REPORT ON
GEOPHYSICAL WORK

ON

MOB-26
BYER TOWNSHIP

NTS: 42-A/12 PROJ # :

for
FALCONBRIDGE LIMITED

2.30761

OCTOBER 2005

D. LONDRY
TIMMINS GEOPHYSICS LTD.

SUMMARY AND RECOMMENDATIONS

Magnetic and HLEM surveys were carried out on the MOB-26 property for Falconbridge Limited in March 2005.

The HLEM survey outlined one bedrock conductor on the property. It is recommended that this conductor is tested by diamond drilling on Line 800 North.

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INTRODUCTION

During March 2005, magnetic and horizontal loop electromagnetic (HLEM) surveys were run on the MOB-26 property, Moberly Township, for Falconbridge Limited. This work was part of an exploration program which included eight grids in Byers, Reid, Thorburn, Moberly and Robb Townships.

The property is located 39 kilometres northwest of the city of Timmins in the southeast corner of Moberly Township, Porcupine Mining Division (Figure 1(a)). It was accessed by snowmobile along an old bush road which runs west from the Thorburn Logging Road. The grid covers one mining claim which consists of four, 40 acre claim units (Table 1).

The magnetic survey was carried out by the author of this report and the HLEM survey was run by M. Copps and the author of this report.

CLAIM #	# of UNITS	RECORDING DATE	RECORDED HOLDER	DESCRIPTION	TOWNSHIP
P 3007052	4	Nov 05, 2003	Falconbridge Limited		Moberly

Table 1 : Property Description

GENERAL GEOLOGY

The geology of Moberly Township is given on regional geological map 2205 (D. R. Pyke, etal 1972) at a scale of 1 inch to 4 miles and on preliminary map 3379 (Ayer, etal, 1998) at a scale of 1:100,000.

The regional geology maps suggest that the MOB-26 property is underlain by mafic to intermediate volcanics. All of the rocks in the area are cut by north northwest striking diabase dikes.

