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### **GEOPHYSICAL REPORT**

### FOR

### FORTUNE NICKEL AND GOLD INC.

### ON THE

### **BECK-OTTAWAY PROPERTY**

OTTAWAY TOWNSHIP PORCUPINE MINING DIVISION NORTHEASTERN ONTARIO

JC Grant

Prepared by: J. C. Grant, May 2022

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#### **SUMMARY**

Fortune Nickel and Gold Inc. commissioned an Induced Polarization (IP) and Magnetic survey along three parallel ~NE-SW grid lines on their Beck-Ottaway-Lennox Townships 80 claim unit mining property. This exploration work began testing geology and structures for favourable conductive horizons that may host economic Ni-Co-PGM, VMS base metal, and Au mineralization.

Exsics Exploration Ltd. of Timmins, ON, completed the work under Exploration Plan PL-21-000075. A total of 7.3 km of line were cut of which 4.0 (IP) and 6.0 km (mag) were surveyed. The field work was undertaken from March 28<sup>th</sup>, 2022 to April 5<sup>th</sup>, 2022, with reporting completed by May 28<sup>th</sup>, 2022.

The Magnetic and IP surveys were successful in outlining several good strong conductive zone generally striking northwest to southeast across the survey lines. Most IP zones correlate directly with the magnetic high units or lie on the flanks of these highs. Both the magnetic and IP trends continue off of the grid in both directions and as a result the grid should be expanded to better define the zones. The grid should also be extended to the south to cover areas that could not be worked during the current program due to spring breakup. Follow-up diamond drilling of the expanded zones should then be considered.

#### **INTRODUCTION**

The services of Exsics Exploration Limited were retained by Mr. Paul Riss, on behalf of the Company, Fortune Nickel and Gold. Inc, (FNGI), a wholly owned subsidiary of 'Here To Serve Holding Corporation', to complete an Induced Polarization (IP), and total field magnetic survey over a portion of the company claim holdings. Known as the Beck-Ottaway Property, it is primarily located in the southeastern section of Beck Township and the northern section of Ottaway Township.

The Beck-Ottaway Property is some 13 kilometres north of Canada Nickel Company's world-class Crawford Ni-Co-PGM deposit, currently one of the largest undeveloped nickel low sulphide deposits known. It is also approximately 55 kilometres to the north of the City of Timmins and the Timmins Gold Camp, which has produced over 75 million ounces of gold and hosted many metal deposits and mines.

Planned work includes a review of historical geophysical and geology datasets, completing detailed and specific IP and Magnetic surveys, and flying a modern airborne EM-Gravity survey prior to drill testing targets. Mining Act Exploration Permits PR-21-000367 (2022/03/08), PR-22-000015 (2022/03/21), and PR-22-000016 (2022/03/18), all valid for 3 years, were issued to cover the project exploration activities.

The current IP and magnetic survey with associated line cutting was completed between March 28<sup>th</sup> and April 5<sup>th</sup>, 2022 (PL-21-000075), and was designed to begin testing geology and structures for favourable conductive horizons that may contain economic mineralization.

#### PROPERTY LOCATION, TOPOGRAPHY, AND ACCESS

The Beck-Ottaway Property is located in Beck, Ottaway, and Lennox Townships all within the Porcupine Mining Division in Northeastern Ontario. The property is approximately 55 kilometres to the north of the City of Timmins which provides extensive infrastructure support, including mill/ore processing facilities, mine services, and a skilled work force. The property is accessible from Hwy 11 to

the north via the south running Montgomery Road and associated trails, and can be explored throughout the year with a travelling time from Timmins to the survey grid area of about 2 hours. (Figures 1 and 2).

The property lies within the Boreal Shield and is marked by warm summer and cold, snowy winters with snow accumulations up to 2 metres. The climate is considered to be continental with overall temperature ranges of  $-40^{\circ}$ C to  $+35^{\circ}$ C. Despite the at times harsh climatic conditions, geophysical surveying and diamond drilling can generally be performed on a year-round basis with limitations during spring breakup. Geological mapping and geochemical sampling are typically restricted to the months of May through to October.

Much of this property is located within low undulating often sandy relief and widespread swampy terrain with spruce-tamarack-alder cover, as can be seen on the Google map (Figure 2 and 6). Drainage is relatively poor with several ponds and small lakes such as Deception Lake to the north, and meandering creeks. North flowing primary drainage systems are the Trappers Creek/North Driftwood River to the west and the closer Buskegau River to the east. Outcrops are not known in the project area and the area is covered by thick clay rich overburden reaching 50m or more. The area is relatively undeveloped with some scattered timbered parcels.



### FIGURE 1: LOCATION MAP

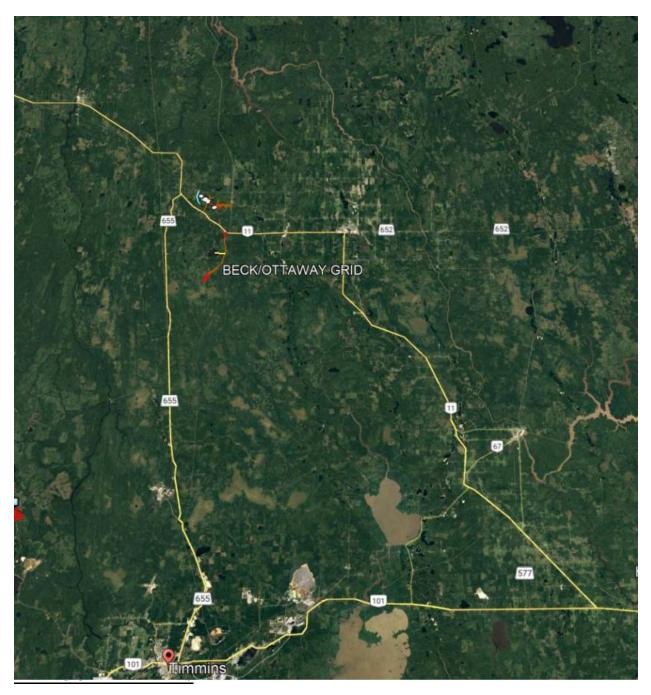
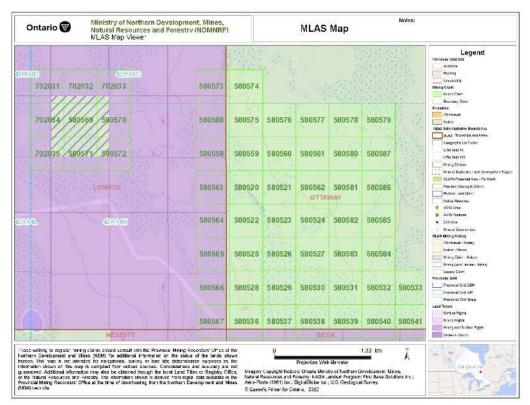


