As showing the popularity of the scheme, I might mention that in the area north of White's Line, 760 residential sections were offered, and of this number only thirty remain unsold.

In the Bell Block, the area adjoining the Railway Workshops, sales have not been so popular, and of 178 sections offered, only eighty-one have been sold. However, I am certain that the prejudice against the proximity of the Workshops will soon disappear, and that sales in this locality will improve, particularly when industries in the adjacent industrial area get going.

The industrial railway-line now completed throughout the Department's area is in active operation, and several industrial concerns—namely, General Motors; Metters (N.Z.), Ltd.; W. D. and H. O. Wills; Wellington Concrete Pipe Co.; Texaco Oil Co.; Vacuum Oil Co.; Hume Pipe Co.; Hutt Valley Shingle Co.; and the Railway Workshops, are actively engaged in their various industries on areas sold by the Department.

The development of the industrial area has necessitated the construction of a wharf at Point Howard to berth the oil-tankers, and it is anticipated that another wharf will be required and built in the same locality in the near future.

During the year a road (Seaview Road) has been completed from approximately the pipe-line bridge across the Hutt River to Lowry Bay Road, and this is now practically the main highway between Wellington City, and the eastern bays. This road, which shortens the distance between the city and the eastern bays and return by one mile, was financed mainly by the Department, and that the expenditure was justified is apparent when it is mentioned that the whole of the frontage to this

road has been disposed of at the satisfactory figure of £34,327.

After payment for land acquired, £174,472; incidental expenses, £10,623; subdivision, roading, sewering, &c., £199,061; and taking into account sales to date amounting to £488,244, the Trading Account discloses a gross profit of £171,148. After providing interest on capital advanced from Lands for Settlement Account the net profit available for the Railways Department as a contribution towards the cost of the railway is £148,795, while from the gross profit there will be paid to the Lands and Survey Department the sum of £11,530 as expenses of administration.

For the coming year the gross amount of unpaid capital advanced from Land for Settlements Account is £124,717, and this sum as reduced from time to time by payments received will be charged with interest at the rate of 5 per cent., which charge should be less than £6,235 for the year.

The sum of £232,009, represents unpaid purchase-money, and this is bearing interest at the rate of 5½ per cent., and should realize by way of interest not less than £12,760 for the year.

The land on hand at the 31st March, 1930, and unsold is estimated to realize £106,000, and this

has been taken into the accounts as an asset at £66,562.

It is expected that the excess of interest-earnings over interest-payments will more than meet all incidental expenses for the coming year.

It is interesting to note that of the sales made, 53 per cent. has been received in cash.

A great feature of the development is the wonderful progress that is being made with the building operations in the residential area, and it is difficult to realize such a complete transformation from what only four years ago was open paddocks to what to-day is a first-class residential suburb laid out on the latest town-planning ideas, and supplied with every modern convenience.

From the gross profit referred to above the sum of £11,530 will be paid to the Lands and

Survey Department as expenses of administration. My thanks are due to the Chief Surveyor (Mr. F. H. Waters) and the members of my staff whose hearty co-operation over the past few years has allowed this sum to be earned without any numerical increase in the staff, and who also have helped considerably in the success of the whole scheme.

## APPENDIX V.—A REPORT ON FIELD EXPERIMENTS IN PIGEON VALLEY, MOUTERE HILLS.

(By T. Rigg, Chief of the Agricultural Department, Cawthron Institute.)

## Introduction.

In previous reports of the Cawthron Institute attention has been drawn to unsatisfactory returns from stock, particularly sheep, on Moutere Hills country. Lambing percentages are rather low-in certain cases less than 50 per cent. High mortality of hoggets frequently occurs during the late autumn and winter if the seasons are unfavourable for stock. Ewes lose condition during the winter, and frequently are slow to recover. Unless the pastures have been resown with good English grasses and clovers, after preliminary lime and phosphate treatment of the land, it is impossible to fatten lambs on Moutere Hills pastures.

One of the most striking features of stock-ailment on these pastures is the occurrence of Xanthin calculi in the kidneys of sheep. During the two years in which careful observations have been made, no less than thirty sheep on one badly affected farm have died. In at least twenty cases the presence

of Xanthin calculi in the kidneys of sheep may be regarded as a predisposing cause of death.

With a view to determining the causes of Xanthin calculi formation and improving the position of the stock industry on Moutere pastures, extensive experiments have been conducted by the Cawthron Institute during the last two years. The experiments include chemical studies of the soil and pastures, and the conduct of field experiments to find a practical remedy by the treatment of the pastures. Through the interest displayed by Mr. A. F. Waters, Commissioner of Crown Lands at Nelson, the co-operation of the Lands Department was secured in financing some of the field experiments