

**Onshore Grab Sample**

**Sample:** IR-18-BB  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 10/30/08  
**Splits?** N/A

**County:** Indian River  
**Latitude:** 27° 38' 31.2"  
**Longitude:** 80° 21' 07.2"  
**Datum:** WGS 84  
**Surf. Elev:** 0  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 62.791 grams  
Total Fines in Sample 0.274 grams  
Total Percent Fines 0.43 %

**Dry Sieving Summary**

Total Sample Weight 62.411 grams  
Total Digested Weight 44.841 grams  
Total Carbonate Weight 17.570 grams  
Total Silica % 71.85 %  
Total Carbonate % 28.15 %  
Carbonate/Silica Ratio 0.392

**General Comments:**

Location Data Estimated.

**Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-18-BB

Total Sample Mass: 62.411 grams

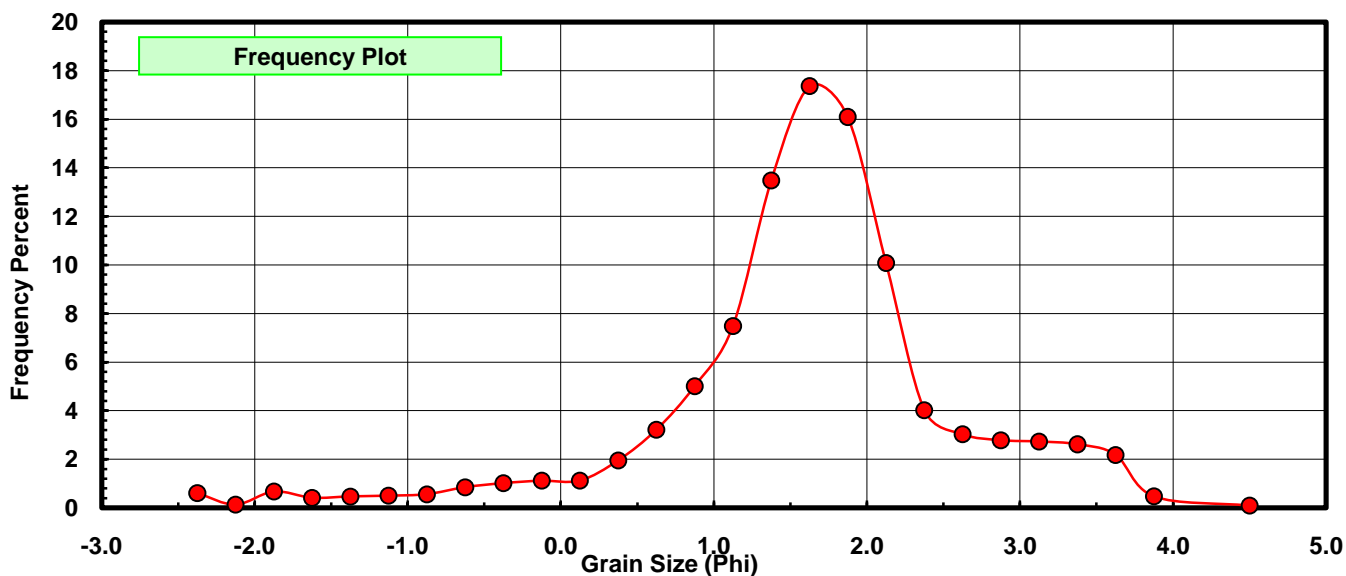
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.375	0.601	0.601
-2.00	-2.125	0.080	0.128	0.729
-1.75	-1.875	0.417	0.668	1.397
-1.50	-1.625	0.257	0.412	1.809
-1.25	-1.375	0.291	0.466	2.275
-1.00	-1.125	0.310	0.497	2.772
-0.75	-0.875	0.348	0.558	3.330
-0.50	-0.625	0.528	0.846	4.176
-0.25	-0.375	0.632	1.013	5.188
0.00	-0.125	0.695	1.114	6.302
0.25	0.125	0.699	1.120	7.422
0.50	0.375	1.216	1.948	9.370
0.75	0.625	2.007	3.216	12.586
1.00	0.875	3.128	5.012	17.598
1.25	1.125	4.671	7.484	25.082
1.50	1.375	8.411	13.477	38.559
1.75	1.625	10.837	17.364	55.923
2.00	1.875	10.044	16.093	72.016
2.25	2.125	6.289	10.077	82.093
2.50	2.375	2.511	4.023	86.116
2.75	2.625	1.890	3.028	89.145
3.00	2.875	1.736	2.782	91.926
3.25	3.125	1.702	2.727	94.653
3.50	3.375	1.632	2.615	97.268
3.75	3.625	1.359	2.178	99.446
4.00	3.875	0.292	0.468	99.913
5.00	4.50	0.054	0.087	100.000

