

## **Onshore Grab Sample**

**Sample:** HL-02  
**Sample Taken By:** D. Phelps  
**Sample Collected On:** 11/4/09  
**Splits?** N/A

**County:** Hillsborough  
**Latitude:** 27° 35' 23.9"  
**Longitude:** 82° 45' 50.6"  
**Datum:** WGS 84  
**Surf. Elev:** N/A  
**Datum:** N/A

### **Fine Data Summary**

Total Sample Weight	66.174 grams
Total Fines in Sample	0.259 grams
Total Percent Fines	0.39 %

### **Dry Sieving Summary**

Total Sample Weight	66.011 grams
Total Digested Weight	47.293 grams
Total Carbonate Weight	18.718 grams
Total Silica %	71.64 %
Total Carbonate %	28.36 %
Carbonate/Silica Ratio	0.396

### **General Comments:**

None

### **Description**

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: HL-02

Total Sample Mass: 66.011 grams

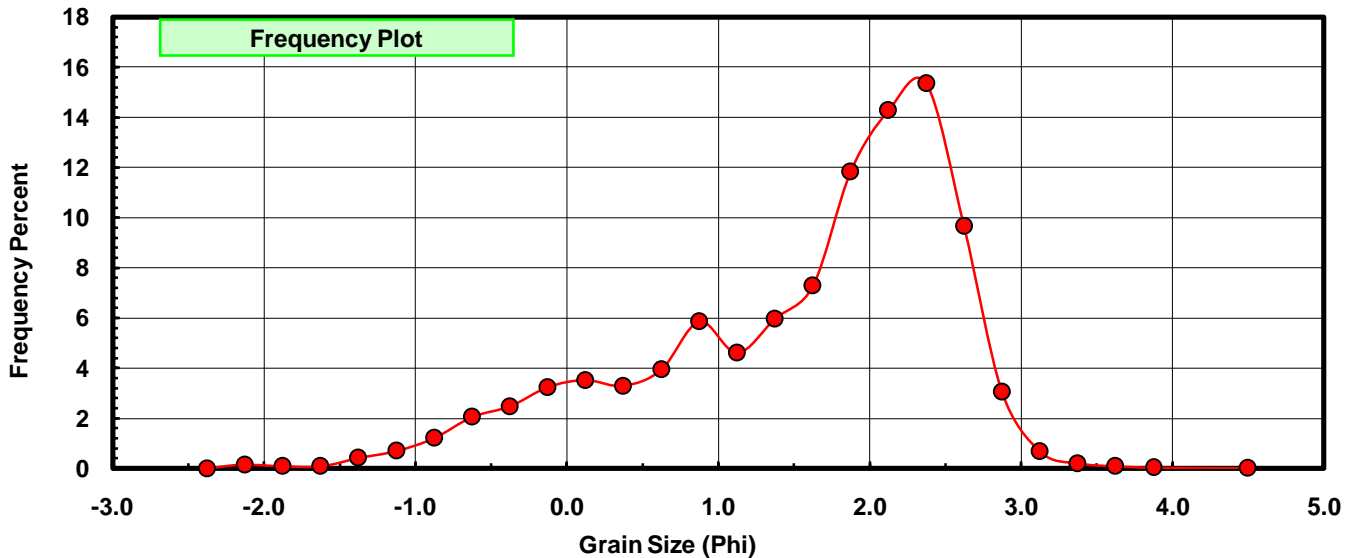
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.095	0.144	0.144
-1.75	-1.875	0.057	0.086	0.230
-1.50	-1.625	0.054	0.082	0.312
-1.25	-1.375	0.274	0.415	0.727
-1.00	-1.125	0.458	0.694	1.421
-0.75	-0.875	0.796	1.206	2.627
-0.50	-0.625	1.349	2.044	4.670
-0.25	-0.375	1.629	2.468	7.138
0.00	-0.125	2.133	3.231	10.369
0.25	0.125	2.320	3.515	13.884
0.50	0.375	2.170	3.287	17.171
0.75	0.625	2.600	3.939	21.110
1.00	0.875	3.867	5.858	26.968
1.25	1.125	3.040	4.605	31.574
1.50	1.375	3.942	5.972	37.545
1.75	1.625	4.805	7.279	44.824
2.00	1.875	7.816	11.840	56.665
2.25	2.125	9.423	14.275	70.940
2.50	2.375	10.133	15.350	86.290
2.75	2.625	6.377	9.661	95.951
3.00	2.875	2.017	3.056	99.006
3.25	3.125	0.441	0.668	99.674
3.50	3.375	0.133	0.201	99.876
3.75	3.625	0.057	0.086	99.962
4.00	3.875	0.018	0.027	99.989
5.00	4.50	0.007	0.011	100.000

