

**Onshore Grab Sample**

**Sample:** VO-23-SS  
**Sample Taken By:** J. Ladner  
**Sample Collected On:** 12/3/03  
**Splits?** N/A

**County:** Volusia  
**Latitude:** 29° 09' 6.06"  
**Longitude:** 80° 58' 5.70"  
**Datum:** NAD 83  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight	92.573 grams
Total Fines in Sample	1.069 grams
Total Percent Fines	1.14 %

**Dry Sieving Summary**

Total Sample Weight	91.491 grams
Total Digested Weight	88.988 grams
Total Carbonate Weight	2.503 grams
Total Silica %	97.26 %
Total Carbonate %	2.74 %
Carbonate/Silica Ratio	0.028

**General Comments:**

None

**Description**

Worked By: M. Lachance

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-23-SS

Total Sample Mass: 91.491 grams

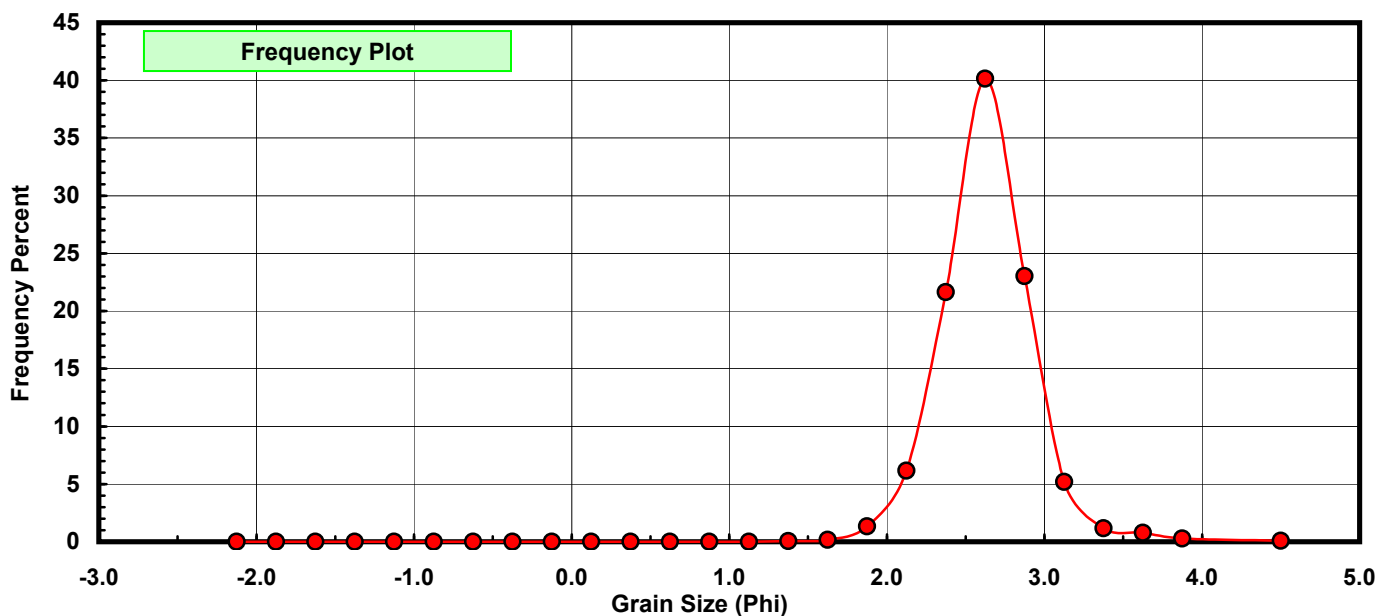
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-0.25	-0.375	0.000	0.000	0.000
0.00	-0.125	0.000	0.000	0.000
0.25	0.125	0.001	0.001	0.001
0.50	0.375	0.000	0.000	0.001
0.75	0.625	0.000	0.000	0.001
1.00	0.875	0.003	0.003	0.004
1.25	1.125	0.010	0.011	0.015
1.50	1.375	0.043	0.047	0.062
1.75	1.625	0.162	0.177	0.239
2.00	1.875	1.207	1.319	1.559
2.25	2.125	5.633	6.157	7.716
2.50	2.375	19.794	21.635	29.350
2.75	2.625	36.723	40.138	69.489
3.00	2.875	21.076	23.036	92.525
3.25	3.125	4.738	5.179	97.704
3.50	3.375	1.060	1.159	98.862
3.75	3.625	0.710	0.776	99.638
4.00	3.875	0.248	0.271	99.909
5.00	4.500	0.083	0.091	100.000

