Onshore Grab Sample

Sample: CR-25
Sample Taken By: D. Phelps
Sample Collected On: 1/27/10
Splits? N/A

County: Collier
Latitude: 26° 3' 18.4"
Longitude: 81° 47' 6"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	66.944	grams
Total Fines in Sample	0.470	grams
Total Percent Fines	0.70	%

Dry Sieving Summary

Total Sample Weight	66.537	grams
Total Digested Weight	48.115	grams
Total Carbonate Weight	18.422	grams
Total Silica %	72.31	%
Total Carbonate %	27.69	%
Carbonate/Silica Ratio	0.383	

General Comments:

Large piece of coral (~3/4-1") wighing 1.900g

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: CR-25

Total Sample Mass: 66.537 grams

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	6.389	9.602	9.602
-2.00	-2.125	0.339	0.509	10.112
-1.75	-1.875	0.493	0.741	10.853
-1.50	-1.625	0.546	0.821	11.673
-1.25	-1.375	0.717	1.078	12.751
-1.00	-1.125	0.467	0.702	13.453
-0.75	-0.875	0.534	0.803	14.255
-0.50	-0.625	0.559	0.840	15.095
-0.25	-0.375	0.549	0.825	15.920
0.00	-0.125	0.476	0.715	16.636
0.25	0.125	0.577	0.867	17.503
0.50	0.375	0.543	0.816	18.319
0.75	0.625	0.763	1.147	19.466
1.00	0.875	1.760	2.645	22.111
1.25	1.125	2.305	3.464	25.575
1.50	1.375	4.990	7.500	33.075
1.75	1.625	7.612	11.440	44.515
2.00	1.875	9.515	14.300	58.815
2.25	2.125	10.498	15.778	74.593
2.50	2.375	8.949	13.450	88.043
2.75	2.625	5.588	8.398	96.441
3.00	2.875	1.914	2.877	99.318
3.25	3.125	0.276	0.415	99.732
3.50	3.375	0.130	0.195	99.928
3.75	3.625	0.029	0.044	99.971
4.00	3.875	0.012	0.018	99.989
5.00	4.50	0.007	0.011	100.000

Statistical Results			
Mean:	1.3057	phi	(0.4045 mm)
Standard Dev:	1.5364	phi-units	(0.3448 mm)
Skewness:	-1.4945	dimensionless	
Kurtosis:	3.9578	dimensionless	
5th Moment:	-8.6889	dimensionless	
6th Moment:	20.7372	dimensionless	
RARD *	1.1767	dimensionless	
Median	1.7209	phi	(0.3034 mm)
* RARD = reciprocal absolute relative dispersion (see below)			

