

Chicora Foundation Gas Displacement Mortar Analysis Data Sheet

Name: Presbyterian Cemetery, Union, SC **Sample No.:** 2005-11
Date: 9/22/05 **Origin of Sample:** Monument 17, Brick box tomb, bedding mortar

Visual Description of sample (color, texture, hardness, inclusions, etc.):
 Reddish, rough texture, small white inclusions (~ 1mm), visible grains of sand

Mortar Analysis

Original weight of powdered sample (in g)	11.18
Weight of filter paper (in g)	2.26
Weight of filter paper + dry fines (in g)	2.83
Weight dry fines (in g)	0.57
Weight of dry sand (in g)	7.83
Gas Displacement (in ml)	265.00
Weight of lime (in g)	1.19
% of sand	70.04
% of fines	5.10
% of lime	10.65
% of acid solubles	14.22

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

Characterization of Sand:

Microscopic Examination:

angular and subangular clear quartz sand with flecks of mica-like material.

	wt. (gm)	%
wt./% finer than		
4.75mm	0.00	0
2.36mm	0.10	1.277139
1.18mm	0.96	12.26054
600µm	1.83	23.37165
300µm	3.10	39.59132
150µm	1.40	17.87995
75µm	0.39	4.980843
53µm	0.00	0
38µm	0.05	0.63857
Total sand weight	7.83	

Munsell Color(s) of Sand:

