

**Onshore Grab Sample**

**Sample:** IR-22-BB  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 10/30/08  
**Splits?** N/A

**County:** Indian River  
**Latitude:** 27° 35' 32.1"  
**Longitude:** 80° 19' 48.3"  
**Datum:** WGS 84  
**Surf. Elev:** 0  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 59.895 grams  
Total Fines in Sample 0.094 grams  
Total Percent Fines 0.16 %

**Dry Sieving Summary**

Total Sample Weight 59.838 grams  
Total Digested Weight 39.243 grams  
Total Carbonate Weight 20.595 grams  
Total Silica % 65.58 %  
Total Carbonate % 34.42 %  
Carbonate/Silica Ratio 0.525

**General Comments:**

None

**Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-22-BB

Total Sample Mass: 59.838 grams

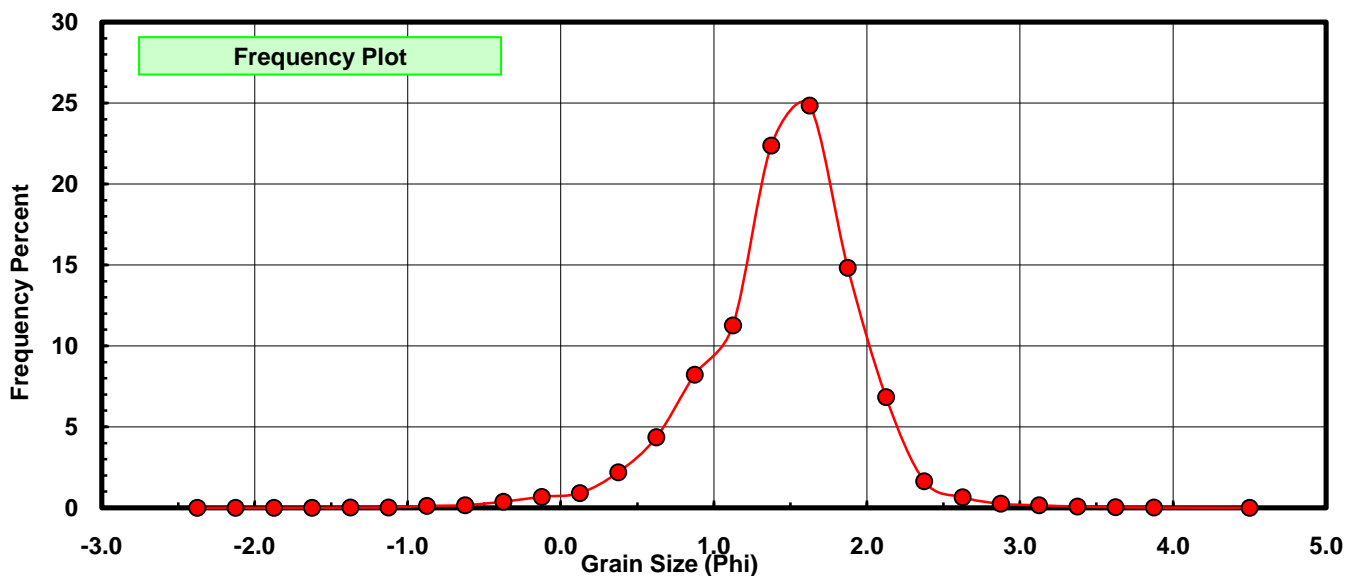
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.008	0.013	0.013
-1.00	-1.125	0.013	0.022	0.035
-0.75	-0.875	0.068	0.114	0.149
-0.50	-0.625	0.097	0.162	0.311
-0.25	-0.375	0.225	0.376	0.687
0.00	-0.125	0.405	0.677	1.364
0.25	0.125	0.543	0.907	2.271
0.50	0.375	1.311	2.191	4.462
0.75	0.625	2.607	4.357	8.819
1.00	0.875	4.923	8.227	17.046
1.25	1.125	6.741	11.265	28.311
1.50	1.375	13.383	22.365	50.677
1.75	1.625	14.867	24.845	75.522
2.00	1.875	8.871	14.825	90.347
2.25	2.125	4.086	6.828	97.176
2.50	2.375	0.985	1.646	98.822
2.75	2.625	0.389	0.650	99.472
3.00	2.875	0.150	0.251	99.723
3.25	3.125	0.091	0.152	99.875
3.50	3.375	0.044	0.074	99.948
3.75	3.625	0.023	0.038	99.987
4.00	3.875	0.008	0.013	100.000
5.00	4.50	0.000	0.000	100.000

