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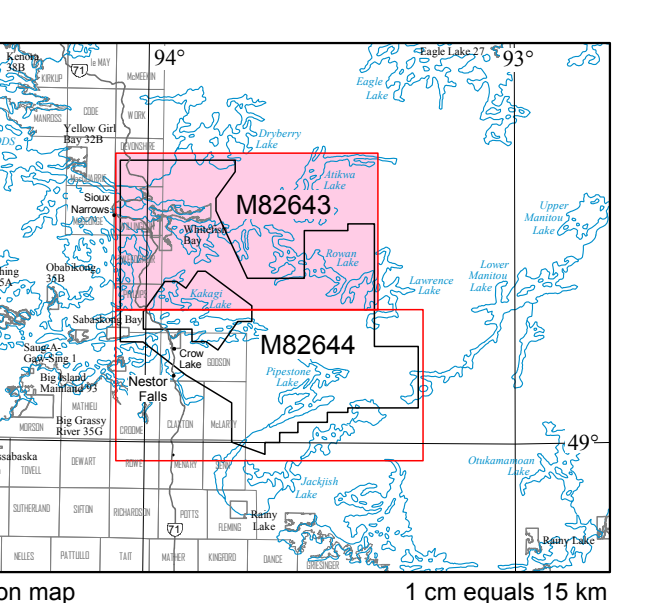
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SOURCES OF INFORMATION

Base map information derived from the Land Information Ontario Data Warehouse, Land Information Ontario, Ontario Ministry of Natural Resources and Forestry, scale 1:50 000.

Magnetic declination for the centre of the map area was approximately 0.1° W in 2014.

Mull, Maxwell, A. 1998. Short Note: A simple method of transient electromagnetic data analysis. Geophysics, v.63, no.2, p.405-410.

CREDITS

Data acquisition, data compilation and map production by Geotech Limited, Aurora, Ontario.

Project management and quality assurance by Paterson, Grant and Watson Limited, Toronto, Ontario.

Contract management, base maps and map surrounds by the Ontario Ministry of Northern Development and Mines, Sudbury, Ontario.

Every possible effort has been made to ensure the accuracy of the information presented; however, the Ontario Ministry of Northern Development and Mines does not assume liability for any errors that may occur. Users should verify critical information.

Corresponding digital data for this survey are available from the following Ontario Geological Survey publication:

Ontario Geological Survey 2014. Ontario airborne geophysical surveys, magnetic and electromagnetic data, grid and profile data (ASCII and Geocoord formats) and vector data, Nestor Falls area, Ontario Geological Survey, Geophysical Data Set 1076.

Issued 2014.

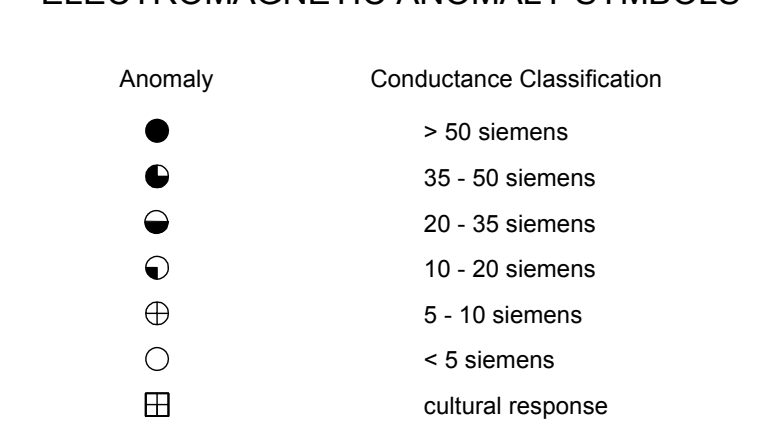
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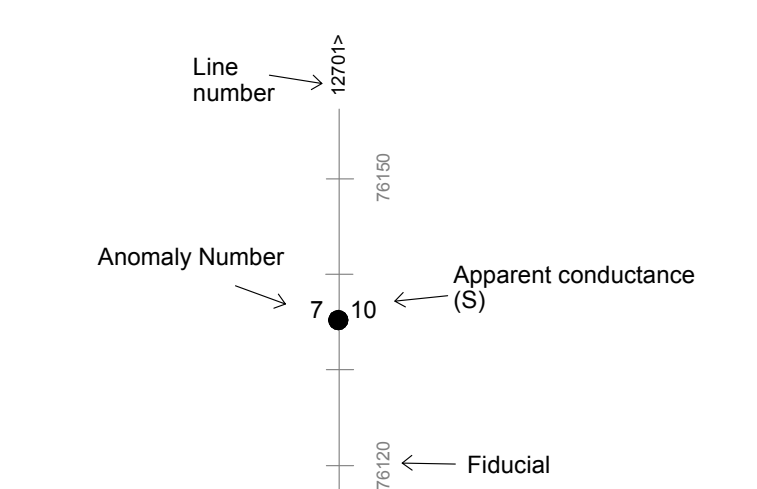
Users of OGS products are encouraged to contact those Aboriginal communities whose traditional territories may be located in the mineral exploration area to discuss their project.

