Barringtonite $MgCO_3 \cdot 2H_2O$

Crystal Data: Triclinic. *Point Group:* $\overline{1}$ or 1. As needles and radiating fibers, to 0.03 mm, in nodular incrustations.

Physical Properties: *Cleavage:* Good on {100}, {010}; on {001}, probable. Hardness = n.d. D(meas.) = n.d. D(calc.) = 2.825

Optical Properties: Semitransparent. *Color:* Colorless.
Optical Class: Biaxial (+). *Orientation:* Length-slow. $\alpha = 1.458$ $\beta = 1.473$ $\gamma = 1.501$
2V(meas.) = 68°–80° 2V(calc.) = 73°44′

Cell Data: *Space Group:* $P\overline{1}$ or $P1$. $a = 9.155$ $b = 6.202$ $c = 6.092$ $\alpha = 94°00'$ $\beta = 95°32'$ $\gamma = 108°42'$ Z = [4]

X-ray Powder Pattern: Barrington Tops, Australia.
8.682 (vs), 3.093 (vs), 2.936 (vs), 6.087 (s), 5.816 (s), 2.495 (s), 2.309 (s)

Chemistry:

	(1)	(2)	(3)
CO_2	34.8	36.5	36.57
MgO	31.8	33.5	33.49
H_2O	33.4	30.0	29.94
Total	[100.0]	[100.0]	100.00

(1) Barrington Tops, Australia; corresponds to $Mg_{1.00}C_{1.00}O_3 \cdot 2.35H_2O$ (2) Do.; corresponds to $Mg_{1.00}C_{1.00}O_3 \cdot 2.00H_2O$ (3) $MgCO_3 \cdot 2H_2O$.

Occurrence: Formed by leaching of magnesium from olivine basalt under a waterfall by meteoric water.

Association: Nesquehonite.

Distribution: In Australia, under Rainbow Falls, Sempill Creek, Barrington Tops, New South Wales.

Name: For its occurrence near Barrington, Australia.

Type Material: n.d.

References: (1) Nashar, B. (1965) Barringtonite – a new hydrous magnesium carbonate from Barrington Tops, New South Wales, Australia. Mineral. Mag., 34, 370–372. (2) (1965) Amer. Mineral., 50, 2103–2104 (abs. ref. 1).