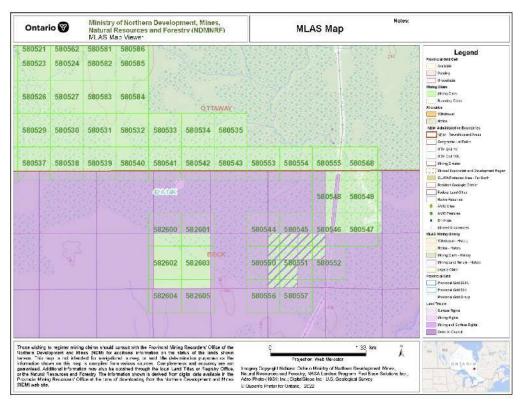
FIGURE 2: PROPERTY / GRID LOCATION MAP

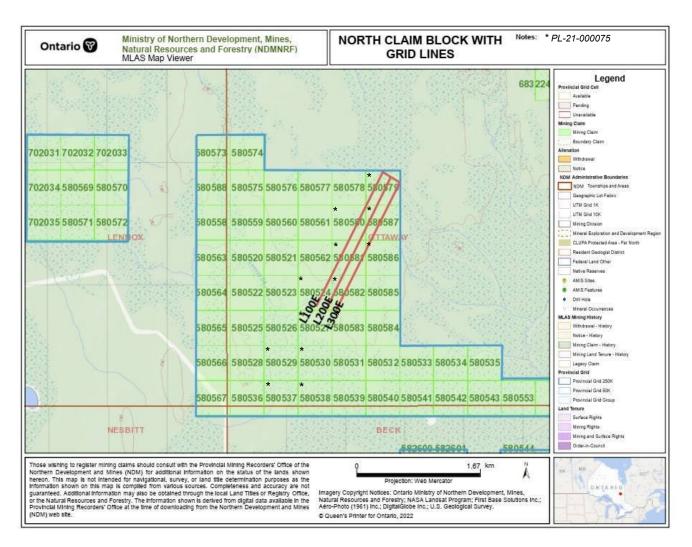
The property comprises 80 unpatented mining claim cells (about 1,160 hectares or 2,870 acres). The claim numbers that represent the Fortune Nickel and Gold Inc. holdings within Beck, Ottaway, and Lennox Townships are outlined on Figure 3A: North Section and Figure 3B: South Section. Appendix B tabulates the claim numbers of the mining property. Note that some claim cells are not full sized due to existing mining patents. Undersized claim cell are predominantly located along the township boundaries. All non-legacy claim cells require annual assessment work value of \$400.



### FIGURE 3A: NORTH SECTION CLAIM BLOCK

### FIGURE 3B: SOUTH SECTION CLAIM BLOCK





### FIGURE 3C: CLAIM BLOCK WITH GRID LINES

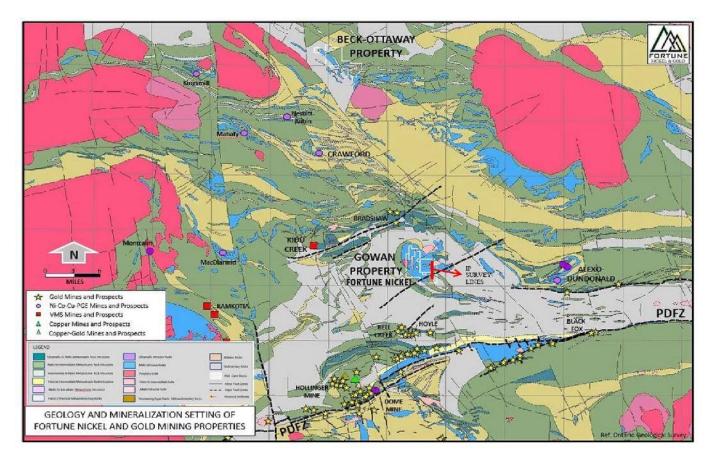
The claim numbers that were covered by the 3 grid lines of the IP and Magnetic surveys are 580524, 580527, 580579, 580580, 580581, 580582, 580583, 580586, and 580587 as shown on Figure 3C.

### **REGIONAL GEOLOGY**

The Beck-Ottaway Project is situated in Northeastern Ontario in the western portion of the mineral-rich Abitibi Greenstone Belt (2.8 to 2.6 Ga) within the Superior Province. The Abitibi Greenstone Belt and Subprovince straddles the Ontario-Quebec provincial border and is considered to be the largest and best preserved greenstone belt in the world (Jackson and Fyon, 1991; Sproule et al., 2003) covering an area of with dimensions of approximately 700 km southeast to northwest and 350 km north to south. It comprises several major east-trending successions of folded volcanic and sedimentary rocks, with associated felsic to ultramafic intrusions. The supracrustal rocks of the Abitibi Greenstone Belt are generally well preserved and only overprinted by low grade metamorphism (Monecke et al., 2017). The economic importance of the Abitibi Greenstone Belt is significant containing some of the most important gold, Cu-Zn base metal, and Ni-Cu-(PGE) deposits and mining camps in Canada.

The 'Ayer et al' field and geochronological data compliation of the Abitibi Greenstone Belt has defined several lithotectonic assemblages or volcanic episodes, however the relationships between assemblages remain unclear in areas. The greenstone belts consist mainly of volcanic units unconformably overlain by largely sedimentary "Timiskaming-style" assemblages.

Proterozoic dykes of the Matachewan Dyke Swarm and the Abitibi Dyke Swarm intrude all of the rock in the region with Matachewan dykes generally trending north-northwest while the younger Abitibi Dyke Swarm trends northeast.



#### FIGURE 4: OGS REGIONAL GEOLOGY MAP

#### **PROPERTY GEOLOGY**

OGS compilations of the Townships provides a geologic framework of the townships in which the project is located despite extensive overburden cover and limited rock exposure. Interpretations have relied heavily on available drill hole data and airborne magnetic surveys that indicate the property is underlain by NeoArchean ultramafic, mafic, felsic, and metasedimentary rocks as well as ultramafic and felsic intrusive rocks. (Figure 4/5).

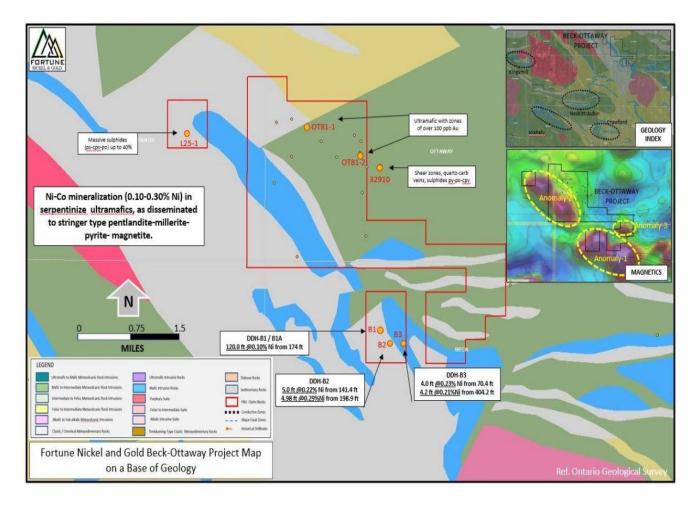
More specific drill hole data indicates the presence of thick serpentinized (altered) ultramafic and mafic suites including flows and intrusive such as gabbro. Andesitic flows contain thin carbonaceous tuffs,

tuffs and graphitic shales. Sediments have been documented as greywacke, quartzite, and graphitic argillite. Minor rhyolite and dacite has also been noted.

The generalized geology remains unclear with the northeastern potion of the property dominated by ultramafic and mafic volcanics while the southwestern portion appears more sedimentary with volcanic intrusives.

A NW trending fault (Buskegau River Fault) passes just to the west of the property and delimits the western extent of the sediments. Numerous smaller faults trending ENE and NE are shown offsetting some of the major lithological units.

