Quality Control Statistical Summary
Onshore Grab Sample: NA-12-MB

Sample Taken By:	J. Ladner	**Latitude:**	30° 33' 4.7"
Sample Taken On:	12/04/02	**Longitude:**	81° 26' 30.5"
County:	Nassau	**Datum:**	WGS 84

Statistical Results: Pre-CaCO3						
	Duplicate			Original		
Mean:	2.1531	phi	(0.2248 mm)	2.1197	phi	(0.2301 mm)
Standard Dev:	1.2596	phi-units	(0.4177 mm)	1.3055	phi-units	(0.4046 mm)
Skewness:	-1.7892	dimensionless		-1.5739	dimensionless	
Kurtosis:	5.5477	dimensionless		4.7897	dimensionless	
5th Moment:	-15.3530	dimensionless		-12.3761	dimensionless	
6th Moment:	46.2478	dimensionless		35.8799	dimensionless	
RARD*:	0.5850	dimensionless		0.6159	dimensionless	
Median:	2.4406	phi	(0.1842 mm)	2.4363	phi	(0.1848 mm)

Statistical Results: CaCO3						
	Duplicate			Original		
Mean:	-0.0780	phi	(1.0555 mm)	0.1172	phi	(0.922 mm)
Standard Dev:	1.6009	phi-units	(0.3297 mm)	1.8219	phi-units	(0.2829 mm)
Skewness:	0.7487	dimensionless		0.6568	dimensionless	
Kurtosis:	2.5400	dimensionless		2.0935	dimensionless	
5th Moment:	3.8347	dimensionless		2.5410	dimensionless	
6th Moment:	9.6545	dimensionless		5.7011	dimensionless	
RARD*:	20.5370	dimensionless		15.5475	dimensionless	
Median:	-0.6008	phi	(1.5166 mm)	-0.4570	phi	(1.3726 mm)

Statistical Results: Post-CaCO3						
	Duplicate			Original		
Mean:	2.5190	phi	(0.1745 mm)	2.4911	phi	(0.1779 mm)
Standard Dev:	0.6944	phi-units	(0.618 mm)	0.7550	phi-units	(0.5925 mm)
Skewness:	-1.7203	dimensionless		-1.5805	dimensionless	
Kurtosis:	7.9517	dimensionless		6.7825	dimensionless	
5th Moment:	-29.5535	dimensionless		-22.4411	dimensionless	
6th Moment:	134.0036	dimensionless		92.4265	dimensionless	
RARD*:	0.2757	dimensionless		0.3031	dimensionless	
Median:	2.5123	phi	(0.1753 mm)	2.5125	phi	(0.1752 mm)

Additional Data	
Total Fines	
Original:	1.56 %
Duplicate:	1.26 %
Total Carbonates	
Original:	14.44 %
Duplicate:	12.98 %

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)

