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## **Diatom Biostratigraphy and Paleoecology of Sangamonian Interglacial (*sensu lato* = 80,000 - ca. 220,000 yr. BP) Artifact Bearing Deposits in the Valsequillo Region, Puebla, Mexico**

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For over a century North American archaeologists repeatedly have ignored the numerous detailed reports of the great antiquity of the Valsequillo artifacts in the Puebla Region of Mexico. Archeologists who insist on maintaining that humanity first arrived in North America during the Late Wisconsinan (i.e., <22,000 y BP) or Postglacial times are going to find it more difficult, if not impossible, to try to discredit the rapidly growing body of evidence supplied by diatom studies and by various investigations which have provided sophisticated and sustained lithostratigraphic, biostratigraphic, paleoecologic, etc. data from the Valsequillo Region, all of which agree with a Pre-Wisconsinan (>80,000 y BP) age for the Valsequillo artifacts. Four diatomaceous samples from deposits associated directly with the Dorenberg Skull (an ancient human) and other artifacts from the Valsequillo Region yielded 30 extinct and 143 extant taxa. A Late Glacial or Postglacial age for these four diatom bearing samples is precluded by the presence of Navicula bronislae and N. dorenbergi, both of which evidently are known only from the Sangamonian (or its =) and by the presence of 13 diatoms which apparently have known, long stratigraphic ranges and extinctions before the end of the Sangamonian. The possibility of redeposition (which archaeologists are so fond of invoking whenever the ages of artifacts contradict their favored ideas) in these Valsequillo samples is precluded, because diatom paleoecology indicates deposition under conditions of low energy water (lacustrine), instead of high energy water (fluvial) or air (aeolian) which are required for redeposition.