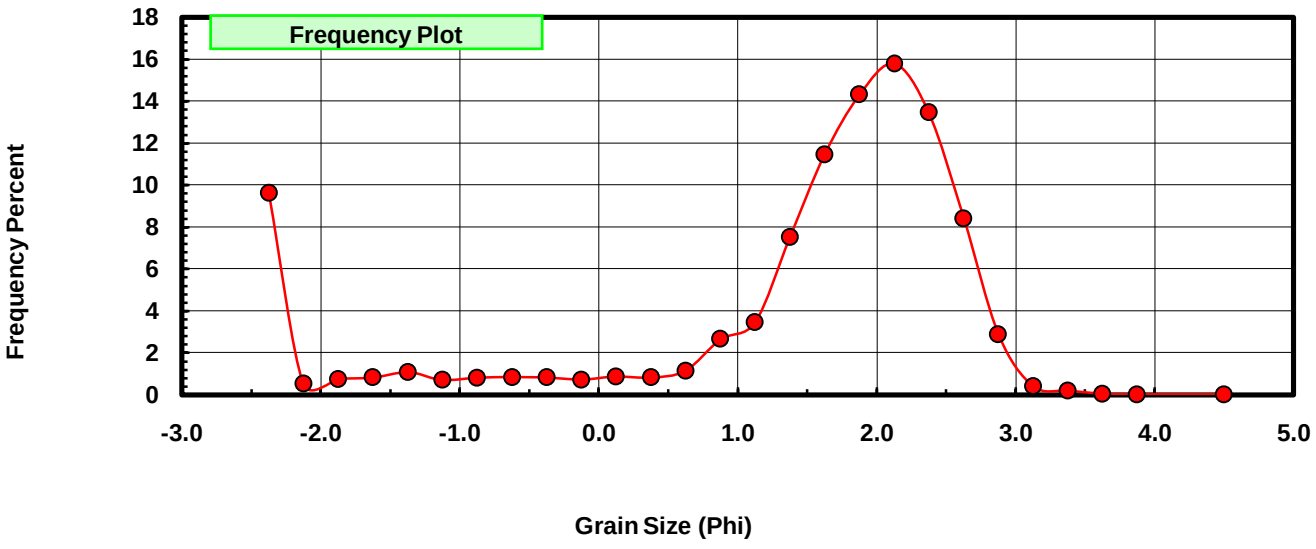
Statistical Explanation

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)



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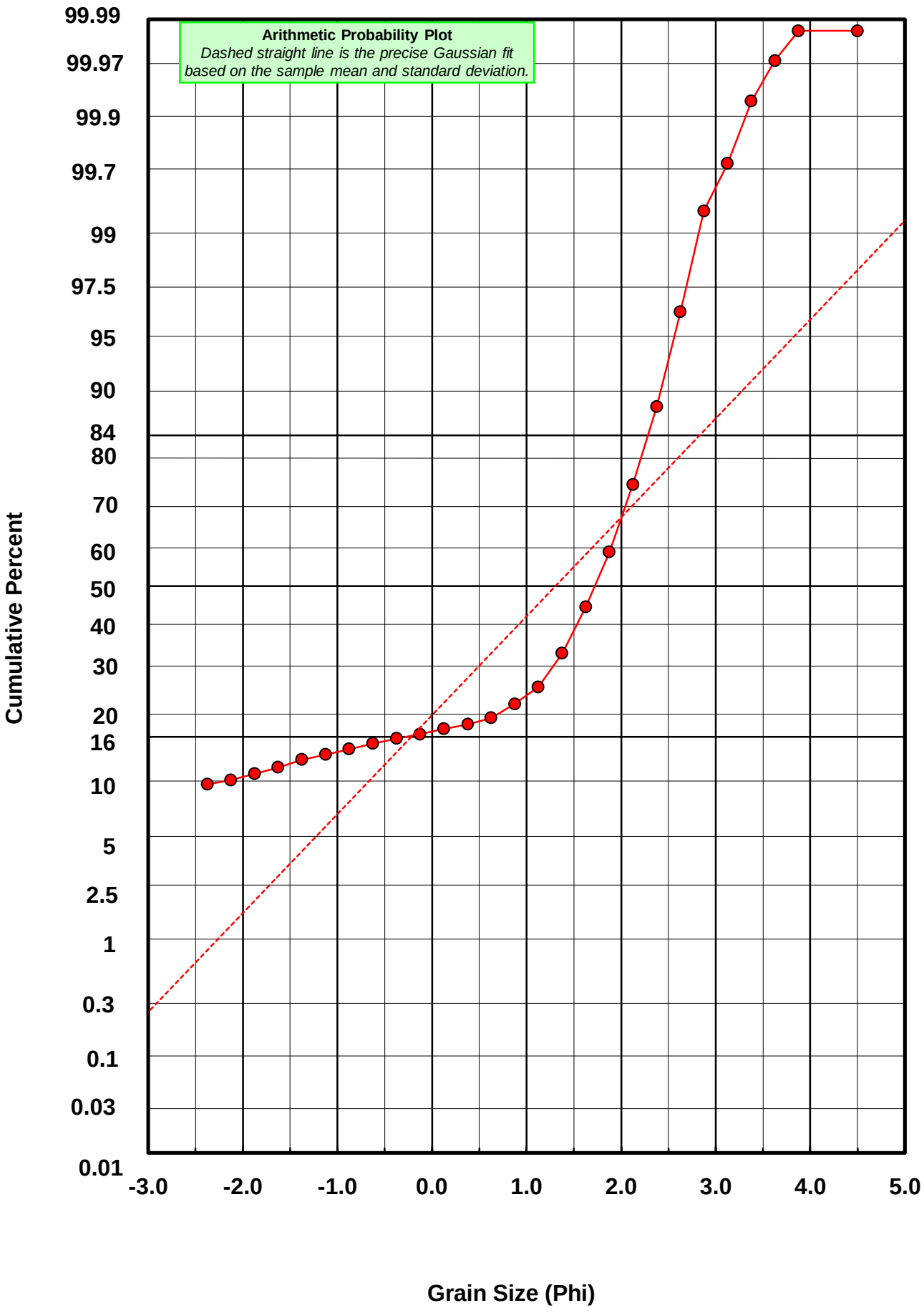
Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit
based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
99.9
99.7
99
97.5
95
90
84
80
70
60
50
40
30
20
16
10
5
2.5
1
0.3
0.1
0.03
0.01
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
Grain Size (Phi)

Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: CR-25

Total Carbonate Mass: 19.726 grams

% Carbonate: 27.7 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	6.389	32.389	32.389
-2.00	-2.125	0.339	1.719	34.107
-1.75	-1.875	0.493	2.499	36.607
-1.50	-1.625	0.546	2.768	39.374
-1.25	-1.375	0.717	3.635	43.009
-1.00	-1.125	0.467	2.367	45.377
-0.75	-0.875	0.534	2.707	48.084
-0.50	-0.625	0.559	2.834	50.918
-0.25	-0.375	0.549	2.783	53.701
0.00	-0.125	0.476	2.413	56.114
0.25	0.125	0.566	2.869	58.983
0.50	0.375	0.533	2.702	61.685
0.75	0.625	0.706	3.579	65.264
1.00	0.875	1.394	7.067	72.331
1.25	1.125	1.138	5.769	78.100
1.50	1.375	1.462	7.412	85.512
1.75	1.625	0.837	4.243	89.755
2.00	1.875	0.569	2.885	92.639
2.25	2.125	0.812	4.116	96.756
2.50	2.375	0.601	3.047	99.802
2.75	2.625	0.000	0.000	99.802
3.00	2.875	0.000	0.000	99.802
3.25	3.125	0.000	0.000	99.802
3.50	3.375	0.037	0.188	99.990
3.75	3.625	0.000	0.000	99.990
4.00	3.875	0.000	0.000	99.990
5.00	4.500	0.002	0.010	100.000

Statistical Results			
Mean:	-0.4747	phi	(1.3896 mm)
Standard Dev:	1.7342	phi-units	(0.3006 mm)
Skewness:	0.1655	dimensionless	
Kurtosis:	1.4141	dimensionless	
5th Moment:	0.7018	dimensionless	
6th Moment:	2.5351	dimensionless	
RARD *	3.6535	dimensionless	
Median	-0.7059	phi	(1.6312 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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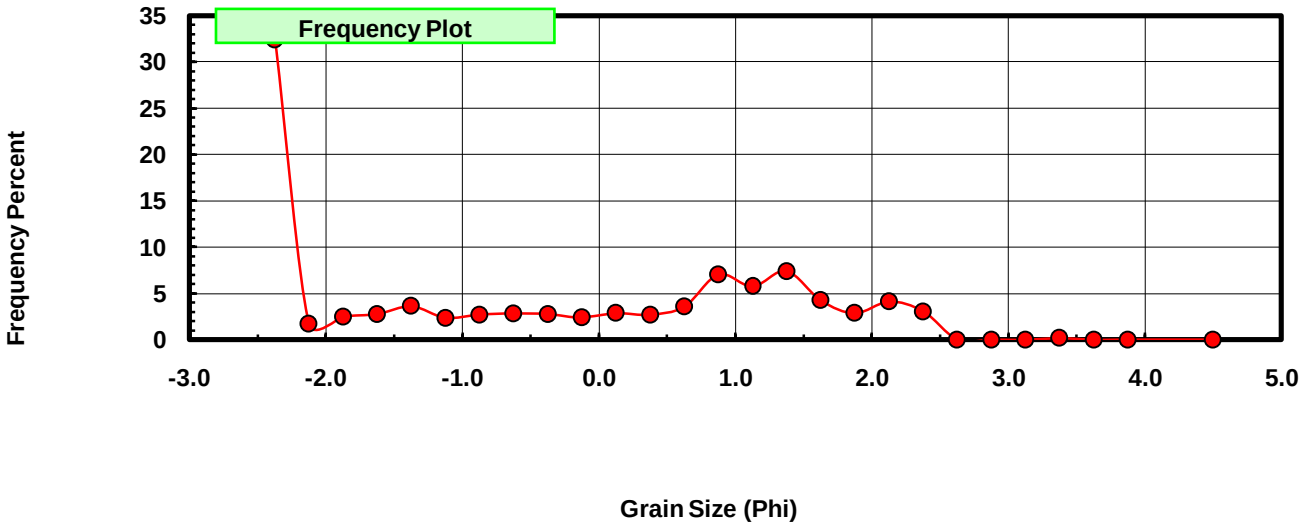

