# REPORT ON AN INDUCED POLARIZATION SURVEY 

On the

LYNX PROPERTY

## DELORO TOWNSHIP, ONTARIO, PORCUPINE MINING DIVISION

## MINING CLAIM 4213578

FOR WADE KORNIK/ PIERRE ROBERT

Submitted by: Ray Meikle

North Bay, Ontario
February 25, 2015

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### 1.0 Introduction

The "Lynx Property", subject of this report consists of one mining claim, numbered 4213578, made up of 10 units in Deloro township, Porcupine Mining Division, Ontario.

This report is is an interpretation/assessement report on an Induced Polarization Survey carried out by R.J. Meikle \& Associates from May 13 - June 3, 2010. The claim is owned jointly by Wade Kornik and Pierre Robert, each having a 50\% share. The claim was under an option agreement to San Gold Corporation which was terminated in 2011. San Gold contracted out and paid for the I.P. Survey.

### 2.0 Location and Access

The Lynx property is located approximately 5 kilometers southeast of the city of Timmins, Ontario. The property is located in the western part of Deloro township and can be accessed by travelling south on Gold Mine road between Timmins and South Porcupine. At Shaw Creek Road, travel south for approximately $\mathbf{2}$ kilometers, where a 4 wheel drive bush road leads to the eastern portion ot the grid area. The grid was accessed from here by an 8 wheeled ARGO ATV for the survey period. (see figures 1 and 2).



### 3.0 Geophysical Program

The I.P. Survey was performed on a north-south grid previously established by Ranger Exploration, the same grid they used to carry out a Magnetometer/VLF-EM Survey. The I.P. Survey covered all or parts of Lines 600 west to Line $\mathbf{6 0 0}$ east at $\mathbf{1 0 0}$ meter line intervals. A "Pole-Dipole electrode array was used with an " a " or dipole spacing of 25 meters, reading 6 dipoles, $\mathrm{N}=1-6$.

The following is a brief description of the theory and parameters used for the survey:

The Induced Polarization (I.P.) method involves applying voltage across two electrodes in a pulsed manner, l.e. 2 seconds on, $\mathbf{2}$ seconds off. A second "dipole" or electrode pair measures the residual potential or voltage between them after the voltage is shut off during the $\mathbf{2}$ second off cycle. The potential is recorded at different times after the shut off. If, for example, there is sulphide mineralization within the measuring dipoles, they will be polarized or charges set up on the individual sulphide particles. This polarization gives the zone a capacitor effect, thereby delaying the current dissipation resulting in a higher chargeability reading (residual voltage), across the measuring dipoles at pre set time windows, during the $\mathbf{2}$ second transmitter shut off.

A typical I.P. response for many gold showings would be a chargeability high, resistivity high and magnetic low. This would be characteristic of disseminated mineralization, alteration, carbonatization and or silification. However, this is by no means the only geological setting for gold, therefore every I.P. profile should be looked at individually and correlated with all other geophysical and geological data.

A typical I.P. response for base metal mineralization such as copper, and or nickel would be a higher chargeability anomaly associated with a higher concentration of sulphides and a low resistivity due to the conductivity of the sulphides.

### 4.0 I.P. Survey Parameters

The electrode array used for the survey was the Pole-Dipole Array. In this array, one current electrode "C1), is placed at "infinity" usually greater than 1 km from the survey area, normal to assumed strike direction. The other current electrode (C2) is moved down a picket line in 25 m intervals, preceeded by 7 potential electrodes or dipole pairs spaced 25 m apart. For a $\mathrm{N}=1$ reading the first pair of potential electrodes is $\mathbf{2 5 m}$ meters from the $\mathbf{C 2}$ current electrode. Successive dipole electrode pairs are read from the same C2 position to obtain the remaining $\mathrm{N}=2-6$, with the farthest electrode pair from the current electrode having a greater depth of penetration.

The following survey parameters were used:
Method: Time Domain
Electrode Array: Pole-Dipole "a" spacing: $\mathbf{2 5}$ meters

Number of dipoles read: $\mathrm{N}=1-6$

Pulse Duration: 2 seconds on, 2 seconds off
Delay Time after current shut off to first time window: 310 milliseconds Integration Time, width of windows: 140 milliseconds

Receiver: Scintrex IPR-12 Time domain
Transmitter: GDD 5KVA, square wave, time domain with 5KW Honda Mg

Data Presentation: Individual Psuedosections, scale 1:2500

Fraser Filtered Chargeability Plan Map, 1:2500

Fraser Filtered Resistivity Plan Map, 1:2500

### 5.0 Results of the Induced Polarization Survey

The I.P. Survey outlined several zones of higher chargeability, most with coincident resistivity highs and some with moderate resistivity to weakly conductive. The I.P. data was filtered to better correlate with the ground magnetic plan map of the previous survey which has been included in this report for that purpose as well.

