

Chicora Foundation Mortar Analysis Data Sheet

Name: Michael Trinkley **Sample No.:** 2004-5
Date: 12/23/04 **Origin of Sample:** 38CH932, Youghal Plantation, 325R175,
mortar floor sample

Visual Description of sample (color, texture, hardness, inclusions, etc.):

Very friable, contorted texture. Many clumps of shell, much of which is large (.5 to 1.5 cm), white to burnt gray. Also clumps of white material that may be lime. Color of the sample is white, N8

Mortar Analysis

Original weight of powdered sample	38.61
Weight of filter paper	1.61
Weight of filter paper + dry fines	4.31
Weight dry fines	2.70
Weight of dry sand	0.54
% of sand	1.40
% of fines	6.99
% of dissolved binder	91.61

Observations (dissolution of binder, color of liquid, reaction):

Very aggressive and prolonged reaction indicating much binder. Much expansion, dark brown-green liquid. All of the resulting fines are black, appear to be very fine charcoal.

Characterization of Sand:

	wt. % finer than		wt (gm)	%
Microscopic Examination: Rounded grains; quartz, very few small brick fragments		4.75mm	0.00	0
		2.36mm	0.00	0
		1.18mm	0.01	1.851852
		600µm	0.02	3.703704
		300µm	0.10	18.51852
		150µm	0.37	68.51852
		75µm	0.04	7.407407
		53µm	0.00	0
		38µm	0.00	0
Total sand weight			0.54	

Munsell Color(s) of Sand: 5YR7/1 light gray

