BRITISH COLUMBIA

BRITISH COLUMBIA GEOLOGICAL SURVEY

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Report on a Helicopter-Borne Magnetic Gradiometer & VLF-EM Survey

TOTAL COST: $188,706.00

AUTHOR(S): Sean Scrivens
SIGNATURE(S): “Signed and Sealed”
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): N/A
STATEMENT OF WORK EVENT NUMBER(S)/DATE(S): 4219565, June 5 2008

YEAR OF WORK: 2008
PROPERTY NAME: Miocene Group
CLAIM NAME(S) (on which work was done): 508204, 508205, 508211, 515234, 515235, 515236, 515246, 519267, 507500, 507502, 507505, 507506, 516439, 516444, 516446, 516449, 516456, 517358, 518120, 518122, 518124, 518126, 518128, 518129, 518130, 518131, 518133, 518859, 518860, 518161, 524859, 524861, 529760

COMMODITIES SOUGHT: Au, Cu, Ni, Mo

MINERAL INVENTORY MINFILE NUMBER(S),IF KNOWN 093A 007
MINING DIVISION: Cariboo
NTS / BCGS: 093A.032, 093A.042
LATITUDE 52 o 21 ’ 29"
LONGITUDE -121 o 40 ’ 18 " (at centre of work)
UTM Zone 10N EASTING 590459 NORTHING 5801694

OWNER(S) Eagle Peak Resources Inc.
MAILING ADDRESS Suite 413, Bentall Three, 595 Burrard Street, PO Box 49096 Vancouver, BC, V7X 1G4
OPERATOR(S) [who paid for the work] Eagle Peak Resources Inc.
MAILING ADDRESS Suite 413, Bentall Three, 595 Burrard Street, PO Box 49096 Vancouver, BC, V7X 1G4
REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude **do not use abbreviations or codes**)

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS
27895, 02014, 02216, 02475, 03129, 10234, 10614, 10878, 14420, 17485, 18673, 20934, 22853, 27719, 27914, 28149, 28471

Report on a Helicopter-Borne Magnetic Gradiometer & VLF-EM Survey

BC Geological Survey
Assessment Report
30230a

Project Name: Jessica & Prouton Lakes

Project Number: 2008-003

Client: EAGLE PEAK RESOURCES

Contractor: CMG canadian mining geophysics ltd

Date: July 21st, 2008

Table of Contents

Table of Figures

List of Tables

List of Appendices

1.0 Introduction

Canadian Mining Geophysics Ltd (CMG) has flown a helicopter-borne magnetic gradiometer and VLF-EM survey for Eagle Peak Resources Inc. in Big Lake, BC.

The survey, consisting of 1,540 line-kilometers (l-km), was started on May 18th, 2008 and was completed on May 23rd, 2008.

The survey was flown using the WGS-84 Datum and UTM Projection, Zone 10 North. The final database was converted to the NAD-83 Datum and UTM Projection, Zone 10 North using Geosoft Oasis Montaj. All map products were processed and are presented in the NAD-83 Datum.

The CMG magnetic gradiometer consists of three (3) potassium magnetometer sensors separated approximately three (3) meters (m) apart. Measured gradients include the vertical and transverse (cross-line) horizontal. The parallel (in-line) horizontal gradient is calculated and is possible because of the close separation of the magnetometer readings (~3 m) along the flight line.

The CMG gamma ray spectrometer consists of 5 individual Sodium Iodide detectors (1 upward looking and 4 downward looking). Products generated include downward counts, upward counts and Total Count, Th, K, & U concentrations.

The CMG system also records two VLF-EM measurements from approximately orthogonal VLF transmitting stations – normally Cutler, Maine and Jim Creek, Seattle, both in the United States.

This report describes the Survey Area in Section 2, Survey Procedures & Personnel in Section 3, Equipment in Section 4, Deliverables in Section 5, Processing in Section 6, and Interpretation in Section 8.

Appendix A contains a list of the survey outline points in NAD-83, Zone 10 N.

Appendix B contains a list of the digital database columns, the database of which is included with this report to Eagle Peaks Resources Ltd.

2.0 Survey Area

The property consists of 51 contiguous claims comprising over 20000 hectares located on map sheet 093A/5 in the Cariboo Mining Division. The claim ground extends over a north-south distance 0f 23 kilometers and the southern boundary is about 30 kilometers by road northeast of the village of 150 Mile House on Highway 97. The property consists of four claim blocks under option from four different vendors and of claims acquired 'online". (Livgard, 2006)

The Jessica and Prouton Lakes survey areas (Figure 1) are located approximately 40 km northeast of Williams Lake, BC centered at latitude 52° 22' 40" and longitude 121° 42' 22".

The survey polygon covered a number of mineral claims which are contiguous (Figure 2). The Jessica and Prouton lake property claims are partially held by the following owners:

- Eagle Peak Resources Inc.
- Karpetz
- 070067 BC Ltd.
- Quantum
- Richard Keep

The property is easily accessible by paved highways and farm and logging roads.

Fuel for the helicopter was provided by VIH by means of a slip tank which was filled in Williams Lake, BC when required.

The property lies on the Quesnel Highlands physiographic region the easternmost part of the large Interior Plateau and bordering the Cariboo Mountains to the east. Valleys, rolling hills and low mountains characterize this region. The local claim area is moderately flat other than where it crosses Beaver Valley. The highest point on the north block is 1259 m above sea level (asl) at the central west area and falling evenly to about 900 m above sea level (asl) at the eastern border and quite rapidly to 683m asl at Lake George in Beaver Valley to the southwest. (Livgard, 2006)

The base of operations was the Silver Horn Lodge in Big Lake, BC which was located only a few km's from the north end of the Jessica Lake block. The landed and fueled out of this location daily.

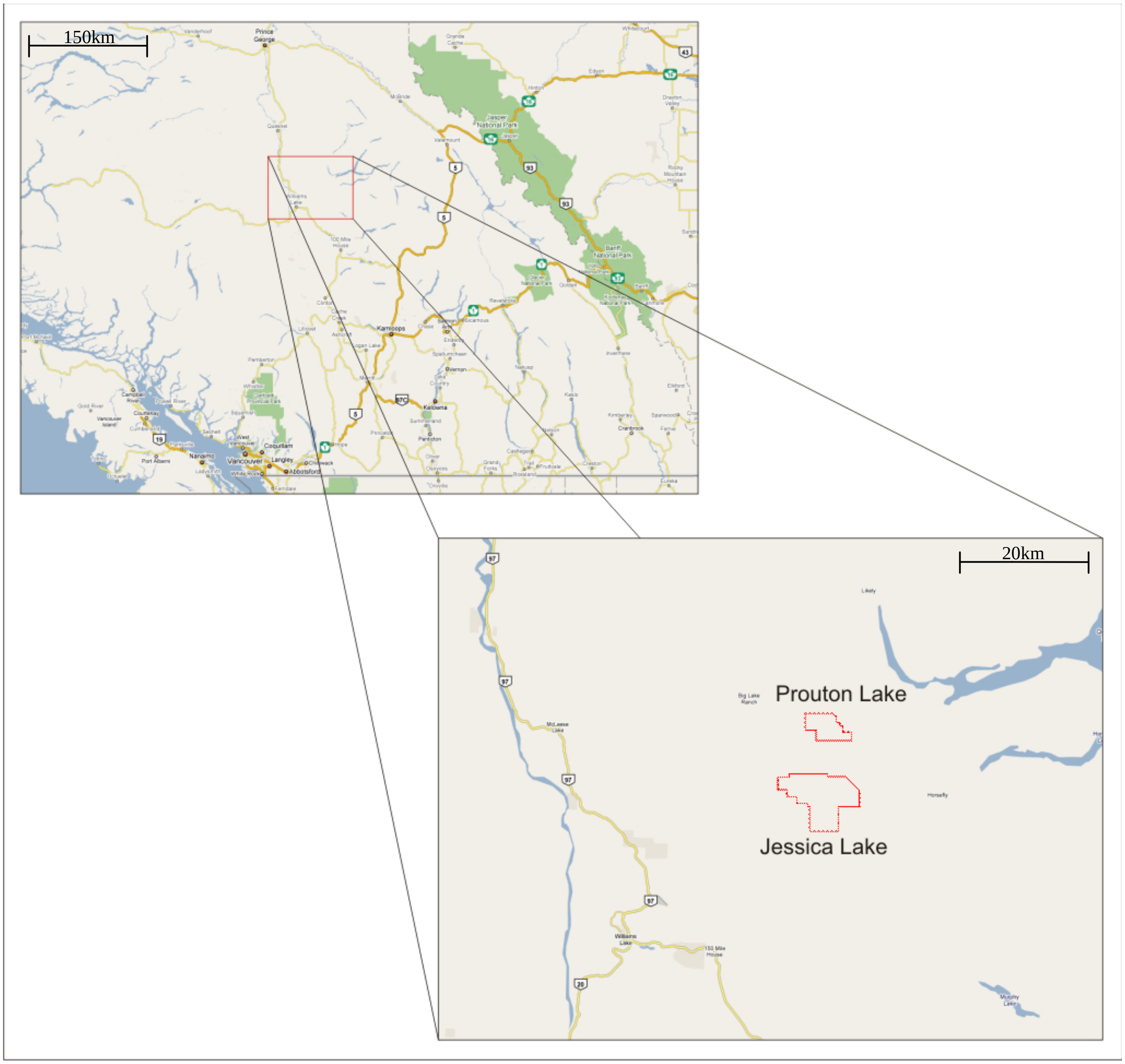

Figure 1 – The Survey Area

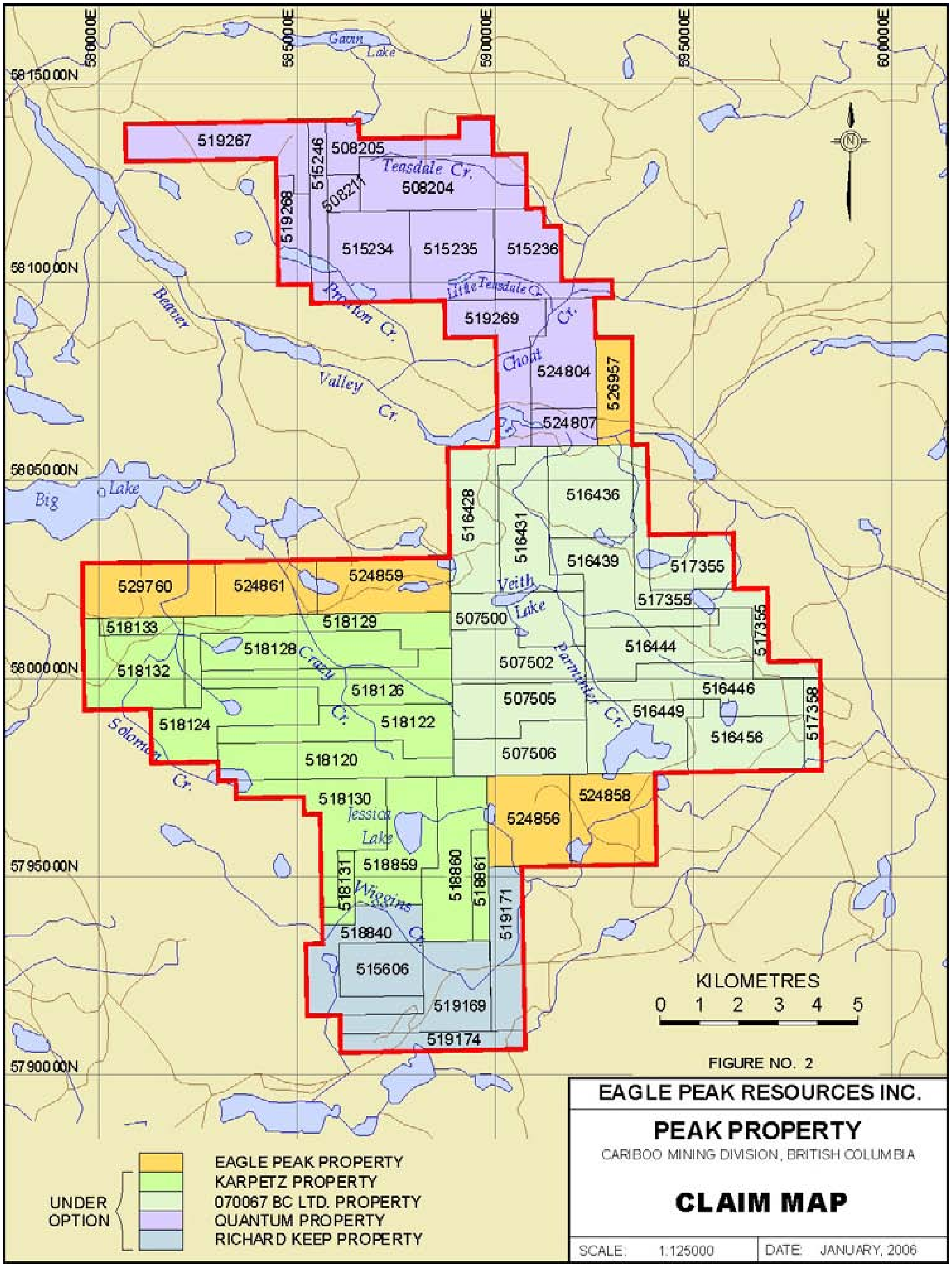

Figure 2 - Survey area mineral claim ownership overview (Livgard, 2006)

