Onshore Grab Sample

Sample: VO-49-SS
Sample Taken By: J. Ladner
Sample Collected On: 12/3/03
Splits? Yes

County: Volusia
Latitude: 28° 52' 14.34"
Longitude: 80° 47' 2.64"
Datum: NAD 83
Surf. Elev: N/A
Datum: N/A

Fine Data Summary

Total Sample Weight	90.818	grams
Total Fines in Sample	0.323	grams
Total Percent Fines	0.35	%

Dry Sieving Summary

Total Sample Weight	90.593	grams
Total Digested Weight	35.839	grams
Total Carbonate Weight	54.754	grams
Total Silica %	39.56	%
Total Carbonate %	60.44	%
Carbonate/Silica Ratio	1.528	

General Comments:

None

Description

Worked By: M. Lachance

Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-49-SS

Total Sample Mass: 90.593 grams

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.315	0.348	0.348
-1.75	-1.875	0.313	0.346	0.693
-1.50	-1.625	0.455	0.502	1.195
-1.25	-1.375	1.128	1.245	2.441
-1.00	-1.125	1.830	2.020	4.461
-0.75	-0.875	3.186	3.517	7.977
-0.50	-0.625	6.583	7.267	15.244
-0.25	-0.375	8.687	9.589	24.833
0.00	-0.125	10.941	12.077	36.910
0.25	0.125	10.807	11.929	48.839
0.50	0.375	7.359	8.123	56.962
0.75	0.625	6.678	7.371	64.334
1.00	0.875	6.995	7.721	72.055
1.25	1.125	3.569	3.940	75.995
1.50	1.375	3.115	3.438	79.433
1.75	1.625	2.694	2.974	82.407
2.00	1.875	3.591	3.964	86.371
2.25	2.125	3.568	3.938	90.309
2.50	2.375	4.149	4.580	94.889
2.75	2.625	3.213	3.547	98.436
3.00	2.875	1.124	1.241	99.677
3.25	3.125	0.209	0.231	99.907
3.50	3.375	0.047	0.052	99.959
3.75	3.625	0.019	0.021	99.980
4.00	3.875	0.011	0.012	99.992
5.00	4.500	0.007	0.008	100.000

Statistical Results			
Mean:	0.5159	phi	(0.6994 mm)
Standard Dev:	1.0767	phi-units	(0.4741 mm)
Skewness:	0.4487	dimensionless	
Kurtosis:	2.5063	dimensionless	
5th Moment:	1.9398	dimensionless	
6th Moment:	8.8183	dimensionless	
RARD *	2.0869	dimensionless	
Median	0.1607	phi	(0.8946 mm)

* RARD = reciprocal absolute relative dispersion (see below)

