

## **Onshore Grab Sample**

**Sample:** SL-18  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 12/16/08  
**Splits?** N/A

**County:** St. Lucie  
**Latitude:** 27° 20' 10.3"  
**Longitude:** 80° 13' 57.1"  
**Datum:** WGS 84  
**Surf. Elev:** 0  
**Datum:** N/A

### **Fine Data Summary**

Total Sample Weight 63.91 grams  
Total Fines in Sample 0.260 grams  
Total Percent Fines 0.41 %

### **Dry Sieving Summary**

Total Sample Weight 63.781 grams  
Total Digested Weight 37.386 grams  
Total Carbonate Weight 26.395 grams  
Total Silica % 58.62 %  
Total Carbonate % 41.38 %  
Carbonate/Silica Ratio 0.706

### **General Comments:**

None

### **Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: SL-18

Total Sample Mass: 63.781 grams

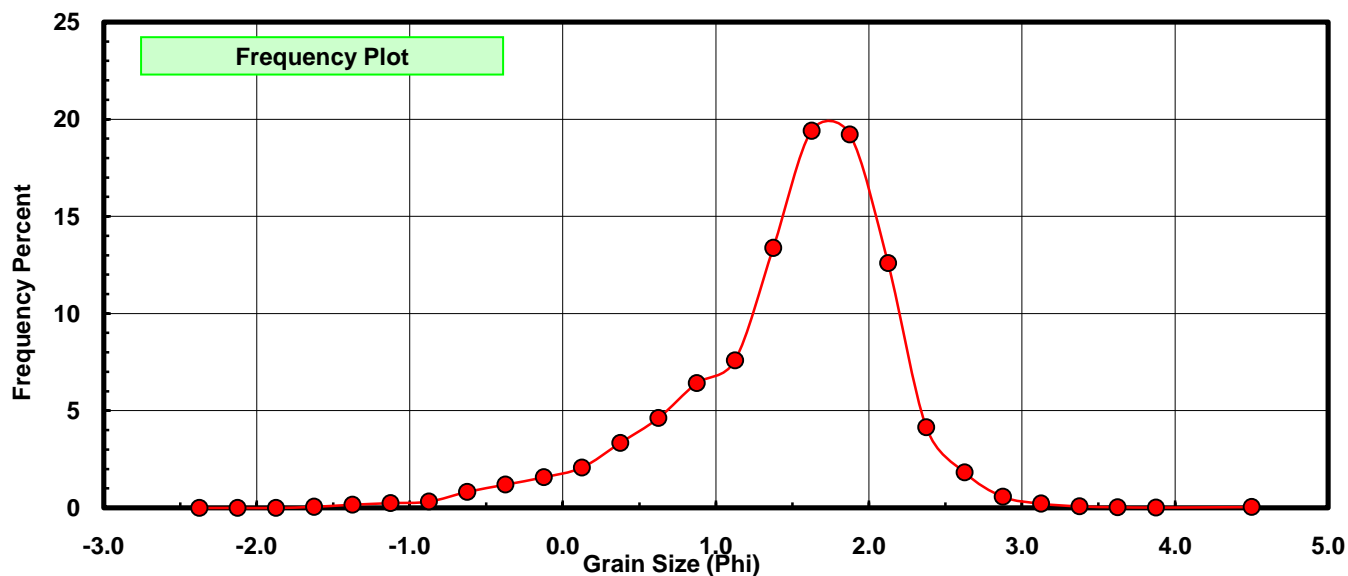
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.036	0.056	0.056
-1.25	-1.375	0.106	0.166	0.223
-1.00	-1.125	0.158	0.248	0.470
-0.75	-0.875	0.206	0.323	0.793
-0.50	-0.625	0.525	0.823	1.616
-0.25	-0.375	0.764	1.198	2.814
0.00	-0.125	1.005	1.576	4.390
0.25	0.125	1.323	2.074	6.464
0.50	0.375	2.132	3.343	9.807
0.75	0.625	2.948	4.622	14.429
1.00	0.875	4.096	6.422	20.851
1.25	1.125	4.845	7.596	28.447
1.50	1.375	8.534	13.380	41.828
1.75	1.625	12.379	19.409	61.236
2.00	1.875	12.261	19.224	80.460
2.25	2.125	8.032	12.593	93.053
2.50	2.375	2.643	4.144	97.197
2.75	2.625	1.164	1.825	99.022
3.00	2.875	0.367	0.575	99.597
3.25	3.125	0.141	0.221	99.818
3.50	3.375	0.051	0.080	99.898
3.75	3.625	0.024	0.038	99.936
4.00	3.875	0.013	0.020	99.956
5.00	4.50	0.028	0.044	100.000

