

**Onshore Grab Sample**

**Sample:** IR-10-BB  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 10/29/08  
**Splits?** N/A

**County:** Indian River  
**Latitude:** 27° 44' 52.9"  
**Longitude:** 80° 23' 16.4"  
**Datum:** WGS 84  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 60.343 grams  
Total Fines in Sample 0.327 grams  
Total Percent Fines 0.54 %

**Dry Sieving Summary**

Total Sample Weight 59.930 grams  
Total Digested Weight 43.100 grams  
Total Carbonate Weight 16.830 grams  
Total Silica % 71.92 %  
Total Carbonate % 28.08 %  
Carbonate/Silica Ratio 0.390

**General Comments:**

None

**Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-10-BB

Total Sample Mass: 59.930 grams

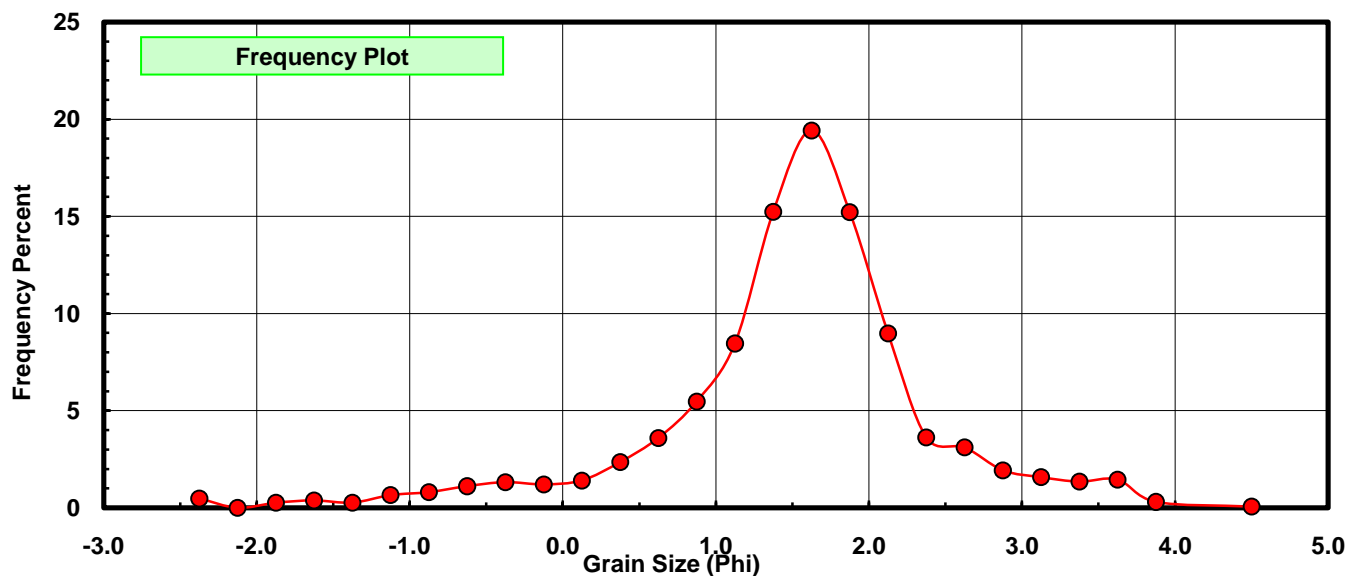
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.289	0.482	0.482
-2.00	-2.125	0.000	0.000	0.482
-1.75	-1.875	0.154	0.257	0.739
-1.50	-1.625	0.227	0.379	1.118
-1.25	-1.375	0.158	0.264	1.382
-1.00	-1.125	0.390	0.651	2.032
-0.75	-0.875	0.482	0.804	2.837
-0.50	-0.625	0.666	1.111	3.948
-0.25	-0.375	0.791	1.320	5.268
0.00	-0.125	0.721	1.203	6.471
0.25	0.125	0.843	1.407	7.878
0.50	0.375	1.411	2.354	10.232
0.75	0.625	2.155	3.596	13.828
1.00	0.875	3.281	5.475	19.303
1.25	1.125	5.068	8.457	27.759
1.50	1.375	9.131	15.236	42.995
1.75	1.625	11.640	19.423	62.418
2.00	1.875	9.115	15.209	77.627
2.25	2.125	5.383	8.982	86.609
2.50	2.375	2.168	3.618	90.227
2.75	2.625	1.865	3.112	93.339
3.00	2.875	1.155	1.927	95.266
3.25	3.125	0.943	1.574	96.840
3.50	3.375	0.805	1.343	98.183
3.75	3.625	0.872	1.455	99.638
4.00	3.875	0.182	0.304	99.942
5.00	4.50	0.035	0.058	100.000

