

**Onshore Grab Sample**

**Sample:** IR-15-BB  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 10/30/08  
**Splits?** N/A

**County:** Indian River  
**Latitude:** 27° 40' 55.7"  
**Longitude:** 80° 21' 50.5"  
**Datum:** WGS 84  
**Surf. Elev:** 0  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 70.24 grams  
Total Fines in Sample 0.341 grams  
Total Percent Fines 0.48 %

**Dry Sieving Summary**

Total Sample Weight 69.574 grams  
Total Digested Weight 63.817 grams  
Total Carbonate Weight 5.757 grams  
Total Silica % 91.73 %  
Total Carbonate % 8.27 %  
Carbonate/Silica Ratio 0.090

**General Comments:**

None

**Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-15-BB

Total Sample Mass: 69.574 grams

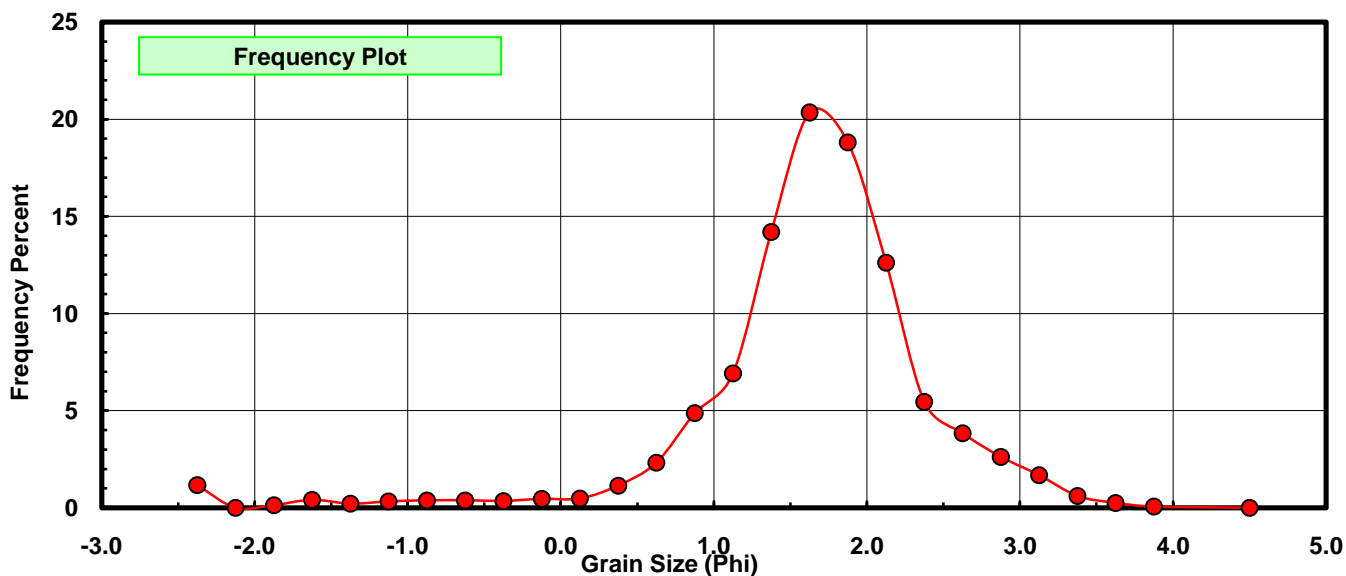
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.810	1.164	1.164
-2.00	-2.125	0.000	0.000	1.164
-1.75	-1.875	0.093	0.134	1.298
-1.50	-1.625	0.283	0.407	1.705
-1.25	-1.375	0.145	0.208	1.913
-1.00	-1.125	0.226	0.325	2.238
-0.75	-0.875	0.265	0.381	2.619
-0.50	-0.625	0.266	0.382	3.001
-0.25	-0.375	0.245	0.352	3.353
0.00	-0.125	0.317	0.456	3.809
0.25	0.125	0.333	0.479	4.288
0.50	0.375	0.795	1.143	5.430
0.75	0.625	1.618	2.326	7.756
1.00	0.875	3.387	4.868	12.624
1.25	1.125	4.807	6.909	19.533
1.50	1.375	9.879	14.199	33.732
1.75	1.625	14.156	20.347	54.079
2.00	1.875	13.085	18.807	72.886
2.25	2.125	8.775	12.612	85.499
2.50	2.375	3.791	5.449	90.948
2.75	2.625	2.671	3.839	94.787
3.00	2.875	1.823	2.620	97.407
3.25	3.125	1.167	1.677	99.084
3.50	3.375	0.422	0.607	99.691
3.75	3.625	0.174	0.250	99.941
4.00	3.875	0.041	0.059	100.000
5.00	4.50	0.000	0.000	100.000

