GROUTITE

 $Mn^{3+}O(OH)$

Groutite is a relatively uncommon manganese mineral found in certain iron formations. Its monoclinic polymorph, manganite, is far more abundant. Northern Peninsula.

Gogebic County: Plymouth mine near Wakefield: Groutite has been identified from a single specimen (DM 22915, Seaman Mineral Museum, Michigan Technological University) collected on the dumps of the Plymouth mine. It Occurs as lustrous, bladed crystals up to 4 mm lining cavities in limonitic ore. Verified by X-ray diffraction.

Iron County: Bengal (Cannon) mine, near Stambaugh: As small, lustrous, bladed, black crystals admixed with minor manganite lining cavities in brecciated hematite. Verified by X-ray diffraction.

FROM: Robinson, G.W., 2004 Mineralogy of Michigan by E.W. Heinrich updated and revised: published by A.E. Seaman Mineral Museum, Houghton, MI, 252p.