Onshore Grab Sample

Sample: VO-04-SS
Sample Taken By: J. Ladner
Sample Collected On: 12/3/03
Splits? N/A

County: Volusia
Latitude: 29° 23' 49.74"
Longitude: 81° 05' 50.16"
Datum: NAD 83
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	76.101	grams
Total Fines in Sample	0.642	grams
Total Percent Fines	0.84	%

Dry Sieving Summary

Total Sample Weight	75.360	grams
Total Digested Weight	49.492	grams
Total Carbonate Weight	25.868	grams
Total Silica %	65.67	%
Total Carbonate %	34.33	%
Carbonate/Silica Ratio	0.523	

General Comments:

None

Description

Worked By: M. Lachance

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-04-SS

Total Sample Mass: 75.360 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	0.004	0.005	0.005
-0.50	-0.625	0.001	0.001	0.007
-0.25	-0.375	0.020	0.027	0.033
0.00	-0.125	0.187	0.248	0.281
0.25	0.125	0.913	1.212	1.493
0.50	0.375	2.218	2.943	4.436
0.75	0.625	5.037	6.684	11.120
1.00	0.875	11.784	15.637	26.757
1.25	1.125	12.058	16.001	42.757
1.50	1.375	10.829	14.370	57.127
1.75	1.625	10.099	13.401	70.528
2.00	1.875	10.214	13.554	84.082
2.25	2.125	5.973	7.926	92.008
2.50	2.375	3.877	5.145	97.152
2.75	2.625	1.621	2.151	99.303
3.00	2.875	0.445	0.590	99.894
3.25	3.125	0.070	0.093	99.987
3.50	3.375	0.010	0.013	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:	1.4076	phi	(0.3769 mm)
Standard Dev:	0.5777	phi-units	(0.67 mm)
Skewness:	0.1359	dimensionless	
Kurtosis:	2.5527	dimensionless	
5th Moment:	0.7017	dimensionless	
6th Moment:	10.1635	dimensionless	
RARD *	0.4104	dimensionless	
Median	1.2510	phi	(0.4202 mm)

* RARD = reciprocal absolute relative dispersion (see below)

