

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.

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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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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.

Table of Contents

| | Page |
|--|-------------|
| Preface | iii |
| Government Contacts/Information Requests | v |
| Executive Summary | vii |
| 1. INDICATORS OF MINERAL EXPLORATION AND DEPOSIT APPRAISAL ACTIVITY IN CANADA | 1 |
| 1.1 Introduction | 1 |
| 1.2 Summary of Survey Definitions | 1 |
| 1.3 Exploration and Deposit Appraisal Expenditures | 2 |
| 1.3.1 2004 Exploration and Deposit Appraisal Expenditures | 2 |
| 1.3.1.1 Statistical Summary | 2 |
| 1.3.1.2 Spending by Work Phase | 6 |
| 1.3.1.3 Spending by Type of Activity | 10 |
| 1.3.1.4 Spending by Type of Company | 13 |
| 1.3.1.5 Spending by Type of Commodity Sought | 14 |
| 1.3.2 2005 Exploration and Deposit Appraisal Expenditures | 17 |
| 1.3.2.1 Statistical Summary | 17 |
| 1.3.2.2 Spending by Work Phase | 20 |
| 1.3.2.3 Spending by Type of Company | 21 |
| 1.4 Drilling | 23 |
| 1.4.1 Drilling by Work Phase | 23 |
| 1.4.2 Drilling by Type of Company | 23 |
| 1.4.3 Drilling by Type of Commodity Sought | 25 |

| | | |
|-----------|---|------------|
| 1.5 | Claim Staking | 26 |
| | 1.5.1 New Claims Staked | 27 |
| | 1.5.2 Claims in Good Standing | 27 |
| 1.6 | Short-Term Outlook for Metal Prices | 29 |
| 1.7 | Tax Incentives and the Recovery in Mineral Exploration Expenditure Levels | 30 |
| 1.8 | Short-Term Outlook for Exploration and Deposit Appraisal Spending in Canada | 30 |
| 2. | REGIONAL OUTLOOK | 33 |
| 2.1 | Introduction | 33 |
| 2.2 | Newfoundland and Labrador | 33 |
| 2.3 | Nova Scotia | 45 |
| 2.4 | New Brunswick | 49 |
| 2.5 | Québec | 55 |
| 2.6 | Ontario | 61 |
| 2.7 | Manitoba | 73 |
| 2.8 | Saskatchewan | 83 |
| 2.9 | Alberta | 99 |
| 2.10 | British Columbia | 106 |
| 2.11 | Yukon | 117 |
| 2.12 | Northwest Territories | 122 |
| 2.13 | Nunavut | 139 |
| 3. | CANADIAN EXPLORATION ACTIVITY AROUND THE WORLD | 159 |
| 3.1 | Introduction | 159 |
| 3.2 | Global Market for Mineral Exploration | 159 |
| 3.3 | World's Larger Companies | 160 |
| 3.4 | World's Smaller Companies | 161 |
| 3.5 | Larger Canadian-Based Companies | 161 |
| 3.6 | Larger-Company Exploration Market in Canada | 164 |
| | 3.6.1 Larger Canadian-Based Companies in Canada | 165 |
| | 3.6.2 Foreign-Based Companies in Canada | 166 |

| | |
|---|-----|
| 3.7 Larger Canadian-Based Companies Abroad | 167 |
| 3.7.1 United States | 169 |
| 3.7.2 Latin America and the Caribbean | 170 |
| 3.7.2.1 Mexico | 170 |
| 3.7.2.2 South America | 171 |
| 3.7.2.3 Central America | 171 |
| 3.7.2.4 Caribbean | 171 |
| 3.7.3 Europe and the Former Soviet Union | 171 |
| 3.7.3.1 Western Europe | 172 |
| 3.7.3.2 Eastern Europe | 172 |
| 3.7.3.3 Former Soviet Union | 172 |
| 3.7.4 Africa and the Middle East | 172 |
| 3.7.4.1 Africa | 172 |
| 3.7.4.2 Middle East | 173 |
| 3.7.5 Asia-Pacific | 173 |
| 3.7.5.1 Southeast Asia | 173 |
| 3.7.5.2 East Asia | 173 |
| 3.7.5.3 South Pacific | 174 |
| 3.7.5.4 South Asia | 174 |
| 3.8 Summary and Outlook | 174 |
| | |
| APPENDIX 1 | |
| Historical Exploration and Deposit Appraisal Statistics | 177 |
| | |
| APPENDIX 2 | |
| Survey of Mineral Exploration, Deposit Appraisal and Mine Complex Development Expenditures | 183 |

