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Abstract

During the winter of 2019 Canadian Exploration Services (CXS) performed three 3DIP surveys over various regions on Battery Mineral Resources (BMR) Shining Tree Project. This data was inverted and presented to Tom Weis, a geophysical consultant for BMR. Tom interpreted the data with previously collected airborne data to form a new interpretation.

BATTERY MINERAL RESOURCES LTD.

Shining Tree Project
3DIP Survey Interpretation

C Jason Ploeger, P.Geo.
October 24, 2019

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1. SUMMARY

1.1 Project Name

This project is known as the **Shining Tree Project**.

1.2 Client

Battery Mineral Resources Limited

Level 36
Governor Phillip Tower
1 Farer Place
Sydney
Australia

1.3 Overview

In the winter of 2019, Canadian Exploration Services Limited (CXS) performed a detailed 3D Distributed Induced Polarization (3D IP) survey for Battery Mineral Resources Limited over various regions of the Shining Tree Project; North, Central and South. Tom Weis a geophysical consultant for BMR integrated the 3D IP models (produced by CXS) with the previous airborne data to interpret new exploration targets.

All coordinates in this report are presented in NAD83 UTM Zone 17N.

1.4 Survey & Physical Activities Undertaken

Activity	Area	Dates	Performed By
3D Distributed IP	North	February 18 to March 5, 2019	CXS of Larder Lake
3D Distributed IP	Central	January 15 to February 18, 2019	CXS of Larder Lake
3D Distributed IP	South	January 3 to January 11, 2019	CXS of Larder Lake
Interpretation	All	July 9, 2019 to October 20, 2019	Thomas V Weis and Associates Inc. of Colorado

Table 1: Work Performed

1.5 Objective

The objective of the interpretation was to obtain recommendations for targeting further exploration programs.

1.6 Summary of Results, Conclusions & Recommendations

Shining Tree - North[1]

"The geophysical characteristics of the Shining Tree North area are distinctly different than those for the Shining Tree South and Central areas. The North block is possibly located within the Archean as the government geology map suggests. Or the block is at the transition zone between the Proterozoic Nipissing and the Archean greenstone belt.

Eight IP targets have been identified and prioritized based on their amplitude and depth extent. It is recommended that the three highest priority targets be drilled.

A N-S striking anticline fold axis is identified which should be drilled with a minimum of one hole.

Three cross cutting, NE-SW, faults are identified which should be considered targets. They may have acted as pathways for mineralizing fluids during the Proterozoic.

If the Shining Tree North block is of exploration interest the 3-D IP/resistivity grid should be extended to the north and west if the land position allows."

Shining Tree - Central[2]

"Geology in the Shining Tree Central area consists of Proterozoic Nipissing diabase intrusives and Gowgonda sediments to the west (2/3 of area) and Archean meta-volcanics and sediments to the east (1/3). Known Ag/Co mineralization is confined to the Nipissing diabase units.

Both magnetic data and resistivity data map out the Nipissing diabase intrusives. The magnetic data is higher resolution and should be used for assisting with targeting. In the Proterozoic rocks the resistivity data correlates well with the magnetic data but has poorer lateral resolution because of the 3-D IP/resistivity array that is used. In the

[1] Following text is from Thomas V Weis and Associates Inc. Geophysical Report titled "Geophysical Interpretation for Shining Tree North Project". See Appendix C for full report.

[2] Following text is from Thomas V Weis and Associates Inc. Geophysical Report titled "Geophysical Interpretation for Shining Tree Central Project". See Appendix C for full report.

Archean rocks the resistivity and magnetic data sets do not correlate. That is, resistivity highs and magnetic highs are not coincident in the Archean but map different features.

The IP chargeability response is used to define Ag/Co exploration targets within the Nipissing rocks. Where a weak to moderate strength IP anomaly is coincident with high resistivity and high magnetic response a target is identified. There are a total of 16 IP targets identified. Five are high priority (Priority 1). Seven are moderate priority (Priority 2). Three are low priority (Priority 3). And one has no priority since it is weak and falls well within the Archean.

These anomalous IP responses should be drill tested starting with the highest priority targets.

The deeper resistivity response in the Shining Tree Central block located at the western side of the block indicates where a deep Nipissing intrusive feeder zone occurs. It is generally coincident with the known Ag/Co mineralization. These roots may be associated with greater heat flow and mineralizing fluid movement.

A single deep and strong IP anomaly occurs within the Archean rocks immediately south of Bing Lake. It should be drill tested."

<u>Shining Tree - South[3]</u>

"The Shining Tree South area is geologically mapped as Proterozoic age Nipissing intrusive rocks with minor Gowgonda sediments at its northern boundary. The helicopter magnetic survey covering the area suggests there may be more Proterozoic sediments in the area than is mapped.

The exploration targeting in the Shining Tree South area is based on the helicopter magnetic mapping of Nipissing diabase sills and dikes (magnetic highs) confirmed by the presence of high resistivity zones characteristic of unaltered intrusive rocks. The magnetic and resistivity lows in the area are interpreted to be associated with Proterozoic age Gowgonda sediments.

Where the magnetic/resistivity highs occur in structurally complex areas along with coincident IP (sulfide) responses they are interpreted to be exploration targets.
There are five high priority exploration targets. Four moderate priority exploration targets. And five low priority exploration targets identified from the shallow 350 meter elevation slice map at Shining Tree South. Two structural zones, the E-W and the SW-NE faults are also exploration targets.

[3] Following text is from Thomas V Weis and Associates Inc. Geophysical Report titled "Geophysical Interpretation for Shining Tree South Project". See Appendix C for full report.

The deeper resistivity and IP features shown in Figures 15 and 16 are interpreted to be associated with the roots of the Nipissing intrusives in this area.

Prior to drill testing the deeper features a series of three (3) 2-D pole dipole lines should be run over them to better resolve their location.

Geochemistry should be utilized to prioritize the cobalt potential of the IP targets and also along the structural trends (E-W and SW-NE) identified in this report."

2. SURVEY LOCATION DETAILS

2.1 Location

The Shining Tree Project is in Leonard Township, approximately 21 kilometres southwest of Gowganda, Ontario or 18 km northeast of Shining Tree, Ontario.

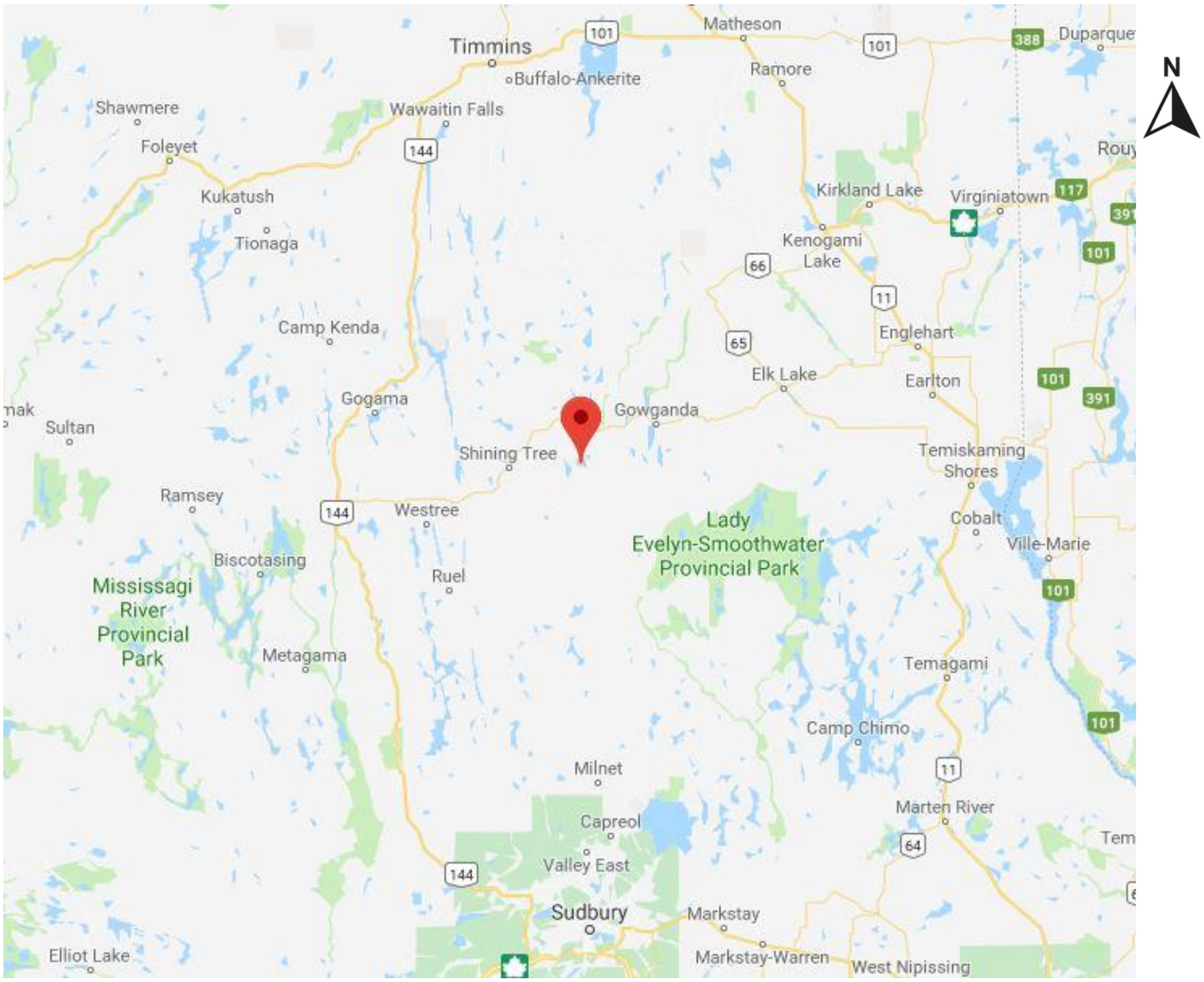

Figure 1: Location of the Shining Tree Project (Map data ©2019 Google)

2.2 Access

Access to the property was attained with a 4x4 truck and snowmobiles via Hwy 560. From Gowganda, the field crew travelled approximately 16 km west along Hwy 560 before turning south, following a trail, for approximately 9 km, then southwest for approximately 7 km, and north for another 5 km to reach the southeast end of the survey grid.

2.3 Mining Claims

Shining Tree - North

Cell Number	Provincial Grid Cell ID	Ownership of Land	Township
131340	41P11A035	Battery Mineral Resources Limited	Leonard
232794	41P11A036	Battery Mineral Resources Limited	Leonard
196080	41P11A037	Battery Mineral Resources Limited	Leonard
171300	41P11A038	Battery Mineral Resources Limited	Leonard
332483	41P11A055	Battery Mineral Resources Limited	Leonard
249324	41P11A056	Battery Mineral Resources Limited	Leonard
249323	41P11A057	Battery Mineral Resources Limited	Leonard
201262	41P11A058	Battery Mineral Resources Limited	Leonard
232795	41P11A075	Battery Mineral Resources Limited	Leonard
270045	41P11A076	Battery Mineral Resources Limited	Leonard
329997	41P11A077	Battery Mineral Resources Limited	Leonard
142563	41P11A078	Battery Mineral Resources Limited	Leonard
112769	41P11A096	Battery Mineral Resources Limited	Leonard
246400	41P11A097	Battery Mineral Resources Limited	Leonard

Table 2: Shining Tree – North Mining Lands and Cells Information

Shining Tree - Central

Cell Number	Provincial Grid Cell ID	Ownership of Land	Township
103993	41P11A155	Battery Mineral Resources Limited	Leonard
327712	41P11A156	Battery Mineral Resources Limited	Leonard
165710	41P11A157	Battery Mineral Resources Limited	Leonard
165709	41P11A158	Battery Mineral Resources Limited	Leonard
280451	41P11A175	Battery Mineral Resources Limited	Leonard

280450	41P11A176	Battery Mineral Resources Limited	Leonard
340115	41P11A177	Battery Mineral Resources Limited	Leonard
103994	41P11A178	Battery Mineral Resources Limited	Leonard
244665	41P11A195	Battery Mineral Resources Limited	Leonard
232465	41P11A196	Battery Mineral Resources Limited	Leonard
269169	41P11A197	Battery Mineral Resources Limited	Leonard
119252	41P11A198	Battery Mineral Resources Limited	Leonard
160535	41P11A215	Battery Mineral Resources Limited	Leonard
331414	41P11A216	Battery Mineral Resources Limited	Leonard
333156	41P11A217	Battery Mineral Resources Limited	Leonard
331413	41P11A218	Battery Mineral Resources Limited	Leonard
309053	41P11A235	Battery Mineral Resources Limited	Leonard
217543	41P11A236	Battery Mineral Resources Limited	Leonard
149306	41P11A237	Battery Mineral Resources Limited	Leonard
149305	41P11A238	Battery Mineral Resources Limited	Leonard
315699	41P11A255	Battery Mineral Resources Limited	Leonard
331415	41P11A256	Battery Mineral Resources Limited	Leonard
168156	41P11A257	Battery Mineral Resources Limited	Leonard
168155	41P11A258	Battery Mineral Resources Limited	Leonard

Table 3: Shining Tree – Central Mining Lands and Cells Information

Shining Tree - South

Cell Number	Provincial Grid Cell ID	Ownership of Land	Township
330284	41P11A275	Battery Mineral Resources Limited	Leonard
155370	41P11A276	Battery Mineral Resources Limited	Leonard
274012	41P11A277	Battery Mineral Resources Limited	Leonard
255163	41P11A278	Battery Mineral Resources Limited	Leonard
186701	41P11A295	Battery Mineral Resources Limited	Leonard

334097	41P11A296	Battery Mineral Resources Limited	Leonard
135843	41P11A297	Battery Mineral Resources Limited	Leonard
274013	41P11A298	Battery Mineral Resources Limited	Leonard
103652	41P11A315	Battery Mineral Resources Limited	Leonard
155371	41P11A316	Battery Mineral Resources Limited	Leonard
255164	41P11A317	Battery Mineral Resources Limited	Leonard
303866	41P11A318	Battery Mineral Resources Limited	Leonard

Table 4: Shining Tree - South Mining Lands and Cells Information

2.4 Property History

A lot of historical exploration has been carried out over the years all over the survey area. The following list describes details of the previous geoscience work which was collected by the Mines and Minerals division and provided by OGSEarth (MNDM & OGSEarth, 2018).

- **1956: Newnorth Gold Mines (File 41P10SW0112)**

Electromagnetic Survey – Leonard Township

- **1963: Coulee Lead & Zinc Mines Ltd (File 41P10SW0109)**

Geological Surveying – Leonard Township
During the months of July and August 1963, a geological mapping program was done on the property to examine the Nipissing diabase (Keewatin contact) found in the area, as well as locating more calcite and quartz-calcite veins.

- **1971: United Reef Petroleums Limited (File 41P10SW0114)**

Diamond Drilling – Leonard Township
Emile Beaudoin conducted drilling on the property to obtain 6 drill holes, each providing 70’ of core, producing a total of 420’ of core sample.

- **1973: United Reef Petroleums Limited (File 41P10SW0108)**

Line Cutting, Soil Sampling – Leonard Township
5.3 miles of picket line were cut over the property. 330 soil samples were collected and sent to Technical Services Laboratories for geochemical assaying. Results showed high cobalt readings at line 4S on the baseline and at 6S on line 100E. Notable silver assays were obtained on the west side of the diabase ridge, on lines 4S and 8S. Further geological investigations were recommended.

- **1973: United Reef Petroleums Limited (File 41P11SE8519)**

Geological Surveying and Mapping – Leonard Township

J.L. Tindale performed geological surveying and mapping on the eastern area of the property owned by United Reef Petroleums Limited. Cobalt and silver mineralization were observed in quartz-carbonate and calcite veins. However, further mapping and diamond drilling were recommended to obtain accurate geological interpretations of the area.

- **1974: United Reef Petroleums Limited (File 41P10SW0106)**

Geological Surveying and Mapping – Leonard Township

J.L. Tindale performed geological surveying and mapping on the property owned by United Reef Petroleums Limited. Six x-ray drill holes showed encouraging cobalt contents but low silver contents. Further drilling was recommended.

- **1974: G E Waddington (File 41P10SW0104–41P10SW0107)**

Ground Geophysics – Leonard Township

Line cutting was carried out between May 11th and May 21st,1974. The magnetometer survey was carried out between May 22nd and May 27th, 1974. The number of stations read was 539 and the number of survey miles including the base line was 5.87

- **1974-1975: United Reef Petroleums Limited (File 41P10SW0103)**

Diamond Drilling – Leonard Township

J.L. Tindale conducted geological surveying and mapping on the property owned by United Reef Petroleums Limited. A. McKnight Diamond Drilling performed diamond drilling to obtain 100' of core samples. Three additional drill holes were planned to follow this program.

- **1975: United Reef Petroleums Limited (File 41P10SW0113)**

Diamond Drilling and Assaying – Leonard Township

A. McKnight Diamond Drilling drilled 3 holes on the property owned by United Reef Petroleums Limited to obtain a total of 1512.5' of core samples. The purpose of this project was to test silver showing at depth. Assaying results revealed positive traces of silver.

- **1975: G E Waddington (File 41P10SW0101)**

Geological Surveying – Leonard Township

Line cutting was carried out between May 11th and May 21st, 1975. Geological mapping was done between June 27th to July 3rd, 1974 and August 23rd to September 2nd, 1974. I.P. survey suggested to trace the mineralization.

- **1976: Alamo Petroleum Ltd. (File 41P10SW0102, 41P10SW0105)**

Line Cutting, Soil Sampling, EM16, Geological Survey/Mapping, ElectroMagnetic, VLF, and Geochemical Surveys – Leonard Township

The property in study covers part of the eastern contact of the Shining Tree diabase sill. There have been numerous north trending calcite veins occasionally showing mineralized native silver, niccolite, smaltite, cobaltite, and native bismuth, found within the area covered by the property. North trending features have been identified from the air photographs which appear to be associated with some of the prospects. The claims were staked to cover the fracture trend in order to explore the associated native silver deposits.

- **1992: Patrick Donovan (File 41P10SW9028, 41P11SE0083)**

Open Cutting, Magnetic, VLF-EM, Geological and Geochemical Surveys – Leonard Township

18.86 km of line was cut for magnetic and VLF-EM surveys. 12 grab samples were obtained from pits and trenches for geochemical assaying. Geophysical surveys showed two significant conductors that may indicate mineralized systems of larger magnitude than previously observed. Along with geochemical assaying and geological information available, it was concluded that the Leonard Township Property hosts an excellent potential for significant Co, Cu, Ni and Ag type mineralization. Induced polarization and diamond drilling are recommended.

- **1993: Patrick Donovan (File 41P11SE0049, 41P11SE0076)**

Overburden Stripping, Geological Surveying, Geochemical Assaying and Analyses – Leonard Township

H. Ferderber Geophysics performed approximately $750m^2$ of overburden stripping. Geochemical assaying was done on 32 channel-chip samples collected and sent to Bourlamaque Assay Laboratory. Due to weathered outcrop surfaces, a modest diamond drill program was recommended to obtain better samples for geochemical analyses.

- **1997: Archie Lacarte (File 41P11SE2002)**

Mechanical Stripping and Trenching – Leonard Township

Archie Lacarte performed mechanical stripping and trenching over 10 areas for the Lacarte Project, covering 216km of the project. Lithologies observed through trenching were noted.

- **1997: Archie Lacarte (File 41P11SE0089)**

Mechanical Stripping and Trenching – Leonard Township

Archie Lacarte performed mechanical stripping and trenching over 3 areas for the Lacarte Project.

- **1999: Walter Hanych (File 41P11SE2024)**

Line Cutting and Geochemical Sampling – Tyrrell Township

The soil survey was conducted between October 20^{th} to 28^{th}, 1999. The grid was initiated in July 1999 and rocks samples were collected in August 1999.

- **2003: International KRL Resources Corporation (File 41P11NE2048)**

Geological Survey, Geochemical Assaying and Analyses and Prospecting – Knight Township

Geological surveying, mapping, and prospecting were conducted on the Copper Hill Property. 42 samples were collected from the area and sent to ALS Chemex Laboratories for geochemical assaying and analyses. No significant results were obtained.

- **2004: Intl Krl Resc Corp (File 41P10SW2024)**

Geological Surveying and Geochemical Sampling – Tyrrell Township

During the month of October 2004, a prospecting, geological mapping and rock sampling program was carried out on the Spider Lake property. A total of 53 rock chip samples were collected and assayed during this program.

- **2007: SL Resc Inc. (File 20000002099)**

Overburden Stripping, Geochemical Assaying and Analyses – Leonard Townships

The purpose of this program was to establish the presence of silver bearing fissure veins on the property while defining structure and host rock types within old pits and trenches which appear to date back to the turn of the century.

- **2008: SL Resources Inc (File 20000002878)**

Hand Stripping and Trenching – Leonard Township

SL Resources performed hand stripping, trenching, sampling, and mapping on five old trenches as well as grid cutting on the Leonard Township Property. Each trench was mapped in detail and sampled where possible. Notable veins were recorded and reported.

- **2008: SL Resources Incorporation (File 20000004141)**

Line Cutting, Total Field Magnetic Survey – Leonard Township

True North Mineral Laboratories performed approximately 25km of line cutting and conducted a magnetometer survey over 22.84km of the cut line on the Leonard Township Property. Positive results that may potentially reflect cobalt and silver mineralization were observed. Due to sufficiency of outcrop exposure, geological mapping and sampling were recommended over the cut grid.

- **2008: Goldeye Exploration Ltd. (File 20000003194)**

Linecutting, Magnetic/Magnetometer Survey – Leonard Township

A magnetic survey had been completed over the Fournier Lake grid in the Leonard Township, Ontario. Total production was 13,075 m. The magnetic highs may be due to gabbroic rocks, diabase and iron formation. The magnetic lows may be associated with felsic volcanic rock and granite. The report recommends conducting geological mapping and an IP survey over the area.

- **2010: Goldeye Explorations Ltd, Robert Maccallum, Sterling Strategies Inc (File 20000006278)**

Line cutting, Magnetic/Magnetometer Survey, Induced Polarization, Electro-magnetic VLF – Tyrrell Township

Spectral IP/resistivity and magnetic/VLF surveys were done on the Indian Lake grid, Tyrrell Township, Shining Tree area, Ontario. Total production was 33,025 m IP/resistivity and 58,075 m magnetics/VLF.

- **2010: Goldeye Explorations Ltd (File 20000006211)**

Diamond Drilling, Assaying and Analyses – Tyrrell Township

Core was drilled from the three target zones by Major Drilling Group. Logging and sampling were ongoing until June 12th, 2010, splitting and photography of the core was done after logging. Sampled core was cut and driven to Swastika Labs of Swastika, Ontario by subcontractors JVX Inc.

- **2016: Battery Mineral Resources Limited (File 20000015781)**

Airborne Geophysical Survey – Donovan Townships

Precision GeoSurveys conducted airborne magnetometer and radiometric surveys over 12 024 line-km of land for the Cobalt Project. Geophysical maps were generated with data obtained, but no solid interpretation was made. Additional geophysical surveying was recommended for accurate interpretation of airborne data collected.

2.5 General Regional/Local Geological Settings

Regional Geology:

The project area occurs within the Superior Province that is composed of northeast trending Paleo- to Neoarchean gneissic complexes, granite-greenstone terranes, and sedimentary basins that were assembled by repeated island arc-microcontinent collisions (Bauer et al., 2011). The Shining Tree project partially comprises Paleoproterozoic (2.5-2.2 Ga) metasedimentary rocks of the Huronian Supergroup (HS) that form a ~60,000 km2 irregular-shaped siliciclastic paleo-basin, colloquially known as the Cobalt Embayment (Potter and Taylor, 2009). The HS unconformably overlies complexly folded and subvertically dipping Neoarchean volcanic, intrusive, and sedimentary rocks of the Wawa-Abitibi terrane that forms the southernmost subprovince of the Canadian portion of the Superior Province (Stott et al., 2010; Stott, 2011; Lodge, 2013). Both Archean rocks and the HS were intruded by Nipissing Diabase sills that are primarily tholeiitic and were sourced from MORB-type parental magma (Potter and Taylor, 2009). These intrusive rocks were emplaced along reactivated pre-HS faults at ca. 2,219 (Corfu and Andrews, 1986) and are envisioned as the heat source that drove hydrothermal fluid circulation responsible for Ag-Co mineralization.

Archean Rocks:

Archean rocks in the region are part of the Wawa-Abitibi subprovince and dominantly comprise mafic to felsic volcanic and volcanoclastic rocks, syn- to post-volcanic intrusions and lesser siliciclastic and chemical sedimentary rocks deposited at ca. 2.7 Ga. The volcanic rocks were deposited in an oceanic arc setting during collision between the Wawa terrane and the Superior Craton in the Neoarchean time period. Paleotectonic settings (e.g., arc, back-arc, rifted arc) and crustal architecture and thickness varies both between and within greenstone belts in the Wawa-Abitibi terrane, which has resulted in a diverse petrogenesis of igneous rocks and related mineralization styles (Mercier-Langevin et al., 2014).

Deformation in the Archean resulted in tight folding and tilting of the rocks to subvertical dips. The stress field was also accommodated by thrust faulting as evidenced by duplication of rock sequences and implied in areas where strain intensity is too low to account for the subvertical rock orientations. Major thrust faults may have been reactivated as deep-seated normal faults developed during extension and deposition of the volcanic facies (Bleeker, 2015). After Archean deformation and deposition of the Huronian Supergroup, the rocks were deformed during the Penokean orogeny that resulted in local reactivation of faults developed in the Archean and Proterozoic (Potter and Taylor, 2009).

Paleoproterozoic Huronian Supergroup:

The Huronian Supergroup comprises a southward-thickening sequence of mainly siliciclastic sedimentary rocks that reach a maximum thickness of 12 km in the southern part of the basin but have an estimated thickness of ~6 km near Cobalt, Ontario (Young et al., 2001). The HS is subdivided in Lower and Upper Huronian. The Lower Huronian comprises, from top to bottom, the Elliot Lake, Hough Lake, and Quirke Lake groups, while the Upper Huronian is solely composed of the Cobalt group. The Lower Huronian has a restricted distribution and was deposited in a rift controlled, non-marine environment. After a significant hiatus, deposition of the more homogenous Upper Huronian is interpreted to have taken place at a passive margin under submarine conditions (Young et al., 2001).

Inversion of the Huronian basin resulted in lower greenschist metamorphism of the sedimentary rocks and caused basin-scale hydrothermal fluid flow that resulted in regionally extensive Na and Ca alteration of the rocks (Potter and Taylor, 2009).

Property Geology:

Geological mapping carried out in the past indicates that the two prominent rock groups occurring on the property are the Gowganda sediments and the Nipissing gabbros, granophyres, and diabase dykes.

The northwest region of the area (Bobtail Lake) is dominated by outcrops of boulder conglomerate. This polymictic clast supported conglomerate is composed of cobble to boulder sized angular to rounded clast of pink felsic intrusive (granite) with some clasts of medium grey chert and some metavolcanic clasts in a pink sandy matrix.

The boulder conglomerate grades into a pebble conglomerate and argillite southeast of Bobtail Lake. The matrix supported pebble conglomerate is composed of dark grey to black argillaceous matrix with a low amount of widely spaced pebble sized angular to rounded clasts of granitic composition. Outcrops of dark grey to green argillite occur southeast of the paraconglomerate. Dark green Nipissing gabbro that is strongly magnetic, outcrops in contact with the argillaceous sediments between Bobtail Lake and Mullen Lake.

The west–central portion of the property around Mullen, Herron and Taylor Lakes is dominated by outcrops of Nipissing diabase, gabbros and granophyres.

Mafic and intermediate metavolcanics outcrop in the area around Spider Lake. Most of the property around Spider Lake is underlain by intermediate metavolcanic rocks of andesite–dacite composition that has been intruded by Nipissing gabbros and/or diabase dykes. Minor quartz–calcite veins occur within the metavolcanic rocks and within the Nipissing gabbroic rocks.

Mineralization in the outcrops consists mostly of pyrite with minor amounts of chalcopyrite, bornite, malachite and minor pentlandite. The general strike of the formations seen on the property was north to northwest with shallow to moderate west to southwest dips. Minor quartz-carbonate veining was observed in various outcrops at various orientations. Sulphide content in the area is general low except for some pyrite rich cherts located on the northwestern shore of Fournier Lake and in some of the quartz calcite veins within the Nippissing gabbros.

APPENDIX A

STATEMENT OF QUALIFICATIONS

I, C. Jason Ploeger, hereby declare that:

1. I am a professional geophysicist with residence in Larder Lake, Ontario and am presently employed as a Geophysicist and Geophysical Manager of Canadian Exploration Services Ltd. of Larder Lake, Ontario.

2. I am a Practicing Member of the Association of Professional Geoscientists, with membership number 2172.

3. I graduated with a Bachelor of Science degree in geophysics from the University of Western Ontario, in London Ontario, in 1999.

4. I have practiced my profession continuously since graduation in Africa, Bulgaria, Canada, Mexico and Mongolia.

5. I am a member of the Ontario Prospectors Association, a Director of the Northern Prospectors Association and a member of the Society of Exploration Geophysicists.

6. I do not have nor expect an interest in the properties and securities of **Battery Mineral Resources Ltd.**

7. I am responsible for the final processing and validation of the survey results and the compilation of the presentation of this report. The statements made in this report represent my professional opinion based on my consideration of the information available to me at the time of writing this report.

C. Jason Ploeger, P.Geo., B.Sc.
Geophysical Manager
Canadian Exploration Services Ltd.

Larder Lake, ON
March 25, 2019

APPENDIX B

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APPENDIX C

INTERPRETATIONS REPORTS BY THOMAS V WEISS AND ASSOCIATES INC.

Thomas V Weis and Associates Inc.

7767 South Poplar Way

Centennial, Colorado 80112 USA

Geophysical Report

Subject: Geophysical Interpretation for Shining Tree North Project

Date: 12th October, 2019

Client: Battery Mineral Resources Ltd.

Summary

The Shining Tree North area is mapped as entirely Archean meta-volcanics and sediments which are not lithologically correct for hosting cobalt mineralization in the Canadian cobalt district in Canada. The block is immediately adjacent to the Proterozoic/Archean contact to the west so it still retains some exploration potential. In fact the Proterozoic/Archean contact may be interpreted to occur to the east of where government geologic mapping places it. This would indicate that the western half of the block may be primarily Proterozoic and have exploration potential. The actual contact will need to be determined by mapping and drilling. The geophysical target characteristics, coincident magnetic highs, resistivity highs and moderate IP highs, observed in the Shining Tree South and Shining Tree Central blocks do not appear to hold in the Shining Tree North area (*supporting government mapping?*). In fact in the Shining Tree North area the strongest IP targets are related to resistivity lows which may indicate that large quantity of sulfides are present. There is one similar deep IP target on the eastern side of the Shining Tree Central block. Targets in the Shining Tree North block consist of eight IP targets, an anticlinal fold axis target, and three crosscutting fault targets.

Most of the area is covered by forest, swamps and lakes and geophysics is fundamental in exploring this area. Once again geochemistry could be used to indicate areas with increased cobalt. Drill testing will be the ultimate test.

The interpretation of the Shining Tree North 3-D IP/resistivity data set is done in conjunction with the 2016 Shining Tree helicopter magnetic data set and minimal outcrop identified in the government geologic mapping. The structural interpretation, shown here, is a product of the RTP Tilt Derivative magnetic data set. The anticline axis is interpreted from the 3D IP model. Anticlines are thought to open structural space during folding which allows mineralizing fluids to enter. If the folding is Archean the structure may have been in place prior to the Proterozoic cobalt mineralizing event.

Location

Figures 1 through 4 are the same maps shown in the previous reports from Shining Tree South and Shining Tree Central.

Figure 1 is a plot of shallow resistivity (350 meters elevation) plotted on top of government geology and the 2016 Precision RTP magnetic data set. The magnetic data, not visible in this image, is included for spatial context only.

Figure 2 shows the location of the Shining Tree North, Central and South exploration blocks plotted on the government geology map. The dark green lines are the interpreted contacts between the Proterozoic rocks (purple) and the Archean rocks (green). In general cobalt exploration occurs in the Nipissing diabase intrusives (purple) or very near the contact with the Archean (dark green line). In the Shining Tree North area the exploration appears to occur very near the contact.

Figure 3 shows the Shining Tree North, Central and South blocks plotted on the 2016 Precision RTP magnetic data set. Note the contact (red dashed line) between Archean and Proterozoic rocks is interpreted to be shifted to the east. The magnetic low located to the west of that line was interpreted by Clyde Smith to be an alteration feature and the 3-D IP/resistivity survey in the Shining Tree North block seems to support this idea. However the alteration could just as well occur in the Archean as in the Proterozoic.

Figure 4 shows the location of the blocks plotted on the Tilt Derivative of the RTP data set. This is the image used to interpret contacts and structures in this report.

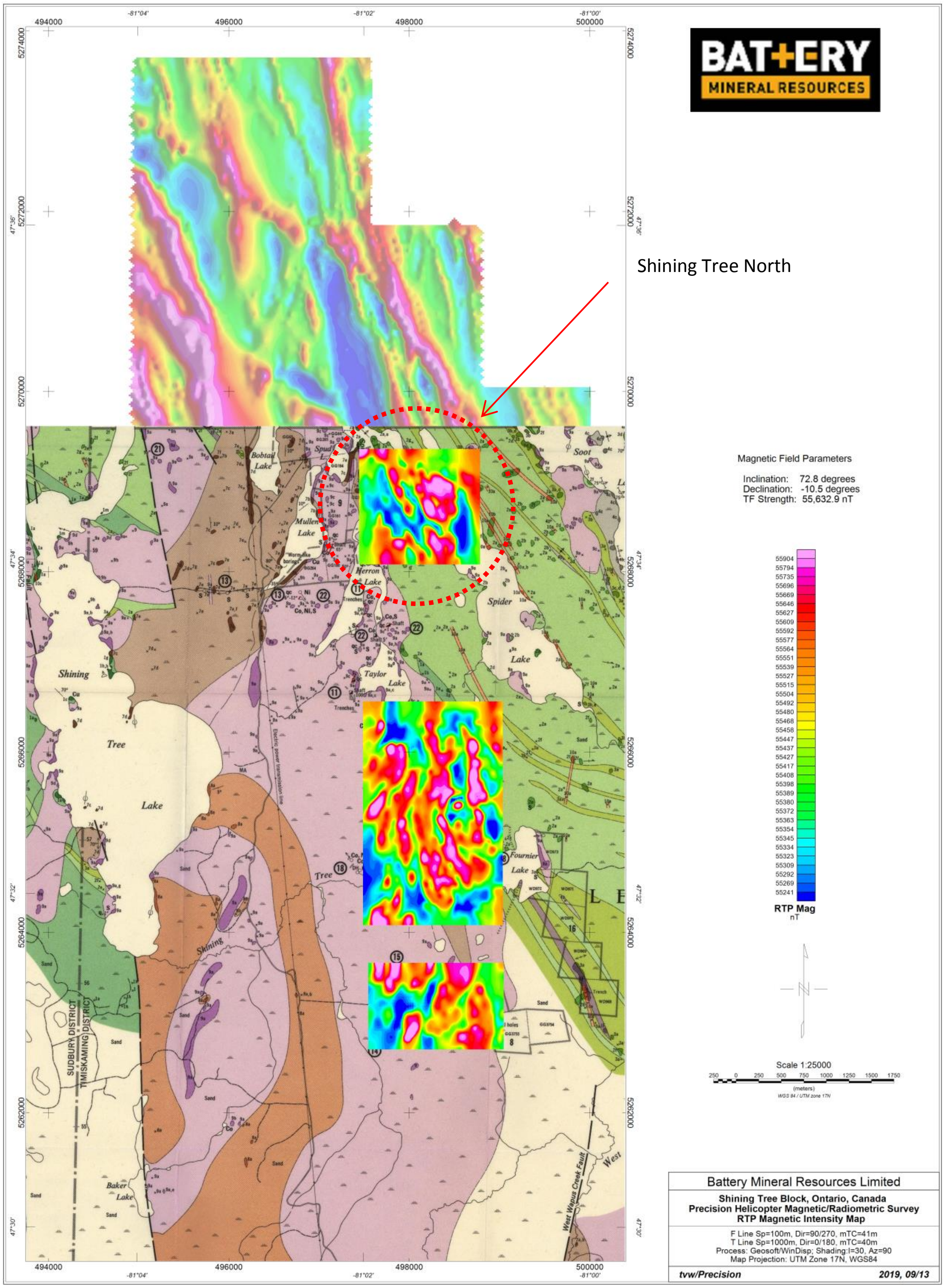


Figure 1 – The location of the Shining Tree North block (red dashed circle). Shallow resistivity (350 meters elevation) is plotted on top of government geology and the 2016 magnetic data set. The limits of this image are determined by the helicopter magnetic data set.

Geology

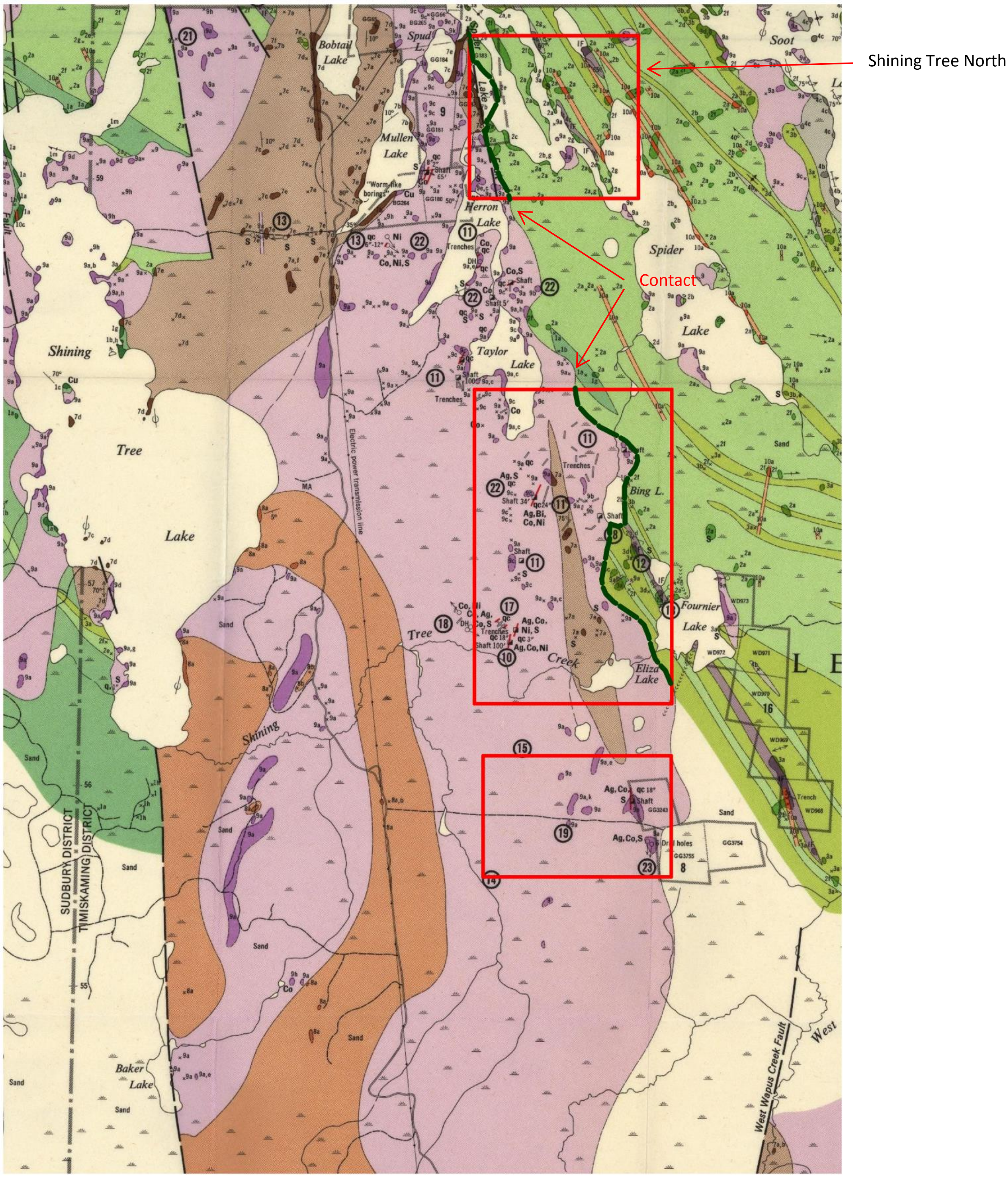
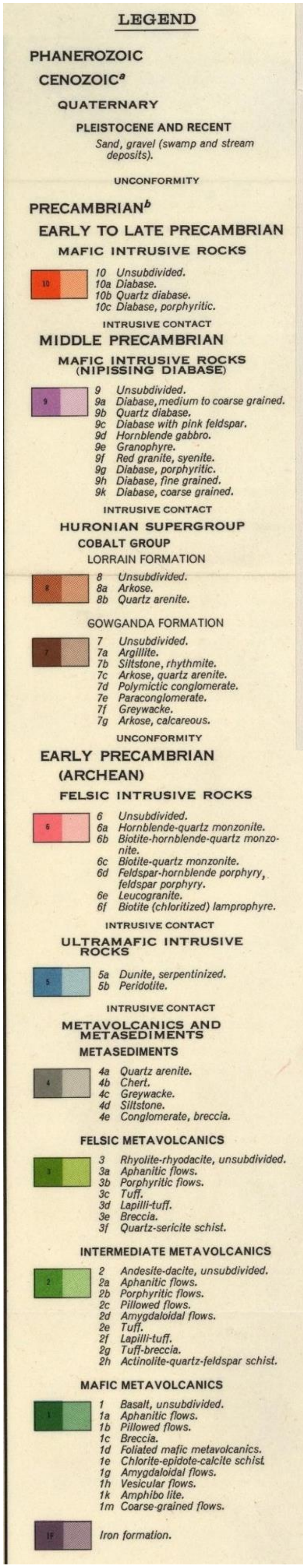


Figure 2 – The location of the Shining Tree North, Central and South blocks plotted on the government geology. The dark green line is the interpretation of the Proterozoic/Archean contact as determined by the government geologic mapping.