Drilling assessment reports from the Ontario Ministry of Northern Development and Mines have documented 3 drill holes completed in 1965 that intersected multiple anomalous nickel bearing zones with up to 118 ft drilled thickness. This nickel sulphide mineralization at the southern portion of the property is hosted in altered dunite-peridotite rocks and occurs in the form of fine-grained, disseminations of pentlandite-millerite-chalcopyrite-pyrite with grades ranging from 0.10 to 0.30% Ni.



### FIGURE 5: PROPERTY GEOLOGY / AIRBORNE MAGNETICS

#### **MINERALIZATION**

Given the known geology of the property, mineralization potential in this area appears to be primarily for komatiite-associated Ni-Cu-Co (PGE) types, although additional historical drill hole data at the north and west portion of the property indicates anomalous copper and gold potentially associated with massive sulphides, and shear-controlled quartz-carbonate veins, respectively. For the last 40+ years, there has been no significant exploration activity on the property.

The Ni-Cu-Co (PGE) komatiite hosted deposits in the Timmins area, are often defined by lava channel geometries (Alexo, Hart, Langmuir, Marbridge, and Texmont) or sheet flows (Sothman, Kelex-Dundeal-Dundonald South). Those of recent interest include the mineralized sills such as Dumont (Quebec) and more recently, the evolving Canada Nickel "Crawford" deposit north of Timmins. It is hosted in the Crawford Ultramafic Complex (CUC) which has been modeled as a differentiated ultramafic to mafic komatiitic flow (sill) comprised primarily of dunite (+90% olivine) and peridotite (+40% olivine) that has been extensively serpentinized with primary olivine altered to an assemblage consisting of mainly serpentine and magnetite.

Drilling assessment reports from the Ontario Ministry of Northern Development and Mines have documented 3 drill holes completed in 1965 that intersected multiple anomalous nickel bearing zones with up to 118 ft drilled thickness. Similar to Crawford, this nickel sulphide mineralization at the southern portion of the property is also hosted in altered dunite-peridotite rocks and occurs in the form of fine-grained, disseminations of pentlandite-millerite-chalcopyrite-pyrite with grades ranging from 0.10 to 0.30% Ni.

Also of interest are VMS deposits, reflecting synvolcanic accumulations of metal enriched sulphide minerals found in geological domains characterized by submarine volcanic rocks, commonly tholeiitic to transitional and bimodal. These deposits are often spatially associated with synvolcanic faults, rhyolite domes or paleo-topographic depressions, caldera rims, or subvolcanic intrusions. The sulphides represent exhalative deposits in favourable settings that enable the focused discharge of hot, metal-rich hydrothermal fluids from sub-seafloor fluid convection systems, driven by large, 15 to 25 km long high level subvolcanic intrusions.

Idealized, un-deformed and un-metamorphosed Archean VMS deposit typically consists of a concordant lens of massive sulphides, typically containing in excess of 60% pyrite-pyrrhotite-sphalerite-chalcopyrite-(magnetite). These cap a discordant stockwork or stringer zone of vein-type sulphide mineralization generally contained in a pipe of hydrothermally altered rock typically comprised of inner chloritized cores surrounded by an outer zone of sericitization. A deposit may consist of several individual massive sulphide lenses and their underlying stockwork zones. Stockwork zones are thought to be near-surface channel ways of submarine hydrothermal systems with massive sulphide lenses representing the accumulation of sulphides precipitated from the hydrothermal solutions on the sea floor above and around the discharge vent.

The property has some potential to host structurally controlled, Archean epigenetic gold deposits. Quartz-carbonate vein deposits are typically associated with deformed greenstone belts characterized by variolitic tholeiitic basalts and ultramafic flows in turn often intruded by intermediate to felsic porphyries along major crustal-scale fault zones. Spatially associated with these deformation and fault zones are Timiskaming type sediments, often conglomeratic. The quartz-carbonate vein gold deposits range from simple to complex networks of laminated quartz-carbonate fault-fill veins within moderately to steeply dipping brittle to ductile shear/ fault zones with locally developed shallow dipping extensional veins and hydrothermal breccias. Extensive ankerite alteration is common and frequently accompanied by sericite and fuchsite. Gold is generally concentrated in the quartz-carbonate vein network but does occur in significant amounts within iron-rich sulphidized wall rock/vein selvages or within silicified and arsenopyrite-rich replacement zones.

### PREVIOUS WORK

Figure 5 includes the 18 historical diamond drill holes located on the property, all completed from 1965 to 1966 and in 1981. Six additional drill holes are recorded in the immediate area.

- 1966 United Macfie Mines Ltd., Ottaway Twp., 2 diamond drill holes: 833 ft, # 0/1/66, 0/5/66
- 1966 United Macfie Mines Ltd., Ottaway Twp., 1 diamond drill hole: 381 ft, # 0/3/66
- 1980/81 Nahanni Mines Ltd., Ottaway Twp., 7 diamond drill holes: 3,897 ft, OT-81-1 to 7, HLEM survey
- 1966 Mid-North Engineering Services Ltd., Ottaway Twp., 1 diamond drill hole: 434 ft, # 0/2/66
- 1966 Mid-North Engineering Services Ltd., Ottaway Twp., 1 diamond drill hole: 682 ft, # 0/4/66
- 1965 Inco, Ottaway Twp., 3 diamond drill holes: 1,303 ft, #28453, 28456, 28451
- 1966 Inco, Ottaway Twp., 2diamond drill holes: 1,226 ft, #20172, 20176
- 1964/65 Chislau Mining Corp, Beck Twp., 4 diamond drill holes: 1,861 ft, Mag/EM survey
- 1966 Inco, Beck Twp., 1 diamond drill hole: 496 ft, #29180
- 1965 Texasgulf Sulphur Co., Lennox Twp., 1 diamond drill hole: 404 ft, # L25-1
- 1966 Inco, Ottaway Twp., 1 diamond drill hole: 531 ft, #29183
- 1965 Inco, Ottaway Twp., 1 diamond drill hole: 826 ft, #29195
- 1967 Inco, Ottaway Twp., 1 diamond drill hole: 473 ft, #32910

More regional exploration 1966-73 (Abitibi Mining, Canico, Cromarty Expl., McIntyre Porcupine Mines) incorporated airborne and geochemical surveys such as the McIntyre Porcupine Mines stream sediment geochemical survey over 11 townships, as well as scattered property package exploration such as the 1964-66 Abitibi-Canico 10 township project with geophysics and diamond drilling.

### **IP AND MAGNETIC SURVEY**

### Personnel

The IP field crew responsible for the collection of all raw survey data, were as follows:

J. Francoeur	Timmins, Ontario, Senior Operator
D. Porier	Timmins, Ontario, Senior Operator
G. Martin	Timmins, Ontario, Field Assistant
J. Hamelin	Timmins, Ontario, Senior, Operator
J. Harrold	Connaught, Ontario, Field Assistant
K. Wilson	Timmins, Ontario, Field Assistant
E. Guillmette	Timmins, Ontario, Field Assistant
N. Collins	Timmins, Ontario, Mag Operator

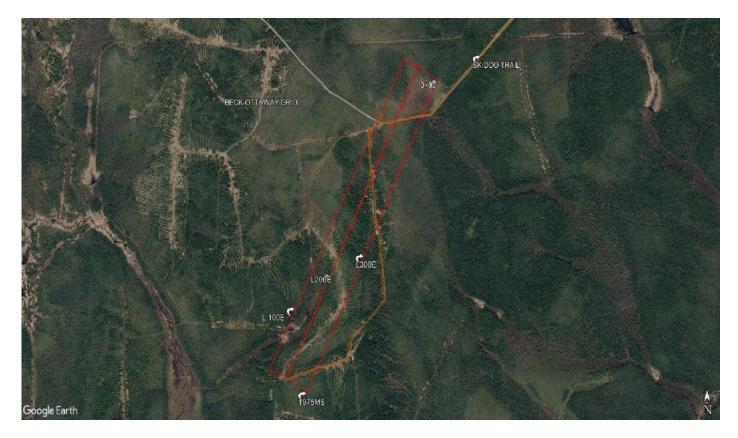
All plotting, interpretation and report was completed by J. C. Grant of Exsics Exploration.

