

**Crystal Data:** Monoclinic. *Point Group:* 2/m. As micrometric aggregates to 0.35 mm.

**Physical Properties:** *Cleavage:* None. *Fracture:* Uneven. *Tenacity:* Brittle.  
Hardness = Soft. D(meas.) = n.d. D(calc.) = 5.57

**Optical Properties:** Translucent. *Color:* Gray, in reflected light with no internal reflections.  
*Streak:* Dark green. *Luster:* Vitreous. Weak anisotropy, bireflectance and reflection pleochroism.  
R<sub>1</sub>-R<sub>2</sub>: (470 nm) 7.0-7.5, (546) 7.1-7.3, (589) 6.1-6.2, (650) 4.4-5.0

**Cell Data:** *Space Group:* C2/c. *a* = 12.72(4) *b* = 5.15(1) *c* = 11.82(3)  $\beta$  = 99.2(3)<sup>o</sup>  
*Z* = 4

**X-ray Powder Pattern:** Zhongshangou gold deposit, Hebei Province, China.  
4.758 (w), 3.240 (w), 2.928 (m), 2.820 (w), 2.155 (w), 1.985 (w), 1.599 (w)

<b>Chemistry:</b>	(1)
ZnO	24.57
PbO	1.64
MgO	0.24
<u>TeO<sub>2</sub></u>	<u>71.90</u>
Total	98.89

(1) Zhongshangou gold deposit, Hebei Province, China; electron microprobe analysis, minor FeO and SeO<sub>2</sub>; corresponding to (Zn<sub>1.97</sub>Pb<sub>0.05</sub>Mg<sub>0.04</sub>Fe<sub>0.02</sub>) $\Sigma=2.08$ (Te<sub>2.95</sub>Se<sub>0.01</sub>) $\Sigma=2.96$ O<sub>8.00</sub>.

**Occurrence:** A secondary mineral in an oxidized Te- and Au-bearing quartz vein.

**Association:** Occurs as a rim on, or a replacement of, calaverite, contains blebs of gold, sphalerite.

**Distribution:** Zhongshangou gold deposit, Chongli County, Hebei Province, People's Republic of China.

**Name:** As the zinc-dominant analogue of *spiroffite*.

**Type Material:** Geological Museum of China, Beijing, People's Republic of China; M10442.

**References:** (1) Zhang, Pei-Hua, Jin-Chu Zhu, Zhen-Hua Zhao, Xiang-Ping Gu, and Jin-Fu Lin (2004) Zincospiroffite, a new tellurite mineral species from the Zhongshangou gold deposit, Hebei Province, People's Republic of China. *Can. Mineral.*, 42, 763-768. (2) (2005) *Amer. Mineral.*, 90, 521 (abs. ref. 1).