

**Crystal Data:** Monoclinic. *Point Group:*  $2/m$ . Crystals acicular along [010] to tabular flattened on (100), to 1 mm, with lozenge-shaped cross sections.

**Physical Properties:** *Cleavage:* Good on  $\{20\bar{1}\}$ . *Tenacity:* Brittle; flexible fibers. *Fracture:* n.d. Hardness = n.d. D(meas.) = n.d. D(calc.) = 5.97

**Optical Properties:** Opaque. *Color:* Black; in reflected light, red internal reflections at grain edges and defects. *Streak:* Brown. *Luster:* Metallic. *Birefractance:* Weak, white to white-gray. *Anisotropism:* Distinct.

*Optical Class:* n.d.

R(air)-R(oil): (470) 38.3-23.8, (546) 37.3-22.4, (589) 36.9-21.5, (650) 35.2-19.6

**Cell Data:** Space Group:  $C2/m$ .  $a = 55.824(11)$   $b = 4.0892(8)$   $c = 24.128(5)$   $\beta = 113.14(3)^\circ$   
Z = 4

**X-ray Powder Pattern:** Buca della Vena mine, Apuan Alps, Tuscany, Italy.

3.423 (100), 4.002 (38), 3.562 (31), 2.948 (27), 3.009 (25), 3.878 (24), 2.048 (20), 2.265 (19)

<b>Chemistry:</b>	(1)	(2)
Pb	47.17	47.55
Sb	31.16	30.94
Cu	0.89	0.95
Ag	0.59	0.61
S	19.08	19.38
Cl	0.33	0.39
O	0.39	0.18
Total	99.60	100.00

(1) Buca della Vena mine, Apuan Alps, Tuscany, Italy; average of 15 electron microprobe analyses, presence of O based on structure analysis, corresponds to  $(\text{Cu}_{0.64}\text{Ag}_{0.25})\text{Pb}_{10.36}\text{Sb}_{11.64}\text{S}_{27.07}\text{Cl}_{0.42}\text{O}_{1.11}$ .

(2) Ideal formula corresponds to  $(\text{Cu}_{1.36}\text{Ag}_{0.52})\text{Pb}_{20.88}\text{Sb}_{23.12}\text{S}_{55}\text{ClO}$ .

**Mineral Group:** Zinkenite group.

**Occurrence:** Formed by high chlorinity hydrothermal fluids in cavities and vugs in calcite veins that cut a Ba-Fe deposit, as well as, the enclosing greenschist facies phyllite and dolomitic limestone.

**Association:** Zinkenite, boulangerite, robinsonite, tintinaite, and, rarely, scainiite and pillaitite; and tetrahedrite, bournonite, sphalerite, cinnabar, galena, andorite, chalcostibite, gersdorffite.

**Distribution:** From the Buca della Vena mine, near Ponte Stazzemese, Apuan Alps, Tuscany, Italy.

**Name:** Honors Professor Alberto Pelloux (1868-1947), curator of the mineralogical Museum, University of Genoa, Italy, and past President of the "Società Geologica Italiana".

**Type Material:** n.a.

**References:** (1) Orlandi, P., Y. Moëlo, A. Meerschaut, P. Palvadeau, and P. Leone (2004) Lead-antimony sulfosalts from Tuscany (Italy). VI. Pellouxite,  $\sim(\text{Cu,Ag})_2\text{Pb}_{21}\text{Sb}_{23}\text{S}_{55}\text{ClO}$ , a new oxy-chloro-sulfosalts from Buca della Vena mine, Apuan Alps. *Eur. J. Mineral.*, 16, 839-844. (2) Palvadeau, P., A. Meerschaut, P. Orlandi, and Y. Moëlo (2004) Lead-antimony sulfosalts from Tuscany (Italy). VII. Crystal structure of pellouxite,  $\sim(\text{Cu,Ag})_2\text{Pb}_{21}\text{Sb}_{23}\text{S}_{55}\text{ClO}$ , an expanded monoclinic derivative of  $\text{Ba}_{12}\text{Bi}_{24}\text{S}_{48}$  hexagonal sub-type (zinkenite group). *Eur. J. Mineral.*, 16, 845-855. (3) (2005) *Amer. Mineral.*, 90, 1230-1231 (abs. refs. 1 & 2).