### Ground Program

The ground program was completed in two phases. The first phase was to establish 3 grid lines across the claim block as laid out by the project geologist. This was done commencing at the northeast corner, UTM point 477619E / 5427336N which represented line 300M E / line point 0+00 of the grid. This line was cut to UTM point 476722E / 5425575N which represents line point 1975M S of the grid. Line 200M E was cut from UTM point 477486E / 5427419N to 476594E / 5425658N. Line 100M E was cut from UTM point 477380E / 5427482N to 476468E / 5425697N.

Once the line cutting was completed the 3 gird lines were covered by an Induced Polarization (2) and Total Field magnetic survey (3).

Specifications for this equipment can be found as Appendix A of this report. The line cutting and surveys were completed between March 28<sup>th</sup> and April 5<sup>th</sup>, 2022. The following parameters were kept constant throughout the survey.



### FIGURE 6: PLAN MAP OF GRID, OTTAWAY TWP. (GOOGLE EARTH)

#### Magnetic Survey

The total field magnetic survey that was done using the GSW Gem mag system. Specifications for the system can be found as Appendix A of this report. The following parameters were kept constant throughout the survey.

Line spacing	100 meters
Reading intervals	25 and 12.5 meters
Diurnal monitoring	Base station recorder, sample rate 30 second intervals
Reference field	56000Nt
Datun subtracted	55000Nt

In all. a total of 6 kilometres of magnetic surveys were completed across the northern section of the grid lines between April 3<sup>rd</sup> and 4<sup>th</sup> before the winter conditions became to soft and wet for further surveys. A plan map of the results of the magnetic survey is included.

#### IP Survey

Method	Time Domain
IP array	Pole-Dipole array
Electrode spacing	50 meters
Number of electrodes	10 stainless steel
Delay time	240Ms
Transmitter cycle;	2 seconds on 2 seconds off
Line spacing	120 and 150 meters
Parameter measured	Apparent resistivity in ohms/meter
	Chargeability in MV/V
Parameters plotted	Chargeability, Resistivity, Calculated Meal factor

Due to winter break-up conditions consisting of rain and warm weather, only 2 of the 3 cut lines or 4 kilometres were completed by the IP survey. Once the two lines of IP were completed the lines were plotted in individual line pseudo-sections at a scale of 1:2500. The individual color sections are included in this report.

#### Magnetic and IP Survey Results (Appendix A)

The survey was successful in outlining 3 main magnetic high structures across the three lines that were covered. The first structure lies between 250MS and 500MS and is represented by a good strong magnetic high unit with a core high of about 400 gammas above the property back ground. This structure appears to dip slightly to the southwest.

The zone correlates directly with a good, deep chargeability high and a narrow resistivity low situated between two flanking resistivity highs. The IP zone is strengthening as it continues to the southeast across line 300E and off of the grid.

A second strong magnetic high unit lies between 850MS and 1050MS with a core high of about 800 gammas above the backround. The zone is the strongest and broadest on line 200E and narrows to the southeast as it continues off of the grid to the southeast. The northwest section of the zone appears to have

been cross cut by a magnetic low unit that appears to strike into the grid from the west and runs across lines 100E to 300E just to the north of the high.

The magnetic high correlates directly with a good strong chargeability high that appears to be plunging in depth as it strikes from line 200E to 300E. The IP zone is associated with a resistivity low that again appears to lie between two resistivity highs. This zone also appears to dip to the southwest.

There is a modest east-west structure striking away from the main magnetic high unit that can be traced from line 200E to 100E and may continue off of the grid to the west.

There is another IP zone that was noted on line 300E that lies bewteen 1250MS and 1400MS that correlates to the southern edge of the north magnetic high unit and a broad magnetic low to the south. The zone is a good but deep chargeability high that is still increasing with depth and it is associated with a modest resistivity low at depth that lies beneath and to the north of a shallow resisitivity high. This zone may continue off the grid to the southeast.

A final magnetic high unit was outlined between 1600MS and the south ends of the grid lines that is host to an IP zone that lies along the northern edge of the high. The IP zone is represented by a good chargeability high that appears to continue at depth. The zone is associated with a shallow resistivity high on line 300E and a resistivity low on line 200E. The zone appears to dip near vertical to slightly southwest.

Data is presented on sections and plan map (IP, magnetics and IP compilation).

### **CONCLUSIONS AND RECOMMENDATIONS**

The Magnetic and IP surveys were successful in outlining several good strong conductive zone generally striking northwest to southeast across the survey lines. In most cases the IP zones correlate directly with the magnetic high units or lie on the flanks of the highs. In all cases the magnetic and IP trends continue off of the grid in both directions.

The grid should be expanded in both directions to better define the zones and the grid should also be extended to the south to cover that portion of the property that could not be done during the current program due to spring breakup.

Diamond drilling of the zones once the expanded grid is completed should then be considered as a follow up to the extended program.

Respectfully submitted

JC Grant

CET, FGAC, May 28<sup>th</sup>, 2022

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#### 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 Exsies 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.

