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**GEOPHYSICAL REPORT**  
FOR  
***INTERNATIONAL EXPLORERS AND PROSPECTORS INC.***  
ON THE  
***WALKER PROPERTY***  
WALKER TOWNSHIP  
LARDER LAKE MINING DIVISION  
NORTHEASTERN, ONTARIO

Prepared by: J. C. Grant,  
January 2019

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## **INTRODUCTION:**

The services of Exsics Exploration Limited were retained by Mr. Lionel Bonhomme, on behalf of the Company, International Explorers and Prospectors Inc., (IEP), to complete a small grid of GPS controlled compassed and paced lines that were to be followed up with a total field magnetic and VLF survey. The program was completed across a claim block, called the Walker Property, located in Walker Township of the Larder Lake Mining Division.

The purpose of the ground program was to check the claim block for a favorable geological setting that may lend itself to potential gold and or base metal deposition.

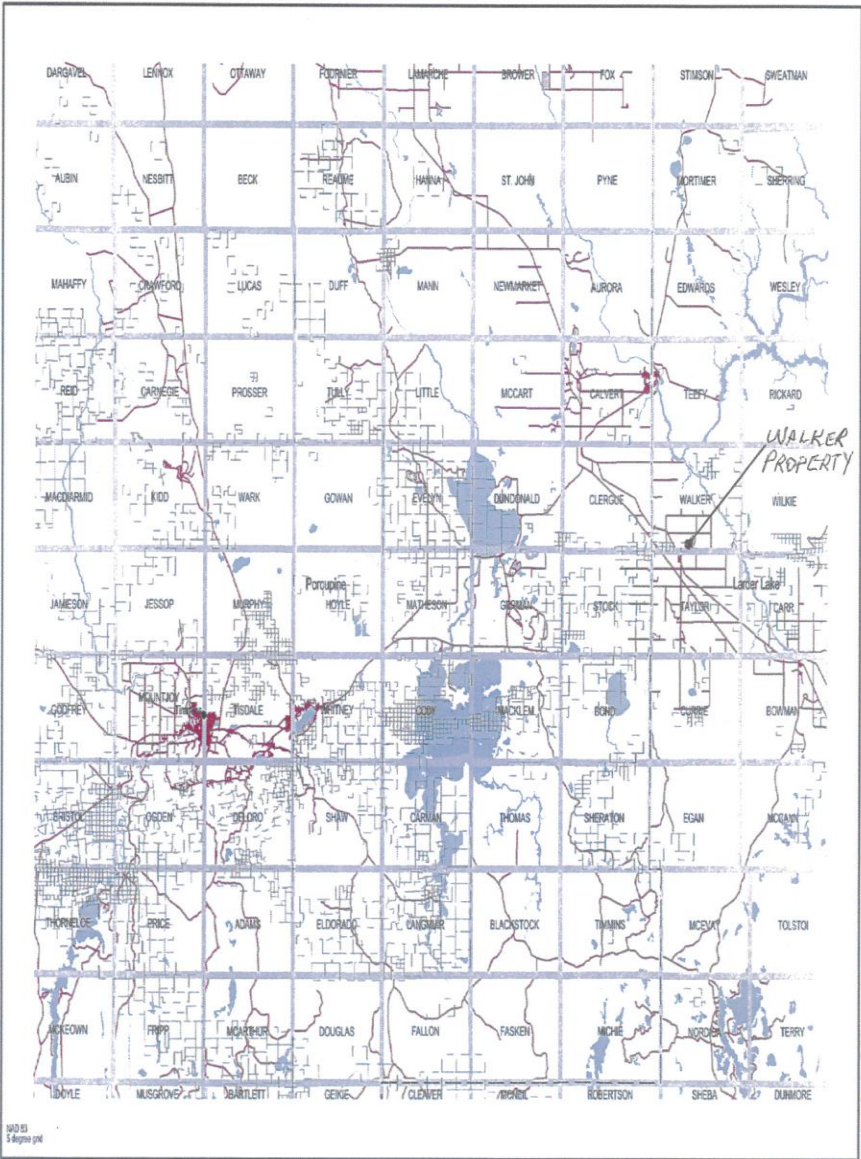
## **PROPERTY LOCATION AND ACCESS:**

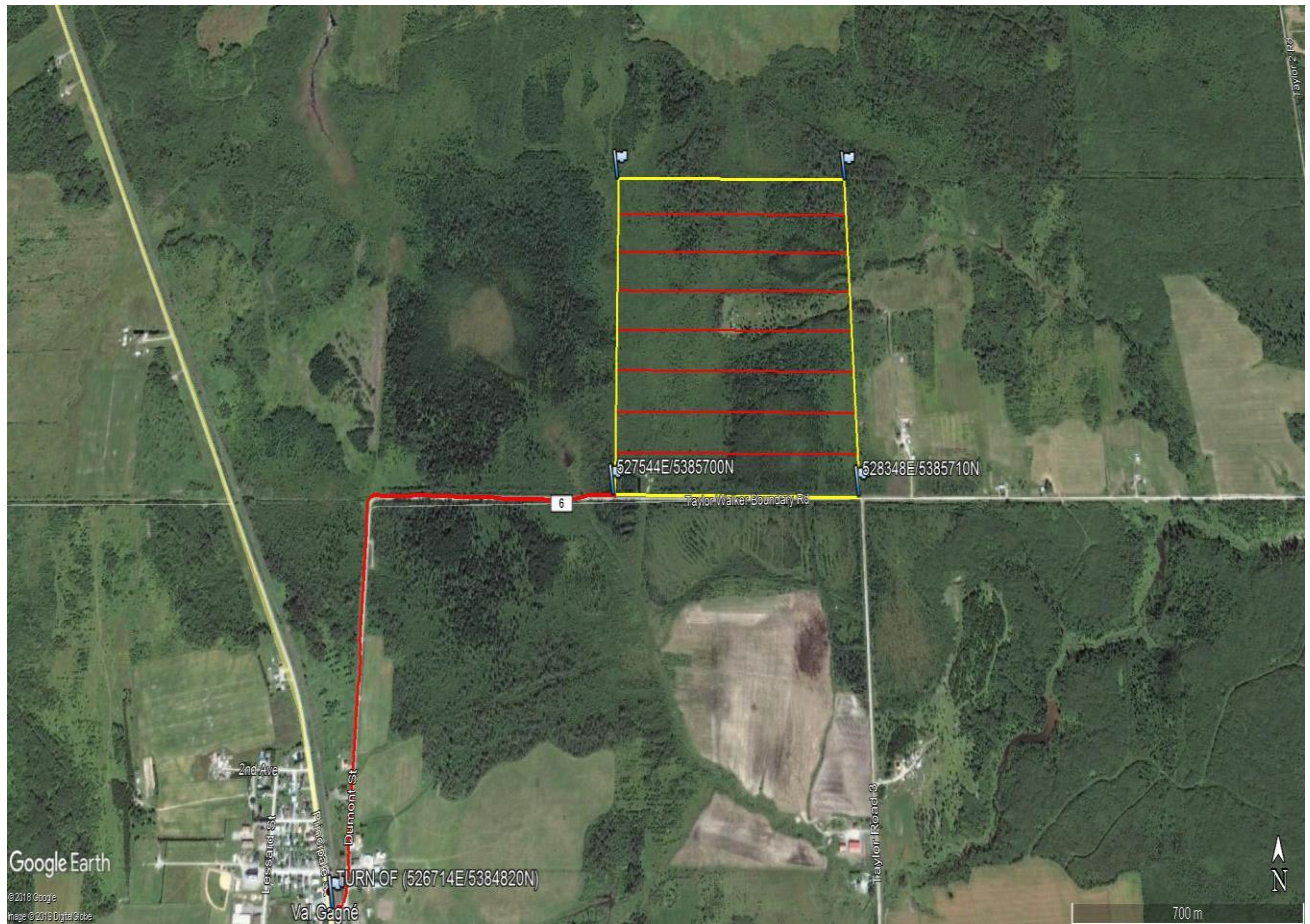
The Walker Property is situated approximately 54 kilometers to the northeast of the City of Timmins and is situated in the southwest section of the Township such that the southernmost grid line represents the township line between Walker and Taylor. Walker Township is part of the Larder Lake Mining Division in Northeastern, Ontario. Refer to Figures 1 of this report.

