

## **Onshore Grab Sample**

**Sample:** SL-17  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 12/16/08  
**Splits?** N/A

**County:** St. Lucie  
**Latitude:** 27° 20' 56.0"  
**Longitude:** 80° 14' 15.7"  
**Datum:** WGS 84  
**Surf. Elev:** 0  
**Datum:** N/A

### **Fine Data Summary**

Total Sample Weight 65.524 grams  
Total Fines in Sample 0.184 grams  
Total Percent Fines 0.28 %

### **Dry Sieving Summary**

Total Sample Weight 65.402 grams  
Total Digested Weight 29.155 grams  
Total Carbonate Weight 36.247 grams  
Total Silica % 44.58 %  
Total Carbonate % 55.42 %  
Carbonate/Silica Ratio 1.243

### **General Comments:**

None

### **Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: SL-17

Total Sample Mass: 65.402 grams

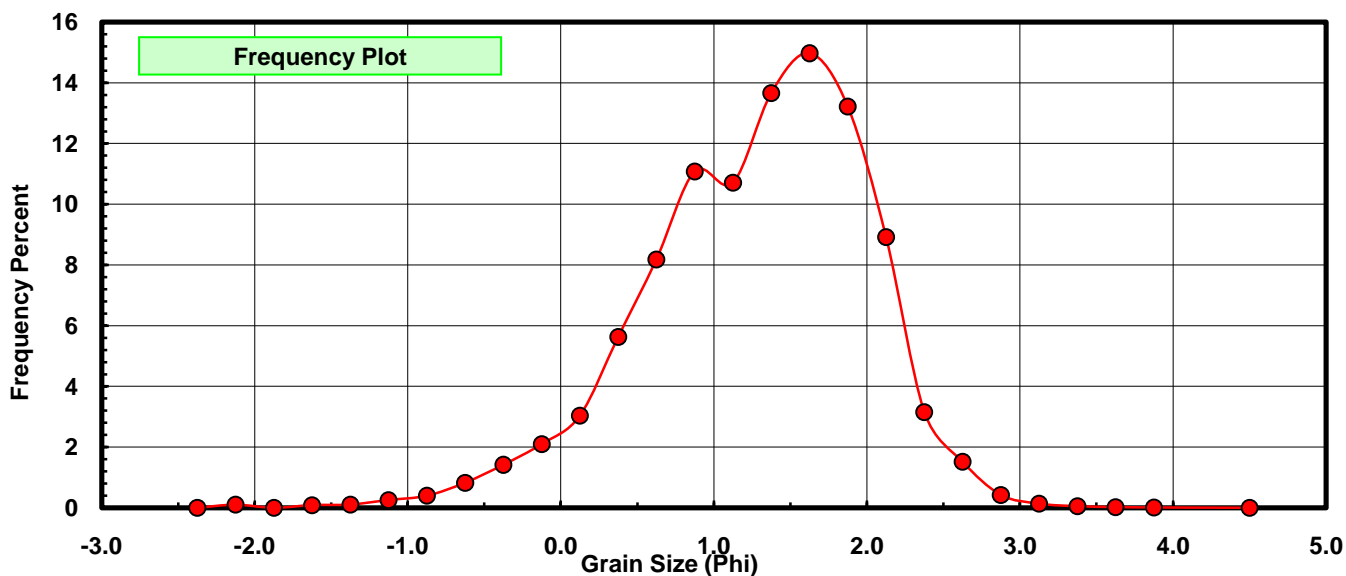
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.066	0.101	0.101
-1.75	-1.875	0.000	0.000	0.101
-1.50	-1.625	0.057	0.087	0.188
-1.25	-1.375	0.070	0.107	0.295
-1.00	-1.125	0.167	0.255	0.550
-0.75	-0.875	0.259	0.396	0.946
-0.50	-0.625	0.540	0.826	1.772
-0.25	-0.375	0.927	1.417	3.190
0.00	-0.125	1.372	2.098	5.287
0.25	0.125	1.986	3.037	8.324
0.50	0.375	3.680	5.627	13.951
0.75	0.625	5.350	8.180	22.131
1.00	0.875	7.246	11.079	33.210
1.25	1.125	7.001	10.705	43.915
1.50	1.375	8.935	13.662	57.576
1.75	1.625	9.792	14.972	72.548
2.00	1.875	8.643	13.215	85.763
2.25	2.125	5.831	8.916	94.679
2.50	2.375	2.064	3.156	97.835
2.75	2.625	0.992	1.517	99.352
3.00	2.875	0.278	0.425	99.777
3.25	3.125	0.089	0.136	99.913
3.50	3.375	0.034	0.052	99.965
3.75	3.625	0.016	0.024	99.989
4.00	3.875	0.007	0.011	100.000
5.00	4.50	0.000	0.000	100.000

