Onshore Grab Sample

Sample: PB-22-BB
Sample Taken By: D. Phelps
Sample Collected On: 1/7/09
Splits? N/A

County: Palm Beach
Latitude: 26° 39' 55.8"
Longitude: 80° 02' 11.1"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	67.604	grams
Total Fines in Sample	0.084	grams
Total Percent Fines	0.12	%

Dry Sieving Summary

Total Sample Weight	67.550	grams
Total Digested Weight	34.249	grams
Total Carbonate Weight	33.301	grams
Total Silica %	50.70	%
Total Carbonate %	49.30	%
Carbonate/Silica Ratio	0.972	

General Comments:

None

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: PB-22-BB

Total Sample Mass: 67.550 grams

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	0.072	0.107	0.107
-0.50	-0.625	0.099	0.147	0.253
-0.25	-0.375	0.155	0.229	0.483
0.00	-0.125	0.240	0.355	0.838
0.25	0.125	0.488	0.722	1.560
0.50	0.375	0.866	1.282	2.842
0.75	0.625	1.870	2.768	5.611
1.00	0.875	6.282	9.300	14.910
1.25	1.125	8.339	12.345	27.255
1.50	1.375	13.368	19.790	47.045
1.75	1.625	12.703	18.805	65.850
2.00	1.875	10.652	15.769	81.620
2.25	2.125	6.537	9.677	91.297
2.50	2.375	3.172	4.696	95.993
2.75	2.625	1.600	2.369	98.361
3.00	2.875	0.781	1.156	99.517
3.25	3.125	0.244	0.361	99.879
3.50	3.375	0.062	0.092	99.970
3.75	3.625	0.011	0.016	99.987
4.00	3.875	0.005	0.007	99.994
5.00	4.50	0.004	0.006	100.000

Statistical Results			
Mean:	1.5416	phi	(0.3435 mm)
Standard Dev:	0.5531	phi-units	(0.6816 mm)
Skewness:	-0.1699	dimensionless	
Kurtosis:	4.0083	dimensionless	
5th Moment:	-3.4013	dimensionless	
6th Moment:	33.6711	dimensionless	
RARD *	0.3588	dimensionless	
Median	1.4143	phi	(0.3752 mm)

* RARD = reciprocal absolute relative dispersion (see below)

Statistical Explanation

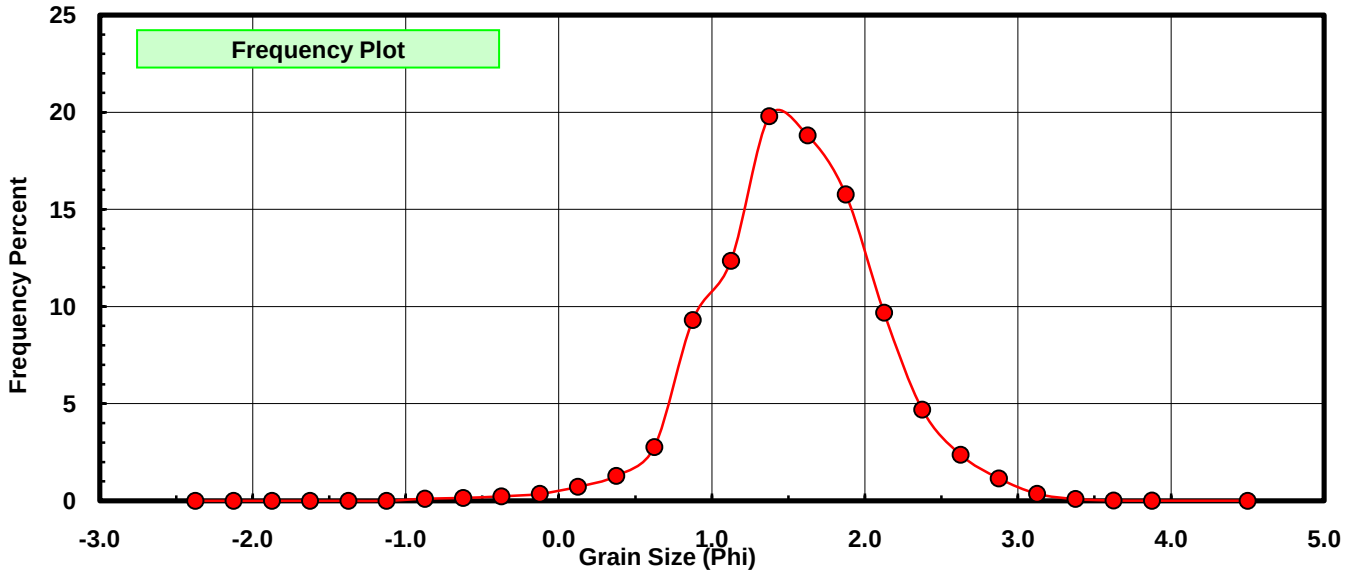
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

