1903. NEW ZEALAND.

COAL-MINES

(REPORT ON THE WORKING OF) FOR THE YEAR ENDING THE 31st MARCH, 1903.

Presented to both Houses of the General Assembly in accordance with the requirements of Section 14 of "The State Coal-mines Act, 1901."

POINT ELIZABETH COAL-MINE.

Mr. A. B. Lindop, Manager of State Coal-mines, to the Under-Secretary of Mines, Wellington. Greymouth, 20th June, 1903.

I have the honour to submit my annual report on the State Coal-mines at Seven-mile

Creek, Point Elizabeth, for the year ending the 31st March last.

The coalfield may be taken as two distinct sections—namely, the northern section, which lies to the north of the Seven-mile Creek, and the southern section, which lies between Coal Creek and

Most of the development-work done has been over the southern section This will be worked from three distinct openings, owing to two large faults crossing the field, which have caused a displacement of the coal on the western side of the fault of fully 100ft. in each case. These openings are made by tunnels driven in from the western face of the range, to cut the coal to the dip of the seams showing in outcrop on higher spurs, and will in each case enable a large area of coal to be won level-free.

No. 1, or the most southern tunnel, has to be driven a distance of 693 ft. to reach the coal. This distance has been accurately ascertained by a shaft which was sunk some years ago on the upper side of the most eastern of the fault-lines before referred to. A borehole was put down from the bottom of this shaft, which went through 16 ft. of an excellent quality of coal. The tunnel at the end of March last was constructed for a distance of 408 ft., leaving 285 ft. yet to be driven to cut the coal. This distance will be driven by the end of June, when a commencement will be made to open up headings in the coal, and an opening will be made to the surface for the purpose of procuring good ventilation. The headings require to be driven for a considerable distance into the coal before any large output can be expected. These works will be energetically carried on, and will be well advanced by the time the railway is completed.

No. 2 tunnel is estimated to be 594 ft. in length before it will reach the coal, but this distance is not definitely fixed, as it depends to a certain measure on the dip or inclination the coal is lying at. It is, however, approximately correct, as far as can be ascertained from surface indications, and the inclination of the strata and coal-seam shown in the Exhibition outcrop. The range rises abruptly, and would necessitate about 600 ft. of a bore to test the coal-seam at the point where the tunnel is expected to cut it. It was not considered desirable to incur the expense of putting down a bore after ascertaining the inclination of the seam at the Exhibition outcrop, which shows there to be 14 ft. of excellent coal, and this seam will be worked from this tunnel. At the end of March last the tunnel was driven a distance of 304 ft., leaving something like 300 ft. to drive to cut the

coal-seam.

No. 3 tunnel: This opens up as much of the western portion of the field as can be worked level-free. Any coals to the southward of the tunnels will have to be worked from shafts, and with the exception of a borehole, which was put down in the bottom of a gully near Camp Creek, between Nos. 1 and 2 tunnels, nothing is known of this portion of the field. The borehole in this gully is down to a depth of 381 ft., and went through, it is said, about 8 ft. 4 in. of good coal. It is estimated that the No. 3 tunnel will have to be driven a distance of 528 ft. to cut the coal, but this distance is not definitely ascertained, as the great depth of borehole required to test the coal at this point would entail an expenditure not warranted, having other information available. This means that the tunnel may be required to be driven some distance further than extincted, but it will depend upon whether any slight alteration has occurred in the angle of the dip from that shown at the coal-outcrops.

These three tunnels have been driven continuously by three shifts.

No. 4 tunnel: This is to open up the section on the northern side of the Seven-mile Creek, where there are several outcrops of hard coal highly suitable as fuel for steam purposes exposed. Before this portion of the field can be worked a bridge will have to be constructed across the Seven-mile Creek, and a tramway connection made between the tunnel and the site of coal-bins. As it only requires a short drive of $2\frac{1}{2}$ chains to reach the coal-seam, one shift has been

employed on this work.

The northern section of the mine is likely to form a large coal-bearing area, but as there has been very little prospecting-work done to prove the thickness of the coal-seams, and determine the number of faults and amount of displacement, there has been very little detailed information acquired respecting it, beyond the fact that numerous outcrops of coal are to be seen alongside the Seven-mile Creek and at the Nine-mile Bluff. At the latter place Mr. John Kane opened out about twelve months ago a seam of coal in the terrace fronting the sea-beach. This seam was of good quality and 6 ft. in thickness.