

**Onshore Grab Sample**

**Sample:** IR-12-BB  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 10/29/08  
**Splits?** N/A

**County:** Indian River  
**Latitude:** 27° 43' 19.1"  
**Longitude:** 80° 22' 40.1"  
**Datum:** WGS 84  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 67.081 grams  
Total Fines in Sample 0.371 grams  
Total Percent Fines 0.55 %

**Dry Sieving Summary**

Total Sample Weight 66.754 grams  
Total Digested Weight 48.954 grams  
Total Carbonate Weight 17.800 grams  
Total Silica % 73.33 %  
Total Carbonate % 26.67 %  
Carbonate/Silica Ratio 0.364

**General Comments:**

None

**Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-12-BB

Total Sample Mass: 66.754 grams

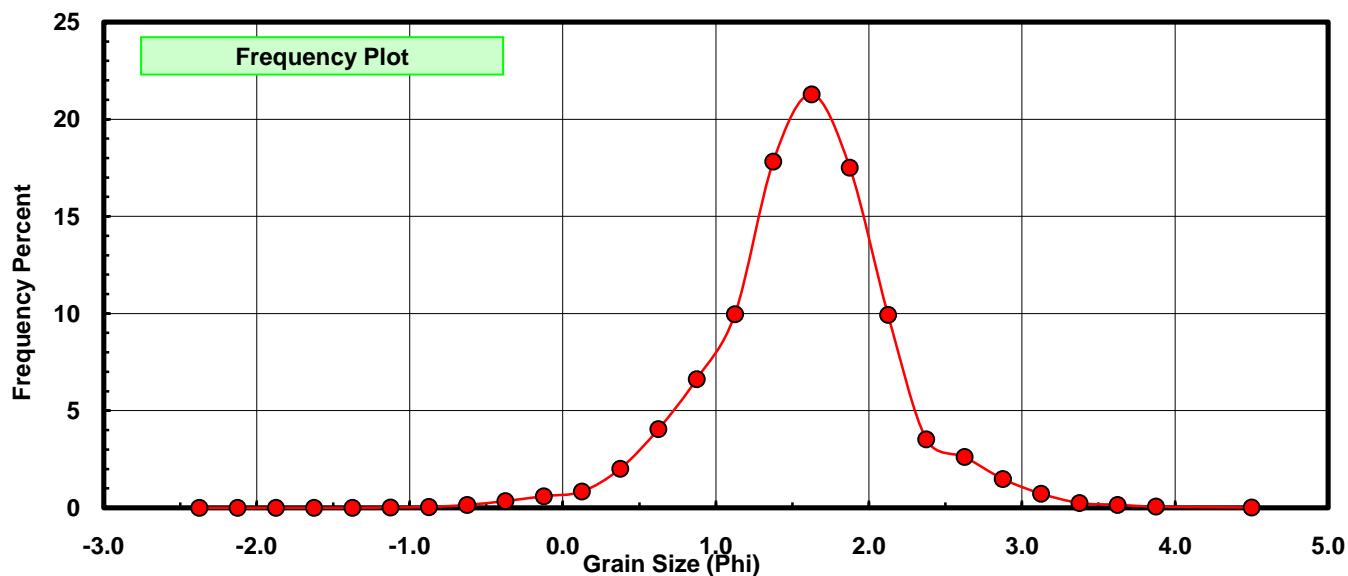
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.012	0.018	0.018
-0.75	-0.875	0.027	0.040	0.058
-0.50	-0.625	0.099	0.148	0.207
-0.25	-0.375	0.230	0.345	0.551
0.00	-0.125	0.398	0.596	1.147
0.25	0.125	0.557	0.834	1.982
0.50	0.375	1.343	2.012	3.994
0.75	0.625	2.703	4.049	8.043
1.00	0.875	4.423	6.626	14.669
1.25	1.125	6.653	9.966	24.635
1.50	1.375	11.892	17.815	42.450
1.75	1.625	14.199	21.271	63.721
2.00	1.875	11.691	17.514	81.234
2.25	2.125	6.630	9.932	91.166
2.50	2.375	2.355	3.528	94.694
2.75	2.625	1.748	2.619	97.313
3.00	2.875	0.990	1.483	98.796
3.25	3.125	0.486	0.728	99.524
3.50	3.375	0.166	0.249	99.772
3.75	3.625	0.103	0.154	99.927
4.00	3.875	0.039	0.058	99.985
5.00	4.50	0.010	0.015	100.000

