

**Onshore Grab Sample**

**Sample:** SL-09-BB  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 12/16/08  
**Splits?** N/A

**County:** St. Lucie  
**Latitude:** 27° 26' 59.2"  
**Longitude:** 80° 17' 00.9"  
**Datum:** WGS 84  
**Surf. Elev:** 0  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 59.872 grams  
Total Fines in Sample 0.085 grams  
Total Percent Fines 0.14 %

**Dry Sieving Summary**

Total Sample Weight 59.923 grams  
Total Digested Weight 16.963 grams  
Total Carbonate Weight 42.960 grams  
Total Silica % 28.31 %  
Total Carbonate % 71.69 %  
Carbonate/Silica Ratio 2.533

**General Comments:**

None

**Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: SL-09-BB

Total Sample Mass: 59.923 grams

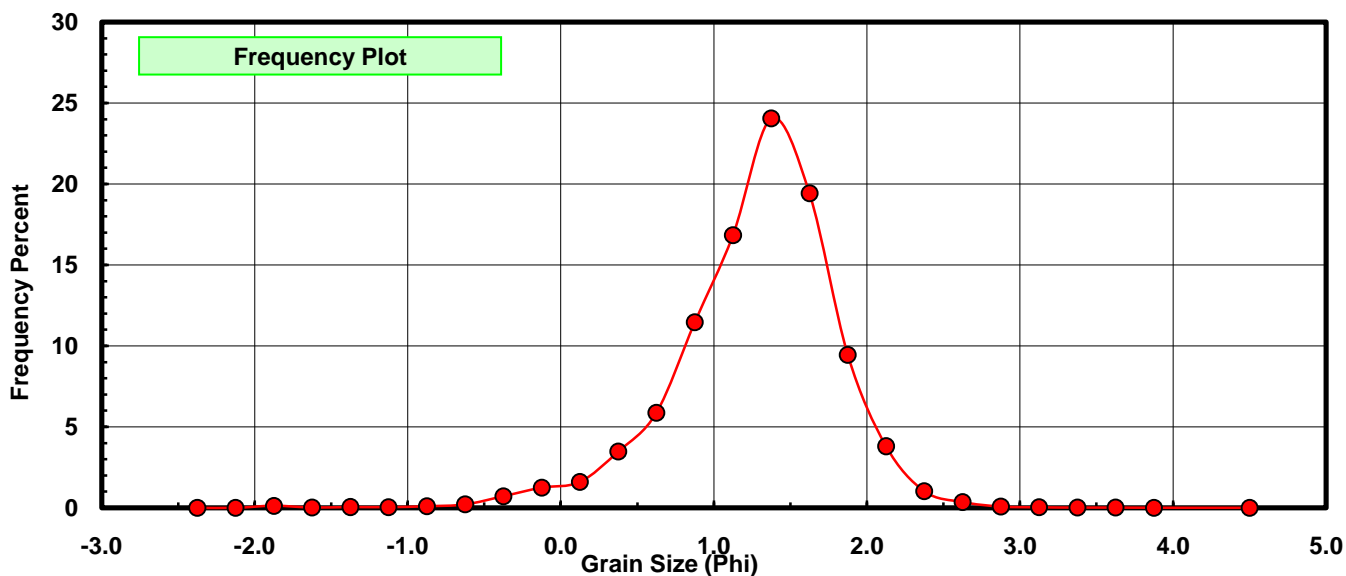
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.076	0.127	0.127
-1.50	-1.625	0.012	0.020	0.147
-1.25	-1.375	0.029	0.048	0.195
-1.00	-1.125	0.024	0.040	0.235
-0.75	-0.875	0.059	0.098	0.334
-0.50	-0.625	0.125	0.209	0.542
-0.25	-0.375	0.430	0.718	1.260
0.00	-0.125	0.749	1.250	2.510
0.25	0.125	0.957	1.597	4.107
0.50	0.375	2.080	3.471	7.578
0.75	0.625	3.521	5.876	13.454
1.00	0.875	6.863	11.453	24.907
1.25	1.125	10.094	16.845	41.752
1.50	1.375	14.409	24.046	65.798
1.75	1.625	11.638	19.422	85.219
2.00	1.875	5.665	9.454	94.673
2.25	2.125	2.279	3.803	98.476
2.50	2.375	0.614	1.025	99.501
2.75	2.625	0.213	0.355	99.856
3.00	2.875	0.047	0.078	99.935
3.25	3.125	0.018	0.030	99.965
3.50	3.375	0.009	0.015	99.980
3.75	3.625	0.009	0.015	99.995
4.00	3.875	0.003	0.005	100.000
5.00	4.50	0.000	0.000	100.000