Stratigraphic Section for the Shining Tree Area



Nipissing Diabase host rocks for cobalt mineralization (Proterozoic)

Magnetic and Resistive

Gowgonda Proterozoic Sediments

Less magnetic and less resistive

Archean Felsic/Intermediate/Mafic meta volcanics

and Iron Formation

Magnetics

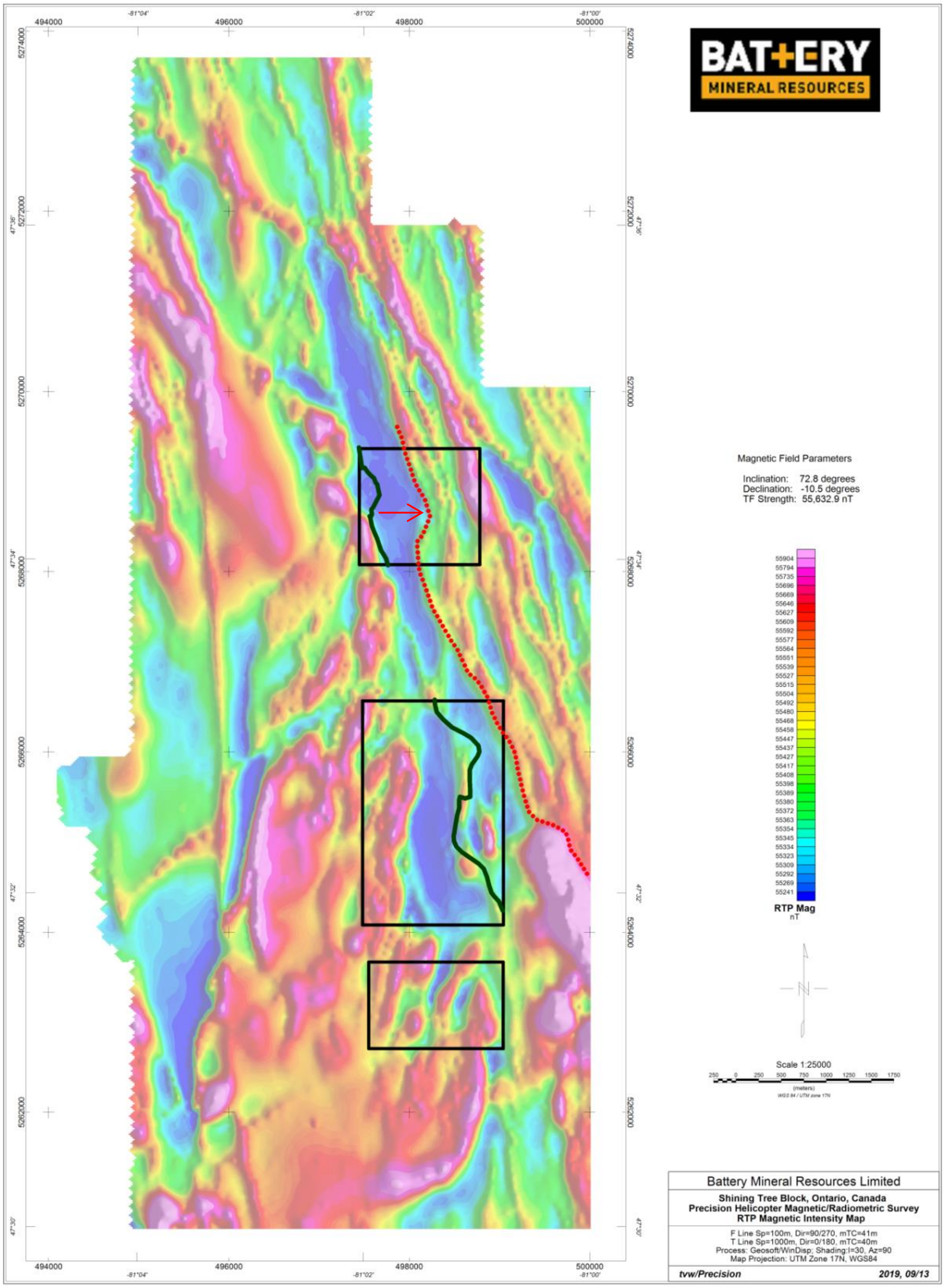


Figure 3 – The Shining Tree North, Central and South blocks plotted on the 2016 RTP magnetic data set. Note the interpreted contact is shifted to the east (red dashed line). The magnetic low is interpreted to be due to alteration within the Proterozoic rocks. The alteration could however occur in the Archean. Mapping and drilling will be required to determine the exact location of the contact.

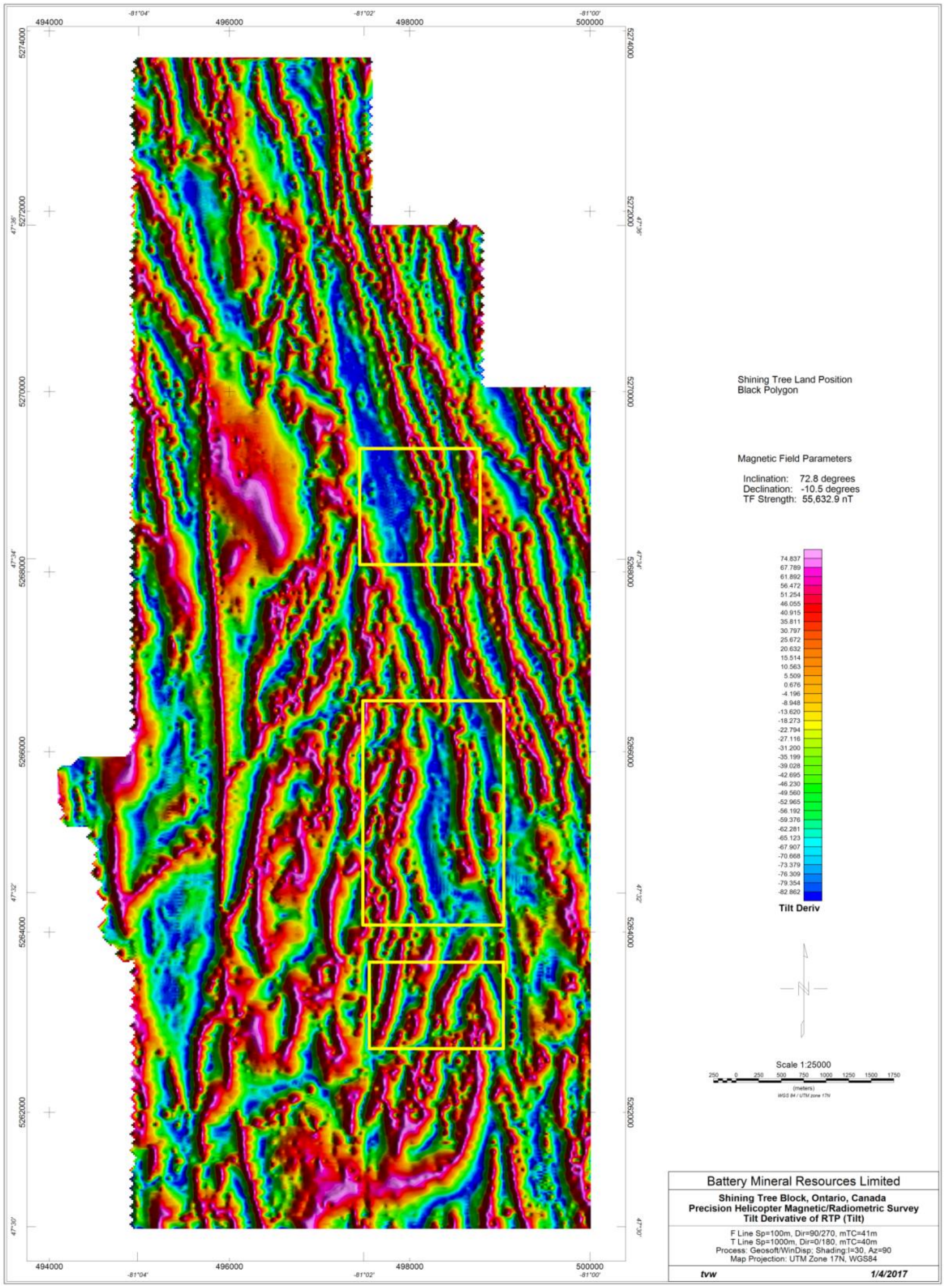


Figure 4 – The Tilt Derivative of the RTP magnetic dataset which is used in the detailed interpretation of contacts and structures in the Shining Tree North block.

Figure 5 shows the Tilt Derivative of the RTP magnetic field for the detailed Shining Tree North area. It is the data set used to interpret structure (thin black lines) in the area. Also interpreted from this data set is the green dashed line representing the possible contact between the

Proterozoic rocks to the west and the Archean rocks to the east. The solid purple line is that contact based on the government geologic mapping. The purple polygons are Nipissing outcrop based on the geologic mapping. The solid N-S thick black lines are the interpreted axis of an anticline based on the 3-D IP modeling.

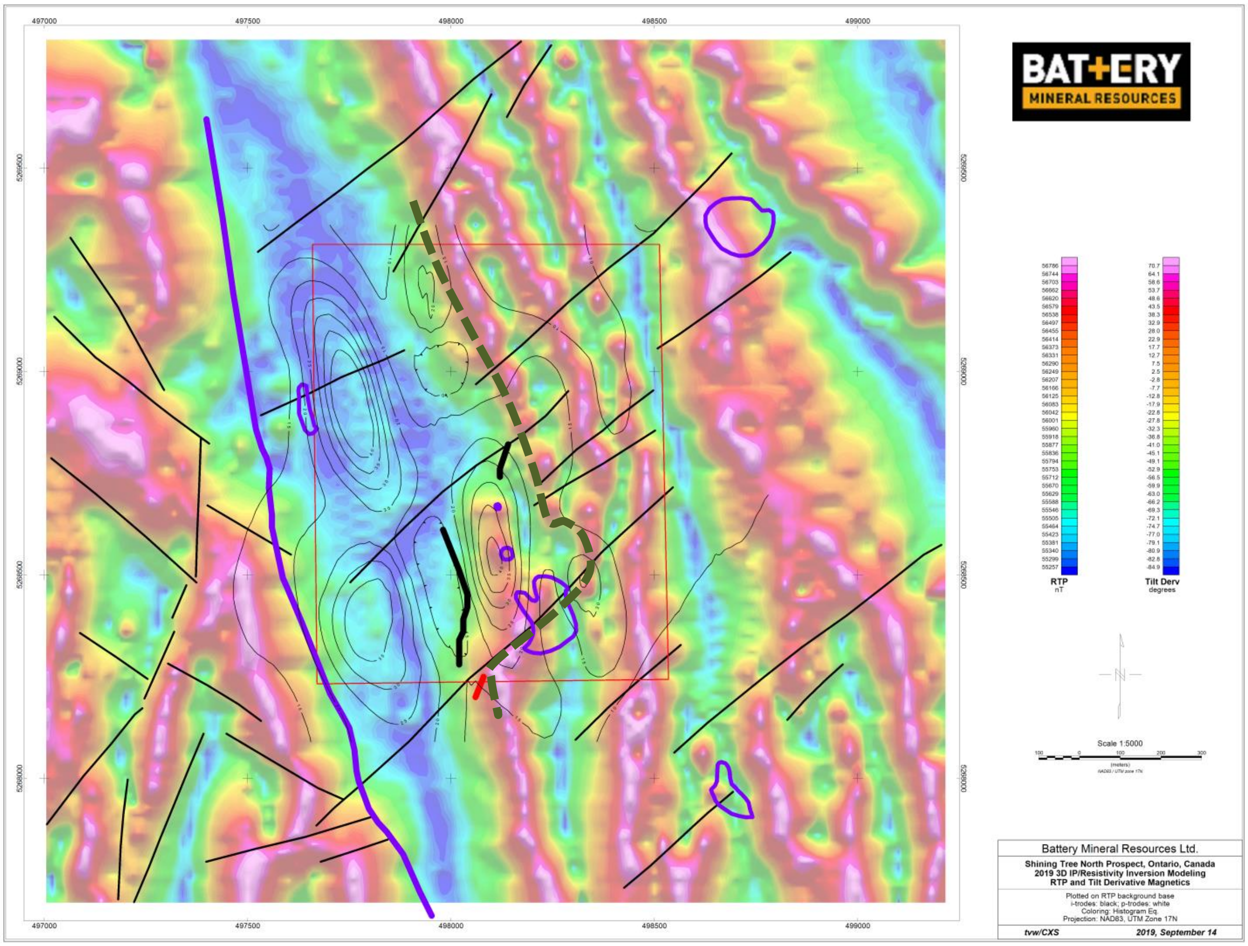


Figure 5 – The Tilt Derivative of the RTP magnetic data set is used here to map structures (thin black lines) and make a guess (green dashed line) at the location of the Proterozoic/Archean contact in the Shining Tree North area. The solid purple line is the contact based on the government geologic mapping. The small purple polygons are Nipissing outcrop. The thick solid black lines are the axis of interpreted anticlinal folds (from 3-D IP modeling). Note the 200 meter IP elevation slice contours are plotted to show the relationship between IP and magnetics.

Note that in Figure 5 the 200 meter elevation IP slice contours are shown. The higher IP response falls within zones of lower magnetic response interpreted to be in the Proterozoic rocks to the west of the green dashed line.

Figure 6 shows the location of the Shining Tree North 3-D IP/resistivity grid plotted on geology. The important feature in this figure is the red box. Inside of the red box the data is sample uniformly and the 3-D models can be trusted. Outside of the red box the data set is under-sampled (no potential electrodes) and the model should not be trusted.

IP and Resistivity

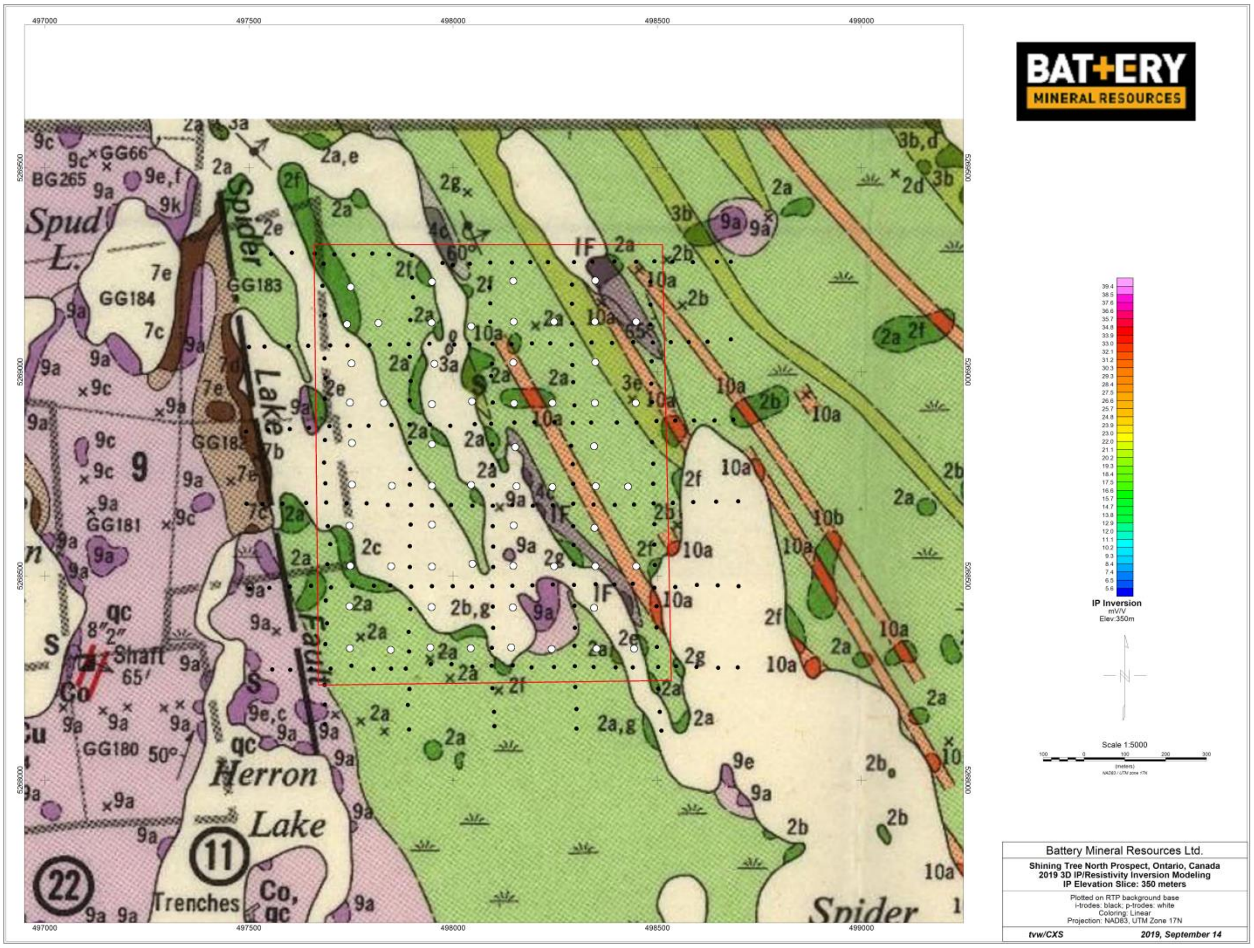


Figure 6 – The location of the 3-D IP/resistivity grid at Shining Tree North plotted on the government geology map. The black dots show the current injection points. The white dots are the potential electrode arrays. The red box shows the area within which the IP and resistivity models can be used. Outside of that box the data is under-sampled (no potential electrodes) and the model cannot be trusted.

Figures 7 and 8 are the 3-D IP and resistivity voxel models respectively. They are the complete voxels so detail cannot be seen inside the models.

Figure 9 shows the 3-D IP voxel with values of chargeability that are less than 20 mV/V removed. This 3-D voxel is where the anticlinal axis (Figure 5) was interpreted from.

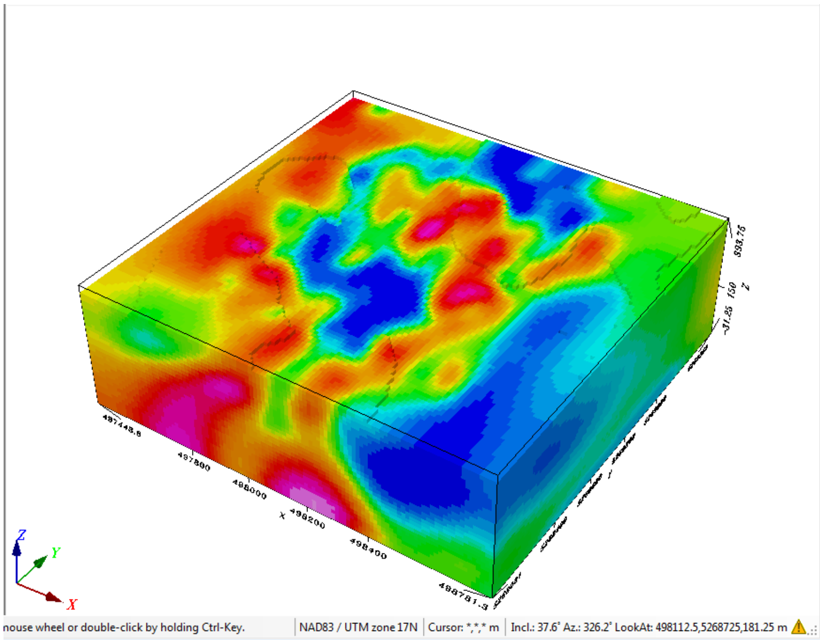


Figure 7 – The Shining Tree North 3-D IP voxel looking down and to the northwest. Reds are high chargeability and blues are low chargeability.

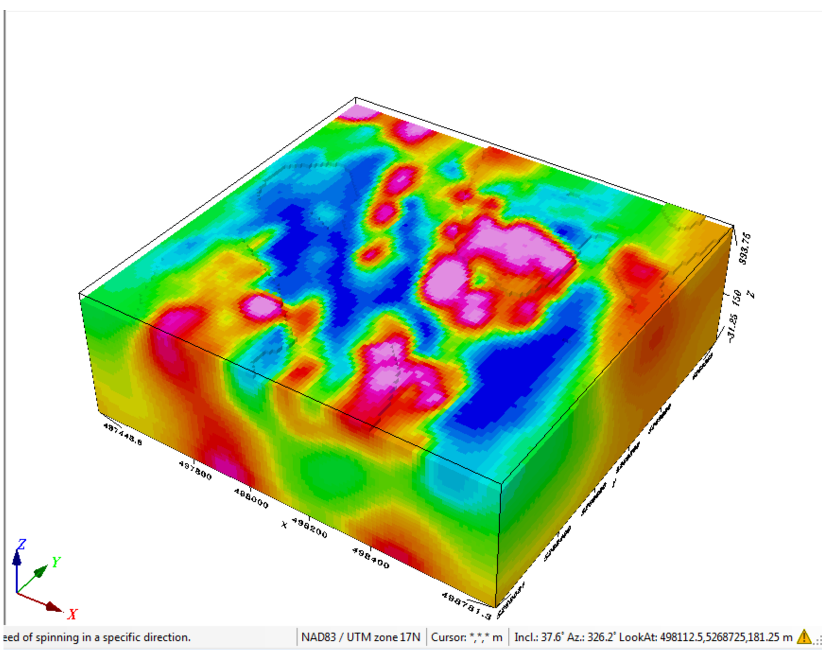


Figure 8 – The Shining Tree North 3-D resistivity voxel looking down and to the northwest. Reds are high resistivity and blues are low resistivity.

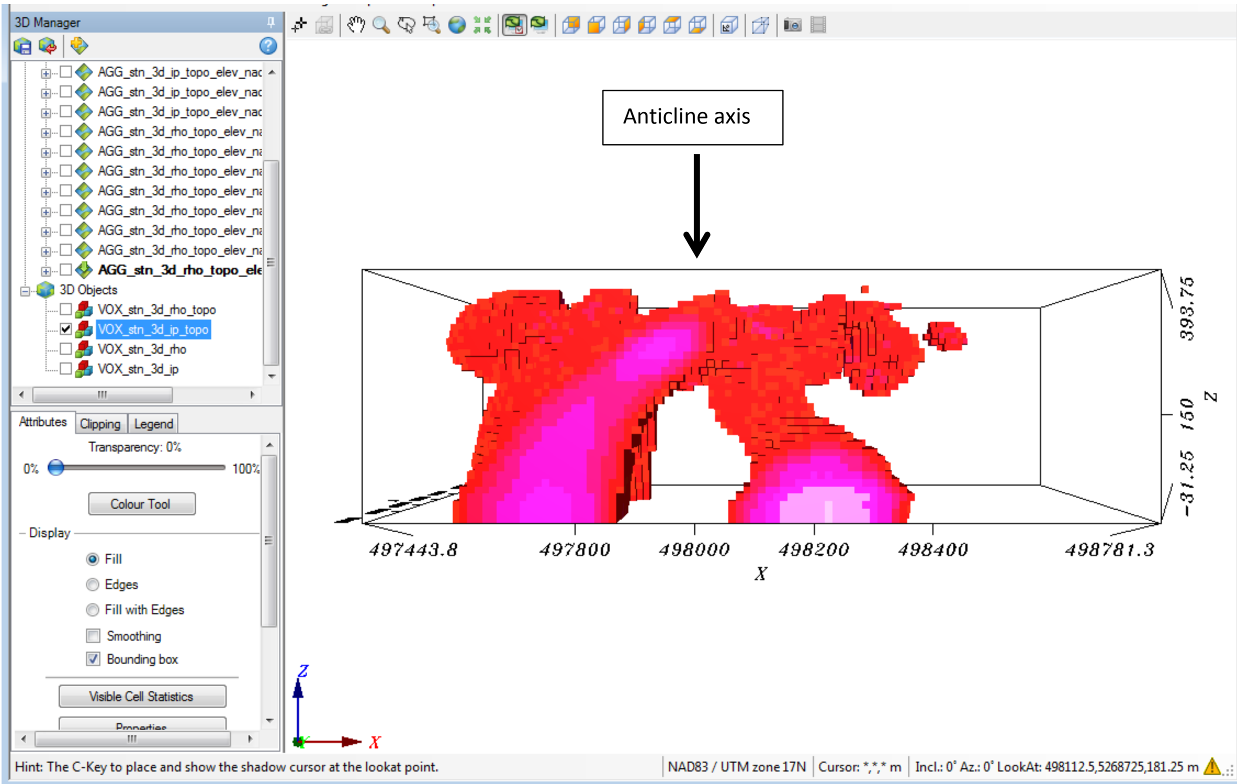


Figure 9 – The Shining Tree North 3-D IP voxel with chargeability clipped to show only values between 20 and 60 mV/V. The view is flat and due north. The anticline axis, shown in Figure 5 above, is interpreted from this data set. By stepping through the voxel from south to north the anticline axis location is determined.

Figures 10 through 15 show the IP and resistivity elevation slices, at 350 meters (shallowest), 250 meters and 200 meters (deepest), from the IP and resistivity 3-D voxel models. They are faded and overlaid on the government geology base. The shallowest, 350 meter slice is noisy and hard to interpret so the 250 meter and 200 meter slices will be used for interpretation purposes and developing exploration targets.

The main feature of exploration interest in these figures is the correlation between IP highs and resistivity lows. The interpretation proposed here is that the sulfide content, associated with the cobalt rich alteration system within the Nipissing, is high enough to cause the observed chargeability values and the coincident low resistivity. Alternative explanations would include: 1) Archean massive sulfide/stringer mineralization or 2) Archean carbonaceous graphitic sediments. Either way these targets need to be drill tested to determine the source of these significant IP anomalies occurring in a highly prospective location.

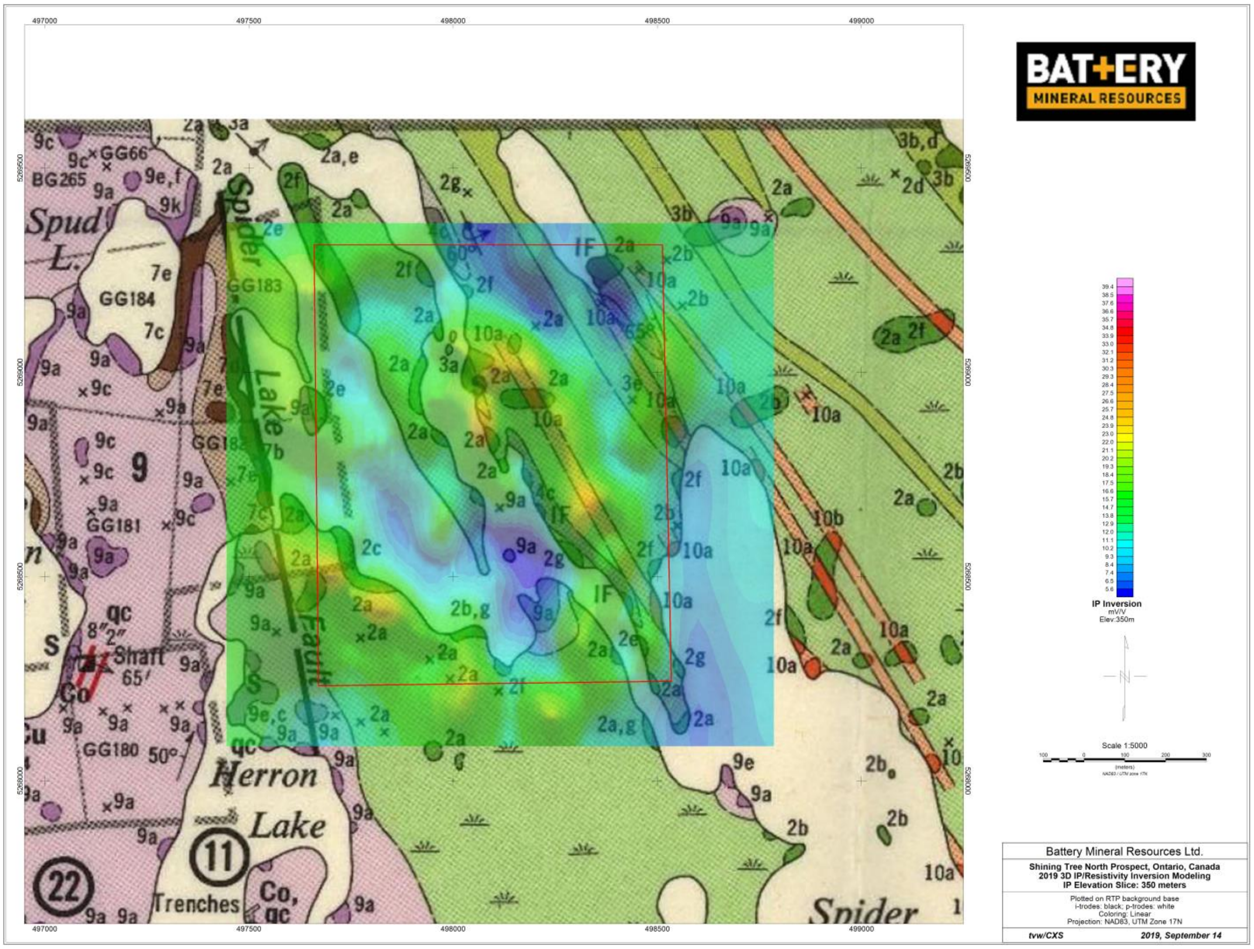


Figure 10 – The Shining Tree North 350 meter IP elevation slice from the 3-D voxel plotted on the government geology. The IP response at this depth (10 to 50 meters) is weak and difficult to interpret.

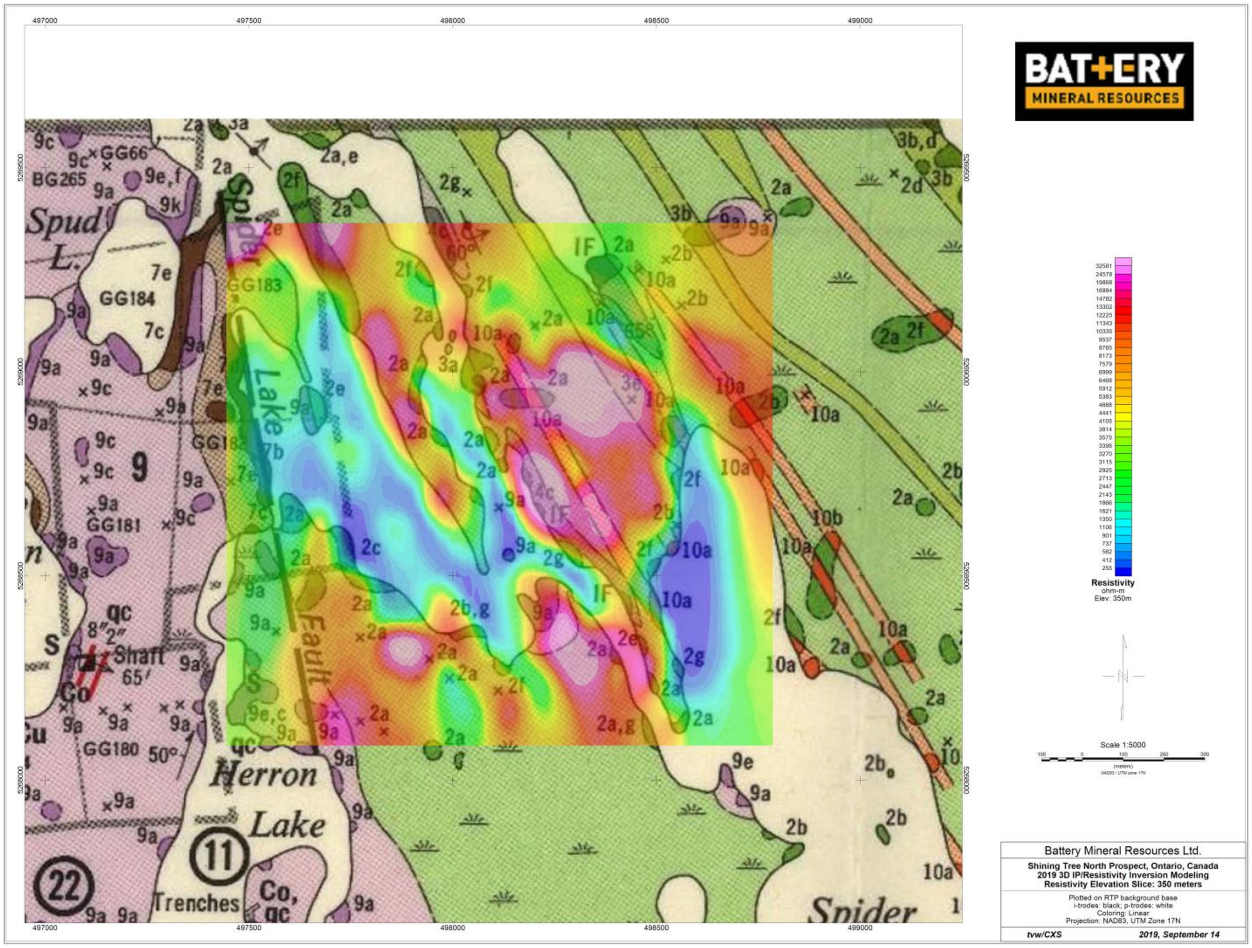


Figure 11 – The Shining Tree North 350 meter resistivity elevation slice from the 3-D voxel plotted on the government geology. The resistivity response at this depth (10 to 50 meters) is possibly mapping shallow outcrop. Mapped Nipissing outcrop are characterized by resistivity lows unlike Nipissing outcrop in the Shining Tree South and Central areas.

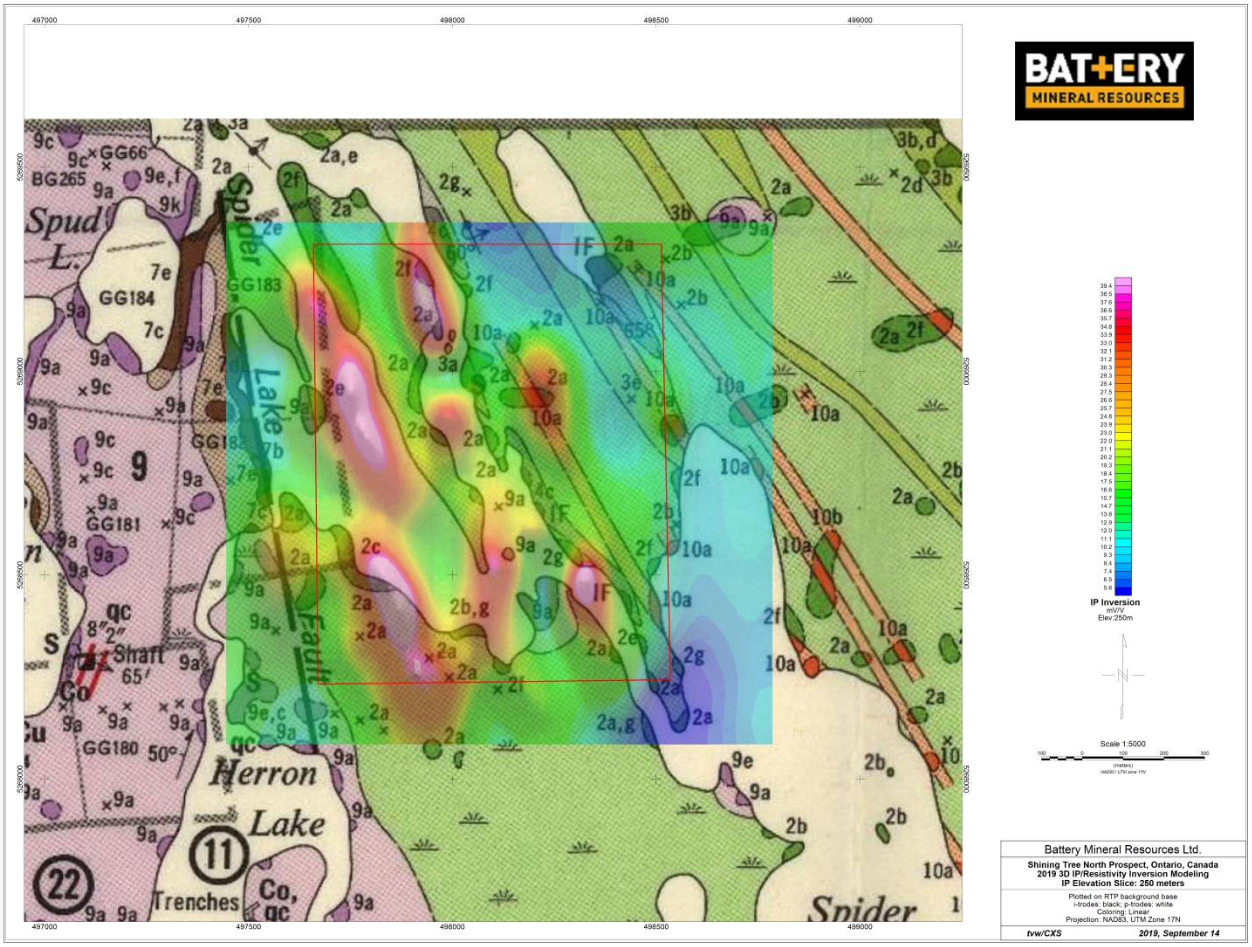


Figure 12 – The Shining Tree North 250 meter IP elevation slice from the 3-D voxel plotted on the government geology. The IP response at this depth (100 to 150 meters) shows well developed IP anomalies that appear to be offset by NE-SW striking faults. These anomalously high IP responses, in the 20 to 60 mV/V range, are exploration targets.

