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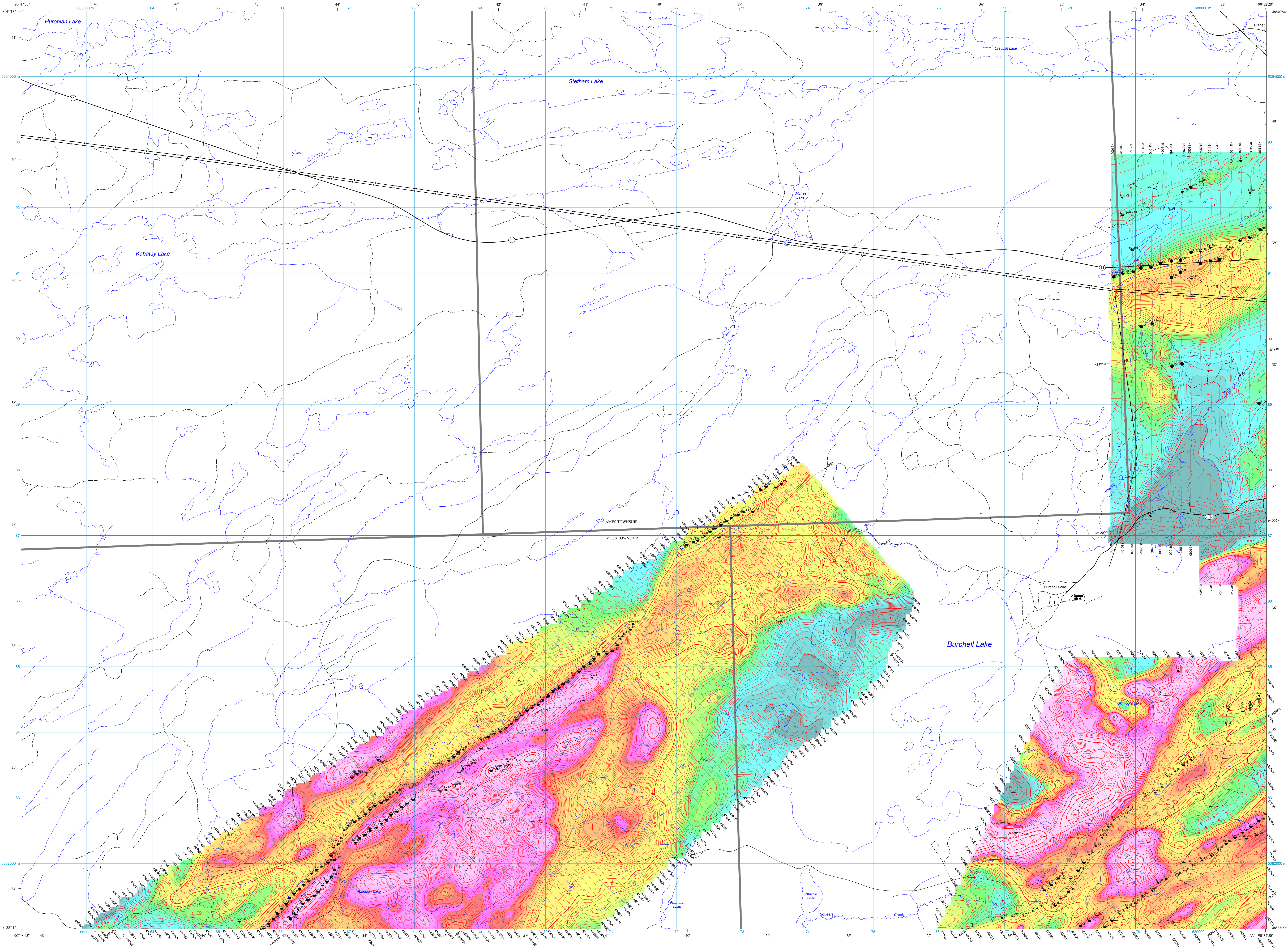
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DESCRIPTIVE NOTES

Introduction

This map was compiled from multiple proprietary airborne surveys purchased by the Ontario Ministry of Northern Development and Mines. These surveys were flown using the Geotech VTEM helicopter-borne magnetic and electromagnetic system. The aircraft were 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 30 m regular grid, using the bi-cubic algorithm. An International Geomagnetic Reference Field (IGRF) correction was applied to the total magnetic field data at survey altitude using the 2005 model year extrapolated to the mean survey date of 2004.28 (April 10, 2004). A regional correction was applied to level the magnetic field to the Ontario Master Aeromagnetic Grid.

Magnetic declination on March 10, 2004 for the centre of the survey area was 1.5°W and magnetic inclination was 75.5°N. Magnetic field strength was 58 002 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 variant decay, magnetic correlation and response shape, together with the response pattern and topography. Man-made responses may be identified by examining the power line monitor.

