Onshore Grab Sample

Sample: VO-48-BB
Sample Taken By: J. Ladner
Sample Collected On: 12/3/03
Splits? Yes

County: Volusia
Latitude: 28° 52' 49.92"
Longitude: 80° 47' 26.46"
Datum: NAD 83
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	98.687	grams
Total Fines in Sample	0.202	grams
Total Percent Fines	0.20	%

Dry Sieving Summary

Total Sample Weight	98.492	grams
Total Digested Weight	38.212	grams
Total Carbonate Weight	60.280	grams
Total Silica %	38.80	%
Total Carbonate %	61.20	%
Carbonate/Silica Ratio	1.578	

General Comments:

Post-Digestion -1.00 phi: Organics Only

Description

Worked By: M. Lachance

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-48-BB

Total Sample Mass: 98.492 grams

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.174	0.177	0.177
-1.75	-1.875	0.298	0.303	0.479
-1.50	-1.625	0.246	0.250	0.729
-1.25	-1.375	0.458	0.465	1.194
-1.00	-1.125	1.641	1.666	2.860
-0.75	-0.875	3.381	3.433	6.293
-0.50	-0.625	7.575	7.691	13.984
-0.25	-0.375	12.577	12.770	26.753
0.00	-0.125	15.220	15.453	42.206
0.25	0.125	13.790	14.001	56.208
0.50	0.375	9.353	9.496	65.704
0.75	0.625	7.144	7.253	72.957
1.00	0.875	7.900	8.021	80.978
1.25	1.125	3.607	3.662	84.640
1.50	1.375	3.099	3.146	87.787
1.75	1.625	2.569	2.608	90.395
2.00	1.875	2.753	2.795	93.190
2.25	2.125	2.359	2.395	95.585
2.50	2.375	2.201	2.235	97.820
2.75	2.625	1.496	1.519	99.339
3.00	2.875	0.489	0.496	99.836
3.25	3.125	0.101	0.103	99.938
3.50	3.375	0.024	0.024	99.962
3.75	3.625	0.016	0.016	99.979
4.00	3.875	0.010	0.010	99.989
5.00	4.500	0.011	0.011	100.000

Statistical Results			
Mean:	0.3276	phi	(0.7969 mm)
Standard Dev:	0.8998	phi-units	(0.536 mm)
Skewness:	0.7466	dimensionless	
Kurtosis:	3.3604	dimensionless	
5th Moment:	5.0170	dimensionless	
6th Moment:	18.2941	dimensionless	
RARD *	2.7467	dimensionless	
Median	0.0142	phi	(0.9902 mm)
* RARD = reciprocal absolute relative dispersion (see below)			

