

**Onshore Grab Sample**

**Sample:** VO-20-SS  
**Sample Taken By:** J. Ladner  
**Sample Collected On:** 12/3/03  
**Splits?** N/A

**County:** Volusia  
**Latitude:** 29° 11' 20.10"  
**Longitude:** 80° 59' 16.68"  
**Datum:** NAD 83  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 84.591 grams  
Total Fines in Sample 0.963 grams  
Total Percent Fines 1.13 %

**Dry Sieving Summary**

Total Sample Weight 83.573 grams  
Total Digested Weight 81.762 grams  
Total Carbonate Weight 1.811 grams  
Total Silica % 97.83 %  
Total Carbonate % 2.17 %  
Carbonate/Silica Ratio 0.022

**General Comments:**

None

**Description**

Worked By: M. Lachance

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-20-SS

Total Sample Mass: 83.573 grams

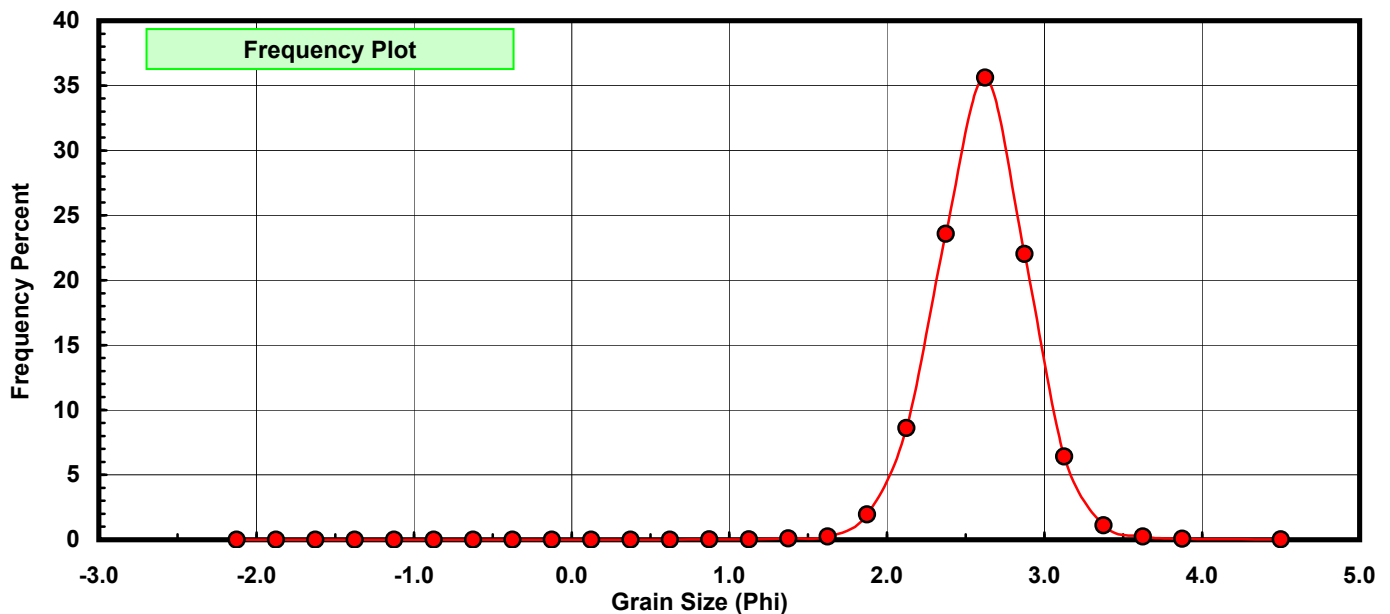
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-0.25	-0.375	0.001	0.001	0.001
0.00	-0.125	0.001	0.001	0.002
0.25	0.125	0.001	0.001	0.004
0.50	0.375	0.001	0.001	0.005
0.75	0.625	0.001	0.001	0.006
1.00	0.875	0.013	0.016	0.022
1.25	1.125	0.025	0.030	0.051
1.50	1.375	0.073	0.087	0.139
1.75	1.625	0.205	0.245	0.384
2.00	1.875	1.623	1.942	2.326
2.25	2.125	7.192	8.606	10.932
2.50	2.375	19.713	23.588	34.520
2.75	2.625	29.760	35.610	70.129
3.00	2.875	18.402	22.019	92.148
3.25	3.125	5.357	6.410	98.558
3.50	3.375	0.936	1.120	99.678
3.75	3.625	0.198	0.237	99.915
4.00	3.875	0.057	0.068	99.983
5.00	4.500	0.014	0.017	100.000

