GEOLOGICAL
FIELDWORK 1999

A Summary of Field Activities and Current Research
Energy and Minerals Division
Geological Survey Branch

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British Columbia Cataloguing in Publication Data
Main entry under title:
Geological Fieldwork: - 1974 -
Annual.
Issuing body varies

Includes Bibliographical references.
ISSN 0381-243X=Geological Fieldwork


QE187.46  622.1'09711  C76-083084-3 (Rev.)
FOREWORD

This is the twenty-fifth edition of Geological Fieldwork: A Summary of Fieldwork and Current Research. An annual publication, it contains reports summarizing results from B.C. Geological Survey (GSB) projects completed throughout the province during the past year. As well, there are several contributions by associated researchers from the Mines Branch, University of Victoria and The University of British Columbia.

The contents of this volume reflect the emphasis of the Geological Survey Branch’s field surveys. Highlights include:

- Initiation of the Ancient Pacific Margin NATMAP project, a joint venture with the Geological Survey of Canada, universities and industry. Bedrock mapping, surficial mapping and geochemical programs demonstrate that favourable Yukon-Tanana stratigraphy, with potential for volcanogenic massive sulphides, extends from the Yukon into British Columbia. Mineral deposit studies in comparable rocks in central British Columbia were also completed.
- Studies started in the southern part of the province used geology and geochemistry to identify regions having potential for plutonic-related gold deposits, such as Pogo and Fort Knox.
- Another new project was started in the Ecstall Belt within the Coast Plutonic Complex with the objective of more clearly identifying the controls on VMS mineralization.
- An innovative provincial assessment to identify potential copper and gold-rich iron oxide deposits in British Columbia, such as Candelaria and Olympic Dam, was conducted.
- Continuing coal quality and washability studies help to understand the nature of coal deposits, the province’s most valuable commodity in 1999.
- Gemstone potential within the province continues to be evaluated.
- Mineral occurrences were examined and key areas in the Coast Ranges and Queen Charlotte Islands were covered with regional geochemical sampling programs as a contribution to Land and Resource Management Plans.
- Geologic mapping in the Mt. McCusker-Robb Lake area was completed as part of the GSB commitment to the Foreland Belt NATMAP project.

The GSB continues to work on upgrading provincial geoscience databases, including those for mineral occurrences (MINFILE), assessment report files (ARIS) and regional geochemical samples (RGS). Access to these databases improves with continual revisions and enhancements to the Ministry’s internet site.

The Terrain Stability and Soils projects, funded by Forest Renewal BC, continued during 1999. The B.C. Geological Survey Branch audits digital terrain data submitted by forest companies in compliance with the Forest Practices Code and makes this data available over the internet. Terrain and soil maps are increasingly being used in mineral exploration, for example as an aid in interpreting geochemical surveys. These products are also valuable for land-use planning.

Our thanks to all the authors whose professional skills in the field and office make this publication possible. The articles have been edited and improved due to feedback from their colleagues and GSB managers. Special thanks go to Janet Holland and Brian Grant, the Branch’s publications staff, who have worked long hours to meet difficult deadlines.

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# TABLE OF CONTENTS

## MAPPING

D.G. MacIntyre and L.C. Struik: Nechako NATMAP Project, Central British Columbia - 1999 Overview ........................................ 7

J. Nelson: Ancient Pacific Margin Part I: BCGS Contributions and Collaborative Activities with GSC and Yukon Geology Program ................. 15


S.J. Cook and H.E. Pass: Ancient Pacific Margin Part V: Preliminary Results of Geochemical Studies for VMS Deposits in the Big Salmon Complex, Northern British Columbia .................................................. 71


F. Ferri: Devonian-Mississippian Felsic Volcanism Along the Western Edge of the Cassiar Terrane, North-Central British Columbia ............... 127

A.S. Legun: Geology of the Mount McCusker-Robb Lake Area, Northeastern British Columbia .................................................. 147

S. Israel and L. Kennedy: Geology and Mineralization of the Tchaikazan River Area Southwestern British Columbia .................................. 157

L.N. Poznikoff, J.K. Mortensen, R.M. Friedman and J.E. Gabites: Geochronological and Lead Isotopic Constraints on the Age and Origin of the Laidman Gold Prospect, Central British Columbia .................. 173

L.J. Marshall, J.K. Mortensen and J.E. Gabites: Lead Isotope Data From Epigenetic Sulphide Occurrences in the Purcell Supergroup, Southeastern British Columbia, and Implications for Exploration for Sediment-hosted Base Metal Deposits ............................. 185

## ECONOMIC GEOLOGY

J.M. Logan: Plutonic-related Gold-quartz Veins in Southern British Columbia .............. 193

M.S. Cathro and D.V. Lefebure: Several New Plutonic-related Gold, Bismuth and Tungsten Occurrences in Southern British Columbia ......... 207

R. Lett and W. Jackaman: Geochemical Exploration Techniques for Plutonic-related Gold Deposits in Southern B.C. ............................. 225

D.J. Alldrick: Exploration Significance of the Iskut River Fault ........................................ 237

D.J. Alldrick and C.S. Gallagher: Geology and Mineral Potential of the Eccall VMS Belt ........................................ 249

G.E. Ray and D.V. Lefebure: A Synopsis of Iron Oxide±Cu±Au±P±REE Deposits of the Candelaria- Kiruna-Olympic Dam Family 267


R.H. Pinsent: Mineral Potential of the Northern Coast Belt, Khutze River Area, British Columbia .................. 319

R.H. Pinsent: Mineral Potential of the Southern Coast Belt, Cape Caution Area, British Columbia .................. 325

R.H. Pinsent: Mineral Potential of the Bella Coola Area, Coast Mountains, British Columbia ........ 333

INDUSTRIAL MINERALS AND COAL

G.J. Simandl, C.P. Riveros and P. Schiarizza: Nephrite (Jade) Deposits, Mount Ogden Area, Central British Columbia .......... 339


B. Ryan and M. Takkinen: In Situ Fracture Porosity and Specific Gravity of Highly Sheared Coals from Southeast British Columbia ........ 359

B. Ryan: A Note on Difficult to Wash Coals from South East British Columbia .......... 373