Onshore Grab Sample

Sample: MT-20
Sample Taken By: D. Phelps
Sample Collected On: 12/18/08
Splits? N/A

County: Martin
Latitude: 27° 02' 29.2"
Longitude: 80° 06' 12.9"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	54.796	grams
Total Fines in Sample	0.137	grams
Total Percent Fines	0.25	%

Dry Sieving Summary

Total Sample Weight	54.592	grams
Total Digested Weight	11.467	grams
Total Carbonate Weight	43.125	grams
Total Silica %	21.00	%
Total Carbonate %	79.00	%
Carbonate/Silica Ratio	3.761	

General Comments:

None

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: MT-20

Total Sample Mass: 54.592 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	0.029	0.053	0.053
-1.50	-1.625	0.094	0.172	0.225
-1.25	-1.375	0.111	0.203	0.429
-1.00	-1.125	0.166	0.304	0.733
-0.75	-0.875	0.319	0.584	1.317
-0.50	-0.625	0.982	1.799	3.116
-0.25	-0.375	1.477	2.706	5.821
0.00	-0.125	2.564	4.697	10.518
0.25	0.125	4.051	7.421	17.939
0.50	0.375	5.549	10.164	28.103
0.75	0.625	8.571	15.700	43.803
1.00	0.875	14.330	26.249	70.052
1.25	1.125	7.773	14.238	84.291
1.50	1.375	5.382	9.859	94.149
1.75	1.625	2.137	3.914	98.064
2.00	1.875	0.813	1.489	99.553
2.25	2.125	0.170	0.311	99.864
2.50	2.375	0.036	0.066	99.930
2.75	2.625	0.010	0.018	99.949
3.00	2.875	0.006	0.011	99.960
3.25	3.125	0.007	0.013	99.973
3.50	3.375	0.008	0.015	99.987
3.75	3.625	0.003	0.005	99.993
4.00	3.875	0.001	0.002	99.995
5.00	4.50	0.003	0.005	100.000

Statistical Results			
Mean:	0.7305	phi	(0.6027 mm)
Standard Dev:	0.5724	phi-units	(0.6725 mm)
Skewness:	-0.6365	dimensionless	
Kurtosis:	4.2790	dimensionless	
5th Moment:	-6.1624	dimensionless	
6th Moment:	41.8094	dimensionless	
RARD *	0.7835	dimensionless	
Median	0.6840	phi	(0.6224 mm)
* RARD = reciprocal absolute relative dispersion (see below)			