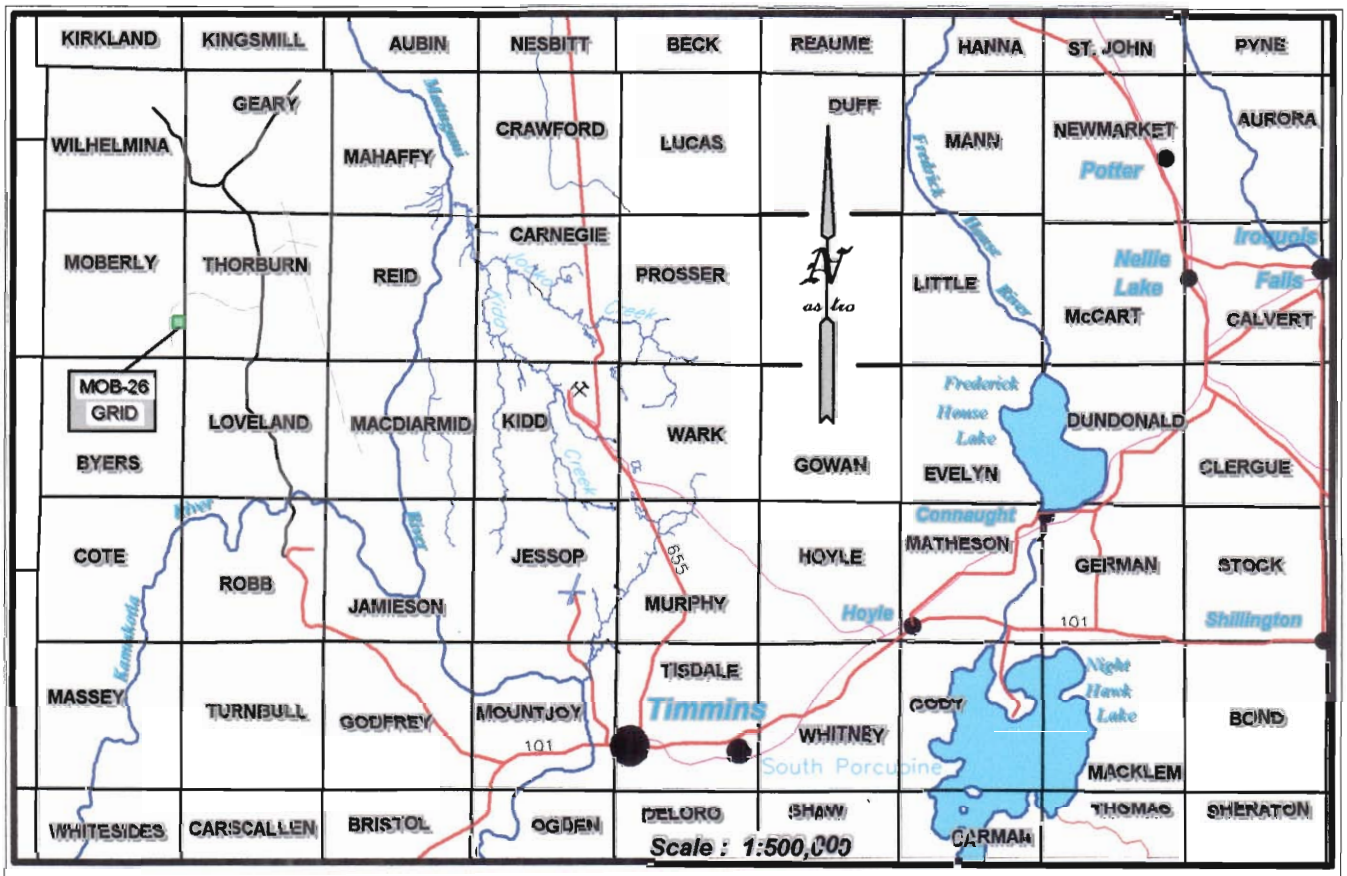


Figure 1(a) : Location Map

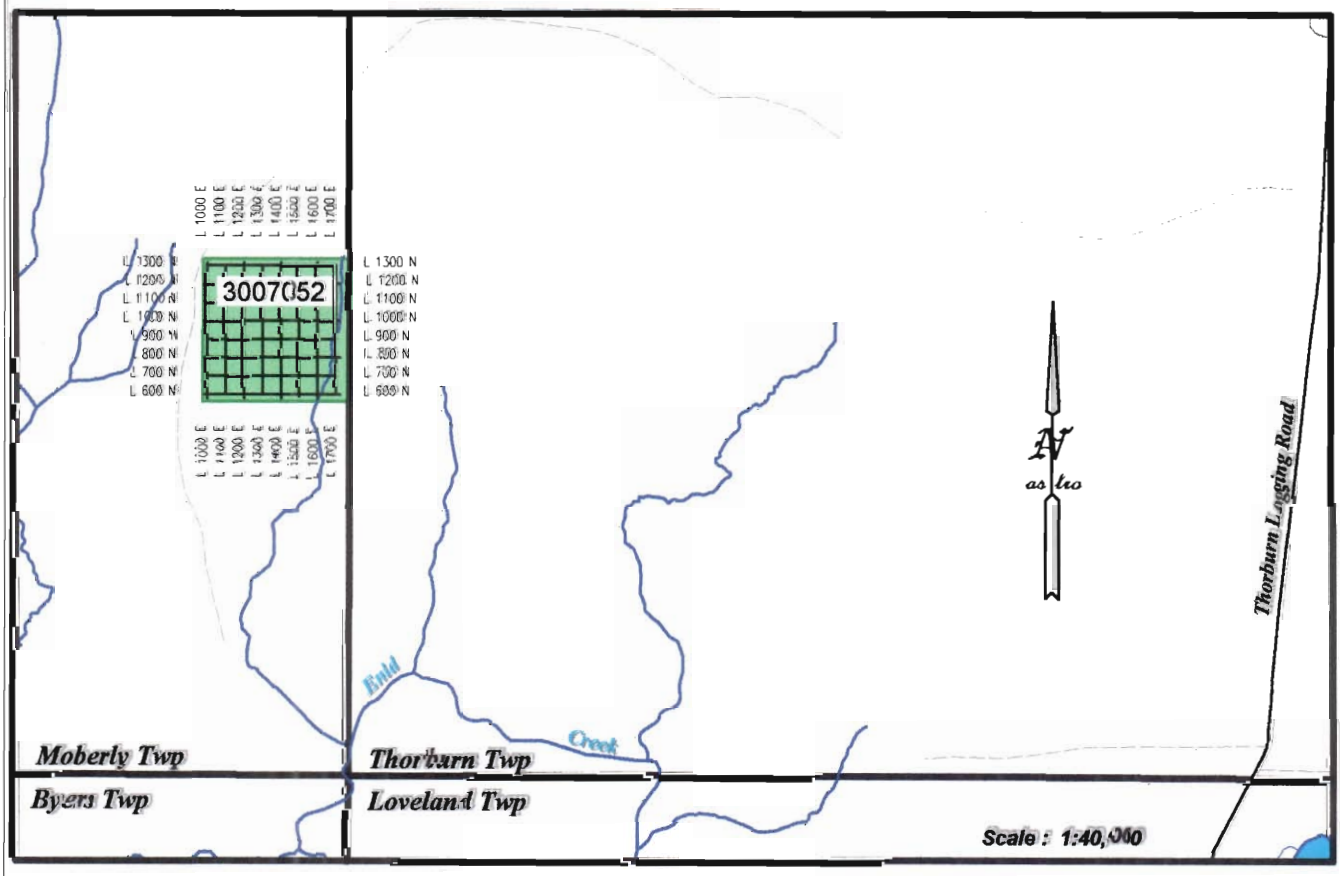


Figure 1(b) : Claim Map

PREVIOUS WORK

The following is a description of previous exploration work which has been filed for assessment credits on the MOB-26 property (Table 2).

In 1976 to 1978, **Hollinger Mines Ltd.** carried out an exploration program on 82 contiguous claims in southeast Moberly Township and northeast Byers Township. The claims in Moberly Township abutted the present MOB-26 property to the west. Magnetic, HLEM and VLF surveys were run on lines spaced every 400 feet and oriented north-south in Moberly Township and east-west in Byers Township. A hole was drilled approximately 1200 metres to the southwest of the MOB-26 grid to test an EM anomaly. It intersected felsic to intermediate volcanics and tuffs. Banded magnetite, which was also intersected in the hole, explains a airborne magnetic high anomaly (OGS, 1988) which continues to the northeast through the MOB-26 property.

YEAR	COMPANY	GEOPHYSICS	DRILL HOLES	AFRI FILE
1976	Hollinger Mines Ltd.	Mag, HLEM, VLF		42A12NE0803 42A12NE0805
1988	Noranda Exploration Co. Ltd.	Mag, HLEM		42A12NE0011

Table 2. Summary of previous assessment work.

In 1987, the **Ontario Geological Survey** flew a magnetic and EM survey over the Timmins area which included Moberly Township (OGS, 1988). This survey was flown along north-south lines spaced approximately every 200 metres.

In 1988, **Noranda Exploration Co. Ltd.** ran magnetic and HLEM surveys in southeast Moberly Township and southwest Thorburn Township. The grid on the property consisted of lines spaced every 100 metres and oriented at 115° Az. It covered parts of eleven 40 acre claims and included the southern half of

