

Crystal Data: Orthorhombic, pseudohexagonal. *Point Group:* n.d. As tiny grains, to 0.25 mm, which may be in aggregates.

Physical Properties: *Tenacity:* Brittle. Hardness = 4–5 VHN = 228–441
D(meas.) = 6.72(2) D(calc.) = 6.66

Optical Properties: Translucent. *Color:* Pale brown to nearly black; pale gray with a bluish tint in reflected light. *Streak:* Brown. *Luster:* Vitreous.
Optical Class: Biaxial (–) or (+). $\alpha = 1.952$ – 1.96 $\beta = 1.98$ $\gamma = 2.002$ – 2.01 $2V(\text{meas.}) = \text{n.d.}$
Anisotropism: Distinct; bright blue to brown. *Bireflectance:* Weak; in rose tints.
R: (460) 24.4, (540) 24.0, (580) 24.5, (660) 23.0

Cell Data: *Space Group:* *C* (possible). $a = 5.11(1)$ $b = 8.91(1)$ $c = 5.32(1)$ $Z = 2$

X-ray Powder Pattern: Kuranakh deposit, Russia.
3.40 (10), 2.558 (6), 2.050 (5), 1.851 (5), 1.596 (4), 2.322 (1), 1.668 (1)

| Chemistry: | (1) | (2) | (3) |
|-------------------|------|-------|--------|
| TeO ₃ | 38.2 | 38.10 | 36.15 |
| MnO ₂ | 15.4 | 16.41 | 17.90 |
| PbO | 45.4 | 45.40 | 45.95 |
| Total | 99.0 | 99.91 | 100.00 |

(1) Kuranakh deposit, Russia; by electron microprobe, average of three analyses, total Mn as MnO₂, total Te as TeO₃; corresponds to Pb_{0.93}Mn_{0.81}Te_{1.00}O₆. (2) Jialu deposit, China; by electron microprobe, average of six analyses, total Mn as MnO₂, total Te as TeO₃; corresponds to Pb_{0.99}Mn_{0.92}Te_{1.06}O₆. (3) PbMnTeO₆.

Occurrence: In the oxidized zone of a gold quartz deposit (Kuranakh deposit, Russia; Jialu deposit, China).

Association: Gold, “electrum”, iron oxides (Kuranakh deposit, Russia); gold, calaverite, pyrite, galena, chalcopyrite, sphalerite, altaite, cerussite, anglesite, pyromorphite, quartz (Jialu deposit, China); gold (Ashley deposit, Canada); cuzticite, eztlite, emmonsite, schmitterite, pyrite (Moctezuma mine, Mexico).

Distribution: In the Kuranakh gold deposit, near Aldan, southern Sakha, Russia. At the Jialu gold deposit, Xiaoqinling district, Shaanxi Province, China. From the Ashley gold deposit, Bannockburn Township, Ontario, Canada. In Mexico, at the Oriental (Bambollita) mine, northeast of the Moctezuma (Bambolla) mine, 12 km south of Moctezuma, Sonora.

Name: For the Kuranakh deposit, Russia, where it was first found to occur.

Type Material: A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 76494.

References: (1) Yablokova, S.V., L.S. Dubakina, A.L. Dmitrik, and G.V. Sokolova (1975) Kuranakhite – a new supergene tellurium mineral. *Zap. Vses. Mineral. Obshch.*, 104, 310–313 (in Russian). (2) (1976) *Amer. Mineral.*, 61, 339 (abs. ref. 1). (3) Zhou Xinchun, Liu Liang, Wang Shizhong, Wang Yan, Yang Jiankun, Guo Nenglin, Li Guanghui, and Hu Jianmin (1998) Kuranakhite discovered in China for the first time. *Chinese J. Geochem.*, 17(1), 77–80 (in English).