For Further Explanation, See Basillle et al. 2002

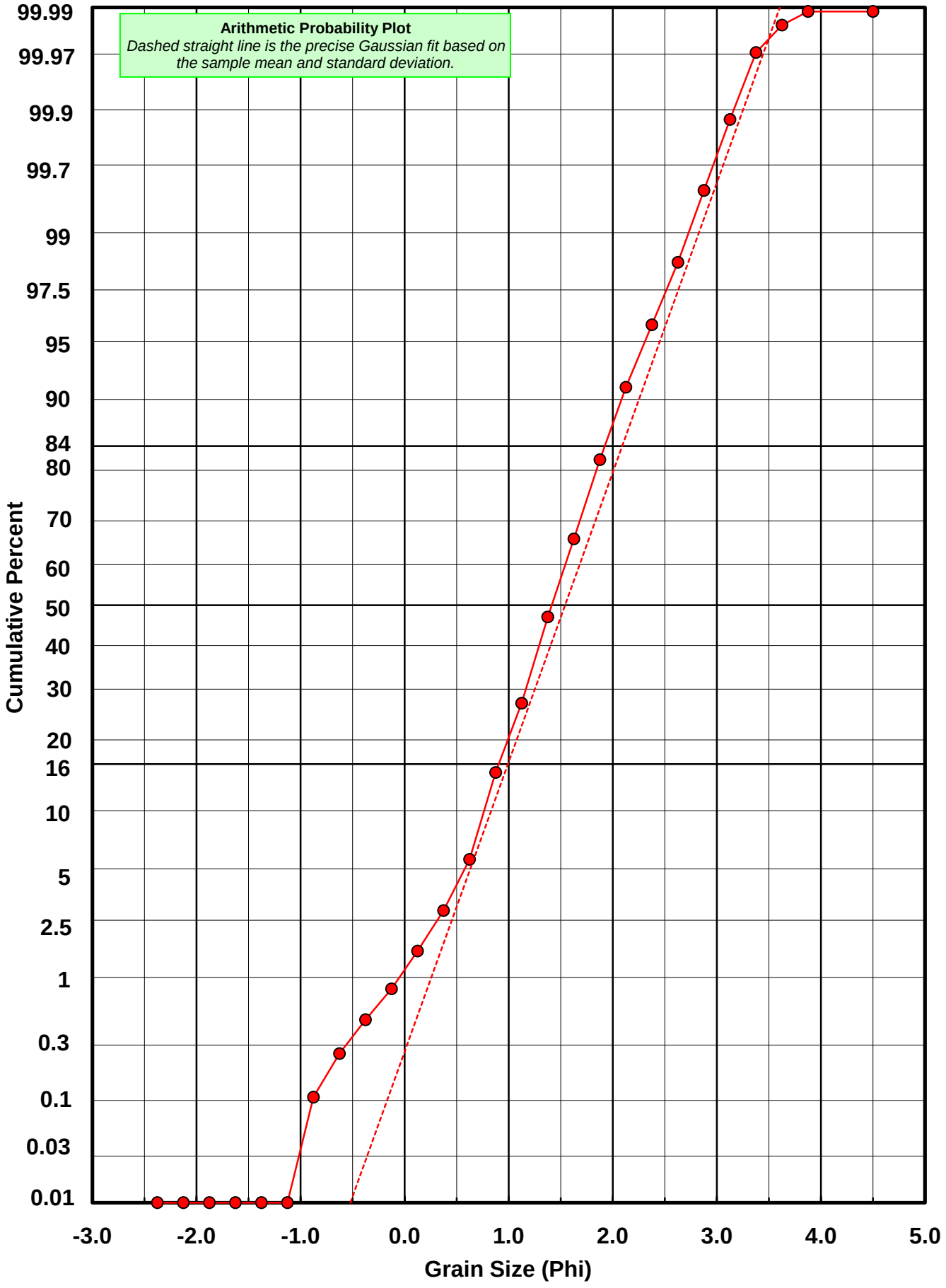
Millimeter data calculated by mm = 2^(-phi)

