



# GEOSCIENCE BC SUMMARY OF ACTIVITIES 2008



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Geoscience BC (2009): Geoscience BC Summary of Activities 2008; Geoscience BC, Report 2009-1, 200 p.

ISSN 1916-2960 Summary of Activities (Geoscience BC)

Cover photo: View from Sander Geophysics Ltd. helicopter while collecting QUEST-West airborne gravity data.

Photo credit: Owen Peterson, Sander Geophysics Ltd.



#### **Foreword**

#### Geoscience BC Overview

Geoscience BC (GBC) is a unique, industry-led, industry-focused, not-for-profit geoscience organization. Since its inception in April 2005 with a \$25 million start-up grant from the Government of British Columbia, GBC has pursued its mandate of attracting new exploration investment to British Columbia through a combination of GBC-led initiatives and funding of partnership projects. The majority of GBC's partnership projects are identified through an annual Request for Proposals (RFP) process, which takes place each fall. Geoscience BC-led geophysical and geochemical surveys have been developed by GBC's Technical Advisory Committees, staff and Project Team, and undertaken by means of contracts awarded through a call for bids, or sole-sourced where specific technical expertise was required.

Geoscience BC obtains industry input into project planning through our Project Team of industry consultants and our two Technical Advisory Committees (Minerals and Oil & Gas) of dedicated industry volunteers and government geoscientists, who advise GBC's Board of Directors on project priorities and review proposals received in response to the RFPs.

As of December 2008, GBC has supported 47 partnership projects with an investment of \$6.6 million, which has been matched by over \$5.6 million in partners' funds. These projects include airborne geophysical surveys, geochemical surveys, mineral deposit studies, mapping projects, data compilations and numerous oil and gas—related projects in the intermontane basins. Projects funded through Geoscience BC's Fall 2008 RFP will be announced in early 2009.

Geoscience BC has also funded three major GBC-led projects: QUEST, QUEST-West and Nechako Seismic. The QUEST and QUEST-West projects focus on highlighting the mineral potential in BC's interior using regional geophysical and geochemical surveys, with QUEST focusing on the Quesnel Terrane between Williams Lake and Mackenzie, and QUEST-West focusing on the Stikine Terrane between Vanderhoof and Terrace. Together, these projects represent over \$10 million in public geoscience investment in BC. Funding partners for QUEST and QUEST-West include the Northern Development Initiative Trust, the Province of British Columbia and the Regional Districts of Bulkley-Nechako and Kitimat-Stikine. All QUEST and some QUEST-West geophysical data are now available through Geoscience BC's website, with the remaining QUEST-West geophysics and geochemistry scheduled for release in early 2009.

The third GBC-led project, Nechako Seismic, is Geoscience BC's first major oil and gas project. The 330 line-kilometres of Vibroseis® seismic data collected this past summer in the northern Nechako Basin will aid in determining hydrocarbon potential in the basin. This \$2.5 million project was funded by Geoscience BC and a grant from the Northern Development Initiative Trust, and was made possible through the support of the Nazko First Nation, BC Ministry of Energy, Mines and Petroleum Resources, BC Oil and Gas Commission and Bighorn Land & Field Service Ltd.

In addition to the original start-up grant of \$25 M, the Province of British Columbia has generously supported Geoscience BC with an additional \$11.7 M grant in the 2008 provincial budget.

#### Geoscience BC Summary of Activities 2008

Geoscience BC is pleased to present the results of ongoing and recently completed geoscience projects and surveys in this, our second edition of the *Geoscience BC Summary of Activities*. The volume is divided into three sections, and contains a total of 21 papers, prepared by industry consultants and contractors, university-based researchers and government geoscientists.

The first section contains two papers on the QUEST-West Project in central British Columbia, highlighting the geophysical and geochemical surveys that make up this \$5.4 million project. The second section contains eleven papers on mineral exploration—related partnership projects supported by Geoscience BC, including geochemical, surficial geology, mapping, mineral deposit and rock property data compilations. The third section contains eight papers highlighting Geoscience BC's Nechako Seismic Project, and complementary partnership projects focused in BC's interior basins. All papers are also available on Geoscience BC's website (www.geosciencebc.com), and we encourage readers to visit website for additional information on all the projects, including project abstracts, posters and presentations, and final datasets for all GBC-funded projects.



### Acknowledgments

Geoscience BC would like to thank all the authors of the *Summary of Activities* papers, including project proponents, graduate students and GBC Project Team members, for their contributions to this volume. Geoscience BC would also like to thank RnD Technical for their work in editing and assembling the volume.

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