



Exploration and Mining in British Columbia, 2014

Ministry of Energy and Mines British Columbia Geological Survey

Information Circular 2015-02

Ministry of Energy and Mines
Mines and Mineral Resources Division
British Columbia Geological Survey

Front Cover: Claim post at past-producing Emerald Glacier Ag-Pb-Zn±Au mine. View south from southern flank of Sweeney Mountain; Hazelton Mountains in background. En-echelon quartz veins (up to 3 m wide) were mined intermittently between 1951 and 1968. Omineca Region. Photo by Travis Ferbey.

Back Cover: Deep drilling to SEDEX target in Gunsteel Formation shale (Upper Devonian), through overlying thrust sheet of Ordovician and Silurian shale and limestone (Road River Group) at the Cirque deposit (Teck Resources Limited and Korea Zinc Company, Ltd.). Omineca Region. **Photo by John DeGrace.**

This publication is available, free of charge, from the British Columbia Geological Survey website:

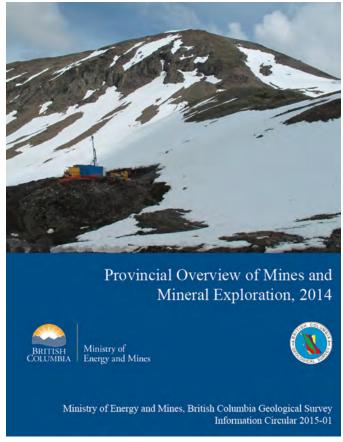
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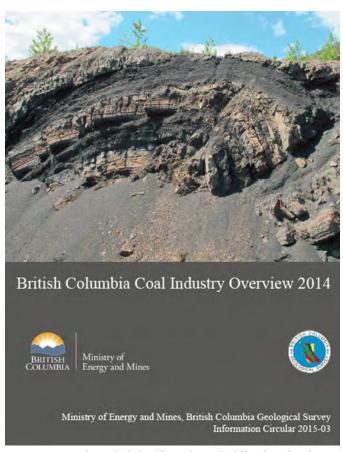
January 2015

Foreword

This volume is the latest in a series of annual reviews that dates back to 1874, when the first Annual Report of the Minister of Mines was published. Detailing significant projects region-by-region, the volume is a companion to the Provincial Overview of Mines and Mineral Exploration, 2014 (British Columbia Geological Survey Information Circular 2015-1) and the British Columbia Coal Industry Overview (British Columbia Geological Survey Information Circular 2015-3).



www.empr.gov.bc.ca/Mining/Geoscience/PublicationsCatalogue/InformationCirculars/Pages/IC2015-1.aspx



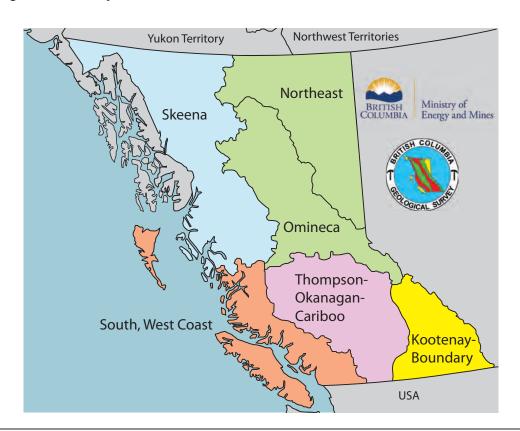
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Based in five communities, the Regional Geologists represent the British Columbia Geological Survey across the province. They monitor exploration and mining activities and provide geological expertise to support investment, land-use processes, First Nation capacity building, and public outreach. Coordinated by the Mineral Development Office, the Regional Geologists prepare annual documents that summarize current exploration and mining activities.

To prepare this volume, the Regional Geologists visit project sites to view outcrops and drill core and to discuss results. A significant amount of information is gleaned from corporate press releases, websites and reports. Late in the year, the Regional Geologists conduct informal phone and email surveys. Exploration expenditure estimates, rounded to the nearest \$1 million, are broken down by category: grassroots exploration, early-stage exploration, advanced exploration, mine evaluation, and mine lease exploration.

- Grassroots exploration commonly does not require permitting, and the activities and expenditures assigned to this category are less likely to be reported because they are typically below Mines Act permit thresholds.
- Early-stage exploration includes activities such as geophysics, geochemistry, trenching, and drilling.
- Advanced-stage exploration is concerned with resource definition, emphasizing drilling and bulk sampling. It may include baseline environmental studies, economic pre-feasibility work, and secondary target exploration.

- Mine evaluation begins with a commitment to develop a resource. It usually coincides with an application to government to open a mine and concentrates on the environmental, social, engineering, and financial assessments of a project.
- Mine lease exploration represents work on a mining property beyond known reserves. It may have characteristics of early-stage or advanced exploration.



Region	Community	Regional Geologist	Phone	email
Skeena	Smithers	Jeff Kyba	250-847-7787	Jeff.Kyba@gov.bc.ca
Omineca and Northeast	Prince George	Paul Jago	250-565-4316	Paul.Jago@gov.bc.ca
Thompson-Okanagan-Cariboo	Kamloops	Jim Britton	250-371-3903	Jim.Britton@gov.bc.ca
Kootenay-Boundary	Cranbrook	Fiona Katay	250-426-1758	Fiona.Katay@gov.bc.ca
South Coast and West Coast	Vancouver	Bruce Northcote	604-660-2713	Bruce.Northcote@gov.bc.ca
Mineral Development Office	Vancouver	Gordon Clarke	604-660-3332	Gordon.Clarke@gov.bc.ca

Founded in 1895, the British Columbia Geological Survey integrates historical data with active research programs and, drawing on continuously advancing concepts and technologies in the Earth sciences, supports the mineral and coal industries. The British Columbia Geological Survey preserves, archives, and provides free web-based access to over a century's worth of geoscience information. For details visit www.em.gov.bc.ca/geology.

We appreciate the information and access to project sites provided by industry representatives and thank George Owsiacki of Total Earth Science Services for desktop publishing.

Gordon Clarke Director, Mineral Development Office British Columbia Geological Survey January, 2015

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