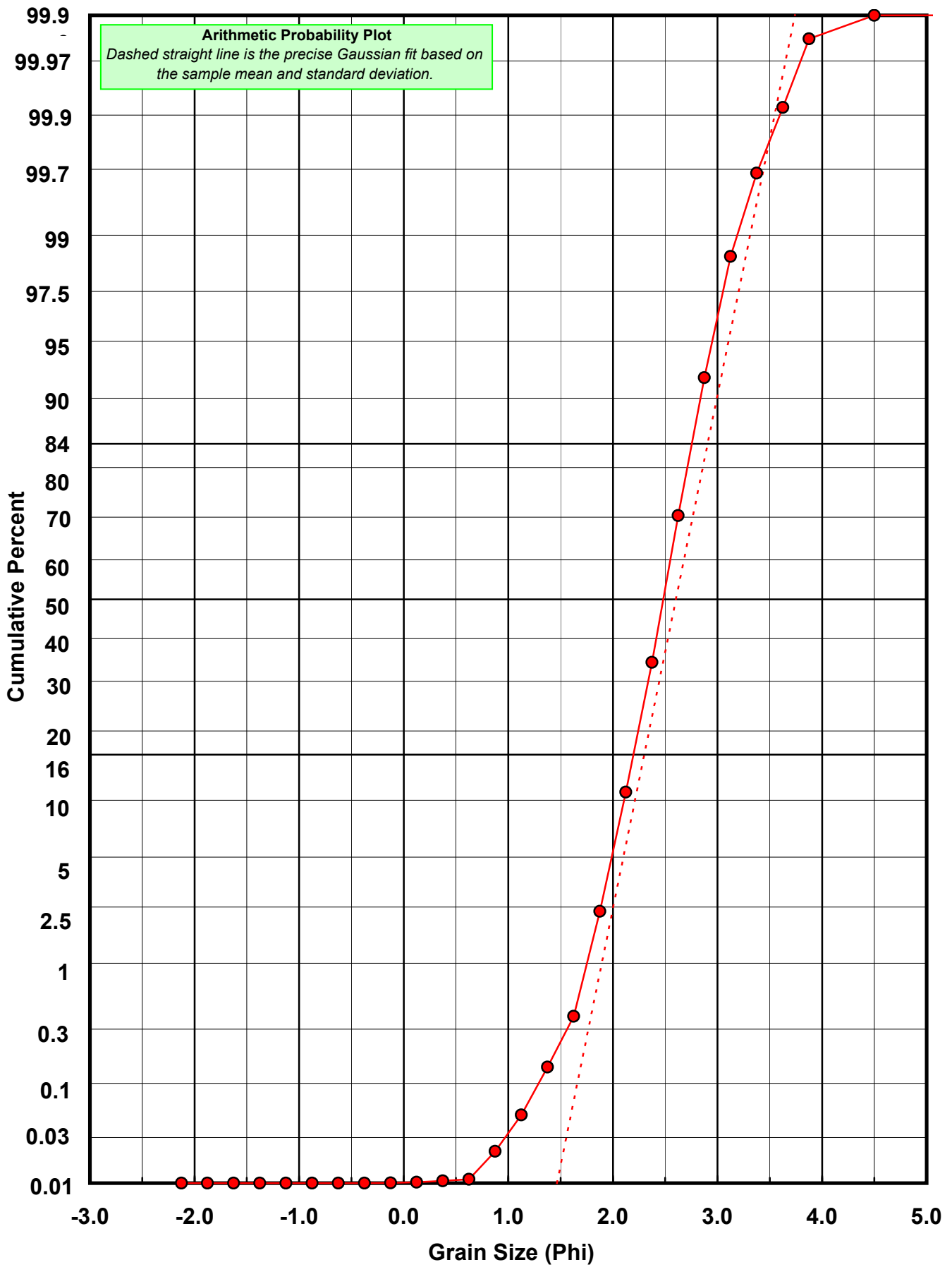
Statistical Results			
Mean:	2.6031	phi	(0.1646 mm)
Standard Dev:	0.3054	phi-units	(0.8092 mm)
Skewness:	-0.0912	dimensionless	
Kurtosis:	4.2631	dimensionless	
5th Moment:	-2.7619	dimensionless	
6th Moment:	64.5254	dimensionless	
RARD *	0.1173	dimensionless	
Median	2.4837	phi	(0.1788 mm)

