

**Onshore Grab Sample**

**Sample:** MN-04-BB  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 12/2/09  
**Splits?** N/A

**County:** Manatee  
**Latitude:** 27° 30' 27.6"  
**Longitude:** 82° 43' 10.4"  
**Datum:** WGS 84  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 53.518 grams  
Total Fines in Sample 0.200 grams  
Total Percent Fines 0.37 %

**Dry Sieving Summary**

Total Sample Weight 53.341 grams  
Total Digested Weight 34.292 grams  
Total Carbonate Weight 19.049 grams  
Total Silica % 64.29 %  
Total Carbonate % 35.71 %  
Carbonate/Silica Ratio 0.555

**General Comments:**

None

**Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: MN-04-BB

Total Sample Mass: 53.341 grams

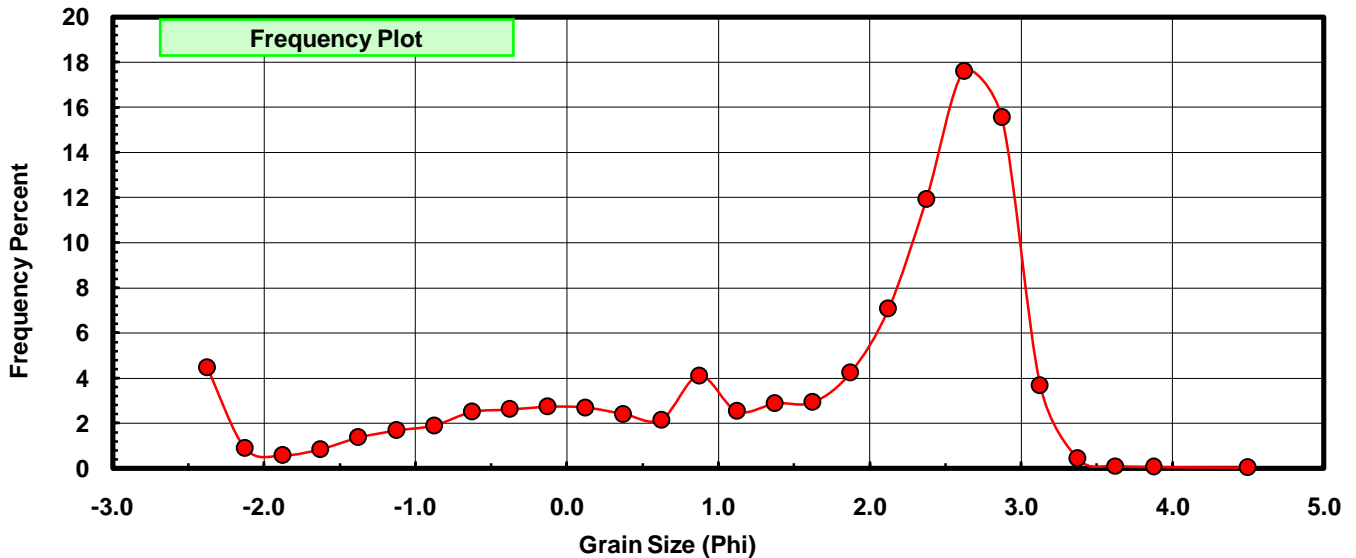
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	2.387	4.475	4.475
-2.00	-2.125	0.477	0.894	5.369
-1.75	-1.875	0.306	0.574	5.943
-1.50	-1.625	0.449	0.842	6.785
-1.25	-1.375	0.732	1.372	8.157
-1.00	-1.125	0.894	1.676	9.833
-0.75	-0.875	1.014	1.901	11.734
-0.50	-0.625	1.335	2.503	14.237
-0.25	-0.375	1.395	2.615	16.852
0.00	-0.125	1.454	2.726	19.578
0.25	0.125	1.436	2.692	22.270
0.50	0.375	1.283	2.405	24.675
0.75	0.625	1.150	2.156	26.831
1.00	0.875	2.188	4.102	30.933
1.25	1.125	1.348	2.527	33.460
1.50	1.375	1.536	2.880	36.340
1.75	1.625	1.561	2.926	39.266
2.00	1.875	2.267	4.250	43.516
2.25	2.125	3.775	7.077	50.593
2.50	2.375	6.361	11.925	62.519
2.75	2.625	9.393	17.609	80.128
3.00	2.875	8.298	15.557	95.684
3.25	3.125	1.961	3.676	99.361
3.50	3.375	0.230	0.431	99.792
3.75	3.625	0.061	0.114	99.906
4.00	3.875	0.032	0.060	99.966
5.00	4.50	0.018	0.034	100.000

