# REPORT ON A HELICOPTER-BORNE MAGNETIC AND ELECTROMAGNETIC SURVEY

"featuring the AeroQuest AeroTEM® System"



Kukagami Lake Property Sudbury Area, Ontario

for

## GoldWright Explorations Inc.

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April, 2004



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#### **MAPS**

The results of the survey are presented in a series of black line and colour maps at a scale of 1:10,000. Map products are as follows:

- Plate 1. Flight path.
- Plate 2. Total Magnetic Intensity (TMI) colour grid w/line contours.
- Plate 3. Z1 & Z3 (RMS) Off-time EM profiles.

All the maps show the flight path and if applicable, EM anomalies represented by symbols classified according to the number of responding conventional EM channels. An anomaly identifier label and the Z3 off-time channel peak amplitude, if applicable, is posted alongside the anomaly symbol. Colour contour maps show colour fill plus superimposed line contours.

#### **DIGITAL DATA on CD-ROM**

The results of the survey are archived on a single CD-ROM as Geosoft GDB (binary) databases and XYZ (ASCII) export files as well as Geosoft maps and magnetic grids. A *readme.txt* file may be found on the CD which describes the contents in more detail.

For the reader's convenience, a copy of Geosoft's Oasis Montaj Ver 5.0 Free Interface is included on the CD. To install the interface, unzip the two files and follow the instructions in the PDF format (Adobe Reader) guide.

The CD also contains a digital version of this report in PDF (Adobe Acrobat) format including the technical paper by Balch, et al, which is re-printed in the appendix of this report. Adobe Acrobat Reader Ver 5.0 has been included on the CD.

# REPORT ON A HELICOPTER-BORNE MAGNETIC AND ELECTROMAGNETIC SURVEY

Kukagami Lake Property Sudbury Area, Ontario

#### 1. INTRODUCTION

This report describes a helicopter-borne geophysical survey carried out on behalf of Goldwright Explorations Inc.on a claim block in Kelly Township, on the east side of Kukagami Lake in the Sudbury area of Northern Ontario.

Principal geophysical sensors included AeroQuest's exclusive AeroTEM<sup>©</sup> time domain helicopter electromagnetic system and a high sensitivity cesium vapour magnetometer. Ancillary equipment included a GPS navigation system with GPS base station, radar altimeter and video recorder. Raw streaming EM data, consisting of 126 channels of Z and X component sampled at 300 times per second during both on-current and off-current times, was recorded. A second RMS "analogue" acquisition system recorded 6 Z-component and one X-component channels of semi-processed EM data at 7.5 times per second, in addition to recording GPS position, magnetic field, and terrain clearance.

Appendix 1 lists the UTM corner co-ordinates for the survey areas. The total line kilometres (unwindowed) flown was 66.3 km. The survey flying described in this report took place on April 8, 2004.

Bedrock EM anomalies were picked from the conventional RMS Off-Time data and graded according to the number of channels of response. This report describes the survey, the data processing and presentation.

#### 2. SURVEY AREA

The Kukagami Lake property is located approximately 40 kilometres northeast the city of Sudbury, in northern Ontario (Figure 1). The property lies in Kelly Township on the east side of Kukagami Lake, within the Sudbury Mining Division. The latitude and longitude of the centre of the property in is 46°4.5'N, 80°30.7'W.

The survey crew resided at the Comfort Inn Motel on Highway 17 at Second Ave on the east side of Sudbury. Survey specification details may be found in the next section of the report.

Figure 1 Regional Setting in Ontario

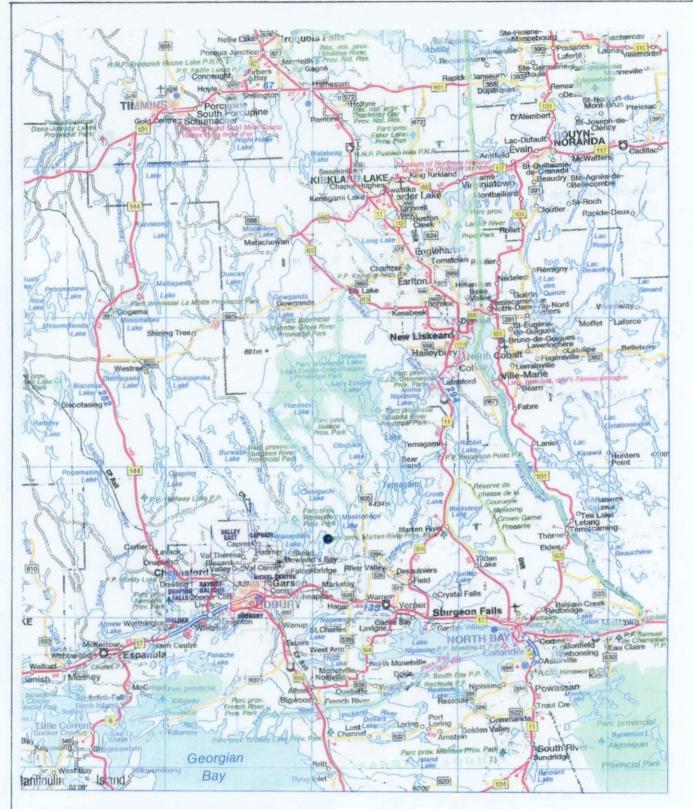
#### 3. SURVEY SPECIFICATIONS AND PROCEDURES

The survey specifications are summarised in the following table:

Area Name	Line Spacing (m)	Line Direction	Unwindowed Total Survey (km)	Windowed Total Survey (km)	Dates Flown (2004)
Kukagami Lake	100	E-W	66.3	57.5	April 8

The unwindowed kilometres flown is calculated by adding up the survey and control (tie) line lengths as presented in the database. The windowed kilometres is determined in the same manner but after masking the database with an outline of the survey boundary, as found in the appendix of this report. All the survey lines were flown in the UTM grid East/West direction.

Nominal EM bird terrain clearance was ~30m (100 ft). The magnetometer sensor was mounted in a smaller bird connected to the tow rope 21 metres above the EM bird and 17 metres below the helicopter. Nominal survey speed was 75 km/hr. Scan rates for data acquisition was 0.1 second for the magnetometer, electromagnetics and altimeter and 0.2 second for the GPS determined position. This translates to a geophysical reading about every 2-3 metres along flight track.



#### KUKAGAMI LAKE PROPERTY

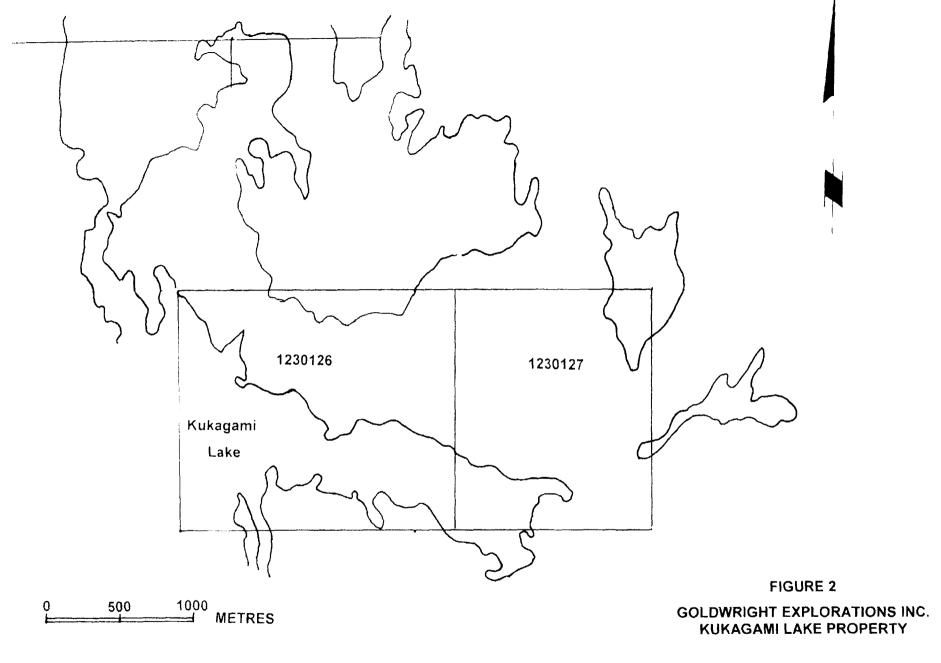
#### FIGURE 1

GOLDWRIGHT EXPLORATIONS INC. KUKAGAMI LAKE PROPERTY

LOCATION MAP

0 20 40 60 80 100 Kilometres
0 25 50 Miles
Milles

January, 2004



PROPERTY CLAIMS

After Ministry of Natural Resources,

Ontario, Map G-3033

January, 2004 Prepared by SW Navigation was assisted by a GPS receiver and the RMS data acquisition system which reports GPS co-ordinates as NAD27 latitude/longitude and directs the pilot over a pre-programmed survey grid. The x-y-z position of the aircraft, as reported by the GPS, is recorded at 0.2 second intervals.

Unlike frequency domain electromagnetic systems, the AeroTEM<sup>®</sup> system has negligible drift due to thermal expansion. The system static offset is removed by high altitude zero calibration lines and employing local levelling lines.

The operator was responsible for ensuring the instrument was properly warmed up prior to departure and that the instruments operated properly throughout the flight. He also maintained a detailed flight log during the survey noting the times of the flight as well as any unusual geophysical or topographic features.

On return of the aircrew to the base camp, the RMS acquisition system survey data on FlashCard was downloaded to the data processing work station. The MDAS recorded data, on removable hard-drive, was also downloaded to the processing station and archived onto DVD. In-field processing included flight preparation, transfer of the RMS acquired data to Geosoft GDB database format and production of preliminary EM, magnetic contour, and flight path maps. Survey lines which showed excessive deviation from the intended flight path were re-flown.

#### 4. AIRCRAFT AND EQUIPMENT

#### 4.1 Aircraft

A Eurocopter (Aerospatiale) AS350B2 "A-Star" helicopter - registration C-FAVI was used as survey platform. The helicopters was owned and operated by Abitibi Helicopters Ltd., LaSarre, P.Q. Installation of the geophysical and ancillary equipment was carried out by AeroQuest Limited at the Gateway Helicopters Base in North Bay, Ont. then ferried to the survey area. The survey aircraft was flown at a nominal terrain clearance of 220 ft (70 m).

#### 4.2 Magnetometer

The AeroQuest airborne survey system employed the Geometrics G-823A cesium vapour magnetometer sensor installed in a two metre towed bird airfoil attached to the main tow line, 17 metres below the helicopter. The sensitivity of the magnetometer is 0.001 nanoTesla at a 0.1 second sampling rate. The nominal ground clearance of the magnetometer bird was 51 metres (170 ft.). The magnetics data is recorded at 10Hz by the RMS DGR-33.

#### 4.3 Electromagnetic System

The electromagnetic system employed was an AeroQuest AeroTEM<sup>©</sup> Time Domain towed bird system. A triangular transmitter on-time pulse of 1.150 millisecond is employed, at a base frequency of 150 Hz. During every tx on-off cycle (300 per second), 126 contiguous channels of raw x and z component (as well as a transmitter current monitor, itx) of the received waveform are measured. Each channel width is 26.455 microsec starting at the beginning of the Tx pulse on. This 126 channel data is referred to as the raw streaming data.