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)



PB-22-BB


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: PB-22-BB

Total Carbonate Mass: 33.363 grams

% Carbonate: 49.3 %

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	0.072	0.216	0.216
-0.50	-0.625	0.099	0.297	0.513
-0.25	-0.375	0.149	0.447	0.959
0.00	-0.125	0.232	0.695	1.655
0.25	0.125	0.461	1.382	3.036
0.50	0.375	0.774	2.320	5.356
0.75	0.625	1.528	4.580	9.936
1.00	0.875	4.312	12.924	22.861
1.25	1.125	4.556	13.656	36.517
1.50	1.375	6.423	19.252	55.768
1.75	1.625	4.951	14.840	70.608
2.00	1.875	4.082	12.235	82.843
2.25	2.125	2.837	8.503	91.347
2.50	2.375	1.590	4.766	96.112
2.75	2.625	0.885	2.653	98.765
3.00	2.875	0.340	1.019	99.784
3.25	3.125	0.072	0.216	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:	1.4343	phi	(0.37 mm)
Standard Dev:	0.6145	phi-units	(0.6531 mm)
Skewness:	-0.2221	dimensionless	
Kurtosis:	3.4942	dimensionless	
5th Moment:	-3.5605	dimensionless	
6th Moment:	22.7733	dimensionless	
RARD *	0.4285	dimensionless	
Median	1.3001	phi	(0.4061 mm)

* RARD = reciprocal absolute relative dispersion (see below)

