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CANADIAN EXPLORATION SERVICES LTD

TIGER GOLD EXPLORATION CORPORATION

**Q2568 – Iris Project
3D Distributed IP & Magnetic Surveys**

**C Jason Ploeger, P.Geo.
Melanie Postman, B.Sc.**

November 22, 2018

Tiger Gold Exploration Corporation

Abstract

CXS was contracted to perform a 3D Distributed IP survey and a detailed walking magnetometer survey over the Iris Project. The survey was designed to perform a reconnaissance of the potential mineralization within the underlying geology. To accomplish this, a 3D Distributed IP survey covering a footprint of 2.26 km² was performed over the property.

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1. SUMMARY

1.1 PROJECT NAME

This project is known as the **Iris Project**.

1.2 CLIENT

TIGER GOLD EXPLORATION CORPORATION,

103 Government Road.
Kirkland Lake, Ontario
P2N 1A9

1.3 OVERVIEW

During the fall of 2018, CXS performed a 3D Distributed IP survey and a walking magnetometer survey over the Iris Project.

A length of 15.35 kilometres was covered with injected current from this 3D Distributed Induced Polarization survey over the Iris Project between October 31, 2018 to November 9, 2018. This consisted of 243 injection locations that spanned a footprint of 2.26km² and was collected at a 25 to 50m current injection interval. A total of 8336 clean IP data points was collected over 7 acquisition days with a maximum depth inverted up to 600 metres.

A total of 19.025-line kilometres of magnetometer samples was read over the Iris Project between November 16th, 2018 to November 19th, 2018. This consisted of 35146 magnetometer samples taken at a 1 second sample interval.

1.4 OBJECTIVE

The 3D distributed IP survey was designed to test the extent of the known mineralization and to perform a reconnaissance of the potential mineralization within the underlying geology.

1.5 SURVEYS & PHYSICAL ACTIVITIES UNDERTAKEN

Survey/Physical Activity	Dates	Total Days in Field	Total Line Kilometres
Line Cutting	October 15, 2018 – October 23, 2018	8	21.35
3D Distributed IP	October 31, 2018 – November 9, 2018	10	15.35
Magnetic Survey	November 16, 2018 – November 19, 2018	4	19.025

Table 1: Survey & Physical Activity Details Undertaken

1.6 SUMMARY OF RESULTS, CONCLUSIONS & RECOMMENDATIONS

The 3D IP and magnetic surveys highlighted the extents of the porphyry plug. The IP survey indicated an orthogonal chargeability trend which may be important to the gold mineralization. This trend would not have been seen or recognized by conventional 2D IP surveys.

The survey also indicated the presence of a strong chargeable zone in the northern extent of the survey area. This area also correlated with a strong drop in resistivity and appears to crosscut the geologic fabric of the area. This anomaly is an ideal target for further exploration.

1.7 CO-ORDINATE SYSTEM

Projection: UTM zone 17N

Datum: NAD83

UTM Coordinates near center of grid: 590616 Easting and 5367705 Northing

2. SURVEY LOCATION DETAILS

2.1 LOCATION

The Iris Project is located approximately 50 km northeast of Kirkland Lake, Ontario.

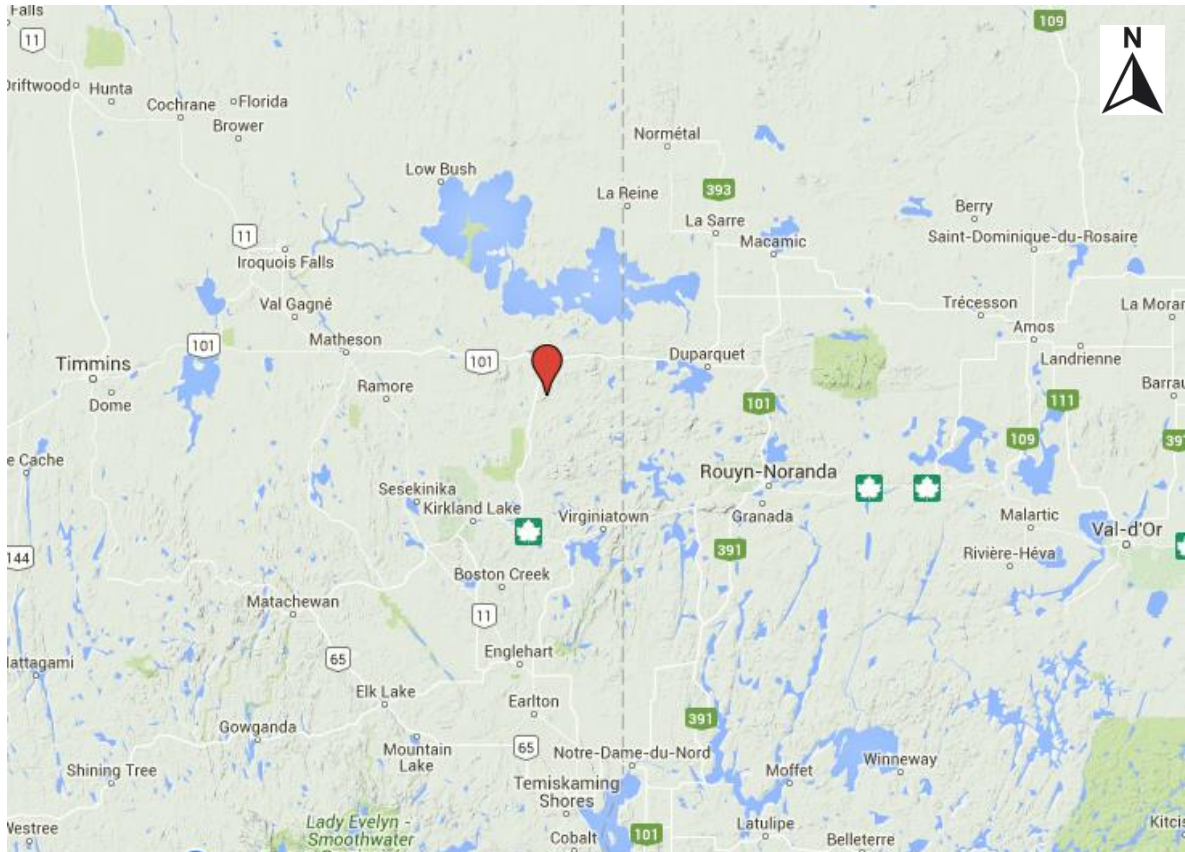


Figure 1: Location of the Iris Property (Map data ©2018 Google)

2.2 ACCESS

Access to this area was via highway 672 to approximately 40 kilometres north of its intersection with highway 66. From here an unnamed road extends east to the historic Iris Adit and a series of forestry roads. This unnamed road was travelled for 2.0 km to the survey area.

2.3 PATENTED MINING CLAIMS

The survey area covers a portion of mining patents located in Harker Township, within the Larder Lake Mining Division. The details of these patents are in the table below.

Cell Number	Cell Type	Ownership of Land	Township
PAT-2854	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2853	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2850	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2852	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2848	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2839	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2840	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2843	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2842	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2849	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2844	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2851	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2841	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2847	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2845	Patent	The Alberta Gold Exploration Corporation	Harker
PAT-2846	Patent	The Alberta Gold Exploration Corporation	Harker

Table 2: Patented Mining Information

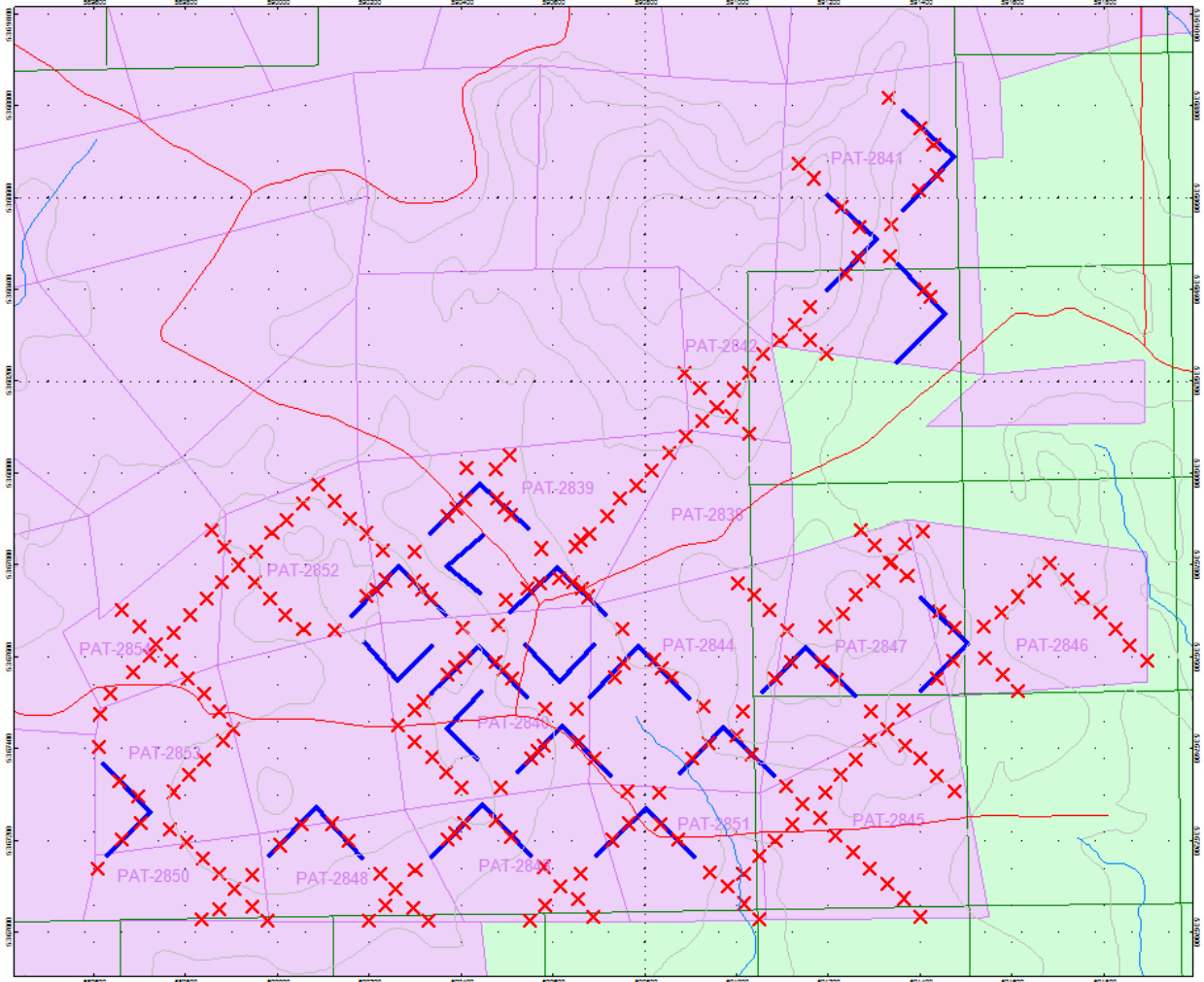


Figure 2: Operational Claim Map with IP Survey Layout

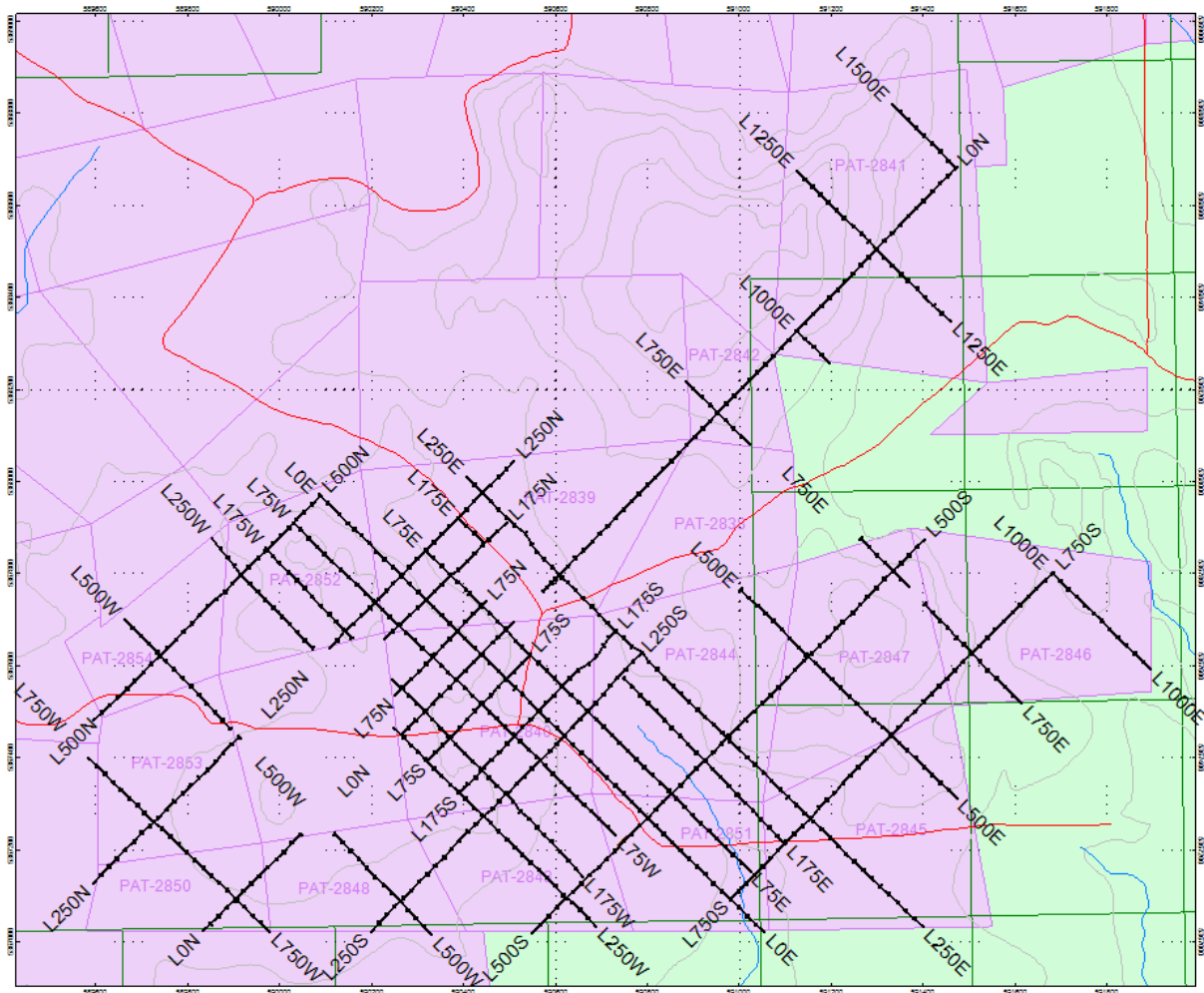


Figure 3: Operational Claim Map with Mag Grid Lines

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 (MNMD & OGSEarth, 2018).

- 1982: Canadian Gold and Metals Inc (File 32D05NW0094):**
Ground Geophysics – Elliott and Harker Township
 Members of the Canadian Gold and Metals Geophysical conducted VLF and magnetic surveys on the Perron Property. Three conductors are detected with good intensities. A fourth conductor was detected with very good intensity but was not discussed in detail due to lack of documentation.

- **1982: Canadian Nickel Co Ltd (File 32D12SE0038):**
Airborne Geophysics – Elliott and Harker Township
Canadian Nickel Company Limited conducted airborne electromagnetic (EM) and magnetic surveys. Three weak to medium responses that may be due to sulfide or graphite concentrations or structural contribution were detected with the EM system. One southwest-northeast-striking trend indicating relatively undisturbed stratabound volcanic sequences was detected with the magnetic system. There were no indications of any major folding or other structural features.
- **1983: J E Perron (File 32D05NW0087):**
Geochemical & Gradiometric – Elliott and Harker Township
MPH Consulting Limited conducted geochemical and gradiometric survey on the Perron Property. No significant results were obtained through geochemical humus sampling. However, 3 concise anomalies were delineated through the gradiometric survey. It was interpreted that these anomalies reflect the contacts between mafic and felsic flows in the area.
- **1983: J E Perron (File 32D05NW0092):**
Geological Mapping – Elliott and Harker Township
A geological survey conducted by H. E. Neal & Associates Ltd. concluded that the local geology is similar to the Iris Gold Mines property located eastward. Reopening and blasting of trenches, as well as outcrop sampling were recommended for future work.
- **1985: A H Perron (File 32D05NW0399):**
Geological Mapping – Harker Township
Mary Greer, along with students from Sir Sandford Fleming College completed a geological survey where no significant results were obtained. Geophysical surveying and stripping of the target area are suggested for further studies.
- **1985: Perrex Resources Inc (File 32D12SW0066):**
Airborne Geophysics – Elliott Township
H. Ferderber Geophysics conducted airborne magnetic and VLF-EM surveys. Northeast-trending magnetic anomalies were interpreted as contributions from magnetite contents. Majority of the observed VLF-EM conductor axes appeared to reflect bedrock features, with 3 conductor axis systems interpreted as contributions from shear zones.
- **1987: Alberta Gold Exploration Corporation (File 32D05NW0383):**
Diamond Drilling – Harker Township
571' of core was obtained through diamond drilling.

- **1988: 595505 Ontario Ltd (File 32D05NW0070):**
Diamond Drilling – Elliott Township
10 diamond drill holes were drilled, where a total of 5981' of core sample was obtained.
- **1988: Alberta Gold Exploration Corporation (File 32D05NW9406):**
Diamond Drilling – Harker Township
DRH Geological Consulting performed an IP survey, mapping, stripping, trenching, diamond drilling, sinking of a 500 feet ramp and assaying. 7 core samples collectively provided 4988 feet of sample. The IP survey showed 7 additional anomalies that were not previously tested. Gold mineralization was discovered in 3 main geological environments, where 4 zones were highlighted following findings from the core samples. Further drilling was recommended to delineate anomalies observed through the IP survey.
- **1991/92: A H Perron, Alberta Gold Exploration Corporation, Perrex Resources Inc (File 32D05NW0121):**
Ground Geophysics & Geology – Elliott, Harker, Holloway Townships
Ground VLF-EM and magnetic surveys were conducted by Mary Mahood-Greer and Wendy Weller. Eight conductors were detected with the VLF-EM method, where three EM responses corresponded to high magnetic anomalies. The magnetic survey revealed very strong targets. However, the general trend was difficult to determine due to wide line spacings.
- **1992: Alberta Gold Exploration Corporation (File 32D05NW0052):**
Ground Geophysics & Geology – Elliott, Harker Townships
Ground VLF-EM and magnetic surveys were conducted by Mary Mahood-Greer and Wendy Weller. Multiple EM responses were observed and interpreted as structural features, lithological boundaries or conductive overburden. Very strong targets were detected through the magnetic survey. However, the general trends of these targets were difficult to decipher due to large line spacings.
- **1997: Alberta Gold Exploration Corporation (File 32D05NW0175):**
Diamond Drilling and Logging – Harker Township
Gwen Resources performed 2.7 km line cutting, whereas Mr. Larry Salo and Mr. Harold Tracanelli, respectively, conducted diamond drilling and logging. 3 drill holes produced collectively 2418 feet of core for this drilling project.
- **2000: Alex H Perron (File 32D05NW2074):**
Ground Geophysics and Trenching – Elliott, Harker Townships
28.61 km line cutting, VLF-EM and magnetic surveys were performed on the Iris Property. North to northwesterly trending faults were detected with the magnetometer. Six contact were observed with the EM system.

- **2000: Alex H Perron (File 32D05NW2076):**
Ground Geophysics and Trenching – Elliott, Harker Townships
M. Fecteau performed 6.45 km line cutting and chaining on the Iris Property. Miss Wendy K. Weller and Mrs. Jan Hennessy conducted magnetic and VLF-EM surveys. In the eastern section of this new grid, an interruption was observed in the magnetic trend and two distinctive anomalies were observed in the EM survey.

- **2000: Alex H Perron (File 32D05NW2078):**
Ground Geophysics and Trenching – Elliott, Harker Townships
M. Fecteau performed 35.16 km line cutting and chaining on the Iris Property. Miss Wendy K. Weller and Steve Demers conducted magnetic and VLF-EM surveys. A large magnetic anomaly interrupting a low magnetic band on the east side of the property was inferred to be structural features due to rhyolitic flow and interflow horizons. Three distinctive contacts were observed through data obtained in the EM survey. Drilling and IP survey are suggested for further understanding of local geological features.

- **2000: Alex H Perron (File 32D05NW2092):**
Ground Geophysics and Trenching – Elliott, Harker Townships
M. Fecteau performed 19.08 km line cutting and chaining on the Iris Property. Miss Wendy K. Weller and Mrs. Jan Hennessy conducted magnetic and VLF-EM surveys. In the eastern section of this property, no significant new data was observed with the magnetic method. Three distinctive anomalies representing contacts between lithologies were observed with the EM method.

- **2000: Alex H Perron (File 32D05NW2093):**
Ground Geophysics and Trenching – Elliott, Harker Townships
M. Fecteau performed 8.78 km line cutting and chaining on the Iris Property. Miss Wendy K. Weller and Mrs. Jan Hennessy conducted magnetic and VLF-EM surveys. In the eastern section of this property, no significant results were obtained through the magnetic survey. Two distinctive anomalies were observed in the EM data, one of which was a contact located in the area enclosing a large north-south fault.

- **2000: Alex H Perron (File 32D05NW2094):**
Ground Geophysics and Trenching – Elliott, Harker Townships
M. Fecteau performed 8.6 km line cutting and chaining on the Iris Property. Miss Wendy K. Weller and Mrs. Jan Hennessy conducted magnetic and VLF-EM surveys. In the central area of this property, a contact that may represent a small south-west fault branching from the large north-south fault was observed through the EM data. Otherwise, no significant new observations were made.

- **2001: Alex H Perron (File 32D05NW2096):**
Ground Geophysics and Trenching – Elliott, Harker Townships
M. Fecteau performed 11.2 km line cutting and chaining on the Iris Property. Miss Wendy K. Weller and Mrs. Jan Hennessy conducted magnetic and VLF-EM surveys. In the north-west area of this property, two small anomalies were observed with the EM system. No significant new results were observed through the magnetic survey.
- **2001: Alex H Perron (File 32D05NW2097):**
Ground Geophysics and Trenching – Elliott Township
M. Fecteau performed 11.8 km line cutting and chaining on the Iris Property. Miss Wendy K. Weller and Mr. John E. Perron conducted magnetic and VLF-EM surveys. This survey covers the south-west area of the property. No significant new results were obtained from the magnetic survey. Three distinctive contacts were observed in the EM data.
- **2001: Alex H Perron (File 32D05NW2099):**
Geological Mapping – Elliott Township
Miss Wendy K. Weller located all geological features and compiled data obtained from the north-south grid surveyed in year 2000. Magnesium- and iron-rich tholeiite outcrops were studied in this survey. No significant geological features were noted. No mineralization was found except minor quartz stringers within the Mg-tholeiite outcrop.
- **2001: Alex H Perron (File 32D05NW2106):**
Ground Geophysics and Trenching – Elliott, Harker Townships
M. Fecteau performed 8.1 km line cutting and chaining on the Iris Property. Miss Wendy K. Weller conducted magnetic and VLF-EM surveys. This survey includes a new grid that extends the eastern section of the existing grid. No significant new results were obtained from the magnetic survey. Three distinctive anomalies that represented contacts between different lithologies and a north-south fault were observed with the EM system.
- **2001: Alex H Perron (File 32D05NW2107):**
Geological Mapping – Harker Township
Miss Wendy K. Weller located all geological features and compiled new data obtained from the north-south grid to that of year 2000. Early Precambrian Mg- and Fe-rich tholeiites were studied. Fe-rich tholeiites were more abundant in visible outcrops and showed distinct pillowing, strike and dip compared to Mg-rich tholeiites. Faults or shear zones were observed on either side of rhyolite in the south. Quartz-filled breccia and quartz veins were observed in these locations. Samples of quartz were collected for assaying.

- **2001: Alex H Perron (File 32D05NW2109):**
Ground Geophysics – Elliott, Harker Townships
M. Fecteau performed 20.53 km line cutting and chaining, whereas Miss Wendy K. Weller conducted magnetic and VLF-EM surveys on the west section of the Iris Property. No significant results were obtained through the magnetic survey. It was noted that the Kinojevis Group rocks were mainly trending east-northeast and pillow shapes indicated that stratigraphic tops are to the south. 7 distinctive contacts were observed in the EM survey. IP and gradiometric surveys were recommended.

- **2001: Alex H Perron (File 32D05NW2110):**
Ground Geophysics – Elliott, Harker Townships
M. Fecteau performed 11.25 km line cutting and chaining, whereas Miss Wendy K. Weller conducted magnetic and VLF-EM surveys on the west section of the Iris Property. No significant results were obtained through the magnetic survey. Three distinctive anomalies were observed on the east side of the new grid.

- **2001/02: Alex H Perron (File 32D05NW2111):**
Ground Geophysics & Trenching – Harker Township
M. Fecteau performed 2.43 km line cutting and chaining, whereas Miss Wendy K. Weller conducted magnetic and VLF-EM surveys on a new west grid of the Iris Property. A large magnetic interruption is observed in the north-south direction that likely reflects a large north-south fault previously discovered. 2 distinctive anomalies were observed in the east side of this new grid with the EM system.

- **2001: Alex H Perron (File 32D05NW2112):**
Ground Geophysics – Elliott, Harker Townships
M. Fecteau performed 10.4 km line cutting and chaining, whereas Miss Wendy K. Weller conducted magnetic and VLF-EM surveys on a new west grid of the Iris Property. No new significant results were obtained from the magnetic survey. 3 distinctive anomalies were observed on the east side of the new grid with the EM system.

- **2001/02: Alex H Perron (File 32D05NW2113):**
Ground Geophysics – Harker Township
M. Fecteau performed 7.64 km line cutting and chaining, whereas Miss Wendy K. Weller conducted magnetic and VLF-EM surveys for a new west grid on the Iris Property. 3 distinctive anomalies were observed on the east side of the new grid with the EM system. No new significant results were obtained through the magnetic survey.

- **2001/02: Alex H Perron (File 32D05NW2120):**
Ground Geophysics – Harker Township
M. Fecteau performed 6.24 km line cutting and chaining, whereas Miss Wendy K. Weller conducted VLF-EM survey on a new west grid of the Iris Property. No new significant results were obtained from the magnetic survey. 3 distinctive anomalies were observed on the east side of the new grid through the EM survey.
- **2004: Tiger Gold Exploration Corporation (File 32D05NW2169):**
Ground Geophysics – Elliott & Harker Townships
Steve Demers and crew performed 15.76 km line cutting and chaining due to vegetation growth, whereas Miss Wendy K. Weller conducted magnetic and VLF-EM surveys on the north/south grid. Magnetic trend was in the east to northeast direction. A magnetic interruption representing a north- to north-westerly-trending fault noted in previous surveys was also observed in this new grid. 4 distinctive EM responses were observed, 2 of which were in the same direction as the magnetic trend.
- **2004: Tiger Gold Exploration Corporation (File 32D05NW2174):**
Ground Geophysics – Elliott & Harker Townships
Steve Demers and crew performed 16.58 km line cutting and chaining, whereas Miss Wendy K. Weller conducted magnetic and VLF-EM surveys on the east section of The Iris Property. No new significant results were obtained through the magnetic survey. 3 distinctive contacts were observed in the EM survey, one of which coincides with the location where gold-bearing quartz samples were previously collected.
- **2015: Tiger Gold Exploration Corporation (File 20000014585):**
Ground Geophysics – Harker Township
A 9.4 km Beepmat survey was performed over Area 8 of the Harker Heritage Property by Bruce Lavalley from CXS Ltd. 5 anomalies were noted, 2 of which were on parallel north-south traverses and interpreted as linear features.
- **2015: Tiger Gold Exploration Corporation (File 20000014626):**
Ground Geophysics –Harker Township
Jason Ploeger of CXS limited conducted a spectrometer survey along a 9.4 km traverse in Area 8 of the Harker Heritage Property. Increased anomalies in potassium, uranium and thorium were observed in the southeasterly region. However, these were not strong anomalies.
- **2016: Tiger Gold Exploration Corporation (File 20000013807):**
Ground Geophysics –Elliott Township
Bruce Lavalley and Claudia Moraga of CXS Ltd. conducted VLF-EM survey on Area 8 of the Harker Heritage Property over a 21.85 km traverse. A series of VLF-EM low responses along a strike of 060° that may reflect a structural

feature was observed. Detailed geological mapping and geophysical surveying were recommended.

- **2016: Tiger Gold Exploration Corporation (File 20000014584):
*Ground Geophysics –Elliott Township***

Bruce Lavalley and Claudia Moraga of CXS Ltd. conducted a magnetic survey over 21.85 km of traverse in Area 8 of the Harker Heritage Property. An east-west magnetic fabric that likely reflect the volcanic layers was observed. Magnetic responses obtained suggested an intrusive system with possible alteration features. Further magnetic and IP surveys were recommended.

- **2016/17: Tiger Gold Exploration Corporation (File 20000015096):
*Geophysics –Harker Township***

Bill Bonney of CXS Ltd. performed a prospecting traverse to collect rock samples in Area 8 of the Harker Heritage Property. Jason Ploeger of CXS Ltd. cut and measured the physical properties of the collected samples. 2 out of 18 samples showed elevated magnetic susceptibility and high frequency responses which likely reflected magnetite contents.

2.5 GENERAL REGIONAL/LOCAL GEOLOGICAL SETTINGS

The Iris Gold claim group is located in the Abitibi Greenstone Belt of the Canadian Shield. This belt is composed of a sequence of meta-volcanic and metasedimentary Archean age rocks that cover an area stretching about 220 miles from Timmins, Ontario, on the west to Val D'Or, Quebec, on the east.

The claims are situated within a sequence of iron rich and magnesium rich tholeiitic basalt flows known as the Kinojevis group (Figure 2). Stratigraphically, this group is about 30,000 feet thick and it occupies the core of a large east plunging synclorium.

The Iris claim group is underlain by a sequence of tholeiitic basalt flows belonging to the Kinojevis Group. This group is composed of a sequence of iron rich and magnesium rich tholeiitic basalt flows forming a stratigraphic package about 30,000 feet thick. These rocks are overlain by younger, Blake River group calc-alkalic volcanics. Both have been folded into a large, east plunging synclorium, the northern and southern limbs of which, have been cut by the major Porcupine Destor and Kirkland Lake-Larder Lake fault zones, respectively. The Iris Property is situated about 5 miles south of the Destor Porcupine Fault zone near the Kinojevis-Blake River group.

2.6 TARGET OF INTEREST

The target of interest surrounds the historic Iris Gold showings and mine. The gold mineralization historically has been associated with sulphide mineralization related to a porphyry plug. The IP survey should be able to highlight areas of mineralization within the plug, which will lead to future exploration targets.

3. PLANNING

3.1 EXPLORATION PERMIT/PLAN

The 3D Distributed Induced Polarization and magnetometer surveys were performed over patents owned by The Alberta Gold Exploration Corporation. Since the land is patented, no plan or permits were required.

3.2 3D IP SURVEY DESIGN

Specialized IP survey design software was used as a tool to assist in the targeting of the survey. In this case a theoretical survey distribution scenario was established to determine the survey results coverage.

For optimal coverage, 20 receivers with 3 read electrodes each were planned in selected locations in between the current injection paths. The 3 read electrodes of each receiver were planned in 2 orthogonal directions, with 100- and 150-metre dipole lengths (grid north-south and grid east-west). Current injections were planned at 50- and some 25-metre intervals along the cut grid lines. The infinite was planned far from the survey location to achieve a pole-dipole array scenario. A theoretical depth of 625 metres was obtained from the software with this layout.

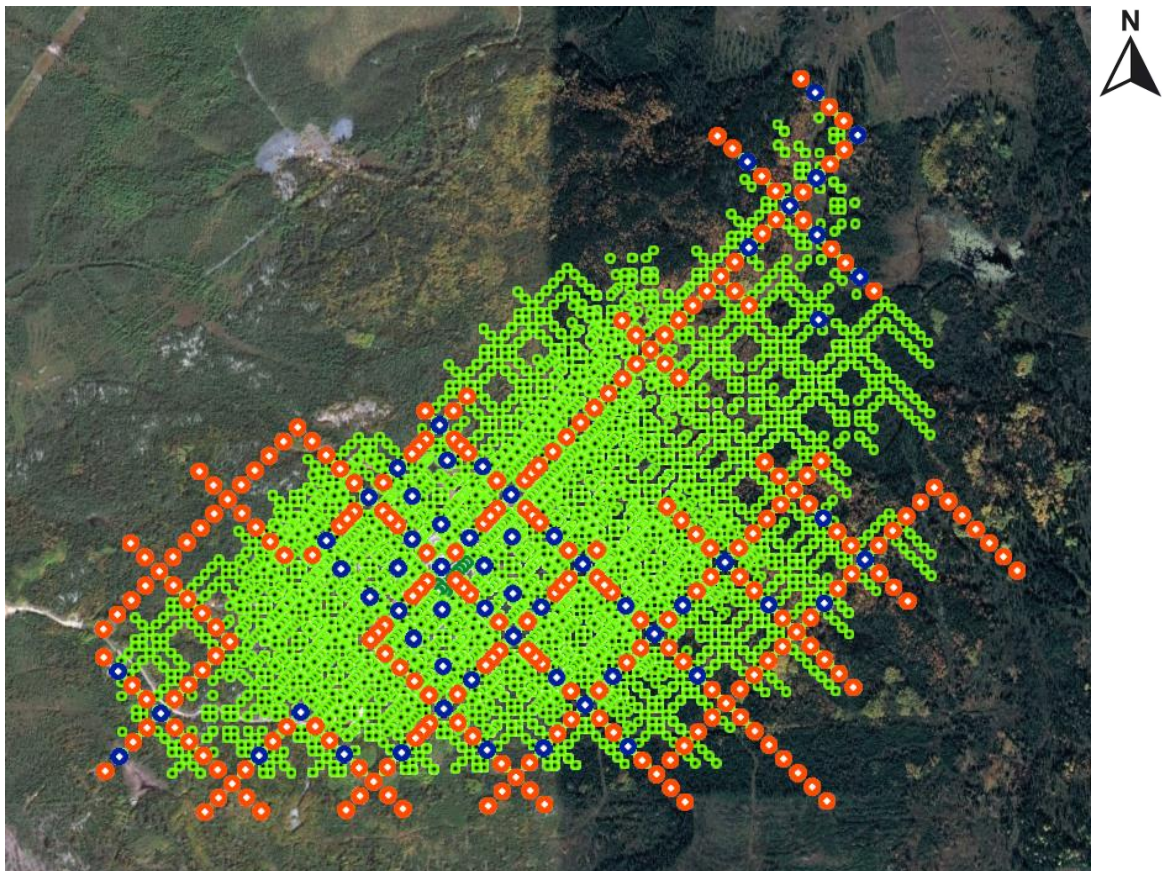


Figure 4: Survey Design Model Looking Down – Red=Current Injection, Blue=Receiver Electrodes, Green=Theoretical Data Point (©2018 Google, Image ©2018 DigitalGlobe)

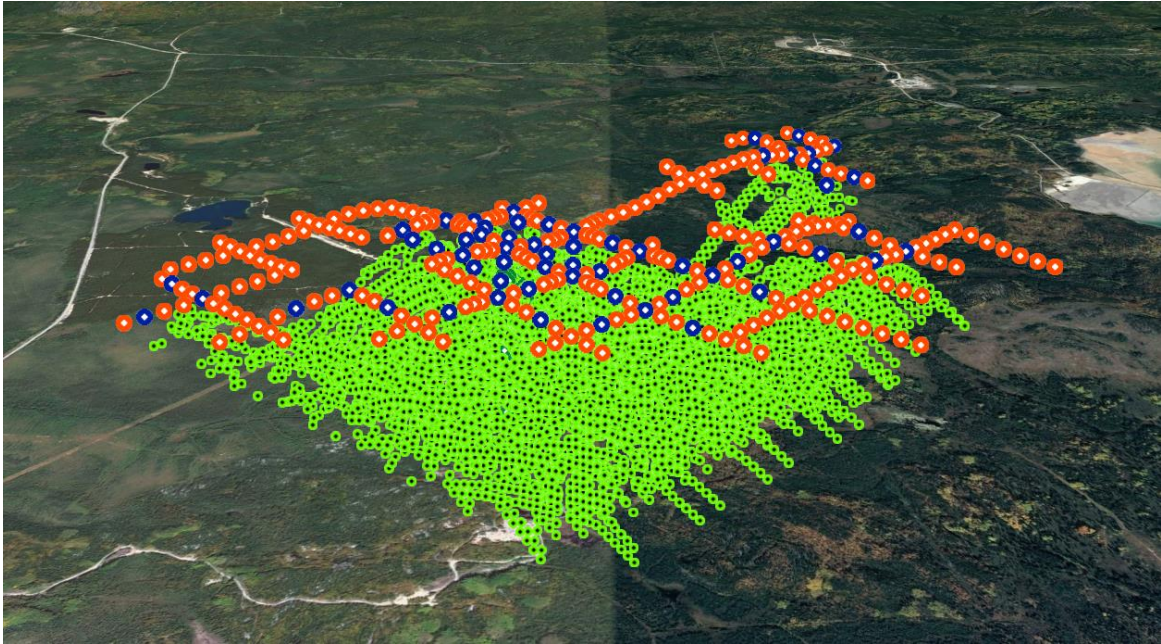


Figure 5: Survey Design Model Looking North – Red=Current Injection, Blue=Receiver Electrodes, Green=Theoretical Data Point (©2018 Google, Image ©2018 DigitalGlobe)

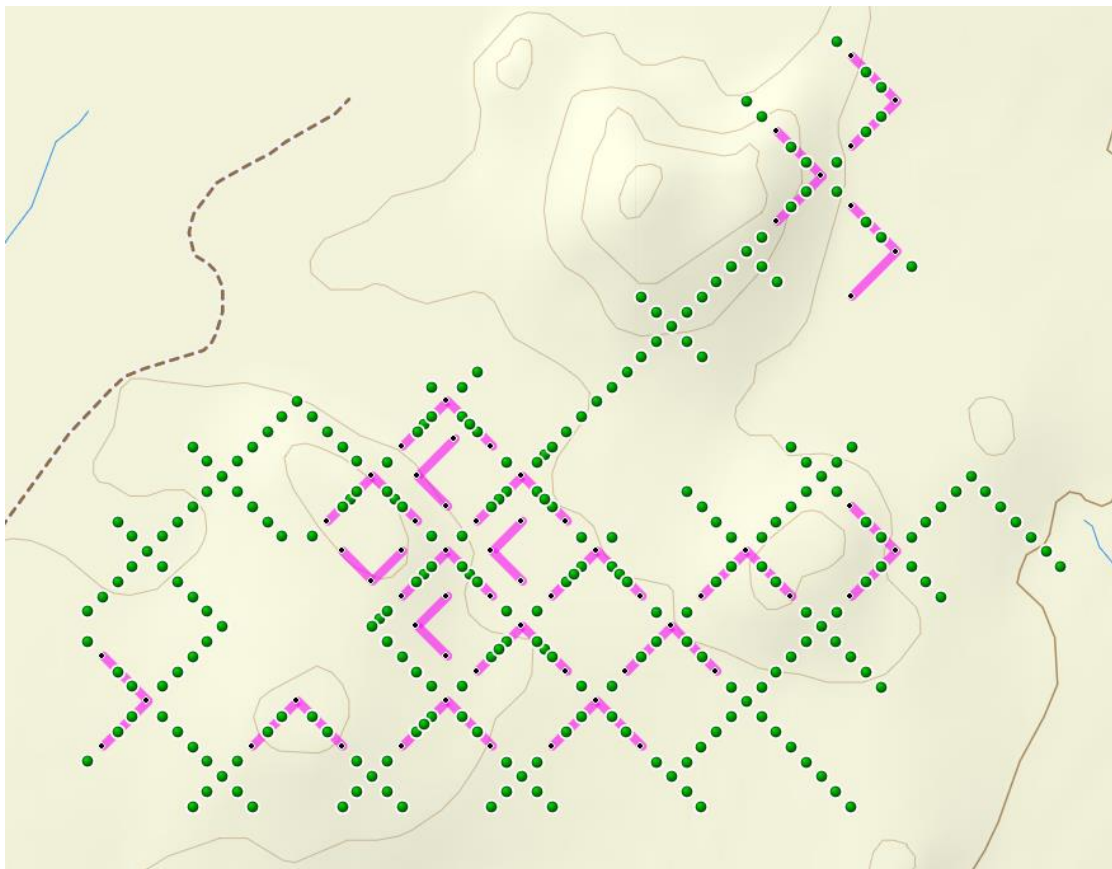


Figure 6: Planned Survey Layout – Green Circles=Current Injections, Pink Lines=Dipoles, Black Dots=Read Electrodes

4. SURVEY WORK UNDERTAKEN

4.1 SUMMARY

CXS was contracted to cut a grid and perform a magnetometer and 3D IP survey over the Iris Project with a survey area footprint of 2.26 km². The crew began to occupy the site in late October and completed both surveys by mid November.

