

This aeromagnetic survey and the production of this map were funded by phase 2 of the Geo-mapping for Energy and Minerals program (GEM-2) of the Lands and Minerals Sector, Natural Resources Canada.

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Cartographic design by D. Oneschuk, Geological Survey of Canada Permanent link: https://doi.org/10.4095/314834

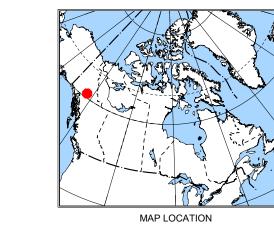
Data acquisition and data compilation YUKON by Novatem Inc., Mont-Saint-Hilaire, Quebec Contract and project management by the Geological Survey of Canada, Ottawa, Ontario Part of NTS 105-B (north half)

> (kilometres) Universal Transverse Mercator Projection Zone 8 North North American Datum, 1983 © Her Majesty the Queen in Right of Canada, as represented by the Minister of Natural Resources, 2019 Base map at the scale of 1:250 000 from Natural Resources Canada, with modifications Elevations in metres above mean sea level

GEOLOGICAL SURVEY OF CANADA OPEN FILE 8607 YUKON GEOLOGICAL SURVEY OPEN FILE 2019-10

RESIDUAL TOTAL MAGNETIC FIELD

AEROMAGNETIC SURVEY OF THE WOLF LAKE AREA



## Residual Total Magnetic Field

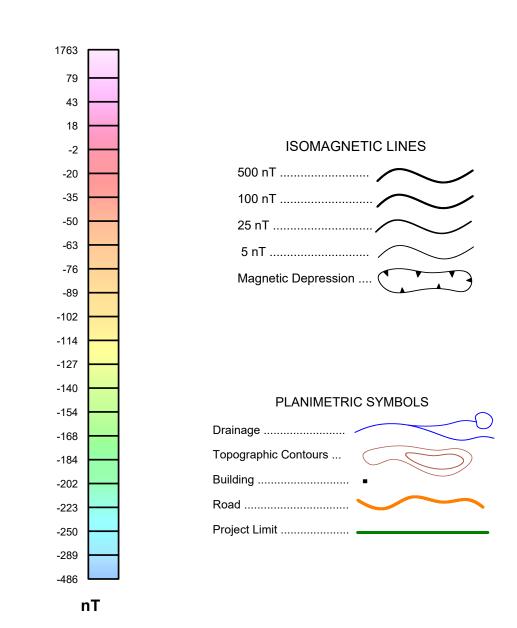
This map of the residual total magnetic field was derived from data acquired during an aeromagnetic survey carried out by Novatem Inc. from February 23, 2019 to April 2, 2019. The data were recorded using split-beam cesium vapour magnetometers (sensitivity = 0.005 nT) mounted in each of the tail booms of two Piper Navajo aircraft (C-FWNG and C-GJDD). The nominal traverse and control line spacings were, respectively, 400 m and 2400 m, and the aircraft flew at a nominal terrain clearance of 150 m. Traverse lines were oriented N45°E with orthogonal control lines. The flight path was recovered following post-flight differential corrections to the raw Global Positioning System (GPS) data and inspection of ground images recorded by a vertically-mounted video camera. The survey was flown on a pre-determined flight surface to minimize differences in magnetic values at the intersections of control and traverse lines. These differences magnetic values at the intersections of control and traverse lines. These differences were computer-analysed to obtain a mutually levelled set of flight-line magnetic data. The levelled values were then interpolated to a 100 m grid. The International Geomagnetic Reference Field (IGRF) defined at the average GPS altitude of 1603 m for the year 2019.2 was then removed. Removal of the IGRF, representing the magnetic field of the Earth's core, produces a residual component related almost entirely to magnetizations within the Earth's crust.

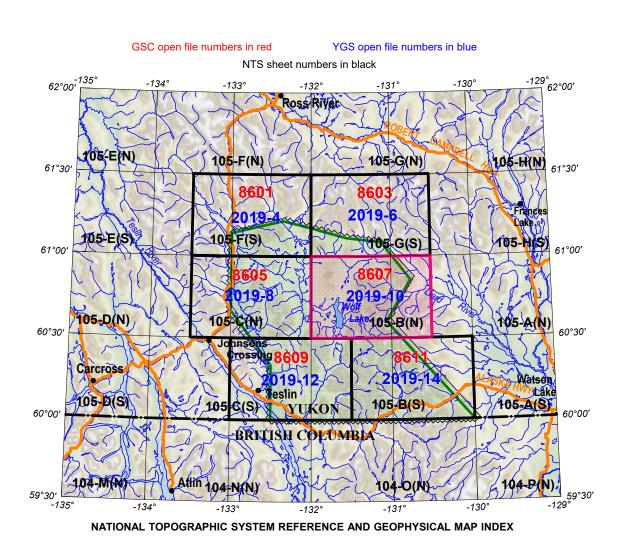
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Copies of this map may also be obtained from the Yukon Geological Survey, Energy, Mines and Resources, Government of Yukon, P.O. Box 2703 (K-102), Whitehorse, Yukon, Y1A 2C6. Telephone: (867) 667-3201, email: <a href="mailto:geology@gov.yk.ca">geology@gov.yk.ca</a>, website: <a href="http://www.geology.gov.yk.ca">http://www.geology.gov.yk.ca</a>.

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