the present MOB-26 survey area. The magnetic survey was run with a total field, proton precession magnetometer and the HLEM survey was run at frequencies of 444 and 1777 Hertz with a coil separation of 200 metres. Four conductors were detected, one within the present survey area.

SURVEY DESCRIPTIONS

The grid on the MOB-26 property consists of north-south and east-west lines spaced every 100 metres and picketed every 25 metres (Figure 1(b)).

The magnetic readings were taken every 12.5 metres with a Scintrex IGS-2/MP-4. This instrument is a proton precession magnetometer which measures the earth's total magnetic field to an accuracy of 0.1 nT. Diurnal variations were monitored every 10 seconds with a Scintrex MP-3 base station magnetometer, located off the property. A total of 915 readings were taken along 11.2 kilometres of line.

The horizontal loop EM survey was carried out with the Apex Parametrics MaxMin I-5. This instrument measures the in-phase and quadrature components of the secondary field as a percentage of the primary field; the depth of penetration is approximately one half of the coil separation. Readings were taken every 25 metres using a coil separation of 200 metres and frequencies of 222, 444 and 1777 Hertz. A total of 337 stations were read along 11.2 kilometres of line.

EM RESULTS

The results of the HLEM survey are profiled on maps 1, 2 and 3 at a scale of 1:5000; the profile scale used for all of the frequencies is 1 cm = 20 %. The results using 444 Hertz are also presented in Figure 2 at a scale of 1:7,500. The following is a description of anomalies that were outlined in the survey.

