

**Onshore Grab Sample**

**Sample:** IR-03-BB  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 10/29/08  
**Splits?** N/A

**County:** Indian River  
**Latitude:** 27° 49' 59.7"  
**Longitude:** 80° 25' 59.9"  
**Datum:** WGS 84  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 54.07 grams  
Total Fines in Sample 0.596 grams  
Total Percent Fines 1.09 %

**Dry Sieving Summary**

Total Sample Weight 53.638 grams  
Total Digested Weight 27.427 grams  
Total Carbonate Weight 26.211 grams  
Total Silica % 51.13 %  
Total Carbonate % 48.87 %  
Carbonate/Silica Ratio 0.956

**General Comments:**

None

**Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-03-BB

Total Sample Mass: 53.638 grams

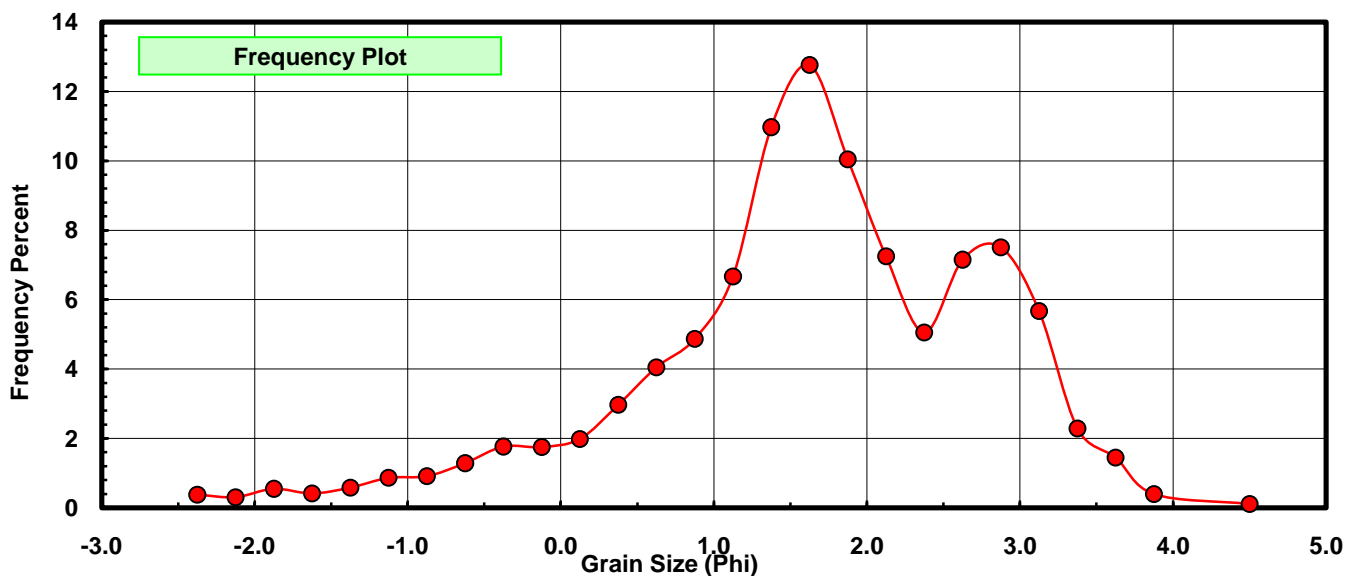
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.204	0.380	0.380
-2.00	-2.125	0.165	0.308	0.688
-1.75	-1.875	0.294	0.548	1.236
-1.50	-1.625	0.222	0.414	1.650
-1.25	-1.375	0.312	0.582	2.232
-1.00	-1.125	0.463	0.863	3.095
-0.75	-0.875	0.489	0.912	4.006
-0.50	-0.625	0.690	1.286	5.293
-0.25	-0.375	0.947	1.766	7.058
0.00	-0.125	0.939	1.751	8.809
0.25	0.125	1.065	1.986	10.795
0.50	0.375	1.591	2.966	13.761
0.75	0.625	2.173	4.051	17.812
1.00	0.875	2.611	4.868	22.680
1.25	1.125	3.576	6.667	29.347
1.50	1.375	5.884	10.970	40.317
1.75	1.625	6.846	12.763	53.080
2.00	1.875	5.389	10.047	63.127
2.25	2.125	3.887	7.247	70.374
2.50	2.375	2.712	5.056	75.430
2.75	2.625	3.836	7.152	82.581
3.00	2.875	4.028	7.510	90.091
3.25	3.125	3.040	5.668	95.759
3.50	3.375	1.227	2.288	98.046
3.75	3.625	0.776	1.447	99.493
4.00	3.875	0.213	0.397	99.890
5.00	4.50	0.059	0.110	100.000

