RP 2004-05(A)

GEOLOGY AND METALLOGENY OF THE LAC AUX LOUTRES AREA, URBAN-BARRY METALLOGENIC SYNTHESIS (STAGE 1/2)

Documents complémentaires

Additional Files

Licence

License

Énergie et Ressources naturelles
Québec

Geology and metallogeny of the Lac aux Loutres area, Urban-Barry metallogenic synthesis (stage 1/2)

Pierre Rhéaume[1], Daniel Bandyayera[1], Francine Fallara[2], Geneviève Boudrias[1], Li Zhen Cheng[2]

RP 2004-05(A)

Keywords: Urban-Barry, 3D modelling, VMS, orogenic gold deposits, epithermal veins

Abstract

The 2003 geoscience studies carried out at Lac aux Loutres (32B13-201) yielded new data to complete the geological compilations and regional surveys carried out, since the year 2000, to promote the Urban-Barry Belt (UBB). The results of our work suggest a geological context more complex than the one previously documented. We link the supracrustal rocks previously assigned to the Macho Formation to three new units: the Panache, Macho and Limpide formations. We also subdivide the Souart Pluton into two entities: a synvolcanic pluton (Souart Pluton) underlying the Panache Formation and the Windfall Member, and a syn- to late-tectonic pluton (Corriveau Pluton). The results of the metallogenic synthesis indicate that at least three types of mineralizations occur in the area: orogenic gold deposits associated with ENE-trending faults, gold-bearing VMS deposits, and epithermal veins. These mineralization types are associated with multiphase metallogenesis occurring in a sustained mineralization setting progressing from a synvolcanic to a synorogenic phase. Three-dimensional modelling work (gOcad®) has made it possible to build 3D surfaces and geological areas as well as gold grade and geophysical measurements isosurfaces. Joint development of the geological map and a 3D geological model by an iterative validation process has optimised the use of available data. It has also helped produced a robust and reliable geological model. This 3D model is also part of a current study by F. Fallara.

1 - Ministère des Ressources naturelles de la Faune et des Parcs

2 - Unité de recherche et de service en technologie minérale - Université du Québec en Abitibi-Témiscamingue

Ressources naturelles, Faune et Parcs
Québec