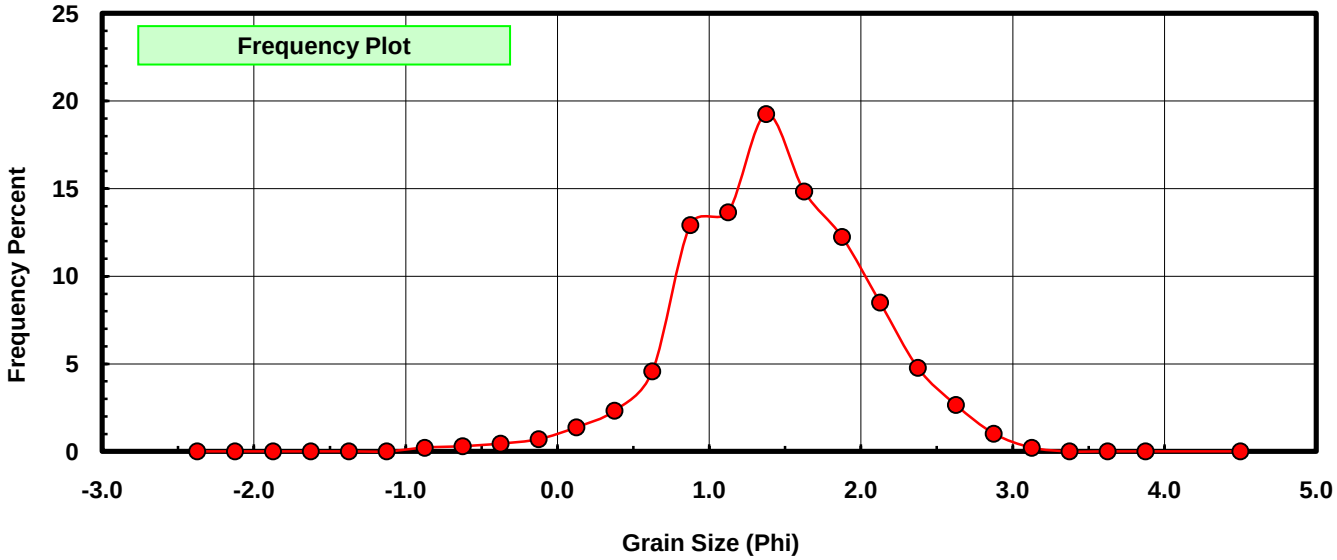
Statistical Explanation

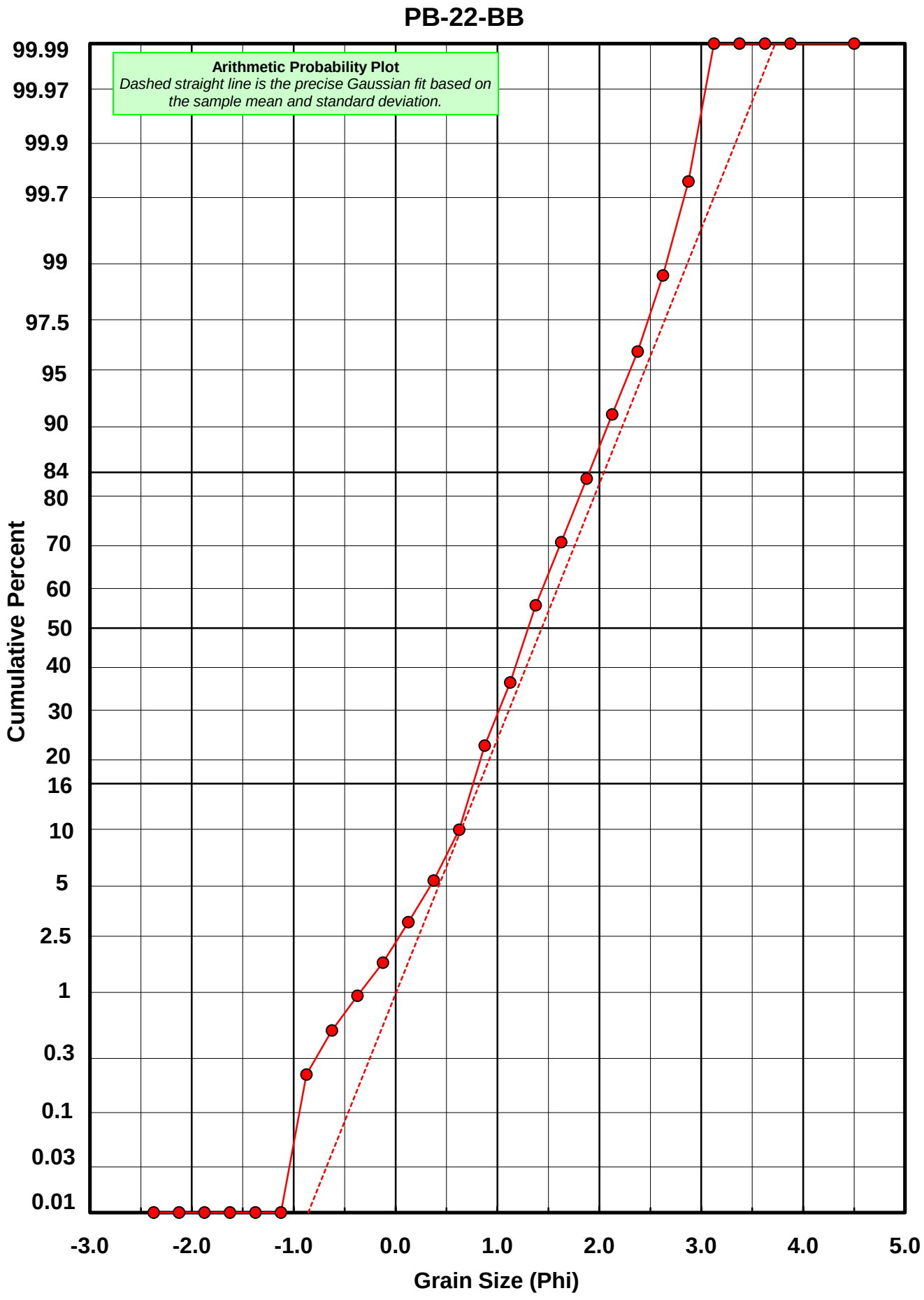
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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)




