

The Northwest Territories Geoscience Office – framework geoscience data for a developing Territory

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Northwest Territories Geoscience Office (NTGO) is a jointly staffed and funded partnership between Indian and Northern Affairs Canada, NWT Region and Government of the Northwest Territories Department of Industry, Tourism and Investment. NTGO is currently staffed with 22 territorial and federal employees tasked with providing geological survey services for the Northwest Territories. Unlike most Canadian jurisdictions, much of the NWT has not even been mapped at 1:100K or better, and thus regional geological mapping programs are prominent within our program. At the same time we are continuing to build our regional geochemical and geophysical datasets, as this data is needed for industry exploration efforts, as well as informed land use planning. The 2010 field season will have two major mapping initiatives and two regional geochemical programs. Thematic studies designed to increase knowledge regarding the geology and petroleum potential of the Mackenzie Plain will also go ahead. Numerous smaller projects, mostly supporting student thesis work are also planned.

The logistics and expense of travelling to Yellowknife have been a detriment to efficient mineral and petroleum exploration research efforts. NTGO invests heavily in web-based discovery and dissemination tools for northern geoscience data. We now have a web-based GIS search engine which allows our publications, reports and publically available exploration data to be easily found, manipulated, and downloaded by our clients. In addition to reports, databases of kimberlite indicator mineral populations picked from glacial drift samples (KIDD database), kimberlite indicator mineral chemistry (KIMC database) and a database for finding our digital geophysical data (GMETA) are now spatially-queryable over the web.

The NTGO core library hosts core and rock samples from many NWT mineral deposits, as well as regional representative suites. Recent additions from BHP Billiton, SouthernEra Resources, and Kennecott Canada make the NTGO core library the largest publically accessible kimberlite collection in the world.