

**Onshore Grab Sample**

**Sample:** VO-15-SS  
**Sample Taken By:** J. Ladner  
**Sample Collected On:** 12/3/03  
**Splits?** N/A

**County:** Volusia  
**Latitude:** 29° 14' 53.82"  
**Longitude:** 81° 01' 01.62"  
**Datum:** NAD 83  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 138.287 grams  
Total Fines in Sample 1.213 grams  
Total Percent Fines 0.87 %

**Dry Sieving Summary**

Total Sample Weight 137.019 grams  
Total Digested Weight 132.480 grams  
Total Carbonate Weight 4.539 grams  
Total Silica % 96.69 %  
Total Carbonate % 3.31 %  
Carbonate/Silica Ratio 0.034

**General Comments:**

None

**Description**

Worked By: M. Lachance

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-15-SS

Total Sample Mass: 137.019 grams

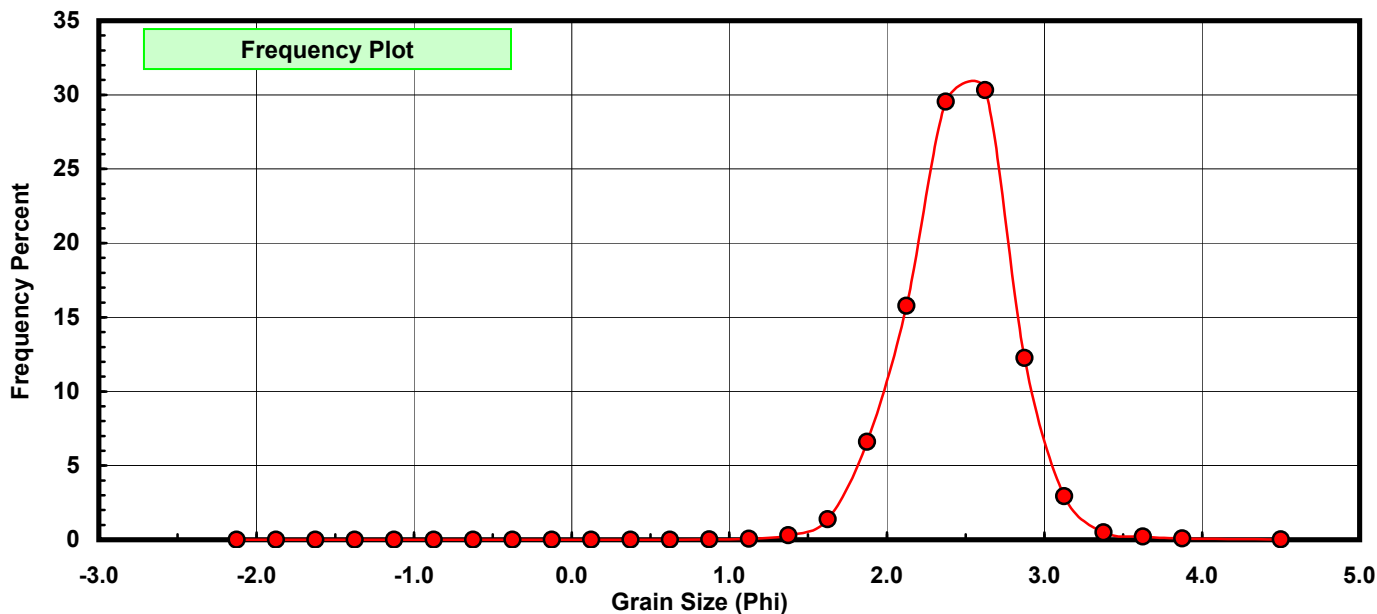
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.008	0.006	0.006
-0.75	-0.875	0.000	0.000	0.006
-0.50	-0.625	0.002	0.001	0.007
-0.25	-0.375	0.002	0.001	0.009
0.00	-0.125	0.001	0.001	0.009
0.25	0.125	0.001	0.001	0.010
0.50	0.375	0.001	0.001	0.011
0.75	0.625	0.001	0.001	0.012
1.00	0.875	0.029	0.021	0.033
1.25	1.125	0.090	0.066	0.099
1.50	1.375	0.411	0.300	0.398
1.75	1.625	1.883	1.374	1.773
2.00	1.875	9.034	6.593	8.366
2.25	2.125	21.601	15.765	24.131
2.50	2.375	40.474	29.539	53.670
2.75	2.625	41.551	30.325	83.995
3.00	2.875	16.797	12.259	96.254
3.25	3.125	4.024	2.937	99.191
3.50	3.375	0.689	0.503	99.693
3.75	3.625	0.293	0.214	99.907
4.00	3.875	0.105	0.077	99.984
5.00	4.500	0.022	0.016	100.000

