Onshore Grab Sample

Sample: VO-28-BB
Sample Taken By: J. Ladner
Sample Collected On: 12/3/03
Splits? N/A

County: Volusia
Latitude: 29° 05' 43.86"
Longitude: 80° 55' 59.04"
Datum: NAD 83
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	91.779	grams
Total Fines in Sample	0.172	grams
Total Percent Fines	0.19	%

Dry Sieving Summary

Total Sample Weight	91.659	grams
Total Digested Weight	68.600	grams
Total Carbonate Weight	23.059	grams
Total Silica %	74.84	%
Total Carbonate %	25.16	%
Carbonate/Silica Ratio	0.336	

General Comments:

Post-CaCO3 -0.75 phi is Organics Only

Description

Worked By: M. Lachance

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-28-BB

Total Sample Mass: 91.659 grams

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	1.923	2.098	2.098
-1.75	-1.875	0.536	0.585	2.683
-1.50	-1.625	0.776	0.847	3.529
-1.25	-1.375	1.000	1.091	4.620
-1.00	-1.125	0.846	0.923	5.543
-0.75	-0.875	1.007	1.099	6.642
-0.50	-0.625	1.659	1.810	8.452
-0.25	-0.375	1.722	1.879	10.331
0.00	-0.125	1.673	1.825	12.156
0.25	0.125	1.736	1.894	14.050
0.50	0.375	1.501	1.638	15.687
0.75	0.625	1.881	2.052	17.740
1.00	0.875	2.485	2.711	20.451
1.25	1.125	2.317	2.528	22.979
1.50	1.375	2.901	3.165	26.144
1.75	1.625	3.008	3.282	29.425
2.00	1.875	4.211	4.594	34.020
2.25	2.125	9.015	9.835	43.855
2.50	2.375	19.038	20.770	64.625
2.75	2.625	20.630	22.507	87.133
3.00	2.875	8.726	9.520	96.653
3.25	3.125	2.060	2.247	98.900
3.50	3.375	0.537	0.586	99.486
3.75	3.625	0.167	0.182	99.668
4.00	3.875	0.286	0.312	99.980
5.00	4.500	0.018	0.020	100.000

Statistical Results			
Mean:	1.8079	phi	(0.2856 mm)
Standard Dev:	1.2741	phi-units	(0.4135 mm)
Skewness:	-1.5181	dimensionless	
Kurtosis:	4.4830	dimensionless	
5th Moment:	-11.3463	dimensionless	
6th Moment:	32.0527	dimensionless	
RARD *	0.7047	dimensionless	
Median	2.1990	phi	(0.2178 mm)

* RARD = reciprocal absolute relative dispersion (see below)