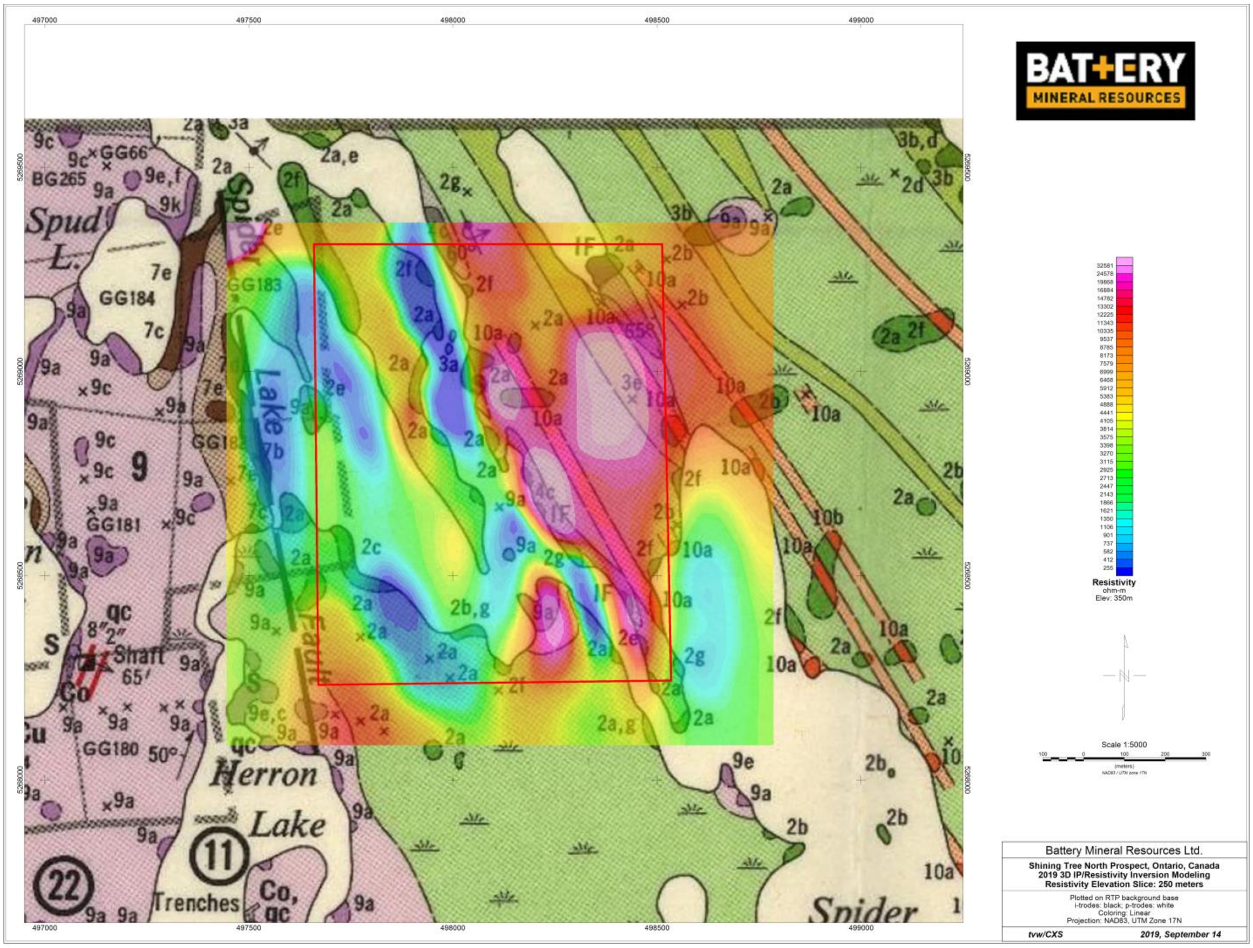


Figure 13 – The Shining Tree North 250 meter resistivity elevation slice plotted on geology. Note the correlation between resistivity lows and IP highs shown in Figure 12 above.

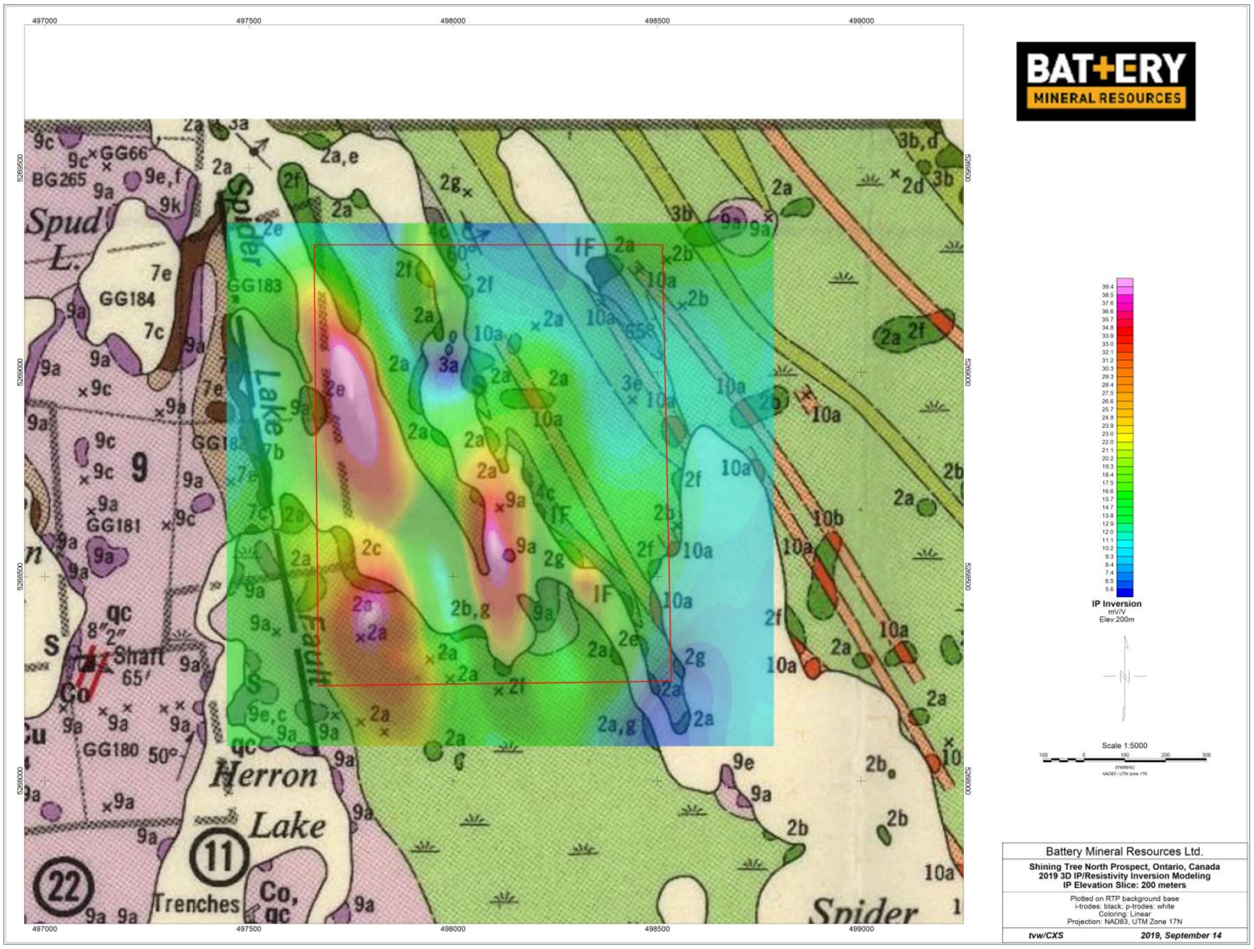


Figure 14 – The Shining Tree North 200 meter IP elevation slice from the 3-D voxel plotted on the government geology. The IP response at this depth (150 to 200 meters) map the deeper roots of the IP anomalies (targets) shown in Figure 12. The presence of these deeper roots help to prioritize the drill targeting of the shallower IP anomalies.

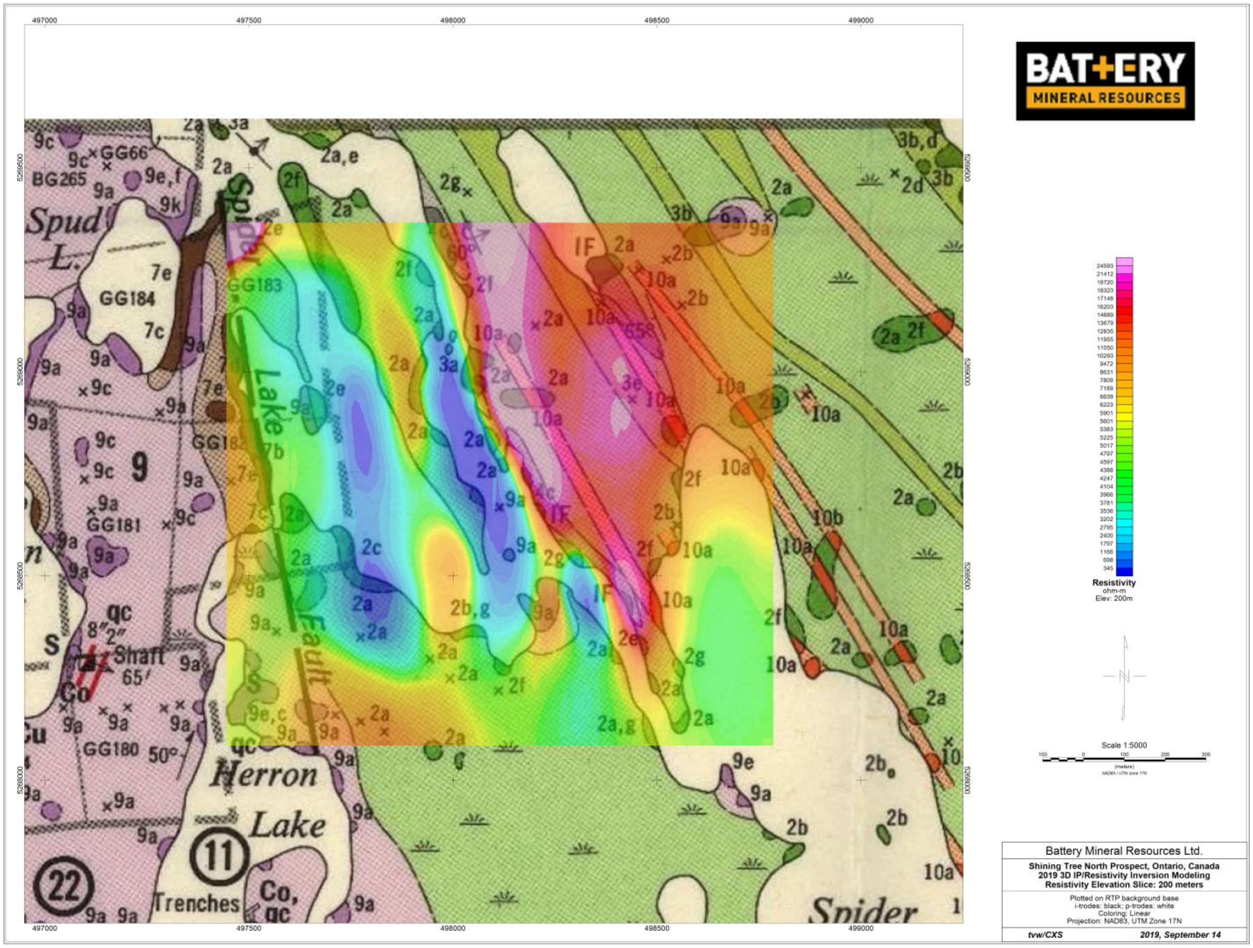


Figure 15 – The Shining Tree North 200 meter resistivity elevation slice plotted on geology. Note the direct correlation between resistivity lows and IP highs shown in Figure 14 above. At this elevation the correlation is exact. Where the resistivity low occurs there is an IP high of the same size and shape.

Interpretation

Figure 16 shows the anomalous IP response for the 250 meter elevation slice. Offsets in the IP anomalies fit well with the NE-SW structures interpreted from the Tilt Derivative of the RTP magnetic data set. The anticline axis mapped as the thick black line from the 3-D IP model probably extends to the north between the anomalous IP responses (black dotted line). It is terminated on the south by a NE-SW fault and offset several times by additional NE-SW faults to the north. The core of the anticline is interpreted to be resistive, low chargeability Archean meta-volcanics. The contact between Proterozoic and Archean rocks is complex in this area.

Figure 17 shows the deeper roots of the IP response at the 200 meter elevation slice. The deeper roots enhance the target priority.

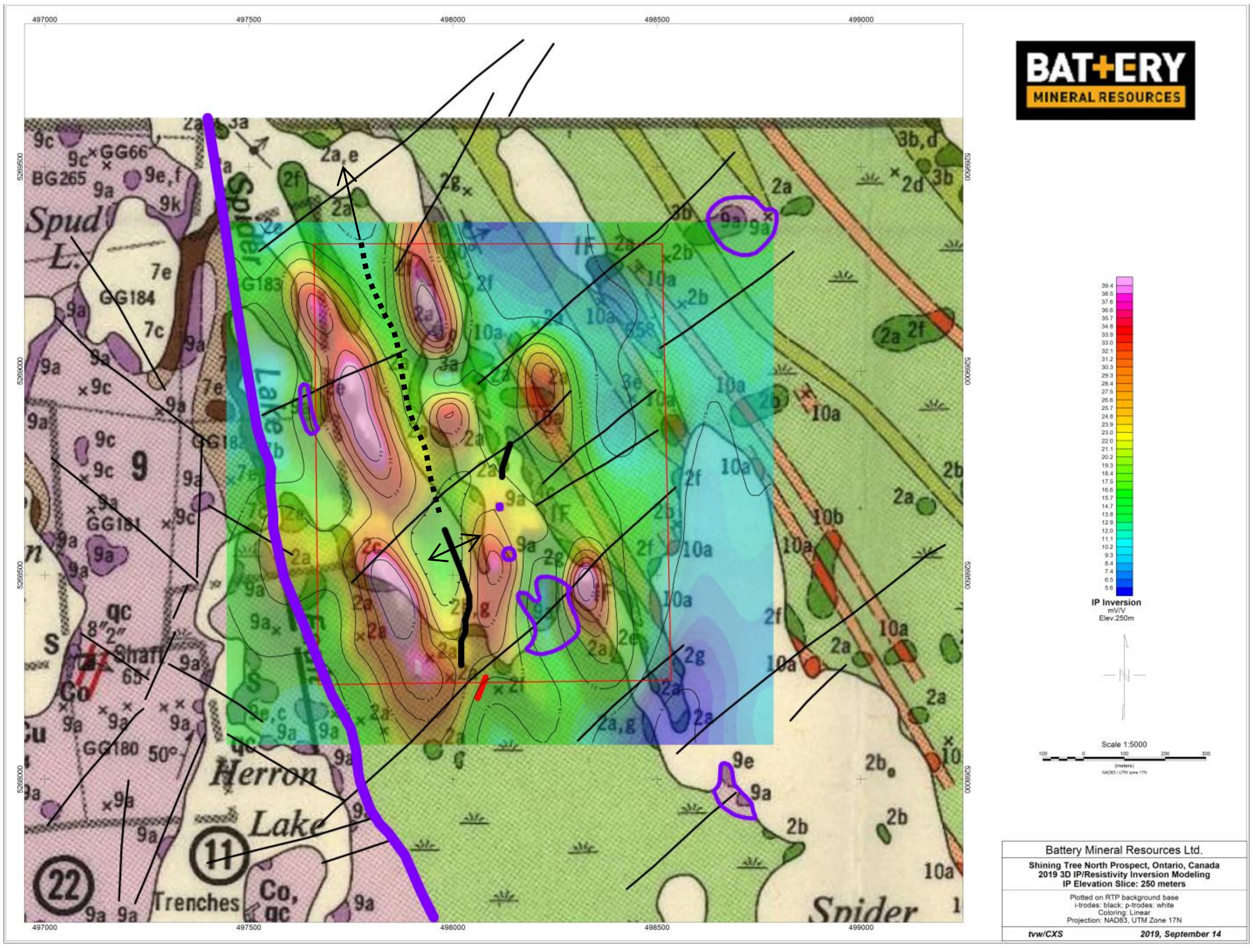


Figure 16 – The Shining Tree North IP interpretation map at the 250 meter elevation slice. The thin black lines (NE-SW) are faults interpreted from the magnetic Tilt Derivative data set. The thick black lines (N-S) are interpreted anticline axis. The dotted black line is a guess at where the axis may run to the north. The short red line indicates a fault termination of the anticline in the 3-D IP model. The purple lines and polygons are from the geologic map indicating the Proterozoic/Archean contact and numerous Nipissing outcrop throughout the area.

Figure 18 shows the resistivity at the 250 meter elevation slice. The 250 meter IP contours are plotted on top and are directly coincident with the resistivity lows.

Figure 19 shows the same relationship at the 200 meter elevation slice. The relationship between IP high and resistivity low is closer at depth.

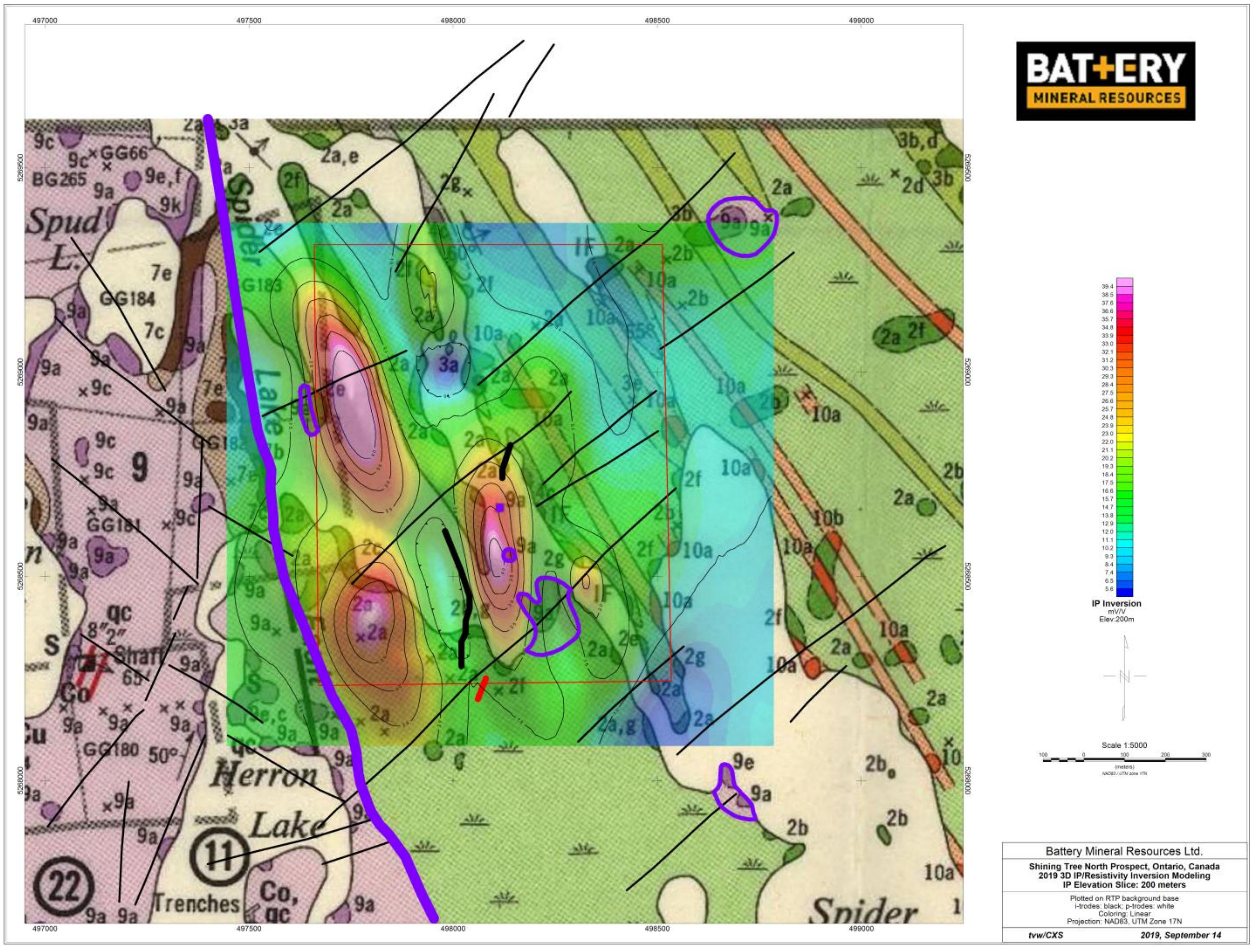


Figure 17 – The Shining Tree North IP interpretation map at the 200 meter elevation slice. This deeper elevation slice shows the roots of the IP anomalies. Other features are the same as described in Figure 16.

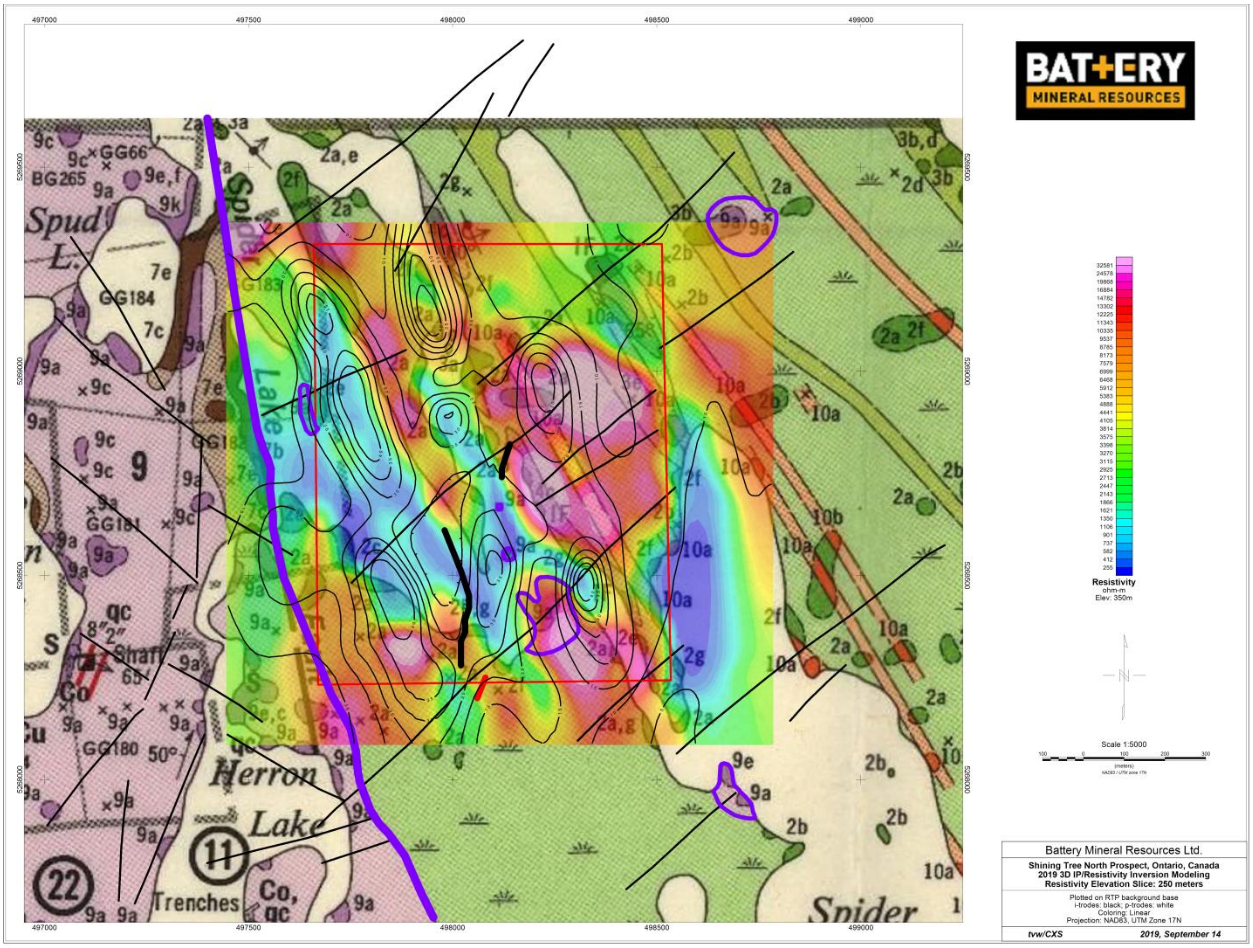


Figure 18 – The Shining Tree North 250 meter resistivity elevation slice with the 250 meter IP contours plotted on top. Note the close correlation between IP contour highs and resistivity lows.

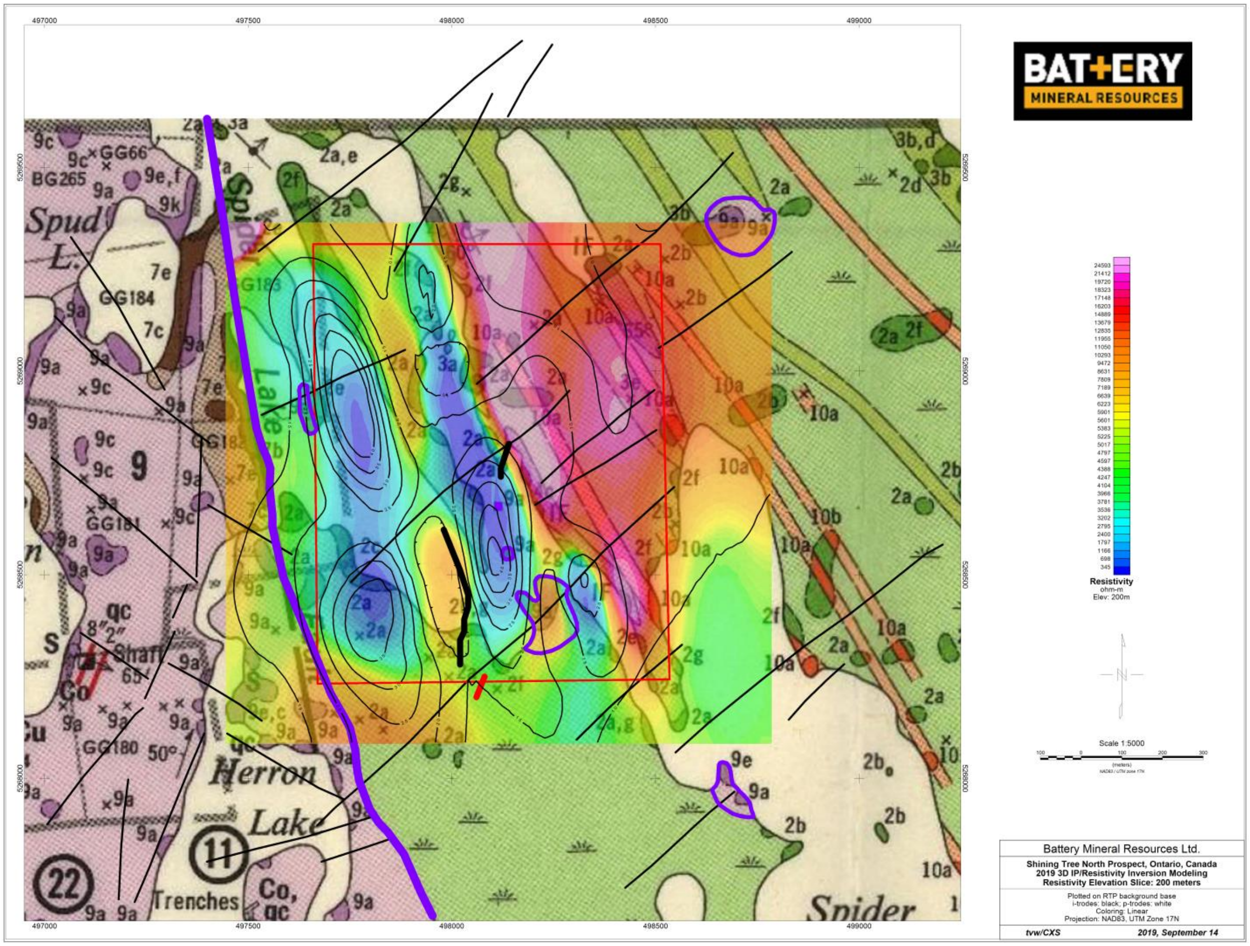


Figure 19 – The Shining Tree North 200 meter resistivity elevation slice with the 200 meter IP contours plotted on top. Note the close correlation between IP contour highs and resistivity lows. The relationship at this elevation is one to one.

Targets

The exploration targets at Shining Tree North consist of: 1) IP chargeability highs that are coincident with resistivity lows; 2) crosscutting NE-SW faults which offset the IP highs with either strike-slip or normal movement; and 3) an anticline axis around which the IP anomalies appear to be folded.

Eight IP targets have been identified from the 250 meter IP elevation slice from the 3-D voxel model. They are targets T1 through T8 and are shown in Figure 20 (listed in Table 1). They are prioritized by their amplitude and the presence of deep roots (Figure 21).

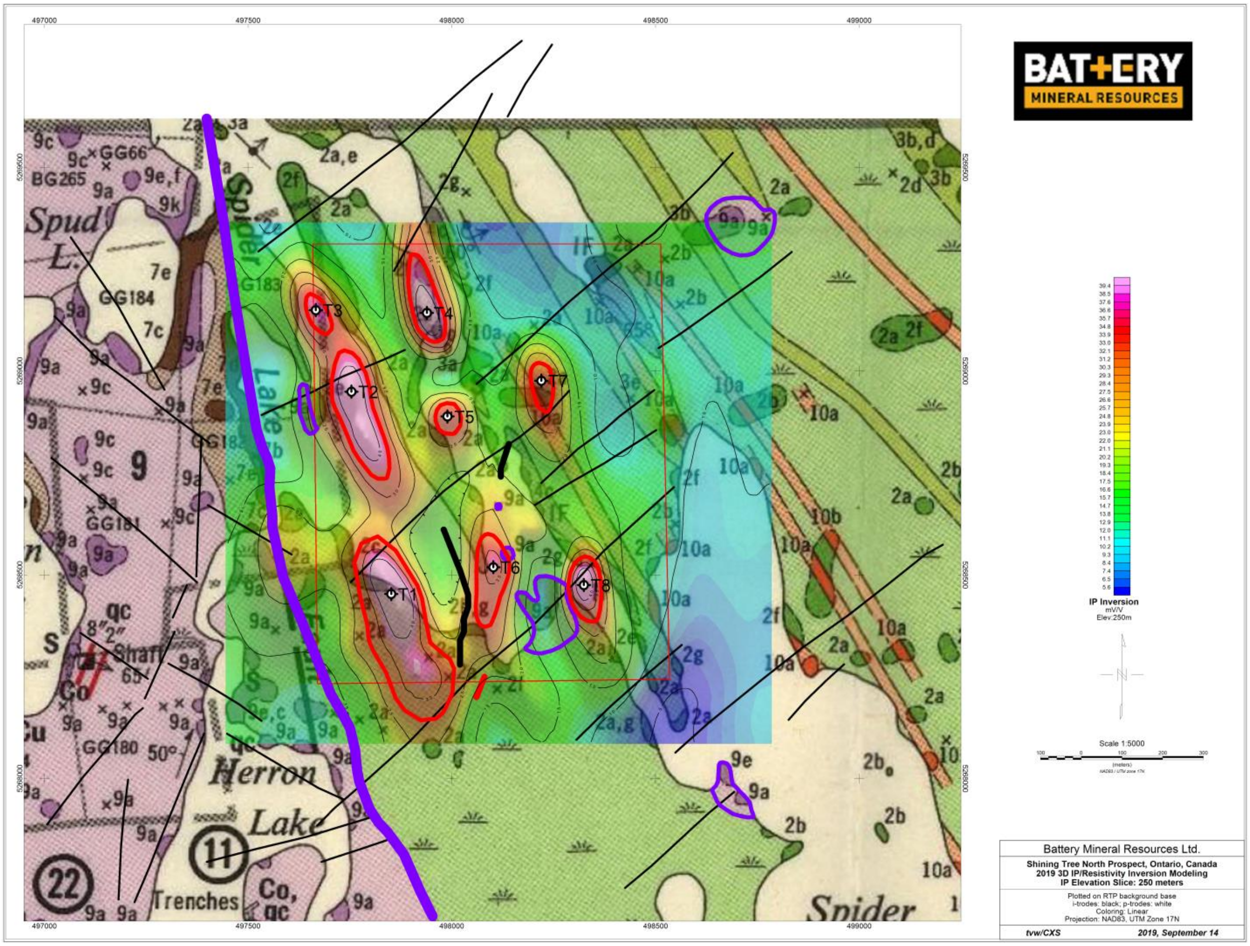


Figure 20 – The Shining Tree North IP targets plotted on the 250 meter IP elevation slice and labeled T-1 through T-8. The target locations are listed in Table 1. The coordinate corresponds to the peak of each target anomaly. Their priority (far right column) is based on IP amplitude and depth extent of their roots.

✔ LSTN_IP_ta	x	y	z	Target
0.0	497851.25	5268453.03	373.34	T1 Priority-1
1.0	497753.66	5268949.38	362.90	T2 Priority-2
2.0	497666.17	5269149.61	367.57	T3 Priority-6
3.0	497938.74	5269142.88	369.57	T4 Priority-4
4.0	497989.22	5268888.81	363.94	T5 Priority-6
5.0	498101.95	5268518.65	365.84	T6 Priority-3
6.0	498219.73	5268976.30	379.14	T7 Priority-6
7.0	498324.05	5268474.90	371.63	T8 Priority-5

Table 1 – A listing of the eight, Shining Tree North IP targets, with priority specified in the right hand column. The coordinates are in NAD83, UTM Zone 17N, meters. They specify a single point within the anomaly polygon.

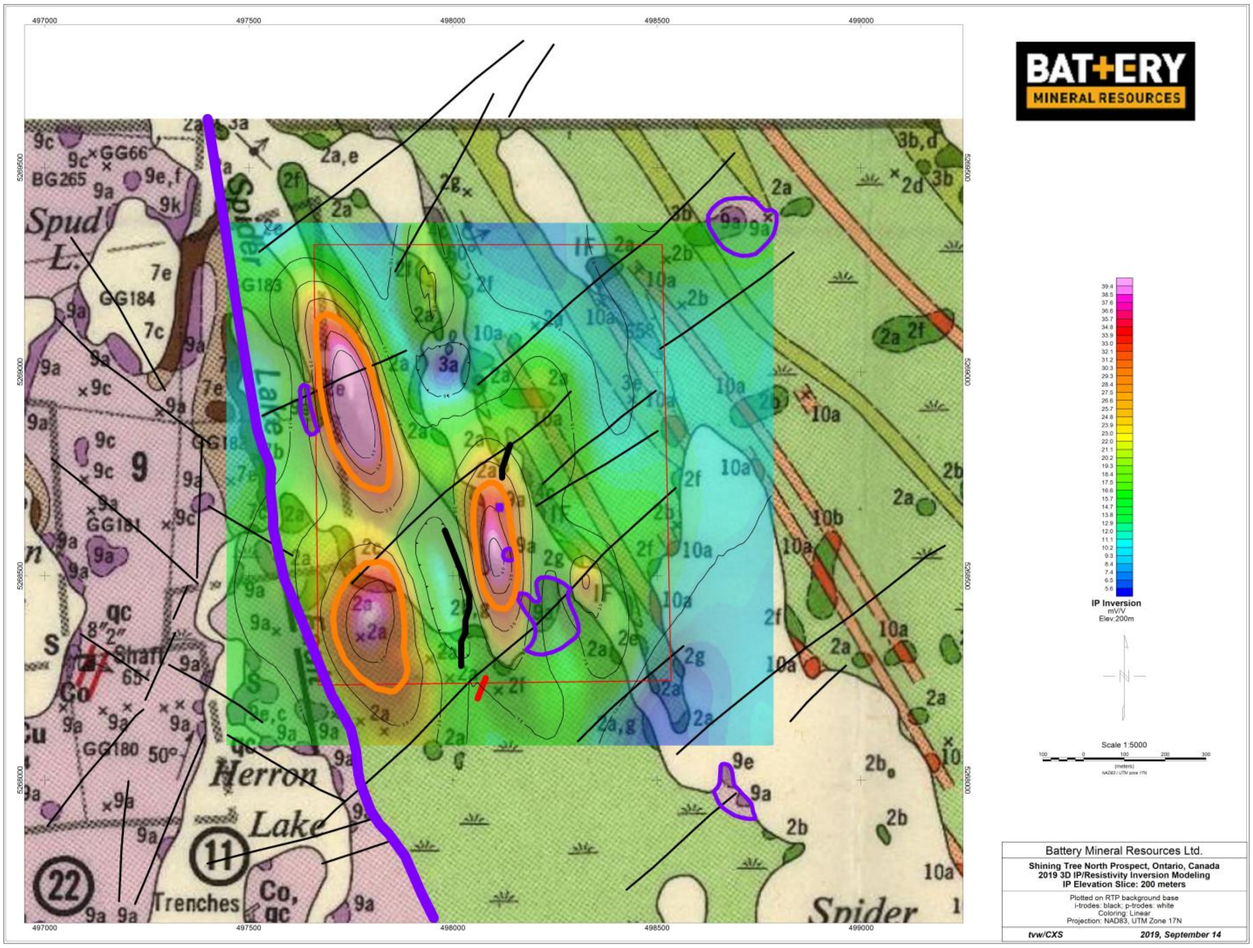


Figure 21 – The anomalous IP responses for the 200 meter IP elevation slice. These anomalies identify deeper roots and assist in prioritizing the IP targets shown in Figure 20 and listed in Table 1.

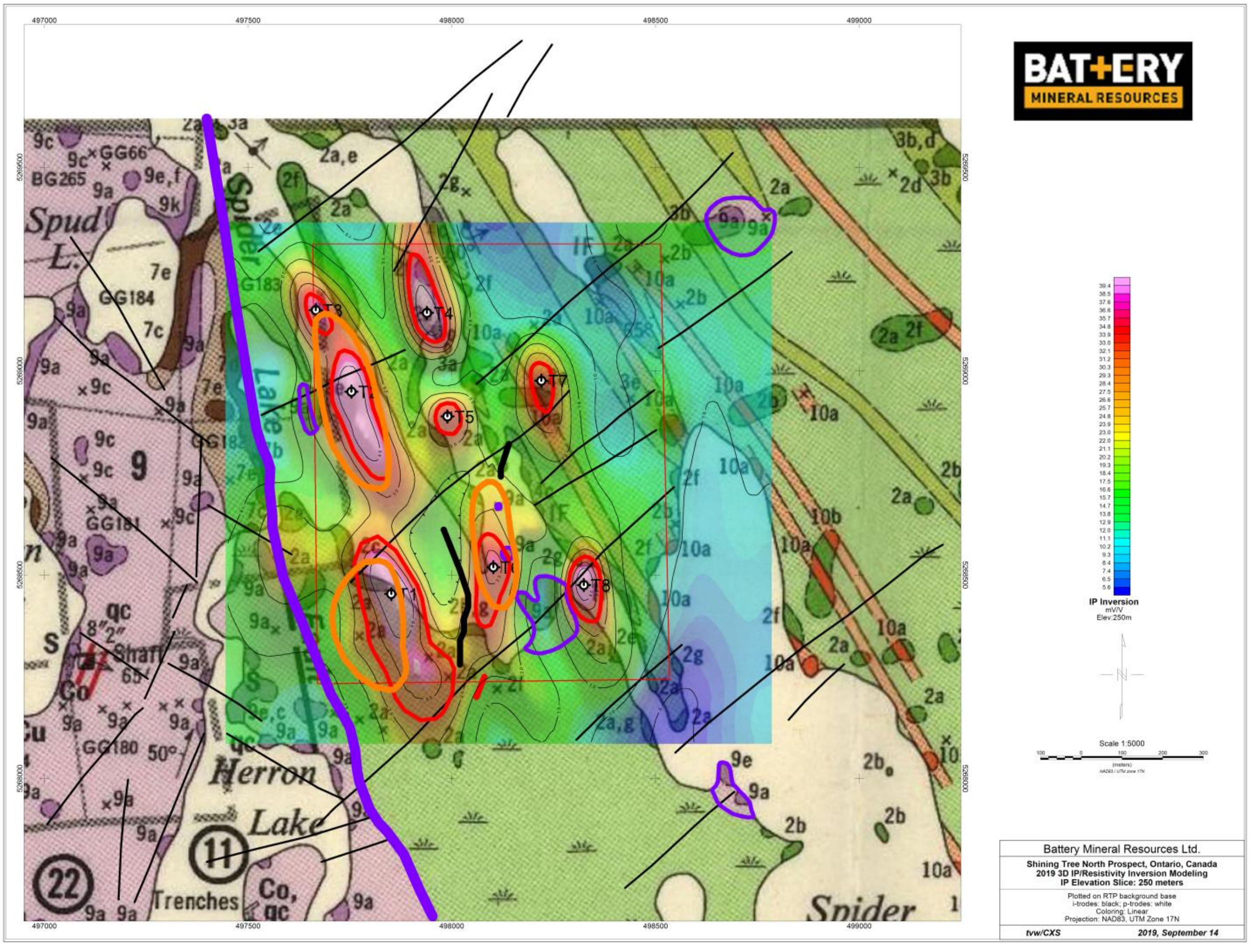


Figure 22 – The combination of Figures 20 and 21 explaining why T-1, T-2 and T-6 are the highest priority targets in this interpretation. They have the deepest roots.