The AeroTEM system has two separate EM data recording streams, the conventional RMS DGR-33 and the MDAS system.

#### **RMS DGR-33 Acquisition System**

In addition to the magnetics, altimeter and position data, six time channels of on-board real time processed off-time EM decay in the Z direction and one in the X direction are recorded by the RMS DGR-33 acquisition system at 7.5 samples per second. These channels are derived by a real-time binning, stacking and filtering procedure on the raw streaming data. The RMS data (Z1 to Z6, X1) is also sent to the analogue chart recorder and is often referred to as the analogue data.



Fig.3 The mag bird (foreground) and EM bird

The channel window timing of the RMS DGR-33 6 channel system is described in the table below.

RMS Channel	Start time (microsec)	End time (microsec)	Width (microsec)	Streaming Channels	Noise tolerance
Z1, X1	1269.8	1322.8	52.9	48-50	20 ppb
Z2	1322.8	1455.0	132.2	50-54	20 ppb
Z3	1428.6	1587.3	158.7	54-59	15 ppb
Z4	1587.3	1746.0	158.7	60-65	15 ppb
Z5	1746.0	2063.5	317.5	66-77	10 ppb
Z6	2063.5	2698.4	634.9	78-101	10 ppb

#### **MDAS Acquisition System**

The 126 channels of raw streaming are recorded by the MDAS acquisition system onto a removeable hard drive. The streaming data may undergo post-survey processing to yield 32 stacked and binned on-time and off-time channels at a 10 Hz sample rate.

The timing of those reduced streaming channels is described in the following table.

Processed Channel	Start	Stop (microsec)	Mid (microsec)	Width (microsec)
1 ON	725	750	737.5	25
2 ON	750	775	762.5	25
3 ON	775	800	787.5	25
4 ON	800	825	812.5	25
5 ON	825	850	837.5	25
6 ON	850	875	862.5	25
7 ON	875	900	887.5	25
8 ON	900	925	912.5	25
9 ON	925	950	937.5	25
10 ON	950	975	962.5	25
11 ON	975	1000	987.5	25
12 ON	1000	1025	1012.5	25
13 ON	1025	1050	1037.5	25
14 ON	1050	1075	1062.5	25
15 ON	1075	1100	1087.5	25
16 ON	1100	1125	1112.5	25
1 OFF	1175	1200	1187.5	25
2 OFF	1200	1225	1212.5	25
3 OFF	1225	1250	1237.5	25
4 OFF	1250	1275	1262.5	25
5 OFF	1275	1300	1287.5	25
6 OFF	1300	1325	1312.5	25
7 OFF	1325	1350	1337.5	25
8 OFF	1350	1375	1362.5	25
9 OFF	1375	1450	1412.5	75
10 OFF	1450	1525	1487.5	75
11 OFF	1525	1600	1562.5	75
12 OFF	1600	1800	1700	200
13 OFF	1800	2000	1900	200
14 OFF	2000	2200	2100	200
15 OFF	2200	2400	2300	200
16 OFF	2400	3000	2700	600

Any picked EM anomalies plotted on the survey maps were generated from the conventional EM channel data logged by the RMS acquisition system.

The current AeroTEM® Transmitter Dipole moment is 38.8 kNIA. The AeroTEM® bird was towed 38 metres (125 ft) below the helicopter. More technical details of the system may be found in the technical paper in the Appendix.



Fig.4 Instrument Rack

#### 4.4 Ancillary Systems

#### Radar Altimeter

A Terra TRA 3500/TRI-30 radar altimeter was used to record terrain clearance. The antenna was mounted on the outside of the helicopter beneath the cockpit. The recorded data represented the height of the antenna, i.e. helicopter, above the ground. The Terra altimeter has an altitude accuracy of +/- 1.5 metres.

#### Video Tracking and Recording System

A high resolution colour VHS/8mm video camera was used to record the helicopter ground flight path along the survey lines. The video is digitally annotated with GPS position and time and can be used to verify ground positioning information and cultural causes of anomalous geophysical data.

#### **GPS Navigation System**

The navigation system consisted of an Ag-Nav Inc. AG-NAV2 GPS navigation system comprising a PC based acquisition system, navigation software, a deviation indicator in front of the aircraft pilot to direct the flight, a full screen display with controls in front of the operator, a Trimble AgGPS132 WAAS enabled GPS receiver mounted on the instrument rack and a Trimble antenna mounted on the magnetometer bird.

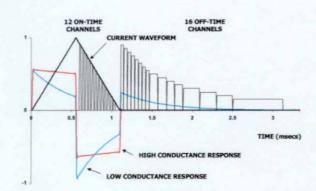


Fig. 5 Schematic of Tx and Rx waveforms

WAAS (Wide Area Augmentation System) consists of approximately 25 ground reference stations positioned across the United States that monitor GPS satellite data. Two master stations, located on either coast, collect data from the reference stations and create a GPS correction message. This correction accounts for GPS satellite orbit and clock drift plus signal delays caused by the atmosphere and ionosphere. The corrected differential message is then broadcast through one of two

geostationary satellites, or satellites with a fixed position over the equator. The corrected position has a published accuracy of under 3 metres. A recent static ground test of the Trimble WAAS GPS yielded a standard deviation in x and y of under 0.6 metres and for z under 1.5 metres over a two hour period.

Survey co-ordinates are set-up prior to survey and the information is fed into the airborne navigation system. The co-ordinate system employed in the survey design was NAD27 CAnada Mean UTM. The real-time differentially corrected GPS positional data was recorded by the RMS DGR-33 in NAD27 latitude and longitude at 0.2 second intervals directly in the analogue geophysical data file. The datum of the recorded latitude/longitude depended on the datum defined in the navigation file used to guide the survey aircraft.

#### **Digital Acquisition System**

The RMS Instruments DGR33A data acquisition system was used to collect and record the analogue data stream, i.e. the geophysical and positional data, including processed 6 channel EM, magnetic, radar altimeter, GPS position, and time. The data was recorded on 128Mb capacity FlashCard. The RMS output was also directed to a thermal chart recorder.

The AeroTEM received waveform sampled during on and off-time at 126 channels per decay, 300 times per second, was logged in parallel by the proprietary MDAS data acquisition system. The channel sampling commences at start of the Tx cycle and the width of each channel is 26.445 microseconds. The streaming data was recorded on a removable hard-drive and was later backed-up onto DVD-ROM on the field-processing computer.

#### 5. PERSONNEL

The following AeroQuest personnel were involved in the project

Field -

Party Chief: Bert Simon Data Processor: Neil Fiset

Operator: Chris Kozak

Office-

Data Processing and Report: Neil Fiset/Chris Balch

The survey pilot, Joel Breton was employed directly by the helicopter operator - Abitibi Helicopters Ltd.

#### 6. DELIVERABLES

The report includes a set of three geophysical maps plotted at 1:10,000 scale. The map types are as follows:

- · Plate 1. Flight path.
- Plate 2. Total Magnetic Intensity (TMI) colour grid w/line contours.
- Plate 3. Z1 & Z3 (RMS) Off-time EM profiles.

The basic map coordinate/projection system used is NAD27 Universal Transverse Mercator Zone 17 - Canada Mean. For reference, the latitude and longitude are also noted on the maps.

All the maps show flight path trace with time reference fiducials marked at a 10 second interval, and conductor picks (if existent) represented by an anomaly symbol classified according to the number of RMS EM Z component channels of response. The anomaly symbol is accompanied by an anomaly identifier label and, where applicable, the Z3 channel amplitude in ppb. The anomaly symbol legend may be found in the margin of the maps. Colour contour maps show colour fill plus superimposed line contours.

The geophysical profile data is archived digitally in a Geosoft GDB binary format database as well as an exported Geosoft Ascii format XYZ file. A description of the various channels found in the database may be found in the appendices of this report.

An archive CD complements the hard copy report and maps. It contains the digital databases as well as the geophysical maps and grids in Geosoft format.

#### 7. DATA PROCESSING AND PRESENTATION

All in-field and post-field data processing was carried out using Geosoft Montaj as well as AeroQuest proprietary data processing software. Plotting was on a 36 inch wide HP650C ink-jet plotter.

#### 7.1 Base Map

The geophysical maps accompanying this report are based on positioning in the datum of NAD27. The survey geodetic GPS positions have been map projected using the Universal Transverse Mercator projection in Zone 17.

A summary of the map datum and projection specifications are as follows:

Ellipse: Clark 1866

Ellipse major axis: 6378206.4m eccentricity: 0.082271854

Datum: North American 1927 - Canada Mean Datum Shifts (x,y,z): 10, -158, -187 metres

Map Projection: Universal Transverse Mercator Zone 17 (Central Meridian 81°W)

Central Scale Factor: 0.9996

False Easting, Northing: 500,000m, 0m

#### 7.2 Flight Path & Terrain Clearance

The position of the survey helicopter was directed by use of the Global Positioning System (GPS). Positions were updated five times per second (5Hz) and expressed as NAD27 latitude and longitude calculated from the raw pseudorange derived from the C/A code signal.

The instantaneous GPS flight path, after conversion to the local datum UTM co-ordinates, is drawn using linear interpolation between the x/y positions. The time reference fiducials are drawn on the map at appropriate intervals and are used to reference the digital data files to the plan map.

The raw Digital Terrain Model (DTM) was derived by simply taking the satellite position altitude and subtracting the radar altimeter. The calculated values are relative and are not tied into to surveyed geodetic heights.

#### 7.3 Electromagnetic Data

The six Z-component and single X-component conventional RMS EM channel underwent a two stage digital filtering process to reject major sferic events and to reduce system noise.

Local sferic activity can produce sharp, large amplitude events that cannot be removed by conventional filtering procedures. Smoothing or stacking will reduce their amplitude but leave a broader residual response that can be confused with geological phenomena. To avoid this possibility, a computer algorithm searches out and rejects the major sferic events. The filter used was a 0.8 sec non-linear filter.

The signal to noise ratio was further improved by the application of a low pass linear digital filter. This filter has zero phase shift which prevents any lag or peak displacement from occurring, and it suppresses only variations with a wavelength less than about 3 seconds. This filter is referred to as a 30 point linear filter.

The EM channels have been levelled to remove the residual zero offset by the use of a short background line at the beginning and end of each flight. The background line is flown at high altitude (>1000 ft), theoretically far enough away from any ground conductivity response. Any residual response is therefore a system offset and can be removed from the on-line response by virtue of linear interpolation between the start and end of flight checks. If any non-linear drift remains in the data then artificial local levelling lines were employed.

During the high elevation checks, an internal 5 second wide calibration pulse in all EM channels was generated in order to ensure that the gain of the system remained constant and within specifications.

If existent, apparent bedrock EM anomalies have been manually picked from the analogue profiles. Each anomaly has been given a letter label and is graded according to the channels in which the anomaly is discernible. The anomalies are plotted on the plan maps with a symbol denoting the number of channels of response and the polarity of that response. Beside the symbol is posted the Z3 channel amplitude. EM Anomalies that are discernible but questionable as they lie within the noise envelope are plotted with an x-symbol.

#### 7.4 Magnetic Data

Prior to any levelling the magnetic data was subjected to a lag correction of -0.3 seconds and a spike removal filter. The filtered aeromagnetic data were then corrected for diurnal variations using the intersections of the tie lines. No corrections for the regional reference field (IGRF) were applied. The corrected profile data were interpolated on to a grid using a random grid technique with a grid cell size of 25 metres. The final levelled grid provided the basis for threading the presented contours which have a minimum contour interval of 10 nT.

