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## Geophysical Report

**Subject:** Gowgonda Transition Gold Project, Geophysical Report.

**Date:** 27<sup>th</sup> January, 2020

**Client:** Battery Mineral Resources Ltd.

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### Summary

The geologic setting in the Gowgonda Transition Gold area (Haultain area) is geophysically complex due to the intersection of N-S Matachewan diabase dikes (magnetic and resistive), E-W striking ultramafic volcanic rocks (magnetic) including serpentinized ultramafic rocks, E-W trending Nipissing diabase dikes (magnetic), graphitic sediments and E-W to WNW striking structures (observed in 2016-2018 helimag). The lack of magnetic response from serpentinized ultramafic bodies is a surprise. From previous experience magnetics has been useful in identifying these bodies. This lack of magnetic response could be a function of contrast with the surrounding rocks. The IP/resistivity data sets, 2011- Quantec and 2017-CXS, at the property have been considered of limited utility. The sweeping statement that all IP response is due to serpentinite or graphitic sediments and that the resistivity highs are the actual targets is misleading. In fact the resistivity highs appear to be caused by the Matachewan dikes running sub-parallel to the ground geophysical lines. There are interesting IP anomalies identified in this report which require testing.

Helicopter magnetic data is a primary targeting tool in this interpretation. It maps structure, alteration and lithology all of which are important in controlling gold mineralization in the Haultain area. The one lithologic unit is does not map, unfortunately, is the monzonitic unit which hosts mineralization in the primary target area.

The IP response is a lower priority targeting tool due to geologic noise associated with serpentinite and graphitic sediment response in the area. However the anomalous IP responses should be considered potential targets especially in the vicinity of EW and WNW striking structures and Nipissing diabase intrusives.

A large amplitude magnetic response located to the north of the target area is interpreted to be a deep rooted mafic intrusion. It may be the source of the Nipissing intrusive dikes in the area and may have acted as a heat source for remobilizing gold in the structural plumbing system in the area.

Although the Gowgonda Transition area is interpreted to be a gold prospect, geologic reports indicate cobalt mineralization may occur in the vicinity of the gold targets and the presence of the Nipissing diabase intrusions is considered to be important. The structures controlling mineralization may have been active in both the Archean and Proterozoic periods.

### **Property Location**

The Gowgonda Transition property is located in east-central Ontario as indicated by the red ellipse in Figure 1. This map shows the 2018 Transition Metals land block and the BMR current target area (red ellipse) plotted in NAD83, UTM Zone 17N coordinates. Both NAD83 and WGS84 datum's are used interchangeably in this report. They are equivalent for practical purposes. The Haultain prospect area of interest occurs within the area surrounded by the red ellipse.

Figure 2 shows the location of the 2017 Haultain IP/resistivity grid plotted on the 'Ministry of Northern Development and Mines' property map. The grid, highlighted by a red dashed ellipse is the immediate area of interest in this report.

Figure 3 shows the reduced to pole regional magnetic map (Precision 2016 and 2018) for the entire BMR Gowgonda area of interest. The black dashed ellipse shows the Haultain target area of interest.

Figure 4 is an enlargement of the regional 2016-2018 BRM Precision survey with the detailed 2008 MPX survey block and the target specific geology map plotted on top.

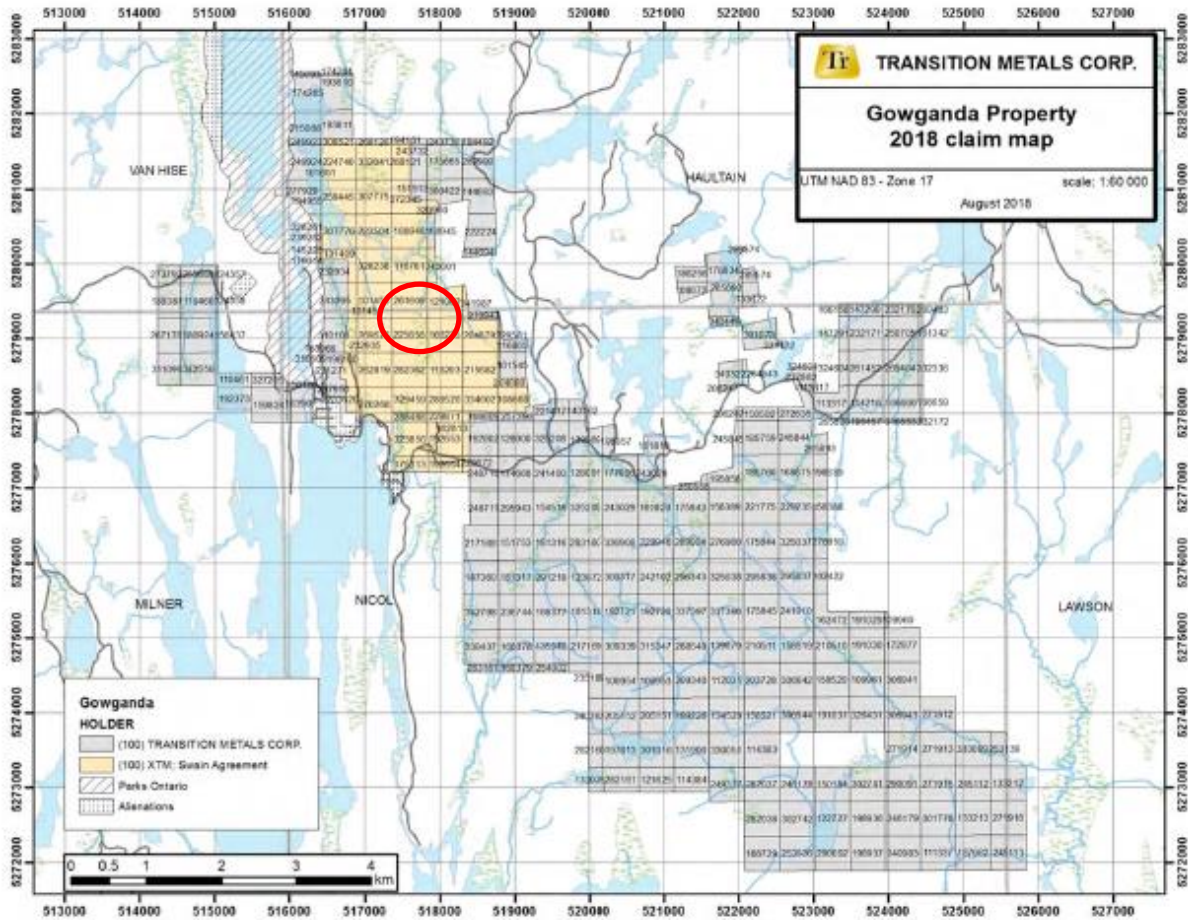


Figure 1 – The location of the BMR Gowganda Transition prospect located in east-central Ontario. The red ellipse identifies the current exploration area of interest.

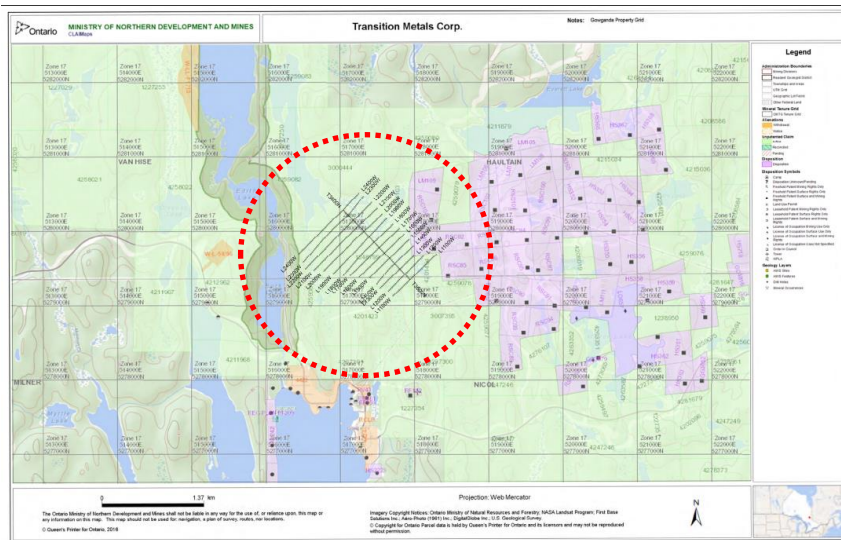


Figure 2 – The Gowganda Transition area of exploration interest with the 2017 CXS IP/resistivity and ground magnetic grid plotted on top.

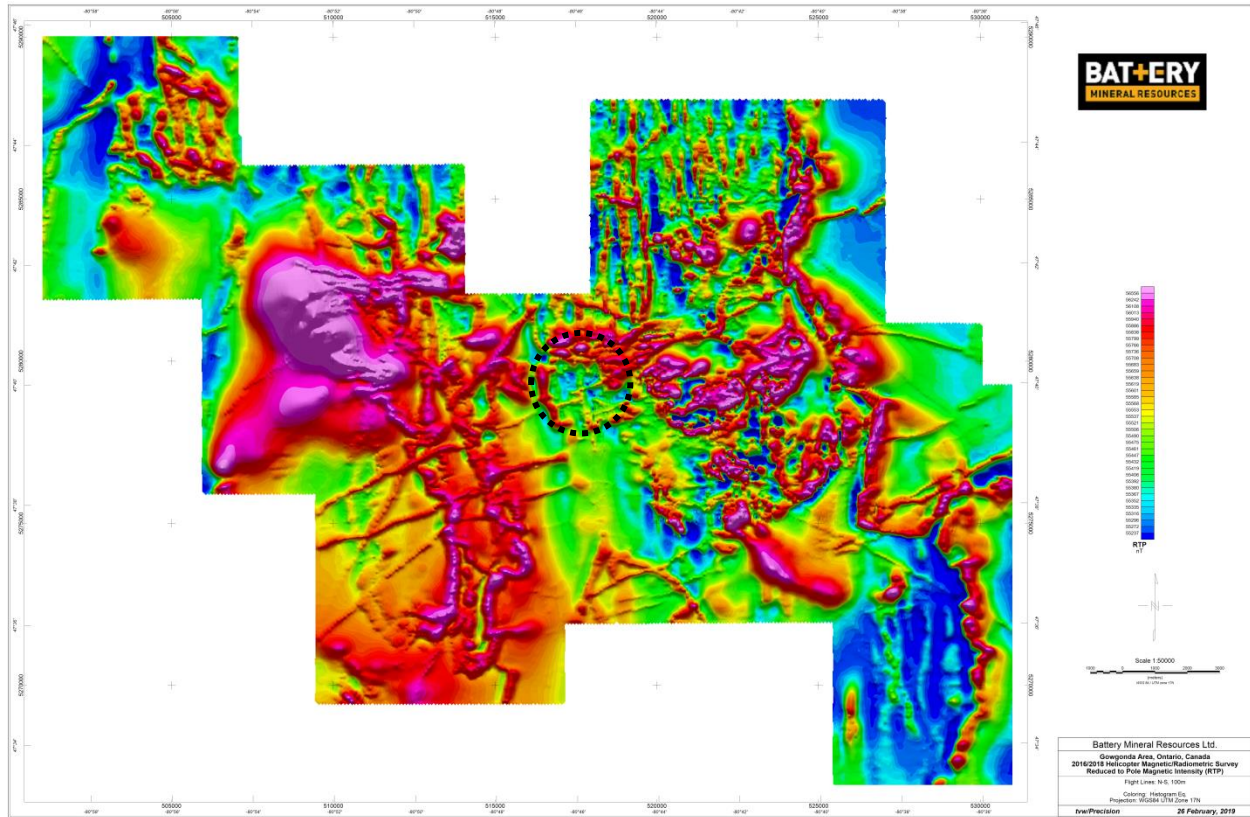


Figure 3 – The RTP magnetic image for the entire BMR Gowgonda cobalt exploration program. The black dashed ellipse shows the area of the exploration interest in this report. It has been referred to in the past as the Haultain area.

Figures 1 through 4 have been presented here for location purposes only. The individual magnetic data sets and their interpretation are discussed below.

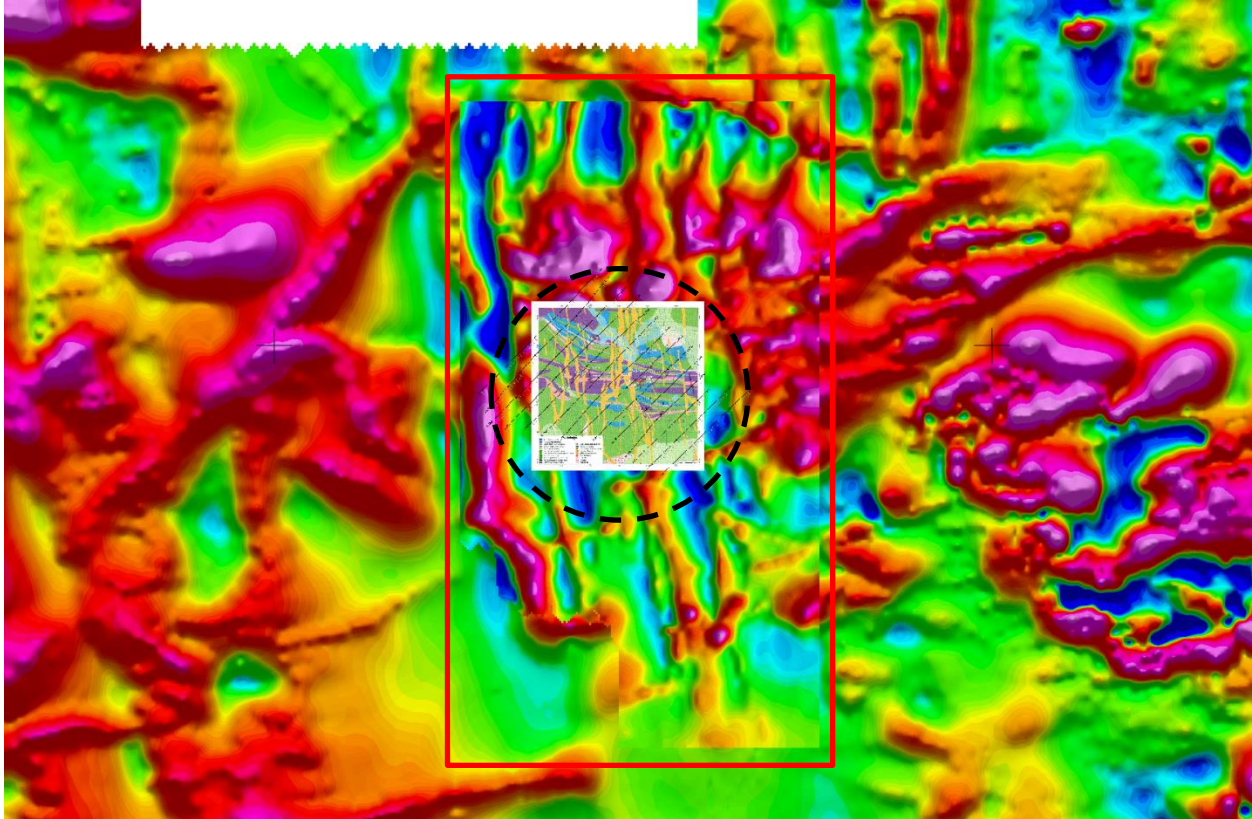


Figure 4 – The 2016-2018 (N-S 100 meter flight lines) RTP map with the detailed 2008 (N-S 50 meter flight lines) RTP data set and detailed prospect geology map plotted on top.

**Regional Magnetic Data Set**

The Gowgonda regional (2016-2018) Precision helicopter magnetic survey was flown in the N-S direction with 100 meter line spacing. The RTP magnetic intensity map from this survey is shown in Figure 3. The N-S line direction was selected to target E-W striking Nipissing diabase dikes and associated structures. This is also effective for mapping the E-W trending gold mineralizing structures in the Haultain area. It poorly maps the approximately N-S striking Matachewan diabase dikes in the area which may be considered magnetic/geologic noise. The 100 meter line spacing is the issue in poorly mapping the N-S dikes sets.

Figure 5 shows a structural interpretation of the regional RTP magnetic data set for the Haultain area. The black lines are interpreted faults and are the primary geophysical target features interpreted in this report. The blue line is a folded ENE trending Proterozoic dike bounding the area of exploration interest on the southern side.

Figure 6 shows the structural interpretation without the RTP image base. This georeferenced image can be dropped directly into the geologists GIS package for location reference purposes.

