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Nous tenons à améliorer <u>l'accessibilité des services à la clientèle</u>. Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez <u>nous contacter</u>. GEOPHYSICAL REPORT FOR **EXPLOR RESOURCES INC.** ON THE **PROSSER PROPERTY** PROSSER, KIDD, CARNEGIE AND WARK TOWNSHIPS PORCUPINE MINING DIVISION NORTHEASTERN, ONTARIO

6

Prepared by: J. C. Grant,

September 2019

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### **INTRODUCTION:**

The services of Exsics Exploration Limited were retained by Mr. Chris Dupont on behalf of the company, Explor Resources Inc., to complete a follow up ground geophysical program across a portion of their claim holdings located in Prosser Township of the Porcupine Mining Division in Northeastern Ontario.

The purpose of the program was to locate and define several airborne targets as well as to better define a magnetic structure situated in the center of the claim block that had been outlined by a historical grid that was done east west.

The area covered by the ground program is generally underlain by ultramafic intrusives in the southern section of the claim block and felsic intrusives in the northern section. A number of gold, silver and zinc showings lie along strike with the property and the massive Kidd Creek VMS deposit is situated about 6 kilometers to the southwest of the claim block.

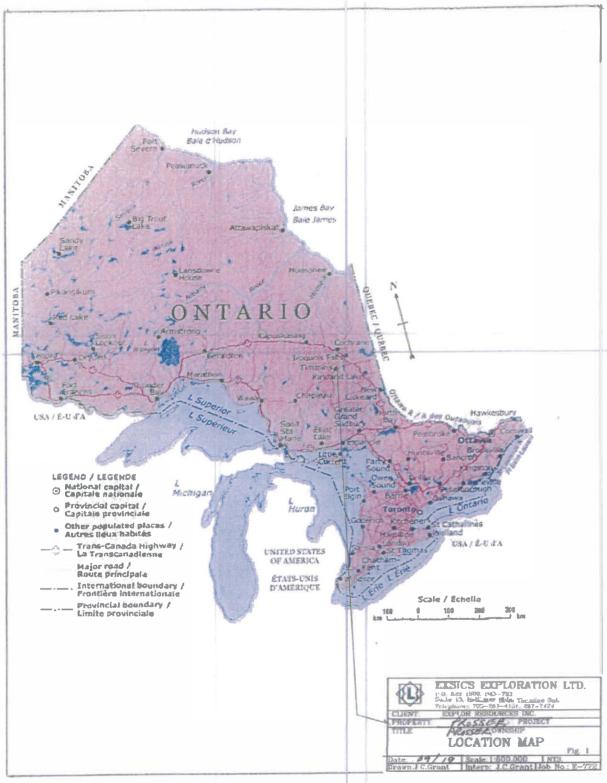
# **PROPERTY LOCATION AND ACCESS:**

The Prosser Property is situated in the southwest section of Prosser, southeast corner of Carnegie, northeast corner of Kidd and the northwest corner of Wark Township with Highway 655 lying about 800 meters to the west of the western edge of the grid area. Boundary Lake lies about 750 meters to the south of the claim block. Line 0+00 and base line represents the corner post of legacy claim 4241147, Carnegie, Prosser, Wark and Kidd Townships and new grid covers portions of the 9 cells.

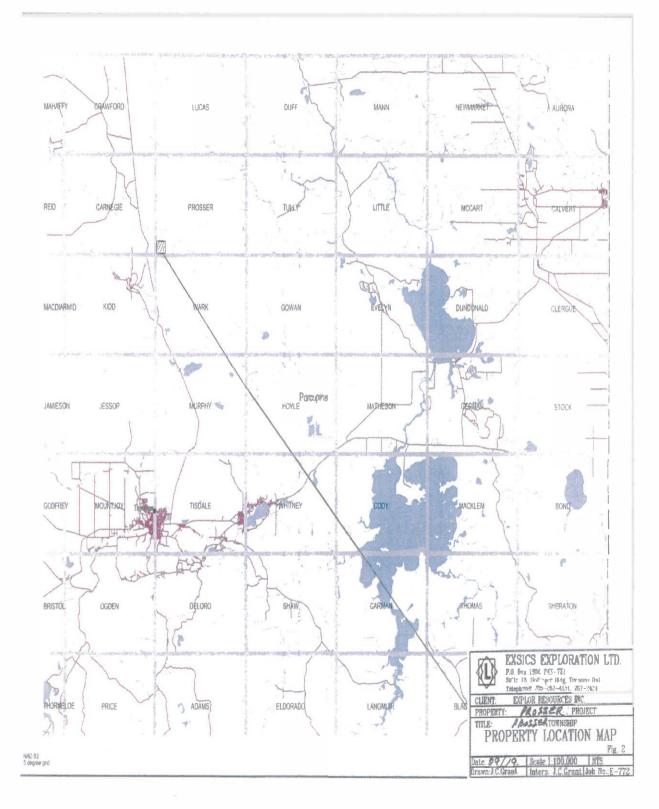
Access to the property during the survey period was relatively easy. Highway 655 travels north from Timmins and cut across the southeastern section of Carnegie Township and about 800 meters west of the grid area. There is a good gravel road that provided good ATV access to the southwest and central sections of the grid area.