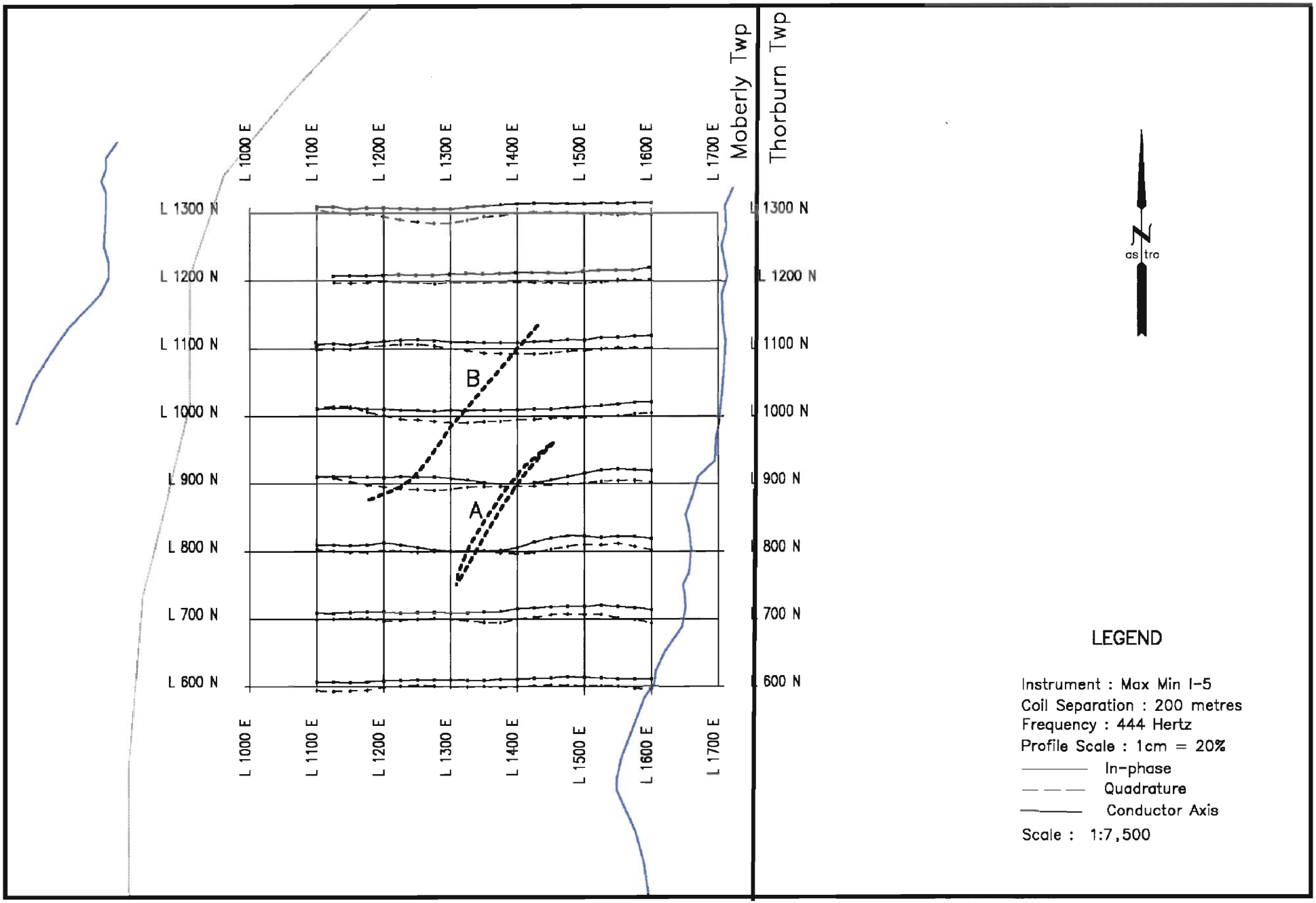


Figure 2 : HLEM Results, 444 Hertz, MOB-26

Anomaly 'A' strikes northeast between 1330 East on Line 800 North and 1395 East on Line 900 North. The source of the anomaly is a 12 metre wide zone of good conductivity at a depth of approximately 120 metres (Table 3). The dip of the source is difficult to determine; the higher shoulder to the east is likely due to deeper overburden in that direction.

LINE	ANOMALY CENTER	ANOMALY WIDTH (m)	IP (%)	Q (%)	DEPTH (m)	CONDUCTIVITY THICKNESS (mhos)	COMMENTS
800 N	1330 E	12.5	5	2	116	57	
900 N	1395 E	12.5	5	2	116	57	
1400 E	1062 N	12.5	4	2	120	50	

Table 3: Anomaly 'A' Interpretation, 444 Hz, 200 metre coil separation.

