

Crystal Data: Monoclinic. *Point Group:* 2/m. Typically as crusts of rounded crystals; as blocky prismatic crystals, elongated on [010] and exhibiting {100}, {010}, {001}, $\{\bar{1}11\}$, and {111}, to 2 mm.

Physical Properties: *Cleavage:* None. *Tenacity:* Very brittle. Hardness = 1
D(meas.) = 2.38(2) D(calc.) = 2.362 Crystals dehydrate to a yellow powder. Soluble in water.

Optical Properties: Transparent. *Color:* Yellow to yellow-orange. *Streak:* Yellow.
Luster: Adamantine.

Optical Class: Biaxial (–). $\alpha = 1.743(5)$ $\beta = 1.773(5)$ $\gamma = 1.780(5)$ $2V(\text{meas.}) = 43(1)^\circ$
Dispersion: $r > v$, strong. *Pleochroism:* X = light greenish yellow; Y = light yellow; Z = light brown.

Cell Data: *Space Group:* C2/c. $a = 23.9019(7)$ $b = 10.9993(3)$ $c = 17.0504(5)$
 $\beta = 118.284(1)^\circ$ $Z = 2$

X-ray Powder Pattern: Vanadium Queen Mine, Utah.

9.72 (100), 6.67 (80), 7.42 (70), 9.09 (60), 8.19 (60), 2.882 (50), 2.706 (50)

Chemistry:	(1)
Na ₂ O	4.06
MgO	5.42
CaO	1.75
K ₂ O	0.47
V ₂ O ₅	61.87
SO ₃	2.55
H ₂ O	23.88
Total	100.00

(1) Vanadium Queen Mine, Utah; average of 2 argon-plasma spectrometric analyses, H₂O by difference, corresponding to (Na_{1.84}Ca_{0.44}K_{0.14}) $\Sigma=2.42$ Mg_{1.89}(V_{9.55}S_{0.45}) $\Sigma=10.00$ O_{28.55}·18.61H₂O.

Occurrence: As efflorescences in oxidized portions of paleochannel uranium vanadium deposits of the Colorado Plateau type.

Association: Rossite, dickthomssenite, hewettite.

Distribution: Vanadium Queen Mine, La Sal district, and Firefly-Pigmy and Blue Cap mines, Utah, USA. Likely widespread in other similar deposits on the Colorado Plateau, e.g. Yellow Cat district, Grand County, Utah, USA.

Name: For the mining district that provided the first specimens.

Type Material: National Museum of Natural History, Washington, D.C., USA (174744).

References: (1) Hughes, J.M., W.S. Wise, M.E. Gunter, J.P. Morton, and J. Rakovan (2008) Lasalite, Na₂Mg₂[V₁₀O₂₈]·20H₂O, a new decavanadate mineral species from the Vanadium Queen mine, La Sal District, Utah: description, atomic arrangement, and relationship to the pascoite group of minerals. *Can. Mineral.*, 46, 1365–1372; (2009) Addendum. *Can Mineral.*, 47, 206. (2) (2009) *Amer. Mineral.*, 94, 1078–1079 (abs. ref. 1).