Statistical Results			
Mean:	1.4693	phi	(0.3612 mm)
Standard Dev:	0.7053	phi-units	(0.6133 mm)
Skewness:	-0.9691	dimensionless	
Kurtosis:	4.5482	dimensionless	
5th Moment:	-9.3214	dimensionless	
6th Moment:	40.5493	dimensionless	
RARD *	0.4800	dimensionless	
Median	1.4803	phi	(0.3584 mm)

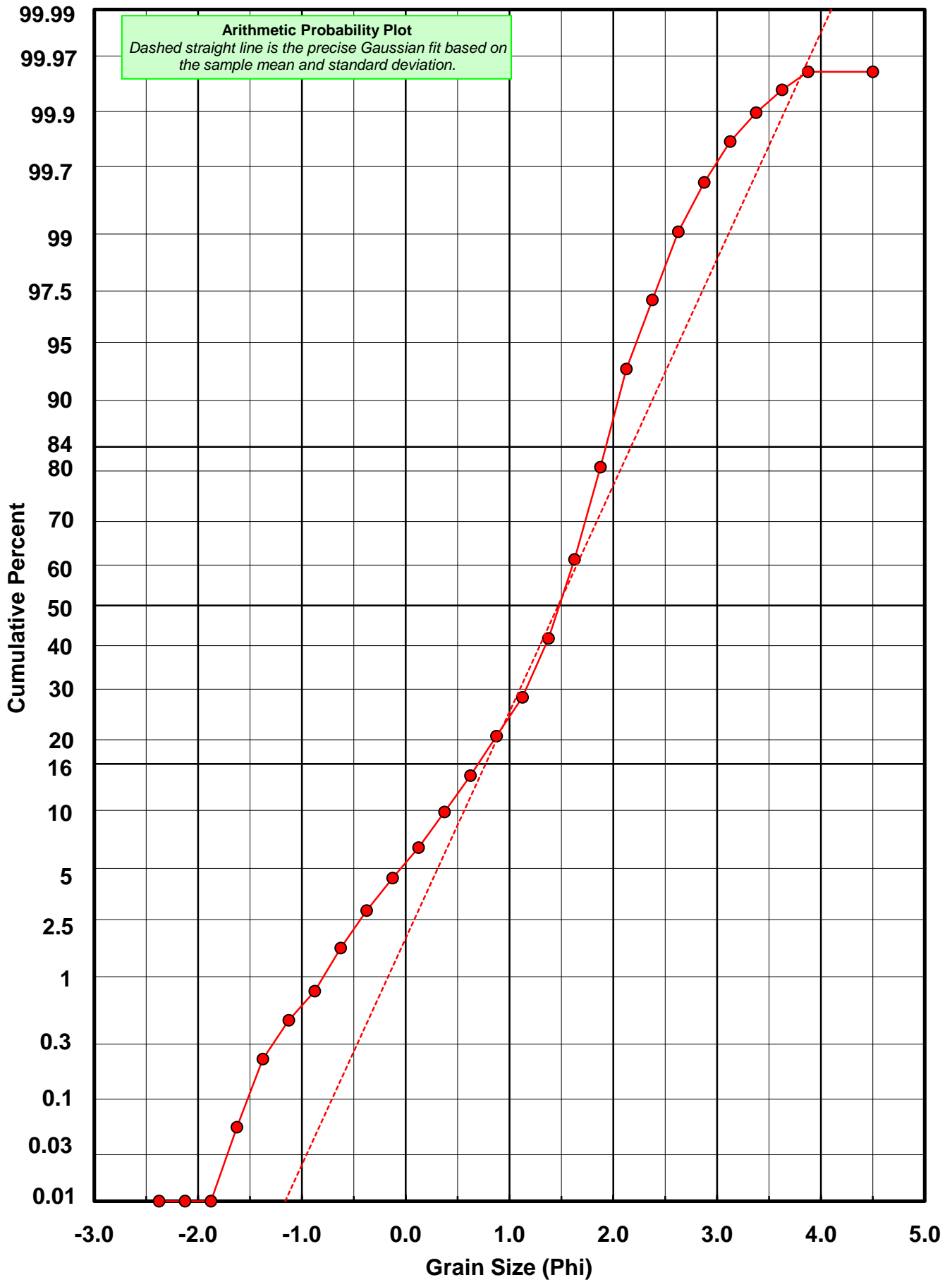
\* RARD = reciprocal absolute relative dispersion (see below)