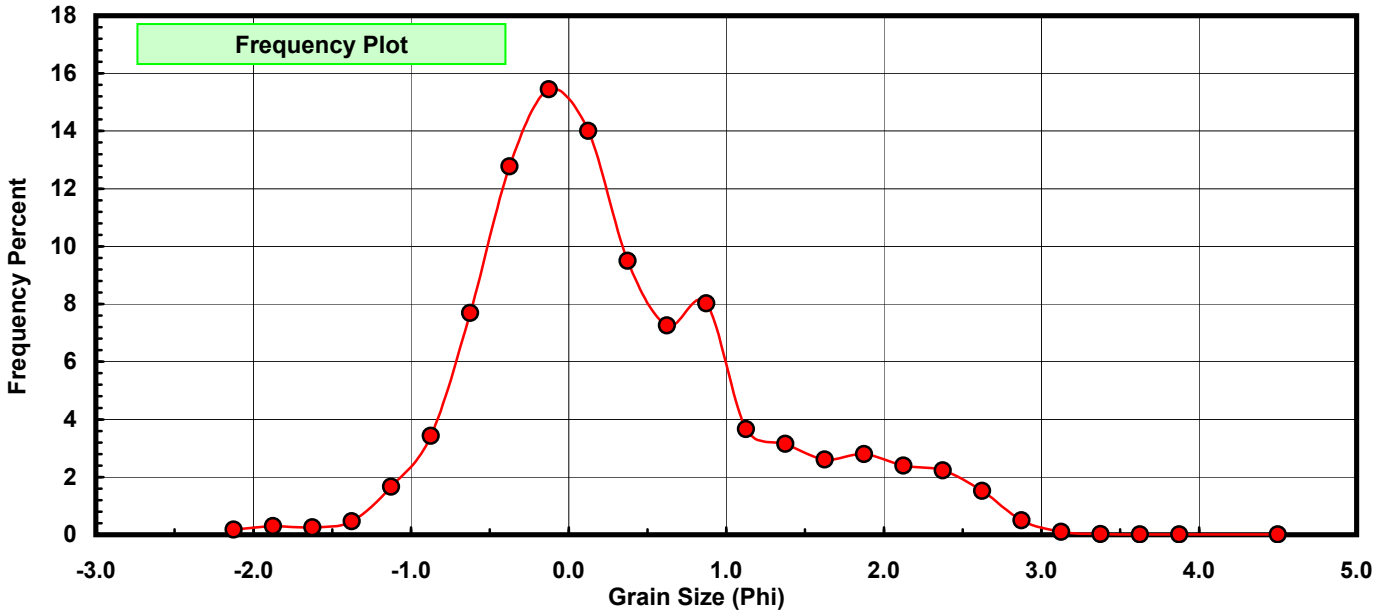
Statistical Explanation

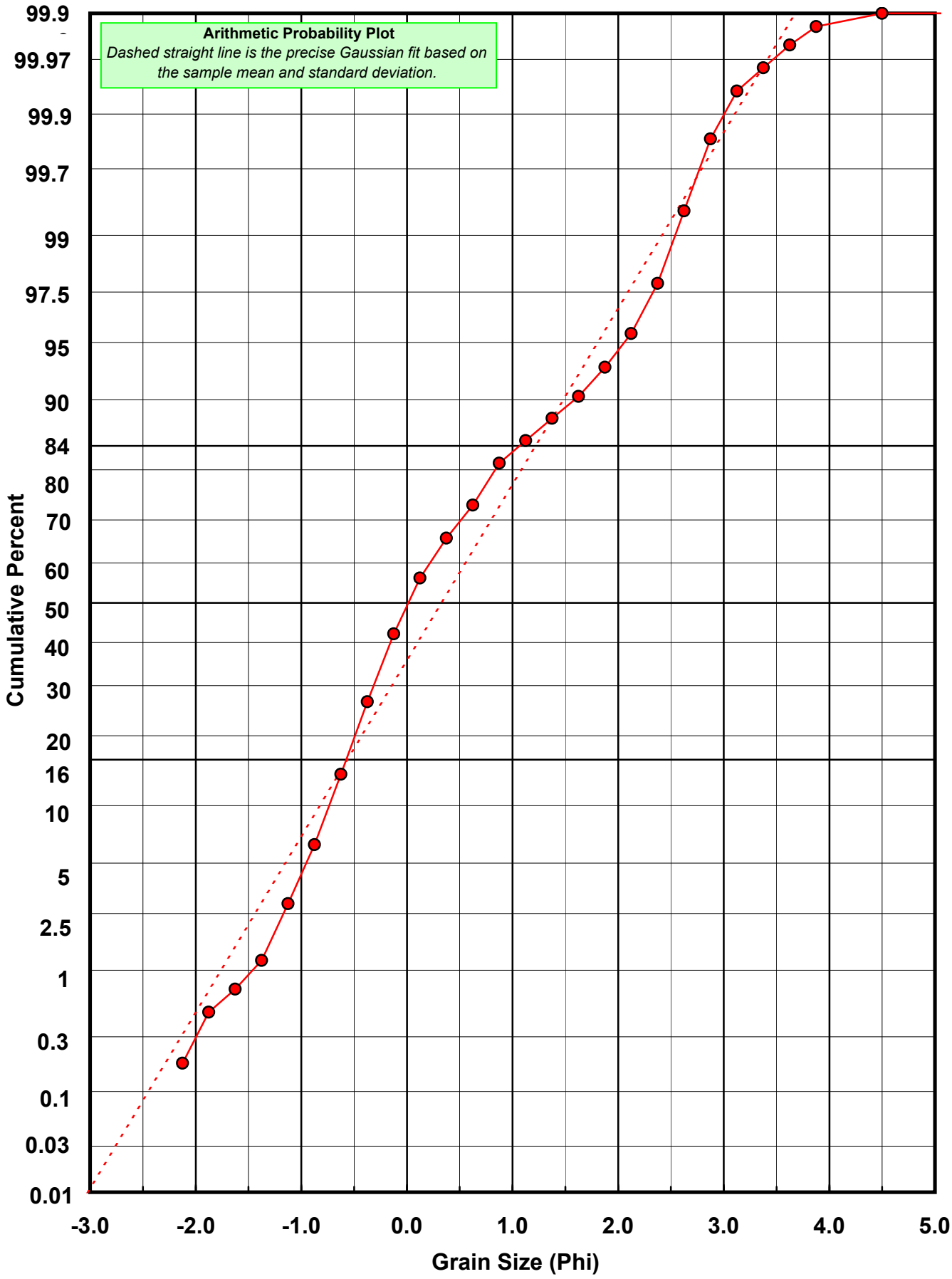
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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-48-BB

