Onshore Grab Sample

Sample: SJ-40-SS
Sample Taken By: J. Ladner
Sample Collected On: 12/1/03
Splits? N/A

County: St. Johns
Latitude: 29° 42' 53.2"
Longitude: 81° 13' 42.0"
Datum: WGS 84
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	63.225	grams
Total Fines in Sample	0.705	grams
Total Percent Fines	1.10	%

Dry Sieving Summary

Total Sample Weight	62.530	grams
Total Digested Weight	61.032	grams
Total Carbonate Weight	1.498	grams
Total Silica %	97.60	%
Total Carbonate %	2.40	%
Carbonate/Silica Ratio	0.025	

General Comments:

None

Description

Worked By: M. Lachance

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: SJ-40-SS

Total Sample Mass: 62.530 grams

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	0.012	0.019	0.019
-1.00	-1.125	0.018	0.029	0.048
-0.75	-0.875	0.010	0.016	0.064
-0.50	-0.625	0.018	0.029	0.093
-0.25	-0.375	0.012	0.019	0.112
0.00	-0.125	0.024	0.038	0.150
0.25	0.125	0.038	0.061	0.211
0.50	0.375	0.045	0.072	0.283
0.75	0.625	0.071	0.114	0.397
1.00	0.875	0.160	0.256	0.652
1.25	1.125	0.198	0.317	0.969
1.50	1.375	0.342	0.547	1.516
1.75	1.625	0.711	1.137	2.653
2.00	1.875	1.898	3.035	5.688
2.25	2.125	4.581	7.326	13.015
2.50	2.375	12.418	19.859	32.874
2.75	2.625	22.221	35.537	68.410
3.00	2.875	15.488	24.769	93.179
3.25	3.125	3.669	5.868	99.047
3.50	3.375	0.500	0.800	99.846
3.75	3.625	0.079	0.126	99.973
4.00	3.875	0.016	0.026	99.998
5.00	4.500	0.001	0.002	100.000

Statistical Results			
Mean:	2.5770	phi	(0.1676 mm)
Standard Dev:	0.3845	phi-units	(0.766 mm)
Skewness:	-2.1125	dimensionless	
Kurtosis:	15.0782	dimensionless	
5th Moment:	-103.9098	dimensionless	
6th Moment:	860.1891	dimensionless	
RARD *	0.1492	dimensionless	
Median	2.4955	phi	(0.1773 mm)

* RARD = reciprocal absolute relative dispersion (see below)

