

**NOTES**

Standardization of publicly available digital magnetic data from assessment reports was performed in 2019 and 2020. Residual magnetic field was calculated through removal of the IGRF. A levelled magnetic field channel was calculated by sampling the 1:250 000 compilation grid and taking the mean difference between the residual magnetic field and the overlapping points; this mean difference is applied as zero order datum shift to the residual data. This is repeated for each 1:250 000 compilation that the survey overlaps.

Up to four gridded products are produced for each survey (Residual Total Magnetic Field (TMI), Reduced-to-Pole Magnetic Field (RTP), First Vertical Derivative of the Reduced-to-Pole Magnetic Field (RTP\_VD) and Tilt Derivative of the Reduced-to-Pole Magnetic Field (RTP\_TDR) and these have pre-existing analogous 1:250 000 products from Open Files 2017-5 to 2017-59.

The outline of the assessment report data is extracted and eroded by a buffer, typically 200 m. The buffer is automatically reduced if it exceeds half the range of either the x or y coordinates. The eroded buffer is then windowed from each the four corresponding 1:250 000 compilations.

Each assessment report grid is then blended with the compilation grid through averaging common points between the grids. By previously windowing out the eroded assessment report outline from the compilation, both fidelity to the higher quality assessment report data and a smooth transition to avoid edge artifacts are achieved. This is an appropriate approach when the assessment report data are of higher quality than the compilation. Mostly this is true due to the higher resolution of data that is typical of a property-scale survey compared to a government regional-scale survey. However this is not universally the case and for every assessment report each of the four new blended grids are compared with the unaltered compilation. Assessment report grids which upon blending lower the quality of the compilation are manually rejected. A log file of accepted and rejected assessment reports for each 1:250 000 sheet is maintained.

The Yukon Geological Survey created georeferenced \*.pdf maps of the shaded relief colour contour products for each 1:250 000 map sheet. The map data are provided as GeoTiff files.

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**REFERENCES**

Miles, W., Saltus, R., Hayward, N. and Oneschuk, D., 2015. Alaska and Yukon Magnetic Compilation, Residual total magnetic field. Geological Survey of Canada, Open File 7862.

Anfield Ventures Inc. and Strategic Metals Ltd., 2008. Assessment Report Describing VTEM and Magnetometer Surveys at the Eureka Property. Yukon Energy, Mines and Resources Assessment Report 95120.

Network Exploration Ltd., 2009. Report on the 2009 Airborne Geophysical Survey on the Strike Property. Yukon Energy, Mines and Resources Assessment Report 95332.

Newcastle Minerals Ltd., 2009. Report on the 2009 Airborne Geophysical Survey on the Strike Property. Yukon Energy, Mines and Resources Assessment Report 95353.

Silver Quest Resources Ltd., 2011. 2011 Airborne Geophysical and Soil Geochemical Survey on the Boulevard Project. Yukon Energy, Mines and Resources Assessment Report 95460.

Cloudbreak Resources Ltd., 2009. Report on the 2009 Airborne Geophysical Survey on the Strike Property. Yukon Energy, Mines and Resources Assessment Report 95524.

Valdez Gold Inc., 2010. Geophysical Report on the Line 1-60 and Line 61-100 Claims. Yukon Energy, Mines and Resources Assessment Report 95536.

First Lithium Resources Inc., 2009. Report on the 2009 Airborne Geophysical Survey on the Strike Property. Yukon Energy, Mines and Resources Assessment Report 95549.

Solomon Resources Ltd., 2011. Airborne Geophysical Survey Report, Ten Mile Creek, Gold Project, Block A and Block B. Yukon Energy, Mines and Resources Assessment Report 95564.

Silver Quest Resources Ltd., 2011. 2011 Airborne Geophysical Survey on the Henderson Property. Yukon Energy, Mines and Resources Assessment Report 95942.

Taku Gold Corp., 2010. Sulphur and Sulphur E Property. Yukon Energy, Mines and Resources Assessment Report 95945.

Taku Gold Corp., 2010. Airborne Geophysical Survey Performed from October 6 to 9, 2010 on the Wounded Moose Property. Yukon Energy, Mines and Resources Assessment Report 95946.