Statistical Results			
Mean:	1.2716	phi	(0.4142 mm)
Standard Dev:	0.7315	phi-units	(0.6023 mm)
Skewness:	-0.6228	dimensionless	
Kurtosis:	3.7062	dimensionless	
5th Moment:	-7.0078	dimensionless	
6th Moment:	30.9528	dimensionless	
RARD *	0.5752	dimensionless	
Median	1.2364	phi	(0.4244 mm)

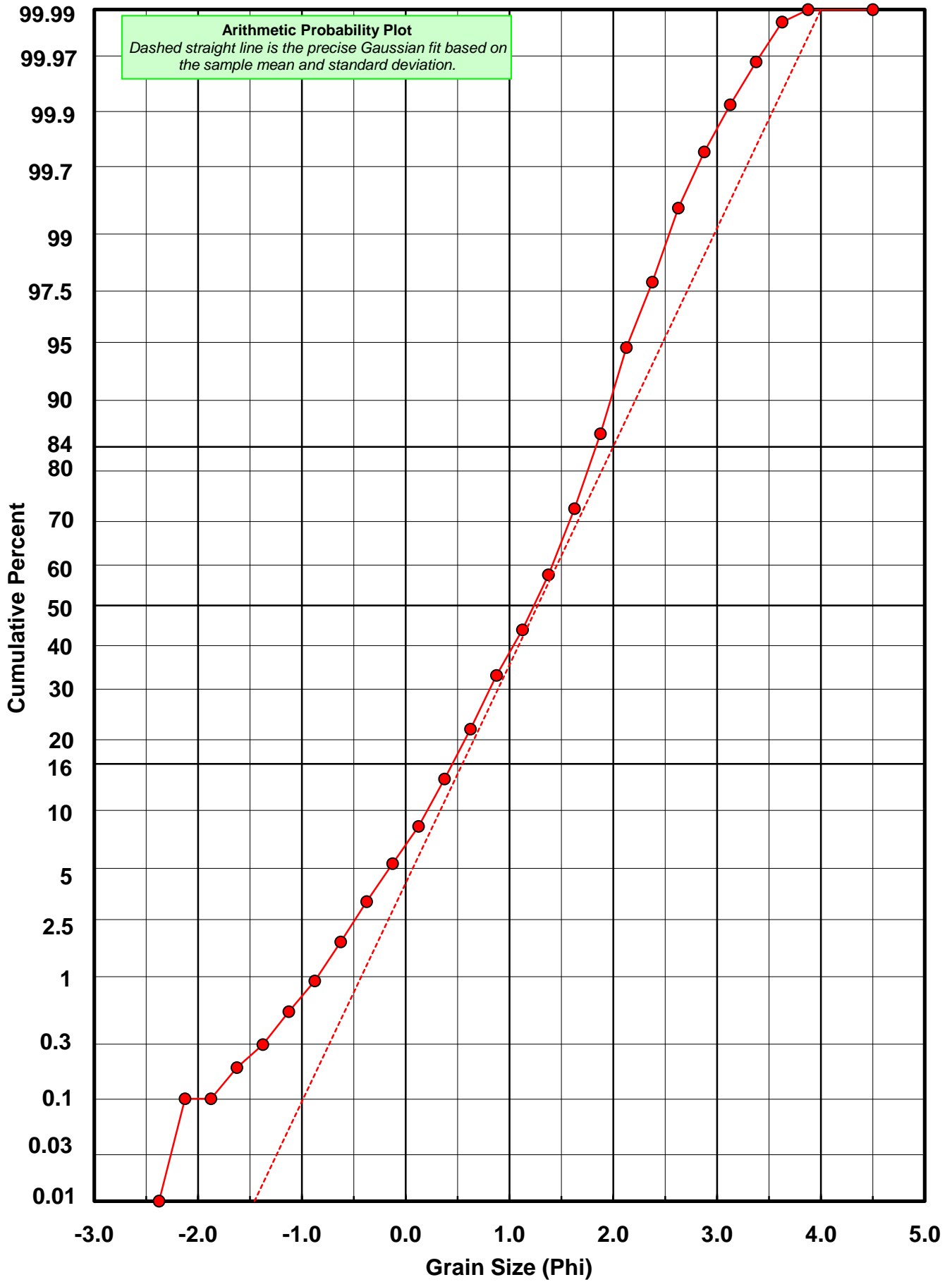
\* RARD = reciprocal absolute relative dispersion (see below)

