

sometimes forming the cementing material. This latter mode of occurrence is similar to that shown by the red hematites found in the lower carboniferous conglomerates at several parts of the island near their junction with older strata. And near the Loch Lomond post office a highly manganiferous red hematite occurs under conditions apparently of a similar nature.

The limestone overlying these measures is highly manganiferous and ferriferous, and contains numerous crystals of galena, which some time ago incited prospecting, as they were thought to be silver ore.

The ore from the Western, or McCuish mine, is a fine-grained pyrolusite, sometimes holding a little brown, or hard ore. It is generally amorphous, but the better grades show a subcrystalline structure. The McCuish ore is a soft black amorphous ore, apparently of high order. At several points considerable masses of lenticular hard ore are met, with calespar and heavy spar. The minerals associated with the ore are calcite, baryte and limonite.

The following analyses by Mr. G. C. Hoffman, Analyst to the Geological Survey, will show the character of the ores:—

Sample No. 1.—Pyrolusite with a little manganite, gave—

Binoxide.....81·52 per cent.

Sample No. 2, consisting almost exclusively of pyrolusite, gave

Binoxide.....88·98 per cent.

Ferric oxide 21 “ “

Ores represented by the above analyses would be adapted for all uses to which the mineral is usually put, and especially to glass making.

As the extent of manganiferous ground is considerable, and the quality good, it is to be hoped that these ores will form a permanent addition to the list of Cape Breton exports. Up to the close of the year 1883 about 200 tons have been shipped.

These ores have been worked by Mr. E. T. Moseley, who deserves credit for having inaugurated a new mining industry in Cape Breton County.