

The Canada – Nunavut Geoscience Office: Nunavut's Partnered Geological Survey

Donald James

The Canada – Nunavut Geoscience Office (CNGO), formed in 1999 and based in Iqaluit, serves as the geological survey for Nunavut. Unlike the other provincial and territorial surveys, the CNGO operates as a unique partnership between the Geological Survey of Canada (GSC), the Department of Indian Affairs and Northern Development (DIAND), the Government of Nunavut, Department of Economic Development and Transportation, and Nunavut Tunngavik Incorporated. The mandate of the CNGO is to collect, interpret and disseminate geoscience data in support of exploration and development of mineral and energy resources, to provide community-focused geoscience data, GIS and cartographic expertise, training opportunities for young geologists and Nunavummiut, and promote geoscience education. In 2009, for example, the CNGO participated in multi-component field-based projects of Natural Resources Canada's GeoMapping for Energy and Minerals (GEM) initiative, continued hydrocarbon source-rock studies, carried out an industrial minerals (limestone) project, supported university and university - industry research partnerships, carried out a remote-sensing survey in support of mineral exploration 'tool' development, provided GIS and cartographic support, was involved in outreach and community consultation activities, and is a principal partner in development and implementation of a web-based system of data delivery.

The objective of resource-focused projects is to highlight mineral and energy exploration opportunities by providing ideas, data and geoscience tools for making effective exploration decisions leading to successful discoveries. Projects are designed to test geologic hypotheses, address critical geoscience knowledge gaps, to develop new geologic and exploration models, and make a significant contribution to the geoscience knowledge base of Nunavut. The GEM projects are multi-faceted and include components of ground-based bedrock and surficial mapping, geophysical, geochemical and geochronological studies, airborne geophysical surveys and comprehensive data compilation activities. Community-focused geoscience includes studies of aggregate resources, permafrost and natural, geo-hazards. All projects involve community engagement and public outreach activities. The outreach is intended to demonstrate the importance of mineral and energy resources for economic development and society, to provide awareness of employment opportunities in geoscience, and promote Earth science education for students. CNGO projects are anticipated to improve the quality of life for Nunavummiut by allowing them to derive economic and social benefits resulting from responsible development of mineral and energy resources.

This poster, included in the Role and Contribution of Geological Surveys in Canada session sponsored by the National Geological Surveys Committee, highlights the programs and contributions of the CNGO in support of our economy, our environment, and our society.