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**Crystal Data:** Tetragonal. *Point Group:*  $4/m \ 2/m \ 2/m$ . In thin crusts intermixed with romarchite.

Physical Properties: Hardness = n.d. D(meas.) = n.d. D(calc.) = [2.40]

Optical Properties: Semitransparent. Color: White.

Optical Class: Uniaxial.  $\omega = \text{n.d.}$   $\epsilon = \text{n.d.}$ 

Cell Data: Space Group: P4/mnc (synthetic). a = 7.98(1) c = 9.17(1) Z = 2

**X-ray Powder Pattern:** Boundary Falls, Canada. (ICDD 25-1303). 3.50 (100), 2.77 (90), 2.96 (80), 3.26 (50), 1.92 (50), 1.90 (50), 2.48 (40)

Chemistry: Boundary Falls, Canada; X-ray spectrographic scans detected only tin.

Occurrence: As an alteration product on tin pannikins immersed in a river.

**Association:** Romarchite.

**Distribution:** At Boundary Falls, Winnipeg River, Ontario, Canada, where tin pannikins had been dropped by a voyageur between 1801 and 1821.

Name: As a HYDROus mineral related to romarchite.

Type Material: Royal Ontario Museum, Toronto, Canada, M28744.

**References:** (1) Organ, R.M. and J.A. Mandarino (1971) Romarchite and hydroromarchite, two new stannous minerals. Can. Mineral., 10, 916 (abs.). (2) (1972) Amer. Mineral., 57, 1555 (abs. ref. 1). (3) Howie, R.A. and W. Moser (1973) Crystal data and formula for hydrous tin(II) oxide: a note. Amer. Mineral., 58, 552.