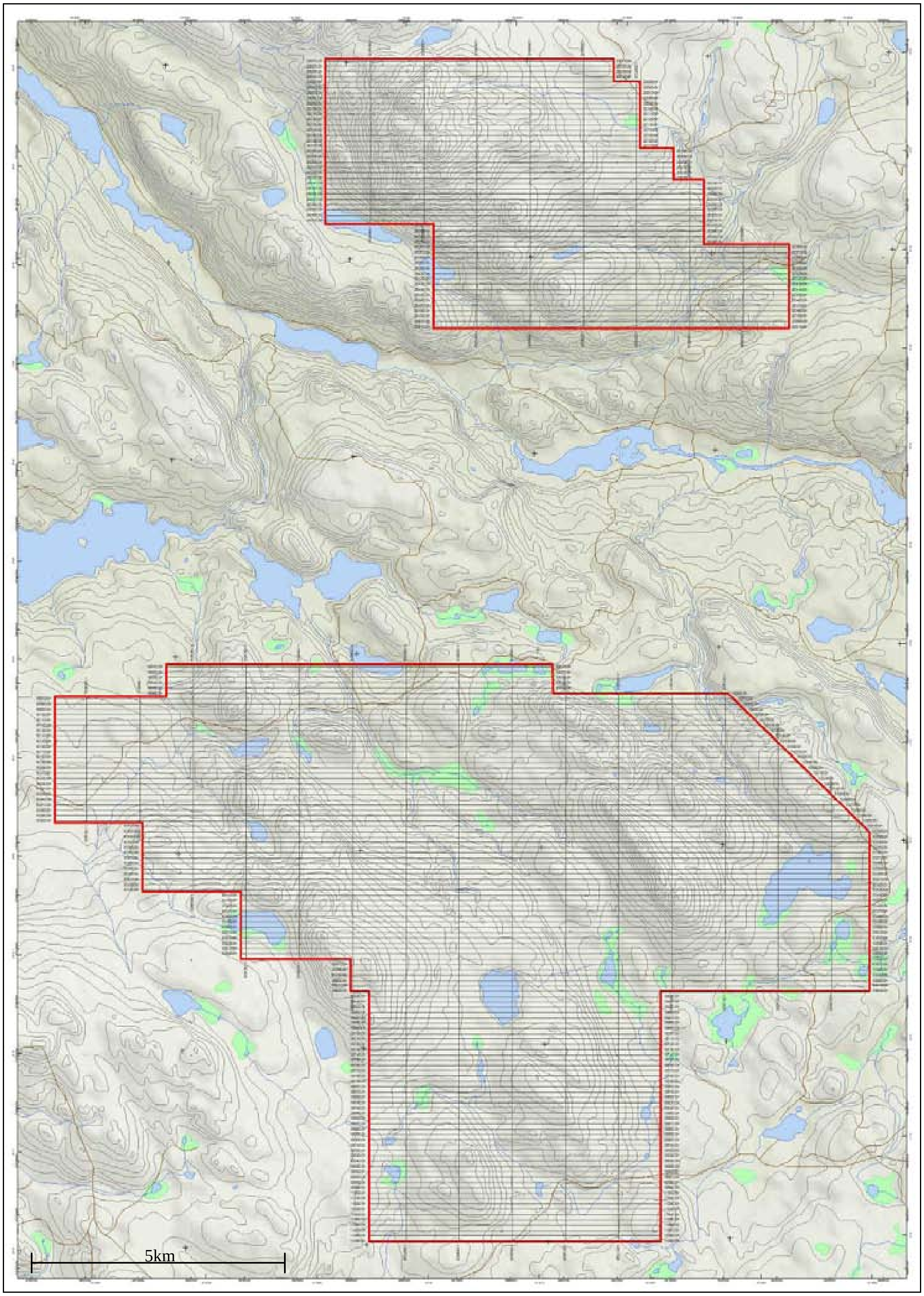

Figure 3 - Projected flight path & survey polygon (Prouton Lake – Top, Jessica Lake – Bottom)

3.0 Survey Procedures & Personnel

The survey was flown according to the specifications outlined in Table One. The survey lines (as flown) were trimmed within a Geosoft database to the survey polygon. This resulted in the number of l-km as described in Table One.

Nominal bird height was 50 m. In some cases the bird height was higher, especially in areas where the cliffs made it difficult to climb and descend quickly. Over low lying areas, the bird height was closer to 35 m.

Nominal survey speed was approximately 100 km/hr. Sampling of all data, including GPS, occurred at a 10 Hz rate. Therefore the approximate lateral distance between readings was 2.5-3.0 m.

Real-time navigation was possible using the AgNav system. GPS positioning was provided using a Novatel 10-channel receiver set to the CD-GPS mode. This mode is considered the most accurate in Canada and provides real-time accuracy of ~ 1-5 m. The GPS antenna was installed on top of the gradiometer bird, near the center (length-wise) of the housing.

A radar altimeter was connected to the skid plate of the helicopter and provided a measurement of distance above ground for the pilot to navigate to. Inside the helicopter the radar altimeter had a digital readout attached to the helicopter dash board.

Approximately one hour before the survey was started the base station magnetometer was turned on and a VLF sensor attached. All available transmitting VLF stations were scanned and the two stations with the most signal that were also roughly orthogonal (the transmitted field direction is dependent upon the transmitter location. The two selected transmitter stations were then relayed to the operator who set them in the helicopter setup for recording during flight. The base station was turned off after the crew landed and contacted the processor.

Table 1 - Survey Area Specifications

Area	Line Direction	Line Spacing	Number of km
Prouton Lake	90^{o} (E-W)	100 m lines	340 km
	0^{o} (N-S)	1000 m tie lines	34 km
Jessica Lake	90^{o} (E-W)	100 m lines	1059 km
	0^{o} (N-S)	1000 m tie lines	107 km

The personnel involved in the survey are summarized in Table 2.

Table 2 - List of Survey Personnel

Individual	Position	Description
Rick Klassen	Pilot	Flew the helicopter.
Luc Rouillard	Aircraft Mechanic	Ensure helicopter maintenance is performed.
Chris Kozak	Operator	In-flight quality control & maintenance of the system and ancillary equipment.
Sean Scrivens	Processor	On-site data processing.
Sean Scrivens	Final Processing	Integration of field data into Geosoft database and generation of grids, profiles, map products and report writeup.
Steve Balch	Interpretation	Preliminary discussions with Client and final report interpretation write-up.
Lloyd Tattersall	Client Representative	Geologist with Eagle Peaks Resources Provided detailed geological report of the survey area.

Final data processing was carried out under the supervision of:

Sean Scrivens
Processing Manager of CMG
7696 Fairhurst Dr.
Kemptville, Ontario
Canada, K0G 1J0.

4.0 Equipment

4.1 The Helicopter

The helicopter used was a Eurocopter AStar Aerospatial 350 B2 with registration C-FTDE, owned and operated by Vancouver Island Helicopters (VIH). An AStar B2 is shown in Figure 4.

Installation of the ancillary equipment was performed at VIH's hangar in Prince George, BC. Two short test flights were performed to ensure the system was operational. The bird was then towed directly to the Silver Horn Lodge and surveying commenced immediately.

Figure 4 - The survey used a AStar B2 as shown above

The gradiometer system was attached to the helicopter by a 30 m long tow cable. The tow cable contains a Kevlar strength member and a weak link. The tow cable also contains the power and signal wires as well as the radar altimeter signal wire.

4.2 The Gradiometer

The CMG magnetic gradiometer (Figure 4) is based on GEM System potassium magnetometers. These sensors are preferred over the cesium optically pumped sensors because they have a lower effective noise level (better for gradient measurements) and a much lower heading error (less absolute correction required from line to line).

Three sensors are also preferred over the normal four sensor arrays featured on systems that measure all three magnetic gradients. CMG measures the vertical gradient from two sensors located 2.95 m apart and the cross-line (or transverse) gradient from two sensors located 3.45 m apart. The in-line gradient is actually calculated from previous and successive measurements given the fact that measurements along the flight line are acquired at approximately the same distance as the sensor separation of the bird.

Computing the in-line gradient as opposed to measuring it directly using an additional sensor has some important advantages. Firstly, and most importantly, by having only three magnetometer sensors, they can all be placed at the front of the bird and the magnetically noisy electronics (including the tow cable) can all be placed at the back of the bird so that the distance between sensors and electronics is maximized. Secondly, the computed in-line measurement has effectively no heading error (the readings are from the same magnetometer and are constant across such a short distance), and is relatively free from diurnal variations in the magnetic field, given the short time interval (0.1 sec) between readings.

Table 3 - Specifications for the CMG Magnetometer Section

Sensitivity:	+/- 0.001 nT
Absolute accuracy:	+/- 0.5 nT over operating range maximum
Sample rate:	10 Hz (0.1 sec)
Dynamic range:	30,000 to 90,000 nT, 5,000 nT/m gradient
Heading error:	+/-0.15 nT maximum for all sensor orientations
Operating temperature:	-32^{o} C to +40^{o} C normally
Tuning method:	Dynamic re-starting at 30,000 nT
Volume of sensor:	70 mm

The magnetometer data is collected at a rate of 10 Hz. The frequency from each sensor is counted separately within the digital electronic section located approximately 4.5 m away from the sensors near the back of the bird. The mag-console then transmits the data in digital format along the tow cable to the data acquisition system in the helicopter. Specifications for the magnetometer sensors are given in Table Two.

4.3 The Magnetometer Bird

The magnetometer bird is constructed from fiberglass. The magnetometer housings are made from Kevlar. The horizontal displacement between magnetometer sensors is 3.45 m. The vertical separation is 2.95 m. The length of the bird is 5.3 m. It weighs 180 Kg approximately. The bird can be separated into two sections and the magnetometer arms removed for easy transportation.

4.4 The Spectrometer

The revolutionary RSX-5 digital airborne gamma-ray spectrometer is designed for the detection and measurement of low-level radiation from both naturally occurring and man-made sources. The spectrometer was built by and purchased from Radiation Solutions Inc. The RS-500 is a fully integrated system that includes an individual Advanced Digital Spectrometer (ADS) for each crystal within the box. The ADS records high resolution, 1024 channel, digital data of naturally occurring radioactive elements.

Figure 5 - Radiation Solutions RSX-5 Gamma Ray Spectrometer

Key Features:

- 1024 channel resolution
- Individual crystal ADC and processing
- No distortion as each crystal output is fully linearized permitting multi-crystal summing without distortion
- Effectively no signal degradation
- No radioactive test sources required for system setup or system performance validation
- Extremely wide dynamic range
- High level of self-diagnostics
- Worldwide usability, fully multi-peak automatic gain stabilization on natural isotopes
- Data compression - individual crystal spectral data storage can be achieved with no effective increase in data volume

The recorded spectrometer data was transferred directly into the acquisition computer via high speed USB. The data was processed independently and merged with the magnetic data using GPS time stamp.

4.5 The VLF-EM System

The CMG gradiometer contains two VLF (very low frequency) EM receivers that can be tuned to any of the operational VLF transmitters worldwide. In general, two orthogonal stations are chosen such as Cutler Maine (24.0 kHz) and Jim Creek Seattle (24.8 kHz).

Measurements of the in-phase, quadrature-phase and total field are taken at a 10 Hz sample rate. The in-phase measurement is easily affected by variations in the sensor orientation and may not be useful in areas of rugged topography or where bird movement is significant. The quadrature-phase measurements are dependent on bird direction so alternating lines are sign inverted. The results can be gridded and provide the locations of weak conductors, given the high relative frequency of the transmitter station.

The measured VLF components are converted into a digital signal and then appended to the data string in the main magnetometer console. This entire data string is then transmitted along the logging cable to the data acquisition system in the helicopter.

4.6 The Magnetometer Base Station

A GSM-19 base station was used to record variations in the earth's magnetic field. This system is based on the Overhauser principle and records total magnetic field to within +/- 0.02 nT at a one (1) second time interval.

The GSM-19 is portable and can be placed in a remote location without the need for extra batteries or cabling. On this survey the unit was placed about 60 m away from the lodge near the lake shore.

4.7 The Radar Altimeter

The CMG system uses two radar altimeters both modulated frequency radio versions manufactured by Sperry. The radar altimeter in the helicopter is used by the pilot to estimate terrain clearance by the helicopter. The second altimeter, mounted directly on the bird, provides an accurate measurement of bird height. The approximate accuracy of these devices is +/- 2 m.

4.8 GPS Navigation

CMG uses the AgNav Incorporated (AgNav-2 version) GPS navigation system for real-time locating while surveying and for final positioning. The AgNav unit is connected to a Honeywell GPS system that uses the CD-GPS system – considered to be the most accurate in Canada and valid right to the North Pole.

CD-GPS is a national standard providing accurate and reliable GPS corrections for meter and sub-meter accuracy for all of Canada. The service uses 14 IGS stations for real-time corrections.

4.9 Data Acquisition System

Data is collected by the main magnetometer console in the gradiometer bird and includes GPS timing and positional information, magnetometer readings, VLF readings, and radar altimeter. This information is digitized inside the console, all at a rate of 10 Hz. The resulting data string is transmitted in digital format along the tow cable into a laptop computer inside the helicopter that is running the GEM Systems DAS software. All data is stored on the hard-drive in ASCII format using a simple column by row format.

