Abstract. 7th International Chrysophyte Symposium, Connecticut College, New London, Connecticut, June 22-27, 2008, p. 10.

Chrysophyte cysts and diatoms: powerful tools for determining the paleoenvironment and age of the Hueyatlaco early man site, Puebla, Mexico

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No other archaeological site in the world is known to be associated with such highly significant age and environmentally diagnostic chrysophyte cyst/diatom evidence as the Hueyatlaco early man site. Cysts and diatoms have been found in 147 samples from 22 distinct stratigraphic units associated with the Hueyatlaco site and its surrounding area. These samples have yielded 44 extant and 39 extinct chrysophyte taxa and 467 extant and 78 extinct diatom taxa, many of which are age diagnostic indicators designating a minimum (Sangamonian sensu lato = 80,000 - ca. 220,000 yr BP) and a maximum (Illinoian = 220,000 - 430,000 yr BP) age for the Hueyatlaco artifacts. Attempts have been made to discredit the Hueyatlaco early man artifacts and their in situ emplacement with such speculations as "redeposition" and "an inset unconformably into an older section". The biostratigraphy and paleoecology of these numerous cysts and diatoms negate the likelihood of any redeposition, inset, or unconformity claims directly associated with artifact-bearing beds at Hueyatlaco. Those who insist on maintaining that humanity first arrived in North America during the latter part of the Last Ice Age (Wisconsinan) or postglacial times are going to find it more and more difficult, if not impossible, to try to ignore and/or discredit the rapidly growing body of evidence supplied by cyst/diatom studies which indicate a pre-Wisconsinan (>80,000 yr BP) age for the Hueyatlaco artifacts.