Total Carbonate Mass: 60.318 grams

% Carbonate: 61.2 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.174	0.288	0.288
-1.75	-1.875	0.298	0.494	0.783
-1.50	-1.625	0.238	0.395	1.177
-1.25	-1.375	0.458	0.759	1.936
-1.00	-1.125	1.625	2.694	4.630
-0.75	-0.875	3.316	5.498	10.128
-0.50	-0.625	6.938	11.502	21.630
-0.25	-0.375	9.746	16.158	37.788
0.00	-0.125	9.927	16.458	54.246
0.25	0.125	8.173	13.550	67.796
0.50	0.375	5.790	9.599	77.395
0.75	0.625	4.018	6.661	84.056
1.00	0.875	4.886	8.100	92.157
1.25	1.125	1.793	2.973	95.129
1.50	1.375	1.244	2.062	97.192
1.75	1.625	0.828	1.373	98.564
2.00	1.875	0.563	0.933	99.498
2.25	2.125	0.047	0.078	99.576
2.50	2.375	0.000	0.000	99.576
2.75	2.625	0.189	0.313	99.889
3.00	2.875	0.067	0.111	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:	0.0164	phi	(0.9887 mm)
Standard Dev:	0.7022	phi-units	(0.6146 mm)
Skewness:	0.4401	dimensionless	
Kurtosis:	3.7329	dimensionless	
5th Moment:	4.3696	dimensionless	
6th Moment:	27.4576	dimensionless	
RARD *	42.7734	dimensionless	
Median	-0.1895	phi	(1.1404 mm)

* RARD = reciprocal absolute relative dispersion (see below)

