Nickelbischofite

Crystal Data: Monoclinic. Point Group: 2/m. As a 2 mm patch of crystalline material on the surface of drill core; a minor component of powdery sublimates.


Cell Data: Space Group: I2/m (synthetic). a = 8.786(2) b = 7.076(2) c = 6.625(2) β = 97.27(1)° Z = 2

X-ray Powder Pattern: Synthetic. (ICDD 25-1044). 5.59 (100), 5.50 (40), 4.82 (35), 2.926 (35), 2.747 (30), 2.689 (20), 2.178 (20)

Chemistry: Natural material shown to contain nickel and chlorine, and to be identical with synthetic material by X-ray diffraction.

Occurrence: As an alteration product on the surface of drill core from an ultramafic intrusion containing low-grade nickel mineralization, formed after storage (Amos, Canada); as a volcanic sublimate (Mt. Shirane, Japan).

Association: Coalingite, paratacamite, pentlandite, awaruite, heazlewoodite (Amos, Canada); alunogen (Mt. Shirane, Japan).

Distribution: From the Dumont ultramafic intrusive, 27 km west of Amos, Quebec, Canada. On Mt. Shirane, Gunma Prefecture, Japan.

Name: As the compositional nickel analog of bischofite, with which it is, however, not isostructural.

Type Material: Canadian Geological Survey, Ottawa, Canada, 17980.