More specifically the property is situated in the south central section of the township such that Line 0+00 represents the Township line between Walker and Taylor

Access to the grid during the survey period was ideal. Highway 101 runs east from the City of Timmins to the junction of highway 11 north, about 61 kilometers to the east of the City. A 13 kilometer run up highway 11 to the north will access the Town of Val Gagne which lies to the immediate southeast of the grid area. A short ride north along a local road called Dumont road and then east for 800 meters along the Walker Taylor boundary road will allow drivable access to the southwest corner of the grid. This point represents Line 0+00 and baseline of the grid. Travelling time from Timmins to the grid is about 1.5 hours. Figures 1 and 2.

**FIGURE 1 LOCATION MAP: 1:100,000 scale**

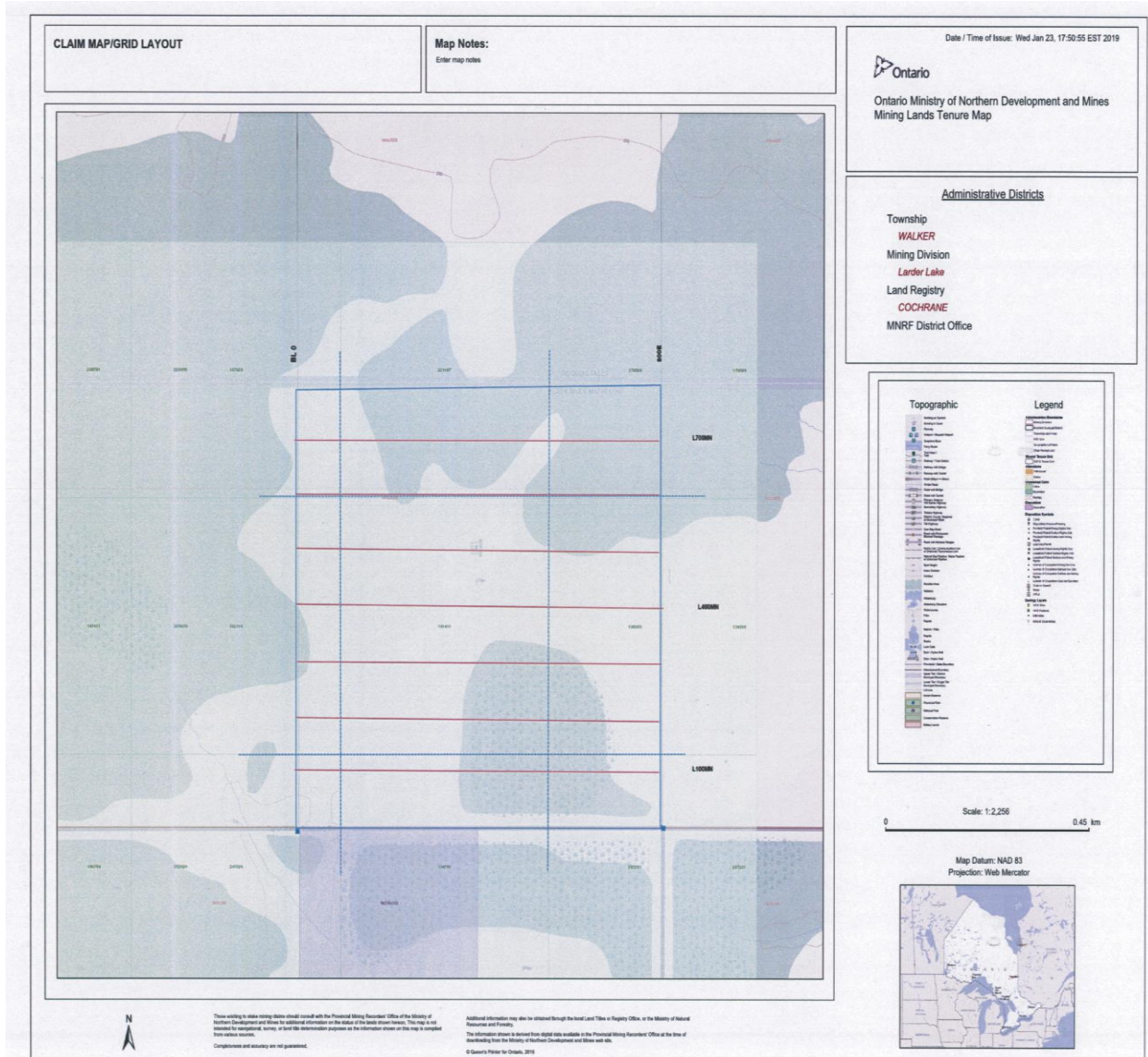


**FIGURE 2 PROPERTY LOCATION MAP/ GRID LINES****CLAIM BLOCK:**

The claim numbers that represent the Walker property of IEP, can be found on Figure 3 copied from MNDM Plan Map of Walker Township for the positioning of the grid lines and the claim numbers within the Township. The numbers are 174589, 139395, 287231, 221197, 191411, 104798, 228659, 295870 and 241326.



**FIGURE 3, CLAIM BLOCK GRID LOCATON:**



**PERSONNEL:**

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

J. Francoeur                      Timmins, Ontario

D. Porier                              Timmins, Ontario

The program was completed under the direct supervision of J. Grant and the plotting and report was completed by J. C. Grant of Exsics.

