

DESCRIPTIVE NOTES

INTRODUCTION In 2012, the Canada-Nunavut Geoscience Office (CNGO) initiated a targeted regional bedrock mapping project (1:250 000 scale) on Hall Peninsula, southern Baffin Island.

The geology of Hall Peninsula remains poorly known, in spite of the first geological observations dating back to Prosser's 1878 voyage (Hogarth, 1994). The peninsula has only been mapped at reconnaissance scale during the Geological Survey of Canada's (GSC) Operation Amadjuak in the 1960s (Blackadar, 1967).

As preparation for field mapping, the CNGO and the GSC flew an aeromagnetic survey in 2008 (Dumont and Dostaler, 2010). Last summer six weeks from the end of June to the beginning of August were devoted to mapping the southern portion of the peninsula (NTS map sheets 25-P, 24, parts of 25-J and parts of 25-J) covering approximately 20 000 km².

PREVIOUS WORK ON HALL PENINSULA Previous work on Hall Peninsula indicated that it is underlain by Palaeoproterozoic plutonic rocks that may be the western continuation of the Comburat Batholith, Palaeoproterozoic metasedimentary rocks that may be the northwestern continuation of the Lake Harbour Group, and Archaean orthogneisses of unknown tectonic affinity (Blackadar, 1967; Scott, 1996, 1999; St-Onge et al., 2006).

DETAILED GEOLOGY Eastern Lithological Domain The eastern lithological domain underlies most of NTS map sheets 25-P and 25-J and is the structural (and depositional) crystalline basement to other rock types in the eastern portion of the peninsula.

Western Lithological Domain At the boundary between the eastern and western domains, a felsic intrusive suite with a tonalitic to granodioritic composition was mapped. It was dated by Scott (1966) at 1877 Ma. Several rock panels of metasedimentary rocks, which are contiguous with the Lake Harbour Group of southern Baffin Island (St-Onge et al., 2006), characterize the domain.