Statistical Results			
Mean:	1.5524	phi	(0.341 mm)
Standard Dev:	1.0173	phi-units	(0.494 mm)
Skewness:	-0.9005	dimensionless	
Kurtosis:	3.0876	dimensionless	
5th Moment:	-5.9649	dimensionless	
6th Moment:	17.1601	dimensionless	
RARD *	0.6553	dimensionless	
Median	1.7343	phi	(0.3006 mm)

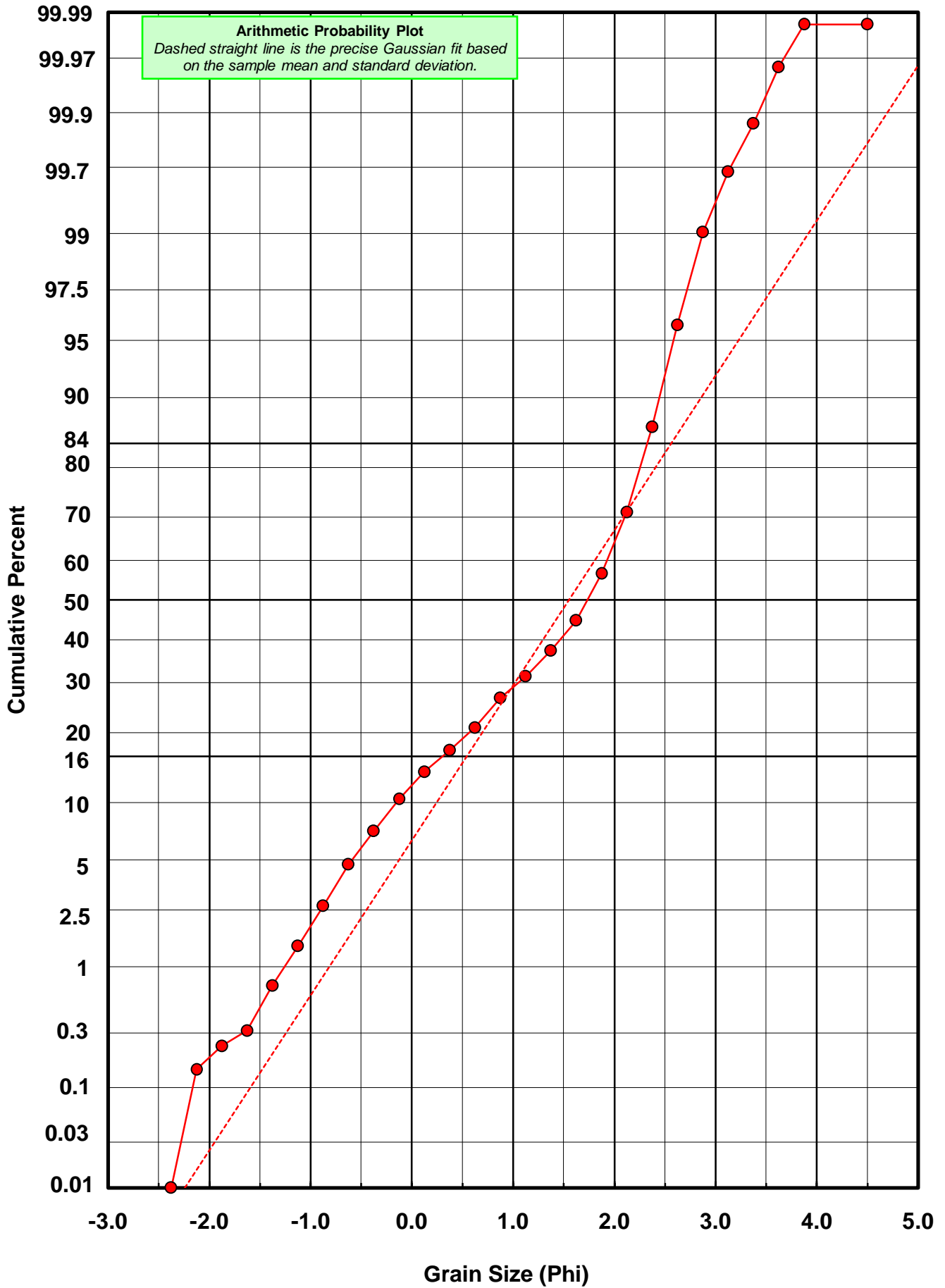
\* RARD = reciprocal absolute relative dispersion (see below)