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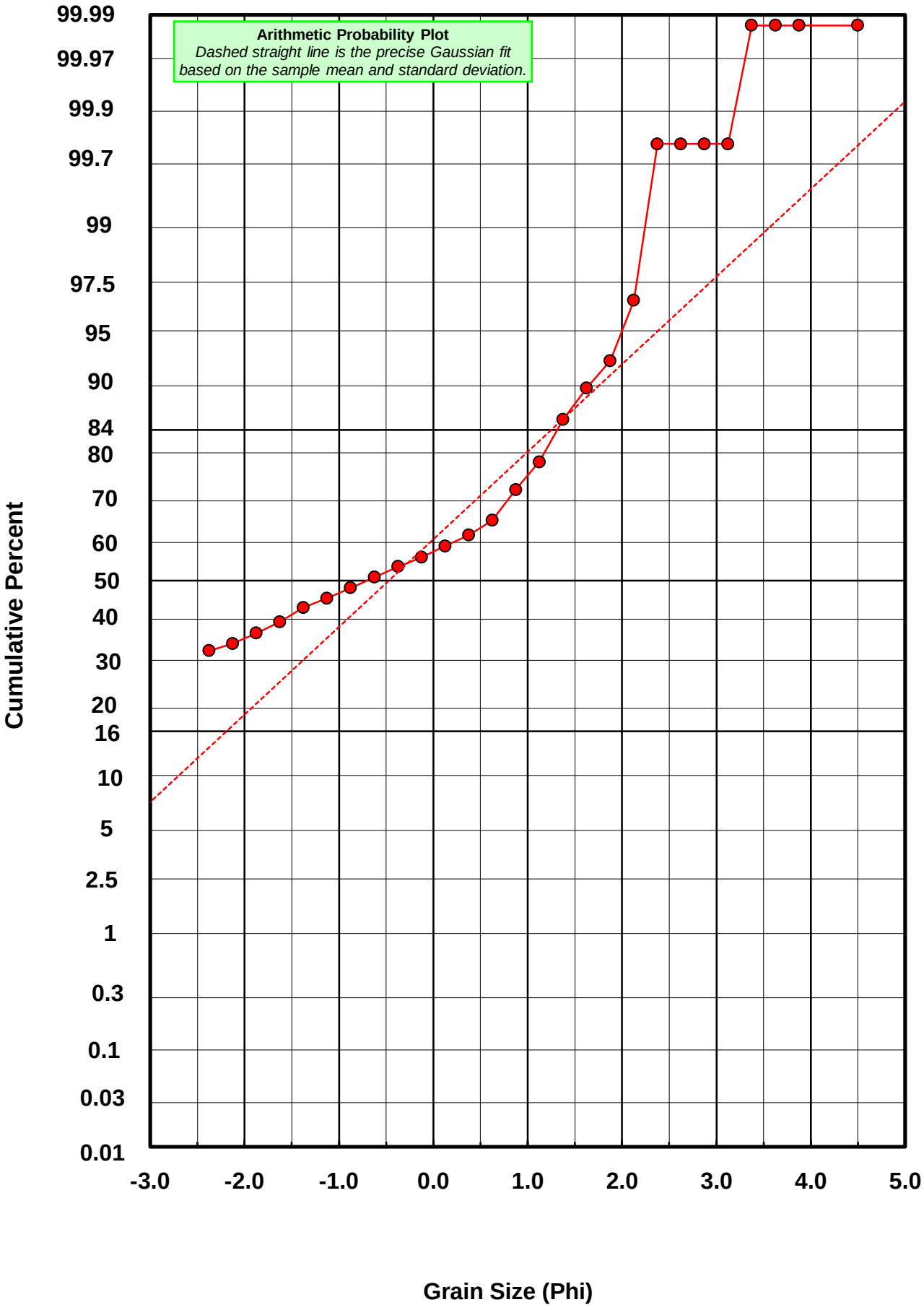
Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
99.9
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99
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40
30
20
16
10
5
2.5
1
0.3
0.1
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: CR-25