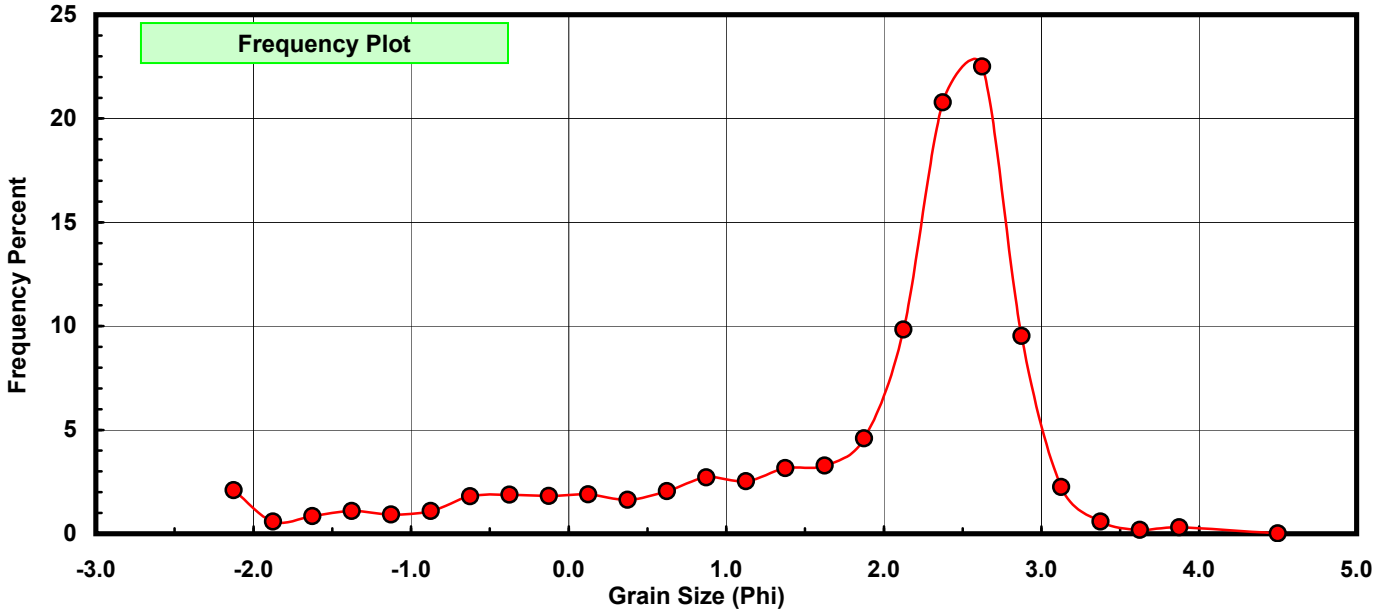
Statistical Explanation

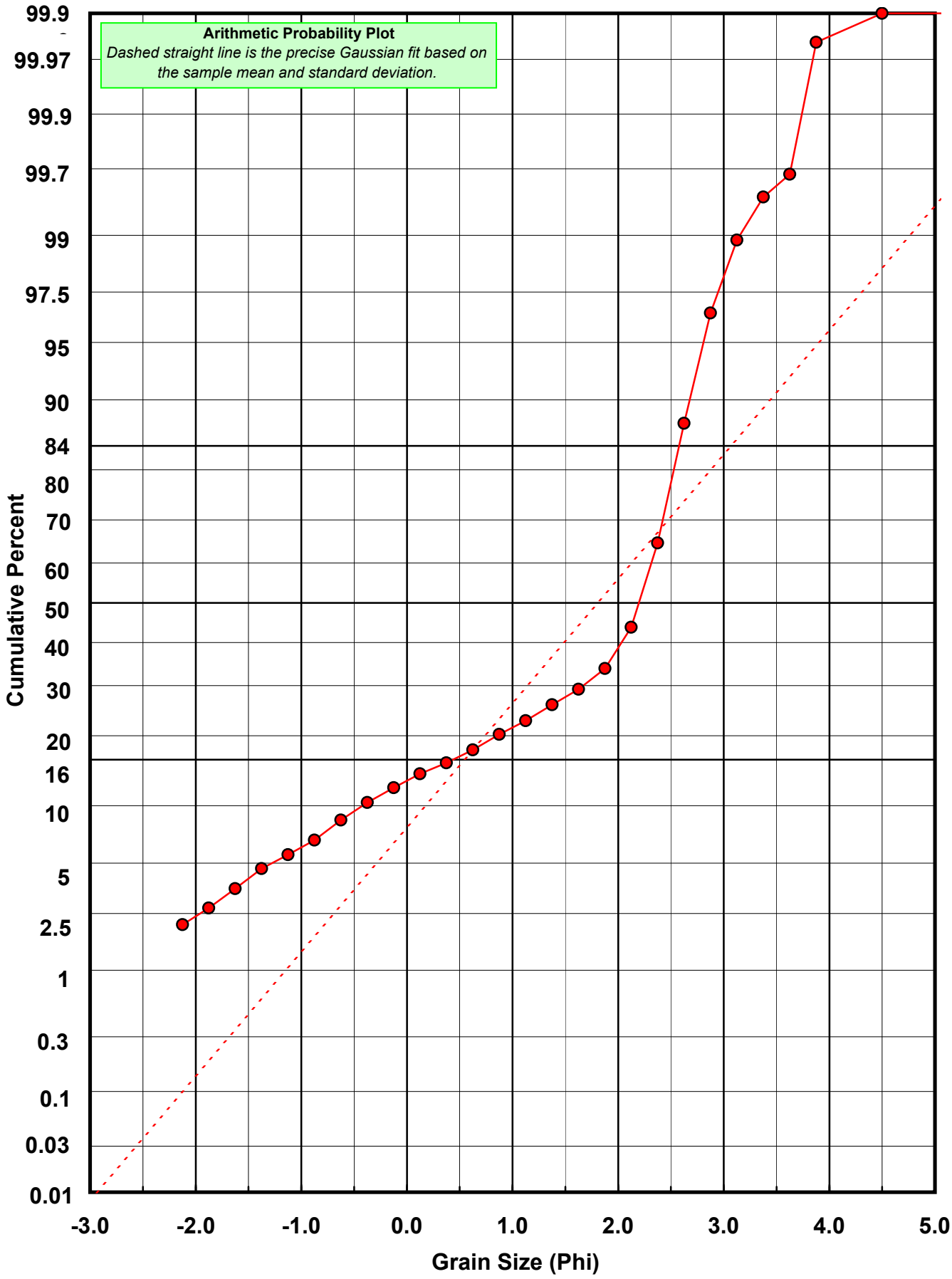
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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
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60
50
40
30
20
16
10
5
2.5
1
0.3
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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-28-BB

