

Crystal Data: Monoclinic, pseudo-hexagonal. *Point Group:* 2 or 2/m. As fibers elongated || [010], up to 2 cm long, or as prisms.

Physical Properties: *Cleavage:* {100}, {010}, {10 $\bar{1}$ }, perfect. *Tenacity:* Flexible. Hardness = ~1.5 VHN = n.d. D(meas.) = 3.96 D(calc.) = 4.06

Optical Properties: Translucent. *Color:* Golden to lemon-yellow, with golden yellow internal reflections. *Streak:* Orange-yellow. *Luster:* Silky (for fibrous aggregates) to resinous. *Anisotropism:* Weak. *Pleochroism:* Strong.

R: (400) 28.4, (420) 27.8, (440) 27.2, (460) 26.0, (480) 24.5, (500) 23.3, (520) 22.5, (540) 22.0, (560) 21.8, (580) 21.6, (600) 21.6, (620) 21.5, (640) 21.4, (660) 21.3, (680) 21.2, (700) 21.2

Cell Data: *Space Group:* P2₁ or P2₁/m; P6₃/mmc (pseudocell). a = 29.128 b = 6.480 c = 29.128 β = 120.0° Z = [8]

X-ray Powder Pattern: White Caps mine, Nevada, USA. 6.28 (100), 3.488 (80), 4.78 (70), 3.239 (40), 3.078 (40), 2.423 (40), 1.590 (40)

Chemistry:	(1)	(2)	
	As	52.3	54.5
	Sb	8.3	5.7
	S	39.0	39.5
	Total	99.6	99.7

(1-2) White Caps mine, Nevada, USA; by electron microprobe.

Occurrence: As fibers in druses of quartz or embedded in calcite.

Association: Realgar, orpiment, stibnite, pyrite (Nishinomaki mine, Japan); realgar, orpiment, calcite (White Caps mine, Nevada, USA); chabournéite, pierrotite, parapierrrotite, stibnite, pyrite, sphalerite, twinnite, zinkenite, madocite, andorite, smithite, laffittite, routhierite, aktashite, realgar, orpiment (Jas Roux, France).

Distribution: In the Nishinomaki mine, Gumma Prefecture, Japan. From the White Caps and Black Mammoth mines, Manhattan district, Nye Co., and in the Getchell mine, Potosi district, Humboldt Co., Nevada, USA. At the Jas Roux deposit, 10 km east of Chapelle-en-Valgaudemar, Hautes-Alpes, France. In the Gal-Khaya deposit, Sakha, and from the Lukhumi arsenic deposit, central Caucasus Mountains, Russia. At Khaydarkan, Fergana Valley, Alai Range, Kyrgyzstan. From the Shuiluo arsenic deposit, Zhuang district, Guangxi Autonomous Region, China.

Name: For Yaichiro Wakabayashi (1874–1943), mineralogist for the Mitsubishi Mining Company, Japan.

Type Material: National Science Museum, Tokyo, Japan, MA5635; National Museum of Natural History, Washington, D.C., USA, C252, 98012, 94600.

References: (1) Kato, A., K.I. Sakurai, and K. Ohsumi (1970) An introduction to Japanese minerals, In: Geol. Survey Japan, 1970, 92–93. (2) (1972) Amer. Mineral., 57, 1311 (abs. ref. 1). (3) Scott, J.D. and W. Nowacki (1975) New data on wakabayashilite. Can. Mineral., 13, 418–419.