Recognizing optimum Banded-Iron Formation-hosted gold environments in ancient, deformed and metamorphosed terranes: Preliminary results from the Meadowbank deposit, Nunavut, Canada

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INTRODUCTION

The Meadowbank project is part of the Loode Gold Project of Nortgold’s Minto Mine Project in the eastern Northwest Territories, which host one of the world’s major gold deposits in the Canadian Shield. The Meadowbank deposit is located within the Western Churchill geological province, which hosts several other gold deposits, including the Macassa mine, built on the metavolcanic rocks of the Superior Province. The deposit is hosted by a succession of metavolcanic and metasedimentary rocks, which have been deformed and metamorphosed in a complex geologic history involving at least three major tectonic events.

Regional geology

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Gold mineralization

The Meadowbank deposit is hosted by a succession of metavolcanic and metasedimentary rocks, which have been deformed and metamorphosed in a complex geologic history involving at least three major tectonic events. The deposit is characterized by a well-defined gold mineralization zone, which is associated with a series of shear zones and foliation planes.

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REFERENCES


This publication is available for free download through GEOSCAN (http://geoscan.ess.nrcan.gc.ca/) or the Canadian Geoscience Database (http://www.geoscience.gc.ca/)

Map and diagrams

Map showing the location of the Meadowbank deposit and its relationship to surrounding geology. Diagrams illustrating the mineralization and deformation features associated with the deposit.

Figures

Figures showing the distribution of mineralization and deformation features associated with the Meadowbank deposit. These figures include cross-sections, geological maps, and petrographic images.