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Crystal Data: Triclinic. *Point Group:* $\overline{1}$ or 1. As fine-grained transverse fibers of very small size.

Physical Properties: Cleavage: Perfect micaceous. Hardness = <5 D(meas.) = 3.18(2) D(calc.) = 3.195

Optical Properties: Transparent. Color: Green, zoned.

Optical Class: Biaxial. Pleochroism: Weak; green to yellow-green. $\alpha = 1.582$ $\beta = \text{n.d.}$ $\gamma = 1.614$ 2V(meas.) = n.d.

Cell Data: Space Group: $C\overline{1}$ or C1 (uncertainty due to random stacking of chlorite layers). a = 5.346(3) b = 9.257(4) c = 14.40(7) $\beta = 97.12(5)^{\circ}$ Z = [2]

X-ray Powder Pattern: Red Dome deposit, Australia. 7.14 (100), 14.3 (90), 1.542 (60), 2.660 (50), 3.573 (40), 2.450 (35b), 4.600 (30)

Chemistry:

	(1)
SiO_2	32.0
Al_2O_3	12.4
FeO	12.9
MnO	0.15
ZnO	30.5
MgO	4.6
CaO	1.0
${\rm H_2O}$	n.d.

(1) Red Dome deposit, Australia; by electron microprobe; excluding CaO, corresponds to $(\mathrm{Zn}_{2.50}\mathrm{Fe}_{1.20}\mathrm{Al}_{1.17}\mathrm{Mg}_{0.76}\mathrm{Mn}_{0.01})_{\Sigma=5.64}(\mathrm{Si}_{3.55}\mathrm{Al}_{0.45})_{\Sigma=4.00}\mathrm{O}_{10}(\mathrm{OH})_{8}.$

Mineral Group: Chlorite group.

Occurrence: As rims on colloform calcite veins, within a strongly oxidized collapse karst-breccia containing skarn clasts.

Association: Andesine, garnet, vesuvianite, zincian chamosite, goethite, hematite, chalcocite, copper, malachite, calcite.

Distribution: From the Red Dome deposit, 15 km west-northwest of Chillagoe, Queensland, Australia.

Name: For Professor Sturges W. Bailey (1919–1994), Department of Geology and Geophysics, University of Wisconsin, Madison, Wisconsin, USA.

Type Material: Geological Museum, University of Wisconsin, Madison, Wisconsin, 6000/1; National Museum of Natural History, Washington, D.C., USA, 164430; South Australian Museum, Adelaide, Australia, 13592.

References: (1) Rule, A.C. and F. Radke (1988) Baileychlore, the Zn end member of the trioctahedral chlorite series. Amer. Mineral., 73, 135–139.