

## **Onshore Grab Sample**

**Sample:** MT-21  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 12/18/08  
**Splits?** N/A

**County:** Martin  
**Latitude:** 27° 01' 49.9"  
**Longitude:** 80° 05' 55.7"  
**Datum:** WGS 84  
**Surf. Elev:** N/A  
**Datum:** N/A

### **Fine Data Summary**

Total Sample Weight	51.421 grams
Total Fines in Sample	0.156 grams
Total Percent Fines	0.30 %

### **Dry Sieving Summary**

Total Sample Weight	51.216 grams
Total Digested Weight	11.834 grams
Total Carbonate Weight	39.382 grams
Total Silica %	23.11 %
Total Carbonate %	76.89 %
Carbonate/Silica Ratio	3.328

### **General Comments:**

None

### **Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: MT-21

Total Sample Mass: 51.216 grams

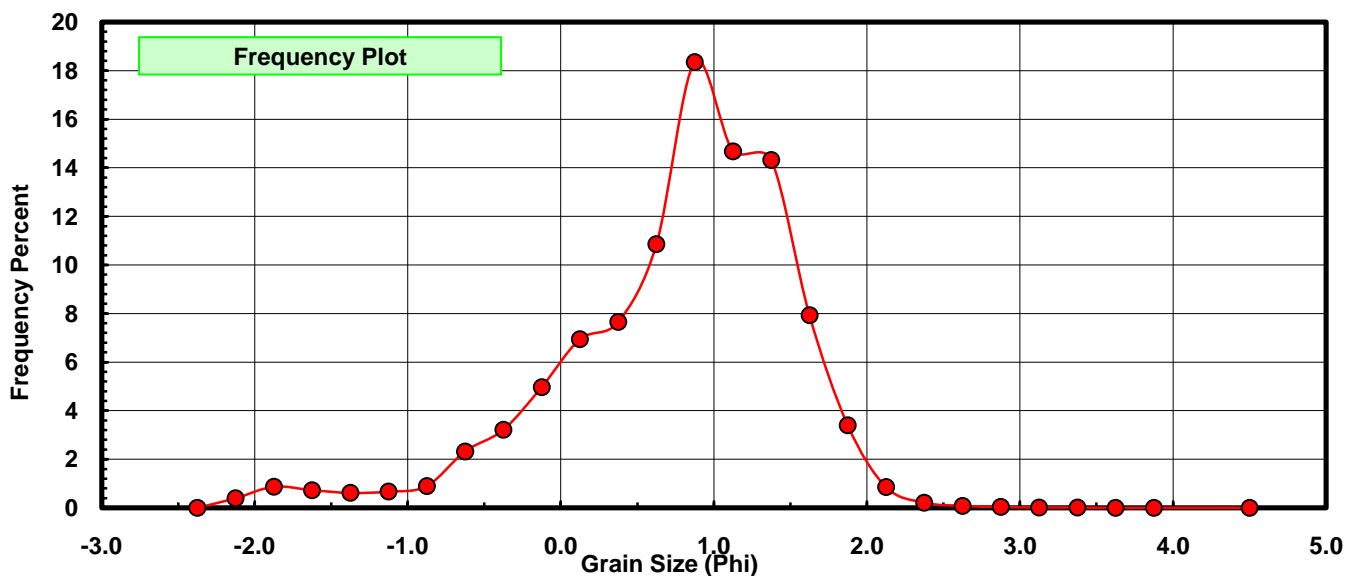
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.201	0.392	0.392
-1.75	-1.875	0.445	0.869	1.261
-1.50	-1.625	0.373	0.728	1.990
-1.25	-1.375	0.314	0.613	2.603
-1.00	-1.125	0.341	0.666	3.269
-0.75	-0.875	0.458	0.894	4.163
-0.50	-0.625	1.190	2.323	6.486
-0.25	-0.375	1.645	3.212	9.698
0.00	-0.125	2.544	4.967	14.665
0.25	0.125	3.555	6.941	21.607
0.50	0.375	3.919	7.652	29.258
0.75	0.625	5.557	10.850	40.109
1.00	0.875	9.397	18.348	58.456
1.25	1.125	7.520	14.683	73.139
1.50	1.375	7.333	14.318	87.457
1.75	1.625	4.059	7.925	95.382
2.00	1.875	1.740	3.397	98.780
2.25	2.125	0.438	0.855	99.635
2.50	2.375	0.109	0.213	99.848
2.75	2.625	0.042	0.082	99.930
3.00	2.875	0.017	0.033	99.963
3.25	3.125	0.009	0.018	99.980
3.50	3.375	0.006	0.012	99.992
3.75	3.625	0.001	0.002	99.994
4.00	3.875	0.001	0.002	99.996
5.00	4.50	0.002	0.004	100.000