Statistical Results			
Mean:	1.4375	phi	(0.3692 mm)
Standard Dev:	0.5135	phi-units	(0.7005 mm)
Skewness:	-0.6356	dimensionless	
Kurtosis:	4.9313	dimensionless	
5th Moment:	-7.9143	dimensionless	
6th Moment:	52.9715	dimensionless	
RARD *	0.3572	dimensionless	
Median	1.3674	phi	(0.3876 mm)

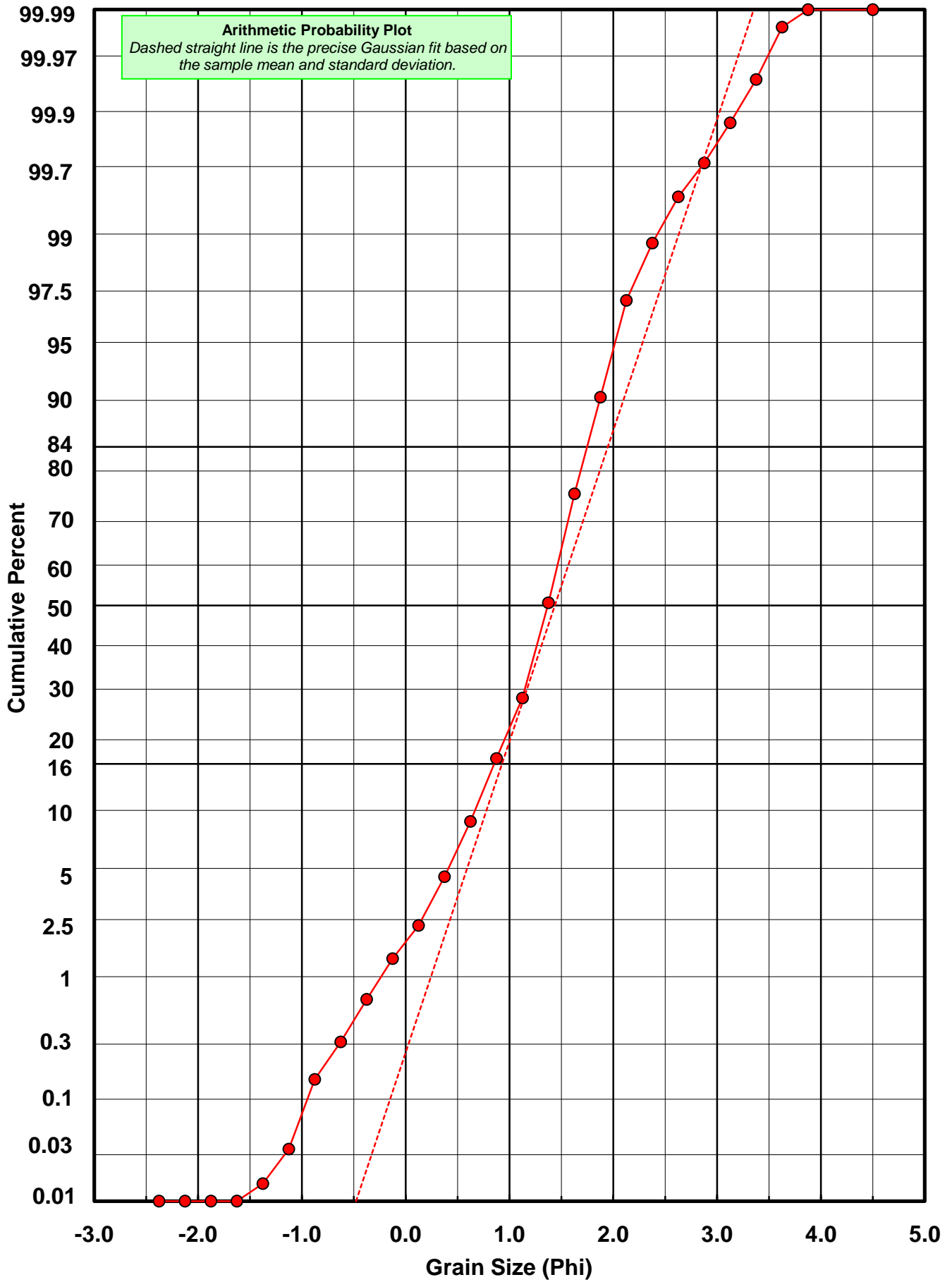
\* RARD = reciprocal absolute relative dispersion (see below)