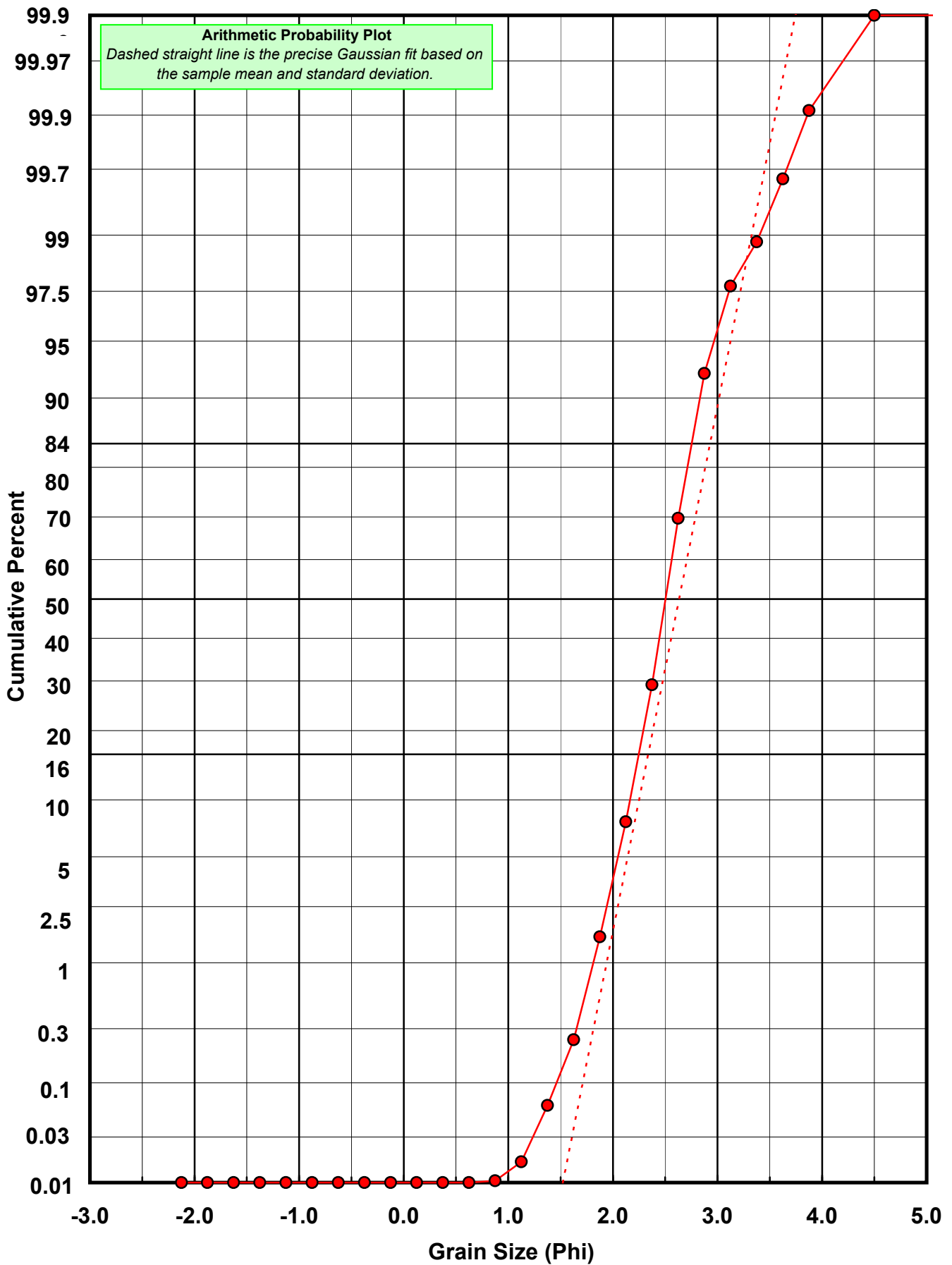
Statistical Results			
Mean:	2.6326	phi	(0.1612 mm)
Standard Dev:	0.2987	phi-units	(0.813 mm)
Skewness:	0.4524	dimensionless	
Kurtosis:	5.8519	dimensionless	
5th Moment:	12.3208	dimensionless	
6th Moment:	100.8823	dimensionless	
RARD *	0.1135	dimensionless	
Median	2.5036	phi	(0.1763 mm)

