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

MINERAL RESOURCES DIVISION
Geological Survey Branch

GEOLOGICAL FIELDWORK 1990

A summary of Field Activities and Current Research

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FOREWORD

Geological Fieldwork 1990: A Summary of Field Activities and Current Research is the sixteenth in this publication series. It contains reports on activities and project results during a year in which the Geological Survey Branch had budgets reduced due to the end of the Canada/British Columbia Mineral Development Agreement (MDA). Many of the Branch staff, particularly those engaged on MDA supported projects, are now producing final reports. This activity resulted in fewer field programs during 1990.

The base budget of the Branch for the 1990/91 fiscal year is $7.05 million, with an additional $300 700 provided by the MDA. The Geological Survey Branch is committed to a strong program of 1:50 000-scale regional mapping and mineral deposits, coal, surficial geology and industrial mineral studies. This includes 18 field programs in frontier areas or areas which are the focus of interest within the minerals industry.

Highlights of the 1990/91 program:

- Six 1:50 000-scale geological mapping programs were supported in areas across the province. Continuing programs were in the Iskut-North, Tagish Lake, Stikine River and Iskut-Sulphurets areas. New mapping projects were started in the Quatsino area of Vancouver Island and in the Mount Milligan area.
- Metallogenic field research continued in the Stewart-Sulphurets-Iskut "Golden Triangle", the Rossland Group of southeastern B.C., and precious metal enriched skarns. New research is supported in the area of the Mount Milligan porphyry Cu-Au deposit and on the potential for listwanite related lode-gold deposits in ultramafics.
- The newly created Surficial Geology unit carried out 3 field programs to improve the provincial database on surficial geology, geological hazards and placer geology. Data for the Peace River, Cariboo and northern Vancouver Island areas are reported herein.
- Reconnaissance geochemical surveys were completed in southeastern British Columbia (82G & J). Archived samples from 82E, F, K, L & M were analyzed for release later in 1991.
- The Coal unit continued studies on coal quality, resources and regional stratigraphy. Prominent projects are mapping on Vancouver Island and the Bowser Basin, as well as coalbed methane potential for the Vancouver Island, Rocky Mountain Foothills and Northeast B.C. deposits.
- The Industrial Minerals unit started a detailed geological evaluation of the Mount Brussilof magnesite deposit in southeastern B.C.
- The Branch continued to enhance computerized access to the provincial geoscience database. Research into Geographic Information Systems and the world-class MINFILE database are at the forefront of this activity.

The British Columbia Geoscience Research Program continued to encourage and support geoscience research. A total of 32 grants, funded by a budget of $130 000, were made to researchers in 17 institutions across the country. Research topics covered such diverse topics as geologic mapping, isotopic dating, geochemistry, conodont research, Quaternary mapping, mineral deposit modelling and the application of Geographic Information Systems to geoscience data.

This volume of *Geological Fieldwork* contains forty-six technical manuscripts, down about 25 per cent from last year. However, producing this annual publication against very tight deadlines required a concerted effort from our editorial and publications staff and we acknowledge the efforts of Doreen Fehr and Janet Holland for formatting and page layout, John Newell for editing, and Brian Grant for managing the process. The quality of this publication is also due in part to Queen's Printer, who extended their cooperation and enthusiasm to ensure timely delivery.

W.R. Smyth
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Mineral Resources Division

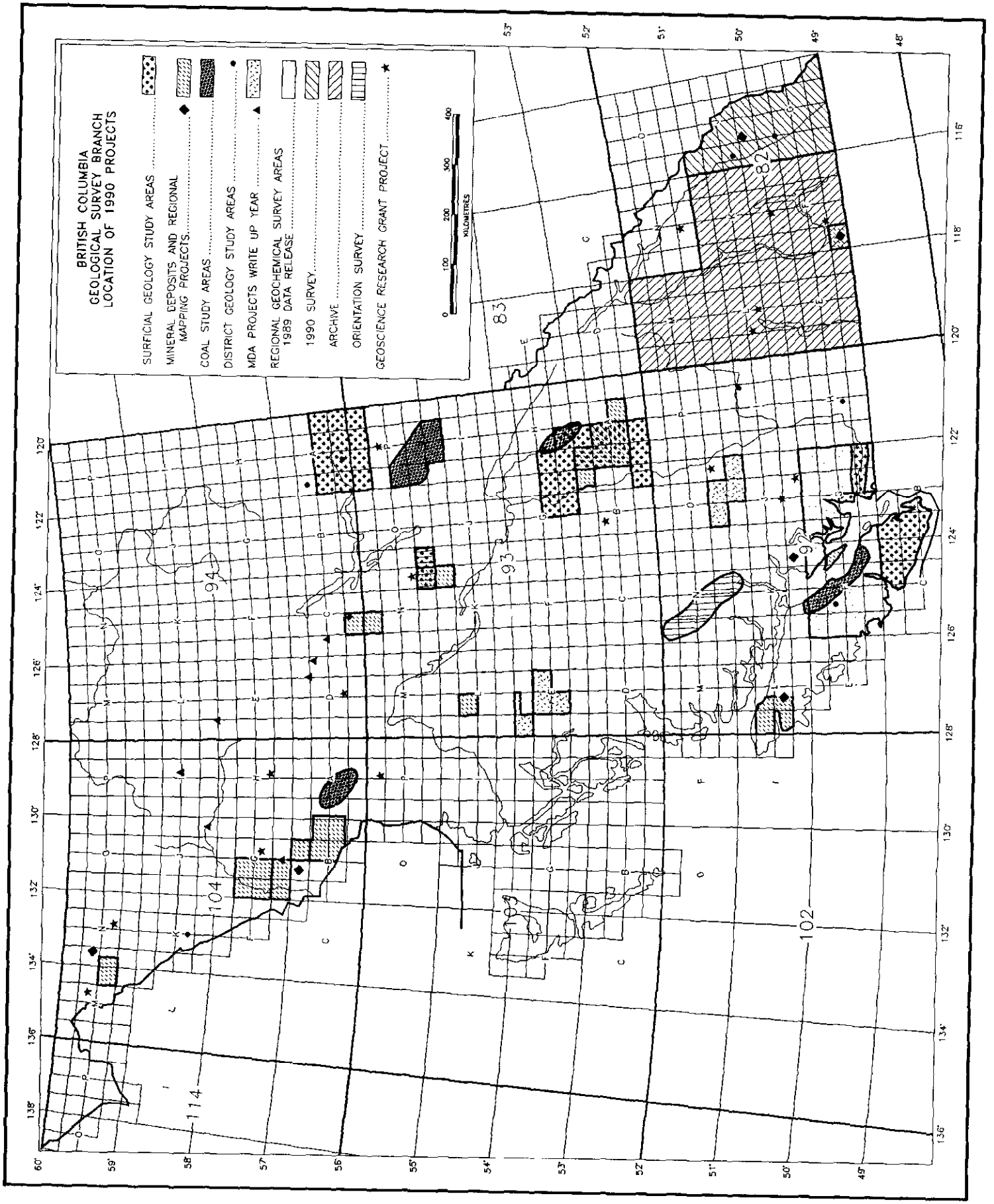
BRITISH COLUMBIA
GEOLOGICAL SURVEY BRANCH
LOCATION OF 1990 PROJECTS
SURFICIAL GEOLOGY STUDY AREAS
MINERAL DEPOSITS AND REGIONAL MAPPING PROJECTS
COAL STUDY AREAS
DISTRICT GEOLOGY STUDY AREAS
MDA PROJECTS WRITE UP YEAR
REGIONAL GEOCHEMICAL SURVEY AREAS 1989 DATA RELEASE
1990 SURVEY
ARCHIVE
ORIENTATION SURVEY
GEOSCIENCE RESEARCH GRANT PROJECT
0 100 200 300 400
KILOMETRES
82
83
94
93
104
103
102
114

TABLE OF CONTENTS

TABLE OF CONTENTS *(Continued)*