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 Basille 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)



# HL-02



# Carbonate Grain Size Distribution

Onshore Grab Sample

Sample: HL-02

Total Carbonate Mass: 19.048 grams

% Carbonate: 28.4 %

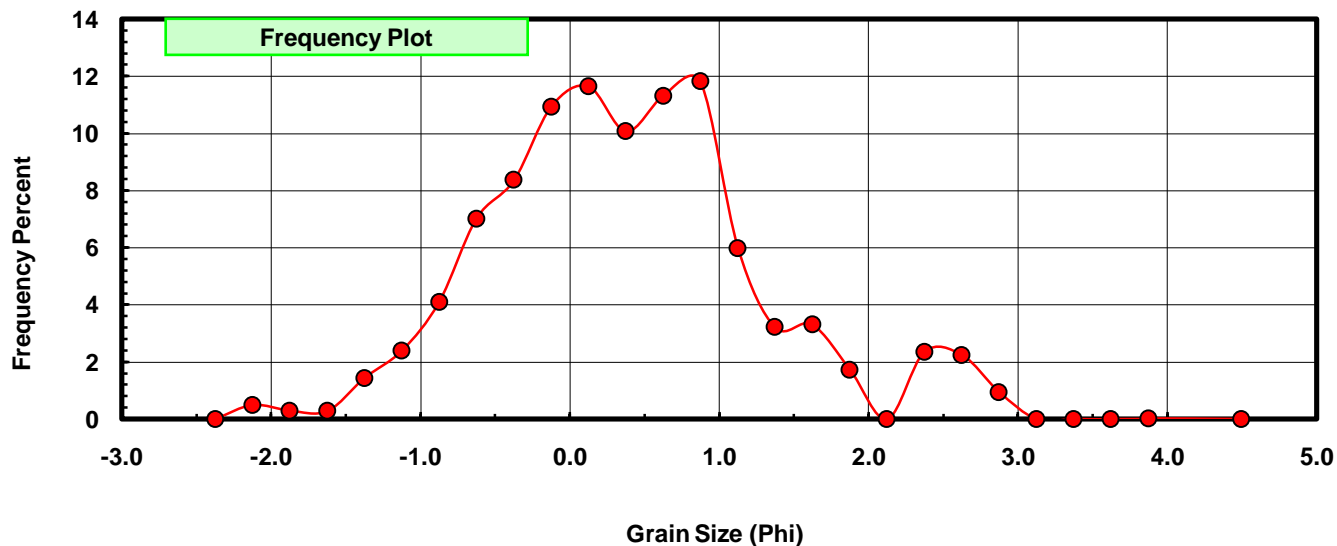
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.095	0.499	0.499
-1.75	-1.875	0.057	0.299	0.798
-1.50	-1.625	0.054	0.283	1.081
-1.25	-1.375	0.274	1.438	2.520
-1.00	-1.125	0.458	2.404	4.924
-0.75	-0.875	0.781	4.100	9.025
-0.50	-0.625	1.336	7.014	16.038
-0.25	-0.375	1.595	8.374	24.412
0.00	-0.125	2.082	10.930	35.342
0.25	0.125	2.219	11.650	46.992
0.50	0.375	1.918	10.069	57.061
0.75	0.625	2.155	11.314	68.375
1.00	0.875	2.250	11.812	80.187
1.25	1.125	1.140	5.985	86.172
1.50	1.375	0.613	3.218	89.390
1.75	1.625	0.631	3.313	92.703
2.00	1.875	0.329	1.727	94.430
2.25	2.125	0.000	0.000	94.430
2.50	2.375	0.448	2.352	96.782
2.75	2.625	0.427	2.242	99.024
3.00	2.875	0.181	0.950	99.974
3.25	3.125	0.000	0.000	99.974
3.50	3.375	0.000	0.000	99.974
3.75	3.625	0.000	0.000	99.974
4.00	3.875	0.004	0.021	99.995
5.00	4.500	0.001	0.005	100.000

Statistical Results			
Mean:	0.3748	phi	(0.7712 mm)
Standard Dev:	0.9389	phi-units	(0.5216 mm)
Skewness:	0.3929	dimensionless	
Kurtosis:	3.2241	dimensionless	
5th Moment:	2.9555	dimensionless	
6th Moment:	16.1262	dimensionless	
RARD *	2.5048	dimensionless	
Median	0.1997	phi	(0.8707 mm)

