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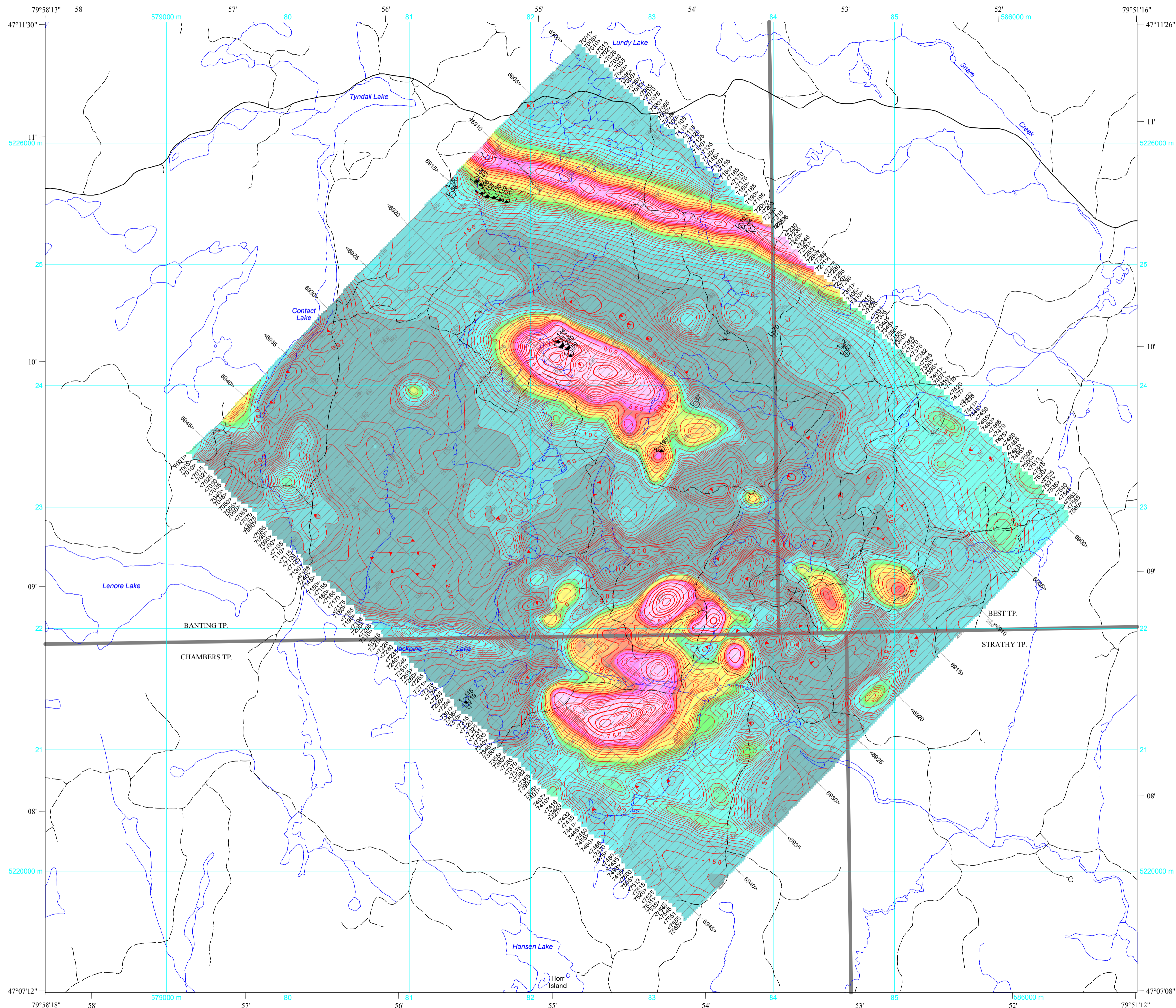
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Ontario Geological Survey 2013. Airborne magnetic and electromagnetic surveys, colour-filled contours of the gradient-enhanced residual magnetic field and electromagnetic anomalies, Latchford (Banting–Chambers) area—Purchased data; Ontario Geological Survey, Map 60 413, scale 1:20 000.

