Onshore Grab Sample

Sample: MT-23-BB
Sample Taken By: D. Phelps
Sample Collected On: 12/18/08
Splits? N/A

County: Martin
Latitude: 27° 00' 26.0"
Longitude: 80° 05' 27.3"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	63.044	grams
Total Fines in Sample	0.085	grams
Total Percent Fines	0.13	%

Dry Sieving Summary

Total Sample Weight	62.903	grams
Total Digested Weight	17.197	grams
Total Carbonate Weight	45.706	grams
Total Silica %	27.34	%
Total Carbonate %	72.66	%
Carbonate/Silica Ratio	2.658	

General Comments:

None

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: MT-23-BB

Total Sample Mass: 62.903 grams

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	0.011	0.017	0.017
-1.00	-1.125	0.024	0.038	0.056
-0.75	-0.875	0.080	0.127	0.183
-0.50	-0.625	0.300	0.477	0.660
-0.25	-0.375	0.703	1.118	1.777
0.00	-0.125	1.720	2.734	4.512
0.25	0.125	3.514	5.586	10.098
0.50	0.375	5.334	8.480	18.578
0.75	0.625	8.065	12.821	31.399
1.00	0.875	14.406	22.902	54.301
1.25	1.125	11.285	17.940	72.241
1.50	1.375	9.529	15.149	87.390
1.75	1.625	4.884	7.764	95.154
2.00	1.875	2.298	3.653	98.808
2.25	2.125	0.584	0.928	99.736
2.50	2.375	0.117	0.186	99.922
2.75	2.625	0.028	0.045	99.967
3.00	2.875	0.006	0.010	99.976
3.25	3.125	0.005	0.008	99.984
3.50	3.375	0.006	0.010	99.994
3.75	3.625	0.002	0.003	99.997
4.00	3.875	0.001	0.002	99.998
5.00	4.50	0.001	0.002	100.000

Statistical Results			
Mean:	0.9381	phi	(0.5219 mm)
Standard Dev:	0.5236	phi-units	(0.6956 mm)
Skewness:	-0.2960	dimensionless	
Kurtosis:	3.3731	dimensionless	
5th Moment:	-2.3042	dimensionless	
6th Moment:	22.7567	dimensionless	
RARD *	0.5581	dimensionless	
Median	0.8280	phi	(0.5633 mm)
* RARD = reciprocal absolute relative dispersion (see below)			

Statistical Explanation

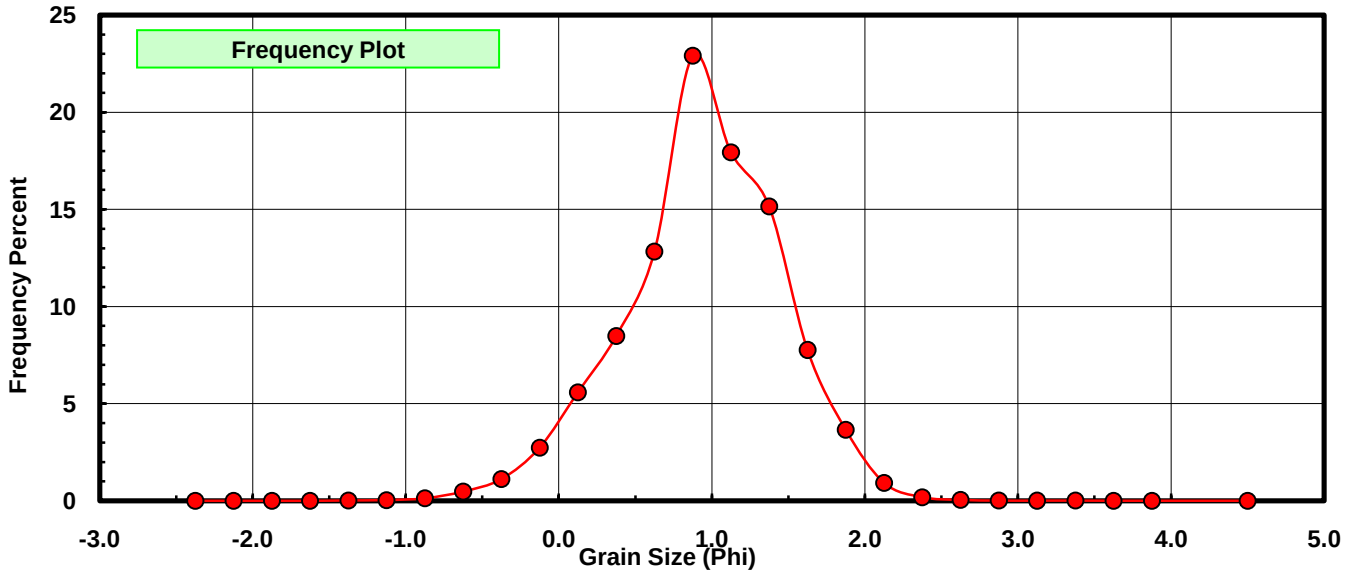
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

