Onshore Grab Sample

Sample: MO-30
Sample Taken By: D. Phelps
Sample Collected On: 4/14/10
Splits? N/A

County: Monroe
Latitude: 24° 32' 44.8"
Longitude: 81° 48' 43.7"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	64.377	grams
Total Fines in Sample	0.538	grams
Total Percent Fines	0.83	%

Dry Sieving Summary

Total Sample Weight	64.068	grams
Total Digested Weight	23.460	grams
Total Carbonate Weight	40.608	grams
Total Silica %	36.62	%
Total Carbonate %	63.38	%
Carbonate/Silica Ratio	1.731	

General Comments:

None

Description

Worked By: M. Ladle

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: MO-30

Total Sample Mass: 64.068 grams

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	1.723	2.689	2.689
-2.00	-2.125	0.085	0.133	2.822
-1.75	-1.875	0.000	0.000	2.822
-1.50	-1.625	0.075	0.117	2.939
-1.25	-1.375	0.044	0.069	3.008
-1.00	-1.125	0.089	0.139	3.147
-0.75	-0.875	0.212	0.331	3.478
-0.50	-0.625	0.366	0.571	4.049
-0.25	-0.375	0.533	0.832	4.881
0.00	-0.125	0.744	1.161	6.042
0.25	0.125	1.497	2.337	8.379
0.50	0.375	2.141	3.342	11.720
0.75	0.625	3.284	5.126	16.846
1.00	0.875	8.543	13.334	30.180
1.25	1.125	7.794	12.165	42.346
1.50	1.375	9.665	15.086	57.431
1.75	1.625	8.976	14.010	71.441
2.00	1.875	7.517	11.733	83.174
2.25	2.125	5.623	8.777	91.951
2.50	2.375	2.962	4.623	96.574
2.75	2.625	1.431	2.234	98.808
3.00	2.875	0.508	0.793	99.600
3.25	3.125	0.146	0.228	99.828
3.50	3.375	0.045	0.070	99.899
3.75	3.625	0.032	0.050	99.948
4.00	3.875	0.021	0.033	99.981
5.00	4.50	0.012	0.019	100.000

Statistical Results			
Mean:	1.2651	phi	(0.4161 mm)
Standard Dev:	0.9239	phi-units	(0.5271 mm)
Skewness:	-1.7336	dimensionless	
Kurtosis:	7.9941	dimensionless	
5th Moment:	-27.4436	dimensionless	
6th Moment:	110.4285	dimensionless	
RARD *	0.7303	dimensionless	
Median	1.2518	phi	(0.4199 mm)

* RARD = reciprocal absolute relative dispersion (see below)

