Onshore Grab Sample

Sample: SJ-30-MB
Sample Taken By: J. Ladner
Sample Collected On: 12/1/03
Splits? N/A

County: St. Johns
Latitude: 29° 50' 54.1"
Longitude: 81° 15' 51.7"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	52.741	grams
Total Fines in Sample	0.267	grams
Total Percent Fines	0.50	%

Dry Sieving Summary

Total Sample Weight	52.307	grams
Total Digested Weight	45.229	grams
Total Carbonate Weight	7.078	grams
Total Silica %	86.47	%
Total Carbonate %	13.53	%
Carbonate/Silica Ratio	0.156	

General Comments:

None

Description

Worked By: M. Lachance

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: SJ-30-MB

Total Sample Mass: 52.307 grams

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.573	1.095	1.095
-1.75	-1.875	0.183	0.350	1.445
-1.50	-1.625	0.330	0.631	2.076
-1.25	-1.375	0.431	0.824	2.900
-1.00	-1.125	0.345	0.660	3.560
-0.75	-0.875	0.475	0.908	4.468
-0.50	-0.625	0.622	1.189	5.657
-0.25	-0.375	0.651	1.245	6.902
0.00	-0.125	0.590	1.128	8.030
0.25	0.125	0.567	1.084	9.114
0.50	0.375	0.553	1.057	10.171
0.75	0.625	0.523	1.000	11.171
1.00	0.875	0.826	1.579	12.750
1.25	1.125	0.673	1.287	14.036
1.50	1.375	0.909	1.738	15.774
1.75	1.625	1.320	2.524	18.298
2.00	1.875	2.224	4.252	22.550
2.25	2.125	4.206	8.041	30.591
2.50	2.375	9.072	17.344	47.934
2.75	2.625	12.001	22.943	70.878
3.00	2.875	8.621	16.482	87.359
3.25	3.125	4.531	8.662	96.022
3.50	3.375	1.449	2.770	98.792
3.75	3.625	0.391	0.748	99.539
4.00	3.875	0.179	0.342	99.881
5.00	4.500	0.062	0.119	100.000

Statistical Results			
Mean:	2.1730	phi	(0.2218 mm)
Standard Dev:	1.1498	phi-units	(0.4507 mm)
Skewness:	-1.9519	dimensionless	
Kurtosis:	6.4936	dimensionless	
5th Moment:	-19.7656	dimensionless	
6th Moment:	65.4192	dimensionless	
RARD *	0.5291	dimensionless	
Median	2.3975	phi	(0.1898 mm)

* RARD = reciprocal absolute relative dispersion (see below)