Pacific Ridge Exploration, 2011. 2011 Airborne Geophysical Survey Report on the Mariposa Property. Yukon Energy, Mines and Resources Assessment Report 95949.

Anglo-Canadian Uranium Corp., 2010. Assessment Report on Geophysical Surveys and Interpretation Report, 2010 on the YK, River, and Arsenius Properties, Klondike Area, Yukon. Yukon Energy, Mines and Resources Assessment Report 95960.

Taku Gold Corp., 2010. Surface Work Performed from August 1, 2010 to December 10, 2010 on the Dan Property. Yukon Energy, Mines and Resources Assessment Report 95963.

Taku Gold Corp., 2010. Surface Work Performed from August 1, 2010 to December 10, 2010 on the Quartz Property. Yukon Energy, Mines and Resources Assessment Report 95964.

Taku Gold Corp., 2010. 2010 Surface Work on the Rosebute Property. Yukon Energy, Mines and Resources Assessment Report 95965.

Kaminak Gold Corp., 2009. Geochemical Report, Kirkman 1-116. Yukon Energy, Mines and Resources Assessment Report 96001.

Arcus Development Group Inc. and Atac Resources Ltd., 2011. Geochemical Sampling, Geophysical Surveying, Trench Reclamation and Diamond Drilling at the Dan Man Property. Yukon Energy, Mines and Resources Assessment Report 96106.

Ethos Gold Corp., 2011. Prospecting, Soil Geochemistry, Airborne Magnetic and Radiometric Surveying, and Airphoto-Orthophoto Surveying on Betty Project. Yukon Energy, Mines and Resources Assessment Report 96155.

Kinross Gold Corp., 2010. High Resolution Airborne Geophysical Report on the Yellow Claims. Yukon Energy, Mines and Resources Assessment Report 96202.

Kinross Gold Corp., 2010. High Resolution Airborne Geophysical Report on the JP Ross Claims (Group 1, 2, and 3). Yukon Energy, Mines and Resources Assessment Report 96204.

Kinross Gold Corp., 2010. High resolution Airborne Geophysical Report on the White and the Black Fox Group. Yukon Energy, Mines and Resources Assessment Report 96207.

Atac Resources Ltd. and Arcus Development Group Inc., 2011. Geochemical Sampling, Geophysical Surveys, Petrographic Studies and Diamond Drilling at the Touleary Property. Yukon Energy, Mines and Resources Assessment Report 96230.

Rackla Metals Inc. and Krefl, Bernard, 2011. 2011 Geophysical and Geochemical Survey Report, Ten Mile Project. Yukon Energy, Mines and Resources Assessment Report 96247.

Comstock Metals Ltd., 2012. Geochemical, Geophysical and Geological Assessment Report on the Walhalla Project. Yukon Energy, Mines and Resources Assessment Report 96286.

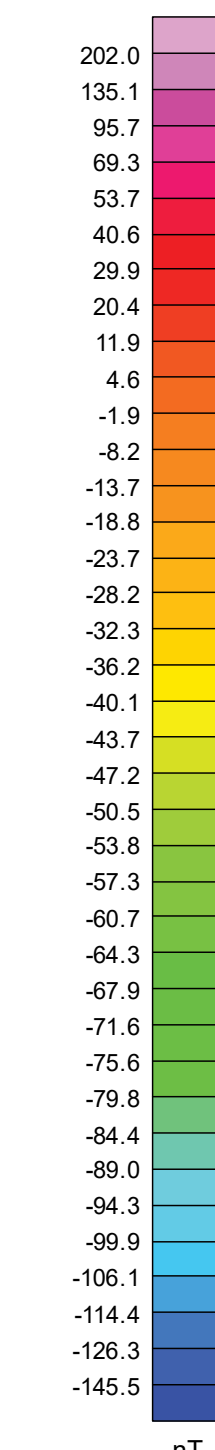
Ethos Gold Corp., 2011. Prospecting, Soil Geochemistry, Airborne Magnetic and Radiometric Surveying, on the Bridget Project. Yukon Energy, Mines and Resources Assessment Report 96304.

