Reaphookhillite $MgZn_2(PO_4)_2 \cdot 4H_2O$

Crystal Data: Triclinic. *Point Group*: $\bar{1}$.

Physical Properties: *Cleavage*: *Tenacity*: *Fracture*:
Hardness = D(meas.) = D(calc.) =

Optical Properties: *Color*: *Streak*: *Luster*:
Optical Class:

Cell Data: *Space Group: P*$\bar{1}$. $a = 5.759(1)$ $b = 7.534(1)$ $c = 5.279(1)$ $\alpha = 93.44(3)°$ $\beta = 91.27(3)°$ $\gamma = 91.30(3)°$

X-Ray Diffraction Pattern: Reaphook Hill, Martins Well, Flinders Ranges, South Australia, Australia.
7.577 (100), 2.982 (32), 2.880 (27), 4.461 (24), 3.771 (14), 2.775 (14), 3.158 (13), 2.668 (13)

Chemistry:

Polymorphism & Series: Dimorph of Sergeysmirnovite.

Mineral Group: The magnesium-analogue of parahopeite.

Occurrence:

Association:

Distribution From Reaphook Hill, Martins Well, Flinders Ranges, South Australia, Australia.

Name: For the locality where the studied material was collected.

Type Material: South Australian Museum, Adelaide, South Australia, Australia (G34798).

References: (1) Miyawaki, R., F. Hatert, M. Pasero, and S.J. Mills (2019) IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) Newsletter 47. New minerals and nomenclature modifications approved in 2018 and 2019. Mineral. Mag., 83(1), 146.