Statistical Results			
Mean:	1.6328	phi	(0.3225 mm)
Standard Dev:	1.1455	phi-units	(0.452 mm)
Skewness:	-0.7583	dimensionless	
Kurtosis:	3.7982	dimensionless	
5th Moment:	-7.4036	dimensionless	
6th Moment:	25.8826	dimensionless	
RARD *	0.7015	dimensionless	
Median	1.5647	phi	(0.3381 mm)

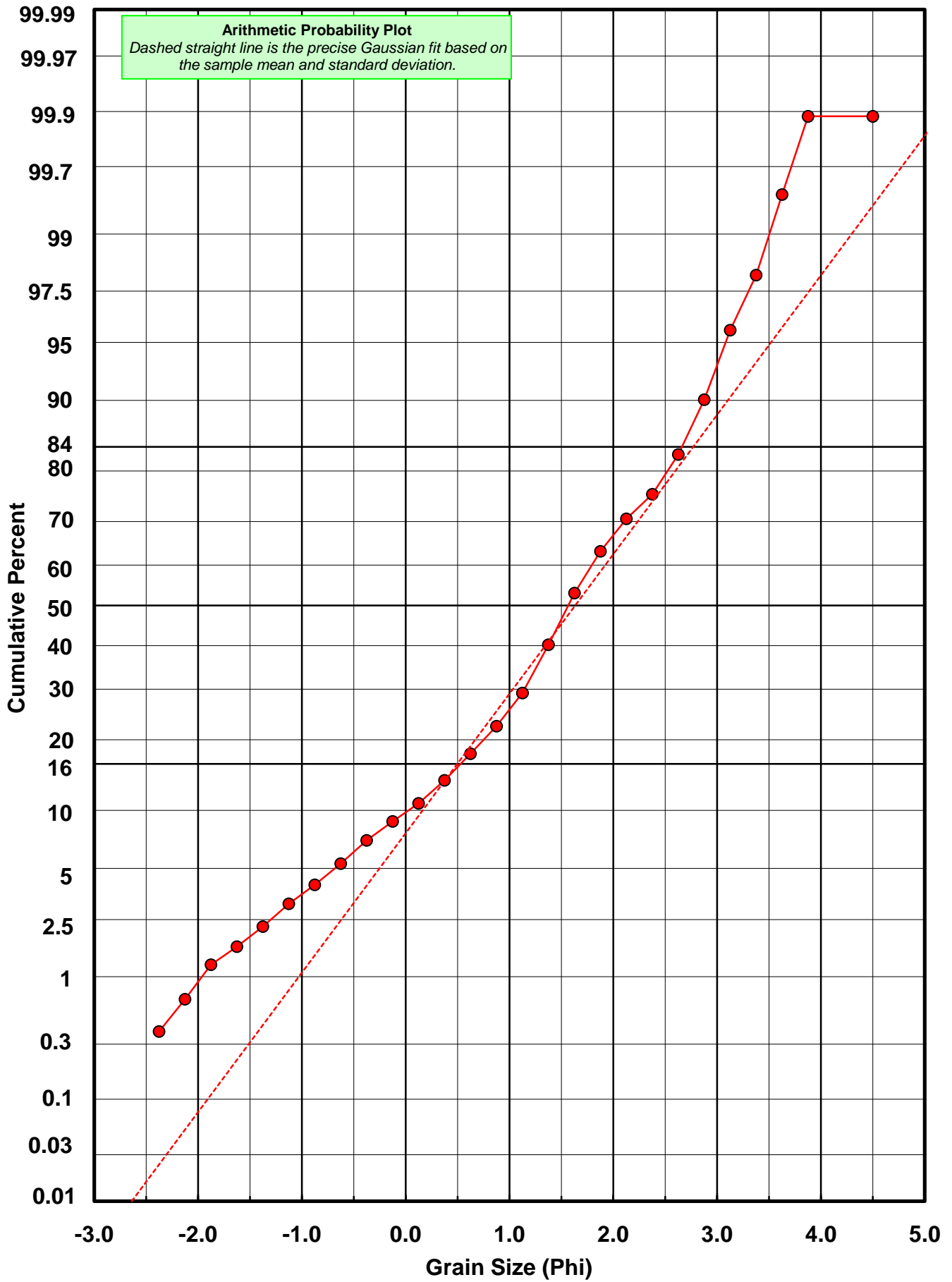
\* RARD = reciprocal absolute relative dispersion (see below)

