	0.7695 phi-units (0.5866 mm)
Skewness:	-0.9355 dimensionless	-0.8679 dimensionless
Kurtosis:	4.0385 dimensionless	4.9489 dimensionless
5th Moment:	-9.2857 dimensionless	-14.0804 dimensionless
6th Moment:	33.2045 dimensionless	63.8993 dimensionless
RARD*:	0.7697 dimensionless	0.6674 dimensionless
Median:	1.1702 phi (0.4444 mm)	1.1272 phi (0.4578 mm)

Statistical Results: CaCO3		
	Duplicate	Original
Mean:	0.7247 phi (0.6051 mm)	0.8177 phi (0.5673 mm)
Standard Dev:	0.9937 phi-units (0.5022 mm)	0.8659 phi-units (0.5487 mm)
Skewness:	-0.5286 dimensionless	-0.6932 dimensionless
Kurtosis:	2.8221 dimensionless	4.1718 dimensionless
5th Moment:	-4.1034 dimensionless	-9.4749 dimensionless
6th Moment:	14.2752 dimensionless	37.9265 dimensionless
RARD*:	1.3712 dimensionless	1.0589 dimensionless
Median:	0.7201 phi (0.6071 mm)	0.7109 phi (0.6109 mm)

Statistical Results: Post-CaCO3		
	Duplicate	Original
Mean:	1.4557 phi (0.3646 mm)	1.4192 phi (0.3739 mm)
Standard Dev:	0.5926 phi-units (0.6632 mm)	0.5722 phi-units (0.6726 mm)
Skewness:	-0.2139 dimensionless	-0.0566 dimensionless
Kurtosis:	3.3516 dimensionless	3.1085 dimensionless
5th Moment:	-1.0743 dimensionless	0.2049 dimensionless
6th Moment:	20.6798 dimensionless	17.9700 dimensionless
RARD*:	0.4071 dimensionless	0.4032 dimensionless
Median:	1.3620 phi (0.389 mm)	1.3133 phi (0.4024 mm)

Additional Data	
Total Fines	
Original:	0.14 %
Duplicate:	0.16 %
Total Carbonates	
Original:	44.02 %
Duplicate:	44.59 %

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)