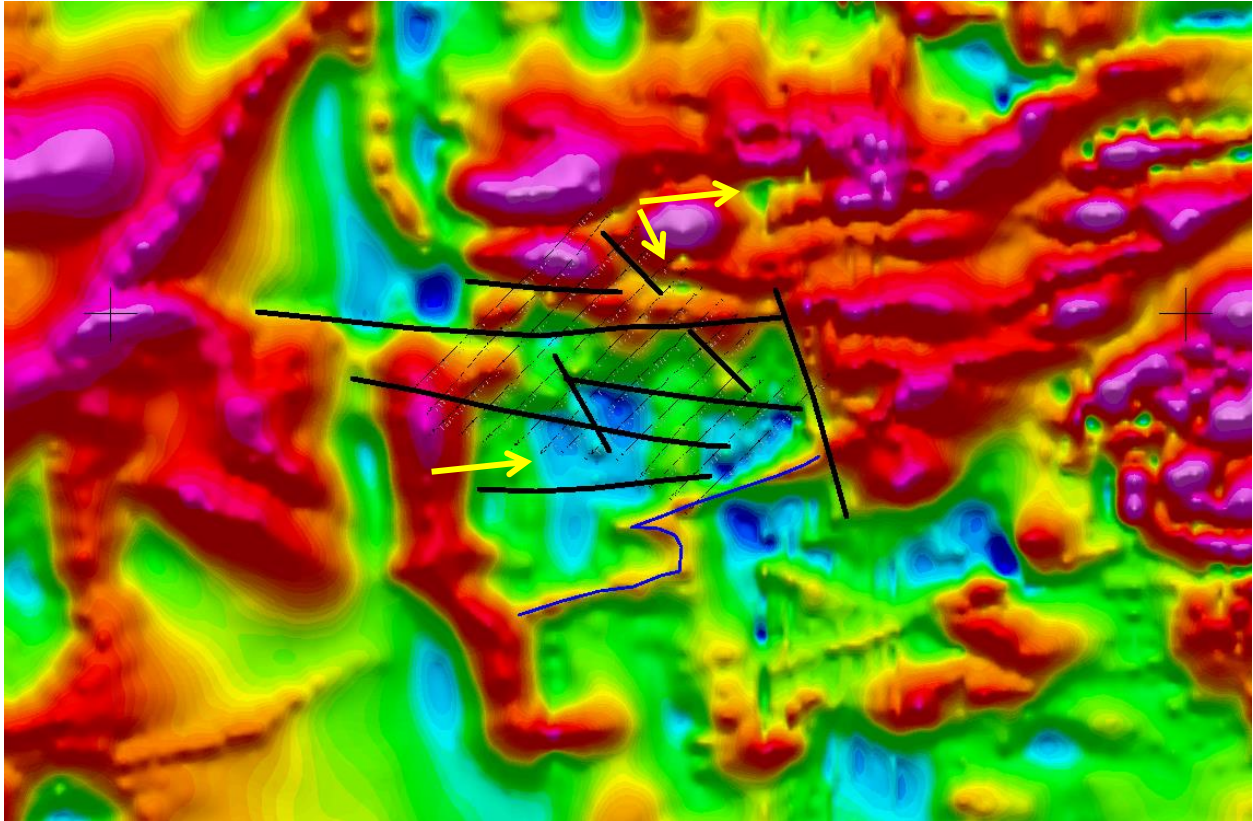


Figure 5 – The regional RTP magnetic intensity map with interpreted structures (black lines) plotted on top. Since the flight line direction is N-S the E-W trending structures show up well. There are a large number of N-S striking Matachewan dikes in the area and they are almost invisible to this 100 meter spaced N-S flight line data set. The yellow arrows in this figure indicate the presence of interpreted alteration magnetic lows which may be of interest and should be field checked and geochemically sampled for gold.

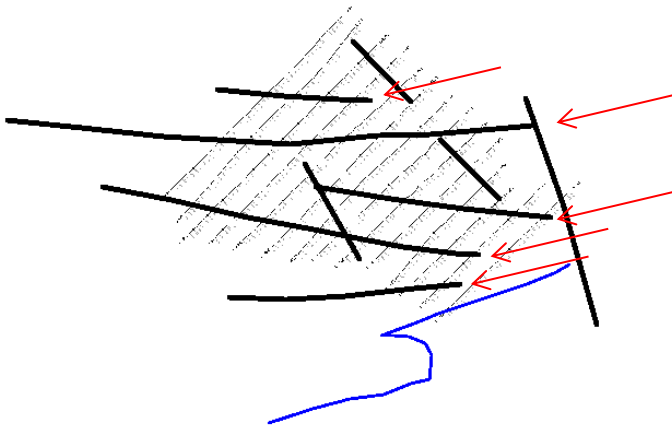


Figure 6 – The structural interpretation from Figure 5 with no RTP colored image base. The georeferenced version of this interpretation can be dropped directly into the geologists GIS package. All E-W trending structures are considered exploration targets in this figure (red arrows).

## Detailed Magnetic Data Set

The detailed Haultain magnetic survey was flown by MPX for Transition Metals in 2008. Similar to the regional data set the 2008 survey was flown in the N-S direction but with a closer line spacing of 50 meters. With the tighter line spacing the N-S striking Matachewan dike sets show up extremely well in this data set. The same processing work flow applied to the regional Precision data set has been applied to the detailed MPX data set. Of the map products produced the RTP, 1VD, Tilt Derivative and 1vi data sets are utilized in this report.

Figure 7 shows the reduced to pole (RTP) magnetic intensity map for the detailed 2008 MPX magnetic survey. The 50 meter line spacing enhances the N-S Matachewan dike response in the area. The small E-W survey block dimension, approximately 2 kilometers, makes identifying the E-W trending structures more difficult in this data set.

Figure 8 shows the first vertical derivative (1VD) of the RTP data set. It is a high frequency pass filter which tightens up the location of both the Matachewan dikes and the cross cutting lithologic features in the Haultain area.

Figure 9 shows the tilt derivative (Tilt) of the RTP data set. It provides a good map of the N-S dikes and the cross cutting lithological features.



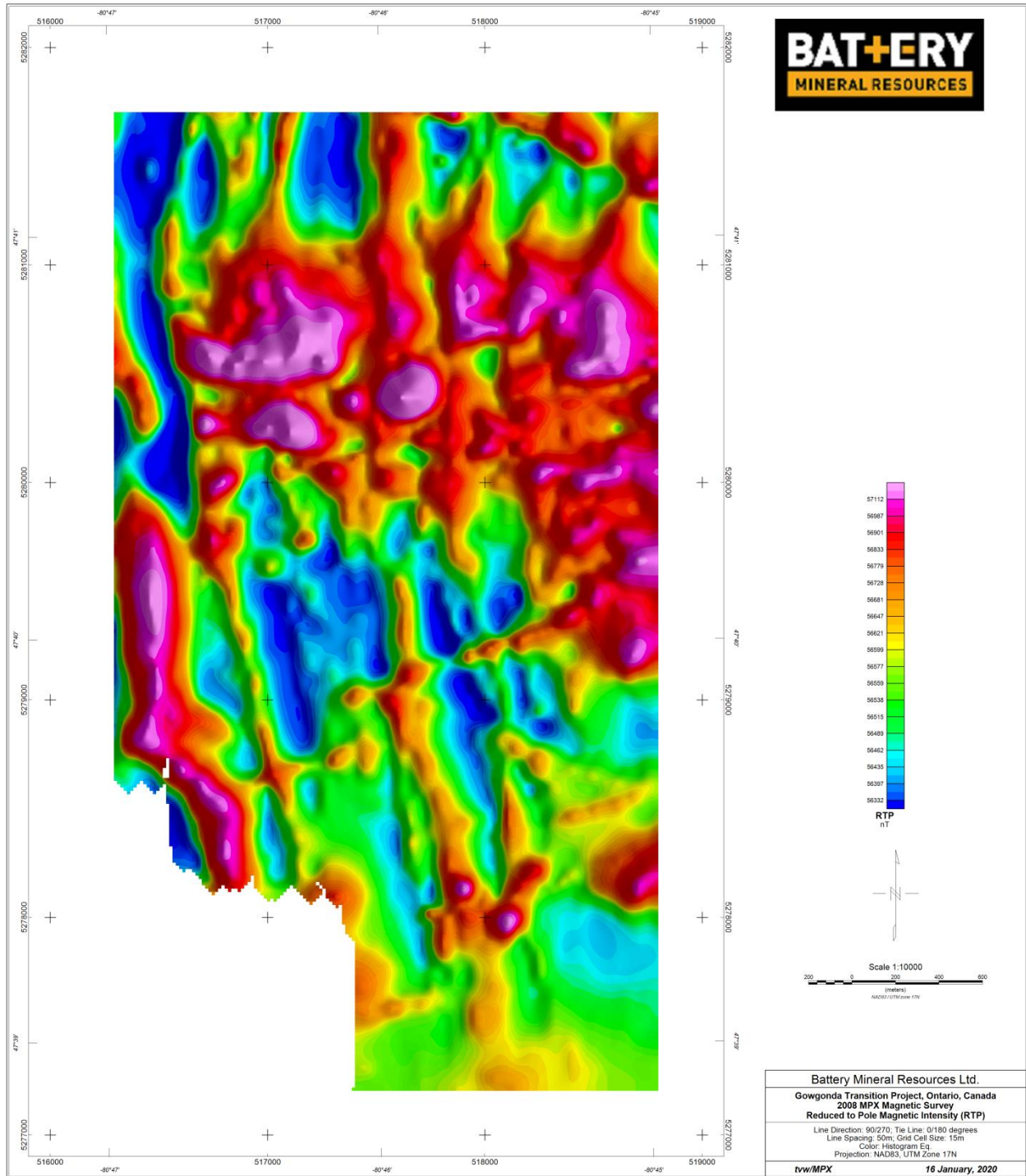


Figure 7 – The Reduced to the Pole magnetic intensity image of the 2008 MPX Haultain data set. Note that with a 50 meter line spacing the Matchewan dikes show up considerably better than with 100 meter line spacing. This image is also used for a structural interpretation that is shown below (Figures 11 and 12).

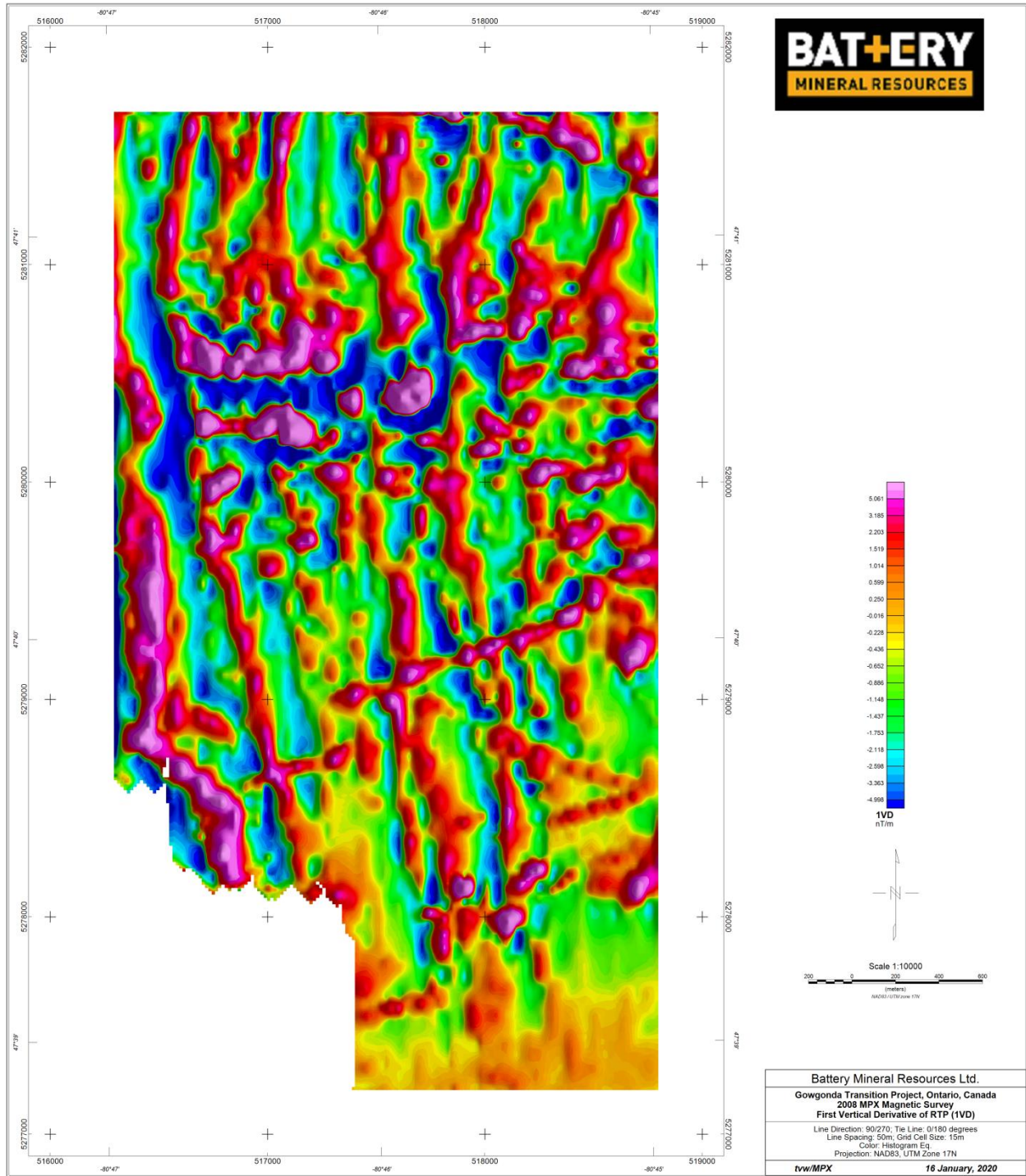


Figure 8 – The first vertical derivative (1VD) of the RTP magnetic data set from the 2008 MPX Haultain data set. The 1VD map product is a high pass filter which tightens up the location of the Matachewan dikes and E-W trending lithology. The apparent thickening and thinning of the Matachewan dikes may be a function of line direction and spacing.

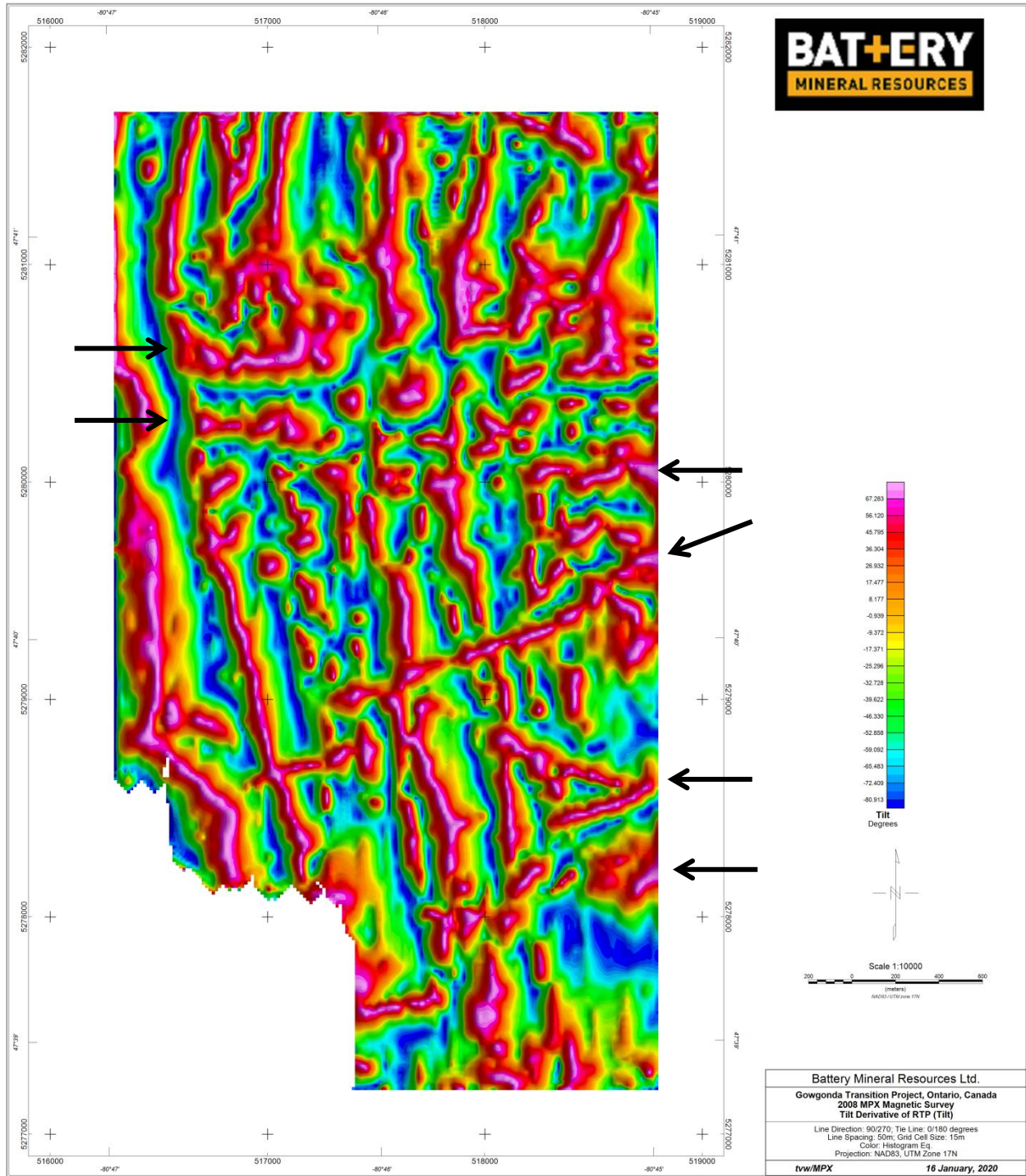


Figure 9 – The Tilt Derivative (Tilt) of the RTP magnetic intensity calculated from the 2008 MPX Haultain data set. This data set is useful in identifying N-S striking Matachewan dikes. They are high resistivity and add confusion to the interpretation of the 2011 and 2017 IP/resistivity surveys run in the area. E-W trending lithologic features are also identified in this image (black arrows).