**GROUND PROGRAM:**

The ground program consisted of establishing a metric grid consisting of 100 meter spaced lines across the property commencing at the southwest corner of the claim block. The base line was turned off at this start point and it was called Line 0+00 base line. The base line was then compassed paced and flagged north from this start point for 700 meters using a hand held GPS unit for grid control. The most northerly line was called 700MN. Cross lines were turned off of this base line at 100 meter intervals from line 0 to and including 700MN and were labelled 100MN to 600MN. All of these cross lines were then compassed paced and flagged to 800ME using the GPS for control of each line. 800ME represented the eastern edge of the claim block. All of the cross lines were flagged at 100 meter station intervals with readings recorded at 25 meter intervals. In all a total of 5.6 kilometers of grid lines were established across the claim block.

Once the lines were completed the entire grid was covered by a total field magnetic survey that was done in conjunction with a VLF survey using the Scintrex Envi mag system. Specifications for this system can be found as Appendix A of this report. In all a total of 5.6 kilometers of grid lines were covered by magnetic and VLF-EM survey between January 16<sup>th</sup> and the 23<sup>rd</sup>. The following parameters were kept constant throughout the survey period.

**Magnetic VLF EM and Survey:**

Line spacing	100 meters
Station spacing	25 meters
Reading intervals	25 meters
Reference field	56,000Nt
Datum subtracted	55,500Nt
Diurnal monitoring	base station recorder
Recorder interval	30 seconds
Contour intervals	20Nt
VLF- transmitter	Cutler, Maine 24.0Khz
Parameters measured	Inphase and Quadrature components of the secondary field
Parameter plotted	Inphase component
Profile scale:	1 cm = +/- 10%

