Onshore Grab Sample

Sample: MT-12
Sample Taken By: D. Phelps
Sample Collected On: 12/17/08
Splits? N/A

County: Martin
Latitude: 27° 08' 0.2"
Longitude: 80° 08' 46.3"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	56.483	grams
Total Fines in Sample	0.201	grams
Total Percent Fines	0.35	%

Dry Sieving Summary

Total Sample Weight	56.247	grams
Total Digested Weight	25.331	grams
Total Carbonate Weight	30.916	grams
Total Silica %	45.04	%
Total Carbonate %	54.96	%
Carbonate/Silica Ratio	1.220	

General Comments:

None

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: MT-12

Total Sample Mass: 56.247 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	0.023	0.041	0.041
-1.25	-1.375	0.037	0.066	0.107
-1.00	-1.125	0.151	0.268	0.375
-0.75	-0.875	0.176	0.313	0.688
-0.50	-0.625	0.361	0.642	1.330
-0.25	-0.375	0.843	1.499	2.829
0.00	-0.125	1.524	2.709	5.538
0.25	0.125	2.621	4.660	10.198
0.50	0.375	3.490	6.205	16.403
0.75	0.625	5.897	10.484	26.887
1.00	0.875	10.167	18.076	44.962
1.25	1.125	7.523	13.375	58.337
1.50	1.375	7.757	13.791	72.128
1.75	1.625	6.041	10.740	82.868
2.00	1.875	4.892	8.697	91.566
2.25	2.125	2.768	4.921	96.487
2.50	2.375	1.023	1.819	98.306
2.75	2.625	0.436	0.775	99.081
3.00	2.875	0.252	0.448	99.529
3.25	3.125	0.140	0.249	99.778
3.50	3.375	0.081	0.144	99.922
3.75	3.625	0.034	0.060	99.982
4.00	3.875	0.005	0.009	99.991
5.00	4.50	0.005	0.009	100.000

Statistical Results			
Mean:	1.1067	phi	(0.4644 mm)
Standard Dev:	0.6870	phi-units	(0.6211 mm)
Skewness:	-0.1172	dimensionless	
Kurtosis:	3.5036	dimensionless	
5th Moment:	-0.9576	dimensionless	
6th Moment:	23.2438	dimensionless	
RARD *	0.6208	dimensionless	
Median	0.9692	phi	(0.5108 mm)
* RARD = reciprocal absolute relative dispersion (see below)			

