

From the Mineral Inventory Files

The Northeast Extension Deserves a Look

In 2003 I wrote one of these articles (Minerals Update, v. 23, Summer 2003) about the potential for gold in a shear-related style of mineralization associated with the Kemptville Shear Zone in Yarmouth County (Fig. 1). This style is atypical of the commonly proposed, bedding-parallel, auriferous quartz vein genetic model for the Meguma Zone's numerous gold deposits.

The Kemptville Shear Zone is an impressive, 35 km (minimum) long metallotect of very well developed deformation with attendant silica and sericite alteration that originates within the South Mountain Batholith and traverses southwest through the Meguma Group metasediments to Carleton, where it swings into parallel with the equally regional scale Deerfield Shear Zone (Fig. 1). The portion of the shear zone between Kemptville and Carleton boasts several occurrences of precious and base metals, most notable being the past-producing Kemptville and Carleton gold mines. Currently, Greenlight Resources Incorporated has optioned the Kemptville property and is undertaking a major exploration project there.

It is my feeling that the northeast extension of the shear zone, between the village of Kemptville and the South Mountain Batholith, also has excellent gold potential. This is demonstrated by a very interesting, but little known and almost forgotten, gold occurrence in the area of Schoolhouse Brook (Fig. 1). In 1990, currently reigning Nova Scotia Prospector of the Year Don Black gave me a sample of silicified and sericitized argillite, which had been turned up by equally renowned prospector Mert Stewart when they were undertaking a reconnaissance exploration program in that area (see NSDNR Assessment Report ME-89-273). The sample (Fig. 2) contains several thin, limonite-stained, quartz-sericite stringers, some of which feed small vugs. In this sample, some of these vugs contain visible gold (inset in Fig. 2). Their exploration effort did not turn up other samples with visible gold

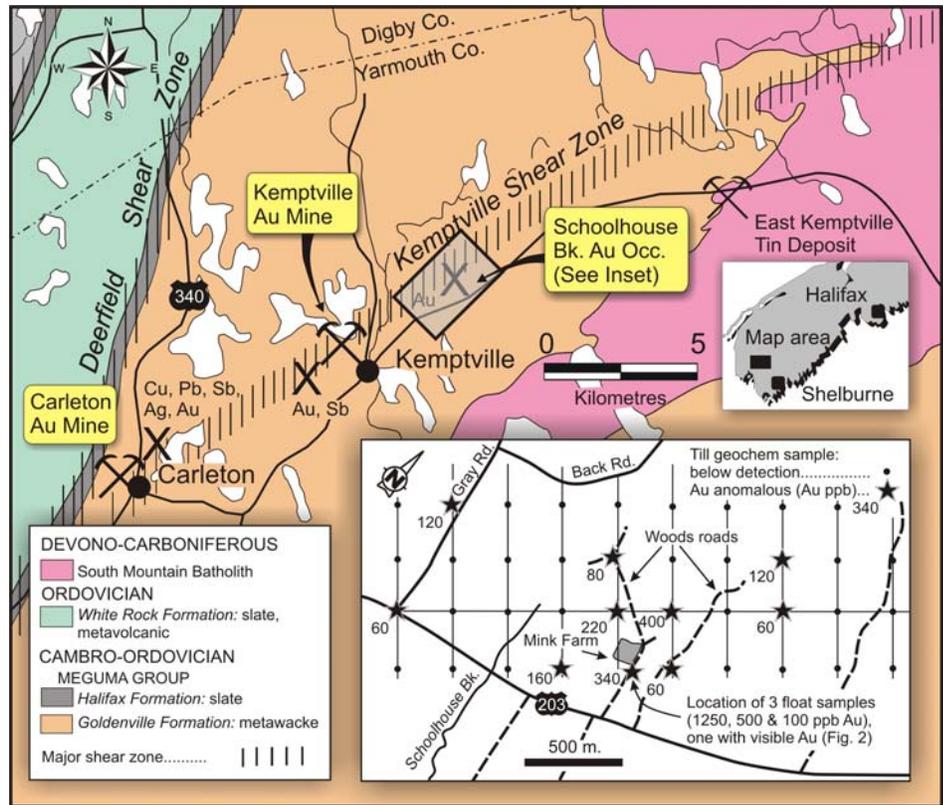


Figure 1. Geology of the Kemptville Shear Zone showing the location of some of the more significant precious- and base-metal occurrences. The area of the Schoolhouse Brook gold occurrence is provided as an inset.

but did return float samples with gold concentrations up to 1250 ppm, in an area where till samples were found to contain up to 400 ppb gold (inset on Fig. 1).

I consider this to be a significant find for a couple of reasons. The auriferous sample, and ones similar to it that abound in this area, reflect the deformation and silica and sericite alteration that is typical of the shear zone, but there is a marked absence of quartz veins in the metasediments. This suggests to me that the gold here, which is clearly of a disseminated style, may be potentially widespread and represent a large, low grade target. Equally important is the fact the occurrence opens up the entire northeast extension of the Kemptville Shear Zone metallotect, indicating that

it, too, has great exploration potential and clearly warrants a much more concerted look.

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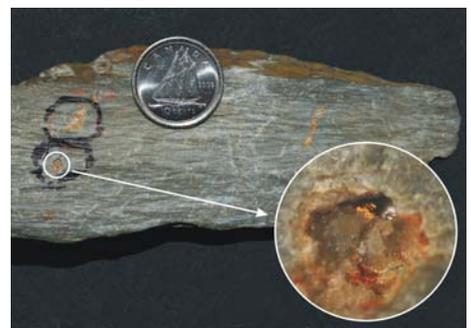


Figure 2. Sample of silicified and sericitized argillite from the Schoolhouse Brook Au occurrence with veinlets and vugs of quartz-sericite containing visible gold (see inset photo).