

**Onshore Grab Sample**

**Sample:** VO-45-SS  
**Sample Taken By:** J. Ladner  
**Sample Collected On:** 12/3/03  
**Splits?** N/A

**County:** Volusia  
**Latitude:** 28° 54' 41.22"  
**Longitude:** 80° 48' 42.12"  
**Datum:** NAD 83  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 90.845 grams  
Total Fines in Sample 0.592 grams  
Total Percent Fines 0.65 %

**Dry Sieving Summary**

Total Sample Weight 90.338 grams  
Total Digested Weight 47.537 grams  
Total Carbonate Weight 42.801 grams  
Total Silica % 52.62 %  
Total Carbonate % 47.38 %  
Carbonate/Silica Ratio 0.900

**General Comments:**

None

**Description**

Worked By: M. Lachance

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-45-SS

Total Sample Mass: 90.338 grams

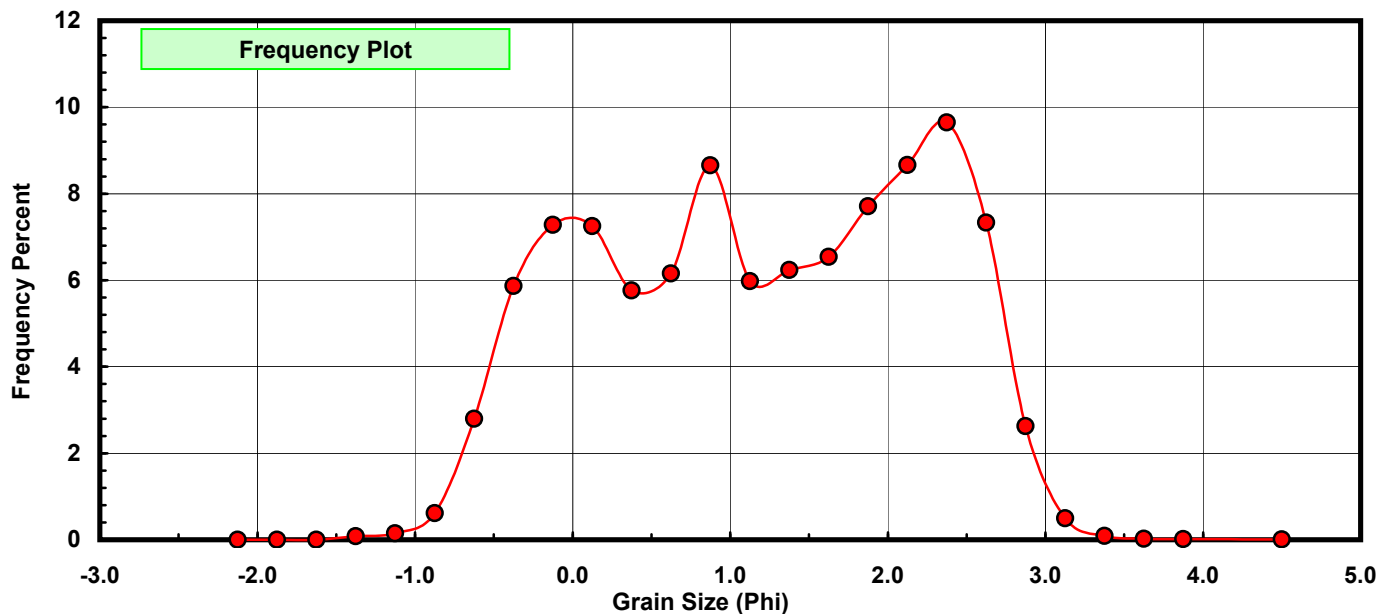
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.074	0.082	0.082
-1.00	-1.125	0.136	0.151	0.232
-0.75	-0.875	0.554	0.613	0.846
-0.50	-0.625	2.524	2.794	3.640
-0.25	-0.375	5.302	5.869	9.509
0.00	-0.125	6.579	7.283	16.791
0.25	0.125	6.553	7.254	24.045
0.50	0.375	5.208	5.765	29.810
0.75	0.625	5.560	6.155	35.965
1.00	0.875	7.822	8.659	44.624
1.25	1.125	5.402	5.980	50.603
1.50	1.375	5.631	6.233	56.837
1.75	1.625	5.909	6.541	63.378
2.00	1.875	6.967	7.712	71.090
2.25	2.125	7.829	8.666	79.756
2.50	2.375	8.718	9.650	89.406
2.75	2.625	6.624	7.332	96.739
3.00	2.875	2.373	2.627	99.366
3.25	3.125	0.451	0.499	99.865
3.50	3.375	0.080	0.089	99.954
3.75	3.625	0.020	0.022	99.976
4.00	3.875	0.015	0.017	99.992
5.00	4.500	0.007	0.008	100.000

