CONFERENCE REPORT

CIM Calgary ’99
Mining: Catalyst for Social and Economic Growth

Grant Smith
Geological Survey of Canada
3303 33 Street N.W.
Calgary, Alberta T2L 2A7
gsmith@gsc.nrcan.gc.ca

INTRODUCTION
About 3000 delegates convened 2-5 May at the Roundup Center in Calgary for the 101st Annual General Meeting of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM). Rising mineral commodity prices and large planned investments in oil sands developments contributed to a spirit of increasing optimism in Canada’s mining industry. The technical program included about 200 presentations and the trade show more than 250 exhibitors. Technical workshops and tours, along with a guest program and a social program, completed the traditional framework for the Annual General Meeting.

This was the first annual general meeting for which CIM used the internet to have papers submitted and approved, and for conference registration. This proved to be efficient and user-friendly. It was also the first time that the technical session was held on the floor of the trade show, which facilitated interaction among delegates.

PLENARY SESSION
The Plenary Session that launched the technical program addressed the theme of the meeting, Mining: Catalyst for social and economic growth. Jim Carter of Syncrude Canada Limited spoke of the importance of the mining industry to Canada’s wealth and the quality of life enjoyed by Canadians. Dave Tuccaro, President and CEO of Neegan Development Corporation Limited, discussed, as an aboriginal entrepreneur from the Fort McMurray region, how aboriginal communities have benefited from partnerships forged with the mining industry. Jim Popowich of Fording Coal Limited discussed the vital role minerals play in the growth and development of societies. Ross Risvold, Mayor of the Town of Hinton, spoke of the importance of rural resource-based communities expressing their values and needs in social, economic and environmental issues that affect them, to offset the overwhelming influence on decision-makers of “urban academic elites.” Maureen Jensen of the Toronto Stock Exchange discussed the strengths of the Canadian mining industry in a global economic context: “Canadian companies are competing on the world stage for projects and financing dollars.”

TECHNICAL PROGRAM
In addition to the traditional, highly specialized technical presentations, the program included papers of interest to senior managers and others with a broader interest in the mining industry. Presentations covered the following general subjects:

- Geology, geophysics and remote sensing
- Open-pit mining
- Rock mechanics (geotechnical) and ground control
- Mine planning and productivity
- Mineral processing
- Mining equipment and accessories
- Equipment maintenance
- Computer applications and automation
- Environmental management
- Community relations
- Social and economic growth
- Mineral economics and outlook
- Regulatory framework for mining

Special theme sessions included:
- New developments in mine planning software
- Working with aboriginal people
- Major mining projects in Canada
- Major Canadian overseas projects
- Unique financing solutions
- Waste management
- Poster session

The most popular sessions were those addressing issues and new developments in oil sands. A significant contingent from Russia presented posters on geophysical applications in potash mining. These were complemented by several excellent oral presentations on geophysical applications in potash and salt mines in Canada and abroad. The session on “New developments in mine planning software” was in the form of short presentations and a panel discussion on important issues by several software vendors. This was the first annual general meeting where the newly formed Environmental Society of CIM coordinated a full slate of presentations on a wide range of issues falling within the subjects of environmental management, reclamation and advances.

The mining industry faces challenges related to economic, environmental and
social matters. It is meeting these challenges through innovation, responsible management and community involvement.

Computer applications and process automation are contributing significantly to the optimization of resource evaluation, mine design, and mining, processing and reclamation activities. The sessions "Mining Geology in Uranium Mines," "Advances in Applied Geophysics and Remote Sensing," and "Geophysical Applications in Potash Mines" highlighted techniques for improved resolution of resource definition. These result in reduced mining risk and allow production planning to proceed with higher confidence. The sessions "Mining Systems Simulation," "Computerized Surface Mine Operations," and "Mining Automation" included examples of computer-based productivity and performance improvement systems. Talks in several sessions addressed the value of collecting, processing and using data from mining and processing machinery to help optimize equipment productivity and maintenance requirements. Computer science research is resulting in new applications in electronic data collection and processing technologies that are providing a basis for innovation and better decision-making.