Additional exploration targets are shown in Figure 23. They consist of three NE-SW faults (red dashed ellipses) and the N-S striking anticline axis (red solid ellipse) about which the anomalous IP responses are folded.

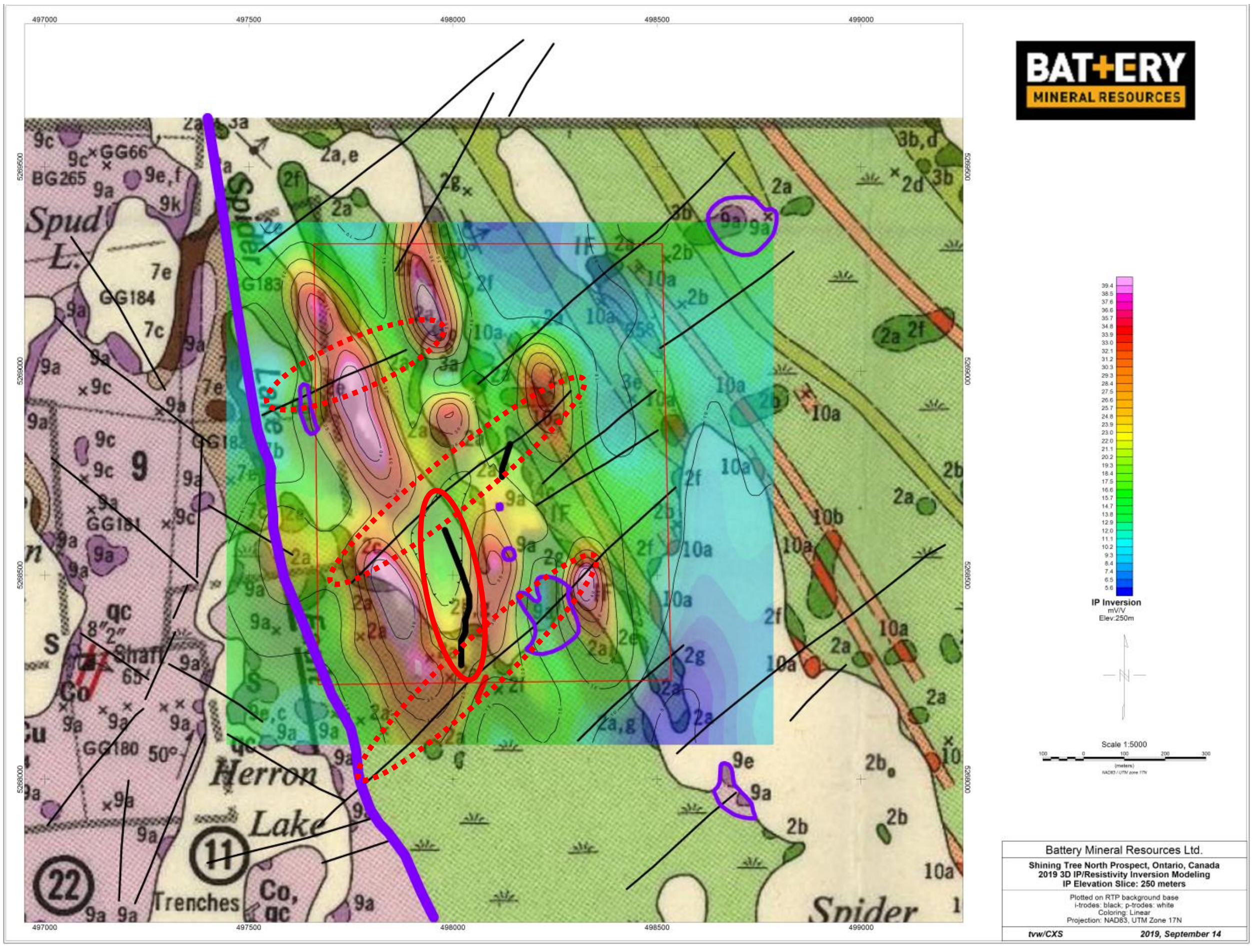


Figure 23 – The structural targets at the Shining Tree North prospect. They include three NE-SW striking faults which fracture and offset the IP anomalies (dashed red ellipses) and the N-S striking anticline axis (solid red ellipse) around which the IP responses are folded.

Target Priorities

High Priority: T1, T2, T6 and Anticline axis

Intermediate Priority: T4, T8 and cross cutting NE-SW fault intersections with IP anomalies

Low Priority: T3, T5 and T7 (weaker IP response and no evidence of deep roots)

Conclusions

The geophysical characteristics of the Shining Tree North area are distinctly different than those for the Shining Tree South and Central areas. Possibly the block is located within the Archean as the government geology map suggests. Or the block is at the transition zone between the Proterozoic Nipissing and the Archean greenstone belt.

Eight IP targets (T1 through T8) have been identified and prioritized based on their amplitude and depth extent. It is recommended that the three highest priority targets be drilled.

A N-S striking anticline fold axis is identified which should be drilled with at least one hole.

Three cross cutting, NE-SW, faults are identified which should be considered targets. They may have acted as pathways for mineralizing fluids during the Proterozoic.

If the Shining Tree North block is of exploration interest the 3-D IP/resistivity grid should be extended to the north and west if the land position allows.

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Geophysical Report

Subject: Geophysical Interpretation for Shining Tree Central Project

Date: 2nd October, 2019

Client: Battery Mineral Resources Ltd.

Summary

The Shining Tree Central area is mapped as both Proterozoic Nipissing diabase intrusive rocks, the target lithology for mineralization in the cobalt district of Canada, and as Archean meta-volcanic and sedimentary rocks which are the basement rocks below the Nipissing. The proposed targets consist of magnetic, high resistivity Nipissing diabase intersected by structures and having anomalous IP (sulfides) response. The interpretation is similar to that of the Shining Tree South area described in a previous report.

Most of the area is covered by forest, swamps and lakes so geophysics is fundamental in exploring this area as it was in Shining Tree South. Once again geochemistry will be useful in identifying areas with increased cobalt. Drilling will be the ultimate test.

The interpretation of the Shining Tree Central 3-D IP/resistivity data set is carried out in conjunction with the Shining Tree helicopter magnetic and government geologic mapping.

Targets are selected where Nipissing dikes and sills (as interpreted from magnetic and resistivity data) are enhanced with coincident IP response.

In the western half of the Shining Tree Central area, mapped as Proterozoic Nipissing intrusives, the close agreement between the magnetic data set and the shallow 3-D resistivity model provides confidence in the 3-D IP/resistivity data set (similar to Shining Tree South). In the

eastern half of the block, in the area mapped as Archean, this magnetic high, resistivity high, IP and outcrop geology relationship breaks down, so care must be taken in targeting these combination features. In fact the strongest IP anomaly in the Shining Tree Central area occurs in the area mapped as Archean at a depth below surface of approximately 100+ meters. It is proposed as a drill target in this interpretation.

The helicopter magnetic data has better lateral resolution then the 3-D resistivity or IP data sets. Therefor drill targeting should consider the magnetic data set as well as the resistivity and IP models.

The deeper IP and resistivity elevation slices from the 3-D models have a lower degree of location confidence then the shallow slices but in the Shining Tree Central area this information seems more significant that in the South block so is considered in targeting.

If these deeper features, which are interpreted to be the roots of the mafic diabase intrusions in the western (Proterozoic) half of the block or unexplained features in the (Archean) eastern half of the block, are to be drilled it is recommended that a minimum of three (3) pole-dipole lines be run across the anomaly to better define its location prior to drilling.

Fifteen shallow IP targets are identified of which five are highest priority. A number of structural zones are interpreted and can be considered target enhancers as well. A single deep IP anomaly, located within the Archean is also considered a drill target.

Location

Figure 1 shows the location of the Shining Tree Central block within the greater Shining Tree helicopter magnetic survey area. This is the area of primary interest in this report. Also shown are the Shining Tree North and Shining Tree South blocks to be discussed in separate reports. In Figure 1 the 350 meter resistivity elevation slice is plotted on government geology overlaying the magnetic survey block. The high resistivity zones in this block are interpreted to have both Proterozoic Nipissing diabase and Archean metavolcanic, dike and iron formation sources. The low resistivity zones are interpreted to be due to Proterozoic or Archean sediments adjacent to the diabase dikes and sills. Note that body edge effects or alteration can also result in magnetic lows. The interpretation of the North and Central blocks are a bit more complex and include high resistivity zones within the Archean as well as in the Proterozoic. For example in the Central block an Archean Iron Formation appears to be mapped as a resistivity high. Therefor not all resistivity highs in the Central block are the Nipissing diabase target units.

Figure 2 is an enlargement of the Shining Tree geology map. Both the magnetic data (Figure 3) and resistivity data (Figure 1) indicate the geology (mixed Proterozoic and Archean) is more complex than is shown for the Shining Tree South area (totally Proterozoic).

Figure 3 shows the 2016 Shining Tree RTP magnetic intensity map with the South, Central and North blocks plotted on it. The red dashed line is a preliminary interpretation of the contact between Proterozoic rocks to the west and Archean rocks to the east based on the magnetic data set. The green solid line is the government geology based contact between the Proterozoic and Archean. The geologic mapping gives a better idea of where the contact actually is. Minor amounts of Nipissing diabase occur in the eastern Archean area. Strong magnetic highs in that area are either associated with Nipissing diabase or an Archean Iron Formation unit (which may also be a cobalt target due to its brittle nature when cut by faults or folded).

Figure 4 shows the 3-D IP/resistivity blocks plotted on the Tilt Derivative filter of the RTP data set. All magnetic amplitude information is lost in the Tilt data but detailed location is emphasized. The highs are interpreted to be Nipissing diabase dikes and sills.

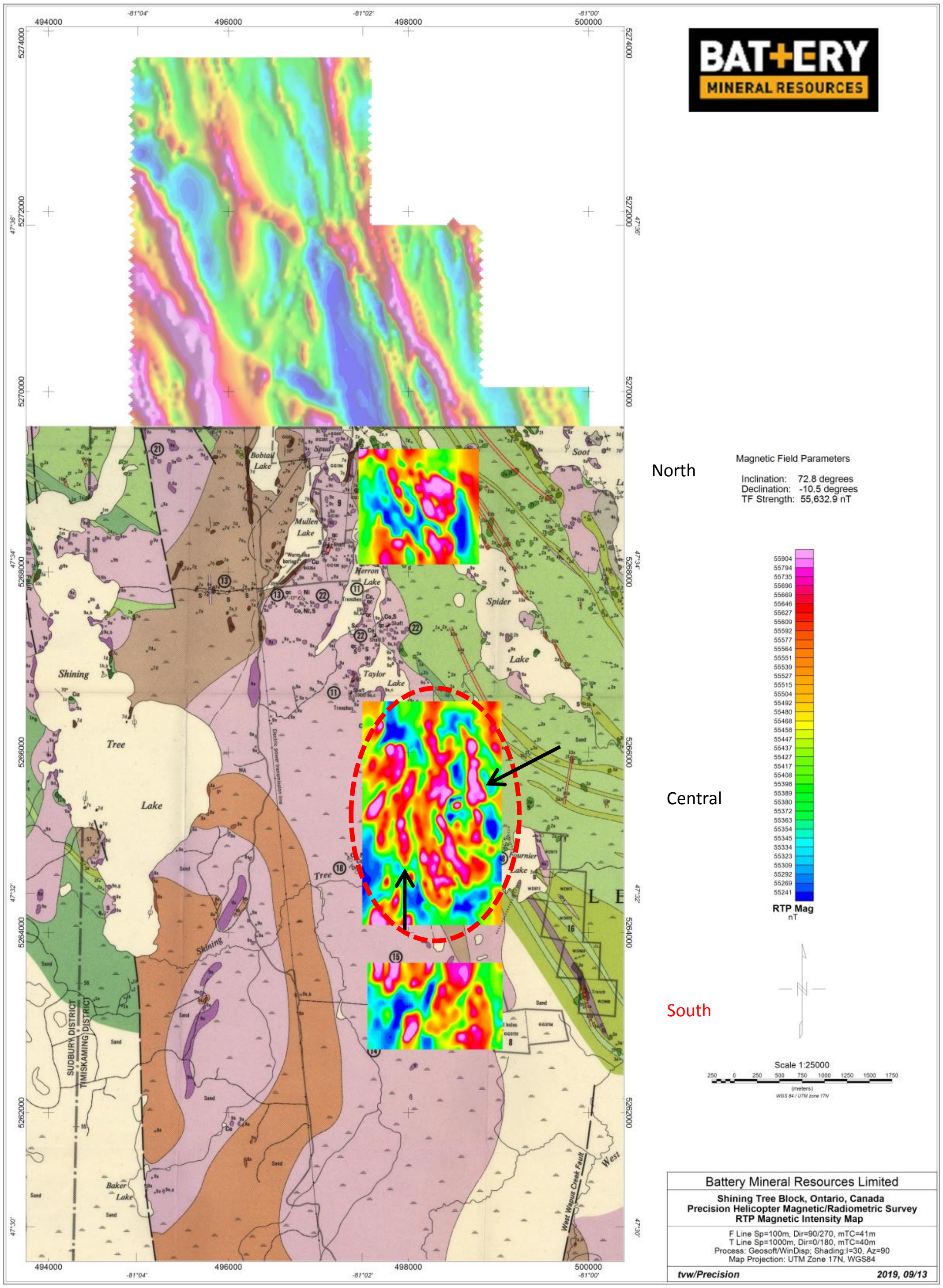


Figure 1 – The combination government geology and helicopter magnetic map is used as the base for showing the location of the Shining Tree North, Central and South 3-D IP/resistivity surveys. The Shining Tree Central block is indicated by the red ellipse and occurs in an area mapped as a combination Proterozoic Nipissing diabase and Gowgonda sediments (western 2/3 of the block and Archean meta-volcanics and sediments in the eastern 1/3 of the block. It appears that from south to north the surface geology changes from predominantly Proterozoic Nipissing rocks to predominantly Archean metavolcanic rocks. The resistivity highs shown in the Shining Tree Central area in red/pink are interpreted to be either Nipissing diabase dikes and sills or resistive features within the Archean consisting of volcanics, dikes or iron formation.

Geology

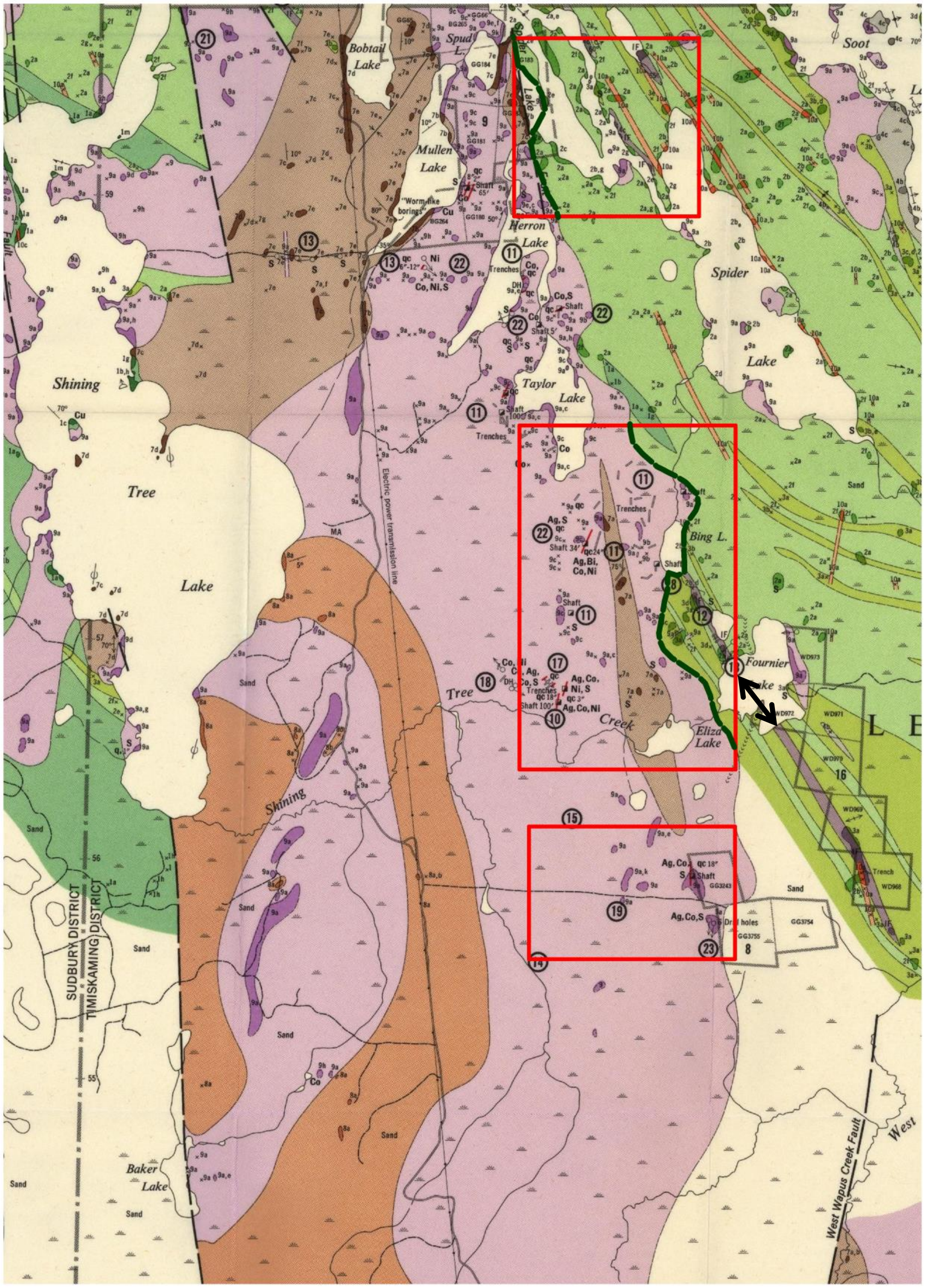
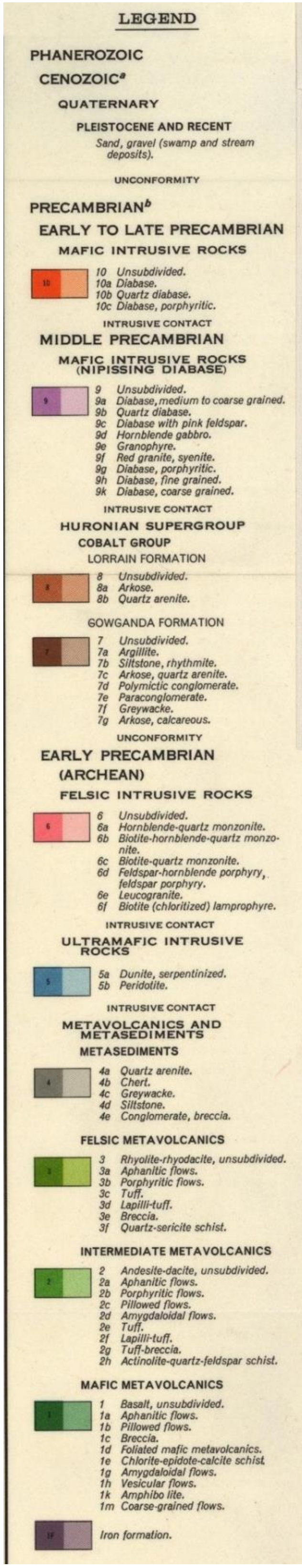


Figure 2 – The IP/resistivity survey polygons (red) plotted on the Shining Tree government geology. The Shining Tree Central area is mapped as a combination of Proterozoic and Archean (green line is contact). The black double arrow shows iron formation entering the block from the SE.

Stratigraphic Section for the Shining Tree Area



Nipissing Diabase host rocks for cobalt mineralization (Proterozoic)

Magnetic and Resistive

Gowgonda Proterozoic sediments

Less magnetic and less resistive

Archean felsic, intermediate and mafic meta-volcanic rocks and sedimentary Iron Formation

Magnetics

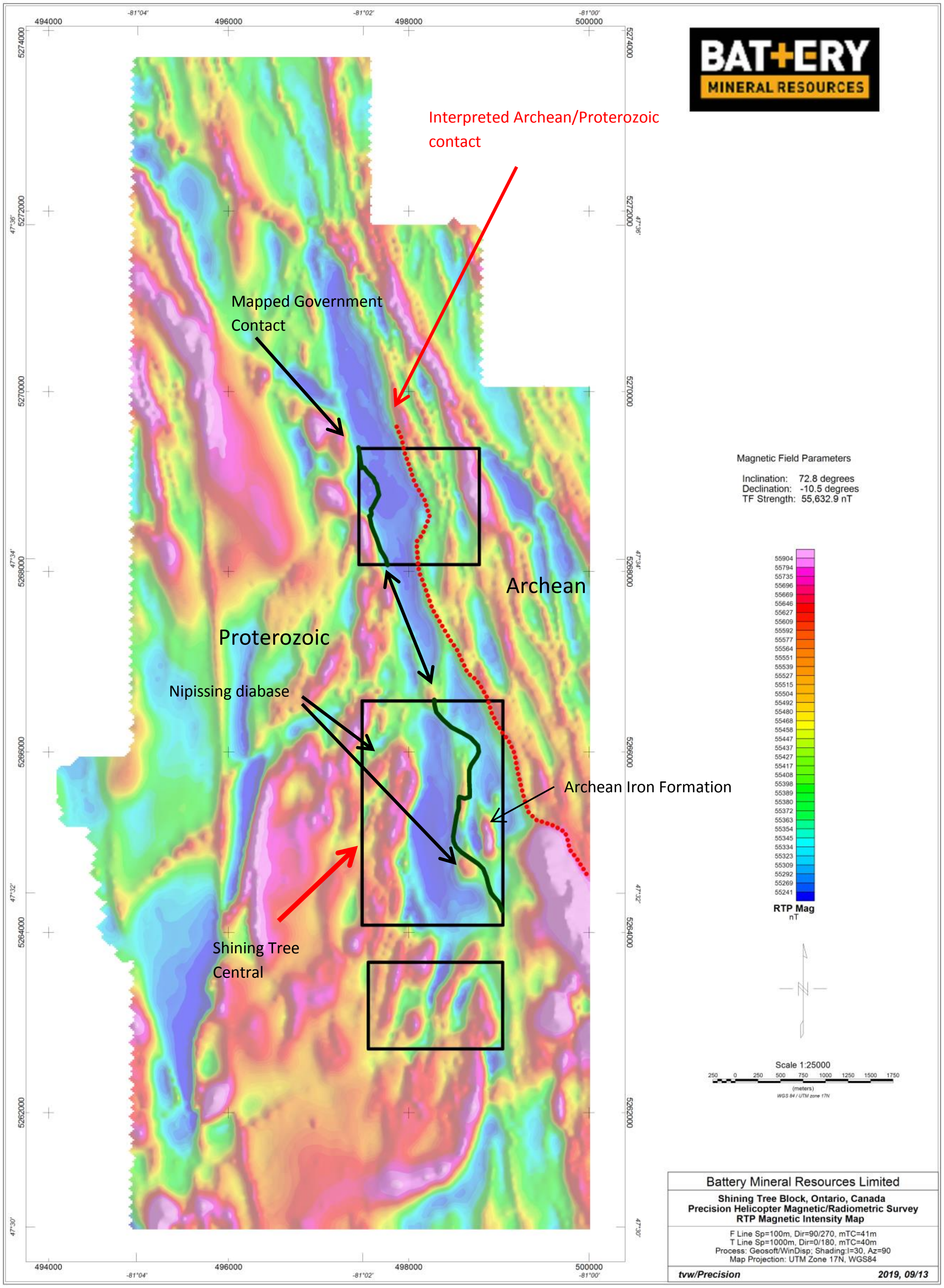


Figure 3 – The 2016 Precision helicopter magnetic RTP map with 2019 IP/resistivity survey polygons plotted on top. The red arrow points towards the Shining Tree Central 3-D IP/resistivity survey block. Magnetic highs are Nipissing diabase (west) or Archean iron formation (east) units.

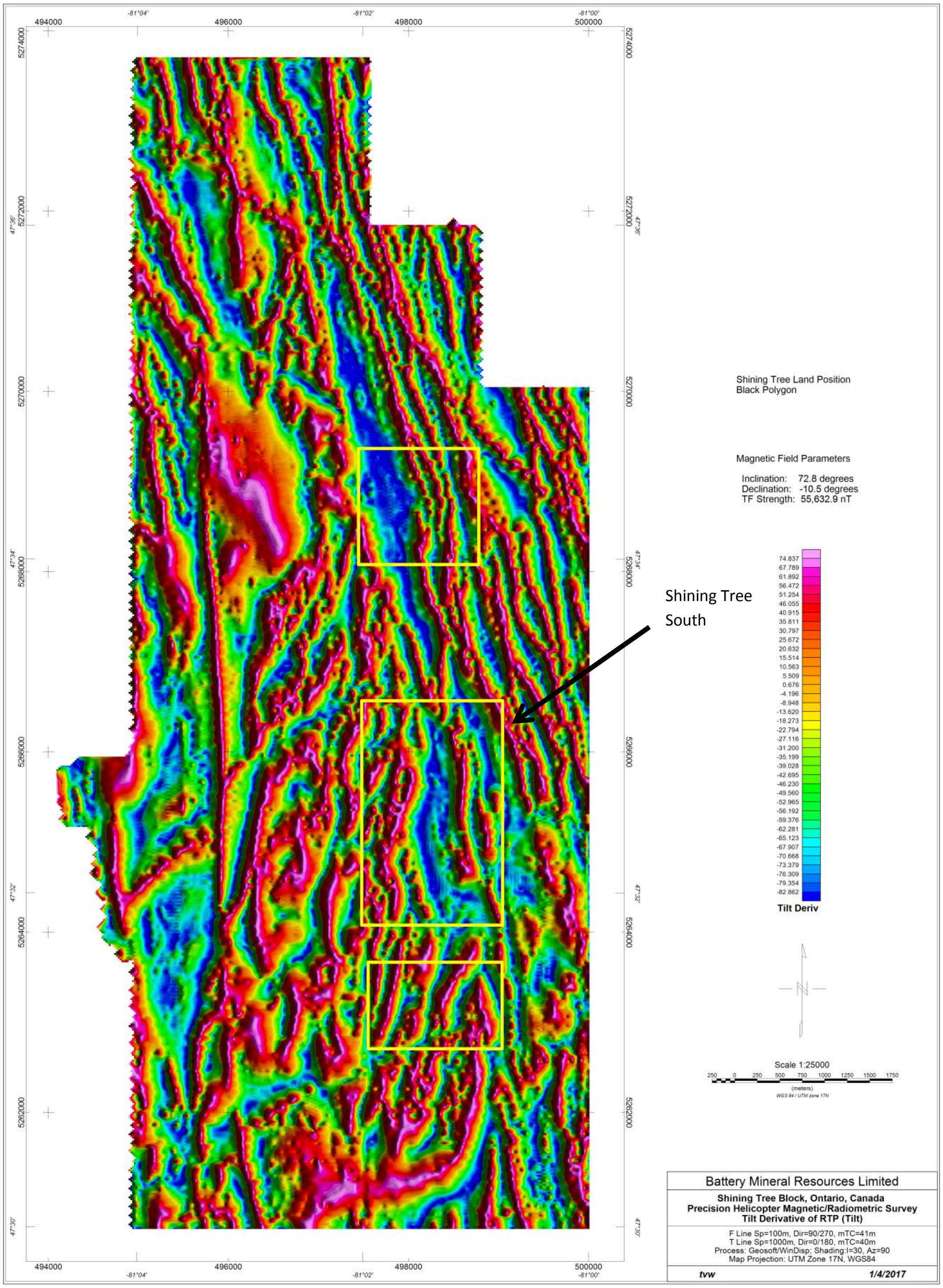


Figure 4 - The 2016 Precision helicopter magnetic Tilt Derivative map with 2019 IP/resistivity survey polygons plotted on top. The tilt derivative tightens up the location of the Nipissing units. Most of the Tilt Derivative highs in the Shining Tree Central area are interpreted as Nipissing dikes and sills. However in the Archean rocks they may be associated with iron formation.

IP and Resistivity

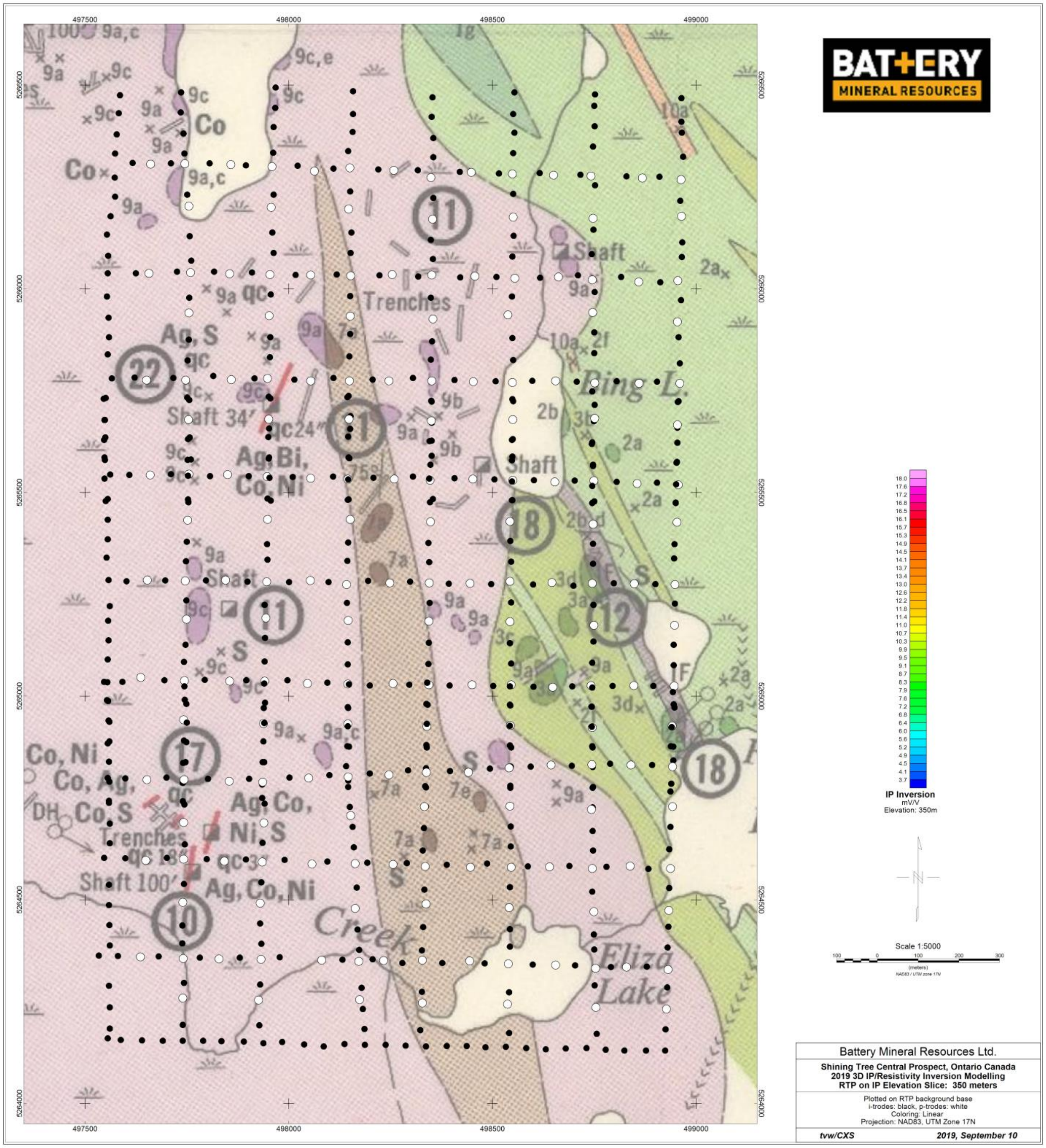


Figure 5 – The Shining Tree Central 3-D IP/resistivity grid plotted on geology. It is actually made up of three separate survey grids. Note the western 2/3 of the area is mapped as Nipissing diabase and Gowgonda sediments based on minimal outcrop in the area. The eastern 1/3 of the area is mapped as Archean age metavolcanic rocks. The black dots are current injection points on the grid. The white dots are potential electrode positions. Electrode coverage of the grid is uniform so IP and resistivity anomalies within the entire grid area can be considered useful information.

Figure 5 shows the Shining Tree Central 3-D IP/resistivity array plotted on geology. Things to note in this image:

> The geology is mapped as Nipissing intrusive (purple) and sedimentary (brown) rocks to the west and Archean rocks green and gray) to the east.
>
> Known mineralization occurs within the Nipissing lithology.
>
> Black dots are current injection points and white dots receiver array points. They are uniformly distributed within the Shining Tree Central block which allows for a consistent 3-D model throughout the area.

Figure 6 shows the entire 3-D IP voxel for the Shining Tree Central block viewed down and to the NW. IP highs are red and lows are blue. The strongest IP anomaly occurs in the Archean at depth and is not visible in this image.

Figure 7 shows the entire 3-D resistivity voxel for the Shining Tree Central block viewed down and to the NW. Resistivity highs are red and lows are blue. The majority of the surface resistivity highs are Nipissing diabase. The black arrow indicates an Archean resistivity high which may be due to iron formation.

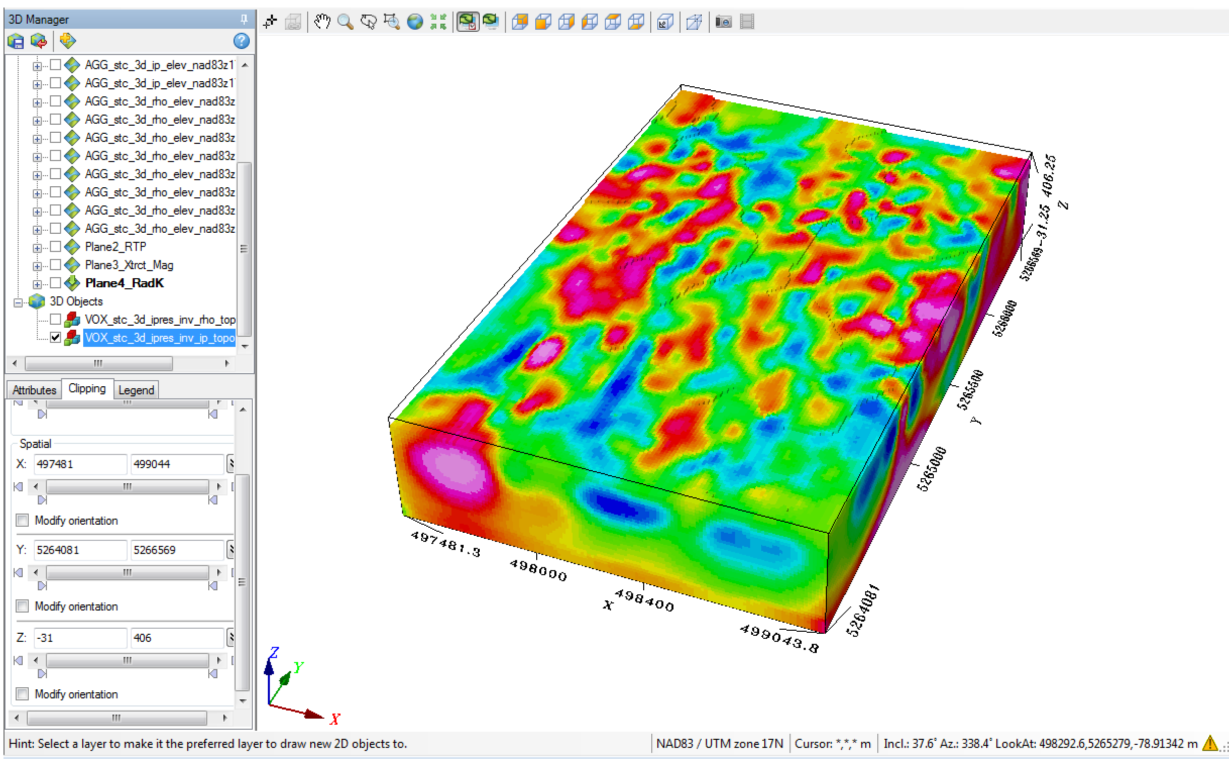


Figure 6 – The Shining Tree Central 3-D IP voxel looking down and to the NW. IP highs are red and lows blue.

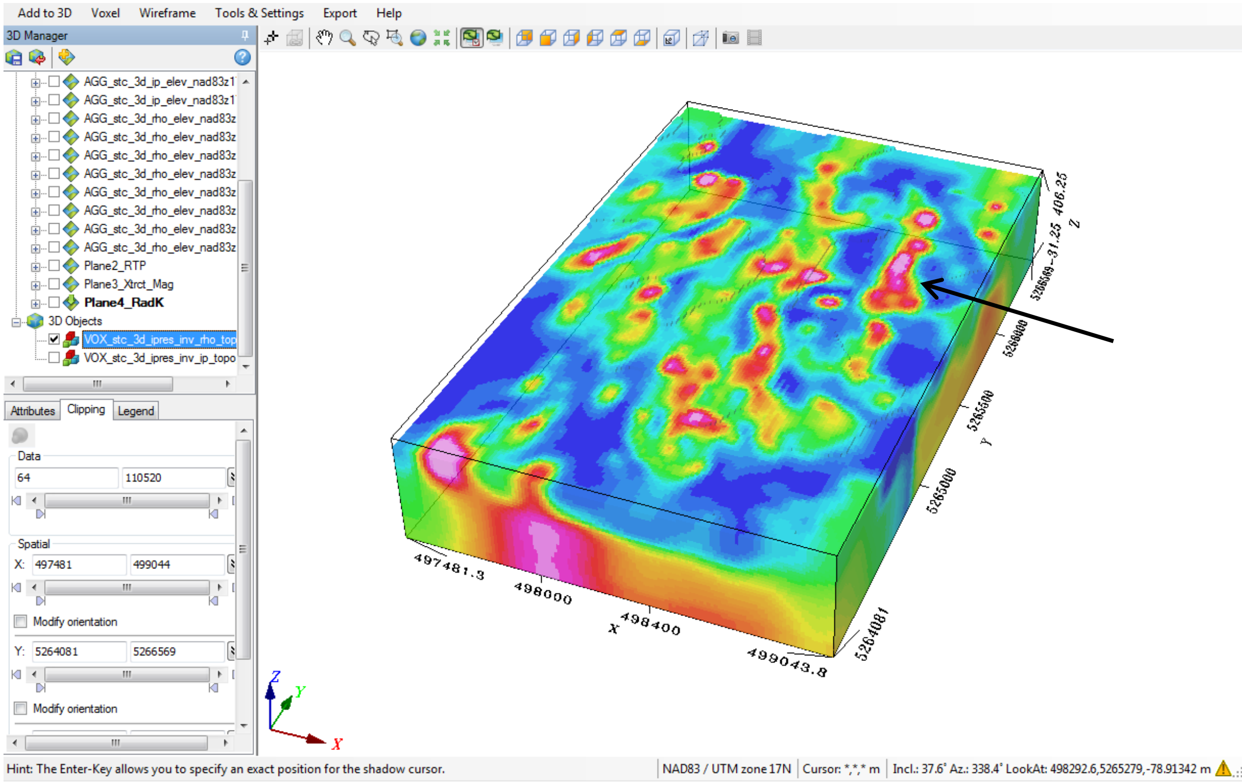


Figure 7 – The Shining Tree Central 3-D Resistivity voxel looking down and to the NW. High resistivity is red and low blue. The black arrow points towards a resistivity high near the Proterozoic/Archean contact. Part of the high is from a source within the Archean (iron formation) while another part appears to be due to Nipissing diabase.

