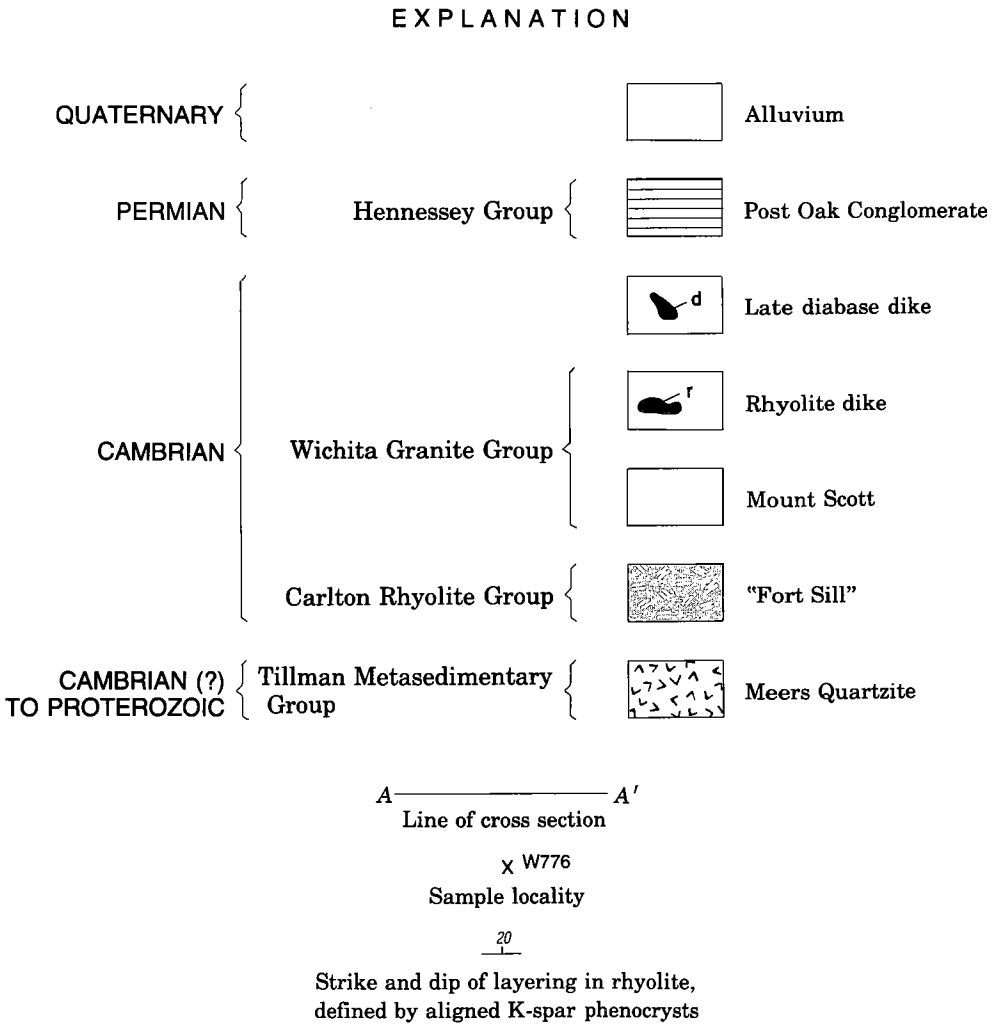
STOP 4—MOUNT SCOTT CAMPGROUND

Contact relations at base of Mount Scott Granite sill, Mount Scott Campground and vicinity. NW¼ sec. 14, T. 3 N., R. 13 W., Comanche County, Oklahoma. **M. C. Gilbert.**

This stop illustrates two contact relations and one key structural relation: (1) the Carlton Rhyolite–Meers Quartzite contact; (2) the Meers Quartzite–Mount Scott Granite contact; and (3) the basal Mount Scott intruded *over* both the rhyolite and quartzite. The geologic map for Stops 4 and 8 (fig. 126) and the three cross sections (fig. 127) show these relations.

This revised geology corrects an error dating from Hoffman (1930), who had assigned rocks that Taylor (1915) originally mapped as Meers, south of Mount Scott, to a new unit called the "Davidson granophyre." This nomenclatural problem is discussed in the first article of the guidebook. A substantial amount of the terrane from here southward to Stop 8 exposes Meers. Many excellent outcrops occur directly south of the Mount Scott picnic area. Stop 8 presents more of the data that have been generated on the quartzite from localities south of Lake Elmer Thomas at Pratt Hill. Sides and Miller (this guidebook) should be consulted for a detailed description of these latter samples.

A correction of the structure and contact relations involving the Mount Scott Granite can also be made on the basis of new mapping. Schoonover (1948) thought that the Mount Scott overlay the Carlton Rhyolite. However, most other workers, especially Ham and others (1964), thought that the granite intruded between the substrate Raggedy Mountain Gabbro Group and the Carlton Rhyolite, thus lying *beneath* the rhyolite. While there is abundant evi-



Geology by M. C. Gilbert and J. R. Miller, after Hoffman (1930), Schoonover (1948), and Chase (unpublished data, OGS files)

Base from U.S. Geological Survey, Mount Scott, 1:24,000, 1956
Photorevisions as of 1970