List of Figures

| | | |
|-----------|---|----|
| Figure 1 | Project Operators Active in Exploration and Deposit Appraisal in Canada, 1997-2005 (Current Dollars) | 3 |
| Figure 2 | Exploration and Deposit Appraisal Expenditures in Canada by Junior and Senior Companies, by Province and Territory, 2002-05 (Current Dollars) | 4 |
| Figure 3 | On-Mine-Site and Off-Mine-Site Exploration and Deposit Appraisal Expenditures in Canada, 1997-05 (Current Dollars) | 6 |
| Figure 4 | On-Mine-Site and Off-Mine-Site Exploration and Deposit Appraisal Expenditures in Canada, by Province and Territory, 2002-05 (Current Dollars) | 7 |
| Figure 5 | Exploration and Deposit Appraisal Expenditures in Canada, by Type of Company and by Work Phase, 1997-2005 (Current Dollars) | 8 |
| Figure 6 | Exploration and Deposit Appraisal Expenditures in Canada, by Province and Territory, 2004 (Current Dollars) | 10 |
| Figure 7 | Exploration and Deposit Appraisal Expenditures in Canada, by Type of Work, 2004 (Current Dollars) | 11 |
| Figure 8 | Exploration and Deposit Appraisal Expenditures in Canada, by Commodity Sought, 1997-2004 (Current Dollars) | 14 |
| Figure 9 | Diamond Exploration and Deposit Appraisal Expenditures in Canada, by Province and Territory, 1999-2004 (Current Dollars) | 16 |
| Figure 10 | Exploration and Deposit Appraisal Expenditures, by Province and Territory, 2005 (Current Dollars) | 20 |
| Figure 11 | Surface and Underground Exploration and Deposit Appraisal Drilling in Canada, by Commodity, 2002-04 | 26 |
| Figure 12 | Off-Mine-Site Exploration and Deposit Appraisal Expenditures Per Hectare of Claims in Good Standing in Canada, by Province and Territory, 2003 and 2004 | 28 |
| Figure 13 | Newfoundland and Labrador Exploration Expenditures, 1990-2005 | 34 |
| Figure 14 | Newfoundland and Labrador Exploration Claim Staking, 1990-2005 | 35 |
| Figure 15 | Newfoundland and Labrador Diamond Drilling, 1990-2005 | 35 |
| Figure 16 | Property Location Map, Labrador, 2005 | 38 |
| Figure 17 | Property and Disposition Map, Voisey's Bay Area, October 2005 | 39 |