\* 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-23-SS

Total Carbonate Mass: 3.003 grams

% Carbonate: 2.7 %

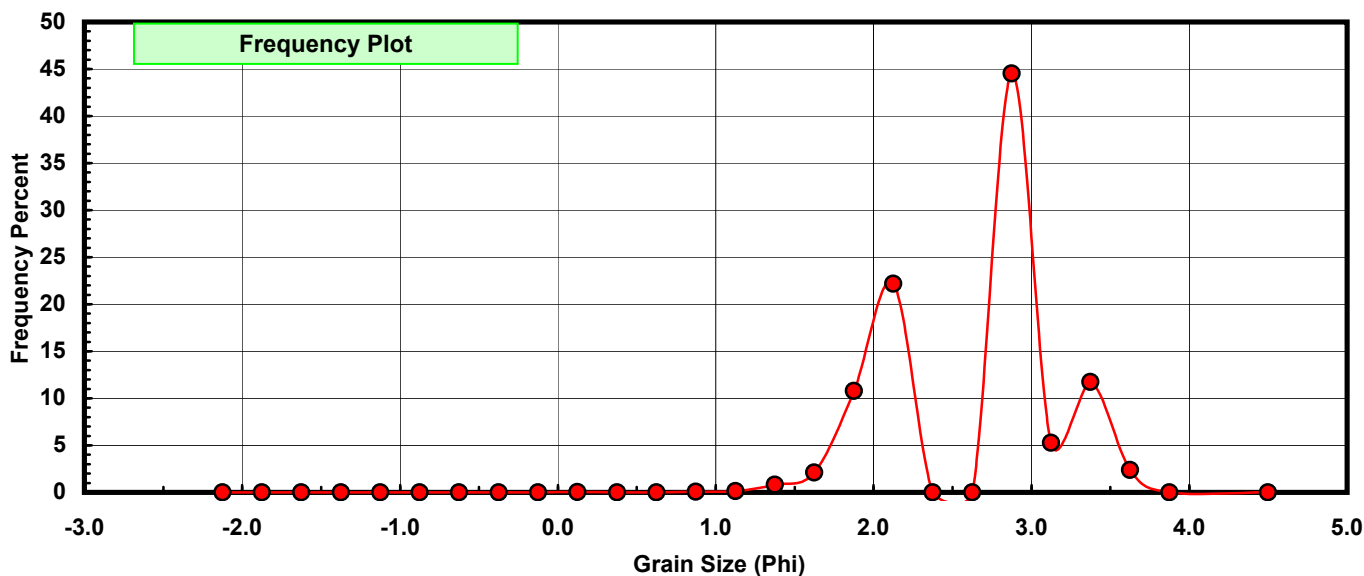
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-0.25	-0.375	0.000	0.000	0.000
0.00	-0.125	0.000	0.000	0.000
0.25	0.125	0.001	0.033	0.033
0.50	0.375	0.000	0.000	0.033
0.75	0.625	0.000	0.000	0.033
1.00	0.875	0.002	0.067	0.100
1.25	1.125	0.004	0.133	0.233
1.50	1.375	0.025	0.833	1.066
1.75	1.625	0.063	2.098	3.164
2.00	1.875	0.324	10.789	13.953
2.25	2.125	0.666	22.178	36.131
2.50	2.375	0.000	0.000	36.131
2.75	2.625	0.000	0.000	36.131
3.00	2.875	1.337	44.522	80.653
3.25	3.125	0.158	5.261	85.914
3.50	3.375	0.352	11.722	97.636
3.75	3.625	0.071	2.364	100.000
4.00	3.875	0.000	0.000	100.000
5.00	4.500	0.000	0.000	100.000

