

3. GEOLOGICAL SETTING

The rocks of the prospect area consist of crystalline basement assigned to Early Proterozoic? Division Two rocks of the Arunta Block near the northeastern margin of the Late Proterozoic to Late Palaeozoic, Amadeus Basin (Alice Springs 1:250 000 Geological Sheet SF 53-14). On a more local scale the prospect is located in the central part of the Ankala Block adjacent to the Bald Hill Fault (Figure 2). Gneiss, schist, amphibolite, marble and calc-silicates of the Sliding Rock metamorphics are the principal rock types. The metamorphic grade is as high as the almandine-amphibolite facies. Small pegmatite and microdiorite intrusions are common but no large igneous intrusions are present. A retrograde schist zone, possibly related to similar more widespread zones to the north, transects the Prospect.

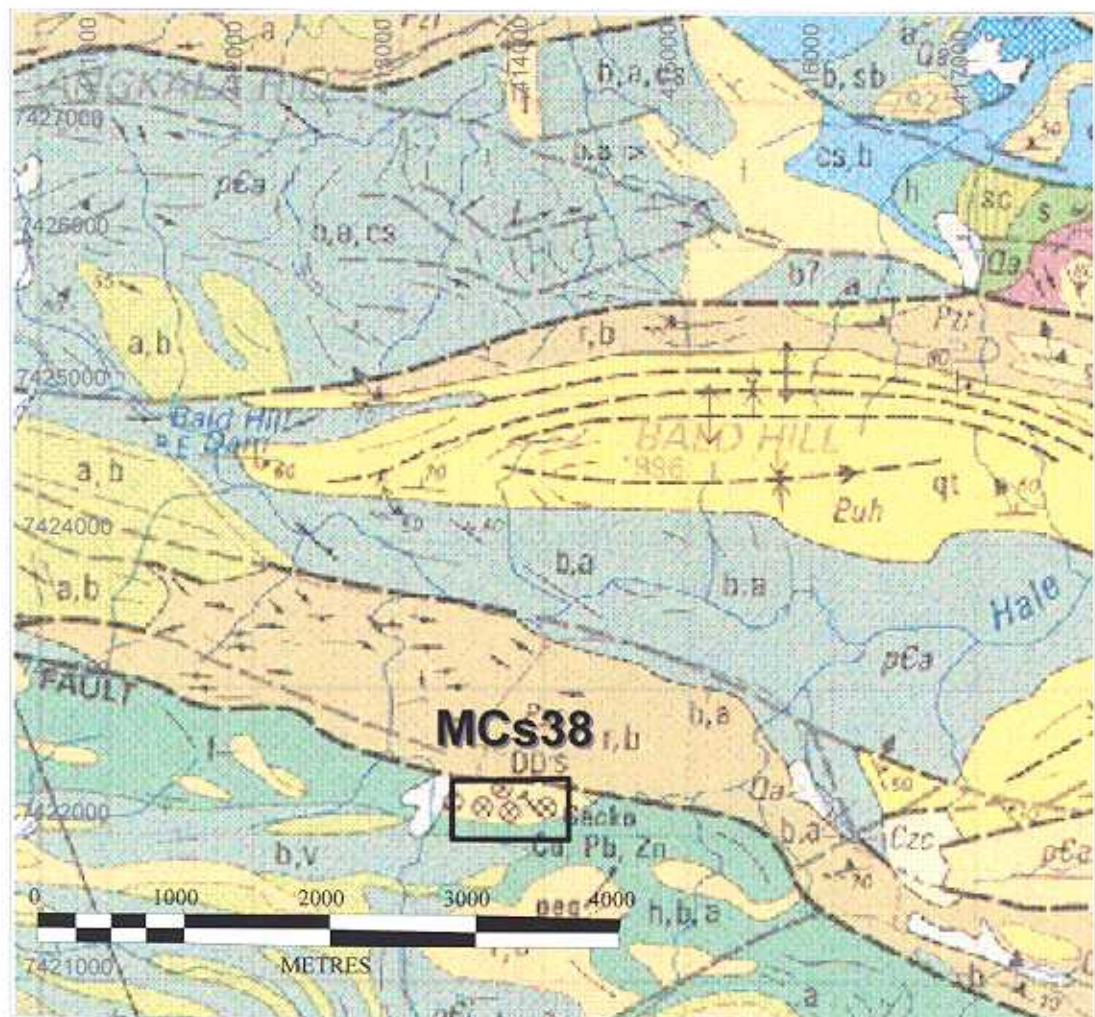


Figure 2: Gheko Prospect – Regional Geological Setting (background geology from the 1:100 000 Geology of the Strangways Region, 1984)

Further to the north the two lowermost formations of the Amadeus Basin, the Late Proterozoic Heavitree Quartzite and the Bitter Springs Formation, are in-folded into the Arunta Block to form the Arltunga Nappe Complex.