Onshore Grab Sample

Sample: BV-54
Sample Taken By: D. Phelps
Sample Collected On: 9/25/08
Splits? N/A

County: Brevard
Latitude: 28° 09' 50.0"
Longitude: 80° 35' 10.9"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	53.272	grams
Total Fines in Sample	0.421	grams
Total Percent Fines	0.78	%

Dry Sieving Summary

Total Sample Weight	52.861	grams
Total Digested Weight	36.113	grams
Total Carbonate Weight	16.748	grams
Total Silica %	68.32	%
Total Carbonate %	31.68	%
Carbonate/Silica Ratio	0.464	

General Comments:

None

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: BV-54

Total Sample Mass: 52.861 grams

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	1.609	3.044	3.044
-2.00	-2.125	0.675	1.277	4.321
-1.75	-1.875	0.449	0.849	5.170
-1.50	-1.625	0.196	0.371	5.541
-1.25	-1.375	0.121	0.229	5.770
-1.00	-1.125	0.208	0.393	6.163
-0.75	-0.875	0.218	0.412	6.576
-0.50	-0.625	0.476	0.900	7.476
-0.25	-0.375	0.577	1.092	8.568
0.00	-0.125	1.021	1.931	10.499
0.25	0.125	1.670	3.159	13.658
0.50	0.375	2.579	4.879	18.537
0.75	0.625	4.864	9.201	27.739
1.00	0.875	11.154	21.101	48.839
1.25	1.125	8.964	16.958	65.797
1.50	1.375	8.546	16.167	81.964
1.75	1.625	5.021	9.498	91.463
2.00	1.875	2.882	5.452	96.915
2.25	2.125	1.035	1.958	98.873
2.50	2.375	0.280	0.530	99.402
2.75	2.625	0.129	0.244	99.646
3.00	2.875	0.080	0.151	99.798
3.25	3.125	0.043	0.081	99.879
3.50	3.375	0.027	0.051	99.930
3.75	3.625	0.017	0.032	99.962
4.00	3.875	0.010	0.019	99.981
5.00	4.50	0.010	0.019	100.000

Statistical Results			
Mean:	0.8613	phi	(0.5505 mm)
Standard Dev:	0.9497	phi-units	(0.5177 mm)
Skewness:	-1.8118	dimensionless	
Kurtosis:	6.9736	dimensionless	
5th Moment:	-20.2198	dimensionless	
6th Moment:	70.3318	dimensionless	
RARD *	1.1027	dimensionless	
Median	0.8921	phi	(0.5388 mm)
* RARD = reciprocal absolute relative dispersion (see below)			