Figure 8 is a combination voxel showing high IP chargeability (solid reds) plotted on high resistivity (faded green, yellow, pink). Note the N-S striking IP anomaly located to the east of the contact between Proterozoic and Archean rocks has a response characterized as Archean in this interpretation. That is, the high IP response is not coincident with high resistivity, so it is not related to Nipissing diabase but with a geologic feature within the Archean, possibly semi-massive to massive sulfide mineralization (or carbonaceous sediments).

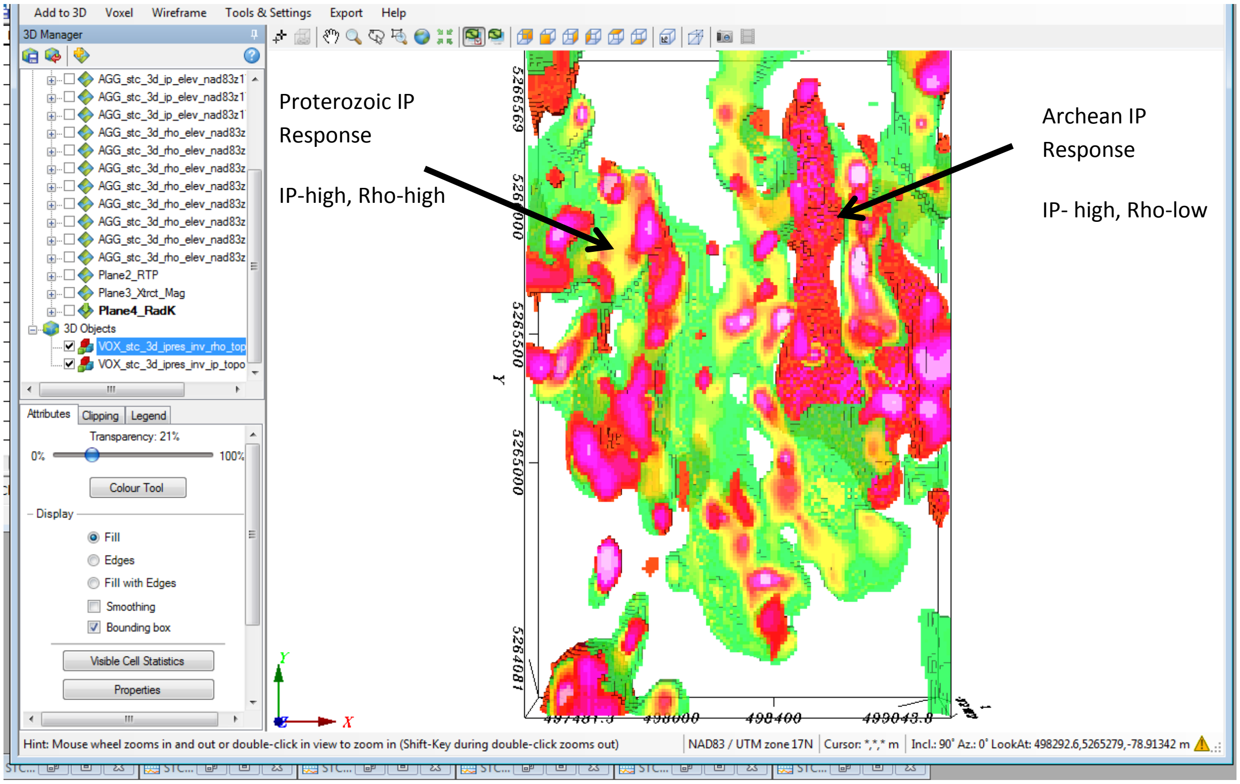


Figure 8 – The Shining Tree Central voxel clipped for shallow high IP response and clipped for shallow resistivity response (High rho>7000 ohm-m; High IP response > 10 (10 to 46 mv/v). View is vertically down.

At the expense of overkill the relationship between magnetic data (RTP and Tilt Derivative of RTP), resistivity, chargeability and prospective lithology and mineral occurrences are shown in Figures 9 through 18.

These relationships are the basis of this interpretation and used when selecting targets for drill testing:

1. magnetic highs with Nipissing diabase intrusives;
2. magnetic lows with Gowgonda sediments;
3. resistivity highs with Nipissing diabase intrusives;
4. chargeability highs coincident with interpreted Nipissing intrusives;
5. and the intersection of these features with interpreted structure;

In the Shining Tree Central area geologic noise sources include Archean age magnetic, resistive and polarizable features which are likely not cobalt targets. They include volcanic rocks, intrusives and iron formation as well as possible sulfide mineralization (semi-massive to massive).

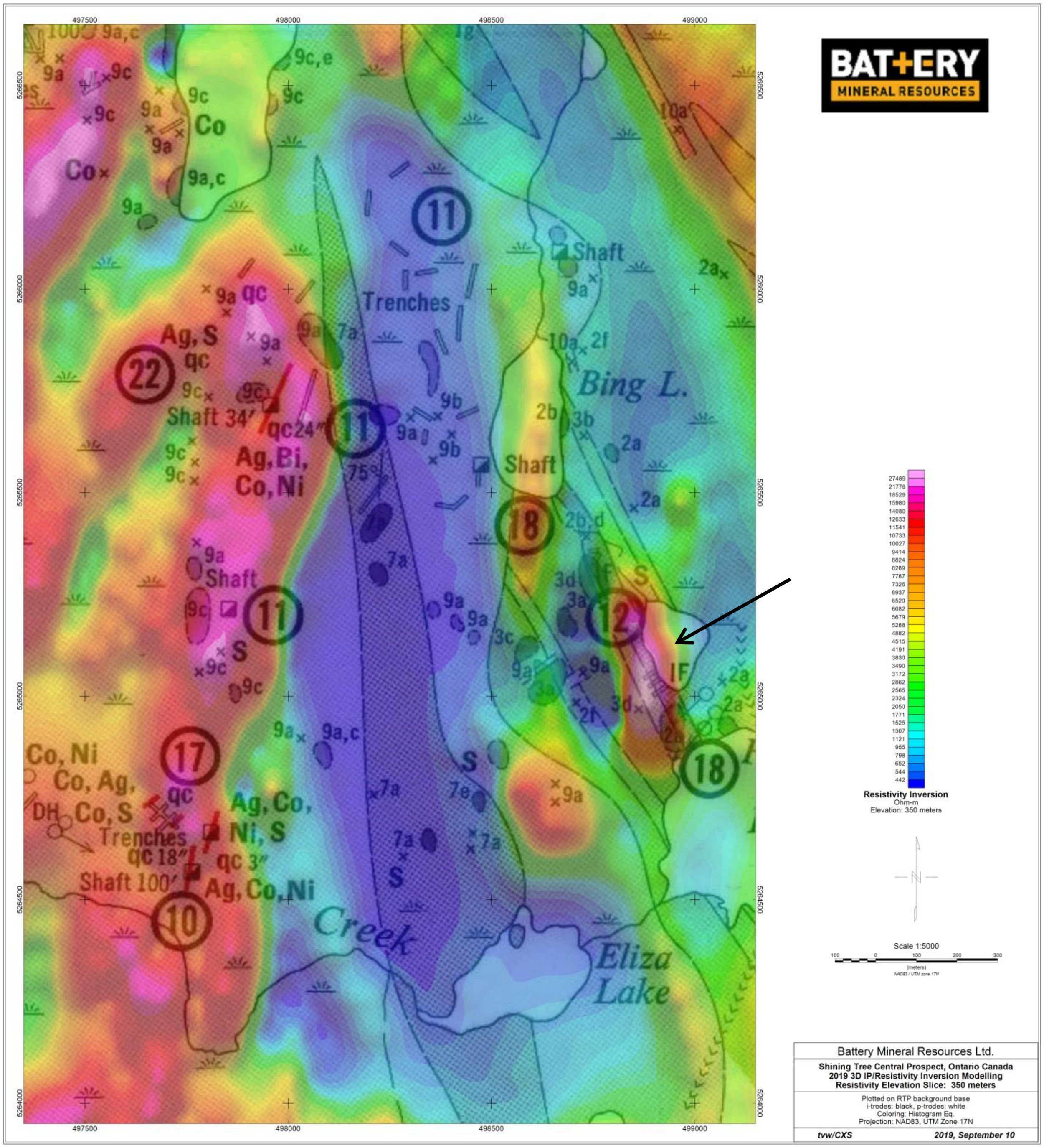


Figure 9 – The Shining Tree Central RTP magnetic image faded and plotted on top of the government geology map. Note the magnetic high to the west (red/pink) maps Nipissing diabase and is coincident with known Ag/Co mineralization. The magnetic low, located immediately to the east of the high (blue), maps Gowgonda sediments. The magnetic highs along the Proterozoic/Archean contact are interpreted to be Nipissing diabase. The strong magnetic high in the Archean near point of interest 12 is interpreted to be due to iron formation (black arrow).

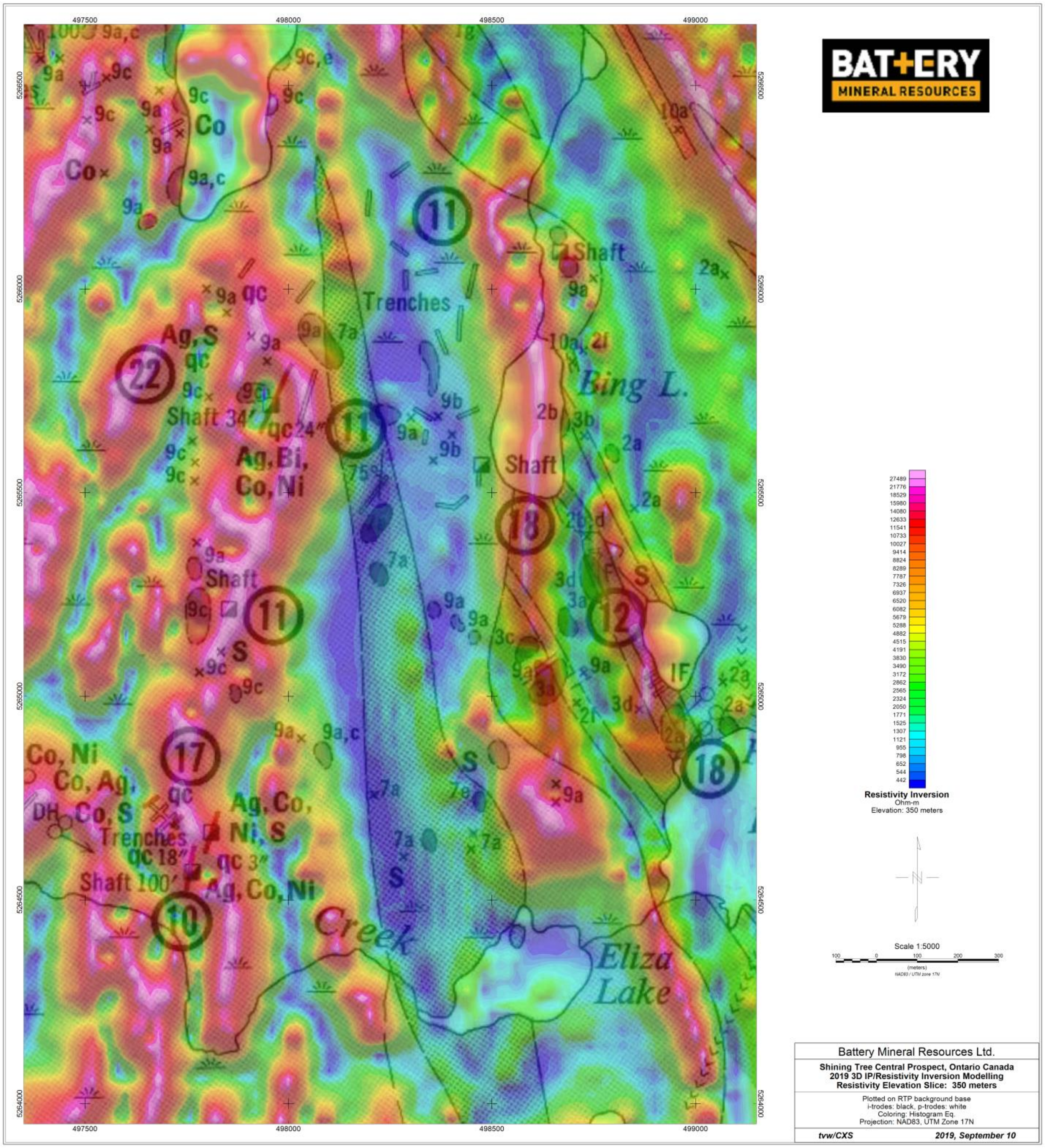


Figure 10 – The Shining Tree Central Tilt Derivative of the RTP magnetic image faded and plotted on top of the government geology map. The Tilt Derivative tightens up the locations of anomalies but suppresses the amplitude information making all anomalies look the same amplitude. This image shows an extremely good correlation between Nipissing diabase, Ag/Co mineralization and magnetic highs. All magnetic highs west of the line from the Eliza Lake to the Bing Lake and Bing Lake shaft are interpreted here as Nipissing diabase sourced. A drill hole into any one of these magnetic anomalies should hit the target unit. IP response is an indication of alteration and possible mineralization. Cross cutting structures should enhance these targets.

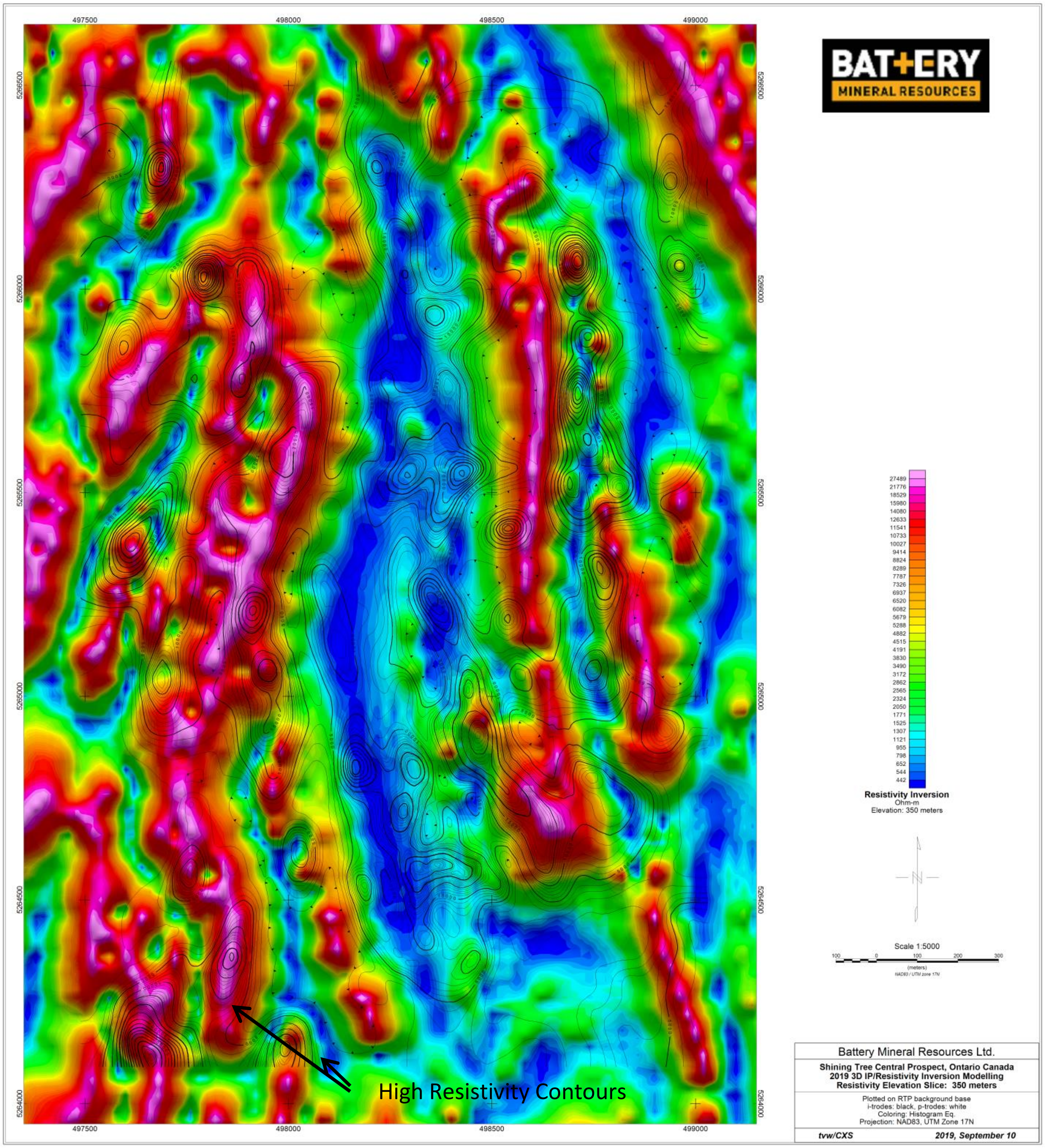


Figure 11 – The 350 meter elevation (near surface) resistivity contours plotted on the Tilt Derivative image shows the close relationship between high resistivity, high magnetism and Nipissing diabase in the Proterozoic rocks at Shining Tree Central. This close relationship does not occur in the Archean rocks.

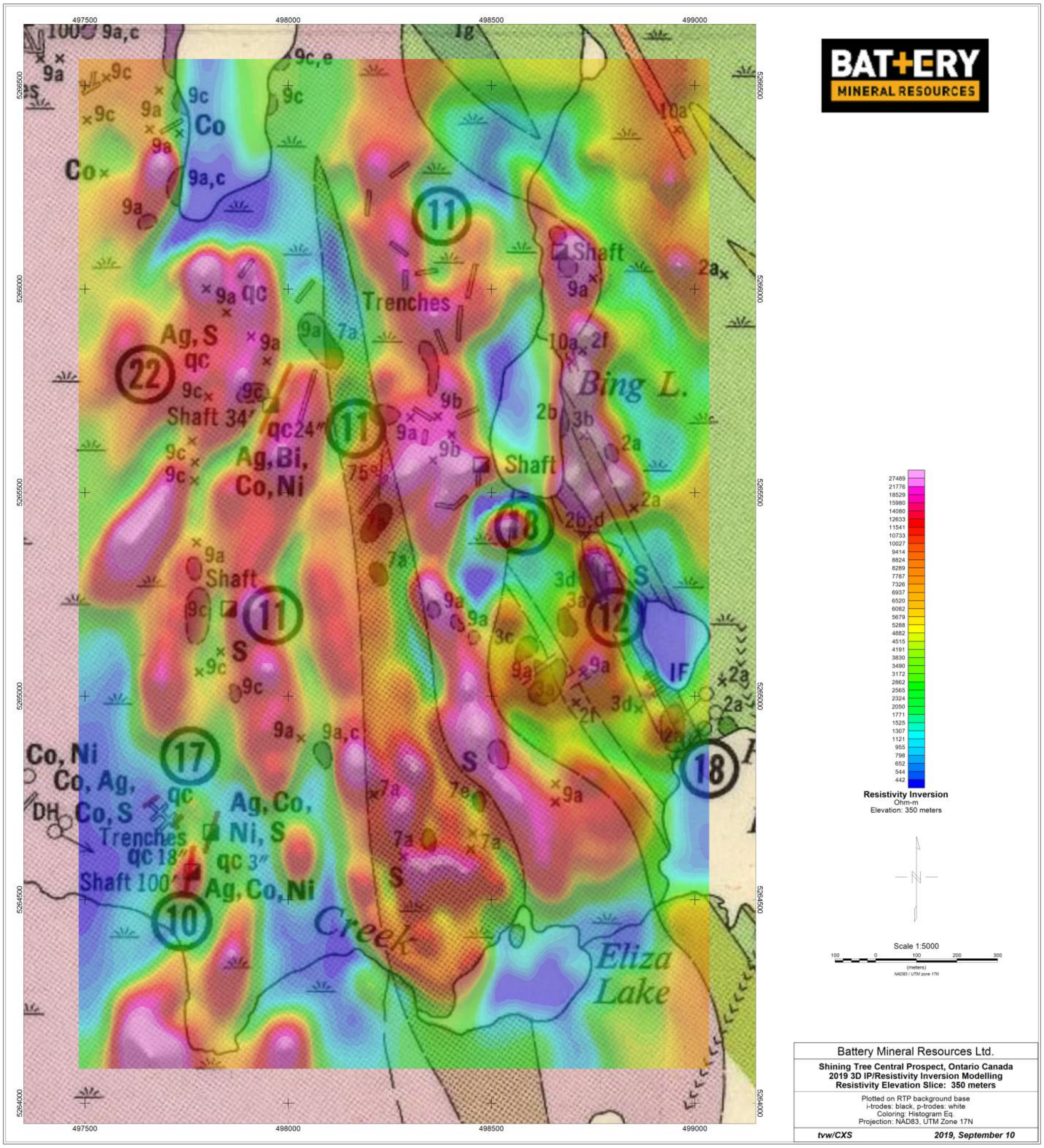


Figure 12 – The 350 meter elevation resistivity image faded and plotted on top of geology at Shining Tree Central. This image confirms the relationship between resistivity highs and Nipissing diabase. The Ag/Co mineralization occurs in the vicinity of the resistivity highs. Note the resistivity data set is lower resolution than the magnetic data set so both should be used in targeting.

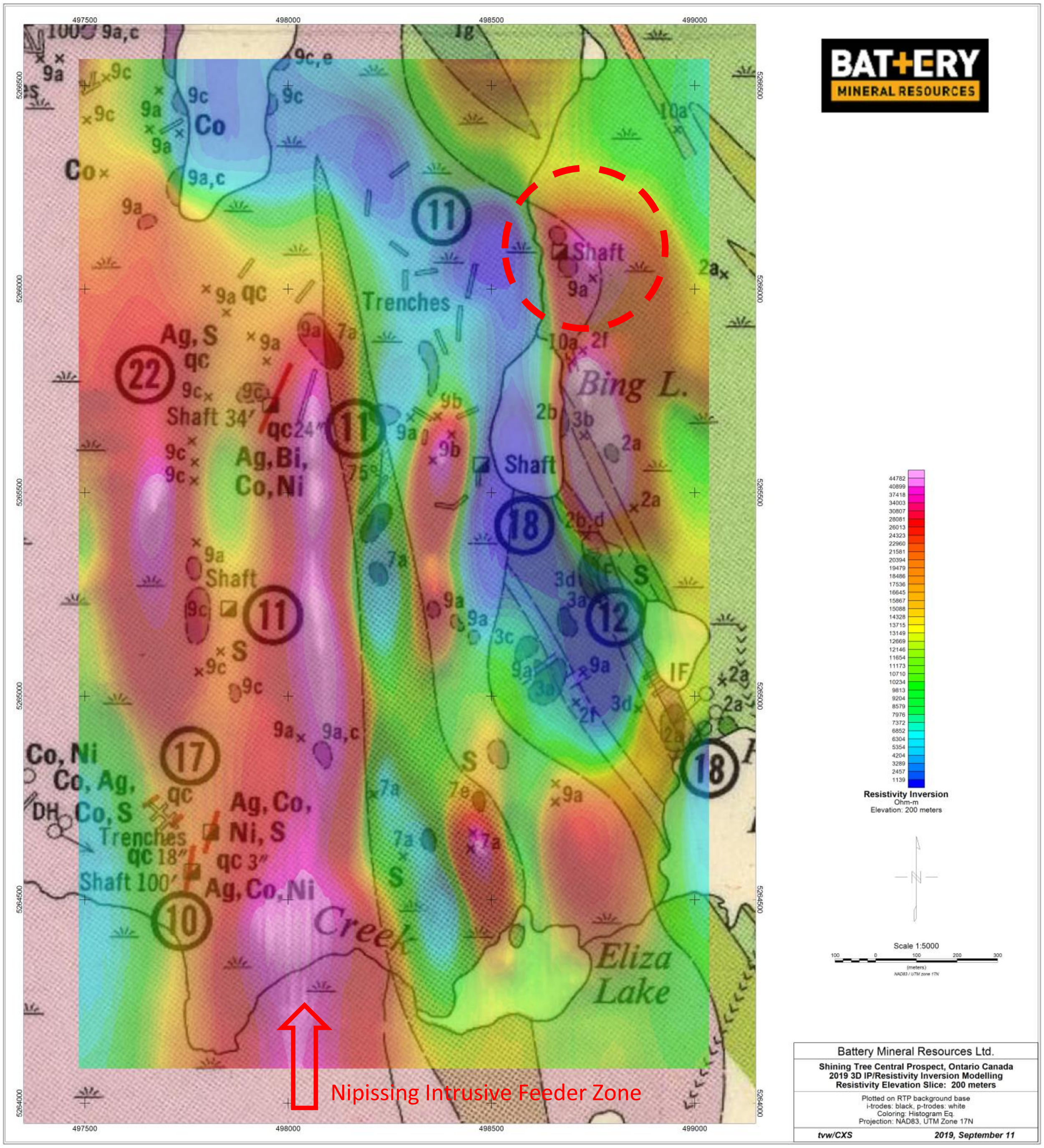


Figure 13 – The 200 meter elevation resistivity faded and plotted on geology. This deeper view of the resistivity model indicates the Nipissing diabase intrusive feeder zones occur to the west at Shining Tree Central. Smaller intrusions of Nipissing occur to the east. An interesting feature highlighted by the red dashed ellipse shows a high resistivity zone interpreted to be due to Nipissing diabase and not to the iron formation response on strike adjacent to Bing Lake. Two things about the Bing Lake resistivity high should be noted. First, it may be Nipissing and a target for drilling. Second, if it is iron formation it may be brittle, fractured and act as a conduit or host for cobalt mineralization.

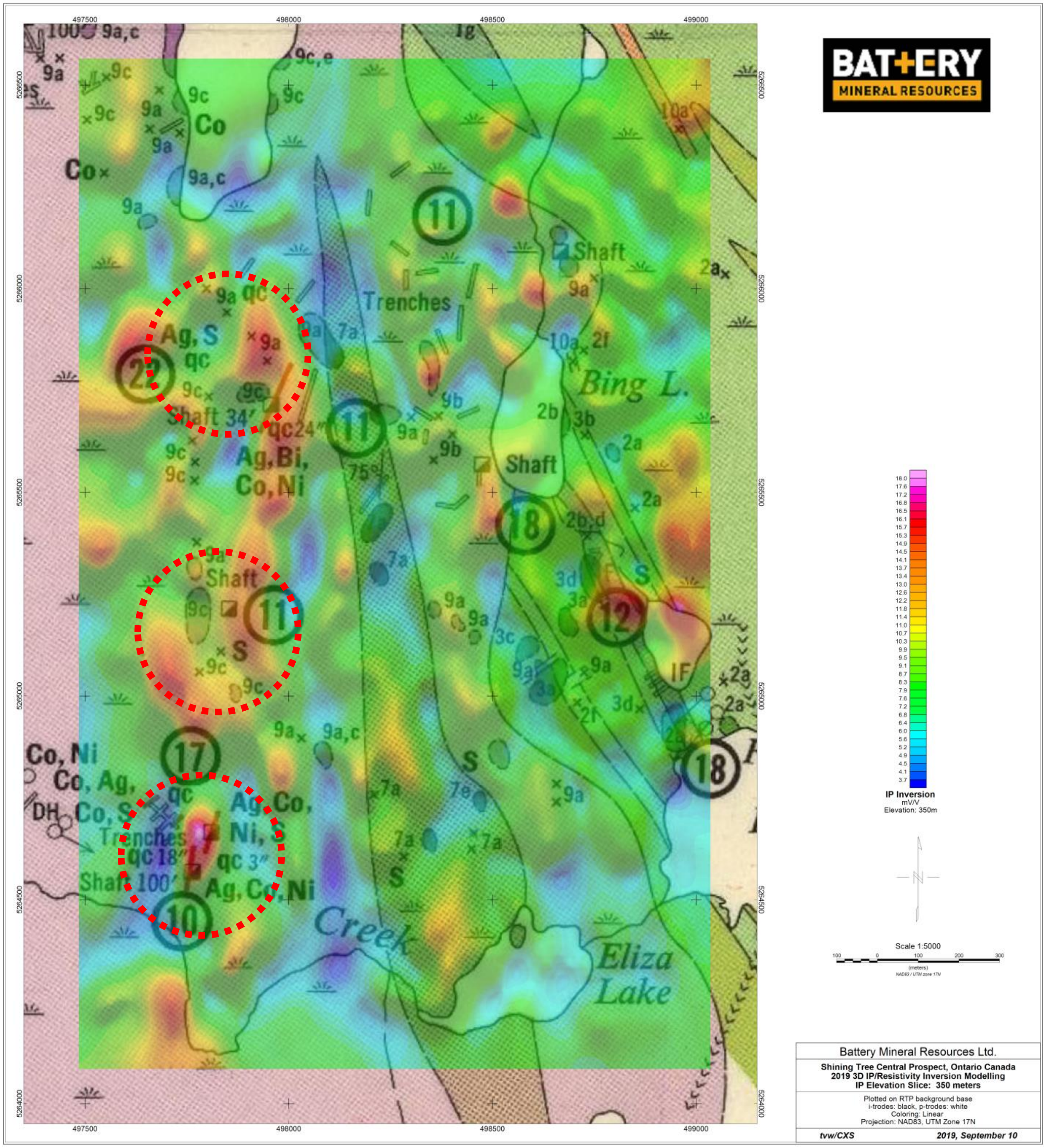


Figure 14 – The Shining Tree Central 350 meter elevation IP image faded and plotted on geology. Note the close relationship between IP response and Nipissing diabase hosted Ag/Co mineralization in the Proterozoic rocks at the west side of the block. This relationship does not occur in the Archean terrain except in areas where small Nipissing intrusions into the Archean may occur. The implication is that in the Proterozoic the high IP response will coincide with the high resistivity and high magnetic responses from the Nipissing diabase. The exploration approach is to use magnetics and resistivity to locate the Nipissing diabase and IP to hone in on areas where sulfides indicate that Ag/Co mineralization may occur.

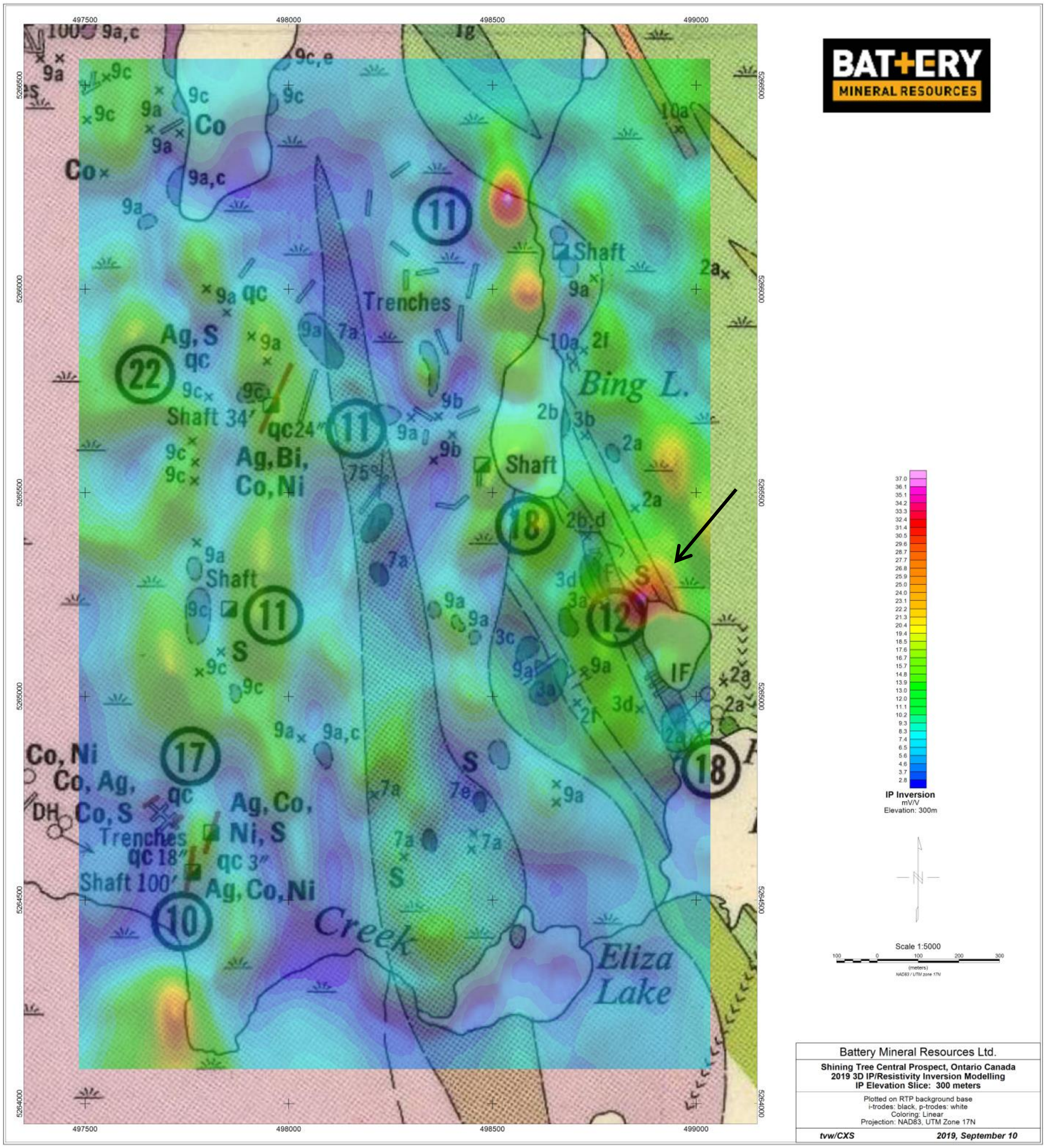


Figure 15 – The 300 meter (slightly deeper) IP data set faded and plotted on Geology. This data set is smoother and is used to generate IP contours for identifying anomalies and plotting on other data sets for interpretation purposes. Note the black arrow indicates the deeper iron formation/massive sulfide (?) IP response is starting to occur at 300 meters elevation. This will develop into the strongest IP response in the Shining Tree Central area (see Figure 16).

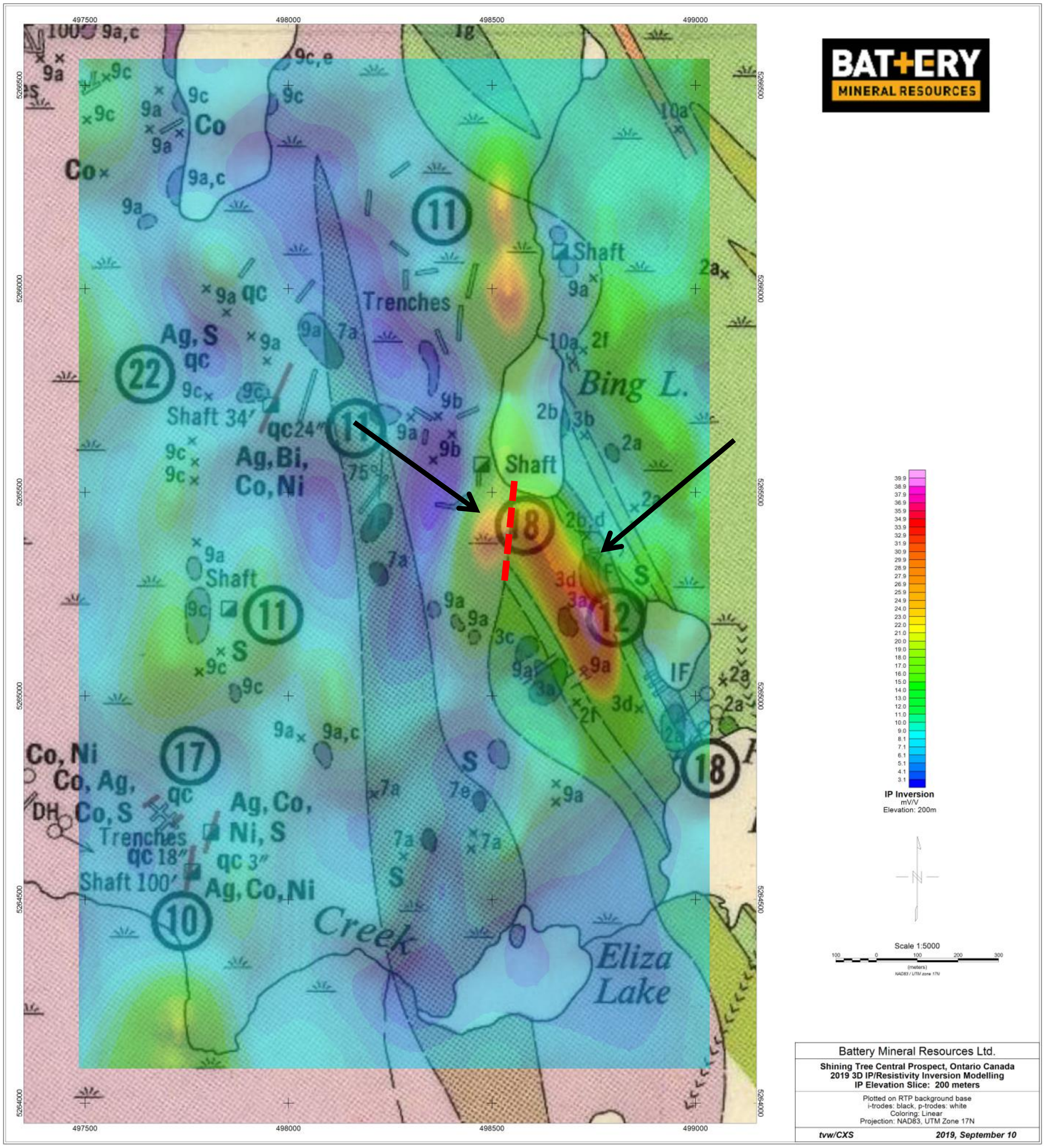


Figure 16 – The 200 meter (deepest, approximately 250 meters depth) IP data set faded and plotted on Geology. The IP anomaly appears to cross the Proterozoic/Archean contact and the interpreted source could be Nipissing Ag/Co mineralization, Iron Formation or Massive Sulfides. No matter the range of possible sources it should be drilled (Ag/Co, Au, base metals?). The red dashed line is the geologic map contact, which may or may not be correct.