Statistical Results			
Mean:	1.2736	phi	(0.4136 mm)
Standard Dev:	0.5372	phi-units	(0.6891 mm)
Skewness:	-0.9062	dimensionless	
Kurtosis:	5.7337	dimensionless	
5th Moment:	-16.9099	dimensionless	
6th Moment:	94.3447	dimensionless	
RARD *	0.4217	dimensionless	
Median	1.2108	phi	(0.432 mm)

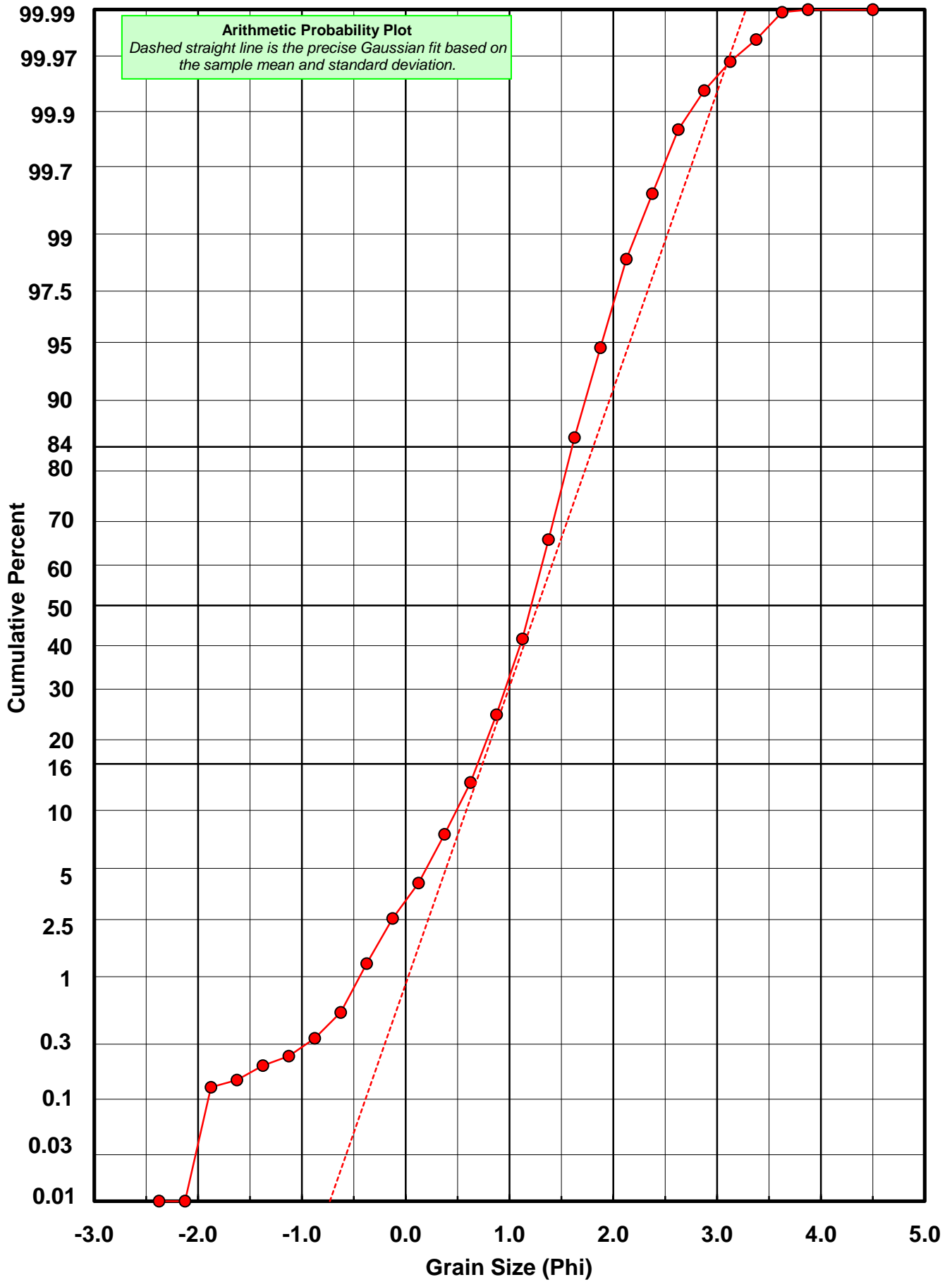
\* RARD = reciprocal absolute relative dispersion (see below)