A total of 8 anomalous chargeability zones were outlined, most having a coincident magnetic correlation. Most of the chargeability anomalies have a high resistivity signature which is not always easy to correlate as there is a variable depth of overburden in the area which tends to enhance or diminish the background of the resistivity values and to some extent that of the chargeability response. The anomalies are described as follows:

Anomaly ' $A$ ' - This anomaly has a higher than background chargeability signature and a higher resistivity with a coincident magnetic high. It was detected on L5e/550n and L6e/600n, open to the northeast.

Anomaly 'B' - This anomaly, on L4e/350n and L5e/350n has a higher resistivity and a coincident magnetic high. It becomes a bit more obscure to the west but may be terminated or displaced by a proposed northwest fault indicated on the magnetic plan map.

Anomaly ' C ' - This is a weakly chargeable zone shown on L3e/On and possibly L4e/060s. This shows it to be a short southeast striking zone but it more likely that it is part of a magnetic anomaly which is part of an overall north northeast striking north south.

Anomaly 'D' - Again, as with Anomaly ' $C$ ', this anomaly is shown on the filtered chargeability plan map to strike east to southeast on L1e/050s, L2e/080s and L3e/100s but the response on all three lines are coincident with spotty magnetic highs. The response on Lines 1 e and $\mathbf{2 e}$ have a significantly higher chargeability.

Anomaly ' $E$ ' - This is a high chargeability anomaly striking in a north south direction coincident with a magnetic high. The southern end of the anomaly on L1e is broad in a north south direction from 100 n to 175 n which is probably due to being along strike of the causative magnetic anomaly. The chargeability is significantly higher on the south end which is also coincident with a resistivity high while the northern part has a much lower moderate resistivity signature. The anomaly is open to the north northwest where the magnetic map suggests it extends off the coverage area.

Anomaly ' $F$ ' - This anomaly is a northwest striking chargeability high between two resistivity highs, having a moderate resistivity over the anomaly. There is no coincident magnetic high. The anomaly starts from L0e/100s to L4e/400n and is open to the northwest. It is parallel if not coincident with an inferred fault interpreted by M. Johnston in his report on the Magnetometer Survey.

Anomaly 'G' - This anomaly has a northwest strike direction, coincident with a magnetic high. The anomaly starts on L2w/100n to L4w/275n. It is quite chargeable on Lines $\mathbf{2 w}$ and 3w which also has the highest magnetic susceptibility.

Anomaly 'H' - This is a weakly chargeable, moderately resistive anomaly with a coincident magnetic high. The anomaly strikle northwest from L4w/250s to L6w/100s, open to the northwest. The magnetic map suggests that the magnetic anomaly is truncated at this point, resuming at L8w/060n, continuing north west from there but there is no I.P. coverage beyond L6e.

### 6.0 Conclusions and Recommendations

Seven of the above eight I.P. anomalies have a coincident magnetic correlation. While it not known by the author if all of the magnetic anomalies are related to the same geological source it is certainly a possibility and as such ground proofing of the anomalies may be as simple as using a magnetometer to locate any areas of outcropping coincident with the magnetic and or I.P. anomalies.

Anomaly ' $F$ ' is different than the other anomalies in that it does not have any magnetic susceptibility signature. It does have a strong chargeability response most notably on L1e/150n.

It is recommended that the property be mapped in detail and the geology correlated with the results of the Magnetic and I.P. Surveys to attempt to explain the causative sources for the anomalies. Based on the compilation of all data, further I.P Survey is recommended on the rest of the property if warranted.


## APPENDIX ' $A$ '

## CERTIFICATION OF AUTHOR

## CERTIFICATION

I, Raymond Joseph Meikle of Timmins, Ontario hereby certify that:

1. I hold a three year Technologist Diploma from the Haileybury School of Mines, Haileybury, Ontario, obtained in May 1975.
2. I have been practising my profession since 1973 in Ontario, Quebec, Nova Scotia, New Brunswick, Newfoundland, NWT, Manitoba, Greenland, Colorado, Nevada, Germany and Chile.
3. I have been employed directly with Teck Corporation, Metallgessellschaft Canada Ltd. Sabina Industries, R.S. Middleton Exploration Services Ltd., self employed 1979-1997 (Rayan Exploration Ltd.) and with Geophysical Engineering \& Surveys Inc., currently with R.J. Meikle \& Associates.
4. I have based conclusions and recommendations contained in this report on knowledge of the area, my previous experience and on the results of the fieldwork conducted on the property during 2010.
5. I hold no interest, directly or indirectly in this property, nor do I expect to receive any interest or considerations from the property owners, other than for professional fees rendered.

Dated this 17th day of April,2015
at North Bay, Ontario.


## APPENDIX ‘B’

## PLAN MAGNETOMETER MAP (RANGER EXPLORATION)



## APPENDIX 'C'

FRASER FILTERED I.P. CHARGEABILITY PLAN MAP


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## APPENDIX ' ${ }^{\prime}$ ’

## FRASER FILTERED I.P. RESISTIVITY PLAN MAP



## APPENDIX 'E’

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v Low resistivity feature.
Scale 1:2500


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LYNX PROPERTY
DELORO TWP., TIMMINS, ON



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Interpretation: M. JOHNSTON
R.J. MEIKLE \& ASSOCIATES

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