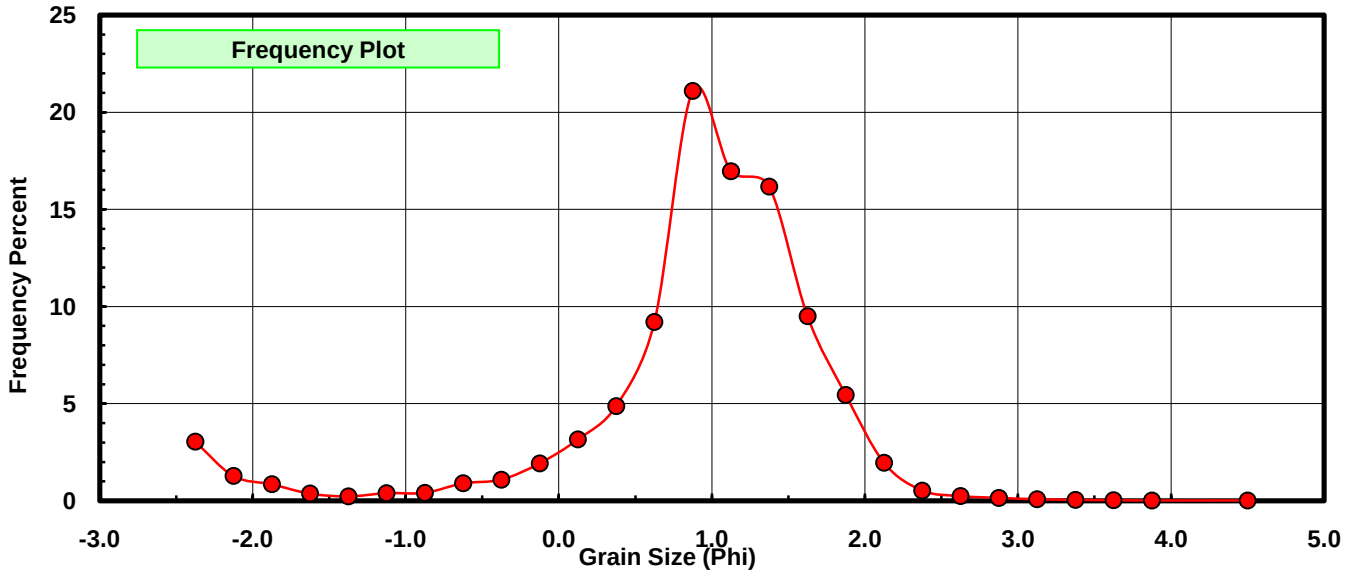
Statistical Explanation

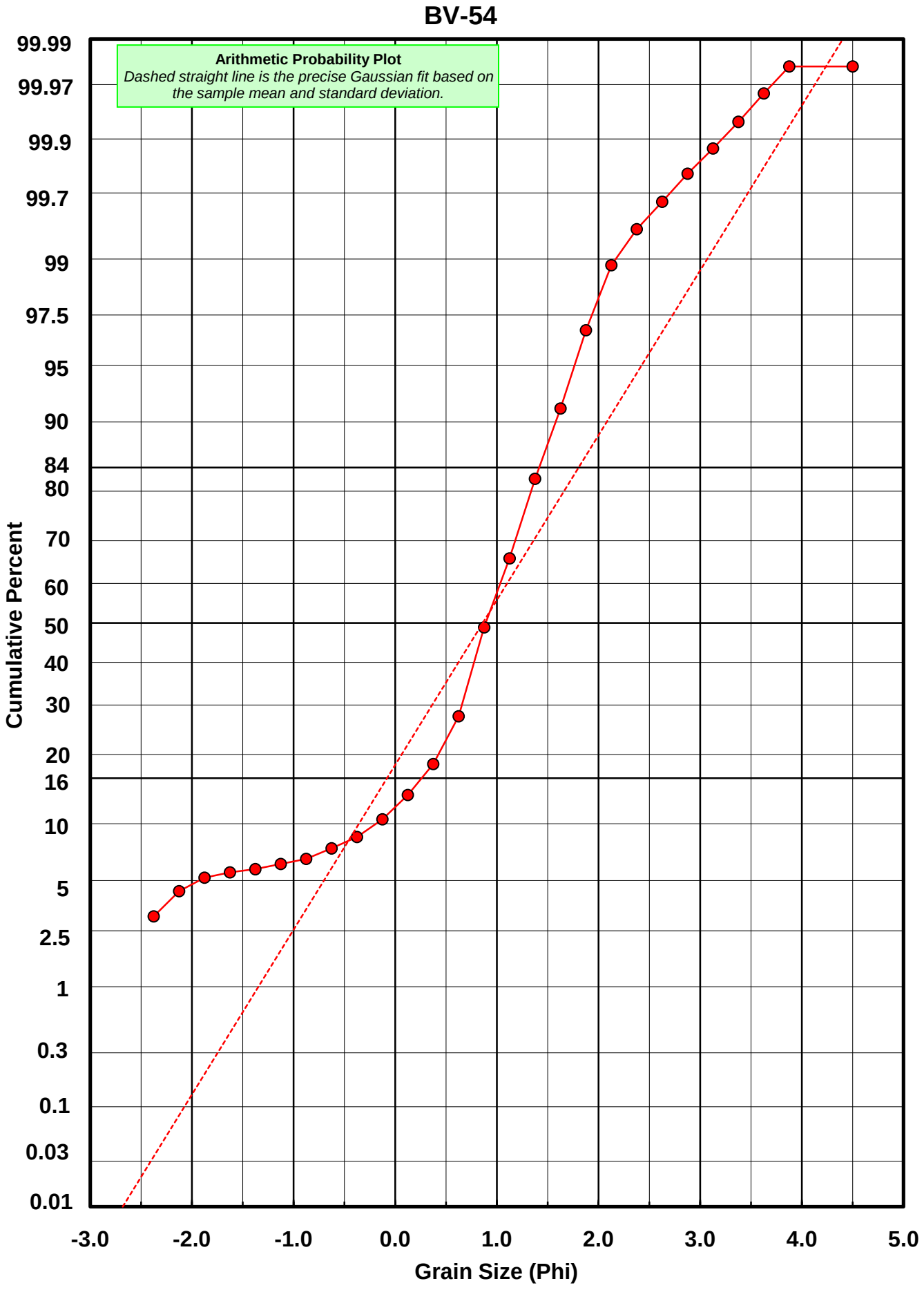
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