A total length of 15.35 kilometres was covered with 243 injected current points for the 3D Distributed Induced Polarization survey occurring between October 31st, 2018 to November 9th, 2018. Collected GPS locations were applied to the electrode field locations.

A total of 19.025-line kilometres of magnetometer samples was read over the Iris Project between November 16th, 2018 to November 19th, 2018. This consisted of 35146 magnetometer samples taken at a 1 second sample interval.

4.2 SURVEY GRID

A grid consisting of fourteen 315-degree lines and ten 45-degree lines (Figure 7) was cut by Five on Line Contracting based out of Belleterre, Quebec, in mid October prior to the survey acquisition. IP current injection paths were intended along the purple and yellow lines, spaced at 250 metre intervals. Additional 75- to 100- metre smaller interval lines were cut to create a denser data set for the magnetometer survey in the centre. Stations were picketed at 25 metre intervals along the lines.

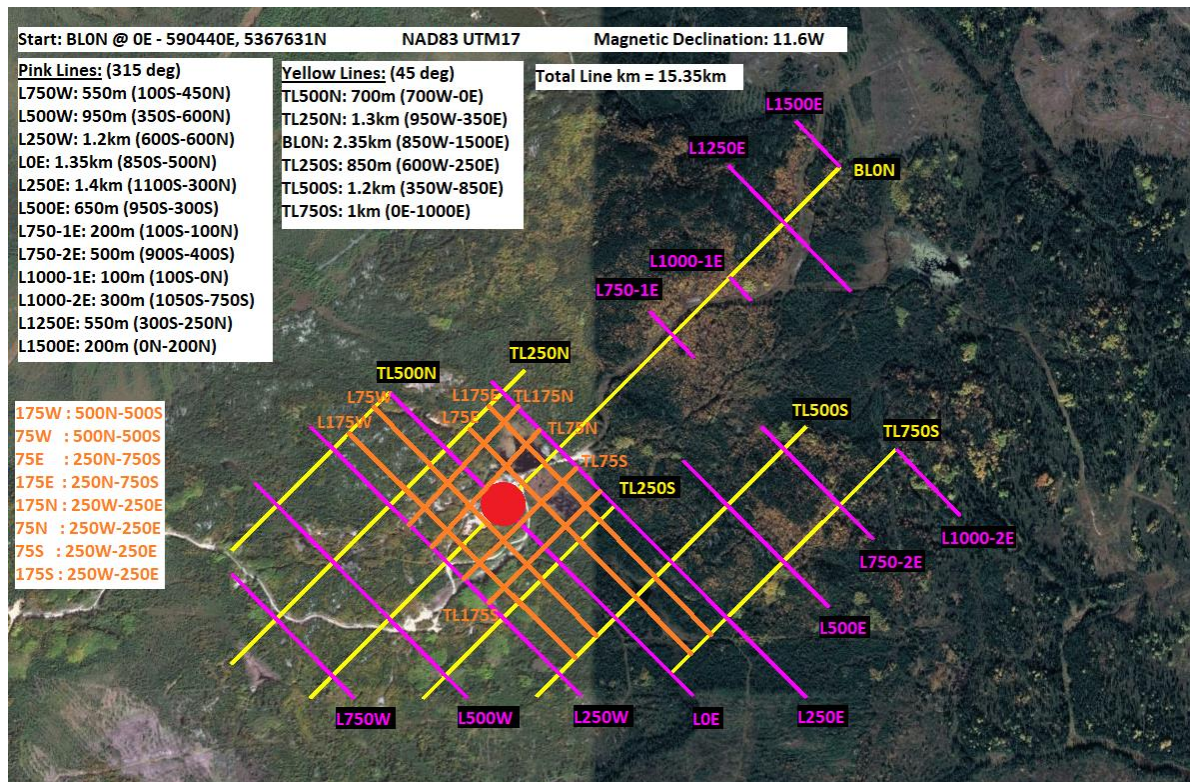


Figure 7: Survey Grid (©2018 Google, Image ©2018 DigitalGlobe)

4.3 3D IP SURVEY SETUP

20 receivers were placed in 20 previously selected locations in between the grid lines. Each receiver was connected to 2 relatively orthogonal, ~100 / ~150 metre dipoles (315 degrees and 45 degrees). The coordinates of the read electrodes were recorded by GPS and are listed in Table 3. Due to field conditions, exact locations and directions were not always achieved. The infinite was located approximately 4.1 kilometres southwest from the centre of the survey area at 586791E, 5366052N to achieve a pole-dipole array scenario. The survey layout covered a footprint of 2.26 km² with irregular dimensions.

Read Electrode	UTM X (m)	UTM Y (m)	Read Electrode	UTM X (m)	UTM Y (m)
402-P1	589621	5367369	412-P1	590441	5367739
402-P2	589722	5367263	412-P2	590369	5367798
402-P3	589628	5367168	412-P3	590444	5367865
403-P1	590183	5367164	413-P1	590712	5367693
403-P2	590083	5367273	413-P2	590607	5367796
403-P3	589981	5367169	413-P3	590507	5367699
404-P1	590551	5367168	414-P1	590539	5367628
404-P2	590445	5367280	414-P2	590613	5367547
404-P3	590336	5367166	414-P3	590688	5367626
405-P1	590906	5367165	415-P1	590896	5367512
405-P2	590801	5367270	415-P2	590784	5367625
405-P3	590694	5367168	415-P3	590681	5367515
406-P1	590724	5367343	416-P1	591079	5367342
406-P2	590619	5367450	416-P2	590970	5367447
406-P3	590523	5367350	416-P3	590877	5367348
407-P1	590435	5367379	417-P1	591257	5367517
407-P2	590369	5367444	417-P2	591149	5367623
407-P3	590442	5367525	417-P3	591054	5367525
408-P1	590541	5367514	418-P1	591401	5367729
408-P2	590436	5367624	418-P2	591503	5367629
408-P3	590335	5367523	418-P3	591401	5367527
409-P1	590189	5367632	419-P1	591351	5368455
409-P2	590260	5367551	419-P2	591453	5368347
409-P3	590334	5367624	419-P3	591347	5368243
410-P1	590364	5367693	420-P1	591197	5368606
410-P2	590264	5367797	420-P2	591305	5368511
410-P3	590160	5367692	420-P3	591196	5368400
411-P1	590545	5367881	421-P1	591363	5368789
411-P2	590441	5367978	421-P2	591471	5368689
411-P3	590332	5367870	421-P3	591363	5368573

Table 3: Receiver Electrode Coordinates

4.4 DATA ACQUISITION

3D Induced Polarization Survey

CXS began acquiring IP data on November 2nd, 2018. Current injection sites were injected along the grid lines at approximately 25- and 50-metre increments. GPS was collected at each injection rod location prior to the current injection and recorded along with the associated injection file created on the current monitor. In total there were 243 current injection locations.

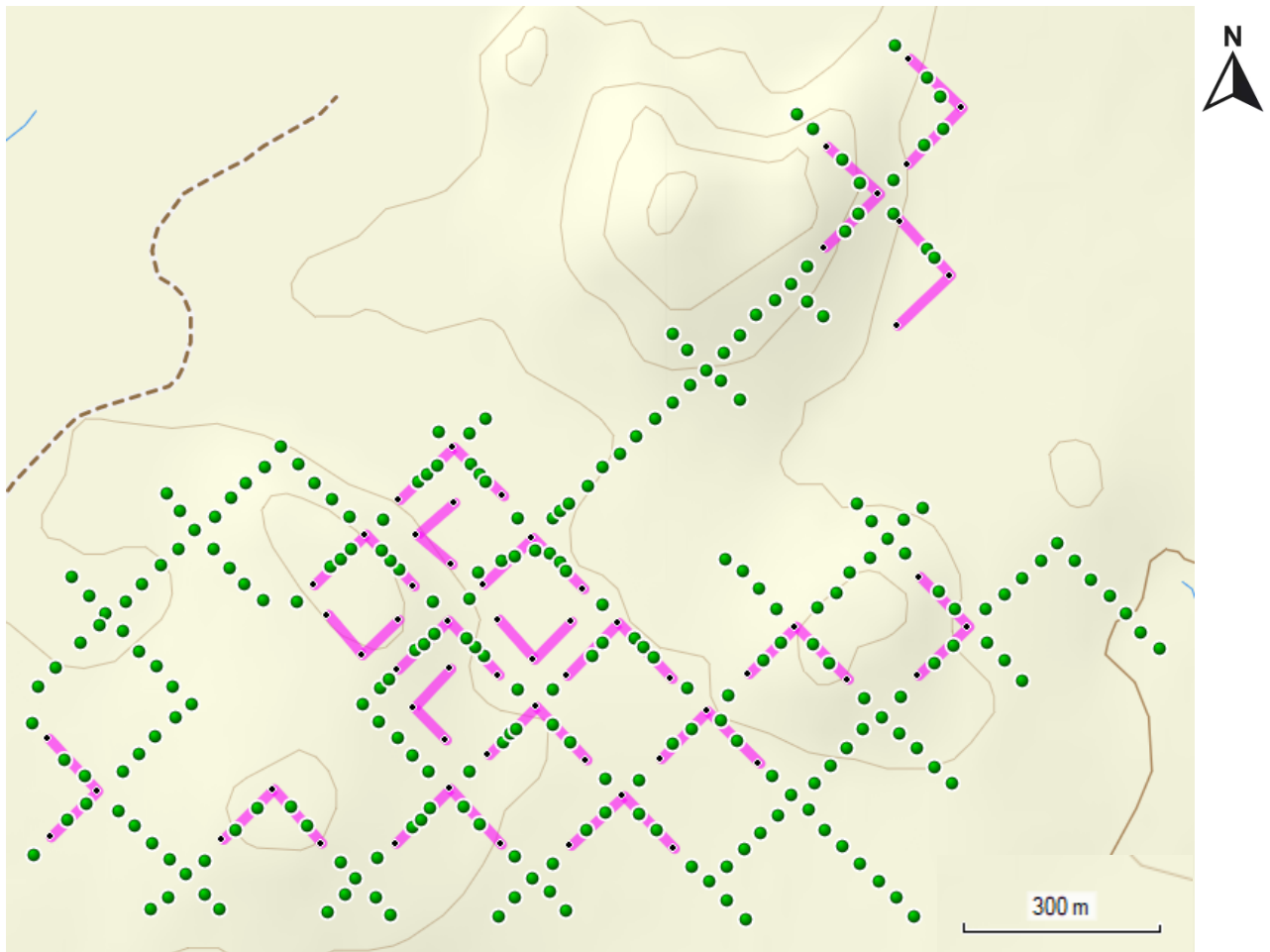


Figure 8: Field Survey Layout with Injection Sites (green dots) in Mapsource

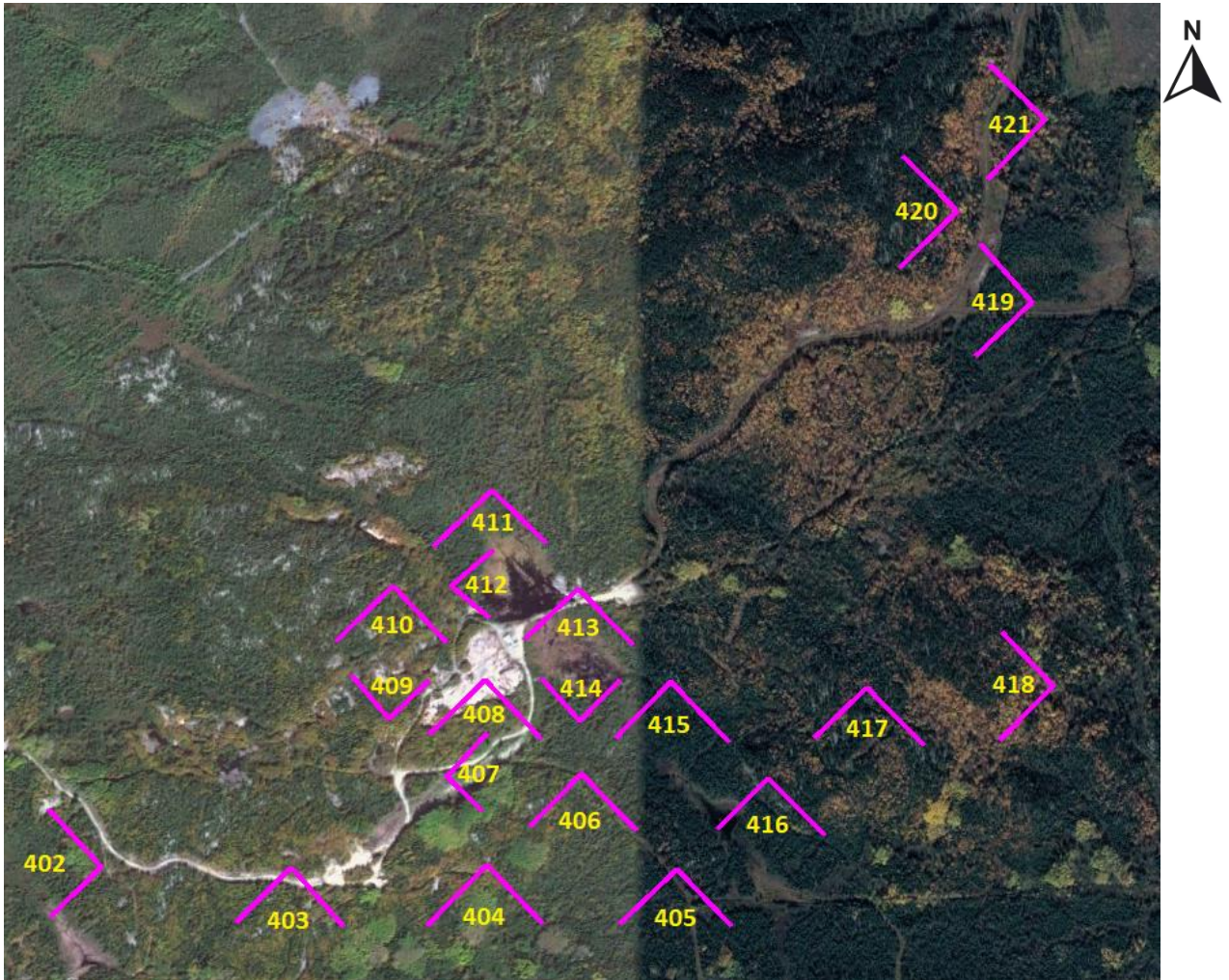


Figure 9: Receiver Dipole Orientations on Google Earth (©2018 Google, Image ©2018 DigitalGlobe)

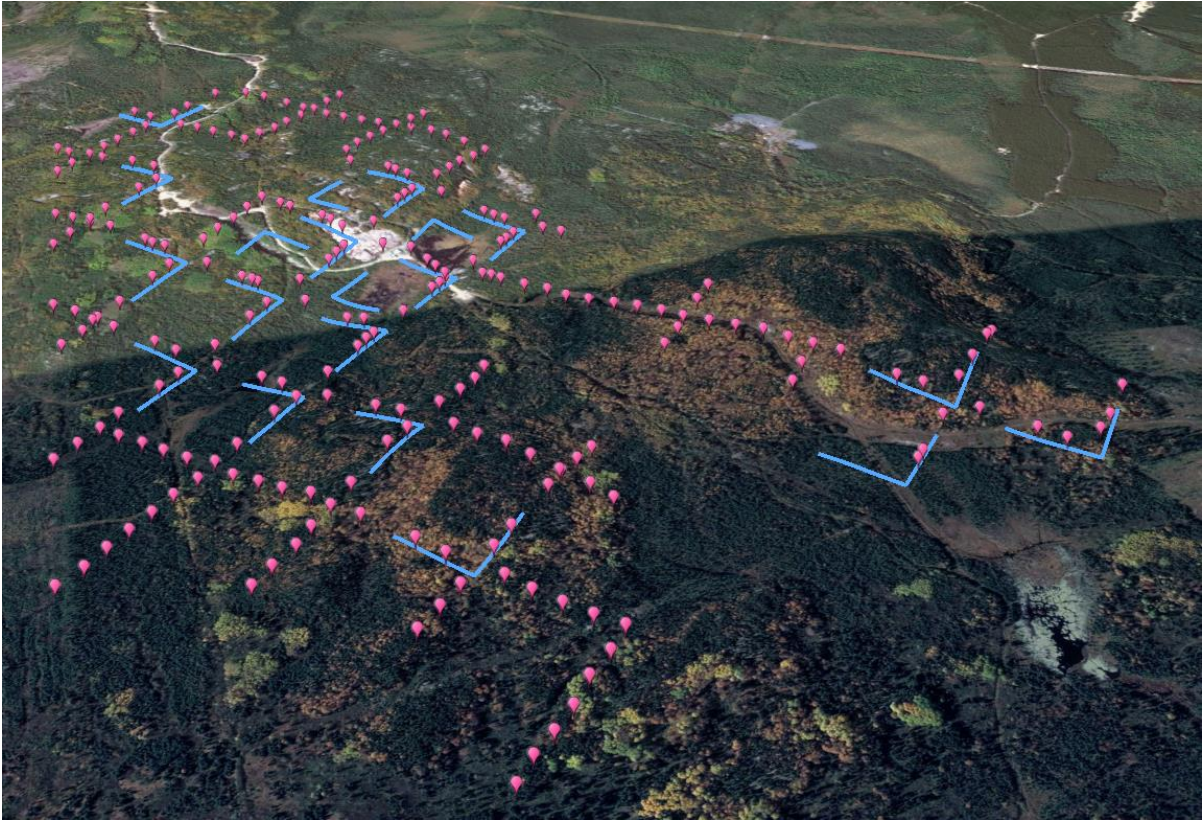


Figure 10: Topographical Relief Image with the Field Survey Layout Looking North-west (2018 Google, Image ©2018 DigitalGlobe)

Magnetometer Survey

Magnetometer data acquisition began on November 16th, 2018. One magnetometer was set in a fixed position in a region of stable geomagnetic gradient to monitor and correct for daily diurnal drift. A second magnetometer was being operated to acquire magnetic data along the grid lines. This second unit was set to 1 second walking magnetometer mode with GPS. A total of 19.025-line kilometres and 35146 magnetometer samples was read over a 4-day period. The following figure shows the path taken by the magnetometer operator, while acquiring data.

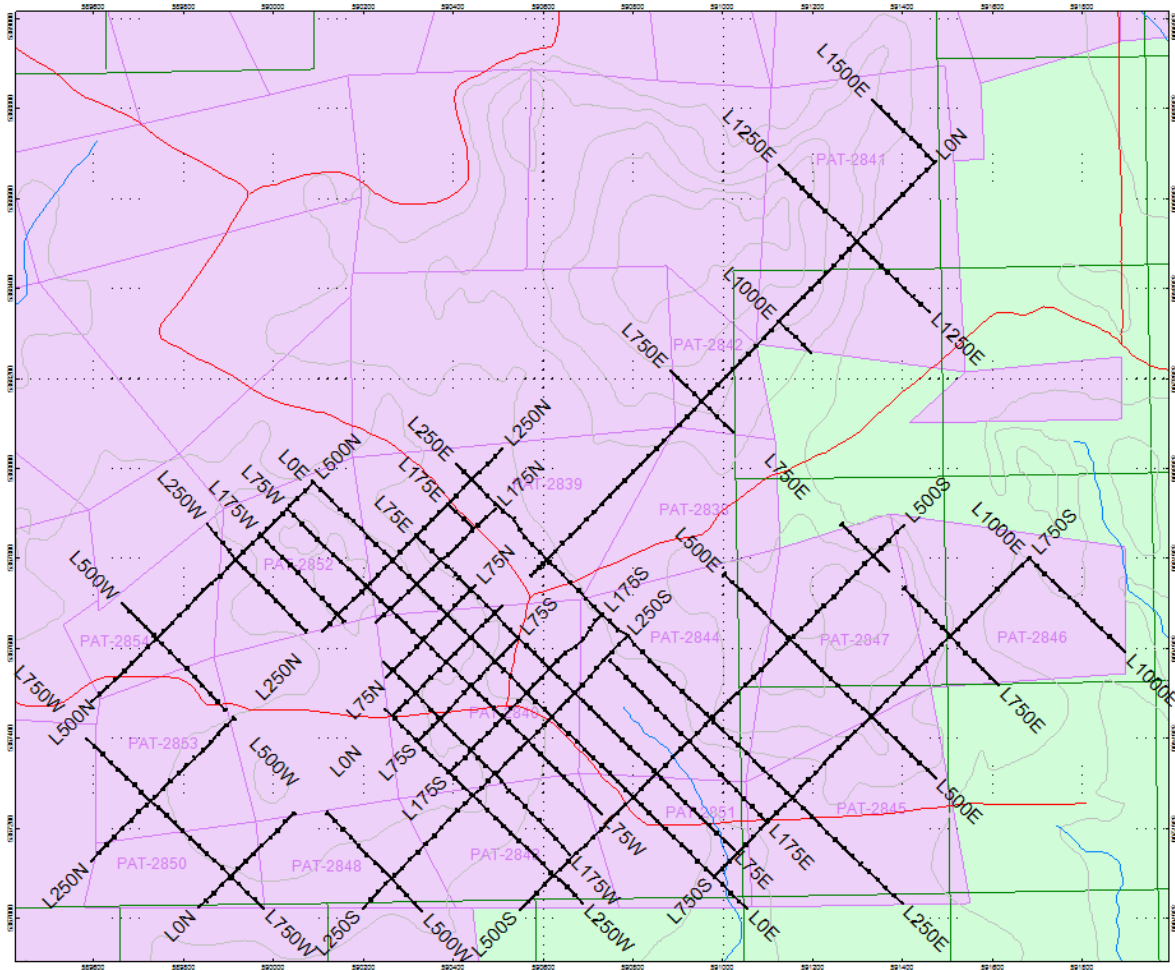


Figure 11: Mag/GPS Path Along Grid Lines

4.5 SURVEY LOGS

IP Survey Log					
Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
October 31, 2018	Mobilize and locate survey area. Begin establishing logger sites and infinite.	-	-	-	-
November 1, 2018	Continue setup of logger and infinite sites.	-	-	-	-
November 2, 2018	Finished setting up logger sites. Started IP survey.	750W	100S	450N	550
		10 Injections			550

IP Survey Log					
Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
November 3, 2018	Continue IP survey.	500W	350S	600N	950
		250W	600S	600N	1200
		0E	850S	100S	750
		43 Injections			2900
November 4, 2018	Continue IP survey.	0E	100S	500N	600
		250E	1100S	300N	1400
		500E	950S	300S	650
		47 Injections			2650
November 5, 2018	Continue IP survey.	750E	900S	400S	500
		1000E	1050S	750S	300
		750S	0E	1000E	1000
		31 Injections			1800
November 6, 2018	Continue IP survey.	500S	350W	850E	1200
		250S	600W	250E	850
		30 Injections			2050
November 7, 2018	Continue IP survey.	0N	850W	1250E	2100
		750E	100S	100N	200
		1000E	100S	0N	100
		1250E	300S	250N	550
		47 Injections			2950
November 8, 2018	Complete IP survey.	0N	1250E	1500E	250
		1500E	0N	200N	200
		250N	950W	350E	1300
		500N	700W	0E	700
		35 Injections			2450
November 9, 2018	Pick up stations and infinite. Demobilize.	-	-	-	-
Total	15.35 Line Kilometres / 243 Injections				

Table 4: IP Survey Log

Magnetometer Survey Log					
Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
November 16, 2018	Started mag survey.	500N	700W	0	700
		250N	950W	500W	450
		250N	225W	350E	575
		175N	125W	250E	375
		75N	200W	100E	300
		0N	850W	550W	300
		750W	100S	450N	550
		175W	50S	100N	150
		175W	225N	500N	275
		75W	100S	500N	600
		0E	100S	500N	600
		75E	0	250N	250
		175E	175N	250N	75
		250E	25S	300N	325
					5525
November 17, 2018	Continue mag survey.	500W	350S	50S	300
		500W	275N	600N	325
		250S	600W	250E	850
		250W	600S	25N	625
		250W	275N	600N	325
		500S	350W	75E	425
		175W	500S	50S	450
		0N	250W	100E	350
		75S	250W	75E	325
		175S	250W	250E	500
		75W	500S	100S	400
		0E	850S	100S	750
		750S	0	75E	75
		75E	750S	500S	250
					5950
November 18, 2018	Continue mag survey.	75E	500S	0N	500
		500S	75E	850E	775
		750S	75E	1000E	925
		175E	750S	250S	500
		250E	1100S	25S	1075
		500E	950S	300S	650
		750E	900S	400S	500

Magnetometer Survey Log					
Date	Description	Line	Min Extent	Max Extent	Total Survey (m)
		1000E	1050S	750S	300
		0N	150E	850E	700
		750E	100S	100N	200
					6125
November 19, 2018	Complete mag survey	0N	850E	1500E	650
		1000E	100S	0N	100
		1250E	225S	250N	475
		1500E	0	200N	200
					1425
Total	19.025 Line Kilometres				

Table 5: Magnetometer Survey Log

4.6 PERSONNEL

Crew Member / Contractor	Position	Resident	Province
Bruce Lavalley	Crew Chief	Britt	Ontario
Claudia Moraga	Transmitter Operator / Magnetometer Operator	Britt	Ontario
Neil Jack	Transmitter Operator	Kirkland Lake	Ontario
Andrew Johnson	IP Technician	Kirkland Lake	Ontario
Joey Emmell	IP Technician	Englehart	Ontario
Mandy Lin	IP Technician	St. Johns	NL
Spencer McGaughey	IP Technician	Kirkland Lake	Ontario
Jason Ploeger	Senior Geophysicist	Larder Lake	Ontario
Melanie Postman	Junior Geophysicist	Larder Lake	Ontario
Five on Line Contracting	Line Cutters	Belleterre	Quebec

Table 6: Induced Polarization Personnel

4.7 FIELD NOTES: CONDITIONS & CULTURE

The average maximum weather over the field surveying days was -5 degrees Celsius with heavy snow/rain.

No significant culture was encountered in this survey area. The only cultural presence noted was a trail, a hunting camp, an old adit and some trenches. Topographical features and ground characteristics along the read dipoles and current injection lines are noted in the following two tables.

Logger & Remote Electrode Field Notes (Soil/Topography/Vegetation/Culture notes on dipoles and corresponding electrodes P1/P2/P3)		
402	Soil	P1/P2 rocky – P3 rocky, swampy
	Topo	P1 to P2 minor topo with two small ponds in between – P2 to P3 level
	Culture	P2 next to trail
403	Soil	P1 rocky soil – P2 rocky – P3 good soil
	Topo	P1 to P2 minor topo with small pond in between – P2 to P3 level
	Veg	P3 mossy
	Culture	P2 next to trail
404	Soil	P1 swampy – P2 rocky – P3 good soil
	Topo	P1/P2/P3 level – P1 to P2 downhill to 50m swamp
405	Soil	P1/P3 cedar swamp – P2 rock & soil
	Topo	P1 to P2 small hills to 100m cedar swamp -- P2 to P3 slight downhill to cedar swamp
406	Soil	P1 swamp – P2/P3 rocky, good soil
	Topo	P1 to P2 flat – P2 to P3 small ups and downs
	Veg	P3 thick bush
407	Soil	P1/P2/P3 rocky
	Topo	P1 to P2 downhill to flat – P2 to P3 flat
	Veg	P2 to P3 mix bush
	Culture	P2 to P3 crosses trail
408	Soil	P1/P2/P3 rocky
	Topo	P1 to P2 uphill to flat – P2 to P3 flat
	Veg	P1/P2/P3 birch, tag alders
409	Soil	P1/P2/P3 bedrock
	Topo	P1 to P2 bumpy – P2 to P3 flat
	Veg	P1/P2/P3 mixed bush
410	Soil	P1/P2/P3 rocky – P3 sandy
	Topo	Flat, smooth uphill from P1 to P2 to P3 – small pond between P1 and P2
	Veg	P1/P2 mossy, mix bush – P3 mossy, Jack pine

Logger & Remote Electrode Field Notes (Soil/Topography/Vegetation/Culture notes on dipoles and corresponding electrodes P1/P2/P3)		
411	Soil	P1/P2/P3 cedar swamp
	Topo	P1/P2/P3 flat
	Veg	P1/P2/P3 mossy
412	Soil	P2 rocky – P3 floating bog/swamp
413	Soil	P1 to P2 rocky – P2 to P3 swamp/pond
	Topo	P1 to P2 downhill to pond
	Veg	P2 mossy
	Culture	P1 to P2 crosses trail – P3 beside hunting camp
414	Soil	P1/P2/P3 swamp
	Topo	P1/P2/P3 flat
	Culture	P2 to P3 along beaver dam
415	Soil	P1 to P2 rocky – P2 to P3 rocky to swamp to rock outcrops
	Topo	P1 to P2 flat alongside hill – P2 to P3 downhill to swamp then uphill
	Veg	P1/P2/P3 mossy – P1/P2 Jack pine
416	Soil	P1/P2 rocky, good soil – P3 edge of dry swamp
	Topo	P1 to P2 flat ground to slight uphill – P2 to P3 moderate decline to dry swamp
	Veg	P1 to P2 mossy – P3 moss
417	Soil	P1/P2/P3 rocky, good soil
	Topo	P1 to P2 up & down on moderate incline to flat side hill – P2 to P3 slight ups & downs
418	Soil	P1 very rocky – P2/P3 rocky
	Topo	P1 to P2 good topo – P2 dead fall – P2 to P3 uphill
	Veg	P2 mossy
419	Soil	P1 rocky – P1/P2/P3 in cedar swamp
	Culture	P1 next to trail

Logger & Remote Electrode Field Notes (Soil/Topography/Vegetation/Culture notes on dipoles and corresponding electrodes P1/P2/P3)		
420	Soil	P1/P2/P3 rocky
	Topo	P1 to P2 downhill – P2 to P3 uphill
	Veg	P1/P2/P3 mossy, Jack pine
421	Soil	P1/P2/P3 rocky
	Topo	P1 to P2 slight downhill – P2 to P3 flat
	Veg	P1 to P2 mixed bush – P2 to P3 mossy
	Culture	P1 to P2 crosses trail – P2 to P3 next to trail
INF	Soil	Muddy
	Topo	Flat

Table 7: Logger Electrodes, Dipoles, & Remote Electrode Field Notes

Date	Grid Line	Station	UTM X (m)	UTM Y (m)	MSL Z (m)	I (mA)	Injection Electrode Field Notes
2-Nov-18	750W	500N				2100	Flat, rocky, good soil
2-Nov-18	750W	450N	589587	5367402	323	1300	Slight uphill, rocky
2-Nov-18	750W	350N	589654	5367330	324	500	Slight uphill, rocky
2-Nov-18	750W	300N	589696	5367296	323	1900	Slight uphill, good ground
2-Nov-18	750W	200N	589765	5367226	328	500	Beside trail, rocky
2-Nov-18	750W	150N	589801	5367197	327	450	Slight uphill, rocky
2-Nov-18	750W	100N	589836	5367161	328	450	Downhill, rocky
2-Nov-18	750W	50N	589873	5367129	326	400	Downhill, rocky
2-Nov-18	750W	0N	589906	5367097	324	500	Flat, rocky
2-Nov-18	750W	50S	589944	5367058	322	450	Flat, rocky
2-Nov-18	750W	100S	589977	5367027	322	550	Flat, rocky
3-Nov-18	500W	350S	590328	5367022	321	600	Flat, wet
3-Nov-18	500W	300S	590295	5367055	322	1300	Flat, wet
3-Nov-18	500W	250S	590255	5367097	325	650	Uphill, sandy
3-Nov-18	500W	200S	590222	5367129	328	1200	Flat, sandy
3-Nov-18	500W	100S	590153	5367200	338	400	Bumpy, next to trench, rocky
3-Nov-18	500W	50S	590119	5367238	342	250	Flat, next to main trail

Date	Grid Line	Station	UTM X (m)	UTM Y (m)	MSL Z (m)	I (mA)	Injection Electrode Field Notes
3-Nov-18	500W	250N	589914	5367446	324	1100	Big trench, wet
3-Nov-18	500W	300N	589873	5367483	325	1000	Edge of beaver pond
3-Nov-18	500W	350N	589839	5367521	324	700	Bumpy, rocky
3-Nov-18	500W	400N	589803	5367554	321	1500	Flat, swampy
3-Nov-18	500W	450N	589768	5367593	319	2000	Flat, cedar swamp
3-Nov-18	500W	500N	589734	5367629	318	1900	Flat, cedar swamp
3-Nov-18	500W	550N	589698	5367666	318	2100	Flat, cedar swamp
3-Nov-18	500W	600N	589661	5367702	318	2100	Flat, cedar swamp
3-Nov-18	250W	600N	589855	5367878	322	800	Flat, rocky, mossy
3-Nov-18	250W	550N	589884	5367842	325	500	Slight uphill, rocky, mossy
3-Nov-18	250W	500N	589913	5367801	329	850	Slight uphill, rocky
3-Nov-18	250W	450N	589951	5367763	333	600	Flat, top of outcrop, mossy, rocky
3-Nov-18	250W	400N	589984	5367727	332	800	Flat, on outcrop, mossy
3-Nov-18	250W	350N	590017	5367692	337	400	Top of outcrop, mossy
3-Nov-18	250W	300N	590056	5367662	331	600	Bumpy, rocky
3-Nov-18	250W	0	590262	5367451	331	450	Flat, flooded area
3-Nov-18	250W	50S	590298	5367416	332	900	Flat, rocky
3-Nov-18	250W	100S	590336	5367384	331	900	Flat, sandy
3-Nov-18	250W	150S	590367	5367349	332	600	Flat, sandy
3-Nov-18	250W	200S	590401	5367317	334	550	Bumpy, rocky
3-Nov-18	250W	300S	590473	5367245	329	450	Downhill, rocky
3-Nov-18	250W	350S	590508	5367210	319	550	Bottom of big hill, rocky
3-Nov-18	250W	450S	590578	5367144	317	1200	Flat, sandy
3-Nov-18	250W	500S	590616	5367102	317	950	Flat, mossy
3-Nov-18	250W	550S	590653	5367074	318	700	Flat, mossy
3-Nov-18	250W	600S	590687	5367035	325	400	Top of outcrop, mossy
3-Nov-18	0	850S	591054	5367025	305	1800	Flat, alder swamp
3-Nov-18	0	800S	591016	5367064	306	1800	Flat, alder swamp
3-Nov-18	0	750S	590979	5367100	309	1900	Flat, wet, mossy
3-Nov-18	0	700S	590942	5367131	312	1100	Flat, wet, mossy
3-Nov-18	0	600S	590871	5367203	312	700	Flat, swampy, wet
3-Nov-18	0	550S	590834	5367237	314	1000	Flat, very rocky
3-Nov-18	0	450S	590762	5367308	317	666	Flat, rocky

Date	Grid Line	Station	UTM X (m)	UTM Y (m)	MSL Z (m)	I (mA)	Injection Electrode Field Notes
3-Nov-18	0	350S	590690	5367380	317	800	Flat, sand or clay
3-Nov-18	0	300S	590653	5367416	318	1000	Flat, sand or clay
3-Nov-18	0	200S	590581	5367488	319	1000	Slight uphill, rocky
3-Nov-18	0	100S	590511	5367555	320	900	Flat, next to road, rocky
4-Nov-18	0	75S	590491	5367573	317	750	Uphill, rocky
4-Nov-18	0	50S	590474	5367591	320	500	Side of outcrop, mossy
4-Nov-18	0	50N	590403	5367665	329	350	Top of outcrop
4-Nov-18	0	150N	590333	5367728	329	900	Side of hill, rocky
4-Nov-18	0	175N	590314	5367747	328	500	Bumpy, rocky
4-Nov-18	0	200N	590298	5367766	328	600	Flat, rocky, mossy
4-Nov-18	0	300N	590229	5367834	329	550	Bumpy, rocky, mossy
4-Nov-18	0	350N	590193	5367870	330	500	Slight uphill, rocky, mossy
4-Nov-18	0	400N	590158	5367901	327	400	Down side of hill, bare rock
4-Nov-18	0	450N	590124	5367940	319	700	Bottom of hill, next to trench
4-Nov-18	0	500N	590087	5367976	316	1600	Flat, alder swamp
4-Nov-18	250E	300N	590410	5368012	321	700	Flat, cedar swamp
4-Nov-18	250E	200N	590476	5367945	320	600	Flat, cedar swamp
4-Nov-18	250E	175N	590494	5367926	321	650	Flat, cedar swamp
4-Nov-18	250E	150N	590508	5367910	322	650	Open swamp, flooded
4-Nov-18	250E	50N	590574	5367837	322	700	Flat, cedar swamp
4-Nov-18	250E	50S	590642	5367765	323	900	Flat, next to trail, mossy
4-Nov-18	250E	75S	590662	5367750	323	550	Flat, rocky, mossy
4-Nov-18	250E	100S	590676	5367732	324	750	Flat, rocky
4-Nov-18	250E	200S	590750	5367662	329	550	Bumpy, rocky
4-Nov-18	250E	300S	590819	5367594	326	700	Slight downhill, rocky
4-Nov-18	250E	325S	590836	5367577	324	650	Slight downhill, rocky
4-Nov-18	250E	350S	590859	5367558	323	900	Flat, rocky
4-Nov-18	250E	450S	590928	5367494	331	500	Slight uphill, rocky
4-Nov-18	250E	550S	590999	5367430	337	350	Top of hill, all rock, mossy
4-Nov-18	250E	600S	591031	5367389	329	350	Downhill, very rocky
4-Nov-18	250E	700S	591106	5367319	321	1000	Flat, alder, clay
4-Nov-18	250E	750S	591143	5367280	321	1000	Flat, alder, clay

Date	Grid Line	Station	UTM X (m)	UTM Y (m)	MSL Z (m)	I (mA)	Injection Electrode Field Notes
4-Nov-18	250E	800S	591181	5367251	322	1500	Flat, alder, clay
4-Nov-18	250E	850S	591215	5367211	323	400	Bumpy, rocky
4-Nov-18	250E	900S	591252	5367176	319	2500	Flat, rocky
4-Nov-18	250E	950S	591289	5367141	318	2300	Flat, mossy
4-Nov-18	250E	1000S	591326	5367108	317	2400	Flat, mossy
4-Nov-18	250E	1050S	591364	5367075	316	2400	Flat, mossy, wet
4-Nov-18	250E	1100S	591400	5367035	315	2100	Flat, mossy
4-Nov-18	500E	950S	591473	5367308	312	550	Flat, rocky
4-Nov-18	500E	900S	591436	5367341	320	500	Slight uphill, rocky
4-Nov-18	500E	850S	591399	5367381	328	500	Slight uphill, rocky
4-Nov-18	500E	800S	591365	5367408	330	500	Flat, rocky
4-Nov-18	500E	750S	591327	5367443	329	900	Flat, rocky
4-Nov-18	500E	700S	591292	5367481	334	500	Uphill, rocky
4-Nov-18	500E	600S	591217	5367552	342	420	Flat, rocky
4-Nov-18	500E	550S	591185	5367590	342	500	Flat, very rocky
4-Nov-18	500E	450S	591108	5367659	341	450	Bedrock with moss patches
4-Nov-18	500E	400S	591071	5367703	337	600	Slight downhill, rocky
4-Nov-18	500E	350S	591038	5367736	334	1500	Flat, mossy
4-Nov-18	500E	300S	591002	5367760	333	900	Flat, rocky
4-Nov-18	0	75S	590491	5367573	317	750	Uphill, rocky
4-Nov-18	0	50S	590474	5367591	320	500	Side of outcrop, mossy
4-Nov-18	0	50N	590403	5367665	329	350	Top of outcrop
4-Nov-18	0	150N	590333	5367728	329	900	Side of hill, rocky
4-Nov-18	0	175N	590314	5367747	328	500	Bumpy, rocky
4-Nov-18	0	200N	590298	5367766	328	600	Flat, rocky, mossy
4-Nov-18	0	300N	590229	5367834	329	550	Bumpy, rocky, mossy
4-Nov-18	0	350N	590193	5367870	330	500	Slight uphill, rocky, mossy
4-Nov-18	0	400N	590158	5367901	327	400	Down side of hill, bare rock
4-Nov-18	0	450N	590124	5367940	319	700	Bottom of hill, next to trench
5-Nov-18	750E	400S	591269	5367878	323	1300	Wet clay, mixed bush
5-Nov-18	750E	450S	591300	5367844	327	550	Good ground, mixed bush
5-Nov-18	750E	500S	591335	5367808	335	660	Steep uphill, mossy out-crop