Statistical Results			
Mean:	1.5081	phi	(0.3516 mm)
Standard Dev:	0.9234	phi-units	(0.5273 mm)
Skewness:	-0.8524	dimensionless	
Kurtosis:	5.6146	dimensionless	
5th Moment:	-12.0514	dimensionless	
6th Moment:	56.5594	dimensionless	
RARD *	0.6123	dimensionless	
Median	1.4652	phi	(0.3622 mm)

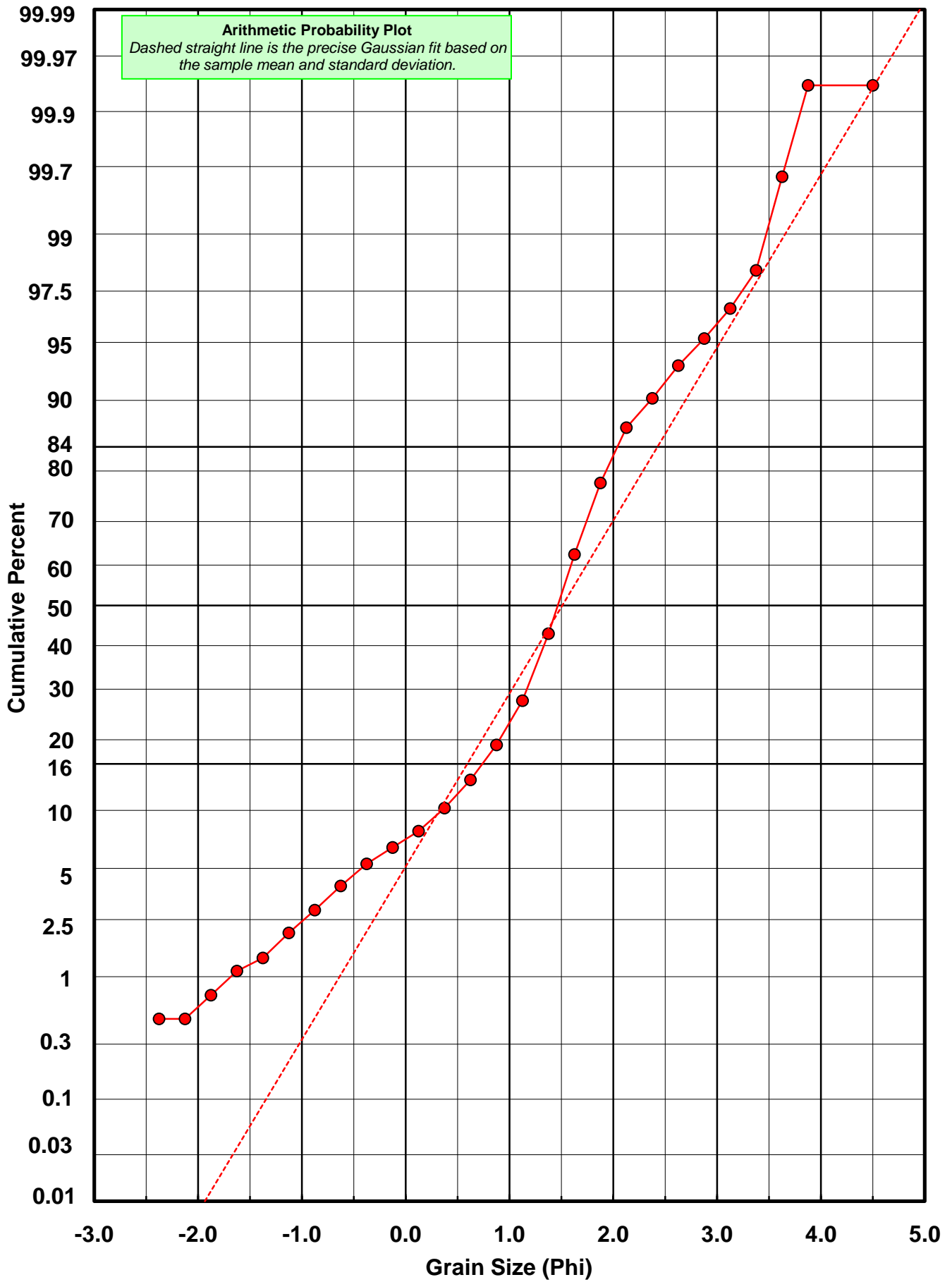
\* RARD = reciprocal absolute relative dispersion (see below)