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-17



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: SL-17

Total Carbonate Mass: 36.284 grams

% Carbonate: 55.4 %

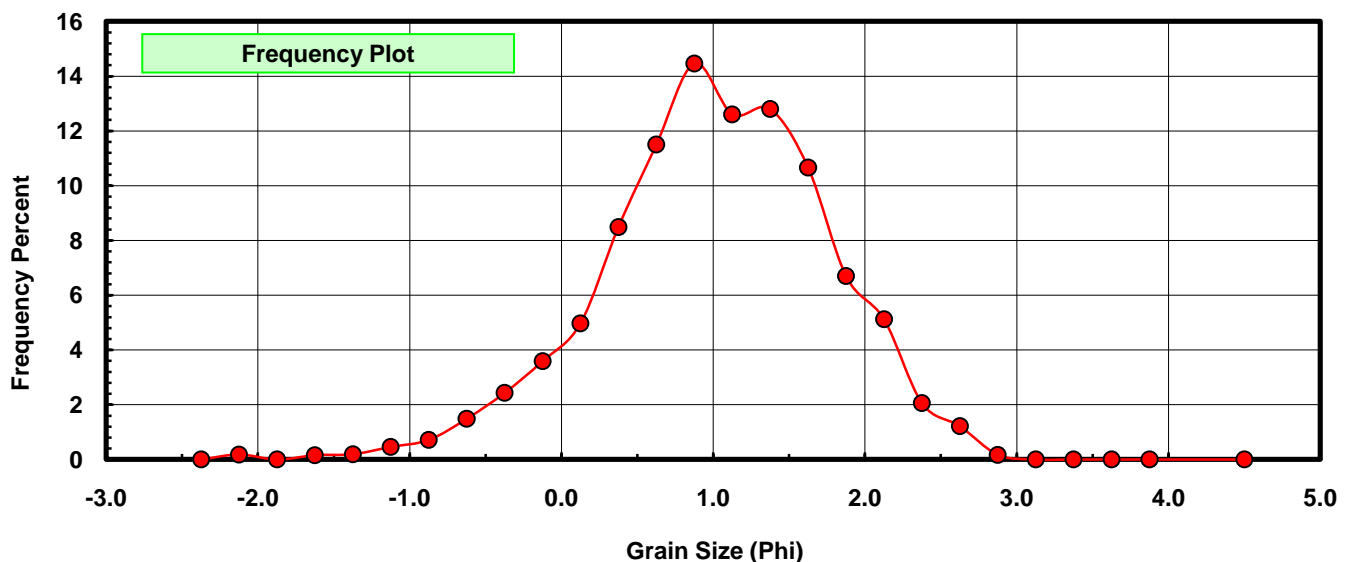
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.066	0.182	0.182
-1.75	-1.875	0.000	0.000	0.182
-1.50	-1.625	0.057	0.157	0.339
-1.25	-1.375	0.070	0.193	0.532
-1.00	-1.125	0.167	0.460	0.992
-0.75	-0.875	0.259	0.714	1.706
-0.50	-0.625	0.540	1.488	3.194
-0.25	-0.375	0.883	2.434	5.628
0.00	-0.125	1.304	3.594	9.222
0.25	0.125	1.805	4.975	14.196
0.50	0.375	3.081	8.491	22.688
0.75	0.625	4.173	11.501	34.189
1.00	0.875	5.248	14.464	48.652
1.25	1.125	4.575	12.609	61.261
1.50	1.375	4.645	12.802	74.063
1.75	1.625	3.868	10.660	84.723
2.00	1.875	2.431	6.700	91.423
2.25	2.125	1.858	5.121	96.544
2.50	2.375	0.749	2.064	98.608
2.75	2.625	0.442	1.218	99.826
3.00	2.875	0.063	0.174	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:	1.0046	phi	(0.4984 mm)
Standard Dev:	0.7594	phi-units	(0.5907 mm)
Skewness:	-0.4209	dimensionless	
Kurtosis:	3.4251	dimensionless	
5th Moment:	-5.0649	dimensionless	
6th Moment:	23.8088	dimensionless	
RARD *	0.7559	dimensionless	
Median	0.9017	phi	(0.5352 mm)