Statistical Results			
Mean:	1.6251	phi	(0.3242 mm)
Standard Dev:	0.8356	phi-units	(0.5604 mm)
Skewness:	-1.8572	dimensionless	
Kurtosis:	9.9011	dimensionless	
5th Moment:	-38.6905	dimensionless	
6th Moment:	180.4955	dimensionless	
RARD *	0.5141	dimensionless	
Median	1.5749	phi	(0.3357 mm)

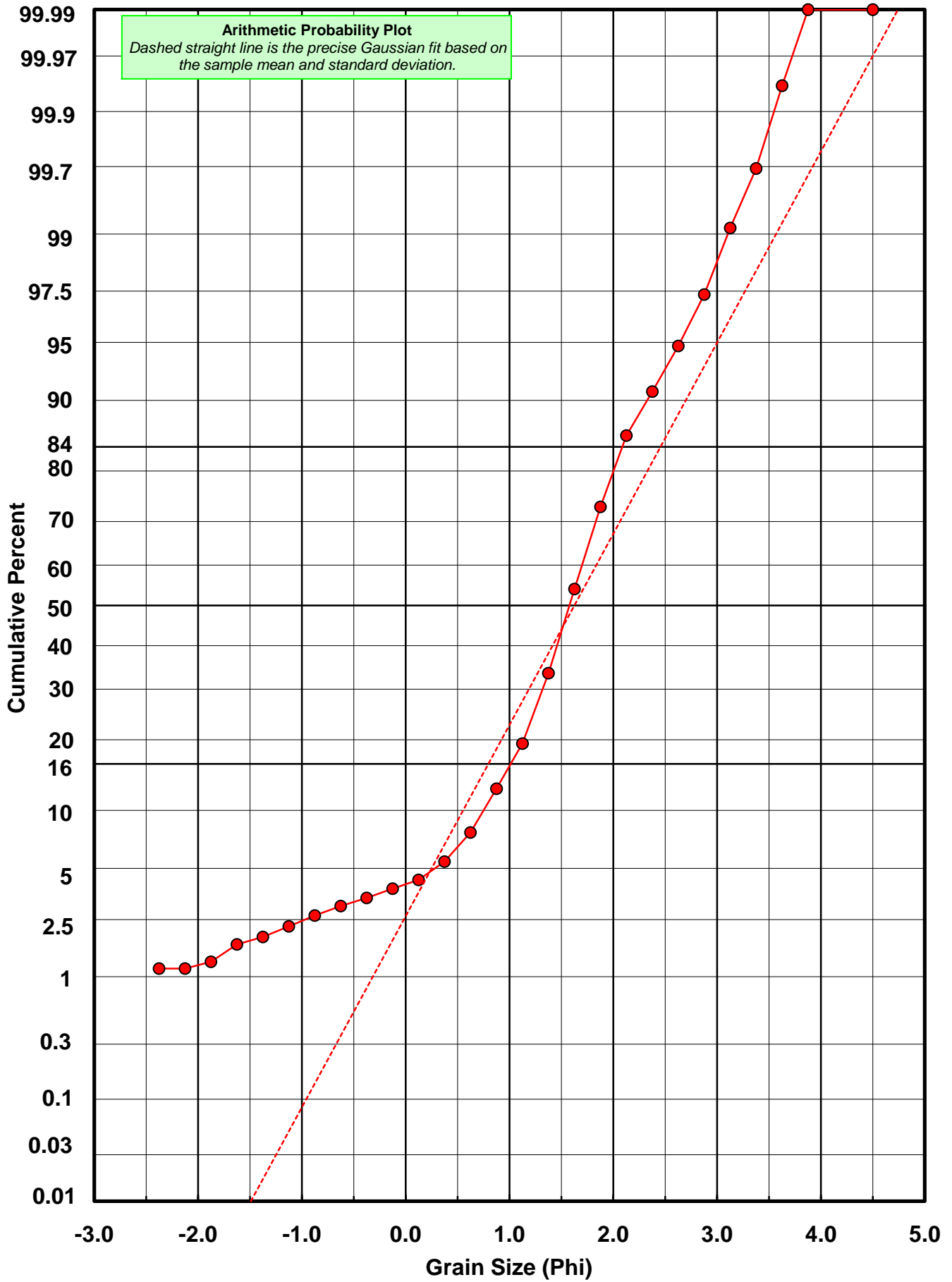
\* RARD = reciprocal absolute relative dispersion (see below)

