

**Onshore Grab Sample**

**Sample:** SL-21-BB  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 12/16/08  
**Splits?** N/A

**County:** St. Lucie  
**Latitude:** 27° 17' 54.2"  
**Longitude:** 80° 12' 58.1"  
**Datum:** WGS 84  
**Surf. Elev:** 0  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 59.33 grams  
Total Fines in Sample 0.178 grams  
Total Percent Fines 0.30 %

**Dry Sieving Summary**

Total Sample Weight 59.262 grams  
Total Digested Weight 19.389 grams  
Total Carbonate Weight 39.873 grams  
Total Silica % 32.72 %  
Total Carbonate % 67.28 %  
Carbonate/Silica Ratio 2.056

**General Comments:**

None

**Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: SL-21-BB

Total Sample Mass: 59.262 grams

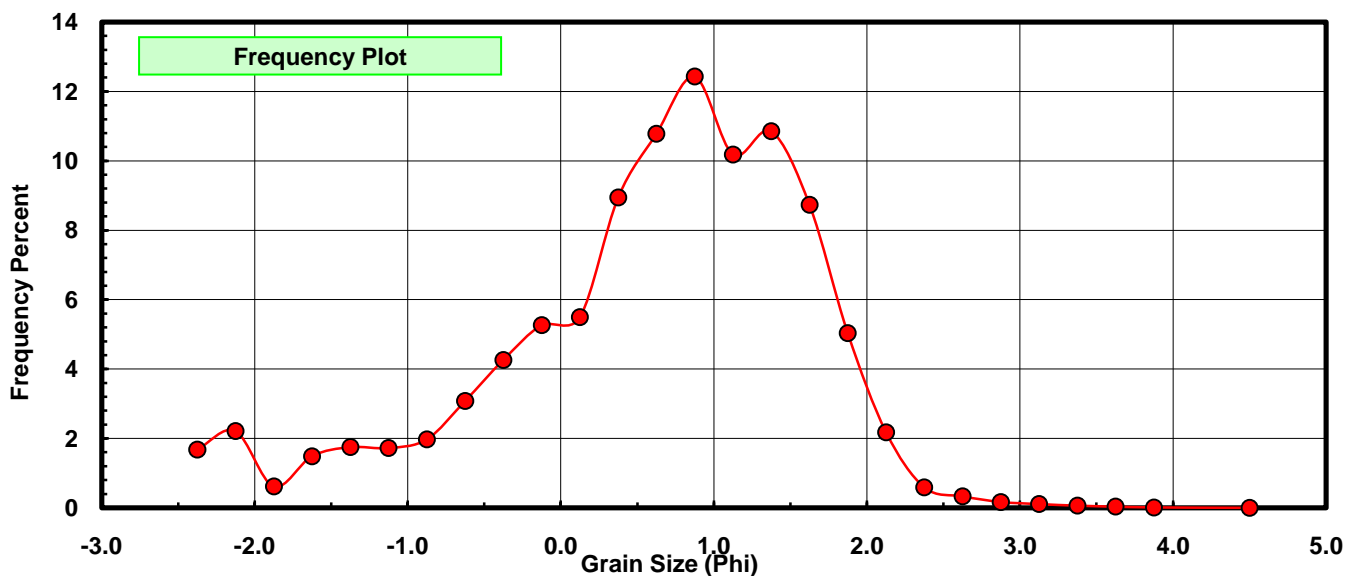
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.996	1.681	1.681
-2.00	-2.125	1.310	2.211	3.891
-1.75	-1.875	0.366	0.618	4.509
-1.50	-1.625	0.882	1.488	5.997
-1.25	-1.375	1.037	1.750	7.747
-1.00	-1.125	1.021	1.723	9.470
-0.75	-0.875	1.170	1.974	11.444
-0.50	-0.625	1.825	3.080	14.524
-0.25	-0.375	2.527	4.264	18.788
0.00	-0.125	3.121	5.266	24.054
0.25	0.125	3.257	5.496	29.550
0.50	0.375	5.300	8.943	38.493
0.75	0.625	6.390	10.783	49.276
1.00	0.875	7.365	12.428	61.704
1.25	1.125	6.035	10.184	71.888
1.50	1.375	6.431	10.852	82.739
1.75	1.625	5.178	8.737	91.477
2.00	1.875	2.983	5.034	96.510
2.25	2.125	1.292	2.180	98.691
2.50	2.375	0.351	0.592	99.283
2.75	2.625	0.197	0.332	99.615
3.00	2.875	0.100	0.169	99.784
3.25	3.125	0.064	0.108	99.892
3.50	3.375	0.037	0.062	99.954
3.75	3.625	0.020	0.034	99.988
4.00	3.875	0.007	0.012	100.000
5.00	4.50	0.000	0.000	100.000