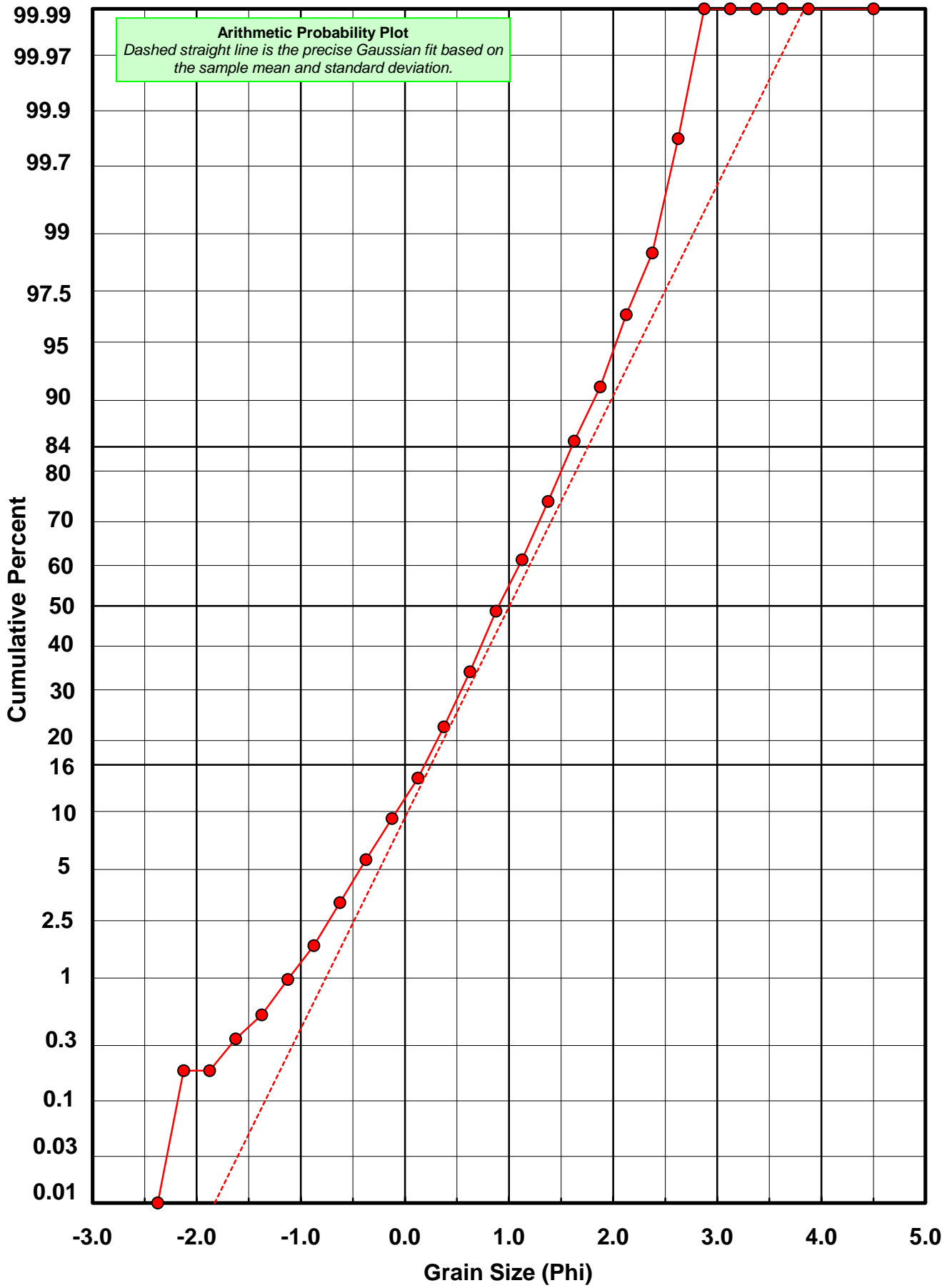
\* RARD = reciprocal absolute relative dispersion (see below)