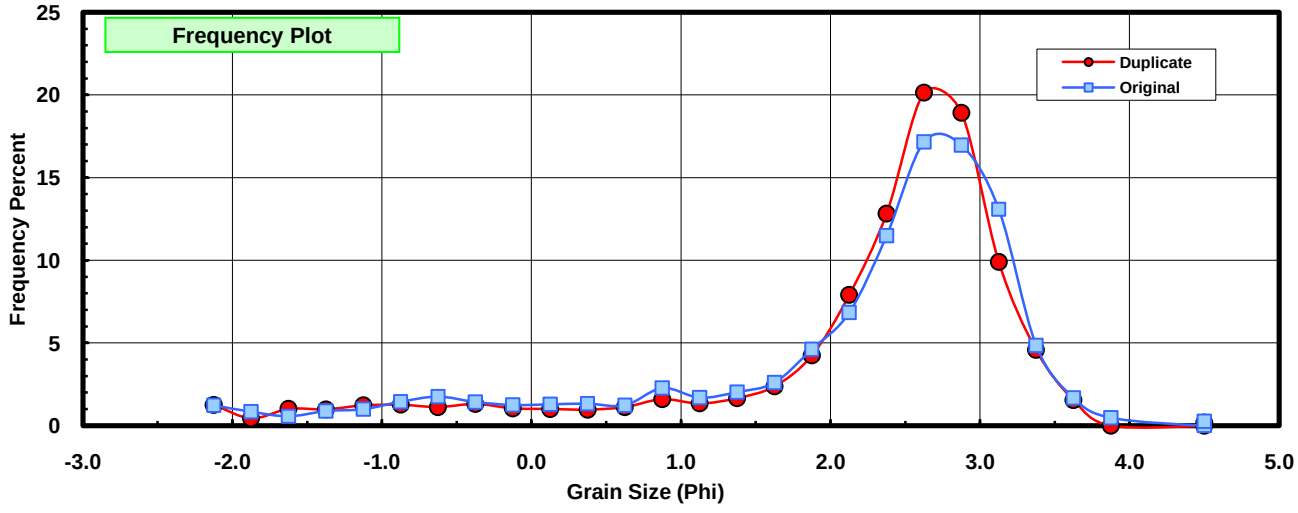
Pre-Digestion Grain Size Distribution

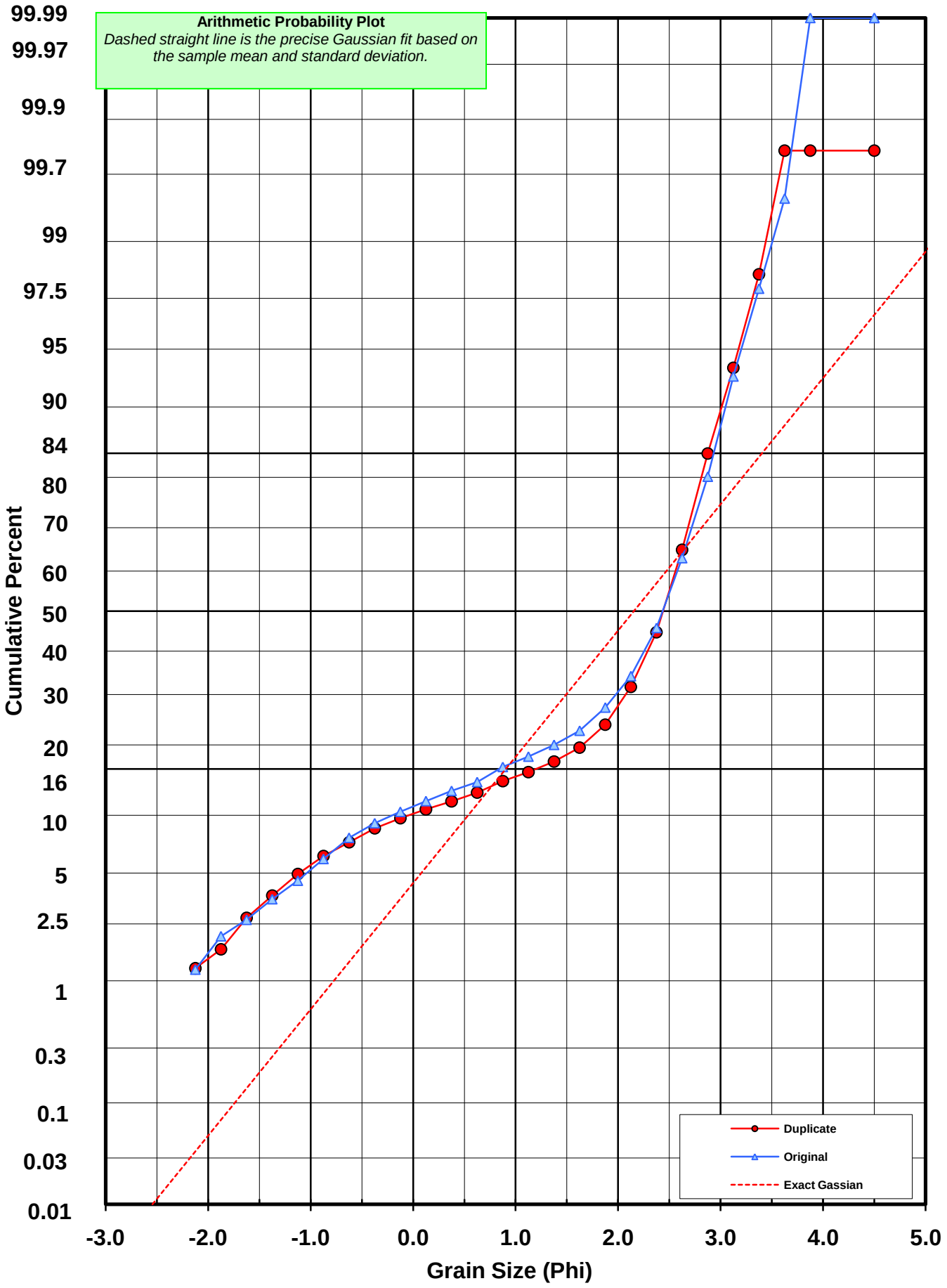
Onshore Grab Sample: NA-12-MB

Total Duplicate Sample Mass: 48.226 grams

Total Original Sample Mass: 51.603 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	0.603	1.250	1.250	0.631	1.226	1.226
-1.75	-1.875	0.213	0.442	1.692	0.432	0.839	2.065
-1.50	-1.625	0.487	1.010	2.702	0.291	0.565	2.631
-1.25	-1.375	0.476	0.987	3.689	0.455	0.884	3.515
-1.00	-1.125	0.590	1.223	4.912	0.511	0.993	4.507
-0.75	-0.875	0.609	1.263	6.175	0.745	1.447	5.955
-0.50	-0.625	0.542	1.124	7.299	0.903	1.754	7.709
-0.25	-0.375	0.633	1.313	8.612	0.735	1.428	9.137
0.00	-0.125	0.505	1.047	9.659	0.642	1.247	10.385
0.25	0.125	0.486	1.008	10.666	0.662	1.286	11.671
0.50	0.375	0.467	0.968	11.635	0.685	1.331	13.002
