

ACCESS TO DATA VIA INTERNET

The Manitoba government continues to aggressively develop access to geoscience, exploration data and e-commerce through the Internet.

Manitoba Industry, Economic Development and Mines has brought additional maps and increased functionality to its GIS Map Gallery, an Internet map server that allows remote access to mineral disposition, assessment, drillhole, and geoscience information from anywhere in the world. Users can now view, extract and download GIS shape files from the Map Gallery to use in their own GIS projects.

Manitoba's geoscience infrastructure also includes

- a searchable, on-line bibliography of all published geoscientific work that has been conducted in the province,
- an on-line Publications Catalogue, where users can order publications with secure on-line credit card purchasing capabilities,
- free downloads of all new Manitoba Geological Survey publications and data, and
- an inventory of hard-copy geological maps and reports.

Datasets currently available or in development on the Internet include:

- 1:1 million bedrock, surficial, aeromagnetic, gravity, and NASA Shuttle Radar Topography Mission (SRTM) digital elevation model compilations of Manitoba (GIS Map Gallery)
- regulatory information including current claim, lease and mineral exploration licence maps (GIS Map Gallery)
- non-confidential assessment files, aeromagnetic datasets and map-based drillhole data (GIS Map Gallery)
- annual reports of geoscience activities
- platinum group metals database
- kimberlite indicator minerals database and integrated anomaly map (GIS Map Gallery)
- geochronology database (updated to 2005)
- mineral occurrence database (GIS Map Gallery)
- Mineral Resources Library on-line catalogue

MANITOBA'S DIAMOND EXPLORATION STRATEGY

The Manitoba Geological Survey has undertaken a number of Internet-accessible initiatives to support diamond exploration in the province:

- compilation of existing data from a number of surveys and agencies into a single comprehensive database of public-sector survey results
- ongoing analysis and 3-D modelling of till stratigraphy in the Hudson Bay Lowland
- compilation of potential-field data, structural data and 'young' igneous occurrences

New work has shown that kimberlite indicator minerals in till within the Hudson Bay Lowland occur preferentially within one of four till units. Ice flow directions derived from till fabric analysis and indicator distributions suggest indicator minerals were dispersed by ice flowing to the southeast in addition to regionally pervasive southwesterly ice flow events.

New bedrock studies show that the northwest Superior Province boundary contains an ancient platformal supracrustal sequence that stabilized prior to 3.0 Ga. The combination of this potentially thick lithosphere and Mesozoic hotspot tracks suggest that this region should host kimberlites.