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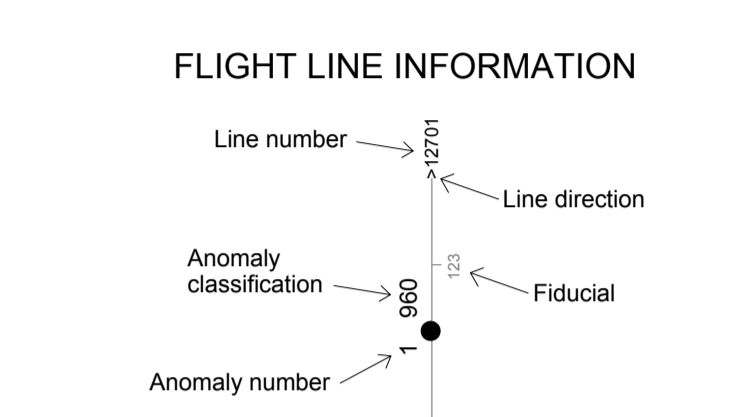
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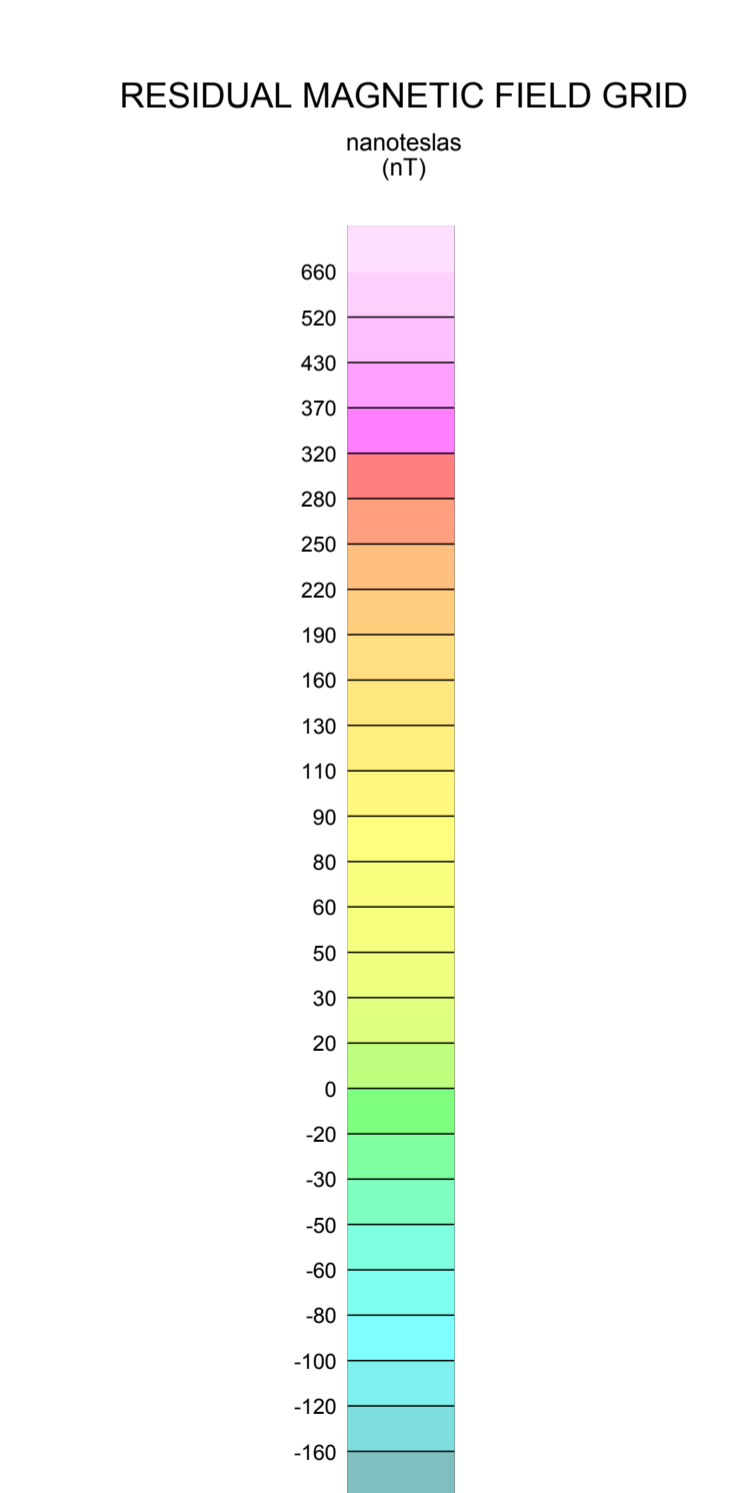
ELECTROMAGNETIC ANOMALY SYMBOLS

Anomaly	Decay Constant Classification
●	960 - 1920 microseconds
●	480 - 960 microseconds
●	240 - 480 microseconds
●	120 - 240 microseconds
⊕	60 - 120 microseconds
○	30 - 60 microseconds
*	0 - 30 microseconds



MAGNETIC CONTOURS
nanoteslas (nT)

10 nT contour	1000 nT contour
50 nT contour	Magnetic depression
250 nT contour	



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.

SOURCES OF INFORMATION

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

Magnetic declination for the centre of the map area was approximately 11°20'W in 2013.

Orta, M. 2006. Report on a helicopter-borne time domain electromagnetic geophysical survey, Banting-Chambers property, Temagami, Ontario; unpublished report for Amador Gold Corp.

DESCRIPTIVE NOTES

Introduction

This map was compiled from a proprietary airborne survey purchased by the Ontario Ministry of Northern Development and Mines. This survey was flown using the Geotech VTEM helicopter-borne magnetic and electromagnetic system. The aircraft was also equipped with GPS navigation systems and digital data acquisition systems.

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 15 m regular grid, using the minimum curvature spline algorithm. An International Geomagnetic Reference Field (IGRF) correction was applied to the total magnetic field data at the magnetic sensor mean survey elevation using the mean survey date of December 28, 2005. A regional correction was applied to level the magnetic field to the Ontario Master Aeromagnetic Grid.

