## Onshore Grab Sample

**Sample:** BY-02-BB
**Sample Taken By:** D. Phelps
**Sample Collected On:** 2/15/11
**Splits?** N/A

**County:** Bay
**Latitude:** 30° 15' 29.7" N
**Longitude:** 85° 58' 6.6" W
**Datum:** WGS 84
**Surf. Elev:** N/A
**Datum:** N/A

### Fine Data Summary

| | | |
|---|---|---|
| Total Sample Weight | 45.103 | grams |
| Total Fines in Sample | 0.007 | grams |
| Total Percent Fines | 0.02 | % |

### Dry Sieving Summary

| | | |
|---|---|---|
| Total Sample Weight | 44.948 | grams |
| Total Digested Weight | 44.399 | grams |
| Total Carbonate Weight | 0.549 | grams |
| Total Silica % | 98.78 | % |
| Total Carbonate % | 1.22 | % |
| Carbonate/Silica Ratio | 0.012 | |

### General Comments:

Not Enough Carbonate Material to do Post-Digestion Analysis

### Description

Worked By: M. Ladle

# Pre-Digestion Grain Size Distribution

**Onshore Grab Sample**

**Sample:** BY-02-BB

**Total Sample Mass:** 44.948 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 | 0.000 | 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 | 1.190 | 2.648 | 2.648 |
| -0.75 | -0.875 | 0.030 | 0.067 | 2.714 |
| -0.50 | -0.625 | 3.206 | 7.133 | 9.847 |
| -0.25 | -0.375 | 0.019 | 0.042 | 9.889 |
| 0.00 | -0.125 | 0.032 | 0.071 | 9.960 |
| 0.25 | 0.125 | 0.128 | 0.285 | 10.245 |
| 0.50 | 0.375 | 0.420 | 0.934 | 11.180 |
| 0.75 | 0.625 | 1.113 | 2.476 | 13.656 |
| 1.00 | 0.875 | 2.540 | 5.651 | 19.307 |
| 1.25 | 1.125 | 3.609 | 8.029 | 27.336 |
| 1.50 | 1.375 | 6.690 | 14.884 | 42.220 |
| 1.75 | 1.625 | 9.261 | 20.604 | 62.824 |
| 2.00 | 1.875 | 9.334 | 20.766 | 83.590 |
| 2.25 | 2.125 | 4.609 | 10.254 | 93.844 |
| 2.50 | 2.375 | 1.934 | 4.303 | 98.147 |
| 2.75 | 2.625 | 0.574 | 1.277 | 99.424 |
| 3.00 | 2.875 | 0.203 | 0.452 | 99.875 |
| 3.25 | 3.125 | 0.036 | 0.080 | 99.956 |
| 3.50 | 3.375 | 0.013 | 0.029 | 99.984 |
| 3.75 | 3.625 | 0.004 | 0.009 | 99.993 |
| 4.00 | 3.875 | 0.002 | 0.004 | 99.998 |
| 5.00 | 4.50 | 0.001 | 0.002 | 100.000 |

| Statistical Results | | | |
|---|---|---|---|
| Mean: | 1.3834 | phi | (0.3833 mm) |
| Standard Dev: | 0.8486 | phi-units | (0.5553 mm) |
| Skewness: | -1.4787 | dimensionless | |
| Kurtosis: | 4.7721 | dimensionless | |
| 5th Moment: | -11.2981 | dimensionless | |
| 6th Moment: | 31.9263 | dimensionless | |
| RARD * | 0.6134 | dimensionless | |
| Median | 1.4694 | phi | (0.3611 mm) |
| * RARD = reciprocal absolute relative dispersion (see below) | | | |

