

1900.

NEW ZEALAND.

WELLINGTON-MANAWATU RAILWAY

(REPORT ON CONDITION OF).

Laid on the Table with the Leave of the House by the Hon. Mr. Hall-Jones.

REPORT ON WELLINGTON-MANAWATU RAILWAY.

SIR,—

Wellington, 24th July, 1900.

We have the honour to submit, in accordance with our instructions, the following report on the condition of this railway :—

The formation is in excellent order and well maintained, clear of weeds and well drained ; cuttings well sloped and in good condition, although a few small slips have occurred at various times. The exceedingly steep hillsides at Paikakariki are, in bad places, provided with overhead shoots to catch falling stones, and everything appeared safe there.

The permanent-way is kept in good running trim. The rails are mostly 53 lb. steel, but particular places have been relaid with about five miles of 65 lb. rails. Rails generally are in very good condition, and have as yet suffered but little from wear. On a mile or two of line at Porirua the rails suffer badly by rusting from the salt spray, but the worst of these are renewed from time to time.

Ballast is good and abundant. Sleepers, originally mostly of totara, are still in fair condition after fifteen years. In some parts of the line the birch sleepers are decaying badly, but renewals are being carried on as fast as they are seen to require it. Last year 3,780 new sleepers were laid, most of which were ironbark.

Most of the structures were built of totara, which in this part of New Zealand was of exceptionally good quality, consequently they are on the whole in good condition, and these include bridges, buildings, fences, platforms, cattle-pens, culverts, gates, cattle-stops, &c.

With the continual use of heavier engines, the necessity has arisen to strengthen the bridges, which has been done. With one exception, all native timber has a good factor of safety, but, considering the unreliability of totara timber as a beam, it is desirable that renewals should not be long delayed. The company evidently recognise this, as several of their bridges have been renewed in ironbark. The bridge ironwork is not stressed above its working limit by the present loads.

Beyond Plimmerton almost all culverts are in totara, the condition of which is good for some years to come. From Plimmerton to Wellington, masonry, concrete, and iron-pipe culverts are mostly used.

The bridges are all in satisfactory condition, the totara and kauri timber as it fails being at once replaced by ironbark ; and defects in strength for heavier engines are carefully attended to. The good condition of the lofty viaduct north of Johnsonville, built of kauri, is especially satisfactory, seeing the very large quantity of timber used and exposed to the weather. The upper transoms in this structure are weak, and should be renewed.

One tunnel on the Paikakariki length has been abandoned, and the line diverted round it on the sea side, and, this being a very good line, there is no reason why the tunnel should be used again. Of the five remaining tunnels at this place, two are slightly cracked in various places through the one-sided pressure of the steeply sloping hillside, but it seems evident that all movement has now ceased, and that the tunnels are safe. There are five tunnels between Crofton and Wellington, and all are in excellent condition.

Fencing is of various descriptions, and is kept in fair condition. Some renewal of fencing has been done with old sleepers. The company is subject to the Fencing Act, and repair in conjunction with the owners. Gates are almost all good and kept painted. Cattle-stops also are mostly in good condition, a small number requiring renewals chiefly in the beams, which they receive from time to time as they are considered to require it. Cattle-pens, timber fronts of platforms and of loading-banks, all of totara, have stood remarkably well.

The stations are all in very fair condition, and we should say that with suitable yearly attention they will show no marked deterioration for another fifteen years, the age they carry at present. There is a line of wires for telephone communication all the way, and most of the stations have telephone instruments.

Mile, half- and quarter-mile posts are in good condition.

Existing signal arrangements are in good condition.

Water-supply is abundant.

Of the rolling-stock we inspected 82 per cent. of carriages and 74 per cent. of the wagons. All of these we found to be in very good condition and well maintained, and we noticed eight wagons only with tires thin from wear, but these were still in safe condition.

The locomotives appear outwardly in excellent order, and as for the boilers, which are the principal item, they are inspected every year by the Government Inspector of Machinery, whose certificates were examined.

Turntables are in good order, so are the weighbridges.

Forty-seven per cent. of the total receipts of last year was expended in maintaining the line. The average revenue per mile was £1,119, and the expenditure £529 per mile.

We have, &c.,

WILLIAM H. HALES, Engineer-in-Chief.

JOHN COOM, M.Inst.C.E.

C. NAPIER BELL, M.Inst.C.E.

The Hon. the Minister for Public Works.

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