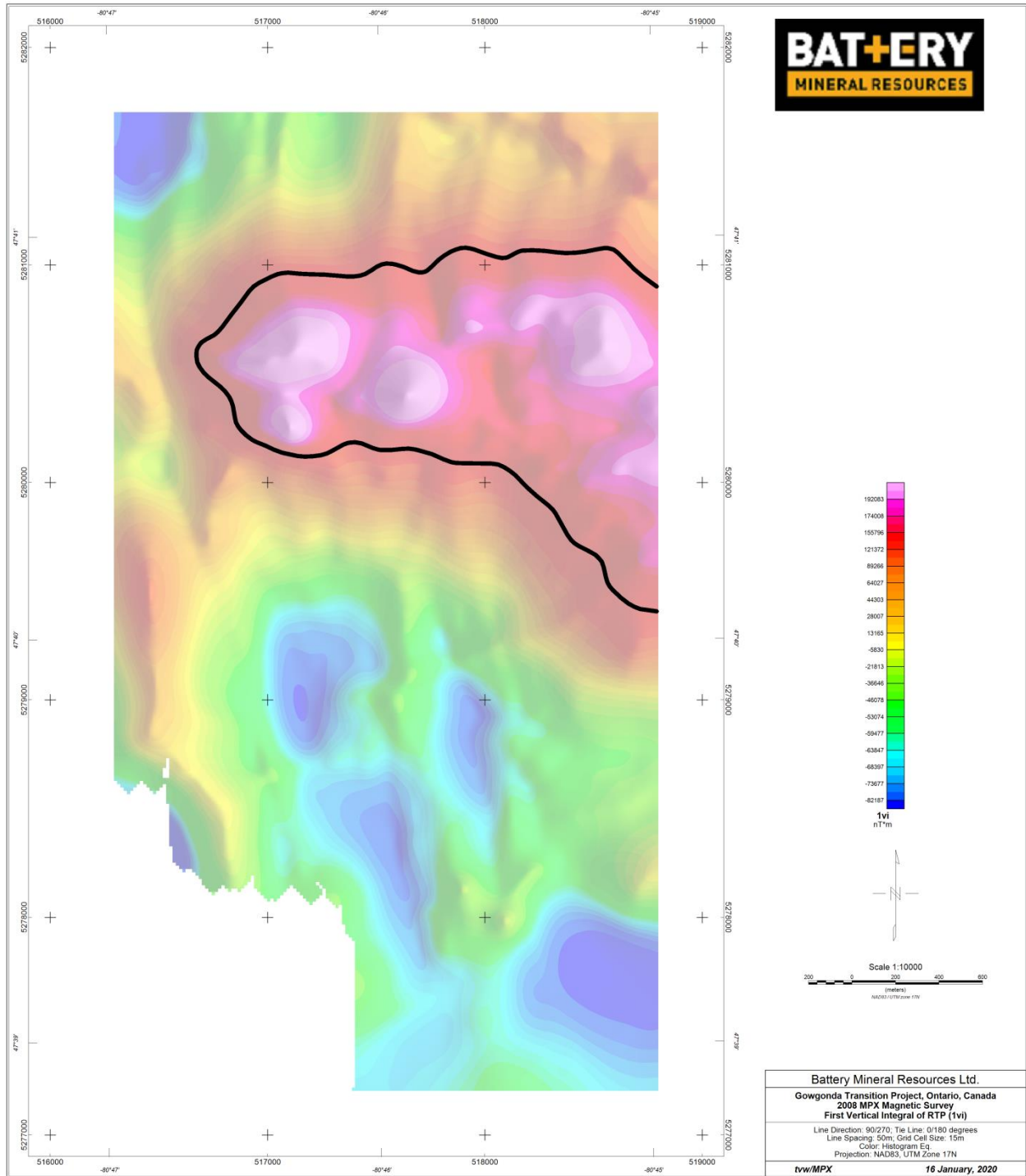


Figure 10 – The First Vertical Integral (1vi) of the detailed 2008 MPX RTP data set. The magnetic high north of the target area (black polygon) is interpreted to be a Proterozoic age mafic intrusive body with large depth extent. It may be the source of the shallow Nipissing intrusions in the area as well as heat which may have driven the remobilization of gold in the structures running parallel to the Nipissing dikes.

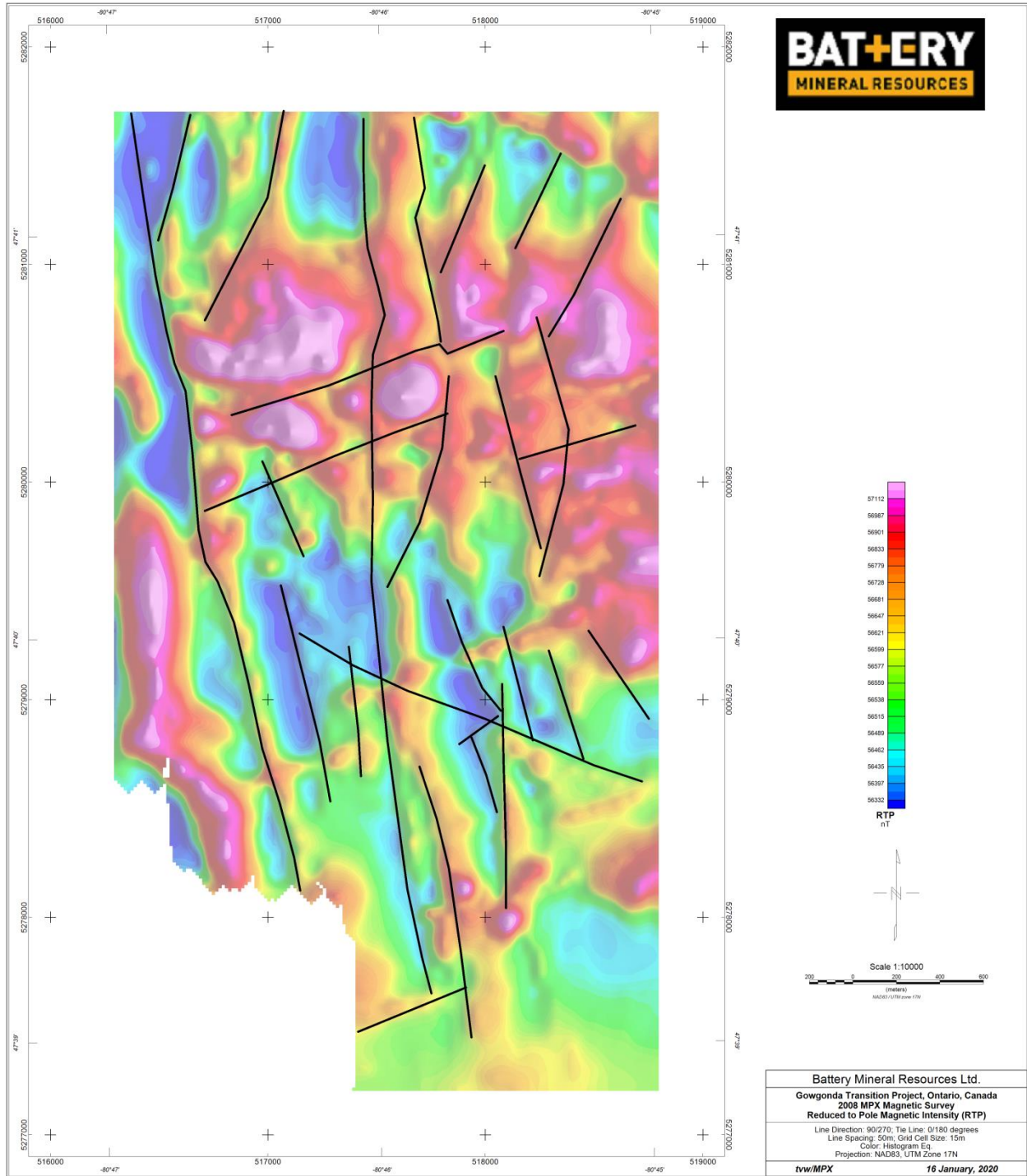


Figure 11 – The structural interpretation from the 2008 MPX magnetic RTP data set. The ENE to E-W to WNW striking structures are interpreted to be important in the gold mineralization of the area. These structures are considered targets in this report.

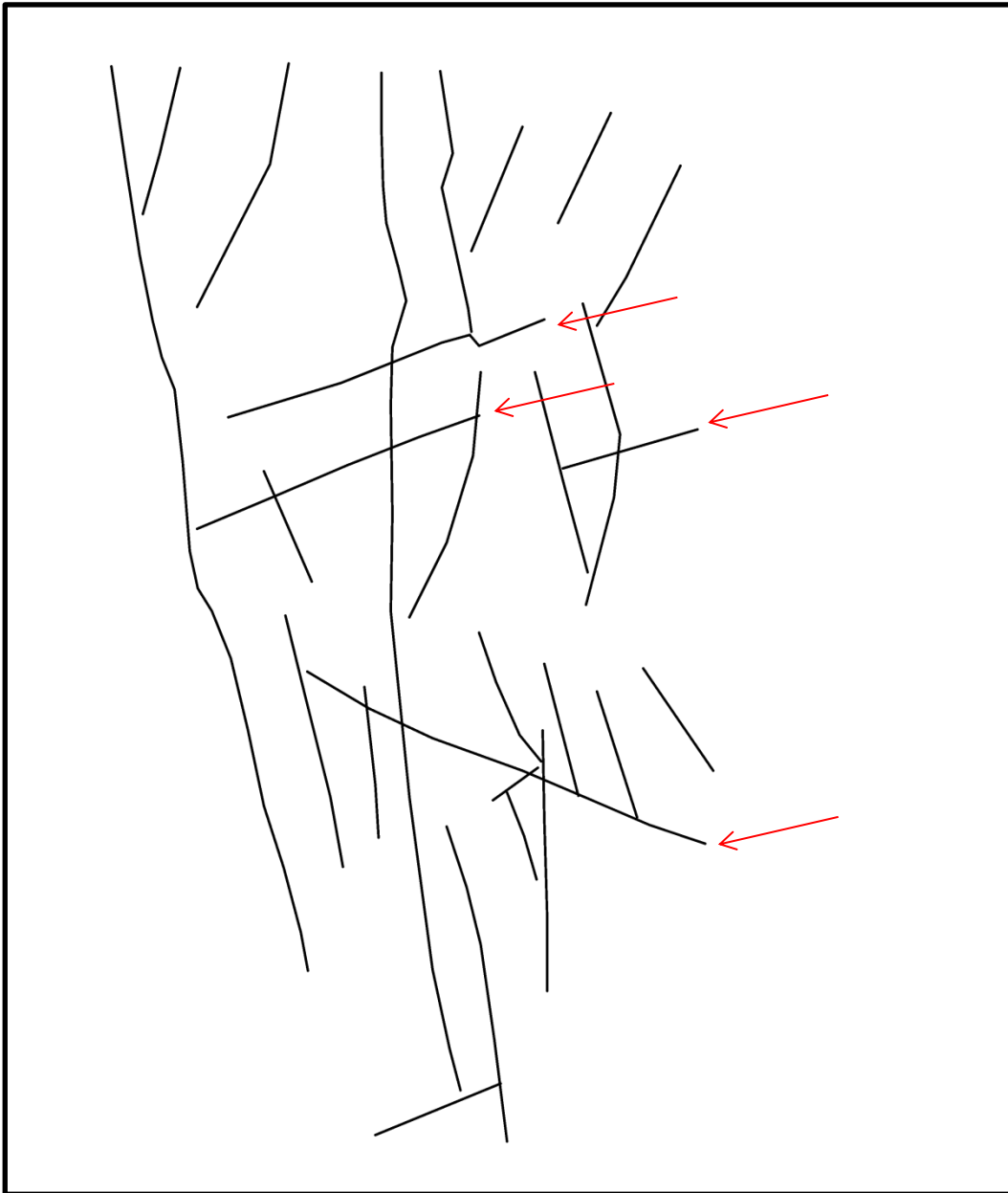


Figure 12 – The structural interpretation from the RTP data set shown in Figure 10. This georeferenced image can be dropped directly into the geologists GIS package. The red arrows indicate target structures.

Figure 10 shows the first vertical integral (1vi) of the RTP magnetic intensity. The 1vi filter is a low frequency pass filter that removes near surface response and emphasizes the deeper magnetic response. In this case the 1vi image at Haultain indicates the presence of a mafic intrusive with deep roots. This is important in that it may be the source of the Proterozoic Nipissing diabase intrusives (dike/sills) located throughout the target area. This large intrusive

body may also be important in providing heat to remobilize mineralizing fluids through the structural plumbing in the area.

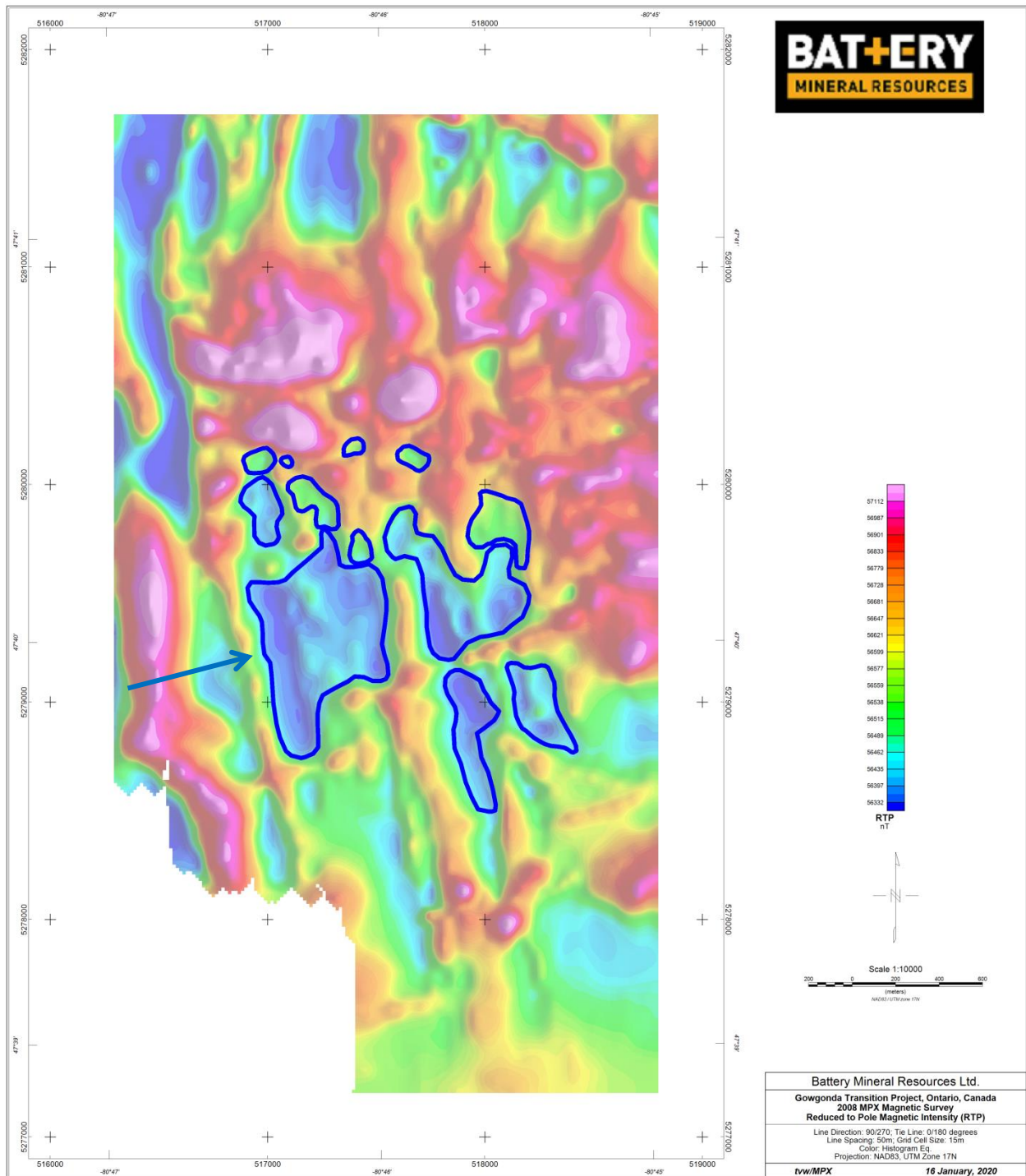


Figure 13 – The RTP magnetic image with alteration magnetic lows interpreted in the immediate prospect area. The blue polygons are interpreted as destruction of magnetite features. The lows extending between and off the ends of the polygons are likely due to alteration as well.

Figure 11 shows the structural interpretation based on the 2008 MPX detailed RTP data set. The E-W trending structures are interpreted to be gold exploration targets.

Figure 12 shows the structural interpretation without the underlying RTP image. This georeferenced image can be dropped directly into the geologists GIS package.

Figure 13 shows the RTP magnetic image with interpreted alteration (destruction of magnetite) lows plotted on top (blue). An alternative interpretation is that the lows are associated with non-magnetic lithologic units such as sediments. The interpretation here is alteration and this will be factored into the selection of geophysical targets.

