of the weathered surface. Such rocks have a greenish-grey colour. They pass transitionally eastwards into pink to brown, hornfelsic lavas with or without chlorite. Zones of intensity of chloritisation have been mapped according to the following scale.

0 - no chlorite
1 - chloritic spots
2 - chlorite becoming pervasive; rock colour greenish
3 - intense chloritisation; rock chlorite-green

The largest chloritic zone is centred on the Eastern Sequence unconformity south of Jukes Pty. No. 1 adit. Another occurs west of the quartz porphyry around the King Jukes workings. The quartz porphyry itself is intensely chloritised at King Jukes. To the north east, green minerals occur sparsely. Thin sections have shown some of this to be tourmaline, but chlorite is also present.

The Central Sequence lavas commonly show a purplish (hematitic) tint near the Owen Conglomerate unconformity. This is the product of Devonian metamorphism of geothite formed during Cambrian weathing at the unconformity.

5. Mineralisation

Three styles are recognised:

(i) Magnetite and pyrite veins with associated tourmaline and rare barite veins cut the Central Sequence lavas (pink to brown hornfelsic zone) in the north-eastern part of the grid and around the quartz porphyry sheet. Where the quartz porphyry ends near line 400N, magnetite veins continue along the band of the sheet into the lavas to the south. The magnetite veining is particularly dense between 500N and 700N, east of 1200E. There, veins and irregular bodies up to 1m or more across are present.

The Jukes Comstock, King Jukes, North Mt. Jukes and Jukes Consols adits have prospected chalcopyrite-bearing veins of this type. The King Jukes workings appear to have prospected disseminated sulphides in the quartz porphyry sheet.

(ii) Chalcopyrite and pyrite occur in sheared pods in the intensely chloritised basal quartz grit of the Eastern Sequence. The Jukes Pty. Nos. 1 and 3 adits worked this type of mineralisation. In addition, a fault-breccia (?) bearing malachite and minor native copper and azurite was intersected in the Jukes Pty. No. 3 adit.

(iii) A vein of manganiferous siderite rich in chalcopyrite and also associated with minor galena and sphalerite was intersected in the Jukes Pty. No. 2 adit.