

**Onshore Grab Sample**

**Sample:** VO-02-BB  
**Sample Taken By:** J. Ladner  
**Sample Collected On:** 12/3/03  
**Splits?** N/A

**County:** Volusia  
**Latitude:** 29° 24' 17.88"  
**Longitude:** 81° 05' 31.92"  
**Datum:** NAD 83  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 79.612 grams  
Total Fines in Sample 0.233 grams  
Total Percent Fines 0.29 %

**Dry Sieving Summary**

Total Sample Weight 79.332 grams  
Total Digested Weight 62.862 grams  
Total Carbonate Weight 16.470 grams  
Total Silica % 79.24 %  
Total Carbonate % 20.76 %  
Carbonate/Silica Ratio 0.262

**General Comments:**

None

**Description**

Worked By: M. Lachance

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-02-BB

Total Sample Mass: 79.332 grams

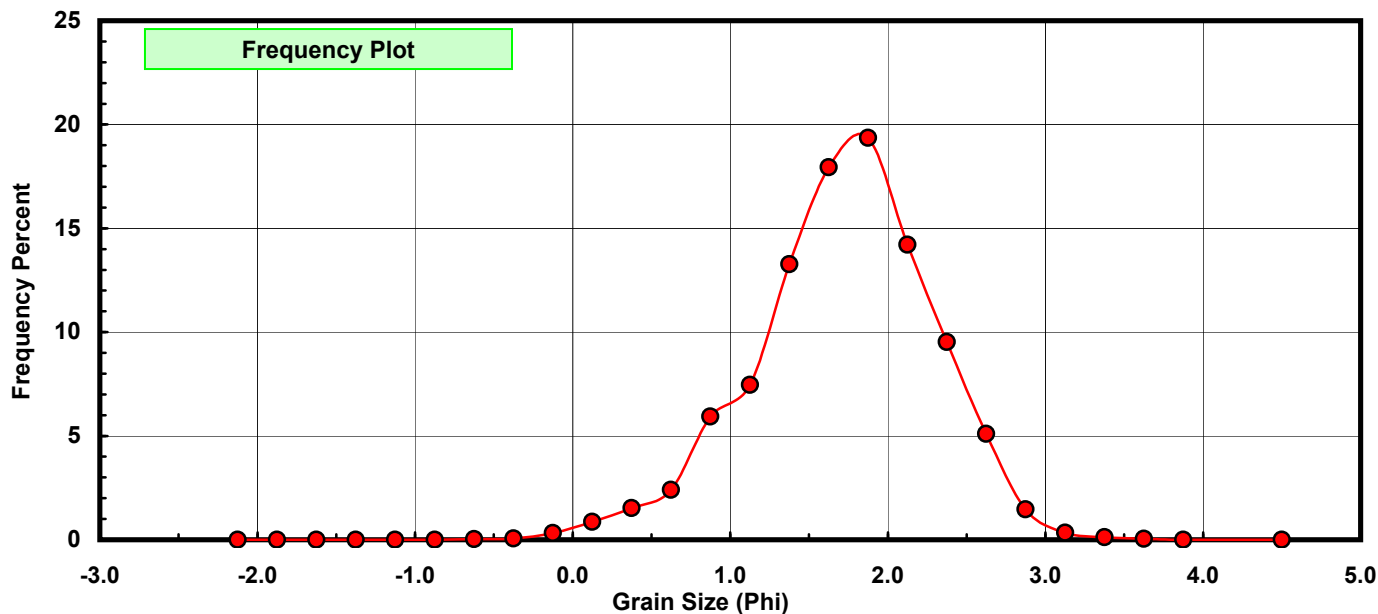
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.024	0.030	0.030
-0.25	-0.375	0.053	0.067	0.097
0.00	-0.125	0.260	0.328	0.425
0.25	0.125	0.688	0.867	1.292
0.50	0.375	1.216	1.533	2.825
0.75	0.625	1.903	2.399	5.224
1.00	0.875	4.710	5.937	11.161
1.25	1.125	5.919	7.461	18.622
1.50	1.375	10.523	13.265	31.886
1.75	1.625	14.234	17.942	49.829
2.00	1.875	15.358	19.359	69.188
2.25	2.125	11.269	14.205	83.393
2.50	2.375	7.559	9.528	92.921
2.75	2.625	4.047	5.101	98.022
3.00	2.875	1.159	1.461	99.483
3.25	3.125	0.272	0.343	99.826
3.50	3.375	0.093	0.117	99.943
3.75	3.625	0.036	0.045	99.989
4.00	3.875	0.006	0.008	99.996
5.00	4.500	0.003	0.004	100.000

