

Crystal Data: Tetragonal. *Point Group:* $4/m\ 2/m\ 2/m$, $4mm$, or $\bar{4}2m$. As anhedral equidimensional grains, up to about 200 μm in diameter.

Physical Properties: *Fracture:* Subconchoidal. *Tenacity:* Brittle. Hardness = [3.5–4] VHN = 150–173, 163 average (100 g load). D(meas.) = n.d. D(calc.) = 7.144

Optical Properties: Opaque. *Color:* Gray. *Streak:* Black. *Luster:* Metallic. *Pleochroism:* Slight, pale gray to pale brownish gray. *Anisotropism:* Distinct, medium gray to slate-gray to brownish gray.

R_1 – R_2 : (400) 23.6–28.4, (420) 25.6–30.1, (440) 27.4–31.4, (460) 28.9–32.5, (480) 30.1–33.1, (500) 31.0–33.6, (520) 31.6–33.7, (540) 32.1–33.8, (560) 32.5–33.7, (580) 32.8–33.6, (600) 33.0–33.4, (620) 33.1–33.2, (640) 33.3–33.0, (660) 33.4–32.7, (680) 33.5–32.6, (700) 33.6–32.3

Cell Data: *Space Group:* $P4_2/mmc$, $P4_2mc$, or $P\bar{4}2c$. $a = 12.695(2)$ $c = 42.186(6)$
Z = 16

X-ray Powder Pattern: Good Hope mine, Colorado, USA.
3.45 (100), 2.118 (100), 1.804 (60), 1.377(40), 1.222 (40), 1.815 (30), 1.151 (30)

Chemistry:	(1)	(2)	(3)
Ag	6.34	6.3	5.89
Cu	24.44	24.1	24.33
Te	69.10	69.6	69.78
Total	99.88	100.0	100.00

(1) Good Hope mine, Colorado, USA; by electron microprobe, average of two analyses; corresponding to Ag_{1.09}Cu_{7.10}Te_{10.00}. (2) Do.; by electron microprobe, corresponding to Ag_{1.07}Cu_{6.95}Te_{10.00}. (3) AgCu₇Te₁₀.

Occurrence: One of a number of metallic tellurium-bearing minerals in a hydrothermal deposit.

Association: Tellurium, rickardite, vulcanite, arsenopyrite, pyrite.

Distribution: From the Good Hope mine, Vulcan, Gunnison Co., Colorado, USA [TL].

Name: In honor of Professor Eugene Nathan Cameron (1910–), University of Wisconsin, who first recognized the mineral as a new species.

Type Material: Canadian Museum of Nature, Ottawa, Canada, 64956; The Natural History Museum, London, England, 1984,356, E.1000, R933; National Museum of Natural History, Washington, D.C., USA, 162713.

References: (1) Roberts, A.C., D.C. Harris, A.J. Criddle, and W.W. Pinch (1986) Cameronite, a new copper-silver telluride from the Good Hope mine, Vulcan, Colorado. *Can. Mineral.*, 24, 379–384. (2) (1987) *Amer. Mineral.*, 72, 1023 (abs. ref. 1). (3) Criddle, A.J. and C.J. Stanley, Eds. (1993) *Quantitative data file for ore minerals*, 3rd ed. Chapman & Hall, London, 70.