Overview of Trends in

Canadian mineral exploration

Canadian Intergovernmental Working Group
on the Mineral Industry

2005

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COVER PHOTO REPRODUCED WITH PERMISSION OF GRAEME OXBY OF TIMMINS, ONTARIO

The cover photo shows winter drilling activity by Wallbridge Mining Company Limited at Windy Lake, northwest of Sudbury, Ontario. The company was awarded an Environmental Award by the Prospectors and Developers Association of Canada (PDAC) in 2004 for its exemplary care of and commitment to preserving the natural and local environment during its exploratory drilling for nickel-copper-platinum group element mineralization on Windy Lake.

Preface

The *Overview of Trends in Canadian Mineral Exploration* report is prepared annually, on behalf of the Intergovernmental Working Group on the Mineral Industry (IGWG), for presentation to federal, provincial and territorial mines ministers. It contains an analysis of recent indicators of exploration and deposit appraisal activity in Canada, a review of the exploration and deposit appraisal sector of each province/territory, and a review of the worldwide activities of the larger Canadian exploration and mining companies. The information in this report is current as of November 2005.

The analyses, articles and reviews found in this report were prepared by officials of the provincial/territorial departments responsible for mineral exploration and Natural Resources Canada (NRCan). The Minerals and Metals Sector of NRCan was responsible for compiling, editing, producing and distributing this report, which covers exploration and deposit appraisal activities for metallic minerals, nonmetallic minerals, coal and uranium. It does not refer to petroleum-related work.

The report is available on the Internet at www.nrcan.gc.ca/mms/pubs/explor_e.htm.

NOTE TO READER

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Government Contacts/ Information Requests

For further information on specific issues related to this report (i.e., exploration activities and statistics, incentives and programs, rules and regulations, geoscientific data, etc.), the reader is invited to contact the appropriate federal, provincial or territorial authorities at the telephone numbers listed below or to consult their respective web sites. The contact information for officials who prepared the provincial/territorial sections are also provided at the beginning of each of these sections while the NRCan officials who participated in the preparation of this report are listed below. Prince Edward Island is not included because of a current lack of mineral exploration activity.

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SOME NRCAN WEB SITES

Minerals and Metals Sector	www.nrcan.gc.ca/mms/hm_e.htm
Minerals and Mining Statistics On-Line	http://mmsd1.mms.nrcan.gc.ca/mmsd/intro_e.asp
Mining Taxation and Regulations in Canada	www.nrcan.gc.ca/miningtax/index.htm
Mining Legislation and Regulations	www.nrcan.gc.ca/mms/busi-entre/mlr_e.htm

PROVINCIAL/TERRITORIAL GOVERNMENTS

• Newfoundland and Labrador (St. John's) Department of Natural Resources	(709) 729-2768 www.gov.nf.ca/nr
• Nova Scotia (Halifax) Department of Natural Resources	(902) 424-7943 www.gov.ns.ca/natr/meb
• New Brunswick (Fredericton) Department of Natural Resources	(506) 453-2206 www.gnb.ca/0078
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• Alberta (Edmonton) Department of Energy	(780) 427-7707 www.energy.gov.ab.ca/1179.asp
• British Columbia (Victoria) Ministry of Energy, Mines and Petroleum Resources	(250) 952-0521 www.gov.bc.ca/empr
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Executive Summary

Statistics from the federal-provincial/territorial Survey of Mineral Exploration, Deposit Appraisal and Mine Complex Development Expenditures show that 2005 was another excellent year for the Canadian mineral exploration sector.

In fact, 2005 revised company spending intentions of $1369 million represent the highest total for exploration and deposit appraisal expenditures since the heyday of the Mining Exploration Depletion Allowance (MEDA) in 1987 and 1988. The 2005 spending forecast marks another year of strong growth as spending was expected to increase by a further 16% after a dramatic 72% increase in 2004 that saw expenditures surge to $1178 million from $687 million in 2003. In real terms, exploration and deposit spending in Canada has now been trending upwards since the historical trough of 2000.

The massive increase in spending recorded in 2004 reflects a rapid response by companies to a metal price outlook that improved considerably in the latter part of 2003. This reaction was so sudden that the revised spending intentions survey for 2004 missed the mark by almost $200 million, clearly showing that even the companies themselves did not expect, in their budgeting process, to undertake as much exploration activity as they eventually did during that year. Other factors that contributed to the exceptional performance of the past two years included the availability of generous tax and non-tax incentives, the willingness of investors to support mineral exploration ventures, and a steady stream of positive exploration news.

The context remains very favourable for 2006, particularly in terms of the price outlook for many of the mineral commodities explored for in Canada. However, a mitigating factor is the phasing out of the federal Investment Tax Credit for Exploration (ITCE). Combined with the flow-through-share mechanism, this tax credit resulted in the industry-dubbed "super-flow-through-share-incentive" and contributed to the revival of the junior mining sector in Canada.

The junior mining sector's recovery has been outstanding. After being severely battered by the downward trend of the late 1990s, this essential component of the Canadian mining industry came back so strongly that its total exploration and deposit appraisal spending overtook that of senior companies in 2004. It continued its ascension in 2005 with revised spending intentions amounting to $790 million, or 58% of the total forecasted expenditures for the year.

As a result of this drastically increased junior company spending, expenditures dedicated solely to the exploration work phase are expected to reach $1085 million in 2005, representing 79% of total intended exploration and deposit appraisal spending for that year. Furthermore, $987 million (91%) of this total will be incurred off mine sites, once again leading to a concentration of spending on grass-roots activities outside of mine properties as opposed to on-mine-site, more advanced activities.

This focus on earlier stages of the mineral resource development cycle is positive for the junior mining sector and for the prospect of new mineral deposit discoveries. However, in the current context of declining ore reserves of the principal metals produced in Canada, it is imperative that this exploration drive be successful in discovering new mines and, at the same time, that more advanced exploration and deposit appraisal work, as well as on-mine-site activities, be undertaken.

The future of mining in Canada will no doubt be moulded by some of the deposits being investigated in this period of intense activity by the Canadian mineral exploration industry, and the Regional Outlook section of this report summarizes the most interesting projects currently under way in this country.

Globally, Canada continues to be the foremost destination for exploration capital. In 2004, some 20% of the mineral exploration programs planned by the world's mining companies were expected to be conducted in Canada. As for Canadian companies, they were expected to undertake 43% of all the exploration programs in the world in 2004, a share that is by far the largest of the global mineral exploration market.

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ABBREVIATIONS

The reader should note that a number of abbreviations for common units of measurement appear in the text:

cm	centimetres
ct	carats
ct/ht	carats per hundred tonnes
ct/t	carats per tonne
ct/y	carats per year
ft	feet
g	grams
g/t	grams per tonne
ha	hectares
kg	kilograms
km	kilometres
km^2	square kilometres
lb	pounds
m	metres
Mct	million carats
Mha	million hectares
Mt	million tonnes
Mt/y	million tonnes per year
NTS	National Topographic System
oz	troy ounces
t	tonnes (metric)
t/d	tonnes per day
t/h	tonnes per hour
t/y	tonnes per year
tU	tonnes of uranium

Note: Unless specified otherwise, all dollar figures are in Canadian dollars.