5.0 Deliverables

From the survey, a number of deliverable products are generated including a set of hard-copy maps, a final report (this document), and a digital archive of the data with digital copies of map products.

5.1 Hardcopy Products

Hardcopy map products are provided at 1:10,000 (Prouton Lake) & 1:20,000 (Jessica Lake) scale and include a topographic back-drop. Each map contains a scale bar, north arrow, coordinate outlines (easting & northing), flight lines with line number and direction and geophysical data.

Both survey blocks consisted of 1 map plate each customized to fit within the boundaries of a 42" plotter.

Each map contains a technical summary of specifications and a colour bar that describes the geophysical data.

5.2 Digital Products

The geophysical data is provided in a Geosoft GDB database. At the Client's request an xyz archive of the same database in ASCII format can also be provided.

The contents of the database are described more fully in Appendix B.

A copy of the GDB database is kept by CMG as a courtesy to the Client but can be deleted at the Client's request.

In addition to the GDB file database, copies of all geophysical grids are provided as GRD files (also in Geosoft format). The cell size used for gridding is nominally ¼ of the flight line spacing.

Map files in Geosoft MAP format are also provided as deliverables. The Client can use a free viewer available from Geosoft Limited (www.geosoft.com) for viewing and plotting map files, but not for editing or changing them.

5.3 Delivered Products

The following map products were delivered in hard-copy and digital format:

- Colored, total magnetic field (TMI) with flight lines and contours over topographic backdrop;
- Colored, analytical signal (ASIG) with contours and flight lines over topographic backdrop;
- Colored, TMI 2nd vertical derivative (2VD) with contours and flight lines over topographic backdrop;
- Colored, TMI reduced to poles (RTP) with contours and flight lines over topographic backdrop;
- Colour shaded, VLF-EM quadrature-phase component with flight lines over topographic backdrop;
- Colour shaded, Total Count spectrometer data with flight lines over topographic backdrop.
- Colour shaded, Uranium Count spectrometer data with flight lines over topographic backdrop.

The following map products were delivered in digital format only (in addition to those above):

- Colored, measured vertical magnetic field derivative with contours and flight lines over topographic backdrop;
- Colored, calculated vertical magnetic field derivative with contours and flight lines over topographic backdrop;
- Colored, measured cross-line horizontal magnetic field derivative with contours and flight lines over topographic backdrop;

- Colored, measured in-line horizontal field derivative with contours and flight lines over topographic backdrop;
- Digital Terrain Model (DTM) Geosoft grid

The following additional products were delivered in digital format:

- Copy of this report in .pdf format;
- Geosoft database GDB of all collected data;
- Geosoft grid files of selected geophysical data (listed above);

6.0 Processing

Preliminary data processing is performed using CMG proprietary methods. This includes calculation of the magnetic gradients from the three sensors (MAG1, MAG2 and MAG3), digital terrain model, bird height, and merging of the base station magnetics (sampled at 1.0 sec) with the survey data (sampled at 0.1 sec).

The raw ASCII survey data files, merged with the raw ASCII base station data files and processed, are then imported into a Geosoft GDB (database) file, for further processing.

The magnetic data (both the total magnetic field from the three sensors and the computed gradients) are not filtered. All data issued on the digital database is unfiltered, unless specifically mentioned.

6.1 Base Maps

All base maps are presented in the Datum and Projection defined in the Introduction of this report. All map coordinates refer to projected easting and northing in meters. All maps contain the actual flight paths as recorded during surveying and have been clipped to the survey polygon with a 100m extension.

The topographic vector data has been obtained from Natural Resources Canada.

Topographic shading has been derived from 90 m resolution digital elevation model (DEM) data provided by the NASA Shuttle Radar Topography Mission (SRTM).

6.2 Flight Path

The helicopter used "ideal" flight lines as guidance during surveying as displayed on the real-time AgNav system. A GPS was used to record actual position. The sample rate of the GPS was 10 Hz, the same as all the other data collected in flight.

The GPS outputted both latitude and longitude values and easting and northing values, all in the WGS84 Datum, using the UTM Projection Zone 10 North. There has been no interpolation of the positional data, nor has there been any filtering of the data.

6.3 Terrain Clearance

A radar altimeter, the transmitter of which was located on the skid plate of the helicopter, was used to maintain terrain clearance by the pilot. A digital indicator was mounted on the dashboard of the helicopter. This work was performed by a licensed helicopter engineer provided by VIH.

The digital terrain model (DTM) was derived by subtracting the radar altimeter value from the GPS z position (mean point above sea level). The DTM values were further corrected for a lag value of 1.0 sec. The DTM values are to be considered relative as they have not been tied into any surveyed geodetic point.

6.4 Magnetic Data Processing

The magnetic data were collected without any lag time, therefore a lag time correction was not applied. In areas where one magnetometer sensor has become unlocked, the total magnetic field values for that sensor were replaced with a dummy value ("*"). The lock and heater settings are both imported into the Geosoft database so it is easy to find the areas where one or more sensors lost lock or were not heating correctly. Locking errors occur almost entirely on turn-arounds.

Diurnal magnetic corrections were applied only to the one sensor that was used to generate a total magnetic field map. The MAG1, MAG2, and MAG3 sensor values were used to generate the gradients and do not require diurnal correction. The base station data was linearly interpolated from a 1.0 sec sample rate to 0.1 sec to correspond to the flight data.

The horizontal gradients are sensitive to line direction. Positive polarity is defined as to the north and east. On south- and/or west-facing lines the horizontal gradients are multiplied by -1.

The magnetic data (total field and gradients) were not filtered. The data were tie line-leveled and the resulting grids micro-leveled, but the profile data were unfiltered and are presented in the final database as such.

6.5 VLF-EM Data Processing

The VLF data is strongly affected by motion of the bird (during ascent and descent during surveying) and is strongly affected by rough topography. The in-phase component (and hence the total field) is most affected. For this project only the quadrature-phase was processed and interpreted.

The VLF data is directional therefore alternate flight lines are inverted for polarity. The positive direction is considered north and east. Due to occasional data spikes, a 5-pt non-linear filter was applied to the VLF dataset. Trends are easily recognized in the gridded VLF quadrature-phase and filtering makes little difference to the gridded data.

7.0 Results

The total magnetic field (TMI) is shown in Figure 6. The TMI has been color imaged with contours superimposed in black to enhance regions of high gradient. The profile data was tie-line leveled and then the grid was further micro-leveled (both processes were performed using Geosoft).

The TMI reduced to poles (RTP) is shown in Figure 7. The RTP has been color imaged with contours superimposed in black to enhance regions of high gradient.

The measured vertical magnetic gradient (M-VMG) is shown in Figure 8. The M-VMG image is shown in shaded color with a sun angle of 45^o inclination and 270^o declination.

The calculated vertical magnetic gradient (C-VMG) is shown in Figure 9. The C-VMG image is shown in shaded color with a sun angle of 45^o inclination and 270^o declination.

The measured in-line horizontal magnetic gradient (MI-HMG) is shown in Figure 10. The MC-HMG image is shown in shaded color with a sun angle of 45^o inclination and 270^o declination.

The measured cross-line horizontal magnetic gradient (MC-HMG) is shown in Figure 11. The MI-HMG image is shown in shaded color with a sun angle of 45^o inclination and 270^o declination.

The measured cross-line horizontal magnetic gradient (ASIG) is shown in Figure 12. The ASIG image is shown in shaded color with a sun angle of 45^o inclination and 270^o declination.

The 2nd vertical derivative (2VD) of the TMI is shown in Figure 13. The 2VD image is shown in shaded color with a sun angle of 45^o inclination and 270^o declination.

The digital terrain model (DTM) is shown in Figure 14 also using a sun angle of 45^o inclination and 270^o declination, but with the “elevation” color transform. A lag of 1.0 sec was applied to the profile data before the grid was generated.

The VLF quadrature-phase data from station #1 (24.8 kHz) is shown in Figure 15 is shown in shaded color with a sun angle of 45^o inclination and 270^o declination.

The gamma ray spectrometer (GRS) total count is shown in Figure 16. The total count image is shown in shaded color with a sun angle of 45^o inclination and 270^o declination.

The gamma ray spectrometer (GRS) uranium count is shown in Figure 17. The uranium count image is shown in shaded color with a sun angle of 45^o inclination and 270^o declination.

8.0 Interpretation

The Property is located within the Central Quesnel Terrane of the Canadian Cordillera which geologically is composed of island arc volcanic and sedimentary rocks. Mineralization within this assemblage is related to volcanism that occurred during a period of subduction of the Quesnel island arc under the North American plate.

The Quesnel rocks include black shale, siltstone and sandstone sedimentary units as well as mafic tuffs and basaltic volcanic rocks. Overlying these units are pillow lavas, breccias and more tuffs. The geologic strike is approximately northwest and the rock units are thought to be steeply dipping.

According to Bailey (2007) mineralization within the area is due to plutonism and volcanism and consists mainly of chalcopyrite within a porphyry system that also contains gold and in some areas molybdenum. Within the Property Bailey describes copper occurrences within fine grained monzonites including the Wiggins Creek copper occurrence. Overall the geologic history appears complex. Rock units are generally younger to the northeast but a series of northwest oriented thrust faults appear to cause repetitions in the geologic sequence.

In 2006 Eagle Peaks contracted an AeroTEM electromagnetic (EM) and magnetic survey over portions of the Property. As summarized by Scrivens and Rudd (2006) the EM responses are predominantly conductive sediments although discrete EM conductors are noted but not specifically interpreted. In this author's opinion the AeroTEM survey should be reviewed with the object of identifying discrete conductors for a possible ground-checking program. Such interpretation could be limited to a few days.

In the current survey, CMG has acquired high resolution magnetic gradiometer data, VLF EM profiles, and multi-channel radiometric data. The vertical magnetic gradient provides a more accurate estimate of magnetic boundaries. The cross-line horizontal gradient highlights structures that may be oriented sub-parallel to the flight direction. The vector sum of the three magnetic gradients – known as the analytic signal – produces highs directly over magnetic sources that are independent of the direction of the earth's magnetization vector. The VLF-EM data is sensitive to weakly conductive geologic units and sub-vertical structures that may have acted as pathways for gold emplacement or remobilization. The radiometric data – particularly the potassium channel – is useful in mapping geologic structure such as potassium-rich granites, or areas of potassium enrichment and depletion that can sometimes indicate an alteration pattern.

8.1 Magnetics

From the image of the total magnetic intensity (or TMI) in Figure 6 there are a number of magnetic features within the Property with a predominant northwest trend. In particular a large magnetic high located in the northeast of the survey block may represent a tightly folded magnetic rock unit. Further to the north is a second series of folded magnetic rocks that appear to cross-cut the local stratigraphy. There is also a broad change in the magnetic character trending northwest and almost bisecting the Property into two parts. All of these features are shown diagrammatically in Figure 18.

In the northwest a large magnetic high (evident in the TMI) is likely caused by a later intrusive plug.

In the southwest is a series of magnetic lows that are more clearly defined by the analytic signal as an anomalous magnetic trend striking north-northwest. The analytic signal in general is more useful for defining magnetic trends than the total magnetic intensity because this computed product is independent of the earth’s magnetization vector. The magnetic lows noted here could be a result of remanent magnetization. This trend may continue to the north-northwest and could also form part of what appears to be a folded geologic sequence to the northwest as shown in Figure 19.

The measured vertical gradient (Figure 20) reveals a second possible contact, also trending north-northwest and containing a shallow magnetic anomaly that may be of exploration interest.

Further to the west the measured vertical gradient also reveals a shallow anomaly (also defined by the analytic signal) that lies along an interpreted folded contact and which also contains a shallow magnetic anomaly located further to the north. Both shallow anomalies are seen as interesting feature that require further investigation.

8.2 VLF

The total field of the VLF-EM signal from the Jim Creek transmitter (Figure 15) reveals a predominant northwest trending set of highs and lows. These features are somewhat related to topography as well. The high amplitude magnetic feature that may represent a folded structure also appears as a VLF high. An interesting correlation appears between the VLF total field and measured vertical gradient in the northwest portion of the survey area as shown in Figure 21.

The VLF-EM signal is also strongly affected by topography and there is a close correlation between some of the topographic features and the noted VLF response described above. There will also be a relationship between topography and geology and it is difficult to separate out these effects.

Overall the VLF shows two dominant trends, one to the northwest that appears to be related to geology and also topography and a second more subtle trend to the northeast that is related to less obvious topographic features and may be related to later faults.

9.0 Recommendations

1) The AeroTEM survey data should be reviewed for discrete conductor responses. Such responses can be indicated as "red-balls" and would exclude responses that are thought to be overburden related.

2) The magnetic trends identified in this report should be correlated with the known geology and any interesting trends ground-checked.

3) Digital products from this report should be made available in either MapInfo or ArcView format as registered tiff files for integration into a GIS compilation.

