

## **Onshore Grab Sample**

**Sample:** MT-15-BB  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 12/17/08  
**Splits?** N/A

**County:** Martin  
**Latitude:** 27° 05' 57.6"  
**Longitude:** 80° 07' 57.3"  
**Datum:** WGS 84  
**Surf. Elev:** N/A  
**Datum:** N/A

### **Fine Data Summary**

Total Sample Weight	58.361 grams
Total Fines in Sample	0.232 grams
Total Percent Fines	0.40 %

### **Dry Sieving Summary**

Total Sample Weight	58.107 grams
Total Digested Weight	23.421 grams
Total Carbonate Weight	34.686 grams
Total Silica %	40.31 %
Total Carbonate %	59.69 %
Carbonate/Silica Ratio	1.481

### **General Comments:**

Location Data Estimated

### **Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: MT-15-BB

Total Sample Mass: 58.107 grams

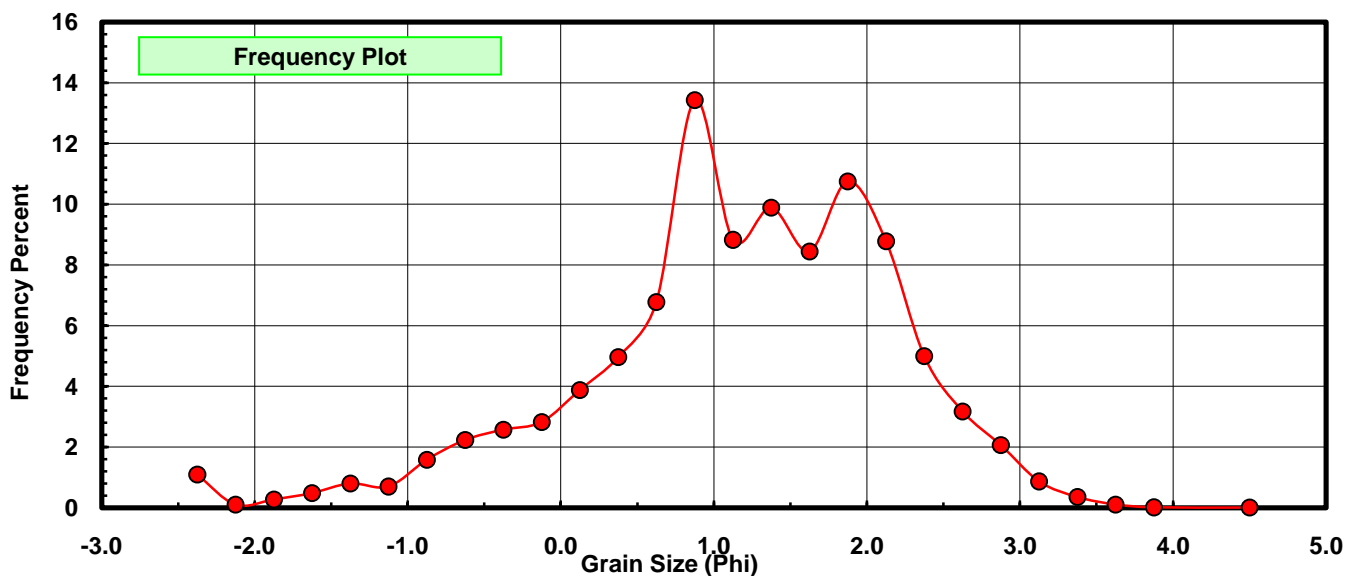
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.639	1.100	1.100
-2.00	-2.125	0.060	0.103	1.203
-1.75	-1.875	0.160	0.275	1.478
-1.50	-1.625	0.281	0.484	1.962
-1.25	-1.375	0.466	0.802	2.764
-1.00	-1.125	0.407	0.700	3.464
-0.75	-0.875	0.919	1.582	5.046
-0.50	-0.625	1.298	2.234	7.280
-0.25	-0.375	1.496	2.575	9.854
0.00	-0.125	1.642	2.826	12.680
0.25	0.125	2.255	3.881	16.561
0.50	0.375	2.883	4.962	21.522
0.75	0.625	3.938	6.777	28.300
1.00	0.875	7.805	13.432	41.732
1.25	1.125	5.129	8.827	50.558
1.50	1.375	5.743	9.883	60.442
1.75	1.625	4.907	8.445	68.887
2.00	1.875	6.247	10.751	79.638
2.25	2.125	5.099	8.775	88.413
2.50	2.375	2.900	4.991	93.404
2.75	2.625	1.846	3.177	96.580
3.00	2.875	1.199	2.063	98.644
3.25	3.125	0.505	0.869	99.513
3.50	3.375	0.207	0.356	99.869
3.75	3.625	0.063	0.108	99.978
4.00	3.875	0.009	0.015	99.993
5.00	4.50	0.004	0.007	100.000

