

**Onshore Grab Sample**

**Sample:** VO-13-BB  
**Sample Taken By:** J. Ladner  
**Sample Collected On:** 12/3/03  
**Splits?** N/A

**County:** Volusia  
**Latitude:** 29° 16' 20.94"  
**Longitude:** 81° 01' 45.54"  
**Datum:** NAD 83  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 131.296 grams  
Total Fines in Sample 0.487 grams  
Total Percent Fines 0.37 %

**Dry Sieving Summary**

Total Sample Weight 130.963 grams  
Total Digested Weight 123.754 grams  
Total Carbonate Weight 7.209 grams  
Total Silica % 94.50 %  
Total Carbonate % 5.50 %  
Carbonate/Silica Ratio 0.058

**General Comments:**

None

**Description**

Worked By: M. Lachance

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-13-BB

Total Sample Mass: 130.963 grams

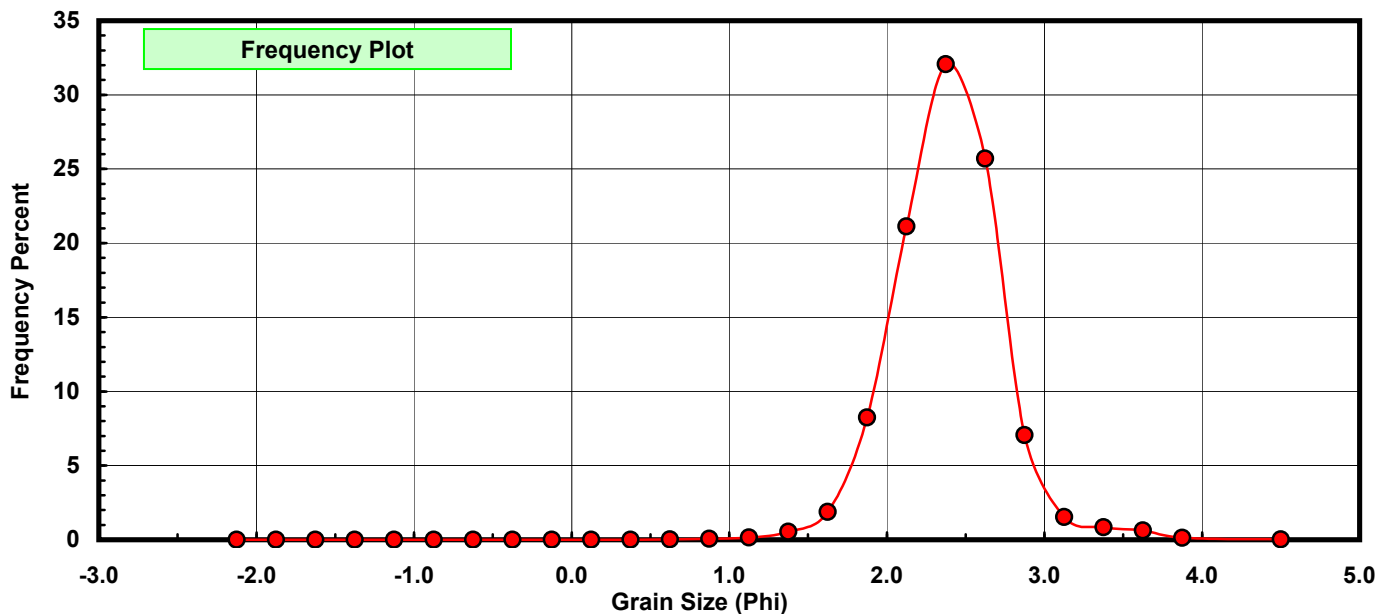
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-0.25	-0.375	0.000	0.000	0.000
0.00	-0.125	0.000	0.000	0.000
0.25	0.125	0.000	0.000	0.000
0.50	0.375	0.011	0.008	0.008
0.75	0.625	0.017	0.013	0.021
1.00	0.875	0.074	0.057	0.078
1.25	1.125	0.211	0.161	0.239
1.50	1.375	0.700	0.535	0.774
1.75	1.625	2.446	1.868	2.641
2.00	1.875	10.782	8.233	10.874
2.25	2.125	27.669	21.127	32.001
2.50	2.375	41.988	32.061	64.062
2.75	2.625	33.666	25.706	89.769
3.00	2.875	9.254	7.066	96.835
3.25	3.125	2.012	1.536	98.371
3.50	3.375	1.105	0.844	99.215
3.75	3.625	0.820	0.626	99.841
4.00	3.875	0.169	0.129	99.970
5.00	4.500	0.039	0.030	100.000