Statistical Results			
Mean:	0.5726	phi	(0.6724 mm)
Standard Dev:	1.0585	phi-units	(0.4801 mm)
Skewness:	-0.8560	dimensionless	
Kurtosis:	3.5103	dimensionless	
5th Moment:	-6.0744	dimensionless	
6th Moment:	19.2722	dimensionless	
RARD *	1.8486	dimensionless	
Median	0.6396	phi	(0.6419 mm)

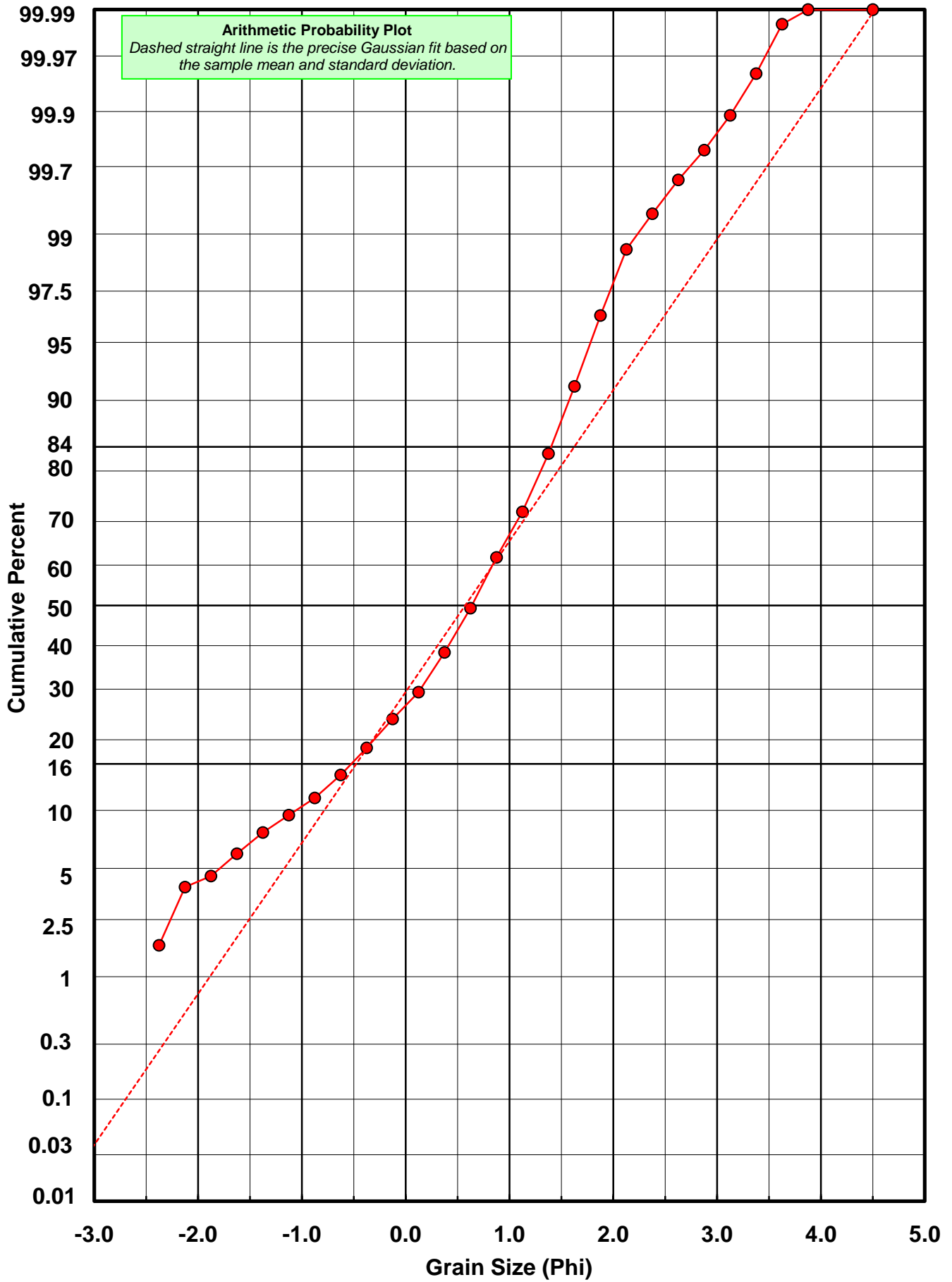
\* RARD = reciprocal absolute relative dispersion (see below)

