

Crystal Data: Triclinic. *Point Group:* $\bar{1}$. As platy crystals in rosette-like aggregates to 0.5 mm.

Physical Properties: *Cleavage:* One perfect on {111} (by analogy to gartrellite). *Tenacity:* Brittle. *Fracture:* Irregular. Hardness = ~3 D(meas.) = > 3.8 D(calc.) = 5.31

Optical Properties: Translucent. *Color:* Yellow to greenish yellow. *Streak:* Yellow. *Luster:* Vitreous.

Optical Class: Biaxial (+) (by analogy to gartrellite). $n(\text{minimum}) = 1.906(5)$
 $n(\text{maximum}) = 1.963(5)$ *Pleochroism:* Weak, pale yellow to colorless to yellow and pale orange.

Cell Data: *Space Group:* $P\bar{1}$. $a = 5.444(2)$ $b = 5.640(2)$ $c = 7.518(2)$ $\alpha = 67.89(2)^\circ$
 $\beta = 69.48(2)^\circ$ $\gamma = 70.18(2)^\circ$ $Z = 1$

X-Ray Diffraction Pattern: Kintore open cut, Broken Hill, New South Wales, Australia.
 2.949 (100), 2.492 (80), 3.286 (65), 1.110 (50), 2.850 (45), 2.891 (40), 2.501 (40)

Chemistry:	(1)	(2)
PbO	36.43	36.56
CuO	12.98	13.03
ZnO	0.74	
Fe ₂ O ₃	4.08	
Al ₂ O ₃	5.14	8.35
As ₂ O ₅	36.25	37.64
H ₂ O	[4.38]	4.43
Total	100.00	100.00

(1) Kintore open cut, Broken Hill, New South Wales, Australia; average electron microprobe analysis supplemented by IR spectroscopy, H₂O by difference; corresponds to Pb_{1.02}Cu_{1.02}Al_{0.63}Fe_{0.32}Zn_{0.06}(AsO₄)_{1.98}(OH)_{1.11}·(H₂O)_{0.97}. (2) PbCuAl(AsO₄)₂OH·H₂O.

Mineral Group: Tsumcorite group.

Occurrence: Secondary in the weathering zone of a Cu-Pb-Zn sulfide deposit.

Association: Gartrellite, beudantite-segnitite, mimetite, agardite-Y, carminate, chlorargyrite.

Distribution: From the Kintore open cut, Broken Hill, New South Wales, Australia.

Name: For Yancowinna County, New South Wales, where the studied samples were collected.

Type Material: South Australia Museum, Adelaide, South Australia (G33029).

References: (1) Elliott, P. and A. Pring (2015) Yancowinnaite, a new mineral from the Kintore open cut, Broken Hill, New South Wales. Australian J. Mineral., 17, 73-76.