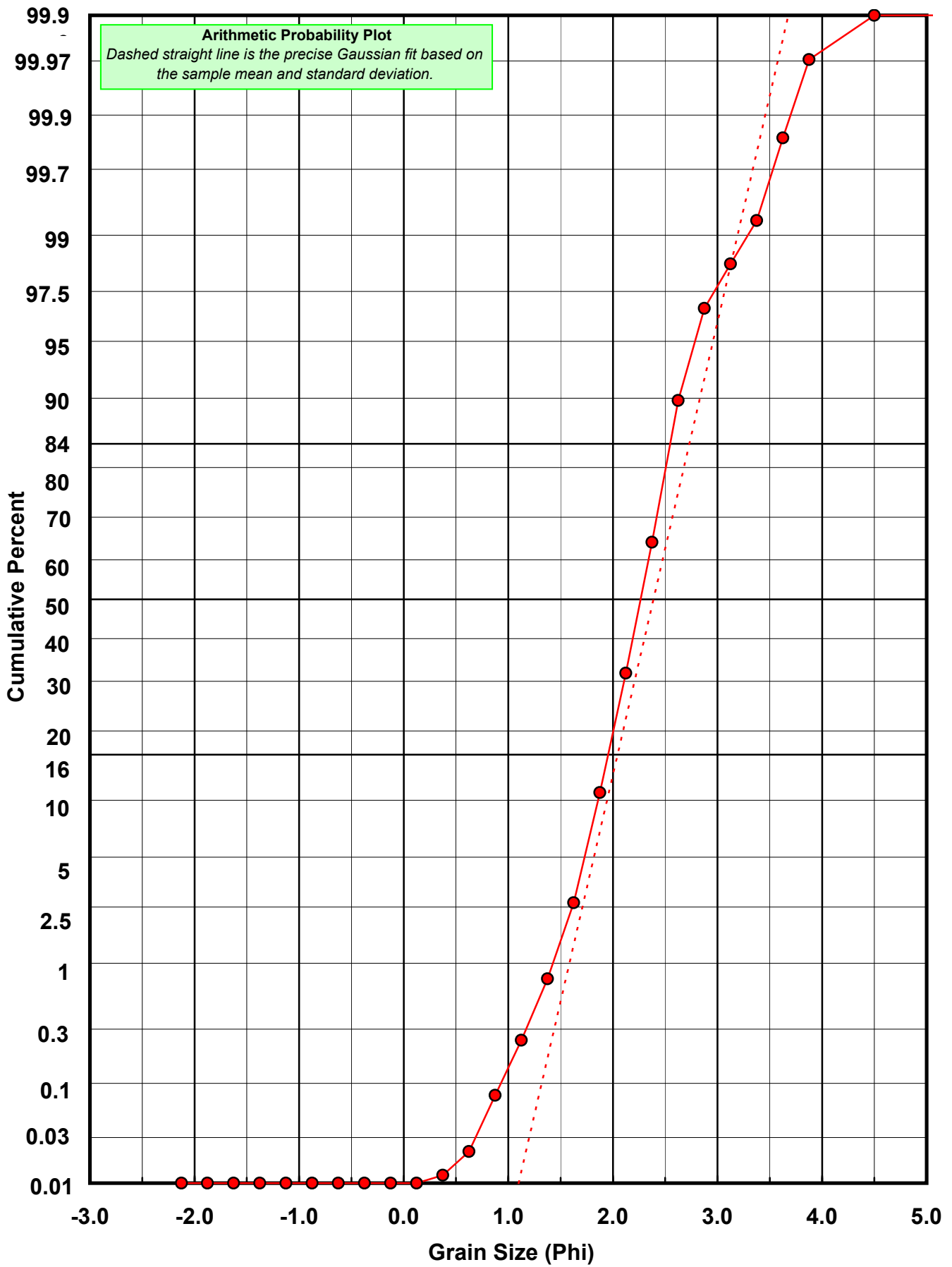
Statistical Results			
Mean:	2.3884	phi	(0.191 mm)
Standard Dev:	0.3460	phi-units	(0.7867 mm)
Skewness:	0.2239	dimensionless	
Kurtosis:	5.1007	dimensionless	
5th Moment:	5.0585	dimensionless	
6th Moment:	63.3038	dimensionless	
RARD *	0.1449	dimensionless	
Median	2.2653	phi	(0.208 mm)

