Underground Workings.—The output during the year from this mine was obtained from the development of what is known as the main-heading section, and the extraction of pillars from the dip, east and west sections. The pillars from the latter section have been extracted, and in the two roadways leading thereto concrete stoppings have been built. In the dip and east sections water is allowed to rise as the pillars are extracted, thus removing any danger of fires from the area pillared.

In the main-heading section a reasonable area has been opened up, but the pillars therefrom cannot be extracted for some time to come. To extract the pillars would no doubt damage the surface, and therefore cause water to percolate into the workings, which would necessitate a pumping plant to deal with it.

On the west side from near the terminal wheel in the main-heading section a level has been driven a distance of about 5 chains. The coal in this level has been fairly good, but the thickness of the seam has been variable, the greatest thickness being no more than about 5 ft. From this level a dip heading was started with the object of opening up an area between James Creek and the Greymouth–Barrytown Road. This dip heading was only driven a distance of 3 chains when the seam pinched to an unworkable thickness.

Development Work.—During the year the main heading was extended a distance of 8 chains, and a connection made with the coal-outcrops on the banks of Cannell Creek. In the driving of this distance two large rolls of stone in the seam had to be driven through, also some very heavy ground had to be dealt with when within a chain of Cannell Creek. Two places have been opened up on these outcrops, and roads laid preparatory to working, but in the meantime they are stopped.

On the main haulage-road leading to Cannell Creek a small section is being developed, and when completed arrangements will be made to extend the main haulage-rope and work the two places opened up.

On the east side of the mine-workings there is an upthrow fault which displaces the seam from 35 ft. to 40 ft. With the object of crossing this fault two slant headings are being driven, one as a haulage-road and the other as a return airway. These headings have been set off in such a direction in order to be suitable to deal with the coal from the area in the vicinity of bore No. 8, where 8 ft. of coal was proved to exist; also the coal that outcrops in the upper reaches of Cannell Creek.

Exploration.—Under this head much work has been done by means of boring and careful examination of the surface outcrops. During the year six holes were put down, the total depth drilled being 767 ft. 6 in. One of the holes, No. 1A, was put down on the upper side of the fault on the east side of the mine-workings, to prove the extent of the displacement, and the other five were drilled to further prove the field on the west side between James Creek and the Greymouth–Barrytown Road. The results obtained from the five latter holes were not satisfactory, as will be seen from the following records: In bore No. 2A 2 ft. of coal was struck, but unfortunately a portion of the boring plant was lost in the hole, which prevented its completion. This hole, however, disclosed an upthrow fault of approximately 80 ft. between it and the present mine-workings. In bore No. 3A. 5 ft. of coal was met with; No. 4A, no coal; No. 5A, 3 ft. 6 in. coal; and in No. 6A 5 ft. of coal. These holes, together with others previously put down, prove that nowhere in this locality is the seam more than 5 ft. in thickness. They also prove that the seam pinches out in places. From this information it is questionable whether this area is worthy of development.

The surface outcrops on the banks of Cannell Creek have been carefully examined and traced for some considerable distance; an area between the mine and Ten-mile Creek has also been carefully prospected. In connection with the former, the results obtained were fairly satisfactory, and will justify further development; but in the latter area no workable coal was discovered.

Electrification.—In my previous report reference was made to the proposed electrical installation to replace the steam and compressed-air plant then in use. The whole of the electrical equipment has been installed, and it is pleasing to report that the plant is working most satisfactorily.

Future Developments.—On a portion of the State Coal Reserve at Dunollie boring operations by means of the diamond-drilling plant are being carried out in order to ascertain whether a workable seam exists in the area between the Seven-mile and Cavern Creeks. One hole has already been drilled, and a seam of hard coal 6 ft. 6 in. in thickness struck at a depth of 222 ft. Drilling operations were carried on to a depth of 406 ft. when the hole was stopped. The seam met with in this hole is one that is situated about 150 ft. above those previously worked at the Point Elizabeth Colliery, and in order to prove the latter boring operations as herein stated were carried on to a depth of 406 ft. At a depth of 372 ft. the upper seam worked at the old Point Elizabeth Colliery was met with, the thickness being as follows: Coal, 1 ft. 3 in.; shale, 6 in.; and coal 1 ft. 9 in. At a depth of 392 ft. the bottom seam was pierced, but the thickness was only 1 ft. 3 in. From the result of this borehole it will be seen that the seam worked at the Point Elizabeth Colliery thins considerably in the westward direction.

General.

Under this head reference may be made to the reduced output and increased cost of production. As already shown in this report, the output from both collieries is lower than in the previous year, due to the number of working-days being considerably less. The average number of days lost during the year at the Liverpool Colliery (excluding back Saturdays) was 62. Taking the latter figure with the daily output of 730 tons per day, this represents a loss in the output of 45,260 tons, also a serious loss in the miners' earnings. It has been the aim of the management to keep down the cost of production, but in consequence of the frequent interruptions to work and the reduced output the costs have been higher than if given a regular and greater output.

In conclusion, I wish to state that the officers in all branches have performed their duties in a satisfactory manner, and I am also indebted to yourself for valuable services rendered in connection with several matters concerning the mines.

I have, &c.,

I. A. James, Superintendent.

The Under-Secretary, Mines Department, Wellington.