Province of British Columbia
Ministry of Energy, Mines and
Petroleum Resources

MINERAL RESOURCES DIVISION
Geological Survey Branch

GEOLOGICAL FIELDWORK 1989

A summary of Field Activities and Current Research

PAPER 1990–1

MINERAL RESOURCES DIVISION
Geological Survey Branch

British Columbia Cataloguing in Publication Data

Main entry under title:
Geological fieldwork. — 1974–

(Paper, ISSN 0226-9430)
Annual.
Issuing body varies: 1974–1980, Geological Division; 1981–1985, Geological Branch; 1986– , Geological Survey Branch.
Subseries, 1979– , of: Paper (British Columbia. Ministry of Energy, Mines and Petroleum Resources)
"A summary of field activities of the Geological Division, Mineral Resources Branch."
ISBN 0381-243X = Geological fieldwork

1. Geology — British Columbia — Periodicals. 2. Geology, Economic — British Columbia — Periodicals. 3. Mines and mineral resources — British Columbia — Periodicals. I. British Columbia. Geological Division. II. British Columbia. Geological Branch. III. British Columbia. Geological Survey Branch. IV. British Columbia. Ministry of Energy, Mines and Petroleum Resources. V. Series: Paper (British Columbia. Ministry of Energy, Mines and Petroleum Resources)

QE187.G46 557.11'05
Rev. Dec. 1987

VICTORIA
BRITISH COLUMBIA
CANADA

January 1990

FOREWORD

The 1989 edition of *Geological Fieldwork: A Summary of Field Activities and Current Research* is the fifteenth in this publication series. It covers a year during which the Geological Survey Branch maintained its extensive program of mapping and research activity to improve the geoscience database in British Columbia.

The base budget of the Branch for the 1989-90 fiscal year is $6.22 million, with an additional $984 000 provided by the Canada/British Columbia Mineral Development Agreement (MDA). The government's policy of encouragement for mineral exploration is solidly backed by funding for geoscience research. In 1989, the combined base and MDA budgets funded 35 in-house field programs and provided support for an additional 28 projects by university researchers. This has been the last year of fieldwork under the MDA program.

Highlights of the program are:

- Eight 1:50 000 mapping projects continued in the Taseko–Bridge River, Whitesail Lake, Telkwa Range, Manson Creek, Stikine River, Iskut River, Tagish Lake and Atlin areas. Regional mapping projects in the Sicker Group on Vancouver Island and the Sylvester allochthon are now in the write-up phase and will generate major publications in the coming year.
- Metallogenic studies include mapping in the Stewart–Sulphurets–Iskut "Golden Triangle" and the Rossland Group volcanic rocks of the East Kootenay District, and on-going investigation of precious metal skarns. A separate section of this edition of "Fieldwork" is devoted to Alaskan-type ultramafic complexes, ophiolites and related precious metal deposits. Detailed mineral deposit studies by university researchers include investigations of the Shasta deposit in the Toodoggone epithermal precious metal district, the Golden Bear deposits near Tatsamenie Lake, the newly reopened Silbak Premier mine in the Stewart mining camp and the Silver Queen epithermal veins at Owen Lake in central British Columbia.
- Reconnaissance geochemical surveys were completed over four 1:250 000 map sheets covering southern Vancouver Island and the Lower Mainland.
- A surficial geology subsection was established in the late summer and preliminary results of work on placer gold deposits are published in this volume.
- A comprehensive program to evaluate the mineral potential of the Purcell Wilderness Conservancy was begun.

The success of the British Columbia Geoscience Research Grant Program is evidenced by the large number of external papers published in this and previous editions of "Fieldwork". In 1989 the MDA funded eight research grants totalling $60 000; a further 20 grants, totalling $130 000, were made from the base budget to researchers at 15 institutions spanning the breadth of Canada from Memorial University of Newfoundland to the University of Victoria. Research projects cover such diverse topics as isotopic dating, fluid inclusion studies, depositional controls in placer gold deposits, platinum geochemistry, palynological dating and the potential for using zeolites to increase the solubility of phosphate rock and permit direct application of low-grade phosphorite in agriculture.

Although the number of papers in the edition of "Fieldwork" is down slightly from the previous two years, preparing it for publication against tight deadlines remains a significant achievement. The efforts of our editorial staff: Brian Grant who managed the process, Doreen Fehr and Janet Holland who formatted the text and did page layout, and John Newell who edited manuscripts, are gratefully acknowledged. Appreciation is also extended to the management and staff of the Queen's Printer who, as always, came through in the crunch; without their whole-hearted cooperation timely delivery would not be possible.

