

**Onshore Grab Sample**

**Sample:** VO-31-BB  
**Sample Taken By:** J. Ladner  
**Sample Collected On:** 12/3/03  
**Splits?** N/A

**County:** Volusia  
**Latitude:** 29° 04' 16.56"  
**Longitude:** 80° 54' 39.78"  
**Datum:** NAD 83  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 68.19 grams  
Total Fines in Sample 0.279 grams  
Total Percent Fines 0.41 %

**Dry Sieving Summary**

Total Sample Weight 67.738 grams  
Total Digested Weight 66.272 grams  
Total Carbonate Weight 1.466 grams  
Total Silica % 97.84 %  
Total Carbonate % 2.16 %  
Carbonate/Silica Ratio 0.022

**General Comments:**

None

**Description**

Worked By: M. Lachance

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-31-BB

Total Sample Mass: 67.738 grams

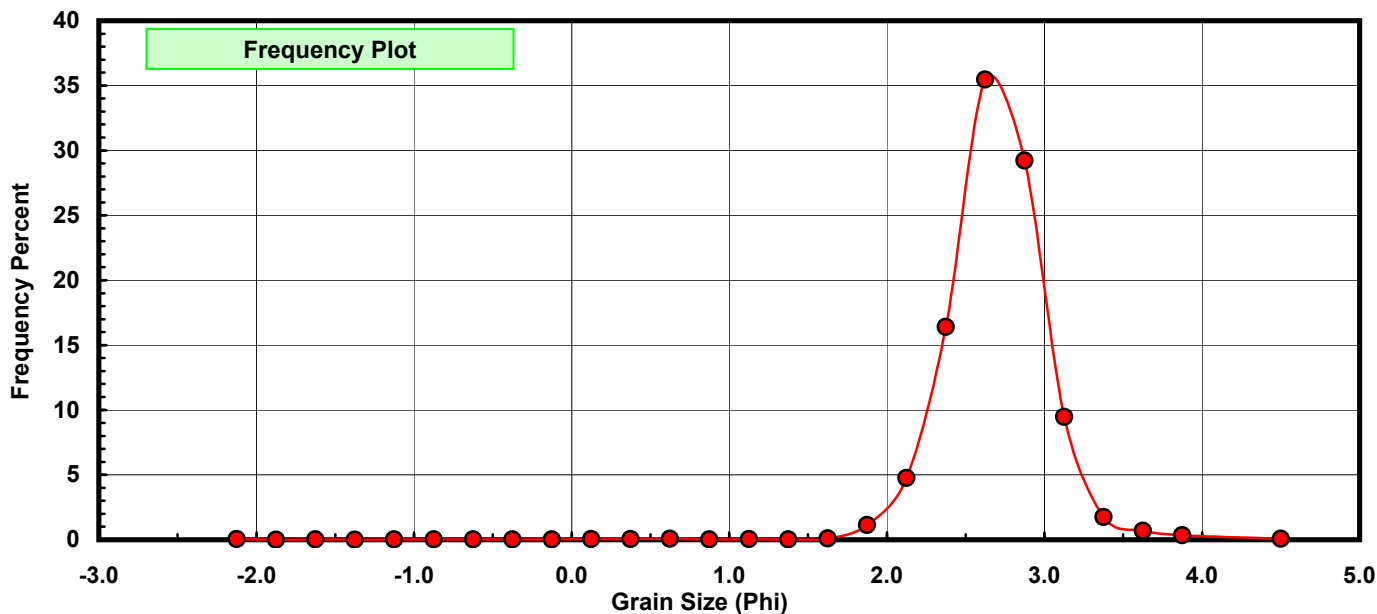
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.036	0.053	0.053
-1.75	-1.875	0.006	0.009	0.062
-1.50	-1.625	0.012	0.018	0.080
-1.25	-1.375	0.007	0.010	0.090
-1.00	-1.125	0.013	0.019	0.109
-0.75	-0.875	0.022	0.032	0.142
-0.50	-0.625	0.017	0.025	0.167
-0.25	-0.375	0.016	0.024	0.190
0.00	-0.125	0.021	0.031	0.221
0.25	0.125	0.034	0.050	0.272
0.50	0.375	0.040	0.059	0.331
0.75	0.625	0.056	0.083	0.413
1.00	0.875	0.023	0.034	0.447
1.25	1.125	0.037	0.055	0.502
1.50	1.375	0.024	0.035	0.537
1.75	1.625	0.072	0.106	0.644
2.00	1.875	0.773	1.141	1.785
2.25	2.125	3.232	4.771	6.556
2.50	2.375	11.104	16.393	22.949
2.75	2.625	24.024	35.466	58.415
3.00	2.875	19.796	29.224	87.639
3.25	3.125	6.420	9.478	97.117
3.50	3.375	1.194	1.763	98.880
3.75	3.625	0.471	0.695	99.575
4.00	3.875	0.236	0.348	99.923
5.00	4.500	0.052	0.077	100.000