Total Digested Mass: 48.115 grams

% Silica: 72.3 %

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	0.000	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	0.011	0.023	0.023
0.50	0.375	0.010	0.021	0.044
0.75	0.625	0.057	0.118	0.162
1.00	0.875	0.366	0.761	0.923
1.25	1.125	1.167	2.425	3.348
1.50	1.375	3.528	7.332	10.681
1.75	1.625	6.775	14.081	24.762
2.00	1.875	8.946	18.593	43.354
2.25	2.125	9.686	20.131	63.485
2.50	2.375	8.348	17.350	80.835
2.75	2.625	6.494	13.497	94.332
3.00	2.875	2.284	4.747	99.079
3.25	3.125	0.299	0.621	99.701
3.50	3.375	0.093	0.193	99.894
3.75	3.625	0.034	0.071	99.965
4.00	3.875	0.012	0.025	99.990
5.00	4.500	0.005	0.010	100.000

Statistical Results			
Mean:	2.0736	phi	(0.2376 mm)
Standard Dev:	0.4623	phi-units	(0.7258 mm)
Skewness:	-0.1073	dimensionless	
Kurtosis:	2.8178	dimensionless	
5th Moment:	-0.5397	dimensionless	
6th Moment:	15.9330	dimensionless	
RARD *	0.2229	dimensionless	
Median	1.9575	phi	(0.2575 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

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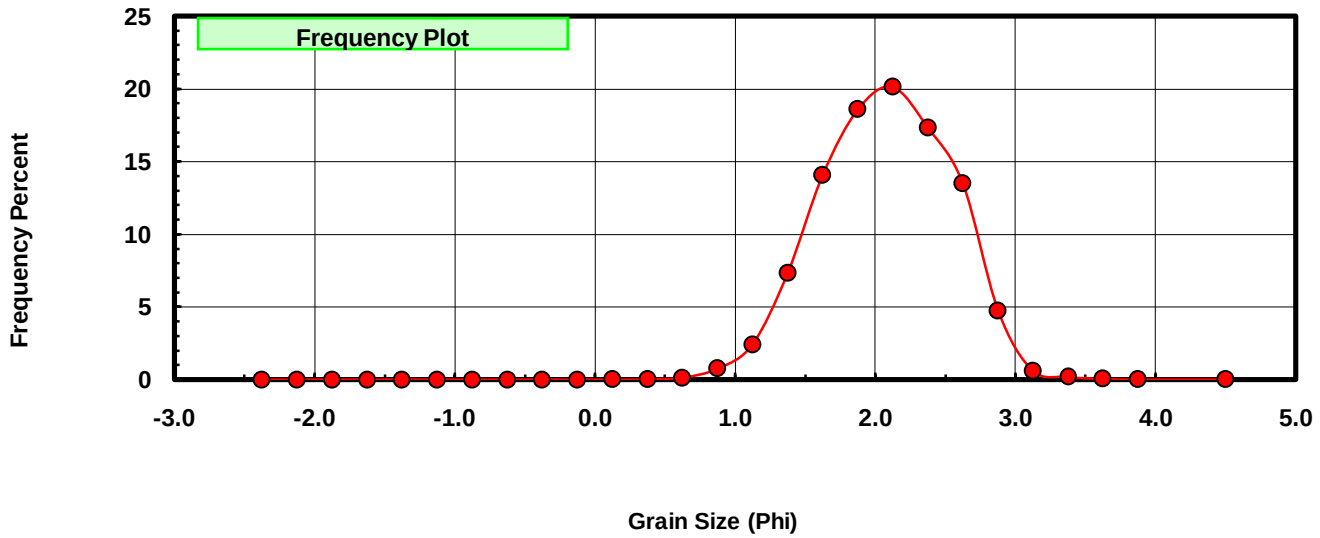