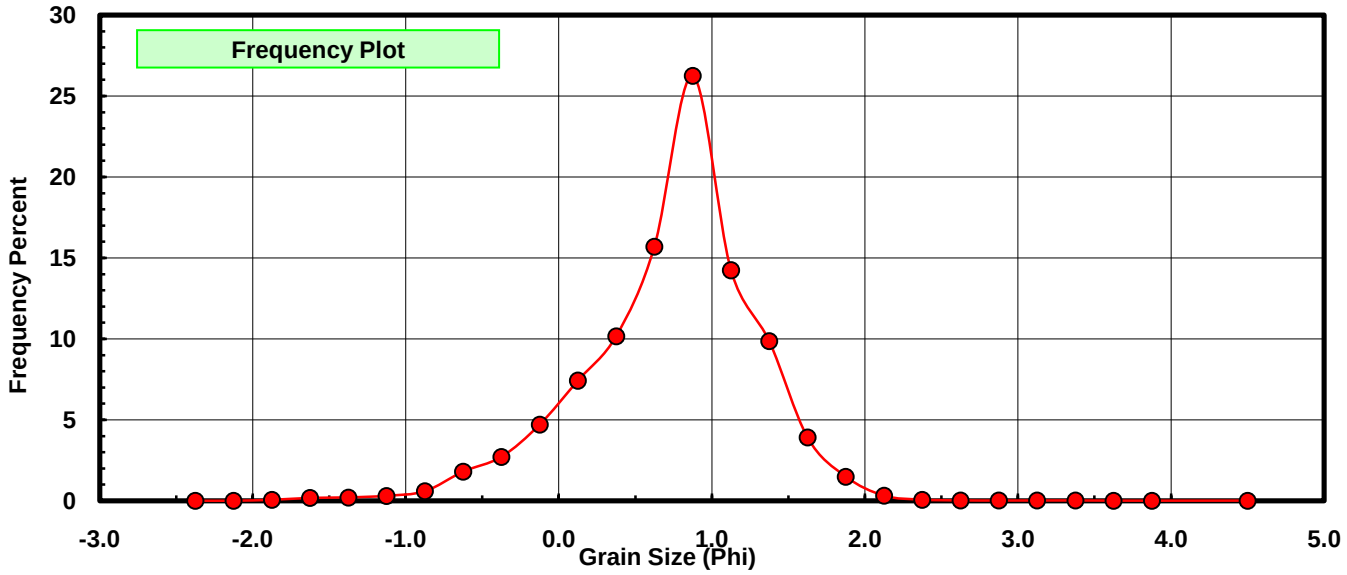
Statistical Explanation

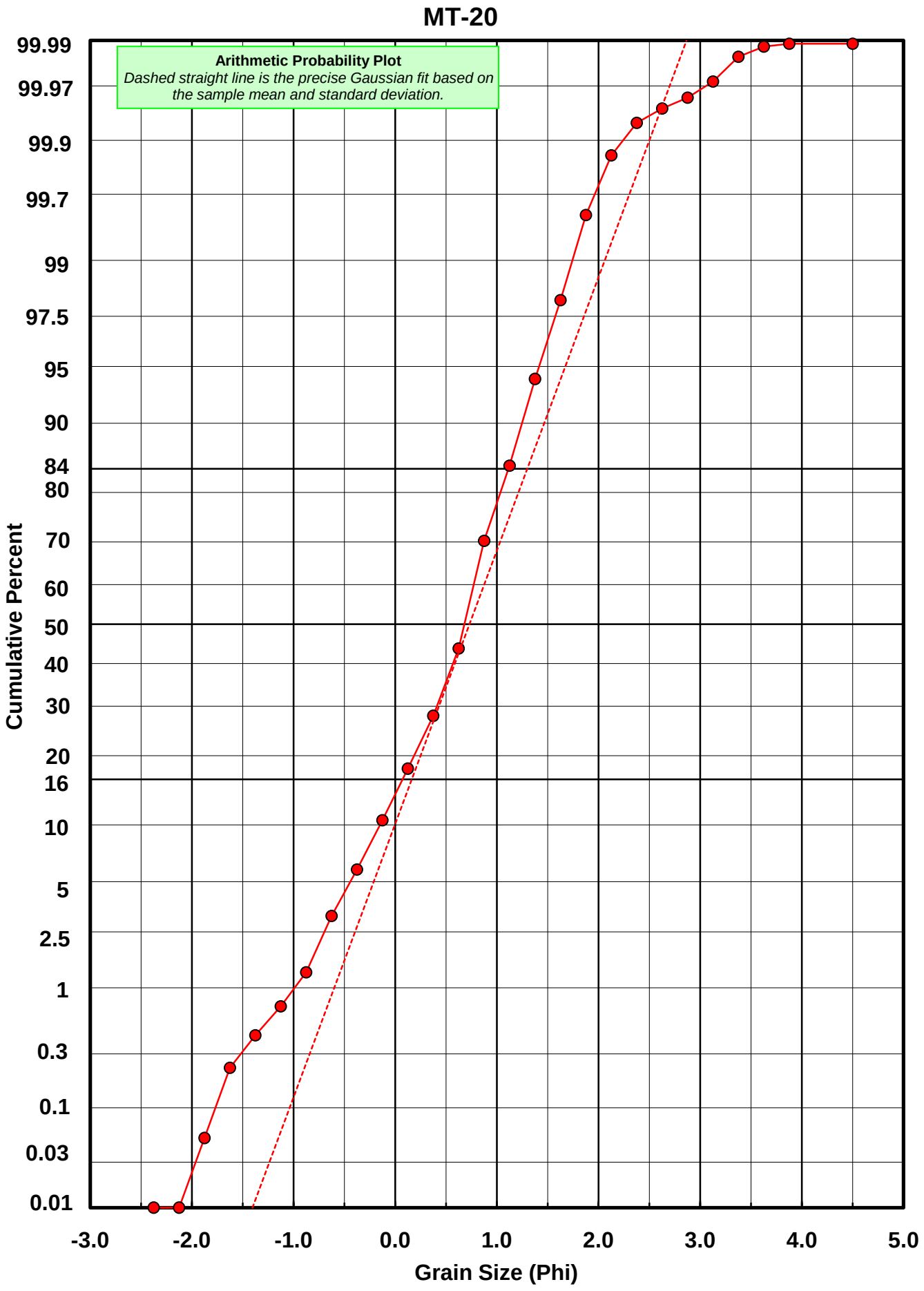
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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-20
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-20