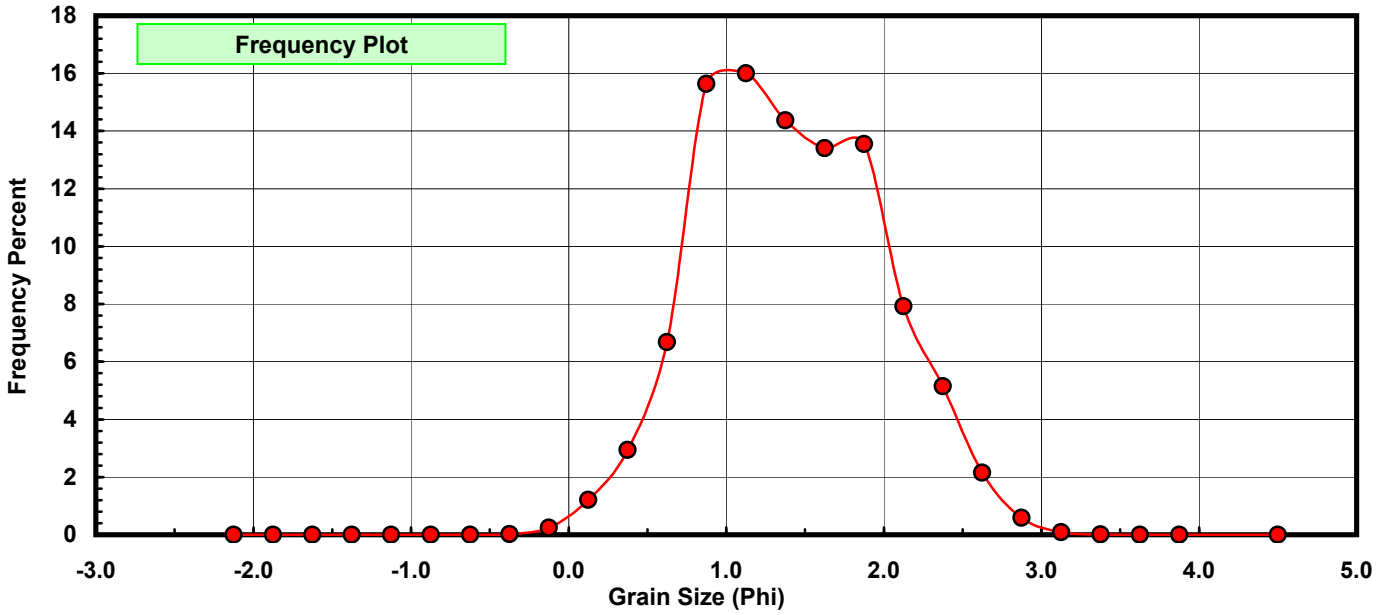
Statistical Explanation

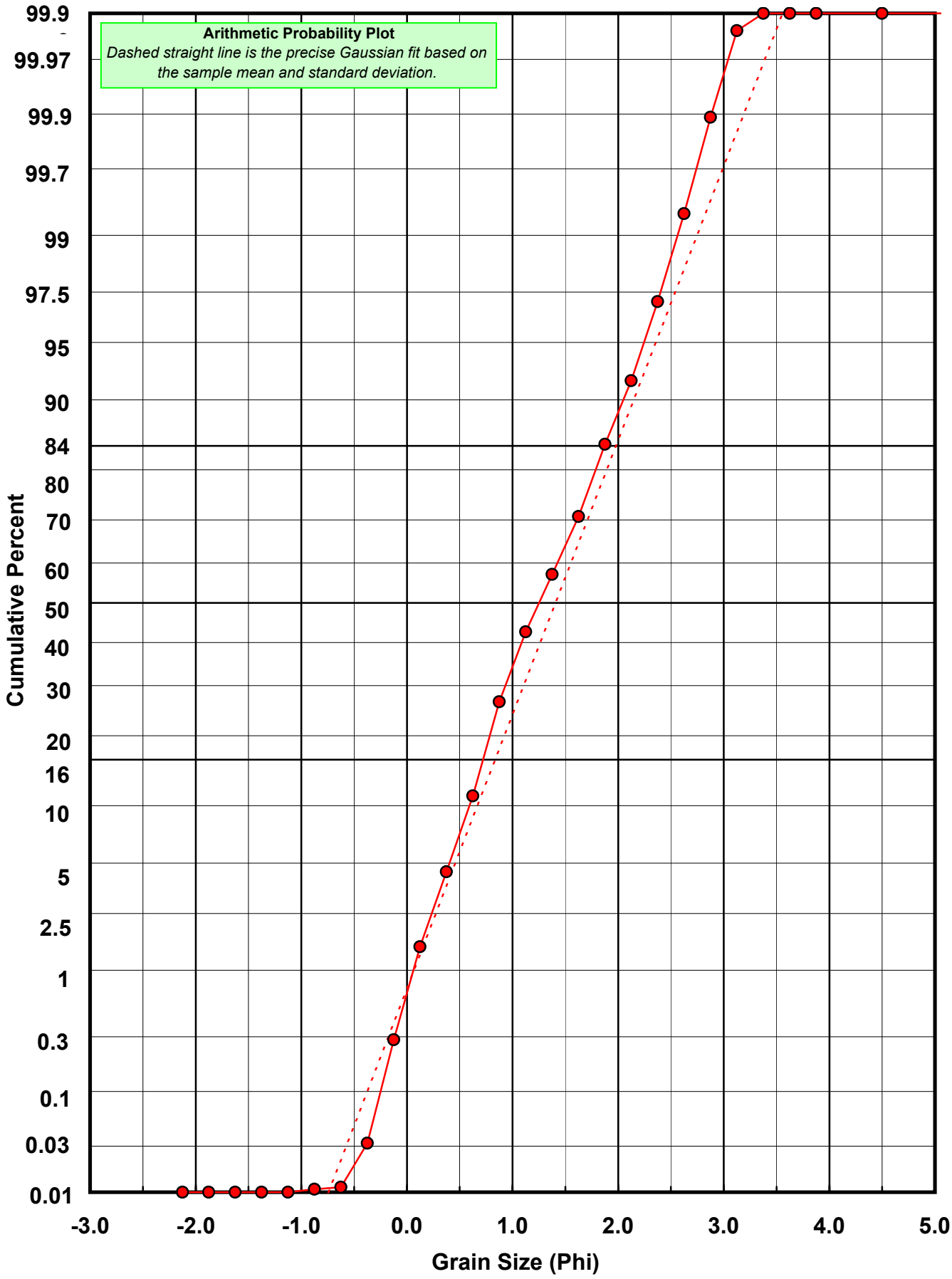
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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-04-SS