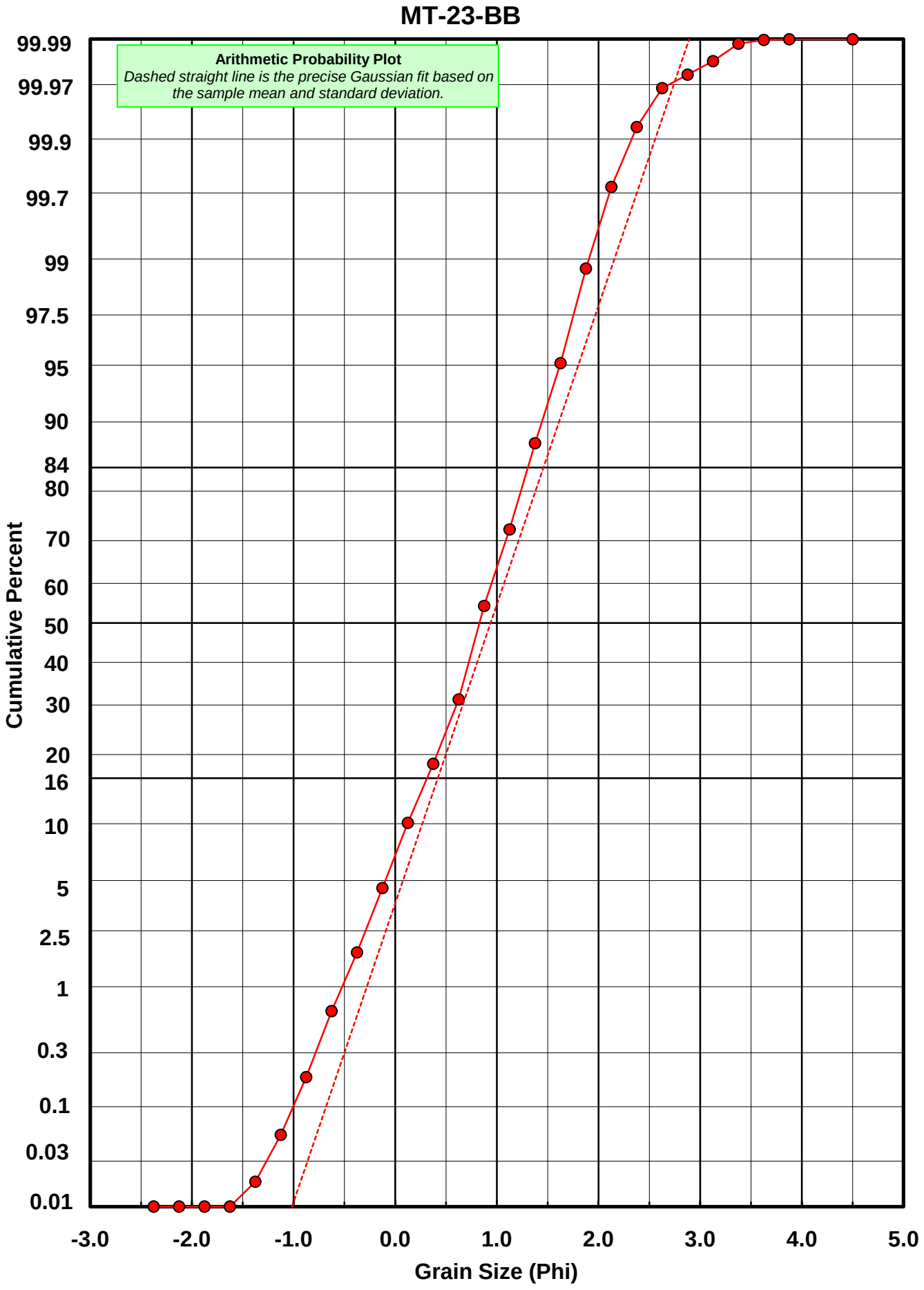
For Further Explanation, See Basillle et al. 2002