Total Carbonate Mass: 43.409 grams

% Carbonate: 79.0 %

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	0.029	0.067	0.067
-1.50	-1.625	0.094	0.217	0.283
-1.25	-1.375	0.111	0.256	0.539
-1.00	-1.125	0.166	0.382	0.921
-0.75	-0.875	0.319	0.735	1.656
-0.50	-0.625	0.962	2.216	3.872
-0.25	-0.375	1.453	3.347	7.220
0.00	-0.125	2.483	5.720	12.940
0.25	0.125	3.780	8.708	21.648
0.50	0.375	4.837	11.143	32.790
0.75	0.625	7.224	16.642	49.432
1.00	0.875	11.089	25.545	74.978
1.25	1.125	5.411	12.465	87.443
1.50	1.375	3.584	8.256	95.699
1.75	1.625	1.323	3.048	98.747
2.00	1.875	0.472	1.087	99.834
2.25	2.125	0.072	0.166	100.000
2.50	2.375	0.000	0.000	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:	0.6548	phi	(0.6352 mm)
Standard Dev:	0.5781	phi-units	(0.6698 mm)
Skewness:	-0.6988	dimensionless	
Kurtosis:	3.8624	dimensionless	
5th Moment:	-7.4475	dimensionless	
6th Moment:	30.6282	dimensionless	
RARD *	0.8828	dimensionless	
Median	0.6306	phi	(0.6459 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	
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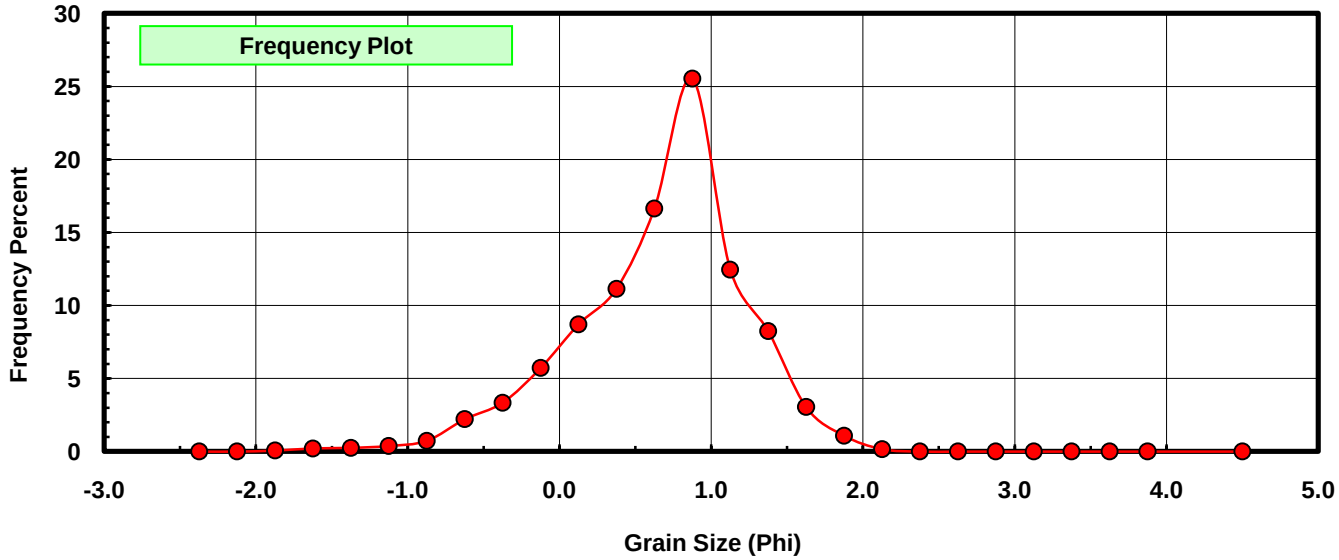