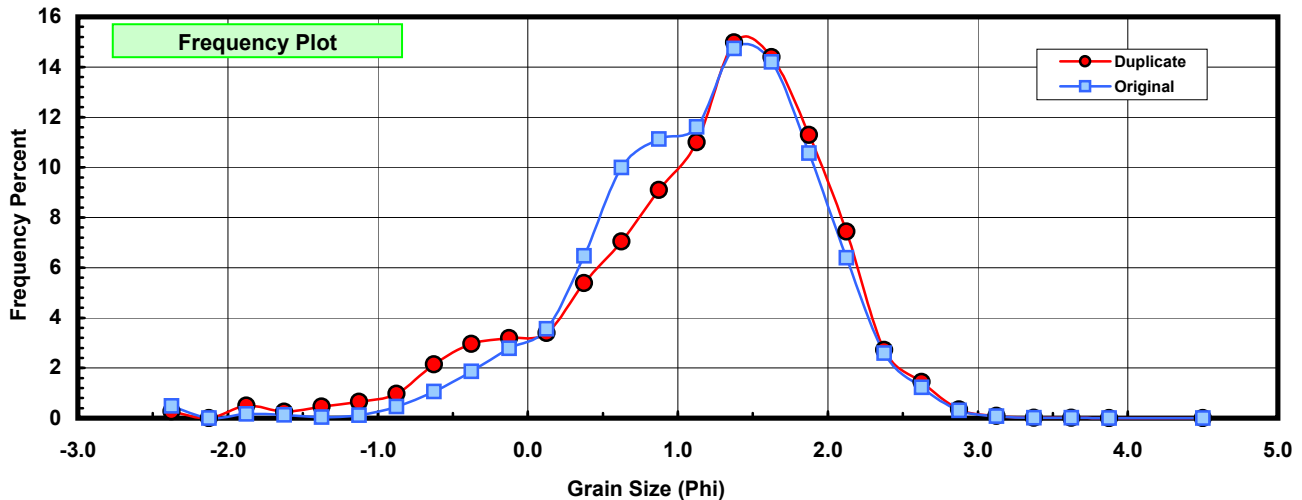
Pre-Digestion Grain Size Distribution

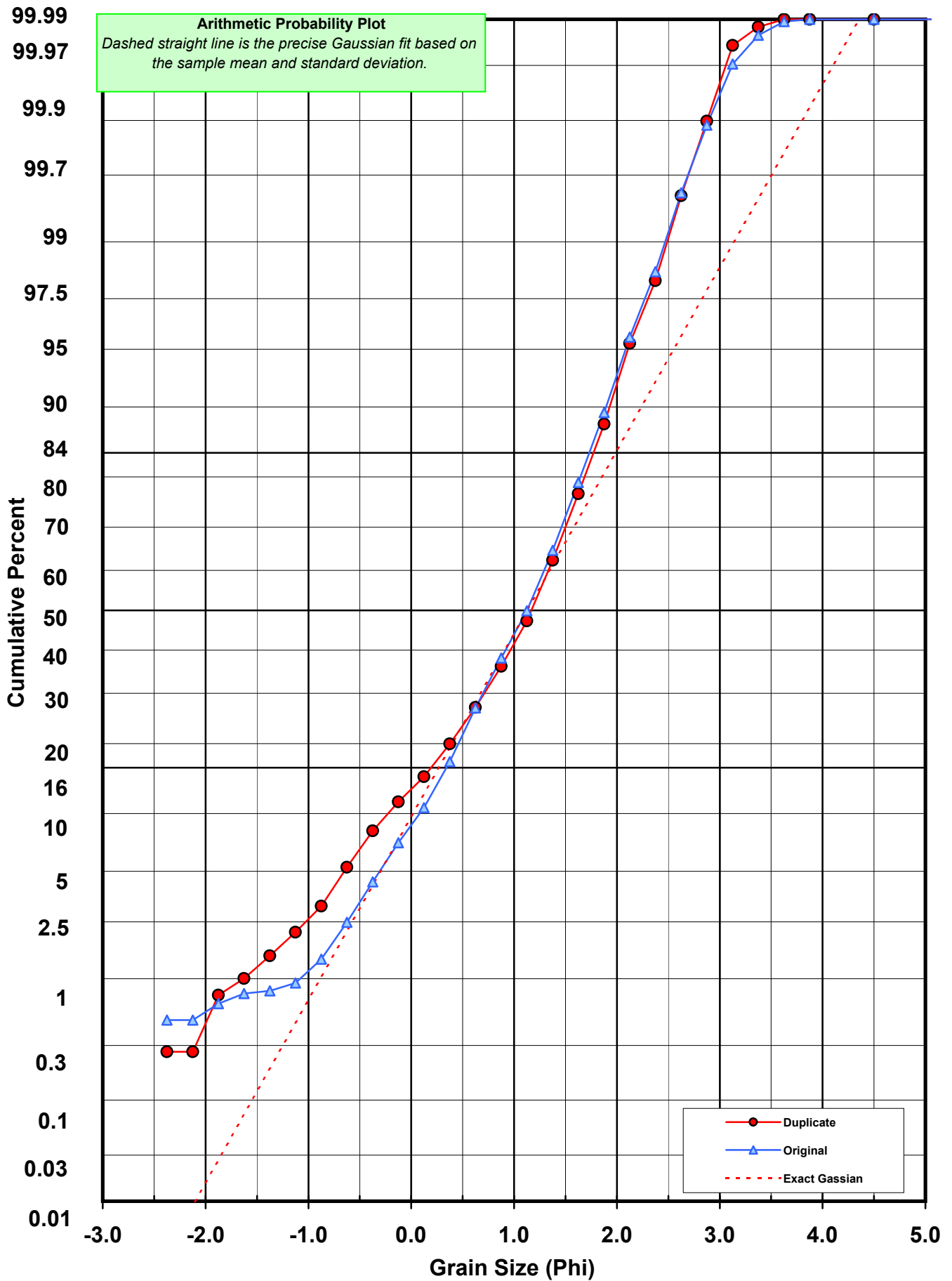
Onshore Grab Sample: IR-01-BB

Total Duplicate Sample Mass: 61.201 grams

Total Original Sample Mass: 63.788 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	0.161	0.263	0.263	0.309	0.484	0.484
-2.00	-2.125	0.000	0.000	0.263	0.000	0.000	0.484
-1.75	-1.875	0.306	0.500	0.763	0.109	0.171	0.655
-1.50	-1.625	0.156	0.255	1.018	0.083	0.130	0.785
-1.25	-1.375	0.280	0.458	1.475	0.024	0.038	0.823
-1.00	-1.125	0.399	0.652	2.127	0.077	0.121	0.944
-0.75	-0.875	0.595	0.972	3.100	0.292	0.458	1.402
-0.50	-0.625	1.311	2.142	5.242	0.677	1.061	2.463
-0.25	-0.375	1.810	2.957	8.199	1.186	1.859	4.322
0.00	-0.125	1.951	3.188	11.387	1.773	2.780	7.102
0.25	0.125	2.077	3.394	14.781	2.272	3.562	10.663
