

Crystal Data: Triclinic. *Point Group:* $\bar{1}$. Crystals display {001}, {010}, {011}, {10 $\bar{1}$ }, {1 $\bar{1}$ 0} and {101}. Typically, as blades, flattened on {001} and elongated along [100], to 2 mm.

Physical Properties: *Cleavage:* Perfect on {001}. *Tenacity:* Brittle. *Fracture:* Irregular. Hardness = 1.5 D(meas.) = 2.38(2) D(calc.) = 2.324 Slowly soluble in water.

Optical Properties: Transparent. *Color:* Dark yellow-green. *Streak:* Pistachio-green. *Luster:* Vitreous.

Optical Class: Biaxial (-). $\alpha = 1.730(5)$ $\beta = 1.780(5)$ $\gamma = 1.790(5)$ $2V(\text{meas.}) = 54.1(6)^\circ$ $2V(\text{calc.}) = 47.1^\circ$ *Pleochroism:* X = bluish green, Y = orange, Z = yellowish green.

Absorption: X > Z > Y. *Orientation:* X ^ a $\approx 10^\circ$, Z ^ c* $\approx 20^\circ$. Anomalous extinction colors. *Dispersion:* Extreme.

Cell Data: *Space Group:* $P\bar{1}$. $a = 10.0870(19)$ $b = 11.0708(2)$ $c = 21.8112(15)$ $\alpha = 94.112(7)^\circ$ $\beta = 96.053(7)^\circ$ $\gamma = 116.398(8)^\circ$ Z = 2

X-ray Powder Pattern: Packrat mine, near Gateway, Mesa County, Colorado, USA. 8.92 (100), 10.70 (31), 9.77 (28), 7.41 (22), 7.75 (20), 6.91 (20), 2.988 (14)

Chemistry:	(1)	(2)
Na ₂ O	0.62	
CaO	10.02	11.14
V ₂ O ₅	60.44	60.23
H ₂ O	[28.92]	28.63
Total	100.00	100.00

(1) Packrat mine, near Gateway, Mesa County, Colorado, USA; normalized average of 26 electron microprobe analyses, H₂O calculated from structure analysis; corresponds to (Ca_{2.69}Na_{0.30}) $\Sigma=2.99$ (H_{0.31}V⁵⁺₁₀O₂₈)·24H₂O. (2) Ca₃(V₁₀O₂₈)·24H₂O.

Occurrence: A secondary mineral in an oxidized roll-front uranium and vanadium deposit in sandstone.

Association: Asphaltum, montroseite, corvusite, pascoite, rossite/metarossite, sherwoodite.

Distribution: Found at the Packrat mine, near Gateway, Mesa County, Colorado, USA.

Name: Alludes to the compositional and structural similarity of the mineral to *pascoite*, Ca₃(V₁₀O₂₈)·17H₂O, and with a prefix for the fact that it has 41% more H₂O groups.

Type Material: Natural History Museum of Los Angeles County, Los Angeles, California, USA (66267).

References: (1) Kampf, A.R., B.P. Nash, J. Marty, J.M. Hughes, and T.P. Rose (2017) Hydropascoite, Ca₃(V₁₀O₂₈)·24H₂O, a new decavanadate mineral from the Packrat mine, Mesa County, Colorado. *Can. Mineral.*, 55(2), 207-217. (2) (2018) *Amer. Mineral.*, 103, 2528 (abs. ref. 1).