For Further Explanation, See Basillle et al. 2002

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)




BV-54
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)

Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: BV-54

Total Carbonate Mass: 16.748 grams

% Carbonate: 31.7 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	1.609	9.607	9.607
-2.00	-2.125	0.675	4.030	13.637
-1.75	-1.875	0.449	2.681	16.318
-1.50	-1.625	0.196	1.170	17.489
-1.25	-1.375	0.121	0.722	18.211
-1.00	-1.125	0.208	1.242	19.453
-0.75	-0.875	0.207	1.236	20.689
-0.50	-0.625	0.452	2.699	23.388
-0.25	-0.375	0.532	3.176	26.564
0.00	-0.125	0.872	5.207	31.771
0.25	0.125	1.135	6.777	38.548
0.50	0.375	1.269	7.577	46.125
0.75	0.625	1.868	11.154	57.278
1.00	0.875	2.890	17.256	74.534
1.25	1.125	1.626	9.709	84.243
1.50	1.375	1.504	8.980	93.223
1.75	1.625	0.483	2.884	96.107
2.00	1.875	0.342	2.042	98.149
2.25	2.125	0.160	0.955	99.104
2.50	2.375	0.054	0.322	99.427
2.75	2.625	0.030	0.179	99.606
3.00	2.875	0.018	0.107	99.713
3.25	3.125	0.010	0.060	99.773
3.50	3.375	0.010	0.060	99.833
3.75	3.625	0.011	0.066	99.898
4.00	3.875	0.008	0.048	99.946
5.00	4.500	0.009	0.054	100.000

Statistical Results			
Mean:	0.1686	phi	(0.8897 mm)
Standard Dev:	1.3147	phi-units	(0.402 mm)
Skewness:	-0.7777	dimensionless	
Kurtosis:	2.5894	dimensionless	
5th Moment:	-2.8967	dimensionless	
6th Moment:	9.1128	dimensionless	
RARD *	7.7971	dimensionless	
Median	0.4619	phi	(0.7261 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 Basillle et al. 2002

Millimeter data calculated by mm = 2^(-phi)

Reciprocal Absolute Relative Dispersion (RARD) Scale	
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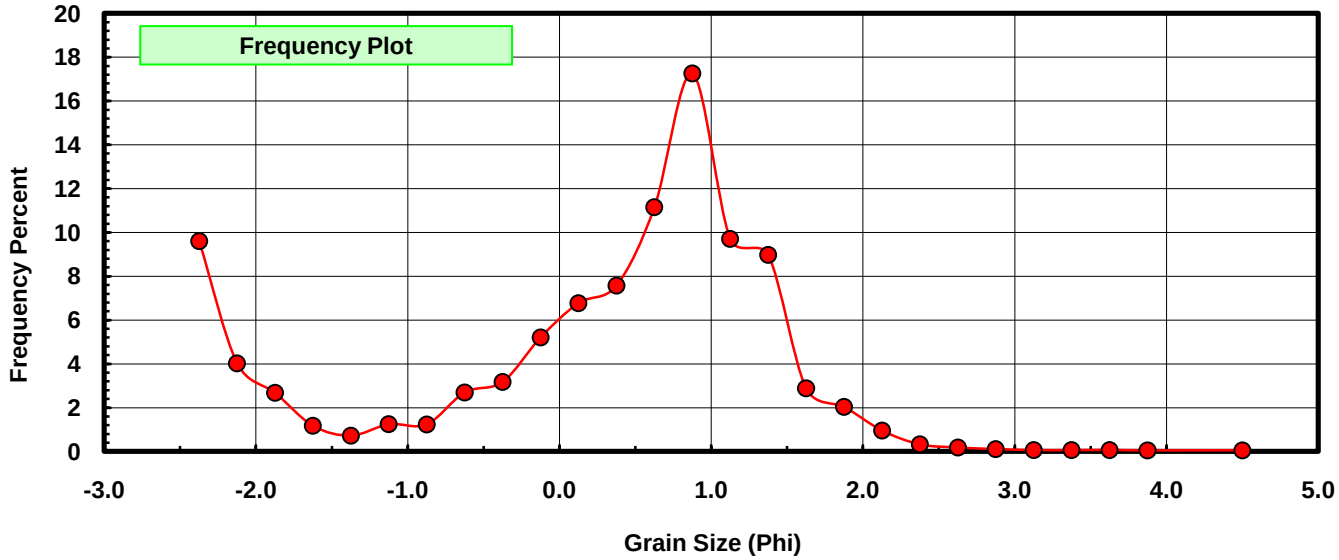

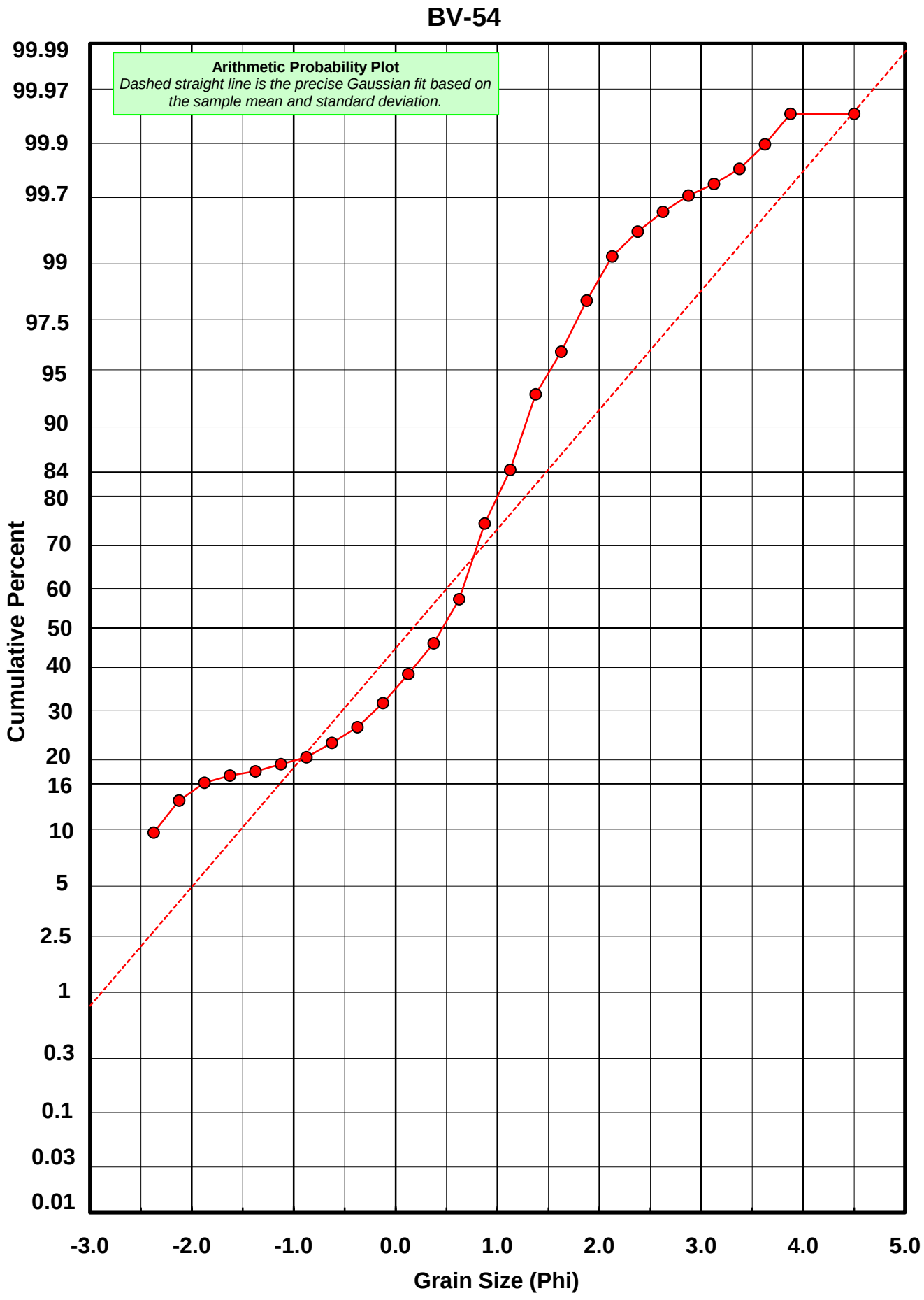
BV-54
Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
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99.7
99
97.5
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84
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30
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: BV-54

