Onshore Grab Sample

Sample: VO-56-SS
Sample Taken By: J. Ladner
Sample Collected On: 12/3/03
Splits? Yes

County: Volusia
Latitude: 28° 48' 13.56"
Longitude: 80° 44' 29.34"
Datum: NAD 83
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	82.571	grams
Total Fines in Sample	0.659	grams
Total Percent Fines	0.79	%

Dry Sieving Summary

Total Sample Weight	81.974	grams
Total Digested Weight	46.193	grams
Total Carbonate Weight	35.781	grams
Total Silica %	56.35	%
Total Carbonate %	43.65	%
Carbonate/Silica Ratio	0.775	

General Comments:

None

Description

Worked By: M. Lachance

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-56-SS

Total Sample Mass: 81.974 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	0.020	0.024	0.024
-1.00	-1.125	0.075	0.091	0.116
-0.75	-0.875	0.142	0.173	0.289
-0.50	-0.625	0.545	0.665	0.954
-0.25	-0.375	1.611	1.965	2.919
0.00	-0.125	3.933	4.798	7.717
0.25	0.125	8.047	9.817	17.534
0.50	0.375	10.346	12.621	30.155
0.75	0.625	15.007	18.307	48.462
1.00	0.875	23.395	28.540	77.001
1.25	1.125	8.459	10.319	87.320
1.50	1.375	5.390	6.575	93.896
1.75	1.625	2.454	2.994	96.889
2.00	1.875	1.184	1.444	98.334
2.25	2.125	0.574	0.700	99.034
2.50	2.375	0.359	0.438	99.472
2.75	2.625	0.243	0.296	99.768
3.00	2.875	0.115	0.140	99.909
3.25	3.125	0.042	0.051	99.960
3.50	3.375	0.013	0.016	99.976
3.75	3.625	0.007	0.009	99.984
4.00	3.875	0.007	0.009	99.993
5.00	4.500	0.006	0.007	100.000

Statistical Results			
Mean:	0.7258	phi	(0.6047 mm)
Standard Dev:	0.5280	phi-units	(0.6935 mm)
Skewness:	0.3214	dimensionless	
Kurtosis:	4.6720	dimensionless	
5th Moment:	7.5416	dimensionless	
6th Moment:	53.9964	dimensionless	
RARD *	0.7275	dimensionless	
Median	0.6385	phi	(0.6424 mm)

* RARD = reciprocal absolute relative dispersion (see below)