Respectively Submitted,

Sean Scrivens
Canadian Mining Geophysics Ltd.
July, 2008

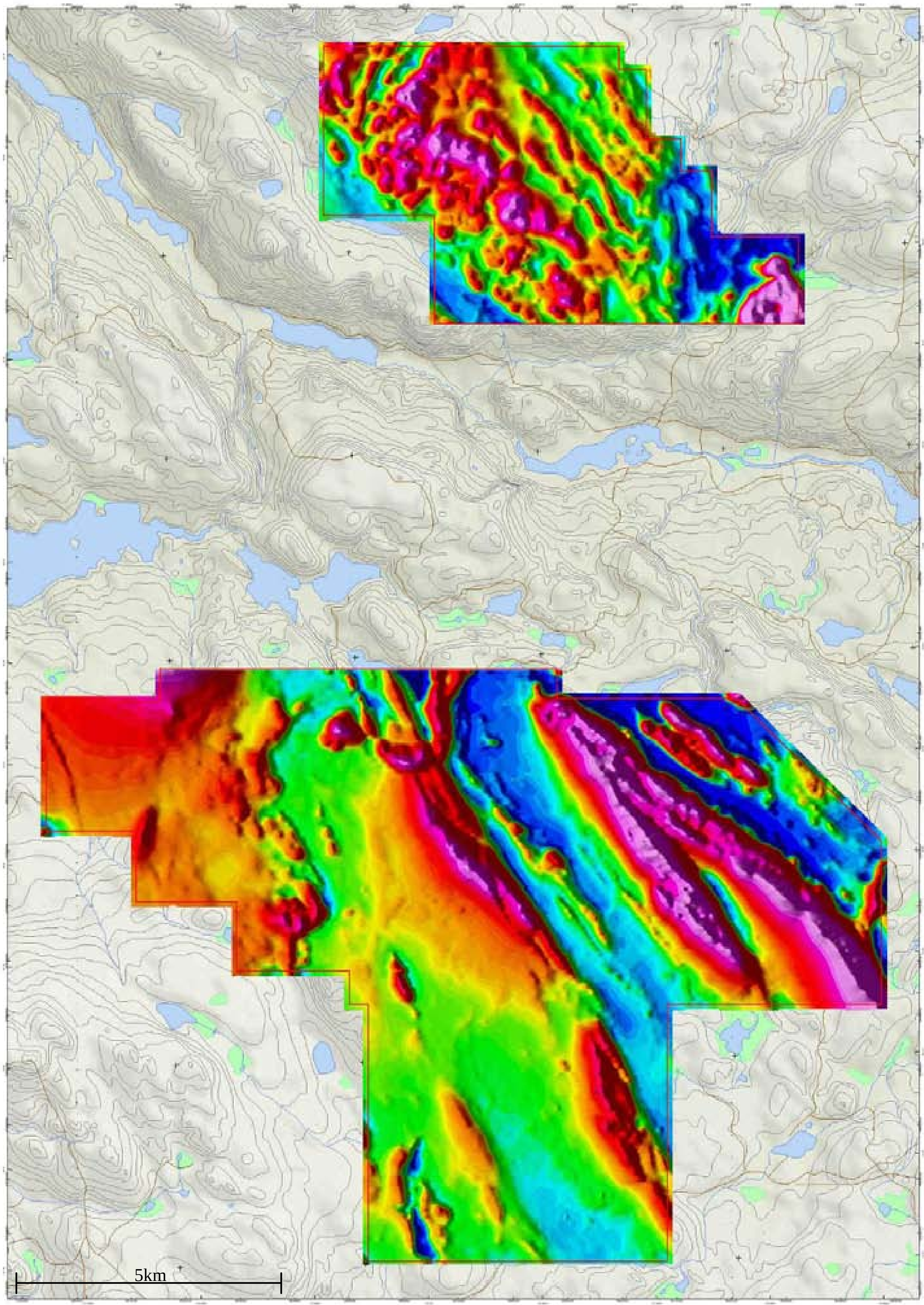

Figure 6 - Shaded image of the total magnetic field intensity (TMI) for the Prouton and Jessica Lake properties.

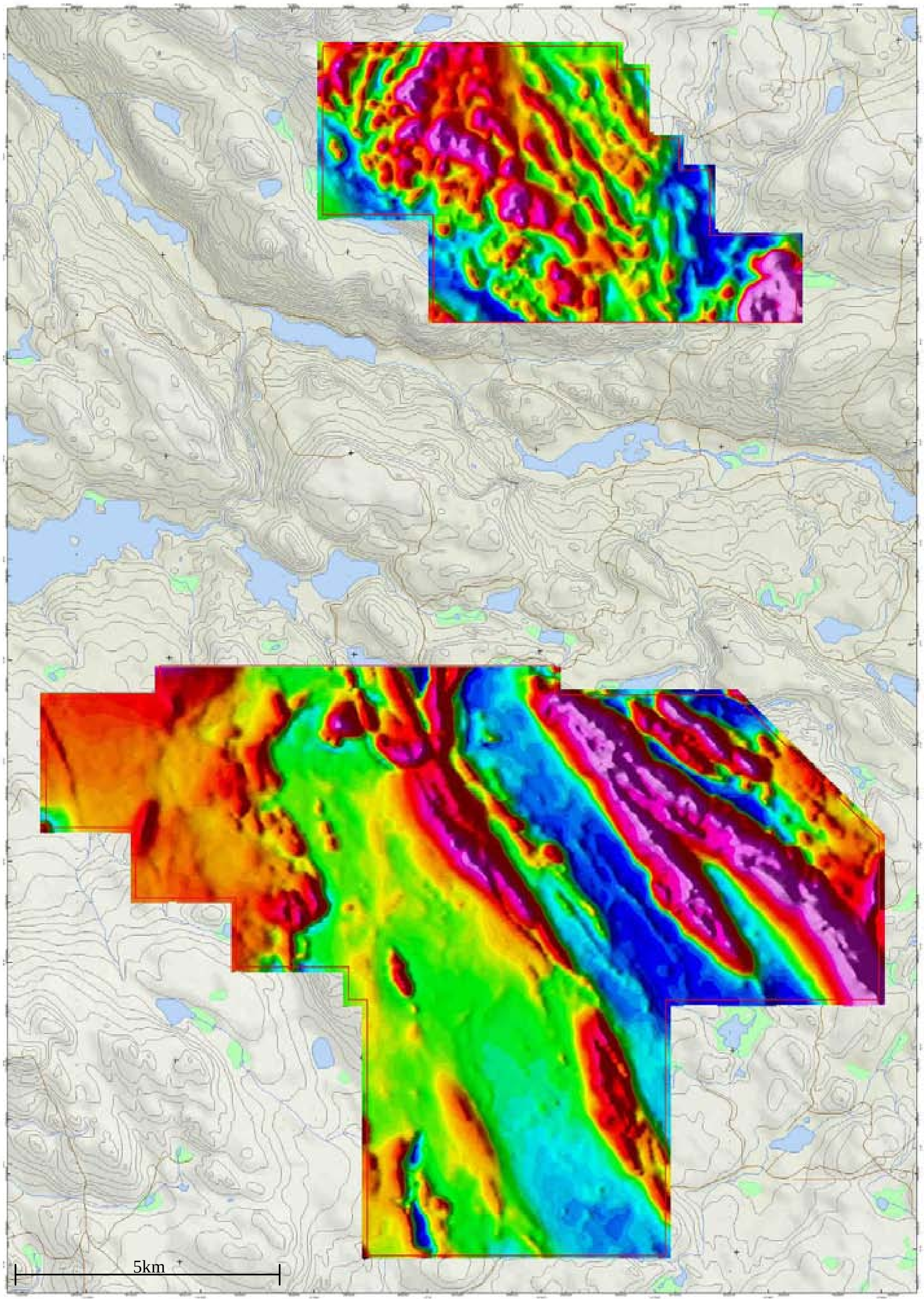

Figure 7 - Shaded image of TMI reduced to poles (RTP) for the Prouton and Jessica Lake properties.

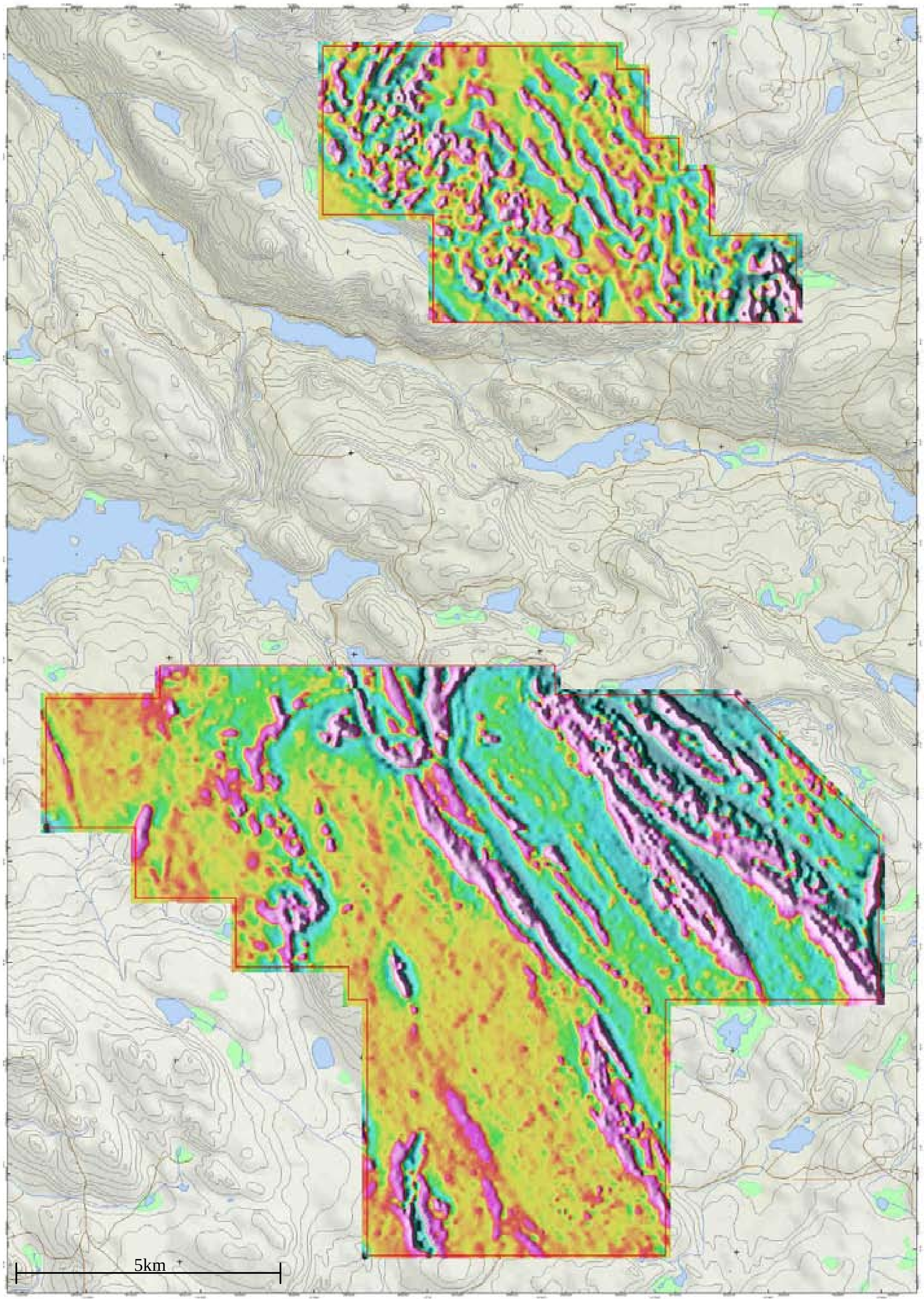

Figure 8 - Shaded image of the measured vertical magnetic gradient (M-VMG) for the Prouton and Jessica Lake properties.