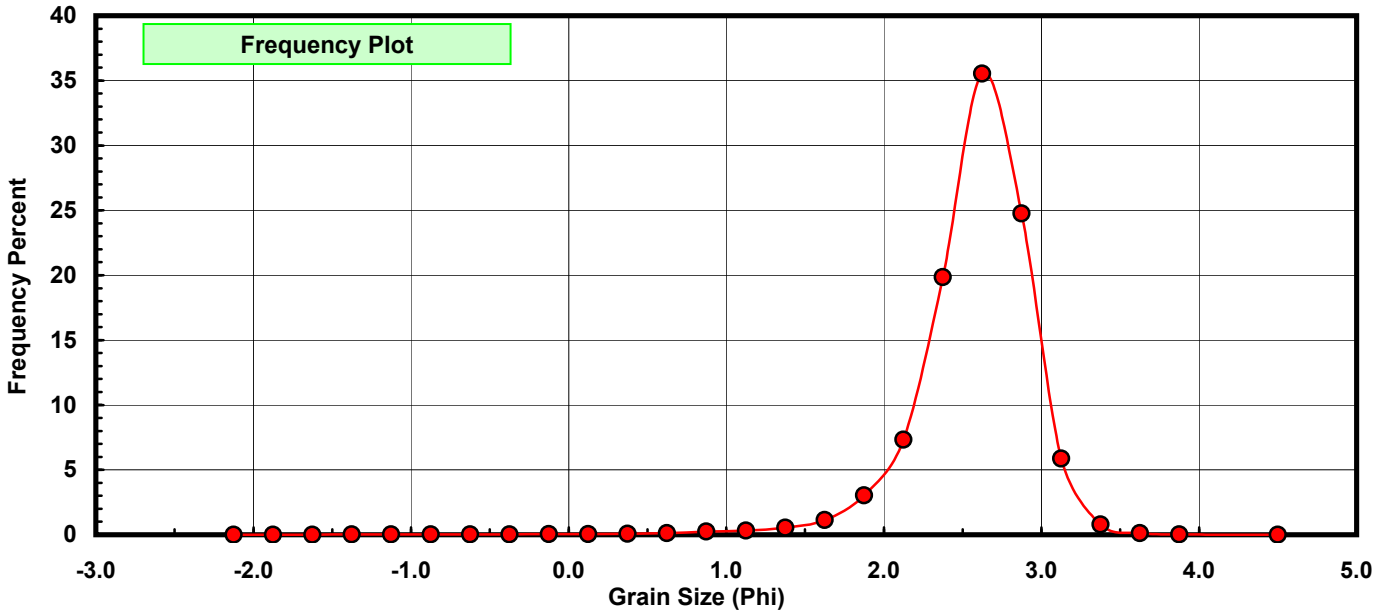
Statistical Explanation

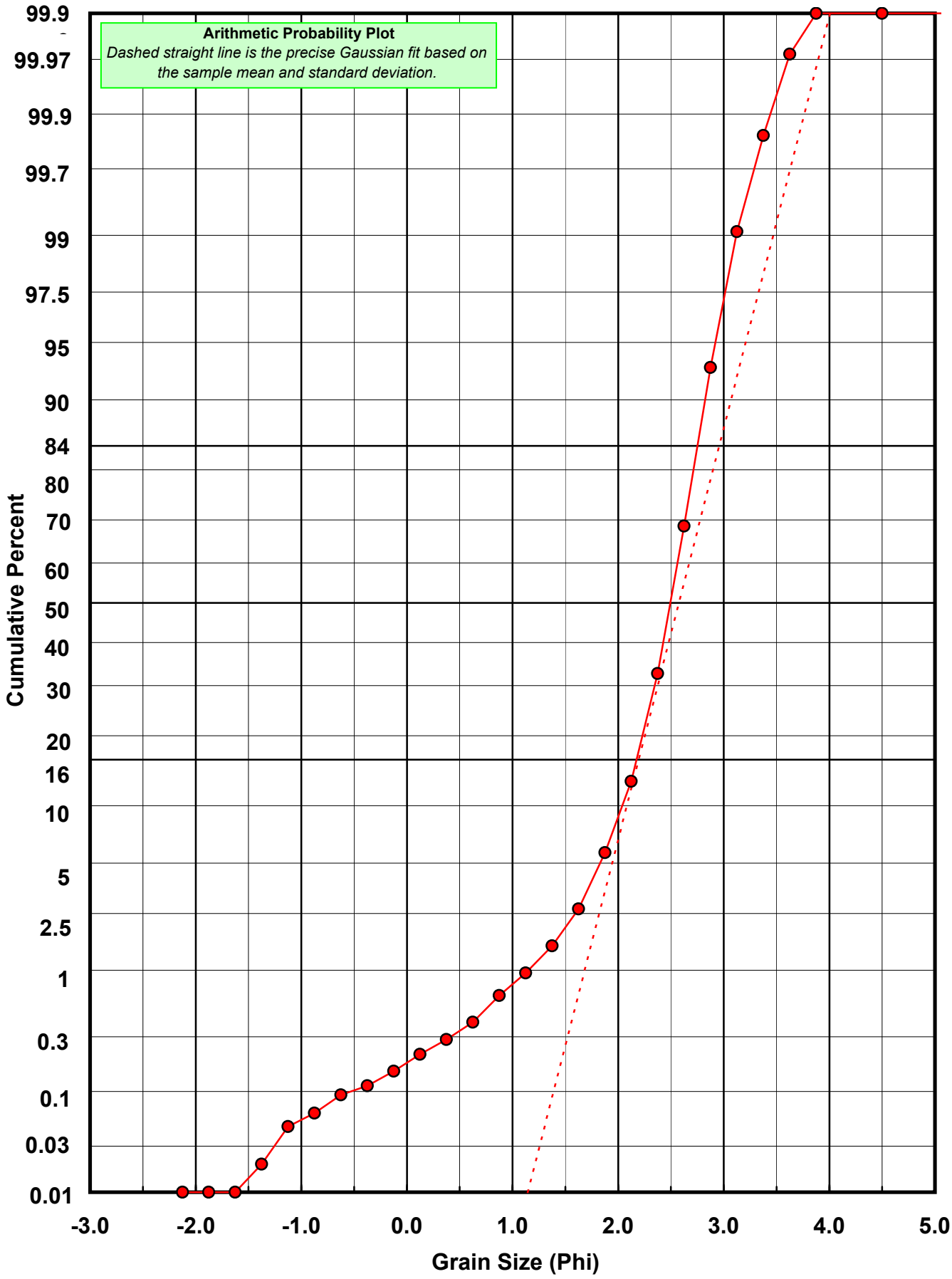
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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-40-SS