### Overlay magnetics on geology

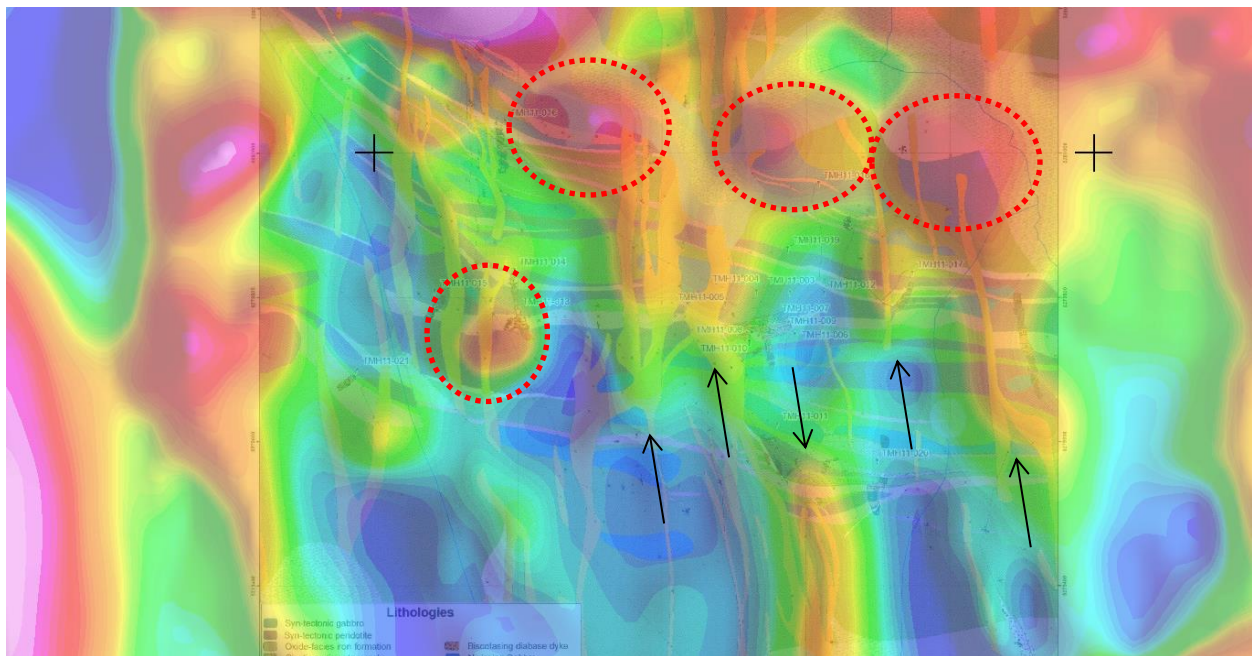


Figure 14 – The Haultain geologic map overlain on the 2008 detailed RTP image. The Matachewan dikes plotted in orange fall directly on the linear N-S trending magnetic highs (black arrows). The conclusion is that these moderate amplitude N-S trending highs are all related to the presence of Matachewan dikes. This is important because those same dikes are high resistivity features that show up in the pole-dipole resistivity data discussed below. The larger amplitude, more magnetic anomalies (red dashed ellipses) are interpreted to be associated with Nipissing diabase intrusives.

Figures 14, 15 and 16 show the Haultain geologic map plotted on the RTP, 1VD and Tilt derivative images. The conclusions from these images are: 1) the N-S trending linear magnetic highs are all related to the Matachewan dike system in the area. This is important because these dikes are also resistive and all of the resistors mapped by the pole-dipole 2017 survey are caused by these dikes; 2) the larger amplitude E-W trending magnetic anomalies are caused by



Nipissing intrusive bodies (Figures 13,14,and15, red dashed ellipses); 3) ultramafic rocks including serpentinite do not seem to have significant magnetic character.

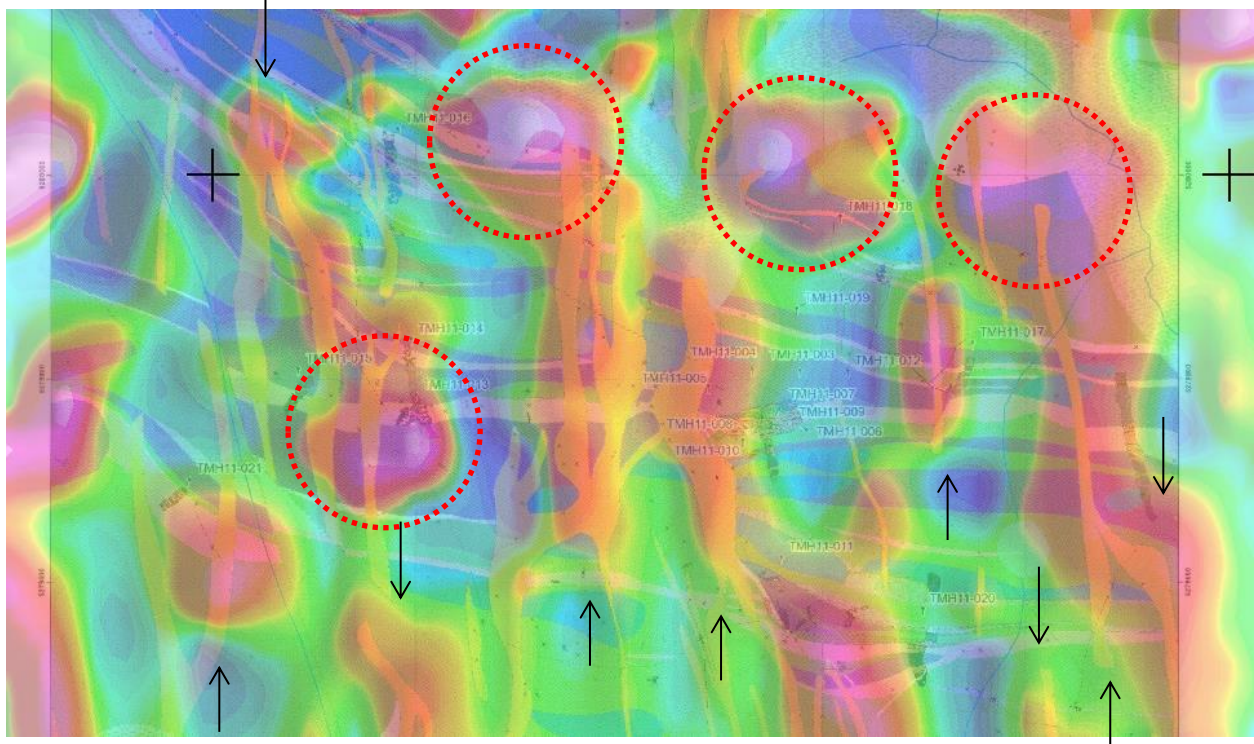


Figure 15 – Shows the 1VD magnetic data with the Haultain geology plotted on top. Note the linear N-S features correspond directly to Matachewan dikes (black arrows). The red dashed circles are interpreted to be magnetic high responses from Nipissing diabase intrusions. Note that they trend more east-west.

To summarize the magnetic interpretation:

1. The N-S trending magnetic highs are all caused by Matachewan diabase dikes. These highs are of intermediate amplitude. They are not related to gold mineralization from a targeting standpoint. However where the N-S linear highs are offset by E-W striking structures or destroyed by alteration destruction of magnetite there may be mineralization potential.
2. The larger amplitude magnetic highs that trend more E-W are interpreted to be structurally controlled Nipissing diabase intrusives. The structurally controlled edges of these intrusives are potentially cobalt and possibly gold mineralization targets. The E-W structures are interpreted to be active through the Archean and into the Proterozoic. Possibly anomalous gold and cobalt can occur along the same structural trend.
3. Magnetic lows in the prospect area are interpreted to be associated with alteration destruction of magnetite. The lows can cover a large area so geochemical sampling should be used to determine if the lows are coincident with mineralization. The

alternative interpretation of these magnetic lows resulting from sediments should be evaluated.

4. The E-W striking structures interpreted to run through the area of interest are all exploration targets.

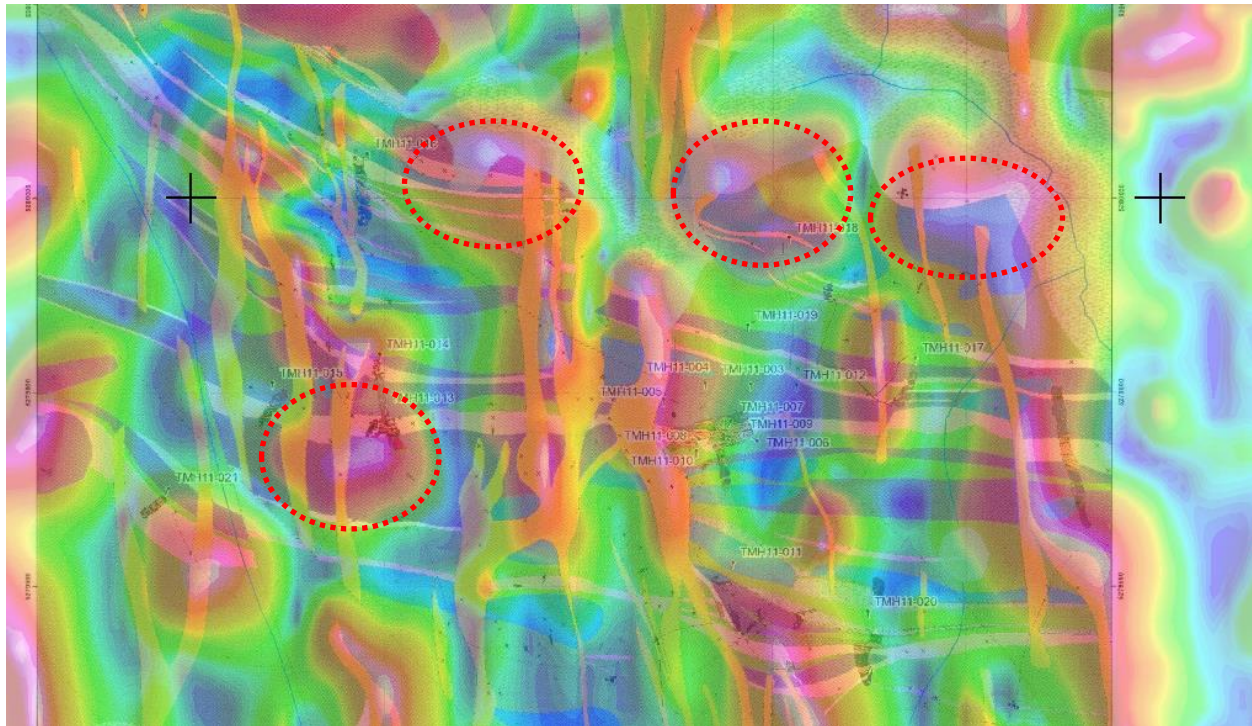


Figure 16 – The Haultain geology plotted on the Tilt Derivative of the RTP data set. Note that the N-S trending anomalies are caused by Matachewan diabase dikes and any anomalies that trend more E-W are interpreted to be Nipissing diabase sourced.

### 2011 and 2017 IP/Resistivity Surveys

Two IP/resistivity surveys were run at Haultain. The first was run in 2011 consisting of two pole-dipole lines and a gradient array survey run by Quantec. It is replaced by a newer survey and is not used in this report. The second, newer survey was run in 2017 by CXS and consists of fourteen pole-dipole lines and is used in this interpretation. Figure 17 shows the IP response from the 2011 Quantec gradient array survey. It is definitely under-sampled and is not used in this report. Figure 18 shows a quick and dirty  $n=2$  chargeability plot of the 2017 CXS data set. Figure 19 shows that the 2011 IP contours match the 2017  $n=2$  IP image closely. The 2017 data set is used for this report.

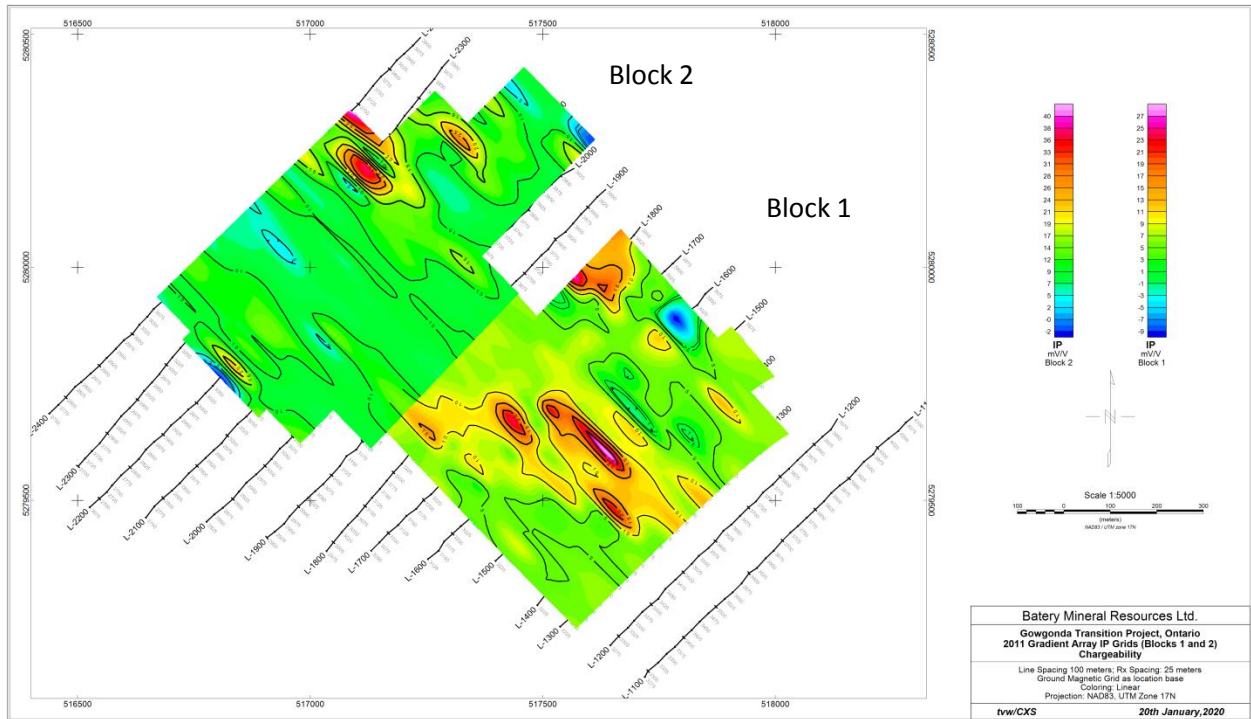


Figure 17 – The 2011 gradient array IP/resistivity survey run by Quantec. The data was collected in two blocks, 1 and 2, and the IP response is shown plotted on the 2017 grid. The results from this under-sampled data set are similar to the 2017 data and are not used in this report.

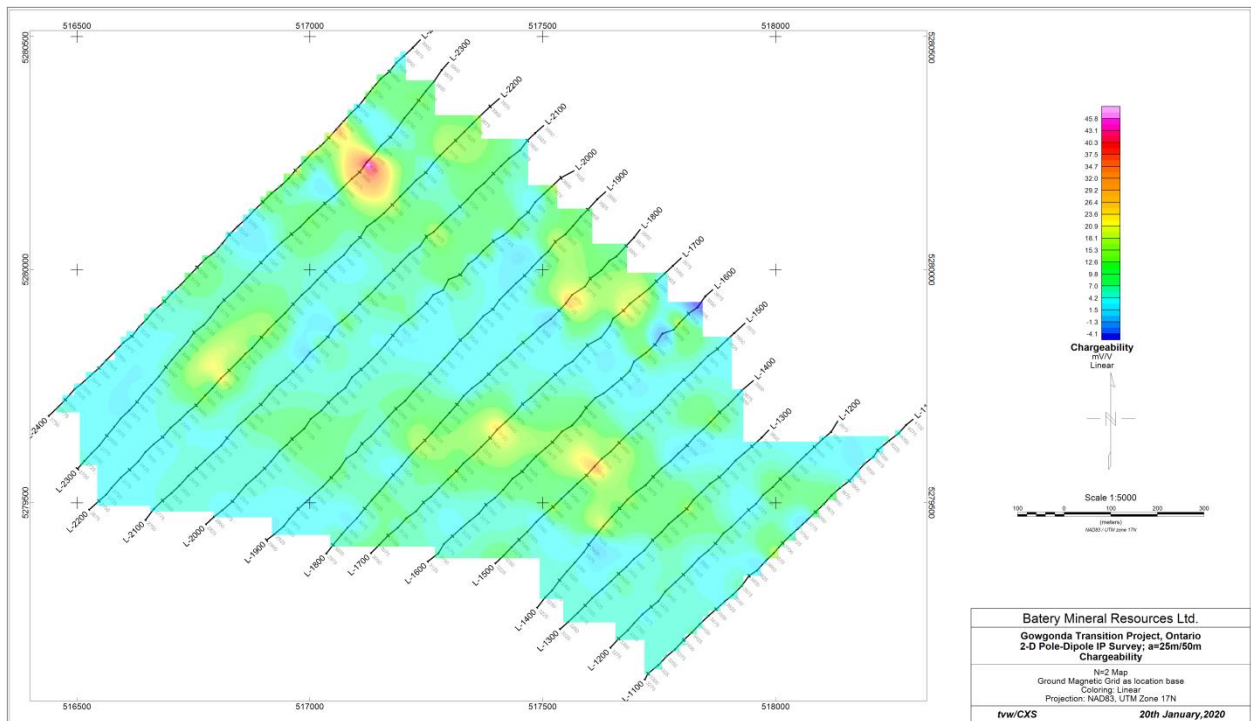


Figure 18 – The 2017 CXS IP data set plotted on its own grid. The n=2 chargeability's are plotted here and are faded to allow the grid lines to be observed.

