

*Waikato Extended Mine.*—This is a small mine being opened on the western bank of the Waikato River, adjacent to the old Waikato Mines. An adit level has been driven and the coal cut into, being from 7 ft. to 8 ft. thick. A ground tram has been constructed half a mile in length from the mine to the wharf on the river-bank. The area of coal available is very small. During the year I visited the mine several times and found the mining and works carried on with care.

*Aria Survey District—New Find of Coal.*—A short time ago a settler named Morgan discovered an outcrop of coal on his farm three miles from Aria Township. On the 10th January, 1917, I visited the district and examined the coal outcropping at a recent landslip. The coal is apparently of the same age as that found at Mokau. The seam is disturbed by the slip, but it appears to be from 10 ft. to 12 ft. thick, separated into two parts by a band of stone 6 in. thick. The coal is of good quality, and will be a great boon to the district. The settlers and the butter-factory will be able to get their supplies at a reasonable rate. There is a formed road from the township to Mr. Morgan's homestead, but half a mile of new road will have to be made to connect with the proposed mine. The coal-consumption will be very small per annum.

*Mangapapa Coal-mine (Mokau).*—As a result of heavy rains early in 1916, logs were deposited in the Mokau River and steamers were unable to reach the mine, consequently no mining has been done during the year.

*Hikurangi Coal Company (Limited).*—The mines have worked continuously during the year. Great inconvenience has been experienced in draining the mine-workings of water from the Hikurangi Swamp owing to limestone boulders overlying the coal-seam, and as a consequence the mines are flooded to an inconvenient degree after heavy rains. During the greater part of the year the deepest workings have been almost continuously flooded. It is unfortunate that in the laying-out of the mine-work no provision was made to effectively deal with the drainage. The class of pump installed was too small, and the corrosive acids in the mine-water have been very destructive to the pumps and pipe-lines. Another feature is that there is a great extent of partly worked pillar coal in the deepest area, and it is almost continuously flooded, and of a necessity the coal more to the rise has been worked first, thus breaking the surface by mine-falls, which allow heavy deposits of surface water to enter the mine. Effective drainage is an urgent problem at this mine. The mine-ventilation has at times been fair, but not up to the usual standard of efficiency maintained at other mines in my district. Too great an area of open workings and openings to the surface have made it difficult to obtain efficient results from the mechanical ventilating machinery installed, which is a small mine-fan. The section known as M 39, Block XVI, is now almost exhausted, and from that area a substantial tonnage of the year's output has been mined.

*Northern Coal Company's Northern Mine.*—This section of the company's mines has been worked continuously during the year. The coal mined is pillar coal, and is almost exhausted. Three months will completely finish mining here. The company has let to contractors a small section of coal to be mined on Section 24, Tauranga, abutting on to Section 39 N.E., Block XVI, from which a small quantity of coal has been mined by Wallace and party, six men being employed.

*Northern Coal Company's Crown Lease.*—(Section 2, Block XVI; Little and party, contractors.) Men are employed mining coal beyond the company's Northern Mine workings. The coal-seam is 10 ft. to 12 ft. thick, but the area is limited, and pillar coal is being mined. The mine is carefully worked. There is another small area adjacent in which the coal occurs, being separated from Little's mine by a downthrow fault. A surface tram is being constructed to work this coal, which is estimated to yield 30,000 tons.

*Northern Coal Company's Waro Section.*—This mine is still closed awaiting the arrival of suitable pumping and haulage machinery, which will be electrically driven.

*Northern Coal Company's Kiripaka Section.*—During 1915 the company acquired a lease of Crown land adjacent to the mine, which has been bored, and the coal-seam located at a depth of about 100 ft., the coal-seam being from 8 ft. to 10 ft. thick. A dip incline tunnel was driven into the coal. This mine worked from September, 1915, to the beginning of October, 1916, when it was temporarily closed. During the period it was worked 13,164 tons of coal was mined, and an average of forty-two men employed. I visited the mine several times during the year, and found the work carefully carried on, ventilation being satisfactory. The coal-measures at this mine are disturbed by faulting, first by a downthrow fault and later by a sharp upthrow fault. The mine was opened on the upper edge of the coal-deposit, the area being very small, besides being faulted, the coal itself being of poor quality intersected by bands and segregations of stone and inferior coal.

*Kerr and Wyatt.*—(Crown lease, Section 39 N.E., Block XVI.)—The coal-seam is thin and an irregular deposit. Of the 515 tons of coal mined during 1916, at least 50 per cent. of it was mined by open cut. The mine-drives into the coal show that the coal on this section is only the edge of the thicker coal-deposit on Section M 39, the freehold property of the Hikurangi Mining Company, where the coal was from 12 ft. to 14 ft. thick. I have noticed that the coal has been carefully worked, there being a very small percentage of loss.

*Co-operative Colliery.*—(Cunningham and Hamilton's Crown lease.) This company's No. 2 mine, on Section 48 N.E., Block XVI, where mining has been carried on during the year, is now nearing exhaustion. The area of coal was small, but it was of good quality, and from 10 ft. to 14 ft. thick. The coal was carefully mined, and the percentage lost in working was very small. I found the mine carefully worked and ventilation good. A good supply of timber was always on hand.

*North New Zealand Coal and Cement Company's Mine.*—This mine has worked continuously during the year with a small number of men. The workings are to the dip of the main shaft, and as a result the mine-drainage has been expensive and has retarded development. An attempt was made to extend the main dip heading into what is believed to be a better coal-deposit, but