Respectfully submitted,

Neil Fiset, B.Sc., AeroQuest Limited April 27, 2004

#### APPENDIX 1

Survey Block corner co-ordinates (NAD27-UTM Zone 17)

Survey	Diani	,
SUIVEV	DIUU	٩

534479mE 5176195mN 534483mE 5177786mN 537663mE 5177810mN 537681mE 5176219mN

#### **APPENDIX 2** Description of Database Fields

The GDB files are Geosoft binary databases. The RMS databases have been exported to Geosoft XYZ ASCII format files.

In the databases the Survey lines, Tie Lines, and High Altitude/Internal Q coil lines are prefixed with an "L" or "Line", "T" or "Tie", and "S" or "Test", respectively.

RMS Database (Gold.gdb & Gold.xyz):

Column	Description
×	Zone 17 UTM Easting in metres (NAD27 - Canada Mean)
у	Zone 17 UTM Northing in metres (NAD27 - Canada Mean)
lat	Latitude in decimal degrees (NAD27 - CAnada Mean)
long	Longitude in decimal degrees (NAD27 - Canada Mean)
fiducial	Time reference fiducial in seconds
manfid	Manual Fiducial
chartfid	Chart Recorder Fiducial
emfid	Fiducial counter for streaming data synchronisation
utctime	UTC Time in seconds of the day
rtctime	Local (System) time in HH:MM:SS
fltno	Flight number
date	Date in YY/MM/DD format
galtf	GPS Altitude in metres
ralt	Radar Altimeter in metres
bheight	Terrain clearance of EM bird in feet
dtm	Raw Digital Terrain Model in metres
basemag	Base Station magnetic field in nT
rawmag	Raw total magnetic intensity in nT
mag	Diurnally corrected Total Magnetic Intensity in nT
x1flev	Smoothed and levelled RMS Off-Time EM-X component of channel 1 in ppb
z1flev-z6flev	Smoothed and levelled RMS Off-Time EM-Z component of channels 1 to 6 in ppb

#### Appendix 4: Technical Paper

#### Mineral Exploration with the AeroTEM System

S.J. Balch, W.P. Boyko, G. Black, and R.N. Pedersen, AeroQuest Limited, Presented at the SEG Int'l Exposition and 72nd Annual Meeting, Salt Lake City, Utah, October 6-11, 2002

#### **Appendix 5:** Instrumentation Specification Sheets

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## **AEROTEM Helicopter Electromagnetic System**

#### **System Characteristics**

Transmitter: Triangular Pulse Shape Base Frequency 30 or 150 Hz.

Tx On Time - 5,750 (30Hz) or 1,150 (150Hz) microsec. Tx Off Time - 10,915 (30Hz) or 2,183 (150Hz) microsec.

Loop Diameter - 5 m. Peak Current - 250 A. Peak Moment - 38,800 NIA.

Typical Z Axis Noise at Survey Speed = 8 ppb peak.

Sling Weight: 270 Kg. Length of Tow Cable: 40 m.

Bird Survey Height: 30 m or less nominal.

#### Receiver

Three Axis Receiver Coils (x, y, z) positioned at centre of transmitter loop. Selectable Time Delay to start of first channel 21.3, 42.7, or 64.0 msec.

#### **Analogue Display & Acquisition**

Six Channels per Axis.

Analogue (RMS) Channel Widths: 52.9,132.3, 158.7, 158.7, 317.5, 634.9 microsec.

Recording & Display Rate = 10 readings per second.

MDAS Digital recording at 126 sample per decay curve at a maximum of 300 curves per second (26.455 microsec channel width).

#### **System Considerations**

Comparing a fixed wing time domain transmitter with a typical moment of 500,000 NIA flying at an altitude of 120 m with a Helicopter TDEM at 30 m, notwithstanding, the substantial moment loss in the airframe of the fixed wing, the same penetration by the lower flying helicopter system would only require a sixty-fourth of the moment. Clearly the AeroTEM system with nearly 40,000 NIA has more than sufficient moment.

The airframe of the fixed wing presents a response to the towed bird, which must be compensated for dynamically. This problem is non-existent for AeroTEM since transmitter and receiver positions are fixed. The AeroTEM system is completely portable, and can be assembled at the survey site within half a day.

# TECHNICAL REPORT NI 43-101 F1

#### ON THE

# **KUKAGAMI LAKE PROPERTY**

# KELLY TOWNSHIP DISTRICT OF SUDBURY ONTARIO

### **FOR**

# **GOLDWRIGHT EXPLORATIONS INC.**

L.D.S. Winter, P.Geo. January 6, 2004



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#### 3. SUMMARY

The Kukagami Lake Property (the Property) of Goldwright Explorations Inc. (Goldwright) is located in Kelly township, Sudbury Mining Division, approximately 50 km northeast of Sudbury, Ontario. The Property was acquired for its potential to host nickel-copper-platinum group metals (Ni-Cu-PGM) mineralization associated with a sill-like body of Nipissing gabbro. The Property consists of 2 claims containing 32 units and covering approximately 512 ha held 100% by Goldwright.

The Nipissing gabbro sill-like body trends west-northwest across the northern part of the 2 claims and dips in the order of 40° south. Magmatic Ni-Cu sulphide mineralization is hosted in a 50 m to 100 m thick melanocratic, hypersthenerich gabbro interval in the basal part of the gabbro over a strike length of greater than 1000 m. Mineralization is present as chalcopyrite, pyrrhotite, pentlandite and minor pyrite as both disseminated and net-textured sulphides. The best mineralization is localized in the area of the Main (J. Whelan) Showing in the northwest part of claim 1230127 with two additional occurrences in the eastern part of the claim. These areas of mineralization are considered to lie within the same mineralized hypersthene gabbro interval.

A total of 74 surface samples, generally of the grab type, were collected during the Phase 1 and Phase 3 exploration programs on the Property carried out by Pacific North West Capital Corp. The best overall assay results came from the Main Showing with the best individual values from sample 44508 being 0.46% Ni, 0.81% Cu, 0.27 g/t Au, 0.46 g/t Pt and 4.37 g/t Pd. The overall ranges for the samples were:

nickel (Ni) 3 ppm to 0.46% copper (Cu) 0 ppm to 0.82% gold (Au) <5 ppb to 0.64 g/t platinum (Pt) <10 ppb to 0.46 g/t <10 ppb to 4.37 g/t

In the southwestern part of claim 1230126 geophysical surveys have identified a Conductive Zone below the waters of Kukagami Lake.

Previously, it was generally perceived that the Nipissing gabbro would not host economic Ni-Cu mineralization of any significant size, however, work over the last 2 years by Ursa Major Minerals Inc. in a Nipissing gabbro body in Shakespeare township west of Sudbury has identified a Ni-Cu sulphide deposit with a reported Indicated Resource of 4.87 million tones grading 0.43% Ni, 0.43% Cu, 0.03% Co (cobalt), 0.22 g/t Au, 0.41 g/t Pd and 0.45 g/t Pd with the zone open along strike and at depth (Ursa Major Minerals Inc. Press Release, July 2003). It is considered that this discovery illustrates that, under the right geological conditions, the Nipissing gabbro can host Ni-Cu-PGM mineralization of economic significance.

It is considered that the Kukagami Lake Property is of merit and to continue the evaluation of the Property a trenching and a preliminary drilling program to test the lake conductive zone, the Main Showing and the mineralized hypersthene gabbro interval is recommended. A Phase 1 program with 600 m of drilling and a total expenditure of \$102,300 is recommended. The implementation of a second phase would be contingent on the results obtained in the Phase 1 program.

#### 4. INTRODUCTION AND TERMS OF REFERENCE

Goldwright Explorations Inc. has acquired by staking the Kukagami Lake Property consisting of 11 claims covering 2,624 ha in Janes township, District of Sudbury at 46° - 42'N latitude, 80° -23'W longitude, approximately 55 km northeast of Sudbury, Ontario (Figure 1).

The Property which lies within the Southern Structural Province of the Canadian Shield was acquired for its potential for copper-nickel-platinum group metals (Cu-Ni-PGM) sulphide mineralization spatially associated with a Nipissing gabbro intrusive body. Sporadic exploration work from the late 1960's to the present time as well as regional mapping by the Ontario Geological Survey identified sulphide mineralization of potential economic interest in the area.

The writer was requested by Mr. Brian Wright, President of Goldwright Explorations Inc. to review the information on the Property and area and to prepare a report on the Property. The writer visited the Property on December 9, 2003 by means of forest access roads from Hagar.

#### 5. DISCLAIMER

This report is prepared in compliance with NI 43-101 F1 and presents a review of the geology and exploration work carried out to date on the Kukagami Lake Property. The writer does not take any responsibility for environmental, political or other non-technical issues related to this report. Information concerning legal issues relevant to Section 3 (Summary), Section 6.2 (Property and Ownership Status) and Section 6.3 (Nature of Company's Interest) of this report have been obtained from information provided by the Company and from information available from the Ministry of Northern Development and Mines. The writer does not take any responsibility for legal issues related to these matters.

#### 6. PROPERTY DESCRIPTION AND LOCATION

#### 6.1 LOCATION

The Kukagami Lake Property is located in Kelly township, District of Sudbury, Ontario, approximately 50 km northeast of Sudbury, Ontario at  $46^{\circ}$  - 47.5'N latitude,  $80^{\circ}$  - 46.7'W longitude and within NTS areas 411/NE (5170075m N, 530065m E, Zone 17) on the east arm of Kukagami Lake.

#### 6.2 PROPERTY AND OWNERSHIP STATUS

The Property consists of 2 claims, 1230126 and 1230127, each containing 16 units to cover a total area of 512 ha, held in the name of Goldwright Explorations Inc. The Company has 100% ownership of the claims. Claim 1230126 comes due on October 28, 2004 and claim 1230127 comes due on April 28, 2004. A minimum of \$12,800 worth of work credits is required to maintain the 2 claims in good standing for one additional year (Figure 2).

#### 6.3 NATURE OF COMPANY'S INTEREST

Goldwright Explorations Inc. holds a 100% interest in both claims.

# 7. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

#### 7.1 TOPOGRAPHY AND PHYSIOGRAPHY

The Property is located on the east side of Kukagami Lake and extends for about 3 km to the east. The eastern arm of Kukagami Lake, Carafel Bay, underlies most of the southern half of claim 1230126 and the southwestern part of claim 1230127.

The surrounding area is made up of generally east-west trending rocky ridges separated by low ground which is often swampy and may contain small lakes and ponds. Relief is in the order of 40 m to 50 m. The area is forested with birch and poplar and red and white pine. There is currently some lumbering taking place immediately east of the Property.

#### 7.2 ACCESS AND INFRASTRUCTURE

The Property can be accessed from both west and east. Approximately 35 km east of Sudbury on Highway 17, the Kukagami Lake Road leads north to Sportsman' Lodge on the southwest shore of Kukagami Lake (20 km). From here a boat can be taken to the Property. The village of Hagar is located on Highway 17, 50 km east of Sudbury. From here a paved road followed by gravel forest access roads lead north about 28 km to the east end of the Property.