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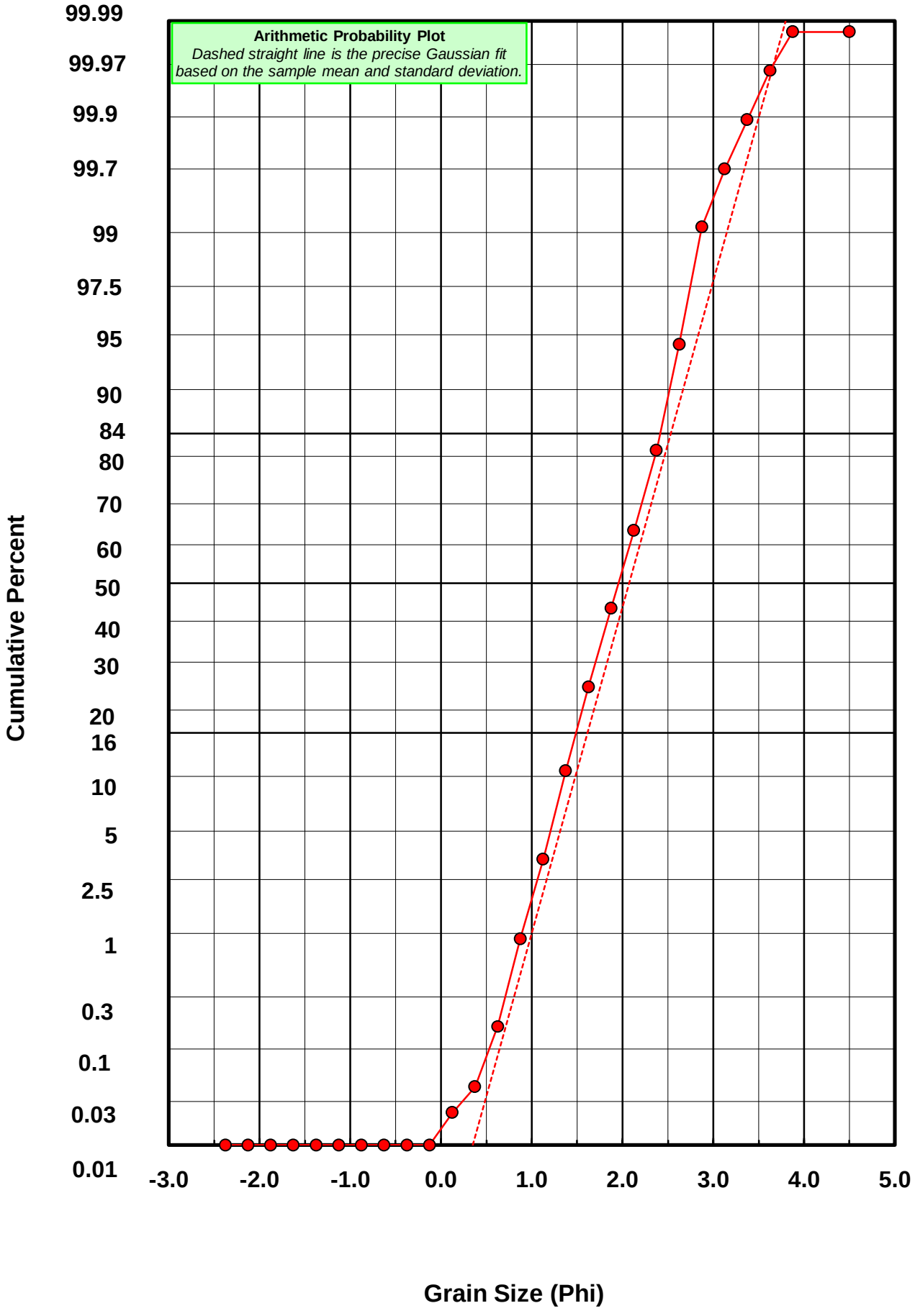
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-1.0
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5.0
Grain Size (Phi)