


This map has been compiled from digitally-recorded high-sensitivity aeromagnetic data obtained by two self-orienting cesium vapour magnetometers installed in twin tail booms mounted on the GSC Beechcraft B80 aircraft. The magnetometers are vertically separated by a distance of 2.05 metres with each measuring the total magnetic field to a resolution of 0.005 gammas.


Flight altitude was 150 m above ground at 300 m average flight line spacing. Double control lines were flown at an average spacing of 7.5 kilometres.


The vertical gradient values, which approximate closely to the first vertical derivative of the earth's total field, are obtained by dividing the difference between the total field readings of the two magnetometers by their vertical separation.


The vertical gradient data was filtered with a digital operator to remove instrument noise. The vertical gradient data from the control lines was not used in the compilation of the map. The data was edited, compiled, leveled and gradient values for contouring interpolated onto a square grid (0.25 m grid spacing at 1:25,000 map scale) by automatic computer processes. The final data grid was contoured and plotted at 1:20,000 scale using the automatic contouring program and digital plotter facilities of Dataplotting Services Ltd. The survey data used to compile this map is available in digital form from the Geological Survey of Canada on a cost recovery basis.


Airborne survey and digital compilation was carried out by Resource Geophysics and Geochemistry Division, Geological Survey of Canada. The survey operations which took place in June and July, 1981, using Beechcraft Queenair 65-B80 aircraft C-FWZG, were wholly funded by the Geological Survey of Canada.


+5 gammas/metre..... 

+1 gammas/metre..... 

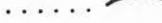
+0.25 gammas/metre..... 

-5 gammas/metre..... 

-1 gammas/metre..... 

-0.25 gammas/metre..... 

(1 gamma = 1 nanotesla in SI units)

Flight lines..... 

Flight altitude: 150 m above ground level

GEOLOGICAL SURVEY OF CANADA  COMMISSION GÉOLOGIQUE DU CANADA

DEPARTMENT OF ENERGY, MINES AND RESOURCES
MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES

63K/14a b

MANITOBA

VERTICAL GRADIENT

Scale 1:20 000 Échelle

Metres 600 0 600 1200 1800 Mètres

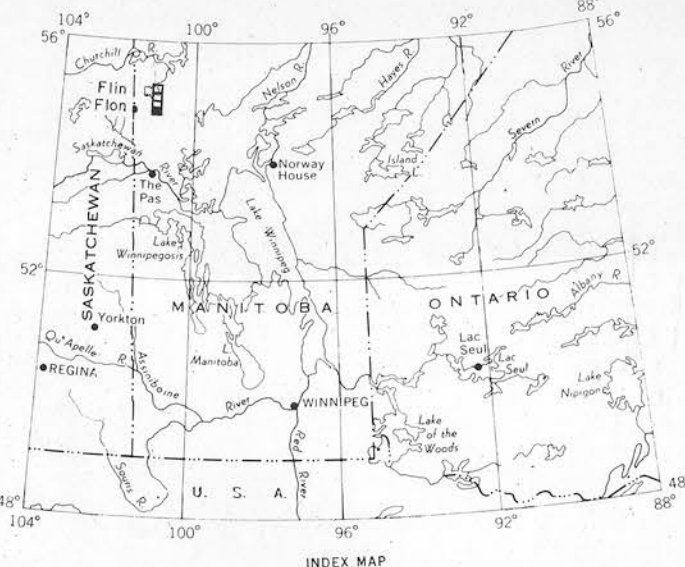
Feet 2000 0 2000 4000 Pieds

Universal Transverse Mercator Projection

© Crown Copyrights reserved

Projection transverse universelle de Mercator

© Droits de la Couronne réservés



OPEN FILE
DOSSIER PUBLIC
876
GEOLOGICAL SURVEY
COMMISSION GÉOLOGIQUE
OTTAWA

This document was produced
by scanning the original publication.
Ce document est le produit d'une
numérisation par balayage
de la publication originale.