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)




MT-23-BB
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)

Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: MT-23-BB

Total Carbonate Mass: 46.077 grams

% Carbonate: 72.7 %

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	0.011	0.024	0.024
-1.00	-1.125	0.024	0.052	0.076
-0.75	-0.875	0.080	0.174	0.250
-0.50	-0.625	0.300	0.651	0.901
-0.25	-0.375	0.694	1.506	2.407
0.00	-0.125	1.674	3.633	6.040
0.25	0.125	3.245	7.043	13.082
0.50	0.375	4.662	10.118	23.200
0.75	0.625	6.812	14.784	37.984
1.00	0.875	10.342	22.445	60.429
1.25	1.125	7.577	16.444	76.873
1.50	1.375	5.912	12.831	89.704
1.75	1.625	2.963	6.431	96.135
2.00	1.875	1.395	3.028	99.162
2.25	2.125	0.345	0.749	99.911
2.50	2.375	0.041	0.089	100.000
2.75	2.625	0.000	0.000	100.000
3.00	2.875	0.000	0.000	100.000
3.25	3.125	0.000	0.000	100.000
3.50	3.375	0.000	0.000	100.000
3.75	3.625	0.000	0.000	100.000
4.00	3.875	0.000	0.000	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	0.8596	phi	(0.5511 mm)
Standard Dev:	0.5345	phi-units	(0.6904 mm)
Skewness:	-0.2810	dimensionless	
Kurtosis:	3.0681	dimensionless	
5th Moment:	-2.6311	dimensionless	
6th Moment:	16.1000	dimensionless	
RARD *	0.6219	dimensionless	
Median	0.7588	phi	(0.591 mm)

* RARD = reciprocal absolute relative dispersion (see below)

