Chicora Foundation Mortar Analysis Data Sheet

Name: Michael Trinkley Sample No.: 2004-4

 Date:
 12/23/04
 Origin of Sample:
 38CH932, Youghal Plantation, colonial

structure, stucco on bricks

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

Stucco is 1.1 cm in thickness, very hard on the exterior, soft on interior surface. Color is gray, 5YR6/1. There are very light parallel striations on the exterior, such as would be made by a brush. There is no indication of paint or whitewash on the sample.

Mortar Analysis

Original weight of powdered sample	12.17
Weight of filter paper	1.57
Weight of filter paper + dry fines	3.68
Weight dry fines	2.11
Weight of dry sand	3.97
% of sand	32.62
% of fines	17.34
% of disolved binder	50.04

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

Aggressive reaction, green-yellow foam and liquid. Binder completely dissolved.

Characterization of Sand:

			wt (gm)	%
Microscopic Examination:	wt./% finer than	4.75mm	0.00	0
Rounded grains; quartz dominant		2.36mm	0.00	0
		1.18mm	0.04	1.007557
		600µm	0.21	5.289673
		300µm	0.98	24.68514
		150µm	2.43	61.20907
		75µm	0.29	7.304786
		53µm	0.02	0.503778
		38µm	0.00	0
	Total sand weight		3.97	

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