Statistical Results			
Mean:	1.6061	phi	(0.3285 mm)
Standard Dev:	1.0107	phi-units	(0.4963 mm)
Skewness:	-0.9057	dimensionless	
Kurtosis:	5.5820	dimensionless	
5th Moment:	-12.8216	dimensionless	
6th Moment:	54.0524	dimensionless	
RARD *	0.6293	dimensionless	
Median	1.5397	phi	(0.344 mm)

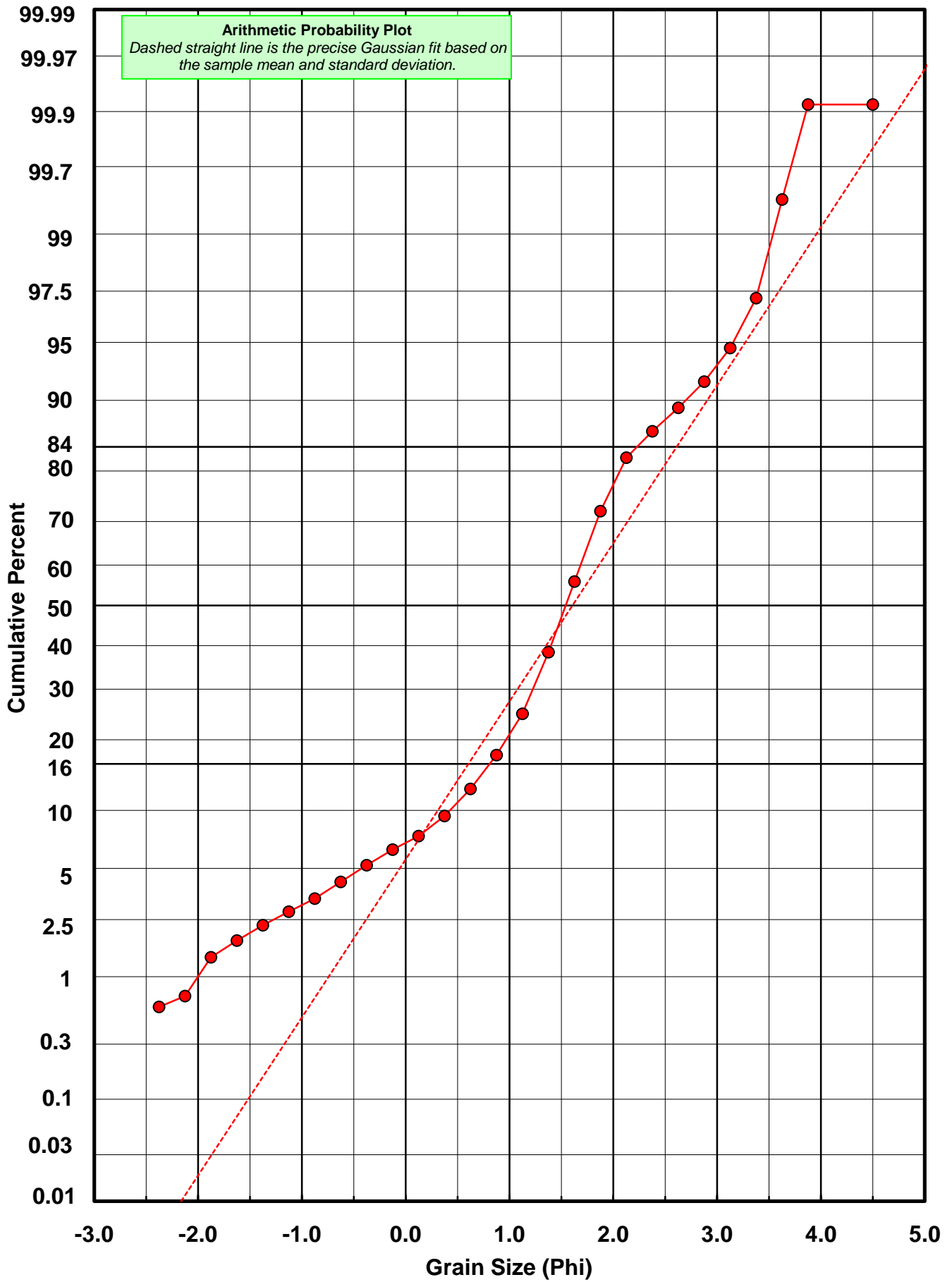
\* RARD = reciprocal absolute relative dispersion (see below)