0.75	0.625	0.541	1.122	12.757	0.633	1.230	14.232
1.00	0.875	0.771	1.599	14.355	1.170	2.273	16.505
1.25	1.125	0.646	1.340	15.695	0.870	1.690	18.195
1.50	1.375	0.803	1.665	17.360	1.045	2.030	20.225
1.75	1.625	1.146	2.376	19.736	1.340	2.603	22.829
2.00	1.875	2.048	4.247	23.983	2.379	4.622	27.451
2.25	2.125	3.812	7.904	31.887	3.523	6.845	34.296
2.50	2.375	6.188	12.831	44.719	5.917	11.496	45.792
2.75	2.625	9.713	20.141	64.859	8.833	17.161	62.953
3.00	2.875	9.129	18.930	83.789	8.732	16.965	79.918
3.25	3.125	4.780	9.912	93.700	6.736	13.087	93.006
3.50	3.375	2.205	4.572	98.273	2.495	4.847	97.853
3.75	3.625	0.743	1.541	99.813	0.861	1.673	99.526
4.00	3.875	0.000	0.000	99.813	0.244	0.474	100.000
5.00	4.500	0.000	0.000	99.813	0.000	0.000	100.000
5.00	4.500	0.090	0.187	100.000	0.133	0.258	100.258