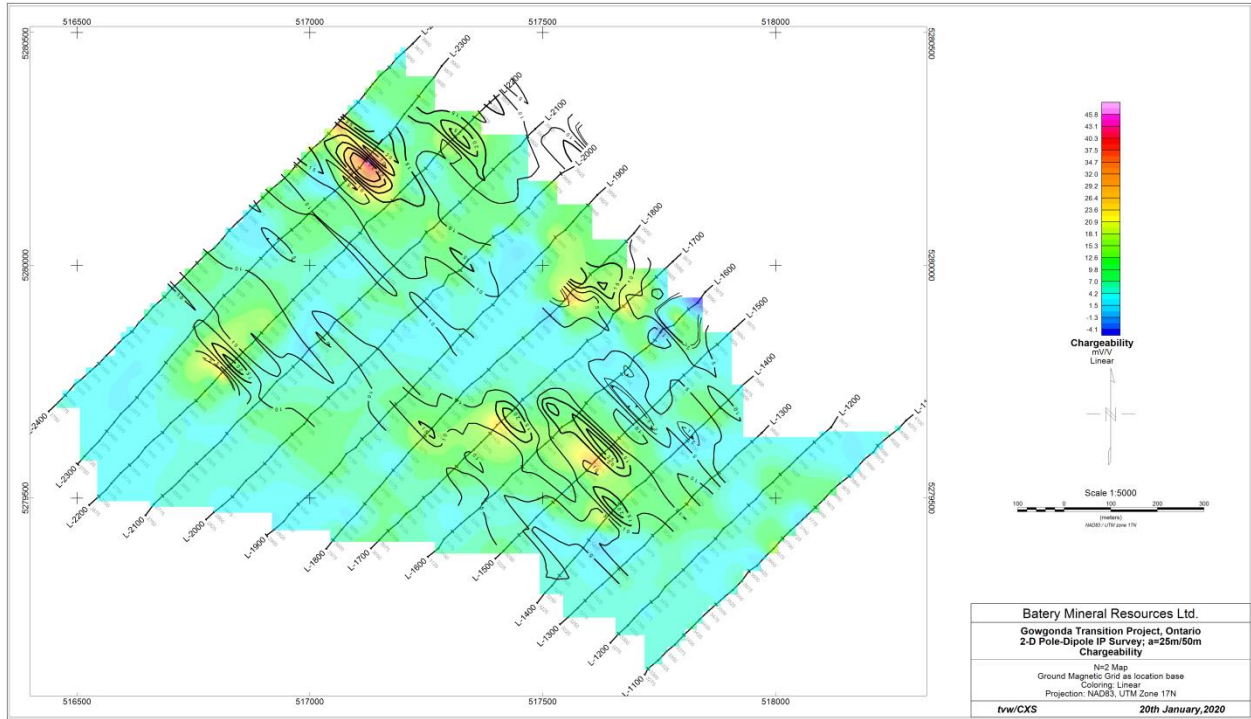


Figure 19 – The 2011 IP contours plotted on the 2017 n=2 image. The agreement is good so the 2017 CXS data set is used in this report.

An example pseudosection from the 2017 CXS data set is shown in Figure 20. The survey array is pole-dipole and uses mixed a-spacing's to attempt to explore to greater depth. Qualitative interpretation of the data set is difficult due to the asymmetry of the array and the variable a-spacing's used. For this reason 2-D inversion models were run on each of the lines.

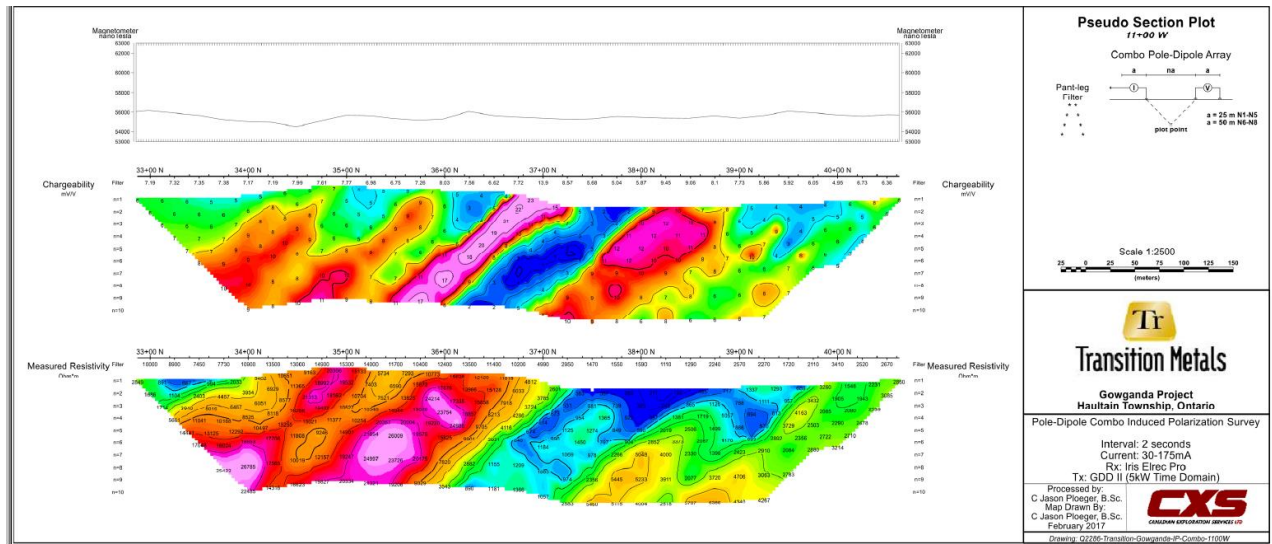


Figure 20 – The IP/resistivity pseudosection from the CXS 2017 survey. The asymmetry of the pole-dipole array and the change of a-spacing from 25 meters to 50 meters make the qualitative interpretation difficult.

An example inversion section for line 1100 W is shown in Figure 21.

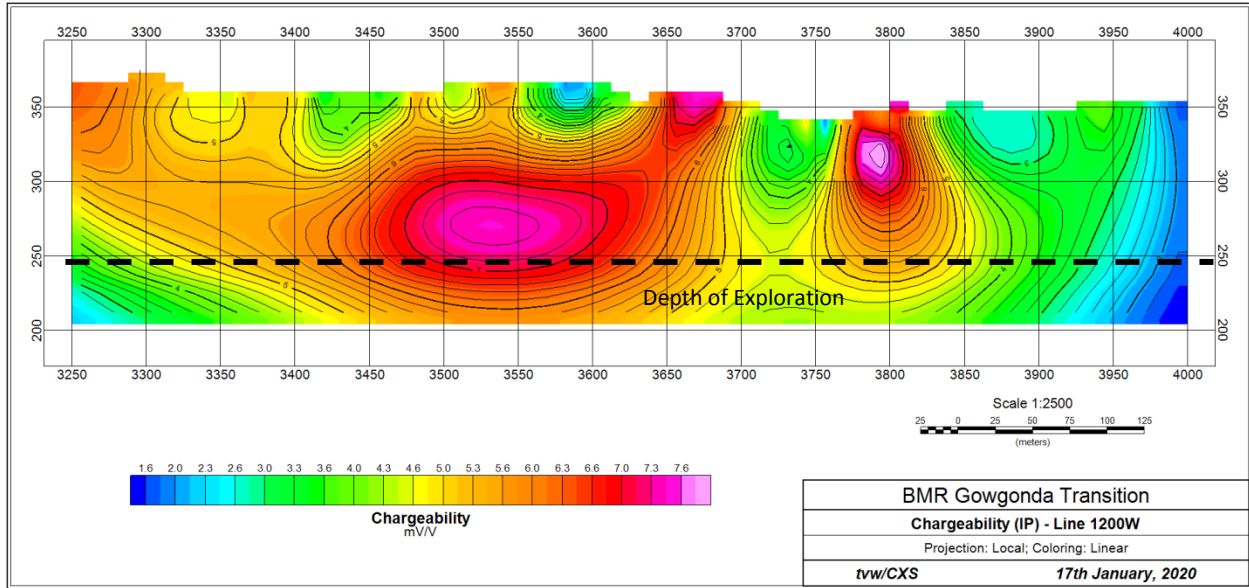


Figure 21 – An example inversion section for the IP response on Line 1100 W. Note that the depth of exploration is approximately 100 meters.

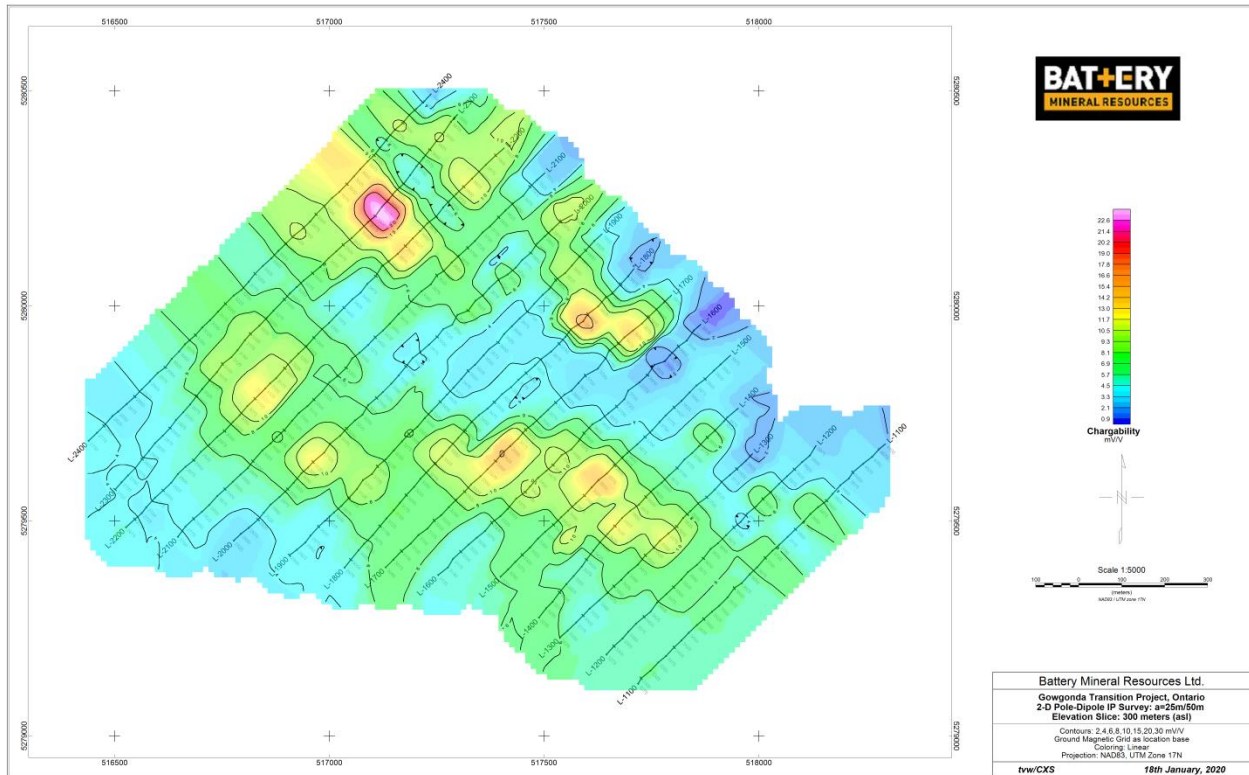


Figure 22 – A 300 meter (asl) IP elevation slice from the combined 2-D inversions for the Haultain grid. The approximate depth of this elevation slice is 50 meters.

Figure 22 shows the 300 meter IP elevation slice from the combined 3-D inversion model that combines all of the fourteen individual 2-D inversions. Figure 23 shows the similar resistivity elevation slice at 300 meters.

Elevation slices at 325 meters, 300 meters, 275 meters, 250 meters and 225 meters were extracted from the combined 2-D inversion models. The 250 meter elevation slice is used here to compare to the magnetic data set, the magnetic structural interpretation, and the geology map. The 250 meter elevation slice has an approximate depth of 100 meters.

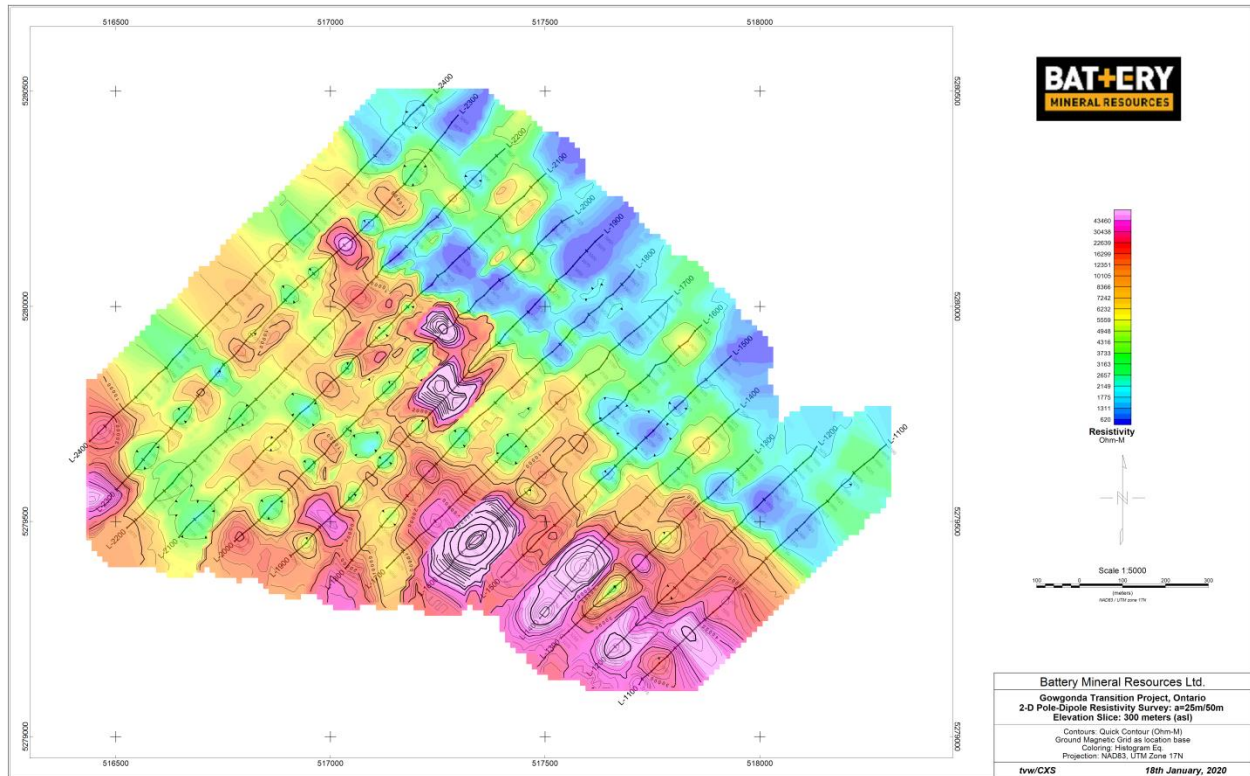


Figure 23 – A 300 meter (asl) resistivity elevation slice from the combined 2-D inversions for the Haultain grid.

## IP Response and Selected Targets

The IP data set at the Haultain prospect has been discounted as primarily mapping ultramafic serpentinite or graphitic bodies. The sweeping generalization which discounts the IP response is a mistake. There is a correlation between E-W trending structures, Nipissing diabase intrusions and weak to moderate IP chargeability response. The serpentinite and graphitic bodies are a geologic noise sources for the IP method but selected IP targets should be drill tested based on their spatial relationship to Nipissing diabase rocks and E-W trending structures. Five IP target zones have been identified in this report.

