

**Onshore Grab Sample**

**Sample:** VO-50-SS  
**Sample Taken By:** J. Ladner  
**Sample Collected On:** 12/3/03  
**Splits?** Yes

**County:** Volusia  
**Latitude:** 28° 51' 39.78"  
**Longitude:** 80° 46' 40.08"  
**Datum:** NAD 83  
**Surf. Elev:** N/A  
**Datum:** N/A

**Fine Data Summary**

Total Sample Weight 80.469 grams  
Total Fines in Sample 0.520 grams  
Total Percent Fines 0.64 %

**Dry Sieving Summary**

Total Sample Weight 79.972 grams  
Total Digested Weight 36.696 grams  
Total Carbonate Weight 43.276 grams  
Total Silica % 45.89 %  
Total Carbonate % 54.11 %  
Carbonate/Silica Ratio 1.179

**General Comments:**

None

**Description**

Worked By: M. Lachance

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-50-SS

Total Sample Mass: 79.972 grams

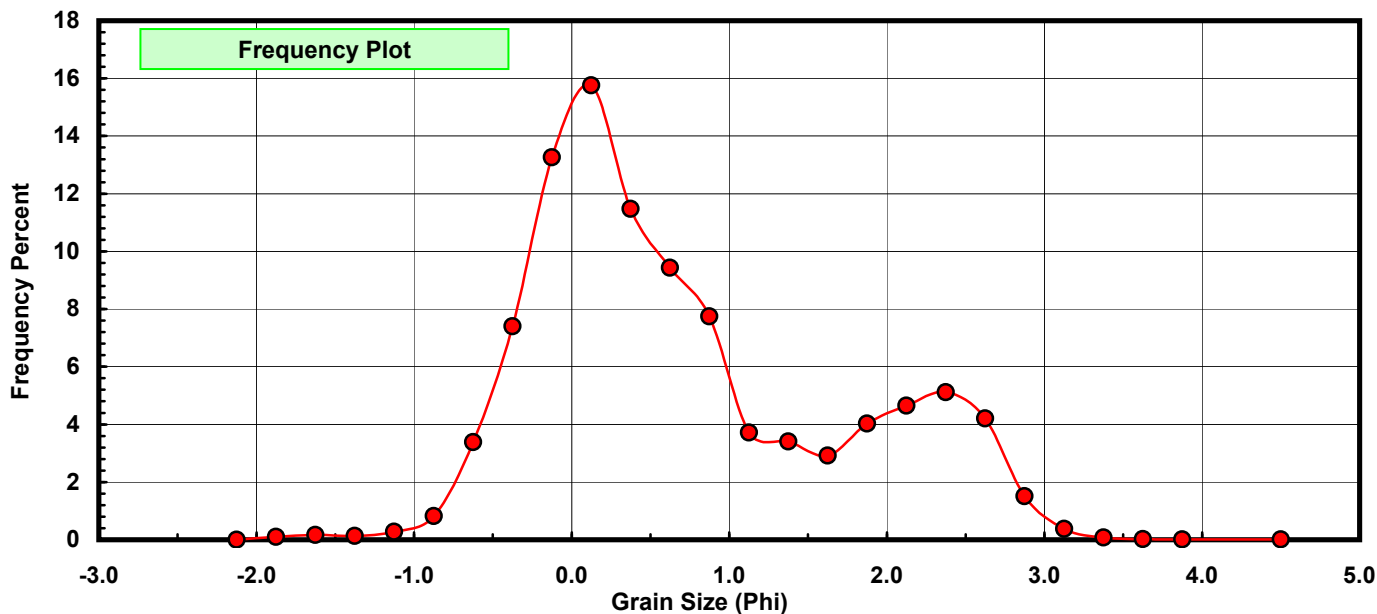
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.079	0.099	0.099
-1.50	-1.625	0.132	0.165	0.264
-1.25	-1.375	0.105	0.131	0.395
-1.00	-1.125	0.225	0.281	0.676
-0.75	-0.875	0.658	0.823	1.499
-0.50	-0.625	2.704	3.381	4.880
-0.25	-0.375	5.916	7.398	12.278
0.00	-0.125	10.604	13.260	25.538
0.25	0.125	12.598	15.753	41.291
0.50	0.375	9.180	11.479	52.770
0.75	0.625	7.548	9.438	62.208
1.00	0.875	6.198	7.750	69.958
1.25	1.125	2.977	3.723	73.681
1.50	1.375	2.722	3.404	77.084
1.75	1.625	2.335	2.920	80.004
2.00	1.875	3.218	4.024	84.028
2.25	2.125	3.721	4.653	88.681
2.50	2.375	4.093	5.118	93.799
2.75	2.625	3.360	4.201	98.001
3.00	2.875	1.208	1.511	99.511
3.25	3.125	0.302	0.378	99.889
3.50	3.375	0.061	0.076	99.965
3.75	3.625	0.016	0.020	99.985
4.00	3.875	0.007	0.009	99.994
5.00	4.500	0.005	0.006	100.000

