Crystal Data: Triclinic. *Point Group:* $\bar{1}$ or 1. Compact, with a felted lamellar to microscopically spherulitic texture.

Physical Properties: Hardness = n.d. D(meas.) = 1.92 D(calc.) = 1.95

Optical Properties: Translucent. *Color:* White. *Luster:* Dull.
Optical Class: Biaxial. $n = 1.484$; birefringence 0.002.

Cell Data: *Space Group:* $P\bar{1}$ or $P1$. $a = 18.126(25)$ $b = 13.519(225)$ $c = 7.500(13)$ $\alpha = 70°30(7)'$ $\beta = 117°52(7)'$ $\gamma = 136°35(7)'$ Z = 2

X-ray Powder Pattern: Kristineberg mine, Sweden.
11.57 (100), 5.02 (23), 6.62 (20), 2.863 (14), 5.37 (12), 5.72 (8), 2.930 (5)

Chemistry:

	(1)	(2)
SO_3	13.05	12.20
P_2O_5	31.27	32.46
Al_2O_3	38.45	38.86
MgO	0.02	
H_2O	17.22	16.48
Total	100.01	100.00

(1) Kristineberg mine, Sweden. (2) $Al_5(PO_4)_3(SO_4)(OH)_4 \cdot 4H_2O$.

Occurrence: Filling fractures in cupriferous pyrite.

Association: Pyrite.

Distribution: From the Kristineberg mine, Västerbotten, Sweden.

Name: A contraction of the type locality, the KRIstineBERG mine, Sweden.

Type Material: Museum of Natural History, Stockholm, Sweden, RM450003.

References: (1) Palache, C., H. Berman, and C. Frondel (1951) Dana's system of mineralogy, (7th edition), v. II, 1011. (2) de Abeledo, M.E.J., V. Angelelli, M.A.R. de Benyacar, and C. Gordillo (1968) Sanjuanite, a new hydrated basic sulfate-phosphate of aluminum. Amer. Mineral., 53, 1–8. (3) de Bruiyn, H., G.J. Beukes, W.A. van der Westhuizen, and E.A.W. Tordiffe (1989) Unit cell dimensions of the hydrated aluminium phosphate-sulphate minerals sanjuanite, kribergite, and hotsonite. Mineral. Mag., 53, 385–386.