Statistical Results			
Mean:	1.5046	phi	(0.3524 mm)
Standard Dev:	1.5750	phi-units	(0.3356 mm)
Skewness:	-1.0735	dimensionless	
Kurtosis:	2.9929	dimensionless	
5th Moment:	-5.9621	dimensionless	
6th Moment:	14.2403	dimensionless	
RARD *	1.0468	dimensionless	
Median	2.1040	phi	(0.2326 mm)

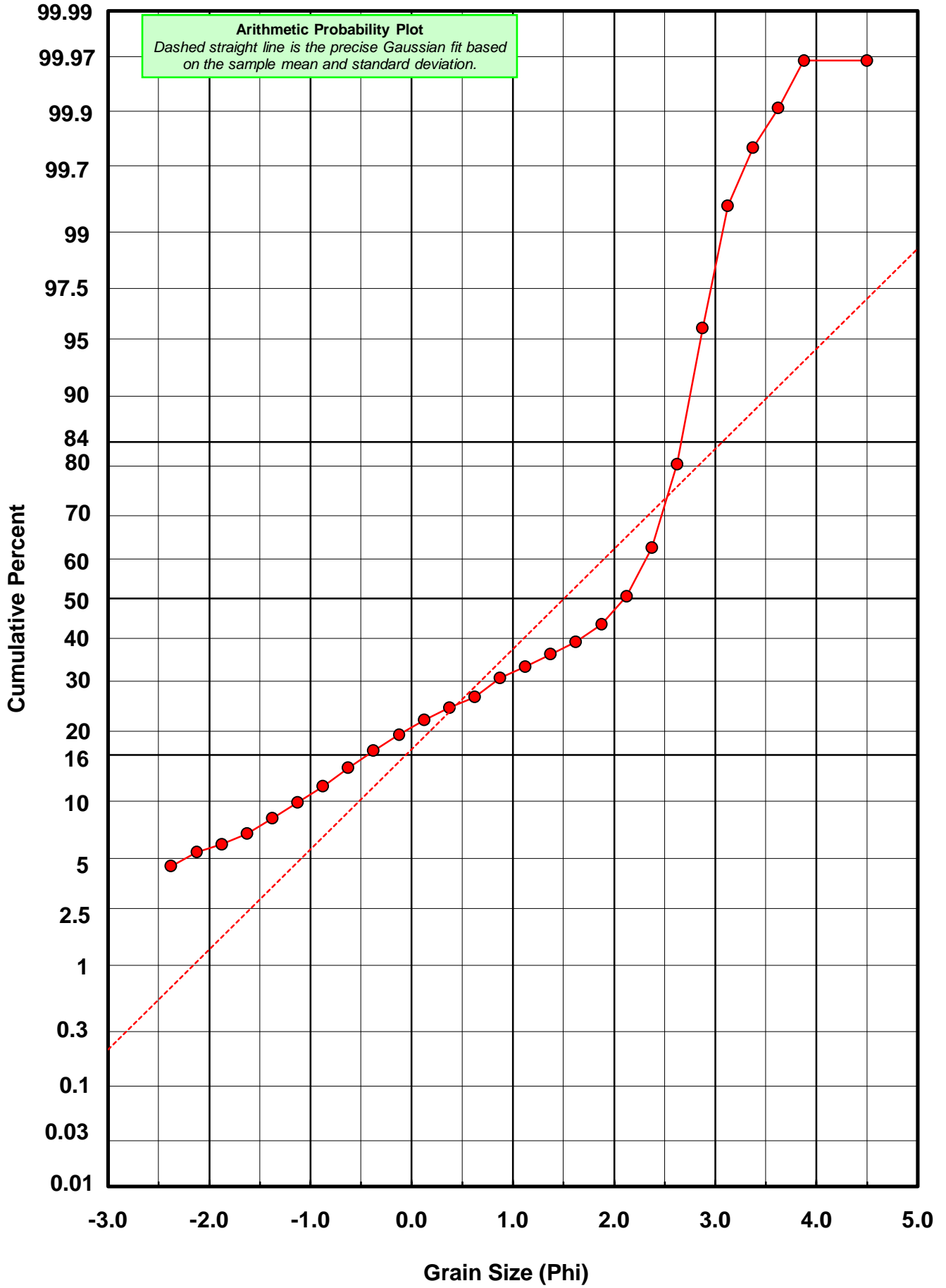
\* RARD = reciprocal absolute relative dispersion (see below)