Statistical Results			
Mean:	1.1479	phi	(0.4513 mm)
Standard Dev:	1.0422	phi-units	(0.4856 mm)
Skewness:	-0.7419	dimensionless	
Kurtosis:	3.8335	dimensionless	
5th Moment:	-7.4355	dimensionless	
6th Moment:	27.3141	dimensionless	
RARD *	0.9080	dimensionless	
Median	1.1092	phi	(0.4636 mm)

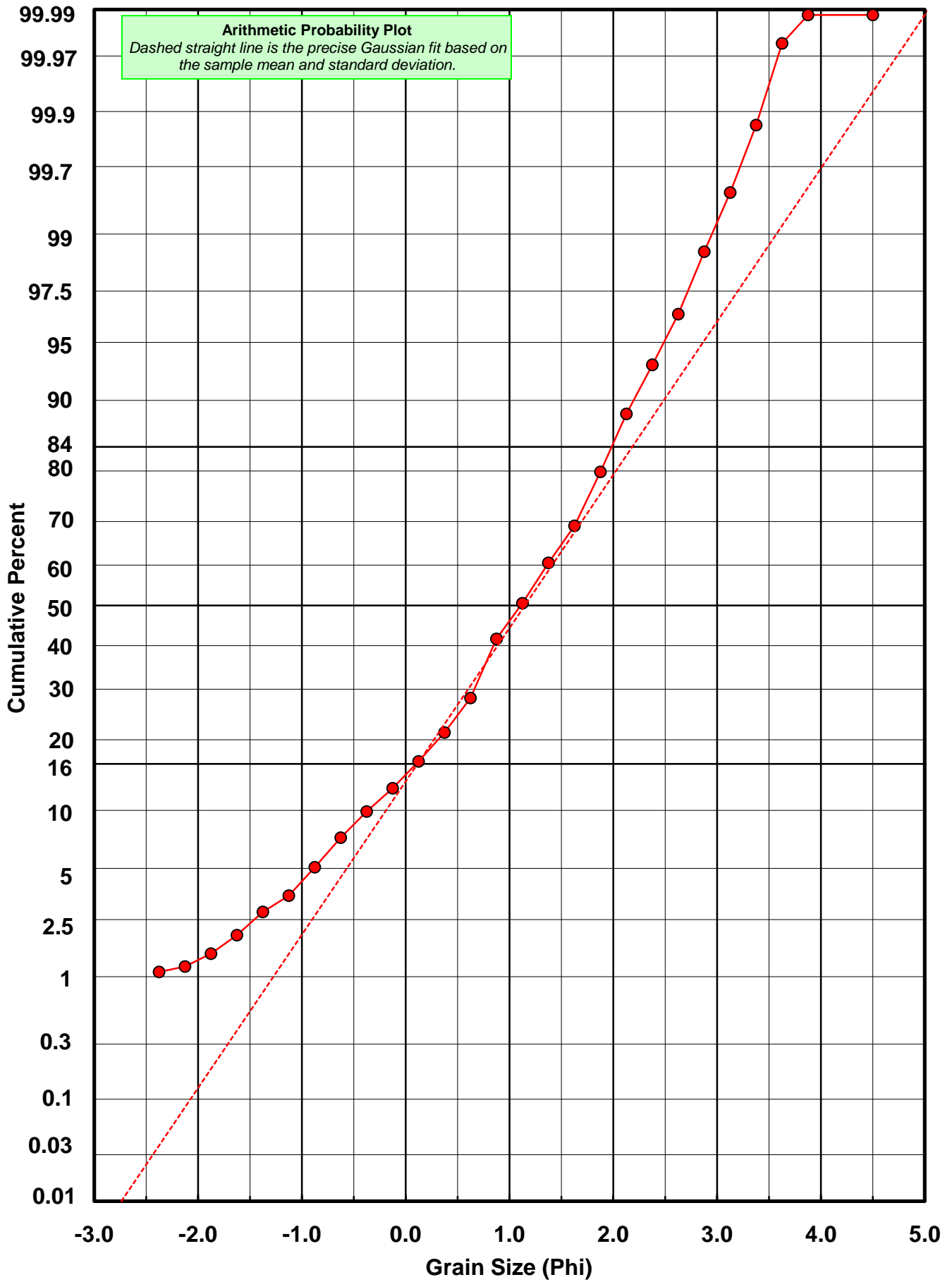
\* RARD = reciprocal absolute relative dispersion (see below)

