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Discover Abitibi

A project of innovation, cooperation and revitalization

Découvrons l'Abitibi

Un projet d'innovation, de coopération et de renouvellement

Discover Abitibi Initiative

The Discover Abitibi Initiative is a regional, cluster economic development project based on geoscientific investigations of the western Abitibi greenstone belt. The initiative, centred on the Kirkland Lake and Timmins mining camps, will complete 19 projects developed and directed by the local stakeholders. FedNor, Northern Ontario Heritage Fund Corporation, municipalities and private sector investors have provided the funding for the initiative.

Initiative Découvrons l'Abitibi

L'initiative Découvrons l'Abitibi est un projet de développement économique régional dans une grappe d'industries, projet fondé sur des études géoscientifiques de la ceinture de roches vertes de l'Abitibi occidentale. Cette initiative, centrée sur les zones minières de Kirkland Lake et de Timmins, mènera à bien 19 projets élaborés et dirigés par des intervenants locaux. FedNor, la Société de gestion du Fonds du patrimoine du Nord de l'Ontario, municipalités et des investisseurs du secteur privé ont fourni les fonds de cette initiative.



The Montclerg Gold Deposit, Abitibi Greenstone Belt, East Timmins Region, Ontario: Stratigraphy, Litho geochemistry, Mineralization and Nature of Vein Fluids

by T.J. Barrett^{1,2}, G.C. Wilson³, M.A. Hamilton⁴, D.J. Kontak⁵, M. Burns⁵, J.A. Ayer^{6,7} and G.M. Stott^{6,8}

This publication can be downloaded from

http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=pub&id=MRD300

This release provides the results of a study, undertaken as part of the Discover Abitibi Initiative, on the Montclerg gold deposit located east-northeast of Timmins. A report (portable document format (.pdf) file) presents the results of a detailed litho geochemical and petrographic study of the host rocks of the Montclerg Zone, and new U/Pb zircon ages, as well as stable isotopic (oxygen, sulphur, carbon) data, electron microprobe data and fluid inclusion data on the veins minerals. Data were also obtained for comparative purposes from the Canamax Zone (400 to 500 m to the south) and the Clavos Mine (9 km to the west-southwest). Supporting data tables are provided as Microsoft® Excel® 2010 (.xlsx) format files. Location data are provided in the Universal Transverse Mercator (UTM) projection and grid system, Zone 17, North American Datum 1983 (NAD83).

The products of this study are

1. a report describing the geology and geochemistry of the Montclerg deposit (Montclerg Zone and Canamax Zone), with short sections on the Clavos Mine (for comparison) and the regional geology (for context);
2. whole-rock litho geochemical analyses of drill core samples and regional outcrop samples;
3. U/Pb zircon ages for 1 sample from each of the Montclerg Zone and the Canamax Zone;
4. stable isotope (oxygen, carbon, sulphur) analyses;
5. modal mineralogical and electron microprobe analyses;
6. petrographic examination of samples with thin-section photomicrographs;
7. fluid inclusion analyses.

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Structure and Contents of MRD 300

There are 2 main parts: 1) the summary report; and 2) the report tables.

The report, titled “*The Montclerg Gold Deposit, Abitibi Greenstone Belt, East Timmins Region, Ontario: Stratigraphy, Lithogeochemistry, Mineralization and Nature of Vein Fluids, Discover Abitibi Initiative*”, and the readme file (this document) (as portable document format (.pdf) files) are located in the root directory; the data files are organized in a separate folder.

MRD300_Montclergreport.pdf

MRD300_readme.pdf

Folder “**Report Tables**” contains workbooks (as Microsoft® Excel® 2010 (.xlsx) format files) for data included in the report as tables (Tables 4-1, 5-1 and 5-2) and for 3 tables (Tables 2-1, 3-1 and 3-2) that are too complex to include in the report format. File names comprise the chapter and table number and an indication of the contents.

Table 2-1_analytical data_Montclerg-Canamax-Clavos.xlsx (3 worksheets: Arranged by Chemical Group; Arranged by Drill Hole & Depth; Outcrop Locations)

Table 3-1_modal mineralogy_Montclerg-Canamax-Clavos.xlsx

Table 3-2_electron microprobe data_Montclerg-Clavos.xlsx (6 worksheets: EPMA data summary; MDL (LOD) [minimum detection limit (limit of detection)]; Carbonates; Muscovite; Chlorite; Sulfides and Sulfosalts)

Table 4-1_new U-Pb zircon data_Montclerg-Canamax.xlsx

Table 5-1_fluid inclusion data_Montclerg.xlsx

Table 5-2_stable isotope data_Montclerg-Canamax-Clavos.xlsx