

MAGNA NORTH GOLD LTD
TOTAL MAGNETIC FIELD SURVEY
SCROGGIE CREEK,
DAWSON MINING DISTRICT, YUKON TERRITORY

Georges Belcourt
AURORA GEOSCIENCES LTD.

CLAIMS

ODE 50-64

P19586 - P19600

Location: 63° 07'N, 138° 36'W
NTS: 115 0/2
Mining District: Dawson Mining District, YT
Date: December 12, 2005

SUMMARY

A total magnetic field survey was conducted on the Scroggie Creek Property for Magna North Gold Ltd. In order to locate detrital magnetic concentrates associated with placer gold deposits. The survey area is located along Scroggie Creek, 110 km SSE of Dawson City, Yukon. The survey was conducted on a virtual Grid guided using GPS and a magnetic compass. The survey was conducted between October 13th and October 16th. A total of 6.325 line-km was surveyed on 50m line spacing, an additional 0.875 km of base line was also surveyed for levelling purposes. Due to the grid conditions around the open water, it was not feasible to survey on the creek. The magnetic survey singled out the presence of magnetic high anomalies with the highest anomaly centred around 620457E, 7000651N. Some smaller magnetic highs were also resolved on the south east of the of the grid block. It is recommended the highest magnetic anomaly be pitted to test for concentrations of gold that may be associated with the magnetic minerals in this area. Expansion of the grid to the SE and further investigation of the broad magnetic high, which is possibly associated with detrital or weak dipole clusters is strongly recommended.

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	LOCATION AND ACCESS	1
3.0	PROPERTY	1
4.0	PHYSIOLOGY & REGIONAL GEOLOGY	1
5.0	SURVEY GRID	3
6.0	PERSONNEL AND EQUIPMENT	3
7.0	SURVEY SPECIFICATIONS	4
8.0	MAGNETIC FIELD THEORY	4
9.0	RESULTS	4
10.0	DISCUSSION & RECOMMENDATIONS	5
	REFERENCES CITED	6
	APPENDIX A. CERTIFICATE	7
	APPENDIX B. SURVEY LOG	9
	APPENDIX C. STATEMENT OF EXPENDITURES	11

LIST OF FIGURES

Figure 1. Property location	Back pocket
Figure 2. Grid location	Back pocket
Figure 3. Regional Geology	Back pocket
Figure 4. Total magnetic field contour map	Back pocket

1.0 INTRODUCTION

Aurora Geosciences Ltd. was retained by Magna North Gold to conduct ground total magnetic field surveys on the Scroggie Creek Placer Property. A total of 7.2 line-km were surveyed. The surveys were conducted on October 13 to 16, 2005 to locate magnetite bearing pay streaks along Scroggie Creek. This report describes the surveys performed, data, results and an interpretation.

2.0 LOCATION AND ACCESS

Scroggie Property is located along Scroggie Creek south of Dawson City, Yukon. and is centered at 63E 7' N 138 E 36' W (Figure 1). The surveyed area runs along a swampy valley hemming-in Scroggie creek, hence the crew was mobilized to establish a camp via helicopter from Dawson City. The property is located approximately 110 km SSE of Dawson City and 9 km S of Grizzly Dome.

3.0 PROPERTY

The Scroggie Creek Placer Property consists of the following claims staked under the Yukon Pacer Mining Act in the Dawson Mining District¹. Claim information is summarized below:

<u>Claim Name</u>	<u>Record Number</u>	<u>Owner</u>	<u>Expiry Date</u>
ODE 50-53	P19586 - P19589	Allen Radford	October 30, 2008
ODE 54-59	P19590-P19595	Allen Radford	October 30, 2009
ODE 60-64	P19596 - P19600	Allen Radford	October 30, 2010

Claim locations as shown on government claim maps and the location of the survey grid are shown in Figure 2.

4.0 PHYSIOLOGY AND REGIONAL GEOLOGY

The property and survey grid area are in the Klondike Plateau at elevations ranging from

¹ Claim information from www.yukonminingrecorder.ca on Dec. 6, 2005

1550 to 1700 feet. The area is subject to continental climatic conditions with short, hot, generally dry summers and cold winters. Temperatures range from -20 to -55[°]C during the winter and from 10 to 30[°]C during the in the summer.

