

INTERPRETED PIMA-II SWR MINERALOGY

PLATE No. 2379.1

Cadia Ridgeway deposit Au-Cu 1

porphyry

Australasian & Pacific Porphyries

Sample	Mineral1	Mineral2	Mineral3	Mineral4	Possible Mineral1	Possible Mineral2	Dominant Illite/muscovite composition
001r	noise						
002r	noise						
003r1	prehnite				+/-illite		
003r2	prehnite				+/-illite		
004r1	epidote				+/-carbonate		
004r2	epidote	carbonate					
005r	epidote	carbonate					
006r	epidote				+/-carbonate		
007r	noise						
008r	noise						
009r	noise	water					
010r	noise						
011r	noise						
012r	noise						
014r	noise						
015r	noise	water					
016r	noise						
017r	carbonate	chlorite?					
018r	noise						
019r	noise						
020r	carbonate?						

Samples on Lithothèque plates number left to right, commencing at top left. Samples are numbered 001-020. The letter after the number refers to the type of measurement made: r = representative; v = vein; vs = vein selvage; m = matrix; c = clast; l = layer; p = phenocryst (if large). Not all plates contain 20 samples; not all samples have been measured; some samples have multiple measurements. THIS PAGE IS DESIGNED TO BE PRINTED.

Summary of Cadia Lithothèque Plates 2377, 2378, 2379, 2380 and 2381

Phengite is common in the Cadia ore bodies, particularly at Cadia Hill and at East Cadia. However, the sericite composition is variable and a number of different phases are evident in the spectra suggesting a complex overprinting history of sericite alteration in the area. Many of the Cadia Hill samples, for example, clearly contain more than one sericite phase (a phengite and a muscovite). It is possible that there may be a particular phase associated with mineralisation, but this is not clear from the available samples. It is also likely that sample lithology also has an influence.

The crystallinities of the illitic sericite also appear to vary significantly in the samples, which may also be a function of position in the alteration system.

The chlorite compositions appear to vary, although not enough samples have good spectra to be able to evaluate this variation in detail.

Note that late stage laumontite does not display any diagnostic features apart from very strong water absorptions. Late stage alterations at Cadia include prehnite as well as the logged epidote, carbonate and laumontite.

The summary is based on a relatively small number of samples which are not spatially attributed. Observations are indicative rather than definitive of the spectral and mineralogical characteristics of this deposit.

Interpretation by Dr Sasha Pontual of AusSpec International: <http://members.ozemail.com.au/~pima/>