The modern mining industry accepts its environmental responsibilities and speaks with pride of its reclamation successes. G. McKenna of Syncrude Canada Ltd. noted, "The mining industry has been perhaps too quiet in promoting its reclamation successes. Virtually every operating mine in Canada has a success story to tell."

"In recent years it has become obvious that successful reclamation is more than greening up the landscape. It means working with stakeholders and regulatory agencies to build reclaimed landscapes that meet the needs of the public... A greater effort in communicating and celebrating the existing successes would go a long way in further promoting mining in Canada." The industry is already working on ways to reduce greenhouse gas emissions, but could benefit from some policy to resolve conflicts in areas of economic feasibility and effective environmental controls.

The modern mining industry is becoming very aware of the importance of constructive community relations in developing a successful mining venture, whether in Canada or abroad. Wayne Dunn of Wayne Dunn & Associates noted that "Local communities have an increasingly powerful role in the resource development process and can cause costly disruptions when projects do not meet their needs." C. Contreras of the same organization stated "Companies are learning to organize their activities to facilitate productive indigenous involvement in normal, ongoing operations, promoting consultative processes and increased local involvement in employment, supply of goods and services and co-management. Local collaboration adds value to a project and enhances the firm's potential to acquire additional resource development opportunities."

Presentations by representatives of Syncrude Canada Limited and Suncor Energy Inc. drew attention to the massive scale of existing oil sands operations and the 50 new planned projects (representing $24 billion of investments over the next nine years) in the construction, design and conceptual stage (including proposals by Syncrude, Suncor, Shell Canada, Mobil Oil Canada, etc.). Applying sophisticated mining and processing techniques, meeting environmental challenges, and working with aboriginal people were presented as worthy models of modern mining approaches in Canada. W. Almdal of the Regional Infrastructure Working Group, Fort McMurray, stated "The city of Fort McMurray will increase in population by 45% and all infrastructure will be taxed to the limit. Acquiring sufficient skilled labour to build and operate these plants is a concern..." Preparations to ensure skilled people are available have begun. The 50 years of evolution of Labrador City and Wabush, from a mining camp to a prosperous industrial center serving a large region, was presented as a proud example of how a mining center can mature, contributing positively to the ongoing economic and cultural development of a region.

Geologists will continue to experience repercussions of the Bre-X Busang fraud for some time. Some of the consequences were discussed in the session "New Regulatory Framework for Mining" under the titles: "Best practices - professional judgement or quality control," "The status of resources and reserves reporting," and "The qualified person concept - implications for geoscientists." The presentations dealt with best practices in exploration, including technical audits of exploration programs, and recommendations from studies by the Toronto Stock Exchange and Ontario Securities Commission for the adoption of the Qualified Person concept through certification of geoscientists.

Abstracts of presentations given in the technical program were published in the March 1999 issue of the CIM Bulletin (v. 92, n. 1028). Most of the papers that were presented are available on a CD-ROM that was included in the registration package. The CD-ROM can be purchased separately from the CIM Publications Department (telephone (514) 939-2710 ext.320) for $75.

CONCLUSIONS

The meeting included subjects of interest to everyone involved in the exploration, extraction and processing of mined materials in Canada and abroad. Virtually all major mining and associated service companies were represented in either the technical program or trade show.

L.-S. Jen of the Minerals and Metals Sector, Natural Resources Canada, Ottawa, stated "Over the next five years, the Canadian mining industry will require major adjustments to fluctuating world demand and supply and to unprecedented and intense competition, all of which will affect mining developments in Canada. To survive these adjustments and emerge as a winner, Canada must continue to set new heights for advancing its high technology capabilities for exploration and mining..." The technical program and trade show indicated that the Canadian mining industry is well positioned to meet these challenges.

CIM and The Prospectors and Developers Association of Canada are coming together next year to offer Mining Millennium 2000: "The most comprehensive conference and trade exhibitions on the mineral industry anywhere in the world."

This will convene 5-10 May 2000, at the Metropolitan Toronto Convention Centre. Information on this event can be found on CIM's Web site at www.cim.org