Nova Scotia Department of Natural Resources
Mineral Resources Branch

Open File Map ME 2005-26

Airborne Magnetic Calculated First Vertical Derivative Map for NTS 11E/10, New Glasgow Area, Nova Scotia

M. S. King

Scale 1:50 000

1 0 1 2 3 km

Halifax, Nova Scotia

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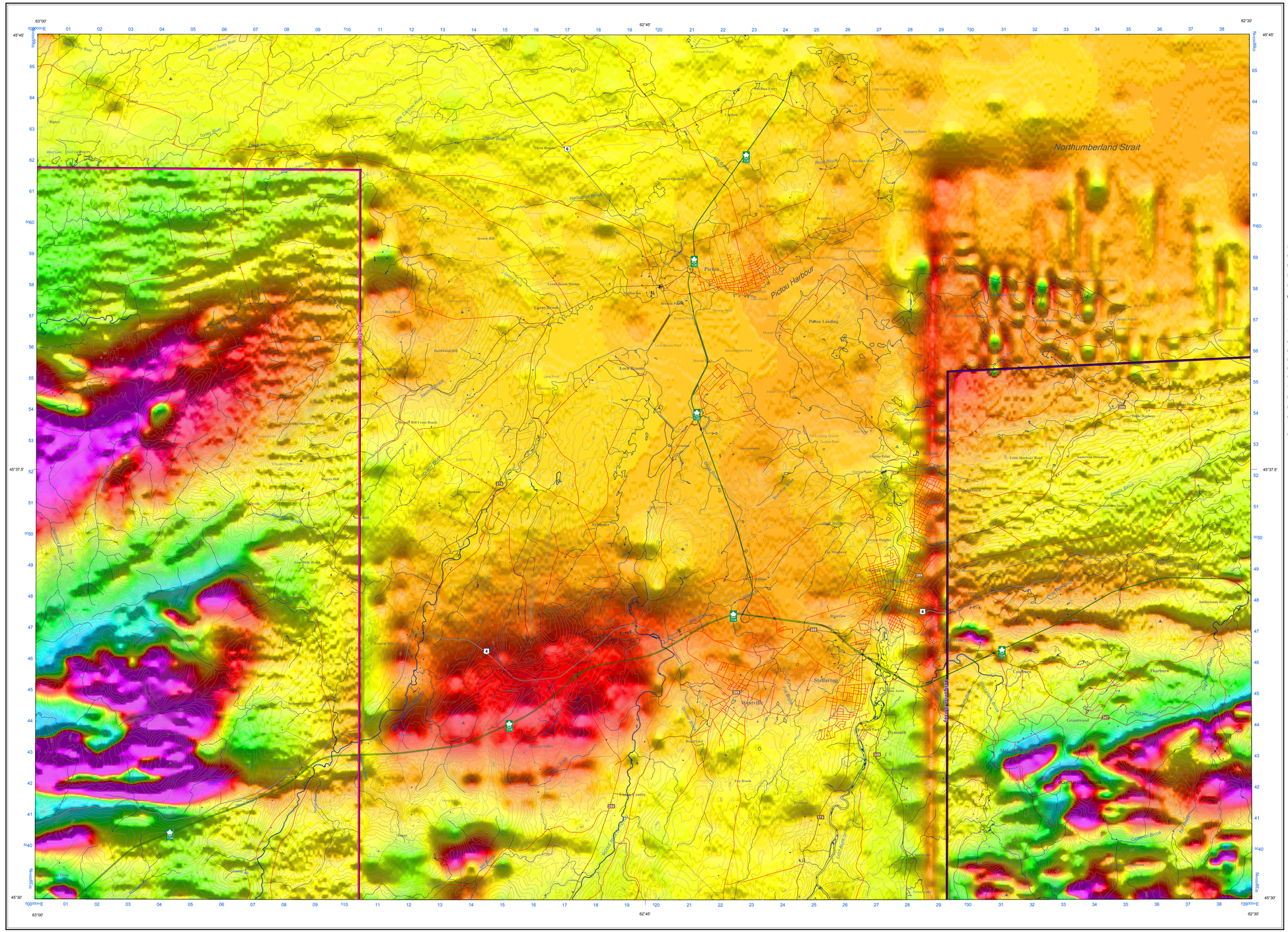


