Mereheadite $Pb_2OCl(OH)$

Crystal Data: n.d. *Point Group:* n.d. As dense, fine-grained aggregates.

Physical Properties: Hardness = n.d. D(meas.) = 4.90 D(calc.) = n.d.

Optical Properties: Semitransparent. *Color:* Orange.
Optical Class: Biaxial (+). $\alpha = 1.897$ $\beta = 1.911$ $\gamma = 1.932$ 2V(meas.) = 81°

Cell Data: *Space Group:* n.d. Z = n.d.

X-ray Powder Pattern: Oktyabr deposit, Russia.
3.089 (9), 1.676 (6), 1.283 (6), 3.425 (5), 1.986 (4), 1.944 (4), 1.915 (3)

Chemistry:

	(1)		(1)
UO_3	76.91	CaO	4.86
As_2O_5	0.48	BaO	4.84
SiO_2	1.0	Na_2O	2.47
ZrO_2	0.45	H_2O^+	3.78
Al_2O_3	0.25	H_2O^-	0.01
Fe_2O_3	0.44	CO_2	1.80
PbO	2.29	Total	99.58

(1) Oktyabr deposit, Russia; corresponds to $(Ca_{0.37}Na_{0.31}Ba_{0.24}Pb_{0.08})_{\Sigma=1.00}O \cdot 2.1UO_3 \cdot 1.7H_2O$.

Occurrence: In the oxidation zone of a U–Mo deposit, replacing "pitchblende", and being replaced by uranophane.

Association: Uraninite, uranophane, bauranoite, calciouranoite, protasite.

Distribution: From the Oktyabr U–Mo deposit, 12 km southeast of Krasnokamensk, Strel'tsovskoye district, eastern Transbaikal, Russia.

Name: As a lower hydrate of *calciouranoite*.

Type Material: A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia, 76549, 76550.

References: (1) Rogova, V.P., L.N. Belova, G.N. Kiziyarov, and N.N. Kuznetsova (1973) Bauranoite and metacaltsuranoite [metacalciouranoite] – new minerals of the group of hydrous uranium oxides. Zap. Vses. Mineral. Obshch., 102, 75–81 (in Russian). (2) (1973) Amer. Mineral., 58, 1111 (abs. ref. 1).