

FOREWORD

Geological Fieldwork 2007

The **British Columbia Geological Survey** (BCGS) presents the results of 2007 geoscience surveys and studies in this thirty-third edition of *Geological Fieldwork*. Most of the articles within this volume are contributions from Survey staff who have worked extensively throughout the province on its geology, geochemistry and mineral deposits. Many BCGS projects include important contributions from researchers and contractors from other organizations. As well, the Survey includes quality submissions in this publication from any professional geoscientist which may add to the province's geoscience database.

The results of the 2007 field surveys and the provision of new geoscience data will lead to tenure acquisition and increased mineral exploration expenditures as it has in previous years. These activities are the first steps towards the development of new mines, which benefit British Columbians, particularly those living in regional communities.

BC Geological Survey Successes

- Survey staff have made significant new mineral discoveries or redefined the mineral potential during their mapping programs in the Chezacut, Merritt, northern Vancouver Island and Terrace areas which should attract mineral tenure acquisition and highlight the under-explored mineral potential of these areas.
- More than 28 300 industry assessment reports have now been published as PDF files to the Survey website, improving access to this critical exploration database. This is part of the Survey's ongoing responsibility to be the custodian for the province's mineral and coal geoscience data.
- Survey staff have created a Drainage Geochemical Atlas for British Columbia which incorporates data collected over 25 years. The Atlas presents a leveled dataset which will be invaluable for regional studies across the Province.
- MapPlace is used by the exploration community around the world and continues to attract exploration investment to the province. The British Columbia Geological Survey geological database and MapPlace have been ranked as a top geoscience database globally by the Fraser Institute Survey for 2006-07.
- Mapping in the Interior Plateau shows that Quaternary volcanic cover rocks are thinner and less extensive than previously shown on geological maps, which encourages more exploration in the region.
- Survey staff, including those based in the Vancouver and Ministry regional offices, contributed their expertise to assist in government decisions, respond to client inquiries in confidence, and report on industry activity in the province.

- The Survey was funded by government to start a three year Cooperative Geological Student Mapping Program to train and mentor geology students as they prepare for their careers. In 2006-07 the Survey hired more than 35 geoscience assistants and provided training and guidance to undergraduate and graduate research projects.
- Field trips led by Survey staff in 2007 included a Porphyry Deposits Tour to Northwestern British Columbia and a visit to the Myra Falls mine.

2007 BCGS Field Surveys, Database Activities and Publications

Articles in this volume include reports on British Columbia Geological Survey programs in the Boundary district, Chilcotin, Merritt, northern Vancouver Island, Peace River coalfield, Quesnel, Terrace and 100 Mile House areas. Three articles highlight some of the many opportunities for economic development related to the province's industrial minerals. New geochemical data from the Quesnel Trough and the Drainage Geochemical Atlas are also discussed in the volume.

The Survey has recognized the impact of the Mountain Pine Beetle infestation in the central interior of the province by expanding its 2006 and 2007 programs in this region. Despite excellent mineral potential, the central interior has been under-explored due to widespread glacial till blankets and young volcanic cover rocks. The objective is to diversify local economies by attracting mineral exploration which could lead to the discovery of new mines. In other parts of the province both mineral exploration and mining contribute to local jobs and taxes and support regional infrastructure.

Many BCGS programs involved cooperative partnerships with universities, other government agencies, Geoscience BC, First Nations, communities and industry. The Survey continued its tradition of working with the Geological Survey of Canada on British Columbia projects providing technical and financial assistance to the Targeted Geoscience Initiative in southern and central British Columbia.

All geoscience publications are routinely posted to the BC Ministry of Energy, Mines and Petroleum Resources website. MapPlace, one of the world's premier geoscience internet-map systems, continues to improve with the addition of more data layers and improved tools. Clients can now freely access 100% of the company mineral assessment reports from the ARIS database over the web. Survey staff played active roles as presenters and organizers at numerous conferences and events to market British Columbia's mineral potential, including a trade mission to Asia, international conferences in Toronto and Vancouver, and numerous meetings and workshops around the province.

Over the past year the BCGS published *Geological Fieldwork 2006*, 10 Open File maps and reports, 1 Geoscience Map, 11 GeoFile maps, reports and data files and 5 Information Circulars. In addition to these traditional publications, Survey geologists provided expertise to companys carrying out exploration and mine development