Total Digested Mass: 36.113 grams

% Silica: 68.3 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-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	0.011	0.030	0.030
-0.50	-0.625	0.024	0.066	0.097
-0.25	-0.375	0.045	0.125	0.222
0.00	-0.125	0.149	0.413	0.634
0.25	0.125	0.535	1.481	2.116
0.50	0.375	1.310	3.628	5.743
0.75	0.625	2.996	8.296	14.039
1.00	0.875	8.264	22.884	36.923
1.25	1.125	7.338	20.320	57.243
1.50	1.375	7.042	19.500	76.742
1.75	1.625	4.538	12.566	89.309
2.00	1.875	2.540	7.033	96.342
2.25	2.125	0.875	2.423	98.765
2.50	2.375	0.226	0.626	99.391
2.75	2.625	0.099	0.274	99.665
3.00	2.875	0.062	0.172	99.837
3.25	3.125	0.033	0.091	99.928
3.50	3.375	0.017	0.047	99.975
3.75	3.625	0.006	0.017	99.992
4.00	3.875	0.002	0.006	99.997
5.00	4.500	0.001	0.003	100.000

Statistical Results			
Mean:	1.1825	phi	(0.4406 mm)
Standard Dev:	0.4712	phi-units	(0.7214 mm)
Skewness:	0.2068	dimensionless	
Kurtosis:	3.9856	dimensionless	
5th Moment:	3.6123	dimensionless	
6th Moment:	39.6187	dimensionless	
RARD *	0.3985	dimensionless	
Median	1.0359	phi	(0.4877 mm)

* RARD = reciprocal absolute relative dispersion (see below)

Statistical Explanation

Calculations based on the Method of Moments
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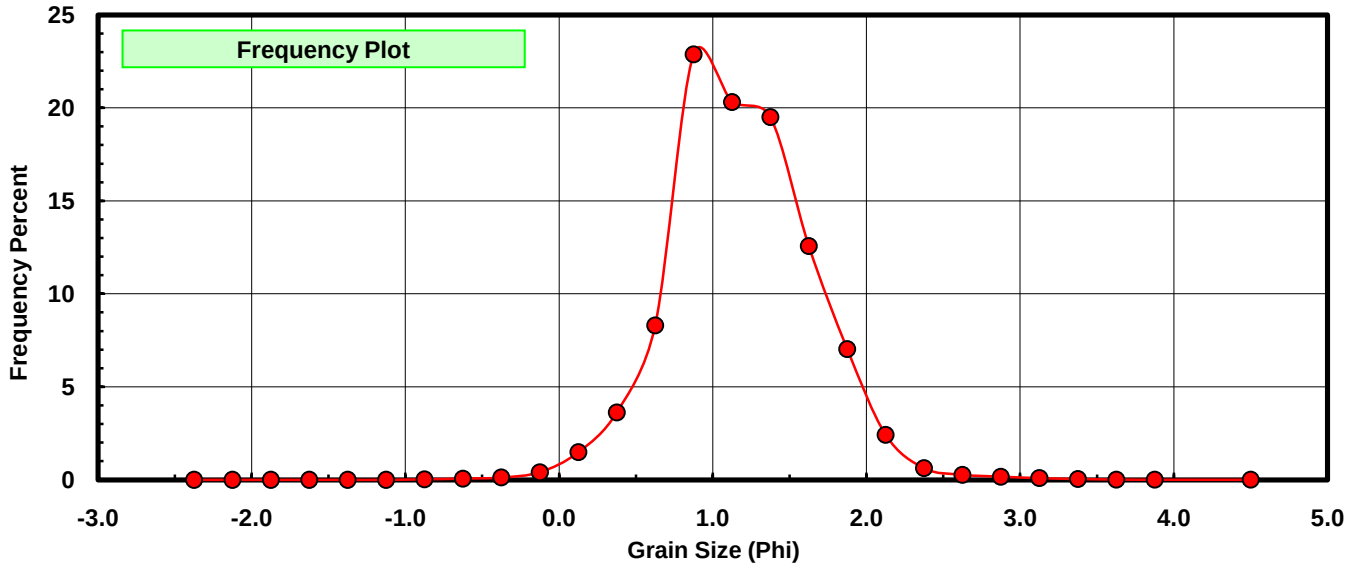

