TABLE of CHAINAGE-CLOSURES in Block XI., Woodland District. By E. H. Wilmot, District Surveyor.

Circuit.	Distance.	Number of Lines.	Average Length.	Error (Links).	1in.	Per Mile.
	M. ch.					
Round Sections 4, 5, 6, 7, 11, 14, &c., through 13, being section-lines Long Point Road and coast traverse*	10 49	156	545	21·9	3,878	2·07
Section 13, down Long Point Road, along coast up east and north sides of 13 to Long Point Road	1 33	30	375	2·1	5,360	1·49
Round Sections 18, 17, 1, 2, 3, 16, and 17, being section-lines, Long Point Road and Purakanui River traverse†	5 5	75	540	1·3	31,149	0·26
Round Sections 11 and 14, and part 13, being coast traverse Cosgrove Road and Long Point Road	9	143	398	7·4	7,691	1·04
Round Sections 11 and 14, being coast traverse Cosgrove Road, and east side of Section 13	6 20	123	407	8·3	6,027	1·33

The above, with the exception of three miles of Long Point Road chained by Mr. Calder, was all chained with 5-chain band, the slopes being taken with an Abney level, there being scarcely a level line in the whole work. The country is all bush and the coast traverse exceptionally rough.

Mr. McCurdie reports in connection with closing errors in Block XIII., Rimu District:—

I am not able to give an account of the closing error in the bearings. Owing to the hilly nature of the country there were a great many check-sights over the block, and the errors were corrected, and the true bearings written in the field-book as the work went on, no record being kept of the closing errors.

The following is an account of the chaining:—

Circuit round Sections.	Distance in Miles.	Error (Three Sides of Triangle).	Error per Mile in Links.	Proportionate Error.
1–9	9·31	0·4 lk., 0·8 lk., 0·7 lk.	0·08	1 in 100,000
10, 11, 23	3·28	3·0 lk., 3·3 lk., 1·4 lk.	1·00	" 8,000
12–21, and 22	8·09	4·3 lk., 4·5 lk., 1·3 lk.	0·55	" 4,182
Whole block	12·44	3·2 lk., 4·46 lk., 3·1 lk.	0·36	" 22,222
	33·12		1·99	1 in 144,404
Means	8·28		0·495	1 in 38,104

Mean error, ½ link to mile = 3·91248in. to mile.

This chaining was done by Mr. Mouat. The smallness of the closing error is not due to accident or to compensation, unless in a very small degree, as most of the traverses were chained more than once to get them to this standard. Intermediate checks were also applied by calculated and observed bearings, so that few errors could have escaped.

Mr. Edie furnishes a table showing closures of traverse forming boundary of Section 1, Block V., Catlin's, and Sections 9, 10, 11, 12, 13, 14, Block VII., Catlin's.

Total length of traverse, 72961 links, or a trifle over nine miles. Total error—southing, 7·6 links; easting, 1·1 links; the value of the traverses being, round north-east traverse—

	S.	E.
To peg 16A	30588·4	14545·9
To peg south-west	30580·8	14547·0
	7·6	1·1

Error, 1 in 9475 links, or 0·83 per mile.

Number of traverse-lines, 210. Average length of traverse-lines, 347 links. The traverse of Catlin's River brings the average length of line up very much. Apart from the Catlin's traverse the lines are very short, averaging 280 links.

I had ten checks on trigs, or otherwise a check of every twenty-one lines. The angular closures varied from ½min. to 3½min., the error being distributed in checks taking into account the engtth of lines when distributing error.

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* Includes about two miles Long Point Road chained by Mr. Calder. My own bearings. † Includes about one mile of Long Point Road chained by Mr. Calder. My own bearings.