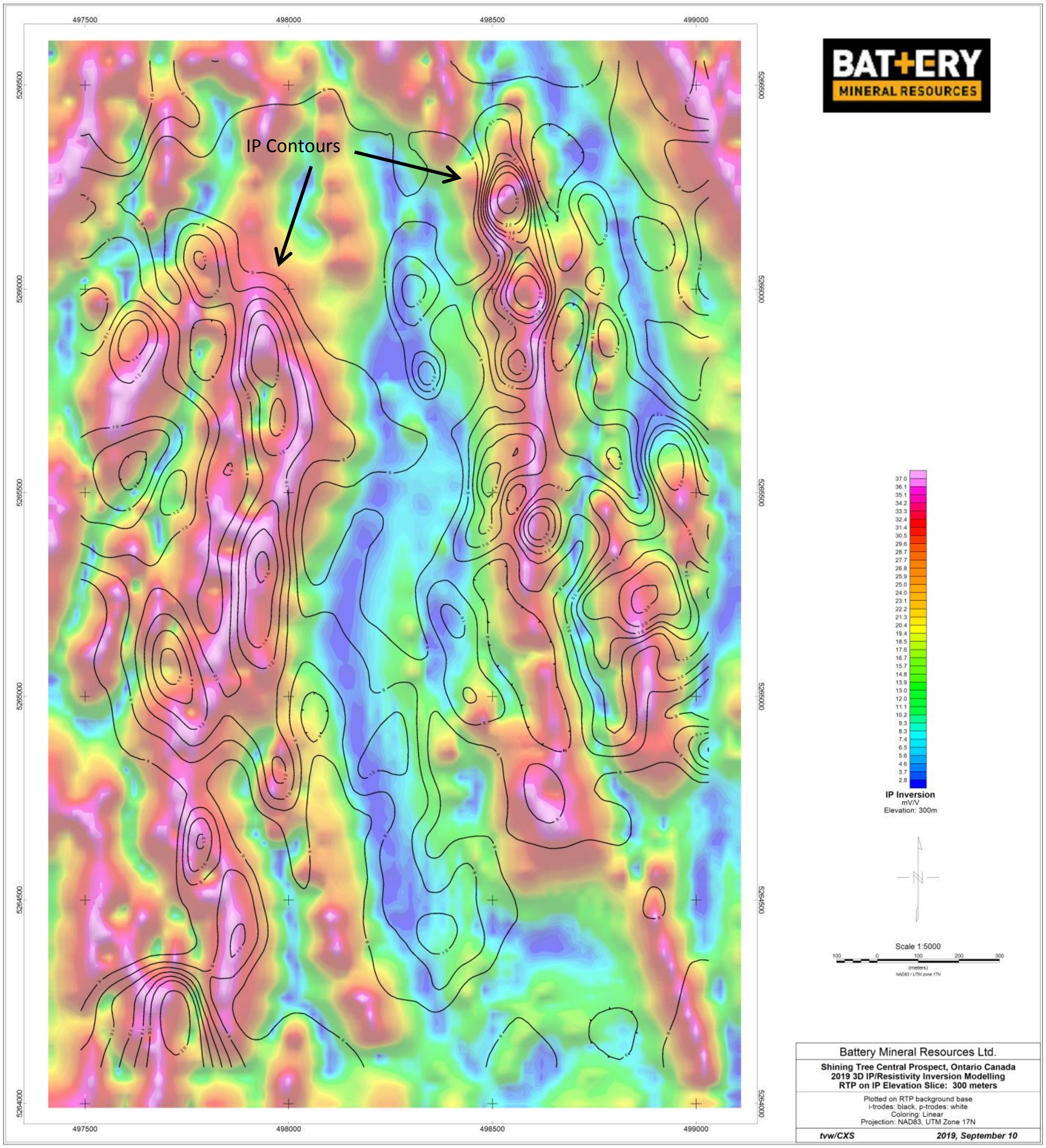


Figure 17 – The 300 meter elevation IP contour plotted on the magnetic Tilt Derivative image. Note the IP response in the Proterozoic lithology falls on the magnetic highs interpreted to be Nipissing intrusives.

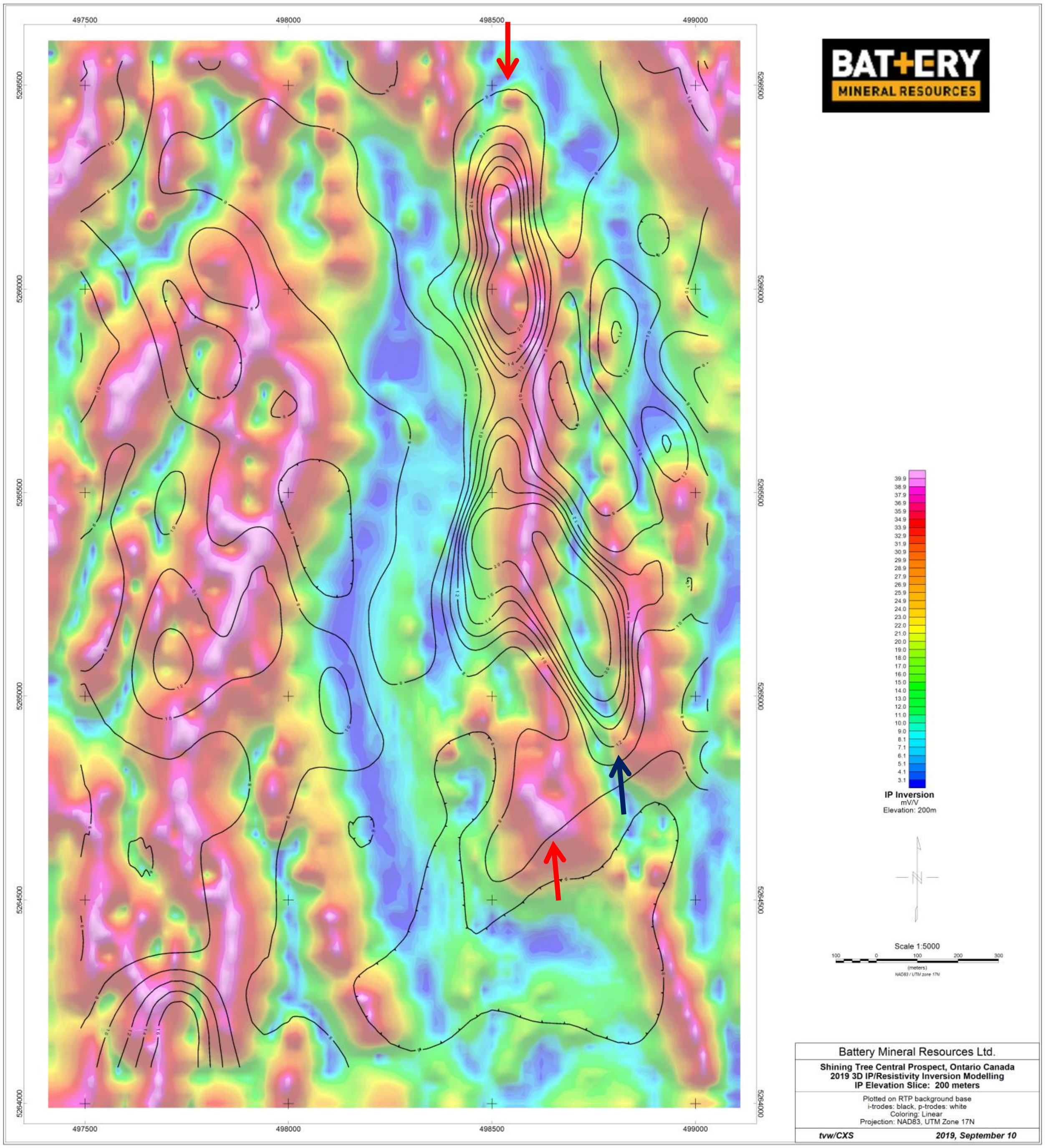


Figure 18 – The 200 meter elevation IP contour plotted on the magnetic Tilt Derivative image. Note the strongest correlation between IP response and Nipissing rocks at depth occurs along the Proterozoic/ Archean contact (red arrows). The strong deep IP response in the Archean (black arrow) falls within a low magnetic zone which may indicate either a massive sulfide or carbonaceous sediment source.

Targets

Fifteen anomalous IP features have been identified as targets in the Shining Tree Central prospect area. They are shown in Figures 19 through 23. Their priority is based on their IP amplitude, their intersection with magnetic and resistivity highs interpreted to be Nipissing diabase intrusives and the structural complexity of their setting. Five are classified as high priority targets. They are IP 1-1, IP 1-2, IP 1-3, IP 1-4 and IP 1-5 (labeled in the interpretation figures). Seven are classified as moderate priority targets. They are IP 2-1, IP 2-2, IP 2-3, IP 2-4, IP 2-5, IP 2-6 and IP 2-7 (also labeled in figures). Three are classified as low priority targets. They are IP 3-1, IP 3-2 and IP 3-3 (also labeled).

The location of the anomalies in NAD83, UTM Zone 17N coordinates are given in Table I.

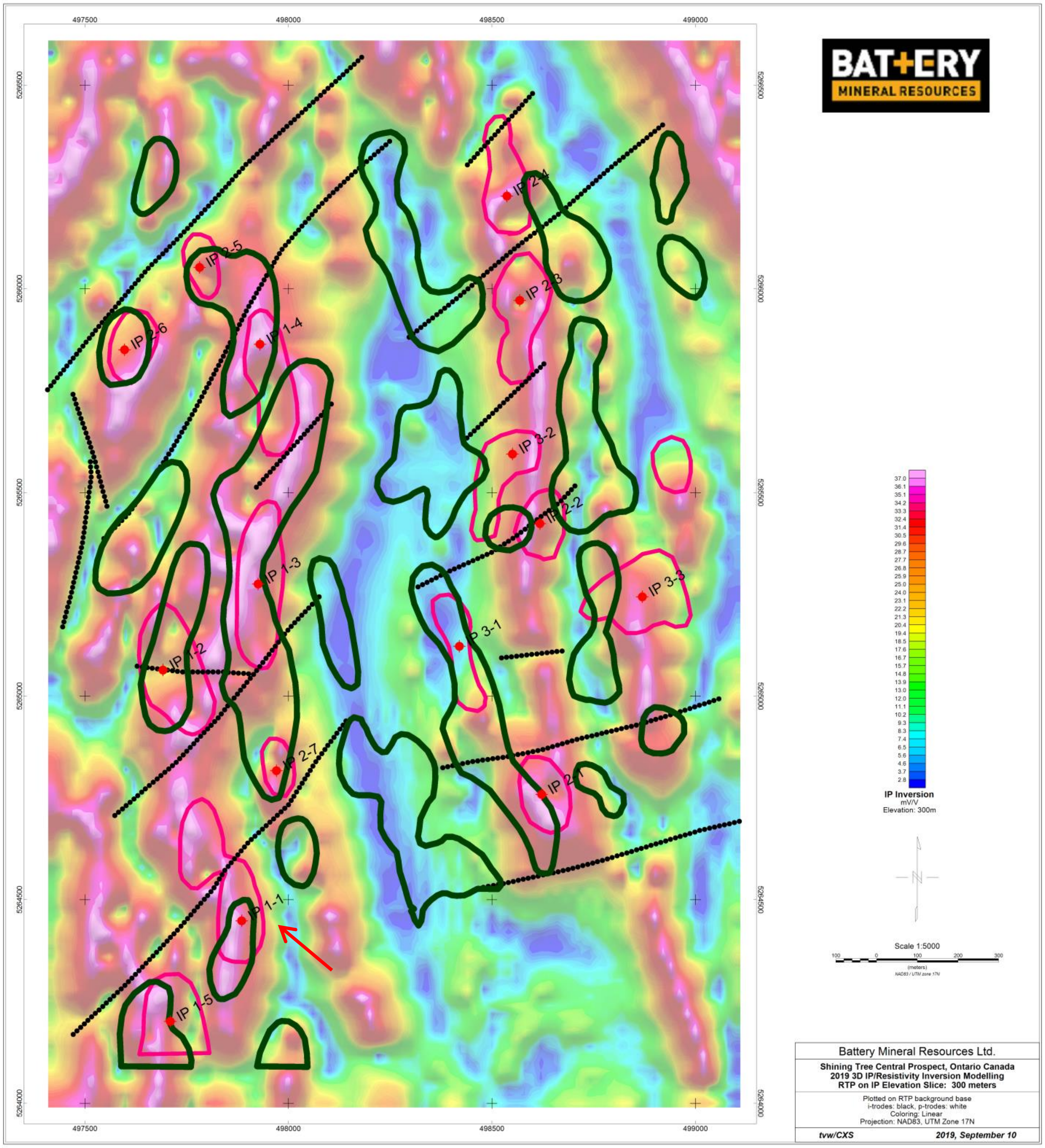


Figure 19 – Interpreted *IP highs (red polygons)* and *resistivity highs (green polygons)* plotted on the Shining Tree helicopter Tilt Derivative of the RTP magnetic data set. Where the high chargeability (IP) anomalies coincide with zones of high resistivity and are located on magnetic highs exploration targets are identified. A central point for each anomaly is picked and plotted as a red circle. Each target is given a number, for example *IP 1-1* is priority 1, feature 1. The priorities are 1, 2 and 3 from highest to lowest respectively. The helicopter magnetic data set has superior location resolution and needs to be considered when targeting the IP and resistivity anomalies.

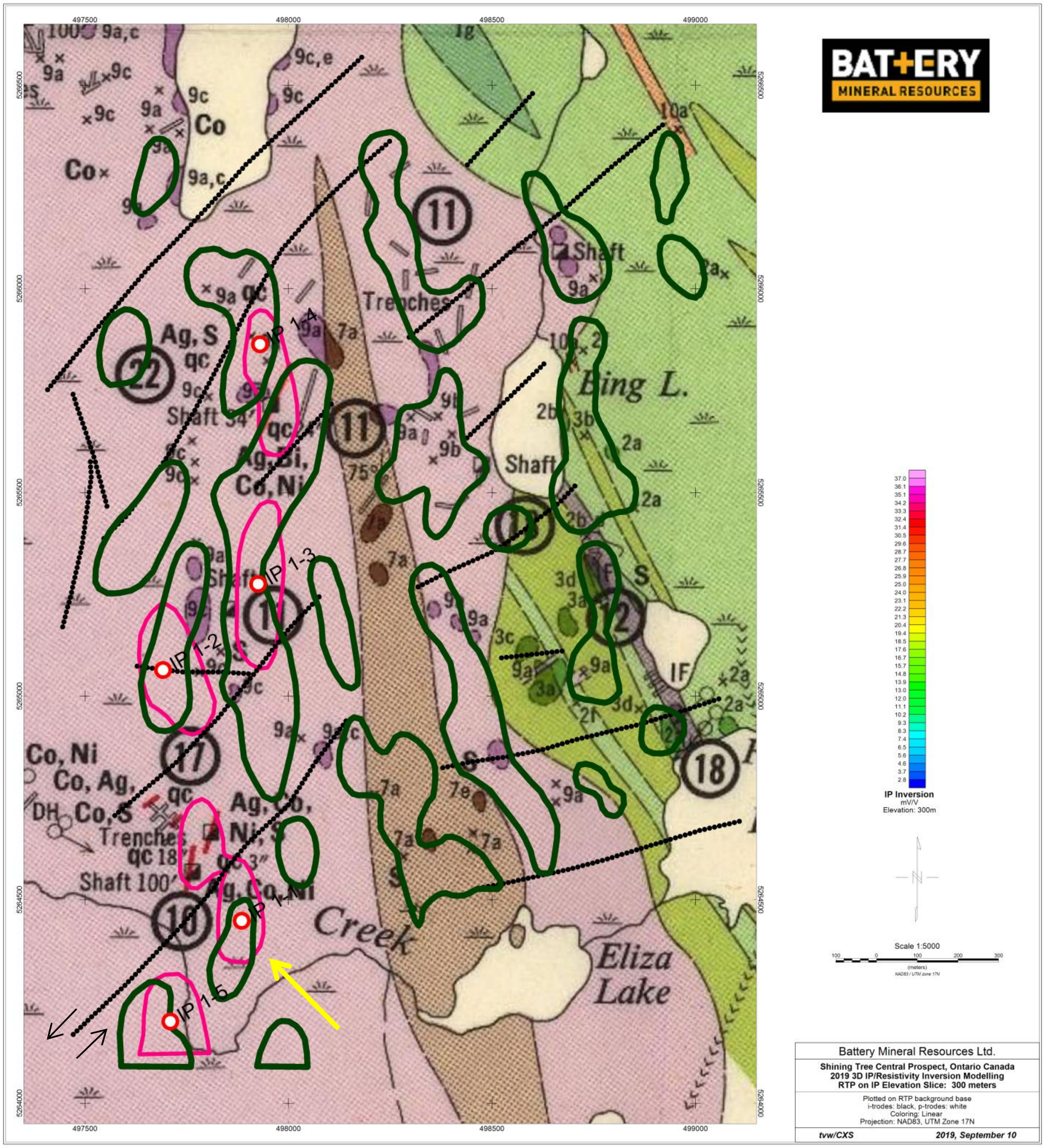


Figure 20 – The *__Priority 1 targets__* as shown in Figure 19 and plotted on geology. Note IP 1-1 is cut in half and the south half is offset by a strike-slip fault from an IP anomaly with known Ag/Co/Ni mineralization immediately to the north (yellow arrow). It is the highest priority target selected here.

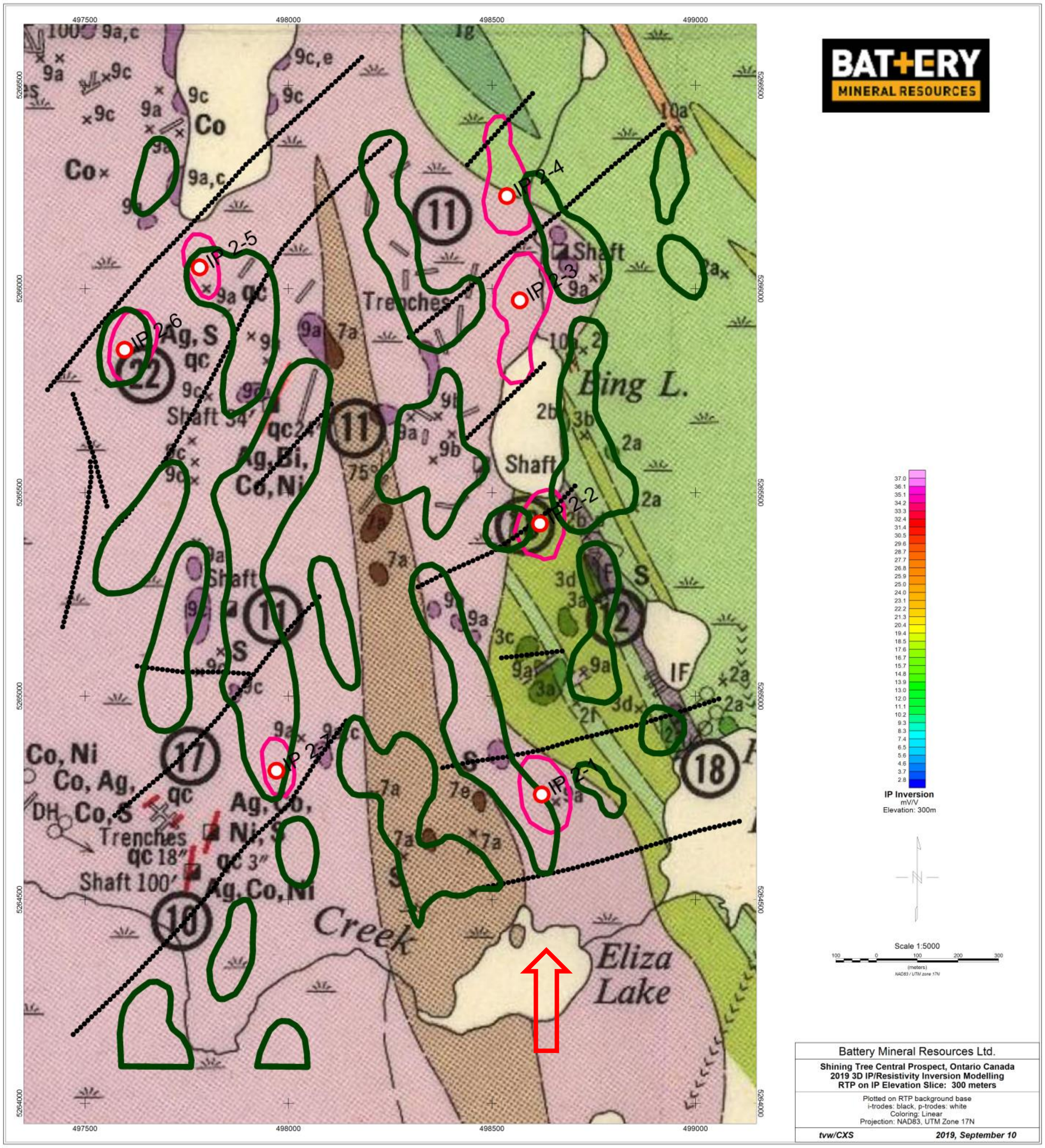


Figure 21 – The Priority 2 IP targets plotted on geology. Note the line of priority 2 IP targets located near the Proterozoic/Archean contact (red arrow).

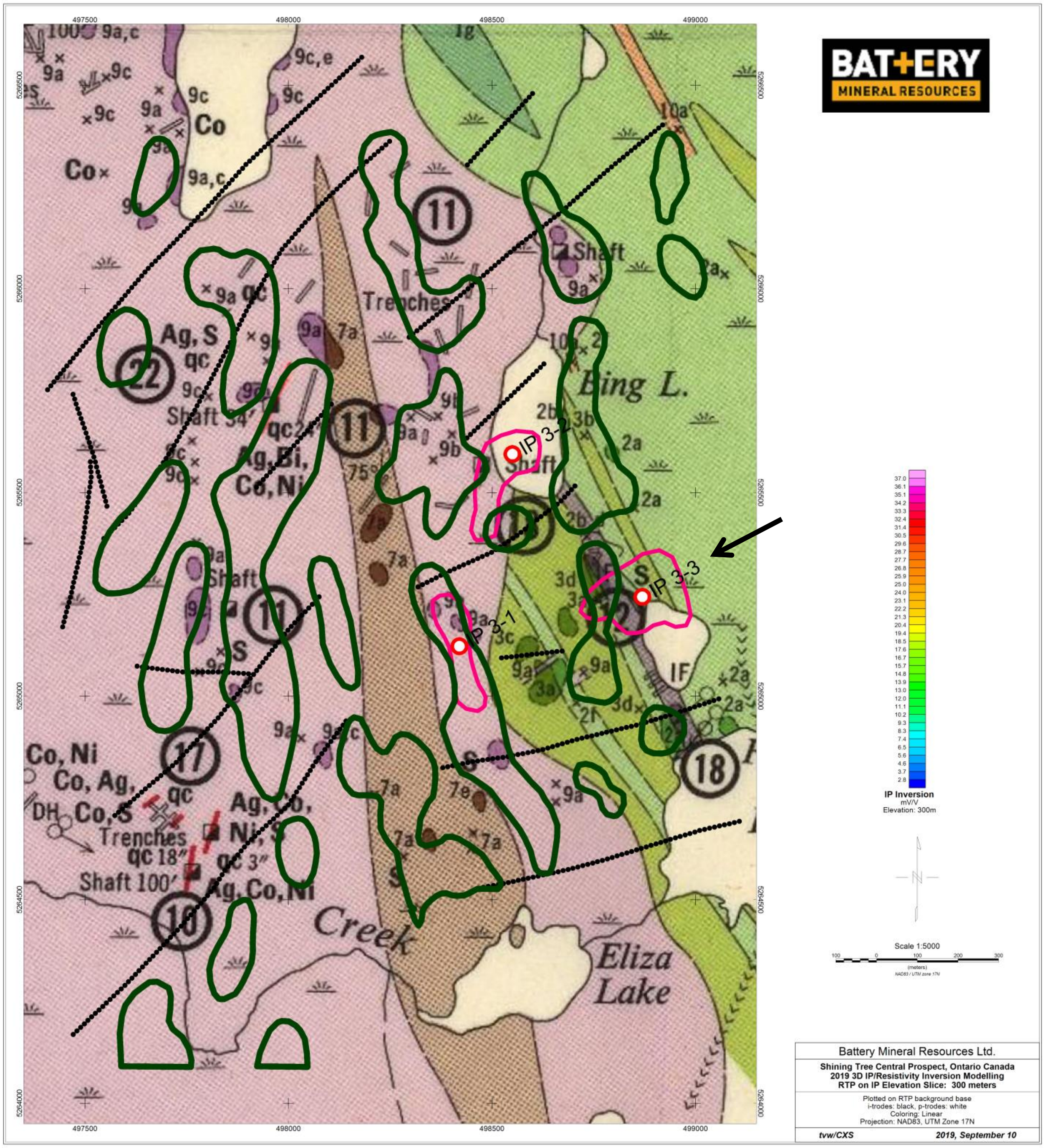


Figure 22 – The Priority 3 IP targets plotted on geology. IP 3-3 may be the top of the deeper Archean IP anomaly discussed below.

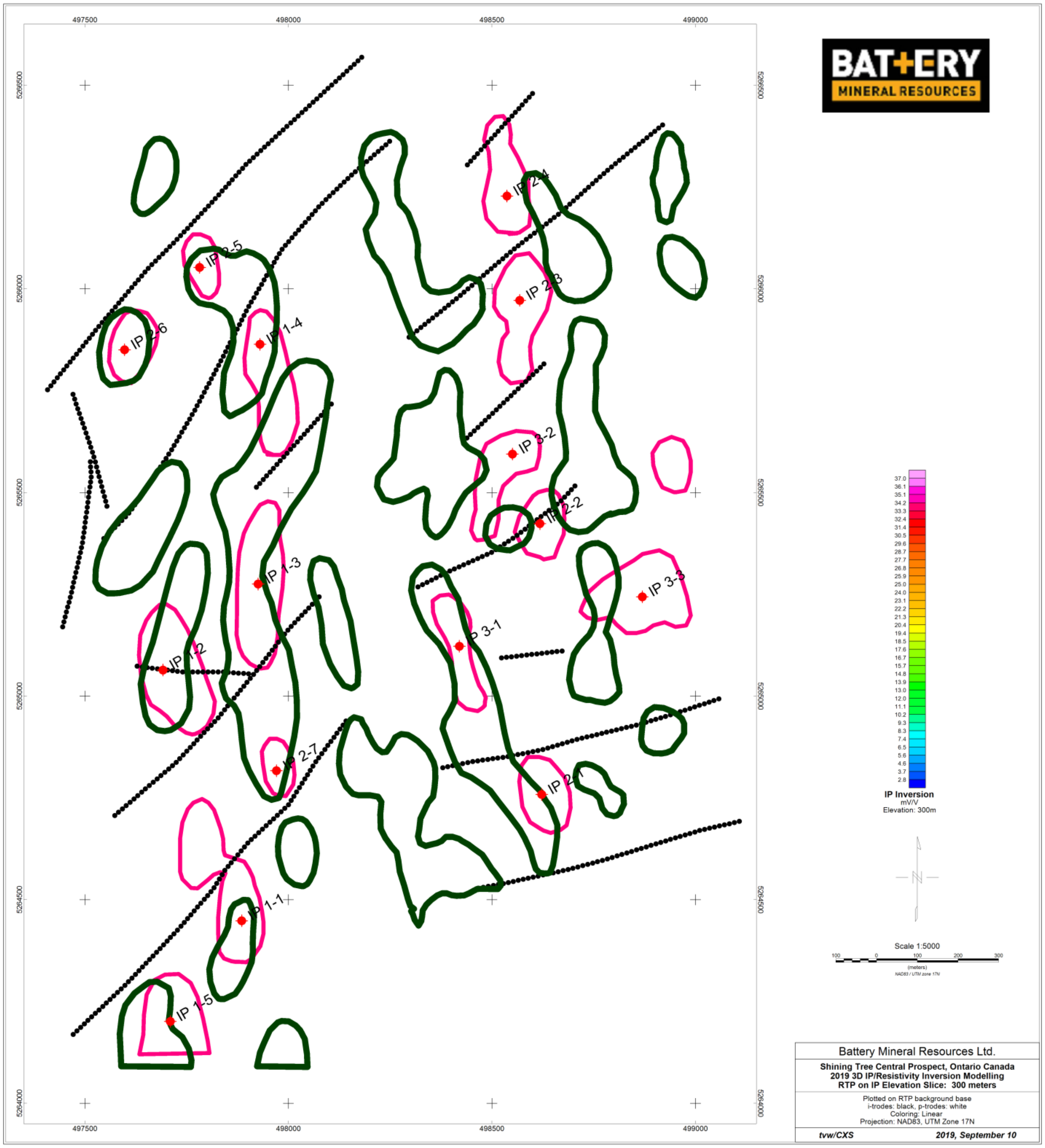


Figure 23 – The same target image as shown in Figures 19 and 22 but on a blank background. Each of the individual, Priority 1, Priority 2 and Priority 3 maps are plotted with blank backgrounds so they can be easily dropped into the geologists GIS packages.

A	B	C	D	E	F
IP Anomaly	X	Y	Z	Priority	Comments
IP 1-1	497885.1124	5264448.32	369.505849	1	fault offset from mineral occurrence
IP 1-2	497691.8539	5265064.05	376.425007	1	intersection high rho/IP/e-w fault
IP 1-3	497925.5618	5265275.28	387.153991	1	intersection high rho/IP long strLength
IP 1-4	497930.0562	5265864.05	383.606714	1	intersection high rho/IP/near NE fault
IP 1-5	497709.8315	5264201.12	368.68978	1	large IP at edge of south survey block
IP 2-1	498622.191	5264758.43	383.375209	2	east Nipissing zone near Archean Contact
IP 2-2	498617.6966	5265423.6	372.548739	2	east Nipissing zone near Archean Contact
IP 2-3	498568.2584	5265971.91	376.448168	2	east Nipissing zone near Archean Contact
IP 2-4	498536.7978	5266228.09	374.720851	2	east Nipissing zone near Archean Contact
IP 2-5	497781.7416	5266052.81	378.046913	2	N edge west zone Nipissing unit
IP 2-6	497597.4719	5265850.56	380.826802	2	N edge west zone Nipissing unit
IP 2-7	497970.5056	5264816.85	378.319362	2	near LeftLat strike slip fault
IP 3-1	498419.9438	5265122.47	377.078699	3	IP high / Rho high / magnetic low
IP 3-2	498550.2809	5265594.38	370.261072	3	Center of east Nipissing zone
IP 3-3	498869.382	5265243.82	373.138026	3	above Archean deep IP

TABLE 1 – A listing of the IP targets as shown in Figures 19 through 21 above. The X and Y coordinates are in NAD83, UTM Zone 17N. The priorities range from 1 to 3, highest to lowest respectively.

One Deep Target in the Archean

Figure 24 is the 100 meter elevation IP elevation slice which shows a strong IP response within the Archean at/near the Proterozoic/Archean geologic boundary. This IP high does not have a coincident resistivity or magnetic high so it is being interpreted here as an Archean semi-massive to massive sulfide body. Based on Mike Hendrickson's thoughts on the massive sulfide body at McAra this target should be drilled. Its peak location is:

Easting – 498604 E

Northing – 5265311 N

Depth to target – approximately 200 to 250 meters

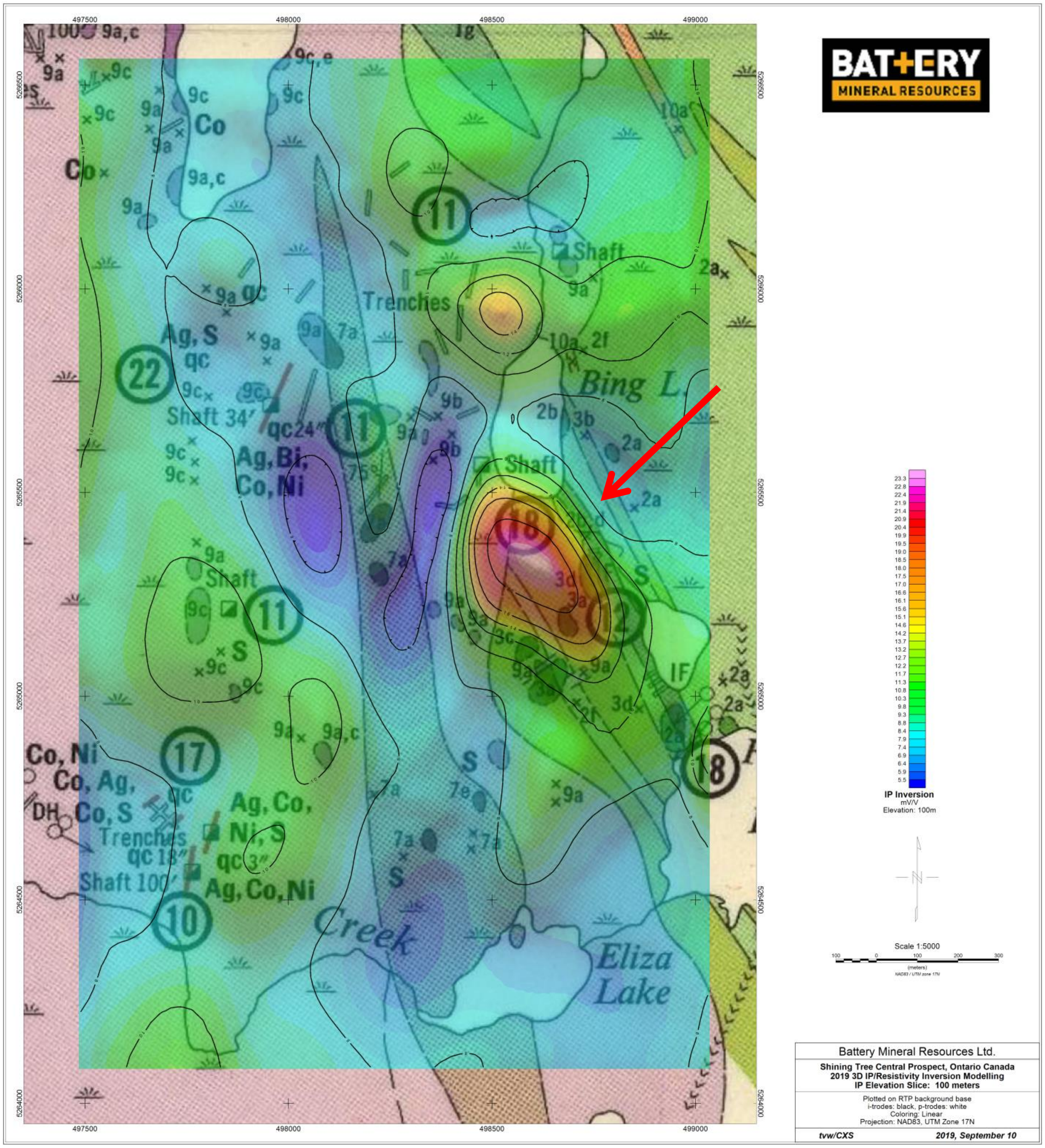


Figure 24 – The Shining Tree Central 100 meter IP elevation slice showing the strong IP anomaly (red arrow) located within the Archean and near the contact with the Proterozoic rocks.

Conclusions/Recommendations

Geology in the Shining Tree Central area consists of Proterozoic Nipissing diabase intrusives and Gowgonda sediments to the west (2/3 of area) and Archean meta-volcanics and sediments to the east (1/3). Known Ag/Co mineralization is confined to the Nipissing diabase units.

Both magnetic data and resistivity data map out the Nipissing diabase intrusives. The magnetic data is higher resolution and should be used for assisting with targeting. In the Proterozoic rocks the resistivity data correlates well with the magnetic data but has poorer lateral resolution because of the 3-D IP/resistivity array that is used. In the Archean rocks the resistivity and magnetic data sets do not correlate. That is, resistivity highs and magnetic highs are not coincident in the Archean but map different features.

The IP chargeability response is used to define Ag/Co exploration targets within the Nipissing rocks. Where a weak to moderate strength IP anomaly is coincident with high resistivity and high magnetic response a target is identified. There are a total of 16 IP targets identified. Five are high priority (Priority 1). Seven are moderate priority (Priority 2). Three are low priority (Priority 3). And one has no priority since it is weak and falls well within the Archean.

Table I shows the list of, locations of and priorities of the IP/resistivity/magnetic/structural targets proposed here.

These anomalous IP responses should be drill tested starting with the highest priority targets.

The deeper resistivity response in the Shining Tree Central block located at the western side of the block indicates where a deep Nipissing intrusive feeder zone occurs. It is generally coincident with the known Ag/Co mineralization. These roots may be associated with greater heat flow and mineralizing fluid movement.

A single deep and strong IP anomaly occurs within the Archean rocks immediately south of Bing Lake. It should be drill tested.

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Geophysical Report

Subject: Geophysical Interpretation for Shining Tree South Project

Date: 24th September, 2019

Client: Battery Mineral Resources Ltd.

Summary

The Shining Tree South area is mapped as Proterozoic Nipissing intrusives, diabase dikes and sills, which are the target lithology for mineralization in the cobalt district of Canada. The proposed targets consist of electrically resistive and high magnetic zones of brittle Nipissing diabase that occupy or are cut by faults or folds that prepare fluid pathways and the depositional setting for cobalt mineralization. Specifically magnetic, high resistivity Nipissing diabase rocks that are intersected by structures and have anomalous IP (sulfides) response are the targets.

Most of the area is covered by forest, swamps and lakes so geophysics is fundamental in exploring this area. Once again geochemistry will be useful in identifying areas with increased cobalt. Drilling will be the ultimate test.

The interpretation of the Shining Tree South 3-D IP/resistivity data set is done in conjunction with the Shining Tree helicopter magnetics, government geology and the Shining Tree Central and North 3-D IP/resistivity data sets.

Targets are selected where Nipissing dikes and sills (as interpreted from magnetic and resistivity data) are enhanced with coincident IP response.

The close agreement between the magnetic maps and the shallow 3-D resistivity model provides a degree of confidence in the 3-D IP/resistivity data set. In spite of this good correlation it should be noted that the helicopter magnetic data has better lateral resolution then the resistivity data. Therefor drill targeting should consider the magnetic data set as well as the resistivity and IP models.

The deeper IP and resistivity elevation slices from the 3-D models have a lower degree of location confidence then the shallow slices. If the deeper features, which are interpreted to be the roots of the mafic diabase intrusions, are to be drilled it is recommended that a minimum of three (3) pole-dipole lines be run across the anomaly to better define its location prior to drilling.

Fourteen shallow IP targets are identified of which five are highest priority. Two structural zones are identified as targets as well.

Location

Figure 1 shows the location of the Shining Tree South (Saville) block within the greater Shining Tree helicopter magnetic area. This is the area of primary interest in this report. Also shown are the Shining Tree North and Shining Tree Central blocks to be discussed in separate reports. In Figure 1 the 350 meter resistivity elevation slice is plotted on government geology overlaying the magnetic survey block. The high resistivity zones in this block are interpreted to be Nipissing diabase units and the low resistivity zones Proterozoic sediments adjacent to the diabase dikes and sills. Note that body edge effects or alteration can also result in magnetic lows. The interpretation of the North and Central blocks are a bit more complex and include high resistivity zones within the Archean.

Figure 2 is an enlargement of the Shining Tree geology map. Both the magnetic data (Figure 3) and resistivity data (Figure 1) indicate the geology is more complex than is shown for the Shining Tree South area.

Figure 3 shows the RTP magnetic intensity response with the Shining Tree South, Central and North blocks plotted on it. The red dashed line is an interpretation of the contact between Proterozoic rocks to the west and Archean rocks to the east. Minor amounts of Nipissing diabase occurs in the eastern Archean area. Strong magnetic highs in that area are either associated with Nipissing diabase or an Archean Iron Formation unit (which I feel may also be a cobalt target due to its brittle nature when cut by faults or folded).

Figure 4 shows the 3-D IP/resistivity blocks plotted on the Tilt Derivative filter of the RTP data set. All magnetic amplitude information is lost in the Tilt data but detailed location is emphasized. The highs are interpreted to be Nipissing diabase dikes and sills.

