

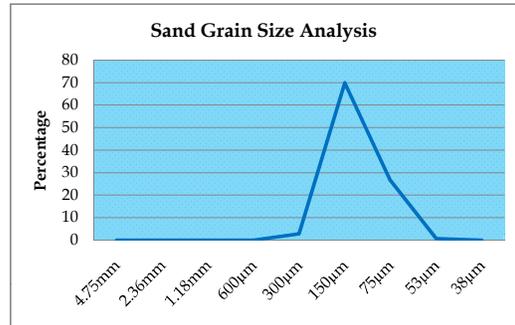
Chicora Foundation Gas Displacement Mortar Analysis Data Sheet

Name: 38CH2091, late 18th c kitchen **Sample No.:** 2008-3
Date: 3/14/08 **Origin of Sample:** 38CH2901, 100R110, Lv. 2

Visual Description of sample (color, texture, hardness, inclusions, etc.):
 Light gray with white lime inclusions; somewhat smooth texture; medium hardness (easily broken by hand).

Mortar Analysis

Original weight of powdered sample (in g)	7.31
Weight of filter paper (in g)	0.90
Weight of filter paper + dry fines (in g)	2.63
Weight dry fines (in g)	1.73
Weight of dry sand (in g)	1.43
Gas Displacement (in ml)	335.00
Weight of lime (in g)	1.50
% of sand	19.56
% of fines	23.67
% of lime	20.59
% of acid solubles	36.19



Observations (dissolution of binder, color of liquid, reaction):
 Immediate, aggressive reaction; liquid turns a light yellow; reaction long lasting and encompassed about 400 ml of beaker; dissolved most of binder quickly.

Characterization of Sand:

			wt (gm)	%
Microscopic Examination: sub-rounded quartz inclusions, all very small.	wt. % finer than	4.75mm	0.00	0
		2.36mm	0.00	0
		1.18mm	0.00	0
		600μm	0.00	0
		300μm	0.04	2.797203
		150μm	1.00	69.93007
		75μm	0.38	26.57343
		53μm	0.01	0.699301
		38μm	0.00	0
		Total sand weight		1.43

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