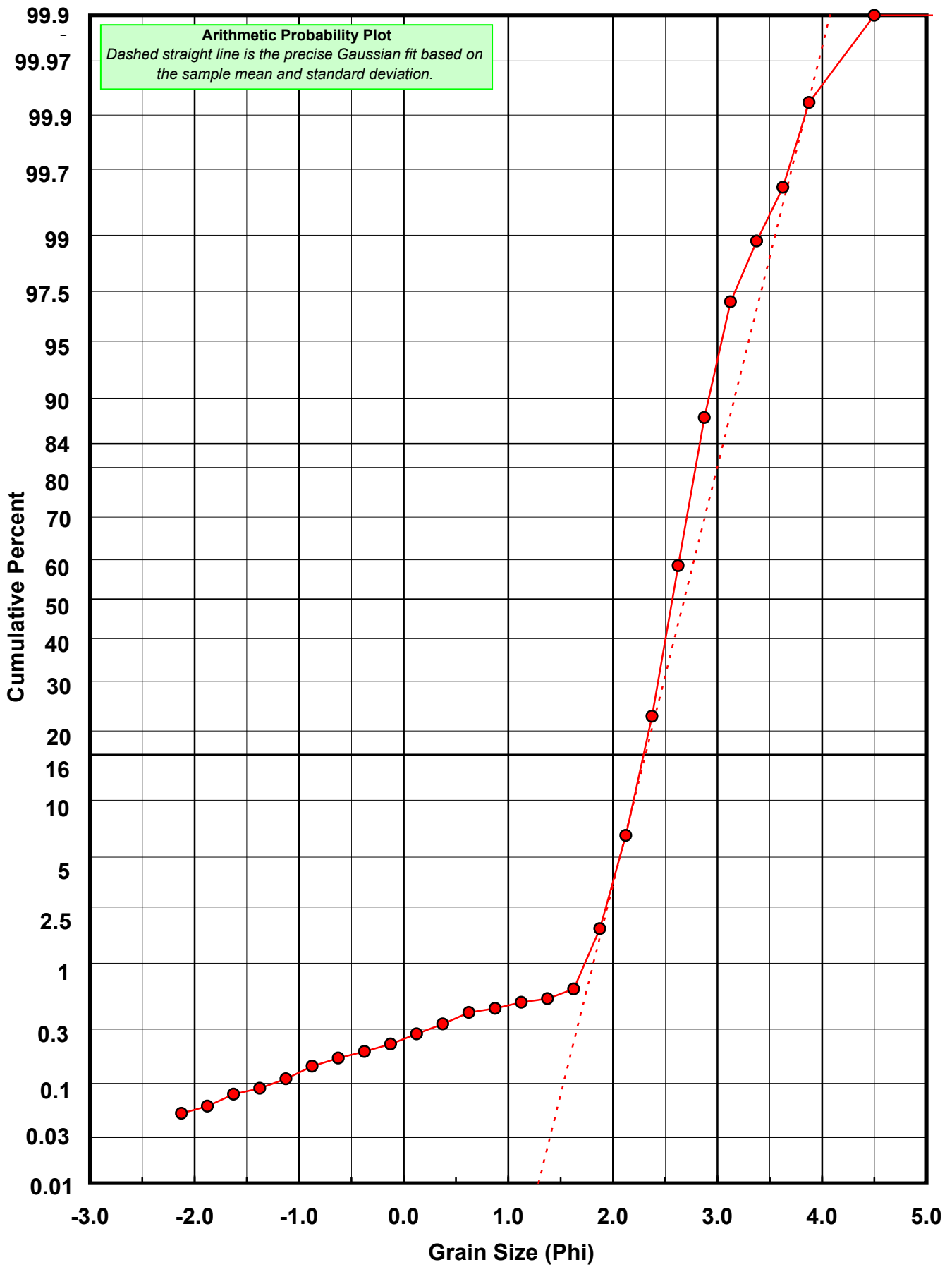
Statistical Results			
Mean:	2.6825	phi	(0.1558 mm)
Standard Dev:	0.3743	phi-units	(0.7715 mm)
Skewness:	-2.9431	dimensionless	
Kurtosis:	34.9472	dimensionless	
5th Moment:	-356.9553	dimensionless	
6th Moment:	4147.1841	dimensionless	
RARD *	0.1395	dimensionless	
Median	2.5657	phi	(0.1689 mm)

\* 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-31-BB

Total Carbonate Mass: 2.178 grams

% Carbonate: 2.2 %

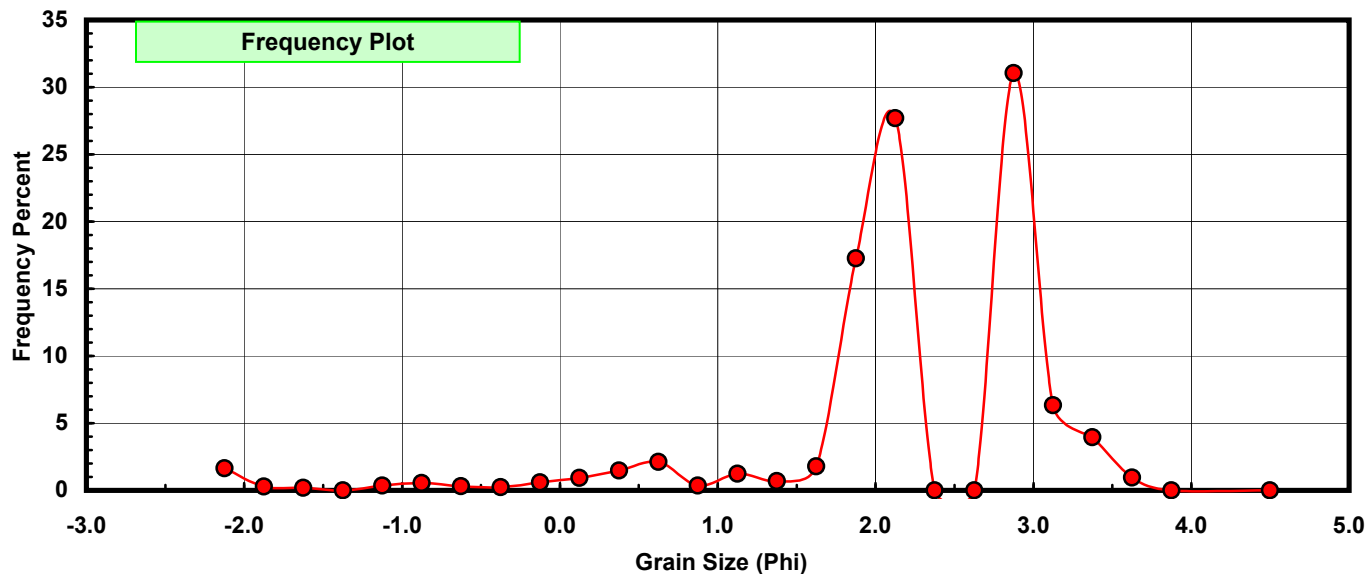
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.036	1.653	1.653
-1.75	-1.875	0.006	0.275	1.928
-1.50	-1.625	0.004	0.184	2.112
-1.25	-1.375	0.000	0.000	2.112
-1.00	-1.125	0.008	0.367	2.479
-0.75	-0.875	0.012	0.551	3.030
-0.50	-0.625	0.007	0.321	3.352
-0.25	-0.375	0.005	0.230	3.581
0.00	-0.125	0.013	0.597	4.178
0.25	0.125	0.020	0.918	5.096
0.50	0.375	0.032	1.469	6.566
0.75	0.625	0.046	2.112	8.678
1.00	0.875	0.008	0.367	9.045
1.25	1.125	0.027	1.240	10.285
1.50	1.375	0.015	0.689	10.973
1.75	1.625	0.039	1.791	12.764
2.00	1.875	0.376	17.264	30.028
2.25	2.125	0.603	27.686	57.713
2.50	2.375	0.000	0.000	57.713
2.75	2.625	0.000	0.000	57.713
3.00	2.875	0.676	31.038	88.751
3.25	3.125	0.138	6.336	95.087
3.50	3.375	0.086	3.949	99.036
3.75	3.625	0.021	0.964	100.000
4.00	3.875	0.000	0.000	100.000
5.00	4.500	0.000	0.000	100.000