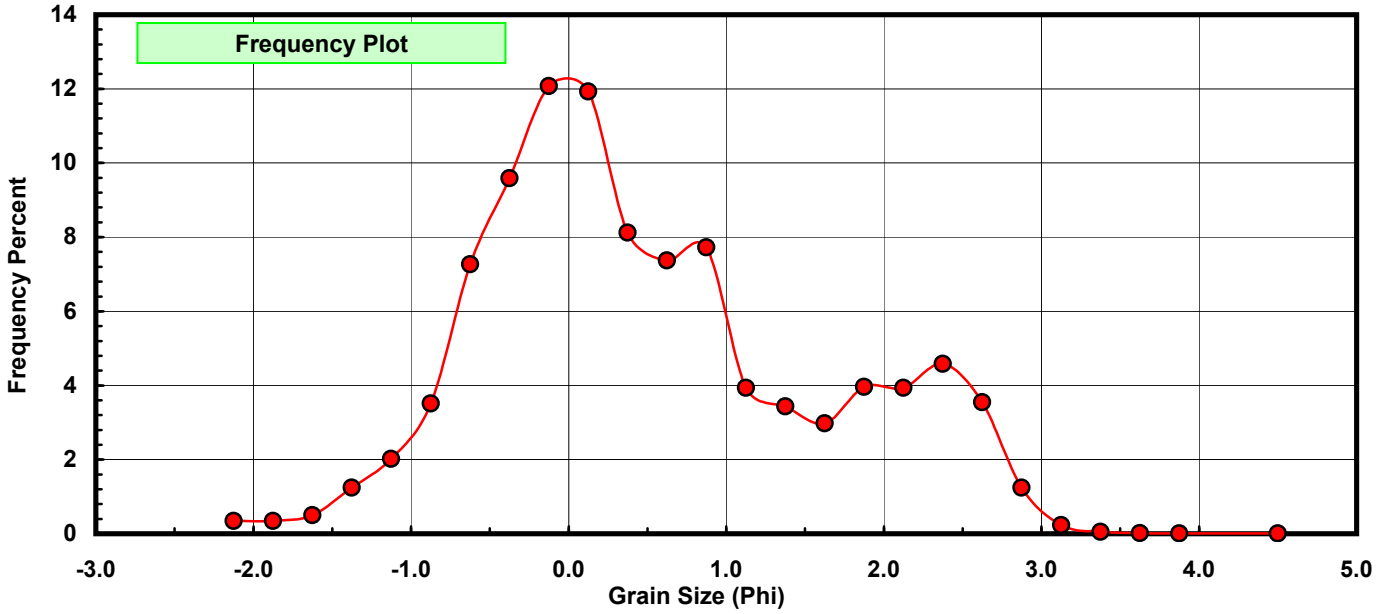
Statistical Explanation

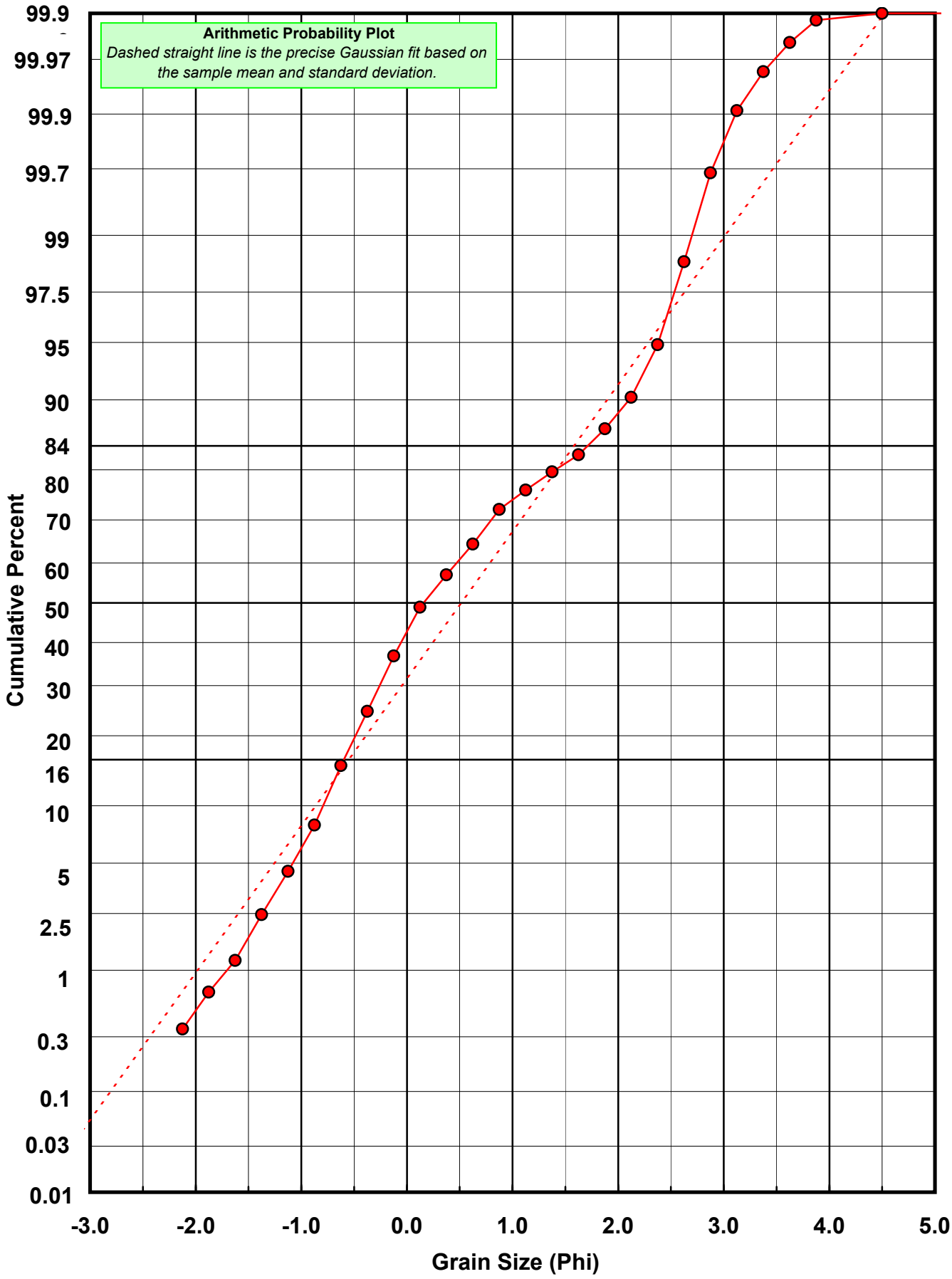
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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: VO-49-SS

