

have a different magnetic signature. Over this zone the subdivision into Eastern, Central and Western Sequences can be partially recognised in the aeromagnetic data.

The area mapped as Eastern Sequence (Corbett 1981), (Figures 3 & 4) can be traced as a magnetic high zone with large amplitude anomalies often exceeding 3000nT over a 3 kilometres wide belt, (Plates 5 & 7). The magnetic zone is more extensive and can be traced under the non-magnetic Owen Conglomerate.

Corbett et al (1982) identified seven zones of magnetic activity warranting discussion:

Zone 22 South Darwin Peak to King River; correlates with Central Sequence rhyolite which has associated magnetite-hematite veins and patchy copper sulphides. A secondary peak to the east of the main anomaly correlates with the eastern margins of the Darwin Granite. It has been concluded that the main sources of the anomalies are magnetite-hematite volcanics and epiclastic rocks. This area will be discussed in detail at a later stage integrating the airborne magnetics, electromagnetic data and I.P. data, Ruddock (1974).

Zone 27 Mt. Owen to Mt. Lyell; correlates with two large Owen Conglomerate bodies forming Mt. Owen and Mt. Lyell. Elsewhere the Owen Conglomerate is non-magnetic therefore it is difficult to accept the explanation that the source of the magnetic response is volcanoclastic conglomerate. The source of these anomalies is possibly beneath the conglomerate and similar to Zones 22 and 28.

Zone 28 Mt. Sedgwick; has been identified as a magnetite-hematite felsic volcanic rock. The smaller anomaly to the south of the Zone was identified as Darwin type magnetite veins. The larger anomaly in the north correlates with a quartz-feldspar porphyry sequence. The younger dolerite dyke in the area did not give a recognisable response however this may have been masked by the larger anomalies. The Mt. Sedgwick anomaly has been interpreted as having a source at depth and no association with the Owen Conglomerate.

Zone 29 Lake Dora to Rolleston; a magnetic zone identified as either magnetite-hematite veins or an intrusive porphyry east of Lake Dora.

Zone 34 Lake Julia to Red Hills; is a magnetic zone west of the main axis of the Eastern Sequence however it has a similar response to Lake Dora and warrants inclusion in this area. The source of the anomalies at Red Hill has been identified as magnetite bearing rhyolite.

Zone 35 Lake Selina to Mt. Murchison; is a magnetic region identified as a felsic volcanic rock or granitic intrusions.

Zone 36 Mt. Murchison to Mt. Farrell; has a series of magnetic highs which follow a belt of Murchison Granite. North of Mt.