Onshore Grab Sample

Sample: IR-07
Sample Taken By: D. Phelps
Sample Collected On: 10/29/08
Splits? N/A

County: Indian River
Latitude: 27° 47' 05.0"
Longitude: 80° 24' 26.9"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	54.418	grams
Total Fines in Sample	0.276	grams
Total Percent Fines	0.50	%

Dry Sieving Summary

Total Sample Weight	54.157	grams
Total Digested Weight	40.134	grams
Total Carbonate Weight	14.023	grams
Total Silica %	74.11	%
Total Carbonate %	25.89	%
Carbonate/Silica Ratio	0.349	

General Comments:

None

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-07

Total Sample Mass: 54.157 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	0.033	0.061	0.061
-1.00	-1.125	0.100	0.185	0.246
-0.75	-0.875	0.092	0.170	0.415
-0.50	-0.625	0.044	0.081	0.497
-0.25	-0.375	0.098	0.181	0.678
0.00	-0.125	0.108	0.199	0.877
0.25	0.125	0.094	0.174	1.051
0.50	0.375	0.207	0.382	1.433
0.75	0.625	0.511	0.944	2.376
1.00	0.875	1.040	1.920	4.297
1.25	1.125	2.605	4.810	9.107
1.50	1.375	8.627	15.930	25.036
1.75	1.625	15.473	28.571	53.607
2.00	1.875	13.708	25.312	78.919
2.25	2.125	7.287	13.455	92.374
2.50	2.375	2.167	4.001	96.375
2.75	2.625	1.162	2.146	98.521
3.00	2.875	0.500	0.923	99.444
3.25	3.125	0.215	0.397	99.841
3.50	3.375	0.062	0.114	99.956
3.75	3.625	0.018	0.033	99.989
4.00	3.875	0.006	0.011	100.000
5.00	4.50	0.000	0.000	100.000

Statistical Results			
Mean:	1.7123	phi	(0.3052 mm)
Standard Dev:	0.4671	phi-units	(0.7234 mm)
Skewness:	-1.1125	dimensionless	
Kurtosis:	9.8659	dimensionless	
5th Moment:	-38.7920	dimensionless	
6th Moment:	250.5988	dimensionless	
RARD *	0.2728	dimensionless	
Median	1.5934	phi	(0.3314 mm)
* RARD = reciprocal absolute relative dispersion (see below)			

Statistical Explanation

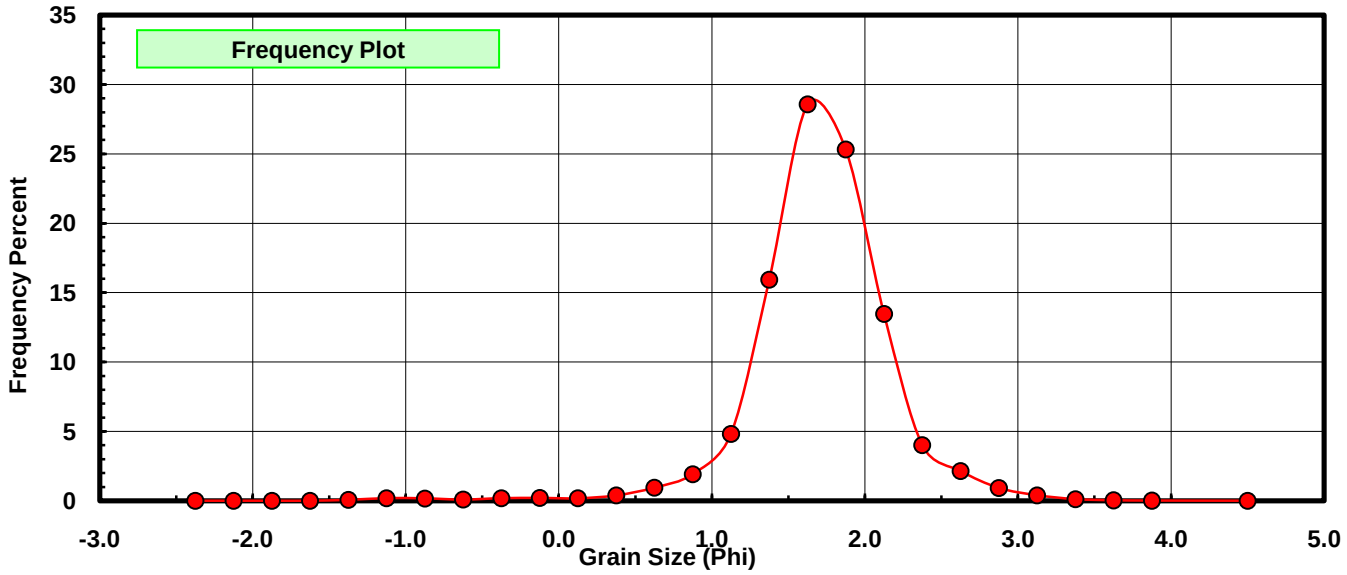
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