Total Carbonate Mass: 1.806 grams

% Carbonate: 2.4 %

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	0.012	0.664	0.664
-1.00	-1.125	0.018	0.997	1.661
-0.75	-0.875	0.010	0.554	2.215
-0.50	-0.625	0.018	0.997	3.212
-0.25	-0.375	0.012	0.664	3.876
0.00	-0.125	0.024	1.329	5.205
0.25	0.125	0.033	1.827	7.032
0.50	0.375	0.039	2.159	9.192
0.75	0.625	0.065	3.599	12.791
1.00	0.875	0.131	7.254	20.044
1.25	1.125	0.135	7.475	27.519
1.50	1.375	0.178	9.856	37.375
1.75	1.625	0.202	11.185	48.560
2.00	1.875	0.130	7.198	55.759
2.25	2.125	0.000	0.000	55.759
2.50	2.375	0.000	0.000	55.759
2.75	2.625	0.065	3.599	59.358
3.00	2.875	0.652	36.102	95.460
3.25	3.125	0.048	2.658	98.117
3.50	3.375	0.032	1.772	99.889
3.75	3.625	0.000	0.000	99.889
4.00	3.875	0.002	0.111	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.8767	phi	(0.2723 mm)
Standard Dev:	1.0606	phi-units	(0.4794 mm)
Skewness:	-0.6857	dimensionless	
Kurtosis:	2.8914	dimensionless	
5th Moment:	-5.6331	dimensionless	
6th Moment:	16.4720	dimensionless	
RARD *	0.5652	dimensionless	
Median	1.6750	phi	(0.3132 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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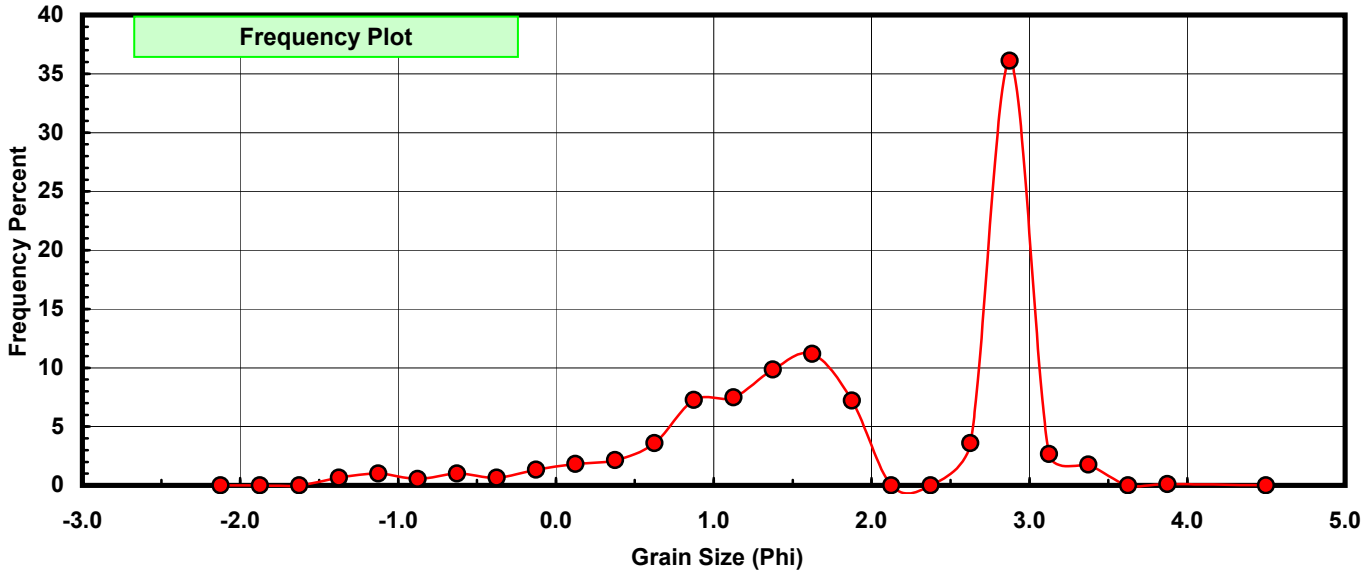