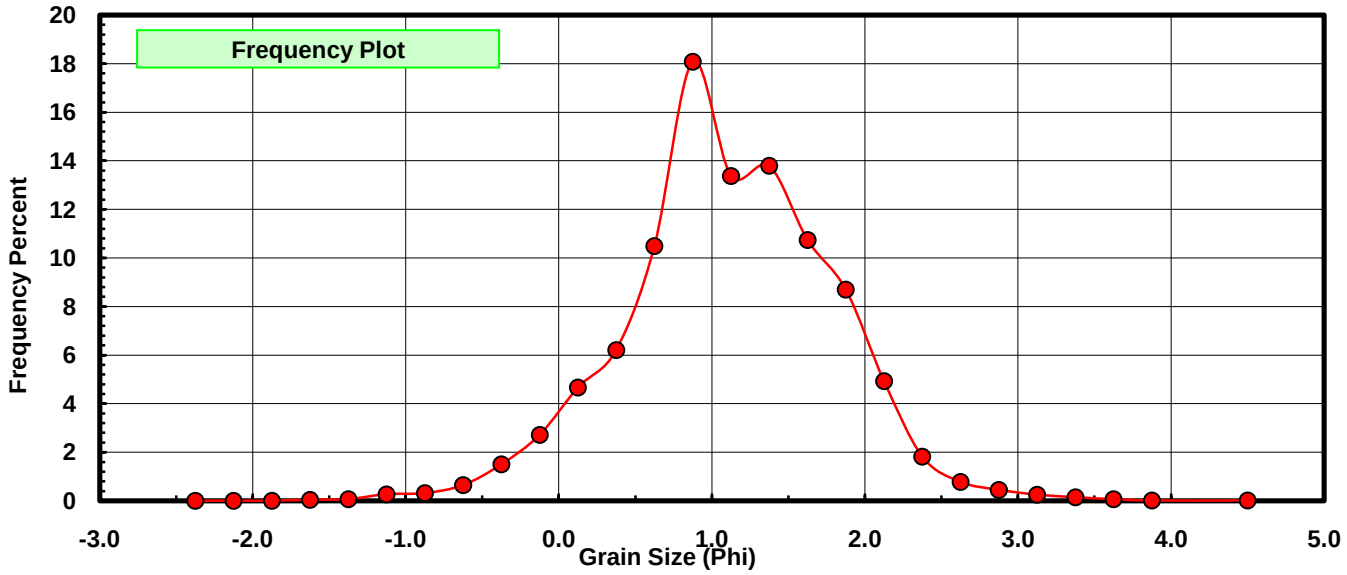
Statistical Explanation

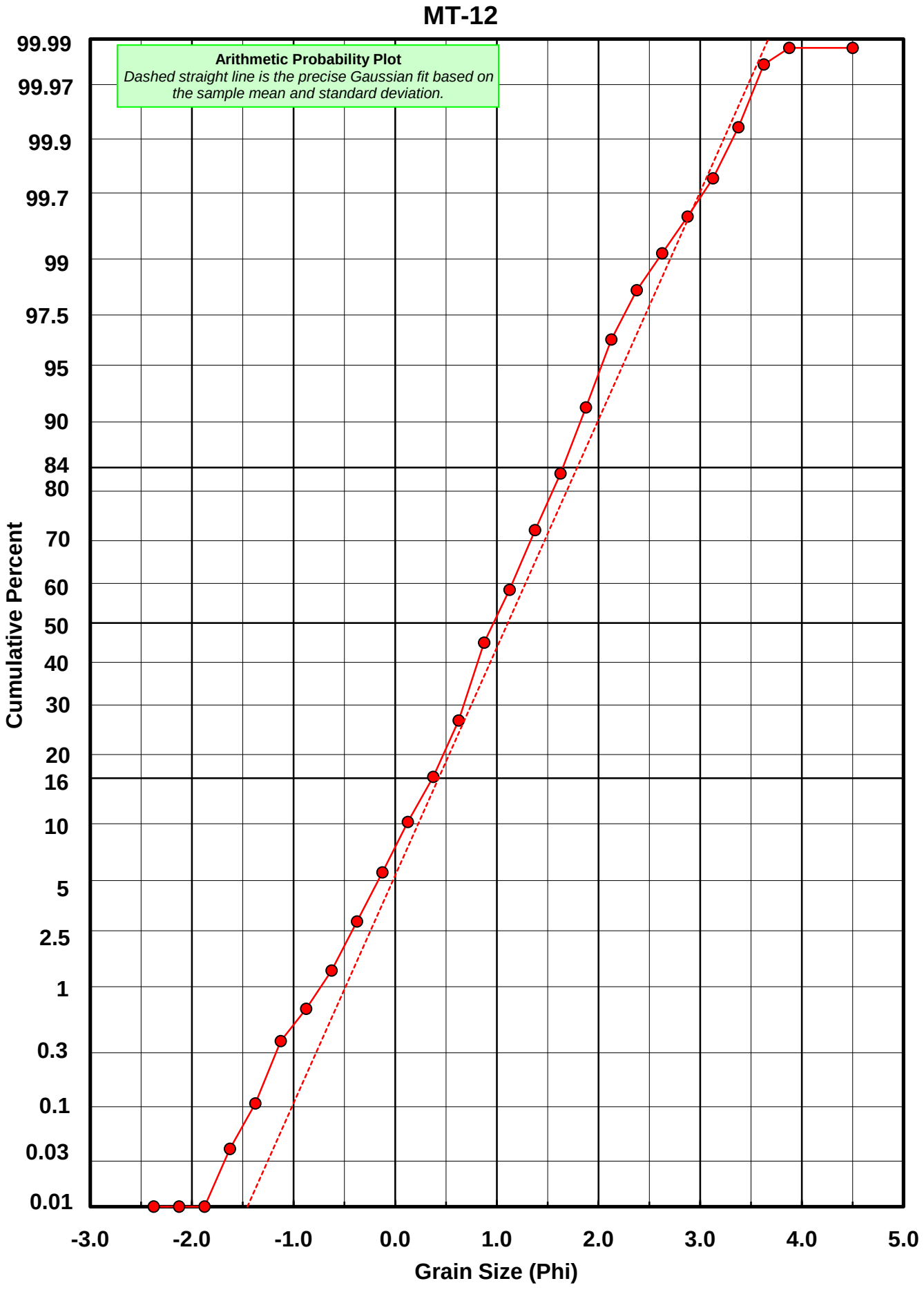
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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-12
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-12

