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HYPOGENE CLAY AND MICA MINERALS
ASSOCIATED WITH FAULT ZONES IN THE
OUACHITA MOUNTAINS-ARKOMA
BASIN AREA, ARKANSAS

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ABSTRACT

During geologic mapping in the Ouachita Mountains-Arkoma Basin area hypogene clay minerals were found in quartz veins, or along fractures, joints or small slickensided surfaces commonly in or very near fault zones. In the vicinity of Little Rock hypogene micas occur along with the clay and other minerals suggesting an even higher temperature for this part of the region. The clay and mica minerals are: dickite, two varieties of rectorite, muscovite, cookeite (a lithium mica), and chlorite. The presence of these minerals, especially dickite, is useful in determining fault zones in the Ouachita Mountains-Arkoma Basin area. These minerals indicate that fairly high temperature hydrothermal solutions were present throughout this region.