Chicora Foundation Mortar Analysis Data Sheet

| Name: | Pon Pon 14 | Sample No.: | 2005-1 |
|-------|------------|-------------------|-----------------------------|
| Date: | 1/24/05 | Origin of Sample: | wall mortar from brick wall |

Visual Description of sample (color, texture, hardness, inclusions, etc.): Soft, friable, fine sand w/ mod. amounts of white lumps, ca. 1-2mm in diam. Color is light gray 10 YR 7/2.

Mortar Analysis

| Original weight of powdered sample | 19.81 |
|------------------------------------|-------|
| Weight of filter paper | 0.86 |
| Weight of filter paper + dry fines | 9.17 |
| Weight dry fines | 8.31 |
| Weight of dry sand | 5.08 |
| % of sand | 25.64 |
| % of fines | 41.95 |
| % of disolved binder | 32.41 |

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

Vigorous but short lived. Brown liquid. Several larger white particles took longer to dissolve.

Characterization of Sand:

| | | | | wt (gm) | % |
|--|----------|-------------------|--------|----------|----------|
| Microscopic Examination: | | wt./% finer than | 4.75mm | 0.00 | 0 |
| 1.18mm is rounded, predominately quartz. | | | 2.36mm | 0.00 | 0 |
| 710µm is rounded, some subangular, mostly quartz, s | some UID | | 1.18mm | 0.03 | 0.590551 |
| material. | | | 600µm | 0.08 | 1.574803 |
| 300µm is subangular and rounded, mostly quartz | | 300µm | 0.36 | 7.086614 | |
| 150µm is subangular and rounded, mostly quartz, so | | 150µm | 0.03 | 0.590551 | |
| material. | 75µm | | 75µm | 4.20 | 82.67717 |
| subangular and rounded quartz. | 53µm is | | 53µm | 0.38 | 7.480315 |
| subangular and round, mostly quartz, with rounded bl | | 38µm | 0.00 | 0 | |
| material. | | Total sand weight | | 5.08 | |

Munsell Color(s) of Sand:

light gray 10 YR 7/2

