

Section 2 — Coal

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POTENTIAL COAL BEARING AREA AT FINGAL COLLIERY

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INTRODUCTION

A geological examination of an area in the vicinity of the Fingal Colliery near Fingal was undertaken with the object of defining the potential coal bearing area available for future mining on leases held by the mine owners.

Three adjoining mineral leases covering 830 acres are held in the name of M. J. S. Yeates. These extend from Consolidated Lease 16M/54 of 230 acres, in the north-west, through 26M/49 of 200 acres, in the central portion, to 72M/56 of 400 acres towards the south-east.

The attached sketch map shows lease boundaries in relation to geological formations, topographical features and underground workings.

HISTORY

Exploration by the Fingal Coal Prospecting Syndicate about the year 1920 disclosed an outcrop of coal in Coal Creek. In the following year development was commenced by driving two tunnels on the seam. Production started in 1922 and continued intermittently on a small scale for 20 years, during which period 17,533 tons of coal were produced.

The original leases were transferred to H. J. E. Yeates in 1942. Following the demise of the latter they were again transferred in 1949 to his widow, Mrs. M. J. S. Yeates. From 1942 onwards mining has been continuous and, to the end of 1958, production amounted to 258,816 tons of coal.

In 1922 Mineral Resources No. 7 "The Coal Resources of Tasmania" was published and this described the geology of the Fingal area together with mining development up to that date.

LOCATION AND ACCESS

Fingal Colliery is situated on the Fingal Range, two miles east of the town of Fingal.

Access is gained by way of the Esk Highway from the railway centre at Fingal for one mile north-easterly to the junction with the mine road. The latter winds up the northern fall of Fingal Range on a steep gradient for a further two miles to the mine.

GEOLOGY

The most important rocks in relation to mining in this area are those of the upper part of the Triassic System, containing the felspathic sandstones and coal measures. With the possible exception of Waratah Creek to the south of the leased area, the only

outcrops of these rocks are located near the mine openings about the head branches of Coal Creek. Over the remaining portion of the area these formations are covered at surface by a thick blanket of dolerite scree. Within the Fingal mine leases the coal bearing rocks appear to extend in a southerly belt, over an average width of 60 chains, from the northern boundary for a distance of 57 chains. To the north of these leases they pass into ground held by Cornwall Coal Co. No Lia. (Duncan Mine), and to the south the belt narrows to the conclusion in unleased Crown land south of Waratah Creek.

The Triassic belt of rocks is almost surrounded by a discordant intrusion of Jurassic dolerite which terminates the coal bearing strata along the boundary of the dolerite mass.

No large faulting is indicated in the area, but some minor faults with throws up to 20 feet are revealed by the underground workings in the vicinity of the dolerite contact.

THE WORKINGS

The coal seam in the Fingal Colliery has been mined from the outcrop in Coal Creek in adjacent workings by way of two tunnels known locally as the "Kitten" and the "Cat".

The former workings are of minor extent and were abandoned after the coal was found to be replaced by an intrusion of dolerite at 730 feet from the entrance.

The "Cat" tunnel has been driven south-easterly on a bearing of 128° for 3000 feet and dips with the coal seam at about 3°. To the north-east of the tunnel the coal has been largely worked to the mutual boundary with the Cornwall Coal Company leases. Production is now proceeding on the south-west side and headings have been extended at intervals up to maximum distances of 600 feet in that direction.

THE PROVED AND POTENTIAL COAL BELTS

Of the 830 acres of land leased by the owners of the Fingal Colliery about 395 acres are underlain by the coal measure formation, while the remaining area is covered by dolerite.

The coal bearing region as proved by underground workings, and indicated on the accompanying map, covers an area of 95 acres.

The belt of potential coal bearing land extending south from the "Cat" workings to the southern boundary contains an area of 300 acres. Any possible extension of the coal seam in this area has yet to be proven. Reported coal outcrops in Waratah Creek some 25 chains south of the Fingal Colliery leases, may correspond with that in the mine but as yet no prospecting has been undertaken in an attempt to establish a possible connection.