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-18-BB



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: IR-18-BB

Total Carbonate Mass: 17.570 grams

% Carbonate: 28.2 %

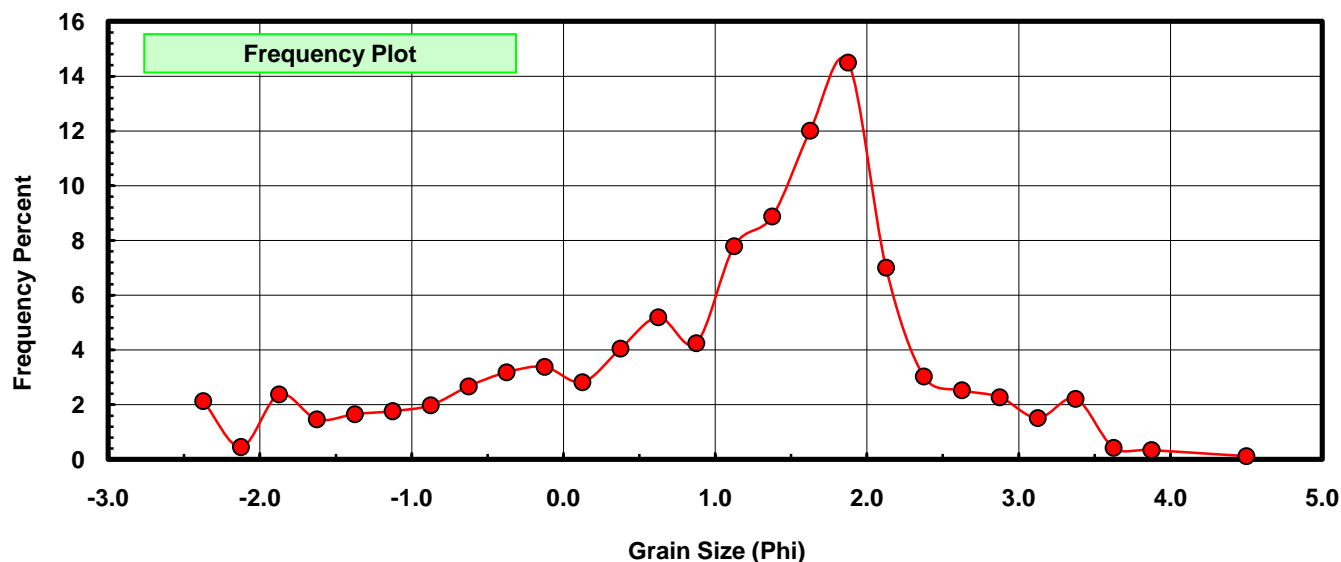
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.375	2.134	2.134
-2.00	-2.125	0.080	0.455	2.590
-1.75	-1.875	0.417	2.373	4.963
-1.50	-1.625	0.257	1.463	6.426
-1.25	-1.375	0.291	1.656	8.082
-1.00	-1.125	0.310	1.764	9.846
-0.75	-0.875	0.348	1.981	11.827
-0.50	-0.625	0.470	2.675	14.502
-0.25	-0.375	0.559	3.182	17.684
0.00	-0.125	0.594	3.381	21.064
0.25	0.125	0.496	2.823	23.887
0.50	0.375	0.711	4.047	27.934
0.75	0.625	0.913	5.196	33.130
1.00	0.875	0.747	4.252	37.382
1.25	1.125	1.369	7.792	45.174
1.50	1.375	1.559	8.873	54.047
1.75	1.625	2.109	12.003	66.050
2.00	1.875	2.548	14.502	80.552
2.25	2.125	1.231	7.006	87.558
2.50	2.375	0.532	3.028	90.586
2.75	2.625	0.444	2.527	93.113
3.00	2.875	0.400	2.277	95.390
3.25	3.125	0.265	1.508	96.898
3.50	3.375	0.389	2.214	99.112
3.75	3.625	0.075	0.427	99.539
4.00	3.875	0.060	0.341	99.880
5.00	4.500	0.021	0.120	100.000

Statistical Results			
Mean:	1.0521	phi	(0.4823 mm)
Standard Dev:	1.3712	phi-units	(0.3866 mm)
Skewness:	-0.6766	dimensionless	
Kurtosis:	2.9258	dimensionless	
5th Moment:	-3.7994	dimensionless	
6th Moment:	12.4470	dimensionless	
RARD *	1.3033	dimensionless	
Median	1.2610	phi	(0.4173 mm)

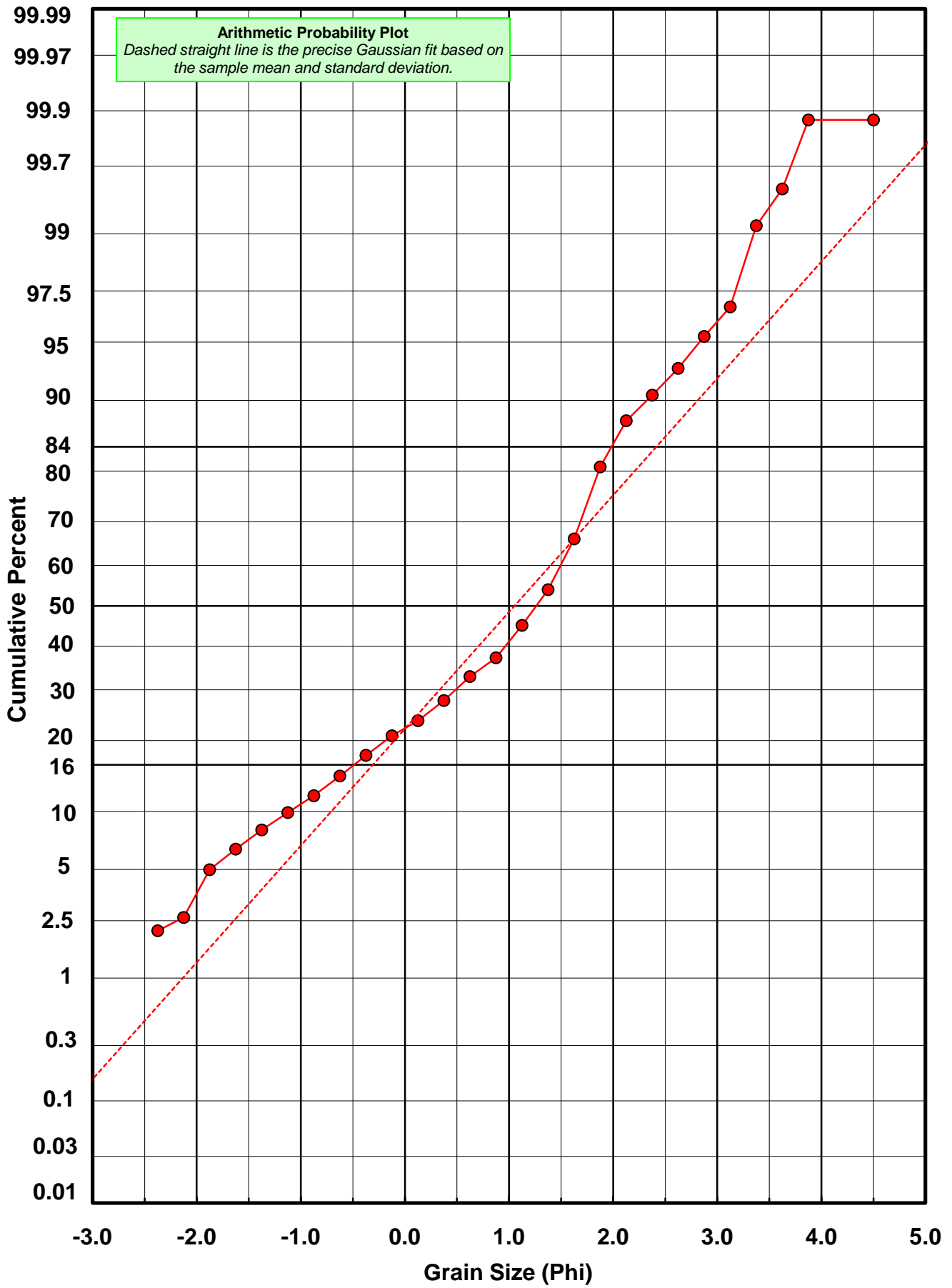
\* RARD = reciprocal absolute relative dispersion (see below)