Date	Grid Line	Station	UTM X (m)	UTM Y (m)	MSL Z (m)	I (mA)	Injection Electrode Field Notes
5-Nov-18	750E	550S	591370	5367777	338	650	Spruce outcrop, mossy, wet
5-Nov-18	750E	650S	591440	5367700	332	850	Spruce, bouldery, mossy
5-Nov-18	750E	700S	591474	5367665	341	450	Spruce, rocky
5-Nov-18	750E	800S	591541	5367599	310	1300	Willow, black muck
5-Nov-18	750E	850S	591579	5367561	315	400	Spruce, birch, rocky, mossy
5-Nov-18	750E	900S	591615	5367522	319	550	Spruce, mossy outcrop
5-Nov-18	1000E	1050S	591894	5367593	299	2000	Next to creek, clay, alder
5-Nov-18	1000E	1000S	591855	5367625	300	2000	Clay, alder
5-Nov-18	1000E	950S	591824	5367661	302	1000	Spruce, clay
5-Nov-18	1000E	900S	591790	5367698	303	1500	Spruce, clay, poplar
5-Nov-18	1000E	850S	591751	5367731	307	600	Spruce, outcrop, very rocky
5-Nov-18	1000E	800S	591719	5367770	307	1800	Spruce, clay
5-Nov-18	1000E	750S	591681	5367804	309	1200	Spruce, clay
5-Nov-18	750S	950E	591648	5367767	313	500	Outcrop, mossy
5-Nov-18	750S	900E	591612	5367732	311	500	Birch, spruce, rocky
5-Nov-18	750S	850E	591575	5367697	309	900	Birch, spruce, rocky
5-Nov-18	750S	800E	591536	5367666	314	500	Birch, spruce, bouldery
5-Nov-18	750S	700E	591471	5367592	317	450	Bottom of cliff, spruce
5-Nov-18	750S	650E	591434	5367554	324	600	Birch, spruce, good ground
5-Nov-18	750S	550E	591364	5367484	325	550	Birch, spruce, good ground
5-Nov-18	750S	450E	591288	5367418	328	450	Poplar, good ground
5-Nov-18	750S	400E	591257	5367377	324	1500	Spruce, clay
5-Nov-18	750S	350E	591225	5367343	319	1200	Alder, black muck
5-Nov-18	750S	300E	591191	5367305	319	650	Spruce, good ground
5-Nov-18	750S	200E	591119	5367237	315	1000	Black spruce, muck, moss
5-Nov-18	750S	150E	591083	5367201	314	1500	Black spruce, muck
5-Nov-18	750S	100E	591049	5367168	313	1900	Black spruce, swamp, muck
5-Nov-18	750S	50E	591014	5367130	311	2100	Black spruce, swamp, muck
6-Nov-18	500S	850E	591404	5367873	319	450	Rocky, slight uphill
6-Nov-18	500S	800E	591366	5367847	326	500	Uphill, rocky
6-Nov-18	500S	700E	591297	5367767	342	600	Uphill, rocky

Date	Grid Line	Station	UTM X (m)	UTM Y (m)	MSL Z (m)	I (mA)	Injection Electrode Field Notes
6-Nov-18	500S	650E	591256	5367737	346	600	Top of hill, rocky
6-Nov-18	500S	600E	591230	5367696	345	850	Flat, rocky
6-Nov-18	500S	550E	591191	5367666	341	550	Swampy
6-Nov-18	500S	450E	591118	5367591	343	500	Mossy, rocky
6-Nov-18	500S	400E	591083	5367554	339	400	Downhill, rocky
6-Nov-18	500S	300E	591013	5367482	336	400	Downhill, rocky
6-Nov-18	500S	200E	590938	5367412	318	550	Cedar swamp
6-Nov-18	500S	150E	590901	5367380	317	600	Swamp
6-Nov-18	500S	50E	590831	5367306	324	450	Uphill, rocky
6-Nov-18	500S	50W	590763	5367238	319	600	Cedar swamp
6-Nov-18	500S	100W	590727	5367202	320	650	Cedar swamp
6-Nov-18	500S	200W	590658	5367130	325	550	Uphill, rocky
6-Nov-18	500S	300W	590582	5367061	325	1700	Swamp
6-Nov-18	500S	350W	590548	5367021	325	600	Swamp
6-Nov-18	250S	600W	590199	5367026	336	450	Rocky, mossy
6-Nov-18	250S	550W	590233	5367061	333	900	Cedar swamp
6-Nov-18	250S	450W	590299	5367137	337	700	Uphill, rocky
6-Nov-18	250S	350W	590370	5367203	337	450	Flat, good ground
6-Nov-18	250S	325W	590387	5367217	336	450	Flat, good ground
6-Nov-18	250S	300W	590405	5367240	336	550	Flat, rocky
6-Nov-18	250S	200W	590485	5367317	335	500	Flat, good ground
6-Nov-18	250S	100W	590551	5367379	335	450	Bottom of outcrop
6-Nov-18	250S	75W	590566	5367397	334	450	Flat, rocky
6-Nov-18	250S	50W	590578	5367407	333	350	Top of outcrop
6-Nov-18	250S	50E	590652	5367489	321	850	Cedar swamp
6-Nov-18	250S	150E	590733	5367558	317	800	Edge of pond, swamp
6-Nov-18	250S	200E	590752	5367587	317	750	Edge of swamp
7-Nov-18	0	850W	589835	5367025	326	500	Flat, rocky
7-Nov-18	0	800W	589872	5367051	327	750	Flat, rocky
7-Nov-18	0	700W	589945	5367126	332	500	Uphill, rocky
7-Nov-18	0	600W	590006	5367191	332	500	Uphill, rocky
7-Nov-18	0	550W	590051	5367236	336	600	Next to trail, rocky
7-Nov-18	0	200W	590298	5367485	334	400	Flat, rocky
7-Nov-18	0	175W	590318	5367503	333	400	Flat, rocky

Date	Grid Line	Station	UTM X (m)	UTM Y (m)	MSL Z (m)	I (mA)	Injection Electrode Field Notes
7-Nov-18	0	100W	590370	5367563	332	350	Bare outcrop, moss patches
7-Nov-18	0	75W	590386	5367578	331	200	Top of outcrop, moss patches
7-Nov-18	0	50W	590408	5367599	333	250	Top of outcrop, moss patches
7-Nov-18	0	50E	590480	5367670	317	200	Edge of outcrop, gravel, crushed rock
7-Nov-18	0	100E	590496	5367725	317	600	Road across swamp, crushed rock
7-Nov-18	0	150E	590543	5367749	317	550	Edge of swamp, rocky
7-Nov-18	0	175E	590571	5367760	317	650	Edge of swamp, rocky
7-Nov-18	0	200E	590612	5367771	317	600	Flat, rocky, next to trail
7-Nov-18	0	300E	590647	5367840	325	500	Downhill, rocky, mossy
7-Nov-18	0	325E	590660	5367854	325	300	Flat, rocky
7-Nov-18	0	350E	590679	5367869	325	850	Flat, rocky, mossy
7-Nov-18	0	400E	590717	5367907	329	500	Flat, rocky
7-Nov-18	0	450E	590746	5367945	328	2000	Flat, rocky, next to trail
7-Nov-18	0	500E	590781	5367973	332	450	Downhill, rocky
7-Nov-18	0	550E	590815	5368008	331	2000	Swamp
7-Nov-18	0	600E	590853	5368046	330	650	Flat, rocky
7-Nov-18	0	650E	590889	5368080	332	900	Uphill, rocky
7-Nov-18	0	700E	590923	5368115	337	500	Uphill, rocky
7-Nov-18	0	750E	590956	5368146	340	750	Uphill, rocky
7-Nov-18	0	800E	590992	5368182	342	600	Top of hill, rocky
7-Nov-18	0	850E	591026	5368220	337	700	Downhill, rocky
7-Nov-18	0	900E	591057	5368260	337	750	Flat, rocky
7-Nov-18	0	950E	591094	5368292	337	600	Flat, rocky
7-Nov-18	0	1000E	591126	5368325	337	700	Uphill, rocky
7-Nov-18	0	1050E	591160	5368362	338	550	Flat, rocky
7-Nov-18	0	1150E	591235	5368434	334	400	Downhill, very rocky
7-Nov-18	0	1200E	591263	5368471	328	550	Downhill, rocky
7-Nov-18	750E	100N	590886	5368219	346	800	Clear-cut, rocky
7-Nov-18	750E	50N	590918	5368186	342	550	Flat, rocky
7-Nov-18	750E	50S	590987	5368124	334	500	Downhill, rocky
7-Nov-18	750E	100S	591026	5368086	329	600	Downhill, rocky
7-Nov-18	1000E	100S	591195	5368260	330	600	Flat, rocky

Date	Grid Line	Station	UTM X (m)	UTM Y (m)	MSL Z (m)	I (mA)	Injection Electrode Field Notes
7-Nov-18	1000E	50S	591160	5368291	332	400	Rocky, next to trail
7-Nov-18	1250E	250N	591135	5368674	331	500	Side of hill, rocky
7-Nov-18	1250E	200N	591168	5368643	341	500	Top of outcrop, rocky
7-Nov-18	1250E	100N	591228	5368580	327	600	Side of hill, very rocky
7-Nov-18	1250E	50N	591266	5368536	320	500	Downhill, rocky
7-Nov-18	1250E	50S	591334	5368474	306	300	Downhill, rocky
7-Nov-18	1250E	150S	591406	5368402	298	750	Cedar swamp
7-Nov-18	1250E	175S	591421	5368386	298	450	Cedar swamp
8-Nov-18	0	1300E	591335	5368542	326	400	Downhill, rocky
8-Nov-18	0	1400E	591397	5368616	314	550	Downhill, rocky
8-Nov-18	0	1450E	591435	5368649	314	600	Flat, rocky
8-Nov-18	1500E	200N	591331	5368818	326	550	Bottom of outcrop
8-Nov-18	1500E	100N	591398	5368752	313	550	Flat, rocky
8-Nov-18	1500E	50N	591428	5368715	309	500	Flat, good soil
8-Nov-18	250N	950W	589594	5367133	322	550	Flat, rocky
8-Nov-18	250N	850W	589661	5367204	321	700	Swamp
8-Nov-18	250N	800W	589701	5367239	324	400	Uphill, rocky
8-Nov-18	250N	700W	589774	5367307	329	450	Flat, rocky
8-Nov-18	250N	650W	589806	5367344	330	550	Uphill, rocky
8-Nov-18	250N	600W	589839	5367378	330	500	Swamp
8-Nov-18	250N	550W	589880	5367418	329	500	Downhill, rocky
8-Nov-18	250N	200W	590125	5367660	337	500	Uphill, rocky
8-Nov-18	250N	100W	590194	5367733	339	550	Downhill, rocky
8-Nov-18	250N	75W	590214	5367746	336	500	Downhill, rocky
8-Nov-18	250N	50W	590235	5367768	336	500	Downhill, rocky
8-Nov-18	250N	50E	590298	5367830	322	500	Downhill, rocky
8-Nov-18	250N	150E	590369	5367908	316	500	Swamp
8-Nov-18	250N	175E	590388	5367925	317	750	Swamp
8-Nov-18	250N	200E	590407	5367943	317	900	Swamp
8-Nov-18	250N	300E	590474	5368010	319	650	Swamp
8-Nov-18	250N	350E	590505	5368040	319	1200	Swamp
8-Nov-18	500N	50W	590054	5367934	316	600	Uphill, rocky
8-Nov-18	500N	100W	590018	5367900	323	700	Uphill, rocky
8-Nov-18	500N	150W	589987	5367871	328	700	Uphill, rocky

Date	Grid Line	Station	UTM X (m)	UTM Y (m)	MSL Z (m)	I (mA)	Injection Electrode Field Notes
8-Nov-18	500N	200W	589953	5367830	324	550	Downhill, rocky
8-Nov-18	500N	300W	589879	5367764	318	600	Downhill, rocky
8-Nov-18	500N	350W	589846	5367729	315	700	Flat, good soil
8-Nov-18	500N	400W	589808	5367691	313	1900	Flat, swamp
8-Nov-18	500N	450W	589774	5367653	313	1800	Swamp
8-Nov-18	500N	550W	589720	5367604	312	1600	Swamp
8-Nov-18	500N	600W	589684	5367568	312	1700	Swamp
8-Nov-18	500N	650W	589632	5367518	314	1550	Uphill, good soil
8-Nov-18	500N	700W	589596	5367476	314	1500	Flat, next to trail, good soil

Table 8: Current Injection Field Notes

4.8 SAFETY

Canadian Exploration Services Limited prides itself in creating and maintaining a safe work environment for its employees. Each crew member is briefed on the jobsite location, equipment safety, standard operating procedures along with our health and safety manual. An emergency response plan is generated relating to the specific job and with the jobsite predominantly in the field, which is unpredictable, morning safety briefings are essential. Topics are generally chosen based off jobsite characteristics of the area, timing and crew experience.

Daily topics included:

Date	Safety Topic
October 31, 2018	Trucks, trailers and ATV circle check.
November 1, 2018	Slips, trips and falls. Three points of contact rule. Rocky topo and wet moss.
November 2, 2018	Big game hunt is on. Be seen by wearing high visibility clothing and hunter orange.
November 3, 2018	Power protocol review. Always assume power is on. State when clear in front and back. Wait until power off before clipping/unclipping. Don't touch red wire when it's on.
November 4, 2018	Weekly review.
November 5, 2018	Driving in snowy and slushy conditions.
November 6, 2018	Power protocol review. Always assume power is on. State when clear in front and back. Wait until power off before clipping/unclipping. Don't touch red wire when it's on.
November 7, 2018	Big game hunt is on. Be seen by wearing high visibility clothing and hunter orange.

November 8, 2018	The weather has changed. There is an increased risk of hypothermia. There is heat in the tent and trucks if needed.
November 9, 2018	Weekly review.
November 16, 2018	Spot use. Emergency route plan. Working alone safety awareness.
November 17, 2018	Careful driving – winter road conditions.
November 18, 2018	Spot use. Emergency route plan. Working alone safety awareness.
November 19, 2018	Review.

Table 9: Daily Safety Topics

5. INSTRUMENTATION & METHODS

5.1 INSTRUMENTATION¹

Induced Polarization

Twenty 2-channel Full Waver IP receivers were employed for the 3D IP survey. The transmitter consisted of a GDDII (5kW) with a Honda 6500 as a power plant. A current monitor was connected to the transmitter to record the current transmitted.

Time domain IP surveys involve measurement of the magnitude of the polarization voltage that results from the injection of pulsed current into the ground. Apparent resistivity and chargeability are the parameters of interest measured through this procedure.

Magnetometer Survey

The survey was conducted with a GSM-19 v7 Overhauser magnetometer in walking mode with GPS with a second GSM-19 magnetometer in base station mode for diurnal correction.

The GSM-19 measures the Earth's magnetic field with less than 0.1 nT sensitivity, 0.01 resolution, and 0.2 nT absolute accuracy over its full temperature range.

5.2 THEORETICAL BASIS

Induced Polarization

Time domain IP (TD-IP) surveys involve measurement of the magnitude of the polarization voltage that results from the injection of pulsed current into the ground.

Two main mechanisms are known to be responsible for the IP effect although the exact causes are still poorly understood. The main mechanism in rocks containing metallic conductors is electrode polarization (overvoltage effect). This results from the buildup of charge on either side of conductive grains within the rock matrix as they block the flow of current. On removal of this current the ions responsible for the charge slowly diffuse back into the electrolyte (groundwater) and the potential difference across each grain slowly decays to zero.

The second mechanism, membrane polarization, results from a constriction of the flow of ions around narrow pore channels. It may also result from the excessive build up of positive ions around clay particles. This cloud of positive ions similarly blocks the passage of negative ions through pore spaces within the rock. On removal of the applied voltage the concentration of ions slowly returns to its original state resulting in the observed IP response.

In TD-IP, the current is usually applied in the form of a square waveform, with the polarization voltage being measured over a series of short time intervals after each

¹ Refer to appendix B for instrument specifications.

current cut-off, following a short delay of approximately 0.5s. These readings are integrated to give the area under the decay curve. The integral voltage is divided by the observed steady voltage (the voltage due to the applied current, plus the polarization voltage) to give the apparent chargeability (Ma) measured in milliseconds. For a given charging period and integration time the measured apparent chargeability provides qualitative information on the subsurface geology.

The polarization voltage is measured using a pair of non-polarizing electrodes like those used in spontaneous potential measurements and other IP techniques.

Magnetometer Survey

The GSM-19 Overhauser magnetometer measures the Earth's magnetic field in a multi-step process that provides better results by using the Overhauser effect. The Overhauser effect occurs when a special liquid (with unpaired electrons) is combined with hydrogen atoms. The unpaired electrons couple with the protons within the hydrogen atom, to produce a two-spin system. This electron-proton coupling is then disturbed once exposed to secondary polarization from a strong radio frequency (RF) magnetic field. The unpaired electrons transfer their stronger polarization to hydrogen atoms, which allows an increased polarization of protons in the sensor liquid. Thus, generating a strong precession signal, which causes a deflection of the proton magnetization into the plane of precession. A pause then allows the electrical transient to die off. This leaves the proton precession signal to slowly decay above the noise level. Following this slow decay, the proton precession frequency is counted, measured and converted into magnetic field units. Finally, the results are stored in memory with the date, time, and coordinates of the measurements. In the base station mode, only the time and total field are stored (GEM Systems, 2007).

5.3 SURVEY SPECIFICATIONS

3D Distributed Induced Polarization Array

The 3D distributed induced polarization array configuration was used for this survey. This array consists of 60 mobile stainless steel read electrodes and two current electrodes. 20 portable receivers were each connected to 3 read electrodes (P1, P2, and P3) to create 2 orthogonal components with 100- and 150-metre dipole spacing. The power location CA was chosen based on field conditions but placed throughout the survey area (randomly or in a grid-like manner). In this case, there were ten 315-degree lines and six 45-degree lines of power locations. Along each line the power transmits were injected at approximately every 25m and/or 50m. The maximum theoretical depth obtained was approximately 625 metres. The second current electrode (the infinite) was stationary for the entire survey at 586791E, 5366052N. The infinite was approximately 4km southwest from the centre of the survey area, placed optimally as far as possible to produce a pole-dipole array scenario. A two second transmit cycle time was used for a duration of 90 seconds for approximately 12 stacks.

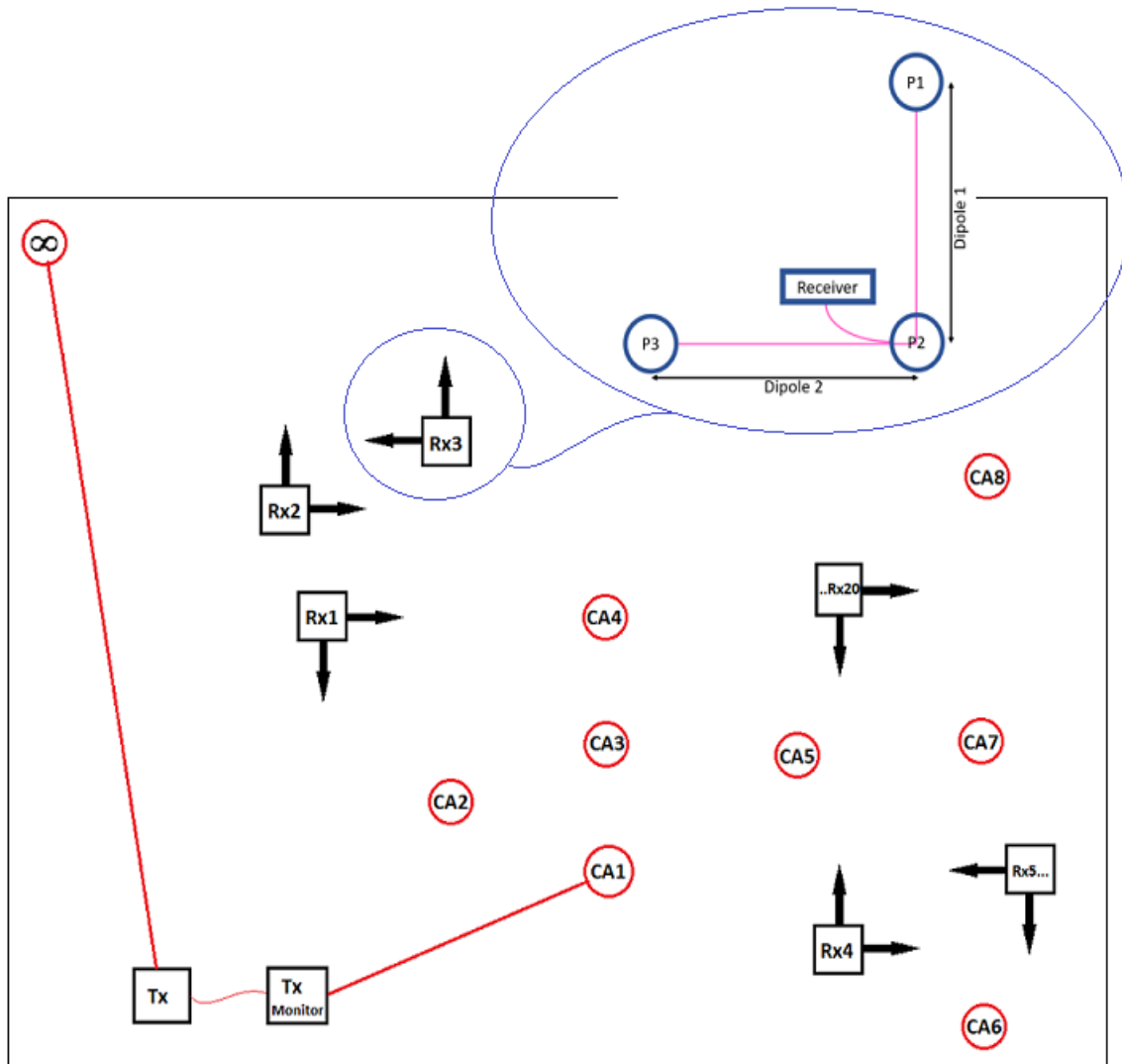


Figure 12: 3D Distributed IP Configuration

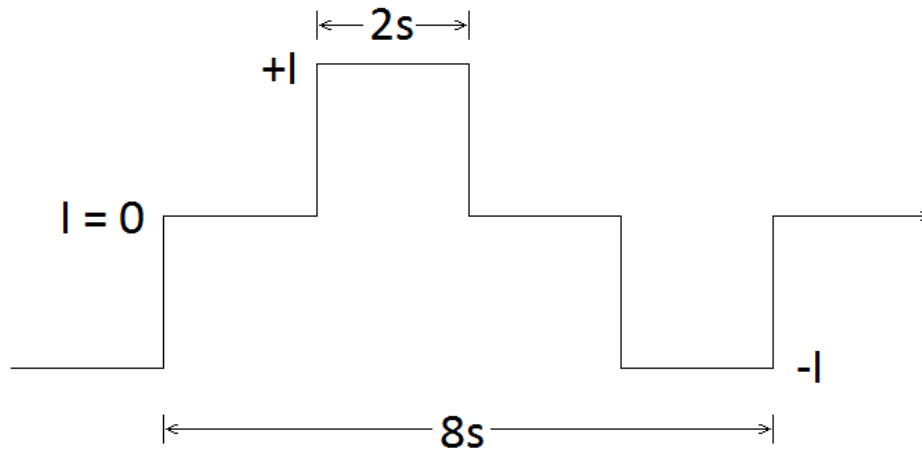


Figure 13: Transmit Cycle Used

Magnetometer Survey

Base station corrected Total Magnetic Field surveying was used for this magnetometer survey. Two synchronized GSM-19 v7 Overhauser magnetometers of identical type were needed. One magnetometer unit was set in a fixed position in a region of stable geomagnetic gradient, and away from possible cultural effects (i.e. moving vehicles) to monitor and correct for daily diurnal drift. This magnetometer, given the term 'base station', stored the time, date and total field measurement at fixed time intervals over the survey day. A second, remote mobile unit was set to 1 second walking magnetometer mode with GPS. It stored the coordinates, time, date, and the total field measurements, simultaneously. The procedure consisted of taking total field magnetic measurements of the Earth's magnetic field along individual profiles; survey lines 750W through 1500E, and 750S through 500N.

6. QUALITY CONTROL & PROCESSING

6.1 MAGNETIC DATA QC & PROCESSING

For optimal data quality, when conducting the survey ferromagnetic objects were kept away from the operator, so as not to impair the quality of measurements. A sensor was mounted on a backpack at a height of approximately 2-metres, in order to optimally minimize localized near-surface geologic noise. With the large amount of survey points recorded at a 1 second interval, noise spikes for a single reading was deemed spurious and deleted during post processing.

At the end of a survey day, the mobile and base-station units were linked, via RS-232 ports, for diurnal drift and other magnetic activity (ionospheric and spheric) corrections using internal software. Diurnally corrected magnetic data (Total Magnetic Field; TMF) was gridded using the Minimum Curvature Gridding option in Geosoft Oasis (Figure 14). If necessary, lines were returned to and repeated.

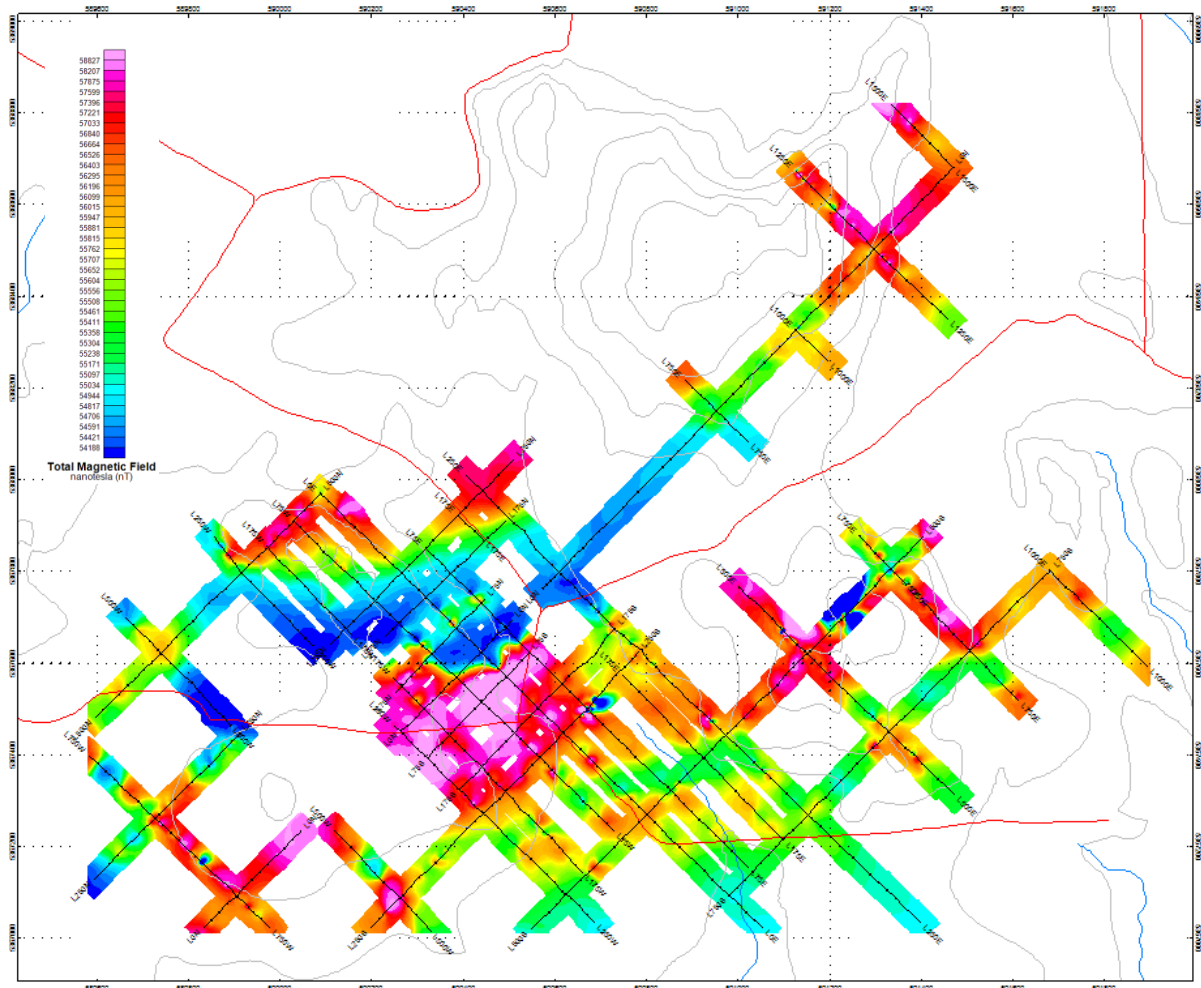


Figure 14: Diurnally Corrected Mag Grid (TMF)

6.2 3D IP FIELD QUALITY CONTROL

Daily 3D IP field quality control steps consisted of the following:

1. Resistivity checks – the resistivity of each dipole was recorded in the field pre- and post-acquisition to ensure dipoles were connected to the receiver properly and the electrode was well contacted with the ground.
2. GPS checks – internal GPS of each receiver was checked that they were placed in the proper position. GPS and injection file time stamps were compared to confirm correlation.
3. Data check – data was dumped daily and confirmed that the number of GPS points matched the number of injection files.
4. Backup – a second current monitor recorded the transmit cycles continuously throughout every acquisition day. If necessary, the backup was used.
5. Repeats – repeats of lines/data were taken if necessary.

6.3 3D IP PROCESSING

In the office, processing of the data and quality control was done interchangeably. The steps included:

1. Import positions – GPS coordinates were imported into each corresponding current injection file (IAB) and receiver file (VMN) using the Fullwave Viewer Software.
2. GPS check – the imported positions were confirmed on Google Earth.
3. Synchronization check – in case of GPS lags or different time settings the synchronization of the files was checked to determine they match (Figure 15).
4. Prosys output – a complete .bin file was output from the Fullwave Viewer software.
5. Data quality control – values were viewed in the complete .bin file. Accepted values with a normal M1-M20 range would have a proper transmit cycle, a smooth curve, and a high amplitude low frequency narrow peak (Figure 16). Unaccepted values with an abnormal M1-M20 range (Figure 17, red circle) would not have proper signals (Figure 18). These abnormal values could be due to the dipole being too far from the current injected and/or the background noise being greater than that of the current injected and/or poor dipole coupling. These were removed in the following step.

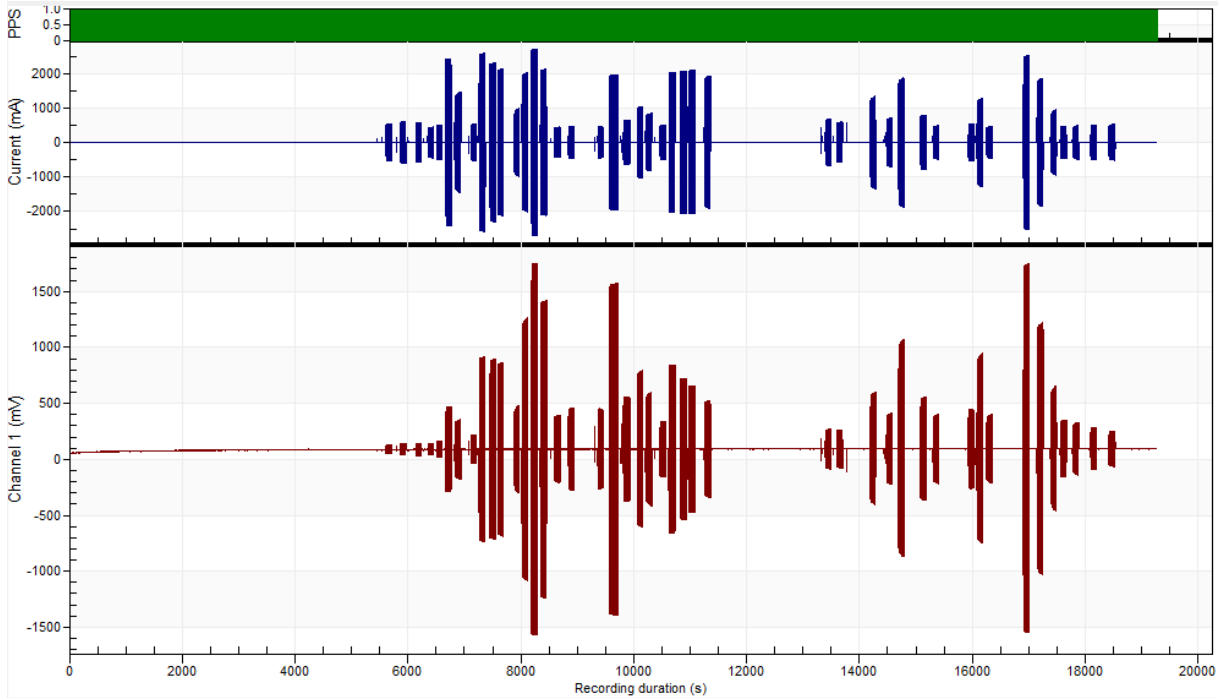


Figure 15: Receiver recordings (red) synchronized with the current injections (blue)

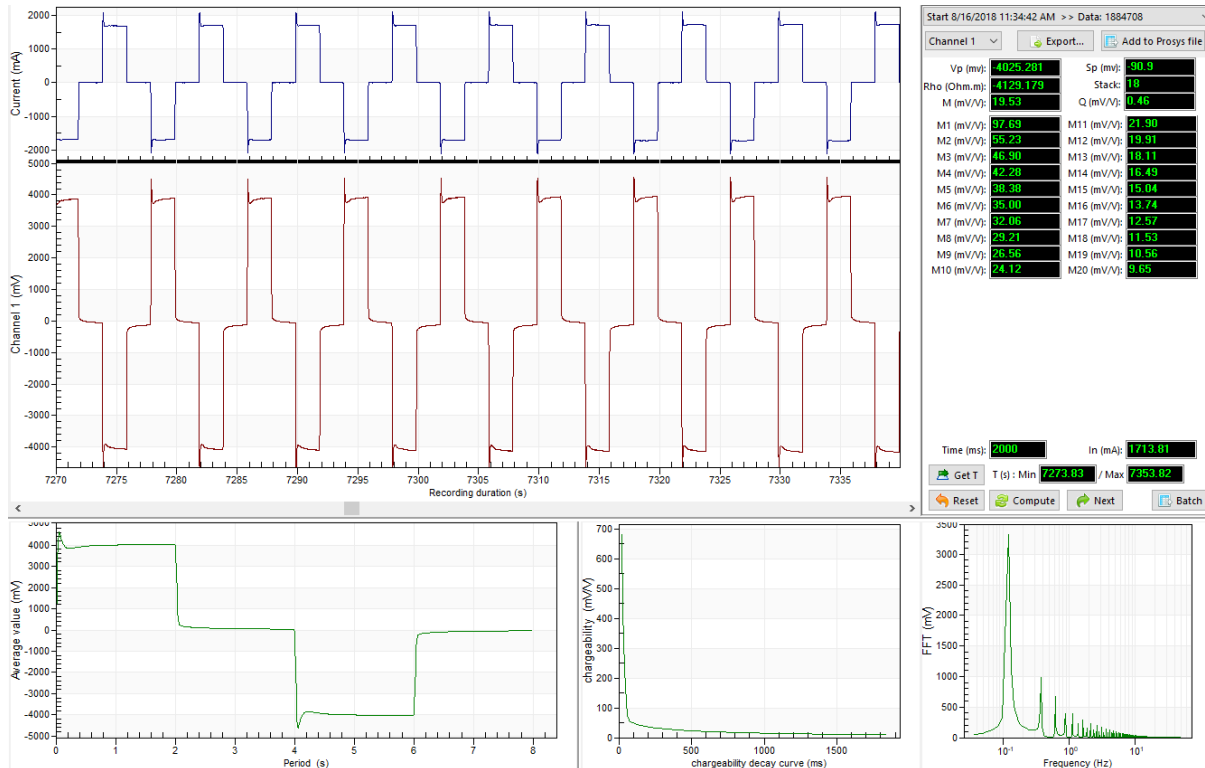


Figure 16: Good 90 second transmit/read pair. Injection (blue), read signal (red), transmit signal (bottom left), decay curve (bottom centre), FFT (bottom right).

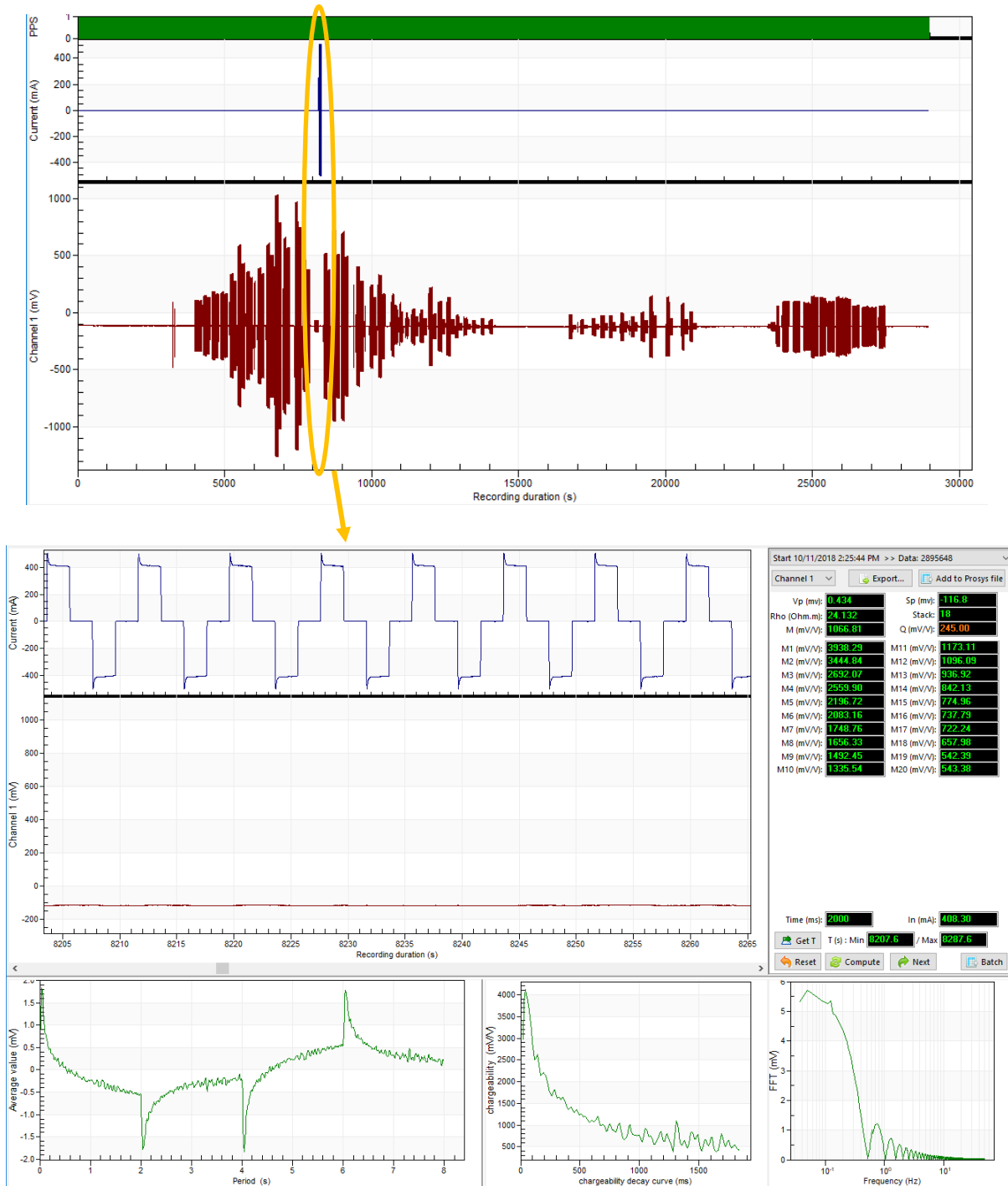


Figure 18: Signal, cycle, and curves of abnormal unaccepted M1-20 values.