PB-22-BB
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: PB-22-BB

Total Digested Mass: 34.249 grams

% Silica: 50.7 %

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	0.000	0.000	0.000
-0.50	-0.625	0.000	0.000	0.000
-0.25	-0.375	0.006	0.018	0.018
0.00	-0.125	0.008	0.023	0.041
0.25	0.125	0.027	0.079	0.120
0.50	0.375	0.092	0.269	0.388
0.75	0.625	0.342	0.999	1.387
1.00	0.875	1.970	5.752	7.139
1.25	1.125	3.783	11.046	18.184
1.50	1.375	6.945	20.278	38.462
1.75	1.625	7.752	22.634	61.097
2.00	1.875	6.570	19.183	80.280
2.25	2.125	3.700	10.803	91.083
2.50	2.375	1.582	4.619	95.702
2.75	2.625	0.715	2.088	97.790
3.00	2.875	0.441	1.288	99.077
3.25	3.125	0.172	0.502	99.580
3.50	3.375	0.071	0.207	99.787
3.75	3.625	0.037	0.108	99.895
4.00	3.875	0.019	0.055	99.950
5.00	4.500	0.017	0.050	100.000

Statistical Results			
Mean:	1.6502	phi	(0.3186 mm)
Standard Dev:	0.4806	phi-units	(0.7167 mm)
Skewness:	0.5386	dimensionless	
Kurtosis:	4.4295	dimensionless	
5th Moment:	9.2660	dimensionless	
6th Moment:	53.5080	dimensionless	
RARD *	0.2912	dimensionless	
Median	1.5024	phi	(0.353 mm)

* RARD = reciprocal absolute relative dispersion (see below)