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)



# IR-10-BB



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: IR-10-BB

Total Carbonate Mass: 16.830 grams

% Carbonate: 28.1 %

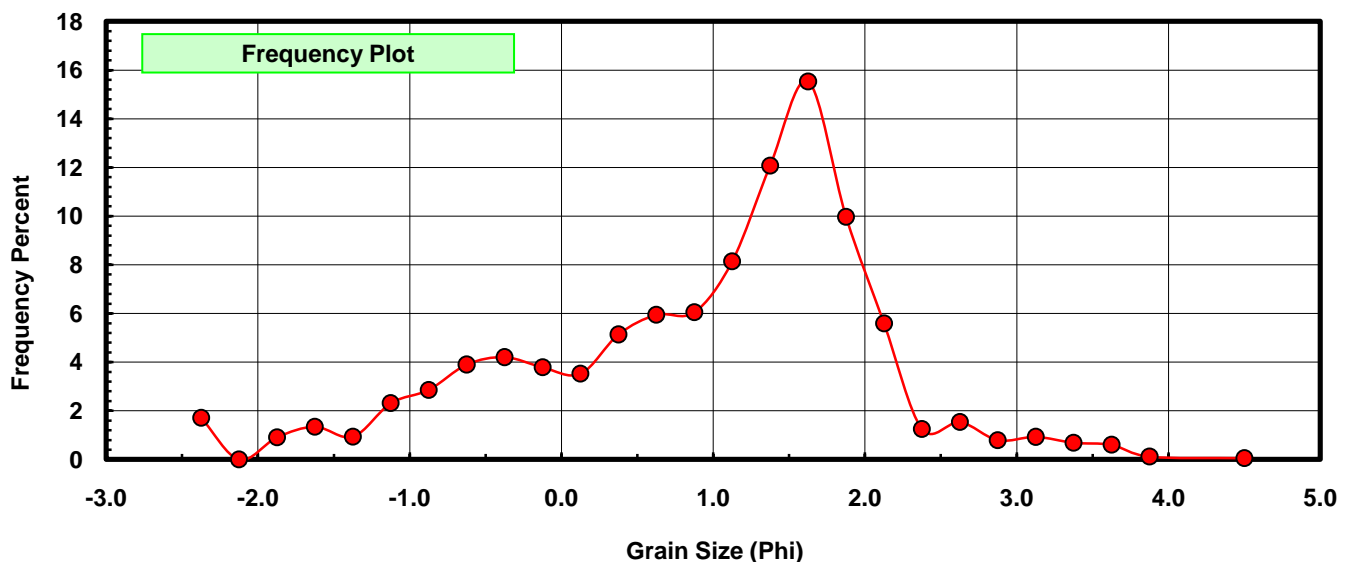
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.289	1.717	1.717
-2.00	-2.125	0.000	0.000	1.717
-1.75	-1.875	0.154	0.915	2.632
-1.50	-1.625	0.227	1.349	3.981
-1.25	-1.375	0.158	0.939	4.920
-1.00	-1.125	0.390	2.317	7.237
-0.75	-0.875	0.482	2.864	10.101
-0.50	-0.625	0.657	3.904	14.005
-0.25	-0.375	0.708	4.207	18.212
0.00	-0.125	0.638	3.791	22.002
0.25	0.125	0.593	3.523	25.526
0.50	0.375	0.865	5.140	30.665
0.75	0.625	1.001	5.948	36.613
1.00	0.875	1.018	6.049	42.662
1.25	1.125	1.371	8.146	50.808
1.50	1.375	2.033	12.080	62.888
1.75	1.625	2.615	15.538	78.425
2.00	1.875	1.678	9.970	88.396
2.25	2.125	0.942	5.597	93.993
2.50	2.375	0.212	1.260	95.253
2.75	2.625	0.260	1.545	96.797
3.00	2.875	0.134	0.796	97.594
3.25	3.125	0.157	0.933	98.526
3.50	3.375	0.116	0.689	99.216
3.75	3.625	0.102	0.606	99.822
4.00	3.875	0.020	0.119	99.941
5.00	4.500	0.010	0.059	100.000

