

## **Onshore Grab Sample**

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

**County:** Indian River  
**Latitude:** 27° 46' 22.6"  
**Longitude:** 80° 24' 05.4"  
**Datum:** WGS 84  
**Surf. Elev:** N/A  
**Datum:** N/A

### **Fine Data Summary**

Total Sample Weight	72.571 grams
Total Fines in Sample	0.218 grams
Total Percent Fines	0.30 %

### **Dry Sieving Summary**

Total Sample Weight	72.371 grams
Total Digested Weight	57.049 grams
Total Carbonate Weight	15.322 grams
Total Silica %	78.83 %
Total Carbonate %	21.17 %
Carbonate/Silica Ratio	0.269

### **General Comments:**

Post Digestion 1.25 Phi: Few grains dropped and recovered.

### **Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-08

Total Sample Mass: 72.371 grams

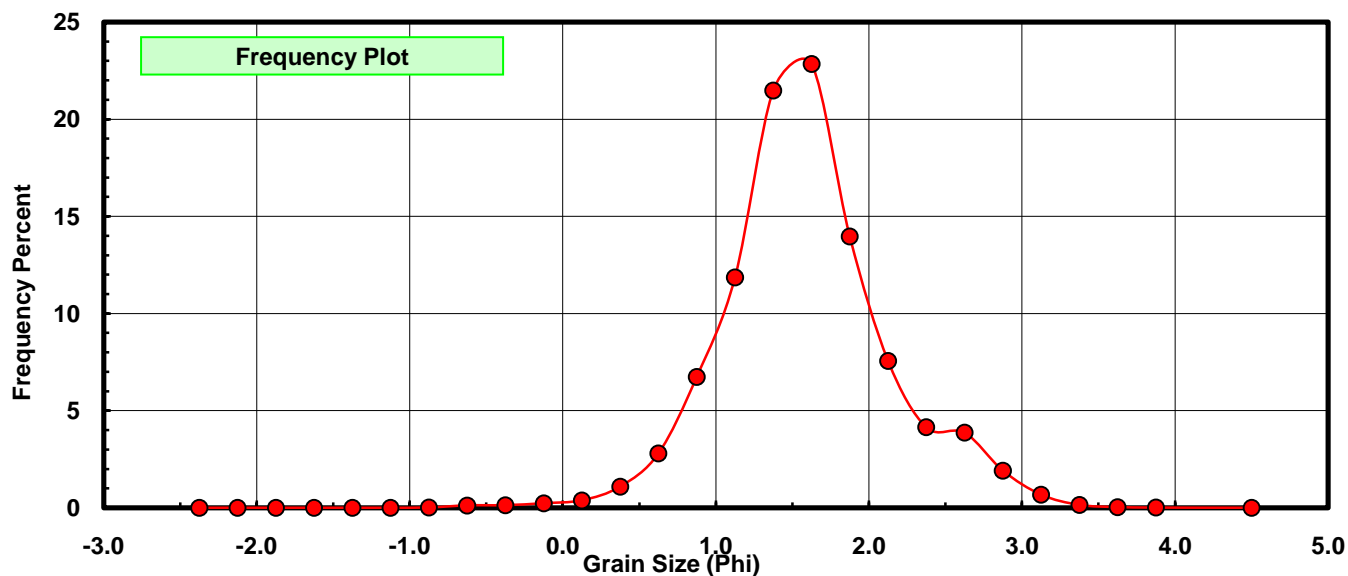
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.011	0.015	0.015
-0.50	-0.625	0.088	0.122	0.137
-0.25	-0.375	0.097	0.134	0.271
0.00	-0.125	0.169	0.234	0.504
0.25	0.125	0.279	0.386	0.890
0.50	0.375	0.788	1.089	1.979
0.75	0.625	2.023	2.795	4.774
1.00	0.875	4.872	6.732	11.506
1.25	1.125	8.578	11.853	23.359
1.50	1.375	15.547	21.482	44.841
1.75	1.625	16.532	22.843	67.685
2.00	1.875	10.107	13.966	81.650
2.25	2.125	5.472	7.561	89.211
2.50	2.375	2.999	4.144	93.355
2.75	2.625	2.798	3.866	97.221
3.00	2.875	1.384	1.912	99.134
3.25	3.125	0.488	0.674	99.808
3.50	3.375	0.107	0.148	99.956
3.75	3.625	0.026	0.036	99.992
4.00	3.875	0.006	0.008	100.000
5.00	4.50	0.000	0.000	100.000

