

It will be noted that in the case of underground mines, while the output per man increased during the years 1941 and 1942, there has been a progressive decline since then. This is due in great part to conditions brought about by the war. Increased production has been expedient in those years even if future production was thereby affected, and the effect has been cumulative with the years. Restriction of essential development work in the interests of immediate production, the shortage of skilled miners, and the increased average age of the coal-hewers owing to difficulties in replacements with younger men have all contributed to lessen the output-per-man figure.

Despite increased production of coal, the supply position has still remained difficult and unequal to demand, and it has been impossible to build up reserves to allow for stoppages in shipment occasioned by the vagaries of the bars at the west coast ports. It is, of course, the shortage of bituminous coal that is crucial to the position since the cessation of imports from Australia and the inability of bituminous mines in New Zealand to make up the leeway.

Although the shortage of coal is world-wide, efforts have been made to arrange imports of coal from other countries, but these have been unsuccessful till recently, when it has been possible to arrange a trial shipment of coal from Vancouver Island, in Canada. The prospect of importing further supplies from the west coast of the United States is being pursued.

However, permanent relief can come only from expansion of production in the Dominion. It is expected that there will be considerably increased production from Stockton when transport facilities have been improved by the construction of a high-capacity aerial ropeway, while it is hoped to bring the new coalfield at Garvey's Creek, in the Reefton district, which contains a bituminous coal of good grade, into early production. The intensive prospecting programme which was carried out on this field during 1945, and which is still continuing, has already proved that there is 1,000,000 tons of extractable coal with another 2,000,000 tons probable. Operations will commence upon a vertical seam, portion of which can be worked opencast and the remainder by underground methods with a high percentage of coal-extraction. In this field production does not have to wait upon extensive development work and production can commence as soon as an access road to the area is completed, so that some relief from this source can be expected at an early date.

As a result of an intensive drilling programme it has been shown that an area at Rewanui contains some 1,750,000 tons of recoverable coal of bituminous type contained in four seams, and plans are now being prepared to open up this area by driving two inclined stone drives. Production from this field necessarily lies some time ahead because of preparatory development work.

Again, the Westport Coal Co. is in the process of opening up a new colliery on what is termed Cook's Lease, and an access road is in course of construction and equipment for an aerial ropeway to transport the coal to Waimangaroa is on order from Great Britain. Production from this new coal-mine will compensate for decreased production from the company's Denniston mine.

As far as sub-bituminous coal is concerned, plans are being prepared for the opening-up of a large-scale colliery capable of producing 1,000 tons of coal per day at the Morley Block, in the Ohai Coalfield. This block was recently acquired by the State, and drilling by the State has confirmed the results obtained by the previous owners from their drilling programme and already 5,000,000 tons of coal are indicated.

OPENCAST MINING

While opencast coal-mining has been practised in New Zealand for many years, it has generally been on a small scale and intermittent in operation and confined in great part to the lignite deposits of Otago and Southland. With the exception of one mine in the Mataura field, operations have been carried out in primitive fashion without recourse to modern earth-moving equipment.