Statistical Results			
Mean:	1.5653	phi	(0.3379 mm)
Standard Dev:	0.5903	phi-units	(0.6642 mm)
Skewness:	-0.1497	dimensionless	
Kurtosis:	4.2708	dimensionless	
5th Moment:	-1.4137	dimensionless	
6th Moment:	34.2454	dimensionless	
RARD *	0.3771	dimensionless	
Median	1.4637	phi	(0.3626 mm)

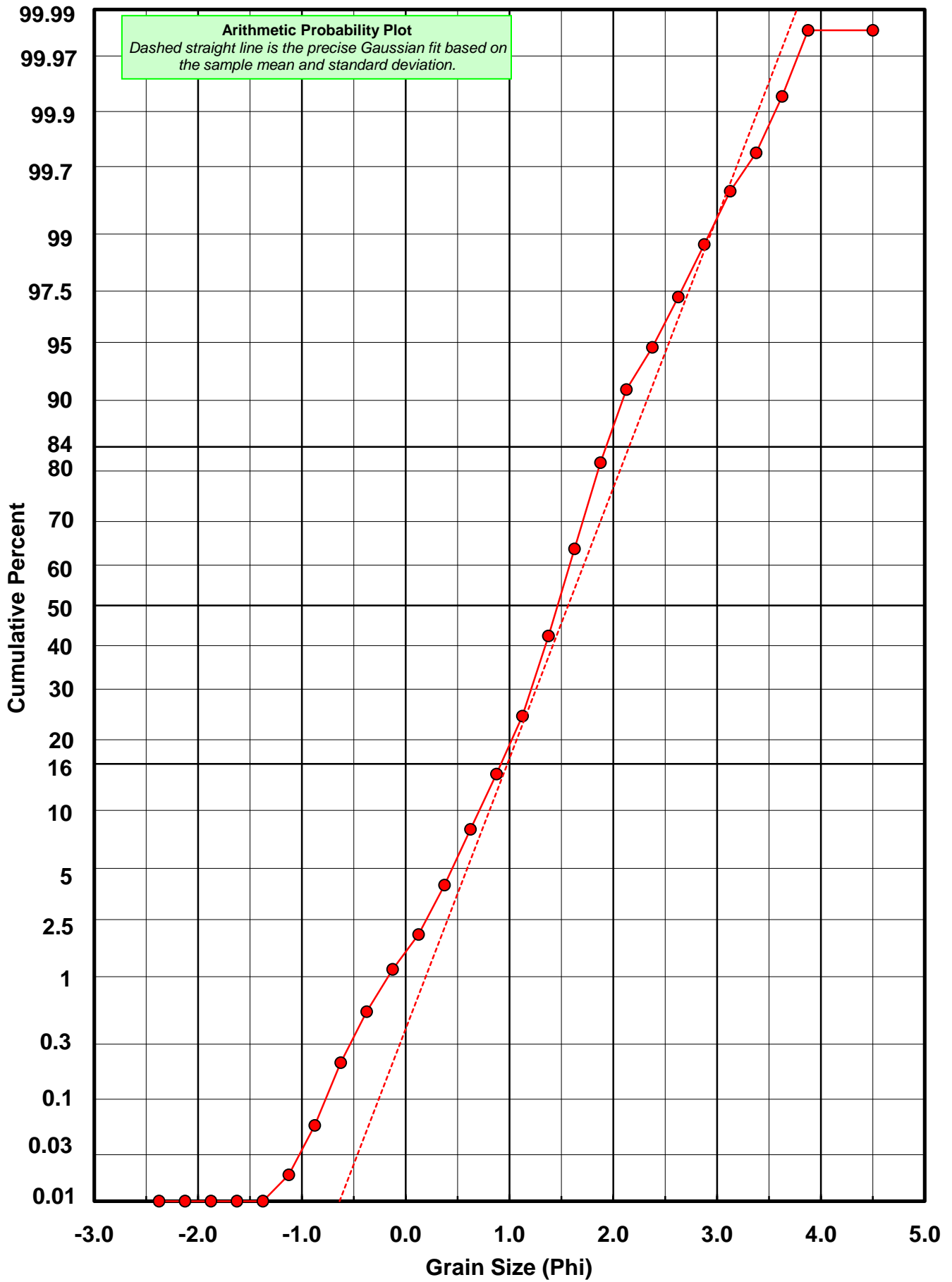
\* RARD = reciprocal absolute relative dispersion (see below)