The Scroggie Creek Property is located in the Yukon Tanana Terrane of the northern Cordillera. The regional geology is shown in Figure 3 and rock unit lithologies are briefly summarized in Table 1. (Gordey et al., 2003).

Table 1. Stratigraphy

Rock unit	Lithology
Nisling Range Suite Granites ETqN	leucocratic, biotite granite; miarolitic alaskite; saccharoidal textured, mafic-poor biotite granite; biotite-hornblende granite to leucocratic granodiorite with sparse, white, alkali feldspar phenocrysts; biotite quartz monzonite (Nisling Range Suite, Nisling Range Alaskite, Coffee Creek Granite, Annie Ned Granite)
Long Lake suite Granites E JL	mostly felsic granitic rocks (q) but locally grading to syenitic (y)
Pelly Gneiss suite DMqPW	foliated equigranular medium-grained muscovite quartz monzonite; moderately to strongly foliated K-feldspar augen-bearing quartz monzonitic to granitic gneiss (S. Fiftymile Batholith, Mt. Burnham Orthogneiss,)
Nasina Suite Quartzite DMN3	quartzite, micaceous quartzite, quartz muscovite (+/-chlorite; +/- feldspar augen) schist, and minor metaconglomerate and metagrit as in (1), but may locally include significant Nisling Assemblage

5.0 SURVEY GRID

Traditional grid was not established nor was a base line visible. The alternative grid was imposed with GPS by establishing a non linear base line which tracks to the east side of the creek and was chained at 50m spacing. The lines were oriented on UTM east-west lines orthogonal to the orientation of the base line on the map provided. The stations along the lines were chained using a hip chain and marked using a flagging tape at 10m intervals in the thick bush and 20m interval in the open. The grid was surveyed in two parts due to lack of access to the west side of the creek. The swampy conditions, deep wide creek posed difficult conditions. The irregular shape of the survey block is mainly dictated by the linearity of the base line.

6.0 PERSONNEL AND EQUIPMENT

The survey was conducted by the following personnel:

Lebole Monagen	Crew chief, Junior Geophysicist
Andy Sewap	Field technician

The crew were equipped with the following instruments and equipment:

Field magnetometer: 2 - Gem GSM-19T proton precession magnetometer.

Base magnetometer: 1 - Gem GSM-19T proton precession magnetometer.

Data processing: Intel centrino Toshiba laptop.
Data processing was facilitated with Geosoft high quality processing facility and proprietary data conversion software.

Other equipment: 1 - satellite phone
2 - man camp
1 - generator
2 - Garmin 72 non-differential GPS receivers

The geophysical crew spent a total of 3 man-days on the property. The geophysical survey log is attached as Appendix B.

7.0 SURVEY SPECIFICATIONS

The magnetometer survey was conducted according to the following specifications:

Station spacing: 5 m nominal, location of each station recorded by GPS.

Base station magnetometer Installed on the survey grid at 620339E, 7000868N near the camp and cycled at 5 s for the rest of the survey to attain accuracy. Variations exceeding 10 nT over the 5s interval were rejected.

Synchronization: Base and rover mags were synchronized daily to GPS time (UTC).

8.0 MAGNETIC FIELD THEORY

Magnetic field theory is well described in standard texts (eg. Telford *et. al.* 1990). In a placer setting, magnetite derived from bedrock weathering is concentrated in the main channel of a creek or river (thalweg) where the water flow has the highest velocity and greatest turbulence. As a result, minerals with high specific gravity (magnetite, ilmenite, gold, etc.) are preferentially concentrated in this region of the stream bed as material with lower specific gravity is winnowed from the sediment. High concentrations of “black sand” (magnetite, ilmenite, chromite) are often recorded in auriferous pay streaks where the stream bed has remained relatively immobile for some period, permitting hydraulic concentration to build up a significant volume of these minerals.