Total Carbonate Mass: 54.757 grams

% Carbonate: 60.4 %

Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.00	-2.125	0.315	0.575	0.575
-1.75	-1.875	0.313	0.572	1.147
-1.50	-1.625	0.455	0.831	1.978
-1.25	-1.375	1.128	2.060	4.038
-1.00	-1.125	1.830	3.342	7.380
-0.75	-0.875	3.124	5.705	13.085
-0.50	-0.625	6.216	11.352	24.437
-0.25	-0.375	7.115	12.994	37.431
0.00	-0.125	7.773	14.195	51.626
0.25	0.125	7.237	13.217	64.843
0.50	0.375	4.675	8.538	73.381
0.75	0.625	4.109	7.504	80.885
1.00	0.875	4.433	8.096	88.980
1.25	1.125	2.032	3.711	92.691
1.50	1.375	1.533	2.800	95.491
1.75	1.625	0.945	1.726	97.217
2.00	1.875	0.787	1.437	98.654
2.25	2.125	0.197	0.360	99.014
2.50	2.375	0.293	0.535	99.549
2.75	2.625	0.206	0.376	99.925
3.00	2.875	0.037	0.068	99.993
3.25	3.125	0.000	0.000	99.993
3.50	3.375	0.001	0.002	99.995
3.75	3.625	0.002	0.004	99.998
4.00	3.875	0.001	0.002	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	0.0442	phi	(0.9698 mm)
Standard Dev:	0.8049	phi-units	(0.5724 mm)
Skewness:	0.3482	dimensionless	
Kurtosis:	3.3648	dimensionless	
5th Moment:	3.0202	dimensionless	
6th Moment:	19.4263	dimensionless	
RARD *	18.1952	dimensionless	
Median	-0.1536	phi	(1.1124 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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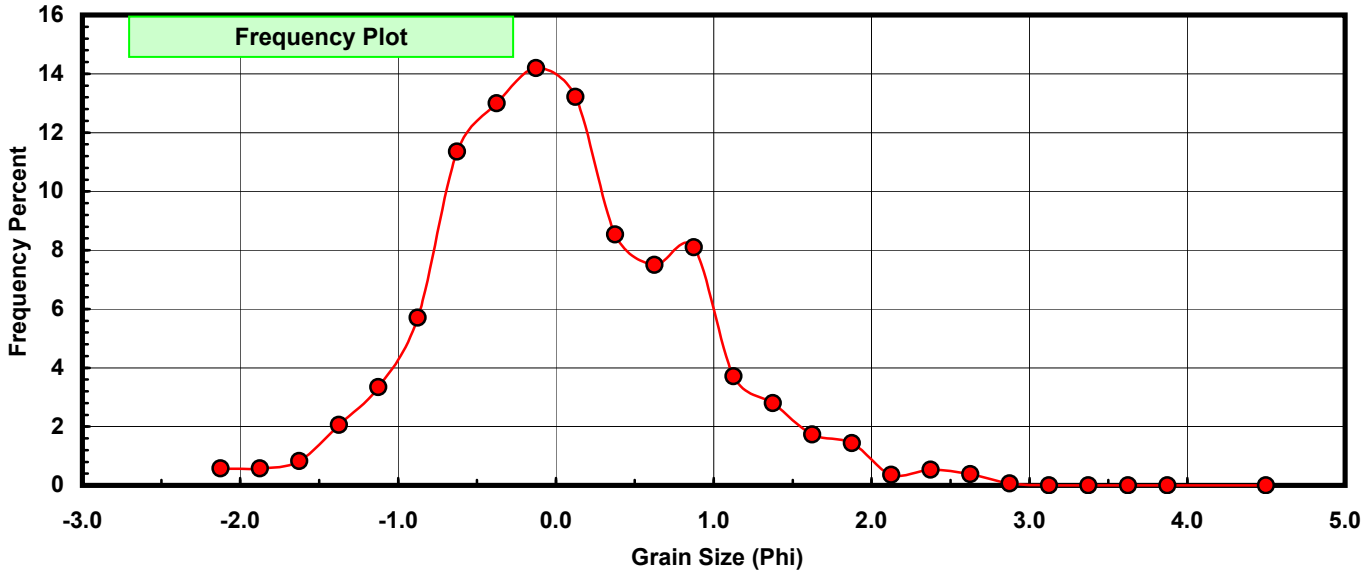