JOHN GRAM CHOW

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### APPENDIX A

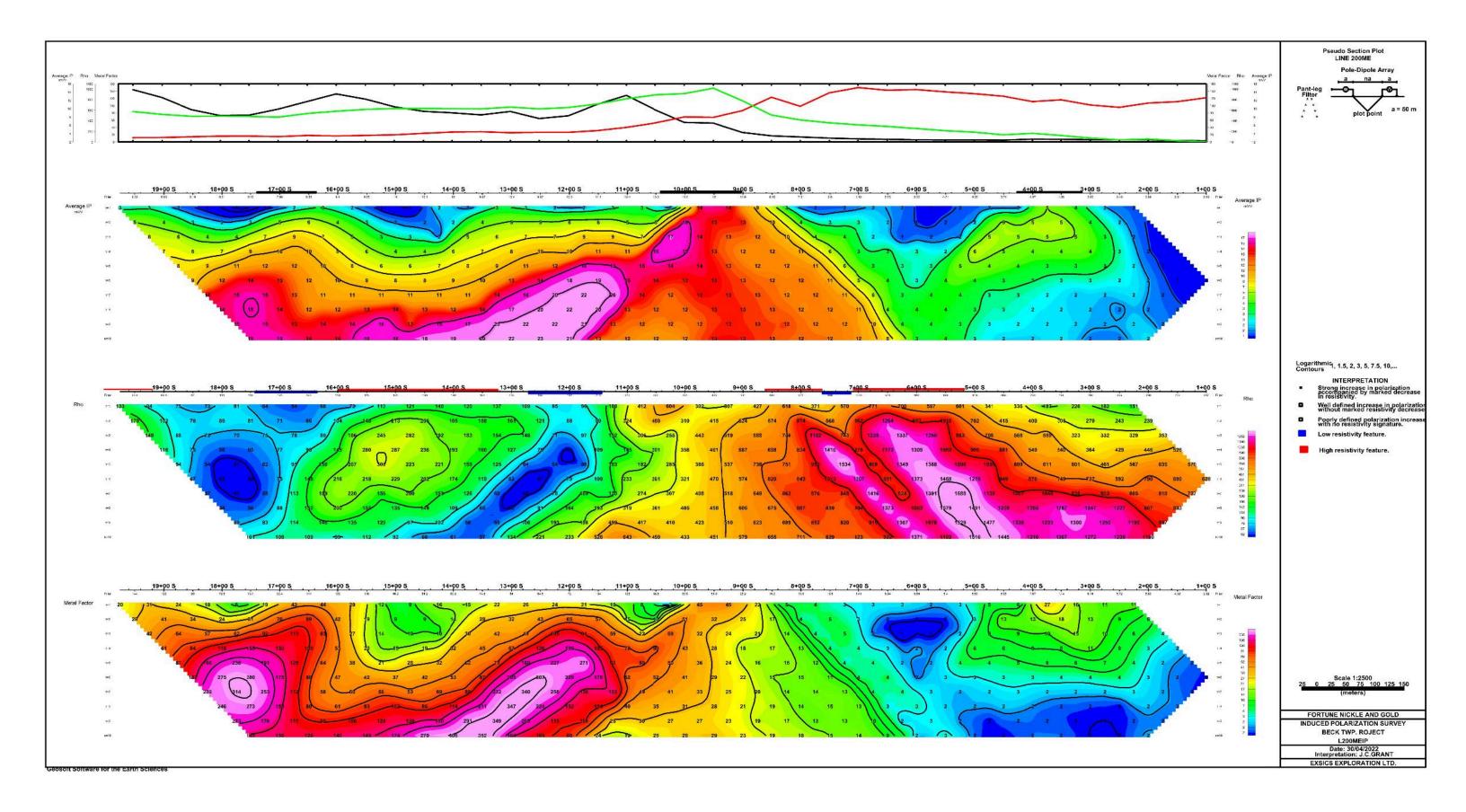
### **IP SECTIONS AND PLAN MAPS**

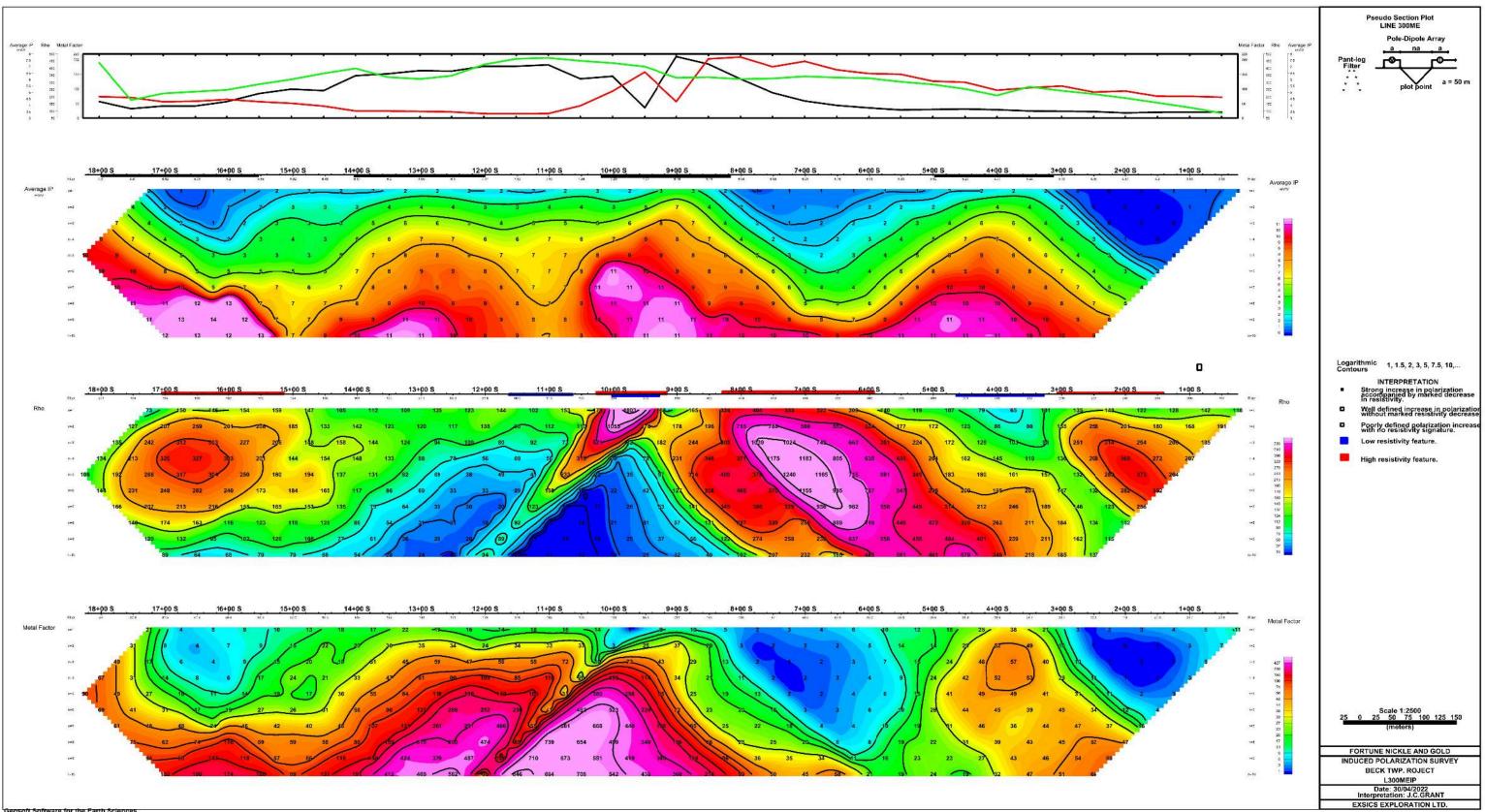
LINE 200ME

LINE 300ME

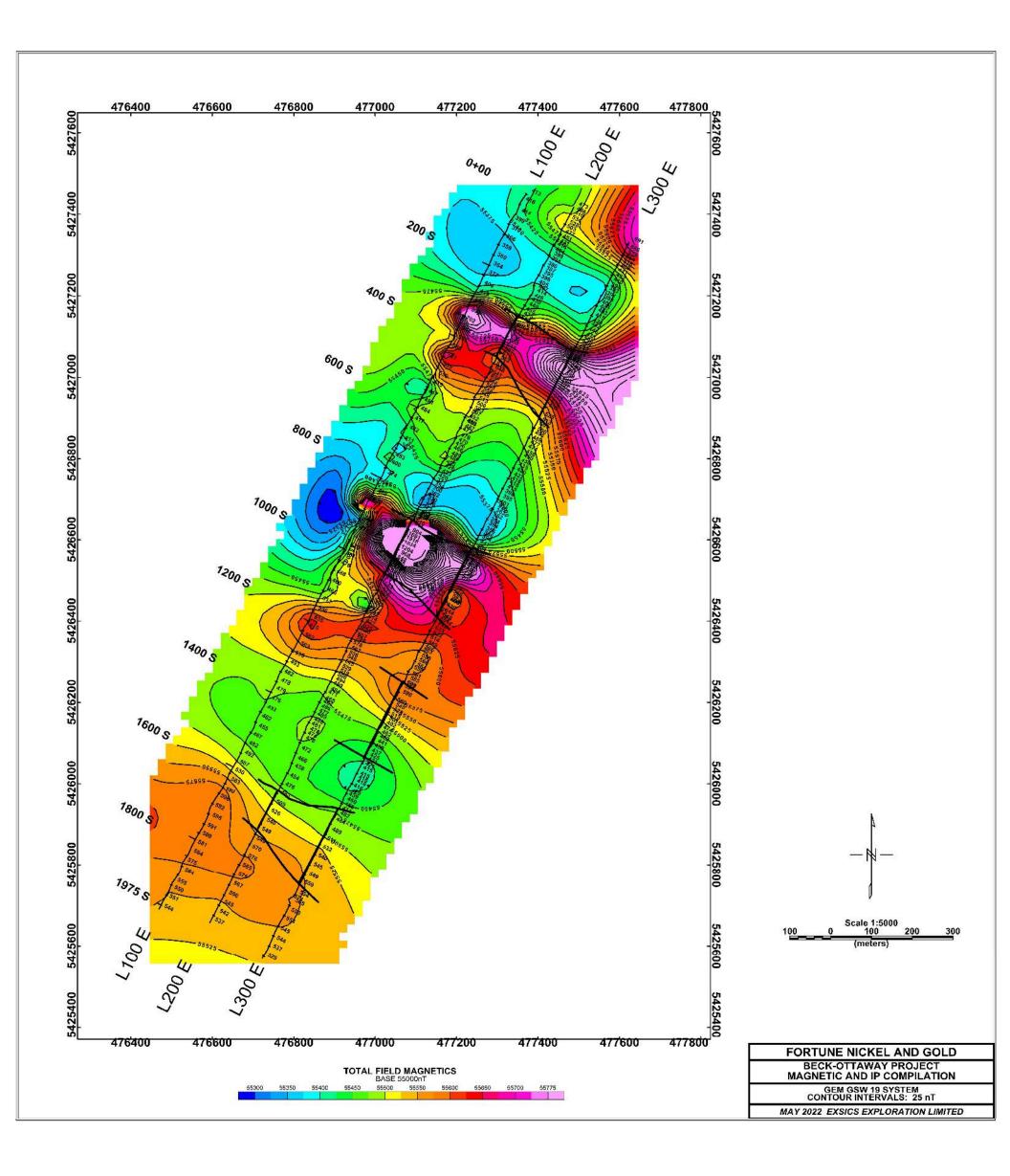
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TOTAL FIELD MAGNETIC WITH IP CORRELATION



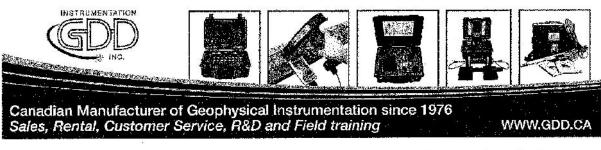


oft Software for the Earth Sciences



### APPENDIX B

Survey Equipment



# **IP Receiver Model GRx8-32**

«Field users have reported that the GDD IP Receiver provided more reliable readings than any other time domain IP receiver and it reads a few additional dipoles. »



### FEATURES

- 8 channels expandable to 16, 24 or 32
- Reads up to 32 ch. simultaneously in poles or dipoles
- · PDA menu-driven software / simple to use
- 32 channels configuration allows 3D Survey:
  4 lines X 8 channels 2 lines X 16 channels
  1 line X 32 channels
- Link to a PDA by wireless communication or a serial cable
- Real-time data and automatic data stacking (Full Wave)
- · Screen-graphics: decay curves, resistivity, chargeability
- Automatic SP compensation and gain setting
- 20 programmable chargeability windows
- · Survey capabilities: Resistivity and Time domain IP
- One 24 bit A/D converter per channel
- Gain from 1 to 1,000,000,000 (10<sup>9</sup>)
- Shock resistant, portable and environmentally sealed

**GRx8-32:** This new receiver is a compact and low consumption unit designed for high productivity Resistivity and Induced Polarization surveys. Its high ruggedness allows it to work under any field conditions.

User modes available: Arithmetic, logarithmic, semi-logarithmic, Cole-Cole, IPR-12 and user defined.

**IP display:** Chargeability values, Resistivity values and IP decay curves can be displayed in real time. The GRx8-32 can be used for monitoring the noise level and checking the primary voltage waveform.

**Internal memory:** A 4 Go (or more) Compact Flash memory card is used to store the readings. Each reading includes the full set of parameters characterizing the measurements for all channels; the full wave signal for post-treatment processing. The data is stored in flash type memory not requiring any battery power for safekeeping.



Manufactured in Canada by Instrumentation GDD Inc.