Total Carbonate Mass: 30.957 grams

% Carbonate: 55.0 %

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	0.023	0.074	0.074
-1.25	-1.375	0.037	0.120	0.194
-1.00	-1.125	0.151	0.488	0.682
-0.75	-0.875	0.176	0.569	1.250
-0.50	-0.625	0.361	1.166	2.416
-0.25	-0.375	0.838	2.707	5.123
0.00	-0.125	1.462	4.723	9.846
0.25	0.125	2.423	7.827	17.673
0.50	0.375	2.891	9.339	27.012
0.75	0.625	4.439	14.339	41.351
1.00	0.875	6.312	20.390	61.740
1.25	1.125	3.782	12.217	73.957
1.50	1.375	3.320	10.725	84.682
1.75	1.625	1.953	6.309	90.991
2.00	1.875	1.258	4.064	95.054
2.25	2.125	0.942	3.043	98.097
2.50	2.375	0.381	1.231	99.328
2.75	2.625	0.151	0.488	99.816
3.00	2.875	0.057	0.184	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:	0.8518	phi	(0.5541 mm)
Standard Dev:	0.6799	phi-units	(0.6242 mm)
Skewness:	-0.0839	dimensionless	
Kurtosis:	3.2422	dimensionless	
5th Moment:	-1.1989	dimensionless	
6th Moment:	17.2620	dimensionless	
RARD *	0.7982	dimensionless	
Median	0.7310	phi	(0.6025 mm)

* RARD = reciprocal absolute relative dispersion (see below)