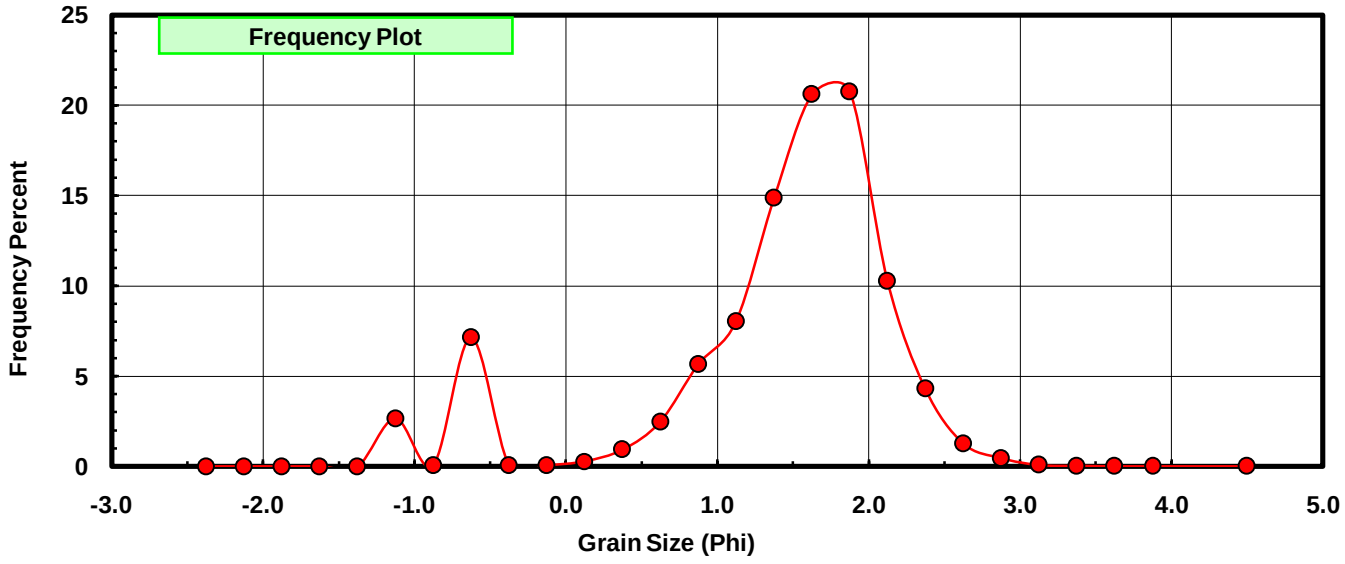
**Statistical Explanation**

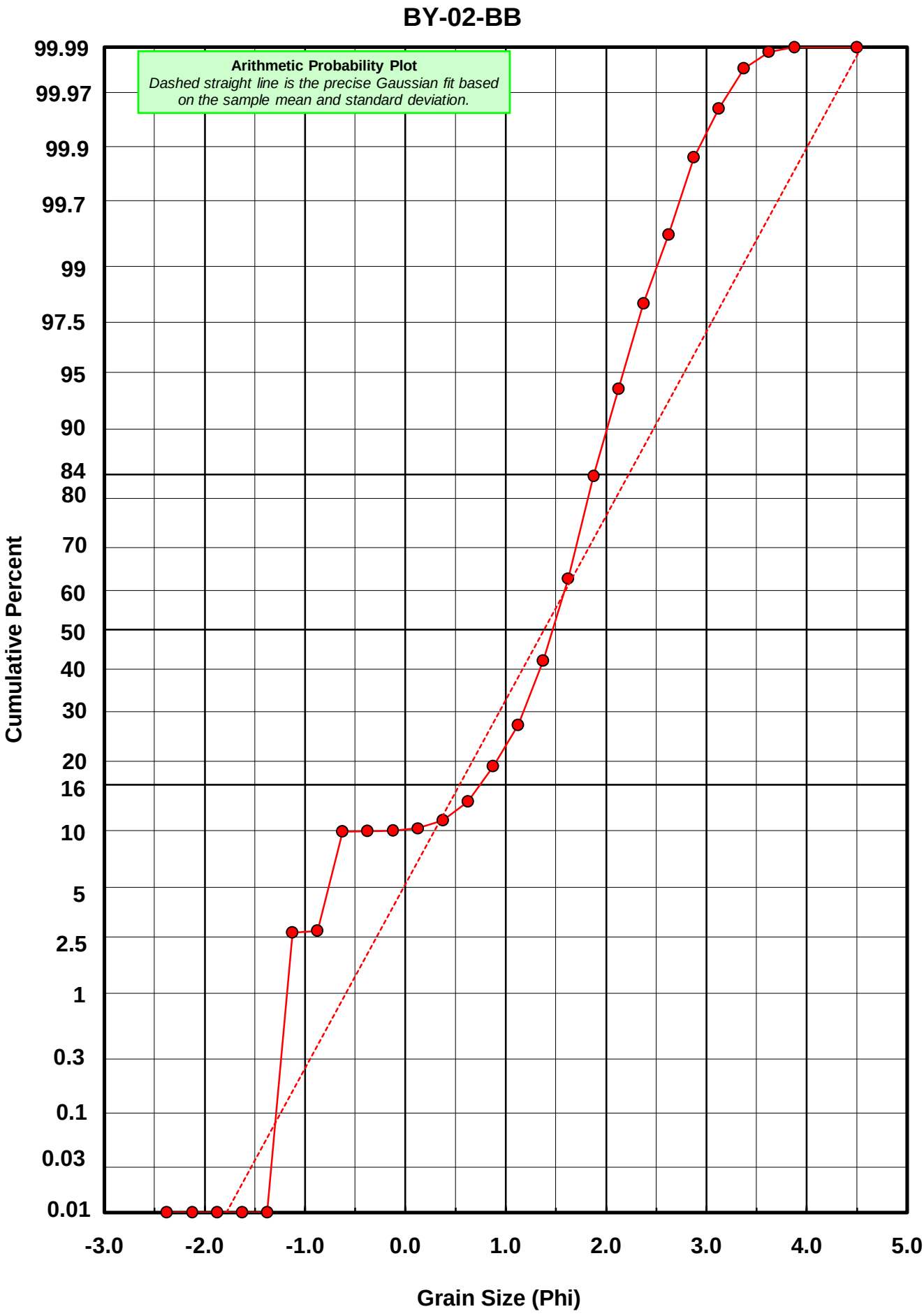
Calculations based on the Method of Moments
Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0
Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0

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) |




BY-02-BB
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)