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-21-BB



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: SL-21-BB

Total Carbonate Mass: 39.961 grams

% Carbonate: 67.3 %

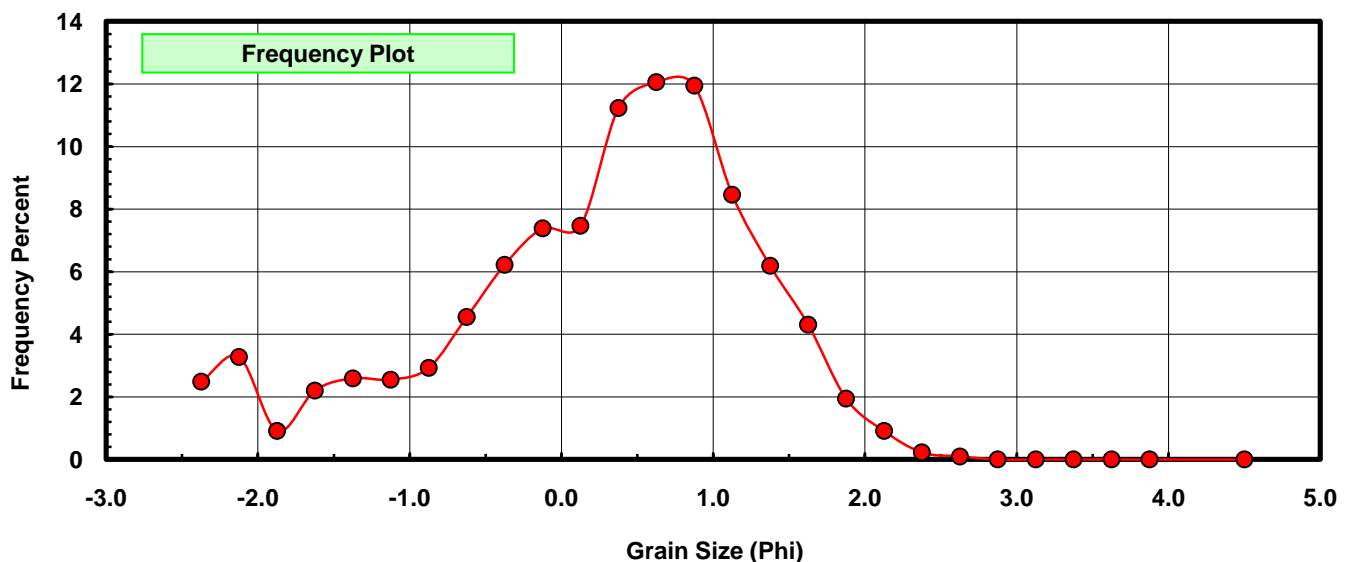
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.996	2.492	2.492
-2.00	-2.125	1.310	3.278	5.771
-1.75	-1.875	0.366	0.916	6.687
-1.50	-1.625	0.882	2.207	8.894
-1.25	-1.375	1.037	2.595	11.489
-1.00	-1.125	1.021	2.555	14.044
-0.75	-0.875	1.170	2.928	16.972
-0.50	-0.625	1.819	4.552	21.523
-0.25	-0.375	2.487	6.224	27.747
0.00	-0.125	2.954	7.392	35.139
0.25	0.125	2.983	7.465	42.604
0.50	0.375	4.490	11.236	53.840
0.75	0.625	4.820	12.062	65.902
1.00	0.875	4.775	11.949	77.851
1.25	1.125	3.382	8.463	86.314
1.50	1.375	2.473	6.189	92.503
1.75	1.625	1.724	4.314	96.817
2.00	1.875	0.779	1.949	98.766
2.25	2.125	0.364	0.911	99.677
2.50	2.375	0.090	0.225	99.902
2.75	2.625	0.039	0.098	100.000
3.00	2.875	0.000	0.000	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:	0.2127	phi	(0.8629 mm)
Standard Dev:	1.0564	phi-units	(0.4808 mm)
Skewness:	-0.6956	dimensionless	
Kurtosis:	2.9345	dimensionless	
5th Moment:	-4.1587	dimensionless	
6th Moment:	12.4735	dimensionless	
RARD *	4.9675	dimensionless	
Median	0.2896	phi	(0.8182 mm)