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-22-BB



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: IR-22-BB

Total Carbonate Mass: 20.606 grams

% Carbonate: 34.4 %

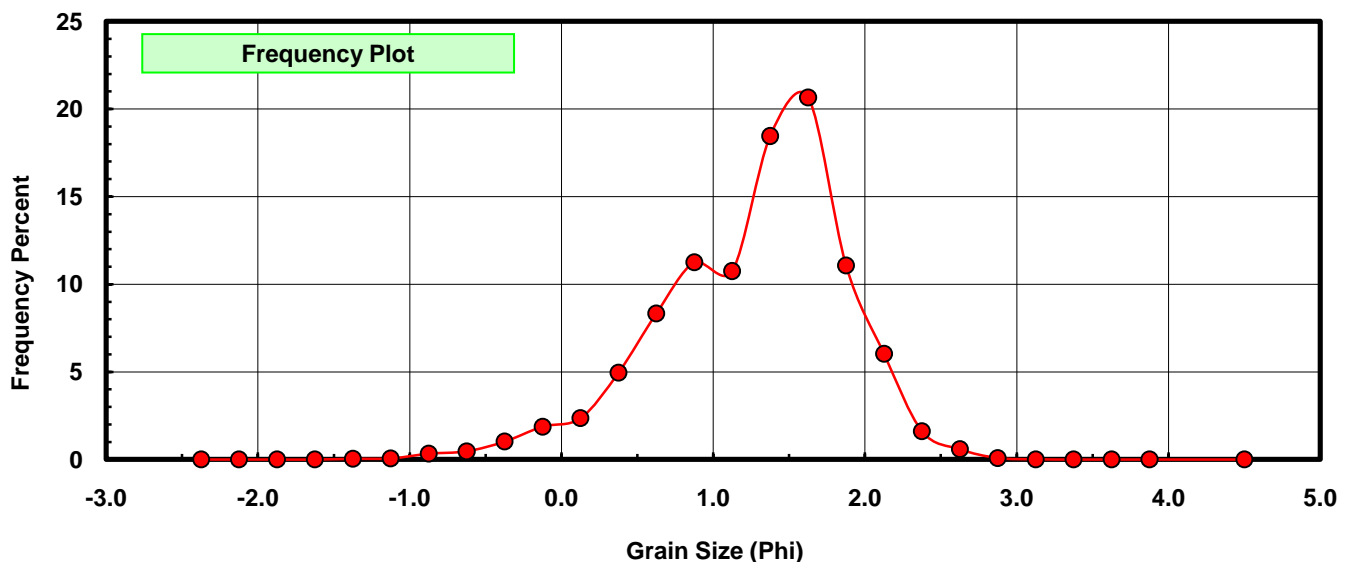
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.008	0.039	0.039
-1.00	-1.125	0.013	0.063	0.102
-0.75	-0.875	0.068	0.330	0.432
-0.50	-0.625	0.097	0.471	0.903
-0.25	-0.375	0.211	1.024	1.927
0.00	-0.125	0.387	1.878	3.805
0.25	0.125	0.486	2.359	6.163
0.50	0.375	1.020	4.950	11.113
0.75	0.625	1.718	8.337	19.451
1.00	0.875	2.319	11.254	30.705
1.25	1.125	2.216	10.754	41.459
1.50	1.375	3.804	18.461	59.919
1.75	1.625	4.258	20.664	80.583
2.00	1.875	2.282	11.074	91.658
2.25	2.125	1.243	6.032	97.690
2.50	2.375	0.334	1.621	99.311
2.75	2.625	0.121	0.587	99.898
3.00	2.875	0.018	0.087	99.985
3.25	3.125	0.003	0.015	100.000
3.50	3.375	0.000	0.000	100.000
3.75	3.625	0.000	0.000	100.000
4.00	3.875	0.000	0.000	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.2621	phi	(0.4169 mm)
Standard Dev:	0.6267	phi-units	(0.6476 mm)
Skewness:	-0.6662	dimensionless	
Kurtosis:	3.4249	dimensionless	
5th Moment:	-5.9681	dimensionless	
6th Moment:	22.6762	dimensionless	
RARD *	0.4966	dimensionless	
Median	1.2407	phi	(0.4232 mm)