Total Carbonate Mass: 26.712 grams

% Carbonate: 34.3 %

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	0.004	0.015	0.015
-0.50	-0.625	0.001	0.004	0.019
-0.25	-0.375	0.020	0.075	0.094
0.00	-0.125	0.187	0.700	0.794
0.25	0.125	0.912	3.414	4.208
0.50	0.375	2.171	8.127	12.335
0.75	0.625	4.514	16.899	29.234
1.00	0.875	7.308	27.358	56.593
1.25	1.125	5.449	20.399	76.992
1.50	1.375	2.616	9.793	86.785
1.75	1.625	1.613	6.038	92.823
2.00	1.875	1.917	7.177	100.000
2.25	2.125	0.000	0.000	100.000
2.50	2.375	0.000	0.000	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:	0.9753	phi	(0.5086 mm)
Standard Dev:	0.4463	phi-units	(0.7339 mm)
Skewness:	0.2033	dimensionless	
Kurtosis:	2.7791	dimensionless	
5th Moment:	0.5650	dimensionless	
6th Moment:	10.9970	dimensionless	
RARD *	0.4576	dimensionless	
Median	0.8148	phi	(0.5685 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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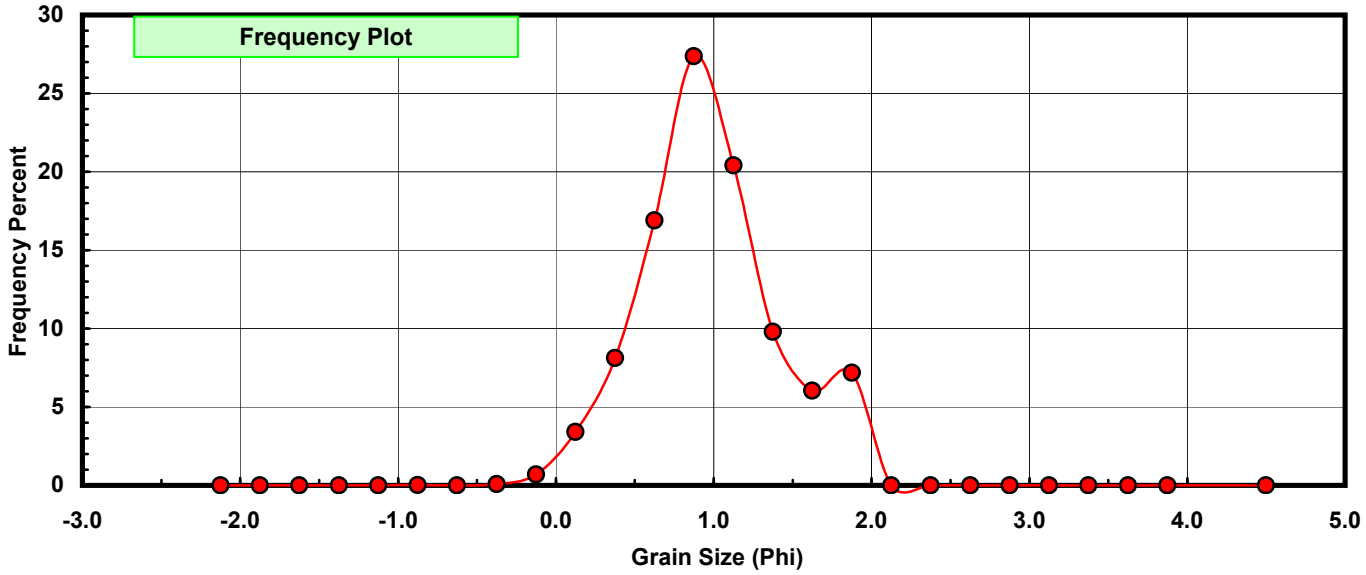