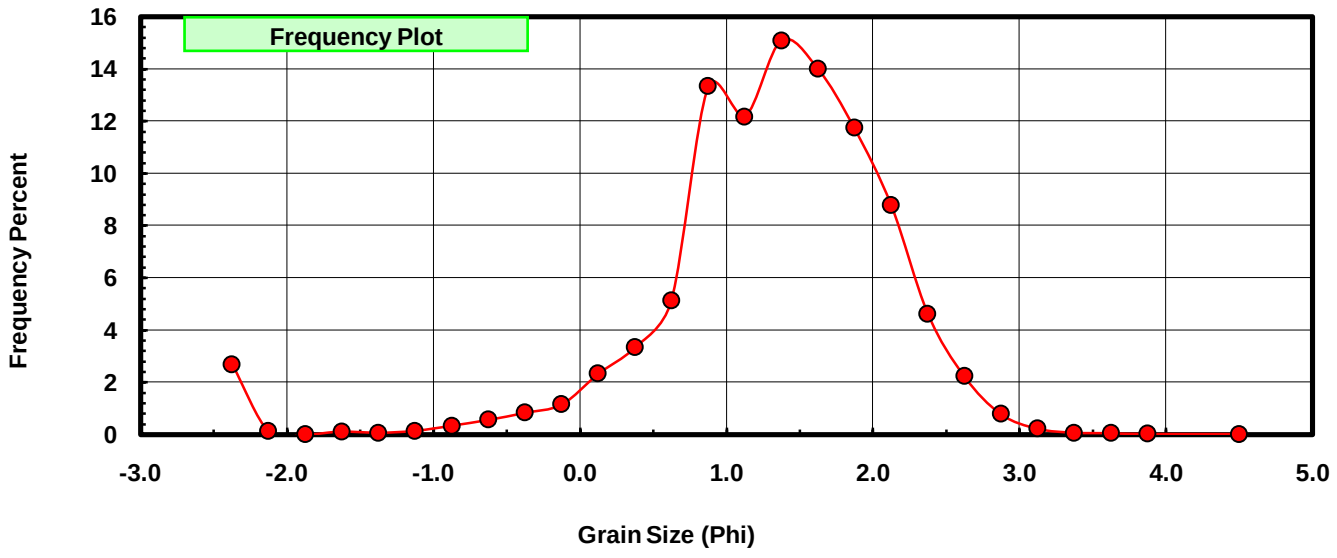
Statistical Explanation

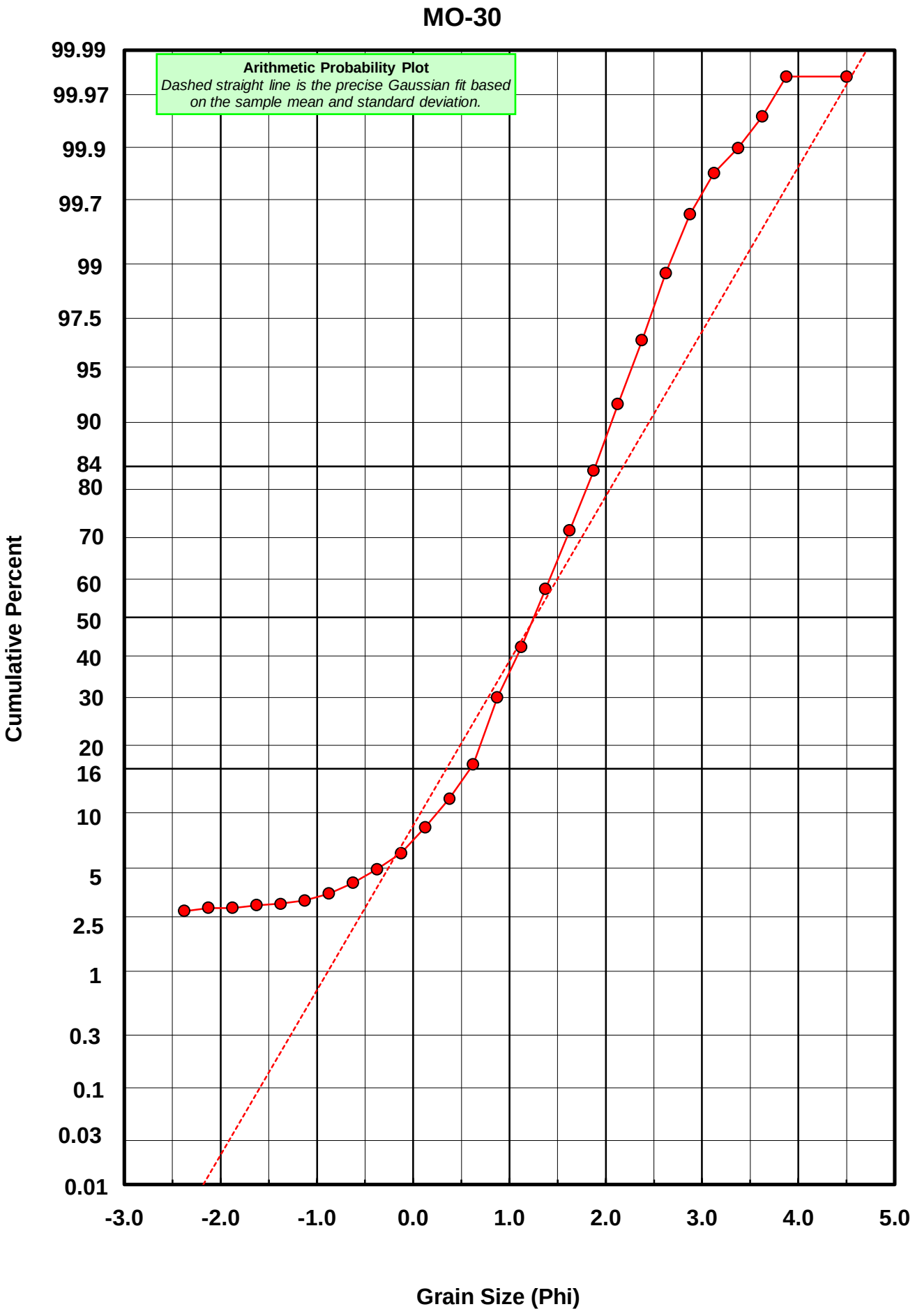
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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)




