

Crystal Data: Monoclinic. *Point Group:* 2/m. Crystals are lathlike, striated parallel to elongation (*c* axis), to 0.5 mm. *Twining:* Pervasive on (100).

Physical Properties: *Cleavage:* Good on {010}. *Fracture:* n.d. *Tenacity:* Brittle. Hardness = ~ 4 D(meas.) = n.d. D(calc.) = 6.005

Optical Properties: Opaque. *Color:* Black; grayish white in reflected light. *Streak:* Black. *Luster:* Metallic.

Optical Class: *Birefractance:* weak. *Pleochroism:* weak, white to pale gray. *Anisotropism:* weak, gray with a bluish tint to bluish black in air.

R₁-R₂: (470) 41.3-37.3, (546) 3.97-35.5, (589) 38.7-53.234.6, (650) 37.1-33.2

Cell Data: *Space Group:* P2₁/c. *a* = 6.9764(4) *b* = 19.3507(10) *c* = 8.3870(4) *β* = 107.519(2)°
Z = 4

X-ray Powder Pattern: Mina Herminia, Julcani Mining District, Huancavelica, Peru. 3.369 (100), 2.911 (58), 3.010 (33), 2.080 (26), 3.680 (23), 1.950 (22), 2.043 (20)

Chemistry:	(1)
S	19.32
Bi	31.10
Sb	18.94
As	0.45
Ag	11.19
<u>Pb</u>	<u>18.22</u>
Total	99.24

(1) Mina Herminia, Julcani Mining District, Huancavelica, Peru; average of 15 electron microprobe analyses; corresponds to Ag_{1.02}Pb_{0.87}(Sb_{1.53}Bi_{1.47})_{Σ=3.00}(S_{5.94}As_{0.06})_{Σ=6.00}.

Mineral Group: Illianite group.

Occurrence: In hydrothermal veins that contain sulfosalt mineralization.

Association: Tetrahedrite, gustavite, barite, pyrite.

Distribution: From the Level 390, Vein 14, Mina Herminia, Julcani Mining District, Huancavelica, Peru.

Name: Honors Terry C. Wallace Jr., former professor of geosciences and mineral museum curator at the University of Arizona, Tucson, USA. Since 2003, Wallace is the Principal Associate Director for science, technology, engineering, and educational activities at Los Alamos National Laboratory.

Type Material: University of Arizona Mineral Museum (19034) and the RRUFF Project (R100007: <http://rruff.info/terrywallaceite>), Tucson, Arizona, USA. The National Museum of Natural History, Washington, D.C., USA (NMNH 175995).

References: (1) Yang, H., R.T. Downs, S.H. Evans, and W.W. Pinch (2013) Terrywallaceite, AgPb(Sb,Bi)₃S₆, isotypic with gustavite, a new mineral from Mina Herminia, Julcani Mining District, Huancavelica, Peru. *Amer. Mineral.*, 98, 1310-1314.