

timbered with 12 in. by 10 in. and 10 in. by 10 in. bars and 10 in. by 8 in. legs. At the present time only one shift of three men is employed in the drive.

Boring.—During the year three holes were drilled on the line of the main haulage-road and one on the village-settlement reserve. The three former were necessary in order to determine the gradient of the haulage-road, and the latter to ascertain whether coal of a workable thickness existed on the village reserve before building thereon. This latter hole was drilled to a depth of 315 ft., but owing to the strata passed through being very broken, and the bottom of the hole being 150 ft. lower than the screening-plant site, together with no coal-seam being located, it was abandoned.

Tree-planting.—On the property acquired for the opening-up of this mine (1,289 acres) there are small areas which are useless for mining, and therefore, in order to utilize these portions of the property arrangements have been made to plant trees for mining purposes. So far 25 acres have been cleared and fenced, and, with the assistance of the Forestry Department, arrangements have been made to plant this area with *Eucalyptus saligna* and *Pinus radiata* trees. It is also arranged to go in for growing black-wattle. In the Waikato district there is a scarcity of mining-timber, and although the mine requirements will in all probability be small during the opening-out stages, there is no doubt that a large quantity will be required when pillar-extraction commences. By the latter time the trees now being planted will have grown large enough to enable mining-timber to be supplied from the State Coal-mines Department's property. This will mean a great saving in the cost of mining-timber, and at the same time ground is being used which would otherwise be non-productive.

Clay for Building Purposes.—During the year several samples of clay from off the property have been tested at the Dominion Laboratory in order to ascertain whether it would be suitable for brickmaking. The samples so far tested are reasonably satisfactory, but have failed to reach the standard required of a good clay for brickmaking. The chief trouble with the clay so far tested is excessive shrinkage, and the liability of the bricks to crack considerably when heated to a certain temperature. With a view to carrying out further tests, other samples will be forwarded, together with a sample of sand from that locality.

GENERAL.

Reviewing the work for the year, it will be seen there is a substantial increase in output as compared with the previous year. In April, 1920, it was estimated that an output of 160,000 tons would be obtained for the year ended 31st March last, but the yield fell short by over 6,000 tons. This deficiency in output, as compared with the estimate, is accounted for by the fourteen days lost through strikes, stop-work meetings, &c., previously referred to. The average daily output for the year works out to 614 tons, and from these figures it will be seen that had it not been for the fourteen-days strike the output would no doubt have been greater to the extent of about 8,000 tons, and the estimated output exceeded by 2,000 tons.

In conclusion, I wish to say that all the officers have performed the duties delegated to them in a most satisfactory manner, and the Consulting Engineer, also the Director of Geological Survey, have rendered valuable assistance in the various developments connected with the mines.

I have, &c.,

I. A. JAMES,

General Manager.

The Under-Secretary, Mines Department, Wellington.