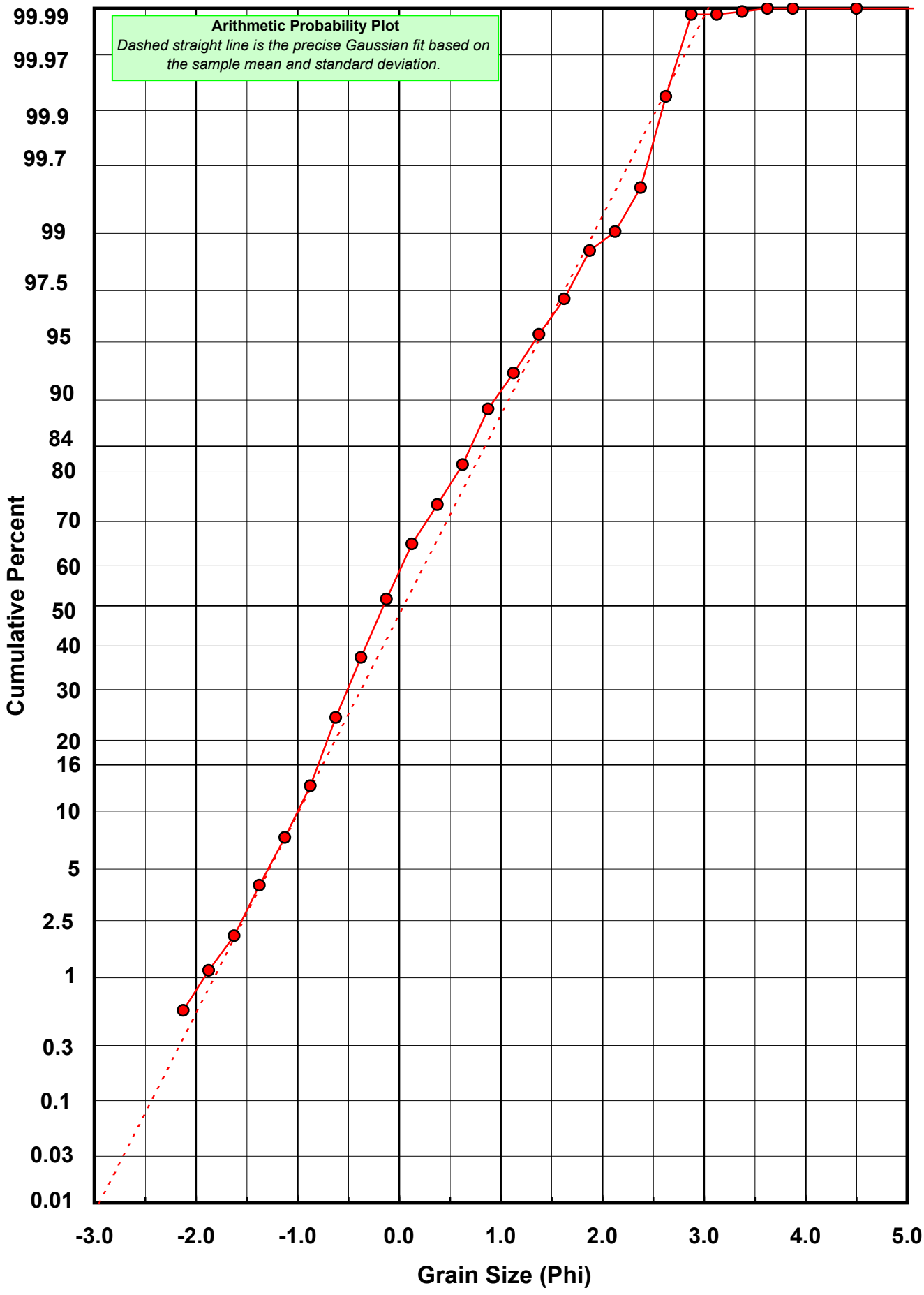
Arithmetic Probability Plot
Dashed straight line is the precise Gaussian fit based on the sample mean and standard deviation.
Cumulative Percent
99.99
99.97
99.9
99.7
99
97.5
95
90
84
80
70
60
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40
30
20
16
10
5
2.5
1
0.3
0.1
0.03
0.01
-3.0
-2.0
-1.0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

Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: VO-49-SS

Total Digested Mass: 35.832 grams

% Silica: 39.6 %

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	0.062	0.173	0.173
-0.50	-0.625	0.367	1.024	1.197
-0.25	-0.375	1.572	4.387	5.584
0.00	-0.125	3.168	8.841	14.426
0.25	0.125	3.570	9.963	24.389
0.50	0.375	2.684	7.491	31.879
0.75	0.625	2.569	7.170	39.049
1.00	0.875	2.562	7.150	46.199
1.25	1.125	1.537	4.289	50.488
1.50	1.375	1.582	4.415	54.903
1.75	1.625	1.749	4.881	59.785
2.00	1.875	2.804	7.825	67.610
2.25	2.125	3.371	9.408	77.018
2.50	2.375	3.856	10.761	87.779
2.75	2.625	3.007	8.392	96.171
3.00	2.875	1.087	3.034	99.205
3.25	3.125	0.212	0.592	99.796
3.50	3.375	0.046	0.128	99.925
3.75	3.625	0.017	0.047	99.972
4.00	3.875	0.010	0.028	100.000
5.00	4.500	0.000	0.000	100.000

Statistical Results			
Mean:	1.2361	phi	(0.4245 mm)
Standard Dev:	1.0468	phi-units	(0.4841 mm)
Skewness:	-0.0199	dimensionless	
Kurtosis:	1.6082	dimensionless	
5th Moment:	-0.0569	dimensionless	
6th Moment:	3.2698	dimensionless	
RARD *	0.8468	dimensionless	
Median	1.0965	phi	(0.4676 mm)

* RARD = reciprocal absolute relative dispersion (see below)

Statistical Explanation

Calculations based on the Method of Moments
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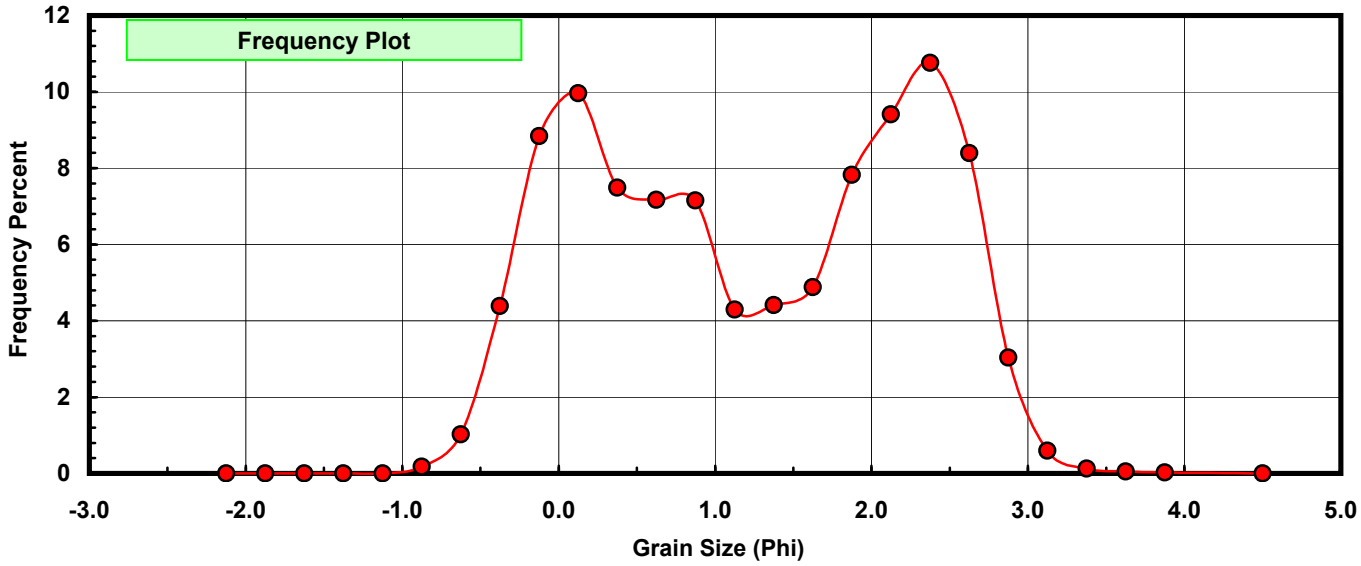