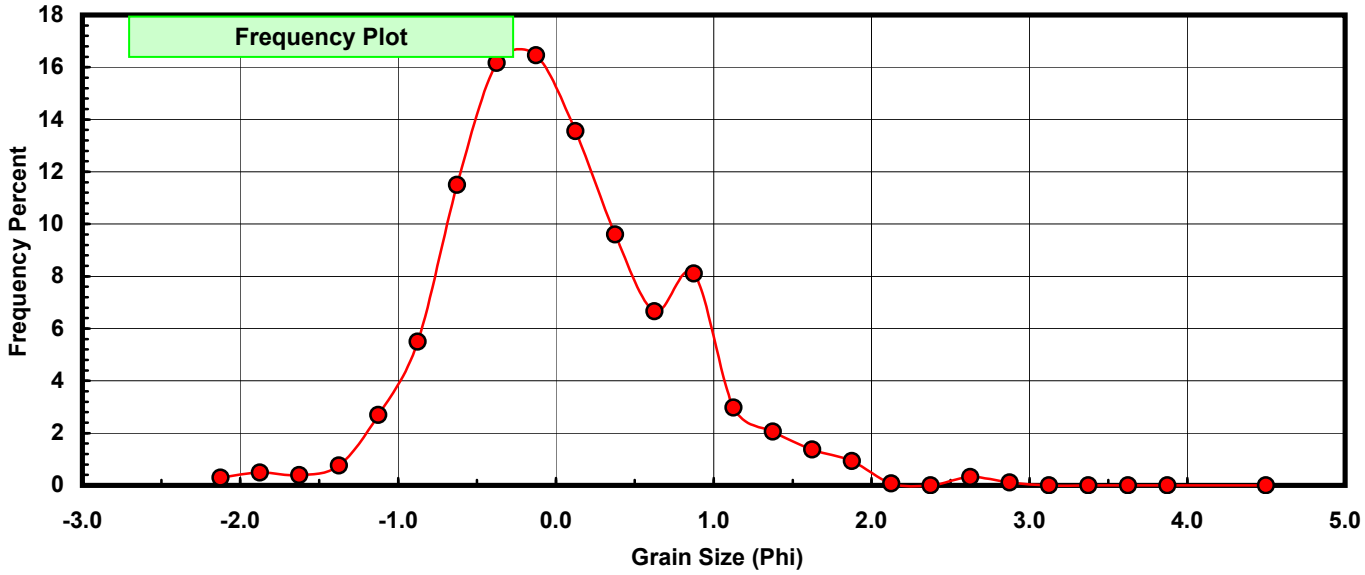
Statistical Explanation

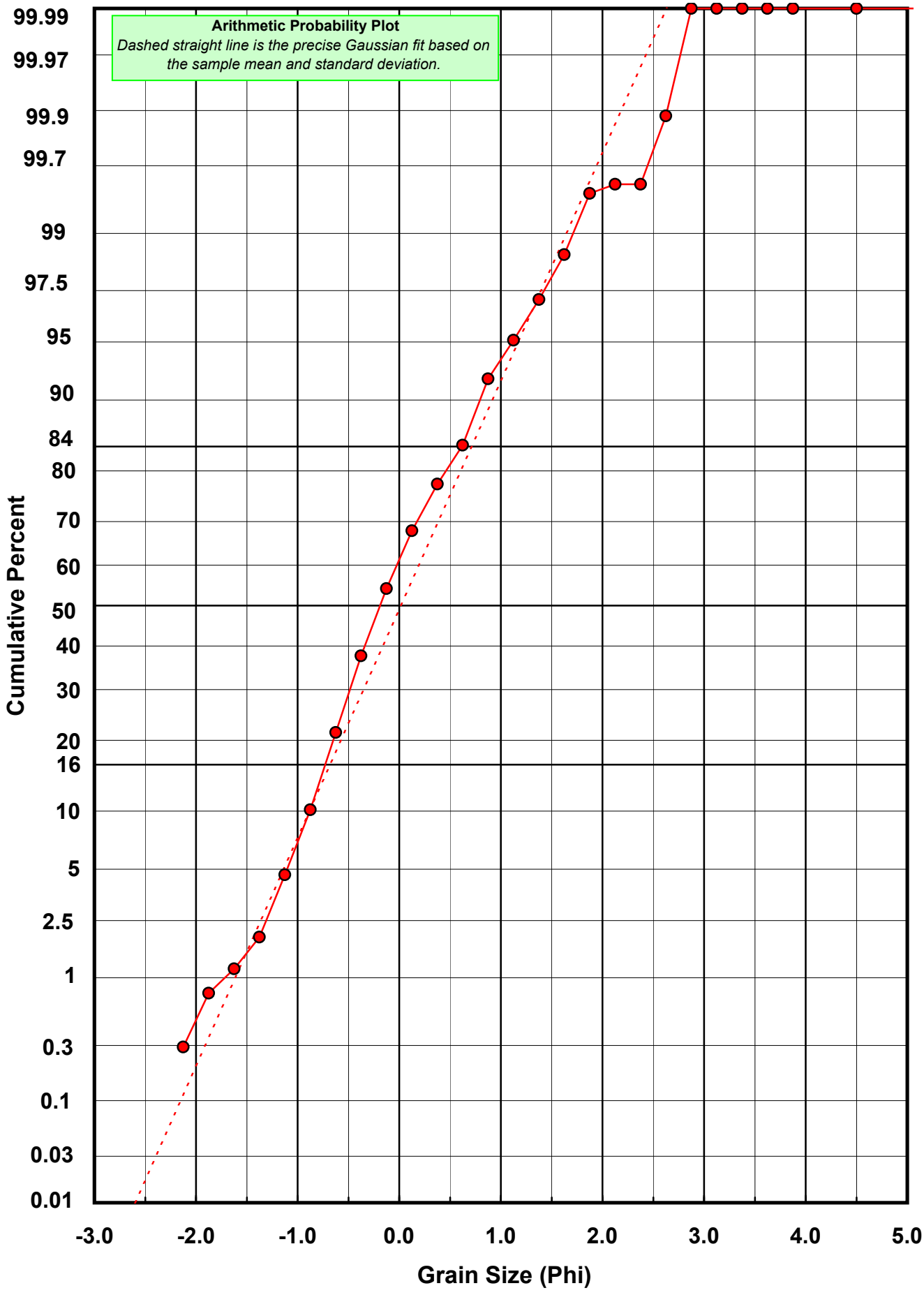
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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
99.99
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-48-BB