Traveling time from Timmins to the grid is about 40 minutes. Figures 1 and 2

FIGURE 1 LOCATION MAP



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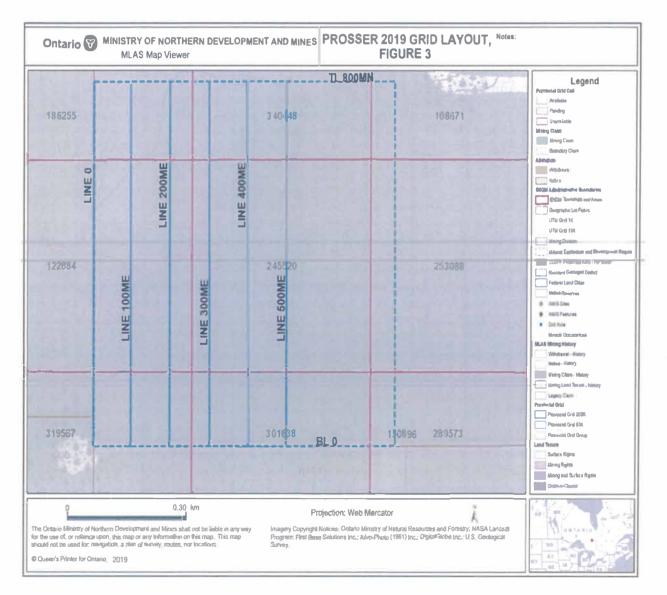
# **CLAIM BLOCK:**

The cell numbers that were covered by the geophysical survey is listed below.

186255, 340448, 108671, 122884, 245520, 253088, 319567, 301638, 289573. These cells represent legacy claim, P-4241147, 4 units, (South ½ of Lot 12, Con. 1).

Refer to figure 3 copied from MNDM Plan Map, G-3965, of Prosser Township for the positioning of the claim number and grid within the Township.

# FIGURE 3 CLAIM BLOCK/GRID MAP



## PERSONNEL:

The field crew directly responsible for the collection of all the raw data were as follows.

N. Collins	Timmins, Ontario
M. Pilon	Timmins, Ontario

The plotting and interpretation as well as the report were completed by J. C. Grant of Exsics Exploration Limited.

#### **GROUND PROGRAM**:

The ground program consisted of compassed and flagged grid lines that were done from the western boundary of the legacy claim, number 4 post. The lines were compassed, flagged and read from the southern boundary to 800 MN. Six lines were completed at 100 meter intervals east from the southwest corner of the claim block. These lines have been labelled 0+00 to and including 500ME. The lines were then covered by a total field magnetic survey that was done in conjunction with a VLF-EM survey using the Terra Plus Gem system. Specifications for this unit can be found as Appendix A of this report.

In all, a total of 4.8 kilometers of grid lines were surveyed across the claim block between September  $6^{th}$  and  $8^{th}$ , 2019..

The following parameters were kept constant throughout both of the surveys.

#### Magnetic Survey:

Line spacing	100 meters
Station spacing	25 meters
Reading intervals	25 meters
Diurnal monitor	base station
Base record intervals	30 seconds
Reference field	56,000 gammas
Datum subtracted	55,000 gammas
Unit accuracy	+/- 0.1 gamma

Once the survey was completed the field data was plotted directly onto a base map at a scale of 1:2500. A datum level of 55000 gammas was removed from the data before it was plotted onto the base map. The data was then contoured at 50 gamma intervals wherever possible. A copy of this color base map is included in the back pocket of this report.

#### **VLF-EM Survey**:

100 meters
25 meters
25 meters
Cutler, Maine 24.0Khz
Inphase and quadrature components
of the secondary field.
+/- 0.1 %

Once this survey was completed the collected data was then plotted onto base maps at a scale of 1:2500 and then profiled at 1 cm = +/-30%. A copy of this profiled base map is included in the back pocket of this report.

