

The average number of men and boys employed in and about the mine throughout the year in connection with coal-winning was 145, made up as follows: Underground—Coal-hewers, 51; deputies, shiftmen, and truckers, 46; boys, 2. On the surface—33 men and 13 boys.

In addition to those employed under the head of "Coal-winning" there were eight men employed boring and prospecting on the State Coal Reserve between the Seven- and Nine-mile Creeks.

The coal-hewers' average daily earnings (gross) was 24s. 11·38d., and the net average return to each man was 24s. 3·18d., a net increase of 1s. 1·16d. per day over the previous year.

The total payments made on wages account, including stores, mine-timber, and compensation, amounted to £35,786 3s. 10d.

#### *Underground Development.*

The whole of the output for the year was obtained from pillar-extraction from both sections (Nos. 1 and 2) of this colliery, and apart from the ordinary routine of operations in opening out old disused bords and headings in order to extract the pillars effectively there has been no new underground development work.

The No. 1 section was abandoned on the 18th February, 1919, the further exploitation of the remaining small pillars being attended with too much danger and expense to warrant any more work being done in the section.

In future the output of the colliery will be obtained from the No. 2 section alone, where only a limited number of pillars of thin coal remain to be worked, and as these pillars are confined to a long narrow series it renders it impossible to employ more than a small number of miners.

Within the course of a month from date the dip workings, which have supplied coal of a superior quality for many years past, and at the present time find employment for three pairs of miners on the day and afternoon shifts, will be exhausted.

In order to maintain a reasonable output the management will endeavour to find places for some of the men out of the dip section by working more places double-shift; but it must be pointed out that, as the remaining pillars to be won are in a portion of the mine where the seam is thin and in several places very dirty, the output will naturally be reduced, and the cost of production correspondingly increased.

#### *Exploratory Work.*

During the year much work has been done by means of boring and other prospecting operations on the State Coal Reserve in close proximity to the Point Elizabeth Colliery, and to the northwards of the same on the low coastal range between the Seven- and Nine-mile Creeks.

As a result of these operations a coal-seam of a semibituminous nature, and averaging 8 ft. in thickness, has been proved to exist over an area of 350 acres, and further boring which is at present being carried out will in all probability increase the workable area. The seam occurs at altitudes varying between 200 ft. and 350 ft., and the quantity of coal in the area proved may be safely estimated at 4½ million tons, of which 75 per cent., or 3¼ million tons, may be won. In several parts of the reserve the seam has been driven on, and it is pleasing to report that the coal was found to be of a very hard nature.

From the following analysis, which is an average of twelve samples, this coal should prove useful for household purposes:—

	Per Cent.
Fixed carbon .. .. .	40·45
Hydrocarbons .. .. .	51·12
Water .. .. .	6·00
Ash .. .. .	2·43
	<hr/> 100·00
Sulphur .. .. .	3·4
Calories, per gram .. .. .	7,254
British thermal units, per pound .. .. .	13,057
Evaporative power, in pounds of water at 212° F. .. .. .	13·53

It must be pointed out that, although the average percentage of fixed carbon in this coal is not so high as in the coals of other mines in this district, the combined principal constituents, carbon and hydrocarbons, are equal to those of Blackball, Point Elizabeth, Puponga, and Reefton coals, all of which are largely used for steam and household purposes, and the inert constituents are no greater.

In connection with this field there are also special features, some of which may be enumerated as follows:—

- (1.) Easy access by means of a short branch railway near Runanga Station, which presents no engineering difficulties and should be cheaply constructed.
- (2.) The cost of establishing a colliery would be comparatively low owing to the fact that very little new plant and machinery would be required, as the plant from Point Elizabeth Colliery will be available within twelve months owing to the exhaustion of that mine.
- (3.) If exploited it would supply the State coal depots with a hard marketable coal, which is highly necessary for their future maintenance, as the present source of supply (Point Elizabeth) is being rapidly exhausted.
- (4.) The present township of Runanga is only two miles and a quarter distant by level road, and no housing difficulties would arise.