

Crystal Data: Triclinic. *Point Group:* $\bar{1}$ or 1. As crystalline masses, to 2.5 cm.

Physical Properties: *Cleavage:* Good on {100} and {011}; fair on {0 $\bar{1}$ 1}. Hardness = 4.5
D(meas.) = 4.01 D(calc.) = 4.05 Fluoresces greenish white under LW UV.

Optical Properties: Translucent. *Color:* Light green. *Luster:* Vitreous.
Optical Class: Biaxial (+) [sic]. $\alpha = 1.672(3)$ $\beta = 1.693(3)$ $\gamma = 1.710(3)$
2V(meas.) = 80(5)°

Cell Data: *Space Group:* $P\bar{1}$ or $P1$. $a = 6.049(2)$ $b = 6.964(3)$ $c = 4.971(2)$
 $\alpha = 116.51(4)^\circ$ $\beta = 86.06(4)^\circ$ $\gamma = 112.59(3)^\circ$ $Z = 1$

X-ray Powder Pattern: Yukon Territory, Canada.
3.00 (100), 3.26 (60), 2.94 (55), 5.55 (40), 2.21 (35), 1.90 (35), 2.91 (30)

Chemistry:	(1)	(2)
P ₂ O ₅	31.41	34.18
Al ₂ O ₃	25.87	24.55
Fe ₂ O ₃	0.26	
BaO	38.41	36.93
S	0.15	
H ₂ O ⁺	4.09	4.34
Total	100.19	100.00

- (1) Yukon Territory, Canada; molecular H₂O shown absent by IR; recalculated after deduction of quartz impurity, then corresponds to Ba_{1.07}(Al_{2.15}Fe_{0.01})_{Σ=2.16}[(P_{0.94}S_{0.01})_{Σ=0.95}O₄]₂(OH)₂.
(2) BaAl₂(PO₄)₂(OH)₂.

Occurrence: In quartz veins filling tension fractures in carbonaceous argillite.

Association: Pyrite, hinsdalite.

Distribution: From a locality about 25 km north of the Hess River, N.T.S. area 105-N-7, Yukon Territory, Canada.

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Type Material: Department of Geological Sciences, University of British Columbia, Vancouver, Canada, S-75-4220; The Natural History Museum, London, England, 1978,450; Harvard University, Cambridge, Massachusetts; National Museum of Natural History, Washington, D.C., USA, 128337.

References: (1) Meagher, E.P., M.E. Coates and A.E. Aho (1973) Jagowerite: a new barium phosphate mineral from the Yukon Territory. *Can. Mineral.*, 12, 135–136. (2) (1976) *Amer. Mineral.*, 61, 175 (abs. ref. 1). (3) Meagher, E.P., C.S. Gibbons, and J. Trotter (1974) The crystal structure of jagowerite: BaAl₂P₂O₈(OH)₂. *Amer. Mineral.*, 59, 291–295.