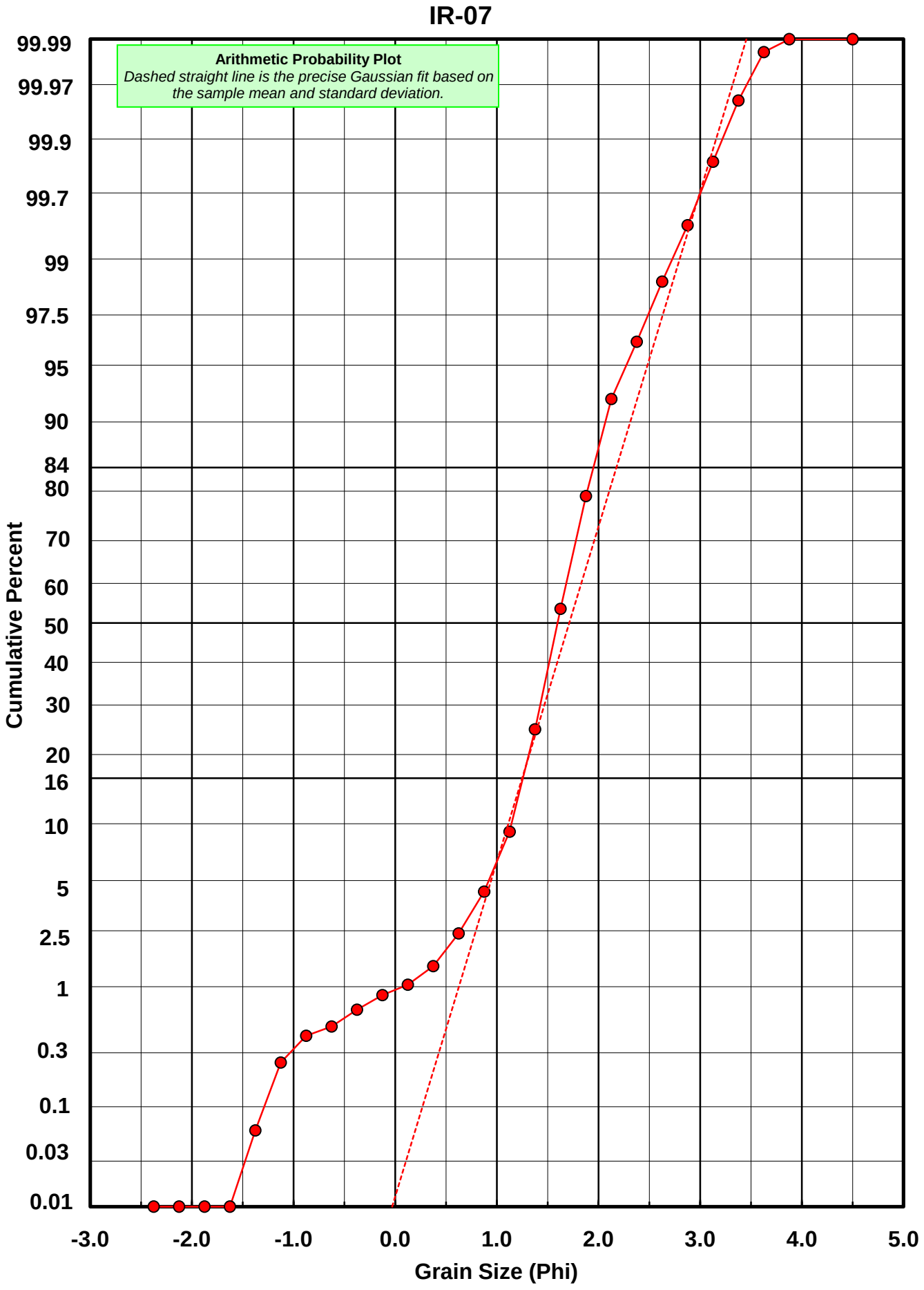
For Further Explanation, See Basillle et al. 2002

