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GEOLOGICAL AND METALLOGENIC RESEARCH IN THE SCHEFFERVILLE (23J15) AND LAC ZENI (23I16) AREAS

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Geological and metallogenic research in the Schefferville (23J15) and Lac Zeni (23I16) areas

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Abstract

In the Schefferville area, the contact zone between the two volcano-sedimentary cycles in the Labrador Trough shows no evidence of a major stratigraphic discontinuity. Previous results from the analysis of the stable isotopes of carbon had suggested that the dolomites of the Denault Formation, considered to occur at the top of cycle 1, were deposited within the time period of 260 Ma separating the two cycles as interpreted from available geochronological data; our investigation of the contact supports this hypothesis. The base of the Menihék Formation in cycle 2 is characterized regionally by a meter-scale unit of radioactive, metalliferous (V, Hg, Se, Ag) black shale. In the lac Zeni area, located in the hinterland of the Trough, rocks previously interpreted as felsic volcanic rocks are reinterpreted as mylonitic granites. U-Pb dating of a tonalite gave an Archean emplacement age. Local Cu anomalies in lake-bottom sediments appear to be caused by bands of metagabbro containing small quantities of disseminated cupriferous sulfides.

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