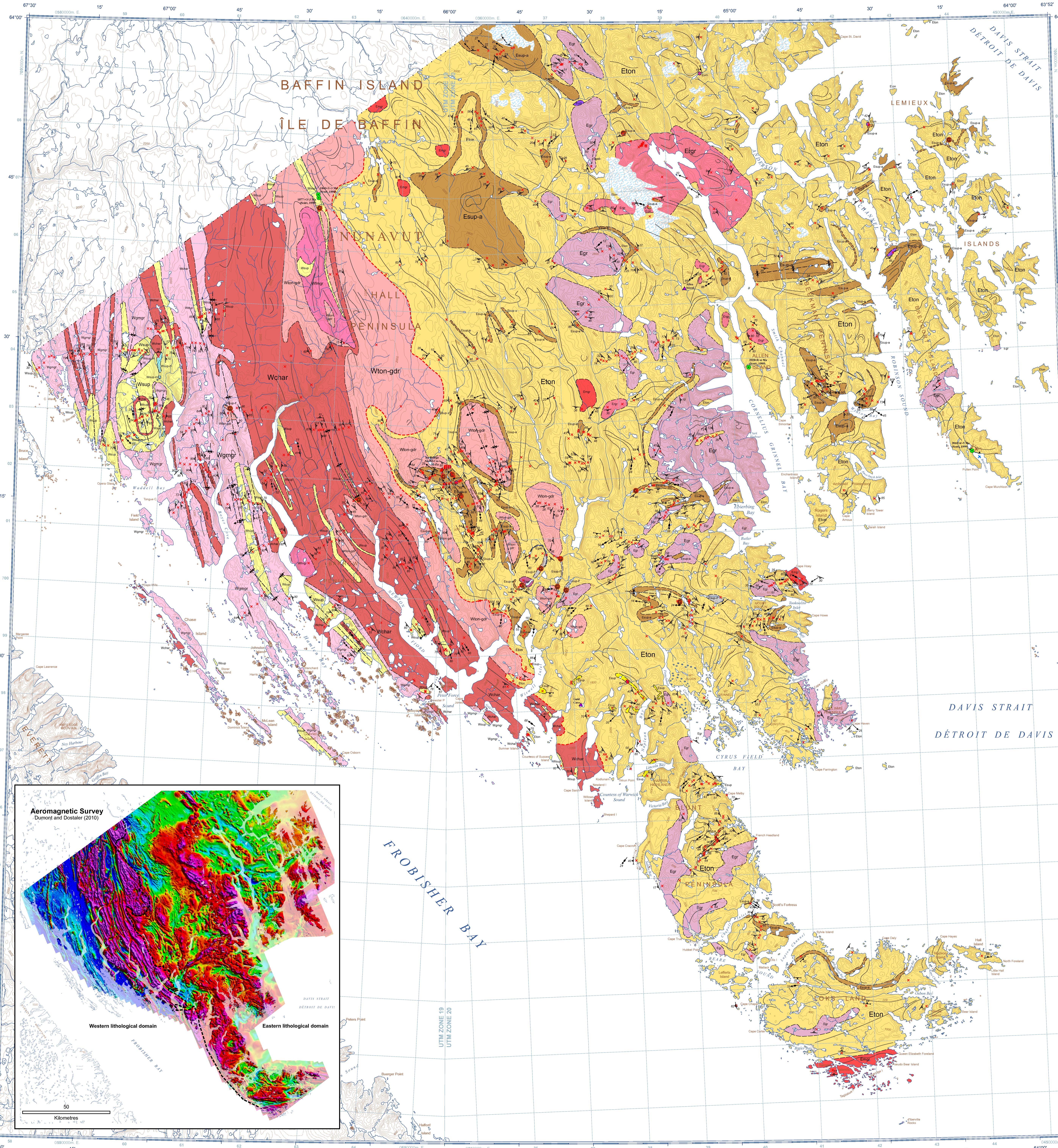
STRUCTURAL AND METAMORPHIC PETROLOGY Three regional deformational episodes were recognized as some crystalline rock units of Hall Peninsula. The first two deformational events (D1 and D2) are together responsible for the overall north-west-south-east trends in the map pattern.

MINERAL POTENTIAL Mineral exploration in the area began in 1977 when Martin Frobisher's "black ore" in the Claretton of Harewood Sound area during his second voyage and brought them back to London to be tested for gold and silver (Hogarth and Loop, 1998).

Abstract In 2012, the Canada-Nunavut Geoscience Office initiated a targeted regional bedrock mapping project on Hall Peninsula, southern Baffin Island.

Résumé Le Bureau Géoscientifique du Canada-Nunavut a débuté, en 2012, un projet de cartographie régionale du socle rocheux de la péninsule de Hall, située au sud de l'île de Baffin.

Geological Survey of Canada, Geological Series, Open File Map 135-1, 1:250,000 scale, 2013. Includes title block, scale, and contact information.