Anomaly 'B' strikes northeast between 887 North on Line 1200 East and 1100 North on Line 1400 East. This anomaly is only a quadrature component response in the lower frequencies, indicating very poor conductivity and likely a surficial source.

MAGNETIC RESULTS

The magnetic results are contoured every 50 nT on map 4 at a scale of 1:5000. The results are also plotted in Figure 3 at a scale of 1:7,500.

A partially defined, magnetic high anomaly is located along the west end of Lines 600 to 900 North. The north northwest strike suggests that the source of this anomaly is a diabase dike. An area of high

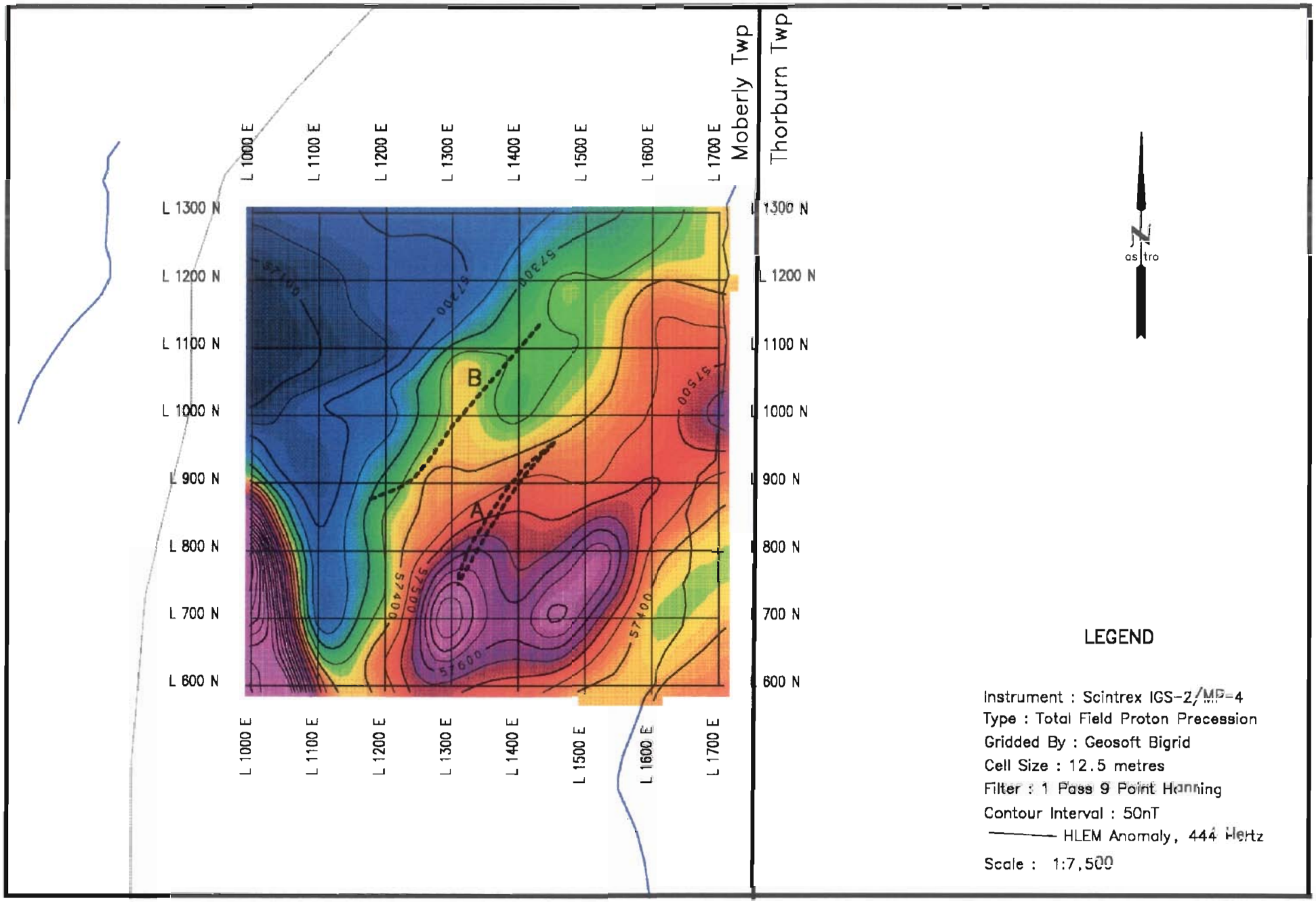


Figure 3 : Total Magnetic Field, MOB-26

magnetic field trends northeast through the southeast half of the property. The government airborne survey suggests that the source of magnetic highs within this area is banded magnetite which was intersected in a drill hole to the southwest. EM anomaly 'A' is located within this area, on strike but not coincident with the higher magnetic anomalies.

