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PARTY No. 2, IRRIGATION SURVEYS.

R. W. MACINTYRE, C.E., IN CHARGE.

DEPARTMENT OF THE INTERIOR,

IRRIGATION SURVEYS OFFICE,

CALGARY, 18th March, 1899.

A. O. WHEELER, Esq. D.L.S.,
In charge of Irrigation Surveys.

SIR,—I have the honour to submit the following report of my season's work during 1898, with Party No. 2, Irrigation Surveys.

My party was completed and went into camp at Shagannapi point by the Bow river on June the 8th.

Instructions for the season's work were received from you on June the 10th.

The instrument allotted to me for the survey is known as Short's Telemeter-level ; maker, L. Casella, London, England.

On June the 11th, extensive trials were made by me in the vicinity of camp with a view to the testing and adjustment of this instrument. The results were on the whole satisfactory.

On June the 13th, telemeter levels were taken along the east boundary of township 24, range 1, west of the 5th meridian, and compared satisfactorily with the levels established in 1894 on the same line.

At the same time, my topographer was employed in making a pace traverse of different areas, to familiarize himself with his method of work.

We struck camp on the 15th of June and proceeded west, via the Morleyville trail, to a point on the Bow river about two miles southeast of Cochrane.

The district mapped out for the season's work is bounded as follows :—To the north, by the north boundary of township 25, commencing at the northeast corner of range 4, west of 5th meridian, and extending east to the northeast corner of range 27, west of the 4th meridian, a distance of 34 miles.

To the east, by the east boundary of range 27, west of the 4th meridian, commencing at the northeast corner of township 25, range 27 (mentioned above), south to its intersection with the Bow river ; thence westerly and southerly along the Bow and Highwood rivers respectively, to the northeast corner of township 18, range 29, west of the 4th meridian.

To the south, by the north boundary of township 18, from the northeast corner of range 29, west of the 4th meridian, to the northeast corner of range 3, west of the 5th meridian.

To the west, by the east boundary of range 3, west of the 5th meridian up to the northeast corner of township 20 ; by the east boundary of range 4, up to the northeast corner of township 23 ; by the east boundary of range 5, to the northeast corner of township 24, and by the east boundary of range 6, up to the Bow river near Radnor, on the C. P. Ry. Work was commenced at the northeast corner of township 25, range 4, west of the 5th meridian, Mr. T. D. Greene's elevation (established in 1894) being taken as a starting point.

The general method of field work adopted was as follows :—Telemeter levels were run along each alternate meridian, either north or south, as was most convenient. The topography of the sections lying between the levelled meridians was taken by the topographer, who usually made a diagonal traverse of blocks containing 4 sections.