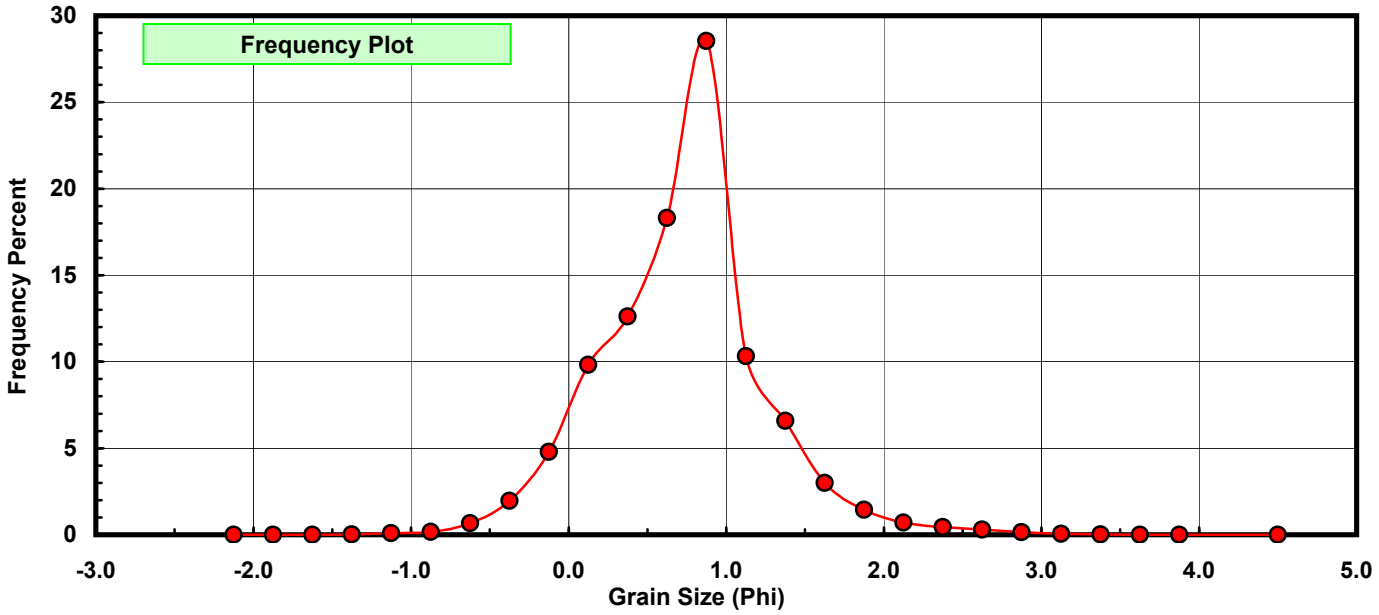
Statistical Explanation

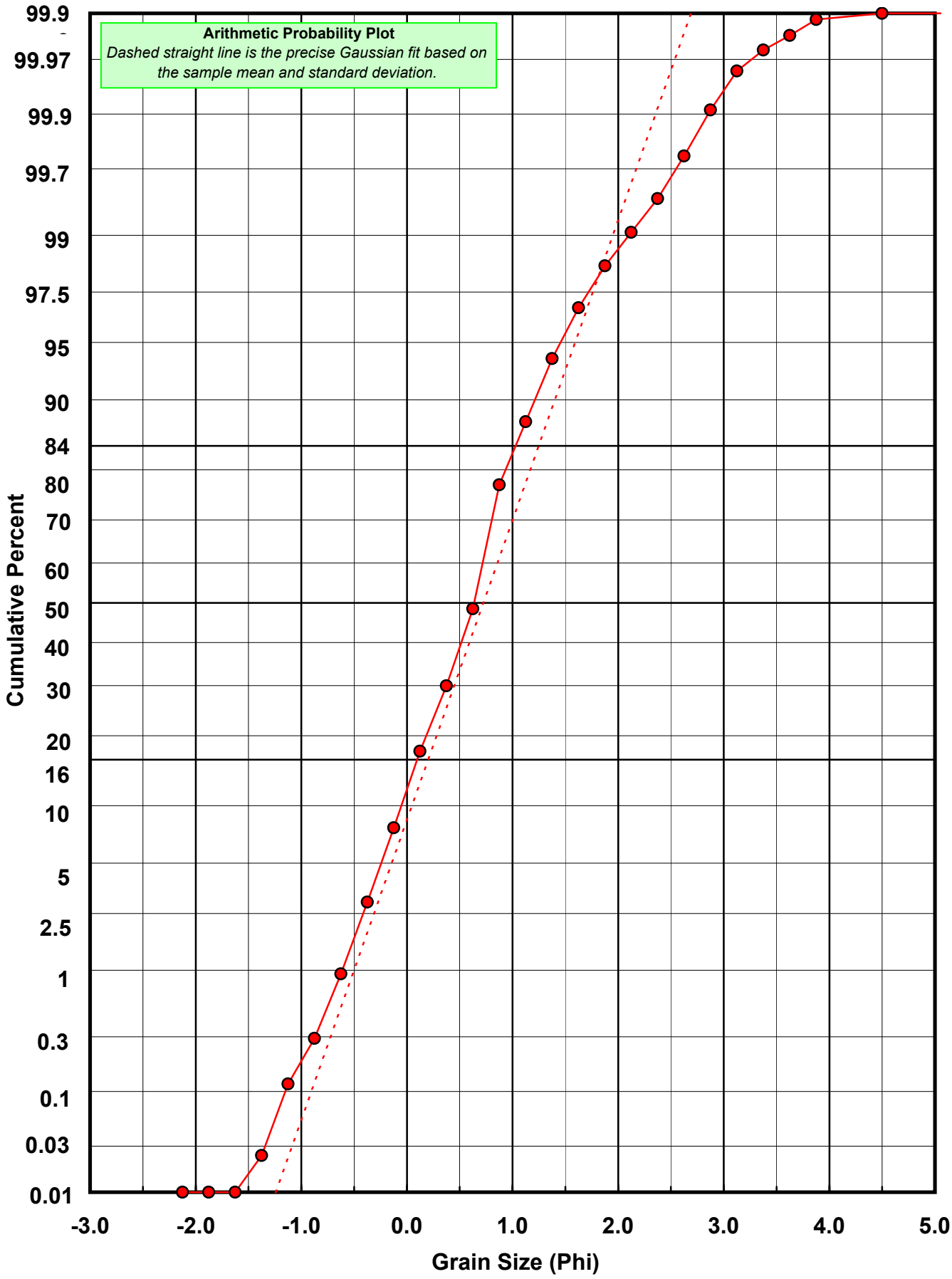
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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)




Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.9
99.97
99.9
99.7
99
97.5
95
90
84
80
70
60
50
40
30
20
16
10
5
2.5
1
0.3
0.1
0.03
0.01
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
Grain Size (Phi)

Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: VO-56-SS

Total Carbonate Mass: 35.803 grams

% Carbonate: 43.6 %

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	0.020	0.056	0.056
-1.00	-1.125	0.075	0.209	0.265
-0.75	-0.875	0.129	0.360	0.626
-0.50	-0.625	0.525	1.466	2.092
-0.25	-0.375	1.452	4.056	6.148
0.00	-0.125	3.092	8.636	14.784
0.25	0.125	5.117	14.292	29.076
0.50	0.375	5.275	14.733	43.809
0.75	0.625	5.185	14.482	58.291
1.00	0.875	10.215	28.531	86.822
1.25	1.125	2.160	6.033	92.855
1.50	1.375	1.579	4.410	97.266
1.75	1.625	0.738	2.061	99.327
2.00	1.875	0.154	0.430	99.757
2.25	2.125	0.070	0.196	99.953
2.50	2.375	0.017	0.047	100.000
2.75	2.625	0.000	0.000	100.000
3.00	2.875	0.000	0.000	100.000
3.25	3.125	0.000	0.000	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:	0.5472	phi	(0.6844 mm)
Standard Dev:	0.5158	phi-units	(0.6994 mm)
Skewness:	-0.1803	dimensionless	
Kurtosis:	3.0149	dimensionless	
5th Moment:	-1.0610	dimensionless	
6th Moment:	16.1799	dimensionless	
RARD *	0.9426	dimensionless	
Median	0.4819	phi	(0.716 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	
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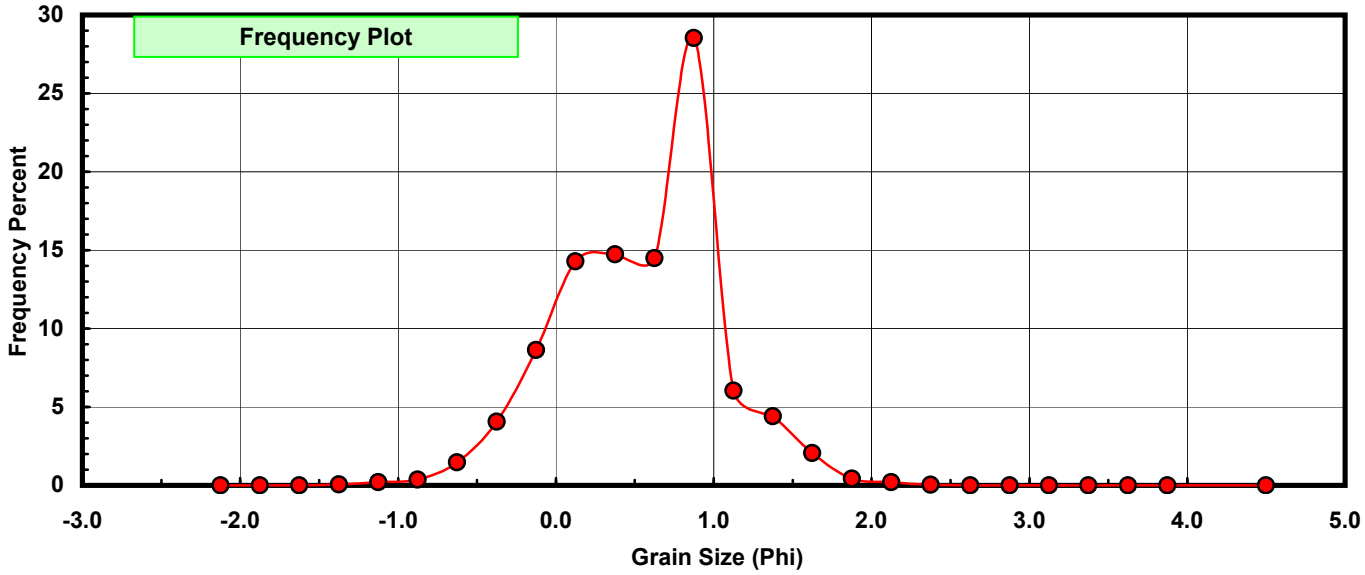
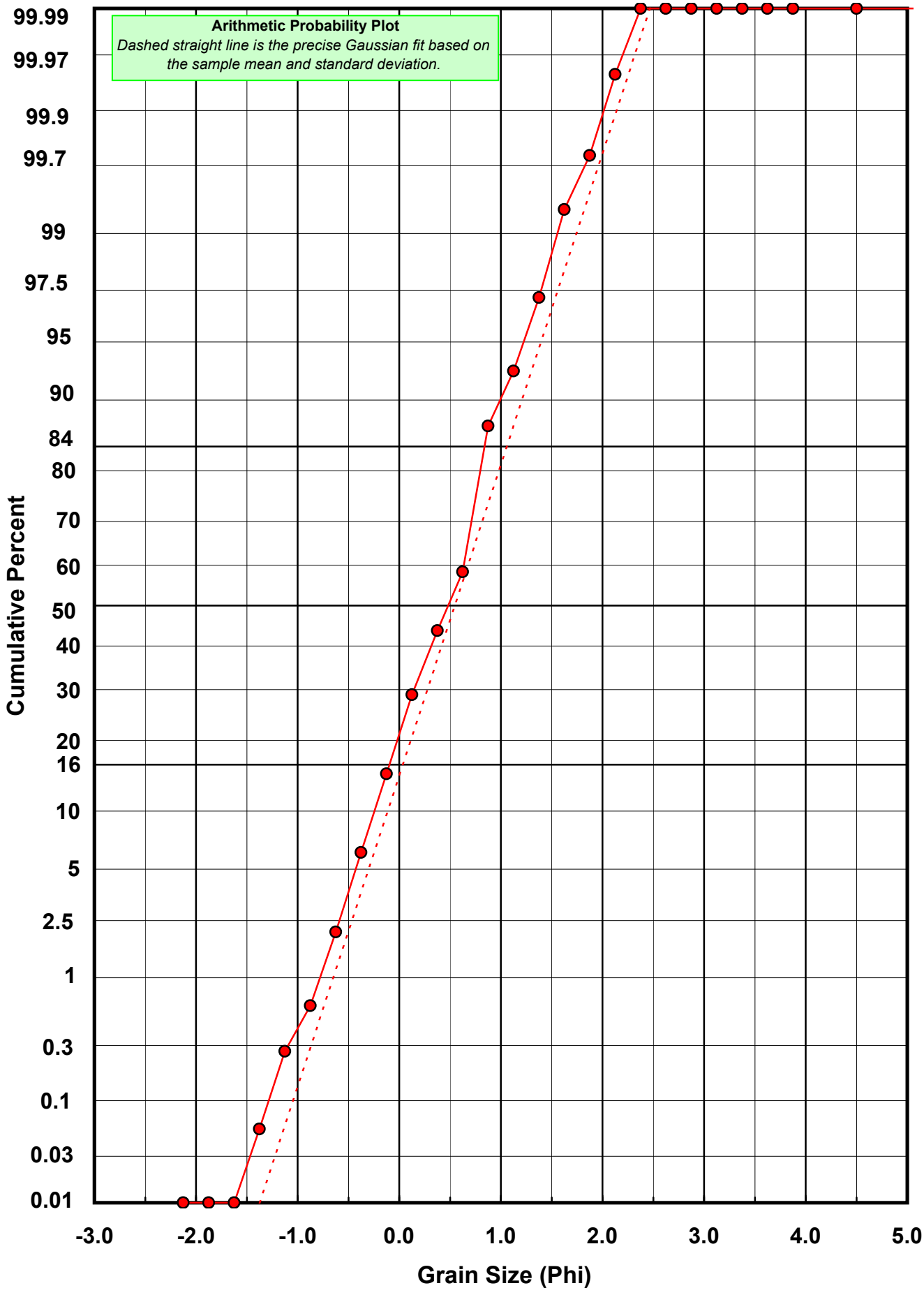
0.5 to 1.0	Good homogeneity
1.0 to 1.33	Fair homogeneity
> 1.33	Poor homogeneity (e.g., glacial)




Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
99.9
99.7
99
97.5
95
90
84
80
70
60
50
40
30
20
16
10
5
2.5
1
0.3
0.1
0.03
0.01
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
Grain Size (Phi)

Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-56-SS

Total Digested Mass: 46.186 grams

% Silica: 56.4 %

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	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.013	0.028	0.028
-0.50	-0.625	0.020	0.043	0.071
-0.25	-0.375	0.159	0.344	0.416
0.00	-0.125	0.841	1.821	2.237
0.25	0.125	2.930	6.344	8.581
0.50	0.375	5.071	10.980	19.560
0.75	0.625	9.822	21.266	40.826
1.00	0.875	13.180	28.537	69.363
1.25	1.125	6.299	13.638	83.001
1.50	1.375	3.811	8.251	91.253
1.75	1.625	1.716	3.715	94.968
2.00	1.875	1.030	2.230	97.198
2.25	2.125	0.504	1.091	98.290
2.50	2.375	0.342	0.740	99.030
2.75	2.625	0.253	0.548	99.578
3.00	2.875	0.119	0.258	99.835
3.25	3.125	0.042	0.091	99.926
3.50	3.375	0.015	0.032	99.959
3.75	3.625	0.010	0.022	99.981
4.00	3.875	0.009	0.019	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	0.8647	phi	(0.5491 mm)
Standard Dev:	0.5003	phi-units	(0.7069 mm)
Skewness:	0.8790	dimensionless	
Kurtosis:	5.2863	dimensionless	
5th Moment:	13.7719	dimensionless	
6th Moment:	64.7840	dimensionless	
RARD *	0.5786	dimensionless	
Median	0.7054	phi	(0.6133 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
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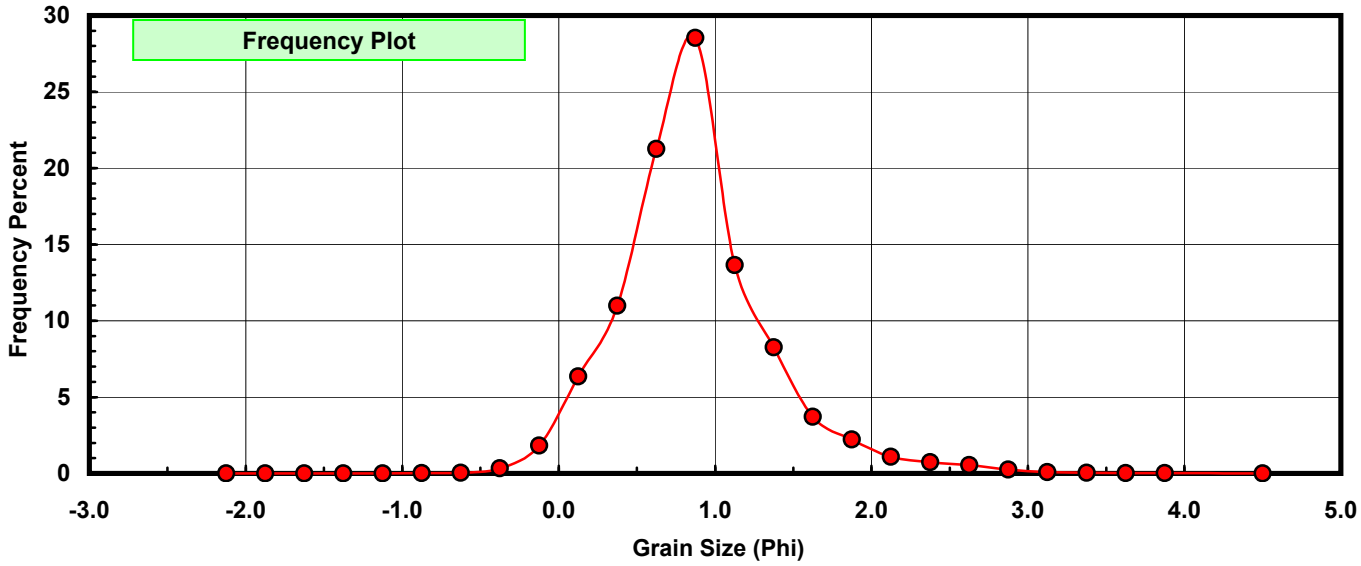