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-18



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: SL-18

Total Carbonate Mass: 26.395 grams

% Carbonate: 41.4 %

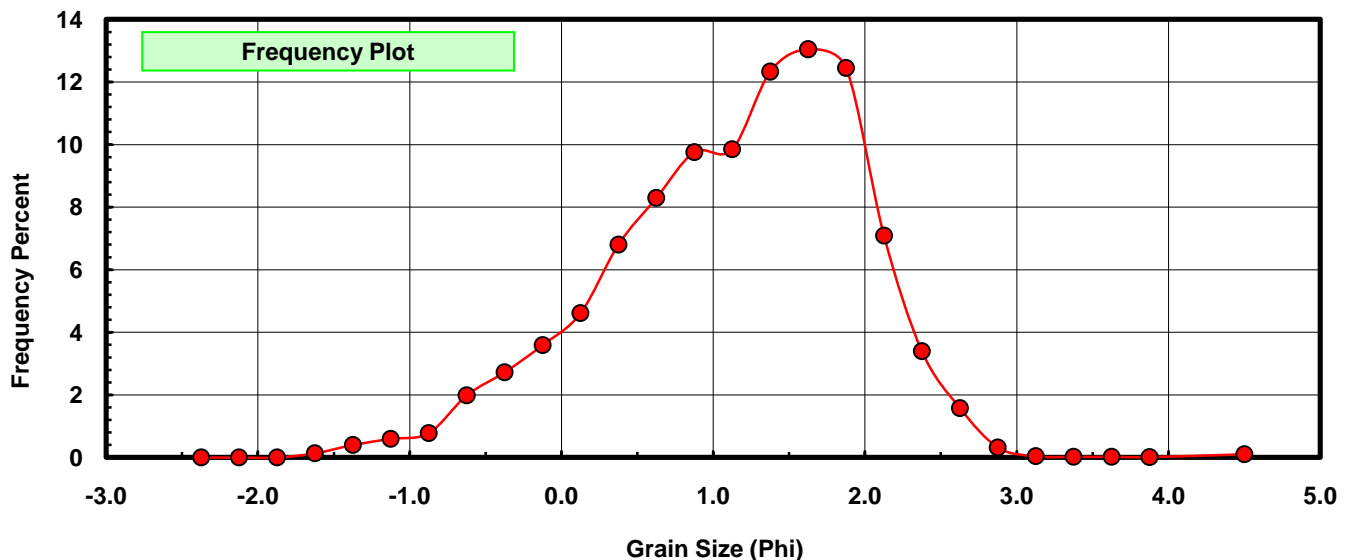
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.036	0.136	0.136
-1.25	-1.375	0.106	0.402	0.538
-1.00	-1.125	0.158	0.599	1.137
-0.75	-0.875	0.206	0.780	1.917
-0.50	-0.625	0.525	1.989	3.906
-0.25	-0.375	0.719	2.724	6.630
0.00	-0.125	0.949	3.595	10.225
0.25	0.125	1.218	4.615	14.840
0.50	0.375	1.797	6.808	21.648
0.75	0.625	2.190	8.297	29.945
1.00	0.875	2.577	9.763	39.708
1.25	1.125	2.600	9.850	49.559
1.50	1.375	3.255	12.332	61.891
1.75	1.625	3.444	13.048	74.938
2.00	1.875	3.287	12.453	87.392
2.25	2.125	1.872	7.092	94.484
2.50	2.375	0.897	3.398	97.882
2.75	2.625	0.418	1.584	99.466
3.00	2.875	0.086	0.326	99.792
3.25	3.125	0.011	0.042	99.833
3.50	3.375	0.006	0.023	99.856
3.75	3.625	0.006	0.023	99.879
4.00	3.875	0.004	0.015	99.894
5.00	4.500	0.028	0.106	100.000