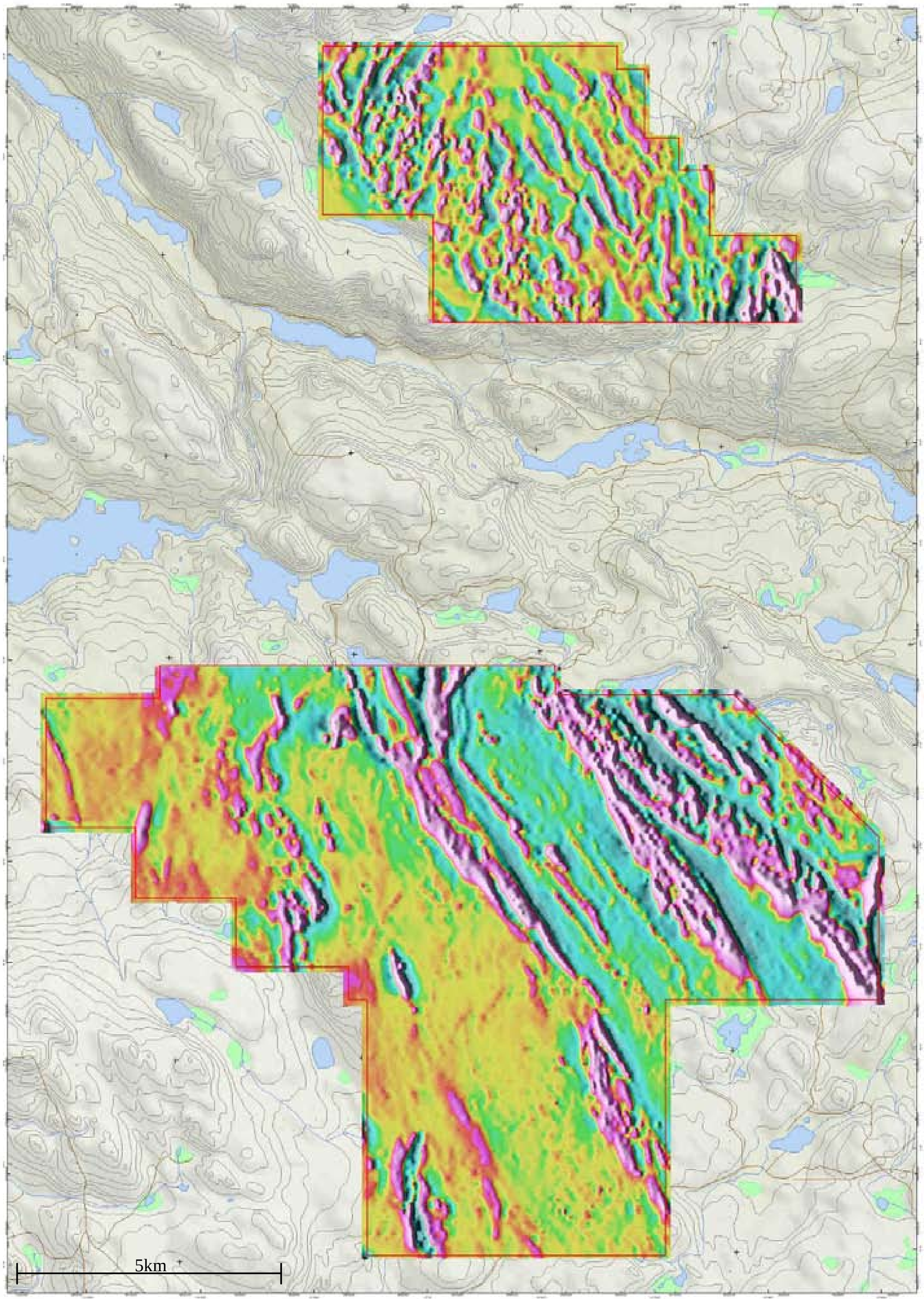

Figure 9 - Shaded image of the calculated vertical magnetic gradient (C-VMG) for the Prouton and Jessica Lake properties.

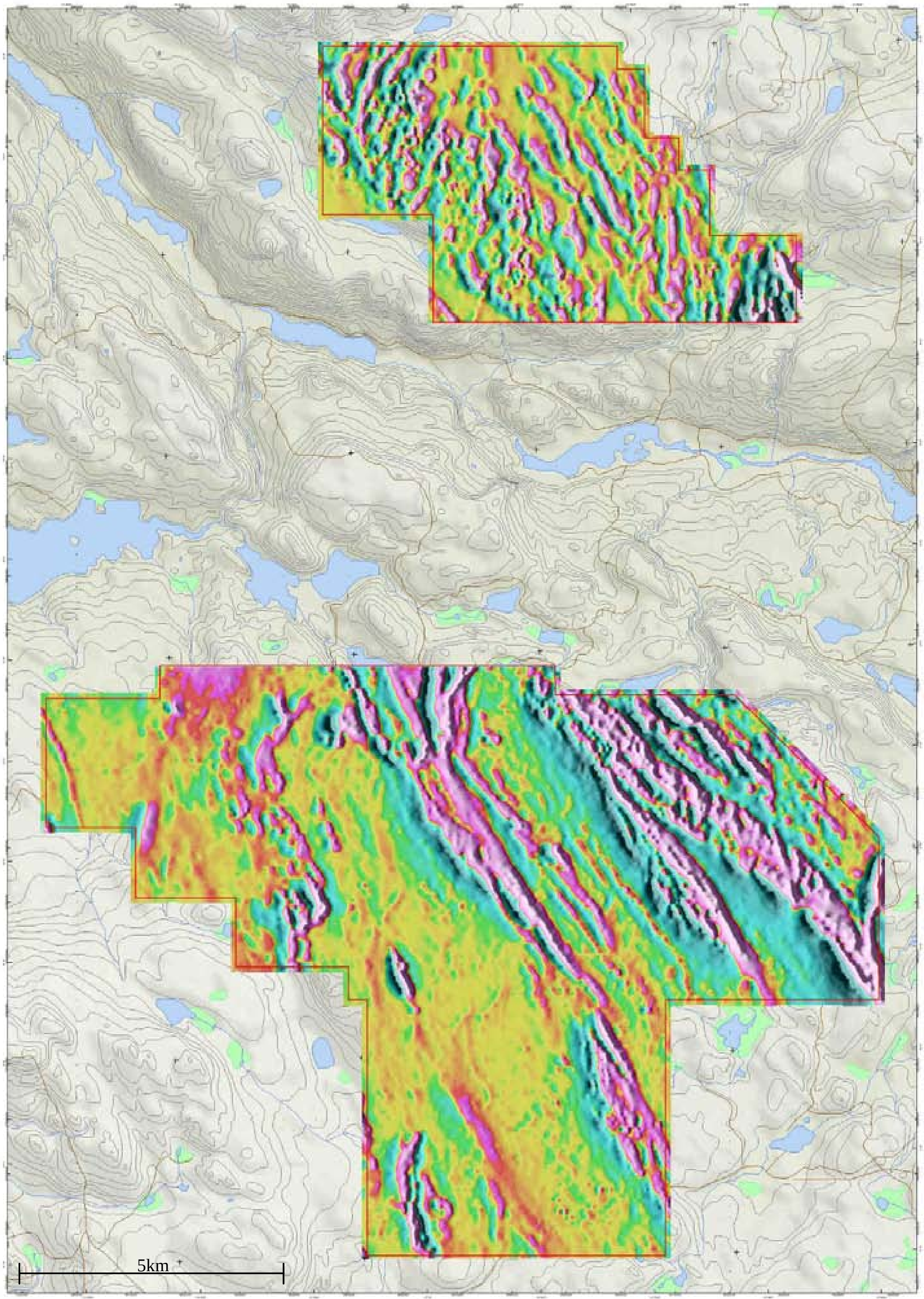

Figure 10 - Shaded image of measured in-line horizontal magnetic (MI-HMG) for the Prouton and Jessica Lake properties.

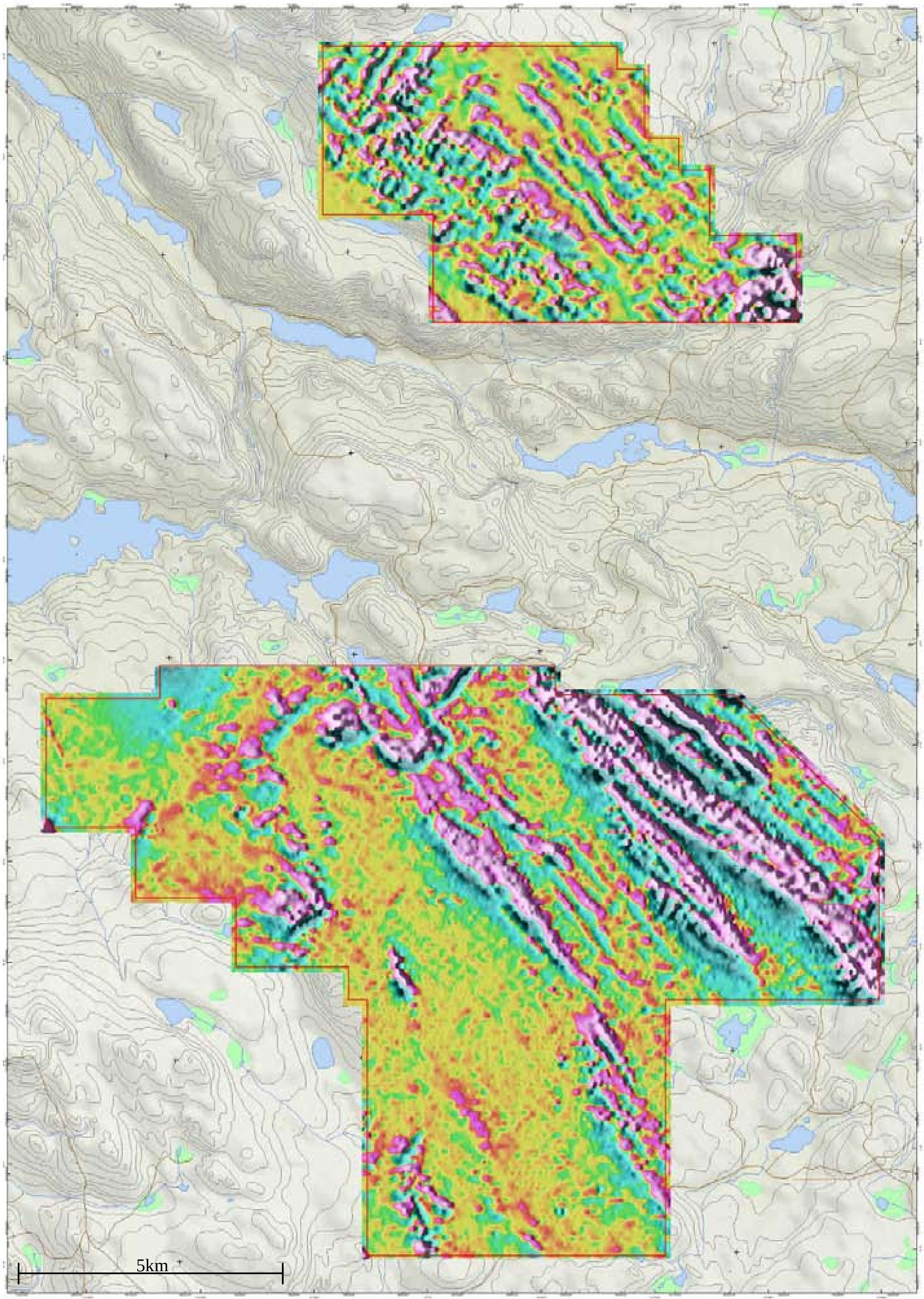

Figure 11 - Shaded image of the measured cross-line horizontal magnetic gradient (MC-HMG) for the Prouton and Jessica Lake properties.

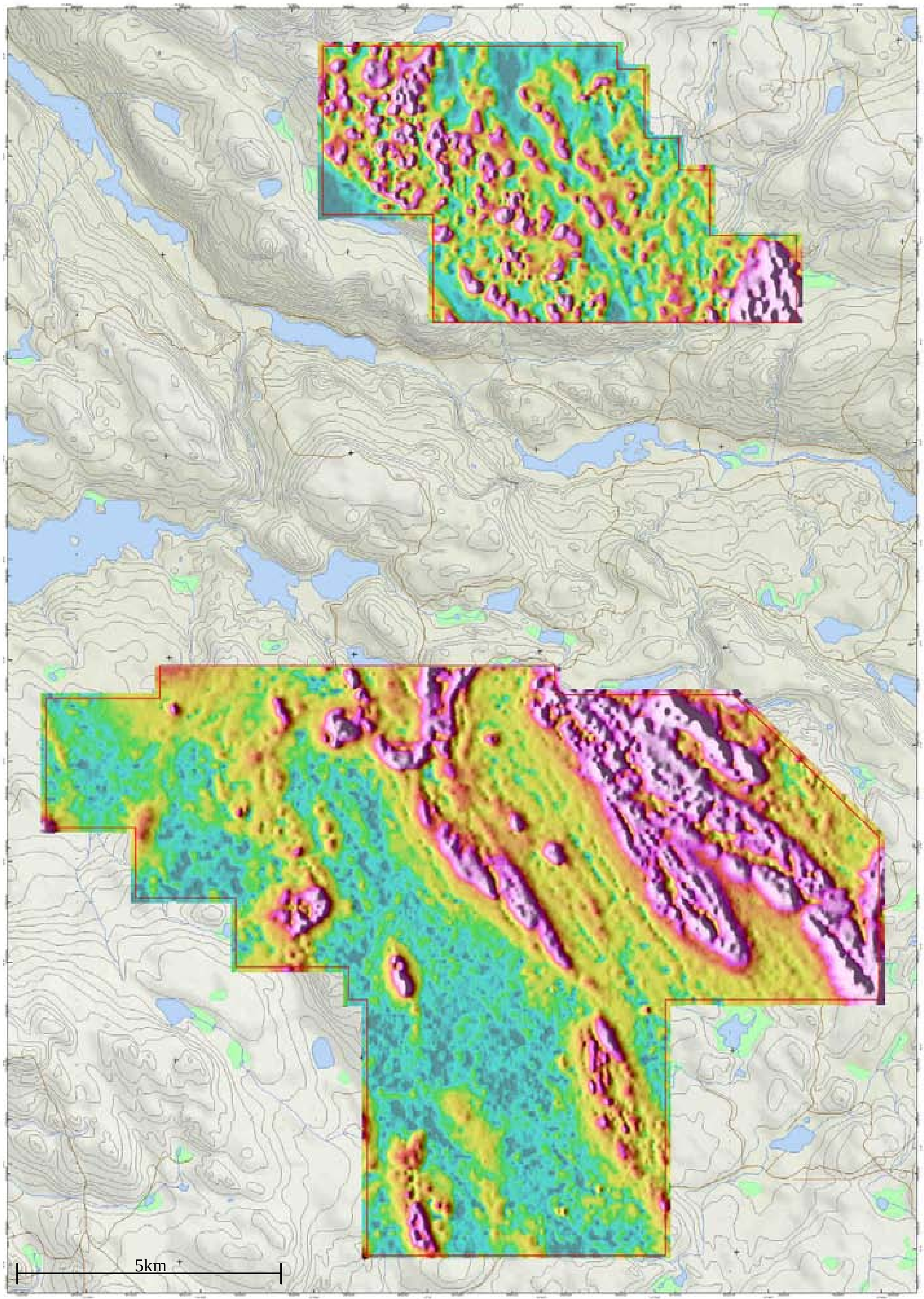

Figure 12 - Shaded image of the magnetic analytical signal (ASIG) for the Prouton and Jessica Lake properties.

