Aplowite $(Co, Mn^{2+}, Ni)SO_4 \cdot 4H_2O$

Crystal Data: Monoclinic. *Point Group:* $2/m$. As finely granular efflorescences.

Physical Properties: Hardness = ∼3 D(meas.) = 2.33 D(calc.) = 2.36 Soluble in H_2O; dehydrates in air.

Optical Properties: Semitransparent. *Color:* Bright pink; light pink in transmitted light. *Streak:* White. *Luster:* Vitreous.
Optical Class: Biaxial (–). $\alpha = 1.528$ $\beta =$ n.d. $\gamma = 1.536$ 2V(meas.) = n.d.

Cell Data: *Space Group:* $P2_1/n$. $a = 5.94$ $b = 13.56$ $c = 7.90$ $\beta = 90°31'$ Z = 4

X-ray Powder Pattern: Magnet Cove mine, Canada.
4.46 (10), 5.44 (9), 3.95 (8), 2.95 (7), 3.39 (6), 3.22 (5), 6.78 (4)

Chemistry: (1) Magnet Cove mine, Canada; partial X-ray spectrographic analysis corresponds to $(Co_{0.50}Mn_{0.25}Ni_{0.22}Cu_{0.01}Fe_{0.01}Zn_{0.01})_{\Sigma=1.00}SO_4 \cdot 4H_2O$.

Mineral Group: Rozenite group.

Occurrence: As efflorescences with sulfides (probably cobaltian and nickelian pyrite) on siderite–barite matrix from a hydrothermal Pb–Zn–Cu orebody associated with a large barite deposit.

Association: Moorhouseite, siderite, barite.

Distribution: From the Magnet Cove barite mine, four km southwest of Walton, Nova Scotia, Canada.

Name: Honors Albert Peter Low (1861–1942), Canadian geologist, former Director of the Geological Survey of Canada.

Type Material: National School of Mines, Paris, France; Canadian Geological Survey, Ottawa, Canada, 12145.

References: (1) Jambor, J.L. and R.W. Boyle (1965) Moorhouseite and aplowite, new cobalt minerals from Walton, Nova Scotia. Can. Mineral., 8, 166–171. (2) (1965) Amer. Mineral., 50, 809 (abs. ref. 1).