Statistical Results			
Mean:	1.5843	phi	(0.3335 mm)
Standard Dev:	0.5456	phi-units	(0.6851 mm)
Skewness:	0.1704	dimensionless	
Kurtosis:	3.9499	dimensionless	
5th Moment:	-0.1133	dimensionless	
6th Moment:	28.3834	dimensionless	
RARD *	0.3444	dimensionless	
Median	1.4315	phi	(0.3708 mm)

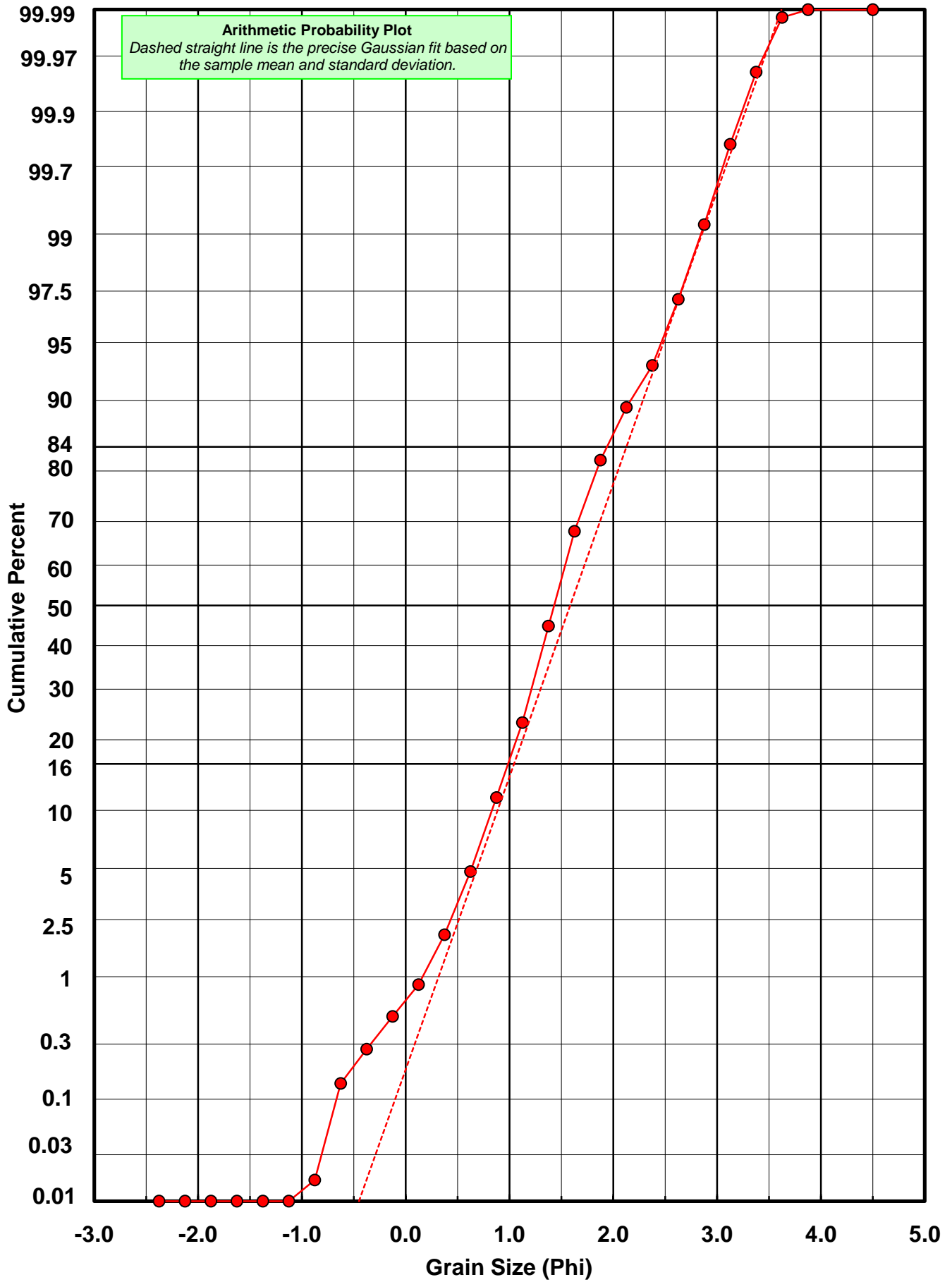
\* RARD = reciprocal absolute relative dispersion (see below)