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-15-BB



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: MT-15-BB

Total Carbonate Mass: 34.761 grams

% Carbonate: 59.7 %

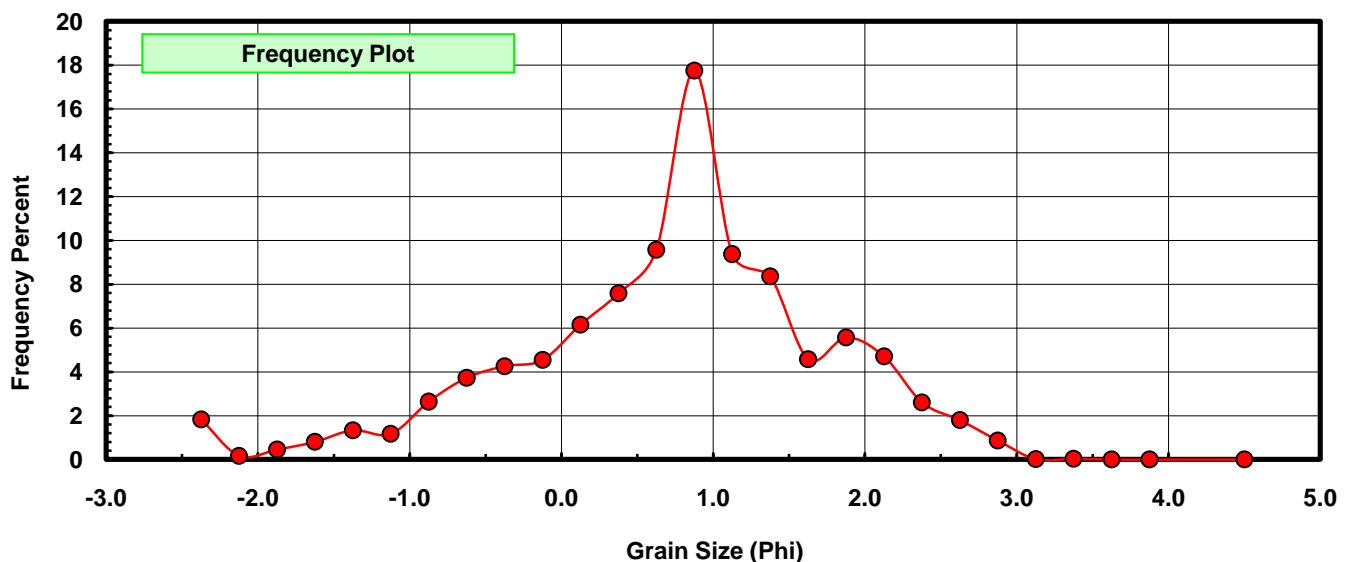
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.639	1.838	1.838
-2.00	-2.125	0.060	0.173	2.011
-1.75	-1.875	0.160	0.460	2.471
-1.50	-1.625	0.281	0.808	3.280
-1.25	-1.375	0.466	1.341	4.620
-1.00	-1.125	0.407	1.171	5.791
-0.75	-0.875	0.919	2.644	8.435
-0.50	-0.625	1.298	3.734	12.169
-0.25	-0.375	1.482	4.263	16.432
0.00	-0.125	1.580	4.545	20.978
0.25	0.125	2.141	6.159	27.137
0.50	0.375	2.638	7.589	34.726
0.75	0.625	3.329	9.577	44.303
1.00	0.875	6.170	17.750	62.052
1.25	1.125	3.260	9.378	71.431
1.50	1.375	2.908	8.366	79.796
1.75	1.625	1.592	4.580	84.376
2.00	1.875	1.937	5.572	89.949
2.25	2.125	1.637	4.709	94.658
2.50	2.375	0.908	2.612	97.270
2.75	2.625	0.626	1.801	99.071
3.00	2.875	0.303	0.872	99.942
3.25	3.125	0.007	0.020	99.963
3.50	3.375	0.013	0.037	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:	0.7183	phi	(0.6078 mm)
Standard Dev:	1.0426	phi-units	(0.4854 mm)
Skewness:	-0.5792	dimensionless	
Kurtosis:	3.4911	dimensionless	
5th Moment:	-5.2514	dimensionless	
6th Moment:	20.0914	dimensionless	
RARD *	1.4516	dimensionless	
Median	0.7052	phi	(0.6133 mm)