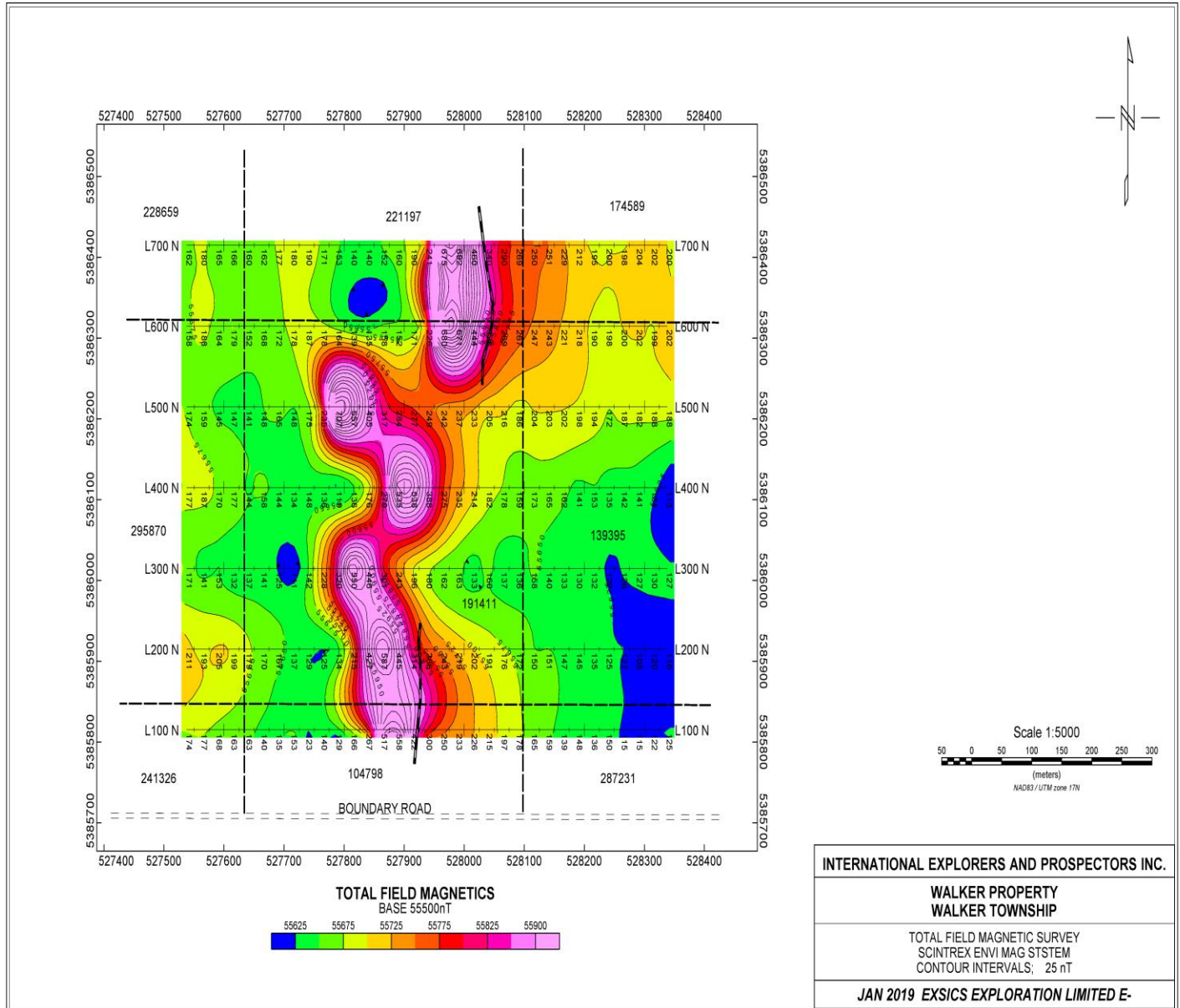
Once the survey was completed the collected data was corrected and then plotted onto a base map at a scale of 1:5000 and then contoured at 25 gamma intervals where ever possible. A copy of the colored plan map is included in the back pocket of this report.

**MAGNETIC SURVEY RESULTS:**

The magnetic survey outlined a good narrow magnetic high unit that generally strikes north-south across the central section of the survey area. It also appears that this unit may have been cross cut by two minor shears and or faults that have offset the central portion of the zone between lines 400MN and 500MN. The high may represent a dike like unit that may have been cross cut by the northern edge of the Porcupine-Destor fault cuts across the southern section of the property. Refer to map 2205, Timmins-Kirkland lake Geological compilation series. The remainder of the grid is relatively flat magnetically.