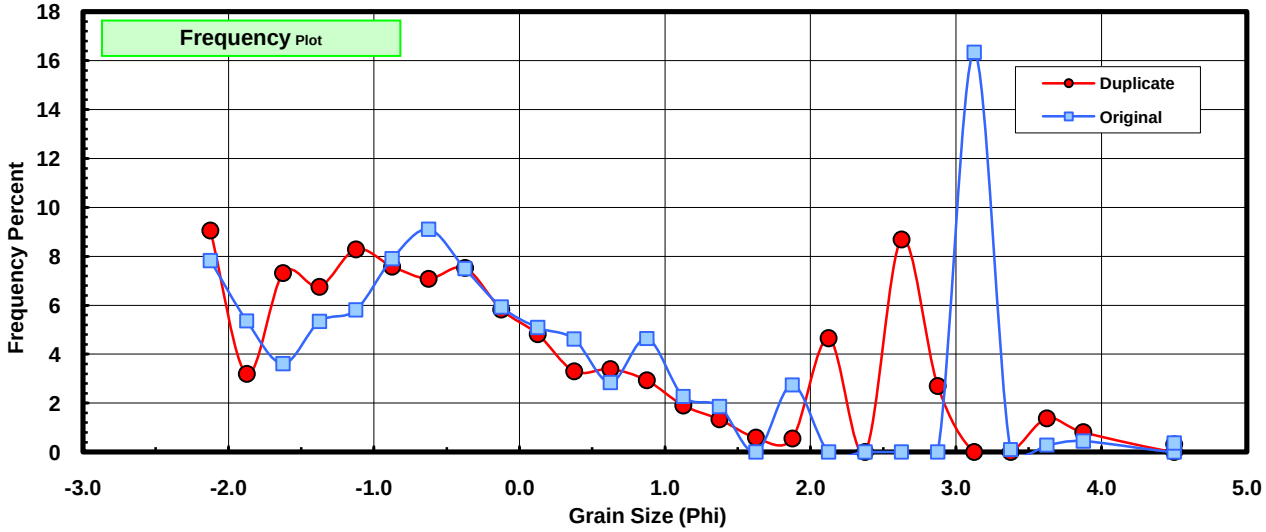

Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
99.9
99.7
99
97.5
95
90
84
80
70
60
50
40
30
20
16
10
5
2.5
1
0.3
0.1
0.03
0.01
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
Grain Size (Phi)
Duplicate
Original
Exact Gassian