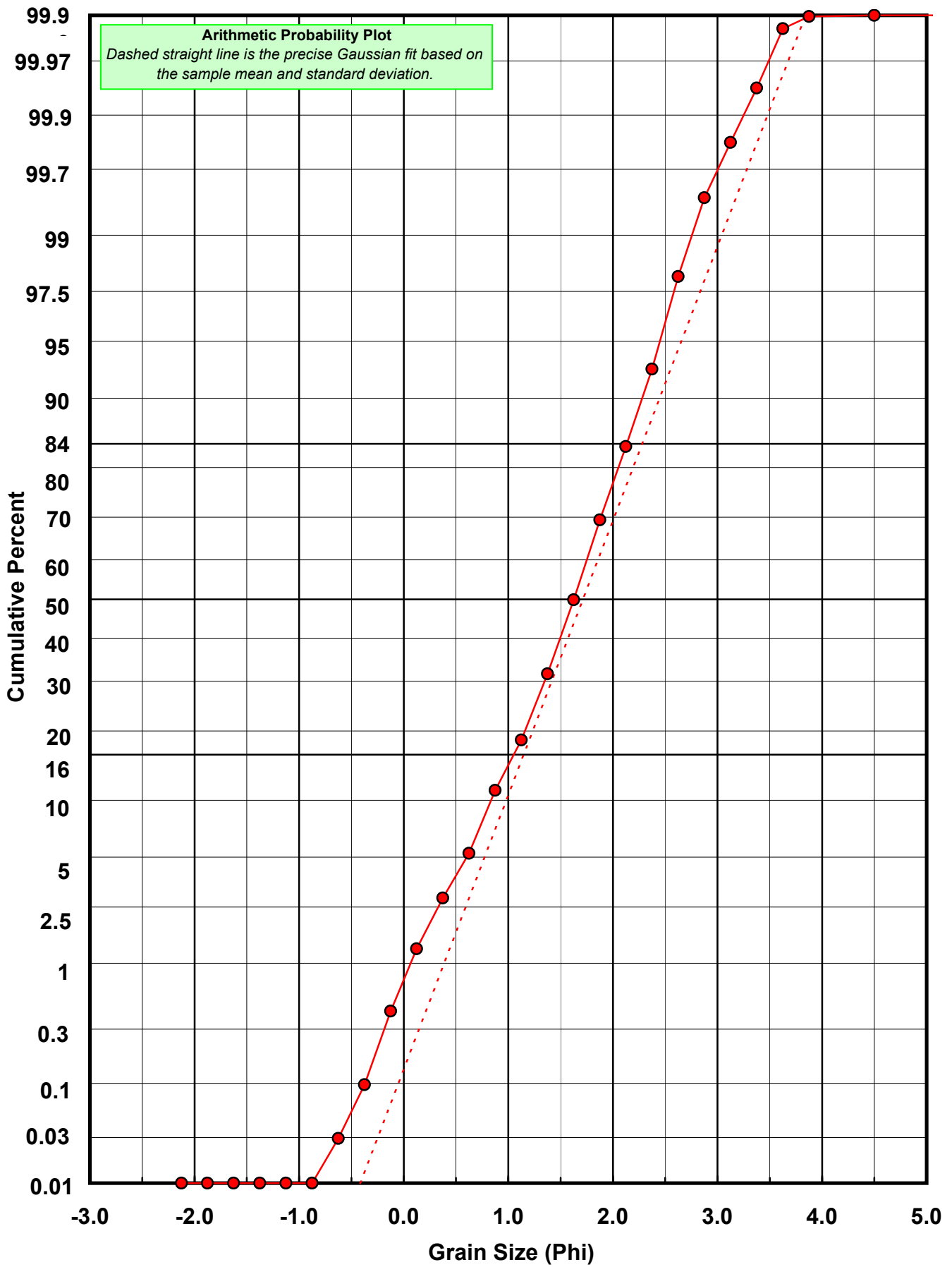
Statistical Results			
Mean:	1.7146	phi	(0.3047 mm)
Standard Dev:	0.5718	phi-units	(0.6728 mm)
Skewness:	-0.3779	dimensionless	
Kurtosis:	3.3575	dimensionless	
5th Moment:	-3.4281	dimensionless	
6th Moment:	20.2013	dimensionless	
RARD *	0.3335	dimensionless	
Median	1.6272	phi	(0.3237 mm)