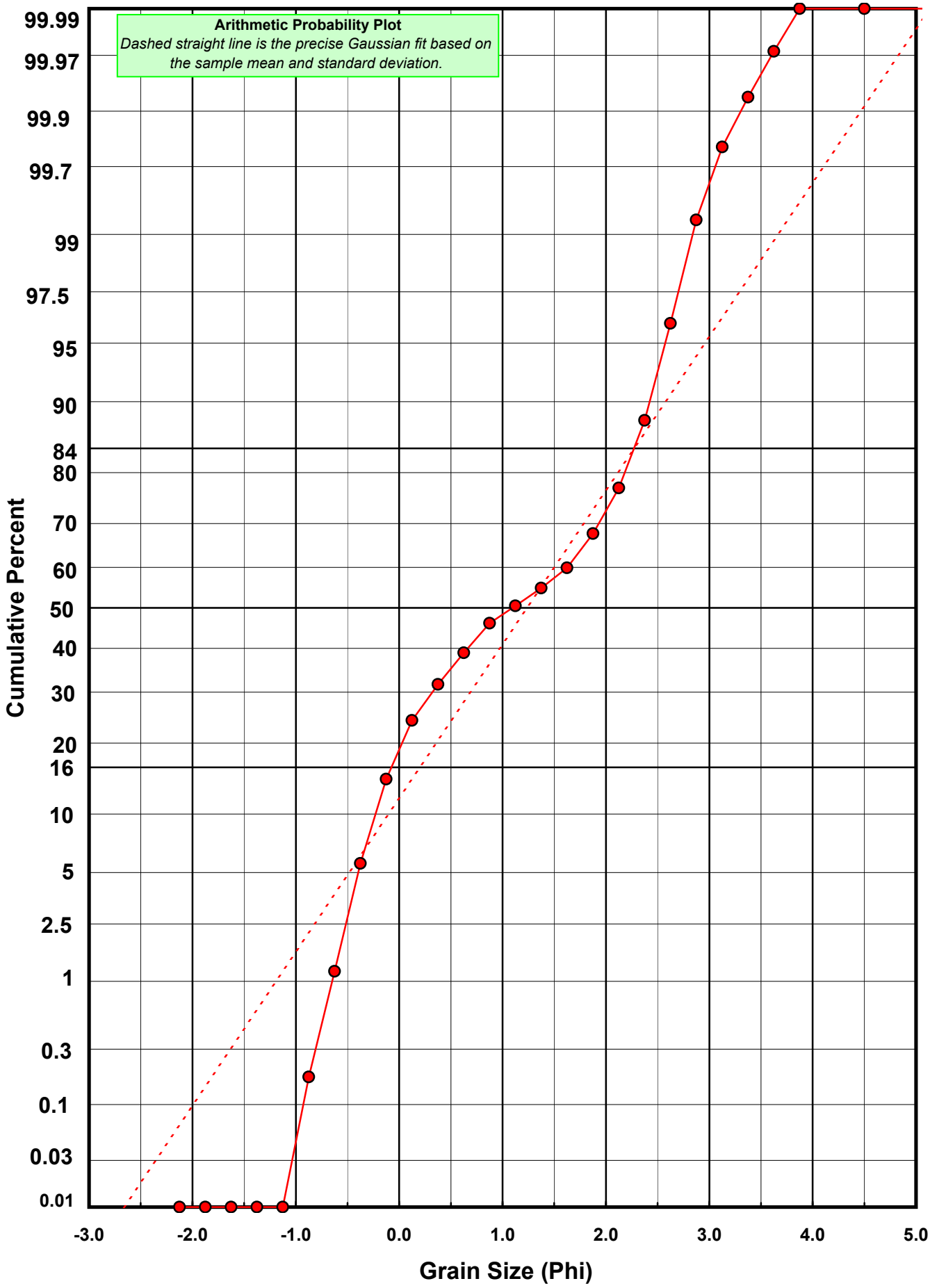
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-2.0
-1.0
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Grain Size (Phi)