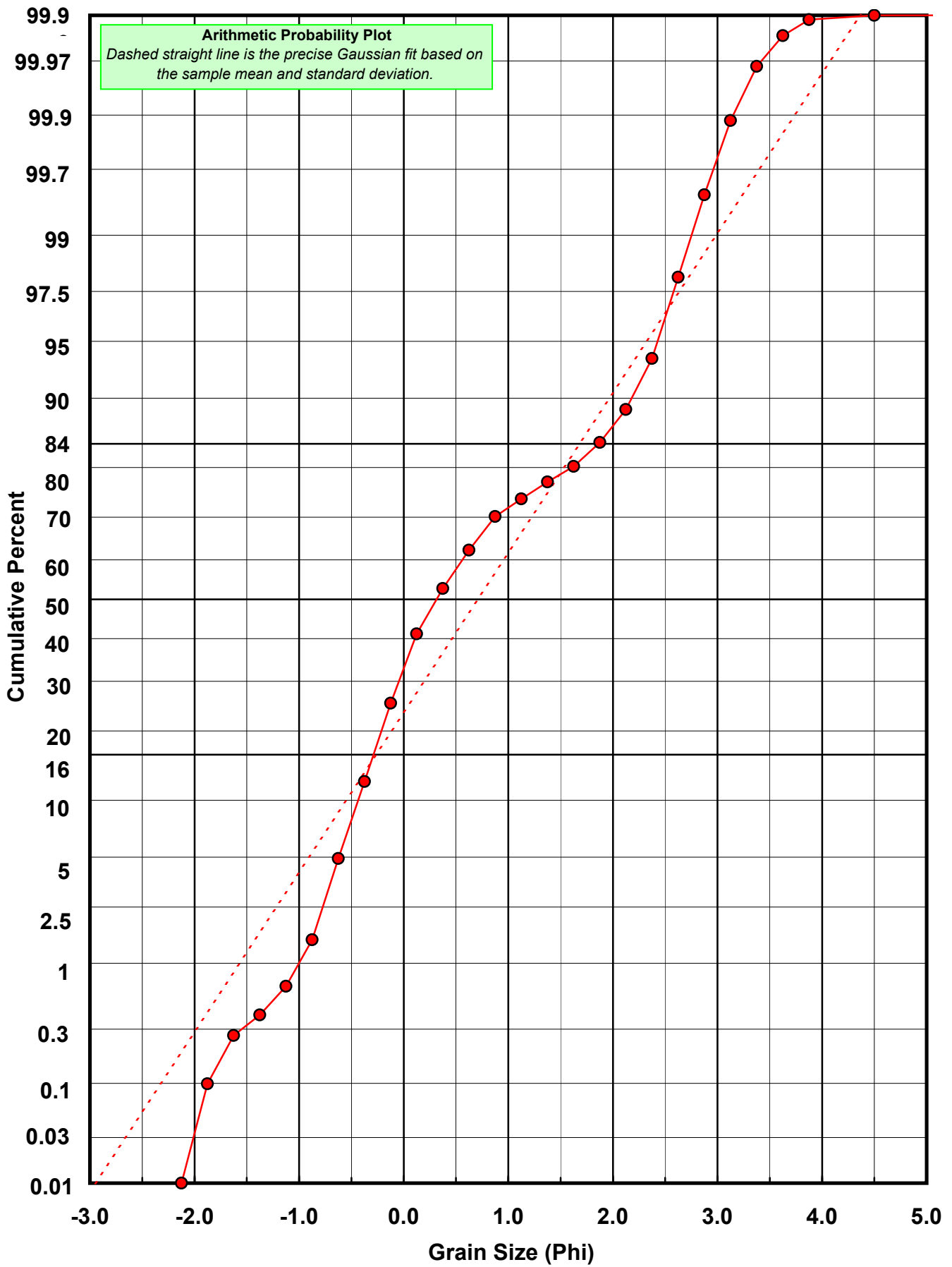
Statistical Results			
Mean:	0.7088	phi	(0.6118 mm)
Standard Dev:	0.9820	phi-units	(0.5063 mm)
Skewness:	0.6517	dimensionless	
Kurtosis:	2.4845	dimensionless	
5th Moment:	2.9208	dimensionless	
6th Moment:	8.9467	dimensionless	
RARD *	1.3853	dimensionless	
Median	0.3147	phi	(0.804 mm)