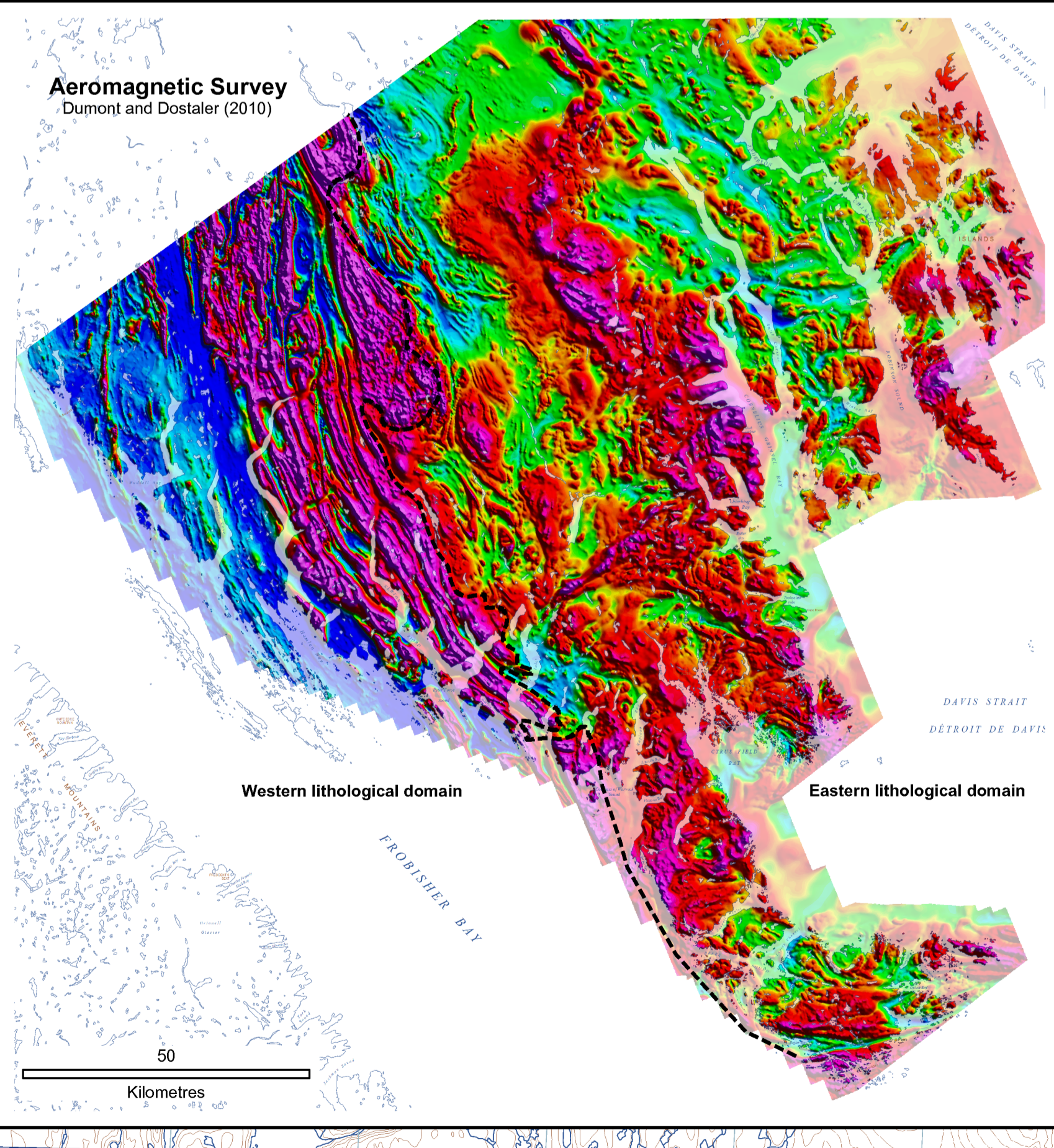


LEGEND Table with columns for Lithological Domain (Western and Eastern), Supracrustal Rocks, and Archaean. Includes symbols for geological contacts, faults, and structural features.

REFERENCES List of scientific publications including Amodeo et al. (2012), Blackadar (1967), Dumont and Dostaler (2010), and Heaman et al. (2011).

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Canadian Geological Survey of Canada Canadian Geoscience Map 135 - CNGO Open File Map 2013-1 Southern Part of Hall Peninsula 1:250 000. Includes logo and descriptive text.

GEOLOGY SOUTHERN PART OF HALL PENINSULA south Baffin Island, Nunavut 1:250 000. Includes scale bar and metadata.

Map projection: Universal Transverse Mercator, zones 19 and 20. Includes information on scale and magnetic declination.

Canadian Geological Survey of Canada Canadian Geoscience Map 135 - CNGO Open File Map 2013-1 Southern Part of Hall Peninsula. Includes logo and descriptive text.