The materials comprising black sand are magnetically susceptible. Magnetite has a very high magnetic susceptibility of $1200-19200 \times 10^{-3}$ SI units, ilmenite ranges from $300-3500 \times 10^{-3}$ SI units, $3-110 \times 10^{-3}$ SI units. Average magnetic susceptibilities for sedimentary, igneous (excluding ultramafic) and metamorphic rocks are 0-18, 3-160 and 0-70 $\times 10^{-3}$ SI units and the magnetic susceptibility of fluvial sediments is in the range $0-2 \times 10^{-3}$ SI units. There is consequently a significant susceptibility contrast between gravels with elevated concentrations of black sand and both bedrock and average gravels.

9.0 RESULTS

Digital data is appended to this report on disk. The magnetic field data is in the following format:

Line	X	Y	Station	Rawmag	Corr	Corr_mag
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where "X" and "Y" are the station coordinates in NAD 83 UTM, "Rawmag" is the raw total magnetic field reading from the rover unit, "Corr" is the correction applied from the base station data, "Corr_mag" is the "Rawmag" plus "Corr" and the "Level_mag" is the "Corr_mag" levelled from each operator, each day. "Finalmag" is the final data set used, a non-linear filter was applied to the data in order to remove instrument spikes. A plot at 1:2000 is appended to this report in the back pocket:

Figure 4. Total magnetic field contour map

10.0 DISCUSSION & RECOMMENDATIONS

The total magnetic field survey identified several significant features on the property. Data collected was levelled at 57350 nT. The total field ranges from 57350 nT to approximately 57520 nT, with areas of magnetic high over 57420 nT. The strongest anomaly resides between L150S and L400S. Magnetic highs are also visible on the south east outside the valley. This anomalies exhibits characteristics of detrital or weak dipole clusters.

It is recommended that the broad magnetic high be test pitted to test for concentrations of gold that may be associated with magnetite in the area. If favourable results occur, further pitting and testing for gold should be completed over additional magnetic high targets visualized between L750S and L550S. An expansion of the magnetics survey towards the southeast is strongly recommended.

Respectfully submitted,

AURORA GEOSCIENCES LTD.

Georges Belcourt, P.Geoph.
Geophysicist

References Cited

Telford, W.M., L.P. Geldart and R.E. Sheriff (1990) Applied Geophysics (2nd Edition) New York: Cambridge University Press.

Gordey, S.P., Makepeace, A.J., 2003: Yukon digital geology, version2.0, S.P. Gordey and A.J. Makepeace (comp.), Geological Survey of Canada, Open File 1749, and Yukon Geological Survey, Open File 2003-9(D)

APPENDIX A. CERTIFICATE

STATEMENT OF QUALIFICATIONS

I, Georges Belcourt, of the City of Yellowknife, in the Northwest Territories, Canada,

HEREBY CERTIFY:

That my address is #44-705 Williams Ave., Yellowknife, N.W.T. X1A 3W9.

That I am a graduate of the University of Saskatchewan in Geophysics:
B.Sc. - The University of Saskatchewan, 1996

That I have been a practising Geophysicist since 1996:

September 1996 - March 1997	Delta Geosciences Ltd. Delta, B.C. Geophysicist
April 1997 to present	Aurora Geosciences Ltd. Yellowknife, N.W.T. Geophysicist

That I am registered as a Professional Geophysicist by The Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories (Registration #1657).

That I am entitled to practice as a Professional Geophysicist in the Northwest Territories and Nunavut.

That I have no direct or indirect interest in MAGNA NORTH GOLD LTD or the ODE claims.

Dated this ____ day of _____, 20__ at Yellowknife, N.W.T.

Georges Belcourt, P. Geoph.

APPENDIX B. SURVEY LOG



AURORA GEOSCIENCES LTD.
NORTH YUKON GRAVITY
JOB MNG-05-01-YT
MAGNA NORTH GOLD LTD.

Period: October 12th - October 16th, 2005

Personnel: Lebole Monagen Crew Chief / Geophysicist
 Andy Sewap Helper

Wed 12 Oct/05 **Mobe**
 Left Whitehorse at 10:15 hrs. Arrived at Dawson at 16:00 hrs. One full load of gear mobed in to Scroggie Property. Arrived at Scroggie at 17:20 hrs. Set up camp and made attempt to locate grid base line. Were unable to locate base line before darkness set in.