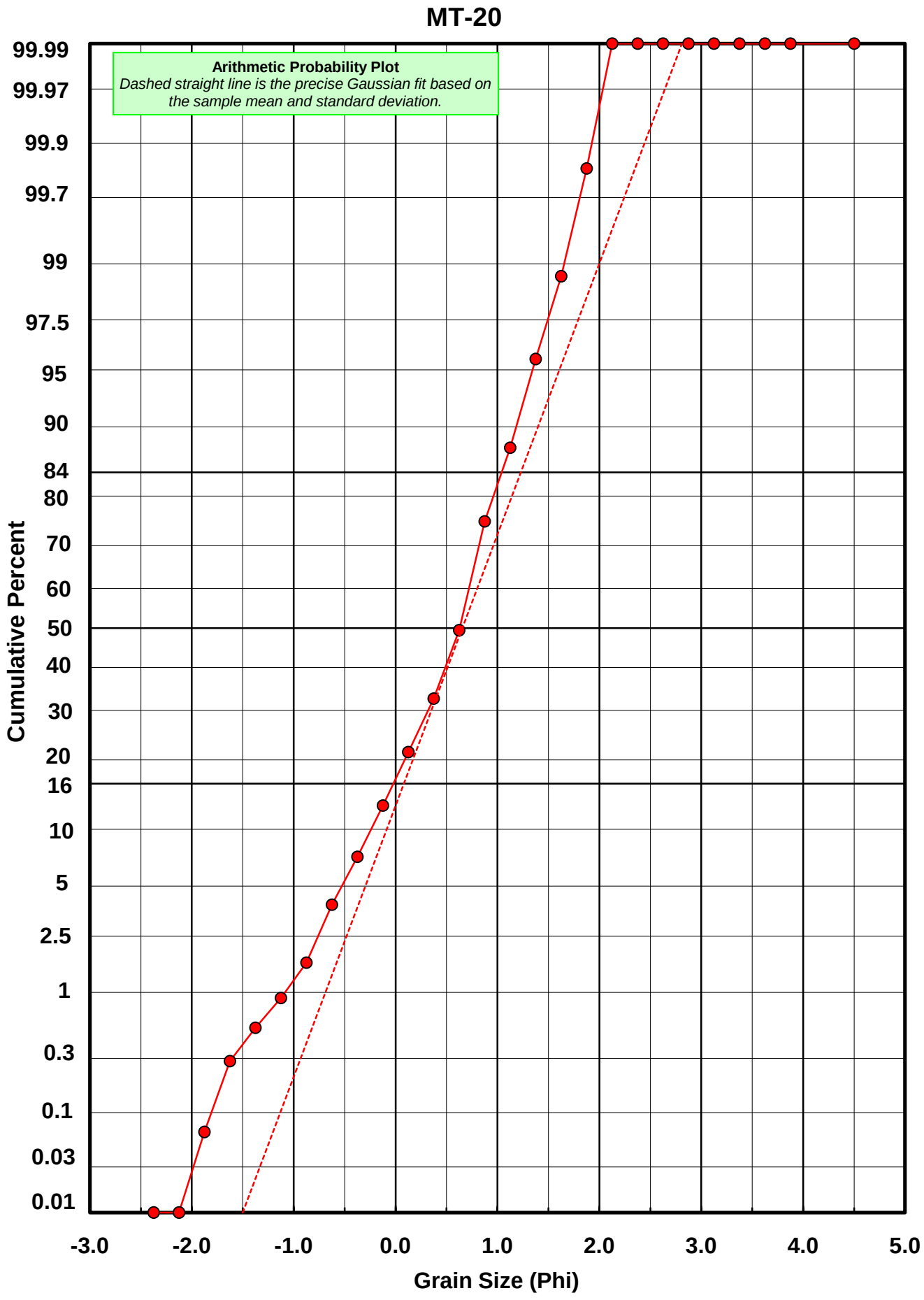
MT-20
Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
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99
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16
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5
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-20