Statistical Results			
Mean:	0.9161	phi	(0.5299 mm)
Standard Dev:	1.2029	phi-units	(0.4344 mm)
Skewness:	-0.6096	dimensionless	
Kurtosis:	3.0633	dimensionless	
5th Moment:	-3.6694	dimensionless	
6th Moment:	15.0282	dimensionless	
RARD *	1.3130	dimensionless	
Median	1.1002	phi	(0.4665 mm)

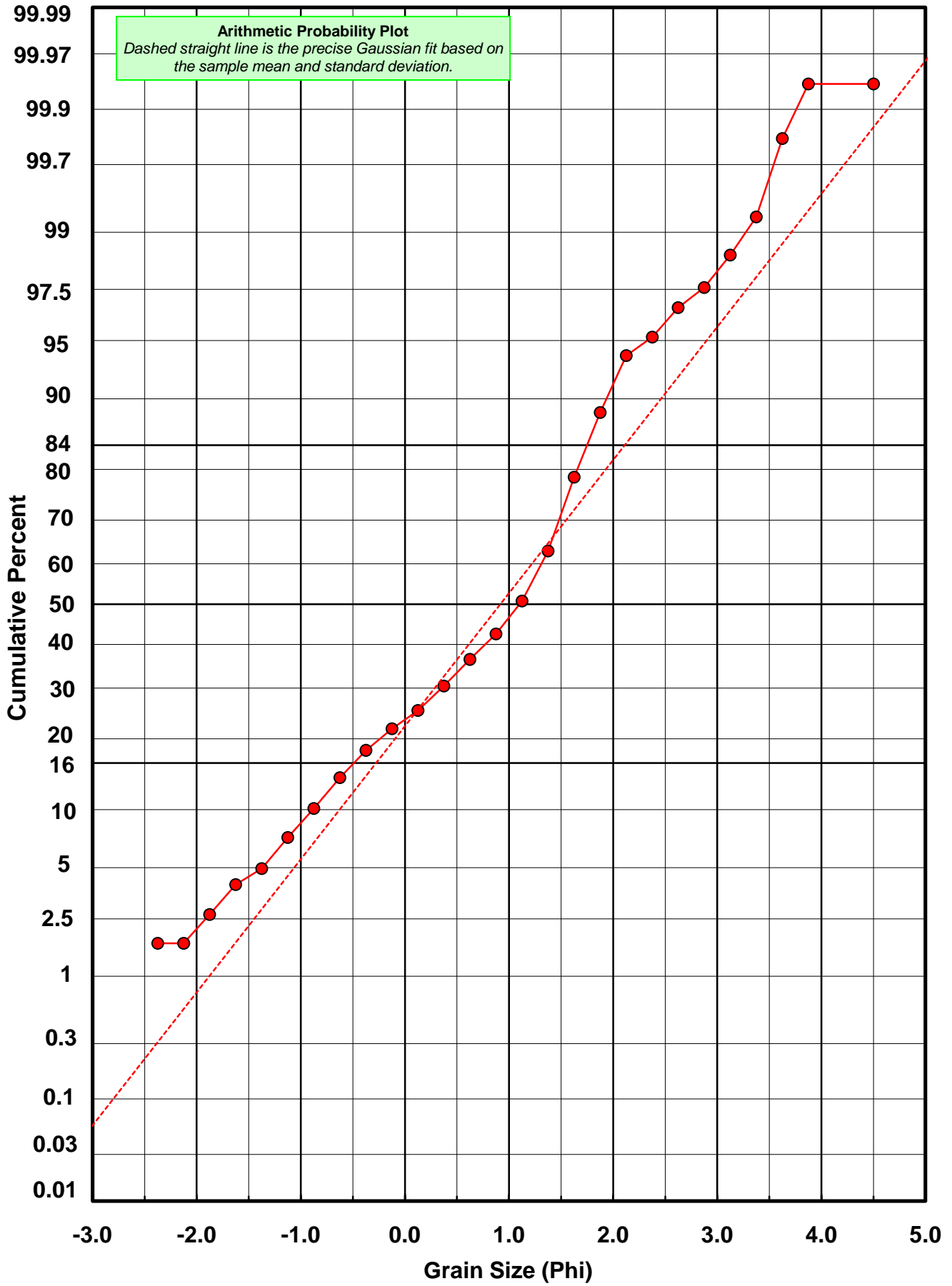
\* RARD = reciprocal absolute relative dispersion (see below)