| | | |
|------------|---|-----|
| Figure 18 | Property Location Map, Island of Newfoundland, 2005 | 42 |
| Figure 19 | Property and Disposition Map, Tulks-Long Lake Area, October 2005 | 43 |
| Figure 20 | Mineral Exploration Expenditures in New Brunswick, 1990-2005 | 50 |
| Figure 21 | New Mineral Claims Recorded in New Brunswick, 1990-2005 | 50 |
| Figure 22 | Claims in Good Standing in New Brunswick, 1990-2005 | 51 |
| Figure 23 | Major Exploration Projects in New Brunswick, 2005 | 53 |
| Figure 24a | Ontario Mining Operations, 2005 | 63 |
| Figure 24b | Ontario Diamond Exploration Expenditures, 1998-2005 | 65 |
| Figure 25 | Mineral Exploration and Deposit Appraisal Expenditures in Saskatchewan, 2002-05 | 84 |
| Figure 26 | Mineral Resource Map of Saskatchewan, 2005 | 86 |
| Figure 27 | Saskatchewan Non-Renewable Resources, 2004 Production Value | 94 |
| Figure 28 | British Columbia's Exploration Expenditures as a Percentage of Canada's Total Expenditures, 1988-2005 | 107 |
| Figure 29 | Annual Exploration Expenditures and British Columbia's Mineral Price Index, 1980-2005 | 109 |
| Figure 30 | Mineral Commodity Price Levels, 1999-2005 (1999=100) | 110 |
| Figure 31 | Exploration Activity in British Columbia as Indicated by Free Miner Certificates, Claim Units, Notices of Work and Exploration Spending, 1999-2005 (1999=100) | 111 |
| Figure 32 | Exploration Spending in British Columbia, by Deposit Type, 2001-05 | 111 |
| Figure 33 | Exploration Spending in British Columbia, by Work Phase, 1997-2005 | 112 |
| Figure 34 | Exploration Spending in British Columbia, by Junior and Senior Companies, 2001-05 | 112 |
| Figure 35 | Number of Exploration Companies and Average Amount Spent Per Company, in British Columbia, 1997-2005 | 113 |
| Figure 36 | New Mineral Discoveries in British Columbia, 2005 | 114 |
| Figure 37 | Advanced-Stage Exploration Projects and Recent Mine Development, in British Columbia, 2005 | 116 |

| | | |
|-----------|--|-----|
| Figure 38 | Yukon’s Exploration and Deposit Appraisal Expenditures, 1997-2005 | 118 |
| Figure 39 | Yukon’s New Claims Staked, 1997-2005 | 118 |
| Figure 40 | Yukon’s Claims in Good Standing, 1997-2005 | 119 |
| Figure 41 | Diamond Exploration Properties on the Slave Craton, Northwest Territories, 2005 | 125 |
| Figure 42 | Microdiamonds Recovered From Caustic Fusion Analysis of 1996 Archived Samples, Doyle Lake Sill, Northwest Territories, 2005 | 127 |
| Figure 43 | Microdiamonds Recovered From Caustic Fusion Analysis of Core From the Jack Pine Kimberlite, Northwest Territories, 2005 | 128 |
| Figure 44 | Diamond Exploration Properties Off of the Slave Craton, Northwest Territories, 2005 | 131 |
| Figure 45 | Precious-Metal and Base-Metal Exploration Projects in the Northwest Territories, 2005 | 132 |
| Figure 46 | Distribution of the World’s Larger Exploration Companies, by Domicile, 2004 | 160 |
| Figure 47 | Exploration Budgets of the World’s Larger Companies, by Domicile, 1992-2004 | 162 |
| Figure 48 | Canadian Mineral Property Portfolio Worldwide, by Region, 1993-2004 | 163 |
| Figure 49 | Exploration Budgets of the World’s Larger Companies for Selected Regions of the World, 2004 | 164 |
| Figure 50 | Exploration Budgets of the World’s Larger Companies for Canada and Elsewhere, 1992-2004 | 165 |
| Figure 51 | Exploration Budgets of the Larger Canadian-Based Companies, 2004 – Countries Accounting for 90% of Canadian Budgets | 166 |
| Figure 52 | Canadian Mineral Property Portfolio Abroad, 2003 and 2004 – Countries Accounting for 80% of Canadian Holdings Located Outside the United States in 2004 | 168 |
| Figure 53 | Exploration and Deposit Appraisal Expenditures (Field Work and Overhead) in Canada by Junior and Senior Companies, 1972-2004 (2004 Dollars) | 177 |
| Figure 54 | Exploration and Deposit Appraisal Expenditures (Field Work and Overhead) in Canada, and Natural Resources Canada’s Monthly Metals Price Index, 1993-2005 (Current Dollars) | 179 |