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-12-BB



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: IR-12-BB

Total Carbonate Mass: 17.800 grams

% Carbonate: 26.7 %

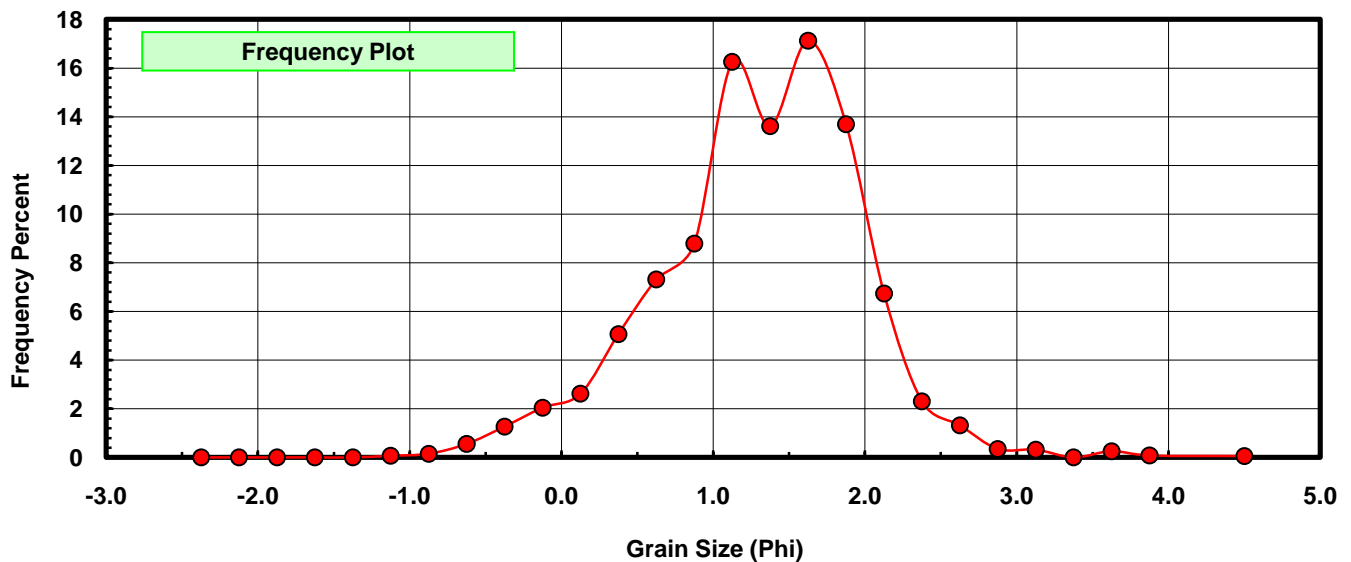
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.012	0.067	0.067
-0.75	-0.875	0.027	0.152	0.219
-0.50	-0.625	0.099	0.556	0.775
-0.25	-0.375	0.226	1.270	2.045
0.00	-0.125	0.364	2.045	4.090
0.25	0.125	0.466	2.618	6.708
0.50	0.375	0.903	5.073	11.781
0.75	0.625	1.303	7.320	19.101
1.00	0.875	1.564	8.787	27.888
1.25	1.125	2.893	16.253	44.140
1.50	1.375	2.423	13.612	57.753
1.75	1.625	3.048	17.124	74.876
2.00	1.875	2.437	13.691	88.567
2.25	2.125	1.200	6.742	95.309
2.50	2.375	0.411	2.309	97.618
2.75	2.625	0.235	1.320	98.938
3.00	2.875	0.062	0.348	99.287
3.25	3.125	0.057	0.320	99.607
3.50	3.375	0.000	0.000	99.607
3.75	3.625	0.046	0.258	99.865
4.00	3.875	0.014	0.079	99.944
5.00	4.500	0.010	0.056	100.000