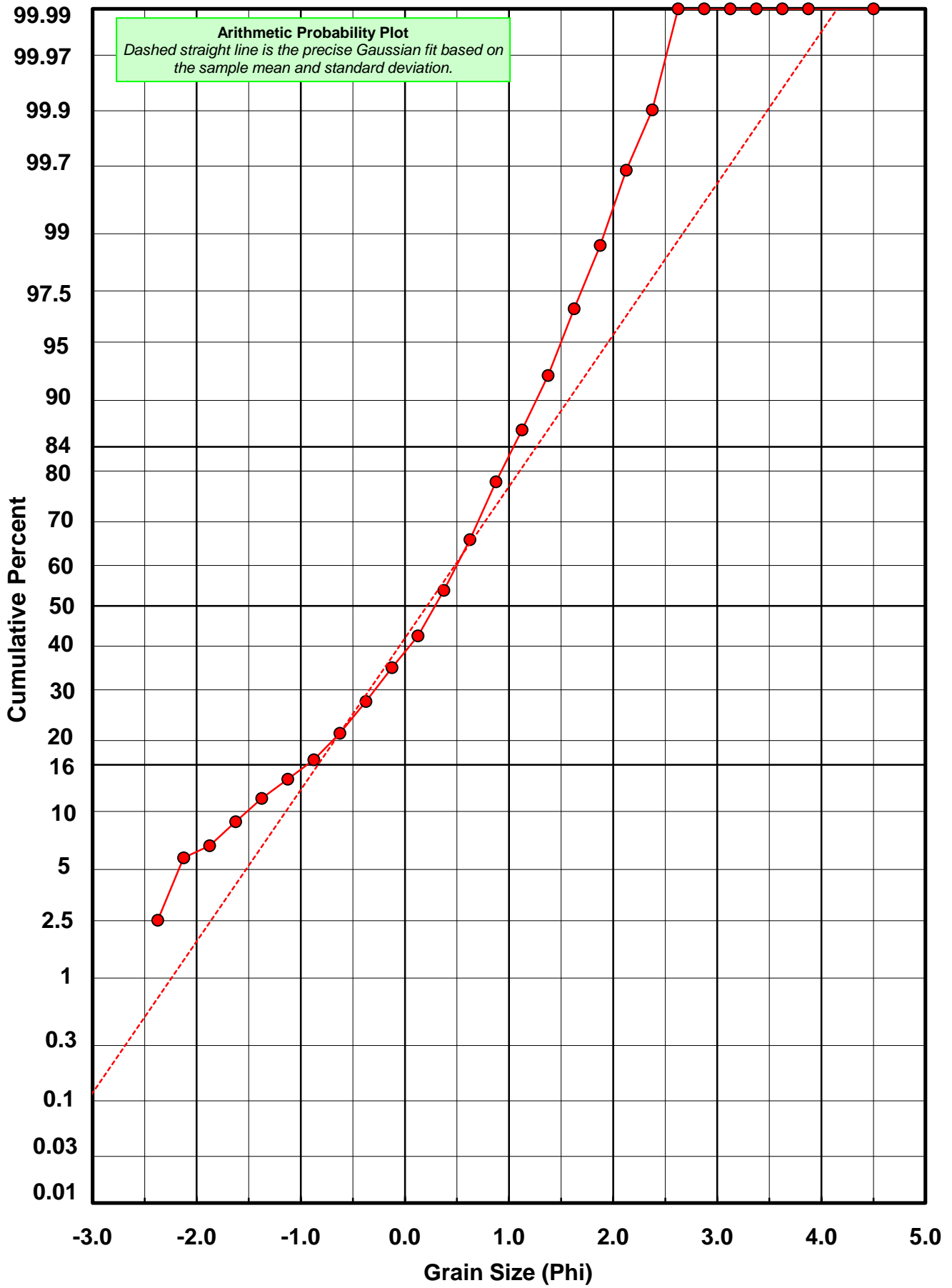
\* RARD = reciprocal absolute relative dispersion (see below)

