

	Tenny. ¹	Cheverie. ²
Manganese oxides.....	85.54	86.81
Iron peroxide.....	1.18	} 2.05
Baryta.....	.80	
Insoluble matter.....	3.27	1.14
Phosphoric acid.....	.34	—
Water.....	8.54	10.00
Available oxygen.....	51.54	47.73

The Tenny Cape manganite is compact, with partly fibrous structure, and submetallic lustre. It is not in much demand at present, but I am informed that considerable quantities could be got at several points. The following are the principal minerals found in connection with the Tenny Cape ores:—

Calcite. This, the most abundant accessory, occurs as low rhombohedral crystals implanted on the limestone, of reddish and bluish shades, frequently with the edges clouded symmetrically with impurities; and as a secondary deposit on the preceding crystals, in the form of snow-white granular incrustations, frequently penetrated by the fibres of pyrolusite; and as a capping on isolated fibres of the ore. The pyrolusite also occurs encrusting wine-coloured crystals of dog-tooth spar.

Iron is present as an earthy red hematite, and as a fibrous and mammilated limonite. Iron sulphide is seldom visible.

Barite occurs in rounded nodules, and in tabular crystals in the ore, and mixed with the calcspar.

Selenite is sometimes noticed in fibrous form, and in thin transparent films.

Many very beautiful cabinet specimens of these minerals have been met at Mr. J. W. Stephens' mine, the natural beauty of the crystals being greatly increased by the setting of gleaming fibres of the black pyrolusite.

Lower Carboniferous limestones at Minudie, in Cumberland County, have yielded small quantities of a soft fine-grained pyrolusite, giving on analysis 97.04 per cent. of manganese binoxide. Ores similar to those of Tenny Cape are found at Onslow, and on the Salmon River, near Truro, Colchester County. Prospecting work has shown red shales and sandstones, and beds of dark-bluish limestone, covered by beds of gravel and clay holding nodules of compact sub-crystalline pyrolusite. The ore also occurs in veins, up to four inches in thickness, in the sandstones, and in irregular nests and layers in the limestone. Calc spar, barite, and selenite are found in the veins, which are filled with fibrous ore. The exact horizon of the beds holding these ores is not readily ascertainable, and it may be higher in the marine limestone formation than at Tenny Cape. The ore is of very good quality, some of it running as high as ninety per cent. of available oxide. In Pictou County, near Glengarry station, nodules of fibrous pyrolusite, containing eighty-four per cent. of peroxide, are found with crystals of dog-tooth spar, in a dark-blue limestone, similar to that at Springville already referred to, and exposed close to the junction of the marine limestone with pre-carboniferous rocks.

Boulders of a mixture of psilomelane with manganite occur lying on the limestone at Springville, of which an analysis has already been given, and on the associated red

¹ Dr. How.

² E. Gilpin.