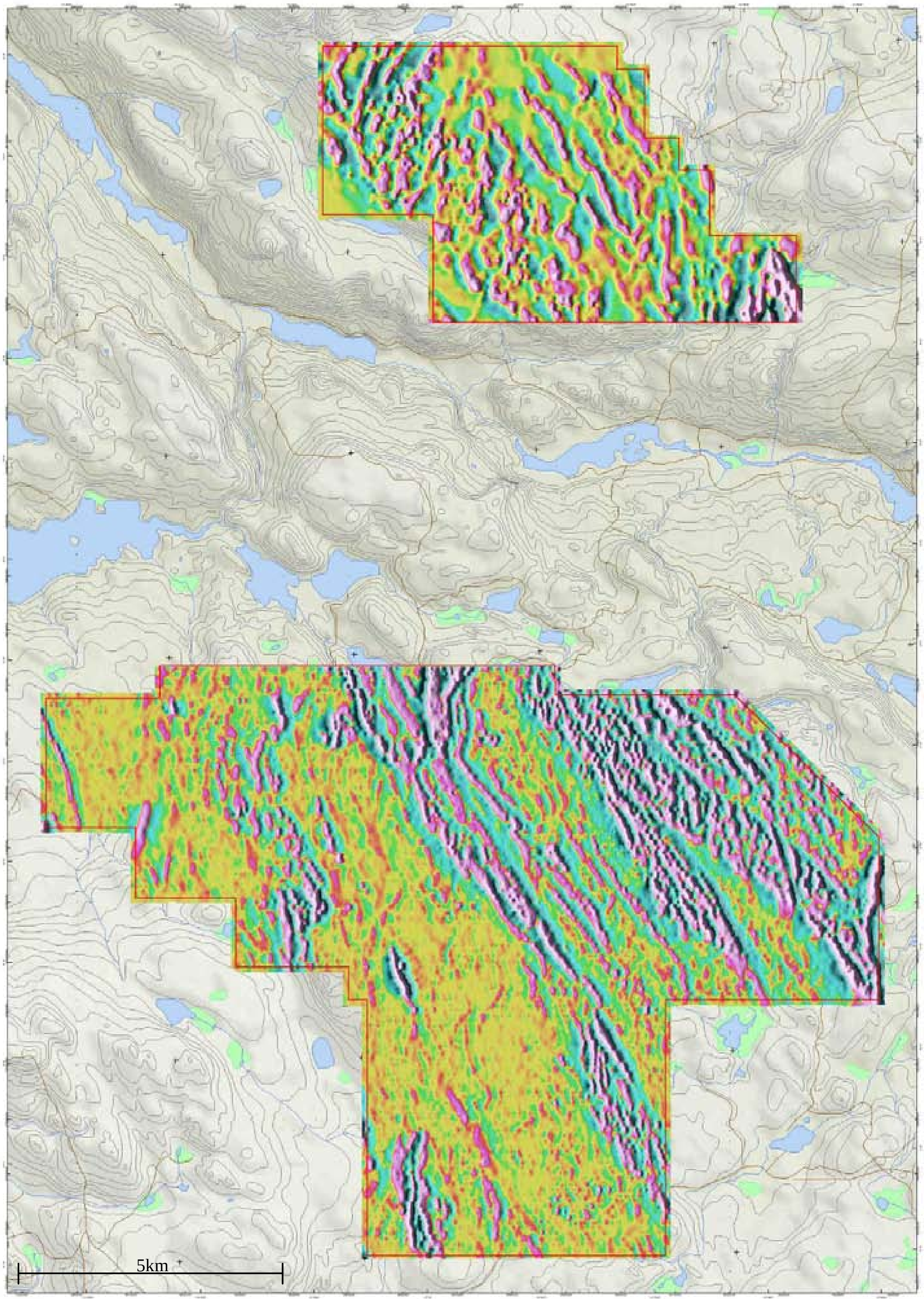

Figure 13 - Shaded image of the 2nd vertical gradient of the TMI for the Prouton and Jessica Lake properties.

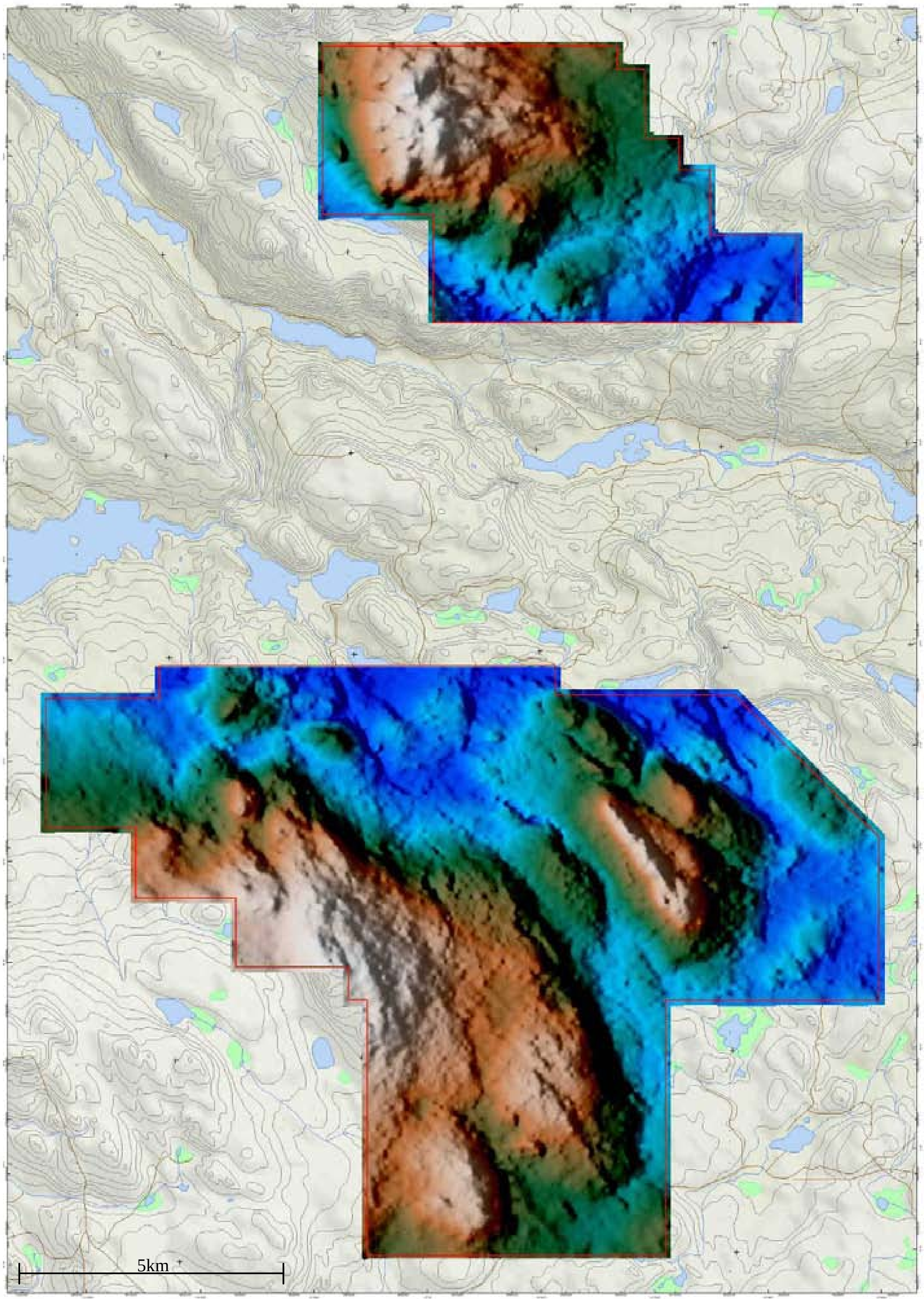

Figure 14 - Shaded image of the digital terrain model (DTM) for the Prouton and Jessica Lake properties.

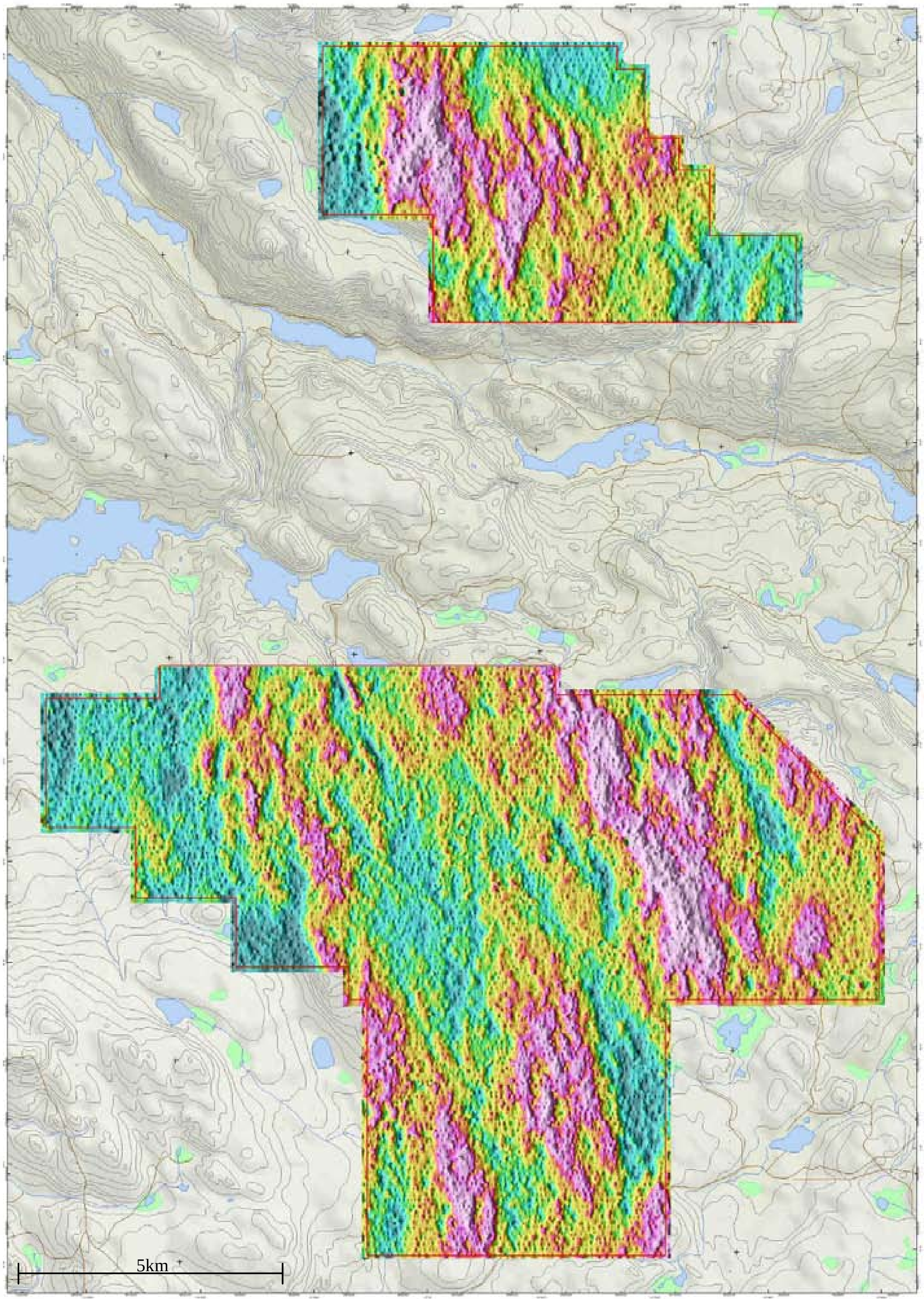

Figure 15 - Shaded image of the VLF-EM quadrature component for station #2 (24.8 kHz) for the Prouton and Jessica Lake properties.

