Crystal Data: Cubic. *Point Group*: $\bar{4}\,3m$. As blocky grains to 100 μm in feather-like, zig-zag intergrowth with torryweiserite.

Physical Properties: *Cleavage*: None. *Tenacity*: Brittle. *Fracture*: n.d. Hardness = n.d.
D(meas.) = n.d. D(calc.) = 5.195

Optical Properties: Opaque. *Color*: In reflected light, creamy brown compared to coldwellite and bornite, white compared to torryweiserite, and gray compared to chalcopyrite and millerite.
Streak: n.d. *Luster*: Metallic.
Optical Class: No discernible pleochroism, bireflectance, or anisotropy.
R: (470) 36.2, (546) 39.1, (589) 40.5, (650) 42.3

Cell Data: *Space Group*: $F\bar{4}\,3m$. a = 10.066(5) Z = 1

X-Ray Diffraction Pattern: Marathon deposit, Coldwell alkaline complex, Ontario, Canada.
3.06 (100), 1.7921 (74), 1.9518 (39), 1.0312 (30), 2.929 (18), 1.3184 (15), 1.5453 (9)

Chemistry:

	(1)	(2)
Rh	10.22	9.61
Ni	36.83	58.46
Fe	16.54	
Co	4.12	
Cu	0.23	
S	32.36	31.93
Total	100.30	100.00

(1) Marathon deposit, Coldwell alkaline complex, Ontario, Canada; average EDS analysis; corresponding to $(Rh_2Ni_{0.67}Fe_{0.33})_{\Sigma=3.00}\,(Ni_{19.30}Fe_{9.09}Co_{2.22}Rh_{1.16}Cu_{0.12})_{\Sigma=31.89}S_{32.11}$. (2) $Rh_3Ni_{32}S_{32}$.

Occurrence: In a heavy-mineral concentrate from coarse-grained ophitic olivine gabbro.

Association: Vysotskite, Au-Ag alloy, isoferroplatinum, Ge-bearing keithconnite, majakite, coldwellite, cuprorhodsite-ferhodsite, kotulskite, mertieite-II, chalcopyrite, bornite, millerite, Rh-bearing pentlandite.

Distribution: From the W Horizon, Marathon Cu-PGE-Au deposit, Coldwell alkaline complex, Ontario, Canada.

Name: Honors Dr. Thomas *Oberthür* (b. 1949), for his work on alluvial platinum-group minerals, notably those found in deposits related to the Great Dyke (Zimbabwe) and the Bushveld complex (Republic of South Africa).

Type Material: Canadian Museum of Nature, Gatineau, Quebec, Canada (87251 and 87179).

References: (1) McDonald, A.M., I.M. Kjarsgaard, L.J. Cabri, K.C. Ross, D.E. Ames, L. Bindi, and D.J. Good (2021) Oberthürite, $Rh_3(Ni,Fe)_{32}S_{32}$ and torryweiserite, $Rh_5Ni_{10}S_{16}$, two new platinum-group minerals from the Marathon deposit, Coldwell Complex, Ontario, Canada: Descriptions, crystal-chemical considerations, and comments on the geochemistry of rhodium. Can. Mineral., 59, 1833-1863.