6. Filtering – Values with unrealistic resistivities and chargeabilities, high standard deviations, large geometric factors, and that are oversaturated were filtered out (Figure 19).

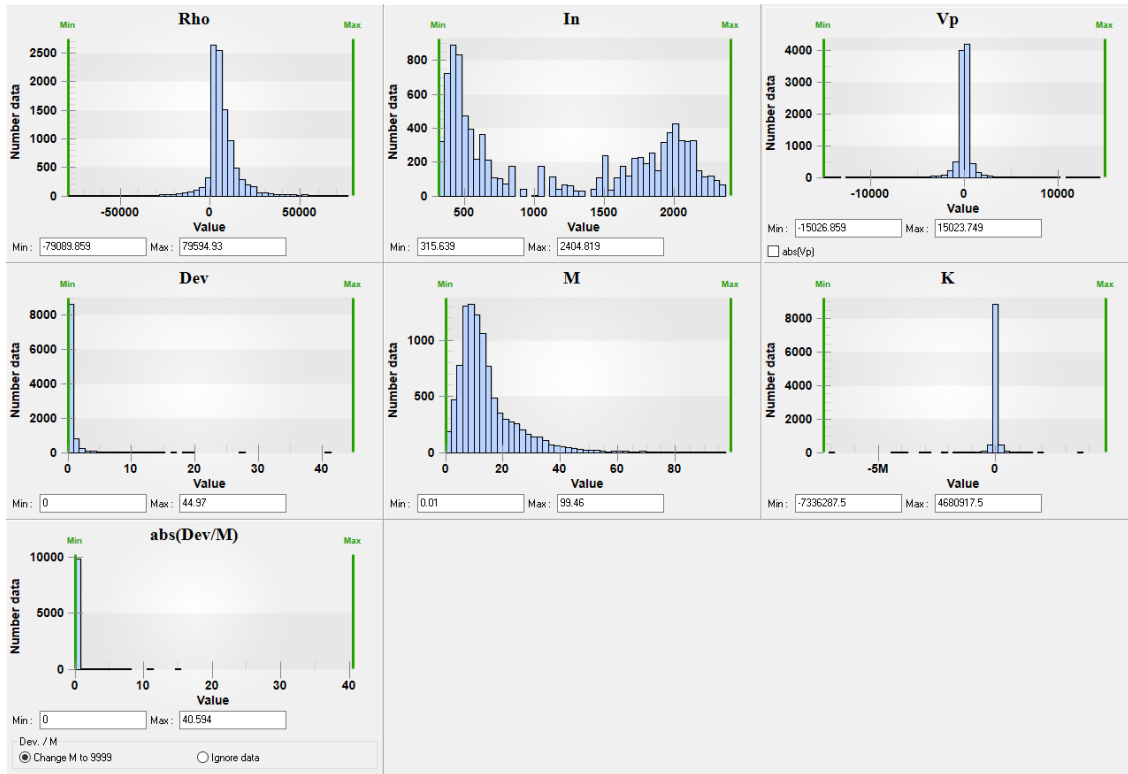


Figure 19: Filtering options

3D viewing of the raw calculated chargeability and resistivity results was observed in Geosoft Oasis (Figures 20-23; Y=North). Calculated report points from acquisition were recorded at a maximum depth of approximately 1180 metres depth.

A total of 8336 filtered data points was collected from this 3D IP survey configuration over a period of 7 days.

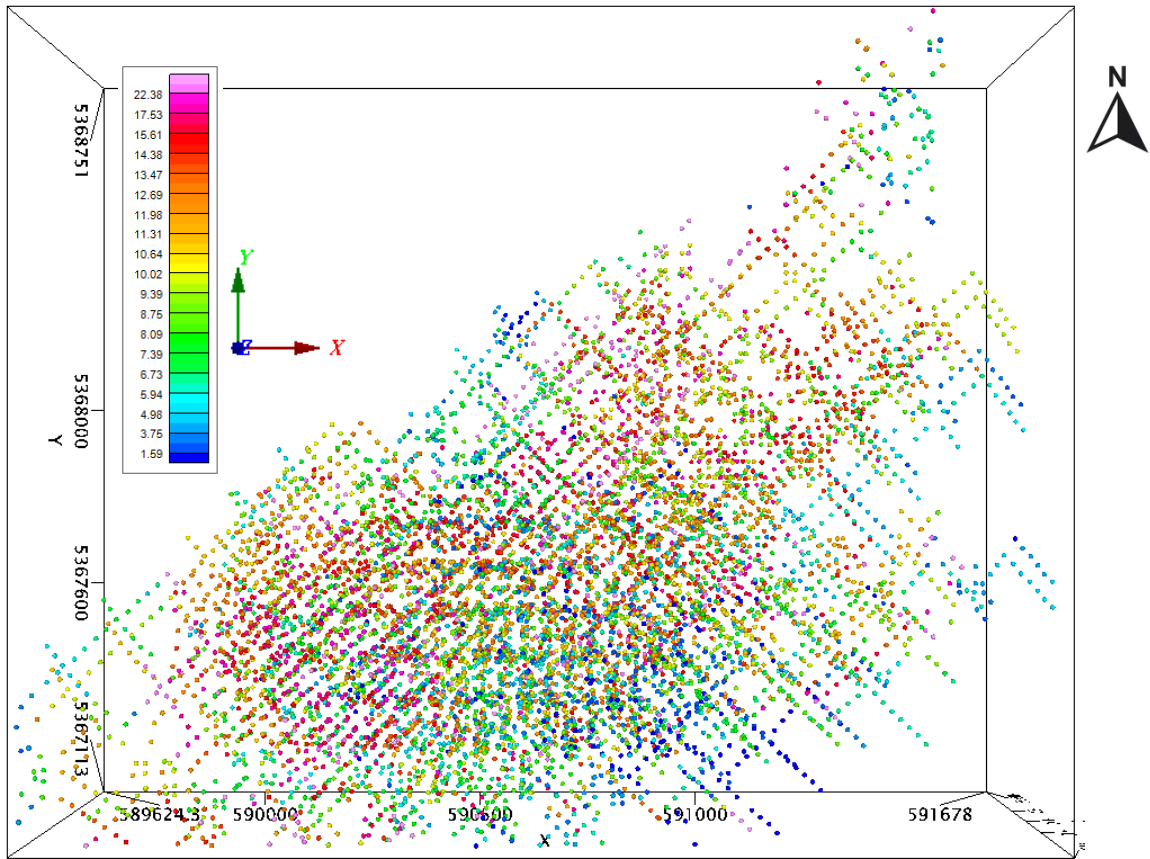


Figure 20: Top view of the raw calculated chargeability data points

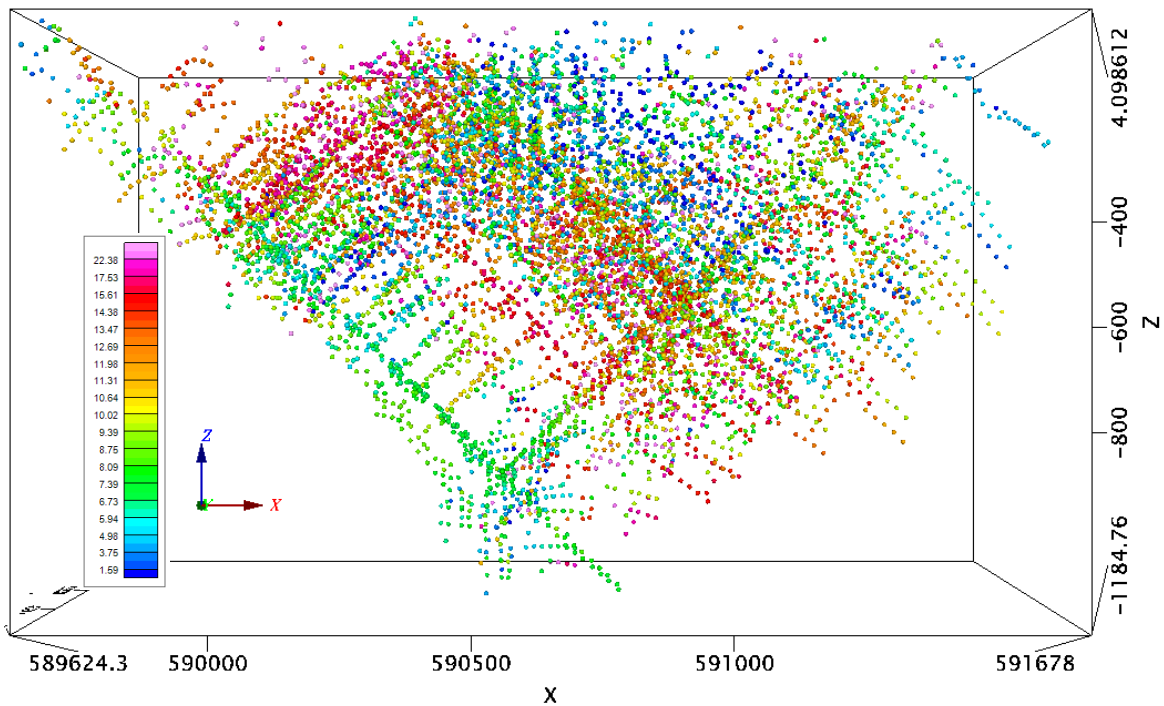


Figure 21: Side view of the raw calculated chargeability data points facing north

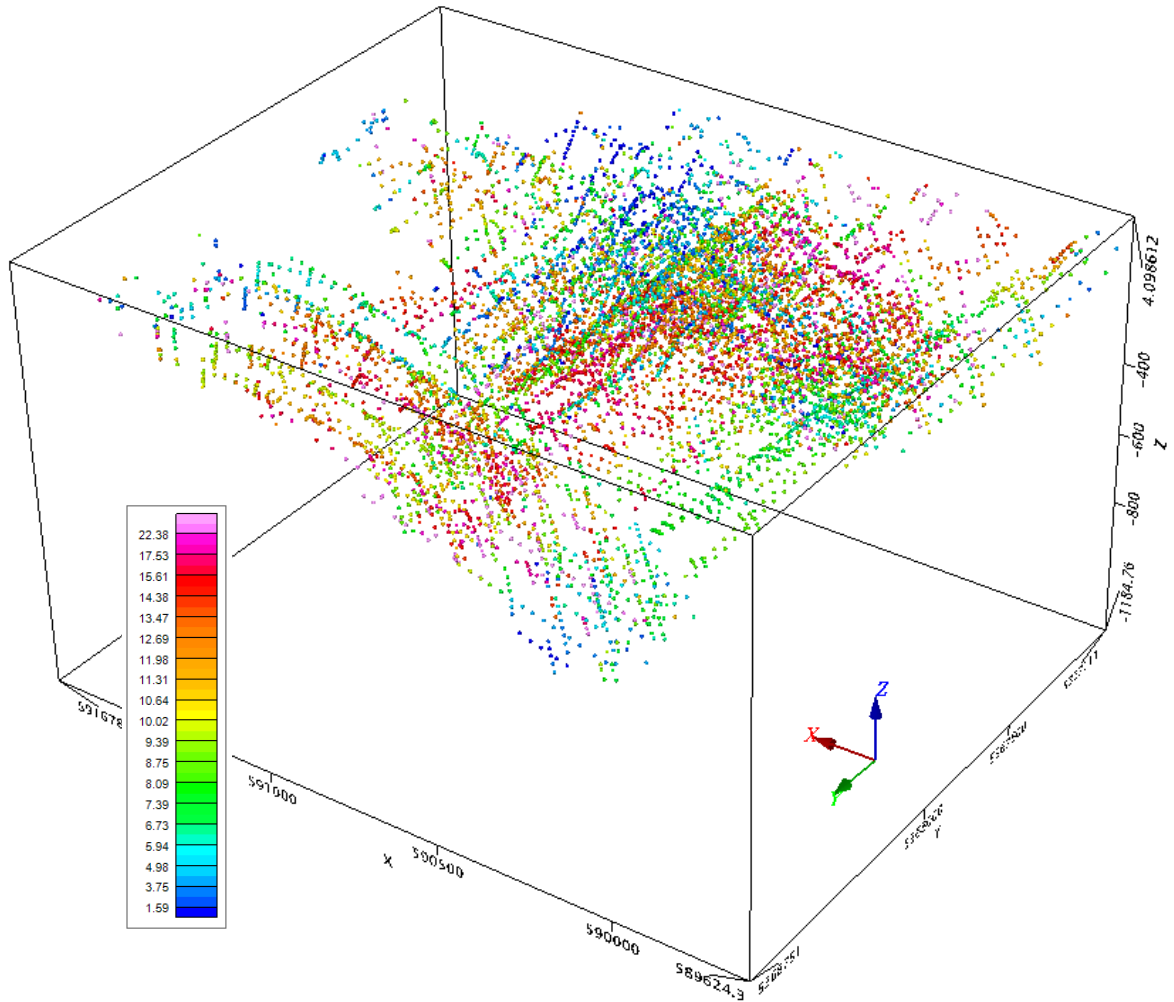


Figure 22: Raw calculated chargeability data points with survey layout

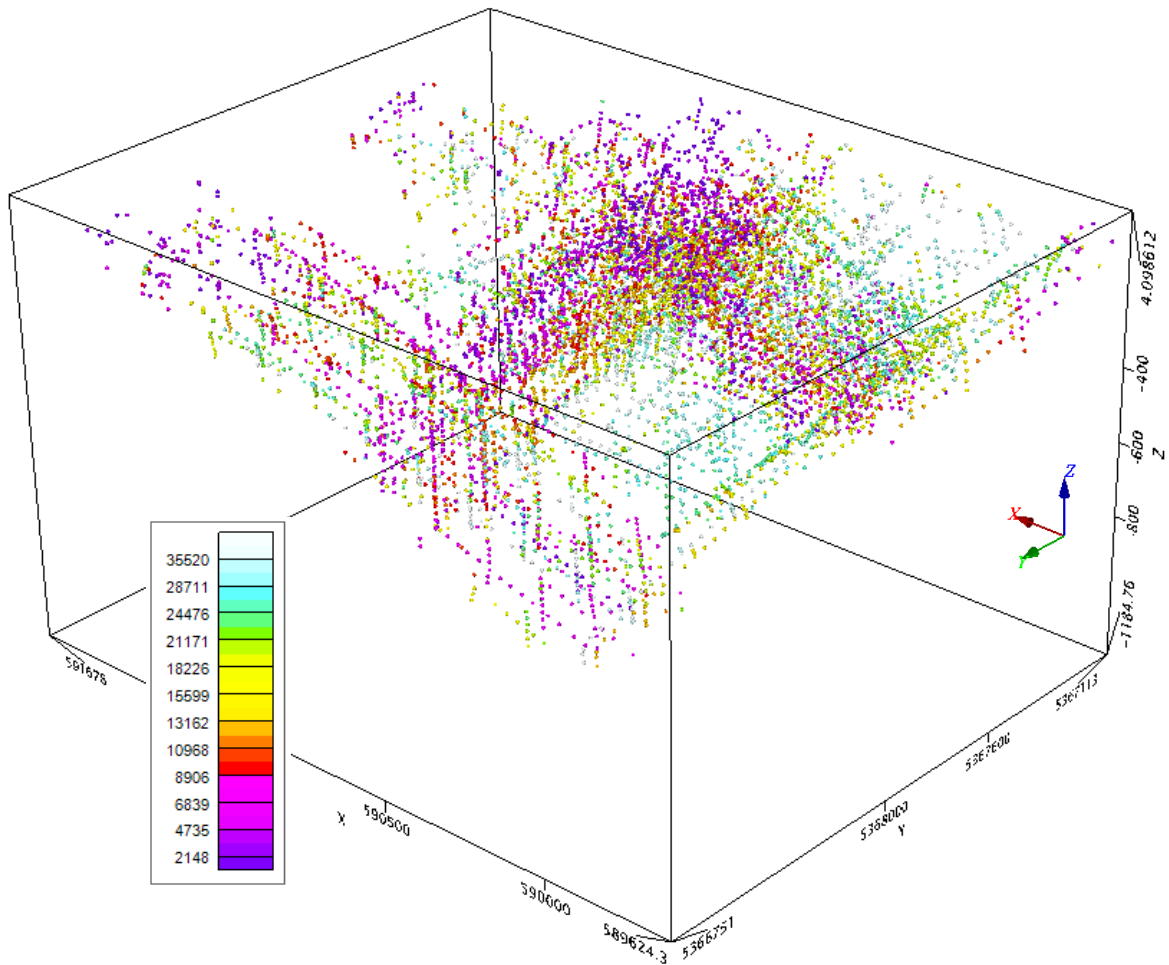


Figure 23: Raw calculated resistivity data points

6.4 3D IP INVERSION

Inversions of the filtered data was done in RES3DINV Professional version 3.14.19. This is a 3D inversion software specifically used for resistivity and induced polarization data. From the finalized Prosys file an export to a RES3DINV format was created with specific selections depending on the survey type completed. The selections seen in Figure 21 are standard 3D distributed IP array settings. Depending on the intended survey array type, including the remote may or may not be used. For example, in this case the infinite was placed far away that a pole-dipole array was intended and the remote was not included. Topography was included.

The screenshot shows a software interface for configuring export settings. On the left, there are several input fields and checkboxes: 'Enter title for data set' with the value '3DIP_ALL_topo_filt.bin', 'Electrode array' set to 'Other', 'Include IP [M]' checked, 'X location distance' with 'True horizontal' selected, and 'Type of Measurement' set to 'Apparent resistivity (Rho)'. Below these is a 'Topography' section with 'Insert topography from data' checked and an 'Import file...' button. On the right, the 'Grid type' section has 'Random grid' selected, with 'Number of lines' and 'Number of columns' both set to 0. A 'Include remote in RES3DINV grid' checkbox is also present. At the bottom, there are three buttons: 'Res3dinv' (highlighted with a green checkmark), 'Cancel', and 'Help'. A grid visualization with scattered points is shown in the center-right area.

Figure 24: Export settings selection from Prosys to RES3DINV

Model grid settings were changed depending on the infinite locations and the dipole lengths. A uniform cell size was chosen to be $\frac{1}{4}$ or $\frac{1}{5}$ of the dipole length, in this survey case a cell size of 25m was used (Figure 25). To reduce edge artifacts a few cells extension was added. Manual edits may be needed to the cell size depending on the location of the infinite. In this case no manual edits were made as the remote electrode was at a theoretically infinite location, as in a pole-dipole array scenario. Twelve model layers were used with depths to 15, 30, 50, 75, 110, 150, 200, 260, 330, 410, 500, and 600 metres.

The theoretical maximum depth obtained from the Fullwave Designer was 625 metres. Calculated report points from acquisition were recorded at a maximum depth of approximately 1180 metres depth. However, a maximum depth of 600 metres was used because resolution and sensitivity decrease as depth increases. Sensitivity values represent how well the model is constrained, with higher sensitivities providing less uncertainty and greater validity. To constrain and optimize both the resolution and sensitivity of the inversion a maximum depth of 600m was used.

Important inversion parameters used for the creation of the model are described in Table 10².

² Refer to the RES3DINV manual and tutorial by Dr. M.H. Loke.

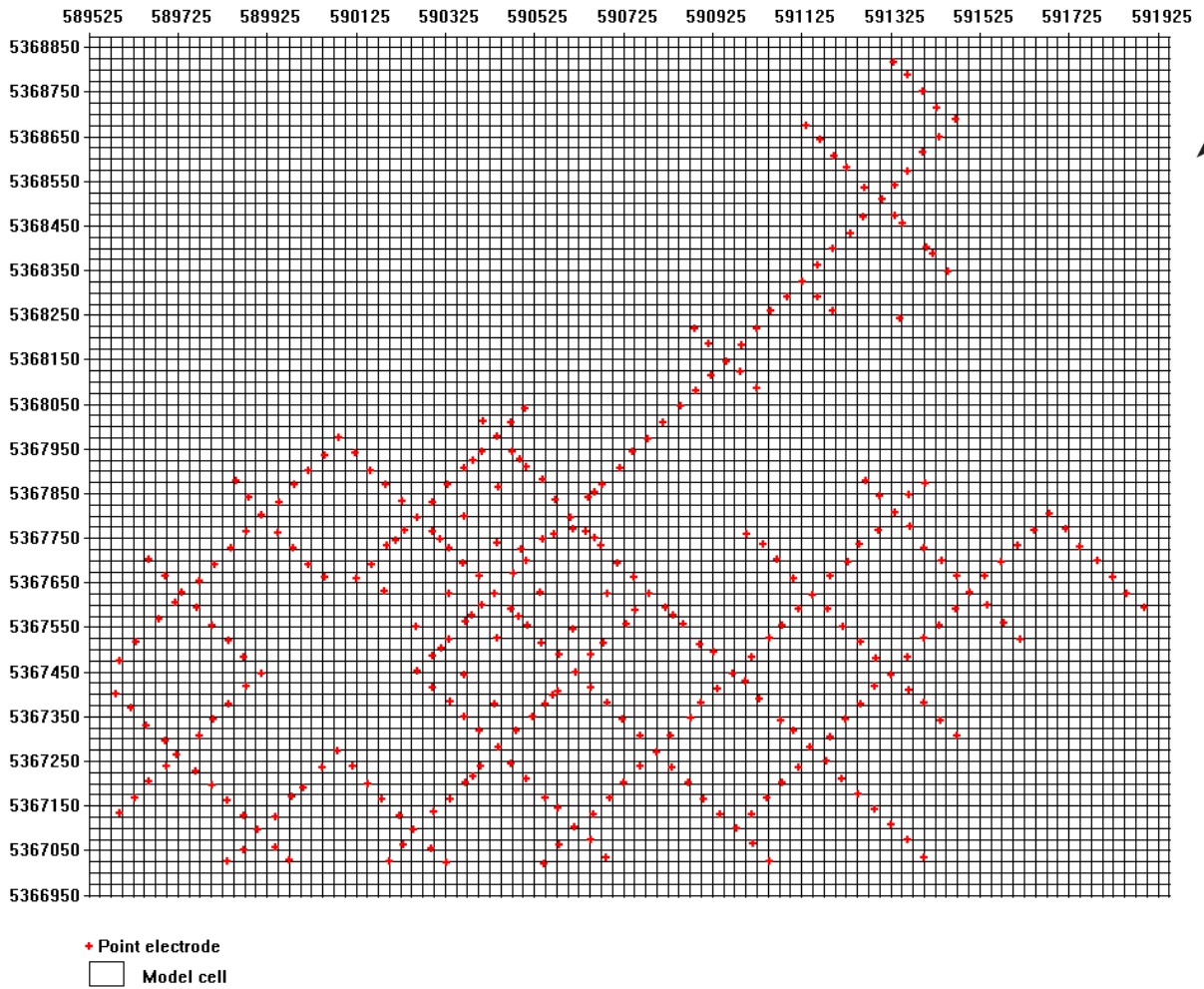


Figure 25: Uniform 25m model cell size – model viewer in RES3DINV

Parameter	Description
Refined Topography	Estimates topography of each interior node individually to take non-linear topography variations within each model block into account.
Higher Damping of 1 st layer	Useful to avoid unusually large resistivity variations in the top layer (Loke and Dahlin 2010).
Diagonal Filter Components	Reduces effects of produced structures with boundaries aligned along the horizontal and vertical directions.
Robust Data Constraint	Attempts to minimize the absolute difference between the measured and calculated apparent resistivity values (Claerbout and Muir 1971). Less sensitive to very noisy data point.
Robust Model Constraint	Produces models with regions of more uniform resistivity values with sharper boundaries.
Incomplete Gauss-Newton	An approximate solution of the least-squares equation that uses an iterative linear conjugate-gradient method.
Reference Model	An additional constraint on the model to limit the deviation of the model resistivity from a homogenous reference model. This is normally the average of the apparent resistivity values.
Logarithm of Apparent Resistivity	In 2D systems it is ~impossible to determine whether the measured potential has the same sign as the transmitted current, thus it was assumed apparent resistivity is always positive and the logarithm is used. However, negative apparent resistivity values not caused by noise are observed in 3D distributed IP systems, especially with near-surface large resistivity contrasts and topography. Thus, the logarithm of apparent resistivity is not used because negative apparent resistivity values are real and kept throughout the inversion for a more accurate model. (Loke, 2018)
Forward Modeling Method	The finite-element method with a medium extended 4 horizontal node mesh between electrodes is used for datasets with topography and for improved accuracy.
Non-Linear IP Complex Method	The non-linear method calculates apparent IP using a complex resistivity formula. This method treats the conductivity as a complex quantity with real and imaginary components (Kenma et al. 2000). The complex conductivity and complex potential are calculated. These components are calculated in a two-step inversion process during each iteration. First the resistivity model is calculated, then the IP model is calculated.
IP Model Transformation	The “range-bound” transformation method is used to ensure the model IP values produced by the inversion program does not exceed the lower or upper limits of 0-800 mV/V.

Table 10: Inversion Parametre Descriptions (© (1996-2018) M.H.Loke)

7. RESULTS, INTERPRETATION & CONCLUSIONS

7.1 RESULTS

A final XYZ is output from the inversion and provides the resistivity, conductivity, chargeability, and sensitivity values at the centre and the corner of the model blocks.

A horizontal slice of the chargeability and resistivity from the final inversion model and the final TMF results overlaid in Google Earth is seen in the following three figures.

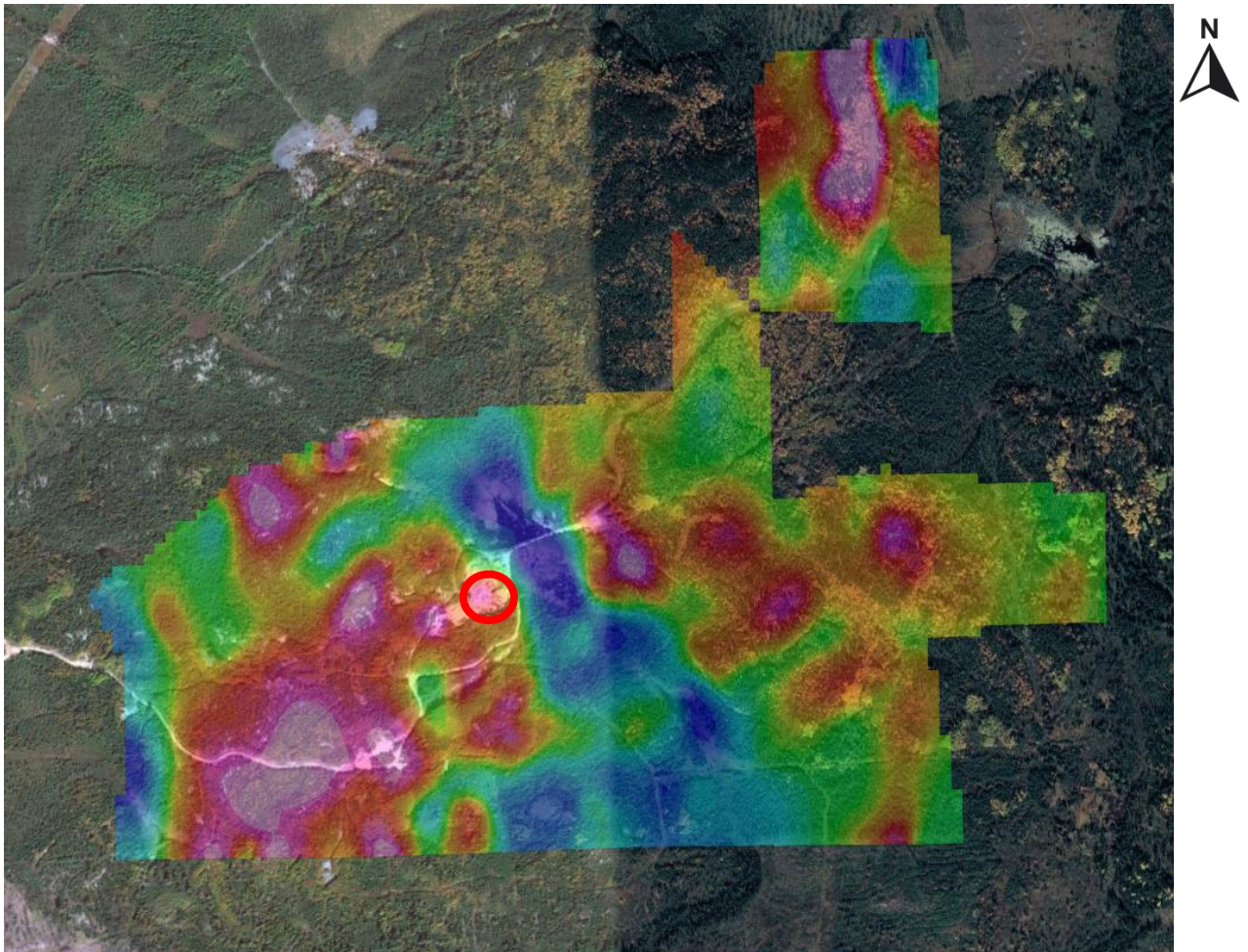


Figure 26: Chargeability grid (300m MSL) overlaying Google Earth. Red circle represents the Iris Adit. (©2018 Google, Image ©2018 DigitalGlobe)

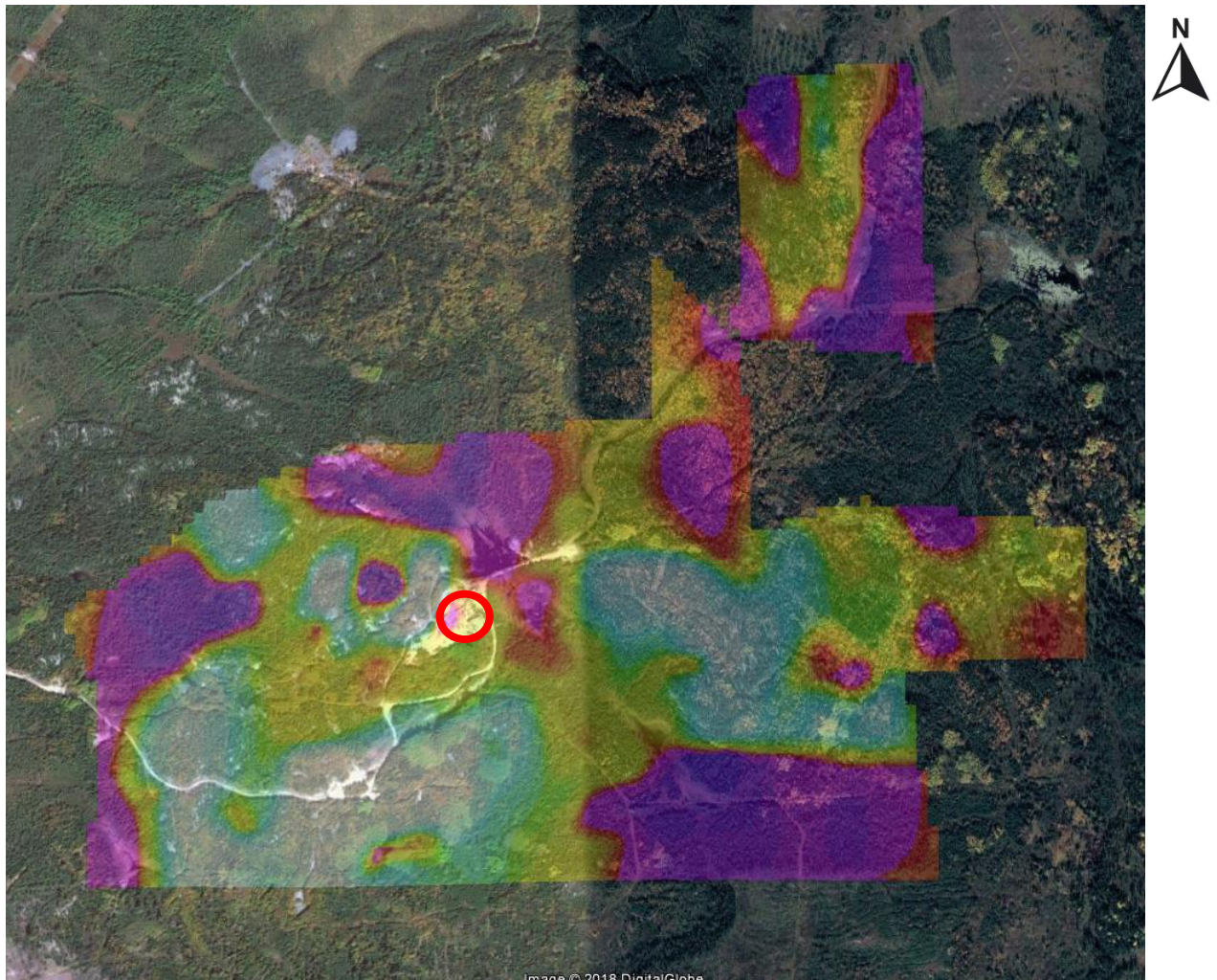


Figure 27: Resistivity grid (250m MSL) overlaying Google Earth. Red circle represents the Iris Adit. (©2018 Google, Image ©2018 DigitalGlobe)

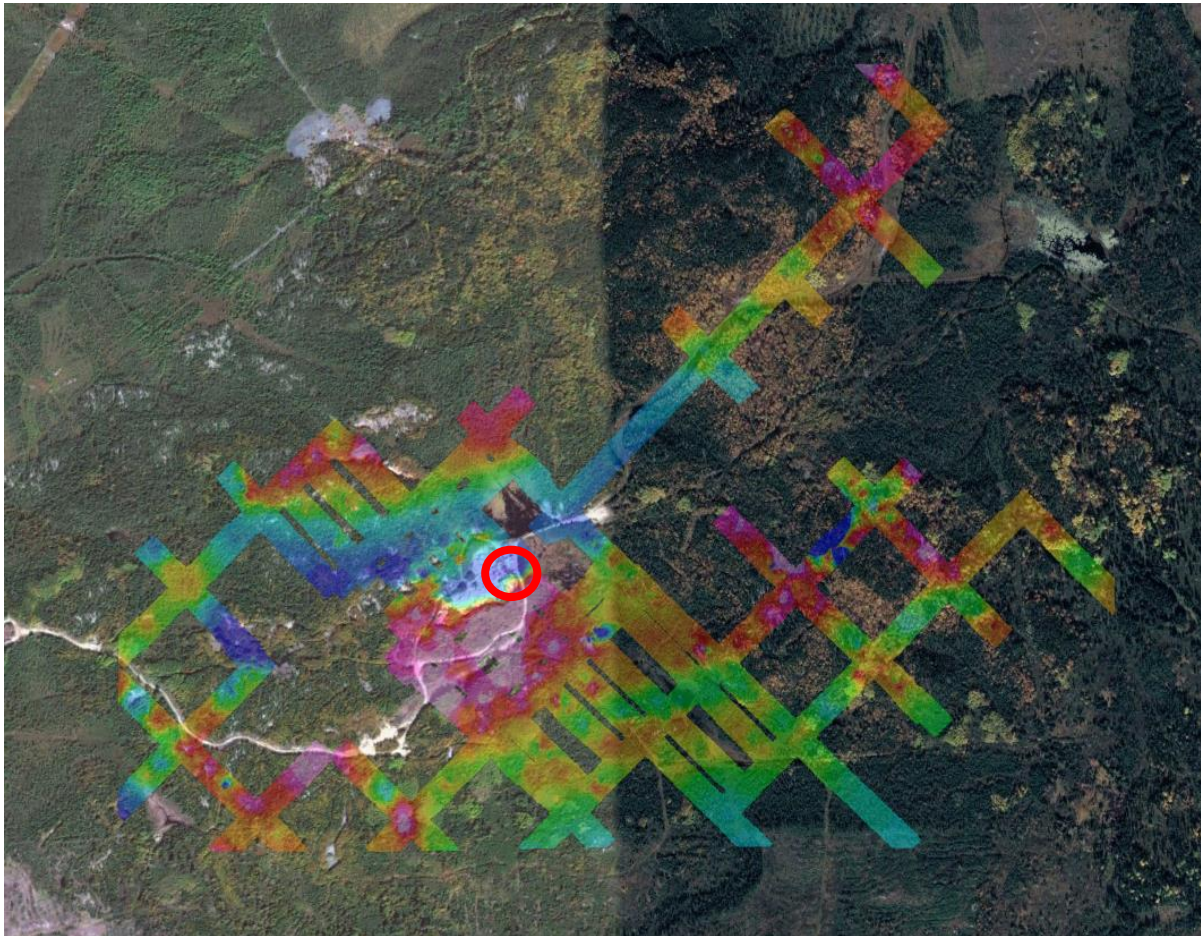


Figure 28: Magnetometer plan overlaying Google Earth. Red circle represents the Iris Adit. (©2018 Google, Image ©2018 DigitalGlobe)

7.2 INTERPRETATIONS³

Targeting of the 3D IP array was based on previous field observations and historic data. The targeting was a broad look at the porphyry plug that hosts the mineralization from the Iris showing. Historically, disseminated sulphides are noted as the mineralization hosting the gold. From this, it is expected that there is a chargeability high and resistivity high associated with the gold mineralization. The porphyry should also be highlighted with a magnetic signature.

Both inverted chargeability and resistivity data were modelled in 3D. The surface information indicates strong chargeability and high resistivity signatures emerged from the inversion of the dataset.

Figure 29 shows an example of the 3D chargeability model at 25mV/V and 30mV/V superimposed on the 0 metre MSL chargeability slice. The 3D model indicates the Iris zone may be related to the interaction of 2 features; a 70° anomaly, and a 345°-

³ Note for all interpretation figures North is in the Y-direction.

350° trending anomaly (Figure 30; 1 and 2, respectively).

The 70° chargeability anomaly (Figure 30; 1) appears to follow the expected geological fabric for the area. It most likely represents the trend of the porphyry plug and the mineralization or magnetite present within the plug.

The second 345°-350° striking trend (Figure 30; 2) most likely represents a mineralized shear zone. The interaction of these two features occurs near 590231E, 5367451N and may be what resulted in the gold enrichment mineralization at the Iris Zone.

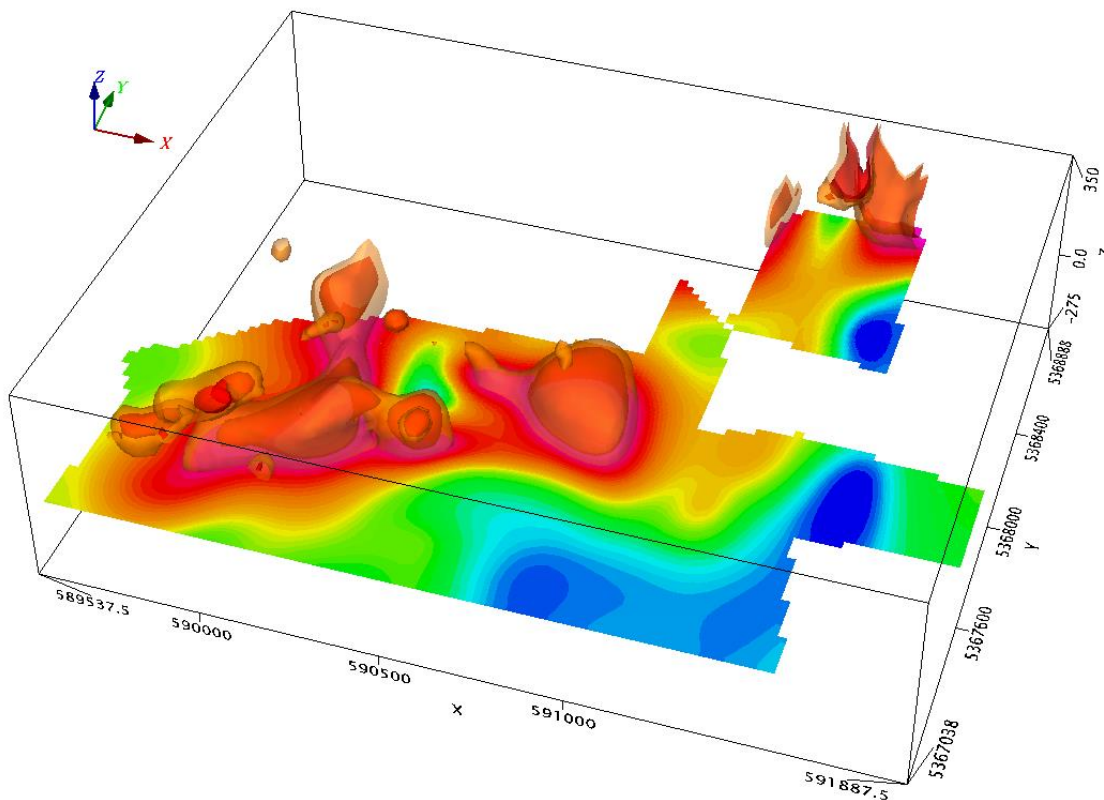


Figure 29: 3D chargeability isosurfaces with 0 metre MSL slice (orange/red isosurface = 25+mV/V)

A narrow strong shallow unconstrained chargeability feature appears on the far north of the survey area (Figure 30; 3). The strength of this feature most likely reflects a strong north-south mineralization. This most likely represents a trenchable target.