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)
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# SL-21-BB



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: SL-21-BB

Total Digested Mass: 19.389 grams

% Silica: 32.7 %

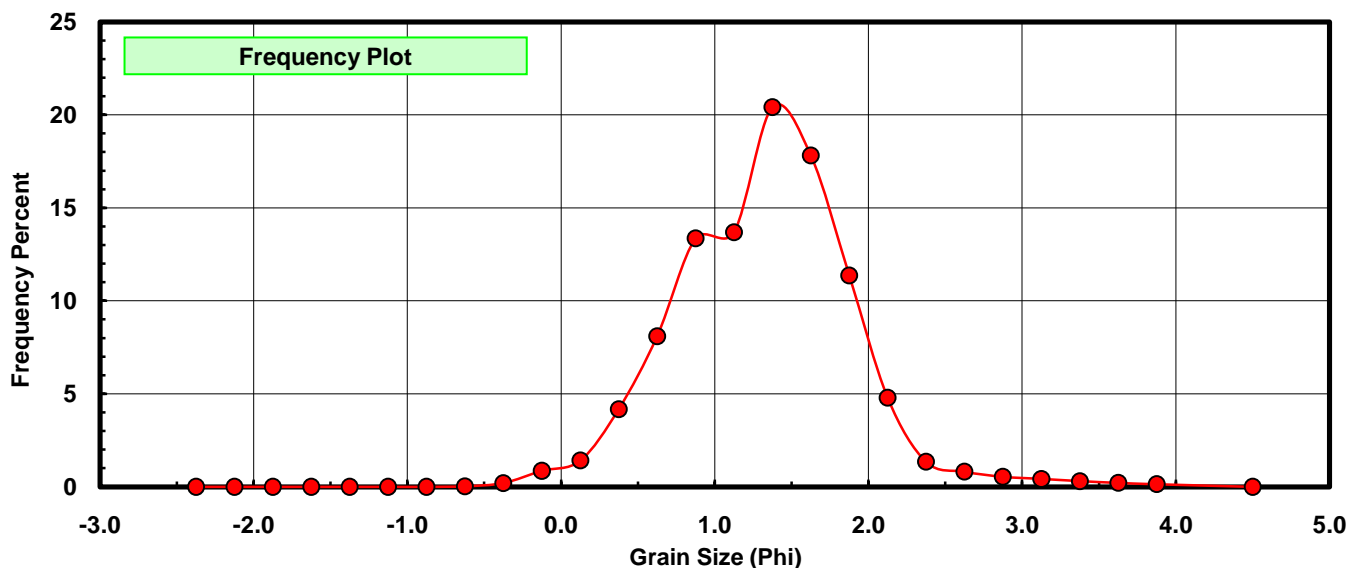
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.006	0.031	0.031
-0.25	-0.375	0.040	0.206	0.237
0.00	-0.125	0.167	0.861	1.099
0.25	0.125	0.274	1.413	2.512
0.50	0.375	0.810	4.178	6.689
0.75	0.625	1.570	8.097	14.787
1.00	0.875	2.590	13.358	28.145
1.25	1.125	2.653	13.683	41.828
1.50	1.375	3.958	20.414	62.241
1.75	1.625	3.454	17.814	80.056
2.00	1.875	2.204	11.367	91.423
2.25	2.125	0.928	4.786	96.209
2.50	2.375	0.261	1.346	97.555
2.75	2.625	0.158	0.815	98.370
3.00	2.875	0.105	0.542	98.912
3.25	3.125	0.083	0.428	99.340
3.50	3.375	0.060	0.309	99.649
3.75	3.625	0.041	0.211	99.861
4.00	3.875	0.027	0.139	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.3276	phi	(0.3984 mm)
Standard Dev:	0.5861	phi-units	(0.6661 mm)
Skewness:	0.3132	dimensionless	
Kurtosis:	4.1782	dimensionless	
5th Moment:	6.3100	dimensionless	
6th Moment:	37.5427	dimensionless	
RARD *	0.4415	dimensionless	
Median	1.2251	phi	(0.4278 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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