

Section 2-Coal
TK5-186-187
COAL RESERVES AT MERRYWOOD

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The Management of Merrywood Colliery is desirous of increasing the mechanisation of coal mining in the underground workings of the colliery, but before doing so, require to know the amount of probable reserves. Due to increasing overburden the open cut workings appear to have a limited life.

The seam worked may be correlated with the Beta seam of the Fingal-St. Marys Basin and has, with bands, a total thickness of over ten feet. The effective mining thickness of the coal is seven feet. The coal measures in the vicinity of the mine are intruded by dolerite. The general dolerite boundary may be taken at the change of slope between the gently sloping semi-circular plateau, covered by dolerite talus, but underlain by the coal measures and the steep scree covered dolerite slopes.

In estimating probable reserves, the important question to be asked is what is the form of the dolerite intrusion. Is it a sill intruding the coal measures some fifty to a hundred feet above the productive seam? If this is so then the coal measures will continue beneath the dolerite hills, undisturbed except for some possible minor rolling near the base of the hills, and the reserves should be very large; or is the intrusion transgressive with the dolerite cutting off the coal measures and the limits of these corresponding to the base of the hills? If this is so, the reserves are limited and the coal available beyond the present workings is in the vicinity of 300,000 tons.

The answer probably lies somewhere between the two; portion of the dolerite may be transgressive but the main mass may be sill-like. Nowhere can any actual boundary between the dolerite and coal measures be seen. To determine the form of intrusion two courses are open. Present workings can be extended, fan-like to reach to or below the suggested dolerite boundary or the answer could be determined by drilling angle holes round the boundary. The first method would of course be slow but not non-productive. In the north-western portion of the workings, places reach to within 300 feet of the suggested boundary. On the eastern side, a tunnel, at creek level, on the coal outcrop could be cleared out and extended to the suggested boundary at no great distance.

It is not considered that the boundary between the dolerite and coal measures in this locality is a faulted one. At the edge of the steep slope the coal seam may be locally displaced, as can be seen in the limits of the open cut, but it is considered that this is due to recent hill slip rather than faulting.

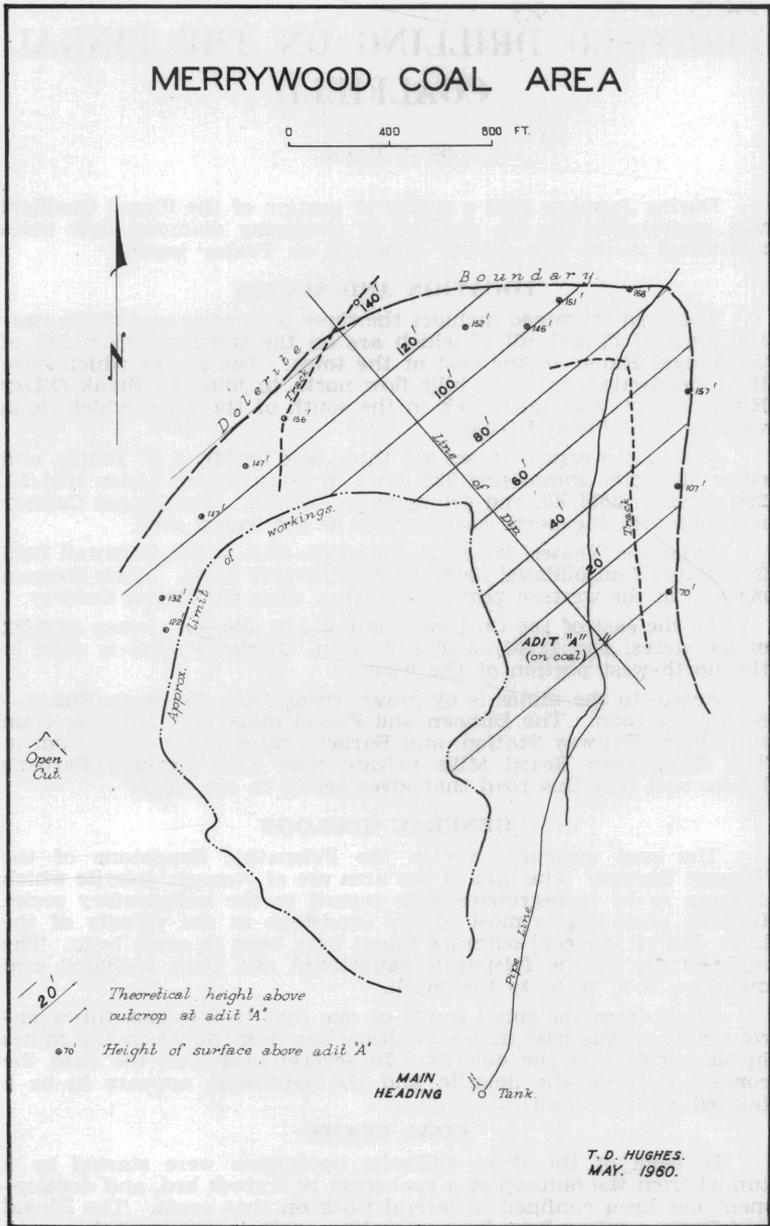


FIGURE 46.