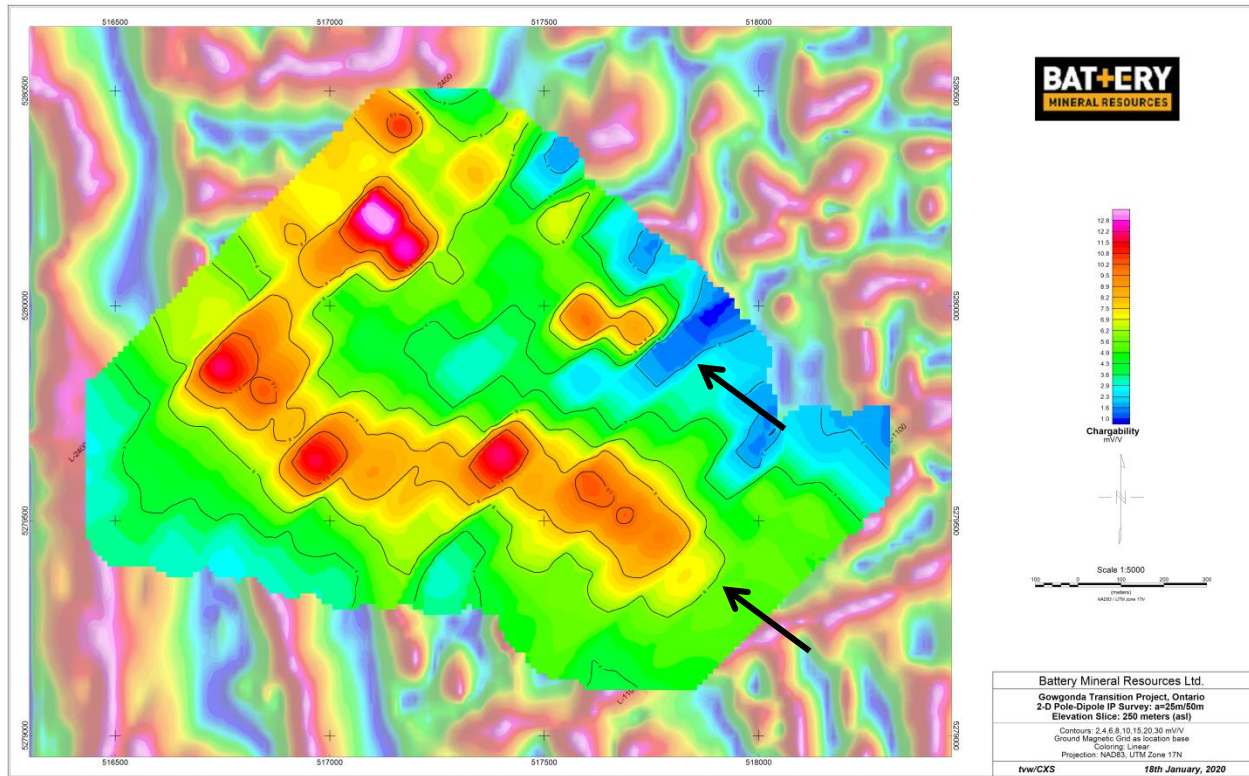


Figure 24 – The 250 meter IP elevation slice with weak to moderate amplitude chargeability highs colored yellow to red.

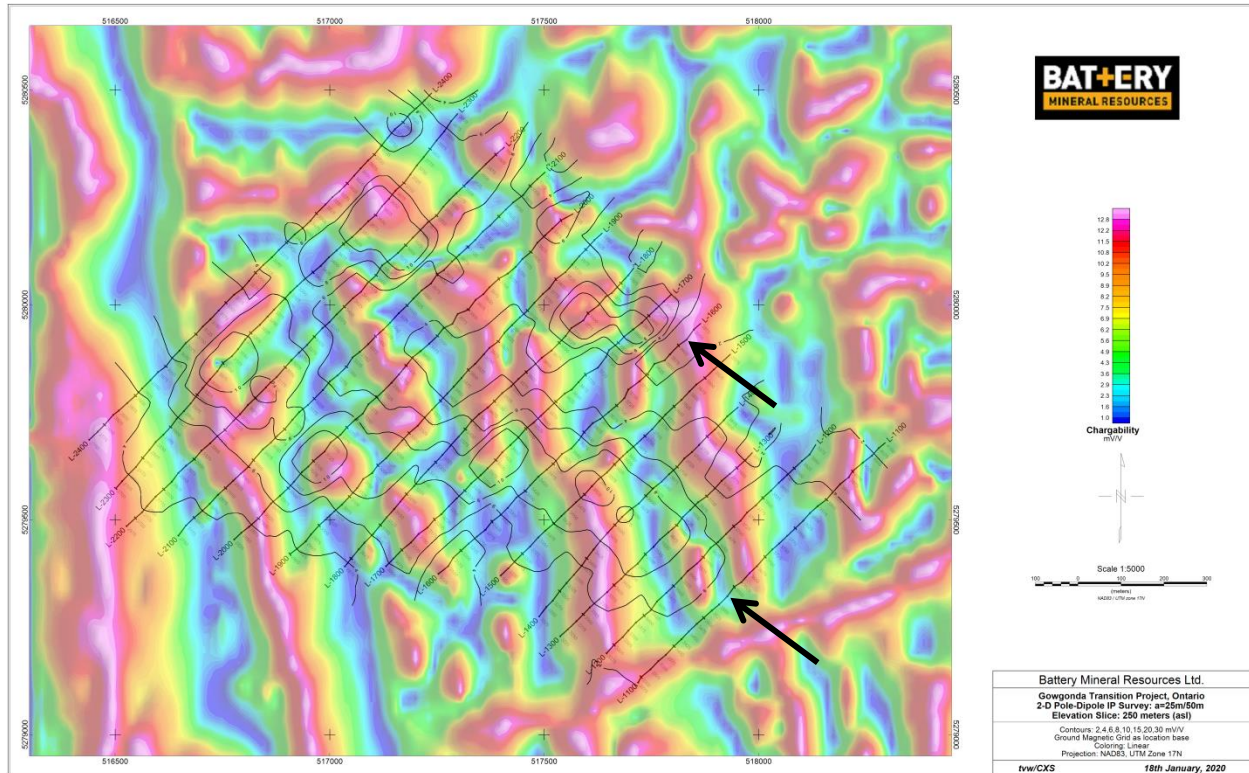


Figure 25 – The 250 meter IP elevation slice contours with colors removed for comparison with Tilt derivative magnetic data.

Figure 24 shows the 250 meter IP elevation slice colored and contoured to show weak to moderate chargeability highs colored yellow, red and pink (black arrows). In Figure 25 the color image is removed and only the IP contours are plotted on top of the tilt derivative of the RTP magnetic data set. This figure shows that the IP response cuts across the Matachewan dike features and is related to either E-W trending cross cutting structures or lithology. Both can be considered targets. The structures can control mineralizing fluids and may be related to the emplacement of Nipissing diabase intrusives explaining the relationship between gold and cobalt mineralization in the area. The E-W to WNW striking structures may have been active through both Archean and Proterozoic periods.

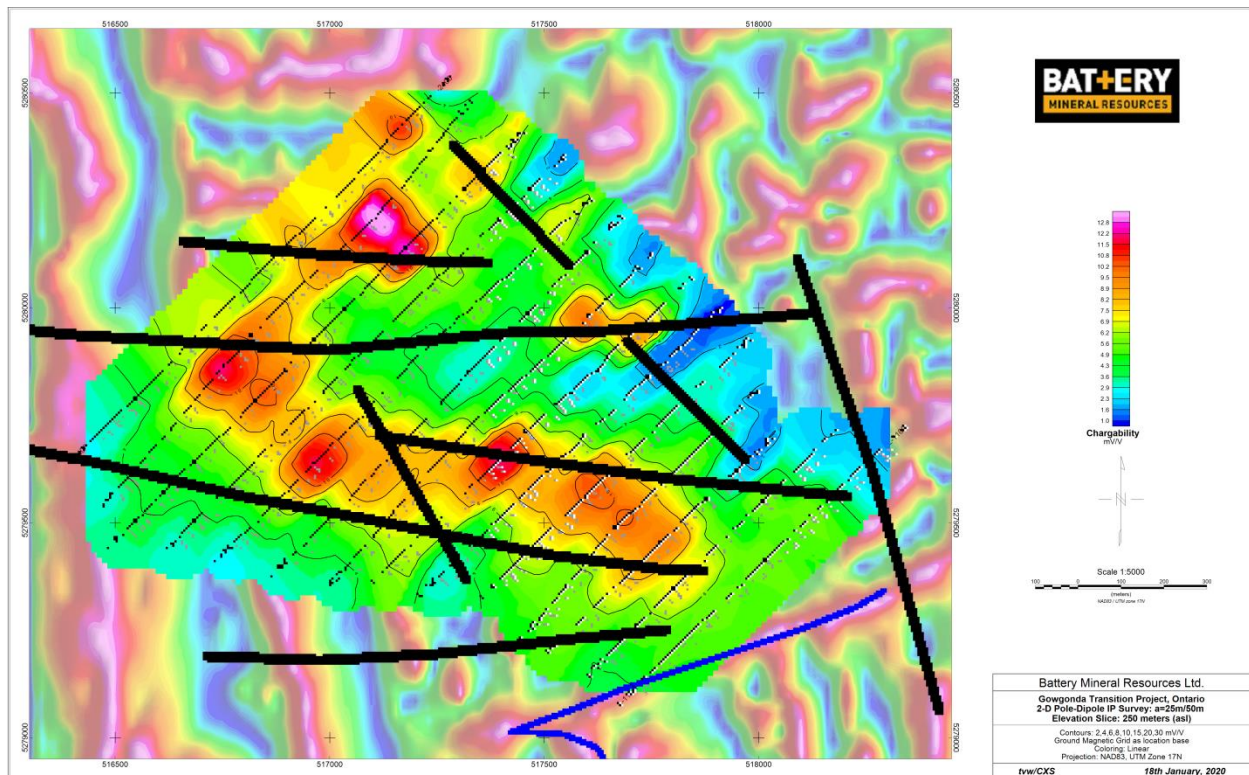


Figure 26 – The interpreted E-W trending structures plotted on top of the 250 meter IP elevation slice. These structures were interpreted from the regional 2016/2018 Precision Helicopter magnetic survey.

Figure 26 indicates a relationship exists between the anomalous IP response and E-W to WNW trending structure. Both the IP response and the structures are interpreted to be targets in this report.

Figures 27 and 28 (enlargement) show IP contours plotted on top of geology. Interestingly the anomalous IP highs have a relationship with structurally controlled Nipissing diabase intrusives (blue) as well as with Ultramafic/Peridotite rocks (purple). This complex/combined relationship





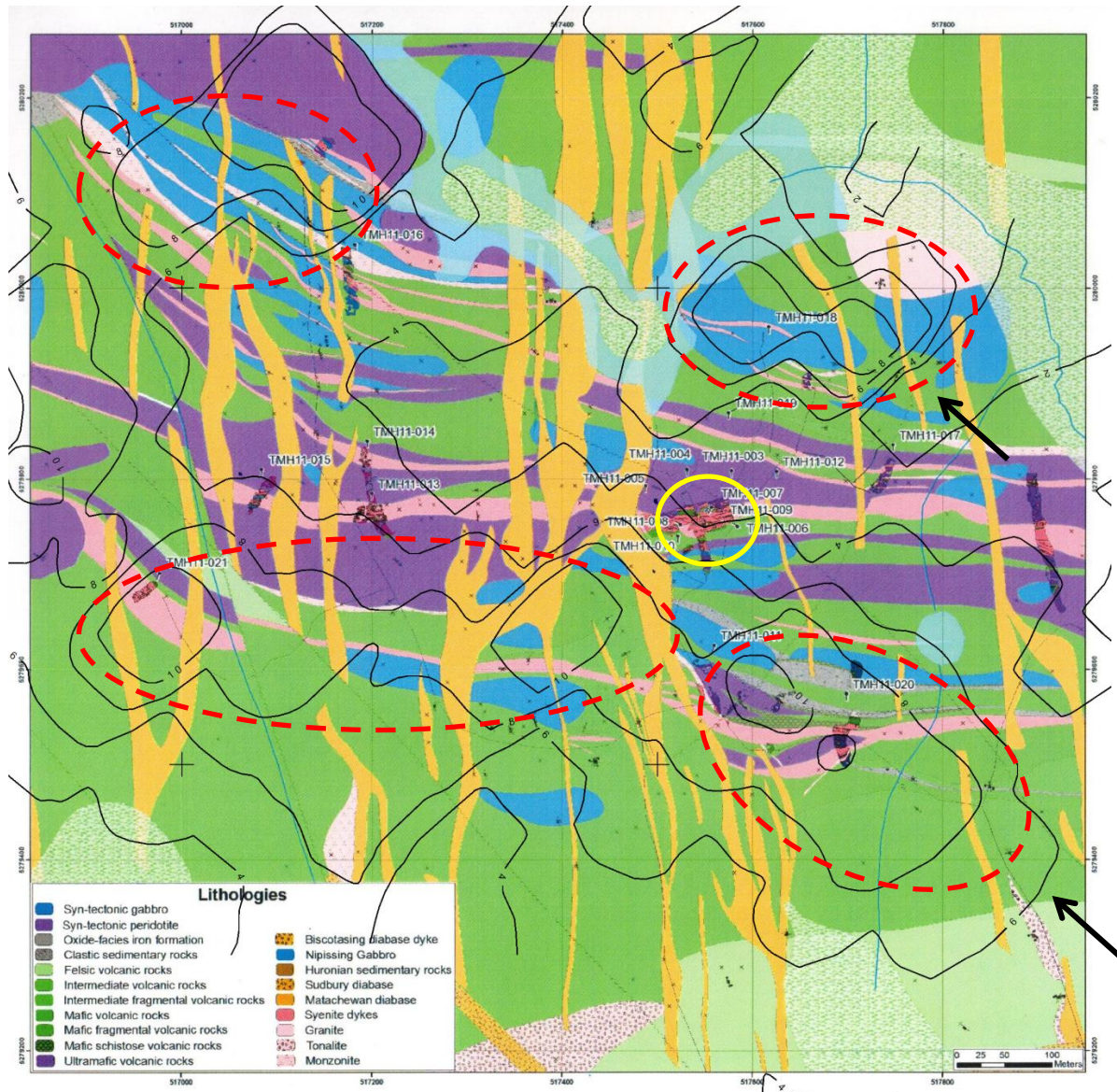


Figure 28 – An enlargement of the geology with the 250 meter IP elevation slice contours plotted on top. This data set is used to identify the IP targets in the Haultain area. The anomalous high IP responses are outlined by red dashed ellipses.

Figure 29 shows the 250 meter resistivity elevation slice from the combined 2-D inversion models. The N-S striking Matachewan diabase dikes are highly resistive and depending on the location of the pole-dipole resistivity electrodes they are mapped as zones of high resistivity in the inversion model. The IP/resistivity survey lines are sub-parallel to N-S Matachewan dikes so the resistivity highs are poorly defined and are lumped into an apparent broad E-W trending high resistivity zone.

Figure 30 shows the high resistivity contours plotted on the Tilt derivative of the RTP magnetic data set. The relationship between the high resistivity and magnetic dike responses is close but not exact. This is thought to be related to the under-sampling of the resistivity array and the broadening/lumping effect of the resistivity inversion model. The spatial relationship between resistivity highs and diabase dikes is close enough to be convincing.

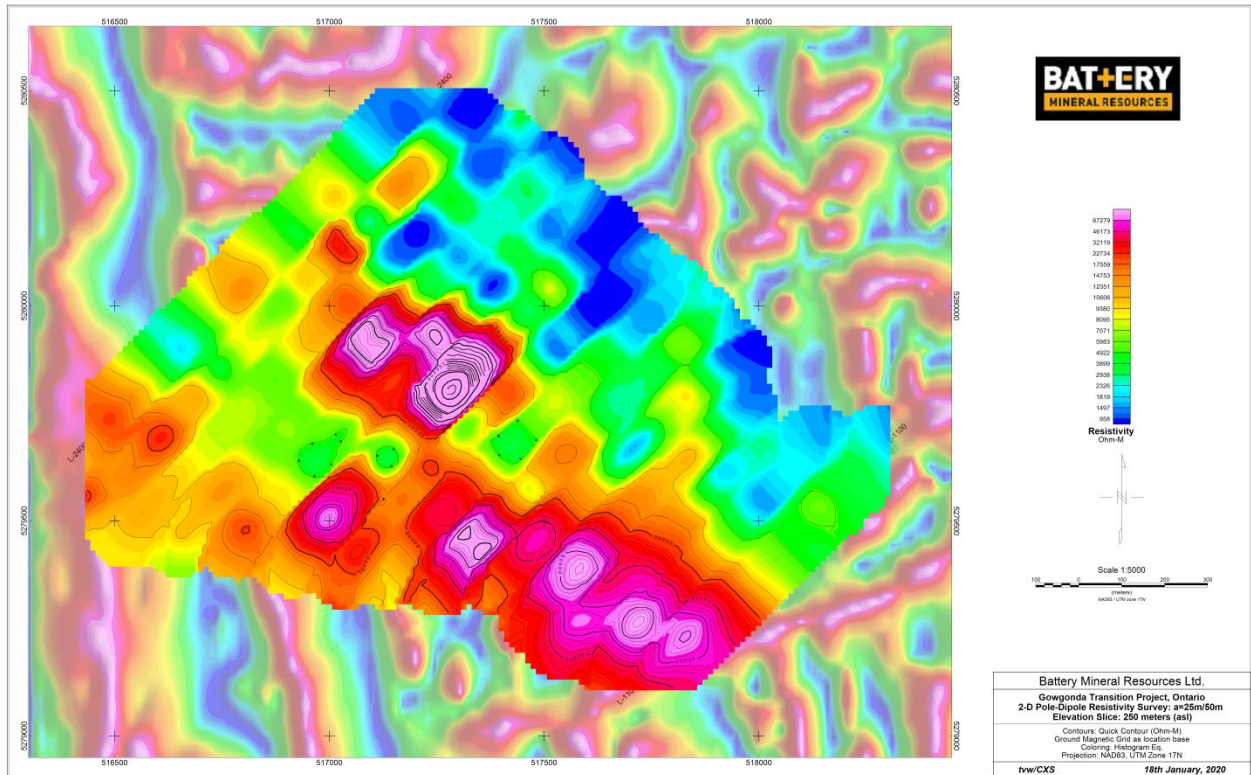


Figure 29 – The 2017 pole-dipole resistivity inversion elevation slice at 250 meters elevation. Although the high resistivity response seems to form two zones it is the interpretation here that the resistivity highs are associated with Matachewan dikes which run sub-parallel to the IP/resistivity grid lines. The resistivity then appears to occur in WNW trending zones formed perpendicular to the survey line directions.