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)




IR-07
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: IR-07

Total Carbonate Mass: 14.044 grams

% Carbonate: 25.9 %

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	0.033	0.235	0.235
-1.00	-1.125	0.100	0.712	0.947
-0.75	-0.875	0.092	0.655	1.602
-0.50	-0.625	0.044	0.313	1.915
-0.25	-0.375	0.094	0.669	2.585
0.00	-0.125	0.097	0.691	3.275
0.25	0.125	0.080	0.570	3.845
0.50	0.375	0.165	1.175	5.020
0.75	0.625	0.381	2.713	7.733
1.00	0.875	0.502	3.574	11.307
1.25	1.125	0.845	6.017	17.324
1.50	1.375	2.541	18.093	35.417
1.75	1.625	3.715	26.453	61.870
2.00	1.875	2.918	20.778	82.647
2.25	2.125	1.782	12.689	95.336
2.50	2.375	0.416	2.962	98.298
2.75	2.625	0.178	1.267	99.566
3.00	2.875	0.047	0.335	99.900
3.25	3.125	0.014	0.100	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:	1.5529	phi	(0.3408 mm)
Standard Dev:	0.6233	phi-units	(0.6492 mm)
Skewness:	-1.7890	dimensionless	
Kurtosis:	8.0108	dimensionless	
5th Moment:	-28.4701	dimensionless	
6th Moment:	118.4141	dimensionless	
RARD *	0.4014	dimensionless	
Median	1.5128	phi	(0.3504 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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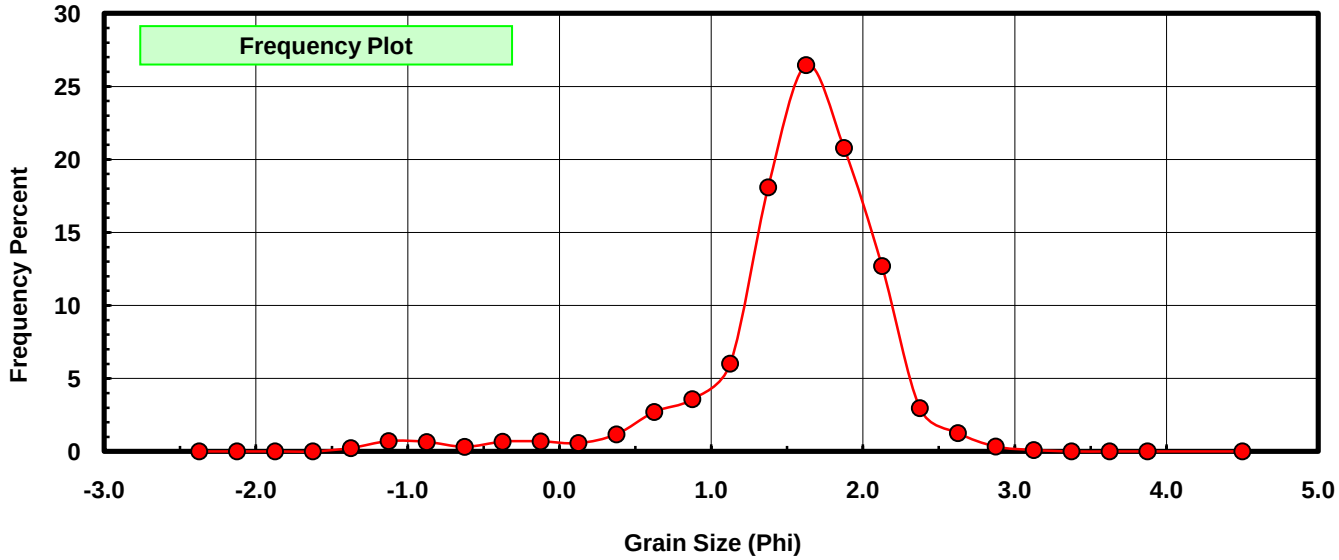