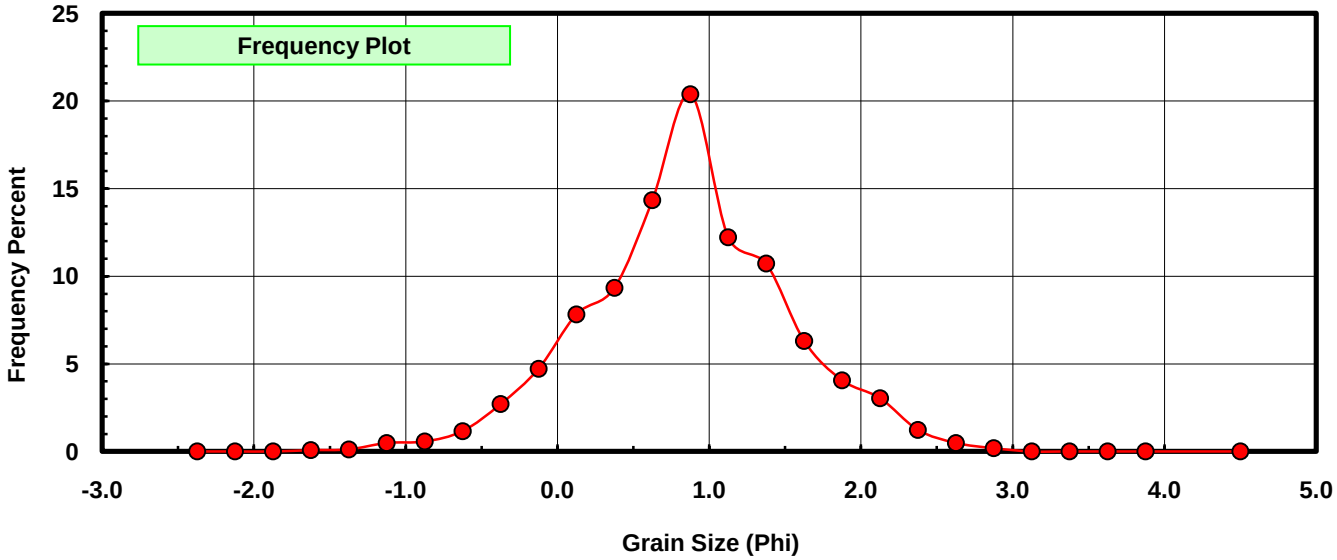
Statistical Explanation

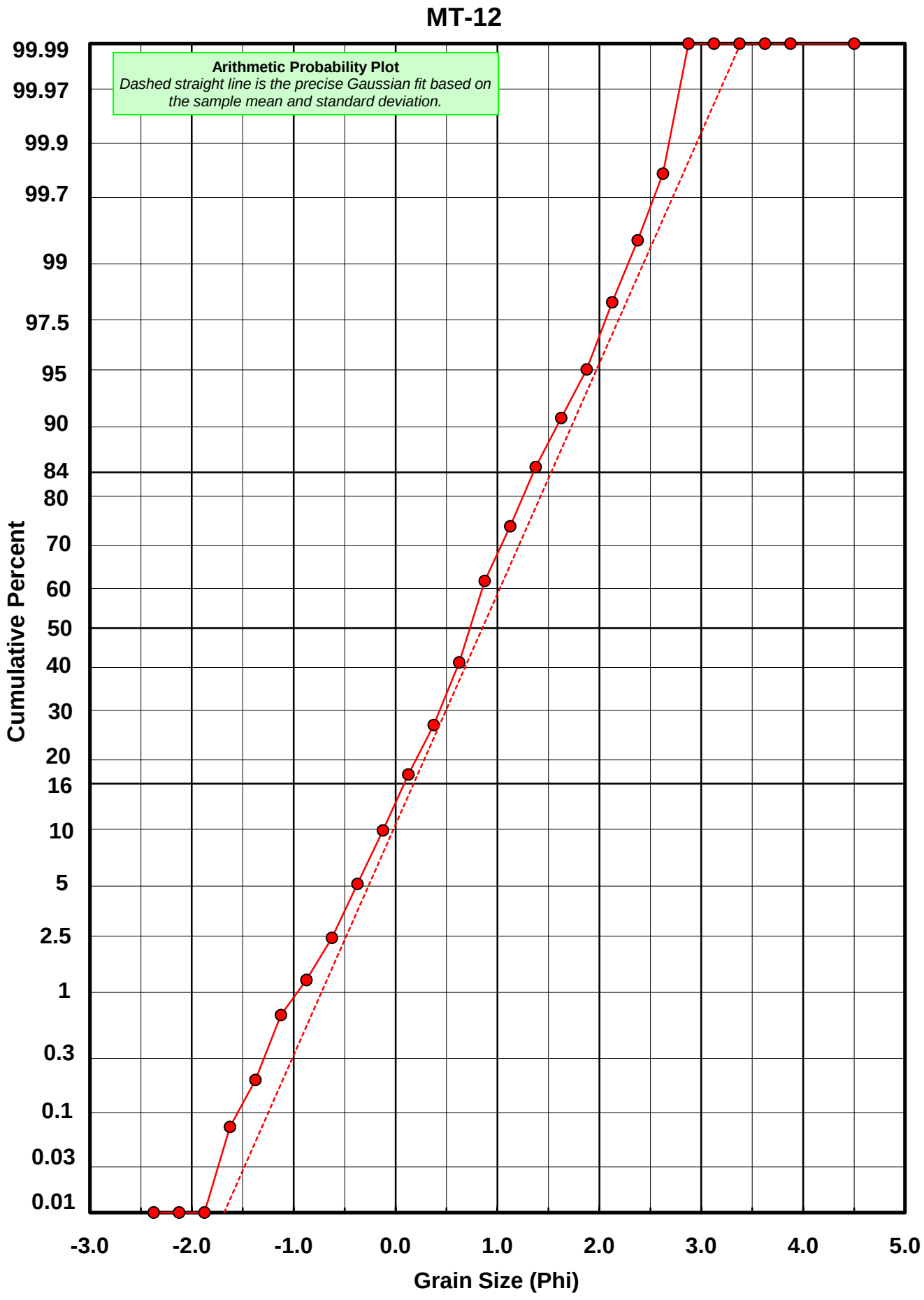
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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-12
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-12