The City of Sudbury is a large, long-established mining centre that can meet any requirements for exploration or future development programs. As indicated there is currently road access to the eastern end of the Property and power is available along the Highway 17 Corridor.

#### 7.3 CLIMATE

The Property lies within the Cold Continental/Cold Temperate Climatic Zone with a temperature range from 35°C to -35°C. Average precipitation is 500 mm to 1000 mm per year with 40% as snowfall. Lakes are frozen for about 5 months per year.

#### 8. HISTORY

The earliest reported work in the area took place in 1896 with work on the Kukagami Lake Property commencing in the late 1960's. Most of the work focused on base metal (Cu-Ni) exploration and included airborne geophysics (mag-EM), geological mapping, minor surface geophysical surveys, trenching and minor diamond drilling.

#### Gold Cliff Mines Ltd. - 1896

Exploration immediately north of the claim blocs uncovered visible gold in east-west trending quartz veins that occurred along a contact between gabbroic rocks of the Nipissing Diabase and Gowganda Formation sedimentary rocks. More than 610 m of stripping and trenching was completed and a 55 m adit intersected auriferous quartz veins.

#### Kelly - K - Mines Ltd. - 1966-67

This property was located on the east side of a large peninsula toward the south end of Kukagami Lake and southwest of the Kelly Property claim blocs. Sulphide-bearing quartz-carbonate veins contained sub-economic concentrations of gold (Au), silver (Ag) and lead (Pb). The mineralized quartz veins were associated with the contact between gabbroic rocks of the Nipissing Diabase and Gowganda Formation sedimentary rocks. Diamond drilling returned an average of 0.10 oz/t Au, 1.3 oz/t Ag, 8.78% Pb over a 0.3-0.45 m core length.

#### Kennco Explorations (Canada) Ltd. - 1969-70

Kennco Explorations completed airborne magnetic-electromagnetic (EM) surveys with follow-up ground work that included geological mapping, trenching and diamond drilling. At their East Trench (Main Showing in Figure 4) diamond drilling returned assays of 0.48% Cu and 0.24% Ni over 7.5 m, including 0.59% Cu and 0.30% Ni over 1.8 m.

#### Nickeldale Resources Inc. - 1986

Nickeldale's exploration work included prospecting, humus geochemistry and ground geophysical surveys (magnetometer and VLF-EM) over the area that included the East Trench (Main Showing) (Figure 4). Grab samples returned anomalous Ni (0.02%), Cu (0.1%), Pd (0.22 g/t) Pt (0.08 g/t) and Au (0.08 g/t) values in the gabbroic rocks that contained 1-3% total visible sulphides. Eleven multi-element anomalies with elevated Ni-Cu-Pd-Pt-Au were outlined from 733 humus samples. The ground and airborne mag-EM surveys failed to delineate any significant targets and no follow-up diamond drilling or further work was reported.

#### Ontario Geological Survey (OGS) (P.C. Lightfoot) - 1991

The Kelly Property was part of a regional study undertaken by the OGS. During the study several grab samples were collected that returned values of up to 4.16 g/t Pd, 1.10 g/t Pt, 0.6 g/t Au (5.86 g/t combined Pt+Pd+Au) in the East Trench (Main Showing) and up to 1.84 g/t Pd, 0.22 g/t Pt, 0.09 g/t Au (2.15 g/t combined Pt+Pd+Au) in the Northeast Trench 2 km northwest of the Main Showing.

#### Wright Prospecting Syndicate - 1995

Exploration work at this time included Horizontal Loop-EM (HLEM), Total Field-magnetometer and Maxiprobe-EM surveys over the north-central part of Kukagami Lake. Although the magnetic survey outlined the local geology, the HL-EM and Maxiprobe-EM surveys outlined two moderate conductors that are coincident with the presumed contact between an olivine diabase dyke and the gabbro. Several small conductors were also noted, north and southwest of the two stronger conductors.

#### Pacific NorthWest Capital Corp. - 1997 to 2000

Pacific NorthWest Capital Corp. (PFN) completed three surface exploration programs that included: (1) establishing exploration girds (land and lake) connecting the main areas of known surface sulphide mineralization on land with a winter grid covering a "lake geophysical anomaly", (2) a ground magnetometer survey over an anomaly located under Kukagami Lake; (3) prospecting, general geological mapping and sampling over the land grid region: (4) reconnaissance prospecting and sampling outside of the main grid area and along strike of known mineralization; (5) clearing, power washing, trenching and blasting in the area of the Main Showing (approximately 50 m x 30 m area); (6) detailed sampling of the cleared area at the Main Showing; and, (7) an induced-polarization survey over the main exploration grid.

Following this work the Property was returned to Goldwright.

#### 9. GEOLOGICAL SETTING

#### 9.1 **REGIONAL GEOLOGY**

The Kukagami Lake Property is located in the Southern Province of the Canadian Shield adjacent to the Grenville Front which lies approximately 6 km to the south (Figure 3). The Southern Province consists of Paleoproterozoic (2.4 - 2.2 Ga: billion years) mainly clastic, continental margin sedimentary rocks of the Huronian Supergroup which were deposited along the southern margin of the Superior Province. The Huronian Supergroup was affected by a poorly documented 2.2 Ga deformation and the 1.8 Ga compressional Penokean Orogeny.

Approximately 50 km west of the subject Property the 1.85 Ga Sudbury Igneous Complex (SIC) and the associated Whitewater Group sedimentary rocks lie along the northern margin of the Penokean Fold Belt. The origin of the SIC and the Whitewater Group breccias and sediments is controversial with some people advocating an origin due to a meteorite impact while others favour a more conventional origin. The world class Ni-Cu-PGM sulphide deposits of the Sudbury area are associated with the basal section of the SIC.

Within the general area of the property the Huronian Supergroup clastic sediments overlie Early Precambrian metavolcanics, metasediments and felsic and mafic intrusive rocks. Generally the Early Precambrian units are not exposed but underlie the Huronian sedimentary rocks (Thomson and Card, 1963).

The units of the Huronian Supergroup in the area are the Mississagi Formation of the Hough Lake Group, the Lorrain and Gowganda Formations of the Cobalt Group and the Nipissing Intrusive rocks. Throughout the Property area, the most common unit exposed is the Gowganda Formation of the Cobalt Group. In much of the area it lies with sharp uncomformity on the Early Precambrian units indicating that much of the Huronian sequence was either not deposited in this area or was eroded prior to deposition of the Gowganda. The units of the Gowganda Formation consist of conglomerate, greywacke, quartz arenite, arkose and lithic greywacke.

Quartz arenite and arkose of the Lorrain Formation occur in a northnortheast trending zone in the eastern half of Janes township, east of the subject Property and also to the southwest in Scadding township.

Nipissing gabbro intrusions occur throughout the area as irregularly shaped to sill-like bodies. Due to strong faulting, folding and subsequent erosion the original form of the intrusions is questionable. Most contacts are probably intrusive however, fault contacts do occur.

In general, the Nipissing gabbro is a medium grained, dark green-grey subophitic gabbro. Near its contacts the rock is finer grained and has a diabasic texture. Pegmatitic gabbros occur in small pods generally towards the top of the sill-like bodies.

Dressler (1979) reports that, in Janes and McNish townships to the east, there is no strong evidence of magmatic differentiation in the gabbro, however, property mapping by Goldwright suggests magmatic layering and differentiation. Sulphide mineralization consisting of Cu-Ni-Fe sulphides and associated PGM and precious metals is spatially associated with the Nipissing gabbro and generally with a hypersthene-rich phase.

Late northwest-trending olivine diabase dykes cross-cut all other rock units.

#### **TABLE 1 LITHOLOGIC UNITS** (after Dressler, 1979)

**PHANEROZOIC** 

Cenozoic

Quaternary

PLEISTOCENE AND RECENT

Fluvial and glacial sand, gravel and boulders; swamp deposits

Unconformity

**PRECAMBRIAN** 

SOUTHERN STRUCTURAL PROVINCE AND GRENVILLE STRUCTURAL PROVINCE Late Precambrian

MAFIC INTRUSIVE ROCKS

Olivine diabase and ultramafic rocks

Intrusive Contact

**GRENVILLE STRUCTURAL PROVINCE** 

Late Precambrian

ANORTHOSITE SUITE INTRUSIVE ROCKS

Anorthositic gabbro, gabbroic anorthosite, massive and gneissic

Intrusive contact

Middle to Late Precambrian

MAFIC INTRUSIVE ROCKS

Amphibolite

Intrusive Contact

Middle Precambrian

**METASEDIMENTS** 

Biotite-(hornblende)-plagioclase gneiss; feldspathic gneiss: migmatites

SOUTHERN STRUCTURAL PROVINCE

Middle Precambrian

SUDBURY TYPE BRECCIA AND PSEUDOTACHYLITE

NIPISSING INTRUSIVE ROCKS

Gabbro, quartz monzonite and granitic dike rock, schistose,

cataclastic and gneissic rocks equivalents

Intrusive Contact

**HURONIAN SUPERGROUP** 

**COBALT GROUP** 

LORRAINE FORMATION

Quartz arenite, arkose, minor silty greywacke

**GOWGANDA FORMATION** 

Conglomerate, greywacke, quartz arenite, arkose

HOUGH LAKE GROUP

MISSISSAGI FORMATION

Conglomerate, arkose, quartz arenite, greywacke, argillite,

metamorphosed equivalents

Uncomformity

Early Precambrian

MAFIC INTRUSIVE ROCKS

Diabase

**Intrusive Contact** 

FELSIC INTRUSIVE ROCKS

Granitic Rocks

Intrusive Contact

METAVOLCANICS AND METASEDIMENTS

**METASEDIMENTS** 

Greywacke

MAFIC METAVOLCANICS

Amphibolite

#### 9.2 PROPERTY GEOLOGY

The Kukagami Lake Property is underlain by sedimentary rocks of the Gowganda formation of the Huronian Supergroup of Early Proterozoic age which have been intruded by Nipissing gabbro (2.2 Ga, i.e., 2.2 billion years old) (Figure 4). The Property is considered to be located on the northern limb of a south-dipping cone sheet, the Kukagami Lake Intrusion (KLI), that extends in an arcuate shape to the east and west. The gabbroic rocks dip south at about 40° and a basal unit, to the north, of chilled gabbro is in sharp contact (sheared) with sedimentary rocks of the Gowganda formation.

The gabbro is differentiated with the igneous "stratigraphy" indicating tops to the south. Towards the top of the gabbro, leucogabbros, vari-textured to pegmatitic gabbro and granophyric gabbro are present. The interval within the gabbro of most economic interest is the medium-grained, melanocratic, hypersthene-bearing horizon that generally occurs within 50 m to 100 m of the lower (northern) contact. Prospecting of the area indicated that the areas of magmatic sulphide mineralization are confined to this interval.

Based on regional mapping as well as outcrops in Kukagami Lake, one or more west-northwest trending, steeply dipping olivine diabase dykes are considered to be present under the waters of the east arm of Kukagami Lake (Figure 4).

