

Crystal Data: Triclinic. *Point Group:* $\bar{1}$. As bladed crystals, elongated along [010], to 6 mm, or as fibrous aggregates.

Physical Properties: *Cleavage:* Distinct on {001}. *Hardness =* n.d. *D(meas.) =* 2.32-2.33 *D(calc.) =* 2.325

Optical Properties: Transparent to translucent. *Color:* White; colorless in thin section. *Luster:* Vitreous.

Optical Class: Biaxial (-). *Orientation:* $X \perp \{001\}$ cleavage; $Y \wedge b = 35^\circ-40^\circ$.
 $\alpha = 1.548-1.552$ $\beta = 1.562-1.564$ $\gamma = 1.570-1.571$ $2V(\text{meas.}) = 74^\circ$

Cell Data: *Space Group:* $P\bar{1}$. $a = 10.576(2)$ $b = 7.265(2)$ $c = 10.931(3)$ $\alpha = 101.30(1)^\circ$
 $\beta = 96.98(1)^\circ$ $\gamma = 109.65(1)^\circ$ $Z = 1$

X-ray Powder Pattern: Crestmore, California, USA.
 10.5 (vvs), 2.92 (vs), 3.04 (s), 2.83 (s), 2.66 (s), 6.46 (ms), 3.47 (ms)

Chemistry:	(1)		(2)	
	SiO ₂	34.2	33.20	Na ₂ O
TiO ₂		0.02	K ₂ O	0.01
Al ₂ O ₃		0.09	H ₂ O ⁺	18.53
FeO		0.01	H ₂ O ⁻	1.69
MnO		0.02	H ₂ O	19.2
MgO		0.03	<u>P₂O₅</u>	<u>0.04</u>
CaO	46.6	46.85	Total	100.0 100.49

(1) Crestmore, California, USA; by electron microprobe; H₂O by TGA; corresponds to Ca_{8.76}H_{2.00}Si_{6.00}O_{17.6}(OH)_{8.00}·6.24H₂O. (2) Fuka, Japan; by electron microprobe, H₂O by gravimetry; corresponds to Ca_{9.00}H_{2.00}(Si_{5.95}Al_{0.02})_{Σ=5.97}O_{17.93}(OH)_{8.00}·6.07H₂O. (3) Structure analysis and IR and Raman spectroscopy suggest the revised formula Ca₉Si₆O₁₈(OH)₆·8H₂O.

Occurrence: A late-stage mineral, partially filling open spaces and in veins in fractured contact metamorphic rocks.

Association: Tobermorite, scawtite, calcite (Crestmore, California, USA); afwillite, oyelite, spurrite (Fuka, Japan).

Distribution: From Crestmore, Riverside Co., California, USA. At Campomorto, Montalto di Castro, Lazio, Italy. In Germany, from the Bellerberg volcano, two km north of Mayen, Eifel district, and fine crystals from the Zeilberg, near Maroldsweisach, Bavaria. In the Hatrurim Formation, Israel. In the Wessels mine, near Kuruman, Cape Province, South Africa. In Japan, from Fuka, near Bicchu, Okayama Prefecture.

Name: For Colonel Clarence M. Jenni (1896-1974?), Director of the Geological Museum, University of Missouri, Rollo, Missouri, USA, the mineral's discoverer.

Type Material: National Museum of Natural History, Washington, D.C., USA, 119007.

References: (1) Carpenter, A.B., R.A. Chalmers, J.A. Gard, K. Speakman, and H.F.W. Taylor (1966) Jennite, a new mineral. *Amer. Mineral.*, 51, 56-74. (2) Gard, J.A., H.F.W. Taylor, G. Cliff, and G.W. Lorimer (1977) A reexamination of jennite. *Amer. Mineral.*, 62, 365-368. (3) Kusachi, I., C. Henmi, and K. Henmi (1989) Afwillite and jennite from Fuka, Okayama Province, Japan. *Mineral. J. (Japan)*, 14, 279-292. (4) Bonaccorsi, E., S. Merlino, and H.F.W. Taylor (2004) The crystal structure of jennite, Ca₉Si₆O₁₈(OH)₆·8H₂O. *Cement Concrete Res.* 34, 1481-1488. (5) (2005) *Amer. Mineral.*, 90, 772 (abs. ref. 4).