#### New IP Receiver Model GRx8-32 with PDA

**GRX8-32:** This new receiver is a compact and low consumption unit designed for high productivity Resistivity and Induced Polarization surveys. It features high ruggedness allowing to work in any field conditions

Reception poles/dipoles: 8 simultaneous channels expandable to 16, 24 or 32,

for dipole-dipole, pole-dipole or pole-pole arrays.

**Programmable windows**: The GRX8-32 offers twenty fully programmable windows for a higher flexibility in the definition of the IP decay curve.

User modes available: Arithmetic, logarithmic, semi-logarithmic, Cole-Cole and user define.

**IP display:** Chargeability values, Resistivity values and IP decay curves can be displayed in real time. The GRX8-32 can be used for monitoring the noise level and checking the primary voltage waveform.

**Internal memory:** The memory of 64 megabytes can store 64,000 readings. Each reading totalizes one kilobyte and includes the full set of parameters characterizing the measurements on 8 channels. The data is stored in flash memories not requiring any lithium battery for safeguard. The memory can hold many days worth of data. It also stores fullwave form of the signal at each electrode for post-treatment.

#### Features:

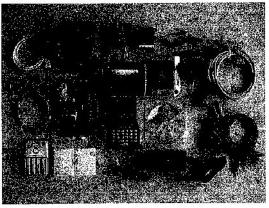
- 8 channels expandable to 16, 24 or 32
- Reads up to 32 ch. simultaneously in poles or dipoles configuration
- PDA menu-driven software / simple to use
- 32 channels configuration allows 3D Survey:
  4 lines X 8 channels, 2 lines X 16 channels or
  1 line X 32 channels
- Link to a PDA by Bluetooth or RS-232 port
- Real-time data and automatic data stacking
- Self-test diagnostic

- Screen-graphics: decay curves, resistivity, chargeability
- Automatic SP compensation and gain setting
- 20 programmable chargeability windows
- Survey capabilities: Resistivity and Time domain IP
- One 24 bit A/D converter per channel
- Gain from 1 to 1,000,000,000 (10<sup>8</sup>)
- Shock resistant, portable and environmentally sealed



GDD IP Receiver model GRx8-32





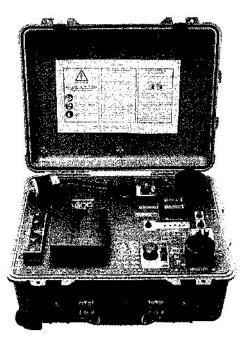
PDA included with GRX8-32 Standard Juniper -Allegro CX mobile PDA