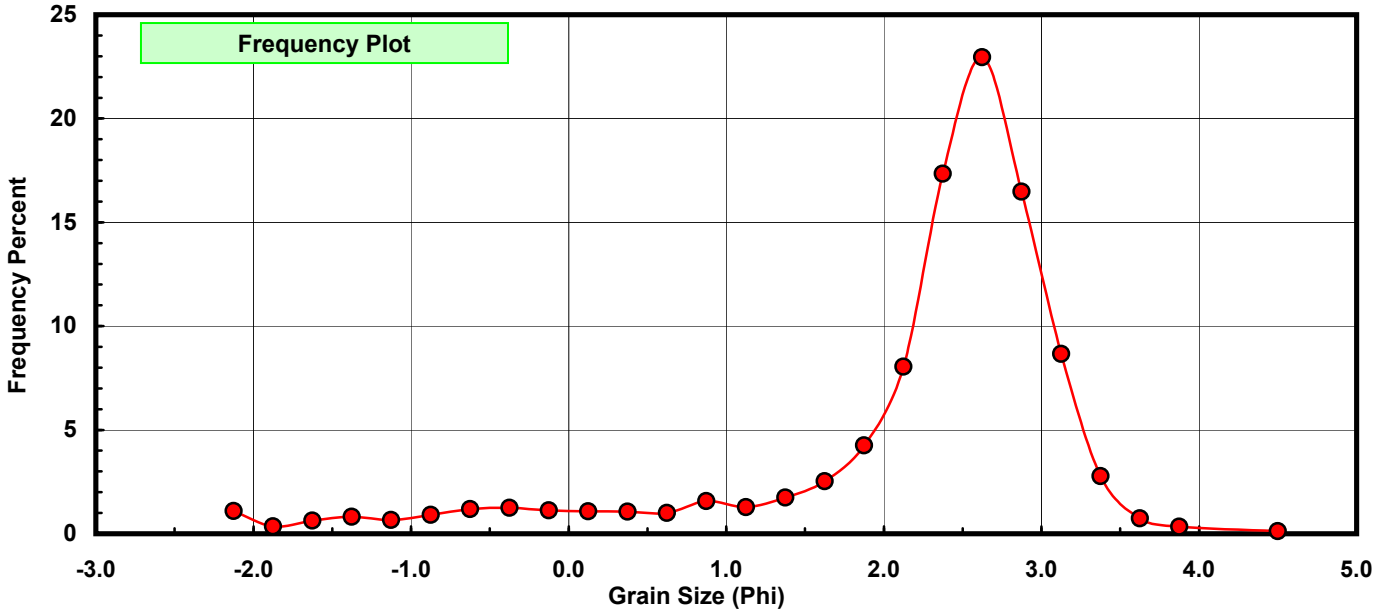
Statistical Explanation

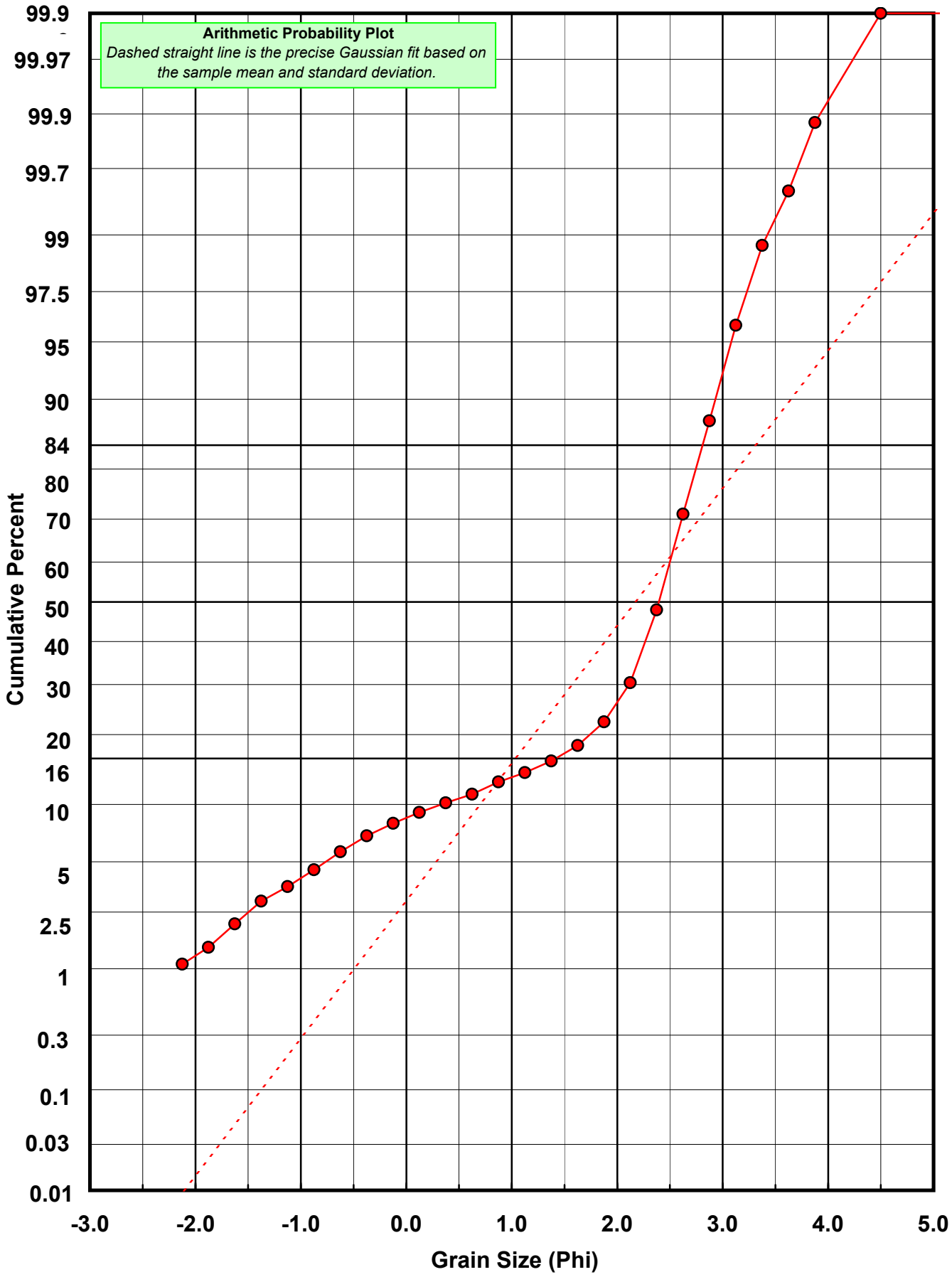
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