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-17



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: SL-17

Total Digested Mass: 29.155 grams

% Silica: 44.6 %

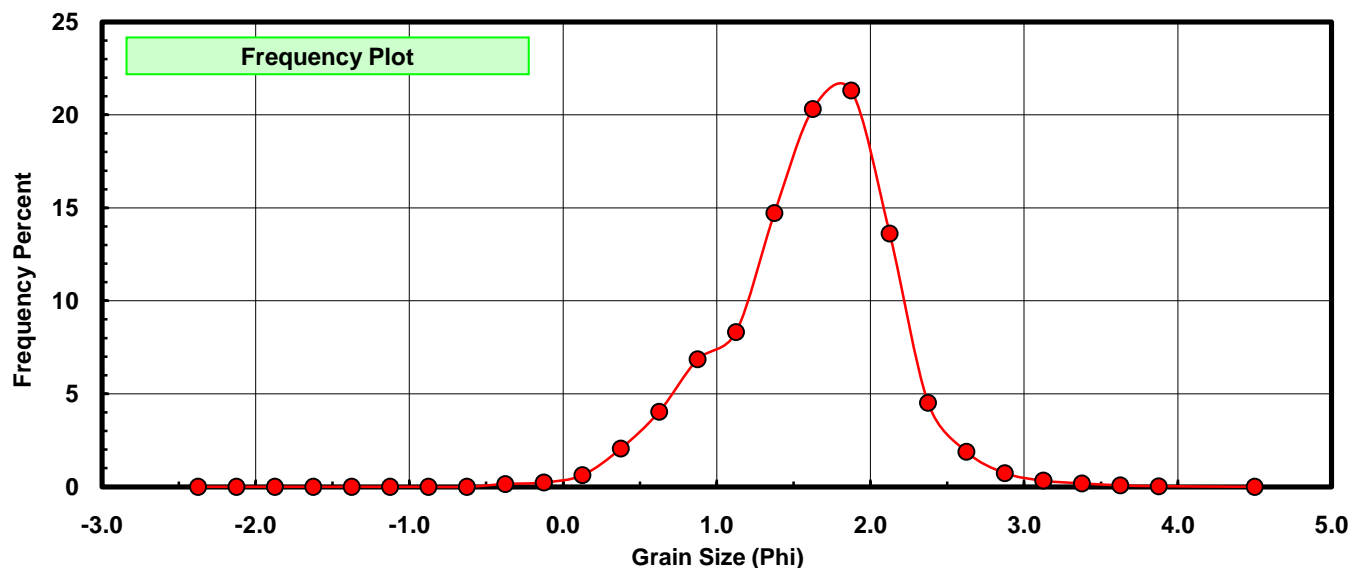
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-0.25	-0.375	0.044	0.151	0.151
0.00	-0.125	0.068	0.233	0.384
0.25	0.125	0.181	0.621	1.005
0.50	0.375	0.599	2.055	3.060
0.75	0.625	1.177	4.037	7.097
1.00	0.875	1.998	6.853	13.950
1.25	1.125	2.426	8.321	22.271
1.50	1.375	4.290	14.714	36.985
1.75	1.625	5.924	20.319	57.304
2.00	1.875	6.212	21.307	78.611
2.25	2.125	3.973	13.627	92.238
2.50	2.375	1.315	4.510	96.748
2.75	2.625	0.550	1.886	98.635
3.00	2.875	0.215	0.737	99.372
3.25	3.125	0.096	0.329	99.702
3.50	3.375	0.054	0.185	99.887
3.75	3.625	0.023	0.079	99.966
4.00	3.875	0.010	0.034	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.6066	phi	(0.3284 mm)
Standard Dev:	0.5470	phi-units	(0.6844 mm)
Skewness:	-0.3021	dimensionless	
Kurtosis:	3.5542	dimensionless	
5th Moment:	-1.4879	dimensionless	
6th Moment:	23.2000	dimensionless	
RARD *	0.3405	dimensionless	
Median	1.5351	phi	(0.345 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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