Thu 13 Oct/05 **Survey**
 Left camp at 08:00 hrs to locate grid and claim posts. Unable to locate base line or any claim posts. Consulted with Whitehorse office and decision was made to establish a new base line with non-differential GPS and compass. Carried out mag survey for remainder of the day.
 Wx: Cloudy and warm.
 Production: 1.60 km

Fri 14 Oct/05 **Survey**
 Left camp at 08:45 hrs. Mag survey all day, no problems.
 Wx: Cold ~ -10 c.
 Production: 3.90 km

Sat 15 Oct/05 **Survey / Demobe**
 Suveyed until mid afternoon. Tore down mag base stn at 14:55 hrs. Pack up camp at 16:00 hrs. Helicopter arrives for demobe at 17:45 hrs. Arrived back in Dawson at 19:45 hrs. Some data for lines L500E (west side) and L600S (west side) discarded.
 Production: 3.90 km

Sun 16 Oct/05 **Demobe**
 Drive back to Whitehorse.

Production summary:
 Survey: 2 days
 Mobe / demobe: 2 days

APPENDIX C. STATEMENT OF EXPENDITURES

Camp costs

Camp costs & travel	3,000.00
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Geophysical surveys

Survey charges	3,930.00
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Report	2,000.00
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Disbursements

Helicopter:	3,358.52
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Room and Board	160.80
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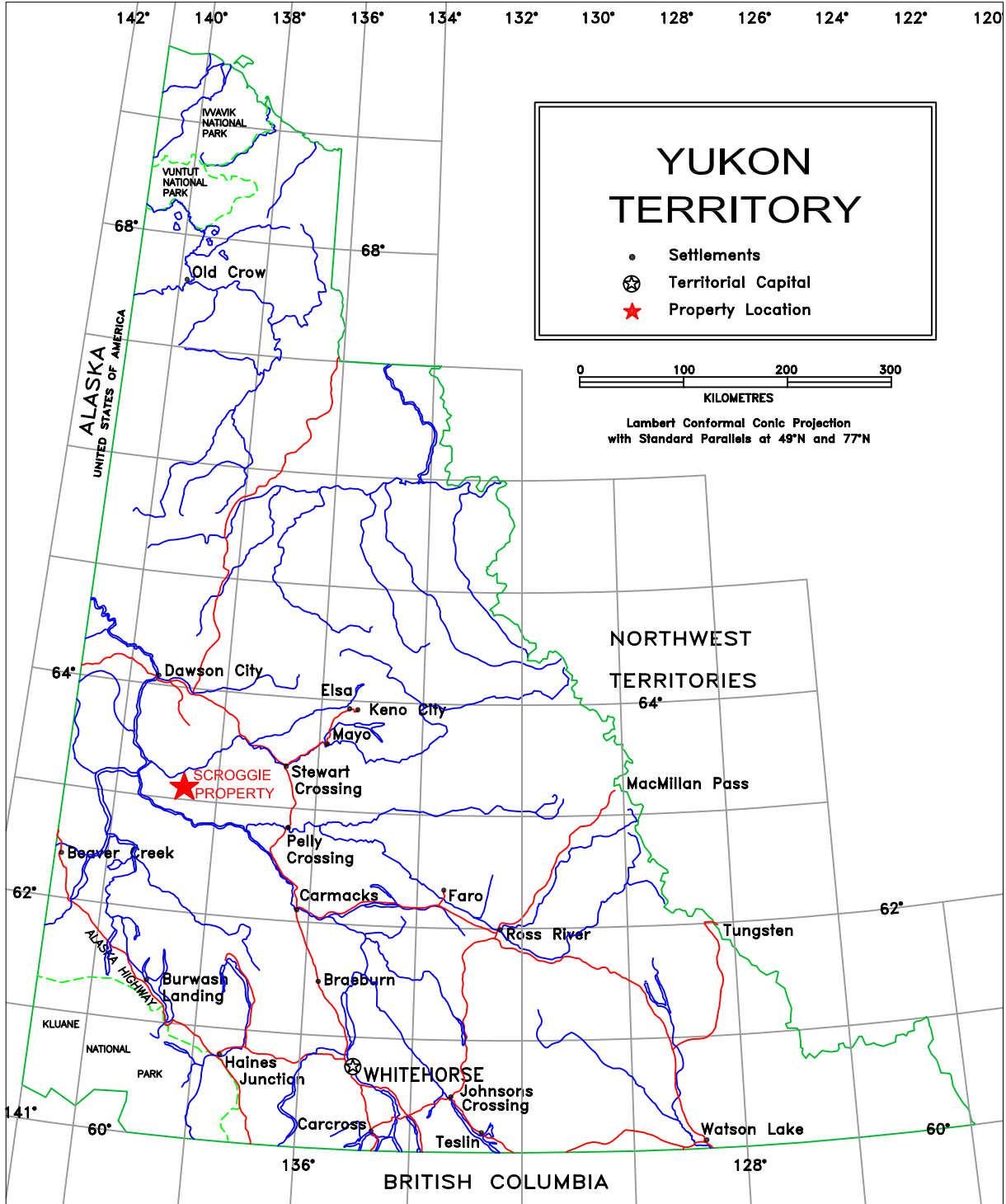
Administration charges	351.93
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GST on Exploration services and admin.	649.74
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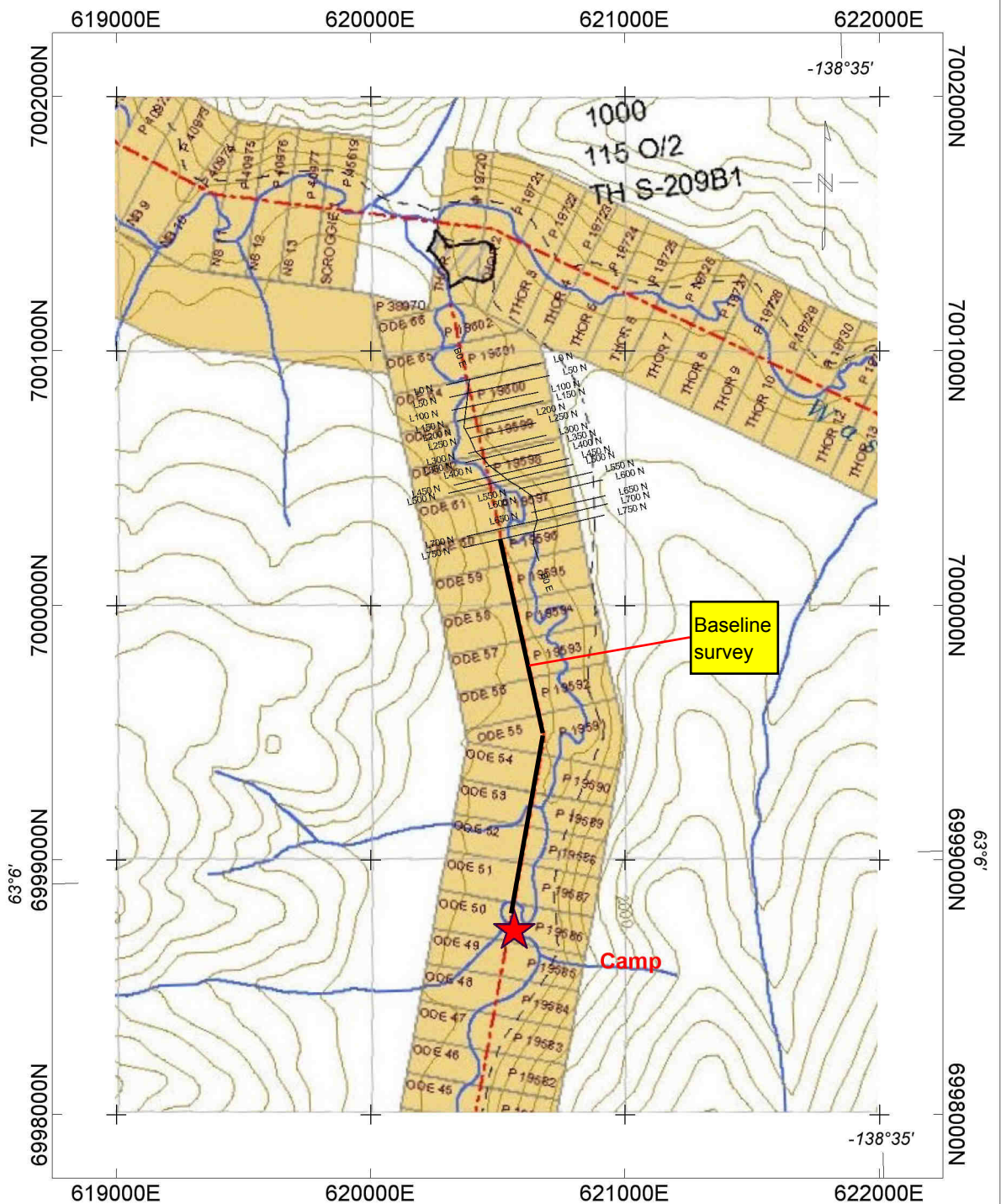
Total project expenses	\$13,450.99
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I certify that these expenses are correct to the best of my knowledge.