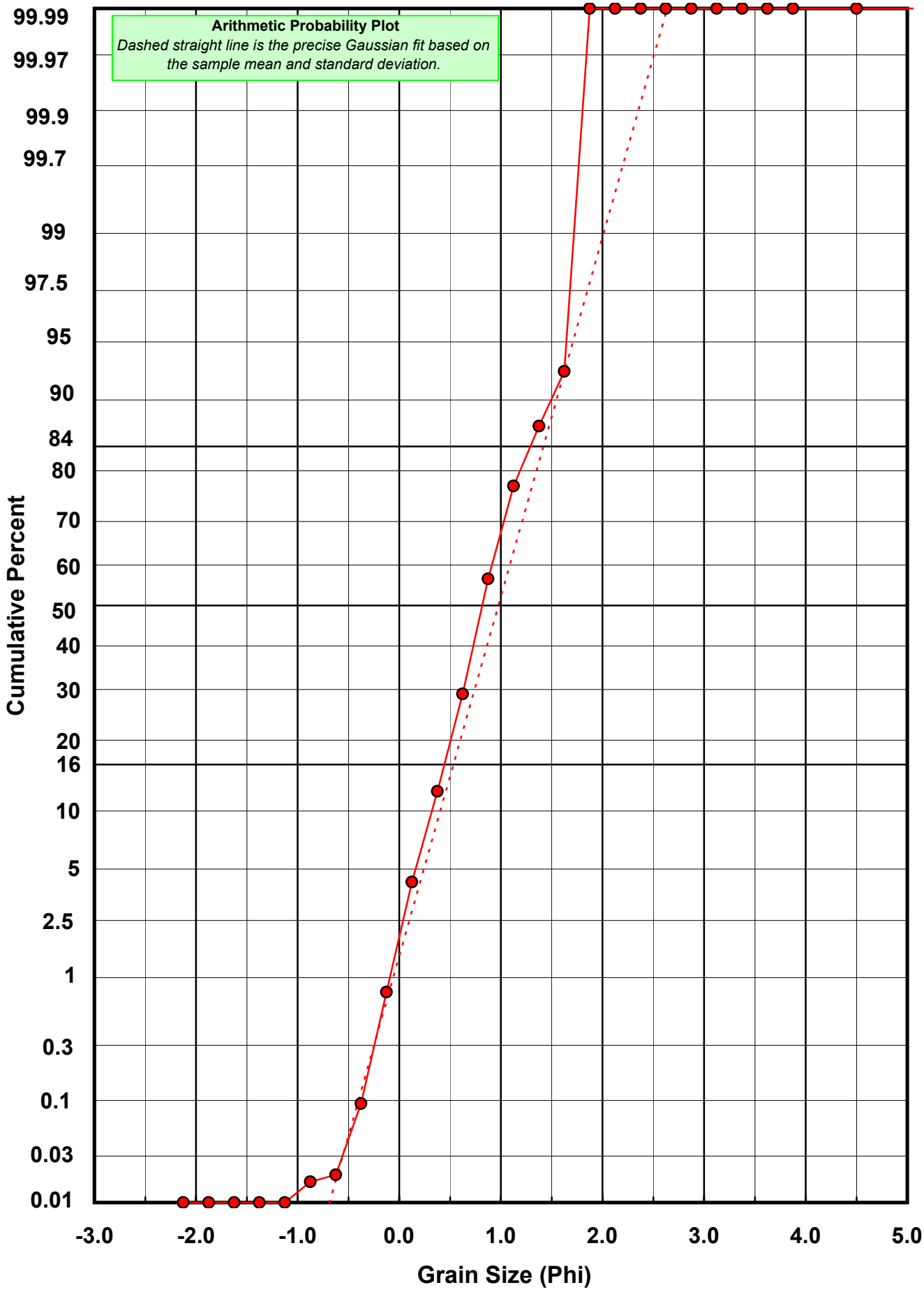
Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
99.9
99.7
99
97.5
95
90
84
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60
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40
30
20
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-04-SS