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-08



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: IR-08

Total Carbonate Mass: 15.333 grams

% Carbonate: 21.2 %

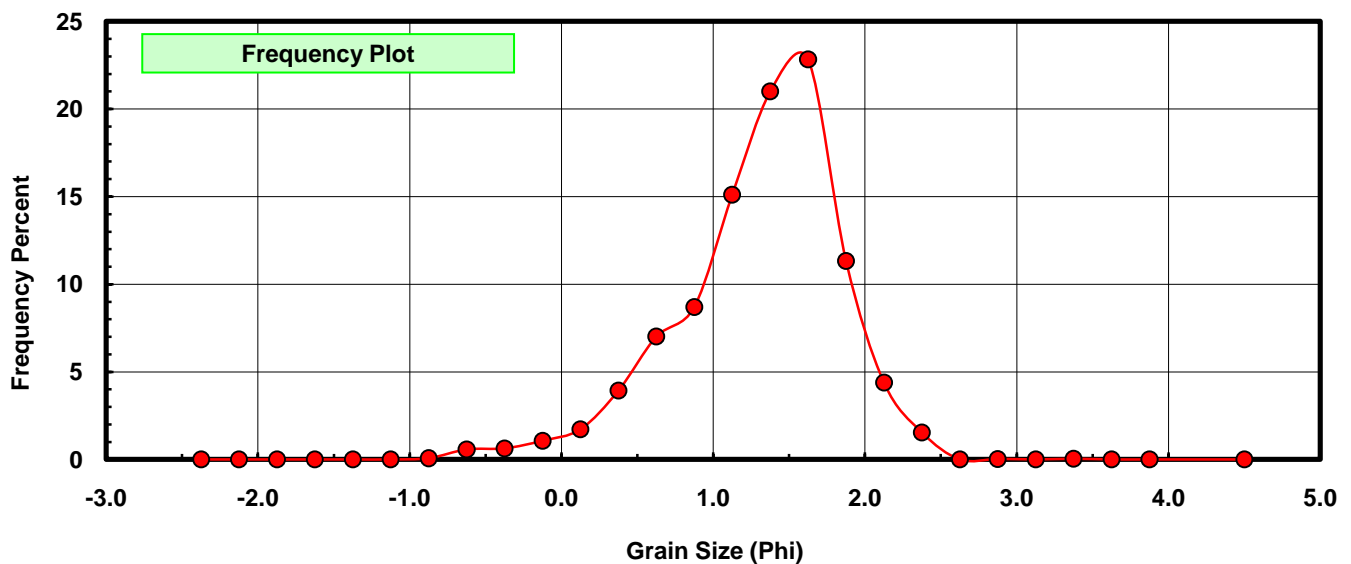
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.011	0.072	0.072
-0.50	-0.625	0.088	0.574	0.646
-0.25	-0.375	0.097	0.633	1.278
0.00	-0.125	0.164	1.070	2.348
0.25	0.125	0.265	1.728	4.076
0.50	0.375	0.603	3.933	8.009
0.75	0.625	1.076	7.018	15.026
1.00	0.875	1.335	8.707	23.733
1.25	1.125	2.318	15.118	38.851
1.50	1.375	3.220	21.000	59.851
1.75	1.625	3.500	22.827	82.678
2.00	1.875	1.737	11.329	94.006
2.25	2.125	0.672	4.383	98.389
2.50	2.375	0.236	1.539	99.928
2.75	2.625	0.000	0.000	99.928
3.00	2.875	0.005	0.033	99.961
3.25	3.125	0.000	0.000	99.961
3.50	3.375	0.006	0.039	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:	1.3031	phi	(0.4052 mm)
Standard Dev:	0.5539	phi-units	(0.6812 mm)
Skewness:	-0.7678	dimensionless	
Kurtosis:	3.8024	dimensionless	
5th Moment:	-7.1703	dimensionless	
6th Moment:	28.1173	dimensionless	
RARD *	0.4251	dimensionless	
Median	1.2577	phi	(0.4182 mm)

