

with intercalated black shale. Evidence of winnowing in the form of pebble lags and current bedding was found in the Ring River. The arenaceous and rudaceous units are poorly sorted and not obviously graded, but individual units are separated by black shale bands and partings. Clasts of black shale up to cobble size occur in the conglomerates.

#### Glacial Deposits

Thick deposits of glacial and periglacial deposits cover a large proportion of GAP. Coarse boulder ground moraine occurs in the ridge between the Ring River and Colebrook Creek, and between Colebrook Creek and the Exe River. Southwards, the deposits are represented by sands, gravel and varved clays, particularly in the Colebrook Creek drainage basin. Coarse fluvioglacial deposits occur in the Ring River valley. In many instances the rivers and creeks have incised down through the base of the glacials.

The ice sheet which deposited these deposits is thought to have been fairly localised between Dreadnought Hill and Colebrook Ridge. It probably formed an arm of the sheet which moved down the Pieman River valley. In the northernmost coast at GAK, the deposits are seen to consist of thick beds of boulder till separated by narrow bands of white varved clay and sand. Some palaeosol development is evidenced by the presence of carbon and fossil wood in the profile.

The top of the glacial deposits are extensively leached, with a white siliceous appearance. An iron pan is intermittently developed below the leached zone, and below this the deposits are streaky with iron rich sections alternating with iron depleted sections. A<sup>0</sup> soil development is very poor over most of the glacial deposits, with little red soil development between the A<sup>00</sup> and B horizons.

#### 5.1.3. Igneous Intrusives

Two large serpentinite complexes have been tectonically emplaced into the sedimentary sequence. The western complex forms part of the Serpentine Hill Complex (6) which is well