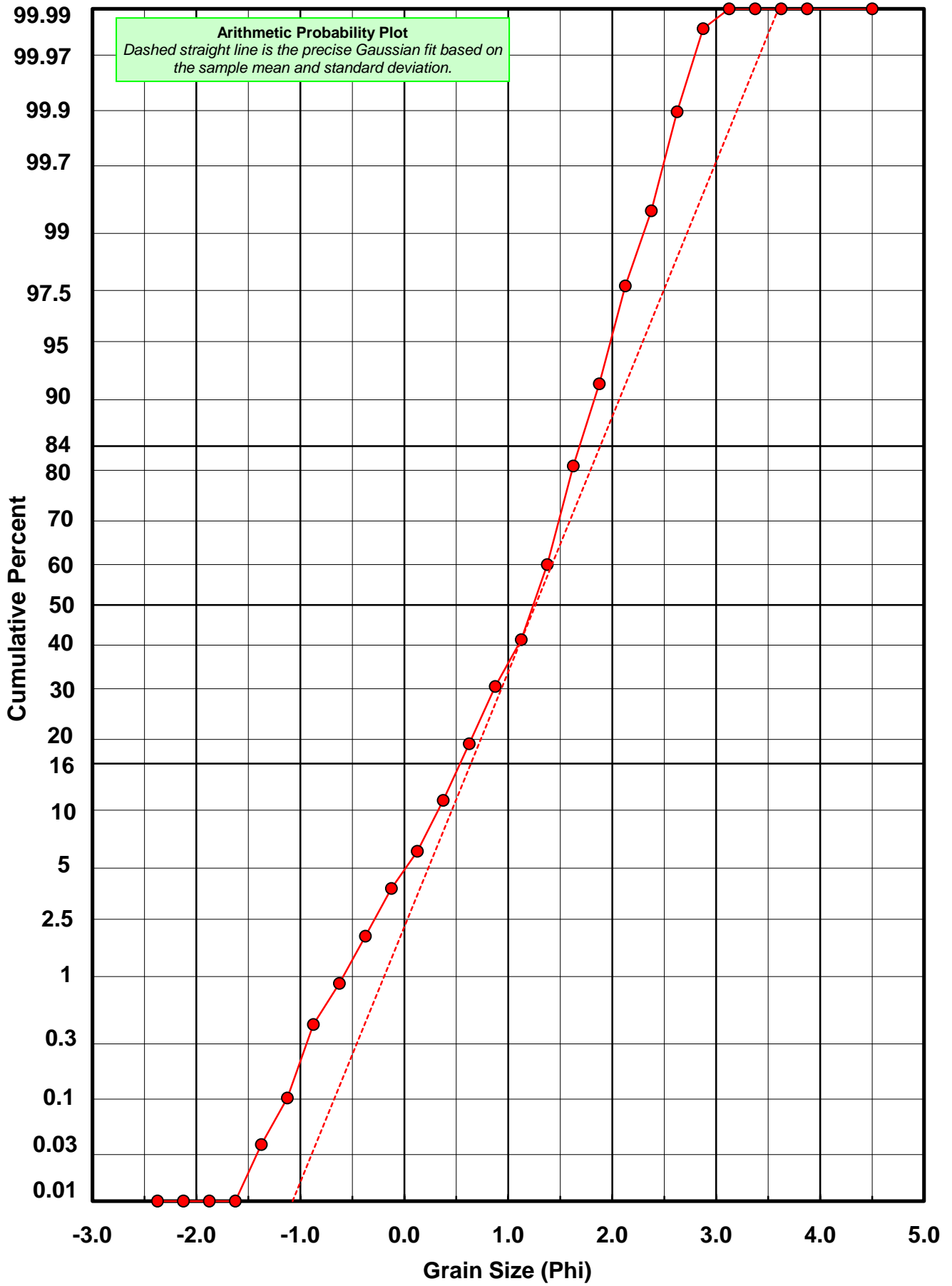
\* RARD = reciprocal absolute relative dispersion (see below)