Total Digested Mass: 38.200 grams

% Silica: 38.8 %

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	0.008	0.021	0.021
-1.25	-1.375	0.000	0.000	0.021
-1.00	-1.125	0.016	0.042	0.063
-0.75	-0.875	0.065	0.170	0.233
-0.50	-0.625	0.637	1.668	1.901
-0.25	-0.375	2.831	7.411	9.312
0.00	-0.125	5.293	13.856	23.168
0.25	0.125	5.617	14.704	37.872
0.50	0.375	3.563	9.327	47.199
0.75	0.625	3.126	8.183	55.382
1.00	0.875	3.014	7.890	63.272
1.25	1.125	1.814	4.749	68.021
1.50	1.375	1.855	4.856	72.877
1.75	1.625	1.741	4.558	77.435
2.00	1.875	2.190	5.733	83.168
2.25	2.125	2.312	6.052	89.220
2.50	2.375	2.217	5.804	95.024
2.75	2.625	1.307	3.421	98.445
3.00	2.875	0.422	1.105	99.550
3.25	3.125	0.103	0.270	99.819
3.50	3.375	0.035	0.092	99.911
3.75	3.625	0.019	0.050	99.961
4.00	3.875	0.015	0.039	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	0.8203	phi	(0.5663 mm)
Standard Dev:	0.9651	phi-units	(0.5122 mm)
Skewness:	0.5184	dimensionless	
Kurtosis:	2.0709	dimensionless	
5th Moment:	2.3349	dimensionless	
6th Moment:	6.3987	dimensionless	
RARD *	1.1765	dimensionless	
Median	0.4606	phi	(0.7267 mm)

* RARD = reciprocal absolute relative dispersion (see below)