\* 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-50-SS

Total Carbonate Mass: 43.400 grams

% Carbonate: 54.1 %

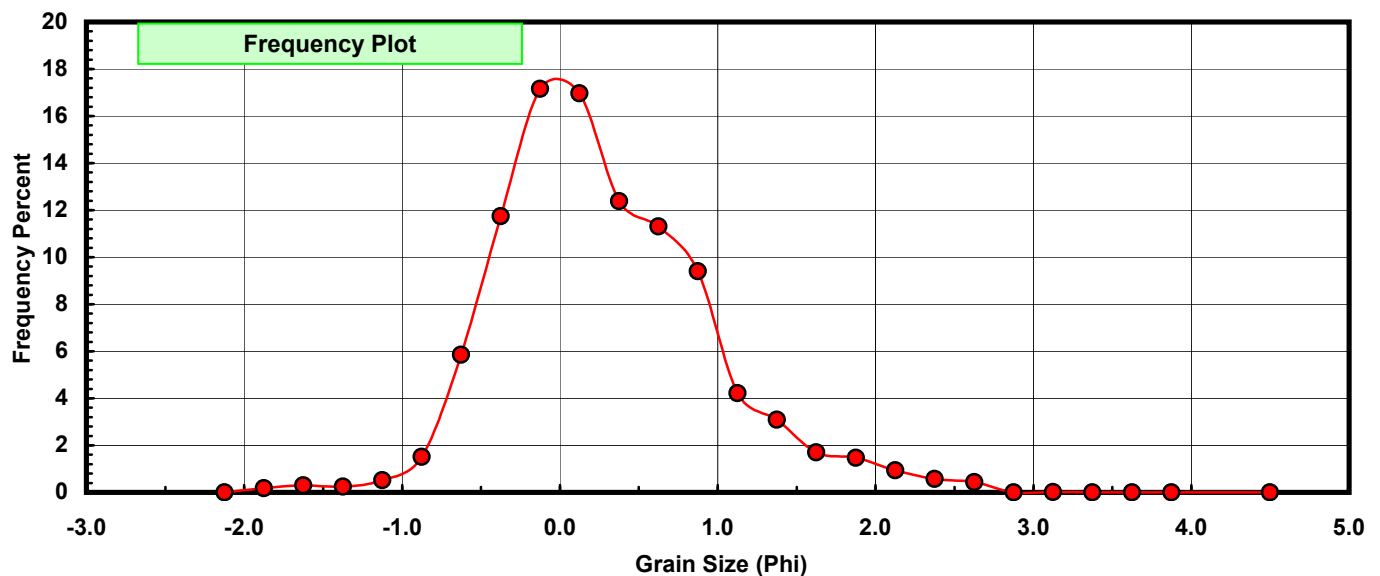
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.079	0.182	0.182
-1.50	-1.625	0.132	0.304	0.486
-1.25	-1.375	0.105	0.242	0.728
-1.00	-1.125	0.225	0.518	1.247
-0.75	-0.875	0.658	1.516	2.763
-0.50	-0.625	2.541	5.855	8.618
-0.25	-0.375	5.098	11.747	20.364
0.00	-0.125	7.448	17.161	37.525
0.25	0.125	7.364	16.968	54.493
0.50	0.375	5.375	12.385	66.878
0.75	0.625	4.904	11.300	78.177
1.00	0.875	4.078	9.396	87.574
1.25	1.125	1.828	4.212	91.786
1.50	1.375	1.340	3.088	94.873
1.75	1.625	0.737	1.698	96.571
2.00	1.875	0.639	1.472	98.044
2.25	2.125	0.406	0.935	98.979
2.50	2.375	0.248	0.571	99.551
2.75	2.625	0.187	0.431	99.982
3.00	2.875	0.000	0.000	99.982
3.25	3.125	0.008	0.018	100.000
3.50	3.375	0.000	0.000	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