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)



# SL-09-BB



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: SL-09-BB

Total Carbonate Mass: 43.065 grams

% Carbonate: 71.7 %

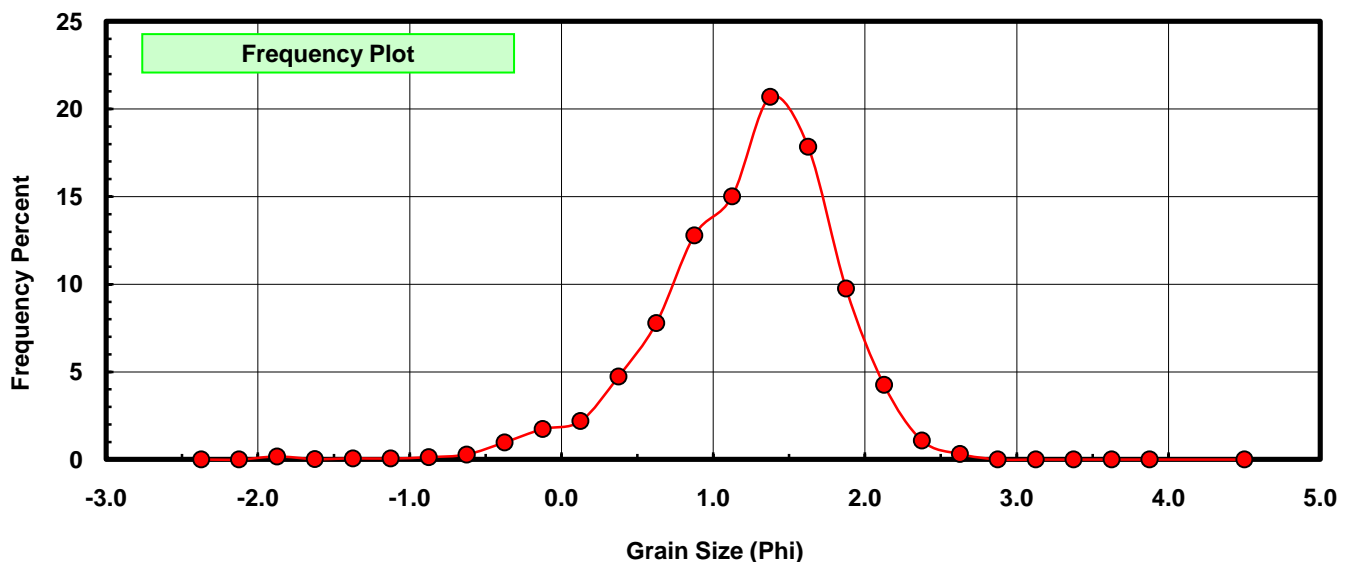
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.076	0.176	0.176
-1.50	-1.625	0.012	0.028	0.204
-1.25	-1.375	0.029	0.067	0.272
-1.00	-1.125	0.024	0.056	0.327
-0.75	-0.875	0.059	0.137	0.464
-0.50	-0.625	0.125	0.290	0.755
-0.25	-0.375	0.423	0.982	1.737
0.00	-0.125	0.749	1.739	3.476
0.25	0.125	0.944	2.192	5.668
0.50	0.375	2.040	4.737	10.405
0.75	0.625	3.357	7.795	18.200
1.00	0.875	5.510	12.795	30.995
1.25	1.125	6.470	15.024	46.019
1.50	1.375	8.911	20.692	66.711
1.75	1.625	7.686	17.847	84.558
2.00	1.875	4.204	9.762	94.320
2.25	2.125	1.838	4.268	98.588
2.50	2.375	0.468	1.087	99.675
2.75	2.625	0.136	0.316	99.991
3.00	2.875	0.004	0.009	100.000
3.25	3.125	0.000	0.000	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:	1.2186	phi	(0.4297 mm)
Standard Dev:	0.5860	phi-units	(0.6662 mm)
Skewness:	-0.8692	dimensionless	
Kurtosis:	4.8458	dimensionless	
5th Moment:	-13.9866	dimensionless	
6th Moment:	66.3993	dimensionless	
RARD *	0.4809	dimensionless	
Median	1.1731	phi	(0.4435 mm)

