

## No. 2.

Mr. JAMES COUTTS, Inspector of Mines, Thames, to the UNDER-SECRETARY, Mines Department, Wellington.

SIR,—

Inspector of Mines Office, Thames, 8th February, 1905.

I have the honour to transmit the following report on the coal-mines in the Auckland district for the year ended 31st December, 1904, in compliance with section 67 of "The Coal-mines Act, 1891":—

*Kawakawa Mine* (John Cully, manager).—The work that has been carried on in this mine during the year has been confined to working out pillars near the outcrop, and searching for pillars of coal and coal that had been left in to strengthen the roof. The old workings being completely filled in with the covering of the coal makes it very difficult to know where or how to drive to find pillars which have been left from the old mining works of years past, more especially as there is no plan to work from. The prospects are not very encouraging as it is considered the coal in sight will only last a few months, when the lessee intends to surrender the present lease. The output of coal for the year was 3,512 tons, a slight increase on the previous year's return. A total of six men were employed.

*Hikurangi Coal Company (Limited)*.—During the year ended 1904 no new machinery has been added to the company's plant; the operations of the company have been chiefly directed to opening up that portion of their mine situated on the western side of the railway, where a large area of excellent coal has been found, and proves to be much better than at first anticipated. It was fully expected there would be a large quantity of water to contend with here as the workings would be immediately under the top end of a swamp, but, fortunately, very little water has been met with. In the eastern section the work is confined to extracting pillars, which is being done with a great amount of success, fully 90 per cent. of the coal left in the pillars being obtained. The contemplated work to be carried out during the year 1905 is to further extend the prospecting operations in the western area, which extends a distance of fully a mile and a half in the direction of the Hikurangi Swamp, where the seam has been partly proved by boring and sinking for half a mile in length and quarter of a mile in width, leaving a mile still unexplored. An opening will be made at a point between the tipping-place at the railway sidings and where the wagons are now being filled. This tunnel will enable the company to open up a large area of coal on this part of the property, from which it can be cheaply worked. A new loading-place will be made north of the present adit incline with a view to further opening up another section of the mine. A splendid quality of fireclay has lately been discovered, 30 ft. in thickness and very suitable for brickmaking. This will be worked at no distant date and at a small outlay. It is said the clay can be made into bricks and leave a good margin of profit. For some time past there has been some difficulty in obtaining water suitable for boiler purposes, and the manager now proposes bringing in a supply from the Hikurangi Mountain, a distance of a mile and a half, the cost of which he estimates will not exceed £300. The work in the mine has been very satisfactorily carried on for the safety of the men, and the ventilation has been good; but eventually, after the mine is further opened up, it will be necessary to procure other means of ventilating the workings and not depend on natural ventilation. The output of coal for the year was 44,974 tons, an increase of 5,349 tons as compared with the previous year. An average of fifty-six men were employed.

*Northern Coal Company (Limited), Hikurangi*.—This company's mine is situated on rising ground, and is worked from adit levels, which are being extended in the seam and opening up a large area of coal of very good quality. Owing to the ground being favourably situated there is no water to contend with in the present workings. A locomotive is used to convey the coal from the mine to the top of a self-acting incline (a distance of a mile and a quarter) where the trucks are lowered to the loading-ground on the Government railway. The locomotive engine mentioned being too light for the amount of work required to be done, and subject to frequent breakdown, thus causing serious delays, it was found to be necessary to purchase another locomotive to do the work and enable the company to increase the output. Another level is now being opened out on the outcrop at a lower elevation. It is expected this will be completed in the month of June, and from here it is expected the coal on this part of the property will be worked to greater advantage than hitherto, and at less expense. The output of coal for the year was 25,719 tons, an increase of 3,337 tons as compared with the previous year. Forty-five men were employed.

*Phoenix Mine, Hikurangi* (D. Kirkwood, manager).—The operations in this mine have been very limited. The small steam-engine erected to pump the water was not large enough to do the work required, and has given a good deal of trouble on account of it frequently breaking or something going wrong; but the owners, I am informed, intend to erect a larger plant to overcome this difficulty. The seam of coal is 10 ft. thick where it is at present being worked, but the lowest level is only 40 ft. below the surface, and the coal very soft, consequently it does not find as ready a sale as the coal from the other mines in the neighbourhood. Whether it will improve as it is driven on or at a depth remains to be proven. The output of coal for the year was 5,043 tons, being a slight decrease on the previous year. An average of sixteen men were employed.

*Kiripaka Mine* (George Clemo, manager).—This mine is worked from an adit level a few feet above the Ngunguru River. From the entrance of this level the coal is conveyed in trucks along a ground tramway by a horse for a distance of half a mile to the loading-ground, where it is put into punts and taken down the river to deep water, and there transhipped into vessels. The seam of coal has varied from 2 ft. to 18 ft. in thickness, but owing to the faulty nature of the country it has only been found in a small area, and practically most of the coal above the level named has been worked out. The company are now directing their attention to opening up a strip of two chains of coal on their boundary below the adit level. The coal to the dip is of good quality, but there is a good deal of water to contend