$\bigodot 2001\mathchar`-2005$  Mineral Data Publishing, version 1

**Crystal Data:** Monoclinic. Point Group: 2 or 2/m. As bladed crystals, to 100  $\mu$ m, with {001}, {101}, {100}, {011}, and {110}; as parallel platy and radiating groups. Twinning: On {001}.

**Physical Properties:** Cleavage:  $\{100\}$ , perfect. Hardness =  $\sim 1$  D(meas.) = n.d. D(calc.) = [6.23]

**Optical Properties:** Semitransparent. *Color:* Yellow-orange; yellow with a slight greenish tint in thin section.

Optical Class: Biaxial (-). Orientation: Z = b;  $X \simeq (100)$ ;  $Y \simeq \bot (001)$ .  $\alpha = 1.89(1) (\alpha')$  $\beta = 1.95(1) (\beta') \quad \gamma = 2.02(1) \quad 2V(\text{meas.}) = \text{n.d.}$ 

**Cell Data:** Space Group:  $P2_1$  or  $P2_1/m$ . a = 5.874(5) b = 8.700(5) c = 7.070(5) $\beta = 105^{\circ}27(5)'$  Z = 2

## X-ray Powder Pattern: Uganda.

3.405 (100), 2.273 (52), 6.83 (36), 1.767 (21), 3.337 (18), 2.627 (17), 3.117 (14)

## Chemistry:

	(1)	(2)
$WO_3$	70.68	70.81
$Al_2O_3$	0.05	
$Ce_2O_3$		25.06
$RE_2O_3$	24.12	
$Fe_2O_3$	0.15	
CaO	0.17	
$H_2O^+$	4.80	4.13
Total	99.97	100.00

(1) Nyamulilo mine, Uganda; RE = La 5.5%, Ce 41.8%, Pr 6.0%, Nd 24.8%, Sm 6.8%, Eu 1.1%, Gd 3.4%, Tb 0.3%, Dy 1.6%, Ho 0.2%, Er 0.3%, Tm 0.07%, Yb 0.3%, Lu 0.07%, Y 7.7%; corresponds to  $(RE_{0.94}Ca_{0.02})_{\Sigma=0.96}(W_{1.94}Fe_{0.01})_{\Sigma=1.95}[O_{5.60}(OH)_{3.40}]_{\Sigma=9.00}$ . (2) CeW<sub>2</sub>O<sub>6</sub>(OH)<sub>3</sub>.

Occurrence: In oxidized tungsten deposits.

Association: Ferberite.

Distribution: In the Kirwa and Nyamulilo mines, Kigezi district, southwestern Uganda.

Name: For CERium and TUNGSten in the composition.

Type Material: University of Helsinki, Helsinki, Finland.

**References:** (1) Sahama, T.G., O. von Knorring, and M. Lehtinen (1970) Cerotungstite, a cerian analogue to yttrotungstite, from Uganda. Bull. Geol. Soc. Finland, 42, 223–228. (2) (1972) Amer. Mineral., 57, 1558–1559 (abs. ref. 1). (3) Sahama, T.G. (1981) The secondary tungsten minerals, a review. Mineral. Record, 12, 81–87.