

# Quality Control Statistical Summary

Onshore Grab Sample: CR-16-BB

Sample Taken By: D. Phelps  
 Sample Taken On: 11/05/09  
 County: Collier

Latitude: 26° 9' 24"  
 Longitude: 81° 48' 37.2"  
 Datum: WGS 84

| Statistical Results: Pre-CaCO3 |                            |                              |
|--------------------------------|----------------------------|------------------------------|
|                                | Duplicate                  | Original                     |
| Mean:                          | 1.7594 phi (0.2954 mm)     | 1.7900 phi (0.2892 mm)       |
| Standard Dev:                  | 0.8889 phi-units (0.54 mm) | 0.8461 phi-units (0.5563 mm) |
| Skewness:                      | -1.7639 dimensionless      | -1.4382 dimensionless        |
| Kurtosis:                      | 8.4393 dimensionless       | 7.2779 dimensionless         |
| 5th Moment:                    | -32.2676 dimensionless     | -26.8930 dimensionless       |
| 6th Moment:                    | 142.1387 dimensionless     | 122.8819 dimensionless       |
| RARD*:                         | 0.5052 dimensionless       | 0.4727 dimensionless         |
| Median:                        | 1.7351 phi (0.3004 mm)     | 1.7505 phi (0.2972 mm)       |

| Statistical Results: CaCO3 |                              |                              |
|----------------------------|------------------------------|------------------------------|
|                            | Duplicate                    | Original                     |
| Mean:                      | 0.7222 phi (0.6062 mm)       | 0.9534 phi (0.5164 mm)       |
| Standard Dev:              | 1.4336 phi-units (0.3702 mm) | 1.3380 phi-units (0.3956 mm) |
| Skewness:                  | -0.9066 dimensionless        | -0.8231 dimensionless        |
| Kurtosis:                  | 2.7124 dimensionless         | 3.1776 dimensionless         |
| 5th Moment:                | -4.2809 dimensionless        | -5.0399 dimensionless        |
| 6th Moment:                | 10.4194 dimensionless        | 14.9733 dimensionless        |
| RARD*:                     | 1.9850 dimensionless         | 1.4034 dimensionless         |
| Median:                    | 1.0156 phi (0.4946 mm)       | 1.0574 phi (0.4805 mm)       |

| Statistical Results: Post-CaCO3 |                             |                              |
|---------------------------------|-----------------------------|------------------------------|
|                                 | Duplicate                   | Original                     |
| Mean:                           | 1.9440 phi (0.2599 mm)      | 1.9327 phi (0.2619 mm)       |
| Standard Dev:                   | 0.6349 phi-units (0.644 mm) | 0.6514 phi-units (0.6367 mm) |
| Skewness:                       | -0.3747 dimensionless       | -0.4244 dimensionless        |
| Kurtosis:                       | 3.3974 dimensionless        | 3.3045 dimensionless         |
| 5th Moment:                     | -4.3760 dimensionless       | -4.3315 dimensionless        |
| 6th Moment:                     | 23.4579 dimensionless       | 20.1550 dimensionless        |
| RARD*:                          | 0.3266 dimensionless        | 0.3370 dimensionless         |
| Median:                         | 1.8236 phi (0.2825 mm)      | 1.8190 phi (0.2834 mm)       |

| Additional Data         |         |
|-------------------------|---------|
| <b>Total Fines</b>      |         |
| Original:               | 0.22 %  |
| Duplicate:              | 0.26 %  |
| <b>Total Carbonates</b> |         |
| Original:               | 14.57 % |
| Duplicate:              | 14.5 %  |

| Statistical Explanation  |                                       |
|--|---------------------------------------|
| Calculations based on the Method of Moments<br>Skewness: 3rd Stand. Moment; Exact Gaussian = 0.0<br>Kurtosis: 4th Stand. Moment; Exact Gaussian = 3.0<br>Millimeter data calculated by $mm = 2^{\sqrt{-\phi}}$ |                                       |
| * 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)      |