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GEOLOGY AND MINERALOGY OF THE RUTHERFORD
PEGMATITES, AMELIA, VIRGINIA: A DISCUSSIONRICHARD S. MITCHELL,
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In a recent paper in this journal on the Rutherford pegmatites in Amelia County, Virginia, Sinkankas (1968) suggests that fergusonite reported from the area may actually be zircon. This assumption is not correct. The writer (Mitchell, 1967) has verified the fergusonite through X-ray studies of heated metamict specimens. Fergusonite in the deposit was first reported by Hidden (1891). It was not mentioned by Fontaine (1883), as erroneously stated by Pegau (1928), Glass (1935), and Sinkankas (1968). Hidden (1891) observed crystals up to 2 cm long implanted at right angles upon an allanite blade. Both minerals were in a feldspar matrix. The fergusonite occurred as square prisms terminated with poorly formed pyramidal faces. The crystals had dull natural surfaces, but showed a brilliant resinous luster when freshly fractured. Mitchell (1967) observed a similar specimen in which black to brownish-black fergusonite crystals less than 1 cm long and about 2 mm wide were attached nearly perpendicular to an altered blade, presumably originally allanite. In other specimens single crystals over 1 cm long and up to 5 mm across were embedded in feldspar.

Several other minerals which have been found in the Rutherford pegmatites were not mentioned by Sinkankas (1968) in his review. New specimens of helvite, described by Fontaine (1883), have recently been collected by the writer. Bastnaesite pseudomorphs after allanite blades (Riesmeyer, 1967) are common in dump rocks. Other minerals identified by X-ray studies by the writer in recent years include: arsenopyrite, pyromorphite, and jarosite. Several additional minerals not summarized by Sinkankas (1968) were reported by Glass (1935).

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