Total Carbonate Mass: 23.951 grams

% Carbonate: 25.2 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	1.923	8.029	8.029
-1.75	-1.875	0.536	2.238	10.267
-1.50	-1.625	0.776	3.240	13.507
-1.25	-1.375	1.000	4.175	17.682
-1.00	-1.125	0.846	3.532	21.214
-0.75	-0.875	1.003	4.188	25.402
-0.50	-0.625	1.645	6.868	32.270
-0.25	-0.375	1.691	7.060	39.330
0.00	-0.125	1.594	6.655	45.986
0.25	0.125	1.568	6.547	52.532
0.50	0.375	1.235	5.156	57.689
0.75	0.625	1.572	6.563	64.252
1.00	0.875	1.678	7.006	71.258
1.25	1.125	1.279	5.340	76.598
1.50	1.375	1.179	4.923	81.521
1.75	1.625	0.926	3.866	85.387
2.00	1.875	0.580	2.422	87.808
2.25	2.125	1.222	5.102	92.911
2.50	2.375	1.573	6.568	99.478
2.75	2.625	0.000	0.000	99.478
3.00	2.875	0.000	0.000	99.478
3.25	3.125	0.000	0.000	99.478
3.50	3.375	0.004	0.017	99.495
3.75	3.625	0.000	0.000	99.495
4.00	3.875	0.121	0.505	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	0.1736	phi	(0.8866 mm)
Standard Dev:	1.3721	phi-units	(0.3863 mm)
Skewness:	0.0224	dimensionless	
Kurtosis:	2.1164	dimensionless	
5th Moment:	0.4345	dimensionless	
6th Moment:	6.2578	dimensionless	
RARD *	7.9022	dimensionless	
Median	0.0283	phi	(0.9806 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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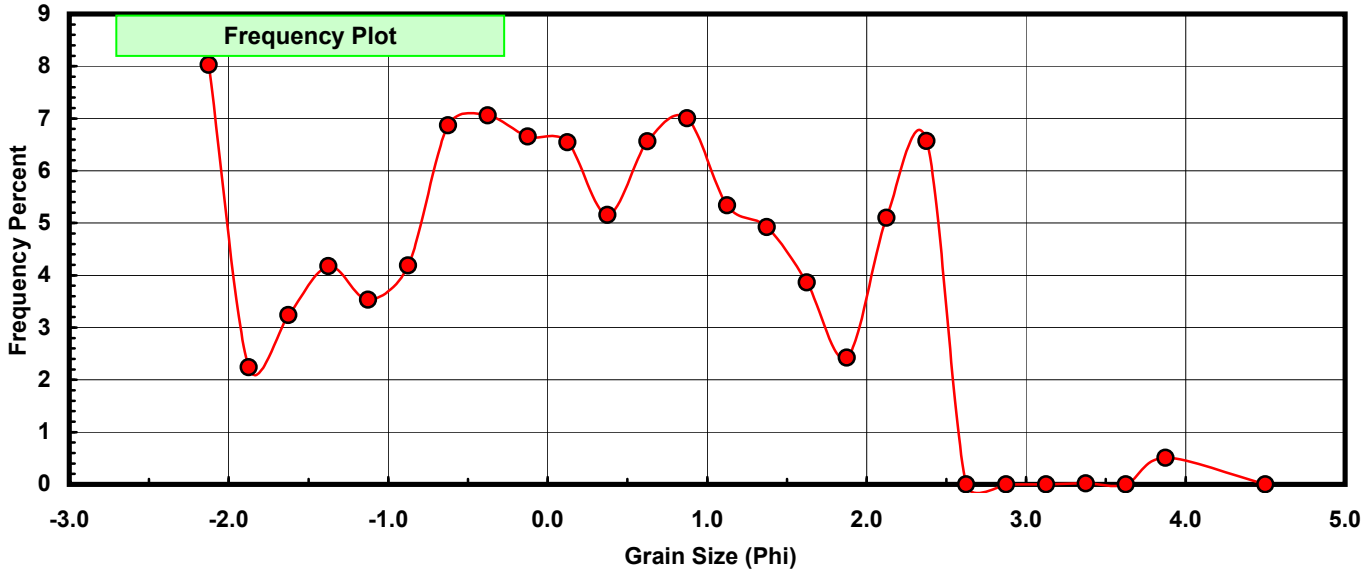