\* 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-20-SS

Total Carbonate Mass: 2.398 grams

% Carbonate: 2.2 %

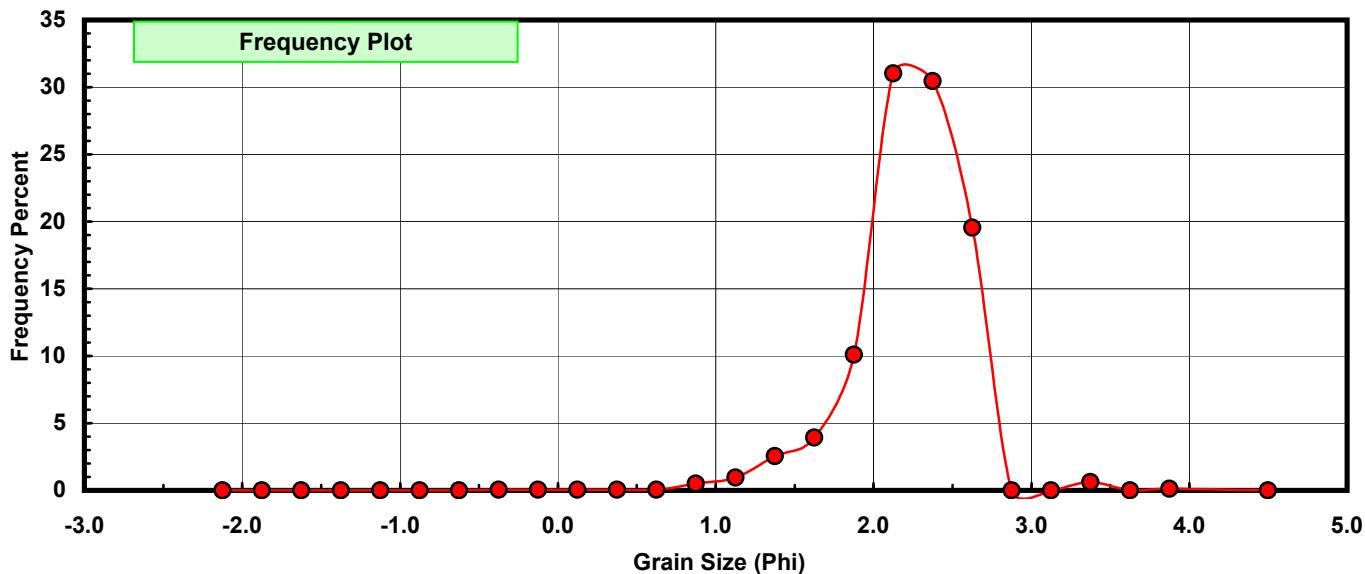
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-0.25	-0.375	0.001	0.042	0.042
0.00	-0.125	0.001	0.042	0.083
0.25	0.125	0.001	0.042	0.125
0.50	0.375	0.001	0.042	0.167
0.75	0.625	0.001	0.042	0.209
1.00	0.875	0.012	0.500	0.709
1.25	1.125	0.023	0.959	1.668
1.50	1.375	0.061	2.544	4.212
1.75	1.625	0.094	3.920	8.132
2.00	1.875	0.242	10.092	18.224
2.25	2.125	0.744	31.026	49.249
2.50	2.375	0.730	30.442	79.691
2.75	2.625	0.469	19.558	99.249
3.00	2.875	0.000	0.000	99.249
3.25	3.125	0.000	0.000	99.249
3.50	3.375	0.015	0.626	99.875
3.75	3.625	0.000	0.000	99.875
4.00	3.875	0.003	0.125	100.000
5.00	4.500	0.000	0.000	100.000