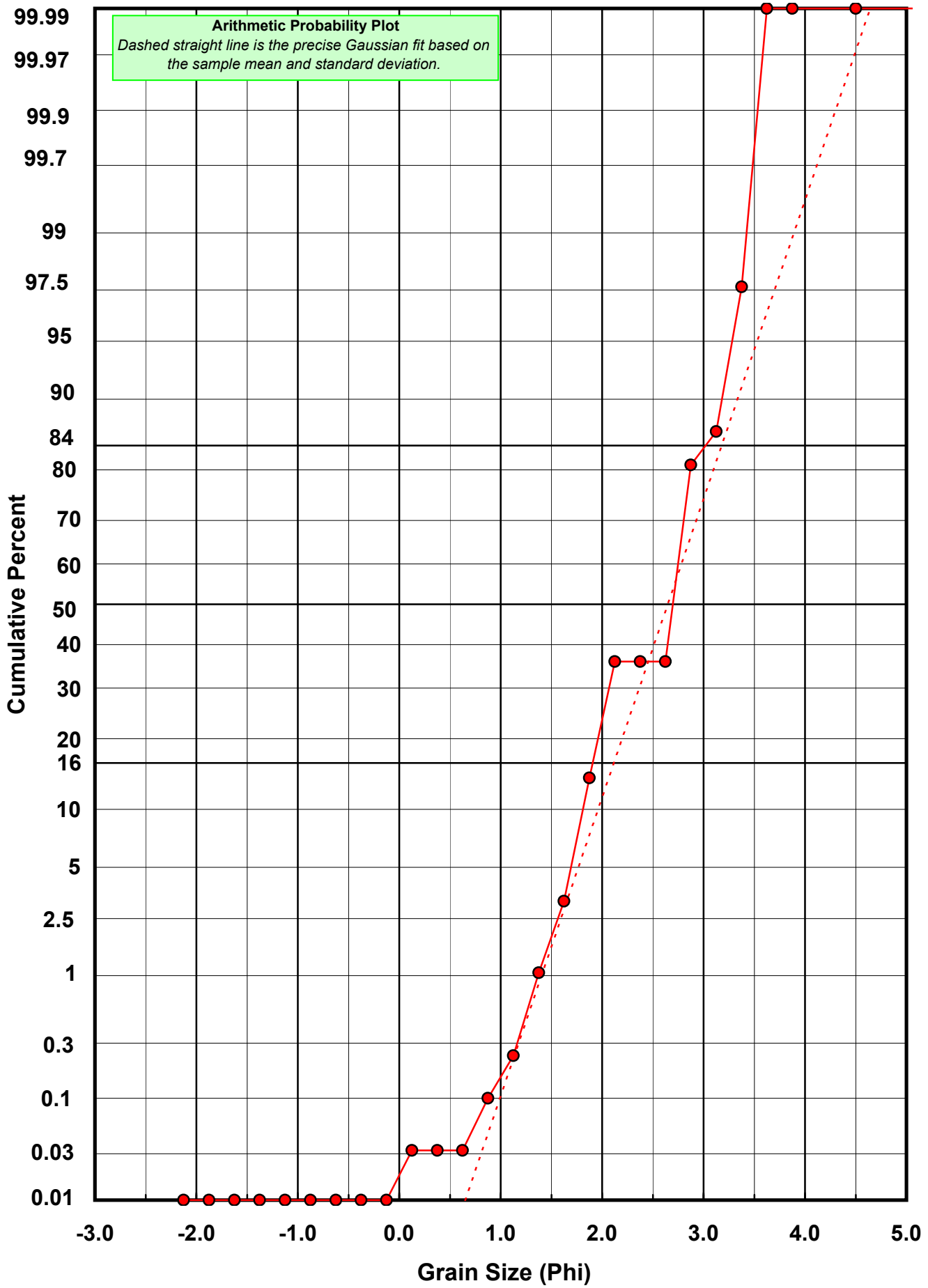
Statistical Results			
Mean:	2.6470	phi	(0.1597 mm)
Standard Dev:	0.5360	phi-units	(0.6897 mm)
Skewness:	-0.3641	dimensionless	
Kurtosis:	2.2430	dimensionless	
5th Moment:	-2.2386	dimensionless	
6th Moment:	10.4638	dimensionless	
RARD *	0.2025	dimensionless	
Median	2.7029	phi	(0.1536 mm)

\* 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-23-SS

Total Digested Mass: 88.915 grams

% Silica: 97.3 %

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	0.000	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	0.006	0.007	0.008
1.50	1.375	0.018	0.020	0.028
1.75	1.625	0.099	0.111	0.139
2.00	1.875	0.883	0.993	1.133
2.25	2.125	4.967	5.586	6.719
2.50	2.375	20.199	22.717	29.436
2.75	2.625	36.821	41.411	70.847
3.00	2.875	19.739	22.200	93.047
3.25	3.125	4.580	5.151	98.198
3.50	3.375	0.708	0.796	98.995
3.75	3.625	0.639	0.719	99.713
4.00	3.875	0.255	0.287	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	2.6293	phi	(0.1616 mm)
Standard Dev:	0.2813	phi-units	(0.8228 mm)
Skewness:	0.3870	dimensionless	
Kurtosis:	4.8793	dimensionless	
5th Moment:	7.0298	dimensionless	
6th Moment:	52.5466	dimensionless	
RARD *	0.1070	dimensionless	
Median	2.4991	phi	(0.1769 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)