Ethos Gold Corp., 2011. Prospecting, Soil Geochemistry, Airborne Magnetic and Radiometric Survey, and Airphoto-Orthophoto Surveying on the Hen Project. Yukon Energy, Mines and Resources Assessment Report 96305.

Kaminak Gold Corp., 2014. Geophysical Survey Report, Midas High Resolution Magnetic Survey, Apollo Area, Project 14013. Yukon Energy, Mines and Resources Assessment Report 96642.

Newmont Exploration Ltd., 1998. Geophysical, Geological and Geochemical Assessment Report on the Clear Creek Property. Yukon Energy, Mines and Resources Assessment Report 93937.

Barramundi Gold Ltd., 1999. Detailed Airborne Magnetics and VLF-EM over the Klondike District, Dawson City - 1999. Yukon Energy, Mines and Resources Assessment Report 94021.



**RECOMMENDED CITATION**

Aurora Geosciences Ltd. and Bruce, J.O., 2020. Reduced-to-Pole Magnetic Field Shaded Colour Contour Map (NTS 1150). In: Reprocessing of Yukon magnetic data for NTS 1150. Yukon Geological Survey, Open File 2020-37, scale 1:250 000, 4 sheets.

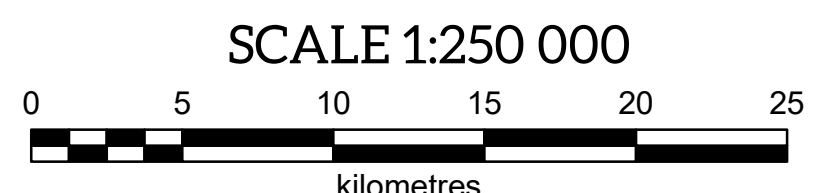
Any revisions or additional geological information known to the user would be welcomed by the Yukon Geological Survey.

Paper copies of this map and the accompanying report may be obtained from the Yukon Geological Survey, Energy, Mines and Resources, Government of Yukon, Room 102-300 Main St., Whitehorse, Yukon, Y1A 2B5. Email: geology@gov.yk.ca.

A digital PDF (Portable Document File) file of this map, and available data, can be downloaded free of charge from the Yukon Geological Survey website: <https://yukon.ca/en/science-and-natural-resources/geology>.

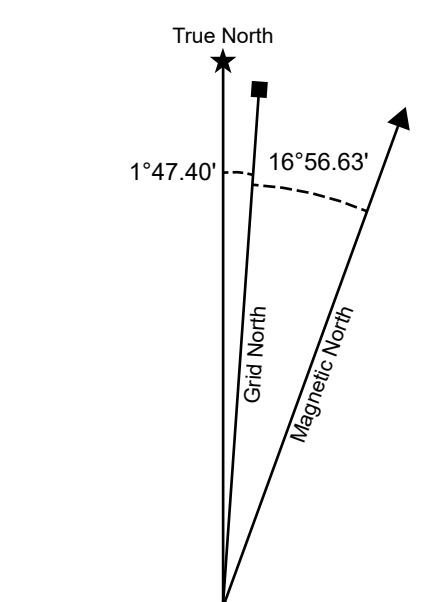


**REDUCED-TO-POLE MAGNETIC FIELD  
STEWART RIVER (NTS 1150)  
YUKON**



1:250 000-scale topographic base data produced by CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA

ONE THOUSAND METRE GRID Universal Transverse Mercator Projection North American Datum 1983 Zone 7



Use diagram only to obtain numerical values APPROXIMATE MEAN DECLINATION 2020 FOR CENTRE OF MAP Annual change 24.1' West

116C PART OF 116B	116B DAWSON	116A LARSEN CREEK
115N PART OF 115O	<b>THIS MAP</b>	115P MCQUESTEN
115K PART OF 115J	115J STEVENSON RIDGE	115I CARMACKS

**Yukon Geological Survey  
Energy, Mines and Resources  
Government of Yukon**

**Open File 2020-37  
Sheet 2 of 4**

**Reduced-to-Pole Magnetic Field  
Shaded Colour Contour Map (NTS 1150)  
(1:250 000 scale)**

by  
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and  
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