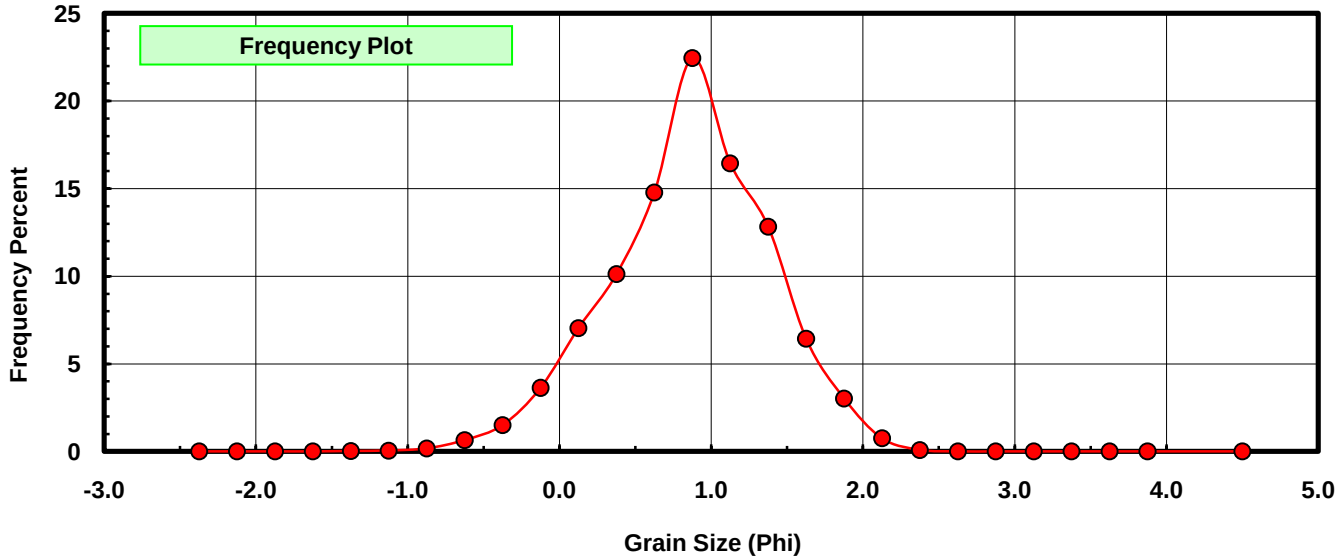
Statistical Explanation

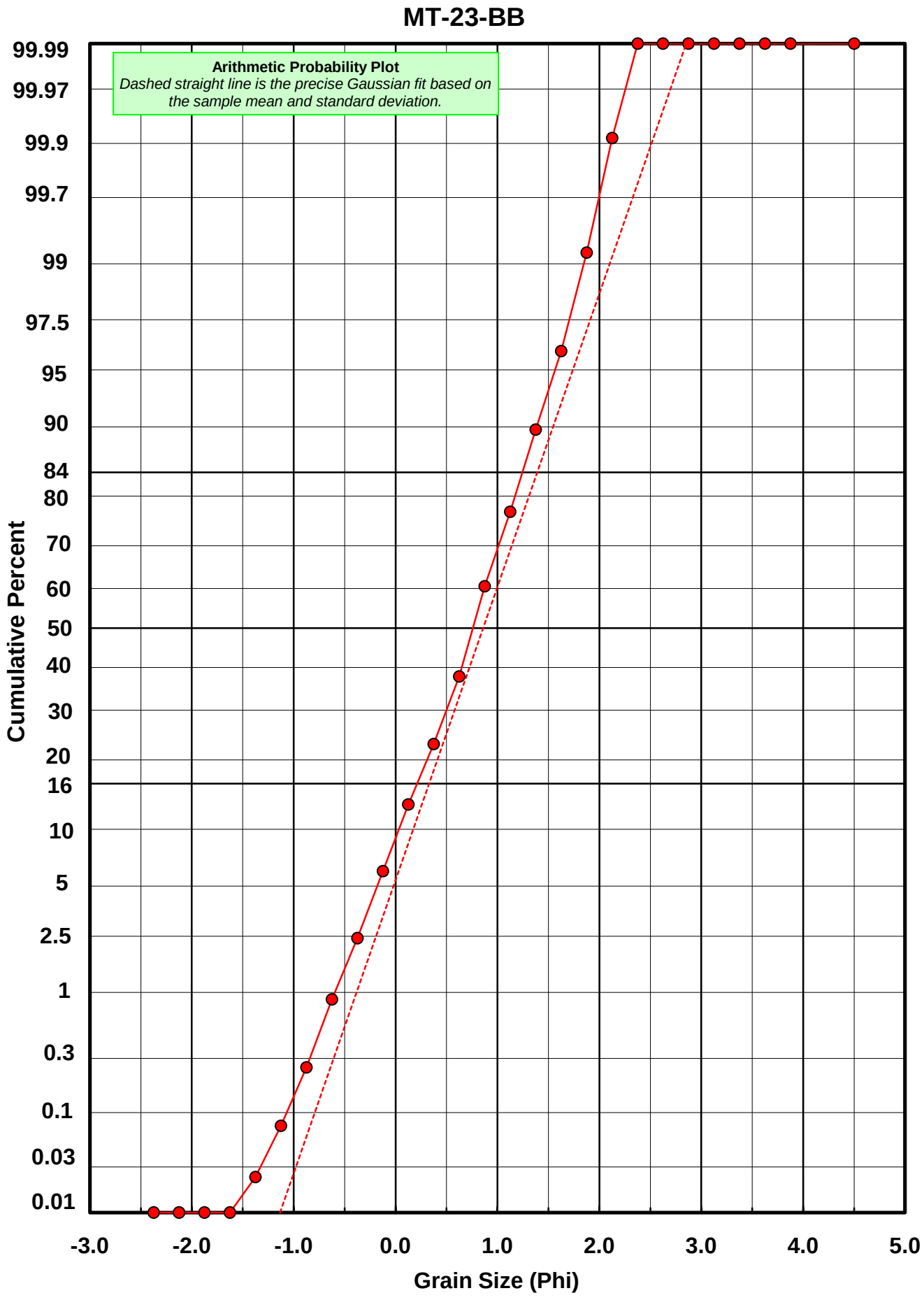
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