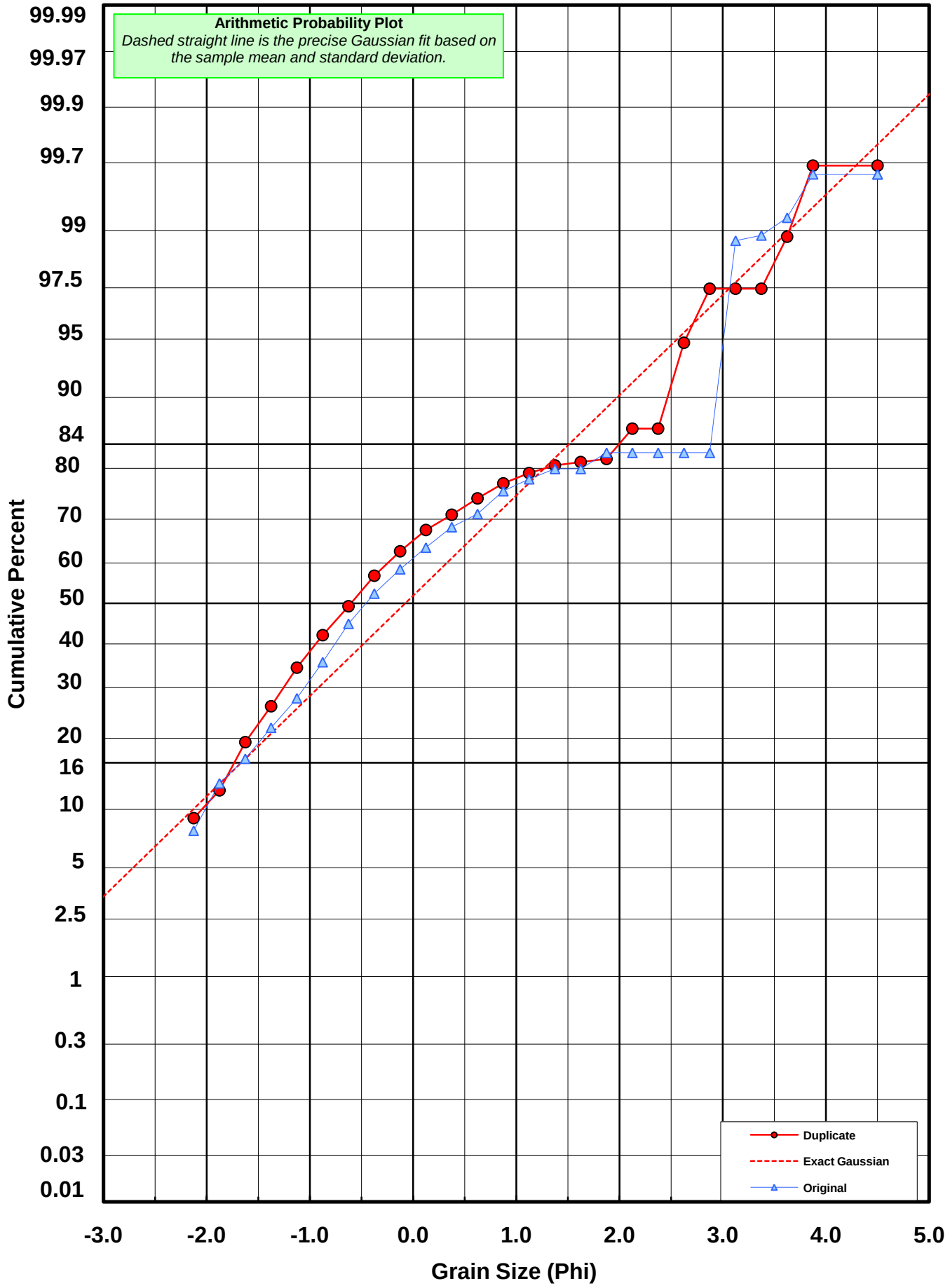
Carbonate Grain Size Distribution

Onshore Grab Sample: NA-12-MB

Total Duplicate Carbonate Mass:	6.661 grams
% Carbonate in Duplicate:	13.0 %
Total Original Carbonate Mass:	8.058 grams
% Carbonate in Original:	14.4 %

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	0.603	9.053	9.053	0.631	7.831	7.831
-1.75	-1.875	0.213	3.198	12.250	0.432	5.361	13.192
-1.50	-1.625	0.487	7.311	19.562	0.291	3.611	16.803
-1.25	-1.375	0.450	6.756	26.317	0.430	5.336	22.139
-1.00	-1.125	0.552	8.287	34.604	0.468	5.808	27.947
-0.75	-0.875	0.505	7.581	42.186	0.637	7.905	35.853
-0.50	-0.625	0.472	7.086	49.272	0.734	9.109	44.962
-0.25	-0.375	0.501	7.521	56.793	0.604	7.496	52.457
0.00	-0.125	0.388	5.825	62.618	0.478	5.932	58.389
0.25	0.125	0.321	4.819	67.437	0.410	5.088	63.477
0.50	0.375	0.220	3.303	70.740	0.372	4.617	68.094
0.75	0.625	0.226	3.393	74.133	0.229	2.842	70.936
1.00	0.875	0.195	2.927	77.061	0.374	4.641	75.577
1.25	1.125	0.127	1.907	78.967	0.183	2.271	77.848
1.50	1.375	0.089	1.336	80.303	0.150	1.862	79.710
1.75	1.625	0.039	0.585	80.889	0.000	0.000	79.710
2.00	1.875	0.037	0.555	81.444	0.221	2.743	82.452
2.25	2.125	0.310	4.654	86.098	0.000	0.000	82.452
2.50	2.375	0.000	0.000	86.098	0.000	0.000	82.452
2.75	2.625	0.579	8.692	94.791	0.000	0.000	82.452
3.00	2.875	0.180	2.702	97.493	0.000	0.000	82.452
3.25	3.125	0.000	0.000	97.493	1.317	16.344	98.796
3.50	3.375	0.000	0.000	97.493	0.008	0.099	98.896
3.75	3.625	0.092	1.381	98.874	0.023	0.285	99.181
4.00	3.875	0.054	0.811	99.685	0.036	0.447	99.628
5.00	4.500	0.000	0.000	99.685	0.000	0.000	99.628
5.00	4.500	0.021	0.315	100.000	0.030	0.372	100.000