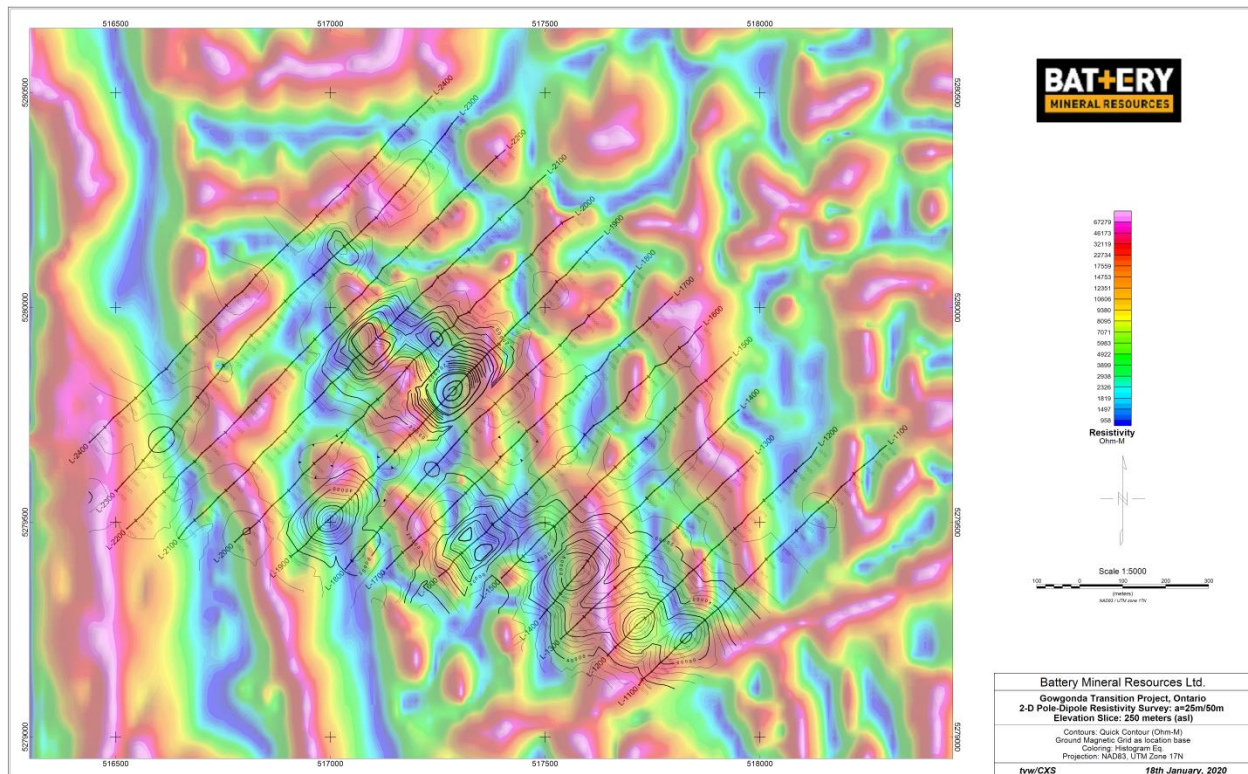


Figure 30 – The pole-dipole resistivity contours plotted on the magnetic Tilt derivative. The resistivity highs generally fall on Tilt derivative highs associated with resistive dikes. There is some discrepancy due to under-sampling of the pole-dipole array, line spacing and line direction.

To summarize the IP/resistivity response:

1. The 2011 Quantec and 2017 CXS IP/resistivity surveys generally agree. Both are under-sampled from the geologic mapping standpoint, however the 2017 CXS data set is superior in terms of both 2-D and 3-D mapping and is therefore used in this report.
2. The anomalous IP chargeability responses were previously disregarded as being caused by serpentinite or graphitic sediments. These are valid noise sources to consider but there is indication that the IP responses may be related to structure and structurally controlled Nipissing diabase intrusions and should be drill tested with an open mind. Previous reports discuss a relationship between gold mineralization and cobalt mineralization so anomalous IP responses should be drill tested.
3. It is interesting that the previously drill tested target zone is surrounded by anomalous IP response but not directly coincident with it. This needs to be considered in designing the current drill program. It may be the structures that are important and not the IP responses themselves.

4. The anomalous resistivity highs are interpreted to be due to resistive Matachewan diabase dikes and not silicification. The under-sampling and sub-parallel (to Matachewan dikes) line orientation makes this difficult to observe but evidence indicates that this is the case. Drill testing resistivity highs based on the current available data sets is discouraged and evidence of Matachewan dikes in the drill holes would likely explain the high resistivity source.

### **Geophysical Targeting**

The geophysical targeting in the Haultain prospect area is based on the following target criteria in order of priority. First, the priority is based on previous drilling/exploration and the six geologic target zones provided by Peter Doyle of BMR. Second, the priority is based on the structural interpretation of the helicopter magnetic data sets. The main structures of interest are striking E-W to WNW. Third, the priority is based on the interpreted alteration features from the helicopter magnetic data sets. The alteration of the rocks is indicated by the presence of magnetic lows. These lows are interpreted to be caused by the destruction of magnetite. Broad alteration systems like those observed here are more likely related to gold mineralization than to cobalt mineralization. Fourth, the priority is based on the presence of mapped Nipissing diabase intrusives which are themselves structurally controlled by E-W to WNW striking faults. And fifth, the priority is based on the presence of sulfides which result in anomalous IP response. The resistivity data set is not used in targeting in this interpretation.

Figure 31 shows the geologic target zones as determined by the BMR geological staff. These target zones are designed on testing the extent of the previously drilled mineralization and the presence of monzonite host rocks which are not identified in the current geophysical data set. Where magnetic and IP targets overlap with these geological target zones the geophysical priority increases.



Figure 31 – The proposed geologic target zones are shown as black ellipses.

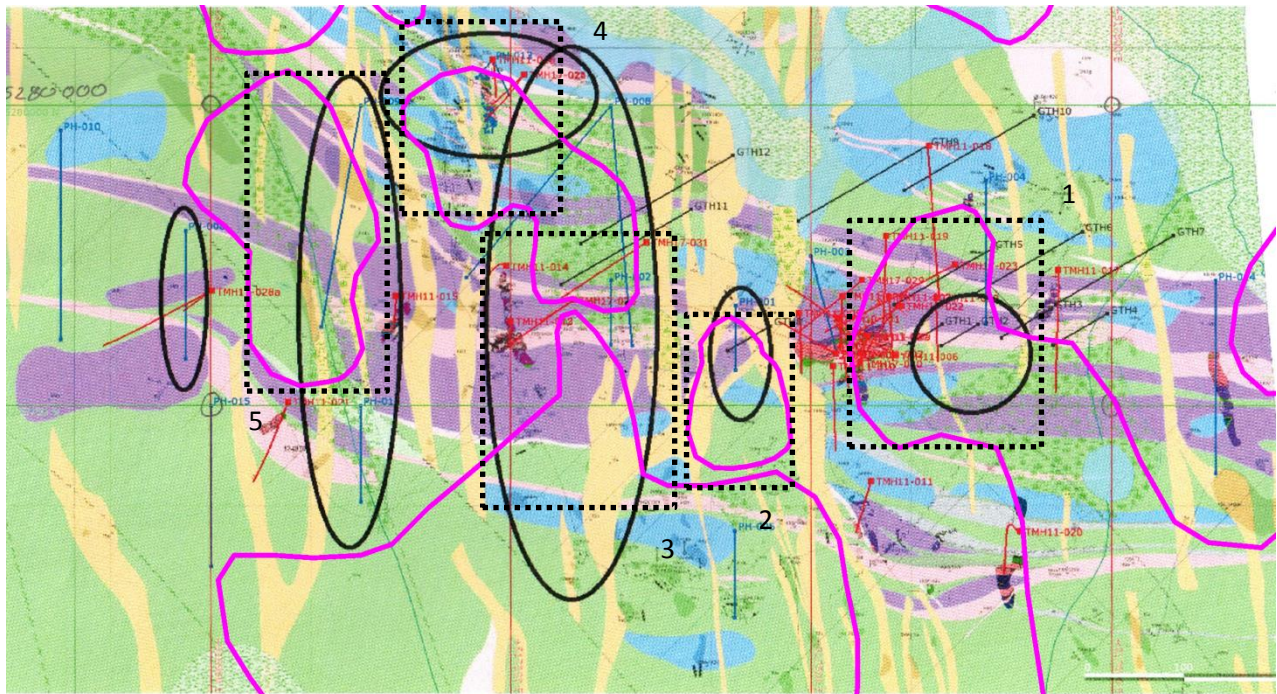


Figure 32 – The alteration features (purple) based on the destruction of magnetite lows shown in Figure 13 are plotted here. The alteration zone targets, shown by dashed rectangular polygons (black) are labeled 1 to 5 from east to west. These numbers do NOT indicate priority. Any evidence of alteration is important. It is interesting that the alteration features (magnetic lows) correspond closely with the geologic target ellipses.

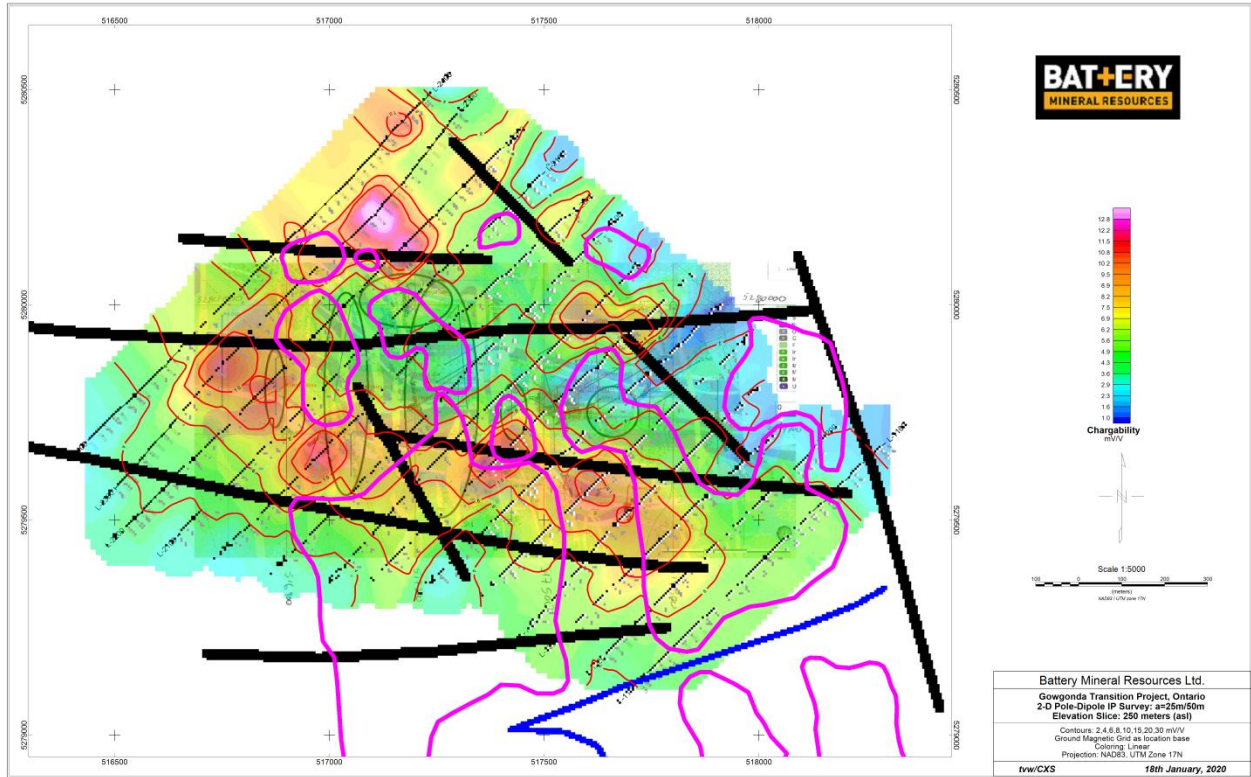


Figure 33 – The interpreted structures based on the regional (2016/2018) helicopter magnetic data set are shown here as black lines plotted on top of anomalous IP response (orange contours) and alteration lows (purple polygons). No targets are picked from this image however it is presented here to show the relationship between structures, magnetic alteration lows and IP chargeability response.

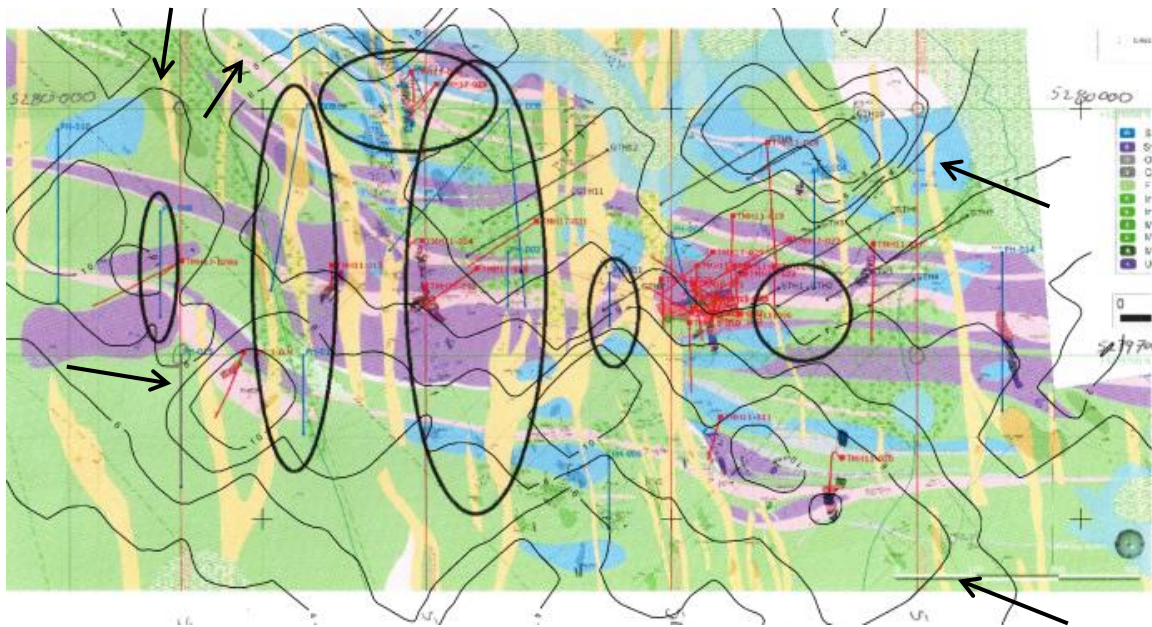


Figure 34 – The relationship between IP chargeability contours (black arrows), geology and geologically selected target zones is shown here. The interesting correlation here is between IP response and structurally controlled Nipissing diabase intrusions (blue).