For Further Explanation, See Calculation Sheets

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)




Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.9
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: SJ-30-MB

Total Carbonate Mass: 7.419 grams

% Carbonate: 13.5 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.573	7.723	7.723
-1.75	-1.875	0.183	2.467	10.190
-1.50	-1.625	0.330	4.448	14.638
-1.25	-1.375	0.431	5.809	20.447
-1.00	-1.125	0.345	4.650	25.098
-0.75	-0.875	0.463	6.241	31.338
-0.50	-0.625	0.613	8.263	39.601
-0.25	-0.375	0.613	8.263	47.864
0.00	-0.125	0.522	7.036	54.900
0.25	0.125	0.420	5.661	60.561
0.50	0.375	0.344	4.637	65.197
0.75	0.625	0.278	3.747	68.945
1.00	0.875	0.357	4.812	73.757
1.25	1.125	0.187	2.521	76.277
1.50	1.375	0.197	2.655	78.932
1.75	1.625	0.155	2.089	81.022
2.00	1.875	0.084	1.132	82.154
2.25	2.125	0.108	1.456	83.610
2.50	2.375	0.967	13.034	96.644
2.75	2.625	0.026	0.350	96.994
3.00	2.875	0.000	0.000	96.994
3.25	3.125	0.182	2.453	99.447
3.50	3.375	0.000	0.000	99.447
3.75	3.625	0.005	0.067	99.515
4.00	3.875	0.036	0.485	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	0.0968	phi	(0.9351 mm)
Standard Dev:	1.5900	phi-units	(0.3322 mm)
Skewness:	0.3770	dimensionless	
Kurtosis:	1.9003	dimensionless	
5th Moment:	1.5392	dimensionless	
6th Moment:	4.8623	dimensionless	
RARD *	16.4322	dimensionless	
Median	-0.2991	phi	(1.2304 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 Calculation Sheets

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

Reciprocal Absolute Relative Dispersion (RARD) Scale	
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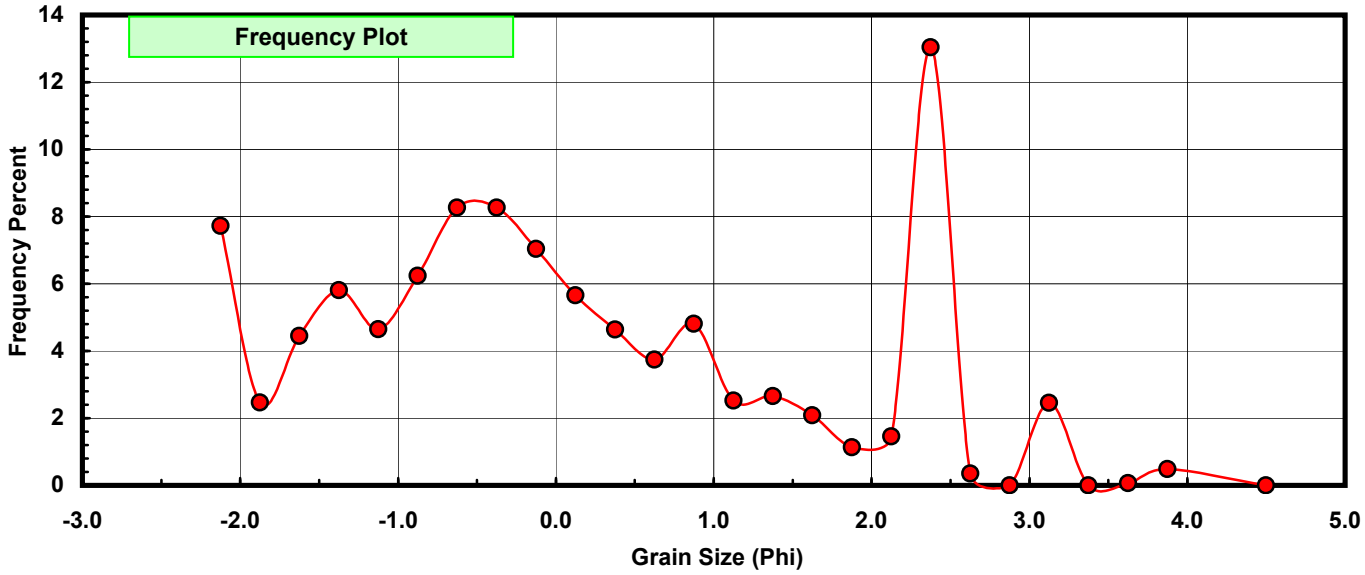