\* 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-02-BB

Total Carbonate Mass: 16.468 grams

% Carbonate: 20.8 %

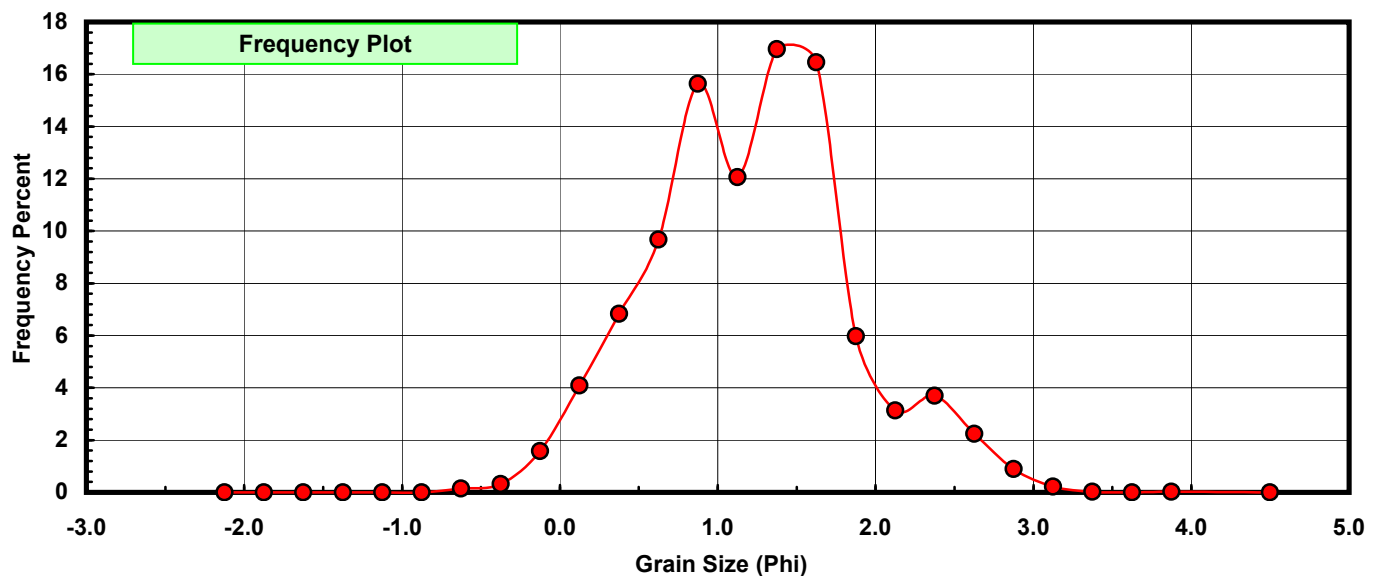
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.024	0.146	0.146
-0.25	-0.375	0.053	0.322	0.468
0.00	-0.125	0.260	1.579	2.046
0.25	0.125	0.674	4.093	6.139
0.50	0.375	1.126	6.838	12.977
0.75	0.625	1.594	9.679	22.656
1.00	0.875	2.575	15.636	38.292
1.25	1.125	1.987	12.066	50.358
1.50	1.375	2.793	16.960	67.318
1.75	1.625	2.711	16.462	83.781
2.00	1.875	0.985	5.981	89.762
2.25	2.125	0.516	3.133	92.895
2.50	2.375	0.609	3.698	96.593
2.75	2.625	0.369	2.241	98.834
3.00	2.875	0.147	0.893	99.727
3.25	3.125	0.036	0.219	99.945
3.50	3.375	0.004	0.024	99.970
3.75	3.625	0.000	0.000	99.970
4.00	3.875	0.005	0.030	100.000
5.00	4.500	0.000	0.000	100.000