\* 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-13-BB

Total Carbonate Mass: 7.474 grams

% Carbonate: 5.5 %

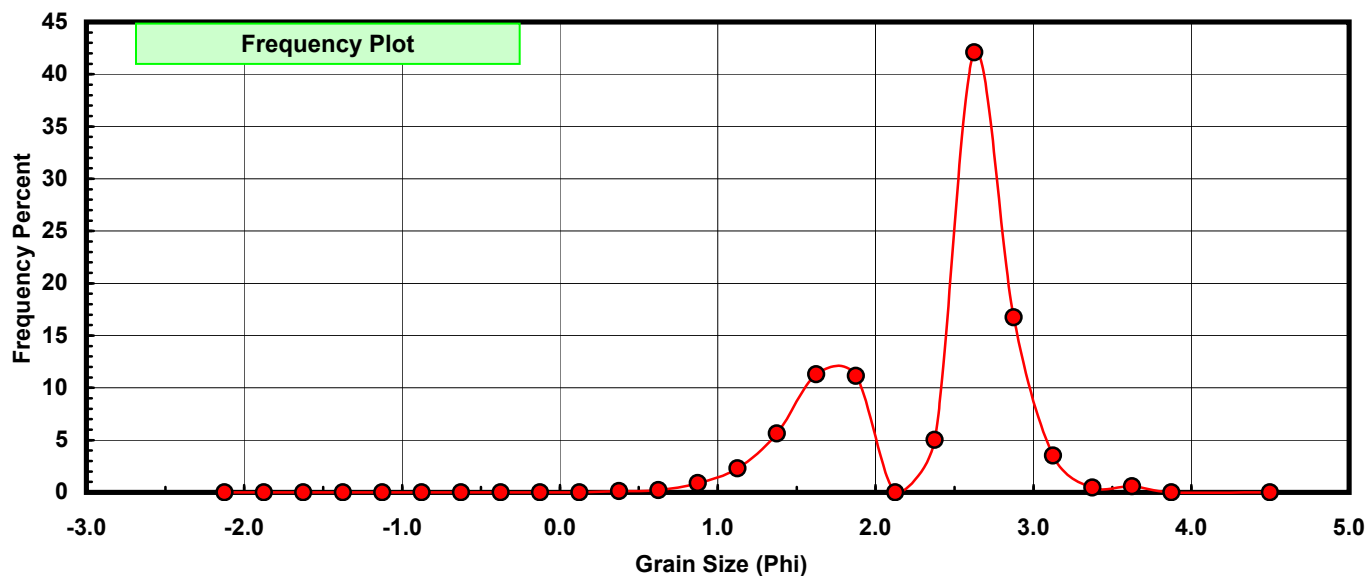
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-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	0.009	0.120	0.120
0.75	0.625	0.015	0.201	0.321
1.00	0.875	0.066	0.883	1.204
1.25	1.125	0.172	2.301	3.505
1.50	1.375	0.421	5.633	9.138
1.75	1.625	0.845	11.306	20.444
2.00	1.875	0.832	11.132	31.576
2.25	2.125	0.000	0.000	31.576
2.50	2.375	0.376	5.031	36.607
2.75	2.625	3.147	42.106	78.713
3.00	2.875	1.252	16.751	95.464
3.25	3.125	0.262	3.505	98.970
3.50	3.375	0.034	0.455	99.425
3.75	3.625	0.043	0.575	100.000
4.00	3.875	0.000	0.000	100.000
5.00	4.500	0.000	0.000	100.000