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-03-BB



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: IR-03-BB

Total Carbonate Mass: 26.211 grams

% Carbonate: 48.9 %

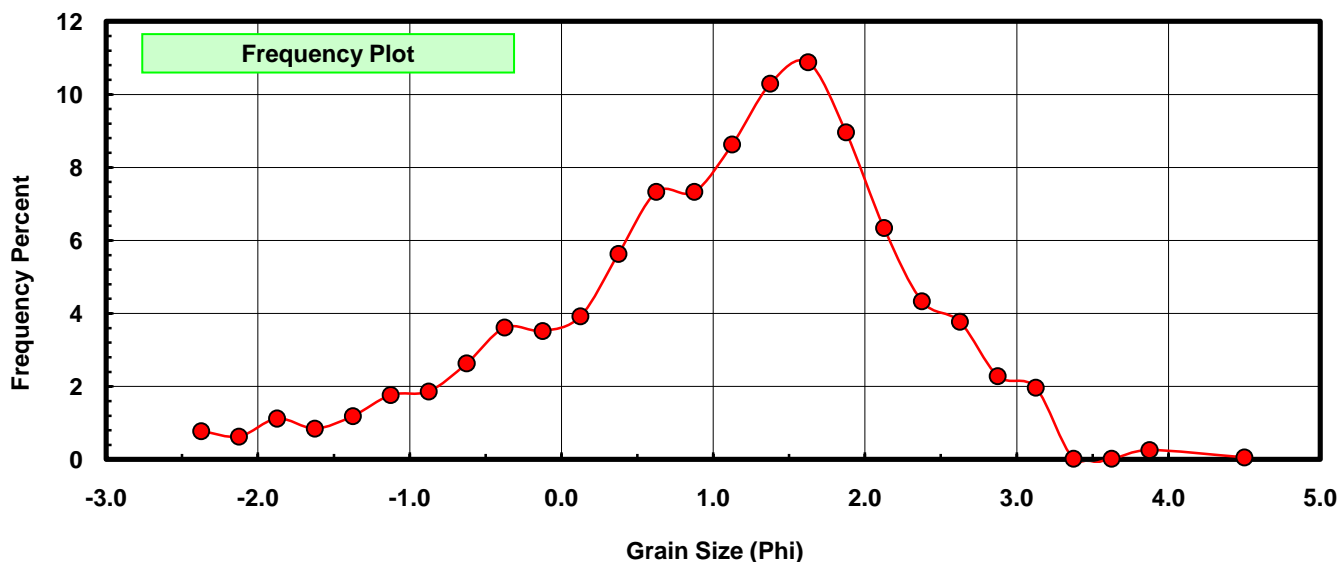
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.204	0.778	0.778
-2.00	-2.125	0.165	0.630	1.408
-1.75	-1.875	0.294	1.122	2.529
-1.50	-1.625	0.222	0.847	3.376
-1.25	-1.375	0.312	1.190	4.567
-1.00	-1.125	0.463	1.766	6.333
-0.75	-0.875	0.489	1.866	8.199
-0.50	-0.625	0.690	2.632	10.831
-0.25	-0.375	0.947	3.613	14.444
0.00	-0.125	0.923	3.521	17.966
0.25	0.125	1.029	3.926	21.892
0.50	0.375	1.477	5.635	27.527
0.75	0.625	1.921	7.329	34.856
1.00	0.875	1.921	7.329	42.185
1.25	1.125	2.262	8.630	50.815
1.50	1.375	2.698	10.293	61.108
1.75	1.625	2.852	10.881	71.989
2.00	1.875	2.349	8.962	80.951
2.25	2.125	1.662	6.341	87.292
2.50	2.375	1.137	4.338	91.629
2.75	2.625	0.988	3.769	95.399
3.00	2.875	0.599	2.285	97.684
3.25	3.125	0.515	1.965	99.649
3.50	3.375	0.005	0.019	99.668
3.75	3.625	0.005	0.019	99.687
4.00	3.875	0.067	0.256	99.943
5.00	4.500	0.015	0.057	100.000