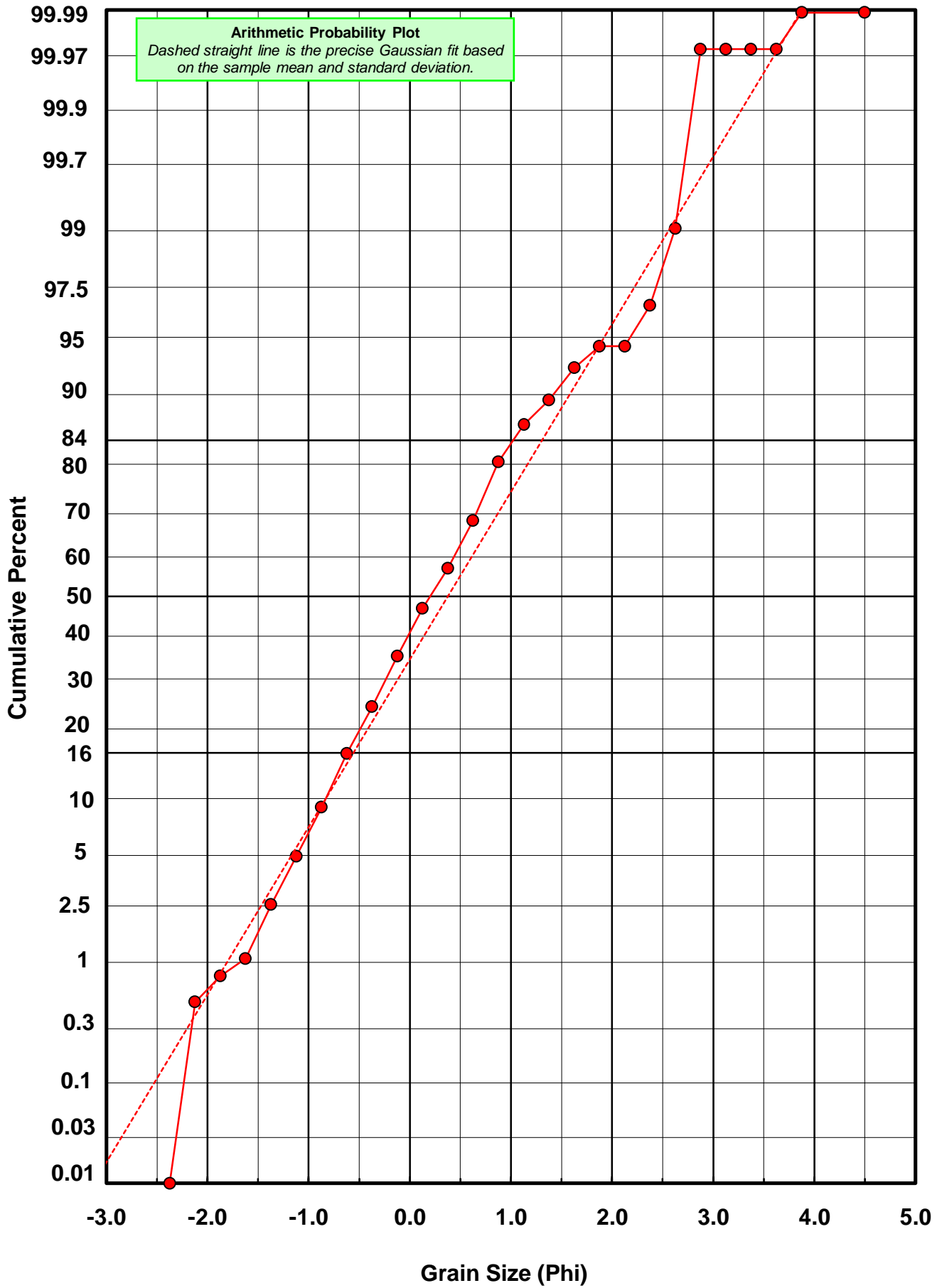
\* RARD = reciprocal absolute relative dispersion (see below)

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 Basille et al. 2002	
Millimeter data calculated by $mm = 2^{-(\phi)}$	

Reciprocal Absolute Relative Dispersion (RARD) Scale	
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# HL-02