#### 10. <u>DEPOSIT TYPES</u>

Mineralization on the Kukagami Lake Property is considered to be of the Nipissing gabbro associated type, with concentrations of Cu-Ni-PGM-bearing sulphides being the targets of economic interest. Sulphide mineralization consists of varying proportions of chalcopyrite, pyrrhotite and pentlandite with minor pyrite. The sulphides occur primarily as finely disseminated grains but also include net-textured, bleb and semi-massive to massive. Total sulphide content ranges from <1% to about 15% in the disseminated, net-textured and bleb variety where it is hosted by a medium-grained,

massive, hypersthene (1%-10% orthopyroxene) gabbro. Semi-massive (25%-75% total sulphide) to massive (>75% total sulphide) sulphides occur in two main settings: (1) along the contact region of the intrusion in what appear to be primary topographic lows; and, (2) within sediment-gabbro breccias that are proximal (<1 m to 30 m) to the basal contact; the breccias probably developed during intrusion of the gabbro body and are therefore emplacement breccias.

The greatest potential for economic sulphide mineralization is within the lower part of the Nipissing gabbro and/or adjacent to the sedimentary-gabbro contact and within topographic lows that occur at the contact. Anomalous PGE-Cu-Ni sulphide mineralization has been encountered substantially higher in the stratigraphy, however, it is not clear whether this location in the stratigraphy is primary or the result of structural displacement.

Currently, there are no known economic Ni-Cu-PGM sulphide deposits associated with Nipissing gabbro, however, numerous showings with anomalous PGM values (1.0 g/t - 10 g/t PGM) are recorded throughout Nipissing gabbro. Currently, Ursa Major Minerals Inc. has an option agreement on the Falconbridge Ltd. Shakespeare property, about 125 km west of the City of Sudbury. An Indicated Resource of 4.87 million tonnes grading 0.43% Ni, 0.43% Cu, 0.03% Co, 0.41 g/t Pt, 0.45 g/t Pd, 0.22 g/t Au in a strike length of 300 m is reported (Ursa Major Minerals Inc., Press Release, July, 2003) The Ni-Cu-PGM sulphide mineralization is hosted by gabbro and consists of the same principal sulphide minerals (chalcopyrite, pyrrhotite, pentlandite) as for the Kukagami Lake Property.

#### 11. MINERALIZATION

The mineralization is of the copper-nickel (cobalt), magmatic sulphide type composed of varying amounts and proportions of chalcopyrite, pyrrhotite, pentlandite and pyrite. In turn the sulphides generally host variable amounts of gold and the platinum group metals (PGM). The total sulphide content of the hypersthene-gabbro interval will vary from less than 1% to about 15% and the sulphides will occur either as disseminated grains, blebs or in a net-textured form. Within the subject Property the favourable hypersthene-gabbro interval has a potential strike length of approximately 3 km.

The J. Whelan prospect (Main Trench) is located within this favourable interval in the northwest part of claim 1230127. Sampling of this area has yielded sample results as summarized in Table 2. The Main Showing pit is about 3 m by 3 m and the grab samples listed in Table 2 were taken from this pit and adjacent area.

TABLE 2
KUKAGAMI LAKE PROPERTY - MAIN SHOWING SAMPLING RESULTS

		Cu	Ni	Pd	Au	Pt
Sample	Location	(ppm)	(ppm)	(ppb)	(ppb)	(ppb)
BW99-398	main showing	7554	3314	2096	228	372
BW99-399	W99-399 main showing		1612	1472	154	206
BW99-400	main showing	6446	2613	3026	332	541
BW99-401	main showing	89	32	21	0	0
BW99-402	main showing	3235	1118	1825	132	275
BW99-403	main showing	2502	881	835	57	125
BW99-404	main showing	30	19	28	0	0
BW99-405	main showing	91	31	21	0	0
BW99-406	main showing	101	41	19	0	0
BW99-407	main showing	104	38	14	0	0
BW99-408	main showing	474	281	421	20	62
BW99-409	main showing	3124	1325	1366	91	192
BW99-410	main showing	277	112	124	10	27
BW99-411	main showing	519	181	200	17	33
BW99-412	main showing	4676	1936	1872	165	329
BW99-413	main showing	4811	2301	1843	146	322
BW99-414	main showing	5234	2187	2313	181	395
BW99-415	main showing	1961	845	772	88	112
BW99-416	main showing	7200	2887	2094	155	316
BW99-417	main showing	0	3	19	8	0
BW99-418	main showing	72	34	20	0	0
BW99-419	main showing	5162	2237	1322	107	209
BW99-420	main showing	1346	638	545	53	87
BW99-421	main showing	123	61	28	0	0
BW99-422	main showing	1601	660	488	39	82
BW99-423	main showing	132	58	42	0	0
BW99-424	main showing	5744	2352	1224	141	259
BW99-425	main showing	3823	1916	989	68	157
BW99-426	narrows area	2687	1127	421	137	137
BW99-427	narrows area	594	207	42	19	29
AV	ERAGE	<b>2462</b> 0.25%	<b>1034</b> 0.10%	<b>850</b> 0.85 g/t	<b>78</b> 0.078 g/t	<b>142</b> 0.14 g/t

#### 12. EXPLORATION

There is currently no exploration work being carried out on the Property, however, during the third phase of the 1999-2000 program (Section 8, History) the following work was completed. The work was all carried out by or under the supervision of S. Jobin-Bevans, P.Geo. on behalf of Pacific North West Capital (Jobin-Bevans, 2001).

- an 11.06 km exploration grid was established along the northern (lower) contact of the gabbro.
- prospecting, geological mapping and sampling of the grid area.
- ground-truthing IP anomalies identified in the Phase 2 program. The IP survey was done by JVX Ltd. in March 2001 and identified 3 IP chargeability targets of which one was recommended for follow-up.
- reconnaissance prospecting and sampling outside the main grid area and along strike of known mineralization.
- a total of 32 samples were collected and analyzed.

In April 2003, Dan Patrie Exploration Ltd. completed 9.5 km of IP surveys over a grid on the ice of Kukagami Lake in the southwestern quadrant of claim 1230126. This work covered an area where previous geophysical surveys had indicated a conductive zone. The IP survey identified a strong chargeability zone trending eastwest on all 10 lines surveyed. The anomaly lies to the north of an olivine diabase dyke which trends west-northwest through the area. The chargeability high is considered to dip south and to the open to the east and west of the grid (Figure 4)

#### 13. DRILLING

No diamond drilling or percussion type drilling was carried out on the Property during the recent exploration work (1999-2000) by Pacific North West Capital, however, in 1969-1970 Kennco Explorations (Canada) Ltd. drilled the Main Showing as reported in Section 8, History.

# 14. SAMPLING METHOD AND APPROACH

During the 3 exploration programs carried out on the Property from 1997 through October 2000, a total of 74 samples were collected and analyzed.

A total of 74 grab samples were collected from the Property during the Phase 1 (42 samples) and Phase 3 (32 samples) exploration program. All samples were of the grab sample type taken in two settings. In the Main Showing area, after stripping and washing, 2 sample traverses, one perpendicular to the mineralization trend and one parallel to the trend were made. Grab samples were taken every metre along these traverses. The results are presented in Table 1, Section 11, Mineralization. The Main Showing pit is about 3 m by 3 m and is within an area of about 1000m<sup>2</sup> underlain by mineralized gabbro.

The balance of the samples outside the Main Showing area were generally taken along grid lines where rock outcrops were present and along strike of the gabbro east and west of the Main Showing. The samples came mainly from a 1000 m strike length of the gabbro with the samples from, in the most part, the 50 m to 100 m wide hypersthene-gabbro interval of the Nipissing gabbro sill. A few additional samples further along strike to the west were also taken.

#### 15. SAMPLE PREPARATION, ANALYSIS AND SECURITY

Grab samples were taken at each sample location, the location was recorded, rock type described or noted, the sample was ticketed and the bag sealed. Groups of samples were placed in large bags for shipment to Accurassay Laboratories, Thunder Bay, Ontario or XRAL Laboratories, Don Mills, Ontario and/or Rouyn-Noranda, Quebec. Samples were collected by S. Jobin-Bevans, geological consultant and by Brian Wright, President of Goldwright Explorations Inc.

The first set of 42 samples (Phase 1) were analyzed by Accurassay Laboratories, Thunder Bay, Ontario using a standard Fire Assay method followed by an AA (Atomic Absorption) finish for Pt, Pd and Au. Copper and nickel were analyzed for using the ICP Method (Inductively Coupled Plasma). The second set of 32 samples (Phase 3) were analyzed by XRAL Laboratories using a standard Fire Assay method followed by a DCP (Direct Current Plasma) finish. Copper and nickel were determined by ICP using an aqua regia digestion. Three samples from this set were also sent to Accurassay Laboratories.

Accurassay Laboratories is an Accredited Fire Assay Lab to ISO/IEC grade 17025 and XRAL Laboratories is part of the SGS Group and is certified to ISO 9002.

## 16. DATA VERIFICATION

No data verification was carried out by the writer, however, all the sampling undertaken during the three phases of exploration work on the Kukagami Lake Property was either personally done by or supervised by S. Jobin-Bevans, P.Geo., consultant to the Project. During this program, 29 grab samples were sent to XRAL Laboratories where they were analyzed for Pt-Pd-Au using a standard fire assay technique followed by dissolution in aqua regia with a DCP finish. Three of the samples were sent to Accurassay Laboratories, Thunder Bay, Ontario for analysis using a standard fire assay technique followed by an AA finish.

The sampling in 1969-1970 by Kennco Explorations, by Nickeldale Resources Inc. in 1986, by the Ontario Geological Survey in 1991 and sampling by Jobin-Bevans for Pacific North West Capital all established the presence of sulphide mineralization carrying nickel, copper and in most cases platinum group metals (Ni-Cu-PGM mineralization). It is the writer's opinion that there is no question as to the presence of Ni-Cu-PGM mineralization on the Kukagami Lake Property. The unknown factor at the present time is the overall grade, the continuity of the mineralization and its extent which can only be determined by additional exploration.

## 17. ADJACENT PROPERTIES

The immediately adjacent areas are open ground, however, 10 km to the southeast is the Janes township Property of Goldwright Explorations Inc.

## 18. MINERAL PROCESSING AND METALLURGICAL TESTING

The Property is at an early stage of exploration and there has been no mineral processing or metallurgical testing.

#### 19. MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

No resource or reserve estimates have been made for any of the areas of mineralization on the Property.

## 20. OTHER RELEVANT DATA AND INFORMATION

The author is not aware of any additional information relevant to the Property.

#### 21. INTERPRETATION AND CONCLUSIONS

The Kukagami Lake Property covers about a 3 km strike length of Nipissing gabbro that contains a 50 m to 100 m wide zone of melanocratic, hypersthene-rich gabbro that hosts copper-nickel-PGM sulphide mineralization. The amount of sulphides within this mineralized zone is variable and ranges from less than 1% to approximately 15%. The best mineralization is exposed in the Main Showing (J. Whelan Prospect in the northwest part of claim 1230127) with 2 additional occurrences, within the same horizon, about 1000 m to the east. Samples from the Main Showing and along this favourable interval have shown the following ranges of values.

gold (Au)<5 to 638 ppb (0.64 g/t)</th>platinum (Pt)<10 to 457 ppb (0.46 g/t)</td>palladium (Pd)<10 to 4373 ppb (4.37 g/t)</td>nickel (Ni)3 to 4557 (0.46%)copper (Cu)0 to 8152 ppm (0.82%)

Geophysical surveys have indicated the presence of a Conductive Zone trending east-west beneath the east arm of Kukagami Lake in the western part of claim 1230127. This conductor could represent structurally controlled magmatic sulphide mineralization related to the adjacent Nipissing gabbro.