Statistical Results			
Mean:	1.0435	phi	(0.4852 mm)
Standard Dev:	1.1830	phi-units	(0.4404 mm)
Skewness:	-0.5980	dimensionless	
Kurtosis:	3.1055	dimensionless	
5th Moment:	-4.2300	dimensionless	
6th Moment:	15.4448	dimensionless	
RARD *	1.1337	dimensionless	
Median	1.1014	phi	(0.4661 mm)

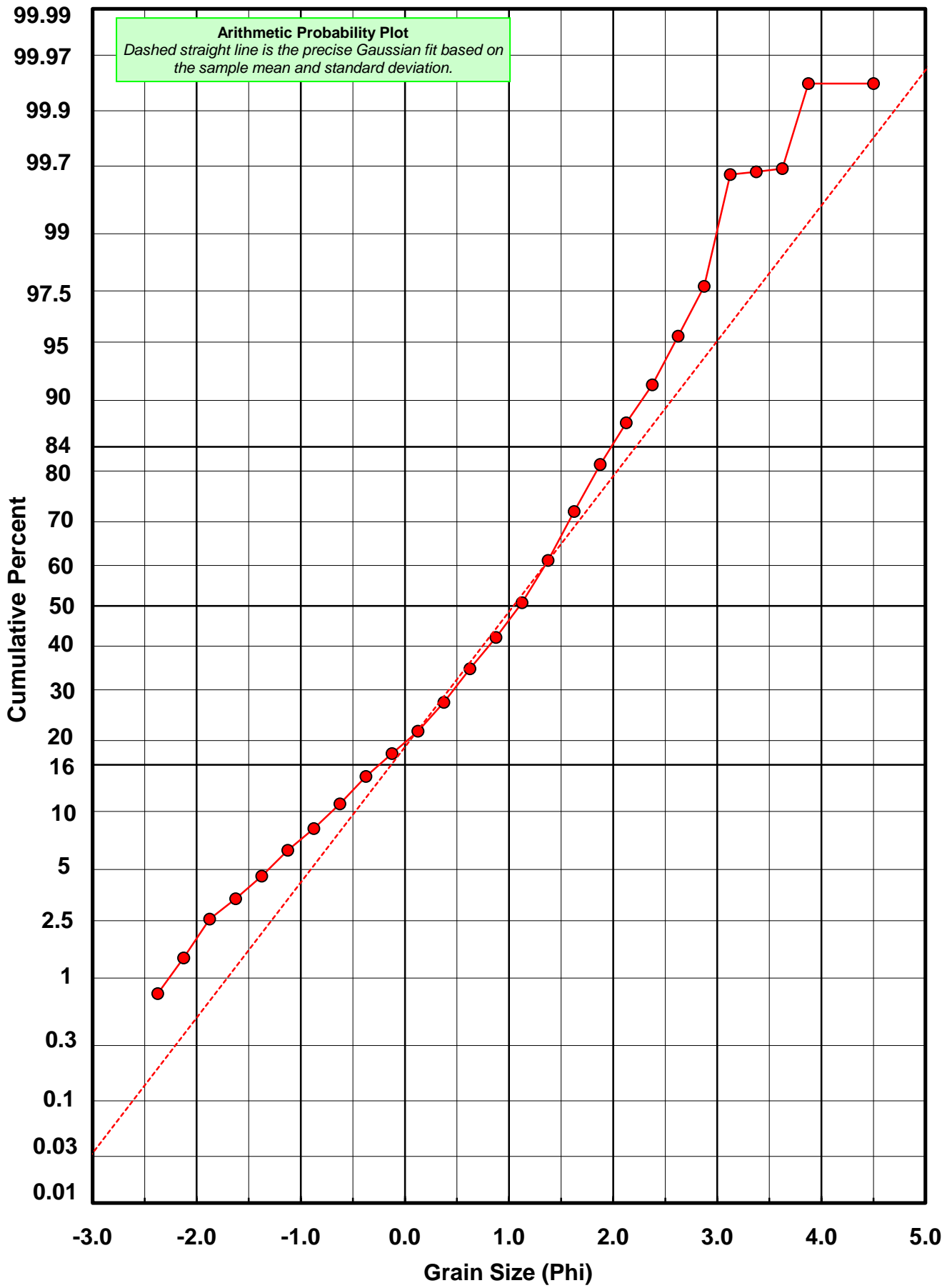
\* RARD = reciprocal absolute relative dispersion (see below)