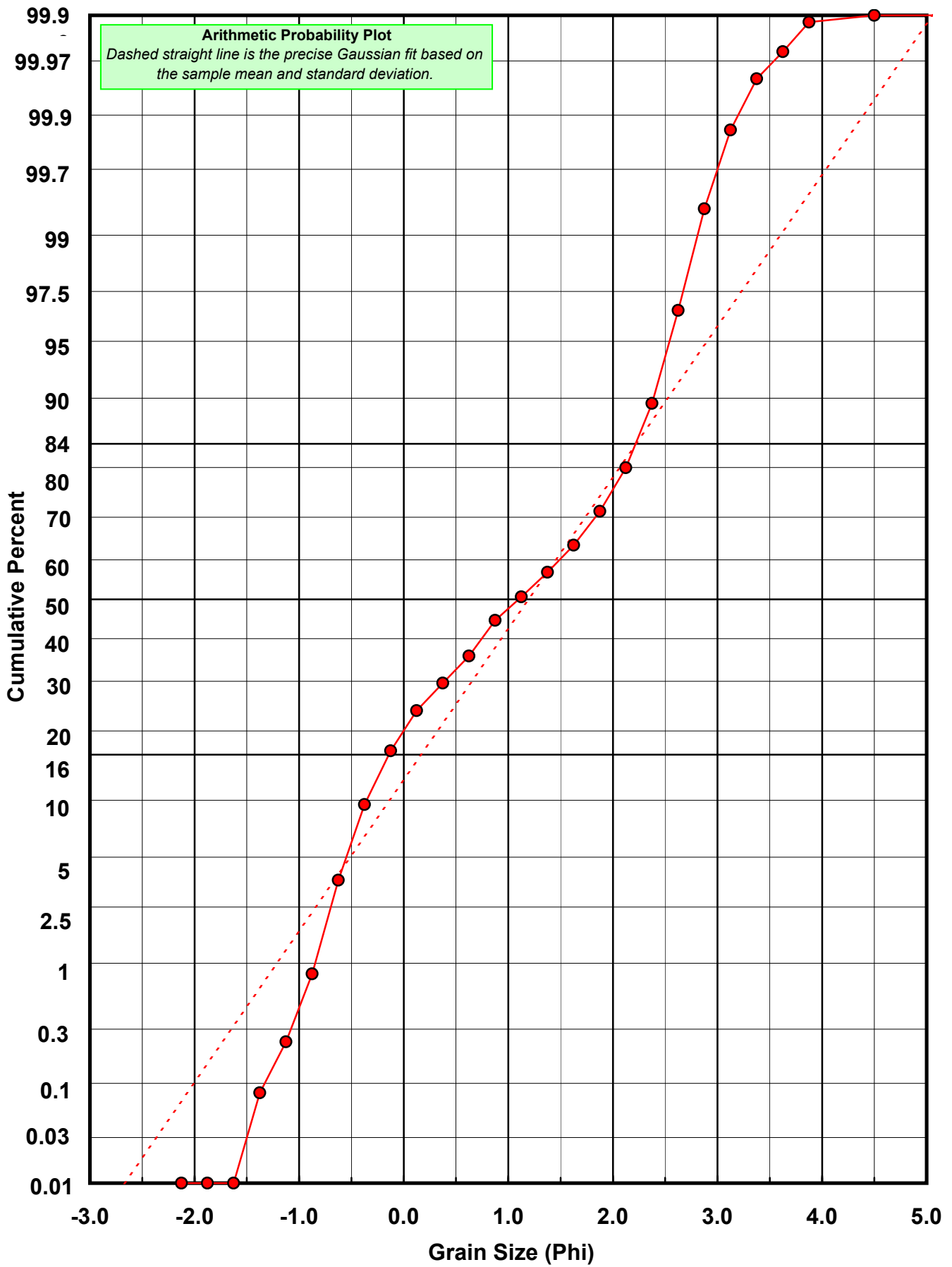
Statistical Results			
Mean:	1.1938	phi	(0.4372 mm)
Standard Dev:	1.0374	phi-units	(0.4872 mm)
Skewness:	-0.1176	dimensionless	
Kurtosis:	1.8385	dimensionless	
5th Moment:	-0.5194	dimensionless	
6th Moment:	4.4307	dimensionless	
RARD *	0.8690	dimensionless	
Median	1.0998	phi	(0.4666 mm)