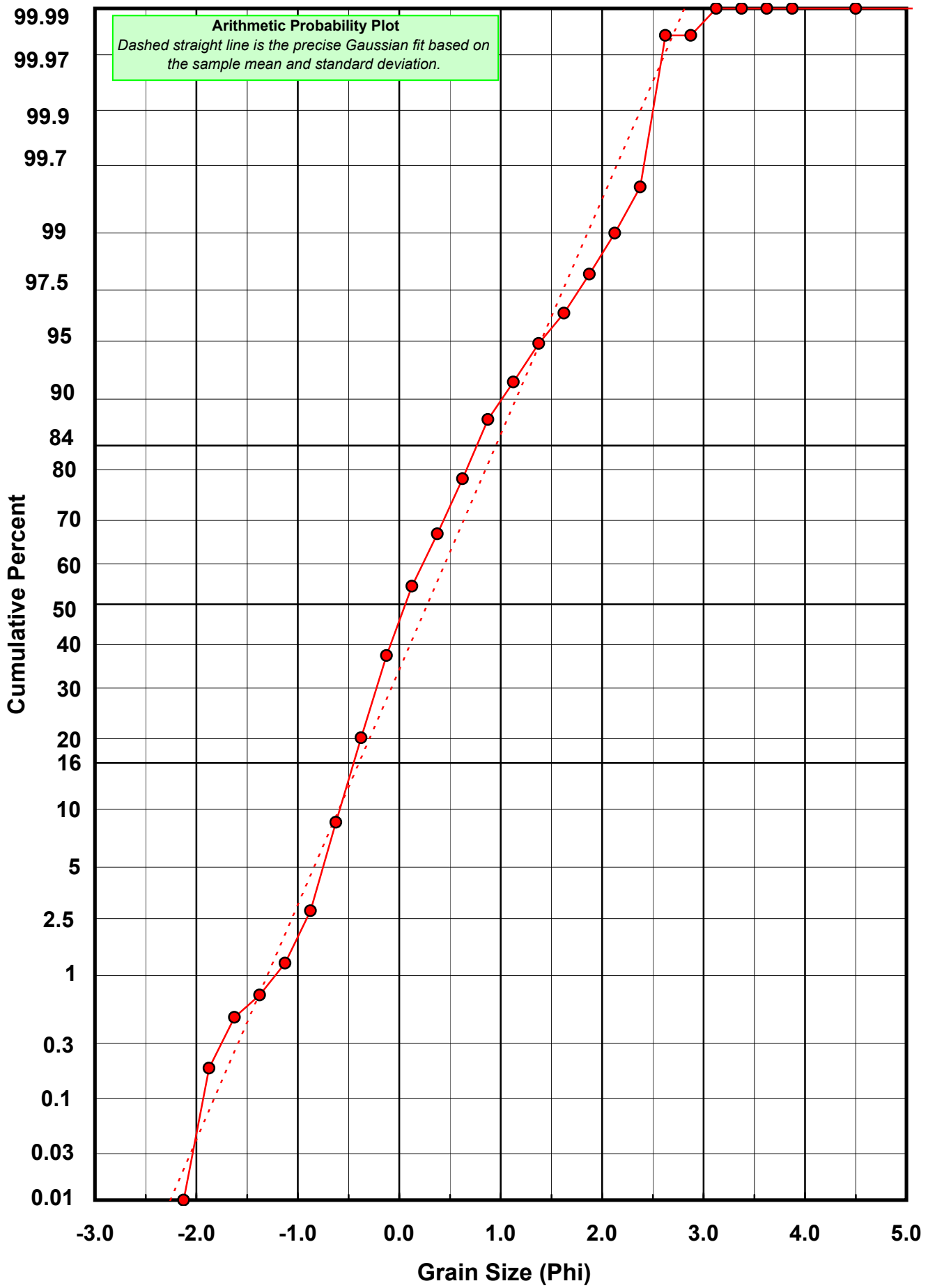
Statistical Results			
Mean:	0.2780	phi	(0.8247 mm)
Standard Dev:	0.6805	phi-units	(0.624 mm)
Skewness:	0.6140	dimensionless	
Kurtosis:	3.8324	dimensionless	
5th Moment:	5.4551	dimensionless	
6th Moment:	26.6742	dimensionless	
RARD *	2.4478	dimensionless	
Median	0.0588	phi	(0.9601 mm)

\* 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-50-SS

Total Digested Mass: 36.689 grams

% Silica: 45.9 %

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	0.163	0.444	0.444
-0.25	-0.375	0.818	2.230	2.674
0.00	-0.125	3.156	8.602	11.276
0.25	0.125	5.234	14.266	25.542
0.50	0.375	3.805	10.371	35.913
0.75	0.625	2.644	7.207	43.119
1.00	0.875	2.120	5.778	48.897
1.25	1.125	1.149	3.132	52.029
1.50	1.375	1.382	3.767	55.796
1.75	1.625	1.598	4.356	60.152
2.00	1.875	2.579	7.029	67.181
2.25	2.125	3.315	9.035	76.216
2.50	2.375	3.845	10.480	86.696
2.75	2.625	3.173	8.648	95.345
3.00	2.875	1.308	3.565	98.910
3.25	3.125	0.294	0.801	99.711
3.50	3.375	0.064	0.174	99.886
3.75	3.625	0.024	0.065	99.951
4.00	3.875	0.018	0.049	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.2257	phi	(0.4276 mm)
Standard Dev:	1.0488	phi-units	(0.4834 mm)
Skewness:	0.1163	dimensionless	
Kurtosis:	1.5268	dimensionless	
5th Moment:	0.4579	dimensionless	
6th Moment:	2.9943	dimensionless	
RARD *	0.8557	dimensionless	
Median	0.9630	phi	(0.513 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)