MO-30
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: MO-30

Total Carbonate Mass: 40.608 grams

% Carbonate: 63.4 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	1.723	4.243	4.243
-2.00	-2.125	0.085	0.209	4.452
-1.75	-1.875	0.000	0.000	4.452
-1.50	-1.625	0.075	0.185	4.637
-1.25	-1.375	0.044	0.108	4.745
-1.00	-1.125	0.089	0.219	4.965
-0.75	-0.875	0.212	0.522	5.487
-0.50	-0.625	0.344	0.847	6.334
-0.25	-0.375	0.352	0.867	7.201
0.00	-0.125	0.491	1.209	8.410
0.25	0.125	0.793	1.953	10.362
0.50	0.375	0.940	2.315	12.677
0.75	0.625	1.259	3.100	15.778
1.00	0.875	4.013	9.882	25.660
1.25	1.125	4.521	11.133	36.793
1.50	1.375	6.211	15.295	52.088
1.75	1.625	6.180	15.219	67.307
2.00	1.875	5.090	12.534	79.841
2.25	2.125	4.158	10.239	90.081
2.50	2.375	2.302	5.669	95.750
2.75	2.625	1.095	2.697	98.446
3.00	2.875	0.426	1.049	99.495
3.25	3.125	0.126	0.310	99.805
3.50	3.375	0.037	0.091	99.897
3.75	3.625	0.023	0.057	99.953
4.00	3.875	0.013	0.032	99.985
5.00	4.500	0.006	0.015	100.000

Statistical Results			
Mean:	1.2779	phi	(0.4124 mm)
Standard Dev:	1.0661	phi-units	(0.4776 mm)
Skewness:	-1.8338	dimensionless	
Kurtosis:	7.0624	dimensionless	
5th Moment:	-21.8354	dimensionless	
6th Moment:	75.6012	dimensionless	
RARD *	0.8342	dimensionless	
Median	1.3409	phi	(0.3948 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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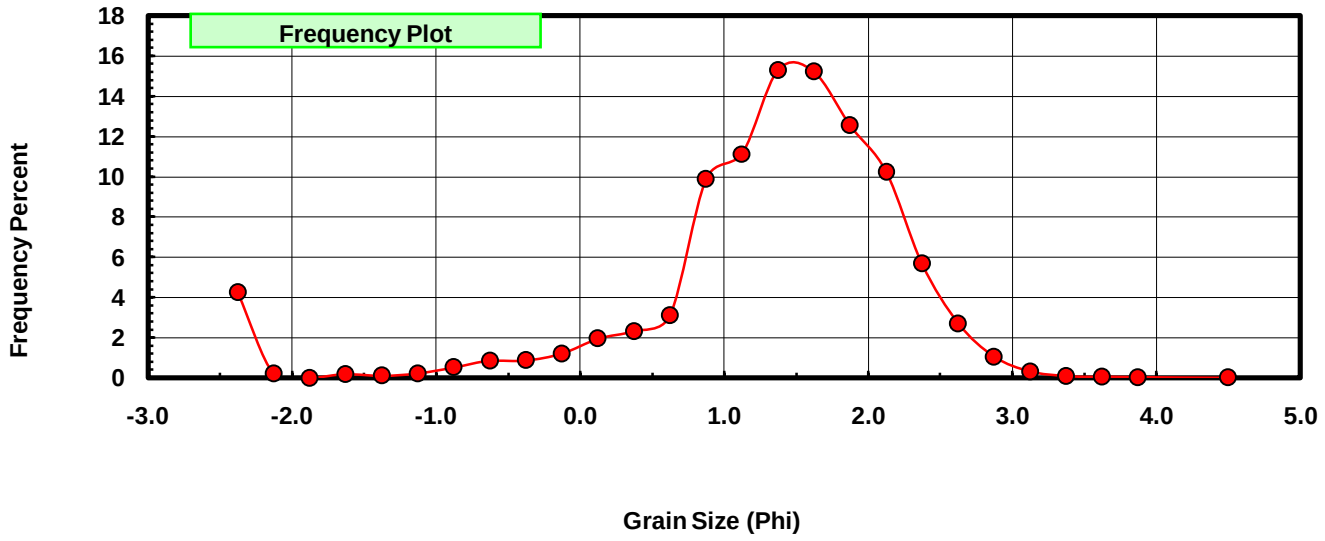