Statistical Results			
Mean:	0.7549	phi	(0.5926 mm)
Standard Dev:	0.7706	phi-units	(0.5862 mm)
Skewness:	-1.0389	dimensionless	
Kurtosis:	4.5607	dimensionless	
5th Moment:	-10.8312	dimensionless	
6th Moment:	39.9444	dimensionless	
RARD *	1.0208	dimensionless	
Median	0.7598	phi	(0.5906 mm)

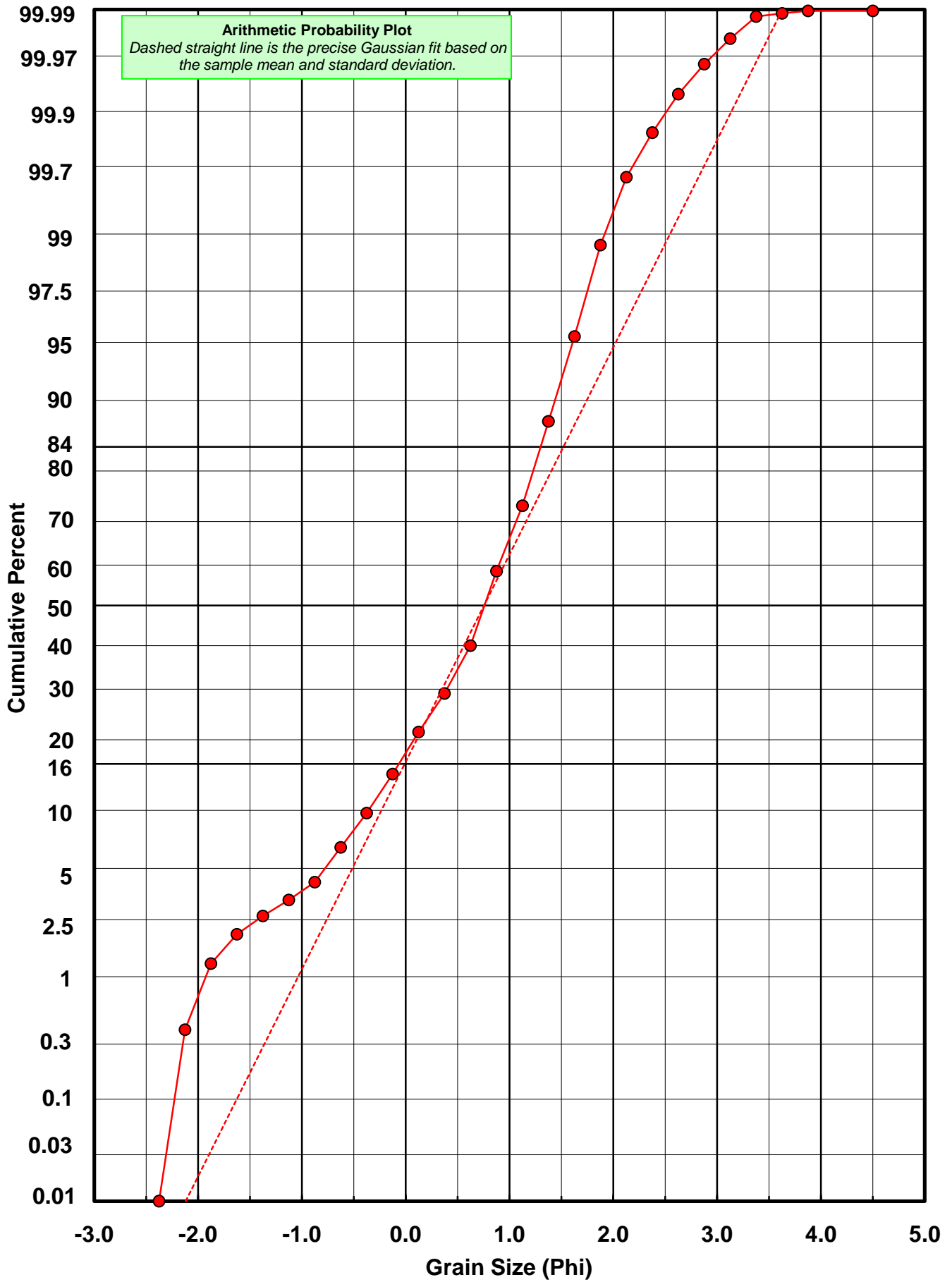
\* RARD = reciprocal absolute relative dispersion (see below)

