Ceramic Microfossil Residues from the Merchant Site (LA43414)

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Microfossil and residue analysis is an important tool to provide context for the environment and culture within the archaeological record. Versar, Inc contracted the Archaeology of Food Laboratory at Wichita State University to conduct microfossil and residue analysis on ten Ochoa sherds collected from the Merchant Site (LA43414). The Merchant site is a fourteenth and early fifteenth-century pueblo site located in southeastern New Mexico. Recovery of microfossils from the ten sherds was low, but several taxa were identified. Both pollen and starch microfossils of Zea Mays were identified from multiple sherds. Absorbed organic residue analysis was compared with known compounds using gas chromatography-mass spectroscopy at the Texas A&M Mass Spectrometry Facility, but no biomarkers were identified. These findings are congruent with macrobotanical and phytolith results from the Merchant Site and advance our understanding of plant use in the American Southwest between 1350-1450 A.D.