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-18-BB



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-18-BB

Total Digested Mass: 44.841 grams

% Silica: 71.8 %

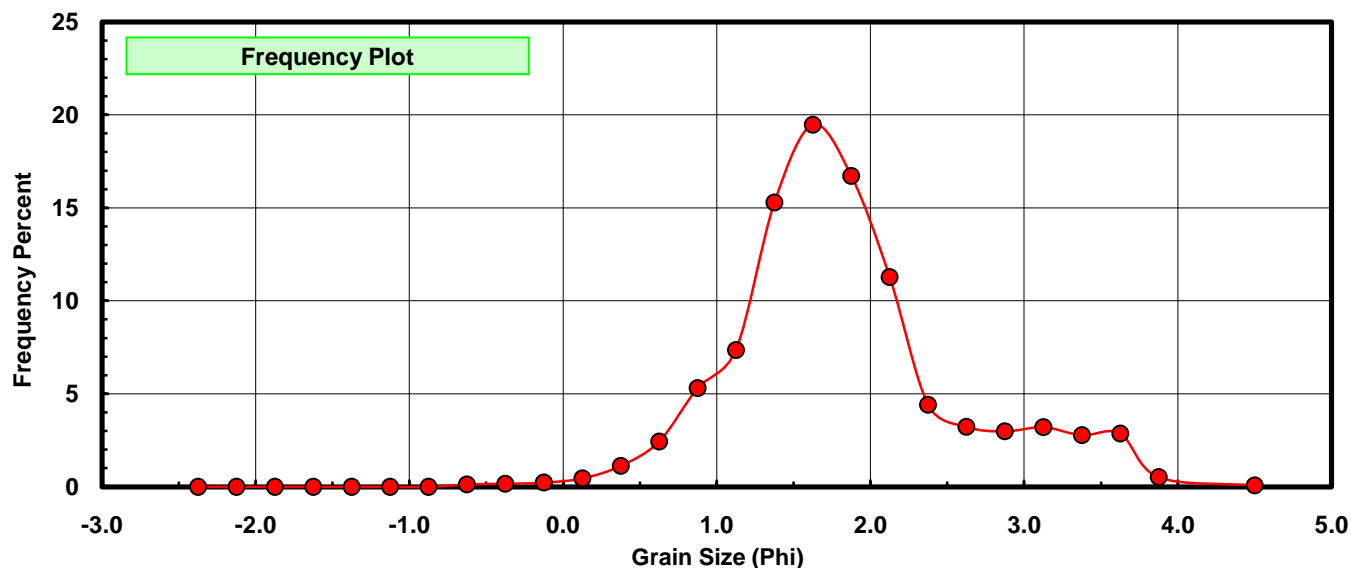
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.058	0.129	0.129
-0.25	-0.375	0.073	0.163	0.292
0.00	-0.125	0.101	0.225	0.517
0.25	0.125	0.203	0.453	0.970
0.50	0.375	0.505	1.126	2.096
0.75	0.625	1.094	2.440	4.536
1.00	0.875	2.381	5.310	9.846
1.25	1.125	3.302	7.364	17.210
1.50	1.375	6.852	15.281	32.490
1.75	1.625	8.728	19.464	51.955
2.00	1.875	7.496	16.717	68.672
2.25	2.125	5.058	11.280	79.951
2.50	2.375	1.979	4.413	84.365
2.75	2.625	1.446	3.225	87.589
3.00	2.875	1.336	2.979	90.569
3.25	3.125	1.437	3.205	93.774
3.50	3.375	1.243	2.772	96.546
3.75	3.625	1.284	2.863	99.409
4.00	3.875	0.232	0.517	99.926
5.00	4.500	0.033	0.074	100.000

Statistical Results			
Mean:	1.8232	phi	(0.2826 mm)
Standard Dev:	0.7410	phi-units	(0.5983 mm)
Skewness:	0.5672	dimensionless	
Kurtosis:	3.5975	dimensionless	
5th Moment:	3.3973	dimensionless	
6th Moment:	19.4583	dimensionless	
RARD *	0.4064	dimensionless	
Median	1.5999	phi	(0.3299 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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