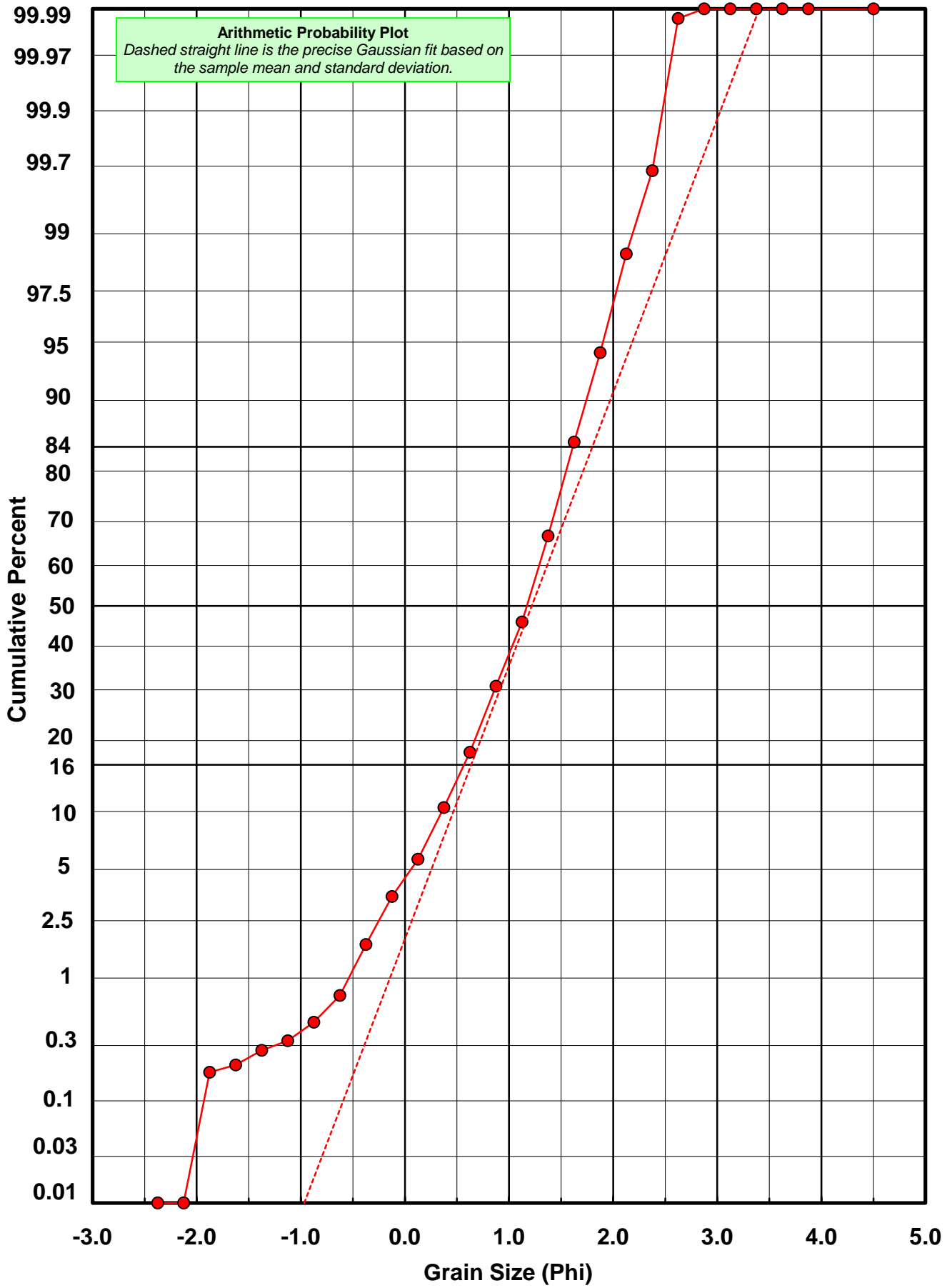
\* RARD = reciprocal absolute relative dispersion (see below)