List of Tables

| | | |
|----------|--|-----|
| Table 1 | Exploration and Deposit Appraisal Expenditures in Canada, by Range of Expenditures and by Type of Company, 2002-05 (Current Dollars) | 3 |
| Table 2 | Exploration and Deposit Appraisal Expenditures in Canada, by Province and Territory, 2002-05 (Current Dollars) | 5 |
| Table 3 | Canadian Reserves of Selected Major Metals as at December 31 of Each Year, 1977-2004 | 8 |
| Table 4 | Exploration, Deposit Appraisal and Mine Complex Development Expenditures in Canada, 2003 and 2004 (Current Dollars) | 9 |
| Table 5 | Exploration and Deposit Appraisal Expenditures in Canada, by Type of Company and Mineral Commodity, 2002-04 (Current Dollars) | 17 |
| Table 6 | Surface and Underground Exploration and Deposit Appraisal Drilling in Canada, by Province and Territory, 2003 and 2004 | 24 |
| Table 7 | Surface and Underground Exploration and Deposit Appraisal Drilling in Canada, 1985-2004 | 24 |
| Table 8 | Surface and Underground Exploration and Deposit Appraisal Drilling in Canada, by Type of Company, 2003 and 2004 | 25 |
| Table 9 | Area of New Mineral Claims Staked in Canada, 2003 and 2004 | 27 |
| Table 10 | Area Occupied by Claims in Good Standing in Canada, 2003 and 2004 | 28 |
| Table 11 | Newfoundland and Labrador Exploration Statistics, 2000-2006 | 34 |
| Table 12 | Nova Scotia Mineral Exploration Statistics, 1998-2005 | 46 |
| Table 13 | Exploration Financing and Exploration and Deposit Appraisal Expenditures in Québec, 1999-2004 | 55 |
| Table 14 | Saskatchewan Crown Metallic and Industrial Mineral Dispositions | 98 |
| Table 15 | Claims Staked and Assessment Work Filed in Alberta, 2001-05 | 99 |
| Table 16 | Exploration Expenditures in British Columbia, 1997-2005 | 106 |
| Table 17 | Increases in the Price of Selected Mineral Commodities, 2001-05 | 110 |
| Table 18 | Mine Development Projects, New Mines and Advanced-Phase Exploration Projects in British Columbia, 2005 | 115 |
| Table 19 | Northwest Territories, Summary of Slave Province Diamond Exploration Work, 2005 | 126 |

| | | |
|----------|--|-----|
| Table 20 | Northwest Territories, Bulk Sample Diamond Recovery Results From the DO-27 Kimberlite | 129 |
| Table 21 | Summary of Diamond Exploration Off the Slave Craton, 2005 | 131 |
| Table 22 | Northwest Territories, Summary of Gold Exploration, 2005 | 133 |
| Table 23 | Northwest Territories, Summary of Base-Metal and Polymetallic Exploration, 2005 | 133 |
| Table 24 | Gold Resources at the Courageous Lake Property, Northwest Territories, October 2005 | 134 |
| Table 25 | Gold Resources in the Ormsby Zone, Northwest Territories, February 2005 | 134 |
| Table 26 | Worldwide Exploration Budgets for Precious Metals, Base Metals or Diamonds, By Type of Company and by Domicile of Company, 2004 | 160 |
| Table 27 | Exploration and Deposit Appraisal Expenditures (Field Work and Overhead) in Canada, By Province and Territory, 1990-2004 (Current Dollars) | 181 |
| Table 28 | Exploration and Deposit Appraisal Expenditures (Field Work and Overhead) in Canada, By Province and Territory, 1990-2004 (2004 Dollars) | 182 |
| Table 29 | Generalized Model of the Mineral Resource Development and Mining Process | 184 |

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.