

**Crystal Data:** Cubic. *Point Group:* n.d. As irregular grains, to 100  $\mu\text{m}$ , as rims on scheelite, and included in colusite and chalcopyrite.

**Physical Properties:** Hardness = n.d. VHN = 183 (100 g load). D(meas.) = n.d. D(calc.) = 4.88

**Optical Properties:** Opaque. *Color:* Pale gray-brown; pale gray in reflected light. *Luster:* Metallic.

R: (400) 22.7, (420) 23.2, (440) 23.6, (460) 23.7, (480) 23.3, (500) 22.6, (520) 22.1, (540) 22.5, (560) 23.3, (580) 23.9, (600) 24.1, (620) 24.0, (640) 23.7, (660) 23.2, (680) 22.6, (700) 22.2

**Cell Data:** *Space Group:* n.d.  $a = 10.856(2)$   $Z = 4$

**X-ray Powder Pattern:** Kidd Creek mine, Canada. 6.29 (100), 1.919 (60), 3.138 (50), 5.41 (30), 3.270 (30), 1.839 (30), 2.712 (20)

Chemistry:	(1)	(2)	(3)
Cu	39.6	40.6	40.55
Fe		0.7	
Sn	12.3	11.9	12.62
V		0.1	
W	20.4	19.0	19.55
Sb		0.5	
Se	2.1		
S	24.7	26.8	27.28
Total	99.1	99.6	100.00

(1) Kidd Creek mine, Canada; by electron microprobe, corresponding to  $\text{Cu}_{6.10}\text{Sn}_{1.02}\text{W}_{1.09}(\text{S}_{7.54}\text{Se}_{0.26})_{\Sigma=7.80}$ . (2) Bisbee, Arizona, USA; by electron microprobe, corresponding to  $\text{Cu}_{6.02}\text{Fe}_{0.12}\text{Sb}_{0.04}\text{Sn}_{0.94}\text{V}_{0.02}\text{W}_{0.98}\text{S}_{7.88}$ . (3)  $\text{Cu}_6\text{SnWS}_8$ .

**Occurrence:** In massive copper sulfide ores.

**Association:** Scheelite, carrollite, clausthalite, tennantite, tungstenite, sphalerite (Kidd Creek mine, Canada); pyrite, colusite, stützite, altaite (Bisbee, Arizona, USA).

**Distribution:** From the Kidd Creek mine, near Timmins, Ontario, Canada [TL]. In the Campbell mine, Bisbee, Cochise Co., Arizona, and at Butte, Silver Bow Co., Montana, USA. From the Bitian Cu–Au–Ag deposit, Fujian Province, China

**Name:** For the Kidd Creek mine, Canada.

**Type Material:** The Natural History Museum, London, England, 1982,2-3; Canadian Geological Survey, Ottawa, 64076-78; Royal Ontario Museum, Toronto, Canada, M39791.

**References:** (1) Harris, D.C., A.C. Roberts, R.I. Thorp, A.J. Criddle, and C.S. Stanley (1984) Kiddcreekite, a new mineral species from the Kidd Creek mine, Timmins, Ontario and from the Campbell orebody, Bisbee, Arizona. *Can. Mineral.*, 22, 227–232. (2) (1985) *Amer. Mineral.*, 70, 437 (abs. ref. 1).