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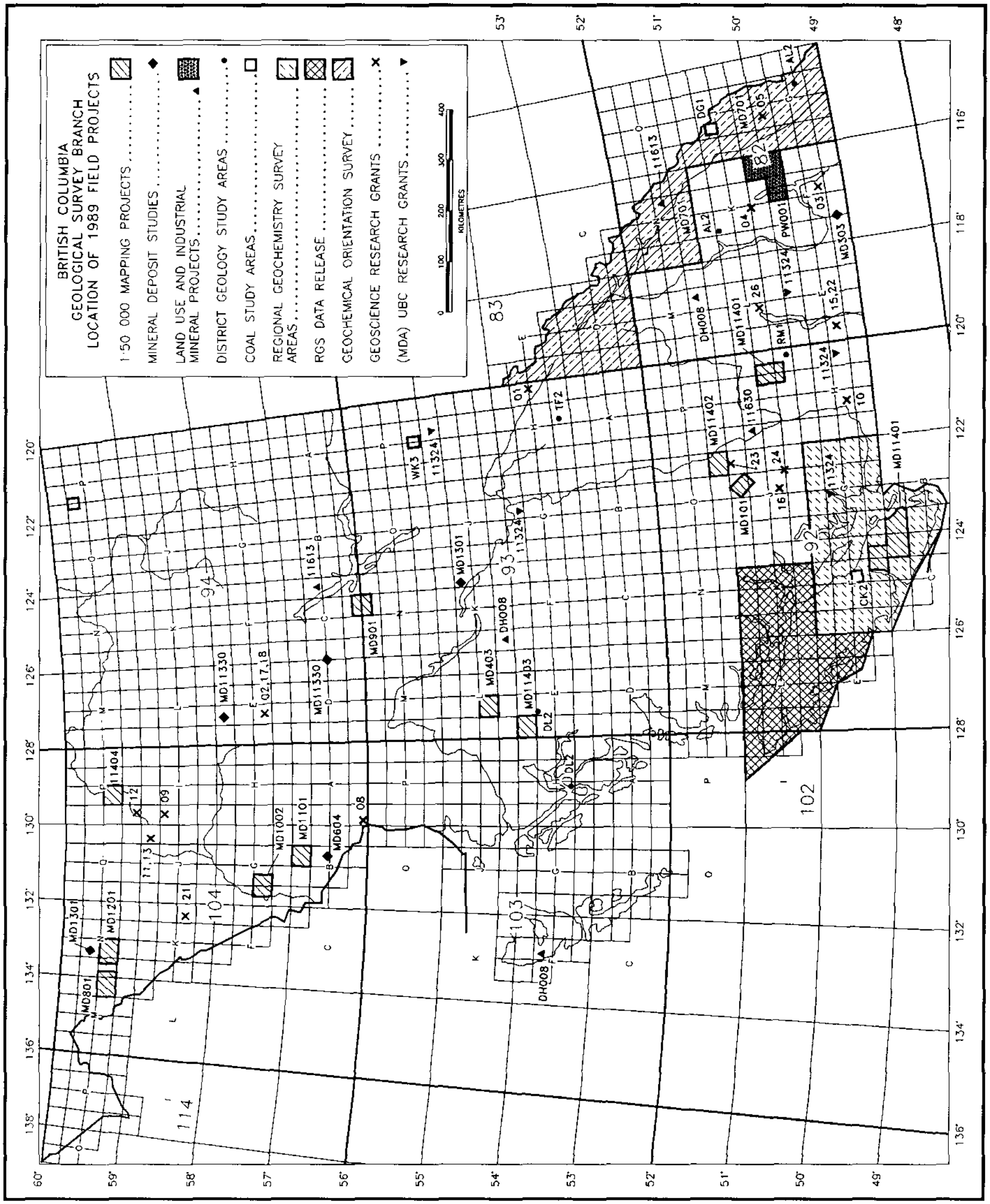
BRITISH COLUMBIA
GEOLOGICAL SURVEY BRANCH
LOCATION OF 1989 FIELD PROJECTS
1:50 000 MAPPING PROJECTS
MINERAL DEPOSIT STUDIES
LAND USE AND INDUSTRIAL MINERAL PROJECTS
DISTRICT GEOLOGY STUDY AREAS
COAL STUDY AREAS
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