Total Digested Mass: 25.331 grams

% Silica: 45.0 %

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	0.005	0.020	0.020
0.00	-0.125	0.062	0.245	0.264
0.25	0.125	0.198	0.782	1.046
0.50	0.375	0.599	2.365	3.411
0.75	0.625	1.458	5.756	9.167
1.00	0.875	3.855	15.219	24.385
1.25	1.125	3.741	14.768	39.154
1.50	1.375	4.437	17.516	56.670
1.75	1.625	4.088	16.138	72.808
2.00	1.875	3.634	14.346	87.154
2.25	2.125	1.826	7.209	94.363
2.50	2.375	0.642	2.534	96.897
2.75	2.625	0.285	1.125	98.022
3.00	2.875	0.195	0.770	98.792
3.25	3.125	0.142	0.561	99.353
3.50	3.375	0.087	0.343	99.696
3.75	3.625	0.041	0.162	99.858
4.00	3.875	0.019	0.075	99.933
5.00	4.500	0.017	0.067	100.000

Statistical Results			
Mean:	1.4228	phi	(0.373 mm)
Standard Dev:	0.5740	phi-units	(0.6718 mm)
Skewness:	0.5122	dimensionless	
Kurtosis:	4.1218	dimensionless	
5th Moment:	8.6143	dimensionless	
6th Moment:	43.8845	dimensionless	
RARD *	0.4034	dimensionless	
Median	1.2798	phi	(0.4119 mm)
* RARD = reciprocal absolute relative dispersion (see below)			