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-03-BB



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-03-BB

Total Digested Mass: 27.427 grams

% Silica: 51.1 %

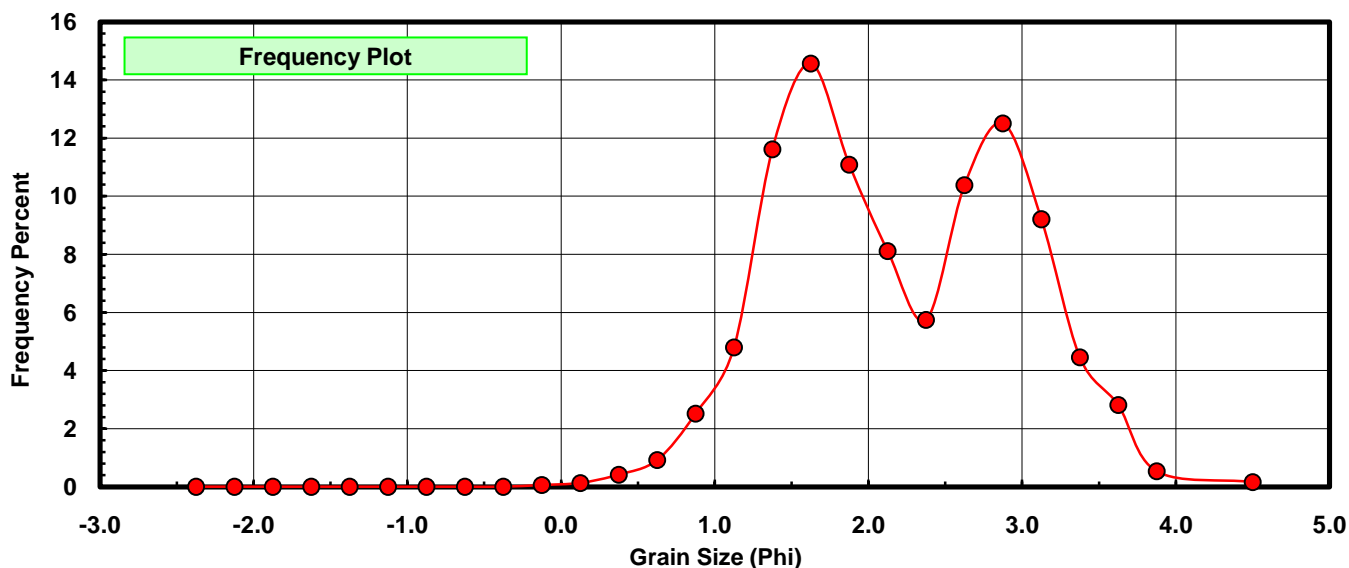
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-0.25	-0.375	0.000	0.000	0.000
0.00	-0.125	0.016	0.058	0.058
0.25	0.125	0.036	0.131	0.190
0.50	0.375	0.114	0.416	0.605
0.75	0.625	0.252	0.919	1.524
1.00	0.875	0.690	2.516	4.040
1.25	1.125	1.314	4.791	8.831
1.50	1.375	3.186	11.616	20.447
1.75	1.625	3.994	14.562	35.009
2.00	1.875	3.040	11.084	46.093
2.25	2.125	2.225	8.112	54.206
2.50	2.375	1.575	5.743	59.948
2.75	2.625	2.848	10.384	70.332
3.00	2.875	3.429	12.502	82.834
3.25	3.125	2.525	9.206	92.041
3.50	3.375	1.222	4.455	96.496
3.75	3.625	0.771	2.811	99.307
4.00	3.875	0.146	0.532	99.840
5.00	4.500	0.044	0.160	100.000

Statistical Results			
Mean:	2.1961	phi	(0.2182 mm)
Standard Dev:	0.7776	phi-units	(0.5833 mm)
Skewness:	0.0652	dimensionless	
Kurtosis:	2.1045	dimensionless	
5th Moment:	0.1657	dimensionless	
6th Moment:	7.1434	dimensionless	
RARD *	0.3541	dimensionless	
Median	1.9954	phi	(0.2508 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-03-BB

