Province of British Columbia
Ministry of Energy, Mines and
Petroleum Resources
Hon. Anne Edwards, Minister

MINERAL RESOURCES DIVISION
Geological Survey Branch

GEOLOGICAL FIELDWORK 1993

A Summary of Field Activities and Current Research

Editors: B. Grant and J.M. Newell

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MINERAL RESOURCES DIVISION

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FOREWORD

The 1993 edition of *Geological Fieldwork: A Summary of Field Activities and Current Research* is the nineteenth in this annual publication series. It contains reports on Geological Survey Branch activities and projects. The base budget of the Branch for the 1993/94 fiscal year is $5.63 million. This budget has been supplemented by an additional $469 000 from the Inter-Ministry Corporate Resource Inventory Initiative to prepare 1:250 000 scale mineral potential maps of Commission on Resources and Environment planning areas.

Regular readers will notice significant changes in the appearance of this year's volume. For the first time production to the camera-ready stage has been entirely by in-house "word processor". Authors have been responsible for the input, formatting and lay-out of their own papers.

The contents of this year's volume reflect the new emphasis of integrated multidisciplinary survey programs. Reports on two major integrated studies, the northern Vancouver Island and Interior Plateau projects are grouped together. Each section includes an overview paper and separate reports on bedrock mapping, surficial geology, applied geochemistry and aspects of metallogenesis. The geochemical components of these programs emphasized the study of natural acid drainage on northern Vancouver Island and the viability of lake-sediment sampling as an exploration technique in heavily drift-covered areas of the Interior Plateau.

Other major contributions to the Ministry's Economic Development Program include 1:50 000 mapping projects in the Yahk-Creston area of the East Kootenays, with emphasis on the Aldridge Formation which hosts the Sullivan orebody; the area surrounding the Goldstream mine in the northern Selkirk Mountains; and the Tulsequah area of northwestern British Columbia where exciting new discoveries have been made on the old Tulsequah Chief property. These programs are targeted on regions where existing reserves will be depleted before the turn of the century or, in the case of Tulsequah, where a past-producer appears headed for revitalization and the surrounding area has promise for new exploration opportunities. Three papers report on continuing research on the coalbed methane potential of British Columbia coals.

An important element of the Branch's 1993/94 program, the Mineral Potential Initiative, is not reported on in this volume as its objectives are geared to the publication of state of the art, stand-alone mineral potential maps at 1:250 000 scale. The first phase of the project, the assessment of the mineral potential of Vancouver Island, is complete.

This volume also includes thirteen papers from the Mineral Deposit Research Unit at The University of British Columbia, providing new insights into alkalic porphyry copper-gold deposits and volcanogenic massive sulphide deposits in the province with particular emphasis on the porphyries in the Ironmask batholith and massive sulphide deposits at Myra Falls on Vancouver Island, Tulsequah and Anyox on the Mainland Coast.

I would like to acknowledge the efforts of the Scientific Review Office for once again meeting tight publication deadlines; John Newell for his thorough and timely edits and Brian Grant for guiding the whole process.

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