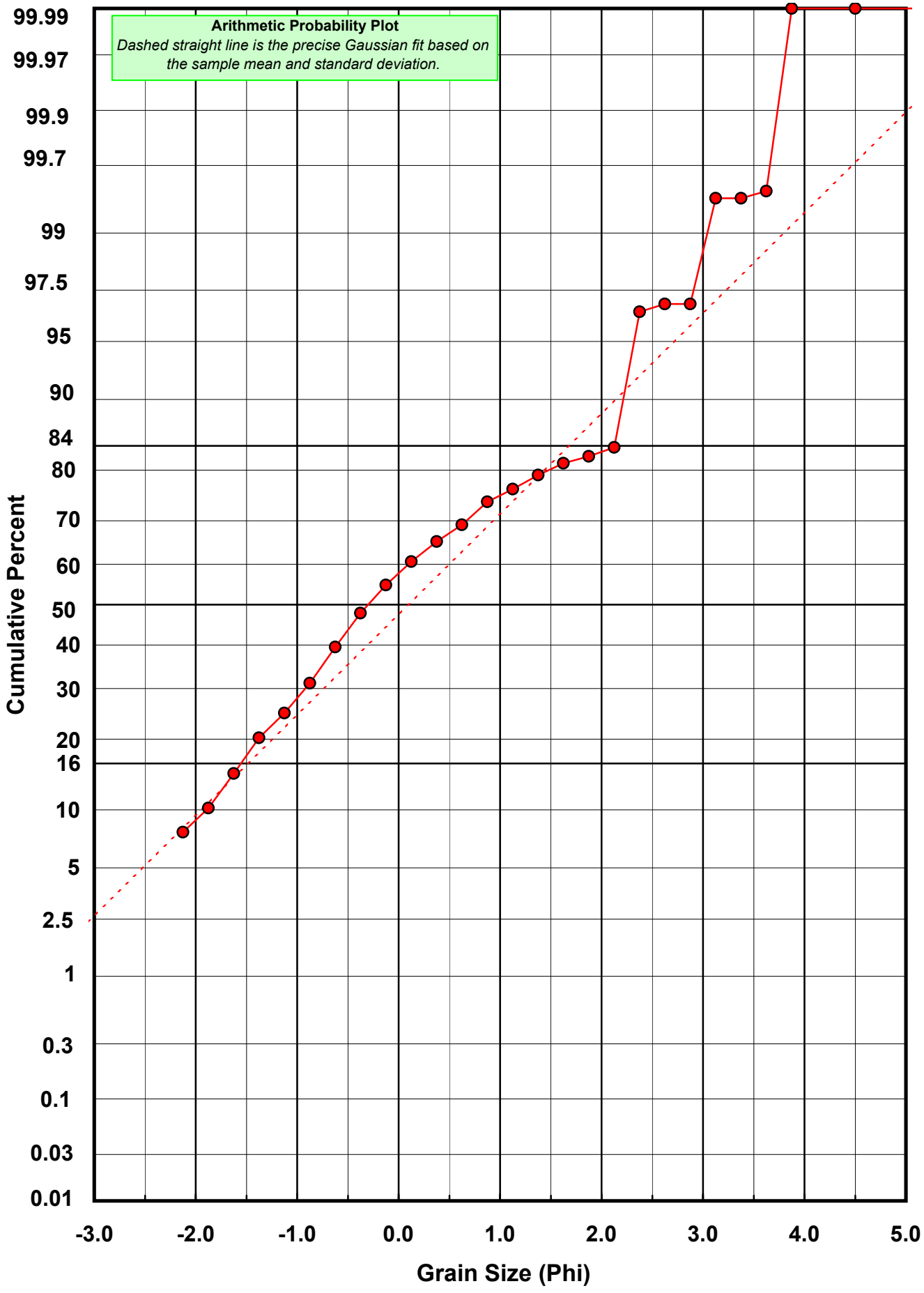
Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
99.9
99.7
99
97.5
95
90
84
80
70
60
50
40
30
20
16
10
5
2.5
1
0.3
0.1
0.03
0.01
-3.0
-2.0
-1.0
0.0
1.0
2.0
3.0
4.0
5.0
Grain Size (Phi)

Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: SJ-30-MB

Total Digested Mass: 45.182 grams

% Silica: 86.5 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-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	0.012	0.027	0.027
-0.50	-0.625	0.009	0.020	0.046
-0.25	-0.375	0.038	0.084	0.131
0.00	-0.125	0.068	0.151	0.281
0.25	0.125	0.147	0.325	0.606
0.50	0.375	0.209	0.463	1.069
0.75	0.625	0.245	0.542	1.611
1.00	0.875	0.469	1.038	2.649
1.25	1.125	0.486	1.076	3.725
1.50	1.375	0.712	1.576	5.301
1.75	1.625	1.165	2.578	7.879
2.00	1.875	2.140	4.736	12.616
2.25	2.125	4.098	9.070	21.686
2.50	2.375	8.105	17.939	39.624
2.75	2.625	11.975	26.504	66.128
3.00	2.875	8.967	19.846	85.975
3.25	3.125	4.349	9.626	95.600
3.50	3.375	1.459	3.229	98.829
3.75	3.625	0.386	0.854	99.684
4.00	3.875	0.143	0.316	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	2.5163	phi	(0.1748 mm)
Standard Dev:	0.5658	phi-units	(0.6756 mm)
Skewness:	-1.4398	dimensionless	
Kurtosis:	6.8501	dimensionless	
5th Moment:	-23.1999	dimensionless	
6th Moment:	102.5057	dimensionless	
RARD *	0.2248	dimensionless	
Median	2.4729	phi	(0.1801 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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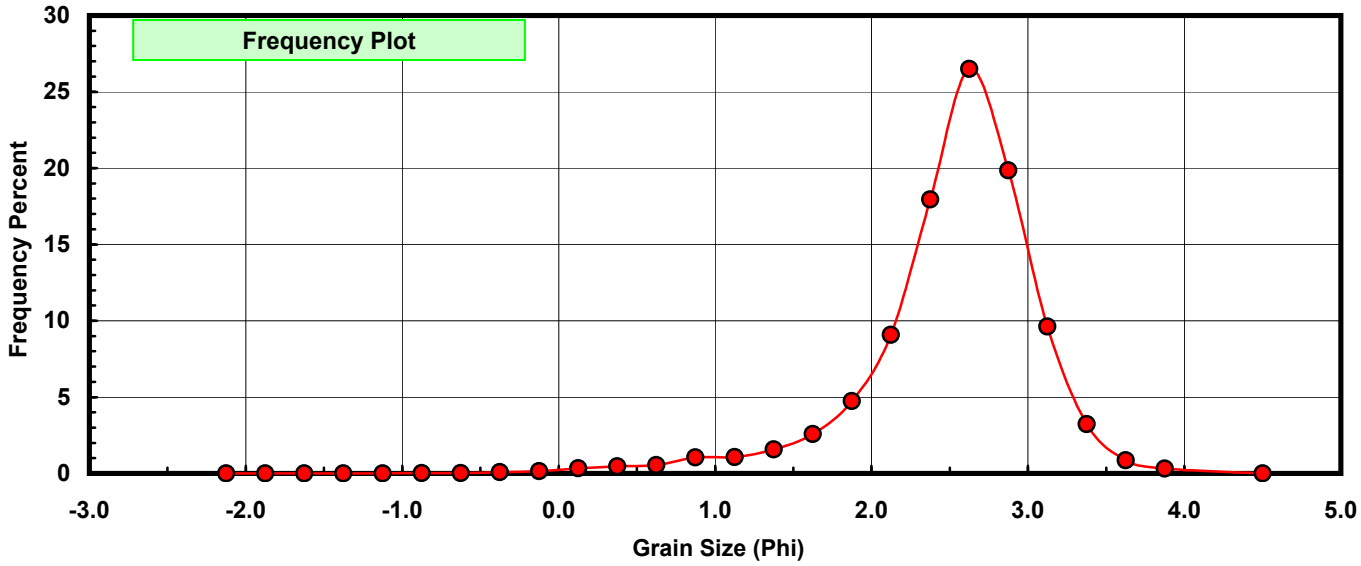