Georges Belcourt, P.Geoph.
Geophysicist



MAGNA NORTH GOLD LTD.	SCROGGIE PROPERTY	
PROPERTY LOCATION	MINING DISTRICT: DAWSON	
	NTS: 115 O/02	SCALE 1: 6 000 000
	DRAWN BY: PJ	
Aurora Geosciences Ltd.	DATE: DEC. 14, 2005	FIGURE: 1



MAGNA NORTH GOLD LTD.

**SCROGGIE CREEK PROPERTY
2005 Total Magnetic Field Survey
Figure 2. Claim locations**

NTS: 115 O / 02

Datum: NAD83

Job: MNG-05-01-YT

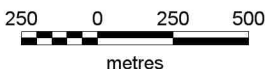
Mining District: Dawson, YT

Projection: UTM Zone 7N

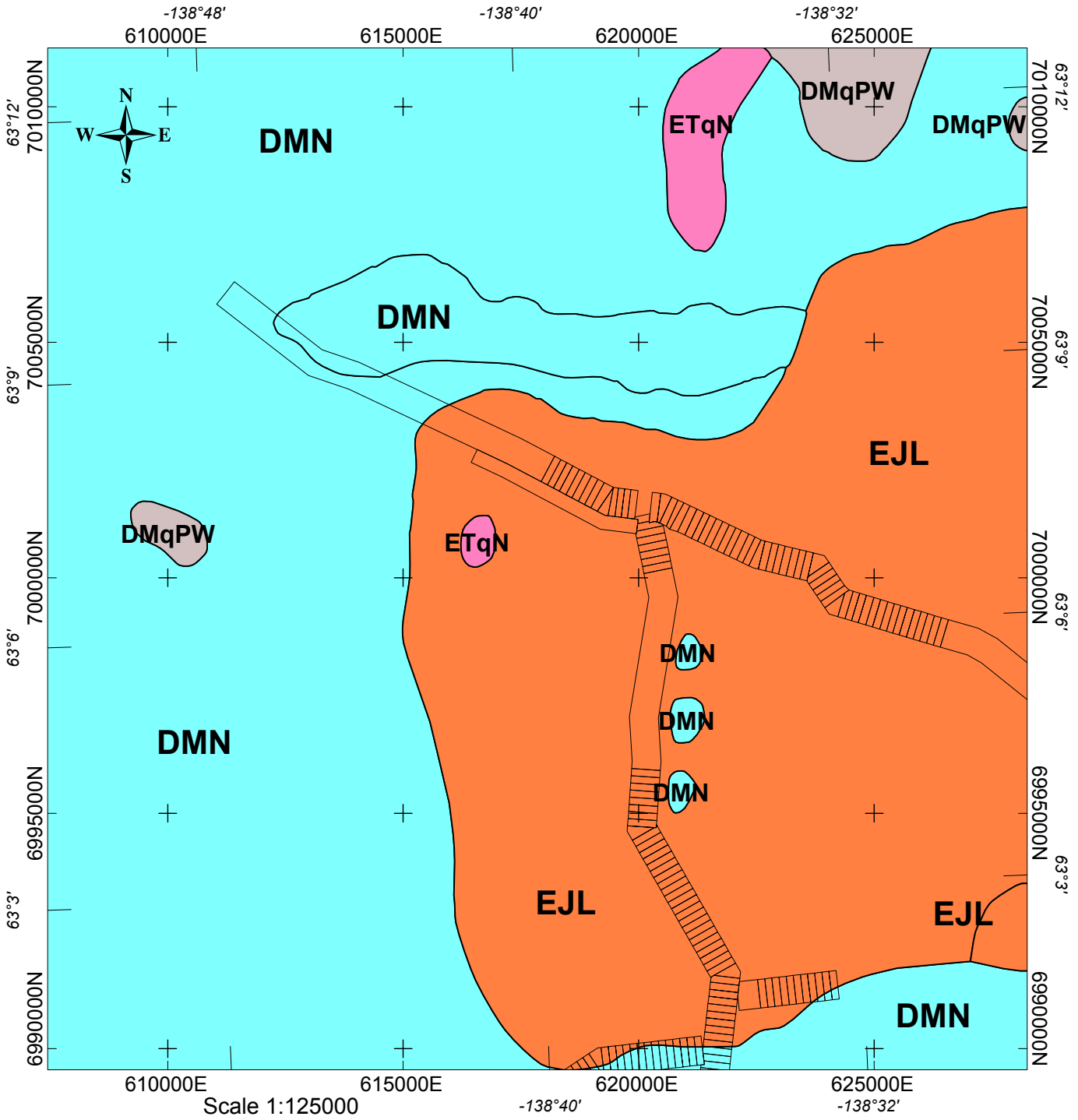
Date: 11 Oct 05

AURORA GEOSCIENCES LTD.

Scale 1:25000



NAD83 / UTM zone 7N

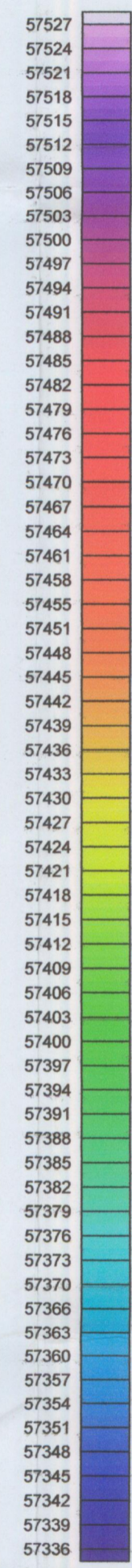
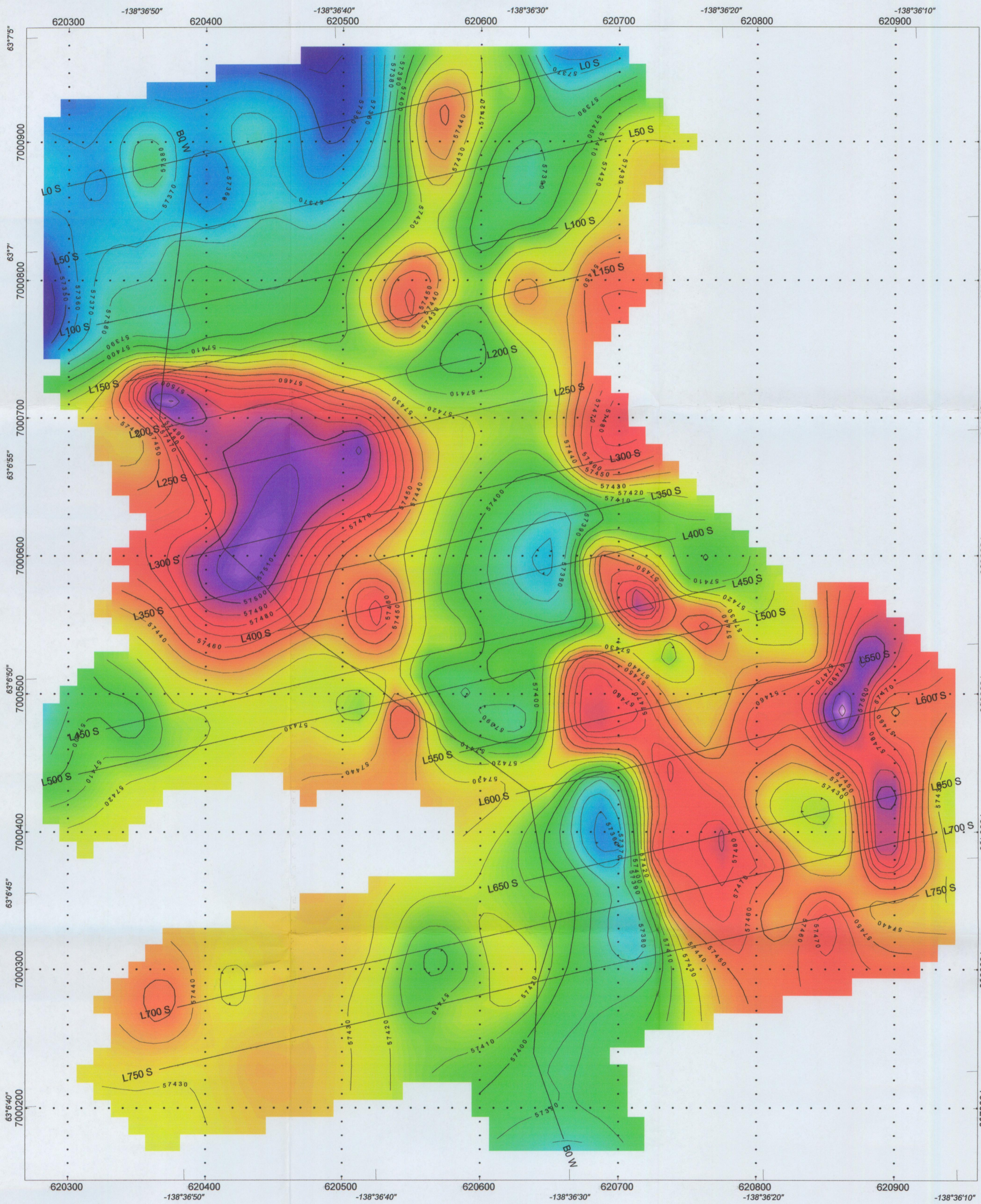