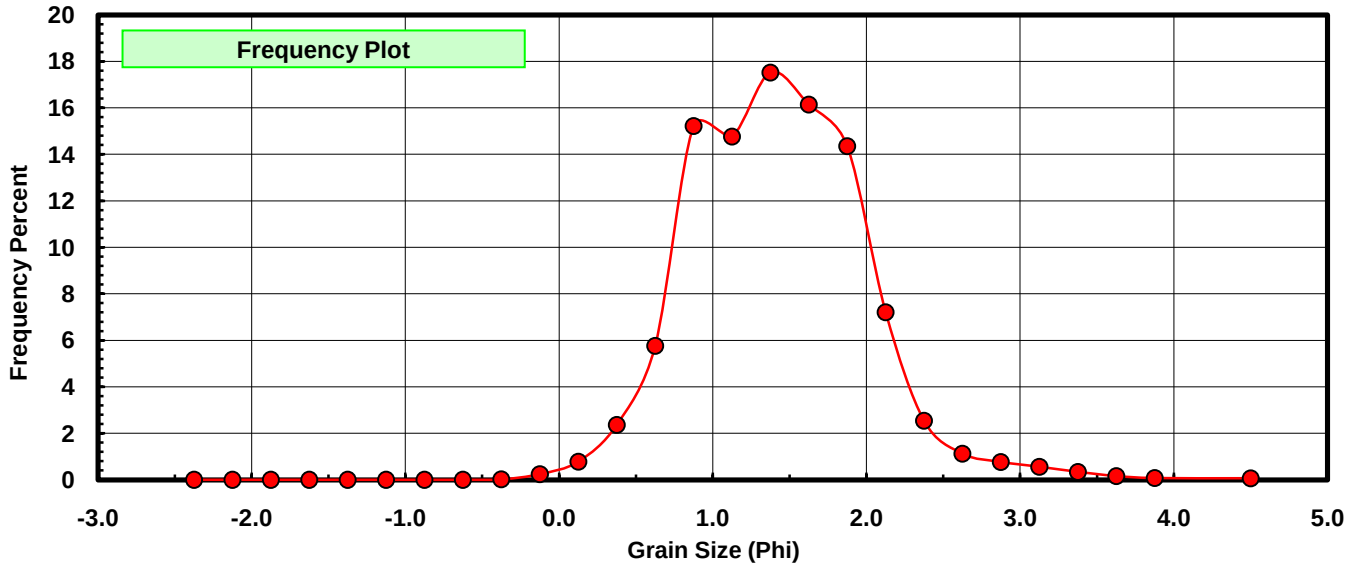
Statistical Explanation

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

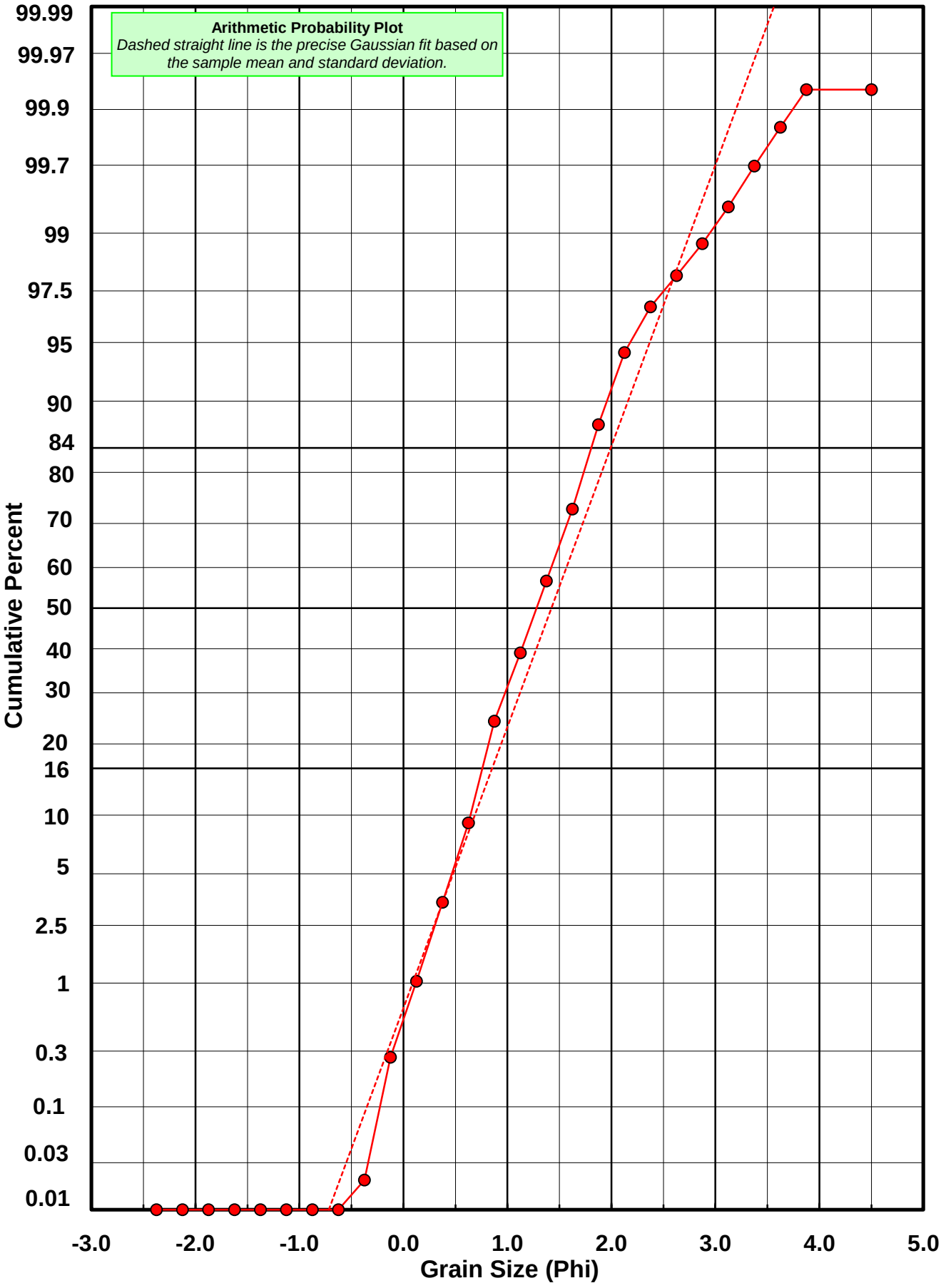
For Further Explanation, See Basillle et al. 2002

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-12


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)