# Chicora Foundation Mortar Analysis Data Sheet

**Name**: Michael Trinkley

**Sample No.**: 2004-6

**Date**: 12/23/04

**Origin of Sample**: 38CH932, Youghal Plantation, 340R225, mortar from pier

**Visual Description of sample (color, texture, hardness, inclusions, etc.)**:
Friable, moderately hard, few lime clumps, no recognizable shell. Color is pink, 7.5YR8/3.

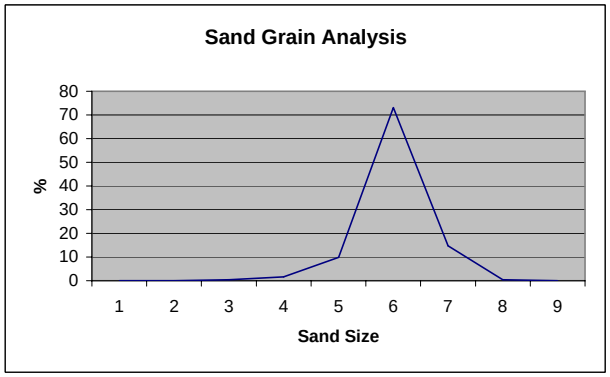
**Mortar Analysis**

| | |
|---|---|
| Original weight of powdered sample | 17.19 |
| Weight of filter paper | 1.66 |
| Weight of filter paper + dry fines | 4.50 |
| Weight dry fines | 2.84 |
| Weight of dry sand | 8.11 |
| % of sand | 47.18 |
| % of fines | 16.52 |
| % of disolved binder | 36.30 |

**Observations (dissolution of binder, color of liquid, reaction)**:
Moderately strong reaction, complete dissolution of binder. The liquid is a greenish-yellow color.

**Characterization of Sand:**

**Microscopic Examination**:
Rounded quartz

| | | wt (gm) | % |
|---|---|---|---|
| wt./% finer than | 4.75mm | 0.00 | 0 |
| | 2.36mm | 0.00 | 0 |
| | 1.18mm | 0.03 | 0.369914 |
| | 600µm | 0.13 | 1.602959 |
| | 300µm | 0.80 | 9.864365 |
| | 150µm | 5.93 | 73.11961 |
| | 75µm | 1.19 | 14.67324 |
| | 53µm | 0.03 | 0.369914 |
| | 38µm | 0.00 | 0 |
| Total sand weight | | 8.11 | |

**Munsell Color(s) of Sand**: pale brown, 10YR8/2