0.50	0.375	3.293	5.381	20.161	4.126	6.468	17.132
0.75	0.625	4.310	7.042	27.204	6.374	9.992	27.124
1.00	0.875	5.564	9.091	36.295	7.100	11.131	38.255
1.25	1.125	6.730	10.997	47.292	7.409	11.615	49.870
1.50	1.375	9.165	14.975	62.267	9.400	14.736	64.606
1.75	1.625	8.810	14.395	76.662	9.059	14.202	78.808
2.00	1.875	6.913	11.296	87.958	6.735	10.558	89.366
2.25	2.125	4.552	7.438	95.396	4.078	6.393	95.759
2.50	2.375	1.661	2.714	98.110	1.653	2.591	98.351
2.75	2.625	0.885	1.446	99.556	0.784	1.229	99.580
3.00	2.875	0.210	0.343	99.899	0.198	0.310	99.890
3.25	3.125	0.051	0.083	99.982	0.051	0.080	99.970
3.50	3.375	0.006	0.010	99.992	0.011	0.017	99.987
3.75	3.625	0.005	0.008	100.000	0.005	0.008	99.995
4.00	3.875	0.000	0.000	100.000	0.003	0.005	100.000
5.00	4.500	0.000	0.000	100.000	0.000	0.000	100.000