Until recently, the general perception was that the Nipissing gabbro only hosted small concentrations of Ni-Cu-PGM mineralization, however, they could be high grade. Over the last 2 years Ursa Major Minerals Inc. has been evaluating Nipissing gabbro-hosted Ni-Cu-PGM mineralization in Shakespeare township west of Sudbury. In July 2003, they reported in a press release an Indicated Resource of 4.87 million tonnes grading 0.43% Ni, 0.43% Cu, 0.03% Co, 0.22 g/t Au, 0.41 g/t Pt and 0.45 g/t Pd over a 300 m strike length and with the zone open along strike and at depth. It is considered that this discovery illustrates that, under the right geological conditions, the Nipissing gabbro can host Ni-Cu-PGM mineralization of economic significance.

In summary, it is considered that the Kukagami Lake Property is of merit and contains 2 target areas of interest with the potential to host Ni-Cu-PGM mineralization of economic significance.

# 22. RECOMMENDATIONS

As indicated, there are 2 target areas on the Kukagami Lake Property, the Conductive Zone under Lake Kukagami and the 50 m to 100 m wide, melanocratic, hypersthene-rich horizon, mineralized with nickel-copper sulphides, at the base of the Nipissing gabbro in the northern part of claims 1230126 and 1230127. There has been considerable surface work done to date and it is considered that trenching followed by an initial drilling program is required to evaluate the potential of these two targets. To carry out this preliminary evaluation, the following program is recommended.

# TABLE 3 KUKAGAMI LAKE PROPERTY

# RECOMMENDED EXPLORATION PROGRAM AND BUDGET - PHASE 1, 2004

1.	Construction of access road from east and permitting	\$ 10,000
2.	Power stripping, trenching, washing, mapping	
	and sampling	12,000
3.	Pulse-type EM Survey Conductive Zone	15,000
4.	Diamond drilling of Conductive Zone, Main Zone	
	and step-out holes along the favourable gabbro interval	
	- 600 m @ \$80/m	48,000
5.	Assaying, supervision, reports, administration,	
	travel expenses	8,000
6.	Contingency 10%	 9,300
	TOTAL PHASE 1	\$ 102,300

The implementation of a second phase program would be contingent on the results of the initial Phase 1 program.

L.D.S. Winter, P.Geo. January 6, 2004

#### **REFERENCES**

- Thomson, Jas. E. and Card, 1963
   Kelly and Davis Townships, Ont. Dept. Mines, Geol. Report No. 15, 20 p., Map 2037.
- Dressler, B.O., 1979
   Geology of McNish and Janes Townships, District of Sudbury, Ont. Geol. Surv., Report 191, 91 p.
- Gilliatt, J. and Webster, B., 2001
   Report on the Spectral IP / Resistivity Survey, Kelly Property, Kelly
   Township <u>for</u> Pacific North West Capital Corp. by JVX Ltd., 11 p. and
   pseudo sections.
- Jobin-Bevans, 1998
   Unpublished reports and maps prepared for Goldwright Explorations Inc.
- Jobin-Bevans, 1999
   Work Report: Phase 1, Kelly Property, Kelly Township, Sudbury Mining District, Ontario for Pacific North West Capital Corporation and Goldwright Explorations Inc., 20 p., 5 Figures, 3 Appendices.
- 6. Jobin-Bevans, S., 2000
  Work Report: Phase II Kelly Property, Kelly Township, Sudbury Mining Division, Ontario for Pacific North West Capital Corp. and Goldwright Explorations Inc., 12 p. + 3 Figures.
- 7. Jobin-Bevans, S., and Lyon, D., 2001
  Work Report: Phase III Kelly Property, Kelly Township, Sudbury Mining Division, Ontario for Pacific North West Capital Corp. and Goldwright Explorations Inc., 29 p., 4 Appendices and 13 Figures.
- 8. Ministry of Northern Development and Mines Assessment Files and claim data.
- 9. Patrie, D.F., 2003
  Geophysics Report on the Kukagami Lake PGE Property, Kelly
  Township, Ontario <u>for</u> Goldwright Explorations Inc., 9 p. and pseudo sections.

#### L.D.S. Winter

# 1849 Oriole Drive, Sudbury, ON P3E 2W5 (705) 524-4106 (705) 524-6368 (fax) email: swinter@vianet.ca

#### **CERTIFICATE OF AUTHOR** (Item 24)

- I, Lionel Donald Stewart Winter, P. Geo. do hereby certify that:
  - 1. I am currently an independent consulting geologist.
  - I graduated with a degree in Mining Engineering (B.A.Sc.) from the University of Toronto in 1957. In addition, I have obtained a Master of Science (Applied) (M.Sc. App.) from McGill University, Montreal, QC.
  - 3. I am a Life Member of the Canadian Institute of Mining, a Member of the Prospectors and Developers Association of Canada, a Fellow of the Geological Association of Canada, a Registered Geoscientist in Ontario and a Registered Geoscientist in British Columbia (P.Geo.)
  - 4. I have worked as a geologist for a total of 46 years since my graduation from university.
  - 5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
  - 6. I am the author responsible for the preparation of the geological report titled "Technical Report on the Kukagami Lake Property, Kelly Township, District of Sudbury, Ontario for Goldwright Explorations Inc." and dated January 6, 2004 (the "Technical Report"). I visited the Property on December 9, 2003.

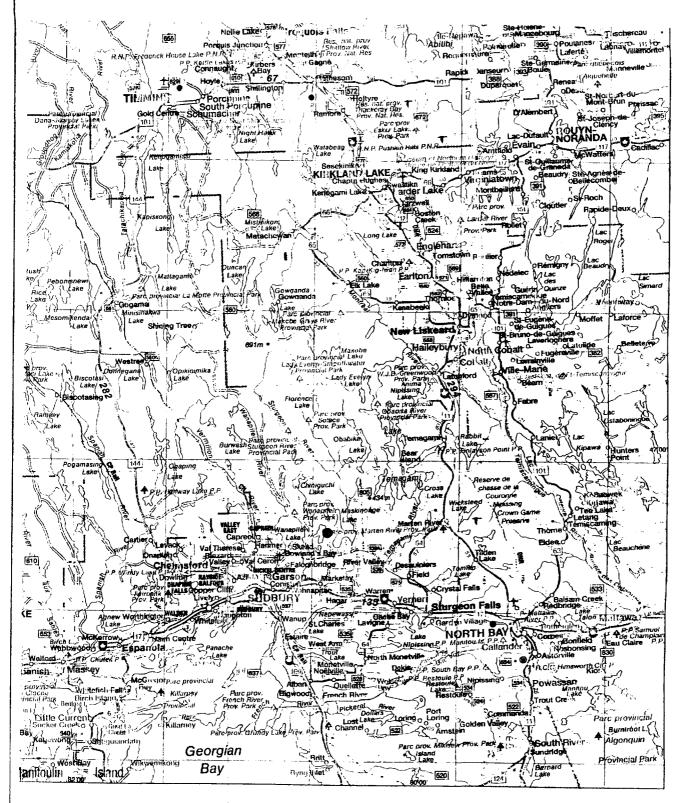
- 7. I have no prior involvement with the Kelly Township, Kukagami Lake Property.
- 8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
- 9. I am independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101.
- 10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 6th Day of January, 2004

