ADDITIONAL PHYSICAL, OPTICAL AND X-RAY DATA FOR PEKOITE

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The following data for pekoite (Mumme & Watts 1976) are supplied by the authors at the request of Drs. J. A. Mandarino and L. J. Cabri (priv. comm.).

The color and streak of pekoite are lead-grey, lustre metallic, and in hand specimen the mineral is indistinguishable from bismuthinite. Cleavage, {010}, is good. Calculated density is 6.8 g/cm^3. In reflected light, pekoite is white to cream; bireflectance is not apparent and is therefore much weaker than that of coexisting junoite. Polarizing colors are light tan to grey. Se-rich pekoite (up to 7 wt. %) has been found associated with junoite as crystals up to 1-2 mm; the Se-poor variety has been observed as the host of exsolved gladite (Large & Mumme 1975; Harris & Chen 1976). Guinier X-ray powder data obtained from crystals of Se-rich pekoite from sample R27788 are given in Table 1.

The molecular proportions for the crystal of pekoite from sample R27788 given in Table 2 of Mumme & Watts (1976) are unfortunately in error. Based on (S+Se)=18, the proportion should be: Pb 0.82, Bi 11.74, Cu 0.68, S 14.87, Se 3.13. An analysis of Se-rich pekoite from sample R27788 is given in Table 8 of Large & Mumme (1975).

TABLE 1. X-RAY POWDER DATA FOR SELENIAN PEKOITE*

hkl	*I*	d_{obs}(Å)	d_{calc}(Å)	*hkl*	*I*	d_{obs}(Å)	d_{calc}(Å)
200	1	5.727	5.734	261	4	3.025	3.025
060	1	5.618	5.618	460	2	2.554	2.553
230	1	5.110	5.104	361	1	2.485	2.482
260	1½	4.012	4.012	401	2	2.333	2.332
031	1	3.779	3.779	431	1	2.284	2.284
330	3	3.622	3.619	1,12,1	1	2.258	2.256
131	2	3.593	3.590	2,12,1	2	2.137	2.136
190	2½	3.564	3.562	2,15,0	½	2.092	2.092
201	1	3.288	3.288	4,12,0	1	2.005	2.006
360	½	3.155	3.160	3,12,1	3	1.971	1.971
161	10	3.140	3.140	3,15,0	1	1.938	1.937
				1,18,0	½	1.849	1.849

*From sample R27788. a = 11.472 Å, b = 3 x 11.248, c = 4.016 Guinier camera with CuKα. Film internally calibrated with KCl, a = 6.2929 Å.

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