

**Waipa Railway and Collieries (Limited):** This company have acquired coal-mining rights over some 6,900 acres at Te Akatea, in the Raglan County, as shown in the plan accompanying my annual report for 1910. The coal is of similar quality to that at Taupiri, and the quantity available has been estimated at several million tons. In order to transport the coal to market the company are constructing a branch railway, five miles and three-quarters in length, built to Government standard, laid with 55 lb. rails, and connecting with sidings at the Ngaruawahia Railway-station. This branch line winds up the valley on the road to Waingaro Hot Springs, and is fairly difficult of construction. The present contract for the formation and bridges is being pushed ahead. The contractors are Messrs. Donald McLean and Co., and the amount of the contract is £27,200. From the railway terminus at Te Akatea the mine will be approached by an endless-rope incline 25 chains in length, with an average grade of 1 in 10, the screening and loading arrangements being at the foot. So far no work has been done in developing the mine beyond exposing the outcrops and driving a heading for about 100 ft. Mr. Ashley Hunter, M.Inst.C.E., is the engineer in charge of the works.

A neighbouring property, the Pukemiro Freehold, upon which several fine outcrops of coal are exposed, has been further prospected, under the direction of Mr. E. S. Wight, M.I.M.E., but mining operations are in abeyance pending the construction of a bridge across the Waikato River.

On the Buller Coalfield the Westport Coal Company have, from their Millerton and Denniston collieries, slightly increased their annual output. At the Millerton Mine the workings to the westward of the Mine Creek section have proved a large area of excellent bituminous coal. In the Mangatini section the south headings have developed favourably, and those to the westward expose hard coal of good quality. A powerful hydraulic brake has been installed for the purpose of operating the area at the rise side of the Lower section. At the Coalbrookdale section of the Denniston Colliery development to the dip continues satisfactory, and a large area of excellent coal has been proved. In the Glasgow section the output has been obtained from pillar-extraction; the Wareatea haulage drive has been extended to the westward, in connection with which a haulage-engine is in course of erection. At the Ironbridge section, headings in a southerly direction have developed an extensive area of coal of considerable thickness.

The Westport-Stockton Coal Company have been less successful, and a considerable decline in their annual output has to be recorded. The narrow but lengthy strip of coal situated to the eastward of the Westport Coal Company's Millerton lease, which constitutes the B, C, and D tunnels of the Stockton Mine, is rapidly approaching exhaustion. It is reported that this company have recently proved, by boring by diamond and other drills, a workable area of coal near their eastern boundary, and it is sincerely to be hoped that they will now be rewarded for their enterprise. At the present time the Geological Survey Branch of the Mines Department, under Mr. P. G. Morgan, Director, are making a geological survey of the locality in which the boring is being carried out.

The output of the Seddonville State Colliery shows a slight decline, due to the approaching exhaustion of marketable coal. The output was obtained almost entirely from pillar-extraction. In connection with this colliery, a considerable amount of attention has been devoted to the Charming Creek Valley, which is included within the State coal reserve, and is situated to the south-west of the present mine-workings. A borehole (No. 1), 2½ in. in diameter, was put down on the banks of Charming Creek, at a distance of 57 chains above its junction with Reed's Brook, and at a depth of 91 ft. a 20 ft. seam of hard bituminous coal was pierced. As a result of this discovery it was decided to systematically bore along the Charming Creek Valley from the Ngakawau River to near Chasm Creek, as coal-measure rocks, consisting of sandstone, grit, and mudstone, together with a thin overlying coal-seam, were found to outcrop over an area of approximately 10 square miles, and the prospects of the large seam underlaying a considerable portion of this area appeared reasonable. The diamond drill was therefore transported to Watson's Mill, near the junction of Charming Creek with the Ngakawau River, a distance of 2 miles 28 chains from the successful borehole No. 1, and a borehole was there put down through mudstone and grit; at a depth of 280 ft. the underlying conglomerate (the base of the coal-measures on the West Coast) was reached, and at 370 ft. gneiss was penetrated, the large seam being non-existent. The plant was then removed up the stream about 46 chains, and another hole was drilled, the results obtained being somewhat similar; at 475 ft. the conglomerate was penetrated, and at 525 ft. the gneiss. These two bores (Nos. 3 and 4) would, if successful, have saved a considerable amount of intermediate boring; but as the results were negative the plant was again moved further up stream, and a series of bores, as shown in the map accompanying this report, were put down between the successful No. 1 borehole and the Seddonville Mine. Altogether sixteen holes were drilled, aggregating in depth 3,120 ft., at an average total cost of about £1 per foot, including transport of plant through a rough and roadless bush. These operations were carried out systematically after preliminary geological survey, and the management thoroughly tested the locality, as, with the approaching exhaustion of the old Seddonville Mine and no other discoveries being made, the outlook for the Seddonville Mine was not bright. In four boreholes altogether—namely, Nos. 1, 5, 8, and 10—the 20 ft. seam was proved, but none of the remaining boreholes showed the seam to maintain that thickness, and the total area of workable coal—i.e., a seam exceeding 5 ft.—was proved not to exceed 190 acres, which at the present time would not be of sufficient extent to warrant the expenditure necessary to lay down a mine to work this area, either as an extension of the Seddonville Mine or as a separate concern to be connected with the railway system at Ngakawau. No doubt in the distant future, when coal becomes scarce, and commands a higher price, attention will be given to the lens-shaped coal-deposit proved by these operations, and it is for this reason that I have described what has been done by the Mines Department. For most of the geological data shown on the map I am indebted to Mr. P. G. Morgan, Director of