Multiple other high chargeability anomalous zones occur along the 70 degree trend and most likely indicate areas where mineralization occurs.

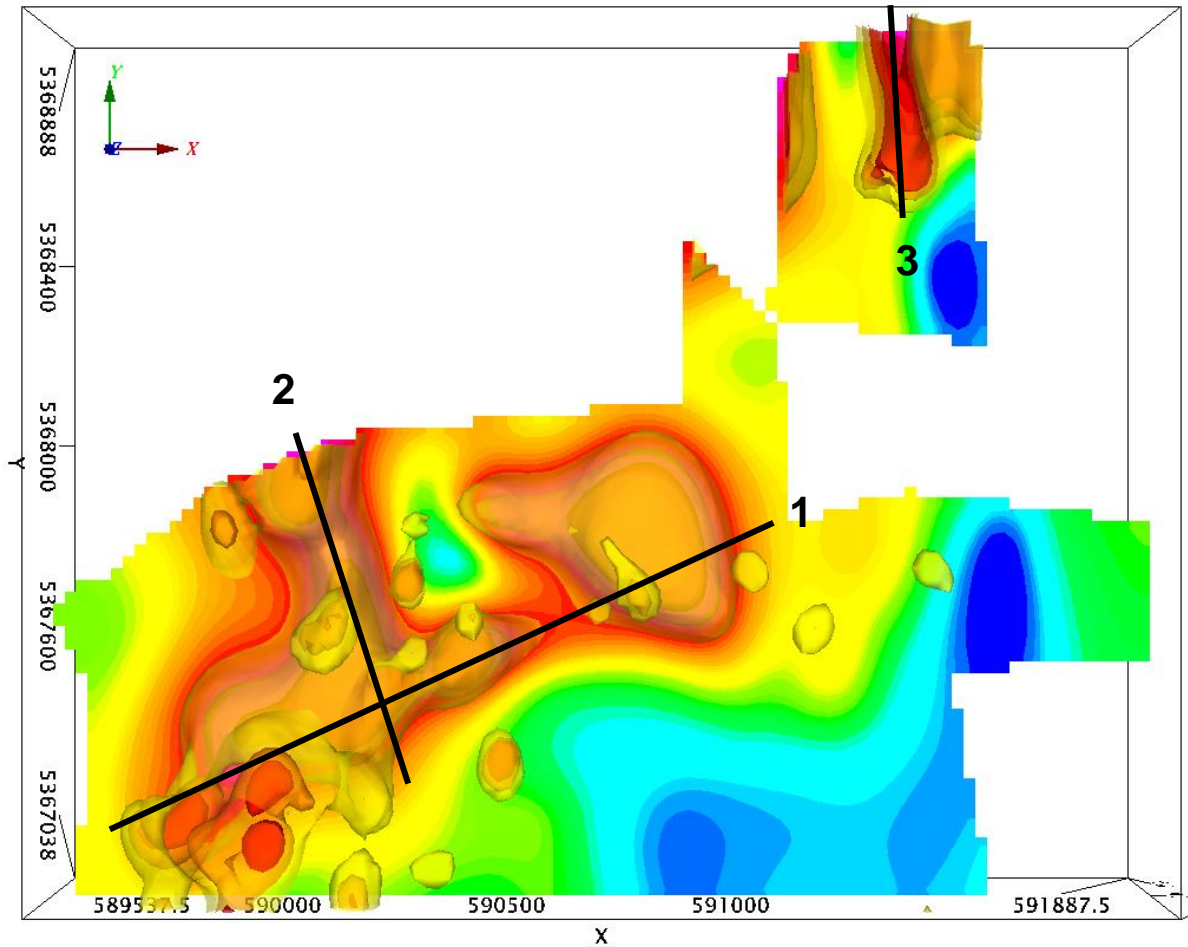


Figure 30: 3D chargeability isosurfaces with 0 metre MSL slice looking down with interpretations (orange/red isosurface = yellow 20mV/V, orange 25mV/V, red 30mV/V)

A large resistivity high appears over the survey area (Figure 31; blue isosurface). This high most likely represents the track of the porphyry system. Historical documents suggest the presence of Rhyolite in the region, which could be represented by some of the resistivity highs seen.

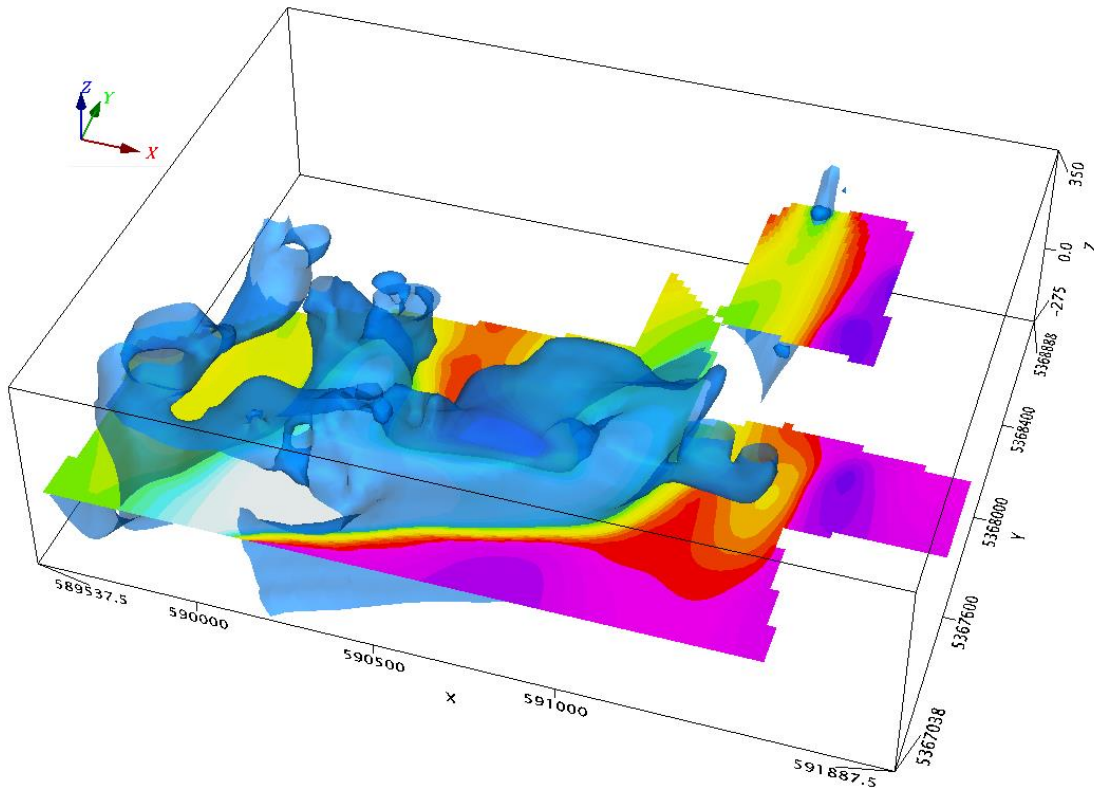


Figure 31: 3D resistivity isosurface (>50,000 ohm*m) on a 0 metre (MSL) resistivity slice

The center of the survey area indicates a strong magnetic high signature (Figure 32; 1 circle). The eastern edge of the signature correlates to the location of the adit, which indicates that the source of this magnetic signature represents the porphyry plug.

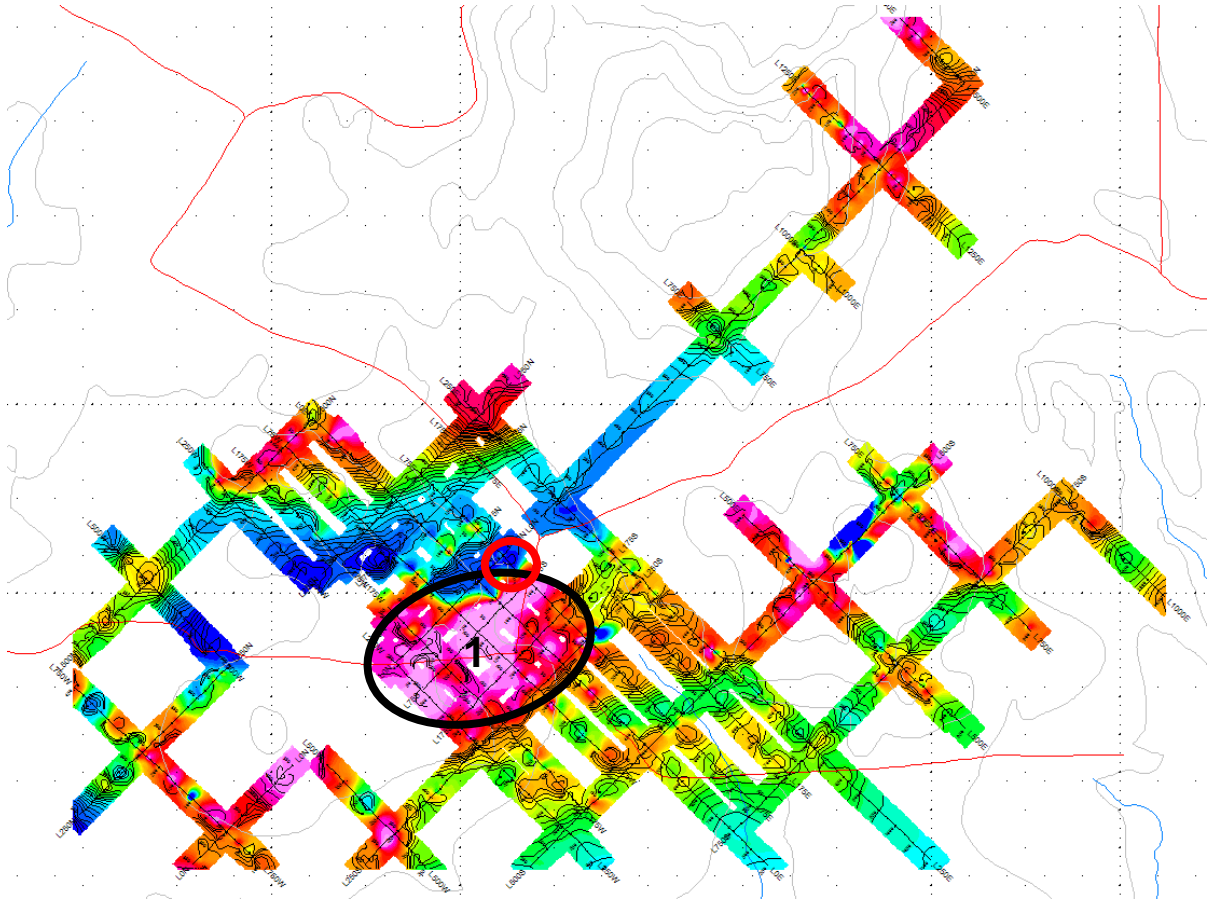


Figure 32: Magnetometer Plan (red circle represents the Iris Adit)

A comparison of the magnetic signature to the high chargeability 70° zone indicates a strong correlation (Figure 33). Correlated locations where the chargeability varies, and the consistent magnetic signature is seen may indicate zones of stronger mineralization within the porphyry (the high chargeable isosurfaces in the high mag seen in Figure 33). For example, the area east of the stripped zone could exhibit a stronger mineralization.

The north-south chargeable feature does not translate well with the magnetic survey. There is a slight drop in the magnetic signature on the northern extent of the chargeability signature, however with the leased claim in the central region, there is an incomplete magnetic dataset. The slight drop in magnetic signature would support the existence of a 345° - 350° alteration zone.

The magnetic signature indicates that the porphyry appears to extend east and west along strike but narrows and weakens (Figure 33; 1). The west end correlates with a strong chargeability signature and may indicate the increase in mineralization. The east exhibits a decrease in chargeability and may indicate a weakening of mineralization.

The chargeability anomaly on the northern margin of the survey area appears to exhibit a moderate increase in the magnetic signature (Figure 33; 2).

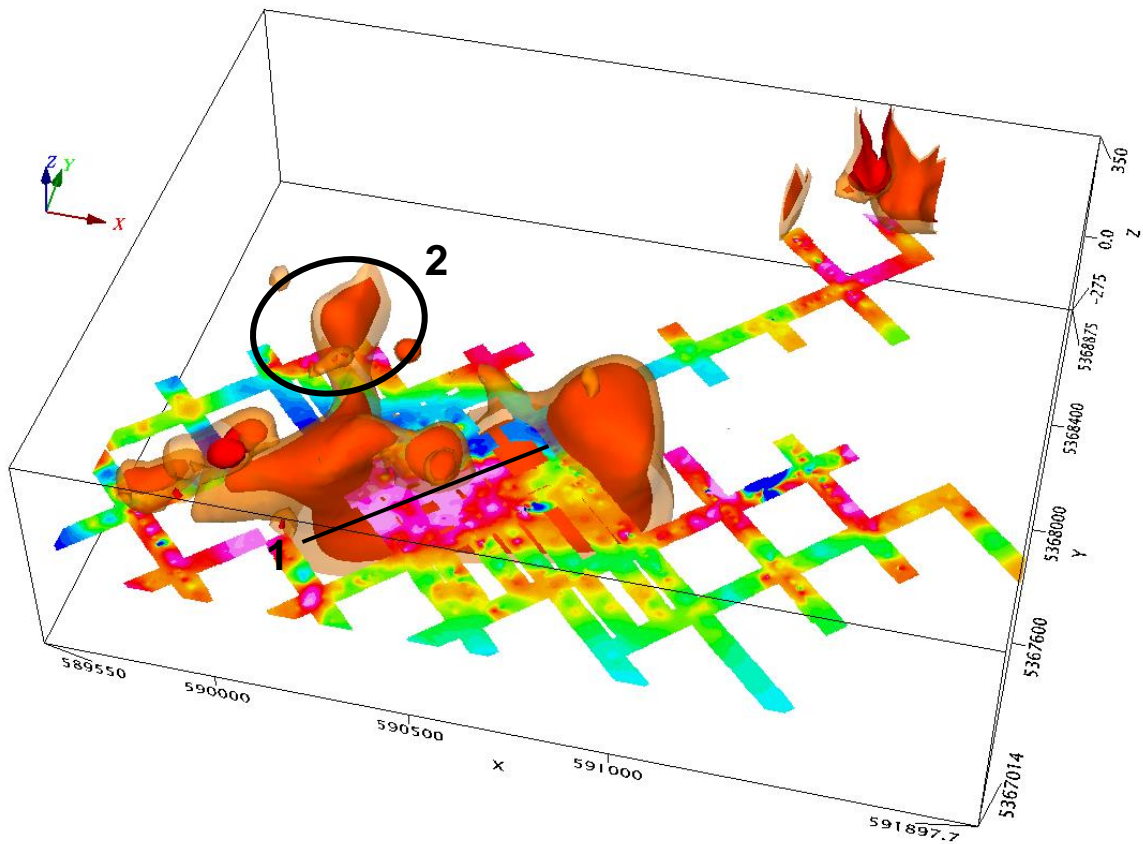


Figure 33: 3D Chargeability Model with isosurfaces (orange=25mV/V and red=30mV/V) on surface magnetic plan with interpretations

The magnetic signature with the resistivity high model below indicates a correlation between the magnetic high and the resistivity high (Figure 34; 1). This correlation most likely represents the porphyry plug.

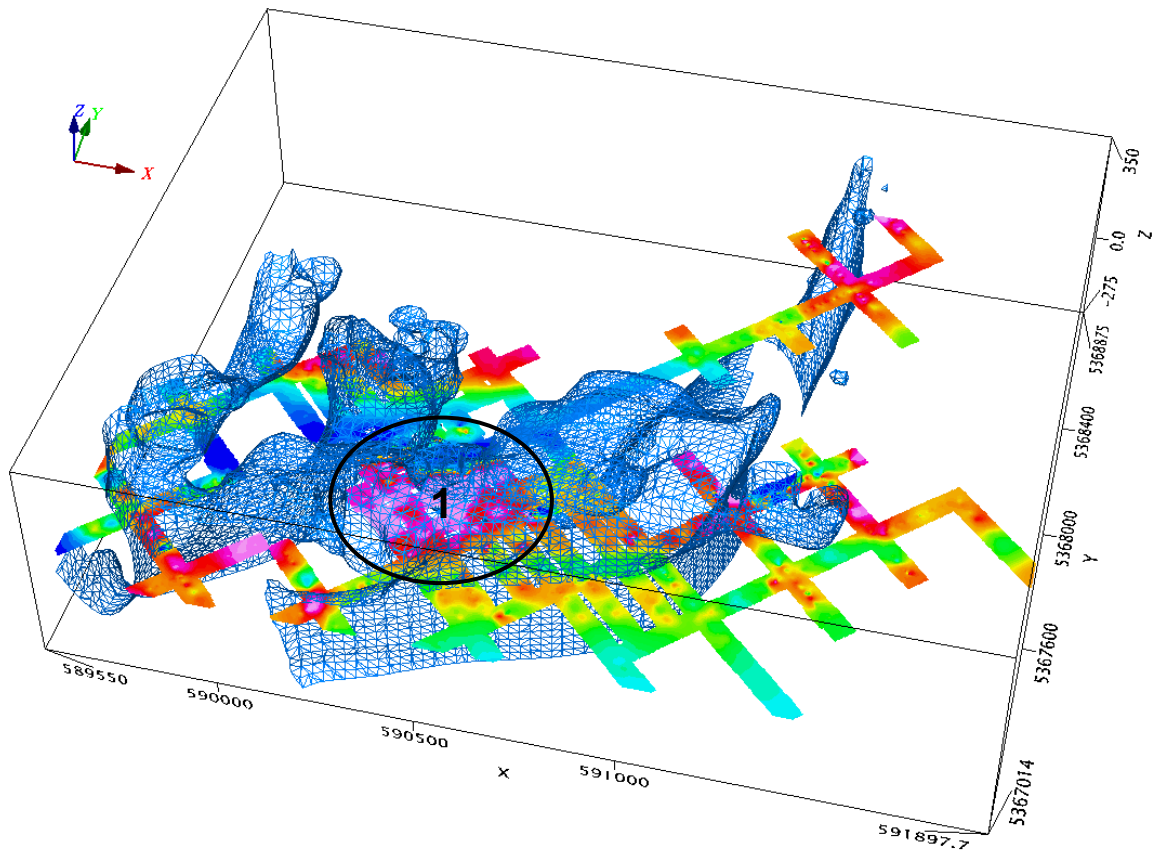


Figure 34: 3D resistivity high (>50,000 ohm.meters) on the ground magnetometer plan with interpretations

Figure 35 shows the magnetometer plan with a 25+ mV/V chargeability (orange/red isosurfaces) and a 50000+ ohm*metre resistivity (blue isosurface). The response in the northern extent of the survey area appears to exhibit a chargeability high, north-south feature, along with an increase in magnetic signature. The resistivity model at this location indicates a sharp decrease in resistivity. This appears to extend perpendicular to the geologic fabric and may indicate a mineralized alteration zone.

The main anomaly in the central portion of the survey area indicates a chargeability, resistivity and magnetic high. This is indicative of a porphyry plug with the high chargeability region being mineralized zones.

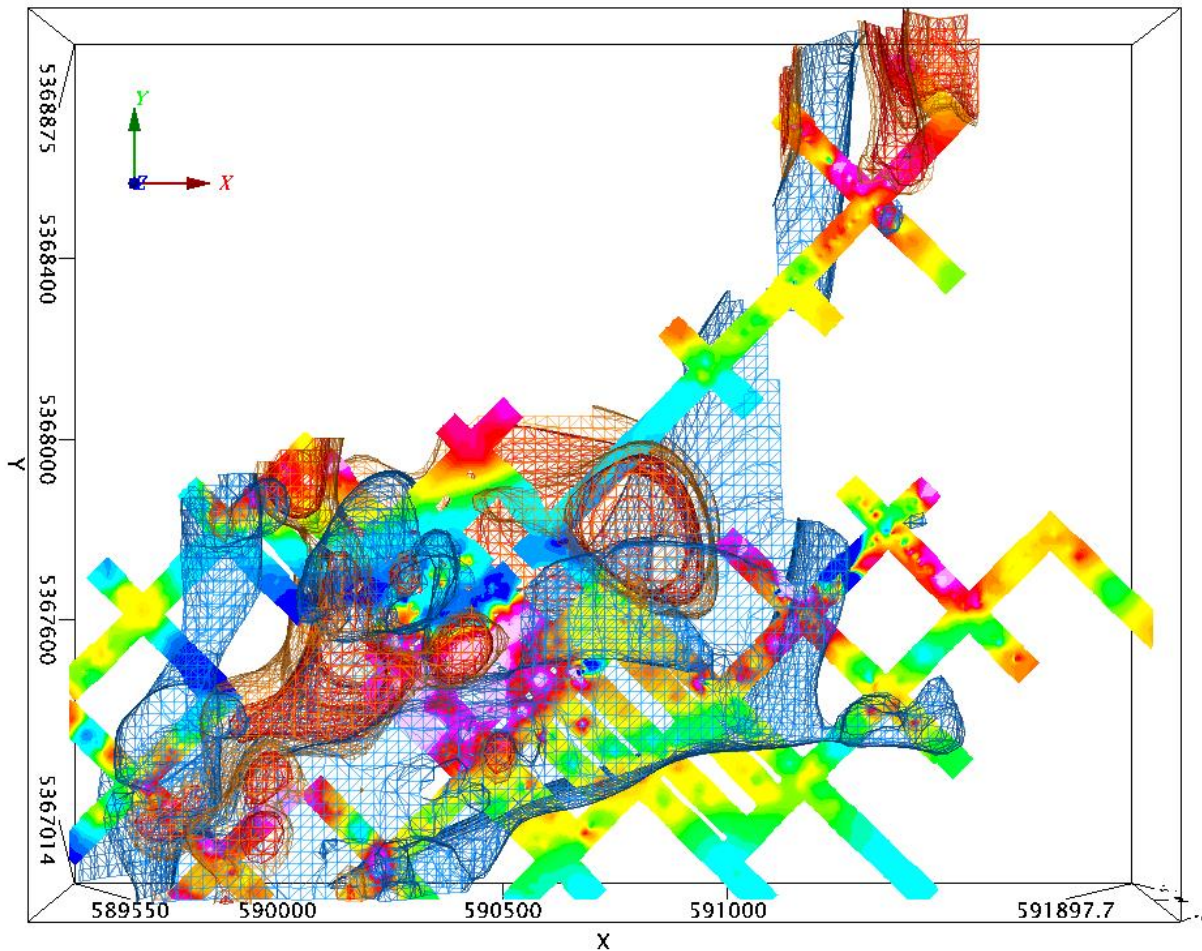


Figure 35: 3D Chargeability Model (Orange=25mV/V, Red=30mV/V) with the Resistivity High Model (blue= >50,000 ohm.meters) on the surface magnetic plan

7.3 RECOMMENDATIONS

A compilation of the historic work on the property is recommended. An attempt should be made to accurately locate the collars of the historic drilling and a 3D model of the drilling be made. This should then be compared with the chargeability and resistivity models to determine if anomalies can be explained.

Prospecting and potentially trenching the anomaly at the northern extent of the survey area and the western extension of the chargeability model (probable porphyry) is recommended.

Obtaining a plan on the lease and any surrounding fabric is suggested. This would enable an extension to the magnetic survey along with additional IP to examine the extension of the chargeability anomalies. Diamond drilling is suggested at the chargeability high intersection near 590231E, 5367451N.

7.4 CONCLUSIONS

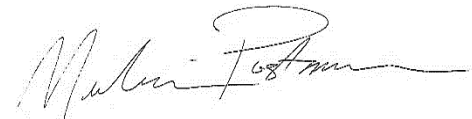
The 3D IP and magnetic surveys highlighted the extents of the porphyry plug. The IP survey indicated an orthogonal chargeability trend which may be important to the gold mineralization. This trend would have not been seen or recognized by conventional 2D IP surveys.

The survey also designated the presence of a strong chargeable zone in the northern extent of the survey area. This area also correlated with a strong drop in resistivity and appears to crosscut the geologic fabric of the area. This anomaly is an ideal target for further exploration.

APPENDIX A**STATEMENT OF QUALIFICATIONS**

I, Melanie Postman, hereby declare that:

1. I am a soon-to-be Geoscientist-in-Training with residence in Larder Lake, Ontario and am presently employed as a Junior Geophysicist with Canadian Exploration Services Ltd. of Larder Lake, Ontario.
2. I graduated with a Bachelor of Science Honors specialization degree in geophysics for professional registration from the University of Western Ontario, in London Ontario, in 2017.
3. I am currently undergoing the application process to register as a Geoscientist-in-Training to later become a practicing member of the Association of Professional Geoscientists.
4. I have previous geophysical work experience during and following my education.
5. I do not have nor expect an interest in the properties and securities of Tiger Gold Exploration Corporation.
6. I am responsible for assisting with 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 opinion based on my consideration of the information available to me at the time of writing this report.



Melanie Postman, B.Sc.
Junior Geophysicist
(non-Professional)

Larder Lake, ON
November 22, 2018

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 Practising 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 Tiger Gold Exploration Corporation.
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
November 22, 2018

Magnetometer Equipment

APPENDIX B**GSM 19****Specifications****Overhauser Performance**

Resolution: 0.01 nT
Relative Sensitivity: 0.02 nT
Absolute Accuracy: 0.2nT
Range: 20,000 to 120,000 nT
Gradient Tolerance: Over 10,000nT/m
Operating Temperature: -40°C to +60°C

Operation Modes

Manual: Coordinates, time, date and reading stored automatically at min. 3 second interval.
Base Station: Time, date and reading stored at 3 to 60 second intervals.
Walking Mag: Time, date and reading stored at coordinates of fiducial.
Remote Control: Optional remote control using RS-232 interface.
Input/Output: RS-232 or analog (optional) output using 6-pin weatherproof connector.

Operating Parameters

Power Consumption: Only 2Ws per reading. Operates continuously for 45 hours on standby.
Power Source: 12V 2.6Ah sealed lead acid battery standard, other batteries available
Operating Temperature: -50°C to +60°C

Storage Capacity

Manual Operation: 29,000 readings standard, with up to 116,000 optional.
With 3 VLF stations: 12,000 standard and up to 48,000 optional.
Base Station: 105,000 readings standard, with up to 419,000 optional (88 hours or 14 days uninterrupted operation with 3 sec. intervals)
Gradiometer: 25,000 readings standard, with up to 100,000 optional. With 3 VLF stations: 12,000, with up to 45,000 optional.

Omnidirectional VLF

Performance Parameters: Resolution 0.5% and range to $\pm 200\%$ of total field.
Frequency 15 to 30 kHz.

Measured Parameters: Vertical in-phase & out-of-phase, 2 horizontal components, total field coordinates, date, and time.

Features: Up to 3 stations measured automatically, in-field data review, displays station field strength continuously, and tilt correction for up to $\pm 10^\circ$ tilts.

Dimensions and Weights: 93 x 143 x 150mm and weighs only 1.0kg.

Dimensions and Weights

Dimensions:

Console: 223 x 69 x 240mm

Sensor: 170 x 71mm diameter cylinder

Weight:

Console: 2.1kg

Sensor and Staff Assembly: 2.0kg

Standard Components

GSM-19 magnetometer console, harness, battery charger, shipping case, sensor with cable, staff, instruction manual, data transfer cable and software.

Taking Advantage of a “Quirk” of Physics

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

The Overhauser effect occurs when a special liquid (with unpaired electrons) is combined with hydrogen atoms and then exposed to secondary polarization from a radio frequency (RF) magnetic field. The unpaired electrons transfer their stronger polarization to hydrogen atoms, thereby generating a strong precession signal-- that is ideal for very high-sensitivity total field measurement. In comparison with proton precession methods, RF signal generation also keeps power consumption to an absolute minimum and reduces noise (i.e. generating RF frequencies are well out of the bandwidth of the precession signal).

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

The unique Overhauser unit blends physics, data quality, operational efficiency, system design and options into an instrumentation package that exceeds proton precession and matches costlier optically pumped cesium capabilities (GEM Systems, 2007).

APPENDIX B**IRIS V-FullWaver Receiver⁴****2 CHANNELS IP FULL WAVE RECORD**

- 2 simultaneous dipoles
- Several weeks recording
- Time stamped data

V-Full Waver: this logger for electrical signal is a new concept of compact and low consumption unit designed for advanced Time Domain Induced Polarization, Resistivity and SP measurements. It can work in all field conditions, small, discrete, autonomous and can record continuously without operator.

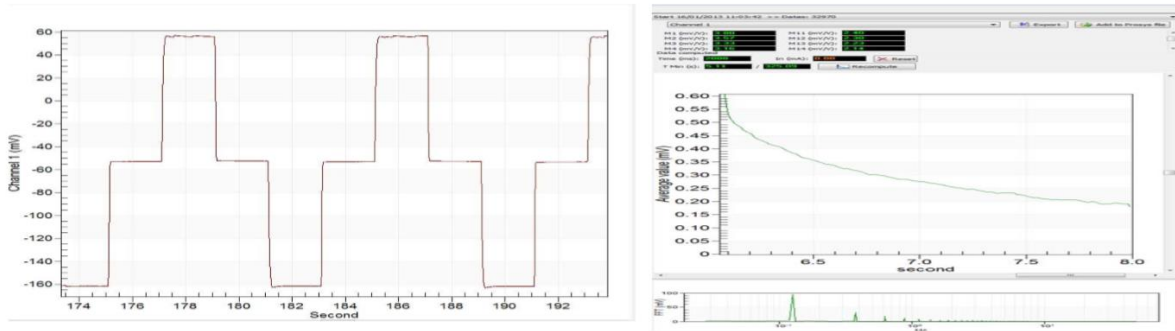
Compactness: light, discrete and easy to setup on the field, even on remote areas. Autonomous two dipoles logger, no need of the operator during acquisition. V-Full Waver allows a high productivity for dipole-dipole, gradient, extended pole-pole and other arrays. A network of several tens of channels can be quickly installed on the field for deep exploration and advanced processing (perpendicular dipoles, remote reference...)

Internal GPS: an integrated GPS, very accurate and providing PPS signal (one pulse per second) allows to store all time series with time information. This is crucial to process data from several V-Full Waver loggers installed in a same area. This is also useful to correlate with injection dipole waveform, in case this has also been recorded with a I-Full Waver logger.

⁴ Information obtained from http://www.iris-instruments.com/Pdf_file/V_fullwaver.pdf

High resolution: samples are recorded every 10 (ten) milliseconds (100 Hz sampling frequency). Data from several recorders can be merged and processed together with the Full Wave Viewer program delivered with the system. All data is synchronized through the GPS-PPS time stamping. A post acquisition processing permits to improve the signal-to-noise ratio. This also allows good quality IP data for deep investigations and for noisy areas.

Internal memory: the memory can store up to one month recording time. Then data can directly be transferred to a USB key in a few seconds.



TECHNICAL SPECIFICATIONS

- Max. input voltage: 15 V
- Protection: up to 1 000 V
- Accuracy: 0.2 % typical
- Resolution: 10 μ V
- Sampling rate: 10 milli seconds (100 Hz)
- Induced Polarization (chargeability) measured every 10 milliseconds (200 IP windows for a 2 sec pulse)
- Input impedance: 100 M Ω
- Low pass filter Cut off frequency: 10 Hz
- Upper frequency which can be resolved: 50 Hz
- Frequency resolution: up to 34 micro Hz
- Internal GPS with PPS (one pulse per second)
- Time resolution: 250 micro seconds (time stamped samples)
- Battery test
- Contact resistance check

GENERAL SPECIFICATIONS

- LCD display, graphic and alpha numeric with 16 lines of 40 characters
- Data flash memory: one-month recording
- After acquisition: possibility of data storage on a USB key (8 GB or more).
- Power supply: internal Li-Ion rechargeable battery; optional external 12V standard car battery can be also used
- Autonomy: 20 operating hours with the internal Li-Ion battery

- Weather proof IP 67
- Shock resistant resin NK-7, case with handle
- Operating temperature: -20 °C to +70 °C
- Dimensions: 31 x 25 x 15 cm
- Weight: 2.8 kg

APPENDIX B**IRIS I-FullWaver Current Monitor⁵****IP Fullwave Record**

- Recording injected current
- Several weeks recording
- Time stamped data

Fullwaver: this logger for electrical signal is a new concept of compact and low consumption unit designed for advanced Time Domain Induced Polarization, Resistivity and SP measurements. It can work in all field conditions, small, discrete, autonomous and can record continuously without operator. I-Fullwaver is connected in series on the AB injection line, it measures and logs very accurately the injected current IAB.

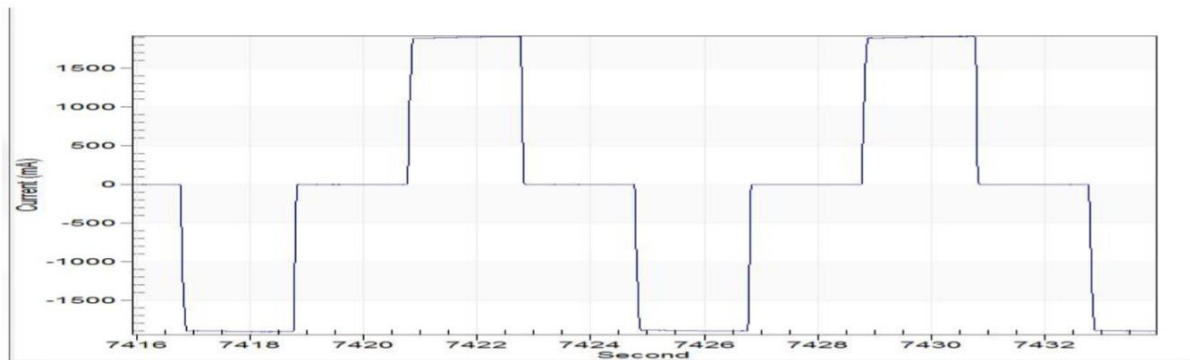
Compactness: light, discrete and easy to setup on the field, even on remote areas. This autonomous logger does not need any operator during the acquisition. I-Fullwaver is connected close to the transmitter or close to any injection electrode

Integrated GPS: an integrated gps, very accurate and providing PPS signal (one pulse per second) allows to store all time series with time information. This is crucial to correlate and process data with V-Fullwaver receiver loggers installed in a same area. This information displays the behaviour of the transmitter, its regulation specifications and the value of IAB in order to compute accurately the apparent resistivity.

⁵ Information obtained from http://www.iris-instruments.com/Pdf_file/I_fullwaver.pdf

High resolution: samples are recorded every 10 (ten) milliseconds (100 Hz sampling frequency). Data from several recorders (for current and received voltages) can be merged and processed together with the FullWaveViewer program delivered with the system. All data is synchronized through the GPS-PPS time stamping. A post acquisition processing allows to improve the signal-to-noise ratio, giving good quality IP data for deep investigations in noisy areas.

Internal memory: the memory can store up to three months recording time. Then data can directly be transferred to a USB key in a few seconds.



TECHNICAL SPECIFICATIONS

- Current range: +/- 25 000 mA
- Current resolution: 0.1 mA
- Accuracy: +/- 1 mA
- Protection: up to 50 A and 3 000 V
- Magnetic sensor
- Magnetization offset (offset memory): up to 0.05%
- Offset calibration
- Sampling rate: 10 milliseconds (100 Hz)
- Integrated GPS with PPS (one pulse per second)
- Time resolution: 250 micro seconds (time stamped samples)
- Battery test

GENERAL SPECIFICATIONS

- LCD display, alpha numeric with 4 lines of 20 characters
- Data flash memory: three months recording
- After acquisition: possibility of data storage on a USB key (8 Gb or more).
- Power supply: internal Li-Ion rechargeable battery; optional external 12V standard car battery can be also used
- Autonomy: 20 operating hours with the internal Li-Ion battery.
- Weather proof IP 67
- Shock resistant resin NK-7, case with handle
- Operating temperature: -20 °C to +70 °C
- Dimensions: 31 x 25 x 15 cm
- Weight: 3.0 kg

APPENDIX B**GGD II 5kW****SPECIFICATIONS**

- Protection against short circuits even at 0 ohms
- Output Voltage range: 150V to 2400V in 14 steps
- Power source is a standard 220/240V, 20/60 Hz source
- Displays electrode contact, transmitting power and current

ELECTRICAL CHARACTERISTICS

- Standard Time Base of 2 seconds for time domain – 2 seconds on, 2 seconds' off
- Optional Time Base of DC, 0.5, 1, 2, 4 or 8 seconds
- Output Current Range, 0.030 to 10A
- Output Voltage Range, 150 to 2400V in 14 steps
- Ability to Link 2 GDD transmitters to double power output

CONTROLS

- Switch ON/OFF
- Output Voltage Range Switch: 150V, 180V, 350V, 420V, 500V, 600V, 700V, 840V, 1000V, 1200V, 1400V, 1680V, 2000V and 2400V

DISPLAYS

- Output Current LCD: reads +/- 0.0010A

- Electrode Contact Displayed when not Transmitting
- Output Power Displayed when Transmitting
- Automatic Thermostat controlled LCD heater for LCD
- Total Protection Against Short Circuits
- Indicator Lamps Indicate Overloads

GENERAL SPECIFICATIONS

- Weather proof
- Shock resistant pelican case
- Operating temperature: -40 °C to +65 °C
- Dimensions: 26 x 45 x 55 cm
- Weight: 40 kg

APPENDIX C**REFERENCES**

- Claerbout, J.F., Kuras, O., Meldrum, P.I., Ogilvy, R.O. and Hollands, J., 2006. Electrical resistivity tomography applied to geologic, hydrogeologic, and engineering investigations at a former waste-disposal site. *Geophysics*, **71**, B231-B239.
- GEM Systems. (2007). *GSM-19 v7.0 Instruction Manual*. GEM Systems Inc. Advanced Magnetometers.
- Google. (2018). *Location of the Iris Property*. Retrieved November 14, 2018 from <https://www.google.ca/maps/@48.3875233,-80.0461366,8.75z>
- Google & DigitalGlobe. (2018). *Chargeability grid (300m MSL) overlaying Google Earth. Red circle represents the Iris Adit*. Google Earth. Imagery date September 25, 2013. Accessed on November 22, 2018.
- Google & DigitalGlobe. (2018). *Magnetometer plan overlaying Google Earth. Red circle represents the Iris Adit*. Google Earth. Imagery date September 25, 2013. Accessed on November 22, 2018.
- Google & DigitalGlobe. (2018). *Receiver Dipole Orientations on Google Earth*. Google Earth. Imagery date September 25, 2013. Accessed on November 14, 2018.
- Google & DigitalGlobe. (2018). *Resistivity grid (250m MSL) overlaying Google Earth. Red circle represents the Iris Adit*. Imagery date September 25, 2013. Accessed on November 22, 2018.
- Google & DigitalGlobe. (2018). *Survey Design Model Looking Down – Red=Current Injection, Blue=Receiver Electrodes, Green=Theoretical Data Point*. Google Earth. Imagery date September 25, 2013. Accessed on November 14, 2018.
- Google & DigitalGlobe. (2018). *Survey Design Model Looking North – Red=Current Injection, Blue=Receiver Electrodes, Green=Theoretical Data Point*. Google Earth. Imagery date September 25, 2013. Accessed on November 14, 2018.
- Google & DigitalGlobe. (2018). *Survey Grid*. Google Earth. Imagery date September 25, 2013. Accessed on November 14, 2018.
- Google & DigitalGlobe. (2018). *Topographical Relief Image with the Field Survey Layout Looking Northwest*. Google Earth. Imagery date September 25, 2013. Accessed on November 14, 2018.