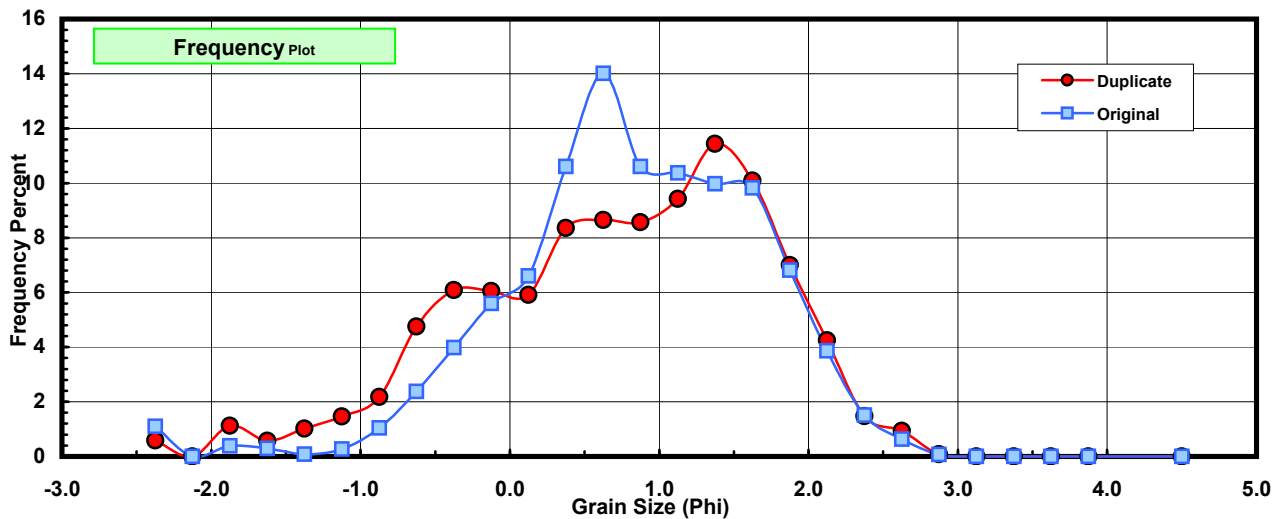


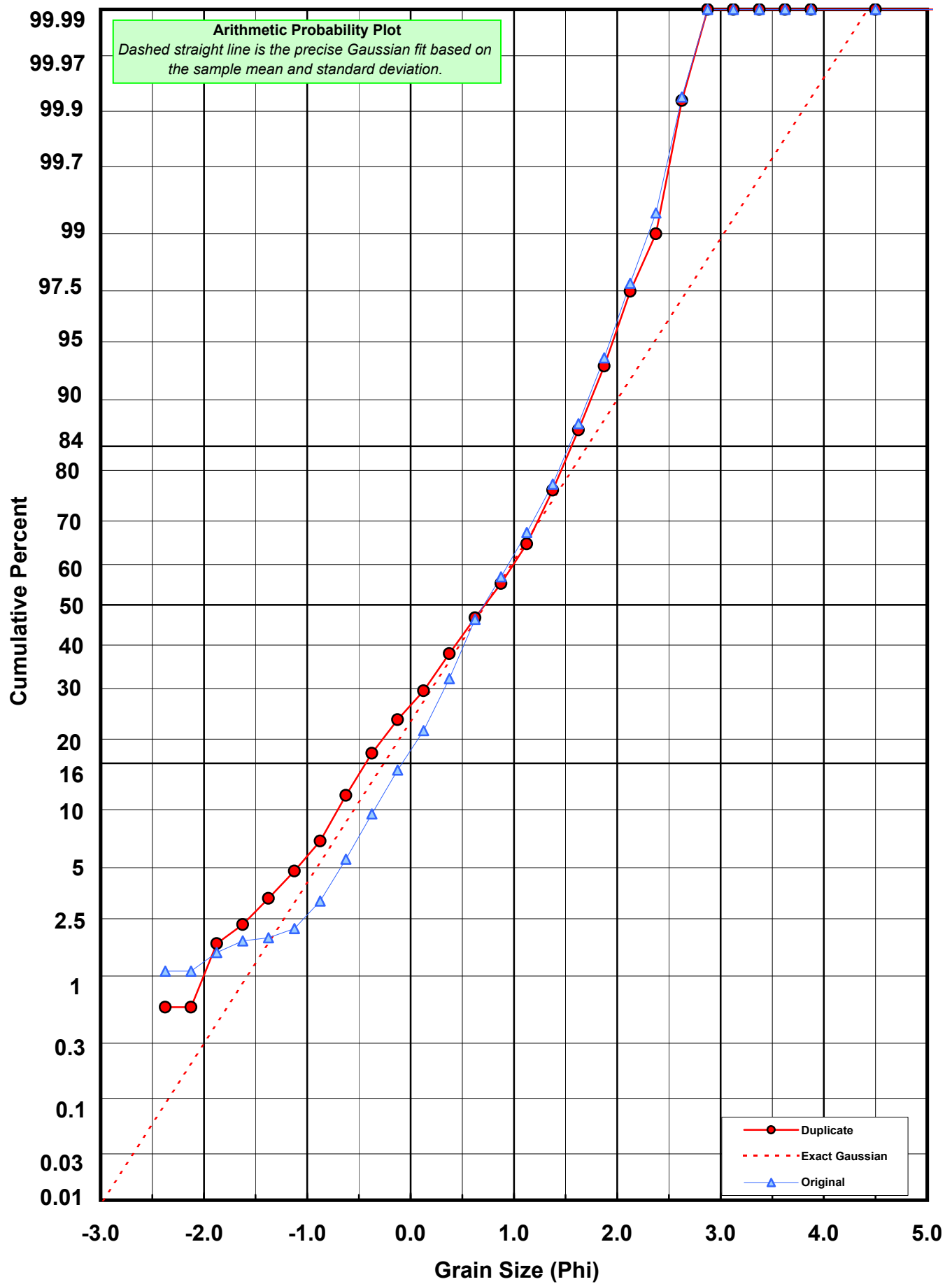
Carbonate Grain Size Distribution

Onshore Grab Sample: IR-01-BB

Total Duplicate Carbonate Mass: 27.358 grams
% Carbonate in Duplicate: 44.6 %
Total Original Carbonate Mass: 28.114 grams
% Carbonate in Original: 44.0 %

