

or the names used by Ruddock (1974), and may not correspond to the registered name. The similarity of these prospects was noted by Corbett:

"The Red Hills mineralisation consists mainly of disseminations and veinlets of chalcopyrite and pyrite, associated with hematite and magnetite, in chloritized zones in the pink rhyolite. Veins of hematite-magnetite are common and there are obvious similarities with the Mt Darwin mineralisation.

Near Lake Selina a zone of disseminated pyrite about one kilometre long occurs in felsic pyroclastics and lavas adjacent to the Owen Conglomerate contact. At Lake Dora a series of small prospects have explored disseminations and veinlets of pyrite and chalcopyrite, associated with hematite and magnetite, in a sequence of locally altered quartz-pyritic volcanics."

Further to the south between Mt. Lyell and South Darwin Peak there are numerous hematite and quartz-hematite-magnetite veins occurring along the Jukes-Darwin Range and also in the Darwin Granite (Corbett 1981).

The aeromagnetic data over this belt (Figures 3, 15 & 16, Plates 5 & 7), locates a magnetic high zone from Mt. Murchison to South Darwin Peak approximately 3 to 4 kilometres wide. Where granite outcrops there is a coincident or adjacent magnetic anomaly. This is best demonstrated at Mt. Murchison, east of Lake Selina and at South Darwin Peak. As noted previously the magnetic susceptibility samples taken by Collins et al (1981) showed that the Murchison Granite was extremely magnetic which would explain the magnetic activity in this area. There is no other magnetic data available over the Lake Selina area to identify the source of the anomalies however, the response is similar to the Mt. Murchison area and it can probably be assumed that these granitic outcrops are part of the same igneous body. In the South Darwin Peak area there is detail magnetic data on open file, Ruddock (1974). From these results the magnetic anomaly is actually located on the western contact of a relatively non-magnetic granite but with one section which is magnetic (Figure 16). An important point to note in this area is that the most intense magnetic anomaly terminates within one kilometre of the granite. The magnetic anomaly correlates with the chloritic alteration zones in the Central Sequence rhyolite.

The magnetic activity associated with the Eastern and Central Sequences of the Mt. Read Volcanics is related either directly or indirectly to granitic intrusions.

The aeromagnetic data over the Red Hills and Lake Selina areas (Figure 15), locates both deposits on large amplitude magnetic anomalies striking north. At Lake Selina the anomaly is directly over the small outcrops of granite magnetically related to the Mt. Murchison granite. There is no Tyndall Group rhyolite in this