For Further Explanation, See Basillle 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)




MT-23-BB
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)

Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: MT-23-BB

Total Digested Mass: 17.197 grams

% Silica: 27.3 %

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	0.000	0.000	0.000
-0.25	-0.375	0.009	0.052	0.052
0.00	-0.125	0.046	0.267	0.320
0.25	0.125	0.269	1.564	1.884
0.50	0.375	0.672	3.908	5.792
0.75	0.625	1.253	7.286	13.078
1.00	0.875	4.064	23.632	36.710
1.25	1.125	3.708	21.562	58.272
1.50	1.375	3.617	21.033	79.305
1.75	1.625	1.921	11.171	90.475
2.00	1.875	0.903	5.251	95.726
2.25	2.125	0.239	1.390	97.116
2.50	2.375	0.076	0.442	97.558
2.75	2.625	0.048	0.279	97.837
3.00	2.875	0.052	0.302	98.139
3.25	3.125	0.073	0.424	98.564
3.50	3.375	0.084	0.488	99.052
3.75	3.625	0.081	0.471	99.523
4.00	3.875	0.052	0.302	99.826
5.00	4.500	0.030	0.174	100.000

Statistical Results			
Mean:	1.2026	phi	(0.4345 mm)
Standard Dev:	0.5556	phi-units	(0.6804 mm)
Skewness:	1.6131	dimensionless	
Kurtosis:	9.1251	dimensionless	
5th Moment:	37.2260	dimensionless	
6th Moment:	187.6453	dimensionless	
RARD *	0.4620	dimensionless	
Median	1.0291	phi	(0.49 mm)
* RARD = reciprocal absolute relative dispersion (see below)			

