

Aplowite



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

Physical Properties: Hardness = ~ 3 $D(\text{meas.}) = 2.33$ $D(\text{calc.}) = 2.36$ 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 (-). $\alpha = 1.528$ $\beta = \text{n.d.}$ $\gamma = 1.536$ $2V(\text{meas.}) = \text{n.d.}$

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

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 $(\text{Co}_{0.50}\text{Mn}_{0.25}\text{Ni}_{0.22}\text{Cu}_{0.01}\text{Fe}_{0.01}\text{Zn}_{0.01})_{\Sigma=1.00}\text{SO}_4 \cdot 4\text{H}_2\text{O}$.

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).