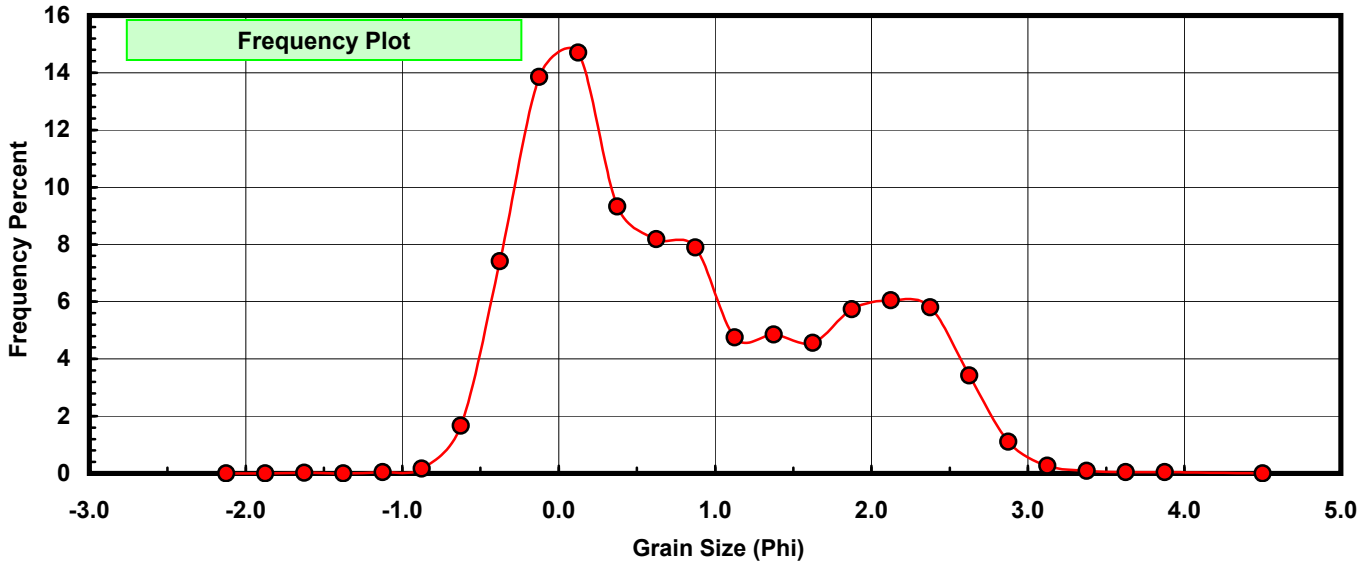
Statistical Explanation

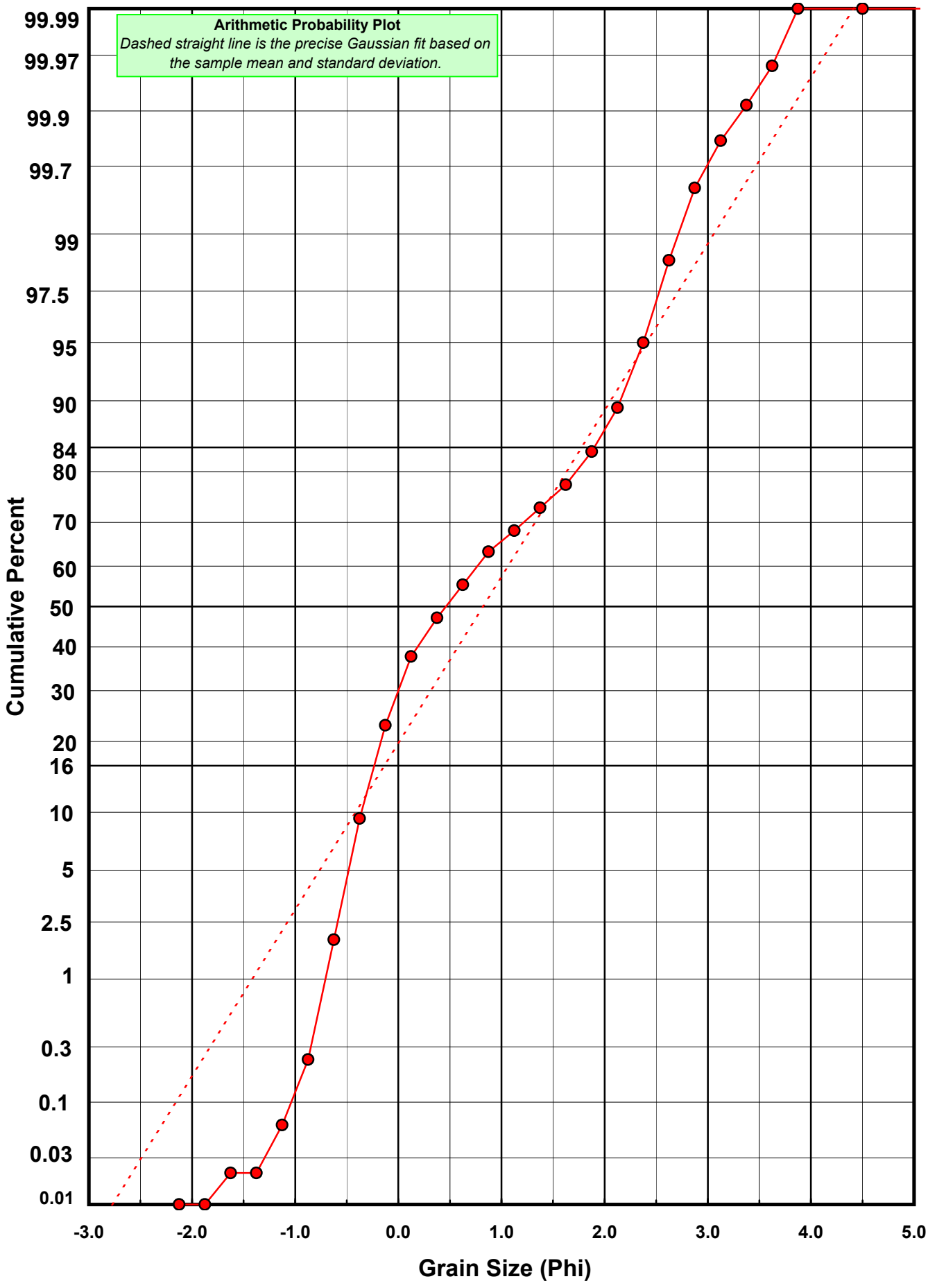
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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
99.99
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)