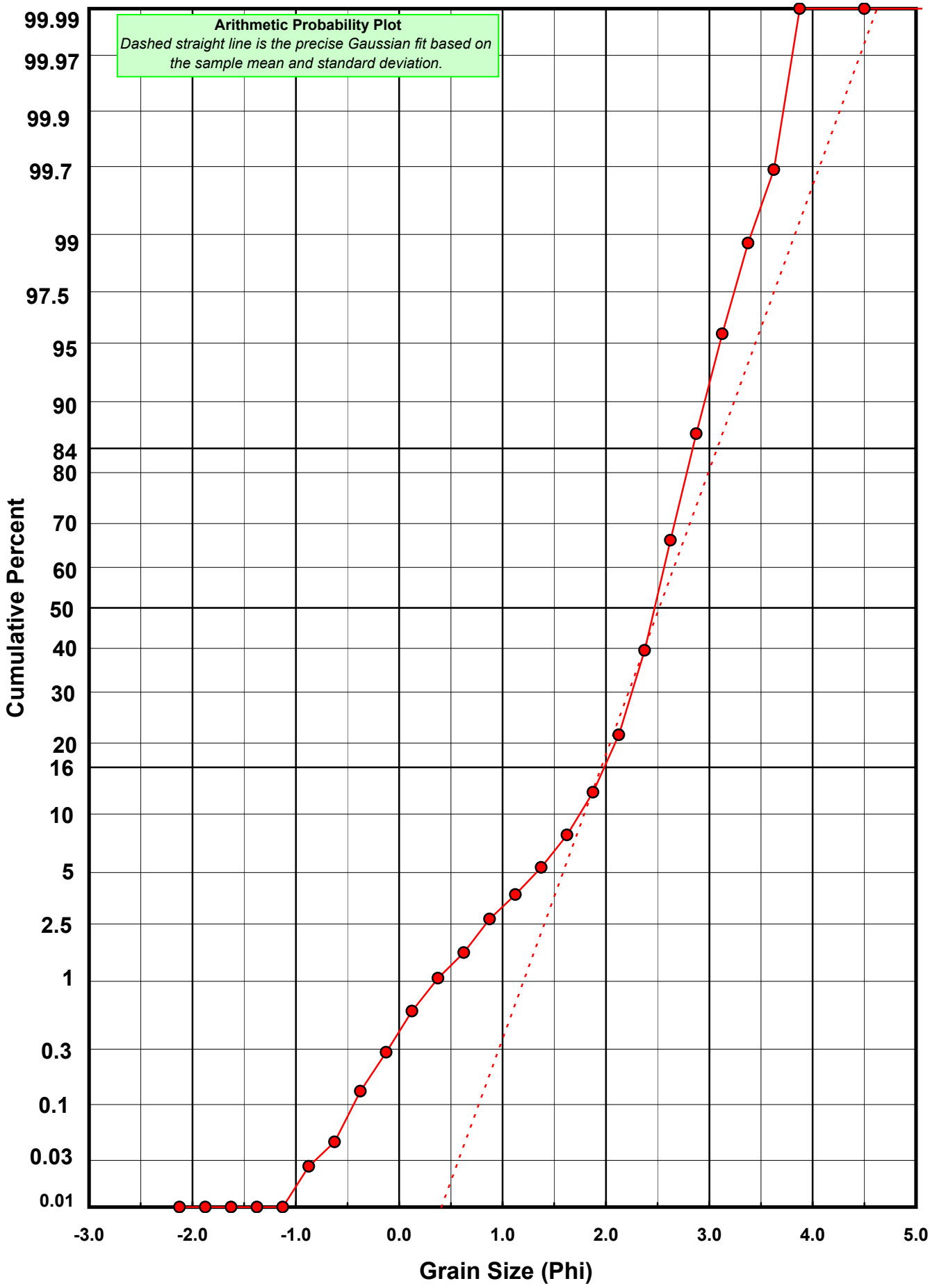
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-2.0
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Grain Size (Phi)