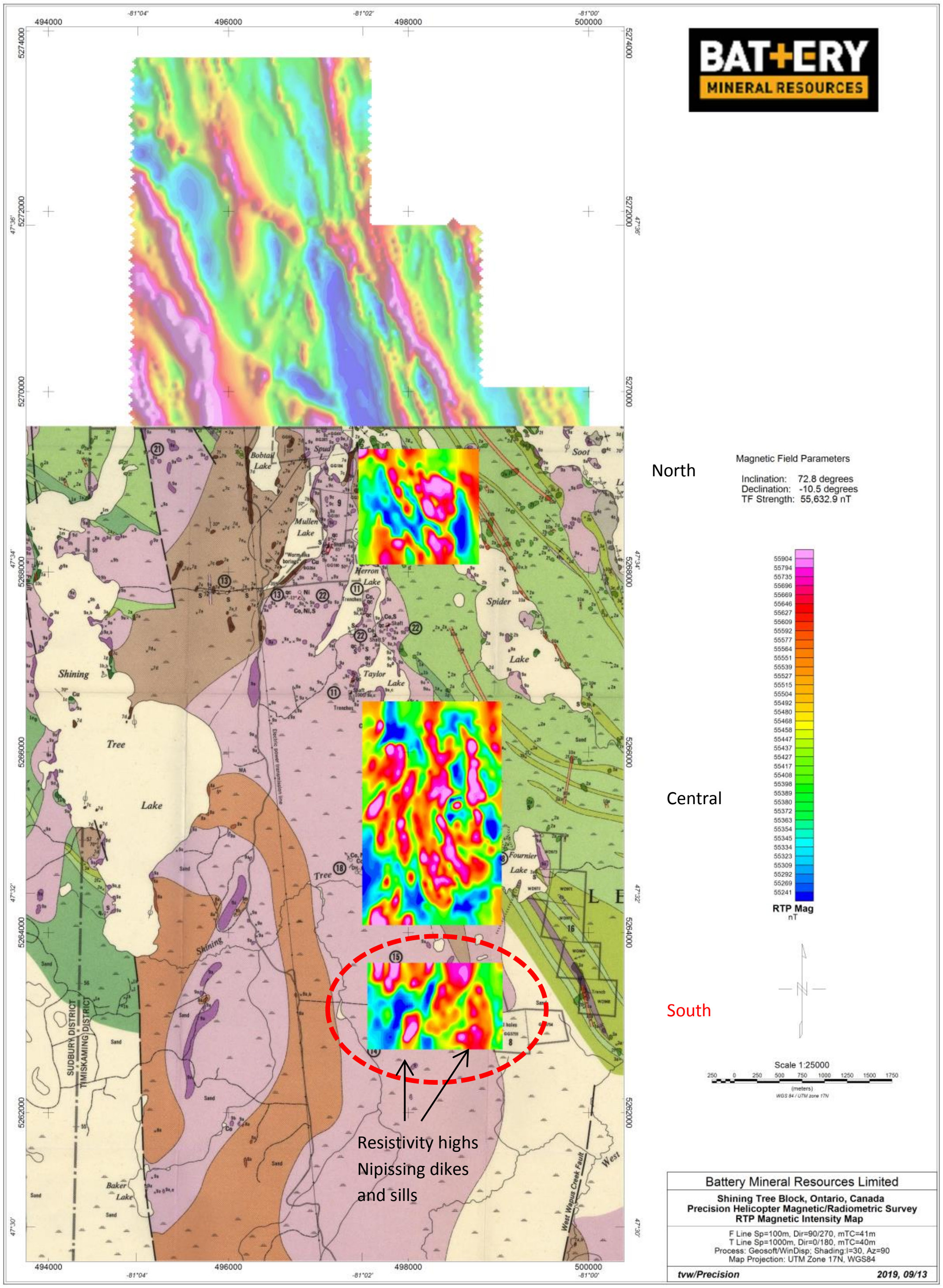


Figure 1 – The combination government geology and helicopter magnetic map is used as the base for showing the location of the Shining Tree North, Central and South 3-D IP/resistivity surveys. The Shining Tree South block is indicated by the red ellipse and occurs in an area entirely mapped as Proterozoic Nipissing diabase with minor Gowgonda sediments occurring to the north. The resistivity highs shown here in red/pink are interpreted to be Nipissing diabase dikes and sills and are cobalt exploration targets.

Geology

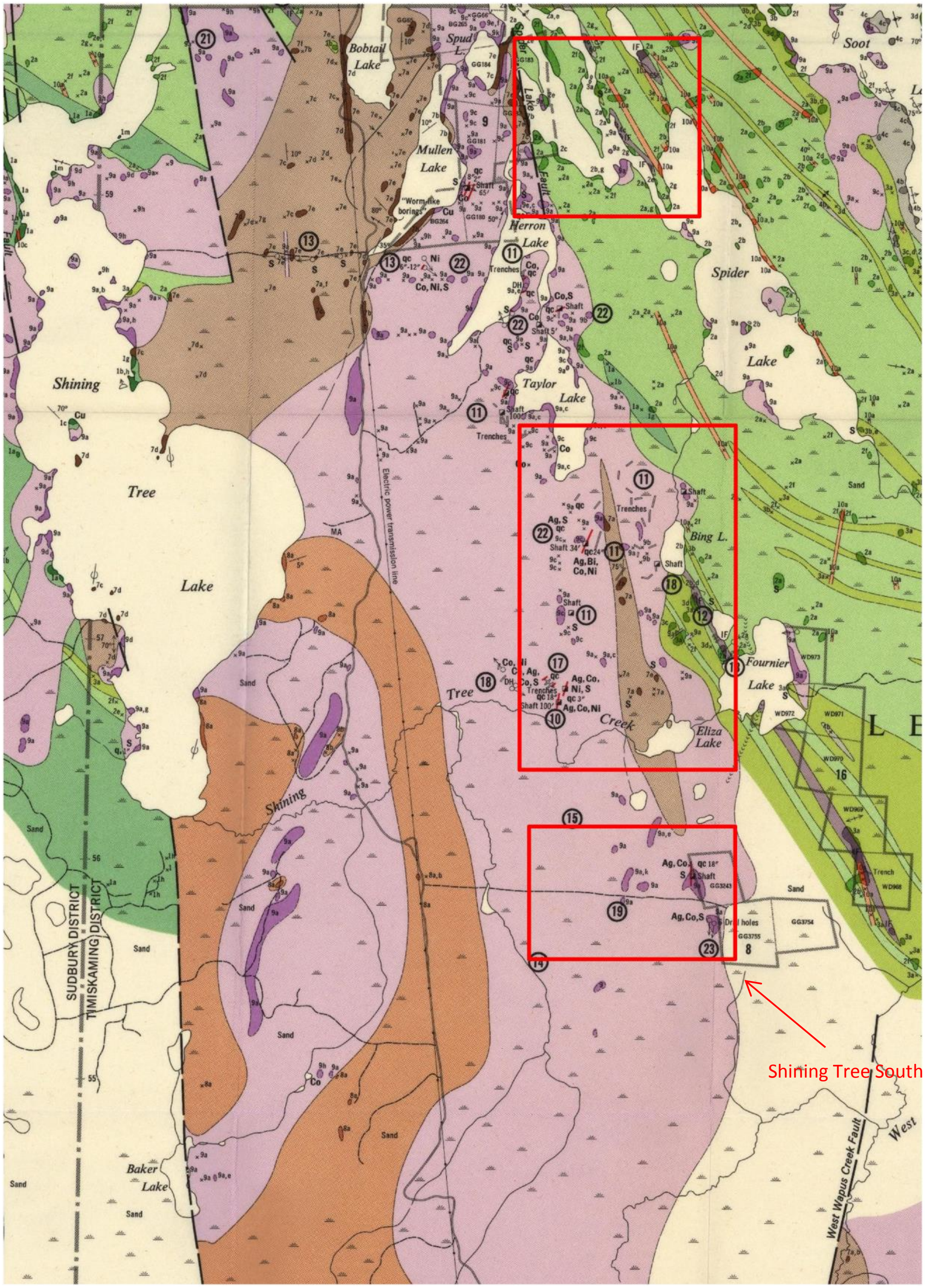
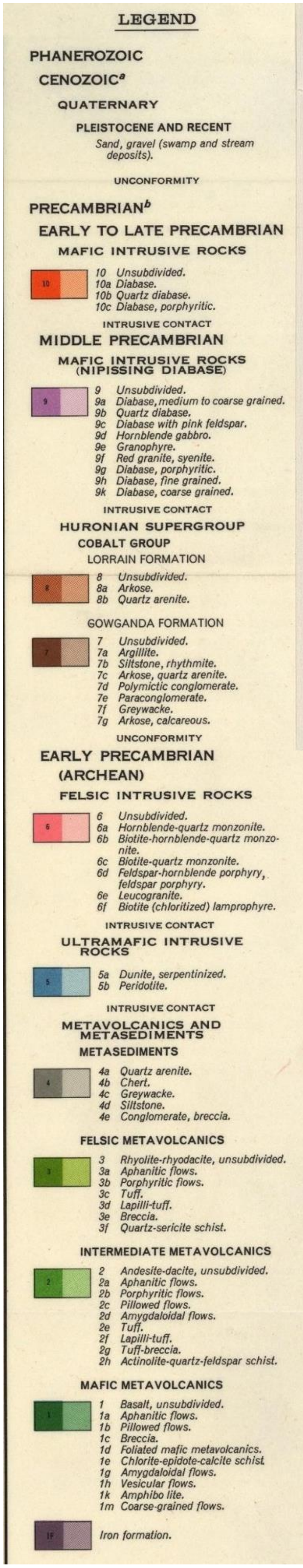


Figure 2 – The IP/resistivity survey polygons (red) plotted on the Shining Tree government geology. The Shining Tree South area is mapped as Nipissing Diabase but magnetic and resistivity data indicates significant Gowgonda sediments may occur beneath cover in the block.



Stratigraphic Section for the Shining Tree Area

Nipissing Diabase host rocks for cobalt mineralization (Proterozoic)

Magnetic and Resistive

Gowgonda Proterozoic sediments

Less magnetic and less resistive

Magnetics

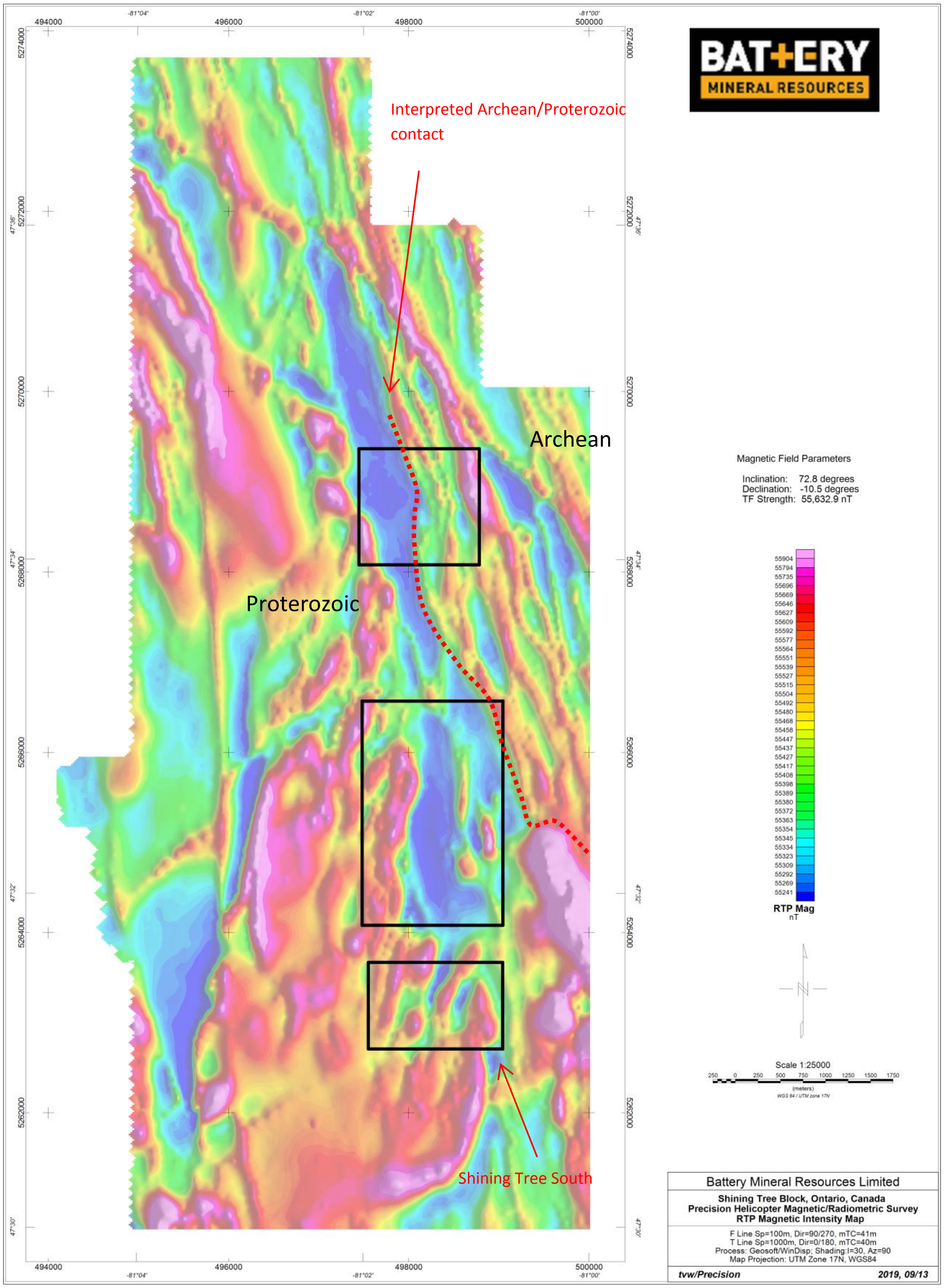


Figure 3 – The 2016 Precision helicopter magnetic RTP map with 2019 IP/resistivity survey polygons plotted on top. The red arrow points towards the Shining Tree South 3-D IP/resistivity survey block. Magnetic highs are Nipissing diabase units.

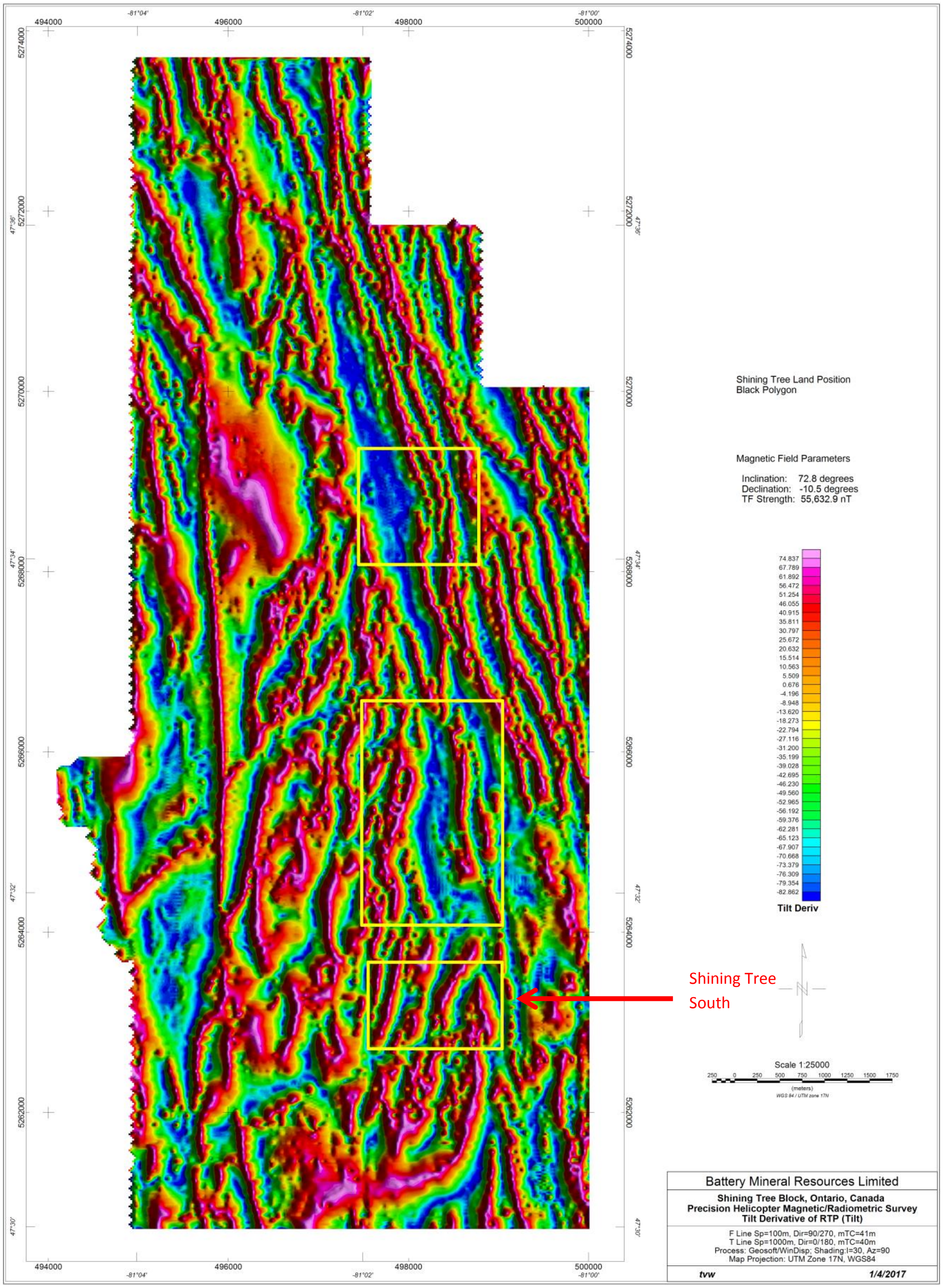


Figure 4 - The 2016 Precision helicopter magnetic Tilt Derivative map with 2019 IP/resistivity survey polygons plotted on top. The tilt derivative tightens up the location of the Nipissing units. All of the Tilt Derivative highs in the Shining Tree South area are interpreted as Nipissing dikes and sills.

IP and Resistivity

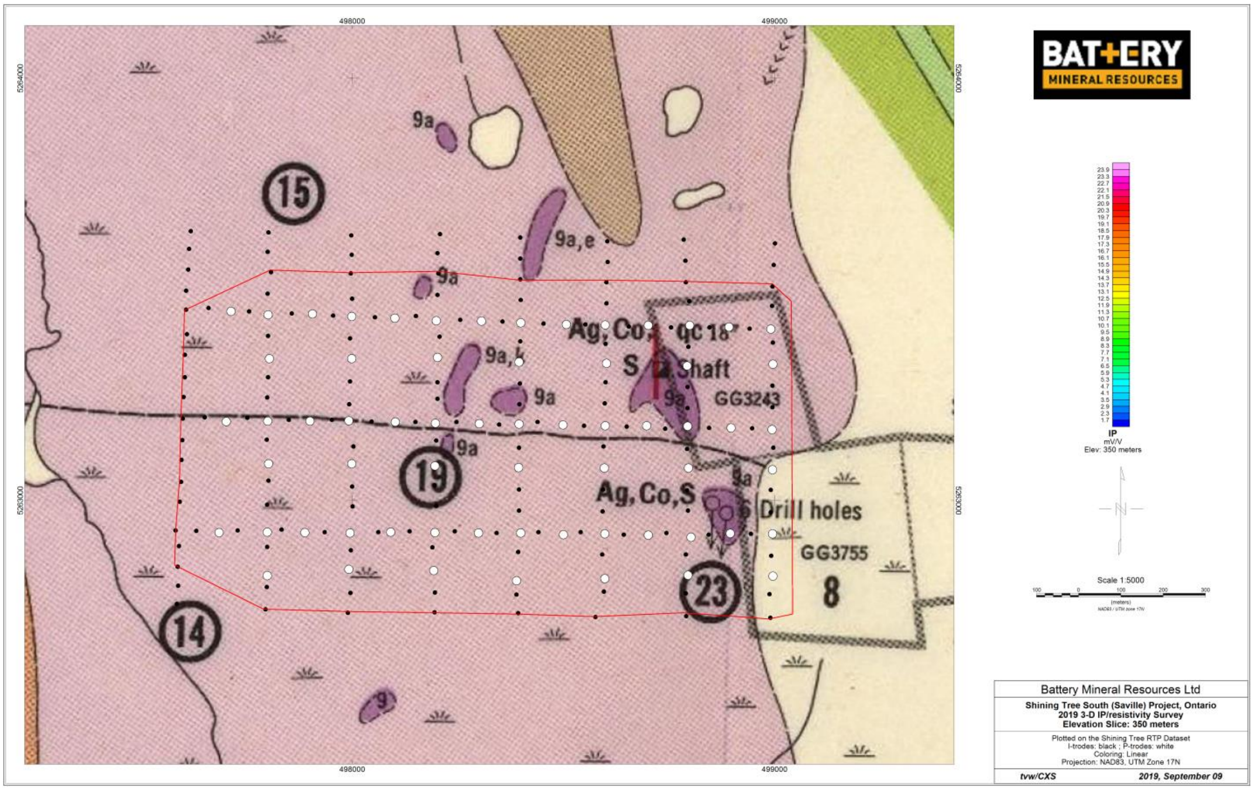


Figure 5 – The Shining Tree South 3-D IP/resistivity grid plotted on geology. Note the entire area is interpreted as Nipissing diabase based on minimal outcrop in the area. Gowgonda sediments are seen coming into the grid area from the north and possibly exists in the swamp covered area where no outcrop occurs. The black dots are current injection points on the grid. The white dots are potential electrode positions. The red polygon around the grid indicates the portion of the grid that has sufficient current and potential electrodes for 3-D modeling. Any IP or resistivity anomalies outside of the polygon can be discounted as under-sampled.

Figure 5 shows the Shining Tree South 3-D IP/resistivity array plotted on geology. Things to note in this image:

The geology is entirely mapped as Nipissing intrusive rocks.

Known mineralization occurs in the eastern end of the survey block.

Black dots are current injection points and white dots receiver array points.

The red polygon indicates the area within which the current and receiver electrodes provide useful information. Outside of the red polygon the data is undersampled and can be ignored.

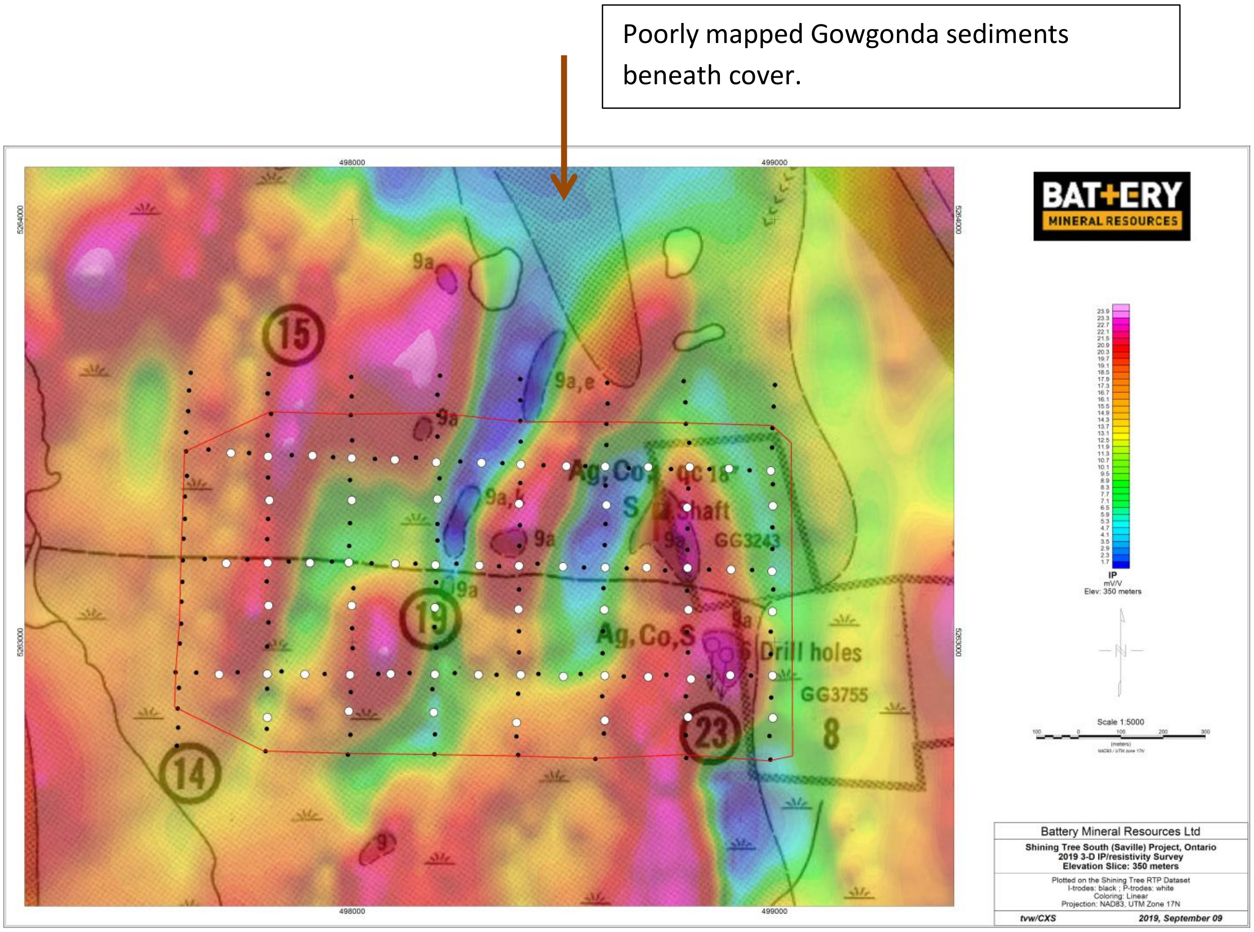


Figure 6 – The Shining Tree South 3-D IP/resistivity grid plotted on the RTP magnetic image for the area. The magnetic highs (red to pink colors) are interpreted to be Nipissing diabase. The lows, blues and purples may be related to the edges of the Nipissing diabase, less magnetic Gowgonda sediments, alteration or a combination of the above.

Figure 6 shows the IP/resistivity array plotted on top of the faded RTP image. Note mineralization correlates with the magnetic highs which are interpreted to be Nipissing diabase units.

Figure 7 is the same as Figure 6 but plotted on top of the RTP Tilt Derivative image. Note the mineralization – magnetic response correlation. Also two structures show up quite well in this image (black dashed lines). An E-W structure which is mapped in the government geology and is shown here as a black dashed curve. And a SW-NE striking black dashed line interpreted from the Tilt Derivative data set. Both of these structures are considered targets where they intercept Nipissing diabase units. Soil geochemistry would be useful to run along the strike length of these structures to provide exploration focus.

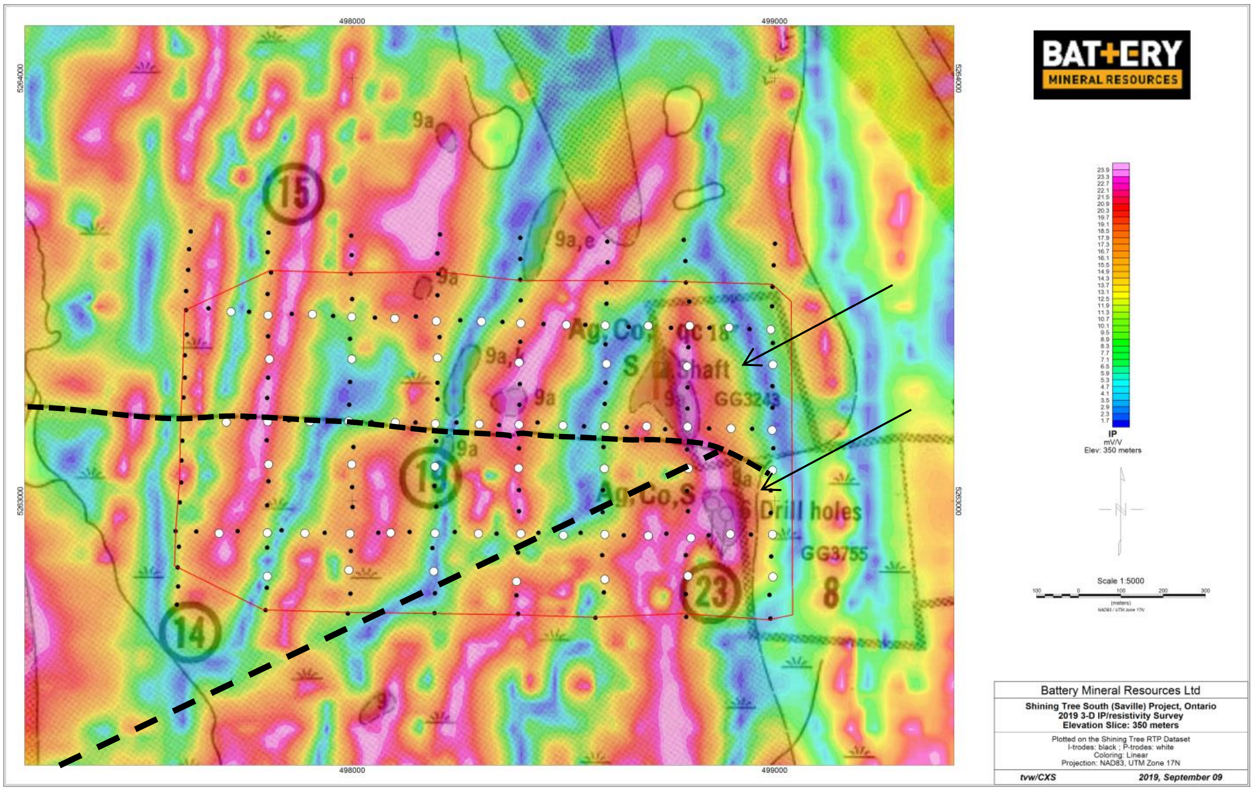


Figure 7 – The Shining Tree South 3-D IP/resistivity grid plotted on the Tilt Derivative of the RTP magnetic field. This filter product sharpens up the magnetic highs and lows and normalizes the anomaly amplitudes (i.e. the varying amplitude information seen in Figure 6 is missing). Note the Ag/Co occurrences all occur within the magnetic Nipissing units. Note the two structures mapped as black dashed lines. The northern E-W structure is plotted on the government geologic map. The southern SW-NE structure is identified by the helicopter magnetic data set. The N-S to NNE trending highs and lows are interpreted to be controlled by structures as well.

Figure 8 shows the 350 meter elevation slice from the 3-D resistivity model plotted on geology. This is the shallowest resistivity elevation slice which covers the entire survey block. The resistivity data is faded to show the geology beneath it. Note the correlation between the Nipissing outcrop, known mineralization and zones of high resistivity.

Figure 9 shows the 350 meter elevation slice resistivity contours plotted on top of the Tilt Derivative image. Note the correlation between high resistivity and magnetic highs. They are mapping the same thing, Nipissing diabase. The Tilt Derivative is a higher resolution data set so it gives a better location of the Nipissing diabase dikes. The 3-D IP/resistivity data set is relatively low resolution due to electrode under-sampling so the correlation is not a perfect one-to-one. However it is close enough to establish that the Nipissing diabase is both highly magnetic and highly resistive.

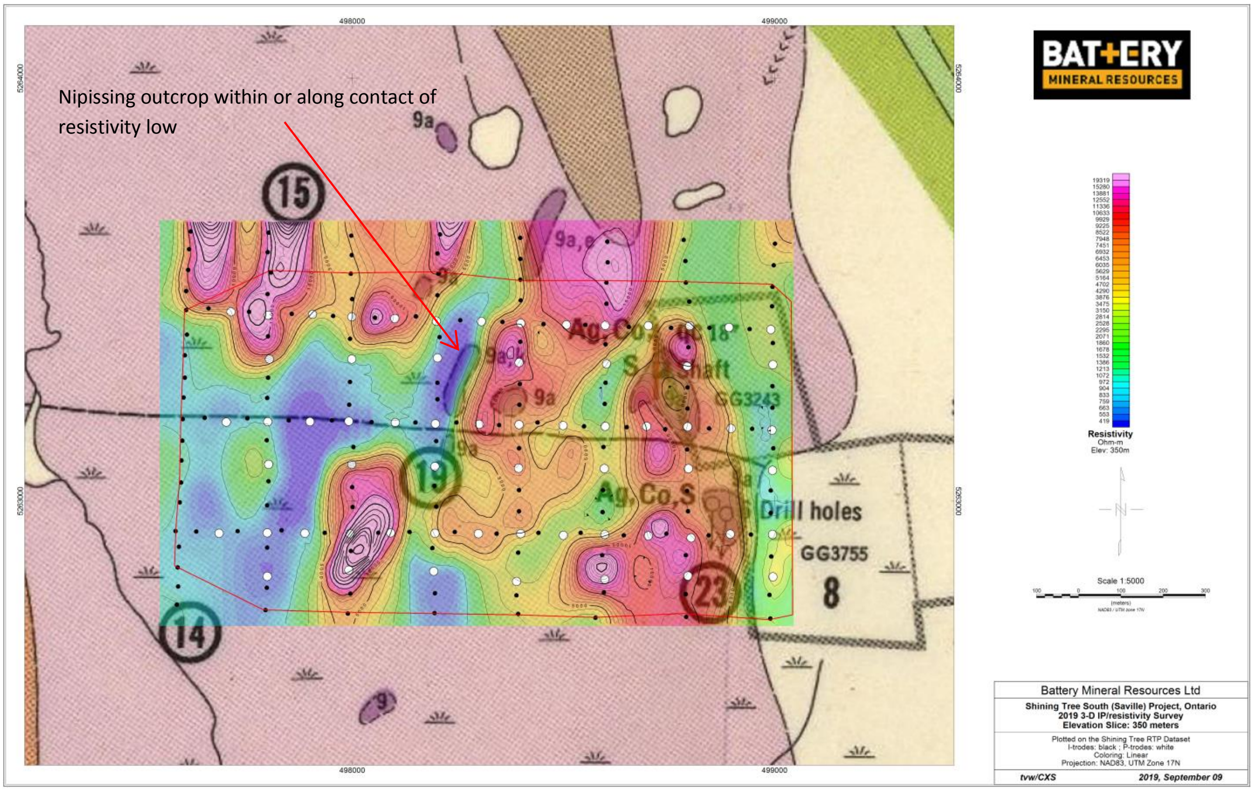


Figure 8 – The 350 meter elevation slice from the 3-D resistivity model plotted on geology. The resistivity highs are interpreted to be caused by Nipissing diabase dikes and sills. Note that the outcropping Nipissing units are associated with resistivity highs. The red arrow indicates an exception where outcropping Nipissing rocks occur within a resistivity (and magnetic) low. The location of the geologic mapping may be the issue here. The resistivity contours from this elevation slice are plotted on the Tilt Derivative of the RTP data set in Figure 9.

Figure 10 shows the 350 meter IP elevation slice faded and plotted on geology. Note the correlation between the IP response and mineralization at the eastern area of the survey block. Figure 11 shows the same image with contours plotted on the IP image.

Figure 12 shows these IP contours plotted on the RTP image and Figure 13 the IP contours on the Tilt Derivative image. The interesting thing here is that the IP data shows that the high sulfide response correlates directly with the Nipissing diabase dikes and sills. Exploration targets in the Shining Tree South area are high sulfide zones in structurally complex areas having Nipissing diabase intrusive character. These targets are discussed below.

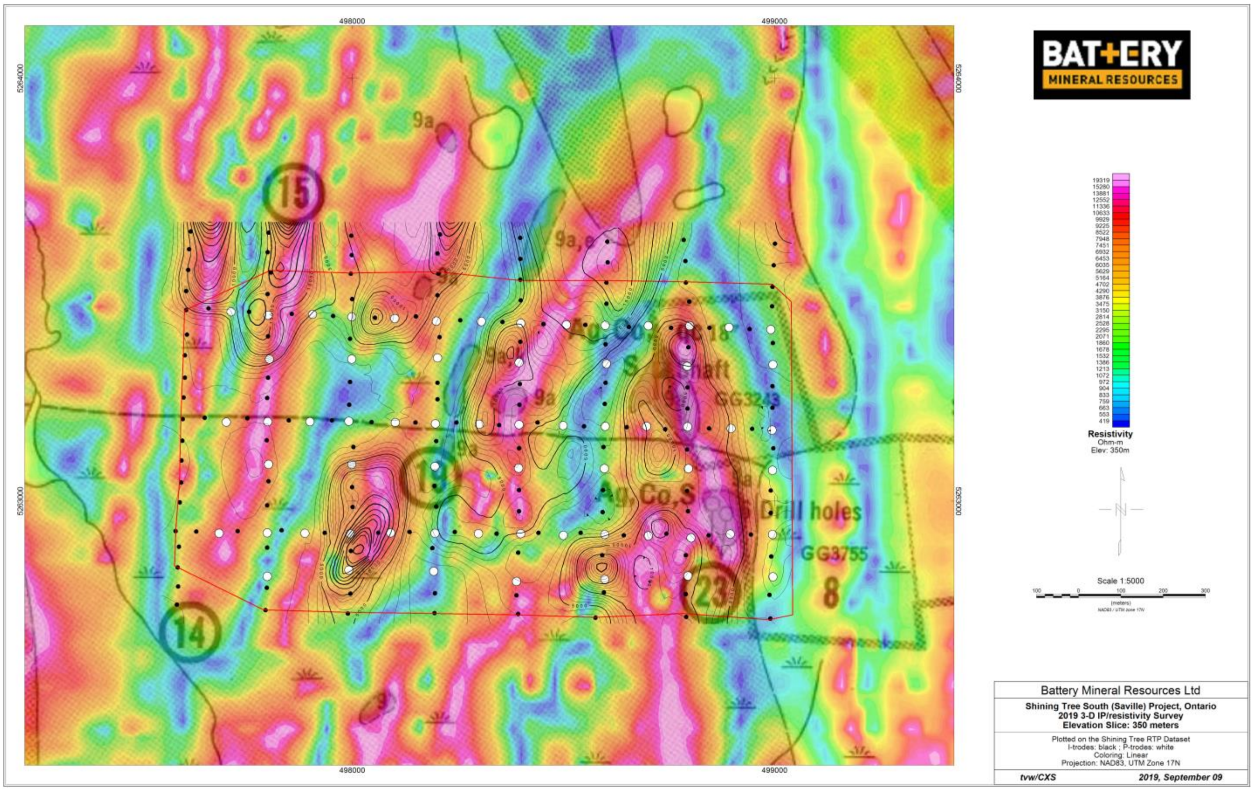


Figure 9 – The resistivity contours from Figure 8 plotted on top of the magnetic Tilt Derivative of the RTP. Note the close correlation between the magnetic highs and the resistivity highs. Both interpreted as Nipissing Diabase. The magnetic response is better sampled whereas the resistivity response is somewhat under-sample due to the course nature if the 3-D grid.

Figure 15 and 16 show deeper IP and resistivity elevation slices at 200 meters and 50 meters elevation respectively. In general the correlation between IP response (sulfides), high resistivity zones, and Nipissing intrusives continues to depth. The exact location of these anomalies at depth is questionable and prior to drill testing, a minimum of three (3) pole-dipole IP/resistivity lines with a-spacing's of 50 meters, should be run to improve the location resolution of these deeper anomalies.

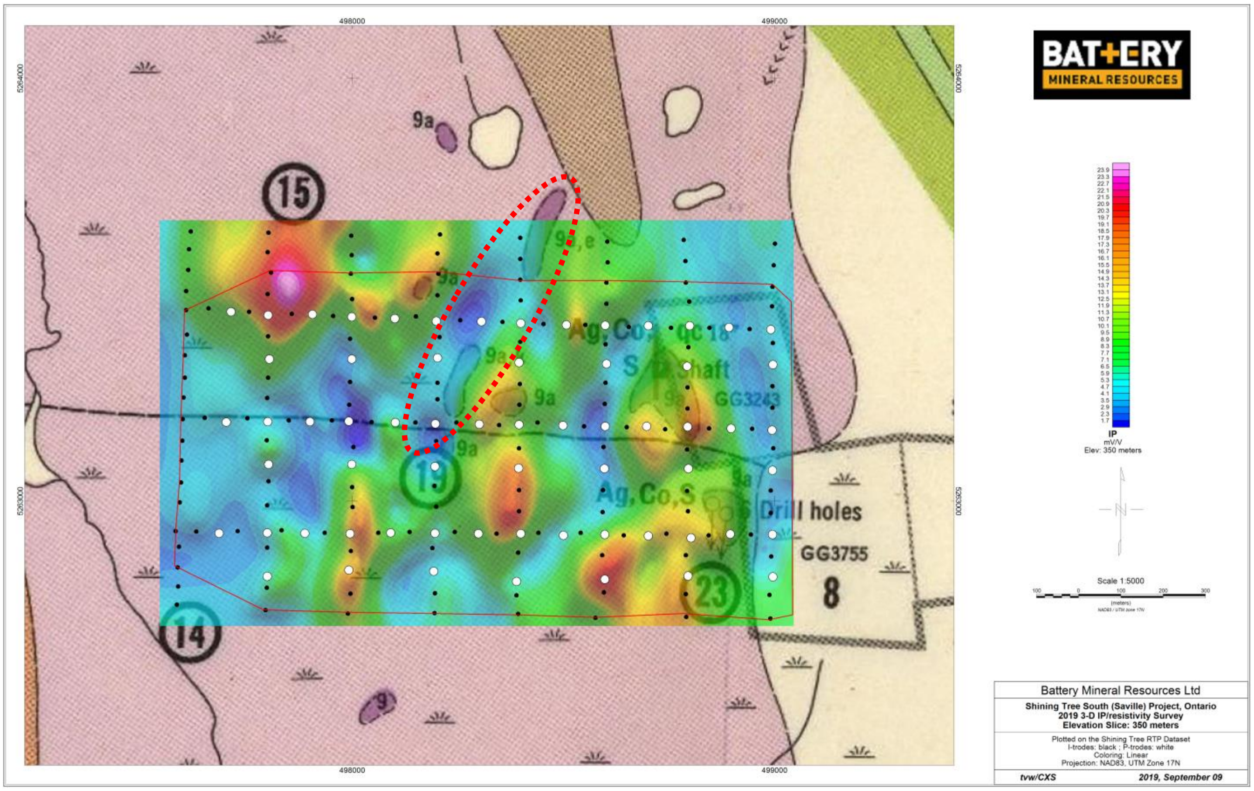


Figure 10 – The 350 meter IP elevation slice faded and plotted on government geology. In general the IP response (sulfides) correlates well with Nipissing diabase and cobalt mineralization occurrences. There are two supposed Nipissing intrusive outcrops mapped within an IP/resistivity/magnetic low that need explanation (red dashed ellipse). It is possible this low is related to Gowgonda sediments but field checking will be required to explain the location and lithology of the outcrop.