Total Digested Mass: 49.492 grams

% Silica: 65.7 %

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	0.001	0.002	0.002
0.50	0.375	0.047	0.095	0.097
0.75	0.625	0.523	1.057	1.154
1.00	0.875	4.476	9.044	10.198
1.25	1.125	6.609	13.354	23.551
1.50	1.375	8.213	16.595	40.146
1.75	1.625	8.486	17.146	57.292
2.00	1.875	8.297	16.764	74.056
2.25	2.125	6.149	12.424	86.481
2.50	2.375	4.009	8.100	94.581
2.75	2.625	2.034	4.110	98.691
3.00	2.875	0.546	1.103	99.794
3.25	3.125	0.083	0.168	99.962
3.50	3.375	0.019	0.038	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:	1.6600	phi	(0.3164 mm)
Standard Dev:	0.5110	phi-units	(0.7017 mm)
Skewness:	0.1977	dimensionless	
Kurtosis:	2.3833	dimensionless	
5th Moment:	1.4454	dimensionless	
6th Moment:	8.5393	dimensionless	
RARD *	0.3079	dimensionless	
Median	1.5187	phi	(0.349 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)

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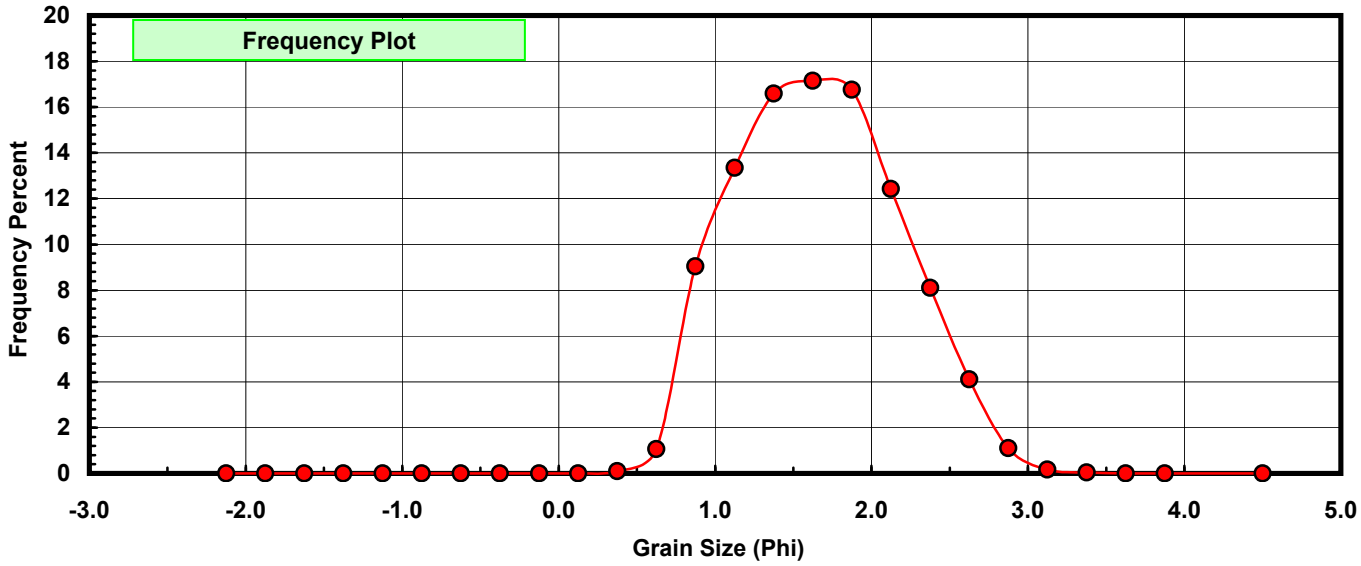