Diamond drilling is the best method of testing the potential coal bearing belt and, in any future consideration, the drilling of two holes from the surface is advised. The first hole would be sited about 32 chains south-west of the end of "Cat" Tunnel, giving a position of six chains inside the southern boundary of Lease 26/M/49 and eight chains south-east of the cleared flat about the eastern

GEOLOGICAL SKETCH MAP FINGAL COLLIERY AREA

0 20 40 CHS

- TRIASSIC Felspathic Sandstones & Coal Measures
- JURASSIC Dolerite
- PROVED COAL BEARING BELT
- POTENTIAL COAL BEARING BELT
- PROPOSED D. D. HOLE

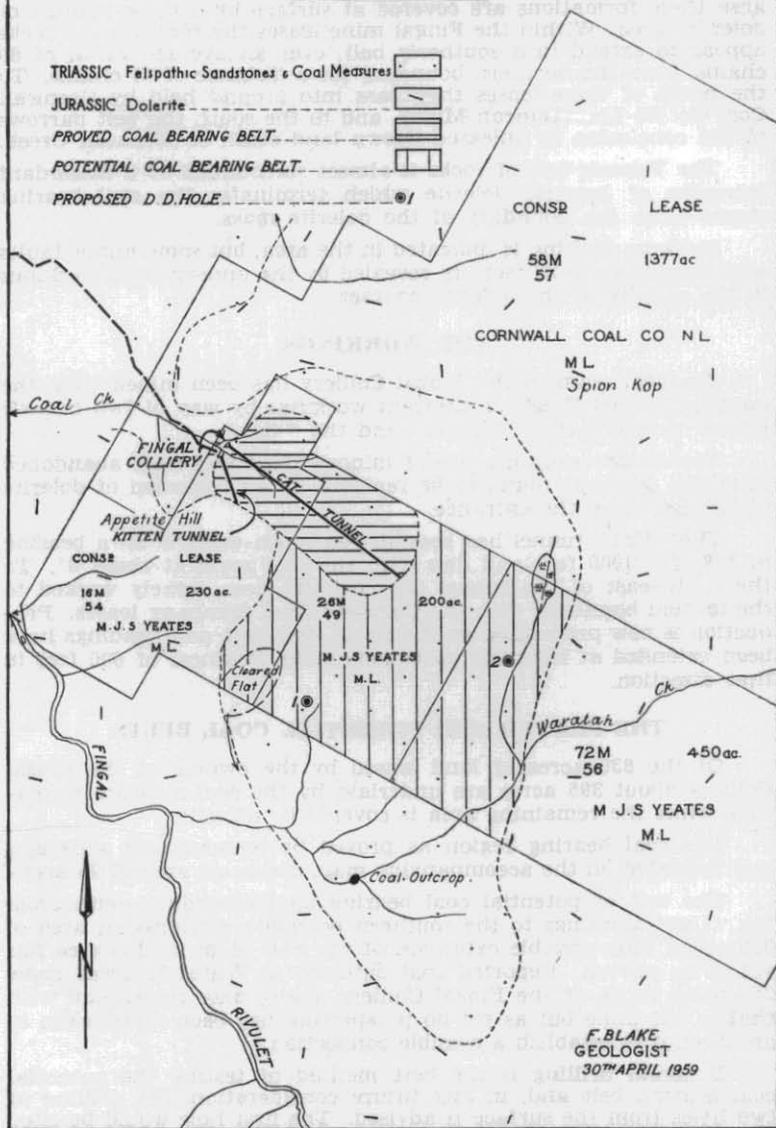


FIGURE 20.

5 cm

boundary of the 50 acres purchased from the Crown by P. M. Saunders. In this hole it is anticipated that, if the coal seam persists, it should be interested at a depth of approximately 350 feet from the surface.

Depending on results obtained in No. 1 Bore the best position for a second hole would be about 27 chains south-east from the end of the "Cat" Tunnel where a depth of about 400 feet would be required.