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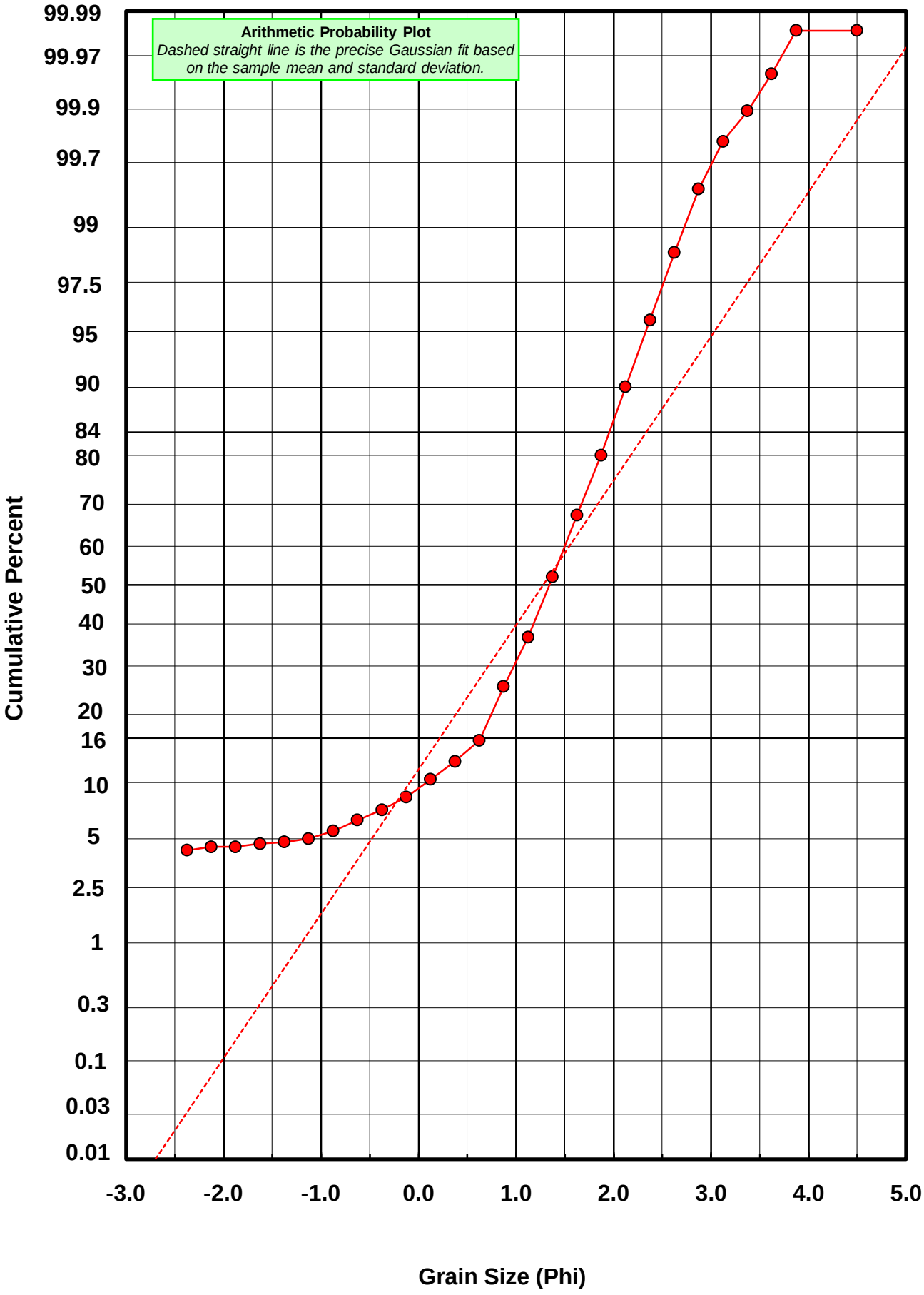
Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
99.9
99.7
99
97.5
95
90
84
80
70
60
50
40
30
20
16
10
5
2.5
1
0.3
0.1
0.03
0.01
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
Grain Size (Phi)

Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: MO-30

Total Digested Mass: 23.460 grams

% Silica: 36.6 %

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	0.022	0.094	0.094
-0.25	-0.375	0.181	0.772	0.865
0.00	-0.125	0.253	1.078	1.944
0.25	0.125	0.704	3.001	4.945
0.50	0.375	1.201	5.119	10.064
0.75	0.625	2.025	8.632	18.696
1.00	0.875	4.530	19.309	38.005
1.25	1.125	3.273	13.951	51.957
1.50	1.375	3.454	14.723	66.679
1.75	1.625	2.796	11.918	78.598
2.00	1.875	2.427	10.345	88.943
2.25	2.125	1.465	6.245	95.188
2.50	2.375	0.660	2.813	98.001
2.75	2.625	0.336	1.432	99.433
3.00	2.875	0.082	0.350	99.783
3.25	3.125	0.020	0.085	99.868
3.50	3.375	0.008	0.034	99.902
3.75	3.625	0.009	0.038	99.940
4.00	3.875	0.008	0.034	99.974
5.00	4.500	0.006	0.026	100.000

Statistical Results			
Mean:	1.2429	phi	(0.4225 mm)
Standard Dev:	0.6260	phi-units	(0.648 mm)
Skewness:	0.1151	dimensionless	
Kurtosis:	3.0574	dimensionless	
5th Moment:	1.8037	dimensionless	
6th Moment:	20.0431	dimensionless	
RARD *	0.5037	dimensionless	
Median	1.0899	phi	(0.4698 mm)
* RARD = reciprocal absolute relative dispersion (see below)			

Statistical Explanation

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

For Further Explanation, See Basillle et al. 2002

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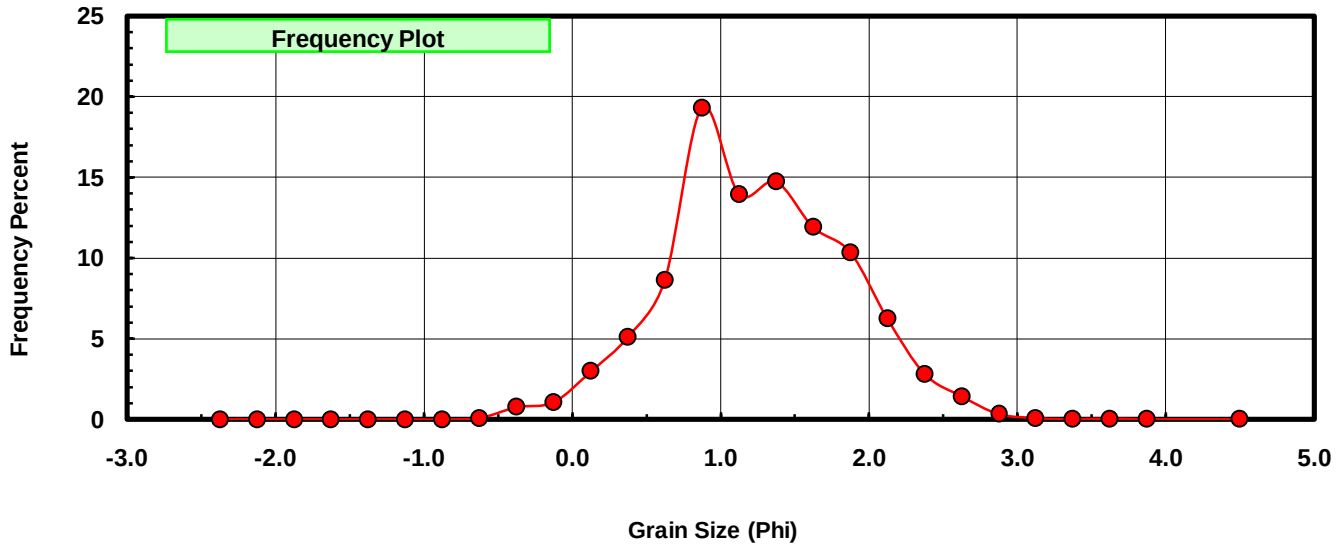