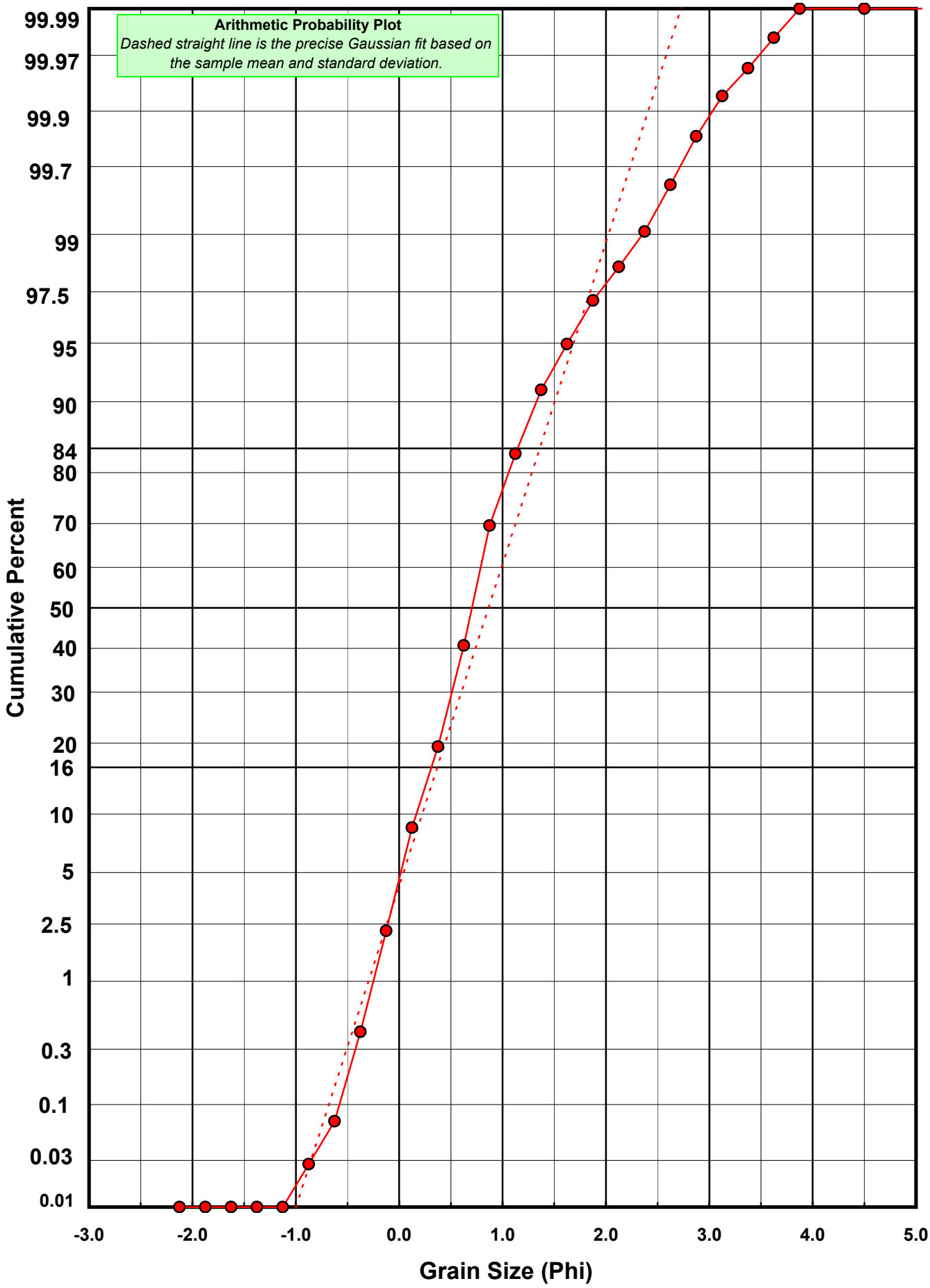
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0.3
0.1
0.03
0.01
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-2.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
Grain Size (Phi)