Signature of QP

L.D.S. Winter

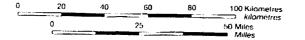
Print name of QP

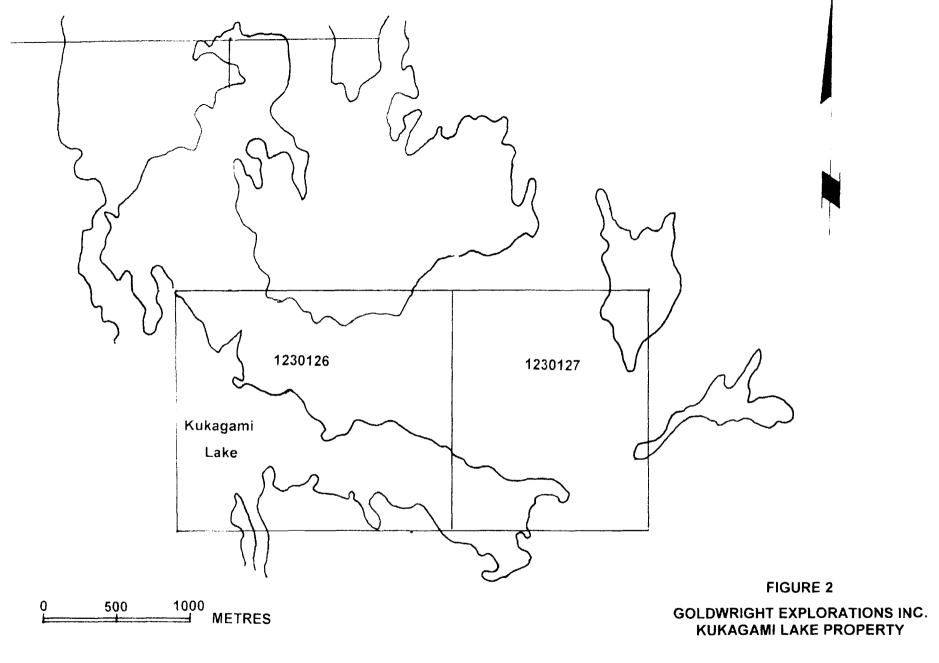


# KUKAGAMI LAKE PROPERTY

# FIGURE 1 GOLDWRIGHT EXPLORATIONS INC. KUKAGAMI LAKE PROPERTY

# **LOCATION MAP**

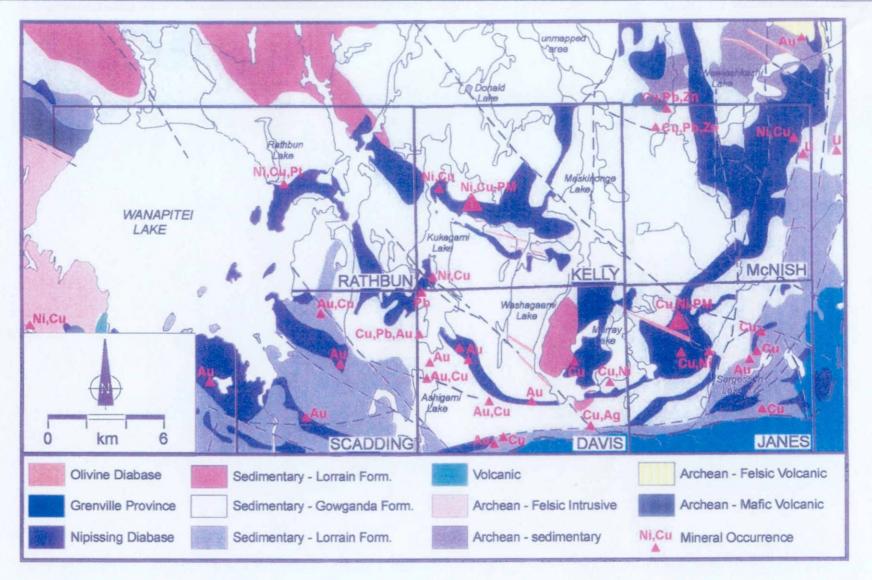




PROPERTY CLAIMS

After Ministry of Natural Resources, Ontario, Map G-3033

January, 2004



A

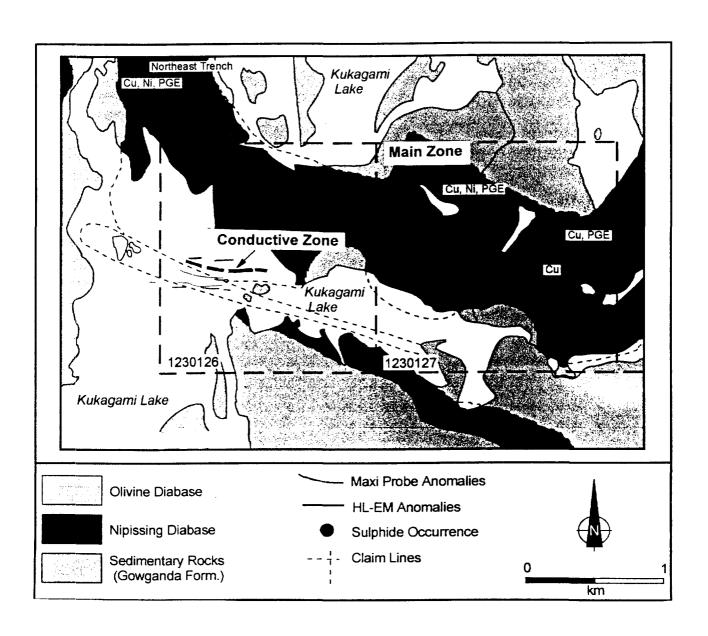
KUKAGAMI LAKE PROPERTY

FIGURE 3
GOLDWRIGHT EXPLORATIONS INC.
KUKAGAMI LAKE PROPERTY

REGIONAL GEOLOGY

January, 2004

After OGS Map 2361



# FIGURE 4 GOLDWRIGHT EXPLORATIONS INC. KUKAGAMI LAKE PROPERTY

# **PROPERTY GEOLOGY**

January, 2004

After Jobin-Bevans 1997 modified by SW



# **Work Report Summary**

**Transaction No:** 

W0470.00638

Status: APPROVED

Recording Date:

2004-APR-28

Work Done from: 2004-APR-07

Approval Date:

2004-MAY-21

to: 2004-APR-28

Client(s):

303574

**GOLDWRIGHT EXPLORATIONS INC** 

Survey Type(s):

**AEM** 

**AMAG** 

Work Report Details:										
Cl	aim#	Perform	Perform Approve	Applied	Applied Approve	Assign	Assign Approve	Reserve	Reserve Approve	Due Date
s	1230126	\$7,100	\$7,100	\$0	\$0	\$0	0	\$7,100	\$7,100	2004-OCT-28
s	1230127	\$7,100	\$7,100	\$6,400	\$6,400	\$0	0	\$700	\$700	2004-OCT-28
		\$14,200	\$14,200	\$6,400	\$6,400	\$0	\$0	\$7,800	\$7,800	_

**External Credits:** 

\$0

Reserve:

\$7,800

Reserve of Work Report#: W0470.00638

\$7,800

Total Remaining

Status of claim is based on information currently on record.



41I15SE2048 2.2757

KELLY

900

Ministry of Northern Development and Mines

Développement du Nord



Date: 2004-MAY-21

GEOSCIENCE ASSESSMENT OFFICE 933 RAMSEY LAKE ROAD, 6th FLOOR SUDBURY, ONTARIO P3E 6B5

**BRIAN JAMES WRIGHT GOLDWRIGHT EXPLORATIONS INC** 503 NORTHERN AND CENTRAL RD HAGAR, ONTARIO P0M 1X0 CANADA

Tel: (888) 415-9845 Fax:(877) 670-1555

Submission Number: 2.27571 Transaction Number(s): W0470.00638

Dear Sir or Madam

#### Subject: Approval of Assessment Work

We have approved your Assessment Work Submission with the above noted Transaction Number(s). The attached Work Report Summary indicates the results of the approval.

At the discretion of the Ministry, the assessment work performed on the mining lands noted in this work report may be subject to inspection and/or investigation at any time.

Thank you for your prompt response to the 45 Day Notice dated May 12, 2004. The deficiencies outlined in the Notice have been corrected. Accordingly, assessment work credit has been approved as outlined on the Declaration of Assessment Work Form that accompanied this submission.

If you have any question regarding this correspondence, please contact STEVEN BENETEAU by email at steve.beneteau@ndm.gov.on.ca or by phone at (705) 670-5855.

Yours Sincerely,

Rom c Gashingh. Ron C. Gashinski

Senior Manager, Mining Lands Section

Cc: Resident Geologist

Goldwright Explorations Inc

(Claim Holder)

Assessment File Library

Goldwright Explorations Inc.

(Assessment Office)



41115SE2048 2.27571

200

ONTARIO CANADA

Mining Land Tenure Map

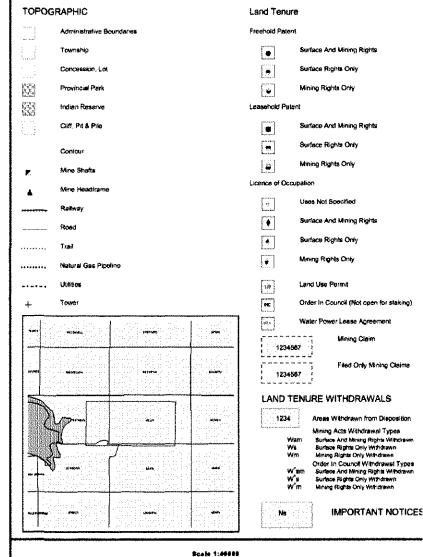
Date / Time of Issue: Wed Jun 09 12:56:44 EDT 2004

TOWNSHIP / AREA **KELLY** 

PLAN G-3033

## **ADMINISTRATIVE DISTRICTS / DIVISIONS**

Mining Division Sudbury Land Titles/Registry Division SUDBURY Ministry of Natural Resources District SUDBURY





Identifier	Туре	Date	Description
6042	Wam	Jan 1, 2001	CROWN RES. S.R.O.
W-LL-F174	Wam	Jan 30, 2002	<a href="http://www.mndm.gov.on.&lt;br&gt;ca/MNDM/MNESA.ANDS/livleg/gtike/2002orders/wilf174-02.htm"> W- F174/02 ONT M&amp;S withdrawal S.35 Mining Act R\$O 1999, 30/01/02 B generally depicts area withdrawn Click to view actual area withdrawn &lt;</a>
W-LL-F175	Wam	Feb 28, 2004	<a href="http://www.mndm.gov.on.ca/mndm/mhres/lands/i/veg/w2004-asp">-W-LL-2004/04 ONT M&amp;S withdraws! S.35 Mining Act RSO 1999. 28/02/04 Boundary generally depicts area withdrawn Click to view actuarea</a> /action of the control
W-LL-F181	Wsm	Aug 29, 2002	<a href="http://www.mndm.gov.on.ca/mNDM/MNDSA/LANDS/M/eg/gitks/2002orders/ollaug/wf181.htm">\ 15/81.ONT M&amp;S withdrawa! S.35 Mining Act RSO 1999, 29/08/02 Bour generally depicts area withdrawn Click to view actual area withdrawn &lt;</a>
W-LL-F181/00	Wam	Oct 4, 2000	Sec. 35 W-LL-F181/00 ONT OCT.04/00 M+S
W-LL-P174	₩am	Jan 30, 2002	<a href="http://www.mndm.gov.on.ca/MNDM/MINESA_ANDS/I/Meg/gitks/2002orders/wilp174-02.htm">W-LL-P174/02 ONT M&amp;S withdrawal S.35 Mining Act RSO 1999, 3C Boundary generally depicts area withdrawn Click to view actual area withdrawn.</a>

2.1km

LOT 3, CONS. LOT 2 CON 5 826225 1230126 W-LL-F181/00 W-LL-F181 826224 826223 1197704 1214825 LOT 4. CON 2 721326 721327

Those wishing to stake mining claims should consult with the Provincial Mining Recorders' Office of the Ministry of Northern Development and Mines for additional information on the status of the lands shown hereon. This map is not intended for navigational, survey, or land title determination purposes as the information shown on this map is compiled from various sources. Completeness and accuracy are not guaranteed. Additional information may also be obtained through the local Land Titles or Registry Office, or the Ministry of Natural Resources.

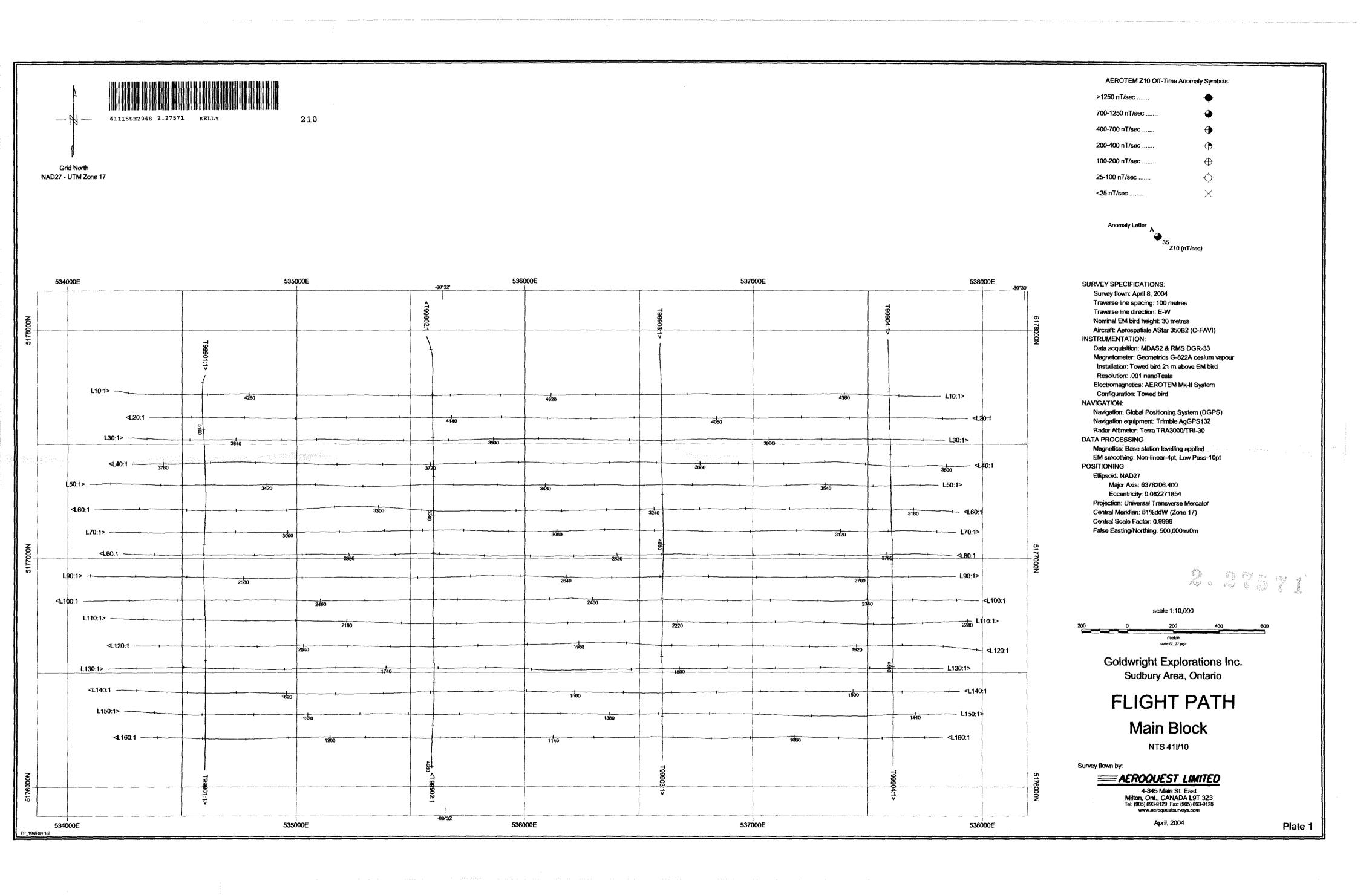
The information shown is derived from digital data available in the Provincial Mining Recorders' Office at the time of downloading from the Ministry of Northern Development and Mines web site.