Total Digested Mass: 11.467 grams

% Silica: 21.0 %

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	0.020	0.174	0.174
-0.25	-0.375	0.024	0.209	0.384
0.00	-0.125	0.081	0.706	1.090
0.25	0.125	0.271	2.363	3.453
0.50	0.375	0.712	6.209	9.663
0.75	0.625	1.347	11.747	21.409
1.00	0.875	3.241	28.264	49.673
1.25	1.125	2.362	20.598	70.271
1.50	1.375	1.798	15.680	85.951
1.75	1.625	0.814	7.099	93.050
2.00	1.875	0.341	2.974	96.023
2.25	2.125	0.098	0.855	96.878
2.50	2.375	0.041	0.358	97.236
2.75	2.625	0.025	0.218	97.454
3.00	2.875	0.038	0.331	97.785
3.25	3.125	0.060	0.523	98.308
3.50	3.375	0.070	0.610	98.919
3.75	3.625	0.053	0.462	99.381
4.00	3.875	0.042	0.366	99.747
5.00	4.500	0.029	0.253	100.000

Statistical Results			
Mean:	1.0838	phi	(0.4718 mm)
Standard Dev:	0.6064	phi-units	(0.6568 mm)
Skewness:	1.7878	dimensionless	
Kurtosis:	9.5967	dimensionless	
5th Moment:	38.5230	dimensionless	
6th Moment:	188.2613	dimensionless	
RARD *	0.5595	dimensionless	
Median	0.8790	phi	(0.5438 mm)
* RARD = reciprocal absolute relative dispersion (see below)			

Statistical Explanation

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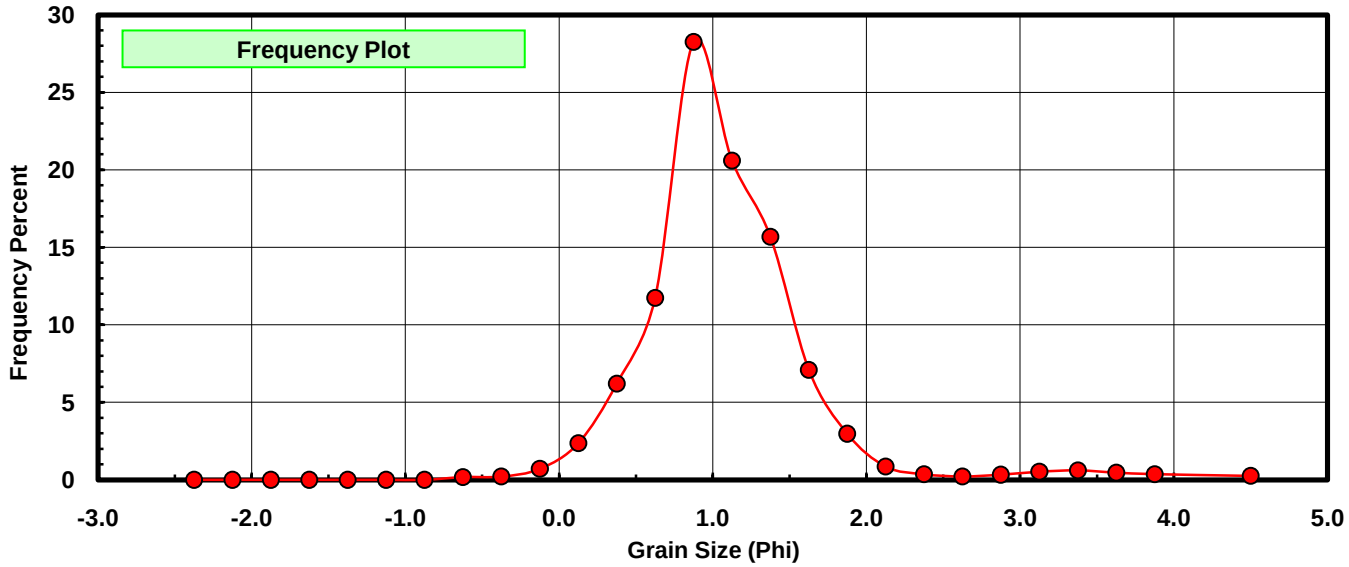