Oct. 23, 2005
Date

Douglas Landry
D. Landry
Timmins Geophysics Ltd.

REFERENCES

Ayer, J.A. and Trowell, N.F.

1998: Geological Compilation of the Timmins Area, Abitibi Greenstone Belt; Ontario Geological Survey, Preliminary **Map P.3379**, scale 1:100,000.

Ontario Geological Survey

1988: Airborne Electromagnetic and Total Intensity Survey, Timmins Area, **Moberly Township**, Districts of Cochrane and Timiskaming Ontario; by Geoterrex Limited, for Ontario Geological Survey. Geophysical/Geochemical Series **Map 81051.** Scale 1:20,000. Survey and compilation from March 1987 to October 1987.

Pyke, D.R., Ayres, L.D. and Innes, D.

1973: Timmins-Kirkland Lake Sheet; Ontario Division of Mines, Geological Compilation Series, **Map 2205**, scale 1" = 4 miles.

MOB-26 PROPERTY
Moberly Township

1. HLEM Results, 222 Hertz
2. HLEM Results, 444 Hertz
3. HLEM Results, 1777 Hertz
4. Magnetic Results

Moberly Twp

Thorburn Twp

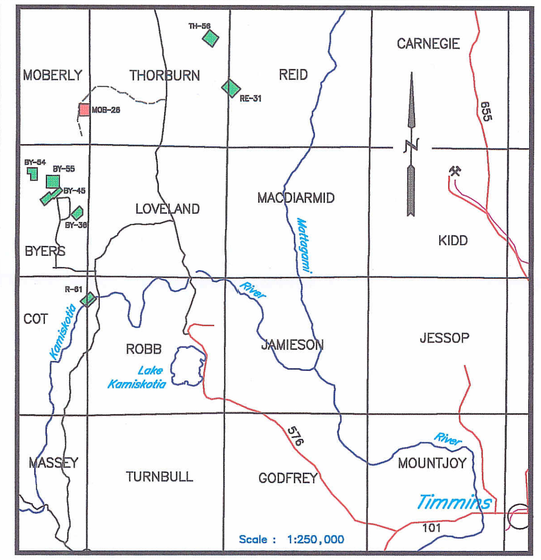
3007052

L 1000 E L 1100 E L 1200 E L 1300 E L 1400 E L 1500 E L 1600 E L 1700 E

L 1300 N L 1200 N L 1100 N L 1000 N L 900 N L 800 N L 700 N L 600 N

A

B



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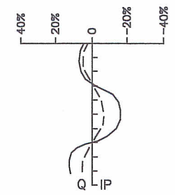
LEGEND 2.30761

Instrument : Apex Parametrics MaxMin I-5
Coil Separation : 200 metres
Frequency : 222 Hertz
Profile Scale : 1cm = 20%



In-phase
Quadrature

0 50 m 100 m 150 m 200 m 250 m

Scale : 1:2500

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HLEM SURVEY (222 Hz)

MOB-26

MOBERLY TOWNSHIP

File : M26HL.XYZ	Date : March, 2005
NTS : 42-A/12	Proj# :
WORK BY : *Timmins Geophysics Ltd.*	

Moberly Twp

Thorburn Twp

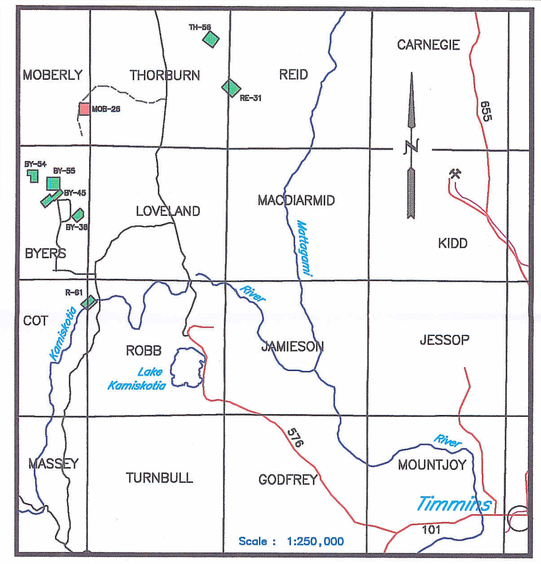
3007052

L 1000 E L 1100 E L 1200 E L 1300 E L 1400 E L 1500 E L 1600 E L 1700 E

L 1300 N L 1200 N L 1100 N L 1000 N L 900 N L 800 N L 700 N L 600 N

A

B



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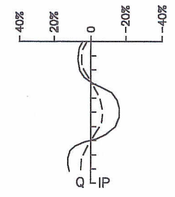
astro