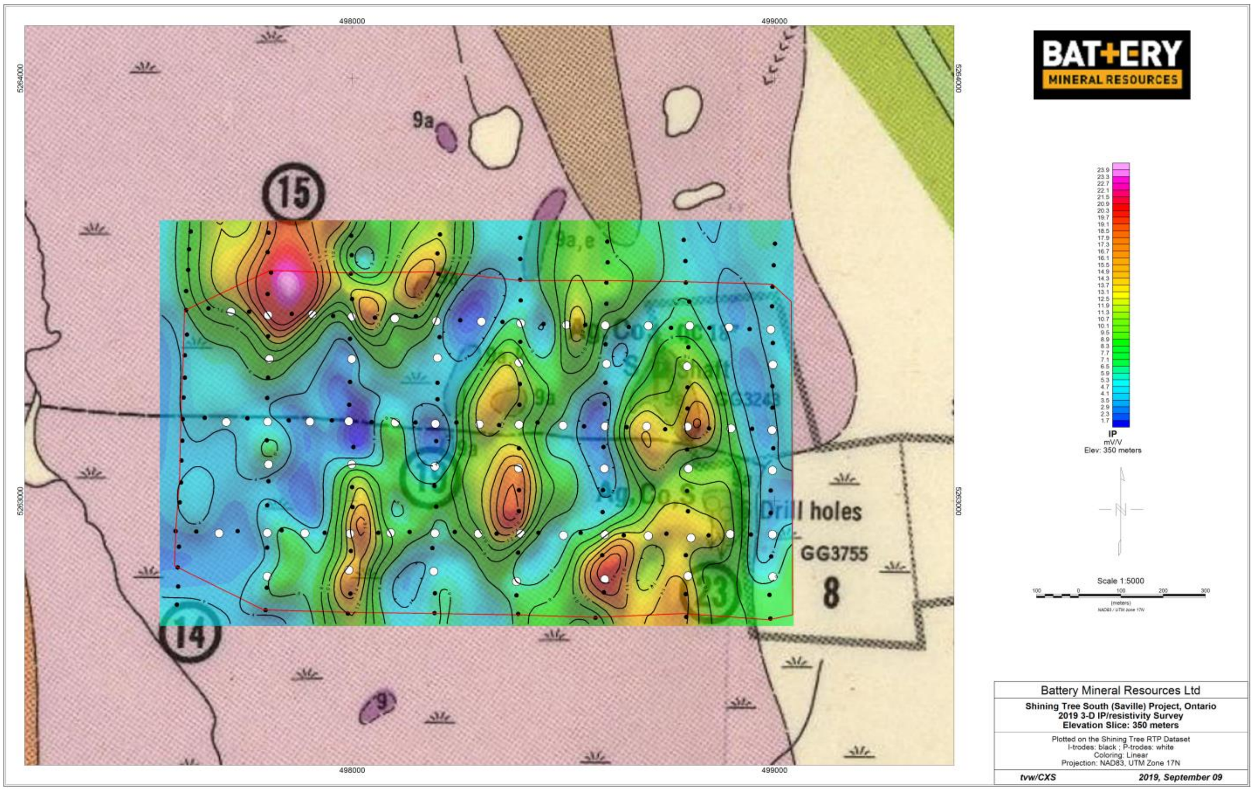


Figure 11 – The same image as Figure 10 except IP contours are included in the plot. These contours will then be transferred to images below to show the relationship between IP response, magnetic response and resistivity response at 350 meters elevation.

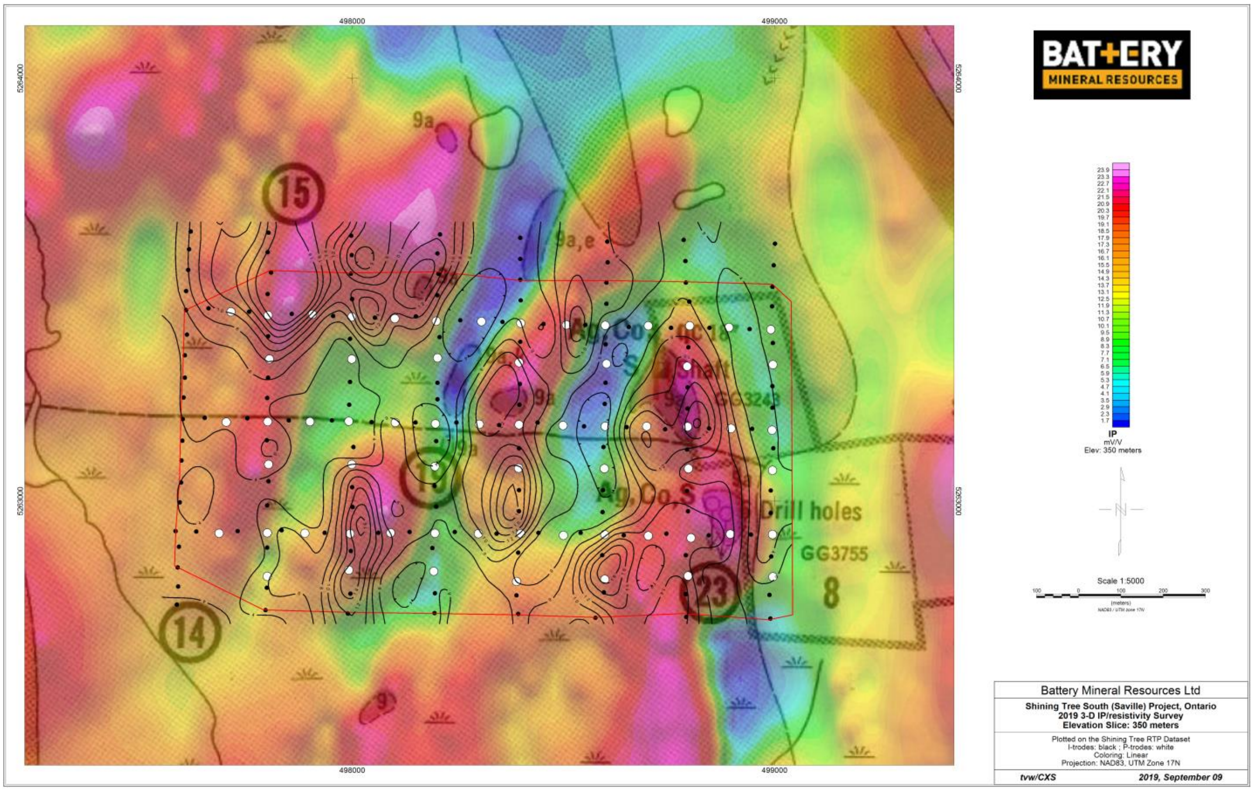


Figure 12 – The IP contours plotted on the RTP magnetic intensity image. The zones of anomalous IP response that are coincident with the Nipissing magnetic response are considered exploration targets in this report.

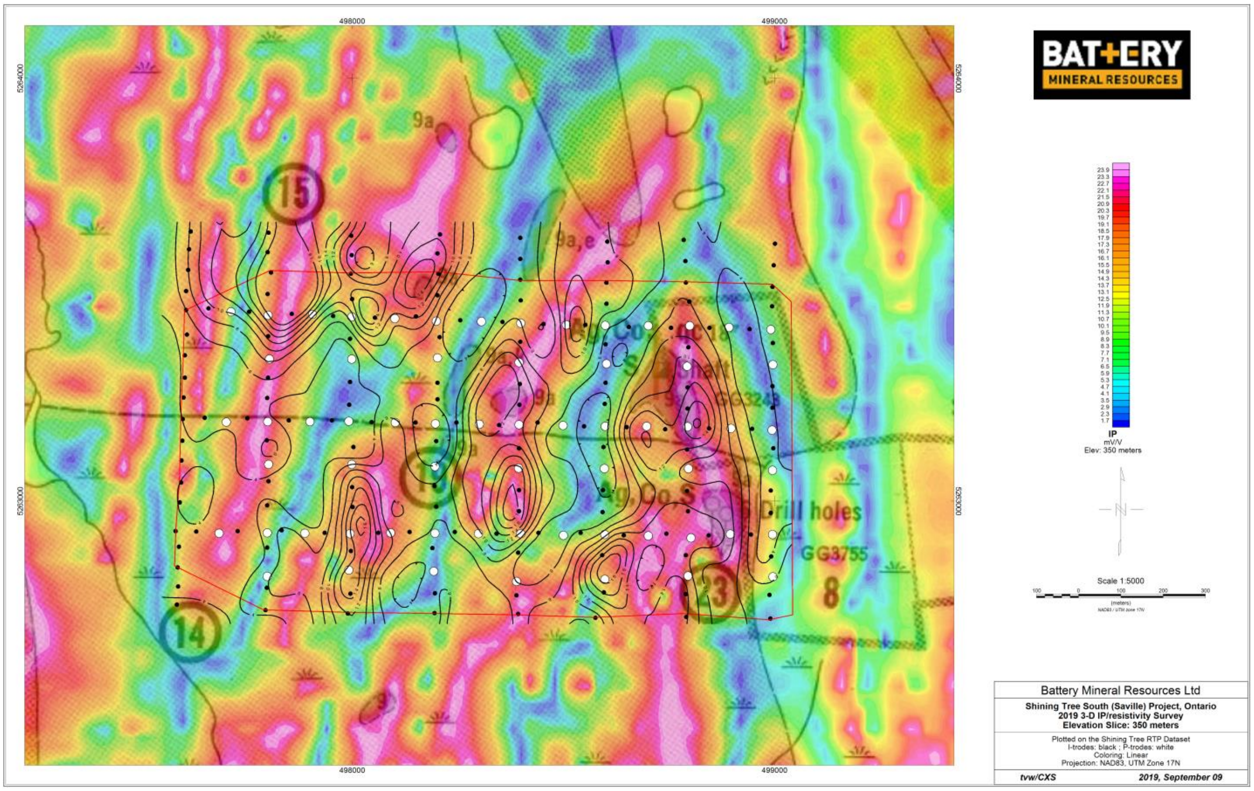


Figure 13 – The IP contours plotted on the Tilt Derivative of the RTP magnetic intensity image. In a similar fashion to Figure 12 the zones of anomalous IP response that are coincident with the Nipissing magnetic response are considered exploration targets in this report.

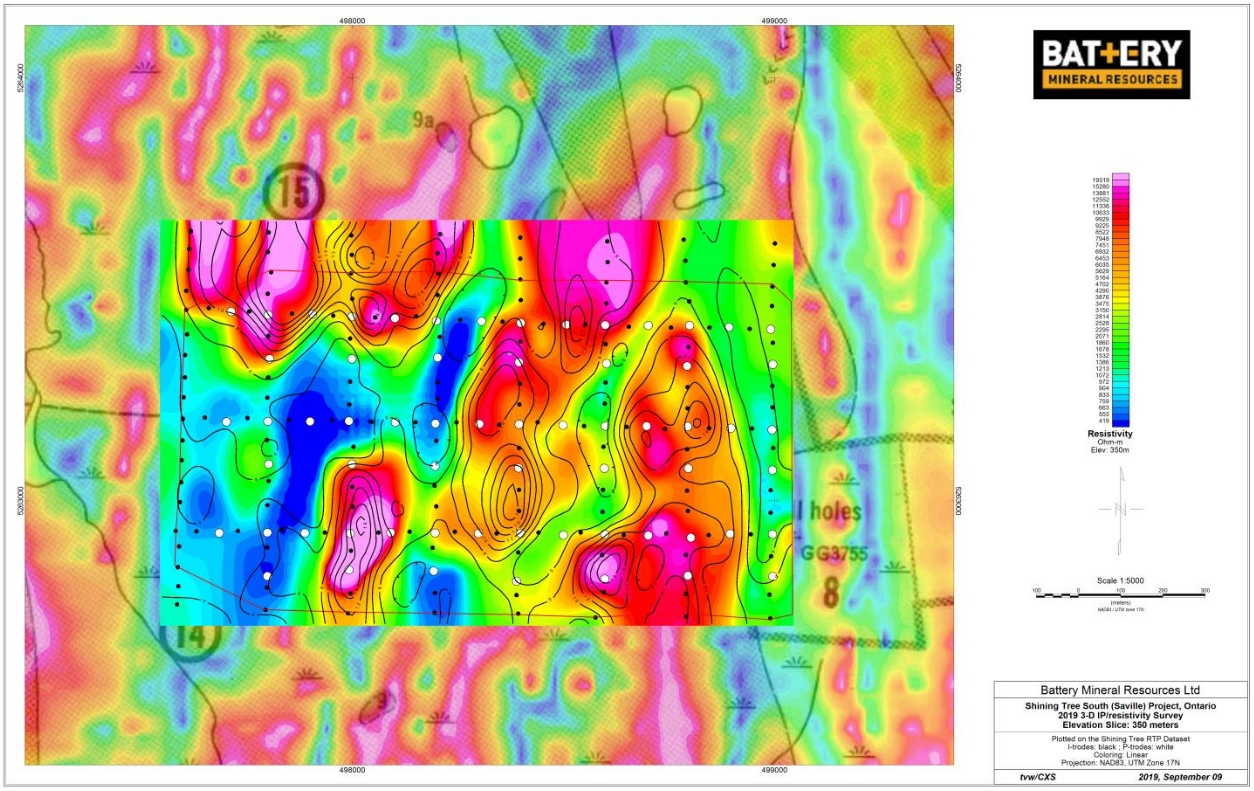


Figure 14 – The 350 meter IP elevation slice contours plotted on the 350 meter resistivity slice. This shows the relationship of IP response, sulfides, to the high resistivity zones interpreted to be mapping Nipissing diabase intrusives.

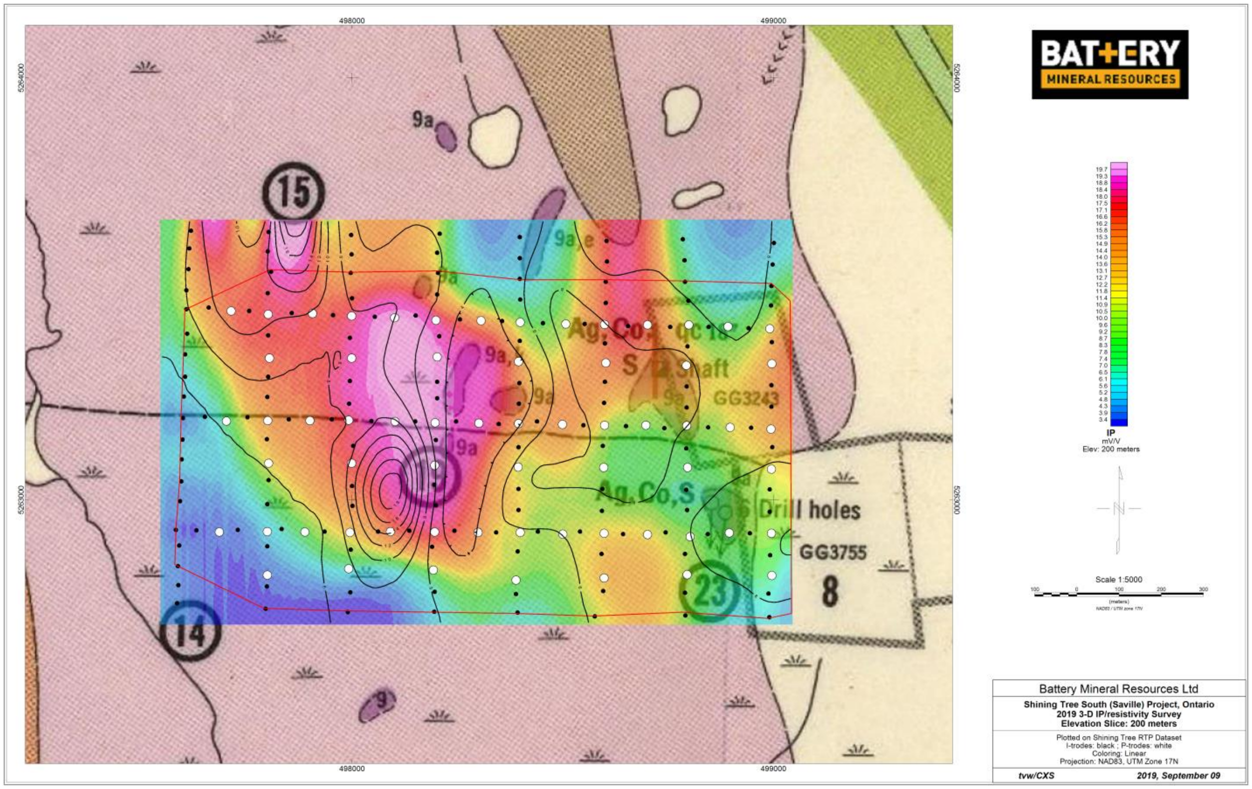


Figure 15 – The 200 meter resistivity elevation slice showing IP contours (sulfide response) plotted on resistivity and geology. Note the deeper high resistivity zone (colored pink) has a moderate to low amplitude IP response (contours) throughout the Shining Tree South area. Prior to drill testing this deeper IP and resistivity response it is recommended that three lines of pole-dipole IP/resistivity with appropriate a-spacing (a=50m) be run to better define the anomaly location.

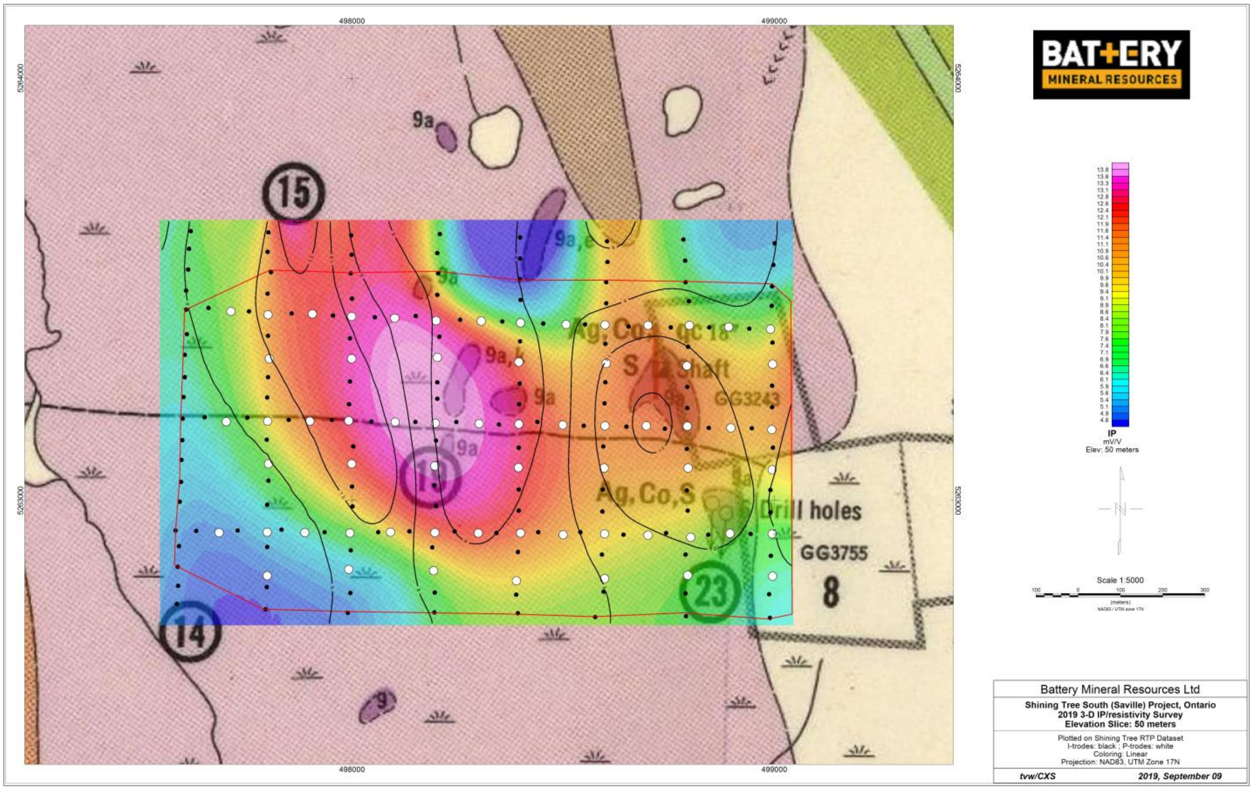


Figure 16 – The 50 meter (deepest) elevation slice showing IP contours (sulfide response) plotted on resistivity and geology. Note the deeper high resistivity zone (colored pink) has a weaker amplitude IP response (contours) throughout the Shining Tree South area. Prior to drill testing this deeper IP and resistivity response it is recommended that three lines of pole-dipole IP/resistivity with appropriate a-spacing (a=50m) be run to better define the anomaly location.

Targets

Fourteen anomalous IP features have been identified as targets in the Shining Tree South prospect area. They are shown in Figures 17 through 20. Their priority is based on their IP amplitude and the structural complexity of their setting. Five are classified as high priority targets. They are IP-1, IP-3, IP-4, IP-5 and IP-11 and are identified in the figures by their heavy red outlines. Four are classified as moderate priority targets. They are IP-2, IP-6, IP-8 and IP-13 and are identified by their green outlines. Five are classified as low priority targets. They are IP-7, IP-9, IP-10, IP-12 and IP-14 and are identified by their thin blue outlines.

The location of the anomalies in NAD83,UTM Zone 17N coordinates are given in Table I.

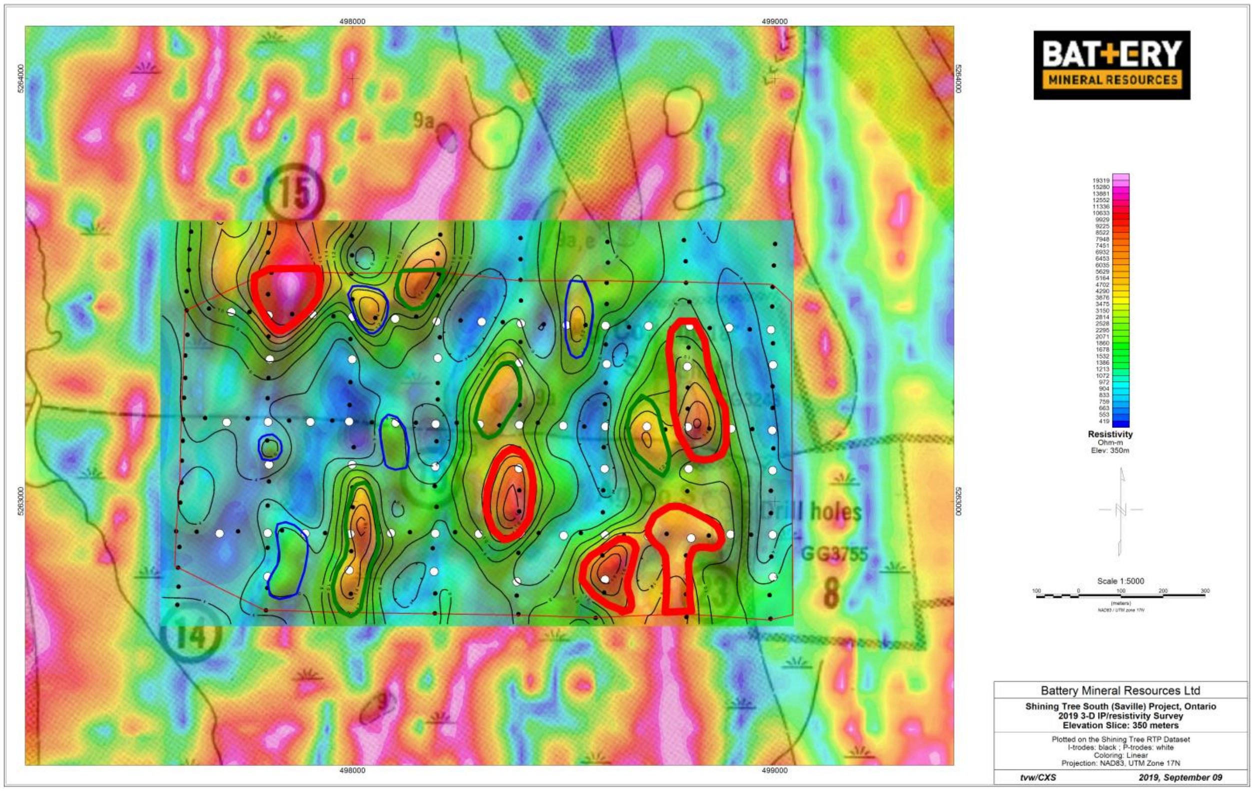


Figure 17 – Anomalous IP targets identified in the 350 meter elevation slice from the 3-D model. Category 1 targets (red) are the highest priority targets because of their amplitude and structural setting. Category 2 targets (green) are lower priority and Category 3 targets (blue) are the lowest priority. Caution should be used in this priority rating system since it is not certain that high IP response correlates to high cobalt tenor.

Figure 20 shows the targets grouped into Zones 1 and 2. Zone 1 is the highest priority zone. This is because of the occurrence of known cobalt mineralization within the zone, the higher IP response and the structural complexity of the area.

Figure 21 shows two structural features of interest. The first is an E-W striking fault zone that is identified in the government geologic mapping of the area. The second is a SW-NE striking fault zone mapped by the Tilt Derivative of the RTP magnetic data set. They intersect within Zone 1 in Figure 20. This structural intersection upgrades Zone 1 in this interpretation.

Figure 18 – A plot of the anomalous IP response targets with target number identifiers posted on top. The targets are IP-1 through IP-14 as shown in Table 1. Priority based on IP amplitude and structural setting ranges from highest priority (red) to moderate priority (green) and lowest priority (blue).

✔ LTargets:0	Target	x	y	RTP	
0.0	IP-1	498813.5585	5263186.064	55699.83257	←
1.0	IP-2	498697.5806	5263147.404	55534.10174	←
2.0	IP-3	498771.9254	5262927.344	55666.37364	←
3.0	IP-4	498602.4194	5262838.130	55572.78183	←
4.0	IP-5	498373.4375	5262983.846	55509.55832	←
5.0	IP-6	498343.6996	5263239.592	55644.79487	←
6.0	IP-7	498528.0746	5263423.967	55546.68365	←
7.0	IP-8	498019.5565	5262939.239	55644.08117	←
8.0	IP-9	497855.9980	5262855.973	55500.03588	←
9.0	IP-10	498096.8750	5263150.378	55502.73829	←
10.0	IP-11	497850.0504	5263498.311	55777.04433	←
11.0	IP-12	498034.4254	5263453.705	55525.06639	←
12.0	IP-13	498150.4032	5263519.128	55658.65997	←
13.0	IP-14	497802.4698	5263123.614	55625.71173	←

TABLE 1 – A listing of the IP targets as shown in Figure 18 above. The X and Y coordinates are in NAD83, UTM Zone 17N. The arrow colors correlate with target priority (red-high to blue-low).

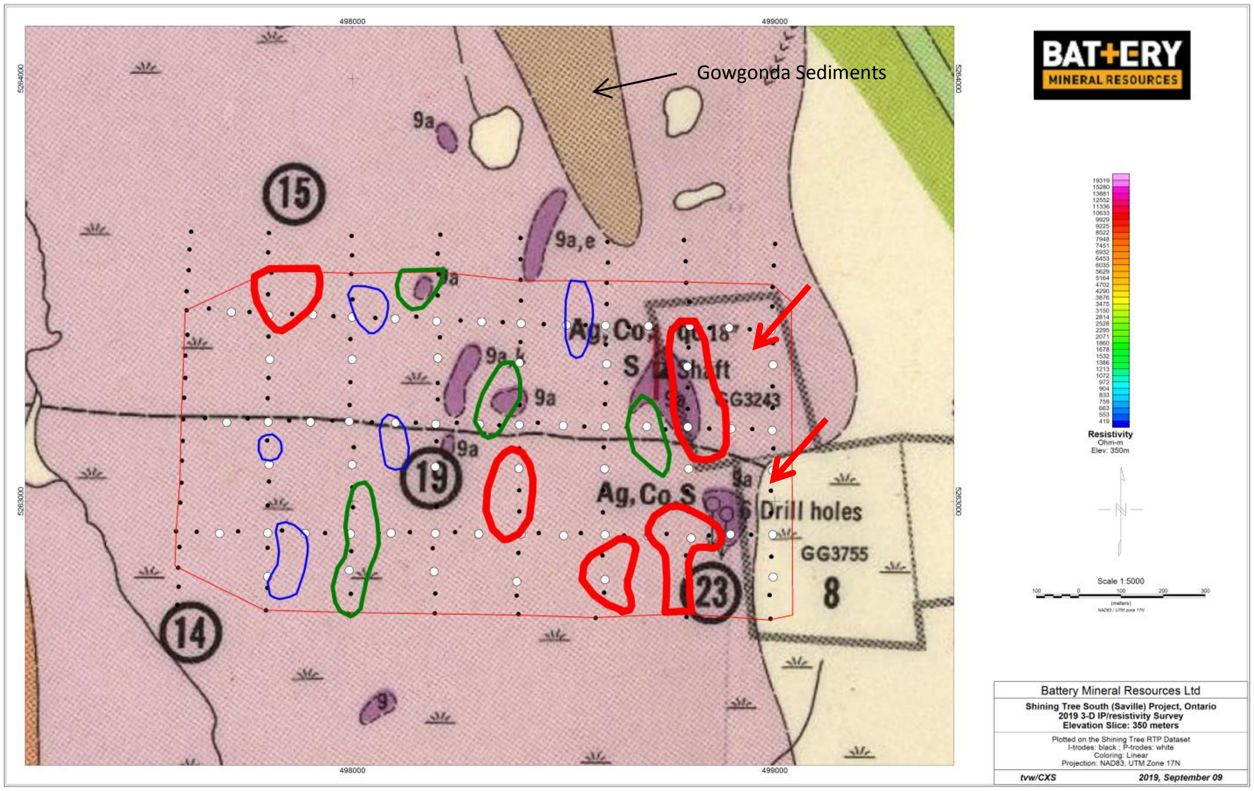


Figure 19 – The IP targets plotted on the government geology map. Note the anomalous IP responses at the eastern end of the survey block occur in the vicinity of known mineralization (red arrows).

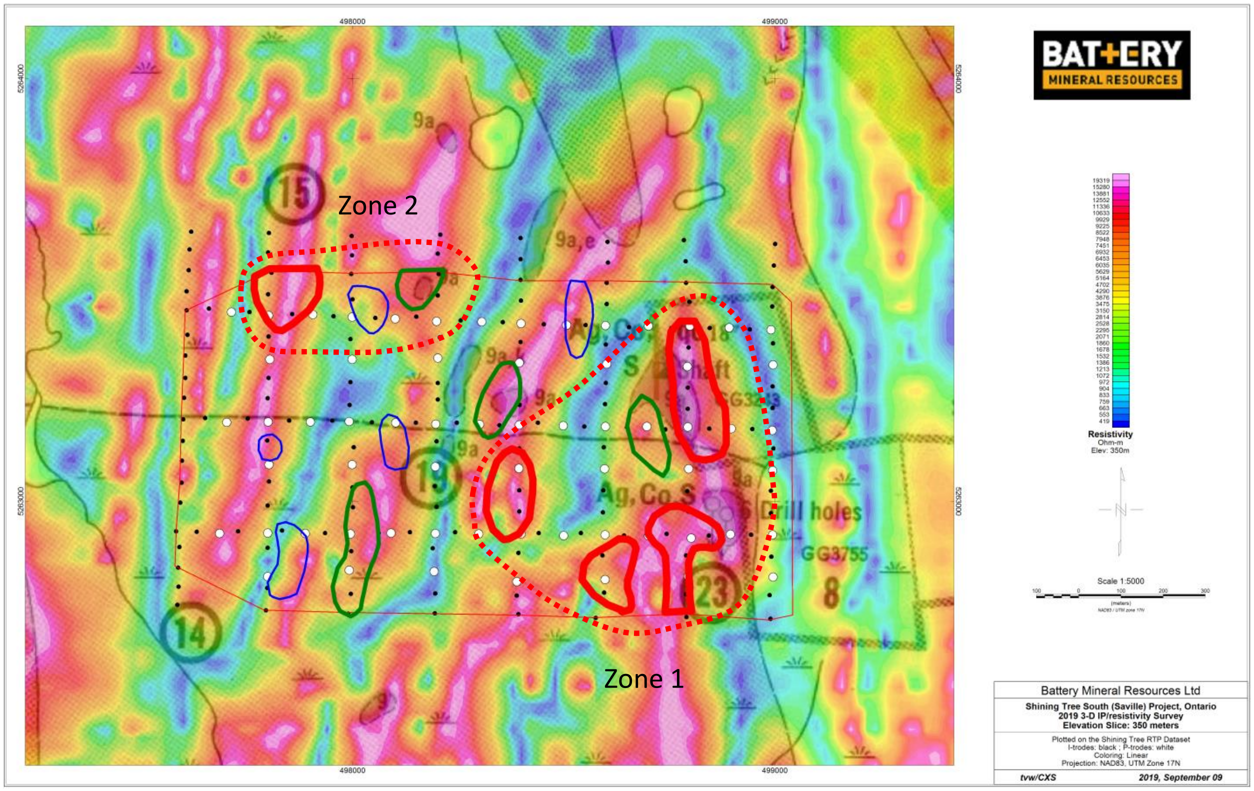


Figure 20 – The anomalous IP response targets plotted on the Tilt Derivative of the RTP magnetic image. The intersection of Nipissing Diabase dikes with anomalous IP response defines the targets proposed in this report. Zone 1 (IP-1 through IP-5) is the highest priority target zone. Zone 2 (IP-11 through IP-13) is the next highest.

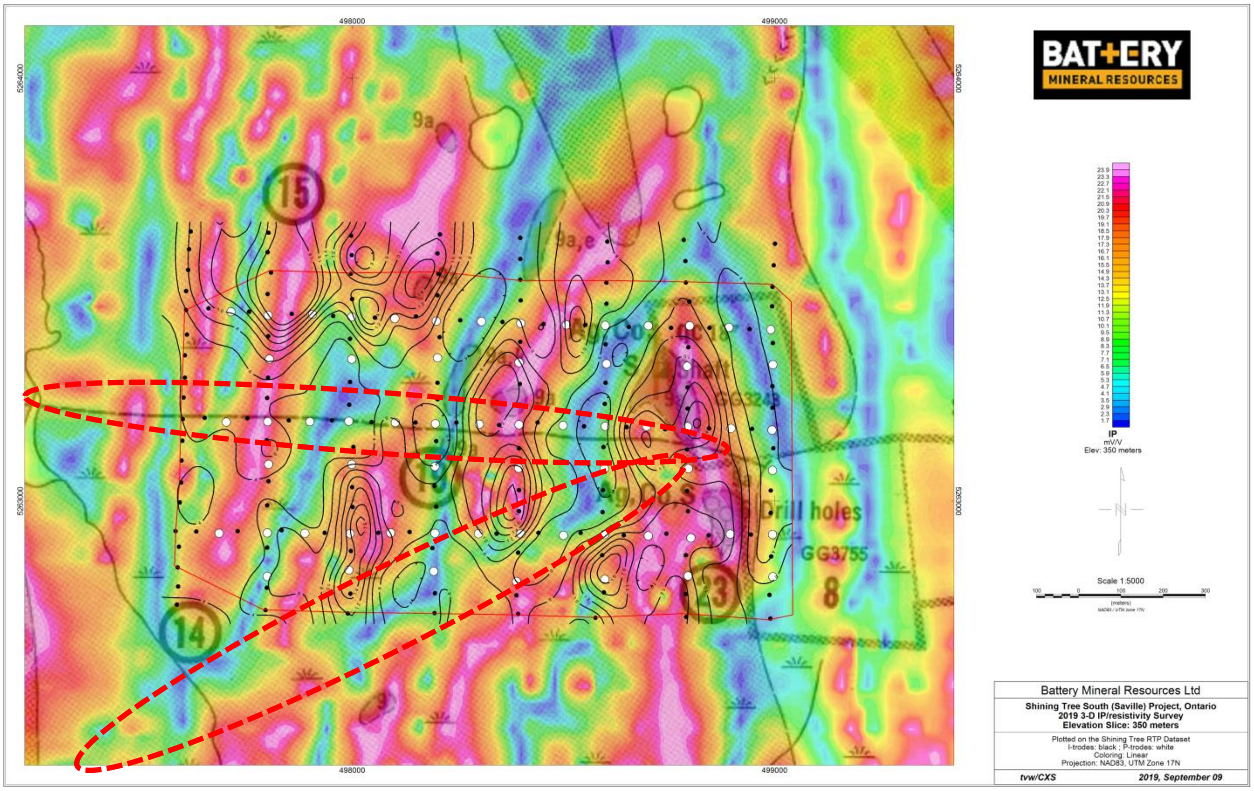


Figure 21 – Shows two structural zones considered targets. The E-W structure identified in the government geology map and the SW-NE structure identified from the Tilt Derivative of the RTP magnetic data set. Where these structures cross, cut or disrupt the magnetic Nipissing diabase trends, are proposed as cobalt mineralization targets. The presence of an anomalous IP response is a target enhancer.

Conclusions/Recommendations

The Shining Tree South area is geologically mapped as Proterozoic age Nipissing intrusive rocks with minor Gowgonda sediments at its northern boundary (see Figure 19). The helicopter magnetic survey covering the area suggests there may be more Proterozoic sediments in the area than is mapped.

The exploration targeting in the Shining Tree South area is based on the helicopter magnetic mapping of Nipissing diabase sills and dikes (magnetic highs) confirmed by the presence of high resistivity zones characteristic of unaltered intrusive rocks. The magnetic and resistivity lows in the area are interpreted to be associated with Proterozoic age Gowgonda sediments.

Where the magnetic/resistivity highs occur in structurally complex areas along with coincident IP (sulfide) responses are interpreted to be exploration targets.

There are five high priority exploration targets. Four moderate priority exploration targets. And five low priority exploration targets identified from the shallow 350 meter elevation slice map at Shining Tree South. Two structural zones, the E-W and the SW-NE faults are also exploration targets.

The deeper resistivity and IP features shown in Figures 15 and 16 are interpreted to be associated with the roots of the Nipissing intrusives in this area.

Prior to drill testing the deeper features a series of three (3) 2-D pole dipole lines should be run over them to better resolve their location.

Geochemistry should be utilized to prioritize the cobalt potential of the IP targets and also along the structural trends (E-W and SW-NE) identified in this report.

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BATTERY MINERAL RESOURCES

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