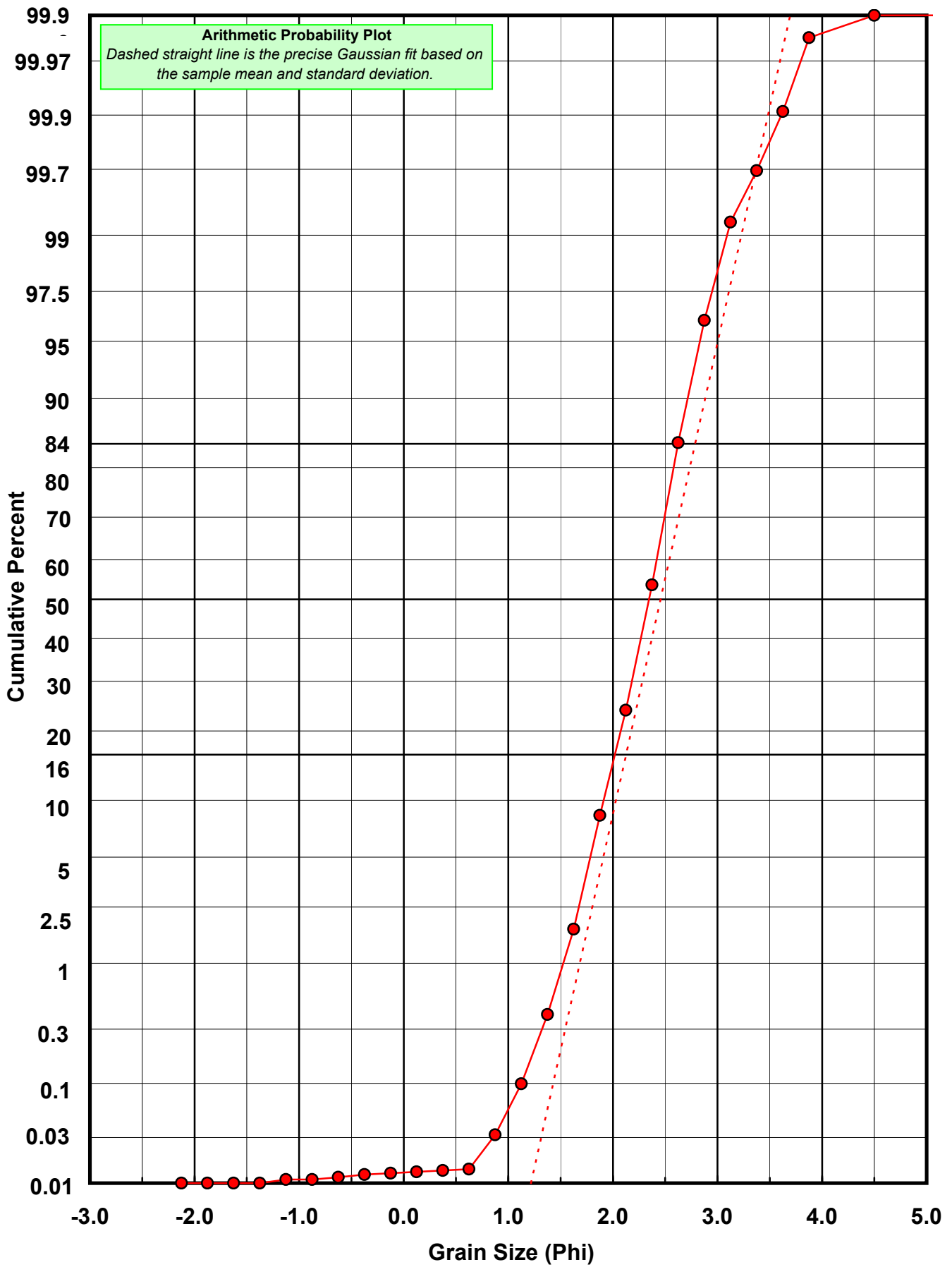
Statistical Results			
Mean:	2.4562	phi	(0.1822 mm)
Standard Dev:	0.3329	phi-units	(0.7939 mm)
Skewness:	-0.1783	dimensionless	
Kurtosis:	4.8775	dimensionless	
5th Moment:	-9.5955	dimensionless	
6th Moment:	145.1537	dimensionless	
RARD *	0.1355	dimensionless	
Median	2.3439	phi	(0.197 mm)

\* 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 Calculation Sheets	
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)





# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: VO-15-SS

Total Carbonate Mass: 10.783 grams

% Carbonate: 3.3 %

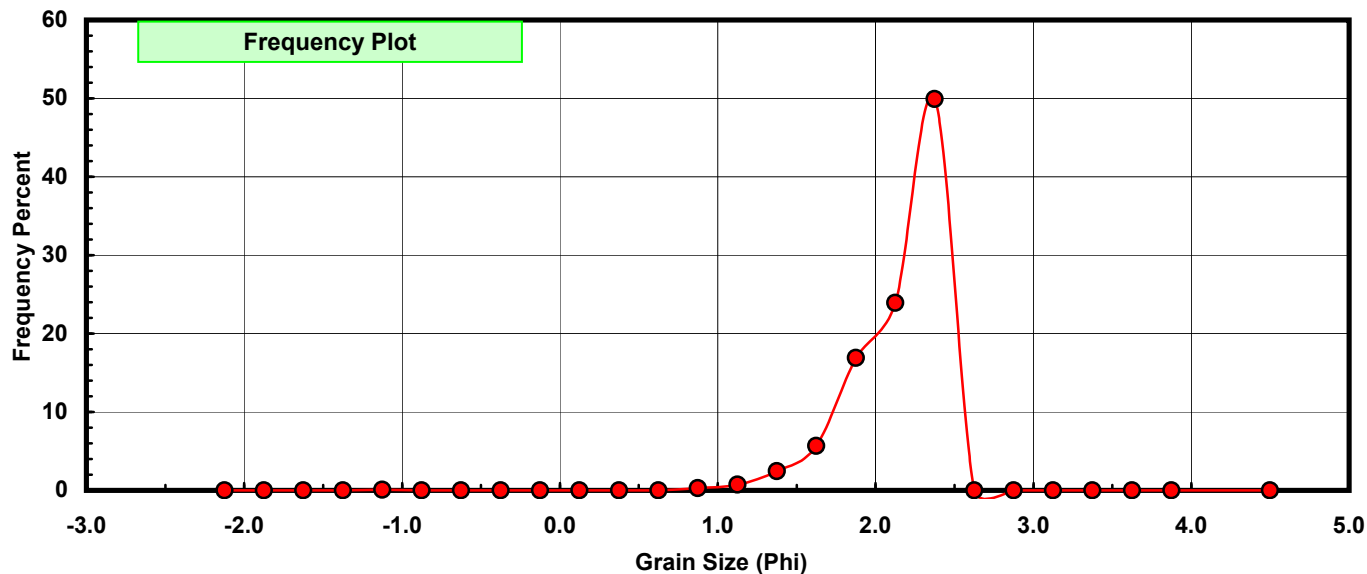
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.008	0.074	0.074
-0.75	-0.875	0.000	0.000	0.074
-0.50	-0.625	0.002	0.019	0.093
-0.25	-0.375	0.002	0.019	0.111
0.00	-0.125	0.001	0.009	0.121
0.25	0.125	0.001	0.009	0.130
0.50	0.375	0.001	0.009	0.139
0.75	0.625	0.001	0.009	0.148
1.00	0.875	0.029	0.269	0.417
1.25	1.125	0.080	0.742	1.159
1.50	1.375	0.263	2.439	3.598
1.75	1.625	0.611	5.666	9.265
2.00	1.875	1.823	16.906	26.171
2.25	2.125	2.580	23.927	50.097
2.50	2.375	5.381	49.903	100.000
2.75	2.625	0.000	0.000	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