Anomalies were classified as having an inductively thin source, which produces a double-peaked (M-shaped) response with the trough centred over the conductor, or as an inductively thick source, which produces a single-peaked response centred 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: Aerostaircase AS350B-2 (Blocks 1, 5, 6, 8)
Aerostaircase AS350BA (Blocks 2, 3, 7)
Aerostaircase AS350B (Block 4)
Registration: C-FQNS (Blocks 1, 5, 6, 8)
C-CHSM (Block 3)
C-GLNE (Block 3, 7)
C-GCTE (Block 4)

MAGNETOMETER

Type: cesium-vapour
Sensitivity: 0.02 nT
Sample interval: 10 readings per second
Sensor location: 10 m below aircraft (Blocks 1, 5, 8)
15 m below aircraft (Blocks 2, 3, 4, 5, 7)

ELECTROMAGNETIC SYSTEM

Type: VTEM (Blocks 1, 2, 4, 5, 6, 8)
Type: Dreamcatcher (Blocks 3, 7)
Base frequency: 30 Hz
Current waveform: Triangular
Peak dipole moment: N/A; 250 000 Am² (Blocks 1, 6, 8)
220 000 Am² (Block 2)
147 800 Am² (Blocks 3, 7)
424 500 Am² (Blocks 4, 5)
147 800 Am² (Blocks 1, 6, 8)
147 800 Am² (Blocks 3, 7)
Pulse width: 7400 usec (Blocks 1, 6, 8)
7600 usec (Blocks 2, 4, 5)
8333 usec (Blocks 3, 7)
18 133 usec (Blocks 2, 4, 5)
16 667 usec (Blocks 3, 7)
Off-time: 18 533 usec (Blocks 1, 6, 8)
18 133 usec (Blocks 2, 4, 5)
Parameters: 2-component of elliptical
Sample interval: 10 readings per second
Bird location: 45 m below aircraft (Blocks 1, 3, 4, 5, 6, 7, 8)
35 m below aircraft (Block 2)

NAVIGATION SYSTEM

GPS receiver: Novatel® OEM4-Q2-3151W
GPS sample interval: 5 readings per second
Radar altimeter: Terra 3000V140
Radar sample interval: 5 readings per second
Guidance system: Geotech
Digital acquisition system: Geotech

BASE STATION

Type: Geometric® cesium-vapour
Magnetometer sample interval: 1 reading per second
GPS sample interval: 1 reading per second

SURVEY SPECIFICATIONS

Survey dates:
December 17, 2004 to December 20, 2004 (Blocks 1, 6)
February 21, 2004 to February 22, 2004 (Block 2)
February 11, 2003 to February 16, 2003 (Block 3)
May 20, 2005 to June 7, 2005 (Blocks 4, 5)
February 11, 2003 to February 12, 2003 (Block 7)
December 10, 2004 to December 16, 2004 (Block 8)

Nominal aircraft terrain clearance: 75 m (Blocks 1, 6, 8)
100, 200 m (Block 2)
80 m (Blocks 3, 7)
85 m (Blocks 4, 5)

Traverse line spacing: 150 m (Blocks 1, 6)
100, 200 m (Block 2)
100 m (Blocks 3, 4, 8)
200 m (Block 5)
150/100 m (Block 7)

Control line spacing: 2000 m (Blocks 1, 8)
2200 m (Blocks 2, 6)
1500 m (Block 4)
2800 m (Block 5)
2000 m (Block 7)

Traverse line direction:
North-south (Blocks 3, 7, 8)
approximately 2°-38.8°W in 2014
N140°E (Blocks 4, 5)
N25.2°W (Block 6)
N22.7°E (Block 11)
N50°E (Blocks 2, 5)
East-west (Blocks 3, 8)
N57°E (Block 4)
N55.2°E (Block 6)
N85°E (Block 7)

CO-ORDINATE SYSTEM

Projection: Universal Transverse Mercator
Datum: NAD83
Central meridian: 83°00' W (UTM Zone 18N)
Central scale factor: 0.9996
False easting: 500 000 m
False northing: 0 m
Ellipsoid: GR80

Data purchased from:
East West Resource Corp. and Maple Mineral Corporation.
(Blocks 1, 2, 6)
East West Resource Corp. (Blocks 3, 4, 5)
Canadian Golden Dragon Resources Corp. (Blocks 7, 8)

LEGEND

ELECTROMAGNETIC ANOMALY SYMBOLS

Anomaly	Decay Constant Classification
●	> 200 microseconds
●	150 - 200 microseconds
●	100 - 150 microseconds
●	50 - 100 microseconds
⊕	25 - 50 microseconds
○	< 25 microseconds
⊞	cultural response

FLIGHT LINE INFORMATION

Line number: 12000
Line direction: 12000
Anomaly number: 1
Tau: 25
Fiducial: 75000

MAGNETIC CONTOURS
nanotesla (nT)

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

RESIDUAL MAGNETIC FIELD GRID
nanotesla (nT)

940
580
480
380
300
270
230
190
160
120
80
50
20
0
-20
-40
-60
-80
-90
-110
-120
-140
-160
-180
-200
-220
-240

Map Information

Location Map

The original names of the purchased surveys have been converted to block numbers as follows:

Block 1: Powell-Hamlin
Block 2: Hamlin (431)
Block 3: Dealy
Block 4: Telle
Block 5: Burchell (532)
Block 6: Burchell (496)
Block 7: Vanguard (A2003)
Block 8: Vanguard (497)

The geographical 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 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.