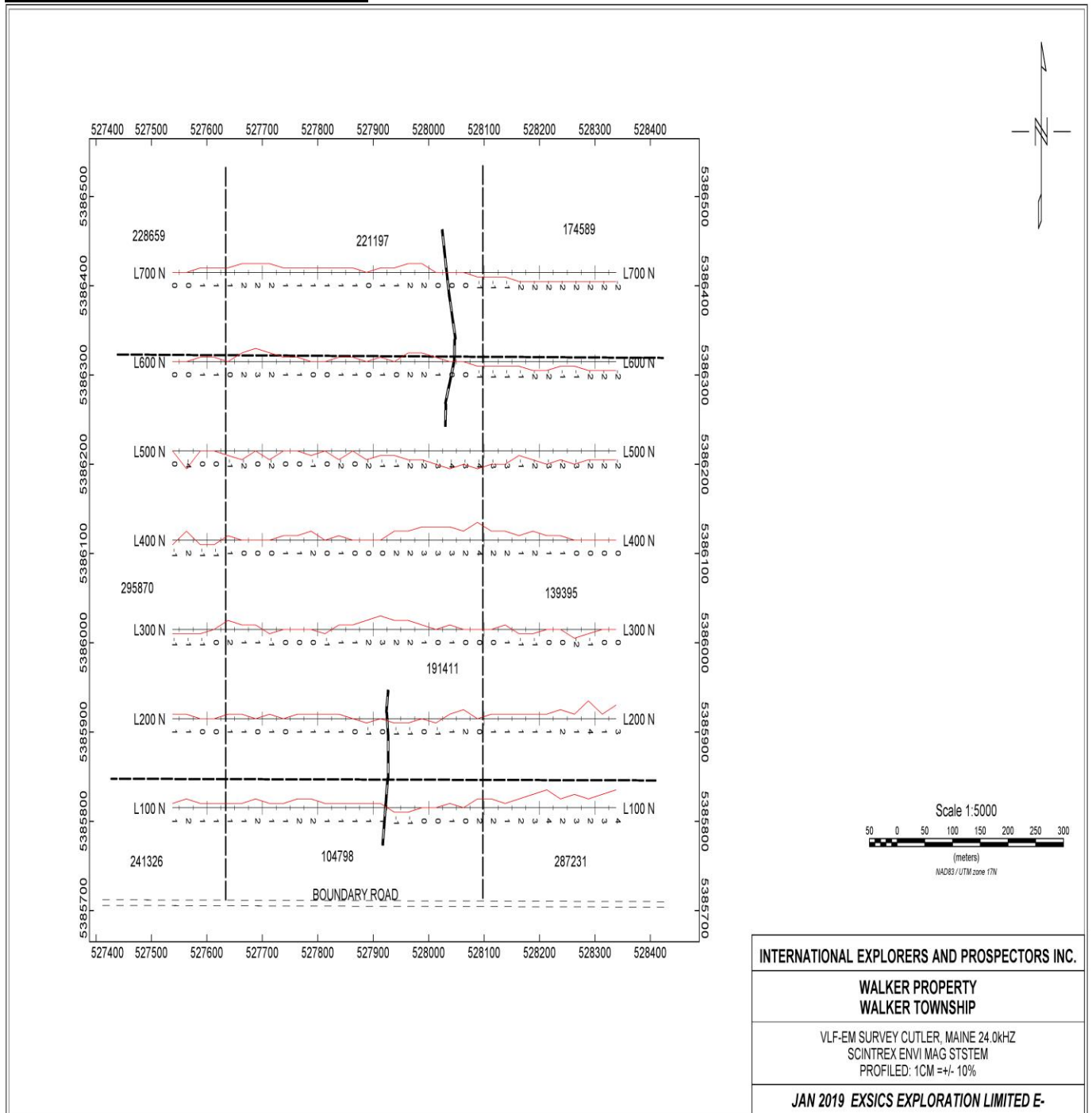
**PLAN MAP OF THE TOTAL FIELD MAGNETIC SURVEY:**



**VLF-EM Survey Results:**

The VLF survey did not return any significant conductive zones across the grid area. The two weak zones noted on the plan map appear to correlate with the edges of the suspected dike like unit.

**Plan Map of the VLF-EM Survey**



**CONCLUSIONS AND RECOMMENDATIONS:**

The magnetic survey was successful in outlining a narrow magnetic high across the grid area that appears to represent a dike like unit. This unit in turn appears to have been cross cut and or offset by the presence of the northern edge of the Destor- Porupine fault that is thought to cut across the southern edge of the grid area.

The property should be followed up with either a two line IP survey to check the property more thoroughly for a conductive horizon. A soil sampling program may also be effective as follow up to the magnetic survey especially in the area of the dike offset.

Respectfully Submitted

*J C Grant*

J. C. Grant, CET, FGAC  
January 23<sup>rd</sup>, 2019.

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CERTIFICATION

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

- 1). 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.
- 2). 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 Charles Grant, CET., FGAC.



## APPENDIX A

# SCINTREX

## ENVI-MAG Environmental Magnetometer/Gradiometer

### Locating Buried Drums and Tanks?

The ENVI-MAG is the solution to this environmental problem. ENVI-MAG is an inexpensive, lightweight, portable "WALKMAG" which enables you to survey large areas quickly and accurately.