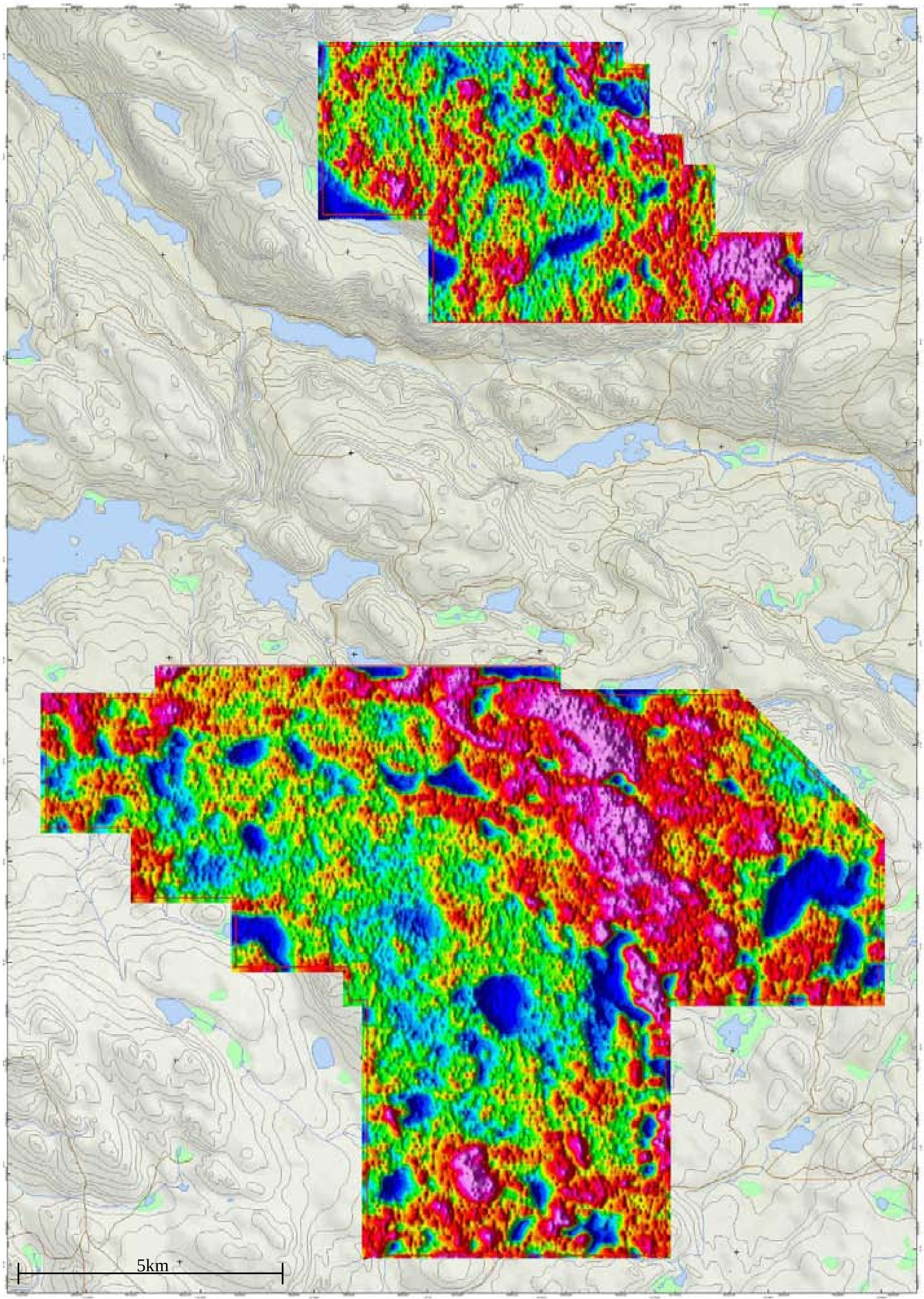

Figure 16 - Shaded image of the gamma ray spectrometry (GRS) total count for the Prouton and Jessica Lake properties.

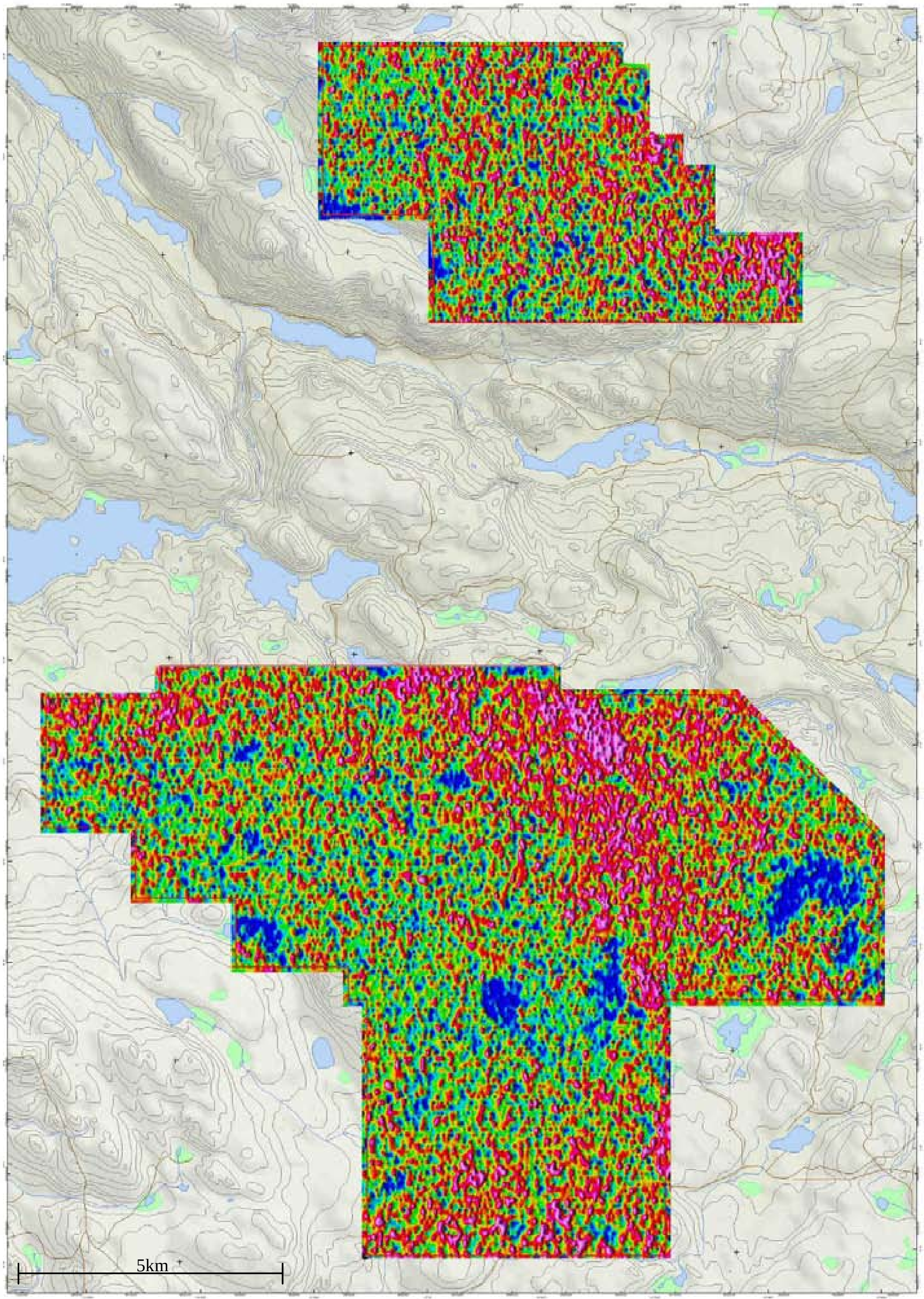

Figure 17 - Shaded image of the gamma ray spectrometry (GRS) Uranium counts for the Prouton and Jessica Lake properties.

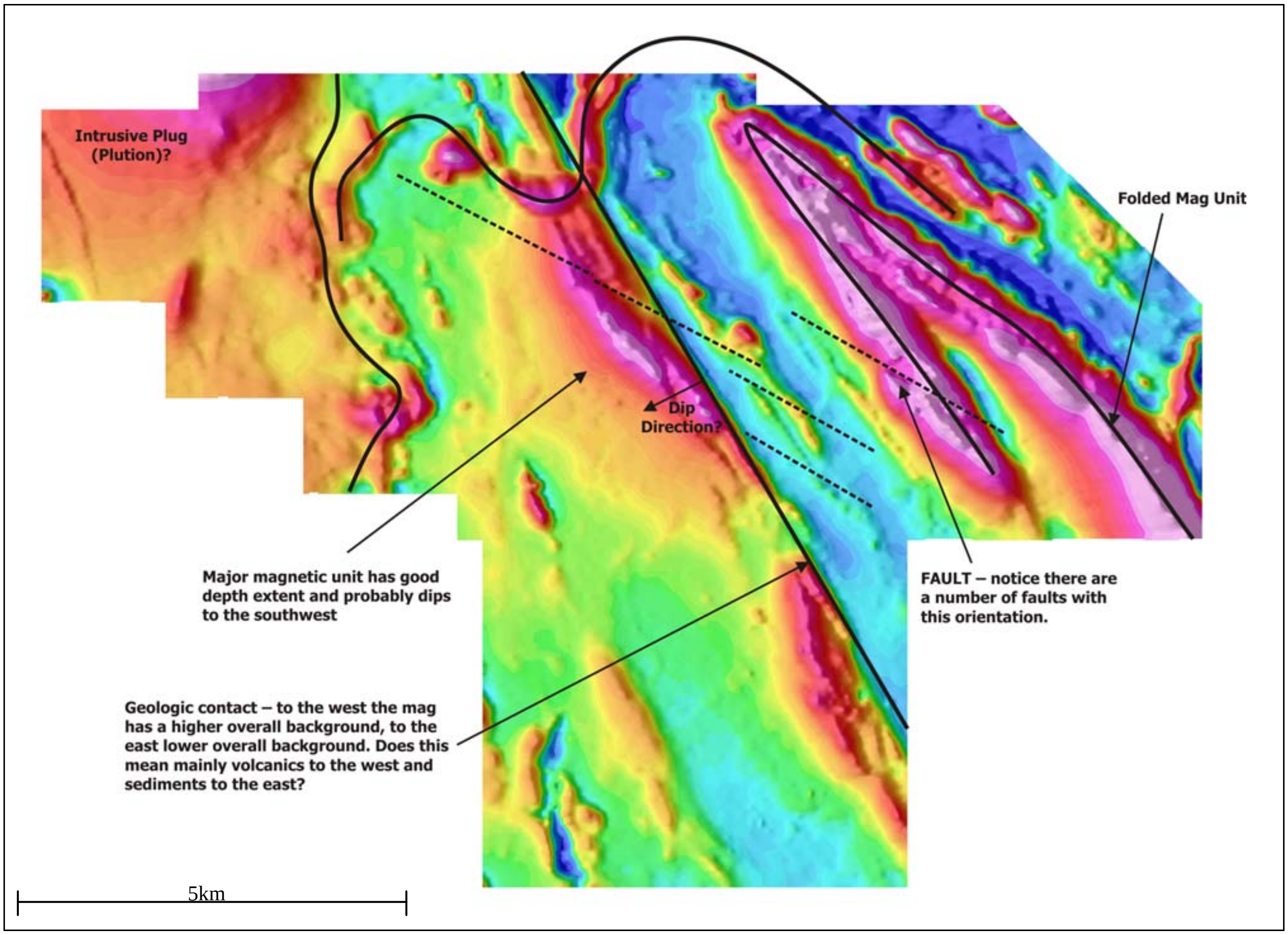

Figure 18 - Total Magnetic Intensity with fold and fault interpretation

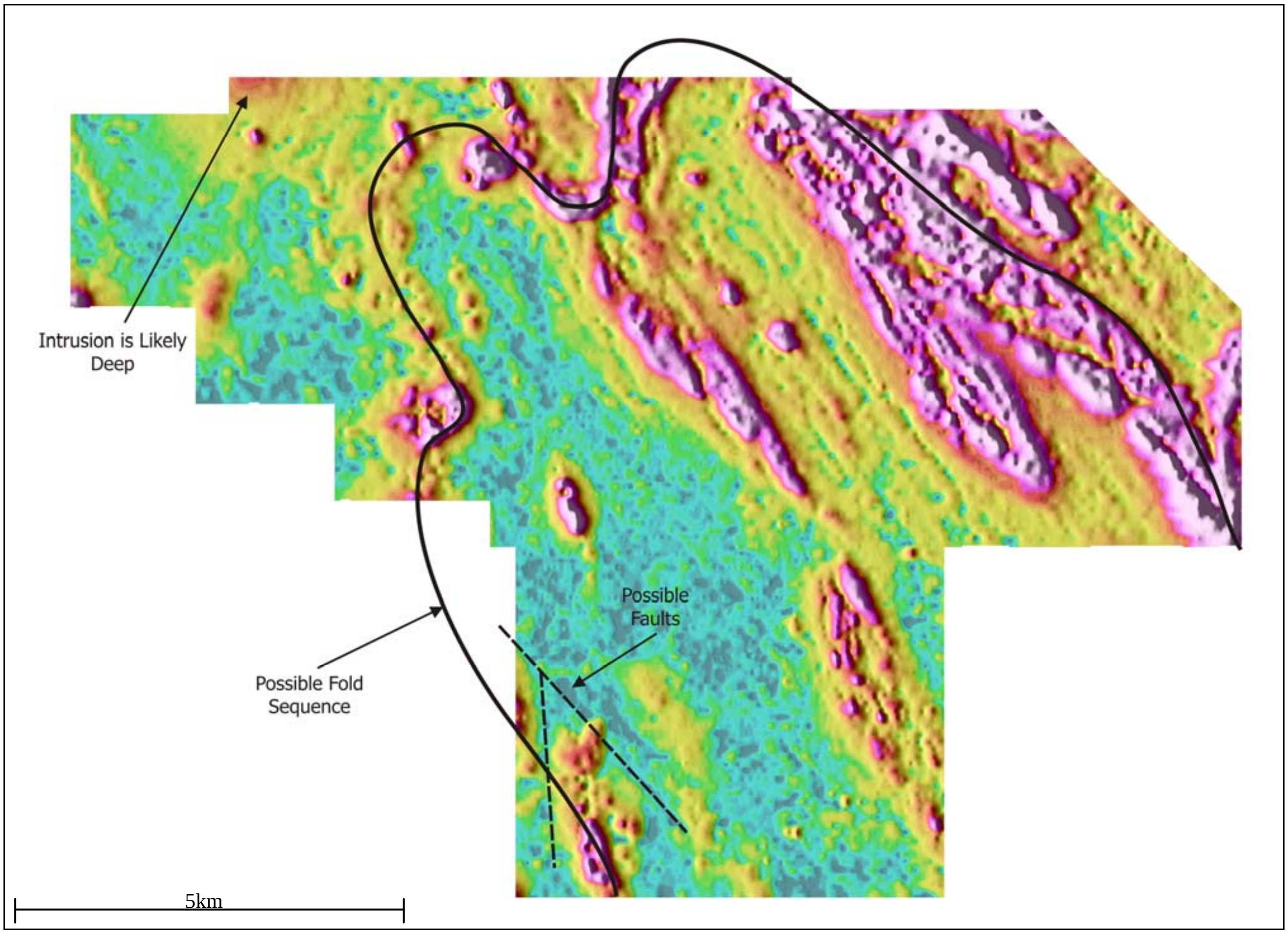

Figure 19 - Magnetic Analytical Signal interpretation with complex fold structure