\* 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-45-SS

Total Carbonate Mass: 42.818 grams

% Carbonate: 47.4 %

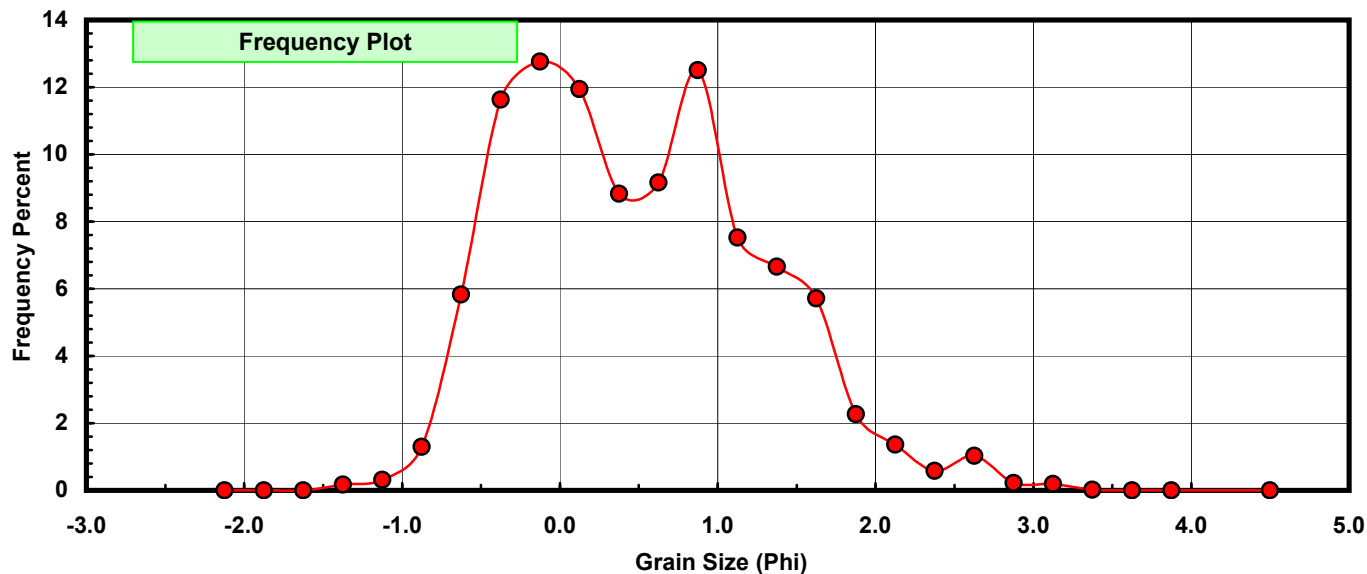
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.074	0.173	0.173
-1.00	-1.125	0.136	0.318	0.490
-0.75	-0.875	0.554	1.294	1.784
-0.50	-0.625	2.494	5.825	7.609
-0.25	-0.375	4.980	11.631	19.240
0.00	-0.125	5.466	12.766	32.005
0.25	0.125	5.113	11.941	43.946
0.50	0.375	3.782	8.833	52.779
0.75	0.625	3.923	9.162	61.941
1.00	0.875	5.353	12.502	74.443
1.25	1.125	3.222	7.525	81.968
1.50	1.375	2.849	6.654	88.622
1.75	1.625	2.446	5.713	94.334
2.00	1.875	0.970	2.265	96.600
2.25	2.125	0.582	1.359	97.959
2.50	2.375	0.250	0.584	98.543
2.75	2.625	0.439	1.025	99.568
3.00	2.875	0.095	0.222	99.790
3.25	3.125	0.082	0.192	99.981
3.50	3.375	0.008	0.019	100.000
3.75	3.625	0.000	0.000	100.000
4.00	3.875	0.000	0.000	100.000
5.00	4.500	0.000	0.000	100.000