# Post-Digestion Grain Size Distribution

Onshore Grab Sample

Sample: HL-02

Total Digested Mass: 47.293 grams

% Silica: 71.6 %

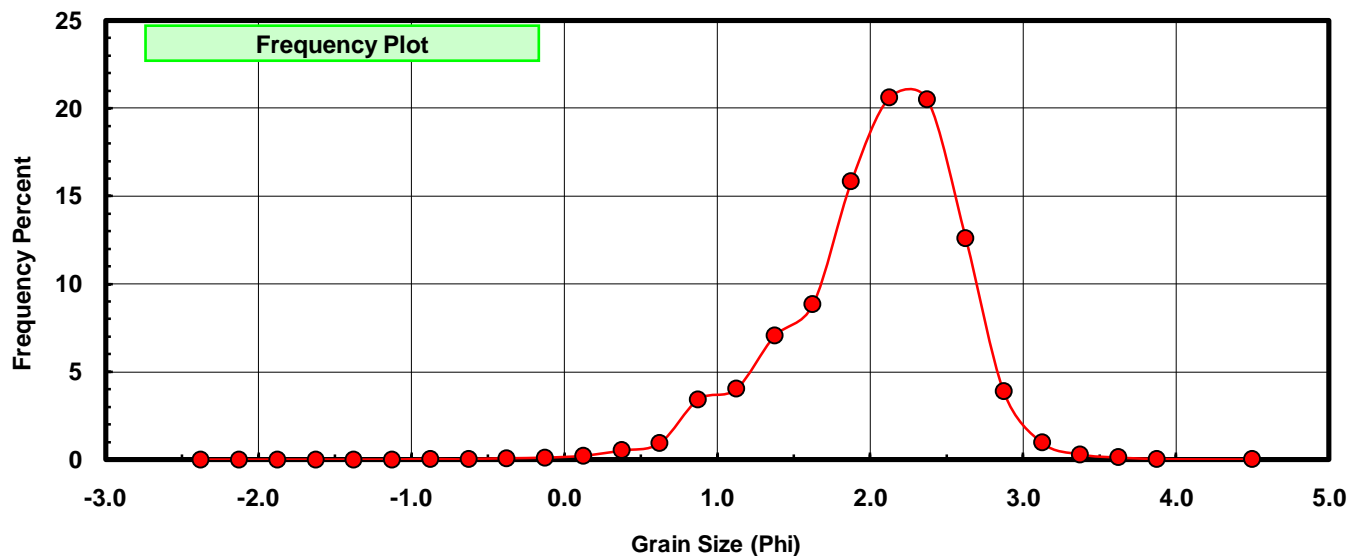
Sieve Size (phi)	Sieve Midpt (phi)	Weight (grams)	Freq Weight %	Cumulative Weight %
-2.25	-2.375	0.000	0.000	0.000
-2.00	-2.125	0.000	0.000	0.000
-1.75	-1.875	0.000	0.000	0.000
-1.50	-1.625	0.000	0.000	0.000
-1.25	-1.375	0.000	0.000	0.000
-1.00	-1.125	0.000	0.000	0.000
-0.75	-0.875	0.015	0.032	0.032
-0.50	-0.625	0.013	0.027	0.059
-0.25	-0.375	0.034	0.072	0.131
0.00	-0.125	0.051	0.108	0.239
0.25	0.125	0.101	0.214	0.452
0.50	0.375	0.252	0.533	0.985
0.75	0.625	0.445	0.941	1.926
1.00	0.875	1.617	3.419	5.345
1.25	1.125	1.900	4.018	9.363
1.50	1.375	3.329	7.039	16.402
1.75	1.625	4.174	8.826	25.228
2.00	1.875	7.487	15.831	41.059
2.25	2.125	9.735	20.584	61.643
2.50	2.375	9.685	20.479	82.122
2.75	2.625	5.950	12.581	94.703
3.00	2.875	1.836	3.882	98.585
3.25	3.125	0.453	0.958	99.543
3.50	3.375	0.137	0.290	99.833
3.75	3.625	0.059	0.125	99.958
4.00	3.875	0.014	0.030	99.987
5.00	4.500	0.006	0.013	100.000

Statistical Results			
Mean:	2.0311	phi	(0.2447 mm)
Standard Dev:	0.5553	phi-units	(0.6805 mm)
Skewness:	-0.7242	dimensionless	
Kurtosis:	3.9746	dimensionless	
5th Moment:	-7.7639	dimensionless	
6th Moment:	36.3805	dimensionless	
RARD *	0.2734	dimensionless	
Median	1.9836	phi	(0.2529 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 Basille et al. 2002	
Millimeter data calculated by $mm = 2^{-(\phi)}$	

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