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	
For Further Explanation, See Basille et al. 2002	
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)



# MN-04-BB



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: MN-04-BB

Total Carbonate Mass: 19.757 grams

% Carbonate: 35.7 %

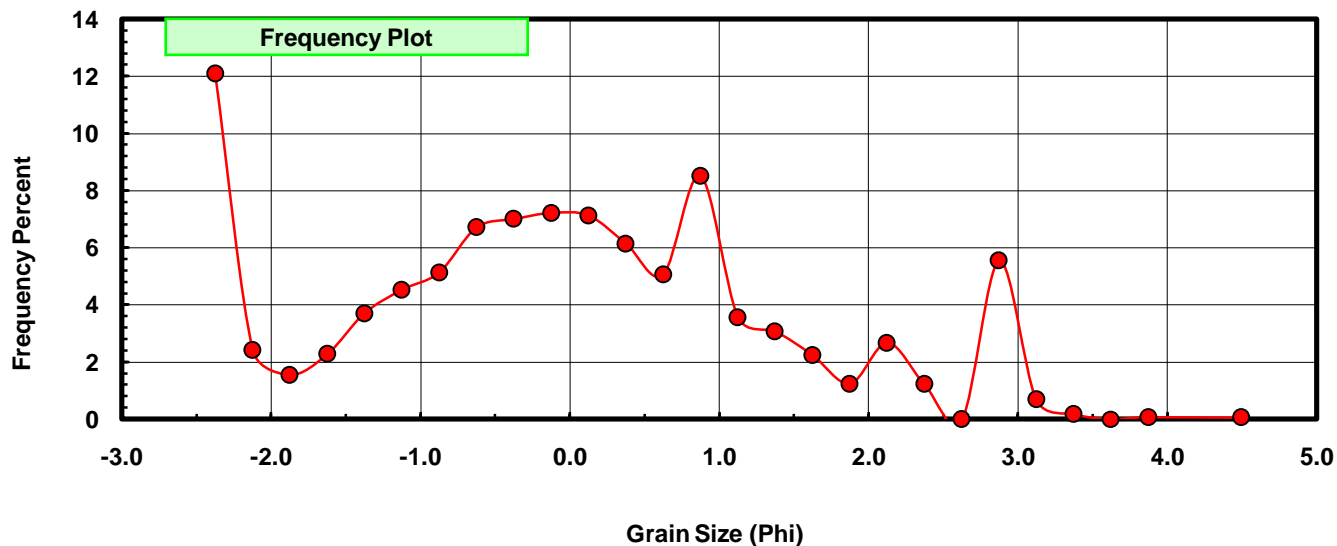
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	2.387	12.082	12.082
-2.00	-2.125	0.477	2.414	14.496
-1.75	-1.875	0.306	1.549	16.045
-1.50	-1.625	0.449	2.273	18.318
-1.25	-1.375	0.732	3.705	22.023
-1.00	-1.125	0.894	4.525	26.548
-0.75	-0.875	1.014	5.132	31.680
-0.50	-0.625	1.325	6.706	38.386
-0.25	-0.375	1.384	7.005	45.392
0.00	-0.125	1.425	7.213	52.604
0.25	0.125	1.408	7.127	59.731
0.50	0.375	1.213	6.140	65.870
0.75	0.625	1.001	5.067	70.937
1.00	0.875	1.682	8.513	79.450
1.25	1.125	0.704	3.563	83.014
1.50	1.375	0.607	3.072	86.086
1.75	1.625	0.443	2.242	88.328
2.00	1.875	0.244	1.235	89.563
2.25	2.125	0.527	2.667	92.231
2.50	2.375	0.243	1.230	93.461
2.75	2.625	0.000	0.000	93.461
3.00	2.875	1.095	5.542	99.003
3.25	3.125	0.135	0.683	99.686
3.50	3.375	0.035	0.177	99.863
3.75	3.625	0.002	0.010	99.873
4.00	3.875	0.014	0.071	99.944
5.00	4.500	0.011	0.056	100.000