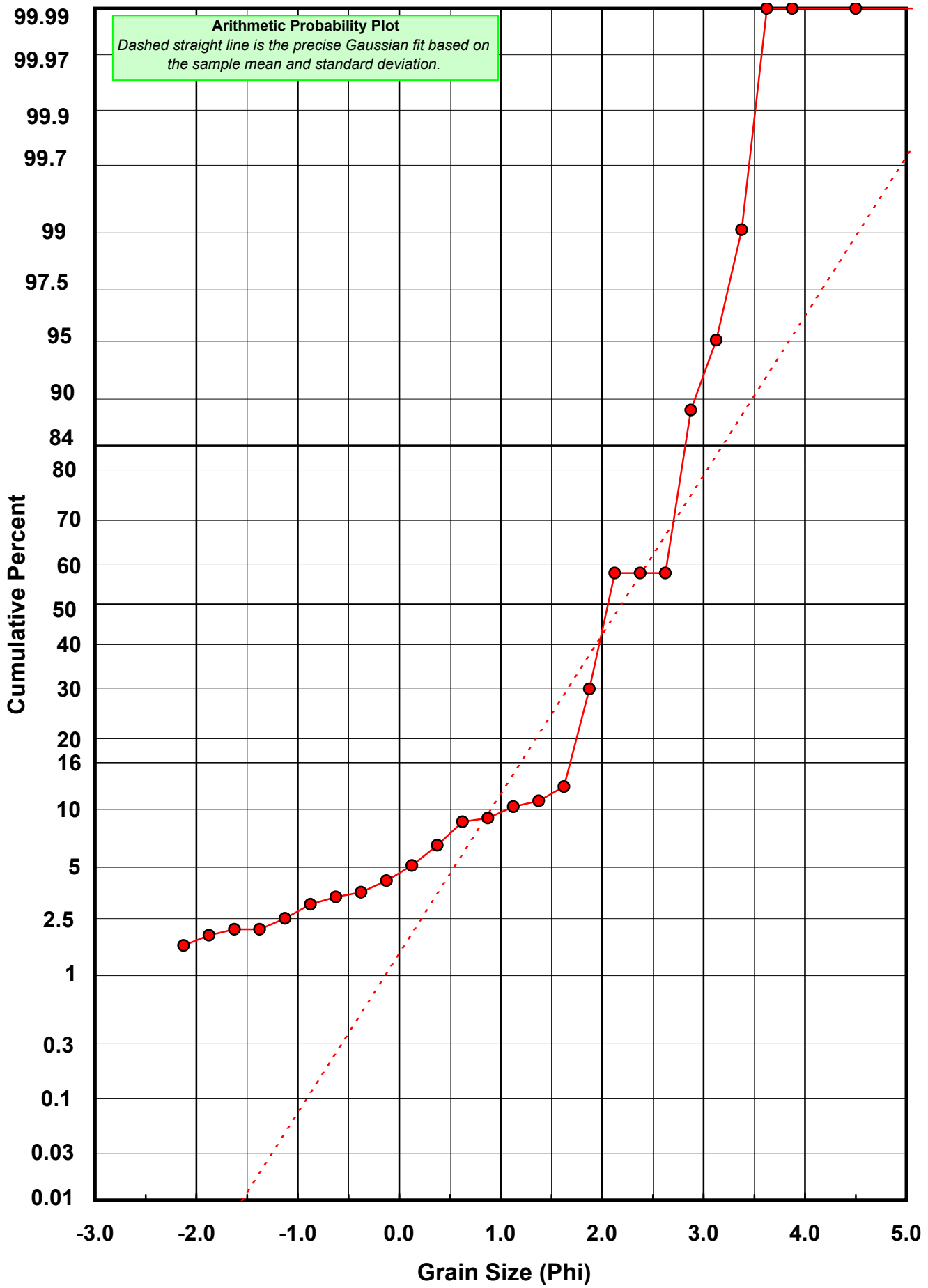
Statistical Results			
Mean:	2.1903	phi	(0.2191 mm)
Standard Dev:	1.0046	phi-units	(0.4984 mm)
Skewness:	-2.1031	dimensionless	
Kurtosis:	8.8334	dimensionless	
5th Moment:	-33.3067	dimensionless	
6th Moment:	135.4975	dimensionless	
RARD *	0.4587	dimensionless	
Median	2.0553	phi	(0.2406 mm)

