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## REPORT ON THE PUPONGA AND PAKAWAU COALFIELDS, COLLINGWOOD COUNTY.

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*Presented to both Houses of the General Assembly by Command of His Excellency.*

Wellington, 30th June, 1900.

SIR,—

I have the honour to acknowledge the receipt of instructions to visit and report on the coal-seams at Puponga, and I accordingly report as follows:—

### NARRATIVE.

In compliance with the above instructions I left Wellington on the 12th June, and Nelson for Collingwood on the 15th, and the following day Collingwood for Puponga, at which place I arrived and pitched camp on the 16th of that month. I remained at Puponga till the 21st, during which period I examined all the known outcrops of coal in that part of the district, and on that date shifted camp to the valley of Taipata Creek, midway between Puponga and Pakawau Inlet. On the 22nd I removed to Pakawau, and the same day examined the Pakawau Coal-mine and the formations exposed on the south side of the Pakawau Gorge, and the western slopes of the mountains farther to the south. On the following day, 23rd June, I returned to Collingwood, and the same day left for and arrived at Nelson about midnight. On the 25th I visited the chrome deposits being worked on the south-west side of Croixelles Harbour by Messrs. Tatton and Jackson, and returned from Nelson to Wellington on the 28th June. The chrome deposits examined on the 25th June will be reported on separately.

### GEOLOGY.

The geology of the district between West Wanganui Inlet and the lower Aorere Valley and Golden Bay to Puponga Point is concisely described in a report on the geology of Collingwood County by James Park, F.G.S.,\* the map illustrating which shows the boundaries of the different groups of strata, approximately correct, over that part of the district dealt with in this report.

Mr. Park describes the sequence of the Cretaceous-tertiary rocks in descending order as being,—

“a. Grey Marl series.

1. Blue and yellow clays.
2. Marly greensands, passing into shelly limestone.

“b. Ototara series.

1. Compact shelly limestone.
2. Quartz sands, grits, and ferruginous cements, passing into hæmatite.

“c. Greensand series.

1. Ferruginous sandstones, with seams of brown coal.
2. Conglomerates, with seams of bituminous coal.”

Of the lower beds (c, 2) Mr. Park says: “Between Puponga Inlet and Cape Farewell the conglomerates are very largely developed; but the seams of coal they contain always appear to be too small to work. The long lines of fine escarpment sections at this place afford the most valuable and reliable evidence as to the relation of the bituminous-coal measures to the brown-coal measures. The sequence usually reads,—

“1. Marly greensands, passing [upwards] into limestone.

“2. Grey sandstone and grits.

“3. Coarse ferruginous sandstones.

“4. Coarse conglomerates and pebbly sandstones.

“5. Ferruginous sandstones and shales with thin seams of bituminous coal.

“6. Coarse, heavy conglomerates.”

“In the West Wanganui district the brown coals occur about the base of the coarse ferruginous sandstones [beds 3 of the above sequence]; but they are absent in this line of section, their place being apparently occupied by the conglomerates (No. 4), which rapidly thin out as they are followed to the westward.” (Geological Reports, 1888–89, pp. 237–238.)

\* Geological Reports, 1888–89, pp. 186–243.