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)



# MT-21



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: MT-21

Total Carbonate Mass: 39.657 grams

% Carbonate: 76.9 %

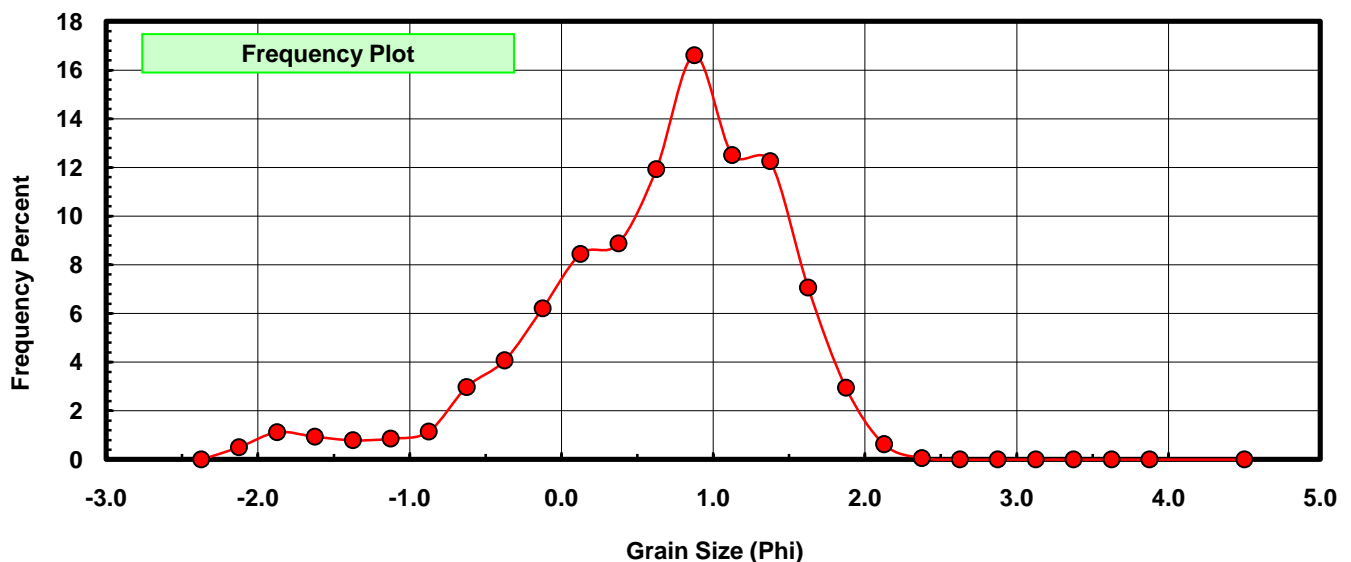
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.201	0.507	0.507
-1.75	-1.875	0.445	1.122	1.629
-1.50	-1.625	0.373	0.941	2.570
-1.25	-1.375	0.314	0.792	3.361
-1.00	-1.125	0.341	0.860	4.221
-0.75	-0.875	0.458	1.155	5.376
-0.50	-0.625	1.183	2.983	8.359
-0.25	-0.375	1.616	4.075	12.434
0.00	-0.125	2.464	6.213	18.647
0.25	0.125	3.350	8.447	27.095
0.50	0.375	3.521	8.879	35.973
0.75	0.625	4.733	11.935	47.908
1.00	0.875	6.588	16.612	64.521
1.25	1.125	4.962	12.512	77.033
1.50	1.375	4.861	12.258	89.291
1.75	1.625	2.803	7.068	96.359
2.00	1.875	1.169	2.948	99.307
2.25	2.125	0.250	0.630	99.937
2.50	2.375	0.025	0.063	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:	0.6387	phi	(0.6423 mm)
Standard Dev:	0.8054	phi-units	(0.5722 mm)
Skewness:	-0.9357	dimensionless	
Kurtosis:	3.9666	dimensionless	
5th Moment:	-8.8545	dimensionless	
6th Moment:	29.0768	dimensionless	
RARD *	1.2611	dimensionless	
Median	0.6565	phi	(0.6344 mm)