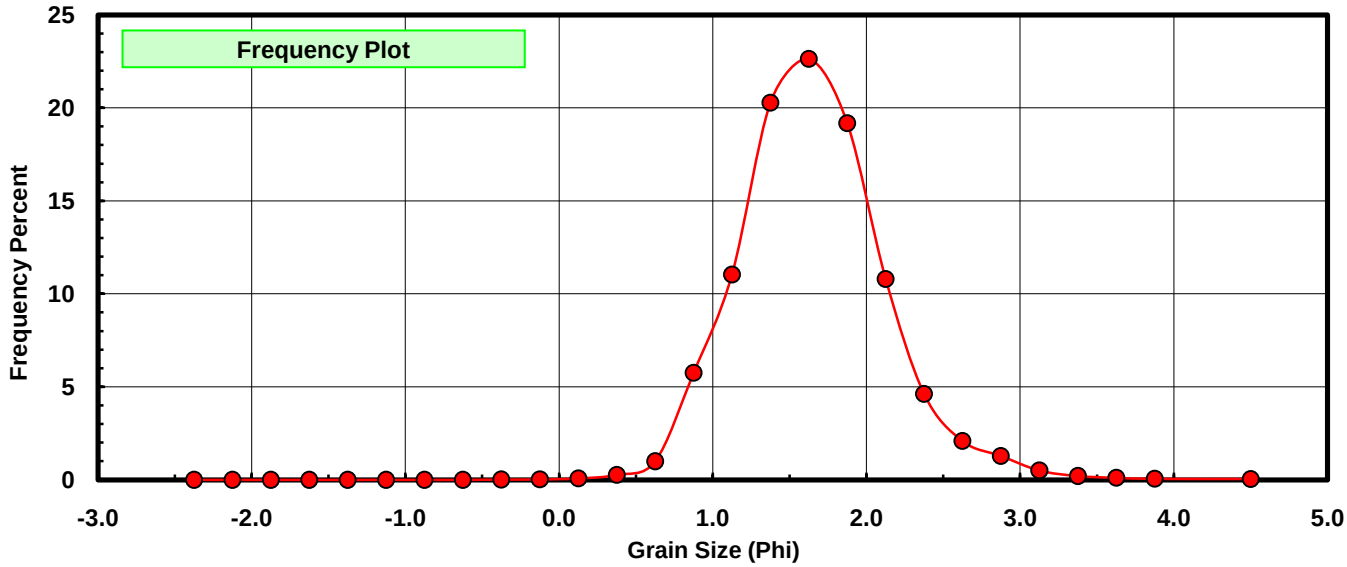
Statistical Explanation

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

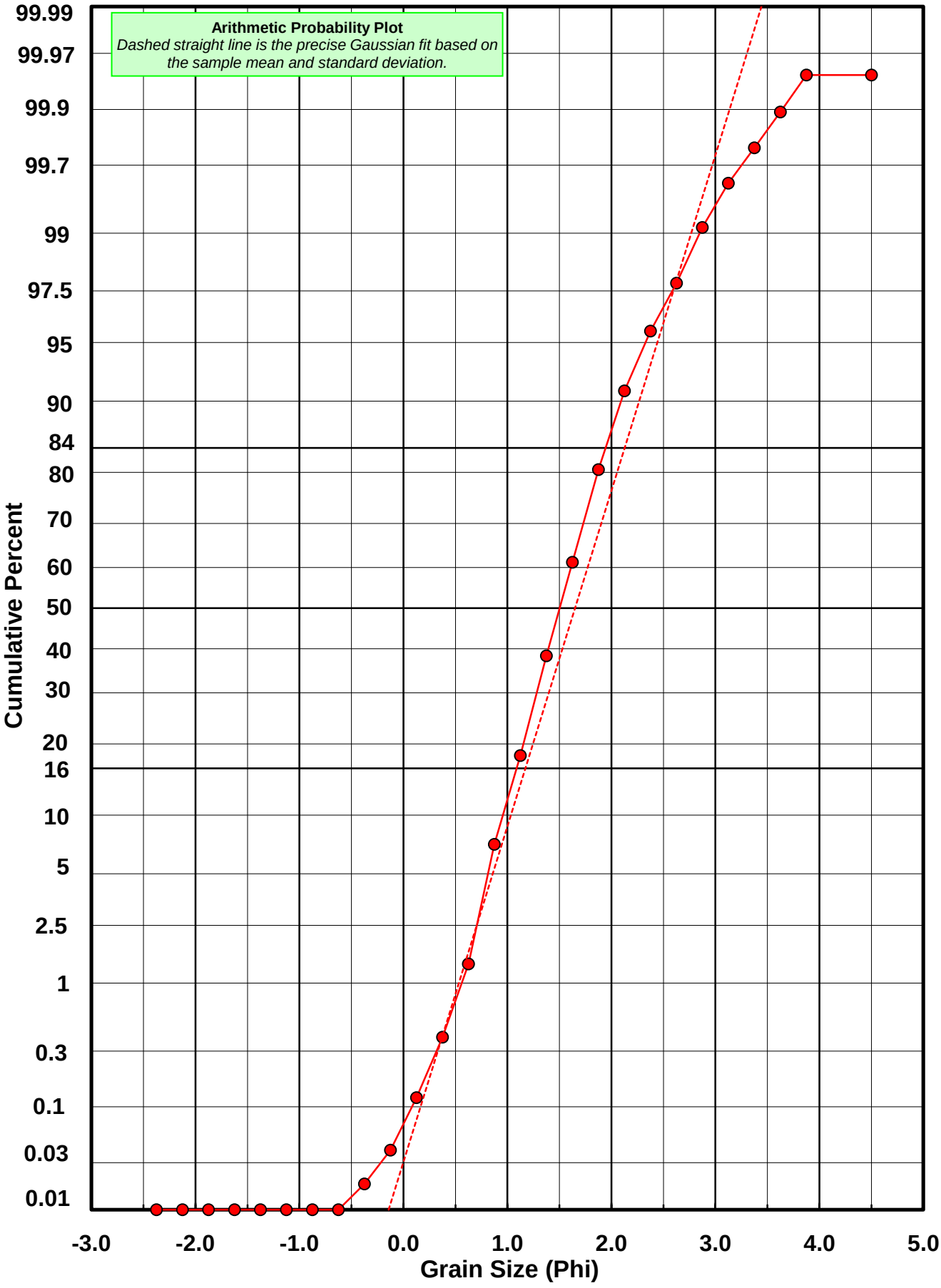
For Further Explanation, See Basillle et al. 2002

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)



PB-22-BB


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)