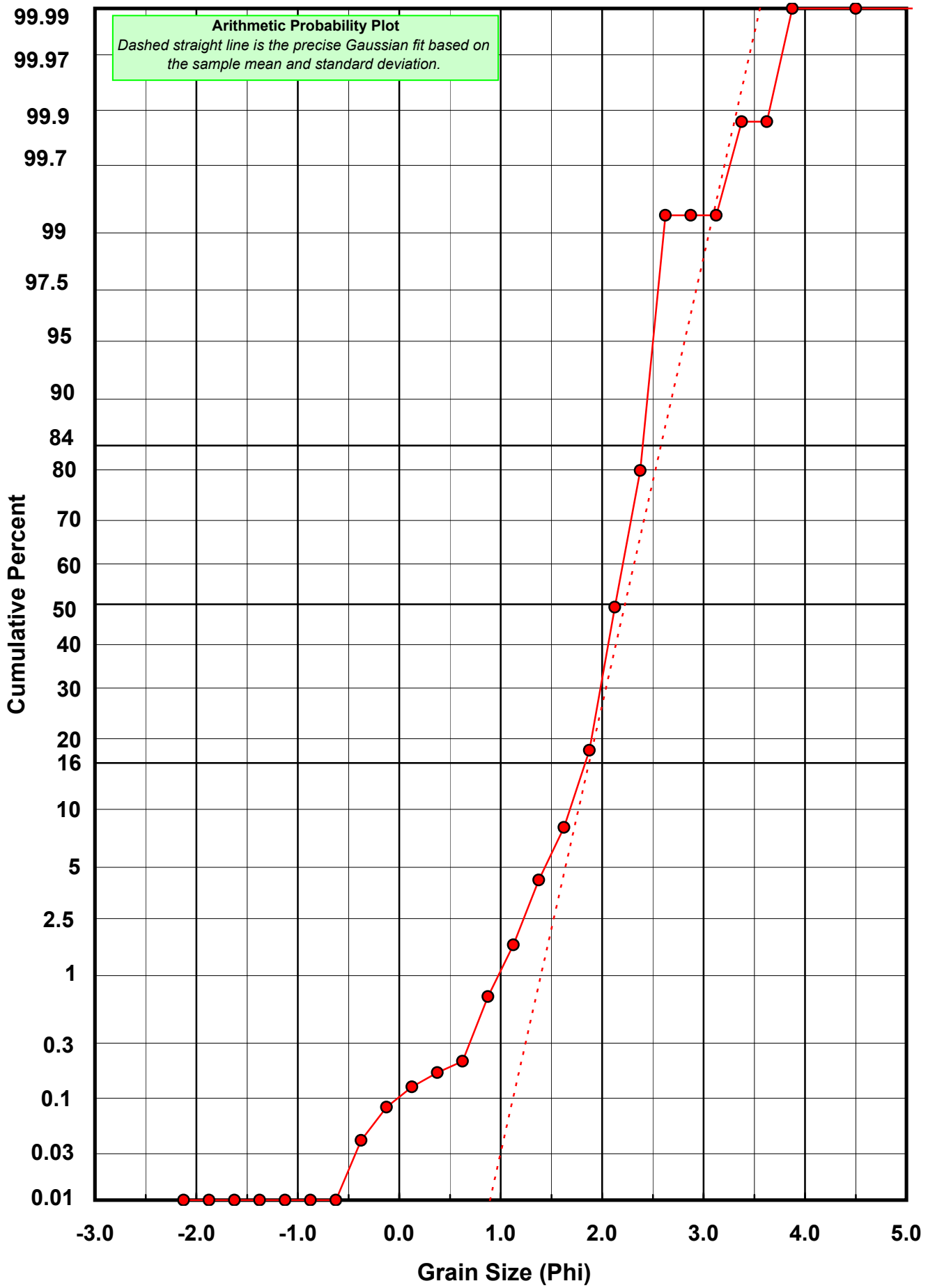
Statistical Results			
Mean:	2.2250	phi	(0.2139 mm)
Standard Dev:	0.3577	phi-units	(0.7804 mm)
Skewness:	-1.0065	dimensionless	
Kurtosis:	7.5392	dimensionless	
5th Moment:	-22.6587	dimensionless	
6th Moment:	170.8448	dimensionless	
RARD *	0.1608	dimensionless	
Median	2.1312	phi	(0.2283 mm)

\* 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-20-SS

Total Digested Mass: 81.746 grams

% Silica: 97.8 %

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	0.001	0.001	0.001
1.25	1.125	0.002	0.002	0.004
1.50	1.375	0.012	0.015	0.018
1.75	1.625	0.111	0.136	0.154
2.00	1.875	1.381	1.689	1.844
2.25	2.125	6.448	7.888	9.731
2.50	2.375	18.983	23.222	32.953
2.75	2.625	29.291	35.832	68.785
3.00	2.875	18.924	23.150	91.935
3.25	3.125	5.419	6.629	98.564
3.50	3.375	0.921	1.127	99.691
3.75	3.625	0.199	0.243	99.934
4.00	3.875	0.054	0.066	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	2.6160	phi	(0.1631 mm)
Standard Dev:	0.2954	phi-units	(0.8149 mm)
Skewness:	0.0122	dimensionless	
Kurtosis:	3.4268	dimensionless	
5th Moment:	0.7622	dimensionless	
6th Moment:	22.7986	dimensionless	
RARD *	0.1129	dimensionless	
Median	2.4939	phi	(0.1775 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)