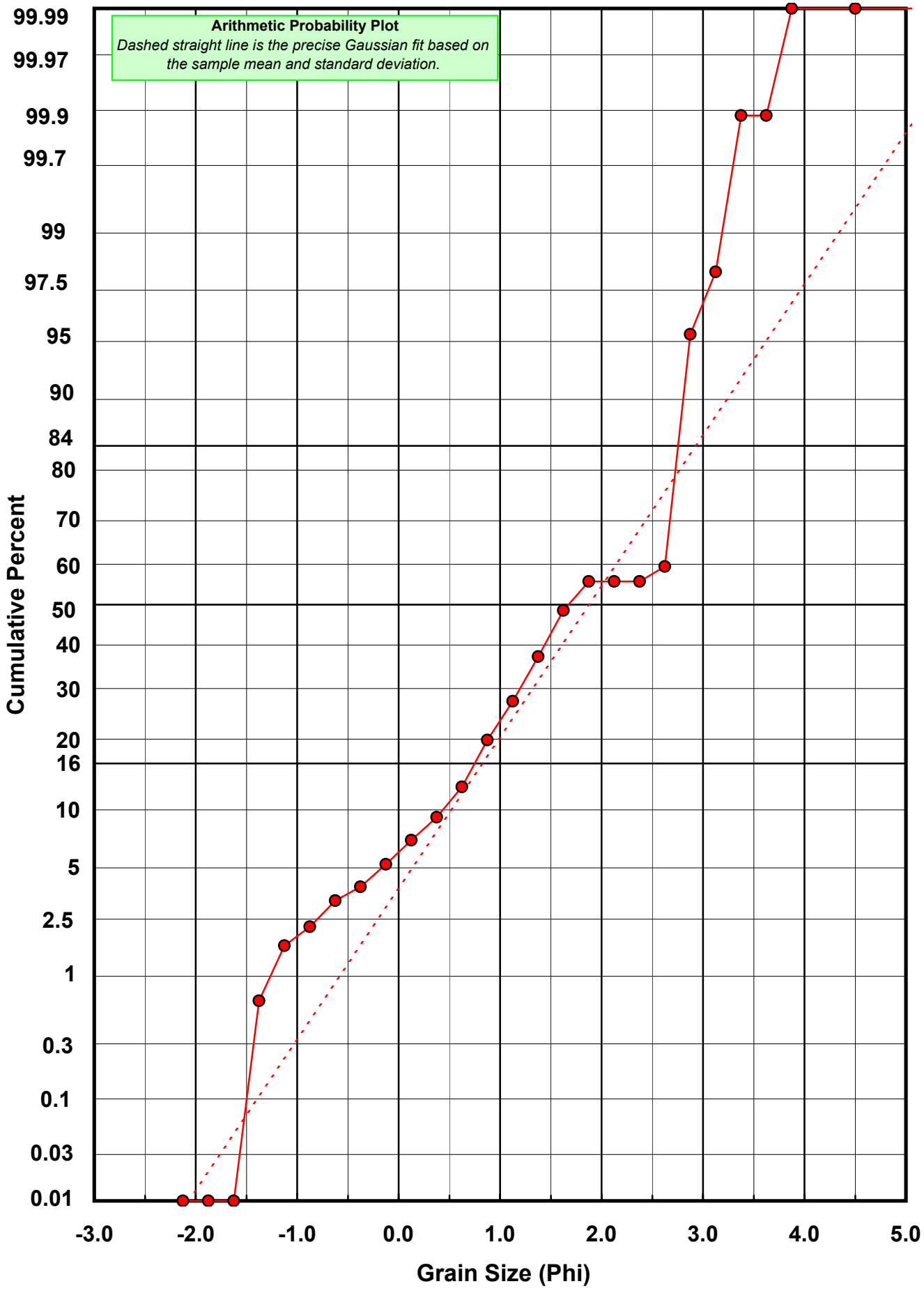
Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
99.9
99.7
99
97.5
95
90
84
80
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16
10
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2.5
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-40-SS

Total Digested Mass: 61.028 grams

% Silica: 97.6 %

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	0.000	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	0.005	0.008	0.008
0.50	0.375	0.006	0.010	0.018
0.75	0.625	0.006	0.010	0.028
1.00	0.875	0.029	0.048	0.075
1.25	1.125	0.063	0.103	0.179
1.50	1.375	0.164	0.269	0.447
1.75	1.625	0.509	0.834	1.281
2.00	1.875	1.768	2.897	4.178
2.25	2.125	4.684	7.675	11.854
2.50	2.375	12.620	20.679	32.533
2.75	2.625	22.156	36.305	68.837
3.00	2.875	14.836	24.310	93.147
3.25	3.125	3.621	5.933	99.081
3.50	3.375	0.468	0.767	99.848
3.75	3.625	0.079	0.129	99.977
4.00	3.875	0.014	0.023	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	2.5963	phi	(0.1654 mm)
Standard Dev:	0.3209	phi-units	(0.8006 mm)
Skewness:	-0.7047	dimensionless	
Kurtosis:	5.0281	dimensionless	
5th Moment:	-13.3875	dimensionless	
6th Moment:	79.6681	dimensionless	
RARD *	0.1236	dimensionless	
Median	2.4953	phi	(0.1774 mm)

* RARD = reciprocal absolute relative dispersion (see below)

Statistical Explanation

Calculations based on the Method of Moments
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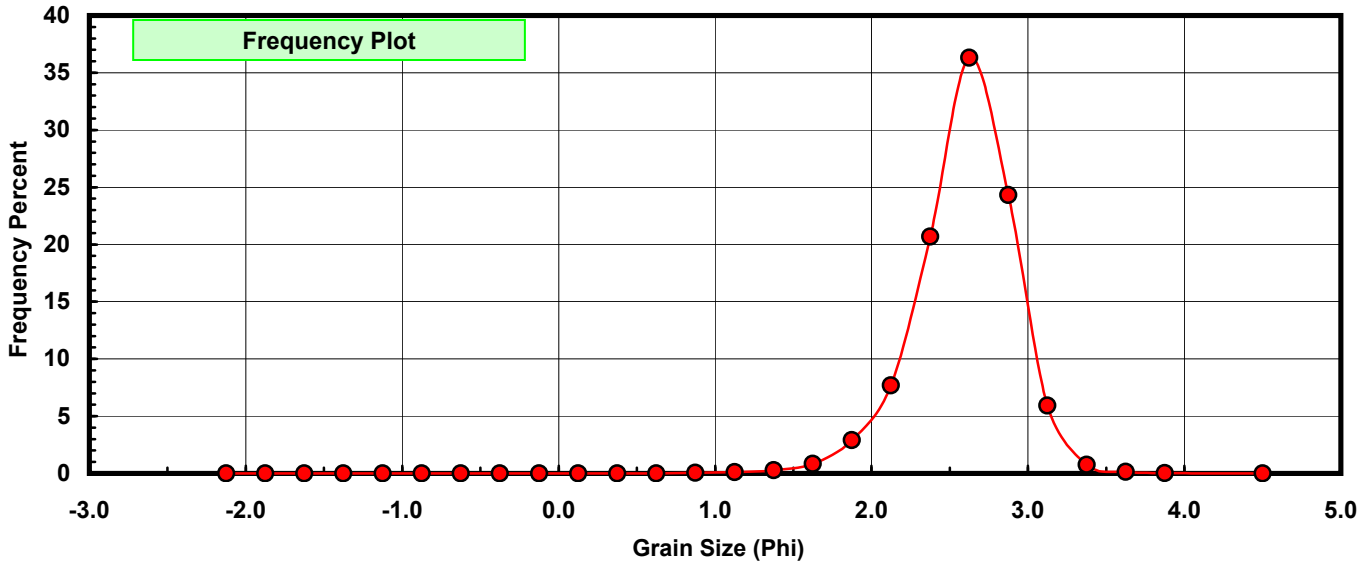

