

*Millbrook Coal-mine.*—This mine is situated two miles west of Ruatangata Railway crossing. The seam is 4 ft. thick, and the roof cover is loose watered sand, necessitating heavy timber in support. The future prospects of obtaining a workable seam are not promising. Up to end of 1931, 50 tons was produced.

*Waikato District.*

*Rotowaro Collieries* (Taupiri Coal-mines, Ltd., Owners).—This colliery returned a decreased output, and at the end of the year two mine sections were closed down. In No. 1 Mine section the endless-rope haulage-road has been extended 40 chains to the east where the development headings are proceeding in a thick seam of coal occurring at shallow depth. The surface machinery has been remodelled, and the mine is now equipped to deal adequately with an output of 1,000 tons per day. The slack-coal dump at the mine has been increased to 30,000 tons, due to the cancellation of the slack contracts. Electric safety-lamps are used throughout No. 1 mine, and all main roadways are stone dusted. The total output to the 31st December, 1931, was 1,633,856 tons.

*Pukemiro Colliery* (Pukemiro Collieries Ltd., Owners).—An average daily output of 650 tons was produced from three separate mine sections. In the North Mine section the pillars are being removed from the north-east section, and bords of the first working are being advanced to the west in a seam of clean bright coal 10 ft. thick. In the South Mine section the coal is soft and friable, and consequent to a pressing demand for hard domestic coal the section was temporarily closed down at the end of the year. In the east section mining operations are confined to the extraction of the roadside pillars of clean thick coal. The working-seams are moderately inclined with occasional rolls over short distances. The roof usually stands well, and heavy props are used over bad areas encountered during pillaring operations. The total output to the 31st December, 1931, was 1,996,777 tons.

*Glen Afton No. 1 Colliery* (Glen Afton Collieries, Ltd., Owners).—A record output of 185,202 tons was produced during the year, principally from bords and headings of the first working. E section is being extended towards the boundary of McDonald's State Coal-mine Reserve, and the subsidiary endless-rope haulage-road for the section has been straightened and advanced to the farthest workable point. In K section the main headings have been driven through the boundary into McDonald's area for the purpose of effecting a connection with the headings advancing from No. 2 Mine (McDonald Colliery). A prospecting-shaft sunk at the end of the main haulage-road proved the continuity of the seam through the 50 ft. down-throw fault, and preparations are being made to connect the recovered seam to the mine system. The roadways were stone-dusted in treatment of the fine coal-dust, and increasing attention is being paid by the management to the benefits derived from filling out the scattered accumulations of fine coal deposited by spillings from overloaded skips. The working-faces are sprayed daily with water prior to shot-firing in allayment of the fine coal-dust. The total output up to the 31st December, 1931, was 1,365,575 tons.

*Glen Afton No. 2 Colliery* (McDonald State Coal-mine Reserve under Lease to the Glen Afton Collieries Ltd.).—During the year this colliery was sufficiently developed to produce 91,905 tons from two separate mine sections. No. 1 section is being opened out on the southern boundary of the lease, and No. 2 section has been developed to the north by headings rapidly advanced to produce bord sections. Both mine sections are adequately equipped with modern haulages, electrically driven, and are proceeding in thick coal of excellent quality. The output is conveyed by endless rope tramway to Glen Afton No. 1 mine screens—a distance of two and a half miles. Reserves of unworked coal are extensive, and the future prospects of the mine will depend on the market requirements for steam and small coal.

*Graham's Colliery* (Party of Miners, Owners).—The pillars have been extracted from the east section, and the seam remaining to be worked does not exceed 4 ft. in thickness. A stone drive 6 chains in length was driven through a roll in the floor in order to afford a level road for horse haulage, and to provide free drainage to a thin area of coal on the west side of the mine. Output, 50 tons per day. Total output up to end of 1931 was 88,663 tons.

*Pukemiro Junction Colliery* (Party of Miners, Owners).—Operations were confined to the extraction of isolated blocks of clean coal remaining near the entrance to the mine. Total output to the 31st December, 1931, was 110,920 tons.

*Waikato Extended Colliery* (Roose Shipping Co., Ltd., Owners).—During the year the pillars were extracted from the Old Waikato Mine section. The seam is 18 ft. thick with an average roof-cover of 40 ft. of jointed fireclay. The output is consumed on the company's river steamers. Total production to the 31st December, 1931, was 88,671 tons.

*Huntly Brick Works.*—The fireclay quarry, operating for the production of fireclay for the manufacture of bricks, tiles, &c., was maintained in good order.

*Taupiri East Colliery* (Auckland University Council Endowment Lease).—A prospecting drive through old workings was the means of recovering a line of pillars in good condition remaining in support of the Old Kimihia Mine dip. The pillars are being reduced and extracted in satisfaction of a local demand for house-fuel. To the 31st December, 1931, 14,784 tons have been produced from this colliery.

*Campbell Colliery* (Whatawhata Crown Lease).—The mine worked continuously during the year, and produced a daily output of 20 tons. A motor-road of 40 chains, from the main Raglan Road, was formed and metalled in readiness to connect to the new drive which is in course of being developed in production of an output from a solid area of proved coal occurring near the northern boundary. Up to the end of 1931 32,804 tons was produced.

*Renown Colliery* (Renown Collieries, Ltd., Owners).—The standard mining method of bord and pillar has been followed in two panel sections with machine mining in all working-bords. A daily tonnage of 12 tons per miner is being maintained from the machine cut places in comparison with 5 tons per man in places cut by hand. Twelve to fourteen bords are usually cut and cleaned up during each working-shift, and having six to seven spare places, the work of cutting, shooting, and loading the coal is so designed that a sufficient number of places are always ready at the commencement of next day's work. The mine is developed well ahead of all possible requirements, and the cost per ton for mining the coal compares favourably with other mines, and if the mine could work four days per week a profitable return for the shareholders could be accomplished with an output of 500 tons per day. Total output to 31st December, 1931, was 270,629 tons.

*Wilton Colliery* (Wilton Collieries, Ltd., Owners).—A daily output of 400 tons has been obtained from the developed mine-workings. Due to the depressed condition of the coal trade, and of the fact that there are too many coal-mines mining a similar class of coal in the Waikato district, this colliery did not average three days per week during the year. The suitability and performances of two types of coal-cutting machines were tested during the year, but, owing to the physical condition of the thin friable coal-seam and timber encountered in fitting the machines, they were withdrawn from use, and hand mining was reinstated throughout the mine. The screening-plant was remodelled during the year, and iron skips were substituted for wooden ones. The main heading has been extended 12 chains to the south, and the west dip has been advanced 10 chains in provision of two bord sections. The pillars in the North dip section are being extracted and recovered while the timber supports and roofs are in good condition. This colliery produced 57,325 tons up to the 31st December, 1931.

*Old Stockman Colliery, Mokau.*—The working-seam is 4 ft. thick, with a strong sandstone roof-cover. The mine is worked intermittently for supplying local requirements. The total output to the 31st December, 1931, was 4,262 tons.

*Mokau Colliery* (Mokau Collieries, Ltd., Owners).—The mine is situated thirteen miles up the Mokau River, and is under course of development with limited capital. Two coal-seams 6 ft. and 8 ft. respectively have been located on the freehold area. Seven men have been engaged in forming and laying three miles of surface tram-