

From the Mineral Inventory Files

Too Coy with Touquoy?

Even though multi-million ounce gold deposits attract most of the media, there's still an industry appetite for smaller ore bodies (~500,000 oz. Au). The *Northern Miner* frequently describes how such deposits are being developed. Thus, I have often wondered why developing a 500,000 oz. gold deposit elsewhere is looked on favourably by industry, while a local deposit of that size known for 15 years is just now receiving a serious look. With Nova Scotia's stable political situation, excellent support infrastructure and favourable location we should be at the front of the line.

In many ways Moose River Gold Mines near Middle Musquodoboit is a typical Meguma gold district, with most of its historical production of gold (26,000 oz.) having been won from bedding-parallel quartz veins. However, since gold was first discovered there in 1866 and mined intermittently until 1947, there have been frequent references to free gold occurring in slate, often with no associated quartz veins. Several of these slate units were mined from small open cuts indicated on E. R. Faribault's 1898 map of the district (Fig. 1). In those days, grades from 0.1-0.2 oz. Au/ton were considered uneconomic.

Enter Seabright Resources Incorporated and its exploration affiliate Seabright Explorations Incorporated (Seabrex), which explored the district in the 1980s. In 1988, 11 diamond-drill holes in the area of the old auriferous slate quarries encountered wide zones of disseminated gold in several meta-siltstone units (e.g. 2.64 g/t over 15.25 m; 4.72 g/t over 94.5 m; 4.88 g/t over 45.72 m). These were exciting results as it was felt a new style of gold mineralization with large tonnage potential had been discovered. By 1990 more than 100 diamond-drill holes were drilled on what became known as the Touquoy Zone, and 23 were drilled in an area of similar mineralization to the east called the Touquoy East Zone

(Fig. 1). A 57,000 tonne bulk sample from the Touquoy Zone returned a grade of 1.7 g/t Au.

Corner Bay Minerals Inc. (formerly Seabrex) optioned the ground to Moose River Resources Inc. in 1996, and it contracted Watts, Griffiths and McOuat to carry out an independent assessment of the deposit in 1997. This assessment defined the currently accepted indicated resource of 3.8 Mt @ 2.22 g Au/t (274,000 oz. Au) and inferred resource of 1.9 Mt @ 2.15 g Au/t (131,000 oz. Au). In 2002, Moose River Resources entered an option agreement with Aurogin Resources and a due diligence program, including large-diameter drilling and metallurgical testing, returned very favourable results. Not only were the earlier results verified, several new mineralized zones were recognized.

Logic would suggest a relationship between the disseminated gold in slate and the auriferous, bedding-parallel quartz veins that abound in the district. Although possibly related, the two styles of mineralization are differ-

ent, and form separate exploration targets. Most important is the conspicuous lack of substantial quartz veins in the Touquoy Zone and only thin auriferous veins in the Touquoy East Zone. In both zones disseminated, native gold is localized in distinct metasiltstone units. Grades increase toward several crosscutting faults in the district, strongly suggesting control by both structural and lithological factors. A well developed wallrock alteration halo (sericite, carbonate, silica, chlorite and arsenopyrite/pyrrhotite) supports the important role of these faults in mineralization. Carbonate alteration, in particular, appears to be associated with higher gold grades.

Maybe only time and the successful mining of a deposit like Touquoy at Moose River will finally remove the stigma that seems to accompany Meguma-hosted gold deposits. These deposits are caught in a "Catch 22": negative perceptions are holding developments back, but only successful developments will serve to change the negative opinions. Perhaps Touquoy is the answer.

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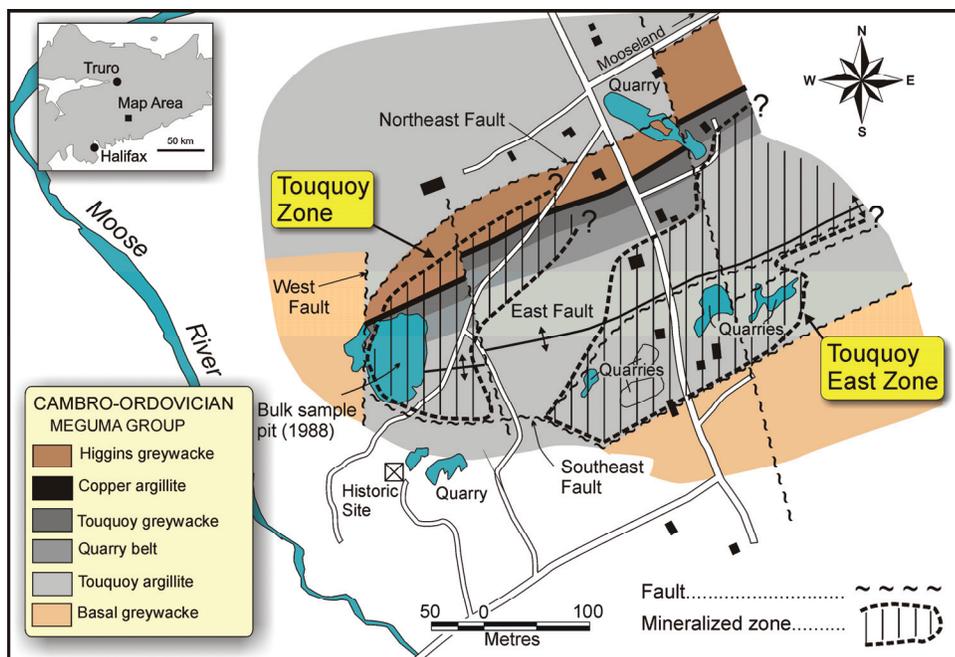


Figure 1. Geology of the Moose River gold district (modified after Faribault, 1898).