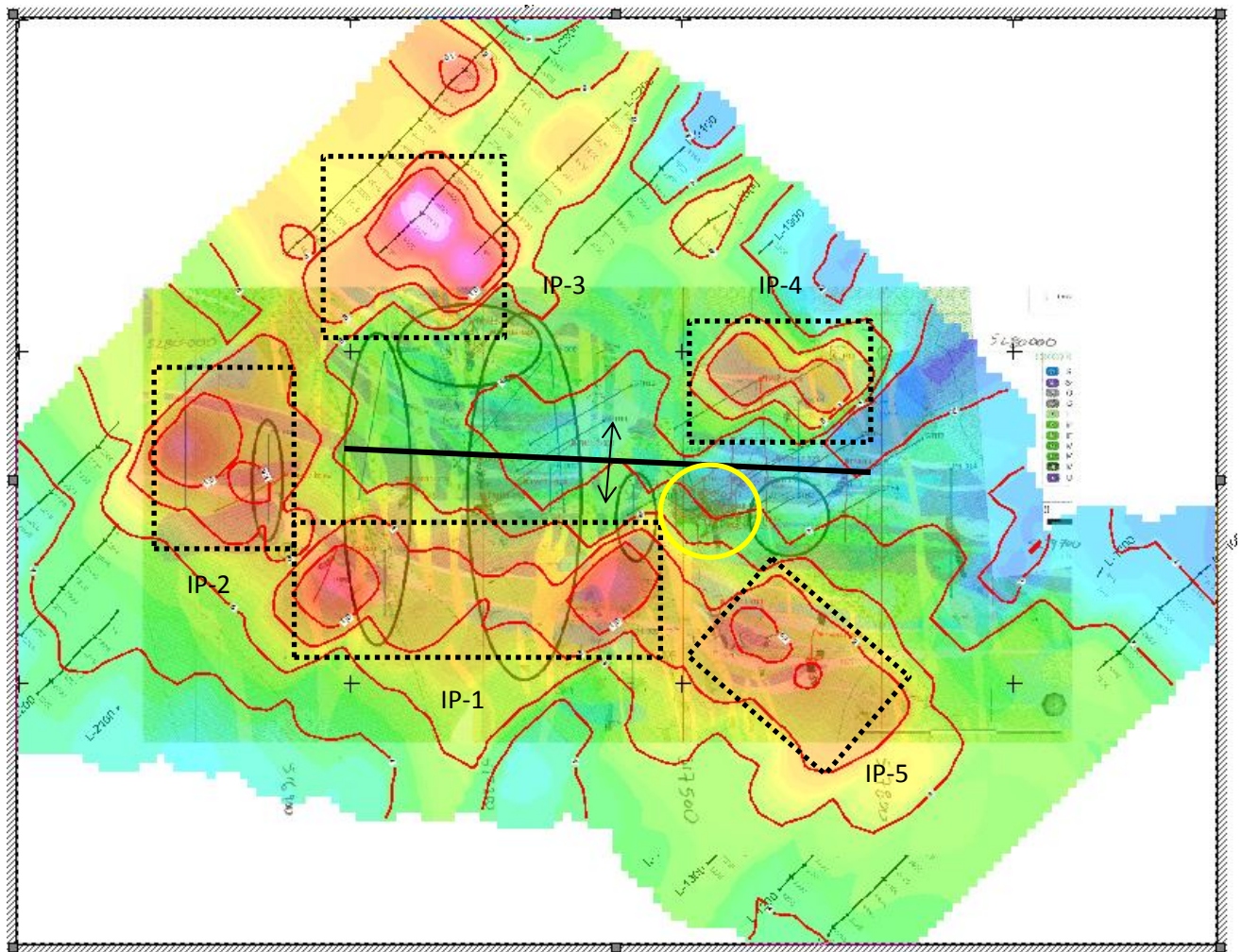


Figure 35 – The anomalous IP chargeability Targets. These zones are numbered by priority. Zone IP-1 covers two of the geologic target zones (black ellipses) and occurs in an area of predominantly Nipissing diabase which indicates the presence of sulfides as opposed to serpentinite or graphite. Target IP-4 occurs north of the target areas in an area mapped as Nipissing diabase, once again indicating the presence of sulfides. Zone IP-2 is of interest as it occurs on the nose of a possible anticlinal fold as expressed by the anomalous IP response. If that is the case the known mineralization (yellow ellipse) occurs near the fold axis. This is a bit of a stretch of the imagination but is proposed here to account for the shape of the anomalous IP response. Zone IP-3 occurs at the contact between Nipissing diabase and ultramafic rocks. This contact is interpreted to be controlled by an E-W striking structure.



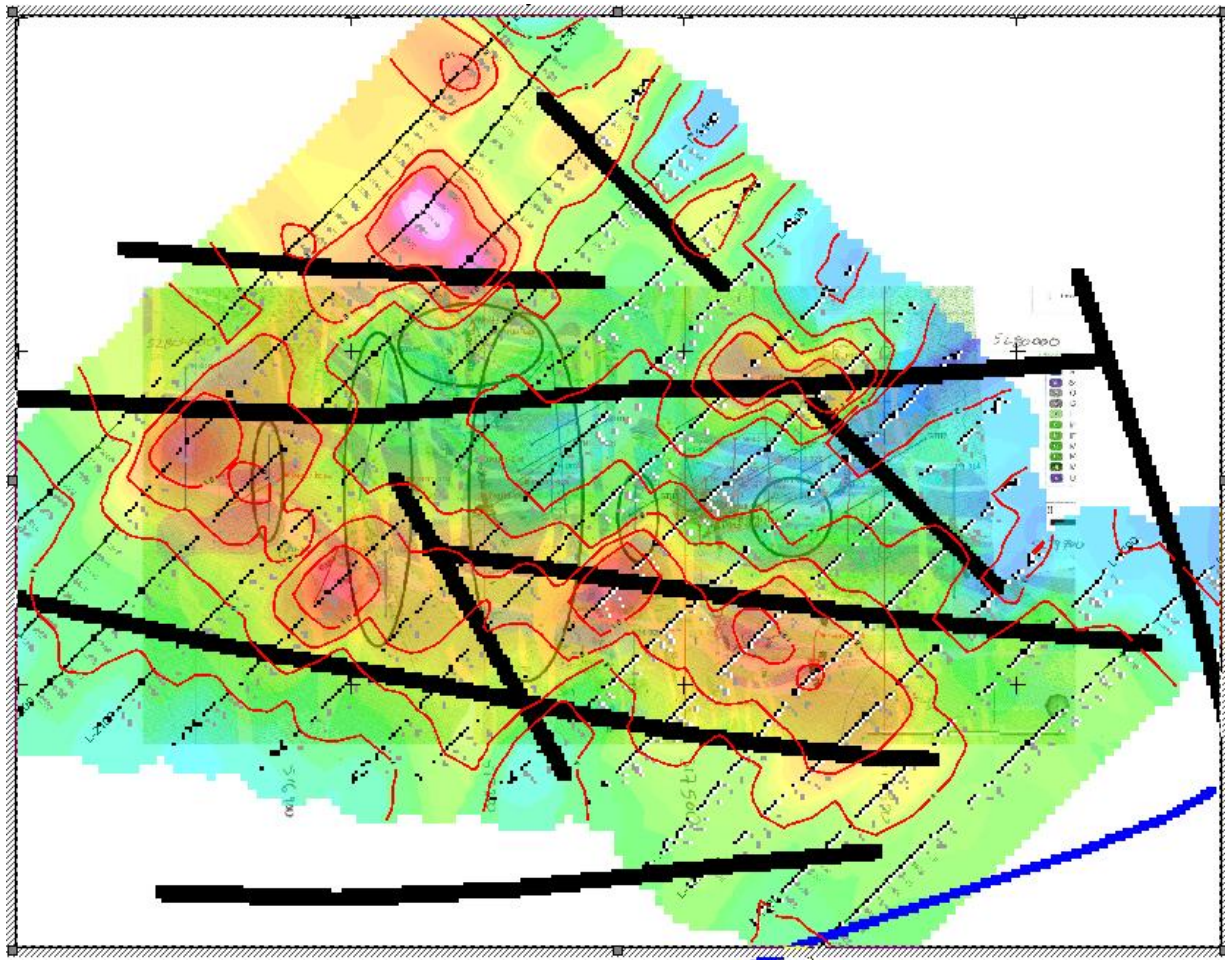


Figure 36 – The location of target structures plotted on top of the anomalous IP response and the geological target zone ellipses. All of the E-W to WNW striking structures are considered target zones. Where they intersect the geological zones they should be drilled. Where they intersect anomalous IP responses they should be drilled.

### Target Spreadsheet

A short list of geophysical targets is given in Table-I and plotted in Figure 37. The priorities are based on the location of the target with respect to the geological priority zones (black ellipses), the presence of an E-W structure in the area, the presence of alteration and the presence of sulfides. A brief description of the targets is given in the database.

	A	B	C	D	E	F
1	Target	Priority	Easting	Northing	Comments	
2	A	6	516971	5280117	EW fault, IP Nipissing intrusions, IP-3	
3	B	5	517598	5279950	EW fault, IP Nipissing intrusions, IP-4	
4	C	4	516873	5279910	Anticline axis nose, IP-2 high, small geologic priority ellipse	
5	D	2	517035	5279656	on strike EW fault, large geologic priority ellipse, IP high, IP-1 west edge	
6	E	1	517266	5279679	EW fault, large geologic priority ellipse, IP high, center of IP-1 block, alteration low, Nipissing diabase	
7	F	3	517424	5279664	EW fault, IP high IP-1 east edge, Alteration low, south of small geological priority ellipse	

Table I – The list of priority geophysical targets. They are plotted on Figure 37.

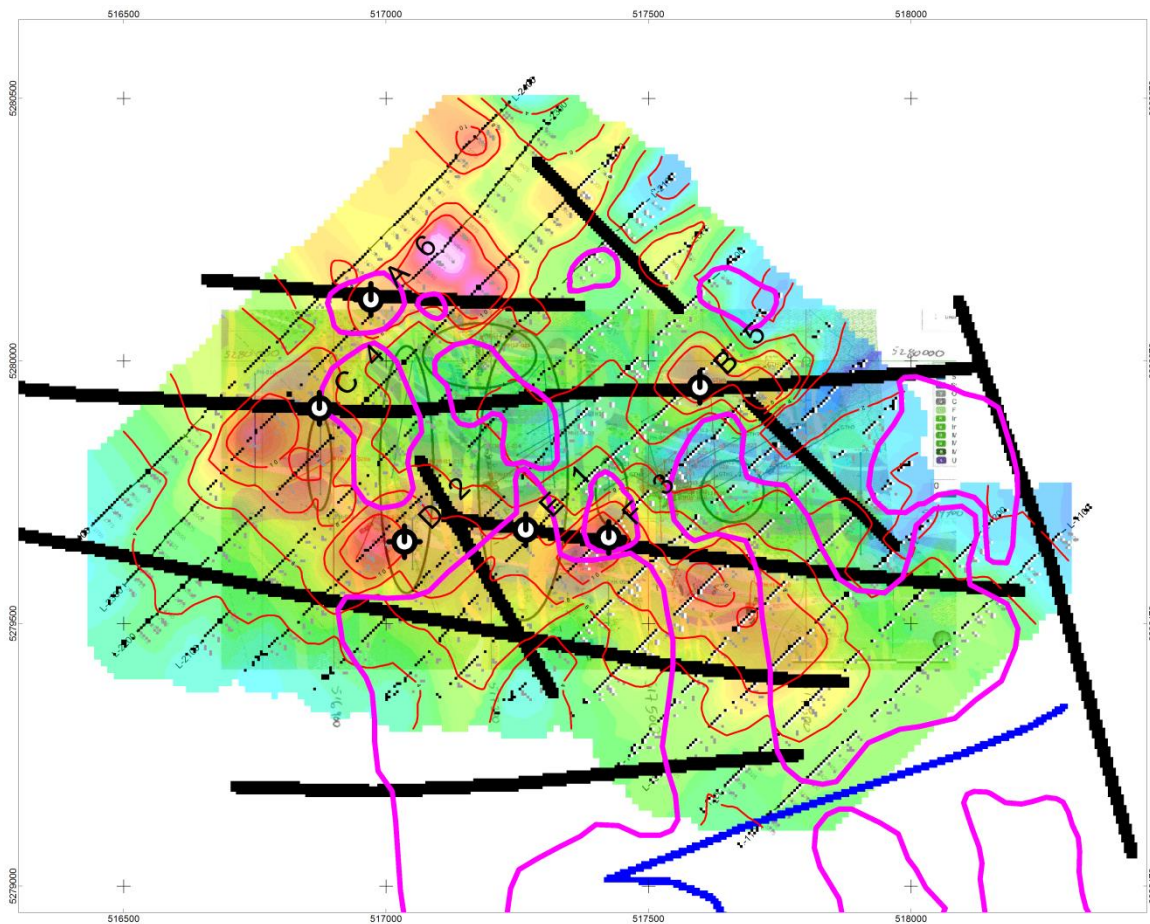


Figure 37 – The Gowgonda Transition Haultain geophysical targets. The first letter is the target name (example A). The second number is the Priority (example A 6). The coordinates for these targets are given in Table I in NAD83 UTM Zone 17N projection.

## **Conclusion**

Historical geophysical data sets have been utilized at the Gowgonda Transition Gold Prospect in eastern Ontario. The original prospect name was Haultain. The data sets reviewed included the 2008 MPX detailed helicopter magnetic survey, the 2011 Quantec pole-dipole and gradient array IP/resistivity surveys, the 2016/2018 Precision GeoSurveys helicopter magnetic surveys, and the 2017 CXS pole-dipole IP/resistivity and ground magnetic surveys.

Six geophysical targets are proposed in this interpretation. They are based on magnetic structure, alteration, the presence of sulfides, and lithology.

The magnetic data sets are the most detailed and useful in the Haultain prospect area. They contribute to mapping structure, alteration and lithology.

The IP/resistivity data set is useful but potential noise from geologic sources, serpentinite and graphitic sediment's, put the source of the chargeability responses in question. A number of the IP anomalies occur in the vicinity of Nipissing diabase and along structures. This enhances their exploration priority. The tradeoff between potential geologic noise and the possibility of sulfides requires that IP anomalies be drill tested.

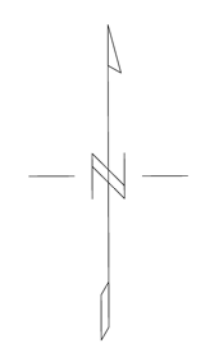
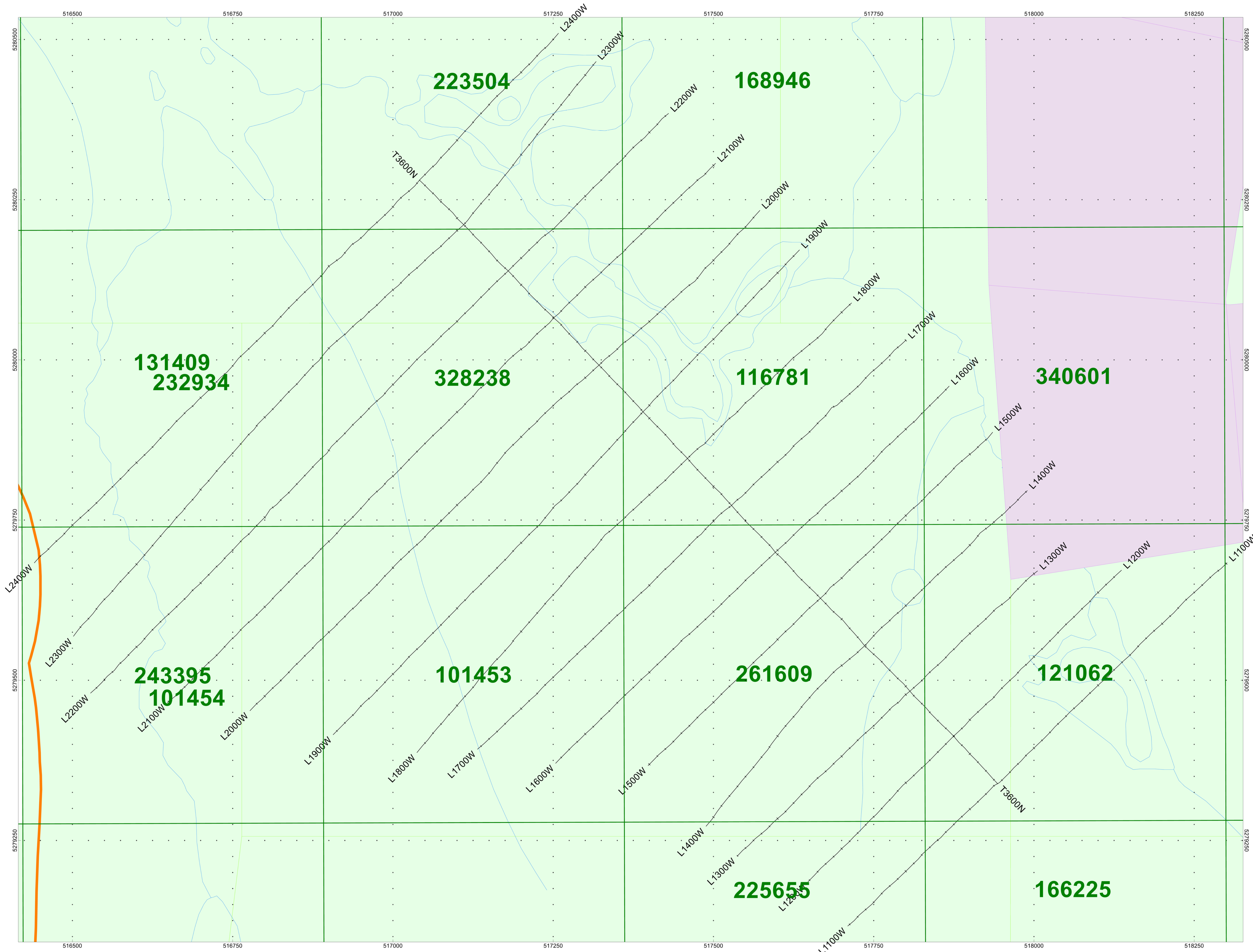
Resistivity anomalies that have previously been interpreted as silicification are thought to be caused by Matachewan diabase dikes which the resistivity survey lines cross or come close to. Geologists should be on the lookout for massive silicification but this interpretation indicates resistive diabase dikes are the more likely source.

The six geophysical targets proposed here should be viewed through the lens of geologic priority and tested where they make sense geologically. Both gold and cobalt mineralization should be considered when testing the targets.

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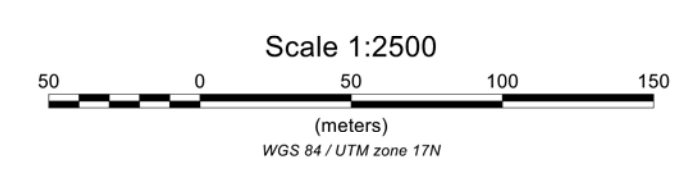
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MINERAL RESOURCES

GOWGANDA PROJECT - TRANSITION  
Haultain Township, Ontario

HISTORIC IP AND MAGNETOMETER GRID LOCATION

Map Drawn By: C Jason Ploeger, P.Geo.  
April 2020



Drawing: BMR-Gowganada-Transition-Historic Grid