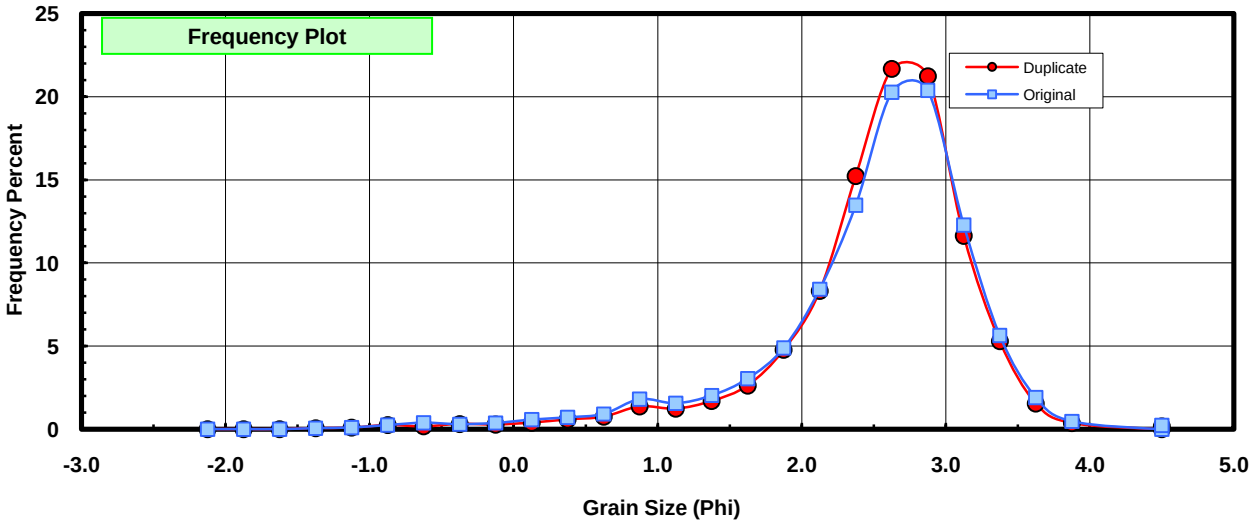

Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
99.9
99.7
99
97.5
95
90
84
80
70
60
50
40
30
20
16
10
5
2.5
1
0.3
0.1
0.03
0.01
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
Grain Size (Phi)
Duplicate
Exact Gaussian
Original