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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# IR-10-BB



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-10-BB

Total Digested Mass: 43.100 grams

% Silica: 71.9 %

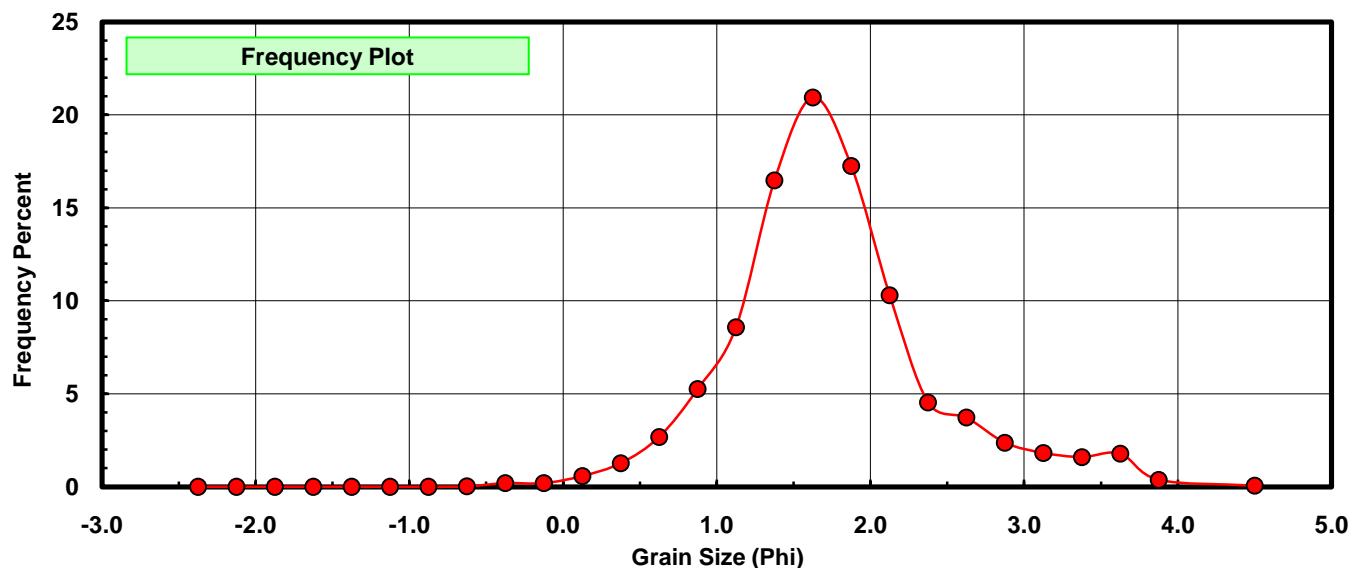
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.009	0.021	0.021
-0.25	-0.375	0.083	0.193	0.213
0.00	-0.125	0.083	0.193	0.406
0.25	0.125	0.250	0.580	0.986
0.50	0.375	0.546	1.267	2.253
0.75	0.625	1.154	2.677	4.930
1.00	0.875	2.263	5.251	10.181
1.25	1.125	3.697	8.578	18.759
1.50	1.375	7.098	16.469	35.227
1.75	1.625	9.025	20.940	56.167
2.00	1.875	7.437	17.255	73.422
2.25	2.125	4.441	10.304	83.726
2.50	2.375	1.956	4.538	88.265
2.75	2.625	1.605	3.724	91.988
3.00	2.875	1.021	2.369	94.357
3.25	3.125	0.786	1.824	96.181
3.50	3.375	0.689	1.599	97.780
3.75	3.625	0.770	1.787	99.566
4.00	3.875	0.162	0.376	99.942
5.00	4.500	0.025	0.058	100.000

Statistical Results			
Mean:	1.7393	phi	(0.2995 mm)
Standard Dev:	0.6743	phi-units	(0.6267 mm)
Skewness:	0.5897	dimensionless	
Kurtosis:	4.1052	dimensionless	
5th Moment:	5.0945	dimensionless	
6th Moment:	26.9748	dimensionless	
RARD *	0.3877	dimensionless	
Median	1.5514	phi	(0.3412 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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< 0.5	Excellent homogeneity (e.g., beaches)
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