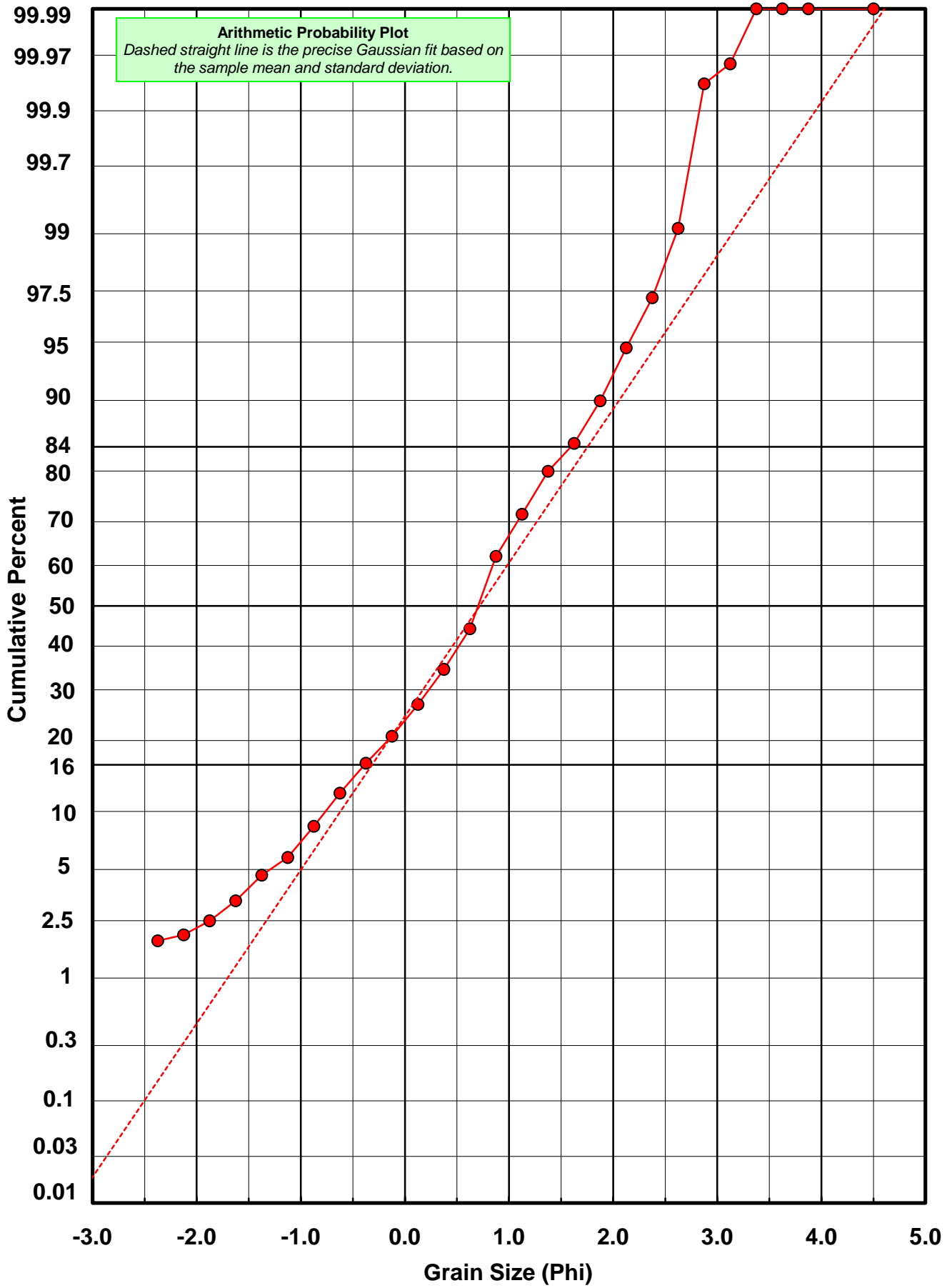
\* RARD = reciprocal absolute relative dispersion (see below)

