

## 6. Dora Conglomerate Correlate

A coarse-grained polymict conglomerate outcropping near the baseline on lines 132N, 128N and 124N has been correlated with the Dora Conglomerate which has its type section between Lake Dora and Lake Spicer. In the Selina area the conglomerate contains well-rounded clasts, up to 60 cm diameter, of various volcanic lithologies and granite, as well as well-rounded pebbles of quartzite and elongate clasts of shale. The matrix consists of tuffaceous grit, with quartz grains, lithic fragments and occasional flattened pumice fragments. In some outcrops (e.g. line 128N, 060 mE) large clasts are absent and the rock resembles the layers of coarse grit found interbedded with conglomerate in the Spicer area.

The features which distinguish this rock from the Jukes Formation are the abundance of quartzite pebbles, the paucity of hematite, the poor sorting and the relative abundance of clasts as against a fine-grained matrix. It is possible, however, that the two units are conformable and grade into one another since no definite boundary could be found between them in the field.

## 7. Jukes Formation

The Jukes Formation in the Selina area occurs as a large mass of volcanoclastic conglomerate straddling the baseline between lines 128N and 184N, with a thin layer continuing north to line 248N between the volcanics and the Owen Conglomerate.

The rock is distinctive for its deep maroon colour due to the abundance of hematite in the matrix, clasts are generally elongated along a strong foliation and range up to about cobble size. The hematitic matrix is fine-grained, contains a lot of phyllosilicate material and usually supports the clasts.

## 8. Owen Conglomerate

The Owen Conglomerate occurs along the western flank of the Selina Grid and consists of pink to white siliceous conglomerate, with clasts up to cobble size, and quartz sandstones. The grainsize tends to decrease north of line 200N and tight folding becomes more obvious.

## 9. Structure

The lack of bedding data in the volcanics and coarse conglomerate prevents a detailed evaluation of the structure of the area. In the northern extension the geophysics data and distribution of rock types in outcrop suggests a simple progression from basal sediments in the east, up through coarse pyroclastics to finer pyroclastics and lavas to the overlying Jukes Formation and Owen Conglomerate. There does not appear to be any marked angular unconformity in the sequence.

In the central part of the grid several major NW-trending faults have been inferred from geophysical data and airphoto interpretation (Figure 15). It is possible that the Eastern Pyrite Zone and the Western Pyrite Zone were originally the one