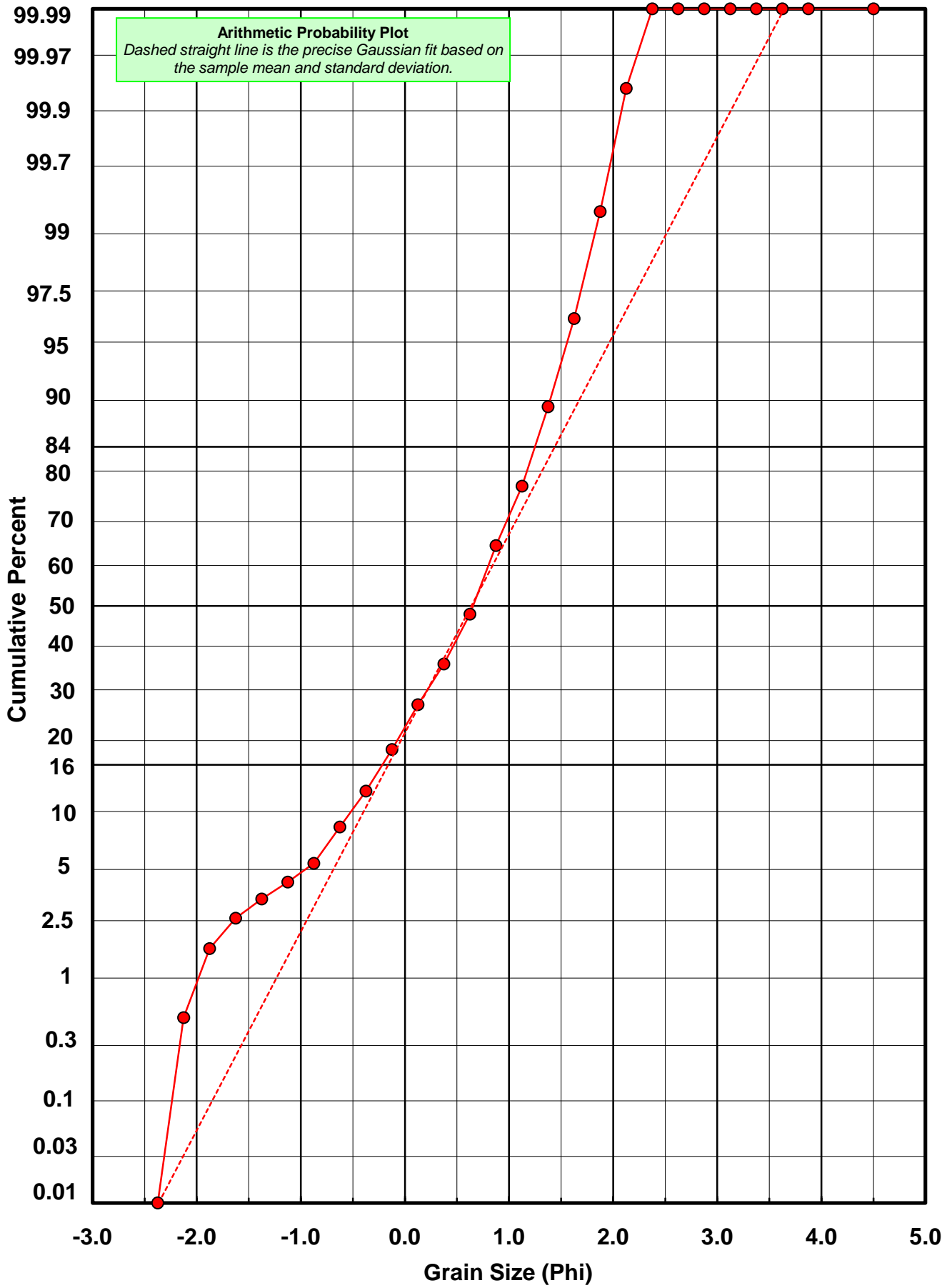
\* RARD = reciprocal absolute relative dispersion (see below)