Statistical Results			
Mean:	1.3047	phi	(0.4048 mm)
Standard Dev:	0.6880	phi-units	(0.6207 mm)
Skewness:	-0.2481	dimensionless	
Kurtosis:	3.6422	dimensionless	
5th Moment:	-0.0958	dimensionless	
6th Moment:	26.8396	dimensionless	
RARD *	0.5273	dimensionless	
Median	1.2326	phi	(0.4255 mm)

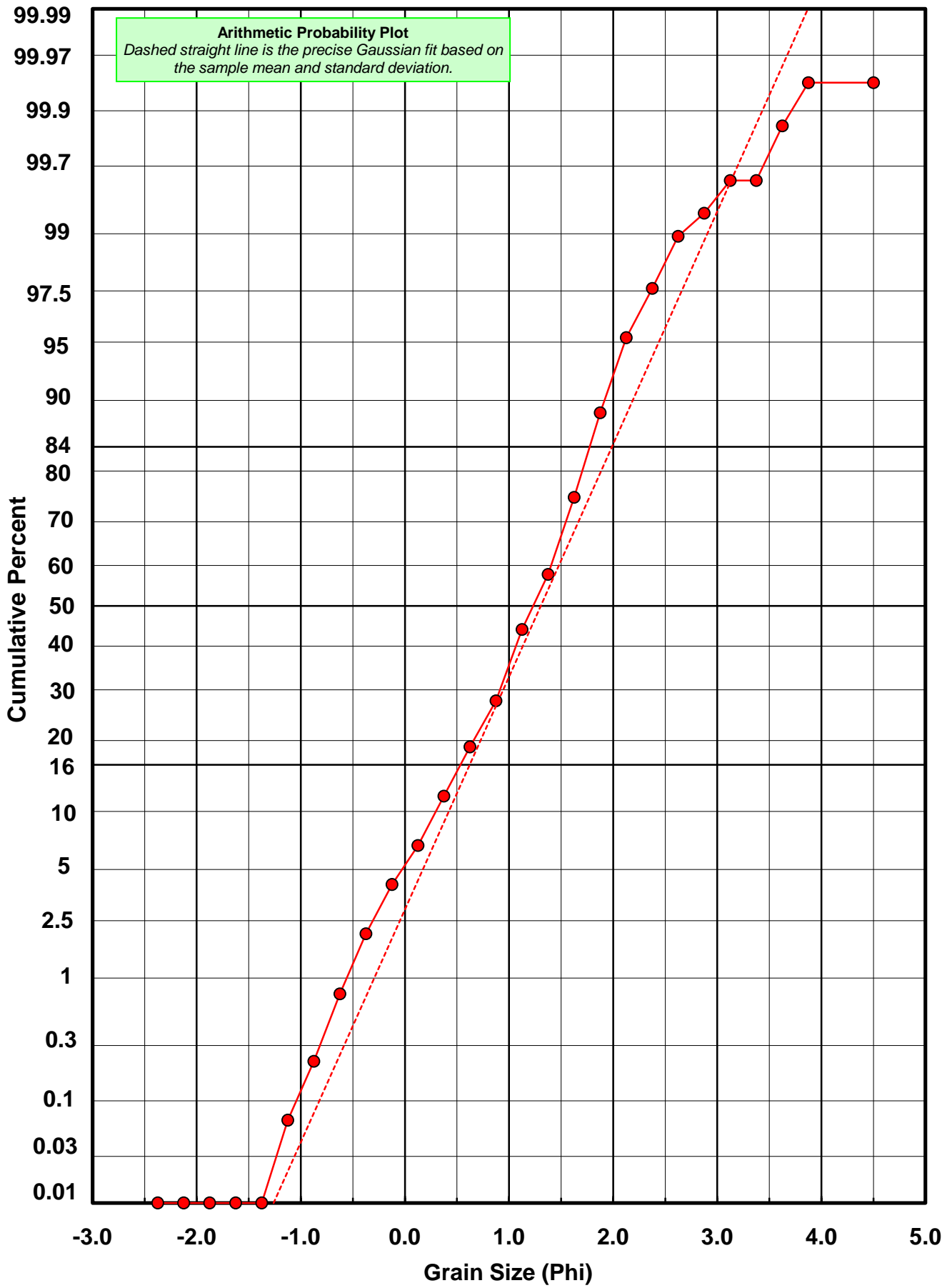
\* RARD = reciprocal absolute relative dispersion (see below)