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	
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# MT-15-BB



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: MT-15-BB

Total Digested Mass: 23.421 grams

% Silica: 40.3 %

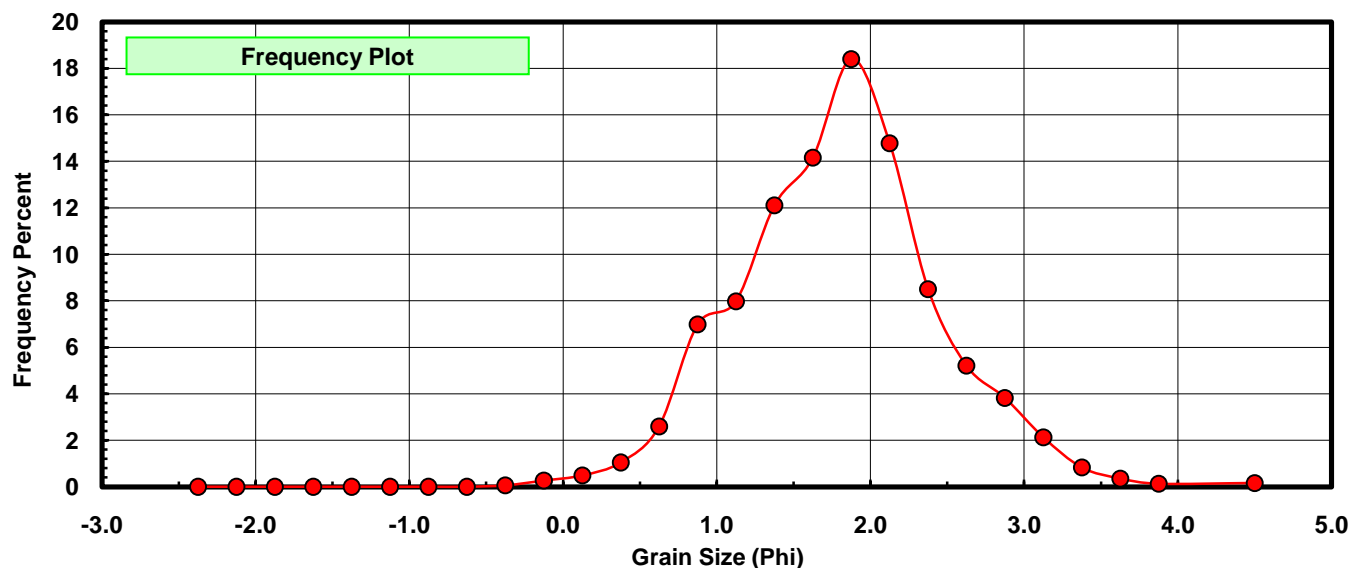
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-0.25	-0.375	0.014	0.060	0.060
0.00	-0.125	0.062	0.265	0.324
0.25	0.125	0.114	0.487	0.811
0.50	0.375	0.245	1.046	1.857
0.75	0.625	0.609	2.600	4.458
1.00	0.875	1.635	6.981	11.438
1.25	1.125	1.869	7.980	19.418
1.50	1.375	2.835	12.105	31.523
1.75	1.625	3.315	14.154	45.677
2.00	1.875	4.310	18.402	64.079
2.25	2.125	3.462	14.782	78.861
2.50	2.375	1.992	8.505	87.366
2.75	2.625	1.220	5.209	92.575
3.00	2.875	0.896	3.826	96.401
3.25	3.125	0.498	2.126	98.527
3.50	3.375	0.194	0.828	99.355
3.75	3.625	0.083	0.354	99.710
4.00	3.875	0.030	0.128	99.838
5.00	4.500	0.038	0.162	100.000

Statistical Results			
Mean:	1.7949	phi	(0.2882 mm)
Standard Dev:	0.6601	phi-units	(0.6328 mm)
Skewness:	0.1489	dimensionless	
Kurtosis:	3.3295	dimensionless	
5th Moment:	2.2829	dimensionless	
6th Moment:	21.5070	dimensionless	
RARD *	0.3678	dimensionless	
Median	1.6837	phi	(0.3113 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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