2.30761

LEGEND

Instrument : Apex Parametrics MaxMin I-5
Coil Separation : 200 metres
Frequency : 444 Hertz
Profile Scale : 1cm = 20%



In-phase ————
Quadrature — — — —

0 50 m 100 m 150 m 200 m 250 m

Scale : 1:2500

FALCONBRIDGE LIMITED

HLEM SURVEY (444 Hz)

MOB-26

MOBERLY TOWNSHIP

File : M26HL.XYZ	Date : March, 2005
NTS : 42-A/12	Proj# :
WORK BY : *Timmins Geophysics Ltd.*	

Moberly Twp

Thorburn Twp

3007052

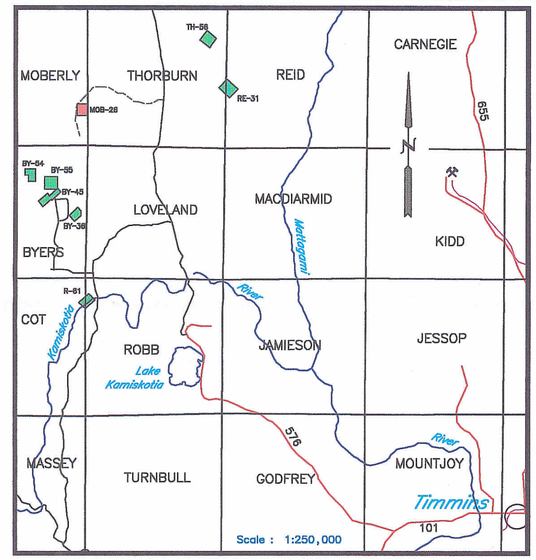
L 1000 E L 1100 E L 1200 E L 1300 E L 1400 E L 1500 E L 1600 E L 1700 E

L 1300 N L 1200 N L 1100 N L 1000 N L 900 N L 800 N L 700 N L 600 N

A

B

B



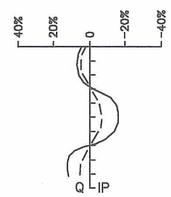
INDEX MAP

astro

2.30761

LEGEND

Instrument : Apex Parametrics MaxMin I-5
Coil Separation : 200 metres
Frequency : 1777 Hertz
Profile Scale : 1cm = 20%