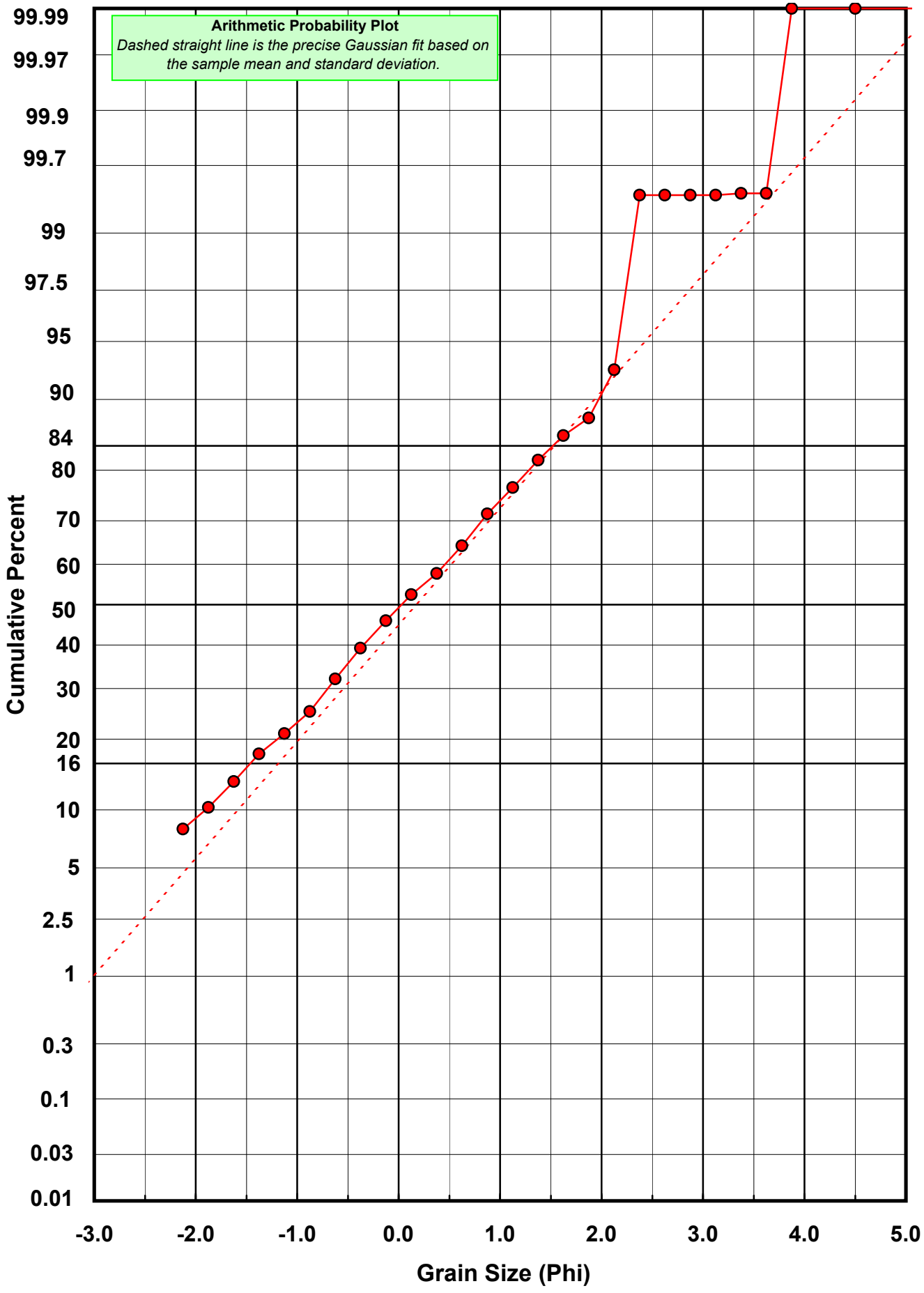
Arithmetic Probability Plot
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Cumulative Percent
99.99
99.97
99.9
99.7
99
97.5
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16
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2.5
1
0.3
0.1
0.03
0.01
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
Grain Size (Phi)

Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-28-BB

Total Digested Mass: 68.560 grams

% Silica: 74.8 %

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	0.000	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	0.006	0.006
-0.50	-0.625	0.014	0.020	0.026
-0.25	-0.375	0.031	0.045	0.071
0.00	-0.125	0.079	0.115	0.187
0.25	0.125	0.168	0.245	0.432
0.50	0.375	0.266	0.388	0.820
0.75	0.625	0.309	0.451	1.270
1.00	0.875	0.807	1.177	2.447
1.25	1.125	1.038	1.514	3.961
1.50	1.375	1.722	2.512	6.473
1.75	1.625	2.082	3.037	9.510
2.00	1.875	3.631	5.296	14.806
2.25	2.125	7.793	11.367	26.173
2.50	2.375	17.465	25.474	51.647
2.75	2.625	20.736	30.245	81.892
3.00	2.875	9.213	13.438	95.330
3.25	3.125	2.161	3.152	98.482
3.50	3.375	0.533	0.777	99.259
3.75	3.625	0.343	0.500	99.759
4.00	3.875	0.165	0.241	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	2.3936	phi	(0.1903 mm)
Standard Dev:	0.5121	phi-units	(0.7012 mm)
Skewness:	-1.4180	dimensionless	
Kurtosis:	6.8088	dimensionless	
5th Moment:	-21.6943	dimensionless	
6th Moment:	98.9257	dimensionless	
RARD *	0.2139	dimensionless	
Median	2.3588	phi	(0.1949 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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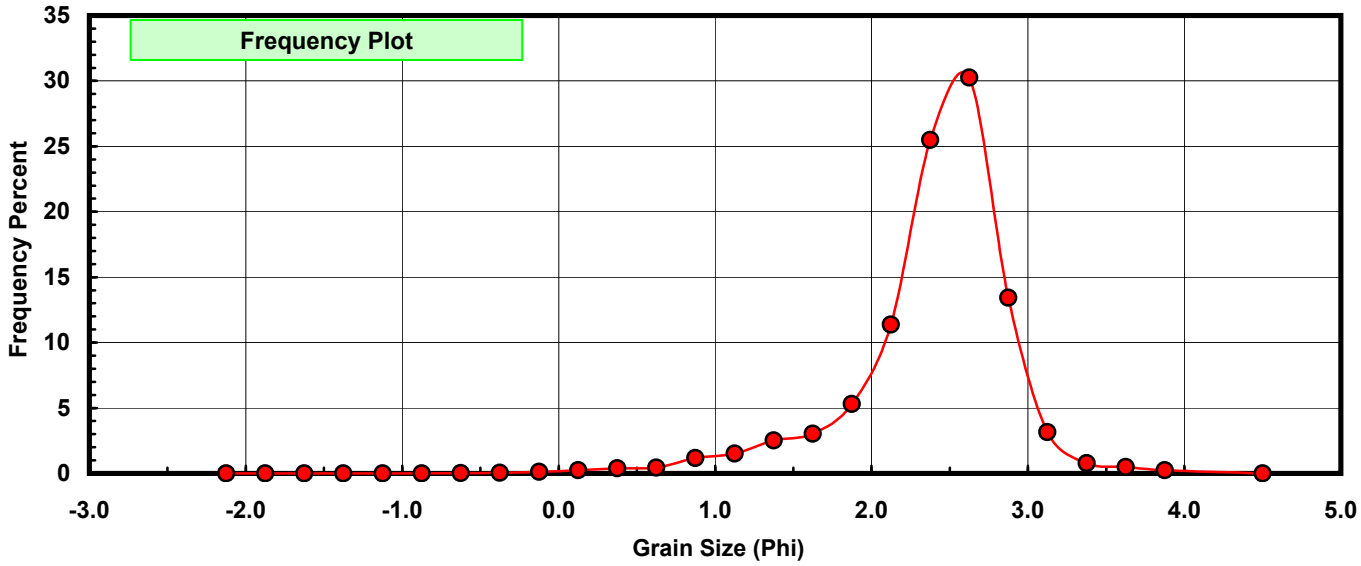