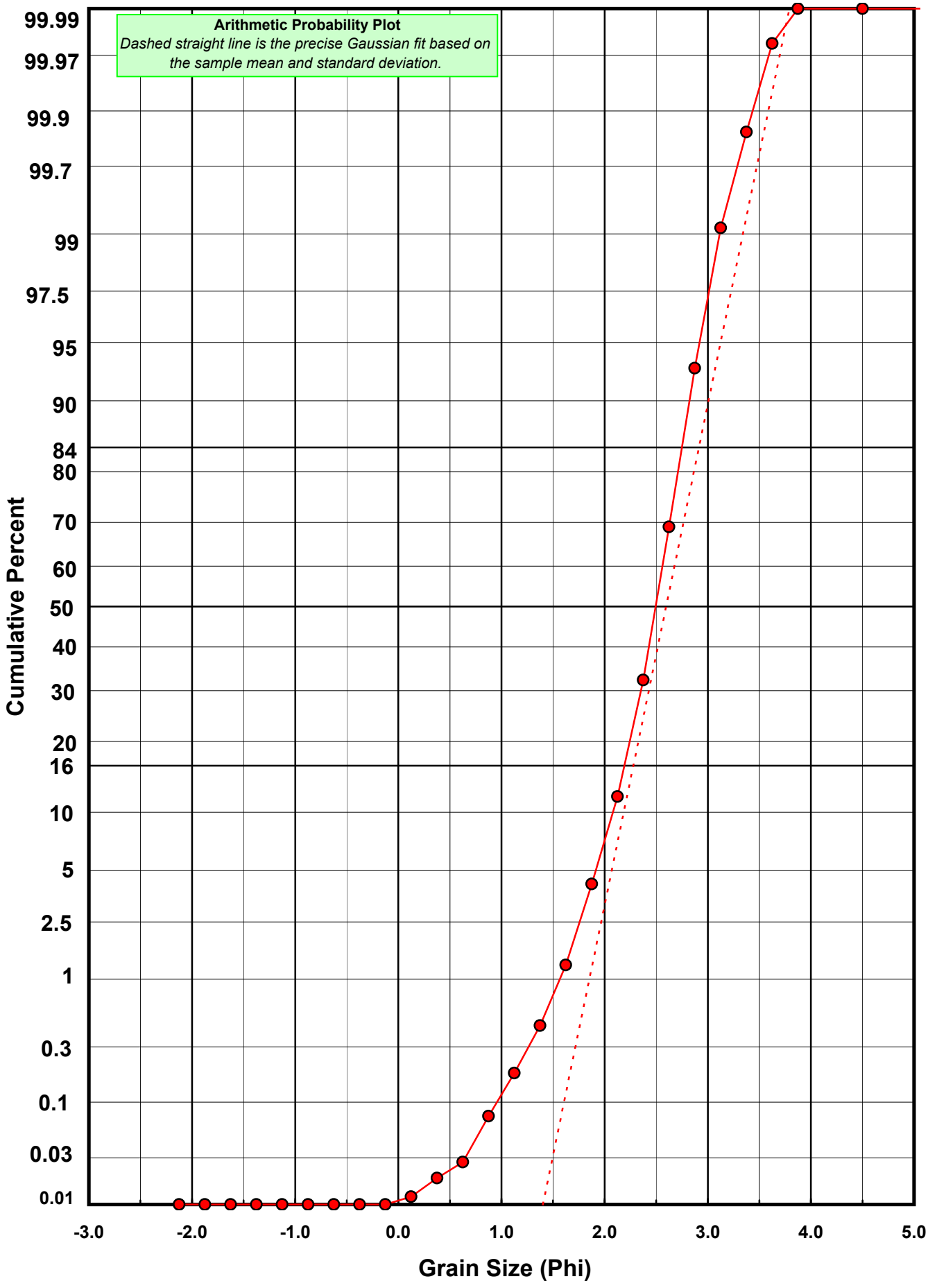
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Grain Size (Phi)