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-15-BB



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: IR-15-BB

Total Carbonate Mass: 6.325 grams

% Carbonate: 8.3 %

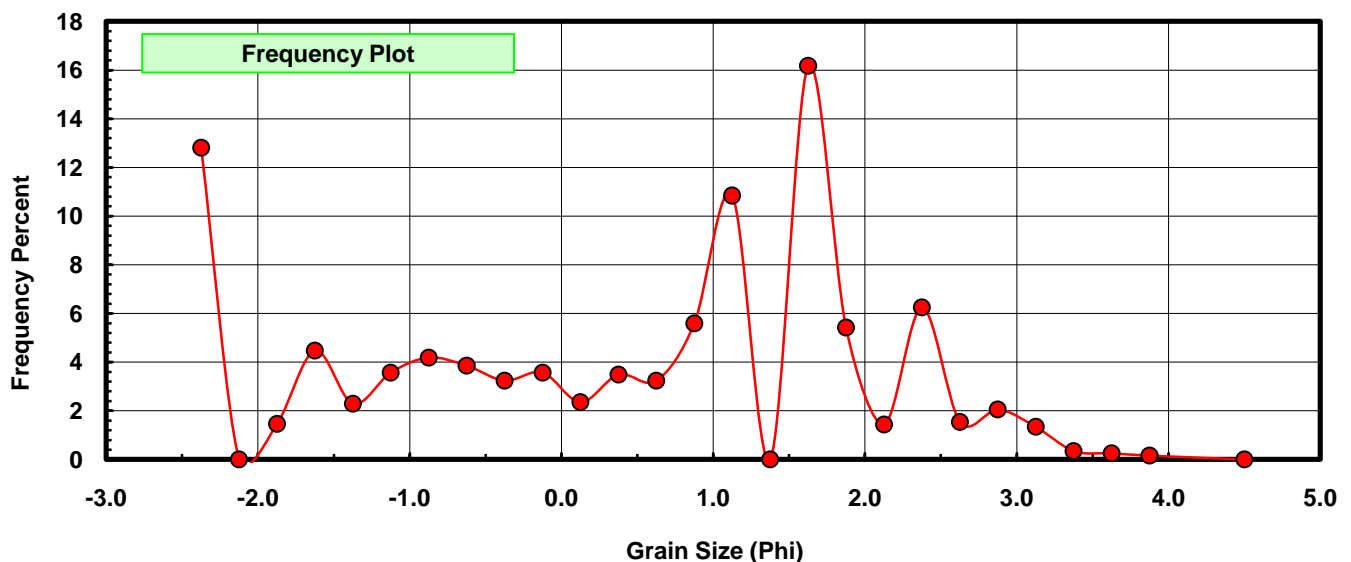
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.810	12.806	12.806
-2.00	-2.125	0.000	0.000	12.806
-1.75	-1.875	0.093	1.470	14.277
-1.50	-1.625	0.283	4.474	18.751
-1.25	-1.375	0.145	2.292	21.043
-1.00	-1.125	0.226	3.573	24.617
-0.75	-0.875	0.265	4.190	28.806
-0.50	-0.625	0.244	3.858	32.664
-0.25	-0.375	0.205	3.241	35.905
0.00	-0.125	0.226	3.573	39.478
0.25	0.125	0.149	2.356	41.834
0.50	0.375	0.221	3.494	45.328
0.75	0.625	0.205	3.241	48.569
1.00	0.875	0.354	5.597	54.166
1.25	1.125	0.686	10.846	65.012
1.50	1.375	0.000	0.000	65.012
1.75	1.625	1.023	16.174	81.186
2.00	1.875	0.343	5.423	86.609
2.25	2.125	0.091	1.439	88.047
2.50	2.375	0.395	6.245	94.292
2.75	2.625	0.098	1.549	95.842
3.00	2.875	0.130	2.055	97.897
3.25	3.125	0.085	1.344	99.241
3.50	3.375	0.022	0.348	99.589
3.75	3.625	0.016	0.253	99.842
4.00	3.875	0.010	0.158	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	0.3659	phi	(0.776 mm)
Standard Dev:	1.6238	phi-units	(0.3245 mm)
Skewness:	-0.3142	dimensionless	
Kurtosis:	1.9459	dimensionless	
5th Moment:	-1.0503	dimensionless	
6th Moment:	4.7846	dimensionless	
RARD *	4.4372	dimensionless	
Median	0.6889	phi	(0.6203 mm)

