



**Ministry of Energy and Mines**

Oil and Gas Division

Resource Development and Geoscience Branch

BRITISH  
COLUMBIA

**Summary of Activities 2004**  
Resource Development and  
Geoscience Branch

Compiled by:  
Filippo Ferri

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**Cover:**

Preliminary reconstruction of the bedrock topography of NTS map area 94 I based on data from about 400 wireline-geophysical logs. Depth to bedrock varies from a few metres to as much as 280 metres. Buried bedrock valleys are interpreted as Late Tertiary to Pleistocene paleochannels that could be suitable targets for gas exploration. View towards southwest. For more information, see article by Levson, *et al.*, (this volume).

In referencing articles within this publication, please use the format in the following example:

Ryan, B. and Richardson, D. (2004): The Potential for CO<sub>2</sub> Sequestration in British Columbia Coal Seams; *in* Summary of Activities 2004, *BC Ministry of Energy and Mines*, pages 137-156.

## FOREWARD

Energy plays a vital role in achieving the goals and needs of our society. It is also a global issue that will challenge humanity's ingenuity in the coming decades. BC Ministry of Energy and Mines, in partnerships with communities, universities, governments, First Nations and other groups, will play an important role in developing British Columbia's energy future.

In 2002, the province of British Columbia released a new energy plan: "Energy for our Future: A Plan for BC". The British Columbia Government's approach to energy is multi-tiered, and includes conservation, efficiency and supply diversification. The latter embraces traditional sources such as hydroelectric, natural gas, oil and coal, together with renewable energy like geothermal, wind, solar and others.

To help maximize the benefits of British Columbia's endowment of energy resources, the BC Ministry of Energy and Mines is expanding geoscience activities related to hydrocarbons (including carbon management) and other energy sources. This inaugural volume presents the results of this new work. Staff from the BC Ministry of Energy and Mines' Oil and Gas Division, Resource Development and Geoscience Branch, contributed the majority of the articles contained in the volume.

The Geological Survey of Canada is a partner in several of the ongoing energy-related research projects within British Columbia. Geological Survey of Canada staff have co-authored or written several of the articles which discuss results from major projects in the Bowser Basin, Whitehorse Trough and aggregate mapping in the northeast part of the province. University research projects also play an important role.

Some of the highlights of this volume are:

- Hydrocarbon source rock potential in northeastern British Columbia
- Indications of three effective petroleum systems in the Bowser Basin
- Aggregate mapping in northeastern British Columbia and its oil and gas potential
- Potential CO<sub>2</sub> sequestration of coals and ultramafic rocks
- Unique aspects of coal bed gas geology in British Columbia
- Thermal maturity of the central Whitehorse Trough

Over the past two years the Resource Development and Geoscience Branch has published numerous Open Files and other products, including descriptions of tight and deep Devonian gas plays for the northeastern part of the province. The branch has also continued to improve and add new information to its website.

I sincerely thank all the authors for the long hours devoted towards these contributions. Special thanks go to Filippo Ferri for his dedication and vision. His perseverance and extra efforts paid off by the production of this volume. Collectively, their efforts made this first volume very successful.

Our energetic, emerging Branch embraces change and continuous improvement and we look forward to serving a broad array of clients. To comment on any of these papers or to provide more general feedback, please contact Derek Brown at (250) 952-0432 or [Derek.brown@gems6.gov.bc.ca](mailto:Derek.brown@gems6.gov.bc.ca).

Derek Brown  
Executive Director,  
Resource Development and Geoscience Branch  
Ministry of Energy and Mines



## TABLE OF CONTENTS

### *Western Canada Sedimentary Basin*

<b>Best, M.E., Levson, V.M. and McConnell, D.</b> Sand and Gravel Mapping in Northeast British Columbia Using Airborne Electromagnetic Surveying Methods .....	1
<b>Ibrahimbas, A. and Riediger, C.</b> Hydrocarbon Source Rock Potential as Determined by Rock-Eval VI/TOC Pyrolysis, N.E. B.C. and N.W. Alberta .....	7
<b>Johnsen, T., Ferbey, T., Levson, V.M. and Kerr, B.</b> Quaternary Geology and Aggregate Potential of the Fort Nelson Airport Area .....	19
<b>Levson, V.M., Ferbey, T., Kerr, B., Johnsen, T., Bednarski, J., Smith, R., Blackwell, J. and Jonnes, S.</b> Quaternary Geology and Aggregate Mapping in Northeast British Columbia: Applications for Oil and Gas Exploration and Development .....	29
<b>Ryan, B.</b> The CBM Resource of Some Prospective Areas of the Crowsnest Coalfield .....	41
<b>Ryan, B., Todoschuck, T. and Lane, B.</b> A Note on the Market Potential of Low-Volatile Bituminous Coal, Willow Creek Property, Northeastern British Columbia .....	57

### *Interior Basins*

<b>Hayes, M., Ferri, F. and Morii, S.</b> Interior Basins Strategy .....	69
<b>Best, M.E.</b> Qualitative Interpretation of Potential Field Profiles: Southern Nechako Basin .....	73
<b>English, J.M., Fowler, M., Johnston, S.T., Mihalynuk, M.G. and Wight, K.L.</b> Thermal Maturity in the Central Whitehorse Trough, Northwest British Columbia .....	79
<b>Ferri, F., Osadetz, K. and Evenchick C.</b> Petroleum Source Rock Potential of Lower to Middle Jurassic Clastics, Intermontane Basins, British Columbia .....	87
<b>Osadetz, K.G., Jiang, C., Evenchick, C.A., Ferri, F., Stasiuk, L.D., Wilson, N.S.F. and Hayes, M.</b> Sterane Compositional Traits of Bowser and Sustut Basin Crude Oils: Indications for Three Effective Petroleum Systems .....	99
<b>Wight, K.L., English, J.M. and Johnston, S.T.</b> Structural Relationship Between the Laberge Group and Sinwa Formation on Copper Island, Southern Atlin Lake, Northwest British Columbia .....	113

### *Coal Bed Gas and CO<sub>2</sub> Sequestration*

<b>Ryan, B.</b> Unique Aspects of British Columbia CBM Geology: Influences on Produceability .....	121
<b>Ryan, B. and Richardson, D.</b> The Potential for CO <sub>2</sub> Sequestration in British Columbia Coal Seams .....	137
<b>Voormeij, D.A. and Simandl, G.J.</b> Ultramafic Rocks in British Columbia: Delineating Targets for Mineral Sequestration of CO <sub>2</sub> .....	157