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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# IR-12-BB



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-12-BB

Total Digested Mass: 48.954 grams

% Silica: 73.3 %

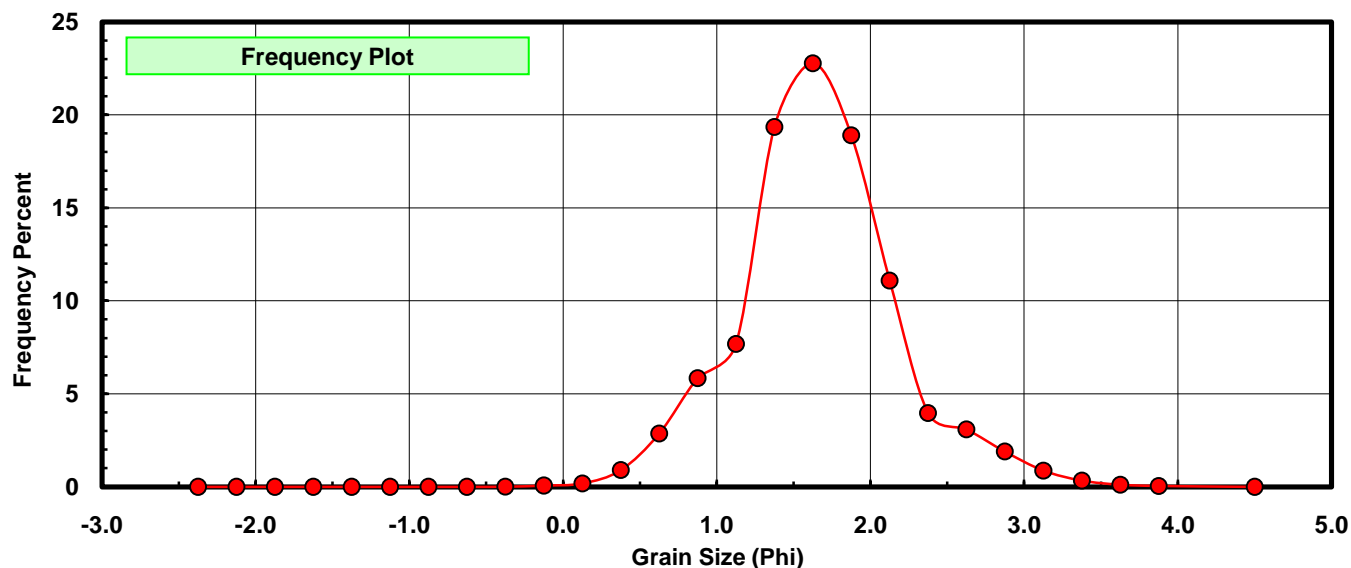
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-0.25	-0.375	0.004	0.008	0.008
0.00	-0.125	0.034	0.069	0.078
0.25	0.125	0.091	0.186	0.264
0.50	0.375	0.440	0.899	1.162
0.75	0.625	1.400	2.860	4.022
1.00	0.875	2.859	5.840	9.862
1.25	1.125	3.760	7.681	17.543
1.50	1.375	9.469	19.343	36.886
1.75	1.625	11.151	22.779	59.664
2.00	1.875	9.254	18.903	78.568
2.25	2.125	5.430	11.092	89.660
2.50	2.375	1.944	3.971	93.631
2.75	2.625	1.513	3.091	96.721
3.00	2.875	0.928	1.896	98.617
3.25	3.125	0.429	0.876	99.493
3.50	3.375	0.166	0.339	99.832
3.75	3.625	0.057	0.116	99.949
4.00	3.875	0.025	0.051	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.6601	phi	(0.3164 mm)
Standard Dev:	0.5269	phi-units	(0.694 mm)
Skewness:	0.2906	dimensionless	
Kurtosis:	3.8315	dimensionless	
5th Moment:	3.4880	dimensionless	
6th Moment:	25.5907	dimensionless	
RARD *	0.3174	dimensionless	
Median	1.5189	phi	(0.3489 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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