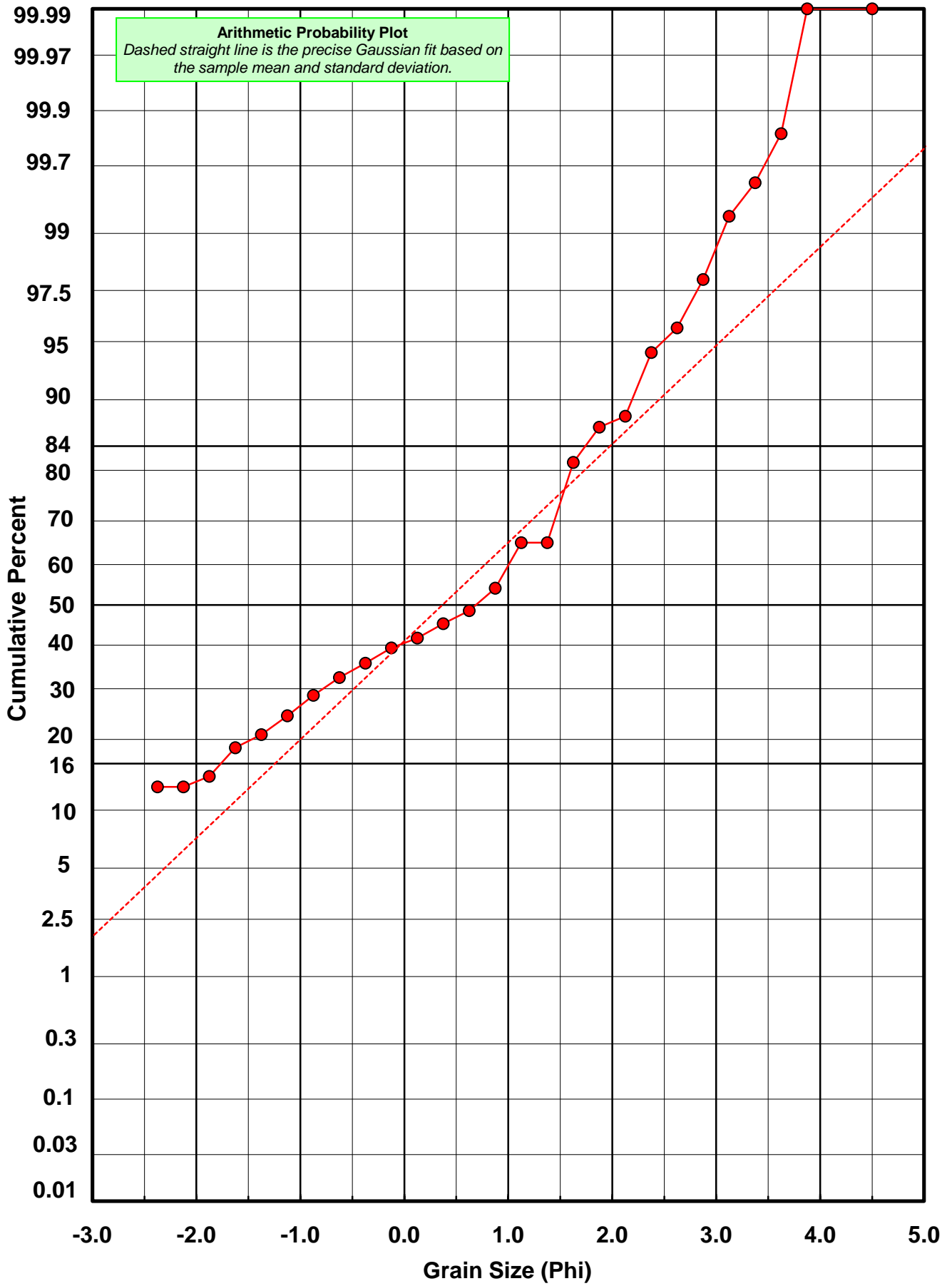
\* RARD = reciprocal absolute relative dispersion (see below)