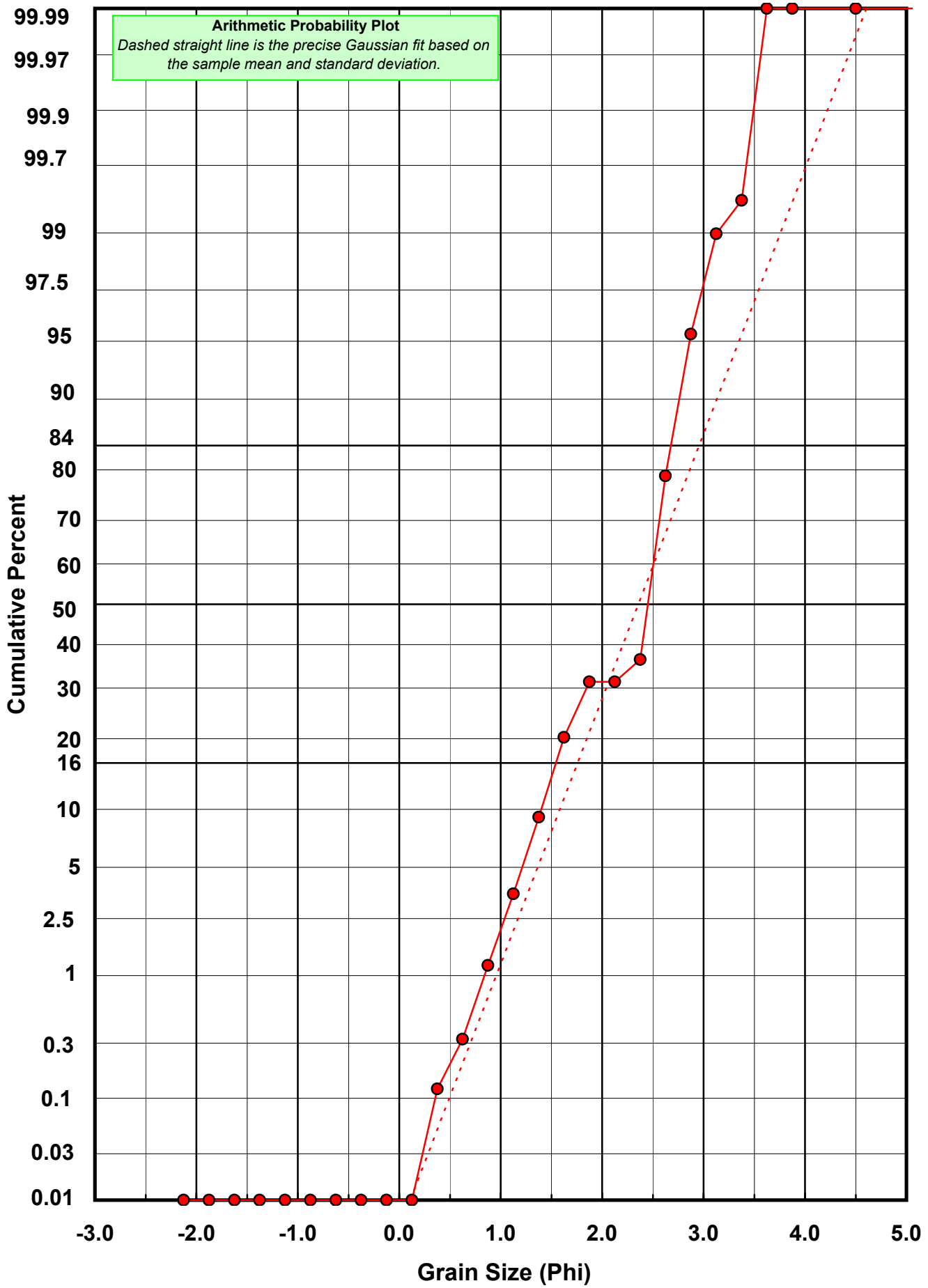
Statistical Results			
Mean:	2.3573	phi	(0.1952 mm)
Standard Dev:	0.6037	phi-units	(0.6581 mm)
Skewness:	-0.7255	dimensionless	
Kurtosis:	2.3423	dimensionless	
5th Moment:	-3.3847	dimensionless	
6th Moment:	9.7914	dimensionless	
RARD *	0.2561	dimensionless	
Median	2.4545	phi	(0.1824 mm)

\* 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-13-BB

Total Digested Mass: 123.714 grams

% Silica: 94.5 %

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	0.002	0.002	0.002
0.75	0.625	0.002	0.002	0.003
1.00	0.875	0.008	0.006	0.010
1.25	1.125	0.039	0.032	0.041
1.50	1.375	0.279	0.226	0.267
1.75	1.625	1.601	1.294	1.561
2.00	1.875	9.950	8.043	9.604
2.25	2.125	27.878	22.534	32.138
2.50	2.375	41.612	33.636	65.773
2.75	2.625	30.519	24.669	90.442
3.00	2.875	8.002	6.468	96.911
3.25	3.125	1.750	1.415	98.325
3.50	3.375	1.071	0.866	99.191
3.75	3.625	0.777	0.628	99.819
4.00	3.875	0.224	0.181	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	2.3898	phi	(0.1908 mm)
Standard Dev:	0.3274	phi-units	(0.797 mm)
Skewness:	0.5135	dimensionless	
Kurtosis:	4.8417	dimensionless	
5th Moment:	8.7782	dimensionless	
6th Moment:	51.5726	dimensionless	
RARD *	0.1370	dimensionless	
Median	2.2578	phi	(0.2091 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)