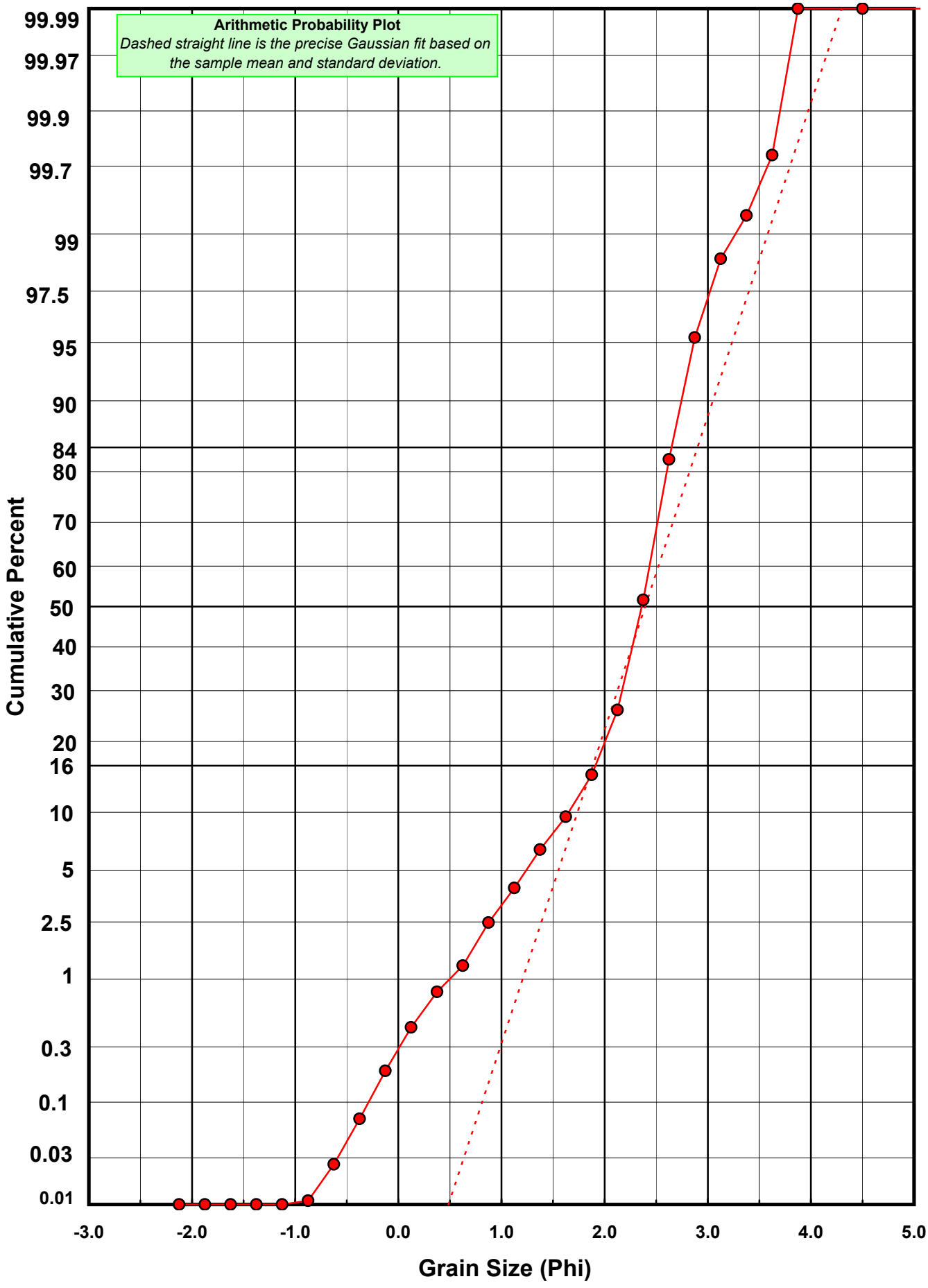
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Grain Size (Phi)