

men to the bathroom and then to the mine entrance, and *vice versa*, which will make it much easier for them, and also save time which is now lost in travelling to and from their places. When No. 4 West Headings have crossed over the present fault they will have a distance of approximately 8 chains to go until they come to the outcrop. When this has occurred it is the intention to work from here a block of coal known to exist on what is called the Bank property. Before this can be done, preliminary work will be necessary to locate the outcrop at the most convenient point, also a small amount of earthwork will be necessary.

*Reasons for Decreased Output.*—The decrease in the output for the year is due to : (1) reduction in days worked ; (2) shortage of efficient labour following lifting of Man-power Regulations ; (3) slips and washouts due to heavy rain during winter.

I have, &c.,  
JOHN PENMAN, Manager.

From the SUPERINTENDENT, Waikato Controlled Mines, to the UNDER-SECRETARY,  
Mines Department, Wellington.

SIR,--

15th April, 1947.

I have the honour to submit my report on the working of the Waikato opencast mines for the year ended 31st March, 1947.

#### KIMIHIA

*No. 1 Section (Kimihia Lake).*—Work has continued on this section during the year, except for a period of eight weeks during mid-winter when coal-winning was stopped because bad weather conditions had affected stripping operations. At the end of the year sufficient coal had been stripped to ensure that, at the present rate of production, coal-winning can continue without interruption during the approaching winter months. During the year 248,830 cubic yards of spoil were removed.

During March the coal output was stepped up to 400 tons a day. The output for the year totalled 42,761 tons 13 cwt. 3 qr., making a total production of 66,595 tons 13 cwt. 3 qr. from No. 1 Area since work began there. To date Kimihia Nos. 1, 2, and 4 have produced 123,031 tons 7 cwt. 3 qr.

Vibrating screens are now being built, and the installation of this plant will result in a better grade of screened coal being supplied to consumers.

The quality of the coal-seam *in situ* is excellent.

The method used in the handling of the unstable overburden was unusual in opencast mines. Material was loaded by the 120-B (5 cubic yard) drag-line into Athey wagons carrying about 10 cubic yards each hauled by D8 tractors and tipped outside the mine area.

#### KIMIHIA No. 5

An area adjacent to and south-west of the present mine has been investigated during the year. Thirty-two coal-prospecting bores were sunk, together with five additional bores on the line of the stop-bank to test the overburden structure. All boring was done with the Department's C. N. Sullivan No. 2 drill rigged on a barge and floated over the bore-sites to a predetermined grid pattern.

A seam 24 ft. to 28 ft. thick has been proved and a stop-bank has been commenced to enclose an area estimated to contain 450,000 tons.

Land has been acquired and plans prepared for improving accommodation facilities in connection with this work.

Some 8 chains of stop-banking have been constructed involving the rehandling of 27,800 cubic yards of harder fireclay previously removed from No. 1 Area and stock-piled for the use to which it has now been put.