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	0.161	0.588	0.588	0.309	1.099	1.099
-2.00	-2.125	0.000	0.000	0.588	0.000	0.000	1.099
-1.75	-1.875	0.306	1.119	1.707	0.109	0.388	1.487
-1.50	-1.625	0.156	0.570	2.277	0.083	0.295	1.782
-1.25	-1.375	0.280	1.023	3.301	0.024	0.085	1.867
-1.00	-1.125	0.399	1.458	4.759	0.077	0.274	2.141
-0.75	-0.875	0.595	2.175	6.934	0.292	1.039	3.180
-0.50	-0.625	1.299	4.748	11.682	0.667	2.372	5.552
-0.25	-0.375	1.666	6.090	17.772	1.120	3.984	9.536
0.00	-0.125	1.655	6.049	23.821	1.573	5.595	15.131
0.25	0.125	1.618	5.914	29.735	1.857	6.605	21.737
0.50	0.375	2.287	8.360	38.095	2.982	10.607	32.343
0.75	0.625	2.365	8.645	46.740	3.940	14.014	46.358
1.00	0.875	2.345	8.572	55.311	2.980	10.600	56.957
1.25	1.125	2.577	9.420	64.731	2.914	10.365	67.322
1.50	1.375	3.128	11.434	76.164	2.802	9.967	77.289
1.75	1.625	2.761	10.092	86.256	2.760	9.817	87.106
2.00	1.875	1.916	7.003	93.260	1.915	6.812	93.918
2.25	2.125	1.161	4.244	97.503	1.087	3.866	97.784
2.50	2.375	0.405	1.480	98.984	0.423	1.505	99.289
2.75	2.625	0.256	0.936	99.920	0.179	0.637	99.925
3.00	2.875	0.022	0.080	100.000	0.021	0.075	100.000
3.25	3.125	0.000	0.000	100.000	0.000	0.000	100.000
3.50	3.375	0.000	0.000	100.000	0.000	0.000	100.000
3.75	3.625	0.000	0.000	100.000	0.000	0.000	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





Post-Digestion Grain Size Distribution

Onshore Grab Sample: IR-01-BB

Total Duplicate Digested Mass: 33.913 grams
% Silica in Duplicate: 55.4 %
Total Original Digested Mass: 35.709 grams
% Silica in Original: 56.0 %

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	0.000	0.000	0.000
-0.50	-0.625	0.012	0.035	0.035	0.010	0.028	0.028
-0.25	-0.375	0.144	0.425	0.460	0.066	0.185	0.213
0.00	-0.125	0.296	0.873	1.333	0.200	0.560	0.773
0.25	0.125	0.459	1.353	2.686	0.415	1.162	1.935
0.50	0.375	1.006	2.966	5.653	1.144	3.204	5.139
0.75	0.625	1.945	5.735	11.388	2.434	6.816	11.955
1.00	0.875	3.219	9.492	20.880	4.120	11.538	23.493
1.25	1.125	4.153	12.246	33.126	4.495	12.588	36.081
1.50	1.375	6.037	17.801	50.927	6.598	18.477	54.558
1.75	1.625	6.049	17.837	68.764	6.299	17.640	72.197
2.00	1.875	4.997	14.735	83.499	4.820	13.498	85.695
2.25	2.125	3.391	9.999	93.498	2.991	8.376	94.072
2.50	2.375	1.256	3.704	97.202	1.230	3.445	97.516
2.75	2.625	0.629	1.855	99.056	0.605	1.694	99.210
3.00	2.875	0.188	0.554	99.611	0.177	0.496	99.706
3.25	3.125	0.059	0.174	99.785	0.056	0.157	99.863
3.50	3.375	0.026	0.077	99.861	0.020	0.056	99.919
3.75	3.625	0.028	0.083	99.944	0.016	0.045	99.964
4.00	3.875	0.019	0.056	100.000	0.013	0.036	100.000
5.00	4.500	0.000	0.000	100.000	0.000	0.000	100.000