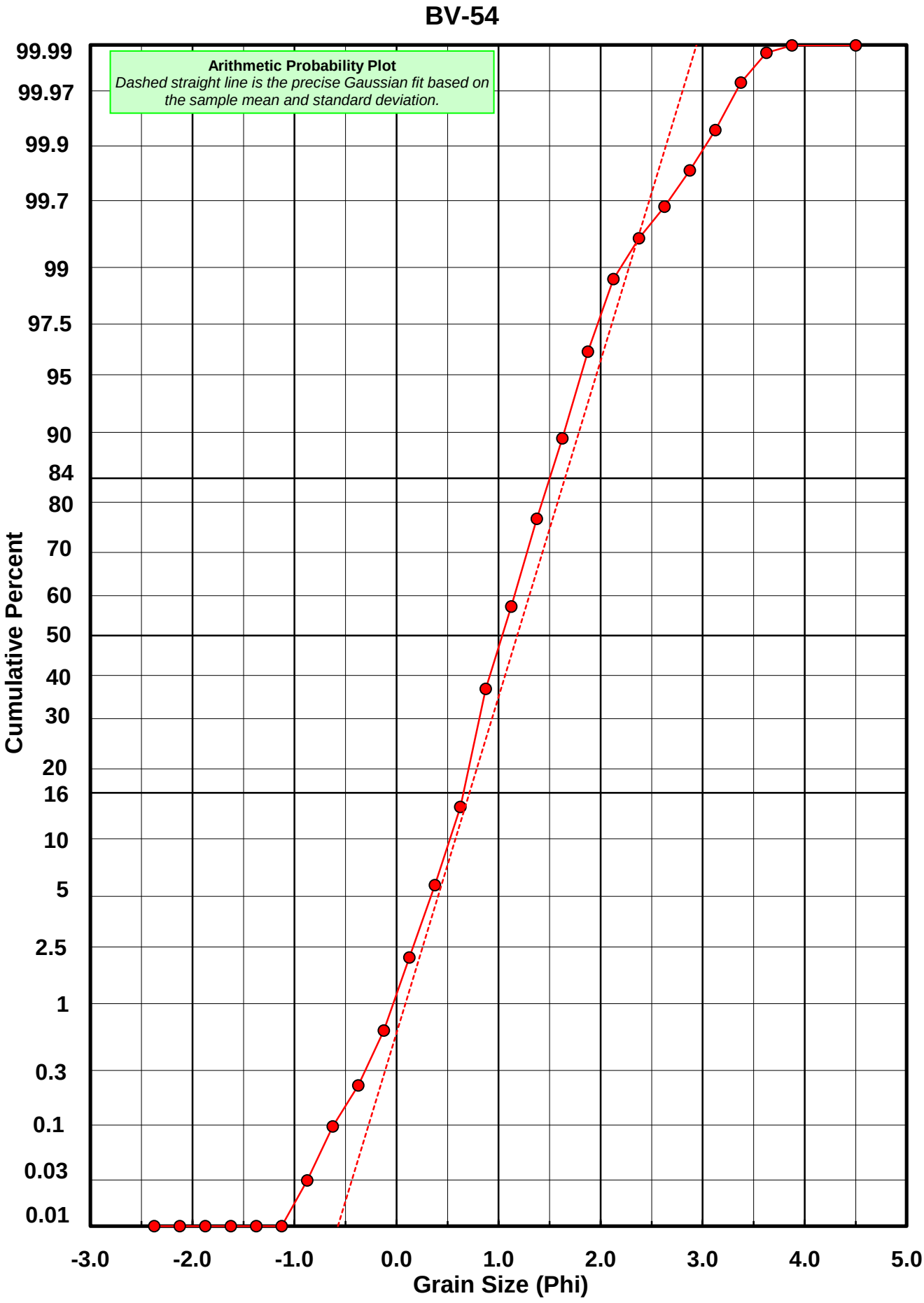
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-1.0
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3.0
4.0
5.0
Grain Size (Phi)