Kenma, A., Binley, A., Ramirez, A. and Daily, W., 2000. Complex resistivity tomography for environmental applications. *Chemical Engineering Journal*, **77**, 11-18.

Loke, M. H., 2018. Tutorial: 2-D and 3-D electrical imaging surveys. (available for download from www.geotomosoft.com)

Loke, M. H. (1996-2018). Rapid 3-D Resistivity & IP inversion using the least-squares method (For 3-D surveys using the pole-pole, pole-dipole, dipole-dipole, rectangular, Wenner, Wenner-Schlumberger and non-conventional arrays) On land, aquatic, cross-borehole and time-lapse surveys. Geotomo Software Sdn Bhd.

Loke, M.H. and Dahlin, T., 2010. Methods to Reduce Banding Effects in 3-D Resistivity Inversion. Near Surface 2010 – 16th European Meeting of Environmental and Engineering Geophysics 6 – 8 September 2010, Zurich, Switzerland, A16.

Loke, M.H., Dahlin, T., Rucker, D.F., 2014. Smoothness-constrained time-lapse inversion of data from 3-D resistivity surveys. *Near Surface Geophysics*, **12**, 5-24.

MNDM & OGSEarth. (2018). *OGSEarth*. Ontario Ministry of Northern Development and Mines.

APPENDIX D

DIGITAL DATA

The digital data contains

- 1) PDF copy of this report
- 2) PDF copy of the maps
- 3) Raw data in binary format
- 4) Raw data in CSV format
- 5) Ascii XYZ of inversion results
- 6) Survey layout (.kml & .txt)

APPENDIX E**LIST OF MAPS (IN MAP POCKET)**

Grid Sketch (1:5000)

- 1) Q2568-TigerGold-Iris-Grid-Claims
- 2) Q2568-TigerGold-Iris-3DIP-Layout-Claims

IP Plan Map (1:5000)

- 3) Q2568-TigerGold-Iris-3DIP-Inv-Chr_350MSL
- 4) Q2568-TigerGold-Iris-3DIP-Inv-Chr_300MSL
- 5) Q2568-TigerGold-Iris-3DIP-Inv-Chr_250MSL
- 6) Q2568-TigerGold-Iris-3DIP-Inv-Chr_200MSL
- 7) Q2568-TigerGold-Iris-3DIP-Inv-Chr_150MSL
- 8) Q2568-TigerGold-Iris-3DIP-Inv-Chr_100MSL
- 9) Q2568-TigerGold-Iris-3DIP-Inv-Chr_50MSL
- 10) Q2568-TigerGold-Iris-3DIP-Inv-Chr_0MSL
- 11) Q2568-TigerGold-Iris-3DIP-Inv-Chr_-50MSL
- 12) Q2568-TigerGold-Iris-3DIP-Inv-Res_350MSL
- 13) Q2568-TigerGold-Iris-3DIP-Inv-Res_300MSL
- 14) Q2568-TigerGold-Iris-3DIP-Inv-Res_250MSL
- 15) Q2568-TigerGold-Iris-3DIP-Inv-Res_200MSL
- 16) Q2568-TigerGold-Iris-3DIP-Inv-Res_150MSL
- 17) Q2568-TigerGold-Iris-3DIP-Inv-Res_100MSL
- 18) Q2568-TigerGold-Iris-3DIP-Inv-Res_50MSL
- 19) Q2568-TigerGold-Iris-3DIP-Inv-Res_0MSL
- 20) Q2568-TigerGold-Iris-3DIP-Inv-Res_-50MSL

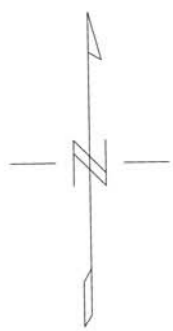
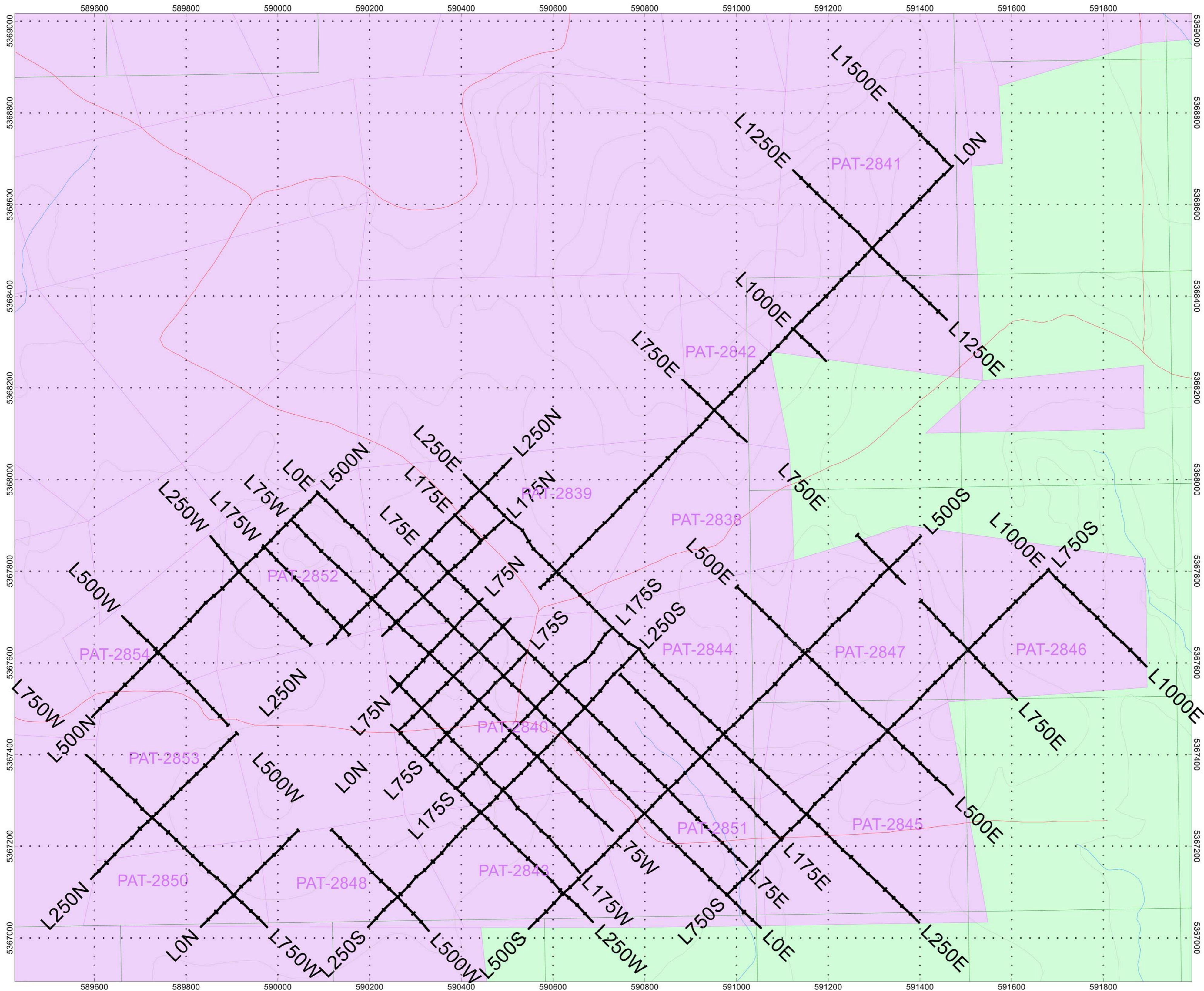
Magnetometer Plan Map (1:5000)

- 21) Q2568-TigerGold-Iris-Mag-Cont

TOTAL MAPS = 21

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Iris Project
Harker Township, Ontario

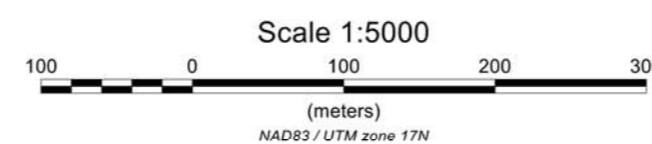
Survey Grid
Operational Claim Fabric

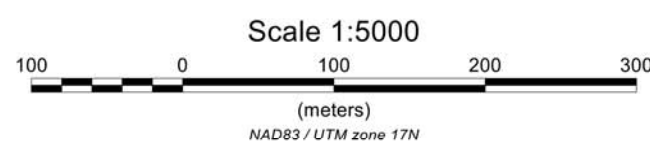
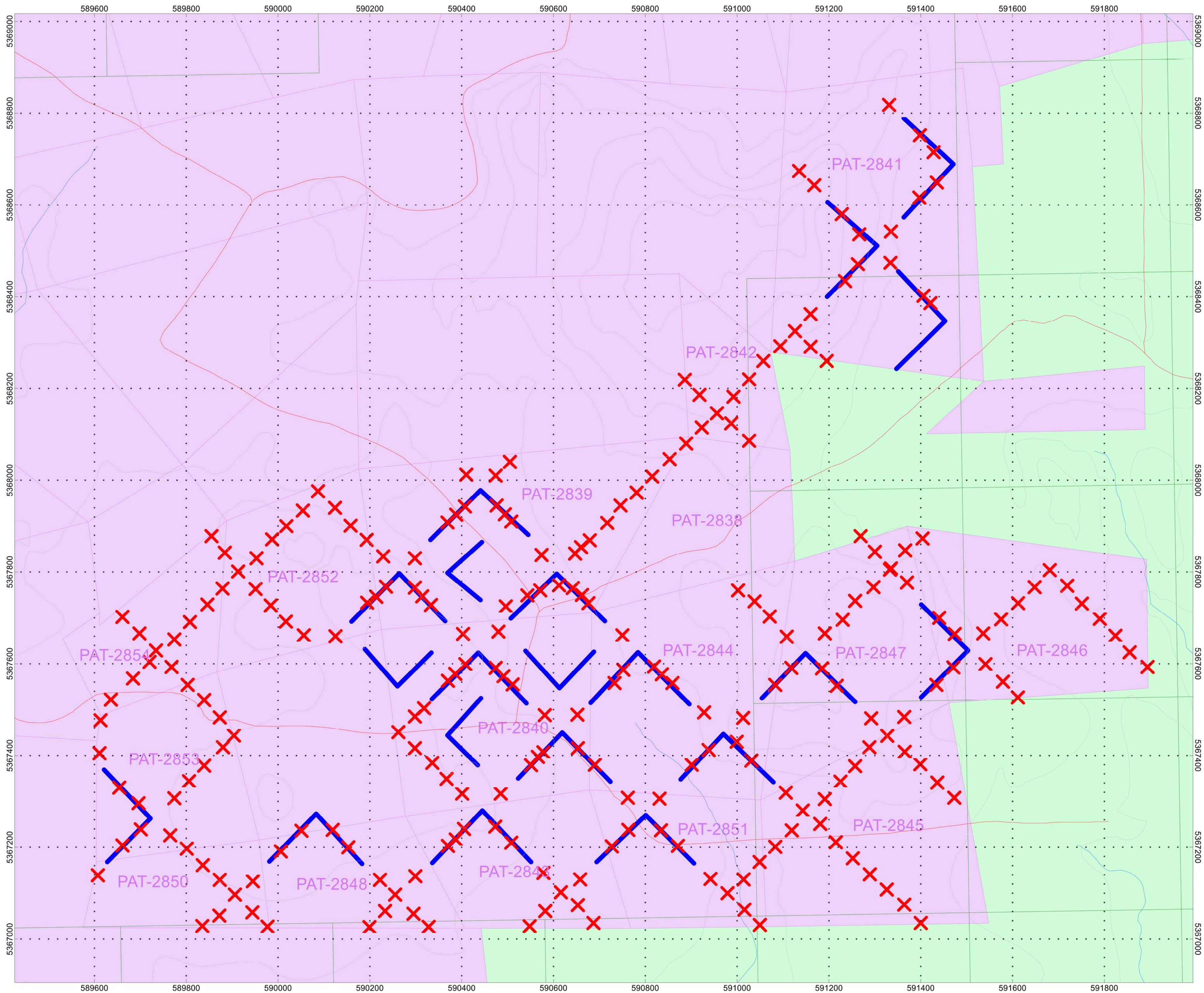
Processed By: Melanie Postman, B.Sc.
Map Drawn By: Jason Ploeger, P.Geo.
November 2018



Drawing: Q2568-TigerGold-Iris-Grid-Claims

✕ Transmitter Locations
— Dipoles





X Transmitter Locations
— Dipoles

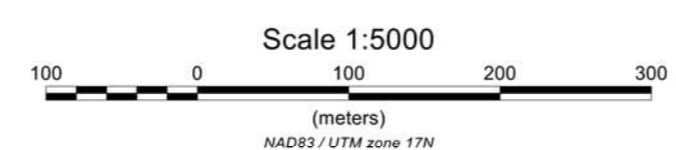
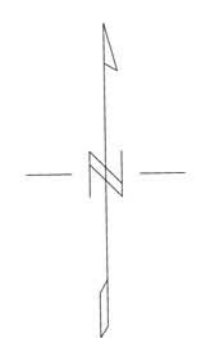
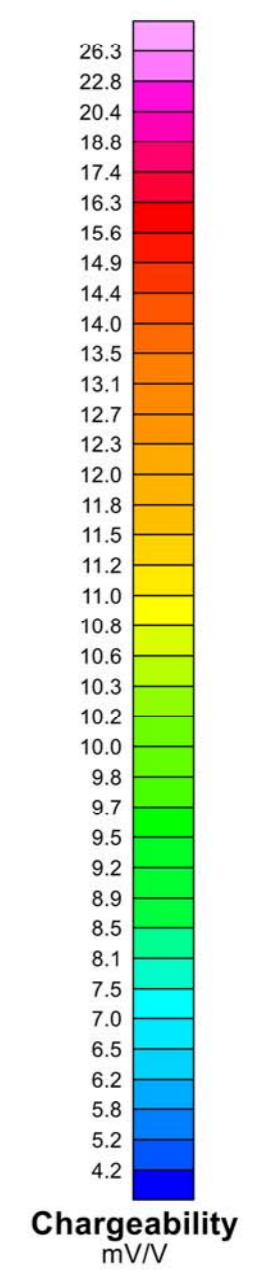
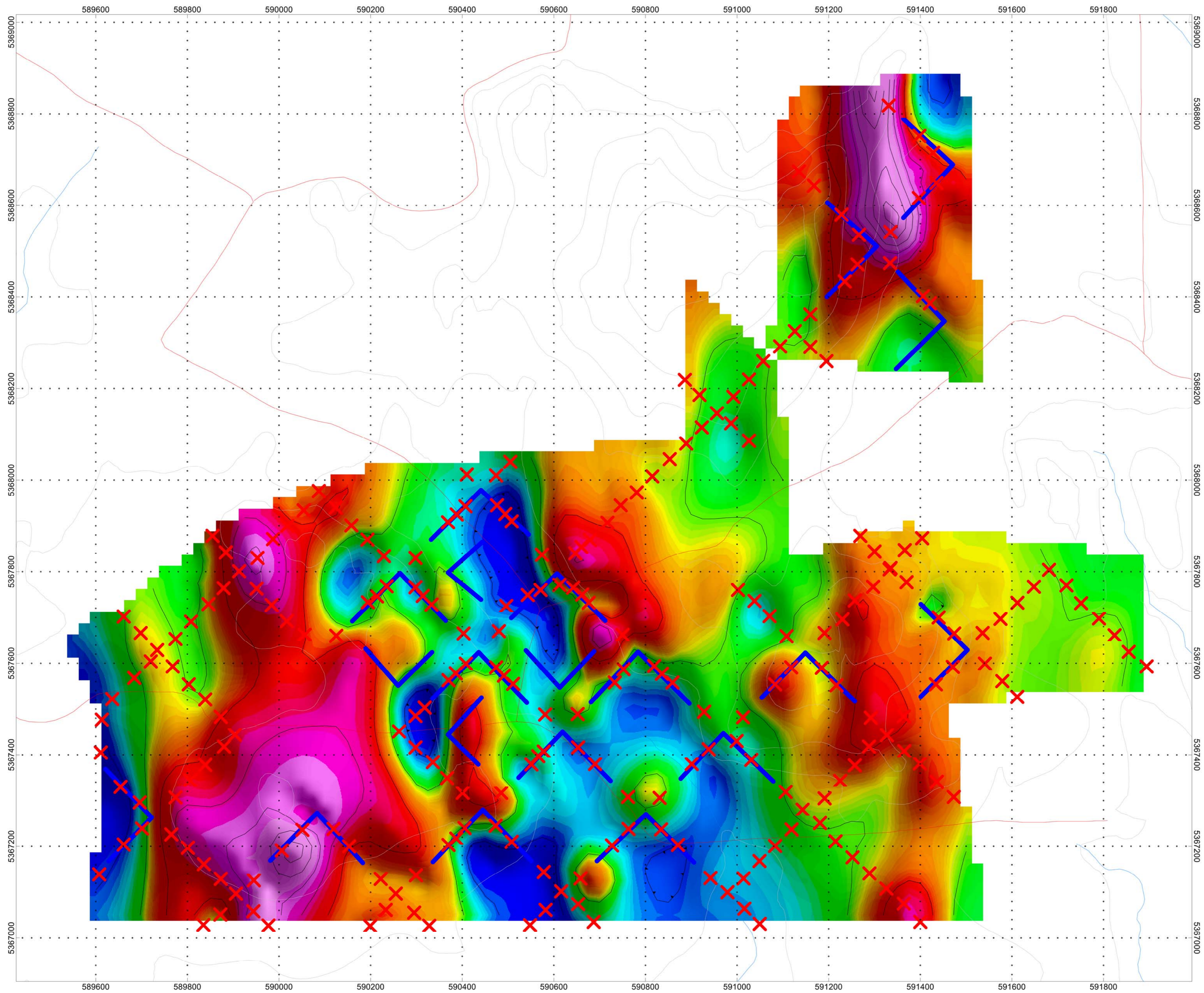
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Harker Township, Ontario

3D Distributed IP Array
 Survey Layout
 Operational Claim Fabric

Processed By: Melanie Postman, B.Sc.
 Map Drawn By: Jason Ploeger, P.Geo.
 November 2018





X Transmitter Locations
— Dipoles

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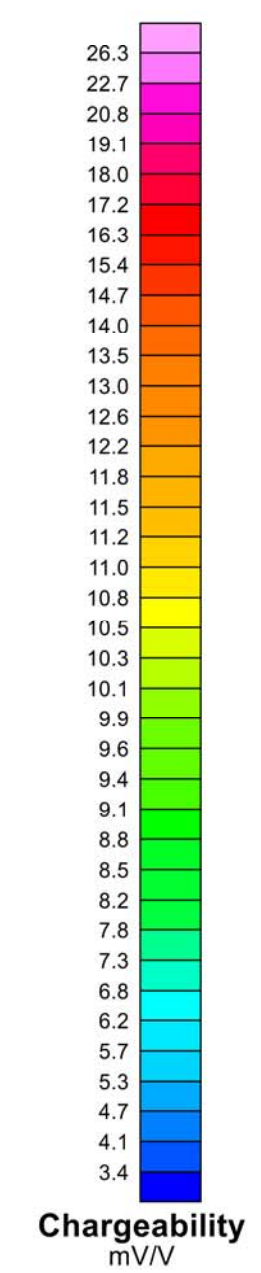
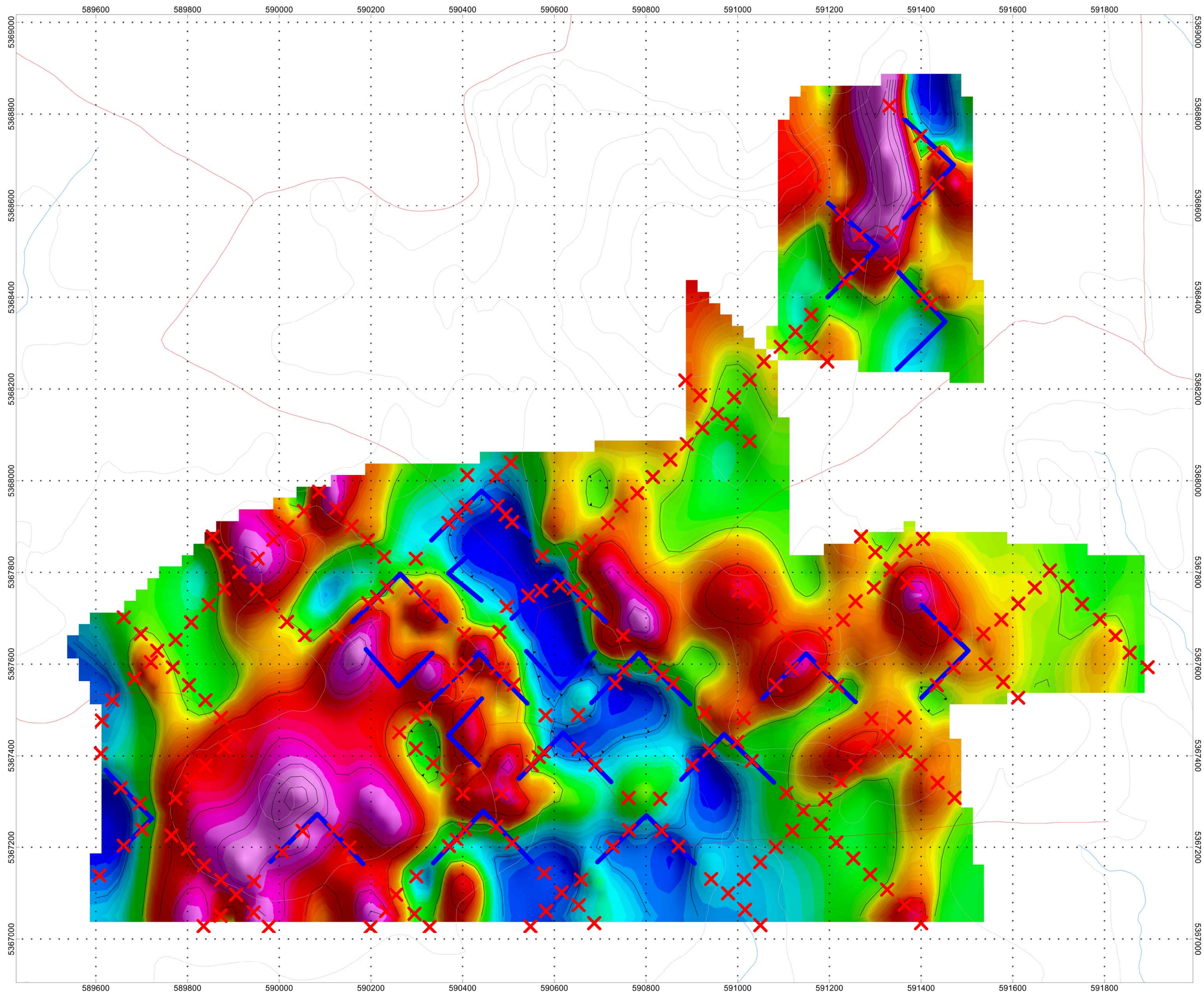
3D Distributed Induced Polarization Array
 Chargeability Inversion Slice at 350m MSL

Interval: 2 seconds
 Rx: Iris V-Fullwaver
 Tx: GDD II (5 kW Time Domain)

Contour Intervals: 5

Processed By: Melanie Postman, B.Sc.
 Map Drawn By: Melanie Postman, B.Sc.
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Chargeability
mV/V

TIGER GOLD EXPLORATION CORPORATION

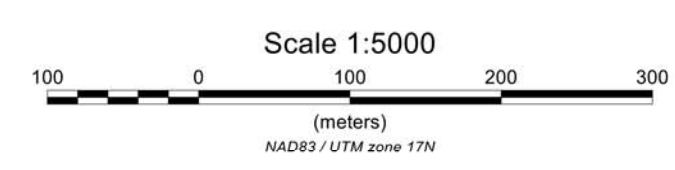
**Iris Project
Harker Township, Ontario**

3D Distributed Induced Polarization Array
Chargeability Inversion Slice at 300m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5 kW Time Domain)

Contour Intervals: 5

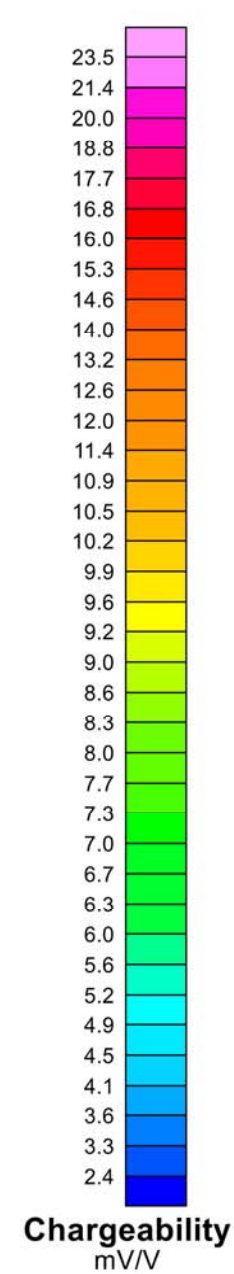
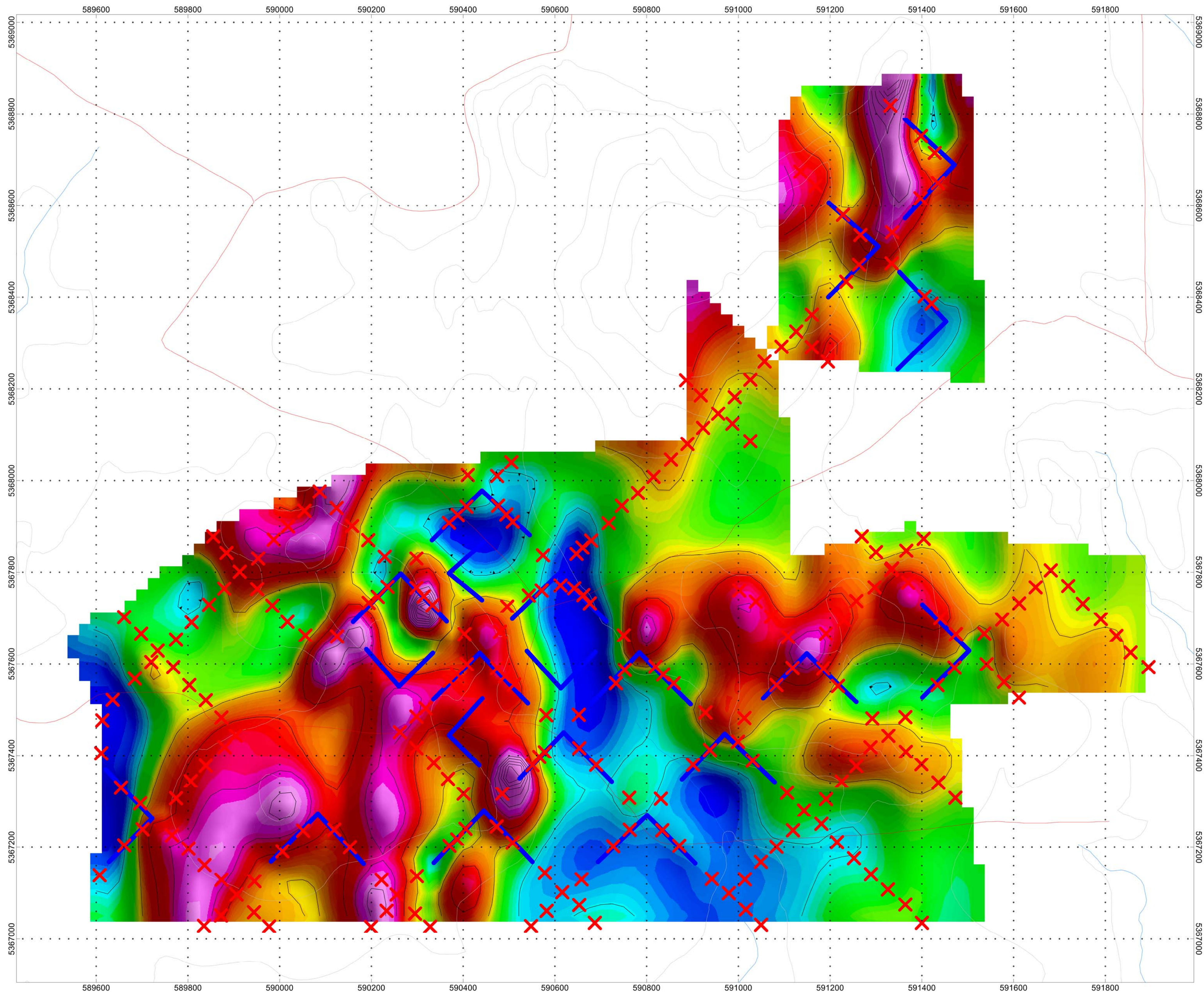
✕ Transmitter Locations
— Dipoles



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Map Drawn By: Melanie Postman, B.Sc.
November 2018



Drawing: Q2568-TigerGold-Iris-3DIP-Inv-Chr_300MSL



Chargeability
mV/V

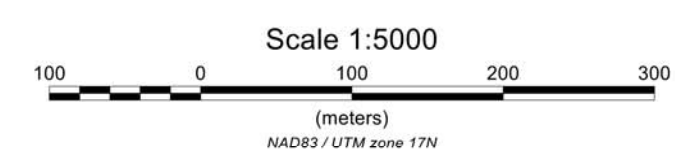
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Iris Project
Harker Township, Ontario

3D Distributed Induced Polarization Array
Chargeability Inversion Slice at 250m MSL

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Tx: GDD II (5 kW Time Domain)

Contour Intervals: 5

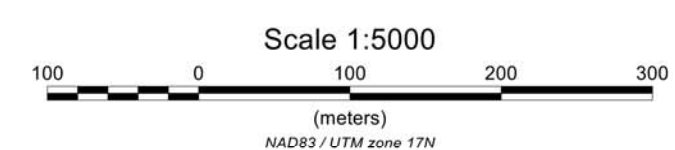
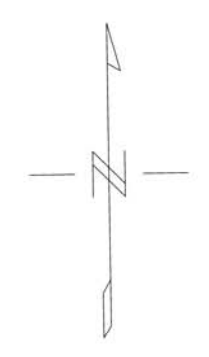
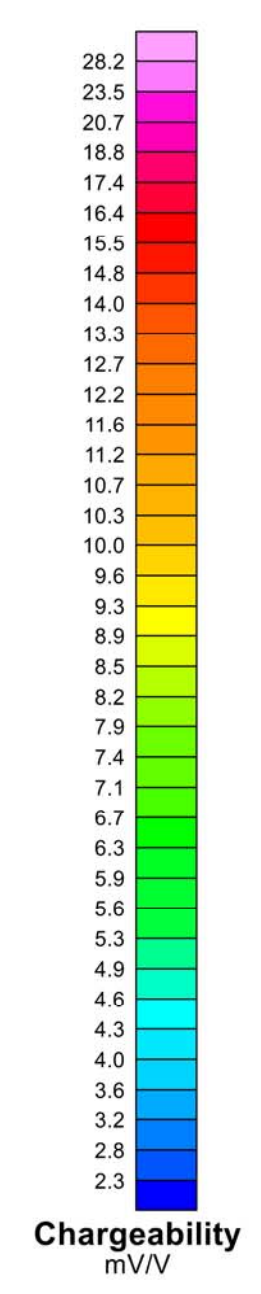
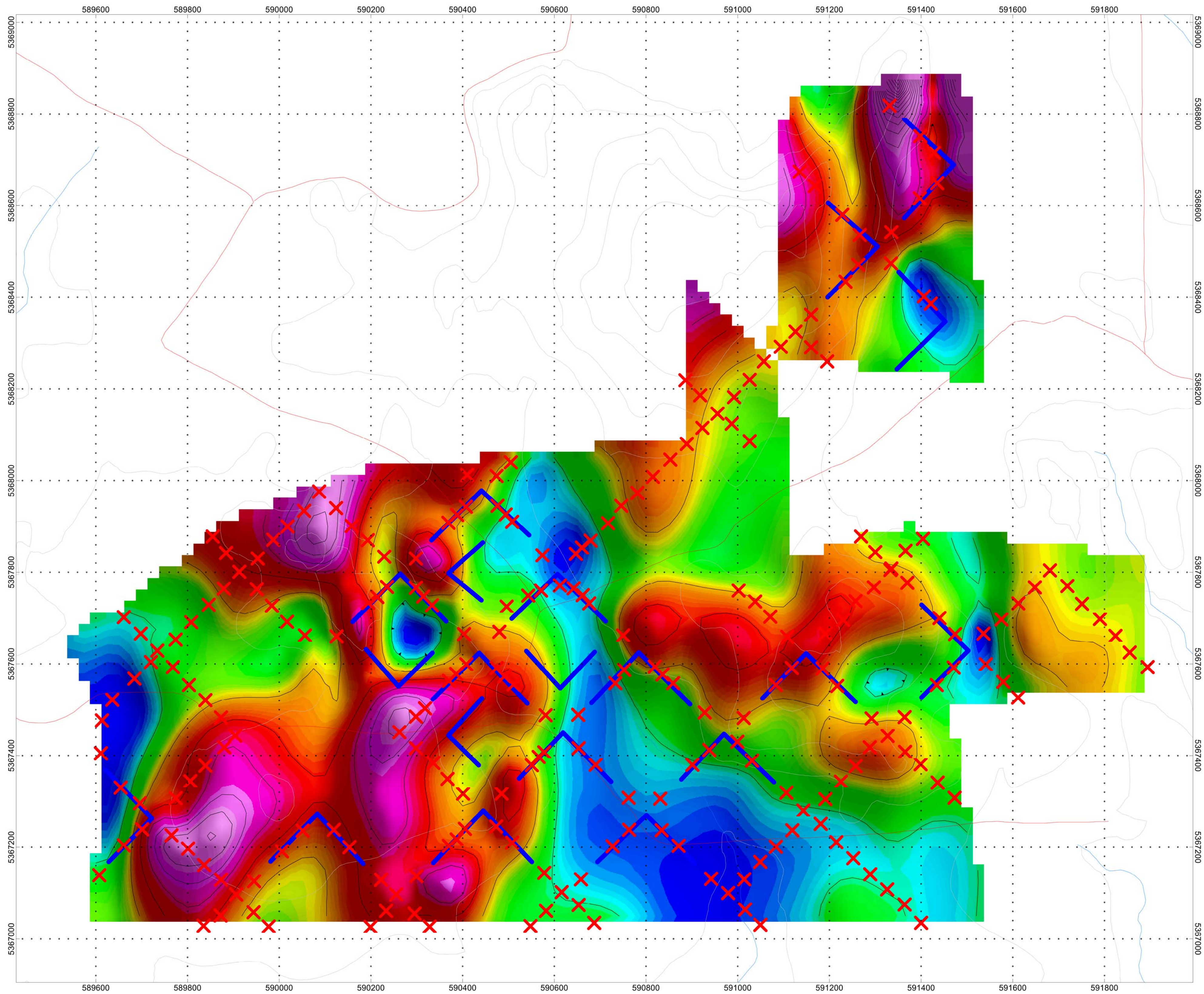


✕ Transmitter Locations
- Dipoles

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Map Drawn By: Melanie Postman, B.Sc.
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Drawing: Q2568-TigerGold-Iris-3DIP-Inv-Chr_250MSL



X Transmitter Locations
— Dipoles

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3D Distributed Induced Polarization Array
 Chargeability Inversion Slice at 200m MSL

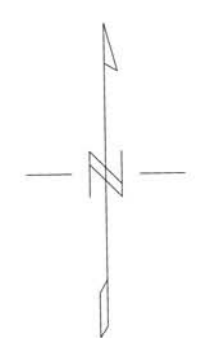
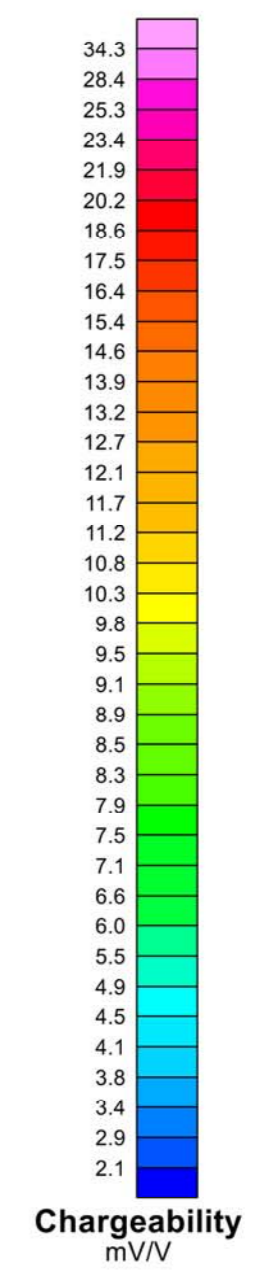
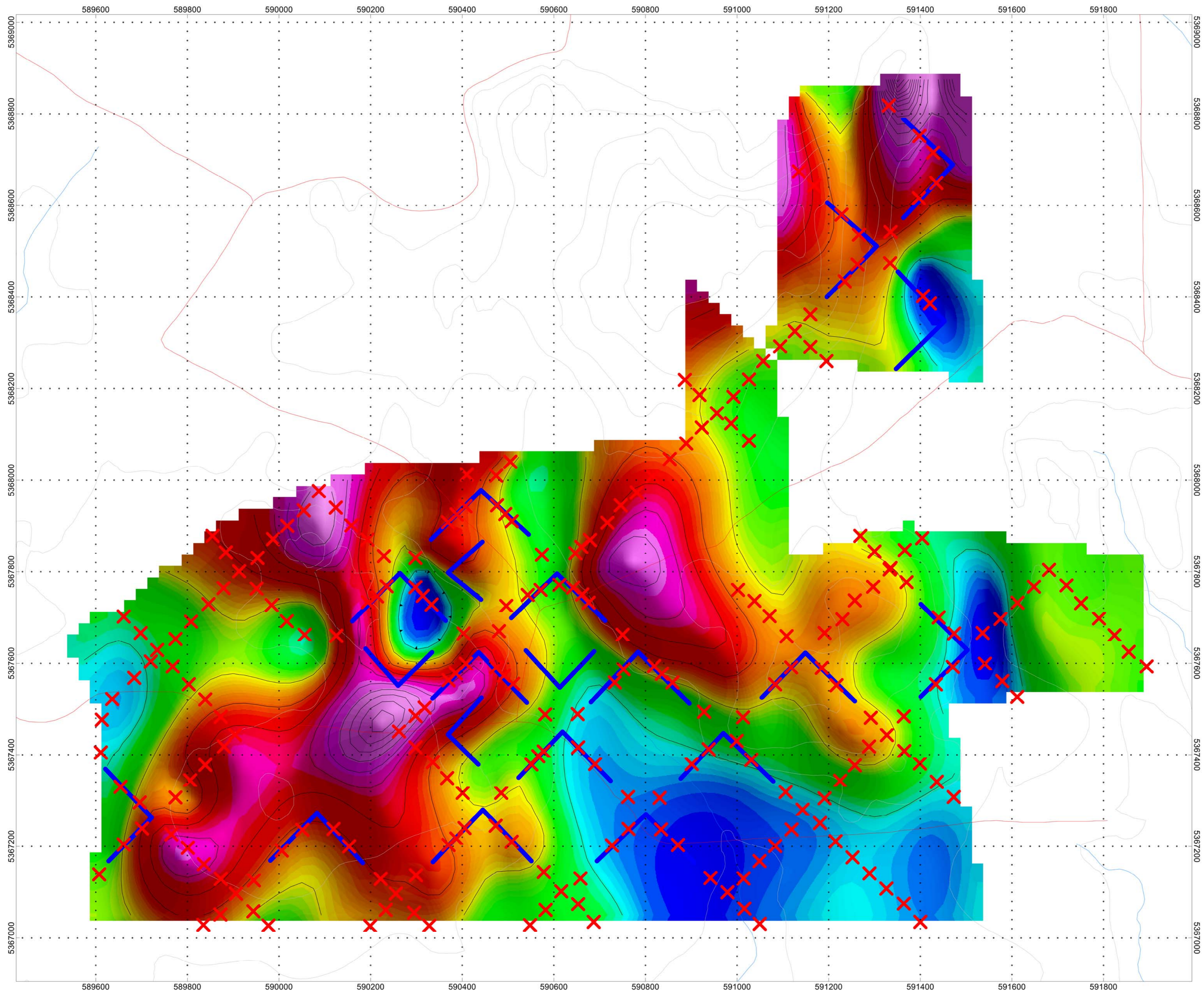
Interval: 2 seconds
 Rx: Iris V-Fullwaver
 Tx: GDD II (5 kW Time Domain)