Magnetic declination on December 28, 2005 for the centre of the survey area was 11.4°W and magnetic inclination was 73.3°N. Magnetic field strength was 56 562 nT (calculated using IGRF).

EM Anomalies

The VTEM 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 may be identified by examining the powerline monitor.

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. Where possible, a single EM anomaly pick has been positioned over the conductor axis, even for double peaked responses.

SURVEY PARAMETERS

AIRCRAFT
Type: Aerospatiale AS350BA
Registration: C-GHSM

MAGNETOMETER
Type: Geometrics caesium-vapour
Sensitivity: 0.02 nT
Sample interval: 10 readings per second
Sensor location: 15 m below aircraft

ELECTROMAGNETIC SYSTEM
Type: VTEM
Base frequency: 30 Hz
Current waveform: trapezoid
Peak dipole moment: 420 500 Am²
Pulse width: 7300 µsec
Off-time: 16 581 µsec
Parameters: Z-component of dB/dT
Sample interval: 10 readings per second
Bird location: 40 m below aircraft

NAVIGATION AND DATA ACQUISITION SYSTEM
GPS receiver: Novatel OEM4-C2-3101W
GPS sample interval: 5 readings per second
Radar altimeter: Terra 3000/TRI-40
Radar sample interval: 5 readings per second
Guidance system: Geotech
Digital acquisition system: Geotech

BASE STATION
Type: Geometrics caesium-vapour
Magnetometer sample interval: 1 reading per second
GPS sample interval: 1 reading per second

SURVEY SPECIFICATIONS
Survey date: December 16, 2005 to January 6, 2006
Nominal aircraft terrain clearance: 80 m
Traverse line spacing: 50 m
Control line spacing: 500 m
Traverse line direction: N44°E
Control line direction: N134°E

CO-ORDINATE SYSTEM
Projection: Universal Transverse Mercator
Datum: NAD83
Central meridian: 87°00'W (UTM zone 16N)
Central scale factor: 0.9996
False easting: 500 000 m
False northing: 0 m

Data purchased from Amador Gold Corp.

Ontario

Ontario Geological Survey

MAP 60 413

AIRBORNE MAGNETIC AND ELECTROMAGNETIC SURVEYS

Colour-filled contours of the gradient-enhanced residual magnetic field and electromagnetic anomalies

LATCHFORD AREA (Banting-Chambers)

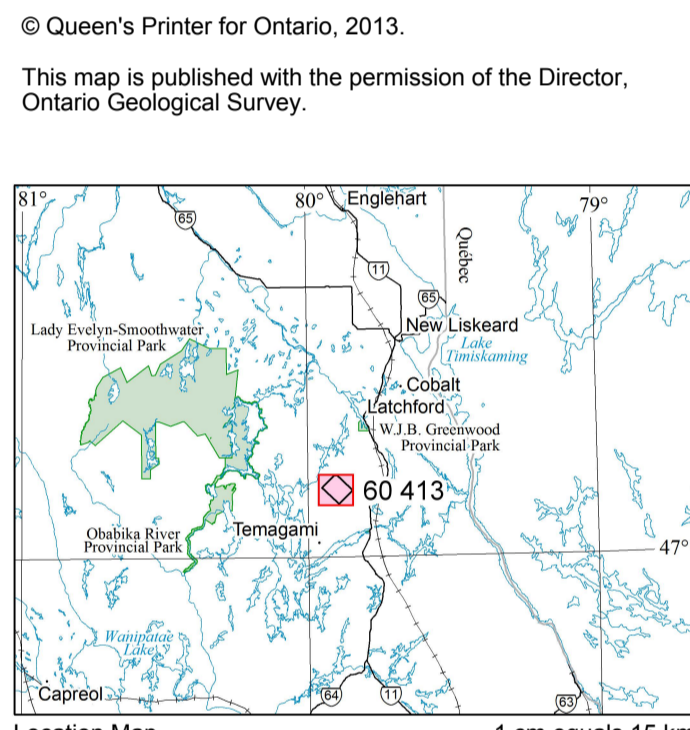
Purchased Data

Scale 1:20 000

NTS References: 31 M/4

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CREDITS

Data acquisition, data compilation by Geotech Limited, Aurora, Ontario for Amador Gold Corp., Vancouver, British Columbia.

Data reprocessing and map production by CGI Controlled Geophysics Inc., Thornhill, Ontario.

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

To enable the rapid dissemination of information, this map has not received a technical edit. 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 may wish to verify critical information.

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

Ontario Geological Survey 2013. Ontario airborne geophysical surveys, magnetic and electromagnetic data, grid and profile data (ASCII and Geosoft® formats) and vector data, Latchford area—Purchased data; Ontario Geological Survey, Geophysical Data Set 1242.

The geophysical data on this map were purchased from the private sector. The original data acquisition was neither supervised by the Ontario Geological Survey (OGS) nor carried out to OGS technical specifications. However, the purchased data do meet a pre-defined valuation criteria set out by the OGS. Some quality assurance and quality control checks have been carried out on the digital data.

Issued 2013.

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