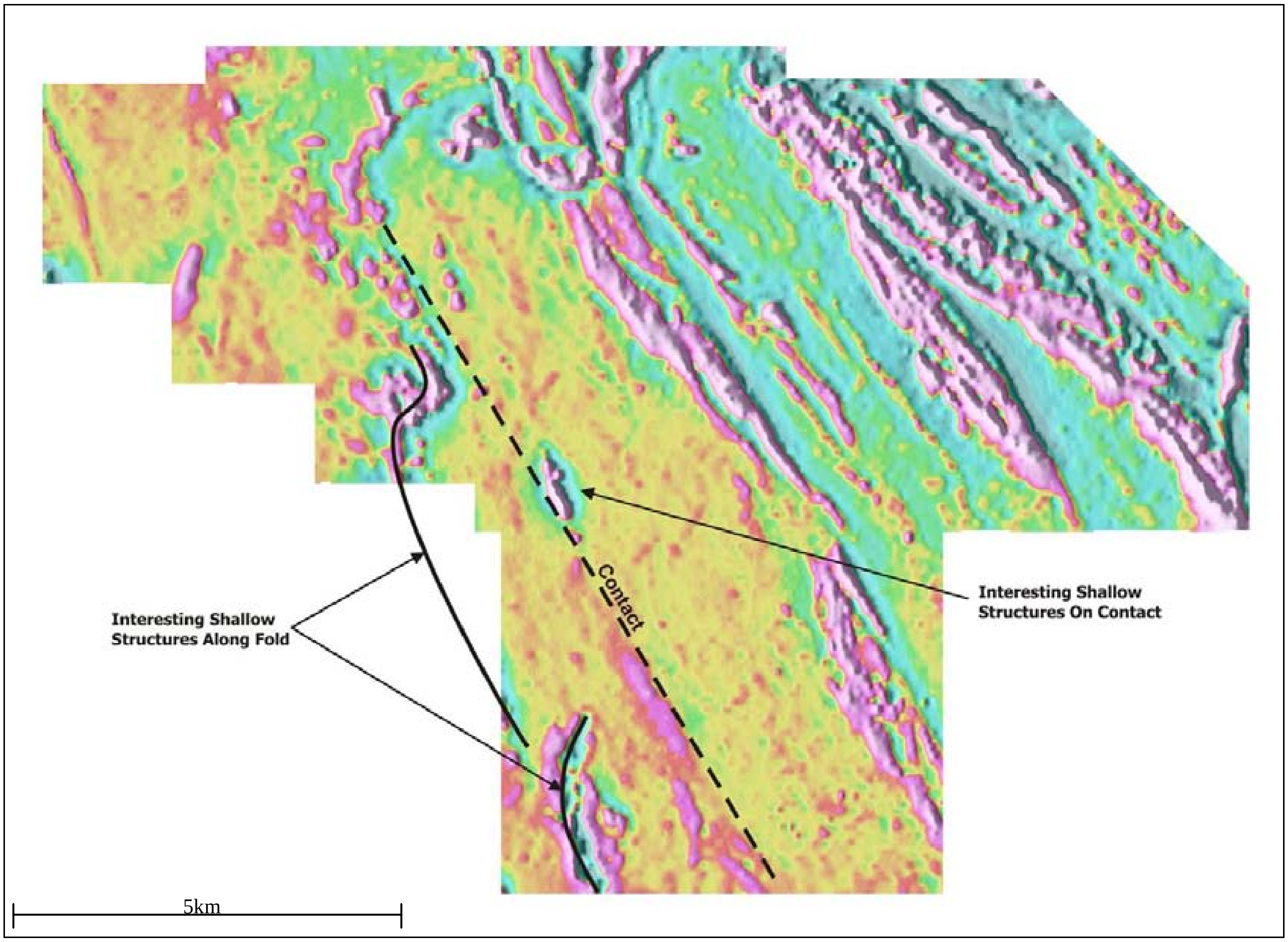

Figure 20 - Measured Vertical Magnetic Gradient showing interesting fold structures and major contact zone

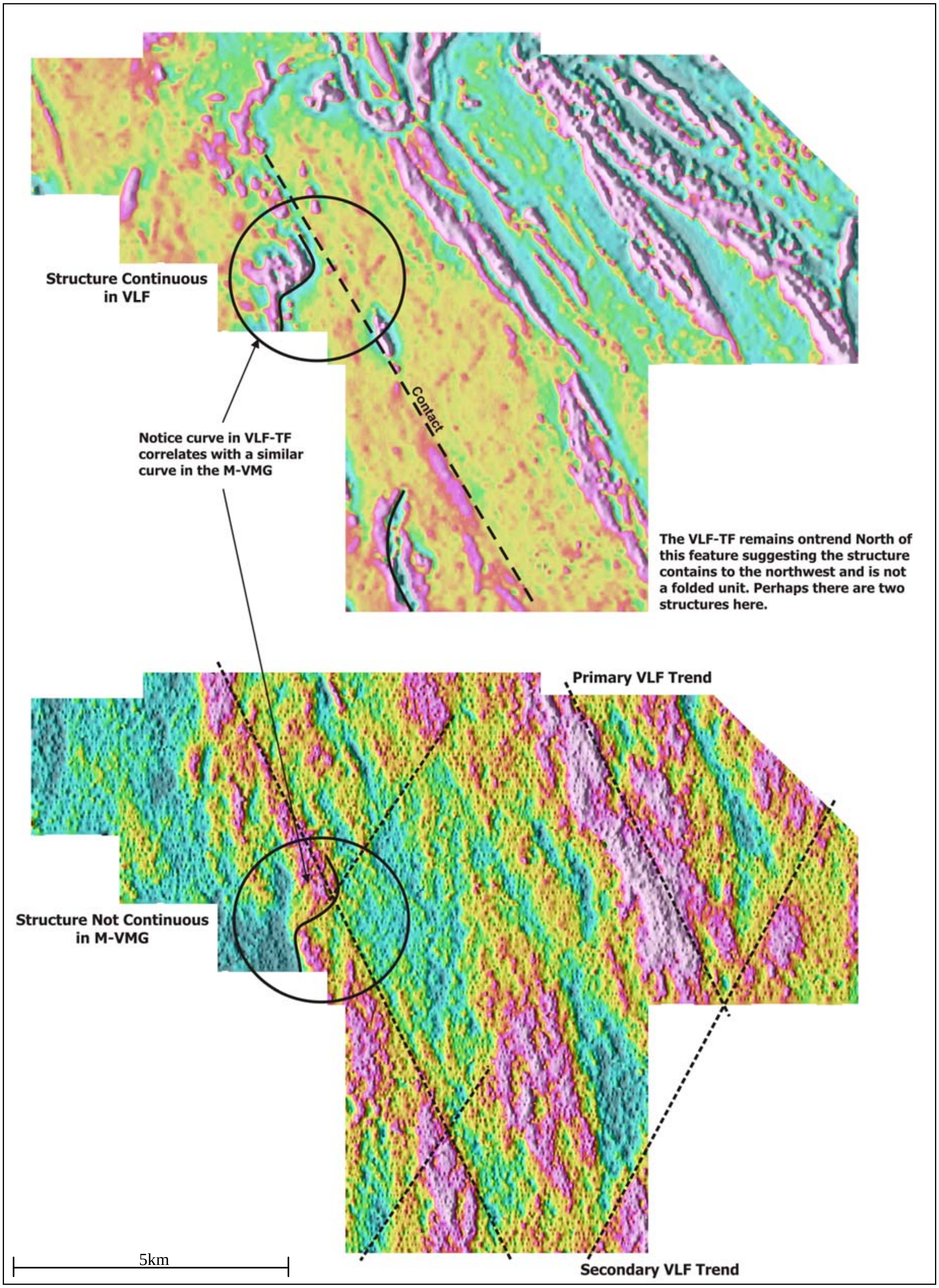

Figure 21 - Comparison between VLF Total Field and Measure Vertical Magnetic Gradient

APPENDIX A

STATEMENT OF QUALIFICATION

Certificate of Author

I, Sean Scrivens do hereby certify that:

I am a graduate of the Carleton University and hold a BSc (with honors) in Computational Geophysics (2004).

I have been a practicing geophysicist since 2003, as a Field Geophysicist (2003-2005), as a Staff Geophysicist (2005-2007), as a Project Manager (2008) along with various consulting project (2008)

I am currently the processing manager of Canadian Mining Geophysics Ltd.

I live at 7696 Fairhurst Dr., Kemptville, ON, K0G 1J0.

I was responsible for the acquisition and supervision of the data collected for this technical report.

Dated at Kemptville, Ontario this 2nd day of July, 2008.

APPENDIX B
LIST OF SURVEY OUTLINE POINTS

The following survey polygon was produced by CMG and approved by the Client.

The Datum is NAD-83.

The Projection is UTM, Zone 10 North.

Jessica Lake

Northing	Easting
581531	5802356
588785	5802356
588790	5801818
592082	5801818
594740	5799204
594740	5796200
590816	5796200
590816	5791500
585340	5791500
585340	5796200
584990	5796200
584990	5796810
582926	5796810
582926	5798084
581083	5798084
581083	5799379
579436	5799379
579436	5801752
581531	5801752

Prouton Lake

Northing	Easting
584521	5813750
589928	5813750
589928	5813322
590430	5813322
590430	5812065
591059	5812065
591059	5811478
591631	5811478
591631	5810263
593228	5810263
593228	5808670
586544	5808670
586544	5810650
584521	5810650

APPENDIX C
LIST OF DATABASE COLUMNS

Geosoft GDB Data Format

Channel Name	Description
x	X positional data (metres – NAD83, UTM zone 10 north)
y	Y positional data (metres – NAD83, UTM zone 10 north)
lon_wgs84	Longitude data (degree – WGS84)
lat_wgs84	Latitude data (degree – WGS84)
Flight	Flight number
Lines	Line number
Date	Flight date
radalt	Radar altimeter height above ground (metres - AGL)
gpstime	GPS time
bheight	Bird height above ground (metres – AGL)
DTM	Digital Terrain Model (metres – ASL)
Basemag	Base station magnetic diurnal (nT)
Mag1	Sensor 1 - Total Magnetic field data (nT)
Mag2	Sensor 2 - Total Magnetic field data (nT)
Mag3	Sensor 3 - Total Magnetic field data (nT)
TMI	Leveled Total Magnetic field data (nT)
TMI_2VD	2^{nd} Derivative of TMI (nT)
ASIG	Magnetic analytical signal (nT)
C_VMG	Calculated Vertical Magnetic Gradient
MC_HMG	Measured Cross-Line Horizontal Magnetic Gradient
MI_HMG	Measured In-Line Horizontal Magnetic Gradient
M_VMG	Measured Vertical Magnetic Gradient
ASIG	Calculated Analytical Signal
VLF_TF	VLF Total Field (24.8 khz)
VLF_QD	VLF Quadrature (24.8 khz)
VLF_IP	VLF In-Phase (24.8 khz)
Total_Counts(_Up)	GRS total counts downward and (Upward) looking
K(_Up)	GRS potassium counts downward and (Upward) looking
Th(_Up)	GRS thorium downward and (Upward) looking
U(_Up)	GRS uranium downward and (Upward) looking
Conc_TC	GRS total count concentrations
Conc_K	GRS potassium concentrations
Conc_Th	GRS thorium concentrations
Conc_U	GRS uranium concentrations

APPENDIX D
STATEMENT OF COSTS

Date	Item	Invoice	Total
08-Apr-08	CMG Mag Grad Survey	2008-002-001	$41,112.75
07-May-08	CMG Mag Grad Survey	2008-002-002	65,780.40
24-May-08	CMG Mag Grad Survey	2008-002-003	56,862.75
22-July-08	CMG Mag Grad Survey	2008-002-004	24,950.10
Total	**CMG Mag Grad Survey**		**$188,706.00**