Contour Intervals: 5

Processed By: Melanie Postman, B.Sc.
 Map Drawn By: Melanie Postman, B.Sc.
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Drawing: Q2568-TigerGold-Iris-3DIP-Inv-Chr_200MSL



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Harker Township, Ontario**

3D Distributed Induced Polarization Array
Chargeability Inversion Slice at 150m MSL

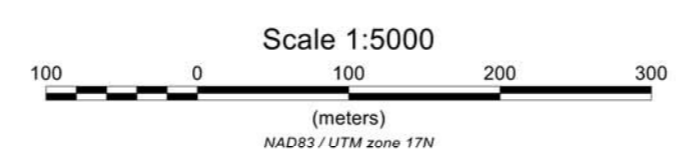
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Tx: GDD II (5 kW Time Domain)

Contour Intervals: 5

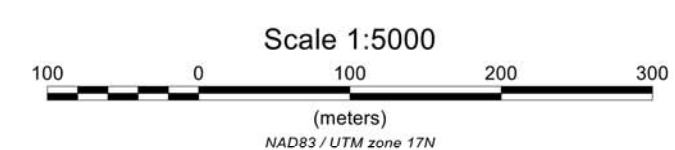
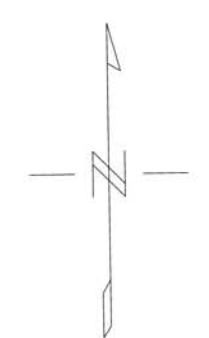
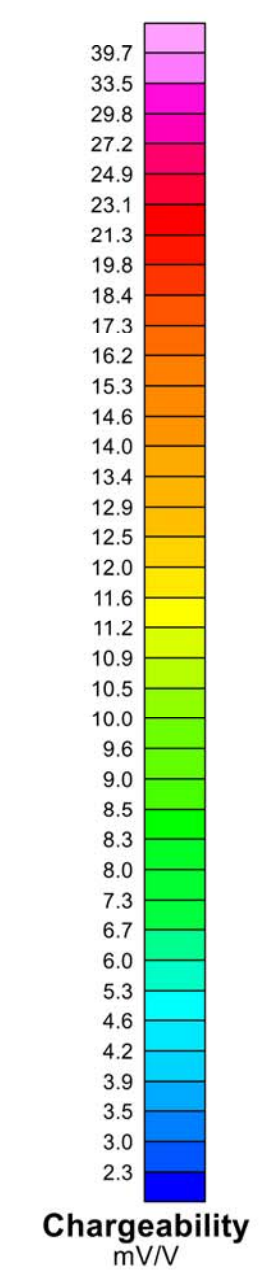
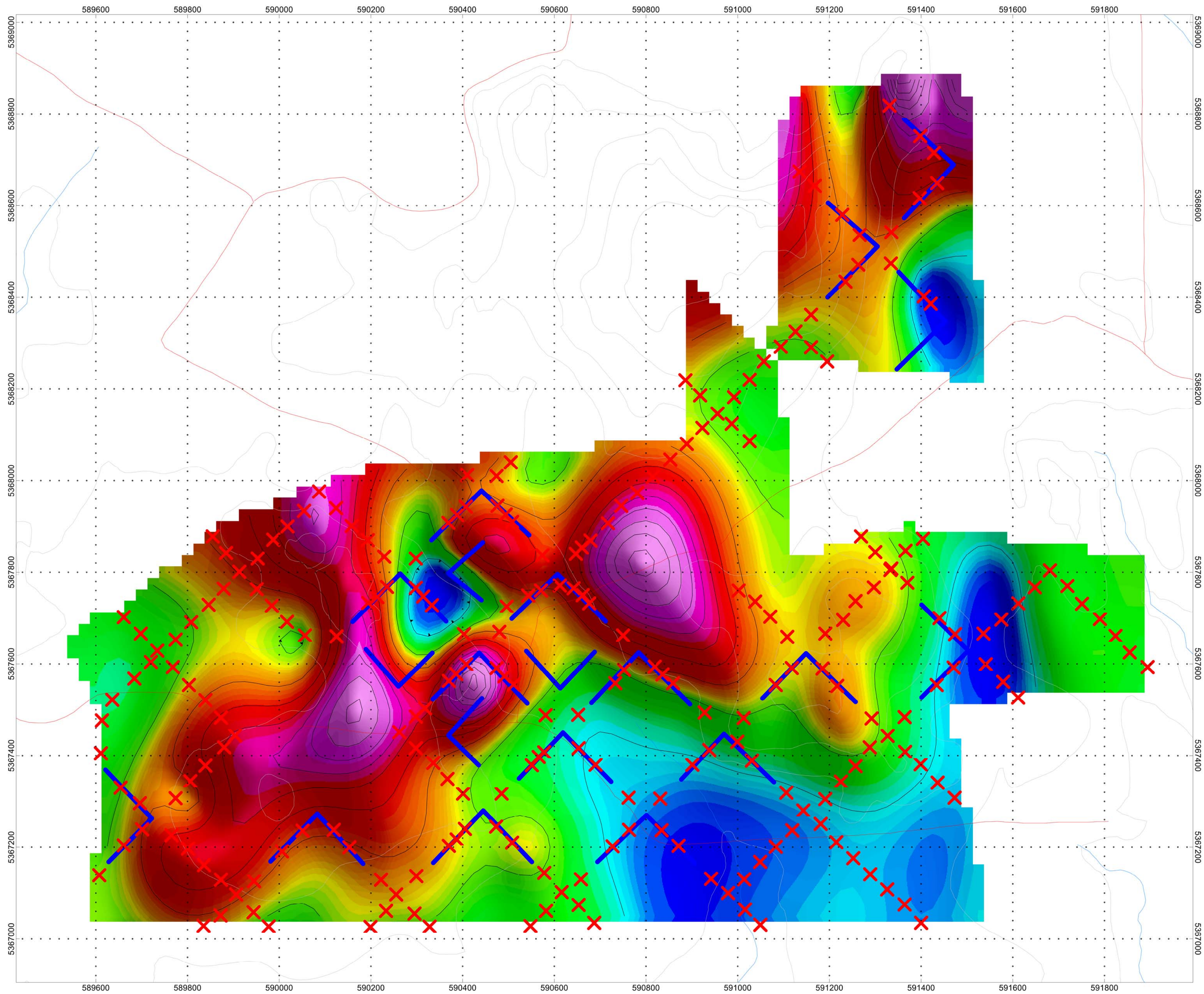
Processed By: Melanie Postman, B.Sc.
Map Drawn By: Melanie Postman, B.Sc.
November 2018

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Drawing: Q2568-TigerGold-Iris-3DIP-Inv-Chr_150MSL



X Transmitter Locations
— Dipoles



x Transmitter Locations
— Dipoles

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Harker Township, Ontario

3D Distributed Induced Polarization Array
 Chargeability Inversion Slice at 100m MSL

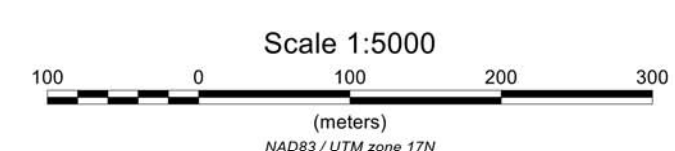
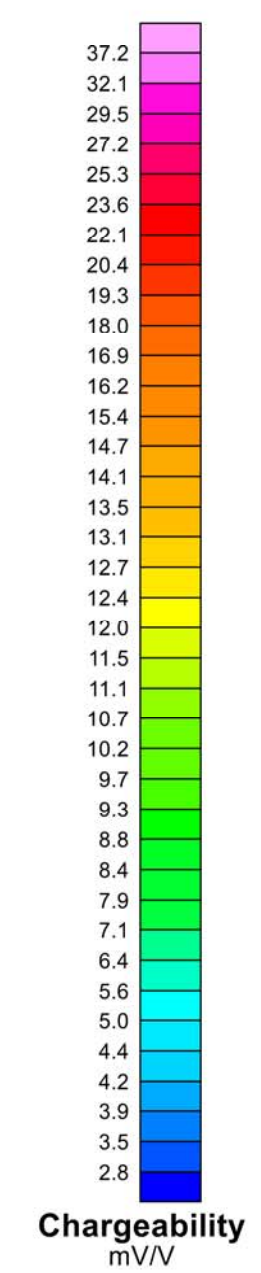
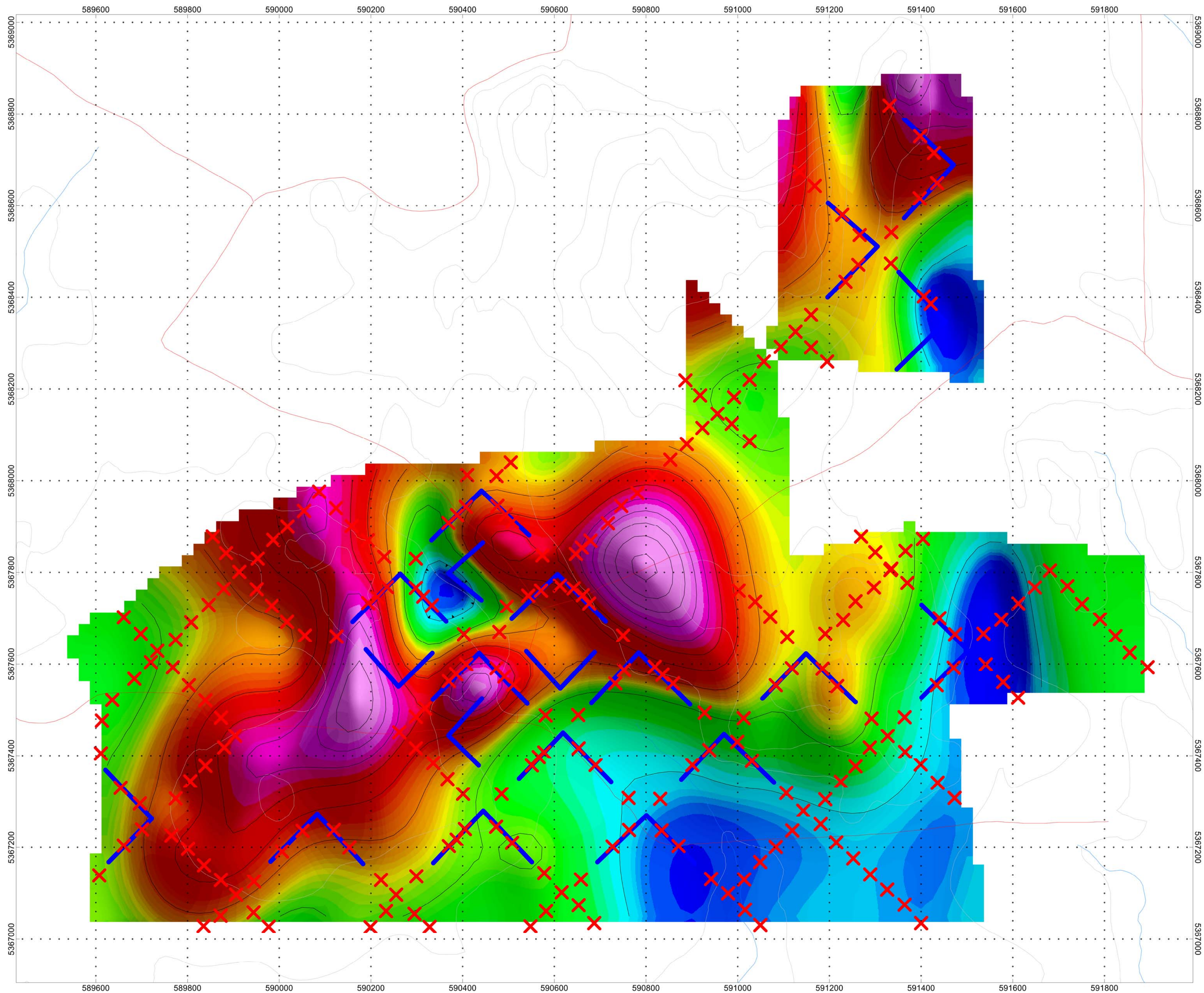
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 Rx: Iris V-Fullwaver
 Tx: GDD II (5 kW Time Domain)

Contour Intervals: 5

Processed By: Melanie Postman, B.Sc.
 Map Drawn By: Melanie Postman, B.Sc.
 November 2018

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Drawing: Q2568-TigerGold-Iris-3DIP-Inv-Chr_100MSL



X Transmitter Locations
— Dipoles

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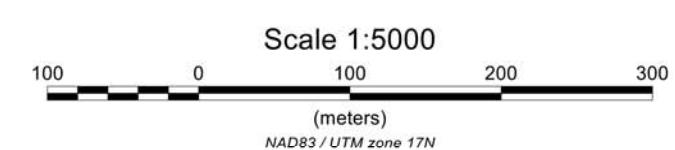
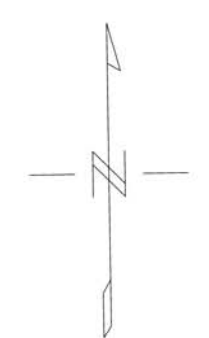
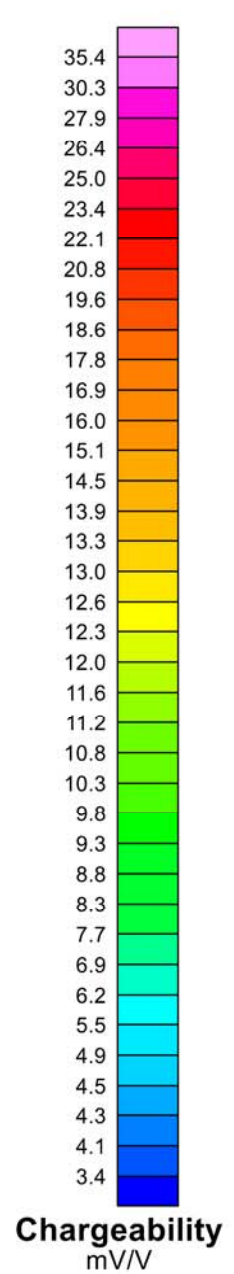
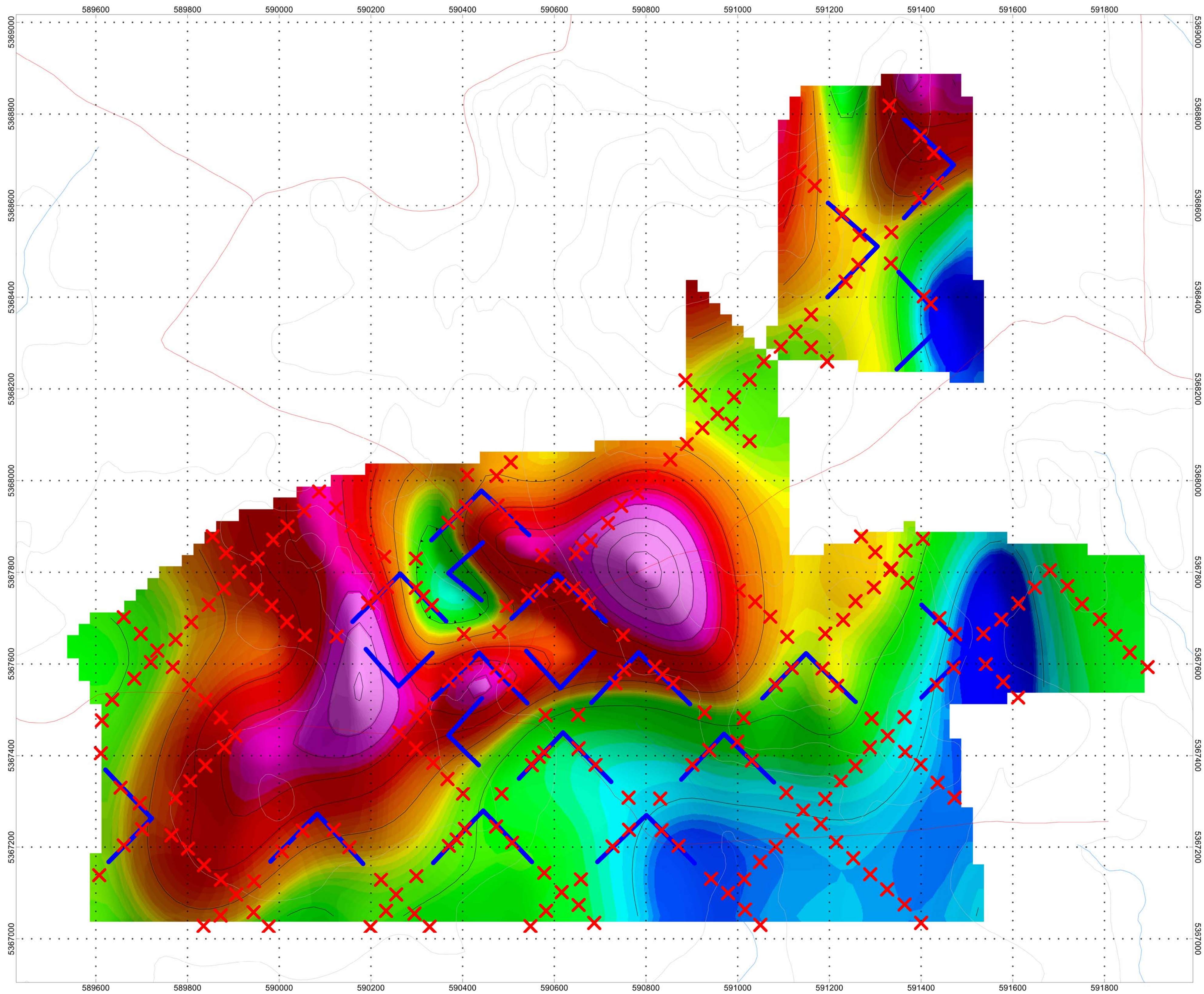
3D Distributed Induced Polarization Array
Chargeability Inversion Slice at 50m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5 kW Time Domain)

Contour Intervals: 5

Processed By: Melanie Postman, B.Sc.
 Map Drawn By: Melanie Postman, B.Sc.
 November 2018





X Transmitter Locations
— Dipoles

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Harker Township, Ontario

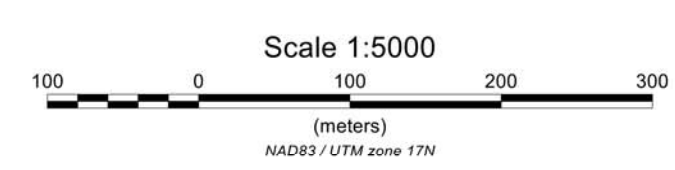
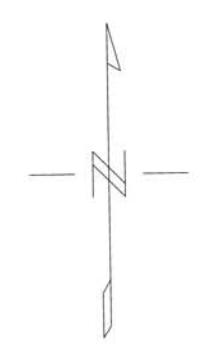
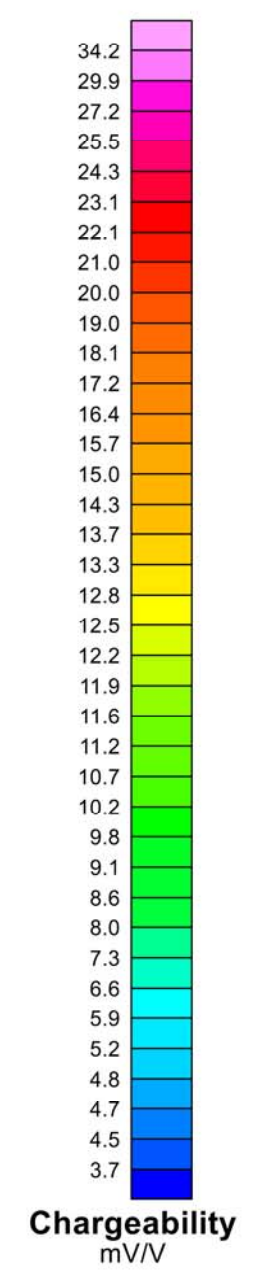
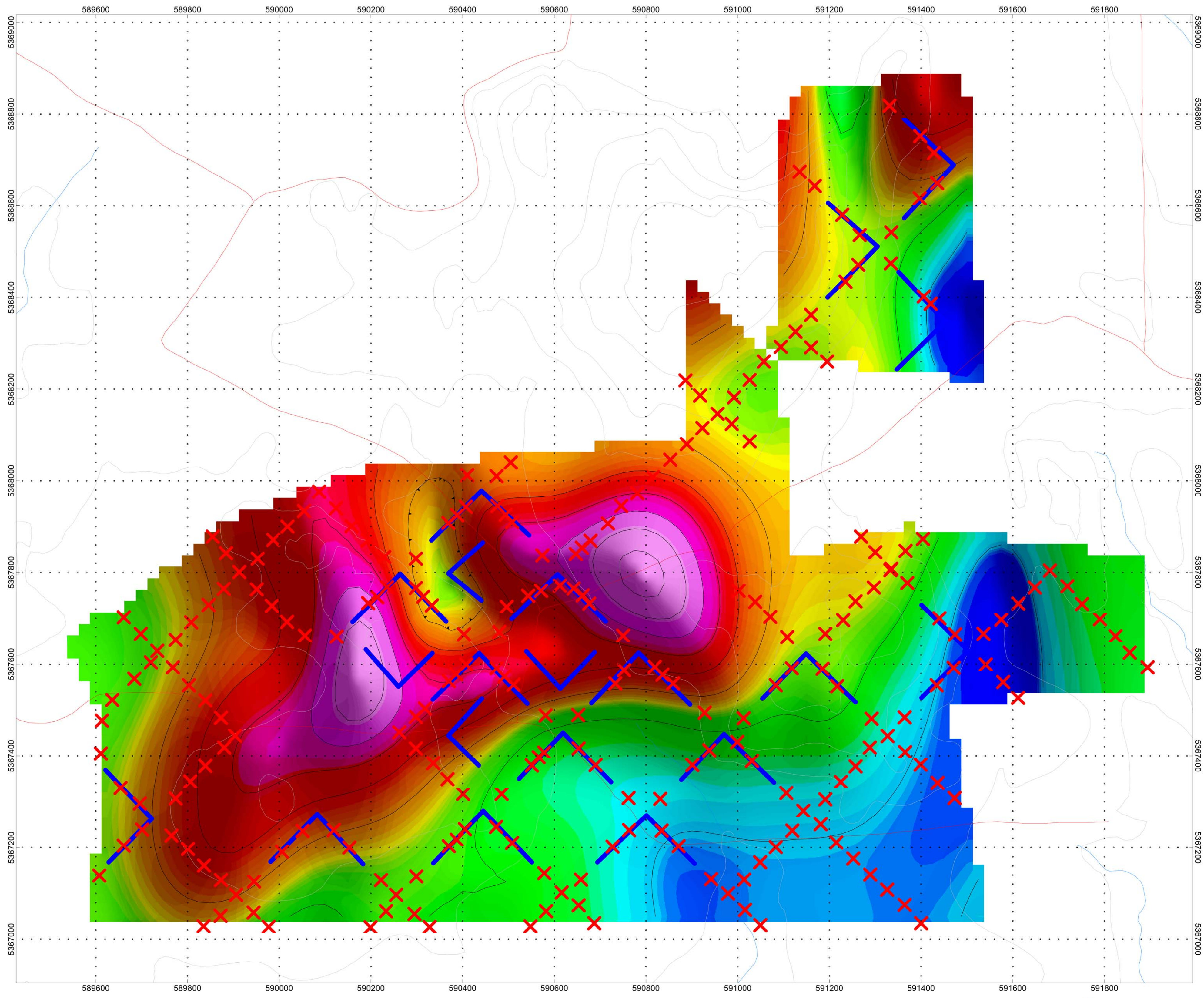
3D Distributed Induced Polarization Array
 Chargeability Inversion Slice at 0m MSL

Interval: 2 seconds
 Rx: Iris V-Fullwaver
 Tx: GDD II (5 kW Time Domain)

Contour Intervals: 5

Processed By: Melanie Postman, B.Sc.
 Map Drawn By: Melanie Postman, B.Sc.
 November 2018

Drawing: Q2568-TigerGold-Iris-3DIP-Inv-Chr_0MSL



X Transmitter Locations
— Dipoles

TIGER GOLD EXPLORATION CORPORATION

Iris Project
Harker Township, Ontario

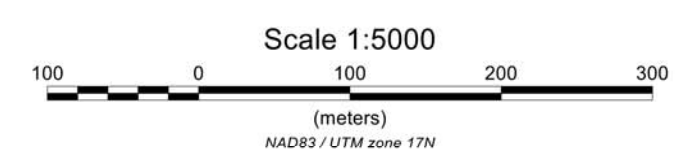
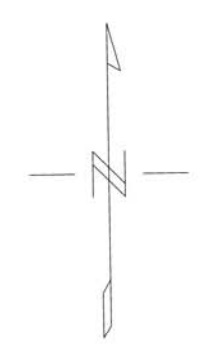
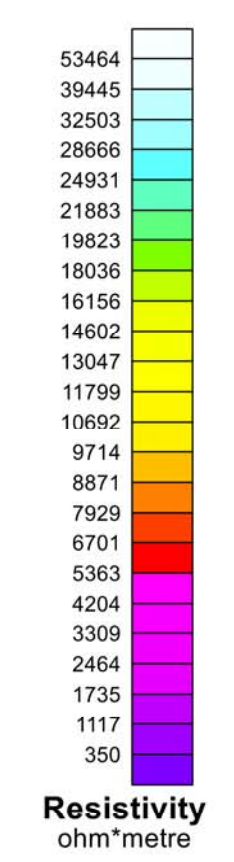
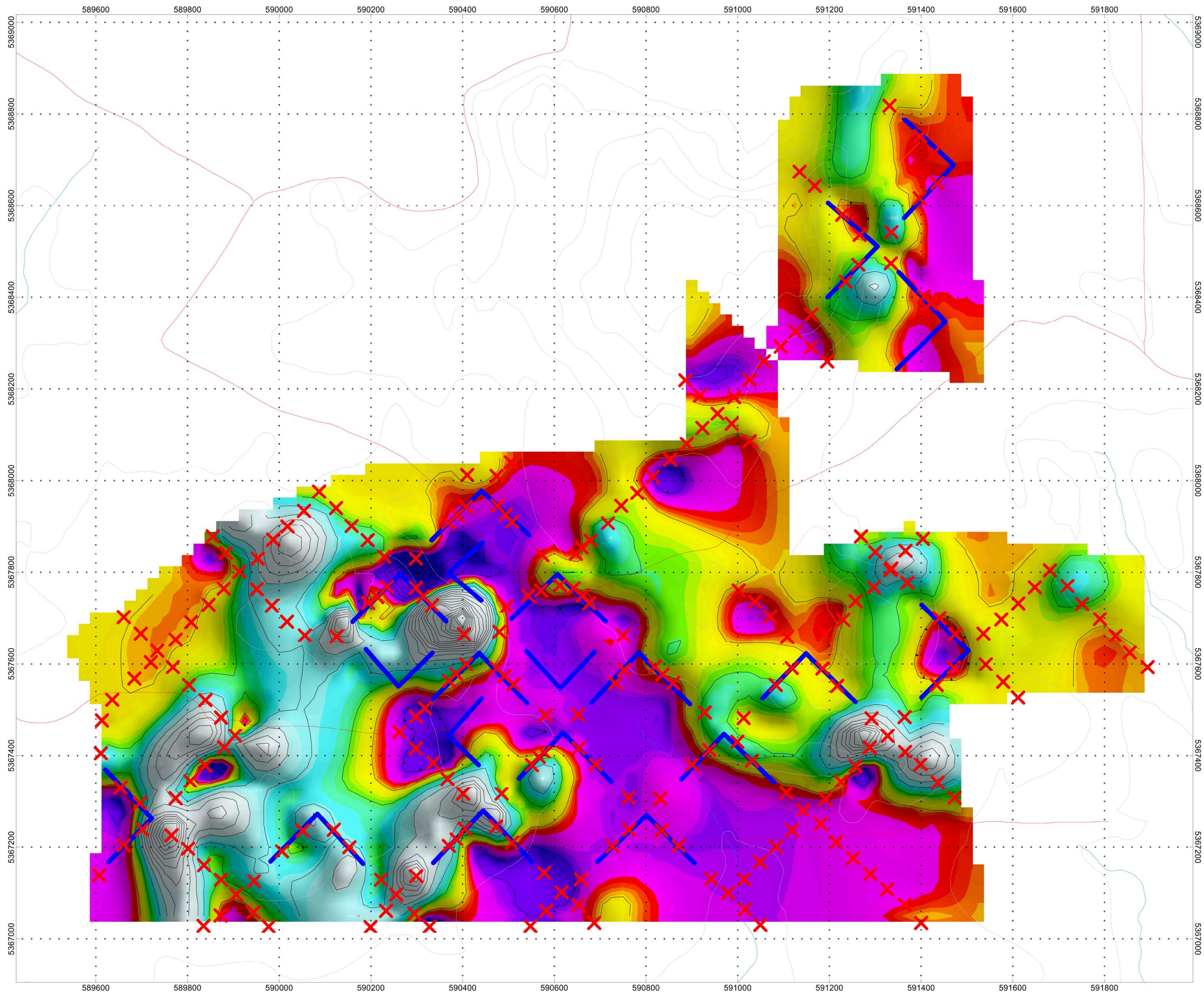
3D Distributed Induced Polarization Array
 Chargeability Inversion Slice at -50m MSL

Interval: 2 seconds
 Rx: Iris V-Fullwaver
 Tx: GDD II (5 kW Time Domain)

Contour Intervals: 5

Processed By: Melanie Postman, B.Sc.
 Map Drawn By: Melanie Postman, B.Sc.
 November 2018

Drawing: Q2568-TigerGold-Iris-3DIP-Inv-Chr_-50MSL



X Transmitter Locations
— Dipoles

TIGER GOLD EXPLORATION CORPORATION

Iris Project
Harker Township, Ontario

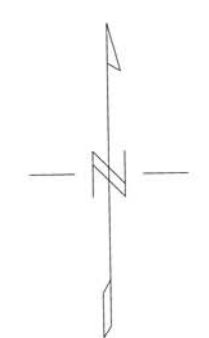
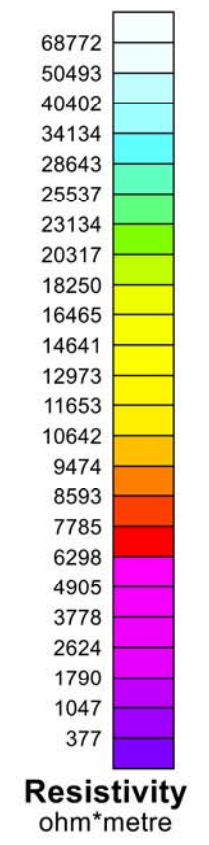
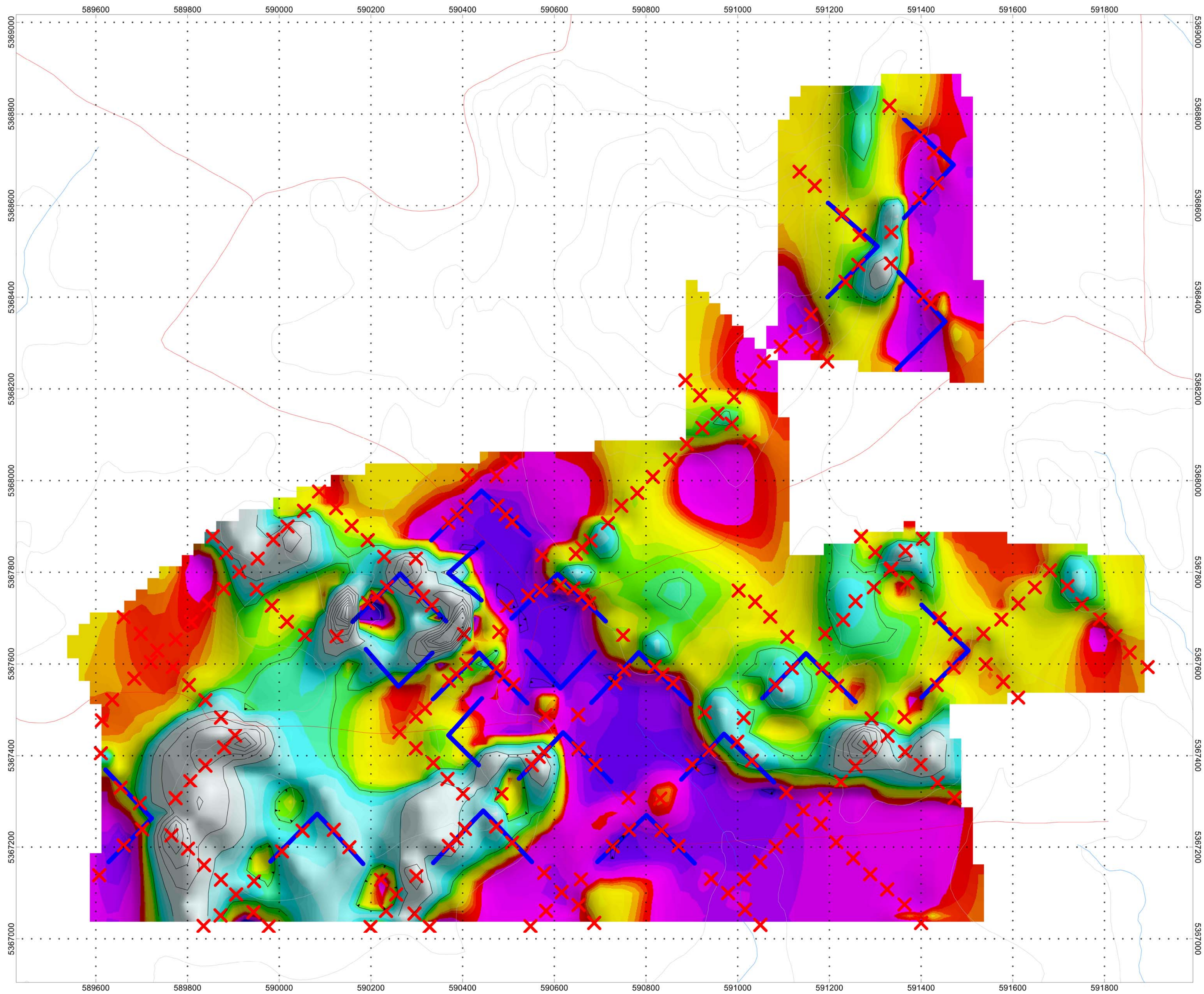
3D Distributed Induced Polarization Array
 Resistivity Inversion Slice at 350m MSL

Interval: 2 seconds
 Rx: Iris V-Fullwaver
 Tx: GDD II (5 kW Time Domain)

Contour Intervals: 10000

Processed By: Melanie Postman, B.Sc.
 Map Drawn By: Jason Ploeger, P.Geo.
 November 2018

Drawing: Q2568-TigerGold-Iris-3DIP-Inv-Res_350MSL



TIGER GOLD EXPLORATION CORPORATION

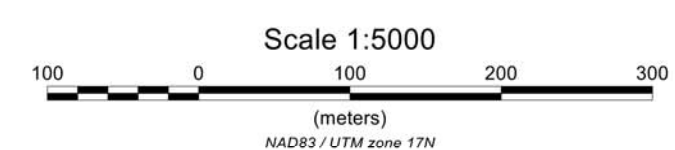
**Iris Project
Harker Township, Ontario**

3D Distributed Induced Polarization Array
Resistivity Inversion Slice at 300m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5 kW Time Domain)

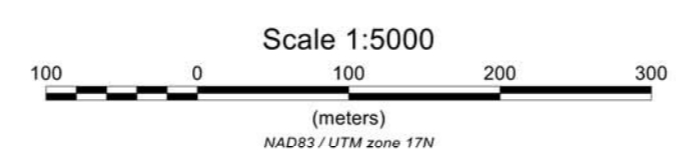
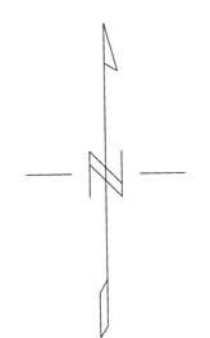
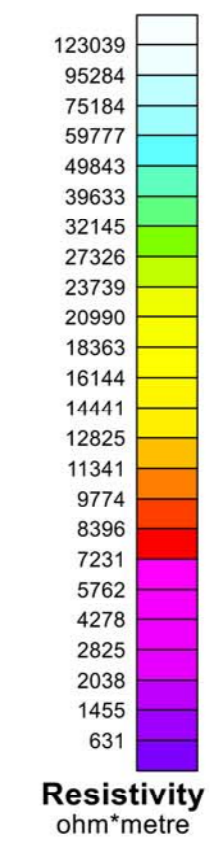
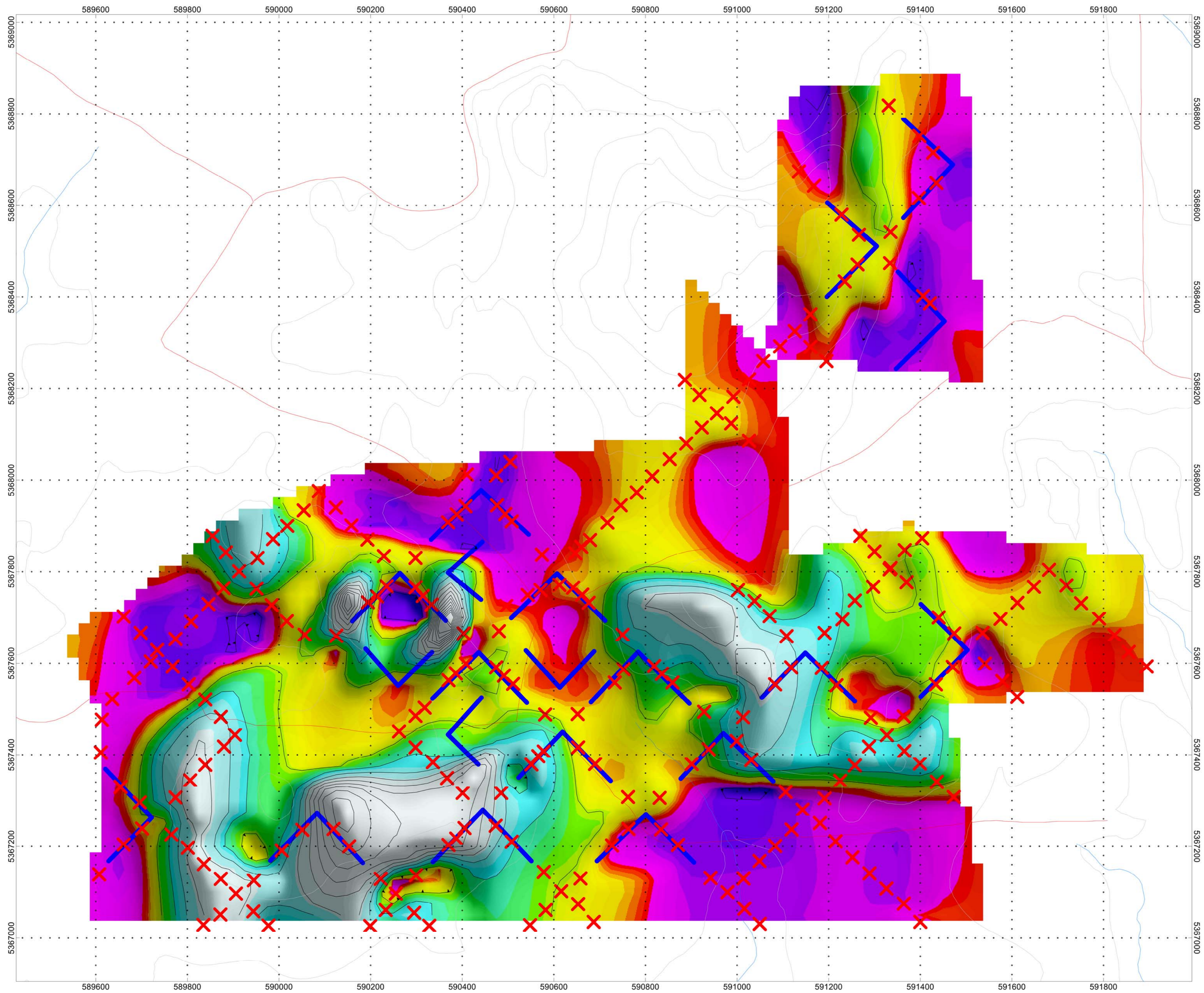
Contour Intervals: 25000