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)
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# MT-21



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: MT-21

Total Digested Mass: 11.834 grams

% Silica: 23.1 %

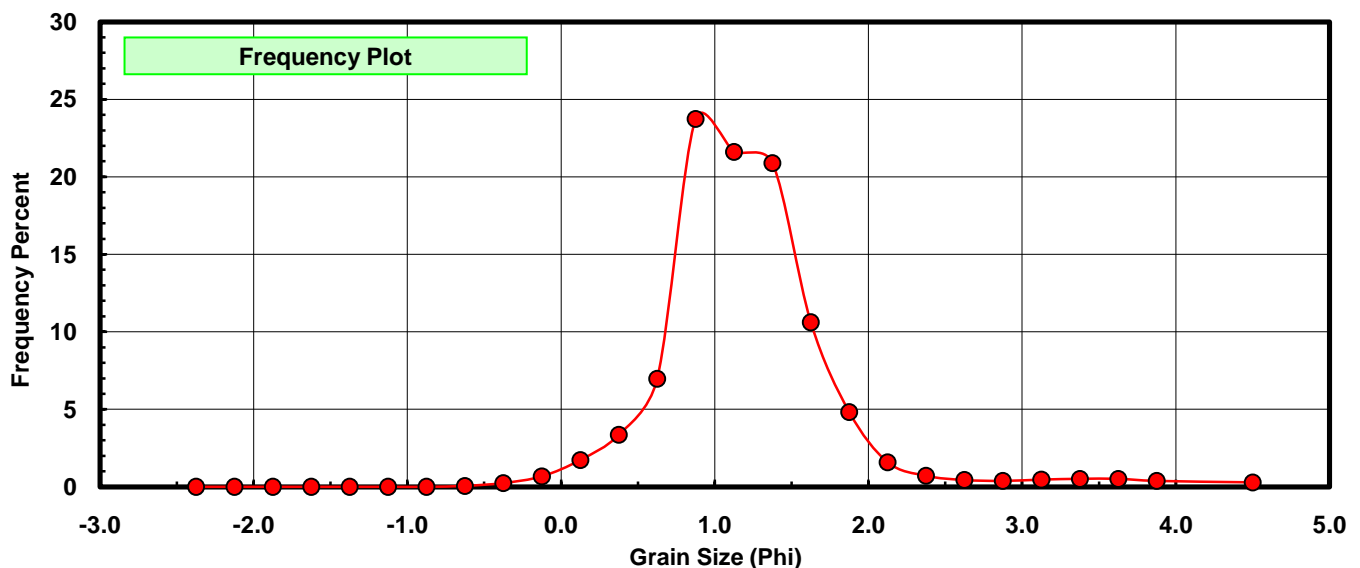
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.007	0.059	0.059
-0.25	-0.375	0.029	0.245	0.304
0.00	-0.125	0.080	0.676	0.980
0.25	0.125	0.205	1.732	2.713
0.50	0.375	0.398	3.363	6.076
0.75	0.625	0.824	6.963	13.039
1.00	0.875	2.809	23.737	36.775
1.25	1.125	2.558	21.616	58.391
1.50	1.375	2.472	20.889	79.280
1.75	1.625	1.256	10.613	89.894
2.00	1.875	0.571	4.825	94.719
2.25	2.125	0.188	1.589	96.307
2.50	2.375	0.084	0.710	97.017
2.75	2.625	0.052	0.439	97.456
3.00	2.875	0.045	0.380	97.837
3.25	3.125	0.055	0.465	98.302
3.50	3.375	0.061	0.515	98.817
3.75	3.625	0.061	0.515	99.332
4.00	3.875	0.045	0.380	99.713
5.00	4.500	0.034	0.287	100.000

Statistical Results			
Mean:	1.2086	phi	(0.4327 mm)
Standard Dev:	0.6031	phi-units	(0.6583 mm)
Skewness:	1.5693	dimensionless	
Kurtosis:	8.7528	dimensionless	
5th Moment:	32.9902	dimensionless	
6th Moment:	161.1274	dimensionless	
RARD *	0.4990	dimensionless	
Median	1.0280	phi	(0.4904 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)
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