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From the Mineral Inventory Files

The Spectacular South Manchester Hematite Vein

Nova Scotia's Bay of Fundy region is well known as a world class mineral- and rock-collecting region, but it is less commonly known that excellent collecting locales occur in all areas of the province. Speaking for myself, a pleasing spin-off of visiting thousands of mineral occurrences for Mineral Inventory compilation was frequently finding spectacular rock and mineral specimens. These are usually found loose in the waste-rock piles that occur at mineral prospects and old mines, but often there are excellent bedrock exposures too. For the most part these sites are well off the beaten path. In South Manchester, Guysborough County, however, a mineralized site of spectacular scale and appearance is found that is well exposed and just a few tens of metres from a welltravelled road (Fig. 1).

South Manchester was home to the long-abandoned South Manchester Fe Mine (NSMinOcc #F06-004). This deposit is one of many dozens of vein deposits of hematite-ankerite-siderite that occur along the regional Cobequid-Chedabucto Fault Zone (CCFZ). Many of these vein deposits reached mineable size and produced Fe for much of the 19th and early 20th century. The South Manchester mine was just a small one. Discovered in 1881, it operated sporadically until the 1930s, producing just a few thousand tons of specular hematite ore.

The deposit comprises a series of parallel veins, breccias and lenses of mixed massive and specular hematite, intruded along a north-trending fault zone. Of particular note is an impressive mineralized zone of specular and massive hematite containing numerous vugs infilled with calcite and quartz, well exposed along the shore of Chedabucto Bay (Fig. 2). The zone has a northerly trend, is exposed for 12-15 m along the shore, and is above water only at medium and low tide. The eastern 5-6 m of the zone is an intricately mixed vein of massive and specular hematite with vugs of calcite and minor quartz. The remainder of the zone is a breccia of

mixed fragments of wallrock, and hematite and calcite veins. About 50 m east along the beach are outcrops of highly faulted Horton Group sediments carrying numerous vuggy veins and breccias of dogtooth spar (calcite) and euhedral quartz. Many carry minor specularite. It is apparent that this entire shoreline section represents a faulted and veined zone with associated Fe mineralization. This is probably a portion of the same northerly trending faulted zone that hosts the South Manchester Fe Mine, just to the north.

In my opinion, this is by far the best, and most spectacular, exposure of hematite in the province. It seems likely that most of the abandoned iron mines along the CCFZ have similarly mineralized veins, but they are either heavily overgrown or not exposed. For mineral collectors and those just interested in viewing a unique exposure of a mineralized zone, South Manchester is a site you have to see. Have fun collecting!

G. A. O'Reilly

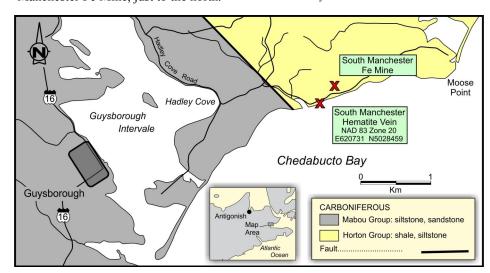


Figure 1. Geology of the South Manchester, Guysborough County, area showing the location of the South Manchester Fe Mine and hematite vein.



Figure 2. Photo of the hematite vein and breccia exposed on the Chedabucto Bay shoreline at South Manchester, Guysborough County.