Components included with GDD IP Receiver GRx8-32

## **IP Transmitter**

Model TxII 5000W-2400V-15A

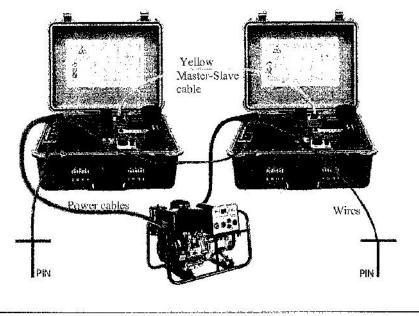
## Instruction Manual





860 boul, de la Chaudière, suite 200 Québec (Qc), Canada, GIX 4B7 Tel.: +1 (418) 877-4249 Fax: +1 (418) 877-4054 E-Mail: gdd@gdd.ca Web site: www.gdd.ca Here are the basic steps for a Master/Slave operation of the TxII:

- 1. Connect the yellow synchronization cable (Master/Slave) to the transmitters. The Master/Slave cable terminations are different: one is labeled *MASTER* and the other one *SLAVE*. The transmitter is *MASTER* or *SLAVE* according to the termination of the cable connected on its interface. The *MASTER* and *SLAVE* LEDs indicate the mode of each transmitter. (see figure 2, yellow line)
- 2. Connect an insulated wire between the terminal (A) of one transmitter and the terminal (B) of the other one. (see figure 2, blue line)
- 3. Connect the two power cables from the transmitters to the generator. (see figure 2, red lines)
- 4. Drive the electrodes into the ground and connect them to the unused terminals (A) and (B) by using insulated wires. (see figure 2, blue lines)



Instrumentation GDD Inc.

2016-02-29

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GEM's unique Overhauser system combines data quality, survey efficiency and options into an instrument that matches costlier optically pumped Caesium devices.

And the latest v7.0 technology upgrades provide even more value:

Data export in standard XYZ (i.e. line-oriented) format for easy use in standard commercial software programs

Programmable export format for full control over output

GPS elevation values provide input for geophysical modeling

Enhanced GPS positioning resolution <1.5m standard GPS for high resolution surveying <1.0m OmniStar GPS <0.7m for newly introduced CDGPS

Multi-sensor capability for advanced surveys to resolve target geometry

Picket marketing / annotation for capturing related surveying information on-the-go

And all of these technologies come complete with the most attractive savings and warranty in the business!

## **Overhauser**

Magnetometer / Gradiometer / VLF (GSM-19 v7.0)

0



Overhauser (GSM-19) console with sensor and cable. Can also be configured with additional sensor for gradiometer (simultaneous) readings.

The GSM-19 v7.0 Overhauser instrument is the total field magnetometer / gradiometer of choice in today's earth science environment -- representing a unique blend of physics, data quality, operational efficiency, system design and options that clearly differentiate it from other quantum magnetometers.

With data quality exceeding standard proton precession and comparable to costlier optically pumped cesium units, the GSM-19 is a standard (or emerging standard) in many fields, including:

- o Mineral exploration (ground and airborne base station)
- o Environmental and engineering
- o Pipeline mapping
- o Unexploded Ordnance Detection
- o Archeology
- o Magnetic observatory measurements
- o Volcanology and earthquake prediction

#### Taking Advantage of the Overhauser Effect

Overhauser effect magnetometers are essentially proton precession devices – except that they produce an order-ofmagnitude greater sensitivity. These "supercharged" quantum magnetometers also deliver high absolute accuracy, rapid cycling (up to 5 readings / second), and exceptionally low power consumption.

The Overhauser effect occurs when a special liquid (with unpaired electrons) is combined with hydrogen atoms and then exposed to secondary polarization from a radio frequency (RF) magnetic field.

The unpaired electrons transfer their stronger polarization to hydrogen atoms, thereby generating a strong precession signal – that is ideal for very highsensitivity total field measurements.

In comparison with proton precession methods, RF signal generation also keeps power consumption to an absolute minimum and eliminates noise (i.e. generating RF frequencies are well out of the bandwidth of the precession signal).

In addition, polarization and signal measurement can occur simultaneously -which enables faster, sequential measurements. This, in turn, facilitates advanced statistical averaging over the sampling period and/or increased cycling rates (i.e. sampling speeds).

Other advantages are described in the section called, "GEM's Commercial Overhauser System" that appears later in this brochure.

#### Key System Components

Key components that differentiate the GSM-19 from other systems on the market include the sensor and data acquisition console. Specifications for components are provided on the right side of this page.

#### Sensor Technology

GEM's sensors represent a proprietary innovation that combines advances in electronics design and quantum magnetometer chemistry.

Electronically, the detection assembly includes dual pick-up coils connected in series opposition to suppress far-source electrical interference, such as atmospheric noise. Chemically, the sensor head houses a proprietary hydrogen-rich

#### About GEM Advanced Magnetometers

GEM Systems, Inc. delivers the world's only magnetometers and gradiometers with built-in GPS for accuratelypositioned ground, airborne and stationary data acquisition. The company serves customers in many fields including mineral exploration, hydrocarbon exploration, environmental and engineering, Unexploded Ordnance Detection, archeology, earthquake hazard prediction and observatory research.

Key products include the QuickTracker<sup>TM</sup> Proton Precession, Overhauser and SuperSenser<sup>TM</sup> Optically-Pumped Potassium instruments. Each system offers unique benefits in terms of sensitivity, sampling, and acquisition of high-quality data. These core benefits are complemented by GPS technologies that provide metre to sub-metre positioning.

With customers in more than 50 countries globally and more than 20 years of continuous technology R&D, GEM is known as the only geophysical instrument manufacturer that focuses exclusively on magnetic technology advancement.

"Our World is Magnetic"



liquid solvent with free electrons (free radicals) added to increase the signal intensity under RF polarization.

From a physical perspective, the sensor is a small size, light-weight assembly that houses the Overhauser detection system and fluid. A rugged plastic housing protects the internal components during operation and transport.

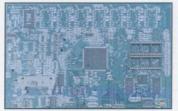
All sensor components are designed from carefully screened non-magnetic materials to assist in maximization of signal-tonoise. Heading errors are also minimized by ensuring that there are no magnetic inclusions or other defects that could result in variable readings for different orientations of the sensor.

Optional omni-directional sensors are available for operating in regions where the magnetic field is near-horizontal (i.e. equatorial regions). These sensors maximize signal strength regardless of field direction.

#### Data Acquisition Console Technology

Console technology comprises an external keypad / display interface with internal firmware for frequency counting, system control and data storage / retrieval. For operator convenience, the display provides both monochrome text as well as real-time profile data with an easyto-use interactive menu for performing all survey functions.

The firmware provides the convenience of upgrades over the Internet via the GEMLinkW software. The benefit is that instrumentation can be enhanced with the latest technology without returning the system to GEM -- resulting in both timely implementation of updates and reduced shipping / servicing costs.



GEM Systems, Inc. 52 West Beaver Creek Road, 14 Richmond Hill, ON Canada L4B 1L9 Tel: 905-764-8008 Fax: 905-764-2949 Email: info@gemsys.ca Web: www.gemsys.ca

### Specifications

	the second s
Sensitivity: < 0.01	5 nT / √Hz @ 1 Hz
Resolution:	0.01 nT
Absolute Accuracy:	+/- 0.1 nT
Range: 10,	000 to 120,000 nT
Gradient Tolerance:	> 10,000 nT/m
Samples at: 60+, 5, 3,	2, 1, 0.5, 0.2 sec
Operating Temperature:	-40C to +55C
Operating Modes	
Manual: Coordinates, tin eading stored automatio 3 second interval.	

Base Station: Time, date and reading stored at 3 to 60 second intervals. Remote Control: Optional remote control using RS-232 interface.

nput / Output: RS-232 or analog optional) output using 6-pin weatherproo connector.