Statistical Results			
Mean:	-0.0700	phi	(1.0497 mm)
Standard Dev:	1.5092	phi-units	(0.3513 mm)
Skewness:	0.2088	dimensionless	
Kurtosis:	2.3558	dimensionless	
5th Moment:	1.5124	dimensionless	
6th Moment:	7.3715	dimensionless	
RARD *	21.5681	dimensionless	
Median	-0.2153	phi	(1.1609 mm)

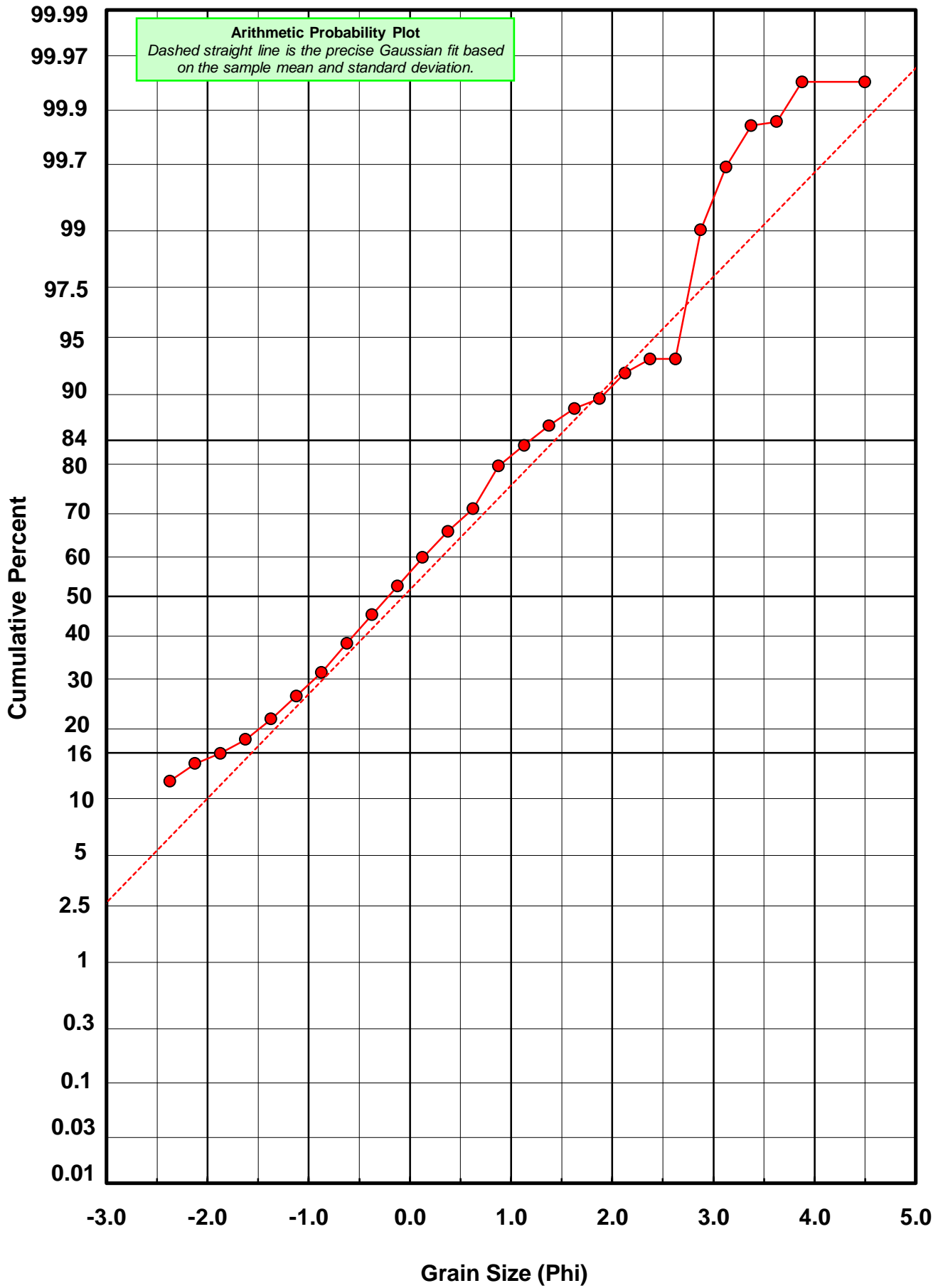
\* RARD = reciprocal absolute relative dispersion (see below)

