

Remnants of late Tertiary basalt cap the Launceston Beds in a number of areas around the margins of the Rosevale coal deposits, forming prominent hills and ridges. Up to 18m of weathered volcanic material has been recorded in drilling to date. The maximum thickness likely to be present on the coalfield is estimated to be 20-25m. Recent cover, soil, clay and sand is volumetrically insignificant except in low-lying swampy areas.

### 3.3 Geology of the Hummocky Hills Inlier

Triassic Upper Permian Super-Group sediments, believed referable to the Fingal Coal Measures, crop out over an area of about 7 km<sup>2</sup> just south of the Hummocky Hills dolerite sill, apparently overlying quartzose Ross Sandstone. Outcrops of these Triassic rocks are predominantly of baked (contact metamorphosed) mudstone, with lesser fine quartz-lithic and quartzo-felspathic sandstone.

The relationship between the Jurassic dolerites and the sediments is not altogether clear on field evidence. In the rolling hills just south of the main dolerite sill, dolerite tends to crop out on all topographic highs, whereas metasediments dominate the low areas. Thus the situation was interpreted as implying that the coal measures had been exhumed from beneath an overlying sill. However, it had also been observed that close to the summit of the Hummocky Hills about 30-50m of hornfelsed coal measures appear to be sandwiched between the main sill and an upper sill.

West and north-west of the Hummocky Hills shallow dolerite is overlain by a thin veneer of Launceston Beds and younger colluvium or alluvium. To the north and east the Tertiary basin deepens rapidly.

Recent exploratory drilling for black coal in the Triassic rocks south of the Hills failed to confirm the hypothesised relationship between dolerite and sediments (see Section 4.3), and no coal was intersected.