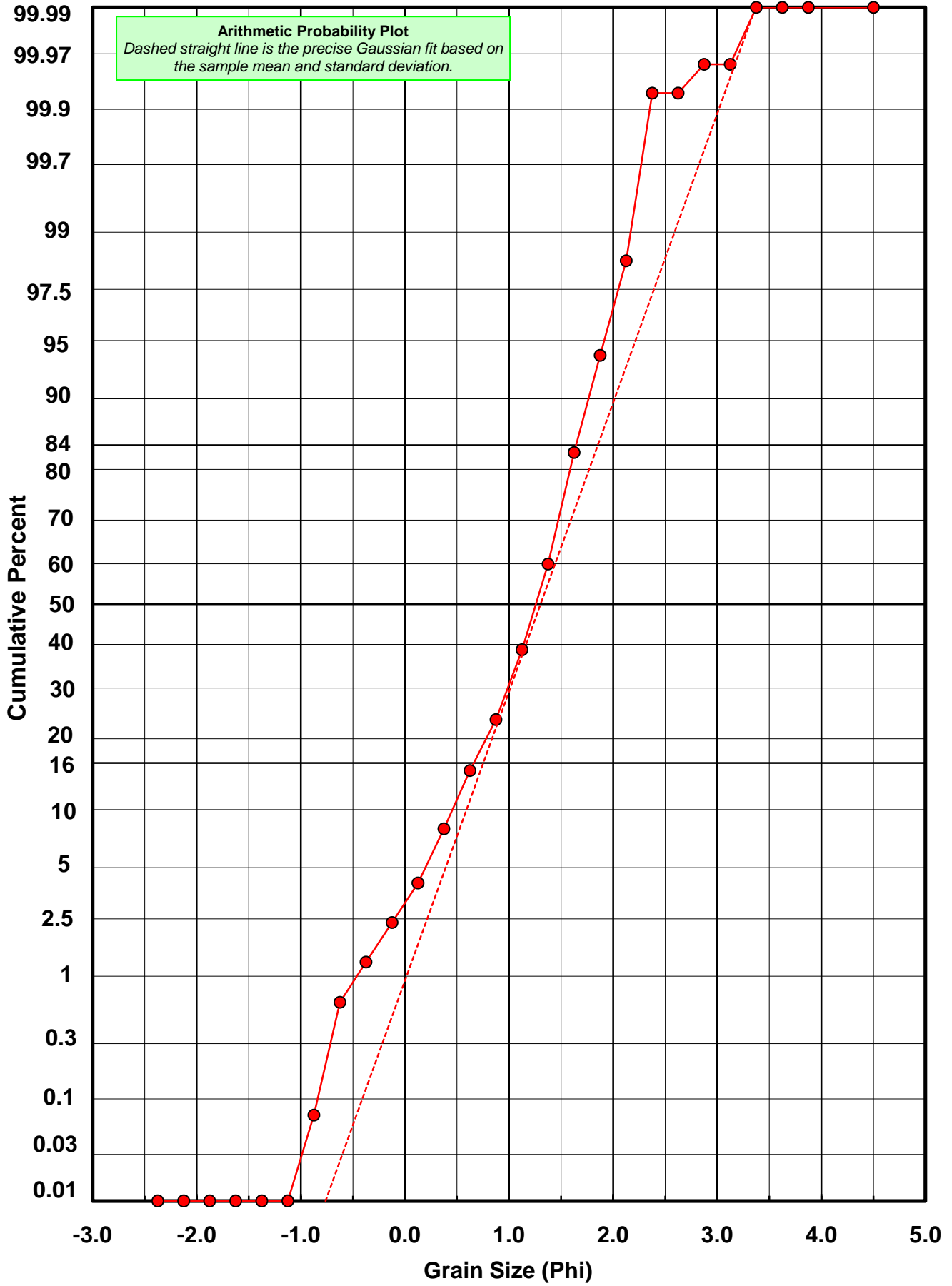
\* RARD = reciprocal absolute relative dispersion (see below)