ENVI-MAG is a portable, proton precession magnetometer and/or gradiometer, for geotechnical, archaeological and environmental applications where high production, fast count rate and high sensitivity are required. It may also be used for other applications, such as mineral exploration, and may be configured as a total-field magnetometer, a vertical gradiometer or as a base station.

#### The ENVI-MAG

- easily detects buried drums to depths of 10 feet or more
- more sensitive to the steel of a buried drum than EM or radar
- much less expensive than EM or radar
- survey productivity much higher than with EM or radar

### Features and Benefits

#### "WALKMAG" Magnetometer/Gradiometer

The "WALKMAG" mode of operation (sometimes known as "Walking Mag") is user-selectable from the keyboard. In this mode, data is acquired and recorded at the rate of 2 readings per second as the operator walks at a steady pace along a line. At desired intervals, the operator "triggers" an event marker by a single key stroke, assigning coordinates to the recorded data.

#### True Simultaneous Gradiometer

An optional upgrade kit is available to configure ENVI-MAG as a gradiometer to make true, simultaneous gradiometer measurements. Gradiometry is useful for geotechnical and archaeological surveys where small near surface magnetic targets are the object of the survey.

#### Selectable Sampling Rates

0.5 second, 1 second and 2 second reading rates user selectable from the keyboard.

#### Main features include:

- select sampling rates as fast as 2 times per second
- "WALKMAG" mode for rapid acquisition of data
- large internal, expandable memory
- easy to read, large LCD screen displays data both numerically and graphically
- ENVIMAP software for processing and mapping data

ENVI-MAG comprises several basic modules; a lightweight console with a large screen alphanumeric display and high capacity memory, a staff mounted sensor and sensor cable, rechargeable battery and battery charger, RS-232 cable and ENVIMAP processing and mapping software.

For gradiometry applications an upgrade kit is available, comprising an additional processor module for installation in the console, and a second sensor with a staff extender.

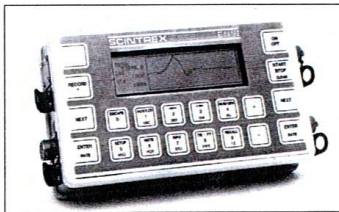


ENVI-MAG Proton Magnetometer in operation

For base station applications a Base Station Accessory Kit is available so that the sensor and staff may be converted into a base station sensor.

#### Large-Key Keypad

The large-key keypad allows easy access for gloved-hands in cold-weather operations. Each key has a multi-purpose function.



Front panel of ENVI-MAG showing a graphic profile of data and large-key keypad

#### Large Capacity Memory

ENVI-MAG with standard memory stores up to 28,000 readings of total field measurements, 21,000 readings of gradiometry data or 151,000 readings as a base station. An expanded memory option is available which increases this standard capacity by a factor of 5.

#### Easy Review of Data

For quality of data and for a rapid analysis of the magnetic characteristics of the survey line, several modes of review are possible. These include the measurements at the last four stations, the ability to scroll through any or all previous readings in memory, and a graphic display of the previous data as profiles, line by line. This feature is very useful for environmental and archaeological surveys.

#### Highly Productive

The "WALKMAG" mode of operation acquires data rapidly at close station intervals, ensuring high-definition results. This increases survey productivity by a factor of 5 when compared to a conventional magnetometer survey.

#### "Datacheck" Quality Control of Data

"Datacheck" provides a feature wherein at the end of each survey line, data may be reviewed as a profile on ENVI-MAG's screen. Datacheck confirms that the instrument is functioning correctly and







International Explorers & Prospectors Inc  
 Walker - Taylor survey costs  
 January 16 to 23 2019

		costs
Exsics Exploration	inv1837	2,900
L Bonhomme	1 day @	500
Total cost		3,400
# of stations		231
cost per station		14.71861472

claim id number	stations per claim	cost per station	\$ per cell
104798	19	14.72	280
241326	4	14.72	59
287231	10	14.72	147
139395	50	14.72	736
174589	10	14.72	147
191411	95	14.72	1,398
221197	19	14.72	280
228659	4	14.72	59
295870	20	14.72	294
totals	231		3,400