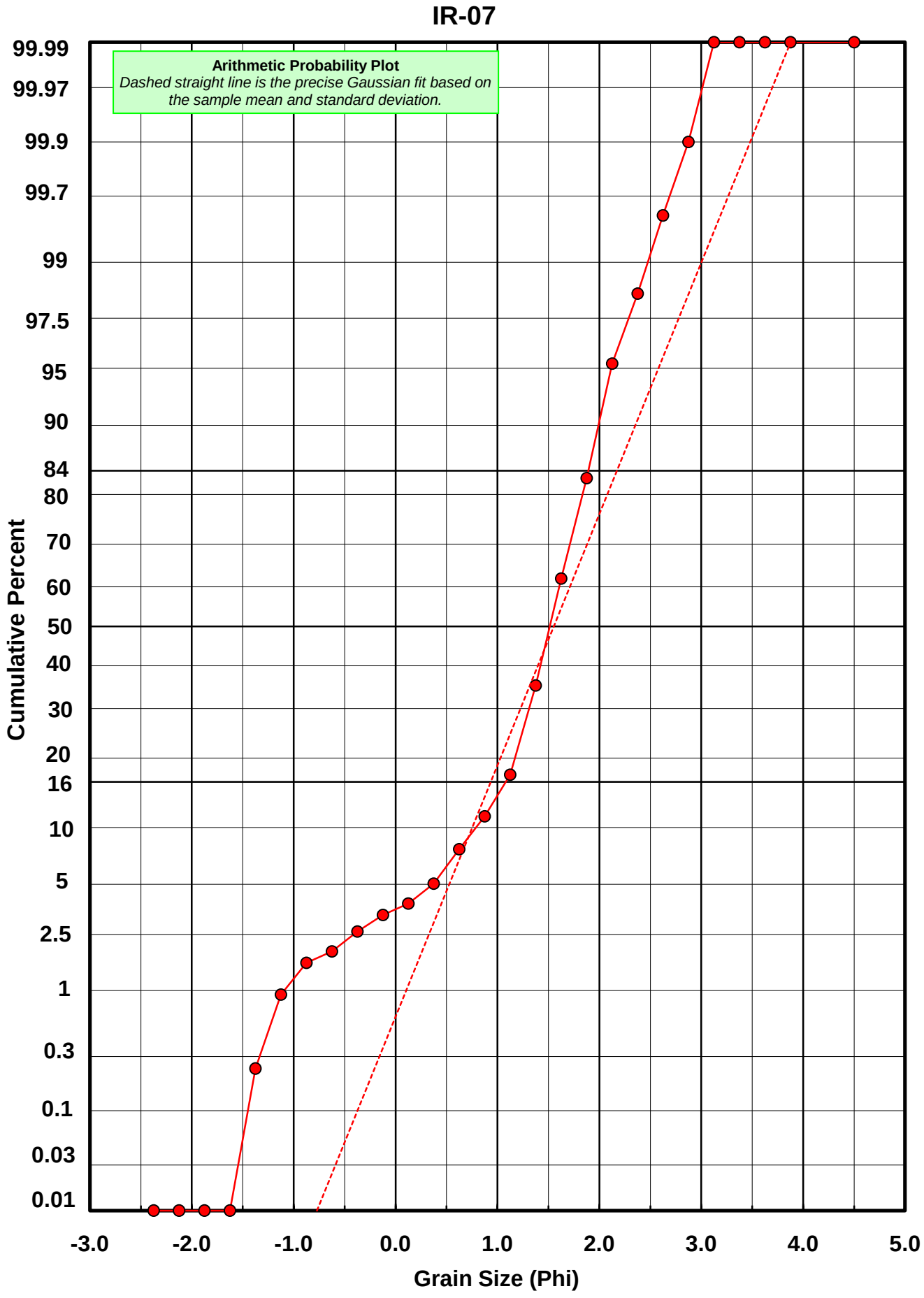
IR-07
Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
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30
20
16
10
5
2.5
1
0.3
0.1
0.03
0.01
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
Grain Size (Phi)

Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: IR-07

Total Digested Mass: 40.134 grams

% Silica: 74.1 %

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	0.004	0.010	0.010
0.00	-0.125	0.011	0.027	0.037
0.25	0.125	0.014	0.035	0.072
0.50	0.375	0.042	0.105	0.177
0.75	0.625	0.130	0.324	0.501
1.00	0.875	0.538	1.341	1.841
1.25	1.125	1.760	4.385	6.227
1.50	1.375	6.086	15.164	21.391
1.75	1.625	11.758	29.297	50.688
2.00	1.875	10.790	26.885	77.573
2.25	2.125	5.505	13.717	91.289
2.50	2.375	1.751	4.363	95.652
2.75	2.625	0.984	2.452	98.104
3.00	2.875	0.453	1.129	99.233
3.25	3.125	0.201	0.501	99.733
3.50	3.375	0.065	0.162	99.895
3.75	3.625	0.031	0.077	99.973
4.00	3.875	0.011	0.027	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.7690	phi	(0.2934 mm)
Standard Dev:	0.3956	phi-units	(0.7601 mm)
Skewness:	0.4974	dimensionless	
Kurtosis:	4.9389	dimensionless	
5th Moment:	6.5284	dimensionless	
6th Moment:	53.9706	dimensionless	
RARD *	0.2237	dimensionless	
Median	1.6191	phi	(0.3255 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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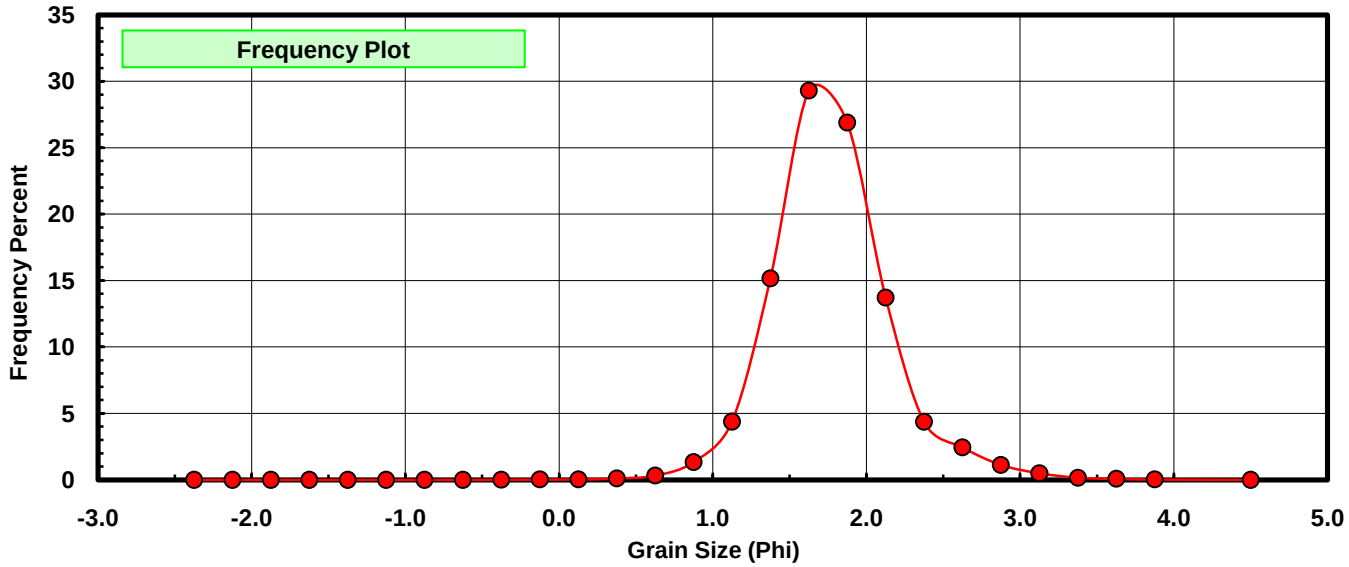
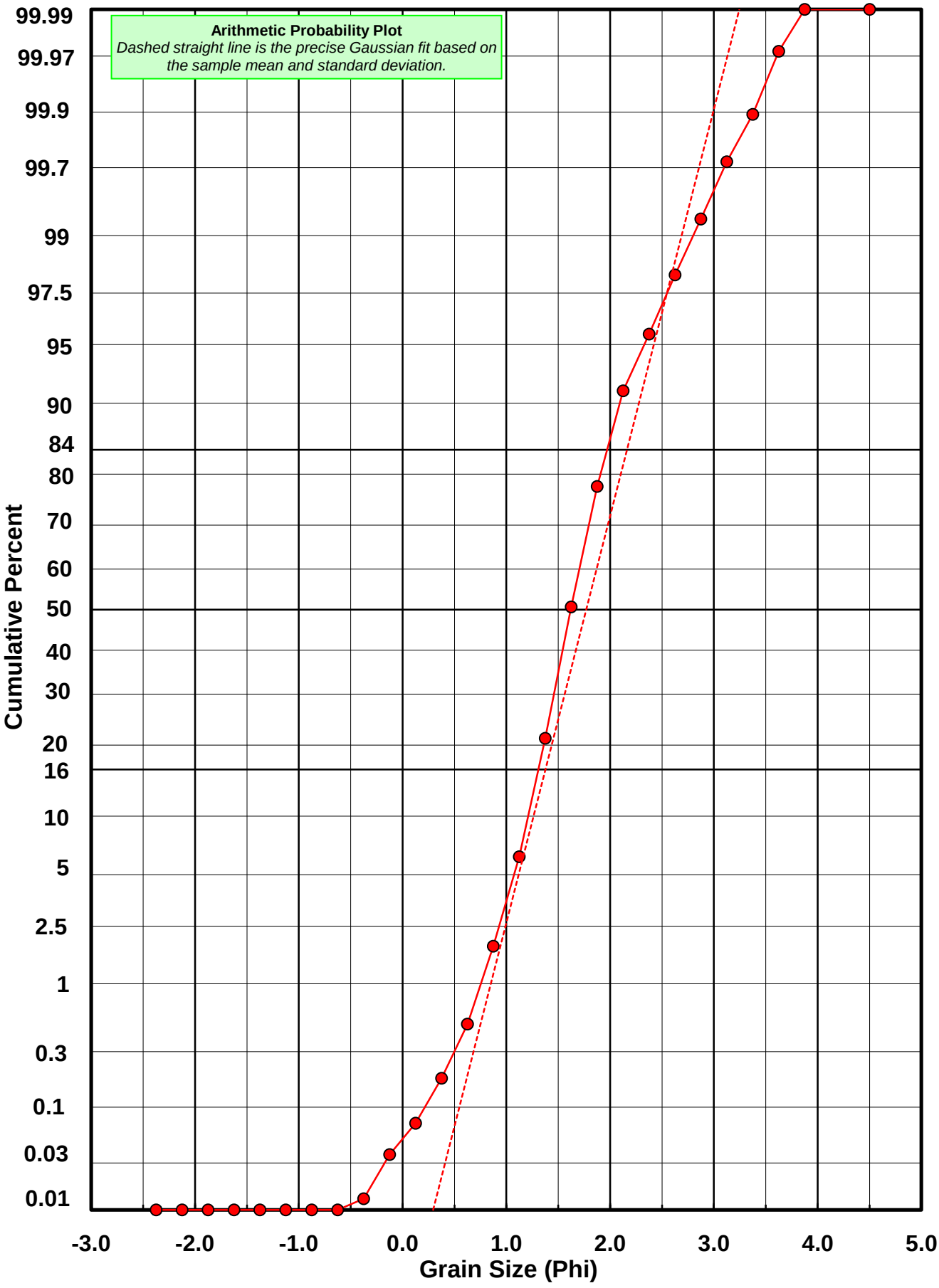


IR-07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-1.0
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3.0
4.0
5.0
Grain Size (Phi)