

REPORT ON THE COAL MEASURES OF MARIA ISLAND

From time to time blocks of coal, similar to that occurring at Mt Paul and Schouten Island, are found on the western shore of Maria Island. This has led to the belief that a seam occurs below water level and that the blocks have been detached therefrom by the action of the waves. Although the Island has been carefully explored no outcrop of coal has been discovered.

In the Eastern districts of Tasmania seams of coal are found in the Felspathic Sandstone member of the Trias-Jura formation. Eight seams constitute the full series, but in some areas all of them are not represented. The felspathic sandstone beds, 400 to 450 feet thick, are very soft and easily removed by erosive agencies, therefore, they are preserved only where covered by harder rock. The complete beds of felspathic sandstones do not outcrop on Maria Island in many places, it may be definitely stated, they have been removed by erosion.

In normal position members of the Permo-Carboniferous formation underlie the Trias-Jura but owing to intrusion of diabase the relative positions have been altered. It is not unusual to find Trias-Jura and Permo-Carboniferous sediments in juxtaposition, and in some places the former outcrop at a much lower altitude than the latter. This is due to dislocation and faulting. The Permo-Carboniferous coalfields of Tasmania are not very extensive and the seams are thin. They occur in small disconnected basins and are represented at two horizons. The upper coal measure of this age occurs at Bruni Island and at Cygnet; the lower at Preolenna, Mersey Valley and Mt Pelion. The lower certainly does not occur here and may be eliminated from the discussion. There are then two possible sources of coal at Maria Island, namely: a seam corresponding in age to that at Bruni Island; and one or more of the lower seams of the Trias-Jura. Granite of Devonian age occupies the eastern fringe of the Island and its western boundary marks the course of a major fault. Small outcrops of Ordovician strata crop out here and there from the covering of Permo-Carboniferous rocks which conformably overly Trias-Jura once occupying the central and eastern sections. Since, Mesozoic diabase has intruded them and now occupies the greater part of the island.

The area first examined lies between Bloodstone Point and the old Freestone Quarries on the western shore line. Here the lower member (Ross Sandstone) of the Trias-Jura overlies upper Permo-Carboniferous sediments consisting of siliceous sandstones, grey shales, sandy mudstone, carbonaceous shale, and coarse sandstone in that order. At Bruni Island carbonaceous shale with thick intervening beds of sandstone overlies the coal seam, and it is considered by the interested parties likely that similar conditions exist here. Although the sequence of strata is similar there is no definite evidence of the existence of the Bruni seam. As the Felspathic Sandstone member of the Trias-Jura is not represented above the Ross Sandstone no coal seams of that age occur.

On the outskirts of the settlement and immediately south therefrom a small patch of felspathic sandstone is exposed in the bed of a small creek. It is so closely and completely surrounded by diabase that if one of the lower seams of the Trias-Jura seams does occur the extent will be very small.

No other areas were examined. Keid reports the occurrence of Trias-Jura strata on the western side of Mt Maria, but the all-important productive member is not mentioned.

The prospects of find coal are not encouraging. If coal seams are found the occurrence will be confined to small faulted areas not of any great commercial importance.

The writer suggests that attention should be directed to the Mt Paul and Schouten Island fields especially the first-mentioned where coal, perfectly suitable for the purpose of the National Portland Cement Company, occurs in large quantity. Tasmanian coal is more suitable for use in powdered form than that obtained from the Newcastle fields of New South Wales.

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