

Crystal Data: Triclinic. *Point Group:* $\bar{1}$. Crystals are tabular, with a number of forms, to 1 cm, generally in crystalline and globular incrustations.

Physical Properties: *Cleavage:* On {001}. *Fracture:* Conchoidal. *Tenacity:* Brittle. Hardness = 5.5 $D(\text{meas.}) = 4.867$ $D(\text{calc.}) = 4.862$

Optical Properties: Semitransparent. *Color:* Dark brown. *Streak:* Reddish brown. *Luster:* Adamantine to semimetallic. *Optical Class:* Biaxial (+). *Pleochroism:* Strong; deep blood-red to reddish brown. *Absorption:* $X < Z$. $\alpha = 2.13$ $\beta = \sim 2.2$ $\gamma = 2.40$ $2V(\text{meas.}) = \text{Medium large}$. *Anisotropism:* Strong.

Cell Data: *Space Group:* $P\bar{1}$. $a = 6.461(5)$ $b = 6.594(3)$ $c = 5.036(3)$ $\alpha = 106.21(5)^\circ$ $\beta = 98.35(5)^\circ$ $\gamma = 108.86(5)^\circ$ $Z = 1$

X-ray Powder Pattern: Cerro Pululus, Argentina.

3.152 (10), 2.997 (7), 2.856 (5), 2.489 (5), 2.072 (5), 2.960 (4), 2.955 (4)

Chemistry:

	(1)	(2)
As ₂ O ₅	32.2	41.85
SiO ₂	5.81	
SnO ₂	2.92	
Al ₂ O ₃	2.82	
Fe ₂ O ₃	55.8	58.15
Total	99.55	100.00

(1) Cerro Pululus, Argentina; contains Fe₂O₃ in excess, as hematite; about 3% Sb found in a separate determination; Fe₂O₃:As₂O₅ = 2.49 but found = 2 by XRF in comparison with synthetic material. (2) Fe₄O₃(AsO₄)₂.

Occurrence: Probably of exhalative origin, in tin ore.

Association: Cassiterite, hematite.

Distribution: From the Vela Yareta tin mine, on Cerro Pululus, east of Laguna Vilama, Jujuy Province, Argentina.

Name: To honor Dr. Victorio Angelelli (1908–), Argentinian mining geologist, Director of the Argentinian Geological Survey.

Type Material: n.d.

References: (1) Ramdohr, P., F. Ahlfeld, and F. Berndt (1959) Angelellit, ein natürliches triklinen Eisen-Arsenat, 2Fe₂O₃ • As₂O₅. Neues Jahrb. Mineral., Monatsh., 145–151 (in German). (2) Weber, K. (1959) Eine kristallographische Untersuchung des Angelellits, 2Fe₂O₃ • As₂O₅. Neues Jahrb. Mineral., Monatsh., 152–158 (in German). (3) (1959) Amer. Mineral., 44, 1322–1323 (abs. refs. 1 and 2). (4) Moore, P. B. and T. Araki (1978) Angelellite, Fe₄³⁺O₃(As⁵⁺O₄)₂: a novel cubic close-packed oxide structure. Neues Jahrb. Mineral., Abh., 132, 91–100 (in German with English abs.).