LEGEND

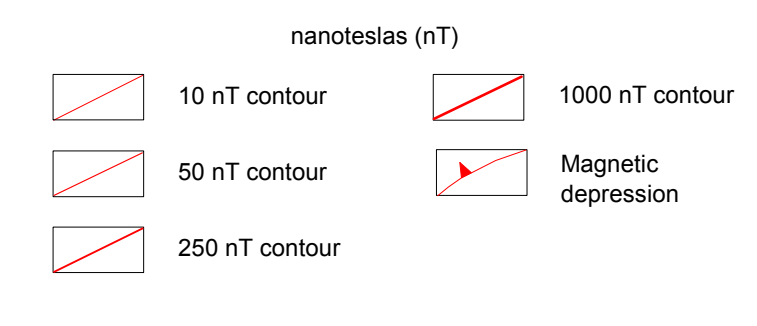
ELECTROMAGNETIC ANOMALY SYMBOLS



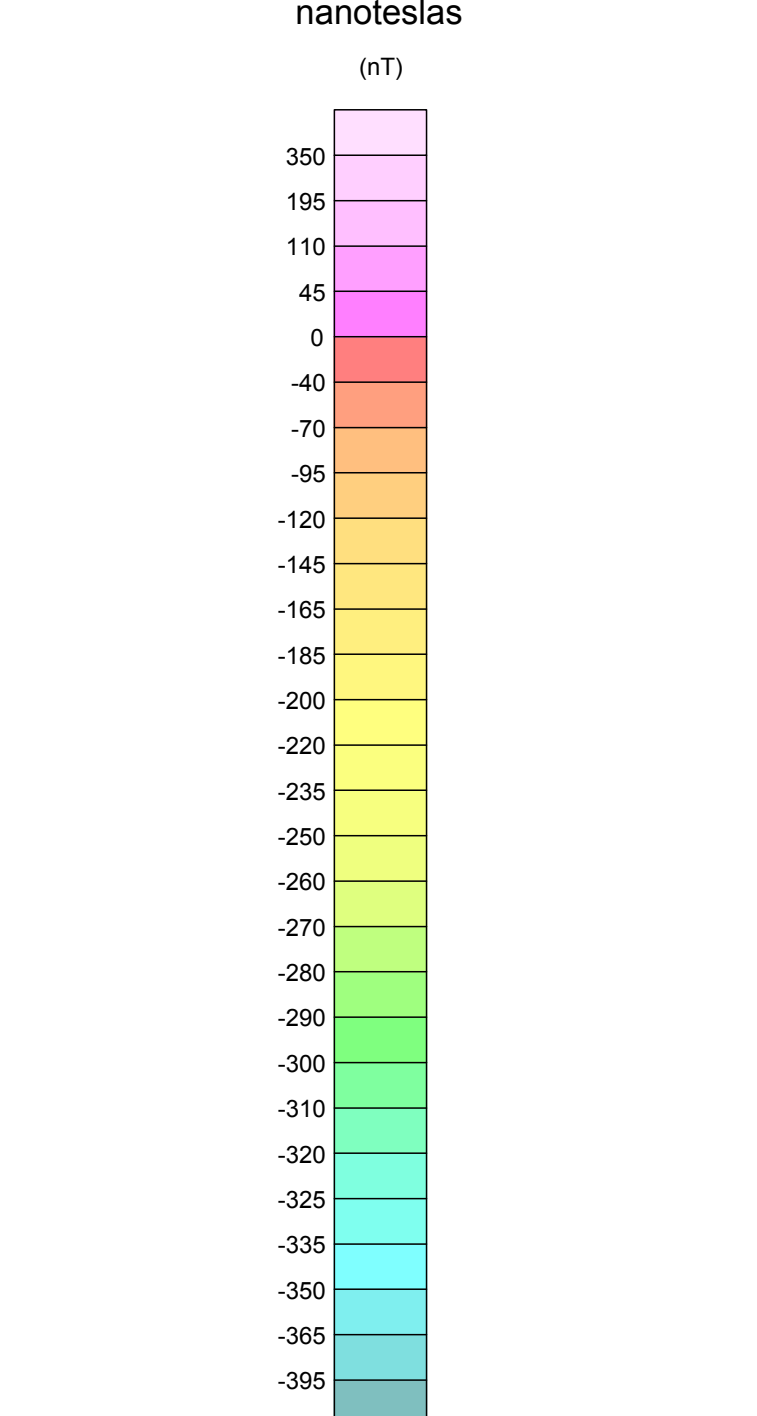
FLIGHT LINE INFORMATION



MAGNETIC CONTOURS



RESIDUAL MAGNETIC FIELD GRID



DESCRIPTIVE NOTES

Introduction
This survey was flown using the Geotech VTEMPlus helicopter-mounted magnetic and electromagnetic system. The aircraft was also equipped with a GPS navigation system and a digital data acquisition system.

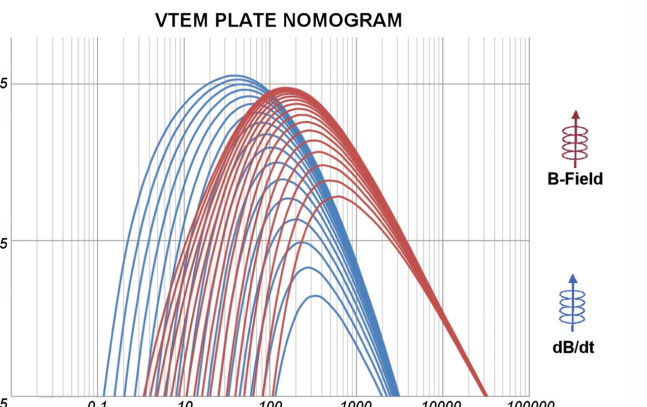
Residual Magnetic Field Map
The contours of residual magnetic intensity were generated from digitally recorded data. The magnetic data were corrected for diurnal variations, levelled to the control lines and interpolated onto a 40 m regular grid, using the minimum curvature algorithm. An International Geomagnetic Reference Field (IGRF) correction was applied to the total magnetic field data at survey altitude using the 2010 model year extrapolated to March 1, 2014. A regional correction was applied to level the magnetic field to the Ontario Master Aeromagnetic Grid.

Magnetic declination from January 26, 2014 to March 1, 2014 for the centre of the survey area was 0.1° W. Magnetic inclination from January 26, 2014 to March 1, 2014 for the centre of the survey area was 74.7° N. Magnetic field strength was 57163 nT (calculated using IGRF).