Storage - 16 MB (# of Readings)

Mobile:	738,769
Base Station:	2,708,821
Gradiometer:	625,112
Walking Mag:	1,354,410
Dimensions	
Console:	223 x 69 x 240 mm
	and the second

Wainhte

Manufacture and a second s	
Console with Belt:	2.11
Sensor and Staff Assembly:	1.0 1

Standard Components

GSM-19 console, GEMLinkW software, batteries, harness, charger, sensor with cable, RS-232 cable, staff, instruction manual and shipping case.

**Optional VLF** 

Frequency Range: Up to 3 stations between 15 to 30.0 kHz

rarameters: vertical in-phase and out-or-phase components as % of total field. 2 components if horizontal field amplitude and total field trength in pT.

0.1% of total field

Represented By:

### APPENDIX C

Project Claims

### FORTUNE NICKEL AND GOLD - 10005094

Township / Area	Tenure ID	Tenure Type
ВЕСК	580544	Single Cell Mining Claim
ВЕСК	580545	Single Cell Mining Claim
ВЕСК	580546	Single Cell Mining Claim
ВЕСК	580547	Single Cell Mining Claim
ВЕСК	580548	Single Cell Mining Claim
ВЕСК	580549	Single Cell Mining Claim
ВЕСК	580550	Single Cell Mining Claim
ВЕСК	580551	Single Cell Mining Claim
ВЕСК	580552	Single Cell Mining Claim
ВЕСК	580556	Single Cell Mining Claim
ВЕСК	580557	Single Cell Mining Claim
BECK,LENNOX,NESBITT,OTTAWAY	580567	Single Cell Mining Claim
BECK,OTTAWAY	580536	Single Cell Mining Claim
BECK,OTTAWAY	580537	Single Cell Mining Claim
BECK,OTTAWAY*	580538	Single Cell Mining Claim
BECK,OTTAWAY	580539	Single Cell Mining Claim
BECK,OTTAWAY	580540	Single Cell Mining Claim
BECK,OTTAWAY	580541	Single Cell Mining Claim
BECK,OTTAWAY	580542	Single Cell Mining Claim
BECK,OTTAWAY	580543	Single Cell Mining Claim
BECK,OTTAWAY	580553	Single Cell Mining Claim
BECK,OTTAWAY	580554	Single Cell Mining Claim
BECK,OTTAWAY	580555	Single Cell Mining Claim
BECK,OTTAWAY	580568	Single Cell Mining Claim
LENNOX,OTTAWAY	580558	Single Cell Mining Claim
LENNOX,OTTAWAY	580563	Single Cell Mining Claim
LENNOX,OTTAWAY	580564	Single Cell Mining Claim
LENNOX,OTTAWAY	580565	Single Cell Mining Claim
LENNOX,OTTAWAY	580566	Single Cell Mining Claim
LENNOX,OTTAWAY	580573	Single Cell Mining Claim
LENNOX,OTTAWAY	580588	Single Cell Mining Claim
OTTAWAY	580520	Single Cell Mining Claim
ΟΤΤΑΨΑΥ	580521	Single Cell Mining Claim
ΟΤΤΑΨΑΥ	580522	Single Cell Mining Claim
ΟΤΤΑΨΑΥ	580523	Single Cell Mining Claim
OTTAWAY*	580524	Single Cell Mining Claim
OTTAWAY	580525	Single Cell Mining Claim
ΟΤΤΑΨΑΥ	580526	Single Cell Mining Claim
OTTAWAY*	580527	Single Cell Mining Claim

OTTAWAY	580528	Single Cell Mining Claim
OTTAWAY*	580529	Single Cell Mining Claim
OTTAWAY*	580530	Single Cell Mining Claim
OTTAWAY	580531	Single Cell Mining Claim
OTTAWAY	580532	Single Cell Mining Claim
OTTAWAY	580533	Single Cell Mining Claim
OTTAWAY	580534	Single Cell Mining Claim
OTTAWAY	580535	Single Cell Mining Claim
OTTAWAY	580559	Single Cell Mining Claim
OTTAWAY	580560	Single Cell Mining Claim
OTTAWAY	580561	Single Cell Mining Claim
OTTAWAY	580562	Single Cell Mining Claim
OTTAWAY	580574	Single Cell Mining Claim
OTTAWAY	580575	Single Cell Mining Claim
OTTAWAY	580576	Single Cell Mining Claim
OTTAWAY	580577	Single Cell Mining Claim
OTTAWAY	580578	Single Cell Mining Claim
OTTAWAY*	580579	Single Cell Mining Claim
OTTAWAY*	580580	Single Cell Mining Claim
OTTAWAY*	580581	Single Cell Mining Claim
OTTAWAY*	580582	Single Cell Mining Claim
OTTAWAY*	580583	Single Cell Mining Claim
OTTAWAY	580584	Single Cell Mining Claim
OTTAWAY	580585	Single Cell Mining Claim
OTTAWAY*	580586	Single Cell Mining Claim
OTTAWAY*	580587	Single Cell Mining Claim
LENNOX	580569	Single Cell Mining Claim
LENNOX	580570	Single Cell Mining Claim
LENNOX	580571	Single Cell Mining Claim
LENNOX	580572	Single Cell Mining Claim
LENNOX	702031	Single Cell Mining Claim
LENNOX	702032	Single Cell Mining Claim
LENNOX	702033	Single Cell Mining Claim
LENNOX	702034	Single Cell Mining Claim
LENNOX	702035	Single Cell Mining Claim
	T	
BECK	582600	Single Cell Mining Claim
BECK	582601	Single Cell Mining Claim
BECK	582602	Single Cell Mining Claim
BECK	582603	Single Cell Mining Claim
BECK	582604	Single Cell Mining Claim
BECK	582605	Single Cell Mining Claim

\* PL-21-000075

### **COSTS and DISTRIBUTION**

### ADDENDUM

TO

### **GEOPHYSICAL REPORT**

FOR

### FORTUNE NICKEL AND GOLD INC.

### ON THE

### **BECK-OTTAWAY PROPERTY**

### Distribution

Work	Cost		Units(km) Units (md)		F	inal Costs	
Access trail	\$	2,000.00	7.5	2.0	\$	4,000.00	
	\$	3,000.00	10.3	3.0	\$	9,000.00	
Linecutting	\$	1,600.00	7.3		\$	11,680.00	
IP	\$	3,800.00	4.0		\$	15,200.00	
Mag	\$	300.00	6.0		\$	1,800.00	
Interp./plots	\$	1,800.00			\$	1,800.00	
Total					\$	43,480.00	

Call	Cell Common Work*		IP Survey			Total Work		
Cell	Grid % \$28,280		Grid % \$28,280		\$	15,200.00		per Cell
580524	12.1	\$	3,409.00	5.1	\$	777	\$	4,186
580527	1.8	\$	505.00	0.0	\$	-	\$	505
580579	23.7	\$	6,691.00	19.0	\$	2,885	\$	9,576
580580	10.3	\$	2,904.00	4.4	\$	666	\$	3,570
580581	21.0	\$	5,933.00	21.2	\$	3,217	\$	9,150
580582	12.9	\$	3,661.00	21.2	\$	3,217	\$	6,878
580583	1.3	\$	379.00	2.2	\$	333	\$	712
580586	3.1	\$	884.00	5.1	\$	777	\$	1,661
580587	13.8	\$	3,914.00	21.8	\$	3,328	\$	7,242
Totals	100.0	\$	28,280.00	100.0	\$	15,200	\$	43,480

\* Linecutting/access, Mag, report