### MAGNETIC & VLF-EM SURVEY RESULTS:

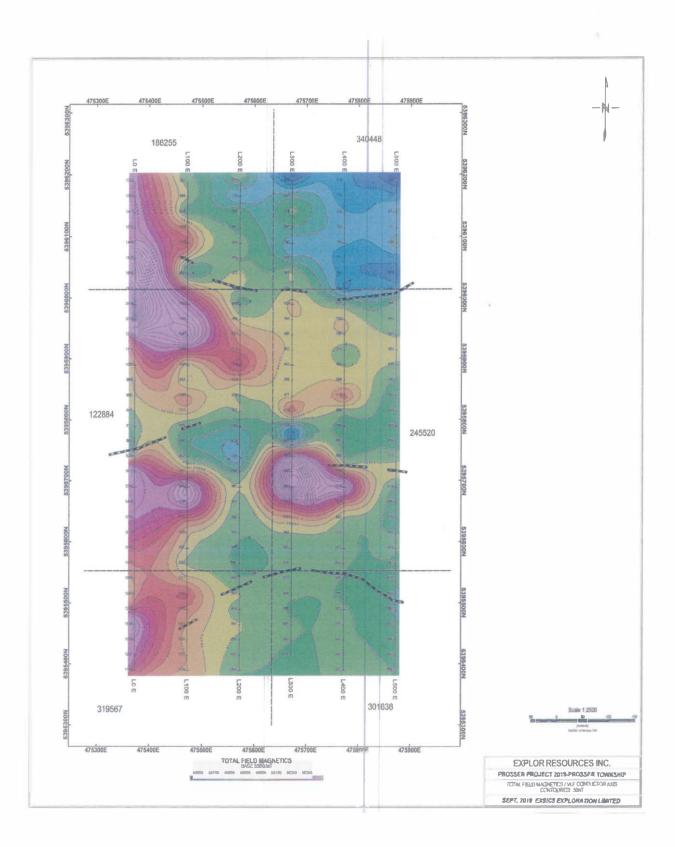
The magnetic survey outlined several magnetic highs across the grid area. The first is a high covering the northwest section of the grid that continues off of the grid to the northwest. The zone appears to be plunging to the southeast and possibly extends as far as line 300ME. The high may correlate to a contact between the felsics to the west and an ultramafic unit to the east.

There are two VLF anomaly trends associated with the northern and southern shoulders of this high unit.

Another high covers the central south section of the grid and it also appears to continue off of the grid to the west. This high appears to pinch along line 200ME but then swells into a good elongated bulls eye structure striking east across lines 300ME and 400ME.

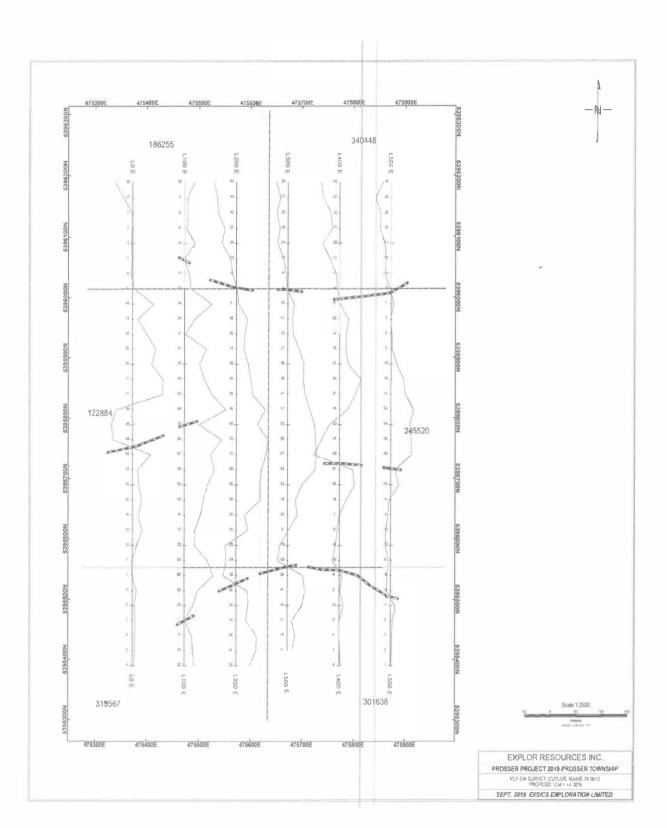
There is a modest VLF zone along the northern edge of this zone and a modest VLF zone along the northern edge of the elongated bull eye high.

There is another VLF zone generally striking east-west across the southern section of the grid that is unknown at this point but may be related to structure within the ultramafic unit that covers most of this section of the claim block.



# TOTAL FIELD MAGNETIC SURVEY WITH VLF-EM ZONES

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# VLF-EM SURVEY WITH CONDUCTOR AXIS

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## **CONCLUSIONS AND RECOMMENDATIONS:**

The ground program was successful in outlining the elongated magnetic high that strikes across the central south section of the grid between lines 200ME and 400ME the high feature appears to dipping slightly to the south and strikes east-west. This feature appears to be an isolated high possibly shallower than the host rock. Two lines of follow up IP surveys using a Pole-Dipole array with at least a 6 dipole spread would better define the source of this high.