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-08



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-08

Total Digested Mass: 57.049 grams

% Silica: 78.8 %

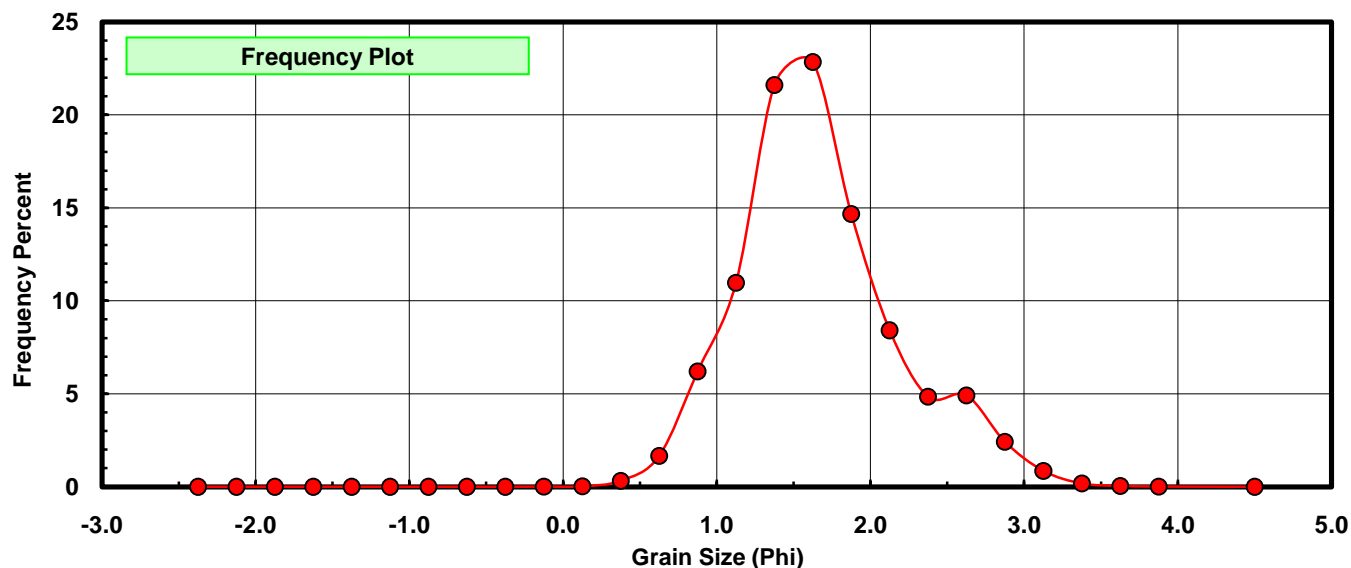
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-0.25	-0.375	0.000	0.000	0.000
0.00	-0.125	0.005	0.009	0.009
0.25	0.125	0.014	0.025	0.033
0.50	0.375	0.185	0.324	0.358
0.75	0.625	0.947	1.660	2.018
1.00	0.875	3.537	6.200	8.217
1.25	1.125	6.260	10.973	19.191
1.50	1.375	12.327	21.608	40.798
1.75	1.625	13.032	22.844	63.642
2.00	1.875	8.370	14.672	78.313
2.25	2.125	4.800	8.414	86.727
2.50	2.375	2.763	4.843	91.570
2.75	2.625	2.804	4.915	96.485
3.00	2.875	1.379	2.417	98.903
3.25	3.125	0.489	0.857	99.760
3.50	3.375	0.101	0.177	99.937
3.75	3.625	0.029	0.051	99.988
4.00	3.875	0.007	0.012	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.6601	phi	(0.3164 mm)
Standard Dev:	0.5231	phi-units	(0.6959 mm)
Skewness:	0.5522	dimensionless	
Kurtosis:	3.2853	dimensionless	
5th Moment:	4.2380	dimensionless	
6th Moment:	17.7165	dimensionless	
RARD *	0.3151	dimensionless	
Median	1.4757	phi	(0.3596 mm)

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

Statistical Explanation	
Calculations based on the Method of Moments	
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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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