

Drift exploration in the Canadian Cordillera

edited by P.T. Bobrowsky, S.J. Sibbick, J.M. Newell, and P.F. Matysek, published by Geological Survey Branch of British Columbia, in 1995, ISBN 0-7726-2368-6.

Review by Christopher G. Kendall

This text has been put together by the Ministry of Energy, Mines and Petroleum Resources of Canada to help economic geologists improve their chances of making mineral discoveries when exploring the Cordillerian Mountains of Western America. As the foreword to this book points out, exploration for mineral resources in these mountainous regions has evolved so that more emphasis is now being placed on mineral exploration in Quaternary drift and its associated sediments.

This book consists of some 27 papers which are focused on techniques aimed at helping improve exploration in drift covered areas. It provides many examples from British Columbia. Papers vary from case studies to descriptions of techniques needed for the analysis of drift samples. For instance, one paper describes the interpretation and recognition of flow direction indicators of former glaciers and meltwater streams. Other papers explain how drift exploration potential maps can be derived from geologic maps of the underlying terrains. Papers include a description of techniques for sampling drift; how mineralized material may be dispersed from a specific locations; how the stratigraphy of various gravels can be analyzed and related to the adjacent geology and to the emplacement of gold placers; the use of lithological analysis; the use of areal photography; the residence of trace elements in oxidized till; the presence of trace element composition of minerals in vegetation; use of shallow seismic methods; and the use of borehole instruments, and resistivity. The book ends with summary of drift exploration data from the British Columbia Ministry of Energy and Mines, and a very complete annotated bibliography of drift prospecting activities in British Columbia.

In the interest of economy the Canadian government focused on the contents of the articles for this book which is printed on "government" quality paper. There are a number of photographs in this text. Some emphasis has been placed on stereo pairs so if you plan to use this book, you probably should have access to a stereo viewer or have mobile eye balls. The photographs and maps are first grade, the print is readable and clear. While this book has a British Columbian flavour the papers point the way for others who are proposing to conduct exploration in other drift covered areas. The book lists many of the techniques that one can use for this line exploration. This text will be of use to those of you who are interested in the exploration potential of British Columbia but also in those of you who wish to explore in similar terrains in other parts of the North American continent or any other regions of the world which have a drift cover which may contain mineral resources. The book could form a text for courses in mineral exploration for both undergraduate and graduate students. This is an extremely professional work which will definitely be a bible for those of you who have interest in mineral resources of drift sediments. It is not an easy read, since the papers are short and annotated, but it will certainly be an important reference source for you if you are interested in the topic. Photographs are sharp, maps are clear, and the text is short and to the point. This is a professional volume.