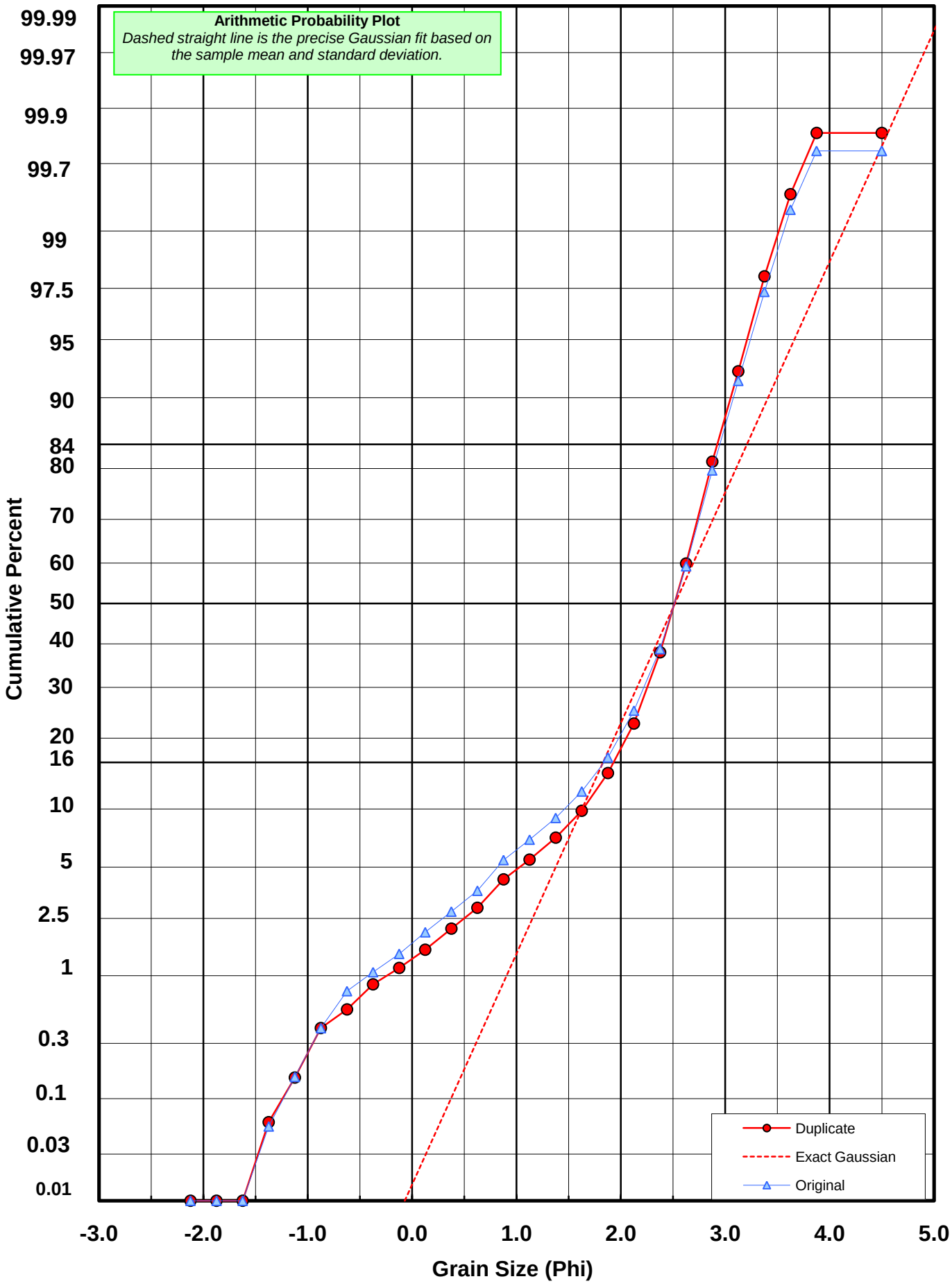
Post-Digestion Grain Size Distribution

Onshore Grab Sample: NA-12-MB

Total Duplicate Digested Mass:	42.147 grams
% Silica in Duplicate:	87.0 %
Total Original Digested Mass:	44.151 grams
% Silica in Original:	85.6 %

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	0.026	0.062	0.062	0.025	0.057	0.057
-1.00	-1.125	0.038	0.090	0.152	0.043	0.097	0.154
-0.75	-0.875	0.104	0.247	0.399	0.108	0.245	0.399
-0.50	-0.625	0.070	0.166	0.565	0.169	0.383	0.781
-0.25	-0.375	0.132	0.313	0.878	0.131	0.297	1.078
0.00	-0.125	0.117	0.278	1.155	0.164	0.371	1.450
0.25	0.125	0.165	0.391	1.547	0.252	0.571	2.020
0.50	0.375	0.247	0.586	2.133	0.313	0.709	2.729
0.75	0.625	0.315	0.747	2.880	0.404	0.915	3.644
1.00	0.875	0.576	1.367	4.247	0.796	1.803	5.447
1.25	1.125	0.519	1.231	5.478	0.687	1.556	7.003
1.50	1.375	0.714	1.694	7.173	0.895	2.027	9.030
1.75	1.625	1.107	2.627	9.799	1.343	3.042	12.072
2.00	1.875	2.011	4.771	14.570	2.158	4.888	16.960
2.25	2.125	3.502	8.309	22.879	3.717	8.419	25.379
2.50	2.375	6.413	15.216	38.095	5.950	13.476	38.855
2.75	2.625	9.134	21.672	59.767	8.945	20.260	59.115
3.00	2.875	8.949	21.233	81.000	8.996	20.376	79.491
3.25	3.125	4.903	11.633	92.633	5.419	12.274	91.765
3.50	3.375	2.230	5.291	97.924	2.487	5.633	97.398
3.75	3.625	0.651	1.545	99.469	0.838	1.898	99.296
4.00	3.875	0.155	0.368	99.836	0.208	0.471	99.767
5.00	4.500	0.000	0.000	99.836	0.000	0.000	99.767
5.00	4.500	0.069	0.164	100.000	0.103	0.233	100.000




Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
99.9
99.7
99
97.5
95
90
84
80
70
60
50
40
30
20
16
10
5
2.5
1
0.3
0.1
0.03
0.01
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
Grain Size (Phi)
Duplicate
Exact Gaussian
Original