Airborne Magnetic Data
Vertical Gradient (First Derivative)

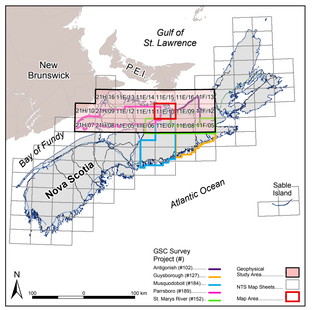
Airborne geophysical data, used to produce this map, were supplied by the Geological Survey of Canada (GSC) - Geophysical Data Centre, 615 Booth St., Ottawa, Ontario K1A 0E9. These high-resolution magnetic data were digitally acquired as part of the Antigonish (GSC Project #102) and Parrsboro (GSC Project #189) surveys. Map coverage was locally augmented by older vintage GSC analogue data. The data, used to produce this map image, are the calculated first vertical derivative of the levelled and decorrugated measured total field response. Vertical gradient data enhance near-surface magnetic sources at the expense of deeper features. Zero value gradient contours also correlate closely with the vertical projection of magnetic contacts. The 24-bit colour map image was produced with a 25 m pixel size. Shading was from the south at 35° above the horizon. For complete details please refer to Open File Report by King (2004).

Reference

For more information on this map series, refer to:

King, M. S. 2004: Report on potential field mapping component of the geological mapping of the St. Marys Basin Project, northern mainland Nova Scotia, Phase 2 of the Targeted Geoscience Initiative; Nova Scotia Department of Natural Resources, Mineral Resources Branch, Open File Report ME 2004-4.

Regional Key Map



Map Notes

Universal Transverse Mercator Projection (UTM), Zone 20, Central Meridian 63°00' West.

North American Datum (NAD) 1927.

Base and digital data derived from the Nova Scotia Topographic Database (NSTDB). The NSTDB is available from Service Nova Scotia and Municipal Relations (SNSMR), Land Information Services Division (LIS), Nova Scotia Geomatics Centre (NSGC), Amherst, Nova Scotia.

Funded by Natural Resources Canada and Nova Scotia Department of Natural Resources under the Targeted Geoscience Initiative (Phase 2) Project: Geological Mapping and Resource Evaluation in Central Nova Scotia, 2004-2005.

Cartography and reproduction by Nova Scotia Department of Natural Resources, Geoscience Information Services Section, 2004-2005.

Disclaimer

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Recommended Citation

King, M.S. 2005: Airborne magnetic calculated first vertical derivative map for NTS 11E/10, New Glasgow area, Nova Scotia: Nova Scotia Department of Natural Resources, Mineral Resources Branch, Open File Map ME 2005-26, scale 1:50 000.

Legend

- Spot Height
- Contour
- Depression Contour
- Index Contour
- Index Depression Contour
- Coastline, Lakes, Single-line Rivers, Streams
- 100 Series Highway
- Trans-Canada Highway
- Trunk Highway
- Collector Highway
- Hard Surface Road
- Road Under Construction
- Loose Surface/Resource Access Road
- Vehicle Track
- Trail/Footpath
- Railway
- Railway Inactive
- County Boundary

Contour Interval = 10 m

0.17, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.085, 0.08, 0.075, 0.07, 0.06, 0.055, 0.05, 0.045, 0.04, 0.035, 0.03, 0.025, 0.02, 0.015, 0.01, 0.00, -0.005, -0.01, -0.015, -0.02, -0.025, -0.03, -0.035, -0.04, -0.045, -0.05, -0.06, -0.065, -0.07, -0.075, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.16, -0.19

Vertical Gradient (nT/m)

May 26, 2005