Erikjonssonite $(Pb_{32}O_{21})[(V, Si, Mo, As)O_4]_4Cl_9$

Crystal Data: Monoclinic. *Point Group*: 2/*m*. As tabular grains to 0.5 mm, flattened on (010).

Physical Properties: *Cleavage*: Distinct on {010}. *Tenacity*: Brittle. *Fracture*: Uneven.
Hardness = ~2.5 VHN = 69.5-89.3, 79.8 average (20 g load). D(meas.) = n.d. D(calc.) = 7.967

Optical Properties: Translucent. *Color*: Orange-red; pale gray, with deep red to brown-red internal reflections in reflected light. *Streak*: n.d. *Luster*: n.d.
Optical Class: Weakly anisotropic.
R_1-R_2: (470) 18.9-20.4, (546) 17.6-19.0, (589) 17.1-18.5, (650) 16.6-18.0

Cell Data: *Space Group: C*2/*c*. a = 23.200(5) b = 22.708(5) c = 12.418(3) β = 102.167(4)° Z = 4

X-Ray Diffraction Pattern: Kombat mine, Grootfontein district, Otjozondjupa region, Namibia.
2.980 (100), 2.794 (45), 1.648 (33), 3.501 (24), 1.990 (24), 1.977 (21), 1.762 (20)

Chemistry:

	(1)
SiO_2	0.86
V_2O_5	1.73
As_2O_5	0.96
MoO_3	1.70
PbO	92.54
Cl	4.15
–O = Cl	0.94
Total	101.00

(1) Kombat mine, Grootfontein district, Otjozondjupa region, Namibia; average electron microprobe and IR spectroscopic analyses; corresponds to $Pb_{31.50}(V^{5+}_{1.45}Si_{1.09}Mo^{6+}_{0.90}As^{5+}_{0.63})_{\Sigma=4.07}Cl_{8.89}O_{37.11}$.

Occurrence: In late-stage, zoned veins crosscutting primary hausmannite ores.

Association: Hausmannite, calcite, glaucochroite, baryte, cerussite.

Distribution: At the Kombat mine, Grootfontein district, Otjozondjupa region, Namibia.

Name: Honors Swedish mineralogist *Erik Jonsson* (b. 1967), Senior Geologist, Geological Survey of Sweden, Department of Mineral Resources, and Adjunct Professor, Department of Earth Sciences, Uppsala University. Erik Jonsson has done extensive field work in both the Fennoscandian shield and Africa (including the Kombat mine).

Type Material: A.E. Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia (5226/1).

References: (1) Chukanov, N.V., O.I. Siidra, Y.S. Polekhovsky, I.V. Pekov, D.A. Varlamov, V.N. Ermolaeva, and A.A. Virus (2019) Erikjonssonite, $(Pb_{32}O_{21})[(V,Si,Mo,As)O_4]_4Cl_9$, a new mineral from the Kombat mine and structural classification of layered lead oxychlorides related to litharge. Eur. J. Mineral., 31, 619-628.