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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# IR-15-BB



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-15-BB

Total Digested Mass: 63.817 grams

% Silica: 91.7 %

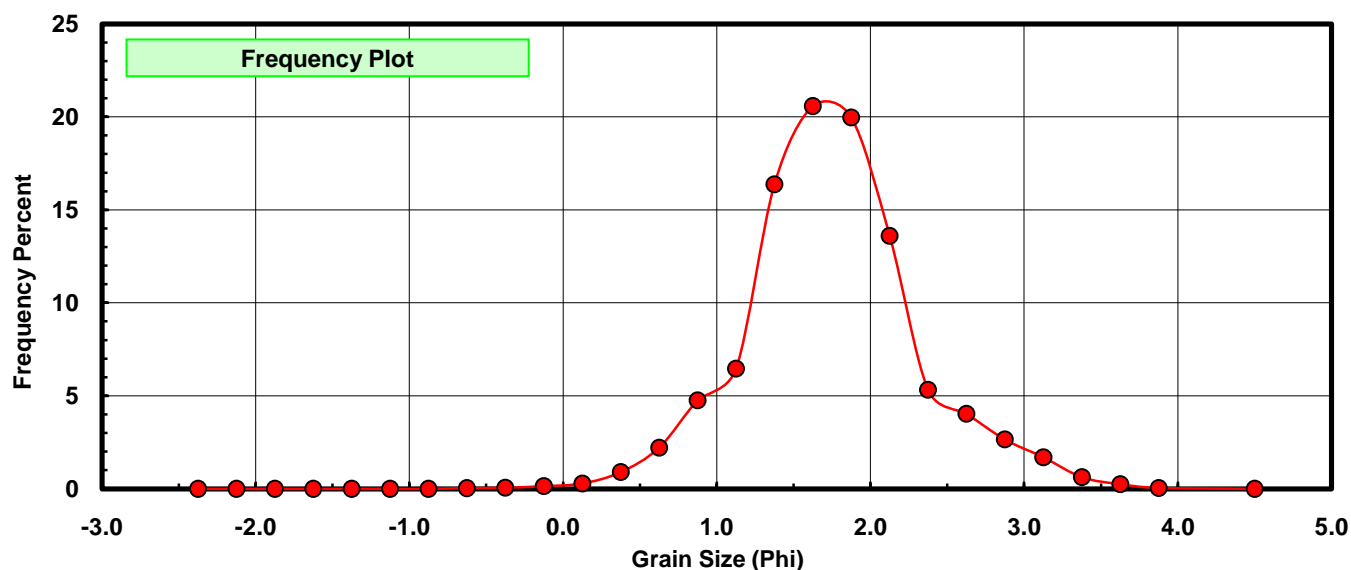
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.022	0.034	0.034
-0.25	-0.375	0.040	0.063	0.097
0.00	-0.125	0.091	0.143	0.240
0.25	0.125	0.184	0.288	0.528
0.50	0.375	0.574	0.899	1.428
0.75	0.625	1.413	2.214	3.642
1.00	0.875	3.033	4.753	8.394
1.25	1.125	4.121	6.458	14.852
1.50	1.375	10.447	16.370	31.222
1.75	1.625	13.133	20.579	51.801
2.00	1.875	12.742	19.966	71.768
2.25	2.125	8.684	13.608	85.375
2.50	2.375	3.396	5.321	90.697
2.75	2.625	2.573	4.032	94.729
3.00	2.875	1.693	2.653	97.382
3.25	3.125	1.082	1.695	99.077
3.50	3.375	0.400	0.627	99.704
3.75	3.625	0.158	0.248	99.951
4.00	3.875	0.031	0.049	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.7477	phi	(0.2978 mm)
Standard Dev:	0.5677	phi-units	(0.6747 mm)
Skewness:	0.1973	dimensionless	
Kurtosis:	3.8355	dimensionless	
5th Moment:	1.3277	dimensionless	
6th Moment:	25.0216	dimensionless	
RARD *	0.3248	dimensionless	
Median	1.6031	phi	(0.3292 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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