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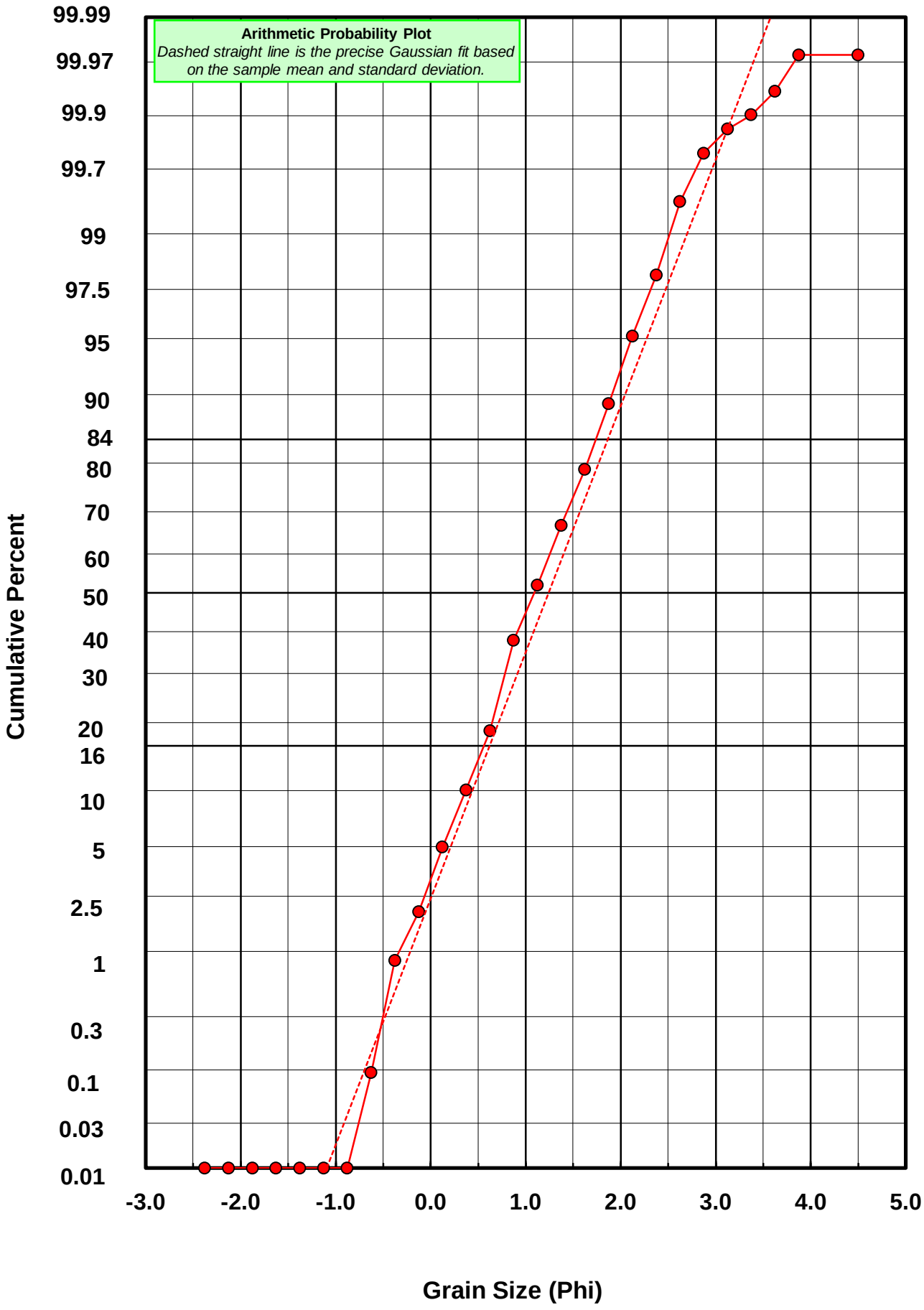
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-2.0
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Grain Size (Phi)