

tuffs, with carbonaceous shales and minor quartz arkosic lithicwackes, are well exposed in Wilbur Creek and may be traced from the Ring River to north of line 2400N. The tuffs vary in composition and grain size. The lowermost tuff exposed in the Ring River is very coarse grained with lithics of chert, shale, quartzite and rhyolite in a carbonaceous matrix. However, along strike in Wilbur Creek, it is a massively bedded crystal lithic tuff. A lensoid lithic tuff unit, exposed at 635m in Wilbur Creek, shows penecontemporaneous weathering in the upper plane and has carbonaceous shales overlying it with load casts developed. The uppermost tuff taken to be the top of this lithological group is a flow textured rhyolitic ignimbrite (5) which forms a fairly consistent mappable unit.

- (iii) 200m - 250m: A complex interlayered sequence of carbonaceous shales and siltstones, with a characteristic banded appearance, flaggy micaceous quartz sandstones and siltstones comprise this lithological group. There is also some development of coarse quartz-lithicwackes and arkosic conglomerates. The rocks are well exposed in the Ring River where they are folded in a series of Z and M folds in an anticlinal axial zone. In Wilbur Creek and northwards, coarser units are more common. This rock sequence is of possible economic interest since it hosts the Bonnie Dundee and Fahlore Mines on the Ring River and has Crone EM and self potential anomalies associated with it on the GAP grid lines.
- (iv) 60m - 90m: A sequence of grey silicified shales, pyritic black shales, quartz crystal tuffs and quartz sandstones may be traced from the Ring River as far north as line 1400N. The rocks coarsen upwards from black shale at the base to predominately quartz lithic sandstone at the top.

Arkose-Conglomerate Sequence

The overlying arenaceous sequence lies conformably on the Black Shale Tuff Sequence. It was mapped at the far eastern end of grid lines 1000N to 1800N and in the Ring River, where it crops out in a synclinal axial zone. The sequence is comprised of grey quartzose arkose, coarse pebbly arkosic lithicwacke and poorly sorted conglomerate