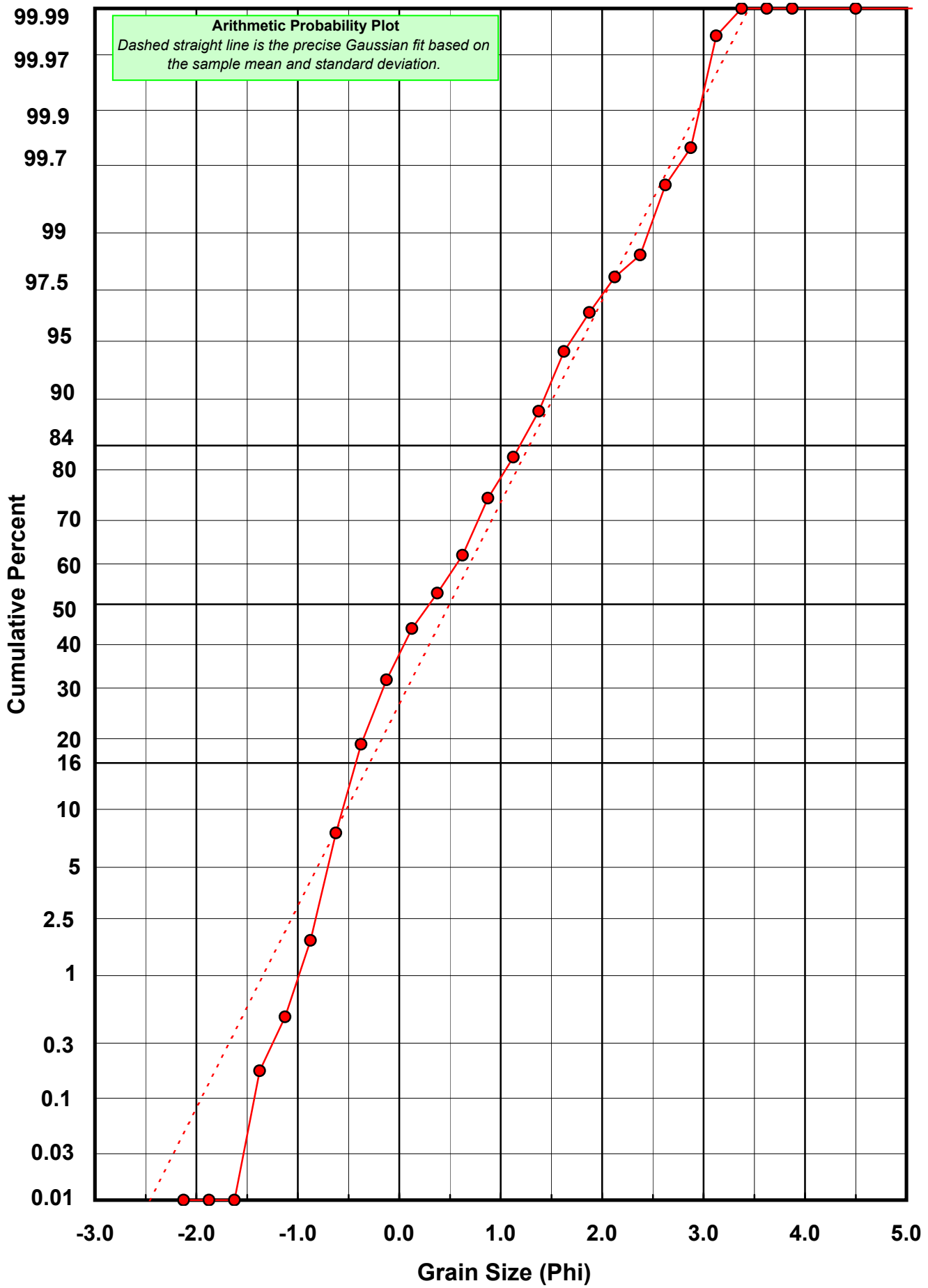
Statistical Results			
Mean:	0.4956	phi	(0.7093 mm)
Standard Dev:	0.7930	phi-units	(0.5771 mm)
Skewness:	0.4619	dimensionless	
Kurtosis:	2.7259	dimensionless	
5th Moment:	3.7195	dimensionless	
6th Moment:	13.6335	dimensionless	
RARD *	1.6002	dimensionless	
Median	0.2963	phi	(0.8143 mm)

\* 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-45-SS

Total Digested Mass: 47.527 grams

% Silica: 52.6 %

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	0.030	0.063	0.063
-0.25	-0.375	0.322	0.678	0.741
0.00	-0.125	1.113	2.342	3.082
0.25	0.125	1.440	3.030	6.112
0.50	0.375	1.426	3.000	9.113
0.75	0.625	1.637	3.444	12.557
1.00	0.875	2.469	5.195	17.752
1.25	1.125	2.180	4.587	22.339
1.50	1.375	2.782	5.854	28.192
1.75	1.625	3.463	7.286	35.479
2.00	1.875	5.997	12.618	48.097
2.25	2.125	7.247	15.248	63.345
2.50	2.375	8.468	17.817	81.162
2.75	2.625	6.185	13.014	94.176
3.00	2.875	2.278	4.793	98.969
3.25	3.125	0.369	0.776	99.745
3.50	3.375	0.072	0.151	99.897
3.75	3.625	0.030	0.063	99.960
4.00	3.875	0.019	0.040	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.8230	phi	(0.2826 mm)
Standard Dev:	0.8051	phi-units	(0.5723 mm)
Skewness:	-0.8450	dimensionless	
Kurtosis:	2.9256	dimensionless	
5th Moment:	-4.9183	dimensionless	
6th Moment:	13.2900	dimensionless	
RARD *	0.4416	dimensionless	
Median	1.9062	phi	(0.2668 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)