Statistical Results			
Mean:	1.1367	phi	(0.4548 mm)
Standard Dev:	0.8431	phi-units	(0.5574 mm)
Skewness:	-0.4661	dimensionless	
Kurtosis:	3.0666	dimensionless	
5th Moment:	-2.6275	dimensionless	
6th Moment:	18.0567	dimensionless	
RARD *	0.7418	dimensionless	
Median	1.1339	phi	(0.4557 mm)

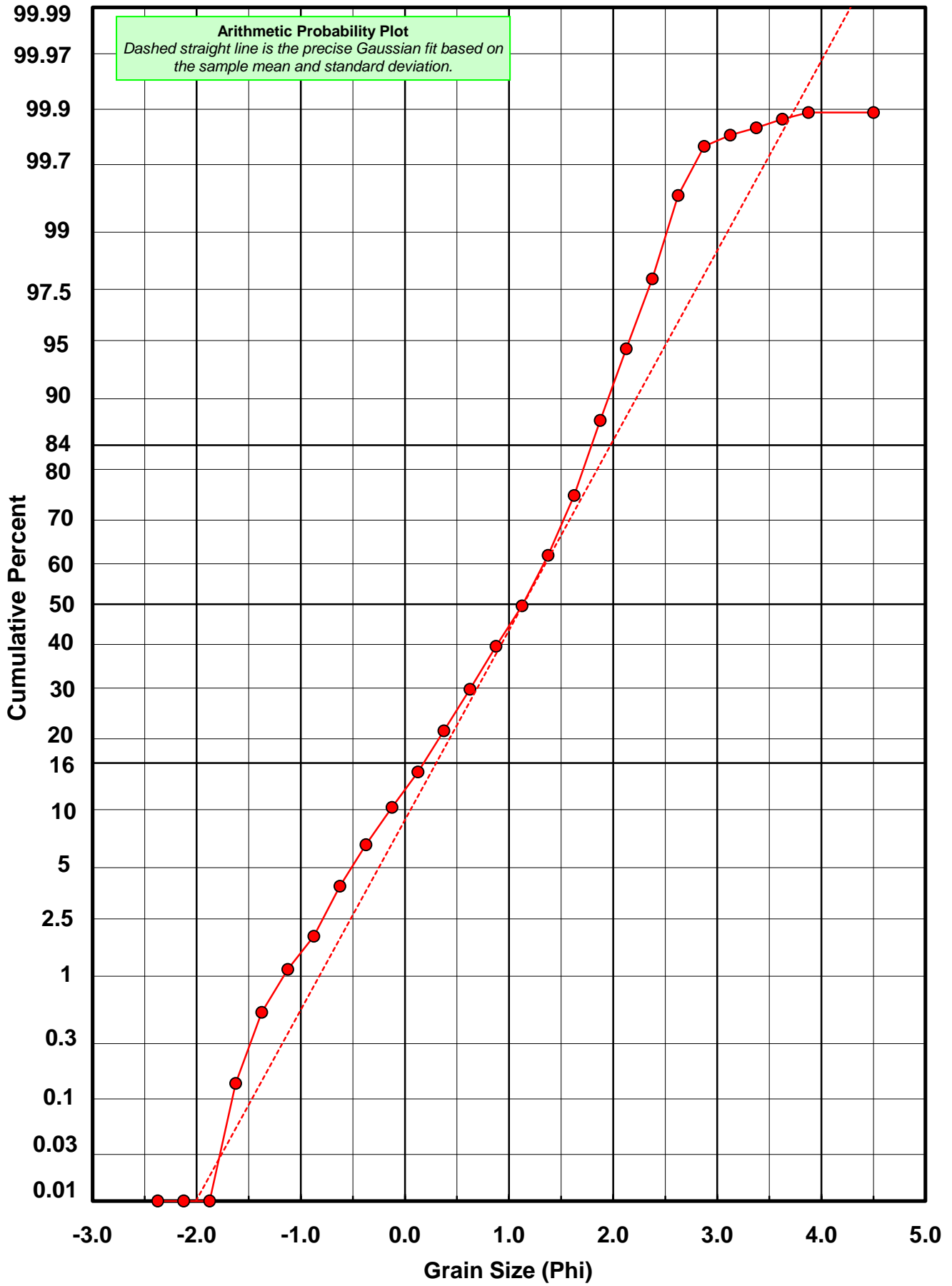
\* RARD = reciprocal absolute relative dispersion (see below)