AN MMI soil sampling program should also be considered over any and all IP zones that may be outlined as well as in the vicinity and over the magnetic high bulls-eye zone.

Respectfully submitted

J. C. Grant September, 2019

#### CERTIFICATION

I, John Charles Grant, of 108 Kay Crescent, in the City of Timmins, Province of Ontario, hereby certify that:

- I am a graduate of Cambrian College of Applied Arts and Technology, 1975, Sudbury Ontario Campus, with a 3 year Honors Diploma in Geological and Geophysical Technology.
- I have worked subsequently as an Exploration Geophysicist for Teck Exploration Limited, (5 years, 1975 to 1980), and currently as Exploration Manager and Chief Geophysicist for Exsics Exploration Limited, since May, 1980.
- 3). I am a member in good standing of the Certified Engineering Technologist Association, (CET), since 1984.
- 4). I am in good standing as a Fellow of the Geological Association of Canada, (FGAC), since 1986.
- 5). I have been actively engaged in my profession since the 15<sup>th</sup> day of May, 1975, in all aspects of ground exploration programs including the planning and execution of field programs, project supervision, data compilation, interpretations and reports.
- 6). I have no specific or special interest nor do I expect to receive any such interest in the herein described property. I have been retained by the property holders and or their Agents as a Geological and Geophysical Consultant and Contract Manager.

JOHN GRAM

CLLD'N

John Charles Grant, CET., FGAC.

APPENDIX A

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8/30/2019

Terraplus: Geophysical Equipment Supplier: Rentals: GSM-19 Overhauser Magnetometer/Gradiometer System

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Bud

# GSM-19 OVERHAUSER MAGNETOMETER/GRADIOMETER SYSTEM Version 5

New Case Study

# **GSM-19** Overhauser Magnetometer

#### Features of the magnetometer

- · Sensitivity = 0.02 nT
- Absolute Accuracy = 0.2 nT
- Sample Rates up to 5 Hz
- Low Power Consumption



New! version 6

#### General magnetometer description

"Overhauser" Once you experience it, you'll never go back to proton. Overhauser technology brings you sensitivities one to two orders of magnitude better than proton, yet in a light weight package. This is because the overhauser magnetometer consumes an order of magnitude less power than proton magnetometer, allowing a lighter weight for batteries.

What is the Overhauser technique? The Overhauser sensor contains the electrons' fluid that has been added to a hydrogen rich in the form of "free radial". The resulting mixture yields a sensor with 5000 times gain in proton polarization. Since the Overhauser polarization effect does not require static magnetic fields, but uses radio frequency fields transparent to protons, measurement can be done concurrently with polarization. The result is a sensor with much greater sensitivity, that can be sampled much more rapidly than the standard proton sensor.

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Terraplus: Geophysical Equipment Supplier: Rentals: GSM-19 Overhauser Magnetometer/Gradiometer System

Walking Gradiometer systems, sampling at rates of once per second or betterare posible; Even in cold temperatures of minus 40 zero degrees Celsius and greater, the internal rechargeable battery can still be relied on for a 10 hour day, or longer.

The GSM-19 Overhauser magnetometer is thus truly a State-of-the-Art Magnetometer / VLF system. The GSM-19 offers the data quality, reliability, and extensive list of capabilities, and options, that allow it to meet a very wide spectrum of applications.

# Standard Features of the Magnetometer

The GSM-19 magnetometer console features a real time graphic display of the current profile. In addition digital display of the current reading, current position, and warning messages are provided. The console design, with internal rechargeable battery pack, allows the unit to be completely sealed against the elements. With the built in heater for the display the GSM-19 magnetometer is ready to go wherever your surveys may take you.

Tuning is automatic worldwide, with provision for manual override. In high gradient conditions the GSM-19 magnetometer monitors the signal decay rate and displays a warning message when the gradient becomes too great. Filters for rejection of 50 or 60 Hz noise are provided.

Diumal corrections may be done in traditional fashion with one magnetometer unit as a base station and a second unit used as the mobile field unit. At the end of the survey the two units are connected and the field unit creates a corrected data file (which still includes the raw data file) based on the temporal drift recorded by the base station.

As a standard feature GSM-19 magnetometer also offer the capability of making tie point measurements for automatic diurnal corrections. To use this feature the operator records a base value and then loops back to this point periodically during the survey to record another measurement, and thus build a file of the drift. In this way a single instrument may be used to make diurnal corrections.

The RS-232 port on the GSM-19 magnetometer will output data as it is collected. This allows interface to GPS loggers that will accept RS232 data. The standard GSM-19 magnetometer may be operated in a remote mode via computer. Memory storage is 512 K in the standard unit, and may be upgraded to 2 MB.

Grid coordinates are stored with either numeric or compass designations. A seven digit number may be used to

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8/30/2019

