Pampaloite AuSbTe

Crystal Data: Monoclinic. *Point Group*: 2/m. As irregular grains to $20 \mu m$.

Physical Properties: *Cleavage*: n.d. *Tenacity*: Brittle. *Fracture*: n.d. Hardness = 4-5 VHN = 245-295, 276 average (25 g load). D(meas.) = n.d. D(calc.) = 9.33

Optical Properties: Opaque. *Color*: White in reflected light, no internal reflections. *Streak*: n.d. *Luster*: Metallic.

Optical Class: *Anisotropism*: Strong, blue to light brown. Medium to strong bireflectance. *Pleochroism*: Weak, slightly pinkish brown to slightly bluish white (synthetic material). R₁-R₂: (470) 60.0-62.5, (546) 62.5-64.8, (589) 63.2-65.6, (650) 63.7-66.0

Cell Data: Space Group: C2/c. a = 11.947(3) b = 4.481(1) c = 12.335(3) $\beta = 105.83(2)^{\circ}$ Z = 8

X-Ray Diffraction Pattern: Synthetic equivalent.

2.978 (100), 2.144 (55), 2.968 (50), 2.063 (33), 2.242 (25), 4.846 (24), 3.825 (18)

Chemistry:

	(1)
Au	44.13
Sb	27.44
Te	28.74
Total	100.31

(1) Pampalo gold mine, eastern Finland; average electron microprobe analysis; corresponding to $Au_{1.00}Sb_{1.00}Te_{1.00}$.

Occurrence: In open space between the gangue minerals in late hydrothermal Au-Te-Sb deposits in quartz-feldspar schist and porphyry dikes.

Association: Gold, frohbergite, altaite.

Distribution: From the Pampalo gold mine (also called the Ward prospect), 65 km east of Joensuu and 46 km north of Ilomantsi village, eastern Finland.

Name: For the *Pampalo* gold mine, Finland.

Type Material: Department of Earth Sciences, Natural History Museum, London, England (BM 2017, 16).

References: (1) Vymazalová, A., K. Kojonen, F. Laufek, B. Johanson, C.J. Stanley, J. Plášil, and P. Halodová (2019) Pampaloite, AuSbTe, a new mineral from Pampalo gold mine, Finland. Mineral. Mag., 83, 393-400.