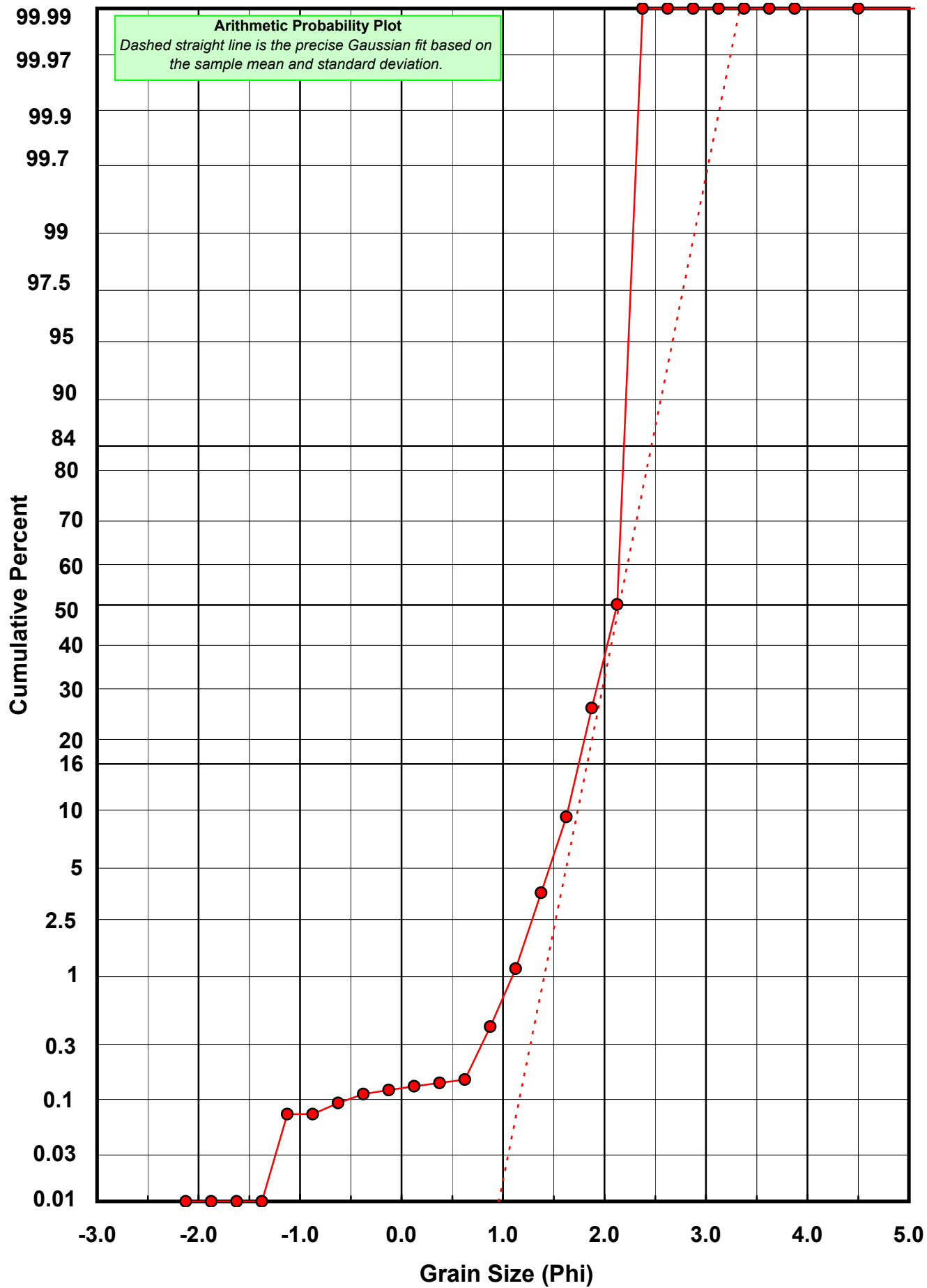
Statistical Results			
Mean:	2.1460	phi	(0.2259 mm)
Standard Dev:	0.3194	phi-units	(0.8014 mm)
Skewness:	-2.2179	dimensionless	
Kurtosis:	14.7160	dimensionless	
5th Moment:	-120.7099	dimensionless	
6th Moment:	1131.1822	dimensionless	
RARD *	0.1488	dimensionless	
Median	2.1240	phi	(0.2294 mm)

\* 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 Calculation Sheets	
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)





# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-15-SS

Total Digested Mass: 132.459 grams

% Silica: 96.7 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-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	0.000	0.000	0.000
0.25	0.125	0.000	0.000	0.000
0.50	0.375	0.000	0.000	0.000
0.75	0.625	0.000	0.000	0.000
1.00	0.875	0.000	0.000	0.000
1.25	1.125	0.010	0.008	0.008
1.50	1.375	0.148	0.112	0.119
1.75	1.625	1.272	0.960	1.080
2.00	1.875	7.211	5.444	6.524
2.25	2.125	19.021	14.360	20.883
2.50	2.375	35.093	26.493	47.377
2.75	2.625	41.734	31.507	78.884
3.00	2.875	21.724	16.401	95.285
3.25	3.125	4.967	3.750	99.034
3.50	3.375	0.809	0.611	99.645
3.75	3.625	0.339	0.256	99.901
4.00	3.875	0.131	0.099	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	2.5032	phi	(0.1764 mm)
Standard Dev:	0.3282	phi-units	(0.7965 mm)
Skewness:	-0.0538	dimensionless	
Kurtosis:	3.4011	dimensionless	
5th Moment:	0.8505	dimensionless	
6th Moment:	22.5401	dimensionless	
RARD *	0.1311	dimensionless	
Median	2.3958	phi	(0.19 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 Calculation Sheets
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)