\* 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-31-BB

Total Digested Mass: 66.222 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	0.008	0.012	0.012
-1.25	-1.375	0.015	0.023	0.035
-1.00	-1.125	0.005	0.008	0.042
-0.75	-0.875	0.010	0.015	0.057
-0.50	-0.625	0.010	0.015	0.072
-0.25	-0.375	0.011	0.017	0.089
0.00	-0.125	0.008	0.012	0.101
0.25	0.125	0.014	0.021	0.122
0.50	0.375	0.008	0.012	0.134
0.75	0.625	0.010	0.015	0.149
1.00	0.875	0.015	0.023	0.172
1.25	1.125	0.010	0.015	0.187
1.50	1.375	0.009	0.014	0.201
1.75	1.625	0.033	0.050	0.251
2.00	1.875	0.397	0.599	0.850
2.25	2.125	2.629	3.970	4.820
2.50	2.375	11.181	16.884	21.704
2.75	2.625	24.648	37.220	58.925
3.00	2.875	19.120	28.873	87.797
3.25	3.125	6.282	9.486	97.283
3.50	3.375	1.108	1.673	98.957
3.75	3.625	0.450	0.680	99.636
4.00	3.875	0.241	0.364	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	2.6960	phi	(0.1543 mm)
Standard Dev:	0.3178	phi-units	(0.8023 mm)
Skewness:	-1.5542	dimensionless	
Kurtosis:	23.2634	dimensionless	
5th Moment:	-233.5860	dimensionless	
6th Moment:	2850.8169	dimensionless	
RARD *	0.1179	dimensionless	
Median	2.5651	phi	(0.169 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)