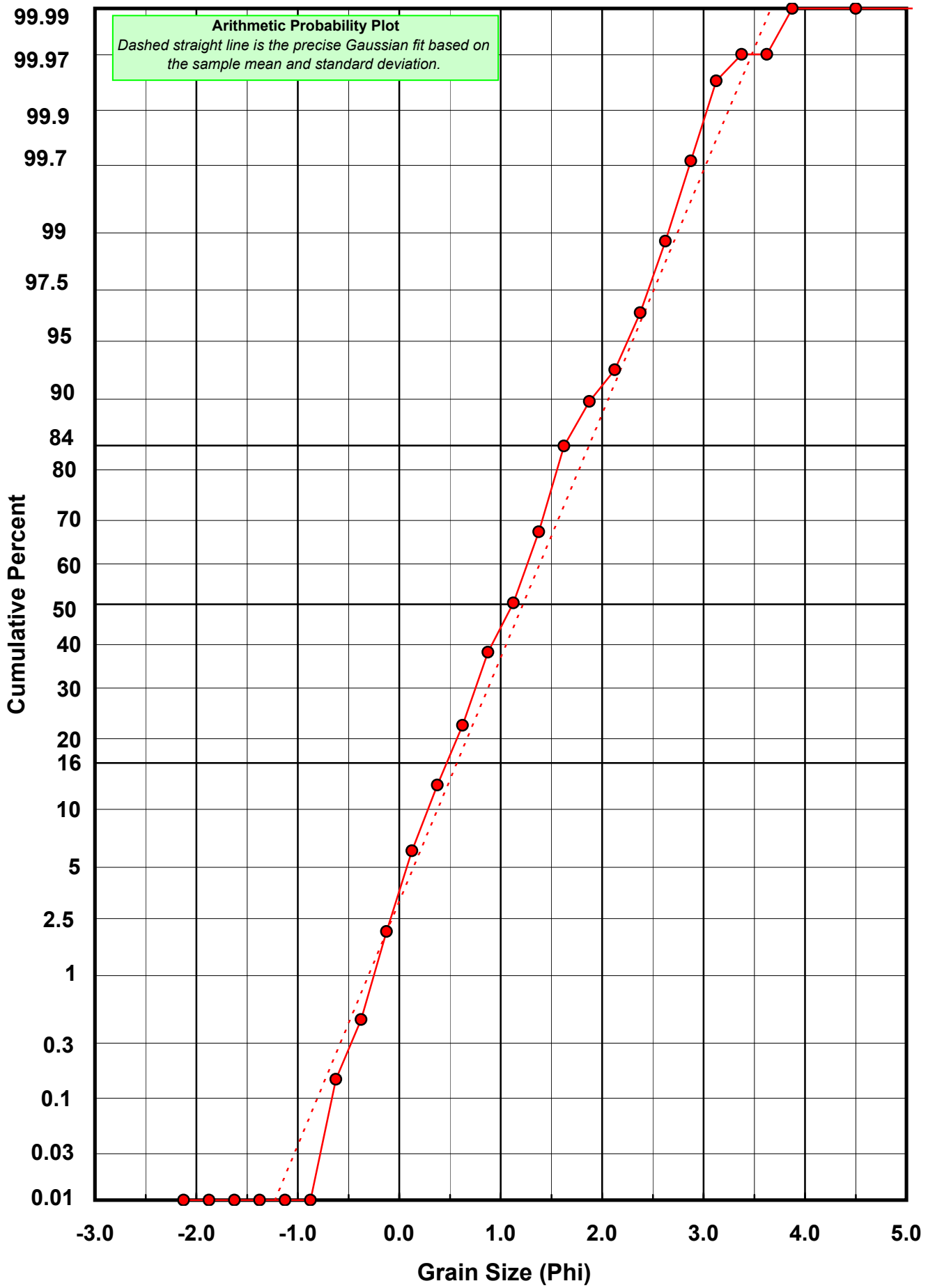
Statistical Results			
Mean:	1.2203	phi	(0.4292 mm)
Standard Dev:	0.6568	phi-units	(0.6343 mm)
Skewness:	0.1936	dimensionless	
Kurtosis:	2.8785	dimensionless	
5th Moment:	1.8052	dimensionless	
6th Moment:	13.3279	dimensionless	
RARD *	0.5382	dimensionless	
Median	1.1176	phi	(0.4609 mm)

\* 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-02-BB

Total Digested Mass: 62.861 grams

% Silica: 79.2 %

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	0.000	0.000	0.000
0.00	-0.125	0.000	0.000	0.000
0.25	0.125	0.014	0.022	0.022
0.50	0.375	0.090	0.143	0.165
0.75	0.625	0.309	0.492	0.657
1.00	0.875	2.135	3.396	4.053
1.25	1.125	3.932	6.255	10.308
1.50	1.375	7.730	12.297	22.605
1.75	1.625	11.523	18.331	40.936
2.00	1.875	14.373	22.865	63.801
2.25	2.125	10.753	17.106	80.907
2.50	2.375	6.950	11.056	91.963
2.75	2.625	3.678	5.851	97.814
3.00	2.875	1.012	1.610	99.424
3.25	3.125	0.236	0.375	99.800
3.50	3.375	0.089	0.142	99.941
3.75	3.625	0.036	0.057	99.998
4.00	3.875	0.001	0.002	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.8440	phi	(0.2785 mm)
Standard Dev:	0.4730	phi-units	(0.7205 mm)
Skewness:	-0.0108	dimensionless	
Kurtosis:	2.9684	dimensionless	
5th Moment:	0.2619	dimensionless	
6th Moment:	14.8552	dimensionless	
RARD *	0.2565	dimensionless	
Median	1.7241	phi	(0.3027 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)
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> 1.33	Poor homogeneity (e.g., glacial)

