

Seven State-operated opencast mines contributed 331,477 tons to the 1946 total, almost two-thirds of the total. Of these mines, Stockton, with a production of 141,804 tons, continues to be the most important both in respect of tonnage and, seeing that it is bituminous coal, in the quality of the coal produced. Detailed topographical and geological surveys of this area have been proceeding for some time, and, subject to confirmation by drilling that has recently been commenced, it is proposed to install a high-capacity aerial ropeway and so eliminate the present transport bottleneck and allow of increased production. Generally, a long life cannot be expected for opencast mines, and during this year operations have terminated at Glen Afton opencast mine where some 54,000 tons have been produced, and at Ohai opencast, where some 95,000 tons have been produced. As a replacement for the Ohai opencast, operations have been commenced on an area acquired from the purchase of the assets of the Black Diamond Co., and consideration is now being given to a replacement for the Glen Afton opencast mine in the Huntly district. Investigations are continuing of other areas where opencast mining may be possible, and as the result of a boring programme at Wangaloa it has been proved that areas adjacent to the Wangaloa opencast mine are capable of supplying a considerable tonnage of coal by opencast methods, and at the present time an area in the Blackball district is being investigated by shallow drilling. At Kimihia, drilling from a barge on the lake has demonstrated that operations may be considerably extended. With experience now gained from actual mining operations it has been possible to produce a much cleaner product from mining operations, and the provision of screening-plants has allowed of coal being delivered to the market in much more acceptable form than that previously obtainable. Due consideration is being given to the restoration of the surface at abandoned opencast mines, and, in particular, it is proposed to plant trees at the site of the Glen Afton opencast mine.

MINING PRACTICE

Labour shortages have been responsible for urging consideration of increased mechanization of our coal-mines, and, while New Zealand coal deposits are generally not suitable for mechanization to the same degree as those overseas, the necessity exists to mechanize as many operations as the conditions permit. From experience obtained during a visit to mechanized mines in Australia, officers of the Mines Department have prepared plans which have allowed of the ordering of equipment to partially mechanize a section of the Wilton State Coal-mine. Use will be made of coal-cutters, electrical drills, and scraper loaders, and operations should not only permit of an increased tonnage being available from this mine, but allow of experimental work leading to mechanization of additional mines.

In view of increasing mechanization of mines, the question of the use of electrical power underground in coal-mines has been examined in some detail recently by a conference of officers of the inspectorate staff and of the State Coal-mines.

In conjunction with the Department of Scientific and Industrial Research, the Mines Department took advantage of the visit to Australia of Professor Jones, a British authority on coal-dust problems, and arranged with him to extend his visit to New Zealand and confer with officers of the Departments concerned. While pneumoconiosis has, fortunately, so far not been contracted by miners in New Zealand coal-mines, increasing mechanization will increase the generation of coal-dust, and much valuable information as to the control of coal-dust has been obtained as a result of Professor Jones's visit.

Along with increased mechanization, consideration is now being given to the introduction of hydraulic stowage practice into New Zealand coal-mines, thereby increasing the percentage of extractable coal and conserving limited resources.