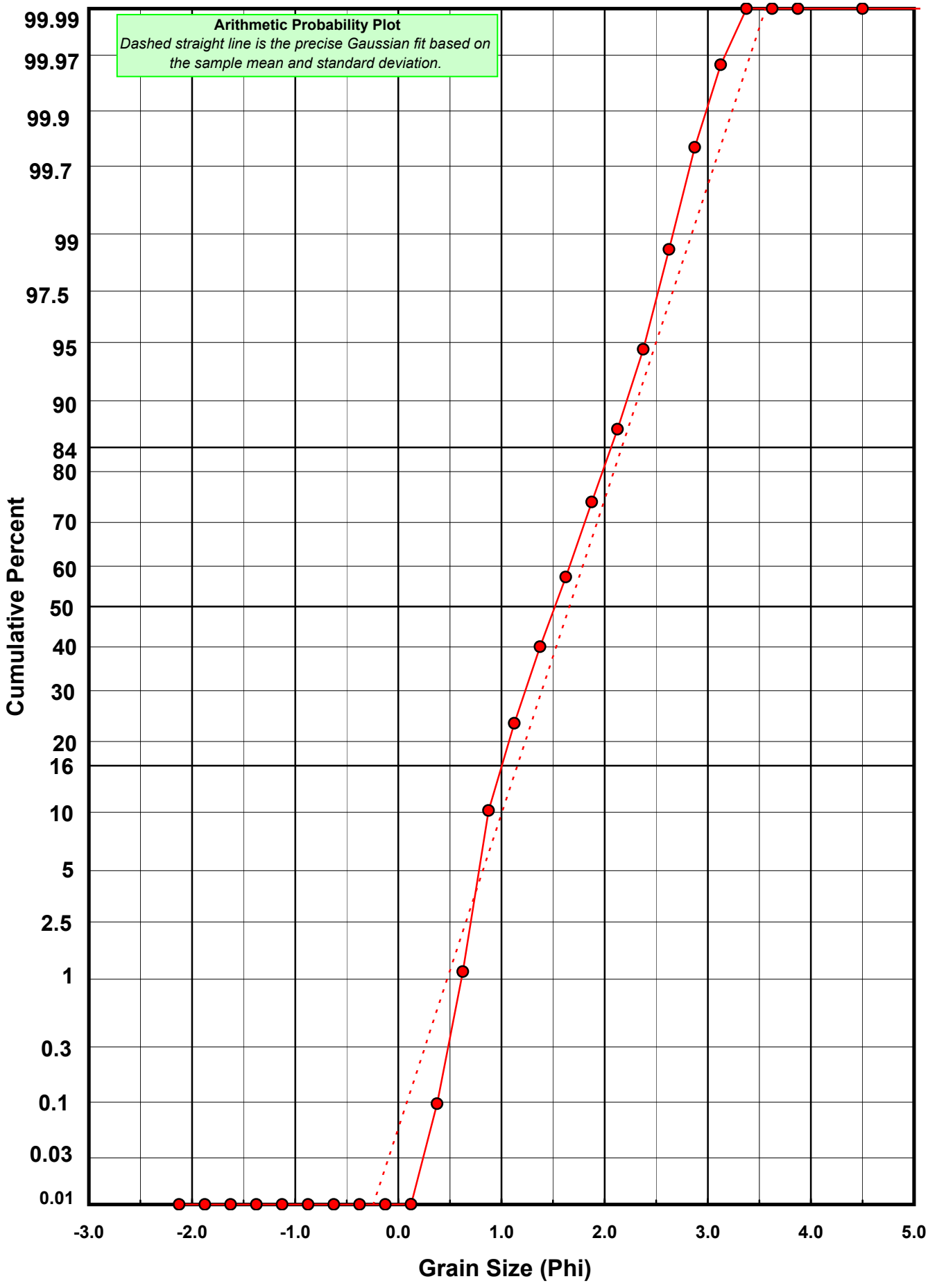
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-2.0
-1.0
0.0
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3.0
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Grain Size (Phi)