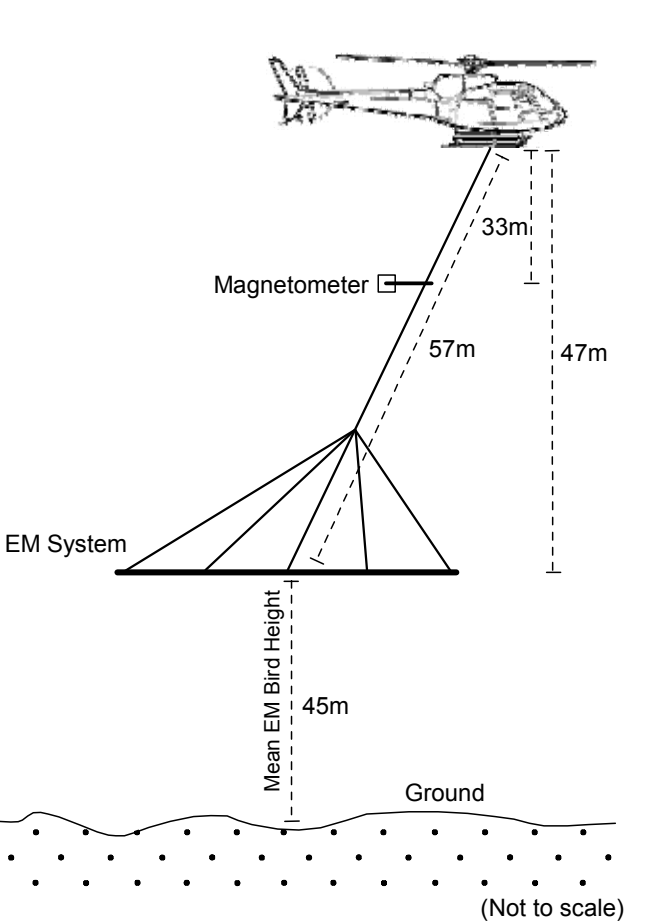
EM Anomalies
The VTEMPlus system will respond to conductive overburden, near-surface horizontal conducting layers, man-made sources and bedrock conductors. Identification of natural conductors is based on the rate of transient decay, magnetic correlation and response shape, together with the response pattern and topography. Man-made responses are identifiable by examining the power line monitor and the flight track video.

Anomalies were classified as having an inductively thin source, which produces a double-peaked (M-shaped) response with the trough centered over the conductor, or as an inductively thick source, which produces a single peaked response centered over the conductor. The anomaly source conductance was computed assuming a 100 m by 100 m thin plate.

VERTICAL PLATE NOMOGRAM



SYSTEM CONFIGURATION



SURVEY PARAMETERS

AIRCRAFT
Type: AS500B3
Registration: C-FKDI

MAGNETOMETER
Type: Geosouth® G823A cesium vapour
Sensitivity: 0.02 nT
Noise level: ±0.004 nT
Sample interval: 10 readings per second
Sensor location: 33 m below aircraft

ELECTROMAGNETIC SYSTEM
Type: VTEMPlus
Base frequency: 30 Hz
Current waveform: trapezoid
Peak dipole moment (NIA): 522 430 Am²
Pulse width: 4.4 msec
Off-time: 7036 µsec
Pulse repetition: 30 cycles per second
Parameters: 2 - compensated
Noise levels: 0.0005 µV/A m²
Sample interval: 10 readings per second
Bird Location: 47 m below aircraft

NAVIGATION SYSTEM
GPS receiver: MD-TECH® RM4000
GPS sample interval: 5 readings per second
Radar altimeter: Terra TRA3000TRI-40
Radar sample interval: 5 readings per second
Video flight path recorder: Archos™ 605 Wi-Fi

BASE STATION
Magnetometer: Geotech Base Station - Geometrics®
G822B cesium vapour sensor
Magnetometer sample interval: 10 readings per second

SURVEY SPECIFICATIONS
Survey date: January 26 to March 1, 2014
Nominal aircraft terrain clearance: 92 m
Traverse line spacing: 200 m
Control line spacing: 1600 m
Traverse line direction: north-south
Control line direction: east-west

CO-ORDINATE SYSTEM
Projection: Universal Transverse Mercator
Datum: NAD83
Central meridian: 93°00'W (UTM zone 15)
Central scale factor: 0.9996
False easting: 500 000 m
False northing: 0 m