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	
For Further Explanation, See Basille et al. 2002	
Millimeter data calculated by $mm = 2^{-(\phi)}$	

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# MN-04-BB



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: MN-04-BB

Total Digested Mass: 34.292 grams

% Silica: 64.3 %

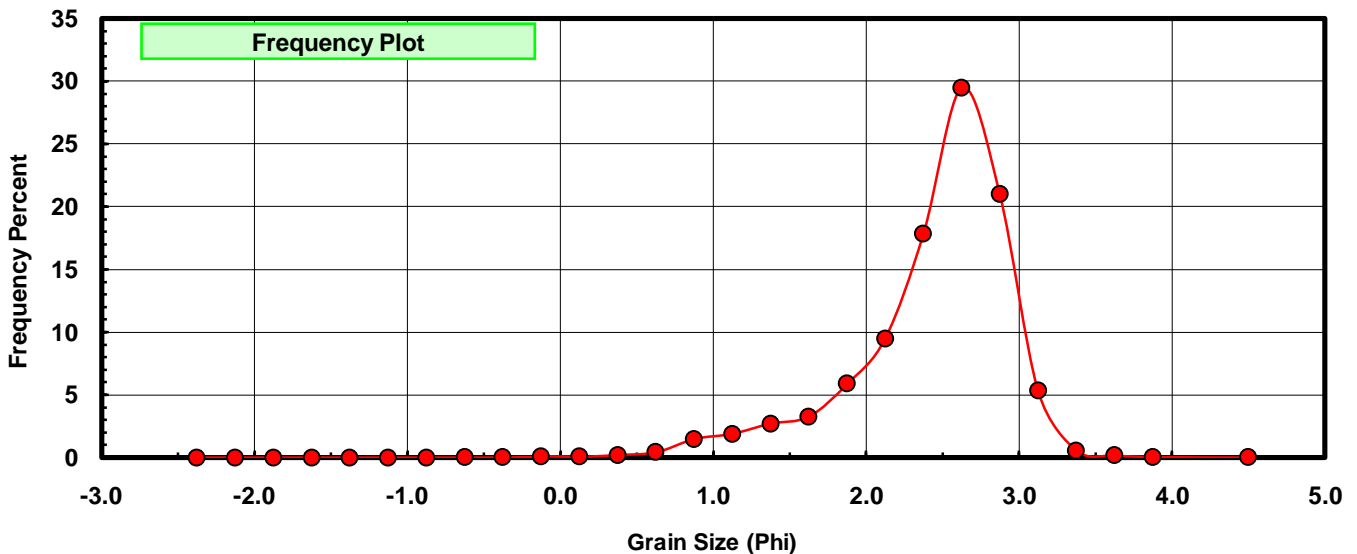
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.010	0.029	0.029
-0.25	-0.375	0.011	0.032	0.061
0.00	-0.125	0.029	0.085	0.146
0.25	0.125	0.028	0.082	0.227
0.50	0.375	0.070	0.204	0.432
0.75	0.625	0.149	0.435	0.866
1.00	0.875	0.506	1.476	2.342
1.25	1.125	0.644	1.878	4.220
1.50	1.375	0.929	2.709	6.929
1.75	1.625	1.118	3.260	10.189
2.00	1.875	2.023	5.899	16.088
2.25	2.125	3.248	9.472	25.560
2.50	2.375	6.118	17.841	43.401
2.75	2.625	10.101	29.456	72.857
3.00	2.875	7.203	21.005	93.862
3.25	3.125	1.826	5.325	99.186
3.50	3.375	0.195	0.569	99.755
3.75	3.625	0.059	0.172	99.927
4.00	3.875	0.018	0.052	99.980
5.00	4.500	0.007	0.020	100.000

Statistical Results			
Mean:	2.4349	phi	(0.1849 mm)
Standard Dev:	0.5296	phi-units	(0.6927 mm)
Skewness:	-1.3584	dimensionless	
Kurtosis:	5.5012	dimensionless	
5th Moment:	-16.5577	dimensionless	
6th Moment:	68.2021	dimensionless	
RARD *	0.2175	dimensionless	
Median	2.4310	phi	(0.1854 mm)

\* RARD = reciprocal absolute relative dispersion (see below)

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	
For Further Explanation, See Basille et al. 2002	
Millimeter data calculated by $mm = 2^{-(\phi)}$	

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