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MINES DEPARTMENT:

GEOLOGICAL SURVEY BRANCH.

ANNUAL REPORT.

Laid on the Table of the House of Representatives by Leave.

Geological Survey Office, Wellington, 12th June, 1919.

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I have the honour to forward herewith the thirteenth annual report of the Geological Survey Branch of the Mines Department. This report gives a summary description of the work of the Geological Survey during the twelve months ended 31st May, 1919.

SUMMARY OF FIELD-WORK.

During the twelve months that ended on the 31st May, 1919, I visited a number of localities in Auckland, Nelson, Westland, Canterbury, and Otago in order to report upon their mineral possibilities or to obtain information for departmental purposes.

Owing to the fact that systematic boring was in progress an inspection of the coal-bearing area between the Seven-mile and Nine-mile creeks, State Coal Reserve, Greymouth district, was made last October. From my previous knowledge of the area and the examination then made I believe that a large amount of coal can be won from this easily accessible area, the development of which will not be at all expensive. In January last I was associated with Messrs. I. A. James and Boyd Bennie in making a careful examination of a coal-bearing area in the Waikokowai district, west of Huntly, which was under option to the Mines Department. In October I visited the Reefton district in order to examine the Waitahu Coal-mine, Boatman's Consolidated Mine, and the Keep-it-Dark Mine.

During February a long-deferred examination of the scheelite-mines of the Glenorchy and Barewood districts, Otago, was made, with the result that I am able to express the opinion that vigorous prospecting of the various lodes will probably result in valuable discoveries being made. Unfortunately, at the moment of writing, tungsten-ore has fallen to less than its pre-war price, and therefore, until the market improves, scheelite-mining in New Zealand can hardly be conducted at a

In February and again in April I visited St. Bathan's and adjoining localities in Central Otago where alluvial mining is being carried on. The special object in view was to ascertain the prospects of mining in the older auriferous quartz-drifts or gravels which are extensively exposed at Naseby, St. Bathan's, Cambrian, Matakanui, and many other places. I am of opinion that these quartz-drifts have not been sufficiently prospected, and that unprospected portions will yet yield considerable quantities of gold.

Visits were also made to the phosphate-quarries near Milburn and Clarendon, and to limestone-quarries at Milburn, Sandymount (Otago Peninsula), and Dunback. In April the Glentunnel district, Malvern Hills. Canterbury, was examined in order that some knowledge of the coal-measures might be obtained, and advice given re proposed boring near the Homebush Coal-mine.

Dr. J. Henderson, Mining Geologist, last spring made a special survey of a considerable area near Huntly, the chief objects in view being to ascertain the coal possibilities of the Waikokowai district, and to locate bore-sites on the area under option to the Mines Department mentioned above. The influenza epidemic prevented further field-work until January, when the survey of the Mokau district was resumed. In this work Dr. Henderson has been assisted by Mr. M. Ongley, Assistant Geologist, who was released from military duty towards the end of January. Field-work in the Mokau Subdivision terminated on the 10th May, and a detailed report is now being prepared. About the middle of May Dr. Henderson visited the Reefton district in order to report upon the Boatman's Consolidated Gold-mine, where search for the Walhalla ore-shoot worked and lost many years ago has so far been unsuccessful. He also visited the Waitahu Coal-mine and the Seven-mile Creek coal area (State Coal Reserve).