In-phase ——————
Quadrature — — — —

0 50 m 100 m 150 m 200 m 250 m

Scale : 1:2500

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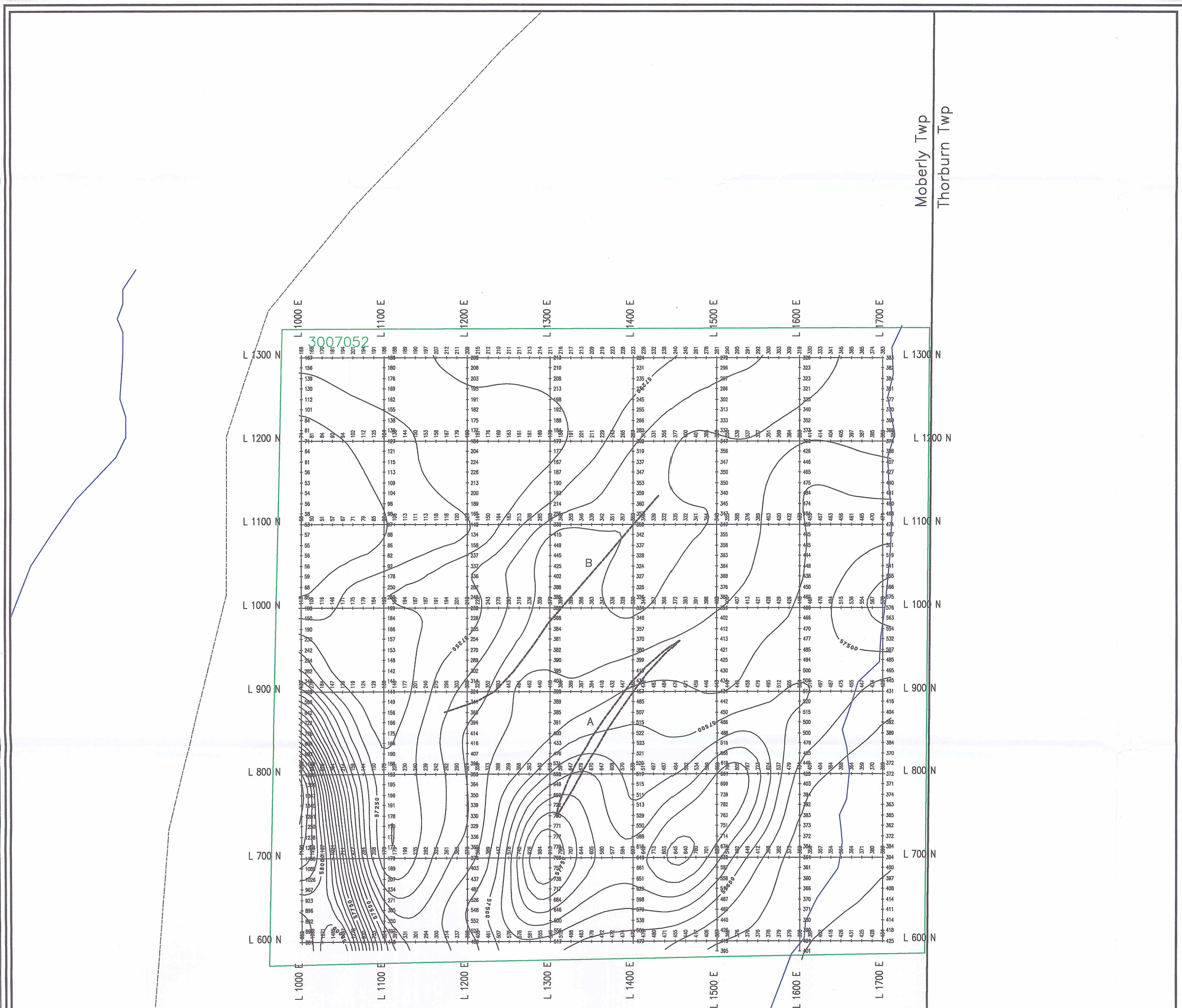
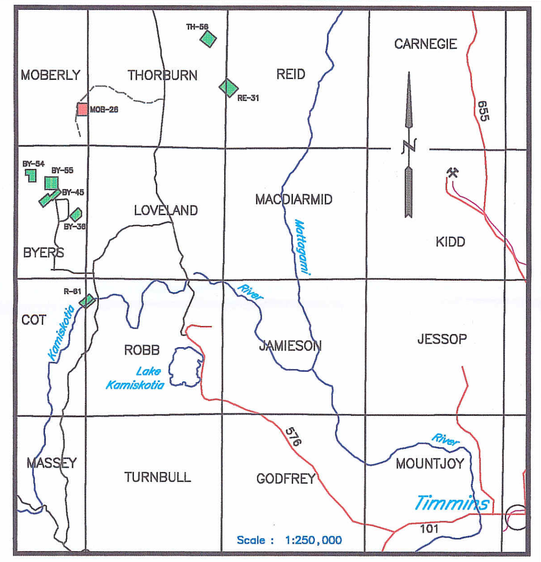
HLEM SURVEY (1777 Hz)

MOB-26

MOBERLY TOWNSHIP

File : M26HL.XYZ	Date : March, 2005
NTS : 42-A/12	Proj# :
WORK BY : *Timmins Geophysics Ltd.*	





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2.30761

LEGEND

Instrument : Scintrex IGS-2/MP-4
Type : Total Field Proton Precession
Datum Level : 57000 nT
Contour Interval : 50 nT
Gridded By : Geosoft Bigrid
Cell Size : 12.5 metres
Filter : 1 Pass 9 Point Hanning
— — — EM Anomaly, 444 Hertz

0 50 m 100 m 150 m 200 m 250 m
Scale : 1:2500

FALCONBRIDGE LIMITED

MAGNETIC SURVEY

MOB-26

MOBERLY TOWNSHIP

File : M26.XYZ	Date : March, 2005
NTS : 42-A/12	Proj# :
WORK BY : *Timmins Geophysics Ltd.*	