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)



# SL-09-BB



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: SL-09-BB

Total Digested Mass: 16.963 grams

% Silica: 28.3 %

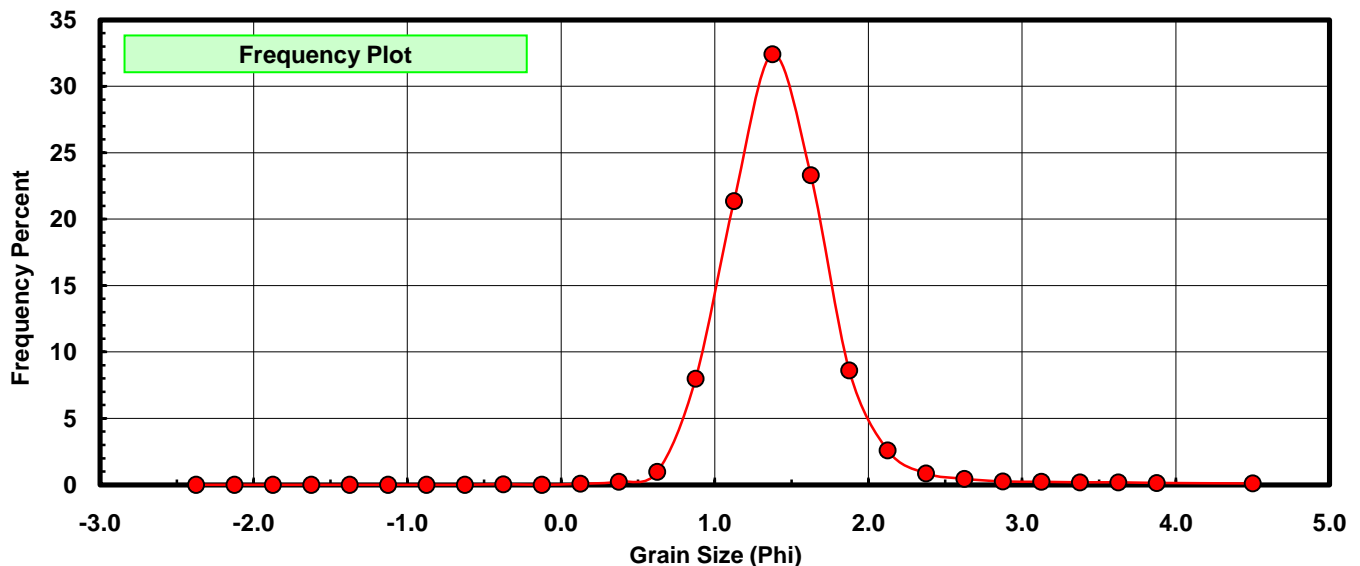
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-0.25	-0.375	0.007	0.041	0.041
0.00	-0.125	0.000	0.000	0.041
0.25	0.125	0.013	0.077	0.118
0.50	0.375	0.040	0.236	0.354
0.75	0.625	0.164	0.967	1.321
1.00	0.875	1.353	7.976	9.297
1.25	1.125	3.624	21.364	30.661
1.50	1.375	5.498	32.412	63.073
1.75	1.625	3.952	23.298	86.370
2.00	1.875	1.461	8.613	94.983
2.25	2.125	0.441	2.600	97.583
2.50	2.375	0.146	0.861	98.444
2.75	2.625	0.077	0.454	98.898
3.00	2.875	0.043	0.253	99.151
3.25	3.125	0.039	0.230	99.381
3.50	3.375	0.032	0.189	99.570
3.75	3.625	0.032	0.189	99.758
4.00	3.875	0.024	0.141	99.900
5.00	4.500	0.017	0.100	100.000

Statistical Results			
Mean:	1.4280	phi	(0.3716 mm)
Standard Dev:	0.4067	phi-units	(0.7544 mm)
Skewness:	1.6534	dimensionless	
Kurtosis:	11.2730	dimensionless	
5th Moment:	57.1333	dimensionless	
6th Moment:	373.2149	dimensionless	
RARD *	0.2848	dimensionless	
Median	1.2742	phi	(0.4135 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)



# SL-09-BB

