Oregonite $Ni_2FeAs_2(?)$

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Crystal Data: Hexagonal. *Point Group:* n.d. As fine-grained pebbles, having a smooth brown crust; polygonal grains, to 0.5 mm.

Physical Properties: Tenacity: Ductile. Hardness = 5 VHN = n.d. D(meas.) = n.d. D(calc.) = 6.92

Optical Properties: Opaque. Color: In polished section, white. Anisotropism: Weak. R: (400) 41.7, (420) 43.0, (440) 44.3, (460) 45.3, (480) 46.1, (500) 46.7, (520) 47.2, (540) 48.0, (560) 48.9, (580) 50.1, (600) 51.3, (620) 52.8, (640) 54.2, (660) 55.4, (680) 56.4, (700) 57.2

Cell Data: Space Group: n.d. a = 6.083 c = 7.130 Z = 3

X-ray Powder Pattern: Josephine Creek, Oregon, USA. 2.314 (vs), 2.120 (vs), 1.991 (s), 1.789 (s), 1.757 (s), 1.739 (s), 3.571 (m)

Chemistry: Composition established by X-ray fluorescence, analysis not given.

Occurrence: As water-rolled pebbles in clinochlore and serpentine (Oregon, USA).

Association: Copper, bornite, chalcopyrite, molybdenite, chromite (Oregon, USA); pyrrhotite, magnetite (Cyprus).

Distribution: From Josephine Creek, west of Kerby, Josephine Co., Oregon, USA [TL]. In the Alexo mine, near Timmins, Ontario, Canada. From near Skouriotissa, Cyprus. In the Ijim massif, west Sayan, Russia.

Name: For the state of Oregon, USA.

Type Material: n.d.

References: (1) Ramdohr, P. and M. Schmitt (1959) Oregonit, ein neues Nickel-Eisenarsenid mit metallartigen Eigenschaften. Neues Jahrb. Mineral., Monatsh., 239–247 (in German). (2) (1960) Amer. Mineral., 45, 1130 (abs. ref. 1). (3) Ramdohr, P. (1969) The ore minerals and their intergrowths, (3rd edition), 399.