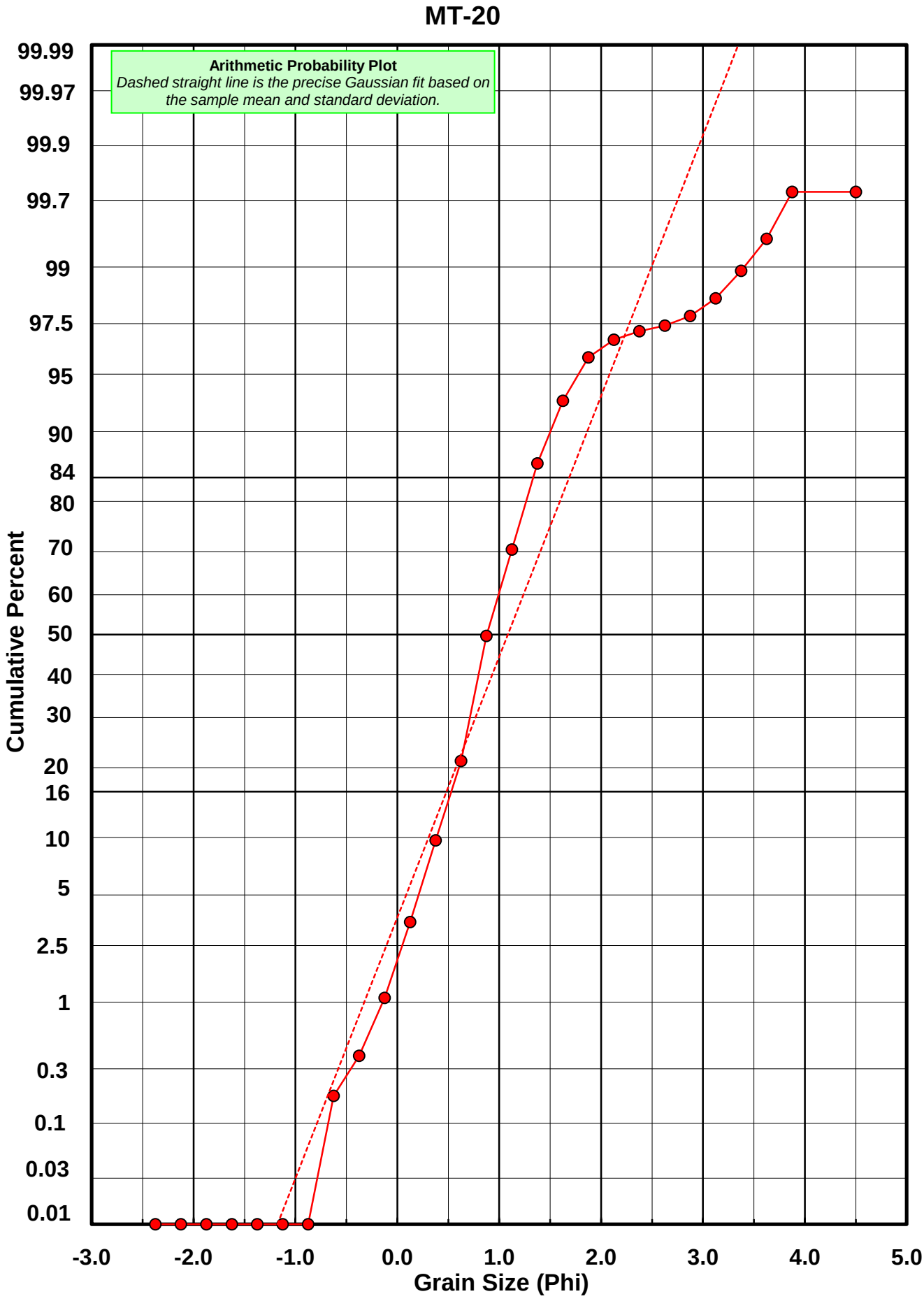
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3.0
4.0
5.0
Grain Size (Phi)