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-22-BB



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-22-BB

Total Digested Mass: 39.243 grams

% Silica: 65.6 %

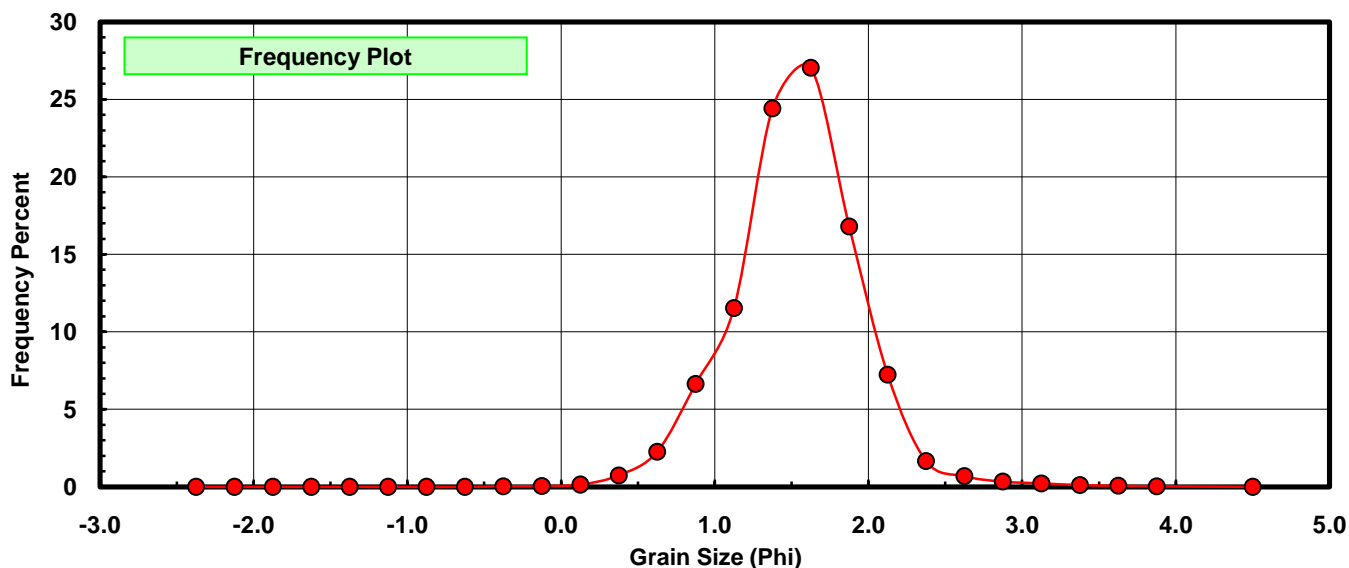
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-0.25	-0.375	0.014	0.036	0.036
0.00	-0.125	0.018	0.046	0.082
0.25	0.125	0.057	0.145	0.227
0.50	0.375	0.291	0.742	0.968
0.75	0.625	0.889	2.265	3.234
1.00	0.875	2.604	6.636	9.869
1.25	1.125	4.525	11.531	21.400
1.50	1.375	9.579	24.409	45.809
1.75	1.625	10.609	27.034	72.844
2.00	1.875	6.589	16.790	89.634
2.25	2.125	2.843	7.245	96.878
2.50	2.375	0.651	1.659	98.537
2.75	2.625	0.268	0.683	99.220
3.00	2.875	0.132	0.336	99.557
3.25	3.125	0.088	0.224	99.781
3.50	3.375	0.045	0.115	99.896
3.75	3.625	0.027	0.069	99.964
4.00	3.875	0.014	0.036	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.5302	phi	(0.3462 mm)
Standard Dev:	0.4248	phi-units	(0.7449 mm)
Skewness:	0.1697	dimensionless	
Kurtosis:	4.7327	dimensionless	
5th Moment:	5.8325	dimensionless	
6th Moment:	54.8427	dimensionless	
RARD *	0.2776	dimensionless	
Median	1.4138	phi	(0.3753 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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