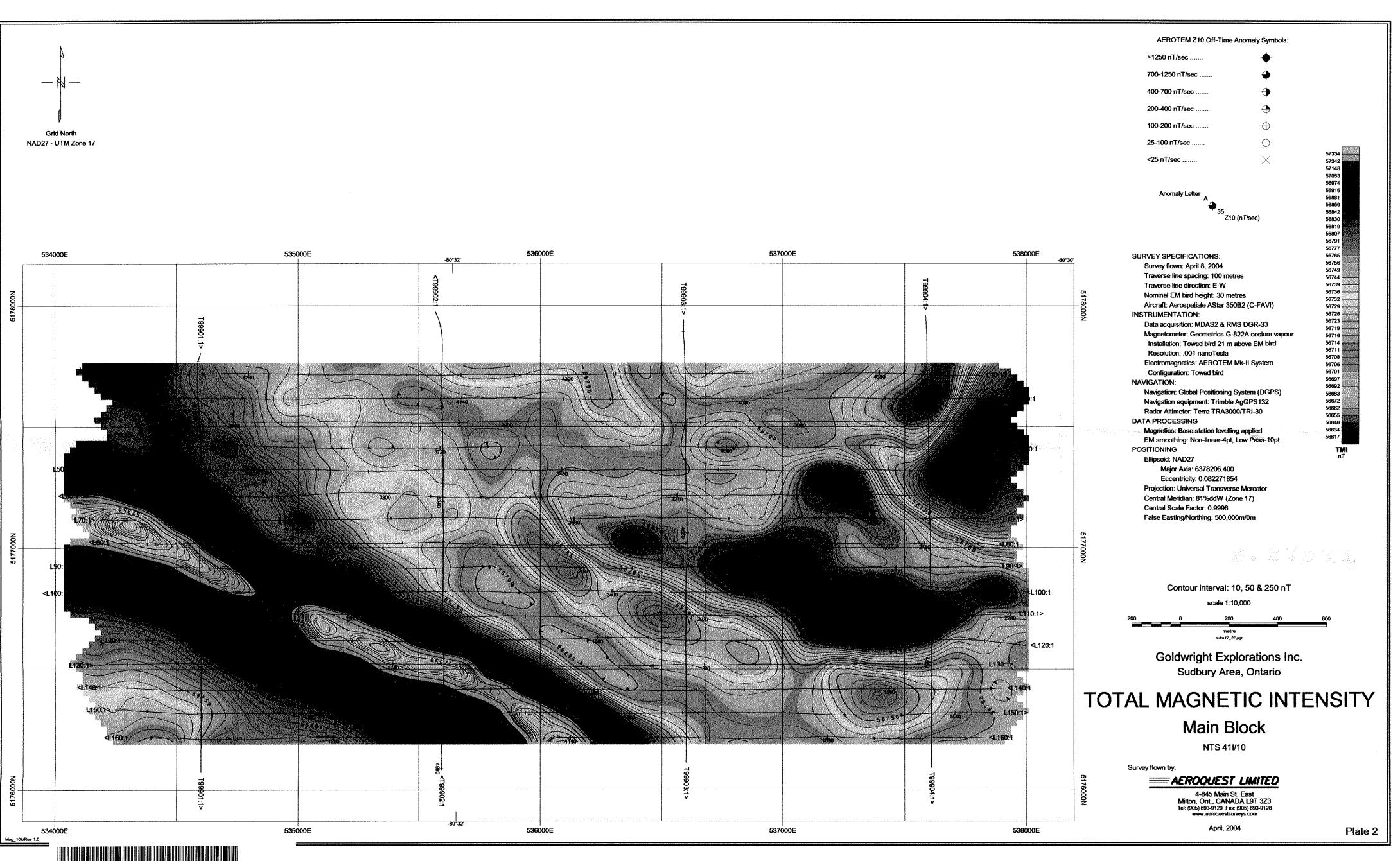
General Information and Limitations

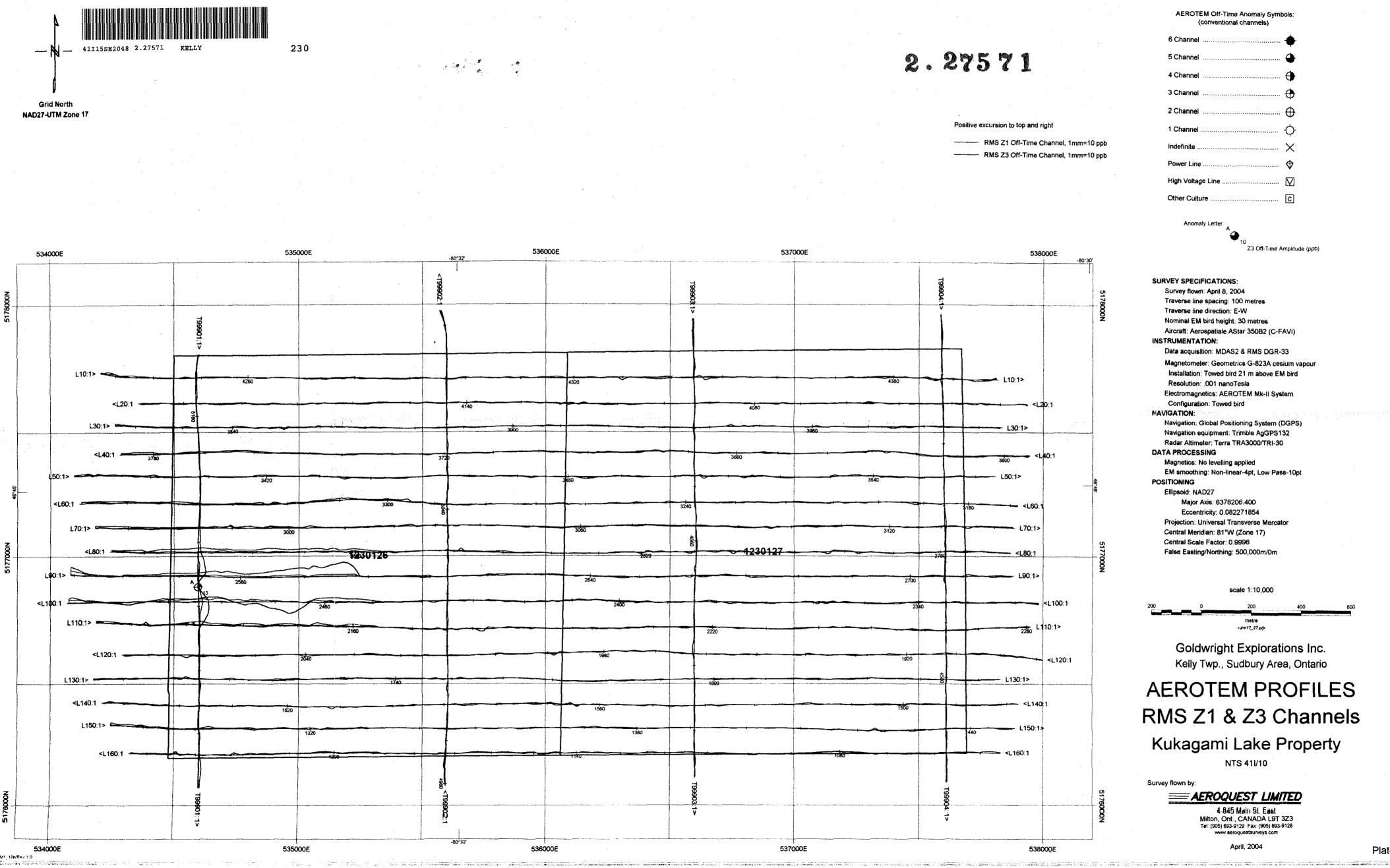
Contact Information:
Contact Information:
Provincial Mining Recorders' Office
Willet Green Miller Centre 933 Ramsey Lake Road
Sudbury ON P3E 6B5
Home Paga: www.mndm.gov.on.ca/MNDM/MINES/LANDS/mismnpge.htm

Toll Free
Map Datum: NAD 83
Toll Free
Map Datum: NAD 83
Toll Free
Tel: 1 (888) 415-9845 ext 57 #20jection: UTM (6 degree)
Topographic Data Source: Land Information Ontario
Mining Land Tenure Source: Provincial Mining Recorders' Office

This map may not show unregistered land tenure and interests in land including certain patents, leases, easements, right of ways, stooding rights, licences, or other forms of disposition of rights and interest from the Crown. Also certain land tenure and land uses that restrict or prohibit free entry to stake mining claims may not be illustrated.







Z3 Off-Time Amplitude (ppb)

**AEROTEM Off-Time Anomaly Symbols:** (conventional channels)

SURVEY SPECIFICATIONS: Survey flown: April 8, 2004

High Voltage Line .

4 Channel

2 Channel

Traverse line spacing: 100 metres Traverse line direction: E-W Nominal EM bird height: 30 metres

Aircraft: Aerospatiale AStar 350B2 (C-FAVI) INSTRUMENTATION:

Data acquisition: MDAS2 & RMS DGR-33

Magnetometer: Geometrics G-823A cesium vapour Installation: Towed bird 21 m above EM bird Resolution: .001 nanoTesla

Electromagnetics: AEROTEM Mk-II System

Configuration: Towed bird NAVIGATION:

Navigation: Global Positioning System (DGPS)

Navigation equipment: Trimble AgGPS132 Radar Altimeter: Terra TRA3000/TRI-30

DATA PROCESSING

Magnetics: No levelling applied EM smoothing: Non-linear-4pt, Low Pass-10pt

POSITIONING

Ellipsoid: NAD27

Major Axis: 6378206.400

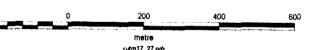
Eccentricity: 0.082271854

Projection: Universal Transverse Mercator

Central Meridian: 81°W (Zone 17) Central Scale Factor: 0.9996

False Easting/Northing: 500,000m/0m

scale 1:10,000



Goldwright Explorations Inc. Kelly Twp., Sudbury Area, Ontario

**AEROTEM PROFILES** RMS Z1 & Z3 Channels

Kukagami Lake Property

AEROQUEST LIMITED

4-845 Main St. East Milton, Ont., CANADA L9T 3Z3 Tel: (905) 693-9129 Fax: (905) 693-9128 www.aeroquestsurveys.com

April, 2004

Plate 3

