**Wittite**

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**Crystal Data:** Monoclinic. **Point Group:** 2/m. Massive, striations parallel [010].

**Physical Properties:** Cleaveage: Good, giving platy appearance. Hardness = 2–2.5 VHN = 45–63 (25 g load). D(meas.) = 7.12 D(calc.) = [6.91]

**Optical Properties:** Opaque. **Color:** Lead-gray; cream-white in reflected light. **Streak:** Black. **Luster:** Metallic.

R₁–R₂: (400) 43.2–45.3, (420) 42.8–44.9, (440) 42.4–44.5, (460) 41.9–44.2, (480) 41.5–43.8, (500) 41.1–43.3, (520) 40.5–42.8, (540) 40.0–42.3, (560) 39.9–41.8, (580) 38.9–41.3, (600) 38.4–40.9, (620) 38.0–40.6, (640) 37.7–40.4, (660) 37.4–40.2, (680) 37.3–39.8, (700) 37.2–39.7

**Cell Data:** **Space Group:** P2₁/m subcell: a = 4.19(1) b = 4.08(1) c = 15.56(4) β = 101.35(16)° Z = [1] **Space Group:** C2/m subcell: a = 7.21(2) b = 4.08(1) c = 15.50(5) β = 98.75(15)° Z = [1]

**X-ray Powder Pattern:** Falun, Sweden.

3.004 (s), 2.887 (sb), 2.041 (s), 3.434 (ms), 3.848 (m), 3.607 (m), 3.529 (m)

**Chemistry:**

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Total 100.2 99.5

(1) Falun, Sweden; average of two analyses. (2) Do.; by electron microprobe.

**Occurrence:** In an amphibolite rock (Falun, Sweden); in garnet tactite (Middlemarch Canyon, Arizona, USA).

**Association:** Nordströmite, friedrichite, magnetite, pyrite, cordierite, quartz (Falun, Sweden).

**Distribution:** From Falun, Kopparberg, Sweden. Found in the Gottesehre mine, near Urberg, Black Forest, Germany. At Middlemarch Canyon, Cochise Co., Arizona, USA.

**Name:** For T. Witt, Swedish mining engineer.

**Type Material:** Swedish Museum of Natural History, Stockholm, Sweden; Royal Ontario Museum, Toronto, Canada, M12992; National School of Mines, Paris, France.