

Crystal Data: Cubic. *Point Group:* $4/m\bar{3}2/m$. As euhedral to subhedral grains to 5 x 14 μm growing on tetrataenite into kamacite.

Physical Properties: *Cleavage:* n.d. *Tenacity:* n.d. *Fracture:* n.d. Hardness = n.d.
D(meas.) = n.d. D(calc.) = 7.89

Optical Properties: Opaque. *Color:* Silver with an orange tinge in reflected light. *Streak:* n.d.
Luster: Metallic.
Optical Class: Isotropic.

Cell Data: *Space Group:* $Pm\bar{3}m$. $a = 3.51(1)$ $Z = 1$

X-ray Powder Pattern: n.d.

Chemistry:	(1)	(2)
Ni	82.80	81.44
Fe	4.92	5.92
Cu		0.13
Si	13.08	13.01
Total	100.80	100.50

(1) Norton County aubrite meteorite; electron microprobe analysis; corresponding to $(\text{Ni}_{2.87}\text{Fe}_{0.18})_{\Sigma=3.05}\text{Si}_{0.95}$. (2) Do.; corresponding to $(\text{Ni}_{2.83}\text{Fe}_{0.22}\text{Cu}_{0.004})_{\Sigma=3.05}\text{Si}_{0.95}$.

Occurrence: Localized on plessite fields in aubrite metal nodules in a meteorite, probably formed by low-temperature epitaxial growth by solid-state diffusion from kamacite on tetrataenite.

Association: Low-Ni iron (kamacite), schreibersite, nickelporphide, perryite, aubr elite, tetrataenite, taenite, graphite.

Distribution: From the Norton County aubrite meteorite.

Name: Honors *Carleton B. Moore*, chemist and geologist, and founding director of the Center for Meteorite Studies, Arizona State University, USA for contributions to cosmochemistry and meteoritics.

Type Material: In the Carleton B. Moore Meteorite Collection, Center for Meteorite Studies, Arizona State University, Tempe, Arizona, USA (523_C6a).

References: (1) Garvie, L.A.J., C. Ma, S. Ray, K. Domanik, A. Wittmann, and M. Wadhwa (2021) Carletonmooreite, Ni₃Si, a new silicide from the Norton County aubrite meteorite. *Amer. Mineral.*, 106, 1828-1834.