Scale 1:125000
 2500 0
 metres
 NAD83 / UTM zone 7N

LEGEND

- ETqN** Early Tertiary Nising Range Suite Granite
- EJL** Early Jurassic Long Lake Suite Granite
- DMqPW** Devonian to Mississippian Pelly Gneiss Suite
- DMN** Devonian to Mississippian Nasina Suite Quartzite

MAGNA NORTH GOLD LTD.	
SCROGGIE CREEK 2005 GEOPHYSICAL SURVEY FIGURE 3 - REGIONAL GEOLOGY	
NTS: 115002 Datum: NAD83 Date: December 14, 2005	Mining District: Dawson Projection: UTM Zone 7N Job: MNG-05-01-YT
AURORA GEOSCIENCES LTD.	



Total Magnetic Field (nT)

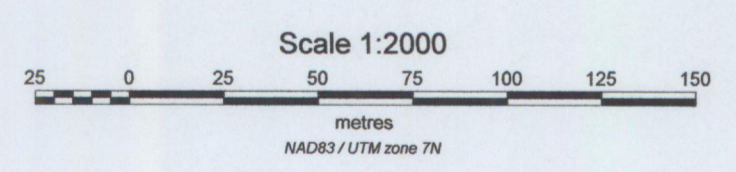
LEGEND

TOTAL FIELD MAGNETICS

CONTOUR INTERVALS (nT)

10	50
250	

REFERENCE FIELD : 60,000 nT
 INSTRUMENT : GEM GSM-19T
 GRIDDING ALGORITHM : GEOSOFTRANGRID
 GRID CELL SIZE : 12.5 m
 GRID HANNING FILTER : 1 PASS(ES)
 DATA FILE : SCROGGIE_MAG.gdb
 OPERATORS : LM
 STATION SEPARATION : 5 m
 LINE-KM SURVEYED THIS SHEET : 7.20 km



MAGNA NORTH GOLD LTD.
SCROGGIE CREEK PROJECT
SCROGGIE GRID
TOTAL MAGNETIC FIELD CONTOURS

YUKON TERRITORY, CANADA
 NTS : 115 O/02
 DATE SURVEYED : OCTOBER, 2005
 CLAIM(S) : ODE 60-64 TAG# : P19595 - P19601
 Map name (Date/Drawn by) : Scroggie_FinalMag.map (DEC. 12, 2005/PJ)

AURORA GEOSCIENCES LTD.