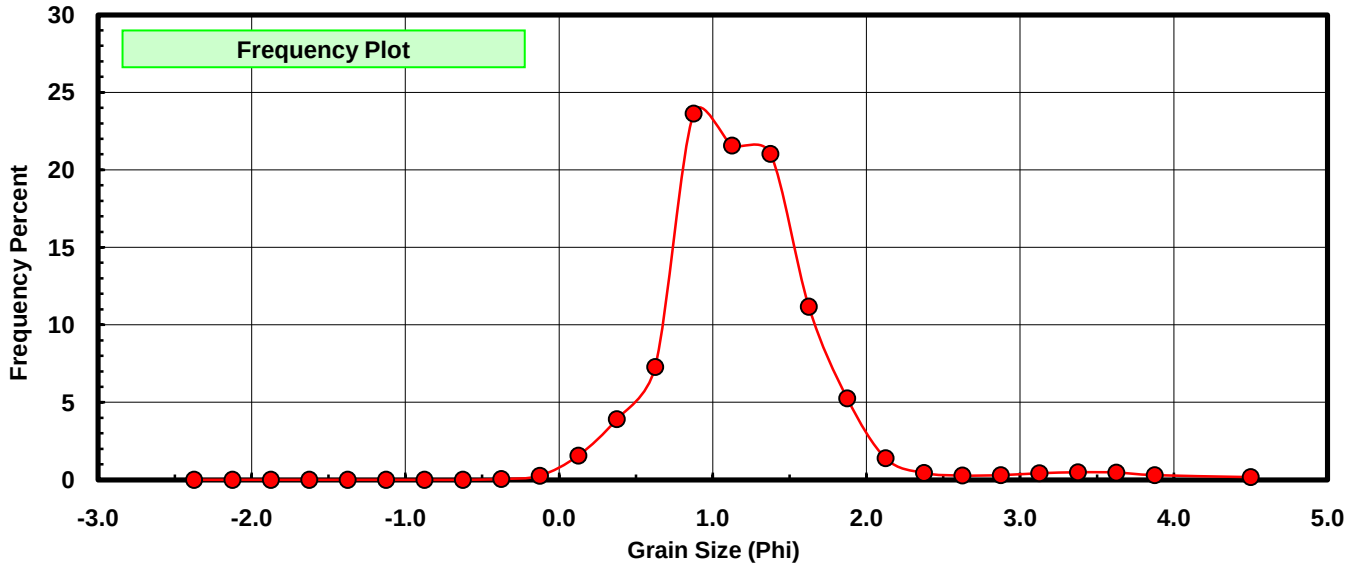
Statistical Explanation

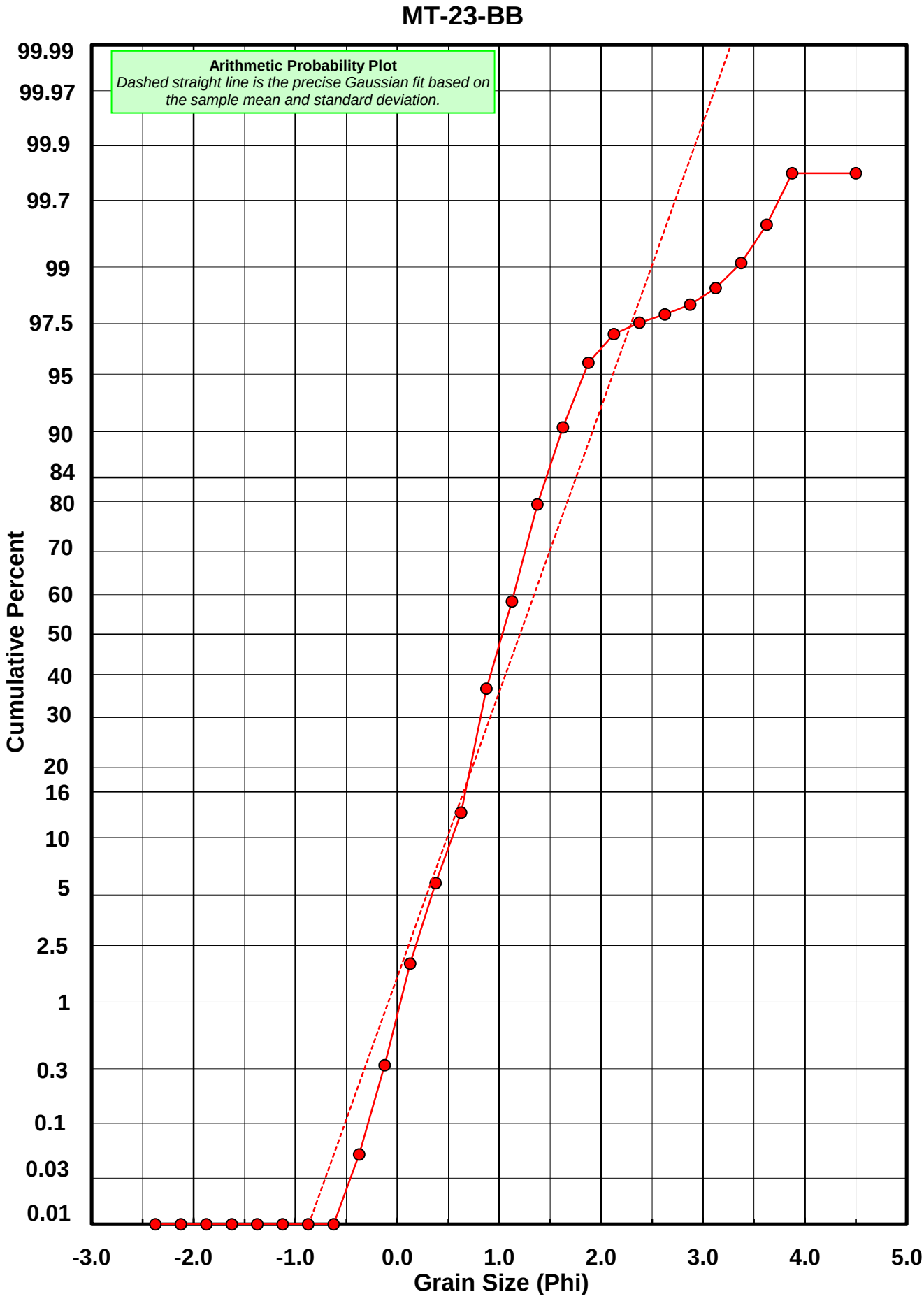
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

For Further Explanation, See Basillle 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)




MT-23-BB
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)