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
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# SL-18



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: SL-18

Total Digested Mass: 37.386 grams

% Silica: 58.6 %

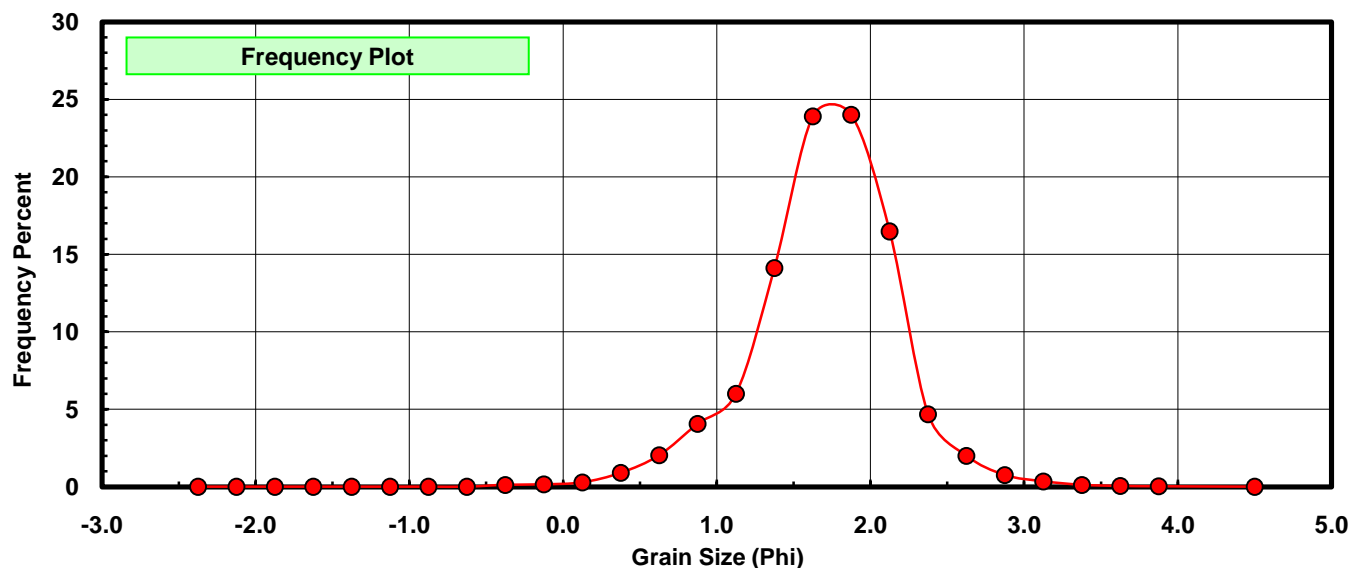
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-0.25	-0.375	0.045	0.120	0.120
0.00	-0.125	0.056	0.150	0.270
0.25	0.125	0.105	0.281	0.551
0.50	0.375	0.335	0.896	1.447
0.75	0.625	0.758	2.027	3.475
1.00	0.875	1.519	4.063	7.538
1.25	1.125	2.245	6.005	13.543
1.50	1.375	5.279	14.120	27.663
1.75	1.625	8.935	23.899	51.562
2.00	1.875	8.974	24.004	75.566
2.25	2.125	6.160	16.477	92.042
2.50	2.375	1.746	4.670	96.713
2.75	2.625	0.746	1.995	98.708
3.00	2.875	0.281	0.752	99.460
3.25	3.125	0.130	0.348	99.807
3.50	3.375	0.045	0.120	99.928
3.75	3.625	0.018	0.048	99.976
4.00	3.875	0.009	0.024	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.7041	phi	(0.3069 mm)
Standard Dev:	0.4746	phi-units	(0.7196 mm)
Skewness:	-0.3922	dimensionless	
Kurtosis:	4.4250	dimensionless	
5th Moment:	-4.0034	dimensionless	
6th Moment:	39.0772	dimensionless	
RARD *	0.2785	dimensionless	
Median	1.6087	phi	(0.3279 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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