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Ministry of Energy, Mines
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Hon. Anne Edwards, Minister

MINERAL RESOURCES DIVISION
Geological Survey Branch

GEOLOGICAL FIELDWORK 1995

A Summary of Field Activities and Current Research

Editors: B. Grant, P. Geo. and J.M. Newell, P. Eng.

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FOREWORD

Geological Fieldwork: A Summary of Field Activities and Current Research, the 1995 edition, is the twenty-first in this annual publication series. It contains reports on Geological Survey Branch activities and projects during the past year. The base budget of the Branch for the 1995/96 fiscal year is \$5.8 million, an increase of 4.7% from the previous year. This budget has been supplemented by an additional \$1.07 million, made up of \$720 000 from the last year of the current federal-provincial Mineral Development Agreement and \$350 000 under the Mineral Potential Initiative; overall funding therefore decreased slightly from the previous year.

As before, the contents of this year's volume reflect the emphasis of Branch programs. The highlight this year has been the initiation of the Nechako Project in central British Columbia. This program, an outgrowth of the Interior Plateau Project completed last year, is a collaborative effort coordinated by the British Columbia Geological Survey Branch and the Geological Survey of Canada. Both agencies fund component projects and the program is financially augmented by the GSC's National Mapping Program (NATMAP). The program will bring the geoscience database for this region, which includes the well mineralized Skeena Arch, up to modern standards. More than fifty scientists from the federal and provincial Surveys, the Canadian Forest Service, North American, Asian and European universities, and the mineral industry, will be involved over the five-year life of the project. More than a dozen component projects were active in 1995, with GSB efforts focused in the Babine Lake area. Papers presented in this volume include reports on both bedrock and surficial geology mapping, geochemistry and an overview outlining the program objectives and progress to date.

Previous multidisciplinary projects on northern Vancouver Island and the southern part of the Nechako Plateau were in the write-up stage this year. Results of this earlier work on the Nechako Plateau are also summarized here, with more detailed papers to be published separately in the spring of 1996. A comprehensive summary of the now-completed mapping in the Tatlayoko Lakes area, south of the Nechako Plateau, is also presented.

Other major contributions include reports on the second field season of 1:50 000 mapping in the Gataga district along the Northern Rocky Mountain Trench and in the northern Selkirk Mountains. A metallogenic study in the Tatogga Lake area, in the headwaters of the Iskut River, is also in its second year. The Red Chris copper gold deposit is the focal point of this study, and was the largest exploration project in the Province in 1995. This year's paper highlights other potential porphyry copper targets in the district.

On other topics, several short papers focus on specific mineral properties, including two wollastonite skarns prospects and four other new industrial minerals targets, emphasizing the Ministry's focus on stimulating industrial mineral development in the province. In this regard, one paper reports on progress towards the development of a complete inventory of the construction aggregate resources of the province. Three other papers on aspects of British Columbia coal deposits will be of more specialized interest. The Branch continues to be much involved in seismic hazard mapping, and heightened public awareness of the potential for a major subduction earthquake beneath Vancouver Island or off the west coast lends a sense of urgency to this work. One paper reports on progress largely as a result of research presently by the Geological Survey of Canada, quantifying the seismic risk in the Fraser Valley area of the Lower Mainland.

An important and time-consuming aspect of the Branch's work over the last two years has been the Mineral Inventory project, now approaching completion. Assessments of mineral potential have been made available to land-use planners throughout the province, and early assessments are constantly being revised; a progress report and a second paper discussing aspects of the methodology used in this project are presented here.

Production of Geological Fieldwork to the camera-ready stage has been by in-house "desktop publishing". Under the general direction of the editors, authors have been responsible for the input, formatting and lay-out of their own papers. The cost savings achieved are substantial and the Branch is moving quickly towards full electronic publishing and print-on-demand for all its geoscience publications. Thanks are due to John Newell for editing and to Brian Grant for guiding the whole process to completion under tight deadlines.

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