✕ Transmitter Locations
— Dipoles



Processed By: Melanie Postman, B.Sc.
Map Drawn By: Melanie Postman, B.Sc.
November 2018





x Transmitter Locations
— Dipoles

TIGER GOLD EXPLORATION CORPORATION

Iris Project
Harker Township, Ontario

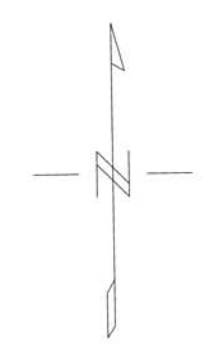
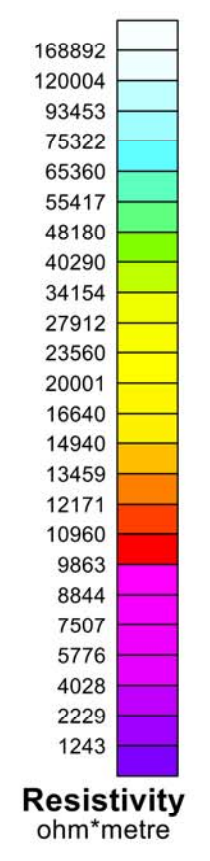
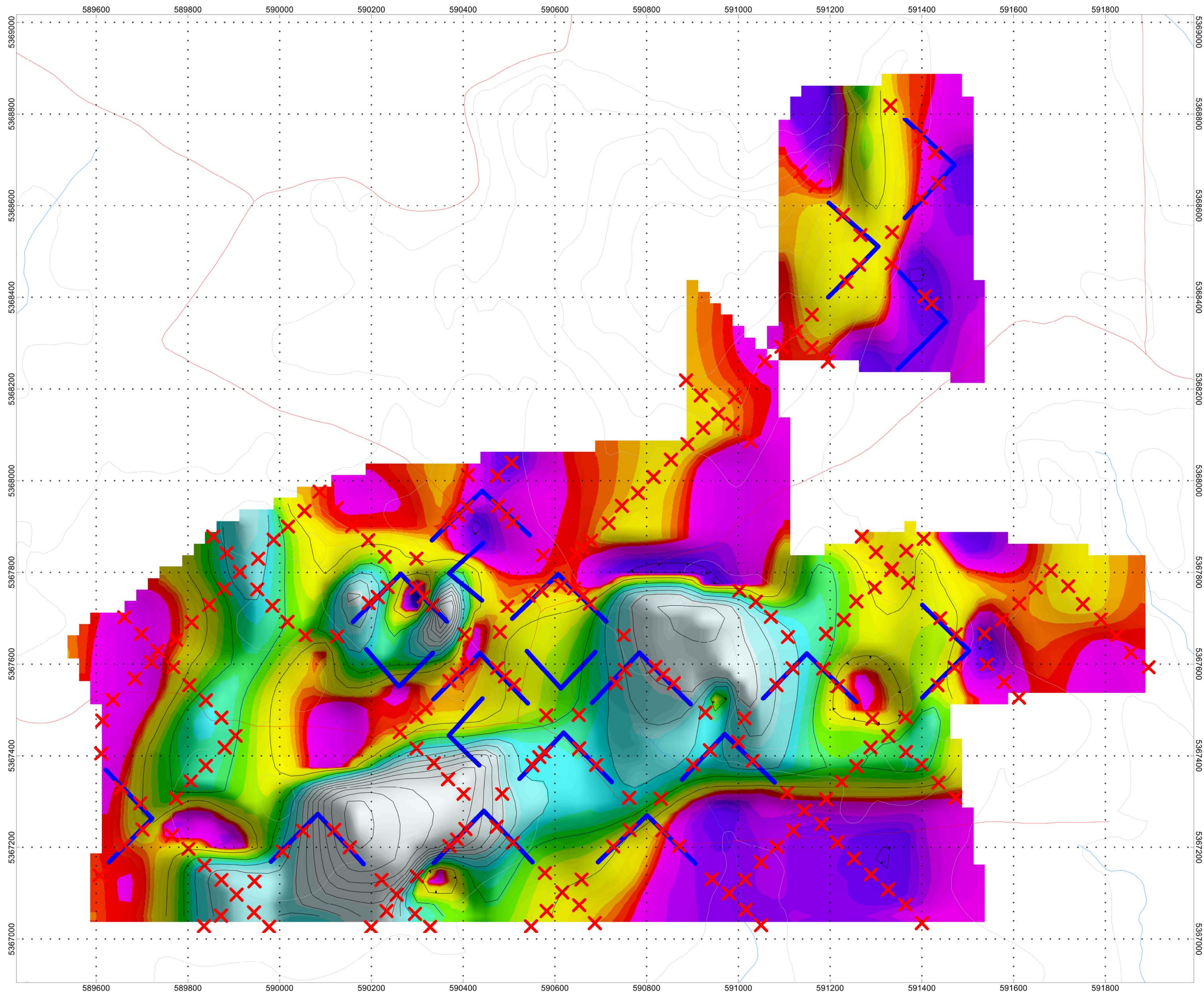
3D Distributed Induced Polarization Array
 Resistivity Inversion Slice at 250m MSL

Interval: 2 seconds
 Rx: Iris V-Fullwaver
 Tx: GDD II (5 kW Time Domain)

Contour Intervals: 25000

Processed By: Melanie Postman, B.Sc.
 Map Drawn By: Melanie Postman, B.Sc.
 November 2018





TIGER GOLD EXPLORATION CORPORATION

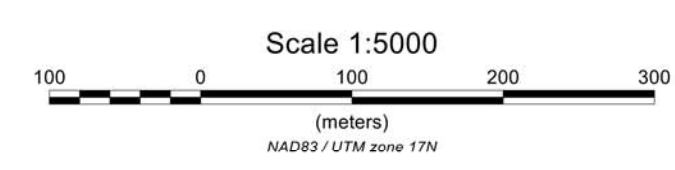
**Iris Project
Harker Township, Ontario**

3D Distributed Induced Polarization Array
Resistivity Inversion Slice at 200m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5 kW Time Domain)

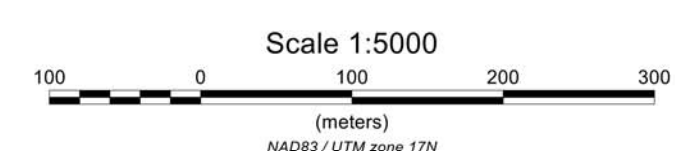
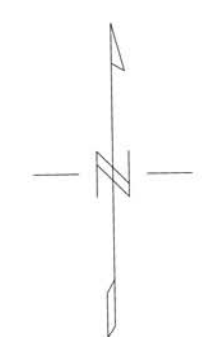
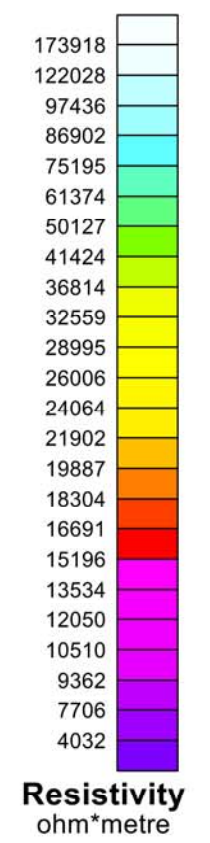
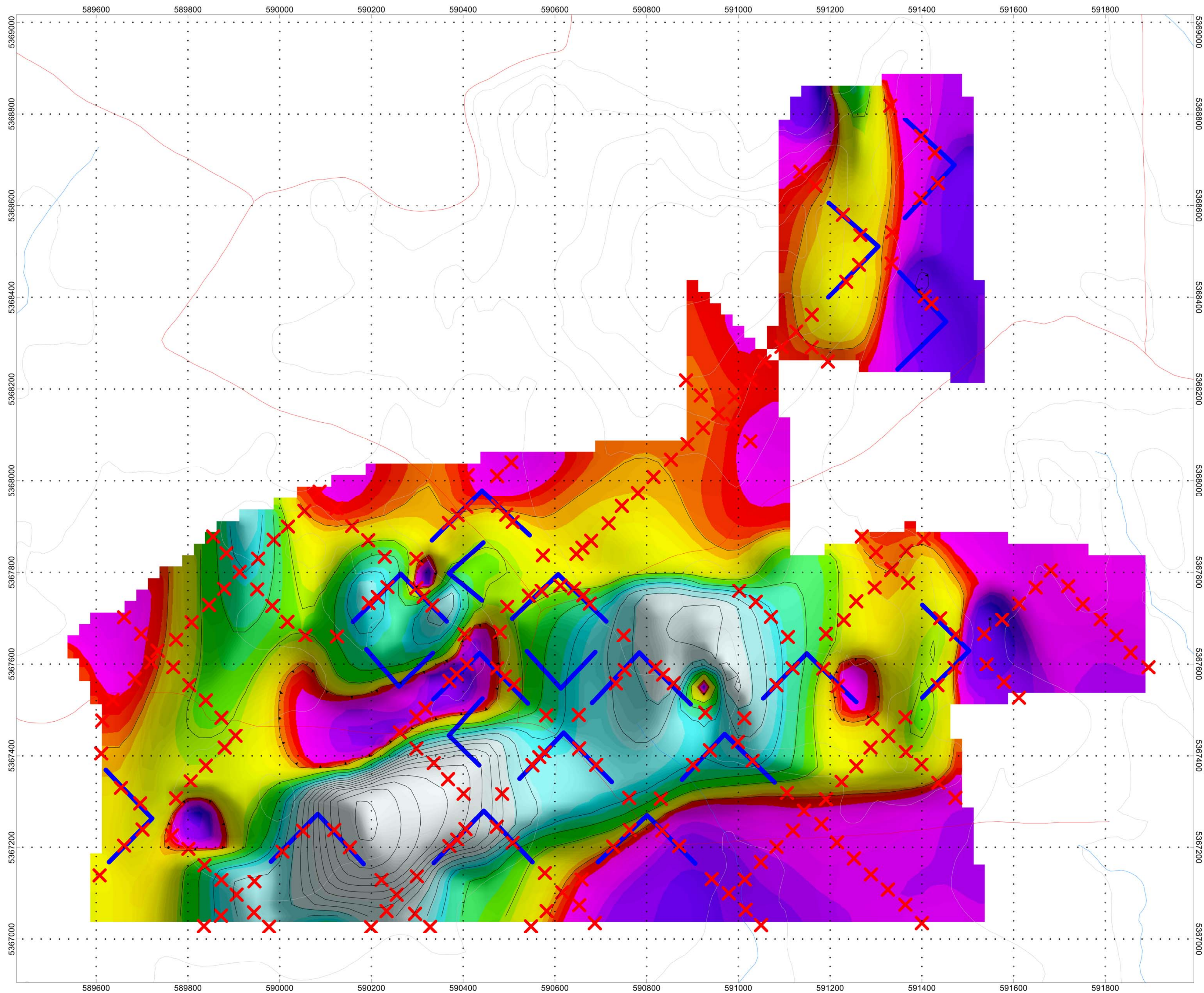
Contour Intervals: 25000

✕ Transmitter Locations
— Dipoles



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Map Drawn By: Melanie Postman, B.Sc.
November 2018





Transmitter Locations
 Dipoles

TIGER GOLD EXPLORATION CORPORATION

**Iris Project
Harker Township, Ontario**

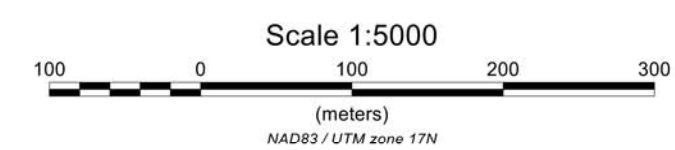
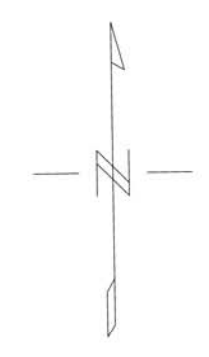
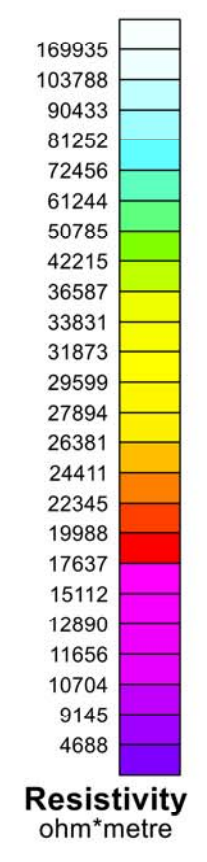
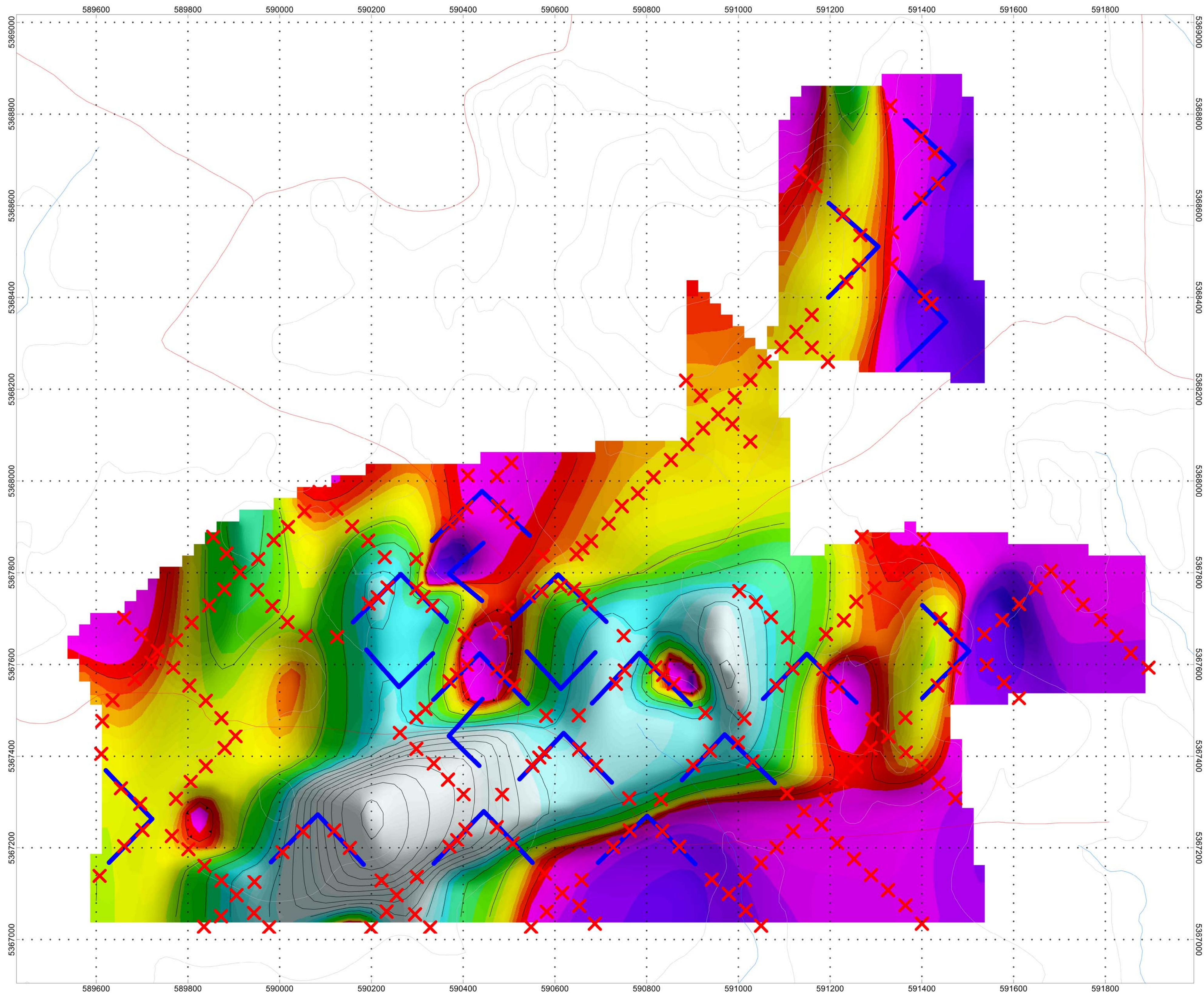
3D Distributed Induced Polarization Array
Resistivity Inversion Slice at 150m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5 kW Time Domain)

Contour Intervals: 20000

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November 2018





X Transmitter Locations
— Dipoles

TIGER GOLD EXPLORATION CORPORATION

Iris Project
Harker Township, Ontario

3D Distributed Induced Polarization Array
 Resistivity Inversion Slice at 100m MSL

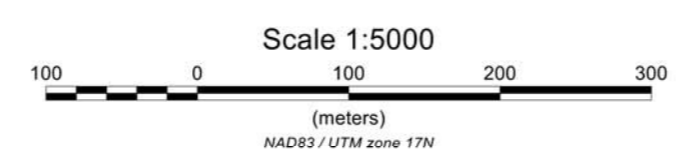
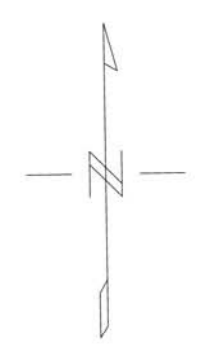
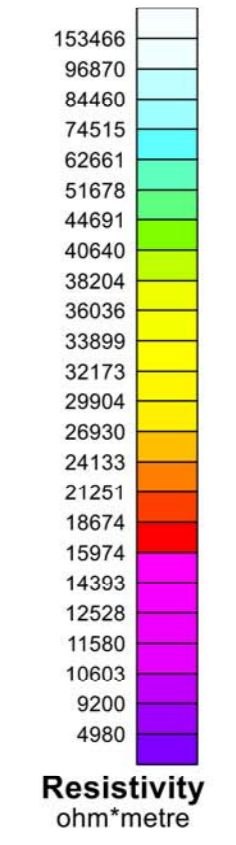
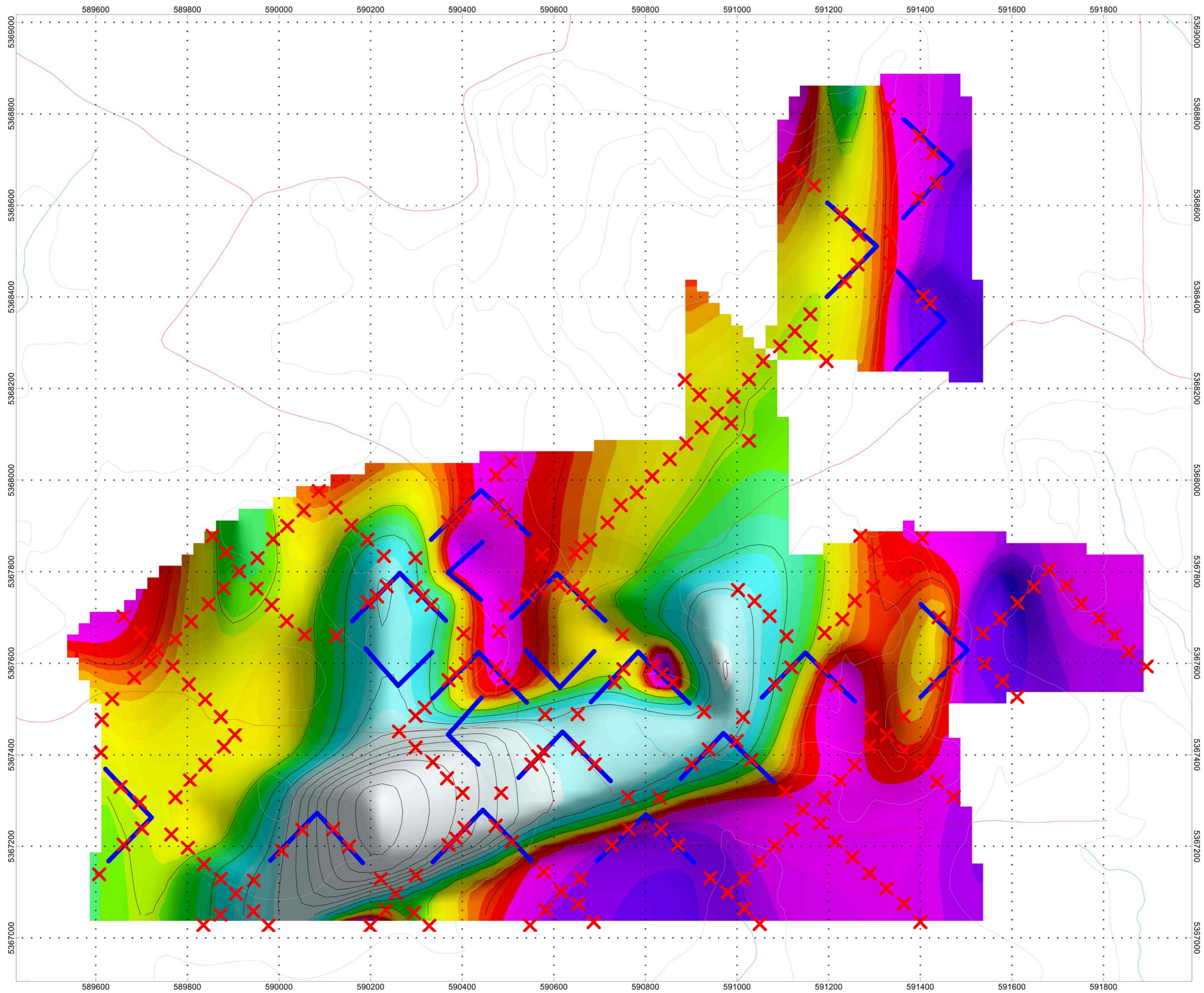
Interval: 2 seconds
 Rx: Iris V-Fullwaver
 Tx: GDD II (5 kW Time Domain)

Contour Intervals: 20000

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 Map Drawn By: Melanie Postman, B.Sc.
 November 2018



Drawing: Q2568-TigerGold-Iris-3DIP-Inv-Res_100MSL



✕ Transmitter Locations
— Dipoles

TIGER GOLD EXPLORATION CORPORATION

**Iris Project
Harker Township, Ontario**

3D Distributed Induced Polarization Array
Resistivity Inversion Slice at 50m MSL

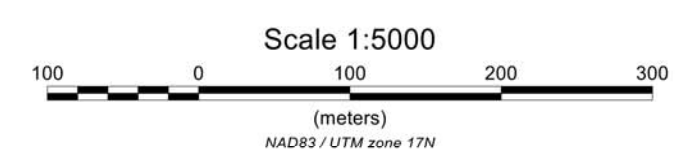
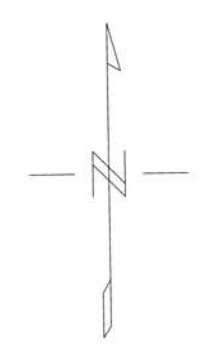
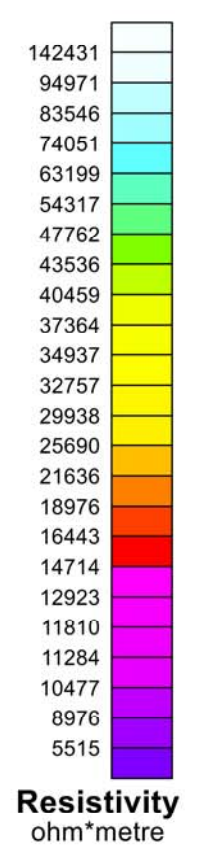
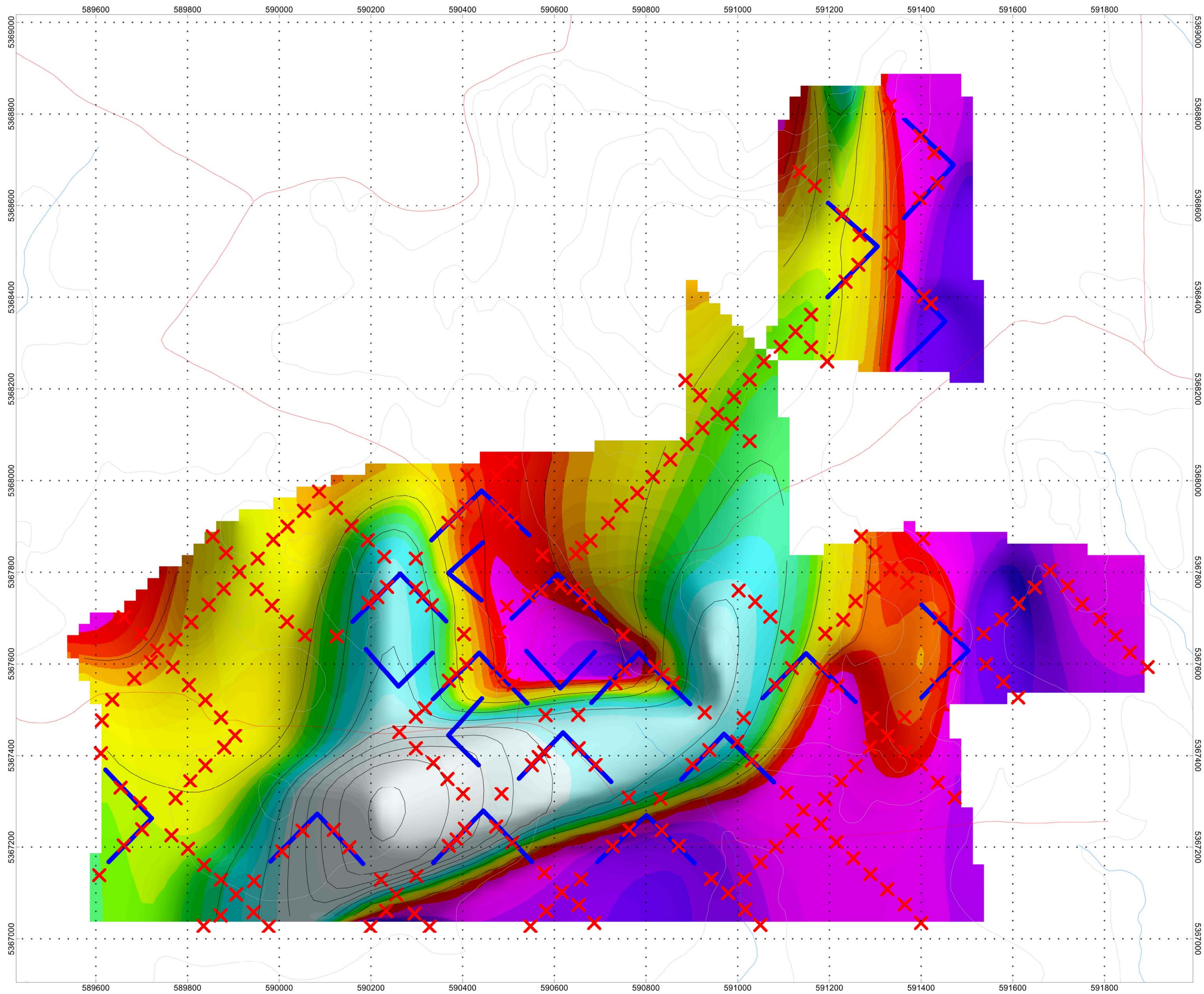
Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5 kW Time Domain)

Contour Intervals: 20000

Processed By: Melanie Postman, B.Sc.
Map Drawn By: Melanie Postman, B.Sc.
November 2018



Drawing: Q2568-TigerGold-Iris-3DIP-Inv-Res_50MSL



✕ Transmitter Locations
— Dipoles

TIGER GOLD EXPLORATION CORPORATION

Iris Project
Harker Township, Ontario

3D Distributed Induced Polarization Array
Resistivity Inversion Slice at 0m MSL

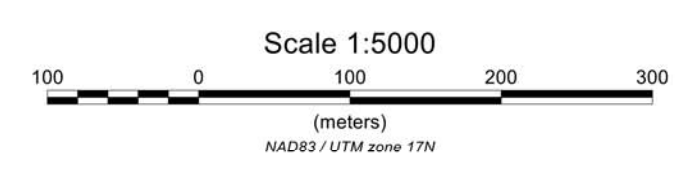
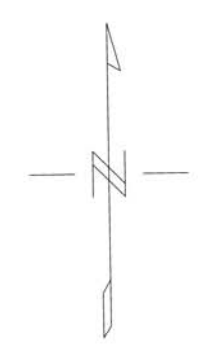
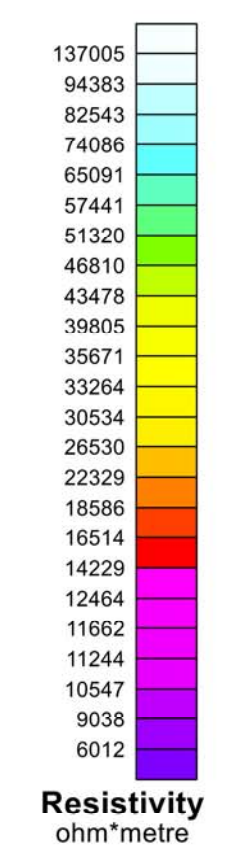
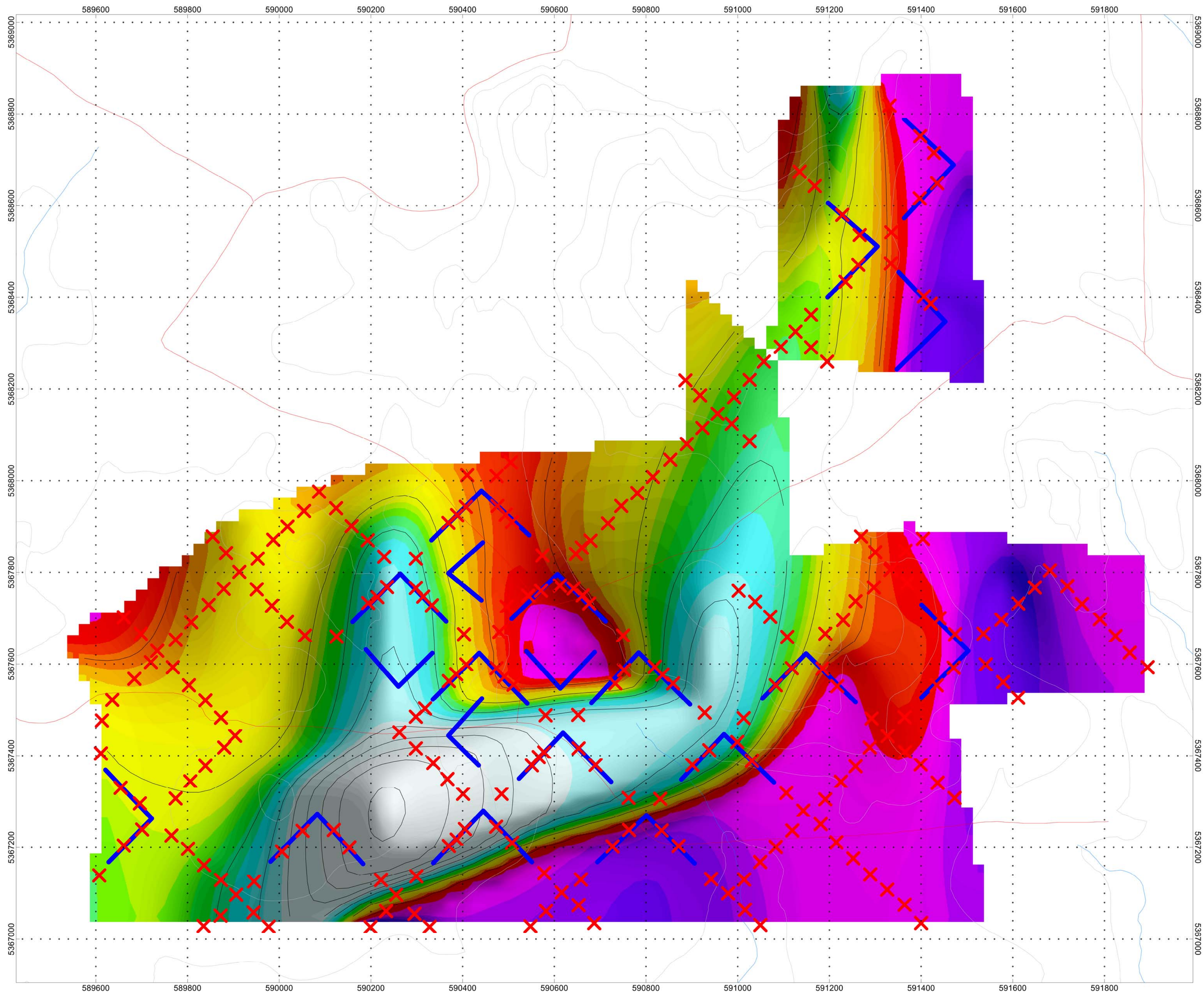
Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5 kW Time Domain)

Contour Intervals: 20000

Processed By: Melanie Postman, B.Sc.
Map Drawn By: Melanie Postman, B.Sc.
November 2018



Drawing: Q2568-TigerGold-Iris-3DIP-Inv-Res_0MSL



x Transmitter Locations
— Dipoles

TIGER GOLD EXPLORATION CORPORATION

**Iris Project
Harker Township, Ontario**

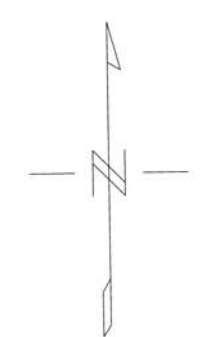
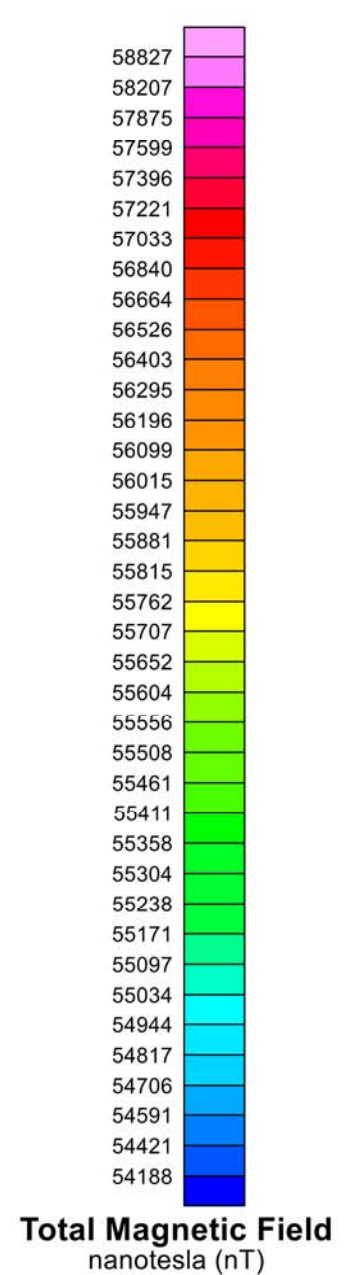
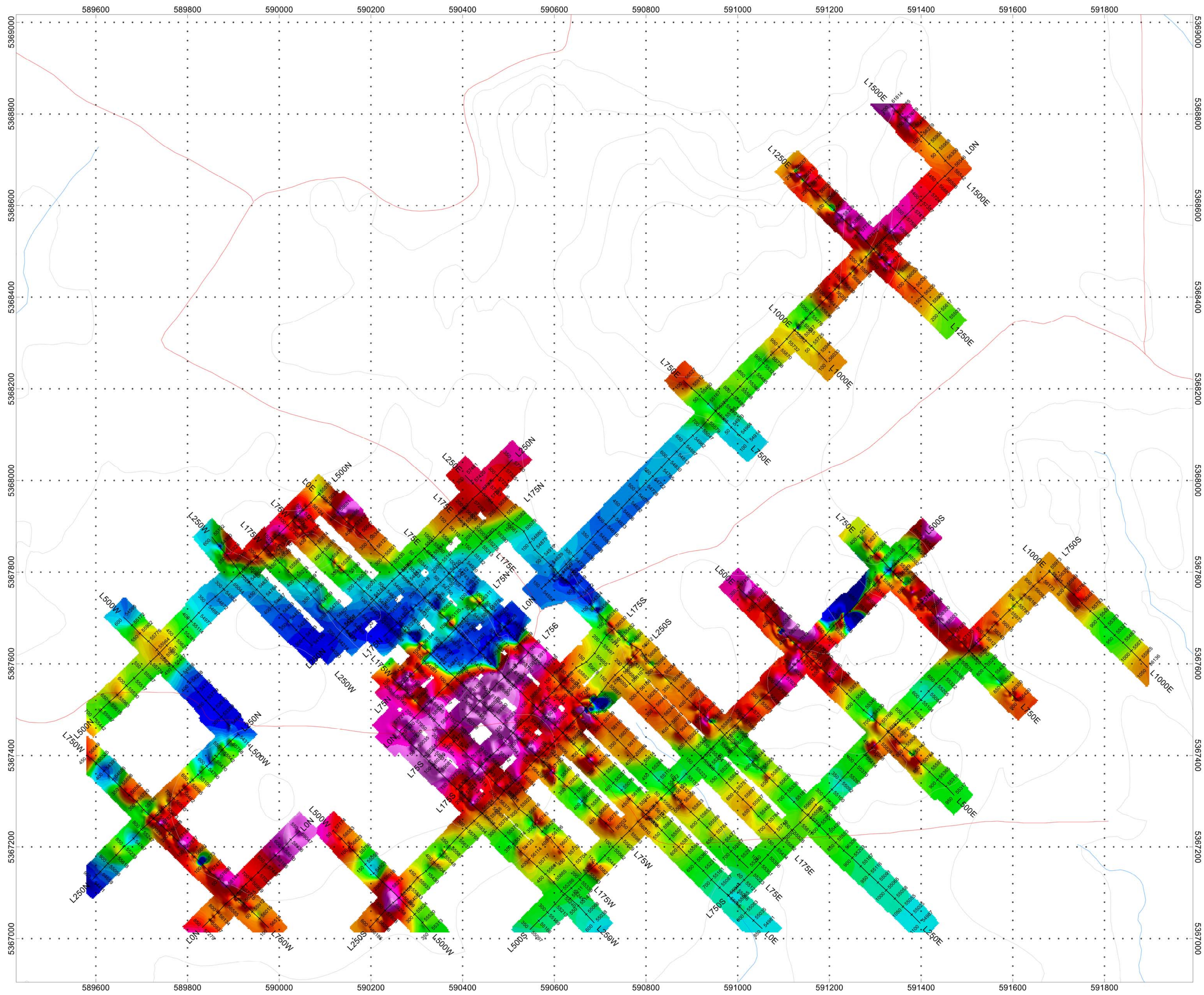
3D Distributed Induced Polarization Array
Resistivity Inversion Slice at -50m MSL

Interval: 2 seconds
Rx: Iris V-Fullwaver
Tx: GDD II (5 kW Time Domain)

Contour Intervals: 20000

Processed By: Melanie Postman, B.Sc.
 Map Drawn By: Melanie Postman, B.Sc.
 November 2018





TIGER GOLD EXPLORATION CORPORATION

**Iris Project
Harker Township, Ontario**

TOTAL FIELD MAGNETIC CONTOURED PLAN MAP
Base Station Corrected

Posting Level: 0nT
Field Inclination/Declination: 73.1degN/11.6degW
Station Separation: Walkmag 1 second
Total Field Magnetic Contours: 250nT

GSM-19 OVERHAUSER MAGNETOMETER v7

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Map Drawn By: Melanie Postman, B.Sc.
November 2018



Drawing: Q2568-TigerGold-Iris-Mag-Cont

